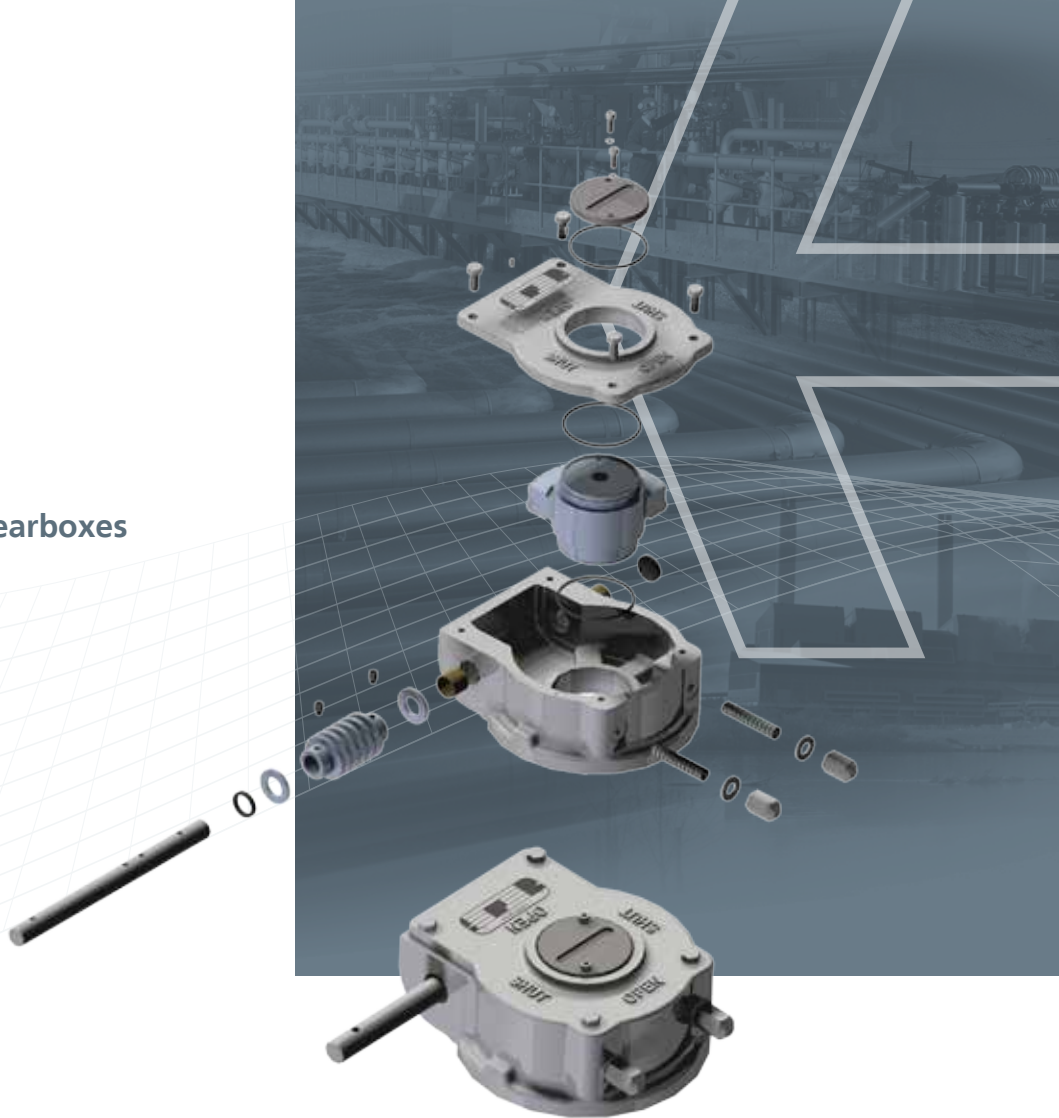


# rotork®

## Gears

### AB-SS

Stainless Steel Housing Gearboxes



### AB-SS Quarter-turn Gear Series

The Rotork Gears Series 'AB-SS' quarter-turn gear operators are designed to withstand the harsh and highly corrosive challenges such as marine and chemical environments. All models in this series feature 316 grade stainless steel housing with a special dynamic sealing arrangement on the critical rotating position indicator. These gear operators are well suited for most industrial applications in chemical, cryogenic, power, O&G and waterworks.

