

# Helical geared motors



	<b>Orientation</b>
2/2	Overview
2/4	Modular system
	<b>General technical data</b>
2/5	Permissible radial force
	<b>Geared motors up to 200 kW</b>
2/8	Selection and ordering data
	<b>Transmission ratios and maximum torques</b>
2/91	Selection and ordering data
	<b>Mounting types</b>
2/116	Selection and ordering data
	<b>Shaft designs</b>
2/117	Selection and ordering data
	<b>Flange-mounted designs</b>
2/118	Selection and ordering data
	<b>Mounting types and mounting positions</b>
2/119	Selection and ordering data
	<b>Special versions</b>
2/130	Lubricants
2/130	Oil level control
2/131	Gearbox ventilation
2/131	Oil drain
2/132	Sealing
2/133	Radially reinforced output shaft bearings
2/133	Agitator flange in dry-well design
	<b>Dimensions</b>
2/134	Dimension drawing overview
2/136	Dimension drawings

# MOTOX Geared Motors

## Helical geared motors

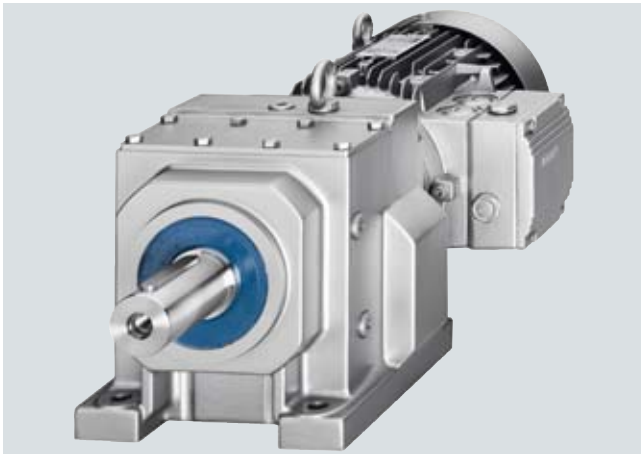
### Orientation

### Overview

2



Helical gearbox E



Helical gearbox D/Z

MOTOX helical gearboxes are part of the MOTOX modular system. With bevel helical, parallel shaft, helical worm or variable speed gearboxes, three-phase motors with and without brakes, this system covers all possible drive combinations, right up to the electronic variable speed drive.

MOTOX helical gearboxes are designed for continuous duty. The gearbox housings made of gray cast iron or aluminium are developed in 3D CAD and have an optimized structure in terms of rigidity and vibration absorption. Radial shaft seals with dust-protection lips prevent oil from leaking out of the housing, dust and water from entering it. All the gear wheels are milled and their surfaces hardened. The tooth flanks are ground or honed so that they are convex and corrected in terms of the profile.

MOTOX helical gearboxes are of 1-stage, 2-stage and 3-stage design. The MOTOX helical gearbox series can be supplied in foot-mounted or flange-mounted design for mounting in any position. Flange housings can be supplied with an integrated housing flange (C type). Combined foot / flange-mounted design or foot-mounted housings with housing flange are available on request.

### Overview (continued)

The helical gearboxes are designated as follows:

#### Gearbox type:

(-) Helical gearboxes

Transmission stage **E** 1-stage  
**Z** 2-stage  
**D** 3-stage

#### Type:

Shaft (-) Solid shaft

Mounting (-) Foot-mounted design  
**F** Flange-mounted design (A-type)  
**Z** Housing flange (C-type)  
**R** Agitator flange  
**K** Cooling tower flange <sup>1)</sup>

Connections (-) Feather key

#### Type of intermediate gearbox

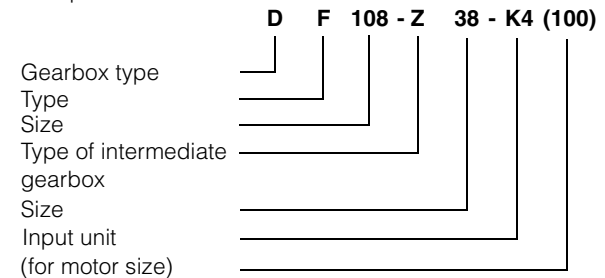
(-) Helical gearboxes

Transmission stage **Z** 2-stage  
**D** 3-stage

#### Input unit

- K2** Coupling lantern with flexible coupling for connecting an IEC motor
- K2TC** Coupling lantern with flexible coupling for connecting a NEMA motor <sup>1)</sup>
- K4** Short coupling lantern with clamp connection for connecting an IEC motor
- K5** Short coupling lantern with clamp connection for connecting a NEMA motor <sup>1)</sup>
- KQ** Lantern for servomotor with feather key and zero-backlash flexible coupling for connecting a servomotor
- KQS** Lantern for servomotor without feather key and zero-backlash flexible coupling for connecting a servomotor
- A** Input unit with free input shaft
- A5** Input unit with free input shaft (NEMA design) <sup>1)</sup>
- P** Input unit with free input shaft and piggy back for connecting an IEC motor
- P5** Input unit with free input shaft and piggy back for connecting a NEMA motor <sup>1)</sup>
- PS** Input unit with free input shaft and piggy back with protection cover

Example:



The series currently comprises 11 sizes for D and Z gearboxes and 7 sizes for E gearboxes.

E gearboxes are available as 1-stage, Z gearboxes as 2-stage and D gearboxes as 3-stage.

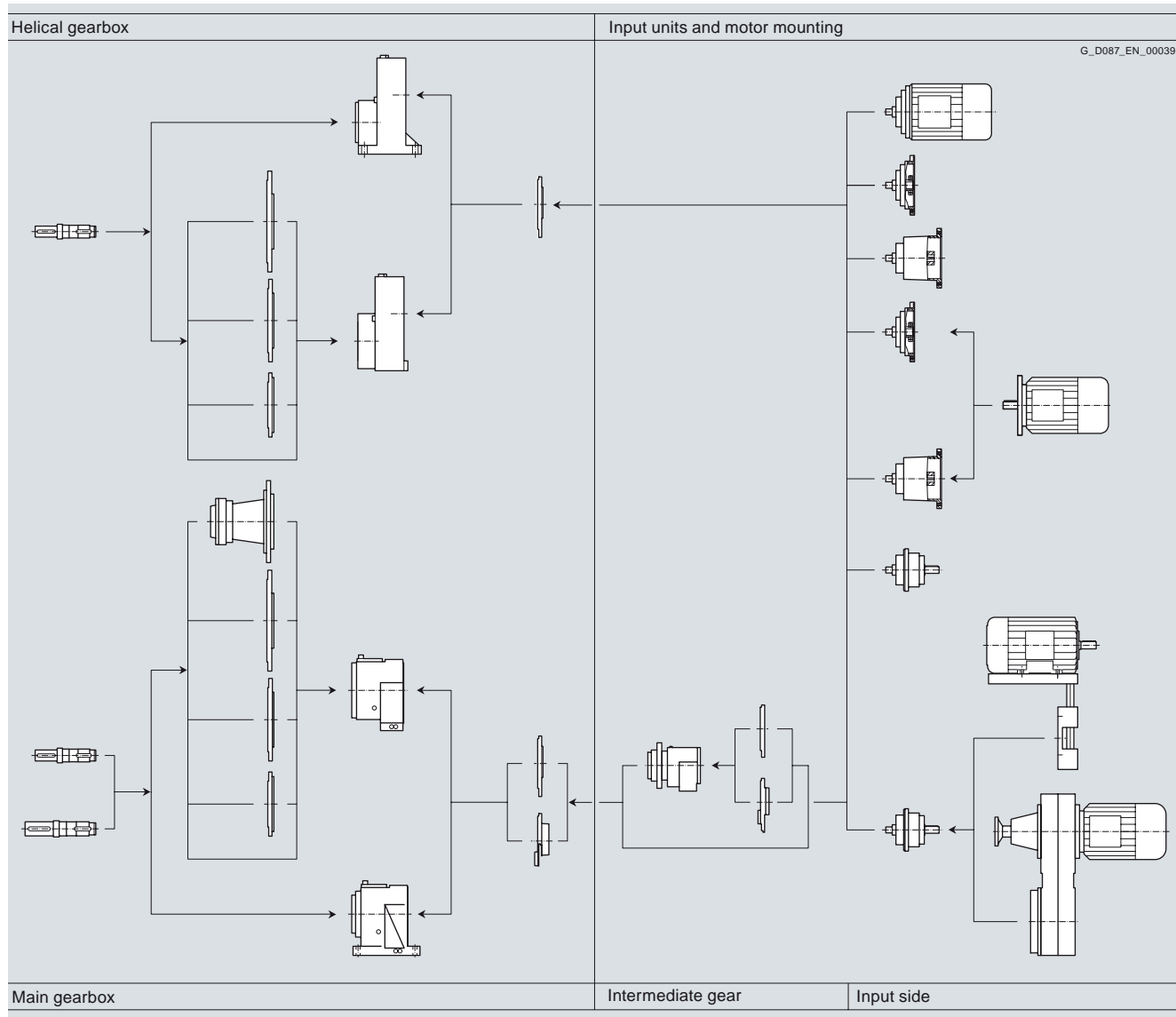
<sup>1)</sup> These designs can be selected from our MOTOX Configurator electronic catalog.

# MOTOX Geared Motors

## Helical geared motors

### Orientation

#### Modular system



### Use

MOTOX helical geared motors have a high efficiency and are characterized by their very low noise emission.

The geared motors offer high economical efficiency with their favorable price and low maintenance expenses.

The housings offer a wide range of mounting options due to their flange-mounted or foot-mounted designs.

### Oil quantities

The oil quantities corresponding to the applicable mounting positions are specified in the operating instructions and on the rating plate.

### Permissible radial force $F_{Rperm}$

#### 1-stage helical gearboxes – standard bearing arrangement

Gearbox type	d mm	l mm	y mm	z mm	a kNmm	b mm	Direction of rotation when viewing the output shaft	$F_{Rperm}$ in N with $x = l/2$ for output speeds $n_2$ in rpm					
								≤ 183	≤ 229	≤ 287	≤ 358	≤ 448	≤ 502
E.38	20	40	105	85	70.9	24.0	Left	4 070	3 722	3 209	2 978	2 358	1 918
					93.3		Right	4 227	3 805	2 603	2 423	1 657	1 152
E.48	25	50	114	89	45.7	24.0	Left	3 687	3 174	2 823	2 283	1 992	1 744
					93.9		Right	3 888	3 437	2 801	1 352	854	441
E.68	30	60	155	125	165.0	29.5	Left	7 175	6 052	4 468	3 606	2 441	2 055
					257.0		Right	6 098	4 813	2 931	2 021	713	327
E.88	40	80	171	131	668.0	32.5	Left	8 403	7 543	6 430	5 764	4 886	4 645
					755.0		Right	8 778	7 976	6 850	5 635	3 496	3 080
E.108	50	100	194	144	904.0	36.5	Left	11 241	9 759	7 901	7 118	5 017	4 933
					1 063.0		Right	9 104	7 169	4 979	4 356	1 797	1 944
E.128	60	120	228	168	2 064.0	36.5	Left	15 781	13 912	12 554	11 239	10 100	9 566
					2 277.0		Right	16 567	14 537	12 052	9 416	7 235	6 307
E.148	70	140	260	190	2 344.0	46.5	Left	19 286	17 125	15 100	13 777	10 937	10 977
					2 688.0		Right	19 631	15 610	11 864	10 015	5 915	6 451

Gearbox type	d mm	l mm	y mm	z mm	a kNmm	b mm	Direction of rotation when viewing the output shaft	$F_{Rperm}$ in N with $x = l/2$ for output speeds $n_2$ in rpm					
								≤ 562	≤ 629	≤ 705	≤ 789	≤ 884	≤ 990
E.38	20	40	105	85	70.9	24.0	Left	1 900	1 641	1 233	991	–	–
					93.3		Right	1 199	942	455	221	–	–
E.48	25	50	114	89	45.7	24.0	Left	1 688	1 663	1 712	1 752	1 666	–
					93.9		Right	475	554	719	869	846	–
E.68	30	60	155	125	165.0	29.5	Left	1 948	1 787	1 662	1 799	1 811	1 736
					257.0		Right	304	232	211	495	627	656
E.88	40	80	171	131	668.0	32.5	Left	4 424	4 113	3 911	3 891	–	–
					755.0		Right	2 756	2 175	1 879	2 055	–	–
E.108	50	100	194	144	904.0	36.5	Left	4 350	3 950	3 921	–	–	–
					1 063.0		Right	1 331	1 007	1 213	–	–	–
E.128	60	120	228	168	2 064.0	36.5	Left	9 171	8 876	8 586	8 298	7 980	7 623
					2 277.0		Right	5 696	5 443	5 283	5 191	4 950	4 681
E.148	70	140	260	190	2 344.0	46.5	Left	10 977	10 156	9 758	9 587	–	–
					2 688.0		Right	6 874	6 079	5 883	6 028	–	–

The values in the table apply to the worst-case scenario.  
 The output shaft bearing arrangement can be calculated using our MOTOX Configurator electronic catalog.  
 See Chapter 1 "Configuring guide" for more information on calculating the permissible radial force.

# MOTOX Geared Motors

## Helical geared motors

### General technical data

#### Permissible radial force $F_{Rperm}$ (continued)

2-stage and 3-stage helical gearboxes – standard bearing arrangement

Gearbox type	d mm	l mm	y mm	z mm	a kNmm	b mm	Direction of rotation when viewing the output shaft	$F_{Rperm}$ in N with $x = l/2$ for output speeds $n_2$ in rpm							
								≤ 16	≤ 25	≤ 40	≤ 63	≤ 100	≤ 160	≤ 250	≤ 400
D./Z.18	20	40	91.0	71.0	51.2	12	Left	1 600	1 600	1 600	1 600	1 600	1 600	1 550	1 420
							Right	1 600	1 600	1 600	1 600	1 600	1 600	1 480	1 370
D./Z.F18	20	40	99.0	79.0	57.2	20	Left	1 430	1 430	1 430	1 430	1 430	1 430	1 420	1 310
							Right	1 430	1 430	1 430	1 430	1 430	1 430	1 360	1 260
D./Z.28	25	50	104.0	79.0	129.5	12	Left	2 890	2 890	2 890	2 890	1 650	960	1 130	1 070
							Right	3 420	3 420	3 420	3 420	2 190	1 500	1 620	1 490
D./Z.F28	25	50	110.0	85.0	129.5	18	Left	2 540	2 540	2 540	2 540	1 450	850	990	940
							Right	3 012	3 012	3 012	3 012	1 930	1 320	1 430	1 310
D./Z.38	30	60	111.0	81.0	210.0	16	Left	4 565	4 565	4 560	3 230	1 990	1 580	1 110	1 020
							Right	4 565	4 565	4 565	3 880	2 630	2 200	1 730	1 560
	25	50	106.0	81.0	169.0	0	Left	6 760	6 310	5 010	3 570	2 180	1 740	1 230	1 110
							Right	6 760	6 010	5 080	4 140	2 890	2 430	1 910	1 710
D./Z.48	40	80	145.0	105.0	499.0	19	Left	8 457	8 457	7 480	5 470	4 150	3 400	3 020	2 350
							Right	8 457	8 457	7 600	6 300	5 130	4 280	3 690	2 950
	30	60	135.0	105.0	265.0	0	Left	8 833	8 833	8 670	6 450	4 850	3 970	3 520	2 740
							Right	8 833	8 833	8 170	6 760	5 630	4 860	4 310	3 460
D./Z.68	50	100	179.5	129.5	943.0	23	Left	12 917	12 917	10 820	7 690	4 970	3 670	3 380	3 010
							Right	12 917	12 917	12 520	9 380	6 710	5 270	4 760	3 880
	40	80	170.0	129.5	564.0	0	Left	14 100	14 100	12 230	8 650	5 630	4 180	3 810	3 390
							Right	14 100	14 100	14 100	10 600	7 580	5 960	5 400	4 380
D./Z.88	60	120	219.0	159.0	1 533.0	21	Left	18 925	18 925	18 925	18 925	16 330	14 060	11 770	11 300
							Right	18 925	18 925	18 925	18 710	15 100	12 960	11 310	10 630
	50	100	209.0	159.0	1 150.0	0	Left	23 000	23 000	23 000	21 010	17 110	14 700	12 830	12 000
							Right	23 000	23 000	23 000	19 630	15 850	13 600	11 880	11 140
D./Z.108	70	140	259.0	189.0	2 328.0	29	Left	23 515	23 515	23 515	23 515	20 860	15 920	13 780	14 760
							Right	23 515	23 515	23 515	22 340	18 830	14 350	13 280	13 690
	60	120	249.0	189.0	2 113.0	0	Left	35 216	35 216	30 120	25 340	21 740	16 980	15 170	15 400
							Right	35 216	33 940	28 090	23 210	19 610	14 940	13 820	14 220
D./Z.128	90	170	320.5	235.5	5 181.0	30	Left	45 052	45 052	36 770	31 220	26 070	22 270	18 010	19 340
							Right	45 052	44 170	34 000	28 490	23 260	19 750	15 860	18 050
	70	140	305.5	235.5	3 120.0	0	Left	44 571	44 571	38 510	32 740	27 300	23 360	18 880	20 280
							Right	44 571	44 571	35 740	29 790	24 420	20 690	16 680	18 920
D./Z.148	100	210	361.0	256.0	6 900.0	33	Left	50 000	50 000	45 040	38 930	31 140	27 200	23 760	21 590
							Right	50 000	50 000	41 490	35 280	27 600	23 660	20 600	19 330
	90	170	341.0	256.0	6 359.0	0	Left	67 600	61 030	47 700	41 090	32 920	28 780	25 140	22 870
							Right	63 750	58 650	43 850	37 450	29 170	25 030	21 780	20 410
D./Z.168	120	210	420.5	315.5	11 652	30	Left	86 311	86 311	86 311	86 311	86 311	86 311	86 311	86 311
							Right	86 311	86 311	86 311	86 311	86 311	86 311	86 311	86 311
	100	210	420.5	315.5	7 958.0	0	Left	75 790	75 790	75 790	75 790	75 790	75 790	75 790	75 790
							Right	75 790	75 790	75 790	75 790	75 790	75 790	75 790	75 790
D./Z.188	120	210	445.5	340.5	16 920	36	Left	120 000	120 000	120 000	120 000	87 920	101 570	114 610	–
							Right	120 000	120 000	120 000	120 000	106 270	116 020	120 000	–

The values in the table apply to the worst-case scenario.  
The output shaft bearing arrangement can be calculated using our MOTOX Configurator electronic catalog.  
See Chapter 1 "Configuring guide" for more information on calculating the permissible radial force.

### Permissible radial force $F_{Rperm}$ (continued)

2-stage and 3-stage helical gearboxes – radially reinforced bearing arrangement

Gearbox type	d mm	l mm	y mm	z mm	a kNmm	b mm	Direction of rotation when viewing the output shaft	$F_{Rperm}$ in N with $x = l/2$ for output speeds $n_2$ in rpm							
								≤ 16	≤ 25	≤ 40	≤ 63	≤ 100	≤ 160	≤ 250	≤ 400
D./Z.68	50	100	179.5	129.5	943	23	Left	12 917	12 917	12 917	12 917	12 917	12 917	12 917	12 917
							Right	12 917	12 917	12 917	12 917	12 917	12 917	12 917	12 917
	40	80	170.0	129.5	564	0	Left	14 100	14 100	14 100	14 100	14 100	14 100	14 100	14 100
							Right	14 100	14 100	14 100	14 100	14 100	14 100	14 100	14 100
D./Z.88	60	120	219.0	159.0	1 533	21	Left	18 925	18 925	18 925	18 925	18 820	16 250	12 320	13 710
							Right	18 925	18 925	18 925	18 925	18 925	18 925	14 570	15 540
	50	100	209.0	159.0	1 150	0	Left	23 000	23 000	23 000	23 000	20 990	18 130	13 740	15 290
							Right	23 000	23 000	23 000	23 000	23 000	21 180	16 250	17 330
D./Z.108	70	140	259.0	189.0	2 328	29	Left	23 515	23 515	23 515	23 515	23 515	15 970	13 870	21 240
							Right	23 515	23 515	23 515	23 515	23 515	20 780	18 680	23 515
	60	120	249.0	189.0	2 113	0	Left	35 216	35 216	35 216	34 530	27 240	17 390	15 080	23 240
							Right	35 216	35 216	35 216	35 216	32 630	22 790	20 530	26 160
D./Z.128	90	170	320.5	235.5	5 181	30	Left	45 052	45 052	45 052	45 052	45 052	45 052	42 010	45 052
							Right	45 052	45 052	45 052	45 052	45 052	45 052	44 110	45 052
	70	140	305.5	235.5	3 120	0	Left	44 571	44 571	44 571	44 571	44 571	44 571	44 571	44 571
							Right	44 571	44 571	44 571	44 571	44 571	44 571	44 571	44 571
D./Z.148	100	210	361.0	256.0	6 900	33	Left	50 000	50 000	50 000	50 000	50 000	50 000	50 000	50 000
							Right	50 000	50 000	50 000	50 000	50 000	50 000	50 000	50 000
	90	170	341.0	256.0	6 359	0	Left	74 811	74 811	74 811	74 811	74 811	74 811	66 220	60 710
							Right	74 811	74 811	74 811	74 811	74 811	71 170	62 530	58 280
D./Z.168	120	210	420.5	315.5	11 652	30	Left	86 311	86 311	86 311	86 311	86 311	86 311	86 311	86 311
							Right	86 311	86 311	86 311	86 311	86 311	86 311	86 311	86 311
	100	210	420.5	315.5	7 958	0	Left	75 790	75 790	75 790	75 790	75 790	75 790	75 790	75 790
							Right	75 790	75 790	75 790	75 790	75 790	75 790	75 790	75 790
D./Z.188	120	210	445.5	340.5	16 920	36	Left	120 000	120 000	120 000	120 000	87 920	101 570	114 610	–
							Right	120 000	120 000	120 000	120 000	106 270	116 020	120 000	–

The values in the table apply to the worst-case scenario.  
 The output shaft bearing arrangement can be calculated using our MOTOX Configurator electronic catalog.  
 See Chapter 1 "Configuring guide" for more information on calculating the permissible radial force.

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data

The selection tables show the most common variants and combinations. Other combinations can be selected using our MOTOX Configurator or made available on request.

At an identical power rating and output speed, priority is given in the selection tables to 4-pole geared motors.

At the available transmission ratios, they cover the majority of output speeds.

Due to their prevalence, 4-pole geared motors are easily available, with short delivery times and at a low cost. They also feature a favorable size / power ratio.

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>0.09</b> (50 Hz)	<b>D.48-LA71M8</b>							
0.11 (60 Hz)	<b>3.0</b>	<b>3.6</b>	285	1.6	208.77 ★	<b>2KJ1203 - ■CE13 - ■■S1</b>	<b>P02</b>	27
	<b>3.4</b>	<b>4.1</b>	253	1.8	185.66	<b>2KJ1203 - ■CE13 - ■■R1</b>	<b>P02</b>	27
	<b>3.9</b>	<b>4.7</b>	220	2.0	161.05 ★	<b>2KJ1203 - ■CE13 - ■■Q1</b>	<b>P02</b>	27
	<b>D.38-LA71M8</b>							
	<b>3.3</b>	<b>4.0</b>	262	0.84	191.75 ★	<b>2KJ1202 - ■CE13 - ■■S1</b>	<b>P02</b>	18
	<b>3.7</b>	<b>4.4</b>	232	0.95	170.24	<b>2KJ1202 - ■CE13 - ■■R1</b>	<b>P02</b>	18
	<b>4.2</b>	<b>5.0</b>	204	1.10	149.26 ★	<b>2KJ1202 - ■CE13 - ■■Q1</b>	<b>P02</b>	18
	<b>D.38-LA71B6</b>							
	<b>4.6</b>	<b>5.5</b>	186	1.2	191.75 ★	<b>2KJ1202 - ■CB13 - ■■S1</b>	<b>P01</b>	18
	<b>5.2</b>	<b>6.2</b>	165	1.3	170.24	<b>2KJ1202 - ■CB13 - ■■R1</b>	<b>P01</b>	18
	<b>5.9</b>	<b>7.1</b>	145	1.5	149.26 ★	<b>2KJ1202 - ■CB13 - ■■Q1</b>	<b>P01</b>	18
	<b>6.6</b>	<b>7.9</b>	130	1.7	133.57	<b>2KJ1202 - ■CB13 - ■■P1</b>	<b>P01</b>	18
<b>0.12</b> (50 Hz)	<b>D.188-D48-LA71B4</b>							
0.14 (60 Hz)	<b>0.05</b>	<b>0.06</b>	15 788	1.3	28 260	<b>2KJ1236 - ■CB13 - ■■J1</b>		604
	<b>0.06</b>	<b>0.07</b>	12 656	1.6	22 654	<b>2KJ1236 - ■CB13 - ■■G1</b>		604
	<b>0.06</b>	<b>0.07</b>	13 965	1.4	24 996 ★	<b>2KJ1236 - ■CB13 - ■■H1</b>		604
	<b>0.07</b>	<b>0.08</b>	11 172	1.8	19 997 ★	<b>2KJ1236 - ■CB13 - ■■F1</b>		604
	<b>0.08</b>	<b>0.10</b>	10 078	2.0	18 039	<b>2KJ1236 - ■CB13 - ■■E1</b>		604
	<b>D.168-D48-LA71B4</b>							
	<b>0.05</b>	<b>0.06</b>	15 652	0.89	28 017 ★	<b>2KJ1234 - ■CB13 - ■■F1</b>		460
	<b>0.06</b>	<b>0.07</b>	12 807	1.1	22 923 ★	<b>2KJ1234 - ■CB13 - ■■D1</b>		460
	<b>0.06</b>	<b>0.07</b>	14 120	0.99	25 274	<b>2KJ1234 - ■CB13 - ■■E1</b>		460
	<b>0.07</b>	<b>0.08</b>	11 668	1.2	20 886	<b>2KJ1234 - ■CB13 - ■■C1</b>		460
	<b>D.168-Z48-LA71B4</b>							
	<b>0.08</b>	<b>0.10</b>	10 003	1.4	17 519	<b>2KJ1232 - ■CB13 - ■■A2</b>		459
	<b>0.09</b>	<b>0.11</b>	8 852	1.6	15 504 ★	<b>2KJ1232 - ■CB13 - ■■X1</b>		459
	<b>0.10</b>	<b>0.12</b>	8 047	1.7	14 094	<b>2KJ1232 - ■CB13 - ■■W1</b>		459
	<b>0.11</b>	<b>0.13</b>	7 229	1.9	12 661 ★	<b>2KJ1232 - ■CB13 - ■■V1</b>		459
	<b>D.148-D38-LA71B4</b>							
	<b>0.08</b>	<b>0.1</b>	9 926	0.81	17767	<b>2KJ1230 - ■CB13 - ■■C1</b>		284
	<b>D.148-Z38-LA71B4</b>							
	<b>0.09</b>	<b>0.11</b>	8 467	0.94	14 830	<b>2KJ1228 - ■CB13 - ■■X1</b>		283
	<b>0.11</b>	<b>0.13</b>	7 530	1.1	13 188	<b>2KJ1228 - ■CB13 - ■■W1</b>		283
	<b>0.12</b>	<b>0.14</b>	6 532	1.2	11 440	<b>2KJ1228 - ■CB13 - ■■V1</b>		283
	<b>0.13</b>	<b>0.16</b>	6 103	1.3	10 689	<b>2KJ1228 - ■CB13 - ■■U1</b>		283
	<b>0.15</b>	<b>0.18</b>	5 368	1.5	9 401	<b>2KJ1228 - ■CB13 - ■■T1</b>		283
	<b>0.17</b>	<b>0.20</b>	4 701	1.7	8 233	<b>2KJ1228 - ■CB13 - ■■S1</b>		283

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R



## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>0.12</b> (50 Hz)	<b>D.148-Z38-LA71B4</b>							
0.14 (60 Hz)	<b>0.19</b>	<b>0.23</b>	4 158	1.9	7 282	<b>2KJ1228 - ■CB13 - ■■R1</b>		283
	<b>D.128-Z38-LA71B4</b>							
	<b>0.13</b>	<b>0.16</b>	6 007	0.85	10 521	<b>2KJ1225 - ■CB13 - ■■W1</b>		198
	<b>0.15</b>	<b>0.18</b>	5 211	0.98	9 127	★ <b>2KJ1225 - ■CB13 - ■■V1</b>		198
	<b>0.16</b>	<b>0.19</b>	4 869	1.0	8 528	<b>2KJ1225 - ■CB13 - ■■U1</b>		198
	<b>0.19</b>	<b>0.23</b>	4 282	1.2	7 500	★ <b>2KJ1225 - ■CB13 - ■■T1</b>		198
	<b>0.21</b>	<b>0.25</b>	3 751	1.4	6 569	<b>2KJ1225 - ■CB13 - ■■S1</b>		198
	<b>0.24</b>	<b>0.29</b>	3 317	1.5	5 810	★ <b>2KJ1225 - ■CB13 - ■■R1</b>		198
	<b>0.27</b>	<b>0.32</b>	3 007	1.7	5 266	<b>2KJ1225 - ■CB13 - ■■Q1</b>		198
	<b>0.3</b>	<b>0.36</b>	2 654	1.9	4 648	★ <b>2KJ1225 - ■CB13 - ■■P1</b>		198
	<b>D.108-Z38-LA71B4</b>							
	<b>0.22</b>	<b>0.26</b>	3 556	0.87	6 228	<b>2KJ1223 - ■CB13 - ■■F2</b>		127
	<b>0.25</b>	<b>0.30</b>	3 208	0.97	5 618	<b>2KJ1223 - ■CB13 - ■■E2</b>		127
	<b>0.28</b>	<b>0.34</b>	2 910	1.1	5 096	<b>2KJ1223 - ■CB13 - ■■D2</b>		127
	<b>0.30</b>	<b>0.36</b>	2 651	1.2	4 643	<b>2KJ1223 - ■CB13 - ■■C2</b>		127
	<b>0.33</b>	<b>0.40</b>	2 424	1.3	4 246	<b>2KJ1223 - ■CB13 - ■■B2</b>		127
	<b>0.37</b>	<b>0.44</b>	2 168	1.4	3 797	<b>2KJ1223 - ■CB13 - ■■A2</b>		127
	<b>0.39</b>	<b>0.47</b>	2 069	1.5	3 624	<b>2KJ1223 - ■CB13 - ■■X1</b>		127
	<b>0.43</b>	<b>0.52</b>	1 840	1.7	3 223	<b>2KJ1223 - ■CB13 - ■■W1</b>		127
	<b>0.50</b>	<b>0.60</b>	1 596	1.9	2 796	<b>2KJ1223 - ■CB13 - ■■V1</b>		127
	<b>D.88-Z28-LA71B4</b>							
	<b>0.39</b>	<b>0.47</b>	2 041	0.82	3 574	<b>2KJ1218 - ■CB13 - ■■A2</b>		76
	<b>0.45</b>	<b>0.54</b>	1 778	0.94	3 114	★ <b>2KJ1218 - ■CB13 - ■■X1</b>		76
	<b>0.5</b>	<b>0.6</b>	1 597	1.1	2 797	<b>2KJ1218 - ■CB13 - ■■W1</b>		76
	<b>0.55</b>	<b>0.66</b>	1 442	1.2	2 525	★ <b>2KJ1218 - ■CB13 - ■■V1</b>		76
	<b>0.61</b>	<b>0.73</b>	1 307	1.3	2 290	<b>2KJ1218 - ■CB13 - ■■U1</b>		76
	<b>0.67</b>	<b>0.8</b>	1 190	1.4	2 084	★ <b>2KJ1218 - ■CB13 - ■■T1</b>		76
	<b>0.76</b>	<b>0.91</b>	1 052	1.6	1 842	<b>2KJ1218 - ■CB13 - ■■S1</b>		76
	<b>0.82</b>	<b>0.98</b>	971	1.7	1 701	★ <b>2KJ1218 - ■CB13 - ■■R1</b>		76
	<b>0.96</b>	<b>1.2</b>	836	2.0	1 465	<b>2KJ1218 - ■CB13 - ■■Q1</b>		76
	<b>D.68-Z28-LA71B4</b>							
	<b>0.84</b>	<b>1.0</b>	955	0.84	1 672	<b>2KJ1214 - ■CB13 - ■■S1</b>		46
	<b>0.91</b>	<b>1.1</b>	882	0.91	1 544	★ <b>2KJ1214 - ■CB13 - ■■R1</b>		46
	<b>1.1</b>	<b>1.3</b>	759	1.1	1 329	<b>2KJ1214 - ■CB13 - ■■Q1</b>		46
	<b>1.2</b>	<b>1.4</b>	690	1.2	1 208	★ <b>2KJ1214 - ■CB13 - ■■P1</b>		46
	<b>1.3</b>	<b>1.6</b>	627	1.3	1 098	★ <b>2KJ1214 - ■CB13 - ■■N1</b>		46
	<b>1.4</b>	<b>1.7</b>	569	1.4	996	<b>2KJ1214 - ■CB13 - ■■M1</b>		46
	<b>1.5</b>	<b>1.8</b>	517	1.5	906	★ <b>2KJ1214 - ■CB13 - ■■L1</b>		46
	<b>1.7</b>	<b>2.0</b>	457	1.7	801	<b>2KJ1214 - ■CB13 - ■■K1</b>		46
	<b>1.9</b>	<b>2.3</b>	423	1.9	740	★ <b>2KJ1214 - ■CB13 - ■■J1</b>		46
	<b>D.68-LA71MB8</b>							
	<b>2.3</b>	<b>2.8</b>	499	1.6	281.01	<b>2KJ1204 - ■CF13 - ■■U1</b>	<b>P02</b>	46
	<b>2.6</b>	<b>3.1</b>	442	1.8	248.68	★ <b>2KJ1204 - ■CF13 - ■■T1</b>	<b>P02</b>	46

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>0.12</b> (50 Hz)	<b>D.68-LA71MB8</b>							
0.14 (60 Hz)	<b>2.9</b>	<b>3.5</b>	402	2.0	226.07	<b>2KJ1204 - ■ CB13 - ■■ S1</b>	<b>P02</b>	46
	<b>D.48-Z28-LA71B4</b>							
	<b>1.6</b>	<b>1.9</b>	505	0.89	885	<b>2KJ1212 - ■ CB13 - ■■ Q1</b>		29
	<b>1.7</b>	<b>2.0</b>	460	0.98	805	★ <b>2KJ1212 - ■ CB13 - ■■ P1</b>		29
	<b>1.9</b>	<b>2.3</b>	417	1.1	731	★ <b>2KJ1212 - ■ CB13 - ■■ N1</b>		29
	<b>2.1</b>	<b>2.5</b>	379	1.2	663	<b>2KJ1212 - ■ CB13 - ■■ M1</b>		29
	<b>2.3</b>	<b>2.8</b>	344	1.3	603	★ <b>2KJ1212 - ■ CB13 - ■■ L1</b>		29
	<b>2.6</b>	<b>3.1</b>	305	1.5	534	<b>2KJ1212 - ■ CB13 - ■■ K1</b>		29
	<b>2.8</b>	<b>3.4</b>	281	1.6	493	★ <b>2KJ1212 - ■ CB13 - ■■ J1</b>		29
	<b>D.48-LA71MB8</b>							
	<b>3.1</b>	<b>3.7</b>	371	1.2	208.77	★ <b>2KJ1203 - ■ CB13 - ■■ S1</b>	<b>P02</b>	27
	<b>3.5</b>	<b>4.2</b>	330	1.4	185.66	<b>2KJ1203 - ■ CB13 - ■■ R1</b>	<b>P02</b>	27
	<b>D.48-LA71C6</b>							
	<b>4.1</b>	<b>4.9</b>	278	1.6	208.77	★ <b>2KJ1203 - ■ CC13 - ■■ S1</b>	<b>P01</b>	27
	<b>4.6</b>	<b>5.5</b>	247	1.8	185.66	<b>2KJ1203 - ■ CC13 - ■■ R1</b>	<b>P01</b>	27
	<b>5.3</b>	<b>6.4</b>	215	2.1	161.05	★ <b>2KJ1203 - ■ CC13 - ■■ Q1</b>	<b>P01</b>	27
	<b>Z.38-Z28-LA71B4</b>							
	<b>3</b>	<b>3.6</b>	268	0.82	464	★ <b>2KJ1112 - ■ CB13 - ■■ H1</b>		20
	<b>D.38-LA71MB8</b>							
	<b>4.3</b>	<b>5.2</b>	265	0.83	149.26	★ <b>2KJ1202 - ■ CB13 - ■■ Q1</b>	<b>P02</b>	18
	<b>D.38-LA71C6</b>							
	<b>4.5</b>	<b>5.4</b>	256	0.86	191.75	★ <b>2KJ1202 - ■ CC13 - ■■ S1</b>	<b>P01</b>	18
	<b>5.1</b>	<b>6.1</b>	227	0.97	170.24	<b>2KJ1202 - ■ CC13 - ■■ R1</b>	<b>P01</b>	18
	<b>5.8</b>	<b>7.0</b>	199	1.1	149.26	★ <b>2KJ1202 - ■ CC13 - ■■ Q1</b>	<b>P01</b>	18
	<b>6.4</b>	<b>7.7</b>	178	1.2	133.57	<b>2KJ1202 - ■ CC13 - ■■ P1</b>	<b>P01</b>	18
	<b>D.38-LA71B4</b>							
	<b>7.3</b>	<b>8.8</b>	157	1.4	191.75	★ <b>2KJ1202 - ■ CB13 - ■■ S1</b>		18
	<b>8.2</b>	<b>9.8</b>	139	1.6	170.24	<b>2KJ1202 - ■ CB13 - ■■ R1</b>		18
	<b>9.4</b>	<b>11.3</b>	122	1.8	149.26	★ <b>2KJ1202 - ■ CB13 - ■■ Q1</b>		18
	<b>10.5</b>	<b>12.6</b>	109	2.0	133.57	<b>2KJ1202 - ■ CB13 - ■■ P1</b>		18
	<b>D.28-LA71B4</b>							
	<b>6.7</b>	<b>8.0</b>	170	0.82	207.96	★ <b>2KJ1201 - ■ CB13 - ■■ M1</b>		10
	<b>7.8</b>	<b>9.4</b>	146	0.96	178.66	<b>2KJ1201 - ■ CB13 - ■■ L1</b>		10
	<b>8.5</b>	<b>10.2</b>	135	1.0	164.48	★ <b>2KJ1201 - ■ CB13 - ■■ K1</b>		10
	<b>9.4</b>	<b>11.3</b>	122	1.1	149.53	<b>2KJ1201 - ■ CB13 - ■■ J1</b>		10
	<b>10.6</b>	<b>12.7</b>	108	1.3	132.35	★ <b>2KJ1201 - ■ CB13 - ■■ H1</b>		10
	<b>12.6</b>	<b>15.1</b>	91	1.5	110.86	<b>2KJ1201 - ■ CB13 - ■■ G1</b>		10
	<b>14.8</b>	<b>17.8</b>	77	1.8	94.52	★ <b>2KJ1201 - ■ CB13 - ■■ F1</b>		10
	<b>17.4</b>	<b>21</b>	66	2.1	80.34	★ <b>2KJ1201 - ■ CB13 - ■■ E1</b>		10
	<b>20</b>	<b>24</b>	57	2.4	69.82	<b>2KJ1201 - ■ CB13 - ■■ D1</b>		10
	<b>23</b>	<b>28</b>	50	2.8	60.77	★ <b>2KJ1201 - ■ CB13 - ■■ C1</b>		10
	<b>Z.28-LA71B4</b>							
	<b>27</b>	<b>32</b>	42	3.3	51.35	<b>2KJ1101 - ■ CB13 - ■■ C2</b>		10

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>0.12 (50 Hz)</b>	<b>Z.28-LA71B4</b>							
0.14 (60 Hz)	<b>32</b>	<b>38</b>	35	3.9	43.30 ★	<b>2KJ1101 - ■CB13 - ■■B2</b>		10
	<b>36</b>	<b>43</b>	32	4.4	38.45	<b>2KJ1101 - ■CB13 - ■■A2</b>		10
	<b>42</b>	<b>50</b>	28	5.1	33.71 ★	<b>2KJ1101 - ■CB13 - ■■X1</b>		10
	<b>46</b>	<b>55</b>	25	5.7	30.16	<b>2KJ1101 - ■CB13 - ■■W1</b>		10
	<b>52</b>	<b>62</b>	22	6.4	26.77 ★	<b>2KJ1101 - ■CB13 - ■■V1</b>		10
	<b>60</b>	<b>72</b>	19	7.3	23.46	<b>2KJ1101 - ■CB13 - ■■U1</b>		10
	<b>68</b>	<b>82</b>	17	8.3	20.63 ★	<b>2KJ1101 - ■CB13 - ■■T1</b>		10
	<b>75</b>	<b>90</b>	15	9.2	18.63	<b>2KJ1101 - ■CB13 - ■■S1</b>		10
	<b>86</b>	<b>103</b>	13	10.5	16.24 ★	<b>2KJ1101 - ■CB13 - ■■R1</b>		10
	<b>96</b>	<b>115</b>	12	11.7	14.58	<b>2KJ1101 - ■CB13 - ■■Q1</b>		10
	<b>106</b>	<b>127</b>	11	13.0	13.17 ★	<b>2KJ1101 - ■CB13 - ■■P1</b>		10
	<b>117</b>	<b>140</b>	9.8	14.3	11.94	<b>2KJ1101 - ■CB13 - ■■N1</b>		10
	<b>D.18-LA71B4</b>							
	<b>10.2</b>	<b>12.2</b>	112	0.80	136.71 ★	<b>2KJ1200 - ■CB13 - ■■L1</b>		9
	<b>11.3</b>	<b>13.6</b>	102	0.88	124.29	<b>2KJ1200 - ■CB13 - ■■K1</b>		9
	<b>12.7</b>	<b>15.2</b>	90	1.0	110.01 ★	<b>2KJ1200 - ■CB13 - ■■J1</b>		9
	<b>15.2</b>	<b>18.2</b>	75	1.2	92.14	<b>2KJ1200 - ■CB13 - ■■H1</b>		9
	<b>17.8</b>	<b>21</b>	64	1.4	78.56 ★	<b>2KJ1200 - ■CB13 - ■■G1</b>		9
	<b>21</b>	<b>25</b>	55	1.6	66.78 ★	<b>2KJ1200 - ■CB13 - ■■F1</b>		9
	<b>24</b>	<b>29</b>	48	1.9	58.03	<b>2KJ1200 - ■CB13 - ■■E1</b>		9
	<b>28</b>	<b>34</b>	41	2.2	50.51 ★	<b>2KJ1200 - ■CB13 - ■■D1</b>		9
	<b>Z.18-LA71B4</b>							
	<b>32</b>	<b>38</b>	35	2.5	43.15	<b>2KJ1100 - ■CB13 - ■■U1</b>		9
	<b>38</b>	<b>46</b>	30	3.0	37.23 ★	<b>2KJ1100 - ■CB13 - ■■T1</b>		9
	<b>44</b>	<b>53</b>	26	3.4	31.98	<b>2KJ1100 - ■CB13 - ■■S1</b>		9
	<b>48</b>	<b>58</b>	24	3.7	29.45 ★	<b>2KJ1100 - ■CB13 - ■■R1</b>		9
	<b>52</b>	<b>62</b>	22	4.1	26.77	<b>2KJ1100 - ■CB13 - ■■Q1</b>		9
	<b>59</b>	<b>71</b>	19	4.6	23.69 ★	<b>2KJ1100 - ■CB13 - ■■P1</b>		9
	<b>70</b>	<b>84</b>	16	5.5	19.85	<b>2KJ1100 - ■CB13 - ■■N1</b>		9
	<b>83</b>	<b>100</b>	14	6.5	16.92 ★	<b>2KJ1100 - ■CB13 - ■■M1</b>		9
	<b>97</b>	<b>116</b>	12	7.6	14.38 ★	<b>2KJ1100 - ■CB13 - ■■L1</b>		9
	<b>112</b>	<b>134</b>	10	8.8	12.50	<b>2KJ1100 - ■CB13 - ■■K1</b>		9
	<b>129</b>	<b>155</b>	8.9	9.8	10.88 ★	<b>2KJ1100 - ■CB13 - ■■J1</b>		9
	<b>143</b>	<b>172</b>	8	10.3	9.81	<b>2KJ1100 - ■CB13 - ■■H1</b>		9
	<b>162</b>	<b>194</b>	7.1	11.3	8.66	<b>2KJ1100 - ■CB13 - ■■G1</b>		9
	<b>189</b>	<b>227</b>	6.1	9.1	7.42 ★	<b>2KJ1100 - ■CB13 - ■■F1</b>		9
	<b>217</b>	<b>260</b>	5.3	10.0	6.45	<b>2KJ1100 - ■CB13 - ■■E1</b>		9
	<b>250</b>	<b>300</b>	4.6	11.1	5.61 ★	<b>2KJ1100 - ■CB13 - ■■D1</b>		9
	<b>277</b>	<b>332</b>	4.1	11.8	5.06	<b>2KJ1100 - ■CB13 - ■■C1</b>		9
	<b>313</b>	<b>376</b>	3.7	13.4	4.47	<b>2KJ1100 - ■CB13 - ■■B1</b>		9
<b>0.18 (50 Hz)</b>	<b>D.188-D48-LA71C4</b>							
0.22 (60 Hz)	<b>0.06</b>	<b>0.07</b>	21 556	0.93	22 654	<b>2KJ1236 - ■CC13 - ■■G1</b>		604

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>0.18</b> (50 Hz)	<b>D.188-D48-LA71C4</b>							
0.22 (60 Hz)	<b>0.06</b>	<b>0.07</b>	23 784	0.84	24 996	★	<b>2KJ1236 - ■ CC13 - ■■ H1</b>	604
	<b>0.07</b>	<b>0.08</b>	19 027	1.1	19 997	★	<b>2KJ1236 - ■ CC13 - ■■ F1</b>	604
	<b>0.08</b>	<b>0.1</b>	15 568	1.3	16 361	★	<b>2KJ1236 - ■ CC13 - ■■ D1</b>	604
	<b>0.08</b>	<b>0.1</b>	17 164	1.2	18 039		<b>2KJ1236 - ■ CC13 - ■■ E1</b>	604
	<b>0.09</b>	<b>0.11</b>	14 184	1.4	14 907		<b>2KJ1236 - ■ CC13 - ■■ C1</b>	604
	<b>D.188-Z48-LA71C4</b>							
	<b>0.11</b>	<b>0.13</b>	12 159	1.6	12 504		<b>2KJ1235 - ■ CC13 - ■■ X1</b>	603
	<b>0.12</b>	<b>0.14</b>	10 761	1.9	11 066	★	<b>2KJ1235 - ■ CC13 - ■■ W1</b>	603
	<b>D.168-Z48-LA71C4</b>							
	<b>0.08</b>	<b>0.10</b>	17 036	0.82	17 519		<b>2KJ1232 - ■ CC13 - ■■ A2</b>	459
	<b>0.09</b>	<b>0.11</b>	15 077	0.93	15 504	★	<b>2KJ1232 - ■ CC13 - ■■ X1</b>	459
	<b>0.10</b>	<b>0.12</b>	13 705	1.0	14 094		<b>2KJ1232 - ■ CC13 - ■■ W1</b>	459
	<b>0.11</b>	<b>0.13</b>	12 312	1.1	12 661	★	<b>2KJ1232 - ■ CC13 - ■■ V1</b>	459
	<b>0.13</b>	<b>0.16</b>	10 554	1.3	10 853		<b>2KJ1232 - ■ CC13 - ■■ U1</b>	459
	<b>0.14</b>	<b>0.17</b>	9 548	1.5	9 819	★	<b>2KJ1232 - ■ CC13 - ■■ T1</b>	459
	<b>0.15</b>	<b>0.18</b>	8 814	1.6	9 064		<b>2KJ1232 - ■ CC13 - ■■ S1</b>	459
	<b>0.17</b>	<b>0.20</b>	7 664	1.8	7 881	★	<b>2KJ1232 - ■ CC13 - ■■ R1</b>	459
	<b>0.19</b>	<b>0.23</b>	6 959	2.0	7 156		<b>2KJ1232 - ■ CC13 - ■■ Q1</b>	459
	<b>D.148-Z38-LA71C4</b>							
	<b>0.15</b>	<b>0.18</b>	9 142	0.88	9 401		<b>2KJ1228 - ■ CC13 - ■■ T1</b>	283
	<b>0.17</b>	<b>0.20</b>	8 006	1.0	8 233		<b>2KJ1228 - ■ CC13 - ■■ S1</b>	283
	<b>0.19</b>	<b>0.23</b>	7 081	1.1	7 282		<b>2KJ1228 - ■ CC13 - ■■ R1</b>	283
	<b>0.21</b>	<b>0.25</b>	6 418	1.2	6 600		<b>2KJ1228 - ■ CC13 - ■■ Q1</b>	283
	<b>0.24</b>	<b>0.29</b>	5 665	1.4	5 826		<b>2KJ1228 - ■ CC13 - ■■ P1</b>	283
	<b>0.26</b>	<b>0.31</b>	5 111	1.6	5 256		<b>2KJ1228 - ■ CC13 - ■■ N1</b>	283
	<b>0.29</b>	<b>0.35</b>	4 636	1.7	4 767		<b>2KJ1228 - ■ CC13 - ■■ M1</b>	283
	<b>0.32</b>	<b>0.38</b>	4 223	1.9	4 343		<b>2KJ1228 - ■ CC13 - ■■ L1</b>	283
	<b>D.128-Z38-LA71C4</b>							
	<b>0.21</b>	<b>0.25</b>	6 388	0.8	6 569		<b>2KJ1225 - ■ CC13 - ■■ S1</b>	198
	<b>0.24</b>	<b>0.29</b>	5 650	0.9	5 810	★	<b>2KJ1225 - ■ CC13 - ■■ R1</b>	198
	<b>0.26</b>	<b>0.31</b>	5 121	1.0	5 266		<b>2KJ1225 - ■ CC13 - ■■ Q1</b>	198
	<b>0.30</b>	<b>0.36</b>	4 520	1.1	4 648	★	<b>2KJ1225 - ■ CC13 - ■■ P1</b>	198
	<b>0.33</b>	<b>0.40</b>	4 077	1.3	4 193		<b>2KJ1225 - ■ CC13 - ■■ N1</b>	198
	<b>0.36</b>	<b>0.43</b>	3 698	1.4	3 803	★	<b>2KJ1225 - ■ CC13 - ■■ M1</b>	198
	<b>0.40</b>	<b>0.48</b>	3 369	1.5	3 465		<b>2KJ1225 - ■ CC13 - ■■ L1</b>	198
	<b>0.43</b>	<b>0.52</b>	3 082	1.7	3 169	★	<b>2KJ1225 - ■ CC13 - ■■ K1</b>	198
	<b>0.48</b>	<b>0.58</b>	2 756	1.9	2 834		<b>2KJ1225 - ■ CC13 - ■■ J1</b>	198
	<b>0.53</b>	<b>0.64</b>	2 530	2.0	2 602	★	<b>2KJ1225 - ■ CC13 - ■■ H1</b>	198
	<b>D.108-Z38-LA71C4</b>							
	<b>0.36</b>	<b>0.43</b>	3 692	0.84	3 797		<b>2KJ1223 - ■ CC13 - ■■ A2</b>	127
	<b>0.38</b>	<b>0.46</b>	3 524	0.88	3 624		<b>2KJ1223 - ■ CC13 - ■■ X1</b>	127
	<b>0.42</b>	<b>0.50</b>	3 134	0.99	3 223		<b>2KJ1223 - ■ CC13 - ■■ W1</b>	127
	<b>0.49</b>	<b>0.59</b>	2 719	1.1	2 796		<b>2KJ1223 - ■ CC13 - ■■ V1</b>	127

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>0.18</b> (50 Hz)	<b>D.108-Z38-LA71C4</b>							
0.22 (60 Hz)	<b>0.52</b>	<b>0.62</b>	2 540	1.2	2 612	<b>2KJ1223 - ■ CC13 - ■■ U1</b>		127
	<b>0.60</b>	<b>0.72</b>	2 234	1.4	2 297	<b>2KJ1223 - ■ CC13 - ■■ T1</b>		127
	<b>0.68</b>	<b>0.82</b>	1 957	1.6	2 012	<b>2KJ1223 - ■ CC13 - ■■ S1</b>		127
	<b>0.77</b>	<b>0.92</b>	1 731	1.8	1 780	<b>2KJ1223 - ■ CC13 - ■■ R1</b>		127
	<b>0.85</b>	<b>1.00</b>	1 569	2.0	1 613	<b>2KJ1223 - ■ CC13 - ■■ Q1</b>		127
	<b>D.88-Z28-LA71C4</b>							
	<b>0.66</b>	<b>0.79</b>	2 027	0.83	2 084	★ <b>2KJ1218 - ■ CC13 - ■■ T1</b>		76
	<b>0.74</b>	<b>0.89</b>	1 791	0.94	1 842	<b>2KJ1218 - ■ CC13 - ■■ S1</b>		76
	<b>0.80</b>	<b>0.96</b>	1 654	1.0	1 701	★ <b>2KJ1218 - ■ CC13 - ■■ R1</b>		76
	<b>0.94</b>	<b>1.1</b>	1 425	1.2	1 465	<b>2KJ1218 - ■ CC13 - ■■ Q1</b>		76
	<b>1.0</b>	<b>1.2</b>	1 294	1.3	1 331	★ <b>2KJ1218 - ■ CC13 - ■■ P1</b>		76
	<b>1.1</b>	<b>1.3</b>	1 177	1.4	1 210	★ <b>2KJ1218 - ■ CC13 - ■■ N1</b>		76
	<b>1.2</b>	<b>1.4</b>	1 067	1.6	1 097	<b>2KJ1218 - ■ CC13 - ■■ M1</b>		76
	<b>1.4</b>	<b>1.7</b>	971	1.7	999	★ <b>2KJ1218 - ■ CC13 - ■■ L1</b>		76
	<b>1.6</b>	<b>1.9</b>	859	2.0	883	<b>2KJ1218 - ■ CC13 - ■■ K1</b>		76
	<b>D.68-Z28-LA71C4</b>							
	<b>1.4</b>	<b>1.7</b>	969	0.83	996	<b>2KJ1214 - ■ CC13 - ■■ M1</b>		46
	<b>1.5</b>	<b>1.8</b>	881	0.91	906	★ <b>2KJ1214 - ■ CC13 - ■■ L1</b>		46
	<b>1.7</b>	<b>2.0</b>	779	1.0	801	<b>2KJ1214 - ■ CC13 - ■■ K1</b>		46
	<b>1.9</b>	<b>2.3</b>	720	1.1	740	★ <b>2KJ1214 - ■ CC13 - ■■ J1</b>		46
	<b>2.2</b>	<b>2.6</b>	619	1.3	637	<b>2KJ1214 - ■ CC13 - ■■ H1</b>		46
	<b>D.68-LA80S8</b>							
	<b>2.4</b>	<b>2.9</b>	716	1.1	281.01	<b>2KJ1204 - ■ DB13 - ■■ U1</b>	<b>P02</b>	50
	<b>2.7</b>	<b>3.2</b>	633	1.3	248.68	★ <b>2KJ1204 - ■ DB13 - ■■ T1</b>	<b>P02</b>	50
	<b>D.68-LA71S6</b>							
	<b>3.0</b>	<b>3.6</b>	568	1.4	281.01	<b>2KJ1204 - ■ CD13 - ■■ U1</b>	<b>P01</b>	46
	<b>3.4</b>	<b>4.1</b>	503	1.6	248.68	★ <b>2KJ1204 - ■ CD13 - ■■ T1</b>	<b>P01</b>	46
	<b>3.8</b>	<b>4.6</b>	457	1.7	226.07	<b>2KJ1204 - ■ CD13 - ■■ S1</b>	<b>P01</b>	46
	<b>4.2</b>	<b>5.0</b>	411	1.9	203.09	★ <b>2KJ1204 - ■ CD13 - ■■ R1</b>	<b>P01</b>	46
	<b>D.48-Z28-LA71C4</b>							
	<b>2.6</b>	<b>3.1</b>	519	0.87	534	<b>2KJ1212 - ■ CC13 - ■■ K1</b>		29
	<b>2.8</b>	<b>3.4</b>	479	0.94	493	★ <b>2KJ1212 - ■ CC13 - ■■ J1</b>		29
	<b>D.48-LA80S8</b>							
	<b>3.2</b>	<b>3.8</b>	532	0.85	208.77	★ <b>2KJ1203 - ■ DB13 - ■■ S1</b>	<b>P02</b>	31
	<b>3.6</b>	<b>4.3</b>	473	0.95	185.66	<b>2KJ1203 - ■ DB13 - ■■ R1</b>	<b>P02</b>	31
	<b>D.48-LA71S6</b>							
	<b>4.1</b>	<b>4.9</b>	422	1.1	208.77	★ <b>2KJ1203 - ■ CD13 - ■■ S1</b>	<b>P01</b>	27
	<b>4.6</b>	<b>5.5</b>	375	1.2	185.66	<b>2KJ1203 - ■ CD13 - ■■ R1</b>	<b>P01</b>	27
	<b>5.3</b>	<b>6.4</b>	326	1.4	161.05	★ <b>2KJ1203 - ■ CD13 - ■■ Q1</b>	<b>P01</b>	27
	<b>5.6</b>	<b>6.7</b>	304	1.5	150.48	<b>2KJ1203 - ■ CD13 - ■■ P1</b>	<b>P01</b>	27
	<b>D.48-LA71C4</b>							
	<b>6.6</b>	<b>7.9</b>	262	1.7	208.77	★ <b>2KJ1203 - ■ CC13 - ■■ S1</b>		27
	<b>7.4</b>	<b>8.9</b>	233	1.9	185.66	<b>2KJ1203 - ■ CC13 - ■■ R1</b>		27

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
0.18 (50 Hz) 0.22 (60 Hz)	<b>D.38-LA71S6</b>							
	<b>6.4</b>	<b>7.7</b>	270	0.81	133.57	<b>2KJ1202 - CC13 - P1</b>	<b>P01</b>	18
	<b>D.38-LA71C4</b>							
	<b>7.1</b>	<b>8.5</b>	241	0.91	191.75 ★	<b>2KJ1202 - CC13 - S1</b>		18
	<b>8.0</b>	<b>9.6</b>	214	1.0	170.24	<b>2KJ1202 - CC13 - R1</b>		18
	<b>9.2</b>	<b>11.0</b>	187	1.2	149.26 ★	<b>2KJ1202 - CC13 - Q1</b>		18
	<b>10.3</b>	<b>12.4</b>	168	1.3	133.57	<b>2KJ1202 - CC13 - P1</b>		18
	<b>11.6</b>	<b>13.9</b>	149	1.5	118.55 ★	<b>2KJ1202 - CC13 - N1</b>		18
	<b>13.2</b>	<b>15.8</b>	130	1.7	103.89	<b>2KJ1202 - CC13 - M1</b>		18
	<b>15.0</b>	<b>18.0</b>	115	1.9	91.34 ★	<b>2KJ1202 - CC13 - L1</b>		18
	<b>16.6</b>	<b>19.9</b>	104	2.1	82.52	<b>2KJ1202 - CC13 - K1</b>		18
	<b>D.28-LA71C4</b>							
	<b>10.4</b>	<b>12.5</b>	166	0.84	132.35 ★	<b>2KJ1201 - CC13 - H1</b>		10
	<b>12.4</b>	<b>14.9</b>	139	1.0	110.86	<b>2KJ1201 - CC13 - G1</b>		10
	<b>14.5</b>	<b>17.4</b>	119	1.2	94.52 ★	<b>2KJ1201 - CC13 - F1</b>		10
	<b>17.1</b>	<b>21</b>	101	1.4	80.34 ★	<b>2KJ1201 - CC13 - E1</b>		10
	<b>19.6</b>	<b>24</b>	88	1.6	69.82	<b>2KJ1201 - CC13 - D1</b>		10
	<b>22</b>	<b>26</b>	76	1.8	60.77 ★	<b>2KJ1201 - CC13 - C1</b>		10
	<b>Z.28-LA71C4</b>							
	<b>27</b>	<b>32</b>	64	2.2	51.35	<b>2KJ1101 - CC13 - C2</b>		10
	<b>32</b>	<b>38</b>	54	2.6	43.30 ★	<b>2KJ1101 - CC13 - B2</b>		10
	<b>36</b>	<b>43</b>	48	2.9	38.45	<b>2KJ1101 - CC13 - A2</b>		10
	<b>41</b>	<b>49</b>	42	3.3	33.71 ★	<b>2KJ1101 - CC13 - X1</b>		10
	<b>45</b>	<b>54</b>	38	3.7	30.16	<b>2KJ1101 - CC13 - W1</b>		10
	<b>51</b>	<b>61</b>	34	4.2	26.77 ★	<b>2KJ1101 - CC13 - V1</b>		10
	<b>58</b>	<b>70</b>	29	4.8	23.46	<b>2KJ1101 - CC13 - U1</b>		10
	<b>66</b>	<b>79</b>	26	5.4	20.63 ★	<b>2KJ1101 - CC13 - T1</b>		10
	<b>74</b>	<b>89</b>	23	6.0	18.63	<b>2KJ1101 - CC13 - S1</b>		10
	<b>84</b>	<b>101</b>	20	6.9	16.24 ★	<b>2KJ1101 - CC13 - R1</b>		10
	<b>94</b>	<b>113</b>	18	7.7	14.58	<b>2KJ1101 - CC13 - Q1</b>		10
	<b>104</b>	<b>125</b>	16	8.5	13.17 ★	<b>2KJ1101 - CC13 - P1</b>		10
	<b>115</b>	<b>138</b>	15	9.3	11.94	<b>2KJ1101 - CC13 - N1</b>		10
	<b>126</b>	<b>151</b>	14	10.3	10.87 ★	<b>2KJ1101 - CC13 - M1</b>		10
	<b>143</b>	<b>172</b>	12	11.6	9.61	<b>2KJ1101 - CC13 - L1</b>		10
	<b>154</b>	<b>185</b>	11	12.6	8.87 ★	<b>2KJ1101 - CC13 - K1</b>		10
	<b>179</b>	<b>215</b>	9.6	14.2	7.64	<b>2KJ1101 - CC13 - J1</b>		10
	<b>217</b>	<b>260</b>	7.9	12.0	6.31 ★	<b>2KJ1101 - CC13 - G1</b>		10
	<b>240</b>	<b>288</b>	7.2	13.0	5.72	<b>2KJ1101 - CC13 - F1</b>		10
	<b>263</b>	<b>316</b>	6.5	14.1	5.21 ★	<b>2KJ1101 - CC13 - E1</b>		10
	<b>D.18-LA71C4</b>							
	<b>17.4</b>	<b>21</b>	99	0.91	78.56 ★	<b>2KJ1200 - CC13 - G1</b>		9
	<b>20</b>	<b>24</b>	84	1.1	66.78 ★	<b>2KJ1200 - CC13 - F1</b>		9
	<b>24</b>	<b>29</b>	73	1.2	58.03	<b>2KJ1200 - CC13 - E1</b>		9
	<b>27</b>	<b>32</b>	63	1.4	50.51 ★	<b>2KJ1200 - CC13 - D1</b>		9

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>0.18</b> (50 Hz)	<b>Z.18-LA71C4</b>							
0.22 (60 Hz)	<b>32</b>	<b>38</b>	54	1.7	43.15	<b>2KJ1100 - CC13 - U1</b>		9
	<b>37</b>	<b>44</b>	47	1.9	37.23 ★	<b>2KJ1100 - CC13 - T1</b>		9
	<b>43</b>	<b>52</b>	40	2.2	31.98	<b>2KJ1100 - CC13 - S1</b>		9
	<b>46</b>	<b>55</b>	37	2.4	29.45 ★	<b>2KJ1100 - CC13 - R1</b>		9
	<b>51</b>	<b>61</b>	34	2.7	26.77	<b>2KJ1100 - CC13 - Q1</b>		9
	<b>58</b>	<b>70</b>	30	3.0	23.69 ★	<b>2KJ1100 - CC13 - P1</b>		9
	<b>69</b>	<b>83</b>	25	3.6	19.85	<b>2KJ1100 - CC13 - N1</b>		9
	<b>81</b>	<b>97</b>	21	4.2	16.92 ★	<b>2KJ1100 - CC13 - M1</b>		9
	<b>95</b>	<b>114</b>	18	5.0	14.38 ★	<b>2KJ1100 - CC13 - L1</b>		9
	<b>110</b>	<b>132</b>	16	5.7	12.50	<b>2KJ1100 - CC13 - K1</b>		9
	<b>126</b>	<b>151</b>	14	6.4	10.88 ★	<b>2KJ1100 - CC13 - J1</b>		9
	<b>140</b>	<b>168</b>	12	6.7	9.81	<b>2KJ1100 - CC13 - H1</b>		9
	<b>158</b>	<b>190</b>	11	7.4	8.66	<b>2KJ1100 - CC13 - G1</b>		9
	<b>185</b>	<b>222</b>	9.3	5.9	7.42 ★	<b>2KJ1100 - CC13 - F1</b>		9
	<b>212</b>	<b>254</b>	8.1	6.5	6.45	<b>2KJ1100 - CC13 - E1</b>		9
	<b>244</b>	<b>293</b>	7.0	7.2	5.61 ★	<b>2KJ1100 - CC13 - D1</b>		9
	<b>271</b>	<b>325</b>	6.3	7.7	5.06	<b>2KJ1100 - CC13 - C1</b>		9
	<b>306</b>	<b>367</b>	5.6	8.7	4.47	<b>2KJ1100 - CC13 - B1</b>		9
	<b>383</b>	<b>460</b>	4.5	10.2	3.58 ★	<b>2KJ1100 - CC13 - A1</b>		9
	<b>E.38-LA71C4</b>							
	<b>147</b>	<b>176</b>	12	2.7	9.33 ★	<b>2KJ1001 - CC13 - S1</b>		13
	<b>165</b>	<b>198</b>	10	3.1	8.3	<b>2KJ1001 - CC13 - R1</b>		13
	<b>190</b>	<b>228</b>	9	4.2	7.2 ★	<b>2KJ1001 - CC13 - Q1</b>		13
<b>0.25</b> (50 Hz)	<b>D.188-D48-LA71S4</b>							
0.3 (60 Hz)	<b>0.08</b>	<b>0.10</b>	23 171	0.86	16 361	★ <b>2KJ1236 - CD13 - D1</b>		604
	<b>0.09</b>	<b>0.11</b>	21 112	0.95	14 907	<b>2KJ1236 - CD13 - C1</b>		604
	<b>D.188-Z48-LA71S4</b>							
	<b>0.11</b>	<b>0.13</b>	18 098	1.1	12 504	<b>2KJ1235 - CD13 - X1</b>		603
	<b>0.12</b>	<b>0.14</b>	16 016	1.2	11 066	★ <b>2KJ1235 - CD13 - W1</b>		603
	<b>0.15</b>	<b>0.18</b>	13 080	1.5	9 037	★ <b>2KJ1235 - CD13 - V1</b>		603
	<b>0.17</b>	<b>0.20</b>	11 211	1.8	7 746	<b>2KJ1235 - CD13 - U1</b>		603
	<b>0.19</b>	<b>0.23</b>	10 143	2.0	7 008	★ <b>2KJ1235 - CD13 - T1</b>		603
	<b>D.168-Z48-LA71S4</b>							
	<b>0.12</b>	<b>0.14</b>	15 708	0.89	10 853	<b>2KJ1232 - CD13 - U1</b>		459
	<b>0.14</b>	<b>0.17</b>	14 212	0.99	9 819	★ <b>2KJ1232 - CD13 - T1</b>		459
	<b>0.15</b>	<b>0.18</b>	13 119	1.1	9 064	<b>2KJ1232 - CD13 - S1</b>		459
	<b>0.17</b>	<b>0.20</b>	11 407	1.2	7 881	★ <b>2KJ1232 - CD13 - R1</b>		459
	<b>0.19</b>	<b>0.23</b>	10 357	1.4	7 156	<b>2KJ1232 - CD13 - Q1</b>		459
	<b>0.21</b>	<b>0.25</b>	9 457	1.5	6 534	★ <b>2KJ1232 - CD13 - P1</b>		459
	<b>0.22</b>	<b>0.26</b>	8 677	1.6	5 995	<b>2KJ1232 - CD13 - N1</b>		459
	<b>0.24</b>	<b>0.29</b>	7 994	1.8	5 523	★ <b>2KJ1232 - CD13 - M1</b>		459
	<b>0.27</b>	<b>0.32</b>	7 260	1.9	5 016	<b>2KJ1232 - CD13 - L1</b>		459

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>0.25</b> (50 Hz)	<b>D.148-Z38-LA71S4</b>							
0.3 (60 Hz)	<b>0.2</b>	<b>0.24</b>	9 553	0.84	6 600	<b>2KJ1228 - ■ CD13 - ■■ Q1</b>		283
	<b>0.23</b>	<b>0.28</b>	8 432	0.95	5 826	<b>2KJ1228 - ■ CD13 - ■■ P1</b>		283
	<b>0.26</b>	<b>0.31</b>	7 607	1.1	5 256	<b>2KJ1228 - ■ CD13 - ■■ N1</b>		283
	<b>0.28</b>	<b>0.34</b>	6 900	1.2	4 767	<b>2KJ1228 - ■ CD13 - ■■ M1</b>		283
	<b>0.31</b>	<b>0.37</b>	6 286	1.3	4 343	<b>2KJ1228 - ■ CD13 - ■■ L1</b>		283
	<b>0.34</b>	<b>0.41</b>	5 749	1.4	3 972	<b>2KJ1228 - ■ CD13 - ■■ K1</b>		283
	<b>0.38</b>	<b>0.46</b>	5 141	1.6	3 552	<b>2KJ1228 - ■ CD13 - ■■ J1</b>		283
	<b>0.41</b>	<b>0.49</b>	4 720	1.7	3 261	<b>2KJ1228 - ■ CD13 - ■■ H1</b>		283
	<b>0.46</b>	<b>0.55</b>	4 254	1.9	2 939	<b>2KJ1228 - ■ CD13 - ■■ G1</b>		283
	<b>D.128-Z38-LA71S4</b>							
	<b>0.32</b>	<b>0.38</b>	6 069	0.84	4 193	<b>2KJ1225 - ■ CD13 - ■■ N1</b>		198
	<b>0.36</b>	<b>0.43</b>	5 504	0.93	3 803	★ <b>2KJ1225 - ■ CD13 - ■■ M1</b>		198
	<b>0.39</b>	<b>0.47</b>	5 015	1.0	3 465	<b>2KJ1225 - ■ CD13 - ■■ L1</b>		198
	<b>0.43</b>	<b>0.52</b>	4 587	1.1	3 169	★ <b>2KJ1225 - ■ CD13 - ■■ K1</b>		198
	<b>0.48</b>	<b>0.58</b>	4 102	1.2	2 834	<b>2KJ1225 - ■ CD13 - ■■ J1</b>		198
	<b>0.52</b>	<b>0.62</b>	3 766	1.4	2 602	★ <b>2KJ1225 - ■ CD13 - ■■ H1</b>		198
	<b>0.58</b>	<b>0.7</b>	3 394	1.5	2 345	<b>2KJ1225 - ■ CD13 - ■■ G1</b>		198
	<b>0.67</b>	<b>0.8</b>	2 911	1.8	2 011	★ <b>2KJ1225 - ■ CD13 - ■■ E1</b>		198
	<b>0.67</b>	<b>0.8</b>	2 919	1.7	2 017	★ <b>2KJ1225 - ■ CD13 - ■■ F1</b>		198
	<b>0.75</b>	<b>0.9</b>	2 602	2.0	1 798	<b>2KJ1225 - ■ CD13 - ■■ D1</b>		198
	<b>D.108-Z38-LA71S4</b>							
	<b>0.52</b>	<b>0.62</b>	3 780	0.82	2 612	<b>2KJ1223 - ■ CD13 - ■■ U1</b>		127
	<b>0.59</b>	<b>0.71</b>	3 325	0.93	2 297	<b>2KJ1223 - ■ CD13 - ■■ T1</b>		127
	<b>0.67</b>	<b>0.8</b>	2 912	1.1	2 012	<b>2KJ1223 - ■ CD13 - ■■ S1</b>		127
	<b>0.76</b>	<b>0.91</b>	2 576	1.2	1 780	<b>2KJ1223 - ■ CD13 - ■■ R1</b>		127
	<b>0.84</b>	<b>1.0</b>	2 335	1.3	1 613	<b>2KJ1223 - ■ CD13 - ■■ Q1</b>		127
	<b>0.95</b>	<b>1.1</b>	2 061	1.5	1 424	<b>2KJ1223 - ■ CD13 - ■■ P1</b>		127
	<b>1.1</b>	<b>1.3</b>	1 858	1.7	1 284	<b>2KJ1223 - ■ CD13 - ■■ N1</b>		127
	<b>1.2</b>	<b>1.4</b>	1 686	1.8	1 165	<b>2KJ1223 - ■ CD13 - ■■ M1</b>		127
	<b>1.3</b>	<b>1.6</b>	1 536	2.0	1 061	<b>2KJ1223 - ■ CD13 - ■■ L1</b>		127
	<b>D.88-Z28-LA71S4</b>							
	<b>1.0</b>	<b>1.2</b>	1 926	0.87	1 331	★ <b>2KJ1218 - ■ CD13 - ■■ P1</b>		76
	<b>1.1</b>	<b>1.3</b>	1 751	0.96	1 210	★ <b>2KJ1218 - ■ CD13 - ■■ N1</b>		76
	<b>1.2</b>	<b>1.4</b>	1 588	1.1	1 097	<b>2KJ1218 - ■ CD13 - ■■ M1</b>		76
	<b>1.4</b>	<b>1.7</b>	1 446	1.2	999	★ <b>2KJ1218 - ■ CD13 - ■■ L1</b>		76
	<b>1.5</b>	<b>1.8</b>	1 278	1.3	883	<b>2KJ1218 - ■ CD13 - ■■ K1</b>		76
	<b>1.7</b>	<b>2.0</b>	1 180	1.4	815	★ <b>2KJ1218 - ■ CD13 - ■■ J1</b>		76
	<b>1.9</b>	<b>2.3</b>	1 016	1.7	702	<b>2KJ1218 - ■ CD13 - ■■ H1</b>		76
	<b>2.1</b>	<b>2.5</b>	936	1.8	647	★ <b>2KJ1218 - ■ CD13 - ■■ G1</b>		76
	<b>D.88-LA80M8</b>							
	<b>2.3</b>	<b>2.8</b>	1 047	1.6	300.41	★ <b>2KJ1205 - ■ DC13 - ■■ V1</b>	<b>P02</b>	82
	<b>2.5</b>	<b>3.0</b>	944	1.8	270.90	<b>2KJ1205 - ■ DC13 - ■■ U1</b>	<b>P02</b>	82
	<b>2.8</b>	<b>3.4</b>	851	2.0	244.29	★ <b>2KJ1205 - ■ DC13 - ■■ T1</b>	<b>P02</b>	82

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R



# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
0.25 (50 Hz) 0.3 (60 Hz)	<b>D.88-LA80M8</b>							
	<b>2.9</b>	<b>3.5</b>	834	2.0	300.41 ★	<b>2KJ1205 - ■CE13 - ■■V1</b>	<b>P02</b>	78
	<b>D.68-Z28-LA71S4</b>							
	<b>2.1</b>	<b>2.5</b>	922	0.87	637	<b>2KJ1214 - ■CD13 - ■■H1</b>		46
	<b>2.2</b>	<b>2.6</b>	879	0.91	607 ★	<b>2KJ1214 - ■CD13 - ■■G1</b>		46
	<b>D.68-LA80M8</b>							
	<b>2.4</b>	<b>2.9</b>	979	0.82	281.01	<b>2KJ1204 - ■DC13 - ■■U1</b>	<b>P02</b>	50
	<b>2.8</b>	<b>3.4</b>	867	0.92	248.68 ★	<b>2KJ1204 - ■DC13 - ■■T1</b>	<b>P02</b>	50
	<b>D.68-LA71M6</b>							
	<b>3.1</b>	<b>3.7</b>	780	1.0	281.01	<b>2KJ1204 - ■CE13 - ■■U1</b>	<b>P01</b>	46
	<b>3.5</b>	<b>4.2</b>	690	1.2	248.68 ★	<b>2KJ1204 - ■CE13 - ■■T1</b>	<b>P01</b>	46
	<b>3.8</b>	<b>4.6</b>	628	1.3	226.07	<b>2KJ1204 - ■CE13 - ■■S1</b>	<b>P01</b>	46
	<b>4.2</b>	<b>5.0</b>	564	1.4	203.09 ★	<b>2KJ1204 - ■CE13 - ■■R1</b>	<b>P01</b>	46
	<b>D.68-LA71S4</b>							
	<b>4.8</b>	<b>5.8</b>	497	1.6	281.01	<b>2KJ1204 - ■CD13 - ■■U1</b>		46
	<b>5.4</b>	<b>6.5</b>	440	1.8	248.68 ★	<b>2KJ1204 - ■CD13 - ■■T1</b>		46
	<b>6.0</b>	<b>7.2</b>	400	2.0	226.07	<b>2KJ1204 - ■CD13 - ■■S1</b>		46
	<b>D.48-LA71M6</b>							
	<b>4.6</b>	<b>5.5</b>	515	0.87	185.66	<b>2KJ1203 - ■CE13 - ■■R1</b>	<b>P01</b>	27
	<b>5.3</b>	<b>6.4</b>	447	1.0	161.05 ★	<b>2KJ1203 - ■CE13 - ■■Q1</b>	<b>P01</b>	27
	<b>5.7</b>	<b>6.8</b>	418	1.1	150.48	<b>2KJ1203 - ■CE13 - ■■P1</b>	<b>P01</b>	27
	<b>D.48-LA71S4</b>							
	<b>6.5</b>	<b>7.8</b>	369	1.2	208.77 ★	<b>2KJ1203 - ■CD13 - ■■S1</b>		27
	<b>7.3</b>	<b>8.8</b>	328	1.4	185.66	<b>2KJ1203 - ■CD13 - ■■R1</b>		27
	<b>8.4</b>	<b>10.1</b>	285	1.6	161.05 ★	<b>2KJ1203 - ■CD13 - ■■Q1</b>		27
	<b>9.0</b>	<b>10.8</b>	266	1.7	150.48	<b>2KJ1203 - ■CD13 - ■■P1</b>		27
	<b>10.2</b>	<b>12.2</b>	234	1.9	132.34 ★	<b>2KJ1203 - ■CD13 - ■■N1</b>		27
	<b>11.6</b>	<b>13.9</b>	205	2.2	115.91	<b>2KJ1203 - ■CD13 - ■■M1</b>		27
	<b>D.38-LA71S4</b>							
	<b>9.0</b>	<b>10.8</b>	264	0.83	149.26 ★	<b>2KJ1202 - ■CD13 - ■■Q1</b>		18
	<b>10.1</b>	<b>12.1</b>	236	0.93	133.57	<b>2KJ1202 - ■CD13 - ■■P1</b>		18
	<b>11.4</b>	<b>13.7</b>	210	1.0	118.55 ★	<b>2KJ1202 - ■CD13 - ■■N1</b>		18
	<b>13.0</b>	<b>15.6</b>	184	1.2	103.89	<b>2KJ1202 - ■CD13 - ■■M1</b>		18
	<b>14.8</b>	<b>17.8</b>	162	1.4	91.34 ★	<b>2KJ1202 - ■CD13 - ■■L1</b>		18
	<b>16.4</b>	<b>19.7</b>	146	1.5	82.52	<b>2KJ1202 - ■CD13 - ■■K1</b>		18
	<b>18.8</b>	<b>23</b>	127	1.7	71.91 ★	<b>2KJ1202 - ■CD13 - ■■J1</b>		18
	<b>21</b>	<b>25</b>	114	1.9	64.58	<b>2KJ1202 - ■CD13 - ■■H1</b>		18
	<b>23</b>	<b>28</b>	103	2.1	58.30 ★	<b>2KJ1202 - ■CD13 - ■■G1</b>		18
	<b>26</b>	<b>31</b>	94	2.4	52.86	<b>2KJ1202 - ■CD13 - ■■F1</b>		18
	<b>Z.38-LA71S4</b>							
	<b>31</b>	<b>37</b>	78	2.3	44.12 ★	<b>2KJ1102 - ■CD13 - ■■A2</b>		17
	<b>D.28-LA71S4</b>							
	<b>14.3</b>	<b>17.2</b>	167	0.84	94.52 ★	<b>2KJ1201 - ■CD13 - ■■F1</b>		10
	<b>16.8</b>	<b>20</b>	142	0.99	80.34 ★	<b>2KJ1201 - ■CD13 - ■■E1</b>		10

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
0.25 (50 Hz) 0.3 (60 Hz)	<b>D.28-LA71S4</b>							
	<b>19.3</b>	<b>23</b>	123	1.1	69.82	<b>2KJ1201 - ■ CD13 - ■■ D1</b>		10
	<b>22</b>	<b>26</b>	107	1.3	60.77 ★	<b>2KJ1201 - ■ CD13 - ■■ C1</b>		10
	<b>Z.28-LA71S4</b>							
	<b>26</b>	<b>31</b>	91	1.5	51.35	<b>2KJ1101 - ■ CD13 - ■■ C2</b>		10
	<b>31</b>	<b>37</b>	77	1.8	43.30 ★	<b>2KJ1101 - ■ CD13 - ■■ B2</b>		10
	<b>35</b>	<b>42</b>	68	2.1	38.45	<b>2KJ1101 - ■ CD13 - ■■ A2</b>		10
	<b>40</b>	<b>48</b>	60	2.3	33.71 ★	<b>2KJ1101 - ■ CD13 - ■■ X1</b>		10
	<b>45</b>	<b>54</b>	53	2.6	30.16	<b>2KJ1101 - ■ CD13 - ■■ W1</b>		10
	<b>50</b>	<b>60</b>	47	3.0	26.77 ★	<b>2KJ1101 - ■ CD13 - ■■ V1</b>		10
	<b>58</b>	<b>70</b>	42	3.4	23.46	<b>2KJ1101 - ■ CD13 - ■■ U1</b>		10
	<b>65</b>	<b>78</b>	36	3.8	20.63 ★	<b>2KJ1101 - ■ CD13 - ■■ T1</b>		10
	<b>72</b>	<b>86</b>	33	4.2	18.63	<b>2KJ1101 - ■ CD13 - ■■ S1</b>		10
	<b>83</b>	<b>100</b>	29	4.9	16.24 ★	<b>2KJ1101 - ■ CD13 - ■■ R1</b>		10
	<b>93</b>	<b>112</b>	26	5.4	14.58	<b>2KJ1101 - ■ CD13 - ■■ Q1</b>		10
	<b>103</b>	<b>124</b>	23	6.0	13.17 ★	<b>2KJ1101 - ■ CD13 - ■■ P1</b>		10
	<b>113</b>	<b>136</b>	21	6.6	11.94	<b>2KJ1101 - ■ CD13 - ■■ N1</b>		10
	<b>124</b>	<b>149</b>	19	7.3	10.87 ★	<b>2KJ1101 - ■ CD13 - ■■ M1</b>		10
	<b>140</b>	<b>168</b>	17	8.2	9.61	<b>2KJ1101 - ■ CD13 - ■■ L1</b>		10
	<b>152</b>	<b>182</b>	16	8.9	8.87 ★	<b>2KJ1101 - ■ CD13 - ■■ K1</b>		10
	<b>177</b>	<b>212</b>	14	10.1	7.64	<b>2KJ1101 - ■ CD13 - ■■ J1</b>		10
	<b>195</b>	<b>234</b>	12	10.8	6.94 ★	<b>2KJ1101 - ■ CD13 - ■■ H1</b>		10
	<b>214</b>	<b>257</b>	11	8.5	6.31 ★	<b>2KJ1101 - ■ CD13 - ■■ G1</b>		10
	<b>236</b>	<b>283</b>	10	9.2	5.72	<b>2KJ1101 - ■ CD13 - ■■ F1</b>		10
	<b>259</b>	<b>311</b>	9.2	10.0	5.21 ★	<b>2KJ1101 - ■ CD13 - ■■ E1</b>		10
	<b>293</b>	<b>352</b>	8.1	10.8	4.60	<b>2KJ1101 - ■ CD13 - ■■ D1</b>		10
	<b>318</b>	<b>382</b>	7.5	12.0	4.25 ★	<b>2KJ1101 - ■ CD13 - ■■ C1</b>		10
	<b>369</b>	<b>443</b>	6.5	12.4	3.66	<b>2KJ1101 - ■ CD13 - ■■ B1</b>		10
	<b>405</b>	<b>486</b>	5.9	13.1	3.33 ★	<b>2KJ1101 - ■ CD13 - ■■ A1</b>		10
	<b>D.18-LA71S4</b>							
	<b>23</b>	<b>28</b>	103	0.88	58.03	<b>2KJ1200 - ■ CD13 - ■■ E1</b>		9
	<b>27</b>	<b>32</b>	89	1.0	50.51 ★	<b>2KJ1200 - ■ CD13 - ■■ D1</b>		9
	<b>Z.18-LA71S4</b>							
	<b>31</b>	<b>37</b>	76	1.2	43.15	<b>2KJ1100 - ■ CD13 - ■■ U1</b>		9
	<b>36</b>	<b>43</b>	66	1.4	37.23 ★	<b>2KJ1100 - ■ CD13 - ■■ T1</b>		9
	<b>42</b>	<b>50</b>	57	1.6	31.98	<b>2KJ1100 - ■ CD13 - ■■ S1</b>		9
	<b>46</b>	<b>55</b>	52	1.7	29.45 ★	<b>2KJ1100 - ■ CD13 - ■■ R1</b>		9
	<b>50</b>	<b>60</b>	47	1.9	26.77	<b>2KJ1100 - ■ CD13 - ■■ Q1</b>		9
	<b>57</b>	<b>68</b>	42	2.1	23.69 ★	<b>2KJ1100 - ■ CD13 - ■■ P1</b>		9
	<b>68</b>	<b>82</b>	35	2.6	19.85	<b>2KJ1100 - ■ CD13 - ■■ N1</b>		9
	<b>80</b>	<b>96</b>	30	3.0	16.92 ★	<b>2KJ1100 - ■ CD13 - ■■ M1</b>		9
	<b>94</b>	<b>113</b>	25	3.5	14.38 ★	<b>2KJ1100 - ■ CD13 - ■■ L1</b>		9
	<b>108</b>	<b>130</b>	22	4.1	12.50	<b>2KJ1100 - ■ CD13 - ■■ K1</b>		9
	<b>124</b>	<b>149</b>	19	4.5	10.88 ★	<b>2KJ1100 - ■ CD13 - ■■ J1</b>		9

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTIX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
0.25 (50 Hz) 0.3 (60 Hz)	<b>Z.18-LA71S4</b>							
	<b>138</b>	<b>166</b>	17	4.8	9.81	<b>2KJ1100 - ■CD13 - ■■H1</b>		9
	<b>156</b>	<b>187</b>	15	5.2	8.66	<b>2KJ1100 - ■CD13 - ■■G1</b>		9
	<b>182</b>	<b>218</b>	13	4.2	7.42 ★	<b>2KJ1100 - ■CD13 - ■■F1</b>		9
	<b>209</b>	<b>251</b>	11	4.6	6.45	<b>2KJ1100 - ■CD13 - ■■E1</b>		9
	<b>241</b>	<b>289</b>	9.9	5.1	5.61 ★	<b>2KJ1100 - ■CD13 - ■■D1</b>		9
	<b>267</b>	<b>320</b>	8.9	5.5	5.06	<b>2KJ1100 - ■CD13 - ■■C1</b>		9
	<b>302</b>	<b>362</b>	7.9	6.2	4.47	<b>2KJ1100 - ■CD13 - ■■B1</b>		9
	<b>377</b>	<b>452</b>	6.3	7.3	3.58 ★	<b>2KJ1100 - ■CD13 - ■■A1</b>		9
	<b>E.48-LA71S4</b>							
<b>119</b>	<b>143</b>	20	2.8	11.3	<b>2KJ1002 - ■CD13 - ■■U1</b>		16	
<b>149</b>	<b>179</b>	16	4	9.09	<b>2KJ1002 - ■CD13 - ■■S1</b>		16	
<b>E.38-LA71S4</b>								
<b>145</b>	<b>174</b>	16	1.9	9.33 ★	<b>2KJ1001 - ■CD13 - ■■S1</b>		13	
<b>163</b>	<b>196</b>	15	2.2	8.30	<b>2KJ1001 - ■CD13 - ■■R1</b>		13	
<b>188</b>	<b>226</b>	13	3.0	7.20 ★	<b>2KJ1001 - ■CD13 - ■■Q1</b>		13	
<b>201</b>	<b>241</b>	12	4.0	6.73	<b>2KJ1001 - ■CD13 - ■■P1</b>		13	
0.37 (50 Hz) 0.44 (60 Hz)	<b>D.188-Z48-LA71M4</b>							
	<b>0.12</b>	<b>0.14</b>	24 391	0.82	11 066 ★	<b>2KJ1235 - ■CE13 - ■■W1</b>		603
	<b>0.15</b>	<b>0.18</b>	19 919	1.0	9 037 ★	<b>2KJ1235 - ■CE13 - ■■V1</b>		603
	<b>0.18</b>	<b>0.22</b>	17 073	1.2	7 746	<b>2KJ1235 - ■CE13 - ■■U1</b>		603
	<b>0.20</b>	<b>0.24</b>	15 447	1.3	7 008 ★	<b>2KJ1235 - ■CE13 - ■■T1</b>		603
	<b>0.21</b>	<b>0.25</b>	14 259	1.4	6 469	<b>2KJ1235 - ■CE13 - ■■S1</b>		603
	<b>0.24</b>	<b>0.29</b>	12 398	1.6	5 625 ★	<b>2KJ1235 - ■CE13 - ■■R1</b>		603
	<b>0.27</b>	<b>0.32</b>	11 257	1.8	5 107	<b>2KJ1235 - ■CE13 - ■■Q1</b>		603
	<b>0.29</b>	<b>0.35</b>	10 278	1.9	4 663 ★	<b>2KJ1235 - ■CE13 - ■■P1</b>		603
	<b>D.168-Z48-LA71M4</b>							
<b>0.17</b>	<b>0.20</b>	17 371	0.81	7 881 ★	<b>2KJ1232 - ■CE13 - ■■R1</b>		459	
<b>0.19</b>	<b>0.23</b>	15 773	0.89	7 156	<b>2KJ1232 - ■CE13 - ■■Q1</b>		459	
<b>0.21</b>	<b>0.25</b>	14 402	0.97	6 534 ★	<b>2KJ1232 - ■CE13 - ■■P1</b>		459	
<b>0.23</b>	<b>0.28</b>	13 214	1.1	5 995	<b>2KJ1232 - ■CE13 - ■■N1</b>		459	
<b>0.25</b>	<b>0.30</b>	12 174	1.2	5 523 ★	<b>2KJ1232 - ■CE13 - ■■M1</b>		459	
<b>0.27</b>	<b>0.32</b>	11 056	1.3	5 016	<b>2KJ1232 - ■CE13 - ■■L1</b>		459	
<b>0.30</b>	<b>0.36</b>	10 071	1.4	4 569 ★	<b>2KJ1232 - ■CE13 - ■■K1</b>		459	
<b>0.33</b>	<b>0.40</b>	9 227	1.5	4 186	<b>2KJ1232 - ■CE13 - ■■J1</b>		459	
<b>0.37</b>	<b>0.44</b>	8 233	1.7	3 735 ★	<b>2KJ1232 - ■CE13 - ■■H1</b>		459	
<b>D.148-Z38-LA71M4</b>								
<b>0.32</b>	<b>0.38</b>	9 573	0.84	4 343	<b>2KJ1228 - ■CE13 - ■■L1</b>		283	
<b>0.34</b>	<b>0.41</b>	8 755	0.91	3 972	<b>2KJ1228 - ■CE13 - ■■K1</b>		283	
<b>0.39</b>	<b>0.47</b>	7 829	1.0	3 552	<b>2KJ1228 - ■CE13 - ■■J1</b>		283	
<b>0.42</b>	<b>0.50</b>	7 188	1.1	3 261	<b>2KJ1228 - ■CE13 - ■■H1</b>		283	
<b>0.47</b>	<b>0.56</b>	6 478	1.2	2 939	<b>2KJ1228 - ■CE13 - ■■G1</b>		283	
<b>0.54</b>	<b>0.65</b>	5 557	1.4	2 521	<b>2KJ1228 - ■CE13 - ■■E1</b>		283	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>0.37</b> (50 Hz)	<b>D.148-Z38-LA71M4</b>							
0.44 (60 Hz)	<b>0.54</b>	<b>0.65</b>	5 572	1.4	2 528	<b>2KJ1228 - ■CE13 - ■■F1</b>		283
	<b>0.61</b>	<b>0.73</b>	4 968	1.6	2 254	<b>2KJ1228 - ■CE13 - ■■D1</b>		283
	<b>0.66</b>	<b>0.79</b>	4 563	1.8	2 070	<b>2KJ1228 - ■CE13 - ■■C1</b>		283
	<b>0.74</b>	<b>0.89</b>	4 111	1.9	1 865	<b>2KJ1228 - ■CE13 - ■■B1</b>		283
	<b>D.128-Z48-LA71M4</b>							
	<b>1.1</b>	<b>1.3</b>	2 801	1.8	1 271	<b>2KJ1227 - ■CE13 - ■■P1</b>		208
	<b>1.2</b>	<b>1.4</b>	2 570	2	1 166	<b>2KJ1227 - ■CE13 - ■■N1</b>		208
	<b>D.128-Z38-LA71M4</b>							
	<b>0.48</b>	<b>0.58</b>	6 247	0.82	2 834	<b>2KJ1225 - ■CE13 - ■■J1</b>		198
	<b>0.53</b>	<b>0.64</b>	5 735	0.89	2 602	★ <b>2KJ1225 - ■CE13 - ■■H1</b>		198
	<b>0.58</b>	<b>0.70</b>	5 169	0.99	2 345	<b>2KJ1225 - ■CE13 - ■■G1</b>		198
	<b>0.68</b>	<b>0.82</b>	4 433	1.2	2 011	★ <b>2KJ1225 - ■CE13 - ■■E1</b>		198
	<b>0.68</b>	<b>0.82</b>	4 446	1.1	2 017	★ <b>2KJ1225 - ■CE13 - ■■F1</b>		198
	<b>0.76</b>	<b>0.91</b>	3 963	1.3	1 798	<b>2KJ1225 - ■CE13 - ■■D1</b>		198
	<b>0.83</b>	<b>1.0</b>	3 639	1.4	1 651	★ <b>2KJ1225 - ■CE13 - ■■C1</b>		198
	<b>0.92</b>	<b>1.1</b>	3 280	1.6	1 488	<b>2KJ1225 - ■CE13 - ■■B1</b>		198
	<b>1.1</b>	<b>1.3</b>	2 821	1.8	1 280	★ <b>2KJ1225 - ■CE13 - ■■A1</b>		198
	<b>D.108-Z38-LA71M4</b>							
	<b>0.85</b>	<b>1.0</b>	3 555	0.87	1 613	<b>2KJ1223 - ■CE13 - ■■Q1</b>		127
	<b>0.96</b>	<b>1.2</b>	3 139	0.99	1 424	<b>2KJ1223 - ■CE13 - ■■P1</b>		127
	<b>1.1</b>	<b>1.3</b>	2 830	1.1	1 284	<b>2KJ1223 - ■CE13 - ■■N1</b>		127
	<b>1.2</b>	<b>1.4</b>	2 568	1.2	1 165	<b>2KJ1223 - ■CE13 - ■■M1</b>		127
	<b>1.3</b>	<b>1.6</b>	2 339	1.3	1 061	<b>2KJ1223 - ■CE13 - ■■L1</b>		127
	<b>1.4</b>	<b>1.7</b>	2 140	1.4	971	<b>2KJ1223 - ■CE13 - ■■K1</b>		127
	<b>1.6</b>	<b>1.9</b>	1 913	1.6	868	<b>2KJ1223 - ■CE13 - ■■J1</b>		127
	<b>1.7</b>	<b>2.0</b>	1 757	1.8	797	<b>2KJ1223 - ■CE13 - ■■H1</b>		127
	<b>D.108-LA90SA8</b>							
	<b>1.9</b>	<b>2.3</b>	1 881	1.6	359.30	<b>2KJ1206 - ■EB13 - ■■V1</b>	<b>P02</b>	133
	<b>2.1</b>	<b>2.5</b>	1 702	1.8	325.21	★ <b>2KJ1206 - ■EB13 - ■■U1</b>	<b>P02</b>	133
	<b>D.88-Z28-LA71M4</b>							
	<b>1.6</b>	<b>1.9</b>	1 946	0.86	883	<b>2KJ1218 - ■CE13 - ■■K1</b>		76
	<b>1.7</b>	<b>2.0</b>	1 796	0.94	815	★ <b>2KJ1218 - ■CE13 - ■■J1</b>		76
	<b>2.0</b>	<b>2.4</b>	1 547	1.1	702	<b>2KJ1218 - ■CE13 - ■■H1</b>		76
	<b>2.1</b>	<b>2.5</b>	1 426	1.2	647	★ <b>2KJ1218 - ■CE13 - ■■G1</b>		76
	<b>D.88-LA90SA8</b>							
	<b>2.2</b>	<b>2.6</b>	1 573	1.1	300.41	★ <b>2KJ1205 - ■EB13 - ■■V1</b>	<b>P02</b>	85
	<b>2.5</b>	<b>3.0</b>	1 418	1.2	270.90	<b>2KJ1205 - ■EB13 - ■■U1</b>	<b>P02</b>	85
	<b>2.8</b>	<b>3.4</b>	1 279	1.3	244.29	★ <b>2KJ1205 - ■EB13 - ■■T1</b>	<b>P02</b>	85
	<b>D.88-LA80S6</b>							
	<b>3.1</b>	<b>3.7</b>	1 154	1.5	300.41	★ <b>2KJ1205 - ■DB13 - ■■V1</b>	<b>P01</b>	82
	<b>3.4</b>	<b>4.1</b>	1 040	1.6	270.90	<b>2KJ1205 - ■DB13 - ■■U1</b>	<b>P01</b>	82
	<b>3.8</b>	<b>4.6</b>	938	1.8	244.29	★ <b>2KJ1205 - ■DB13 - ■■T1</b>	<b>P01</b>	82
	<b>4.3</b>	<b>5.2</b>	821	2.0	213.64	<b>2KJ1205 - ■DB13 - ■■S1</b>	<b>P01</b>	82

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>0.37</b> (50 Hz)	<b>D.68-LA80S6</b>							
0.44 (60 Hz)	<b>3.7</b>	<b>4.4</b>	955	0.84	248.68 ★	<b>2KJ1204 - ■DB13 - ■■T1</b>	<b>P01</b>	50
	<b>4.1</b>	<b>4.9</b>	868	0.92	226.07	<b>2KJ1204 - ■DB13 - ■■S1</b>	<b>P01</b>	50
	<b>4.5</b>	<b>5.4</b>	780	1.0	203.09 ★	<b>2KJ1204 - ■DB13 - ■■R1</b>	<b>P01</b>	50
	<b>D.68-LA71M4</b>							
	<b>4.9</b>	<b>5.9</b>	725	1.1	281.01	<b>2KJ1204 - ■CE13 - ■■U1</b>		46
	<b>5.5</b>	<b>6.6</b>	641	1.2	248.68 ★	<b>2KJ1204 - ■CE13 - ■■T1</b>		46
	<b>6.1</b>	<b>7.3</b>	583	1.4	226.07	<b>2KJ1204 - ■CE13 - ■■S1</b>		46
	<b>6.7</b>	<b>8.0</b>	524	1.5	203.09 ★	<b>2KJ1204 - ■CE13 - ■■R1</b>		46
	<b>7.9</b>	<b>9.5</b>	449	1.8	174.08	<b>2KJ1204 - ■CE13 - ■■Q1</b>		46
	<b>8.7</b>	<b>10.4</b>	406	2.0	157.50 ★	<b>2KJ1204 - ■CE13 - ■■P1</b>		46
	<b>9.4</b>	<b>11.3</b>	375	2.1	145.38	<b>2KJ1204 - ■CE13 - ■■N1</b>		46
	<b>D.48-LA71M4</b>							
	<b>6.6</b>	<b>7.9</b>	538	0.84	208.77 ★	<b>2KJ1203 - ■CE13 - ■■S1</b>		27
	<b>7.4</b>	<b>8.9</b>	479	0.94	185.66	<b>2KJ1203 - ■CE13 - ■■R1</b>		27
	<b>8.5</b>	<b>10.2</b>	415	1.1	161.05 ★	<b>2KJ1203 - ■CE13 - ■■Q1</b>		27
	<b>9.1</b>	<b>10.9</b>	388	1.2	150.48	<b>2KJ1203 - ■CE13 - ■■P1</b>		27
	<b>10.4</b>	<b>12.5</b>	341	1.3	132.34 ★	<b>2KJ1203 - ■CE13 - ■■N1</b>		27
	<b>11.8</b>	<b>14.2</b>	299	1.5	115.91	<b>2KJ1203 - ■CE13 - ■■M1</b>		27
	<b>13.4</b>	<b>16.1</b>	264	1.7	102.52 ★	<b>2KJ1203 - ■CE13 - ■■L1</b>		27
	<b>14.7</b>	<b>17.6</b>	240	1.9	92.91	<b>2KJ1203 - ■CE13 - ■■K1</b>		27
	<b>16.7</b>	<b>20.0</b>	212	2.1	82.02 ★	<b>2KJ1203 - ■CE13 - ■■J1</b>		27
	<b>Z.48-LA71M4</b>							
	<b>27</b>	<b>32</b>	132	2.2	51.28	<b>2KJ1103 - ■CE13 - ■■A2</b>		27
	<b>D.38-LA71M4</b>							
	<b>13.2</b>	<b>15.8</b>	268	0.82	103.89	<b>2KJ1202 - ■CE13 - ■■M1</b>		18
	<b>15.0</b>	<b>18.0</b>	236	0.93	91.34 ★	<b>2KJ1202 - ■CE13 - ■■L1</b>		18
	<b>16.6</b>	<b>19.9</b>	213	1.0	82.52	<b>2KJ1202 - ■CE13 - ■■K1</b>		18
	<b>19.1</b>	<b>23</b>	185	1.2	71.91 ★	<b>2KJ1202 - ■CE13 - ■■J1</b>		18
	<b>21</b>	<b>25</b>	167	1.3	64.58	<b>2KJ1202 - ■CE13 - ■■H1</b>		18
	<b>24</b>	<b>29</b>	150	1.5	58.30 ★	<b>2KJ1202 - ■CE13 - ■■G1</b>		18
	<b>26</b>	<b>31</b>	136	1.6	52.86	<b>2KJ1202 - ■CE13 - ■■F1</b>		18
	<b>28</b>	<b>34</b>	124	1.8	48.10 ★	<b>2KJ1202 - ■CE13 - ■■E1</b>		18
	<b>Z.38-LA71M4</b>							
	<b>31</b>	<b>37</b>	114	1.6	44.12 ★	<b>2KJ1102 - ■CE13 - ■■A2</b>		17
	<b>35</b>	<b>42</b>	101	2.1	39.24	<b>2KJ1102 - ■CE13 - ■■X1</b>		17
	<b>40</b>	<b>48</b>	88	2.5	34.04 ★	<b>2KJ1102 - ■CE13 - ■■W1</b>		17
	<b>43</b>	<b>52</b>	82	2.7	31.80	<b>2KJ1102 - ■CE13 - ■■V1</b>		17
	<b>D.28-LA71M4</b>							
	<b>22</b>	<b>26</b>	157	0.89	60.77 ★	<b>2KJ1201 - ■CE13 - ■■C1</b>		10
	<b>Z.28-LA71M4</b>							
	<b>27</b>	<b>32</b>	132	1.1	51.35	<b>2KJ1101 - ■CE13 - ■■C2</b>		10
	<b>32</b>	<b>38</b>	112	1.3	43.30 ★	<b>2KJ1101 - ■CE13 - ■■B2</b>		10
	<b>36</b>	<b>43</b>	99	1.4	38.45	<b>2KJ1101 - ■CE13 - ■■A2</b>		10

