

Block cylinders

piston with outer thread, double-acting, pmax. 500 bar

200-5
Issue: 10/2022



The image shows a block cylinder with external threaded piston together with accessories joint head and bearing support. The bearing support is supplied with 4 cylinder head screws and mounted to the cylinder through bleeder bores.

Description:

Where linear movements are hydraulically created and exact strokes are essential, this double-acting block cylinder is ideal for application.

Block cylinders are typically used in plant engineering, moldmaking, general mechanical engineering, fixture construction and toolmaking.

The compact cubic design and the transverse groove make assembly easy and guarantee service under high operating pressure.

HYDROKOMP offers various versions of oil supply.

Apart from the double sealing at the rod diameter, block cylinders are equipped with an additional metal wiper.

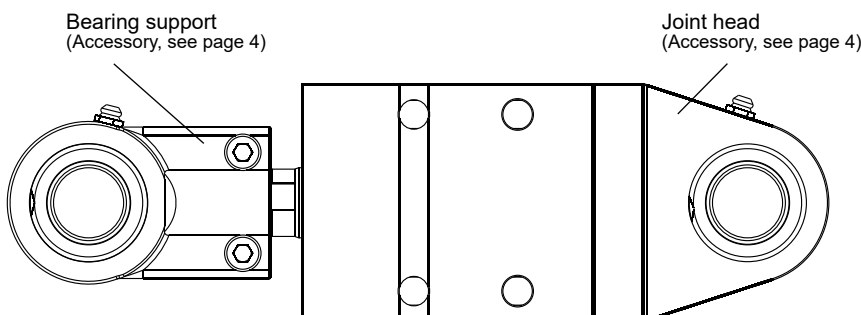
The metal wiper prevents ingress of metallic filings into the soft wiper and ensures continuous operation with little leakage.

The piston rods of the block cylinders have an outer thread. This enables mounting of joint heads for example and other fastening elements.

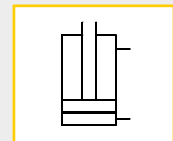
For more information see page 4.

As standard, HYDROKOMP offers the block cylinder in five sizes. Special designs and other strokes are available.

Mounting example:



Webcode: 020005



Designs:

- ⊗ Threaded port
- ⊗ Manifold connection with O-ring
- ⊗ Bleeder bores
- ⊗ Transverse bores

Sealing:

- ⊗ NBR, Operating temperature: -10° up to +80°C
- ⊗ FKM, Operating temperature: up to max. 150°C

Advantages:

- ⊗ Continuous operation with little leakage
- ⊗ Allows exact strokes
- ⊗ 4 mounting options
- ⊗ Outer thread for accessories
- ⊗ Metal wiper as standard
- ⊗ Double hydraulic sealing

We also design and manufacture customized variants!

