The Rolaram® range

Standard features

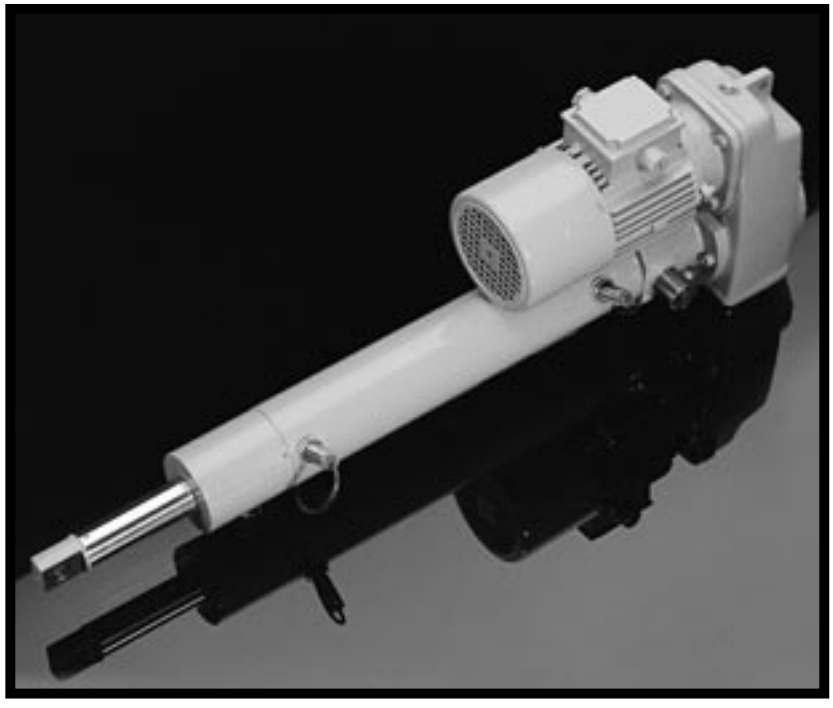
- Right angle or parallel drive configurations
- Choice of end fittings - clevis, threaded end, top plate
- Trunnion mounting (with or without feet)
- Proximity switches, encoder
- Ball screw version for R075, R100 and R125 models
- Anti-rotation ram

Operating life and duty

The actuator models listed in the technical charts are capable of very high operating lives (in excess of 10,000 hours for some high speed models). The ball screw version may have a lower life expectancy than the equivalent roller screw version. Due to the almost limitless number of possible configurations, please consult our product engineers for an estimate of life for individual applications. Continuous duty applications, such as reciprocating systems, can also be accommodated.

Efficiency

The inherent high efficiency of the screw and helical spur and spiral bevel gear system combine to give a typical overall mechanical efficiency of 80%. This minimizes power consumption and actuator size.



Synchronization

Synchronization of two or more Rolaram® actuators can be achieved in one of two ways, depending on the requirements of the application:

- Using encoders, synchronous motors or servo systems (each unit motorized).
- By linking the units mechanically with drive shafting driven by one common motor.

Positional accuracy

The accuracy of the roller screw and low backlash gearing provide repeatable positioning to within 5 microns (0.0002 inches) when the actuator is combined with a suitable drive and control system. Ball screw models have a positional accuracy of 50 microns (0.002 inches).

Guiding the Load

Side loads on the actuator ram should be avoided by ensuring that the load is guided. The load guide mechanism should resist the torque developed at the ram by the screw mechanism, thus precluding the use of spherical end fittings. The anti-rotation option, which utilizes rolling element followers, eliminates the need for torsional restraint and allows flexibility in the choice of end fittings.

Mounting position

The Rolaram® actuator can be mounted for operation in any orientation.

Safety features

- In the event of power failure, the fail-safe brake on the motor will maintain the position of the actuator
- Totally enclosed and sealed unit
- Built in proximity switches/ limit switches
- Anti-rotation version

Operating environment

All units are designed for industrial operating conditions. The actuator is sealed at the ram and, along with the standard brake motor, is protected to IP55 (Nema ratings available) enclosure. Normal operating temperatures are from 10°C (14°F) to +50°C (122°F). However, these products have been proven at operating temperatures of

- 30°C (-22F) (arctic) and the very high temperature of +70°C (158°F) (steelworks). Please contact our product engineers to discuss hostile or hazardous operating environments.

Lubrication and maintenance

Rolaram® actuators require minimal maintenance during the normal operating life. Depending upon the application, periodic lubrication should be carried out on the Spiracon® roller nut, thrust housing and helical spur/spiral bevel gearbox as recommended in our detailed maintenance instructions.

Specials

The Rolaram® concept has been successfully applied in many special applications requiring:

- Very high linear speed of over 50 meters/minute (17 ft/minute) and an acceleration of over 3 meters/s^2 (10 ft/s^2)
- Very high dynamic load of over 1000kN (112 tons)
- In-line drive configuration
- Special drive inverter, servo, DC, stepper
- Protection from extreme temperatures or hazardous environments
- Built in load cell
- Special mounting or restricted space
- Very low noise (under 60dB)

Technical charts

Model B075/R075—right angle and parallel configuration

Right angle configuration

Product Code	Linear Speed		Dynamic Load Capacity[1]		Motor	Max. Stroke in compression[2]		Basic Weight[3]	
	mm/minute	inches/minute	kN	tons	(kW)/Frame Size	mm	inches	kg	lbm
BALL SCREW									
B0750280[4]	280	11	21.0	2.4	0.18/80	2200	87	22.5	49.5
B0750720[4]	720	28	16.0	1.8	0.25/71	2500	98	22.5	49.5
B0750970[4]	970	38	12.0	1.3	0.25/71	2900	114	22.5	49.5
B0751270	1270	50	9.0	1.0	0.25/71	3200	126	22.5	49.5
B0751470	1470	58	7.8	0.9	0.25/71	3500	138	22.5	49.5
B0751650	1650	65	7.0	0.8	0.37/71	4000	157	22.5	49.5
B0752560	2560	101	6.6	0.7	0.37/71	4000	157	22.5	49.5
B0754030	4030	159	6.2	0.7	0.55/71	3400	134	22.5	49.5
B0754700	4700	185	5.3	0.6	0.55/71	3100	122	22.5	49.5
B0757130	7130	281	4.8	0.5	0.75/80	2500	98	36.5	80.3
ROLLER SCREW									
R0750240[4]	240	9	23.0	2.6	0.12/71	400	16	22.5	49.5
R0750620[4]	620	24	19.0	2.1	0.25/71	450	18	22.5	49.5
R0750840[4]	840	33	14.0	1.6	0.25/71	530	21	22.5	49.5
R0751010	1010	40	11.5	1.3	0.25/71	600	24	22.5	49.5
R0751280	1280	50	9.0	1.0	0.25/71	690	27	22.5	49.5
R0751850	1850	73	9.3	1.0	0.37/71	690	27	22.5	49.5
R0752400	2400	94	7.2	0.8	0.37/71	750	30	22.5	49.5
R0754290	4290	169	6.0	0.7	0.55/71	750	30	22.5	49.5
R0754800	4800	189	5.4	0.6	0.55/71	800	31	22.5	49.5
R0757000	7000	276	5.0	0.6	0.75/80	800	31	36.5	80.3