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>0.37</b> (50 Hz)	<b>Z.28-LA71M4</b>							
0.44 (60 Hz)	<b>41</b>	<b>49</b>	87	1.6	33.71 ★	<b>2KJ1101 - ■CE13 - ■■X1</b>		10
	<b>45</b>	<b>54</b>	78	1.8	30.16	<b>2KJ1101 - ■CE13 - ■■W1</b>		10
	<b>51</b>	<b>61</b>	69	2.0	26.77 ★	<b>2KJ1101 - ■CE13 - ■■V1</b>		10
	<b>58</b>	<b>70</b>	60	2.3	23.46	<b>2KJ1101 - ■CE13 - ■■U1</b>		10
	<b>66</b>	<b>79</b>	53	2.6	20.63 ★	<b>2KJ1101 - ■CE13 - ■■T1</b>		10
	<b>74</b>	<b>89</b>	48	2.9	18.63	<b>2KJ1101 - ■CE13 - ■■S1</b>		10
	<b>84</b>	<b>101</b>	42	3.3	16.24 ★	<b>2KJ1101 - ■CE13 - ■■R1</b>		10
	<b>Z.18-LA71M4</b>							
	<b>32</b>	<b>38</b>	111	0.81	43.15	<b>2KJ1100 - ■CE13 - ■■U1</b>		9
	<b>37</b>	<b>44</b>	96	0.94	37.23 ★	<b>2KJ1100 - ■CE13 - ■■T1</b>		9
	<b>43</b>	<b>52</b>	82	1.1	31.98	<b>2KJ1100 - ■CE13 - ■■S1</b>		9
	<b>46</b>	<b>55</b>	76	1.2	29.45 ★	<b>2KJ1100 - ■CE13 - ■■R1</b>		9
	<b>51</b>	<b>61</b>	69	1.3	26.77	<b>2KJ1100 - ■CE13 - ■■Q1</b>		9
	<b>58</b>	<b>70</b>	61	1.5	23.69 ★	<b>2KJ1100 - ■CE13 - ■■P1</b>		9
	<b>69</b>	<b>83</b>	51	1.8	19.85	<b>2KJ1100 - ■CE13 - ■■N1</b>		9
	<b>81</b>	<b>97</b>	44	2.1	16.92 ★	<b>2KJ1100 - ■CE13 - ■■M1</b>		9
	<b>95</b>	<b>114</b>	37	2.4	14.38 ★	<b>2KJ1100 - ■CE13 - ■■L1</b>		9
	<b>110</b>	<b>132</b>	32	2.8	12.50	<b>2KJ1100 - ■CE13 - ■■K1</b>		9
	<b>126</b>	<b>151</b>	28	3.1	10.88 ★	<b>2KJ1100 - ■CE13 - ■■J1</b>		9
	<b>140</b>	<b>168</b>	25	3.3	9.81	<b>2KJ1100 - ■CE13 - ■■H1</b>		9
	<b>158</b>	<b>190</b>	22	3.6	8.66	<b>2KJ1100 - ■CE13 - ■■G1</b>		9
	<b>185</b>	<b>222</b>	19	2.9	7.42 ★	<b>2KJ1100 - ■CE13 - ■■F1</b>		9
	<b>212</b>	<b>254</b>	17	3.2	6.45	<b>2KJ1100 - ■CE13 - ■■E1</b>		9
	<b>244</b>	<b>293</b>	14	3.5	5.61 ★	<b>2KJ1100 - ■CE13 - ■■D1</b>		9
	<b>271</b>	<b>325</b>	13	3.8	5.06	<b>2KJ1100 - ■CE13 - ■■C1</b>		9
	<b>306</b>	<b>367</b>	12	4.3	4.47	<b>2KJ1100 - ■CE13 - ■■B1</b>		9
	<b>383</b>	<b>460</b>	9.2	5.0	3.58 ★	<b>2KJ1100 - ■CE13 - ■■A1</b>		9
	<b>E.68-LA71M4</b>							
	<b>110</b>	<b>132</b>	32	2.5	12.40 ★	<b>2KJ1003 - ■CE13 - ■■W1</b>		26
	<b>123</b>	<b>148</b>	29	3.2	11.18	<b>2KJ1003 - ■CE13 - ■■V1</b>		26
	<b>136</b>	<b>163</b>	26	3.7	10.08 ★	<b>2KJ1003 - ■CE13 - ■■U1</b>		26
	<b>E.48-LA71M4</b>							
	<b>121</b>	<b>145</b>	29	1.9	11.30	<b>2KJ1002 - ■CE13 - ■■U1</b>		16
	<b>137</b>	<b>164</b>	26	3.1	10.00 ★	<b>2KJ1002 - ■CE13 - ■■T1</b>		16
	<b>151</b>	<b>181</b>	23	2.7	9.09	<b>2KJ1002 - ■CE13 - ■■S1</b>		16
	<b>168</b>	<b>202</b>	21	4.0	8.17 ★	<b>2KJ1002 - ■CE13 - ■■R1</b>		16
	<b>E.38-LA71M4</b>							
	<b>147</b>	<b>176</b>	24	1.3	9.33 ★	<b>2KJ1001 - ■CE13 - ■■S1</b>		13
	<b>165</b>	<b>198</b>	21	1.5	8.30	<b>2KJ1001 - ■CE13 - ■■R1</b>		13
	<b>190</b>	<b>228</b>	19	2.0	7.20 ★	<b>2KJ1001 - ■CE13 - ■■Q1</b>		13
	<b>204</b>	<b>245</b>	17	2.8	6.73	<b>2KJ1001 - ■CE13 - ■■P1</b>		13
	<b>231</b>	<b>277</b>	15	3.5	5.92 ★	<b>2KJ1001 - ■CE13 - ■■N1</b>		13

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>0.55</b> (50 Hz)	<b>D.188-Z48-LA71ZMP4</b>							
0.66 (60 Hz)	<b>0.20</b>	<b>0.24</b>	23 625	0.85	7 008	★	2KJ1235 - ■CG13 - ■■T1	603
	<b>0.21</b>	<b>0.25</b>	21 808	0.92	6 469		2KJ1235 - ■CG13 - ■■S1	603
	<b>0.24</b>	<b>0.29</b>	18 962	1.1	5 625	★	2KJ1235 - ■CG13 - ■■R1	603
	<b>0.27</b>	<b>0.32</b>	17 216	1.2	5 107		2KJ1235 - ■CG13 - ■■Q1	603
	<b>0.29</b>	<b>0.35</b>	15 719	1.3	4 663	★	2KJ1235 - ■CG13 - ■■P1	603
	<b>0.32</b>	<b>0.38</b>	14 425	1.4	4 279		2KJ1235 - ■CG13 - ■■N1	603
	<b>0.35</b>	<b>0.42</b>	13 289	1.5	3 942	★	2KJ1235 - ■CG13 - ■■M1	603
	<b>0.38</b>	<b>0.46</b>	12 068	1.7	3 580		2KJ1235 - ■CG13 - ■■L1	603
	<b>0.42</b>	<b>0.50</b>	10 993	1.8	3 261	★	2KJ1235 - ■CG13 - ■■K1	603
	<b>0.46</b>	<b>0.55</b>	10 073	2.0	2 988		2KJ1235 - ■CG13 - ■■J1	603
	<b>D.168-Z48-LA71ZMP4</b>							
	<b>0.27</b>	<b>0.32</b>	16 909	0.83	5 016		2KJ1232 - ■CG13 - ■■L1	459
	<b>0.30</b>	<b>0.36</b>	15 402	0.91	4 569	★	2KJ1232 - ■CG13 - ■■K1	459
	<b>D.168-Z48-LA71ZMP4</b>							
	<b>0.33</b>	<b>0.40</b>	14 111	0.99	4 186		2KJ1232 - ■CG13 - ■■J1	459
	<b>0.37</b>	<b>0.44</b>	12 591	1.1	3 735	★	2KJ1232 - ■CG13 - ■■H1	459
	<b>0.59</b>	<b>0.71</b>	7 818	1.8	2 319	★	2KJ1232 - ■CG13 - ■■D1	459
	<b>D.148-Z48-LA71ZMP4</b>							
	<b>0.84</b>	<b>1.0</b>	5 498	1.5	1 631		2KJ1231 - ■CG13 - ■■N1	292
	<b>0.91</b>	<b>1.1</b>	5 063	1.6	1 502		2KJ1231 - ■CG13 - ■■M1	292
	<b>1.0</b>	<b>1.2</b>	4 598	1.7	1 364		2KJ1231 - ■CG13 - ■■L1	292
	<b>1.1</b>	<b>1.3</b>	4 190	1.9	1 243		2KJ1231 - ■CG13 - ■■K1	292
	<b>D.148-Z38-LA71ZMP4</b>							
	<b>0.47</b>	<b>0.56</b>	9 908	0.81	2 939		2KJ1228 - ■CG13 - ■■G1	283
	<b>0.54</b>	<b>0.65</b>	8 498	0.94	2 521		2KJ1228 - ■CG13 - ■■E1	283
	<b>0.54</b>	<b>0.65</b>	8 522	0.94	2 528		2KJ1228 - ■CG13 - ■■F1	283
	<b>0.61</b>	<b>0.73</b>	7 598	1.1	2 254		2KJ1228 - ■CG13 - ■■D1	283
	<b>0.66</b>	<b>0.79</b>	6 978	1.1	2 070		2KJ1228 - ■CG13 - ■■C1	283
	<b>0.74</b>	<b>0.89</b>	6 287	1.3	1 865		2KJ1228 - ■CG13 - ■■B1	283
	<b>0.85</b>	<b>1.00</b>	5 407	1.5	1 604		2KJ1228 - ■CG13 - ■■A1	283
	<b>D.128-Z38-LA71ZMP4</b>							
	<b>0.76</b>	<b>0.91</b>	6 061	0.84	1 798		2KJ1225 - ■CG13 - ■■D1	198
	<b>0.83</b>	<b>1.0</b>	5 566	0.92	1 651	★	2KJ1225 - ■CG13 - ■■C1	198
	<b>0.92</b>	<b>1.1</b>	5 016	1.0	1 488		2KJ1225 - ■CG13 - ■■B1	198
	<b>1.1</b>	<b>1.3</b>	4 315	1.2	1 280	★	2KJ1225 - ■CG13 - ■■A1	198
	<b>1.1</b>	<b>1.3</b>	4 285	1.2	1 271		2KJ1227 - ■CG13 - ■■P1	208
	<b>1.2</b>	<b>1.4</b>	3 931	1.3	1 166		2KJ1227 - ■CG13 - ■■N1	208
	<b>1.3</b>	<b>1.6</b>	3 621	1.4	1 074		2KJ1227 - ■CG13 - ■■M1	208
	<b>1.4</b>	<b>1.7</b>	3 287	1.6	975		2KJ1227 - ■CG13 - ■■L1	208
	<b>1.5</b>	<b>1.8</b>	2 997	1.7	889		2KJ1227 - ■CG13 - ■■K1	208
	<b>1.7</b>	<b>2.0</b>	2 744	1.9	814		2KJ1227 - ■CG13 - ■■J1	208
	<b>D.108-Z38-LA71ZMP4</b>							
	<b>1.3</b>	<b>1.6</b>	3 577	0.87	1 061		2KJ1223 - ■CG13 - ■■L1	127

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>0.55</b> (50 Hz)	<b>D.108-Z38-LA71ZMP4</b>							
0.66 (60 Hz)	<b>1.4</b>	<b>1.7</b>	3 273	0.95	971	<b>2KJ1223 - CG13 - K1</b>		127
	<b>1.6</b>	<b>1.9</b>	2 926	1.1	868	<b>2KJ1223 - CG13 - J1</b>		127
	<b>1.7</b>	<b>2.0</b>	2 687	1.2	797	<b>2KJ1223 - CG13 - H1</b>		127
<b>D.108-LA90LA8</b>								
	<b>1.9</b>	<b>2.3</b>	2 796	1.1	359.30	<b>2KJ1206 - EE13 - V1</b>	<b>P02</b>	136
	<b>2.1</b>	<b>2.5</b>	2 531	1.2	325.21 ★	<b>2KJ1206 - EE13 - U1</b>	<b>P02</b>	136
	<b>2.4</b>	<b>2.9</b>	2 216	1.4	284.73	<b>2KJ1206 - EE13 - T1</b>	<b>P02</b>	136
<b>D.108-LA80M6</b>								
	<b>2.5</b>	<b>3.0</b>	2 074	1.5	359.30	<b>2KJ1206 - DC13 - V1</b>	<b>P01</b>	130
	<b>2.8</b>	<b>3.4</b>	1 877	1.7	325.21 ★	<b>2KJ1206 - DC13 - U1</b>	<b>P01</b>	130
	<b>3.2</b>	<b>3.8</b>	1 643	1.9	284.73	<b>2KJ1206 - DC13 - T1</b>	<b>P01</b>	130
<b>D.88-LA90LA8</b>								
	<b>2.5</b>	<b>3.0</b>	2 108	0.80	270.90	<b>2KJ1205 - EE13 - U1</b>	<b>P02</b>	88
	<b>2.8</b>	<b>3.4</b>	1 901	0.88	244.29 ★	<b>2KJ1205 - EE13 - T1</b>	<b>P02</b>	88
<b>D.88-LA80M6</b>								
	<b>3.0</b>	<b>3.6</b>	1 734	0.97	300.41 ★	<b>2KJ1205 - DC13 - V1</b>	<b>P01</b>	82
	<b>3.4</b>	<b>4.1</b>	1 564	1.1	270.90	<b>2KJ1205 - DC13 - U1</b>	<b>P01</b>	82
	<b>3.7</b>	<b>4.4</b>	1 410	1.2	244.29 ★	<b>2KJ1205 - DC13 - T1</b>	<b>P01</b>	82
	<b>4.3</b>	<b>5.2</b>	1 233	1.4	213.64	<b>2KJ1205 - DC13 - S1</b>	<b>P01</b>	82
<b>D.88-LA71ZMP4</b>								
	<b>4.6</b>	<b>5.5</b>	1 152	1.5	300.41 ★	<b>2KJ1205 - CG13 - V1</b>		78
	<b>5.1</b>	<b>6.1</b>	1 039	1.6	270.90	<b>2KJ1205 - CG13 - U1</b>		78
	<b>5.6</b>	<b>6.7</b>	937	1.8	244.29 ★	<b>2KJ1205 - CG13 - T1</b>		78
	<b>6.4</b>	<b>7.7</b>	819	2.1	213.64	<b>2KJ1205 - CG13 - S1</b>		78
<b>D.68-LA71ZMP4</b>								
	<b>5.5</b>	<b>6.6</b>	953	0.84	248.68 ★	<b>2KJ1204 - CG13 - T1</b>		46
	<b>6.1</b>	<b>7.3</b>	867	0.92	226.07	<b>2KJ1204 - CG13 - S1</b>		46
	<b>6.7</b>	<b>8.0</b>	779	1.0	203.09 ★	<b>2KJ1204 - CG13 - R1</b>		46
	<b>7.9</b>	<b>9.5</b>	667	1.2	174.08	<b>2KJ1204 - CG13 - Q1</b>		46
	<b>8.7</b>	<b>10.4</b>	604	1.3	157.50 ★	<b>2KJ1204 - CG13 - P1</b>		46
	<b>9.4</b>	<b>11.3</b>	557	1.4	145.38	<b>2KJ1204 - CG13 - N1</b>		46
<b>D.68-LA71ZMP4</b>								
	<b>10.8</b>	<b>13.0</b>	485	1.7	126.41 ★	<b>2KJ1204 - CG13 - M1</b>		46
	<b>11.9</b>	<b>14.3</b>	440	1.8	114.78	<b>2KJ1204 - CG13 - L1</b>		46
	<b>13.1</b>	<b>15.7</b>	402	2.0	104.80 ★	<b>2KJ1204 - CG13 - K1</b>		46
	<b>14.2</b>	<b>17.0</b>	369	2.2	96.16	<b>2KJ1204 - CG13 - J1</b>		46
<b>D.48-LA71ZMP4</b>								
	<b>10.4</b>	<b>12.5</b>	507	0.89	132.34 ★	<b>2KJ1203 - CG13 - N1</b>		27
	<b>11.8</b>	<b>14.2</b>	444	1.0	115.91	<b>2KJ1203 - CG13 - M1</b>		27
	<b>13.4</b>	<b>16.1</b>	393	1.1	102.52 ★	<b>2KJ1203 - CG13 - L1</b>		27
	<b>14.7</b>	<b>17.6</b>	356	1.3	92.91	<b>2KJ1203 - CG13 - K1</b>		27
	<b>16.7</b>	<b>20</b>	314	1.4	82.02 ★	<b>2KJ1203 - CG13 - J1</b>		27
	<b>18.5</b>	<b>22</b>	284	1.6	73.99	<b>2KJ1203 - CG13 - H1</b>		27

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R



# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>0.55</b> (50 Hz)	<b>D.48-LA71ZMP4</b>							
0.66 (60 Hz)	<b>20</b>	<b>24</b>	257	1.7	67.10 ★	<b>2KJ1203 - CG13 - G1</b>		27
	<b>22</b>	<b>26</b>	234	1.9	61.14	<b>2KJ1203 - CG13 - F1</b>		27
	<b>27</b>	<b>32</b>	192	2.3	50.00	<b>2KJ1203 - CG13 - D1</b>		27
	<b>Z.48-LA71ZMP4</b>							
	<b>27</b>	<b>32</b>	197	1.5	51.28	<b>2KJ1103 - CG13 - A2</b>		27
	<b>D.38-LA71ZMP4</b>							
	<b>19.1</b>	<b>23</b>	276	0.80	71.91 ★	<b>2KJ1202 - CG13 - J1</b>		18
	<b>21</b>	<b>25</b>	248	0.89	64.58	<b>2KJ1202 - CG13 - H1</b>		18
	<b>24</b>	<b>29</b>	224	0.98	58.30 ★	<b>2KJ1202 - CG13 - G1</b>		18
	<b>26</b>	<b>31</b>	203	1.1	52.86	<b>2KJ1202 - CG13 - F1</b>		18
	<b>Z.38-LA71ZMP4</b>							
	<b>31</b>	<b>37</b>	169	1.1	44.12 ★	<b>2KJ1102 - CG13 - A2</b>		17
	<b>35</b>	<b>42</b>	150	1.4	39.24	<b>2KJ1102 - CG13 - X1</b>		17
	<b>40</b>	<b>48</b>	131	1.7	34.04 ★	<b>2KJ1102 - CG13 - W1</b>		17
	<b>43</b>	<b>52</b>	122	1.8	31.80	<b>2KJ1102 - CG13 - V1</b>		17
	<b>49</b>	<b>59</b>	107	2.1	27.97 ★	<b>2KJ1102 - CG13 - U1</b>		17
	<b>56</b>	<b>67</b>	94	2.3	24.50	<b>2KJ1102 - CG13 - T1</b>		17
	<b>63</b>	<b>76</b>	83	2.6	21.67 ★	<b>2KJ1102 - CG13 - S1</b>		17
	<b>70</b>	<b>84</b>	75	2.9	19.64	<b>2KJ1102 - CG13 - R1</b>		17
	<b>Z.28-LA71ZMP4</b>							
	<b>32</b>	<b>38</b>	166	0.84	43.30 ★	<b>2KJ1101 - CG13 - B2</b>		10
	<b>36</b>	<b>43</b>	147	0.95	38.45	<b>2KJ1101 - CG13 - A2</b>		10
	<b>41</b>	<b>49</b>	129	1.1	33.71 ★	<b>2KJ1101 - CG13 - X1</b>		10
	<b>45</b>	<b>54</b>	116	1.2	30.16	<b>2KJ1101 - CG13 - W1</b>		10
	<b>51</b>	<b>61</b>	103	1.4	26.77 ★	<b>2KJ1101 - CG13 - V1</b>		10
	<b>58</b>	<b>70</b>	90	1.6	23.46	<b>2KJ1101 - CG13 - U1</b>		10
	<b>66</b>	<b>79</b>	79	1.8	20.63 ★	<b>2KJ1101 - CG13 - T1</b>		10
	<b>74</b>	<b>89</b>	71	2.0	18.63	<b>2KJ1101 - CG13 - S1</b>		10
	<b>84</b>	<b>101</b>	62	2.2	16.24 ★	<b>2KJ1101 - CG13 - R1</b>		10
	<b>94</b>	<b>113</b>	56	2.5	14.58	<b>2KJ1101 - CG13 - Q1</b>		10
	<b>104</b>	<b>125</b>	50	2.8	13.17 ★	<b>2KJ1101 - CG13 - P1</b>		10
	<b>Z.28-LA71ZMP4</b>							
	<b>115</b>	<b>138</b>	46	3.1	11.94	<b>2KJ1101 - CG13 - N1</b>		10
	<b>126</b>	<b>151</b>	42	3.4	10.87 ★	<b>2KJ1101 - CG13 - M1</b>		10
	<b>143</b>	<b>172</b>	37	3.8	9.61	<b>2KJ1101 - CG13 - L1</b>		10
	<b>217</b>	<b>260</b>	24	3.9	6.31 ★	<b>2KJ1101 - CG13 - G1</b>		10
	<b>240</b>	<b>288</b>	22	4.2	5.72	<b>2KJ1101 - CG13 - F1</b>		10
	<b>263</b>	<b>316</b>	20	4.6	5.21 ★	<b>2KJ1101 - CG13 - E1</b>		10
	<b>298</b>	<b>358</b>	18	5.0	4.60	<b>2KJ1101 - CG13 - D1</b>		10
	<b>Z.18-LA71ZMP4</b>							
	<b>46</b>	<b>55</b>	113	0.8	29.45 ★	<b>2KJ1100 - CG13 - R1</b>		9
	<b>51</b>	<b>61</b>	103	0.88	26.77	<b>2KJ1100 - CG13 - Q1</b>		9
	<b>58</b>	<b>70</b>	91	0.99	23.69 ★	<b>2KJ1100 - CG13 - P1</b>		9

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>0.55 (50 Hz)</b>	<b>Z.18-LA71ZMP4</b>							
0.66 (60 Hz)	<b>69</b>	<b>83</b>	76	1.2	19.85	<b>2KJ1100 - ■CG13 - ■■N1</b>		9
	<b>81</b>	<b>97</b>	65	1.4	16.92 ★	<b>2KJ1100 - ■CG13 - ■■M1</b>		9
	<b>95</b>	<b>114</b>	55	1.6	14.38 ★	<b>2KJ1100 - ■CG13 - ■■L1</b>		9
	<b>110</b>	<b>132</b>	48	1.9	12.50	<b>2KJ1100 - ■CG13 - ■■K1</b>		9
	<b>126</b>	<b>151</b>	42	2.1	10.88 ★	<b>2KJ1100 - ■CG13 - ■■J1</b>		9
	<b>140</b>	<b>168</b>	38	2.2	9.81	<b>2KJ1100 - ■CG13 - ■■H1</b>		9
	<b>158</b>	<b>190</b>	33	2.4	8.66	<b>2KJ1100 - ■CG13 - ■■G1</b>		9
	<b>185</b>	<b>222</b>	28	1.9	7.42 ★	<b>2KJ1100 - ■CG13 - ■■F1</b>		9
	<b>212</b>	<b>254</b>	25	2.1	6.45	<b>2KJ1100 - ■CG13 - ■■E1</b>		9
	<b>244</b>	<b>293</b>	22	2.4	5.61 ★	<b>2KJ1100 - ■CG13 - ■■D1</b>		9
	<b>271</b>	<b>325</b>	19	2.5	5.06	<b>2KJ1100 - ■CG13 - ■■C1</b>		9
	<b>306</b>	<b>367</b>	17	2.9	4.47	<b>2KJ1100 - ■CG13 - ■■B1</b>		9
	<b>383</b>	<b>460</b>	14	3.4	3.58 ★	<b>2KJ1100 - ■CG13 - ■■A1</b>		9
	<b>E.68-LA71ZMP4</b>							
	<b>110</b>	<b>132</b>	48	1.7	12.40 ★	<b>2KJ1003 - ■CG13 - ■■W1</b>		26
	<b>123</b>	<b>148</b>	43	2.1	11.18	<b>2KJ1003 - ■CG13 - ■■V1</b>		26
	<b>136</b>	<b>163</b>	39	2.5	10.08 ★	<b>2KJ1003 - ■CG13 - ■■U1</b>		26
	<b>E.48-LA71ZMP4</b>							
	<b>121</b>	<b>145</b>	43	1.3	11.30	<b>2KJ1002 - ■CG13 - ■■U1</b>		16
	<b>137</b>	<b>164</b>	38	2.1	10.00 ★	<b>2KJ1002 - ■CG13 - ■■T1</b>		16
	<b>151</b>	<b>181</b>	35	1.8	9.09	<b>2KJ1002 - ■CG13 - ■■S1</b>		16
	<b>168</b>	<b>202</b>	31	2.7	8.17 ★	<b>2KJ1002 - ■CG13 - ■■R1</b>		16
	<b>196</b>	<b>235</b>	27	3.6	7.00	<b>2KJ1002 - ■CG13 - ■■Q1</b>		16
	<b>E.38-LA71ZMP4</b>							
	<b>147</b>	<b>176</b>	36	0.89	9.33 ★	<b>2KJ1001 - ■CG13 - ■■S1</b>		13
	<b>165</b>	<b>198</b>	32	1.0	8.30	<b>2KJ1001 - ■CG13 - ■■R1</b>		13
	<b>190</b>	<b>228</b>	28	1.4	7.20 ★	<b>2KJ1001 - ■CG13 - ■■Q1</b>		13
	<b>204</b>	<b>245</b>	26	1.9	6.73	<b>2KJ1001 - ■CG13 - ■■P1</b>		13
	<b>231</b>	<b>277</b>	23	2.3	5.92 ★	<b>2KJ1001 - ■CG13 - ■■N1</b>		13
	<b>264</b>	<b>317</b>	20	3.5	5.18	<b>2KJ1001 - ■CG13 - ■■M1</b>		13
	<b>299</b>	<b>359</b>	18	4.4	4.58 ★	<b>2KJ1001 - ■CG13 - ■■L1</b>		13
	<b>330</b>	<b>396</b>	16	3.9	4.15	<b>2KJ1001 - ■CG13 - ■■K1</b>		13
	<b>373</b>	<b>448</b>	14	5.0	3.67 ★	<b>2KJ1001 - ■CG13 - ■■J1</b>		13
	<b>414</b>	<b>497</b>	13	5.1	3.31	<b>2KJ1001 - ■CG13 - ■■H1</b>		13
<b>0.75 (50 Hz)</b>	<b>D.188-Z48-LA80M4</b>							
0.9 (60 Hz)	<b>0.27</b>	<b>0.32</b>	23 410	0.85	5 107	<b>2KJ1235 - ■DC13 - ■■Q1</b>		607
	<b>0.30</b>	<b>0.36</b>	21 375	0.94	4 663 ★	<b>2KJ1235 - ■DC13 - ■■P1</b>		607
	<b>0.33</b>	<b>0.40</b>	19 615	1.0	4 279	<b>2KJ1235 - ■DC13 - ■■N1</b>		607
	<b>0.35</b>	<b>0.42</b>	18 070	1.1	3 942 ★	<b>2KJ1235 - ■DC13 - ■■M1</b>		607
	<b>0.39</b>	<b>0.47</b>	16 411	1.2	3 580	<b>2KJ1235 - ■DC13 - ■■L1</b>		607
	<b>0.43</b>	<b>0.52</b>	14 948	1.3	3 261 ★	<b>2KJ1235 - ■DC13 - ■■K1</b>		607
	<b>0.47</b>	<b>0.56</b>	13 697	1.5	2 988	<b>2KJ1235 - ■DC13 - ■■J1</b>		607

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>0.75 (50 Hz)</b>	<b>D.188-Z48-LA80M4</b>							
0.9 (60 Hz)	<b>0.52</b>	<b>0.62</b>	12 221	1.6	2 666	★ 2KJ1235 - ■DC13 - ■■H1		607
	<b>0.59</b>	<b>0.71</b>	10 905	1.8	2 379	2KJ1235 - ■DC13 - ■■G1		607
	<b>D.168-Z48-LA80M4</b>							
	<b>0.37</b>	<b>0.44</b>	17 121	0.82	3 735	★ 2KJ1232 - ■DC13 - ■■H1		463
	<b>0.42</b>	<b>0.50</b>	15 278	0.92	3 333	2KJ1232 - ■DC13 - ■■G1		463
	<b>0.49</b>	<b>0.59</b>	12 977	1.1	2 831	2KJ1232 - ■DC13 - ■■F1		463
	<b>0.59</b>	<b>0.71</b>	10 804	1.3	2 357	★ 2KJ1232 - ■DC13 - ■■E1		463
	<b>0.60</b>	<b>0.72</b>	10 630	1.3	2 319	★ 2KJ1232 - ■DC13 - ■■D1		463
	<b>0.67</b>	<b>0.80</b>	9 489	1.5	2 070	2KJ1232 - ■DC13 - ■■C1		463
	<b>0.79</b>	<b>0.95</b>	8 059	1.7	1 758	2KJ1232 - ■DC13 - ■■B1		463
	<b>D.148-Z48-LA80M4</b>							
	<b>0.86</b>	<b>1.0</b>	7 477	1.1	1 631	2KJ1231 - ■DC13 - ■■N1		296
	<b>0.93</b>	<b>1.1</b>	6 885	1.2	1 502	2KJ1231 - ■DC13 - ■■M1		296
	<b>1.0</b>	<b>1.2</b>	6 253	1.3	1 364	2KJ1231 - ■DC13 - ■■L1		296
	<b>1.1</b>	<b>1.3</b>	5 698	1.4	1 243	2KJ1231 - ■DC13 - ■■K1		296
	<b>1.2</b>	<b>1.4</b>	5 221	1.5	1 139	2KJ1231 - ■DC13 - ■■J1		296
	<b>1.4</b>	<b>1.7</b>	4 657	1.7	1 016	2KJ1231 - ■DC13 - ■■H1		296
	<b>1.5</b>	<b>1.8</b>	4 158	1.9	907	2KJ1231 - ■DC13 - ■■G1		296
	<b>D.148-Z38-LA80M4</b>							
	<b>0.67</b>	<b>0.8</b>	9 489	0.84	2070	2KJ1228 - ■DC13 - ■■C1		287
	<b>0.75</b>	<b>0.9</b>	8 549	0.94	1 865	2KJ1228 - ■DC13 - ■■B1		287
	<b>0.87</b>	<b>1</b>	7 353	1.1	1 604	2KJ1228 - ■DC13 - ■■A1		287
	<b>D.128-Z48-LA80M4</b>							
	<b>1.1</b>	<b>1.3</b>	5 826	0.88	1 271	2KJ1227 - ■DC13 - ■■P1		212
	<b>1.2</b>	<b>1.4</b>	5 345	0.95	1 166	2KJ1227 - ■DC13 - ■■N1		212
	<b>1.3</b>	<b>1.6</b>	4 923	1.0	1 074	2KJ1227 - ■DC13 - ■■M1		212
	<b>1.4</b>	<b>1.7</b>	4 469	1.1	975	2KJ1227 - ■DC13 - ■■L1		212
	<b>1.6</b>	<b>1.9</b>	4 075	1.3	889	2KJ1227 - ■DC13 - ■■K1		212
	<b>1.7</b>	<b>2.0</b>	3 731	1.4	814	2KJ1227 - ■DC13 - ■■J1		212
	<b>1.9</b>	<b>2.3</b>	3 328	1.5	726	2KJ1227 - ■DC13 - ■■H1		212
	<b>2.2</b>	<b>2.6</b>	2 970	1.7	648	2KJ1227 - ■DC13 - ■■G1		212
	<b>D.128-Z38-LA80M4</b>							
	<b>1.1</b>	<b>1.3</b>	5 868	0.87	1 280	★ 2KJ1225 - ■DC13 - ■■A1		202
	<b>D.128-LA100LA8</b>							
	<b>2.5</b>	<b>3.0</b>	2 825	1.8	268.16	★ 2KJ1207 - ■FB13 - ■■U1	P02	221
	<b>2.8</b>	<b>3.4</b>	2 590	2	245.93	2KJ1207 - ■FB13 - ■■T1	P02	221
	<b>D.108-Z38-LA80M4</b>							
	<b>1.8</b>	<b>2.2</b>	3 653	0.85	797	2KJ1223 - ■DC13 - ■■H1		131
	<b>D.108-LA100LA8</b>							
	<b>2.4</b>	<b>2.9</b>	2 999	1	284.73	2KJ1206 - ■FB13 - ■■T1	P02	144
	<b>D.108-LA90S6</b>							
	<b>2.5</b>	<b>3.0</b>	2 813	1.1	359.30	2KJ1206 - ■EC13 - ■■V1	P01	133
	<b>2.8</b>	<b>3.4</b>	2 546	1.2	325.21	★ 2KJ1206 - ■EC13 - ■■U1	P01	133

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>0.75</b> (50 Hz)	<b>D.108-LA90S6</b>							
0.9 (60 Hz)	<b>3.2</b>	<b>3.8</b>	2 229	1.4	284.73	<b>2KJ1206 - ■ EC13 - ■■ T1</b>	<b>P01</b>	133
	<b>3.6</b>	<b>4.3</b>	2 011	1.5	256.86 ★	<b>2KJ1206 - ■ EC13 - ■■ S1</b>	<b>P01</b>	133
<b>D.108-LA80M4</b>								
	<b>3.9</b>	<b>4.7</b>	1 845	1.7	359.3	<b>2KJ1206 - ■ DC13 - ■■ V1</b>		130
	<b>4.3</b>	<b>5.2</b>	1 670	1.9	325.21 ★	<b>2KJ1206 - ■ DC13 - ■■ U1</b>		130
<b>D.88-LA90S6</b>								
	<b>3.7</b>	<b>4.4</b>	1 912	0.88	244.29 ★	<b>2KJ1205 - ■ EC13 - ■■ T1</b>	<b>P01</b>	85
	<b>4.3</b>	<b>5.2</b>	1 672	1.0	213.64	<b>2KJ1205 - ■ EC13 - ■■ S1</b>	<b>P01</b>	85
<b>D.88-LA80M4</b>								
	<b>4.6</b>	<b>5.5</b>	1 542	1.1	300.41 ★	<b>2KJ1205 - ■ DC13 - ■■ V1</b>		82
	<b>5.1</b>	<b>6.1</b>	1 391	1.2	270.90	<b>2KJ1205 - ■ DC13 - ■■ U1</b>		82
	<b>5.7</b>	<b>6.8</b>	1 254	1.3	244.29 ★	<b>2KJ1205 - ■ DC13 - ■■ T1</b>		82
	<b>6.5</b>	<b>7.8</b>	1 097	1.5	213.64	<b>2KJ1205 - ■ DC13 - ■■ S1</b>		82
	<b>7.3</b>	<b>8.8</b>	985	1.7	191.8 ★	<b>2KJ1205 - ■ DC13 - ■■ R1</b>		82
	<b>8.0</b>	<b>9.6</b>	899	1.9	175.18	<b>2KJ1205 - ■ DC13 - ■■ Q1</b>		82
	<b>9.0</b>	<b>10.8</b>	798	2.1	155.46 ★	<b>2KJ1205 - ■ DC13 - ■■ P1</b>		82
<b>D.68-LA80M4</b>								
	<b>8.0</b>	<b>9.6</b>	894	0.90	174.08	<b>2KJ1204 - ■ DC13 - ■■ Q1</b>		50
	<b>8.9</b>	<b>10.7</b>	809	0.99	157.5 ★	<b>2KJ1204 - ■ DC13 - ■■ P1</b>		50
	<b>9.6</b>	<b>11.5</b>	746	1.1	145.38	<b>2KJ1204 - ■ DC13 - ■■ N1</b>		50
	<b>11.0</b>	<b>13.2</b>	649	1.2	126.41 ★	<b>2KJ1204 - ■ DC13 - ■■ M1</b>		50
	<b>12.2</b>	<b>14.6</b>	589	1.4	114.78	<b>2KJ1204 - ■ DC13 - ■■ L1</b>		50
	<b>13.3</b>	<b>16.0</b>	538	1.5	104.80 ★	<b>2KJ1204 - ■ DC13 - ■■ K1</b>		50
	<b>14.5</b>	<b>17.4</b>	494	1.6	96.16	<b>2KJ1204 - ■ DC13 - ■■ J1</b>		50
	<b>15.7</b>	<b>18.8</b>	455	1.8	88.59 ★	<b>2KJ1204 - ■ DC13 - ■■ H1</b>		50
	<b>17.3</b>	<b>21</b>	413	1.9	80.46	<b>2KJ1204 - ■ DC13 - ■■ G1</b>		50
	<b>19</b>	<b>23</b>	376	2.1	73.30 ★	<b>2KJ1204 - ■ DC13 - ■■ F1</b>		50
	<b>21</b>	<b>25</b>	345	2.3	67.14	<b>2KJ1204 - ■ DC13 - ■■ E1</b>		50
<b>Z.68-LA80M4</b>								
	<b>29</b>	<b>35</b>	247	2.2	48.09 ★	<b>2KJ1104 - ■ DC13 - ■■ X1</b>		48
<b>D.48-LA80M4</b>								
	<b>13.6</b>	<b>16.3</b>	526	0.85	102.52 ★	<b>2KJ1203 - ■ DC13 - ■■ L1</b>		31
	<b>15.0</b>	<b>18</b>	477	0.94	92.91	<b>2KJ1203 - ■ DC13 - ■■ K1</b>		31
	<b>17.0</b>	<b>20</b>	421	1.1	82.02 ★	<b>2KJ1203 - ■ DC13 - ■■ J1</b>		31
	<b>18.9</b>	<b>23</b>	380	1.2	73.99	<b>2KJ1203 - ■ DC13 - ■■ H1</b>		31
	<b>21</b>	<b>25</b>	345	1.3	67.10 ★	<b>2KJ1203 - ■ DC13 - ■■ G1</b>		31
	<b>23</b>	<b>28</b>	314	1.4	61.14	<b>2KJ1203 - ■ DC13 - ■■ F1</b>		31
	<b>25</b>	<b>30</b>	287	1.6	55.92 ★	<b>2KJ1203 - ■ DC13 - ■■ E1</b>		31
	<b>28</b>	<b>34</b>	257	1.8	50.00	<b>2KJ1203 - ■ DC13 - ■■ D1</b>		31
<b>Z.48-LA80M4</b>								
	<b>27</b>	<b>32</b>	263	1.1	51.28	<b>2KJ1103 - ■ DC13 - ■■ A2</b>		31
	<b>31</b>	<b>37</b>	233	1.9	45.38 ★	<b>2KJ1103 - ■ DC13 - ■■ X1</b>		31
	<b>34</b>	<b>41</b>	212	2.1	41.26	<b>2KJ1103 - ■ DC13 - ■■ W1</b>		31

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
0.75 (50 Hz) 0.9 (60 Hz)	<b>Z.48-LA80M4</b>							
	<b>38</b>	<b>46</b>	190	2.4	37.06 ★	<b>2KJ1103 - DC13 - V1</b>		31
	<b>D.38-LA80M4</b>							
	<b>26</b>	<b>31</b>	271	0.81	52.86	<b>2KJ1202 - DC13 - F1</b>		22
	<b>Z.38-LA80M4</b>							
	<b>32</b>	<b>38</b>	227	0.8	44.12 ★	<b>2KJ1102 - DC13 - A2</b>		21
	<b>36</b>	<b>43</b>	201	1.0	39.24	<b>2KJ1102 - DC13 - X1</b>		21
	<b>41</b>	<b>49</b>	175	1.3	34.04 ★	<b>2KJ1102 - DC13 - W1</b>		21
	<b>44</b>	<b>53</b>	163	1.3	31.80	<b>2KJ1102 - DC13 - V1</b>		21
	<b>50</b>	<b>60</b>	144	1.5	27.97 ★	<b>2KJ1102 - DC13 - U1</b>		21
	<b>57</b>	<b>68</b>	126	1.7	24.50	<b>2KJ1102 - DC13 - T1</b>		21
	<b>64</b>	<b>77</b>	111	2.0	21.67 ★	<b>2KJ1102 - DC13 - S1</b>		21
	<b>71</b>	<b>85</b>	101	2.2	19.64	<b>2KJ1102 - DC13 - R1</b>		21
	<b>80</b>	<b>96</b>	89	2.5	17.33 ★	<b>2KJ1102 - DC13 - Q1</b>		21
	<b>89</b>	<b>107</b>	80	2.7	15.64	<b>2KJ1102 - DC13 - P1</b>		21
	<b>98</b>	<b>118</b>	73	3.0	14.18 ★	<b>2KJ1102 - DC13 - N1</b>		21
	<b>108</b>	<b>130</b>	66	3.3	12.92	<b>2KJ1102 - DC13 - M1</b>		21
	<b>118</b>	<b>142</b>	61	3.6	11.82 ★	<b>2KJ1102 - DC13 - L1</b>		21
	<b>Z.28-LA71ZMD4</b>							
	<b>44</b>	<b>53</b>	162	0.86	30.16	<b>2KJ1101 - CH13 - W1</b>		10
	<b>50</b>	<b>60</b>	144	0.97	26.77 ★	<b>2KJ1101 - CH13 - V1</b>		10
	<b>57</b>	<b>68</b>	126	1.1	23.46	<b>2KJ1101 - CH13 - U1</b>		10
	<b>64</b>	<b>77</b>	111	1.3	20.63 ★	<b>2KJ1101 - CH13 - T1</b>		10
	<b>71</b>	<b>85</b>	100	1.4	18.63	<b>2KJ1101 - CH13 - S1</b>		10
	<b>82</b>	<b>98</b>	88	1.6	16.24 ★	<b>2KJ1101 - CH13 - R1</b>		10
	<b>91</b>	<b>109</b>	78	1.8	14.58	<b>2KJ1101 - CH13 - Q1</b>		10
	<b>101</b>	<b>121</b>	71	2.0	13.17 ★	<b>2KJ1101 - CH13 - P1</b>		10
	<b>111</b>	<b>133</b>	64	2.2	11.94	<b>2KJ1101 - CH13 - N1</b>		10
	<b>122</b>	<b>146</b>	58	2.4	10.87 ★	<b>2KJ1101 - CH13 - M1</b>		10
	<b>138</b>	<b>166</b>	52	2.7	9.61	<b>2KJ1101 - CH13 - L1</b>		10
	<b>150</b>	<b>180</b>	48	2.9	8.87 ★	<b>2KJ1101 - CH13 - K1</b>		10
	<b>174</b>	<b>209</b>	41	3.3	7.64	<b>2KJ1101 - CH13 - J1</b>		10
	<b>192</b>	<b>230</b>	37	3.5	6.94 ★	<b>2KJ1101 - CH13 - H1</b>		10
	<b>211</b>	<b>253</b>	34	2.8	6.31 ★	<b>2KJ1101 - CH13 - G1</b>		10
	<b>233</b>	<b>280</b>	31	3.0	5.72	<b>2KJ1101 - CH13 - F1</b>		10
	<b>255</b>	<b>306</b>	28	3.3	5.21 ★	<b>2KJ1101 - CH13 - E1</b>		10
	<b>289</b>	<b>347</b>	25	3.6	4.60	<b>2KJ1101 - CH13 - D1</b>		10
	<b>313</b>	<b>376</b>	23	3.9	4.25 ★	<b>2KJ1101 - CH13 - C1</b>		10
	<b>363</b>	<b>436</b>	20	4.1	3.66	<b>2KJ1101 - CH13 - B1</b>		10
	<b>399</b>	<b>479</b>	18	4.3	3.33 ★	<b>2KJ1101 - CH13 - A1</b>		10
	<b>Z.18-LA71ZMD4</b>							
	<b>67</b>	<b>80</b>	107	0.84	19.85	<b>2KJ1100 - CH13 - N1</b>		9
	<b>79</b>	<b>95</b>	91	0.99	16.92 ★	<b>2KJ1100 - CH13 - M1</b>		9
	<b>92</b>	<b>110</b>	77	1.2	14.38 ★	<b>2KJ1100 - CH13 - L1</b>		9

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>0.75</b> (50 Hz)	<b>Z.18-LA71ZMD4</b>							
0.9 (60 Hz)	<b>106</b>	<b>127</b>	67	1.3	12.50	<b>2KJ1100 - ■CH13 - ■■K1</b>		9
	<b>122</b>	<b>146</b>	59	1.5	10.88 ★	<b>2KJ1100 - ■CH13 - ■■J1</b>		9
	<b>136</b>	<b>163</b>	53	1.6	9.81	<b>2KJ1100 - ■CH13 - ■■H1</b>		9
	<b>154</b>	<b>185</b>	47	1.7	8.66	<b>2KJ1100 - ■CH13 - ■■G1</b>		9
	<b>179</b>	<b>215</b>	40	1.4	7.42 ★	<b>2KJ1100 - ■CH13 - ■■F1</b>		9
	<b>206</b>	<b>247</b>	35	1.5	6.45	<b>2KJ1100 - ■CH13 - ■■E1</b>		9
	<b>237</b>	<b>284</b>	30	1.7	5.61 ★	<b>2KJ1100 - ■CH13 - ■■D1</b>		9
	<b>263</b>	<b>316</b>	27	1.8	5.06	<b>2KJ1100 - ■CH13 - ■■C1</b>		9
	<b>298</b>	<b>358</b>	24	2.0	4.47	<b>2KJ1100 - ■CH13 - ■■B1</b>		9
	<b>372</b>	<b>446</b>	19	2.4	3.58 ★	<b>2KJ1100 - ■CH13 - ■■A1</b>		9
	<b>E.68-LA80M4</b>							
	<b>112</b>	<b>134</b>	64	1.3	12.40 ★	<b>2KJ1003 - ■DC13 - ■■W1</b>		30
	<b>125</b>	<b>150</b>	57	1.6	11.18	<b>2KJ1003 - ■DC13 - ■■V1</b>		30
	<b>138</b>	<b>166</b>	52	1.8	10.08 ★	<b>2KJ1003 - ■DC13 - ■■U1</b>		30
	<b>158</b>	<b>190</b>	45	3.3	8.82	<b>2KJ1003 - ■DC13 - ■■T1</b>		30
	<b>176</b>	<b>211</b>	41	4.2	7.92 ★	<b>2KJ1003 - ■DC13 - ■■S1</b>		30
	<b>193</b>	<b>232</b>	37	4.0	7.23	<b>2KJ1003 - ■DC13 - ■■R1</b>		30
	<b>E.48-LA80M4</b>							
	<b>123</b>	<b>148</b>	58	0.95	11.30	<b>2KJ1002 - ■DC13 - ■■U1</b>		20
	<b>140</b>	<b>168</b>	51	1.6	10.00 ★	<b>2KJ1002 - ■DC13 - ■■T1</b>		20
	<b>153</b>	<b>184</b>	47	1.4	9.09	<b>2KJ1002 - ■DC13 - ■■S1</b>		20
	<b>171</b>	<b>205</b>	42	2.0	8.17 ★	<b>2KJ1002 - ■DC13 - ■■R1</b>		20
	<b>199</b>	<b>239</b>	36	2.7	7.00	<b>2KJ1002 - ■DC13 - ■■Q1</b>		20
	<b>220</b>	<b>264</b>	32	3.5	6.33 ★	<b>2KJ1002 - ■DC13 - ■■P1</b>		20
	<b>238</b>	<b>286</b>	30	4.0	5.85	<b>2KJ1002 - ■DC13 - ■■N1</b>		20
	<b>275</b>	<b>330</b>	26	4.6	5.08 ★	<b>2KJ1002 - ■DC13 - ■■M1</b>		20
	<b>E.38-LA80M4</b>							
	<b>194</b>	<b>233</b>	37	1.0	7.20 ★	<b>2KJ1001 - ■DC13 - ■■Q1</b>		17
	<b>207</b>	<b>248</b>	35	1.4	6.73	<b>2KJ1001 - ■DC13 - ■■P1</b>		17
	<b>236</b>	<b>283</b>	30	1.7	5.92 ★	<b>2KJ1001 - ■DC13 - ■■N1</b>		17
	<b>269</b>	<b>323</b>	27	2.6	5.18	<b>2KJ1001 - ■DC13 - ■■M1</b>		17
	<b>305</b>	<b>366</b>	24	3.3	4.58 ★	<b>2KJ1001 - ■DC13 - ■■L1</b>		17
	<b>336</b>	<b>403</b>	21	2.9	4.15	<b>2KJ1001 - ■DC13 - ■■K1</b>		17
	<b>380</b>	<b>456</b>	19	3.7	3.67 ★	<b>2KJ1001 - ■DC13 - ■■J1</b>		17
	<b>421</b>	<b>505</b>	17	3.8	3.31	<b>2KJ1001 - ■DC13 - ■■H1</b>		17
	<b>465</b>	<b>558</b>	15	5.2	3.00 ★	<b>2KJ1001 - ■DC13 - ■■G1</b>		17
	<b>511</b>	<b>613</b>	14	5.7	2.73	<b>2KJ1001 - ■DC13 - ■■F1</b>		17
	<b>558</b>	<b>670</b>	13	5.7	2.50 ★	<b>2KJ1001 - ■DC13 - ■■E1</b>		17
<b>1.1</b> (50 Hz)	<b>D.188-Z48-LA90S4</b>							
1.3 (60 Hz)	<b>0.40</b>	<b>0.48</b>	24 043	0.83	3 580	<b>2KJ1235 - ■EL13 - ■■L1</b>		610
	<b>0.43</b>	<b>0.52</b>	21 901	0.91	3 261 ★	<b>2KJ1235 - ■EL13 - ■■K1</b>		610
	<b>0.47</b>	<b>0.56</b>	20 068	1.0	2 988	<b>2KJ1235 - ■EL13 - ■■J1</b>		610

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
1.1 (50 Hz) 1.3 (60 Hz)	<b>D.188-Z48-LA90S4</b>							
		<b>0.53</b>	<b>0.64</b>	17 905	1.1	2 666	★ 2KJ1235 - ■ EL13 - ■■ H1	610
		<b>0.60</b>	<b>0.72</b>	15 977	1.3	2 379	2KJ1235 - ■ EL13 - ■■ G1	610
		<b>0.70</b>	<b>0.84</b>	13 573	1.5	2 021	2KJ1235 - ■ EL13 - ■■ F1	610
		<b>0.84</b>	<b>1.0</b>	11 296	1.8	1 682	★ 2KJ1235 - ■ EL13 - ■■ E1	610
		<b>0.86</b>	<b>1.0</b>	11 115	1.8	1 655	★ 2KJ1235 - ■ EL13 - ■■ D1	610
		<b>0.96</b>	<b>1.2</b>	9 920	2.0	1 477	2KJ1235 - ■ EL13 - ■■ C1	610
<b>D.168-Z48-LA90S4</b>								
	<b>0.60</b>	<b>0.72</b>	15 830	0.88	2 357	★ 2KJ1232 - ■ EL13 - ■■ E1	466	
	<b>0.61</b>	<b>0.73</b>	15 575	0.9	2 319	★ 2KJ1232 - ■ EL13 - ■■ D1	466	
	<b>0.68</b>	<b>0.82</b>	13 902	1.0	2 070	2KJ1232 - ■ EL13 - ■■ C1	466	
	<b>0.80</b>	<b>0.96</b>	11 807	1.2	1 758	2KJ1232 - ■ EL13 - ■■ B1	466	
	<b>0.97</b>	<b>1.2</b>	9 826	1.4	1 463	★ 2KJ1232 - ■ EL13 - ■■ A1	466	
<b>D.168-Z68-LA90S4</b>								
	<b>0.97</b>	<b>1.2</b>	9 812	1.4	1 461	2KJ1233 - ■ EL13 - ■■ J1	483	
	<b>1.2</b>	<b>1.4</b>	8 234	1.7	1 226	2KJ1233 - ■ EL13 - ■■ H1	483	
	<b>1.4</b>	<b>1.7</b>	7 025	2.0	1 046	2KJ1233 - ■ EL13 - ■■ G1	483	
<b>D.148-Z48-LA90S4</b>								
	<b>1.0</b>	<b>1.2</b>	9 161	0.87	1 364	2KJ1231 - ■ EL13 - ■■ L1	299	
	<b>1.1</b>	<b>1.3</b>	8 348	0.96	1 243	2KJ1231 - ■ EL13 - ■■ K1	299	
	<b>1.2</b>	<b>1.4</b>	7 650	1.0	1 139	2KJ1231 - ■ EL13 - ■■ J1	299	
	<b>1.4</b>	<b>1.7</b>	6 824	1.2	1 016	2KJ1231 - ■ EL13 - ■■ H1	299	
	<b>1.6</b>	<b>1.9</b>	6 091	1.3	907	2KJ1231 - ■ EL13 - ■■ G1	299	
	<b>1.8</b>	<b>2.2</b>	5 171	1.5	770	2KJ1231 - ■ EL13 - ■■ F1	299	
<b>D.148-LA100L8</b>								
	<b>2</b>	<b>2.4</b>	5 192	1.5	336.11	2KJ1208 - ■ FL13 - ■■ W1 P02	311	
	<b>2.3</b>	<b>2.8</b>	4 655	1.7	301.34	★ 2KJ1208 - ■ FL13 - ■■ V1 P02	311	
	<b>2.5</b>	<b>3.0</b>	4 267	1.9	276.23	2KJ1208 - ■ FL13 - ■■ U1 P02	311	
	<b>2.7</b>	<b>3.2</b>	3 935	2.0	254.70	★ 2KJ1208 - ■ FL13 - ■■ T1 P02	311	
<b>D.128-Z48-LA90S4</b>								
	<b>1.6</b>	<b>1.9</b>	5 971	0.85	889	2KJ1227 - ■ EL13 - ■■ K1	215	
	<b>1.7</b>	<b>2.0</b>	5 467	0.93	814	2KJ1227 - ■ EL13 - ■■ J1	215	
	<b>1.9</b>	<b>2.3</b>	4 876	1.0	726	2KJ1227 - ■ EL13 - ■■ H1	215	
	<b>2.2</b>	<b>2.6</b>	4 352	1.2	648	2KJ1227 - ■ EL13 - ■■ G1	215	
<b>D.128-LA100L8</b>								
	<b>2.5</b>	<b>3.0</b>	4 143	1.2	268.16	★ 2KJ1207 - ■ FL13 - ■■ U1 P02	221	
	<b>2.8</b>	<b>3.4</b>	3 799	1.3	245.93	2KJ1207 - ■ FL13 - ■■ T1 P02	221	
	<b>3.1</b>	<b>3.7</b>	3 394	1.5	219.72	★ 2KJ1207 - ■ FL13 - ■■ S1 P02	221	
<b>D.128-LA90L6</b>								
	<b>3.4</b>	<b>4.1</b>	3 079	1.7	268.16	★ 2KJ1207 - ■ EP13 - ■■ U1 P01	213	
	<b>3.7</b>	<b>4.4</b>	2 823	1.8	245.93	2KJ1207 - ■ EP13 - ■■ T1 P01	213	
	<b>4.2</b>	<b>5.0</b>	2 523	2.0	219.72	★ 2KJ1207 - ■ EP13 - ■■ S1 P01	213	
<b>D.108-LA90L6</b>								
	<b>2.8</b>	<b>3.4</b>	3 734	0.83	325.21	★ 2KJ1206 - ■ EP13 - ■■ U1 P01	136	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
1.1 (50 Hz) 1.3 (60 Hz)	<b>D.108-LA90L6</b>							
	<b>3.2</b>	<b>3.8</b>	3 269	0.95	284.73	<b>2KJ1206 - ■ EL13 - ■■ T1</b>	<b>P01</b>	136
	<b>3.6</b>	<b>4.3</b>	2 949	1.1	256.86 ★	<b>2KJ1206 - ■ EL13 - ■■ S1</b>	<b>P01</b>	136
<b>D.108-LA90S4</b>								
	<b>3.9</b>	<b>4.7</b>	2 667	1.2	359.30	<b>2KJ1206 - ■ EL13 - ■■ V1</b>		133
	<b>4.4</b>	<b>5.3</b>	2 414	1.3	325.21 ★	<b>2KJ1206 - ■ EL13 - ■■ U1</b>		133
	<b>5.0</b>	<b>6.0</b>	2 114	1.5	284.73	<b>2KJ1206 - ■ EL13 - ■■ T1</b>		133
	<b>5.5</b>	<b>6.6</b>	1 907	1.6	256.86 ★	<b>2KJ1206 - ■ EL13 - ■■ S1</b>		133
	<b>6.0</b>	<b>7.2</b>	1 746	1.8	235.19	<b>2KJ1206 - ■ EL13 - ■■ R1</b>		133
	<b>6.8</b>	<b>8.2</b>	1 553	2.0	209.21 ★	<b>2KJ1206 - ■ EL13 - ■■ Q1</b>		133
<b>D.88-LA90S4</b>								
	<b>5.2</b>	<b>6.2</b>	2 011	0.84	270.90	<b>2KJ1205 - ■ EL13 - ■■ U1</b>		85
	<b>5.8</b>	<b>7.0</b>	1 814	0.93	244.29 ★	<b>2KJ1205 - ■ EL13 - ■■ T1</b>		85
	<b>6.6</b>	<b>7.9</b>	1 586	1.1	213.64	<b>2KJ1205 - ■ EL13 - ■■ S1</b>		85
	<b>7.4</b>	<b>8.9</b>	1 424	1.2	191.80 ★	<b>2KJ1205 - ■ EL13 - ■■ R1</b>		85
	<b>8.1</b>	<b>9.7</b>	1 301	1.3	175.18	<b>2KJ1205 - ■ EL13 - ■■ Q1</b>		85
	<b>9.1</b>	<b>10.9</b>	1 154	1.5	155.46 ★	<b>2KJ1205 - ■ EL13 - ■■ P1</b>		85
	<b>9.9</b>	<b>11.9</b>	1 065	1.6	143.50	<b>2KJ1205 - ■ EL13 - ■■ N1</b>		85
	<b>10.9</b>	<b>13.1</b>	964	1.7	129.79 ★	<b>2KJ1205 - ■ EL13 - ■■ M1</b>		85
	<b>11.8</b>	<b>14.2</b>	887	1.9	119.52	<b>2KJ1205 - ■ EL13 - ■■ L1</b>		85
	<b>12.8</b>	<b>15.4</b>	821	2.0	110.54 ★	<b>2KJ1205 - ■ EL13 - ■■ K1</b>		85
	<b>13.8</b>	<b>16.6</b>	762	2.2	102.61	<b>2KJ1205 - ■ EL13 - ■■ J1</b>		85
<b>D.68-LA90S4</b>								
	<b>11.2</b>	<b>13.4</b>	938	0.85	126.41 ★	<b>2KJ1204 - ■ EL13 - ■■ M1</b>		53
	<b>12.3</b>	<b>14.8</b>	852	0.94	114.78	<b>2KJ1204 - ■ EL13 - ■■ L1</b>		53
	<b>13.5</b>	<b>16.2</b>	778	1.0	104.80 ★	<b>2KJ1204 - ■ EL13 - ■■ K1</b>		53
	<b>14.7</b>	<b>17.6</b>	714	1.1	96.16	<b>2KJ1204 - ■ EL13 - ■■ J1</b>		53
	<b>16.0</b>	<b>19.2</b>	658	1.2	88.59 ★	<b>2KJ1204 - ■ EL13 - ■■ H1</b>		53
	<b>17.6</b>	<b>21</b>	597	1.3	80.46	<b>2KJ1204 - ■ EL13 - ■■ G1</b>		53
	<b>19.3</b>	<b>23</b>	544	1.5	73.30 ★	<b>2KJ1204 - ■ EL13 - ■■ F1</b>		53
	<b>21</b>	<b>25</b>	498	1.6	67.14	<b>2KJ1204 - ■ EL13 - ■■ E1</b>		53
	<b>24</b>	<b>29</b>	445	1.8	59.91 ★	<b>2KJ1204 - ■ EL13 - ■■ D1</b>		53
	<b>26</b>	<b>31</b>	397	2.0	53.47	<b>2KJ1204 - ■ EL13 - ■■ C1</b>		53
<b>Z.68-LA90S4</b>								
	<b>29</b>	<b>35</b>	357	1.5	48.09 ★	<b>2KJ1104 - ■ EL13 - ■■ X1</b>		51
	<b>34</b>	<b>41</b>	312	2.6	42.06	<b>2KJ1104 - ■ EL13 - ■■ W1</b>		51
<b>D.48-LA90S4</b>								
	<b>19.1</b>	<b>23</b>	549	0.82	73.99	<b>2KJ1203 - ■ EL13 - ■■ H1</b>		34
	<b>21</b>	<b>25</b>	498	0.90	67.10 ★	<b>2KJ1203 - ■ EL13 - ■■ G1</b>		34
	<b>23</b>	<b>28</b>	454	0.99	61.14	<b>2KJ1203 - ■ EL13 - ■■ F1</b>		34
	<b>25</b>	<b>30</b>	415	1.1	55.92 ★	<b>2KJ1203 - ■ EL13 - ■■ E1</b>		34
	<b>28</b>	<b>34</b>	371	1.2	50.00	<b>2KJ1203 - ■ EL13 - ■■ D1</b>		34
<b>Z.48-LA90S4</b>								
	<b>31</b>	<b>37</b>	337	1.3	45.38 ★	<b>2KJ1103 - ■ EL13 - ■■ X1</b>		34

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R



# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
1.1 (50 Hz) 1.3 (60 Hz)	<b>Z.48-LA90S4</b>							
	<b>34</b>	<b>41</b>	306	1.5	41.26	<b>2KJ1103 - ■ EL13 - ■■ W1</b>		34
	<b>38</b>	<b>46</b>	275	1.6	37.06 ★	<b>2KJ1103 - ■ EL13 - ■■ V1</b>		34
	<b>44</b>	<b>53</b>	236	1.9	31.77	<b>2KJ1103 - ■ EL13 - ■■ U1</b>		34
	<b>49</b>	<b>59</b>	213	2.1	28.74 ★	<b>2KJ1103 - ■ EL13 - ■■ T1</b>		34
	<b>53</b>	<b>64</b>	197	2.3	26.53	<b>2KJ1103 - ■ EL13 - ■■ S1</b>		34
	<b>61</b>	<b>73</b>	171	2.6	23.07 ★	<b>2KJ1103 - ■ EL13 - ■■ R1</b>		34
	<b>68</b>	<b>82</b>	156	2.9	20.95	<b>2KJ1103 - ■ EL13 - ■■ Q1</b>		34
	<b>74</b>	<b>89</b>	142	3.2	19.13 ★	<b>2KJ1103 - ■ EL13 - ■■ P1</b>		34
<b>Z.38-LA90S4</b>								
<b>42</b>	<b>50</b>	253	0.87	34.04 ★	<b>2KJ1102 - ■ EL13 - ■■ W1</b>		24	
<b>44</b>	<b>53</b>	236	0.93	31.80	<b>2KJ1102 - ■ EL13 - ■■ V1</b>		24	
<b>51</b>	<b>61</b>	208	1.1	27.97 ★	<b>2KJ1102 - ■ EL13 - ■■ U1</b>		24	
<b>58</b>	<b>70</b>	182	1.2	24.50	<b>2KJ1102 - ■ EL13 - ■■ T1</b>		24	
<b>65</b>	<b>78</b>	161	1.4	21.67 ★	<b>2KJ1102 - ■ EL13 - ■■ S1</b>		24	
<b>72</b>	<b>86</b>	146	1.5	19.64	<b>2KJ1102 - ■ EL13 - ■■ R1</b>		24	
<b>82</b>	<b>98</b>	129	1.7	17.33 ★	<b>2KJ1102 - ■ EL13 - ■■ Q1</b>		24	
<b>90</b>	<b>108</b>	116	1.9	15.64	<b>2KJ1102 - ■ EL13 - ■■ P1</b>		24	
<b>100</b>	<b>120</b>	105	2.1	14.18 ★	<b>2KJ1102 - ■ EL13 - ■■ N1</b>		24	
<b>110</b>	<b>132</b>	96	2.3	12.92	<b>2KJ1102 - ■ EL13 - ■■ M1</b>		24	
<b>120</b>	<b>144</b>	88	2.5	11.82 ★	<b>2KJ1102 - ■ EL13 - ■■ L1</b>		24	
<b>134</b>	<b>161</b>	78	2.7	10.57	<b>2KJ1102 - ■ EL13 - ■■ K1</b>		24	
<b>146</b>	<b>175</b>	72	2.8	9.70 ★	<b>2KJ1102 - ■ EL13 - ■■ J1</b>		24	
<b>162</b>	<b>194</b>	65	3.0	8.75	<b>2KJ1102 - ■ EL13 - ■■ H1</b>		24	
<b>188</b>	<b>226</b>	56	3.4	7.52 ★	<b>2KJ1102 - ■ EL13 - ■■ G1</b>		24	
<b>189</b>	<b>227</b>	56	3.3	7.50 ★	<b>2KJ1102 - ■ EL13 - ■■ F1</b>		24	
<b>211</b>	<b>253</b>	50	3.6	6.71	<b>2KJ1102 - ■ EL13 - ■■ D1</b>		24	
<b>230</b>	<b>276</b>	46	3.7	6.16 ★	<b>2KJ1102 - ■ EL13 - ■■ C1</b>		24	
<b>255</b>	<b>306</b>	41	4.0	5.55	<b>2KJ1102 - ■ EL13 - ■■ B1</b>		24	
<b>297</b>	<b>356</b>	35	4.5	4.77 ★	<b>2KJ1102 - ■ EL13 - ■■ A1</b>		24	
<b>Z.28-LA90S4</b>								
<b>60</b>	<b>72</b>	174	0.8	23.46	<b>2KJ1101 - ■ EL13 - ■■ U1</b>		17	
<b>69</b>	<b>83</b>	153	0.91	20.63 ★	<b>2KJ1101 - ■ EL13 - ■■ T1</b>		17	
<b>76</b>	<b>91</b>	138	1.0	18.63	<b>2KJ1101 - ■ EL13 - ■■ S1</b>		17	
<b>87</b>	<b>104</b>	121	1.2	16.24 ★	<b>2KJ1101 - ■ EL13 - ■■ R1</b>		17	
<b>97</b>	<b>116</b>	108	1.3	14.58	<b>2KJ1101 - ■ EL13 - ■■ Q1</b>		17	
<b>107</b>	<b>128</b>	98	1.4	13.17 ★	<b>2KJ1101 - ■ EL13 - ■■ P1</b>		17	
<b>119</b>	<b>143</b>	89	1.6	11.94	<b>2KJ1101 - ■ EL13 - ■■ N1</b>		17	
<b>130</b>	<b>156</b>	81	1.7	10.87 ★	<b>2KJ1101 - ■ EL13 - ■■ M1</b>		17	
<b>147</b>	<b>176</b>	71	2.0	9.61	<b>2KJ1101 - ■ EL13 - ■■ L1</b>		17	
<b>160</b>	<b>192</b>	66	2.1	8.87 ★	<b>2KJ1101 - ■ EL13 - ■■ K1</b>		17	
<b>185</b>	<b>222</b>	57	2.4	7.64	<b>2KJ1101 - ■ EL13 - ■■ J1</b>		17	
<b>204</b>	<b>245</b>	52	2.6	6.94 ★	<b>2KJ1101 - ■ EL13 - ■■ H1</b>		17	
<b>224</b>	<b>269</b>	47	2.0	6.31 ★	<b>2KJ1101 - ■ EL13 - ■■ G1</b>		17	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
1.1 (50 Hz)	<b>Z.28-LA90S4</b>							
1.3 (60 Hz)	<b>247</b>	<b>296</b>	42	2.2	5.72	<b>2KJ1101 - ■ EL13 - ■■ F1</b>		17
	<b>272</b>	<b>326</b>	39	2.4	5.21 ★	<b>2KJ1101 - ■ EL13 - ■■ E1</b>		17
	<b>308</b>	<b>370</b>	34	2.6	4.60	<b>2KJ1101 - ■ EL13 - ■■ D1</b>		17
	<b>333</b>	<b>400</b>	32	2.9	4.25 ★	<b>2KJ1101 - ■ EL13 - ■■ C1</b>		17
	<b>387</b>	<b>464</b>	27	2.9	3.66	<b>2KJ1101 - ■ EL13 - ■■ B1</b>		17
	<b>425</b>	<b>510</b>	25	3.1	3.33 ★	<b>2KJ1101 - ■ EL13 - ■■ A1</b>		17
	<b>E.88-LA90S4</b>							
	<b>137</b>	<b>164</b>	77	3.0	10.33 ★	<b>2KJ1004 - ■ EL13 - ■■ S1</b>		50
	<b>150</b>	<b>180</b>	70	3.0	9.46	<b>2KJ1004 - ■ EL13 - ■■ R1</b>		50
	<b>168</b>	<b>202</b>	62	3.9	8.42 ★	<b>2KJ1004 - ■ EL13 - ■■ Q1</b>		50
	<b>184</b>	<b>221</b>	57	4.3	7.69	<b>2KJ1004 - ■ EL13 - ■■ P1</b>		50
	<b>E.68-LA90S4</b>							
	<b>114</b>	<b>137</b>	92	0.88	12.40 ★	<b>2KJ1003 - ■ EL13 - ■■ W1</b>		33
	<b>127</b>	<b>152</b>	83	1.1	11.18	<b>2KJ1003 - ■ EL13 - ■■ V1</b>		33
	<b>140</b>	<b>168</b>	75	1.3	10.08 ★	<b>2KJ1003 - ■ EL13 - ■■ U1</b>		33
	<b>160</b>	<b>192</b>	66	2.3	8.82	<b>2KJ1003 - ■ EL13 - ■■ T1</b>		33
	<b>179</b>	<b>215</b>	59	2.9	7.92 ★	<b>2KJ1003 - ■ EL13 - ■■ S1</b>		33
	<b>196</b>	<b>235</b>	54	2.8	7.23	<b>2KJ1003 - ■ EL13 - ■■ R1</b>		33
	<b>220</b>	<b>264</b>	48	3.6	6.42 ★	<b>2KJ1003 - ■ EL13 - ■■ P1</b>		33
	<b>239</b>	<b>287</b>	44	4.3	5.92	<b>2KJ1003 - ■ EL13 - ■■ N1</b>		33
	<b>E.48-LA90S4</b>							
	<b>142</b>	<b>170</b>	74	1.10	10.00 ★	<b>2KJ1002 - ■ EL13 - ■■ T1</b>		23
	<b>156</b>	<b>187</b>	68	0.95	9.09	<b>2KJ1002 - ■ EL13 - ■■ S1</b>		23
	<b>173</b>	<b>208</b>	61	1.4	8.17 ★	<b>2KJ1002 - ■ EL13 - ■■ R1</b>		23
	<b>202</b>	<b>242</b>	52	1.9	7.00	<b>2KJ1002 - ■ EL13 - ■■ Q1</b>		23
	<b>224</b>	<b>269</b>	47	2.4	6.33 ★	<b>2KJ1002 - ■ EL13 - ■■ P1</b>		23
	<b>242</b>	<b>290</b>	43	2.8	5.85	<b>2KJ1002 - ■ EL13 - ■■ N1</b>		23
	<b>279</b>	<b>335</b>	38	3.2	5.08 ★	<b>2KJ1002 - ■ EL13 - ■■ M1</b>		23
	<b>306</b>	<b>367</b>	34	3.8	4.62	<b>2KJ1002 - ■ EL13 - ■■ L1</b>		23
	<b>336</b>	<b>403</b>	31	4.8	4.21 ★	<b>2KJ1002 - ■ EL13 - ■■ K1</b>		23
	<b>397</b>	<b>476</b>	26	5.3	3.56 ★	<b>2KJ1002 - ■ EL13 - ■■ H1</b>		23
	<b>E.38-LA90S4</b>							
	<b>210</b>	<b>252</b>	50	0.96	6.73	<b>2KJ1001 - ■ EL13 - ■■ P1</b>		20
	<b>239</b>	<b>287</b>	44	1.2	5.92 ★	<b>2KJ1001 - ■ EL13 - ■■ N1</b>		20
	<b>273</b>	<b>328</b>	38	1.8	5.18	<b>2KJ1001 - ■ EL13 - ■■ M1</b>		20
	<b>309</b>	<b>371</b>	34	2.3	4.58 ★	<b>2KJ1001 - ■ EL13 - ■■ L1</b>		20
	<b>341</b>	<b>409</b>	31	2.0	4.15	<b>2KJ1001 - ■ EL13 - ■■ K1</b>		20
	<b>386</b>	<b>463</b>	27	2.6	3.67 ★	<b>2KJ1001 - ■ EL13 - ■■ J1</b>		20
	<b>427</b>	<b>512</b>	25	2.6	3.31	<b>2KJ1001 - ■ EL13 - ■■ H1</b>		20
	<b>472</b>	<b>566</b>	22	3.6	3.00 ★	<b>2KJ1001 - ■ EL13 - ■■ G1</b>		20
	<b>518</b>	<b>622</b>	20	3.9	2.73	<b>2KJ1001 - ■ EL13 - ■■ F1</b>		20
	<b>566</b>	<b>679</b>	19	3.9	2.5 ★	<b>2KJ1001 - ■ EL13 - ■■ E1</b>		20
	<b>632</b>	<b>758</b>	17	4.3	2.24	<b>2KJ1001 - ■ EL13 - ■■ D1</b>		20

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg	
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm							
1.1 (50 Hz) 1.3 (60 Hz)	<b>E.38-LA90S4</b>								
	<b>690</b>	<b>828</b>	15	5.3	2.05 ★	<b>2KJ1001 - ■EL13 - ■■C1</b>		20	
	<b>765</b>	<b>918</b>	14	6.0	1.85	<b>2KJ1001 - ■EL13 - ■■B1</b>		20	
	<b>890</b>	<b>1 068</b>	12	6.1	1.59 ★	<b>2KJ1001 - ■EL13 - ■■A1</b>		20	
1.5 (50 Hz) 1.8 (60 Hz)	<b>D.188-Z68-LA90L4</b>								
	<b>1.1</b>	<b>1.3</b>	11 502	1.7	1 251	<b>2KJ1237 - ■EP13 - ■■J1</b>		630	
	<b>D.188-Z48-LA90L4</b>								
	<b>0.53</b>	<b>0.64</b>	24 512	0.82	2 666 ★	<b>2KJ1235 - ■EP13 - ■■H1</b>		613	
	<b>0.60</b>	<b>0.72</b>	21 873	0.91	2 379	<b>2KJ1235 - ■EP13 - ■■G1</b>		613	
	<b>0.70</b>	<b>0.84</b>	18 582	1.1	2 021	<b>2KJ1235 - ■EP13 - ■■F1</b>		613	
	<b>0.84</b>	<b>1.0</b>	15 465	1.3	1 682 ★	<b>2KJ1235 - ■EP13 - ■■E1</b>		613	
	<b>0.86</b>	<b>1.0</b>	15 216	1.3	1 655 ★	<b>2KJ1235 - ■EP13 - ■■D1</b>		613	
	<b>0.96</b>	<b>1.2</b>	13 580	1.5	1 477	<b>2KJ1235 - ■EP13 - ■■C1</b>		613	
	<b>1.1</b>	<b>1.3</b>	11 539	1.7	1 255	<b>2KJ1235 - ■EP13 - ■■B1</b>		613	
	<b>D.168-Z68-LA90L4</b>								
	<b>0.97</b>	<b>1.2</b>	13 433	1.0	1 461	<b>2KJ1233 - ■EP13 - ■■J1</b>		486	
	<b>1.2</b>	<b>1.4</b>	11 272	1.2	1 226	<b>2KJ1233 - ■EP13 - ■■H1</b>		486	
<b>1.4</b>	<b>1.7</b>	9 617	1.5	1 046	<b>2KJ1233 - ■EP13 - ■■G1</b>		486		
<b>D.168-Z48-LA90L4</b>									
<b>0.81</b>	<b>0.97</b>	16 163	0.87	1 758	<b>2KJ1232 - ■EP13 - ■■B1</b>		469		
<b>0.97</b>	<b>1.2</b>	13 451	1.0	1 463 ★	<b>2KJ1232 - ■EP13 - ■■A1</b>		469		
	<b>D.148-Z48-LA90L4</b>								
	<b>1.4</b>	<b>1.7</b>	9 341	0.86	1 016	<b>2KJ1231 - ■EP13 - ■■H1</b>		302	
	<b>1.6</b>	<b>1.9</b>	8 339	0.96	907	<b>2KJ1231 - ■EP13 - ■■G1</b>		302	
<b>1.8</b>	<b>2.2</b>	7 080	1.1	770	<b>2KJ1231 - ■EP13 - ■■F1</b>		302		
	<b>D.148-LA112M8</b>								
	<b>2.1</b>	<b>2.5</b>	6 829	1.2	336.11	<b>2KJ1208 - ■GG13 - ■■W1 P02</b>		318	
	<b>2.3</b>	<b>2.8</b>	6 123	1.3	301.34 ★	<b>2KJ1208 - ■GG13 - ■■V1 P02</b>		318	
<b>2.6</b>	<b>3.1</b>	5 613	1.4	276.23	<b>2KJ1208 - ■GG13 - ■■U1 P02</b>		318		
	<b>D.148-LA100L6</b>								
	<b>2.8</b>	<b>3.4</b>	5 205	1.5	336.11	<b>2KJ1208 - ■FL13 - ■■W1 P01</b>		311	
	<b>3.1</b>	<b>3.7</b>	4 667	1.7	301.34 ★	<b>2KJ1208 - ■FL13 - ■■V1 P01</b>		311	
	<b>3.3</b>	<b>4.0</b>	4 278	1.9	276.23	<b>2KJ1208 - ■FL13 - ■■U1 P01</b>		311	
<b>3.6</b>	<b>4.3</b>	3 944	2.0	254.7 ★	<b>2KJ1208 - ■FL13 - ■■T1 P01</b>		311		
	<b>D.128-Z48-LA90L4</b>								
<b>2.2</b>	<b>2.6</b>	5 958	0.86	648	<b>2KJ1227 - ■EP13 - ■■G1</b>		218		
	<b>D.128-LA112M8</b>								
	<b>2.6</b>	<b>3.1</b>	5 449	0.94	268.16 ★	<b>2KJ1207 - ■GG13 - ■■U1 P02</b>		228	
	<b>2.9</b>	<b>3.5</b>	4 997	1.0	245.93	<b>2KJ1207 - ■GG13 - ■■T1 P02</b>		228	
<b>3.2</b>	<b>3.8</b>	4 465	1.1	219.72 ★	<b>2KJ1207 - ■GG13 - ■■S1 P02</b>		228		
	<b>D.128-LA100L6</b>								
	<b>3.4</b>	<b>4.1</b>	4 153	1.2	268.16 ★	<b>2KJ1207 - ■FL13 - ■■U1 P01</b>		221	
<b>3.8</b>	<b>4.6</b>	3 809	1.3	245.93	<b>2KJ1207 - ■FL13 - ■■T1 P01</b>		221		

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
1.5 (50 Hz) 1.8 (60 Hz)	<b>D.128-LA100L6</b>							
	<b>4.2</b>	<b>5.0</b>	3 403	1.5	219.72 ★	<b>2KJ1207 - ■FL13 - ■■S1</b>	<b>P01</b>	221
	<b>4.6</b>	<b>5.5</b>	3 116	1.6	201.22	<b>2KJ1207 - ■FL13 - ■■R1</b>	<b>P01</b>	221
	<b>5.0</b>	<b>6.0</b>	2 871	1.8	185.36 ★	<b>2KJ1207 - ■FL13 - ■■Q1</b>	<b>P01</b>	221
	<b>D.128-LA90L4</b>							
	<b>5.3</b>	<b>6.4</b>	2 705	1.9	268.16 ★	<b>2KJ1207 - ■EP13 - ■■U1</b>		213
	<b>5.8</b>	<b>7.0</b>	2 481	2.1	245.93	<b>2KJ1207 - ■EP13 - ■■T1</b>		213
	<b>D.108-LA90L4</b>							
	<b>4.0</b>	<b>4.8</b>	3 625	0.86	359.30	<b>2KJ1206 - ■EP13 - ■■V1</b>		136
	<b>4.4</b>	<b>5.3</b>	3 281	0.94	325.21 ★	<b>2KJ1206 - ■EP13 - ■■U1</b>		136
	<b>5.0</b>	<b>6.0</b>	2 872	1.1	284.73	<b>2KJ1206 - ■EP13 - ■■T1</b>		136
	<b>5.5</b>	<b>6.6</b>	2 591	1.2	256.86 ★	<b>2KJ1206 - ■EP13 - ■■S1</b>		136
	<b>6.0</b>	<b>7.2</b>	2 373	1.3	235.19	<b>2KJ1206 - ■EP13 - ■■R1</b>		136
	<b>6.8</b>	<b>8.2</b>	2 111	1.5	209.21 ★	<b>2KJ1206 - ■EP13 - ■■Q1</b>		136
	<b>7.4</b>	<b>8.9</b>	1 929	1.6	191.21	<b>2KJ1206 - ■EP13 - ■■P1</b>		136
	<b>8.1</b>	<b>9.7</b>	1 773	1.7	175.78 ★	<b>2KJ1206 - ■EP13 - ■■N1</b>		136
	<b>8.7</b>	<b>10.4</b>	1 638	1.9	162.40	<b>2KJ1206 - ■EP13 - ■■M1</b>		136
	<b>9.4</b>	<b>11.3</b>	1 520	2.0	150.70 ★	<b>2KJ1206 - ■EP13 - ■■L1</b>		136
	<b>10.1</b>	<b>12.1</b>	1 416	2.2	140.37	<b>2KJ1206 - ■EP13 - ■■K1</b>		136
	<b>D.88-LA90L4</b>							
	<b>7.4</b>	<b>8.9</b>	1 935	0.87	191.80 ★	<b>2KJ1205 - ■EP13 - ■■R1</b>		88
	<b>8.1</b>	<b>9.7</b>	1 767	0.95	175.18	<b>2KJ1205 - ■EP13 - ■■Q1</b>		88
	<b>9.1</b>	<b>10.9</b>	1 568	1.1	155.46 ★	<b>2KJ1205 - ■EP13 - ■■P1</b>		88
	<b>9.9</b>	<b>11.9</b>	1 448	1.2	143.50	<b>2KJ1205 - ■EP13 - ■■N1</b>		88
	<b>10.9</b>	<b>13.1</b>	1 309	1.3	129.79 ★	<b>2KJ1205 - ■EP13 - ■■M1</b>		88
	<b>11.9</b>	<b>14.3</b>	1 206	1.4	119.52	<b>2KJ1205 - ■EP13 - ■■L1</b>		88
	<b>12.8</b>	<b>15.4</b>	1 115	1.5	110.54 ★	<b>2KJ1205 - ■EP13 - ■■K1</b>		88
	<b>13.8</b>	<b>16.6</b>	1 035	1.6	102.61	<b>2KJ1205 - ■EP13 - ■■J1</b>		88
	<b>15.7</b>	<b>18.8</b>	913	1.8	90.53 ★	<b>2KJ1205 - ■EP13 - ■■H1</b>		88
	<b>17</b>	<b>20</b>	843	2.0	83.58	<b>2KJ1205 - ■EP13 - ■■G1</b>		88
	<b>19</b>	<b>23</b>	755	2.2	74.88 ★	<b>2KJ1205 - ■EP13 - ■■F1</b>		88
	<b>21</b>	<b>25</b>	697	2.4	69.05	<b>2KJ1205 - ■EP13 - ■■E1</b>		88
	<b>D.68-LA90L4</b>							
	<b>14.8</b>	<b>17.8</b>	970	0.82	96.16	<b>2KJ1204 - ■EP13 - ■■J1</b>		56
	<b>16.0</b>	<b>19.2</b>	894	0.90	88.59 ★	<b>2KJ1204 - ■EP13 - ■■H1</b>		56
	<b>17.6</b>	<b>21</b>	812	0.99	80.46	<b>2KJ1204 - ■EP13 - ■■G1</b>		56
	<b>19.4</b>	<b>23</b>	739	1.1	73.30 ★	<b>2KJ1204 - ■EP13 - ■■F1</b>		56
	<b>21</b>	<b>25</b>	677	1.2	67.14	<b>2KJ1204 - ■EP13 - ■■E1</b>		56
	<b>24</b>	<b>29</b>	604	1.3	59.91 ★	<b>2KJ1204 - ■EP13 - ■■D1</b>		56
	<b>27</b>	<b>32</b>	539	1.5	53.47	<b>2KJ1204 - ■EP13 - ■■C1</b>		56
	<b>Z.68-LA90L4</b>							
	<b>30</b>	<b>36</b>	485	1.1	48.09 ★	<b>2KJ1104 - ■EP13 - ■■X1</b>		54
	<b>34</b>	<b>41</b>	424	1.9	42.06	<b>2KJ1104 - ■EP13 - ■■W1</b>		54
	<b>38</b>	<b>46</b>	381	2.1	37.76 ★	<b>2KJ1104 - ■EP13 - ■■V1</b>		54

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
1.5 (50 Hz) 1.8 (60 Hz)	<b>Z.68-LA90L4</b>							
	41	49	348	2.3	34.49	2KJ1104 - ■EP13 - ■■U1		54
	46	55	309	2.6	30.60 ★	2KJ1104 - ■EP13 - ■■T1		54
	50	60	285	2.8	28.25	2KJ1104 - ■EP13 - ■■S1		54
<b>D.48-LA90L4</b>								
	25	30	564	0.80	55.92 ★	2KJ1203 - ■EP13 - ■■E1		37
	28	34	504	0.89	50.00	2KJ1203 - ■EP13 - ■■D1		37
<b>Z.48-LA90L4</b>								
	31	37	458	0.98	45.38 ★	2KJ1103 - ■EP13 - ■■X1		37
	34	41	416	1.1	41.26	2KJ1103 - ■EP13 - ■■W1		37
	38	46	374	1.2	37.06 ★	2KJ1103 - ■EP13 - ■■V1		37
	45	54	320	1.4	31.77	2KJ1103 - ■EP13 - ■■U1		37
	49	59	290	1.6	28.74 ★	2KJ1103 - ■EP13 - ■■T1		37
	54	65	268	1.7	26.53	2KJ1103 - ■EP13 - ■■S1		37
	62	74	233	1.9	23.07 ★	2KJ1103 - ■EP13 - ■■R1		37
	68	82	211	2.1	20.95	2KJ1103 - ■EP13 - ■■Q1		37
	74	89	193	2.3	19.13 ★	2KJ1103 - ■EP13 - ■■P1		37
	81	97	177	2.5	17.55	2KJ1103 - ■EP13 - ■■N1		37
	88	106	163	2.6	16.17 ★	2KJ1103 - ■EP13 - ■■M1		37
	97	116	148	2.8	14.68	2KJ1103 - ■EP13 - ■■L1		37
	106	127	135	3.0	13.38 ★	2KJ1103 - ■EP13 - ■■K1		37
	116	139	124	3.2	12.25	2KJ1103 - ■EP13 - ■■J1		37
	130	156	110	3.5	10.93 ★	2KJ1103 - ■EP13 - ■■H1		37
	145	174	98	3.9	9.76	2KJ1103 - ■EP13 - ■■G1		37
	209	251	68	3.9	6.79 ★	2KJ1103 - ■EP13 - ■■D1		37
	234	281	61	4.4	6.06	2KJ1103 - ■EP13 - ■■C1		37
<b>Z.38-LA90L4</b>								
	58	70	247	0.89	24.50	2KJ1102 - ■EP13 - ■■T1		27
	66	79	219	1.0	21.67 ★	2KJ1102 - ■EP13 - ■■S1		27
	72	86	198	1.1	19.64	2KJ1102 - ■EP13 - ■■R1		27
	82	98	175	1.3	17.33 ★	2KJ1102 - ■EP13 - ■■Q1		27
	91	109	158	1.4	15.64	2KJ1102 - ■EP13 - ■■P1		27
	100	120	143	1.5	14.18 ★	2KJ1102 - ■EP13 - ■■N1		27
	110	132	130	1.7	12.92	2KJ1102 - ■EP13 - ■■M1		27
	120	144	119	1.8	11.82 ★	2KJ1102 - ■EP13 - ■■L1		27
	134	161	107	2.0	10.57	2KJ1102 - ■EP13 - ■■K1		27
	146	175	98	2.0	9.70 ★	2KJ1102 - ■EP13 - ■■J1		27
	162	194	88	2.2	8.75	2KJ1102 - ■EP13 - ■■H1		27
	189	227	76	2.4	7.50 ★	2KJ1102 - ■EP13 - ■■F1		27
	189	227	76	2.5	7.52 ★	2KJ1102 - ■EP13 - ■■G1		27
	212	254	68	2.7	6.71	2KJ1102 - ■EP13 - ■■D1		27
	231	277	62	2.7	6.16 ★	2KJ1102 - ■EP13 - ■■C1		27
	256	307	56	2.9	5.55	2KJ1102 - ■EP13 - ■■B1		27
	298	358	48	3.3	4.77 ★	2KJ1102 - ■EP13 - ■■A1		27

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>1.5 (50 Hz)</b>	<b>Z.28-LA90L4</b>							
<b>1.8 (60 Hz)</b>	<b>87</b>	<b>104</b>	164	0.85	16.24 ★	<b>2KJ1101 - ■EP13 - ■■R1</b>		20
	<b>97</b>	<b>116</b>	147	0.95	14.58	<b>2KJ1101 - ■EP13 - ■■Q1</b>		20
	<b>108</b>	<b>130</b>	133	1.1	13.17 ★	<b>2KJ1101 - ■EP13 - ■■P1</b>		20
	<b>119</b>	<b>143</b>	120	1.2	11.94	<b>2KJ1101 - ■EP13 - ■■N1</b>		20
	<b>131</b>	<b>157</b>	110	1.3	10.87 ★	<b>2KJ1101 - ■EP13 - ■■M1</b>		20
	<b>148</b>	<b>178</b>	97	1.4	9.61	<b>2KJ1101 - ■EP13 - ■■L1</b>		20
	<b>160</b>	<b>192</b>	90	1.6	8.87 ★	<b>2KJ1101 - ■EP13 - ■■K1</b>		20
	<b>186</b>	<b>223</b>	77	1.8	7.64	<b>2KJ1101 - ■EP13 - ■■J1</b>		20
	<b>205</b>	<b>246</b>	70	1.9	6.94 ★	<b>2KJ1101 - ■EP13 - ■■H1</b>		20
	<b>225</b>	<b>270</b>	64	1.5	6.31 ★	<b>2KJ1101 - ■EP13 - ■■G1</b>		20
	<b>248</b>	<b>298</b>	58	1.6	5.72	<b>2KJ1101 - ■EP13 - ■■F1</b>		20
	<b>273</b>	<b>328</b>	53	1.8	5.21 ★	<b>2KJ1101 - ■EP13 - ■■E1</b>		20
	<b>309</b>	<b>371</b>	46	1.9	4.60	<b>2KJ1101 - ■EP13 - ■■D1</b>		20
	<b>334</b>	<b>401</b>	43	2.1	4.25 ★	<b>2KJ1101 - ■EP13 - ■■C1</b>		20
	<b>388</b>	<b>466</b>	37	2.2	3.66	<b>2KJ1101 - ■EP13 - ■■B1</b>		20
	<b>426</b>	<b>511</b>	34	2.3	3.33 ★	<b>2KJ1101 - ■EP13 - ■■A1</b>		20
	<b>E.88-LA90L4</b>							
	<b>137</b>	<b>164</b>	104	2.2	10.33 ★	<b>2KJ1004 - ■EP13 - ■■S1</b>		53
	<b>150</b>	<b>180</b>	95	2.2	9.46	<b>2KJ1004 - ■EP13 - ■■R1</b>		53
	<b>169</b>	<b>203</b>	85	2.9	8.42 ★	<b>2KJ1004 - ■EP13 - ■■Q1</b>		53
	<b>185</b>	<b>222</b>	78	3.2	7.69	<b>2KJ1004 - ■EP13 - ■■P1</b>		53
	<b>201</b>	<b>241</b>	71	4.1	7.07 ★	<b>2KJ1004 - ■EP13 - ■■N1</b>		53
	<b>234</b>	<b>281</b>	61	4.6	6.06 ★	<b>2KJ1004 - ■EP13 - ■■L1</b>		53
	<b>E.68-LA90L4</b>							
	<b>127</b>	<b>152</b>	113	0.82	11.18	<b>2KJ1003 - ■EP13 - ■■V1</b>		36
	<b>141</b>	<b>169</b>	102	0.93	10.08 ★	<b>2KJ1003 - ■EP13 - ■■U1</b>		36
	<b>161</b>	<b>193</b>	89	1.7	8.82	<b>2KJ1003 - ■EP13 - ■■T1</b>		36
	<b>179</b>	<b>215</b>	80	2.1	7.92 ★	<b>2KJ1003 - ■EP13 - ■■S1</b>		36
	<b>196</b>	<b>235</b>	73	2.1	7.23	<b>2KJ1003 - ■EP13 - ■■R1</b>		36
	<b>221</b>	<b>265</b>	65	2.6	6.42 ★	<b>2KJ1003 - ■EP13 - ■■P1</b>		36
	<b>240</b>	<b>288</b>	60	3.2	5.92	<b>2KJ1003 - ■EP13 - ■■N1</b>		36
	<b>265</b>	<b>318</b>	54	4.1	5.36 ★	<b>2KJ1003 - ■EP13 - ■■M1</b>		36
	<b>288</b>	<b>346</b>	50	4.5	4.93	<b>2KJ1003 - ■EP13 - ■■L1</b>		36
	<b>311</b>	<b>373</b>	46	4.8	4.56 ★	<b>2KJ1003 - ■EP13 - ■■K1</b>		36
	<b>E.48-LA90L4</b>							
	<b>174</b>	<b>209</b>	82	1.0	8.17 ★	<b>2KJ1002 - ■EP13 - ■■R1</b>		26
	<b>203</b>	<b>244</b>	71	1.4	7.00	<b>2KJ1002 - ■EP13 - ■■Q1</b>		26
	<b>224</b>	<b>269</b>	64	1.8	6.33 ★	<b>2KJ1002 - ■EP13 - ■■P1</b>		26
	<b>243</b>	<b>292</b>	59	2.0	5.85	<b>2KJ1002 - ■EP13 - ■■N1</b>		26
	<b>280</b>	<b>336</b>	51	2.3	5.08 ★	<b>2KJ1002 - ■EP13 - ■■M1</b>		26
	<b>307</b>	<b>368</b>	47	2.8	4.62	<b>2KJ1002 - ■EP13 - ■■L1</b>		26
	<b>337</b>	<b>404</b>	42	3.5	4.21 ★	<b>2KJ1002 - ■EP13 - ■■K1</b>		26
	<b>367</b>	<b>440</b>	39	4.1	3.87	<b>2KJ1002 - ■EP13 - ■■J1</b>		26

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
1.5 (50 Hz) 1.8 (60 Hz)	<b>E.48-LA90L4</b>							
	399	479	36	3.9	3.56 ★	2KJ1002 - ■EP13 - ■■H1		26
	438	526	33	4.6	3.24	2KJ1002 - ■EP13 - ■■G1		26
	481	577	30	5.7	2.95 ★	2KJ1002 - ■EP13 - ■■F1		26
	776	931	18	6.2	1.83	2KJ1002 - ■EP13 - ■■B1		26
	934	1 121	15	6.5	1.52 ★	2KJ1002 - ■EP13 - ■■A1		26
<b>E.38-LA90L4</b>								
	240	288	60	0.89	5.92 ★	2KJ1001 - ■EP13 - ■■N1		23
	274	329	52	1.3	5.18	2KJ1001 - ■EP13 - ■■M1		23
	310	372	46	1.7	4.58 ★	2KJ1001 - ■EP13 - ■■L1		23
	342	410	42	1.5	4.15	2KJ1001 - ■EP13 - ■■K1		23
	387	464	37	1.9	3.67 ★	2KJ1001 - ■EP13 - ■■J1		23
	429	515	33	1.9	3.31	2KJ1001 - ■EP13 - ■■H1		23
	473	568	30	2.6	3.00 ★	2KJ1001 - ■EP13 - ■■G1		23
	520	624	28	2.9	2.73	2KJ1001 - ■EP13 - ■■F1		23
	568	682	25	2.9	2.50 ★	2KJ1001 - ■EP13 - ■■E1		23
	634	761	23	3.2	2.24	2KJ1001 - ■EP13 - ■■D1		23
	693	832	21	3.9	2.05 ★	2KJ1001 - ■EP13 - ■■C1		23
	768	922	19	4.4	1.85	2KJ1001 - ■EP13 - ■■B1		23
	893	1 072	16	4.5	1.59 ★	2KJ1001 - ■EP13 - ■■A1		23
2.2 (50 Hz) 2.6 (60 Hz)	<b>D.188-Z68-LA100L4</b>							
	1.1	1.3	16 979	1.2	1 251	2KJ1237 - ■FL13 - ■■J1		638
	1.4	1.7	14 251	1.4	1 050	2KJ1237 - ■FL13 - ■■H1		638
	1.6	1.9	12 161	1.6	896 ★	2KJ1237 - ■FL13 - ■■G1		638
	1.9	2.3	10 125	2.0	746	2KJ1237 - ■FL13 - ■■F1		638
<b>D.188-Z48-LA100L4</b>								
	0.84	1.0	22 829	0.88	1 682 ★	2KJ1235 - ■FL13 - ■■E1		621
	0.86	1.0	22 462	0.89	1 655 ★	2KJ1235 - ■FL13 - ■■D1		621
	0.96	1.2	20 046	1.0	1 477	2KJ1235 - ■FL13 - ■■C1		621
	1.1	1.3	17 033	1.2	1 255	2KJ1235 - ■FL13 - ■■B1		621
	1.4	1.7	14 170	1.4	1 044 ★	2KJ1235 - ■FL13 - ■■A1		621
<b>D.168-Z68-LA100L4</b>								
	1.2	1.4	16 640	0.84	1 226	2KJ1233 - ■FL13 - ■■H1		494
	1.4	1.7	14 197	0.99	1 046	2KJ1233 - ■FL13 - ■■G1		494
	1.6	1.9	11 822	1.2	871	2KJ1233 - ■FL13 - ■■F1		494
<b>D.168-LA132S8</b>								
	2.0	2.4	10 253	1.4	341.61 ★	2KJ1210 - ■HE13 - ■■U1	P02	499
	2.2	2.6	9 407	1.5	313.41	2KJ1210 - ■HE13 - ■■T1	P02	499
	2.4	2.9	8 681	1.6	289.23 ★	2KJ1210 - ■HE13 - ■■S1	P02	499
	2.6	3.1	8 053	1.7	268.29	2KJ1210 - ■HE13 - ■■R1	P02	499
<b>D.148-LA132S8</b>								
	2.3	2.8	9 045	0.88	301.34 ★	2KJ1208 - ■HE13 - ■■V1	P02	328
	2.5	3.0	8 291	0.96	276.23	2KJ1208 - ■HE13 - ■■U1	P02	328

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
2.2 (50 Hz) 2.6 (60 Hz)	<b>D.148-LA132S8</b>							
	2.7	3.2	7 645	1	254.70 ★	2KJ1208 - ■HE13 - ■■T1	P02	328
<b>D.148-LA112M6</b>								
	2.8	3.4	7 512	1.1	336.11	2KJ1208 - ■GG13 - ■■W1	P01	318
	3.1	3.7	6 735	1.2	301.34 ★	2KJ1208 - ■GG13 - ■■V1	P01	318
	3.4	4.1	6 174	1.3	276.23	2KJ1208 - ■GG13 - ■■U1	P01	318
	3.7	4.4	5 693	1.4	254.70 ★	2KJ1208 - ■GG13 - ■■T1	P01	318
	4.0	4.8	5 276	1.5	236.05	2KJ1208 - ■GG13 - ■■S1	P01	318
<b>D.148-LA100L4</b>								
	4.2	5.0	4 973	1.6	336.11	2KJ1208 - ■FL13 - ■■W1		311
	4.7	5.6	4 459	1.8	301.34 ★	2KJ1208 - ■FL13 - ■■V1		311
	5.1	6.1	4 087	2.0	276.23	2KJ1208 - ■FL13 - ■■U1		311
	5.6	6.7	3 768	2.1	254.70 ★	2KJ1208 - ■FL13 - ■■T1		311
<b>D.128-LA112M6</b>								
	3.5	4.2	5 994	0.85	268.16 ★	2KJ1207 - ■GG13 - ■■U1	P01	228
	3.8	4.6	5 497	0.93	245.93	2KJ1207 - ■GG13 - ■■T1	P01	228
	4.3	5.2	4 911	1.0	219.72 ★	2KJ1207 - ■GG13 - ■■S1	P01	228
	4.7	5.6	4 497	1.1	201.22	2KJ1207 - ■GG13 - ■■R1	P01	228
	5.1	6.1	4 143	1.2	185.36 ★	2KJ1207 - ■GG13 - ■■Q1	P01	228
<b>D.128-LA100L4</b>								
	5.3	6.4	3 968	1.3	268.16 ★	2KJ1207 - ■FL13 - ■■U1		221
	5.8	7.0	3 639	1.4	245.93	2KJ1207 - ■FL13 - ■■T1		221
	6.5	7.8	3 251	1.6	219.72 ★	2KJ1207 - ■FL13 - ■■S1		221
	7.1	8.5	2 977	1.7	201.22	2KJ1207 - ■FL13 - ■■R1		221
	7.7	9.2	2 743	1.9	185.36 ★	2KJ1207 - ■FL13 - ■■Q1		221
	8.3	10	2 539	2.0	171.62	2KJ1207 - ■FL13 - ■■P1		221
<b>D.108-LA100L4</b>								
	5.5	6.6	3 800	0.82	256.86 ★	2KJ1206 - ■FL13 - ■■S1		144
	6.0	7.2	3 480	0.89	235.19	2KJ1206 - ■FL13 - ■■R1		144
	6.8	8.2	3 095	1.0	209.21 ★	2KJ1206 - ■FL13 - ■■Q1		144
	7.4	8.9	2 829	1.1	191.21	2KJ1206 - ■FL13 - ■■P1		144
	8.1	9.7	2 601	1.2	175.78 ★	2KJ1206 - ■FL13 - ■■N1		144
	8.7	10.4	2 403	1.3	162.40	2KJ1206 - ■FL13 - ■■M1		144
	9.4	11.3	2 230	1.4	150.70 ★	2KJ1206 - ■FL13 - ■■L1		144
	10.1	12.1	2 077	1.5	140.37	2KJ1206 - ■FL13 - ■■K1		144
	11.2	13.4	1 878	1.7	126.90 ★	2KJ1206 - ■FL13 - ■■J1		144
	12.2	14.6	1 729	1.8	116.83	2KJ1206 - ■FL13 - ■■H1		144
	13.5	16.2	1 555	2	105.08 ★	2KJ1206 - ■FL13 - ■■G1		144
	14.6	17.5	1 434	2.2	96.94	2KJ1206 - ■FL13 - ■■F1		144
<b>D.88-LA100L4</b>								
	10.9	13.1	1 920	0.87	129.79 ★	2KJ1205 - ■FL13 - ■■M1		96
	11.9	14.3	1 768	0.95	119.52	2KJ1205 - ■FL13 - ■■L1		96
	12.8	15.4	1 636	1	110.54 ★	2KJ1205 - ■FL13 - ■■K1		96
	13.8	16.6	1 518	1.1	102.61	2KJ1205 - ■FL13 - ■■J1		96

