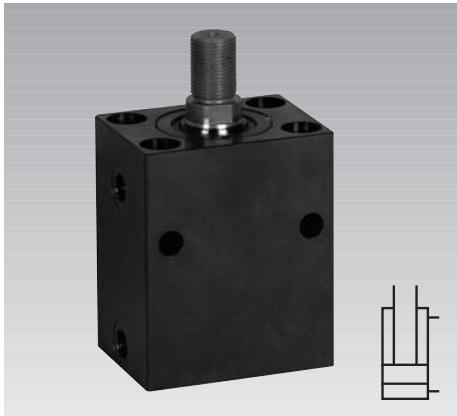




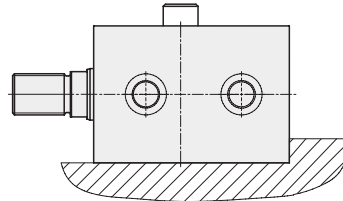
Block Cylinders

Piston rod with external thread
double acting, max. operating pressure 500 bar



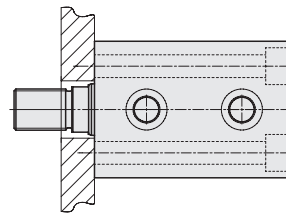
Fixing possibilities

Broad side with 2 cross holes

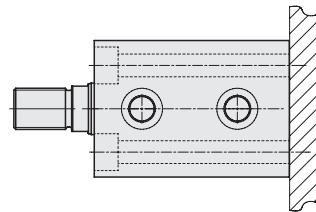


Cylinders must be backed up for operating pressures exceeding 160 bar.

Rod side with 4 mounting holes

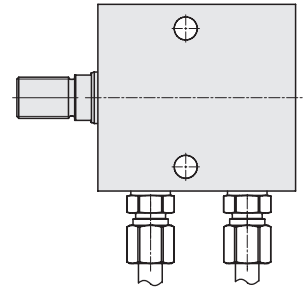


Bottom side with 4 mounting holes



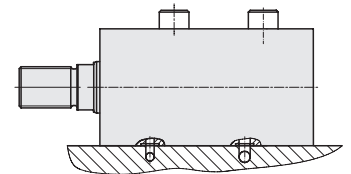
Hydraulic connecting possibilities

Pipe thread

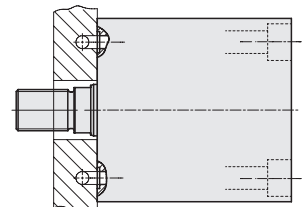


Manifold mounting versions with O-ring sealing

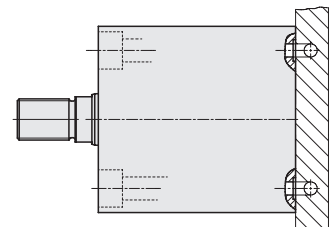
● **Broad side with 4 cross holes**
Version L



● **Rod side with 4 mounting holes**
Version S



● **Bottom side with 4 mounting holes**
Version B



Application

Double-acting block cylinders can be used universally for all hydraulic-operated linear movements.

Functioning

The double-acting functioning allows a high function safety as well as exactly calculable and repeatable stroke times.

Description

Double-acting block cylinder whose piston rod is provided with an external thread.

Fixing elements as for example rod end bearings, which are available as accessory, can be screwed onto the external thread (see data sheet G3.810).

Material

Cylinder body: high alloy steel, black oxide
Piston: casehardening steel, nitrated
Sealings: NBR or FKM

Maximum operating temperature

- With NBR seals: 100°C
- With FKM seals: 150°C

Important notes

Fixing elements have to be torqued firmly against the piston rod shoulder and then locked with the piston rod.

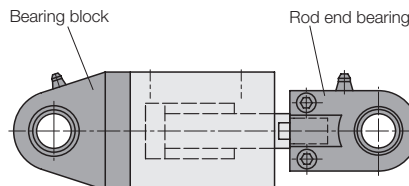
Tolerances, further operating conditions, and other data see data sheet A 0.100.

Accessory - Spherical bearing

As accessories the following spherical bearings can be delivered (see data sheet G 3.810).

A bearing block, which is fixed at the cylinder bottom with socket head cap screws.

A rod end bearing, which is screwed onto the external thread of the piston rod and then locked with the piston rod.

