

POWERAM - Electric Linear Actuators

POWERAM an industrial precision Electro-Mechanical Linear Actuator that is enabling engineers to quickly and easily:

- Automate a manual system
- Standardise Machine Design
- Improve Performance by Switching from Hydraulics to Electro-Mechanical
- Operate in Demanding Environments
- Upgrade a screw jack to a linear actuator



Our POWERAM electro-mechanical linear actuators are designed for low to medium duty applications, with loads up to 200kN as standard. Loads up to 2000kN are available on request.

POWERAM Linear Actuator Range

A design for every occasion thanks to 3 main POWERAM versions:

1. **Machine Screw** – Typically for Intermittent duty
2. **Stainless Steel** – High corrosion protection, intermittent duty
3. **Ball Screw** – medium to high duty or high speed or low power consumption applications

Where the standard range does not meet the application specification, special actuators can be designed to meet customers' specific requirements.

Design Features for Better Linear Motion Solutions

Unified Design Helps Machine Builders Standardise System & Machine Design

The 3 POWERAM actuator designs of machine screw, stainless steel and ball screw use the same common housing. This allows system builders to alter the performance of the actuator and their system while maintaining the same dimensions for the actuator to aid machine design standardisation and gain cost benefits.

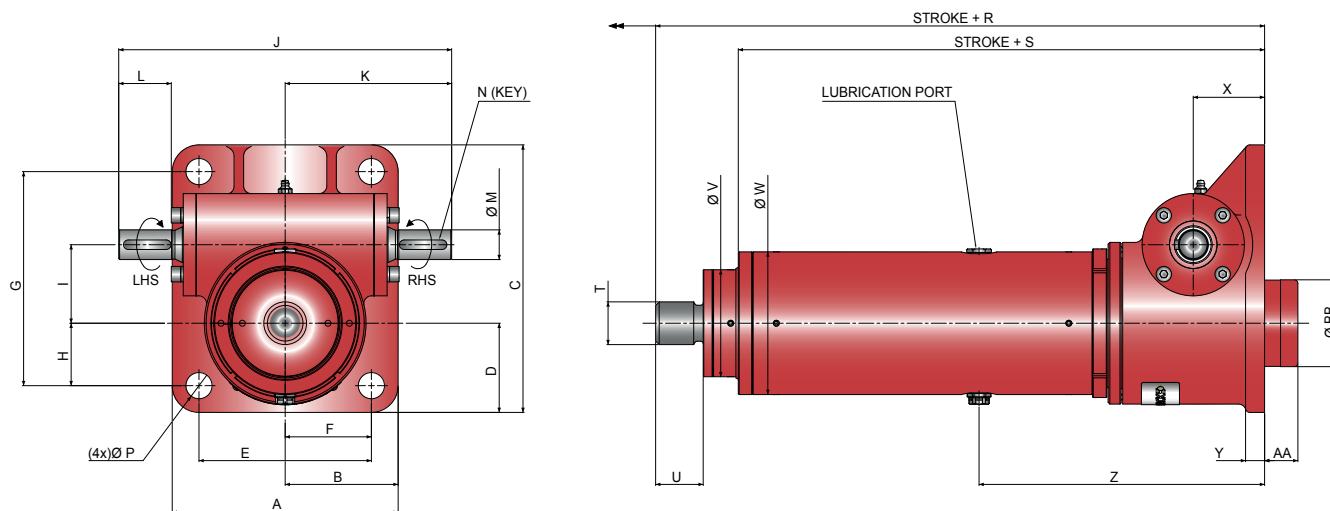
High Corrosion Resistance with Stainless Steel Version

A complete stainless steel version is available as standard using our proven marine and subsea technology.

