

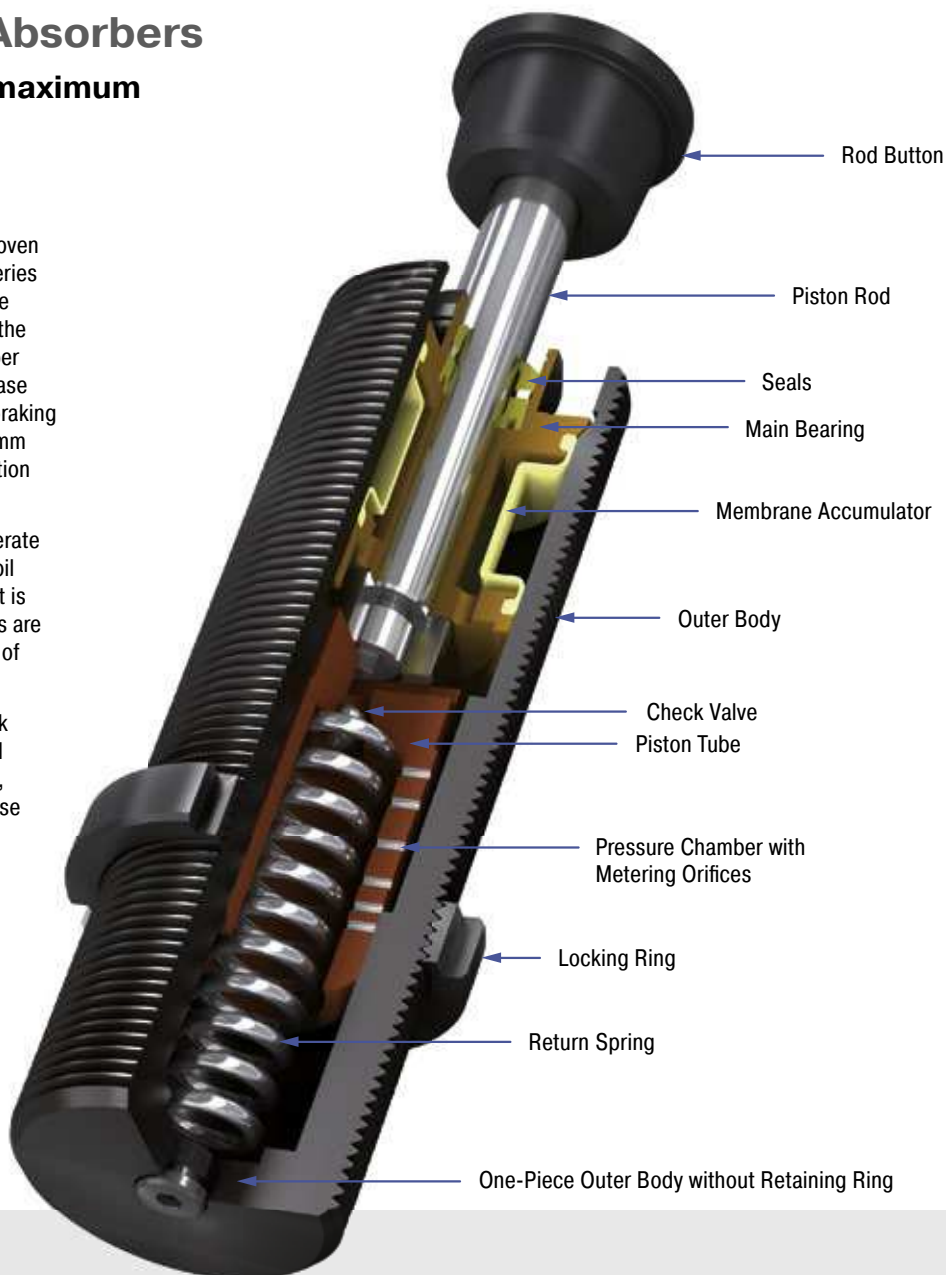
SC33 to SC45 Industrial Shock Absorbers

Piston tube design for maximum energy absorption

True performers: The combination the proven sealing technology from the MAGNUM series including membrane accumulator with the well-known piston tube technology from the SC² family makes the SC33 to 45 absorber models so strong and durable. The increase of the oil volume ensures the maximum braking forces. Short stroke lengths of 25 to 50 mm lead to shorter braking times in combination with a high energy absorption.