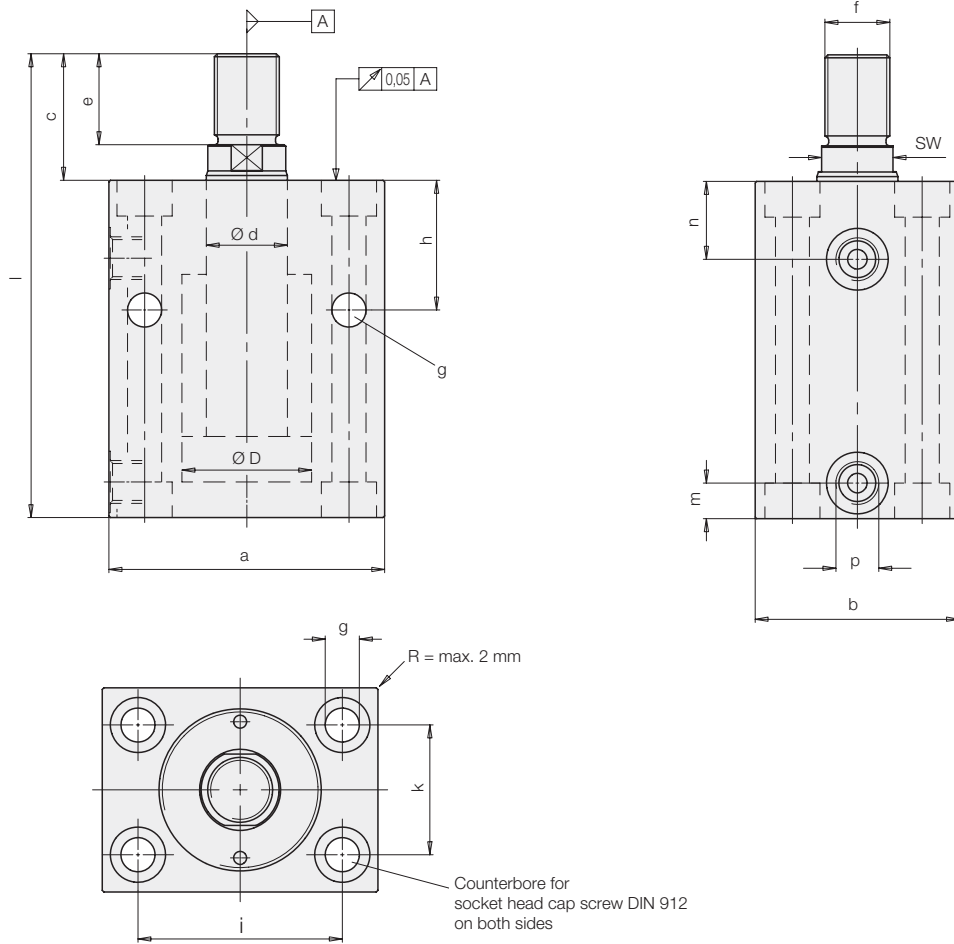


Available variants

- Stroke reduction by distance bushing
- Keyway at the broad side of the body to support the body.
- Internal thread to fix the body at the bottom or front side (instead of mounting holes)

