

POWER SPRINGS

HEAVY DUTY SHOCK CORD \ BRITISH STANDARD BS3F70 \ BESPOKE DESIGNS \ PATENTED TERMINATIONS \
RANGE OF DIAMETERS \ EXTREME ENVIRONMENTS LAND OR MARINE



UK MANUFACTURED ROPES,
SHOCK CORD AND ASSEMBLIES



Power Springs

E Type and E Type Shortie Terminations

Bespoke Aluminium-Terminated Tri-actor

Standard Shortie and E Type Shortie Termination Combination

E Type Shortie Terminations with Disc

Tab End





POWERSPRINGS ARE AVAILABLE IN SIX DIAMETERS.

Cord diameter mm (in)	Maximum load N (lb)	Initial Tension N (lb)	Preload N (lb)	Nominal free length	Spring rate N (lb)	Maximum extension %
12.5 (0.49)	487 (109)	135 (30)	174 (39)	Any	3.91 (0.88)	90
16.0 (0.63)	826 (186)	190 (43)	261 (59)	Any	7.07 (1.59)	90
19.0 (0.75)	1152 (259)	248 (56)	348 (78)	Any	10.04 (2.26)	90
22.0 (0.87)	1565 (352)	367 (82)	500 (112)	Any	13.31 (2.99)	90
26.0 (1.02)	1957 (440)	538 (121)	696 (156)	Any	15.77 (3.54)	90
32.0 (1.26)	3326 (747)	782 (176)	1065 (239)	Any	28.27 (6.35)	90

Pre-load = load at 10% extension.
Initial tension = calculated value that assumes the modulus is constant to zero extension.

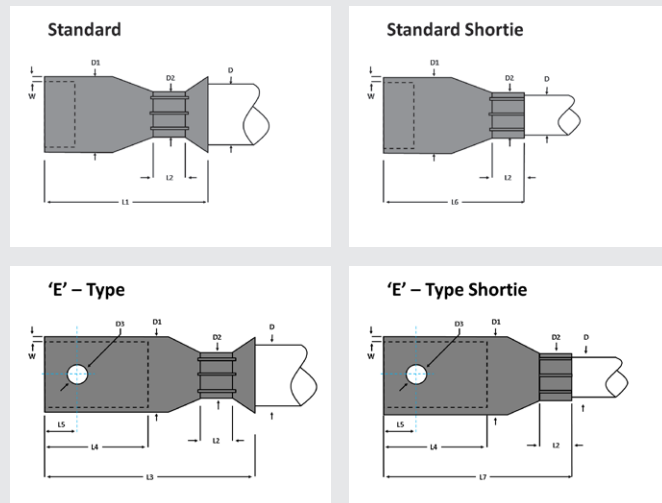
At each of these diameters length is available from 100mm to 100m with a length tolerance of +/- 1% or 5mm. PowerSprings can be specified in a similar way to a steel extension spring. A typical specification chart is shown in the table.

The load at any extension can be calculated using the formula:

$$\text{Load} = S \times E + F_0$$

(where S = spring rate, E = % extension and F0 = initial tension)

POWERSPRINGS STANDARD TERMINATIONS



E Type Termination

A range of stainless steel and aluminium end fittings are used as standard, but customised end options can be fitted to meet application demands. Additionally for special requirements, to meet British Standard 3F70:1991 for example, or when high performance is required, different fibre sheathing cover materials can be used.

Cord Diameter (mm)	Aluminium											Steel										
	D1	D2	D3	L1	L2	L3	L4	L5	L6	L7	W	D1	D2	D3	L1	L2	L3	L4	L5	L6	L7	W
12.5	19	16	7	46	26	64	18	11	38	56	2.6	19	15	7	46	26	64	18	11	38	56	2.6
16	25.4	21	7	51	26	75	21	11	41	65	3.3	25.4	21	7	51	26	75	21	11	41	65	3.3
19	28.6	19	7	55	26	79	21	11	44	67	3.3	28.6	19	7	55	26	79	21	11	44	67	3.3
22	31.8	23	10	59	27	83	22	15	46	70	3.3	31.8	23	10	59	27	83	22	15	46	70	3.3
26	38.1	26	10	65	27	95	36	15	50	80	3.3	38.1	26	10	65	27	95	36	15	50	80	4
32	44.5	30	10	75	29	111	38	15	57	93	3.3	44.5	30	10	75	29	111	38	15	57	93	3.3

This information may be subject to change.

POWERSPRINGS DELIVER A UNIQUE COMBINATION OF **POWER** AND **LOAD** CHARACTERISTICS THAT OFFER A **HIGH PERFORMANCE** ALTERNATIVE TO COILED STEEL SPRINGS.

Essential to the versatility of Power Springs are its patented termination options.

In external tests carried out by the Institute of Spring Technology, in excess of 5,000,000 load cycles have been achieved.

- Virtually no restriction on length
- Exceptional load:weight ratio
- Non magnetic
- Chemical resistance
- Outstanding flexibility
- Wide temperature service range
- Tested beyond 5,000,000 cycles
- Available in endless ring applications

