

## > AMF PNEUMATIC TOGGLE CLAMPS

have definite advantages over the manual toggle clamps:

- > relieve operator of strenuous clamping movement
- > a number of clamps can be used simultaneously
- > a number of clamps can be operated with different sequences
- > one or more clamps can be controlled from the machine panel
- > one or more clamps can be operated from different positions.

## > ADVANTAGES OF THE TOGGLE ACTION...

- > in the event of air failure, clamp stays locked
- > low air consumption with maximum leverage
- > large opening angle, clearing the component for easy removal
- > assures maximum power-to movement ratio.

## > SELECTION GUIDE

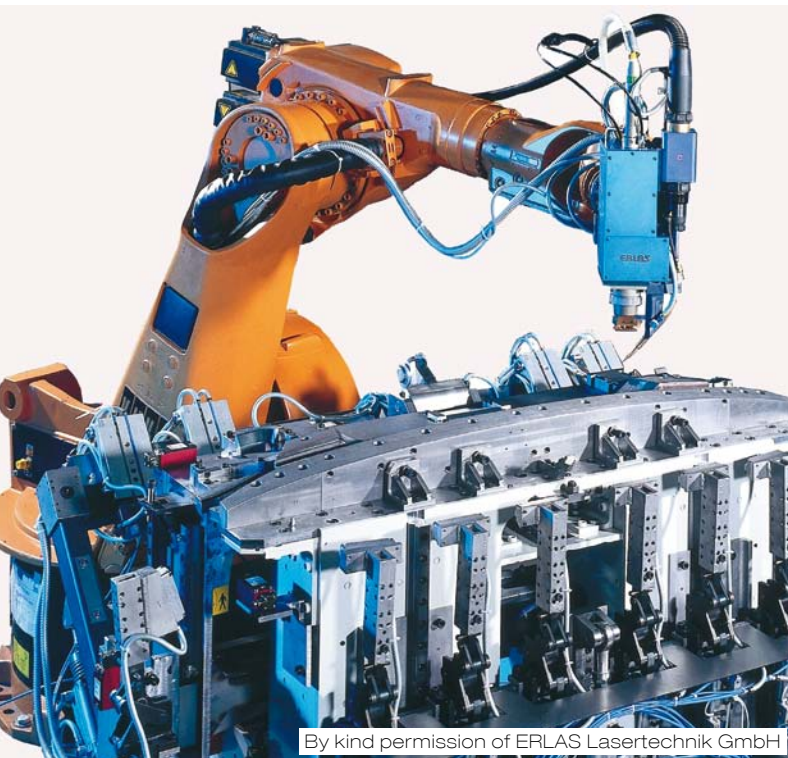
The pneumatic toggle clamp no. 6820 correspond in design and dimensions to the mechanical toggle clamp no. 6800. Therefore hand operated clamps can be replaced with pneumatic toggle clamps - if required.

Heavy duty pneumatic toggle clamps no. 6825A/CE and no. 6826A are recommended to be incorporated in special and transfer machines. Tempered and ground bolts guarantee long life. The push type pneumatic toggle clamp no. 6850A corresponds in design and dimensions to the mechanical toggle clamp no. 6842 when pushed/closed, maximum forces of 2.5 - 10 kN can be reached.

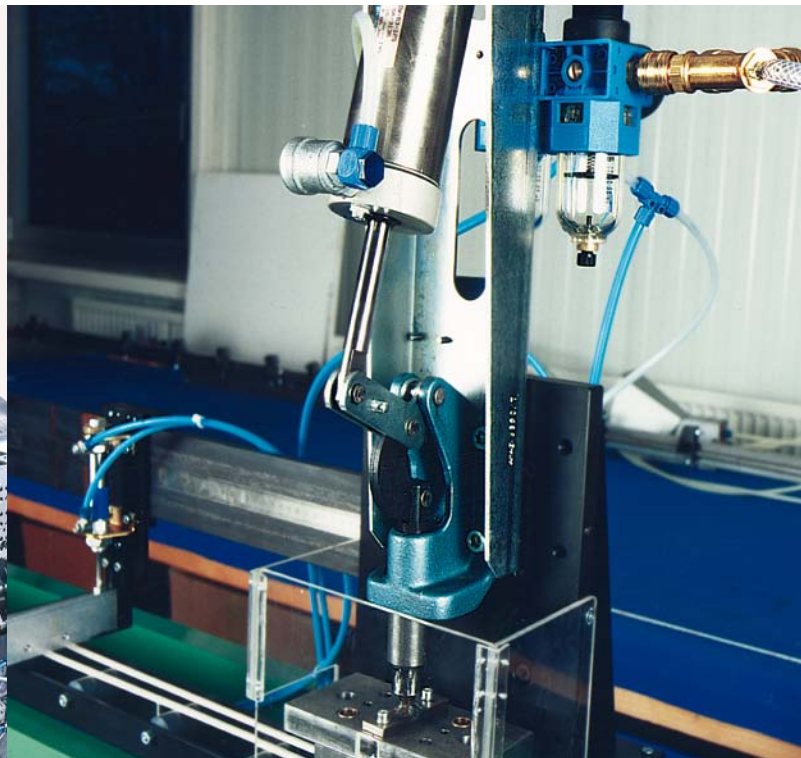
## > CLAMPING AND HOLDING FORCES

As already explained for the hand operated toggle clamps, the selection of the correct clamp is of utmost importance. To select the correct size of pneumatic clamp, apart from the holding force, the possible clamping force at 6 bar air pressure (other pressure media may also be used at pressures up to max. 10 bar) is indicated in the tables

- > F3 is the possible clamping force at the end of the arm.
- > F4 is the force applied at the fulcum.
- > F5 is the piston force 6 bar air pressure.



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## No. 6850A

### Push type pneumatic toggle clamp

Push-type clamp.  
Heavy version for long working life. Pneumatic cylinder with magnetic piston for end-position monitoring. Console galvanized and passivated, clamp body made of malleable iron casting, painted. Lever parts and push rod made of tempered steel, galvanized and passivated. Stainless steel rivets. Bearing positions are greased.

**Complete with tempered, galvanised clamping screw no. 6880.**

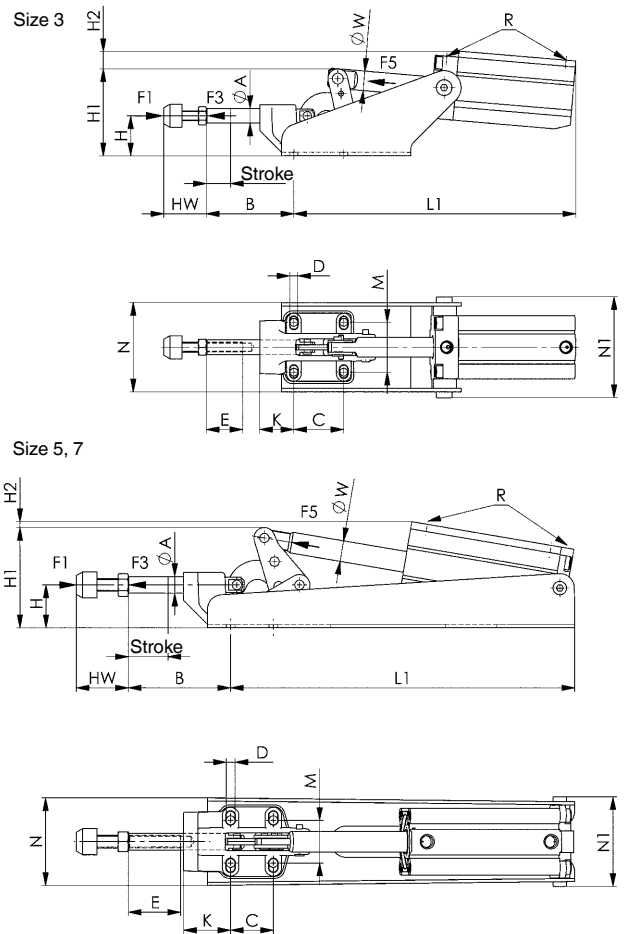


CAD

Order no.	Size	F1 [kN]	F3 [kN]	F5 [kN]	Vn [dm <sup>3</sup> ]	Clamping screw	Weight [g]
560007	3	4	2,5	0,75	0,8	M8 x 35	2610
560008	5	10	5,0	1,00	2,2	M12 x 50	5265
560009	7	25	10,0	1,80	4,5	M12 x 50	6120

#### Note:

Sizes 5 and 7 are not to design, and have long consoles.  
Suitable proximity switches for end-position monitoring are available using order no. 392241.  
0.3 m PUR cable with M8 connector and rotatable knurled nuts.  
Switching function: NOC. Output: PNP.



#### Recommendations



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#### Dimensions:

Order no.	Size	dia. A	B	C	D	E	H	H1	H2	Stroke	HW min.	HW max.	K	L1	M	N	N1	R	dia. W	Piston dia.
560007	3	12	72	41	6,5	30	33	72	22	20	21,5	35	28	232	41	73,5	83	G1/8	16	40
560008	5	16	98	41	8,5	50	41	96	22	29	30,0	50	45	316	41	84,0	86	G1/4	20	50
560009	7	22	105	70	11,0	50	59	128	29	38	30,0	50	45	422	57	114,0	93	G1/4	20	63

## No. 6860P

### Combi-clamp, pneumatic

Galvanized and passivated. Stainless steel rivets which run in case-hardened bearing bushes.

Bearing points greased.

Equipped with pneumatic cylinder, double-acting, red anodised.

With magnetic piston for limit position query.



CAD

Order no.	Size	F1 [kN]	F2 [kN]	F3 [kN]	F4 [kN]	F5 [kN]	Vn [dm <sup>3</sup> ]	Weight [g]
90787	1	1,0	1,0	0,3	0,12	0,26	0,26	770
91488	2	2,0	2,0	0,5	0,25	0,35	0,35	1450
92163	3	3,0	3,0	0,7	0,35	0,80	0,80	3050

F3 or F4 = max. achievable clamping force at 6 bar.

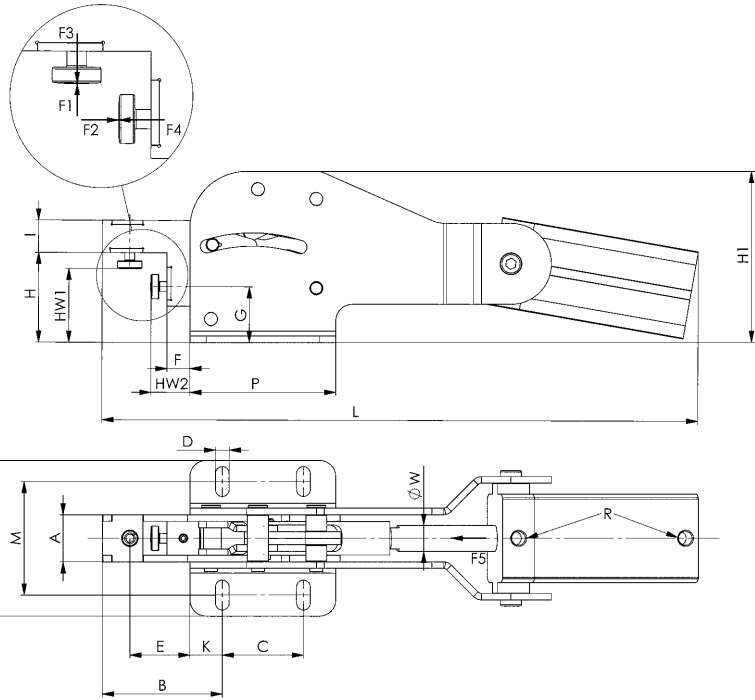
Vn = air consumption per double stroke in dm<sup>3</sup> at 6 bar.

#### Note:

Suitable proximity switches for end-position monitoring are available using order no. 392241.

0.3 m PUR cable with M8 connector and rotatable knurled nuts.

Switching function: NOC. Output: PNP.



#### Recommendations



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#### Dimensions:

Order no.	Size	A	B	C	D	E	F	G	H	H1	HW1 min.	HW1 max.	HW2 min.	HW2 max.	I	K
90787	1	17,0	33	40	5,5	15	0,5	22	36,0	68	25	32	5	10	12	7,5
91488	2	19,5	56	50	6,5	32	10,5	28	46,0	88	30	40	10	20	16	12,5
92163	3	29,0	74	50	8,5	37	14,0	34	55,5	106	40	50	20	30	20	20,0

Order no.	Size	L	M	N	P	R	dia. W	Piston dia.
90787	1	225	34,5-39,5	53	55	M5	10	25
91488	2	305	55	75	75	G1/8	12	32
92163	3	370	70	96	90	G1/8	16	40

Subject to technical alterations.

## No. 6820P

### Pneumatic toggle clamp

With horizontal cylinder attachment.

Plastic pneumatic cylinder, double-acting and ready to connect. Clamps galvanized and passivated, rivets made of stainless steel, which, for sizes 2 and 3, run in hardened bearing bushes. Bearing positions are greased.

**Complete with tempered, galvanised clamping screw no. 6890.** The console is self-supporting and must be clear of other surfaces.

