

rotork® Gears



MOW Series

Modulating Worm Gearbox

MOW Modulating Worm Gear Series

Modulating worm gear operators are designed to suit control valves or dampers requiring constant movement.

They are suitable for continuous duty up to 1200 starts per hour and give a positional accuracy of $\pm 1/2^\circ$.

Features

- Hardened and ground worm shaft
- Aluminium bronze worm wheel
- Special grease
- Totally enclosed gearing
- Grease filled for life & fully sealed
- Adjustable mechanical stops at $90^\circ \pm 5^\circ$ travel
- Removable output sleeve
- Finished with grey primer

Environmental Specification

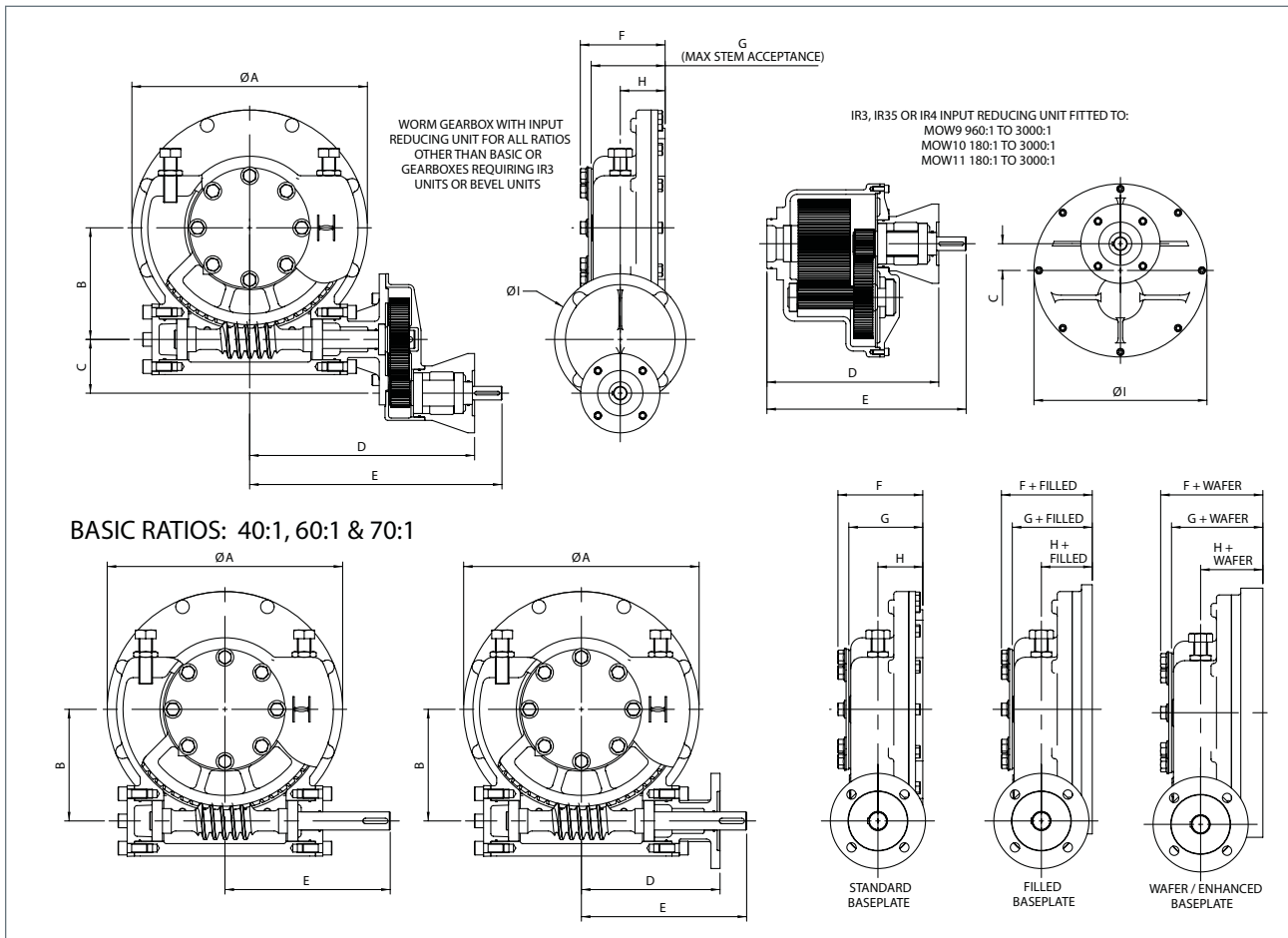
- Enclosure: IP67 standard, IP68 optional
- Temperature: -4°F to 250°F

Options

- All types of environment
- Submersible, buried service, marinised
- ATEX
- Limit switches
- Lever arms
- Flexible extensions
- Food grade grease

