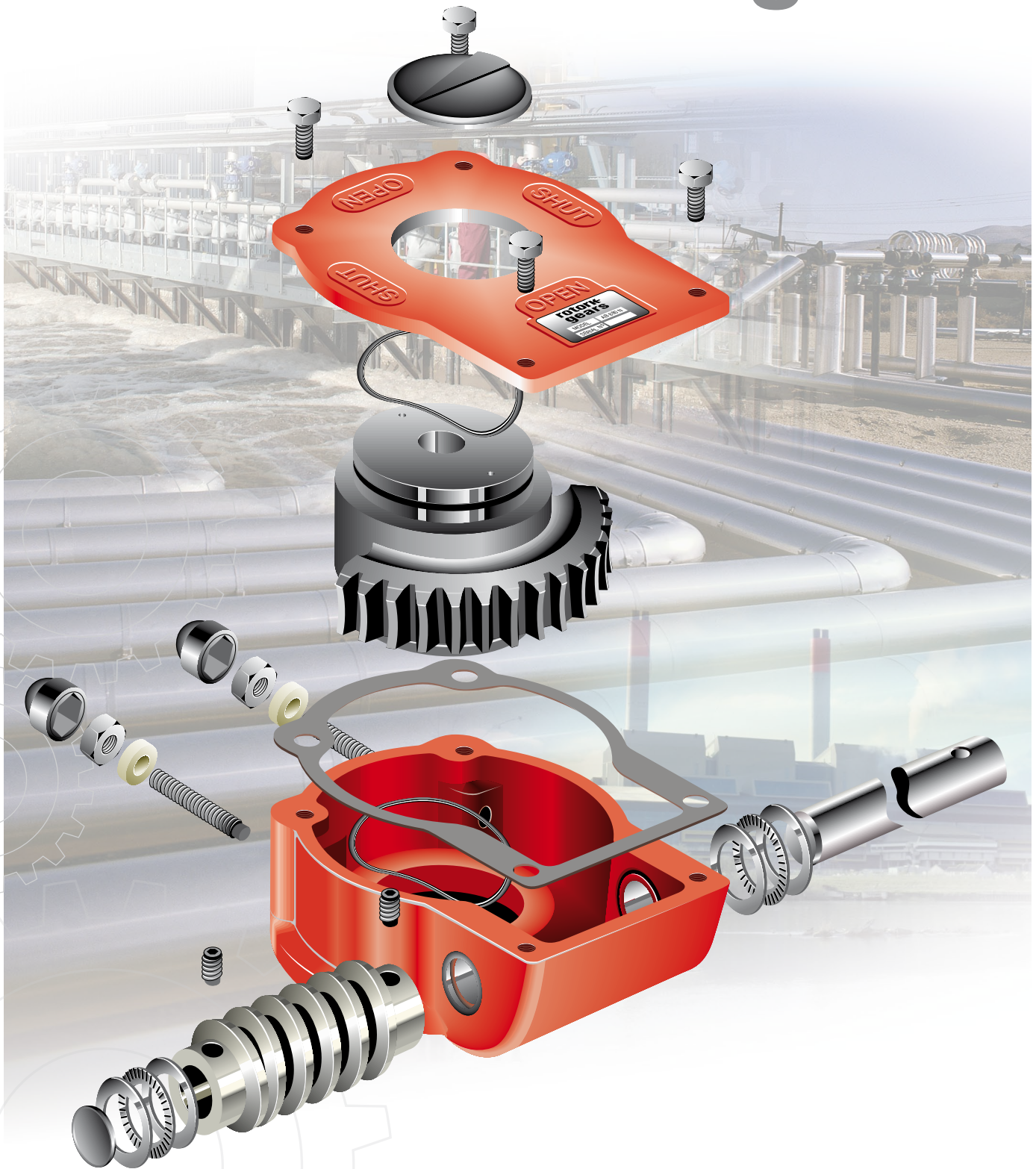


AB Quarter-turn Gearbox Series

rotork[®]
gears



Cast Iron Housing Gearboxes - AB Quarter-turn Gear Series

AB Gearbox Series



AB Quarter-turn Gearbox Series

Description

The Rotork Gears Series 'AB' quarter-turn gear operators are rugged, industrial grade products manufactured with cast iron housing components.