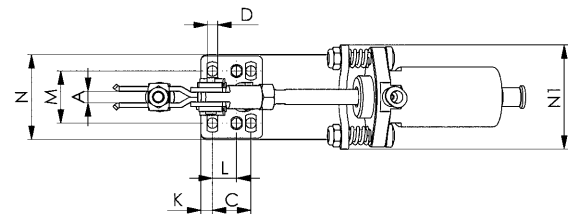
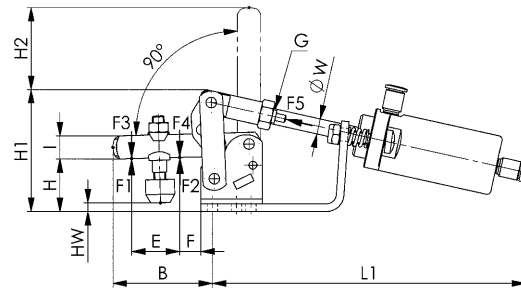
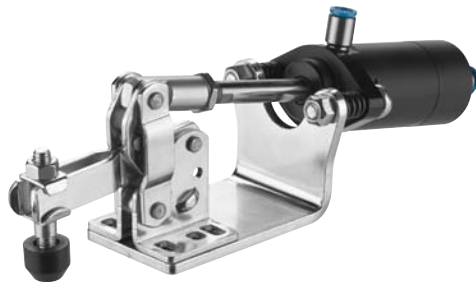


CAD

Order no.	Size	F1 [kN]	F2 [kN]	F3 [kN]	F4 [kN]	F5 [N]	Vn [dm <sup>3</sup> ]	Clamping screw	Weight [g]
559791	0	0,5	0,7	0,07	0,09	38	0,03	M4 x 25	125
559792	1	0,8	1,1	0,13	0,18	60	0,06	M5 x 30	400
559793	2	1,0	1,2	0,35	0,50	170	0,17	M6 x 35	600
559794	3	1,4	2,5	0,55	1,00	265	0,30	M8 x 45	800

F3 or F4 = max. achievable clamping force at 6 bar.

Vn = air consumption per double stroke in dm<sup>3</sup> at 6 bar.



### Recommendations



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### Dimensions:

Order no.	Size	A	B	C	D	E	F	G	H	H1	H2	HW min.	HW max.	I	K
559791	0	4	31	13,5	4,5	14	5,5	M4	20	46	23,0	-1	6	8	5,0
559792	1	5	39	16,0	4,5	18	6,0	M6	22	50	34,5	-2	5	10	6,0
559793	2	6	52	20,0	5,4	25	11,0	M8	27	63	42,5	1	8	12	6,0
559794	3	8	78	20,0	7,1	37	19,0	M10 x 1,25	38	84	69,0	7	16	18	7,5

Order no.	Size	L	L1	M	N	N1	dia. W	Piston dia.	Outside-Ø for compressed air tubing
559791	0	-	132	23	33	29	4	10	4
559792	1	-	145	24	34	33	6	12	6
559793	2	12,5	163	27	44	54	8	20	6
559794	3	-	205	32	50	59	10	25	6

Subject to technical alterations.

## No. 6820A

### Pneumatic clamp

with horizontal cylinder attachment.  
 Fitted with pneumatic cylinder, double-acting. **With magnetic piston for end-position monitoring.** With throttle bores for reduced speed. Clamps are galvanised and passivated. Stainless steel rivets which, for sizes 2 to 4, run in hardened bearing bushes. Bearings positioned are lubricated.  
**Complete with tempered, galvanised clamping screw no. 6890.**

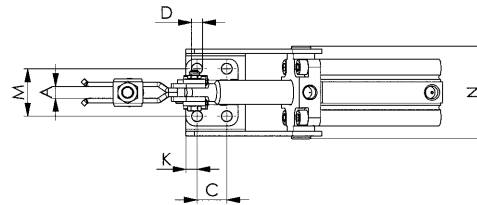
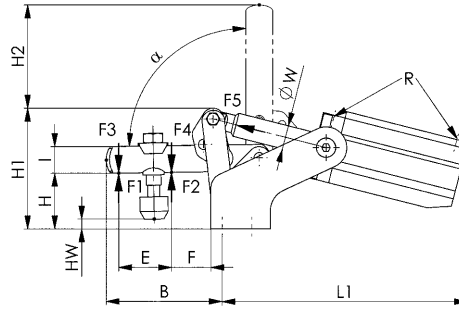


CAD

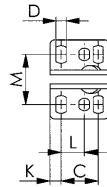
Order no.	Size	F1 [kN]	F2 [kN]	F3 [kN]	F4 [kN]	F5 [kN]	Vn [dm <sup>3</sup> ]	Clamping screw	Weight [g]
555061	1	0,8	1,1	0,20	0,3	0,10	0,08	M5 x 30	320
555062	2	1,0	1,2	0,70	1,0	0,30	0,26	M6 x 35	600
555063	3	1,0	2,5	0,65	1,1	0,50	0,35	M8 x 45	1005
555064	4	2,0	3,0	1,50	2,2	0,75	0,80	M8 x 65	1520

### Note:

Suitable proximity switches for end-position monitoring are available using order no. 392241. 0.3 m PUR cable with M8 connector and rotatable knurled nuts.  
 Switching function: NOC. Output: PNP.



Size 2



### Recommendations



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### Dimensions:

Order no.	Size	A	B	C	D	E	F	H	H1	H2	HW min.	HW max.	I	K	L	L1	M	N	R	dia. W	Piston dia.	Opening angle $\alpha$
555061	1	5	39,0	16	4,5	18	6	21,0	51,0	34,0	-2,0	4,5	10	6,0	-	126,0	24	50,0	M5	8	16	92,0°
555062	2	6	51,5	20	5,5	25	11	26,0	62,0	42,5	-1,0	7,0	12	6,0	12,5	145,0	27	54,5	M5	12	25	91,5°
555063	3	8	78,0	20	7,5	36	19	36,5	82,0	69,0	5,4	14,0	18	7,5	-	165,5	32	62,5	G1/8	16	32	90,0°
555064	4	10	101,0	32	8,6	45	25	45,0	99,5	92,0	-3,0	25,5	20	13,0	-	196,0	45	77,5	G1/8	16	40	90,5°

## No. 6821A

### Pneumatic clamp

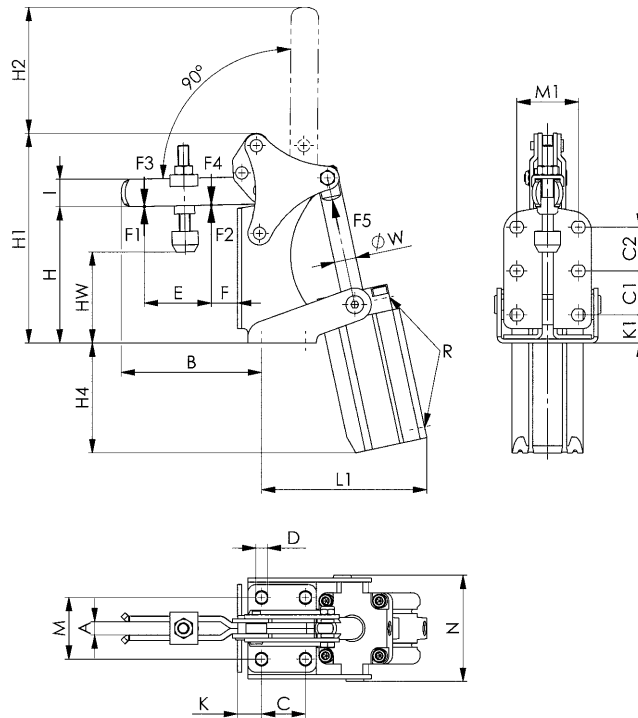
with vertical cylinder structure.  
 Space-saving angled form. Vertical or horizontal mounting.  
 Fitted with pneumatic cylinder, double-acting. **With magnetic piston for end-position monitoring.** With throttle bores for reduced speed. Clamps are galvanised and passivated.  
 Stainless steel rivets, which run in hardened bearing bushes.  
 Bearings positioned are lubricated.  
**Complete with tempered, galvanised clamping screw no. 6890.**



Order no.	Size	F1 [kN]	F2 [kN]	F3 [kN]	F4 [kN]	F5 [kN]	Vn [dm <sup>3</sup> ]	Clamping screw	Weight [g]
555065	2	1	1,2	0,70	1,0	0,30	0,26	M6 x 35	625
555066	3	1	2,5	0,65	1,1	0,50	0,35	M8 x 45	1025
555067	4	2	3,0	1,50	2,2	0,75	0,80	M8 x 65	1700

### Note:

Suitable proximity switches for end-position monitoring are available using order no. 392241. 0.3 m PUR cable with M8 connector and rotatable knurled nuts.  
 Switching function: NOC. Output: PNP.



### Recommendations



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### Dimensions:

Order no.	Size	A	B	C	C1	C2	D	E	F	H	H1	H2	H4	HW min.	HW max.	I	K	K1	L1	M	M1	N	R	dia. W	Piston dia.
555065	2	6	56,5	12,5	12,5	12,5	5,6	25	6,5	65,0	100,5	43	67,5	38,4	45,0	12	15,3	15,9	83,0	27	26,6	54,5	M5	12	25
555066	3	8	80,5	16,0	16,0	-	6,5	36	12,5	68,7	114,5	69	78,0	38,0	46,5	18	16,5	17,5	96,0	25	25,0	62,5	G1/8	16	32
555067	4	10	102,0	32,0	32,0	32,0	8,5	49	19,0	100,0	153,0	92	80,0	51,0	80,0	20	17,5	20,5	123,5	45	45,0	77,5	G1/4	16	40

## No. 6825A

### Heavy pneumatic toggle clamp

With horizontal cylinder attachment.  
 Tempered steel, burnished. The bearing bolts running in bearing bushes are tempered, ground and locked with circlips.  
 With magnetic piston for end-position monitoring.  
 Ready to connect, comprising:  
 - mechanical element  
 - double acting pneumatic cylinder



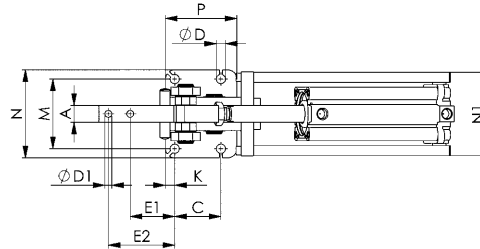
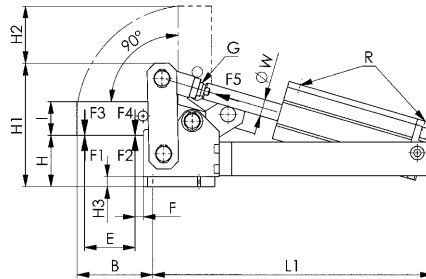
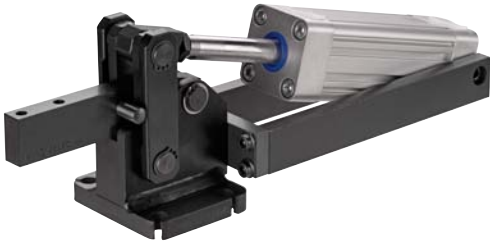
Order no.	Size	F1 [kN]	F2 [kN]	F3 [kN]	F4 [kN]	F5 [kN]	Vn [dm <sup>3</sup> ]	Weight [g]
559769	4	6	9	1,5	2,2	0,75	1,0	4800
559770	6	12	18	2,5	3,5	1,00	1,8	6965
559771	8	20	30	4,0	6,0	1,80	4,3	12785

### Application:

These pneumatic toggle clamps are of machine tool quality and can be installed in machines such as material handling lines and special machines. Opening and clamping position of the clamp can be controlled electrically and can be integrated into automated manufacturing.

### Note:

This heavy pneumatic toggle clamp is also available in a hydraulic drive version (article no. 6960C). In case of interest, please ask for our catalogue „Hydraulic Clamping Systems“. Suitable proximity switches for end-position monitoring are available using order no. 392241. Design: PUR cable 0.3 m with M8 plug connection and rotating knurled nuts. Switching function: NOC. Output: PNP.



### Recommendations



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No. 6825CE,  
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### Dimensions:

Order no.	Size	A	B	C	dia. D	dia. D1	E	E1	E2	F	G	H	H1	H2	H3
559769	4	15	82	52	11	6,2	54	47,0	74,0	10,0	M12 x 1,25	57	122	75	12
559770	6	20	90	55	11	8,2	60	53,0	79,0	10,0	M16 x 1,50	61	147	68	12
559771	8	30	128	80	13	13,0	95	69,5	109,5	9,5	M16 x 1,50	86	196	110	12

Order no.	Size	I	K	L1	M	N	N1	P	R	dia. W	Piston dia.
559769	4	30	10,0	284	70	90	82	77,0	G1/8	16	40
559770	6	40	11,0	333	83	105	100	85,0	G1/4	20	50
559771	8	60	12,5	404	111	135	123	112,5	G1/4	20	63

Subject to technical alterations.

## No. 6825CE

### Heavy pneumatic toggle clamp

with horizontal cylinder attachment.

With adjustable end position cushioning.

**Magnetic piston for end-position monitoring.** Tempered

steel, blued. The axle bolts running in bronze bushes are

tempered, ground and locked with circlips.

Clamp is ready for installation and consists of:

- toggle clamp element
- double acting FESTO pneumatic cylinder
- bearing block

These cylinders are made to DIN ISO 6432.



CAD

Order no.	Size	F1 [kN]	F2 [kN]	F3 [kN]	F4 [kN]	F5 [kN]	Vn [dm <sup>3</sup> ]	Weight [g]
92106	0	0,6	1,0	0,2	0,4	0,10	0,10	260
92122	1	0,8	1,2	0,6	0,8	0,19	0,15	500

F3 or. F4 = max. achievable clamping force at 6 bar.

