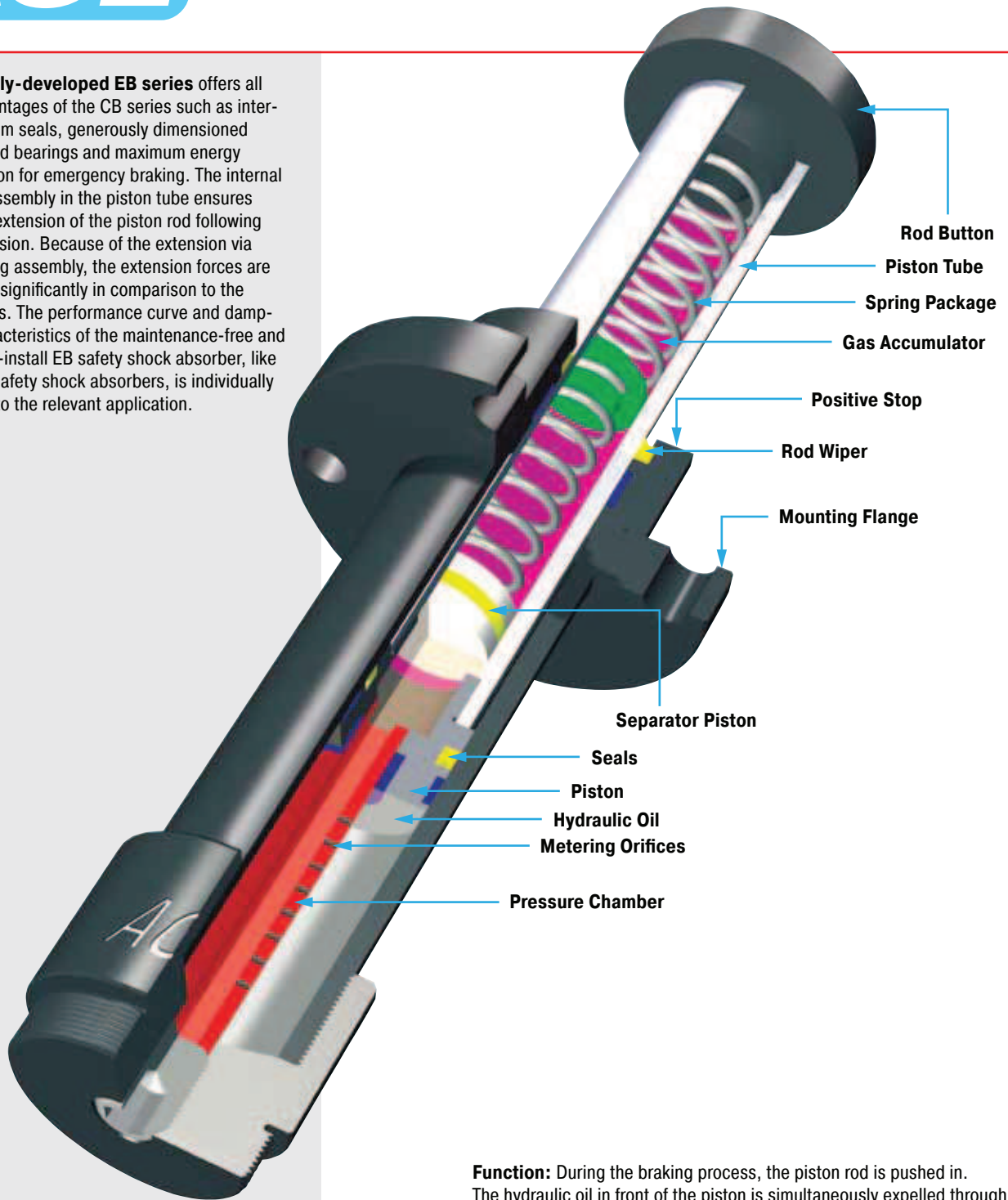


The newly-developed EB series offers all the advantages of the CB series such as internal system seals, generously dimensioned piston rod bearings and maximum energy absorption for emergency braking. The internal spring assembly in the piston tube ensures reliable extension of the piston rod following compression. Because of the extension via the spring assembly, the extension forces are reduced significantly in comparison to the CB series. The performance curve and damping characteristics of the maintenance-free and ready-to-install EB safety shock absorber, like all ACE safety shock absorbers, is individually tailored to the relevant application.



Function: During the braking process, the piston rod is pushed in. The hydraulic oil in front of the piston is simultaneously expelled through all orifice openings. The number of orifice openings in effect reduces in proportion to the stroke movement. The retraction speed is reduced. The back-pressure created in front of the piston, and therefore the counterforce (Q), remain constant during the complete stroke. The oil volume displaced by the piston rod is compensated for by the separating piston. The piston rod is extended again by the spring assembly in the piston tube.