All models in this series feature a polyurethane coating and high performance axial bearings. These gear operators are well suited for applications in chemical, power, waterworks, HVAC and most general industrial applications.

Application

Rotork Gears series 'AB' operators are quarter-turn devices intended for the operation of ball, plug and butterfly valves as well as power and process dampers.

The handwheels are available in a variety of sizes for smooth and easy operation.



Features

- Cast iron housing (ductile iron optional)
- Steel input shaft (Stainless Steel optional)
- 15 models up to 32.000 Nm (283.224 lbf.in.) output
- Rugged construction
- Axial needle bearings
- Polyurethane coating
- Stroke: 0 - 90° (± 5° adjustable)

Options

- Padlockable Flange
- Limit switches
- High Temperature to +160°C
- Low Temperature to -55°C
- Chainwheels

Environmental Specification

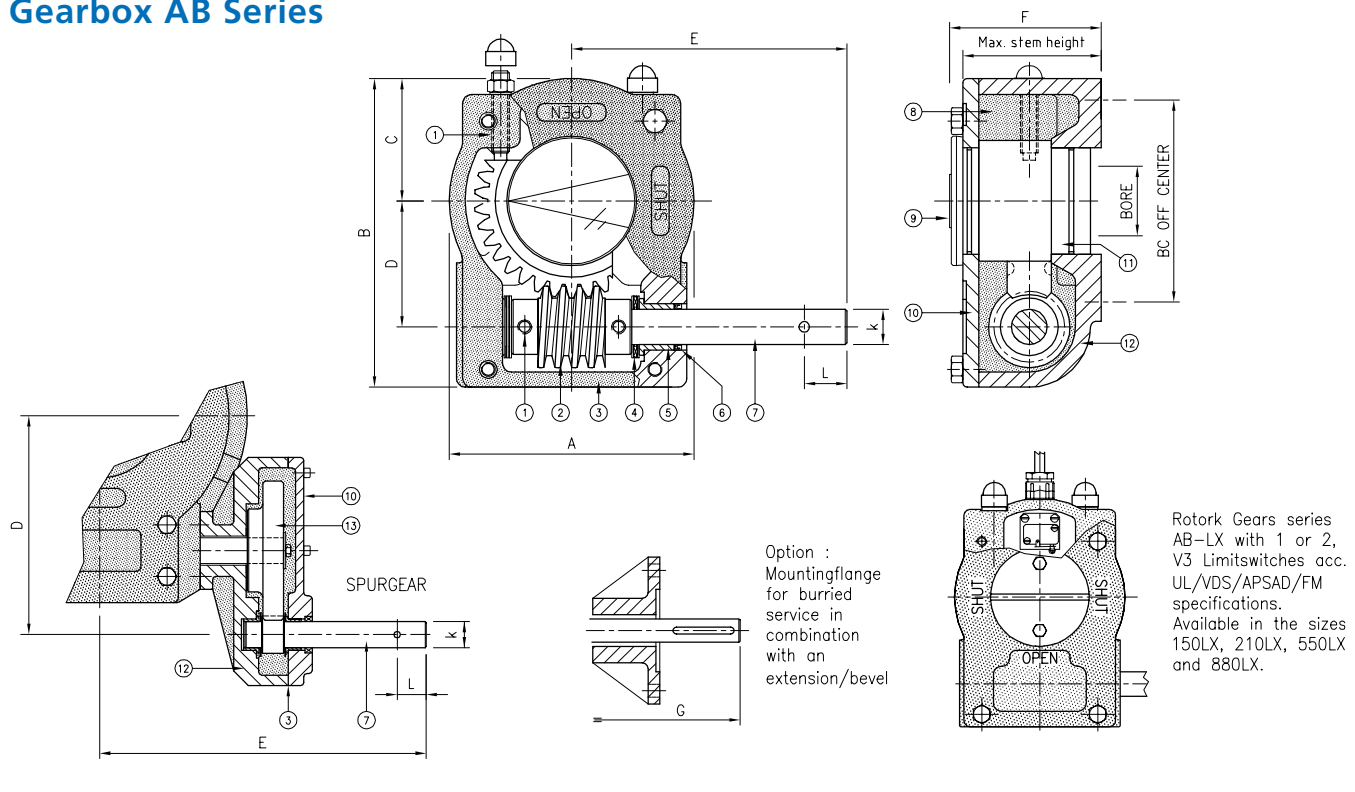
- Enclosure:
N type sealed to IP67 for standard environment
W type sealed to IP68 for prolonged submerged applications
G type sealed to IP68 for buried service applications
- Temperature: -20 to +120°C (-4 to +250°F)

