GERMA
HYDRAULIKZYLINDER

BLOCK CYLINDER
DOUBLE-ACTING

TYPE 600

- **Piston diameter:** 25 mm – 125 mm
- **Stroke:** 20 mm – 100 mm
- **Seal variants:** NBR (80°C) and FKM (180°C)
- **Piston rod:** Internal or external thread
- **Accessories:** Thrust pieces
- **Possible custom series:** Special housing, Special stroke lengths, Special pistons

TYPE 600

Operating pressure: max. 500bar
Lateral forces on the piston rod must be avoided

Our **block cylinders** are designed to meet the requirements of a wide range of applications and perform their tasks in **mechanical engineering**, **fixture construction**, **mold** and **tool making**, as well as **plant engineering**.

Type 600 – With longitudinal and cross holes

The **Type 600 block cylinder** features four longitudinal holes, countersunk on both sides, as well as two cross holes (four cross holes from stroke stage 3 onwards). This allows the cylinder to be mounted upright or horizontally in any desired orientation relative to the oil ports. If the cylinder is mounted using the cross holes, it must be supported against the direction of force by means of a stop bar when operating at higher pressures. The cylinder is mounted using socket head cap screws in accordance with DIN EN ISO 4762. The pressure medium is supplied via pipe thread connections according to DIN ISO 228-1.

Our block cylinders are of modular design and offer **a wide range of mounting options**, **stroke increments**, **sealing variants**, and **accessories**. They feature **high power density**, are **compact**, and therefore provide **high forces** in a very small installation space.

PERFORMANCE FEATURES

TYPE 600

- **High force output**
- **Very compact and space-saving design**
- **Versatile mounting options**
- **Screwed connections secured against unintended loosening**
- **Application-specific sealing systems**
- **Modular design**
- **Roller-burnished cylinder bore**

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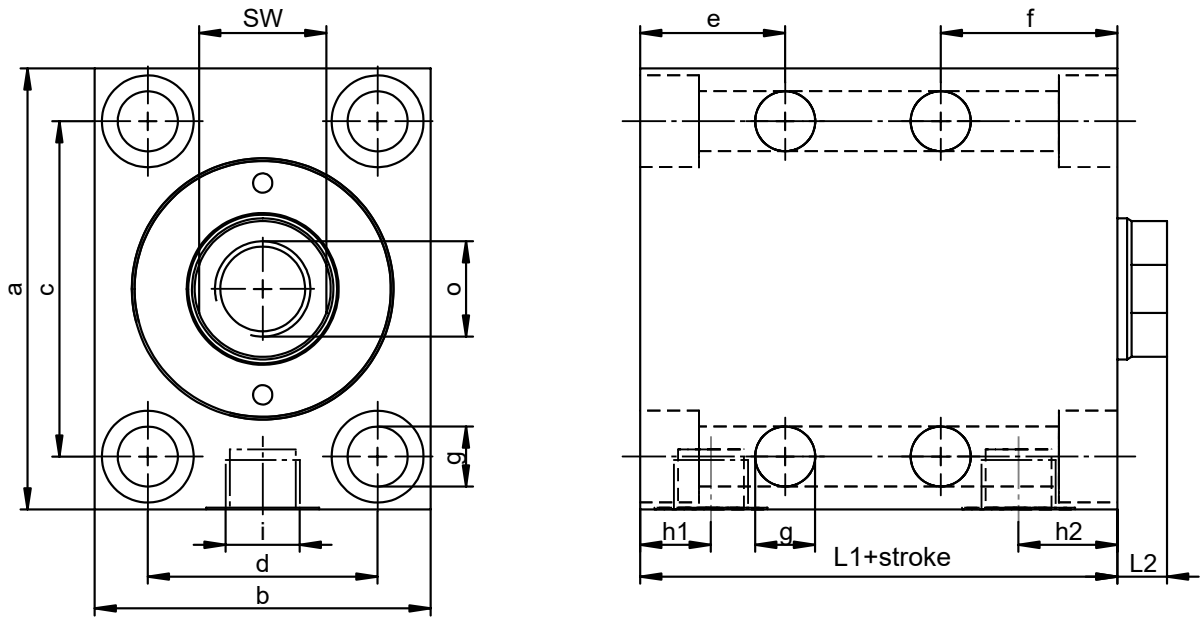
DIMENSION TABLE
AND ORDER NUMBER

