

# ROTARY LEVER CLAMPS

hydraulic single- and double-acting, pneumatic double-acting



Hydraulic rotary lever clamps, single-acting, lever mechanism and built-in version in a housing block made from aluminium with threaded port, for housing blocks refer to pages 5 and 6.

## Description:

This type of cylinder is especially suited for clamping fixtures with only little space for the installation of clamping elements. Its construction and compact design allows flexible solutions at various installation conditions.

HYDROKOMP offers hydraulic clamps which are single-acting as well double-acting. They are used in clamping fixtures whose oil supply is made through drilled channels.

The connection is made through G1/8 resp. G1/4 threaded port or manifold with O-ring. The pneumatic rotary lever clamp cylinders can be purchased double-acting. The cylinder housings can be manufactured from aluminium or steel.

To swing down the clamp arm, the linear motion is used pro rata which clamps the workpiece. To unclamp, the clamp arm swings back to where the workpiece can be safely taken out.

You can order standard clamp arms from different materials and various lengths as accessories. The cylinder can also be assembled with special and self made clamp arms (see page 7). The clamping force depends on the length of the clamp arm.

## Operating conditions:

The clamp arm is coupled with the piston rod. In single-acting cylinders the clamp arm is opened through the reset spring. In double-acting cylinders this is done through the pressure medium.

When installing a rotary lever clamp, the flange face should be adapted to the height of the workpiece. With that, the clamping point should be horizontally. Despite the short clamping stroke, workpiece tolerances can be optimally compensated.

For mounting on the fixture, you can have housing blocks made of aluminium or steel. These can be ordered as accessory items (see pages 5 and 6).

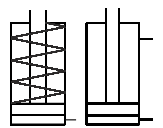
The rotars lever clamp is suited for any installation positions. For the hydraulic version we recommend hydraulic oils according to DIN 51524 (HL, HLP) as pressure medium.

Rotary lever clamps can generate great forces. Workpieces and fixtures must be suitable for this. During operation, danger of crushing is given. Accident prevention regulations must be observed. The rotary lever clamps must regularly be checked for contamination and cleaned when necessary.



Webcode: 025010

We also design and manufacture special designs



## Connections:

- ⊗ G1/8 or G1/4 threaded port
- ⊗ Manifold with O-ring

## Designs:

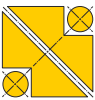
- ⊗ Hydraulic
  - single-acting
  - double-acting
- ⊗ Pneumatic
  - double-acting

## Advantages:

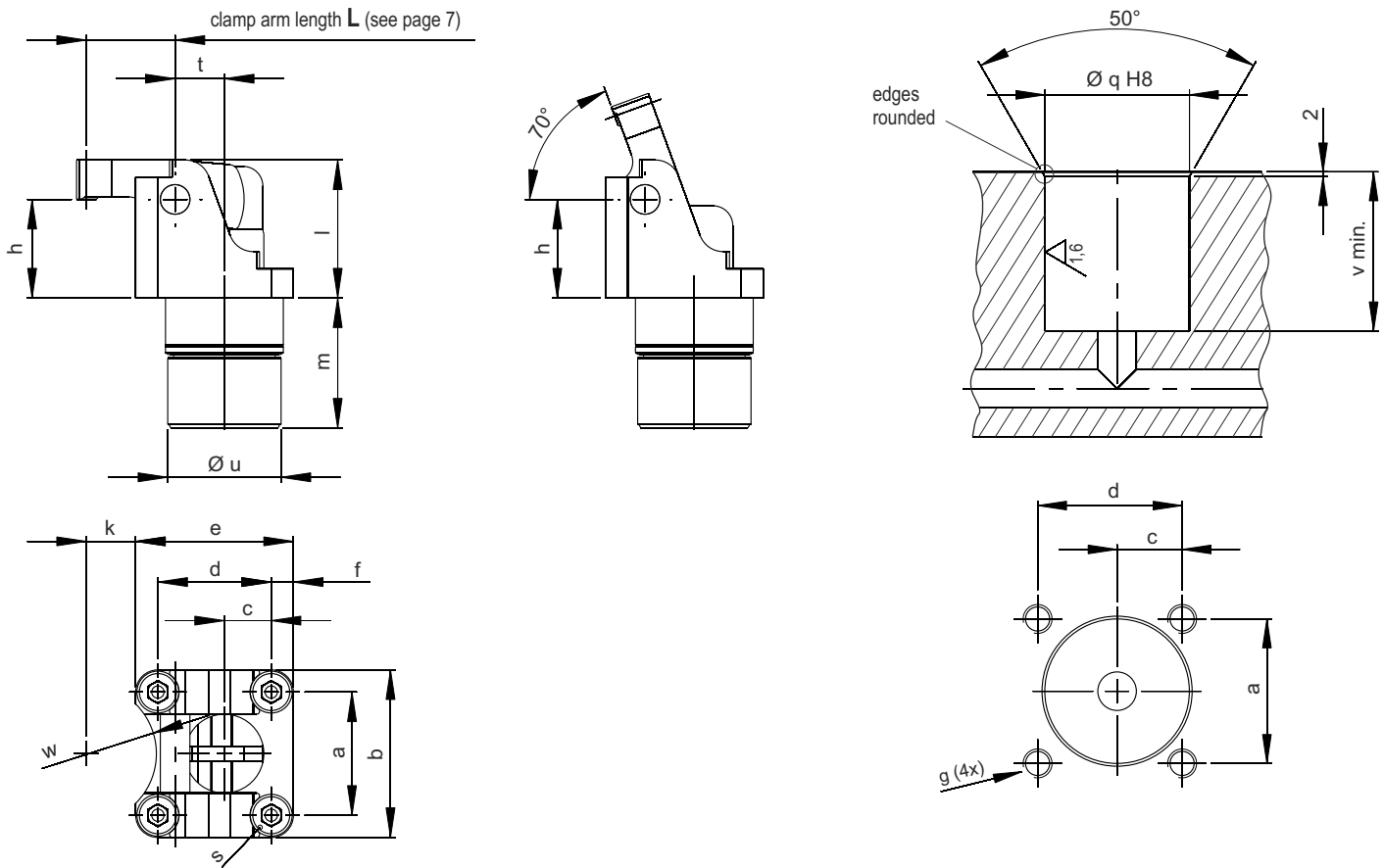
- ⊗ Clamping without shear force
- ⊗ Allows various mounting positions
- ⊗ Oil supply through drilled channels or threaded ports
- ⊗ Partial retractable housing
- ⊗ Various clamp arms and housing blocks available
- ⊗ Easy loading and unloading of the fixture

