SCS33 to SCS64

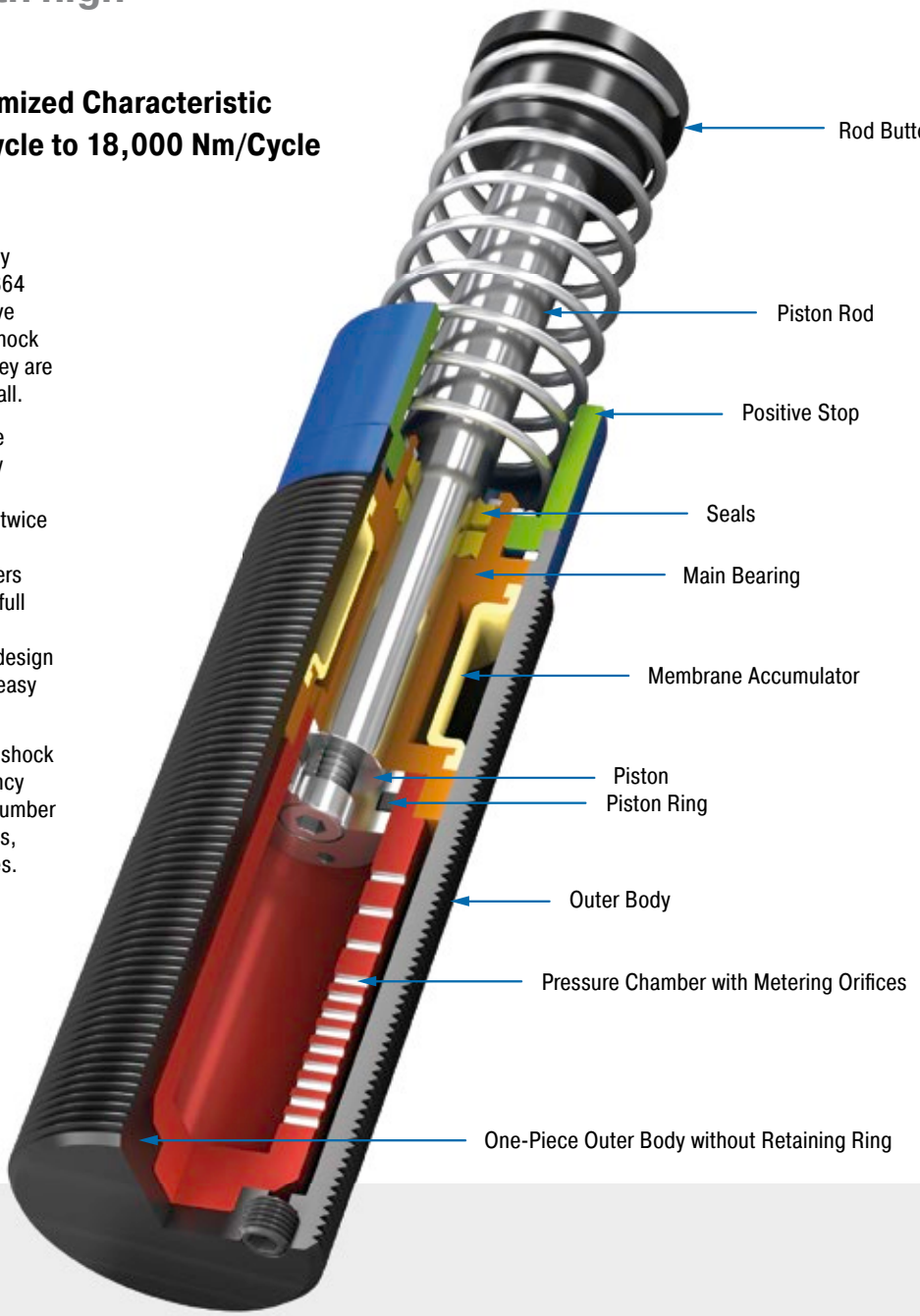
Industry design with high energy absorption

Self-Compensating or Optimized Characteristic
Energy capacity 310 Nm/Cycle to 18,000 Nm/Cycle
Stroke 23.1 mm to 150 mm

Effective emergency stop: The ACE safety shock absorbers from the SCS33 to SCS64 product family are based on the innovative technology of the successful industrial shock absorbers from the MAGNUM-Series. They are also maintenance-free and ready-to-install.

Due to the optimised characteristic curve for the respective application, the energy absorption of these hydraulic machine elements can be increased to more than twice the level of the MAGNUM model of ACE industrial shock absorber per stroke. Users benefit from a service life of up to 1,000 full load emergency cycles with a very good price-performance ratio. Their compact design in sizes M33x1.5 to M64x2 makes them easy to integrate into current applications.