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R



## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
2.2 (50 Hz) 2.6 (60 Hz)	<b>D.88-LA100L4</b>							
	<b>15.7</b>	<b>18.8</b>	1 339	1.3	90.53 ★	<b>2KJ1205 - FL13 - H1</b>		96
	<b>17</b>	<b>20</b>	1 237	1.4	83.58	<b>2KJ1205 - FL13 - G1</b>		96
	<b>19</b>	<b>23</b>	1 108	1.5	74.88 ★	<b>2KJ1205 - FL13 - F1</b>		96
	<b>21</b>	<b>25</b>	1 022	1.6	69.05	<b>2KJ1205 - FL13 - E1</b>		96
	<b>24</b>	<b>29</b>	857	2	57.93	<b>2KJ1205 - FL13 - D1</b>		96
	<b>Z.88-LA100L4</b>							
	<b>28</b>	<b>34</b>	751	2	50.73	<b>2KJ1105 - FL13 - B2</b>		94
	<b>31</b>	<b>37</b>	677	2.5	45.76 ★	<b>2KJ1105 - FL13 - A2</b>		94
	<b>D.68-LA100L4</b>							
	<b>21</b>	<b>25</b>	993	0.81	67.14	<b>2KJ1204 - FL13 - E1</b>		64
	<b>24</b>	<b>29</b>	886	0.9	59.91 ★	<b>2KJ1204 - FL13 - D1</b>		64
	<b>27</b>	<b>32</b>	791	1	53.47	<b>2KJ1204 - FL13 - C1</b>		64
	<b>Z.68-LA100L4</b>							
	<b>34</b>	<b>41</b>	622	1.3	42.06	<b>2KJ1104 - FL13 - W1</b>		62
	<b>38</b>	<b>46</b>	559	1.4	37.76 ★	<b>2KJ1104 - FL13 - V1</b>		62
	<b>41</b>	<b>49</b>	510	1.6	34.49	<b>2KJ1104 - FL13 - U1</b>		62
	<b>46</b>	<b>55</b>	453	1.8	30.6 ★	<b>2KJ1104 - FL13 - T1</b>		62
	<b>50</b>	<b>60</b>	418	1.9	28.25	<b>2KJ1104 - FL13 - S1</b>		62
	<b>56</b>	<b>67</b>	378	2.1	25.55 ★	<b>2KJ1104 - FL13 - R1</b>		62
	<b>60</b>	<b>72</b>	348	2.3	23.53	<b>2KJ1104 - FL13 - Q1</b>		62
	<b>65</b>	<b>78</b>	322	2.5	21.76 ★	<b>2KJ1104 - FL13 - P1</b>		62
	<b>70</b>	<b>84</b>	299	2.7	20.2	<b>2KJ1104 - FL13 - N1</b>		62
	<b>80</b>	<b>96</b>	264	3.0	17.82 ★	<b>2KJ1104 - FL13 - M1</b>		62
	<b>86</b>	<b>103</b>	243	3.3	16.45	<b>2KJ1104 - FL13 - L1</b>		62
	<b>D.48-LA100L4</b>							
	<b>40</b>	<b>48</b>	527	0.85	35.59	<b>2KJ1203 - FL13 - A1</b>		45
	<b>Z.48-LA100L4</b>							
	<b>45</b>	<b>54</b>	470	0.96	31.77	<b>2KJ1103 - FL13 - U1</b>		45
	<b>49</b>	<b>59</b>	425	1.1	28.74 ★	<b>2KJ1103 - FL13 - T1</b>		45
	<b>54</b>	<b>65</b>	393	1.1	26.53	<b>2KJ1103 - FL13 - S1</b>		45
	<b>62</b>	<b>74</b>	341	1.3	23.07 ★	<b>2KJ1103 - FL13 - R1</b>		45
	<b>68</b>	<b>82</b>	310	1.5	20.95	<b>2KJ1103 - FL13 - Q1</b>		45
	<b>74</b>	<b>89</b>	283	1.6	19.13 ★	<b>2KJ1103 - FL13 - P1</b>		45
	<b>81</b>	<b>97</b>	260	1.7	17.55	<b>2KJ1103 - FL13 - N1</b>		45
	<b>88</b>	<b>106</b>	239	1.8	16.17 ★	<b>2KJ1103 - FL13 - M1</b>		45
	<b>97</b>	<b>116</b>	217	1.9	14.68	<b>2KJ1103 - FL13 - L1</b>		45
	<b>106</b>	<b>127</b>	198	2.1	13.38 ★	<b>2KJ1103 - FL13 - K1</b>		45
	<b>116</b>	<b>139</b>	181	2.2	12.25	<b>2KJ1103 - FL13 - J1</b>		45
	<b>130</b>	<b>156</b>	162	2.4	10.93 ★	<b>2KJ1103 - FL13 - H1</b>		45
	<b>145</b>	<b>174</b>	144	2.6	9.76	<b>2KJ1103 - FL13 - G1</b>		45
	<b>171</b>	<b>205</b>	123	2.9	8.29	<b>2KJ1103 - FL13 - F1</b>		45
	<b>206</b>	<b>247</b>	102	3.3	6.90 ★	<b>2KJ1103 - FL13 - E1</b>		45
	<b>209</b>	<b>251</b>	100	2.7	6.79 ★	<b>2KJ1103 - FL13 - D1</b>		45

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>2.2</b> (50 Hz)	<b>Z.48-LA100L4</b>							
2.6 (60 Hz)	<b>234</b>	<b>281</b>	90	3.0	6.06	<b>2KJ1103 - ■FL13 - ■■C1</b>		45
	<b>276</b>	<b>331</b>	76	3.5	5.15	<b>2KJ1103 - ■FL13 - ■■B1</b>		45
	<b>332</b>	<b>398</b>	63	4.1	4.28 ★	<b>2KJ1103 - ■FL13 - ■■A1</b>		45
	<b>Z.38-LA100L4</b>							
	<b>82</b>	<b>98</b>	256	0.86	17.33 ★	<b>2KJ1102 - ■FL13 - ■■Q1</b>		35
	<b>91</b>	<b>109</b>	231	0.95	15.64	<b>2KJ1102 - ■FL13 - ■■P1</b>		35
	<b>100</b>	<b>120</b>	210	1.0	14.18 ★	<b>2KJ1102 - ■FL13 - ■■N1</b>		35
	<b>110</b>	<b>132</b>	191	1.2	12.92	<b>2KJ1102 - ■FL13 - ■■M1</b>		35
	<b>120</b>	<b>144</b>	175	1.3	11.82 ★	<b>2KJ1102 - ■FL13 - ■■L1</b>		35
	<b>134</b>	<b>161</b>	156	1.3	10.57	<b>2KJ1102 - ■FL13 - ■■K1</b>		35
	<b>146</b>	<b>175</b>	144	1.4	9.70 ★	<b>2KJ1102 - ■FL13 - ■■J1</b>		35
	<b>162</b>	<b>194</b>	129	1.5	8.75	<b>2KJ1102 - ■FL13 - ■■H1</b>		35
	<b>189</b>	<b>227</b>	111	1.7	7.50 ★	<b>2KJ1102 - ■FL13 - ■■F1</b>		35
	<b>189</b>	<b>227</b>	111	1.7	7.52 ★	<b>2KJ1102 - ■FL13 - ■■G1</b>		35
	<b>212</b>	<b>254</b>	99	1.8	6.71	<b>2KJ1102 - ■FL13 - ■■D1</b>		35
	<b>231</b>	<b>277</b>	91	1.9	6.16 ★	<b>2KJ1102 - ■FL13 - ■■C1</b>		35
	<b>256</b>	<b>307</b>	82	2.0	5.55	<b>2KJ1102 - ■FL13 - ■■B1</b>		35
	<b>298</b>	<b>358</b>	71	2.3	4.77 ★	<b>2KJ1102 - ■FL13 - ■■A1</b>		35
	<b>Z.28-LA90ZLB4</b>							
	<b>126</b>	<b>151</b>	166	0.84	10.87 ★	<b>2KJ1101 - ■EQ13 - ■■M1</b>		20
	<b>143</b>	<b>172</b>	147	0.95	9.61	<b>2KJ1101 - ■EQ13 - ■■L1</b>		20
	<b>155</b>	<b>186</b>	136	1.0	8.87 ★	<b>2KJ1101 - ■EQ13 - ■■K1</b>		20
	<b>180</b>	<b>216</b>	117	1.2	7.64	<b>2KJ1101 - ■EQ13 - ■■J1</b>		20
	<b>198</b>	<b>238</b>	106	1.2	6.94 ★	<b>2KJ1101 - ■EQ13 - ■■H1</b>		20
	<b>218</b>	<b>262</b>	96	0.99	6.31 ★	<b>2KJ1101 - ■EQ13 - ■■G1</b>		20
	<b>240</b>	<b>288</b>	87	1.1	5.72	<b>2KJ1101 - ■EQ13 - ■■F1</b>		20
	<b>264</b>	<b>317</b>	80	1.2	5.21 ★	<b>2KJ1101 - ■EQ13 - ■■E1</b>		20
	<b>299</b>	<b>359</b>	70	1.3	4.60	<b>2KJ1101 - ■EQ13 - ■■D1</b>		20
	<b>324</b>	<b>389</b>	65	1.4	4.25 ★	<b>2KJ1101 - ■EQ13 - ■■C1</b>		20
	<b>376</b>	<b>451</b>	56	1.4	3.66	<b>2KJ1101 - ■EQ13 - ■■B1</b>		20
	<b>413</b>	<b>496</b>	51	1.5	3.33 ★	<b>2KJ1101 - ■EQ13 - ■■A1</b>		20
	<b>E.128-LA100L4</b>							
	<b>140</b>	<b>168</b>	150	3.6	10.14 ★	<b>2KJ1006 - ■FL13 - ■■T1</b>		119
	<b>E.88-LA100L4</b>							
	<b>137</b>	<b>164</b>	153	1.5	10.33 ★	<b>2KJ1004 - ■FL13 - ■■S1</b>		61
	<b>150</b>	<b>180</b>	140	1.5	9.46	<b>2KJ1004 - ■FL13 - ■■R1</b>		61
	<b>169</b>	<b>203</b>	125	2.0	8.42 ★	<b>2KJ1004 - ■FL13 - ■■Q1</b>		61
	<b>185</b>	<b>222</b>	114	2.2	7.69	<b>2KJ1004 - ■FL13 - ■■P1</b>		61
	<b>201</b>	<b>241</b>	105	2.8	7.07 ★	<b>2KJ1004 - ■FL13 - ■■N1</b>		61
	<b>217</b>	<b>260</b>	97	3.1	6.53	<b>2KJ1004 - ■FL13 - ■■M1</b>		61
	<b>234</b>	<b>281</b>	90	3.1	6.06 ★	<b>2KJ1004 - ■FL13 - ■■L1</b>		61
	<b>251</b>	<b>301</b>	84	3.8	5.65	<b>2KJ1004 - ■FL13 - ■■K1</b>		61
	<b>278</b>	<b>334</b>	76	4.9	5.11 ★	<b>2KJ1004 - ■FL13 - ■■J1</b>		61

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>2.2</b> (50 Hz)	<b>E.68-LA100L4</b>							
<b>2.6</b> (60 Hz)	<b>161</b>	<b>193</b>	130	1.1	8.82	<b>2KJ1003 - ■FL13 - ■■T1</b>		44
	<b>179</b>	<b>215</b>	117	1.5	7.92 ★	<b>2KJ1003 - ■FL13 - ■■S1</b>		44
	<b>196</b>	<b>235</b>	107	1.4	7.23	<b>2KJ1003 - ■FL13 - ■■R1</b>		44
	<b>221</b>	<b>265</b>	95	1.8	6.42 ★	<b>2KJ1003 - ■FL13 - ■■P1</b>		44
	<b>240</b>	<b>288</b>	88	2.2	5.92	<b>2KJ1003 - ■FL13 - ■■N1</b>		44
	<b>265</b>	<b>318</b>	79	2.8	5.36 ★	<b>2KJ1003 - ■FL13 - ■■M1</b>		44
	<b>288</b>	<b>346</b>	73	3.1	4.93	<b>2KJ1003 - ■FL13 - ■■L1</b>		44
	<b>311</b>	<b>373</b>	68	3.3	4.56 ★	<b>2KJ1003 - ■FL13 - ■■K1</b>		44
	<b>335</b>	<b>402</b>	63	3.7	4.24	<b>2KJ1003 - ■FL13 - ■■J1</b>		44
	<b>380</b>	<b>456</b>	55	4.2	3.74 ★	<b>2KJ1003 - ■FL13 - ■■H1</b>		44
	<b>412</b>	<b>494</b>	51	4.7	3.45	<b>2KJ1003 - ■FL13 - ■■G1</b>		44
	<b>460</b>	<b>552</b>	46	5.5	3.09 ★	<b>2KJ1003 - ■FL13 - ■■F1</b>		44
	<b>E.48-LA100L4</b>							
	<b>203</b>	<b>244</b>	104	0.94	7.00	<b>2KJ1002 - ■FL13 - ■■Q1</b>		34
	<b>224</b>	<b>269</b>	94	1.2	6.33 ★	<b>2KJ1002 - ■FL13 - ■■P1</b>		34
	<b>243</b>	<b>292</b>	87	1.4	5.85	<b>2KJ1002 - ■FL13 - ■■N1</b>		34
	<b>280</b>	<b>336</b>	75	1.6	5.08 ★	<b>2KJ1002 - ■FL13 - ■■M1</b>		34
	<b>307</b>	<b>368</b>	68	1.9	4.62	<b>2KJ1002 - ■FL13 - ■■L1</b>		34
	<b>337</b>	<b>404</b>	62	2.4	4.21 ★	<b>2KJ1002 - ■FL13 - ■■K1</b>		34
	<b>367</b>	<b>440</b>	57	2.8	3.87	<b>2KJ1002 - ■FL13 - ■■J1</b>		34
	<b>399</b>	<b>479</b>	53	2.7	3.56 ★	<b>2KJ1002 - ■FL13 - ■■H1</b>		34
	<b>438</b>	<b>526</b>	48	3.1	3.24	<b>2KJ1002 - ■FL13 - ■■G1</b>		34
	<b>481</b>	<b>577</b>	44	3.9	2.95 ★	<b>2KJ1002 - ■FL13 - ■■F1</b>		34
	<b>526</b>	<b>631</b>	40	4.0	2.70	<b>2KJ1002 - ■FL13 - ■■E1</b>		34
	<b>589</b>	<b>707</b>	36	4.2	2.41 ★	<b>2KJ1002 - ■FL13 - ■■D1</b>		34
	<b>660</b>	<b>792</b>	32	4.2	2.15	<b>2KJ1002 - ■FL13 - ■■C1</b>		34
	<b>776</b>	<b>931</b>	27	4.2	1.83	<b>2KJ1002 - ■FL13 - ■■B1</b>		34
	<b>934</b>	<b>1 121</b>	22	4.4	1.52 ★	<b>2KJ1002 - ■FL13 - ■■A1</b>		34
	<b>E.38-LA100L4</b>							
	<b>274</b>	<b>329</b>	77	0.91	5.18	<b>2KJ1001 - ■FL13 - ■■M1</b>		31
	<b>310</b>	<b>372</b>	68	1.2	4.58 ★	<b>2KJ1001 - ■FL13 - ■■L1</b>		31
	<b>342</b>	<b>410</b>	61	1.0	4.15	<b>2KJ1001 - ■FL13 - ■■K1</b>		31
	<b>387</b>	<b>464</b>	54	1.3	3.67 ★	<b>2KJ1001 - ■FL13 - ■■J1</b>		31
	<b>429</b>	<b>515</b>	49	1.3	3.31	<b>2KJ1001 - ■FL13 - ■■H1</b>		31
	<b>473</b>	<b>568</b>	44	1.8	3.00 ★	<b>2KJ1001 - ■FL13 - ■■G1</b>		31
	<b>520</b>	<b>624</b>	40	2.0	2.73	<b>2KJ1001 - ■FL13 - ■■F1</b>		31
	<b>568</b>	<b>682</b>	37	2.0	2.50 ★	<b>2KJ1001 - ■FL13 - ■■E1</b>		31
	<b>634</b>	<b>761</b>	33	2.2	2.24	<b>2KJ1001 - ■FL13 - ■■D1</b>		31
	<b>693</b>	<b>832</b>	30	2.6	2.05 ★	<b>2KJ1001 - ■FL13 - ■■C1</b>		31
	<b>768</b>	<b>922</b>	27	3.0	1.85	<b>2KJ1001 - ■FL13 - ■■B1</b>		31
	<b>893</b>	<b>1 072</b>	24	3.1	1.59 ★	<b>2KJ1001 - ■FL13 - ■■A1</b>		31

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
3.0 (50 Hz) 3.6 (60 Hz)	<b>D.188-Z68-LA100LB4</b>							
	<b>1.1</b>	<b>1.3</b>	23 239	0.86	1 251	<b>2KJ1237 - FM13 - J1</b>		638
	<b>1.4</b>	<b>1.7</b>	19 505	1.0	1 050	<b>2KJ1237 - FM13 - H1</b>		638
	<b>1.6</b>	<b>1.9</b>	16 644	1.2	896	<b>2KJ1237 - FM13 - G1</b>		638
	<b>1.9</b>	<b>2.3</b>	13 858	1.4	746	<b>2KJ1237 - FM13 - F1</b>		638
	<b>2.3</b>	<b>2.8</b>	11 499	1.7	619	<b>2KJ1237 - FM13 - E1</b>		638
	<b>2.6</b>	<b>3.1</b>	10 143	2.0	546	<b>2KJ1237 - FM13 - D1</b>		638
<b>D.188-Z48-LA100LB4</b>								
<b>1.1</b>	<b>1.3</b>	23 313	0.86	1 255	<b>2KJ1235 - FM13 - B1</b>		621	
<b>1.4</b>	<b>1.7</b>	19 393	1.0	1 044	<b>2KJ1235 - FM13 - A1</b>		621	
<b>D.188-LA132MA8</b>								
<b>2.9</b>	<b>3.5</b>	9 979	2.0	243.82	<b>2KJ1211 - HG13 - N1</b>	<b>P02</b>	652	
<b>D.168-Z68-LA100LB4</b>								
<b>1.6</b>	<b>1.9</b>	16 180	0.87	871	<b>2KJ1233 - FM13 - F1</b>		494	
<b>D.168-LA132MA8</b>								
<b>2.0</b>	<b>2.4</b>	13 982	1.0	341.61	<b>2KJ1210 - HG13 - U1</b>	<b>P02</b>	507	
<b>2.2</b>	<b>2.6</b>	12 827	1.1	313.41	<b>2KJ1210 - HG13 - T1</b>	<b>P02</b>	507	
<b>2.4</b>	<b>2.9</b>	11 838	1.2	289.23	<b>2KJ1210 - HG13 - S1</b>	<b>P02</b>	507	
<b>2.6</b>	<b>3.1</b>	10 981	1.3	268.29	<b>2KJ1210 - HG13 - R1</b>	<b>P02</b>	507	
<b>D.168-LA132S6</b>								
<b>2.8</b>	<b>3.4</b>	10 302	1.4	341.61	<b>2KJ1210 - HE13 - U1</b>	<b>P01</b>	499	
<b>3.0</b>	<b>3.6</b>	9 452	1.5	313.41	<b>2KJ1210 - HE13 - T1</b>	<b>P01</b>	499	
<b>3.3</b>	<b>4.0</b>	8 723	1.6	289.23	<b>2KJ1210 - HE13 - S1</b>	<b>P01</b>	499	
<b>3.5</b>	<b>4.2</b>	8 091	1.7	268.29	<b>2KJ1210 - HE13 - R1</b>	<b>P01</b>	499	
<b>3.8</b>	<b>4.6</b>	7 632	1.8	253.08	<b>2KJ1210 - HE13 - Q1</b>	<b>P01</b>	499	
<b>4.0</b>	<b>4.8</b>	7 139	2.0	236.72	<b>2KJ1210 - HE13 - P1</b>	<b>P01</b>	499	
<b>D.148-LA132S6</b>								
<b>3.2</b>	<b>3.8</b>	9 088	0.88	301.34	<b>2KJ1208 - HE13 - V1</b>	<b>P01</b>	328	
<b>3.4</b>	<b>4.1</b>	8 331	0.96	276.23	<b>2KJ1208 - HE13 - U1</b>	<b>P01</b>	328	
<b>3.7</b>	<b>4.4</b>	7 681	1.0	254.70	<b>2KJ1208 - HE13 - T1</b>	<b>P01</b>	328	
<b>4.0</b>	<b>4.8</b>	7 119	1.1	236.05	<b>2KJ1208 - HE13 - S1</b>	<b>P01</b>	328	
<b>D.148-LA100LB4</b>								
<b>4.2</b>	<b>5.0</b>	6 781	1.2	336.11	<b>2KJ1208 - FM13 - W1</b>		311	
<b>4.7</b>	<b>5.6</b>	6 080	1.3	301.34	<b>2KJ1208 - FM13 - V1</b>		311	
<b>5.1</b>	<b>6.1</b>	5 573	1.4	276.23	<b>2KJ1208 - FM13 - U1</b>		311	
<b>5.6</b>	<b>6.7</b>	5 139	1.6	254.70	<b>2KJ1208 - FM13 - T1</b>		311	
<b>6.0</b>	<b>7.2</b>	4 763	1.7	236.05	<b>2KJ1208 - FM13 - S1</b>		311	
<b>6.3</b>	<b>7.6</b>	4 528	1.8	224.43	<b>2KJ1208 - FM13 - R1</b>		311	
<b>6.8</b>	<b>8.2</b>	4 232	1.9	209.76	<b>2KJ1208 - FM13 - Q1</b>		311	
<b>7.7</b>	<b>9.2</b>	3 733	2.1	185.03	<b>2KJ1208 - FM13 - P1</b>		311	
<b>D.128-LA132S6</b>								
<b>4.7</b>	<b>5.6</b>	6 068	0.84	201.22	<b>2KJ1207 - HE13 - R1</b>	<b>P01</b>	238	
<b>5.1</b>	<b>6.1</b>	5 590	0.91	185.36	<b>2KJ1207 - HE13 - Q1</b>	<b>P01</b>	238	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
3.0 (50 Hz) 3.6 (60 Hz)	<b>D.128-LA100LB4</b>							
		<b>5.3</b>	<b>6.4</b>	5 410	0.94	268.16 ★	<b>2KJ1207 - FM13 - U1</b>	221
		<b>5.8</b>	<b>7.0</b>	4 962	1.0	245.93	<b>2KJ1207 - FM13 - T1</b>	221
		<b>6.5</b>	<b>7.8</b>	4 433	1.2	219.72 ★	<b>2KJ1207 - FM13 - S1</b>	221
		<b>7.1</b>	<b>8.5</b>	4 060	1.3	201.22	<b>2KJ1207 - FM13 - R1</b>	221
		<b>7.7</b>	<b>9.2</b>	3 740	1.4	185.36 ★	<b>2KJ1207 - FM13 - Q1</b>	221
		<b>8.3</b>	<b>10.0</b>	3 463	1.5	171.62	<b>2KJ1207 - FM13 - P1</b>	221
		<b>8.9</b>	<b>10.7</b>	3 220	1.6	159.60 ★	<b>2KJ1207 - FM13 - N1</b>	221
		<b>9.5</b>	<b>11.4</b>	3 006	1.7	148.99	<b>2KJ1207 - FM13 - M1</b>	221
		<b>10.7</b>	<b>12.8</b>	2 689	1.9	133.30 ★	<b>2KJ1207 - FM13 - L1</b>	221
		<b>11.5</b>	<b>13.8</b>	2 492	2.0	123.53	<b>2KJ1207 - FM13 - K1</b>	221
		<b>12.5</b>	<b>15.0</b>	2 285	2.2	113.24 ★	<b>2KJ1207 - FM13 - J1</b>	221
	<b>D.108-LA100LB4</b>							
		<b>7.4</b>	<b>8.9</b>	3 858	0.8	191.21	<b>2KJ1206 - FM13 - P1</b>	144
	<b>8.1</b>	<b>9.7</b>	3 547	0.87	175.78 ★	<b>2KJ1206 - FM13 - N1</b>	144	
	<b>8.7</b>	<b>10.4</b>	3 277	0.95	162.40	<b>2KJ1206 - FM13 - M1</b>	144	
	<b>9.4</b>	<b>11.3</b>	3 041	1.0	150.70 ★	<b>2KJ1206 - FM13 - L1</b>	144	
	<b>10.1</b>	<b>12.1</b>	2 832	1.1	140.37	<b>2KJ1206 - FM13 - K1</b>	144	
	<b>11.2</b>	<b>13.4</b>	2 560	1.2	126.9 ★	<b>2KJ1206 - FM13 - J1</b>	144	
	<b>12.2</b>	<b>14.6</b>	2 357	1.3	116.83	<b>2KJ1206 - FM13 - H1</b>	144	
	<b>13.5</b>	<b>16.2</b>	2 120	1.5	105.08 ★	<b>2KJ1206 - FM13 - G1</b>	144	
	<b>14.6</b>	<b>17.5</b>	1 956	1.6	96.94	<b>2KJ1206 - FM13 - F1</b>	144	
	<b>17.3</b>	<b>21</b>	1 657	1.9	82.14	<b>2KJ1206 - FM13 - E1</b>	144	
	<b>19.8</b>	<b>24</b>	1 444	2.1	71.59 ★	<b>2KJ1206 - FM13 - D1</b>	144	
<b>Z.108-LA100LB4</b>								
	<b>24</b>	<b>29</b>	1 191	2.0	59.05 ★	<b>2KJ1106 - FM13 - E2</b>	140	
	<b>26</b>	<b>31</b>	1 093	2.1	54.15	<b>2KJ1106 - FM13 - D2</b>	140	
<b>D.88-LA100LB4</b>								
	<b>13.8</b>	<b>16.6</b>	2 070	0.81	102.61	<b>2KJ1205 - FM13 - J1</b>	96	
	<b>15.7</b>	<b>18.8</b>	1 827	0.92	90.53 ★	<b>2KJ1205 - FM13 - H1</b>	96	
	<b>17</b>	<b>20</b>	1 686	1.0	83.58	<b>2KJ1205 - FM13 - G1</b>	96	
	<b>19</b>	<b>23</b>	1 511	1.1	74.88 ★	<b>2KJ1205 - FM13 - F1</b>	96	
	<b>21</b>	<b>25</b>	1 393	1.2	69.05	<b>2KJ1205 - FM13 - E1</b>	96	
	<b>24</b>	<b>29</b>	1 169	1.4	57.93	<b>2KJ1205 - FM13 - D1</b>	96	
<b>Z.88-LA100LB4</b>								
	<b>28</b>	<b>34</b>	1 024	1.4	50.73	<b>2KJ1105 - FM13 - B2</b>	94	
	<b>31</b>	<b>37</b>	923	1.8	45.76 ★	<b>2KJ1105 - FM13 - A2</b>	94	
	<b>34</b>	<b>41</b>	845	2.0	41.90	<b>2KJ1105 - FM13 - X1</b>	94	
	<b>38</b>	<b>46</b>	752	2.2	37.27 ★	<b>2KJ1105 - FM13 - W1</b>	94	
	<b>42</b>	<b>50</b>	687	2.4	34.07	<b>2KJ1105 - FM13 - V1</b>	94	
	<b>45</b>	<b>54</b>	632	2.7	31.32 ★	<b>2KJ1105 - FM13 - U1</b>	94	
<b>Z.68-LA100LB4</b>								
	<b>34</b>	<b>41</b>	849	0.94	42.06	<b>2KJ1104 - FM13 - W1</b>	62	
	<b>38</b>	<b>46</b>	762	1.1	37.76 ★	<b>2KJ1104 - FM13 - V1</b>	62	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>3.0</b> (50 Hz)	<b>Z.68-LA100LB4</b>							
3.6 (60 Hz)	<b>41</b>	<b>49</b>	696	1.1	34.49	<b>2KJ1104 - FM13 - U1</b>		62
	<b>46</b>	<b>55</b>	617	1.3	30.60 ★	<b>2KJ1104 - FM13 - T1</b>		62
	<b>50</b>	<b>60</b>	570	1.4	28.25	<b>2KJ1104 - FM13 - S1</b>		62
	<b>56</b>	<b>67</b>	515	1.6	25.55 ★	<b>2KJ1104 - FM13 - R1</b>		62
	<b>60</b>	<b>72</b>	475	1.7	23.53	<b>2KJ1104 - FM13 - Q1</b>		62
	<b>65</b>	<b>78</b>	439	1.8	21.76 ★	<b>2KJ1104 - FM13 - P1</b>		62
	<b>70</b>	<b>84</b>	408	2.0	20.20	<b>2KJ1104 - FM13 - N1</b>		62
	<b>80</b>	<b>96</b>	360	2.2	17.82 ★	<b>2KJ1104 - FM13 - M1</b>		62
	<b>86</b>	<b>103</b>	332	2.4	16.45	<b>2KJ1104 - FM13 - L1</b>		62
	<b>96</b>	<b>115</b>	297	2.7	14.74 ★	<b>2KJ1104 - FM13 - K1</b>		62
	<b>104</b>	<b>125</b>	274	2.9	13.59	<b>2KJ1104 - FM13 - J1</b>		62
	<b>125</b>	<b>150</b>	230	3.4	11.40	<b>2KJ1104 - FM13 - H1</b>		62
	<b>146</b>	<b>175</b>	196	3.8	9.73 ★	<b>2KJ1104 - FM13 - G1</b>		62
	<b>239</b>	<b>287</b>	120	4.1	5.93	<b>2KJ1104 - FM13 - D1</b>		62
	<b>281</b>	<b>337</b>	102	4.7	5.06 ★	<b>2KJ1104 - FM13 - C1</b>		62
	<b>Z.48-LA100LB4</b>							
	<b>54</b>	<b>65</b>	535	0.84	26.53	<b>2KJ1103 - FM13 - S1</b>		45
	<b>62</b>	<b>74</b>	465	0.97	23.07 ★	<b>2KJ1103 - FM13 - R1</b>		45
	<b>68</b>	<b>82</b>	423	1.1	20.95	<b>2KJ1103 - FM13 - Q1</b>		45
	<b>74</b>	<b>89</b>	386	1.2	19.13 ★	<b>2KJ1103 - FM13 - P1</b>		45
	<b>81</b>	<b>97</b>	354	1.3	17.55	<b>2KJ1103 - FM13 - N1</b>		45
	<b>88</b>	<b>106</b>	326	1.3	16.17 ★	<b>2KJ1103 - FM13 - M1</b>		45
	<b>97</b>	<b>116</b>	296	1.4	14.68	<b>2KJ1103 - FM13 - L1</b>		45
	<b>106</b>	<b>127</b>	270	1.5	13.38 ★	<b>2KJ1103 - FM13 - K1</b>		45
	<b>116</b>	<b>139</b>	247	1.6	12.25	<b>2KJ1103 - FM13 - J1</b>		45
	<b>130</b>	<b>156</b>	221	1.8	10.93 ★	<b>2KJ1103 - FM13 - H1</b>		45
	<b>145</b>	<b>174</b>	197	1.9	9.76	<b>2KJ1103 - FM13 - G1</b>		45
	<b>171</b>	<b>205</b>	167	2.2	8.29	<b>2KJ1103 - FM13 - F1</b>		45
	<b>206</b>	<b>247</b>	139	2.4	6.90 ★	<b>2KJ1103 - FM13 - E1</b>		45
	<b>209</b>	<b>251</b>	137	2.0	6.79 ★	<b>2KJ1103 - FM13 - D1</b>		45
	<b>234</b>	<b>281</b>	122	2.2	6.06	<b>2KJ1103 - FM13 - C1</b>		45
	<b>276</b>	<b>331</b>	104	2.6	5.15	<b>2KJ1103 - FM13 - B1</b>		45
	<b>332</b>	<b>398</b>	86	3.0	4.28 ★	<b>2KJ1103 - FM13 - A1</b>		45
	<b>Z.38-LA100LB4</b>							
	<b>110</b>	<b>132</b>	261	0.84	12.92	<b>2KJ1102 - FM13 - M1</b>		35
	<b>120</b>	<b>144</b>	238	0.92	11.82 ★	<b>2KJ1102 - FM13 - L1</b>		35
	<b>134</b>	<b>161</b>	213	0.98	10.57	<b>2KJ1102 - FM13 - K1</b>		35
	<b>146</b>	<b>175</b>	196	1.0	9.70 ★	<b>2KJ1102 - FM13 - J1</b>		35
	<b>162</b>	<b>194</b>	177	1.1	8.75	<b>2KJ1102 - FM13 - H1</b>		35
	<b>189</b>	<b>227</b>	151	1.2	7.50 ★	<b>2KJ1102 - FM13 - F1</b>		35
	<b>189</b>	<b>227</b>	152	1.3	7.52 ★	<b>2KJ1102 - FM13 - G1</b>		35
	<b>212</b>	<b>254</b>	135	1.3	6.71	<b>2KJ1102 - FM13 - D1</b>		35
	<b>231</b>	<b>277</b>	124	1.4	6.16 ★	<b>2KJ1102 - FM13 - C1</b>		35

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
3.0 (50 Hz) 3.6 (60 Hz)	<b>Z.38-LA100LB4</b>							
	256	307	112	1.5	5.55	2KJ1102 - ■ FM13 - ■■ B1		35
	298	358	96	1.7	4.77 ★	2KJ1102 - ■ FM13 - ■■ A1		35
<b>E.128-LA100LB4</b>								
	140	168	205	2.7	10.14 ★	2KJ1006 - ■ FM13 - ■■ T1		119
	151	181	190	3.1	9.40	2KJ1006 - ■ FM13 - ■■ S1		119
	159	191	180	3.5	8.94 ★	2KJ1006 - ■ FM13 - ■■ R1		119
	170	204	168	4.2	8.35	2KJ1006 - ■ FM13 - ■■ Q1		119
<b>E.88-LA100LB4</b>								
	137	164	208	1.1	10.33 ★	2KJ1004 - ■ FM13 - ■■ S1		61
	150	180	191	1.1	9.46	2KJ1004 - ■ FM13 - ■■ R1		61
	169	203	170	1.4	8.42 ★	2KJ1004 - ■ FM13 - ■■ Q1		61
	185	222	155	1.6	7.69	2KJ1004 - ■ FM13 - ■■ P1		61
	201	241	143	2.0	7.07 ★	2KJ1004 - ■ FM13 - ■■ N1		61
	217	260	132	2.3	6.53	2KJ1004 - ■ FM13 - ■■ M1		61
	234	281	122	2.3	6.06 ★	2KJ1004 - ■ FM13 - ■■ L1		61
	251	301	114	2.8	5.65	2KJ1004 - ■ FM13 - ■■ K1		61
	278	334	103	3.6	5.11 ★	2KJ1004 - ■ FM13 - ■■ J1		61
	302	362	95	4.1	4.70	2KJ1004 - ■ FM13 - ■■ H1		61
	336	403	85	4.7	4.23 ★	2KJ1004 - ■ FM13 - ■■ G1		61
	364	437	79	4.9	3.90	2KJ1004 - ■ FM13 - ■■ F1		61
<b>E.68-LA100LB4</b>								
	161	193	178	0.84	8.82	2KJ1003 - ■ FM13 - ■■ T1		44
	179	215	160	1.1	7.92 ★	2KJ1003 - ■ FM13 - ■■ S1		44
	196	235	146	1.0	7.23	2KJ1003 - ■ FM13 - ■■ R1		44
	221	265	130	1.3	6.42 ★	2KJ1003 - ■ FM13 - ■■ P1		44
	240	288	119	1.6	5.92	2KJ1003 - ■ FM13 - ■■ N1		44
	265	318	108	2.0	5.36 ★	2KJ1003 - ■ FM13 - ■■ M1		44
	288	346	100	2.3	4.93	2KJ1003 - ■ FM13 - ■■ L1		44
	311	373	92	2.4	4.56 ★	2KJ1003 - ■ FM13 - ■■ K1		44
	335	402	86	2.7	4.24	2KJ1003 - ■ FM13 - ■■ J1		44
	380	456	76	3.0	3.74 ★	2KJ1003 - ■ FM13 - ■■ H1		44
	412	494	70	3.4	3.45	2KJ1003 - ■ FM13 - ■■ G1		44
	460	552	62	4.0	3.09 ★	2KJ1003 - ■ FM13 - ■■ F1		44
	498	598	58	4.3	2.85	2KJ1003 - ■ FM13 - ■■ E1		44
	594	713	48	4.8	2.39	2KJ1003 - ■ FM13 - ■■ D1		44
	696	835	41	5.1	2.04 ★	2KJ1003 - ■ FM13 - ■■ C1		44
	835	1 002	34	5.1	1.70	2KJ1003 - ■ FM13 - ■■ B1		44
	1 007	1 208	28	5.3	1.41 ★	2KJ1003 - ■ FM13 - ■■ A1		44
<b>E.48-LA100LB4</b>								
	224	269	128	0.9	6.33 ★	2KJ1002 - ■ FM13 - ■■ P1		34
	243	292	118	1	5.85	2KJ1002 - ■ FM13 - ■■ N1		34
	280	336	102	1.2	5.08 ★	2KJ1002 - ■ FM13 - ■■ M1		34
	307	368	93	1.4	4.62	2KJ1002 - ■ FM13 - ■■ L1		34

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight *) kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>3.0</b> (50 Hz)	<b>E.48-LA100LB4</b>							
3.6 (60 Hz)	<b>337</b>	<b>404</b>	85	1.8	4.21 ★	<b>2KJ1002 - FM13 - K1</b>		34
	<b>367</b>	<b>440</b>	78	2.0	3.87	<b>2KJ1002 - FM13 - J1</b>		34
	<b>399</b>	<b>479</b>	72	1.9	3.56 ★	<b>2KJ1002 - FM13 - H1</b>		34
	<b>438</b>	<b>526</b>	65	2.3	3.24	<b>2KJ1002 - FM13 - G1</b>		34
	<b>481</b>	<b>577</b>	60	2.9	2.95 ★	<b>2KJ1002 - FM13 - F1</b>		34
	<b>526</b>	<b>631</b>	54	2.9	2.70	<b>2KJ1002 - FM13 - E1</b>		34
	<b>589</b>	<b>707</b>	49	3.1	2.41 ★	<b>2KJ1002 - FM13 - D1</b>		34
	<b>660</b>	<b>792</b>	43	3.1	2.15	<b>2KJ1002 - FM13 - C1</b>		34
	<b>776</b>	<b>931</b>	37	3.1	1.83	<b>2KJ1002 - FM13 - B1</b>		34
	<b>934</b>	<b>1 121</b>	31	3.3	1.52 ★	<b>2KJ1002 - FM13 - A1</b>		34
	<b>E.38-LA100LB4</b>							
	<b>310</b>	<b>372</b>	92	0.84	4.58 ★	<b>2KJ1001 - FM13 - L1</b>		31
	<b>387</b>	<b>464</b>	74	0.95	3.67 ★	<b>2KJ1001 - FM13 - J1</b>		31
	<b>429</b>	<b>515</b>	67	0.97	3.31	<b>2KJ1001 - FM13 - H1</b>		31
	<b>473</b>	<b>568</b>	60	1.3	3.00 ★	<b>2KJ1001 - FM13 - G1</b>		31
	<b>520</b>	<b>624</b>	55	1.5	2.73	<b>2KJ1001 - FM13 - F1</b>		31
	<b>634</b>	<b>761</b>	45	1.6	2.24	<b>2KJ1001 - FM13 - D1</b>		31
	<b>693</b>	<b>832</b>	41	1.9	2.05 ★	<b>2KJ1001 - FM13 - C1</b>		31
	<b>768</b>	<b>922</b>	37	2.2	1.85	<b>2KJ1001 - FM13 - B1</b>		31
	<b>893</b>	<b>1 072</b>	32	2.2	1.59 ★	<b>2KJ1001 - FM13 - A1</b>		31
<b>4.0</b> (50 Hz)	<b>D.188-Z68-LA112MB4</b>							
4.8 (60 Hz)	<b>1.6</b>	<b>1.9</b>	21 939	0.91	896 ★	<b>2KJ1237 - GH13 - G1</b>		645
	<b>1.9</b>	<b>2.3</b>	18 266	1.1	746	<b>2KJ1237 - GH13 - F1</b>		645
	<b>2.3</b>	<b>2.8</b>	15 157	1.3	619 ★	<b>2KJ1237 - GH13 - E1</b>		645
	<b>2.6</b>	<b>3.1</b>	13 369	1.5	546	<b>2KJ1237 - GH13 - D1</b>		645
	<b>D.188-LA160M8</b>							
	<b>2.9</b>	<b>3.5</b>	13 026	1.5	243.82	<b>2KJ1211 - JE13 - N1</b>	<b>P02</b>	676
	<b>3.2</b>	<b>3.8</b>	11 763	1.7	220.17	<b>2KJ1211 - JE13 - M1</b>	<b>P02</b>	676
	<b>3.5</b>	<b>4.2</b>	11 024	1.8	206.34	<b>2KJ1211 - JE13 - L1</b>	<b>P02</b>	676
	<b>D.188-LA132MA6</b>							
	<b>3.9</b>	<b>4.7</b>	9 804	2.0	243.82	<b>2KJ1211 - HG13 - N1</b>	<b>P01</b>	652
	<b>D.168-LA132MA6</b>							
	<b>2.8</b>	<b>3.4</b>	13 736	1.0	341.61 ★	<b>2KJ1210 - HG13 - U1</b>	<b>P01</b>	507
	<b>3.0</b>	<b>3.6</b>	12 602	1.1	313.41	<b>2KJ1210 - HG13 - T1</b>	<b>P01</b>	507
	<b>3.3</b>	<b>4.0</b>	11 630	1.2	289.23 ★	<b>2KJ1210 - HG13 - S1</b>	<b>P01</b>	507
	<b>3.5</b>	<b>4.2</b>	10 788	1.3	268.29	<b>2KJ1210 - HG13 - R1</b>	<b>P01</b>	507
	<b>3.8</b>	<b>4.6</b>	10 176	1.4	253.08 ★	<b>2KJ1210 - HG13 - Q1</b>	<b>P01</b>	507
	<b>4.0</b>	<b>4.8</b>	9 519	1.5	236.72	<b>2KJ1210 - HG13 - P1</b>	<b>P01</b>	507
	<b>D.148-LA132MA6</b>							
	<b>4.0</b>	<b>4.8</b>	9 492	0.84	236.05	<b>2KJ1208 - HG13 - S1</b>	<b>P01</b>	336
	<b>D.148-LA112MB4</b>							
	<b>4.3</b>	<b>5.2</b>	8 916	0.9	336.11	<b>2KJ1208 - GH13 - W1</b>		318

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R



# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
4.0 (50 Hz) 4.8 (60 Hz)	<b>D.148-LA112MB4</b>							
	<b>4.8</b>	<b>5.8</b>	7 994	1	301.34 ★	<b>2KJ1208 - ■GH13 - ■■V1</b>		318
	<b>5.2</b>	<b>6.2</b>	7 328	1.1	276.23	<b>2KJ1208 - ■GH13 - ■■U1</b>		318
	<b>5.7</b>	<b>6.8</b>	6 757	1.2	254.70 ★	<b>2KJ1208 - ■GH13 - ■■T1</b>		318
	<b>6.1</b>	<b>7.3</b>	6 262	1.3	236.05	<b>2KJ1208 - ■GH13 - ■■S1</b>		318
	<b>6.4</b>	<b>7.7</b>	5 954	1.3	224.43 ★	<b>2KJ1208 - ■GH13 - ■■R1</b>		318
	<b>6.9</b>	<b>8.3</b>	5 564	1.4	209.76	<b>2KJ1208 - ■GH13 - ■■Q1</b>		318
	<b>7.8</b>	<b>9.4</b>	4 908	1.6	185.03 ★	<b>2KJ1208 - ■GH13 - ■■P1</b>		318
	<b>8.3</b>	<b>10</b>	4 630	1.7	174.53	<b>2KJ1208 - ■GH13 - ■■N1</b>		318
	<b>9.2</b>	<b>11</b>	4 148	1.9	156.38 ★	<b>2KJ1208 - ■GH13 - ■■M1</b>		318
<b>10</b>	<b>12</b>	3 830	2.1	144.39	<b>2KJ1208 - ■GH13 - ■■L1</b>		318	
<b>D.128-LA112MB4</b>								
<b>6.6</b>	<b>7.9</b>	5 829	0.87	219.72 ★	<b>2KJ1207 - ■GH13 - ■■S1</b>		228	
<b>7.2</b>	<b>8.6</b>	5 338	0.96	201.22	<b>2KJ1207 - ■GH13 - ■■R1</b>		228	
<b>7.8</b>	<b>9.4</b>	4 917	1.0	185.36 ★	<b>2KJ1207 - ■GH13 - ■■Q1</b>		228	
<b>8.4</b>	<b>10.1</b>	4 553	1.1	171.62	<b>2KJ1207 - ■GH13 - ■■P1</b>		228	
<b>9.0</b>	<b>10.8</b>	4 234	1.2	159.60 ★	<b>2KJ1207 - ■GH13 - ■■N1</b>		228	
<b>9.7</b>	<b>11.6</b>	3 952	1.3	148.99	<b>2KJ1207 - ■GH13 - ■■M1</b>		228	
<b>10.8</b>	<b>13.0</b>	3 536	1.4	133.30 ★	<b>2KJ1207 - ■GH13 - ■■L1</b>		228	
<b>11.7</b>	<b>14.0</b>	3 277	1.6	123.53	<b>2KJ1207 - ■GH13 - ■■K1</b>		228	
<b>12.7</b>	<b>15.2</b>	3 004	1.7	113.24 ★	<b>2KJ1207 - ■GH13 - ■■J1</b>		228	
<b>13.9</b>	<b>16.7</b>	2 754	1.9	103.80	<b>2KJ1207 - ■GH13 - ■■H1</b>		228	
<b>16.3</b>	<b>19.6</b>	2 347	2.2	88.46	<b>2KJ1207 - ■GH13 - ■■G1</b>		228	
<b>D.108-LA112MB4</b>								
<b>10.3</b>	<b>12.4</b>	3 724	0.83	140.37	<b>2KJ1206 - ■GH13 - ■■K1</b>		151	
<b>11.3</b>	<b>13.6</b>	3 366	0.92	126.90 ★	<b>2KJ1206 - ■GH13 - ■■J1</b>		151	
<b>12.3</b>	<b>14.8</b>	3 099	1	116.83	<b>2KJ1206 - ■GH13 - ■■H1</b>		151	
<b>13.7</b>	<b>16.4</b>	2 788	1.1	105.08 ★	<b>2KJ1206 - ■GH13 - ■■G1</b>		151	
<b>14.9</b>	<b>17.9</b>	2 572	1.2	96.94	<b>2KJ1206 - ■GH13 - ■■F1</b>		151	
<b>17.5</b>	<b>21</b>	2 179	1.4	82.14	<b>2KJ1206 - ■GH13 - ■■E1</b>		151	
<b>20</b>	<b>24</b>	1 899	1.6	71.59 ★	<b>2KJ1206 - ■GH13 - ■■D1</b>		151	
<b>24</b>	<b>29</b>	1 616	1.9	60.90	<b>2KJ1206 - ■GH13 - ■■C1</b>		151	
<b>Z.108-LA112MB4</b>								
<b>24</b>	<b>29</b>	1 566	1.5	59.05 ★	<b>2KJ1106 - ■GH13 - ■■E2</b>		147	
<b>27</b>	<b>32</b>	1 436	1.6	54.15	<b>2KJ1106 - ■GH13 - ■■D2</b>		147	
<b>30</b>	<b>36</b>	1 283	2.4	48.38 ★	<b>2KJ1106 - ■GH13 - ■■C2</b>		147	
<b>D.88-LA112MB4</b>								
<b>19.2</b>	<b>23</b>	1 986	0.85	74.88 ★	<b>2KJ1205 - ■GH13 - ■■F1</b>		103	
<b>21</b>	<b>25</b>	1 832	0.92	69.05	<b>2KJ1205 - ■GH13 - ■■E1</b>		103	
<b>25</b>	<b>30</b>	1 537	1.1	57.93	<b>2KJ1205 - ■GH13 - ■■D1</b>		103	
<b>Z.88-LA112MB4</b>								
<b>32</b>	<b>38</b>	1 214	1.4	45.76 ★	<b>2KJ1105 - ■GH13 - ■■A2</b>		101	
<b>34</b>	<b>41</b>	1 112	1.5	41.90	<b>2KJ1105 - ■GH13 - ■■X1</b>		101	
<b>39</b>	<b>47</b>	989	1.7	37.27 ★	<b>2KJ1105 - ■GH13 - ■■W1</b>		101	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>4.0</b> (50 Hz)	<b>Z.88-LA112MB4</b>							
4.8 (60 Hz)	<b>42</b>	<b>50</b>	904	1.9	34.07	<b>2KJ1105 - ■GH13 - ■■V1</b>		101
	<b>46</b>	<b>55</b>	831	2.0	31.32 ★	<b>2KJ1105 - ■GH13 - ■■U1</b>		101
	<b>50</b>	<b>60</b>	767	2.2	28.93	<b>2KJ1105 - ■GH13 - ■■T1</b>		101
	<b>54</b>	<b>65</b>	712	2.4	26.85 ★	<b>2KJ1105 - ■GH13 - ■■S1</b>		101
	<b>58</b>	<b>70</b>	663	2.5	25.01	<b>2KJ1105 - ■GH13 - ■■R1</b>		101
	<b>64</b>	<b>77</b>	600	2.8	22.61 ★	<b>2KJ1105 - ■GH13 - ■■Q1</b>		101
	<b>69</b>	<b>83</b>	552	3.0	20.81	<b>2KJ1105 - ■GH13 - ■■P1</b>		101
	<b>Z.68-LA112MB4</b>							
	<b>38</b>	<b>46</b>	1 002	0.80	37.76 ★	<b>2KJ1104 - ■GH13 - ■■V1</b>		69
	<b>42</b>	<b>50</b>	915	0.87	34.49	<b>2KJ1104 - ■GH13 - ■■U1</b>		69
	<b>47</b>	<b>56</b>	812	0.99	30.60 ★	<b>2KJ1104 - ■GH13 - ■■T1</b>		69
	<b>51</b>	<b>61</b>	749	1.1	28.25	<b>2KJ1104 - ■GH13 - ■■S1</b>		69
	<b>56</b>	<b>67</b>	678	1.2	25.55 ★	<b>2KJ1104 - ■GH13 - ■■R1</b>		69
	<b>61</b>	<b>73</b>	624	1.3	23.53	<b>2KJ1104 - ■GH13 - ■■Q1</b>		69
	<b>66</b>	<b>79</b>	577	1.4	21.76 ★	<b>2KJ1104 - ■GH13 - ■■P1</b>		69
	<b>71</b>	<b>85</b>	536	1.5	20.20	<b>2KJ1104 - ■GH13 - ■■N1</b>		69
	<b>81</b>	<b>97</b>	473	1.7	17.82 ★	<b>2KJ1104 - ■GH13 - ■■M1</b>		69
	<b>88</b>	<b>106</b>	436	1.8	16.45	<b>2KJ1104 - ■GH13 - ■■L1</b>		69
	<b>98</b>	<b>118</b>	391	2.0	14.74 ★	<b>2KJ1104 - ■GH13 - ■■K1</b>		69
	<b>106</b>	<b>127</b>	361	2.2	13.59	<b>2KJ1104 - ■GH13 - ■■J1</b>		69
	<b>126</b>	<b>151</b>	302	2.6	11.40	<b>2KJ1104 - ■GH13 - ■■H1</b>		69
	<b>148</b>	<b>178</b>	258	2.9	9.73 ★	<b>2KJ1104 - ■GH13 - ■■G1</b>		69
	<b>178</b>	<b>214</b>	215	3.3	8.11	<b>2KJ1104 - ■GH13 - ■■F1</b>		69
	<b>214</b>	<b>257</b>	178	3.6	6.72 ★	<b>2KJ1104 - ■GH13 - ■■E1</b>		69
	<b>243</b>	<b>292</b>	157	3.1	5.93	<b>2KJ1104 - ■GH13 - ■■D1</b>		69
	<b>285</b>	<b>342</b>	134	3.6	5.06 ★	<b>2KJ1104 - ■GH13 - ■■C1</b>		69
	<b>341</b>	<b>409</b>	112	4.2	4.22	<b>2KJ1104 - ■GH13 - ■■B1</b>		69
	<b>413</b>	<b>496</b>	93	4.5	3.49 ★	<b>2KJ1104 - ■GH13 - ■■A1</b>		69
	<b>Z.48-LA112MB4</b>							
	<b>69</b>	<b>83</b>	556	0.81	20.95	<b>2KJ1103 - ■GH13 - ■■Q1</b>		52
	<b>75</b>	<b>90</b>	507	0.89	19.13 ★	<b>2KJ1103 - ■GH13 - ■■P1</b>		52
	<b>82</b>	<b>98</b>	466	0.97	17.55	<b>2KJ1103 - ■GH13 - ■■N1</b>		52
	<b>89</b>	<b>107</b>	429	1.0	16.17 ★	<b>2KJ1103 - ■GH13 - ■■M1</b>		52
	<b>98</b>	<b>118</b>	389	1.1	14.68	<b>2KJ1103 - ■GH13 - ■■L1</b>		52
	<b>108</b>	<b>130</b>	355	1.2	13.38 ★	<b>2KJ1103 - ■GH13 - ■■K1</b>		52
	<b>118</b>	<b>142</b>	325	1.2	12.25	<b>2KJ1103 - ■GH13 - ■■J1</b>		52
	<b>132</b>	<b>158</b>	290	1.3	10.93 ★	<b>2KJ1103 - ■GH13 - ■■H1</b>		52
	<b>148</b>	<b>178</b>	259	1.5	9.76	<b>2KJ1103 - ■GH13 - ■■G1</b>		52
	<b>174</b>	<b>209</b>	220	1.6	8.29	<b>2KJ1103 - ■GH13 - ■■F1</b>		52
	<b>209</b>	<b>251</b>	183	1.9	6.90 ★	<b>2KJ1103 - ■GH13 - ■■E1</b>		52
	<b>212</b>	<b>254</b>	180	1.5	6.79 ★	<b>2KJ1103 - ■GH13 - ■■D1</b>		52
	<b>238</b>	<b>286</b>	161	1.7	6.06	<b>2KJ1103 - ■GH13 - ■■C1</b>		52
	<b>280</b>	<b>336</b>	137	2.0	5.15	<b>2KJ1103 - ■GH13 - ■■B1</b>		52

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
4.0 (50 Hz) 4.8 (60 Hz)	<b>Z.48-LA112MB4</b>							
	<b>336</b>	<b>403</b>	114	2.3	4.28 ★	<b>2KJ1103 - ■GH13 - ■■A1</b>		52
<b>Z.38-LA112MB4</b>								
	<b>165</b>	<b>198</b>	232	0.84	8.75	<b>2KJ1102 - ■GH13 - ■■H1</b>		42
	<b>191</b>	<b>229</b>	199	0.95	7.52 ★	<b>2KJ1102 - ■GH13 - ■■G1</b>		42
	<b>192</b>	<b>230</b>	199	0.93	7.50 ★	<b>2KJ1102 - ■GH13 - ■■F1</b>		42
	<b>215</b>	<b>258</b>	178	1.0	6.71	<b>2KJ1102 - ■GH13 - ■■D1</b>		42
	<b>234</b>	<b>281</b>	163	1.0	6.16 ★	<b>2KJ1102 - ■GH13 - ■■C1</b>		42
	<b>259</b>	<b>311</b>	147	1.1	5.55	<b>2KJ1102 - ■GH13 - ■■B1</b>		42
	<b>302</b>	<b>362</b>	127	1.3	4.77 ★	<b>2KJ1102 - ■GH13 - ■■A1</b>		42
<b>E.128-LA112MB4</b>								
	<b>142</b>	<b>170</b>	269	2.0	10.14 ★	<b>2KJ1006 - ■GH13 - ■■T1</b>		126
	<b>153</b>	<b>184</b>	249	2.3	9.40	<b>2KJ1006 - ■GH13 - ■■S1</b>		126
	<b>161</b>	<b>193</b>	237	2.7	8.94 ★	<b>2KJ1006 - ■GH13 - ■■R1</b>		126
	<b>172</b>	<b>206</b>	222	3.2	8.35	<b>2KJ1006 - ■GH13 - ■■Q1</b>		126
	<b>195</b>	<b>234</b>	196	4.2	7.37 ★	<b>2KJ1006 - ■GH13 - ■■P1</b>		126
<b>E.108-LA112MB4</b>								
	<b>264</b>	<b>317</b>	145	4.6	5.46 ★	<b>2KJ1005 - ■GH13 - ■■K1</b>		89
<b>E.88-LA112MB4</b>								
	<b>139</b>	<b>167</b>	274	0.84	10.33 ★	<b>2KJ1004 - ■GH13 - ■■S1</b>		68
	<b>152</b>	<b>182</b>	251	0.84	9.46	<b>2KJ1004 - ■GH13 - ■■R1</b>		68
	<b>171</b>	<b>205</b>	223	1.1	8.42 ★	<b>2KJ1004 - ■GH13 - ■■Q1</b>		68
	<b>187</b>	<b>224</b>	204	1.2	7.69	<b>2KJ1004 - ■GH13 - ■■P1</b>		68
	<b>204</b>	<b>245</b>	188	1.5	7.07 ★	<b>2KJ1004 - ■GH13 - ■■N1</b>		68
	<b>221</b>	<b>265</b>	173	1.7	6.53	<b>2KJ1004 - ■GH13 - ■■M1</b>		68
	<b>238</b>	<b>286</b>	161	1.7	6.06 ★	<b>2KJ1004 - ■GH13 - ■■L1</b>		68
	<b>255</b>	<b>306</b>	150	2.1	5.65	<b>2KJ1004 - ■GH13 - ■■K1</b>		68
	<b>282</b>	<b>338</b>	136	2.7	5.11 ★	<b>2KJ1004 - ■GH13 - ■■J1</b>		68
	<b>306</b>	<b>367</b>	125	3.1	4.70	<b>2KJ1004 - ■GH13 - ■■H1</b>		68
	<b>340</b>	<b>408</b>	112	3.6	4.23 ★	<b>2KJ1004 - ■GH13 - ■■G1</b>		68
	<b>369</b>	<b>443</b>	103	3.7	3.90	<b>2KJ1004 - ■GH13 - ■■F1</b>		68
	<b>436</b>	<b>523</b>	88	5.1	3.30	<b>2KJ1004 - ■GH13 - ■■E1</b>		68
	<b>500</b>	<b>600</b>	76	5.7	2.88 ★	<b>2KJ1004 - ■GH13 - ■■D1</b>		68
<b>E.68-LA112MB4</b>								
	<b>182</b>	<b>218</b>	210	0.81	7.92 ★	<b>2KJ1003 - ■GH13 - ■■S1</b>		51
	<b>224</b>	<b>269</b>	170	1.0	6.42 ★	<b>2KJ1003 - ■GH13 - ■■P1</b>		51
	<b>243</b>	<b>292</b>	157	1.2	5.92	<b>2KJ1003 - ■GH13 - ■■N1</b>		51
	<b>269</b>	<b>323</b>	142	1.5	5.36 ★	<b>2KJ1003 - ■GH13 - ■■M1</b>		51
	<b>292</b>	<b>350</b>	131	1.7	4.93	<b>2KJ1003 - ■GH13 - ■■L1</b>		51
	<b>316</b>	<b>379</b>	121	1.8	4.56 ★	<b>2KJ1003 - ■GH13 - ■■K1</b>		51
	<b>340</b>	<b>408</b>	112	2.0	4.24	<b>2KJ1003 - ■GH13 - ■■J1</b>		51
	<b>385</b>	<b>462</b>	99	2.3	3.74 ★	<b>2KJ1003 - ■GH13 - ■■H1</b>		51
	<b>417</b>	<b>500</b>	92	2.6	3.45	<b>2KJ1003 - ■GH13 - ■■G1</b>		51
	<b>466</b>	<b>559</b>	82	3.0	3.09 ★	<b>2KJ1003 - ■GH13 - ■■F1</b>		51

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
4.0 (50 Hz) 4.8 (60 Hz)	<b>E.68-LA112MB4</b>							
	<b>505</b>	<b>606</b>	76	3.3	2.85	<b>2KJ1003 - ■GH13 - ■■E1</b>		51
	<b>603</b>	<b>724</b>	63	3.6	2.39	<b>2KJ1003 - ■GH13 - ■■D1</b>		51
	<b>706</b>	<b>847</b>	54	3.9	2.04 ★	<b>2KJ1003 - ■GH13 - ■■C1</b>		51
	<b>847</b>	<b>1 016</b>	45	3.9	1.70	<b>2KJ1003 - ■GH13 - ■■B1</b>		51
	<b>1 021</b>	<b>1 225</b>	37	4.0	1.41 ★	<b>2KJ1003 - ■GH13 - ■■A1</b>		51
	<b>E.48-LA112MB4</b>							
	<b>283</b>	<b>340</b>	135	0.89	5.08 ★	<b>2KJ1002 - ■GH13 - ■■M1</b>		41
	<b>312</b>	<b>374</b>	123	1.1	4.62	<b>2KJ1002 - ■GH13 - ■■L1</b>		41
	<b>342</b>	<b>410</b>	112	1.3	4.21 ★	<b>2KJ1002 - ■GH13 - ■■K1</b>		41
	<b>372</b>	<b>446</b>	103	1.6	3.87	<b>2KJ1002 - ■GH13 - ■■J1</b>		41
	<b>404</b>	<b>485</b>	94	1.5	3.56 ★	<b>2KJ1002 - ■GH13 - ■■H1</b>		41
	<b>444</b>	<b>533</b>	86	1.7	3.24	<b>2KJ1002 - ■GH13 - ■■G1</b>		41
	<b>488</b>	<b>586</b>	78	2.2	2.95 ★	<b>2KJ1002 - ■GH13 - ■■F1</b>		41
	<b>533</b>	<b>640</b>	72	2.2	2.70	<b>2KJ1002 - ■GH13 - ■■E1</b>		41
	<b>598</b>	<b>718</b>	64	2.3	2.41 ★	<b>2KJ1002 - ■GH13 - ■■D1</b>		41
	<b>670</b>	<b>804</b>	57	2.4	2.15	<b>2KJ1002 - ■GH13 - ■■C1</b>		41
	<b>787</b>	<b>944</b>	48	2.4	1.83	<b>2KJ1002 - ■GH13 - ■■B1</b>		41
	<b>947</b>	<b>1 136</b>	40	2.5	1.52 ★	<b>2KJ1002 - ■GH13 - ■■A1</b>		41
	<b>E.38-LA112MB4</b>							
	<b>480</b>	<b>576</b>	80	1.0	3.00 ★	<b>2KJ1001 - ■GH13 - ■■G1</b>		38
	<b>527</b>	<b>632</b>	72	1.1	2.73	<b>2KJ1001 - ■GH13 - ■■F1</b>		38
	<b>702</b>	<b>842</b>	54	1.5	2.05 ★	<b>2KJ1001 - ■GH13 - ■■C1</b>		38
	<b>778</b>	<b>934</b>	49	1.7	1.85	<b>2KJ1001 - ■GH13 - ■■B1</b>		38
	<b>906</b>	<b>1 087</b>	42	1.7	1.59 ★	<b>2KJ1001 - ■GH13 - ■■A1</b>		38
5.5 (50 Hz) 6.6 (60 Hz)	<b>D.188-Z68-LA132SB4</b>							
	<b>2.0</b>	<b>2.4</b>	24 909	0.8	746	<b>2KJ1237 - ■HF13 - ■■F1</b>		655
	<b>2.4</b>	<b>2.9</b>	20 668	0.97	619 ★	<b>2KJ1237 - ■HF13 - ■■E1</b>		655
	<b>2.7</b>	<b>3.2</b>	18 231	1.1	546	<b>2KJ1237 - ■HF13 - ■■D1</b>		655
	<b>D.188-LA160MB8</b>							
	<b>2.9</b>	<b>3.5</b>	18 038	1.1	243.82	<b>2KJ1211 - ■JF13 - ■■N1</b>	<b>P02</b>	676
	<b>3.2</b>	<b>3.8</b>	16 288	1.2	220.17	<b>2KJ1211 - ■JF13 - ■■M1</b>	<b>P02</b>	676
	<b>3.4</b>	<b>4.1</b>	15 265	1.3	206.34	<b>2KJ1211 - ■JF13 - ■■L1</b>	<b>P02</b>	676
	<b>3.9</b>	<b>4.7</b>	13 481	1.5	243.82	<b>2KJ1211 - ■HJ13 - ■■N1</b>	<b>P02</b>	652
	<b>4.3</b>	<b>5.2</b>	12 173	1.6	220.17	<b>2KJ1211 - ■HJ13 - ■■M1</b>	<b>P02</b>	652
	<b>4.6</b>	<b>5.5</b>	11 408	1.8	206.34	<b>2KJ1211 - ■HJ13 - ■■L1</b>	<b>P02</b>	652
	<b>D.168-LA132MB6</b>							
	<b>3.0</b>	<b>3.6</b>	17 328	0.81	313.41	<b>2KJ1210 - ■HJ13 - ■■T1</b>	<b>P01</b>	507
	<b>3.3</b>	<b>4.0</b>	15 991	0.88	289.23 ★	<b>2KJ1210 - ■HJ13 - ■■S1</b>	<b>P01</b>	507
	<b>3.5</b>	<b>4.2</b>	14 834	0.94	268.29	<b>2KJ1210 - ■HJ13 - ■■R1</b>	<b>P01</b>	507
	<b>3.8</b>	<b>4.6</b>	13 993	1.0	253.08 ★	<b>2KJ1210 - ■HJ13 - ■■Q1</b>	<b>P01</b>	507
	<b>4.0</b>	<b>4.8</b>	13 088	1.1	236.72	<b>2KJ1210 - ■HJ13 - ■■P1</b>	<b>P01</b>	507

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>5.5 (50 Hz)</b>	<b>D.168-LA132SB4</b>							
6.6 (60 Hz)	<b>4.3</b>	<b>5.2</b>	12 332	1.1	341.61 ★	<b>2KJ1210 - HF13 - U1</b>		499
	<b>4.6</b>	<b>5.5</b>	11 314	1.2	313.41	<b>2KJ1210 - HF13 - T1</b>		499
	<b>5.0</b>	<b>6.0</b>	10 441	1.3	289.23 ★	<b>2KJ1210 - HF13 - S1</b>		499
	<b>5.4</b>	<b>6.5</b>	9 685	1.4	268.29	<b>2KJ1210 - HF13 - R1</b>		499
	<b>5.7</b>	<b>6.8</b>	9 136	1.5	253.08 ★	<b>2KJ1210 - HF13 - Q1</b>		499
	<b>6.1</b>	<b>7.3</b>	8 546	1.6	236.72	<b>2KJ1210 - HF13 - P1</b>		499
	<b>6.9</b>	<b>8.3</b>	7 599	1.8	210.49 ★	<b>2KJ1210 - HF13 - N1</b>		499
	<b>7.3</b>	<b>8.8</b>	7 173	2.0	198.71	<b>2KJ1210 - HF13 - M1</b>		499
	<b>D.148-LA132SB4</b>							
	<b>5.3</b>	<b>6.4</b>	9 972	0.8	276.23	<b>2KJ1208 - HF13 - U1</b>		328
	<b>5.7</b>	<b>6.8</b>	9 195	0.87	254.70 ★	<b>2KJ1208 - HF13 - T1</b>		328
	<b>6.2</b>	<b>7.4</b>	8 521	0.94	236.05	<b>2KJ1208 - HF13 - S1</b>		328
	<b>6.5</b>	<b>7.8</b>	8 102	0.99	224.43 ★	<b>2KJ1208 - HF13 - R1</b>		328
	<b>6.9</b>	<b>8.3</b>	7 572	1.1	209.76	<b>2KJ1208 - HF13 - Q1</b>		328
	<b>7.9</b>	<b>9.5</b>	6 680	1.2	185.03 ★	<b>2KJ1208 - HF13 - P1</b>		328
	<b>8.3</b>	<b>10.0</b>	6 300	1.3	174.53	<b>2KJ1208 - HF13 - N1</b>		328
	<b>9.3</b>	<b>11.2</b>	5 645	1.4	156.38 ★	<b>2KJ1208 - HF13 - M1</b>		328
	<b>10.1</b>	<b>12.1</b>	5 212	1.5	144.39	<b>2KJ1208 - HF13 - L1</b>		328
	<b>11.8</b>	<b>14.2</b>	4 454	1.8	123.37	<b>2KJ1208 - HF13 - K1</b>		328
	<b>13.0</b>	<b>15.6</b>	4 025	2.0	111.50 ★	<b>2KJ1208 - HF13 - J1</b>		328
	<b>13.5</b>	<b>16.2</b>	3 878	2.1	107.42	<b>2KJ1208 - HF13 - H1</b>		328
	<b>Z.148-LA132SB4</b>							
	<b>25</b>	<b>30</b>	2 076	2.2	57.50	<b>2KJ1108 - HF13 - B2</b>		316
	<b>D.128-LA132SB4</b>							
	<b>8.5</b>	<b>10.2</b>	6 195	0.82	171.62	<b>2KJ1207 - HF13 - P1</b>		238
	<b>9.1</b>	<b>10.9</b>	5 762	0.89	159.60 ★	<b>2KJ1207 - HF13 - N1</b>		238
	<b>9.8</b>	<b>11.8</b>	5 378	0.95	148.99	<b>2KJ1207 - HF13 - M1</b>		238
	<b>10.9</b>	<b>13.1</b>	4 812	1.1	133.30 ★	<b>2KJ1207 - HF13 - L1</b>		238
	<b>11.8</b>	<b>14.2</b>	4 459	1.1	123.53	<b>2KJ1207 - HF13 - K1</b>		238
	<b>12.8</b>	<b>15.4</b>	4 088	1.2	113.24 ★	<b>2KJ1207 - HF13 - J1</b>		238
	<b>14.0</b>	<b>16.8</b>	3 747	1.4	103.80	<b>2KJ1207 - HF13 - H1</b>		238
	<b>16.4</b>	<b>19.7</b>	3 193	1.6	88.46	<b>2KJ1207 - HF13 - G1</b>		238
	<b>18.6</b>	<b>22.0</b>	2 818	1.8	78.06 ★	<b>2KJ1207 - HF13 - F1</b>		238
	<b>22.0</b>	<b>26.0</b>	2 398	2.1	66.43	<b>2KJ1207 - HF13 - E1</b>		238
	<b>Z.128-LA132SB4</b>							
	<b>33</b>	<b>40</b>	1 595	2.1	44.19 ★	<b>2KJ1107 - HF13 - D2</b>		229
	<b>36</b>	<b>43</b>	1 479	2.2	40.96	<b>2KJ1107 - HF13 - C2</b>		229
	<b>D.108-LA132SB4</b>							
	<b>13.8</b>	<b>16.6</b>	3 793	0.82	105.08 ★	<b>2KJ1206 - HF13 - G1</b>		161
	<b>15</b>	<b>18</b>	3 500	0.89	96.94	<b>2KJ1206 - HF13 - F1</b>		161
	<b>17.7</b>	<b>21</b>	2 965	1.0	82.14	<b>2KJ1206 - HF13 - E1</b>		161
	<b>20</b>	<b>24</b>	2 584	1.2	71.59 ★	<b>2KJ1206 - HF13 - D1</b>		161
	<b>24</b>	<b>29</b>	2 198	1.4	60.90	<b>2KJ1206 - HF13 - C1</b>		161

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
5.5 (50 Hz)	<b>Z.108-LA132SB4</b>							
6.6 (60 Hz)	30	36	1 747	1.8	48.38 ★	2KJ1106 - HF13 - C2		157
	33	40	1 600	1.9	44.31	2KJ1106 - HF13 - B2		157
	36	43	1 474	2.1	40.82 ★	2KJ1106 - HF13 - A2		157
	38	46	1 364	2.3	37.79	2KJ1106 - HF13 - X1		157
	41	49	1 269	2.4	35.14 ★	2KJ1106 - HF13 - W1		157
	44	53	1 184	2.6	32.81	2KJ1106 - HF13 - V1		157
	<b>D.88-LA132SB4</b>							
	25	30	2 091	0.80	57.93	2KJ1205 - HF13 - D1		113
	29	35	1 784	0.94	49.42 ★	2KJ1205 - HF13 - C1		113
	35	42	1 487	1.10	41.19	2KJ1205 - HF13 - B1		113
	<b>Z.88-LA132SB4</b>							
	39	47	1 345	1.2	37.27 ★	2KJ1105 - HF13 - W1		111
	43	52	1 230	1.4	34.07	2KJ1105 - HF13 - V1		111
	46	55	1 131	1.5	31.32 ★	2KJ1105 - HF13 - U1		111
	50	60	1 044	1.6	28.93	2KJ1105 - HF13 - T1		111
	54	65	969	1.7	26.85 ★	2KJ1105 - HF13 - S1		111
	58	70	903	1.9	25.01	2KJ1105 - HF13 - R1		111
	64	77	816	2.1	22.61 ★	2KJ1105 - HF13 - Q1		111
	70	84	751	2.2	20.81	2KJ1105 - HF13 - P1		111
	78	94	676	2.5	18.72 ★	2KJ1105 - HF13 - N1		111
	84	101	623	2.7	17.27	2KJ1105 - HF13 - M1		111
	100	120	528	3.1	14.63	2KJ1105 - HF13 - L1		111
	114	137	460	3.4	12.75 ★	2KJ1105 - HF13 - K1		111
	134	161	392	3.8	10.85	2KJ1105 - HF13 - J1		111
	327	392	161	5.0	4.45 ★	2KJ1105 - HF13 - C1		111
	384	461	137	5.4	3.79 ★	2KJ1105 - HF13 - B1		111
	<b>Z.68-LA132SB4</b>							
	57	68	922	0.87	25.55 ★	2KJ1104 - HF13 - R1		79
	62	74	849	0.94	23.53	2KJ1104 - HF13 - Q1		79
	67	80	786	1.0	21.76 ★	2KJ1104 - HF13 - P1		79
	72	86	729	1.1	20.20	2KJ1104 - HF13 - N1		79
	82	98	643	1.2	17.82 ★	2KJ1104 - HF13 - M1		79
	88	106	594	1.3	16.45	2KJ1104 - HF13 - L1		79
	99	119	532	1.5	14.74 ★	2KJ1104 - HF13 - K1		79
	107	128	491	1.6	13.59	2KJ1104 - HF13 - J1		79
	128	154	412	1.9	11.40	2KJ1104 - HF13 - H1		79
	150	180	351	2.1	9.73 ★	2KJ1104 - HF13 - G1		79
	179	215	293	2.4	8.11	2KJ1104 - HF13 - F1		79
	217	260	243	2.7	6.72 ★	2KJ1104 - HF13 - E1		79
	245	294	214	2.3	5.93	2KJ1104 - HF13 - D1		79
	288	346	183	2.6	5.06 ★	2KJ1104 - HF13 - C1		79
	345	414	152	3.1	4.22	2KJ1104 - HF13 - B1		79
	417	500	126	3.3	3.49 ★	2KJ1104 - HF13 - A1		79

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>5.5 (50 Hz)</b>	<b>Z.48-LA132SB4</b>							
6.6 (60 Hz)	<b>109</b>	<b>131</b>	483	0.85	13.38 ★	<b>2KJ1103 - HF13 - K1</b>		62
	<b>119</b>	<b>143</b>	442	0.90	12.25	<b>2KJ1103 - HF13 - J1</b>		62
	<b>133</b>	<b>160</b>	395	0.99	10.93 ★	<b>2KJ1103 - HF13 - H1</b>		62
	<b>149</b>	<b>179</b>	352	1.1	9.76	<b>2KJ1103 - HF13 - G1</b>		62
	<b>176</b>	<b>211</b>	299	1.2	8.29	<b>2KJ1103 - HF13 - F1</b>		62
	<b>211</b>	<b>253</b>	249	1.4	6.90 ★	<b>2KJ1103 - HF13 - E1</b>		62
	<b>214</b>	<b>257</b>	245	1.1	6.79 ★	<b>2KJ1103 - HF13 - D1</b>		62
	<b>240</b>	<b>288</b>	219	1.2	6.06	<b>2KJ1103 - HF13 - C1</b>		62
	<b>283</b>	<b>340</b>	186	1.5	5.15	<b>2KJ1103 - HF13 - B1</b>		62
	<b>340</b>	<b>408</b>	155	1.7	4.28 ★	<b>2KJ1103 - HF13 - A1</b>		62
	<b>E.148-LA132SB4</b>							
	<b>106</b>	<b>127</b>	493	1.2	13.67 ★	<b>2KJ1007 - HF13 - U1</b>		160
	<b>116</b>	<b>139</b>	453	1.3	12.54	<b>2KJ1007 - HF13 - T1</b>		160
	<b>126</b>	<b>151</b>	418	1.6	11.57 ★	<b>2KJ1007 - HF13 - S1</b>		160
	<b>136</b>	<b>163</b>	387	2.0	10.73	<b>2KJ1007 - HF13 - R1</b>		160
	<b>144</b>	<b>173</b>	366	2.2	10.13 ★	<b>2KJ1007 - HF13 - Q1</b>		160
	<b>154</b>	<b>185</b>	342	2.7	9.47	<b>2KJ1007 - HF13 - P1</b>		160
	<b>173</b>	<b>208</b>	304	3.3	8.42 ★	<b>2KJ1007 - HF13 - N1</b>		160
	<b>183</b>	<b>220</b>	287	3.7	7.95	<b>2KJ1007 - HF13 - M1</b>		160
	<b>204</b>	<b>245</b>	258	4.3	7.14 ★	<b>2KJ1007 - HF13 - L1</b>		160
	<b>E.128-LA132SB4</b>							
	<b>143</b>	<b>172</b>	366	1.5	10.14 ★	<b>2KJ1006 - HF13 - T1</b>		136
	<b>155</b>	<b>186</b>	339	1.7	9.40	<b>2KJ1006 - HF13 - S1</b>		136
	<b>163</b>	<b>196</b>	323	2.0	8.94 ★	<b>2KJ1006 - HF13 - R1</b>		136
	<b>174</b>	<b>209</b>	301	2.4	8.35	<b>2KJ1006 - HF13 - Q1</b>		136
	<b>197</b>	<b>236</b>	266	3.1	7.37 ★	<b>2KJ1006 - HF13 - P1</b>		136
	<b>209</b>	<b>251</b>	251	3.5	6.95	<b>2KJ1006 - HF13 - N1</b>		136
	<b>234</b>	<b>281</b>	225	4.1	6.23 ★	<b>2KJ1006 - HF13 - M1</b>		136
	<b>253</b>	<b>304</b>	208	4.6	5.75	<b>2KJ1006 - HF13 - L1</b>		136
	<b>E.108-LA132SB4</b>							
	<b>266</b>	<b>319</b>	197	3.3	5.46 ★	<b>2KJ1005 - HF13 - K1</b>		99
	<b>291</b>	<b>349</b>	180	3.8	5.00	<b>2KJ1005 - HF13 - J1</b>		99
	<b>342</b>	<b>410</b>	154	4.7	4.26	<b>2KJ1005 - HF13 - H1</b>		99
	<b>387</b>	<b>464</b>	136	4.4	3.76 ★	<b>2KJ1005 - HF13 - G1</b>		99
	<b>E.88-LA132SB4</b>							
	<b>173</b>	<b>208</b>	304	0.81	8.42 ★	<b>2KJ1004 - HF13 - Q1</b>		78
	<b>189</b>	<b>227</b>	278	0.88	7.69	<b>2KJ1004 - HF13 - P1</b>		78
	<b>206</b>	<b>247</b>	255	1.1	7.07 ★	<b>2KJ1004 - HF13 - N1</b>		78
	<b>223</b>	<b>268</b>	236	1.3	6.53	<b>2KJ1004 - HF13 - M1</b>		78
	<b>240</b>	<b>288</b>	219	1.3	6.06 ★	<b>2KJ1004 - HF13 - L1</b>		78
	<b>258</b>	<b>310</b>	204	1.6	5.65	<b>2KJ1004 - HF13 - K1</b>		78
	<b>285</b>	<b>342</b>	184	2.0	5.11 ★	<b>2KJ1004 - HF13 - J1</b>		78
	<b>310</b>	<b>372</b>	170	2.3	4.70	<b>2KJ1004 - HF13 - H1</b>		78

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
5.5 (50 Hz)	<b>E.88-LA132SB4</b>							
6.6 (60 Hz)	<b>344</b>	<b>413</b>	153	2.6	4.23 ★	<b>2KJ1004 - ■HF13 - ■■G1</b>		78
	<b>373</b>	<b>448</b>	141	2.7	3.90	<b>2KJ1004 - ■HF13 - ■■F1</b>		78
	<b>441</b>	<b>529</b>	119	3.8	3.30	<b>2KJ1004 - ■HF13 - ■■E1</b>		78
	<b>505</b>	<b>606</b>	104	4.2	2.88 ★	<b>2KJ1004 - ■HF13 - ■■D1</b>		78
	<b>594</b>	<b>713</b>	88	4.7	2.45	<b>2KJ1004 - ■HF13 - ■■C1</b>		78
	<b>696</b>	<b>835</b>	75	5.6	2.09 ★	<b>2KJ1004 - ■HF13 - ■■B1</b>		78
	<b>851</b>	<b>1 021</b>	62	5.8	1.71 ★	<b>2KJ1004 - ■HF13 - ■■A1</b>		78
	<b>E.68-LA132SB4</b>							
	<b>246</b>	<b>295</b>	214	0.89	5.92	<b>2KJ1003 - ■HF13 - ■■N1</b>		61
	<b>271</b>	<b>325</b>	193	1.1	5.36 ★	<b>2KJ1003 - ■HF13 - ■■M1</b>		61
	<b>295</b>	<b>354</b>	178	1.3	4.93	<b>2KJ1003 - ■HF13 - ■■L1</b>		61
	<b>319</b>	<b>383</b>	165	1.3	4.56 ★	<b>2KJ1003 - ■HF13 - ■■K1</b>		61
	<b>343</b>	<b>412</b>	153	1.5	4.24	<b>2KJ1003 - ■HF13 - ■■J1</b>		61
	<b>389</b>	<b>467</b>	135	1.7	3.74 ★	<b>2KJ1003 - ■HF13 - ■■H1</b>		61
	<b>422</b>	<b>506</b>	125	1.9	3.45	<b>2KJ1003 - ■HF13 - ■■G1</b>		61
	<b>471</b>	<b>565</b>	112	2.2	3.09 ★	<b>2KJ1003 - ■HF13 - ■■F1</b>		61
	<b>511</b>	<b>613</b>	103	2.4	2.85	<b>2KJ1003 - ■HF13 - ■■E1</b>		61
	<b>609</b>	<b>731</b>	86	2.7	2.39	<b>2KJ1003 - ■HF13 - ■■D1</b>		61
	<b>713</b>	<b>856</b>	74	2.9	2.04 ★	<b>2KJ1003 - ■HF13 - ■■C1</b>		61
	<b>856</b>	<b>1 027</b>	61	2.9	1.70	<b>2KJ1003 - ■HF13 - ■■B1</b>		61
	<b>1 032</b>	<b>1 238</b>	51	2.9	1.41 ★	<b>2KJ1003 - ■HF13 - ■■A1</b>		61
	<b>E.48-LA132SB4</b>							
	<b>346</b>	<b>415</b>	152	0.99	4.21 ★	<b>2KJ1002 - ■HF13 - ■■K1</b>		51
	<b>376</b>	<b>451</b>	140	1.1	3.87	<b>2KJ1002 - ■HF13 - ■■J1</b>		51
	<b>409</b>	<b>491</b>	129	1.1	3.56 ★	<b>2KJ1002 - ■HF13 - ■■H1</b>		51
	<b>449</b>	<b>539</b>	117	1.3	3.24	<b>2KJ1002 - ■HF13 - ■■G1</b>		51
	<b>493</b>	<b>592</b>	106	1.6	2.95 ★	<b>2KJ1002 - ■HF13 - ■■F1</b>		51
	<b>539</b>	<b>647</b>	98	1.6	2.70	<b>2KJ1002 - ■HF13 - ■■E1</b>		51
	<b>604</b>	<b>725</b>	87	1.7	2.41 ★	<b>2KJ1002 - ■HF13 - ■■D1</b>		51
	<b>677</b>	<b>812</b>	78	1.7	2.15	<b>2KJ1002 - ■HF13 - ■■C1</b>		51
	<b>795</b>	<b>954</b>	66	1.7	1.83	<b>2KJ1002 - ■HF13 - ■■B1</b>		51
	<b>957</b>	<b>1 148</b>	55	1.8	1.52 ★	<b>2KJ1002 - ■HF13 - ■■A1</b>		51
7.5 (50 Hz)	<b>D.188-Z68-LA132M4</b>							
9.0 (60 Hz)	<b>2.7</b>	<b>3.2</b>	24 896	0.8	546	<b>2KJ1237 - ■HH13 - ■■D1</b>		663
	<b>D.188-LA160LB8</b>							
	<b>2.9</b>	<b>3.5</b>	24 425	0.82	243.82	<b>2KJ1211 - ■JJ13 - ■■N1</b>	<b>P02</b>	688
	<b>3.2</b>	<b>3.8</b>	22 055	0.91	220.17	<b>2KJ1211 - ■JJ13 - ■■M1</b>	<b>P02</b>	688
	<b>3.5</b>	<b>4.2</b>	20 670	0.97	206.34	<b>2KJ1211 - ■JJ13 - ■■L1</b>	<b>P02</b>	688
	<b>D.188-LA160MB6</b>							
	<b>3.9</b>	<b>4.7</b>	18 191	1.1	243.82	<b>2KJ1211 - ■JF13 - ■■N1</b>	<b>P01</b>	676
	<b>4.4</b>	<b>5.3</b>	16 427	1.2	220.17	<b>2KJ1211 - ■JF13 - ■■M1</b>	<b>P01</b>	676
	<b>4.7</b>	<b>5.6</b>	15 395	1.3	206.34	<b>2KJ1211 - ■JF13 - ■■L1</b>	<b>P01</b>	676

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R



# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
7.5 (50 Hz) 9.0 (60 Hz)	<b>D.188-LA160MB6</b>							
	5.4	6.5	13 223	1.5	177.23 ★	2KJ1211 - ■JF13 - ■■K1	P01	676
<b>D.188-LA132M4</b>								
	6	7.2	12 002	1.7	243.82	2KJ1211 - ■HH13 - ■■N1		652
	6.6	7.9	10 838	1.8	220.17	2KJ1211 - ■HH13 - ■■M1		652
	7.1	8.5	10 157	2.0	206.34	2KJ1211 - ■HH13 - ■■L1		652
<b>D.168-LA132M4</b>								
	4.3	5.2	16 816	0.83	341.61 ★	2KJ1210 - ■HH13 - ■■U1		507
	4.6	5.5	15 428	0.91	313.41	2KJ1210 - ■HH13 - ■■T1		507
	5.0	6.0	14 238	0.98	289.23 ★	2KJ1210 - ■HH13 - ■■S1		507
	5.4	6.5	13 207	1.1	268.29	2KJ1210 - ■HH13 - ■■R1		507
	5.7	6.8	12 458	1.1	253.08 ★	2KJ1210 - ■HH13 - ■■Q1		507
	6.1	7.3	11 653	1.2	236.72	2KJ1210 - ■HH13 - ■■P1		507
	6.9	8.3	10 362	1.4	210.49 ★	2KJ1210 - ■HH13 - ■■N1		507
	7.3	8.8	9 782	1.4	198.71	2KJ1210 - ■HH13 - ■■M1		507
	8.2	9.8	8 781	1.6	178.38 ★	2KJ1210 - ■HH13 - ■■L1		507
	8.9	10.7	8 059	1.7	163.72	2KJ1210 - ■HH13 - ■■K1		507
	10.3	12.4	6 955	2.0	141.28	2KJ1210 - ■HH13 - ■■J1		507
<b>D.148-LA132M4</b>								
	7.9	9.5	9 108	0.88	185.03 ★	2KJ1208 - ■HH13 - ■■P1		336
	8.3	10.0	8 592	0.93	174.53	2KJ1208 - ■HH13 - ■■N1		336
	9.3	11.2	7 698	1.0	156.38 ★	2KJ1208 - ■HH13 - ■■M1		336
	10.1	12.1	7 108	1.1	144.39	2KJ1208 - ■HH13 - ■■L1		336
	11.8	14.2	6 073	1.3	123.37	2KJ1208 - ■HH13 - ■■K1		336
	13.0	15.6	5 489	1.5	111.50 ★	2KJ1208 - ■HH13 - ■■J1		336
	13.5	16.2	5 288	1.5	107.42	2KJ1208 - ■HH13 - ■■H1		336
	15.7	18.8	4 574	1.7	92.91	2KJ1208 - ■HH13 - ■■G1		336
	18	22	3 989	2.0	81.04 ★	2KJ1208 - ■HH13 - ■■F1		336
	21	25	3 414	2.3	69.36 ★	2KJ1208 - ■HH13 - ■■E1		336
<b>Z.148-LA132M4</b>								
	25	30	2 831	1.6	57.50	2KJ1108 - ■HH13 - ■■B2		324
<b>D.128-LA132M4</b>								
	11.8	14.2	6 081	0.84	123.53	2KJ1207 - ■HH13 - ■■K1		246
	12.8	15.4	5 574	0.91	113.24 ★	2KJ1207 - ■HH13 - ■■J1		246
	14.0	16.8	5 110	1.0	103.80	2KJ1207 - ■HH13 - ■■H1		246
	16.4	19.7	4 355	1.2	88.46	2KJ1207 - ■HH13 - ■■G1		246
	18.6	22	3 843	1.3	78.06 ★	2KJ1207 - ■HH13 - ■■F1		246
	22	26	3 270	1.6	66.43	2KJ1207 - ■HH13 - ■■E1		246
	25	30	2 833	1.8	57.56 ★	2KJ1207 - ■HH13 - ■■D1		246
	30	36	2 385	2.1	48.44 ★	2KJ1207 - ■HH13 - ■■C1		246
	33	40	21 52	2.4	43.71	2KJ1207 - ■HH13 - ■■B1		246
<b>Z.128-LA132M4</b>								
	33	40	2 175	1.5	44.19 ★	2KJ1107 - ■HH13 - ■■D2		237
	36	43	2 016	1.6	40.96	2KJ1107 - ■HH13 - ■■C2		237

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
7.5 (50 Hz) 9.0 (60 Hz)	<b>D.108-LA132M4</b>							
	<b>20</b>	<b>24</b>	3 524	0.88	71.59 ★	<b>2KJ1206 - ■■■HH13 - ■■■D1</b>		169
	<b>24</b>	<b>29</b>	2 998	1.0	60.90	<b>2KJ1206 - ■■■HH13 - ■■■C1</b>		169
	<b>Z.108-LA132M4</b>							
	<b>30</b>	<b>36</b>	2 382	1.3	48.38 ★	<b>2KJ1106 - ■■■HH13 - ■■■C2</b>		165
	<b>33</b>	<b>40</b>	2 181	1.4	44.31	<b>2KJ1106 - ■■■HH13 - ■■■B2</b>		165
	<b>36</b>	<b>43</b>	2 009	1.5	40.82 ★	<b>2KJ1106 - ■■■HH13 - ■■■A2</b>		165
	<b>38</b>	<b>46</b>	1 860	1.7	37.79	<b>2KJ1106 - ■■■HH13 - ■■■X1</b>		165
	<b>41</b>	<b>49</b>	1 730	1.8	35.14 ★	<b>2KJ1106 - ■■■HH13 - ■■■W1</b>		165
	<b>44</b>	<b>53</b>	1 615	1.9	32.81	<b>2KJ1106 - ■■■HH13 - ■■■V1</b>		165
	<b>50</b>	<b>60</b>	1 445	2.1	29.35 ★	<b>2KJ1106 - ■■■HH13 - ■■■U1</b>		165
	<b>54</b>	<b>65</b>	1 339	2.3	27.20	<b>2KJ1106 - ■■■HH13 - ■■■T1</b>		165
	<b>58</b>	<b>70</b>	1 228	2.5	24.94 ★	<b>2KJ1106 - ■■■HH13 - ■■■S1</b>		165
	<b>64</b>	<b>77</b>	1 125	2.8	22.86	<b>2KJ1106 - ■■■HH13 - ■■■R1</b>		165
	<b>75</b>	<b>90</b>	959	3.2	19.48	<b>2KJ1106 - ■■■HH13 - ■■■Q1</b>		165
	<b>278</b>	<b>334</b>	258	4.4	5.24 ★	<b>2KJ1106 - ■■■HH13 - ■■■D1</b>		165
	<b>D.88-LA132M4</b>							
	<b>35</b>	<b>42</b>	2 028	0.83	41.19	<b>2KJ1205 - ■■■HH13 - ■■■B1</b>		121
	<b>Z.88-LA132M4</b>							
	<b>39</b>	<b>47</b>	1 835	0.92	37.27 ★	<b>2KJ1105 - ■■■HH13 - ■■■W1</b>		119
	<b>43</b>	<b>52</b>	1 677	1.0	34.07	<b>2KJ1105 - ■■■HH13 - ■■■V1</b>		119
	<b>46</b>	<b>55</b>	1 542	1.1	31.32 ★	<b>2KJ1105 - ■■■HH13 - ■■■U1</b>		119
	<b>50</b>	<b>60</b>	1 424	1.2	28.93	<b>2KJ1105 - ■■■HH13 - ■■■T1</b>		119
	<b>54</b>	<b>65</b>	1 322	1.3	26.85 ★	<b>2KJ1105 - ■■■HH13 - ■■■S1</b>		119
	<b>58</b>	<b>70</b>	1 231	1.4	25.01	<b>2KJ1105 - ■■■HH13 - ■■■R1</b>		119
	<b>64</b>	<b>77</b>	1 113	1.5	22.61 ★	<b>2KJ1105 - ■■■HH13 - ■■■Q1</b>		119
	<b>70</b>	<b>84</b>	1 024	1.6	20.81	<b>2KJ1105 - ■■■HH13 - ■■■P1</b>		119
	<b>78</b>	<b>94</b>	922	1.8	18.72 ★	<b>2KJ1105 - ■■■HH13 - ■■■N1</b>		119
	<b>84</b>	<b>101</b>	850	2.0	17.27	<b>2KJ1105 - ■■■HH13 - ■■■M1</b>		119
	<b>100</b>	<b>120</b>	720	2.2	14.63	<b>2KJ1105 - ■■■HH13 - ■■■L1</b>		119
	<b>114</b>	<b>137</b>	628	2.5	12.75 ★	<b>2KJ1105 - ■■■HH13 - ■■■K1</b>		119
	<b>134</b>	<b>161</b>	534	2.8	10.85	<b>2KJ1105 - ■■■HH13 - ■■■J1</b>		119
	<b>157</b>	<b>188</b>	456	3.0	9.26 ★	<b>2KJ1105 - ■■■HH13 - ■■■H1</b>		119
	<b>192</b>	<b>230</b>	374	3.5	7.59 ★	<b>2KJ1105 - ■■■HH13 - ■■■G1</b>		119
	<b>209</b>	<b>251</b>	343	3.7	6.96	<b>2KJ1105 - ■■■HH13 - ■■■F1</b>		119
	<b>245</b>	<b>294</b>	292	4.1	5.94 ★	<b>2KJ1105 - ■■■HH13 - ■■■E1</b>		119
	<b>299</b>	<b>359</b>	240	4.6	4.87 ★	<b>2KJ1105 - ■■■HH13 - ■■■D1</b>		119
	<b>327</b>	<b>392</b>	219	3.7	4.45 ★	<b>2KJ1105 - ■■■HH13 - ■■■C1</b>		119
	<b>384</b>	<b>461</b>	187	4.0	3.79 ★	<b>2KJ1105 - ■■■HH13 - ■■■B1</b>		119
	<b>468</b>	<b>562</b>	153	4.3	3.11 ★	<b>2KJ1105 - ■■■HH13 - ■■■A1</b>		119
	<b>Z.68-LA132M4</b>							
	<b>72</b>	<b>86</b>	994	0.80	20.20	<b>2KJ1104 - ■■■HH13 - ■■■N1</b>		87
	<b>82</b>	<b>98</b>	877	0.91	17.82 ★	<b>2KJ1104 - ■■■HH13 - ■■■M1</b>		87
	<b>88</b>	<b>106</b>	810	0.99	16.45	<b>2KJ1104 - ■■■HH13 - ■■■L1</b>		87

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
7.5 (50 Hz) 9.0 (60 Hz)	<b>Z.68-LA132M4</b>							
	<b>99</b>	<b>119</b>	726	1.1	14.74 ★	<b>2KJ1104 - ■HH13 - ■■K1</b>		87
	<b>107</b>	<b>128</b>	669	1.2	13.59	<b>2KJ1104 - ■HH13 - ■■J1</b>		87
	<b>128</b>	<b>154</b>	561	1.4	11.40	<b>2KJ1104 - ■HH13 - ■■H1</b>		87
	<b>150</b>	<b>180</b>	479	1.6	9.73 ★	<b>2KJ1104 - ■HH13 - ■■G1</b>		87
	<b>179</b>	<b>215</b>	399	1.8	8.11	<b>2KJ1104 - ■HH13 - ■■F1</b>		87
	<b>217</b>	<b>260</b>	331	2.0	6.72 ★	<b>2KJ1104 - ■HH13 - ■■E1</b>		87
	<b>245</b>	<b>294</b>	292	1.7	5.93	<b>2KJ1104 - ■HH13 - ■■D1</b>		87
	<b>288</b>	<b>346</b>	249	1.9	5.06 ★	<b>2KJ1104 - ■HH13 - ■■C1</b>		87
	<b>345</b>	<b>414</b>	208	2.3	4.22	<b>2KJ1104 - ■HH13 - ■■B1</b>		87
	<b>417</b>	<b>500</b>	172	2.4	3.49 ★	<b>2KJ1104 - ■HH13 - ■■A1</b>		87
	<b>Z.48-LA132M4</b>							
<b>176</b>	<b>211</b>	408	0.88	8.29	<b>2KJ1103 - ■HH13 - ■■F1</b>		70	
<b>211</b>	<b>253</b>	340	1.00	6.90 ★	<b>2KJ1103 - ■HH13 - ■■E1</b>		70	
<b>214</b>	<b>257</b>	334	0.81	6.79 ★	<b>2KJ1103 - ■HH13 - ■■D1</b>		70	
<b>240</b>	<b>288</b>	298	0.91	6.06	<b>2KJ1103 - ■HH13 - ■■C1</b>		70	
<b>283</b>	<b>340</b>	254	1.1	5.15	<b>2KJ1103 - ■HH13 - ■■B1</b>		70	
<b>340</b>	<b>408</b>	211	1.2	4.28 ★	<b>2KJ1103 - ■HH13 - ■■A1</b>		70	
<b>E.148-LA132M4</b>								
<b>106</b>	<b>127</b>	673	0.89	13.67 ★	<b>2KJ1007 - ■HH13 - ■■U1</b>		168	
<b>116</b>	<b>139</b>	617	0.97	12.54	<b>2KJ1007 - ■HH13 - ■■T1</b>		168	
<b>126</b>	<b>151</b>	570	1.2	11.57 ★	<b>2KJ1007 - ■HH13 - ■■S1</b>		168	
<b>136</b>	<b>163</b>	528	1.4	10.73	<b>2KJ1007 - ■HH13 - ■■R1</b>		168	
<b>144</b>	<b>173</b>	499	1.6	10.13 ★	<b>2KJ1007 - ■HH13 - ■■Q1</b>		168	
<b>154</b>	<b>185</b>	466	2.0	9.47	<b>2KJ1007 - ■HH13 - ■■P1</b>		168	
<b>173</b>	<b>208</b>	414	2.4	8.42 ★	<b>2KJ1007 - ■HH13 - ■■N1</b>		168	
<b>183</b>	<b>220</b>	391	2.7	7.95	<b>2KJ1007 - ■HH13 - ■■M1</b>		168	
<b>204</b>	<b>245</b>	351	3.2	7.14 ★	<b>2KJ1007 - ■HH13 - ■■L1</b>		168	
<b>222</b>	<b>266</b>	322	3.6	6.55	<b>2KJ1007 - ■HH13 - ■■K1</b>		168	
<b>E.128-LA132M4</b>								
<b>143</b>	<b>172</b>	499	1.1	10.14 ★	<b>2KJ1006 - ■HH13 - ■■T1</b>		144	
<b>155</b>	<b>186</b>	463	1.3	9.40	<b>2KJ1006 - ■HH13 - ■■S1</b>		144	
<b>163</b>	<b>196</b>	440	1.5	8.94 ★	<b>2KJ1006 - ■HH13 - ■■R1</b>		144	
<b>174</b>	<b>209</b>	411	1.7	8.35	<b>2KJ1006 - ■HH13 - ■■Q1</b>		144	
<b>197</b>	<b>236</b>	363	2.2	7.37 ★	<b>2KJ1006 - ■HH13 - ■■P1</b>		144	
<b>209</b>	<b>251</b>	342	2.6	6.95	<b>2KJ1006 - ■HH13 - ■■N1</b>		144	
<b>234</b>	<b>281</b>	307	3.0	6.23 ★	<b>2KJ1006 - ■HH13 - ■■M1</b>		144	
<b>253</b>	<b>304</b>	283	3.4	5.75	<b>2KJ1006 - ■HH13 - ■■L1</b>		144	
<b>296</b>	<b>355</b>	242	4.0	4.91	<b>2KJ1006 - ■HH13 - ■■K1</b>		144	
<b>328</b>	<b>394</b>	219	4.6	4.44 ★	<b>2KJ1006 - ■HH13 - ■■J1</b>		144	
<b>340</b>	<b>408</b>	211	4.7	4.28	<b>2KJ1006 - ■HH13 - ■■H1</b>		144	
<b>E.108-LA132M4</b>								
<b>266</b>	<b>319</b>	269	2.5	5.46 ★	<b>2KJ1005 - ■HH13 - ■■K1</b>		107	
<b>291</b>	<b>349</b>	246	2.8	5.00	<b>2KJ1005 - ■HH13 - ■■J1</b>		107	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>7.5 (50 Hz)</b>	<b>E.108-LA132M4</b>							
9.0 (60 Hz)	<b>342</b>	<b>410</b>	210	3.4	4.26	<b>2KJ1005 - ■HH13 - ■■H1</b>		107
	<b>387</b>	<b>464</b>	185	3.2	3.76 ★	<b>2KJ1005 - ■HH13 - ■■G1</b>		107
	<b>455</b>	<b>546</b>	158	4.7	3.20	<b>2KJ1005 - ■HH13 - ■■F1</b>		107
	<b>525</b>	<b>630</b>	136	4.9	2.77 ★	<b>2KJ1005 - ■HH13 - ■■E1</b>		107
	<b>624</b>	<b>749</b>	115	5.9	2.33 ★	<b>2KJ1005 - ■HH13 - ■■C1</b>		107
	<b>690</b>	<b>828</b>	104	6.0	2.11	<b>2KJ1005 - ■HH13 - ■■B1</b>		107
	<b>804</b>	<b>965</b>	89	6.2	1.81 ★	<b>2KJ1005 - ■HH13 - ■■A1</b>		107
	<b>E.88-LA132M4</b>							
	<b>206</b>	<b>247</b>	348	0.83	7.07 ★	<b>2KJ1004 - ■HH13 - ■■N1</b>		86
	<b>223</b>	<b>268</b>	321	0.93	6.53	<b>2KJ1004 - ■HH13 - ■■M1</b>		86
	<b>240</b>	<b>288</b>	298	0.94	6.06 ★	<b>2KJ1004 - ■HH13 - ■■L1</b>		86
	<b>258</b>	<b>310</b>	278	1.2	5.65	<b>2KJ1004 - ■HH13 - ■■K1</b>		86
	<b>285</b>	<b>342</b>	252	1.5	5.11 ★	<b>2KJ1004 - ■HH13 - ■■J1</b>		86
	<b>310</b>	<b>372</b>	231	1.7	4.70	<b>2KJ1004 - ■HH13 - ■■H1</b>		86
	<b>344</b>	<b>413</b>	208	1.9	4.23 ★	<b>2KJ1004 - ■HH13 - ■■G1</b>		86
	<b>373</b>	<b>448</b>	192	2.0	3.90	<b>2KJ1004 - ■HH13 - ■■F1</b>		86
	<b>441</b>	<b>529</b>	162	2.8	3.30	<b>2KJ1004 - ■HH13 - ■■E1</b>		86
	<b>505</b>	<b>606</b>	142	3.1	2.88 ★	<b>2KJ1004 - ■HH13 - ■■D1</b>		86
	<b>594</b>	<b>713</b>	121	3.5	2.45	<b>2KJ1004 - ■HH13 - ■■C1</b>		86
	<b>696</b>	<b>835</b>	103	4.1	2.09 ★	<b>2KJ1004 - ■HH13 - ■■B1</b>		86
	<b>851</b>	<b>1 021</b>	84	4.2	1.71 ★	<b>2KJ1004 - ■HH13 - ■■A1</b>		86
	<b>E.68-LA132M4</b>							
	<b>271</b>	<b>325</b>	264	0.83	5.36 ★	<b>2KJ1003 - ■HH13 - ■■M1</b>		69
	<b>295</b>	<b>354</b>	243	0.93	4.93	<b>2KJ1003 - ■HH13 - ■■L1</b>		69
	<b>319</b>	<b>383</b>	224	0.98	4.56 ★	<b>2KJ1003 - ■HH13 - ■■K1</b>		69
	<b>343</b>	<b>412</b>	209	1.1	4.24	<b>2KJ1003 - ■HH13 - ■■J1</b>		69
	<b>389</b>	<b>467</b>	184	1.2	3.74 ★	<b>2KJ1003 - ■HH13 - ■■H1</b>		69
	<b>422</b>	<b>506</b>	170	1.4	3.45	<b>2KJ1003 - ■HH13 - ■■G1</b>		69
	<b>471</b>	<b>565</b>	152	1.6	3.09 ★	<b>2KJ1003 - ■HH13 - ■■F1</b>		69
	<b>511</b>	<b>613</b>	140	1.8	2.85	<b>2KJ1003 - ■HH13 - ■■E1</b>		69
	<b>609</b>	<b>731</b>	118	2	2.39	<b>2KJ1003 - ■HH13 - ■■D1</b>		69
	<b>713</b>	<b>856</b>	100	2.1	2.04 ★	<b>2KJ1003 - ■HH13 - ■■C1</b>		69
	<b>856</b>	<b>1 027</b>	84	2.1	1.70	<b>2KJ1003 - ■HH13 - ■■B1</b>		69
	<b>1 032</b>	<b>1 238</b>	69	2.2	1.41 ★	<b>2KJ1003 - ■HH13 - ■■A1</b>		69
	<b>E.48-LA132M4</b>							
	<b>376</b>	<b>451</b>	191	0.84	3.87	<b>2KJ1002 - ■HH13 - ■■J1</b>		59
	<b>409</b>	<b>491</b>	175	0.8	3.56 ★	<b>2KJ1002 - ■HH13 - ■■H1</b>		59
	<b>449</b>	<b>539</b>	159	0.94	3.24	<b>2KJ1002 - ■HH13 - ■■G1</b>		59
	<b>493</b>	<b>592</b>	145	1.2	2.95 ★	<b>2KJ1002 - ■HH13 - ■■F1</b>		59
	<b>539</b>	<b>647</b>	133	1.2	2.70	<b>2KJ1002 - ■HH13 - ■■E1</b>		59
<b>9.2 (50 Hz)</b>	<b>D.188-LA132ZMP4</b>							
11.0 (60 Hz)	<b>5.9</b>	<b>7.1</b>	14 825	1.3	243.82	<b>2KJ1211 - ■HT13 - ■■N1</b>		652