Parallel configuration

Product Code	Linear Speed		Dynamic Load Capacity[1]		Motor	Max. Stroke in compression[2]		Basic Weight[3]	
	mm/minute	inches/minute	kN	tons	(kW)/Frame Size	mm	inches	kg	lbm
BALL SCREW									
B0750250	250	10	22.0	2.5	0.12/63	2200	87	29	63.8
B0750670	670	26	17.0	1.9	0.25/71	2500	98	29	63.8
B0751340	1340	53	12.7	1.4	0.37/71	2900	114	30	66
B0751600	1600	63	10.5	1.2	0.37/71	3200	126	30	66
B0751960	1960	77	8.6	1.0	0.37/71	3500	138	30	66
B0752670	2670	105	6.4	0.7	0.37/71	4100	161	30	66
B0753200	3200	126	5.3	0.6	0.37/71	3800	150	30	66
B0755400	5400	213	4.7	0.5	0.55/71	2900	114	30	66
B0756080	6080	239	4.1	0.5	0.55/71	2700	106	30	66
B0756770	6770	267	3.7	0.4	0.55/71	2600	102	30	66
ROLLER SCREW									
R0750220	220	9	24.0	2.7	0.12/63	400	16	29	63.8
R0750600	600	24	19.0	2.1	0.25/63	450	18	29	63.8
R0751020	1020	40	17.0	1.9	0.37/71	480	19	30	66
R0751220	1220	48	14.3	1.6	0.37/71	530	21	30	66
R0751570	1570	62	11.2	1.3	0.37/71	600	24	30	66
R0752040	2040	80	8.5	1.0	0.37/71	690	27	30	66
R0752610	2610	103	6.7	0.8	0.37/71	770	30	30	66
R0754070	4070	160	6.5	0.7	0.55/71	780	31	30	66
R0755930	5930	233	4.4	0.5	0.55/71	940	37	30	66
R0757120	7120	280	3.7	0.4	0.55/71	1000	39	30	66

Notes:
1) Static load capacity = dynamic load capacity x 1.5.
2) For tensile loads, greater maximum strokes can be accommodated depending on the linear speed.
3) Total weight = basic weight + 2.4 kg (ball screw)/1.0 kg (roller screw) per 100 mm stroke. All weights are approximate.
4) Dimension AB applies (motor axis offset) on page 34.

Technical charts

Model B100/R100—right angle and parallel configuration

Right angle configuration

Product Code	Linear Speed		Dynamic Load Capacity[1]		Motor	Max. Stroke in compression[2]		Basic Weight[3]	
	mm/minute	inches/minute	kN	tons	(kW)/Frame Size	mm	inches	kg	lbm
BALL SCREW									
B1000280[4]	280	11	41.5	4.6	0.25/80	2400	94	40	88
B1000350[4]	350	14	33.0	3.7	0.25/80	2700	106	40	88
B1000970[4]	970	38	26.0	2.9	0.55/80	3000	118	40	88
B1001280	1280	50	19.5	2.2	0.55/80	3500	138	40	88
B1001660	1660	65	15.0	1.7	0.55/80	4000	157	40	88
B1002380	2380	94	14.4	1.6	0.75/80	4100	161	40	88
B1002590	2590	102	13.2	1.5	0.75/80	4200	165	40	88
B1004100	4100	161	12.2	1.4	1.1/80	3700	146	40	88
B1004780	4780	188	10.5	1.2	1.1/80	3400	134	40	88
B1007180	7180	283	9.6	1.1	1.5/90	2800	110	45	99
ROLLER SCREW									
R1000240[4]	240	9	48.0	5.4	0.25/80	850	33	40	88
R1000300[4]	300	12	38.0	4.3	0.25/80	900	35	40	88
R1000840[4]	840	33	30.5	3.4	0.55/80	1100	43	40	88
R1001010	1010	40	25.5	2.9	0.55/80	1200	47	40	88
R1001280	1280	50	20.0	2.2	0.55/80	1400	55	40	88
R1001840	1840	72	19.0	2.1	0.75/80	1400	55	40	88
R1002380	2380	94	14.8	1.7	0.75/80	1500	59	40	88
R1004410	4410	174	11.7	1.3	1.1/80	1750	69	40	88
R1004920	4920	194	10.4	1.2	1.1/80	1800	71	40	88
R1007080	7080	279	9.9	1.1	1.5/90	1800	71	49	107.8

Parallel configuration

Product Code	Linear Speed		Dynamic Load Capacity[1]		Motor	Max. Stroke in compression[2]		Basic Weight[3]	
	mm/minute	inches/minute	kN	tons	(kW)/Frame Size	mm	inches	kg	lbm
BALL SCREW									
B1000270	270	11	42.0	4.7	0.25/71	2400	94	47	103.4
B1000530	530	21	32.0	3.6	0.37/71	2700	106	47	103.4
B1000930	930	37	27.0	3.0	0.55/80	3000	118	47	103.4
B1001260	1260	50	20.0	2.2	0.55/80	3500	138	47	103.4
B1001680	1680	66	15.0	1.7	0.55/80	4000	157	47	103.4
B1002090	2090	82	12.0	1.3	0.55/80	4500	177	47	103.4
B1003060	3060	120	11.2	1.3	0.75/80	4200	165	50	110
B1004290	4290	169	8.0	0.9	0.75/80	3600	142	50	110
B1006770	6770	267	7.4	0.8	1.1/80	2800	110	50	110
B1007580	7580	298	6.6	0.7	1.1/80	2700	106	50	110
ROLLER SCREW									
R1000360	360	14	50.0	5.6	0.37/71	800	31	47	103.4
R1000490	490	19	35.5	4.0	0.37/71	900	35	47	103.4
R1000930	930	37	28.0	3.1	0.55/71	1100	43	47	103.4
R1001140	1140	45	23.0	2.6	0.55/71	1200	47	47	103.4
R1001510	1510	59	16.4	1.8	0.55/71	1400	55	47	103.4
R1001900	1900	75	13.7	1.5	0.55/71	1500	59	47	103.4
R1002880	2880	113	13.0	1.5	0.75/80	1600	63	50	110
R1003900	3900	154	9.1	1.0	0.75/80	1800	71	50	110
R1006430	6430	253	8.1	0.9	1.1/80	1800	71	50	110
R1007200	7200	283	7.2	0.8	1.1/80	1900	75	50	110