#### Application

Rotork Gears series 'AB-SS' operators are quarter-turn devices intended for the operation of ball, plug and butterfly valves as well as power and process dampers. Stainless steel 316 handwheels are available in a variety of sizes for smooth and easy operation.

#### Features

- Stainless steel SS316 housing
- Stainless steel SS316 input shaft
- Stainless steel SS316 stop bolt covers
- Stainless steel SS316 fasteners
- 14 models up to 26,000 Nm (230,119 lbf.in.) output
- Rugged construction
- Axial needle bearings
- Stroke: 0 - 90° ( $\pm 5^\circ$  adjustable).

#### Options

- Padlockable flange
- Limit switches
- High temperature to +200 °C
- Low temperature to -60 °C
- Chainwheels
- Flexible extensions
- Emergency fire duty e.g. to ISO 10497
- Bronze quadrant.

#### Environmental Specification

- Enclosure: Sealed to IP68 for submerged applications up to depth 1 metre for 72 hours according to EN60529:1991/14.2.8
- Temperature: -40 to +120 °C (-40 to +250 °F)

Redefining Flow Control

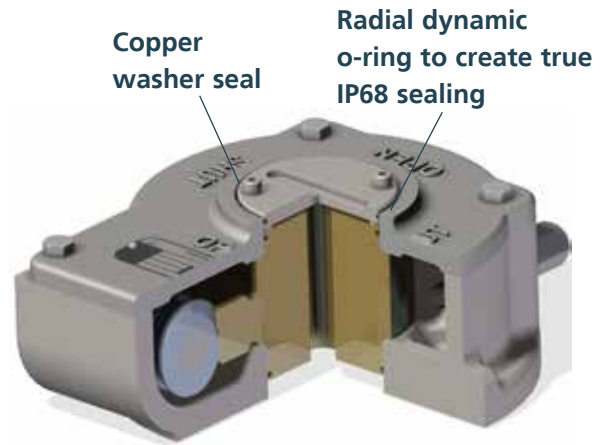
# rotork® Gears

Type	Ratio	Torque Nm (lbf. inch)		M.A. ±15%	Max. Stem Height (mm)	Weight kg (lb)
		Output	Input			
AB210	37 : 1	330 (2921)	28,5 (252)	11.6	54	4 (8)
AB215	37 : 1	500 (4425)	43 (381)	11.6	54	4 (8)
AB550	34 : 1	1000 (8851)	83 (738)	12	79	10.5 (22.5)
AB880	38 : 1	2000 (17701)	152 (1341)	13.2	82	16 (35)
AB1250	55 : 1	3250 (28765)	171 (1514)	19	91	23 (51)
AB1950	52 : 1	5500 (48679)	289 (2562)	19	111	33.5 (74)
AB1950 HR	84 : 1	4500 (39828)	159 (1407)	24	111	33.5 (74)
AB1950/SP4	211 : 1	6800 (60185)	103 (912)	66	111	47.5 (105)
AB6800	78 : 1	8400 (74346)	305 (2704)	27.5	121	60.5 (134)
AB6800LT/SP4	317 : 1	9000 (79657)	96 (851)	93.6	121	76 (168)
AB6800/SP4	317 : 1	12500 (110634)	134 (1182)	93.6	121	76 (168)
AB6800/SP6	468 : 1	17000 (150620)	108 (958)	157	121	87 (193)
A200/SP6	432 : 1	24000 (212400)	198 (1752)	121	165	130 (288)
A200/SP9	592 : 1	26000 (230119)	165.6 (1466)	157.6	165	144 (319)

More ratios are available. The static safety factor is 1.5.

