

HBD-50 to HBD-85

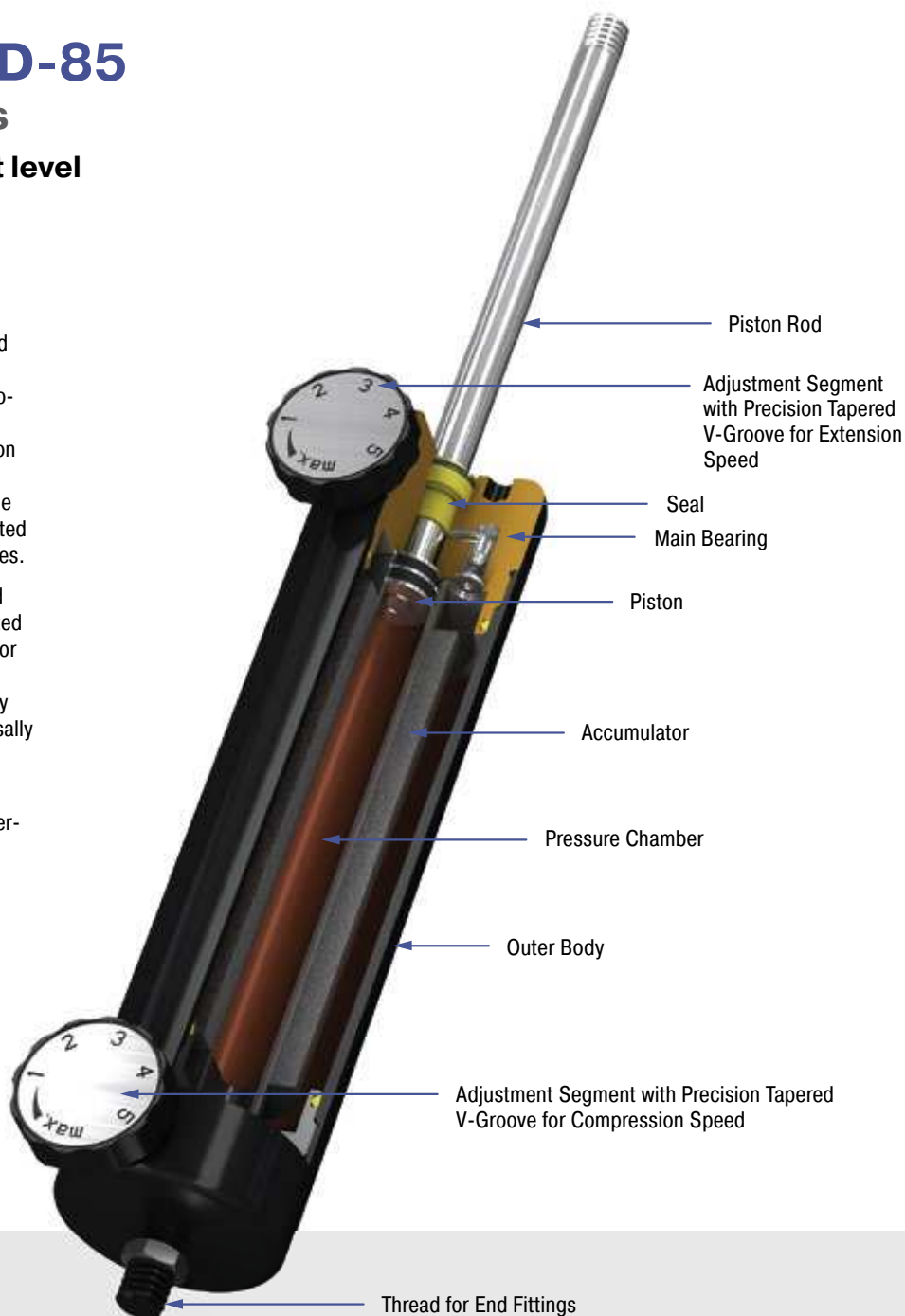
Hydraulic Dampers

Regulation at the highest level

Motion control in both directions: The HBD model of hydraulic dampers can be adjusted independently in both the push and pull direction. These maintenance-free, ready-to-install and closed systems leave no prayers unanswered as far as the setting of retraction and extension speeds are concerned. In addition each damper works without any free travel therefore the flow of oil can be regulated exactly via the two precision metering orifices.

