

Kinetrol D-Line Damped Manual Fail-Safe

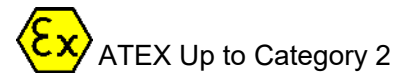
Specially developed damped manual fail-safe lever-operated units designed to safely operate larger valves manually whilst ensuring certainty of position when unattended.

- Manual unit, cannot be left in the wrong position
- Reliable torque delivery for valve reseal
- Safe and easy manual lever operation using Kinetrol's proven torque multiplier and energy-dissipating rotary dashpot damping units
- 180° lever input with 90° spring action (clockwise or counter clockwise)
- ATEX as standard
- All units sealed to IP65 to protect from internal corrosion



Application

The D-line damped manual fail-safe uses Kinetrol's highly reliable, low stress range, clock type spring linked to a torque multiplier to allow effortless manual operation of a valve. The integral dashpot then ensures the safe, controlled return of the valve to its start position.



Specification

Materials of Construction

Spring case: Diecast aluminium alloy - epoxy stove enamel coating

Clock type spring: Carbon spring steel

Torque multiplier: Diecast aluminium alloy - epoxy stove enamel coating

Energy-dissipating dashpots: Zinc alloy

Shafts: Stainless steel or zinc plated carbon steel

Locking plate: Mild steel - epoxy stove enamel coating

Manual lever: Stainless steel

Operating Temperature

Standard: -40°C to 80°C (-40°F to 176°F)

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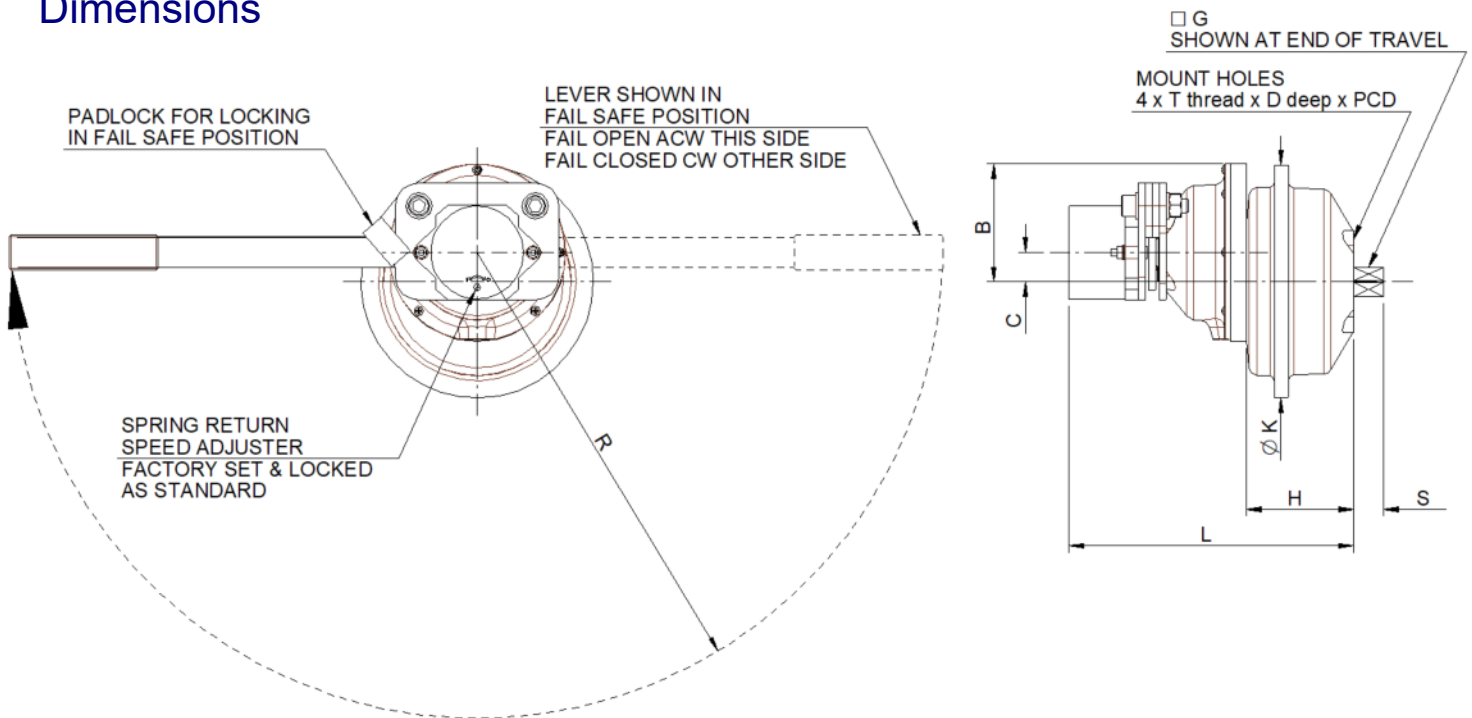
Models

Metric			Imperial		
Model	Maximum Allowable Valve Torque ** (Nm)	Weight (kg)	Model	Maximum Allowable Valve Torque ** (lbf ins)	Weight (lb)
074-M20-P	42.4	10	077-M20-P	375	22.05
084-M20-P	65.5	12	087-M20-P	580	26.50
094-M20-P	93.8	14	097-M20-P	830	30.85
103-M20-P	143.0	28	107-M20-P	1270	61.75

** maximum allowable valve torque will not exceed 360 N lever pull force as per API 6D / S-562 requirements.

The direction of the spring action and unit is determined by looking from above with the mounting face at the bottom. Suffix M20 clockwise, suffix M30 counter clockwise.

Dimensions



Metric Units (mm)

Model	L	H	ØK	□G	S	B	C	R	T	D	PCD
074	235	82	152	16	20	101	25	200	M8	16	50.9
084	240	87	174	17	19	101	25	300	M8	16	70.0
094	245	92	200	19	26	101	25	400	M10	20	65.0
103	326	110	206	22	26	138	35	600	M10	16	102.0

English Units (in)

Model	L	H	ØK	□G	S	B	C	R	T	D	PCD
077	9.3	3.23	6.00	0.630	0.79	4.0	1.0	7.9	5/16-18 UNC	0.63	2.00
087	9.5	3.43	6.85	0.669	0.75	4.0	1.0	11.8	5/16-18 UNC	0.63	2.76
097	9.6	3.62	7.90	0.748	1.02	4.0	1.0	15.8	3/8-16 UNC	0.79	2.58
107	12.8	4.33	8.11	0.866	1.02	5.4	1.4	23.6	3/8-16 UNC	0.63	4.02