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## Rotary lever clamps, hydraulic, with reset spring, single-acting

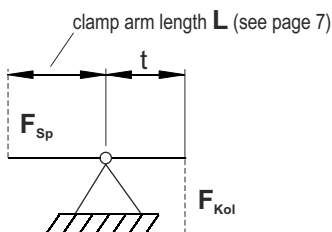


Size		12	16	20	25	32	40	50
Piston force at 100 bar	[kN]	1,1	1,9	3,0	4,7	7,8	12,3	19,3
Piston force at 400 bar	[kN]	4,4	8,0	12,4	19,4	32,0	50,0	78,2
Volume	[cm <sup>3</sup> ]	0,68	1,61	3,14	6,14	12,90	25,20	49,10
Effective piston area	[cm <sup>2</sup> ]	1,13	2,01	3,14	4,91	8,04	12,57	19,63
a	[mm]	19,5	25,0	30,0	38,5	49,0	59,0	74,0
b	[mm]	27	34	40	52	66	78	98
c	[mm]	8,75	9,50	13,50	14,75	18,50	21,50	25,75
d	[mm]	18,5	23,0	30,0	35,5	45,0	55,0	68,0
e	[mm]	26	32	40	49	62	74	92
f	[mm]	3,75	4,50	5,00	6,75	8,50	9,50	12,00
g	[mm]	M4x8	M5x10	M6x10	M8x12	M10x15	M12x18	M16x22
h	[mm]	15,00	20,00	25,00	31,25	40,00	50,00	62,50
k	[mm]	7,50	10,00	13,50	11,00	9,00	12,00	14,50
l	[mm]	21,00	28,00	35,00	43,75	56,00	70,00	87,50
m	[mm]	23,00	26,0	32,5	37,0	47,0	55,0	62,5
q Ø	[mm]	20	24	30	36	45	55	66
s (acc. to DIN 6912)	[mm]	M4x10/4x25	M5x16/5x35	M6x16/6x40	M8x20/8x50	M10x25/10x65	M12x30/12x80	M16x40/16x100
t	[mm]	7,50	10,00	12,50	15,63	20,00	25,00	31,25
u Ø	[mm]	20	24	30	36	45	55	66
v	[mm]	23,5	26,5	33,0	38,0	48,0	56,0	63,5
w Radius	[mm]	10,6	14,2	18,2	18,7	19,7	24,7	31,0
Weight (aluminium housing) <sup>(1)</sup>	[kg]	0,070	0,135	0,265	0,460	0,900	1,550	3,600
Weight (steel housing) <sup>(2)</sup>	[kg]	0,110	0,200	0,405	0,700	1,400	2,460	5,070
<b>Order numbers<sup>(3)</sup>:</b>								
with aluminium housing	DHSP...	-EHA-012-001	-EHA-016-001	-EHA-020-001	-EHA-025-001	-EHA-032-001	-EHA-040-001	-EHA-050-001
with steel housing	DHSP...	-EHS-012-001	-EHS-016-001	-EHS-020-001	-EHS-025-001	-EHS-032-001	-EHS-040-001	-EHS-050-001

