

Power Clamps

Aluminum, Pneumatic

SPECIFICATION

Types

- Type **S**: With clamping arm
- Type **O**: Without clamping arm

Switch output

- **P**: PNP

Housing

Aluminum

Square shaft

Steel, nitrided

Double-action cylinder

Pressure range 2 to 8 bar

Inductive sensor

Zinc die casting

Clamping arm for type S

Aluminum, anodized, natural color
Clamp piece, steel, zinc plated, blue passivated

INFORMATION

Power clamps GN 8620 hold and position parts, such as sheet metal panels, in automated welding processes or grip and secure parts in transfer and mounting mechanisms. The clamping arm transmits the tensioning or clamping force, which is produced pneumatically, from the knee lever mechanism to the workpiece. The quick swivel movement enables short cycle times. The pneumatic end position damping ensures smooth and gentle movement.

The opening angle of the clamping arm can be set or limited at any position. The end positions are detected by sensors integrated into the internal mechanism and do not have to be set. The entire mechanism is encapsulated in the aluminum housing as protection against dirt and water spray. A long service life is ensured by the reinforced, weightoptimized housing and the high-quality needle bearings and joints in the internal mechanism.

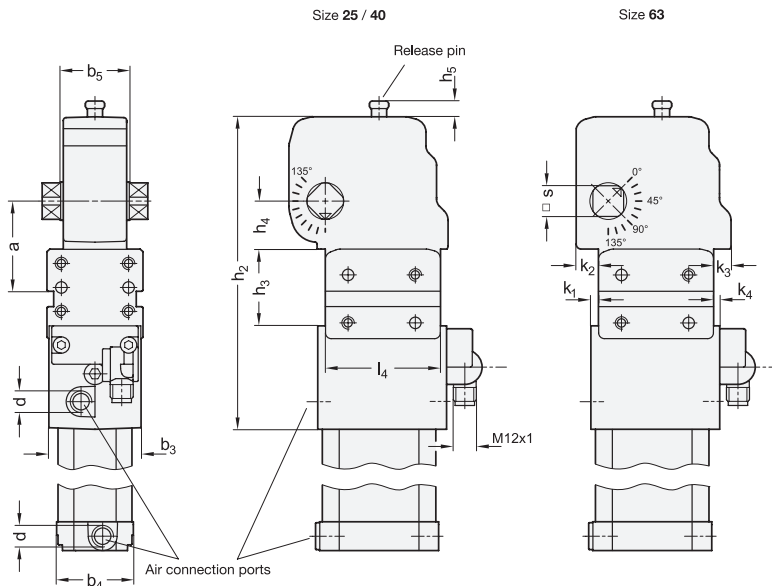


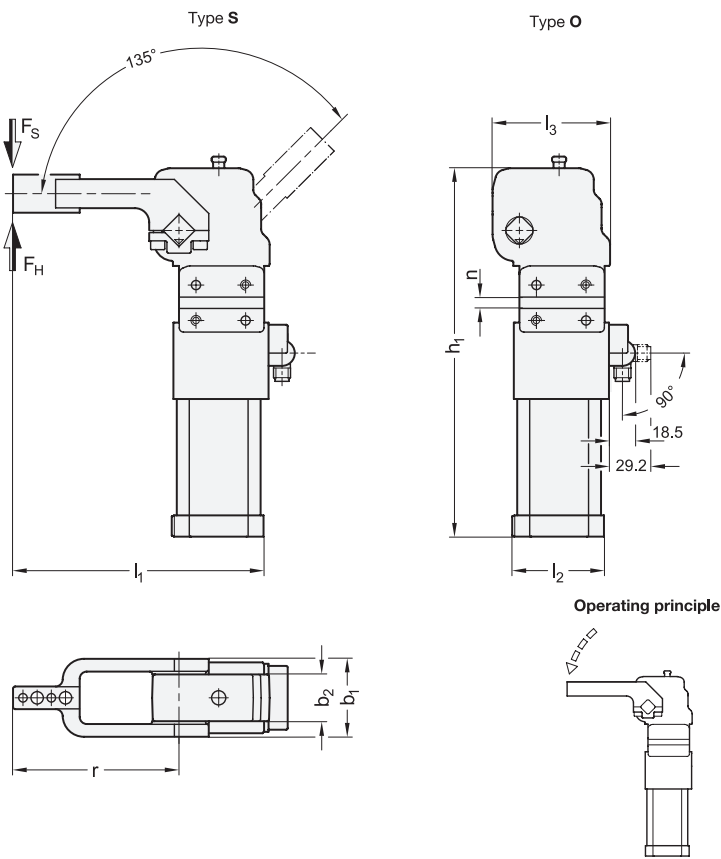
ACCESSORY

- Clamping Screws
- DIN 6325 (see page) Dowel Pins
- DIN 7979 (see page) Dowel Pins (with Internal Thread)
- GN 330 (see page 1448) Cables with Connector Coupling (4-pole, 5 or 10 Meters long)

TECHNICAL INFORMATION