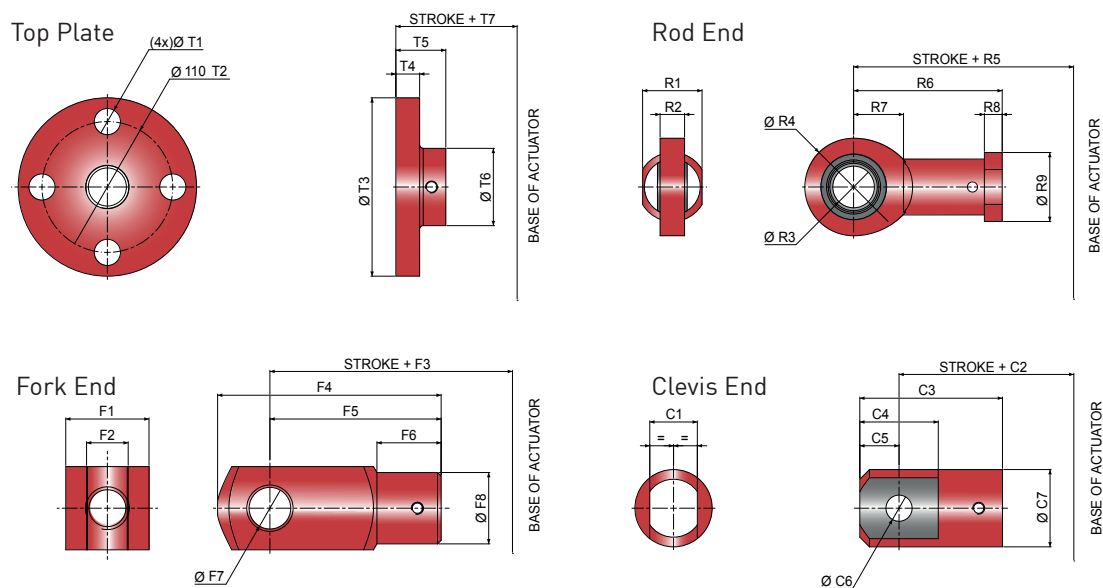
Easy upgrade from screw jack to POWERAM

Both POWERAM linear actuators and E-Series screw jacks use the same worm gearbox design for each nominal capacity size, which allows for an easy upgrade path from E-Series screw jack to POWERAM linear actuator.

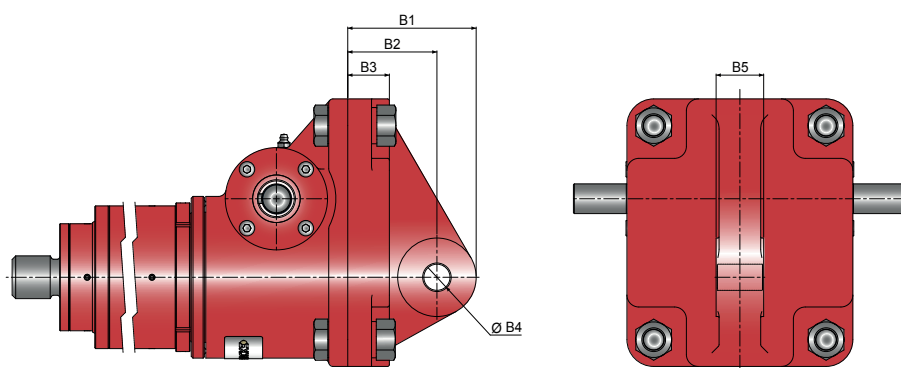
POWERAM Actuator Dimensions



POWERAM End Fitting Dimensions



Rear Clevis - Standard



POWERAM Actuator - Standard Performance

Model		L-A0010		L-A0025		L-A0050		L-A0100		L-A0200	
Capacity	kN	10		25		50		100		200	
Lifting Screw	Option	1	2	1	2	1	2	1	2	1	2
Machine Screw [& Stainless Steel]	Lead (mm)	5	10	6	12	9	18	12	24	12	24
Ball Screw	Lead (mm)	5	N/A	5	10	10	20	10	20	10	20
Gear Ratios	Option 1	5:1		6:1		6:1		8:1		8:1	
	Option 2	20:1		24:1		24:1		24:1		24:1	
Max. Input Power (kW)	Gear Ratio Option 1	0.375		1.5		3.0		3.75		3.75	
	Gear Ratio Option 2	0.19		0.375		0.55		1.125		1.125	

POWERAM Actuator Dimensions

Model	L-A0010	L-A0025	L-A0050	L-A0100	L-A0200
A	85	110	150	190	210
B	42.5	55	75	95	105
C	128	165	205	225	275
D	54	65	75	75	105
E	70	80	115	145	150
F	35	40	57.5	72.5	75
G	112	135	170	180	215
H	46	50	57.5	52.5	75
I	31.83 31.75	45.13 43.26	60.13 55.58	66.06 66.00	66.07 66.00
J	150	180	230	280	300
K	75	90	115	140	150
L	35	27.5	35	44	44
ØM	14 h8	16 h8	19 h8	25 h8	28 h8

