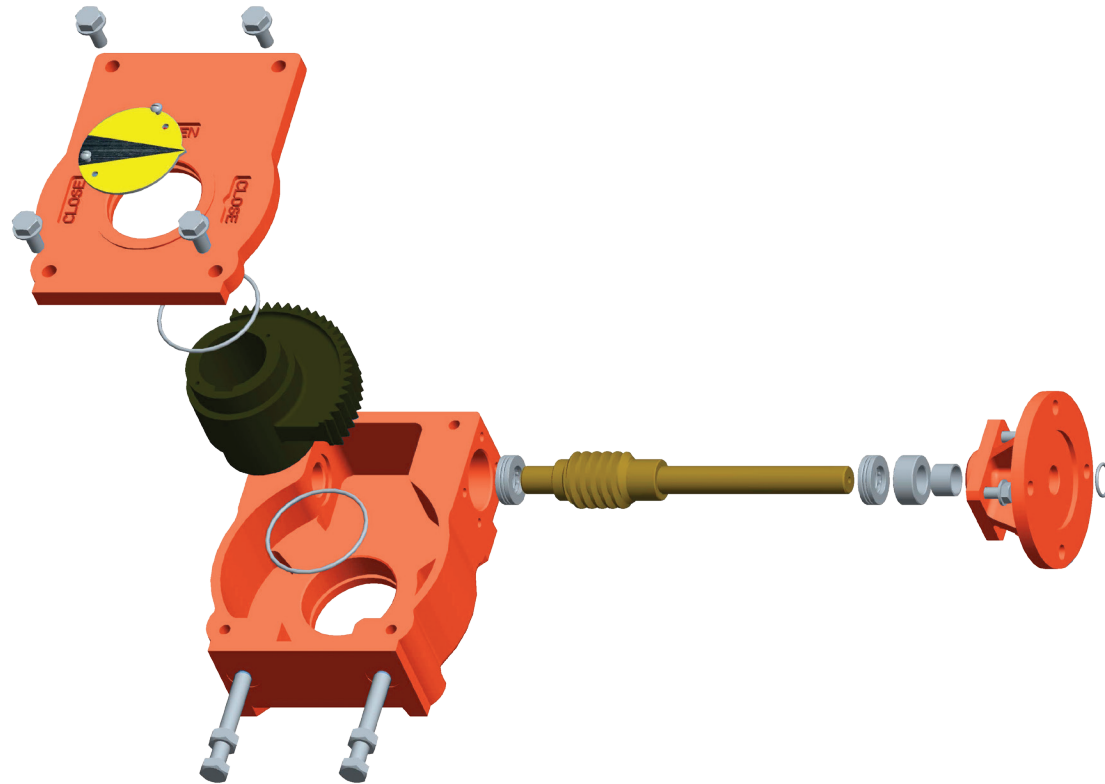


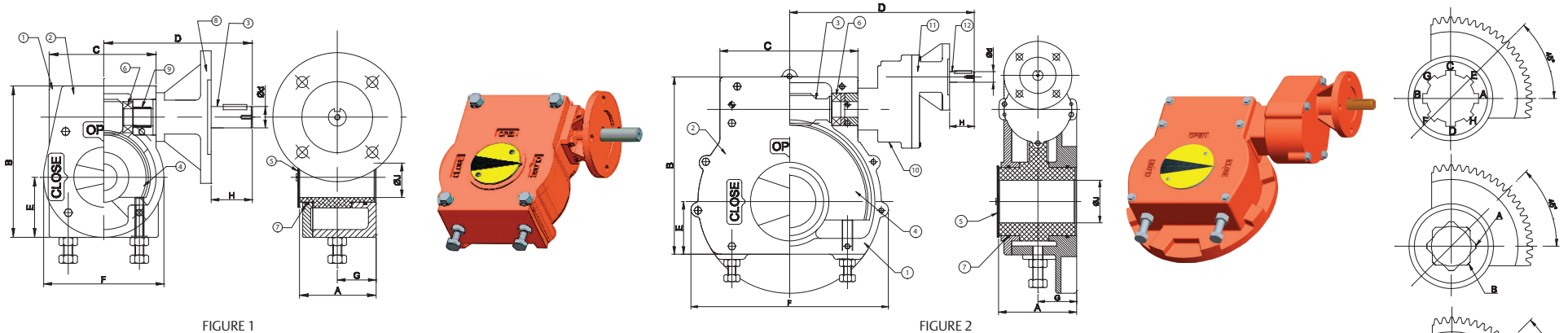
# Bettis IS-EA-Series

Quarter-turn Worm Gear Operators for Electrical Actuation



# Performance Specifications IS-EA Series

## Quarter-turn Worm Gear Operators for Electrical Actuation



Model	Output Torque (lb-in) ±10%	Ratio	Mech. Advantage ±10%	Turns To Close	ISO 5211 Mounting	Max Drive Bore	Actuator Mounting Flange Detail		A	B	C	D	E	F	G	H
							Standard Mounting Ød	Optional Mounting Ød								
AT-20E-IS	1770.15	33:1	8	8.25	F05, F07	0.79	F10/Ø0.5906	-	2.22	4.33	3.23	5.79	1.42	3.54	1.02	2.17
AT-25E-IS	3540.30	40:1	10.5	10	F07, F10	1.18	F10/Ø0.5906	-	2.72	5.35	4.06	6.30	2.13	4.25	1.38	2.17
AT-30E-IS	5310.45	40:1	10	10	F07, F10, F12	1.26	F10/Ø0.7874	-	3.03	5.63	4.65	6.18	1.77	5.04	1.54	1.77
AT-40E-IS	7523.13	44:1	11.5	11	F10, F12, F14	1.77	F10/Ø0.7874	-	3.66	6.93	5.24	6.89	2.76	5.51	1.85	2.17
AT-50E-IS	11063.43	48:1	12.5	12	F10, F12, F14, F16	1.97	F10/Ø0.7874	-	3.46	7.80	5.91	7.48	3.19	6.61	1.77	1.77
AT-60E-IS	15046.27	60:1	15	15	F12, F14, F16	1.97	F10/Ø0.7874	-	3.62	8.43	6.42	7.44	3.27	6.93	1.81	2.17
AT-80E-IS	21241.79	80:1	22	20	F14, F16, F25	3.15	F10/Ø0.7874	-	4.70	9.65	9.09	8.86	3.31	11.81	2.52	2.17
AT-70E-IS	26552.24	73:1	18	18.25	F14, F16, F25	3.15	F10/Ø0.7874	-	4.65	10.43	8.03	8.86	3.31	11.81	2.44	2.36
AT-90E-IS	30977.61	90:1	22.5	22.5	F16, F25	3.54	F10/Ø0.7874	F14/Ø0.9843	5.24	12.01	10.55	10.94	3.94	13.78	3.07	2.36
AT-80/1/S1E-IS	35402.98	264:1	60	66	F14, F16, F25	3.15	F10/Ø0.7874	F14/Ø0.9843	4.80	10.43	9.13	12.99	3.31	11.42	2.52	1.93
AT-70/3/S1E-IS	44253.73	292:1	65	73	F14, F16, F25	3.15	F10/Ø0.7874	F14/Ø0.9843	4.65	10.43	8.03	12.91	3.31	11.81	2.44	1.93
AT-90/1/S1E-IS	57529.85	300:1	70	75	F16, F25	3.54	F10/Ø0.7874	F14/Ø0.9843	5.24	12.01	10.55	14.17	3.94	13.78	3.07	1.93
AT-100/1/S1E-IS	75231.34	300:1	75	75	F25, F30	3.94	F10/Ø0.7874	F14/Ø0.9843	5.94	13.70	10.43	14.06	4.33	14.84	2.99	1.93
AT-150/1/S2E-IS	110634.32	450:1	100	112.5	F25, F30	3.94	F14/Ø0.9843	F16/Ø1.1811	5.94	13.70	10.43	15.47	4.33	14.84	2.99	2.17
