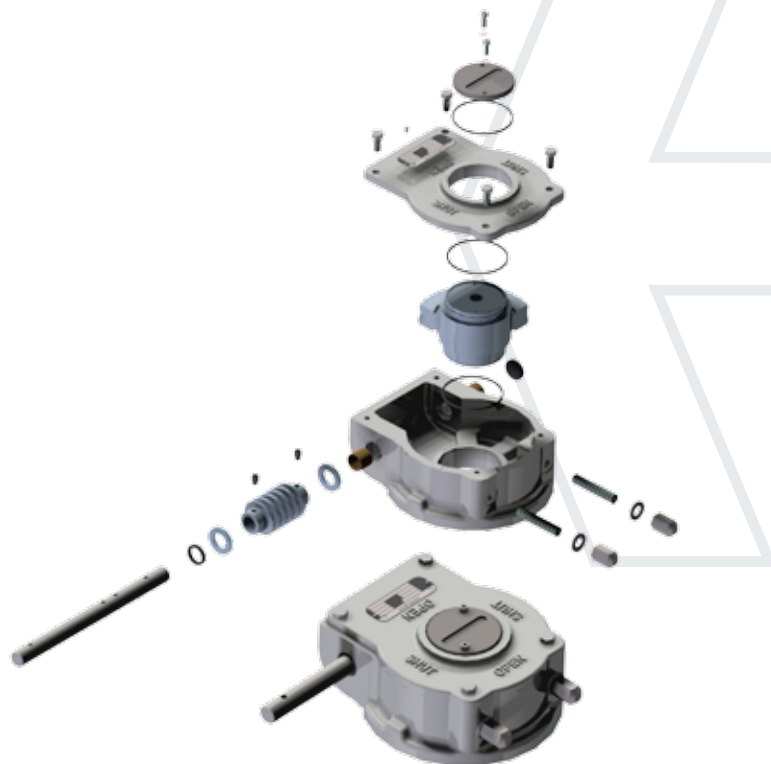


# rotork®

## Gears



### 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.

## AB-SS

### Stainless Steel Housing Gearboxes

#### Features

- Stainless steel SS316 housing
- Stainless steel SS316 input shaft
- Stainless steel SS316 stop bolt covers
- Stainless steel SS316 fasteners
- 11 models up to 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 +392 °F
- Low temperature to -76 °F
- Chainwheels
- Flexible extensions
- Firesafe to ISO 10497
- Bronze quadrant

#### Environmental Specification

- Enclosure: Sealed to IP68 for submerged applications to a depth of 3 feet for 72 hours according to EN60529:1991/14.2.8
- Temperature: -40 to +250 °F

## AB-SS Series

Type	Ratio :1	Torque lbf.inch		M.A. ±15%	Max stem height inch	Weight lb
		Output	Input			
AB210	37	2,921	252	11.6	2.13	8
AB215	37	4,425	381	11.6	2.13	8
AB550	34	8,851	738	12	3.11	22.5
AB880	38	17,701	1,341	13.2	3.23	35
AB1250	55	28,765	1,514	19	3.58	51
AB1950	52	48,679	2,562	19	4.37	74
AB1950/PR4	217	61,955	939	66	4.37	93
AB6800	78	74,346	2,704	27.5	4.76	134
AB6800/PR4	326	110,634	1,152	96	4.76	170
AB6800/PR6	468	150,463	1,075	140	4.76	173.5
A200/PR10	729	230,120	1,096	210	6.49	346

The static safety factor is 1.5.

The published M.A. is achieved after a few cycles.

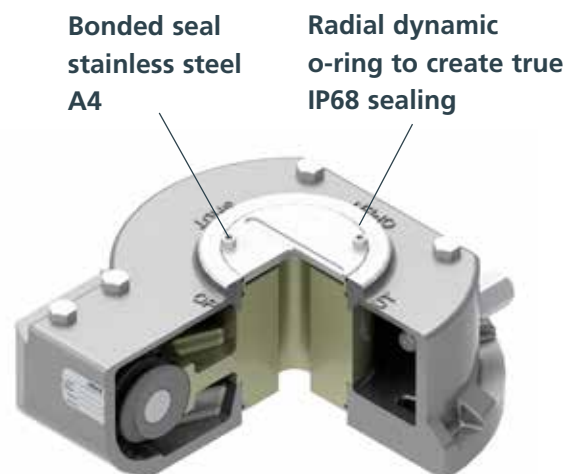
Type	Maximum dimensions (insert)						
	ØM	ØN	O	P	ØQ	R	S
AB210	1.27	0.79	1.01	0.24	0.87	0.67	0.67
AB215	1.27	0.79	1.01	0.24	0.87	0.67	0.67
AB550	1.78	1.18	1.44	0.31	1.43	1.06	1.06
AB880	2.36	1.73	1.99	0.47	1.90	1.42	1.42
AB1250	2.36	1.73	1.99	0.47	1.90	1.42	1.42
AB1950	TBC	TBC	TBC	TBC	TBC	TBC	TBC
AB1950/PR4	TBC	TBC	TBC	TBC	TBC	TBC	TBC