<sup>(1)</sup>Housing made of anodized aluminum, tempered piston

<sup>(2)</sup>Housing made of steel, nickel plated, tempered piston

<sup>(3)</sup>Order numbers without clamp arm



**Effective clamping force  $F_{Sp}$  depending from piston force  $F_{Kol}$  and clamp arm length  $L$**

**Example:**

Rotary lever clamp size 32

Operating pressure 400 bar

Piston force  $F_{Kol}$  at 400 bar = 32 kN

Measure  $t$  acc. chart = 20 mm

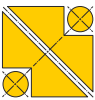
Clamp arm length  $L$  (page 7) = 48 mm

Resulting effective clamping force  $F_{Sp}$  = 13,33 kN

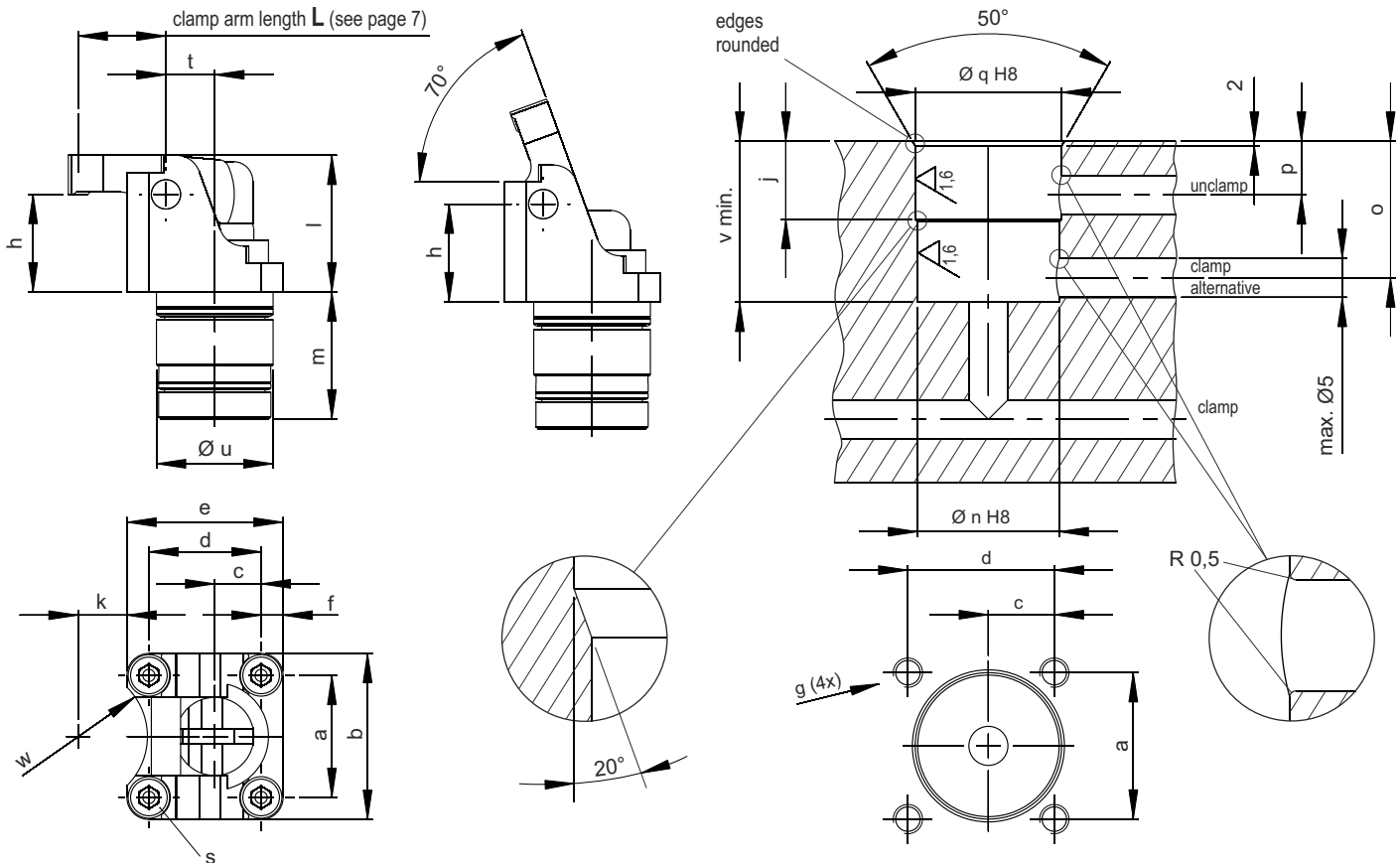
**Calculation:**

$$\text{r. e. clamp. force } F_{Sp} = \frac{F_{Kol} \times t}{L}$$

$$\text{r. e. clamp. force } F_{Sp} = \frac{32 \text{ kN} \times 20 \text{ mm}}{48 \text{ mm}} = 13,33 \text{ kN}$$



## Rotary lever clamps, hydraulic, double-acting

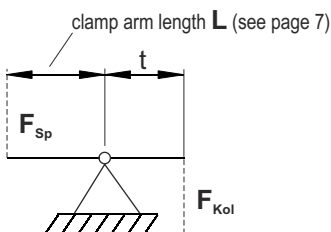


Size		12	16	20	25	32	40	50
Piston force at 100 bar	[kN]	1,7	2,5	4,5	7,0	10,1	15,9	23,7
Piston force at 400 bar	[kN]	7,0	10,1	18,0	28,2	40,6	63,6	95,0
Volume	[cm <sup>3</sup> ]	1,06	2,03	4,52	8,82	16,27	31,80	58,20
Effective piston area	[cm <sup>2</sup> ]	1,77	2,54	4,52	7,06	10,17	15,90	23,75
a	[mm]	19,5	25,0	30,0	38,5	49,0	59,0	74,0
b	[mm]	27	34	40	52	66	78	98
c	[mm]	8,75	9,50	13,50	14,75	18,50	21,50	25,75
d	[mm]	18,5	23,0	30,0	35,5	45,0	55,0	68,0
e	[mm]	26	32	40	49	62	74	92
f	[mm]	3,75	4,50	5,00	6,75	8,50	9,50	12,00
g	[mm]	M4x8	M5x10	M6x10	M8x12	M10x15	M12x18	M16x23
h	[mm]	15,00	20,00	25,00	31,25	40,00	50,00	62,50
j	[mm]	14	17	19	20	23	25	30
k	[mm]	7,5	10,0	13,5	11,0	9,0	12,0	14,5
l	[mm]	21,00	28,00	35,00	43,75	56,00	70,00	87,50
m	[mm]	21,0	26,0	32,5	37,0	42,0	47,0	57,5
n Ø	[mm]	19,4	23,0	29,0	35,0	43,0	53,0	64,0
o	[mm]	23	26	31	33	38	40	53
p	[mm]	11	13	14	15	17	19	24
q Ø	[mm]	20	24	30	36	45	55	66
s (acc. to DIN 6912)	[mm]	M4x10/4x25	M5x16/5x35	M6x16/6x40	M8x20/8x50	M10x25/10x65	M12x30/12x80	M16x40/16x100
t	[mm]	7,50	10,00	12,50	15,63	20,00	25,00	31,25
u Ø	[mm]	20	24	30	36	45	55	66
v	[mm]	21,5	26,5	33,0	38,0	43,0	48,0	58,5
w Radius	[mm]	10,6	14,2	18,2	18,7	19,7	24,7	31,0
Weight (aluminium housing) <sup>(4)</sup>	[kg]	0,080	0,170	0,360	0,570	1,125	1,800	3,860
Weight (steel housing) <sup>(5)</sup>	[kg]	0,115	0,265	0,550	0,855	1,755	2,625	5,325
<b>Order numbers<sup>(6)</sup>:</b>								
with aluminium housing	DHSP...	-DHA-012-001	-DHA-016-001	-DHA-020-001	-DHA-025-001	-DHA-032-001	-DHA-040-001	-DHA-050-001
with steel housing	DHSP...	-DHS-012-001	-DHS-016-001	-DHS-020-001	-DHS-025-001	-DHS-032-001	-DHS-040-001	-DHS-050-001