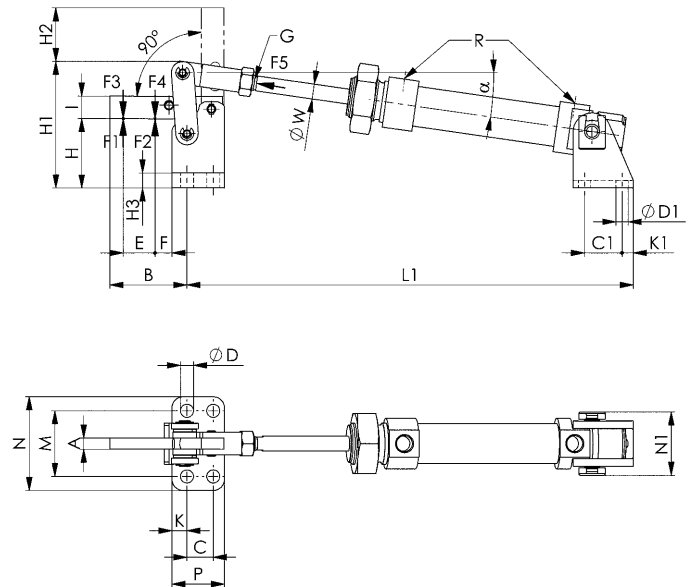
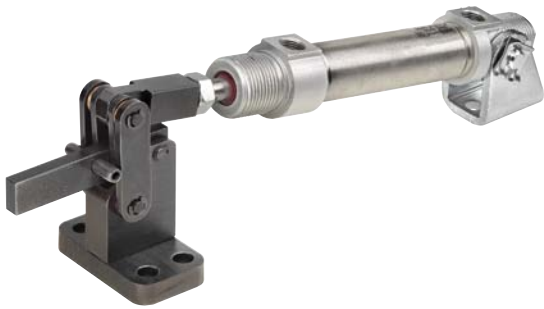
Vn = air consumption per double stroke in dm<sup>3</sup> at 6 bar.

### Application:

These pneumatic toggle clamps are of machine tool quality and can be installed in machines such as material handling lines and special machines. Opening and clamping position of the clamp can be controlled electrically and can be intergrated into automated manufacturing.

### Note:

Please enquire separately for suitable fastening kits and proximity switches for end position monitoring.



### Recommendations



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### Dimensions:

Order no.	Size	A	B	C	C1	dia. D	dia. D1	E	F	G	H	H1	H2	H3
92106	0	5	34	11	15	4,5	5,5	14	7	M6	26	53	23	6
92122	1	6	41	14	20	7,0	6,5	17	9	M8	37	68	28	8

Order no.	Size	I	K	K1	L1	M	N	N1	P	R	dia. W	α	Piston dia.	Piston stroke
92106	0	10	5,5	5	195	27	35	27,5	22	M5	6	6,6°	16	40
92122	1	12	8,0	6	238	35	50	34,0	28	G1/8	8	9,0°	20	40

Piston dia. = Cylinder dia. required for piston force F5 at 6 bar air pressure.



## No. 6826A

### Heavy pneumatic toggle clamp

with vertical cylinder attachment.

Tempered steel, burnished. The bearing bolts running in bearing bushes are tempered, ground and locked with circlips.

With magnetic piston for end-position monitoring.

Ready to connect, comprising:

- mechanical element
- double acting pneumatic cylinder



Order no.	Size	F1 [kN]	F2 [kN]	F3 [kN]	F4 [kN]	F5 [kN]	Vn [dm <sup>3</sup> ]	Weight [g]
559772	4	6	9	1,5	2,2	0,75	1,0	3850
559773	6	12	18	2,5	3,5	1,00	1,6	6950
559774	8	20	30	4,0	6,0	1,80	1,8	13160

### Application:

These pneumatic toggle clamps are of machine tool quality and can be installed in machines such as material handling lines and special machines. Opening and clamping position of the clamp can be controlled electrically and can be integrated into automated manufacturing.

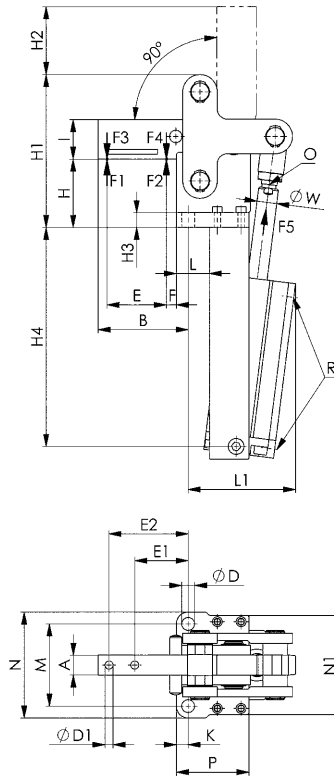
### Note:

Suitable proximity switches for end-position monitoring are available using order no. 392241.

Design: PUR cable 0.3 m with M8 plug connection and rotating knurled nuts.

Switching function: NOC.

Output: PNP.



### Dimensions:

Order no.	Size	A	B	dia. D	dia. D1	E	E1	E2	F	H	H1	H2	H3	H4
559772	4	15	82	11	6,2	54	47	74	10,0	65	129,5	75,5	12	193
559773	6	20	91	13	8,2	60	54	80	10,0	69	154,5	68,5	15	221
559774	8	30	125	17	13,0	95	67	107	9,5	94	204,0	110,0	20	255

Order no.	Size	I	K	L	L1	M	N	N1	O	P	R	dia. W	Piston dia.
559772	4	30	10	37,0	103	70	90	82	M12 x 1,25	67,0	G1/8	16	40
559773	6	40	12	33,5	120	83	107	100	M16 x 1,50	73,5	G1/4	20	50
559774	8	60	15	49,0	162	115	145	115	M16 x 1,50	109,0	G1/4	20	63

Subject to technical alterations.

## No. 6829V

### Link Clamp, pneumatic, flange-mounting version

#### dual acting.

Parts of mechanism are made of steel and blued. Piston rod non-rusting, polished. Body is made of aluminium, red anodised. HART-COAT® surface for wear-resistance. **Complete with clamping screw.**



Order no.	Size	F3 [kN]	Clamping screw	Weight [g]
93609	25	0,23	M 6x25	580
93617	32	0,37	M 8x35	950
93625	40	0,56	M 8x35	1200
93633	50	0,76	M12x50	1900
93641	63	1,35	M12x50	2300

#### Attachment options:

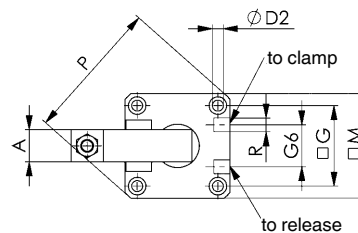
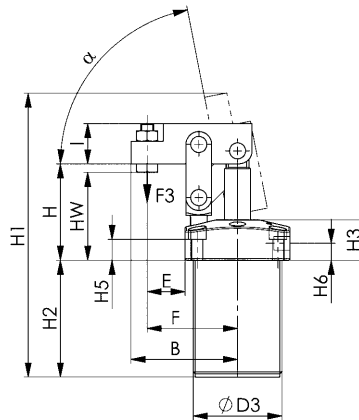
- from above by cylinder screws through the flange
- screwed in using the threads and secured with lock nut
- both ends secured with lock nuts

#### Accessories (not supplied as standard):

- lock nut no. 6829N
- threaded flange bi. 6829GF
- clamping screw no. 6880

#### Note:

The lever mechanism can be dismantled so that it can be individually modified. The mounting holes in the flange are similar to those in threaded flange No. 6829GF. Operate only with lubricated air.



#### Recommendations



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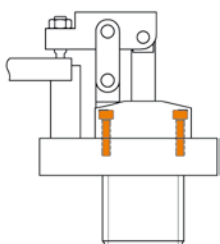


No. 6829ER/EL, page 150

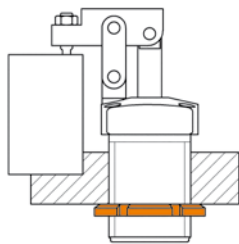
#### Dimensions:

Order no.	Size	A	B	dia. D2	dia. D3	E	F	G	G6	H	H1	H2	H3	H5	H6	HW	I	M	P	R	Piston dia.	$\alpha$
93609	25	16	48,0	5,5	M40x1,5	16,0	41,0	37	23	51,0	144	62	25	15	12,0	37-47	17	50	66	M5	25	79°
93617	32	16	60,0	6,5	M50x1,5	22,0	52,0	45	23	57,0	170	73	25	13	10,5	50-56	20	60	80	G1/8	32	80°
93625	40	20	66,0	6,8	M55x1,5	23,5	56,0	50	26	60,0	178	73	25	13	10,5	50-54,5	25	65	87	G1/8	40	79°
93633	50	22	77,5	8,5	M65x1,5	26,0	63,5	58	32	65,0	200	79	25	11	10,5	47-57	30	75	100	G1/8	50	72°
93641	63	22	88,0	8,5	M80x1,5	29,5	74,0	70	35	71,5	211	80	25	11	9,0	54-64	30	89	118	G1/8	63	63°

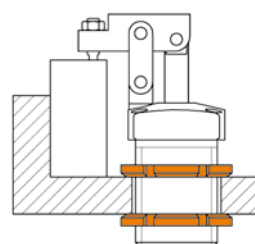
#### Examples of mountings



From above with 4 socket cap screws through the flange.



By screwing the body into a tapped hole and locking with a grooved nut.



By inserting the body into a plain hole and locking with two grooved nuts.

No. 6828M

## Pneumatic toggle clamp

double-acting.

Max. operating pressure 6 bar.

Mini design in block version for clamping and grasping uses.

High-strength aluminium, red anodised. **Magnetic piston for end-position monitoring.** Clamping arm made of steel, burnished, with three holes.



CAD

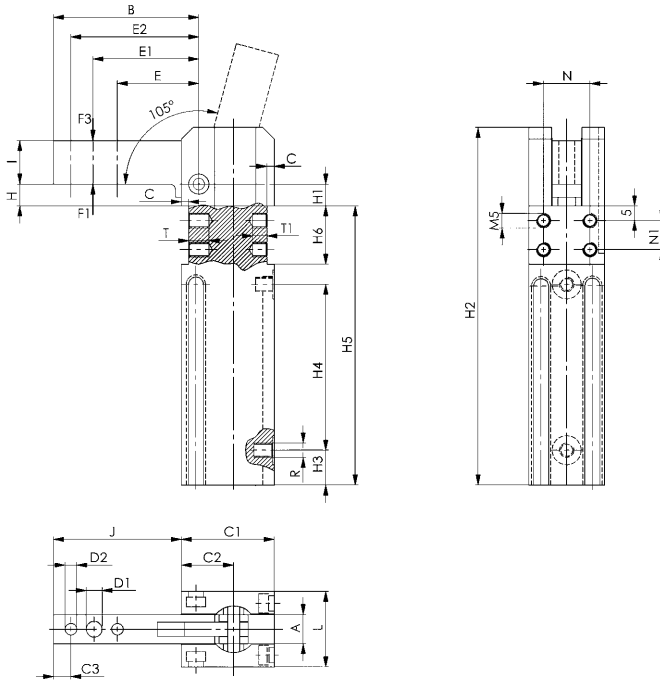
Order no.	Size	Clamping moment at 5 bar	Holding moment max.	Weight
		[Nm]	[Nm]	[g]
91843	16	8	25	300
91868	20	15	54	550
91884	25	25	75	850

### Note:

Suitable proximity switches for end-position monitoring are available using order no. 392241.

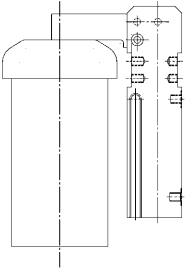
0.3 m PUR cable with M8 connector and rotatable knurled nuts.

Switching function: NOC. Output: PNP.



### Application example:

Mini clamp, e.g. as „cover close device“. Defined, locked close position through toggle lever mechanism.



### Recommendations



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page 137



No. 6828V,  
page 144

### Dimensions:

Order no.	Size	A	B	C	C1	C2	C3	D1	D2 H7	E	E1	E2	H	H1	H2
91843	16	10	50	2,5	32	18	6	5,5	4	28	36,0	44	7,5	7,5	123
91868	20	12	60	3,0	39	22	8	6,5	5	32	42,0	52	15,0	14,0	158
91884	25	16	75	4,0	45	25	10	8,5	6	40	52,5	65	19,0	17,0	182

Order no.	Size	H3	H4	H5	H6 +0.1	I	J	L	N ±0.1	N1 ±0.1	R	T	T1	Piston dia.
91843	16	12,0	57	96	20	15	44	26	16	10	M5	7	5	16
91868	20	15,0	69	120	25	18	53	30	20	15	G1/8	8	6	20
91884	25	17,5	80	136	28	22	68	35	25	18	G1/8	8	6	25

Subject to technical alterations.

## No. 6828H

### Pneumatic clamp with lever

double-acting and with additional lever for manual opening and/or closing.

Max. operating pressure 6 bar.

Mini design in block version for clamping and gripping technology. High-strength aluminium, red anodised.

Magnetic piston for end-position monitoring. Clamp arm made from steel, bronzed, with three bores.



