

MC33-HT to MC64-HT

Extremely heat-resistant at high cycle frequencies

Self-Compensating, use at 0 °C to 150 °C

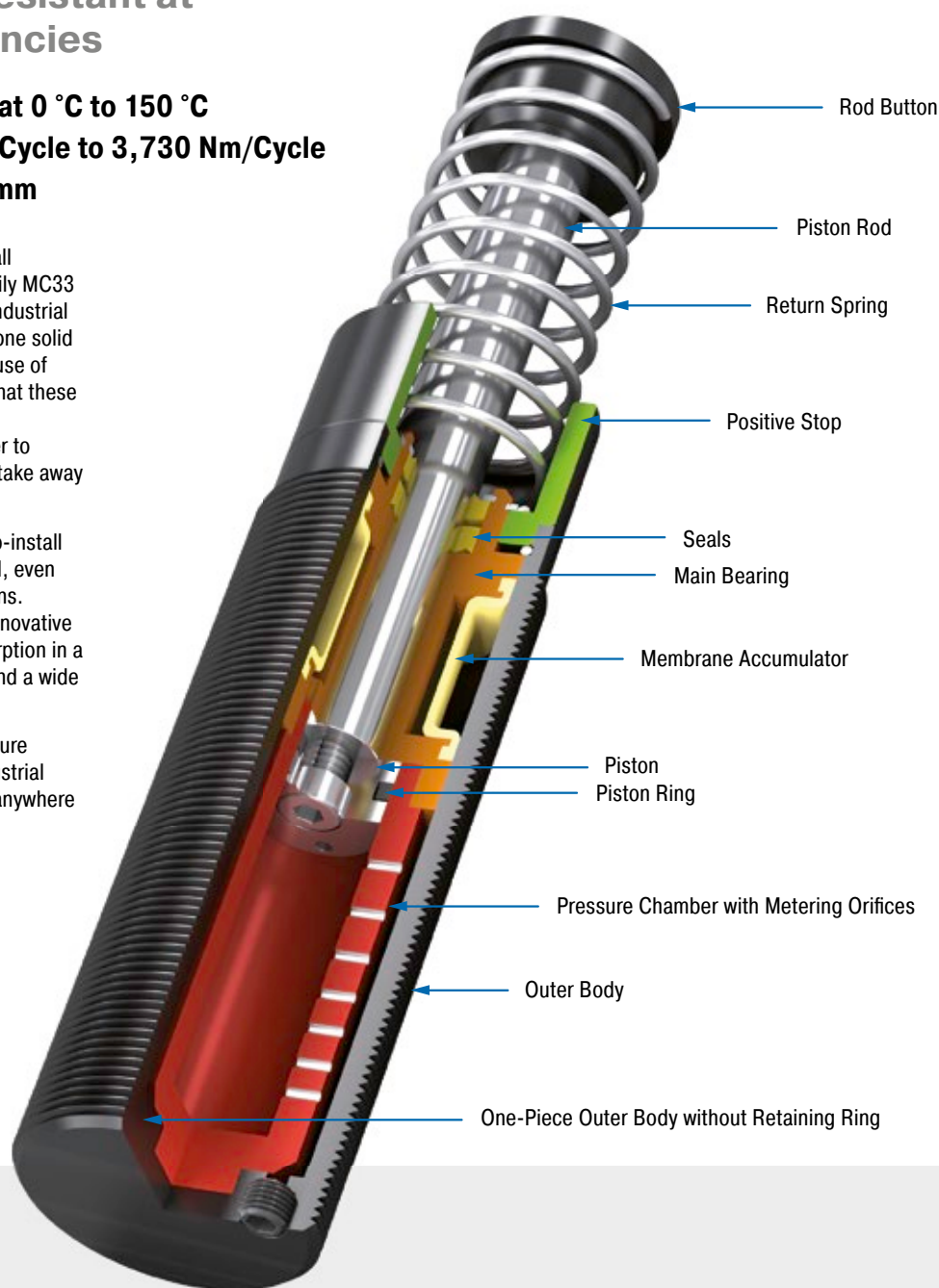
Energy capacity 170 Nm/Cycle to 3,730 Nm/Cycle

Stroke 23.1 mm to 99.4 mm

Further possibilities of use: Just like all MAGNUM types from the product family MC33 to MC64, the HT (high temperature) industrial shock absorbers are also made from one solid piece. They are characterised by the use of special seals and fluids. This means that these versions can even be used at extreme temperatures of 0 °C to 150 °C in order to safely and reliably damp masses and take away 100 % kinetic energy.

There is no reason why these ready-to-install machine elements should not be used, even under the most unfavourable conditions. Additional benefits are their robust, innovative sealing technology, high energy absorption in a compact design, fixed positive stop and a wide damping range.

