ROEMHELD
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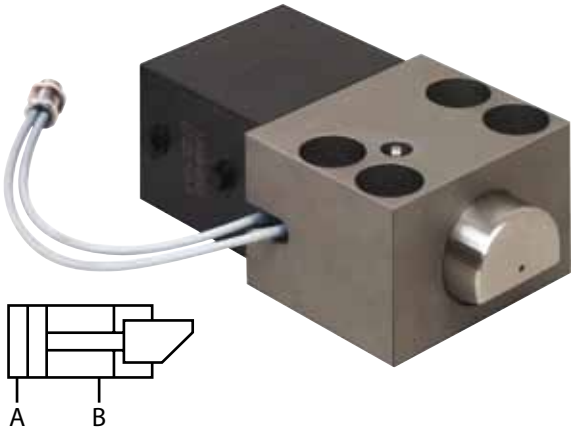
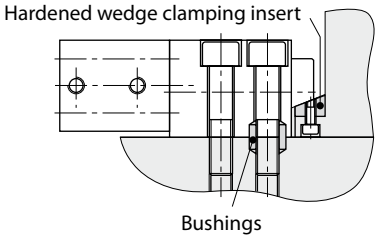
Wedge clamp, double-acting for dies with tapered clamping edge





Retrofit: In many cases, existing dies can be standardised by adding **wedge inserts.** Max. hardness: 50 HRc.

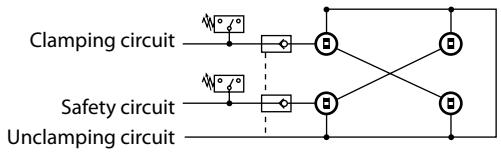
The occurring transverse forces must be absorbed by **bushings** to be drilled into the fixture plate (see table for accessories)

Please note:
In case of incorrect operation of the wedge clamping element, the clamping bolt may fully retract into the guide housing and thus cause the upper die falling off the slide.

The greasing intervals (high-temperature grease) should be scheduled in accordance with the operating conditions. **Greasing of the clamping bolt should only be made with the elements being retracted.**

Clamping elements with wedge clamping bolt must be protected against dirt, scale, swarf, coolant, etc. by means of a suitable covering.
Dies clamped by means of wedge clamping elements are subject to transverse forces which may be strong enough to displace them. Therefore, location pins or suitable limit stops should be provided, in order to keep the dies in their correct position.

When using wedge clamping elements on the press slide, it is recommended that multiple-circuit hydraulic supply of the clamping elements and pilot-controlled check valves are used in the clamping lines for securing hydraulic clamping.



Application:

- safe clamping of dies with a tapered clamping edge
- for clamping of dies on a press bed and slide
- for clamping of dies in injection moulding machines

Design:

Double-acting wedge clamp for clamping dies on a press bed or slide or for clamping dies in injection moulding machines.

The wedge clamp consists of a hydraulic block cylinder and a piston guided in a housing.

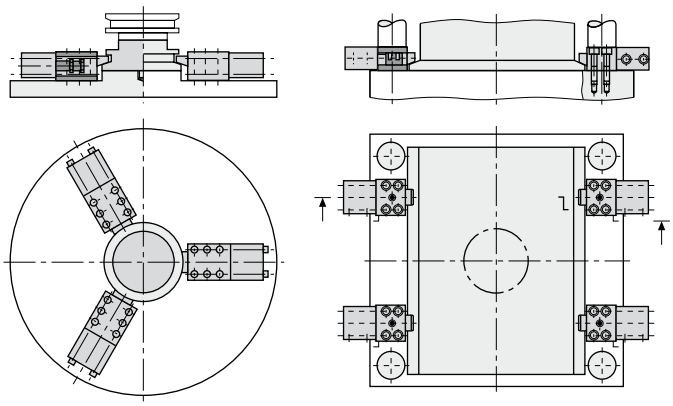
The clamping bolt is provided with 20° bevel to clamp on the tapered clamping surface of the die.

Based on the internal design of the wedge clamp and the 20° clamping bevel the system is providing internal friction. For reasons of safety and in order to comply with the specifications of the 'Machinery' directive no. ML98/37/EC, hydraulic pressure must always be maintained.

When upper dies are clamped by wedge clamps, they must be secured mechanically when maintenance work is carried out.

Special features:

- available in sizes between 25 kN and 1250 kN
- high functional reliability ensured by position monitoring and an automatic cycle
- rugged and well-proven clamping element with high degree of safety and long service life



Principle of die clamping
In general, dies with round geometry are clamped using three clamping elements for each half, whereas dies with square or rectangular geometry are clamped using four clamping elements for each half.

