

MC33-V4A to MC64-V4A

Optimum corrosion protection

self-Compensating, stainless Steel

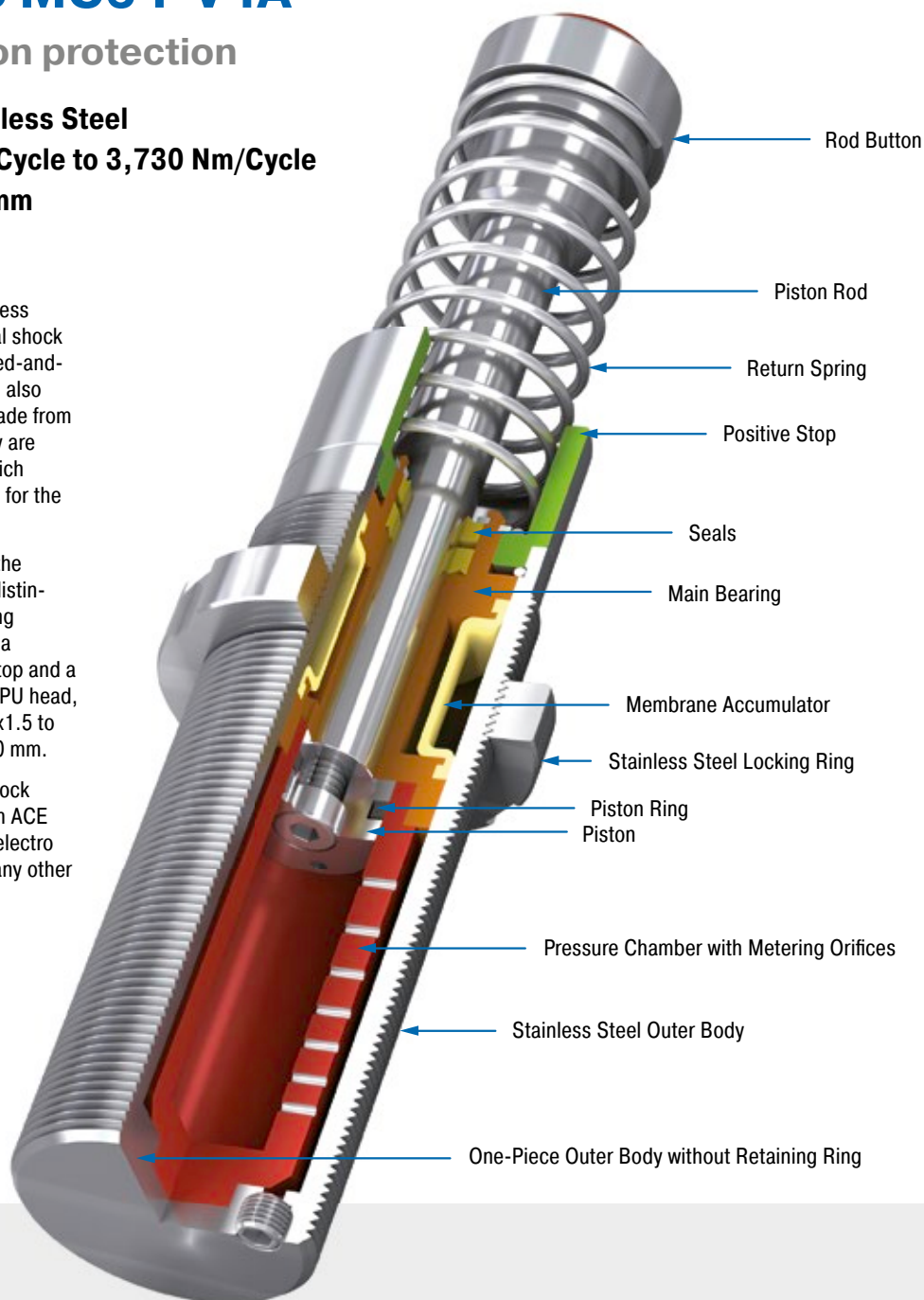
Energy capacity 170 Nm/Cycle to 3,730 Nm/Cycle

Stroke 23.1 mm to 99.4 mm

The latest damper technology in stainless steel: The self-compensating industrial shock absorbers MC33 to MC64 from the tried-and-tested and popular MAGNUM series is also available with all outer components made from stainless steel (material 1.4404). They are filled in the factory with special oil, which meets the permit conditions (NSF-H1) for the food industry.