CAD

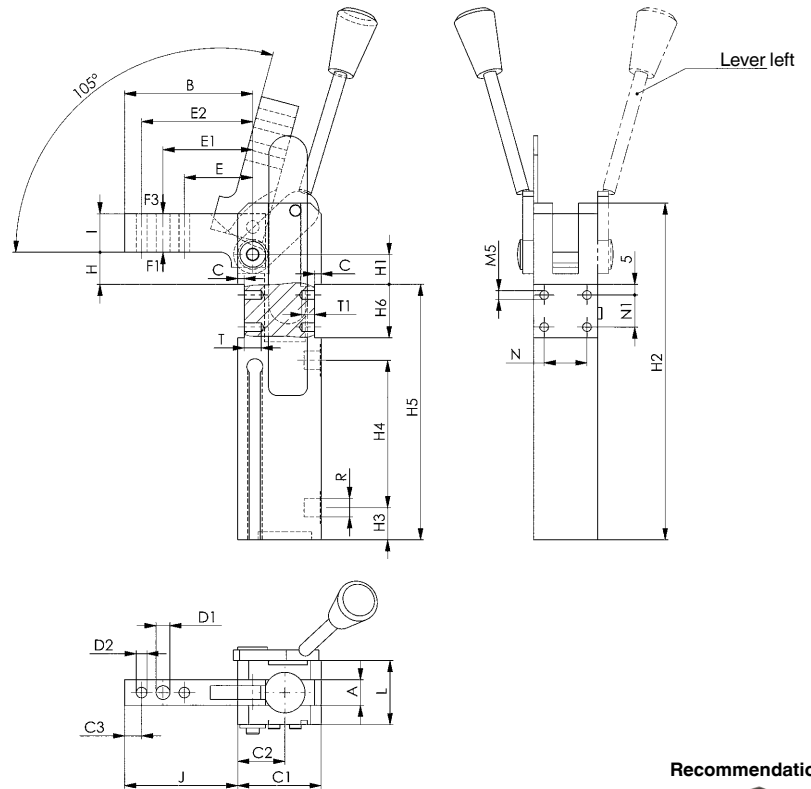
Order no.	Size	Clamping moment at 5 bar [Nm]	Lever left	Lever right	Holding moment max. [Nm]	Weight [g]
555083	16	8	-	●	25	320
555170	16	8	●	-	25	320
555084	20	15	-	●	54	700
555171	20	15	●	-	54	700
555085	25	25	-	●	75	920
555172	25	25	●	-	75	920

### Note:

Suitable proximity switches for end-position monitoring are available using order no. 392241.

0.3 m PUR cable with M8 connector and rotatable knurled nuts.

Switching function: NOC. Output: PNP.



### Recommendations



No. 6829V,  
page 137



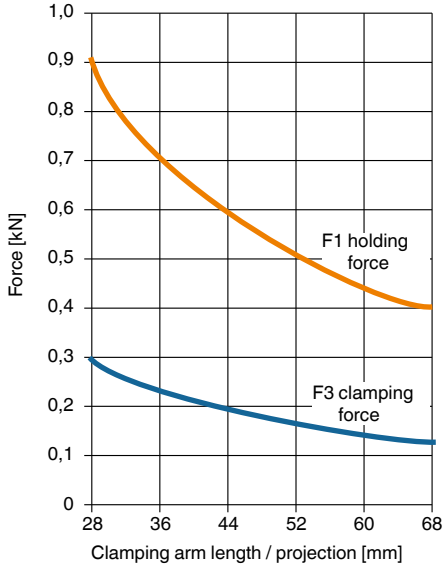
No. 6828V,  
page 144

### Dimensions:

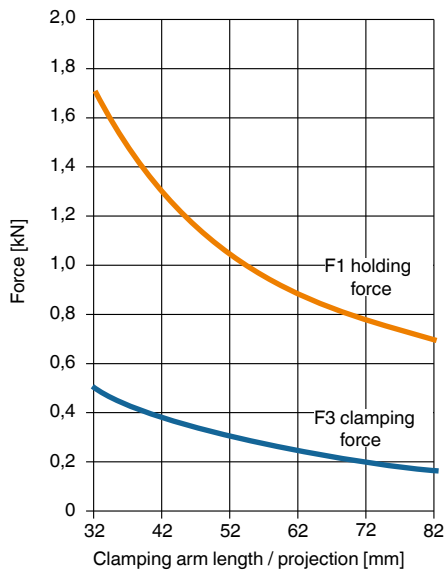
Order no.	Size	A	B	C	C1	C2	C3	D1	D2	H7	E	E1	E2	H	H1	H2	H3	H4	H5	H6 +0.1	I	J	L	N ±0.1	N1 ±0.1	R	T	T1	Piston dia.
555083	16	10	50	2,5	32	18	6	5,5	4	28	36,0	44	7,5	7,5	123	12,0	57	96	20	15	44	26	10	10	M5	7	5	16	
555170	16	10	50	2,5	32	18	6	5,5	4	28	36,0	44	7,5	7,5	123	12,0	57	96	20	15	44	26	10	10	M5	7	5	16	
555084	20	12	60	3,0	39	22	8	6,5	5	32	42,0	52	15,0	14,0	158	15,0	69	120	25	18	53	30	20	15	G1/8	8	6	20	
555171	20	12	60	3,0	39	22	8	6,5	5	32	42,0	52	15,0	14,0	158	15,0	69	120	25	18	53	30	20	15	G1/8	8	6	20	
555085	25	16	75	4,0	45	25	10	8,5	6	40	52,5	65	19,0	17,0	182	17,5	80	136	28	22	68	35	18	18	G1/8	8	6	25	
555172	25	16	75	4,0	45	25	10	8,5	6	40	52,5	65	19,0	17,0	182	17,5	80	136	28	22	68	35	18	18	G1/8	8	6	25	

## Force diagrams 6828M and 6828H

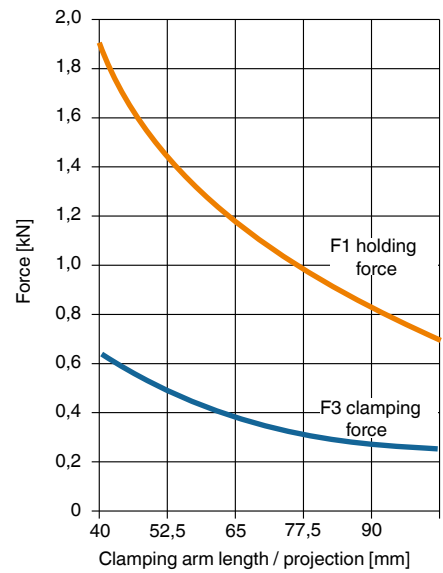
### Size 16



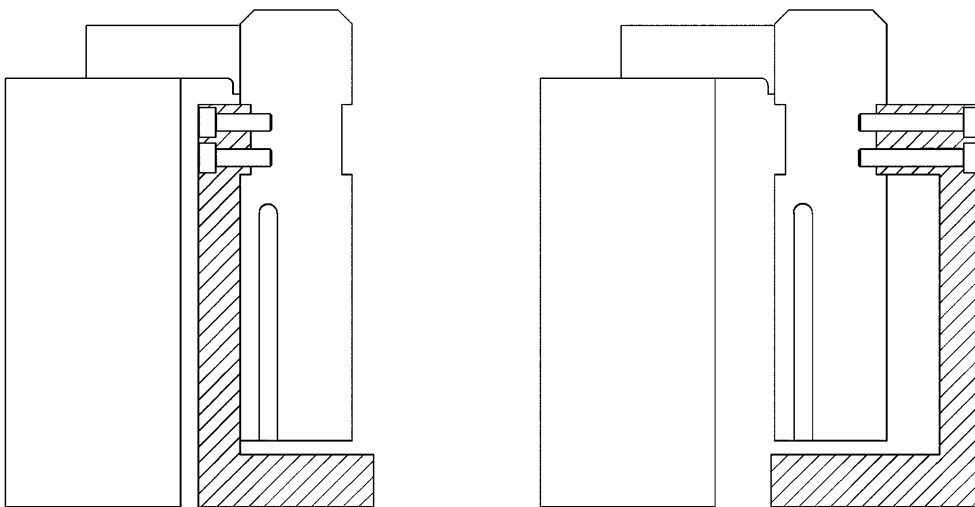
### Size 20

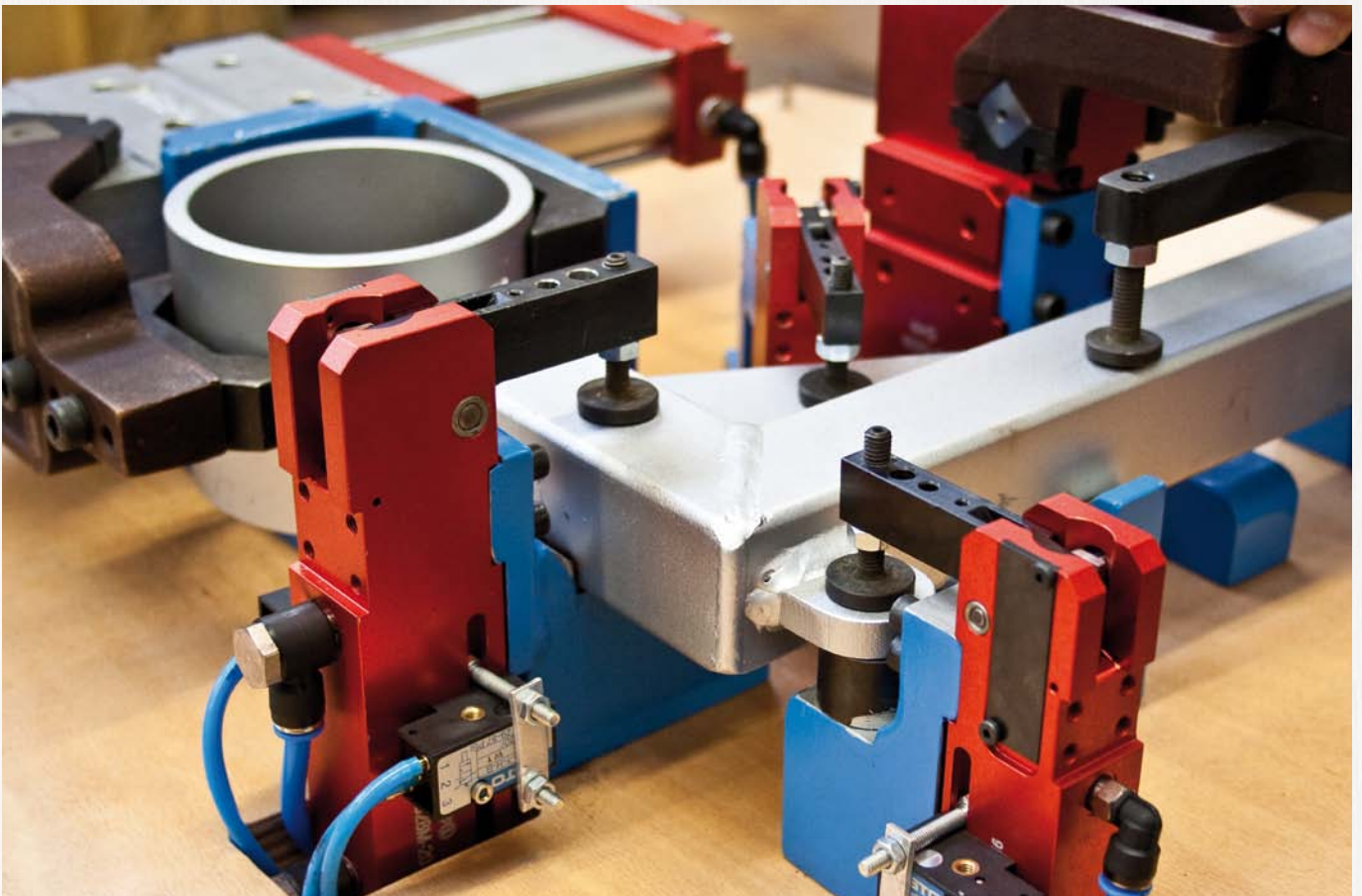
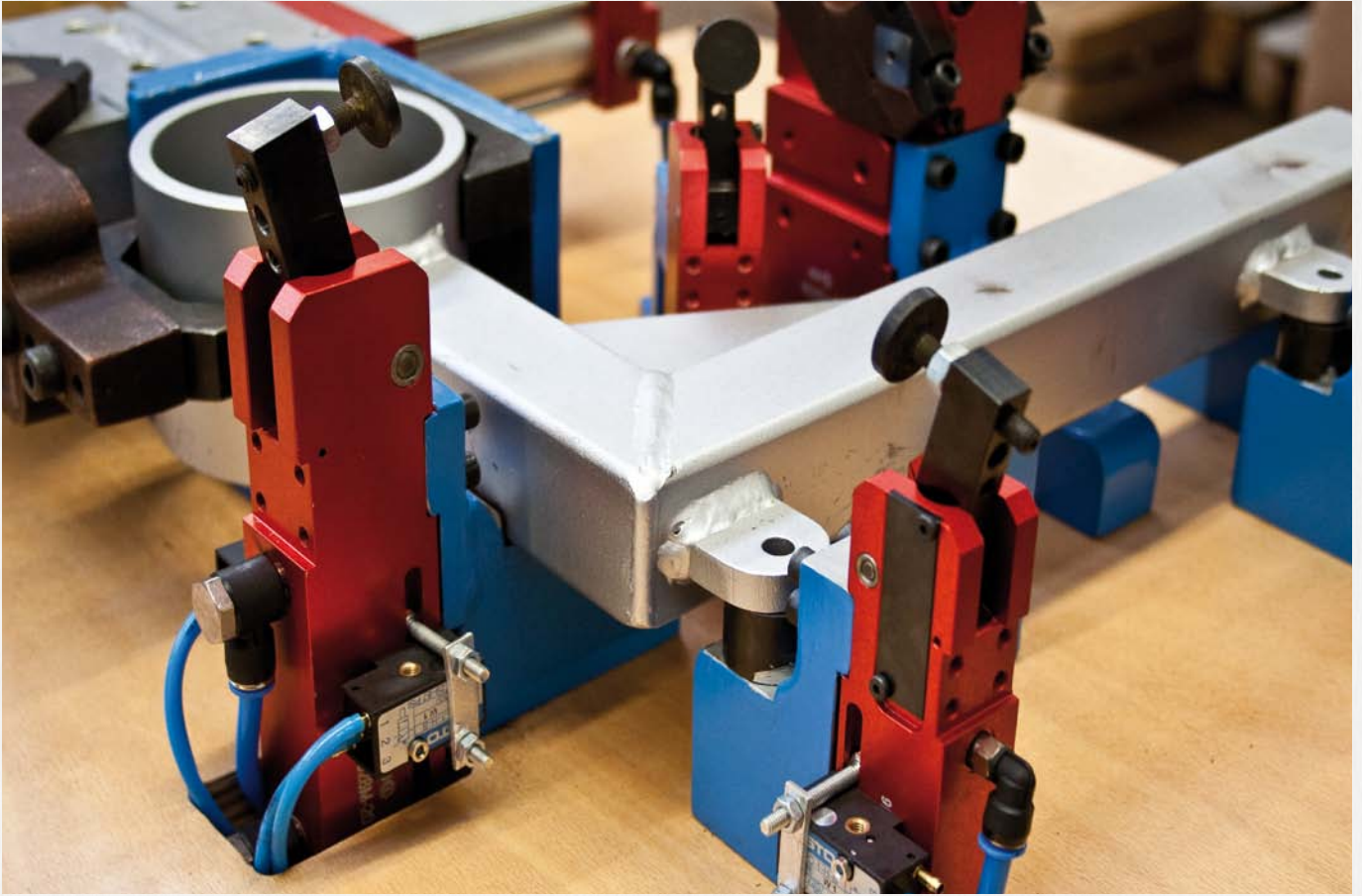


### Size 25



## Examples of mountings:





Subject to technical alterations.