<sup>(4)</sup>Housing made of anodized aluminum, tempered piston

<sup>(6)</sup>Order numbers without clamp arm

<sup>(5)</sup>Housing made of steel, nickel plated, tempered piston



**Effective clamping force  $F_{Sp}$  depending from piston force  $F_{Kol}$  and clamp arm length  $L$**

**Example:**

Rotary lever clamp size 20

Operating pressure 100 bar

Piston force  $F_{Kol}$  at 100 bar = 2,5 kN

Measure  $t$  acc. chart = 10 mm

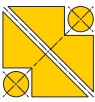
Clamp arm length  $L$  (page 7) = 18 mm

Resulting effective clamping force  $F_{Sp}$  = 1,39 kN

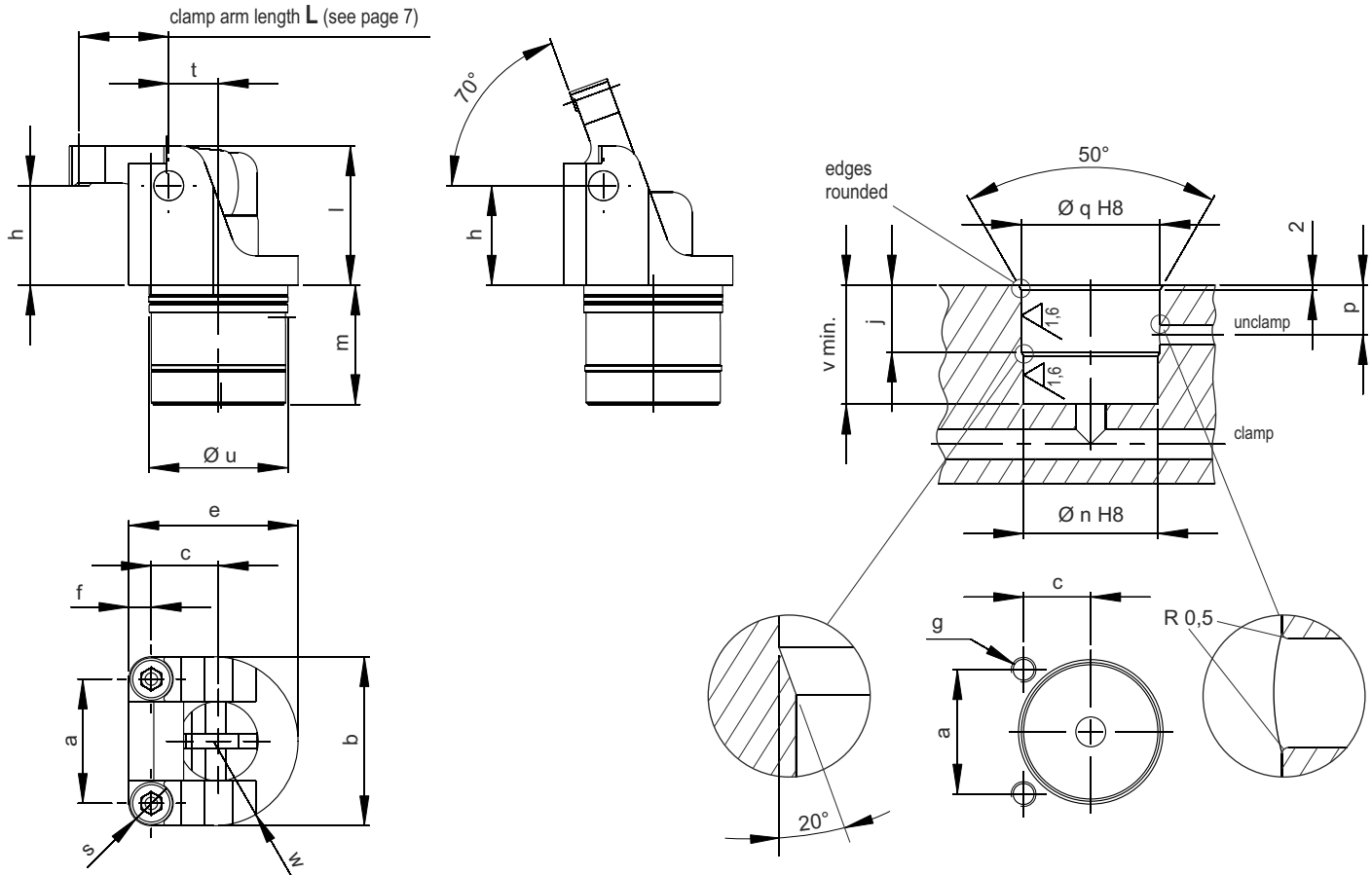
**Calculation:**

$$r. e. \text{ clamp. force } F_{Sp} = \frac{F_{Kol} \times t}{L}$$

$$r. e. \text{ clamp. force } F_{Sp} = \frac{2,5 \text{ kN} \times 10 \text{ mm}}{18 \text{ mm}} = 1,39 \text{ kN}$$



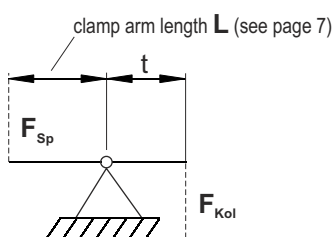
## Rotary lever clamps, pneumatic, double-acting