Notes:
1) Static load capacity = dynamic load capacity x 1.5.
2) For tensile loads, greater maximum strokes can be accommodated depending on the linear speed.
3) Total weight = basic weight + 3.3 kg (ball screw)/1.6 kg (roller screw) per 100 mm stroke. All weights are approximate.
4) Dimension AB applies (motor axis offset) on page 34.

Technical charts

Model B125/R125—right angle and parallel configuration

Right angle configuration

Product Code	Linear Speed		Dynamic Load Capacity[1]		Motor	Max. Stroke in compression[2]		Basic Weight[3]	
	mm/minute	inches/minute	kN	tons	(kW)/Frame Size	mm	inches	kg	lbm
BALL SCREW									
B1250380[4]	380	15	65.0	7.3	0.55/80	1900	75	61	134.2
B1250630[4]	630	25	54.0	6.0	0.75/90	2100	83	61	134.2
B1251180	1180	46	42.5	4.8	1.1/90	2300	91	61	134.2
B1252030	2030	80	34.0	3.8	1.5/90	2600	102	61	134.2
B1252370	2370	93	29.0	3.2	1.5/90	2900	114	61	134.2
B1253020	3020	119	22.8	2.6	1.5/90	3200	126	61	134.2
B1253380	3380	133	20.4	2.3	1.5/90	3400	134	61	134.2
B1254100	4100	161	16.8	1.9	1.5/90	3700	146	61	134.2
B1254780	4780	188	14.4	1.6	1.5/90	3400	134	61	134.2
B1257130	7130	281	14.0	1.6	2.2/100	2800	110	68	149.6
ROLLER SCREW									
R1250330[4]	330	13	78.0	8.7	0.55/90	1600	63	61	134.2
R1250550[4]	550	22	64.0	7.2	0.75/90	1800	71	61	134.2
R1250890	890	35	58.0	6.5	1.1/90	1900	75	61	134.2
R1251390	1390	55	50.5	5.7	1.5/90	2000	79	61	134.2
R1251760	1760	69	40.0	4.5	1.5/90	2100	83	61	134.2
R1252000	2000	79	37.0	4.1	1.5/90	2200	87	61	134.2
R1252450	2450	96	28.5	3.2	1.5/90	2400	94	61	134.2
R1254440	4440	175	23.2	2.6	2.2/90	2600	102	61	134.2
R1254960	4960	195	20.7	2.3	2.2/90	2600	102	61	134.2
R1257180	7180	283	19.5	2.2	3.0/90	2600	102	72	158.4

Parallel configuration

Product Code	Linear Speed		Dynamic Load Capacity[1]		Motor	Max. Stroke in compression[2]		Basic Weight[3]	
	mm/minute	inches/minute	kN	tons	(kW)/Frame Size	mm	inches	kg	lbm
BALL SCREW									
B1250390	390	15	64.0	7.2	0.55/80	1900	75	78	171.6
B1250620	620	24	55.5	6.2	0.75/80	2000	79	78	171.6
B1251090	1090	43	46.0	5.2	1.1/90	2200	87	82	180.4
B1251990	1990	78	34.0	3.8	1.5/90	2600	102	82	180.4
B1253420	3420	135	29.0	3.2	2.2/90	2900	114	82	180.4
B1254040	4040	159	25.0	2.8	2.2/90	3100	122	82	180.4
B1255010	5010	197	20.0	2.2	2.2/90	3300	130	82	180.4
B1255820	5820	229	17.0	1.9	2.2/90	3100	122	82	180.4
B1256860	6860	270	14.6	1.6	2.2/90	2800	110	82	180.4
B1258510	8510	335	11.8	1.3	2.2/90	2500	98	82	180.4
ROLLER SCREW									
R1250330	330	13	80.0	9.0	0.55/80	1500	59	78	171.6
R1250770	770	30	68.0	7.6	1.1/80	1600	63	78	171.6
R1251040	1040	41	67.6	7.6	1.5/90	1600	63	82	180.4
R1251530	1530	60	46.0	5.2	1.5/90	2000	79	82	180.4
R1252380	2380	94	43.6	4.9	2.2/90	2040	80	82	180.4
R1252980	2980	117	34.8	3.9	2.2/90	2200	87	82	180.4
R1253610	3610	142	28.8	3.2	2.2/90	2400	94	82	180.4
R1254240	4240	167	24.5	2.7	2.2/90	2500	98	82	180.4
R1255130	5130	202	20.2	2.3	2.2/90	2700	106	82	180.4
R1256060	6060	239	17.1	1.9	2.2/90	2740	108	82	180.4

Notes:
1) Static load capacity = dynamic load capacity x 1.5.
2) For tensile loads, greater maximum strokes can be accommodated depending on the linear speed.
3) Total weight = basic weight + 4.2 kg (ball screw)/2.2 kg (roller screw) per 100 mm stroke. All weights are approximate.
4) Dimension AB applies (motor axis offset) on page 34.