Impact velocity range:
0.5 to 4.6 m/s

Material: Steel body with black oxide finish. Piston rod hard chrome plated.

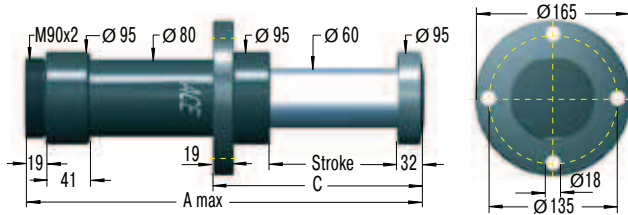
Operating temperature range:
-12 °C to 66 °C

Initial fill pressure: governs the rod return force.

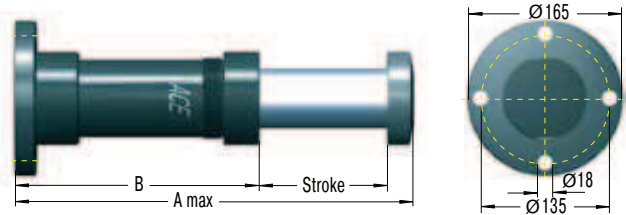
In creep speed: The shock absorber can be pushed through its stroke.



Front Flange -F



Rear Flange -R



Ordering Example

Safety Shock Absorber _____
 Bore Size Ø 63 mm _____
 Stroke 400 mm _____
 EU Compliant _____
 Mounting Style: Front Flange _____
 Identification No. assigned by ACE _____

EB63-400EU-F-X

Please indicate identification no. in case of replacement order

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 13 to 15.

The calculation and selection of the correct ACE safety shock absorber for your application should be referred to ACE for approval and assignment of unique identification number.

Technical Data

Reacting force Q: At max. capacity rating = **187 kN max.**

Rod return: Nitrogen accumulator (0.55 bar to 1.03 bar) combined with return spring

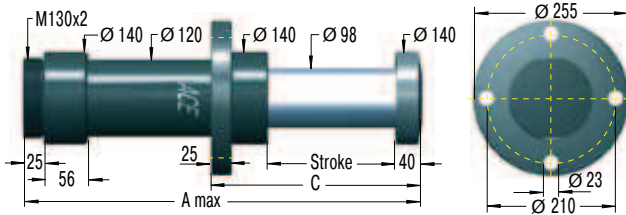
Dimensions and Capacity Chart

| Type | Stroke mm | A max | B | C | Max. Energy Capacity W_3 Nm/Cycle | 1 Effective Weight me | | Min. Return Force N | Max. Return Force N | Max. Side Load Angle ° | Weight kg |
|------------|-----------|-------|-------|-----|---|-----------------------|---------------|------------------------|------------------------|------------------------|--------------|
| | | | | | | me min. kg | me max. kg | | | | |
| EB63-100EU | 100 | 420 | 288 | 192 | 16 000 | 1 510 | 128 000 | 700 | 6 900 | 3.5 | 13.7 |
| EB63-200EU | 200 | 700 | 468 | 292 | 32 000 | 3 020 | 256 000 | 770 | 9 300 | 3 | 16.7 |
| EB63-300EU | 300 | 980 | 648 | 392 | 48 000 | 4 540 | 384 000 | 830 | 10 600 | 2.5 | 21.8 |
| EB63-400EU | 400 | 1 260 | 828 | 492 | 64 000 | 6 050 | 512 000 | 600 | 11 100 | 2 | 25.8 |
| EB63-500EU | 500 | 1 540 | 1 008 | 592 | 80 000 | 7 560 | 640 000 | 670 | 12 000 | 1.5 | 29.8 |

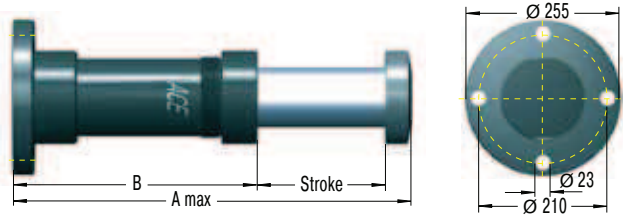
¹ The correct effective weight range for your application will be calculated by ACE and should fall within this band.

Special options: Special oils, special flanges, additional corrosion protection etc. available on request.

Front Flange -F



Rear Flange -R



Ordering Example

Safety Shock Absorber _____
 Bore Size Ø 100 mm _____
 Stroke 400 mm _____
 EU Compliant _____
 Mounting Style: Front Flange _____
 Identification No. assigned by ACE _____

EB100-400EU-F-X

Please indicate identification no. in case of replacement order

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 13 to 15.

