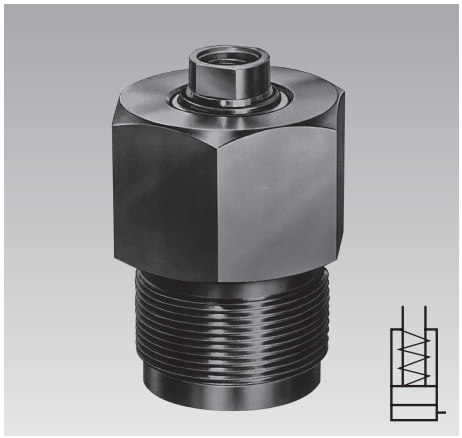
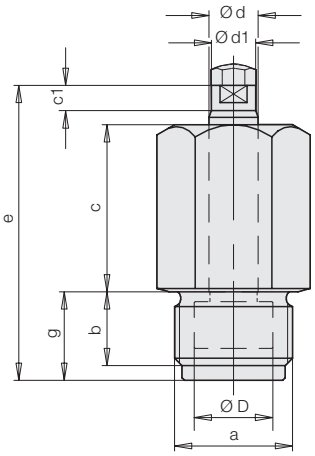
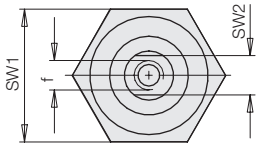
Threaded-Body Cylinders

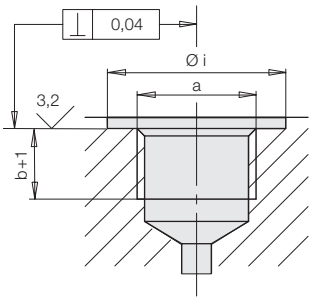
single acting, spring return, with wiper
max. operating pressure 500 bar



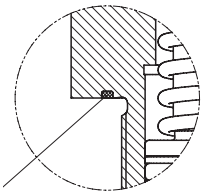




Porting details at fixture



Sealing is attained by a knife edge at cylinder collar, requiring the sealing surface to be square to hole axis and flat.



For piston Ø D = 32 mm the knife edge will be replaced by a Kantseal joint.

Description

These clamping cylinders may be threaded directly into tapped holes of the fixture.
These compact devices can be used to great advantage in fixtures where space is at a premium.
Hydraulic fluid is supplied through passages drilled into the fixture body, thus eliminating hydraulic hoses and threaded fittings.
The built-in spring returns the piston when hydraulic pressure is released.
The internal threads at the piston rod end accept contact bolts.
Contact bolts see data sheet G 3.800.

Material

Piston material: casehardening steel, hardened
Cylinder body: free-cutting steel, black oxide

Important notes

Threaded-body cylinders must not be subjected to a load in retracted position.

Operating conditions, tolerances and other data see data sheet A 0.100.

Piston Ø D		**[mm]**	**12**	**16**	**25**	**32**
Rod Ø d		**[mm]**	**8**	**10**	**16**	**20**
Stroke ±0.5		[mm]	8	10	10	16
Clamping force at	100 bar	[kN]	1.1	2.0	4.9	8
	500 bar	[kN]	5.6	10.0	24.5	40
Spring return force, min		[N]	32	56	151	183
Oil volume / 10 mm stroke		[cm³]	1.13	2.01	4.91	8.04
a		[mm]	M20x1.5	M24x1.5	M36x1.5	M42x1.5
b		[mm]	12	15	20	25
c		[mm]	25	34	35	40
Ø d1 x c1		[mm]	7.7x4	9.2x3.7	15x5	19x7.8
e ±0.5		[mm]	46	58	66	75
f x depth of thread		[mm]	M5x10	M6x12	M10x15	M12x15
g		[mm]	15	18	23	25
Ø i		[mm]	29	33	49	65
SW 1		[mm]	24	27	41	55
SW 2		[mm]	7	8	13	17
Max. seating torque		[Nm]	90	110	130	200
Weight		[kg]	0.16	0.25	0.65	0.92
Part no.			**1450000**	**1451000**	**1453000**	**1454000**

Application example