No. 6828V

## Heavy pneumatic toggle clamp

dual acting.

Max. operating pressure 6 bar.

With continuously adjustable opening angle in the range 10° to 135°. Aluminium case. With pneumatic end position cushioning and self-locking. With inductive query 24V as standard.

Supplied without clamp arm.

Accessories (not included in the standard scope of delivery):

- Clamping arm no. 6828SP centre, right and left
- Connecting plug for inductive query

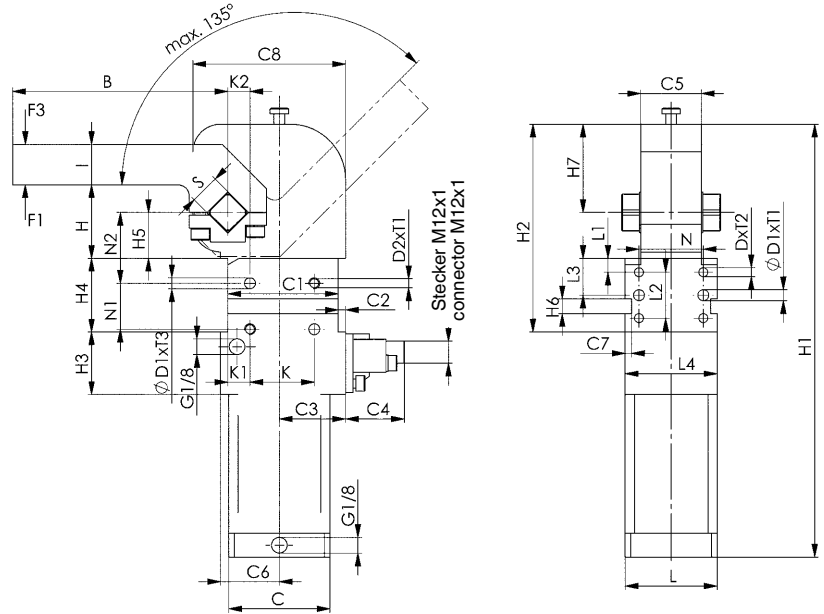


CAD

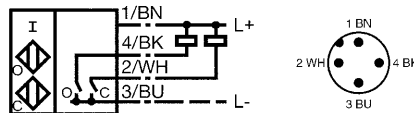
Order no.	Size	Clamping moment at 5 bar	Holding moment max.	Weight
		[Nm]	[Nm]	[Kg]
91835	40	120	380	1,4

### Application:

These pneumatic toggle clamps are suitable for use in material handling lines and special machines. Opening and clamping position of the clamp can be controlled electrically, allowing intergration into automated manufacturing processes.



Connection sketch:



O ... open  
C ... close

### Recommendations



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No. 6829V, page 137



No. 6828V, page 144

### Dimensions:

Order no.	Size	B	C	C1 *	C2	C3	C4	C5-0.5	C6	C7	C8	D	dia. D1 H7	D2	H ±0.2	H1	H2	H3	H4 +0.1	H5
91835	40	117	55	60	4	36	34	33	32	3,5	83	M6	6	M6	40	235,5	113	34	40	25

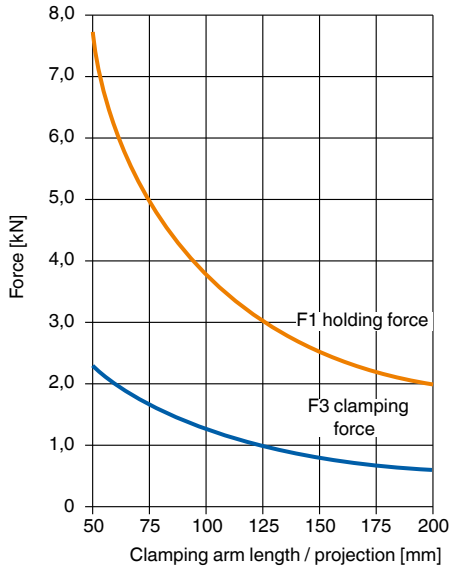
  

Order no.	Size	H6 N9	H7	I ±0,1	K*	K1 ±0.05	K2 ±0.05	L	L1 ±0,1	L2*	L3 ±0.05	L4	N*	N1*	N2 ±0.05	S h9	T1	T2	T3	Piston dia.
91835	40	8	48	22	35	12	12	50	7,5	25	20	50	35	25	38,5	16	8	12	6	40

\* Tolerance for peg holes ±0.02 mm; for threaded holes ±0.1 mm.

Subject to technical alterations.

## Force diagram 6828V-40



## No. 6828SP

### Clamp arm

made of steel, for heavy pneumatic toggle clamp no. 6828V, size 40.

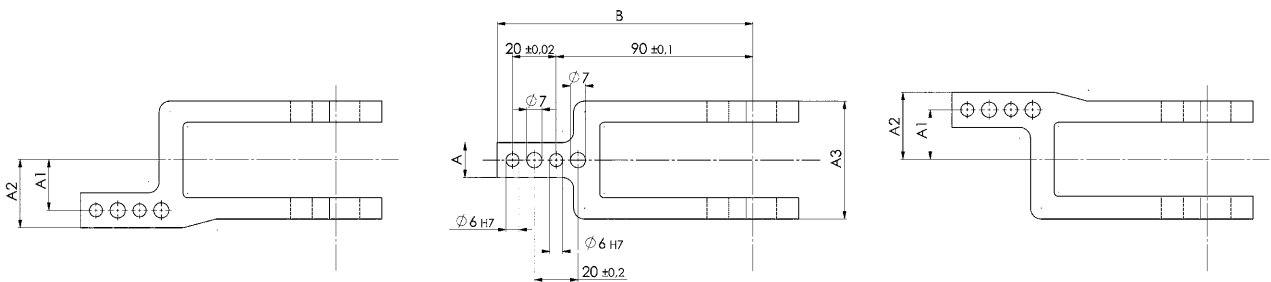


### Clamp arm variants:

SPL (Clamp arm left)

SPM (Clamp arm in the middle)

SPR (Clamp arm right)

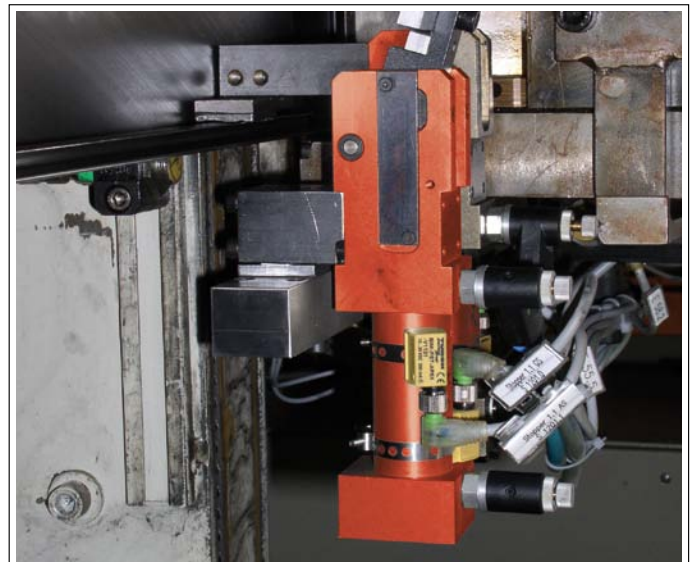


Order no.	Size	Article no.	A -0.1	A1 ±0.1	A2	A3	B	Weight [g]
92080	40	6828SPL-40	16	23	31	54	117	520
91900	40	6828SPM-40	16	23	31	54	117	520
92007	40	6828SPR-40	16	23	31	54	117	520

### Recommendations



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Subject to technical alterations.



No. 6828V

## Heavy pneumatic toggle clamp

dual acting.

Max. operating pressure 6 bar.

With continuously adjustable opening angle in the range 5° to 135°. Aluminium case. With pneumatic end position cushioning and self-locking. With inductive query 24V as standard.

**Clamp arm not included.**

Accessories (not included in the standard scope of delivery):

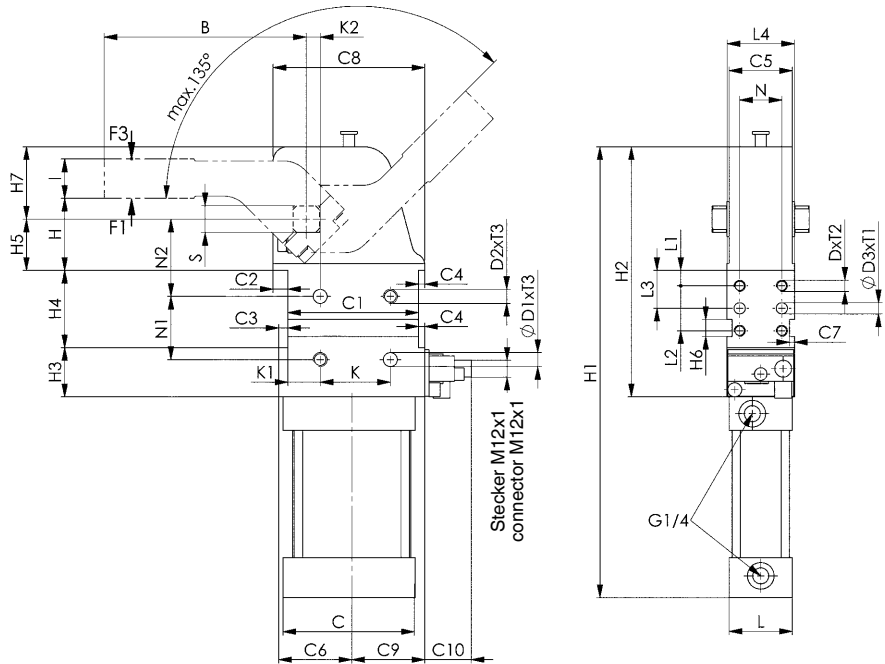
- Clamping arm no. 6828SP centre, right and left
- Connecting plug for inductive query



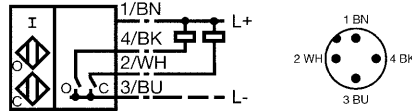
Order no.	Size	Clamping moment at 5 bar	Holding moment max.	Weight [Kg]
		[Nm]	[Nm]	
91850	50	160	800	3,5
91876	63	380	1500	4,6
91892	80	800	2500	15,6

### Application:

These pneumatic toggle clamps are suitable for use in material handling lines and special machines. Opening and clamping position of the clamp can be controlled electrically, allowing intergration into automated manufacturing processes.



Connection sketch:



O ... open  
C ... close

### Recommendations



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page 145



No. 6828M,  
page 138

### Dimensions:

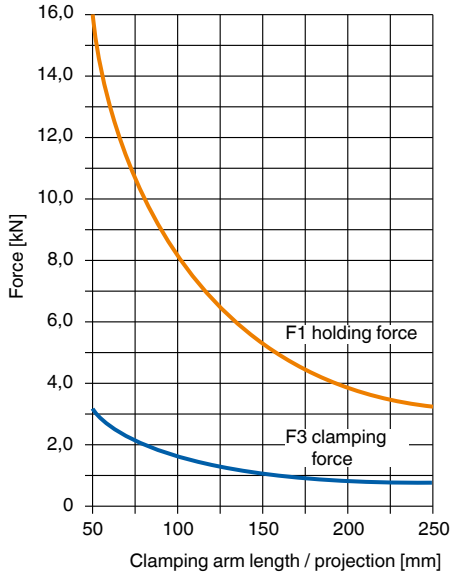
Order no.	Size	B	C	C1*	C2	C3	C4	C5	C6	C7	C8	C9	C10	D	D1	H7	D2	ØD3	H7	H ±0.2	H1	H2	H3	H4 +0.1	H5 ±0.05	H6	H7	l ±0.1
91850	50	144	94	93	10,5	6,5	4,5	45	52	3,5	108,0	52	33	M8	10	M10	8	51,5	321	178	35	55	36,5	12	51,5	28		
91876	63	144	106	93	12,0	7,5	7,5	52	54	3,5	112,5	54	34	M8	10	M10	8	51,5	335	185	35	55	36,5	12	58,5	28		
91892	80	179	140	134	20,0	8,0	8,0	74	81	3,5	162,0	72	33	M10	12	M12	8	70,0	488	270	55	80	50,0	12	88,0	35		

Order no.	Size	K*	K1 ±0.1	K2 ±0.05	L	L1 ±0,1	L2 ±0,1	L3 ±0.05	L4	N*	N1*	N2 ±0.05	S	T1	T2	T3	Piston dia.
91850	50	50	23	10	45	11	32	27	48	30	45	55	19	12	12	12	50
91876	63	50	23	10	52	11	32	27	54	30	45	55	22	12	12	12	63
91892	80	70	36	15	62	15	50	40	76	50	75	65	30	12	15	13	80

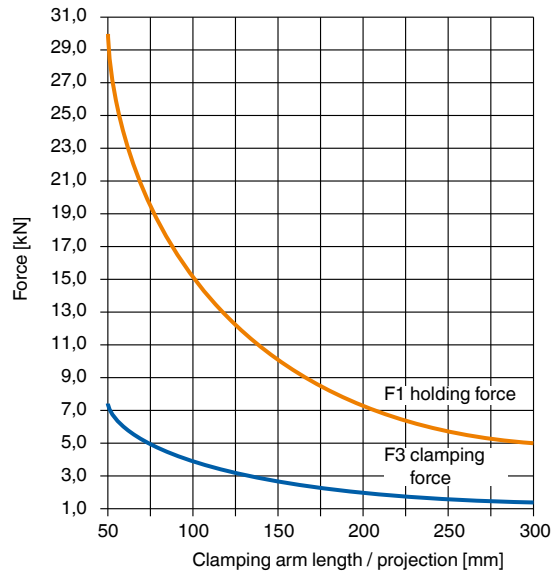
\* Tolerance for peg holes ±0.02 mm; for threaded holes ±0.1 mm.

