



## ABAW Series AWWA

C504 and C517 Quarter-turn  
Worm Gear Operator



### ABAW Quarter-turn Worm Gear Operator

The ABAW AWWA C504 & C517 worm gear operators are suitable for manual actuation of AWWA C504 butterfly valves and C517 plug valves. They are designed to meet or exceed all aspects of AWWA C504 & C517 specifications and are manufactured from high quality and reliable materials. Overload and life tests reports are available upon request. All Rotork Gears actuators are made to ISO 9001 standards.

#### Features

- 90% grease filled for life and fully sealed
- Self-lubricating sleeve bearings
- -4 to +250°F (-20 to +120°C) standard temperature range
- Adjustable travel stops +/- 5 degrees
- Above or buried service
- 300 ft-lbs Overload Capability for AB550AW
- 450 ft-lbs Overload Capability for AB880AW & AB1250AW

#### Options

- Stem extensions
- Square nut
- Padlock kit
- NAMUR & Westlock position indicator mounting kit
- High temperature to +392°F (+200°C)
- Low temperature to -76°F (-60°C)
- Open Right Service

Keeping the World Flowing

# rotork®

## Gears

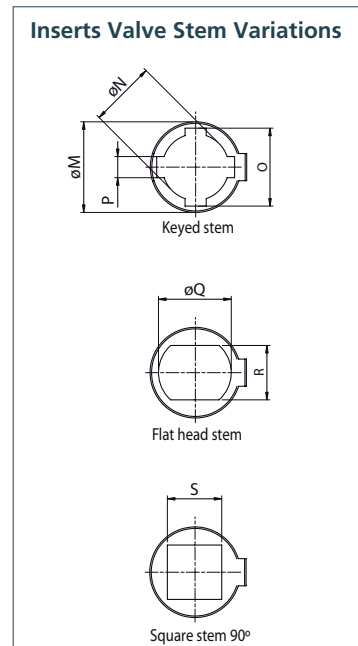
Type	Ratio	Max. Torque lbf.in (Nm)	M.A. ±15%	Max. Stem Height inch (mm)
AB550AW	34 : 1	5310 (600)	12	3.11 (79)
AB880AW	38 : 1	10621 (1200)	12.4	3.23 (82)
AB1250AW	48 : 1	17702 (2000)	16.2	3.58 (91)

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

Type	Dimensions Maximum (Inserts)						
	ØM	ØN	O	P	ØQ	R	S
AB550AW	1.78 (45.3)	1.18 (30)	1.44 (36.6)	0.31 (8)	1.43 (36.2)	1.06 (27)	1.06 (27)
AB880AW	2.36 (60)	1.73 (44)	1.99 (50.6)	0.47 (12)	1.90 (48.2)	1.42 (36)	1.42 (36)
AB1250AW	2.36 (60)	1.73 (44)	1.99 (50.6)	0.47 (12)	1.90 (48.2)	1.42 (36)	1.42 (36)

The ABAW Series can have the quadrant machined to suit the valve stem or delivered with a blank insert to be machined by others.

Note: The insert option will reduce the stem size acceptance.