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
9.2 (50 Hz) 11.0 (60 Hz)	<b>D.188-LA132ZMP4</b>							
	6.6	7.9	13 387	1.5	220.17	2KJ1211 - ■HT13 - ■■M1		652
	7.0	8.4	12 546	1.6	206.34	2KJ1211 - ■HT13 - ■■L1		652
	9.4	11.3	9 310	2.1	153.12	2KJ1211 - ■HT13 - ■■J1		652
<b>D.168-LA132ZMP4</b>								
	5.0	6.0	17 586	0.80	289.23 ★	2KJ1210 - ■HT13 - ■■S1		507
	5.4	6.5	16 313	0.86	268.29	2KJ1210 - ■HT13 - ■■R1		507
	5.7	6.8	15 388	0.91	253.08 ★	2KJ1210 - ■HT13 - ■■Q1		507
	6.1	7.3	14 393	0.97	236.72	2KJ1210 - ■HT13 - ■■P1		507
	6.9	8.3	12 798	1.10	210.49 ★	2KJ1210 - ■HT13 - ■■N1		507
	7.3	8.8	12 082	1.2	198.71	2KJ1210 - ■HT13 - ■■M1		507
	8.1	9.7	10 846	1.3	178.38 ★	2KJ1210 - ■HT13 - ■■L1		507
	8.8	10.6	9 955	1.4	163.72	2KJ1210 - ■HT13 - ■■K1		507
	10.2	12.2	8 590	1.6	141.28	2KJ1210 - ■HT13 - ■■J1		507
	11.7	14.0	7 515	1.9	123.59	2KJ1210 - ■HT13 - ■■H1		507
	13.4	16.1	6 535	2.1	107.48	2KJ1210 - ■HT13 - ■■G1		507
<b>D.148-LA132ZMP4</b>								
	9.2	11.0	9 508	0.84	156.38 ★	2KJ1208 - ■HT13 - ■■M1		336
	10.0	12.0	8 779	0.91	144.39	2KJ1208 - ■HT13 - ■■L1		336
	11.7	14.0	7 501	1.1	123.37	2KJ1208 - ■HT13 - ■■K1		336
	13.0	15.6	6 780	1.2	111.50 ★	2KJ1208 - ■HT13 - ■■J1		336
	13.5	16.2	6 531	1.2	107.42	2KJ1208 - ■HT13 - ■■H1		336
	15.6	18.7	5 649	1.4	92.91	2KJ1208 - ■HT13 - ■■G1		336
	17.8	21	4 927	1.6	81.04 ★	2KJ1208 - ■HT13 - ■■F1		336
	21	25	4 217	1.9	69.36 ★	2KJ1208 - ■HT13 - ■■E1		336
	23	28	3 777	2.1	62.12	2KJ1208 - ■HT13 - ■■D1		336
<b>Z.148-LA132ZMP4</b>								
	25	30	3 496	1.3	57.50	2KJ1108 - ■HT13 - ■■B2		324
	27	32	3 298	2.4	54.24 ★	2KJ1108 - ■HT13 - ■■A2		324
<b>D.128-LA132ZMP4</b>								
	13.9	16.7	6 311	0.81	103.80	2KJ1207 - ■HT13 - ■■H1		246
	16.3	19.6	5 379	0.95	88.46	2KJ1207 - ■HT13 - ■■G1		246
	18.5	22	4 746	1.1	78.06 ★	2KJ1207 - ■HT13 - ■■F1		246
	22	26	4 039	1.3	66.43	2KJ1207 - ■HT13 - ■■E1		246
	25	30	3 500	1.5	57.56 ★	2KJ1207 - ■HT13 - ■■D1		246
	30	36	2 945	1.7	48.44 ★	2KJ1207 - ■HT13 - ■■C1		246
	33	40	2 658	1.9	43.71	2KJ1207 - ■HT13 - ■■B1		246
<b>Z.128-LA132ZMP4</b>								
	33	40	2 687	1.2	44.19 ★	2KJ1107 - ■HT13 - ■■D2		237
	35	42	2 490	1.3	40.96	2KJ1107 - ■HT13 - ■■C2		237
	37	44	2 368	2.2	38.94 ★	2KJ1107 - ■HT13 - ■■B2		237
	40	48	2 213	2.3	36.39	2KJ1107 - ■HT13 - ■■A2		237
	45	54	1 952	2.6	32.11 ★	2KJ1107 - ■HT13 - ■■X1		237
	48	58	1 841	2.8	30.28	2KJ1107 - ■HT13 - ■■W1		237

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
9.2 (50 Hz) 11.0 (60 Hz)	<b>D.108-LA132ZMP4</b>							
	<b>24</b>	<b>29</b>	3 703	0.84	60.9	<b>2KJ1206 - ■HT13 - ■■C1</b>		169
	<b>Z.108-LA132ZMP4</b>							
	<b>30</b>	<b>36</b>	2 942	1.1	48.38 ★	<b>2KJ1106 - ■HT13 - ■■C2</b>		165
	<b>33</b>	<b>40</b>	2 694	1.2	44.31	<b>2KJ1106 - ■HT13 - ■■B2</b>		165
	<b>35</b>	<b>42</b>	2 482	1.2	40.82 ★	<b>2KJ1106 - ■HT13 - ■■A2</b>		165
	<b>38</b>	<b>46</b>	2 298	1.3	37.79	<b>2KJ1106 - ■HT13 - ■■X1</b>		165
	<b>41</b>	<b>49</b>	2 137	1.5	35.14 ★	<b>2KJ1106 - ■HT13 - ■■W1</b>		165
	<b>44</b>	<b>53</b>	1 995	1.6	32.81	<b>2KJ1106 - ■HT13 - ■■V1</b>		165
	<b>49</b>	<b>59</b>	1 785	1.7	29.35 ★	<b>2KJ1106 - ■HT13 - ■■U1</b>		165
	<b>53</b>	<b>64</b>	1 654	1.9	27.20	<b>2KJ1106 - ■HT13 - ■■T1</b>		165
	<b>58</b>	<b>70</b>	1 516	2.0	24.94 ★	<b>2KJ1106 - ■HT13 - ■■S1</b>		165
	<b>63</b>	<b>76</b>	1 390	2.2	22.86	<b>2KJ1106 - ■HT13 - ■■R1</b>		165
	<b>74</b>	<b>89</b>	1 184	2.6	19.48	<b>2KJ1106 - ■HT13 - ■■Q1</b>		165
	<b>84</b>	<b>101</b>	1 045	3.0	17.19 ★	<b>2KJ1106 - ■HT13 - ■■P1</b>		165
	<b>99</b>	<b>119</b>	890	3.5	14.63	<b>2KJ1106 - ■HT13 - ■■N1</b>		165
	<b>204</b>	<b>245</b>	432	4.2	7.10 ★	<b>2KJ1106 - ■HT13 - ■■H1</b>		165
	<b>225</b>	<b>270</b>	390	4.5	6.41	<b>2KJ1106 - ■HT13 - ■■G1</b>		165
	<b>276</b>	<b>331</b>	319	3.6	5.24 ★	<b>2KJ1106 - ■HT13 - ■■D1</b>		165
	<b>328</b>	<b>394</b>	268	4.3	4.41 ★	<b>2KJ1106 - ■HT13 - ■■C1</b>		165
	<b>363</b>	<b>436</b>	242	4.6	3.98	<b>2KJ1106 - ■HT13 - ■■B1</b>		165
	<b>423</b>	<b>508</b>	208	5.2	3.42 ★	<b>2KJ1106 - ■HT13 - ■■A1</b>		165
	<b>Z.88-LA132ZMP4</b>							
	<b>42</b>	<b>50</b>	2 072	0.81	34.07	<b>2KJ1105 - ■HT13 - ■■V1</b>		119
	<b>46</b>	<b>55</b>	1 904	0.88	31.32 ★	<b>2KJ1105 - ■HT13 - ■■U1</b>		119
	<b>50</b>	<b>60</b>	1 759	0.96	28.93	<b>2KJ1105 - ■HT13 - ■■T1</b>		119
	<b>54</b>	<b>65</b>	1 633	1.0	26.85 ★	<b>2KJ1105 - ■HT13 - ■■S1</b>		119
	<b>58</b>	<b>70</b>	1 521	1.1	25.01	<b>2KJ1105 - ■HT13 - ■■R1</b>		119
	<b>64</b>	<b>77</b>	1 375	1.2	22.61 ★	<b>2KJ1105 - ■HT13 - ■■Q1</b>		119
	<b>69</b>	<b>83</b>	1 265	1.3	20.81	<b>2KJ1105 - ■HT13 - ■■P1</b>		119
	<b>77</b>	<b>92</b>	1 138	1.5	18.72 ★	<b>2KJ1105 - ■HT13 - ■■N1</b>		119
	<b>84</b>	<b>101</b>	1 050	1.6	17.27	<b>2KJ1105 - ■HT13 - ■■M1</b>		119
	<b>99</b>	<b>119</b>	890	1.8	14.63	<b>2KJ1105 - ■HT13 - ■■L1</b>		119
	<b>113</b>	<b>136</b>	775	2.0	12.75 ★	<b>2KJ1105 - ■HT13 - ■■K1</b>		119
	<b>133</b>	<b>160</b>	660	2.2	10.85	<b>2KJ1105 - ■HT13 - ■■J1</b>		119
	<b>156</b>	<b>187</b>	563	2.5	9.26 ★	<b>2KJ1105 - ■HT13 - ■■H1</b>		119
	<b>190</b>	<b>228</b>	461	2.8	7.59 ★	<b>2KJ1105 - ■HT13 - ■■G1</b>		119
	<b>208</b>	<b>250</b>	423	3.0	6.96	<b>2KJ1105 - ■HT13 - ■■F1</b>		119
	<b>243</b>	<b>292</b>	361	3.3	5.94 ★	<b>2KJ1105 - ■HT13 - ■■E1</b>		119
	<b>297</b>	<b>356</b>	296	3.7	4.87 ★	<b>2KJ1105 - ■HT13 - ■■D1</b>		119
	<b>325</b>	<b>390</b>	271	3.0	4.45 ★	<b>2KJ1105 - ■HT13 - ■■C1</b>		119
	<b>381</b>	<b>457</b>	230	3.2	3.79 ★	<b>2KJ1105 - ■HT13 - ■■B1</b>		119
	<b>465</b>	<b>558</b>	189	3.5	3.11 ★	<b>2KJ1105 - ■HT13 - ■■A1</b>		119

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
9.2 (50 Hz) 11.0 (60 Hz)	<b>Z.68-LA132ZMP4</b>							
	<b>88</b>	<b>106</b>	1 000	0.80	16.45	<b>2KJ1104 - HT13 - L1</b>		87
	<b>98</b>	<b>118</b>	896	0.89	14.74 ★	<b>2KJ1104 - HT13 - K1</b>		87
	<b>106</b>	<b>127</b>	826	0.97	13.59	<b>2KJ1104 - HT13 - J1</b>		87
	<b>127</b>	<b>152</b>	693	1.1	11.40	<b>2KJ1104 - HT13 - H1</b>		87
	<b>149</b>	<b>179</b>	592	1.3	9.73 ★	<b>2KJ1104 - HT13 - G1</b>		87
	<b>178</b>	<b>214</b>	493	1.4	8.11	<b>2KJ1104 - HT13 - F1</b>		87
	<b>215</b>	<b>258</b>	409	1.6	6.72 ★	<b>2KJ1104 - HT13 - E1</b>		87
	<b>244</b>	<b>293</b>	361	1.4	5.93	<b>2KJ1104 - HT13 - D1</b>		87
	<b>286</b>	<b>343</b>	308	1.6	5.06 ★	<b>2KJ1104 - HT13 - C1</b>		87
	<b>342</b>	<b>410</b>	257	1.8	4.22	<b>2KJ1104 - HT13 - B1</b>		87
	<b>414</b>	<b>497</b>	212	2.0	3.49 ★	<b>2KJ1104 - HT13 - A1</b>		87
	<b>Z.48-LA132ZMP4</b>							
	<b>209</b>	<b>251</b>	420	0.81	6.90 ★	<b>2KJ1103 - HT13 - E1</b>		70
<b>281</b>	<b>337</b>	313	0.86	5.15	<b>2KJ1103 - HT13 - B1</b>		70	
<b>338</b>	<b>406</b>	260	1.0	4.28 ★	<b>2KJ1103 - HT13 - A1</b>		70	
<b>E.148-LA132ZMP4</b>								
<b>125</b>	<b>150</b>	703	0.97	11.57 ★	<b>2KJ1007 - HT13 - S1</b>		168	
<b>135</b>	<b>162</b>	652	1.2	10.73	<b>2KJ1007 - HT13 - R1</b>		168	
<b>143</b>	<b>172</b>	616	1.3	10.13 ★	<b>2KJ1007 - HT13 - Q1</b>		168	
<b>153</b>	<b>184</b>	576	1.6	9.47	<b>2KJ1007 - HT13 - P1</b>		168	
<b>172</b>	<b>206</b>	512	2.0	8.42 ★	<b>2KJ1007 - HT13 - N1</b>		168	
<b>182</b>	<b>218</b>	483	2.2	7.95	<b>2KJ1007 - HT13 - M1</b>		168	
<b>202</b>	<b>242</b>	434	2.6	7.14 ★	<b>2KJ1007 - HT13 - L1</b>		168	
<b>221</b>	<b>265</b>	398	2.9	6.55	<b>2KJ1007 - HT13 - K1</b>		168	
<b>256</b>	<b>307</b>	344	4.0	5.65	<b>2KJ1007 - HT13 - J1</b>		168	
<b>293</b>	<b>352</b>	300	4.7	4.94	<b>2KJ1007 - HT13 - H1</b>		168	
<b>336</b>	<b>403</b>	261	5.1	4.30	<b>2KJ1007 - HT13 - G1</b>		168	
<b>E.128-LA132ZMP4</b>								
<b>143</b>	<b>172</b>	617	0.88	10.14 ★	<b>2KJ1006 - HT13 - T1</b>		144	
<b>154</b>	<b>185</b>	572	1.0	9.40	<b>2KJ1006 - HT13 - S1</b>		144	
<b>162</b>	<b>194</b>	544	1.2	8.94 ★	<b>2KJ1006 - HT13 - R1</b>		144	
<b>173</b>	<b>208</b>	508	1.4	8.35	<b>2KJ1006 - HT13 - Q1</b>		144	
<b>196</b>	<b>235</b>	448	1.8	7.37 ★	<b>2KJ1006 - HT13 - P1</b>		144	
<b>208</b>	<b>250</b>	423	2.1	6.95	<b>2KJ1006 - HT13 - N1</b>		144	
<b>232</b>	<b>278</b>	379	2.4	6.23 ★	<b>2KJ1006 - HT13 - M1</b>		144	
<b>251</b>	<b>301</b>	350	2.7	5.75	<b>2KJ1006 - HT13 - L1</b>		144	
<b>294</b>	<b>353</b>	299	3.2	4.91	<b>2KJ1006 - HT13 - K1</b>		144	
<b>325</b>	<b>390</b>	270	3.7	4.44 ★	<b>2KJ1006 - HT13 - J1</b>		144	
<b>338</b>	<b>406</b>	260	3.8	4.28	<b>2KJ1006 - HT13 - H1</b>		144	
<b>391</b>	<b>469</b>	225	4.4	3.70	<b>2KJ1006 - HT13 - G1</b>		144	
<b>447</b>	<b>536</b>	196	5.1	3.23 ★	<b>2KJ1006 - HT13 - F1</b>		144	
<b>E.108-LA132ZMP4</b>								
<b>265</b>	<b>318</b>	332	2.0	5.46 ★	<b>2KJ1005 - HT13 - K1</b>		107	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
9.2 (50 Hz) 11.0 (60 Hz)	<b>E.108-LA132ZMP4</b>							
		<b>289</b>	<b>347</b>	304	2.2	5.00	<b>2KJ1005 - ■HT13 - ■■J1</b>	107
		<b>339</b>	<b>407</b>	259	2.8	4.26	<b>2KJ1005 - ■HT13 - ■■H1</b>	107
		<b>384</b>	<b>461</b>	229	2.6	3.76 ★	<b>2KJ1005 - ■HT13 - ■■G1</b>	107
		<b>452</b>	<b>542</b>	195	3.8	3.20	<b>2KJ1005 - ■HT13 - ■■F1</b>	107
		<b>522</b>	<b>626</b>	168	4.0	2.77 ★	<b>2KJ1005 - ■HT13 - ■■E1</b>	107
		<b>620</b>	<b>744</b>	142	4.8	2.33 ★	<b>2KJ1005 - ■HT13 - ■■C1</b>	107
		<b>685</b>	<b>822</b>	128	4.8	2.11	<b>2KJ1005 - ■HT13 - ■■B1</b>	107
		<b>798</b>	<b>958</b>	110	5.0	1.81 ★	<b>2KJ1005 - ■HT13 - ■■A1</b>	107
		<b>E.88-LA132ZMP4</b>						
	<b>256</b>	<b>307</b>	344	0.93	5.65	<b>2KJ1004 - ■HT13 - ■■K1</b>	86	
	<b>283</b>	<b>340</b>	311	1.2	5.11 ★	<b>2KJ1004 - ■HT13 - ■■J1</b>	86	
	<b>307</b>	<b>368</b>	286	1.3	4.70	<b>2KJ1004 - ■HT13 - ■■H1</b>	86	
	<b>342</b>	<b>410</b>	257	1.6	4.23 ★	<b>2KJ1004 - ■HT13 - ■■G1</b>	86	
	<b>371</b>	<b>445</b>	237	1.6	3.90	<b>2KJ1004 - ■HT13 - ■■F1</b>	86	
	<b>438</b>	<b>526</b>	201	2.2	3.30	<b>2KJ1004 - ■HT13 - ■■E1</b>	86	
	<b>502</b>	<b>602</b>	175	2.5	2.88 ★	<b>2KJ1004 - ■HT13 - ■■D1</b>	86	
	<b>590</b>	<b>708</b>	149	2.8	2.45	<b>2KJ1004 - ■HT13 - ■■C1</b>	86	
	<b>691</b>	<b>829</b>	127	3.3	2.09 ★	<b>2KJ1004 - ■HT13 - ■■B1</b>	86	
	<b>845</b>	<b>1 014</b>	104	3.4	1.71 ★	<b>2KJ1004 - ■HT13 - ■■A1</b>	86	
	<b>E.68-LA132ZMP4</b>							
	<b>341</b>	<b>409</b>	258	0.89	4.24	<b>2KJ1003 - ■HT13 - ■■J1</b>	69	
	<b>386</b>	<b>463</b>	227	1.0	3.74 ★	<b>2KJ1003 - ■HT13 - ■■H1</b>	69	
	<b>419</b>	<b>503</b>	210	1.1	3.45	<b>2KJ1003 - ■HT13 - ■■G1</b>	69	
	<b>468</b>	<b>562</b>	188	1.3	3.09 ★	<b>2KJ1003 - ■HT13 - ■■F1</b>	69	
	<b>507</b>	<b>608</b>	173	1.4	2.85	<b>2KJ1003 - ■HT13 - ■■E1</b>	69	
	<b>605</b>	<b>726</b>	145	1.6	2.39	<b>2KJ1003 - ■HT13 - ■■D1</b>	69	
	<b>708</b>	<b>850</b>	124	1.7	2.04 ★	<b>2KJ1003 - ■HT13 - ■■C1</b>	69	
	<b>850</b>	<b>1 020</b>	103	1.7	1.70	<b>2KJ1003 - ■HT13 - ■■B1</b>	69	
	<b>1 025</b>	<b>1 230</b>	86	1.7	1.41 ★	<b>2KJ1003 - ■HT13 - ■■A1</b>	69	
	<b>E.48-LA132ZMP4</b>							
	<b>490</b>	<b>588</b>	179	0.95	2.95 ★	<b>2KJ1002 - ■HT13 - ■■F1</b>	59	
	<b>535</b>	<b>642</b>	164	0.97	2.70	<b>2KJ1002 - ■HT13 - ■■E1</b>	59	
11.0 (50 Hz) 13.2 (60 Hz)	<b>D.188-LA160LB6</b>							
	<b>4.4</b>	<b>5.3</b>	24 093	0.83	220.17	<b>2KJ1211 - ■JS13 - ■■M1</b>	<b>P01</b>	688
	<b>4.7</b>	<b>5.6</b>	22 579	0.89	206.34	<b>2KJ1211 - ■JS13 - ■■L1</b>	<b>P01</b>	688
	<b>5.4</b>	<b>6.5</b>	19 394	1.0	177.23 ★	<b>2KJ1211 - ■JS13 - ■■K1</b>	<b>P01</b>	688
	<b>6</b>	<b>7.2</b>	17 543	1.1	243.82	<b>2KJ1211 - ■JP13 - ■■N1</b>	<b>P01</b>	676
	<b>6.6</b>	<b>7.9</b>	15 842	1.3	220.17	<b>2KJ1211 - ■JP13 - ■■M1</b>	<b>P01</b>	676
	<b>7.1</b>	<b>8.5</b>	14 847	1.3	206.34	<b>2KJ1211 - ■JP13 - ■■L1</b>	<b>P01</b>	676
	<b>8.2</b>	<b>9.8</b>	12 752	1.6	177.23 ★	<b>2KJ1211 - ■JP13 - ■■K1</b>	<b>P01</b>	676
	<b>9.5</b>	<b>11.4</b>	11 017	1.8	153.12	<b>2KJ1211 - ■JP13 - ■■J1</b>	<b>P01</b>	676
		<b>10.8</b>	<b>13.0</b>	9 725	2.1	135.16	<b>2KJ1211 - ■JP13 - ■■H1</b>	<b>P01</b>

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R



# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
11.0 (50 Hz) 13.2 (60 Hz)	<b>D.168-LA160MB4</b>							
	<b>6.2</b>	<b>7.4</b>	17 032	0.82	236.72	<b>2KJ1210 - JP13 - P1</b>		531
	<b>6.9</b>	<b>8.3</b>	15 145	0.92	210.49 ★	<b>2KJ1210 - JP13 - N1</b>		531
	<b>7.3</b>	<b>8.8</b>	14 298	0.98	198.71	<b>2KJ1210 - JP13 - M1</b>		531
	<b>8.2</b>	<b>9.8</b>	12 835	1.1	178.38 ★	<b>2KJ1210 - JP13 - L1</b>		531
	<b>8.9</b>	<b>10.7</b>	11 780	1.2	163.72	<b>2KJ1210 - JP13 - K1</b>		531
	<b>10.3</b>	<b>12.4</b>	10 165	1.4	141.28	<b>2KJ1210 - JP13 - J1</b>		531
	<b>11.8</b>	<b>14.2</b>	8 893	1.6	123.59	<b>2KJ1210 - JP13 - H1</b>		531
	<b>13.6</b>	<b>16.3</b>	7 733	1.8	107.48	<b>2KJ1210 - JP13 - G1</b>		531
	<b>15.5</b>	<b>18.6</b>	6 785	2.1	94.30 ★	<b>2KJ1210 - JP13 - F1</b>		531
<b>D.148-LA160MB4</b>								
<b>11.8</b>	<b>14.2</b>	8 877	0.9	123.37	<b>2KJ1208 - JP13 - K1</b>		360	
<b>13.1</b>	<b>15.7</b>	8 023	1.0	111.50 ★	<b>2KJ1208 - JP13 - J1</b>		360	
<b>13.6</b>	<b>16.3</b>	7 729	1.0	107.42	<b>2KJ1208 - JP13 - H1</b>		360	
<b>15.7</b>	<b>18.8</b>	6 685	1.2	92.91	<b>2KJ1208 - JP13 - G1</b>		360	
<b>18</b>	<b>22</b>	5 831	1.4	81.04 ★	<b>2KJ1208 - JP13 - F1</b>		360	
<b>21</b>	<b>25</b>	4 991	1.6	69.36 ★	<b>2KJ1208 - JP13 - E1</b>		360	
<b>24</b>	<b>29</b>	4 470	1.8	62.12	<b>2KJ1208 - JP13 - D1</b>		360	
<b>Z.148-LA160MB4</b>								
<b>27</b>	<b>32</b>	3 903	2.0	54.24 ★	<b>2KJ1108 - JP13 - A2</b>		348	
<b>29</b>	<b>35</b>	3 651	2.2	50.74	<b>2KJ1108 - JP13 - X1</b>		348	
<b>32</b>	<b>38</b>	3 246	2.5	45.11 ★	<b>2KJ1108 - JP13 - W1</b>		348	
<b>34</b>	<b>41</b>	3 064	2.6	42.59	<b>2KJ1108 - JP13 - V1</b>		348	
<b>D.128-LA160MB4</b>								
<b>16.5</b>	<b>19.8</b>	6 365	0.80	88.46	<b>2KJ1207 - JP13 - G1</b>		270	
<b>18.7</b>	<b>22</b>	5 617	0.91	78.06 ★	<b>2KJ1207 - JP13 - F1</b>		270	
<b>22</b>	<b>26</b>	4 780	1.1	66.43	<b>2KJ1207 - JP13 - E1</b>		270	
<b>25</b>	<b>30</b>	4 142	1.2	57.56 ★	<b>2KJ1207 - JP13 - D1</b>		270	
<b>30</b>	<b>36</b>	3 485	1.5	48.44 ★	<b>2KJ1207 - JP13 - C1</b>		270	
<b>33</b>	<b>40</b>	3 145	1.6	43.71	<b>2KJ1207 - JP13 - B1</b>		270	
<b>Z.128-LA160MB4</b>								
<b>38</b>	<b>46</b>	2 802	1.8	38.94 ★	<b>2KJ1107 - JP13 - B2</b>		261	
<b>40</b>	<b>48</b>	2 618	1.9	36.39	<b>2KJ1107 - JP13 - A2</b>		261	
<b>46</b>	<b>55</b>	2 310	2.2	32.11 ★	<b>2KJ1107 - JP13 - X1</b>		261	
<b>48</b>	<b>58</b>	2 179	2.3	30.28	<b>2KJ1107 - JP13 - W1</b>		261	
<b>54</b>	<b>65</b>	1 952	2.6	27.13 ★	<b>2KJ1107 - JP13 - V1</b>		261	
<b>58</b>	<b>70</b>	1 802	2.8	25.05	<b>2KJ1107 - JP13 - U1</b>		261	
<b>D.108-LA160MB4</b>								
<b>28</b>	<b>34</b>	3 739	0.83	51.97 ★	<b>2KJ1206 - JP13 - B1</b>		193	
<b>34</b>	<b>41</b>	3 066	1	42.61 ★	<b>2KJ1206 - JP13 - A1</b>		193	
<b>Z.108-LA160MB4</b>								
<b>42</b>	<b>50</b>	2 528	1.2	35.14 ★	<b>2KJ1106 - JP13 - W1</b>		189	
<b>44</b>	<b>53</b>	2 361	1.3	32.81	<b>2KJ1106 - JP13 - V1</b>		189	
<b>50</b>	<b>60</b>	2 112	1.5	29.35 ★	<b>2KJ1106 - JP13 - U1</b>		189	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>11.0</b> (50 Hz)	<b>Z.108-LA160MB4</b>							
13.2 (60 Hz)	<b>54</b>	<b>65</b>	1 957	1.6	27.20	<b>2KJ1106 - JP13 - T1</b>		189
	<b>58</b>	<b>70</b>	1 794	1.7	24.94 ★	<b>2KJ1106 - JP13 - S1</b>		189
	<b>64</b>	<b>77</b>	1 645	1.9	22.86	<b>2KJ1106 - JP13 - R1</b>		189
	<b>75</b>	<b>90</b>	1 402	2.2	19.48	<b>2KJ1106 - JP13 - Q1</b>		189
	<b>85</b>	<b>102</b>	1 237	2.5	17.19 ★	<b>2KJ1106 - JP13 - P1</b>		189
	<b>100</b>	<b>120</b>	1 053	2.9	14.63	<b>2KJ1106 - JP13 - N1</b>		189
	<b>115</b>	<b>138</b>	912	3.4	12.68 ★	<b>2KJ1106 - JP13 - M1</b>		189
	<b>206</b>	<b>247</b>	511	3.5	7.10 ★	<b>2KJ1106 - JP13 - H1</b>		189
	<b>228</b>	<b>274</b>	461	3.8	6.41	<b>2KJ1106 - JP13 - G1</b>		189
	<b>265</b>	<b>318</b>	396	4.3	5.51 ★	<b>2KJ1106 - JP13 - E1</b>		189
	<b>279</b>	<b>335</b>	377	3.0	5.24 ★	<b>2KJ1106 - JP13 - D1</b>		189
	<b>331</b>	<b>397</b>	317	3.6	4.41 ★	<b>2KJ1106 - JP13 - C1</b>		189
	<b>367</b>	<b>440</b>	286	3.9	3.98	<b>2KJ1106 - JP13 - B1</b>		189
	<b>427</b>	<b>512</b>	246	4.4	3.42 ★	<b>2KJ1106 - JP13 - A1</b>		189
	<b>Z.88-LA160MB4</b>							
	<b>54</b>	<b>65</b>	1 932	0.87	26.85 ★	<b>2KJ1105 - JP13 - S1</b>		143
	<b>58</b>	<b>70</b>	1 800	0.93	25.01	<b>2KJ1105 - JP13 - R1</b>		143
	<b>65</b>	<b>78</b>	1 627	1.0	22.61 ★	<b>2KJ1105 - JP13 - Q1</b>		143
	<b>70</b>	<b>84</b>	1 497	1.1	20.81	<b>2KJ1105 - JP13 - P1</b>		143
	<b>78</b>	<b>94</b>	1 347	1.2	18.72 ★	<b>2KJ1105 - JP13 - N1</b>		143
	<b>84</b>	<b>101</b>	1 243	1.4	17.27	<b>2KJ1105 - JP13 - M1</b>		143
	<b>100</b>	<b>120</b>	1 053	1.5	14.63	<b>2KJ1105 - JP13 - L1</b>		143
	<b>115</b>	<b>138</b>	917	1.7	12.75 ★	<b>2KJ1105 - JP13 - K1</b>		143
	<b>135</b>	<b>162</b>	781	1.9	10.85	<b>2KJ1105 - JP13 - J1</b>		143
	<b>158</b>	<b>190</b>	666	2.1	9.26 ★	<b>2KJ1105 - JP13 - H1</b>		143
	<b>192</b>	<b>230</b>	546	2.4	7.59 ★	<b>2KJ1105 - JP13 - G1</b>		143
	<b>210</b>	<b>252</b>	501	2.5	6.96	<b>2KJ1105 - JP13 - F1</b>		143
	<b>246</b>	<b>295</b>	427	2.8	5.94 ★	<b>2KJ1105 - JP13 - E1</b>		143
	<b>300</b>	<b>360</b>	350	3.2	4.87 ★	<b>2KJ1105 - JP13 - D1</b>		143
	<b>328</b>	<b>394</b>	320	2.5	4.45 ★	<b>2KJ1105 - JP13 - C1</b>		143
	<b>385</b>	<b>462</b>	273	2.7	3.79 ★	<b>2KJ1105 - JP13 - B1</b>		143
	<b>469</b>	<b>563</b>	224	2.9	3.11 ★	<b>2KJ1105 - JP13 - A1</b>		143
	<b>Z.68-LA160MB4</b>							
	<b>107</b>	<b>128</b>	978	0.82	13.59	<b>2KJ1104 - JP13 - J1</b>		111
	<b>128</b>	<b>154</b>	820	0.96	11.40	<b>2KJ1104 - JP13 - H1</b>		111
	<b>150</b>	<b>180</b>	700	1.1	9.73 ★	<b>2KJ1104 - JP13 - G1</b>		111
	<b>180</b>	<b>216</b>	584	1.2	8.11	<b>2KJ1104 - JP13 - F1</b>		111
	<b>217</b>	<b>260</b>	484	1.3	6.72 ★	<b>2KJ1104 - JP13 - E1</b>		111
	<b>246</b>	<b>295</b>	427	1.1	5.93	<b>2KJ1104 - JP13 - D1</b>		111
	<b>289</b>	<b>347</b>	364	1.3	5.06 ★	<b>2KJ1104 - JP13 - C1</b>		111
	<b>346</b>	<b>415</b>	304	1.5	4.22	<b>2KJ1104 - JP13 - B1</b>		111
	<b>418</b>	<b>502</b>	251	1.7	3.49 ★	<b>2KJ1104 - JP13 - A1</b>		111

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>11.0</b> (50 Hz)	<b>E.148-LA160MB4</b>							
13.2 (60 Hz)	<b>144</b>	<b>173</b>	729	1.1	10.13 ★	<b>2KJ1007 - ■JP13 - ■■Q1</b>		192
	<b>154</b>	<b>185</b>	681	1.4	9.47	<b>2KJ1007 - ■JP13 - ■■P1</b>		192
	<b>173</b>	<b>208</b>	606	1.7	8.42 ★	<b>2KJ1007 - ■JP13 - ■■N1</b>		192
	<b>184</b>	<b>221</b>	572	1.9	7.95	<b>2KJ1007 - ■JP13 - ■■M1</b>		192
	<b>204</b>	<b>245</b>	514	2.2	7.14 ★	<b>2KJ1007 - ■JP13 - ■■L1</b>		192
	<b>223</b>	<b>268</b>	471	2.4	6.55	<b>2KJ1007 - ■JP13 - ■■K1</b>		192
	<b>258</b>	<b>310</b>	407	3.3	5.65	<b>2KJ1007 - ■JP13 - ■■J1</b>		192
	<b>296</b>	<b>355</b>	355	3.9	4.94	<b>2KJ1007 - ■JP13 - ■■H1</b>		192
	<b>340</b>	<b>408</b>	309	4.3	4.30	<b>2KJ1007 - ■JP13 - ■■G1</b>		192
	<b>387</b>	<b>464</b>	271	5.0	3.77 ★	<b>2KJ1007 - ■JP13 - ■■F1</b>		192
	<b>E.128-LA160MB4</b>							
	<b>163</b>	<b>196</b>	643	0.99	8.94 ★	<b>2KJ1006 - ■JP13 - ■■R1</b>		168
	<b>175</b>	<b>210</b>	601	1.20	8.35	<b>2KJ1006 - ■JP13 - ■■Q1</b>		168
	<b>198</b>	<b>238</b>	530	1.5	7.37 ★	<b>2KJ1006 - ■JP13 - ■■P1</b>		168
	<b>210</b>	<b>252</b>	500	1.8	6.95	<b>2KJ1006 - ■JP13 - ■■N1</b>		168
	<b>234</b>	<b>281</b>	448	2.1	6.23 ★	<b>2KJ1006 - ■JP13 - ■■M1</b>		168
	<b>254</b>	<b>305</b>	414	2.3	5.75	<b>2KJ1006 - ■JP13 - ■■L1</b>		168
	<b>297</b>	<b>356</b>	353	2.7	4.91	<b>2KJ1006 - ■JP13 - ■■K1</b>		168
	<b>329</b>	<b>395</b>	319	3.1	4.44 ★	<b>2KJ1006 - ■JP13 - ■■J1</b>		168
	<b>341</b>	<b>409</b>	308	3.2	4.28	<b>2KJ1006 - ■JP13 - ■■H1</b>		168
	<b>395</b>	<b>474</b>	266	3.8	3.70	<b>2KJ1006 - ■JP13 - ■■G1</b>		168
	<b>452</b>	<b>542</b>	232	4.3	3.23 ★	<b>2KJ1006 - ■JP13 - ■■F1</b>		168
	<b>529</b>	<b>635</b>	199	5.0	2.76 ★	<b>2KJ1006 - ■JP13 - ■■E1</b>		168
	<b>591</b>	<b>709</b>	178	5.3	2.47	<b>2KJ1006 - ■JP13 - ■■D1</b>		168
	<b>695</b>	<b>834</b>	151	5.7	2.10 ★	<b>2KJ1006 - ■JP13 - ■■C1</b>		168
	<b>807</b>	<b>968</b>	130	6.1	1.81	<b>2KJ1006 - ■JP13 - ■■B1</b>		168
	<b>E.108-LA160MB4</b>							
	<b>267</b>	<b>320</b>	393	1.7	5.46 ★	<b>2KJ1005 - ■JP13 - ■■K1</b>		131
	<b>292</b>	<b>350</b>	360	1.9	5.00	<b>2KJ1005 - ■JP13 - ■■J1</b>		131
	<b>343</b>	<b>412</b>	307	2.3	4.26	<b>2KJ1005 - ■JP13 - ■■H1</b>		131
	<b>388</b>	<b>466</b>	271	2.2	3.76 ★	<b>2KJ1005 - ■JP13 - ■■G1</b>		131
	<b>456</b>	<b>547</b>	230	3.2	3.20	<b>2KJ1005 - ■JP13 - ■■F1</b>		131
	<b>527</b>	<b>632</b>	199	3.4	2.77 ★	<b>2KJ1005 - ■JP13 - ■■E1</b>		131
	<b>627</b>	<b>752</b>	168	4.1	2.33 ★	<b>2KJ1005 - ■JP13 - ■■C1</b>		131
	<b>692</b>	<b>830</b>	152	4.1	2.11	<b>2KJ1005 - ■JP13 - ■■B1</b>		131
	<b>807</b>	<b>968</b>	130	4.2	1.81 ★	<b>2KJ1005 - ■JP13 - ■■A1</b>		131
	<b>E.88-LA160MB4</b>							
	<b>286</b>	<b>343</b>	368	1	5.11 ★	<b>2KJ1004 - ■JP13 - ■■J1</b>		110
	<b>311</b>	<b>373</b>	338	1.1	4.70	<b>2KJ1004 - ■JP13 - ■■H1</b>		110
	<b>345</b>	<b>414</b>	304	1.3	4.23 ★	<b>2KJ1004 - ■JP13 - ■■G1</b>		110
	<b>374</b>	<b>449</b>	281	1.4	3.90	<b>2KJ1004 - ■JP13 - ■■F1</b>		110
	<b>442</b>	<b>530</b>	237	1.9	3.30	<b>2KJ1004 - ■JP13 - ■■E1</b>		110
	<b>507</b>	<b>608</b>	207	2.1	2.88 ★	<b>2KJ1004 - ■JP13 - ■■D1</b>		110

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>11.0</b> (50 Hz)	<b>E.88-LA160MB4</b>							
13.2 (60 Hz)	<b>596</b>	<b>715</b>	176	2.4	2.45	<b>2KJ1004 - ■JP13 - ■■C1</b>		110
	<b>699</b>	<b>839</b>	150	2.8	2.09 ★	<b>2KJ1004 - ■JP13 - ■■B1</b>		110
	<b>854</b>	<b>1 025</b>	123	2.9	1.71 ★	<b>2KJ1004 - ■JP13 - ■■A1</b>		110
	<b>E.68-LA160MB4</b>							
	<b>390</b>	<b>468</b>	269	0.85	3.74 ★	<b>2KJ1003 - ■JP13 - ■■H1</b>		93
	<b>423</b>	<b>508</b>	248	0.97	3.45	<b>2KJ1003 - ■JP13 - ■■G1</b>		93
	<b>472</b>	<b>566</b>	222	1.1	3.09 ★	<b>2KJ1003 - ■JP13 - ■■F1</b>		93
	<b>512</b>	<b>614</b>	205	1.2	2.85	<b>2KJ1003 - ■JP13 - ■■E1</b>		93
	<b>1 035</b>	<b>1 242</b>	101	1.5	1.41 ★	<b>2KJ1003 - ■JP13 - ■■A1</b>		93
<b>15</b> (50 Hz)	<b>D.188-LA160L4</b>							
18 (60 Hz)	<b>6.0</b>	<b>7.2</b>	23 923	0.84	243.82	<b>2KJ1211 - ■JR13 - ■■N1</b>		688
	<b>6.6</b>	<b>7.9</b>	21 602	0.93	220.17	<b>2KJ1211 - ■JR13 - ■■M1</b>		688
	<b>D.188-LA160L4</b>							
	<b>7.1</b>	<b>8.5</b>	20 245	0.99	206.34	<b>2KJ1211 - ■JR13 - ■■L1</b>		688
	<b>8.2</b>	<b>9.8</b>	17 389	1.2	177.23 ★	<b>2KJ1211 - ■JR13 - ■■K1</b>		688
	<b>9.5</b>	<b>11.4</b>	15 024	1.3	153.12	<b>2KJ1211 - ■JR13 - ■■J1</b>		688
	<b>10.8</b>	<b>13.0</b>	13 261	1.5	135.16	<b>2KJ1211 - ■JR13 - ■■H1</b>		688
	<b>12.0</b>	<b>14.4</b>	11 938	1.7	121.67 ★	<b>2KJ1211 - ■JR13 - ■■G1</b>		688
	<b>14.5</b>	<b>17.4</b>	9 906	2.0	100.96 ★	<b>2KJ1211 - ■JR13 - ■■F1</b>		688
	<b>15.9</b>	<b>19.1</b>	9 033	2.2	92.06	<b>2KJ1211 - ■JR13 - ■■E1</b>		688
	<b>D.168-LA160L4</b>							
	<b>8.2</b>	<b>9.8</b>	17 502	0.8	178.38 ★	<b>2KJ1210 - ■JR13 - ■■L1</b>		543
	<b>8.9</b>	<b>10.7</b>	16 064	0.87	163.72	<b>2KJ1210 - ■JR13 - ■■K1</b>		543
	<b>10.3</b>	<b>12.4</b>	13 862	1.0	141.28	<b>2KJ1210 - ■JR13 - ■■J1</b>		543
	<b>11.8</b>	<b>14.2</b>	12 126	1.2	123.59	<b>2KJ1210 - ■JR13 - ■■H1</b>		543
	<b>13.6</b>	<b>16.3</b>	10 546	1.3	107.48	<b>2KJ1210 - ■JR13 - ■■G1</b>		543
	<b>15.5</b>	<b>18.6</b>	9 252	1.5	94.30 ★	<b>2KJ1210 - ■JR13 - ■■F1</b>		543
	<b>18.3</b>	<b>22</b>	7 825	1.8	79.75 ★	<b>2KJ1210 - ■JR13 - ■■E1</b>		543
	<b>20</b>	<b>24</b>	7 100	2.0	72.36	<b>2KJ1210 - ■JR13 - ■■D1</b>		543
	<b>23</b>	<b>28</b>	6 189	2.3	63.08 ★	<b>2KJ1210 - ■JR13 - ■■C1</b>		543
	<b>Z.168-LA160L4</b>							
	<b>31</b>	<b>37</b>	4 573	2.2	46.61	<b>2KJ1110 - ■JR13 - ■■V1</b>		524
	<b>D.148-LA160L4</b>							
	<b>15.7</b>	<b>18.8</b>	9 116	0.88	92.91	<b>2KJ1208 - ■JR13 - ■■G1</b>		372
	<b>18</b>	<b>22</b>	7 951	1.0	81.04 ★	<b>2KJ1208 - ■JR13 - ■■F1</b>		372
	<b>21</b>	<b>25</b>	6 805	1.2	69.36 ★	<b>2KJ1208 - ■JR13 - ■■E1</b>		372
	<b>24</b>	<b>29</b>	6 095	1.3	62.12	<b>2KJ1208 - ■JR13 - ■■D1</b>		372
	<b>Z.148-LA160L4</b>							
	<b>27</b>	<b>32</b>	5 322	1.5	54.24 ★	<b>2KJ1108 - ■JR13 - ■■A2</b>		360
	<b>29</b>	<b>35</b>	4 978	1.6	50.74	<b>2KJ1108 - ■JR13 - ■■X1</b>		360
	<b>32</b>	<b>38</b>	4 426	1.8	45.11 ★	<b>2KJ1108 - ■JR13 - ■■W1</b>		360
	<b>34</b>	<b>41</b>	4 179	1.9	42.59	<b>2KJ1108 - ■JR13 - ■■V1</b>		360

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
15 (50 Hz) 18 (60 Hz)	<b>Z.148-LA160L4</b>							
	<b>38</b>	<b>46</b>	3 751	2.1	38.23 ★	<b>2KJ1108 - ■JR13 - ■■U1</b>		360
	<b>42</b>	<b>50</b>	3 443	2.3	35.09	<b>2KJ1108 - ■JR13 - ■■T1</b>		360
	<b>48</b>	<b>58</b>	2 971	2.7	30.28	<b>2KJ1108 - ■JR13 - ■■S1</b>		360
	<b>D.128-LA160L4</b>							
	<b>25</b>	<b>30</b>	5 648	0.9	57.56 ★	<b>2KJ1207 - ■JR13 - ■■D1</b>		282
	<b>30</b>	<b>36</b>	4 753	1.1	48.44 ★	<b>2KJ1207 - ■JR13 - ■■C1</b>		282
	<b>33</b>	<b>40</b>	4 289	1.2	43.71	<b>2KJ1207 - ■JR13 - ■■B1</b>		282
	<b>Z.128-LA160L4</b>							
	<b>38</b>	<b>46</b>	3 821	1.3	38.94 ★	<b>2KJ1107 - ■JR13 - ■■B2</b>		273
	<b>40</b>	<b>48</b>	3 570	1.4	36.39	<b>2KJ1107 - ■JR13 - ■■A2</b>		273
	<b>46</b>	<b>55</b>	3 151	1.6	32.11 ★	<b>2KJ1107 - ■JR13 - ■■X1</b>		273
	<b>48</b>	<b>58</b>	2 971	1.7	30.28	<b>2KJ1107 - ■JR13 - ■■W1</b>		273
	<b>54</b>	<b>65</b>	2 662	1.9	27.13 ★	<b>2KJ1107 - ■JR13 - ■■V1</b>		273
	<b>58</b>	<b>70</b>	2 458	2.1	25.05	<b>2KJ1107 - ■JR13 - ■■U1</b>		273
	<b>68</b>	<b>82</b>	2 101	2.4	21.41	<b>2KJ1107 - ■JR13 - ■■T1</b>		273
	<b>Z.128-LA160L4</b>							
	<b>76</b>	<b>91</b>	1 899	2.7	19.35 ★	<b>2KJ1107 - ■JR13 - ■■S1</b>		273
	<b>78</b>	<b>94</b>	1 829	2.8	18.64	<b>2KJ1107 - ■JR13 - ■■R1</b>		273
	<b>91</b>	<b>109</b>	1 582	3.2	16.12	<b>2KJ1107 - ■JR13 - ■■Q1</b>		273
	<b>104</b>	<b>125</b>	1 380	3.5	14.06 ★	<b>2KJ1107 - ■JR13 - ■■P1</b>		273
	<b>200</b>	<b>240</b>	715	3.6	7.29 ★	<b>2KJ1107 - ■JR13 - ■■J1</b>		273
	<b>234</b>	<b>281</b>	612	4.1	6.24 ★	<b>2KJ1107 - ■JR13 - ■■H1</b>		273
	<b>261</b>	<b>313</b>	548	4.8	5.59 ★	<b>2KJ1107 - ■JR13 - ■■F1</b>		273
	<b>Z.108-LA160L4</b>							
	<b>42</b>	<b>50</b>	3 448	0.9	35.14 ★	<b>2KJ1106 - ■JR13 - ■■W1</b>		201
	<b>44</b>	<b>53</b>	3 219	0.96	32.81	<b>2KJ1106 - ■JR13 - ■■V1</b>		201
	<b>50</b>	<b>60</b>	2 880	1.1	29.35 ★	<b>2KJ1106 - ■JR13 - ■■U1</b>		201
	<b>54</b>	<b>65</b>	2 669	1.2	27.20	<b>2KJ1106 - ■JR13 - ■■T1</b>		201
	<b>58</b>	<b>70</b>	2 447	1.3	24.94 ★	<b>2KJ1106 - ■JR13 - ■■S1</b>		201
	<b>64</b>	<b>77</b>	2 243	1.4	22.86	<b>2KJ1106 - ■JR13 - ■■R1</b>		201
	<b>75</b>	<b>90</b>	1 911	1.6	19.48	<b>2KJ1106 - ■JR13 - ■■Q1</b>		201
	<b>85</b>	<b>102</b>	1 687	1.8	17.19 ★	<b>2KJ1106 - ■JR13 - ■■P1</b>		201
	<b>100</b>	<b>120</b>	1 435	2.2	14.63	<b>2KJ1106 - ■JR13 - ■■N1</b>		201
	<b>115</b>	<b>138</b>	1 244	2.5	12.68 ★	<b>2KJ1106 - ■JR13 - ■■M1</b>		201
	<b>137</b>	<b>164</b>	1 047	3.0	10.67 ★	<b>2KJ1106 - ■JR13 - ■■L1</b>		201
	<b>152</b>	<b>182</b>	944	3.3	9.62	<b>2KJ1106 - ■JR13 - ■■K1</b>		201
	<b>177</b>	<b>212</b>	811	3.8	8.27 ★	<b>2KJ1106 - ■JR13 - ■■J1</b>		201
	<b>206</b>	<b>247</b>	697	2.6	7.10 ★	<b>2KJ1106 - ■JR13 - ■■H1</b>		201
	<b>228</b>	<b>274</b>	629	2.8	6.41	<b>2KJ1106 - ■JR13 - ■■G1</b>		201
	<b>265</b>	<b>318</b>	541	3.1	5.51 ★	<b>2KJ1106 - ■JR13 - ■■E1</b>		201
	<b>279</b>	<b>335</b>	514	2.2	5.24 ★	<b>2KJ1106 - ■JR13 - ■■D1</b>		201
	<b>331</b>	<b>397</b>	433	2.6	4.41 ★	<b>2KJ1106 - ■JR13 - ■■C1</b>		201
	<b>367</b>	<b>440</b>	391	2.9	3.98	<b>2KJ1106 - ■JR13 - ■■B1</b>		201

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
15 (50 Hz) 18 (60 Hz)	<b>Z.108-LA160L4</b>							
	427	512	336	3.2	3.42 ★	2KJ1106 - ■JR13 - ■■A1		201
<b>Z.88-LA160L4</b>								
	70	84	2 042	0.82	20.81	2KJ1105 - ■JR13 - ■■P1		155
	78	94	1 837	0.91	18.72 ★	2KJ1105 - ■JR13 - ■■N1		155
	84	101	1 694	0.99	17.27	2KJ1105 - ■JR13 - ■■M1		155
	100	120	1 435	1.1	14.63	2KJ1105 - ■JR13 - ■■L1		155
	115	138	1 251	1.2	12.75 ★	2KJ1105 - ■JR13 - ■■K1		155
	135	162	1 065	1.4	10.85	2KJ1105 - ■JR13 - ■■J1		155
	158	190	909	1.5	9.26 ★	2KJ1105 - ■JR13 - ■■H1		155
	192	230	745	1.7	7.59 ★	2KJ1105 - ■JR13 - ■■G1		155
	210	252	683	1.8	6.96	2KJ1105 - ■JR13 - ■■F1		155
	246	295	583	2.0	5.94 ★	2KJ1105 - ■JR13 - ■■E1		155
	300	360	478	2.3	4.87 ★	2KJ1105 - ■JR13 - ■■D1		155
	328	394	437	1.8	4.45 ★	2KJ1105 - ■JR13 - ■■C1		155
	385	462	372	2.0	3.79 ★	2KJ1105 - ■JR13 - ■■B1		155
	469	563	305	2.2	3.11 ★	2KJ1105 - ■JR13 - ■■A1		155
<b>Z.68-LA160L4</b>								
	180	216	796	0.88	8.11	2KJ1104 - ■JR13 - ■■F1		123
	217	260	659	0.99	6.72 ★	2KJ1104 - ■JR13 - ■■E1		123
	246	295	582	0.84	5.93	2KJ1104 - ■JR13 - ■■D1		123
	289	347	496	0.97	5.06 ★	2KJ1104 - ■JR13 - ■■C1		123
	346	415	414	1.1	4.22	2KJ1104 - ■JR13 - ■■B1		123
	418	502	342	1.2	3.49 ★	2KJ1104 - ■JR13 - ■■A1		123
<b>E.148-LA160L4</b>								
	144	173	994	0.80	10.13 ★	2KJ1007 - ■JR13 - ■■Q1		204
	154	185	929	0.99	9.47	2KJ1007 - ■JR13 - ■■P1		204
	173	208	826	1.2	8.42 ★	2KJ1007 - ■JR13 - ■■N1		204
	184	221	780	1.4	7.95	2KJ1007 - ■JR13 - ■■M1		204
	204	245	701	1.6	7.14 ★	2KJ1007 - ■JR13 - ■■L1		204
	223	268	643	1.8	6.55	2KJ1007 - ■JR13 - ■■K1		204
	258	310	554	2.5	5.65	2KJ1007 - ■JR13 - ■■J1		204
	296	355	485	2.9	4.94	2KJ1007 - ■JR13 - ■■H1		204
	340	408	422	3.2	4.30	2KJ1007 - ■JR13 - ■■G1		204
	387	464	370	3.6	3.77 ★	2KJ1007 - ■JR13 - ■■F1		204
	458	550	313	5.0	3.19 ★	2KJ1007 - ■JR13 - ■■E1		204
	503	604	285	4.9	2.90	2KJ1007 - ■JR13 - ■■D1		204
	579	695	247	4.9	2.52 ★	2KJ1007 - ■JR13 - ■■C1		204
	682	818	210	5.7	2.14	2KJ1007 - ■JR13 - ■■B1		204
	890	1 068	161	6.0	1.64 ★	2KJ1007 - ■JR13 - ■■A1		204
<b>E.128-LA160L4</b>								
	175	210	819	0.87	8.35	2KJ1006 - ■JR13 - ■■Q1		180
	198	238	723	1.1	7.37 ★	2KJ1006 - ■JR13 - ■■P1		180
	210	252	682	1.3	6.95	2KJ1006 - ■JR13 - ■■N1		180

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTEX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
15 (50 Hz) 18 (60 Hz)	<b>E.128-LA160L4</b>							
	234	281	611	1.5	6.23 ★	2KJ1006 - ■JR13 - ■■M1		180
	254	305	564	1.7	5.75	2KJ1006 - ■JR13 - ■■L1		180
	297	356	482	2.0	4.91	2KJ1006 - ■JR13 - ■■K1		180
	329	395	436	2.3	4.44 ★	2KJ1006 - ■JR13 - ■■J1		180
	341	409	420	2.4	4.28	2KJ1006 - ■JR13 - ■■H1		180
	395	474	363	2.8	3.70	2KJ1006 - ■JR13 - ■■G1		180
	452	542	317	3.2	3.23 ★	2KJ1006 - ■JR13 - ■■F1		180
	529	635	271	3.7	2.76 ★	2KJ1006 - ■JR13 - ■■E1		180
	591	709	242	3.9	2.47	2KJ1006 - ■JR13 - ■■D1		180
	695	834	206	4.2	2.10 ★	2KJ1006 - ■JR13 - ■■C1		180
	807	968	178	4.5	1.81	2KJ1006 - ■JR13 - ■■B1		180
	1 074	1 289	133	5.1	1.36 ★	2KJ1006 - ■JR13 - ■■A1		180
	<b>E.108-LA160L4</b>							
267	320	536	1.2	5.46 ★	2KJ1005 - ■JR13 - ■■K1		143	
292	350	491	1.4	5.00	2KJ1005 - ■JR13 - ■■J1		143	
343	412	418	1.7	4.26	2KJ1005 - ■JR13 - ■■H1		143	
388	466	369	1.6	3.76 ★	2KJ1005 - ■JR13 - ■■G1		143	
456	547	314	2.4	3.20	2KJ1005 - ■JR13 - ■■F1		143	
527	632	272	2.5	2.77 ★	2KJ1005 - ■JR13 - ■■E1		143	
627	752	229	3.0	2.33 ★	2KJ1005 - ■JR13 - ■■C1		143	
692	830	207	3.0	2.11	2KJ1005 - ■JR13 - ■■B1		143	
807	968	178	3.1	1.81 ★	2KJ1005 - ■JR13 - ■■A1		143	
<b>E.88-LA160L4</b>								
311	373	461	0.83	4.70	2KJ1004 - ■JR13 - ■■H1		122	
345	414	415	0.96	4.23 ★	2KJ1004 - ■JR13 - ■■G1		122	
374	449	383	1.0	3.90	2KJ1004 - ■JR13 - ■■F1		122	
442	530	324	1.4	3.30	2KJ1004 - ■JR13 - ■■E1		122	
507	608	283	1.5	2.88 ★	2KJ1004 - ■JR13 - ■■D1		122	
596	715	240	1.7	2.45	2KJ1004 - ■JR13 - ■■C1		122	
699	839	205	2.0	2.09 ★	2KJ1004 - ■JR13 - ■■B1		122	
854	1 025	168	2.1	1.71 ★	2KJ1004 - ■JR13 - ■■A1		122	
<b>E.68-LA160L4</b>								
472	566	303	0.82	3.09 ★	2KJ1003 - ■JR13 - ■■F1		105	
512	614	280	0.89	2.85	2KJ1003 - ■JR13 - ■■E1		105	
18.5 (50 Hz) 22.0 (60 Hz)	<b>D.188-LG180ZMB4E</b>							
	7.1	8.5	24 799	0.81	206.34	2KJ1211 - ■KL13 - ■■L1		743
	8.3	10.0	21 301	0.94	177.23 ★	2KJ1211 - ■KL13 - ■■K1		743
	9.6	11.5	18 403	1.1	153.12	2KJ1211 - ■KL13 - ■■J1		743
	10.9	13.1	16 244	1.2	135.16	2KJ1211 - ■KL13 - ■■H1		743
	12.1	14.5	14 623	1.4	121.67 ★	2KJ1211 - ■KL13 - ■■G1		743
	14.6	17.5	12 134	1.6	100.96 ★	2KJ1211 - ■KL13 - ■■F1		743
	16.0	19.2	11 064	1.8	92.06	2KJ1211 - ■KL13 - ■■E1		743

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>18.5</b> (50 Hz)	<b>D.188-LG180ZMB4E</b>							
	<b>18.2</b>	<b>22</b>	9 708	2.1	80.77 ★	<b>2KJ1211 - ■ KL13 - ■■ D1</b>		743
22.0 (60 Hz)	<b>21</b>	<b>25</b>	8 342	2.4	69.41	<b>2KJ1211 - ■ KL13 - ■■ C1</b>		743
	<b>Z.188-LG180ZMB4E</b>							
	<b>28</b>	<b>34</b>	6 292	2.5	52.35	<b>2KJ1111 - ■ KL13 - ■■ P1</b>		709
<b>D.168-LG180ZMB4E</b>								
	<b>10.4</b>	<b>12.5</b>	16 980	0.82	141.28	<b>2KJ1210 - ■ KL13 - ■■ J1</b>		598
	<b>11.9</b>	<b>14.3</b>	14 854	0.94	123.59	<b>2KJ1210 - ■ KL13 - ■■ H1</b>		598
	<b>13.7</b>	<b>16.4</b>	12 918	1.1	107.48	<b>2KJ1210 - ■ KL13 - ■■ G1</b>		598
	<b>15.6</b>	<b>18.7</b>	11 334	1.2	94.30 ★	<b>2KJ1210 - ■ KL13 - ■■ F1</b>		598
	<b>18.4</b>	<b>22</b>	9 585	1.5	79.75 ★	<b>2KJ1210 - ■ KL13 - ■■ E1</b>		598
	<b>20</b>	<b>24</b>	8 697	1.6	72.36	<b>2KJ1210 - ■ KL13 - ■■ D1</b>		598
	<b>23</b>	<b>28</b>	7 581	1.8	63.08 ★	<b>2KJ1210 - ■ KL13 - ■■ C1</b>		598
	<b>27</b>	<b>32</b>	6 437	2.2	53.56	<b>2KJ1210 - ■ KL13 - ■■ B1</b>		598
<b>Z.168-LG180ZMB4E</b>								
	<b>32</b>	<b>38</b>	5 602	1.8	46.61	<b>2KJ1110 - ■ KL13 - ■■ V1</b>		579
<b>D.148-LG180ZMB4E</b>								
	<b>18.1</b>	<b>22</b>	9 740	0.82	81.04 ★	<b>2KJ1208 - ■ KL13 - ■■ F1</b>		427
	<b>21</b>	<b>25</b>	8 336	0.96	69.36 ★	<b>2KJ1208 - ■ KL13 - ■■ E1</b>		427
	<b>24</b>	<b>29</b>	7 466	1.1	62.12	<b>2KJ1208 - ■ KL13 - ■■ D1</b>		427
	<b>28</b>	<b>34</b>	6 323	1.3	52.61 ★	<b>2KJ1208 - ■ KL13 - ■■ C1</b>		427
<b>Z.148-LG180ZMB4E</b>								
	<b>33</b>	<b>40</b>	5 422	1.5	45.11 ★	<b>2KJ1108 - ■ KL13 - ■■ W1</b>		415
	<b>34</b>	<b>41</b>	5 119	1.6	42.59	<b>2KJ1108 - ■ KL13 - ■■ V1</b>		415
	<b>38</b>	<b>46</b>	4 595	1.7	38.23 ★	<b>2KJ1108 - ■ KL13 - ■■ U1</b>		415
	<b>42</b>	<b>50</b>	4 217	1.9	35.09	<b>2KJ1108 - ■ KL13 - ■■ T1</b>		415
	<b>48</b>	<b>58</b>	3 639	2.2	30.28	<b>2KJ1108 - ■ KL13 - ■■ S1</b>		415
	<b>56</b>	<b>67</b>	3 184	2.5	26.49	<b>2KJ1108 - ■ KL13 - ■■ R1</b>		415
	<b>64</b>	<b>77</b>	2 769	2.9	23.04	<b>2KJ1108 - ■ KL13 - ■■ Q1</b>		415
<b>D.128-LG180ZMB4E</b>								
	<b>30</b>	<b>36</b>	5 822	0.88	48.44 ★	<b>2KJ1207 - ■ KL13 - ■■ C1</b>		337
	<b>34</b>	<b>41</b>	5 253	0.97	43.71	<b>2KJ1207 - ■ KL13 - ■■ B1</b>		337
	<b>39</b>	<b>47</b>	4 515	1.1	37.57 ★	<b>2KJ1207 - ■ KL13 - ■■ A1</b>		337
<b>Z.128-LG180ZMB4E</b>								
	<b>46</b>	<b>55</b>	3 859	1.3	32.11 ★	<b>2KJ1107 - ■ KL13 - ■■ X1</b>		328
	<b>48</b>	<b>58</b>	3 639	1.4	30.28	<b>2KJ1107 - ■ KL13 - ■■ W1</b>		328
	<b>54</b>	<b>65</b>	3 261	1.6	27.13 ★	<b>2KJ1107 - ■ KL13 - ■■ V1</b>		328
	<b>59</b>	<b>71</b>	3 011	1.7	25.05	<b>2KJ1107 - ■ KL13 - ■■ U1</b>		328
	<b>69</b>	<b>83</b>	2 573	2.0	21.41	<b>2KJ1107 - ■ KL13 - ■■ T1</b>		328
	<b>76</b>	<b>91</b>	2 326	2.2	19.35 ★	<b>2KJ1107 - ■ KL13 - ■■ S1</b>		328
	<b>79</b>	<b>95</b>	2 240	2.3	18.64	<b>2KJ1107 - ■ KL13 - ■■ R1</b>		328
	<b>91</b>	<b>109</b>	1 937	2.6	16.12	<b>2KJ1107 - ■ KL13 - ■■ Q1</b>		328
	<b>105</b>	<b>126</b>	1 690	2.9	14.06 ★	<b>2KJ1107 - ■ KL13 - ■■ P1</b>		328
	<b>122</b>	<b>146</b>	1 446	3.3	12.03 ★	<b>2KJ1107 - ■ KL13 - ■■ N1</b>		328

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R



# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>18.5</b> (50 Hz)	<b>Z.128-LG180ZMB4E</b>							
22.0 (60 Hz)	<b>136</b>	<b>163</b>	1 296	3.6	10.78	<b>2KJ1107 - ■ KL13 - ■■ M1</b>		328
	<b>161</b>	<b>193</b>	1 097	4.0	9.13 ★	<b>2KJ1107 - ■ KL13 - ■■ L1</b>		328
	<b>202</b>	<b>242</b>	876	2.9	7.29 ★	<b>2KJ1107 - ■ KL13 - ■■ J1</b>		328
	<b>236</b>	<b>283</b>	750	3.4	6.24 ★	<b>2KJ1107 - ■ KL13 - ■■ H1</b>		328
	<b>263</b>	<b>316</b>	672	3.9	5.59 ★	<b>2KJ1107 - ■ KL13 - ■■ F1</b>		328
	<b>304</b>	<b>365</b>	581	4.3	4.83	<b>2KJ1107 - ■ KL13 - ■■ E1</b>		328
	<b>311</b>	<b>373</b>	568	4.2	4.73 ★	<b>2KJ1107 - ■ KL13 - ■■ D1</b>		328
	<b>359</b>	<b>431</b>	492	4.8	4.09 ★	<b>2KJ1107 - ■ KL13 - ■■ C1</b>		328
	<b>405</b>	<b>486</b>	436	5.3	3.63 ★	<b>2KJ1107 - ■ KL13 - ■■ B1</b>		328
	<b>Z.108-LG180ZMB4E</b>							
	<b>50</b>	<b>60</b>	3 527	0.88	29.35 ★	<b>2KJ1106 - ■ KL13 - ■■ U1</b>		256
	<b>54</b>	<b>65</b>	3 269	0.95	27.20	<b>2KJ1106 - ■ KL13 - ■■ T1</b>		256
	<b>59</b>	<b>71</b>	2 997	1.0	24.94 ★	<b>2KJ1106 - ■ KL13 - ■■ S1</b>		256
	<b>64</b>	<b>77</b>	2 747	1.1	22.86	<b>2KJ1106 - ■ KL13 - ■■ R1</b>		256
	<b>76</b>	<b>91</b>	2 341	1.3	19.48	<b>2KJ1106 - ■ KL13 - ■■ Q1</b>		256
	<b>86</b>	<b>103</b>	2 066	1.5	17.19 ★	<b>2KJ1106 - ■ KL13 - ■■ P1</b>		256
	<b>100</b>	<b>120</b>	1 758	1.8	14.63	<b>2KJ1106 - ■ KL13 - ■■ N1</b>		256
	<b>116</b>	<b>139</b>	1 524	2.0	12.68 ★	<b>2KJ1106 - ■ KL13 - ■■ M1</b>		256
	<b>138</b>	<b>166</b>	1 282	2.4	10.67 ★	<b>2KJ1106 - ■ KL13 - ■■ L1</b>		256
	<b>153</b>	<b>184</b>	1 156	2.7	9.62	<b>2KJ1106 - ■ KL13 - ■■ K1</b>		256
	<b>178</b>	<b>214</b>	994	3.1	8.27 ★	<b>2KJ1106 - ■ KL13 - ■■ J1</b>		256
	<b>207</b>	<b>248</b>	853	2.1	7.10 ★	<b>2KJ1106 - ■ KL13 - ■■ H1</b>		256
	<b>229</b>	<b>275</b>	770	2.3	6.41	<b>2KJ1106 - ■ KL13 - ■■ G1</b>		256
	<b>267</b>	<b>320</b>	662	2.6	5.51 ★	<b>2KJ1106 - ■ KL13 - ■■ E1</b>		256
	<b>281</b>	<b>337</b>	630	1.8	5.24 ★	<b>2KJ1106 - ■ KL13 - ■■ D1</b>		256
	<b>333</b>	<b>400</b>	530	2.2	4.41 ★	<b>2KJ1106 - ■ KL13 - ■■ C1</b>		256
	<b>369</b>	<b>443</b>	478	2.3	3.98	<b>2KJ1106 - ■ KL13 - ■■ B1</b>		256
	<b>430</b>	<b>516</b>	411	2.6	3.42 ★	<b>2KJ1106 - ■ KL13 - ■■ A1</b>		256
	<b>Z.88-LG180ZMB4E</b>							
	<b>85</b>	<b>102</b>	2 076	0.81	17.27	<b>2KJ1105 - ■ KL13 - ■■ M1</b>		210
	<b>100</b>	<b>120</b>	1 758	0.92	14.63	<b>2KJ1105 - ■ KL13 - ■■ L1</b>		210
	<b>115</b>	<b>138</b>	1 532	1.0	12.75 ★	<b>2KJ1105 - ■ KL13 - ■■ K1</b>		210
	<b>135</b>	<b>162</b>	1 304	1.1	10.85	<b>2KJ1105 - ■ KL13 - ■■ J1</b>		210
	<b>159</b>	<b>191</b>	1 113	1.2	9.26 ★	<b>2KJ1105 - ■ KL13 - ■■ H1</b>		210
	<b>194</b>	<b>233</b>	912	1.4	7.59 ★	<b>2KJ1105 - ■ KL13 - ■■ G1</b>		210
	<b>211</b>	<b>253</b>	837	1.5	6.96	<b>2KJ1105 - ■ KL13 - ■■ F1</b>		210
	<b>247</b>	<b>296</b>	714	1.7	5.94 ★	<b>2KJ1105 - ■ KL13 - ■■ E1</b>		210
	<b>302</b>	<b>362</b>	585	1.9	4.87 ★	<b>2KJ1105 - ■ KL13 - ■■ D1</b>		210
	<b>330</b>	<b>396</b>	535	1.5	4.45 ★	<b>2KJ1105 - ■ KL13 - ■■ C1</b>		210
	<b>388</b>	<b>466</b>	456	1.6	3.79 ★	<b>2KJ1105 - ■ KL13 - ■■ B1</b>		210
	<b>473</b>	<b>568</b>	374	1.8	3.11 ★	<b>2KJ1105 - ■ KL13 - ■■ A1</b>		210
	<b>E.148-LG180ZMB4E</b>							
	<b>175</b>	<b>210</b>	1 012	0.99	8.42 ★	<b>2KJ1007 - ■ KL13 - ■■ N1</b>		259

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>18.5</b> (50 Hz)	<b>E.148-LG180ZMB4E</b>							
22.0 (60 Hz)	<b>185</b>	<b>222</b>	955	1.1	7.95	<b>2KJ1007 - ■ KL13 - ■■ M1</b>		259
	<b>206</b>	<b>247</b>	858	1.3	7.14 ★	<b>2KJ1007 - ■ KL13 - ■■ L1</b>		259
	<b>224</b>	<b>269</b>	787	1.5	6.55	<b>2KJ1007 - ■ KL13 - ■■ K1</b>		259
	<b>260</b>	<b>312</b>	679	2.0	5.65	<b>2KJ1007 - ■ KL13 - ■■ J1</b>		259
	<b>298</b>	<b>358</b>	594	2.4	4.94	<b>2KJ1007 - ■ KL13 - ■■ H1</b>		259
	<b>342</b>	<b>410</b>	517	2.6	4.30	<b>2KJ1007 - ■ KL13 - ■■ G1</b>		259
	<b>390</b>	<b>468</b>	453	3.0	3.77 ★	<b>2KJ1007 - ■ KL13 - ■■ F1</b>		259
	<b>461</b>	<b>553</b>	383	4.0	3.19 ★	<b>2KJ1007 - ■ KL13 - ■■ E1</b>		259
	<b>507</b>	<b>608</b>	349	4.0	2.90	<b>2KJ1007 - ■ KL13 - ■■ D1</b>		259
	<b>583</b>	<b>700</b>	303	4.0	2.52 ★	<b>2KJ1007 - ■ KL13 - ■■ C1</b>		259
	<b>687</b>	<b>824</b>	257	4.7	2.14	<b>2KJ1007 - ■ KL13 - ■■ B1</b>		259
	<b>896</b>	<b>1 075</b>	197	4.9	1.64 ★	<b>2KJ1007 - ■ KL13 - ■■ A1</b>		259
	<b>E.128-LG180ZMB4E</b>							
	<b>199</b>	<b>239</b>	886	0.92	7.37 ★	<b>2KJ1006 - ■ KL13 - ■■ P1</b>		235
	<b>212</b>	<b>254</b>	835	1.1	6.95	<b>2KJ1006 - ■ KL13 - ■■ N1</b>		235
	<b>236</b>	<b>283</b>	749	1.2	6.23 ★	<b>2KJ1006 - ■ KL13 - ■■ M1</b>		235
	<b>256</b>	<b>307</b>	691	1.4	5.75	<b>2KJ1006 - ■ KL13 - ■■ L1</b>		235
	<b>299</b>	<b>359</b>	590	1.6	4.91	<b>2KJ1006 - ■ KL13 - ■■ K1</b>		235
	<b>331</b>	<b>397</b>	534	1.9	4.44 ★	<b>2KJ1006 - ■ KL13 - ■■ J1</b>		235
	<b>343</b>	<b>412</b>	514	1.9	4.28	<b>2KJ1006 - ■ KL13 - ■■ H1</b>		235
	<b>397</b>	<b>476</b>	445	2.2	3.70	<b>2KJ1006 - ■ KL13 - ■■ G1</b>		235
	<b>455</b>	<b>546</b>	388	2.6	3.23 ★	<b>2KJ1006 - ■ KL13 - ■■ F1</b>		235
	<b>533</b>	<b>640</b>	332	3.0	2.76 ★	<b>2KJ1006 - ■ KL13 - ■■ E1</b>		235
	<b>595</b>	<b>714</b>	297	3.2	2.47	<b>2KJ1006 - ■ KL13 - ■■ D1</b>		235
	<b>700</b>	<b>840</b>	252	3.4	2.10 ★	<b>2KJ1006 - ■ KL13 - ■■ C1</b>		235
	<b>812</b>	<b>974</b>	218	3.7	1.81	<b>2KJ1006 - ■ KL13 - ■■ B1</b>		235
	<b>1 081</b>	<b>1 297</b>	163	4.2	1.36 ★	<b>2KJ1006 - ■ KL13 - ■■ A1</b>		235
	<b>E.108-LG180ZMB4E</b>							
	<b>269</b>	<b>323</b>	656	1.0	5.46 ★	<b>2KJ1005 - ■ KL13 - ■■ K1</b>		198
	<b>294</b>	<b>353</b>	601	1.1	5.00	<b>2KJ1005 - ■ KL13 - ■■ J1</b>		198
	<b>345</b>	<b>414</b>	512	1.4	4.26	<b>2KJ1005 - ■ KL13 - ■■ H1</b>		198
	<b>391</b>	<b>469</b>	452	1.3	3.76 ★	<b>2KJ1005 - ■ KL13 - ■■ G1</b>		198
	<b>459</b>	<b>551</b>	385	1.9	3.20	<b>2KJ1005 - ■ KL13 - ■■ F1</b>		198
	<b>531</b>	<b>637</b>	333	2.0	2.77 ★	<b>2KJ1005 - ■ KL13 - ■■ E1</b>		198
	<b>631</b>	<b>757</b>	280	2.4	2.33 ★	<b>2KJ1005 - ■ KL13 - ■■ C1</b>		198
	<b>697</b>	<b>836</b>	254	2.4	2.11	<b>2KJ1005 - ■ KL13 - ■■ B1</b>		198
	<b>812</b>	<b>974</b>	218	2.5	1.81 ★	<b>2KJ1005 - ■ KL13 - ■■ A1</b>		198
	<b>E.88-LG180ZMB4E</b>							
	<b>377</b>	<b>452</b>	469	0.82	3.90	<b>2KJ1004 - ■ KL13 - ■■ F1</b>		177
	<b>445</b>	<b>534</b>	397	1.1	3.30	<b>2KJ1004 - ■ KL13 - ■■ E1</b>		177
	<b>510</b>	<b>612</b>	346	1.3	2.88 ★	<b>2KJ1004 - ■ KL13 - ■■ D1</b>		177
	<b>703</b>	<b>844</b>	251	1.7	2.09 ★	<b>2KJ1004 - ■ KL13 - ■■ B1</b>		177
	<b>860</b>	<b>1 032</b>	206	1.7	1.71 ★	<b>2KJ1004 - ■ KL13 - ■■ A1</b>		177

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
22 (50 Hz) 26 (60 Hz)	<b>D.188-LG180ZLB4E</b>							
	9.6	11.5	21 885	0.91	153.12	2KJ1211 - ■ KP13 - ■■ J1		758
	10.9	13.1	19 318	1.0	135.16	2KJ1211 - ■ KP13 - ■■ H1		758
	12.1	14.5	17 390	1.2	121.67 ★	2KJ1211 - ■ KP13 - ■■ G1		758
	14.6	17.5	14 430	1.4	100.96 ★	2KJ1211 - ■ KP13 - ■■ F1		758
	16	19.2	13 158	1.5	92.06	2KJ1211 - ■ KP13 - ■■ E1		758
	18.2	22	11 544	1.7	80.77 ★	2KJ1211 - ■ KP13 - ■■ D1		758
	21	25	9 920	2	69.41	2KJ1211 - ■ KP13 - ■■ C1		758
<b>Z.188-LG180ZLB4E</b>								
28	34	7 482	2.1	52.35	2KJ1111 - ■ KP13 - ■■ P1		724	
30	36	6 892	2.3	48.22	2KJ1111 - ■ KP13 - ■■ N1		724	
<b>D.168-LG180ZLB4E</b>								
13.7	16.4	15 362	0.91	107.48	2KJ1210 - ■ KP13 - ■■ G1		613	
15.6	18.7	13 478	1.0	94.30 ★	2KJ1210 - ■ KP13 - ■■ F1		613	
18.4	22	11 398	1.2	79.75 ★	2KJ1210 - ■ KP13 - ■■ E1		613	
20	24	10 342	1.4	72.36	2KJ1210 - ■ KP13 - ■■ D1		613	
23	28	9 016	1.6	63.08 ★	2KJ1210 - ■ KP13 - ■■ C1		613	
27	32	7 655	1.8	53.56	2KJ1210 - ■ KP13 - ■■ B1		613	
<b>Z.168-LG180ZLB4E</b>								
32	38	6 662	1.5	46.61	2KJ1110 - ■ KP13 - ■■ V1		594	
35	42	6 016	2.3	42.09	2KJ1110 - ■ KP13 - ■■ U1		594	
37	44	5 638	2.5	39.45	2KJ1110 - ■ KP13 - ■■ T1		594	
<b>D.148-LG180ZLB4E</b>								
21	25	9 913	0.81	69.36 ★	2KJ1208 - ■ KP13 - ■■ E1		442	
24	29	8 879	0.9	62.12	2KJ1208 - ■ KP13 - ■■ D1		442	
28	34	7 519	1.1	52.61 ★	2KJ1208 - ■ KP13 - ■■ C1		442	
<b>Z.148-LG180ZLB4E</b>								
33	40	6 447	1.2	45.11 ★	2KJ1108 - ■ KP13 - ■■ W1		430	
34	41	6 087	1.3	42.59	2KJ1108 - ■ KP13 - ■■ V1		430	
38	46	5 464	1.5	38.23 ★	2KJ1108 - ■ KP13 - ■■ U1		430	
42	50	5 015	1.6	35.09	2KJ1108 - ■ KP13 - ■■ T1		430	
48	58	4 328	1.8	30.28	2KJ1108 - ■ KP13 - ■■ S1		430	
56	67	3 786	2.1	26.49	2KJ1108 - ■ KP13 - ■■ R1		430	
64	77	3 293	2.4	23.04	2KJ1108 - ■ KP13 - ■■ Q1		430	
73	88	2 889	2.8	20.21 ★	2KJ1108 - ■ KP13 - ■■ P1		430	
86	103	2 443	3.3	17.09 ★	2KJ1108 - ■ KP13 - ■■ N1		430	
170	204	1 235	3.9	8.64 ★	2KJ1108 - ■ KP13 - ■■ H1		430	
188	226	1 121	4.3	7.84	2KJ1108 - ■ KP13 - ■■ G1		430	
<b>D.128-LG180ZLB4E</b>								
34	41	6 247	0.82	43.71	2KJ1207 - ■ KP13 - ■■ B1		352	
39	47	5 370	0.95	37.57 ★	2KJ1207 - ■ KP13 - ■■ A1		352	
<b>Z.128-LG180ZLB4E</b>								
46	55	4 589	1.1	32.11 ★	2KJ1107 - ■ KP13 - ■■ X1		343	
48	58	4 328	1.2	30.28	2KJ1107 - ■ KP13 - ■■ W1		343	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
22 (50 Hz) 26 (60 Hz)	<b>Z.128-LG180ZLB4E</b>							
	54	65	3 878	1.3	27.13 ★	2KJ1107 - ■ KP13 - ■■ V1		343
	59	71	3 580	1.4	25.05	2KJ1107 - ■ KP13 - ■■ U1		343
	69	83	3 060	1.7	21.41	2KJ1107 - ■ KP13 - ■■ T1		343
	76	91	2 766	1.8	19.35 ★	2KJ1107 - ■ KP13 - ■■ S1		343
	79	95	2 664	1.9	18.64	2KJ1107 - ■ KP13 - ■■ R1		343
	91	109	2 304	2.2	16.12	2KJ1107 - ■ KP13 - ■■ Q1		343
	105	126	2 010	2.4	14.06 ★	2KJ1107 - ■ KP13 - ■■ P1		343
	122	146	1 719	2.7	12.03 ★	2KJ1107 - ■ KP13 - ■■ N1		343
	136	163	1 541	3.0	10.78	2KJ1107 - ■ KP13 - ■■ M1		343
	161	193	1 305	3.4	9.13 ★	2KJ1107 - ■ KP13 - ■■ L1		343
	187	224	1 126	3.8	7.88	2KJ1107 - ■ KP13 - ■■ K1		343
	202	242	1 042	2.4	7.29 ★	2KJ1107 - ■ KP13 - ■■ J1		343
	236	283	892	2.8	6.24 ★	2KJ1107 - ■ KP13 - ■■ H1		343
	248	298	848	4.6	5.93 ★	2KJ1107 - ■ KP13 - ■■ G1		343
	263	316	799	3.3	5.59 ★	2KJ1107 - ■ KP13 - ■■ F1		343
	304	365	690	3.6	4.83	2KJ1107 - ■ KP13 - ■■ E1		343
	311	373	676	3.5	4.73 ★	2KJ1107 - ■ KP13 - ■■ D1		343
	359	431	585	4.0	4.09 ★	2KJ1107 - ■ KP13 - ■■ C1		343
405	486	519	4.5	3.63 ★	2KJ1107 - ■ KP13 - ■■ B1		343	
479	575	439	5.1	3.07 ★	2KJ1107 - ■ KP13 - ■■ A1		343	
<b>Z.108-LG180ZLB4E</b>								
54	65	3 888	0.80	27.20	2KJ1106 - ■ KP13 - ■■ T1		271	
59	71	3 565	0.87	24.94 ★	2KJ1106 - ■ KP13 - ■■ S1		271	
64	77	3 267	0.95	22.86	2KJ1106 - ■ KP13 - ■■ R1		271	
76	91	2 784	1.1	19.48	2KJ1106 - ■ KP13 - ■■ Q1		271	
86	103	2 457	1.3	17.19 ★	2KJ1106 - ■ KP13 - ■■ P1		271	
100	120	2 091	1.5	14.63	2KJ1106 - ■ KP13 - ■■ N1		271	
116	139	1 812	1.7	12.68 ★	2KJ1106 - ■ KP13 - ■■ M1		271	
138	166	1 525	2.0	10.67 ★	2KJ1106 - ■ KP13 - ■■ L1		271	
153	184	1 375	2.3	9.62	2KJ1106 - ■ KP13 - ■■ K1		271	
178	214	1 182	2.6	8.27 ★	2KJ1106 - ■ KP13 - ■■ J1		271	
207	248	1 015	1.8	7.10 ★	2KJ1106 - ■ KP13 - ■■ H1		271	
229	275	916	1.9	6.41	2KJ1106 - ■ KP13 - ■■ G1		271	
267	320	788	2.2	5.51 ★	2KJ1106 - ■ KP13 - ■■ E1		271	
281	337	749	1.5	5.24 ★	2KJ1106 - ■ KP13 - ■■ D1		271	
333	400	630	1.8	4.41 ★	2KJ1106 - ■ KP13 - ■■ C1		271	
369	443	569	2.0	3.98	2KJ1106 - ■ KP13 - ■■ B1		271	
430	516	489	2.2	3.42 ★	2KJ1106 - ■ KP13 - ■■ A1		271	
<b>Z.88-LG180ZLB4E</b>								
115	138	1 822	0.85	12.75 ★	2KJ1105 - ■ KP13 - ■■ K1		225	
135	162	1 551	0.95	10.85	2KJ1105 - ■ KP13 - ■■ J1		225	
159	191	1 323	1.1	9.26 ★	2KJ1105 - ■ KP13 - ■■ H1		225	
194	233	1 085	1.2	7.59 ★	2KJ1105 - ■ KP13 - ■■ G1		225	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
22 (50 Hz) 26 (60 Hz)	<b>Z.88-LG180ZLB4E</b>							
	211	253	995	1.3	6.96	2KJ1105 - ■ KP13 - ■■ F1		225
	247	296	849	1.4	5.94 ★	2KJ1105 - ■ KP13 - ■■ E1		225
	302	362	696	1.6	4.87 ★	2KJ1105 - ■ KP13 - ■■ D1		225
	330	396	636	1.3	4.45 ★	2KJ1105 - ■ KP13 - ■■ C1		225
	388	466	542	1.4	3.79 ★	2KJ1105 - ■ KP13 - ■■ B1		225
	473	568	444	1.5	3.11 ★	2KJ1105 - ■ KP13 - ■■ A1		225
<b>E.148-LG180ZLB4E</b>								
175	210	1 203	0.83	8.42 ★	2KJ1007 - ■ KP13 - ■■ N1		274	
185	222	1 136	0.93	7.95	2KJ1007 - ■ KP13 - ■■ M1		274	
206	247	1 020	1.1	7.14 ★	2KJ1007 - ■ KP13 - ■■ L1		274	
224	269	936	1.2	6.55	2KJ1007 - ■ KP13 - ■■ K1		274	
260	312	808	1.7	5.65	2KJ1007 - ■ KP13 - ■■ J1		274	
298	358	706	2	4.94	2KJ1007 - ■ KP13 - ■■ H1		274	
342	410	615	2.2	4.30	2KJ1007 - ■ KP13 - ■■ G1		274	
390	468	539	2.5	3.77 ★	2KJ1007 - ■ KP13 - ■■ F1		274	
461	553	456	3.4	3.19 ★	2KJ1007 - ■ KP13 - ■■ E1		274	
507	608	414	3.4	2.9	2KJ1007 - ■ KP13 - ■■ D1		274	
583	700	360	3.4	2.52 ★	2KJ1007 - ■ KP13 - ■■ C1		274	
687	824	306	3.9	2.14	2KJ1007 - ■ KP13 - ■■ B1		274	
896	1075	234	4.1	1.64 ★	2KJ1007 - ■ KP13 - ■■ A1		274	
<b>E.128-LG180ZLB4E</b>								
212	254	993	0.89	6.95	2KJ1006 - ■ KP13 - ■■ N1		250	
236	283	890	1.0	6.23 ★	2KJ1006 - ■ KP13 - ■■ M1		250	
256	307	822	1.2	5.75	2KJ1006 - ■ KP13 - ■■ L1		250	
299	359	702	1.4	4.91	2KJ1006 - ■ KP13 - ■■ K1		250	
331	397	635	1.6	4.44 ★	2KJ1006 - ■ KP13 - ■■ J1		250	
343	412	612	1.6	4.28	2KJ1006 - ■ KP13 - ■■ H1		250	
397	476	529	1.9	3.70	2KJ1006 - ■ KP13 - ■■ G1		250	
455	546	462	2.2	3.23 ★	2KJ1006 - ■ KP13 - ■■ F1		250	
533	640	394	2.5	2.76 ★	2KJ1006 - ■ KP13 - ■■ E1		250	
595	714	353	2.7	2.47	2KJ1006 - ■ KP13 - ■■ D1		250	
700	840	300	2.9	2.10 ★	2KJ1006 - ■ KP13 - ■■ C1		250	
812	974	259	3.1	1.81	2KJ1006 - ■ KP13 - ■■ B1		250	
1 081	1 297	194	3.5	1.36 ★	2KJ1006 - ■ KP13 - ■■ A1		250	
<b>E.108-LG180ZLB4E</b>								
269	323	780	0.85	5.46 ★	2KJ1005 - ■ KP13 - ■■ K1		213	
294	353	715	0.95	5.00	2KJ1005 - ■ KP13 - ■■ J1		213	
345	414	609	1.2	4.26	2KJ1005 - ■ KP13 - ■■ H1		213	
391	469	537	1.1	3.76 ★	2KJ1005 - ■ KP13 - ■■ G1		213	
459	551	457	1.6	3.20	2KJ1005 - ■ KP13 - ■■ F1		213	
531	637	396	1.7	2.77 ★	2KJ1005 - ■ KP13 - ■■ E1		213	
631	757	333	2.0	2.33 ★	2KJ1005 - ■ KP13 - ■■ C1		213	
697	836	302	2.1	2.11	2KJ1005 - ■ KP13 - ■■ B1		213	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
22 (50 Hz) 26 (60 Hz)	<b>E.108-LG180ZLB4E</b>							
	<b>812</b>	<b>974</b>	259	2.1	1.81 ★	<b>2KJ1005 - ■ KP13 - ■■ A1</b>		213
	<b>E.88-LG180ZLB4E</b>							
	<b>445</b>	<b>534</b>	472	0.95	3.3	<b>2KJ1004 - ■ KP13 - ■■ E1</b>		192
	<b>510</b>	<b>612</b>	412	1.1	2.88 ★	<b>2KJ1004 - ■ KP13 - ■■ D1</b>		192
	<b>860</b>	<b>1 032</b>	244	1.5	1.71 ★	<b>2KJ1004 - ■ KP13 - ■■ A1</b>		192
30 (50 Hz) 36 (60 Hz)	<b>D.188-LG200LB4E</b>							
	<b>12.1</b>	<b>14.5</b>	23 713	0.84	121.67 ★	<b>2KJ1211 - ■ LM13 - ■■ G1</b>		808
	<b>14.6</b>	<b>17.5</b>	19 677	1.0	100.96 ★	<b>2KJ1211 - ■ LM13 - ■■ F1</b>		808
	<b>16.0</b>	<b>19.2</b>	17 942	1.1	92.06	<b>2KJ1211 - ■ LM13 - ■■ E1</b>		808
	<b>18.2</b>	<b>22</b>	15 742	1.3	80.77 ★	<b>2KJ1211 - ■ LM13 - ■■ D1</b>		808
	<b>21</b>	<b>25</b>	13 528	1.5	69.41	<b>2KJ1211 - ■ LM13 - ■■ C1</b>		808
	<b>27</b>	<b>32</b>	10 536	1.9	54.06 ★	<b>2KJ1211 - ■ LM13 - ■■ B1</b>		808
	<b>34</b>	<b>41</b>	8 371	2.4	42.95 ★	<b>2KJ1211 - ■ LM13 - ■■ A1</b>		808
	<b>Z.188-LG200LB4E</b>							
	<b>28</b>	<b>34</b>	10 203	1.5	52.35	<b>2KJ1111 - ■ LM13 - ■■ P1</b>		774
	<b>30</b>	<b>36</b>	9 398	1.7	48.22	<b>2KJ1111 - ■ LM13 - ■■ N1</b>		774
	<b>35</b>	<b>42</b>	8 156	2.0	41.85 ★	<b>2KJ1111 - ■ LM13 - ■■ M1</b>		774
	<b>40</b>	<b>48</b>	7 190	2.3	36.89	<b>2KJ1111 - ■ LM13 - ■■ L1</b>		774
	<b>D.168-LG200LB4E</b>							
	<b>18.4</b>	<b>22</b>	15 543	0.90	79.75 ★	<b>2KJ1210 - ■ LM13 - ■■ E1</b>		663
	<b>20</b>	<b>24</b>	14 103	0.99	72.36	<b>2KJ1210 - ■ LM13 - ■■ D1</b>		663
	<b>23</b>	<b>28</b>	12 294	1.1	63.08 ★	<b>2KJ1210 - ■ LM13 - ■■ C1</b>		663
	<b>27</b>	<b>32</b>	10 439	1.3	53.56	<b>2KJ1210 - ■ LM13 - ■■ B1</b>		663
	<b>Z.168-LG200LB4E</b>							
	<b>32</b>	<b>38</b>	9 084	1.1	46.61	<b>2KJ1110 - ■ LM13 - ■■ V1</b>		644
<b>35</b>	<b>42</b>	8 203	1.7	42.09	<b>2KJ1110 - ■ LM13 - ■■ U1</b>		644	
<b>37</b>	<b>44</b>	7 689	1.8	39.45	<b>2KJ1110 - ■ LM13 - ■■ T1</b>		644	
<b>43</b>	<b>52</b>	6 603	2.1	33.88 ★	<b>2KJ1110 - ■ LM13 - ■■ S1</b>		644	
<b>50</b>	<b>60</b>	5 705	2.5	29.27	<b>2KJ1110 - ■ LM13 - ■■ Q1</b>		644	
<b>57</b>	<b>68</b>	5 036	2.8	25.84	<b>2KJ1110 - ■ LM13 - ■■ P1</b>		644	
<b>Z.148-LG200LB4E</b>								
<b>33</b>	<b>40</b>	8 792	0.91	45.11 ★	<b>2KJ1108 - ■ LM13 - ■■ W1</b>		480	
<b>34</b>	<b>41</b>	8 301	0.96	42.59	<b>2KJ1108 - ■ LM13 - ■■ V1</b>		480	
<b>38</b>	<b>46</b>	7 451	1.1	38.23 ★	<b>2KJ1108 - ■ LM13 - ■■ U1</b>		480	
<b>42</b>	<b>50</b>	6 839	1.2	35.09	<b>2KJ1108 - ■ LM13 - ■■ T1</b>		480	
<b>48</b>	<b>58</b>	5 902	1.4	30.28	<b>2KJ1108 - ■ LM13 - ■■ S1</b>		480	
<b>56</b>	<b>67</b>	5 163	1.5	26.49	<b>2KJ1108 - ■ LM13 - ■■ R1</b>		480	
<b>64</b>	<b>77</b>	4 490	1.8	23.04	<b>2KJ1108 - ■ LM13 - ■■ Q1</b>		480	
<b>73</b>	<b>88</b>	3 939	2.0	20.21 ★	<b>2KJ1108 - ■ LM13 - ■■ P1</b>		480	
<b>86</b>	<b>103</b>	3 331	2.4	17.09 ★	<b>2KJ1108 - ■ LM13 - ■■ N1</b>		480	
<b>95</b>	<b>114</b>	3 023	2.6	15.51	<b>2KJ1108 - ■ LM13 - ■■ M1</b>		480	
<b>109</b>	<b>131</b>	2 635	3.0	13.52 ★	<b>2KJ1108 - ■ LM13 - ■■ L1</b>		480	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
30 (50 Hz) 36 (60 Hz)	<b>Z.148-LG200LB4E</b>							
	128	154	2 237	3.6	11.48	2KJ1108 - ■LM13 - ■■K1		480
	170	204	1 684	2.9	8.64 ★	2KJ1108 - ■LM13 - ■■H1		480
	188	226	1 528	3.1	7.84	2KJ1108 - ■LM13 - ■■G1		480
	194	233	1 475	3.8	7.57 ★	2KJ1108 - ■LM13 - ■■F1		480
	215	258	1 333	3.6	6.84 ★	2KJ1108 - ■LM13 - ■■E1		480
	229	275	1 253	4.3	6.43	2KJ1108 - ■LM13 - ■■D1		480
	253	304	1 130	3.7	5.80	2KJ1108 - ■LM13 - ■■C1		480
	331	397	865	4.4	4.44 ★	2KJ1108 - ■LM13 - ■■A1		480
<b>Z.128-LG200LB4E</b>								
46	55	6 258	0.81	32.11 ★	2KJ1107 - ■LM13 - ■■X1		393	
48	58	5 902	0.86	30.28	2KJ1107 - ■LM13 - ■■W1		393	
54	65	5 288	0.96	27.13 ★	2KJ1107 - ■LM13 - ■■V1		393	
59	71	4 882	1.0	25.05	2KJ1107 - ■LM13 - ■■U1		393	
69	83	4 173	1.2	21.41	2KJ1107 - ■LM13 - ■■T1		393	
76	91	3 771	1.4	19.35 ★	2KJ1107 - ■LM13 - ■■S1		393	
79	95	3 633	1.4	18.64	2KJ1107 - ■LM13 - ■■R1		393	
91	109	3 142	1.6	16.12	2KJ1107 - ■LM13 - ■■Q1		393	
105	126	2 740	1.8	14.06 ★	2KJ1107 - ■LM13 - ■■P1		393	
122	146	2 345	2.0	12.03 ★	2KJ1107 - ■LM13 - ■■N1		393	
136	163	2 101	2.2	10.78	2KJ1107 - ■LM13 - ■■M1		393	
161	193	1 779	2.5	9.13 ★	2KJ1107 - ■LM13 - ■■L1		393	
187	224	1 536	2.8	7.88	2KJ1107 - ■LM13 - ■■K1		393	
202	242	1 421	1.8	7.29 ★	2KJ1107 - ■LM13 - ■■J1		393	
236	283	1 216	2.1	6.24 ★	2KJ1107 - ■LM13 - ■■H1		393	
248	298	1 156	3.4	5.93 ★	2KJ1107 - ■LM13 - ■■G1		393	
263	316	1 089	2.4	5.59 ★	2KJ1107 - ■LM13 - ■■F1		393	
304	365	941	2.7	4.83	2KJ1107 - ■LM13 - ■■E1		393	
311	373	922	2.6	4.73 ★	2KJ1107 - ■LM13 - ■■D1		393	
359	431	797	3.0	4.09 ★	2KJ1107 - ■LM13 - ■■C1		393	
405	486	707	3.3	3.63 ★	2KJ1107 - ■LM13 - ■■B1		393	
479	575	598	3.7	3.07 ★	2KJ1107 - ■LM13 - ■■A1		393	
<b>Z.108-LG200LB4E</b>								
76	91	3 797	0.82	19.48	2KJ1106 - ■LM13 - ■■Q1		321	
86	103	3 350	0.93	17.19 ★	2KJ1106 - ■LM13 - ■■P1		321	
100	120	2 851	1.1	14.63	2KJ1106 - ■LM13 - ■■N1		321	
116	139	2 471	1.3	12.68 ★	2KJ1106 - ■LM13 - ■■M1		321	
138	166	2 080	1.5	10.67 ★	2KJ1106 - ■LM13 - ■■L1		321	
153	184	1 875	1.7	9.62	2KJ1106 - ■LM13 - ■■K1		321	
178	214	1 612	1.9	8.27 ★	2KJ1106 - ■LM13 - ■■J1		321	
207	248	1 384	1.3	7.10 ★	2KJ1106 - ■LM13 - ■■H1		321	
229	275	1 249	1.4	6.41	2KJ1106 - ■LM13 - ■■G1		321	
267	320	1 074	1.6	5.51 ★	2KJ1106 - ■LM13 - ■■E1		321	
281	337	1 021	1.1	5.24 ★	2KJ1106 - ■LM13 - ■■D1		321	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
30 (50 Hz) 36 (60 Hz)	<b>Z.108-LG200LB4E</b>							
	<b>333</b>	<b>400</b>	860	1.3	4.41 ★	<b>2KJ1106 - LM13 - C1</b>		321
	<b>369</b>	<b>443</b>	776	1.4	3.98	<b>2KJ1106 - LM13 - B1</b>		321
	<b>430</b>	<b>516</b>	667	1.6	3.42 ★	<b>2KJ1106 - LM13 - A1</b>		321
<b>E.148-LG200LB4E</b>								
	<b>206</b>	<b>247</b>	1 392	0.8	7.14 ★	<b>2KJ1007 - LM13 - L1</b>		324
	<b>224</b>	<b>269</b>	1 277	0.9	6.55	<b>2KJ1007 - LM13 - K1</b>		324
	<b>260</b>	<b>312</b>	1 101	1.2	5.65	<b>2KJ1007 - LM13 - J1</b>		324
	<b>298</b>	<b>358</b>	963	1.5	4.94	<b>2KJ1007 - LM13 - H1</b>		324
	<b>342</b>	<b>410</b>	838	1.6	4.30	<b>2KJ1007 - LM13 - G1</b>		324
	<b>390</b>	<b>468</b>	735	1.8	3.77 ★	<b>2KJ1007 - LM13 - F1</b>		324
	<b>461</b>	<b>553</b>	622	2.5	3.19 ★	<b>2KJ1007 - LM13 - E1</b>		324
	<b>507</b>	<b>608</b>	565	2.5	2.90	<b>2KJ1007 - LM13 - D1</b>		324
	<b>583</b>	<b>700</b>	491	2.5	2.52 ★	<b>2KJ1007 - LM13 - C1</b>		324
	<b>687</b>	<b>824</b>	417	2.9	2.14	<b>2KJ1007 - LM13 - B1</b>		324
	<b>896</b>	<b>1 075</b>	320	3.0	1.64 ★	<b>2KJ1007 - LM13 - A1</b>		324
<b>E.128-LG200LB4E</b>								
	<b>256</b>	<b>307</b>	1 121	0.86	5.75	<b>2KJ1006 - LM13 - L1</b>		300
	<b>299</b>	<b>359</b>	957	1.0	4.91	<b>2KJ1006 - LM13 - K1</b>		300
	<b>331</b>	<b>397</b>	865	1.2	4.44 ★	<b>2KJ1006 - LM13 - J1</b>		300
	<b>343</b>	<b>412</b>	834	1.2	4.28	<b>2KJ1006 - LM13 - H1</b>		300
	<b>397</b>	<b>476</b>	721	1.4	3.70	<b>2KJ1006 - LM13 - G1</b>		300
	<b>455</b>	<b>546</b>	630	1.6	3.23 ★	<b>2KJ1006 - LM13 - F1</b>		300
	<b>533</b>	<b>640</b>	538	1.9	2.76 ★	<b>2KJ1006 - LM13 - E1</b>		300
	<b>595</b>	<b>714</b>	481	2.0	2.47	<b>2KJ1006 - LM13 - D1</b>		300
	<b>700</b>	<b>840</b>	409	2.1	2.10 ★	<b>2KJ1006 - LM13 - C1</b>		300
	<b>812</b>	<b>974</b>	353	2.3	1.81	<b>2KJ1006 - LM13 - B1</b>		300
	<b>1 081</b>	<b>1 297</b>	265	2.6	1.36 ★	<b>2KJ1006 - LM13 - A1</b>		300
<b>E.108-LG200LB4E</b>								
	<b>345</b>	<b>414</b>	830	0.87	4.26	<b>2KJ1005 - LM13 - H1</b>		263
	<b>391</b>	<b>469</b>	733	0.82	3.76 ★	<b>2KJ1005 - LM13 - G1</b>		263
	<b>459</b>	<b>551</b>	624	1.2	3.20	<b>2KJ1005 - LM13 - F1</b>		263
	<b>531</b>	<b>637</b>	540	1.2	2.77 ★	<b>2KJ1005 - LM13 - E1</b>		263
	<b>631</b>	<b>757</b>	454	1.5	2.33 ★	<b>2KJ1005 - LM13 - C1</b>		263
	<b>697</b>	<b>836</b>	411	1.5	2.11	<b>2KJ1005 - LM13 - B1</b>		263
	<b>812</b>	<b>974</b>	353	1.6	1.81 ★	<b>2KJ1005 - LM13 - A1</b>		263
37 (50 Hz) 44 (60 Hz)	<b>D.188-LG225S4E</b>							
	<b>14.7</b>	<b>17.6</b>	24 104	0.83	100.96 ★	<b>2KJ1211 - ME13 - F1</b>		888
	<b>16.1</b>	<b>19.3</b>	21 979	0.91	92.06	<b>2KJ1211 - ME13 - E1</b>		888
	<b>18.3</b>	<b>22</b>	19 284	1.0	80.77 ★	<b>2KJ1211 - ME13 - D1</b>		888
	<b>21</b>	<b>25</b>	16 572	1.2	69.41	<b>2KJ1211 - ME13 - C1</b>		888
	<b>27</b>	<b>32</b>	12 907	1.5	54.06 ★	<b>2KJ1211 - ME13 - B1</b>		888
	<b>34</b>	<b>41</b>	10 254	2.0	42.95 ★	<b>2KJ1211 - ME13 - A1</b>		888