These slimline, high-performance safety shock absorbers are only designed for emergency stop situations. They can be used for a number of tasks in gantries and conveyor systems, processing centres or assembly machines.



Technical Data

Energy capacity: 310 Nm/Cycle to 18,000 Nm/Cycle

Impact velocity range: 0.02 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: 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 corrosion-resistant coating

Damping medium: Automatic Transmission Fluid (ATF)

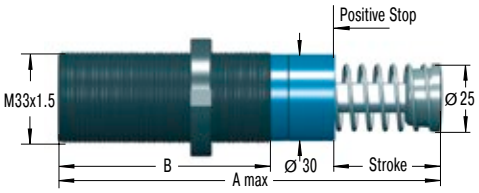
Application field: Finishing and processing centres, Conveyor systems, Portal systems, Test stations, Machines and plants, Swivel units, Cranes

Note: The shock absorber can be pushed through its stroke. In creep speed conditions the shock absorber provides minimal resistance and there is no braking effect.

On request: Special oils, special flanges etc.

Issue 07.2017 – Specifications subject to change

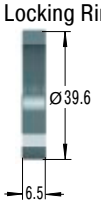
SCS33EU



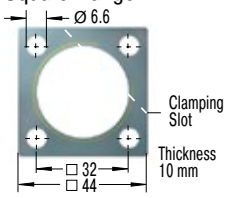
The calculation and selection of the most suitable damper should be carried out or be approved by ACE.

Accessories

NM33
Locking Ring

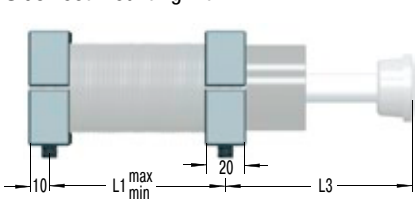


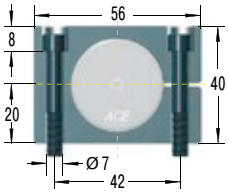
QF33
Square Flange



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

S33
Side Foot Mounting Kit





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.

Complete details required when ordering

Moving load: m (kg)
Impact velocity range: v (m/s) max.
Creep speed: vs (m/s)
Motor power: P (kW)
Stall torque factor: ST (normal, 2.5)
Number of absorbers in parallel: n

or technical data according to formulae and calculations on page 265.

Ordering Example **SCS33-50EU-1xxxx**

Safety Shock Absorber
Thread Size M33
Max. Stroke without Positive Stop 50 mm
EU Compliant
Identification No. assigned by ACE

Please indicate identification no. in case of replacement order

Performance and Dimensions

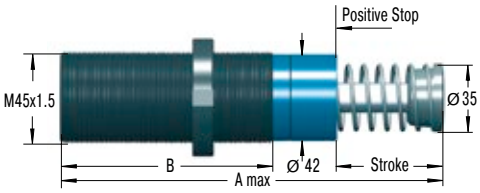
TYPES	Max. Energy Capacity W_3 Self-compensating Nm/cycle	W_3 Optimised Nm/cycle	Return Force min. N	Return Force max. N	Stroke mm	A max. mm	B mm	L1 min. mm	L1 max. mm	L3 mm	[1] Side Load Angle max. °	Weight kg
SCS33-25EU	310	500	45	90	23.2	138	83	25	60	68	3	0.51
SCS33-50EU	620	950	45	135	48.6	189	108	32	86	93	2	0.63

[1] The values are reduced by 20 % at max. side load angle.

Safety Shock Absorbers SCS45EU

Self-Compensating or Optimized Characteristic

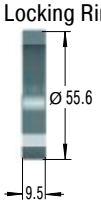
SCS45EU



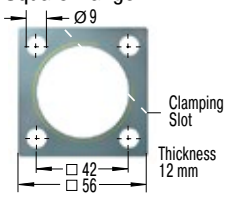
The calculation and selection of the most suitable damper should be carried out or be approved by ACE.

Accessories

NM45
Locking Ring

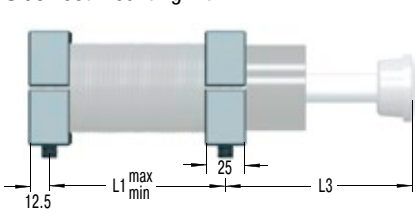


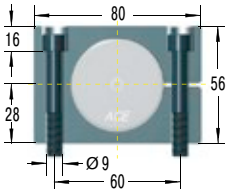
QF45
Square Flange



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

S45
Side Foot Mounting Kit





S45 = 2 flanges + 4 screws M8x50, DIN 912
Torque max.: 27 Nm
Clamping torque: 350 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.