Type	Maximum Dimensions (insert)						
	øM	øN	O	P	øQ	R	S
AB150	25 (0.98)	15 (0.59)	19.6 (0.77)	5 (0.2)	18.1 (0.71)	14 (0.55)	14 (0.55)
AB210	32.15 (1.27)	20 (0.79)	25.2 (0.99)	6 (0.24)	22.2 (0.87)	17 (0.67)	17 (0.67)
AB215	32.15 (1.27)	20 (0.79)	25.2 (0.99)	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)
AB1250/SP4	60 (2.36)	44 (1.73)	50.6 (1.99)	12 (0.47)	48.2 (1.90)	36 (1.42)	36 (1.42)
AB1950	75 (2.95)	55 (2.17)	64 (2.52)	16 (0.63)	55 (2.17)	46 (1.81)	46 (1.81)
AB1950 HR	75 (2.95)	55 (2.17)	64 (2.52)	16 (0.63)	55 (2.17)	46 (1.81)	46 (1.81)
AB1950/SP4	75 (2.95)	55 (2.17)	64 (2.52)	16 (0.63)	55 (2.17)	46 (1.81)	46 (1.81)

Type	Ratio	Torque Nm (lbf. inch)		M.A. ±10%	Max. Stem Height(mm)	Weight kg (lb)
		Output	Input			
AB 150	40:1	150 (1328)	16 (138)	9.6	38	2.2 (4.8)
AB 210	37:1	330 (2921)	28.5 (252)	11.6	45	3.5 (7.7)
AB 215	37:1	500 (4425)	43 (381)	11.6	45	3.5 (7.7)
AB 550	34:1	1000 (8851)	83 (738)	12.0	79	8.5 (18.7)
AB 880	38:1	2000 (17701)	152 (1341)	13.2	82	14 (30.9)
AB 1250	55:1	3250 (28765)	171 (1514)	19.0	91	22 (48.5)
AB 1950	52:1	5500 (48679)	289 (2562)	19.0	111	32 (70.5)
AB 1950 HR	84:1	4500 (39828)	159 (1407)	28.3	111	32 (70.5)
AB 1950/SP4	208:1	6800 (60185)	125 (1106)	54.4	111	45 (99.2)
AB 6800	78:1	8400 (74346)	305 (2704)	27.5	121	56 (123.5)
AB 6800 LT/SP4	312:1	9000 (79657)	96 (851)	93.6	121	70 (154.3)
AB 6800/SP4	312:1	12500 (110634)	134 (1182)	93.6	121	70 (154.3)
AB 6800/SP9	702:1	17000 (150463)	92 (813)	185.0	121	100 (220.0)
A 250 LT/SP9	705:1	26000 (230119)	116 (1023)	225.0	169	225 (496.0)
A 250/SP9	705:1	32000 (283224)	142 (1259)	225.0	169	225 (496.0)

