ROEMHELD
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Articles and prices
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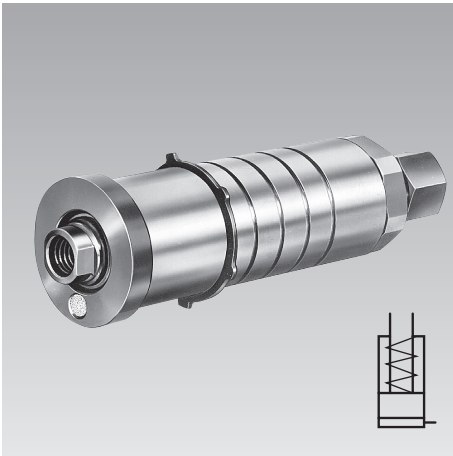
Issue 7-23 E

B 1.310

Universal Clamping Cylinders
single acting with spring return,
max. operating pressure 200 / 500 bar

Description
Universal clamping cylinders are particularly suited for clamping fixtures designed to hold various sizes of workpieces (parts families). They can be mounted directly into the fixture wall or installed into horizontal or vertical mounting brackets which are available as accessories. Spacers and C-washers provide axial adjustment in increments of 10 mm.
Bleeding is effected via fitting connection or via bleeding screw for type 1316.

Material
Piston: casehardening steel, hardened
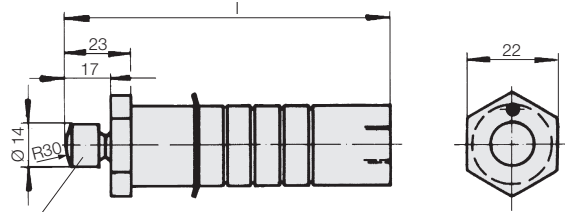Cylinder body: free cutting steel

Important notes
Penetration of aggressive cutting lubricants and coolants through the sintered metal air filter into the cylinder's interior should be avoided by appropriate arrangement or covering.
If required, a vent hose has to be connected and be placed in a protected position.

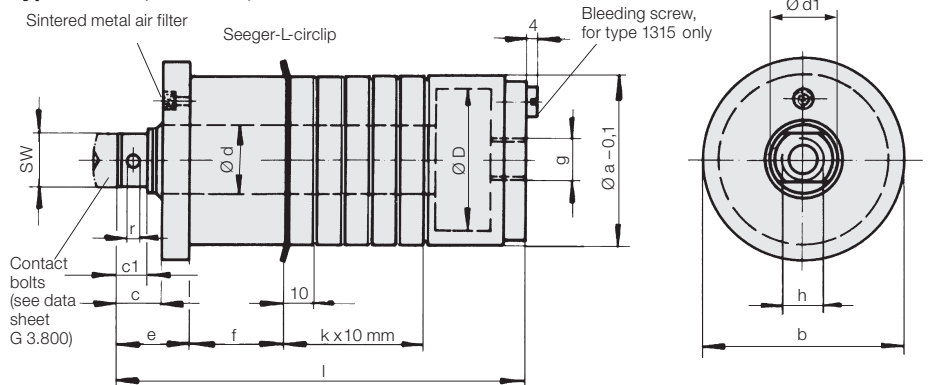Operating conditions, tolerances and other data see data sheet A 0.100.

It is absolutely necessary to follow the instructions for venting of the spring area on data sheet G 0.110.

Type 1309 020

Contact bolt 3542 085 is included in our delivery

Typ 1313 020, 1315 020, 1316 060

Piston Ø D	[mm]	**10**	**25**	**40**	**50**
Rod Ø d	[mm]	**6**	**16**	**25**	**32**
Stroke ± 1	[mm]	20	20	22	50
Clamping force 100 bar	[kN]	0.7	4.9	12.6	19.5
at max. operating pressure	[kN]	3.7	24.5	62.8	39.0
Max. operating pressure	[bar]	500	500	500	200
Spring return force, min.	[N]	28	140	270	390
Oil volume per 10 mm stroke	[cm³]	0.78	4.91	12.56	19.63
Ø a	[mm]	20	35	60	60
b	[mm]	–	40	68	68
c	[mm]	–	9	11	11
Ø d1 x c1	[mm]	–	15 x 5	24 x 7	30,5 x 6,5
e	[mm]	–	16	19	19
f	[mm]	18.7	28.4	37.9	37.9
g		G 1/4	G 1/4	G 1/4	G 1/4
h x depth of thread	[mm]	–	M 10 x 15	M 16 x 25	M 20 x 30
k		4 x	5 x	5 x	11 x
l ± 1	[mm]	111	123	138	194
r	[mm]	–	–	4	4
SW	[mm]	–	13	–	–
Weight	[kg]	0.3	0.75	2.0	2.5
Part no.		**1309 020**	**1313 020**	**1315 020**	**1316 060**

Article available on request

Application example

Römheld GmbH