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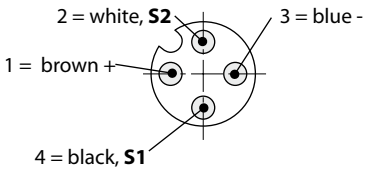
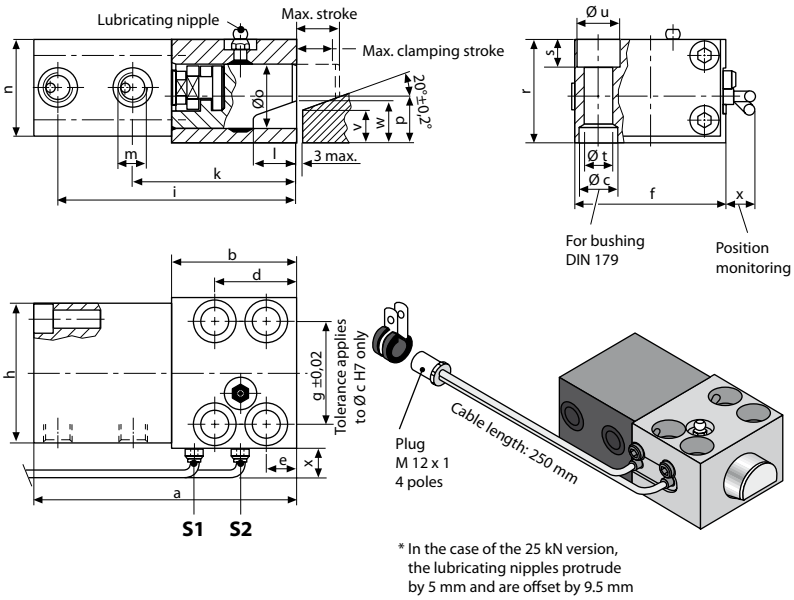
Wedge clamp, double-acting with position monitoring (lateral fastening)

The inductive proximity switches are installed in the guide housing. They are activated by the clamping bolt. The contact areas are designed in such a way that one signal each is provided for the bolt in its initial position and in the clamping position.

Resistant to temperatures of up to 100°C, 120°C for 1000 working hours.
Cable length: 250 mm
4-pole plug

Pin assignment:





* In the case of the 25 kN version, the lubricating nipples protrude by 5 mm and are offset by 9.5 mm

Connecting lead with screw coupling:
cable length 5 m **part no. 5700013**
cable length 10 m **part no. 5700014**

*** Clamping force ** Permissible retention force** (for details, please see 2.2400, page 2)

Max. clamping force * (kN)	**25**	**50**	**100**	**160**	**250**	**400**	**630**
Perm. retention force** (kN) Screw property class 8.8	35	65	130	210	320	520	820
Max. operating pressure (bar)	**350**	**275**	**350**	**350**	**350**	**350**	**350**
Cylinder-Ø (mm)	25	40	50	63	80	100	125
Max. stroke (mm)	20	25	25	30	32	40	40
Clamping stroke (from/to) (mm)	15 – 18	18 – 22	19 – 22	23 – 27	24 – 29	30 – 36	30 – 36
Max. oil consumption (cm^3)	10	31	49	94	161	314	491
a (mm)	122	157	190	227	267	310	375
b (mm)	58	78	100	125	150	180	225
Ø c H7 x depth (mm)	18/7	26/9	30/11	35/11	48/13	55/16	62/16
d (mm)	38	46	58	75	78	95	108
e (mm)	14	16	20	25	26	32	38
f (mm)	70	95	120	150	200	240	280
g (mm)	48	65	85	106	140	180	210
h (mm)	65	85	100	125	160	200	230
i (mm)	111	146	177	210	246	285	344
k (mm)	76	102	127	151	184	215	272
l (mm)	20	25	26	32	40	45	50
m	G ¼	G ¼	G ¼	G ½	G ½	G ½	G ½
n (mm)	45	63	75	95	120	150	180
Ø o (mm)	30	40	55	70	80	100	125
p (mm)	21,5	28	37	49	55	75	85
r (mm)	48	65	80	105	125	160	190
s (mm)	13	18	20	26	32	38	44
Ø t (mm)	13	17	21	26	33	39	45
Ø u (mm)	20	26	32	40	48	57	66
v (mm)	15	18	25	30	30	50	60
w (mm)	19,5	23,5	30,5	37	38	60	70
x (mm)	12	5	0	0	0	0	0
Screw DIN 912-8.8 (4 pieces)	M 12	M 16	M 20	M 24	M 30	M 36	M 42
Tightening torque (Nm)	86	210	410	710	1450	2520	4050
Weight (kg)	2,4	5,8	10,6	21	40	74	125
Part no.	**8.2403.0500**	**8.2404.0500**	**8.2405.0500**	**8.2406.0500**	**8.2407.0500**	**8.2408.0500**	**8.2409.0500**
Accessories Bushings DIN 179	12 x 12	17 x 16	21 x 20	26 x 20	32 x 25	38 x 30	44 x 30
Part no.	**3300 285**	**3300 287**	**3300 288**	**3300 289**	**3300 420**	**3300 430**	**3300 440**

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