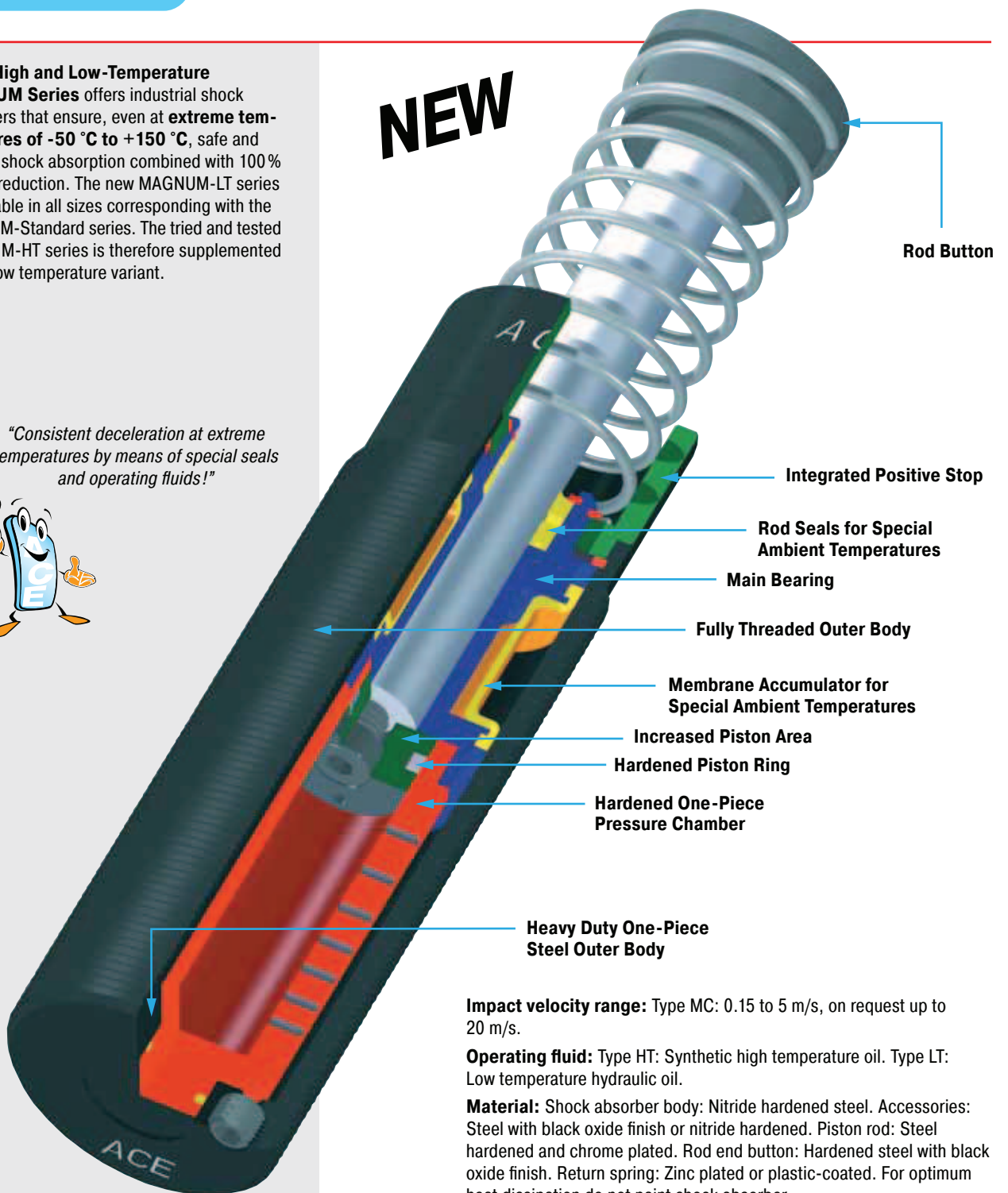


ACE's High and Low-Temperature **MAGNUM Series** offers industrial shock absorbers that ensure, even at **extreme temperatures of -50 °C to +150 °C**, safe and reliable shock absorption combined with 100% energy reduction. The new MAGNUM-LT series is available in all sizes corresponding with the MAGNUM-Standard series. The tried and tested MAGNUM-HT series is therefore supplemented with a low temperature variant.

*"Consistent deceleration at extreme temperatures by means of special seals and operating fluids!"*



**NEW**



Rod Button

Integrated Positive Stop

Rod Seals for Special Ambient Temperatures

Main Bearing

Fully Threaded Outer Body

Membrane Accumulator for Special Ambient Temperatures

Increased Piston Area

Hardened Piston Ring

Hardened One-Piece Pressure Chamber

Heavy Duty One-Piece Steel Outer Body

**Impact velocity range:** Type MC: 0.15 to 5 m/s, on request up to 20 m/s.

**Operating fluid:** Type HT: Synthetic high temperature oil. Type LT: Low temperature hydraulic oil.

**Material:** Shock absorber body: Nitride hardened steel. Accessories: Steel with black oxide finish or nitride hardened. Piston rod: Steel hardened and chrome plated. Rod end button: Hardened steel with black oxide finish. Return spring: Zinc plated or plastic-coated. For optimum heat dissipation do not paint shock absorber.