These dampers safely and reliably decelerate rotary movements without unwanted recoil effects. Assembly close to the pivot point is possible. The low impact speeds with this are managed with ease by ACE's generation of piston tubes.

These self-compensating industrial shock absorbers can be relied on in mechanical engineering. They are used in pivot units, rotary tables, robot arms or integrated else where in construction designs.



Technical Data

Energy capacity: 155 Nm/Cycle to 680 Nm/Cycle

Impact velocity range: 0.02 m/s to 0.46 m/s. Other speeds on request.

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

Mounting: In any position

Positive stop: In any position

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

Damping medium: Low temperature hydraulic oil

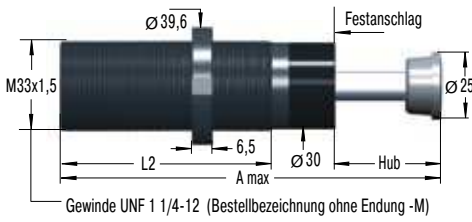
Application field: Turntables, Swivel units, Robot arms, Linear slides

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

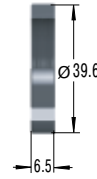
Safety instructions: External materials in the surrounding area can attack the seal components and lead to a shorter service life. Please contact ACE for appropriate solution suggestions. Do not paint the shock absorbers due to heat emission.

On request: Special oils, mounting inside air cylinders or other special options are available on request.

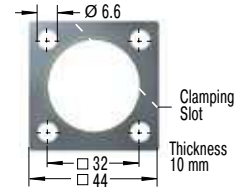
SC33EUM



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.

Ordering Example

Self-Compensating _____ **SC3325EUM-5**
 Thread Size M33 _____
 Stroke 25 mm _____
 EU Compliant _____
 Metric Thread _____
 (omitted when using thread UNF 1 1/4-12)
 Effective Weight Range Version _____

Dimensions

TYPES	Stroke mm	A max. mm	L2 mm
SC3325EUM	23.2	178	122
SC3350EUM	48.6	254	173

Performance

TYPES	Max. Energy Capacity		Effective Weight			² Side Load Angle				
	W ₃ Nm/cycle	W ₄ Nm/h	¹ me min. kg	¹ me max. kg	Hardness	Return force min. N	Return force max. N	Return time s	max. °	Weight kg
SC3325EUM-5	155	75,000	1,360	2,721	-5	44	89	0.75	4	1.13
SC3325EUM-6	155	75,000	2,500	5,443	-6	44	89	0.75	4	1.13
SC3325EUM-7	155	75,000	4,989	8,935	-7	44	89	0.75	4	1.13
SC3325EUM-8	155	75,000	8,618	13,607	-8	44	89	0.75	4	1.13
SC3350EUM-5	310	85,000	2,721	4,990	-5	51	125	0.90	3	1.36
SC3350EUM-6	310	85,000	4,536	9,980	-6	51	125	0.90	3	1.36

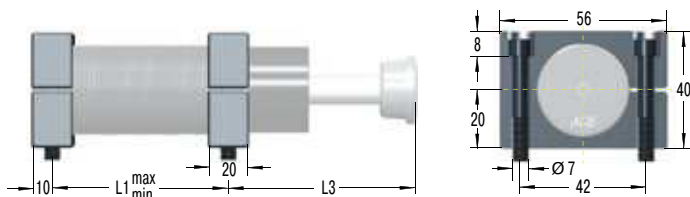
¹ The effective weight range limits can be raised or lowered to special order.