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

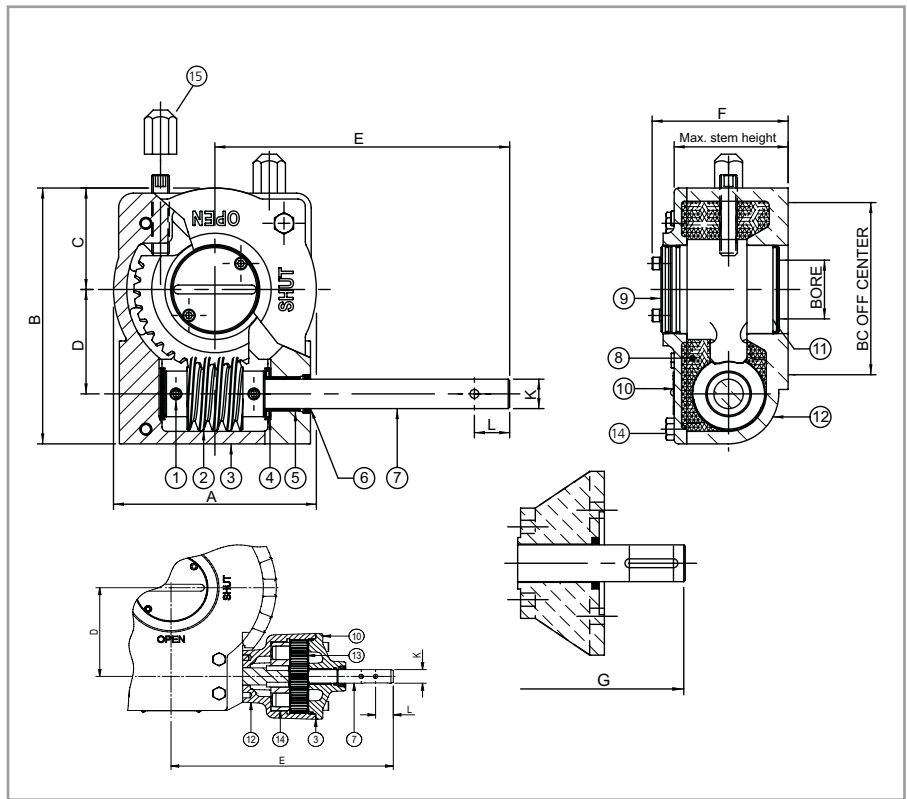
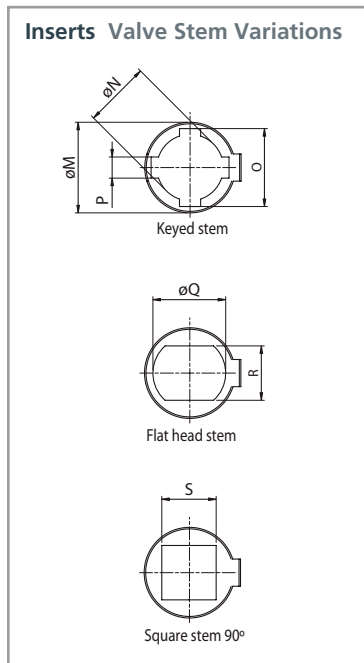
### Material specification for Rotork AB-SS Quarter-turn Gear Series

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	-
5	Bushing	P10, P14	PAP
6	Oilseal	Nitrile	-
7	Shaft	Stainless steel	AISI316
7A	Shaft PR	Super duplex	UNS S32760
8	Grease	Renolit CLX2	-
9	Position indicator	Stainless steel	AISI316
10	Coverplate	Stainless steel	CF8M / ASTM 351-2000
11	Quadrant	Ductile iron	GGG40 / ASTM D60-40-18
11A	Quadrant AB215	Ductile iron	GGG50 / ASTM D70-50-05
12	Body	Stainless steel	CF8M / ASTM 351-2000
13	Gear	Carbon Steel	C45 / AISI1045
14	Fasteners	Stainless steel	A4
15	Stop bolt covers	Stainless steel	AISI316