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R



# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
37 (50 Hz) 44 (60 Hz)	<b>Z.188-LG225S4E</b>							
	28	34	12 499	1.3	52.35	2KJ1111 - ■ME13 - ■■P1		854
	31	37	11 513	1.4	48.22	2KJ1111 - ■ME13 - ■■N1		854
	35	42	9 992	1.6	41.85 ★	2KJ1111 - ■ME13 - ■■M1		854
	40	48	8 807	1.9	36.89	2KJ1111 - ■ME13 - ■■L1		854
	46	55	7 728	2.4	32.37	2KJ1111 - ■ME13 - ■■K1		854
	<b>D.168-LG225S4E</b>							
	20	24	17 276	0.81	72.36	2KJ1210 - ■ME13 - ■■D1		743
	24	29	15 060	0.93	63.08 ★	2KJ1210 - ■ME13 - ■■C1		743
	28	34	12 787	1.1	53.56	2KJ1210 - ■ME13 - ■■B1		743
	<b>Z.168-LG225S4E</b>							
	35	42	10 049	1.4	42.09	2KJ1110 - ■ME13 - ■■U1		724
	38	46	9 419	1.5	39.45	2KJ1110 - ■ME13 - ■■T1		724
	44	53	8 089	1.7	33.88 ★	2KJ1110 - ■ME13 - ■■S1		724
	51	61	6 988	2.0	29.27	2KJ1110 - ■ME13 - ■■Q1		724
	57	68	6 169	2.3	25.84	2KJ1110 - ■ME13 - ■■P1		724
	64	77	5 553	2.5	23.26 ★	2KJ1110 - ■ME13 - ■■N1		724
	77	92	4 608	3.0	19.30 ★	2KJ1110 - ■ME13 - ■■M1		724
	84	101	4 202	3.3	17.60	2KJ1110 - ■ME13 - ■■L1		724
	160	192	2 211	3.6	9.26 ★	2KJ1110 - ■ME13 - ■■G1		724
	206	247	1 719	4.1	7.20 ★	2KJ1110 - ■ME13 - ■■E1		724
	<b>Z.148-LG225S4E</b>							
	39	47	9 127	0.88	38.23 ★	2KJ1108 - ■ME13 - ■■U1		560
	42	50	8 378	0.95	35.09	2KJ1108 - ■ME13 - ■■T1		560
	49	59	7 229	1.1	30.28	2KJ1108 - ■ME13 - ■■S1		560
	56	67	6 324	1.3	26.49	2KJ1108 - ■ME13 - ■■R1		560
	64	77	5 501	1.5	23.04	2KJ1108 - ■ME13 - ■■Q1		560
	73	88	4 825	1.7	20.21 ★	2KJ1108 - ■ME13 - ■■P1		560
	87	104	4 080	2.0	17.09 ★	2KJ1108 - ■ME13 - ■■N1		560
	95	114	3 703	2.2	15.51	2KJ1108 - ■ME13 - ■■M1		560
	109	131	3 228	2.5	13.52 ★	2KJ1108 - ■ME13 - ■■L1		560
	129	155	2 741	2.9	11.48	2KJ1108 - ■ME13 - ■■K1		560
	168	202	2 099	3.8	8.79 ★	2KJ1108 - ■ME13 - ■■J1		560
	171	205	2 063	2.3	8.64 ★	2KJ1108 - ■ME13 - ■■H1		560
	189	227	1 872	2.6	7.84	2KJ1108 - ■ME13 - ■■G1		560
	196	235	1 807	3.1	7.57 ★	2KJ1108 - ■ME13 - ■■F1		560
	216	259	1 633	2.9	6.84 ★	2KJ1108 - ■ME13 - ■■E1		560
	230	276	1 535	3.5	6.43	2KJ1108 - ■ME13 - ■■D1		560
	255	306	1 385	3.0	5.80	2KJ1108 - ■ME13 - ■■C1		560
	301	361	1 175	4.3	4.92 ★	2KJ1108 - ■ME13 - ■■B1		560
	333	400	1 060	3.6	4.44 ★	2KJ1108 - ■ME13 - ■■A1		560
	<b>Z.128-LG225S4E</b>							
	59	71	5 981	0.85	25.05	2KJ1107 - ■ME13 - ■■U1		473
	69	83	5 112	1.0	21.41	2KJ1107 - ■ME13 - ■■T1		473

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
37 (50 Hz) 44 (60 Hz)	<b>Z.128-LG225S4E</b>							
	76	91	4 620	1.1	19.35 ★	2KJ1107 - ■ME13 - ■■S1		473
	79	95	4 450	1.1	18.64	2KJ1107 - ■ME13 - ■■R1		473
	92	110	3 849	1.3	16.12	2KJ1107 - ■ME13 - ■■Q1		473
	105	126	3 357	1.5	14.06 ★	2KJ1107 - ■ME13 - ■■P1		473
	123	148	2 872	1.6	12.03 ★	2KJ1107 - ■ME13 - ■■N1		473
	137	164	2 574	1.8	10.78	2KJ1107 - ■ME13 - ■■M1		473
	162	194	2 180	2.0	9.13 ★	2KJ1107 - ■ME13 - ■■L1		473
	188	226	1 881	2.3	7.88	2KJ1107 - ■ME13 - ■■K1		473
	203	244	1 740	1.5	7.29 ★	2KJ1107 - ■ME13 - ■■J1		473
	237	284	1 490	1.7	6.24 ★	2KJ1107 - ■ME13 - ■■H1		473
	250	300	1 416	2.8	5.93 ★	2KJ1107 - ■ME13 - ■■G1		473
	265	318	1 335	2.0	5.59 ★	2KJ1107 - ■ME13 - ■■F1		473
	306	367	1 153	2.2	4.83	2KJ1107 - ■ME13 - ■■E1		473
	313	376	1 129	2.1	4.73 ★	2KJ1107 - ■ME13 - ■■D1		473
	362	434	976	2.4	4.09 ★	2KJ1107 - ■ME13 - ■■C1		473
	408	490	867	2.7	3.63 ★	2KJ1107 - ■ME13 - ■■B1		473
482	578	733	3.0	3.07 ★	2KJ1107 - ■ME13 - ■■A1		473	
<b>Z.108-K4-LG1225S4E</b>								
101	121	3 493	0.89	14.63	2KJ1106 - ■ME13 - ■■N1		401	
117	140	3 027	1.00	12.68 ★	2KJ1106 - ■ME13 - ■■M1		401	
139	167	2 547	1.20	10.67 ★	2KJ1106 - ■ME13 - ■■L1		401	
154	185	2 297	1.30	9.62	2KJ1106 - ■ME13 - ■■K1		401	
179	215	1 974	1.60	8.27 ★	2KJ1106 - ■ME13 - ■■J1		401	
208	250	1 695	1.10	7.10 ★	2KJ1106 - ■ME13 - ■■H1		401	
231	277	1 530	1.20	6.41	2KJ1106 - ■ME13 - ■■G1		401	
269	323	1 316	1.30	5.51 ★	2KJ1106 - ■ME13 - ■■E1		401	
282	338	1 251	0.91	5.24 ★	2KJ1106 - ■ME13 - ■■D1		401	
336	403	1 053	1.1	4.41 ★	2KJ1106 - ■ME13 - ■■C1		401	
372	446	950	1.2	3.98	2KJ1106 - ■ME13 - ■■B1		401	
433	520	817	1.3	3.42 ★	2KJ1106 - ■ME13 - ■■A1		401	
<b>E.148-LG225S4E</b>								
262	314	1 349	1.0	5.65	2KJ1007 - ■ME13 - ■■J1		404	
300	360	1 179	1.2	4.94	2KJ1007 - ■ME13 - ■■H1		404	
344	413	1 027	1.3	4.30	2KJ1007 - ■ME13 - ■■G1		404	
393	472	900	1.5	3.77 ★	2KJ1007 - ■ME13 - ■■F1		404	
464	557	762	2.0	3.19 ★	2KJ1007 - ■ME13 - ■■E1		404	
510	612	692	2.0	2.90	2KJ1007 - ■ME13 - ■■D1		404	
587	704	602	2.0	2.52 ★	2KJ1007 - ■ME13 - ■■C1		404	
692	830	511	2.3	2.14	2KJ1007 - ■ME13 - ■■B1		404	
902	1 082	392	2.5	1.64 ★	2KJ1007 - ■ME13 - ■■A1		404	
<b>E.128-LG225S4E</b>								
301	361	1 172	0.82	4.91	2KJ1006 - ■ME13 - ■■K1		380	
333	400	1 060	0.94	4.44 ★	2KJ1006 - ■ME13 - ■■J1		380	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg	
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm							
37 (50 Hz) 44 (60 Hz)	<b>E.128-LG225S4E</b>								
		<b>346</b>	<b>415</b>	1 022	0.98	4.28	<b>2KJ1006 - ■ME13 - ■■H1</b>	380	
		<b>400</b>	<b>480</b>	883	1.1	3.70	<b>2KJ1006 - ■ME13 - ■■G1</b>	380	
		<b>458</b>	<b>550</b>	771	1.3	3.23 ★	<b>2KJ1006 - ■ME13 - ■■F1</b>	380	
		<b>536</b>	<b>643</b>	659	1.5	2.76 ★	<b>2KJ1006 - ■ME13 - ■■E1</b>	380	
		<b>599</b>	<b>719</b>	590	1.6	2.47	<b>2KJ1006 - ■ME13 - ■■D1</b>	380	
		<b>705</b>	<b>846</b>	501	1.7	2.10 ★	<b>2KJ1006 - ■ME13 - ■■C1</b>	380	
		<b>818</b>	<b>982</b>	432	1.9	1.81	<b>2KJ1006 - ■ME13 - ■■B1</b>	380	
		<b>1 088</b>	<b>1 306</b>	325	2.1	1.36 ★	<b>2KJ1006 - ■ME13 - ■■A1</b>	380	
		<b>E.108-K4-LG1225S4E</b>							
	<b>462</b>	<b>554</b>	764	0.98	3.2	<b>2KJ1005 - ■ME13 - ■■F1</b>	343		
	<b>534</b>	<b>641</b>	661	1.0	2.77 ★	<b>2KJ1005 - ■ME13 - ■■E1</b>	343		
45 (50 Hz) 54 (60 Hz)	<b>D.188-LG225ZM4E</b>								
		<b>18.3</b>	<b>22</b>	23 453	0.85	80.77 ★	<b>2KJ1211 - ■MU13 - ■■D1</b>	888	
		<b>21</b>	<b>25</b>	20 155	0.99	69.41	<b>2KJ1211 - ■MU13 - ■■C1</b>	888	
		<b>27</b>	<b>32</b>	15 697	1.3	54.06 ★	<b>2KJ1211 - ■MU13 - ■■B1</b>	888	
		<b>34</b>	<b>41</b>	12 471	1.6	42.95 ★	<b>2KJ1211 - ■MU13 - ■■A1</b>	888	
		<b>Z.188-LG225ZM4E</b>							
		<b>28</b>	<b>34</b>	15 201	1.0	52.35	<b>2KJ1111 - ■MU13 - ■■P1</b>	854	
		<b>31</b>	<b>37</b>	14 002	1.1	48.22	<b>2KJ1111 - ■MU13 - ■■N1</b>	854	
		<b>35</b>	<b>42</b>	12 152	1.3	41.85 ★	<b>2KJ1111 - ■MU13 - ■■M1</b>	854	
		<b>40</b>	<b>48</b>	10 712	1.5	36.89	<b>2KJ1111 - ■MU13 - ■■L1</b>	854	
	<b>46</b>	<b>55</b>	9 399	2.0	32.37	<b>2KJ1111 - ■MU13 - ■■K1</b>	854		
	<b>51</b>	<b>61</b>	8 473	2.4	29.18 ★	<b>2KJ1111 - ■MU13 - ■■J1</b>	854		
	<b>60</b>	<b>72</b>	7 193	2.8	24.77 ★	<b>2KJ1111 - ■MU13 - ■■H1</b>	854		
	<b>64</b>	<b>77</b>	6 681	3.0	23.01	<b>2KJ1111 - ■MU13 - ■■G1</b>	854		
	<b>D.168-LG225ZM4E</b>								
	<b>28</b>	<b>34</b>	15 552	0.9	53.56	<b>2KJ1210 - ■MU13 - ■■B1</b>	743		
	<b>Z.168-LG225ZM4E</b>								
	<b>35</b>	<b>42</b>	12 222	1.1	42.09	<b>2KJ1110 - ■MU13 - ■■U1</b>	724		
	<b>38</b>	<b>46</b>	11 455	1.2	39.45	<b>2KJ1110 - ■MU13 - ■■T1</b>	724		
	<b>44</b>	<b>53</b>	9 838	1.4	33.88 ★	<b>2KJ1110 - ■MU13 - ■■S1</b>	724		
	<b>51</b>	<b>61</b>	8 499	1.6	29.27	<b>2KJ1110 - ■MU13 - ■■Q1</b>	724		
	<b>57</b>	<b>68</b>	7 503	1.9	25.84	<b>2KJ1110 - ■MU13 - ■■P1</b>	724		
	<b>64</b>	<b>77</b>	6 754	2.1	23.26 ★	<b>2KJ1110 - ■MU13 - ■■N1</b>	724		
	<b>77</b>	<b>92</b>	5 604	2.5	19.30 ★	<b>2KJ1110 - ■MU13 - ■■M1</b>	724		
	<b>84</b>	<b>101</b>	5 111	2.7	17.60	<b>2KJ1110 - ■MU13 - ■■L1</b>	724		
	<b>96</b>	<b>115</b>	4 483	3.0	15.44 ★	<b>2KJ1110 - ■MU13 - ■■K1</b>	724		
	<b>112</b>	<b>134</b>	3 853	3.4	13.27	<b>2KJ1110 - ■MU13 - ■■J1</b>	724		
	<b>160</b>	<b>192</b>	2 689	2.9	9.26 ★	<b>2KJ1110 - ■MU13 - ■■G1</b>	724		
	<b>206</b>	<b>247</b>	2 091	3.4	7.20 ★	<b>2KJ1110 - ■MU13 - ■■E1</b>	724		
	<b>239</b>	<b>287</b>	1 800	4.2	6.20 ★	<b>2KJ1110 - ■MU13 - ■■D1</b>	724		
	<b>264</b>	<b>317</b>	1 629	4.2	5.61 ★	<b>2KJ1110 - ■MU13 - ■■C1</b>	724		

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
45 (50 Hz) 54 (60 Hz)	<b>Z.168-LG225ZM4E</b>							
	<b>300</b>	<b>360</b>	1 432	4.9	4.93 ★	<b>2KJ1110 - ■MU13 - ■■B1</b>		724
	<b>332</b>	<b>398</b>	1 295	5.0	4.46 ★	<b>2KJ1110 - ■MU13 - ■■A1</b>		724
	<b>D.148-LG225ZM4E</b>							
	<b>43</b>	<b>52</b>	9 916	0.81	34.15 ★	<b>2KJ1208 - ■MU13 - ■■A1</b>		572
	<b>Z.148-LG225ZM4E</b>							
	<b>49</b>	<b>59</b>	8 792	0.91	30.28	<b>2KJ1108 - ■MU13 - ■■S1</b>		560
	<b>56</b>	<b>67</b>	7 692	1.0	26.49	<b>2KJ1108 - ■MU13 - ■■R1</b>		560
	<b>64</b>	<b>77</b>	6 690	1.2	23.04	<b>2KJ1108 - ■MU13 - ■■Q1</b>		560
	<b>73</b>	<b>88</b>	5 868	1.4	20.21 ★	<b>2KJ1108 - ■MU13 - ■■P1</b>		560
	<b>87</b>	<b>104</b>	4 962	1.6	17.09 ★	<b>2KJ1108 - ■MU13 - ■■N1</b>		560
	<b>95</b>	<b>114</b>	4 504	1.8	15.51	<b>2KJ1108 - ■MU13 - ■■M1</b>		560
	<b>109</b>	<b>131</b>	3 926	2.0	13.52 ★	<b>2KJ1108 - ■MU13 - ■■L1</b>		560
	<b>129</b>	<b>155</b>	3 333	2.4	11.48	<b>2KJ1108 - ■MU13 - ■■K1</b>		560
	<b>168</b>	<b>202</b>	2 552	3.1	8.79 ★	<b>2KJ1108 - ■MU13 - ■■J1</b>		560
	<b>171</b>	<b>205</b>	2 509	1.9	8.64 ★	<b>2KJ1108 - ■MU13 - ■■H1</b>		560
	<b>189</b>	<b>227</b>	2 277	2.1	7.84	<b>2KJ1108 - ■MU13 - ■■G1</b>		560
	<b>196</b>	<b>235</b>	2 198	2.5	7.57 ★	<b>2KJ1108 - ■MU13 - ■■F1</b>		560
	<b>216</b>	<b>259</b>	1 986	2.4	6.84 ★	<b>2KJ1108 - ■MU13 - ■■E1</b>		560
	<b>230</b>	<b>276</b>	1 867	2.9	6.43	<b>2KJ1108 - ■MU13 - ■■D1</b>		560
	<b>255</b>	<b>306</b>	1 684	2.5	5.80	<b>2KJ1108 - ■MU13 - ■■C1</b>		560
	<b>301</b>	<b>361</b>	1 429	3.5	4.92 ★	<b>2KJ1108 - ■MU13 - ■■B1</b>		560
	<b>333</b>	<b>400</b>	1 289	3.0	4.44 ★	<b>2KJ1108 - ■MU13 - ■■A1</b>		560
	<b>Z.128-LG225ZM4E</b>							
	<b>69</b>	<b>83</b>	6 217	0.82	21.41	<b>2KJ1107 - ■MU13 - ■■T1</b>		473
	<b>76</b>	<b>91</b>	5 619	0.91	19.35 ★	<b>2KJ1107 - ■MU13 - ■■S1</b>		473
	<b>79</b>	<b>95</b>	5 413	0.94	18.64	<b>2KJ1107 - ■MU13 - ■■R1</b>		473
	<b>92</b>	<b>110</b>	4 681	1.1	16.12	<b>2KJ1107 - ■MU13 - ■■Q1</b>		473
	<b>105</b>	<b>126</b>	4 083	1.2	14.06 ★	<b>2KJ1107 - ■MU13 - ■■P1</b>		473
	<b>123</b>	<b>148</b>	3 493	1.4	12.03 ★	<b>2KJ1107 - ■MU13 - ■■N1</b>		473
	<b>137</b>	<b>164</b>	3 130	1.5	10.78	<b>2KJ1107 - ■MU13 - ■■M1</b>		473
	<b>162</b>	<b>194</b>	2 651	1.7	9.13 ★	<b>2KJ1107 - ■MU13 - ■■L1</b>		473
	<b>188</b>	<b>226</b>	2 288	1.9	7.88	<b>2KJ1107 - ■MU13 - ■■K1</b>		473
	<b>203</b>	<b>244</b>	2 117	1.2	7.29 ★	<b>2KJ1107 - ■MU13 - ■■J1</b>		473
	<b>237</b>	<b>284</b>	1 812	1.4	6.24 ★	<b>2KJ1107 - ■MU13 - ■■H1</b>		473
	<b>250</b>	<b>300</b>	1 722	2.3	5.93 ★	<b>2KJ1107 - ■MU13 - ■■G1</b>		473
	<b>265</b>	<b>318</b>	1 623	1.6	5.59 ★	<b>2KJ1107 - ■MU13 - ■■F1</b>		473
	<b>306</b>	<b>367</b>	1 402	1.8	4.83	<b>2KJ1107 - ■MU13 - ■■E1</b>		473
	<b>313</b>	<b>376</b>	1 373	1.7	4.73 ★	<b>2KJ1107 - ■MU13 - ■■D1</b>		473
	<b>362</b>	<b>434</b>	1 188	2.0	4.09 ★	<b>2KJ1107 - ■MU13 - ■■C1</b>		473
	<b>408</b>	<b>490</b>	1 054	2.2	3.63 ★	<b>2KJ1107 - ■MU13 - ■■B1</b>		473
	<b>482</b>	<b>578</b>	891	2.5	3.07 ★	<b>2KJ1107 - ■MU13 - ■■A1</b>		473
	<b>Z.108-K4-LG1225ZM4E</b>							
	<b>117</b>	<b>140</b>	3 682	0.84	12.68 ★	<b>2KJ1106 - ■MU13 - ■■M1</b>		401

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
45 (50 Hz) 54 (60 Hz)	<b>Z.108-K4-LG1225ZM4E</b>							
	139	167	3 098	1.00	10.67 ★	2KJ1106 - ■MU13 - ■■L1		401
	154	185	2 793	1.10	9.62	2KJ1106 - ■MU13 - ■■K1		401
	179	215	2 401	1.30	8.27 ★	2KJ1106 - ■MU13 - ■■J1		401
	208	250	2 062	0.87	7.10 ★	2KJ1106 - ■MU13 - ■■H1		401
	231	277	1 861	0.95	6.41	2KJ1106 - ■MU13 - ■■G1		401
	269	323	1 600	1.10	5.51 ★	2KJ1106 - ■MU13 - ■■E1		401
	336	403	1 281	0.89	4.41 ★	2KJ1106 - ■MU13 - ■■C1		401
	372	446	1 156	0.97	3.98	2KJ1106 - ■MU13 - ■■B1		401
	433	520	993	1.10	3.42 ★	2KJ1106 - ■MU13 - ■■A1		401
<b>E.148-LG225ZM4E</b>								
262	314	1 641	0.83	5.65	2KJ1007 - ■MU13 - ■■J1		404	
300	360	1 434	0.98	4.94	2KJ1007 - ■MU13 - ■■H1		404	
344	413	1 249	1.1	4.30	2KJ1007 - ■MU13 - ■■G1		404	
393	472	1 095	1.2	3.77 ★	2KJ1007 - ■MU13 - ■■F1		404	
464	557	926	1.7	3.19 ★	2KJ1007 - ■MU13 - ■■E1		404	
510	612	842	1.7	2.90	2KJ1007 - ■MU13 - ■■D1		404	
587	704	732	1.7	2.52 ★	2KJ1007 - ■MU13 - ■■C1		404	
692	830	621	1.9	2.14	2KJ1007 - ■MU13 - ■■B1		404	
902	1 082	476	2.0	1.64 ★	2KJ1007 - ■MU13 - ■■A1		404	
<b>E.128-LG225ZM4E</b>								
346	415	1 243	0.80	4.28	2KJ1006 - ■MU13 - ■■H1		380	
400	480	1 074	0.93	3.70	2KJ1006 - ■MU13 - ■■G1		380	
458	550	938	1.1	3.23 ★	2KJ1006 - ■MU13 - ■■F1		380	
536	643	801	1.2	2.76 ★	2KJ1006 - ■MU13 - ■■E1		380	
818	982	526	1.5	1.81	2KJ1006 - ■MU13 - ■■B1		380	
1 088	1 306	395	1.7	1.36 ★	2KJ1006 - ■MU13 - ■■A1		380	
<b>E.108-K4-LG1225ZM4E</b>								
462	554	929	0.80	3.20	2KJ1005 - ■MU13 - ■■F1		343	
534	641	804	0.83	2.77 ★	2KJ1005 - ■MU13 - ■■E1		343	
55 (50 Hz) 66 (60 Hz)	<b>D.188-LG250ZM4E</b>							
	21	25	24 551	0.81	69.41	2KJ1211 - ■NN13 - ■■C1		978
	28	34	19 121	1.0	54.06 ★	2KJ1211 - ■NN13 - ■■B1		978
	35	42	15 192	1.3	42.95 ★	2KJ1211 - ■NN13 - ■■A1		978
	<b>Z.188-LG250ZM4E</b>							
	31	37	17 056	0.93	48.22	2KJ1111 - ■NN13 - ■■N1		944
	36	43	14 802	1.1	41.85 ★	2KJ1111 - ■NN13 - ■■M1		944
	40	48	13 048	1.3	36.89	2KJ1111 - ■NN13 - ■■L1		944
	46	55	11 449	1.6	32.37	2KJ1111 - ■NN13 - ■■K1		944
	51	61	10 321	1.9	29.18 ★	2KJ1111 - ■NN13 - ■■J1		944
60	72	8 761	2.3	24.77 ★	2KJ1111 - ■NN13 - ■■H1		944	
64	77	8 139	2.5	23.01	2KJ1111 - ■NN13 - ■■G1		944	
75	90	6 989	2.9	19.76 ★	2KJ1111 - ■NN13 - ■■F1		944	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
55 (50 Hz) 66 (60 Hz)	<b>Z.188-LG250ZM4E</b>							
	179	215	2 936	3.7	8.30	2KJ1111 - ■ NN13 - ■■ A1		944
<b>Z.168-LG250ZM4E</b>								
	38	46	13 954	1.0	39.45	2KJ1110 - ■ NN13 - ■■ T1		814
	44	53	11 983	1.2	33.88 ★	2KJ1110 - ■ NN13 - ■■ S1		814
	51	61	10 353	1.4	29.27	2KJ1110 - ■ NN13 - ■■ Q1		814
	58	70	9 140	1.5	25.84	2KJ1110 - ■ NN13 - ■■ P1		814
	64	77	8 227	1.7	23.26 ★	2KJ1110 - ■ NN13 - ■■ N1		814
	77	92	6 826	2.1	19.30 ★	2KJ1110 - ■ NN13 - ■■ M1		814
	84	101	6 225	2.2	17.60	2KJ1110 - ■ NN13 - ■■ L1		814
	96	115	5 461	2.5	15.44 ★	2KJ1110 - ■ NN13 - ■■ K1		814
	112	134	4 694	2.8	13.27	2KJ1110 - ■ NN13 - ■■ J1		814
	144	173	3 657	3.4	10.34 ★	2KJ1110 - ■ NN13 - ■■ H1		814
	160	192	3 275	2.4	9.26 ★	2KJ1110 - ■ NN13 - ■■ G1		814
	181	217	2 904	4.0	8.21 ★	2KJ1110 - ■ NN13 - ■■ F1		814
	206	247	2 547	2.8	7.20 ★	2KJ1110 - ■ NN13 - ■■ E1		814
	240	288	2 193	3.4	6.20 ★	2KJ1110 - ■ NN13 - ■■ D1		814
	265	318	1 984	3.4	5.61 ★	2KJ1110 - ■ NN13 - ■■ C1		814
	301	361	1 744	4.1	4.93 ★	2KJ1110 - ■ NN13 - ■■ B1		814
	333	400	1 578	4.1	4.46 ★	2KJ1110 - ■ NN13 - ■■ A1		814
<b>Z.148-LG250ZM4E</b>								
	56	67	9 370	0.85	26.49	2KJ1108 - ■ NN13 - ■■ R1		650
	64	77	8 149	0.98	23.04	2KJ1108 - ■ NN13 - ■■ Q1		650
	74	89	7 148	1.1	20.21 ★	2KJ1108 - ■ NN13 - ■■ P1		650
	87	104	6 045	1.3	17.09 ★	2KJ1108 - ■ NN13 - ■■ N1		650
	96	115	5 486	1.5	15.51	2KJ1108 - ■ NN13 - ■■ M1		650
	110	132	4 782	1.7	13.52 ★	2KJ1108 - ■ NN13 - ■■ L1		650
	129	155	4 061	2.0	11.48	2KJ1108 - ■ NN13 - ■■ K1		650
	169	203	3 109	2.6	8.79 ★	2KJ1108 - ■ NN13 - ■■ J1		650
	172	206	3 056	1.6	8.64 ★	2KJ1108 - ■ NN13 - ■■ H1		650
	189	227	2 773	1.7	7.84	2KJ1108 - ■ NN13 - ■■ G1		650
	196	235	2 678	2.1	7.57 ★	2KJ1108 - ■ NN13 - ■■ F1		650
	217	260	2 419	2.0	6.84 ★	2KJ1108 - ■ NN13 - ■■ E1		650
<b>Z.148-LG250ZM4E</b>								
	231	277	2 274	2.4	6.43	2KJ1108 - ■ NN13 - ■■ D1		650
	256	307	2 051	2.0	5.80	2KJ1108 - ■ NN13 - ■■ C1		650
	302	362	1 740	2.9	4.92 ★	2KJ1108 - ■ NN13 - ■■ B1		650
	334	401	1 570	2.5	4.44 ★	2KJ1108 - ■ NN13 - ■■ A1		650
<b>Z.128-K4-LGI250ZM4E</b>								
	92	110	5 702	0.88	16.12	2KJ1107 - ■ NN13 - ■■ Q1		563
	106	127	4 973	0.98	14.06 ★	2KJ1107 - ■ NN13 - ■■ P1		563
	123	148	4 255	1.10	12.03 ★	2KJ1107 - ■ NN13 - ■■ N1		563
	138	166	3 813	1.20	10.78	2KJ1107 - ■ NN13 - ■■ M1		563
	163	196	3 229	1.40	9.13 ★	2KJ1107 - ■ NN13 - ■■ L1		563

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
55 (50 Hz) 66 (60 Hz)	<b>Z.128-K4-LGI250ZM4E</b>							
	188	226	2 787	1.50	7.88	2KJ1107 - ■NN13 - ■■K1		563
	204	245	2 578	0.99	7.29 ★	2KJ1107 - ■NN13 - ■■J1		563
	238	286	2 207	1.1	6.24 ★	2KJ1107 - ■NN13 - ■■H1		563
	250	300	2 097	1.9	5.93 ★	2KJ1107 - ■NN13 - ■■G1		563
	266	319	1 977	1.3	5.59 ★	2KJ1107 - ■NN13 - ■■F1		563
	307	368	1 708	1.5	4.83	2KJ1107 - ■NN13 - ■■E1		563
	314	377	1 673	1.4	4.73 ★	2KJ1107 - ■NN13 - ■■D1		563
	363	436	1 447	1.6	4.09 ★	2KJ1107 - ■NN13 - ■■C1		563
	409	491	1 284	1.8	3.63 ★	2KJ1107 - ■NN13 - ■■B1		563
	484	581	1 086	2.0	3.07 ★	2KJ1107 - ■NN13 - ■■A1		563
	<b>E.148-LG250ZM4E</b>							
301	361	1 747	0.80	4.94	2KJ1007 - ■NN13 - ■■H1		494	
345	414	1 521	0.87	4.3	2KJ1007 - ■NN13 - ■■G1		494	
394	473	1 333	1.0	3.77 ★	2KJ1007 - ■NN13 - ■■F1		494	
466	559	1 128	1.4	3.19 ★	2KJ1007 - ■NN13 - ■■E1		494	
512	614	1 026	1.4	2.90	2KJ1007 - ■NN13 - ■■D1		494	
694	833	757	1.6	2.14	2KJ1007 - ■NN13 - ■■B1		494	
905	1 086	580	1.7	1.64 ★	2KJ1007 - ■NN13 - ■■A1		494	
<b>E.128-K4-LGI250ZM4E</b>								
460	552	1 142	0.88	3.23 ★	2KJ1006 - ■NN13 - ■■F1		470	
538	646	976	1.0	2.76 ★	2KJ1006 - ■NN13 - ■■E1		470	
75 (50 Hz) 90 (60 Hz)	<b>D.188-K4-LGI280S4E</b>							
	35	42	20 716	0.97	42.95 ★	2KJ1211 - ■PG13 - ■■A1		1103
	<b>Z.188-K4-LGI280S4E</b>							
	40	48	17 793	0.93	36.89	2KJ1111 - ■PG13 - ■■L1		1 069
	46	55	15 613	1.2	32.37	2KJ1111 - ■PG13 - ■■K1		1 069
	51	61	14 074	1.4	29.18 ★	2KJ1111 - ■PG13 - ■■J1		1 069
	60	72	11 947	1.7	24.77 ★	2KJ1111 - ■PG13 - ■■H1		1 069
	64	77	11 098	1.8	23.01	2KJ1111 - ■PG13 - ■■G1		1 069
	75	90	9 531	2.1	19.76 ★	2KJ1111 - ■PG13 - ■■F1		1 069
	88	106	8 132	2.5	16.86	2KJ1111 - ■PG13 - ■■E1		1 069
	112	134	6 405	2.9	13.28 ★	2KJ1111 - ■PG13 - ■■D1		1 069
	139	167	5 156	3.1	10.69 ★	2KJ1111 - ■PG13 - ■■C1		1 069
160	192	4 481	3.2	9.29	2KJ1111 - ■PG13 - ■■B1		1 069	
179	215	4 003	2.7	8.3	2KJ1111 - ■PG13 - ■■A1		1 069	
<b>Z.168-K4-LGI280S4E</b>								
51	61	14 118	0.99	29.27	2KJ1110 - ■PG13 - ■■Q1		939	
58	70	12 463	1.1	25.84	2KJ1110 - ■PG13 - ■■P1		939	
64	77	11 219	1.2	23.26 ★	2KJ1110 - ■PG13 - ■■N1		939	
77	92	9 309	1.5	19.30 ★	2KJ1110 - ■PG13 - ■■M1		939	
84	101	8 489	1.6	17.60	2KJ1110 - ■PG13 - ■■L1		939	
96	115	7 447	1.8	15.44 ★	2KJ1110 - ■PG13 - ■■K1		939	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
75 (50 Hz) 90 (60 Hz)	<b>Z.168-K4-LGI280S4E</b>							
	112	134	6 400	2.0	13.27	2KJ1110 - ■PG13 - ■■J1		939
	144	173	4 987	2.5	10.34 ★	2KJ1110 - ■PG13 - ■■H1		939
	160	192	4 466	1.8	9.26 ★	2KJ1110 - ■PG13 - ■■G1		939
	181	217	3 960	2.9	8.21 ★	2KJ1110 - ■PG13 - ■■F1		939
	206	247	3 473	2.0	7.20 ★	2KJ1110 - ■PG13 - ■■E1		939
	240	288	2 990	2.5	6.20 ★	2KJ1110 - ■PG13 - ■■D1		939
	265	318	2 706	2.5	5.61 ★	2KJ1110 - ■PG13 - ■■C1		939
	301	361	2 378	3.0	4.93 ★	2KJ1110 - ■PG13 - ■■B1		939
	333	400	2 151	3.0	4.46 ★	2KJ1110 - ■PG13 - ■■A1		939
	<b>Z.148-K4-LGI280S4E</b>							
	74	89	9 748	0.82	20.21 ★	2KJ1108 - ■PG13 - ■■P1		775
	87	104	8 243	0.97	17.09 ★	2KJ1108 - ■PG13 - ■■N1		775
	96	115	7 481	1.1	15.51	2KJ1108 - ■PG13 - ■■M1		775
110	132	6 521	1.2	13.52 ★	2KJ1108 - ■PG13 - ■■L1		775	
129	155	5 537	1.4	11.48	2KJ1108 - ■PG13 - ■■K1		775	
169	203	4 240	1.9	8.79 ★	2KJ1108 - ■PG13 - ■■J1		775	
172	206	4 167	1.2	8.64 ★	2KJ1108 - ■PG13 - ■■H1		775	
189	227	3 781	1.3	7.84	2KJ1108 - ■PG13 - ■■G1		775	
196	235	3 651	1.5	7.57 ★	2KJ1108 - ■PG13 - ■■F1		775	
217	260	3 299	1.5	6.84 ★	2KJ1108 - ■PG13 - ■■E1		775	
231	277	3 101	1.7	6.43	2KJ1108 - ■PG13 - ■■D1		775	
256	307	2 797	1.5	5.80	2KJ1108 - ■PG13 - ■■C1		775	
302	362	2 373	2.1	4.92 ★	2KJ1108 - ■PG13 - ■■B1		775	
334	401	2 142	1.8	4.44 ★	2KJ1108 - ■PG13 - ■■A1		775	
<b>E.148-K4-LGI280S4E</b>								
466	559	1 539	1.0	3.19 ★	2KJ1007 - ■PG13 - ■■E1		619	
512	614	1 399	1.0	2.90	2KJ1007 - ■PG13 - ■■D1		619	
90 (50 Hz) 108 (60 Hz)	<b>D.188-K4-LGI280ZM4E</b>							
	35	42	24 859	0.8	42.95 ★	2KJ1211 - ■PW13 - ■■A1		1143
	<b>Z.188-K4-LGI280ZM4E</b>							
	46	55	18 735	0.98	32.37	2KJ1111 - ■PW13 - ■■K1		1 109
	51	61	16 889	1.2	29.18 ★	2KJ1111 - ■PW13 - ■■J1		1 109
	60	72	14 337	1.4	24.77 ★	2KJ1111 - ■PW13 - ■■H1		1 109
	64	77	13 318	1.5	23.01	2KJ1111 - ■PW13 - ■■G1		1 109
	75	90	11 437	1.7	19.76 ★	2KJ1111 - ■PW13 - ■■F1		1 109
	88	106	9 758	2.0	16.86	2KJ1111 - ■PW13 - ■■E1		1 109
	112	134	7 686	2.4	13.28 ★	2KJ1111 - ■PW13 - ■■D1		1 109
	139	167	6 187	2.6	10.69 ★	2KJ1111 - ■PW13 - ■■C1		1 109
	160	192	5 377	2.7	9.29	2KJ1111 - ■PW13 - ■■B1		1 109
	179	215	4 804	2.2	8.30	2KJ1111 - ■PW13 - ■■A1		1 109
	<b>Z.168-K4-LGI280ZM4E</b>							
51	61	16 941	0.83	29.27	2KJ1110 - ■PW13 - ■■Q1		979	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R



# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

## Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
90 (50 Hz) 108 (60 Hz)	<b>Z.168-K4-LGI280ZM4E</b>							
	<b>58</b>	<b>70</b>	14 956	0.94	25.84	<b>2KJ1110 - PW13 - P1</b>		979
	<b>64</b>	<b>77</b>	13 463	1.00	23.26 ★	<b>2KJ1110 - PW13 - N1</b>		979
	<b>77</b>	<b>92</b>	11 171	1.3	19.30 ★	<b>2KJ1110 - PW13 - M1</b>		979
	<b>84</b>	<b>101</b>	10 187	1.4	17.60	<b>2KJ1110 - PW13 - L1</b>		979
	<b>96</b>	<b>115</b>	8 936	1.5	15.44 ★	<b>2KJ1110 - PW13 - K1</b>		979
	<b>112</b>	<b>134</b>	7 681	1.7	13.27	<b>2KJ1110 - PW13 - J1</b>		979
	<b>144</b>	<b>173</b>	5 985	2.1	10.34 ★	<b>2KJ1110 - PW13 - H1</b>		979
	<b>160</b>	<b>192</b>	5 360	1.5	9.26 ★	<b>2KJ1110 - PW13 - G1</b>		979
	<b>181</b>	<b>217</b>	4 752	2.4	8.21 ★	<b>2KJ1110 - PW13 - F1</b>		979
	<b>206</b>	<b>247</b>	4 167	1.7	7.20 ★	<b>2KJ1110 - PW13 - E1</b>		979
	<b>240</b>	<b>288</b>	3 588	2.1	6.20 ★	<b>2KJ1110 - PW13 - D1</b>		979
	<b>265</b>	<b>318</b>	3 247	2.1	5.61 ★	<b>2KJ1110 - PW13 - C1</b>		979
	<b>301</b>	<b>361</b>	2 853	2.5	4.93 ★	<b>2KJ1110 - PW13 - B1</b>		979
<b>333</b>	<b>400</b>	2 581	2.5	4.46 ★	<b>2KJ1110 - PW13 - A1</b>		979	
<b>Z.148-K4-LGI280ZM4E</b>								
<b>87</b>	<b>104</b>	9 891	0.81	17.09 ★	<b>2KJ1108 - PW13 - N1</b>		815	
<b>96</b>	<b>115</b>	8 977	0.89	15.51	<b>2KJ1108 - PW13 - M1</b>		815	
<b>110</b>	<b>132</b>	7 825	1.00	13.52 ★	<b>2KJ1108 - PW13 - L1</b>		815	
<b>129</b>	<b>155</b>	6 644	1.20	11.48	<b>2KJ1108 - PW13 - K1</b>		815	
<b>169</b>	<b>203</b>	5 088	1.60	8.79 ★	<b>2KJ1108 - PW13 - J1</b>		815	
<b>172</b>	<b>206</b>	5 001	0.96	8.64 ★	<b>2KJ1108 - PW13 - H1</b>		815	
<b>189</b>	<b>227</b>	4 538	1.10	7.84	<b>2KJ1108 - PW13 - G1</b>		815	
<b>196</b>	<b>235</b>	4 381	1.30	7.57 ★	<b>2KJ1108 - PW13 - F1</b>		815	
<b>217</b>	<b>260</b>	3 959	1.20	6.84 ★	<b>2KJ1108 - PW13 - E1</b>		815	
<b>231</b>	<b>277</b>	3 722	1.50	6.43	<b>2KJ1108 - PW13 - D1</b>		815	
<b>256</b>	<b>307</b>	3 357	1.30	5.80	<b>2KJ1108 - PW13 - C1</b>		815	
<b>302</b>	<b>362</b>	2 848	1.80	4.92 ★	<b>2KJ1108 - PW13 - B1</b>		815	
<b>334</b>	<b>401</b>	2 570	1.50	4.44 ★	<b>2KJ1108 - PW13 - A1</b>		815	
<b>E.148-K4-LGI280ZM4E</b>								
<b>466</b>	<b>559</b>	1 846	0.84	3.19 ★	<b>2KJ1007 - PW13 - E1</b>		659	
<b>512</b>	<b>614</b>	1 678	0.83	2.90	<b>2KJ1007 - PW13 - D1</b>		659	
110 (50 Hz) 132 (60 Hz)	<b>Z.188-K2-LGI315S4</b>							
	<b>88</b>	<b>106</b>	11 927	1.7	16.86	<b>2KJ1111 - QQ13 - E1</b>		1 289
	<b>112</b>	<b>134</b>	9 394	2.0	13.28 ★	<b>2KJ1111 - QQ13 - D1</b>		1 289
	<b>139</b>	<b>167</b>	7 562	2.1	10.69 ★	<b>2KJ1111 - QQ13 - C1</b>		1 289
	<b>160</b>	<b>192</b>	6 572	2.2	9.29	<b>2KJ1111 - QQ13 - B1</b>		1 289
<b>179</b>	<b>215</b>	5 871	1.8	8.30	<b>2KJ1111 - QQ13 - A1</b>		1 289	
132 (50 Hz) 158 (60 Hz)	<b>Z.188-K2-LGI315M4</b>							
	<b>88</b>	<b>106</b>	14 312	1.4	16.86	<b>2KJ1111 - QS13 - E1</b>		1 344
	<b>112</b>	<b>134</b>	11 273	1.7	13.28 ★	<b>2KJ1111 - QS13 - D1</b>		1 344
<b>139</b>	<b>167</b>	9 075	1.8	10.69 ★	<b>2KJ1111 - QS13 - C1</b>		1 344	

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

\*) For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

# MOTOX Geared Motors

## Helical geared motors

Geared motors up to 200 kW

### Selection and ordering data (continued)

Power rating $P_{\text{Motor}}$ kW	Output speed		Output torque $T_2$ Nm	Service factor $f_B$	Gearbox ratio $i_{\text{tot}}$	Order No.	Order code (No. of poles)	Weight <sup>*)</sup> kg
	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm						
<b>132</b> (50 Hz)	<b>Z.188-K2-LGI315M4</b>							
158 (60 Hz)	<b>160</b>	<b>192</b>	7 886	1.8	9.29	<b>2KJ1111 - ■ QS13 - ■■ B1</b>		1 344
	<b>179</b>	<b>215</b>	7 046	1.5	8.30	<b>2KJ1111 - ■ QS13 - ■■ A1</b>		1 344
<b>160</b> (50 Hz)	<b>Z.188-K2-LGI315L4</b>							
192 (60 Hz)	<b>88</b>	<b>106</b>	17 348	1.2	16.86	<b>2KJ1111 - ■ QU13 - ■■ E1</b>		1 469
	<b>112</b>	<b>134</b>	13 665	1.4	13.28 ★	<b>2KJ1111 - ■ QU13 - ■■ D1</b>		1 469
	<b>139</b>	<b>167</b>	11 000	1.5	10.69 ★	<b>2KJ1111 - ■ QU13 - ■■ C1</b>		1 469
	<b>160</b>	<b>192</b>	9 559	1.5	9.29	<b>2KJ1111 - ■ QU13 - ■■ B1</b>		1 469
	<b>179</b>	<b>215</b>	8 540	1.3	8.30	<b>2KJ1111 - ■ QU13 - ■■ A1</b>		1 469
<b>200</b> (50 Hz)	<b>Z.188-K2-LGI315LB4</b>							
240 (60 Hz)	<b>88</b>	<b>106</b>	21 685	0.92	16.86	<b>2KJ1111 - ■ QV13 - ■■ E1</b>		1 584
	<b>112</b>	<b>134</b>	17 081	1.10	13.28 ★	<b>2KJ1111 - ■ QV13 - ■■ D1</b>		1 584
	<b>139</b>	<b>167</b>	13 749	1.20	10.69 ★	<b>2KJ1111 - ■ QV13 - ■■ C1</b>		1 584
	<b>160</b>	<b>192</b>	11 949	1.20	9.29	<b>2KJ1111 - ■ QV13 - ■■ B1</b>		1 584
	<b>179</b>	<b>215</b>	10 675	1.00	8.30	<b>2KJ1111 - ■ QV13 - ■■ A1</b>		1 584

★ Preferred transmission ratio

Shaft designs, see page 2/117

Frequency and voltage, see page 8/20

Gearbox housing mounting position, see page 2/119

<sup>\*)</sup> For mounting type B3

1, 2 or 9

1 to 9

A, F, H or R

## Selection and ordering data

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]													
			$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm		2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$			$T_{2N}$ ( $f_B=1$ ) Nm	Motor size													
Nm						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>1-stage helical gearbox with 4-pole motors</b>																			
<b>E.38</b>	<b>S1</b>	9.33 ★	155	188	32	•	•												
<b>32 ... 82</b>	<b>R1</b>	8.30	175	211	32	•	•	•											
	<b>Q1</b>	7.20 ★	201	243	38	•	•	•	•										
	<b>P1</b>	6.73	215	260	48	•	•	•	•										
	<b>N1</b>	5.92 ★	245	296	53	•	•	•	•										
	<b>M1</b>	5.18	280	338	70	•	•	•	•	•									
	<b>L1</b>	4.58 ★	317	382	78	•	•	•	•	•	•								
	<b>K1</b>	4.15	349	422	62	•	•	•	•	•	•	•							
	<b>J1</b>	3.67 ★	395	477	70	•	•	•	•	•	•	•							
	<b>H1</b>	3.31	438	529	65	•	•	•	•	•	•	•	•						
	<b>G1</b>	3.00 ★	483	583	80	•	•	•	•	•	•	•	•						
	<b>F1</b>	2.73	531	641	80	•	•	•	•	•	•	•	•	•					
	<b>E1</b>	2.50 ★	580	700	73	•	•	•	•	•	•	•	•	•					
	<b>D1</b>	2.24	647	781	72	•	•	•	•	•	•	•	•	•	•				
	<b>C1</b>	2.05 ★	707	854	80	•	•	•	•	•	•	•	•	•	•				
<b>B1</b>	1.85	784	946	82	•	•	•	•	•	•	•	•	•	•	•				
<b>A1</b>	1.59 ★	912	1 101	72	•	•	•	•	•	•	•	•	•	•	•				
<b>E.48</b>	<b>U1</b>	11.30	128	155	55	•	•	•											
<b>55 ... 170</b>	<b>T1</b>	10.00 ★	145	175	80	•	•	•	•										
	<b>S1</b>	9.09	160	193	64	•	•	•	•										
	<b>R1</b>	8.17 ★	177	214	85	•	•	•	•										
	<b>Q1</b>	7.00	207	250	97	•	•	•	•	•									
	<b>P1</b>	6.33 ★	229	276	115	•	•	•	•	•	•								
	<b>N1</b>	5.85	248	299	120	•	•	•	•	•	•								
	<b>M1</b>	5.08 ★	285	344	120	•	•	•	•	•	•	•							
	<b>L1</b>	4.62	314	379	130	•	•	•	•	•	•	•	•						
	<b>K1</b>	4.21 ★	344	416	150	•	•	•	•	•	•	•	•	•					
	<b>J1</b>	3.87	375	452	160	•	•	•	•	•	•	•	•	•	•				
	<b>H1</b>	3.56 ★	407	492	140	•	•	•	•	•	•	•	•	•	•	•			
	<b>G1</b>	3.24	448	540	150	•	•	•	•	•	•	•	•	•	•	•			
	<b>F1</b>	2.95 ★	492	593	170	•	•	•	•	•	•	•	•	•	•	•	•		
	<b>E1</b>	2.70	537	648	160	•	•	•	•	•	•	•	•	•	•	•	•		
<b>D1</b>	2.41 ★	602	726	150	•	•	•	•	•	•	•	•	•	•	•	•			
<b>C1</b>	2.15	674	814	135			•	•	•	•	•	•	•	•	•	•			
<b>B1</b>	1.83	792	956	115			•	•	•	•	•	•	•	•	•	•			
<b>A1</b>	1.52 ★	954	1 151	100			•	•	•	•	•	•	•	•	•	•	•		

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]													
			$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm		2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque Nm	Order No. 15th and 16th position	$i_{tot}$			$T_{2N}$ ( $f_B=1$ ) Nm	Motor size													
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>E68</b> 81 ... 250	<b>W1</b>	12.40 ★	117	141	81	•	•	•	•										
	<b>V1</b>	11.18	130	157	92	•	•	•	•										
	<b>U1</b>	10.08 ★	144	174	95	•	•	•	•										
	<b>T1</b>	8.82	164	198	150	•	•	•	•	•									
	<b>S1</b>	7.92 ★	183	221	170	•	•	•	•	•	•								
	<b>R1</b>	7.23	201	242	150	•	•	•	•	•	•								
	<b>P1</b>	6.42 ★	226	273	170	•	•	•	•	•	•	•							
	<b>N1</b>	5.92	245	296	190	•	•	•	•	•	•	•							
	<b>M1</b>	5.36 ★	271	326	220	•	•	•	•	•	•	•							
	<b>L1</b>	4.93	294	355	225	•	•	•	•	•	•	•							
	<b>K1</b>	4.56 ★	318	384	220	•	•	•	•	•	•	•	•						
	<b>J1</b>	4.24	342	413	230	•	•	•	•	•	•	•	•	•					
	<b>H1</b>	3.74 ★	388	468	230	•	•	•	•	•	•	•	•	•	•				
	<b>G1</b>	3.45	420	507	240	•	•	•	•	•	•	•	•	•	•				
	<b>F1</b>	3.09 ★	469	566	250	•	•	•	•	•	•	•	•	•	•				
	<b>E1</b>	2.85	509	614	250			•	•	•	•	•	•	•	•				
<b>D1</b>	2.39	607	732	230			•	•	•	•	•	•	•	•					
<b>C1</b>	2.04 ★	711	858	210			•	•	•	•	•	•	•	•					
<b>B1</b>	1.70	853	1 029	175					•	•	•	•	•	•					
<b>A1</b>	1.41 ★	1 028	1 241	150						•	•	•	•	•					
<b>E88</b> 210 ... 450	<b>S1</b>	10.33 ★	140	169	230				•	•	•								
	<b>R1</b>	9.46	153	185	210				•	•	•								
	<b>Q1</b>	8.42 ★	172	208	245				•	•	•	•							
	<b>P1</b>	7.69	189	228	245				•	•	•	•							
	<b>N1</b>	7.07 ★	205	248	290				•	•	•	•							
	<b>M1</b>	6.53	222	268	300				•	•	•	•							
	<b>L1</b>	6.06 ★	239	289	280				•	•	•	•	•						
	<b>K1</b>	5.65	257	310	320				•	•	•	•	•						
	<b>J1</b>	5.11 ★	284	342	370				•	•	•	•	•	•					
	<b>H1</b>	4.70	309	372	385				•	•	•	•	•	•	•				
	<b>G1</b>	4.23 ★	343	414	400				•	•	•	•	•	•	•				
	<b>F1</b>	3.90	372	449	385				•	•	•	•	•	•	•				
	<b>E1</b>	3.30	439	530	450				•	•	•	•	•	•	•				
	<b>D1</b>	2.88 ★	503	608	435				•	•	•	•	•	•	•				
	<b>C1</b>	2.45	592	714	420					•	•	•	•	•	•				
	<b>B1</b>	2.09 ★	694	837	420						•	•	•	•	•				
<b>A1</b>	1.71 ★	848	1 023	355							•	•	•	•					

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

## Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]															
			$i_{tot}$	$n_2$ (50 Hz) rpm		$n_2$ (60 Hz) rpm	$T_{2N}$ ( $f_B=1$ ) Nm	2.5x the value is permissible for a brief period (e.g. motor starting torque)													
								3	3	5	10	20	26	61	98	198	198	291	356	580	1290
<b>Max. gearbox torque</b>	Order No. 15th and 16th position					<b>Motor size</b>															
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315		
<b>E108</b>	<b>K1</b>	5.46 ★	266	321	660				•	•	•	•	•	•	•	•	•	•	•	• <sup>1)</sup>	
<b>550 ... 745</b>	<b>J1</b>	5.00	290	350	680				•	•	•	•	•	•	•	•	•	•	•	• <sup>1)</sup>	
	<b>H1</b>	4.26	340	411	720				•	•	•	•	•	•	•	•	•	•	•	• <sup>1)</sup>	
	<b>G1</b>	3.76 ★	386	465	600				•	•	•	•	•	•	•	•	•	•	•	• <sup>1)</sup>	
	<b>F1</b>	3.20	453	547	745				•	•	•	•	•	•	•	•	•	•	•	• <sup>1)</sup>	
	<b>E1</b>	2.77 ★	523	632	670				•	•	•	•	•	•	•	•	•	•	•	• <sup>1)</sup>	
	<b>C1</b>	2.33 ★	622	751	680				•	•	•	•	•	•	•	•	•	•	•	• <sup>1)</sup>	
	<b>B1</b>	2.11	687	829	620				•	•	•	•	•	•	•	•	•	•	•	• <sup>1)</sup>	
	<b>A1</b>	1.81 ★	801	967	550				•	•	•	•	•	•	•	•	•	•	•	• <sup>1)</sup>	
<b>E128</b>	<b>T1</b>	10.14 ★	143	173	544				•	•	•										
<b>544 ... 1000</b>	<b>S1</b>	9.40	154	186	584				•	•	•										
	<b>R1</b>	8.94 ★	162	196	640				•	•	•	•									
	<b>Q1</b>	8.35	174	210	712				•	•	•	•									
	<b>P1</b>	7.37 ★	197	237	816				•	•	•	•	•	•							
	<b>N1</b>	6.95	209	252	880				•	•	•	•	•	•							
	<b>M1</b>	6.23 ★	233	281	928				•	•	•	•	•	•	•						
	<b>L1</b>	5.75	252	304	960				•	•	•	•	•	•	•						
	<b>K1</b>	4.91	295	356	960				•	•	•	•	•	•	•						
	<b>J1</b>	4.44 ★	327	394	1 000				•	•	•	•	•	•	•						
	<b>H1</b>	4.28	339	409	1 000				•	•	•	•	•	•	•	•					• <sup>1)</sup>
	<b>G1</b>	3.70	392	473	1 000				•	•	•	•	•	•	•	•					• <sup>1)</sup>
	<b>F1</b>	3.23 ★	449	542	1 000				•	•	•	•	•	•	•	•					• <sup>1)</sup>
	<b>E1</b>	2.76 ★	525	634	1 000				•	•	•	•	•	•	•	•					• <sup>1)</sup>
	<b>D1</b>	2.47	587	709	950				•	•	•	•	•	•	•	•					• <sup>1)</sup>
	<b>C1</b>	2.10 ★	690	833	860				•	•	•	•	•	•	•	•					• <sup>1)</sup>
	<b>B1</b>	1.81	801	967	800				•	•	•	•	•	•	•	•					• <sup>1)</sup>
<b>A1</b>	1.36 ★	1 066	1 287	680				•	•	•	•	•	•	•	•					• <sup>1)</sup>	
<b>E148</b>	<b>U1</b>	13.67 ★	106	128	600						•										
<b>600 ... 1550</b>	<b>T1</b>	12.54	116	140	600						•										
	<b>S1</b>	11.57 ★	125	151	680						•										
	<b>R1</b>	10.73	135	163	760						•										
	<b>Q1</b>	10.13 ★	143	173	800						•	•									
	<b>P1</b>	9.47	153	185	920						•	•									
	<b>N1</b>	8.42 ★	172	208	1 000						•	•	•	•							
	<b>M1</b>	7.95	182	220	1 060						•	•	•	•							
	<b>L1</b>	7.14 ★	203	245	1 120						•	•	•	•	•						
	<b>K1</b>	6.55	221	267	1 150						•	•	•	•	•						
	<b>J1</b>	5.65	257	310	1 360						•	•	•	•	•	•					
	<b>H1</b>	4.94	294	354	1 400						•	•	•	•	•	•					
	<b>G1</b>	4.30	337	407	1 330						•	•	•	•	•	•					
	<b>F1</b>	3.77 ★	385	464	1 350						•	•	•	•	•	•					
	<b>E1</b>	3.19 ★	455	549	1 550						•	•	•	•	•	•					
	<b>D1</b>	2.90	500	603	1 400						•	•	•	•	•	•					
	<b>C1</b>	2.52 ★	575	694	1 220						•	•	•	•	•	•					
	<b>B1</b>	2.14	678	818	1 200						•	•	•	•	•	•					
	<b>A1</b>	1.64 ★	884	1 067	960						•	•	•	•	•	•					

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]													
			$n_2$ (50 Hz)	$n_2$ (60 Hz)		2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm	$T_{2N}$ ( $f_B=1$ ) Nm	3	3	5	10	20	26	61	98	198	198	291	356	580	1290
Nm						Motor size													
						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>2-stage and 3-stage helical gearbox with 4-pole motors, 50 Hz</b> (at service factor $f_B = 1$ and ambient temperature of 20 °C)																			
<b>D18</b>	<b>P1</b>	200.36	7.2	8.7	90	•													
<b>90</b>	<b>N1</b>	172.85 ★	8.4	10.1	90	•													
	<b>M1</b>	148.50	9.8	11.8	90	•													
	<b>L1</b>	136.71 ★	10.6	12.8	90	•													
	<b>K1</b>	124.29	11.7	14.1	90	•													
	<b>J1</b>	110.01 ★	13.2	15.9	90	•													
	<b>H1</b>	92.14	15.7	19.0	90	•													
	<b>G1</b>	78.56 ★	18.5	22.3	90	•													
	<b>F1</b>	66.78 ★	22.0	26.0	90	•													
	<b>E1</b>	58.03	25.0	30.0	90	•													
	<b>D1</b>	50.51 ★	29.0	35.0	90	•													
	<b>C1</b>	45.56	32.0	38.0	90	•													
	<b>B1</b>	40.21	36.0	44.0	90	•													
	<b>A1</b>	32.26 ★	45.0	54.0	90	•													
<b>Z18</b>	<b>U1</b>	43.15	34	41	90	•													
<b>46 ... 90</b>	<b>T1</b>	37.23 ★	39	47	90	•													
	<b>S1</b>	31.98	45	55	90	•													
	<b>R1</b>	29.45 ★	49	59	90	•													
	<b>Q1</b>	26.77	54	65	90	•													
	<b>P1</b>	23.69 ★	61	74	90	•													
	<b>N1</b>	19.85	73	88	90	•													
	<b>M1</b>	16.92 ★	86	103	90	•													
	<b>L1</b>	14.38 ★	101	122	90	•													
	<b>K1</b>	12.50	116	140	90	•													
	<b>J1</b>	10.88 ★	133	161	87	•													
	<b>H1</b>	9.81	148	178	83	•													
	<b>G1</b>	8.66	167	202	80	•													
	<b>F1</b>	7.42 ★	195	236	55	•													
	<b>E1</b>	6.45	225	271	53	•													
	<b>D1</b>	5.61 ★	258	312	51	•													
	<b>C1</b>	5.06	286	346	49	•													
	<b>B1</b>	4.47	325	392	49	•													
<b>A1</b>	3.58 ★	405	488	46	•														

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and QQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

## Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]													
			$n_2$ (50 Hz)	$n_2$ (60 Hz)		2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size													
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
Nm						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>D28</b> <b>140</b>	<b>N1</b>	241.05	6.0	7.3	140	•													
	<b>M1</b>	207.96 ★	7.0	8.4	140	•	•												
	<b>L1</b>	178.66	8.1	9.8	140	•	•												
	<b>K1</b>	164.48 ★	8.8	10.6	140	•	•	•											
	<b>J1</b>	149.53	9.7	11.7	140	•	•	•											
	<b>H1</b>	132.35 ★	11.0	13.2	140	•	•	•											
	<b>G1</b>	110.86	13.1	15.8	140	•	•	•											
	<b>F1</b>	94.52 ★	15.3	18.5	140	•	•	•											
	<b>E1</b>	80.34 ★	18.0	22.0	140	•	•	•											
	<b>D1</b>	69.82	21.0	25.0	140	•	•	•											
	<b>C1</b>	60.77 ★	24.0	29.0	140	•	•	•											
	<b>B1</b>	54.82	26.0	32.0	140	•	•	•											
<b>A1</b>	48.38	30.0	36.0	140	•	•	•												
<b>Z28</b> <b>77 ... 140</b>	<b>C2</b>	51.35	28	34	140	•													
	<b>B2</b>	43.30 ★	33	40	140	•	•												
	<b>A2</b>	38.45	38	46	140	•	•												
	<b>X1</b>	33.71 ★	43	52	140	•	•	•											
	<b>W1</b>	30.16	48	58	140	•	•	•											
	<b>V1</b>	26.77 ★	54	65	140	•	•	•											
	<b>U1</b>	23.46	62	75	140	•	•	•											
	<b>T1</b>	20.63 ★	70	85	140	•	•	•											
	<b>S1</b>	18.63	78	94	140	•	•	•	•										
	<b>R1</b>	16.24 ★	89	108	140	•	•	•											
	<b>Q1</b>	14.58	99	120	140	•	•	•											
	<b>P1</b>	13.17 ★	110	133	140	•	•	•	•										
	<b>N1</b>	11.94	121	147	140	•	•	•	•										
	<b>M1</b>	10.87 ★	133	161	140	•	•	•	•										
	<b>L1</b>	9.61	151	182	140	•	•	•	•										
	<b>K1</b>	8.87 ★	163	197	140	•	•	•	•										
	<b>J1</b>	7.64	190	229	136	•	•	•	•										
	<b>H1</b>	6.94 ★	209	252	132	•	•	•	•										
	<b>G1</b>	6.31 ★	230	277	95	•	•	•	•										
	<b>F1</b>	5.72	253	306	93	•	•	•	•										
<b>E1</b>	5.21 ★	278	336	92	•	•	•	•											
<b>D1</b>	4.60	315	380	88	•	•	•	•											
<b>C1</b>	4.25 ★	341	412	90	•	•	•	•											
<b>B1</b>	3.66	396	478	80	•	•	•	•											
<b>A1</b>	3.33 ★	436	526	77	•	•	•	•											

★ Preferred transmission ratio

1) Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]													
			$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm		2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque Nm	Order No. 15th and 16th position	$i_{tot}$			$T_{2N}$ ( $f_B=1$ ) Nm	Motor size													
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>Z.38-D28</b> <b>220</b>	<b>M1</b>	5 905		0.24	0.29	220	•												
	<b>L1</b>	5 094	★	0.27	0.33	220	•	•											
	<b>K1</b>	4 376		0.32	0.39	220	•	•											
	<b>J1</b>	4 029	★	0.35	0.42	220	•	•	•										
	<b>H1</b>	3 663		0.38	0.46	220	•	•	•										
	<b>G1</b>	3 242	★	0.43	0.52	220	•	•	•										
	<b>F1</b>	2 715		0.52	0.62	220	•	•	•										
	<b>E1</b>	2 315	★	0.60	0.73	220	•	•	•										
	<b>D1</b>	1 968	★	0.71	0.85	220	•	•	•										
	<b>C1</b>	1 710		0.82	0.98	220	•	•	•										
	<b>B1</b>	1 489	★	0.94	1.13	220	•	•	•										
	<b>A1</b>	1 343		1.00	1.20	220	•	•	•										
<b>Z38-Z28</b> <b>220</b>	<b>R1</b>	1 258		1.1	1.3	220	•												
	<b>Q1</b>	1 061	★	1.3	1.6	220	•	•											
	<b>P1</b>	942		1.5	1.8	220	•	•											
	<b>N1</b>	890		1.6	1.9	220	•												
	<b>M1</b>	751	★	1.9	2.2	220	•	•											
	<b>L1</b>	666		2.1	2.5	220	•	•											
	<b>K1</b>	584	★	2.4	2.9	220	•	•	•										
	<b>J1</b>	523		2.7	3.2	220	•	•	•										
	<b>H1</b>	464	★	3.0	3.6	220	•	•	•										
	<b>G1</b>	407		3.4	4.1	220	•	•	•										
	<b>F1</b>	358	★	3.9	4.7	220	•	•	•										
	<b>E1</b>	323		4.3	5.2	220	•	•	•	•									
<b>D1</b>	281	★	5.0	6.0	220	•	•	•	•										
<b>C1</b>	253		5.5	6.6	220	•	•	•	•										
<b>B1</b>	228	★	6.1	7.3	220	•	•	•	•	•									
<b>A1</b>	207		6.8	8.1	220	•	•	•	•	•									

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.



## Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]															
			$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm		2.5x the value is permissible for a brief period (e.g. motor starting torque)															
Max. gearbox torque Nm	Order No. 15th and 16th position	$i_{tot}$			$T_{2N}$ ( $f_B=1$ ) Nm	Motor size															
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290		
						63	71	80	90	100	112	132	160	180	200	225	250	280	315		
<b>D38</b> <b>220</b>	<b>S1</b>	191.75 ★	7.6	9.1	220	•	•	•													
	<b>R1</b>	170.24	8.5	10.3	220	•	•	•													
	<b>Q1</b>	149.26 ★	9.7	11.7	220	•	•	•	•												
	<b>P1</b>	133.57	10.9	13.1	220	•	•	•	•												
	<b>N1</b>	118.55 ★	12.2	14.8	220	•	•	•	•												
	<b>M1</b>	103.89	14.0	16.8	220	•	•	•	•												
	<b>L1</b>	91.34 ★	15.9	19.2	220	•	•	•	•												
	<b>K1</b>	82.52	17.6	21.0	220	•	•	•	•												
	<b>J1</b>	71.91 ★	20.0	24.0	220	•	•	•	•												
	<b>H1</b>	64.58	22.0	27.0	220	•	•	•	•												
	<b>G1</b>	58.30 ★	25.0	30.0	220	•	•	•	•												
	<b>F1</b>	52.86	27.0	33.0	220	•	•	•	•												
	<b>E1</b>	48.10 ★	30.0	36.0	220	•	•	•	•												
	<b>D1</b>	42.53	34.0	41.0	220	•	•	•	•												
	<b>C1</b>	39.28 ★	37.0	45.0	220	•	•	•	•												
	<b>B1</b>	33.82	43.0	52.0	220	•	•	•	•												
<b>A1</b>	30.74 ★	47.0	57.0	220	•	•	•	•													
<b>Z38</b> <b>160 ... 220</b>	<b>A2</b>	44.12 ★	33	40	220	•	•	•													
	<b>X1</b>	39.24	37	45	208	•	•	•													
	<b>W1</b>	34.04 ★	43	51	220	•	•	•	•												
	<b>V1</b>	31.80	46	55	220	•	•	•	•												
	<b>U1</b>	27.97 ★	52	63	220	•	•	•	•												
	<b>T1</b>	24.50	59	71	220	•	•	•	•	•											
	<b>S1</b>	21.67 ★	67	81	220	•	•	•	•	•	•										
	<b>R1</b>	19.64	74	89	220	•	•	•	•	•	•	•									
	<b>Q1</b>	17.33 ★	84	101	220	•	•	•	•	•	•	•									
	<b>P1</b>	15.64	93	112	220	•	•	•	•	•	•	•	•								
	<b>N1</b>	14.18 ★	102	123	220	•	•	•	•	•	•	•	•								
	<b>M1</b>	12.92	112	135	220	•	•	•	•	•	•	•	•	•							
	<b>L1</b>	11.82 ★	123	148	220	•	•	•	•	•	•	•	•	•	•						
	<b>K1</b>	10.57	137	166	210	•	•	•	•	•	•	•	•	•	•	•					
	<b>J1</b>	9.70 ★	149	180	200	•	•	•	•	•	•	•	•	•	•	•	•				
	<b>H1</b>	8.75	166	200	195	•	•	•	•	•	•	•	•	•	•	•	•	•			
	<b>G1</b>	7.52 ★	193	233	190	•	•	•	•	•	•	•	•	•	•	•	•	•			
	<b>F1</b>	7.50 ★	193	233	185	•	•	•	•	•	•	•	•	•	•	•	•	•			
	<b>D1</b>	6.71	216	261	180	•	•	•	•	•	•	•	•	•	•	•	•	•			
	<b>C1</b>	6.16 ★	235	284	170	•	•	•	•	•	•	•	•	•	•	•	•	•			
	<b>B1</b>	5.55	261	315	165	•	•	•	•	•	•	•	•	•	•	•	•	•			
	<b>A1</b>	4.77 ★	304	367	160	•	•	•	•	•	•	•	•	•	•	•	•	•			

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and QQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}; \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]													
			$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm		2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque Nm	Order No. 15th and 16th position	$i_{tot}$			$T_{2N}$ ( $f_B=1$ ) Nm	Motor size													
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
						63	71	80	90	100	112	132	160	180	200	225	250	280	315
D48-D28 450	N1	27 940		0.05	0.06	450	•												
	M1	24 104	★	0.06	0.07	450	•	•											
	L1	20 708		0.07	0.08	450	•	•											
	K1	19 065	★	0.07	0.08	450	•	•	•										
	J1	17 332		0.08	0.10	450	•	•	•										
	H1	15 341	★	0.09	0.11	450	•	•	•										
	G1	12 849		0.11	0.13	450	•	•	•										
	F1	10 956	★	0.13	0.15	450	•	•	•										
	E1	9 312	★	0.15	0.18	450	•	•	•										
	D1	8 093		0.17	0.21	450	•	•	•										
	C1	7 044	★	0.20	0.24	450	•	•	•										
	B1	6 354		0.22	0.26	450	•	•	•										
	A1	5 608		0.25	0.30	450	•	•	•										
D48-Z28 450	H2	5 019	★	0.28	0.34	450	•	•											
	G2	4 456		0.31	0.38	450	•	•											
	F2	3 907	★	0.36	0.43	450	•	•	•										
	E2	3 496		0.40	0.48	450	•	•	•										
	D2	3 103	★	0.45	0.54	450	•	•	•										
	C2	2 720		0.51	0.62	450	•	•	•										
	B2	2 391	★	0.59	0.70	450	•	•	•										
	A2	2 160		0.65	0.78	450	•	•	•	•									
	X1	1 882	★	0.74	0.89	450	•	•	•										
	W1	1 690		0.83	0.99	450	•	•	•										
	V1	1 526	★	0.92	1.10	450	•	•	•	•									
	U1	1 384		1.00	1.20	450	•	•	•	•									
	T1	1 259	★	1.10	1.30	450	•	•	•	•									
	S1	1 113		1.30	1.50	450	•	•	•	•									
	R1	1 028	★	1.40	1.60	450	•	•	•	•									
	Q1	885		1.60	1.90	450	•	•	•	•									
	P1	805	★	1.70	2.10	450	•	•	•	•									
	N1	731	★	1.90	2.30	450	•	•	•	•									
	M1	663		2.10	2.50	450	•	•	•	•									
	L1	603	★	2.30	2.80	450	•	•	•	•									
	K1	534		2.60	3.10	450	•	•	•	•									
J1	493	★	2.80	3.40	450	•	•	•	•										
H1	424		3.30	3.90	450	•	•	•	•										
G1	423	★	3.30	4.00	450	•	•	•	•										
F1	384		3.70	4.40	450	•	•	•	•										
E1	349	★	4.00	4.80	450	•	•	•	•										
D1	309		4.50	5.40	450	•	•	•	•										
C1	285	★	4.90	5.90	450	•	•	•	•										
B1	246		5.70	6.80	450	•	•	•	•										
A1	223	★	6.30	7.50	450	•	•	•	•										

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

## Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]													
			$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm		2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque Nm	Order No. 15th and 16th position	$i_{tot}$			$T_{2N}$ ( $f_B=1$ ) Nm	Motor size													
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>D48</b> <b>450</b>	<b>S1</b>	208.77 ★	6.9	8.4	450	•	•	•											
	<b>R1</b>	185.66	7.8	9.4	450	•	•	•											
	<b>Q1</b>	161.05 ★	9.0	10.9	450	•	•	•	•										
	<b>P1</b>	150.48	9.6	11.6	450	•	•	•	•										
	<b>N1</b>	132.34 ★	11.0	13.2	450	•	•	•	•										
	<b>M1</b>	115.91	12.5	15.1	450	•	•	•	•	•									
	<b>L1</b>	102.52 ★	14.1	17.1	450	•	•	•	•	•									
	<b>K1</b>	92.91	15.6	18.8	450	•	•	•	•	•									
	<b>J1</b>	82.02 ★	17.7	21.0	450	•	•	•	•	•	•								
	<b>H1</b>	73.99	19.6	24.0	450	•	•	•	•	•	•								
	<b>G1</b>	67.10 ★	22.0	26.0	450	•	•	•	•	•	•								
	<b>F1</b>	61.14	24.0	29.0	450	•	•	•	•	•	•								
	<b>E1</b>	55.92 ★	26.0	31.0	450	•	•	•	•	•	•								
	<b>D1</b>	50.00	29.0	35.0	450	•	•	•	•	•	•								
	<b>C1</b>	45.91 ★	32.0	38.0	450	•	•	•	•	•	•								
	<b>B1</b>	41.38	35.0	42.0	450	•	•	•	•	•	•								
<b>A1</b>	35.59	41.0	49.0	450	•	•	•	•	•	•									
<b>Z48</b>	<b>A2</b>	51.28	28	34	292	•	•	•											
<b>260 ... 450</b>	<b>X1</b>	45.38 ★	32	39	450	•	•	•	•										
	<b>W1</b>	41.26	35	42	450	•	•	•	•										
	<b>V1</b>	37.06 ★	39	47	450	•	•	•	•										
	<b>U1</b>	31.77	46	55	450	•	•	•	•	•									
	<b>T1</b>	28.74 ★	50	61	450	•	•	•	•	•	•								
	<b>S1</b>	26.53	55	66	450	•	•	•	•	•	•								
	<b>R1</b>	23.07 ★	63	76	450	•	•	•	•	•	•	•							
	<b>Q1</b>	20.95	69	84	450	•	•	•	•	•	•	•	•						
	<b>P1</b>	19.13 ★	76	91	450	•	•	•	•	•	•	•	•	•					
	<b>N1</b>	17.55	83	100	450	•	•	•	•	•	•	•	•	•	•				
	<b>M1</b>	16.17 ★	90	108	430	•	•	•	•	•	•	•	•	•	•	•			
	<b>L1</b>	14.68	99	119	420	•	•	•	•	•	•	•	•	•	•	•	•		
	<b>K1</b>	13.38 ★	108	131	410	•	•	•	•	•	•	•	•	•	•	•	•	•	
	<b>J1</b>	12.25	118	143	400	•	•	•	•	•	•	•	•	•	•	•	•	•	
	<b>H1</b>	10.93 ★	133	160	390	•	•	•	•	•	•	•	•	•	•	•	•	•	
	<b>G1</b>	9.76	149	179	380			•	•	•	•	•	•	•	•	•	•	•	
	<b>F1</b>	8.29	175	211	360			•	•	•	•	•	•	•	•	•	•	•	
	<b>E1</b>	6.90 ★	210	254	340			•	•	•	•	•	•	•	•	•	•	•	
	<b>D1</b>	6.79 ★	214	258	270	•	•	•	•	•	•	•	•	•	•	•	•	•	
	<b>C1</b>	6.06	239	289	270			•	•	•	•	•	•	•	•	•	•	•	
	<b>B1</b>	5.15	282	340	270			•	•	•	•	•	•	•	•	•	•	•	
	<b>A1</b>	4.28 ★	339	409	260			•	•	•	•	•	•	•	•	•	•	•	

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]														
			$n_2$ (50 Hz)	$n_2$ (60 Hz)		2.5x the value is permissible for a brief period (e.g. motor starting torque)														
Max. gearbox torque Nm	Order No. 15th and 16th position	$i_{tot}$	rpm	rpm	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size														
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290	
						63	71	80	90	100	112	132	160	180	200	225	250	280	315	
D68-D28 800	N1	41 961	★	0.03	0.04	800	•													
	M1	36 200	★	0.04	0.05	800	•	•												
	L1	31 101		0.05	0.05	800	•	•												
	K1	28 633	★	0.05	0.06	800	•	•	•											
	J1	26 030		0.05	0.07	800	•	•	•											
	H1	23 039	★	0.06	0.07	800	•	•	•											
	G1	19 297		0.07	0.09	800	•	•	•											
	F1	16 454	★	0.09	0.10	800	•	•	•											
	E1	13 986	★	0.10	0.12	800	•	•	•											
	D1	12 154		0.12	0.14	800	•	•	•											
	C1	10 579	★	0.13	0.16	800	•	•	•											
	B1	9 543		0.15	0.18	800	•	•	•											
	A1	8 422		0.17	0.20	800	•	•	•											
D68-Z28 800	H2	7 538	★	0.19	0.22	800	•	•												
	G2	6 693		0.21	0.25	800	•	•												
	F2	5 868	★	0.24	0.29	800	•	•	•											
	E2	5 251		0.27	0.32	800	•	•	•											
	D2	4 660	★	0.30	0.36	800	•	•	•											
	C2	4 084		0.34	0.41	800	•	•	•											
	B2	3 591	★	0.39	0.47	800	•	•	•											
	A2	3 244		0.43	0.52	800	•	•	•	•										
	X1	2 827	★	0.50	0.59	800	•	•	•											
	W1	2 539		0.55	0.66	800	•	•	•											
	V1	2 292	★	0.61	0.73	800	•	•	•	•										
	U1	2 078		0.67	0.81	800	•	•	•	•										
	T1	1 891	★	0.74	0.89	800	•	•	•	•										
	S1	1 672		0.84	1.00	800	•	•	•	•										
	R1	1 544	★	0.91	1.10	800	•	•	•	•										
	Q1	1 329		1.10	1.30	800	•	•	•	•										
	P1	1 208	★	1.20	1.40	800	•	•	•	•										
	N1	1 098	★	1.30	1.50	800	•	•	•	•										
	M1	996		1.40	1.70	800	•	•	•	•										
	L1	906	★	1.50	1.90	800	•	•	•	•										
	K1	801		1.80	2.10	800	•	•	•	•										
J1	740	★	1.90	2.30	800	•	•	•	•											
H1	637		2.20	2.60	800	•	•	•	•											
G1	607	★	2.30	2.80	800	•	•	•	•											
F1	550		2.50	3.10	800	•	•	•	•											
E1	501	★	2.80	3.40	800	•	•	•	•											
D1	443		3.20	3.80	800	•	•	•	•											
C1	409	★	3.40	4.10	800	•	•	•	•											
B1	352		4.00	4.80	800	•	•	•	•											
A1	320	★	4.40	5.30	800	•	•	•	•											

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

## Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]																	
			$i_{tot}$	$n_2$ (50 Hz) rpm		$n_2$ (60 Hz) rpm	$T_{2N}$ ( $f_B=1$ ) Nm	2.5x the value is permissible for a brief period (e.g. motor starting torque)															
								Motor size															
Max. gearbox torque Nm	Order No. 15th and 16th position					3	3	5	10	20	26	61	98	198	198	291	356	580	1290				
<b>D68</b> <b>800</b>	<b>U1</b>	281.01	★	5.2	6.2	800	•	•	•														
	<b>T1</b>	248.68	★	5.8	7.0	800	•	•	•	•													
	<b>S1</b>	226.07		6.4	7.7	800	•	•	•	•													
	<b>R1</b>	203.09	★	7.1	8.6	800	•	•	•	•													
	<b>Q1</b>	174.08		8.3	10.1	800	•	•	•	•	•												
	<b>P1</b>	157.50	★	9.2	11.1	800	•	•	•	•	•												
	<b>N1</b>	145.38		10.0	12.0	800	•	•	•	•	•												
	<b>M1</b>	126.41	★	11.5	13.8	800	•	•	•	•	•												
	<b>L1</b>	114.78		12.6	15.2	800	•	•	•	•	•												
	<b>K1</b>	104.80	★	13.8	16.7	800	•	•	•	•	•												
	<b>J1</b>	96.16		15.1	18.2	800	•	•	•	•	•												
	<b>H1</b>	88.59	★	16.4	19.8	800	•	•	•	•	•												
	<b>G1</b>	80.46		18.0	22.0	800	•	•	•	•	•												
	<b>F1</b>	73.30	★	19.8	24.0	800	•	•	•	•	•												
	<b>E1</b>	67.14		22.0	26.0	800	•	•	•	•	•												
	<b>D1</b>	59.91	★	24.0	29.0	800	•	•	•	•	•												
<b>C1</b>	53.47		27.0	33.0	800			•	•	•													
<b>B1</b>	45.41		32.0	39.0	800			•	•	•													
<b>A1</b>	37.80		38.0	46.0	800			•	•	•													
<b>Z68</b>	<b>X1</b>	48.09	★	30	36	535	•	•	•	•													
<b>420 ... 800</b>	<b>W1</b>	42.06		34	42	800	•	•	•	•	•												
	<b>V1</b>	37.76	★	38	46	800	•	•	•	•	•	•											
	<b>U1</b>	34.49		42	51	800	•	•	•	•	•	•											
	<b>T1</b>	30.60	★	47	57	800	•	•	•	•	•	•	•										
	<b>S1</b>	28.25		51	62	800	•	•	•	•	•	•	•										
	<b>R1</b>	25.55	★	57	68	800	•	•	•	•	•	•	•										
	<b>Q1</b>	23.53		62	74	800	•	•	•	•	•	•	•										
	<b>P1</b>	21.76	★	67	80	800	•	•	•	•	•	•	•	•									
	<b>N1</b>	20.20		72	87	800	•	•	•	•	•	•	•	•									
	<b>M1</b>	17.82	★	81	98	800	•	•	•	•	•	•	•	•									
	<b>L1</b>	16.45		88	106	800	•	•	•	•	•	•	•	•									
	<b>K1</b>	14.74	★	98	119	800	•	•	•	•	•	•	•	•									
	<b>J1</b>	13.59		107	129	800			•	•	•	•	•	•									
	<b>H1</b>	11.40		127	154	785			•	•	•	•	•	•									
	<b>G1</b>	9.73	★	149	180	745			•	•	•	•	•	•									
	<b>F1</b>	8.11		179	216	700				•	•	•	•	•									
	<b>E1</b>	6.72	★	216	260	650				•	•	•	•	•									
	<b>D1</b>	5.93		245	295	490				•	•	•	•	•									
	<b>C1</b>	5.06	★	287	346	480				•	•	•	•	•									
<b>B1</b>	4.22		344	415	470					•	•	•	•										
<b>A1</b>	3.49	★	415	501	420					•	•	•	•										

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]													
			$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm		2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque Nm	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size													
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>D.88-D.28 800</b>	<b>N1</b>	46 233		0.03	0.04	1 680	•												
	<b>M1</b>	39 885	★	0.04	0.04	1 680	•	•											
	<b>L1</b>	34 267		0.04	0.05	1 680	•	•											
	<b>K1</b>	31 547	★	0.04	0.05	1 680	•	•	•										
	<b>J1</b>	28 679		0.05	0.06	1 680	•	•	•										
	<b>H1</b>	25 384	★	0.06	0.07	1 680	•	•	•										
	<b>G1</b>	21 262		0.07	0.08	1 680	•	•	•										
	<b>F1</b>	18 129	★	0.08	0.09	1 680	•	•	•										
	<b>E1</b>	15 409	★	0.09	0.11	1 680	•	•	•										
	<b>D1</b>	13 391		0.10	0.13	1 680	•	•	•										
	<b>C1</b>	11 656	★	0.12	0.14	1 680	•	•	•										
	<b>B1</b>	10 514		0.13	0.16	1 680	•	•	•										
	<b>A1</b>	9 279		0.15	0.18	1 680	•	•	•										
<b>D.88-Z.28 800</b>	<b>H2</b>	8 305	★	0.17	0.20	1 680	•	•											
	<b>G2</b>	7 374		0.19	0.23	1 680	•	•											
	<b>F2</b>	6 465	★	0.22	0.26	1 680	•	•	•										
	<b>E2</b>	5 785		0.24	0.29	1 680	•	•	•										
	<b>D2</b>	5 134	★	0.27	0.33	1 680	•	•	•										
	<b>C2</b>	4 500		0.31	0.37	1 680	•	•	•										
	<b>B2</b>	3 957	★	0.35	0.43	1 680	•	•	•										
	<b>A2</b>	3 574		0.39	0.47	1 680	•	•	•	•									
	<b>X1</b>	3 114	★	0.45	0.54	1 680	•	•	•										
	<b>W1</b>	2 797		0.50	0.60	1 680	•	•	•										
	<b>V1</b>	2 525	★	0.55	0.67	1 680	•	•	•	•									
	<b>U1</b>	2 290		0.61	0.73	1 680	•	•	•	•									
	<b>T1</b>	2 084	★	0.67	0.81	1 680	•	•	•	•									
	<b>S1</b>	1 842		0.76	0.91	1 680	•	•	•	•									
	<b>R1</b>	1 701	★	0.82	0.99	1 680	•	•	•	•									
	<b>Q1</b>	1 465		0.96	1.10	1 680	•	•	•	•									
	<b>P1</b>	1 331	★	1.10	1.30	1 680	•	•	•	•									
	<b>N1</b>	1 210	★	1.20	1.40	1 680	•	•	•	•									
	<b>M1</b>	1 097		1.30	1.50	1 680	•	•	•	•									
	<b>L1</b>	999	★	1.40	1.70	1 680	•	•	•	•									
	<b>K1</b>	883		1.60	1.90	1 680	•	•	•	•									
<b>J1</b>	815	★	1.70	2.10	1 680	•	•	•	•										
<b>H1</b>	702		2.00	2.40	1 680	•	•	•	•										
<b>G1</b>	647	★	2.20	2.60	1 680	•	•	•	•										
<b>F1</b>	587		2.40	2.90	1 680	•	•	•	•										
<b>E1</b>	534	★	2.60	3.10	1 680	•	•	•	•										
<b>D1</b>	472		3.00	3.60	1 680	•	•	•	•										
<b>C1</b>	436	★	3.20	3.90	1 680	•	•	•	•										
<b>B1</b>	375		3.70	4.50	1 680	•	•	•	•										
<b>A1</b>	341	★	4.10	4.90	1 680	•	•	•	•										

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

## Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]																	
			$i_{tot}$	$n_2$ (50 Hz) rpm		$n_2$ (60 Hz) rpm	$T_{2N}$ ( $f_B=1$ ) Nm	2.5x the value is permissible for a brief period (e.g. motor starting torque)															
								Motor size															
Max. gearbox torque Nm	Order No. 15th and 16th position					3	3	5	10	20	26	61	98	198	198	291	356	580	1290				
<b>D.88</b> <b>1 680</b>	<b>V1</b>	300.41 ★	4.8	5.8	1 680	•	•	•	•														
	<b>U1</b>	270.90	5.4	6.5	1 680	•	•	•	•														
	<b>T1</b>	244.29 ★	5.9	7.2	1 680	•	•	•	•														
	<b>S1</b>	213.64	6.8	8.2	1 680	•	•	•	•	•													
	<b>R1</b>	191.80 ★	7.6	9.1	1 680	•	•	•	•	•	•												
	<b>Q1</b>	175.18	8.3	10.0	1 680	•	•	•	•	•	•												
	<b>R1</b>	155.46 ★	9.3	11.3	1 680	•	•	•	•	•	•	•											
	<b>N1</b>	143.50	10.1	12.2	1 680	•	•	•	•	•	•	•											
	<b>M1</b>	129.79 ★	11.2	13.5	1 680	•	•	•	•	•	•	•											
	<b>L1</b>	119.52	12.1	14.6	1 680	•	•	•	•	•	•	•											
	<b>K1</b>	110.54 ★	13.1	15.8	1 680	•	•	•	•	•	•	•											
	<b>J1</b>	102.61	14.1	17.1	1 680	•	•	•	•	•	•	•											
	<b>H1</b>	90.53 ★	16.0	19.3	1 680	•	•	•	•	•	•	•											
	<b>G1</b>	83.58	17.3	21.0	1 680	•	•	•	•	•	•	•											
	<b>F1</b>	74.88 ★	19.4	23.0	1 680	•	•	•	•	•	•	•											
	<b>E1</b>	69.05	21.0	25.0	1 680			•	•	•	•	•											
	<b>D1</b>	57.93	25.0	30.0	1 680			•	•	•	•	•											
	<b>C1</b>	49.42 ★	29.0	35.0	1 680				•	•	•	•											
<b>B1</b>	41.19	35.0	42.0	1 680					•	•	•												
<b>A1</b>	34.14 ★	42.0	51.0	1 680						•	•	•											
<b>Z.88</b> <b>660 ... 1 680</b>	<b>B2</b>	50.73	29	34	1 468				•	•													
	<b>A2</b>	45.76 ★	32	38	1 680				•	•	•												
	<b>X1</b>	41.90	35	42	1 680				•	•	•												
	<b>W1</b>	37.27 ★	39	47	1 680				•	•	•	•											
	<b>V1</b>	34.07	43	51	1 680				•	•	•	•											
	<b>U1</b>	31.32 ★	46	56	1 680				•	•	•	•											
	<b>T1</b>	28.93	50	60	1 680				•	•	•	•											
	<b>S1</b>	26.85 ★	54	65	1 680				•	•	•	•	•										
	<b>R1</b>	25.01	58	70	1 680				•	•	•	•	•										
	<b>Q1</b>	22.61 ★	64	77	1 680				•	•	•	•	•	•									
	<b>P1</b>	20.81	70	84	1 680				•	•	•	•	•	•	•								
	<b>N1</b>	18.72 ★	77	93	1 680				•	•	•	•	•	•	•								
	<b>M1</b>	17.27	84	101	1 680				•	•	•	•	•	•	•	•							
	<b>L1</b>	14.63	99	120	1 620				•	•	•	•	•	•	•	•							
	<b>K1</b>	12.75 ★	114	137	1 550				•	•	•	•	•	•	•	•							
	<b>J1</b>	10.85	134	161	1 470					•	•	•	•	•	•	•							
	<b>H1</b>	9.26 ★	157	189	1 390					•	•	•	•	•	•	•							
	<b>G1</b>	7.59 ★	191	231	1 300					•	•	•	•	•	•	•							
	<b>F1</b>	6.96	208	251	1 260					•	•	•	•	•	•	•							
	<b>E1</b>	5.94 ★	244	295	1 190					•	•	•	•	•	•	•							
	<b>D1</b>	4.87 ★	298	359	1 110					•	•	•	•	•	•	•							
<b>C1</b>	4.45 ★	326	393	800					•	•	•	•	•	•	•								
<b>B1</b>	3.79 ★	383	462	740					•	•	•	•	•	•	•								
<b>A1</b>	3.11 ★	466	563	660					•	•	•	•	•	•	•								

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and QQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]													
			$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm		2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque Nm	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size													
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>D.108-D38</b> <b>3 100</b>	<b>P1</b>	68 896	0.02	0.03	3 100	•	•	•											
	<b>N1</b>	61 169	0.02	0.03	3 100	•	•	•											
	<b>M1</b>	53 627	0.03	0.03	3 100	•	•	•	•										
	<b>L1</b>	47 990	0.03	0.04	3 100	•	•	•	•										
	<b>K1</b>	42 595	0.03	0.04	3 100	•	•	•	•										
	<b>J1</b>	37 326	0.04	0.05	3 100	•	•	•	•										
	<b>H1</b>	32 819	0.04	0.05	3 100	•	•	•	•										
	<b>G1</b>	29 650	0.05	0.06	3 100	•	•	•	•										
	<b>F1</b>	25 836	0.06	0.07	3 100	•	•	•	•										
	<b>E1</b>	23 204	0.06	0.08	3 100	•	•	•	•										
	<b>D1</b>	20 948	0.07	0.08	3 100	•	•	•	•										
	<b>C1</b>	18 993	0.08	0.09	3 100	•	•	•	•										
	<b>B1</b>	17 282	0.08	0.10	3 100	•	•	•	•										
	<b>A1</b>	15 280	0.09	0.11	3 100	•	•	•	•										

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and QQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.



## Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]															
			$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm		2.5x the value is permissible for a brief period (e.g. motor starting torque)															
Max. gearbox torque Nm	Order No. 15th and 16th position	$i_{tot}$			$T_{2N}$ ( $f_B=1$ ) Nm	Motor size															
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290		
						63	71	80	90	100	112	132	160	180	200	225	250	280	315		
<b>D.108-Z38</b> <b>3 100</b>	<b>P2</b>	15 853	0.09	0.11	3 100	•	•	•													
	<b>N2</b>	14 098	0.10	0.12	3 100	•	•	•													
	<b>M2</b>	12 229	0.12	0.14	3 100	•	•	•	•												
	<b>L2</b>	11 426	0.13	0.15	3 100	•	•	•	•												
	<b>K2</b>	10 049	0.14	0.17	3 100	•	•	•	•												
	<b>J2</b>	8 801	0.16	0.20	3 100	•	•	•	•	•											
	<b>H2</b>	7 785	0.19	0.22	3 100	•	•	•	•	•											
	<b>G2</b>	7 055	0.21	0.25	3 100	•	•	•	•	•											
	<b>F2</b>	6 228	0.23	0.28	3 100	•	•	•	•	•											
	<b>E2</b>	5 618	0.26	0.31	3 100	•	•	•	•	•											
	<b>D2</b>	5 096	0.28	0.34	3 100	•	•	•	•	•											
	<b>C2</b>	4 643	0.31	0.38	3 100	•	•	•	•	•											
	<b>B2</b>	4 246	0.34	0.41	3 100	•	•	•	•	•											
	<b>A2</b>	3 797	0.38	0.46	3 100	•	•	•	•	•											
	<b>X1</b>	3 624	0.40	0.48	3 100	•	•	•													
	<b>W1</b>	3 223	0.45	0.54	3 100	•	•	•													
	<b>V1</b>	2 796	0.52	0.63	3 100	•	•	•	•												
	<b>U1</b>	2 612	0.56	0.67	3 100	•	•	•	•												
	<b>T1</b>	2 297	0.63	0.76	3 100	•	•	•	•												
	<b>S1</b>	2 012	0.72	0.87	3 100	•	•	•	•	•											
	<b>R1</b>	1 780	0.81	0.98	3 100	•	•	•	•	•											
	<b>Q1</b>	1 613	0.90	1.10	3 100	•	•	•	•	•											
	<b>P1</b>	1 424	1.00	1.20	3 100	•	•	•	•	•											
	<b>N1</b>	1 284	1.10	1.40	3 100	•	•	•	•	•											
	<b>M1</b>	1 165	1.20	1.50	3 100	•	•	•	•	•											
	<b>L1</b>	1 061	1.40	1.60	3 100	•	•	•	•	•											
	<b>K1</b>	971	1.50	1.80	3 100	•	•	•	•	•											
	<b>J1</b>	868	1.70	2.00	3 100	•	•	•	•	•											
	<b>H1</b>	797	1.80	2.20	3 100	•	•	•	•	•											
	<b>G1</b>	718	2.00	2.40	3 100	•	•	•	•	•											
	<b>F1</b>	618	2.30	2.80	3 100	•	•	•	•	•											
<b>E1</b>	616	2.40	2.80	3 100	•	•	•	•	•												
<b>D1</b>	551	2.60	3.20	3 100	•	•	•	•	•												
<b>C1</b>	506	2.90	3.50	3 100	•	•	•	•	•												
<b>B1</b>	456	3.20	3.80	3 100	•	•	•	•	•												
<b>A1</b>	392	3.70	4.50	3 100	•	•	•	•	•												

★ Preferred transmission ratio

1) Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]													
			$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm		2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque Nm	Order No. 15th and 16th position	$i_{tot}$			$T_{2N}$ ( $f_B=1$ ) Nm	Motor size													
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>D.108</b> <b>3 100</b>	<b>V1</b>	359.30	4.0	4.9	3 100			•	•										
	<b>U1</b>	325.21 ★	4.5	5.4	3 100			•	•										
	<b>T1</b>	284.73	5.1	6.1	3 100			•	•	•									
	<b>S1</b>	256.86 ★	5.6	6.8	3 100			•	•	•	•								
	<b>R1</b>	235.19	6.2	7.4	3 100			•	•	•	•								
	<b>Q1</b>	209.21 ★	6.9	8.4	3 100			•	•	•	•	•							
	<b>P1</b>	191.21	7.6	9.2	3 100			•	•	•	•	•							
	<b>N1</b>	175.78 ★	8.2	10.0	3 100			•	•	•	•	•							
	<b>M1</b>	162.40	8.9	10.8	3 100			•	•	•	•	•							
	<b>L1</b>	150.70 ★	9.6	11.6	3 100			•	•	•	•	•	•						
	<b>K1</b>	140.37	10.3	12.5	3 100			•	•	•	•	•	•						
	<b>J1</b>	126.90 ★	11.4	13.8	3 100			•	•	•	•	•	•						
	<b>H1</b>	116.83	12.4	15.0	3 100			•	•	•	•	•	•						
	<b>G1</b>	105.08 ★	13.8	16.7	3 100			•	•	•	•	•	•	•					
	<b>F1</b>	96.94	15.0	18.1	3 100			•	•	•	•	•	•	•					
	<b>E1</b>	82.14	17.7	21.0	3 100			•	•	•	•	•	•	•					
	<b>D1</b>	71.59 ★	20.0	24.0	3 100			•	•	•	•	•	•	•					
<b>C1</b>	60.90	24.0	29.0	3 100					•	•	•	•	•						
<b>B1</b>	51.97 ★	28.0	34.0	3 100					•	•	•	•	•						
<b>A1</b>	42.61 ★	34.0	41.0	3 100					•	•	•	•	•						
<b>Z.108</b>	<b>E2</b>	59.05 ★	25	30	2 368			•	•	•									
<b>1 080 ... 3 100</b>	<b>D2</b>	54.15	27	32	2 306			•	•	•									
	<b>C2</b>	48.38 ★	30	36	3 100			•	•	•	•								
	<b>B2</b>	44.31	33	39	3 100			•	•	•	•	•							
	<b>A2</b>	40.82 ★	36	43	3 100			•	•	•	•	•							
	<b>X1</b>	37.79	38	46	3 100			•	•	•	•	•							
	<b>W1</b>	35.14 ★	41	50	3 100			•	•	•	•	•	•						
	<b>V1</b>	32.81	44	53	3 100			•	•	•	•	•	•						
	<b>U1</b>	29.35 ★	49	60	3 100			•	•	•	•	•	•	•					
	<b>T1</b>	27.20	53	64	3 100			•	•	•	•	•	•	•					
	<b>S1</b>	24.94 ★	58	70	3 100			•	•	•	•	•	•	•	•			1)	
	<b>R1</b>	22.86	63	77	3 100			•	•	•	•	•	•	•	•			1)	
	<b>Q1</b>	19.48	74	90	3 100			•	•	•	•	•	•	•	•			1)	
	<b>P1</b>	17.19 ★	84	102	3 100			•	•	•	•	•	•	•	•			1)	
	<b>N1</b>	14.63	99	120	3 100			•	•	•	•	•	•	•	•			1)	
	<b>M1</b>	12.68 ★	114	138	3 100			•	•	•	•	•	•	•	•			1)	
	<b>L1</b>	10.67 ★	136	164	3 100			•	•	•	•	•	•	•	•			1)	
	<b>K1</b>	9.62	151	182	3 100			•	•	•	•	•	•	•	•			1)	
	<b>J1</b>	8.27 ★	175	212	3 100			•	•	•	•	•	•	•	•			1)	
	<b>H1</b>	7.10 ★	204	246	1 800			•	•	•	•	•	•	•	•			1)	
	<b>G1</b>	6.41	226	273	1 760			•	•	•	•	•	•	•	•			1)	
	<b>E1</b>	5.51 ★	263	318	1 700			•	•	•	•	•	•	•	•			1)	
	<b>D1</b>	5.24 ★	277	334	1 140			•	•	•	•	•	•	•	•			1)	
	<b>C1</b>	4.41 ★	329	397	1 140			•	•	•	•	•	•	•	•			1)	
<b>B1</b>	3.98 ★	364	440	1 120			•	•	•	•	•	•	•	•			1)		
<b>A1</b>	3.42 ★	424	512	1 080			•	•	•	•	•	•	•	•			1)		

★ Preferred transmission ratio

1) Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

## Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]															
			$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm		2.5x the value is permissible for a brief period (e.g. motor starting torque)															
Max. gearbox torque Nm	Order No. 15th and 16th position	$i_{tot}$	★		$T_{2N}$ ( $f_B=1$ ) Nm	Motor size															
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290		
						63	71	80	90	100	112	132	160	180	200	225	250	280	315		
<b>D.128-D38</b> <b>5 100</b>	<b>P1</b>	51 420	★	0.03	0.03	5 100	•	•	•												
	<b>N1</b>	45 652		0.03	0.04	5 100	•	•	•												
	<b>M1</b>	40 024	★	0.04	0.04	5 100	•	•	•	•											
	<b>L1</b>	35 817		0.04	0.05	5 100	•	•	•	•											
	<b>K1</b>	31 790	★	0.05	0.06	5 100	•	•	•	•											
	<b>J1</b>	27 858		0.05	0.06	5 100	•	•	•	•											
	<b>H1</b>	24 494	★	0.06	0.07	5 100	•	•	•	•											
	<b>G1</b>	22 129		0.07	0.08	5 100	•	•	•	•											
	<b>F1</b>	19 282	★	0.08	0.09	5 100	•	•	•	•											
	<b>E1</b>	17 318		0.08	0.10	5 100	•	•	•	•											
	<b>D1</b>	15 634	★	0.09	0.11	5 100	•	•	•	•											
	<b>C1</b>	14 175		0.10	0.12	5 100	•	•	•	•											
	<b>B1</b>	12 898	★	0.11	0.14	5 100	•	•	•	•											
<b>A1</b>	11 404		0.13	0.15	5 100	•	•	•	•												
<b>D.128-Z38</b> <b>5 100</b>	<b>X1</b>	11 831	★	0.12	0.15	5 100	•	•	•												
	<b>W1</b>	10 521		0.14	0.17	5 100	•	•	•												
	<b>V1</b>	9 127	★	0.16	0.19	5 100	•	•	•	•											
	<b>U1</b>	8 528		0.17	0.21	5 100	•	•	•	•											
	<b>T1</b>	7 500	★	0.19	0.23	5 100	•	•	•	•											
	<b>S1</b>	6 569		0.22	0.27	5 100	•	•	•	•	•										
	<b>R1</b>	5 810	★	0.25	0.30	5 100	•	•	•	•	•										
	<b>Q1</b>	5 266		0.28	0.33	5 100	•	•	•	•	•										
	<b>P1</b>	4 648	★	0.31	0.38	5 100	•	•	•	•	•										
	<b>N1</b>	4 193		0.35	0.42	5 100	•	•	•	•	•										
	<b>M1</b>	3 803	★	0.38	0.46	5 100	•	•	•	•	•										
	<b>L1</b>	3 465		0.42	0.51	5 100	•	•	•	•	•										
	<b>K1</b>	3 169	★	0.46	0.55	5 100	•	•	•	•	•										
	<b>J1</b>	2 834		0.51	0.62	5 100	•	•	•	•	•										
	<b>H1</b>	2 602	★	0.56	0.67	5 100	•	•	•	•	•										
	<b>G1</b>	2 345		0.62	0.75	5 100	•	•	•	•	•										
	<b>F1</b>	2 017	★	0.72	0.87	5 100	•	•	•	•	•										
	<b>E1</b>	2 011	★	0.72	0.87	5 100	•	•	•	•	•										
	<b>C1</b>	1 798		0.81	0.97	5 100	•	•	•	•	•										
	<b>D1</b>	1 651	★	0.88	1.10	5 100	•	•	•	•	•										
<b>B1</b>	1 488		0.97	1.20	5 100	•	•	•	•	•											
<b>A1</b>	1 280	★	1.10	1.40	5 100	•	•	•	•	•											

★ Preferred transmission ratio

1) Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]													
			$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm		2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque Nm	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size													
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>D.128-Z48</b>	<b>P1</b>	1 271	1.1	1.4	5 100	•	•	•	•	•	•								
<b>5 100</b>	<b>N1</b>	1 166	1.2	1.5	5 100	•	•	•	•	•	•								
	<b>M1</b>	1 074	1.4	1.6	5 100	•	•	•	•	•	•								
	<b>L1</b>	975	1.5	1.8	5 100	•	•	•	•	•	•								
	<b>K1</b>	889	1.6	2.0	5 100	•	•	•	•	•	•								
	<b>J1</b>	814	1.8	2.1	5 100	•	•	•	•	•	•								
	<b>H1</b>	726	2.0	2.4	5 100	•	•	•	•	•	•								
	<b>G1</b>	648	2.2	2.7	5 100			•	•	•	•								
	<b>F1</b>	551	2.6	3.2	5 100			•	•	•	•								
	<b>E1</b>	458	3.2	3.8	5 100			•	•	•	•								
	<b>D1</b>	451	3.2	3.9	5 100	•	•	•	•	•	•								
	<b>C1</b>	403	3.6	4.3	5 100			•	•	•	•								
	<b>B1</b>	342	4.2	5.1	5 100			•	•	•	•								
	<b>A1</b>	285	5.1	6.1	5 100			•	•	•	•								

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and QQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

## Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]														
			$i_{tot}$	$n_2$ (50 Hz) rpm		$n_2$ (60 Hz) rpm	$T_{2N}$ ( $f_B=1$ ) Nm	2.5x the value is permissible for a brief period (e.g. motor starting torque)												
								Motor size												
Max. gearbox torque Nm	Order No. 15th and 16th position					3	3	5	10	20	26	61	98	198	198	291	356	580	1290	
						63	71	80	90	100	112	132	160	180	200	225	250	280	315	
<b>D.128</b> <b>5 100</b>	<b>K1</b>	268.16 ★	5.4	6.5	5 100				•	•	•									
	<b>T1</b>	245.93	5.9	7.1	5 100				•	•	•									
	<b>S1</b>	219.72 ★	6.6	8.0	5 100				•	•	•	•								
	<b>R1</b>	201.22	7.2	8.7	5 100				•	•	•	•								
	<b>Q1</b>	185.36 ★	7.8	9.4	5 100				•	•	•	•								
	<b>P1</b>	171.62	8.4	10.2	5 100				•	•	•	•								
	<b>N1</b>	159.60 ★	9.1	11.0	5 100				•	•	•	•	•							
	<b>M1</b>	148.99	9.7	11.7	5 100				•	•	•	•	•							
	<b>L1</b>	133.30 ★	10.9	13.1	5 100				•	•	•	•	•	•						
	<b>K1</b>	123.53	11.7	14.2	5 100				•	•	•	•	•	•	•					
	<b>J1</b>	113.24 ★	12.8	15.5	5 100				•	•	•	•	•	•	•	•				
	<b>H1</b>	103.80	14.0	16.9	5 100				•	•	•	•	•	•	•	•				
	<b>G1</b>	88.46	16.4	19.8	5 100				•	•	•	•	•	•	•	•				
	<b>F1</b>	78.06 ★	18.6	22.0	5 100				•	•	•	•	•	•	•	•				
	<b>E1</b>	66.43	22.0	26.0	5 100					•	•	•	•	•	•	•				
	<b>D1</b>	57.56 ★	25.0	30.0	5 100					•	•	•	•	•	•	•				
<b>C1</b>	48.44 ★	30.0	36.0	5 100					•	•	•	•	•	•	•					
<b>B1</b>	43.71	33.0	40.0	5 100							•	•	•	•	•					
<b>A1</b>	37.57 ★	39.0	47.0	5 100							•	•	•	•	•					
<b>Z.128</b>	<b>D2</b>	44.19 ★	33	40	3 275				•	•	•									
<b>2 220 ... 5 100</b>	<b>C2</b>	40.96	35	43	3 196				•	•	•									
	<b>B2</b>	38.94 ★	37	45	5 100				•	•	•	•								
	<b>A2</b>	36.39	40	48	5 100				•	•	•	•								
	<b>X1</b>	32.11 ★	45	55	5 100				•	•	•	•	•							
	<b>W1</b>	30.28	48	58	5 100				•	•	•	•	•	•						
	<b>V1</b>	27.13 ★	53	65	5 100				•	•	•	•	•	•	•					
	<b>U1</b>	25.05	58	70	5 100				•	•	•	•	•	•	•	•				
	<b>T1</b>	21.41	68	82	5 100				•	•	•	•	•	•	•	•	•			
	<b>S1</b>	19.35 ★	75	90	5 100				•	•	•	•	•	•	•	•	•	•		
	<b>R1</b>	18.64	78	94	5 100					•	•	•	•	•	•	•	•	•		
	<b>Q1</b>	16.12	90	109	4 993				•	•	•	•	•	•	•	•	•	•		
	<b>P1</b>	14.06 ★	103	124	4 868				•	•	•	•	•	•	•	•	•	•		
	<b>N1</b>	12.03 ★	121	145	4 716				•	•	•	•	•	•	•	•	•	•		
	<b>M1</b>	10.78	135	162	4 603					•	•	•	•	•	•	•	•	•		
	<b>L1</b>	9.13 ★	159	192	4 425						•	•	•	•	•	•	•	•		
	<b>K1</b>	7.88	184	222	4 258							•	•	•	•	•	•	•		
	<b>J1</b>	7.29 ★	199	240	2 540								•	•	•	•	•	•		
	<b>H1</b>	6.24 ★	232	280	2 530								•	•	•	•	•	•		
	<b>G1</b>	5.93 ★	245	295	3 908								•	•	•	•	•	•		
	<b>F1</b>	5.59 ★	259	313	2 607								•	•	•	•	•	•		
	<b>E1</b>	4.83	300	362	2 512								•	•	•	•	•	•		
	<b>D1</b>	4.73 ★	307	370	2 375								•	•	•	•	•	•		
	<b>C1</b>	4.09 ★	355	428	2 360								•	•	•	•	•	•		
<b>B1</b>	3.63 ★	399	482	2 310								•	•	•	•	•	•			
<b>A1</b>	3.07 ★	472	570	2 220								•	•	•	•	•	•			

★ Preferred transmission ratio

1) Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]															
			$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm		2.5x the value is permissible for a brief period (e.g. motor starting torque)															
Max. gearbox torque Nm	Order No. 15th and 16th position	$i_{tot}$	$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm	$T_{2N}$ ( $f_B=1$ ) Nm	Motor size															
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290		
						63	71	80	90	100	112	132	160	180	200	225	250	280	315		
<b>D.148-D38</b> <b>8 000</b>	<b>P1</b>	64 450	0.02	0.03	8 000	*	*	*													
	<b>N1</b>	57 221	0.03	0.03	8 000	*	*	*													
	<b>M1</b>	50 166	0.03	0.03	8 000	*	*	*	*												
	<b>L1</b>	44 893	0.03	0.04	8 000	*	*	*	*	*											
	<b>K1</b>	39 846	0.04	0.04	8 000	*	*	*	*	*											
	<b>J1</b>	34 917	0.04	0.05	8 000	*	*	*	*	*											
	<b>H1</b>	30 701	0.05	0.06	8 000	*	*	*	*	*											
	<b>G1</b>	27 736	0.05	0.06	8 000	*	*	*	*	*											
	<b>F1</b>	24 169	0.06	0.07	8 000	*	*	*	*	*											
	<b>E1</b>	21 707	0.07	0.08	8 000	*	*	*	*	*											
	<b>D1</b>	19 596	0.07	0.09	8 000	*	*	*	*	*											
	<b>C1</b>	17 767	0.08	0.10	8 000	*	*	*	*	*											
	<b>B1</b>	16 167	0.09	0.11	8 000	*	*	*	*	*											
	<b>A1</b>	14 294	0.10	0.12	8 000	*	*	*	*	*											
<b>D.148-Z38</b> <b>8 000</b>	<b>X1</b>	14 830	0.10	0.12	8 000	*	*	*	*												
	<b>W1</b>	13 188	0.11	0.13	8 000	*	*	*	*												
	<b>V1</b>	11 440	0.13	0.15	8 000	*	*	*	*	*											
	<b>U1</b>	10 689	0.14	0.16	8 000	*	*	*	*	*											
	<b>T1</b>	9 401	0.15	0.19	8 000	*	*	*	*	*											
	<b>S1</b>	8 233	0.18	0.21	8 000	*	*	*	*	*	*										
	<b>R1</b>	7 282	0.20	0.24	8 000	*	*	*	*	*	*										
	<b>Q1</b>	6 600	0.22	0.27	8 000	*	*	*	*	*	*										
	<b>P1</b>	5 826	0.25	0.30	8 000	*	*	*	*	*	*										
	<b>N1</b>	5 256	0.28	0.33	8 000	*	*	*	*	*	*										
	<b>M1</b>	4 767	0.30	0.37	8 000	*	*	*	*	*	*										
	<b>L1</b>	4 343	0.33	0.40	8 000	*	*	*	*	*	*										
	<b>K1</b>	3 972	0.37	0.44	8 000	*	*	*	*	*	*										
	<b>J1</b>	3 552	0.41	0.49	8 000	*	*	*	*	*	*										
	<b>H1</b>	3 261	0.44	0.54	8 000	*	*	*	*	*	*										
	<b>G1</b>	2 939	0.49	0.60	8 000	*	*	*	*	*	*										
	<b>F1</b>	2 528	0.57	0.69	8 000	*	*	*	*	*	*										
	<b>E1</b>	2 521	0.58	0.69	8 000	*	*	*	*	*	*										
<b>D1</b>	2 254	0.64	0.78	8 000	*	*	*	*	*	*											
<b>C1</b>	2 070	0.70	0.85	8 000	*	*	*	*	*	*											
<b>B1</b>	1 865	0.78	0.94	8 000	*	*	*	*	*	*											
<b>A1</b>	1 604	0.90	1.10	8 000	*	*	*	*	*	*											
<b>D.148-Z48</b> <b>8 000</b>	<b>N1</b>	1 631	0.89	1.10	8 000	*	*	*	*	*	*										
	<b>M1</b>	1 502	0.97	1.20	8 000	*	*	*	*	*	*										
	<b>L1</b>	1 364	1.10	1.30	8 000	*	*	*	*	*	*										
	<b>K1</b>	1 243	1.20	1.40	8 000	*	*	*	*	*	*										
	<b>J1</b>	1 139	1.30	1.50	8 000	*	*	*	*	*	*										
	<b>H1</b>	1 016	1.40	1.70	8 000	*	*	*	*	*	*										
	<b>G1</b>	907	1.60	1.90	8 000	*	*	*	*	*	*										
	<b>F1</b>	770	1.90	2.30	8 000	*	*	*	*	*	*										
	<b>E1</b>	641	2.30	2.70	8 000	*	*	*	*	*	*										
	<b>D1</b>	631	2.30	2.80	8 000	*	*	*	*	*	*										
	<b>C1</b>	563	2.60	3.10	8 000	*	*	*	*	*	*										
	<b>B1</b>	478	3.00	3.70	8 000	*	*	*	*	*	*										
<b>A1</b>	398	3.60	4.40	8 000	*	*	*	*	*	*											

★ Preferred transmission ratio

1) Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]															
			$i_{tot}$	$n_2$ (50 Hz) rpm		$n_2$ (60 Hz) rpm	$T_{2N}$ ( $f_B=1$ ) Nm	2.5x the value is permissible for a brief period (e.g. motor starting torque)													
								Motor size													
Max. gearbox torque Nm	Order No. 15th and 16th position					3	3	5	10	20	26	61	98	198	198	291	356	580	1290		
						63	71	80	90	100	112	132	160	180	200	225	250	280	315		
<b>D.148</b> <b>8 000</b>	<b>W1</b>	336.11	4.3	5.2	8 000					•	•										
	<b>V1</b>	301.34 ★	4.8	5.8	8 000					•	•	•									
	<b>U1</b>	276.23	5.2	6.3	8 000					•	•	•									
	<b>T1</b>	254.70 ★	5.7	6.9	8 000					•	•	•									
	<b>S1</b>	236.05	6.1	7.4	8 000					•	•	•									
	<b>R1</b>	224.43 ★	6.5	7.8	8 000					•	•	•	•								
	<b>Q1</b>	209.76	6.9	8.3	8 000					•	•	•	•								
	<b>P1</b>	185.03 ★	7.8	9.5	8 000					•	•	•	•	•							
	<b>N1</b>	174.53	8.3	10.0	8 000					•	•	•	•	•	•						
	<b>M1</b>	156.38 ★	9.3	11.2	8 000					•	•	•	•	•	•	•					
	<b>L1</b>	144.39	10.0	12.1	8 000					•	•	•	•	•	•	•					
	<b>K1</b>	123.37	11.8	14.2	8 000					•	•	•	•	•	•	•					
	<b>J1</b>	111.50 ★	13.0	15.7	8 000					•	•	•	•	•	•	•					
	<b>H1</b>	107.42	13.5	16.3	8 000						•	•	•	•	•	•					
	<b>G1</b>	92.91	15.6	18.8	8 000					•	•	•	•	•	•	•					
	<b>F1</b>	81.04 ★	17.9	22.0	8 000					•	•	•	•	•	•	•					
	<b>E1</b>	69.36 ★	21.0	25.0	8 000					•	•	•	•	•	•	•					
	<b>D1</b>	62.12	23.0	28.0	8 000						•	•	•	•	•	•					
<b>C1</b>	52.61 ★	28.0	33.0	8 000							•	•	•	•	•						
<b>B1</b>	45.44	32.0	39.0	8 000								•	•	•	•						
<b>A1</b>	34.15 ★	42.0	51.0	8 000									•	•	•	•					
<b>Z.148</b> <b>3 850 ... 8 000</b>	<b>B2</b>	57.50	25	30	4 664							•									
	<b>A2</b>	54.24 ★	27	32	8 000								•	•							
	<b>X1</b>	50.74	29	34	8 000								•	•							
	<b>W1</b>	45.11 ★	32	39	8 000								•	•	•	•					
	<b>V1</b>	42.59	34	41	8 000								•	•	•	•					
	<b>U1</b>	38.23 ★	38	46	8 000								•	•	•	•	•				
	<b>T1</b>	35.09	41	50	8 000								•	•	•	•	•				
	<b>S1</b>	30.28	48	58	8 000								•	•	•	•	•	•			
	<b>R1</b>	26.49	55	66	8 000								•	•	•	•	•	•			
	<b>Q1</b>	23.04	63	76	8 000								•	•	•	•	•	•			
	<b>P1</b>	20.21 ★	72	87	8 000								•	•	•	•	•	•			
	<b>N1</b>	17.09 ★	85	102	8 000								•	•	•	•	•	•			
	<b>M1</b>	15.51	93	113	8 000								•	•	•	•	•	•			
	<b>L1</b>	13.52 ★	107	129	8 000								•	•	•	•	•	•			
	<b>K1</b>	11.48	126	152	8 000									•	•	•	•	•			
	<b>J1</b>	8.79 ★	165	199	8 000										•	•	•	•			
	<b>H1</b>	8.64 ★	168	203	4 800										•	•	•	•			
	<b>G1</b>	7.84 ★	185	223	4 800										•	•	•	•			
	<b>F1</b>	7.57 ★	192	231	5 600										•	•	•	•			
	<b>E1</b>	6.84 ★	212	256	4 800										•	•	•	•			
<b>D1</b>	6.43	226	272	5 400											•	•	•				
<b>C1</b>	5.80 ★	250	302	4 200											•	•	•				
<b>B1</b>	4.92 ★	295	356	5 050											•	•	•				
<b>A1</b>	4.44 ★	327	394	3 850											•	•	•				

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]													
			$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm		2.5x the value is permissible for a brief period (e.g. motor starting torque)													
Max. gearbox torque Nm	Order No. 15th and 16th position	$i_{tot}$	★		$T_{2N}$ ( $f_B=1$ ) Nm	Motor size													
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290
						63	71	80	90	100	112	132	160	180	200	225	250	280	315
<b>D.168-D48</b> 14 000	<b>P1</b>	71 317	★	0.02	0.02	14 000	•	•	•										
	<b>N1</b>	63 421		0.02	0.03	14 000	•	•	•										
	<b>M1</b>	55 016	★	0.03	0.03	14 000	•	•	•	•									
	<b>L1</b>	51 404		0.03	0.03	14 000	•	•	•	•									
	<b>K1</b>	45 210	★	0.03	0.04	14 000	•	•	•	•									
	<b>J1</b>	39 595		0.04	0.04	14 000	•	•	•	•	•								
	<b>H1</b>	35 022	★	0.04	0.05	14 000	•	•	•	•	•								
	<b>G1</b>	31 740		0.05	0.06	14 000	•	•	•	•	•								
	<b>F1</b>	28 017	★	0.05	0.06	14 000	•	•	•	•	•								
	<b>E1</b>	25 274		0.06	0.07	14 000	•	•	•	•	•								
	<b>D1</b>	22 923	★	0.06	0.08	14 000	•	•	•	•	•								
	<b>C1</b>	20 886		0.07	0.08	14 000	•	•	•	•	•								
	<b>B1</b>	19 103	★	0.08	0.09	14 000	•	•	•	•	•								
	<b>A1</b>	17 080		0.08	0.10	14 000	•	•	•	•	•								
<b>D.168-Z48</b> 14 000	<b>A2</b>	17 519		0.08	0.10	14 000	•	•	•										
	<b>X1</b>	15 504	★	0.09	0.11	14 000	•	•	•	•									
	<b>W1</b>	14 094		0.10	0.12	14 000	•	•	•	•									
	<b>V1</b>	12 661	★	0.11	0.14	14 000	•	•	•	•									
	<b>U1</b>	10 853		0.13	0.16	14 000	•	•	•	•	•								
	<b>T1</b>	9 819	★	0.15	0.18	14 000	•	•	•	•	•	•							
	<b>S1</b>	9 064		0.16	0.19	14 000	•	•	•	•	•	•							
	<b>R1</b>	7 881	★	0.18	0.22	14 000	•	•	•	•	•	•							
	<b>Q1</b>	7 156		0.20	0.24	14 000	•	•	•	•	•	•							
	<b>P1</b>	6 534	★	0.22	0.27	14 000	•	•	•	•	•	•							
	<b>N1</b>	5 995		0.24	0.29	14 000	•	•	•	•	•	•							
	<b>M1</b>	5 523	★	0.26	0.32	14 000	•	•	•	•	•	•							
	<b>L1</b>	5 016		0.29	0.35	14 000	•	•	•	•	•	•							
	<b>K1</b>	4 569	★	0.32	0.38	14 000	•	•	•	•	•	•							
	<b>J1</b>	4 186		0.35	0.42	14 000	•	•	•	•	•	•							
	<b>H1</b>	3 735	★	0.39	0.47	14 000	•	•	•	•	•	•							
	<b>G1</b>	3 333		0.44	0.53	14 000			•	•	•	•							
	<b>F1</b>	2 831		0.51	0.62	14 000			•	•	•	•							
	<b>E1</b>	2 357	★	0.62	0.74	14 000			•	•	•	•							
	<b>D1</b>	2 319	★	0.63	0.75	14 000	•	•	•	•	•	•							
<b>C1</b>	2 070		0.70	0.85	14 000			•	•	•	•								
<b>B1</b>	1 758		0.82	1.00	14 000			•	•	•	•								
<b>A1</b>	1 463	★	0.99	1.20	14 000			•	•	•	•								
<b>D.168-Z68</b> 14 000	<b>H1</b>	1 226		1.2	1.4	14 000			•	•	•	•							
	<b>G1</b>	1 046		1.4	1.7	14 000			•	•	•	•							
	<b>F1</b>	871		1.7	2.0	14 000				•	•	•							
	<b>E1</b>	722		2.0	2.4	14 000					•	•	•						
	<b>D1</b>	637		2.3	2.7	14 000					•	•	•	•					
	<b>C1</b>	544		2.7	3.2	14 000					•	•	•	•	•				
	<b>B1</b>	453		3.2	3.9	14 000						•	•	•	•				
<b>A1</b>	376		3.9	4.7	14 000							•	•	•					

★ Preferred transmission ratio

1) Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.



## Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]															
			$i_{tot}$	$n_2$ (50 Hz) rpm		$n_2$ (60 Hz) rpm	$T_{2N}$ ( $f_B=1$ ) Nm	2.5x the value is permissible for a brief period (e.g. motor starting torque)													
								Motor size													
Max. gearbox torque Nm	Order No. 15th and 16th position					3	3	5	10	20	26	61	98	198	198	291	356	580	1290		
<b>D.168</b> <b>14000</b>	<b>U1</b>	341.61 ★	4.2	5.1	14 000																
	<b>T1</b>	313.41	4.6	5.6	14 000																
	<b>S1</b>	289.23 ★	5.0	6.1	14 000																
	<b>R1</b>	268.29	5.4	6.5	14 000																
	<b>Q1</b>	253.08 ★	5.7	6.9	14 000																
	<b>P1</b>	236.72	6.1	7.4	14 000																
	<b>N1</b>	210.49 ★	6.9	8.3	14 000																
	<b>M1</b>	198.71	7.3	8.8	14 000																
	<b>L1</b>	178.38 ★	8.1	9.8	14 000																
	<b>K1</b>	163.72	8.9	10.7	14 000																
	<b>J1</b>	141.28	10.3	12.4	14 000																
	<b>H1</b>	123.59	11.7	14.2	14 000																
	<b>G1</b>	107.48	13.5	16.3	14 000																
	<b>F1</b>	94.30 ★	15.4	18.6	14 000																
	<b>E1</b>	79.75 ★	18.2	22.0	14 000																
	<b>D1</b>	72.36	20.0	24.0	14 000																
<b>C1</b>	63.08 ★	23.0	28.0	14 000																	
<b>B1</b>	53.56	27.0	33.0	14 000																	
<b>A1</b>	40.99 ★	35.0	43.0	14 000																	
<b>Z.168</b> <b>6 470 ...</b> <b>14 000</b>	<b>V1</b>	46.61	31	38	10 100																
	<b>U1</b>	42.09	34	42	14 000																
	<b>T1</b>	39.45	37	44	14 000																
	<b>S1</b>	33.88 ★	43	52	14 000																
	<b>Q1</b>	29.27	50	60	14 000																
	<b>P1</b>	25.84	56	68	14 000																
	<b>N1</b>	23.26 ★	62	75	14 000																
	<b>M1</b>	19.30 ★	75	91	14 000																
	<b>L1</b>	17.60	82	99	13 826																
	<b>K1</b>	15.44 ★	94	113	13 486																
	<b>J1</b>	13.27	109	132	13 081																
	<b>H1</b>	10.34 ★	140	169	12 345																
	<b>G1</b>	9.26 ★	157	189	7 850																
	<b>F1</b>	8.21 ★	177	213	11 622																
	<b>E1</b>	7.20 ★	201	243	7 100																
	<b>D1</b>	6.20 ★	234	282	7 507																
<b>C1</b>	5.61 ★	258	312	6 780																	
<b>B1</b>	4.93 ★	294	355	7 064																	
<b>A1</b>	4.46 ★	325	392	6 470																	

★ Preferred transmission ratio

1) Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]															
			$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm		2.5x the value is permissible for a brief period (e.g. motor starting torque)															
Max. gearbox torque Nm	Order No. 15th and 16th position	$i_{tot}$	★		$T_{2N}$ ( $f_B=1$ ) Nm	Motor size															
						3	3	5	10	20	26	61	98	198	198	291	356	580	1290		
						63	71	80	90	100	112	132	160	180	200	225	250	280	315		
<b>D.188-D48</b> 20 000	<b>P1</b>	50 901	★	0.03	0.03	20 000	•	•	•												
	<b>N1</b>	45 266		0.03	0.04	20 000	•	•	•												
	<b>M1</b>	39 267	★	0.04	0.04	20 000	•	•	•	•											
	<b>L1</b>	36 689		0.04	0.05	20 000	•	•	•	•											
	<b>K1</b>	32 268	★	0.04	0.05	20 000	•	•	•	•											
	<b>I1</b>	28 260		0.05	0.06	20 000	•	•	•	•											
	<b>H1</b>	24 996	★	0.06	0.07	20 000	•	•	•	•	•										
	<b>G1</b>	22 654		0.06	0.08	20 000	•	•	•	•	•										
	<b>F1</b>	19 997	★	0.07	0.09	20 000	•	•	•	•	•										
	<b>E1</b>	18 039		0.08	0.10	20 000	•	•	•	•	•										
	<b>D1</b>	16 361	★	0.09	0.11	20 000	•	•	•	•	•										
	<b>C1</b>	14 907		0.10	0.12	20 000	•	•	•	•	•										
	<b>B1</b>	13 634	★	0.11	0.13	20 000	•	•	•	•	•										
<b>A1</b>	12 191		0.12	0.14	20 000	•	•	•	•	•											
<b>D.188-Z48</b> 20 000	<b>X1</b>	12 504		0.12	0.14	20 000	•	•	•												
	<b>W1</b>	11 066	★	0.13	0.16	20 000	•	•	•	•											
	<b>V1</b>	9 037	★	0.16	0.19	20 000	•	•	•	•											
	<b>U1</b>	7 746		0.19	0.23	20 000	•	•	•	•	•										
	<b>T1</b>	7 008	★	0.21	0.25	20 000	•	•	•	•	•	•									
	<b>S1</b>	6 469		0.22	0.27	20 000	•	•	•	•	•	•									
	<b>R1</b>	5 625	★	0.26	0.31	20 000	•	•	•	•	•	•									
	<b>Q1</b>	5 107		0.28	0.34	20 000	•	•	•	•	•	•									
	<b>P1</b>	4 663	★	0.31	0.38	20 000	•	•	•	•	•	•									
	<b>N1</b>	4 279		0.34	0.41	20 000	•	•	•	•	•	•									
	<b>M1</b>	3 942	★	0.37	0.44	20 000	•	•	•	•	•	•									
	<b>L1</b>	3 580		0.41	0.49	20 000	•	•	•	•	•	•									
	<b>K1</b>	3 261	★	0.44	0.54	20 000	•	•	•	•	•	•									
	<b>J1</b>	2 988		0.49	0.59	20 000	•	•	•	•	•	•									
	<b>H1</b>	2 666	★	0.54	0.66	20 000	•	•	•	•	•	•									
	<b>G1</b>	2 379		0.61	0.74	20 000			•	•	•	•									
	<b>F1</b>	2 021		0.72	0.87	20 000			•	•	•	•									
	<b>E1</b>	1 682	★	0.86	1.00	20 000			•	•	•	•									
	<b>D1</b>	1 655	★	0.88	1.10	20 000	•	•	•	•	•	•									
<b>C1</b>	1 477		0.98	1.20	20 000			•	•	•	•										
<b>B1</b>	1 255		1.20	1.40	20 000			•	•	•	•										
<b>A1</b>	1 044	★	1.40	1.70	20 000			•	•	•	•										
<b>D.188-Z68</b> 20 000	<b>G1</b>	896	★	1.6	2.0	20 000			•	•	•	•									
	<b>F1</b>	746		1.9	2.3	20 000				•	•	•									
	<b>E1</b>	619	★	2.3	2.8	20 000				•	•	•									
	<b>D1</b>	546		2.7	3.2	20 000				•	•	•	•								
	<b>C1</b>	466	★	3.1	3.8	20 000				•	•	•	•								
	<b>B1</b>	388		3.7	4.5	20 000					•	•	•	•							
<b>A1</b>	322	★	4.5	5.4	20 000					•	•	•	•								

★ Preferred transmission ratio

1) Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and QQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Transmission ratios and maximum torques

#### Selection and ordering data (continued)

Gearbox size	Ratio code	Transmission ratio	Output speed		Nominal torque	Permissible input torque $T_1$ [Nm]												
			$n_2$ (50 Hz) rpm	$n_2$ (60 Hz) rpm		2.5x the value is permissible for a brief period (e.g. motor starting torque)												
Max. gearbox torque Nm	Order No. 15th and 16th position	$i_{tot}$	Motor size															
			3	3	5	10	20	26	61	98	198	198	291	356	580	1290		
			63	71	80	90	100	112	132	160	180	200	225	250	280	315		
<b>D.188</b> <b>20 000</b>	<b>N1</b>	243.82						•	•	•	•							
	<b>M1</b>	220.17						•	•	•	•	•						
	<b>L1</b>	206.34						•	•	•	•	•	•					
	<b>K1</b>	177.23 ★	8.2	9.9	20 000			•	•	•	•	•	•					
	<b>J1</b>	153.12	9.5	11.4	20 000			•	•	•	•	•	•	•				
	<b>H1</b>	135.16	10.7	13.0	20 000			•	•	•	•	•	•	•	•			
	<b>G1</b>	121.67 ★	11.9	14.4	20 000			•	•	•	•	•	•	•	•			
	<b>F1</b>	100.96 ★	14.4	17.3	20 000			•	•	•	•	•	•	•	•			
	<b>E1</b>	92.06	15.8	19.0	20 000			•	•	•	•	•	•	•	•			
	<b>D1</b>	80.77 ★	18.0	22.0	20 000			•	•	•	•	•	•	•	•			
	<b>C1</b>	69.41	21.0	25.0	20 000			•	•	•	•	•	•	•	•			
	<b>B1</b>	54.06 ★	27.0	32.0	20 000			•	•	•	•	•	•	•	•			
<b>A1</b>	42.95 ★	34.0	41.0	20 000			•	•	•	•	•	•	•	•				
<b>Z.188</b> <b>13 040 ...</b> <b>20 000</b>	<b>P1</b>	52.35	28	33	15 710					•	•	•	•					
	<b>N1</b>	48.22	30	36	15 920					•	•	•	•	•				
	<b>M1</b>	41.85 ★	35	42	16 110					•	•	•	•	•	•			
	<b>L1</b>	36.89	39	47	16 600					•	•	•	•	•	•			
	<b>K1</b>	32.37	45	54	18 450					•	•	•	•	•	•			
	<b>J1</b>	29.18 ★	50	60	20 000					•	•	•	•	•	•			
	<b>H1</b>	24.77 ★	59	71	20 000					•	•	•	•	•	•			
	<b>G1</b>	23.01	63	76	20 000					•	•	•	•	•	•			
	<b>F1</b>	19.76 ★	73	89	20 000					•	•	•	•	•	•			
	<b>E1</b>	16.86	86	104	20 000					•	•	•	•	•	•			
	<b>D1</b>	13.28 ★	109	132	18 820					•	•	•	•	•	•			
	<b>C1</b>	10.69 ★	136	164	16 170						•	•	•	•	•			
<b>B1</b>	9.29	156	188	14 310							•	•	•	•				
<b>A1</b>	✘	175	211	13 040								•	•	•				

★ Preferred transmission ratio

<sup>1)</sup> Only possible with integrated adapter.

In the case of gearboxes of size 18 or 28, only possible with integrated motor or input unit KQ and KQS.

Calculation of maximum output torque  $T_{2max}$  for gearboxes with input units:

$$T_{2max} = T_1 \times i_{tot}, \text{ if } T_{2max} \leq T_{2N}$$

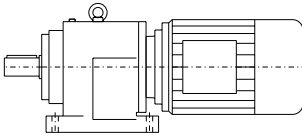
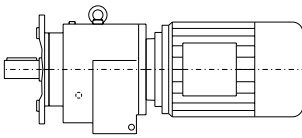
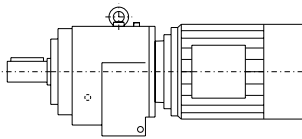
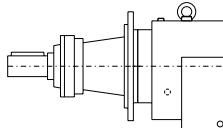
If  $T_{2max} \geq T_{2N}$ , the max. output torque  $T_{2N}$  of the gearbox is the decisive factor.

# MOTOX Geared Motors

## Helical geared motors

### Mounting types

#### Selection and ordering data

Mounting type	Order No. 14th position	Code in type designation 2nd position	Representation
<b>Foot-mounted design</b>	<b>A</b>	—	
<b>Flange-mounted design (A-type)</b>	<b>F</b>	F	
<b>Housing flange (C-type)</b>	<b>H</b>	Z	
<b>Agitator flange</b>	<b>R</b>	R	

#### *Helical gearbox with agitator flange, sizes 68 to 168*

The agitator flange is fitted with a heavy-duty spherical roller bearing with a sizable bearing span for absorbing large radial and axial forces.

The optimized design ensures that no axial forces are transferred to the gearbox housing.

Helical gearboxes with an agitator flange are particularly well suited to agitator applications with very high radial forces.

Bearing life can be calculated on request or using the MOTOX Configurator calculation program.

## Selection and ordering data

Shaft design	Order No. 8th position	Shaft dimensions					
<b>1-stage helical gearbox E</b>							
<b>Size</b>		<b>E38</b>	<b>E48</b>	<b>E68</b>	<b>E88</b>	<b>E108</b>	<b>E128</b>
Solid shaft with feather key	1	V20 x 40 *)	V25 x 50 *)	V30 x 60 *)	V40 x 80 *)	V50 x 100 *)	V60 x 120 *)
	2	V25 x 50	V30 x 60	V40 x 80	V45 x 90	V55 x 110	
<b>Size</b>		<b>E148</b>					
Solid shaft with feather key	1	V70 x 140 *)					
	2						
<b>2-stage helical gearbox Z</b>							
<b>Size</b>		<b>Z18</b>	<b>Z28</b>	<b>Z38</b>	<b>Z48</b>	<b>Z68</b>	<b>Z88</b>
Solid shaft with feather key	1	V16 x 28	V25 x 50 *)	V25 x 50 *)	V30 x 60 *)	V40 x 80 *)	V50 x 100 *)
	2	V20 x 40 *)		V30 x 60	V40 x 80	V50 x 100	V60 x 120
	3				V35 x 70	V35 x 70	
<b>Size</b>		<b>Z108</b>	<b>Z128</b>	<b>Z148</b>	<b>Z168</b>	<b>Z188</b>	
Solid shaft with feather key	1	V60 x 120 *)	V70 x 140 *)	V90 x 170 *)	V100 x 210 *)	V120 x 210 *)	
	2	V70 x 140	V90 x 170	V100 x 210	V120 x 210		
	3				V110 x 210		
<b>3-stage helical gearbox D</b>							
<b>Size</b>		<b>D18</b>	<b>D28</b>	<b>D38</b>	<b>D48</b>	<b>D68</b>	<b>D88</b>
Solid shaft with feather key	1	V16 x 28	V25 x 50 *)	V25 x 50 *)	V30 x 60 *)	V40 x 80 *)	V50 x 100 *)
	2	V20 x 40 *)		V30 x 60	V40 x 80	V50 x 100	V60 x 120
	3				V35 x 70	V35 x 70	
<b>Size</b>		<b>D108</b>	<b>D128</b>	<b>D148</b>	<b>D168</b>	<b>D188</b>	
Solid shaft with feather key	1	V60 x 120 *)	V70 x 140 *)	V90 x 170 *)	V100 x 210 *)	V120 x 210 *)	
	2	V70 x 140	V90 x 170	V100 x 210	V120 x 210		
	3				V110 x 210		

\*) Preferred series

## Shaft designs for helical gearbox with agitator flange

Shaft design	Order No. 8th position	Order No. suffix	Shaft dimensions					
<b>2-stage helical gearbox ZR</b>								
<b>Size</b>			<b>ZR68</b>	<b>ZR88</b>	<b>ZR108</b>	<b>ZR128</b>	<b>ZR148</b>	<b>ZR168</b>
Solid shaft with feather key	2		V50 x 100	V60 x 120	V70 x 140		V100 x 210	
	9	<b>H1A</b>				V80 x 170		V110 x 210
<b>3-stage helical gearbox DR</b>								
<b>Size</b>			<b>DR68</b>	<b>DR88</b>	<b>DR108</b>	<b>DR128</b>	<b>DR148</b>	<b>DR168</b>
Solid shaft with feather key	2		V50 x 100	V60 x 120	V70 x 140		V100 x 210	
	9	<b>H1A</b>				V80 x 170		V110 x 210

# MOTOX Geared Motors

## Helical geared motors

### Flange-mounted designs (A-type)

#### Selection and ordering data

Order code	Flange diameter										
<b>Helical gearbox EF, 1-stage</b>											
Size	EF38	EF48	EF68	EF88	EF108	EF128	EF148				
H01	120	120									
H02	140	140	200	250	300	350	350				
H03	160	160	250	300	350	450	450				
H04	200	200	300	350	450		550				
H05	250	250									
<b>Helical gearbox ZF, 2-stage</b>											
Size	ZF18	ZF28	ZF38	ZF48	ZF68	ZF88	ZF108	ZF128	ZF148	ZF168	ZF188
H02	120	120	120								550
H03	140	140	140	200	250	300	350	350	450	450	660
H04	160	160	160	250	300	350	450	450	550	550	
H05			200	300	350	450		550		660	
H06			250								
<b>Helical gearbox DF, 3-stage</b>											
Size	DF18	DF28	DF38	DF48	DF68	DF88	DF108	DF128	DF148	DF168	DF188
H02	120	120	120								550
H03	140	140	140	200	250	300	350	350	450	450	660
H04	160	160	160	250	300	350	450	450	550	550	
H05			200	300	350	450		550		660	
H06			250								

#### Selection and ordering data

The mounting type / mounting position must be specified when you place your order to ensure that the gearbox is supplied with the correct quantity of oil.

Please contact customer service if you wish to use a mounting position which is not shown here.

#### Position of the terminal box

The terminal box of the motor can be mounted in four different positions. See Chapter 8 for an accurate representation of the terminal box position and the corresponding order codes.

#### 1-stage helical gearbox, foot-mounted design

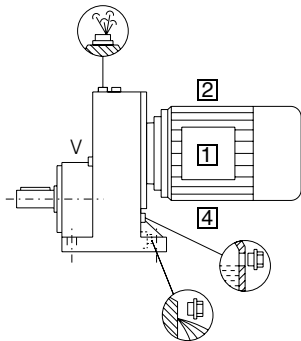
##### Oil control valves:

- Size 38: V oil inlet
- From size 48 up:  Oil level  Ventilation  Oil drain  Oil dipstick \* On opposite side

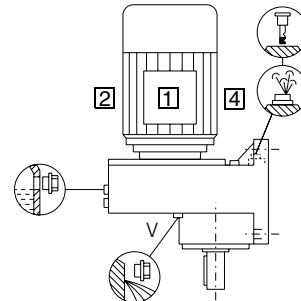
**1** ... **4** Position of the terminal box, see Chapter 8

<sup>1)</sup> Standard mounting type

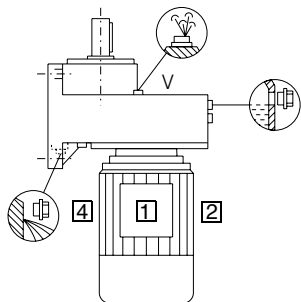
B3 (IM B3) <sup>1)</sup>  
Order code: **D04**



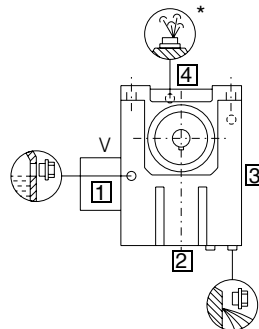
V5 (IM V5)  
Order code: **E02**



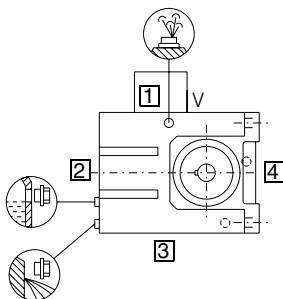
V6 (IM V6)  
Order code: **E14**



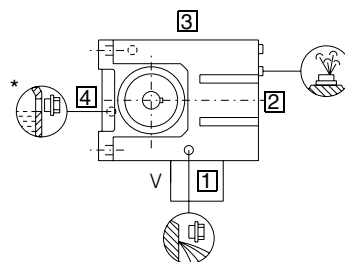
B8 (IM B8)  
Order code: **D66**



B7 (IM B7)  
Order code: **D57**



B6 (IM B6)  
Order code: **D36**



# MOTOX Geared Motors

## Helical geared motors





### Mounting types and mounting positions

#### Selection and ordering data (continued)

#### 1-stage helical gearbox, flange-mounted design (EF) and with housing flange (EZ)

##### Oil control valves:

• Size 38: V oil inlet

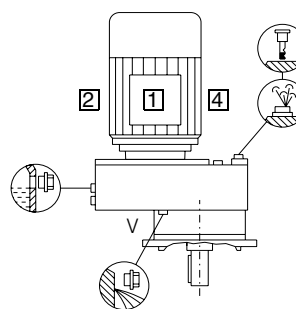
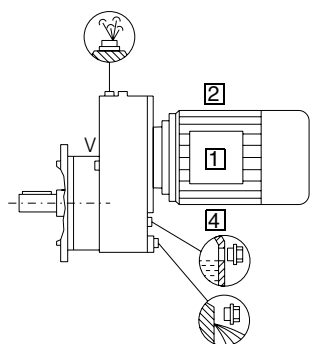
• From size 48 up:  Oil level  Ventilation  Oil drain  Oil dipstick \* On opposite side

**1** ... **4** Position of the terminal box, see Chapter 8

<sup>1)</sup> Standard mounting type

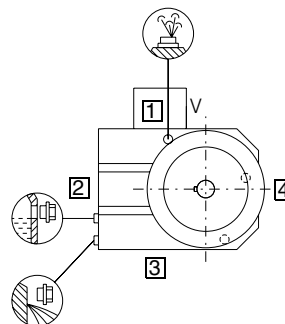
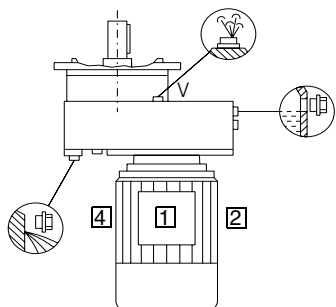
EF: B5 (IM B5) <sup>1)</sup>  
Order code: **D16**  
EZ: B14 (IM B14)  
Order code: **D00**

EF: V1 (IM V1)  
Order code: **D88**  
EZ: V18 (IM V18)  
Order code: **D94**



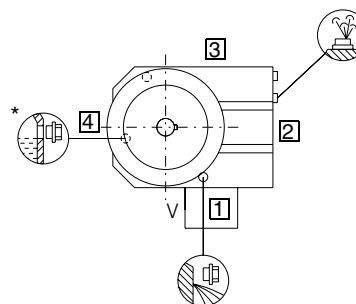
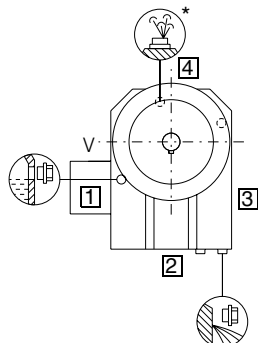
EF: V3 (IM V3)  
Order code: **D96**  
EZ: V19 (IM V19)  
Order code: **D95**

EF: B5-02 (IM B5-02)  
Order code: **D26**  
EZ: B14-02 (IM B14-02)  
Order code: **D02**



EF: B5-03 (IM B5-03)  
Order code: **D31**  
EZ: B14-03 (IM B14-03)  
Order code: **D03**

EF: B5-00 (IM B5-00)  
Order code: **D17**  
EZ: B14-00 (IM B14-00)  
Order code: **D01**





**Selection and ordering data** (continued)

**2- and 3-stage helical gearbox, foot-mounted design, sizes 18 - 88**

**Oil control valves:**

• Size 18/28: These types are lubricated for life. No ventilation, oil level, or drain plugs are present.

• Size 38: V oil inlet

• From size 48 up:  Oil level  Ventilation  Oil drain \* On opposite side

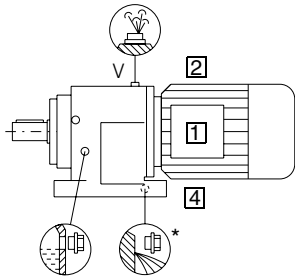
② 2-stage gearbox

③ 3-stage gearbox

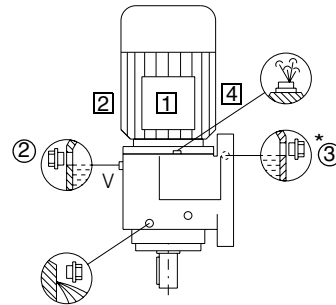
① ... ④ Position of the terminal box, see Chapter 8

1) Standard mounting type

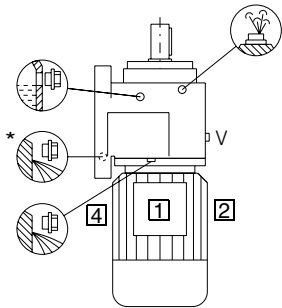
B3 (IM B3) <sup>1)</sup>  
Order code: **D04**



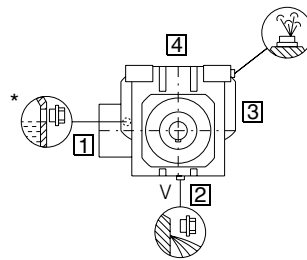
V5 (IM V5)  
Order code: **E02**



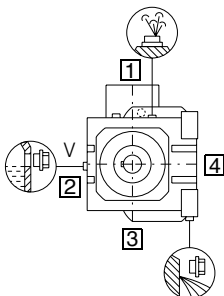
V6 (IM V6)  
Order code: **E14**



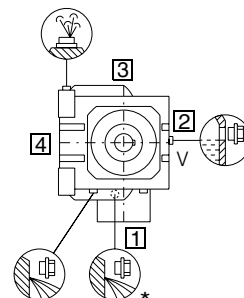
B8 (IM B8)  
Order code: **D66**



B7 (IM B7)  
Order code: **D57**



B6 (IM B6)  
Order code: **D36**



# MOTOX Geared Motors

## Helical geared motors

### Mounting types and mounting positions

#### Selection and ordering data (continued)

#### 2- and 3-stage helical gearbox, foot-mounted design, sizes 108 - 168

##### Oil control valves:

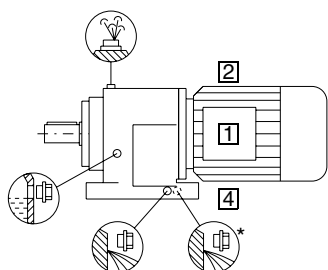
-  Oil level
-  Ventilation
-  Oil drain
- \* On opposite side

- ② 2-stage gearbox
- ③ 3-stage gearbox

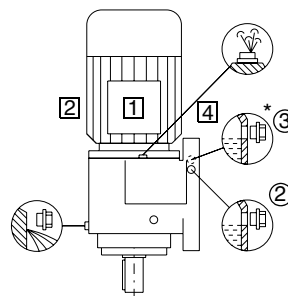
① ... ④ Position of the terminal box, see Chapter 8

1) Standard mounting type

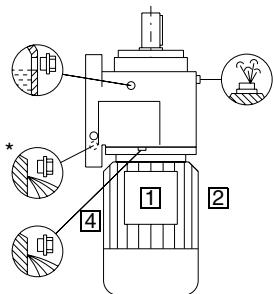
B3 (IM B3) <sup>1)</sup>  
Order code: **D04**



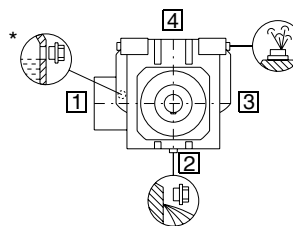
V5 (IM V5)  
Order code: **E02**



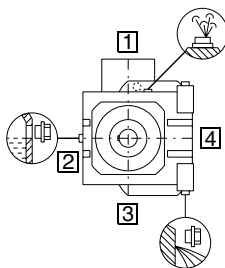
V6 (IM V6)  
Order code: **E14**



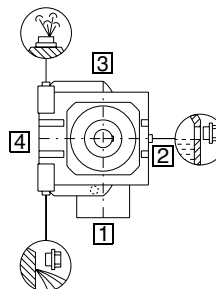
B8 (IM B8)  
Order code: **D66**



B7 (IM B7)  
Order code: **D57**



B6 (IM B6)  
Order code: **D36**



**Selection and ordering data** (continued)

**2- and 3-stage helical gearbox, foot-mounted design, size 188**

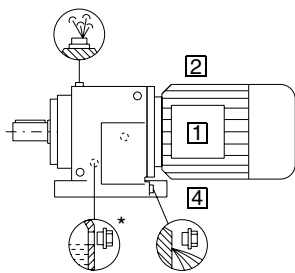
**Oil control valves:**

-  Oil level
-  Ventilation
-  Oil drain
- \* On opposite side

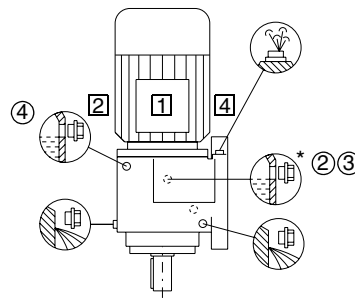
- ② 2-stage gearbox
- ③ 3-stage gearbox
- ④ Tandem gearbox

- ① ... ④ Position of the terminal box, see Chapter 8
- 1) Standard mounting type

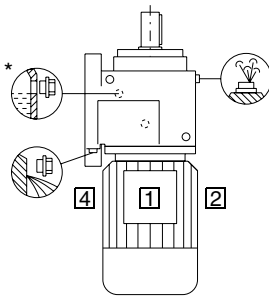
B3 (IM B3) <sup>1)</sup>  
Order code: **D04**



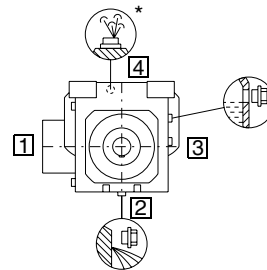
V5 (IM V5)  
Order code: **E02**



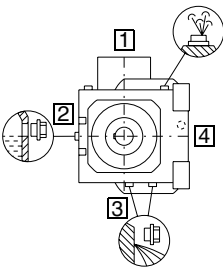
V6 (IM V6)  
Order code: **E14**



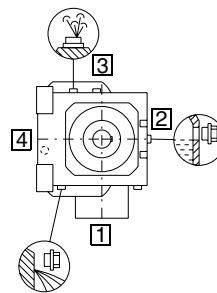
B8 (IM B8)  
Order code: **D66**



B7 (IM B7)  
Order code: **D57**



B6 (IM B6)  
Order code: **D36**



# MOTOX Geared Motors

## Helical geared motors

### Mounting types and mounting positions

#### Selection and ordering data (continued)

2- and 3-stage helical gearbox, flange-mounted design (DF/ZF) or with housing flange (DZ/ZZ), sizes 18 - 88

#### Oil control valves:

• Size 18/28: These types are lubricated for life. No ventilation, oil level, or drain plugs are present.

• Size 38: V oil inlet

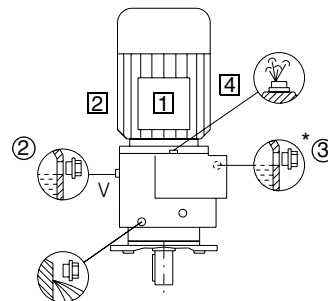
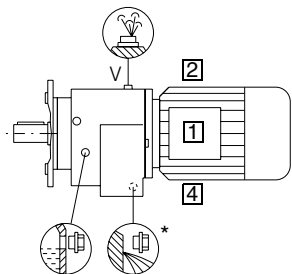
• From size 48 up:  Oil level  Ventilation  Oil drain  Oil dipstick \* On opposite side

**1** ... **4** Position of the terminal box, see Chapter 8

<sup>1)</sup> Standard mounting type

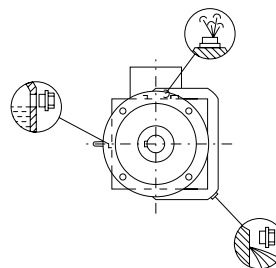
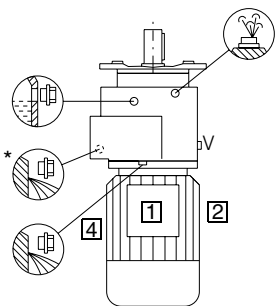
DF/ZF: B5 (IM B5) <sup>1)</sup>  
Order code: **D16**  
DZ/ZZ: B14 (IM B14)  
Order code: **D00**

DF/ZF: V1 (IM V1)  
Order code: **D88**  
DZ/ZZ: V18 (IM V18)  
Order code: **D94**



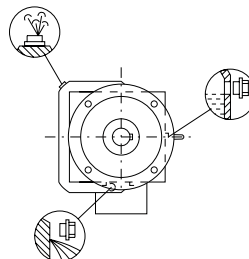
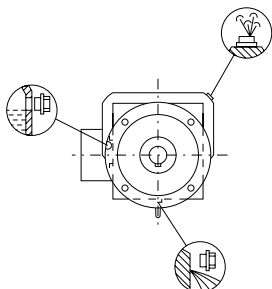
DF/ZF: V3 (IM V3)  
Order code: **D96**  
DZ/ZZ: V19 (IM V19)  
Order code: **D95**

DF/ZF: B5-02 (IM B5-02)  
Order code: **D26**  
DZ/ZZ: B14-02 (IM B14-02)  
Order code: **D02**



DF/ZF: B5-03 (IM B5-03)  
Order code: **D31**  
DZ/ZZ: B14-03 (IM B14-03)  
Order code: **D03**

DF/ZF: B5-00 (IM B5-00)  
Order code: **D17**  
DZ/ZZ: B14-00 (IM B14-00)  
Order code: **D01**



**Selection and ordering data** (continued)

*2- and 3-stage helical gearbox, flange-mounted design (DF/ZF) or with housing flange (DZ/ZZ), sizes 108 - 168*

**Oil control valves:**

-  Oil level
-  Ventilation
-  Oil drain
- \* On opposite side

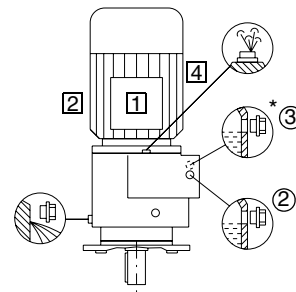
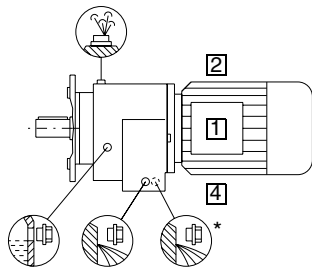
- ② 2-stage gearbox
- ③ 3-stage gearbox

① ... ④ Position of the terminal box, see Chapter 8

1) Standard mounting type

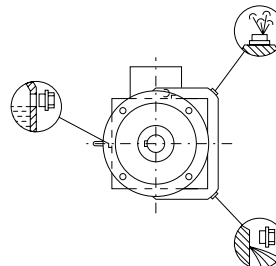
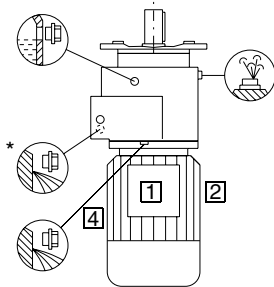
DF/ZF: B5 (IM B5) <sup>1)</sup>  
 Order code: **D16**  
 DZ/ZZ: B14 (IM B14)  
 Order code: **D00**

DF/ZF: V1 (IM V1)  
 Order code: **D88**  
 DZ/ZZ: V18 (IM V18)  
 Order code: **D94**



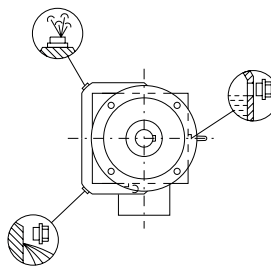
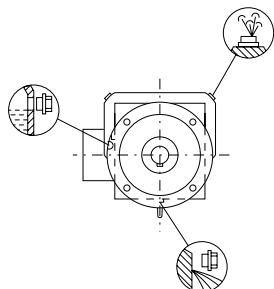
DF/ZF: V3 (IM V3)  
 Order code: **D96**  
 DZ/ZZ: V19 (IM V19)  
 Order code: **D95**

DF/ZF: B5-02 (IM B5-02)  
 Order code: **D26**  
 DZ/ZZ: B14-02 (IM B14-02)  
 Order code: **D02**



DF/ZF: B5-03 (IM B5-03)  
 Order code: **D31**  
 DZ/ZZ: B14-03 (IM B14-03)  
 Order code: **D03**

DF/ZF: B5-00 (IM B5-00)  
 Order code: **D17**  
 DZ/ZZ: B14-00 (IM B14-00)  
 Order code: **D01**



# MOTOX Geared Motors

## Helical geared motors

### Mounting types and mounting positions

#### Selection and ordering data (continued)

#### 2- and 3-stage helical gearbox, flange-mounted design (DF/ZF) or with housing flange (DZ/ZZ), size 188

##### Oil control valves:

-  Oil level
-  Ventilation
-  Oil drain
- \* On opposite side

- ② 2-stage gearbox
- ③ 3-stage gearbox
- ④ Tandem gearbox

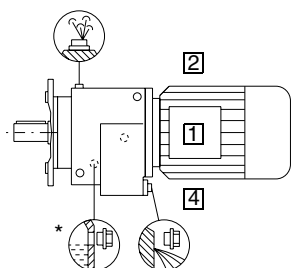
- ① ... ④ Position of the terminal box, see Chapter 8
- 1) Standard mounting type

DF/ZF: B5 (IM B5) <sup>1)</sup>

Order code: **D16**

DZ/ZZ: B14 (IM B14) <sup>1)</sup>

Order code: **D00**

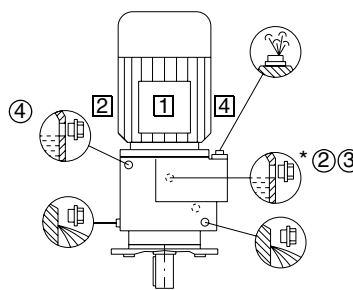


DF/ZF: V1 (IM V1)

Order code: **D88**

DZ/ZZ: V18 (IM V18)

Order code: **D94**

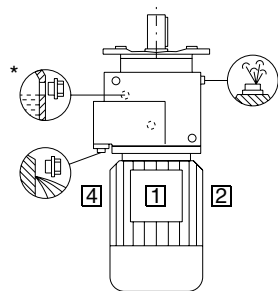


DF/ZF: V3 (IM V3)

Order code: **D96**

DZ/ZZ: V19 (IM V19)

Order code: **D95**

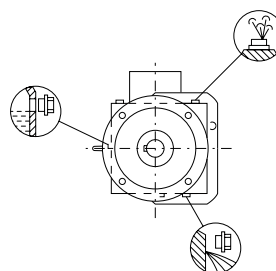


DF/ZF: B5-02 (IM B5-02)

Order code: **D26**

DZ/ZZ: B14-02 (IM B14-02)

Order code: **D02**

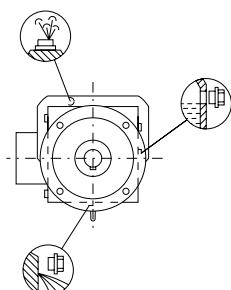


DF/ZF: B5-03 (IM B5-03)

Order code: **D31**

DZ/ZZ: B14-03 (IM B14-03)

Order code: **D03**

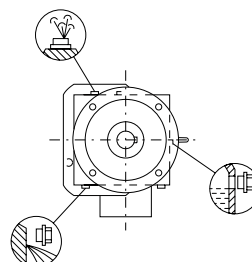


DF/ZF: B5-00 (IM B5-00)

Order code: **D17**

DZ/ZZ: B14-00 (IM B14-00)

Order code: **D01**



**Selection and ordering data** (continued)

**2- and 3-stage helical gearbox with agitator flange (DR/ZR), sizes 68 - 88**

**Oil control valves:**

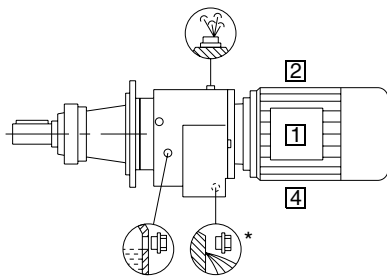
-  Oil level
-  Ventilation
-  Oil drain
- \* On opposite side

- ② 2-stage gearbox
- ③ 3-stage gearbox

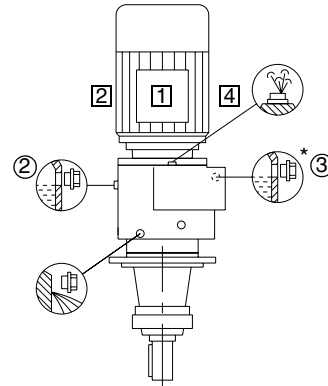
① ... ④ Position of the terminal box, see Chapter 8

<sup>1)</sup> Standard mounting type

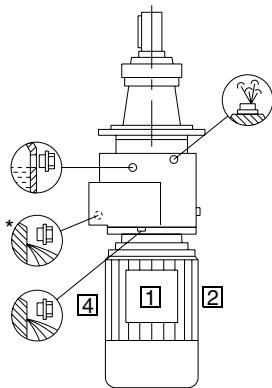
DR/ZR: B5 (IM B5) <sup>1)</sup>  
Order code: **D16**



DR/ZR: V1 (IM V1)  
Order code: **D88**



DR/ZR: V3 (IM V3)  
Order code: **D96**



# MOTOX Geared Motors

## Helical geared motors

### Mounting types and mounting positions

#### Selection and ordering data (continued)

#### 2- and 3-stage helical gearbox with agitator flange (DR/ZR), sizes 108 - 168

##### Oil control valves:

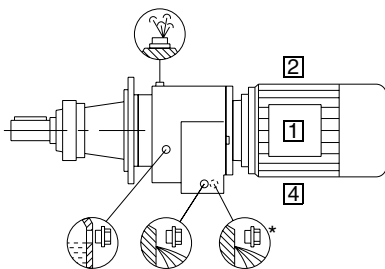
-  Oil level
-  Ventilation
-  Oil drain
- \* On opposite side

- ② 2-stage gearbox
- ③ 3-stage gearbox

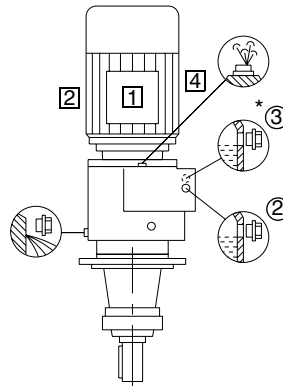
① ... ④ Position of the terminal box, see Chapter 8

<sup>1)</sup> Standard mounting type

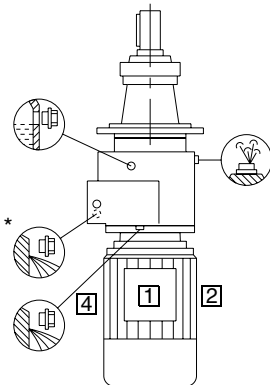
DR/ZR: B5 (IM B5) <sup>1)</sup>  
Order code: **D16**



DR/ZR: V1 (IM V1)  
Order code: **D88**



DR/ZR: V3 (IM V3)  
Order code: **D96**





#### Selection and ordering data (continued)

##### Helical tandem gearbox

The mounting type / mounting position of the tandem gearbox corresponds to that of the main gearbox. The figures below are only designed to show the position of the oil control valves of the 2nd gearbox.

##### Note:

In a horizontal operating position the bulging part of the housing of the 2nd gearbox generally faces vertically downwards.

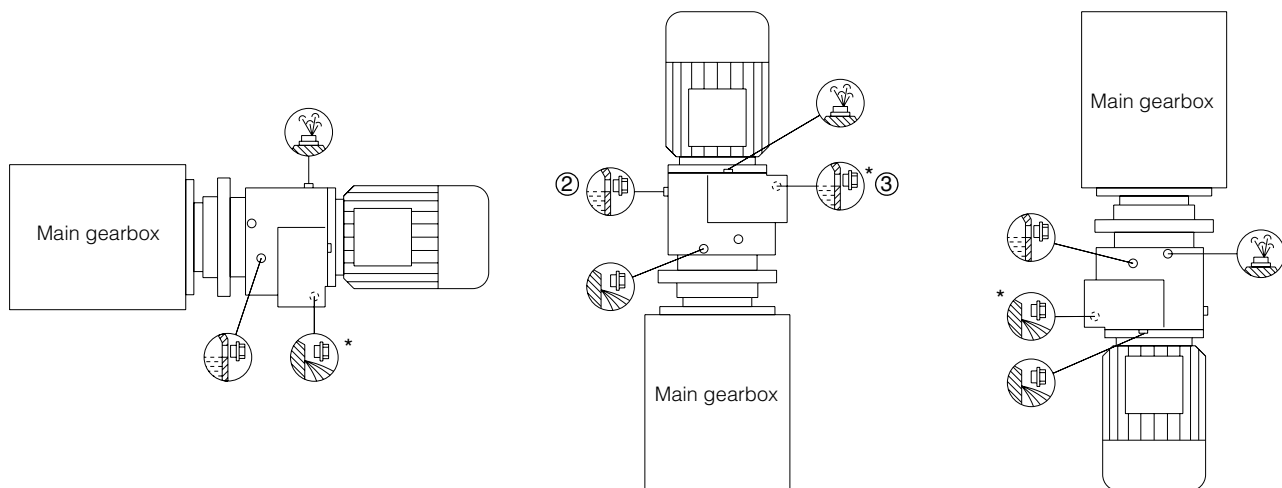
##### Oil control valves:

- Size 28/38 (2nd gearbox): These types are lubricated for life. No ventilation, oil level, or drain plugs are present.

- From size 48 up:  Oil level  Ventilation  Oil drain \* On opposite side

② 2-stage gearbox

③ 3-stage gearbox



# MOTOX Geared Motors

## Helical geared motors

### Special versions

#### Lubricants

Helical gearboxes are filled with mineral oil and supplied ready for use as standard.

If the gearbox is to be used in an application with special requirements, the lubricants listed in the table below can be used.

Area of application	Ambient temperature <sup>1)</sup>	DIN ISO designation	Order code
<b>Standard oils</b>			
Standard temperature	-10 ... +40 °C	CLP ISO VG220	<b>K06</b>
Improved oil service life	-20 ... +50 °C	CLP ISO PG VG220	<b>K07</b>
High temperature usage	0 ... +60 °C	CLP ISO PG VG460	<b>K08</b>
Low temperature usage	-40 ... +40 °C	CLP ISO PAO VG220	2)
Lowest temperature usage	-40 ... +10 °C	CLP ISO PAO VG68	2)
<b>Physiologically safe oils (for use in the food industry) in acc. with NSF (USDA)-H1</b>			
Standard temperature	-30 ... +40 °C	CLP ISO H1 VG460	<b>K11</b>
<b>Biologically degradable oils</b>			
Standard temperature	-20 ... +40 °C	CLP ISO E VG220	<b>K10</b>

1) Recommendation

2) On request

Sizes 18 to 28 do not feature any ventilation, oil level, or drain plugs. The lubricant does not need to be changed, due to the low thermal load the gearbox is subjected to.

Helical gearboxes of size 38 have an oil screw; these gearboxes do not require ventilation or ventilation elements.

Gearboxes of sizes 48 to 188 are fitted with filler, oil level, and drain plugs as standard. The ventilation and vent filter, which is delivered loose, must be attached in place of the filler plug prior to startup.

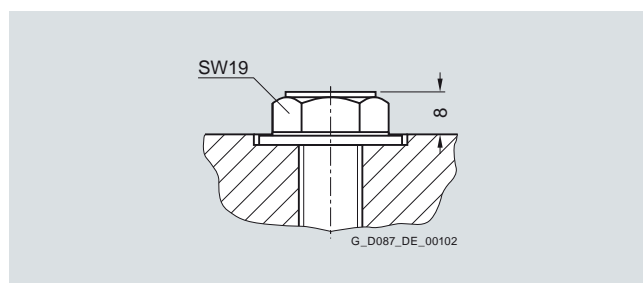
#### Oil level control

##### Oil sight glass

For size 48 and above, gearboxes can be equipped with a visual oil level indicator (oil sight glass) for most mounting types and mounting positions.

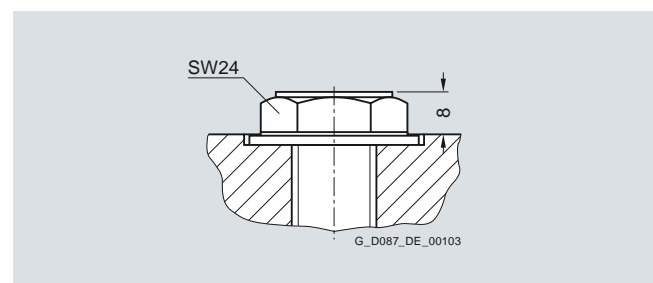
Order code:

Oil sight glass **G34**



SW = Wrench width

Gearbox	Size
Helical gearbox	E.48 ... E.128 D./Z.48 ... D./Z.128



SW = Wrench width

Gearbox	Size
Helical gearbox	E.148 D./Z.148 ... D./Z.188

##### Electrical oil level monitoring system

On request, the gearbox can be supplied with an electrical oil level monitoring system, which enables the oil level of the gearbox to be monitored remotely. The oil level is monitored by a capacitive sensor only when the gearbox starts up; it is not measured continuously during operation.

### Gearbox ventilation

The positions of the ventilation and ventilation elements can be seen on the mounting position diagrams.

If required, a pressure ventilation valve can be used for size 48 and above.

Order code	E.48 ... E.128 D./Z.48 ... D./Z.128	E.148 D./Z.148 ... D./Z.188
Vent filter		
Pressure ventilation valve		

SW = Wrench width

### Oil drain

#### Magnetic oil drain plug

A magnetic oil drain plug for inserting in the oil drainage hole is available for helical gearboxes of size 48 and above. This serves to collect any metal grit contained in the gear lubricant.

Order code:  
Magnetic oil drain plug **G53**

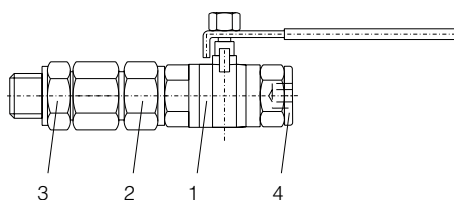
#### Oil drain valve

An oil drain valve is available for helical gearboxes of size 48 and above.

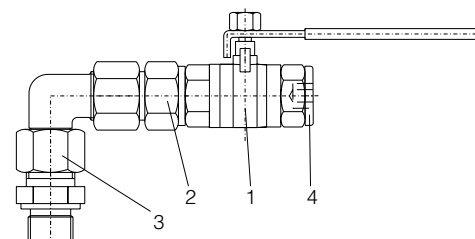
The oil drain valve may be designed as a complete unit featuring a screw plug, depending on the corresponding mounting position.

Order code:  
Oil drain valve, straight **G54**

An angled oil drain valve is also available on request.



- Item 3 Screwed connection GE
- Item 2 Screwed connection EGE
- Item 1 Oil drain valve
- Item 4 Screw plug



- Item 3 Screwed connection GE
- Item 2 Screwed connection EGE
- Item 1 Oil drain valve
- Item 4 Screw plug

# MOTOX Geared Motors

## Helical geared motors

### Special versions

#### Sealing

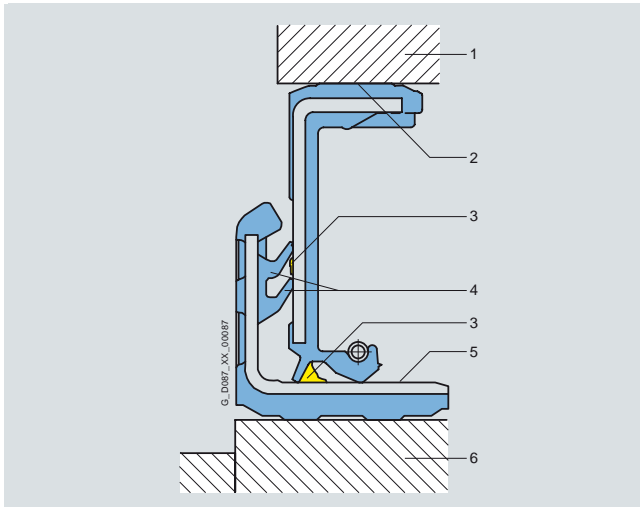
##### Combination shaft sealing

A combination shaft sealing, which helps to prevent oil from leaking, is available for helical gearboxes of sizes 38 to 168.

A combination shaft sealing is particularly well suited to external use.

Order code:

Combination shaft sealing **G24**



- 1 • Housing
- 2 • Rubberized inner and outer diameter
- 3 • Grease filling prevents dry running of the sealing lips
- 4 • Additional sealing lips to protect against dirt
  - Decoupled sealing system prevents scoring of the shaft as a result of corrosion or dirt
- 5 • Protected running surface for radial shaft sealing ring
  - No damage when mounting
- 6 • Shaft

##### Double sealing

Double sealing is possible for helical gearboxes of sizes 18, 28 and 188. Double sealing is particularly well suited to external use.

Order code:

Double sealing MSS1 (sizes 18, 28) **G23**

Double radial shaft seal (size 188) **G22+G31**

##### High temperature resistant sealing

High temperature resistant sealings (Viton/fluorinated rubber) for high operating and ambient temperatures of +60 °C and above are available for helical gearboxes.

Order code:

High temperature resistant sealing **G25**

### Radially reinforced output shaft bearings

If required, gearboxes are available with a radially reinforced output shaft bearing arrangement. The reinforced bearings allow higher radial forces to be transferred.

Order code:

Radially reinforced output shaft bearing **G20**

### Axially reinforced output shaft bearings

The gearboxes can be fitted with axially reinforced output shaft bearings on request.

Order code:

Axially reinforced output shaft bearing **G21**

### Agitator flange in dry-well design

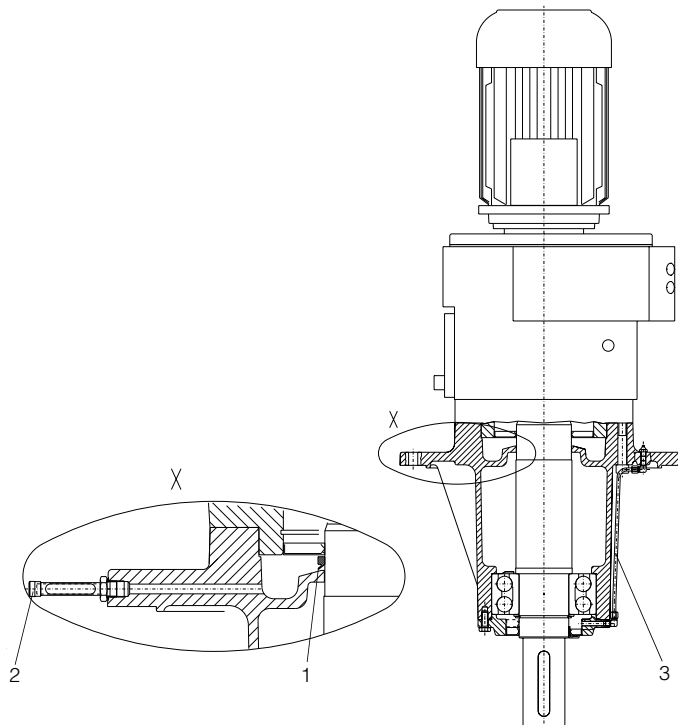
The agitator flange can be fitted with an additional "V" ring (1) in mounting position V1 in order to drain off any leak oil to a safety chamber and protect the equipment against the effects of leak-ages.

The oil can either be viewed through a sight glass, or its presence indicated by an electrical sensor (2).

Order codes:

Design with sight glass **G89**

Design with sensor **G90**



### Regreasing device for the agitator flange (3)

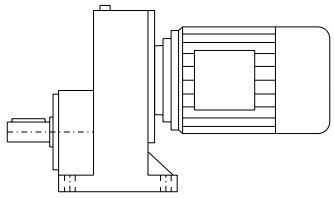
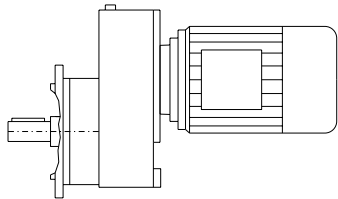
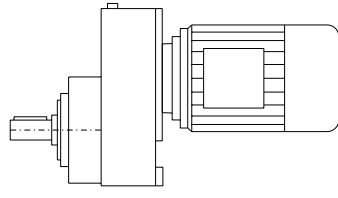
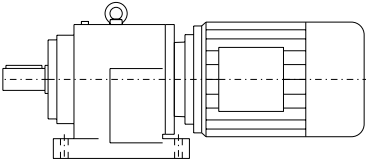
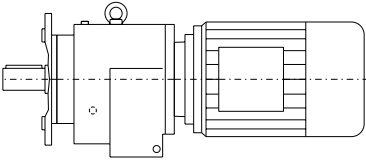
The agitator flange gearbox can be fitted with a regreasing device on request.

# MOTOX Geared Motors

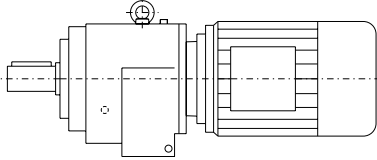
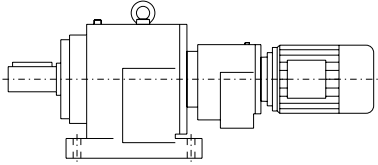
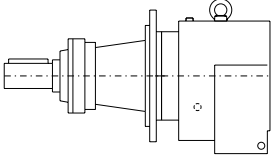
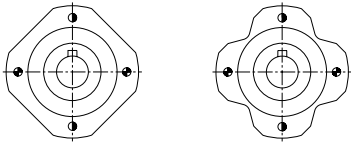
## Helical geared motors

### Dimensions

#### Dimension drawing overview

Representation	Gearbox type	Dimension drawing on page	
	E38	2/136	
	E48	2/139	
	E68	2/142	
	E88	2/145	
	E108	2/148	
	E128	2/151	
	E148	2/154	
	EF38	2/137	
	EF48	2/140	
	EF68	2/143	
	EF88	2/146	
	EF108	2/149	
	EF128	2/152	
	EF148	2/155	
	EZ38	2/138	
	EZ48	2/141	
	EZ68	2/144	
	EZ88	2/147	
	EZ108	2/150	
	EZ128	2/153	
	EZ148	2/156	
	D/Z18	2/157	
	D/Z28	2/159	
	D/Z38	2/161	
	D/Z48	2/164	
	D/Z68	2/167	
	D/Z88	2/170	
	D/Z108	2/173	
	D/Z128	2/176	
	D/Z148	2/179	
	D/Z168	2/182	
	D/Z188	2/185	
		DF/ZF18	2/158
		DF/ZF28	2/160
DF/ZF38		2/162	
DF/ZF48		2/165	
DF/ZF68		2/168	
DF/ZF88		2/171	
DF/ZF108		2/174	
DF/ZF128		2/177	
DF/ZF148		2/180	
DF/ZF168		2/183	
DF/ZF188	2/186		

**Dimension drawing overview (continued)**

Representation	Gearbox type	Dimension drawing on page
	DZ/ZZ38	2/163
	DZ/ZZ48	2/166
	DZ/ZZ68	2/169
	DZ/ZZ88	2/172
	DZ/ZZ108	2/175
	DZ/ZZ128	2/178
	DZ/ZZ148	2/181
	DZ/ZZ168	2/184
	DZ/ZZ188	2/187
	D./Z.38-Z28 ... D.188-Z68	2/188
	DR/ZR68 ... DR/ZR168	2/191
	Pin holes	2/192

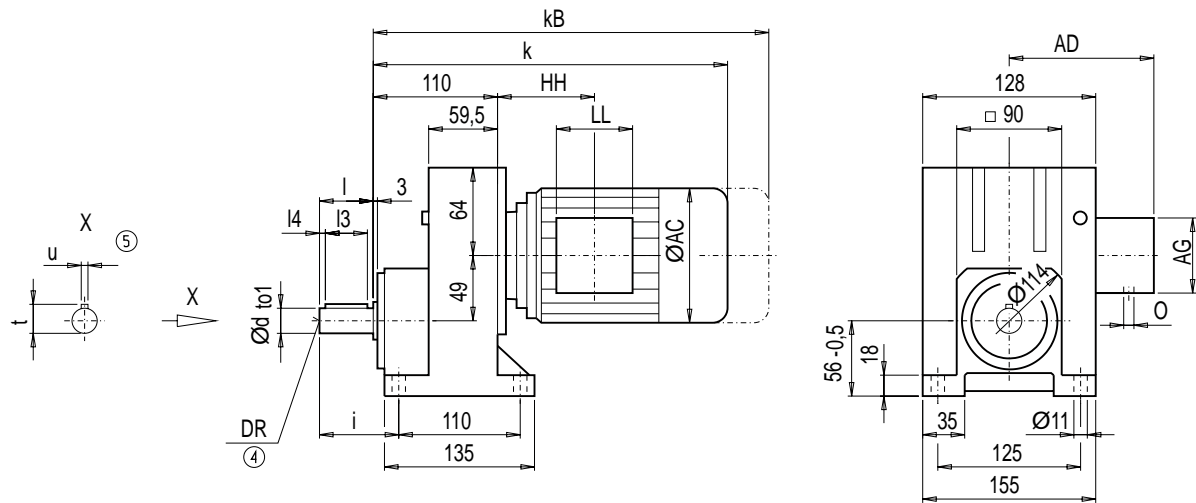
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox E38 (1-stage), foot-mounted design

E011



d	to1	l	l4	l3	t	u	i	DR
20 <sup>*)</sup>	k6	40	5	30	22.5	6	56	M6x16
25	k6	50	7	40	28.0	8	66	M10x22

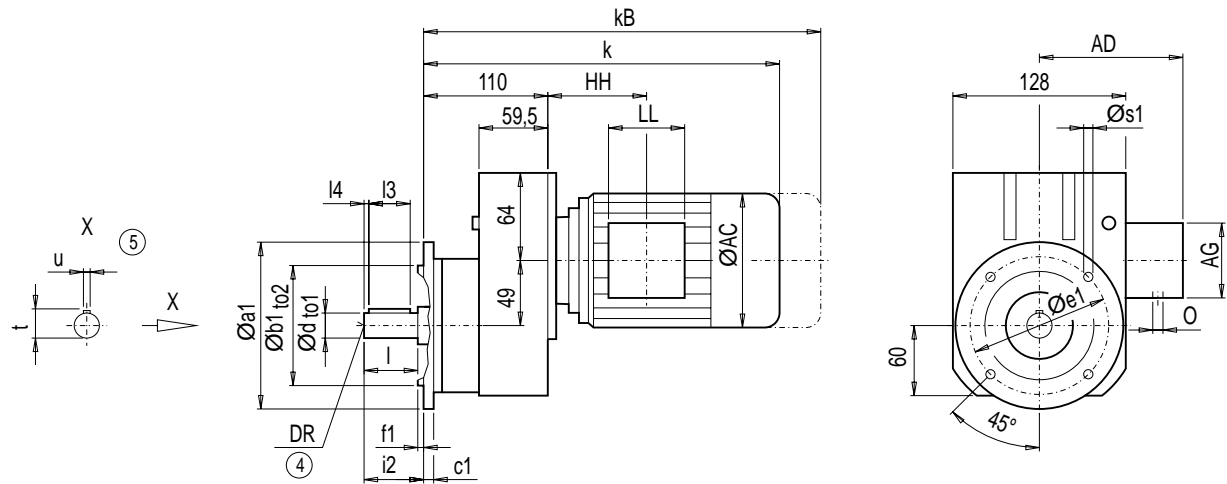
\*) Preferred series

Motor	E38								Weight E38
	k	kB	AC	AD	AG	LL	HH	O	
LA71	368.5	423.5	139.0	146	90	90	114.5	M20x1.5/M25x1.5	12
LA71Z	387.5	442.5	139.0	146	90	90	114.5	M20x1.5/M25x1.5	12
LA80	405.5	469.0	156.5	155	90	90	114.0	M20x1.5/M25x1.5	16
LA90S	436.5	507.5	174.0	163	90	90	114.0	M20x1.5/M25x1.5	21
LA90L	436.5	507.5	174.0	163	90	90	114.0	M20x1.5/M25x1.5	21
LA100L	482.5	563.5	195.0	168	120	120	154.5	2xM32x1.5	30
LA112M	512.5	593.5	219.0	181	120	120	160.5	2xM32x1.5	41



### Gearbox EF38 (1-stage), flange-mounted design (A-type)

EF011



Flange	a1	b1	to2	c1	e1	f1	s1	d	to1	l	l4	l3	t	u	i2	DR
A120	120	80	j6	8	100	3.0	6.8	20 <sup>*)</sup>	k6	40	5	30	22.5	6	40	M6x16
								25	k6	50	7	40	28.0	8	50	M10x22
A140	140	95	j6	10	115	3.0	9.0	20 <sup>*)</sup>	k6	40	5	30	22.5	6	40	M6x16
								25	k6	50	7	40	28.0	8	50	M10x22
A160	160	110	j6	10	130	3.5	9.0	20 <sup>*)</sup>	k6	40	5	30	22.5	6	40	M6x16
								25	k6	50	7	40	28.0	8	50	M10x22
A200	200	130	j6	12	165	3.5	11.0	20 <sup>*)</sup>	k6	40	5	30	22.5	6	40	M6x16
								25	k6	50	7	40	28.0	8	50	M10x22
A250	250	180	j6	15	215	4.0	13.5	20 <sup>*)</sup>	k6	40	5	30	22.5	6	40	M6x16
								25	k6	50	7	40	28.0	8	50	M10x22

\*) Preferred series

Motor	EF38								Weight EF38
	k	kB	AC	AD	AG	LL	HH	O	
LA71	368.5	423.5	139.0	146	90	90	114.5	M20x1.5/M25x1.5	14
LA71Z	387.5	442.5	139.0	146	90	90	114.5	M20x1.5/M25x1.5	14
LA80	405.5	469.0	156.5	155	90	90	114.0	M20x1.5/M25x1.5	19
LA90S	436.5	507.5	174.0	163	90	90	114.0	M20x1.5/M25x1.5	24
LA90L	436.5	507.5	174.0	163	90	90	114.0	M20x1.5/M25x1.5	24
LA100L	482.5	563.5	195.0	168	120	120	154.5	2xM32x1.5	33
LA112M	512.5	593.5	219.0	181	120	120	160.5	2xM32x1.5	43

④ DIN 332

⑤ Feather key / keyway DIN 6885

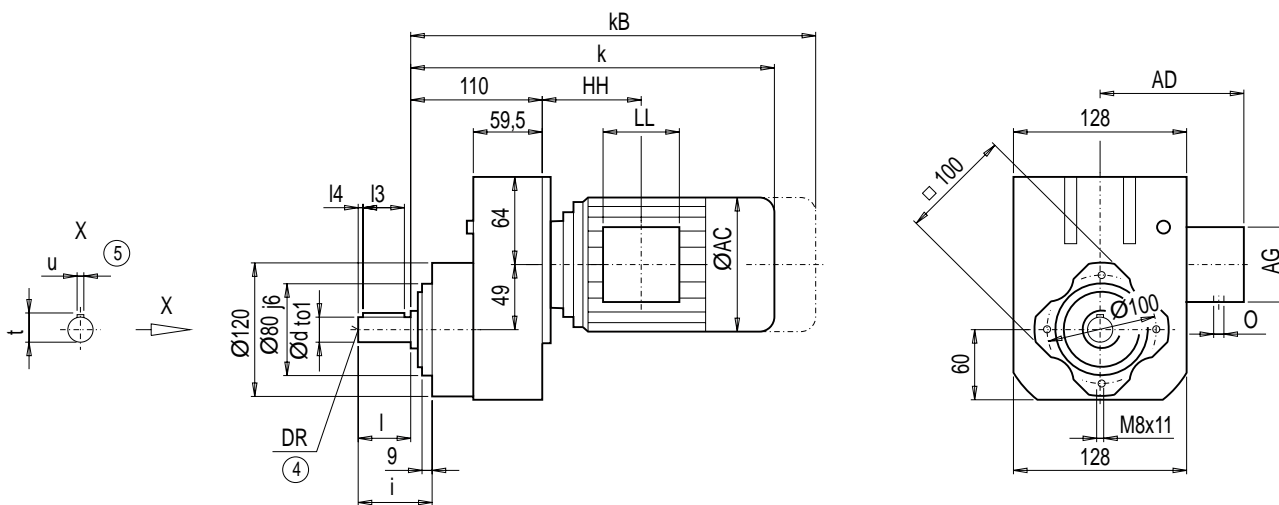
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox EZ38 (1-stage), housing-flange-mounted design (C-type)

EZ011



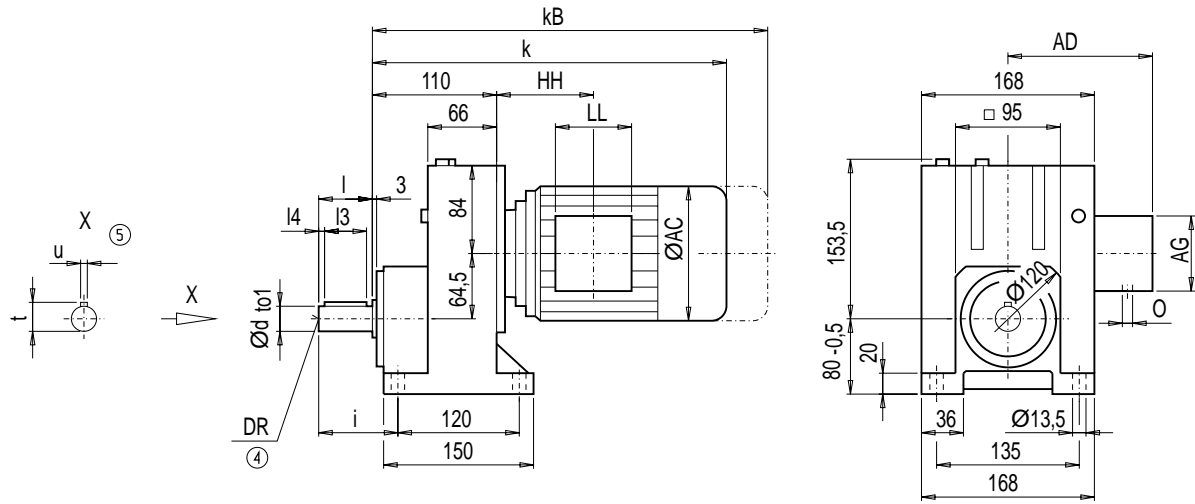
d	to1	l	l4	l3	t	u	i	DR
20 <sup>*)</sup>	k6	40	5	30	22.5	6	53	M6x16
25	k6	50	7	40	28.0	8	63	M10x22

\*) Preferred series

Motor	EZ38								Weight EZ38
	k	kB	AC	AD	AG	LL	HH	O	
LA71	368.5	423.5	139.0	146	90	90	114.5	M20x1.5/M25x1.5	11
LA71Z	387.5	442.5	139.0	146	90	90	114.5	M20x1.5/M25x1.5	11
LA80	405.5	469.0	156.5	155	90	90	114.0	M20x1.5/M25x1.5	16
LA90S	436.5	507.5	174.0	163	90	90	114.0	M20x1.5/M25x1.5	20
LA90L	436.5	507.5	174.0	163	90	90	114.0	M20x1.5/M25x1.5	20
LA100L	482.5	563.5	195.0	168	120	120	154.5	2xM32x1.5	29
LA112M	512.5	593.5	219.0	181	120	120	160.5	2xM32x1.5	40

### Gearbox E48 (1-stage), foot-mounted design

E011



d	to1	l	l4	l3	t	u	i	DR
25 *)	k6	50	7	40	28	8	75	M10x22
30	k6	60	7	50	33	8	85	M10x22

\*) Preferred series

Motor	E48								Weight E48
	k	kB	AC	AD	AG	LL	HH	O	
LA71	363.0	418.0	139.0	146	90	90	109.0	M20x1.5/M25x1.5	15
LA71Z	382.0	437.0	139.0	146	90	90	109.0	M20x1.5/M25x1.5	15
LA80	400.0	463.5	156.5	155	90	90	108.5	M20x1.5/M25x1.5	20
LA90S	431.0	502.0	174.0	163	90	90	108.5	M20x1.5/M25x1.5	25
LA90L	431.0	502.0	174.0	163	90	90	108.5	M20x1.5/M25x1.5	25
LA100L	477.0	558.0	195.0	168	120	120	149.0	2xM32x1.5	34
LA112M	506.0	587.0	219.0	181	120	120	154.0	2xM32x1.5	45
LA132S	568.5	670.5	259.0	195	140	140	197.0	2xM32x1.5	55
LA132M	568.5	670.5	259.0	195	140	140	197.0	2xM32x1.5	55
LA132ZM	614.5	716.5	259.0	195	140	140	197.0	2xM32x1.5	64

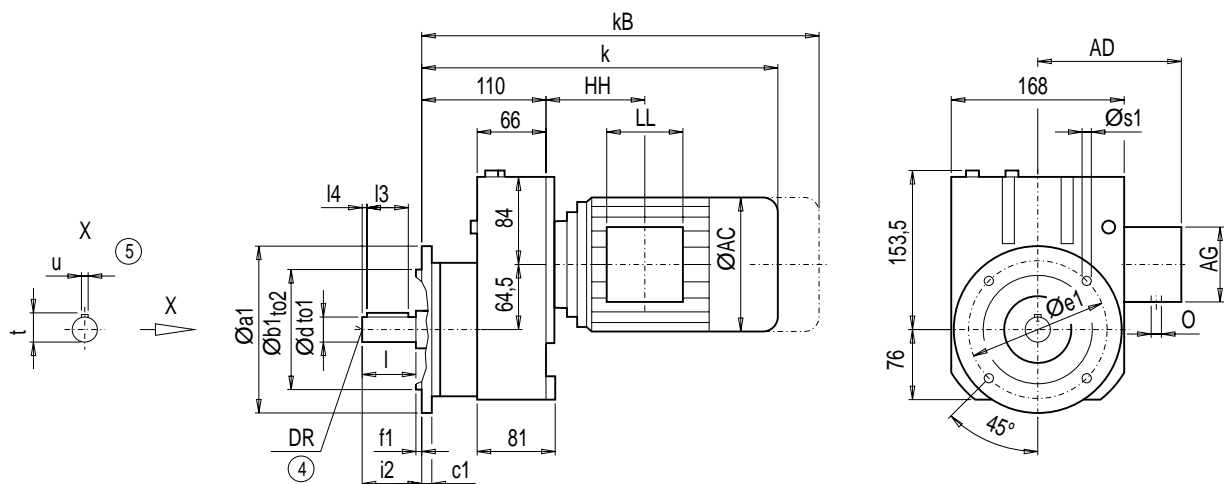
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox EF48 (1-stage), flange-mounted design (A-type)

EF011



Flange	a1	b1	to2	c1	e1	f1	s1	d	to1	l	l3	l4	t	u	i2	DR
A120	120	80	j6	8	100	3.0	6.8	25 <sup>*)</sup>	k6	50	7	40	28	8	50	M10x22
								30	k6	60	7	50	33	8	60	M10x22
A140	140	95	j6	10	115	3.0	9.0	25 <sup>*)</sup>	k6	50	7	40	28	8	50	M10x22
								30	k6	60	7	50	33	8	60	M10x22
A160	160	110	j6	10	130	3.5	9.0	25 <sup>*)</sup>	k6	50	7	40	28	8	50	M10x22
								30	k6	60	7	50	33	8	60	M10x22
A200	200	130	j6	12	165	3.5	11.0	25 <sup>*)</sup>	k6	50	7	40	28	8	50	M10x22
								30	k6	60	7	50	33	8	60	M10x22
A250	250	180	j6	15	215	4.0	13.5	25 <sup>*)</sup>	k6	50	7	40	28	8	50	M10x22
								30	k6	60	7	50	33	8	60	M10x22

\*) Preferred series

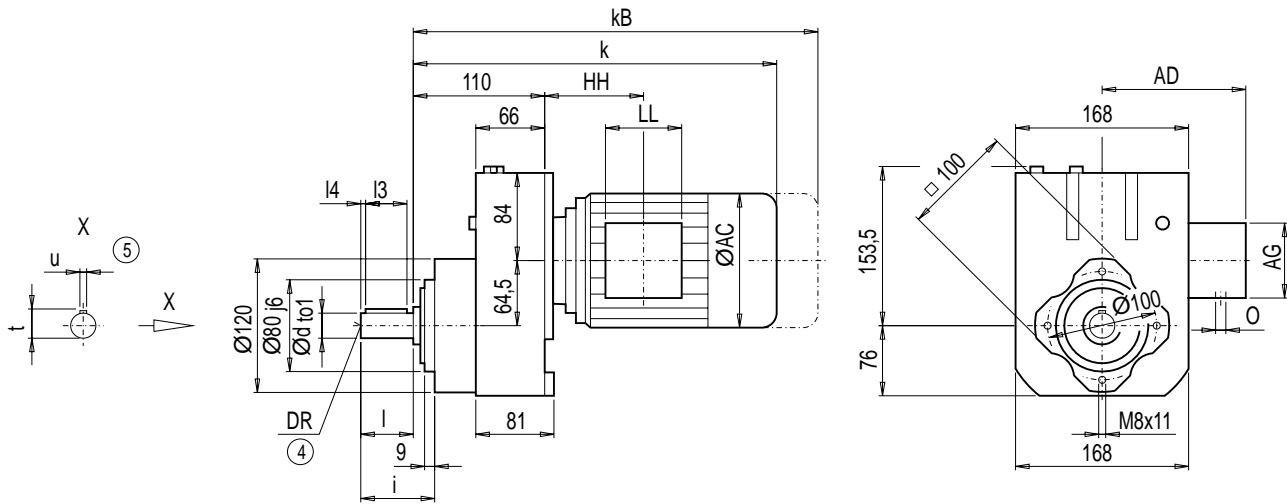
Motor	EF48								Weight EF48
	k	kB	AC	AD	AG	LL	HH	O	
LA71	363.0	418.0	139.0	146	90	90	109.0	M20x1.5/M25x1.5	17
LA71Z	382.0	437.0	139.0	146	90	90	109.0	M20x1.5/M25x1.5	17
LA80	400.0	463.5	156.5	155	90	90	108.5	M20x1.5/M25x1.5	22
LA90S	431.0	502.0	174.0	163	90	90	108.5	M20x1.5/M25x1.5	27
LA90L	431.0	502.0	174.0	163	90	90	108.5	M20x1.5/M25x1.5	27
LA100L	477.0	558.0	195.0	168	120	120	149.0	2xM32x1.5	36
LA112M	506.0	587.0	219.0	181	120	120	154.0	2xM32x1.5	47
LA132S	568.5	670.5	259.0	195	140	140	197.0	2xM32x1.5	57
LA132M	568.5	670.5	259.0	195	140	140	197.0	2xM32x1.5	57
LA132ZM	614.5	716.5	259.0	195	140	140	197.0	2xM32x1.5	66

Ⓔ DIN 332

Ⓔ Feather key / keyway DIN 6885

### Gearbox EZ48 (1-stage), housing-flange-mounted design (C-type)

EZ011



d	to1	l	l4	l3	t	u	i	DR
25 <sup>*)</sup>	k6	50	7	40	28	8	63	M10x22
30	k6	60	7	50	33	8	73	M10x22

\*) Preferred series

Motor	EZ48								Weight EZ48
	k	kB	AC	AD	AG	LL	HH	O	
LA71	363.0	418.0	139.0	146	90	90	109.0	M20x1.5/M25x1.5	14
LA71Z	382.0	437.0	139.0	146	90	90	109.0	M20x1.5/M25x1.5	14
LA80	400.0	463.5	156.5	155	90	90	108.5	M20x1.5/M25x1.5	19
LA90S	431.0	502.0	174.0	163	90	90	108.5	M20x1.5/M25x1.5	23
LA90L	431.0	502.0	174.0	163	90	90	108.5	M20x1.5/M25x1.5	23
LA100L	477.0	558.0	195.0	168	120	120	149.0	2xM32x1.5	33
LA112M	506.0	587.0	219.0	181	120	120	154.0	2xM32x1.5	44
LA132S	568.5	670.5	259.0	195	140	140	197.0	2xM32x1.5	54
LA132M	568.5	670.5	259.0	195	140	140	197.0	2xM32x1.5	54
LA132ZM	614.5	716.5	259.0	195	140	140	197.0	2xM32x1.5	63

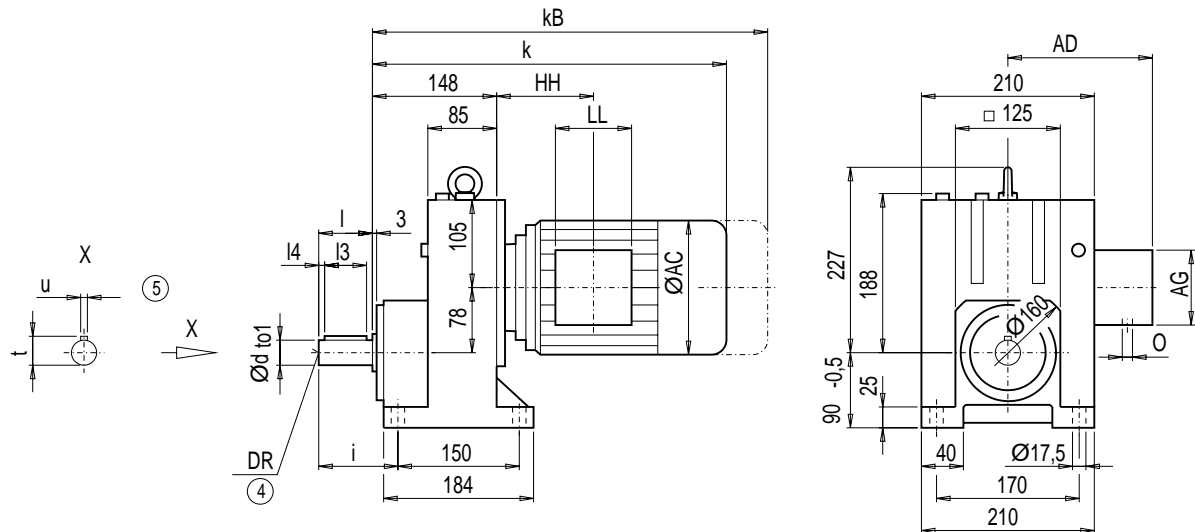
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox E68 (1-stage), foot-mounted design

E011



d	to1	l	l4	l3	t	u	i	DR
30 <sup>*)</sup>	k6	60	3.5	50	33	8	85	M10x22
40	k6	80	5	70	43	12	105	M16x36

\*) Preferred series

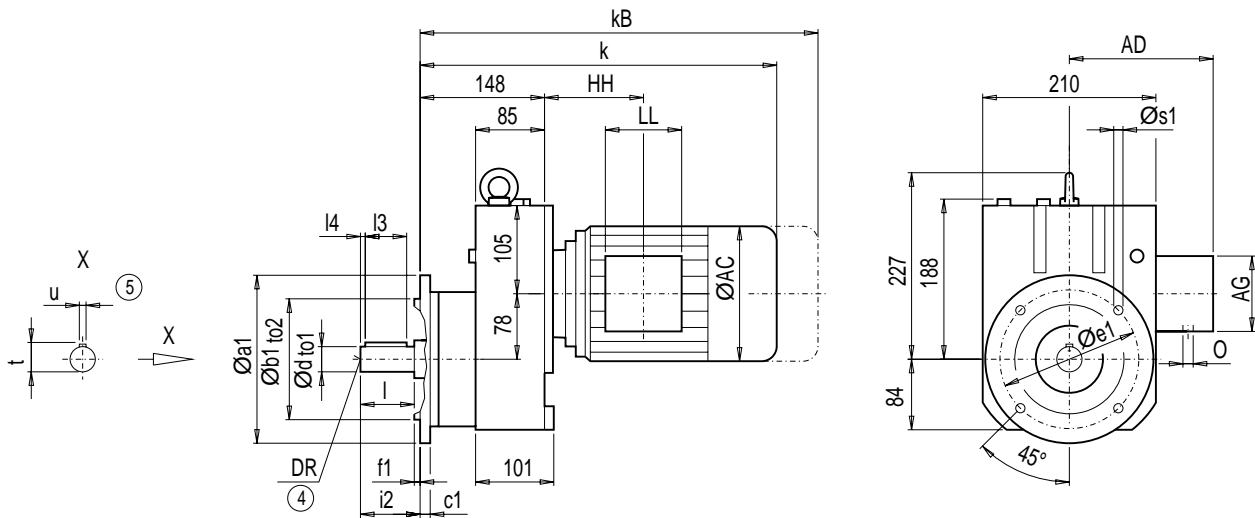
Motor	E68								Weight E68
	k	kB	AC	AD	AG	LL	HH	O	
LA71	395	450.0	139.0	146	90	90	103.0	M20x1.5/M25x1.5	25
LA71Z	414	469.0	139.0	146	90	90	103.0	M20x1.5/M25x1.5	25
LA80	432	495.5	156.5	155	90	90	102.5	M20x1.5/M25x1.5	30
LA90S	463	534.0	174.0	163	90	90	102.5	M20x1.5/M25x1.5	34
LA90L	463	534.0	174.0	163	90	90	102.5	M20x1.5/M25x1.5	34
LA100L	509	590.0	195.0	168	120	120	143.0	2xM32x1.5	44
LA112M	536	617.0	219.0	181	120	120	146.0	2xM32x1.5	55
LA132S	596	698.0	259.0	195	140	140	186.5	2xM32x1.5	68
LA132M	596	698.0	259.0	195	140	140	186.5	2xM32x1.5	68
LA132ZM	642	744.0	259.0	195	140	140	186.5	2xM32x1.5	77
LA160M	699	817.5	313.5	227	165	165	212.5	2xM40x1.5	101
LA160L	699	817.5	313.5	227	165	165	212.5	2xM40x1.5	101