Technical charts

Model R150—right angle and parallel configuration

Rght angle configuration

Product Code	Linear Speed		Dynamic Load Capacity[1]		Motor	Max. Stroke in compression[2]		Basic Weight[3]	
	mm/minute	inches/minute	kN	tons	(kW)/Frame Size	mm	inches	kg	lbm
ROLLER SCREW									
R1500440[4]	440	17	118.0	13.2	1.1/90	2180	86	90	198
R1500760[4]	760	30	92.0	10.3	1.5/100	2300	91	100	220
R1501160[4]	1160	46	88.6	9.9	2.2/100	2300	91	100	220
R1501400	1400	55	73.5	8.2	2.2/100	2650	104	100	220
R1501770	1770	70	58.2	6.5	2.2/100	2800	110	100	220
R1501910	1910	75	53.9	6.0	2.2/100	3000	118	100	220
R1503590	3590	141	39.1	4.4	3.0/100	3300	130	100	220
R1504530	4530	178	30.9	3.5	3.0/100	3600	142	100	220
R1505060	5060	199	27.7	3.1	3.0/100	3500	138	100	220
R1507230	7230	285	25.9	2.9	4.0/112	3500	138	105	231

Parallel configuration

Product Code	Linear Speed		Dynamic Load Capacity[1]		Motor	Max. Stroke in compression[2]		Basic Weight[3]	
	mm/minute	inches/minute	kN	tons	(kW)/Frame Size	mm	inches	kg	lbm
ROLLER SCREW									
R1500420	420	17	122.0	13.7	1.1/90	2000	79	101	222.2
R1500680	680	27	103.8	11.6	1.5/90	2180	86	101	222.2
R1501070	1070	42	97.4	10.9	2.2/90	2200	87	101	222.2
R1501420	1420	56	73.0	8.2	2.2/90	2500	98	101	222.2
R1501810	1810	71	57.4	6.4	2.2/90	2800	110	101	222.2
R1502260	2260	89	45.8	5.1	2.2/90	3200	126	101	222.2
R1502980	2980	117	34.8	3.9	2.2/90	3500	138	101	222.2
R1503610	3610	142	28.8	3.2	2.2/90	3600	142	101	222.2
R1504240	4240	167	24.5	2.7	2.2/90	3700	146	101	222.2
R1506060	6060	239	17.1	1.9	2.2/90	3500	138	101	222.2

Notes:

1) Static load capacity = dynamic load capacity x 1.5.

2) For tensile loads, greater maximum strokes can be accommodated depending on the linear speed.

3) Total weight = basic weight + 2.8 per 100 mm stroke. All weights are approximate.

4) Dimension AB applies (motor axis offset) on page 34.

Technical charts

Model R175—right angle and parallel configuration

Right angle configuration

Product Code	Linear Speed		Dynamic Load Capacity[1]		Motor	Max. Stroke in compression[2]		Basic Weight[3]	
	mm/minute	inches/minute	kN	tons	(kW)/Frame Size	mm	inches	kg	lbm
ROLLER SCREW									
R1750460[4]	460	18	225.0	25.2	2.2/112	2200	87	165	363
R1750570[4]	570	22	180.0	20.2	2.2/112	2400	94	165	363
R1751160[4]	1160	46	121.0	13.6	3.0/100	3000	118	161	354.2
R1751810	1810	71	103.6	11.6	4.0/112	3100	122	165	363
R1752020	2020	80	92.7	10.4	4.0/112	3300	130	165	363
R1752860	2860	113	65.4	7.3	4.0/112	3800	150	165	363
R1753610	3610	142	51.8	5.8	4.0/112	4000	157	165	363
R1754560	4560	180	41.0	4.6	4.0/112	4000	157	165	363
R1755100	5100	201	36.7	4.1	4.0/112	3800	150	165	363
R1757230	7230	285	35.6	4.0	5.5/132	3600	142	210	462

Parallel configuration

Product Code	Linear Speed		Dynamic Load Capacity[1]		Motor	Max. Stroke in compression[2]		Basic Weight[3]	
	mm/minute	inches/minute	kN	tons	(kW)/Frame Size	mm	inches	kg	lbm
ROLLER SCREW									
R1750220	220	9	210.0	23.5	1.1/90	2200	87	158	347.6
R1750650	650	26	176.0	19.7	2.2/100	2400	94	168	369.6
R1751120	1120	44	140.0	15.7	3.0/100	2700	106	168	369.6
R1751330	1330	52	117.0	13.1	3.0/100	3000	118	168	369.6
R1751880	1880	74	102.8	11.5	4.0/112	3100	122	175	385
R1752140	2140	84	83.7	9.4	4.0/112	3400	134	175	385
R1752680	2680	106	67.0	7.5	4.0/112	3800	150	175	385
R1753300	3300	130	53.4	6.0	4.0/112	4000	157	175	385
R1754760	4760	187	40.2	4.5	4.0/112	4000	157	175	385
R1755690	5690	224	32.6	3.7	4.0/112	3900	154	175	385

Notes:

1) Static load capacity = dynamic load capacity x 1.5.

2) For tensile loads, greater maximum strokes can be accommodated depending on the linear speed.

3) Total weight = basic weight + 3.9 kg per 100 mm stroke. All weights are approximate.

4) Dimension AB applies (motor axis offset) on page 34.

Technical charts

Model R225—right angle and parallel configuration

Right angle configuration

Product Code	Linear Speed		Dynamic Load Capacity[1]		Motor	Max. Stroke in compression[2]		Basic Weight[3]	
	mm/minute	inches/minute	kN	tons	(kW)/Frame Size	mm	inches	kg	lbm
ROLLER SCREW									
R2250340[4]	340	13	300.0	33.6	2.2/132	3000	118	307	675.4
R2250580[4]	580	23	240.0	26.9	3.0/132	3300	130	311	684.2
R2250880[4]	880	35	212.5	23.8	4.0/112	3500	138	285	627
R2251180[4]	1180	46	158.0	17.7	4.0/112	3950	156	285	627
R2251820	1820	72	141.4	15.8	5.5/132	4100	161	306	673.2
R2252880	2880	113	89.3	10.0	5.5/132	4800	189	306	673.2
R2253610	3610	142	71.2	8.0	5.5/132	4900	193	306	673.2
R2254560	4560	180	56.3	6.3	5.5/132	4600	181	306	673.2
R2255100	5100	201	50.4	5.6	5.5/132	4600	181	306	673.2
R2257230	7230	285	48.5	5.4	7.5/132	4500	177	316	695.2

Parallel configuration

Product Code	Linear Speed		Dynamic Load Capacity[1]		Motor	Max. Stroke in compression[2]		Basic Weight[3]	
	mm/minute	inches/minute	kN	tons	(kW)/Frame Size	mm	inches	kg	lbm
ROLLER SCREW									
R2250370	370	15	280.0	31.4	2.2/100	3000	118	297	653.4
R2250750	750	30	246.0	27.6	4.0/112	3200	126	301	662.2
R2251010	1010	40	196.5	22.0	4.0/112	3500	138	301	662.2
R2251250	1250	49	184.0	20.6	4.0/112	3600	142	301	662.2
R2251480	1480	58	174.4	19.5	5.5/132	3700	146	348	765.6
R2252610	2610	103	124.7	14.0	5.5/132	4200	165	348	765.6
R2252860	2860	113	90.0	10.1	5.5/132	4800	189	348	765.6
R2253490	3490	137	73.8	8.3	5.5/132	4900	193	348	765.6
R2254960	4960	195	51.9	5.8	5.5/132	4700	185	348	765.6
R2256720	6720	265	43.9	4.9	5.5/132	4600	181	348	765.6

Notes:

1) Static load capacity = dynamic load capacity x 1.5.

