



Short-Stroke Hollow Piston Cylinders
single acting, with spring return
max. operating pressure 400 bar

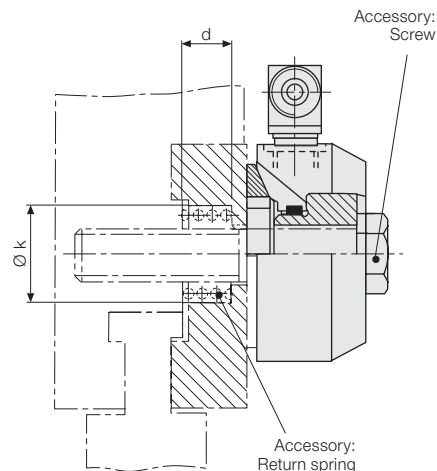


Advantages

- Flat and compact design
- Jerkless piston movement
- Stroke limitation designed for max. operating pressure
- Easy to retrofit
- Ideal force transmission

Description

The clamping element is particularly suitable for clamping mechanical clamping bars on die bending presses and folding presses. The clamping force is generated by applying hydraulic pressure to the piston, and the piston is returned by a spring which is installed in the clamping bar. The piston is provided with a through hole and is hardened and ground. For an optimum adaptation to the clamping surface, the hollow piston cylinder can be equipped with a spherical disk.



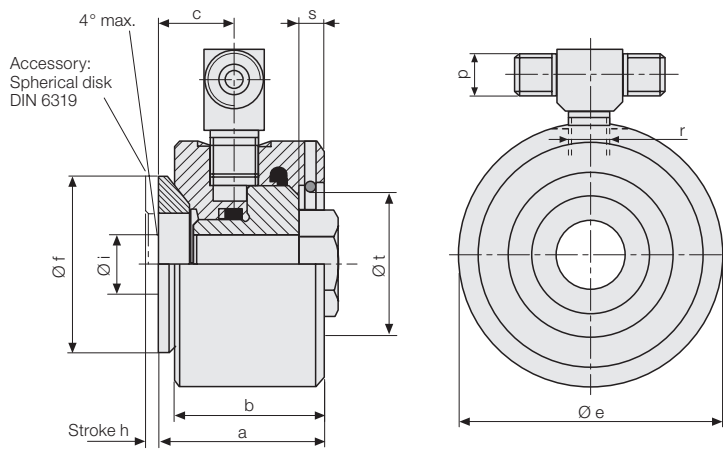
Application

Hollow piston cylinders are used in connection with tie rods, screws and threaded rods, for clamping and locking dies on presses and machines.

Technical data

Max. operating pressure 400 bar

Clamping force at 100 bar	[kN]	5.5	13.5
Clamping force at 400 bar	[kN]	22	54
For screw		M 12	M 16
Stroke h	[mm]	2.5	3.0
Spring return force	[kN]	0.27	0.67
Piston area	[cm ²]	5.5	13.5
Oil volume per 1 mm stroke	[cm ³]	0.6	1.4
a	[mm]	33	46
b	[mm]	30.6	41
c	[mm]	15	20
d	[mm]	12	18
Ø e	[mm]	50	80
Ø f	[mm]	36	56
Spherical disk		C 21	C 31
Ø i	[mm]	13	18
Ø k	[mm]	22	30
p		M12 x 1.5	M14 x 1.5
r		G 1/8	G 1/4
s	[mm]	5.2	8.6
Ø t	[mm]	30	48
Weight	[kg]	0.4	1.4
Part no.		1830011	1830012
Accessories			
Spherical disk	Part no.	5700028	5700029
Return spring	Part no.	5700031	5700032



Special versions on request

Hydraulic power units

see product group 7

Accessories

see product group 11