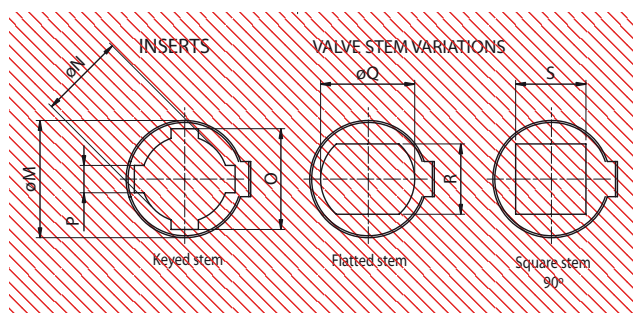
Established Leaders in Actuation Technology

Gearbox AB Series



Material Specification

Inserts Valve Stem Variations

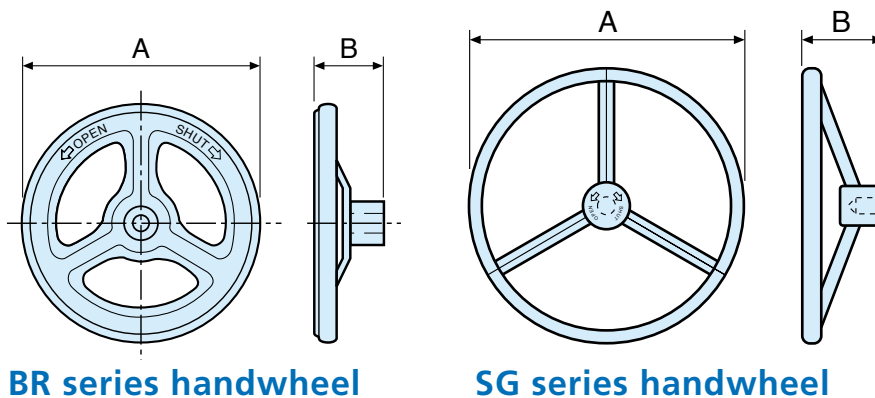


No.	Description	Material	Notes
1	Set-screw	Carbon Steel	8.8 / DIN 916
2	Worm	Carbon Steel	C45 / AISI 1045
3	Gasket	NBR	70° Shore
4	Needle-Bearing	AXK-AS	Hardened Steel
5	Bushing	Sintered Steel	FP15
6	Oil-seal	Nitrile	-
7	Shaft	Carbon Steel	C45 / AISI 1045
8	Grease	Lithium-Calcium	Multipurpose EP-2
9	Position indicator	Polypropylene	-
10	Coverplate	Cast Iron	GG25 / ASTM A48-40
11	Quadrant	Ductile Iron	GGG40 / ASTM D60-40-18
11A	Quadrant 215	Ductile Iron	GGG50 / ASTM D70-50-05
12	Body	Cast Iron	GG25 / ASTM A48-40
13	Gear	Carbon Steel	C45 / AISI 1045

