

HOLLOW PISTON CYLINDERS

with internal piston thread, single- and double-acting, pmax. 500 bar

Description:

Hollow piston cylinders are used in combination with mechanical clamping elements in hydraulic clamping fixtures as traction and pressure cylinders.

The piston has a threaded through-bore which can, for example, be used to screw in the tensile rods.

The integrated metal wiper prevents the piston from being damaged by metal shavings, thus increasing the availability and service life of the cylinders.

The external thread of the housing allows versatile installation options, including using lock nuts. HYDROKOMP offers single-acting (with spring reset) and double-acting hollow piston cylinders. For the purpose of supplying oil, the hollow piston cylinders are equipped with G1/4 threaded ports.

Operating conditions:

For single-acting hollow piston cylinders, the penetration of foreign objects and liquids into the spring cavity must be prevented via preventive cylinder arrangement or by covering. If required, a vent line can also be connected.

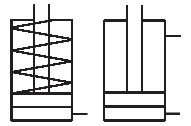
In order to prevent the threading from becoming damaged during use, the grooved nuts must always be tightened according to the load.

The user must ensure that the tensile rods and screws are made of a material with a strength class of at least 10.9. This is especially applicable for maximal operating pressures between 350 and 500 bar.



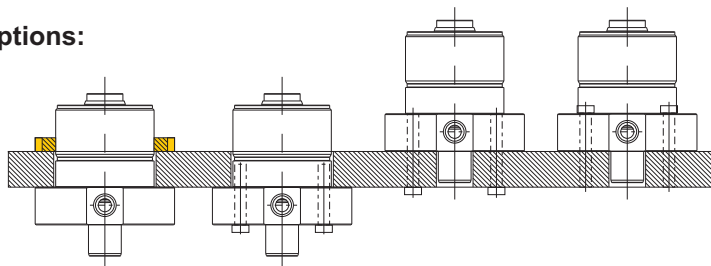
Webcode: 022006

We also design and manufacture special designs

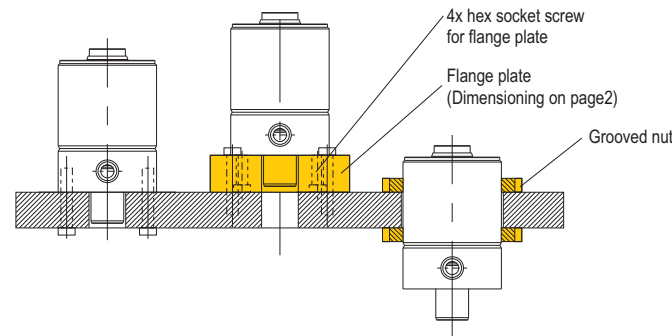


Installation options:

Type (A)

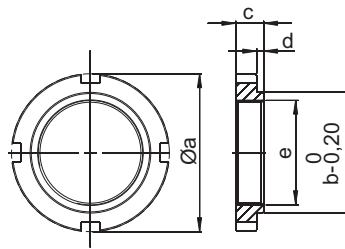


Type (B)



Grooved nut: (DIN 1804, accessory)

	Piston Ø	Øa	b	c	d	e
(A)	20 mm	36	30	8	0,5	M40x1,5
(A)	32 mm	75	67	13	0,5	M48x1,5
(A)	40 mm	90	80	13	0,5	M60x1,5
(B)	50 mm	110	100	14	0,5	M75x1,5
(B)	63 mm	130	120	16	1	M90x2
(B)	80 mm	165	150	18	1	M120x2

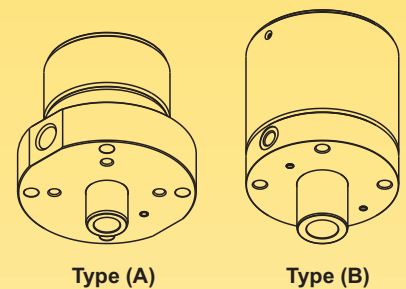


Sealing:

⊗ NBR, Operating temperature: -10° up to +80°C

Advantages:

- ⊗ Suitable as traction or pressure cylinder
- ⊗ Pistons with through-bore
- ⊗ Use of tensile rods possible
- ⊗ Various installation options
- ⊗ Protection against shavings via integrated metal wiper



General operating conditions and other information can be found in the catalogue under "Recommendations and Specifications" or at www.hydrokomp.de.

Accessories: (Order numbers)

Type (A)			
for piston Ø [mm]	20	32	40
Grooved nut	7040-006	7048-002	7060-007
Type (B)			
for piston Ø [mm]	50	63	80
Grooved nut	7075-005	7090-003	7120-003
Flange plate	4105-012	4125-007	4160-015
Hex socket screw for flange plate	7008-021	7010-005	7012-006

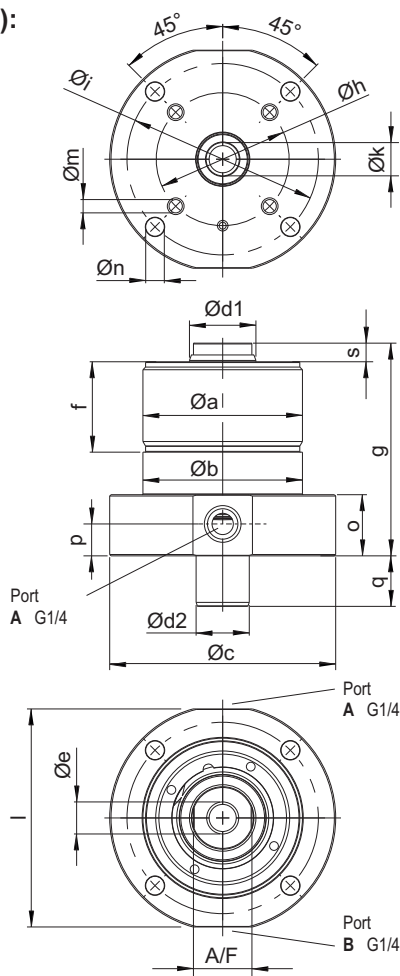


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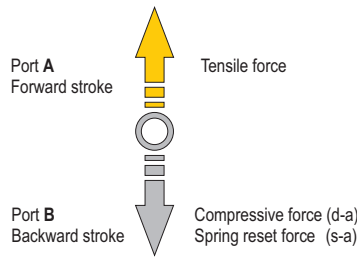