The calculation and selection of the correct ACE safety shock absorber for your application should be referred to ACE for approval and assignment of unique identification number.

Technical Data

Reacting force Q: At max. capacity rating = **467 kN max.**

Rod return: Nitrogen accumulator (0.55 bar to 1.03 bar) combined with return spring

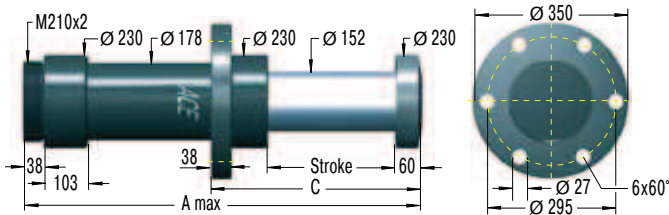
Dimensions and Capacity Chart

| Type | Stroke mm | A max | B | C | Max. Energy Capacity W ₃ Nm/Cycle | 1 Effective Weight me | | Min. Return Force N | Max. Return Force N | Max. Side Load Angle ° | Weight kg |
|-------------|-----------|-------|-------|-----|--|-----------------------|---------------|------------------------|------------------------|------------------------|--------------|
| | | | | | | me min. kg | me max. kg | | | | |
| EB100-200EU | 200 | 735 | 495 | 320 | 80 000 | 7 560 | 640 000 | 1 200 | 8 900 | 4 | 42.5 |
| EB100-300EU | 300 | 1 005 | 665 | 420 | 120 000 | 11 340 | 960 000 | 950 | 14 100 | 3.5 | 50.8 |
| EB100-400EU | 400 | 1 275 | 835 | 520 | 160 000 | 15 120 | 1 280 000 | 1 190 | 18 200 | 3 | 59.1 |
| EB100-500EU | 500 | 1 545 | 1 005 | 620 | 200 000 | 18 900 | 1 600 000 | 930 | 20 800 | 2.5 | 68.5 |
| EB100-600EU | 600 | 1 815 | 1 175 | 720 | 240 000 | 22 680 | 1 920 000 | 1 170 | 23 300 | 2 | 76.8 |

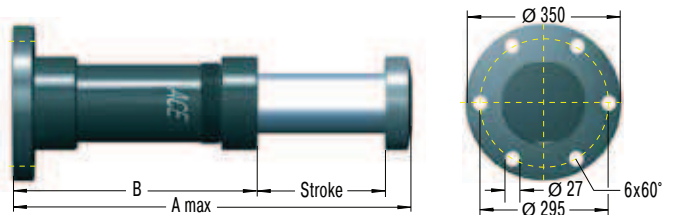
¹ The correct effective weight range for your application will be calculated by ACE and should fall within this band.

Special options: Special oils, special flanges, additional corrosion protection etc. available on request.

Front Flange -F



Rear Flange -R



Ordering Example

Safety Shock Absorber _____
 Bore Size Ø 160 mm _____
 Stroke 400 mm _____
 EU Compliant _____
 Mounting Style: Front Flange _____
 Identification No. assigned by ACE _____

EB160-400EU-F-X

Please indicate identification no. in case of replacement order

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 13 to 15.

The calculation and selection of the correct ACE safety shock absorber for your application should be referred to ACE for approval and assignment of unique identification number.

Technical Data

Reacting force Q: At max. capacity rating = **700 kN max.**

Rod return: Nitrogen accumulator (0.55 bar to 1.03 bar) combined with return spring

Dimensions and Capacity Chart

| Type | Stroke mm | A max | B | C | Max. Energy Capacity W_3 Nm/Cycle | 1 Effective Weight me | | Min. Return Force N | Max. Return Force N | Max. Side Load Angle ° | Weight kg |
|-------------|-----------|-------|-------|-------|---|-----------------------|---------------|------------------------|------------------------|------------------------|--------------|
| | | | | | | me min. kg | me max. kg | | | | |
| EB160-400EU | 400 | 1 400 | 940 | 600 | 240 000 | 22 700 | 1 920 000 | 1 870 | 18 100 | 4 | 155.6 |
| EB160-600EU | 600 | 2 000 | 1 340 | 800 | 360 000 | 34 000 | 2 880 000 | 2 100 | 18 800 | 3 | 189 |
| EB160-800EU | 800 | 2 600 | 1 740 | 1 000 | 480 000 | 45 400 | 3 840 000 | 2 400 | 19 500 | 2 | 222.3 |

¹ The correct effective weight range for your application will be calculated by ACE and should fall within this band.

Special options: Special oils, special flanges, additional corrosion protection etc. available on request.