Just like the standard product family, the MAGNUM stainless steel models are distinguished by their robust, modern sealing technology, high energy absorption in a compact design, integrated positive stop and a wide damping range. Equipped with a PU head, they are available in thread sizes M33x1.5 to M64x2 with damping strokes up to 100 mm.

These self-compensating industrial shock absorbers made of stainless steel from ACE are mainly used in the food, medical, electro and offshore industries, but also in many other markets.



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: -12 °C to +66 °C. Other temperatures on request.

Mounting: In any position

Positive stop: Integrated

Material: Outer body, Main bearing, Accessories, Locking ring: Stainless steel (1.4404, AISI 316L); Piston rod: Hard chrome plated steel; Rod end button: Stainless steel (1.4404, AISI 316L) with elastomer insert; Return spring: Stainless steel

Damping medium: Special oil NSF-H1 approved

Application field: Linear slides, Swivel units, Turntables, Food industry, Medical technology, Portal systems, Machines and plants, Tool machines, Machining centres

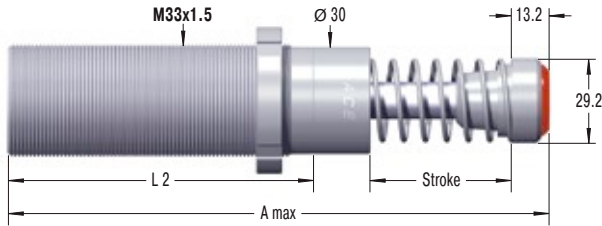
Note: Impact button (PP) for noise reduction included. For emergency use only applications and for continuous use (with additional cooling) it is sometimes possible to exceed the published max. capacity ratings. In this case, please consult ACE.

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.

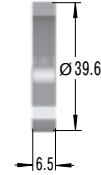
On request: Special oils, other special options and special accessories are available on request.

MC33EUM-V4A



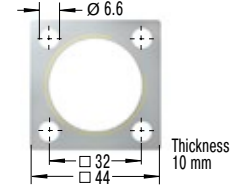
NM33-V4A

Locking Ring



QF33-V4A

Square Flange



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

Model Type Prefix

Standard Models

MC: Self-Contained with return spring, self-compensating

Special Models

MCA: Air/Oil return without return spring.

Use only with external air/oil tank.

MCS: Air/Oil return with return spring.

Use only with external air/oil tank.

MCN: Self-Contained without return spring

Ordering Example

MC3325EUM-2-V4A

Self-Compensating _____
 Thread Size M33 _____
 Stroke 25 mm _____
 EU Compliant _____
 Metric Thread _____
 Effective Weight Range Version _____
 Stainless Steel 1.4404/AISI 316L _____

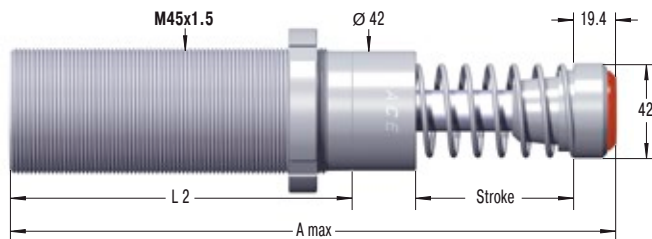
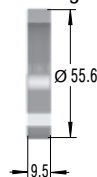
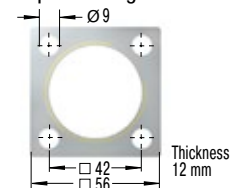
Performance and Dimensions