2) For tensile loads, greater maximum strokes can be accommodated depending on the linear speed.

3) Total weight = basic weight + 5.1 kg per 100 mm stroke. All weights are approximate.

4) Dimension AB applies (motor axis offset) on page 34.

Right angle configuration

Product Code	Linear Speed		Dynamic Load Capacity[1]		Motor	Max. Stroke in compression[2]		Basic Weight[3]	
	mm/minute	inches/minute	kN	tons	(kW)/Frame Size	mm	inches	kg	lbm
ROLLER SCREW									
R2500470[4]	470	19	402.0	45.0	4.0/132	3000	118	405	891
R2500790[4]	790	31	327.0	36.6	5.5/132	3200	126	417	917.4
R2501190[4]	1190	47	294.0	32.9	7.5/132	3500	138	431	948.2
R2501440	1440	57	243.5	27.3	7.5/132	3800	150	431	948.2
R2501820	1820	72	192.8	21.6	7.5/132	4100	161	431	948.2
R2502030	2030	80	172.5	19.3	7.5/132	4300	169	431	948.2
R2503000[4]	3000	118	143.4	16.1	9.5/132	4500	177	431	948.2
R2503630	3630	143	118.6	13.3	9.5/132	4800	189	431	948.2
R2505150	5150	203	99.8	11.2	11.0/160	4500	177	457	1005.4
R2507330	7330	289	95.7	10.7	15.0/160	4500	177	467	1027.4

Parallel configuration

Product Code	Linear Speed		Dynamic Load Capacity[1]		Motor	Max. Stroke in compression[2]		Basic Weight[3]	
	mm/minute	inches/minute	kN	tons	(kW)/Frame Size	mm	inches	kg	lbm
ROLLER SCREW									
R2500670	670	26	396.0	44.4	5.5/132	3000	118	483	1062.6
R2501140	1140	45	329.0	36.8	7.5/132	3300	130	483	1062.6
R2501340	1340	53	262.5	29.4	7.5/132	3600	142	483	1062.6
R2501860	1860	73	250.5	28.1	9.5/132	3750	148	483	1062.6
R2502350	2350	93	189.8	21.3	9.5/132	4100	161	483	1062.6
R2502820	2820	111	165.3	18.5	9.5/132	4300	169	483	1062.6
R2503520	3520	139	132.3	14.8	9.5/132	4700	185	483	1062.6
R2504080	4080	161	116.5	13.0	9.5/132	4800	189	483	1062.6
R2504630	4630	182	95.0	10.6	9.5/132	4800	189	483	1062.6
R2505560	5560	219	75.3	8.4	9.5/132	4600	181	483	1062.6

Notes:

1) Static load capacity = dynamic load capacity x 1.5.

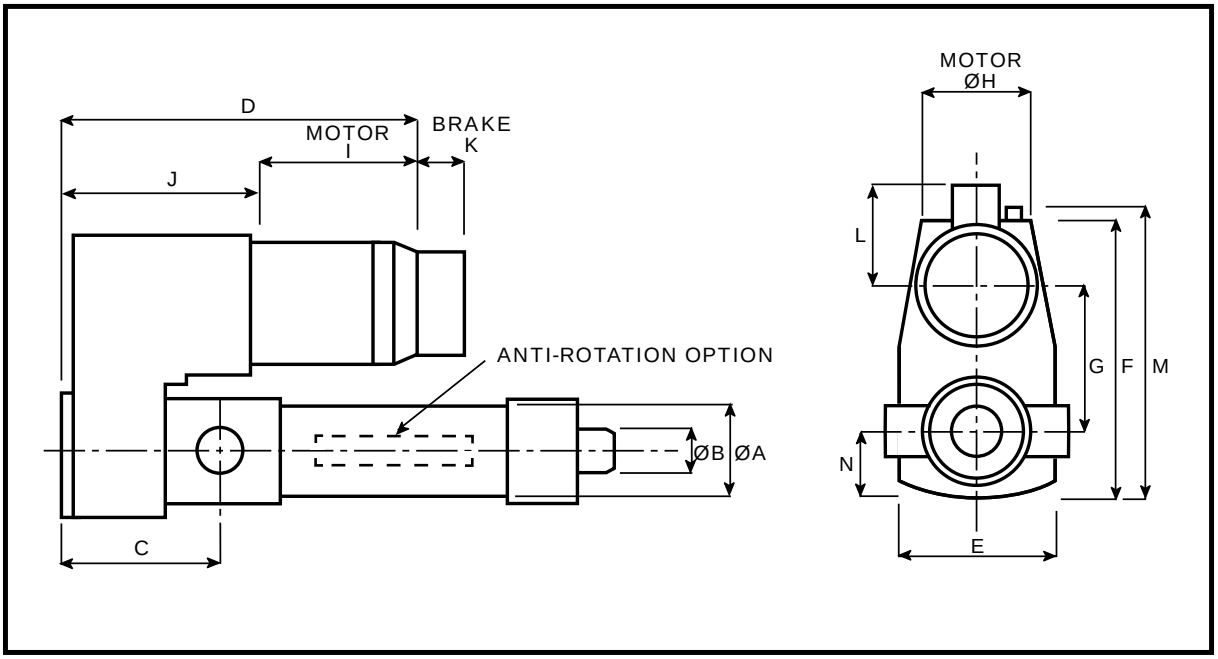
2) For tensile loads, greater maximum strokes can be accommodated depending on the linear speed.

3) Total weight = basic weight + 5.8 kg per 100 mm stroke. All weights are approximate.

4) Dimension AB applies (motor axis offset) on page 34.