Size		12	16	20	25	32	40	50
Piston force at 6 bar	[kN]	0,135	0,270	0,420	0,680	1,270	1,990	3,010
Piston force at 6 bar, ret. stroke	[kN]	0,068	0,150	0,235	0,385	0,791	1,236	1,837
a	[mm]	19,5	25,0	30,0	38,5	49,0	59,0	74,0
b	[mm]	27	34	40	52	66	78	98
c	[mm]	9,75	13,50	16,50	20,75	26,50	33,50	42,25
e	[mm]	27,0	34,0	41,0	51,5	66,0	81,0	101,5
f	[mm]	3,75	4,50	5,00	6,75	8,50	9,50	12,00
g	[mm]	M4x8	M5x11	M6x10	M8x12	M10x16	M12x18	M16x23
h	[mm]	15,00	20,00	25,00	31,25	40,00	50,00	62,50
j	[mm]	12	13	15	19	21	28	35
l	[mm]	21,00	28,00	35,00	43,75	56,00	70,00	87,50
m	[mm]	22,0	24,0	27,5	32,0	37,0	46,0	55,0
n Ø	[mm]	20	27	34	43	57	71	89
p	[mm]	9,5	10,0	11,0	13,0	14,5	18,5	22,5
q Ø	[mm]	21	28	35	44	58	72	90
s (acc. to DIN 6912)	[mm]	M4x25	M5x35	M6x40	M8x50	M10x65	M12x80	M16x100
t	[mm]	7,50	10,00	12,50	15,63	20,00	25,00	31,25
u Ø	[mm]	21	28	35	44	58	72	90
v	[mm]	22,5	24,5	28,0	33,0	38,0	47,0	56,0
w Radius	[mm]	13,5	17,0	20,0	26,0	33,0	39,0	49,0
Weight (aluminium housing) <sup>(7)</sup>	[kg]	0,056	0,116	0,215	0,410	0,815	1,500	2,995
Order numbers <sup>(8)</sup> :	DHSP...	-DPA-012-001	-DPA-016-001	-DPA-020-001	-DPA-025-001	-DPA-032-001	-DPA-040-001	-DPA-050-001

<sup>(7)</sup>Housing made of anodized aluminum, tempered piston

<sup>(8)</sup>Order numbers without clamp arm



**Effective clamping force  $F_{sp}$  depending from piston force  $F_{kol}$  and clamp arm length  $L$**

**Example:**

Rotary lever clamp size 50  
 Operating pressure 6 bar  
 piston force  $F_{kol}$  at 6 bar = 3,010 kN  
 Measure  $t$  acc. chart = 31,25 mm  
 Clamp arm length  $L$  (page 7) = 56 mm  
 Resulting effective clamping force  $F_{sp} = 1,68$  kN

**Calculation:**

$$\text{r.e. clamp. force } F_{sp} = \frac{F_{kol} \times t}{L}$$

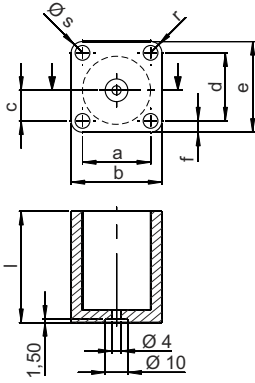
$$\text{r.e. clamp. force } F_{sp} = \frac{3,010 \text{ kN} \times 31,25 \text{ mm}}{56 \text{ mm}} = 1,68 \text{ kN}$$



## Rotary lever clamps / Housing blocks

### single-acting, hydraulic, with manifold connection

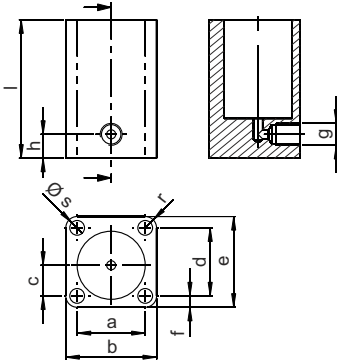
aluminium anodized



Size	a	b	c	d	e	f	l	r	Øs	[kg]	Order no.
12	19,5	27	8,75	18,5	26	3,75	26	3,75	4,5	0,025	request
16	25,0	34	9,50	23,0	32	4,50	30	4,50	5,5	0,050	//
20	30,0	40	13,50	30,0	40	5,00	37	5,00	6,5	0,085	//
25	38,5	52	14,75	35,5	49	6,75	41	6,75	9,0	0,150	//
32	49,0	66	18,50	45,0	62	8,50	51	8,50	11,0	0,310	//
40	59,0	78	21,50	55,0	74	9,50	60	9,50	13,0	0,495	//
50	74,0	98	25,75	68,0	92	12,00	68	12,00	17,0	0,915	//

### single-acting, hydraulic, with threaded port

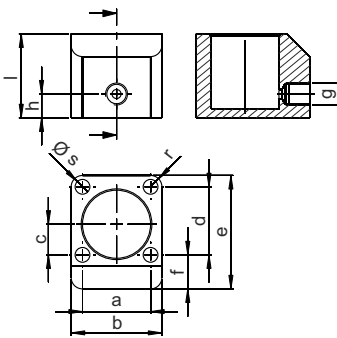
aluminium anodized



Size	a	b	c	d	e	f	g	h	l	r	sØ	[kg]	Order no.
12	19,5	27	8,75	18,5	26	3,75	1/8	10,5	40	3,75	4,5	0,050	request
16	25,0	34	9,50	23,0	32	4,50	1/8	10,5	43	4,50	5,5	0,085	//
20	30,0	40	13,50	30,0	40	5,00	1/8	10,5	50	5,00	6,5	0,135	//
25	38,5	52	14,75	35,5	49	6,75	1/8	10,5	54	6,75	9,0	0,230	//
32	49,0	66	18,50	45,0	62	8,50	1,8	10,5	64	8,50	11,0	0,440	//
40	59,0	78	21,50	55,0	74	9,50	1/4	11,5	75	9,50	13,0	0,705	//
50	74,0	98	25,75	68,0	92	12,00	1/4	11,5	82	12,00	17,0	1,220	//