TYPES	Max. Energy Capacity		Effective Weight										
	W ₃ Nm/cycle	W ₄ Nm/h	¹ me min. kg	¹ me max. kg	Hardness	Stroke mm	A max. mm	L2 mm	Return Force min. N	Return Force max. N	Return Time s	² Side Load Angle max. °	Weight kg
MC3325EUM-0-V4A	170	75,000	3	11	-0	23.2	151.2	83	45	90	0.03	4	0.51
MC3325EUM-1-V4A	170	75,000	9	40	-1	23.2	151.2	83	45	90	0.03	4	0.51
MC3325EUM-2-V4A	170	75,000	30	120	-2	23.2	151.2	83	45	90	0.03	4	0.51
MC3325EUM-3-V4A	170	75,000	100	420	-3	23.2	151.2	83	45	90	0.03	4	0.51
MC3325EUM-4-V4A	170	75,000	350	1,420	-4	23.2	151.2	83	45	90	0.03	4	0.51
MC3350EUM-0-V4A	330	85,000	5	22	-0	48.6	202.2	108	45	135	0.06	3	0.63
MC3350EUM-1-V4A	330	85,000	18	70	-1	48.6	202.2	108	45	135	0.06	3	0.63
MC3350EUM-2-V4A	330	85,000	60	250	-2	48.6	202.2	108	45	135	0.06	3	0.63
MC3350EUM-3-V4A	330	85,000	210	840	-3	48.6	202.2	108	45	135	0.06	3	0.63
MC3350EUM-4-V4A	330	85,000	710	2,830	-4	48.6	202.2	108	45	135	0.06	3	0.63

¹ For emergency use only applications it is sometimes possible to exceed the above ratings. Please consult ACE for further details.

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

self-Compensating, stainless Steel

MC45EUM-V4A**NM45-V4A**
Locking Ring**QF45-V4A**
Square Flange

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

Model Type Prefix**Standard Models**

MC: Self-Contained with return spring, self-compensating

Special Models

MCA: Air/Oil return without return spring.

Use only with external air/oil tank.

MCS: Air/Oil return with return spring.

Use only with external air/oil tank.

MCN: Self-Contained without return spring

Ordering Example**MC4550EUM-1-V4A**

Self-Compensating _____
 Thread Size M45 _____
 Stroke 50 mm _____
 EU Compliant _____
 Metric Thread _____
 Effective Weight Range Version _____
 Stainless Steel 1.4404/AISI 316L _____