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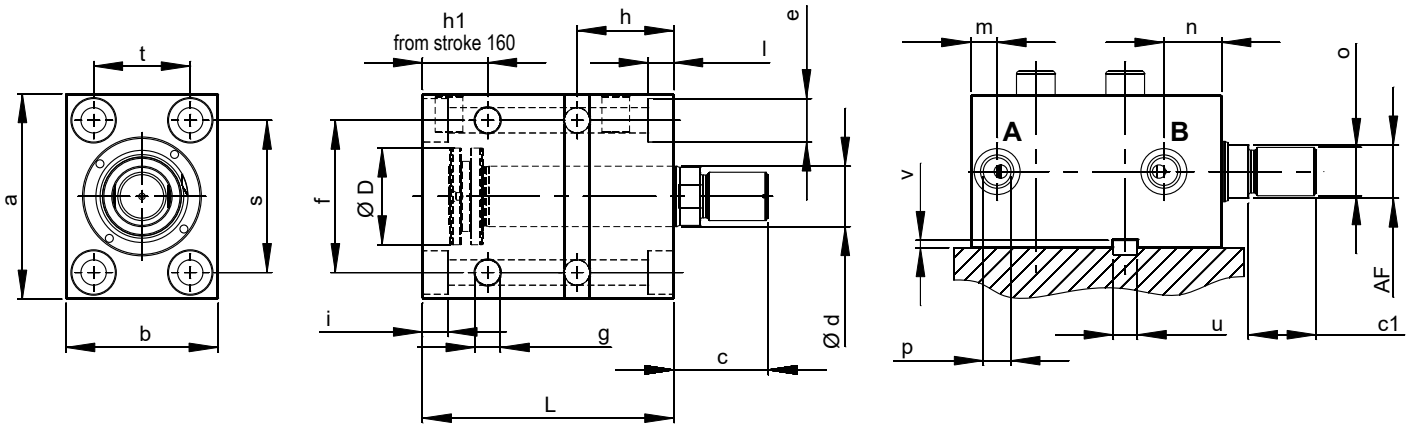
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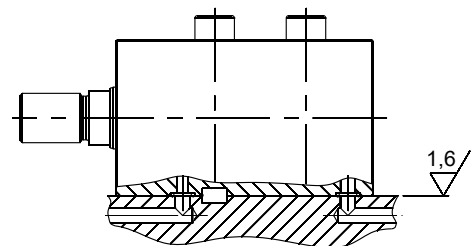
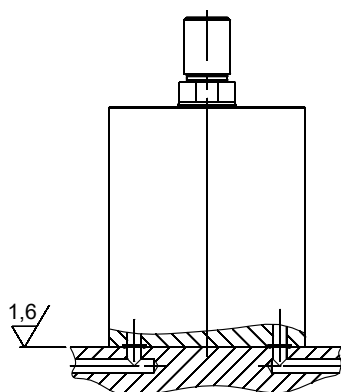
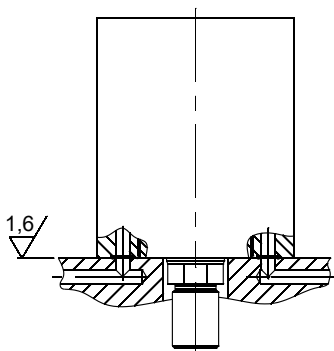
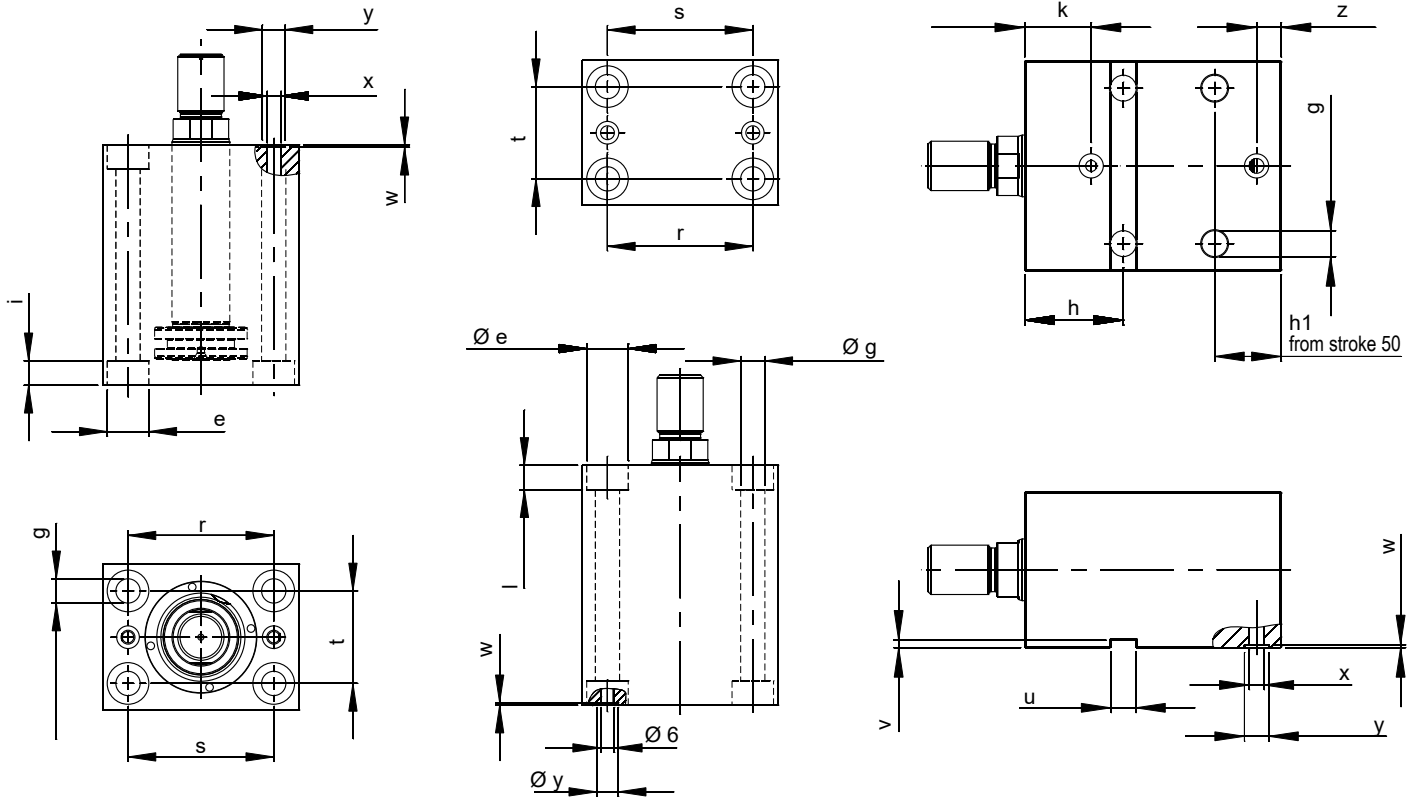
A threaded port, bleeder bores and transverse bores