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MOW Dimensions



Gearbox	Ratio	ØA	B	C	D	E	F	G	H	ØI	Weight (lbs)
MOW3	40,70	6.77	2.99		4.65	6.22	3.58	2.91	1.93		24.25
MOW4	40,70	8.58	4.02		5.59	7.17	4.02	3.35	1.97		48.50
MOW4	80,120,140,160,210, 280	8.58	4.02	2.52	10.59	12.60	4.09	3.35	1.97	7.48	66.14
MOW4	200,240,350,420	8.58	4.02	3.78	11.46	13.46	4.09	3.35	1.97	9.76	77.16
MOW5	40,70	11.22	5.35		7.32	9.29	5.20	4.49	2.72		99.21
MOW5	80,120,140,160,210, 280	11.22	5.35	2.52	12.32	14.33	5.20	4.49	2.72	7.48	116.84
MOW5	200,240,350,420	11.22	5.35	3.78	13.19	15.20	5.20	4.49	2.72	9.76	127.87
MOW6	70	14.76	7.01		7.32, 7.72 for F10,FA10	9.29	5.47	4.45	2.76		149.91
MOW6	140,210,280	14.76	7.01	2.52	12.32	14.33	5.47	4.45	2.76	7.48	174.16
MOW6	350,420	14.76	7.01	3.78	13.46	15.47	5.47	4.45	2.76	9.76	185.19
MOW7	60	17.72	8.27		10.63	12.95	6.73	5.51	3.39		264.55
MOW7	120,180,240,360	17.72	8.27	4.69	18.11	20.51	6.73	5.51	3.39	11.42	335.10
MOW7	480, 540,720	17.72	8.27	7.05	18.46	20.87	6.73	5.51	3.39	16.06	357.15
MOW8	60	20.47	9.69		12.05	14.37	7.56	6.30	3.90		396.83
MOW8	120,180,240,360	20.47	9.69	4.69	19.53	21.93	7.56	6.30	3.90	11.42	467.38
MOW8	480,540,720	20.47	9.69	7.05	19.88	22.28	7.56	6.30	3.90	16.06	489.43
MOW9	60	23.46	10.98		14.61	18.94	7.87	6.61	3.90		485.02
MOW9	180,240,360,480,540,720	23.46	10.98	7.05	22.36	24.84	7.87	6.61	3.90	16.06	577.61
MOW9	960,1080,1440,2160,2520, 3000	23.46	10.98	2.32	23.82	26.22	7.87	6.61	3.90	15.04	639.34
MOW10	60	28.94	13.50		15.63	19.96	8.50	7.09	4.33		727.52
MOW10	180,240,360,540,720,960,1080,1440,2160,2520,3000	28.94	13.50	2.32	24.84	27.24	8.50	7.09	4.33	15.04	899.48
MOW11	60	31.30	15.00		16.30	20.63	9.72	7.87	4.72		1146.40
MOW11	180,240,360,540,720,960,1080,1440,2160,2520,3000	31.30	15.00	2.32	25.51	27.91	9.72	7.87	4.72	15.04	1256.63

All dimensions in inches.

Material specification for MOW Modulating Worm Gearbox

Component	Material	UK Standard	USA Standard
Gearcase	SG Iron	BS1563 EN-GJS-450-10 or BS1563 EN-GJS-400-15	ASTM A536 65-45-12 or ASTM A536 60-40-18
Baseplate	Cast Iron or SG Iron	BS1561 EN-GJL-250 BS1563 EN-GJS-400-15	ASTM A48 35B/40B ASTM A536 60-40-18
End cap	SG Iron Steel	BS1563 EN-GJS-450-10 or BS970 grade 070M20	ASTM A536 65-45-12 or AISI/SAE 1023
Input Flange	Cast Iron or SG Iron	BS1561 EN-GJL-250 BS1563 EN-GJS-400-15	ASTM A48 35B/40B ASTM A536 60-40-18
Indicator Plate	Protected Steel	BS970 grade 070M20	AISI/SAE 1023
Wormwheel	Aluminium Bronze	BS1400 grade AB2	ASTM B505 & B271 958
Wormshaft	Steel	BS970 grade 045M10	AISI/SAE 1010
Seals	Nitrile Rubber		
Fixing Screws	Protected Steel	BS3692 and BS4168	
Worm Shaft Bearings	Angular Contact Ball Bearings		
Output Sleeve	Cast Iron	BS1561 EN-GJL-250	ASTM A48 35B/40B
Grease	Renolit LST 0		

Mounting Options

Gearbox	Max Bore Rectangle Key ANSI B17.1	Max Square Bore AF	MSS Flange Standard Baseplate	MSS Flange Filled Baseplate	MSS Flange Enhanced Baseplate	Filled Baseplate Thickness	Enhanced Baseplate Thickness
MOW3	1.77	1.42	FA10 - FA12	-	FA14 - FA16	-	0.87
MOW4	2.52	2.01	FA10 - FA12- FA14	-	FA16	-	0.98
MOW5	2.99	2.44	FA14 - FA16	FA25	FA25	0.24	1.26
MOW6	4.02	3.28	FA16 - FA25	FA16 - FA25 - FA30	FA30	0	0.91
MOW7	5.35	4.28	FA25 - FA30	FA30	FA35	0.39	1.22
MOW8	6.18	4.84	FA25 - FA30 - FA35 -FA40	FA25 - FA30 - FA35	FA40 - FA48	0	1.50
MOW9	7.01	5.20	FA30 - FA35 - FA40	FA30 - FA35 - FA40	FA40 - FA48	0	1.06
MOW10	7.99	6.01	FA35 - FA40 - FA48	FA48	FA60	0	1.26
MOW11	7.99	6.01	FA35 - FA40 - FA48	FA60	-	0	-
MOW11BB	10.63	7.48	FA40 - FA48	FA60	-	0	-

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