- List of Pneumatic Clamps (see page)
- Fastening and Mounting Dimensions (see page)
- Technical Instructions (see page)
- Electrical Properties (see page)
- ISO-Fundamental Tolerances (see page A21)





GN 8620-S

Description	Size (Piston-Ø)	Max. clamping moment at 5 bar in Nm	F _S Clamping force at r at 5 bar in N ≈	F _H Holding capacity at r in N	a ±0.05	b ₁	b ₂	b ₃	b ₄	b ₅	d	h ₁ max.	h ₂
GN 8620-25-S-P	25	50	530	800	33.5	53	34.5	46	34	36	G 1/8	210	130
GN 8620-40-S-P	40	130	1110	3240	47	55	33.5	48	40	34.5	G 1/8	260	162.5
GN 8620-63-S-P	63	390	2700	10410	71.5	78	51.5	53	46	54	G 1/4	332.5	212

Description	Size (Piston-Ø)	h ₃	h ₄ ±0.05	h ₅ +0.1 0	k ₁	k ₂	k ₃	k ₄	l ₁	l ₂	l ₃	l ₄ ±0.1	n	r	s Square	⚖
GN 8620-25-S-P	25	28	17	8	4	4	4	4.5	132	43	60	44	6 H7	93	12	675
GN 8620-40-S-P	40	40	25	8	4	4.4	4	3	176	62	83	60	8 H7	117	16	1680
GN 8620-63-S-P	63	55	36.5	9	7.5	12	7	7.5	229	106	112	93	12 N9	144	22	4100

GN 8620-O

Description	Size (Piston-Ø)	Max. clamping moment at 5 bar in Nm	F _S Clamping force at r at 5 bar in N ≈	F _H Holding capacity at r in N	a ±0.05	b ₁	b ₂	b ₃	b ₄	b ₅	d	h ₁ max.	h ₂
GN 8620-25-O-P	25	50	530	800	33.5	53	34.5	46	34	36	G 1/8	210	130
GN 8620-40-O-P	40	130	1110	3240	47	55	33.5	48	40	34.5	G 1/8	260	162.5
GN 8620-63-O-P	63	390	2700	10410	71.5	78	51.5	53	46	54	G 1/4	332.5	212

Description	Size (Piston-Ø)	h ₃	h ₄ ±0.05	h ₅ +0.1 0	k ₁	k ₂	k ₃	k ₄	l ₂	l ₃	l ₄ ±0.1	n	s Square	⚖
GN 8620-25-O-P	25	28	17	8	4	4	4	4.5	43	60	44	6 H7	12	550
GN 8620-40-O-P	40	40	25	8	4	4.4	4	3	62	83	60	8 H7	16	1450
GN 8620-63-O-P	63	55	36.5	9	7.5	12	7	7.5	106	112	93	12 N9	22	3500