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

Overview

M33x1.5

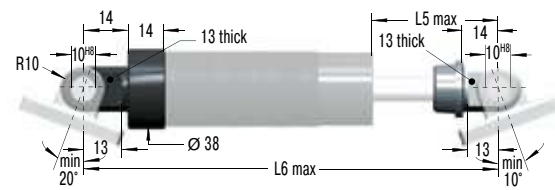
S33
Side Foot Mounting Kit



TYPES	L1 min.	L1 max.	L3
	mm	mm	mm
MC, MA, ML3325EUM	25	60	68
MC, MA, ML3350EUM	32	86	93
SC3325EUM	40	98	66
SC3350EUM	60	153	92

S33 = 2 flanges + 4 screws M6x40, DIN 912
 Torque max.: 11 Nm
 Clamping torque: 90 Nm
 Because of the thread pitch the fixing holes for the second foot mount should only be drilled and tapped after the first foot mount has been fixed in position.

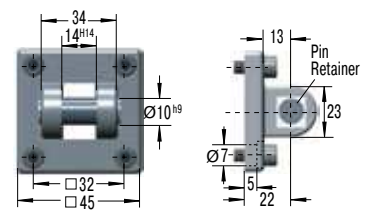
C33
Clevis Mounting Kit



TYPES	L5 max.	L6 max.
	mm	mm
MC, MA, ML3325EUM	39	168
MC, MA, ML3350EUM	64	218
SC3325EUM	39	208
SC3350EUM	64	283

C33 = 2 clevis eyes. Delivered assembled to shock absorber.
 Use positive stop at both ends of travel.

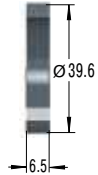
SF33
Clevis Flange



SF33 = flange + 4 screws M6x20, DIN 912
 Torque max.: 7.5 Nm
 Clamping torque: > 50 Nm
Secure with pin or use additional bar.
Due to limited force capacity the respective ability should be reviewed by ACE.

M33x1.5

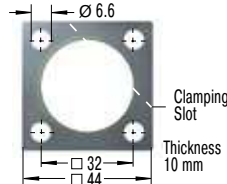
NM33
Locking Ring



PP33
Poly Button

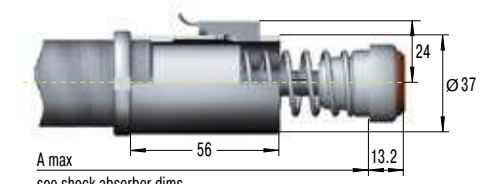


QF33
Square Flange



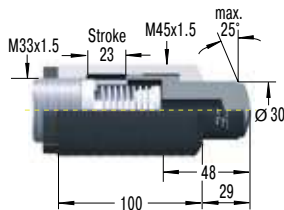
Torque max.: 11 Nm
 Clamping torque: > 90 Nm
 Install with 4 machine screws

AS33
Switch Stop Collar

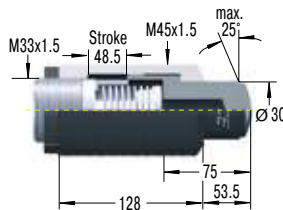


inc. Proximity Switch and Poly Button with elastomer insert

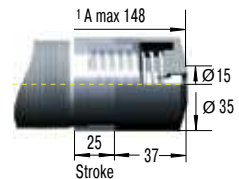
BV3325
Side Load Adaptor



BV3350
Side Load Adaptor

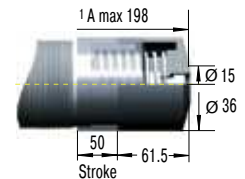


PB3325
Steel Shroud



¹ Total installation length of the shock absorber inc. steel shroud

PB3350
Steel Shroud



¹ Total installation length of the shock absorber inc. steel shroud

Mounting, installation, ... see page 77.