Outline drawings

Actuator—parallel configuration



Actuator—right angle configuration

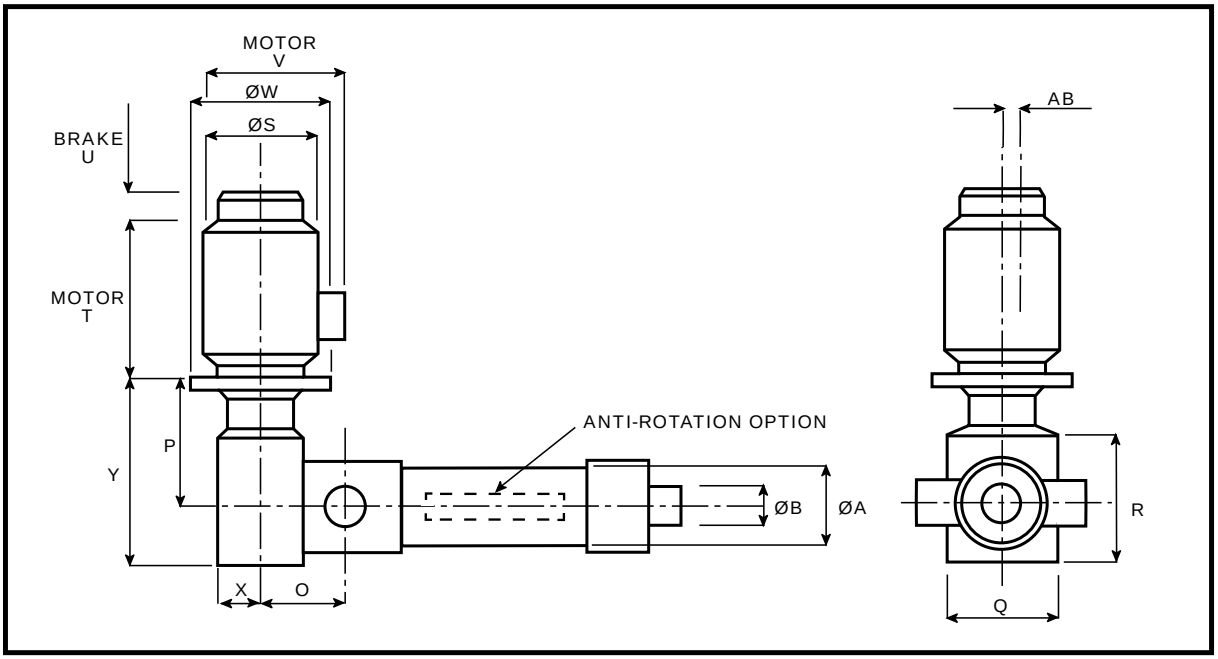


Table of dimensions

Actuator—parallel and right angle configuration

(All dimensions are in millimeters)

Parallel configuration

	R075		R100		R125		R150	R175			R225			R250
MOTOR FRAME SIZES	(63)	(71)	(71)	(80)	(80)	(90)	(90)	(90)	(100)	(112)	(100)	(112)	(132)	(132)
AØ	102		120		145		175	195			255			275
BØ	40 (75)		50 (92)		70 (106)		90	110			140			150
C	208		248		305		320	385			465			560
D	340	360	385	409	426	463	463	510	545	568	558	581	660	750
E	158		190		226		226	255			306			350
F	264	272	337	337	385	385	385	454	454	454	522	522	530	586
G	122		147		178		178	206			251			281
HØ	130	145	145	162	162	181	181	181	203	228	203	228	266	266
I	227	248	242	266	266	303	303	310	345	368	345	368	447	443
J	118		143		160		160	200			213			307
K	60	68	68	67	67	75	75	75	90	95	90	95	122	122
L	113	125	125	137	137	147	147	147	158	171	158	171	196	196
M	267		324		387		387	438			527			581
N	77		90		107		107	123			146			172

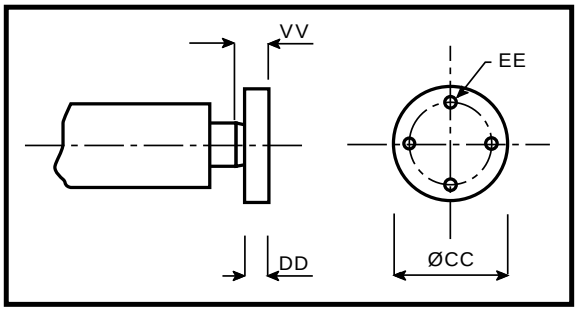
Right angle configuration

	R075		R100		R125		R150			R175			R225		R250	
MOTOR FRAME SIZES	(71)	(80)	(80)	(90)	(90)	(100)	(90)	(100)	(112)	(100)	(112)	(132)	(112)	(132)	(132)	(160)
0	157.5		190		210		236.5			300			365		370	
P	155MAX	209MAX	233MAX	245MAX	243MAX	255MAX	285MAX	295MAX	292MAX	270MAX	343MAX	363MAX	332MAX	427MAX	383MAX	383MAX
Q	110		140		140		170			210			240		280	
R	158		193		193		235			291			338		406	
SØ	145	162	162	181	181	203	181	203	228	203	228	266	228	266	266	326
T	207	232	232	275	275	305	275	305	325	305	325	395	325	395	395	521
U	68	67	67	75	75	90	75	90	95	90	95	122	95	122	122	130
V	186	223	223	226	226	261	226	261	273	261	273	323	273	323	323	380
WØ	160	200	200	200	200	250	200	250	250	250	250	300	250	300	300	350
X	62		60		72		85			107			128		151	
Y	220.5MAX	274.5MAX	316MAX	328MAX	326MAX	338MAX	383MAX	393MAX	390MAX	391MAX	464MAX	484MAX	468MAX	563MAX	546MAX	546MAX
AB	10		12		12		18			22			26		32	

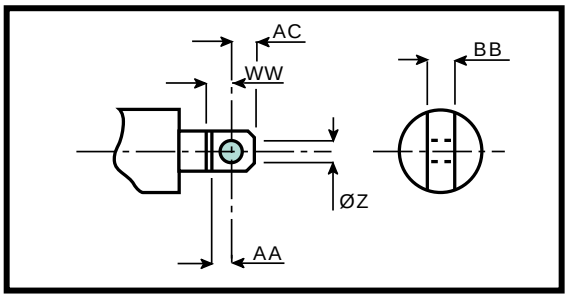
Notes: Dimensions in brackets for (BØ) refer to ball screw models.