### single-acting, hydraulic, with threaded port

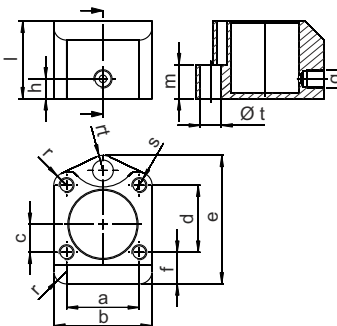
aluminium anodized



Size	a	b	c	d	e	f	g	h	l	r	Øs	[kg]	Order no.
12	19,5	27	8,75	18,5	37	14,75	1/8	10,5	26	3,75	4,5	0,043	request
16	25,0	34	9,50	23,0	43	15,50	1/8	10,5	30	4,50	5,5	0,073	//
20	30,0	40	13,50	30,0	50	15,00	1/8	10,5	37	5,00	6,5	0,119	//
25	38,5	52	14,75	35,5	59	16,75	1/8	10,5	41	6,75	9,0	0,202	//
32	49,0	66	18,50	45,0	71	17,50	1,8	10,5	51	8,50	11,0	0,384	//
40	59,0	78	21,50	55,0	90	25,50	1/4	11,5	60	9,50	13,0	0,673	//
50	74,0	98	25,75	68,0	108	28,00	1/4	11,5	68	12,00	17,0	1,136	//

### single-acting, hydraulic, with threaded port for T-slot mounting

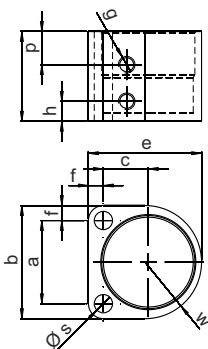
aluminium anodized



Size	a	b	c	d	e	f	g	h	l	m	r	rt	Øs	t	[kg]	Order no.
12	19,5	27	8,75	18,5	45,8	14,75	1/8	10,5	26	8	3,75	5,0	M4x8	6,5	0,044	request
16	25,0	34	9,50	23,0	52,3	15,50	1/8	10,5	30	10	4,50	6,5	M5x10	8,5	0,073	//
20	30,0	40	13,50	30,0	61,7	15,00	1/8	10,5	37	14	5,00	8,0	M6x10	11,0	0,121	//
25	38,5	52	14,75	35,5	68,0	16,75	1/8	10,5	41	18	6,75	8,0	M8x16	11,0	0,199	//
32	49,0	66	18,50	45,0	79,0	17,50	1,8	10,5	51	20	8,50	9,0	M10x20	13,0	0,368	//
40	59,0	78	21,50	55,0	96,3	25,50	1/4	11,5	60	25	9,50	9,0	M12x24	13,0	0,643	//
50	74,0	98	25,75	68,0	116,5	28,00	1/4	11,5	68	30	12,00	12,0	M16x32	17,0	1,119	//

### double-acting, pneumatic, with threaded port

aluminium anodized



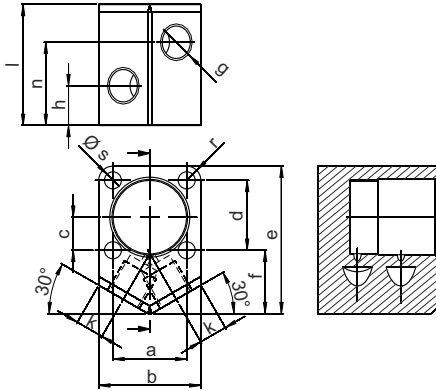
Size	a	b	c	e	f	g	h	l	p	Øs	w	Radius	[kg]	Order no.
12	19,5	27	9,75	27,0	3,75	M5	6,0	26,0	9,5	4,5	13,5	0,024	request	
16	25,0	34	13,50	33,0	4,50	M5	6,0	27,0	10,0	5,5	17,0	0,033	//	
20	30,0	40	16,50	41,0	5,00	M5	6,0	31,0	11,0	6,5	20,0	0,047	//	
25	38,5	52	20,75	51,5	6,75	M5	6,0	35,0	13,0	9,0	26,0	0,084	//	
32	49,0	66	26,50	66,0	8,50	M5	6,0	40,0	14,5	11,0	33,0	0,137	//	
40	59,0	78	33,50	81,0	9,50	1/8	10,5	51,0	18,5	13,0	39,0	0,238	//	
50	74,0	98	42,25	101,5	12,00	1/8	10,5	59,0	22,5	17,0	49,0	0,403	//	



## Rotary lever clamps / Housing blocks

### double-acting, hydraulic, with threaded port

aluminium anodized

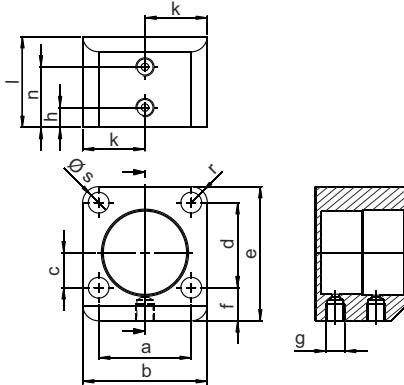


Size	a	b	c	d	e	f	g	h
12	19,5	27	8,75	18,5	39	16,75	1/8	10,5
16	25,0	34	9,50	23,0	46	18,50	1/8	10,5
20	30,0	40	13,50	30,0	53	18,00	1/8	10,5

Size	k	l	n	r	Øs	[kg]	Order no.
12	7,5	32	22	3,75	4,5	0,055	request
16	8,5	34	24	4,50	5,5	0,090	//
20	11,0	37	26	5,00	6,5	0,120	//