Dimensions

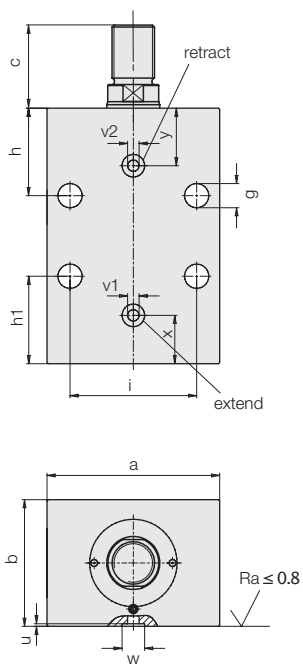
Pipe thread



Manifold mounting versions with O-ring sealing

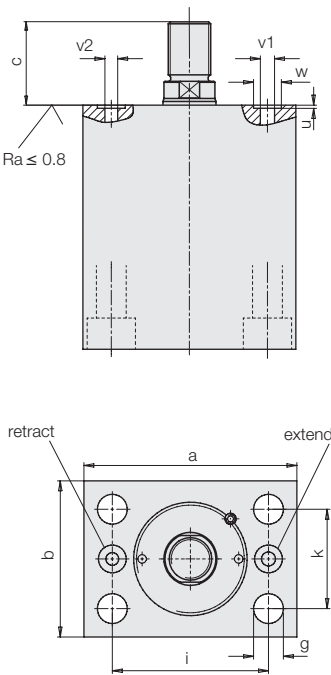
Version L

Broad side with 4 cross holes



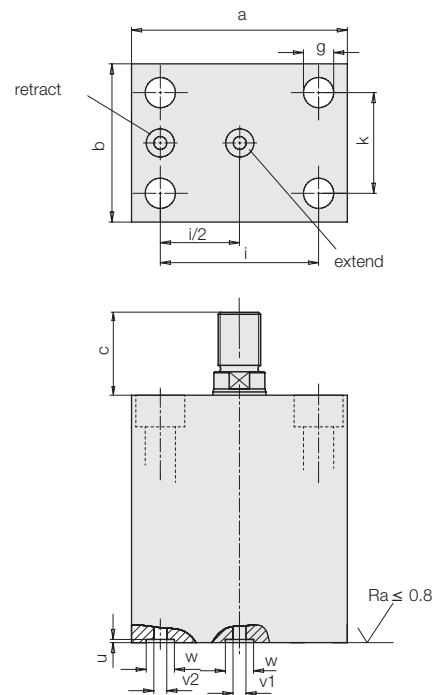
Version S

Rod side with 4 mounting holes



Version B

Bottom side with 4 mounting holes



Technical Characteristics Dimensions

Piston Ø D	[mm]	25	32	40	50	63
Rod Ø d	[mm]	16	20	25	32	40
Stroke ±1	[mm]	50	50	50	50	63
Force to push at	100 bar [kN]	4.9	8.0	12.6	19.5	31.2
	500 bar [kN]	24.5	40.2	62.8	98.5	155.9
Force to pull at	100 bar [kN]	2.9	4.9	7.7	11.6	18.6
	500 bar [kN]	14.5	24.5	38.3	57.9	93
Oil volume per	Stroke to extend [cm³]	4.91	8.05	12.56	19.63	31.17
10 mm stroke	Stroke to retract [cm³]	2.9	4.9	7.66	11.59	18.61
a	[mm]	65	75	85	100	125
b	[mm]	45	55	63	75	95
c	[mm]	26	33	39	47	63
e	[mm]	18	22	28	36	45
f	[mm]	M 14x1.5	M 16x1.5	M 20x1.5	M 27x2	M 33x2
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]	50	55	63	76	95
k	[mm]	30	35	40	45	65
l	[mm]	120	133	143	162	198
m	[mm]	11	11	11	13	17
n	[mm]	18	22	24	27	26
p		G 1/4	G 1/4	G 1/4	G 1/4	G 1/2
SW	[mm]	13	17	22	27	36
Weight	[kg]	2.0	2.8	3.7	5.4	8.2
u ± 0.05	[mm]	1.1	1.1	1.1	1.1	1.5
v1 extend	[mm]	4	5	6	6	8
v2 retract	[mm]	4	4.5	4.5	6	6
w + 0.2	[mm]	9.8	9.8	9.8	10.8	13.8
x	[mm]	7.5	10	10	13	16
y	[mm]	21	25	27	29.5	32
Dimensions O-ring	[mm]	7 x 1.5	7 x 1.5	7 x 1.5	8 x 1.5	10 x 2

Part numbers for versions with pipe thread

with NBR seals	1543-265	1544-265	1545-265	1546-265	1547-275
with FKM seals	1543-266	1544-266	1545-266	1546-266	1547-276

Part-numbers for manifold mounting versions with O-ring sealing

Basic number	1543-26XX	1544-26XX	1545-26XX	1546-26XX	1547-27XX
Part-no. O-ring (NBR)*	3000-342	3000-342	3000-342	3000-343	3000-347
Part-no. O-ring (FKM)*	3001-077	3001-077	3001-077	3000-275	3001-078

* Included in our delivery

Code for part numbers for sealing material and manifold mounting versions

1 5 4 X - 2 X XX

Basic number
(from the chart)

- 0L:** NBR seals, manifold mounting version L with 4 cross holes
- 1L:** FKM seals, manifold mounting version L with 4 cross holes
- 5S:** NBR seals, manifold mounting version L with 4 longitudinal holes
- 6S:** FKM seals, manifold mounting version L with 4 longitudinal holes
- 5B:** NBR seals, manifold mounting version B with 4 longitudinal holes
- 6B:** FKM seals, manifold mounting version B with 4 longitudinal holes

Example of ordering:

Double-acting block cylinder with piston rod diameter 50 mm, with oil supply at the broad side (manifold mounting version L) and FKM seals:

Part number: 1546-261L

Accessories:

Spherical bearings see data sheet G 3.800.