Model	L-A0010	L-A0025	L-A0050	L-A0100	L-A0200
N	5 x 5 x 25	5 x 5 x 25	6 x 6 x 32	8 x 7 x 40	8 x 7 x 40
ØP	8.5	13.5	18	22	26
R	287	321	390	462	582
S	231	256	321	393	474
T	M12 x 1.75	M20 x 2.5	M24 x 3	M36 x 4	M48 x 5
U	24	30	35	40	55
V	40	50	70	90	110
W	60	80	95	120	150
X	40 ± 0.13	45 ± 0.13	60 ± 0.13	60 ± 0.13	85 ± 0.13
Y	13.5	13	14	16	20
Z	144	170	223	240	322
AA	N/A	N/A	N/A	28	24
ØBB	N/A	N/A	N/A	73	89

Top Plate

Model	L-A0010	L-A0025	L-A0050	L-A0100	L-A0200
ØT1 x QTY	11 x 4	13.5 x 4	18 x 4	22 x 4	26 x 4
ØT2 (PCD)	55	70	85	110	120
ØT3	80	100	120	150	170
T4	10	12	16	20	25
T5	25	31.5	36.5	42	58
ØT6	30	40	50	65	75
T7	287	321	390	464	585

Clevis End

Model	L-A0010	L-A0025	L-A0050	L-A0100	L-A0200
C1	20	30	35	40	50
C2	308	348	417	509	630
C3	63	79.5	91.5	120	143
C4	36	46	60	66	80
C5	18	23	30	33	40
ØC6	12	16	20	22	30
ØC7	30	40	50	65	75

Fork End

Model	L-A0010	L-A0025	L-A0050	L-A0100	L-A0200
F1	24	40	50	70	96
F2	12	20	25	35	50
F3	311	371	455	566	719
F4	62	105	132	188	265
F5	48	80	100	144	192
F6	18	30	36	54	73
ØF7	12	20	25	35	50
ØF8	20	34	42	60	82

Rod End

Model	L-A0010	L-A0025	L-A0050	L-A0100	L-A0200
R1	19	32	36	50	65
R2	8	13	17	21	30
ØR3	12	20	25	35	50
ØR4	34	53	64	82	112
R5	313	368	449	547	687
R6	50	77	94	125	160
R7	18	27	32	42	60
R8	6.5	10	12	15	20
ØR9	22	35	42	58	75

Rear Clevis - Standard

Model	L-A0010	L-A0025	L-A0050	L-A0100	L-A0200
B1	57	67	91	108	138
B2	39	44	61	75	96
B3	15	15	25	35	50

Model	L-A0010	L-A0025	L-A0050	L-A0100	L-A0200
ØB4	12	16	20	22	30
B5	20	30	35	40	50

Direct Motor Drive



Geared Motor Drive



Rotary Limit Switch



Trunnion Mount

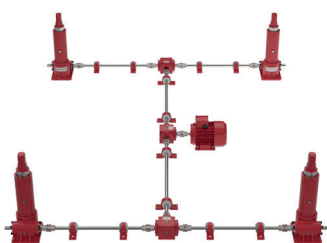


Actuator Systems

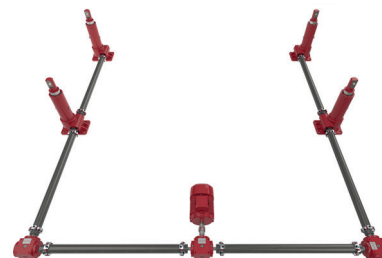
POWERAM ACTUATORS can be connected together in systems so that multiple units can be operated and controlled together. These actuator system arrangements or configurations can be built in many formats with the use of bevel gearboxes, motors, reduction gearboxes, drive shafts, couplings, plummer blocks and motion control devices.

Four of the most popular system configurations are the 'H', 'U', 'T' and 'I' configured actuator systems. Multiple actuators can be linked together mechanically or electrically, extending the possible number of actuators used in unison to in excess of 100.

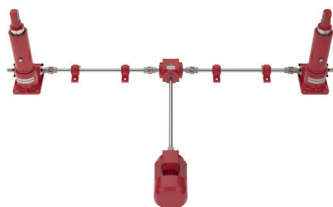
H-CONFIGURATION



U-CONFIGURATION



T-CONFIGURATION



I-CONFIGURATION



PJ-F-LA-POWERAM-EN-00