

### Mounting instructions

Prior to installation and use, check if the identification number on the shock absorber or on the package corresponds to the number on the delivery sheet. Industrial shock absorbers are maintenance-free and ready-to-fit.

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

**Mounting:** In any position, but always so that the complete stroke can be used. The shock absorber is to be mounted so that the forces can be guided centrally via the piston rod. The maximum permissible side load may not be exceeded.

Safety shock absorbers may not be transferred from one application place to another if the application characteristics are not identical. Contact ACE if in any doubt.

**Emergency stop application:** After an emergency impact has occurred, the safety shock absorber must be checked for the proper rod return, the seal tightness and the fastening of mounting elements.

Damage to the piston rod, outer body, or to the mounts should be inspected and considered for replacement or refurbishment.

**Regular start up:** Safety shock absorbers may be operated with the complete stroke in creep speed at 1/10 of the maximum impact velocity.

**Inspection:** An inspection should be carried out not less than every **three months**.

WARNING	
	Shock absorbers can break away on impact. The assembly has to be dimensioned in a way that the maximum forces can be absorbed.
	Check the following points after hitting the safety shock absorber in an emergency: complete rod return, seal tightness and screw connection of mounting elements.

### Initial Start-Up Checks

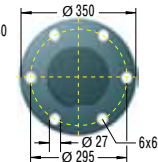
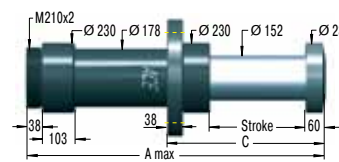
First impacts on the shock absorber should only be tried after correctly mounting and with reduced impact speeds and – if possible – with reduced load. Differences between calculated and actual operating data can then be detected early on, and damage to your system can be avoided. If the shock absorbers were selected on calculated data that does not correspond to the maximum possible loading (i.e. selection based on drive power being switched off or at reduced impact speed) then these restricted impact conditions must not be exceeded during initial testing or subsequent use of the system. Otherwise you risk damaging the shock absorbers and/or your machine by overstressing materials. After the initial trial check that the piston rod fully extends again and that there are no signs of oil leakage. Also check that the mounting hardware is still securely tightened. You need to satisfy yourself that no damage has occurred to the piston rod, the body, or the mounting hardware.

### Disposal of packaging

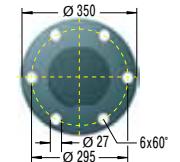
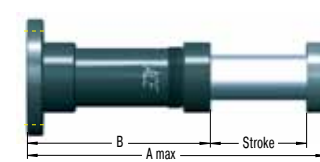
Dispose of packaging in an environmentally safe manner. The recycling of packaging saves raw materials and lowers the amount of waste. The used packaging materials do not contain illegal substances.

WARNING	
	Please check that the customer specific inner tube ID number at the end of the shock absorber description and number on the delivery note match exactly. The application data on the safety shock absorbers label, such as moving masses and the max. impact velocity, must be matched with the technical calculation by ACE. This check is important to make sure that the damper is correctly calculated for the application. Otherwise damage to the machine or safety shock absorbers can occur due to overload.
	The gas accumulators on safety shock absorbers from the CB series are filled with nitrogen in the factory. The corresponding filling pressure (5.6 to 5.9 bar) can be taken from the absorber label. The absorbers may only be operated with this filling pressure. A reduced filling pressure can lead to major malfunctions.
	Moving masses can lead to injuries or bodily harm when installing the shock absorber. Secure moving masses against accidental movement.
	The shock absorbers may be unsuitable for the application and show insufficient damping performance. Check for proper suitability of shock absorber.
	When operating outside the allowed temperature range, the shock absorber may lose its function. Permissible temperature range must be adhered to. Do not paint the shock absorber due to heat radiation.
	Ambient fluids, gases and dirt particles may affect or damage the sealing system and lead to failure of the shock absorber. Piston rods and sealing systems must be protected against foreign substances.
	Damage to the piston rod surface may destroy the sealing system. Do not grease, oil, etc. the piston rod and protect it from dirt particles.
	The piston rod can be torn out of the shock absorber. Do not put tensile stress on the piston rod.

### Front Flange -F



### Rear Flange -R



### Dimensions

Type	Stroke mm	A max	B	C	Max. Side Load Angle °	Weight kg
CB160-400EU	400	1400	940	600	4	154.6
CB160-600EU	600	2000	1340	800	3	188
CB160-800EU	800	2600	1740	1000	2	221.3

### EU Marking

Starting with the production date September 2010 (Code IB or 10244) all shock absorbers are to be marked with an additional EU letter code in the identification number. The EU marking refers to the adherence to the required norms, laws, and guidelines of the EU. Only products marked with EU ensure the worldwide standard and the guarantee for liability.