**Capacity rating:** For emergency use only applications it is sometimes possible to exceed the published max. capacity ratings. Please consult ACE for further details. If your application exceeds the tabulated  $W_4$  figures (max. energy per hour Nm/hr) consider additional cooling. Ask ACE for further details.

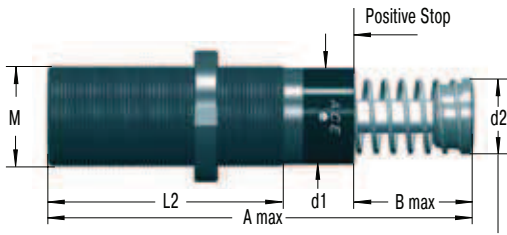
**Mounting:** In any position

**Operating temperature range:** Type LT: -50 °C to 66 °C, type HT: 0 °C to 150 °C.

**On request:** Plated finishes, weartec finish (seawater resistant). Mounting inside air cylinders and other special options are available on request.

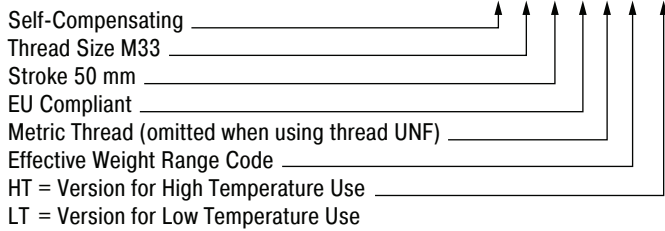
**Noise reduction:** 3 to 7 dB when using the impact buttons with urethane insert.





Note: 150 mm stroke model does not include stop collar and positive stop is provided by the rod button (Ø 60 mm)

### Ordering Example



### Complete Details Required when Ordering

Load to be decelerated	m	(kg)
Impact velocity	v	(m/s)
Propelling force	F	(N)
Operating cycles per hour	c	(/hr)
Number of absorbers in parallel	n	
Ambient temperature		°C

The calculation and selection of the most suitable shock absorber (effective weight range) should be carried out or be approved by ACE.

### Dimensions and Capacity Chart MC33-HT to MC64-HT

Type	1 Stroke mm	A max	B	d1	d2	L2	M	Max. Energy Capacity			Max. Side Load Angle °	Weight kg
								per Cycle W <sub>3</sub> Nm/Cycle	per Hour W <sub>4</sub> at 20 °C Nm/h	per Hour W <sub>4</sub> at 100 °C Nm/h		
MC3325EUM-HT	25	138	23	30	25	83	M33x1.5	155	215 000	82 000	4	0.45
MC3350EUM-HT	50	189	48.5	30	25	108	M33x1.5	310	244 000	93 000	3	0.54
MC4525EUM-HT	25	145	23	42	35	95	M45x1.5	340	307 000	117 000	4	1.13
MC4550EUM-HT	50	195	48.5	42	35	120	M45x1.5	680	321 000	122 000	3	1.36
MC6450EUM-HT	50	225	48.5	60	48	140	M64x2	1 700	419 000	159 000	4	2.9
MC64100EUM-HT	100	326	99.5	60	48	191	M64x2	3 400	550 000	200 000	3	3.7

Adjustable models are also available on request.

<sup>1</sup> Nominal stroke length (without stop collar fitted).

### Dimensions and Capacity Chart MC33-LT to MC64-LT

Type	1 Stroke mm	A max	B	d1	d2	L2	M	Max. Energy Capacity			2 Rod Reset Time s	Max. Side Load Angle °	Weight kg
								per Cycle W <sub>3</sub> Nm/Cycle	per Hour W <sub>4</sub> Nm/h				
MC3325EUM-LT	25	138	23	30	25	83	M33x1.5	155	75 000	0.08	4	0.5	
MC3350EUM-LT	50	189	48.5	30	25	108	M33x1.5	310	85 000	0.16	3	0.54	
MC4525EUM-LT	25	145	23	42	35	95	M45x1.5	340	107 000	0.08	4	1.13	
MC4550EUM-LT	50	195	48.5	42	35	120	M45x1.5	680	112 000	0.16	3	1.36	
MC4575EUM-LT	75	246	74	42	35	145	M45x1.5	1 020	146 000	0.24	2	1.59	
MC6450EUM-LT	50	225	48.5	60	48	140	M64x2	1 700	146 000	0.24	4	2.9	
MC64100EUM-LT	100	326	99.5	60	48	191	M64x2	3 400	192 000	0.68	3	3.7	
MC64150EUM-LT	150	450	150	60	48	241	M64x2	5 100	248 000	0.96	2	5.1	

Adjustable models are also available on request.

<sup>1</sup> Nominal stroke length (without stop collar fitted).

<sup>2</sup> at -50 °C