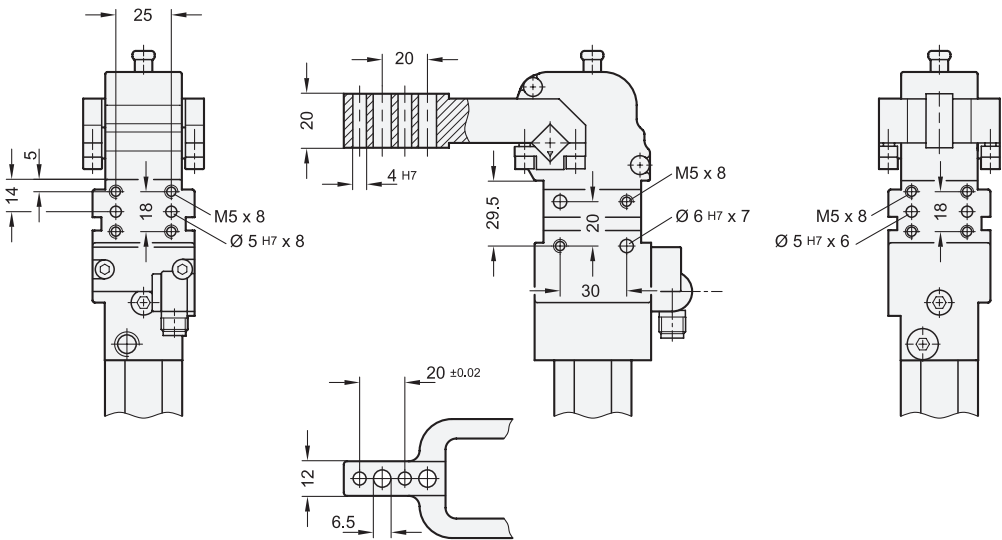


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Toggle, power and hook clamps

Fastening and Mounting Dimensions

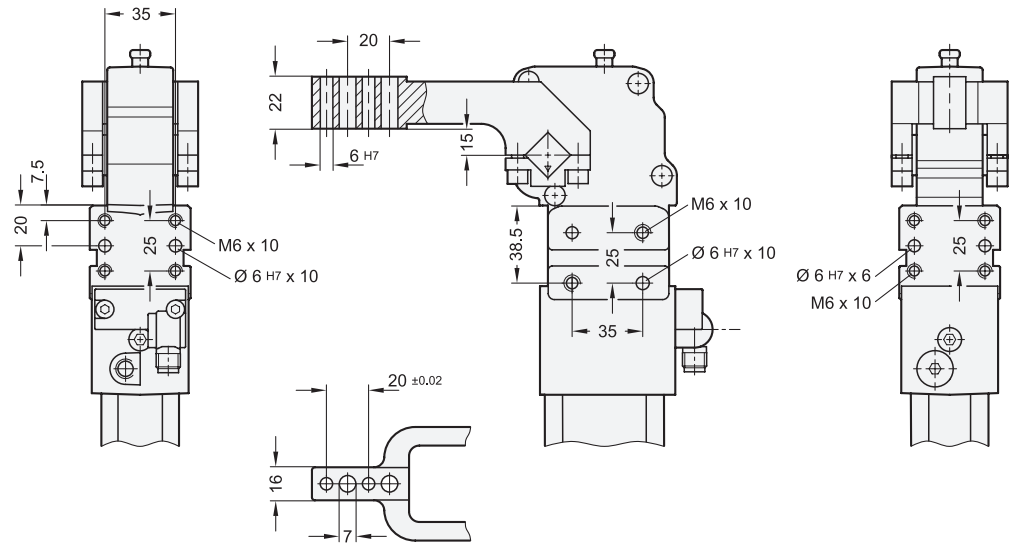
During mounting, all holes present on the respective side must be used for the mounting screws and dowel pins. For side mounting, as an alternative to positioning with the dowel pins, a parallel key can be used in the parallel adjustment in connection with elongated mounting holes on the application side. The air connections are located on the front and back side. Connections that are not needed are closed with supplied blanking plugs.

Size 25



Fastening and Mounting Dimensions

Size 40



Size 63