Type	Maximum Dimensions (insert)						
	ØM	ØN	O	P	ØQ	R	S
AB210	32.15 (1.27)	20 (0.79)	25.6 (1.01)	6 (0.24)	22.2 (0.87)	17 (0.67)	17 (0.67)
AB215	32.15 (1.27)	20 (0.79)	25.6 (1.01)	6 (0.24)	22.2 (0.87)	17 (0.67)	17 (0.67)
AB550	45.3 (1.78)	30 (1.18)	36.6 (1.44)	8 (0.31)	36.2 (1.43)	27 (1.06)	27 (1.06)
AB880	60 (2.36)	44 (1.73)	50.6 (1.99)	12 (0.47)	48.2 (1.90)	36 (1.42)	36 (1.42)
AB1250	60 (2.36)	44 (1.73)	50.6 (1.99)	12 (0.47)	48.2 (1.90)	36 (1.42)	36 (1.42)
AB1950	TBC	TBC	TBC	TBC	TBC	TBC	TBC
AB1950 HR	TBC	TBC	TBC	TBC	TBC	TBC	TBC
AB1950/SP4	TBC	TBC	TBC	TBC	TBC	TBC	TBC

Inserts are not retained in the gearbox, please specify if required.



## Material specification for Rotork AB-SS Quarter-turn Gear Series

No.	Description	Material	Notes
1	Set-screw	Carbon Steel	DIN915 / grade 12.9
2	Worm	Carbon Steel	C45 / AISI1045
3	Gasket	Liquid seal	-
4	Needle-Bearing	AXK-AS	Hardened Steel
5	Bushing	P10, P14	PAP
6	Oil-seal	Nitrile	-
7	Shaft	Stainless Steel	AISI 316
8	Grease	Renolit CLX2	-
9	Position Indicator	Stainless Steel	AISI 316
10	Coverplate	Stainless Steel	AISI 316
11	Quadrant	Ductile Iron	GGG40 / ASTM D60-40-18
11A	Quadrant AB215	Ductile Iron	GGG50 / ASTM D70-50-05
12	Body	Stainless Steel	AISI 316
13	Gear	Carbon Steel	C45 / AISI1045
14	Fasteners	Stainless Steel	AISI 316
15	Stop Bolt Covers	Stainless Steel	AISI 316

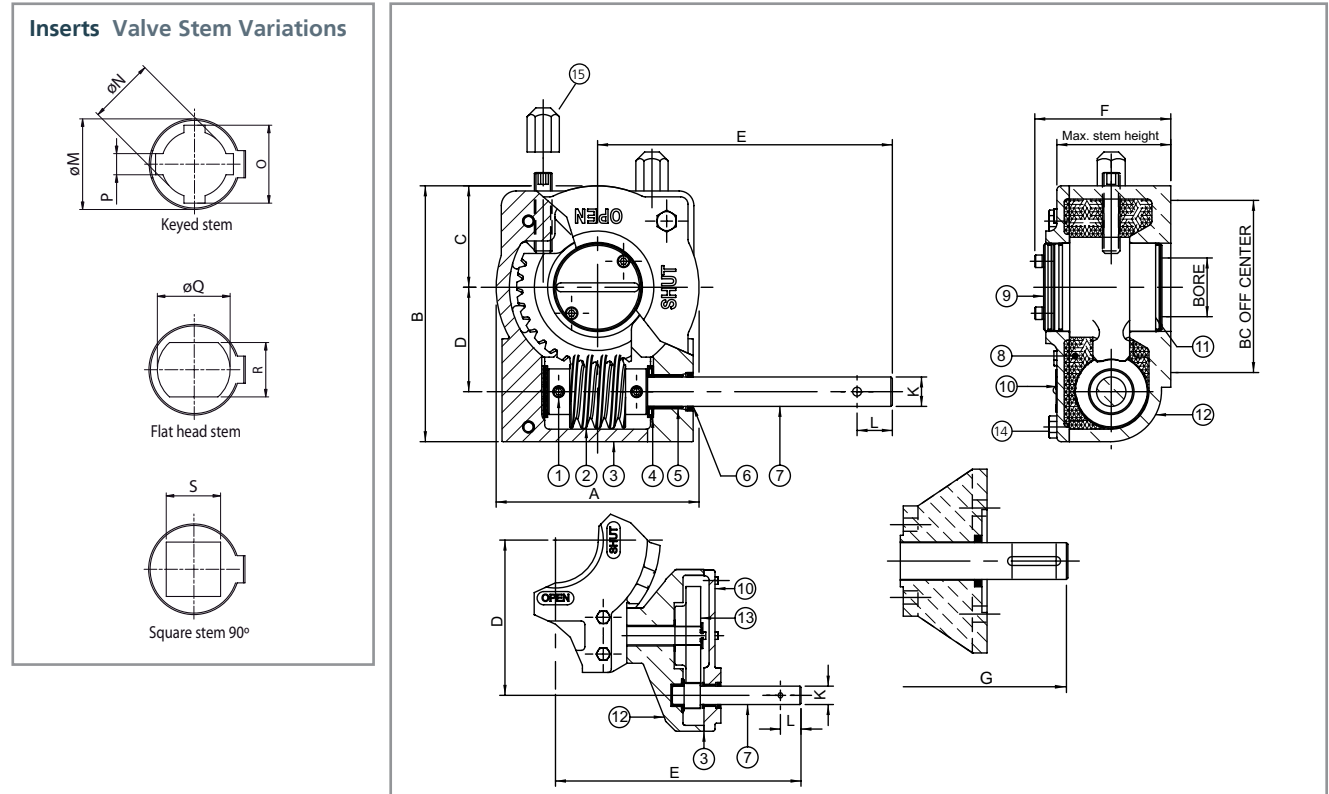
Note: Because of the company's policy of continuous improvement, Rotork Gears reserves the right to change specification details without prior notice.