Ⓔ DIN 332

Ⓔ Feather key / keyway DIN 6885

### Gearbox EF68 (1-stage), flange-mounted design (A-type)

EF011



Flange	a1	b1	to2	c1	e1	f1	s1	d	to1	l	l4	l3	t	u	i2	DR
A200	200	130	j6	12	165	3.5	11.0	30 <sup>*)</sup>	k6	60	3.5	50	33	8	60	M10x22
								40	k6	80	5	70	43	12	80	M16x36
A250	250	180	j6	15	215	4.0	13.5	30 <sup>*)</sup>	k6	60	3.5	50	33	8	60	M10x22
								40	k6	80	5	70	43	12	80	M16x36
A300	300	230	j6	16	265	4.0	13.5	30 <sup>*)</sup>	k6	60	3.5	50	33	8	60	M10x22
								40	k6	80	5	70	43	12	80	M16x36

\*) Preferred series

Motor	EF68										Weight	
	k	kB	AC	AD	AG	LL	HH	O	EF68			
LA71	395	450.0	139.0	146	90	90	103.0	M20x1.5/M25x1.5	27			
LA71Z	414	469.0	139.0	146	90	90	103.0	M20x1.5/M25x1.5	27			
LA80	432	495.5	156.5	155	90	90	102.5	M20x1.5/M25x1.5	32			
LA90S	463	534.0	174.0	163	90	90	102.5	M20x1.5/M25x1.5	36			
LA90L	463	534.0	174.0	163	90	90	102.5	M20x1.5/M25x1.5	36			
LA100L	509	590.0	195.0	168	120	120	143.0	2xM32x1.5	46			
LA112M	536	617.0	219.0	181	120	120	146.0	2xM32x1.5	57			
LA132S	596	698.0	259.0	195	140	140	186.5	2xM32x1.5	70			
LA132M	596	698.0	259.0	195	140	140	186.5	2xM32x1.5	70			
LA132ZM	642	744.0	259.0	195	140	140	186.5	2xM32x1.5	79			
LA160M	699	817.5	313.5	227	165	165	212.5	2xM40x1.5	103			
LA160L	699	817.5	313.5	227	165	165	212.5	2xM40x1.5	103			

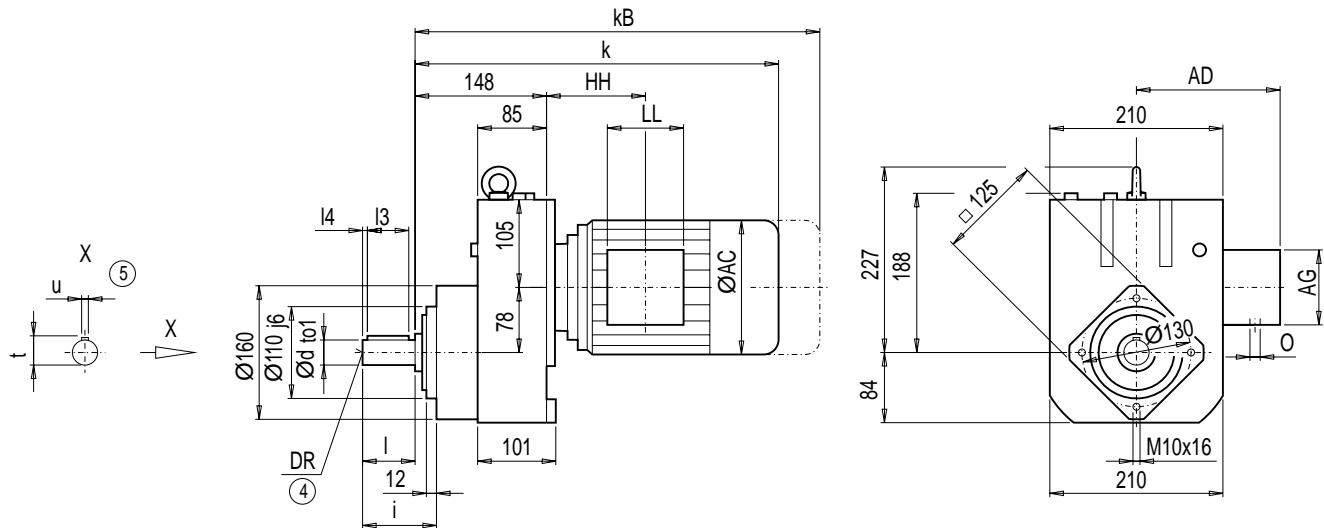
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox EZ68 (1-stage), housing-flange-mounted design (C-type)

EZ011



d	to1	l	l4	l3	t	u	i	DR
30 <sup>*)</sup>	k6	60	3.5	50	33	8	77	M10x22
40	k6	80	5	70	43	12	97	M16x36

\*) Preferred series

Motor	EZ68								Weight EZ68
	k	kB	AC	AD	AG	LL	HH	O	
LA71	395	450.0	139.0	146	90	90	103.0	M20x1.5/M25x1.5	22
LA71Z	414	469.0	139.0	146	90	90	103.0	M20x1.5/M25x1.5	22
LA80	432	495.5	156.5	155	90	90	102.5	M20x1.5/M25x1.5	27
LA90S	463	534.0	174.0	163	90	90	102.5	M20x1.5/M25x1.5	32
LA90L	463	534.0	174.0	163	90	90	102.5	M20x1.5/M25x1.5	32
LA100L	509	590.0	195.0	168	120	120	143.0	2xM32x1.5	41
LA112M	536	617.0	219.0	181	120	120	146.0	2xM32x1.5	53
LA132S	596	698.0	259.0	195	140	140	186.5	2xM32x1.5	66
LA132M	596	698.0	259.0	195	140	140	186.5	2xM32x1.5	66
LA132ZM	642	744.0	259.0	195	140	140	186.5	2xM32x1.5	75
LA160M	699	817.5	313.5	227	165	165	212.5	2xM40x1.5	99
LA160L	699	817.5	313.5	227	165	165	212.5	2xM40x1.5	99

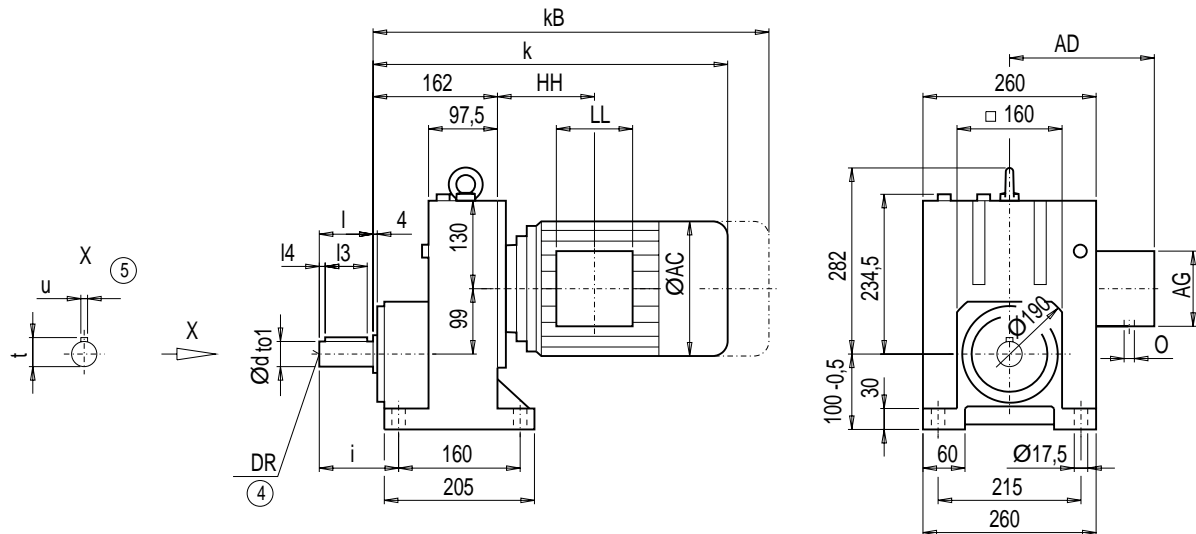
④ DIN 332

⑤ Feather key / keyway DIN 6885



### Gearbox E88 (1-stage), foot-mounted design

E011



d	to1	l	l4	l3	t	u	i	DR
40 *)	k6	80	5	70	43	12	110	M16x36
45	k6	90	5	80	48.5	14	120	M16x36

\*) Preferred series

Motor	E88									Weight E88
	k	kB	AC	AD	AG	LL	HH	O		
LA90S	462.0	533.0	174.0	163.0	90	90	87.5	M20x1.5/M25x1.5	52	
LA90L	462.0	533.0	174.0	163.0	90	90	87.5	M20x1.5/M25x1.5	52	
LA100L	505.5	586.5	195.0	168.0	120	120	125.5	2xM32x1.5	60	
LA112M	531.5	612.5	219.0	181.0	120	120	127.5	2xM32x1.5	72	
LA132S	591.5	693.5	259.0	195.0	140	140	168.0	2xM32x1.5	84	
LA132M	591.5	693.5	259.0	195.0	140	140	168.0	2xM32x1.5	84	
LA132ZM	637.5	739.5	259.0	195.0	140	140	168.0	2xM32x1.5	93	
LA160M	696.0	814.5	313.5	227.0	165	165	195.5	2xM40x1.5	119	
LA160L	696.0	814.5	313.5	227.0	165	165	195.5	2xM40x1.5	119	
LG180M	756.0	878.0	348.0	322.5	260	192	213.0	2xM40x1.5	211	
LG180ZM	807.0	929.0	348.0	322.5	260	192	213.0	2xM40x1.5	241	
LG180L	756.0	878.0	348.0	322.5	260	192	213.0	2xM40x1.5	211	
LG180ZL	807.0	929.0	348.0	322.5	260	192	213.0	2xM40x1.5	241	

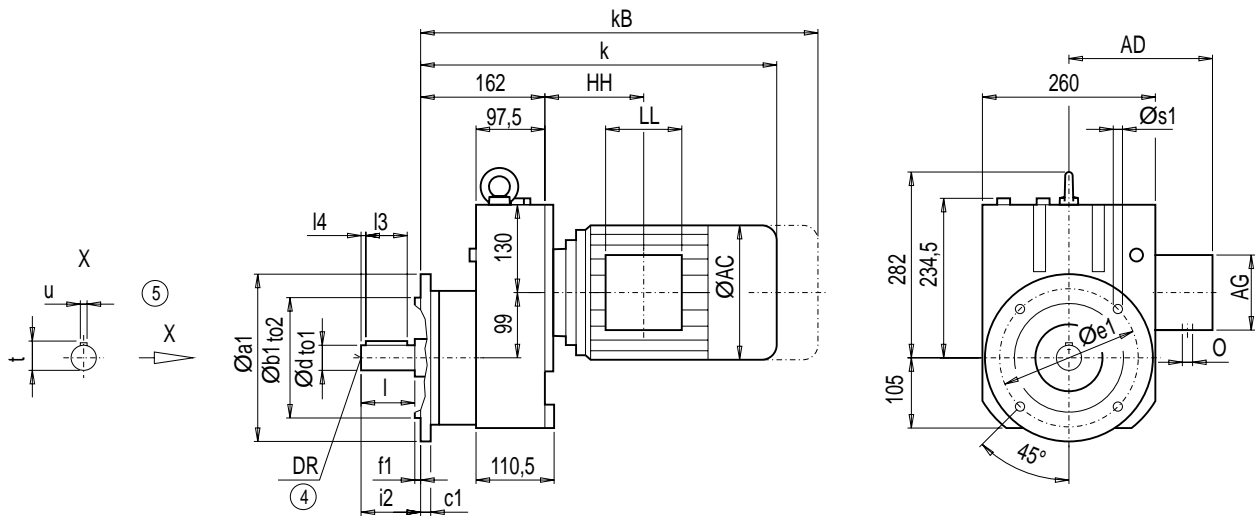
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox EF88 (1-stage), flange-mounted design (A-type)

EF011



Flange	a1	b1	to2	c1	e1	f1	s1	d	to1	l	l4	l3	t	u	i2	DR
<b>A250</b>	250	180	j6	15	215	4	13.5	40 <sup>*)</sup>	k6	80	5	70	43	12	80	M16x36
								45	k6	90	5	80	48.5	14	90	M16x36
<b>A300</b>	300	230	j6	16	265	4	13.5	40 <sup>*)</sup>	k6	80	5	70	43	12	80	M16x36
								45	k6	90	5	80	48.5	14	90	M16x36
<b>A350</b>	350	250	h6	18	300	4	17.5	40 <sup>*)</sup>	k6	80	5	70	43	12	80	M16x36
								45	k6	90	5	80	48.5	14	90	M16x36

\*) Preferred series

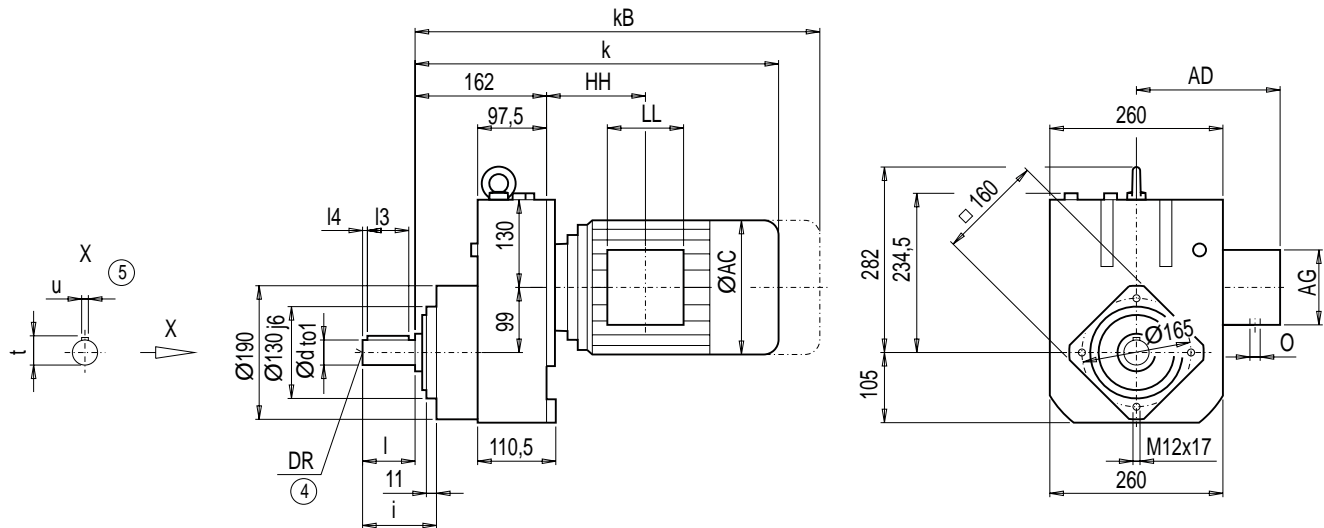
Motor	EF88										Weight
	k	kB	AC	AD	AG	LL	HH	O	EF88		
LA90S	462.0	533.0	174.0	163.0	90	90	87.5	M20x1.5/M25x1.5	54		
LA90L	462.0	533.0	174.0	163.0	90	90	87.5	M20x1.5/M25x1.5	54		
LA100L	505.5	586.5	195.0	168.0	120	120	125.5	2xM32x1.5	62		
LA112M	531.5	612.5	219.0	181.0	120	120	127.5	2xM32x1.5	74		
LA132S	591.5	693.5	259.0	195.0	140	140	168.0	2xM32x1.5	85		
LA132M	591.5	693.5	259.0	195.0	140	140	168.0	2xM32x1.5	85		
LA132ZM	637.5	739.5	259.0	195.0	140	140	168.0	2xM32x1.5	95		
LA160M	696.0	814.5	313.5	227.0	165	165	195.5	2xM40x1.5	120		
LA160L	696.0	814.5	313.5	227.0	165	165	195.5	2xM40x1.5	120		
LG180M	756.0	878.0	348.0	322.5	260	192	213.0	2xM40x1.5	212		
LG180ZM	807.0	929.0	348.0	322.5	260	192	213.0	2xM40x1.5	242		
LG180L	756.0	878.0	348.0	322.5	260	192	213.0	2xM40x1.5	212		
LG180ZL	807.0	929.0	348.0	322.5	260	192	213.0	2xM40x1.5	212		

④ DIN 332

⑤ Feather key / keyway DIN 6885

#### Gearbox EZ88 (1-stage), housing-flange-mounted design (C-type)

EZ011



d	to1	l	l4	l3	t	u	i	DR
40 *)	k6	80	5	70	43	12	98	M16x36
45	k6	90	5	80	48.5	14	108	M16x36

\*) Preferred series

Motor	EZ88								Weight EZ88
	k	kB	AC	AD	AG	LL	HH	O	
LA90S	462.0	533.0	174.0	163.0	90	90	87.5	M20x1.5/M25x1.5	47
LA90L	462.0	533.0	174.0	163.0	90	90	87.5	M20x1.5/M25x1.5	47
LA100L	505.5	586.5	195.0	168.0	120	120	125.5	2xM32x1.5	55
LA112M	531.5	612.5	219.0	181.0	120	120	127.5	2xM32x1.5	67
LA132S	591.5	693.5	259.0	195.0	140	140	168.0	2xM32x1.5	79
LA132M	591.5	693.5	259.0	195.0	140	140	168.0	2xM32x1.5	79
LA132ZM	637.5	739.5	259.0	195.0	140	140	168.0	2xM32x1.5	88
LA160M	696.0	814.5	313.5	227.0	165	165	195.5	2xM40x1.5	114
LA160L	696.0	814.5	313.5	227.0	165	165	195.5	2xM40x1.5	114
LG180M	756.0	878.0	348.0	322.5	260	192	213.0	2xM40x1.5	206
LG180ZM	807.0	929.0	348.0	322.5	260	192	213.0	2xM40x1.5	236
LG180L	756.0	878.0	348.0	322.5	260	192	213.0	2xM40x1.5	206
LG180ZL	807.0	929.0	348.0	322.5	260	192	213.0	2xM40x1.5	236

④ DIN 332

⑤ Feather key / keyway DIN 6885

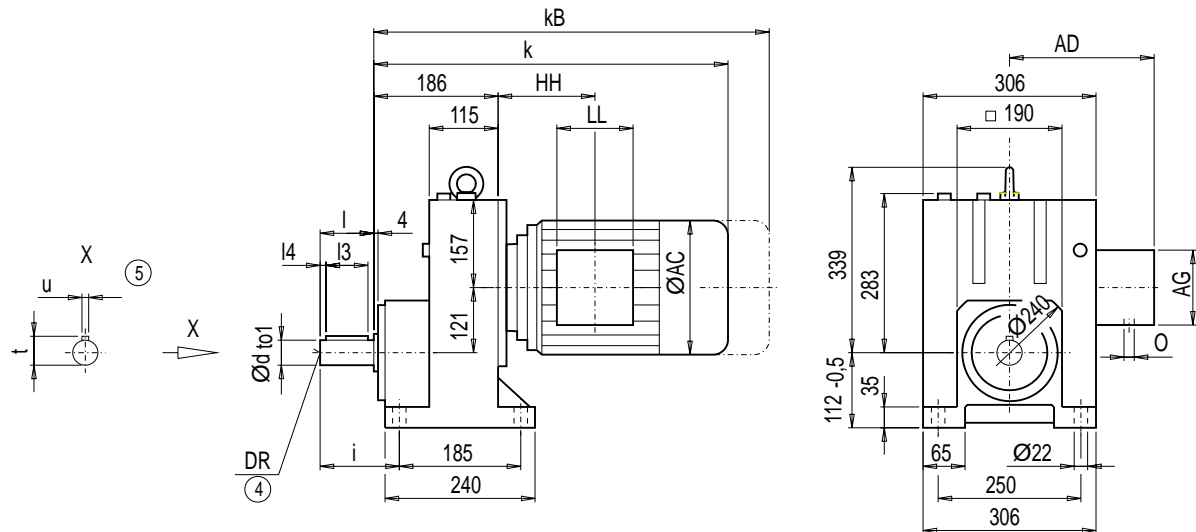
# MOTEX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox E108 (1-stage), foot-mounted design

E011



d	to1	l	l4	l3	t	u	i	DR
50 *)	k6	100	10	80	53.5	14	140	M16x36
55	k6	110	5	100	59.0	16	150	M20x42

\*) Preferred series

Motor	E108								Weight E108
	k	kB	AC	AD	AG	LL	HH	O	
LA90S	474.5	545.5	174.0	163.0	90	90	76.0	M20x1.5/M25x1.5	74
LA90L	474.5	545.5	174.0	163.0	90	90	76.0	M20x1.5/M25x1.5	74
LA100L	517.5	598.5	195.0	168.0	120	120	113.5	2xM32x1.5	82
LA112M	544.0	625.0	219.0	181.0	120	120	116.0	2xM32x1.5	94
LA132S	603.0	705.0	259.0	195.0	140	140	155.5	2xM32x1.5	105
LA132M	603.0	705.0	259.0	195.0	140	140	155.5	2xM32x1.5	105
LA132ZM	649.0	751.0	259.0	195.0	140	140	155.5	2xM32x1.5	114
LA160M	708.5	827.0	313.5	227.0	165	165	184.0	2xM40x1.5	139
LA160L	708.5	827.0	313.5	227.0	165	165	184.0	2xM40x1.5	139
LG180M	765.0	887.0	348.0	322.5	260	192	198.0	2xM40x1.5	236
LG180ZM	816.0	938.0	348.0	322.5	260	192	198.0	2xM40x1.5	266
LG180L	765.0	887.0	348.0	322.5	260	192	198.0	2xM40x1.5	236
LG180ZL	816.0	938.0	348.0	322.5	260	192	198.0	2xM40x1.5	266
LG200L	821.0	947.0	385.0	301.0	260	192	228.0	2xM50x1.5	316
K4-LGI225S	1 082.0	1 321.0	439.0	325.0	260	192	197.0	2xM50x1.5	472
K4-LGI225M	1 082.0	1 321.0	439.0	325.0	260	192	197.0	2xM50x1.5	460
K4-LGI225ZM	1 142.0	1 381.0	439.0	325.0	260	192	197.0	2xM50x1.5	518

Ⓞ DIN 332

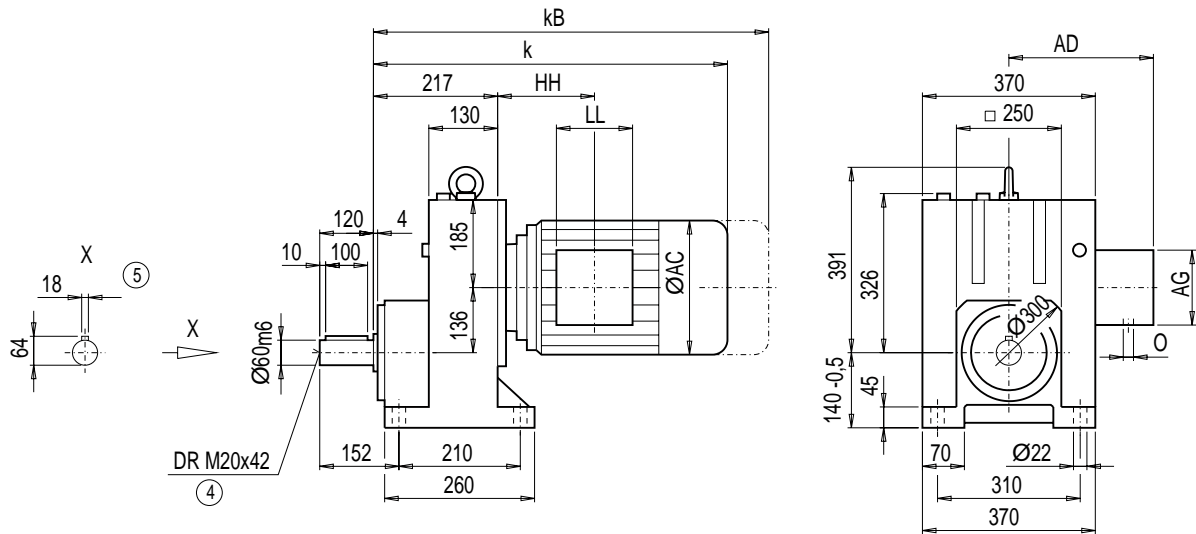
Ⓞ Feather key / keyway DIN 6885





### Gearbox E128 (1-stage), foot-mounted design

E011



2

Motor	E128								Weight E128
	k	kB	AC	AD	AG	LL	HH	O	
LA100L	539.0	620.0	195.0	168.0	120	120	104.0	2xM32x1.5	121
LA112M	564.5	645.5	219.0	181.0	120	120	105.5	2xM32x1.5	132
LA132S	623.5	725.5	259.0	195.0	140	140	145.0	2xM32x1.5	142
LA132M	623.5	725.5	259.0	195.0	140	140	145.0	2xM32x1.5	142
LA132ZM	669.5	771.5	259.0	195.0	140	140	145.0	2xM32x1.5	151
LA160M	723.0	841.5	313.5	227.0	165	165	167.5	2xM40x1.5	181
LA160L	723.0	841.5	313.5	227.0	165	165	167.5	2xM40x1.5	181
LG180M	782.5	904.5	348.0	322.5	260	192	184.5	2xM40x1.5	272
LG180ZM	833.5	955.5	348.0	322.5	260	192	184.5	2xM40x1.5	302
LG180L	782.5	904.5	348.0	322.5	260	192	184.5	2xM40x1.5	272
LG180ZL	833.5	955.5	348.0	322.5	260	192	184.5	2xM40x1.5	302
LG200L	838.5	964.5	385.0	301.0	260	192	214.5	2xM50x1.5	352
LG225S	909.5	1 148.5	442.0	325.0	260	192	250.5	2xM50x1.5	428
LG225M	909.5	1 148.5	442.0	325.0	260	192	250.5	2xM50x1.5	416
LG225ZM	969.5	1 208.5	442.0	325.0	260	192	250.5	2xM50x1.5	474
K4-LGI250M	1 197.0	1 422.0	495.0	392.0	300	236	238.0	2xM63x1.5	596
K4-LGI250ZM	1 267.0	1 492.0	495.0	392.0	300	236	238.0	2xM63x1.5	699

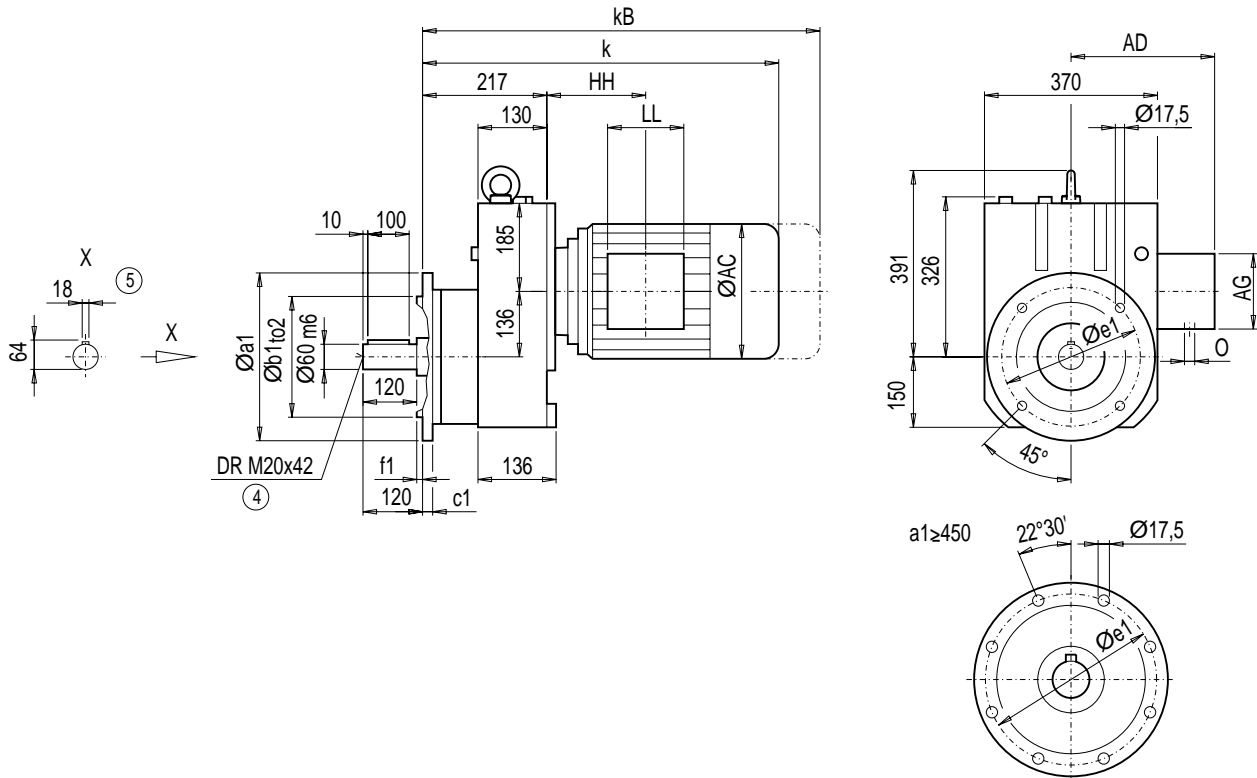
# MOTEX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox EF128 (1-stage), flange-mounted design (A-type)

EF011



Flange	a1	b1	to2	c1	e1	f1	s1
A350	350	250	h6	18	300	5	17.5
A450	450	350	h6	20	400	5	17.5

Motor	EF128								Weight EF128
	k	kB	AC	AD	AG	LL	HH	O	
LA100L	539.0	620.0	195.0	168.0	120	120	104.0	2xM32x1.5	125
LA112M	564.5	645.5	219.0	181.0	120	120	105.5	2xM32x1.5	137
LA132S	623.5	725.5	259.0	195.0	140	140	145.0	2xM32x1.5	146
LA132M	623.5	725.5	259.0	195.0	140	140	145.0	2xM32x1.5	146
LA132ZM	669.5	771.5	259.0	195.0	140	140	145.0	2xM32x1.5	155
LA160M	723.0	841.5	313.5	227.0	165	165	167.5	2xM40x1.5	185
LA160L	723.0	841.5	313.5	227.0	165	165	167.5	2xM40x1.5	185
LG180M	782.5	904.5	348.0	322.5	260	192	184.5	2xM40x1.5	276
LG180ZM	833.5	955.5	348.0	322.5	260	192	184.5	2xM40x1.5	306
LG180L	782.5	904.5	348.0	322.5	260	192	184.5	2xM40x1.5	276
LG180ZL	833.5	955.5	348.0	322.5	260	192	184.5	2xM40x1.5	306
LG200L	838.5	964.5	385.0	301.0	260	192	214.5	2xM50x1.5	356
LG225S	909.5	1 148.5	442.0	325.0	260	192	250.5	2xM50x1.5	432
LG225M	909.5	1 148.5	442.0	325.0	260	192	250.5	2xM50x1.5	420
LG225ZM	969.5	1 208.5	442.0	325.0	260	192	250.5	2xM50x1.5	478
K4-LGI250M	1 197.0	1 422.0	495.0	392.0	300	236	238.0	2xM63x1.5	600
K4-LGI250ZM	1 267.0	1 492.0	495.0	392.0	300	236	238.0	2xM63x1.5	703

④ DIN 332

⑤ Feather key / keyway DIN 6885





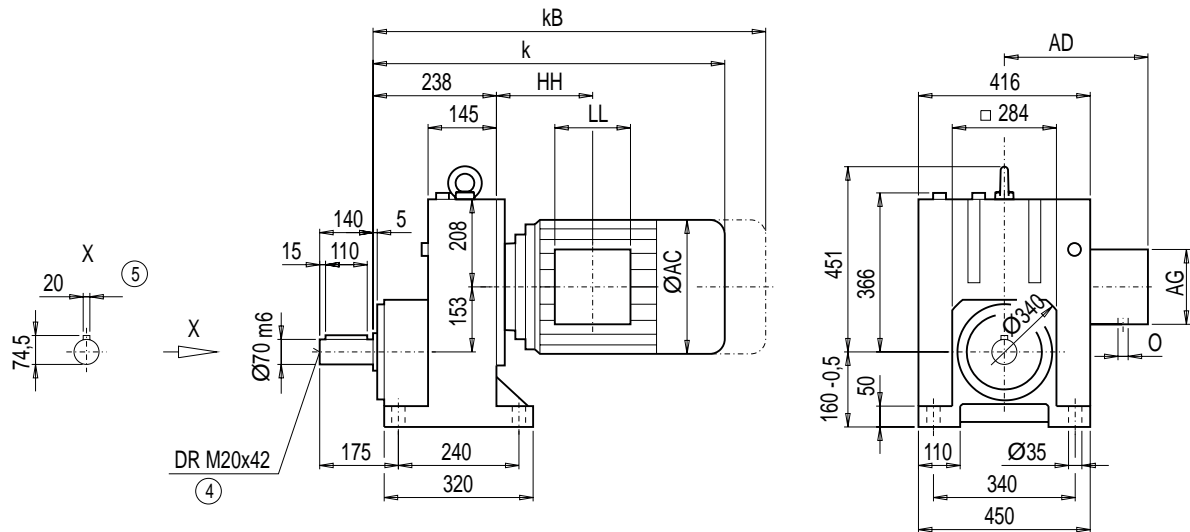
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox E148 (1-stage), foot-mounted design

E011



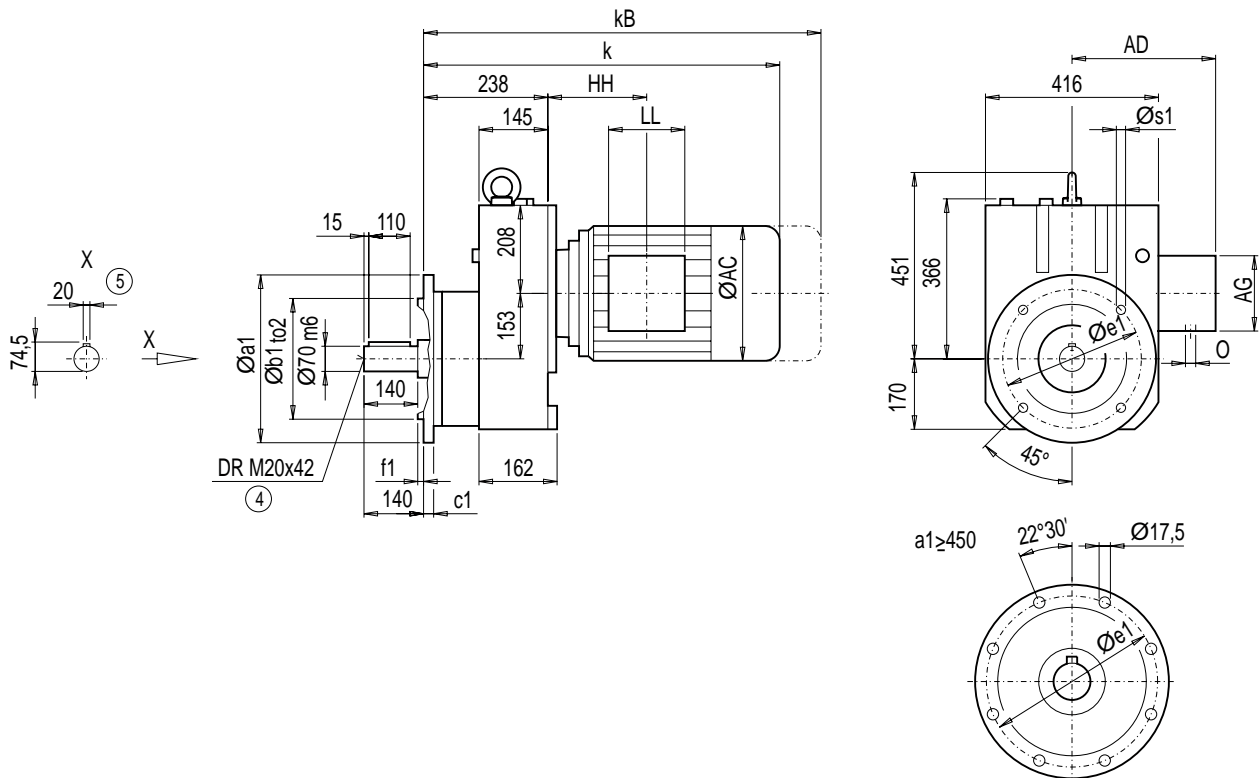
Motor	E148								Weight E148
	k	kB	AC	AD	AG	LL	HH	O	
LA132S	636.5	738.5	259.0	195.0	140	140	137.0	2xM32x1.5	169
LA132M	636.5	738.5	259.0	195.0	140	140	137.0	2xM32x1.5	169
LA132ZM	682.5	784.5	259.0	195.0	140	140	137.0	2xM32x1.5	178
LA160M	736.5	855.0	313.5	227.0	165	165	160.0	2xM40x1.5	203
LA160L	736.5	855.0	313.5	227.0	165	165	160.0	2xM40x1.5	203
LG180M	796.0	918.0	348.0	322.5	260	192	177.0	2xM40x1.5	298
LG180ZM	847.0	969.0	348.0	322.5	260	192	177.0	2xM40x1.5	328
LG180L	796.0	918.0	348.0	322.5	260	192	177.0	2xM40x1.5	298
LG180ZL	847.0	969.0	348.0	322.5	260	192	177.0	2xM40x1.5	328
LG200L	852.0	978.0	385.0	301.0	260	192	207.0	2xM50x1.5	378
LG225S	923.0	1 162.0	442.0	325.0	260	192	243.0	2xM50x1.5	452
LG225M	923.0	1 162.0	442.0	325.0	260	192	243.0	2xM50x1.5	440
LG225ZM	983.0	1 222.0	442.0	325.0	260	192	243.0	2xM50x1.5	498
LG250M	1 016.5	1 241.5	495.0	392.0	300	236	278.5	2xM63x1.5	542
LG250ZM	1 086.5	1 312.0	495.0	392.0	300	236	278.5	2xM63x1.5	645
K4-LGI280S	1 296.0	1 523.0	555.0	432.0	300	236	253.0	2xM63x1.5	774
K4-LGI280M	1 296.0	1 523.0	555.0	432.0	300	236	253.0	2xM63x1.5	785
K4-LGI280ZM	1 406.0	1 633.0	555.0	432.0	300	236	253.0	2xM63x1.5	874

④ DIN 332

⑤ Feather key / keyway DIN 6885

### Gearbox EF148 (1-stage), flange-mounted design (A-type)

EF011



Flange	a1	b1	to2	c1	e1	f1	s1
A350	350	250	h6	18	300	5	17.5
A450	450	350	h6	22	400	5	17.5
A550	550	450	h6	25	500	5	17.5

Motor	EF148								Weight EF148
	k	kB	AC	AD	AG	LL	HH	O	
LA132S	636.5	738.5	259.0	195.0	140	140	137.0	2xM32x1.5	180
LA132M	636.5	738.5	259.0	195.0	140	140	137.0	2xM32x1.5	180
LA132ZM	682.5	784.5	259.0	195.0	140	140	137.0	2xM32x1.5	190
LA160M	736.5	855.0	313.5	227.0	165	165	160.0	2xM40x1.5	214
LA160L	736.5	855.0	313.5	227.0	165	165	160.0	2xM40x1.5	214
LG180M	796.0	918.0	348.0	322.5	260	192	177.0	2xM40x1.5	310
LG180ZM	847.0	969.0	348.0	322.5	260	192	177.0	2xM40x1.5	340
LG180L	796.0	918.0	348.0	322.5	260	192	177.0	2xM40x1.5	310
LG180ZL	847.0	969.0	348.0	322.5	260	192	177.0	2xM40x1.5	340
LG200L	852.0	978.0	385.0	301.0	260	192	207.0	2xM50x1.5	390
LG225S	923.0	1 162.0	442.0	325.0	260	192	243.0	2xM50x1.5	464
LG225M	923.0	1 162.0	442.0	325.0	260	192	243.0	2xM50x1.5	452
LG225ZM	983.0	1 222.0	442.0	325.0	260	192	243.0	2xM50x1.5	510
LG250M	1 016.5	1 241.5	495.0	392.0	300	236	278.5	2xM63x1.5	554
LG250ZM	1 086.5	1 312.0	495.0	392.0	300	236	278.5	2xM63x1.5	657
K4-LGI280S	1 296.0	1 523.0	555.0	432.0	300	236	253.0	2xM63x1.5	786
K4-LGI280M	1 296.0	1 523.0	555.0	432.0	300	236	253.0	2xM63x1.5	797
K4-LGI280ZM	1 406.0	1 633.0	555.0	432.0	300	236	253.0	2xM63x1.5	886

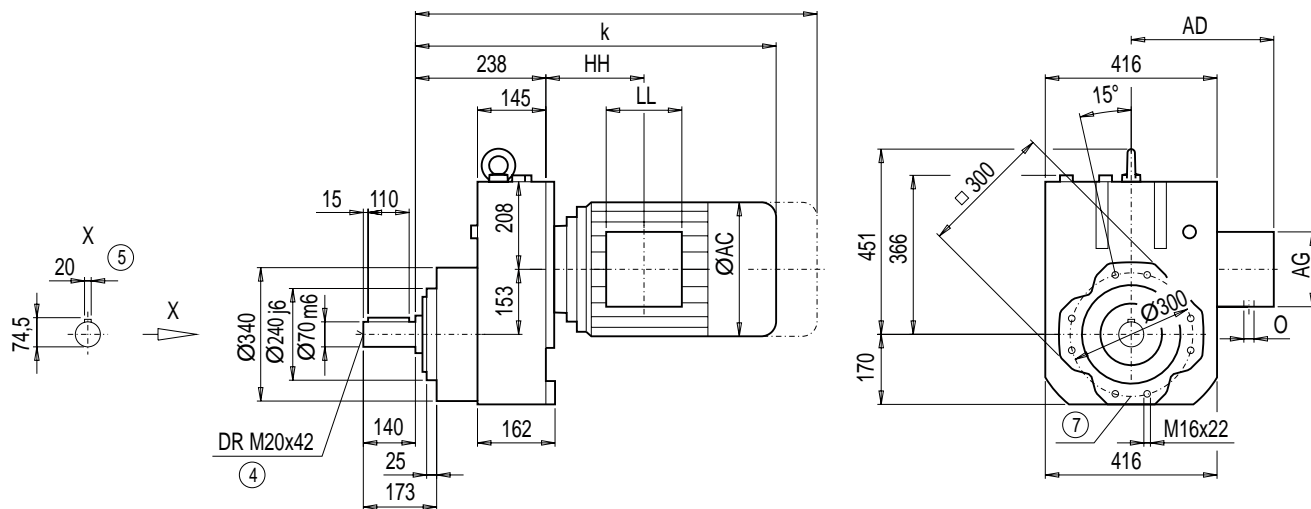
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox EZ148 (1-stage), housing-flange-mounted design (C-type)

EZ011



Motor	EZ148								Weight EZ148
	k	kB	AC	AD	AG	LL	HH	O	
LA132S	636.5	738.5	259.0	195.0	140	140	137.0	2xM32x1.5	154
LA132M	636.5	738.5	259.0	195.0	140	140	137.0	2xM32x1.5	154
LA132ZM	682.5	784.5	259.0	195.0	140	140	137.0	2xM32x1.5	163
LA160M	736.5	855.0	313.5	227.0	165	165	160.0	2xM40x1.5	188
LA160L	736.5	855.0	313.5	227.0	165	165	160.0	2xM40x1.5	188
LG180M	796.0	918.0	348.0	322.5	260	192	177.0	2xM40x1.5	283
LG180ZM	847.0	969.0	348.0	322.5	260	192	177.0	2xM40x1.5	313
LG180L	796.0	918.0	348.0	322.5	260	192	177.0	2xM40x1.5	283
LG180ZL	847.0	969.0	348.0	322.5	260	192	177.0	2xM40x1.5	313
LG200L	852.0	978.0	385.0	301.0	260	192	207.0	2xM50x1.5	363
LG225S	923.0	1 162.0	442.0	325.0	260	192	243.0	2xM50x1.5	437
LG225M	923.0	1 162.0	442.0	325.0	260	192	243.0	2xM50x1.5	425
LG225ZM	983.0	1 222.0	442.0	325.0	260	192	243.0	2xM50x1.5	483
LG250M	1 016.5	1 241.0	495.0	392.0	300	236	278.5	2xM63x1.5	527
LG250ZM	1 086.5	1 312.0	495.0	392.0	300	236	278.5	2xM63x1.5	630
K4-LGI280S	1 296.0	1 523.0	555.0	432.0	300	236	253.0	2xM63x1.5	759
K4-LGI280M	1 296.0	1 523.0	555.0	432.0	300	236	253.0	2xM63x1.5	770
K4-LGI280ZM	1 406.0	1 633.0	555.0	432.0	300	236	253.0	2xM63x1.5	859

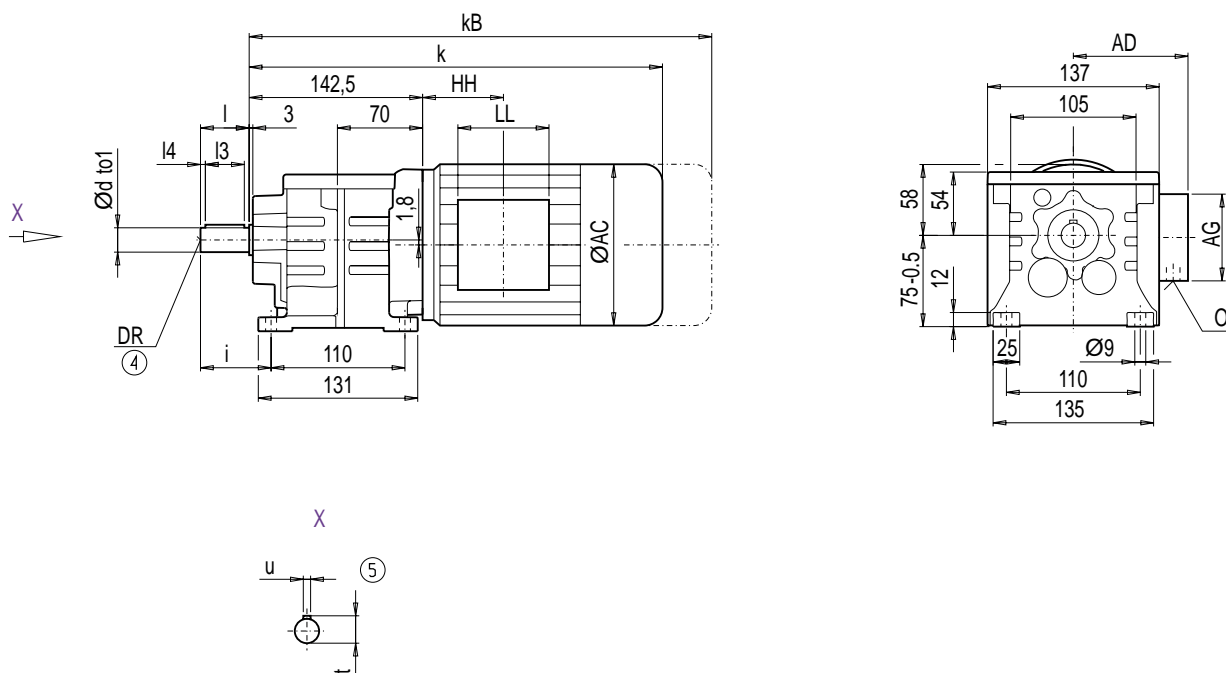
④ DIN 332

⑤ Feather key / keyway DIN 6885

⑦ For note, see page 2/192

### Gearbox D/Z18 (3- / 2-stage), foot-mounted design

DZ011



d	to1	l	l4	l3	t	u	i	DR
16	k6	28	3	22	18	5	46	M6x16
20 <sup>*)</sup>	k6	40	4	32	22.5	6	58	M6x16

\*) Preferred series

Motor	Z18		D18		AC	AD	AG	LL	HH	O	Weight	
	k	kB	k	kB							Z18	D18
LA71	327	382	327	382	139	146	90	90	40.5	M20x1.5/M25x1.5	8	8
LA71Z	346	401	346	401	139	146	90	90	40.5	M20x1.5/M25x1.5	8	8

# MOTOX Geared Motors

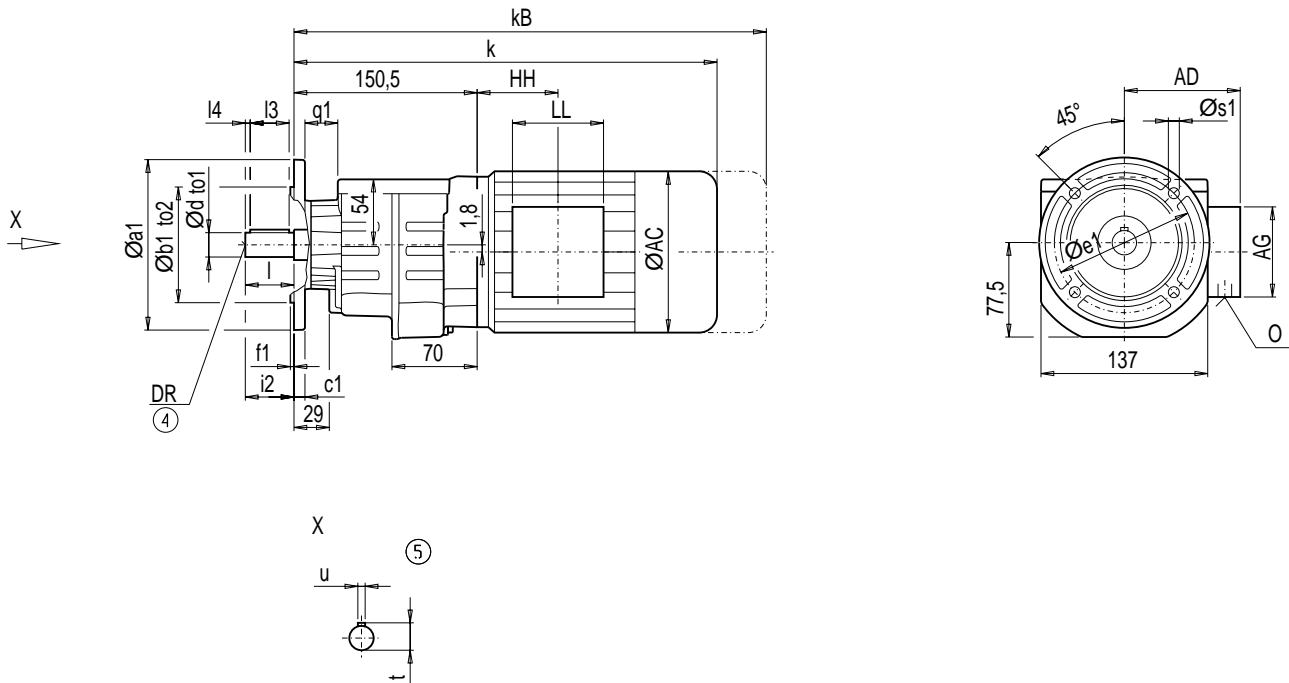
## Helical geared motors

### Dimensions

#### Gearbox DF/ZF18 (3- / 2-stage), flange-mounted design (A-type)

DZF011

2



Flange	a1	b1	to2	c1	e1	f1	q1	s1	d	to1	l	l4	l3	t	u	i2	DR
A120	120	80	j6	8	100	3.0	28	6.6	16	k6	28	3	22	18	5	28	M6x16
									20 <sup>*)</sup>	k6	40	4	32	22.5	6	40	M6x16
A140	140	95	j6	9	115	3.0	27	9.0	16	k6	28	3	22	18	5	28	M6x16
									20 <sup>*)</sup>	k6	40	4	32	22.5	6	40	M6x16
A160	160	110	j6	9	130	3.5	27	9.0	16	k6	28	3	22	18	5	28	M6x16
									20 <sup>*)</sup>	k6	40	4	32	22.5	6	40	M6x16

\*) Preferred series

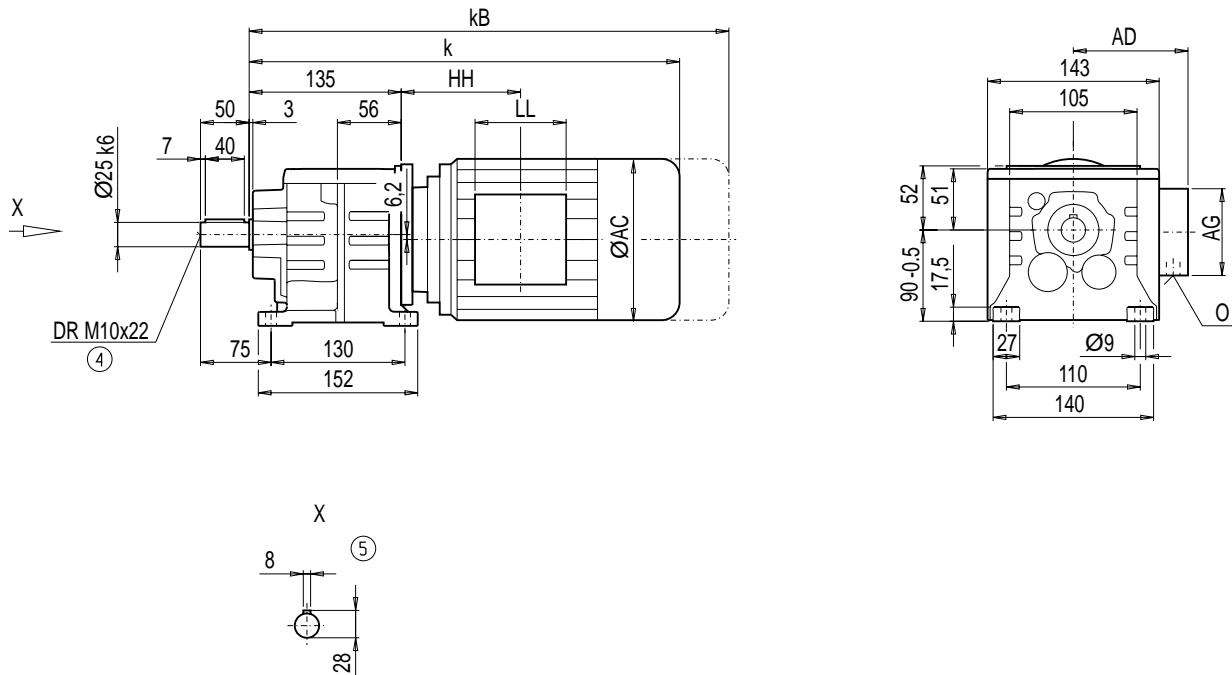
Motor	ZF18		DF18		AC	AD	AG	LL	HH	O	Weight	
	k	kB	k	kB							ZF18	DF18
LA71	335	390	335	390	139	146	90	90	40.5	M20x1.5/M25x1.5	8	9
LA71Z	354	409	354	409	139	146	90	90	40.5	M20x1.5/M25x1.5	8	9

④ DIN 332

⑤ Feather key / keyway DIN 6885

### Gearbox D/Z28 (3- / 2-stage), foot-mounted design

DZ011



2

Motor	Z28		D28		AC	AD	AG	LL	HH	O	Weight	
	k	kB	k	kB							Z28	D28
LA71	337.5	392.5	337.5	392.5	139	146	90	90	58.5	M20x1.5/M25x1.5	9	9
LA71Z	356.5	411.5	356.5	411.5	139	146	90	90	58.5	M20x1.5/M25x1.5	9	9
LA90S	434.5	505.5	434.5	505.5	174	185	90	90	87.0	M20x1.5/M25x1.5	18	19
LA90L	434.5	505.5	434.5	505.5	174	185	90	90	87.0	M20x1.5/M25x1.5	18	19
LA90ZL	479.5	550.5	479.5	550.5	174	185	90	90	87.0	M20x1.5/M25x1.5	21	22
LA100L	516.5	597.5	-	-	195	168	120	120	163.5	2xM32x1.5	28	-

④ DIN 332

⑤ Feather key / keyway DIN 6885

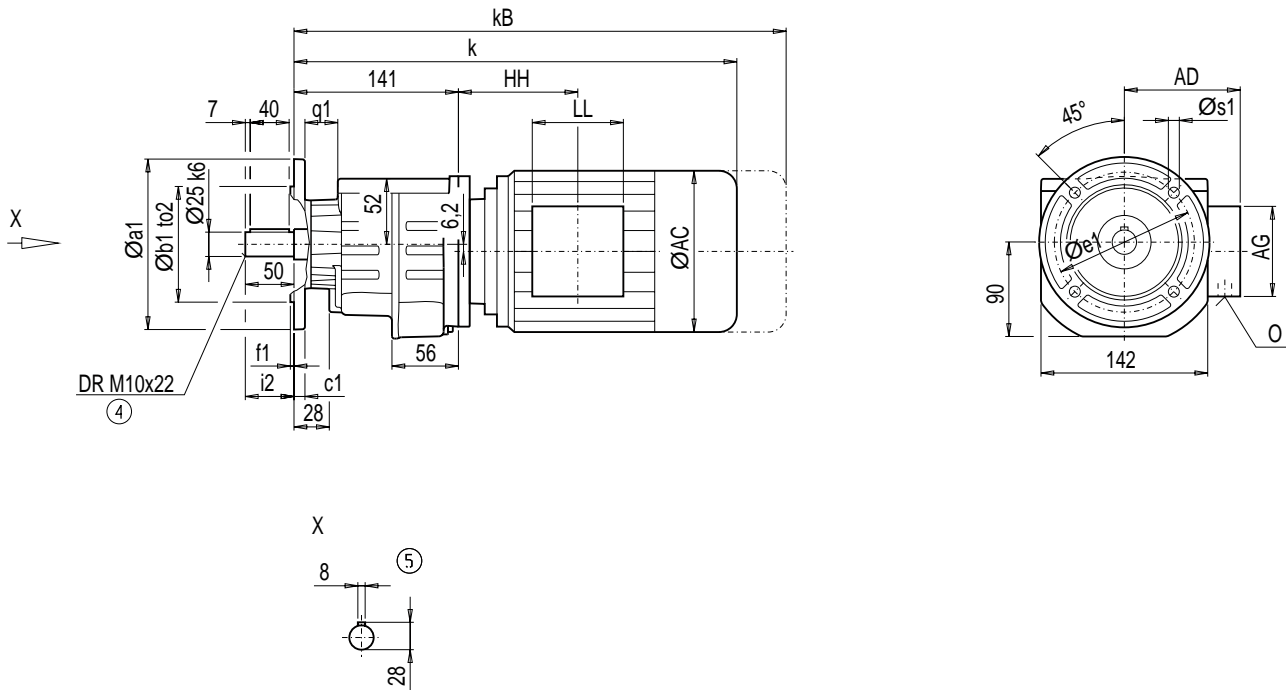
# MOTEX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox DF/ZF28 (3- / 2-stage), flange-mounted design (A-type)

DZF011



Flange	a1	b1	to2	c1	e1	f1	q1	s1	i2
A120	120	80	j6	8	100	3.0	28	6.6	50
A140	140	95	j6	9	115	3.0	27	9.0	50
A160	160	110	j6	9	130	3.5	27	9.0	50

Motor	ZF28		DF28		AC	AD	AG	LL	HH	O	Weight	
	k	kB	k	kB							ZF28	DF28
LA71	343.5	398.5	337.5	398.5	139	146	90	90	58.5	M20x1.5/M25x1.5	9	9
LA71Z	362.5	417.5	356.5	417.5	139	146	90	90	58.5	M20x1.5/M25x1.5	9	9
LA90S	440.5	511.5	440.5	511.5	174	185	90	90	87.0	M20x1.5/M25x1.5	18	19
LA90L	440.5	511.5	440.5	511.5	174	185	90	90	87.0	M20x1.5/M25x1.5	18	19
LA90ZL	485.5	556.5	485.5	556.5	174	185	90	90	87.0	M20x1.5/M25x1.5	21	22
LA100L	522.5	603.5	-	-	195	168	120	120	163.5	2xM32x1.5	28	-

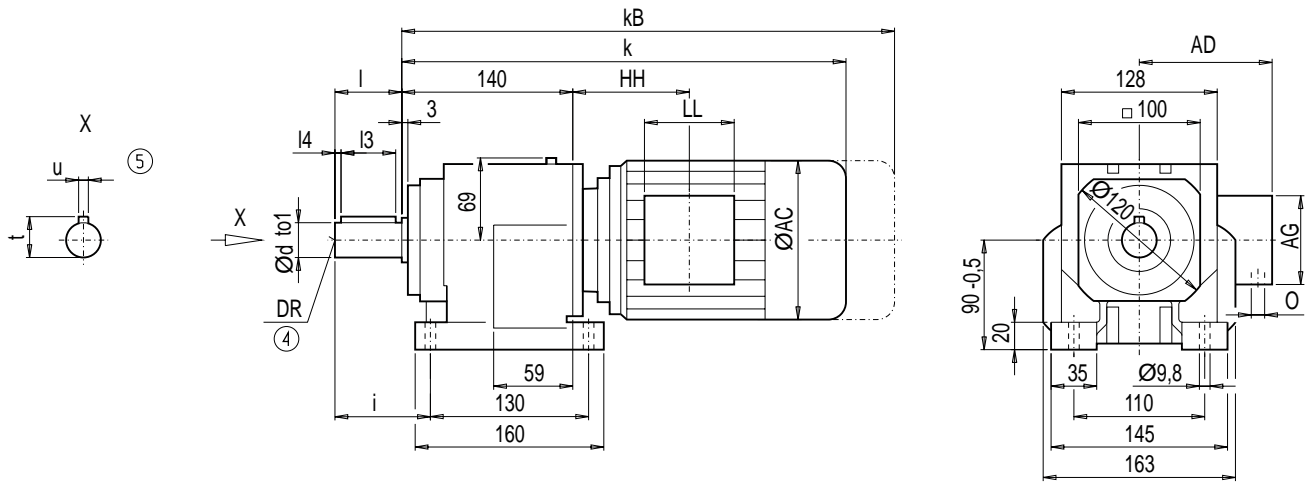
④ DIN 332

⑤ Feather key / keyway DIN 6885



### Gearbox D/Z38 (3- / 2-stage), foot-mounted design

DZ011



d	to1	l	l4	l3	t	u	i	DR
25 *)	k6	50	7	40	28	8	75	M10x22
30	k6	60	7	50	33	8	85	M10x22

\*) Preferred series

Motor	Z38		D38		AC	AD	AG	LL	Z38 HH	D38 HH	O	Weight	
	k	kB	k	kB								Z38	D38
LA71	398.5	453.5	413.5	468.5	139.0	146	90	90	114.5	129.5	M20x1.5/M25x1.5	16	17
LA71Z	417.5	472.5	432.5	487.5	139.0	146	90	90	114.5	129.5	M20x1.5/M25x1.5	16	17
LA80	435.5	499.0	450.5	514.0	156.5	155	90	90	114.0	129.0	M20x1.5/M25x1.5	21	22
LA90S	466.5	537.5	481.5	552.5	174.0	163	90	90	114.0	129.0	M20x1.5/M25x1.5	26	27
LA90L	466.5	537.5	481.5	552.5	174.0	163	90	90	114.0	129.0	M20x1.5/M25x1.5	26	27
LA100L	512.5	593.5	-	-	195.0	168	120	120	154.5	-	2xM32x1.5	35	-
LA112M	542.0	623.0	-	-	219.0	181	120	120	160.0	-	2xM32x1.5	45	-

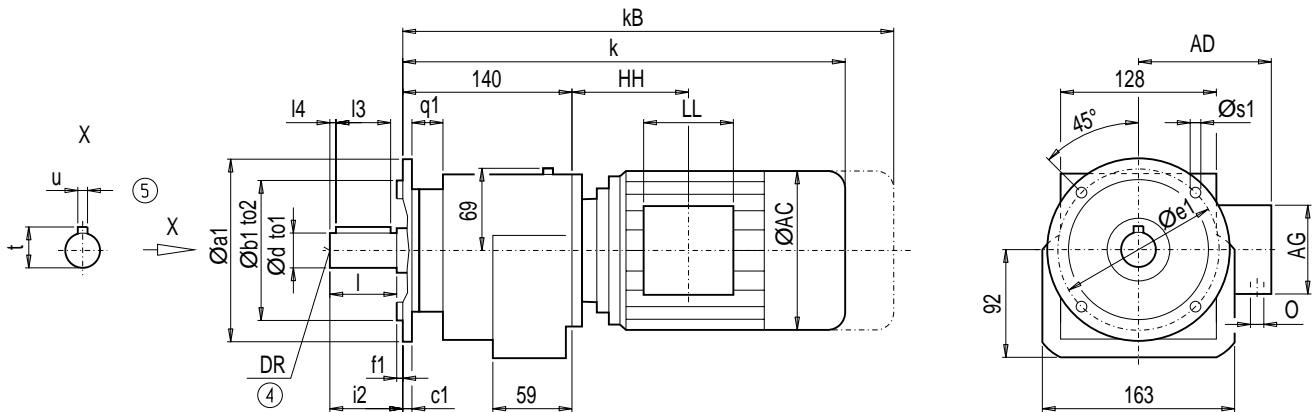
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox DF/ZF38 (3- / 2-stage), flange-mounted design (A-type)

DZF011



Flange	a1	b1	to2	c1	e1	f1	q1	s1	d	to1	l	l4	l3	t	u	i2	DR
A120	120	80	j6	8	100	3.0	23	6.8	25 <sup>*)</sup>	k6	50	7	40	28	8	50	M10x22
									30	k6	60	7	50	33	8	60	M10x22
A140	140	95	j6	7	115	3.0	26	9.0	25 <sup>*)</sup>	k6	50	7	40	28	8	50	M10x22
									30	k6	60	7	50	33	8	60	M10x22
A160	160	110	j6	10	130	3.5	26	9.0	25 <sup>*)</sup>	k6	50	7	40	28	8	50	M10x22
									30	k6	60	7	50	33	8	60	M10x22
A200 <sup>1)</sup>	200	130	j6	12	165	3.5	24	11.0	25 <sup>*)</sup>	k6	50	7	40	28	8	50	M10x22
									30	k6	60	7	50	33	8	60	M10x22
A250	250	180	j6	15	215	4.0	21	13.5	25 <sup>*)</sup>	k6	50	7	40	28	8	50	M10x22
									30	k6	60	7	50	33	8	60	M10x22

1) The A200 flange is connected to the machine using stud bolts.

\*) Preferred series

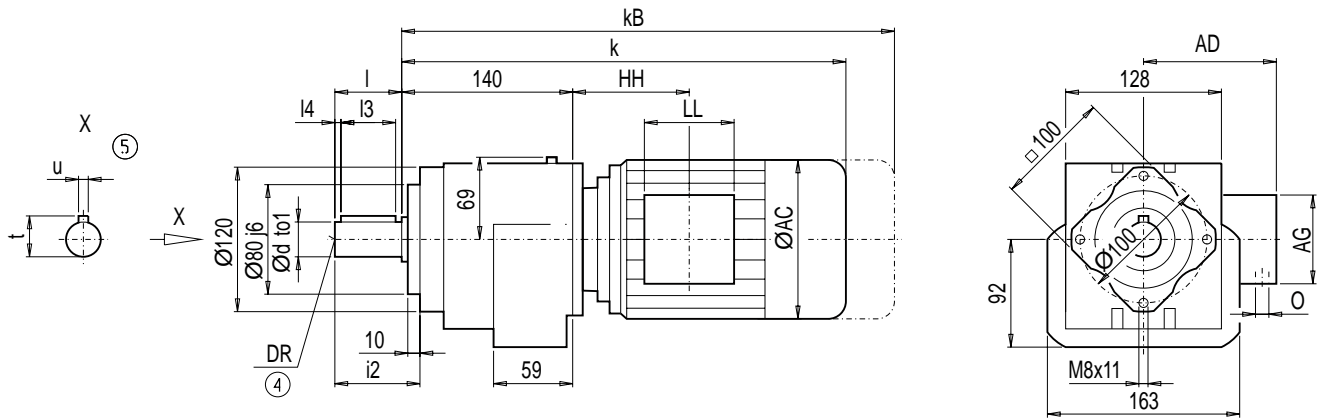
Motor	ZF38		DF38		ZF38		DF38		ZF38		DF38		Weight	
	k	kB	k	kB	AC	AD	AG	LL	HH	HH	O	ZF38	DF38	
LA71	398.5	453.5	413.5	468.5	139.0	146	90	90	114.5	129.5	M20x1.5/M25x1.5	17	18	
LA71Z	417.5	472.5	432.5	487.5	139.0	146	90	90	114.5	129.5	M20x1.5/M25x1.5	17	18	
LA80	435.5	499.0	450.5	514.0	156.5	155	90	90	114.0	129.0	M20x1.5/M25x1.5	22	22	
LA90S	466.5	537.5	481.5	552.5	174.0	163	90	90	114.0	129.0	M20x1.5/M25x1.5	26	27	
LA90L	466.5	537.5	481.5	552.5	174.0	163	90	90	114.0	129.0	M20x1.5/M25x1.5	26	27	
LA100L	512.5	593.5	–	–	195.0	168	120	120	154.5	–	2xM32x1.5	35	–	
LA112M	542.0	623.0	–	–	219.0	181	120	120	160.0	–	2xM32x1.5	46	–	

⊗ DIN 332

⊗ Feather key / keyway DIN 6885

### Gearbox DZ/ZZ38 (3- / 2-stage), housing-flange-mounted design (C-type)

DZZ011



d	to1	l	l4	l3	t	u	i2	DR
25 *)	k6	50	7	40	28	8	63	M10x22
30	k6	60	7	50	33	8	73	M10x22

\*) Preferred series

Motor	ZZ38		DZ38		AC	AD	AG	LL	ZZ38	DZ38	O	Weight	
	k	kB	k	kB					HH	HH		ZZ38	DZ38
LA71	398.5	453.5	413.5	468.5	139.0	146	90	90	114.5	129.5	M20x1.5/M25x1.5	15	16
LA71Z	417.5	472.5	432.5	487.5	139.0	146	90	90	114.5	129.5	M20x1.5/M25x1.5	15	16
LA80	435.5	499.0	450.5	514.0	156.5	155	90	90	114.0	129.0	M20x1.5/M25x1.5	20	21
LA90S	466.5	537.5	481.5	552.5	174.0	163	90	90	114.0	129.0	M20x1.5/M25x1.5	24	25
LA90L	466.5	537.5	481.5	552.5	174.0	163	90	90	114.0	129.0	M20x1.5/M25x1.5	24	25
LA100L	512.5	593.5	–	–	195.0	168	120	120	154.5	–	2xM32x1.5	33	–
LA112M	542.0	623.0	–	–	219.0	181	120	120	160.0	–	2xM32x1.5	44	–

© DIN 332

© Feather key / keyway DIN 6885

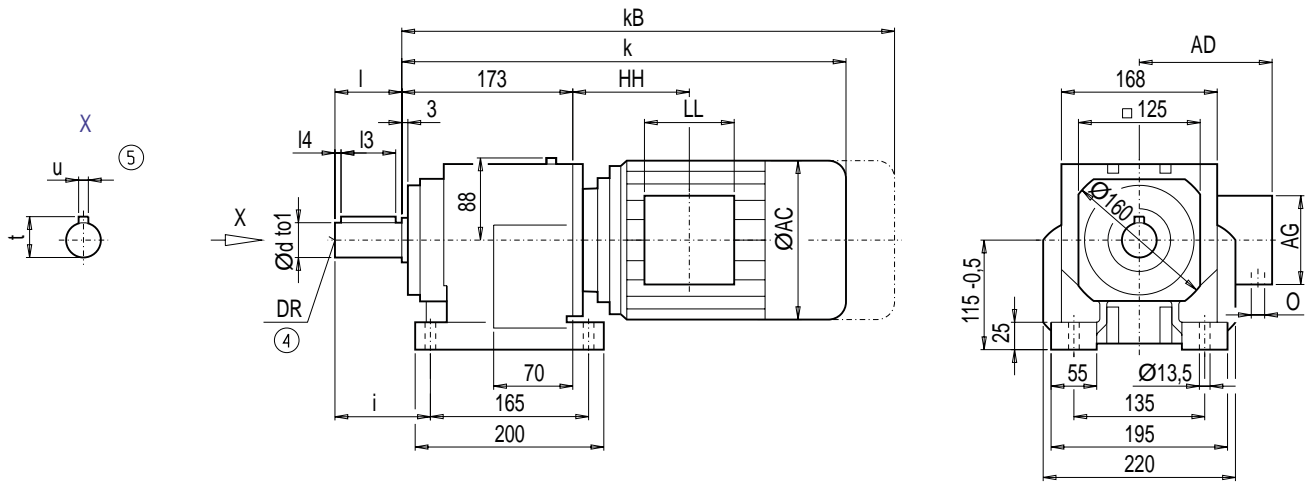
# MOTEX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox D/Z48 (3- / 2-stage), foot-mounted design

DZ011



d	to1	l	l4	l3	t	u	i	DR
30 <sup>*)</sup>	k6	60	7	50	33	8	90	M10x22
35	k6	70	63	4	38	10	100	M10x22
40	k6	80	5	70	43	12	110	M16x36

<sup>\*)</sup> Preferred series

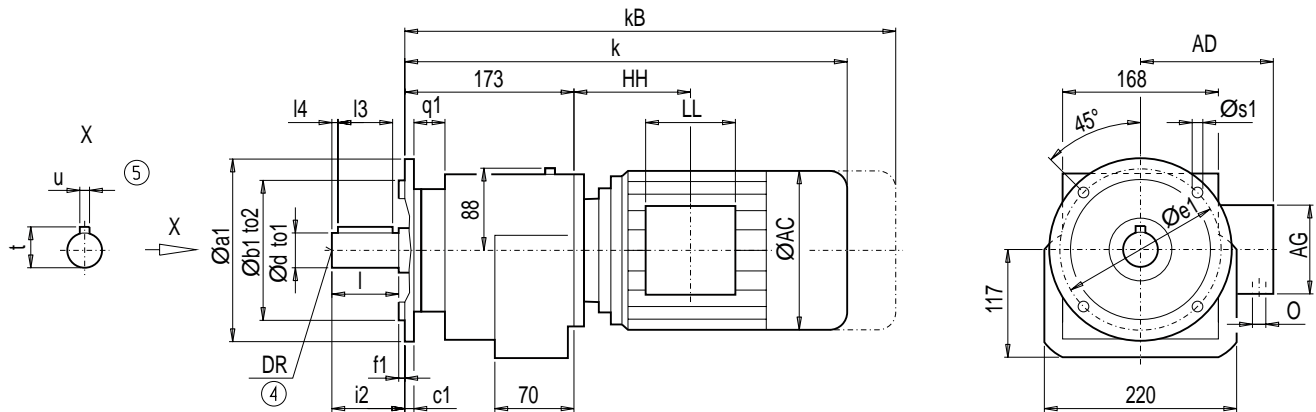
Motor	Z48		D48		AC	AD	AG	LL	Z48	D48	O	Weight	
	k	kB	k	kB								Z48	D48
LA71	426	481.0	443	498.0	139.0	146	90	90	109.0	126.0	M20x1.5/M25x1.5	26	27
LA71Z	445	500.0	462	517.0	139.0	146	90	90	109.0	126.0	M20x1.5/M25x1.5	26	27
LA80	463	526.5	480	543.5	156.5	155	90	90	108.5	125.5	M20x1.5/M25x1.5	31	32
LA90S	494	565.0	511	582.0	174.0	163	90	90	108.5	125.5	M20x1.5/M25x1.5	35	36
LA90L	494	565.0	511	582.0	174.0	163	90	90	108.5	125.5	M20x1.5/M25x1.5	35	36
LA100L	540	621.0	557	638.0	195.0	168	120	120	149.0	166.0	2xM32x1.5	44	45
LA112M	569	650.0	-	-	219.0	181	120	120	154.0	-	2xM32x1.5	56	-
LA132S	631	733.0	-	-	259.0	195	140	140	196.5	-	2xM32x1.5	66	-
LA132M	631	733.0	-	-	259.0	195	140	140	196.5	-	2xM32x1.5	66	-
LA132ZM	677	779.0	-	-	259.0	195	140	140	196.5	-	2xM32x1.5	75	-

⊗ DIN 332

⊗ Feather key / keyway DIN 6885

### Gearbox DF/ZF48 (3- / 2-stage), flange-mounted design (A-type)

DZF011



Flange	a1	b1	to2	c1	e1	f1	q1	s1	d	to1	l	l4	l3	t	u	i2	DR
A200	200	130	j6	12	165	3.5	29	11.0	30 <sup>*)</sup>	k6	60	7	50	33	8	60	M10x22
									35	k6	70	4	63	38	10	70	M10x22
									40	k6	80	5	70	43	12	80	M16x36
A250 <sup>1)</sup>	250	180	j6	15	215	4.0	26	13.5	30 <sup>*)</sup>	k6	60	7	50	33	8	60	M10x22
									35	k6	70	4	63	38	10	70	M10x22
									40	k6	80	5	70	43	12	80	M16x36
A300	300	230	j6	15	265	4.0	26	13.5	30 <sup>*)</sup>	k6	60	7	50	33	8	60	M10x22
									35	k6	70	4	63	38	10	70	M10x22
									40	k6	80	5	70	43	12	80	M16x36

<sup>1)</sup> The A250 flange is connected to the machine using stud bolts.

<sup>\*)</sup> Preferred series

Motor	ZF48		DF48		AC	AD	AG	LL	ZF48	DF48	O	Weight	
	k	kB	k	kB					HH	HH		ZF48	DF48
LA71	426	481.0	443	498.0	139.0	146	90	90	109.0	126.0	M20x1.5/M25x1.5	27	28
LA71Z	445	500.0	462	517.0	139.0	146	90	90	109.0	126.0	M20x1.5/M25x1.5	27	28
LA80	463	526.5	480	543.5	156.5	155	90	90	108.5	125.5	M20x1.5/M25x1.5	32	33
LA90S	494	565.0	511	582.0	174.0	163	90	90	108.5	125.5	M20x1.5/M25x1.5	37	38
LA90L	494	565.0	511	582.0	174.0	163	90	90	108.5	125.5	M20x1.5/M25x1.5	37	38
LA100L	540	621.0	557	638.0	195.0	168	120	120	149.0	166.0	2xM32x1.5	46	47
LA112M	569	650.0	–	–	219.0	181	120	120	154.0	–	2xM32x1.5	57	–
LA132S	631	733.0	–	–	259.0	195	140	140	196.5	–	2xM32x1.5	67	–
LA132M	631	733.0	–	–	259.0	195	140	140	196.5	–	2xM32x1.5	67	–
LA132ZM	677	779.0	–	–	259.0	195	140	140	196.5	–	2xM32x1.5	76	–

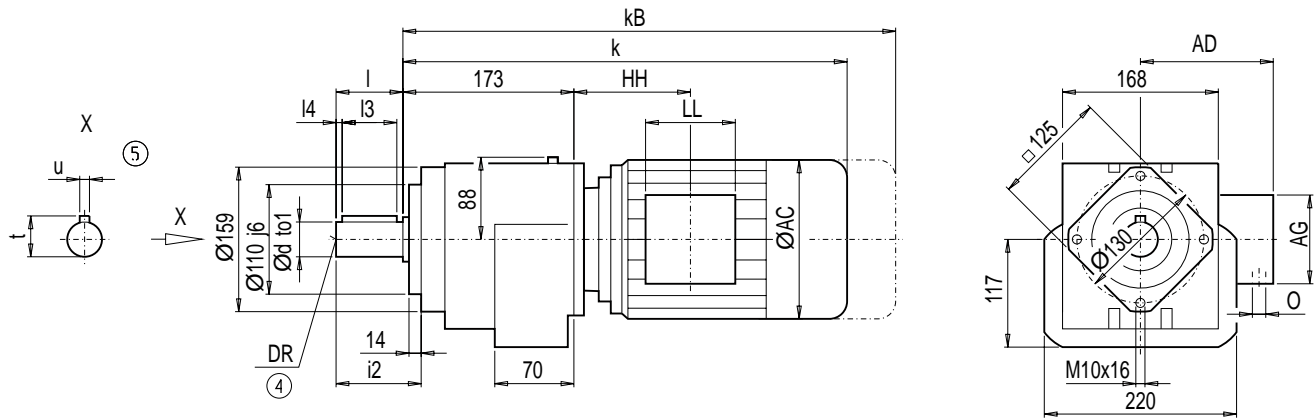
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox DZ/ZZ48 (3- / 2-stage), housing-flange-mounted design (C-type)

DZZ011



d	to1	l	i4	i3	t	u	i2	DR
30 <sup>*)</sup>	k6	60	7	50	33	8	77	M10x22
35	k6	70	4	63	38	10	87	M10x22
40	k6	80	5	70	43	12	97	M16x36

<sup>\*)</sup> Preferred series

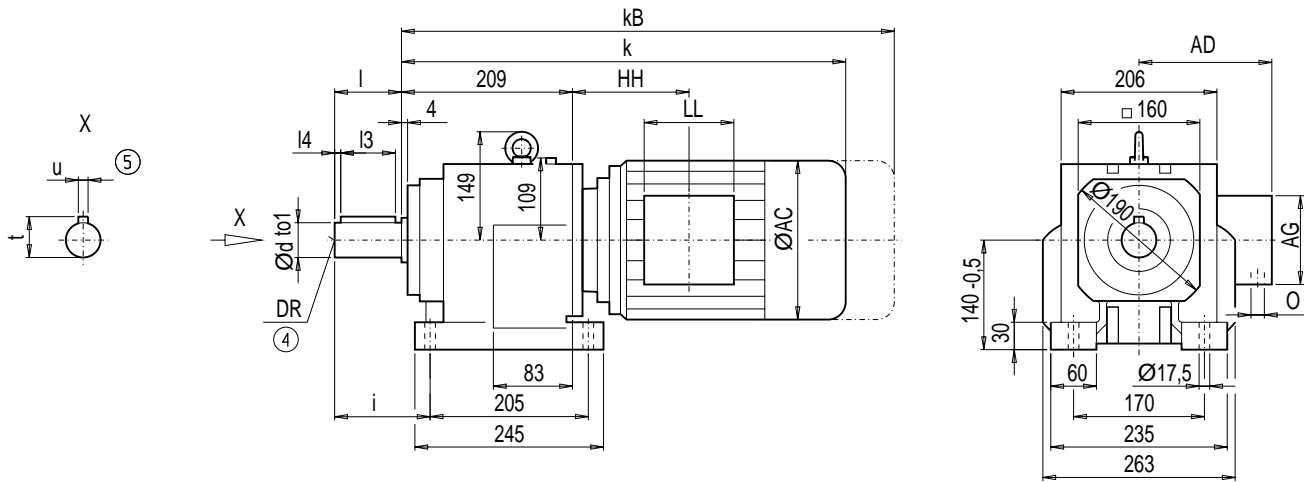
Motor	ZZ48		DZ48		AC	AD	AG	LL	ZZ48	DZ48	O	Weight	
	k	kB	k	kB								ZZ48	DZ48
LA71	426	481.0	443	498.0	139.0	146	90	90	109.0	126.0	M20x1.5/M25x1.5	24	25
LA71Z	445	500.0	462	517.0	139.0	146	90	90	109.0	126.0	M20x1.5/M25x1.5	24	25
LA80	463	526.5	480	543.5	156.5	155	90	90	108.5	125.5	M20x1.5/M25x1.5	29	30
LA90S	494	565.0	511	582.0	174.0	163	90	90	108.5	125.5	M20x1.5/M25x1.5	33	34
LA90L	494	565.0	511	582.0	174.0	163	90	90	108.5	125.5	M20x1.5/M25x1.5	33	34
LA100L	540	621.0	557	638.0	195.0	168	120	120	149.0	166.0	2xM32x1.5	42	43
LA112M	569	650.0	-	-	219.0	181	120	120	154.0	-	2xM32x1.5	54	-
LA132S	631	733.0	-	-	259.0	195	140	140	196.5	-	2xM32x1.5	64	-
LA132M	631	733.0	-	-	259.0	195	140	140	196.5	-	2xM32x1.5	64	-
LA132ZM	677	779.0	-	-	259.0	195	140	140	196.5	-	2xM32x1.5	73	-

④ DIN 332

⑤ Feather key / keyway DIN 6885

### Gearbox D/Z68 (3- / 2-stage), foot-mounted design

DZ011



d	to1	l	l4	l3	t	u	i	DR
35	k6	70	5	56	38.0	10	105	M12x28
40 <sup>*)</sup>	k6	80	5	70	43.0	12	115	M16x36
50	k6	100	10	80	53.5	14	135	M16x36

<sup>\*)</sup> Preferred series

Motor	Z68		D68		AC	AD	AG	LL	Z68 HH	D68 HH	O	Weight	
	k	kB	k	kB								Z68	D68
LA71	456.0	511.0	474.5	529.5	139.0	146	90	90	103.0	121.5	M20x1.5/M25x1.5	43	45
LA71Z	475.0	530.0	493.5	548.5	139.0	146	90	90	103.0	121.5	M20x1.5/M25x1.5	43	45
LA80	493.0	556.5	511.5	575.0	156.5	155	90	90	102.5	121.0	M20x1.5/M25x1.5	48	50
LA90S	524.0	595.0	542.5	613.5	174.0	163	90	90	102.5	121.0	M20x1.5/M25x1.5	52	55
LA90L	524.0	595.0	542.5	613.5	174.0	163	90	90	102.5	121.0	M20x1.5/M25x1.5	52	55
LA100L	570.0	651.0	588.5	669.5	195.0	168	120	120	143.0	161.5	2xM32x1.5	61	64
LA112M	597.0	678.0	-	-	219.0	181	120	120	146.0	-	2xM32x1.5	73	-
LA132S	657.0	759.0	-	-	259.0	195	140	140	186.5	-	2xM32x1.5	86	-
LA132M	657.0	759.0	-	-	259.0	195	140	140	186.5	-	2xM32x1.5	86	-
LA132ZM	703.0	805.0	-	-	259.0	195	140	140	186.5	-	2xM32x1.5	95	-
LA160M	759.5	878.0	-	-	313.5	227	165	165	212.0	-	2xM40x1.5	119	-
LA160L	759.5	878.0	-	-	313.5	227	165	165	212.0	-	2xM40x1.5	119	-

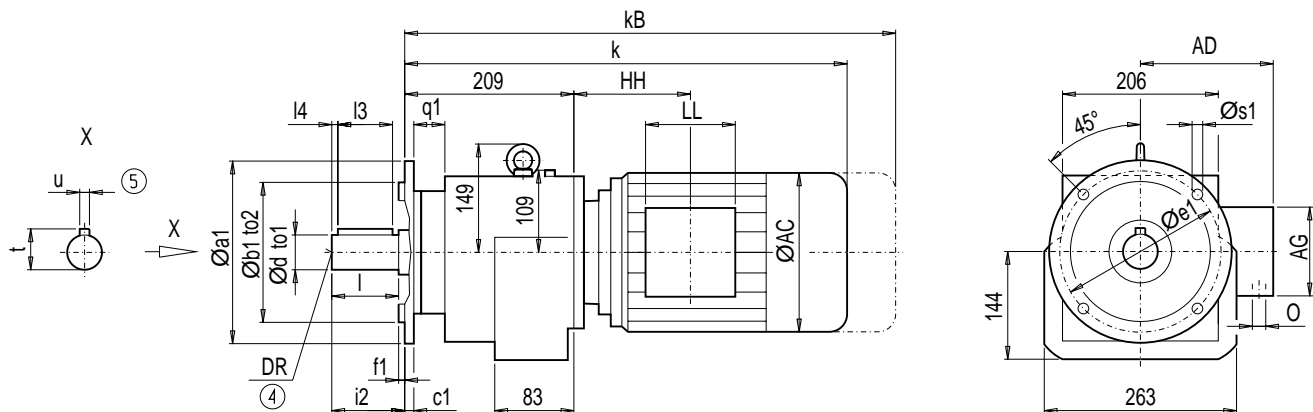
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox DF/ZF68 (3- / 2-stage), flange-mounted design (A-type)

DZF011



Flange	a1	b1	to2	c1	e1	f1	q1	s1	d	to1	l	l4	l3	t	u	i2	DR
A250	250	180	j6	15	215	4	40	13.5	35	k6	70	5	56	38.0	10	70	M12x28
									40 <sup>*)</sup>	k6	80	5	70	43.0	12	80	M16x36
									50	k6	100	10	80	53.5	14	100	M16x36
A300	300	230	j6	16	265	4	39	13.5	35	k6	70	5	56	38.0	10	70	M12x28
									40 <sup>*)</sup>	k6	80	5	70	43.0	12	80	M16x36
									50	k6	100	10	80	53.5	14	100	M16x36
A350	350	250	j6	18	300	4	39	17.5	35	k6	70	5	56	38.0	10	70	M12x28
									40 <sup>*)</sup>	k6	80	5	70	43.0	12	80	M16x36
									50	k6	100	10	80	53.5	14	100	M16x36

\*) Preferred series

Motor	ZF68		DF68		ZF68		DF68		ZF68		DF68		Weight		
	k	kB	k	kB	AC	AD	AG	LL	HH	HH	O	HH	O	ZF68	DF68
LA71	456.0	511.0	474.5	529.5	139.0	146	90	90	103.0	121.5	M20x1.5/M25x1.5	45	47		
LA71Z	475.0	530.0	493.5	548.5	139.0	146	90	90	103.0	121.5	M20x1.5/M25x1.5	45	47		
LA80	493.0	556.5	511.5	575.0	156.5	155	90	90	102.5	121.0	M20x1.5/M25x1.5	49	52		
LA90S	524.0	595.0	542.5	613.5	174.0	163	90	90	102.5	121.0	M20x1.5/M25x1.5	54	56		
LA90L	524.0	595.0	542.5	613.5	174.0	163	90	90	102.5	121.0	M20x1.5/M25x1.5	54	56		
LA100L	570.0	651.0	588.5	669.5	195.0	168	120	120	143.0	161.5	2xM32x1.5	63	65		
LA112M	597.0	678.0	-	-	219.0	181	120	120	146.0	-	2xM32x1.5	75	-		
LA132S	657.0	759.0	-	-	259.0	195	140	140	186.5	-	2xM32x1.5	88	-		
LA132M	657.0	759.0	-	-	259.0	195	140	140	186.5	-	2xM32x1.5	88	-		
LA132ZM	703.0	805.0	-	-	259.0	195	140	140	186.5	-	2xM32x1.5	97	-		
LA160M	759.5	878.0	-	-	313.5	227	165	165	212.0	-	2xM40x1.5	121	-		
LA160L	759.5	878.0	-	-	313.5	227	165	165	212.0	-	2xM40x1.5	121	-		

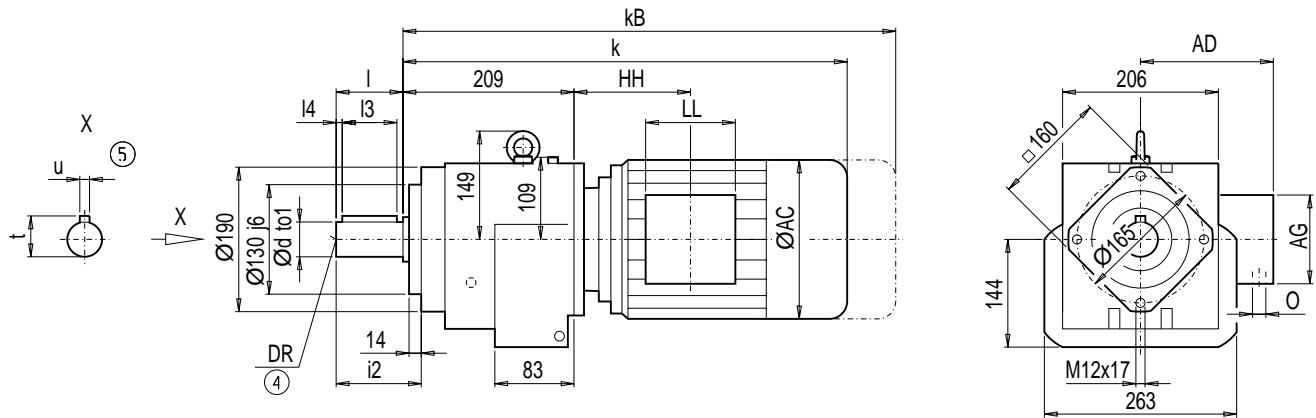
Ⓒ DIN 332

Ⓒ Feather key / keyway DIN 6885



### Gearbox DZ/ZZ68 (3- / 2-stage), housing-flange-mounted design (C-type)

DZZ011



2

d	to1	l	l4	l3	t	u	i2	DR
35	k6	70	5	56	38.0	10	88	M12x28
40 <sup>*)</sup>	k6	80	5	70	43.0	12	98	M16x36
50	k6	100	10	80	53.5	14	118	M16x36

\*) Preferred series

Motor	ZZ68		DZ68		AC	AD	AG	LL	ZZ68 HH	DZ68 HH	O	Weight	
	k	kB	k	kB								ZZ68	DZ68
LA71	456.0	511.0	474.5	529.5	139.0	146	90	90	103.0	121.5	M20x1.5/M25x1.5	39	41
LA71Z	475.0	530.0	493.5	548.5	139.0	146	90	90	103.0	121.5	M20x1.5/M25x1.5	39	41
LA80	493.0	556.5	511.5	575.0	156.5	155	90	90	102.5	121.0	M20x1.5/M25x1.5	44	46
LA90S	524.0	595.0	542.5	613.5	174.0	163	90	90	102.5	121.0	M20x1.5/M25x1.5	49	51
LA90L	524.0	595.0	542.5	613.5	174.0	163	90	90	102.5	121.0	M20x1.5/M25x1.5	49	51
LA100L	570.0	651.0	588.5	669.5	195.0	168	120	120	143.0	161.5	2xM32x1.5	58	60
LA112M	597.0	678.0	–	–	219.0	181	120	120	146.0	–	2xM32x1.5	69	–
LA132S	657.0	759.0	–	–	259.0	195	140	140	186.5	–	2xM32x1.5	82	–
LA132M	657.0	759.0	–	–	259.0	195	140	140	186.5	–	2xM32x1.5	82	–
LA132ZM	703.0	805.0	–	–	259.0	195	140	140	186.5	–	2xM32x1.5	92	–
LA160M	759.5	878.0	–	–	313.5	227	165	165	212.0	–	2xM40x1.5	115	–
LA160L	759.5	878.0	–	–	313.5	227	165	165	212.0	–	2xM40x1.5	115	–

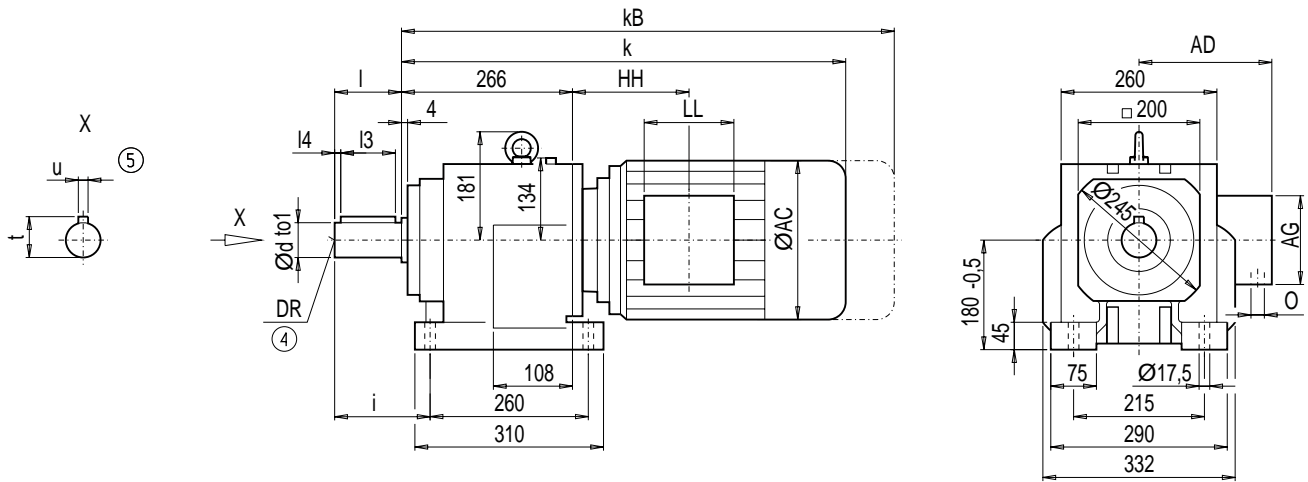
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox D/Z88 (3- / 2-stage), foot-mounted design

DZ011



d	to1	l	l4	l3	t	u	i	DR
50 <sup>*)</sup>	k6	100	10	80	53.5	14	140	M16x36
60	m6	120	10	100	64.0	18	160	M20x42

\*) Preferred series

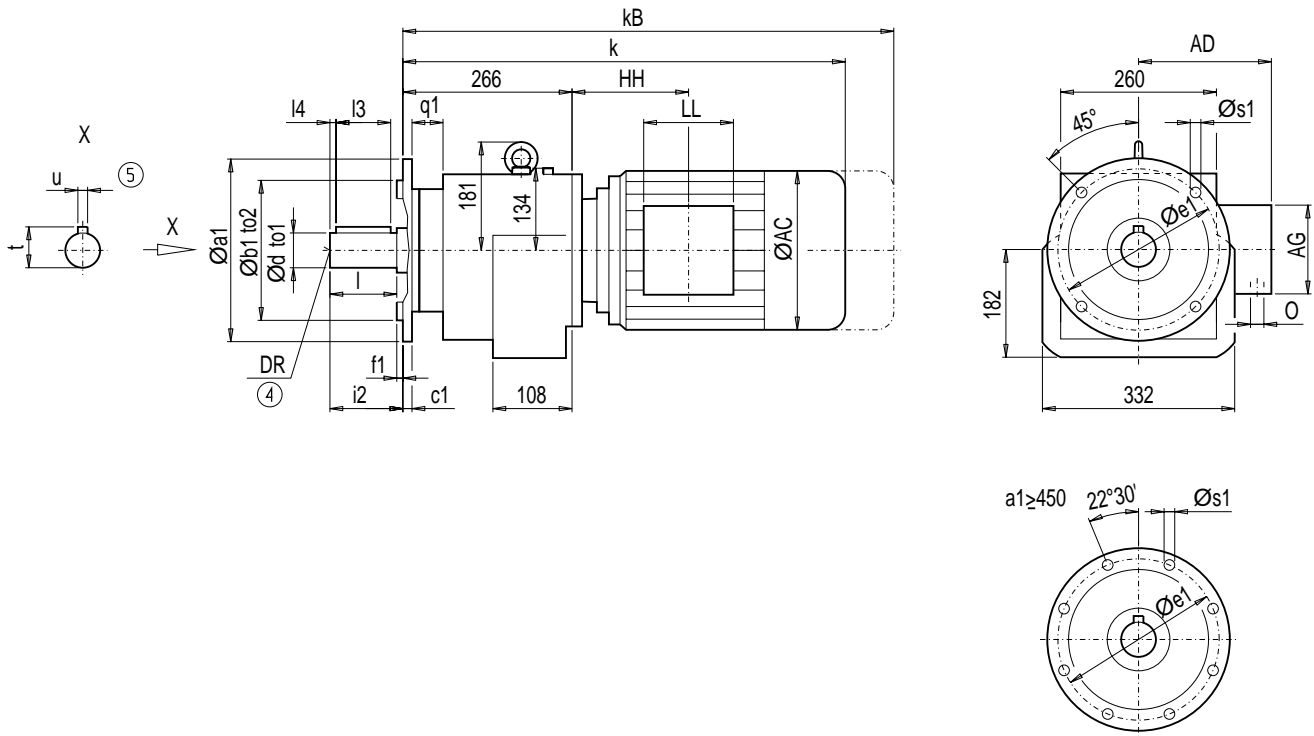
Motor	Z88		D88				Z88		D88		Weight		
	k	kB	k	kB	AC	AD	AG	LL	HH	HH	O	Z88	D88
LA71	–	–	523.0	578.0	139.0	146.0	90	90	–	113.0	M20x1.5/M25x1.5	–	76
LA71Z	–	–	542.0	597.0	139.0	146.0	90	90	–	113.0	M20x1.5/M25x1.5	–	76
LA80	–	–	560.0	623.5	156.5	155.0	90	90	–	112.5	M20x1.5/M25x1.5	–	81
LA90S	566.0	637.0	591.0	662.0	174.0	163.0	90	90	87.5	112.5	M20x1.5/M25x1.5	85	86
LA90L	566.0	637.0	591.0	662.0	174.0	163.0	90	90	87.5	112.5	M20x1.5/M25x1.5	85	86
LA100L	609.5	690.5	637.0	718.0	195.0	168.0	120	120	125.5	153.0	2xM32x1.5	93	95
LA112M	635.5	716.5	664.5	745.5	219.0	181.0	120	120	127.5	156.5	2xM32x1.5	106	107
LA132S	695.5	797.5	723.5	825.5	259.0	195.0	140	140	168.0	196.0	2xM32x1.5	117	120
LA132M	695.5	797.5	723.5	825.5	259.0	195.0	140	140	168.0	196.0	2xM32x1.5	117	120
LA132ZM	741.5	843.5	769.5	871.5	259.0	195.0	140	140	168.0	196.0	2xM32x1.5	126	129
LA160M	800.0	918.5	–	–	313.5	227.0	165	165	195.5	–	2xM40x1.5	152	–
LA160L	800.0	918.5	–	–	313.5	227.0	165	165	195.5	–	2xM40x1.5	152	–
LG180M	859.5	981.5	–	–	348.0	322.5	260	192	212.5	–	2xM40x1.5	244	–
LG180ZM	910.5	1 032.5	–	–	348.0	322.5	260	192	212.5	–	2xM40x1.5	274	–
LG180L	859.5	981.5	–	–	348.0	322.5	260	192	212.5	–	2xM40x1.5	244	–
LG180ZL	910.5	1 032.5	–	–	348.0	322.5	260	192	212.5	–	2xM40x1.5	274	–

④ DIN 332

⑤ Feather key / keyway DIN 6885

### Gearbox DF/ZF88 (3- / 2-stage), flange-mounted design (A-type)

DZF011



Flange	a1	b1	to2	c1	e1	f1	q1	s1	d	to1	l	i4	i3	t	u	i2	DR
A300	300	230	j6	16	265	4	54	13.5	50 <sup>*)</sup>	k6	100	10	80	53.5	14	100	M16x36
									60	m6	120	10	100	64.0	18	120	M20x42
A350	350	250	j6	18	300	5	52	17.5	50 <sup>*)</sup>	k6	100	10	80	53.5	14	100	M16x36
									60	m6	120	10	100	64.0	18	120	M20x42
A450	450	350	j6	18	400	5	52	17.5	50 <sup>*)</sup>	k6	100	10	80	53.5	14	100	M16x36
									60	m6	120	10	100	64.0	18	120	M20x42

\*) Preferred series

Motor	ZF88		DF88		AC	AD	AG	LL	ZF88	DF88	O	Weight	
	k	kB	k	kB					HH	HH		ZF88	DF88
LA71	-	-	523.0	578.0	139.0	146.0	90	90	-	113.0	M20x1.5/M25x1.5	-	78
LA71Z	-	-	542.0	597.0	139.0	146.0	90	90	-	113.0	M20x1.5/M25x1.5	-	78
LA80	-	-	560.0	623.5	156.5	155.0	90	90	-	112.5	M20x1.5/M25x1.5	-	83
LA90S	566.0	637.0	591.0	662.0	174.0	163.0	90	90	87.5	112.5	M20x1.5/M25x1.5	87	88
LA90L	566.0	637.0	591.0	662.0	174.0	163.0	90	90	87.5	112.5	M20x1.5/M25x1.5	87	88
LA100L	609.5	690.5	637.0	718.0	195.0	168.0	120	120	125.5	153.0	2xM32x1.5	95	97
LA112M	635.5	716.5	664.5	745.5	219.0	181.0	120	120	127.5	156.5	2xM32x1.5	108	109
LA132S	695.5	797.5	723.5	825.5	259.0	195.0	140	140	168.0	196.0	2xM32x1.5	119	122
LA132M	695.5	797.5	723.5	825.5	259.0	195.0	140	140	168.0	196.0	2xM32x1.5	119	122
LA132ZM	741.5	843.5	769.5	871.5	259.0	195.0	140	140	168.0	196.0	2xM32x1.5	128	131
LA160M	800.0	918.5	-	-	313.5	227.0	165	165	195.5	-	2xM40x1.5	154	-
LA160L	800.0	918.5	-	-	313.5	227.0	165	165	195.5	-	2xM40x1.5	154	-
LG180M	859.5	981.5	-	-	348.0	322.5	260	192	212.5	-	2xM40x1.5	246	-
LG180ZM	910.5	1 032.5	-	-	348.0	322.5	260	192	212.5	-	2xM40x1.5	276	-
LG180L	859.5	981.5	-	-	348.0	322.5	260	192	212.5	-	2xM40x1.5	246	-
LG180ZL	910.5	1 032.5	-	-	348.0	322.5	260	192	212.5	-	2xM40x1.5	276	-