### double-acting, hydraulic, with threaded port

aluminium anodized

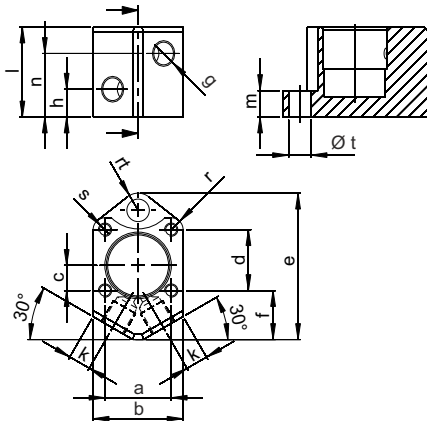


Size	a	b	c	d	e	f	g	h
25	38,5	52	14,75	35,5	59	16,75	1/8	10,5
32	49,0	66	18,50	45,0	71	17,50	1,8	10,5
40	59,0	78	21,50	55,0	90	25,50	1/4	11,5
50	74,0	98	25,75	68,0	108	28,00	1/4	11,5

Size	k	l	n	r	Øs	[kg]	Order no.
25	19	41	29	6,75	9,0	0,230	request
32	33	48	32	8,50	11,0	0,440	//
40	39	58	36	9,50	13,0	0,705	//
50	49	65	38	12,00	17,0	1,220	//

### double-acting, with threaded port for T-slot mounting

aluminium anodized

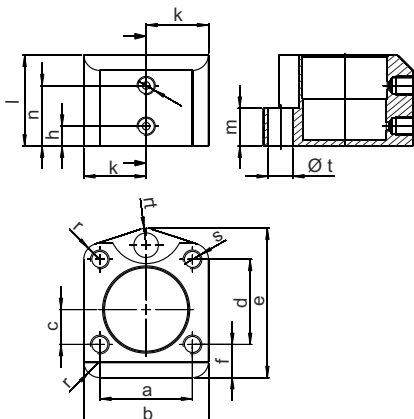


Size	a	b	c	d	e	f	g	h	k
12	19,5	27	8,75	18,5	47,8	16,75	1/8	10,5	7,5
16	25,0	34	9,50	23,0	55,3	18,50	1/8	10,5	8,5
20	30,0	40	13,50	30,0	64,7	18,00	1/8	10,5	11,0

Size	l	m	n	r	rt	s	Øt	[kg]	Order no.
12	32	8	22	3,75	5,0	M4x8	6,5	0,057	request
16	34	10	24	4,50	8,5	M5x10	8,5	0,090	//
20	37	14	26	5,00	8,0	M6x12	8,0	0,120	//

### double acting, with threaded port for T-slot mounting

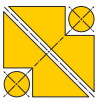
aluminium anodized



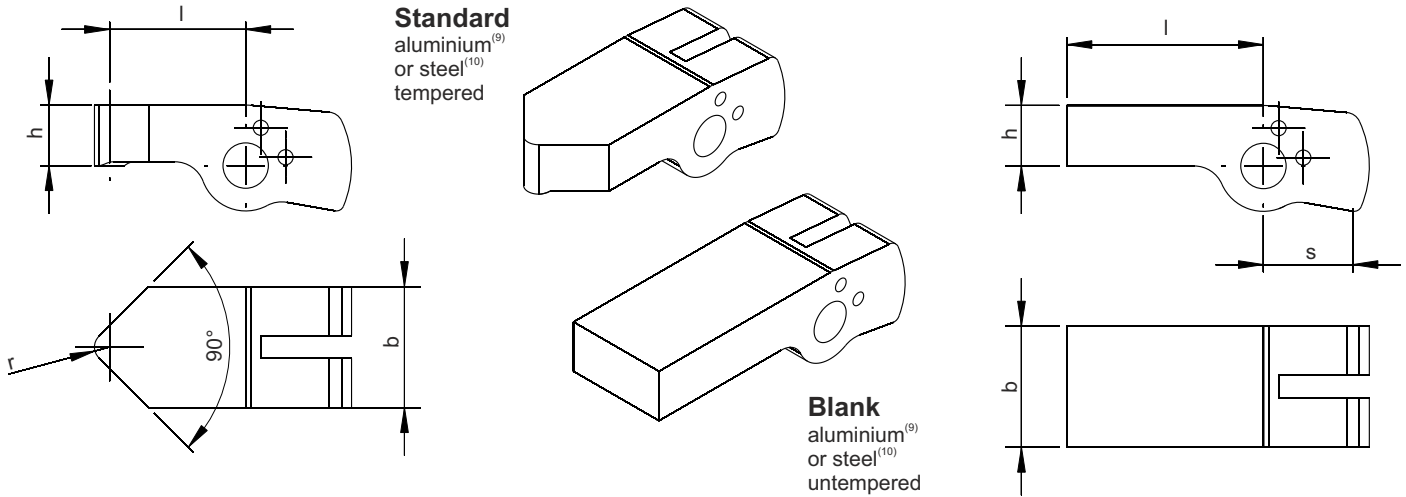
Size	a	b	c	d	e	f	g	h	k
25	38,5	52	14,75	35,5	68,0	16,75	1/8	10,5	19
32	49,0	66	18,50	45,0	79,0	17,50	1/8	10,5	33
40	59,0	78	21,50	55,0	96,3	25,50	1/4	11,5	39
50	74,0	98	25,75	68,0	116,5	28,00	1/4	11,5	49

Size	l	m	n	r	rt	s	Øt	[kg]	Order no.
25	41	18	29	6,75	8,0	M8x16	11	0,210	request
32	48	20	32	8,50	9,0	M10x20	13	0,365	//
40	58	25	36	9,50	9,0	M12x24	13	0,665	//
50	65	30	38	12,00	12,0	M16x32	17	1,105	//





