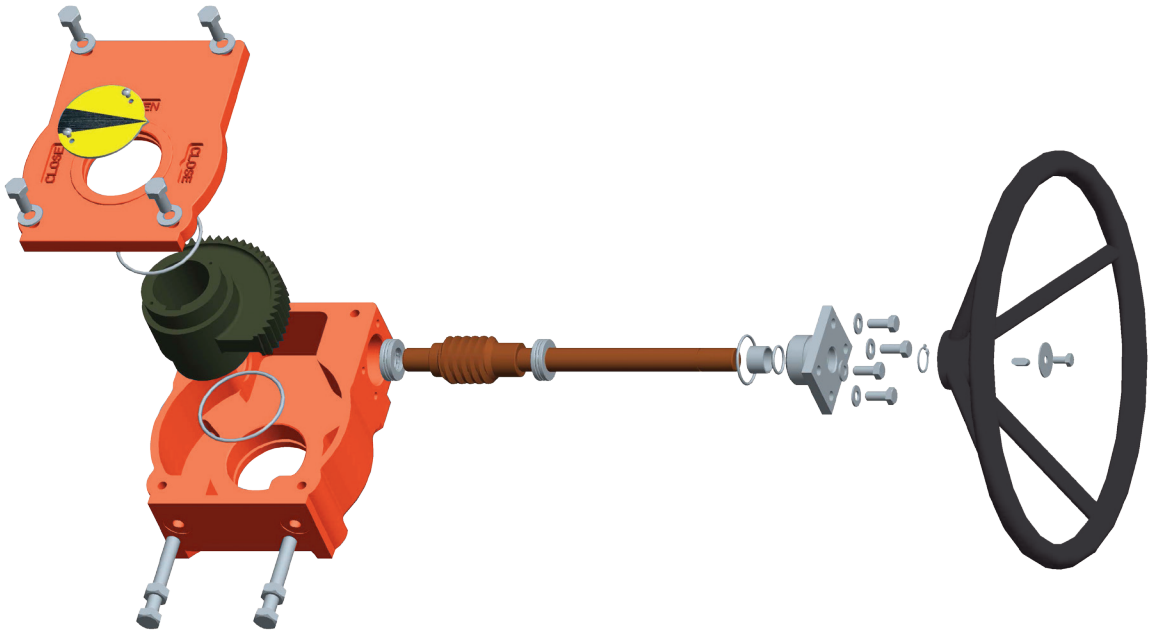


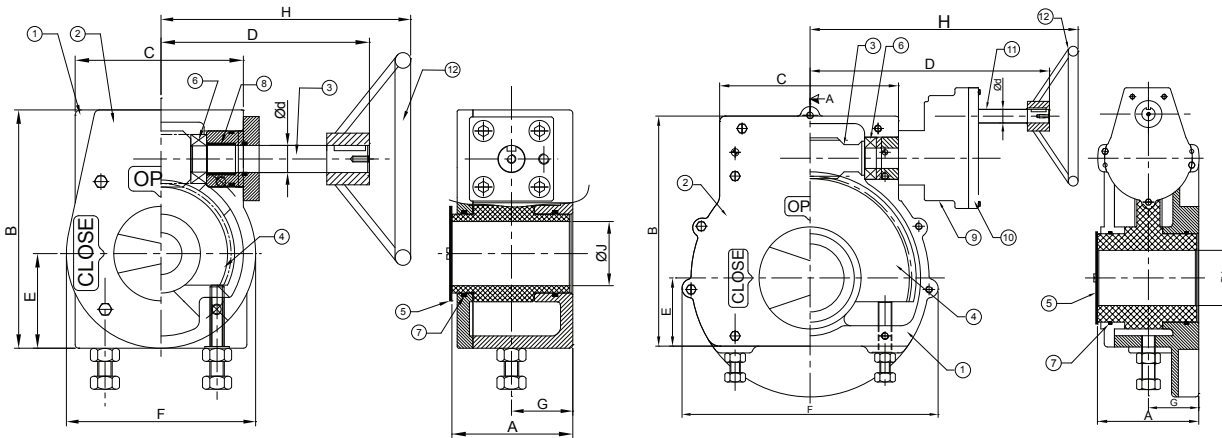
# Bettis AT-IS-Series

Quarter-turn Worm Gear Operators for Manual Operation



# Performance Specifications AT-IS Series

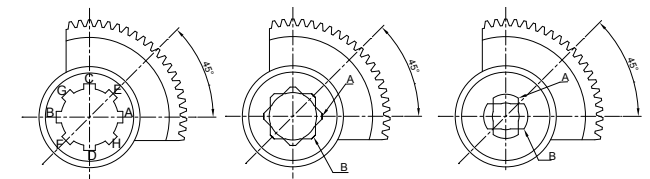
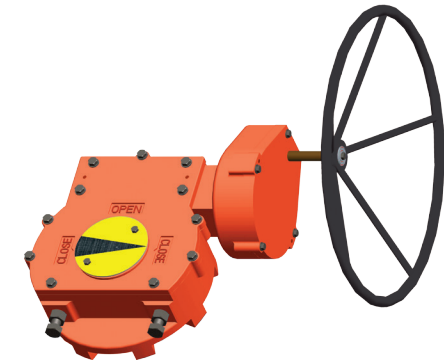
## Quarter-turn Worm Gear Operators for Manual Operation



SR.	Description	Material	US Standard	IS Standard
1	Housing	Ductile Iron	ASTM A536 60-40-18	SG 400/12
2	Top Cover	Ductile Iron	ASTM A536 60-40-18	SG 400/12
3	Worm Shaft	Carbon Steel	ASTM A322 4140	40Cr4Mo3
4	Worm Wheel	Ductile Iron	ASTM A70-50 05	SG 500/7
5	Indicator	Carbon Steel	ASTM A576 1045	45C8
6	Thrust Bearing	Special Steel	ASTM A295 52100	-
7	'O' Ring	NBR (Buna-N)	NBR (Buna-N)	Nitrile
8	Sintered Bush	Bronze	B148 C95800	-
9	Spur Housing	Ductile Iron	ASTM A536 60-40-18	SG 400/12
10	Spur Cover	Ductile Iron	ASTM A536 60-40-18	SG 400/12
11	Spur Pinion	Carbon Steel	ASTM A322 4140	40Cr4Mo3
12	Handwheel (Pipe)	Carbon Steel	ASTM A53	IS 2062 Gr B
13	Fasteners	Stainless Steel	ASTM A276 304	SS304