Subject to technical alterations.

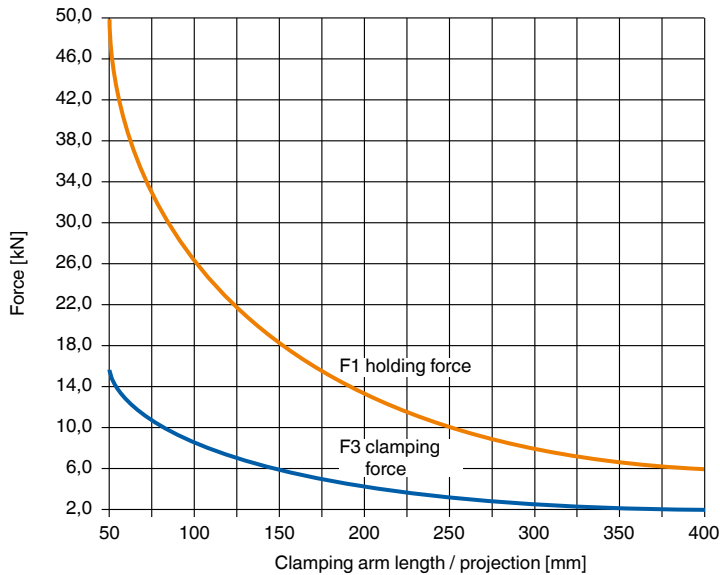
## Force diagrams 6828V-50



## 6828V-63



## 6828V-80



## No. 6828SP

### Clamp arm

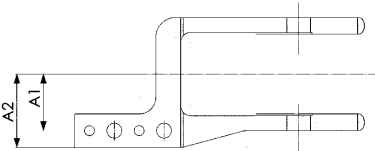
made of steel, for heavy pneumatic toggle clamp no. 6828V, size 50, 63, 80.



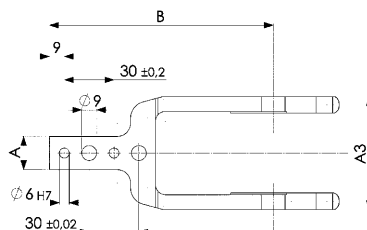
Order no.	Size	Article no.	A -0.1	A1 ±0.1	A2	A3	B	Weight [g]
92072	50	6828SPL-50	20	34,0	44	68	144	855
91959	50	6828SPM-50	20	34,0	44	68	144	855
92056	50	6828SPR-50	20	34,0	44	68	144	855
92130	63	6828SPL-63	20	37,0	47	78	144	1150
92098	63	6828SPM-63	20	37,0	47	78	144	1150
92114	63	6828SPR-63	20	37,0	47	78	144	1150
92395	80	6828SPL-80	25	50,5	63	108	179	1450
92353	80	6828SPM-80	25	50,5	63	108	179	1450
92379	80	6828SPR-80	25	50,5	63	108	179	1450

### Clamp arm variants:

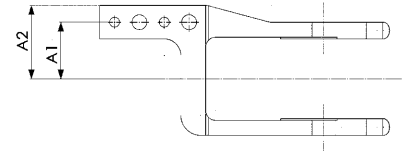
SPL (Clamp arm left)



SPM (Clamp arm in the middle)



SPR (Clamp arm right)



Subject to technical alterations.

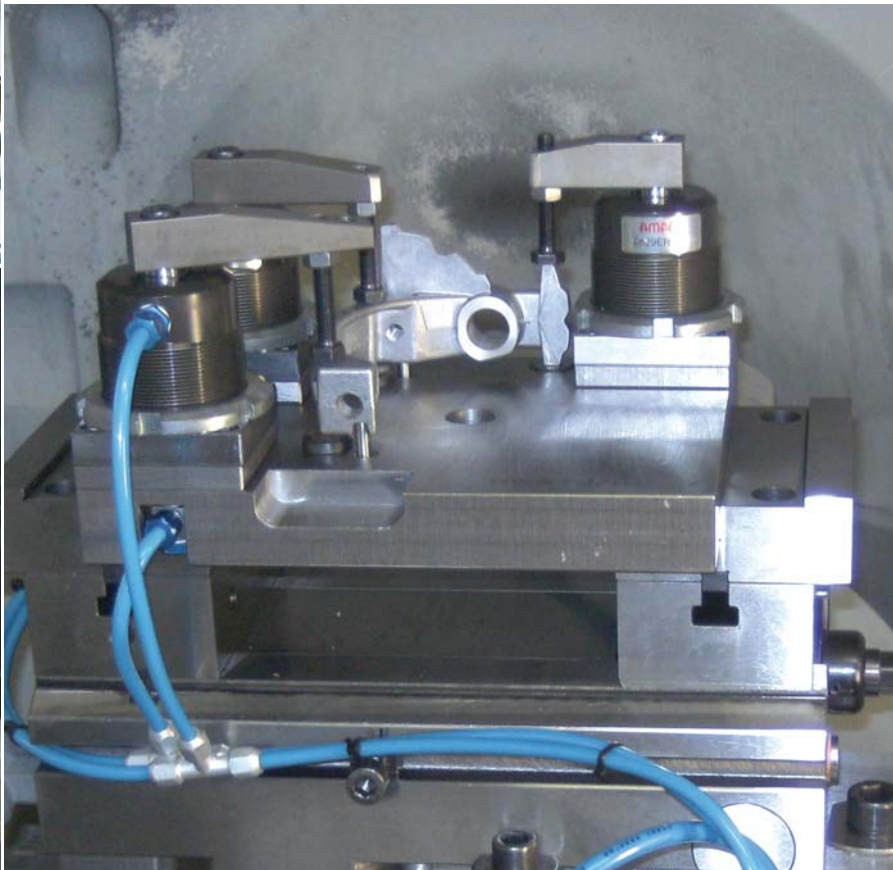
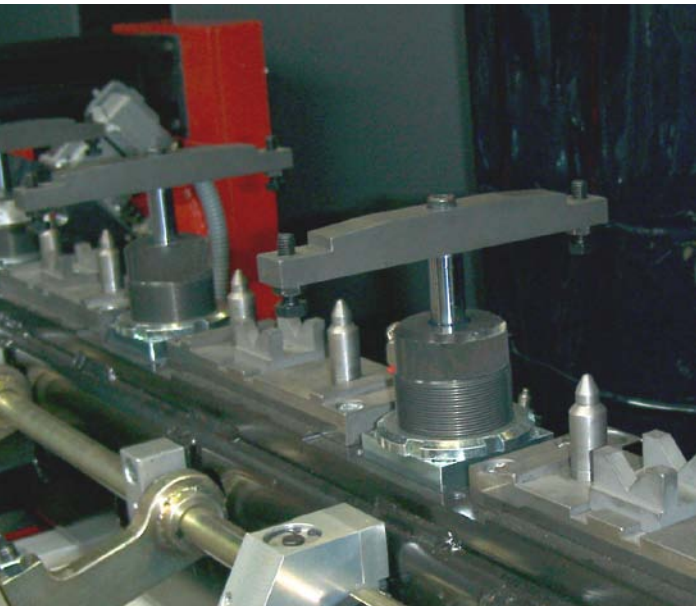
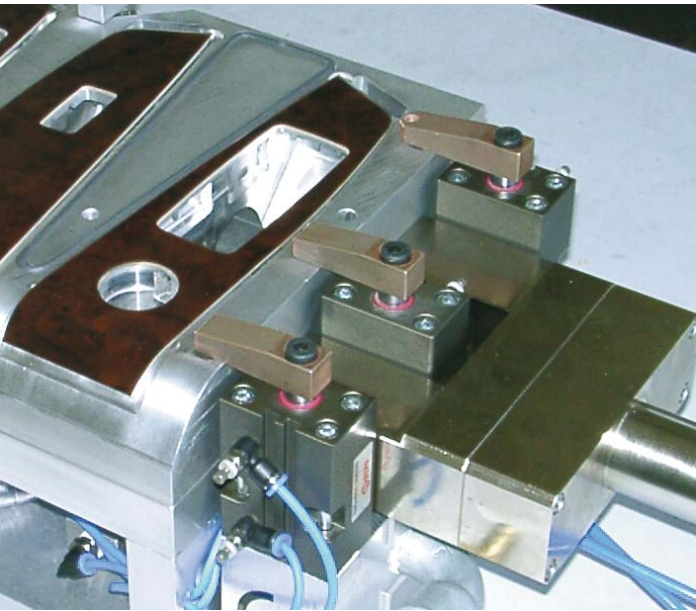
# PNEUMATIC SWING CLAMPS

## > APPLICATIONS

Pneumatic swing clamps are used where low clamping forces are needed (e.g. for welding), and where workpieces must be easily positioned from above.

## > POINTS TO REMEMBER!

The swing action of toggle clamps must not be hindered. They can only clamp on their vertical stroke, not while swinging.



## No. 6829KR/KL

### Swing clamp, pneumatic, flange-mounting version

#### double-acting

For recessed installation in fixtures. Both compressed-air connections are in the flange. Piston rod non-rusting, polished. Body is made of aluminium, anodised. HART-COAT® surface for wear-resistance. Including screw and spring washer for simple setting of the clamp arm position.

#### Mounting:

- from above with cap screws through the flange
- from below in a bore in the fixture using grooved nuts and clamping against the flange
- from above with grooved nuts against the fixture

#### Accessories (not included in pack):

- Clamping arm 6829SP
- Grooved nut 6829N
- Clamping screw 6880



CAD

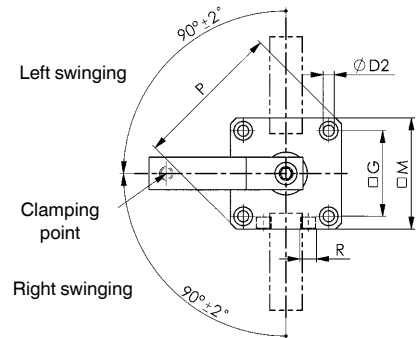
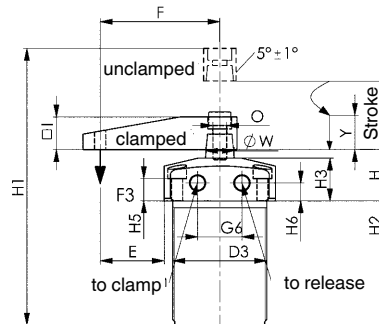


Order no.	Size	right swinging	left swinging	F3 [kN]	Connecting thread for clamping screws	Weight [g]
560012	12	●	-	0,03	M4	130
560018	12	-	●	0,03	M4	130
560011	16	●	-	0,06	M4	180
560019	16	-	●	0,06	M4	180
560010	20	●	-	0,08	M6	300
560020	20	-	●	0,08	M6	300
93484	25	●	-	0,17	M6	500
93559	25	-	●	0,17	M6	500
93492	32	●	-	0,27	M8	650
93567	32	-	●	0,27	M8	650
93500	40	●	-	0,45	M8	800
93575	40	-	●	0,45	M8	800
93518	50	●	-	0,70	M12	920
93583	50	-	●	0,70	M12	920
93526	63	●	-	1,10	M12	1080
93591	63	-	●	1,10	M12	1080

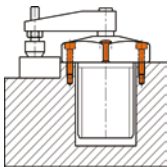
F3 = at 6 bar max. air pressure

#### Note:

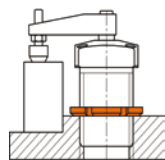
The mounting holes in the flange are the same as in threaded flange no. 6828GF. Operate only with lubricated air.