Outline drawings

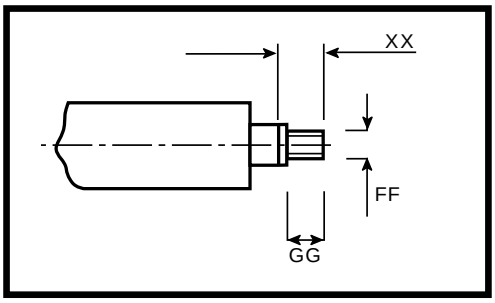
Top plate



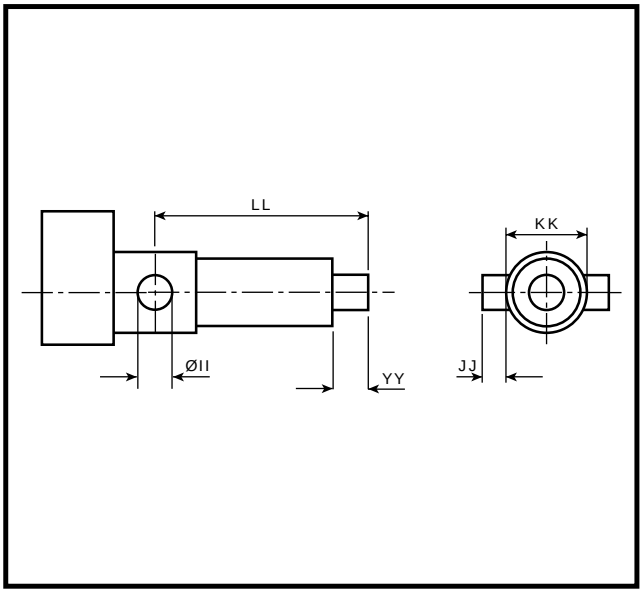
Clevis end



Threaded end



Trunnion



Trunnion feet/end cap foot

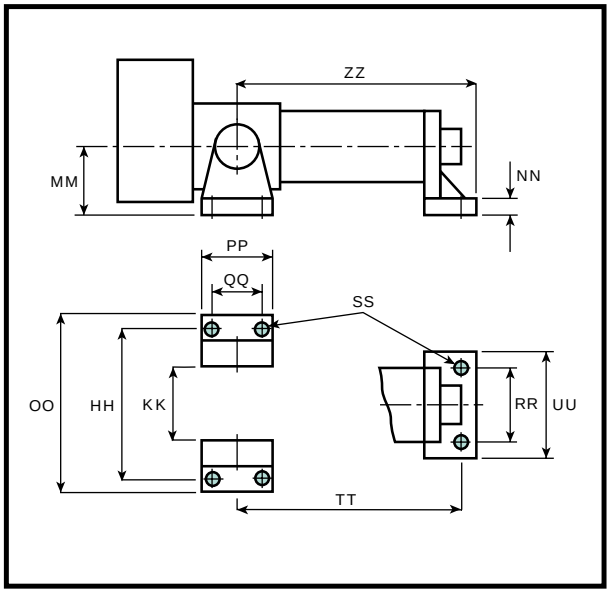


Table of dimensions

End fittings/mountings

(All dimensions are in millimeters)

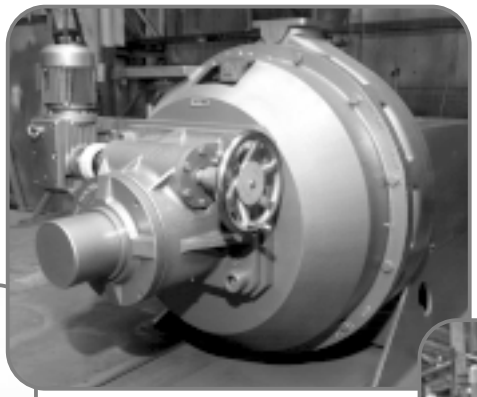
	R075	R100	R125	R150	R175	R225	R250
ZØ (H7)	20	28	35	42	55	70	80
AA	23	32	38	47	62	78	90
BB	25	30	35	40	50	70	80
CCØ	105 (145)	130 (175)	170 (210)	220	270	300	330
DD	14	18	22	26	33	33	39
EE	4 x Ø13.5 x 80 PCD (115)	4 x Ø18 x 100 PCD (140)	4 x Ø22 x 130 PCD (165)	4 x Ø26 x 170 PCD	4 x Ø33 x 205 PCD	6 x Ø33 x 235 PCD	6 x Ø39 x 260 PCD
FF	M24 x 3	M36 x 4	M36 x 4	M48 x 5	M68 x 6	M80 x 6	M80 x 6
GG	35	40	50	60	75	90	125
HH	211	290	325	324	355	530	610
IIØ (f7)	35	45	60	70	95	110	125
JJ	32	45	50	60	80	90	105
KK	115	160	175	190	195	260	310
LL + STROKE	300	305	363	495	750	850	750
MM	85	100	110	120	150	180	195
NN	14	20	25	35	40	45	50
OO	251	350	389	412	453	640	742
PP	100	140	154	238	308	350	400
QQ	60	80	90	150	210	240	268
RR	120	145	180	210	260	280	350
SS	6 x Ø13.5	6 x Ø22	6 x Ø26	6 x Ø33	6 x Ø39	6 x Ø45	6 x Ø52
TT + STROKE	281	305	407	505	767	903	790
UU	160	205	250	300	370	410	500
VV	20	23	27	32	40	52	60
WW	28	37	45	54	72	90	105
XX	40	45	57	67	85	102	140
YY	50	41	24	50	58	32	60
ZZ + STROKE	301	335	442	550	822	968	865
AC	20	28	35	45	55	70	80

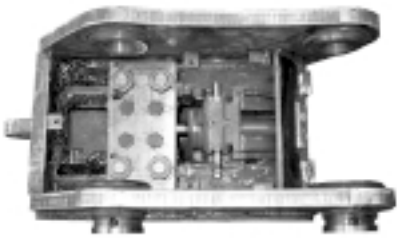
Notes: Dimensions in brackets for (CCØ and EE) refer to ball screw models.

1.1.2. Typical Applications

Power Jacks actuators operating successfully world-wide in a wide variety of industries including paper, food processing, nuclear, steel, transport, aerospace, communications and leisure.