Hollow piston cylinders / Types

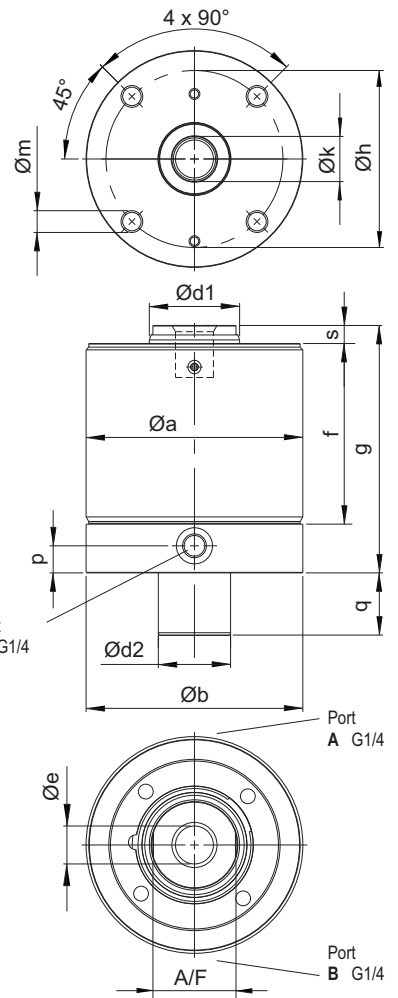
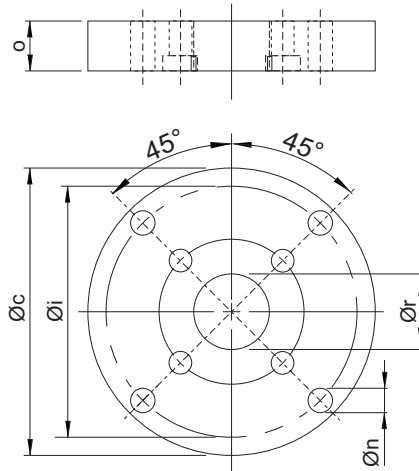
Type (A):



Type (B):



Flange plate for type (B)
(Accessories see page 1)



Type:		A	A	A	B	B	B
Piston Ø	[mm]	20	32	40	50	63	80
Compressive force at 100 bar	[kN]	2	4,8	7,6	11,9	18,6	30,6
Tensile force at 100 bar	[kN]	2	6	9,4	14,7	23,1	37,7
Compressive force at 500 bar	[kN]	10	24	38	57,9	93	153
Tensile force at 500 bar	[kN]	10	30	47	73,6	115,6	188,5
Spring reset force (at s-a)	[kN]	0,09	0,2	0,27	0,38	0,47	0,95
Piston area, effective, forward stroke	[cm ²]	2,01	6,03	9,42	14,73	23,13	37,7
Piston area, effective, backward stroke	[cm ²]	2,01	4,89	7,65	11,58	18,6	30,61
Oil requirement/10 mm forward stroke	[cm ³]	2,01	6,03	9,42	14,73	23,13	37,7
Oil requirement/10 mm backward stroke	[cm ³]	2,01	4,89	7,65	11,58	18,6	30,61
a Ø	[mm]	M40x1,5	M48x1,5	M60x1,5	M75x1,5	M90x2	M120x2
b Ø	[mm]	-	48	60	75	90	120
c Ø	[mm]	65	72	85	105	125	160
d1 Ø	[mm]	12	20	25	32	40	50
d2 Ø	[mm]	12	16	20	25	32	40
e Ø x thread depth	[mm]	M6x8	M10x12	M12x15	M16x20	M20x25	M24x30
f	[mm]	30	28	34	60	72	100
g	[mm]	58	68	80	94	116	137
h Ø	[mm]	30	40	50	60	70	98
i Ø	[mm]	52	60	72	90	108	140
k Ø	[mm]	6,5	10,5	12,5	16,5	21	25
l	[mm]	60	68	82	72	87	117
m Ø x thread depth	[mm]	M6x8	M6x8	M6x10	M8x10	M10x14	M12x15
n Ø	[mm]	7	7	7	9	11,0	13,5
o	[mm]	23	23	23	20	22	25
p	[mm]	12	12	12	12	15	15
q	[mm]	12	14	19	23	35	43
r Ø	[mm]	-	-	-	28	35	43
s	[mm]	5	6	7	9	10	10
A/F		10	17	22	27	36	46
Weight approx.	[kg]	0,8	1,1	1,8	2,5	4,4	9,7
single-acting with spring reset (sa)							
Stroke ±1	[mm]	6	8	10	12	16	20
Order number	HKZY...	-020-006-002	-032-008-002	-040-010-002	-EW-050-012-001	-EW-063-016-001	-EW-080-020-001
double-acting (da)							
Stroke ±1	[mm]	10	12	16	20	32	40
Order number	HKZY...	-020-010-001	-032-012-001	-040-016-001	-DW-050-020-001	-DW-063-032-001	-DW-080-040-001