### Material specification for Rotork ABAW Quarter-turn Gear Series

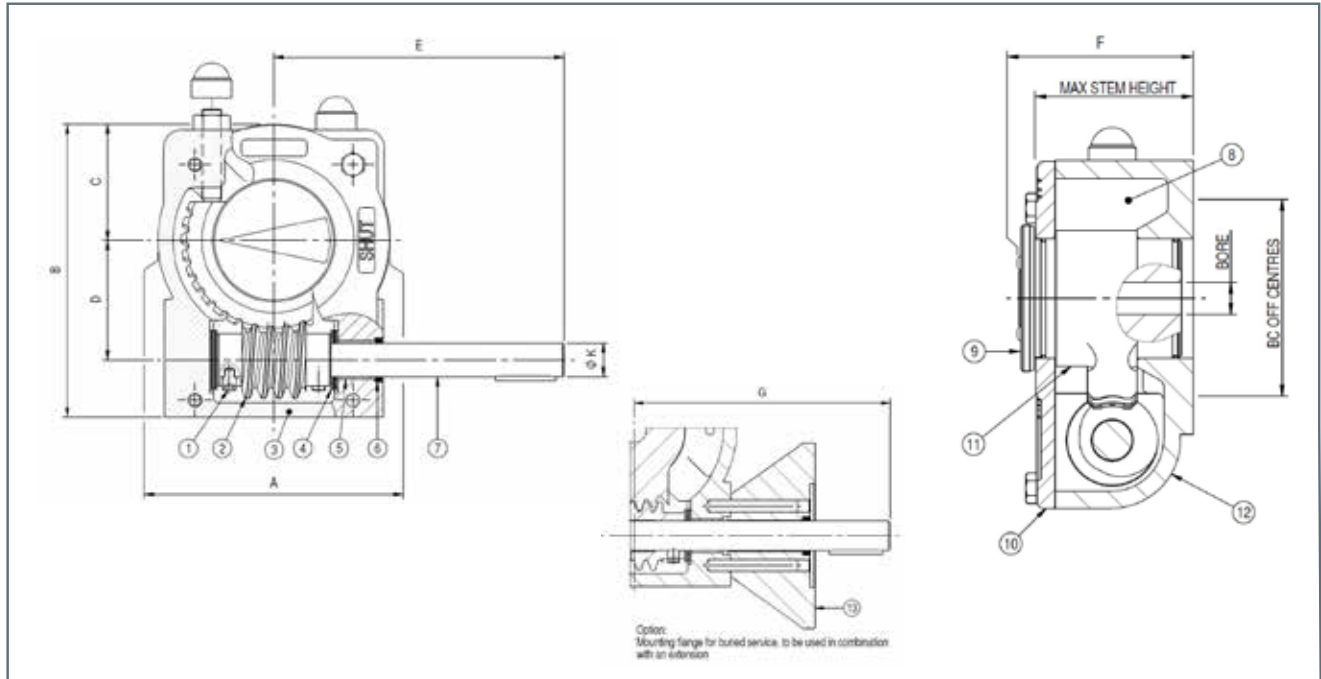
No.	Description	Material	Notes
1	Set-screw	Carbon Steel	DIN915 / grade 12.9
2	Worm	Treated Carbon Steel	C45 / AISI1045
3	Gasket	Liquid seal	-
4	Axial-bearing	Hardened Steel	-
5	Bushing	P10,P14	PAP
6	Oil-seal	Nitrile	-
7	Shaft	Protected Steel	C45 / AISI1045
8	Grease	Renolit CLX2	-
9	Position indicator	Scanblend FS7 PC/ASA	-
10	Coverplate	Ductile iron	GGG40 / ASTM D60-40-18
11	Quadrant	Treated Ductile iron	GGG40 / ASTM D60-40-18 (AB1250 GGG50 / EN-GLS-500-7)
12	Body	Ductile iron	GGG40 / ASTM D60-40-18
13	Cover + E-flange	Ductile iron	GGG40 / ASTM D60-40-18