AT-250/2/S2E-IS	159313.42	456:1	120	114	F25, F30, F35	4.72	F14/Ø0.9843	F16/Ø1.1811	6.18	16.69	13.15	16.93	5.24	18.46	3.46	2.17
AT-300/1/S3E-IS	212417.90	902:1	210	225.5	F30, F35	5.31	F14/Ø0.9843	F16/Ø1.1811	6.18	16.69	13.15	18.62	5.24	18.46	3.46	2.36
AT-350/2/S3E-IS	265522.37	1114:1	253	287.5	F30, F35	5.31	F14/Ø0.9843	F16/Ø1.1811	6.18	16.69	13.15	18.62	5.24	18.46	3.46	2.36
AT-450/1/S3E-IS	354029.83	1175:1	275	294	F30, F35, F40	5.91	F14/Ø0.9843	F16/Ø1.1811	7.87	23.94	16.73	20.35	6.38	23.31	3.94	2.36
AT-500/1/S3E-IS	398283.56	1261:1	287	325.5	F30, F35, F40	5.91	F14/Ø0.9843	F16/Ø1.1811	7.99	25.59	23.43	23.66	7.83	27.95	4.13	2.36
AT-600/1/S3.5E-IS	486791.02	1545:1	340	386.25	F30, F35, F40	5.91	F16/Ø1.1811	-	7.99	25.59	23.43	26.46	7.83	27.95	4.13	2.36
AT-750/1/S4E-IS	575298.47	1826:1	400	447	F40, F48	7.87	F16/Ø1.3780	-	7.99	25.59	23.43	27.56	7.83	27.95	4.13	2.36
AT-1000/1/S4E-IS	752313.39	2635:1	600	656	F40, F48	7.87	F16/Ø1.3780	-	7.99	25.59	23.43	27.56	7.83	27.95	4.13	2.36
AT-1500/1/S5E-IS	1194850.68	4224:1	860	1056	F40, F48, F60	9.84	F16/Ø1.3780	-	12.32	35.04	28.70	31.69	10.87	37.80	6.69	2.36
AT-2000/1/S5E-IS	1593134.24	5498:1	1210	1374.5	F40, F48, F60	9.84	F16/Ø1.3780	-	12.32	35.04	28.70	31.69	10.87	37.80	6.69	2.36
AT-2500/1/S6E-IS	1991417.80	7440:1	1630	1860	F40, F48, F60	9.84	F16/Ø1.5748	-	12.32	35.04	28.70	36.65	10.87	37.80	6.69	2.36
AT-3000/1/S6E-IS	2433955.09	9300:1	2045	2325	F48, F60	10.24	F16/Ø1.5748	-	15.16	45.43	39.61	39.88	13.78	50.87	6.89	2.36
AT-3500/1/S6E-IS	2876492.37	11284:1	2482	2821	F48, F60	10.24	F16/Ø1.5748	-	15.16	45.43	39.61	39.88	13.78	50.87	6.89	2.36

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

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	Actuation Flange	Ductile Iron	ASTM A536 60-40-18	SG 400/12
9	Sintered Bush	Bronze	B148 C95800	-
10	Spur Housing	Ductile Iron	ASTM A536 60-40-18	SG 400/12
11	Spur Cover	Ductile Iron	ASTM A536 60-40-18	SG 400/12
12	Spur Pinion	Carbon Steel	ASTM A322 4140	40Cr4Mo3
13	Fasteners	Carbon steel	ASTM A322 4140	40Cr4Mo3

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