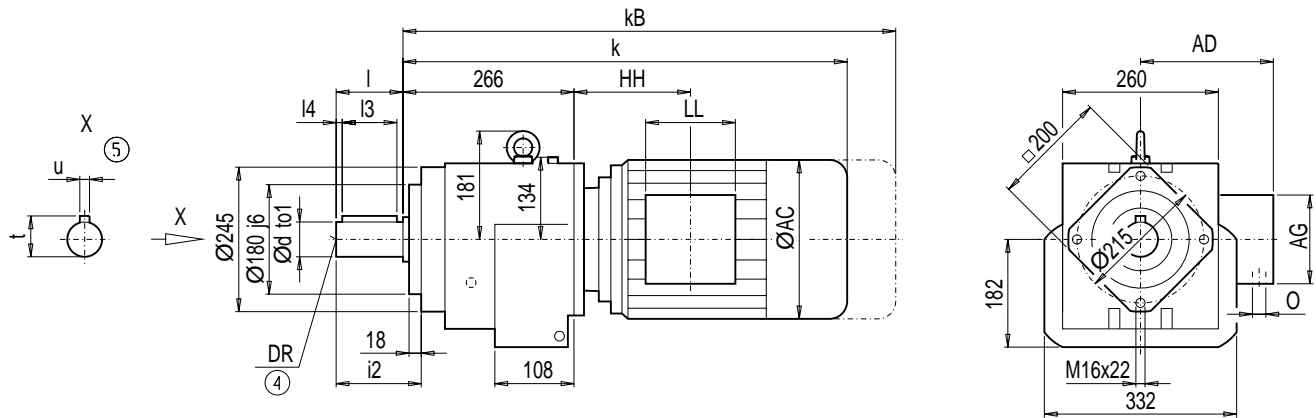
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox DZ/ZZ88 (3- / 2-stage), housing-flange-mounted design (C-type)

DZZ011



d	to1	l	l4	l3	t	u	i2	DR
50 *)	k6	100	10	80	53.5	14	122	M16x36
60	m6	120	10	100	64.0	18	142	M20x42

\*) Preferred series

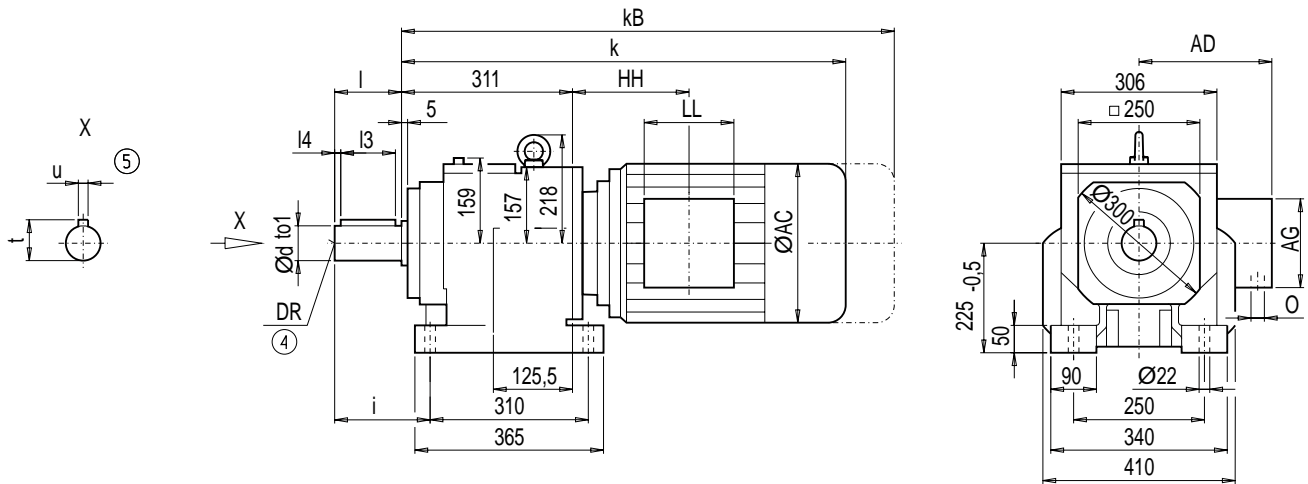
Motor	ZZ88		DZ88		AC	AD	AG	LL	ZZ88	DZ88	O	Weight	
	k	kB	k	kB								HH	HH
LA71	-	-	523.0	578.0	139.0	146.0	90	90	-	113.0	M20x1.5/M25x1.5	-	69
LA71Z	-	-	542.0	597.0	139.0	146.0	90	90	-	113.0	M20x1.5/M25x1.5	-	69
LA80	-	-	560.0	623.5	156.5	155.0	90	90	-	112.5	M20x1.5/M25x1.5	-	74
LA90S	566.0	637.0	591.0	662.0	174.0	163.0	90	90	87.5	112.5	M20x1.5/M25x1.5	79	79
LA90L	566.0	637.0	591.0	662.0	174.0	163.0	90	90	87.5	112.5	M20x1.5/M25x1.5	79	79
LA100L	609.5	690.5	637.0	718.0	195.0	168.0	120	120	125.5	153.0	2xM32x1.5	87	88
LA112M	635.5	716.5	664.5	745.5	219.0	181.0	120	120	127.5	156.5	2xM32x1.5	99	101
LA132S	695.5	797.5	723.5	825.5	259.0	195.0	140	140	168.0	196.0	2xM32x1.5	110	113
LA132M	695.5	797.5	723.5	825.5	259.0	195.0	140	140	168.0	196.0	2xM32x1.5	110	113
LA132ZM	741.5	843.5	769.5	871.5	259.0	195.0	140	140	168.0	196.0	2xM32x1.5	120	122
LA160M	800.0	918.5	-	-	313.5	227.0	165	165	195.5	-	2xM40x1.5	145	-
LA160L	800.0	918.5	-	-	313.5	227.0	165	165	195.5	-	2xM40x1.5	145	-
LG180M	859.5	981.5	-	-	348.0	322.5	260	192	212.5	-	2xM40x1.5	237	-
LG180ZM	910.5	1 032.5	-	-	348.0	322.5	260	192	212.5	-	2xM40x1.5	267	-
LG180L	859.5	981.5	-	-	348.0	322.5	260	192	212.5	-	2xM40x1.5	237	-
LG180ZL	910.5	1 032.5	-	-	348.0	322.5	260	192	212.5	-	2xM40x1.5	267	-

Ⓒ DIN 332

Ⓒ Feather key / keyway DIN 6885

### Gearbox D/Z108 (3- / 2-stage), foot-mounted design

DZ011



d	to1	l	l4	l3	t	u	i	DR
60 <sup>*)</sup>	m6	120	10	100	64.0	18	159.5	M20x42
70	m6	140	15	110	74.5	20	179.5	M20x42

\*) Preferred series

Motor	Z108		D108		AC	AD	AG	LL	Z108	D108	O	Weight	
	k	kB	k	kB					HH	HH		Z108	D108
LA80	–	–	599.0	662.5	156.5	155.0	90	90	–	106.5	M20x1.5/M25x1.5	–	130
LA90S	599.5	670.5	630.0	701.0	174.0	163.0	90	90	76.0	106.5	M20x1.5/M25x1.5	133	135
LA90L	599.5	670.5	630.0	701.0	174.0	163.0	90	90	76.0	106.5	M20x1.5/M25x1.5	133	135
LA100L	642.5	723.5	676.0	757.0	195.0	168.0	120	120	113.5	147.0	2xM32x1.5	141	144
LA112M	669.0	750.0	700.5	781.5	219.0	181.0	120	120	116.0	147.5	2xM32x1.5	152	156
LA132S	728.0	830.0	760.5	862.5	259.0	195.0	140	140	155.5	188.0	2xM32x1.5	163	168
LA132M	728.0	830.0	760.5	862.5	259.0	195.0	140	140	155.5	188.0	2xM32x1.5	163	168
LA132ZM	774.0	876.0	806.5	908.5	259.0	195.0	140	140	155.5	188.0	2xM32x1.5	172	177
LA160M	833.5	952.0	863.0	981.5	313.5	227.0	165	165	184.0	213.5	2xM40x1.5	198	205
LA160L	833.5	952.0	863.0	981.5	313.5	227.0	165	165	184.0	213.5	2xM40x1.5	198	205
LG180M	890.0	1 012.0	–	–	348.0	322.5	260	192	198.0	–	2xM40x1.5	294	–
LG180ZM	941.0	1 063.0	–	–	348.0	322.5	260	192	198.0	–	2xM40x1.5	324	–
LG180L	890.0	1 012.0	–	–	348.0	322.5	260	192	198.0	–	2xM40x1.5	294	–
LG180ZL	941.0	1 063.0	–	–	348.0	322.5	260	192	198.0	–	2xM40x1.5	324	–
LG200L	946.0	1 072.0	–	–	385.0	301.0	260	192	228.0	–	2xM50x1.5	374	–
K4-LGI225S	1 206.5	1 445.5	–	–	442.0	325.0	260	192	196.5	–	2xM50x1.5	530	–
K4-LGI225M	1 206.5	1 445.5	–	–	442.0	325.0	260	192	196.5	–	2xM50x1.5	518	–
K4-LGI225ZM	1 266.5	1 505.5	–	–	442.0	325.0	260	192	196.5	–	2xM50x1.5	576	–

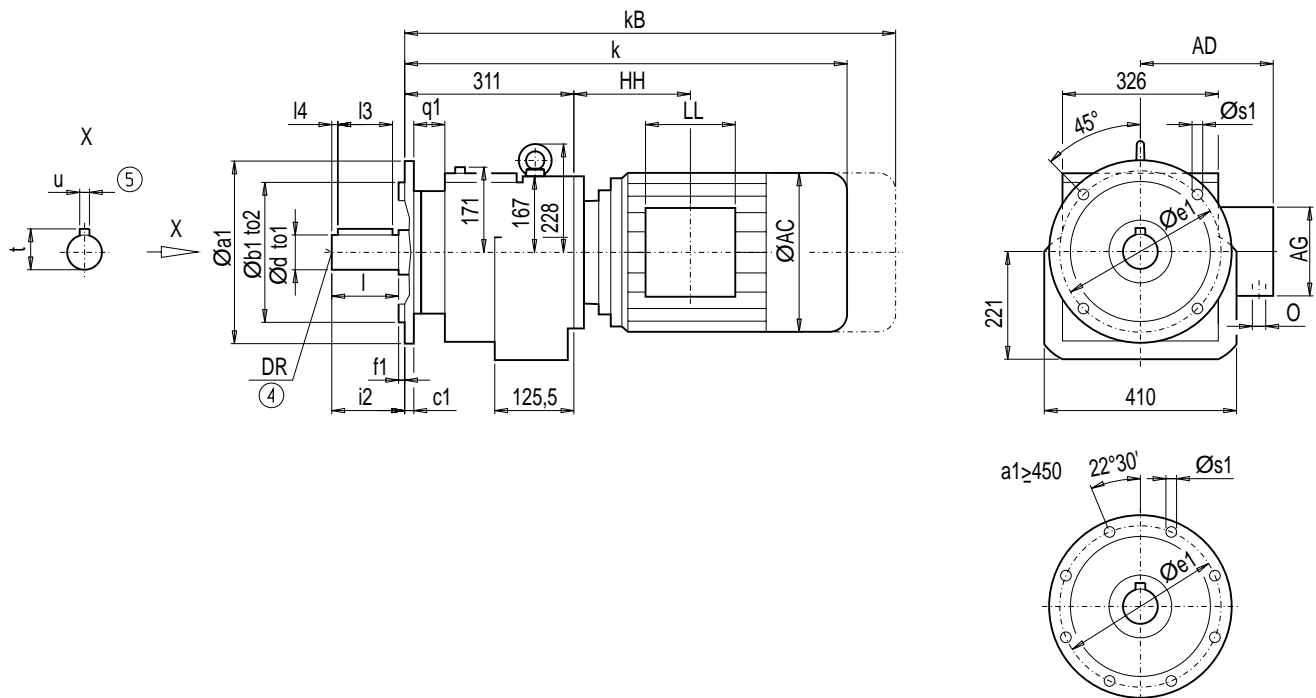
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox DF/ZF108 (3- / 2-stage), flange-mounted design (A-type)

##### DZF011



Flange	a1	b1	to2	c1	e1	f1	q1	s1	d	to1	l	l4	l3	t	u	i2	DR
A350	350	250	h6	18	300	5	41	17.5	60 <sup>*)</sup>	m6	120	10	100	64.0	18	120	M20x42
									70	m6	140	15	110	74.5	20	140	M20x42
A450	450	350	h6	20	400	5	39	17.5	60 <sup>*)</sup>	m6	120	10	100	64.0	18	120	M20x42
									70	m6	140	15	110	74.5	20	140	M20x42

<sup>\*)</sup> Preferred series

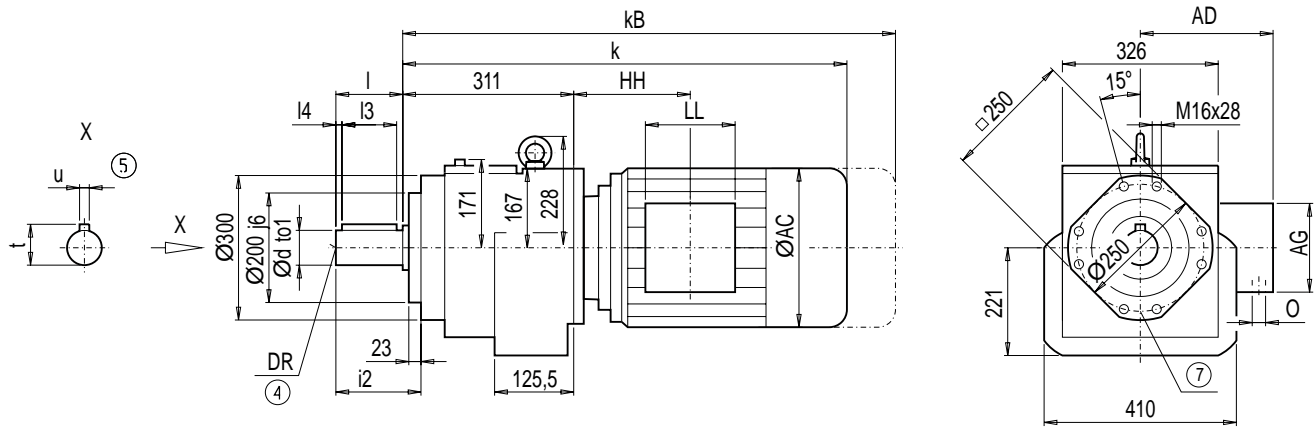
Motor	ZF108		DF108		AC	AD	AG	LL	ZF108	DF108	O	Weight	
	k	kB	k	kB					HH	HH		ZF108	DF108
LA80	-	-	599.0	662.5	156.5	155.0	90	90	-	106.5	M20x1.5/M25x1.5	-	129
LA90S	599.5	670.5	630.0	701.0	174.0	163.0	90	90	76.0	106.5	M20x1.5/M25x1.5	131	134
LA90L	599.5	670.5	630.0	701.0	174.0	163.0	90	90	76.0	106.5	M20x1.5/M25x1.5	131	134
LA100L	642.5	727.5	676.0	757.0	195.0	168.0	120	120	113.5	147.0	2xM32x1.5	139	143
LA112M	669.0	750.0	700.5	781.5	219.0	181.0	120	120	116.0	147.5	2xM32x1.5	151	155
LA132S	728.0	830.0	760.5	862.5	259.0	195.0	140	140	155.5	188.0	2xM32x1.5	162	167
LA132M	728.0	830.0	760.5	862.5	259.0	195.0	140	140	155.5	188.0	2xM32x1.5	162	167
LA132ZM	774.0	876.0	806.5	908.5	259.0	195.0	140	140	155.5	188.0	2xM32x1.5	171	176
LA160M	833.5	952.0	863.0	981.5	313.5	227.0	165	165	184.0	213.5	2xM40x1.5	196	204
LA160L	833.5	952.0	863.0	981.5	313.5	227.0	165	165	184.0	213.5	2xM40x1.5	196	204
LG180M	890.0	1 012.0	-	-	348.0	322.5	260	192	198.0	-	2xM40x1.5	293	-
LG180ZM	941.0	1 063.0	-	-	348.0	322.5	260	192	198.0	-	2xM40x1.5	323	-
LG180L	890.0	1 012.0	-	-	348.0	322.5	260	192	198.0	-	2xM40x1.5	293	-
LG180ZL	941.0	1 063.0	-	-	348.0	322.5	260	192	198.0	-	2xM40x1.5	323	-
LG200L	946.0	1 072.0	-	-	385.0	301.0	260	192	228.0	-	2xM50x1.5	373	-
K4-LGI225S	1 206.5	1 445.5	-	-	442.0	325.0	260	192	196.5	-	2xM50x1.5	529	-
K4-LGI225M	1 206.5	1 445.5	-	-	442.0	325.0	260	192	196.5	-	2xM50x1.5	517	-
K4-LGI225ZM	1 266.5	1 505.5	-	-	442.0	325.0	260	192	196.5	-	2xM50x1.5	575	-

⊗ DIN 332

⊗ Feather key / keyway DIN 6885

### Gearbox DZ/ZZ108 (3- / 2-stage), housing-flange-mounted design (C-type)

DZZ011



d	to1	l	l4	l3	t	u	i2	DR
60 *)	m6	120	10	100	64.0	18	148	M20x42
70	m6	140	15	110	74.5	20	168	M20x42

\*) Preferred series

Motor	ZZ108		DZ108		AC	AD	AG	LL	ZZ108	DZ108	O	Weight	
	k	kB	k	kB								HH	HH
LA80	-	-	599.0	662.5	156.5	155.0	90	90	-	106.5	M20x1.5/M25x1.5	-	121
LA90S	599.5	670.5	630.0	701.0	174.0	163.0	90	90	76.0	106.5	M20x1.5/M25x1.5	124	126
LA90L	599.5	670.5	630.0	701.0	174.0	163.0	90	90	76.0	106.5	M20x1.5/M25x1.5	124	126
LA100L	642.5	727.5	676.0	757.0	195.0	168.0	120	120	113.5	147.0	2xM32x1.5	132	135
LA112M	669.0	750.0	700.5	781.5	219.0	181.0	120	120	116.0	147.5	2xM32x1.5	144	147
LA132S	728.0	830.0	760.5	862.5	259.0	195.0	140	140	155.5	188.0	2xM32x1.5	154	159
LA132M	728.0	830.0	760.5	862.5	259.0	195.0	140	140	155.5	188.0	2xM32x1.5	154	159
LA132ZM	774.0	876.0	806.5	908.5	259.0	195.0	140	140	155.5	188.0	2xM32x1.5	163	168
LA160M	833.5	952.0	863.0	981.5	313.5	227.0	165	165	184.0	213.5	2xM40x1.5	189	196
LA160L	833.5	952.0	863.0	981.5	313.5	227.0	165	165	184.0	213.5	2xM40x1.5	189	196
LG180M	890.0	1 012.0	-	-	348.0	322.5	260	192	198.0	-	2xM40x1.5	285	-
LG180ZM	941.0	1 063.0	-	-	348.0	322.5	260	192	198.0	-	2xM40x1.5	315	-
LG180L	890.0	1 012.0	-	-	348.0	322.5	260	192	198.0	-	2xM40x1.5	285	-
LG180ZL	941.0	1 063.0	-	-	348.0	322.5	260	192	198.0	-	2xM40x1.5	315	-
LG200L	946.0	1 072.0	-	-	385.0	301.0	260	192	228.0	-	2xM50x1.5	365	-
K4-LGI225S	1 206.5	1 445.5	-	-	442.0	325.0	260	192	196.5	-	2xM50x1.5	521	-
K4-LGI225M	1 206.5	1 445.5	-	-	442.0	325.0	260	192	196.5	-	2xM50x1.5	509	-
K4-LGI225ZM	1 266.5	1 505.5	-	-	442.0	325.0	260	192	196.5	-	2xM50x1.5	567	-

④ DIN 332

⑤ Feather key / keyway DIN 6885

⑦ For note, see page 2/192

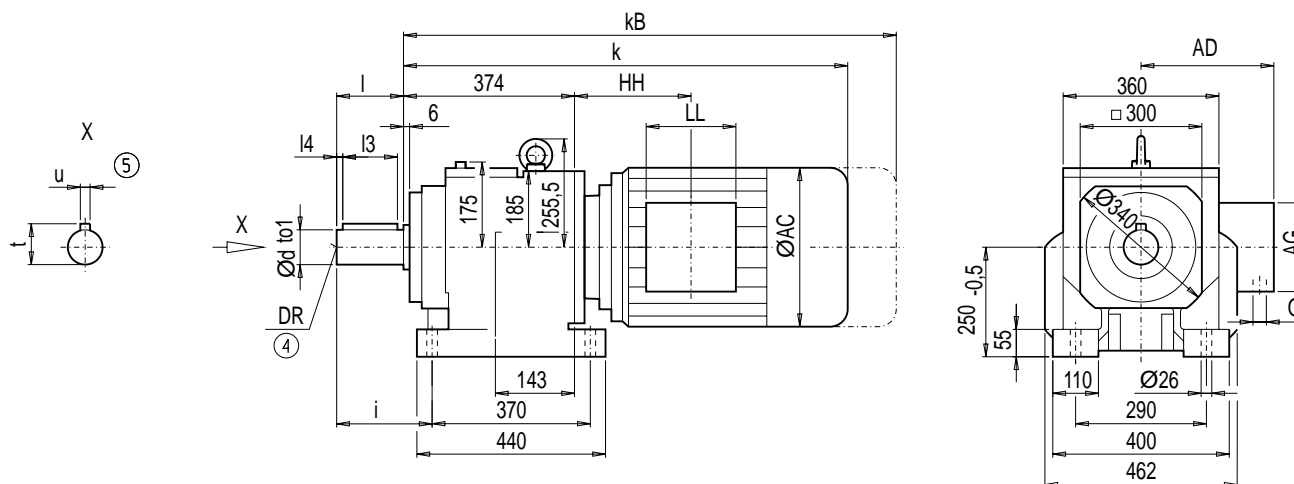
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox D/Z128 (3- / 2-stage), foot-mounted design

DZ011



d	to1	l	l4	l3	t	u	i	DR
70 *)	m6	140	15	110	74.5	20	186	M20x42
90	m6	170	15	140	95.0	25	216	M24x50

\*) Preferred series

Motor	Z128		D128		AC	AD	AG	LL	Z128	D128	O	Weight	
	k	kB	k	kB					HH	HH		Z128	D128
LA90S	-	-	686.0	757.0	174.0	163.0	90	90	-	99.5	M20x1.5/M25x1.5	-	212
LA90L	-	-	686.0	757.0	174.0	163.0	90	90	-	99.5	M20x1.5/M25x1.5	-	212
LA100L	696.0	777.0	732.0	813.0	195.0	168.0	120	120	104.0	140.0	2xM32x1.5	214	221
LA112M	721.5	802.5	755.5	836.5	219.0	181.0	120	120	105.5	139.5	2xM32x1.5	226	233
LA132S	780.5	882.5	814.5	916.5	259.0	195.0	140	140	145.0	179.0	2xM32x1.5	235	246
LA132M	780.5	882.5	814.5	916.5	259.0	195.0	140	140	145.0	179.0	2xM32x1.5	235	246
LA132ZM	826.5	928.5	860.5	962.5	259.0	195.0	140	140	145.0	179.0	2xM32x1.5	244	255
LA160M	880.0	998.5	917.0	1035.5	313.5	227.0	165	165	167.5	204.5	2xM40x1.5	274	282
LA160L	880.0	998.5	917.0	1035.5	313.5	227.0	165	165	167.5	204.5	2xM40x1.5	274	282
LG180M	939.5	1061.5	976.5	1098.5	348.0	322.5	260	192	184.5	221.5	2xM40x1.5	365	378
LG180ZM	990.5	1112.5	1027.5	1149.5	348.0	322.5	260	192	184.5	221.5	2xM40x1.5	395	408
LG180L	939.5	1061.5	976.5	1098.5	348.0	322.5	260	192	184.5	221.5	2xM40x1.5	365	378
LG180ZL	990.5	1112.5	1027.5	1149.5	348.0	322.5	260	192	184.5	221.5	2xM40x1.5	395	408
LG200L	995.5	1121.5	1032.5	1158.5	385.0	301.0	260	192	214.5	251.5	2xM50x1.5	445	458
LG225S	1066.0	1305.5	-	-	442.0	325.0	260	192	250.5	-	2xM50x1.5	522	-
LG225M	1066.0	1305.5	-	-	442.0	325.0	260	192	250.5	-	2xM50x1.5	510	-
LG225ZM	1126.0	1365.5	-	-	442.0	325.0	260	192	250.5	-	2xM50x1.5	568	-
K4-LGI250M	1353.5	1578.5	-	-	495.0	392.0	300	236	237.5	-	2xM63x1.5	689	-
K4-LGI250ZM	1423.5	1648.5	-	-	495.0	392.0	300	236	237.5	-	2xM63x1.5	792	-

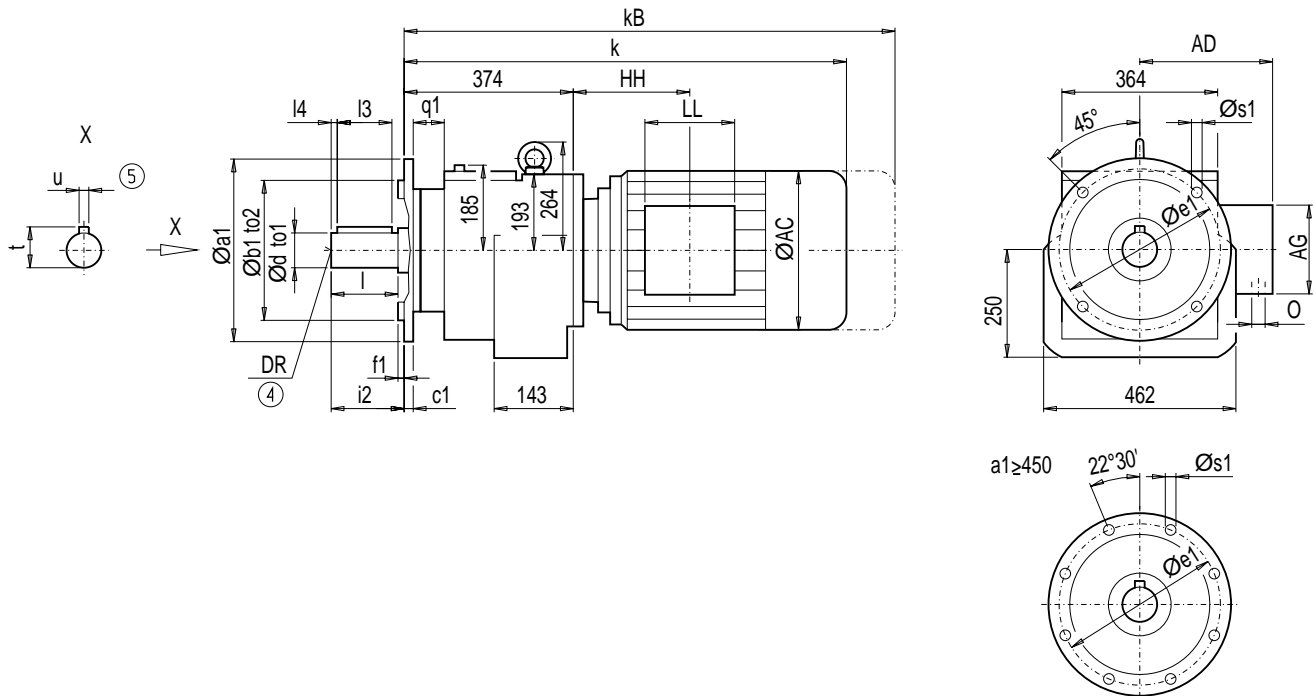
© DIN 332

© Feather key / keyway DIN 6885



### Gearbox DF/ZF128 (3- / 2-stage), flange-mounted design (A-type)

DZF011



Flange	a1	b1	to2	c1	e1	f1	q1	s1	d	to1	l	l4	l3	t	u	i2	DR
<b>A350</b> <sup>1)</sup>	350	250	h6	18	300	5	60	17.5	70 <sup>*)</sup>	m6	140	15	110	74.5	20	140	M20x42
									90	m6	170	15	140	95.0	25	170	M24x50
<b>A450</b>	450	350	h6	22	400	5	56	17.5	70 <sup>*)</sup>	m6	140	15	110	74.5	20	140	M20x42
									90	m6	170	15	140	95.0	25	170	M24x50
<b>A550</b>	550	450	h6	22	500	5	56	17.5	70 <sup>*)</sup>	m6	140	15	110	74.5	20	140	M20x42
									90	m6	170	15	140	95.0	25	170	M24x50

<sup>1)</sup> If torque > 3.500 Nm, the flange must be pinned. We recommend you use 2 pins with a 12 mm diameter.

<sup>\*)</sup> Preferred series

Motor	ZF128		DF128		AC	AD	AG	LL	ZF128	DF128	O	Weight	
	k	kB	k	kB								ZF128	DF128
LA90S	-	-	686.0	757.0	174.0	163.0	90	90	-	99.5	M20x1.5/M25x1.5	-	206
LA90L	-	-	686.0	757.0	174.0	163.0	90	90	-	99.5	M20x1.5/M25x1.5	-	206
LA100L	696.0	777.0	732.0	813.0	195.0	168.0	120	120	104.0	140.0	2xM32x1.5	209	216
LA112M	721.5	802.5	755.5	836.5	219.0	181.0	120	120	105.5	139.5	2xM32x1.5	220	227
LA132S	780.5	882.5	814.5	916.5	259.0	195.0	140	140	145.0	179.0	2xM32x1.5	230	240
LA132M	780.5	882.5	814.5	916.5	259.0	195.0	140	140	145.0	179.0	2xM32x1.5	230	240
LA132ZM	826.5	928.5	860.5	962.5	259.0	195.0	140	140	145.0	179.0	2xM32x1.5	239	249
LA160M	880.0	998.5	917.0	1 035.5	313.5	227.0	165	165	167.5	204.5	2xM40x1.5	269	276
LA160L	880.0	998.5	917.0	1 035.5	313.5	227.0	165	165	167.5	204.5	2xM40x1.5	269	276
LG180M	939.5	1 061.5	976.5	1 098.5	348.0	322.5	260	192	184.5	221.5	2xM40x1.5	360	372
LG180ZM	990.5	1 112.5	1 027.5	1 149.5	348.0	322.5	260	192	184.5	221.5	2xM40x1.5	390	402
LG180L	939.5	1 061.5	976.5	1 098.5	348.0	322.5	260	192	184.5	221.5	2xM40x1.5	360	372
LG180ZL	990.5	1 112.5	1 027.5	1 149.5	348.0	322.5	260	192	184.5	221.5	2xM40x1.5	390	402
LG200L	995.5	1 121.5	1 032.5	1 158.5	385.0	301.0	260	192	214.5	251.5	2xM50x1.5	440	452
LG225S	1 066.0	1 305.5	-	-	442.0	325.0	260	192	250.5	-	2xM50x1.5	517	-
LG225M	1 066.0	1 305.5	-	-	442.0	325.0	260	192	250.5	-	2xM50x1.5	505	-
LG225ZM	1 126.0	1 365.5	-	-	442.0	325.0	260	192	250.5	-	2xM50x1.5	563	-
K4-LGI250M	1 353.5	1 578.5	-	-	495.0	392.0	300	236	237.5	-	2xM63x1.5	684	-
K4-LGI250ZM	1 423.5	1 648.5	-	-	495.0	392.0	300	236	237.5	-	2xM63x1.5	787	-

© DIN 332

© Feather key / keyway DIN 6885

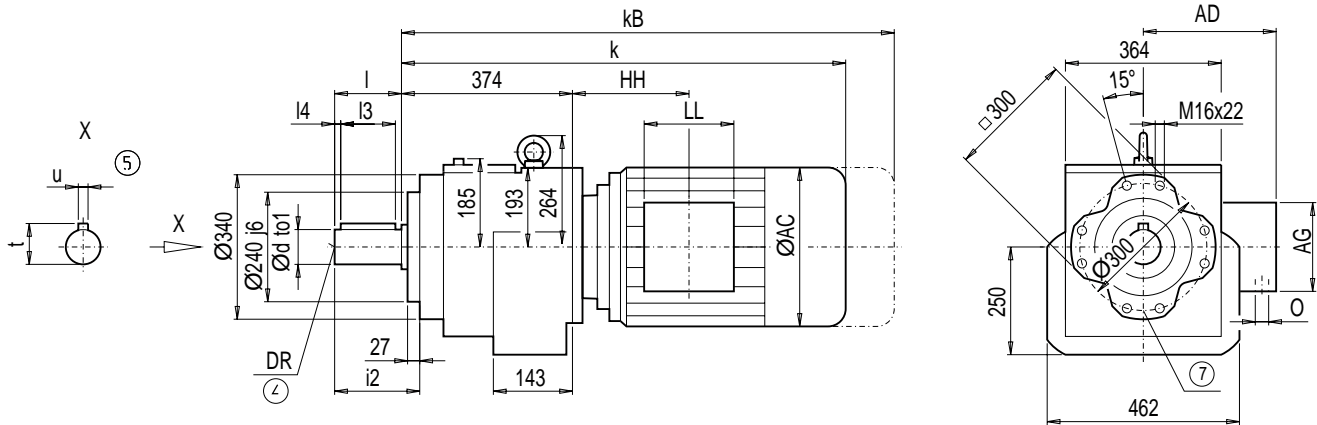
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox DZ/ZZ128 (3- / 2-stage), housing-flange-mounted design (C-type)

DZZ011



d	to1	l	l4	l3	t	u	i2	DR
70 *)	m6	140	15	110	74.5	20	173	M20x42
90	m6	170	15	140	95.0	25	203	M24x50

\*) Preferred series

Motor	ZZ128		DZ128			AC	AD	AG	LL	ZZ128	DZ128	O	Weight	
	k	kB	k	kB	HH					HH	ZZ128		DZ128	
LA90S	-	-	686.0	757.0	174.0	163.0	90	90	-	99.5	M20x1.5/M25x1.5	-	190	
LA90L	-	-	686.0	757.0	174.0	163.0	90	90	-	99.5	M20x1.5/M25x1.5	-	190	
LA100L	696.0	777.0	732.0	813.0	195.0	168.0	120	120	104.0	140.0	2xM32x1.5	192	199	
LA112M	721.5	802.5	755.5	836.5	219.0	181.0	120	120	105.5	139.5	2xM32x1.5	203	210	
LA132S	780.5	882.5	814.5	916.5	259.0	195.0	140	140	145.0	179.0	2xM32x1.5	213	223	
LA132M	780.5	882.5	814.5	916.5	259.0	195.0	140	140	145.0	179.0	2xM32x1.5	213	223	
LA132ZM	826.5	928.5	860.5	962.5	259.0	195.0	140	140	145.0	179.0	2xM32x1.5	222	233	
LA160M	880.0	998.5	917.0	1035.5	313.5	227.0	165	165	167.5	204.5	2xM40x1.5	252	259	
LA160L	880.0	998.5	917.0	1035.5	313.5	227.0	165	165	167.5	204.5	2xM40x1.5	252	259	
LG180M	939.5	1061.5	976.5	1098.5	348.0	322.5	260	192	184.5	221.5	2xM40x1.5	343	355	
LG180ZM	990.5	1112.5	1027.5	1149.5	348.0	322.5	260	192	184.5	221.5	2xM40x1.5	373	385	
LG180L	939.5	1061.5	976.5	1098.5	348.0	322.5	260	192	184.5	221.5	2xM40x1.5	343	355	
LG180ZL	990.5	1112.5	1027.5	1149.5	348.0	322.5	260	192	184.5	221.5	2xM40x1.5	373	385	
LG200L	995.5	1121.5	1032.5	1158.5	385.0	301.0	260	192	214.5	251.5	2xM50x1.5	423	435	
LG225S	1066.0	1305.5	-	-	442.0	325.0	260	192	250.5	-	2xM50x1.5	500	-	
LG225M	1066.0	1305.5	-	-	442.0	325.0	260	192	250.5	-	2xM50x1.5	488	-	
LG225ZM	1126.0	1365.5	-	-	442.0	325.0	260	192	250.5	-	2xM50x1.5	546	-	
K4-LGI250M	1353.5	1578.5	-	-	495.0	392.0	300	236	237.5	-	2xM63x1.5	667	-	
K4-LGI250ZM	1423.5	1648.5	-	-	495.0	392.0	300	236	237.5	-	2xM63x1.5	770	-	

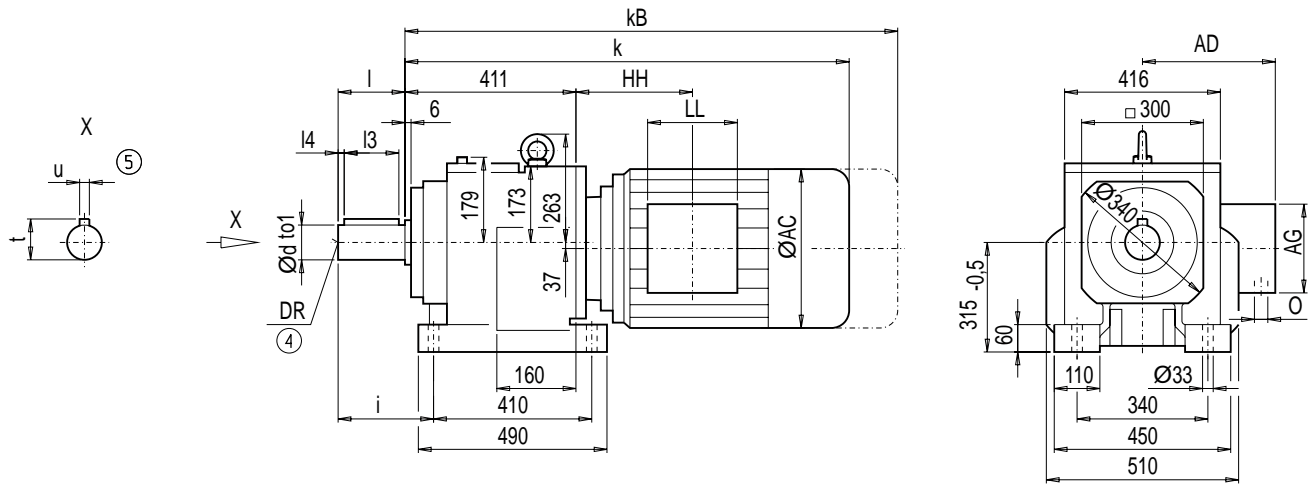
④ DIN 332

⑤ Feather key / keyway DIN 6885

⑦ For note, see page 2/192

#### Gearbox D/Z148 (3- / 2-stage), foot-mounted design

DZ011



d	to1	l	l4	l3	t	u	i	DR
90 *)	m6	170	15	140	95	25	220	M24x50
100	m6	210	15	180	106	28	260	M24x50

\*) Preferred series

Motor	Z148		D148		AC	AD	AG	LL	Z148	D148	O	Weight	
	k	kB	k	kB								Z148	D148
LA100L	-	-	764.0	845.0	195.0	168.0	120	120	-	135.0	2xM32x1.5	-	313
LA112M	-	-	789.5	870.5	219.0	181.0	120	120	-	136.5	2xM32x1.5	-	324
LA132S	809.5	911.5	847.5	949.5	259.0	195.0	140	140	137.0	175.0	2xM32x1.5	325	336
LA132M	809.5	911.5	847.5	949.5	259.0	195.0	140	140	137.0	175.0	2xM32x1.5	325	336
LA132ZM	855.5	957.5	893.5	995.5	259.0	195.0	140	140	137.0	175.0	2xM32x1.5	334	345
LA160M	909.5	1 028.0	947.5	1 066.0	313.5	227.0	165	165	160.0	198.0	2xM40x1.5	359	371
LA160L	909.5	1 028.0	947.5	1 066.0	313.5	227.0	165	165	160.0	198.0	2xM40x1.5	359	371
LG180M	969.0	1 091.0	1 007.0	1 129.0	348.0	322.5	260	192	177.0	215.0	2xM40x1.5	455	467
LG180ZM	1 020.0	1 142.0	1 058.0	1 180.0	348.0	322.5	260	192	177.0	215.0	2xM40x1.5	485	497
LG180L	969.0	1 091.0	1 007.0	1 129.0	348.0	322.5	260	192	177.0	215.0	2xM40x1.5	455	467
LG180ZL	1 020.0	1 142.0	1 058.0	1 180.0	348.0	322.5	260	192	177.0	215.0	2xM40x1.5	485	497
LG200L	1 025.0	1 151.0	1 063.0	1 189.0	385.0	301.0	260	192	207.0	245.0	2xM50x1.5	535	547
LG225S	1 096	1 335.0	1 134.0	1 373.0	442.0	325.0	260	192	243.0	281.0	2xM50x1.5	608	621
LG225M	1 096	1 335.0	1 134.0	1 373.0	442.0	325.0	260	192	243.0	281.0	2xM50x1.5	596	609
LG225ZM	1 156	1 395.0	1 194.0	1 433.0	442.0	325.0	260	192	243.0	281.0	2xM50x1.5	654	667
LG250M	1 189.5	1 414.5	-	-	495.0	392.0	300	236	278.5	-	2xM63x1.5	698	-
LG250ZM	1 259.5	1 485.0	-	-	495.0	392.0	300	236	278.5	-	2xM63x1.5	801	-
K4-LG1280S	1 468.5	1 695.5	-	-	555.0	432.0	300	236	252.5	-	2xM63x1.5	929	-
K4-LG1280M	1 468.5	1 695.5	-	-	555.0	432.0	300	236	252.5	-	2xM63x1.5	941	-
K4-LG1280ZM	1 578.5	1 805.5	-	-	555.0	432.0	300	236	252.5	-	2xM63x1.5	1 029	-

© DIN 332

© Feather key / keyway DIN 6885

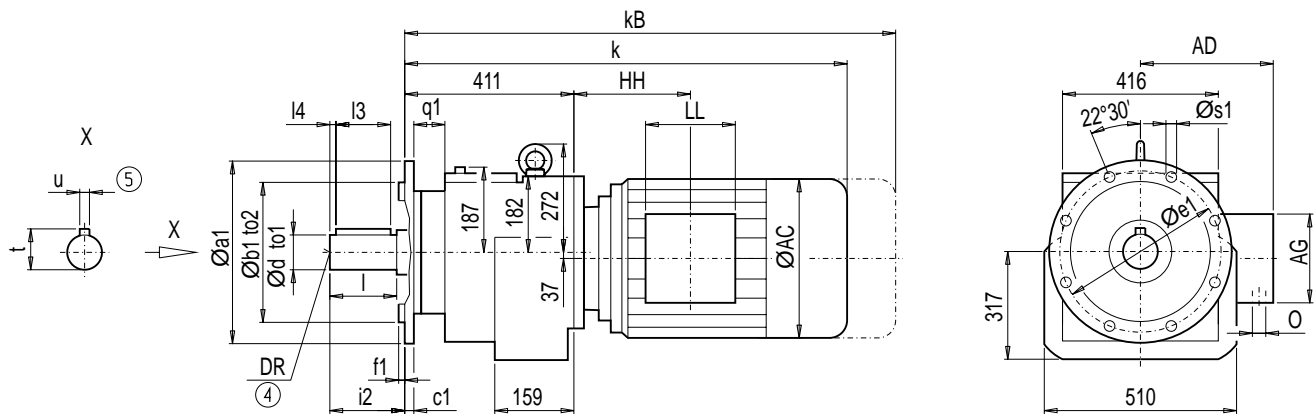
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox DF/ZF148 (3- / 2-stage), flange-mounted design (A-type)

DZF011



Flange	a1	b1	to2	c1	e1	f1	q1	s1	d	to1	l	l4	l3	t	u	i2	DR
A450	450	350	h6	22	400	5	68	17.5	90 <sup>*)</sup>	m6	170	15	140	95	25	170	M24x50
									100	m6	210	15	180	106	28	210	M24x50
A550	550	450	h6	25	500	5	65	17.5	90 <sup>*)</sup>	m6	170	15	140	95	25	170	M24x50
									100	m6	210	15	180	106	28	210	M24x50

\*) Preferred series

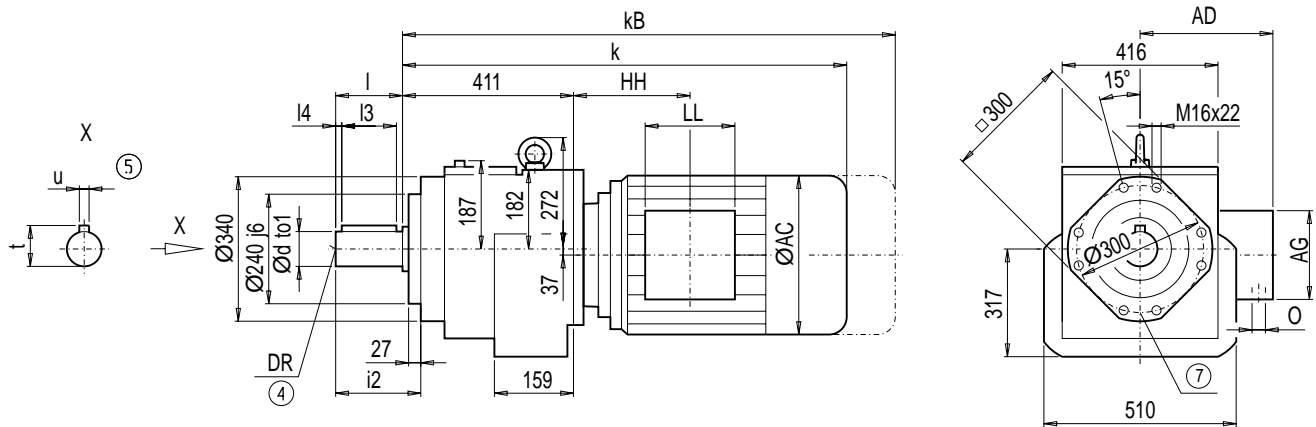
Motor	ZF148		DF148		AC	AD	AG	LL	ZF148	DF148	O	Weight	
	k	kB	k	kB					HH	HH		ZF148	DF148
LA100L	–	–	764.0	845.0	195.0	168.0	120	120	–	135.0	2xM32x1.5	–	307
LA112M	–	–	789.5	870.5	219.0	181.0	120	120	–	136.5	2xM32x1.5	–	318
LA132S	809.5	911.5	847.5	949.5	259.0	195.0	140	140	137.0	175.0	2xM32x1.5	319	330
LA132M	809.5	911.5	847.5	949.5	259.0	195.0	140	140	137.0	175.0	2xM32x1.5	319	330
LA132ZM	855.5	957.5	893.5	995.5	259.0	195.0	140	140	137.0	175.0	2xM32x1.5	328	339
LA160M	909.5	1 028.0	947.5	1 066.0	313.5	227.0	165	165	160.0	198.0	2xM40x1.5	353	365
LA160L	909.5	1 028.0	947.5	1 066.0	313.5	227.0	165	165	160.0	198.0	2xM40x1.5	353	365
LG180M	969.0	1 091.0	1 007.0	1 129.0	348.0	322.5	260	192	177.0	215.0	2xM40x1.5	449	461
LG180ZM	1 020.0	1 142.0	1 058.0	1 180.0	348.0	322.5	260	192	177.0	215.0	2xM40x1.5	479	491
LG180L	969.0	1 091.0	1 007.0	1 129.0	348.0	322.5	260	192	177.0	215.0	2xM40x1.5	449	461
LG180ZL	1 020.0	1 142.0	1 058.0	1 180.0	348.0	322.5	260	192	177.0	215.0	2xM40x1.5	479	491
LG200L	1 025.0	1 151.0	1 063.0	1 189.0	385.0	301.0	260	192	207.0	245.0	2xM50x1.5	529	541
LG225S	1 096.0	1 335.0	1 134.0	1 373.0	442.0	325.0	260	192	243.0	281.0	2xM50x1.5	602	615
LG225M	1 096.0	1 335.0	1 134.0	1 373.0	442.0	325.0	260	192	243.0	281.0	2xM50x1.5	590	603
LG225ZM	1 156.0	1 395.0	1 194.0	1 433.0	442.0	325.0	260	192	243.0	281.0	2xM50x1.5	648	661
LG250M	1 189.5	1 414.5	–	–	495.0	392.0	300	236	278.5	–	2xM63x1.5	692	–
LG250ZM	1 259.5	1 485.0	–	–	495.0	392.0	300	236	278.5	–	2xM63x1.5	795	–
K4-LGI280S	1 468.5	1 695.5	–	–	555.0	432.0	300	236	252.5	–	2xM63x1.5	923	–
K4-LGI280M	1 468.5	1 695.5	–	–	555.0	432.0	300	236	252.5	–	2xM63x1.5	941	–
K4-LGI280ZM	1 578.5	1 805.5	–	–	555.0	432.0	300	236	252.5	–	2xM63x1.5	1 029	–

④ DIN 332

⑤ Feather key / keyway DIN 6885

### Gearbox DZ/ZZ148 (3- / 2-stage), housing-flange-mounted design (C-type)

DZZ011



2

d	to1	i	i4	i3	t	u	i2	DR
90 *)	m6	170	15	140	95	25	203	M24x50
100	m6	210	15	180	106	28	243	M24x50

\*) Preferred series

Motor	ZZ148		DZ148		AC	AD	AG	LL	ZZ148	DZ148	O	Weight	
	k	kB	k	kB					HH	HH		ZZ148	DZ148
LA100L	-	-	764.0	845.0	195.0	168.0	120	120	-	135.0	2xM32x1.5	-	283
LA112M	-	-	789.5	870.5	219.0	181.0	120	120	-	136.5	2xM32x1.5	-	294
LA132S	809.5	911.5	847.5	949.5	259.0	195.0	140	140	137.0	175.0	2xM32x1.5	302	306
LA132M	809.5	911.5	847.5	949.5	259.0	195.0	140	140	137.0	175.0	2xM32x1.5	302	306
LA132ZM	855.5	957.5	893.5	995.5	259.0	195.0	140	140	137.0	175.0	2xM32x1.5	311	315
LA160M	909.5	1 028.0	947.5	1 066.0	313.5	227.0	165	165	160.0	198.0	2xM40x1.5	336	341
LA160L	909.5	1 028.0	947.5	1 066.0	313.5	227.0	165	165	160.0	198.0	2xM40x1.5	336	341
LG180M	969.0	1 091.0	1 007.0	1 129.0	348.0	322.5	260	192	177.0	215.0	2xM40x1.5	432	437
LG180ZM	1 020.0	1 142.0	1 058.0	1 180.0	348.0	322.5	260	192	177.0	215.0	2xM40x1.5	462	467
LG180L	969.0	1 091.0	1 007.0	1 129.0	348.0	322.5	260	192	177.0	215.0	2xM40x1.5	432	437
LG180ZL	1 020.0	1 142.0	1 058.0	1 180.0	348.0	322.5	260	192	177.0	215.0	2xM40x1.5	462	467
LG200L	1 025.0	1 151.0	1 063.0	1 189.0	385.0	301.0	260	192	207.0	245.0	2xM50x1.5	512	517
LG225S	1 096.0	1 335.0	1 134.0	1 373.0	442.0	325.0	260	192	243.0	281.0	2xM50x1.5	585	547
LG225M	1 096.0	1 335.0	1 134.0	1 373.0	442.0	325.0	260	192	243.0	281.0	2xM50x1.5	573	591
LG225ZM	1 156.0	1 395.0	1 194.0	1 433.0	442.0	325.0	260	192	243.0	281.0	2xM50x1.5	631	637
LG250M	1 189.5	1 414.5	-	-	495.0	392.0	300	236	278.5	-	2xM63x1.5	675	-
LG250ZM	1 259.5	1 485.0	-	-	495.0	392.0	300	236	278.5	-	2xM63x1.5	778	-
K4-LG1280S	1 468.5	1 695.5	-	-	555.0	432.0	300	236	252.5	-	2xM63x1.5	906	-
K4-LG1280M	1 468.5	1 695.5	-	-	555.0	432.0	300	236	252.5	-	2xM63x1.5	918	-
K4-LG1280ZM	1 578.5	1 805.5	-	-	555.0	432.0	300	236	252.5	-	2xM63x1.5	1 006	-

④ DIN 332

⑤ Feather key / keyway DIN 6885

⑦ For note, see page 2/192

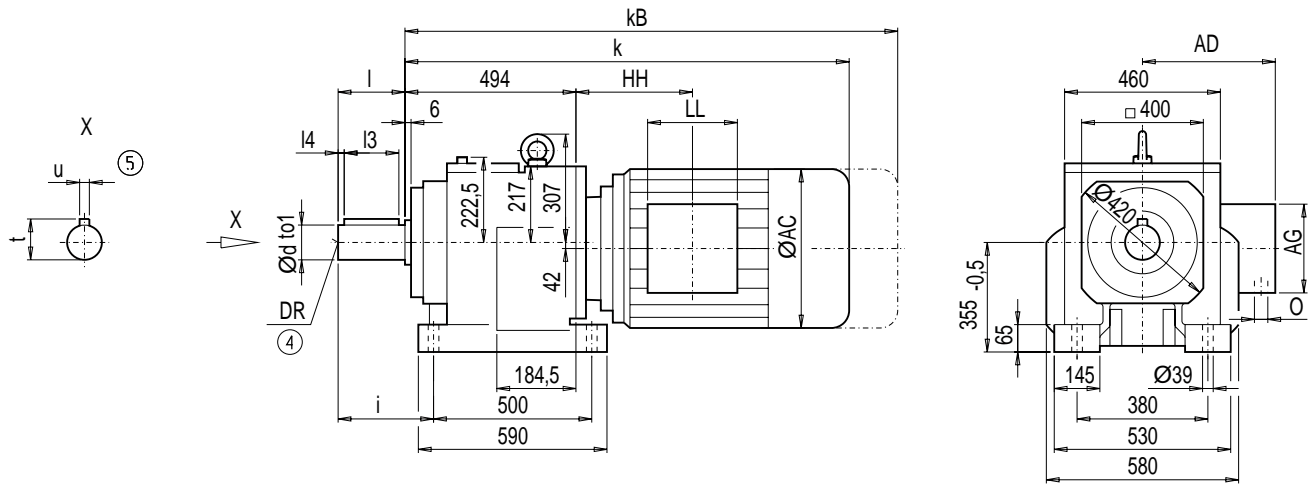
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox D/Z168 (3- / 2-stage), foot-mounted design

DZ011



d	to1	l	l4	l3	t	u	i	DR
100 <sup>*)</sup>	m6	210	15	180	106	28	260	M24x50
110	m6	210	15	180	116	28	260	M24x50
120	m6	210	15	180	127	32	260	M24x50

\*) Preferred series

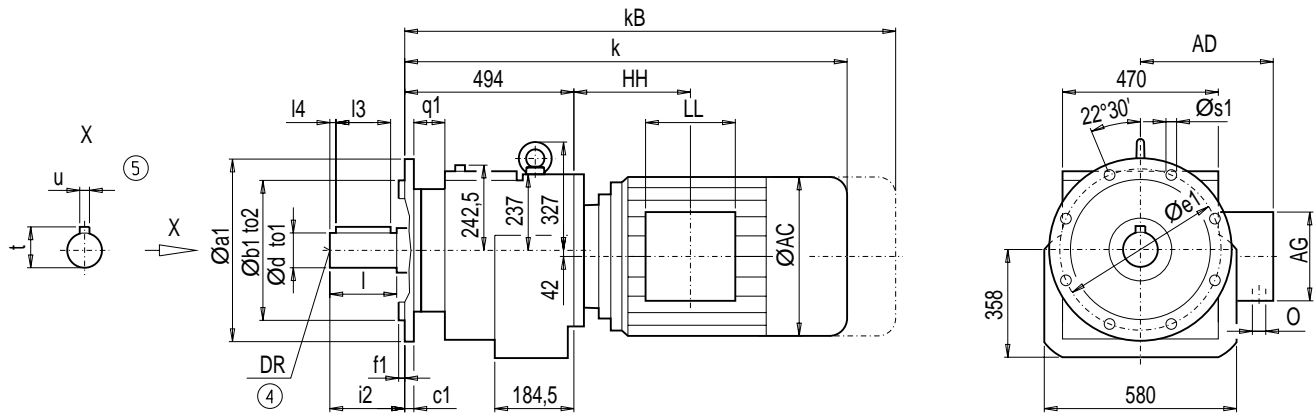
Motor	Z168		D168		AC	AD	AG	LL	Z168	D168	O	Weight	
	k	kB	k	kB					HH	HH		Z168	D168
LA132S	878.0	980.0	919.0	1 021.0	259.0	195.0	140	140	122.5	163.5	2xM32x1.5	491	508
LA132M	878.0	980.0	919.0	1 021.0	259.0	195.0	140	140	122.5	163.5	2xM32x1.5	491	508
LA132ZM	924.0	1 026.0	965.0	1 067.0	259.0	195.0	140	140	122.5	163.5	2xM32x1.5	500	517
LA160M	978.0	1 096.5	1 019.0	1 137.5	313.5	227.0	165	165	145.5	186.5	2xM40x1.5	524	543
LA160L	978.0	1 096.5	1 019.0	1 137.5	313.5	227.0	165	165	145.5	186.5	2xM40x1.5	524	543
LG180M	1 037.5	1 159.5	1 078.5	1 200.5	348.0	322.5	260	192	162.5	203.5	2xM40x1.5	620	639
LG180ZM	1 088.5	1 210.5	1 129.5	1 251.5	348.0	322.5	260	192	162.5	203.5	2xM40x1.5	650	669
LG180L	1 037.5	1 159.5	1 078.5	1 200.5	348.0	322.5	260	192	162.5	203.5	2xM40x1.5	620	639
LG180ZL	1 088.5	1 210.5	1 129.5	1 251.5	348.0	322.5	260	192	162.5	203.5	2xM40x1.5	650	669
LG200L	1 093.5	1 219.5	1 134.5	1 260.5	385.0	301.0	260	192	192.5	233.5	2xM50x1.5	700	719
LG225S	1 164.5	1 403.5	1 205.5	1 444.5	442.0	325.0	260	192	228.5	269.5	2xM50x1.5	772	792
LG225M	1 164.5	1 403.5	1 205.5	1 444.5	442.0	325.0	260	192	228.5	269.5	2xM50x1.5	760	780
LG225ZM	1 224.5	1 463.5	1 265.5	1 504.5	442.0	325.0	260	192	228.5	269.5	2xM50x1.5	818	838
LG250M	1 258.0	1 483.0	–	–	495.0	392.0	300	236	264.0	–	2xM63x1.5	862	–
LG250ZM	1 328.0	1 553.5	–	–	495.0	392.0	300	236	264.0	–	2xM63x1.5	965	–
K4-LG1280S	1 537.5	1 764.5	–	–	555.0	432.0	300	236	252.5	–	2xM63x1.5	991	–
K4-LG1280M	1 537.5	1 764.5	–	–	555.0	432.0	300	236	252.5	–	2xM63x1.5	1 097	–
K4-LG1280ZM	1 647.5	1 874.5	–	–	555.0	432.0	300	236	252.5	–	2xM63x1.5	1 185	–

Ⓞ DIN 332

Ⓢ Feather key / keyway DIN 6885

### Gearbox DF/ZF168 (3- / 2-stage), flange-mounted design (A-type)

DZF011



Flange	a1	b1	to2	c1	e1	f1	q1	s1	d	to1	l	l4	l3	t	u	i2	DR
A450	450	350	h6	31	400	5	65	17.5	100 <sup>*)</sup>	m6	210	15	180	106	28	210	M24x50
									110	m6	210	15	180	116	28	210	M24x50
									120	m6	210	15	180	127	32	210	M24x50
A550	550	450	h6	31	500	5	65	17.5	100 <sup>*)</sup>	m6	210	15	180	106	28	210	M24x50
									110	m6	210	15	180	116	28	210	M24x50
									120	m6	210	15	180	127	32	210	M24x50
A660	660	550	h6	31	600	5	65	22.0	100 <sup>*)</sup>	m6	210	15	180	106	28	210	M24x50
									110	m6	210	15	180	116	28	210	M24x50
									120	m6	210	15	180	127	32	210	M24x50

\*) Preferred series

Motor	ZF168		DF168		AC	AD	AG	LL	ZF168	DF168	O	Weight	
	k	kB	k	kB					HH	HH		ZF168	DF168
LA132S	878.0	980.0	919.0	1 021.0	259.0	195.0	140	140	122.5	163.5	2xM32x1.5	466	484
LA132M	878.0	980.0	919.0	1 021.0	259.0	195.0	140	140	122.5	163.5	2xM32x1.5	466	484
LA132ZM	924.0	1 026.0	965.0	1 067.0	259.0	195.0	140	140	122.5	163.5	2xM32x1.5	475	493
LA160M	978.0	1 096.5	1 019.0	1 137.5	313.5	227.0	165	165	145.5	186.5	2xM40x1.5	500	518
LA160L	978.0	1 096.5	1 019.0	1 137.5	313.5	227.0	165	165	145.5	186.5	2xM40x1.5	500	518
LG180M	1 037.5	1 159.5	1 078.5	1 200.5	348.0	322.5	260	192	162.5	203.5	2xM40x1.5	595	614
LG180ZM	1 088.5	1 210.5	1 129.5	1 251.5	348.0	322.5	260	192	162.5	203.5	2xM40x1.5	625	644
LG180L	1 037.5	1 159.5	1 078.5	1 200.5	348.0	322.5	260	192	162.5	203.5	2xM40x1.5	595	614
LG180ZL	1 088.5	1 210.5	1 129.5	1 251.5	348.0	322.5	260	192	162.5	203.5	2xM40x1.5	625	644
LG200L	1 093.5	1 219.5	1 134.5	1 260.5	385.0	301.0	260	192	192.5	233.5	2xM50x1.5	675	694
LG225S	1 164.5	1 403.5	1 205.5	1 444.5	442.0	325.0	260	192	228.5	269.5	2xM50x1.5	747	767
LG225M	1 164.5	1 403.5	1 205.5	1 444.5	442.0	325.0	260	192	228.5	269.5	2xM50x1.5	735	755
LG225ZM	1 224.5	1 463.5	1 265.5	1 504.5	442.0	325.0	260	192	228.5	269.5	2xM50x1.5	793	813
LG250M	1 258.0	1 483.0	–	–	495.0	392.0	300	236	264.0	–	2xM63x1.5	837	–
LG250ZM	1 328.0	1 553.5	–	–	495.0	392.0	300	236	264.0	–	2xM63x1.5	940	–
K4-LGI280S	1 537.5	1 764.5	–	–	555.0	432.0	300	236	252.5	–	2xM63x1.5	966	–
K4-LGI280M	1 537.5	1 764.5	–	–	555.0	432.0	300	236	252.5	–	2xM63x1.5	1 072	–
K4-LGI280ZM	1 647.5	1 874.5	–	–	555.0	432.0	300	236	252.5	–	2xM63x1.5	1 160	–

④ DIN 332

⑤ Feather key / keyway DIN 6885

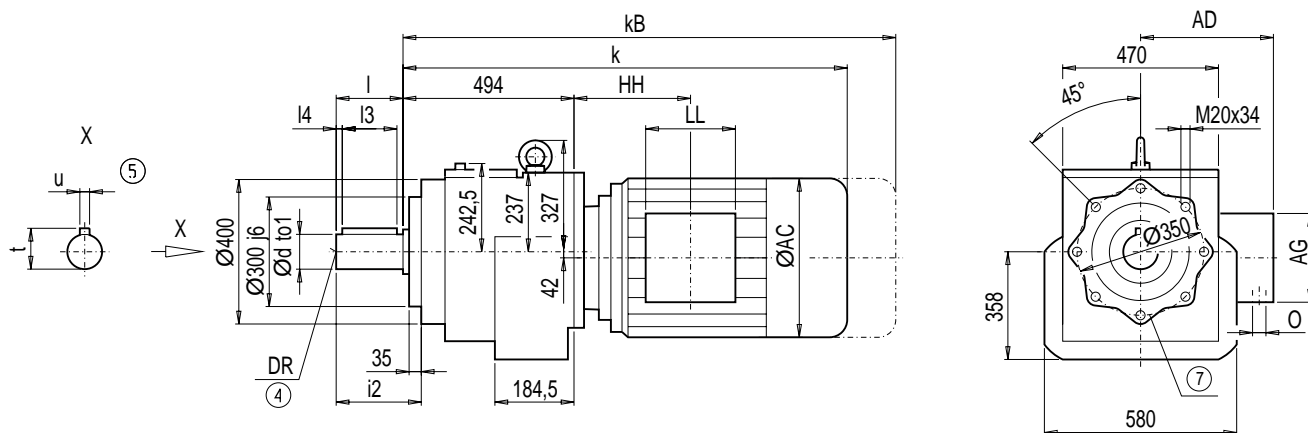
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox DZ/ZZ168 (3- / 2-stage), housing-flange-mounted design (C-type)

DZZ011



d	to1	l	l4	l3	t	u	i2	DR
100	m6	210	15	180	106	28	251	M24x50
110	m6	210	15	180	116	28	251	M24x50
120 <sup>*)</sup>	m6	210	15	180	127	32	251	M24x50

\*) Preferred series

Motor	ZZ168		DZ168		AC	AD	AG	LL	ZZ168	DZ168	O	Weight	
	k	kB	k	kB								ZZ168	DZ168
LA132S	878.0	980.0	919.0	1 021.0	259.0	195.0	140	140	122.5	163.5	2xM32x1.5	447	465
LA132M	878.0	980.0	919.0	1 021.0	259.0	195.0	140	140	122.5	163.5	2xM32x1.5	447	465
LA132ZM	924.0	1 026.0	965.0	1 067.0	259.0	195.0	140	140	122.5	163.5	2xM32x1.5	456	474
LA160M	978.0	1 096.5	1 019.0	1 137.5	313.5	227.0	165	165	145.5	186.5	2xM40x1.5	481	499
LA160L	978.0	1 096.5	1 019.0	1 137.5	313.5	227.0	165	165	145.5	186.5	2xM40x1.5	481	499
LG180M	1 037.5	1 159.5	1 078.5	1 200.5	348.0	322.5	260	192	162.5	203.5	2xM40x1.5	576	595
LG180ZM	1 088.5	1 210.5	1 129.5	1 251.5	348.0	322.5	260	192	162.5	203.5	2xM40x1.5	606	625
LG180L	1 037.5	1 159.5	1 078.5	1 200.5	348.0	322.5	260	192	162.5	203.5	2xM40x1.5	576	595
LG180ZL	1 088.5	1 210.5	1 129.5	1 251.5	348.0	322.5	260	192	162.5	203.5	2xM40x1.5	606	625
LG200L	1 093.5	1 219.5	1 134.5	1 260.5	385.0	301.0	260	192	192.5	233.5	2xM50x1.5	656	675
LG225S	1 164.5	1 403.5	1 205.5	1 444.5	442.0	325.0	260	192	228.5	269.5	2xM50x1.5	728	748
LG225M	1 164.5	1 403.5	1 205.5	1 444.5	442.0	325.0	260	192	228.5	269.5	2xM50x1.5	716	736
LG225ZM	1 224.5	1 463.5	1 265.5	1 504.5	442.0	325.0	260	192	228.5	269.5	2xM50x1.5	774	794
LG250M	1 258.0	1 483.0	–	–	495.0	392.0	300	236	264.0	–	2xM63x1.5	818	–
LG250ZM	1 328.0	1 553.5	–	–	495.0	392.0	300	236	264.0	–	2xM63x1.5	921	–
K4-LGI280S	1 537.5	1 764.5	–	–	555.0	432.0	300	236	252.5	–	2xM63x1.5	947	–
K4-LGI280M	1 537.5	1 764.5	–	–	555.0	432.0	300	236	252.5	–	2xM63x1.5	1 053	–
K4-LGI280ZM	1 647.5	1 874.5	–	–	555.0	432.0	300	236	252.5	–	2xM63x1.5	1 141	–

④ DIN 332

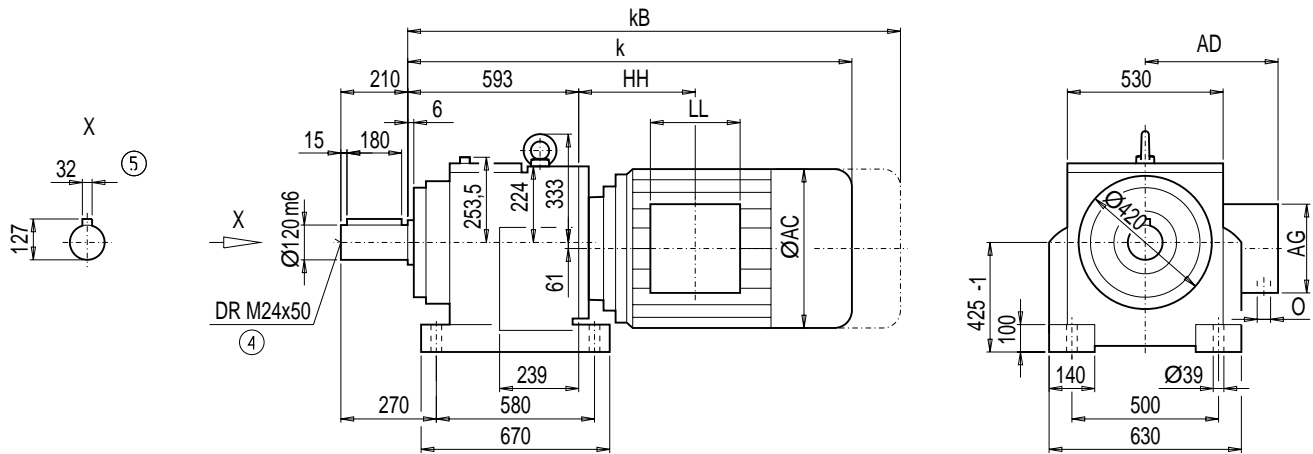
⑤ Feather key / keyway DIN 6885

⑦ For note, see page 2/192



### Gearbox D/Z188 (3- / 2-stage), foot-mounted design

DZ011



Motor	Z188		D188		AC	AD	AG	LL	Z188	D188	O	Weight	
	k	kB	k	kB								Z188	D188
LA132S	-	-	977.0	1 079.0	259.0	195.0	140	140	-	122.5	2xM32x1.5	-	652
LA132M	-	-	977.0	1 079.0	259.0	195.0	140	140	-	122.5	2xM32x1.5	-	652
LA132ZM	-	-	1 023.0	1 125.0	259.0	195.0	140	140	-	122.5	2xM32x1.5	-	661
LA160M	1 077.0	1 195.5	1 077.0	1 195.5	313.5	227.0	165	165	145.5	145.5	2xM40x1.5	654	684
LA160L	1 077.0	1 195.5	1 077.0	1 195.5	313.5	227.0	165	165	145.5	145.5	2xM40x1.5	654	684
LG180M	1 136.5	1 258.5	1 136.5	1 258.5	348.0	322.5	260	192	162.5	162.5	2xM40x1.5	750	779
LG180ZM	1 187.5	1 309.5	1 187.5	1 309.5	348.0	322.5	260	192	162.5	162.5	2xM40x1.5	780	809
LG180L	1 136.5	1 258.5	1 136.5	1 258.5	348.0	322.5	260	192	162.5	162.5	2xM40x1.5	750	779
LG180ZL	1 187.5	1 309.5	1 187.5	1 309.5	348.0	322.5	260	192	162.5	162.5	2xM40x1.5	780	809
LG200L	1 192.5	1 318.5	1 192.5	1 318.5	385.0	301.0	260	192	192.5	192.5	2xM50x1.5	830	859
LG225S	1 263.5	1 502.5	1 263.5	1 502.5	442.0	325.0	260	192	228.5	228.5	2xM50x1.5	903	932
LG225M	1 263.5	1 502.5	1 263.5	1 502.5	442.0	325.0	260	192	228.5	228.5	2xM50x1.5	891	920
LG225ZM	1 323.5	1 562.5	1 323.5	1 562.5	442.0	325.0	260	192	228.5	228.5	2xM50x1.5	949	978
LG250M	1 357.0	1 582.0	1 357.0	1 582.0	495.0	392.0	300	236	264.0	264.0	2xM63x1.5	993	1022
LG250ZM	1 427.0	1 652.5	1 427.0	1 652.5	495.0	392.0	300	236	264.0	264.0	2xM63x1.5	1 096	1 125
K4-LGI280S	1 636.5	1 863.5	1 636.5	1 863.5	555.0	432.0	300	236	252.5	252.5	2xM63x1.5	1 121	1 151
K4-LGI280M	1 636.5	1 863.5	1 636.5	1 863.5	555.0	432.0	300	236	252.5	252.5	2xM63x1.5	1 227	1 256
K4-LGI280ZM	1 746.5	1 973.5	1 746.5	1 973.5	555.0	432.0	300	236	252.5	252.5	2xM63x1.5	1 315	1 344
K2-LGI315S	1 824.5	2 089.5	-	-	610.0	500.0	379	307	285.5	-	2xM63x1.5	1 421	-
K2-LGI315M	1 824.5	2 089.5	-	-	610.0	500.0	379	307	285.5	-	2xM63x1.5	1 501	-
K2-LGI315L	1 984.5	-	-	-	610.0	500.0	379	307	285.5	-	2xM63x1.5	1 646	-
K2-LGI315ZL	2 124.5	-	-	-	610.0	500.0	379	307	285.5	-	2xM63x1.5	2 048	-

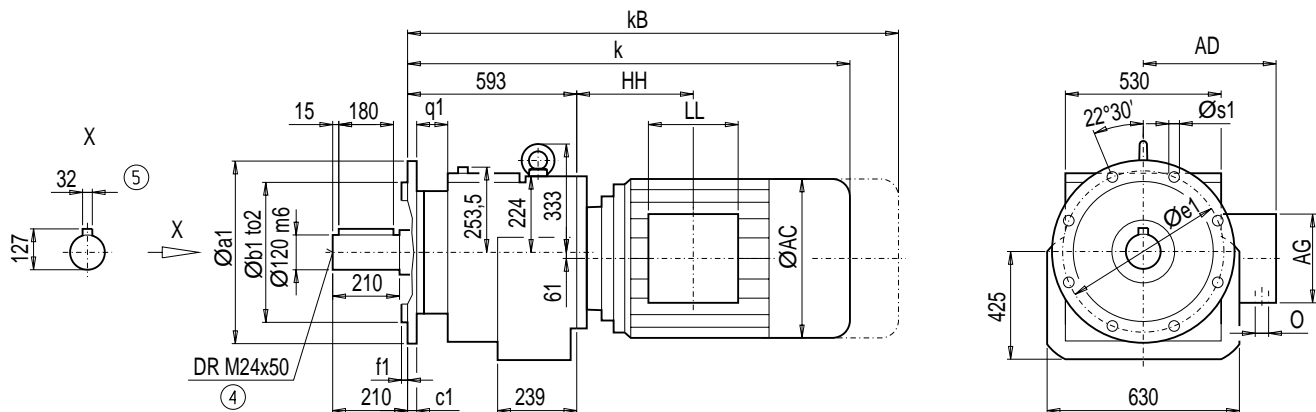
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Gearbox DF/ZF188 (3- / 2-stage), flange-mounted design (A-type)

##### DZF011



Flange	a1	b1	to2	c1	e1	f1	q1	s1
A550	550	450	h6	31	500	5	83	17.5
A660	660	550	h6	31	600	6	83	22.0

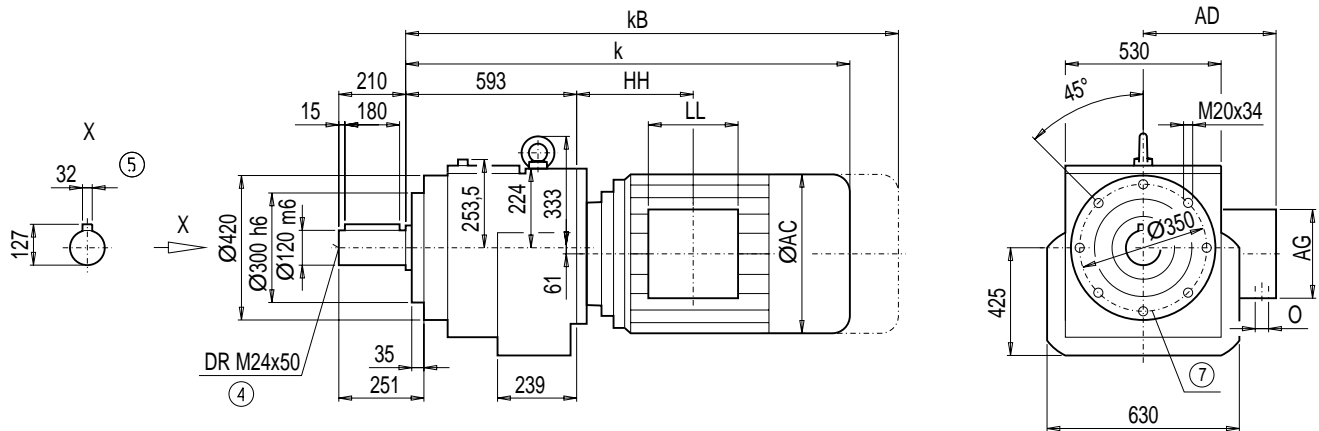
Motor	ZF188		DF188		AC	AD	AG	LL	ZF188	DF188	O	Weight	
	k	kB	k	kB					HH	HH		ZF188	DF188
LA132S	-	-	977.0	1 079.0	259.0	195.0	140	140	-	122.5	2xM32x1.5	-	600
LA132M	-	-	977.0	1 079.0	259.0	195.0	140	140	-	122.5	2xM32x1.5	-	600
LA132ZM	-	-	1 023.0	1 125.0	259.0	195.0	140	140	-	122.5	2xM32x1.5	-	609
LA160M	1 077.0	1 195.5	1 077.0	1 195.5	313.5	227.0	165	165	145.5	145.5	2xM40x1.5	602	632
LA160L	1 077.0	1 195.5	1 077.0	1 195.5	313.5	227.0	165	165	145.5	145.5	2xM40x1.5	602	632
LG180M	1 136.5	1 258.5	1 136.5	1 258.5	348.0	322.5	260	192	162.5	162.5	2xM40x1.5	698	727
LG180ZM	1 187.5	1 309.5	1 187.5	1 309.5	348.0	322.5	260	192	162.5	162.5	2xM40x1.5	728	757
LG180L	1 136.5	1 258.5	1 136.5	1 258.5	348.0	322.5	260	192	162.5	162.5	2xM40x1.5	698	727
LG180ZL	1 187.5	1 309.5	1 187.5	1 309.5	348.0	322.5	260	192	162.5	162.5	2xM40x1.5	728	757
LG200L	1 192.5	1 318.5	1 192.5	1 318.5	385.0	301.0	260	192	192.5	192.5	2xM50x1.5	778	807
LG225S	1 263.5	1 502.5	1 263.5	1 502.5	442.0	325.0	260	192	228.5	228.5	2xM50x1.5	851	880
LG225M	1 263.5	1 502.5	1 263.5	1 502.5	442.0	325.0	260	192	228.5	228.5	2xM50x1.5	839	868
LG225ZM	1 323.5	1 562.5	1 323.5	1 562.5	442.0	325.0	260	192	228.5	228.5	2xM50x1.5	897	926
LG250M	1 357.0	1 582.0	1 357.0	1 582.0	495.0	392.0	300	236	264.0	264.0	2xM63x1.5	941	970
LG250ZM	1 427.0	1 652.5	1 427.0	1 652.5	495.0	392.0	300	236	264.0	264.0	2xM63x1.5	1 044	1 073
K4-LGI280S	1 636.5	1 863.5	1 636.5	1 863.5	555.0	432.0	300	236	252.5	252.5	2xM63x1.5	1 069	1 099
K4-LGI280M	1 636.5	1 863.5	1 636.5	1 863.5	555.0	432.0	300	236	252.5	252.5	2xM63x1.5	1 175	1 204
K4-LGI280ZM	1 746.5	1 973.5	1 746.5	1 973.5	555.0	432.0	300	236	252.5	252.5	2xM63x1.5	1 263	1 292
K2-LGI315S	1 824.5	2 089.5	-	-	610.0	500.0	379	307	285.5	-	2xM63x1.5	1 369	-
K2-LGI315M	1 824.5	2 089.5	-	-	610.0	500.0	379	307	285.5	-	2xM63x1.5	1 449	-
K2-LGI315L	1 984.5	-	-	-	610.0	500.0	379	307	285.5	-	2xM63x1.5	1 594	-
K2-LGI315ZL	2 124.5	-	-	-	610.0	500.0	379	307	285.5	-	2xM63x1.5	1 998	-

④ DIN 332

⑤ Feather key / keyway DIN 6885

### Gearbox DZ/ZZ188 (3- / 2-stage), housing-flange-mounted design (C-type)

DZZ011



Motor	ZZ188		DZ188		AC	AD	AG	LL	ZZ188	DZ188	O	Weight	
	k	kB	k	kB								HH	HH
LA132S	-	-	977.0	1 079.0	259.0	195.0	140	140	-	122.5	2xM32x1.5	-	580
LA132M	-	-	977.0	1 079.0	259.0	195.0	140	140	-	122.5	2xM32x1.5	-	580
LA132ZM	-	-	1 023.0	1 125.0	259.0	195.0	140	140	-	122.5	2xM32x1.5	-	589
LA160M	1 077.0	1 195.5	1 077.0	1 195.5	313.5	227.0	165	165	145.5	145.5	2xM40x1.5	582	612
LA160L	1 077.0	1 195.5	1 077.0	1 195.5	313.5	227.0	165	165	145.5	145.5	2xM40x1.5	582	612
LG180M	1 136.5	1 258.5	1 136.5	1 258.5	348.0	322.5	260	192	162.5	162.5	2xM40x1.5	678	707
LG180ZM	1 187.5	1 309.5	1 187.5	1 309.5	348.0	322.5	260	192	162.5	162.5	2xM40x1.5	708	737
LG180L	1 136.5	1 258.5	1 136.5	1 258.5	348.0	322.5	260	192	162.5	162.5	2xM40x1.5	678	707
LG180ZL	1 187.5	1 309.5	1 187.5	1 309.5	348.0	322.5	260	192	162.5	162.5	2xM40x1.5	708	737
LG200L	1 192.5	1 318.5	1 192.5	1 318.5	385.0	301.0	260	192	192.5	192.5	2xM50x1.5	758	787
LG225S	1 263.5	1 502.5	1 263.5	1 502.5	442.0	325.0	260	192	228.5	228.5	2xM50x1.5	831	860
LG225M	1 263.5	1 502.5	1 263.5	1 502.5	442.0	325.0	260	192	228.5	228.5	2xM50x1.5	819	848
LG225ZM	1 323.5	1 562.5	1 323.5	1 562.5	442.0	325.0	260	192	228.5	228.5	2xM50x1.5	877	906
LG250M	1 357.0	1 582.0	1 357.0	1 582.0	495.0	392.0	300	236	264.0	264.0	2xM63x1.5	921	950
LG250ZM	1 427.0	1 652.5	1 427.0	1 652.5	495.0	392.0	300	236	264.0	264.0	2xM63x1.5	1 024	1 053
K4-LGI280S	1 636.5	1 863.5	1 636.5	1 863.5	555.0	432.0	300	236	252.5	252.5	2xM63x1.5	1 049	1 079
K4-LGI280M	1 636.5	1 863.5	1 636.5	1 863.5	555.0	432.0	300	236	252.5	252.5	2xM63x1.5	1 155	1 184
K4-LGI280ZM	1 746.5	1 973.5	1 746.5	1 973.5	555.0	432.0	300	236	252.5	252.5	2xM63x1.5	1 243	1 272
K2-LGI315S	1 824.5	2 089.5	-	-	610.0	500.0	379	307	285.5	-	2xM63x1.5	1 349	-
K2-LGI315M	1 824.5	2 089.5	-	-	610.0	500.0	379	307	285.5	-	2xM63x1.5	1 501	-
K2-LGI315L	1 984.5	-	-	-	610.0	500.0	379	307	285.5	-	2xM63x1.5	1 646	-
K2-LGI315ZL	2 124.5	-	-	-	610.0	500.0	379	307	285.5	-	2xM63x1.5	2 048	-

④ DIN 332

⑤ Feather key / keyway DIN 6885

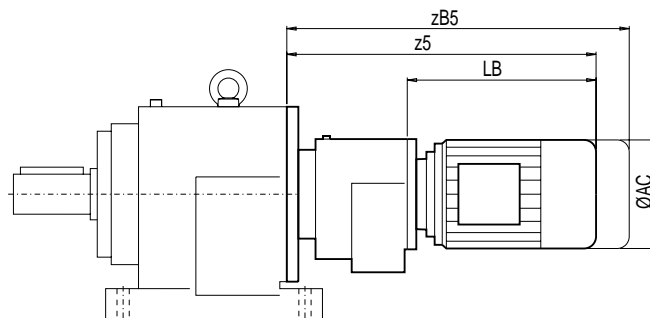
⑦ For note, see page 2/192

# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Helical tandem geared motors

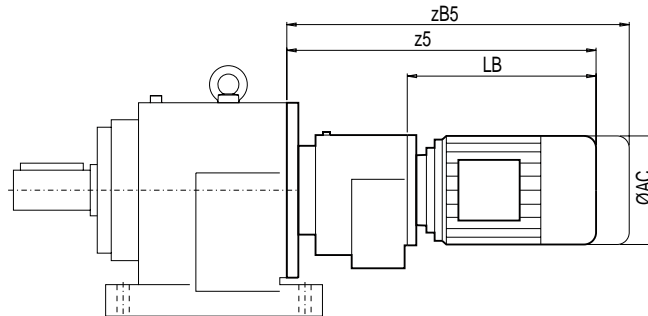


Gearbox	Motor	AC	z5	zB5	LB
Z.38-Z28	LA71	139	363.0	418.0	202.5
	LA71Z	139	382.0	437.0	221.5
	LA90S	174	460.0	531.0	299.5
	LA90L	174	460.0	531.0	299.5
	LA90ZL	174	505.0	576.0	344.5
	LA100L	195	542.0	623.0	381.5
Z.38-D28	LA71	139	363.0	418.0	202.5
	LA71Z	139	382.0	437.0	221.5
	LA90S	174	460.0	531.0	299.5
	LA90L	174	460.0	531.0	299.5
	LA90ZL	174	505.0	576.0	344.5
D.48-Z28	LA71	139	374.5	429.5	202.5
	LA71Z	139	393.5	448.5	221.5
	LA90S	174	471.5	542.5	299.5
	LA90L	174	471.5	542.5	299.5
	LA90ZL	174	516.5	587.5	344.5
	LA100L	195	553.5	634.5	381.5
D.48-D28	LA71	139	374.5	429.5	202.5
	LA71Z	139	393.5	448.5	221.5
	LA90S	174	471.5	542.5	299.5
	LA90L	174	471.5	542.5	299.5
	LA90ZL	174	516.5	587.5	344.5
D.68-Z28	LA71	139	370.0	425.0	202.5
	LA71Z	139	389.0	444.0	221.5
	LA90S	174	467.0	538.0	299.5
	LA90L	174	467.0	538.0	299.5
	LA90ZL	174	512.0	583.0	344.5
	LA100L	195	549.0	630.0	381.5
D.68-D28	LA71	139	370.0	425.0	202.5
	LA71Z	139	389.0	444.0	221.5
	LA90S	174	467.0	538.0	299.5
	LA90L	174.0	467.0	538.0	299.5
	LA90ZL	174.0	512.0	583.0	344.5
D.88-Z28	LA71	139.0	361.5	416.5	202.5
	LA71Z	139.0	380.5	435.5	221.5
	LA90S	174.0	458.5	529.5	299.5
	LA90L	174.0	458.5	529.5	299.5
	LA90ZL	174.0	503.5	574.5	344.5
	LA100L	195.0	540.5	621.5	381.5

Gearbox	Motor	AC	z5	zB5	LB	
D.88-D28	LA71	139.0	361.5	416.5	202.5	
	LA71Z	139.0	380.5	435.5	221.5	
	LA90S	174.0	458.5	529.5	299.5	
	LA90L	174.0	458.5	529.5	299.5	
	LA90ZL	174.0	503.5	574.5	344.5	
D.108-Z38	LA71 <sup>1)</sup>	139.0	484.5	539.5	258.5	
	LA71Z <sup>1)</sup>	139.0	503.5	558.5	277.5	
	LA80 <sup>1)</sup>	156.5	521.5	585.0	295.5	
	LA90S <sup>1)</sup>	174.0	552.5	623.5	326.5	
	LA90L <sup>1)</sup>	174.0	552.5	623.5	326.5	
	LA100L <sup>1)</sup>	195.0	598.5	679.5	372.5	
	LA112M <sup>1)</sup>	219.0	628.0	709.0	402.0	
	LA71 <sup>2)</sup>	139.0	496.0	551.0	258.5	
	LA71Z <sup>2)</sup>	139.0	515.0	570.0	277.5	
	LA80 <sup>2)</sup>	156.5	533.0	596.5	295.5	
D.108-D38	LA71	139.0	499.5	554.5	273.5	
	LA71Z	139.0	518.5	573.5	292.5	
	LA80	156.5	536.5	600.0	310.5	
	LA90S	174.0	567.5	638.5	341.5	
	LA90L	174.0	567.5	638.5	341.5	
	D.128-Z38	LA71	139.0	488.0	543.0	258.5
		LA71Z	139.0	507.0	562.0	277.5
		LA80	156.5	525.0	588.5	295.5
		LA90S	174.0	556.0	627.0	326.5
		LA90L	174.0	556.0	627.0	326.5
D.128-D38	LA71	139.0	503.0	558.0	273.5	
	LA71Z	139.0	522.0	577.0	292.5	
	LA80	156.5	540.0	603.5	310.5	
	LA90S	174.0	571.0	642.0	341.5	
D.128-Z48	LA71	139.0	555.5	610.5	253.0	
	LA71Z	139.0	574.5	629.5	272.0	
	LA80	156.5	592.5	656.0	290.0	
	LA90L	174.0	571.0	642.0	341.5	

<sup>1)</sup>  $i_{tot} \geq 3797$ 
<sup>2)</sup>  $i_{tot} < 3797$

## Helical tandem geared motors (continued)



Gearbox	Motor	AC	z5	zB5	LB
D.128-Z48	LA90S	174.0	623.5	694.5	321.0
	LA90L	174.0	623.5	694.5	321.0
	LA100L	195.0	669.5	750.5	367.0
	LA112M	219.0	698.5	779.5	396.0
D.128-Z48	LA132S	259.0	760.5	862.5	458.0
	LA132M	259.0	760.5	862.5	458.0
	LA132ZM	259.0	806.5	908.5	504.0
D.148-Z38	LA71	139.0	485.0	540.0	258.5
	LA71Z	139.0	504.0	559.0	277.5
	LA80	156.5	522.0	585.5	295.5
	LA90S	174.0	553.0	624.0	326.5
	LA90L	174.0	553.0	624.0	326.5
	LA100L	195.0	599.0	680.0	372.5
	LA112M	219.0	628.5	709.5	402.0
D.148-D38	LA71	139.0	500.0	555.0	273.5
	LA71Z	139.0	519.0	574.0	292.5
	LA80	156.5	537.0	600.5	310.5
	LA90S	174.0	568.0	639.0	341.5
	LA90L	174.0	568.0	639.0	341.5
D.148-Z48	LA71	139.0	551.5	606.5	253.0
	LA71Z	139.0	570.5	625.5	272.0
	LA80	156.5	588.5	652.0	290.0
	LA90S	174.0	619.5	690.5	321.0
	LA90L	174.0	619.5	690.5	321.0
	LA100L	195.0	665.5	746.5	367.0
	LA112M	219.0	694.5	775.5	396.0
	LA132S	259.0	756.5	858.5	458.0
	LA132M	259.0	756.5	858.5	458.0
	LA132ZM	259.0	802.5	904.5	504.0
	D.168-Z48	LA71	139.0	540.0	595.0
LA71Z		139.0	559.0	614.0	272.0
LA80		156.5	577.0	640.5	290.0
D.168-Z48	LA90S	174.0	608.0	679.0	321.0
	LA90L	174.0	608.0	679.0	321.0
	LA100L	195.0	654.0	735.0	367.0
	LA112M	219.0	683.0	764.0	396.0
	LA132S	259.0	745.0	847.0	458.0
	LA132M	259.0	745.0	847.0	458.0
D.168-Z48	LA132ZM	259.0	791.0	893.0	504.0

Gearbox	Motor	AC	z5	zB5	LB
D.168-D48	LA71	139.0	557.0	612.0	270.0
	LA71Z	139.0	576.0	631.0	289.0
	LA80	156.5	594.0	657.5	307.0
	LA90S	174.0	625.0	696.0	338.0
	LA90L	174.0	625.0	696.0	338.0
D.168-Z68	LA100L	195.0	671.0	752.0	384.0
	LA71	139.0	626.0	681.0	247.0
	LA71Z	139.0	645.0	700.0	266.0
D.168-Z68	LA80	156.5	663.0	726.5	284.0
	LA90S	174.0	694.0	765.0	315.0
	LA90L	174.0	694.0	765.0	315.0
	LA100L	195.0	740.0	821.0	361.0
	LA112M	219.0	767.0	848.0	388.0
	LA132S	259.0	827.0	929.0	448.0
	LA132M	259.0	827.0	929.0	448.0
	LA132ZM	259.0	873.0	975.0	494.0
	LA160M	313.5	929.5	1 048.0	550.5
	LA160L	313.5	929.5	1 048.0	550.5
D.188-Z48	LA71	139.0	499.0	554.0	253.0
	LA71Z	139.0	518.0	573.0	272.0
	LA80	156.5	536.0	599.5	290.0
	LA90S	174.0	567.0	638.0	321.0
	LA90L	174.0	567.0	638.0	321.0
	LA100L	195.0	613.0	694.0	367.0
	LA112M	219.0	642.0	723.0	396.0
	LA132S	259.0	704.0	806.0	458.0
	LA132M	259.0	704.0	806.0	458.0
	LA132ZM	259.0	750.0	852.0	504.0
	D.188-D48	LA71	139.0	516.0	571.0
LA71Z		139.0	535.0	590.0	289.0
LA80		156.5	553.0	616.5	307.0
LA90S		174.0	584.0	655.0	338.0
LA90L		174.0	584.0	655.0	338.0
D.188-Z48	LA100L	195.0	630.0	711.0	384.0
	LA71	139.0	585.0	640.0	247.0
D.188-Z68	LA71Z	139.0	604.0	659.0	266.0
	LA80	156.5	622.0	685.5	284.0
	LA90S	174.0	653.0	724.0	315.0
	LA90L	174.0	653.0	724.0	315.0

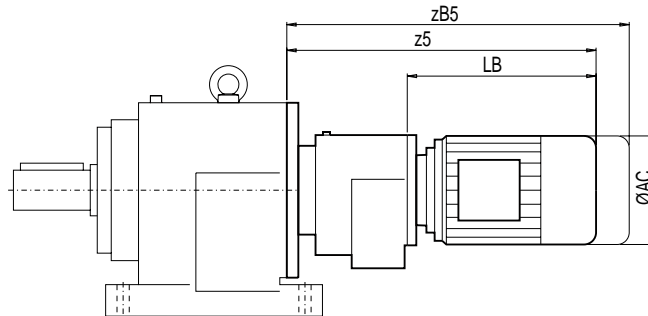
# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Helical tandem geared motors (continued)

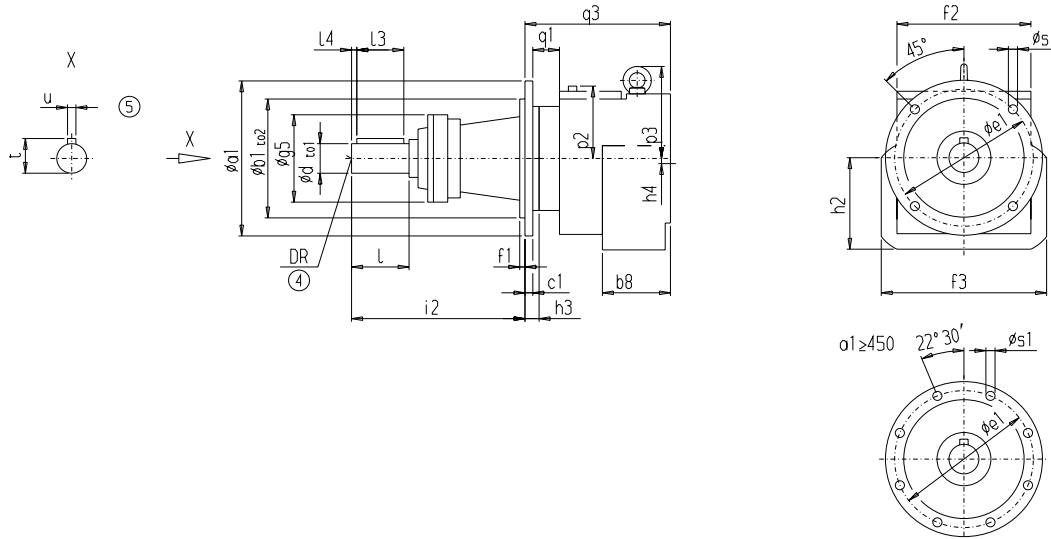
2



Gearbox	Motor	AC	z5	zB5	LB
D.188-Z68	LA100L	195.0	699.0	780.0	361.0
	LA112M	219.0	726.0	807.0	388.0
	LA132S	259.0	786.0	888.0	448.0
	LA132M	259.0	786.0	888.0	448.0
	LA132ZM	259.0	832.0	934.0	494.0
	LA160M	313.5	888.5	1 007.0	550.5
	LA160L	313.5	888.5	1 007.0	550.5

### Gearbox DR/ZR68-168 (3- / 2-stage) with agitator flange

DZZ011



Gearbox	p2	p3	h2	b8	q3	f3	f2	h4	Additional weight <sup>1)</sup>
DR/ZR68	109.0	149	144.0	91.5	248	263	206	0	24
DR/ZR88	134.0	181	182.0	129.0	306	332	260	0	46
DR/ZR108	177.0	228	219.5	126.5	355	410	326	0	82
DR/ZR128	194.0	263	250.0	146.0	422	462	364	0	85
DR/ZR148	190.5	270	317.0	160.0	459	510	416	37	94
DR/ZR168	248.0	325	358.0	188.5	539	580	470	42	248

Gearbox	a1	b1	to2	c1	e1	f1	q1	s1	g5	h3	d	to1	l	l4	l3	t	u	DR	i2
DR/ZR68	350	250	h6	18	300	7	79	17.5	165	57	50	k6	100	10.0	80	53.5	14	M16x36	300
DR/ZR88	350	250	h6	18	300	7	92	17.5	185	62	60	m6	120	10.0	100	64.0	18	M20x42	360
DR/ZR108	450	350	h6	22	400	7	78	17.5	210	72	70	m6	140	7.5	125	74.5	20	M20x42	420
DR/ZR128	550	450	h6	25	500	8	101	17.5	252	81	80	m6	170	20.0	125	85.0	22	M20x42	500
DR/ZR148	550	450	h6	25	500	8	113	17.5	252	81	100	m6	210	15.0	180	106	28	M24x50	600
DR/ZR168	660	550	h6	28	600	8	113	22.0	270	86	110	m6	210	15.0	180	116	28	M24x50	660

<sup>1)</sup> To calculate the overall weight of the drive, add the additional weight to the weight of the DZ/ZZ gearbox, flange-mounted design.  
For example: weight of DZ88-M112M (97 kg) + additional weight DR88 (46 kg) = total weight of DR88-M112M (143 kg).

# MOTOX Geared Motors

## Helical geared motors

### Dimensions

#### Pin holes

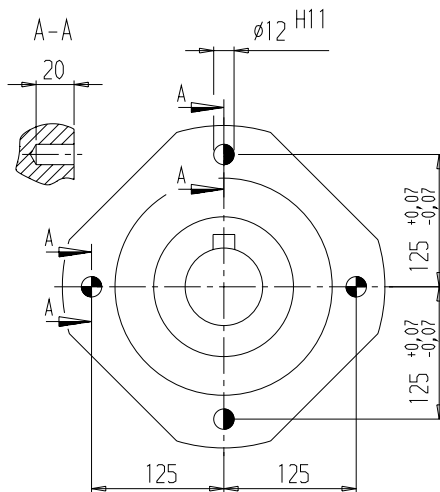
The customer's interface can be pinned to the housing flange (C-type) for sizes EZ128 to EZ148 and DZ/ZZ108 to DZ/ZZ188.

The output flanges have been designed to ensure the reliable transmission of the permissible torques and radial forces by the bolt connections.

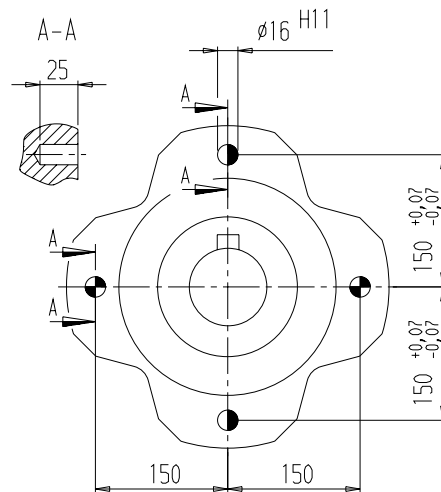
If an additional fuse, e. g. for high shock loads, is required, the existing pin holes can be used.

The gearbox and the machine can be drilled and pinned together. To do so, the provided dimensions must be observed.

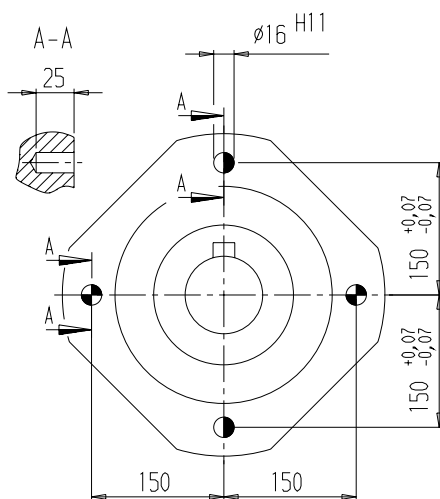
**EZ128, DZ/ZZ108**



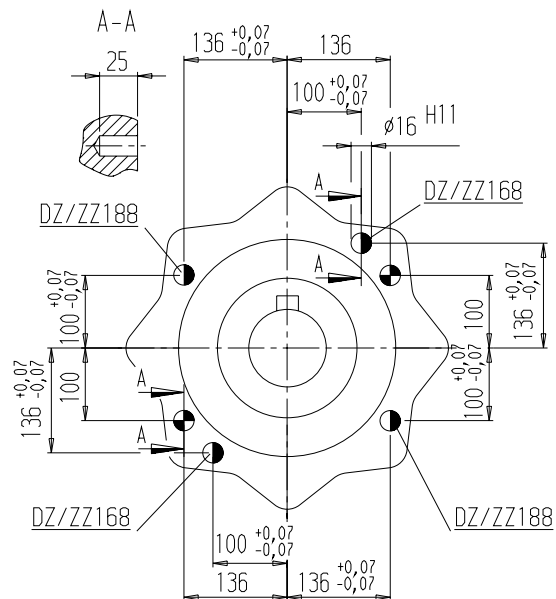
**EZ148, DZ/ZZ128**



**DZ/ZZ148**



**DZ/ZZ168, DZ/ZZ188**



- Spring pins, heavy-duty design, to DIN 1481: Use pin holes provided in the housing flange.
- Grooved cylindrical pins with chamfer to DIN EN 28740 / ISO 8740: Drill connecting component together with housing.