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

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## Gearbox ABAW Series



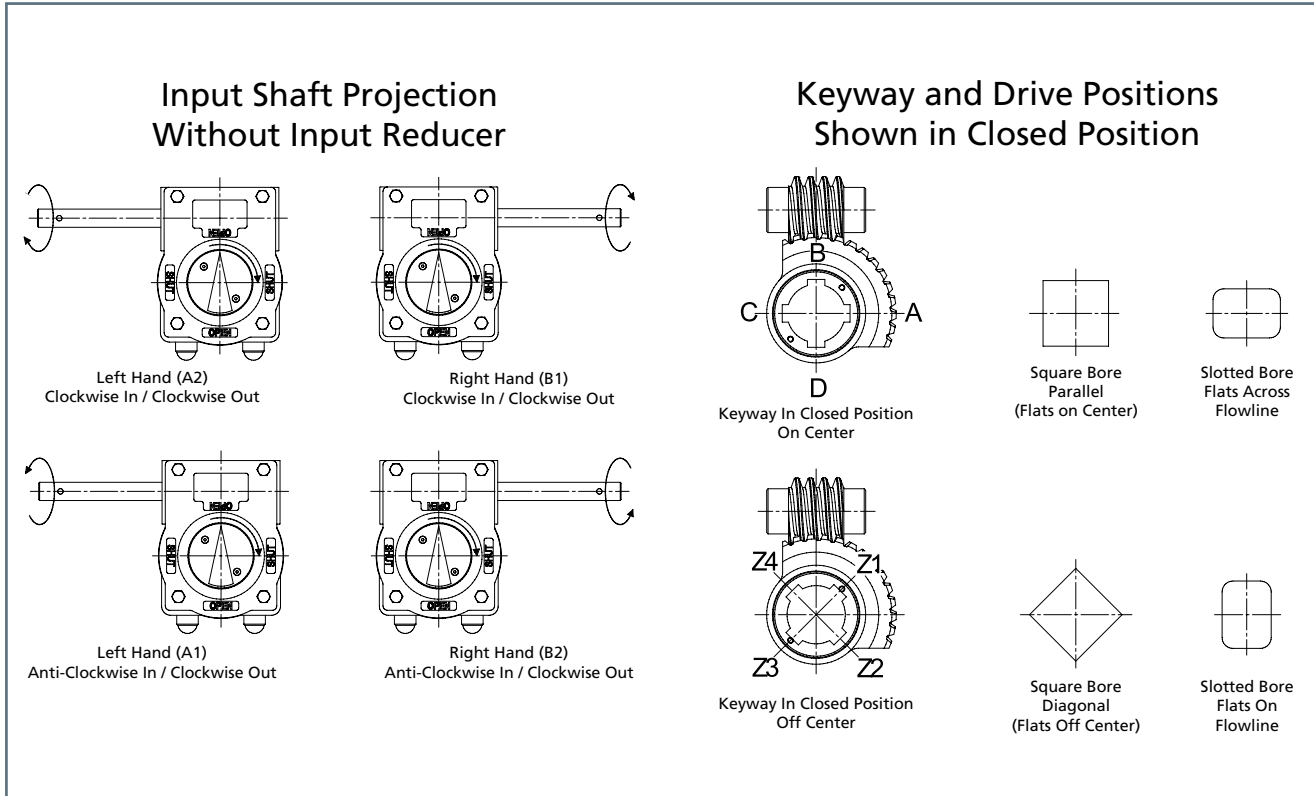
Type	A	B	C	D	E	F	G	ØK	Max Bore with insert		Max Bore in quadrant		Valve Connection BC acc. ISO 5211
									Square inch (mm)	Round inch (mm)	Square inch (mm)	Round inch (mm)	
AB550AW	5.43 (138)	6.85 (174)	2.72 (69)	2.80 (71)	6.77 (172)	3.46 (88)	6.77 (172)	0.79 (20)	1.06 (27)	1.18 (30)	1.49 (38)	1.77 (45)	FA/F07,FA/F10,FA/F12,FA/F14 FA/F16
AB880AW	7.87 (200)	8.90 (226)	3.94 (100)	3.39 (86)	7.17 (182)	3.64 (92.5)	7.17 (182)	0.79 (20)	1.42 (36)	1.73 (44)	1.81 (46)	2.36 (60)	FA/F10,FA/F12,FA/F14,FA/F16
AB1250AW	8.69 (221)	10.16 (258)	4.33 (110)	4.11 (104.5)	7.87 (200)	4.05 (103)	7.87 (200)	0.79 (20)	1.42 (36)	1.73 (44)	1.97 (50)	2.56 (65)	FA/F10,FA/F12,FA/F14,FA/F16

All dimensions in inches (mm).

### IP RATING AND SPECIFICATION FOR ABAW SERIES GEARBOXES

Service:	Standard Duty	Marinised Duty	Buried Service Duty
Duty	N	W	G
IP Rating	IP67	IP68	IP68
Time & Depth	30 min to a depth of 1 meter (3 feet)	72 hours to a depth of 1 meter (3 feet) in clean water.	Buried service
Input Shafts	C45 Carbon Steel or Stainless Steel	C45 Carbon Steel or Stainless Steel	C45 Carbon Steel or Stainless Steel
Fasteners	Steel	Stainless Steel A4	Stainless Steel A4
Position Indicator	FS7 (plastic)	Powder coated metal with O-Ring	Metal non-rotating plate

### Customer Drive and Orientation Options



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