## Rotary lever clamps / Clamp arms



For size	Type	Clamp. force at 6 bar, aluminium <sup>(9)</sup>	Clamp. force at 10 bar, aluminium <sup>(9)</sup>	Clamp. force at 100 bar, steel <sup>(10)</sup>	Clamp. force at 400 bar, steel <sup>(10)</sup>	b	h	L	r	s	Order no.	Order no.
											aluminium <sup>(9)</sup>	steel <sup>(10)</sup>
12	Standard	0,135 kN	0,225 kN	1,100 kN	4,400 kN	12	6,0	9,0	1,5	-	request	5012-003
	Standard	0,090 kN	0,150 kN	0,730 kN	3,100 kN	12	6,0	13,5	1,5	-	//	5012-004
	Standard	0,067 kN	0,110 kN	0,550 kN	2,200 kN	12	6,0	18,0	1,5	-	//	5012-005
	Standard	0,054 kN	0,090 kN	0,400 kN	1,750 kN	12	6,0	22,5	1,5	-	//	5012-006
	Blank	-	-	-	-	12	6,0	15,0	-	9,00	//	5012-001
	Blank	-	-	-	-	12	6,0	24,0	-	9,00	//	5012-002
16	Standard	0,270 kN	0,450 kN	1,900 kN	8,000 kN	16	8,0	12,0	2,0	-	request	5016-006
	Standard	0,180 kN	0,300 kN	1,300 kN	5,300 kN	16	8,0	18,0	2,0	-	//	5016-007
	Standard	0,135 kN	0,225 kN	0,950 kN	4,000 kN	16	8,0	24,0	2,0	-	//	5016-008
	Standard	0,108 kN	0,180 kN	0,400 kN	3,200 kN	16	8,0	30,0	2,0	-	//	5016-009
	Blank	-	-	-	-	16	8,0	20,0	-	10,00	//	5016-004
	Blank	-	-	-	-	16	8,0	32,0	-	10,00	//	5016-005
20	Standard	0,420 kN	0,700 kN	3,000 kN	12,400 kN	20	10,0	15,0	2,5	-	request	5020-006
	Standard	0,280 kN	0,465 kN	2,000 kN	8,200 kN	20	10,0	22,5	2,5	-	//	5020-007
	Standard	0,210 kN	0,350 kN	1,500 kN	6,200 kN	20	10,0	30,0	2,5	-	//	5020-008
	Standard	0,168 kN	0,280 kN	1,200 kN	4,900 kN	20	10,0	37,5	2,5	-	//	5020-009
	Blank	-	-	-	-	20	10,0	25,0	-	12,50	//	5020-004
	Blank	-	-	-	-	20	10,0	40,0	-	12,50	//	5020-005
25	Standard	0,680 kN	1,130 kN	4,700 kN	19,400 kN	25	12,5	19,0	3,0	-	request	5025-006
	Standard	0,460 kN	0,765 kN	3,200 kN	13,400 kN	25	12,5	28,0	3,0	-	//	5025-007
	Standard	0,340 kN	0,565 kN	2,300 kN	9,700 kN	25	12,5	38,0	3,0	-	//	5025-008
	Standard	0,274 kN	0,455 kN	1,600 kN	6,700 kN	25	12,5	47,0	3,0	-	//	5025-009
	Blank	-	-	-	-	25	12,5	31,0	-	15,63	//	5025-004
	Blank	-	-	-	-	25	12,5	50,0	-	15,63	//	5025-005
32	Standard	1,270 kN	2,110 kN	7,800 kN	32,000 kN	32	16,0	24,0	4,0	-	request	5032-006
	Standard	0,845 kN	1,400 kN	5,200 kN	21,300 kN	32	16,0	36,0	4,0	-	//	5032-007
	Standard	0,635 kN	1,050 kN	3,900 kN	16,000 kN	32	16,0	48,0	4,0	-	//	5032-008
	Standard	0,505 kN	0,840 kN	3,100 kN	12,800 kN	32	16,0	60,0	4,0	-	//	5032-009
	Blank	-	-	-	-	32	16,0	40,0	-	20,00	//	5032-004
	Blank	-	-	-	-	32	16,0	64,0	-	20,00	//	5032-005
40	Standard	1,990 kN	3,310 kN	12,300 kN	50,000 kN	40	20,0	30,0	5,0	-	request	5040-011
	Standard	0,995 kN	2,200 kN	8,200 kN	33,300 kN	40	20,0	45,0	5,0	-	//	5040-012
	Standard	0,795 kN	1,650 kN	6,100 kN	25,000 kN	40	20,0	60,0	5,0	-	//	5040-013
	Standard	0,325 kN	1,320 kN	4,900 kN	20,000 kN	40	20,0	75,0	5,0	-	//	5040-014
	Blank	-	-	-	-	40	20,0	50,0	-	25,00	//	5040-009
	Blank	-	-	-	-	40	20,0	80,0	-	25,00	//	5040-010
50	Standard	3,000 kN	5,000 kN	19,300 kN	78,200 kN	50	25,0	38,0	6,0	-	request	5050-010
	Standard	2,030 kN	3,380 kN	13,000 kN	53,000 kN	50	25,0	56,0	6,0	-	//	5050-011
	Standard	1,500 kN	2,500 kN	9,600 kN	39,100 kN	50	25,0	75,0	6,0	-	//	5050-012
	Standard	1,210 kN	2,000 kN	6,500 kN	26,500 kN	50	25,0	112,0	6,0	-	//	5050-013
	Blank	-	-	-	-	50	25,0	62,0	-	31,25	//	5050-008
	Blank	-	-	-	-	50	25,0	118,0	-	31,25	//	5050-009

<sup>(9)</sup> Clamp arms made of aluminum are suitable only for pneumatic rotary lever clamps.

<sup>(10)</sup> Clamp arms made of steel are suitable for pneumatic and hydraulic rotary lever clamps.

**Other sizes and designs available on request.**