Complete details required when ordering

Moving load: m (kg)
Impact velocity range: v (m/s) max.
Creep speed: vs (m/s)
Motor power: P (kW)
Stall torque factor: ST (normal, 2.5)
Number of absorbers in parallel: n

or technical data according to formulae and calculations on page 265.

Ordering Example **SCS45-50EU-1xxxx**

Safety Shock Absorber
Thread Size M45
Max. Stroke without Positive Stop 50 mm
EU Compliant
Identification No. assigned by ACE

Please indicate identification no. in case of replacement order

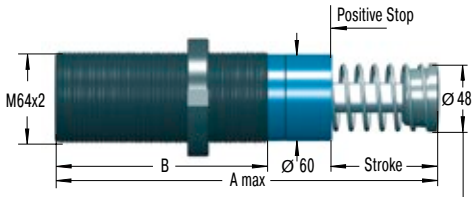
Performance and Dimensions

	Max. Energy Capacity											
TYPES	W_3 Self-compensating Nm/cycle	W_3 Optimised Nm/cycle	Return Force min. N	Return Force max. N	Stroke mm	A max. mm	B mm	L1 min. mm	L1 max. mm	L3 mm	[1] Side Load Angle max. °	Weight kg
SCS45-25EU	680	1,200	70	100	23.1	145	95	32	66	66	3	1.13
SCS45-50EU	1,360	2,350	70	145	48.5	195	120	40	92	91	2	1.36
SCS45-75EU	2,040	3,500	50	180	73.9	246	145	50	118	116	1	1.59

[1] The values are reduced by 20 % at max. side load angle.

Issue 07.2017 – Specifications subject to change

SCS64EU

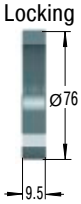


150 mm stroke model does not include stop collar.
Positive stop is provided by the rod button (Ø 60 mm) and a stop block.

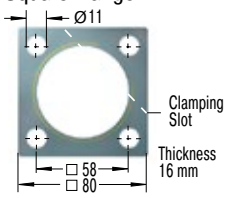
The calculation and selection of the most suitable damper should be carried out or be approved by ACE.

Accessories

NM64
Locking Ring

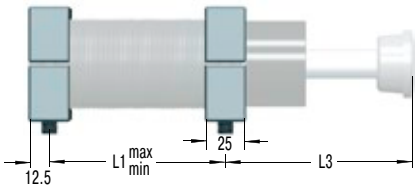


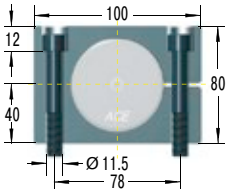
QF64
Square Flange



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

S64
Side Foot Mounting Kit





S64 = 2 flanges + 4 screws M10x80, DIN 912
Torque max.: 50 Nm
Clamping torque: 350 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.

Complete details required when ordering

Moving load: m (kg)
Impact velocity range: v (m/s) max.
Creep speed: vs (m/s)
Motor power: P (kW)
Stall torque factor: ST (normal, 2.5)
Number of absorbers in parallel: n

or technical data according to formulae and calculations on page 265.

Ordering Example **SCS64-50EU-1xxxx**

Safety Shock Absorber
Thread Size M64
Max. Stroke without Positive Stop 50 mm
EU Compliant
Identification No. assigned by ACE

Please indicate identification no. in case of replacement order

Performance and Dimensions

	Max. Energy Capacity											
TYPES	W_3 Self-compensating Nm/cycle	W_3 Optimised Nm/cycle	Return Force min. N	Return Force max. N	Stroke mm	A max. mm	B mm	L1 min. mm	L1 max. mm	L3 mm	[1] Side Load Angle max. °	Weight kg
SCS64-50EU	3,400	6,000	90	155	48.6	225	140	50	112	100	3	2.90
SCS64-100EU	6,800	12,000	105	270	99.4	326	191	64	162	152	2	3.70
SCS64-150EU	10,200	18,000	75	365	150.0	450	241	80	212	226	1	5.10

[1] The values are reduced by 20 % at max. side load angle.

ACE Stoßdämpfer GmbH · PO Box 1510 · D-40740 Langenfeld · T +49 (0)2173 - 9226-4100 · F +49 (0)2173 - 9226-89 · info@ace-int.eu · www.ace-ace.com