Designed for use in extreme temperature ranges, these self-compensating industrial shock absorbers are suitable almost anywhere in plant and mechanical engineering.



Technical Data

Energy capacity: 170 Nm/Cycle to 3,730 Nm/Cycle

Impact velocity range: 0.15 m/s to 5 m/s.
Other speeds on request.

Operating temperature range: 0 °C to 150 °C

Mounting: In any position

Positive stop: Integrated

Material: Outer body: Nitride hardened steel; Piston rod: Hard chrome plated steel; Rod end button: Hardened steel and corrosion-resistant coating; Return spring: Zinc plated or plastic-coated steel; Accessories: Steel with black oxide finish or nitride hardened

Damping medium: Synthetic high temperature oil

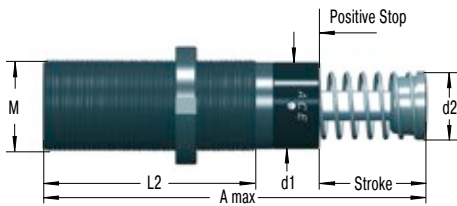
Application field: Linear slides, Swivel units, Turntables, Machines and plants, Tool machines, Machining centres, Z-axes

Note: A noise reduction of 3 to 7 dB is possible when using the special impact button (PP).

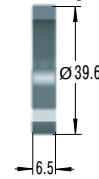
Safety instructions: External materials in the surrounding area can attack the seal components and lead to a shorter service life. Please contact ACE for appropriate solution suggestions. Do not paint the shock absorbers due to heat emission.

On request: Nickel-plated, increased corrosion protection, mounting inside air cylinders or other special options are available on request. Adjustable HT and LT shock absorbers.

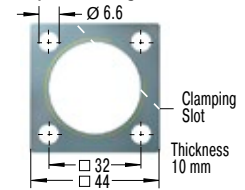
MC33EUM-HT



NM33 Locking Ring



QF33 Square Flange



Torque max.: 11 Nm
Clamping torque: > 90 Nm
Install with 4 machine screws

The calculation and selection of the most suitable damper should be carried out or be approved by ACE.

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

Ordering Example

Self-Compensating _____
Thread Size M33 _____
Stroke 50 mm _____
EU Compliant _____
Metric Thread (omitted when using thread UNF) _____
Effective Weight Range Code _____
HT = Version for High Temperature Use _____

MC3350EUM-2-HT

Dimensions

TYPES	Stroke mm	A max. mm	d1 mm	d2 mm	L2 mm	M
MC3325EUM-HT	23.2	138	30	25	83	M33x1.5
MC3350EUM-HT	48.6	189	30	25	108	M33x1.5

Performance

TYPES	Max. Energy Capacity			Effective Weight			² Side Load Angle max. °	Weight kg
	W ₃ Nm/cycle	W ₄ at 20 °C Nm/h	W ₄ at 100 °C Nm/h	¹ me min. kg	¹ me max. kg	Hardness		
MC3325EUM-0-HT	170	215,000	82,000	3	11	-0	4	0.51
MC3325EUM-1-HT	170	215,000	82,000	9	40	-1	4	0.51
MC3325EUM-2-HT	170	215,000	82,000	30	120	-2	4	0.51
MC3325EUM-3-HT	170	215,000	82,000	100	420	-3	4	0.51
MC3325EUM-4-HT	170	215,000	82,000	350	1,420	-4	4	0.51
MC3350EUM-0-HT	330	244,000	93,000	5	22	-0	3	0.63
MC3350EUM-1-HT	330	244,000	93,000	18	70	-1	3	0.63
MC3350EUM-2-HT	330	244,000	93,000	60	250	-2	3	0.63
MC3350EUM-3-HT	330	244,000	93,000	240	840	-3	3	0.63
MC3350EUM-4-HT	330	244,000	93,000	710	2,830	-4	3	0.63

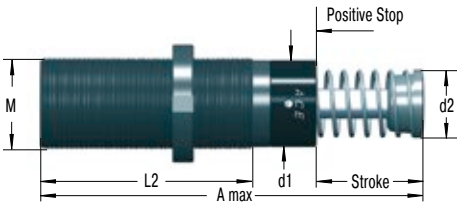
¹ The effective weight range limits can be raised or lowered to special order.

² For applications with higher side load angles consider using the side load adaptor (BV) pages 74 to 77.

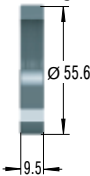


Self-Compensating

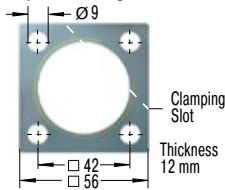
MC45EUM-HT



NM45
Locking Ring



QF45
Square Flange



Torque max.: 27 Nm
Clamping torque: > 200 Nm
Install with 4 machine screws

The calculation and selection of the most suitable damper should be carried out or be approved by ACE.