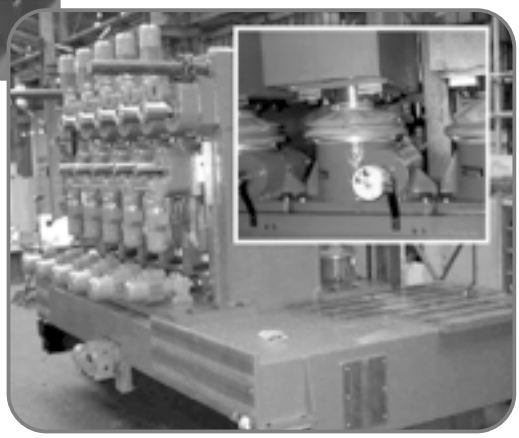
Adjuster to Paper Machine





Quick Hitch for Excavator Bucket Attachment

Satellite Dish Positioning



Steel Strip Tension Leveler

Roll Tensioner

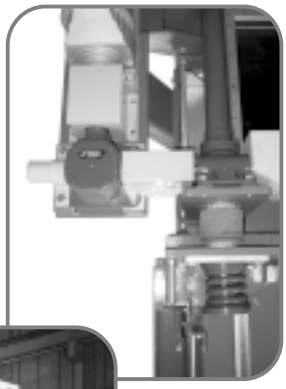
12 Head Horizontal Band Saw

Stadium Access Lift

Particle Accelerator

Plate Leveller

Biscuit
Making Machine



Screw Jack with Coil
Spring Damper Unit

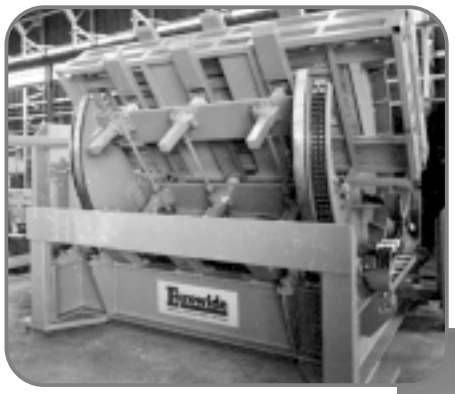
Headbox Adjustment
on Paper Machine

Pre-Feed and Stacking
on Fibre Board Machine

Glass Packaging
Machine

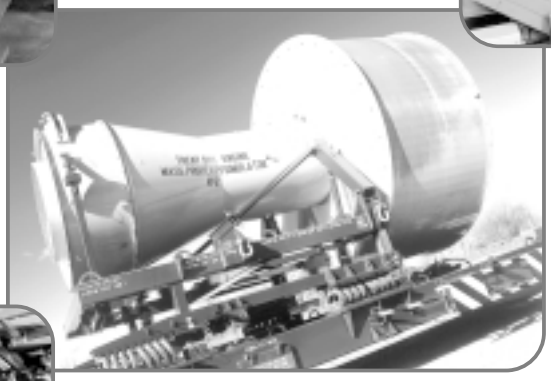
Aircraft Airbridge
Access Leveling

Military Aircraft
Assembly Locating Rig



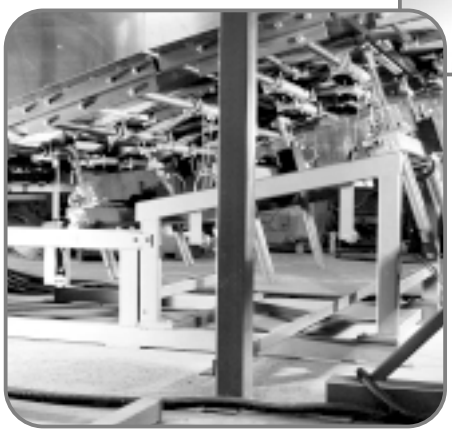
Sheet Metal Bundle Turnover Machine

Tube End Deburring Machine



Aero Engine Lift for Transportation Stand

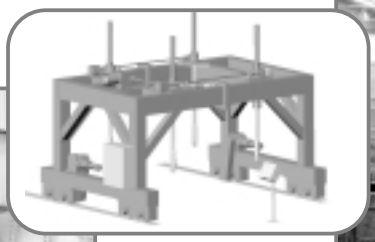
Foam Forming Machine



Railway Carriage Lift

Raise and Lower Dampers in Power Station Flues

Hydospace Test Centre 35 Te Pressure Vessel Lid Lift



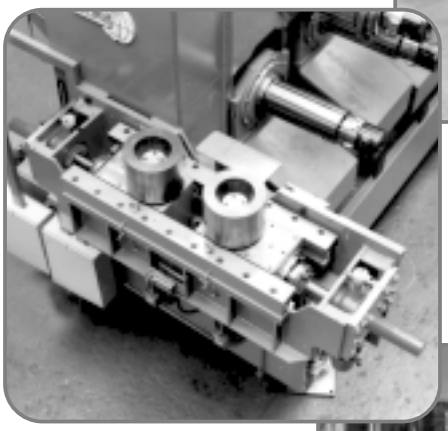
Aircraft Access Equipment

Section Rolling Machine

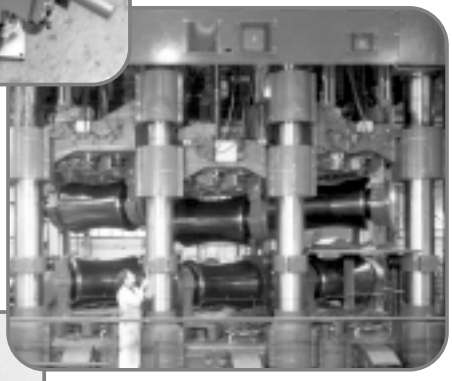
Access Platform Lift for Aircraft Wing Manufacture

Printing Press

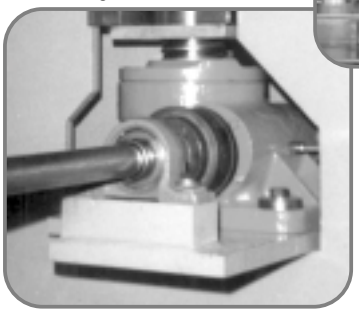
Strip Guide Adjusters



Heavy Duty Straightening Machine



Double Pinch Bending Rolls Machine



Medical Examination Table

Actuators with Shock Absorbers