## Redefining Flow Control

# AB-SS

## Stainless Steel Housing Gearboxes

### Gearbox AB Series



Type	A	B	C	D	E	F	G	$\phi K$	L	Valve Connection BC acc. ISO 5211	Bore Max.	Max. Square Bore AF
AB210	102 (4,02)	127,5 (5,02)	48 (1,89)	52 (2,05)	159 (6,26)	68,5 (2,70)	146 (5,75)	15 (0,59)	14 (0,55)	F05-F07-F10	30 (1,18)	24 (0,94)
AB215	102 (4,02)	127,5 (5,02)	48 (1,89)	52 (2,05)	159 (6,26)	68,5 (2,70)	146 (5,75)	15 (0,59)	14 (0,55)	F05-F07-F10	30 (1,18)	24 (0,94)
AB550	138 (5,43)	174 (6,85)	69 (2,72)	71 (2,80)	201 (7,91)	92,5 (3,64)	170 (6,69)	20 (0,79)	24 (0,95)	F07-F10-F12-F14	45 (1,77)	38 (1,50)
AB880	200 (7,87)	226 (8,90)	100 (3,94)	86 (3,39)	189 (7,44)	97,5 (3,83)	182 (7,17)	20 (0,79)	24 (0,95)	F10-F12-F14-F16	60 (2,36)	46 (1,81)
AB1250	220 (8,66)	258 (10,16)	110 (4,33)	104,5 (4,11)	230 (9,06)	106,5 (3,83)	200 (7,87)	20 (0,79)	24 (0,95)	F10-F12-F14-F16	65 (2,56)	50 (1,97)
AB1950	285 (11,22)	322,5 (12,70)	142,5 (5,62)	130 (5,12)	275 (10,83)	129 (5,08)	204 (8,03)	25 (0,98)	28 (1,10)	F12-F14-F16-F25	80 (3,15)	60 (2,36)
AB1950HR	285 (11,22)	322,5 (12,70)	142,5 (5,62)	130 (5,12)	275 (10,83)	129 (5,08)	204 (8,03)	25 (0,98)	28 (1,10)	F12-F14-F16-F25	80 (3,15)	60 (2,36)
AB1950/SP4	285 (11,22)	322,5 (12,70)	142,5 (5,62)	211 (8,31)	335 (13,19)	129 (5,08)	334 (13,15)	25 (0,98)	28 (1,10)	F12-F14-F16-F25	80 (3,15)	60 (2,36)
AB6800	370 (14,57)	407 (16)	170 (6,69)	182 (7,17)	300 (11,81)	143,5 (5,65)	257 (10,12)	25 (0,98)	28 (1,10)	F16-F25-F30	100 (3,94)	75 (2,95)
AB6800LT/SP4	370 (14,57)	407 (16)	170 (6,69)	263 (10,35)	388 (15,28)	143,5 (5,65)	388 (15,28)	25 (0,98)	28 (1,10)	F16-F25-F30	100 (3,94)	75 (2,95)
AB6800/SP4	370 (14,57)	407 (16)	170 (6,69)	263 (10,35)	388 (15,28)	143,5 (5,65)	388 (15,28)	25 (0,98)	28 (1,10)	F16-F25-F30	100 (3,94)	75 (2,95)
AB6800/SP6	370 (14,57)	407 (16)	170 (6,69)	278 (10,9)	434 (17,09)	143,5 (5,65)	429 (16,9)	25 (0,98)	24 (0,95)	F16-F25-F30	100 (3,94)	75 (2,95)
A200/SP6	440 (17,32)	648,5 (25,53)	207,5 (8,17)	305 (12)	459 (18,07)	190 (7,48)	464 (18,27)	25 (1,18)	24 (0,95)	F25-F30-F35	160 (6,29)	115 (4,52)
A200/SP9	440 (17,32)	648,5 (25,53)	207,5 (8,17)	384 (15,12)	459 (18,07)	190 (7,48)	459 (18,09)	30 (1,18)	28 (1,10)	F25-F30-F35	160 (6,29)	115 (4,52)