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

Ordering Example

Self-Compensating _____

Thread Size M45 _____

Stroke 25 mm _____

EU Compliant _____

Metric Thread (omitted when using thread UNF) _____

Effective Weight Range Code _____

HT = Version for High Temperature Use _____

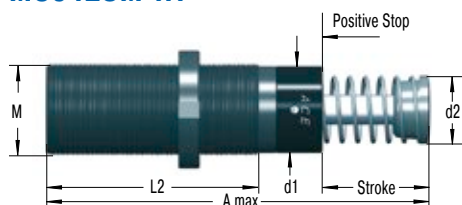
MC4525EUM-3-HT

Dimensions						
TYPES	Stroke mm	A max. mm	d1 mm	d2 mm	L2 mm	M
MC4525EUM-HT	23.1	145	42	35	95	M45x1.5
MC4550EUM-HT	48.5	195	42	35	120	M45x1.5

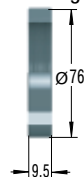
Performance								
TYPES	Max. Energy Capacity			Effective Weight			Side Load Angle max. °	Weight kg
	W ₃ Nm/cycle	W ₄ at 20 °C Nm/h	W ₄ at 100 °C Nm/h	¹ me min. kg	¹ me max. kg	Hardness		
MC4525EUM-0-HT	370	307,000	117,000	7	27	-0	4	1.14
MC4525EUM-1-HT	370	307,000	117,000	20	90	-1	4	1.14
MC4525EUM-2-HT	370	307,000	117,000	80	310	-2	4	1.14
MC4525EUM-3-HT	370	307,000	117,000	260	1,050	-3	4	1.14
MC4525EUM-4-HT	370	307,000	117,000	890	3,540	-4	4	1.14
MC4550EUM-0-HT	740	321,000	122,000	13	54	-0	3	1.36
MC4550EUM-1-HT	740	321,000	122,000	45	180	-1	3	1.36
MC4550EUM-2-HT	740	321,000	122,000	150	620	-2	3	1.36
MC4550EUM-3-HT	740	321,000	122,000	520	2,090	-3	3	1.36
MC4550EUM-4-HT	740	321,000	122,000	1,800	7,100	-4	3	1.36

¹ The effective weight range limits can be raised or lowered to special order.
² For applications with higher side load angles consider using the side load adaptor (BV) pages 74 to 77.

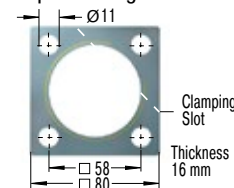
MC64EUM-HT



NM64 Locking Ring



QF64 Square Flange



Torque max.: 50 Nm
Clamping torque: > 210 Nm
Install with 4 machine screws

The calculation and selection of the most suitable damper should be carried out or be approved by ACE.

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

Ordering Example

Self-Compensating _____
Thread Size M64 _____
Stroke 50 mm _____
EU Compliant _____
Metric Thread (omitted when using thread UNF) _____
Effective Weight Range Code _____
HT = Version for High Temperature Use _____

MC6450EUM-1-HT

Dimensions

TYPES	Stroke mm	A max. mm	d1 mm	d2 mm	L2 mm	M
MC6450EUM-HT	48.6	225	60	48	140	M64x2
MC64100EUM-HT	99.4	326	60	48	191	M64x2

Performance

TYPES	Max. Energy Capacity			Effective Weight			² Side Load Angle max. °	Weight kg
	W ₃ Nm/cycle	W ₄ at 20 °C Nm/h	W ₄ at 100 °C Nm/h	¹ me min. kg	¹ me max. kg	Hardness		
MC6450EUM-0-HT	1,870	419,000	159,000	35	140	-0	4	2.9
MC6450EUM-1-HT	1,870	419,000	159,000	140	540	-1	4	2.9
MC6450EUM-2-HT	1,870	419,000	159,000	460	1,850	-2	4	2.9
MC6450EUM-3-HT	1,870	419,000	159,000	1,600	6,300	-3	4	2.9
MC6450EUM-4-HT	1,870	419,000	159,000	5,300	21,200	-4	4	2.9
MC64100EUM-0-HT	3,730	550,000	200,000	70	280	-0	3	3.7
MC64100EUM-1-HT	3,730	550,000	200,000	270	1,100	-1	3	3.7
MC64100EUM-2-HT	3,730	550,000	200,000	930	3,700	-2	3	3.7
MC64100EUM-3-HT	3,730	550,000	200,000	3,150	12,600	-3	3	3.7
MC64100EUM-4-HT	3,730	550,000	200,000	10,600	42,500	-4	3	3.7

¹ The effective weight range limits can be raised or lowered to special order.

² For applications with higher side load angles consider using the side load adaptor (BV) pages 74 to 77.