Type	A	B	C	D	E	F	G	øK	L	Valve Connection BC acc. ISO 5211	Bore Max.
AB150	80 (3.15)	124 (4.88)	58 (2.28)	42.5 (1.67)	99.5 (3.92)	53.5 (2.11)	-	12 (0.47)	14 (0.55)	F04-F05-F07	20 (0.78)
AB210	102 (4.02)	127.5 (5.02)	48 (1.89)	52 (2.05)	159 (6.26)	65 (2.56)	146 (5.75)	15 (0.59)	14 (0.55)	F05-F07-F10	30 (1.18)
AB215	102 (4.02)	127.5 (5.02)	48 (1.89)	52 (2.05)	159 (6.26)	65 (2.56)	146 (5.75)	15 (0.59)	14 (0.55)	F05-F07-F10	30 (1.18)
AB550	138 (5.43)	174 (6.85)	69 (2.72)	71 (2.80)	201 (7.91)	88 (3.46)	170 (6.69)	20 (0.79)	24 (0.95)	F07-F10-F12-F14	45 (1.77)
AB880	200 (7.87)	226 (8.90)	100 (3.94)	86 (3.39)	189 (7.44)	92.5 (3.64)	182 (7.17)	20 (0.79)	24 (0.95)	F10-F12-F14-F16	60 (2.36)
AB1250	220 (8.66)	258 (10.16)	110 (4.33)	104.5 (4.11)	230 (9.06)	102 (4.02)	200 (7.87)	20 (0.79)	24 (0.95)	F10-F12-F14-F16	65 (2.56)
AB1250/SP4	220 (8.66)	258 (10.16)	110 (4.33)	185.5 (7.31)	346 (13.62)	196 (7.72)	343 (13.50)	25 (0.98)	28 (1.10)	F10/F12/F14/F16	65 (2.56)
AB1950	285 (11.22)	322.5 (12.70)	142.5 (5.62)	130 (5.12)	275 (10.83)	123.5 (4.86)	204 (8.03)	25 (0.98)	28 (1.10)	F12-F14-F16-F25	80 (3.15)
AB1950 HR	285 (11.22)	322.5 (12.70)	142.5 (5.62)	130 (5.12)	275 (10.83)	123.5 (4.86)	204 (8.03)	25 (0.98)	28 (1.10)	F12-F14-F16-F25	80 (3.15)
AB1950/SP4	285 (11.22)	322.5 (12.70)	142.5 (5.62)	211 (8.31)	335 (13.19)	196 (7.72)	334 (13.15)	25 (0.98)	28 (1.10)	F12-F14-F16-F25	80 (3.15)
AB6800	370 (14.57)	402 (15.83)	170 (6.69)	182 (7.17)	300 (11.81)	160 (6.30)	257 (10.12)	25 (0.98)	28 (1.10)	F16-F25-F30	100 (3.94)
AB6800 LT/SP4	370 (14.57)	482 (15.83)	170 (6.69)	263 (10.35)	388 (15.28)	196 (7.72)	388 (15.28)	25 (0.98)	28 (1.10)	F16-F25-F30	100 (3.94)
AB6800/SP4	370 (14.57)	482 (15.83)	170 (6.69)	263 (10.35)	388 (15.28)	196 (7.72)	388 (15.28)	25 (0.98)	28 (1.10)	F16-F25-F30	100 (3.94)
AB6800/SP9	370 (14.57)	584 (22.99)	170 (6.69)	357 (14.06)	466 (18.35)	180 (7.09)	469 (18.46)	30 (1.18)	20 (0.79)	F16-F25-F30	100 (3.94)
A 250LT/SP9	510 (20.08)	725 (28.54)	235 (9.25)	431 (16.97)	499 (19.65)	180 (7.09)	500 (19.69)	30 (1.18)	20 (0.79)	F25-F30-F35-F40	150 (5.91)
A 250/SP9	510 (20.08)	725 (28.54)	235 (9.25)	431 (16.97)	499 (19.65)	180 (7.09)	500 (19.69)	30 (1.18)	20 (0.79)	F25-F30-F35-F40	150 (5.91)

Handwheel Selection Chart Input Torque

Type	M.A. ± 10%
AB 150	9.6
AB 210	11.6
AB 215	11.6
AB 550	12.0
AB 880	13.2
AB 1250	19.0
AB 1950	19.0
AB 1950 HR	28.3
AB 1950/SP4	54.4
AB 6800	27.5
AB 6800 LT/SP4	93.6
AB 6800/SP4	93.6
AB 6800/SP9	185.0
A 250 LT/SP9	225.0
A 250/SP9	225.0



Dimensions

Type	A	B
BR100	ø100	35
BR125	ø125	48
BR160	ø160	49
BR200	ø200	67
BR250	ø250	70
BR315	ø315	71
BR400	ø400	94

Type	A	B
SG200	ø200	80
SG250	ø250	110
SG300	ø300	115
SG400	ø400	130
SG500	ø500	150
SG600	ø600	150
SG700	ø700	150
SG800	ø800	150
SG900	ø900	160
SG1000	ø1000	160