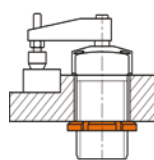
#### Examples of mountings:



with 4 cap screws from above



with grooved nut from above



with grooved nut from below

#### Recommendations



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page 151



No. 6829N,  
page 152



No. 6829GF,  
page 152

#### Dimensions:

Order no.	Size	dia. D2	D3	E	F	G	G6	H	H1	H2	H3	H5	H6	I	M	O	P	R	dia. W	Piston dia.	Y Clamping stroke*	Stroke
560012	12	4,5	M25x1,5	18,7	35	23,0	10	25	105	50	20	11	9,0	12,0	33	M5	43	M5	8	12	8,6	17,6
560018	12	4,5	M25x1,5	18,7	35	23,0	10	25	105	50	20	11	9,0	12,0	33	M5	43	M5	8	12	8,6	17,6
560011	16	4,5	M30x1,5	23,0	41	26,5	12	25	105	50	20	11	9,0	12,0	36	M5	47	M5	8	16	8,5	17,5
560019	16	4,5	M30x1,5	23,0	41	26,5	12	25	105	50	20	11	9,0	12,0	36	M5	47	M5	8	16	8,5	17,5
560010	20	4,5	M35x1,5	27,5	48	30,5	14	26	107	65	20	10	9,0	16,0	41	M8	54	M5	12	20	15,0	27,0
560020	20	4,5	M35x1,5	27,5	48	30,5	14	26	107	65	20	10	9,0	16,0	41	M8	54	M5	12	20	15,0	27,0
93484	25	5,5	M40x1,5	25,0	50	37,0	23	30	135	62	25	15	11,5	16,0	50	M8	66	M5	14	25	13,0	26,0
93559	25	5,5	M40x1,5	25,0	50	37,0	23	30	135	62	25	15	11,5	16,0	50	M8	66	M5	14	25	13,0	26,0
93492	32	6,5	M50x1,5	30,0	60	45,0	23	30	152	73	25	13	10,5	19,0	60	M8	80	G1/8	16	32	14,0	28,0
93567	32	6,5	M50x1,5	30,0	60	45,0	23	30	152	73	25	13	10,5	19,0	60	M8	80	G1/8	16	32	14,0	28,0
93500	40	6,5	M55x1,5	37,5	70	50,0	26	30	152	73	25	13	10,5	19,0	65	M8	87	G1/8	16	40	16,0	30,0
93575	40	6,5	M55x1,5	37,5	70	50,0	26	30	152	73	25	13	10,5	19,0	65	M8	87	G1/8	16	40	16,0	30,0
93518	50	8,5	M65x1,5	42,5	80	58,0	32	30	164	80	25	11	10,5	25,5	75	M10	100	G1/8	20	50	16,0	32,0
93583	50	8,5	M65x1,5	42,5	80	58,0	32	30	164	80	25	11	10,5	25,5	75	M10	100	G1/8	20	50	16,0	32,0
93526	63	8,5	M80x1,5	45,0	90	70,0	35	30	164	80	25	11	10,5	25,5	90	M10	118	G1/8	20	63	14,0	30,0
93591	63	8,5	M80x1,5	45,0	90	70,0	35	30	164	80	25	11	10,5	25,5	90	M10	118	G1/8	20	63	14,0	30,0

\* Swing clamps may only be loaded during the clamping stroke Y.

Subject to technical alterations.

## No. 6829BR/BL

### Swing clamp, pneumatic, block version

#### double-acting

Piston rod non-rusting, polished. Body is made of aluminium, anodised. HART-COAT® surface for wear-resistance. **Magnetic piston to signal end positions.** Including screw and spring washer for simple setting of the clamp arm position.

#### Mounting:

- on front or rear faces, using through holes
- from above with long socket bolts ISO 4762 (DIN 912)
- from below using tapped holes in base

#### Accessories (not included in pack):

- Clamping arm 6829SP
- Clamping screw 6880

Order no.	Size	right swinging	left swinging	F3 [kN]	Connecting thread for clamping screws	Weight [g]
91496	12	●	-	0,03	M 4	200
91397	12	-	●	0,03	M 4	200
91504	16	●	-	0,06	M 4	300
91405	16	-	●	0,06	M 4	300
91512	20	●	-	0,08	M 6	400
91413	20	-	●	0,08	M 6	400
91520	25	●	-	0,17	M 6	600
91421	25	-	●	0,17	M 6	600
91538	32	●	-	0,27	M 8	800
91439	32	-	●	0,27	M 8	800
91546	40	●	-	0,45	M 8	920
91447	40	-	●	0,45	M 8	920
91553	50	●	-	0,70	M12	1000
91454	50	-	●	0,70	M12	1000
91561	63	●	-	1,10	M12	1150
91462	63	-	●	1,10	M12	1150

F3 = at 6 bar max. air pressure

#### Note:

Suitable proximity switches for end-position monitoring are available using order no. 392241. Design: PUR cable 0,3 m with M8 plug connection and rotating knurled nuts. Switching function: NOC. Output: PNP. Operate only with lubricated air.



#### Recommendations



No. 6880,  
page 157

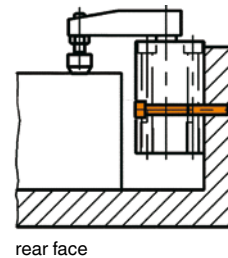
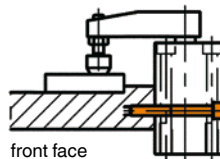
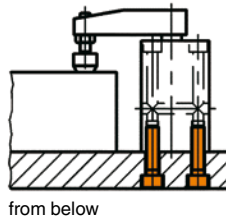
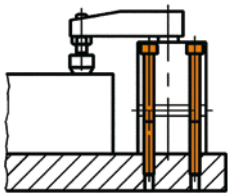


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page 151



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page 150

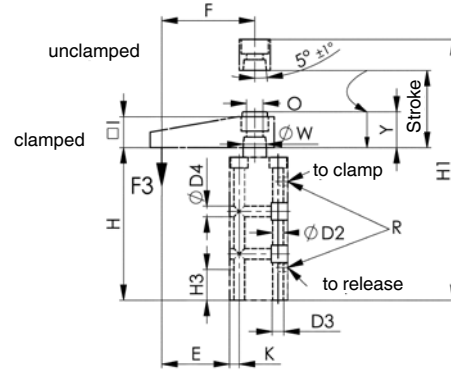
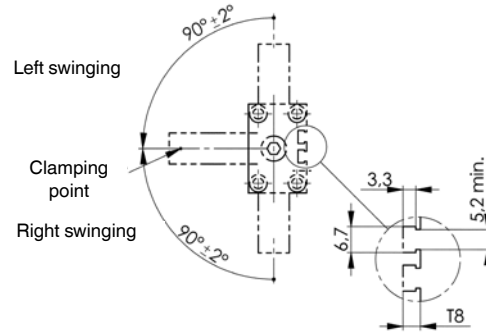
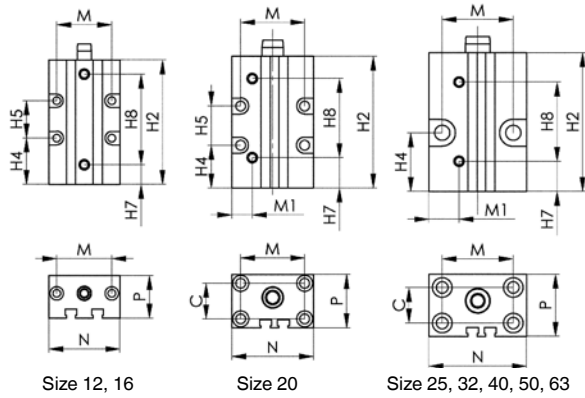
#### Examples of mountings:



CAD



Subject to technical alterations.



## Dimensions:

Order no.	Size	C	dia. D2	D3	dia. D4	E	F	H	H1	H2	H3	H4	H5	H7	H8
91496	12	-	4,3	M 5	4,3	25,0	35	76	105	70	15	26	21	11	51,0
91397	12	-	4,3	M 5	4,3	25,0	35	76	105	70	15	26	21	11	51,0
91504	16	-	4,3	M 5	4,3	30,0	41	76	105	70	15	26	21	11	51,0
91405	16	-	4,3	M 5	4,3	30,0	41	76	105	70	15	26	21	11	51,0
91512	20	20	5,5	M 6	5,5	35,0	48	80	125	74	20	24	22	17	44,5
91413	20	20	5,5	M 6	5,5	35,0	48	80	125	74	20	24	22	17	44,5
91520	25	20	6,5	M 8	8,5	35,0	50	83	125	78	20	32	-	17	44,5
91421	25	20	6,5	M 8	8,5	35,0	50	83	125	78	20	32	-	17	44,5
91538	32	30	6,5	M 8	8,5	40,0	60	96	145	90	20	43	-	22	50,0
91439	32	30	6,5	M 8	8,5	40,0	60	96	145	90	20	43	-	22	50,0
91546	40	37	8,5	M10	8,5	45,5	70	96	145	90	25	40	-	20	52,0
91447	40	37	8,5	M10	8,5	45,5	70	96	145	90	25	40	-	20	52,0
91553	50	46	8,5	M10	10,5	49,0	80	106	162	100	30	45	-	25	53,5
91454	50	46	8,5	M10	10,5	49,0	80	106	162	100	30	45	-	25	53,5
91561	63	60	10,5	M12	10,5	52,5	90	106	162	100	30	36	-	28	53,0
91462	63	60	10,5	M12	10,5	52,5	90	106	162	100	30	36	-	28	53,0

Order no.	Size	I	K	M	M1	N	O	P	R	T8	dia. W	Piston dia.	Y Clamping stroke*	Stroke
91496	12	12	10,0	31	20,0	40	M 5	24	M 5	5,0	8	12	8,5	17,5
91397	12	12	10,0	31	20,0	40	M 5	24	M 5	5,0	8	12	8,5	17,5
91504	16	12	13,0	31	21,0	42	M 5	28	M 5	4,5	8	16	8,5	17,5
91405	16	12	13,0	31	21,0	42	M 5	28	M 5	4,5	8	16	8,5	17,5
91512	20	16	5,0	36	11,5	46	M 8	30	M 5	4,5	12	20	14,0	27,0
91413	20	16	5,0	36	11,5	46	M 8	30	M 5	4,5	12	20	14,0	27,0
91520	25	16	7,5	40	17,0	55	M 8	35	M 5	5,0	14	25	14,0	27,0
91421	25	16	7,5	40	17,0	55	M 8	35	M 5	5,0	14	25	14,0	27,0
91538	32	19	7,5	45	18,0	60	M 8	45	G1/8	6,5	16	32	15,5	30,0
91439	32	19	7,5	45	18,0	60	M 8	45	G1/8	6,5	16	32	15,5	30,0
91546	40	19	9,0	52	22,0	70	M 8	55	G1/8	8,0	16	40	15,5	30,0
91447	40	19	9,0	52	22,0	70	M 8	55	G1/8	8,0	16	40	15,5	30,0
91553	50	25	9,5	66	25,0	85	M10	65	G1/8	6,5	20	50	15,0	31,0
91454	50	25	9,5	66	25,0	85	M10	65	G1/8	6,5	20	50	15,0	31,0
91561	63	25	10,0	80	30,0	100	M10	80	G1/8	8,5	20	63	15,0	31,0
91462	63	25	10,0	80	30,0	100	M10	80	G1/8	8,5	20	63	15,0	31,0

\* Swing clamps may only be loaded during the clamping stroke Y.

## No. 6829ER/EL

### Swing clamp, pneumatic, screw-in version

#### double-acting

Piston rod non-rusting, polished. Body is made of aluminium, anodised. HART-COAT® surface for wear-resistance. Including screw and spring washer for simple setting of the clamp arm position.

#### Mounting:

- with grooved nut 6829N (DIN 70852)
- with threaded flange 6829GF

#### Accessories (not included in pack):

- Clamping arm 6829SP
- Grooved nut 6829N
- Thread flange 6829GF
- Clamping screw 6880



#### Recommendations



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No. 6829N, page 152



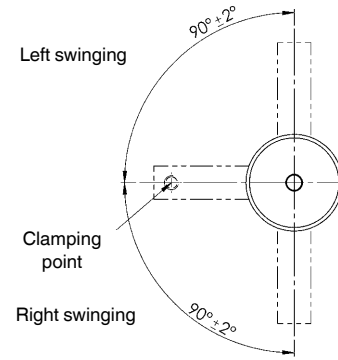
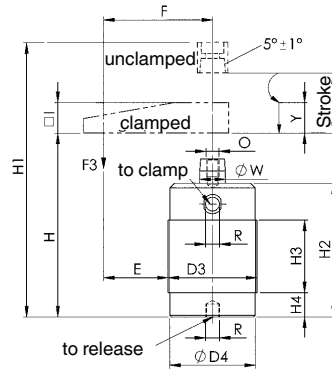
No. 6829GF, page 152

Order no.	Size	right swinging	left swinging	F3 [kN]	Connecting thread for clamping screws	Weight [g]
560062	12	●	-	0,03	M4	100
560027	12	-	●	0,03	M4	100
560063	16	●	-	0,06	M4	150
560028	16	-	●	0,06	M4	150
560064	20	●	-	0,08	M6	270
560029	20	-	●	0,08	M6	270
92809	25	●	-	0,17	M 6	450
92858	25	-	●	0,17	M 6	450
92817	32	●	-	0,27	M 8	550
92866	32	-	●	0,27	M 8	550
92825	40	●	-	0,45	M 8	700
92874	40	-	●	0,45	M 8	700
92833	50	●	-	0,70	M12	850
92882	50	-	●	0,70	M12	850
92841	63	●	-	1,10	M12	1000
92890	63	-	●	1,10	M12	1000

F3 = at 6 bar max. air pressure

#### Note:

Operate only with lubricated air.