C
manifold connection with O-rings,
rod-side mounting

D
manifold connection with O-rings,
bottom-side mounting

E
manifold connection with O-rings,
broadside mounting





Order numbers:						
D Piston Ø ⁽¹⁾	[mm]	25	32	40	50	63
d Rod Ø	[mm]	16	20	25	32	40
Stroke ⁽²⁾ ±1	[mm]	50	50	50	50	63
Pressure force at 100 bar	[kN]	4,9	8,0	12,6	19,6	31,2
Tension force at 100 bar	[kN]	2,9	4,9	7,7	11,6	18,6
Oil requ./10 mm supply	[cm ³]	4,9	8,0	12,6	19,6	31,0
Oil requ./10 mm return flow	[cm ³]	2,9	4,9	7,7	11,6	18,6
a	[mm]	65	75	85	100	125
b	[mm]	45	55	63	75	95
c	[mm]	26	33	39	47	63
c1	[mm]	18	22	28	36	45
Ø e	[mm]	14	18	18	20	26
f	[mm]	50	55	63	76	95
Ø g	[mm]	8,5	10,5	10,5	13	17
h	[mm]	33	38	40	44	50
h1	[mm]	26	27	27	30	41
i	[mm]	6,4	7,6	10,6	12,6	16,6
k	[mm]	21	25	27	29,5	32
l	[mm]	8,6	10,6	10,6	12,6	16,6
L	[mm]	94	100	104	115	135
m	[mm]	11	11	11	13	17
n	[mm]	18	22	24	27	26
o		M14x1,5	M16x1,5	M20x1,5	M27x2	M33x2
p		G1/4	G1/4	G1/4	G1/4	G1/2
r	[mm]	50	55	63	76	95
s	[mm]	50	55	63	76	95
AF	[mm]	13	17	22	27	36
t	[mm]	30	35	40	45	65
u	[mm]	10	12	12	15	20
v	[mm]	2	3	3	5	5
w	[mm]	1,1	1,1	1,1	1,1	1,5
Ø x	[mm]	4	5	6	6	8
Ø y	[mm]	9,8	9,8	9,8	10,8	13,8
z	[mm]	7,5	10	10	13	16
Design A (threaded port, bleeder bores and transverse bores)						
Sealing:						
NBR	BZY...	025-050-AP-G001	032-050-AP-G001	040-050-AP-G001	050-050-AP-G001	063-063-AP-G001
FKM	BZY...	025-050-AV-G001	032-050-AV-G001	040-050-AV-G001	050-050-AV-G001	063-063-AV-G001
Design C (manifold connection with O-rings, rod-side mounting)						
Sealing:						
NBR	BZY...	025-050-CP-G001	032-050-CP-G001	040-050-CP-G001	050-050-CP-G001	063-063-CP-G001
FKM	BZY...	025-050-CV-G001	032-050-CV-G001	040-050-CV-G001	050-050-CV-G001	063-063-CV-G001
Design D (manifold connection with O-rings, bottom-side mounting)						
Sealing:						
NBR	BZY...	025-050-DP-G001	032-050-DP-G001	040-050-DP-G001	050-050-DP-G001	063-063-DP-G001
FKM	BZY...	025-050-DV-G001	032-050-DV-G001	040-050-DV-G001	050-050-DV-G001	063-063-DV-G001
Design E (manifold connection with O-rings, broadside mounting)						
Sealing:						
NBR	BZY...	025-050-EP-G001	032-050-EP-G001	040-050-EP-G001	050-050-EP-G001	063-063-EP-G001
FKM	BZY...	025-050-EV-G001	032-050-EV-G001	040-050-EV-G001	050-050-EV-G001	063-063-EV-G001
Accessories (see page 4)						
Bearing support		8700-006	8700-009	8700-003	8700-012	8700-015
Joint head		8700-005	8700-008	8700-002	8700-011	8700-014

⁽¹⁾ Special piston diameters available on request.