**Note:**  
 Refer to Figure (1) for Models up to "AT-90-IS"  
 Refer to Figure (2) for Models above "AT-90-IS"

Model	Output Torque (lb-in)	Ratio	Mech. Adv. ±10%	Turns To Close	ISO 5211	Max	Reco. H.wheel (inch)	Ød	A	B	C	D	E	F	G	H
AT-20-IS	2212.69	33:1	8	8.25	F05, F07	0.79	Ø6.89	0.59	2.22	4.33	3.23	5.75	1.42	3.54	1.02	7.13
AT-25-IS	4425.37	40:1	10.5	10	F07, F10	1.18	Ø9.84	0.59	2.72	5.35	3.78	6.30	2.13	4.25	1.38	8.86
AT-30-IS	6195.52	40:1	10	10	F07, F10, F12	1.26	Ø13.78	0.79	3.15	5.63	4.65	6.69	1.77	5.04	1.54	9.84
AT-40-IS	8850.75	44:1	11.5	11	F10, F12, F14	1.77	Ø13.78	0.98	3.66	6.93	5.24	6.81	2.76	5.51	1.85	9.96
AT-50-IS	13276.12	48:1	12.5	12	F10, F12, F14, F16	1.97	Ø19.69	0.98	3.50	7.80	5.98	7.87	2.52	6.61	1.77	10.94
AT-60-IS	17701.49	60:1	15	15	F12, F14, F16	1.97	Ø19.69	0.98	3.62	8.43	6.14	7.40	3.27	6.93	1.81	10.55
AT-80-IS	24782.09	80:1	22	20	F14, F16, F25	3.15	Ø19.69	0.98	4.69	9.65	9.13	8.66	3.31	11.81	2.52	11.81
AT-70-IS	30977.61	73:1	18	18.25	F14, F16, F25	3.15	Ø19.69	0.98	4.65	10.43	8.11	8.94	3.35	11.81	2.44	12.09
AT-90-IS	35402.98	90:1	22.5	22.5	F16, F25	3.54	Ø23.62	0.98	5.24	12.01	10.55	9.80	3.94	13.46	3.07	13.74
AT-80/1/S1-IS	39828.36	264:1	60	66	F14, F16, F25	3.15	Ø19.69	0.98	4.80	10.43	8.11	12.95	3.35	11.42	2.52	16.10
AT-70/3/S1-IS	53104.47	292:1	65	73	F14, F16, F25	3.15	Ø23.62	0.98	4.65	10.43	8.11	12.87	3.35	11.81	2.44	16.81
AT-90/1/S1-IS	70805.97	300:1	70	75	F16, F25	3.54	Ø23.62	0.98	5.24	12.01	10.55	14.13	3.94	13.46	3.07	18.07
AT-100/1/S1-IS	88507.46	300:1	75	75	F25, F30	3.94	Ø23.62	0.98	5.94	13.70	10.35	14.02	4.33	14.84	2.99	17.95
AT-150/1/S2-IS	132761.19	450:1	100	112.5	F25, F30	3.94	Ø23.62	0.98	5.94	13.70	10.35	15.83	4.33	14.84	2.99	19.76
AT-250/2/S2-IS	199141.78	456:1	120	114	F25, F30, F35	4.33	Ø23.62	0.98	6.18	16.69	13.15	17.13	5.24	18.46	3.46	21.85
AT-300/1/S3-IS	247820.88	902:1	210	225.5	F30, F35	5.91	Ø29.53	1.18	6.18	16.69	13.15	18.62	5.24	18.46	3.46	23.35
AT-350/2/S3-IS	309776.10	1114:1	253	278.5	F30, F35	5.91	Ø29.53	1.18	6.18	16.69	13.15	18.62	5.24	18.46	3.46	23.35
AT-450/1/S3-IS	398283.56	1175:1	275	293.75	F30, F35, F40	5.91	Ø29.53	1.18	7.99	25.59	23.43	20.31	6.38	23.31	3.94	25.04
AT-500/1/S3-IS	442537.29	1261:1	287	315.25	F30, F35, F40	5.91	Ø29.53	1.18	7.99	25.59	23.43	23.62	7.83	27.80	4.13	28.35
AT-600/1/S3.5-IS	531044.75	1545:1	340	386.25	F30, F35, F40	5.91	Ø29.53	1.18	7.99	25.59	23.43	25.75	7.83	27.95	4.13	28.11
AT-750/1/S4-IS	663805.93	1826:1	400	456.5	F40, F48	7.87	Ø29.53	1.18	7.99	25.59	23.43	25.83	7.83	27.80	4.13	30.16
AT-1000/1/S4-IS	885074.58	2635:1	600	658.75	F40, F48	7.87	Ø29.53	1.18	7.99	25.59	23.43	25.83	7.83	27.80	4.13	30.16
AT-1500/1/S5-IS	1327611.87	4224:1	860	1056	F40, F48, F60	9.84	Ø35.43	1.18	12.32	35.04	28.70	31.06	10.87	37.80	6.69	35.39
AT-2000/1/S6-IS	1770149.15	5498:1	1210	1374.5	F40, F48, F60	9.84	Ø35.43	1.18	12.32	35.04	28.70	31.06	10.87	37.80	6.69	35.39
AT-2500/1/S6-IS	2212686.44	7440:1	1630	1860	F40, F48, F60	9.84	Ø35.43	1.18	12.32	35.04	28.70	31.06	10.87	37.80	6.69	35.39
AT-3000/1/S6-IS	2655223.73	9300:1	2045	2325	F48, F60	10.24	Ø35.43	1.18	15.16	45.43	39.61	37.91	13.78	50.87	6.89	41.85
AT-3500/1/S6-IS	3097761.02	11284:1	2482	2821	F48, F60	10.24	Ø39.37	1.18	15.16	45.43	39.61	37.91	13.78	50.87	6.89	41.85



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