TYPE 600



Basic designation		600-025	600-032	600-040	600-050	600-063	600-080	600-100	600-125
Piston Ø	(mm)	25	32	40	50	63	80	100	125
Rod Ø	(mm)	16	20	25	32	40	50	63	80
Compressive force per 100 bar	(kN)	4,9	8,0	12,6	19,6	31,2	50,3	78,6	122,7
Tensile force per 100 bar	(kN)	2,9	4,9	7,7	11,6	18,6	30,6	47,4	72,4
a	(mm)	65	75	85	100	125	160	200	230
b	(mm)	45	55	63	75	95	120	150	180
c	(mm)	50	55	63	76	95	120	158	180
d	(mm)	30	35	40	45	65	80	108	130
e (from stroke stage 3 onwards)	(mm)	26	27	27	30	41	-	-	-
f	(mm)	33	38	40	44	50	60	64	82
g	(mm)	8,5	10,5	10,5	13	17	21	25	32
o		M10x15	M12x15	M16x25	M20x30	M27x40	M30x40	M42x60	M48x70
SW	(mm)	13	17	22	27	36	46	55	70
i		G1/4	G1/4	G1/4	G1/4	G1/2	G1/2	G1/2	G1/2
h1	(mm)	12	12	12	12	17	20	18	29
h2	(mm)	20	23	25	27	28	36	39	50
L1	(mm)	44	50	54	65	72	85	90	110
L2	(mm)	7	10	10	10	14	14	15	16
Basic mass	(kg)	0,81	1,26	1,87	3,18	5,36	10,36	17,19	28,53
Weight increase per 10 mm stroke	(kg)	0,19	0,25	0,33	0,44	0,69	1,16	1,83	2,43
Stroke stage 1	(mm)	**20**	**25**	**25**	**25**	**30**	**32**	**40**	**40**
Order number		**600-025-020**	**600-032-025**	**600-040-025**	**600-050-025**	**600-063-030**	**600-080-032**	**600-100-040**	**600-125-040**
Stroke stage 2	(mm)	**50**	**50**	**50**	**50**	**63**	**80**	**100**	**100**
Order number		**600-025-050**	**600-032-050**	**600-040-050**	**600-050-050**	**600-063-063**	**600-080-080**	**600-100-100**	**600-125-100**
Stroke stage 3	(mm)	**100**	**100**	**100**	**100**	**100**	**-**	**-**	**-**
Order number		**600-025-100**	**600-032-100**	**600-040-100**	**600-050-100**	**600-063-100**	**-**	**-**	**-**

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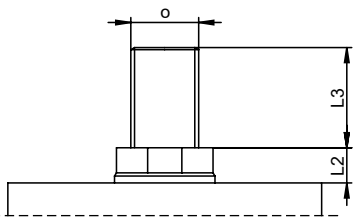
FURTHER VERSIONS
EXTERNAL THREAD • FKM SEALS

TYPE 600



Piston Ø	o	L2	L3
25	M10	7	15
32	M12	10	15
40	M16	10	25
50	M20	10	30
63	M27	14	40
80	M30	14	40
100	M42	15	60
125	M48	16	60

External thread on the piston rod

All block cylinders are alternatively available with an **external thread** on the piston rod.
For this version, the suffix „**-A**“* must be added to the order number.

Example: 600-050-025-A

FKM seals

All block cylinders can optionally be equipped with **FKM seals**. These increase the permissible operating temperature from 80°C to 180°C. For this version, the suffix „**-V**“* must be added to the order number.

Example: 600-050-025-V

* Suffixes can be combined

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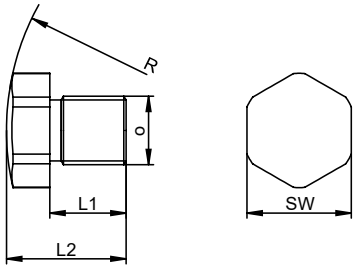
ACCESSORIES
THRUST PIECES

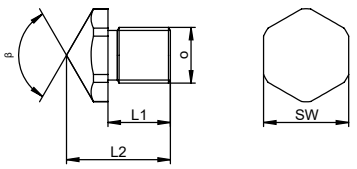
TYPE 600



Order No.:	o	L1	L2	R	SW
DR-10	M10	12	22	35	17
DR-12	M12	14	24	45	19
DR-16	M16	20	30	60	24
DR-20	M20	25	35	60	30
DR-27	M27	30	47	100	41
DR-30	M30	35	54	100	46
DR-42	M42	45	71	140	65

Thrust pieces with radius

Radius thrust pieces are available for GERMA block cylinders. They can be screwed into the internal thread of the piston rod.



Order No.:	o	L1	L2	β	SW
DS-10	M10	12	27	90	17
DS-12	M12	14	29	120	19
DS-16	M16	20	35	120	24
DS-20	M20	25	40	120	30
DS-27	M27	30	50	120	41
DS-30	M30	35	60	120	46
DS-42	M42	45	77	120	65

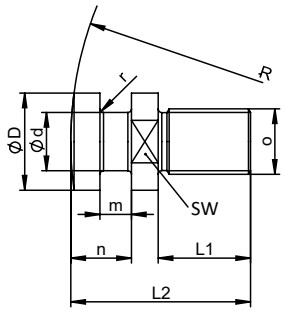
Pointed thrust pieces

Pointed thrust pieces are available for GERMA block cylinders. They can be screwed into the internal thread of the piston rod.

Thrust pieces with coupling pin

Thrust pieces with **coupling pin** are available for GERMA block cylinders. They can be screwed into the internal thread of the piston rod.

By means of the coupling – when used with a corresponding mating part – a **lateral-force-free** and **floating connection** between the hydraulic cylinder and the moving mass can be established.



Order No.:	o	L1	L2	D	d	m	n	R	r	SW
DK-10	M10	14	31,5	20	10	6,5	12	320	1	17
DK-12	M12	14	31,5	20	10	6,5	12	320	1	17
DK-16	M16	24	44	25	16	7	13	400	1	22
DK-20	M20	28	56	32	18	10	20	500	1	27
DK-27	M27	38	74	40	24	13	25	630	1,5	36
DK-30	M30	38	92	52	30	19	38	800	2	46

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