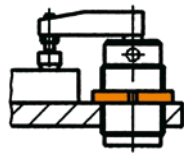
Order no.	Size	D3	dia. D4	E	F	H	H1	H2	H3	H4	I	O	R	dia. W	Piston dia.	Y Clamping stroke*	Stroke
560062	12	M25x1,5	23	22,5	35	75	105	70	48	2	12,0	M5	M5	8	12	8,6	17,6
560027	12	M25x1,5	23	22,5	35	75	105	70	48	2	12,0	M5	M5	8	12	8,6	17,6
560063	16	M30x1,5	28	26,0	41	75	105	70	48	2	12,0	M5	M5	8	16	8,5	17,5
560028	16	M30x1,5	28	26,0	41	75	105	70	48	2	12,0	M5	M5	8	16	8,5	17,5
560064	20	M35x1,5	33	30,5	48	91	134	85	64	2	16,0	M8	M5	12	20	15,0	27,0
560029	20	M35x1,5	33	30,5	48	91	134	85	64	2	16,0	M8	M5	12	20	15,0	27,0
92809	25	M40x1,5	38	30,0	50	73	118	70	35	10	16,0	M 8	M 5	14	25	13,0	26,0
92858	25	M40x1,5	38	30,0	50	73	118	70	35	10	16,0	M 8	M 5	14	25	13,0	26,0
92817	32	M50x1,5	48	35,0	60	83	132	79	40	15	19,0	M 8	G1/8	16	32	15,5	29,5
92866	32	M50x1,5	48	35,0	60	83	132	79	40	15	19,0	M 8	G1/8	16	32	15,5	29,5
92825	40	M55x1,5	53	42,5	70	87	136	83	45	15	19,0	M 8	G1/8	16	40	16,5	30,5
92874	40	M55x1,5	53	42,5	70	87	136	83	45	15	19,0	M 8	G1/8	16	40	16,5	30,5
92833	50	M65x1,5	62	47,5	80	92	148	87	50	15	25,5	M10	G1/8	20	50	14,0	30,0
92882	50	M65x1,5	62	47,5	80	92	148	87	50	15	25,5	M10	G1/8	20	50	14,0	30,0
92841	63	M80x1,5	77	50,0	90	98	153	92	56	15	25,5	M10	G1/8	20	63	13,5	29,5
92890	63	M80x1,5	77	50,0	90	98	153	92	56	15	25,5	M10	G1/8	20	63	13,5	29,5

\* Swing clamps may only be loaded during the clamping stroke Y.

#### Examples of mountings:



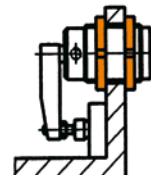
with grooved nut from below



with grooved nut from above



with threaded flange and grooved nut



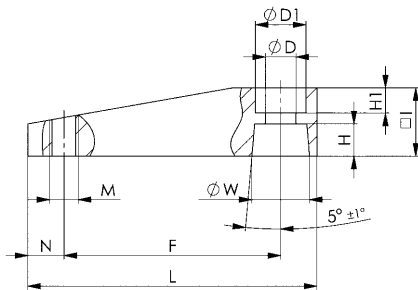
with two grooved nuts

Subject to technical alterations.

## No. 6829SP

### Clamping arm

High-strength aluminium alloy. HART-COAT® surface for wear-resistance and reduced adhesion of weld spatter. With thread for clamping screw No. 6880.



Order no.	Size	dia. D	dia. D1	F	H	H1	I	L	M	N	dia. W	Weight [g]
92486	12	5,5	9	35	5,0	5,0	12	45	M4	4	8	13
92494	16	5,5	9	41	5,0	4,0	12	51	M4	4	8	15
92502	20	8,5	14	48	5,5	7,5	16	64	M6	6	12	31
93674	25	8,5	14	50	6,5	6,0	16	66	M6	6	14	32
93682	32	8,5	14	60	9,0	7,0	19	80	M8	10	16	55
93690	40	8,5	14	70	9,0	7,0	19	90	M8	10	16	65
93708	50	10,5	17	80	10,0	9,0	25	105	M12	10	20	132
93716	63	10,5	17	90	10,0	9,0	25	115	M12	10	20	149

### Note:

Fitting clamping arm:

- 1) Set up clamping arm with spring washer and screw without play.
- 2) Turn clamping arm into position.
- 3) Hold clamping arm fixed with wrench and tighten screw.

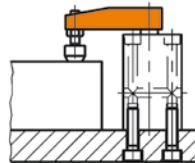
Clamping arm removal:

- 1) Hold clamping arm fixed with wrench and loosen screw.
  - 2) With light blows from below (plastic hammer), separate clamping arm from the piston rod.
- Caution! No side blows permitted!



### Application example:

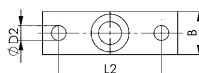
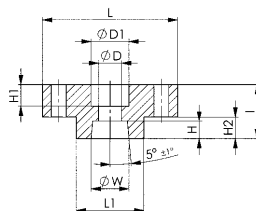
Clamping arm with clamping screw no. 6880.



## No. 6829AD

### Adapter

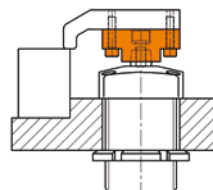
for mounting special clamping arms, with taper bore and mounting holes for arm. High-strength aluminium alloy. HART-COAT® surface for wear-resistance and reduced adhesion of weld spatter.



Order no.	Size	B	dia. D	dia. D1	dia. D2	H	H1	H2	I	L	L1	L2	dia. W	Weight [g]
92403	12/16	12	5,5	10	4,5	5,0	7,0	6	14	30	13	22	8	8
92411	20	16	8,5	14	5,5	5,5	10,5	8	20	40	18	30	12	20
92429	25	16	8,5	14	5,5	6,5	8,0	8	20	50	25	38	14	28
92437	32/40	19	8,5	14	7,0	9,0	11,0	10	25	60	30	45	16	50
92452	50/63	25	10,5	17	9,0	10,0	14,0	12	30	65	30	48	20	80

### Application example:

Adapter in use as a connecting element between an individual clamping arm and the piston rod of a pneumatic swing clamp no. 6829.





## No. 6829N

### Grooved nut (DIN 70852)

Steel, galvanized.  
Use hook spanner for tightening (see AMF catalogue „Hand Tools“).

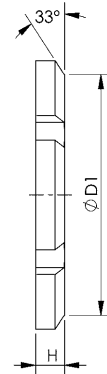
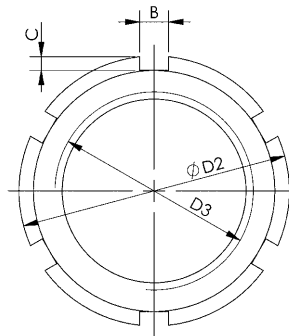


Order no.	Size	B	C	dia. D1	dia. D2	D3	H	Weight [g]
560083	12 *	5,0	2,0	32	38	M25x1,5	7	32
560084	16	6,5	2,8	38	44	M30x1,5	7	36
560085	20	7,0	3,3	43	50	M35x1,5	8	51
92924	25	7,0	3,3	49	56	M40x1,5	8	63
92932	32	8,0	3,8	60	68	M50x1,5	8	84
92940	40	8,0	3,8	67	75	M55x1,5	8	106
92957	50	11,0	4,3	76	85	M65x1,5	9	132
92973	63	11,0	4,3	91	100	M80x1,5	10	180

\* according to DIN 981

### Application example:

Grooved nut from above for locking swing clamp in a fixture.



## No. 6829GF

### Threaded flange

Aluminium.  
With four counterbored mounting holes. Female screw-in thread for swing clamp. Use grooved nut to lock in desired.



Order no.	Size	C	dia. D1	dia. D2	D3	H	H1	L	Weight [g]
560065	12	24	8	4,5	M25x1,5	8	5	35	15
560066	16	29	8	4,5	M30x1,5	8	5	40	18
560067	20	32	9	5,5	M35x1,5	9	6	45	25
93062	25	37	9	5,5	M40x1,5	9	6	50	30
93070	32	45	11	6,5	M50x1,5	12	7	60	50
93088	40	50	11	6,5	M55x1,5	12	7	65	55
93096	50	58	13	8,5	M65x1,5	15	9	75	85
93104	63	70	13	8,5	M80x1,5	15	9	88	102

### Advantage:

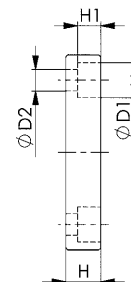
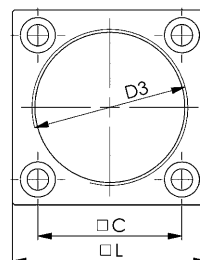
Avoids cutting a large thread in the fixture.

### Note:

The mounting holes in the flange are the same as in pneumatic clamp flange no. 6829K and 6829V.

### Application example:

Swing clamp screwed into threaded flange.



Subject to technical alterations.

## No. 6829W

### Swing Clamp with welding protection, pneumatic

#### double acting

Piston rod non-rusting, polished and protected against weld spatter. Body, welding protection and clamping arm made of aluminium. HART-COAT® surface for wear-resistance. **Magnetic piston for end-position monitoring.**  
**Clamp arm not included.**

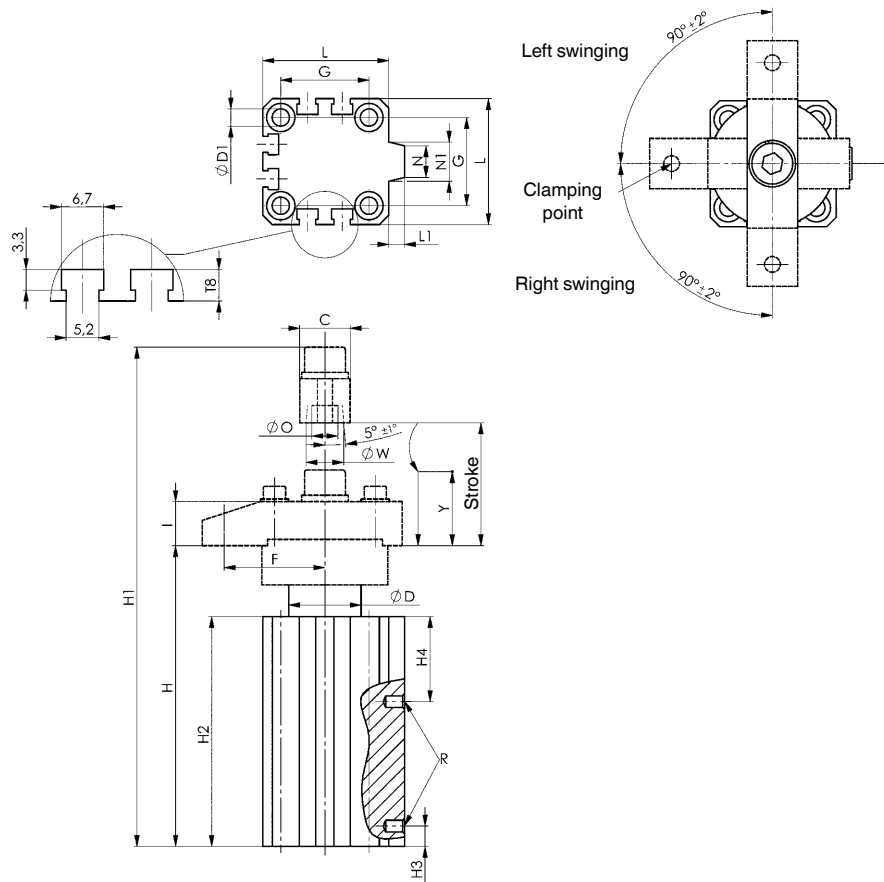
Accessories (not included in pack):

- Welding protection no. 6829WS
- Clamping arm no. 6829WSP

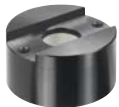
Order no.	Size	right swinging	left swinging	F3 [kN]	Weight [g]
91579	25	●	-	0,2	326
92361	25	-	●	0,2	326
91595	32	●	-	0,3	537
92387	32	-	●	0,3	537
91611	40	●	-	0,6	680
92445	40	-	●	0,6	680
91637	50	●	-	0,9	1160
92460	50	-	●	0,9	1160
91652	63	●	-	1,4	1520
92478	63	-	●	1,4	1520

#### Note:

Suitable proximity switches for end-position monitoring are available using order no. 392241.  
 Design: PUR cable 0.3 m with M8 plug connection and rotating knurled nuts.  
 Switching function: NOC. Output: PNP.  
 Operate only with lubricated air.



#### Recommendations



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#### Dimensions:

Order no.	Size	C	dia. D	dia. D1	F	G	H	H1	H2	H3	H4	I	L	L1	N	N1	dia. O	R	T8	dia. W	Piston dia.	Y Clamping stroke*	Stroke
91579	25	16	23	5,5	32,0	28	95,5	139,0	73,0	6,5	27,0	14	40	5,0	9,6	12,5	8,3	M5	5,0	12	25	10	19,5
92361	25	16	23	5,5	32,0	28	95,5	139,0	73,0	6,5	27,0	14	40	5,0	9,6	12,5	8,3	M5	5,0	12	25	10	19,5
91595	32	22	30	5,5	45,0	34	113,0	168,0	80,0	9,0	34,5	18	45	4,5	16,5	16,5	10,5	G1/8	6,5	16	32	10	25,0
92387	32	22	30	5,5	45,0	34	113,0	168,0	80,0	9,0	34,5	18	45	4,5	16,5	16,5	10,5	G1/8	6,5	16	32	10	25,0
91611	40	22	30	5,5	45,0	40	114,0	173,0	80,0	9,0	34,5	22	52	5,0	18,0	22,0	10,5	G1/8	8,0	16	40	10	25,0
92445	40	22	30	5,5	45,0	40	114,0	173,0	80,0	9,0	34,5	22	52	5,0	18,0	22,0	10,5	G1/8	8,0	16	40	10	25,0
91637	50	25	37	6,6	65,0	50	149,4	227,9	101,5	11,0	39,0	25	64	7,0	20,0	23,0	12,5	G1/4	6,5	20	50	20	39,0
92460	50	25	37	6,6	65,0	50	149,4	227,9	101,5	11,0	39,0	25	64	7,0	20,0	23,0	12,5	G1/4	6,5	20	50	20	39,0
91652	63	25	47	6,6	72,5	60	152,9	231,4	104,0	9,0	35,0	25	77	7,0	28,0	33,0	12,5	G1/4	8,5	20	63	20	39,0
92478	63	25	47	6,6	72,5	60	152,9	231,4	104,0	9,0	35,0	25	77	7,0	28,0	33,0	12,5	G1/4	8,5	20	63	20	39,0

\* Swing clamps may only be loaded during the clamping stroke Y.