Adjustment can be made once installed and even when moving through stroke. The coated body and hard-chromed piston rods stand for quality and long service life. The variety of mounting accessories makes assembly easy and the high-end hydraulic dampers universally usable.

HBD hydraulic dampers are used in the automotive, in industry, mechanical engineering and medical technology.



Technical Data

Compression and extension force:

150 N to 50,000 N

Outer body diameter: Ø 50 mm to Ø 85 mm

Piston rod diameter: Ø 10 mm to Ø 20 mm

Lifetime: Approx. 10,000 m

Operating temperature range: 0 °C to 65 °C

Adjustment: Steplessly adjustable

Positive stop: External positive stops 1 mm to 3 mm before the end of stroke provided by the customer.

Damping medium: Hydraulic oil

Material: Outer body: Coated steel; Piston rod: Hard chrome plated steel; End fittings: Zinc plated steel

Mounting: In any position

Application field: Sports equipment, Rehabilitation technology, Conveyor technology

Note: Increased break-away force if unit has not moved for some time. One locknut included.

End fittings: They are interchangeable and must be positively secured by the customer to prevent unscrewing.

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

Adjustable, Without Free Travel, Compression and extension force 100 N to 6,000 N

End Fitting

Standard Dimensions

End Fitting

B10 Stud Thread B10

A10 Eye A10 max. force 10,000 N

C10 Angle Ball Joint C10 max. force 1,800 N

D10 Clevis Fork D10 max. force 10,000 N

E10 Swivel Eye E10 max. force 10,000 N

Performance and Dimensions

TYPES	Stroke mm	L extended mm	¹ Compression Force max. N
HBD-50-50	50	192	6,000
HBD-50-100	100	292	6,000
HBD-50-150	150	392	4,400
HBD-50-200	200	492	2,800
HBD-50-250	250	592	2,000
HBD-50-300	300	692	1,400

¹ Max. extension force for all stroke lengths 6,000 N.

Ordering Example

HBD-50-150-EE

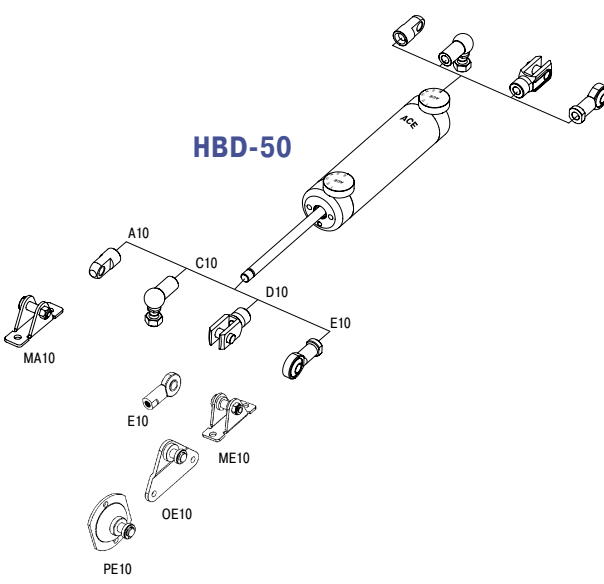
Type (Hydraulic Damper) _____
 Body \varnothing (50 mm) _____
 Stroke (150 mm) _____
 Piston Rod End Fitting E10 _____
 Body End Fitting E10 _____

Model Type Prefix

P: Damping in both directions (standard model)
 M: Damping on out stroke only (adjustment knob at "rear end" free flow)
 N: Damping on in stroke only (adjustment knob at "piston rod end" free flow)

Mounting accessories see from page 194.

Issue 08.2016 – Specifications subject to change



Technical Data

- Compression and extension force:** 100 N to 6,000 N
- Operating temperature range:** 0 °C to 65 °C
- Adjustment:** Steplessly adjustable
- Positive stop:** External positive stops 1 mm to 1.5 mm before the end of stroke provided by the customer.
- Material:** Outer body: Coated steel; Piston rod: Hard chrome plated steel; End fittings: Zinc plated steel
- Mounting:** In any position
- Note:** Increased break-away force if unit has not moved for some time. One locknut included.
- End fittings:** They are interchangeable and must be positively secured by the customer to prevent unscrewing.