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



## AB-SS Series



Type	A	B	C	D	E	F	G	ØK	L	Valve Connection BC acc. ISO 5211	Bore Max.	Max. Square Bore AF
AB210	4.02	5.02	1.89	2.05	6.26	2.70	5.75	0.59	0.55	FA05-FA07-FA10	1.18	0.94
AB215	4.02	5.02	1.89	2.05	6.26	2.70	5.75	0.59	0.55	FA05-FA07-FA10	1.18	0.94
AB550	5.43	6.85	2.72	2.80	7.91	3.64	6.69	0.79	0.95	FA07-FA10-FA12-FA14	1.77	1.50
AB880	7.87	8.90	3.94	3.39	7.44	3.83	7.17	0.79	0.95	FA10-FA12-FA14-FA16	2.36	1.81
AB1250	8.66	10.16	4.33	4.11	9.06	3.83	7.87	0.79	0.95	FA10-FA12-FA14-FA16	2.56	1.97
AB1950	11.22	12.70	5.62	5.12	10.83	5.08	8.03	0.98	1.10	FA12-FA14-FA16-FA25	3.15	2.36
AB1950/PR4	11.22	12.70	5.62	5.12	11.85	5.08	11.85	0.79	0.95	FA12-FA14-FA16-FA25	3.15	2.36
AB6800	14.57	16	6.69	7.17	11.81	5.65	10.12	0.98	1.10	FA16-FA25-FA30	3.94	2.95
AB6800/PR4	14.57	16	6.69	7.17	13.94	5.65	13.94	0.79	0.95	FA16-FA25-FA30	3.94	2.95
AB6800/PR6	14.57	16	6.69	7.17	13.94	5.65	13.94	0.79	0.95	FA16-FA25-FA30	3.94	2.95
A200/PR10	17.32	25.53	8.17	8.22	14.74	18.07	14.74	0.79	0.95	FA25-FA30-FA35	6.29	4.52

All dimensions in inches, unless otherwise stated.

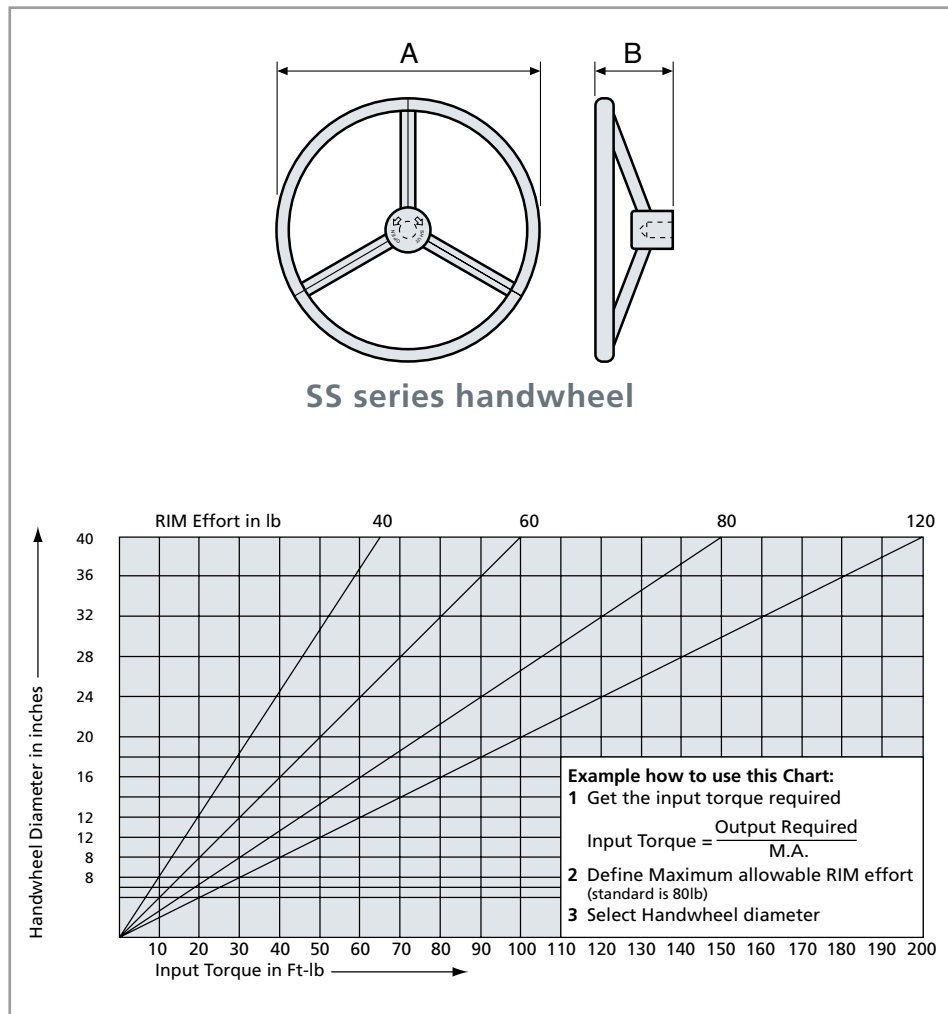
## Handwheel Selection Chart

### Input Torque

Type	M.A. ± 15%
AB210	11.6
AB215	11.6
AB550	12
AB880	13.2
AB1250	19
AB1950	19
AB1950/PR4	66
AB6800	27.5
AB6800/PR4	96
AB6800/PR6	140
A200/PR10	210

### Dimensions

Type	A	B
SS200	Ø8"	3,15"
SS250	Ø10"	4,33"
SS300	Ø12"	4,53"
SS400	Ø16"	5,12"
SS500	Ø20"	5,91"
SS600	Ø24"	5,91"
SS700	Ø28"	5,91"
SS800	Ø32"	5,91"
SS900	Ø36"	6,30"
SS1000	Ø40"	6,30"



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