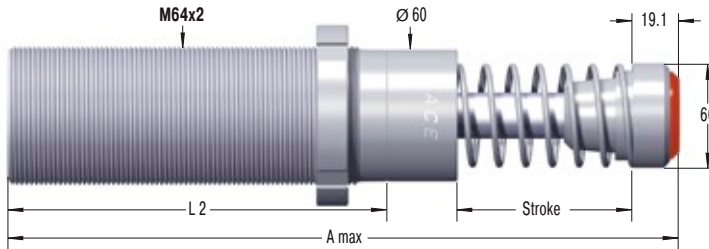
Performance and Dimensions

	Max. Energy Capacity		Effective Weight											
	W ₃	W ₄	¹ me min.	¹ me max.	Hardness				Return Force	Return Force	² Side Load			
TYPES	Nm/cycle	Nm/h	kg	kg		Stroke mm	A max. mm	L2 mm	min.	max.	Return Time s	Angle max. °	Weight kg	
MC4525EUM-0-V4A	370	107,000	7	27	-0	23.1	164.5	95	70	100	0.03	4	1.14	
MC4525EUM-1-V4A	370	107,000	20	90	-1	23.1	164.5	95	70	100	0.03	4	1.14	
MC4525EUM-2-V4A	370	107,000	80	310	-2	23.1	164.5	95	70	100	0.03	4	1.14	
MC4525EUM-3-V4A	370	107,000	260	1,050	-3	23.1	164.5	95	70	100	0.03	4	1.14	
MC4525EUM-4-V4A	370	107,000	890	3,540	-4	23.1	164.5	95	70	100	0.03	4	1.14	
MC4550EUM-0-V4A	740	112,000	13	54	-0	48.5	214.4	120	70	145	0.08	3	1.36	
MC4550EUM-1-V4A	740	112,000	45	180	-1	48.5	214.4	120	70	145	0.08	3	1.36	
MC4550EUM-2-V4A	740	112,000	150	620	-2	48.5	214.4	120	70	145	0.08	3	1.36	
MC4550EUM-3-V4A	740	112,000	520	2,090	-3	48.5	214.4	120	70	145	0.08	3	1.36	
MC4550EUM-4-V4A	740	112,000	1,800	7,100	-4	48.5	214.4	120	70	145	0.08	3	1.36	
MC4575EUM-0-V4A	1,130	146,000	20	80	-0	73.9	265.4	145	50	180	0.11	2	1.59	
MC4575EUM-1-V4A	1,130	146,000	70	270	-1	73.9	265.4	145	50	180	0.11	2	1.59	
MC4575EUM-2-V4A	1,130	146,000	230	930	-2	73.9	265.4	145	50	180	0.11	2	1.59	
MC4575EUM-3-V4A	1,130	146,000	790	3,140	-3	73.9	265.4	145	50	180	0.11	2	1.59	
MC4575EUM-4-V4A	1,130	146,000	2,650	10,600	-4	73.9	265.4	145	50	180	0.11	2	1.59	

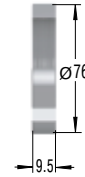
¹ For emergency use only applications it is sometimes possible to exceed the above ratings. Please consult ACE for further details.

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

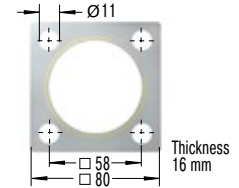
MC64EUM-V4A



NM64-V4A Locking Ring



QF64-V4A Square Flange



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

Model Type Prefix

Standard Models

MC: Self-Contained with return spring, self-compensating

Special Models

MCA: Air/Oil return without return spring.

Use only with external air/oil tank.

MCS: Air/Oil return with return spring.

Use only with external air/oil tank.

MCN: Self-Contained without return spring

Ordering Example

MC6450EUM-3-V4A

Self-Compensating
Thread Size M64
Stroke 50 mm
EU Compliant
Metric Thread
Effective Weight Range Version
Stainless Steel 1.4404/AISI 316L

Performance and Dimensions

TYPES	Max. Energy Capacity		Effective Weight										
	W ₃ Nm/cycle	W ₄ Nm/h	¹ me min. kg	¹ me max. kg	Hardness	Stroke mm	A max. mm	L2 mm	Return Force min. N	Return Force max. N	Return Time s	² Side Load Angle max. °	Weight kg
MC6450EUM-0-V4A	1,870	146,000	35	140	-0	48.6	244.1	140	90	155	0.12	4	2.9
MC6450EUM-1-V4A	1,870	146,000	140	540	-1	48.6	244.1	140	90	155	0.12	4	2.9
MC6450EUM-2-V4A	1,870	146,000	460	1,850	-2	48.6	244.1	140	90	155	0.12	4	2.9
MC6450EUM-3-V4A	1,870	146,000	1,600	6,300	-3	48.6	244.1	140	90	155	0.12	4	2.9
MC6450EUM-4-V4A	1,870	146,000	5,300	21,200	-4	48.6	244.1	140	90	155	0.12	4	2.9
MC64100EUM-0-V4A	3,730	192,000	70	280	-0	99.4	345.1	191	105	270	0.34	3	3.7
MC64100EUM-1-V4A	3,730	192,000	270	11,000	-1	99.4	345.1	191	105	270	0.34	3	3.7
MC64100EUM-2-V4A	3,730	192,000	930	3,700	-2	99.4	345.1	191	105	270	0.34	3	3.7
MC64100EUM-3-V4A	3,730	192,000	3,150	12,600	-3	99.4	345.1	191	105	270	0.34	3	3.7
MC64100EUM-4-V4A	3,730	192,000	10,600	42,500	-4	99.4	345.1	191	105	270	0.34	3	3.7

¹ For emergency use only applications it is sometimes possible to exceed the above ratings. Please consult ACE for further details.

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