FA Valve connection available. All dimensions in millimetres.

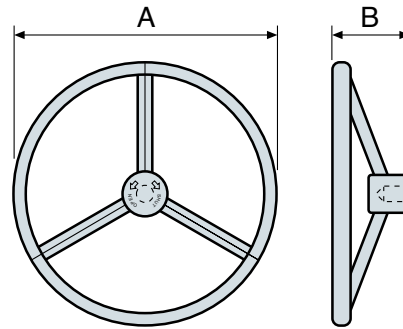
### Handwheel Selection Chart

#### Input Torque

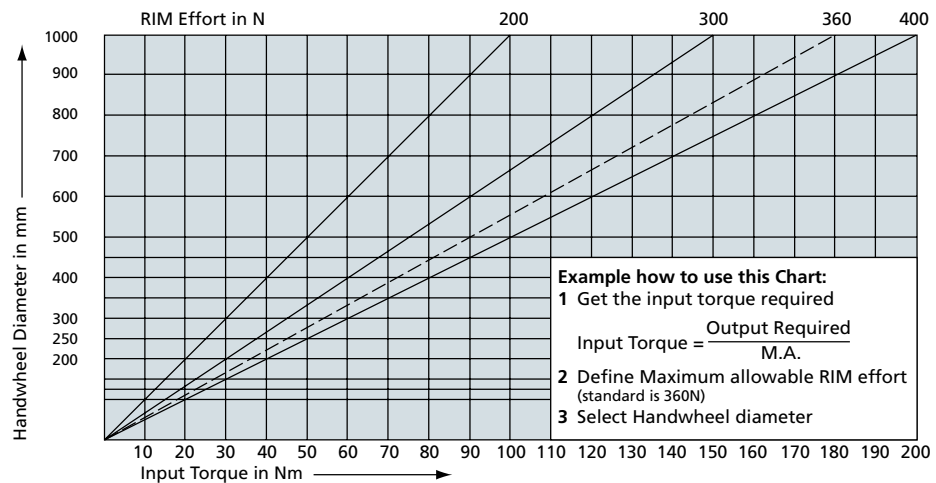
Type	M.A. ± 15%
AB210	11.6
AB215	11.6
AB550	12
AB880	13.2
AB1250	19
AB1950	19
AB1950 HR	24
AB1950/SP4	66
AB6800	27.5
AB6800 LT/SP4	93.6
AB6800/SP4	93.6
AB6800/SP6	157
A200/SP6	121
A200/SP9	157.6

#### Dimensions

Type	A	B
SS200	Ø200 (8")	80 (3,15")
SS250	Ø250 (10")	110 (4,33")
SS300	Ø300 (12")	115 (4,53")
SS400	Ø400 (16")	130 (5,12")
SS500	Ø500 (20")	150 (5,91")
SS600	Ø600 (24")	150 (5,91")
SS700	Ø700 (28")	150 (5,91")
SS800	Ø800 (32")	150 (5,91")
SS900	Ø900 (36")	160 (6,30")
SS1000	Ø1000 (40")	160 (6,30")



SS series handwheel



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