⁽²⁾ Special stroke lengths available on request.

Scope of supply includes the O-rings.



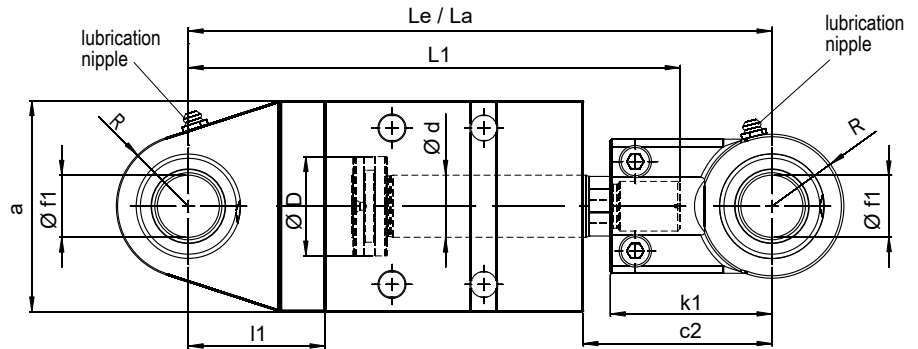
Description:

The piston rods of the block cylinders are equipped with an outer thread. This way joint heads for example and other fastening elements can be mounted. For the cylinder bottom we offer a bearing support which is mounted with cylinder screws.

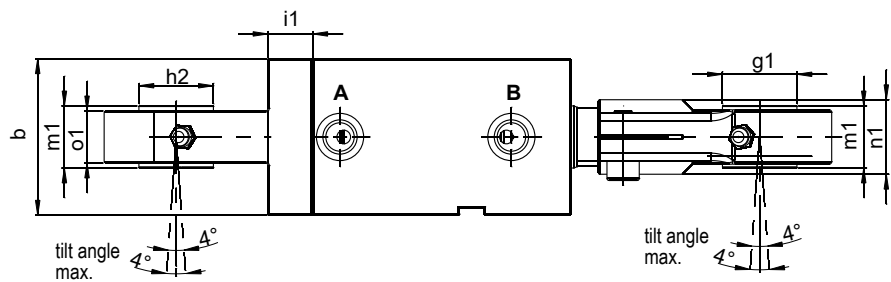
When mounting the joint head it is important to make sure that it is tightly fastened with the piston rod shoulder and jammed by screwing with the piston rod.

Lubrication nipples enable relubrication of joint head and bearing support.

Bearing support:



Joint head:
(including fastening screws)



Technical Data:

D Piston Ø ⁽³⁾	[mm]	25	32	40	50	63
d Rod Ø	[mm]	16	20	25	32	40
Stroke ⁽⁴⁾ ±1	[mm]	50	50	50	50	63
Pressure force at 100 bar	[kN]	4,9	8,0	12,6	19,6	31,2
Tensile force at 100 bar	[kN]	2,9	4,9	7,7	11,6	18,6
Oil requirement/10 mm supply	[cm ³]	4,9	8,0	12,6	19,6	31,0
Oil requirement/10 mm return flow	[cm ³]	2,9	4,9	7,7	11,6	18,6
a	[mm]	65	75	85	100	125
b	[mm]	45	55	63	75	95
c2	[mm]	52	63	76	91	115
Ø f1 H7	[mm]	16	20	25	32	40
Ø g1	[mm]	20	25	30	38	46
Ø h2	[mm]	20	25	30	38	46
i1	[mm]	12	12	18	20	25
k1	[mm]	44	52	65	80	97
l1	[mm]	37	42	55	65	80
m1	[mm]	16	20	25	32	40
n1	[mm]	21	25	30	38	47
o1	[mm]	13	17	21	27	32
R	[mm]	20	23,5	29	35,5	45
Length cylinder L1	[mm]	157	175	198	227	278
Length retracted Le	[mm]	183	205	235	271	330
Length extracted La	[mm]	233	255	285	321	393
Weight approx.	[kg]	2,45	3,75	5,6	7,9	11,3

⁽³⁾Special piston diameters available on request.

⁽⁴⁾Special stroke lengths available on request.

Order numbers on page 3.