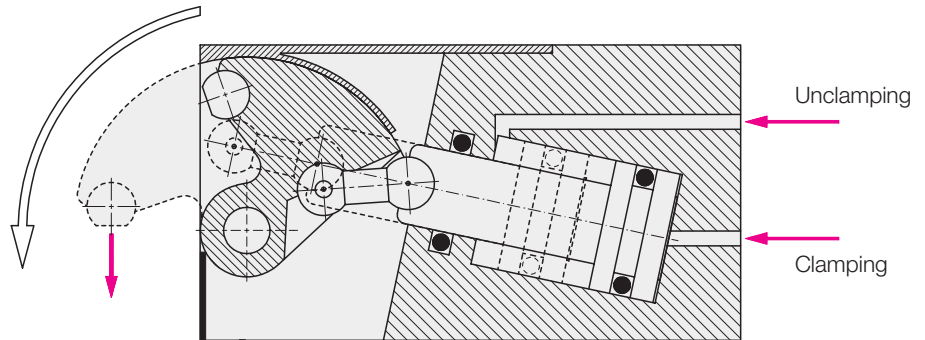




Flat Clamp

double acting, max. operating pressure 500 bar



Application

The flat clamp is a compact and flat clamping element with large clamping stroke.

This clamp is designed for clamping of flat workpieces in fixtures on machine tools or for welding applications. It is well protected against coolants and swarf and resistant to welding spatter.

Description

The flat clamp is a double-acting hydraulic clamping element where the piston acts via a con-rod onto a clamping lever. In unclamped position, the clamping lever is completely retracted and the workpieces can easily be inserted from above. A clamping recess which is larger than the clamping lever is sufficient as clamping point.

The element compensates transverse forces at the clamping point. The clamping forces are introduced vertically to the base at the clamping height „h3“, therefore introducing no additional turning moments.

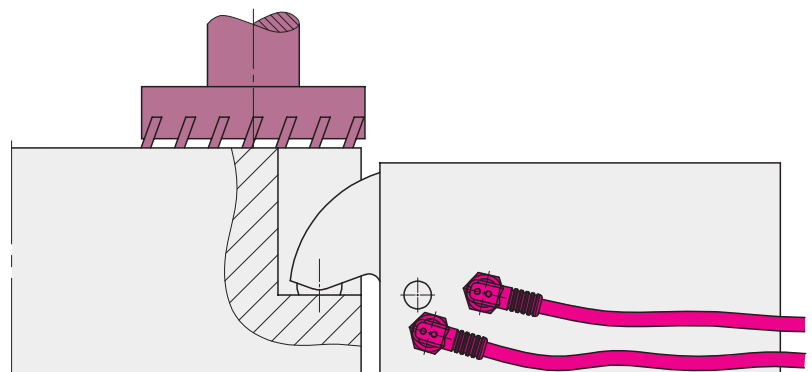
Advantages

- flat and compact design
- high protection against swarf and welding spatter
- large clamping stroke
- clamping lever is completely retracted in unclamped mode
- transverse forces at the clamping point are compensated
- reduced maintenance
- Position monitoring, optional

Important notes

For metal-cutting and vertical mounting position (clamping lever upwards) it is recommended to remove the cover plate. Operating conditions, tolerances and other data see data sheet A 0.100.

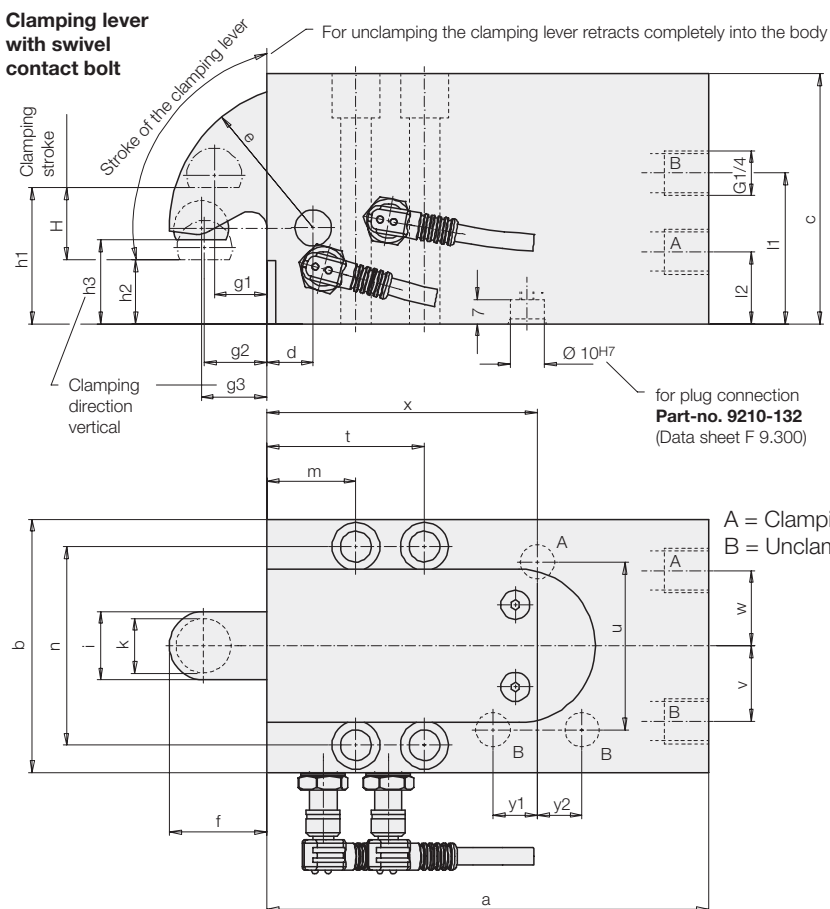
Application example with inductive position monitoring



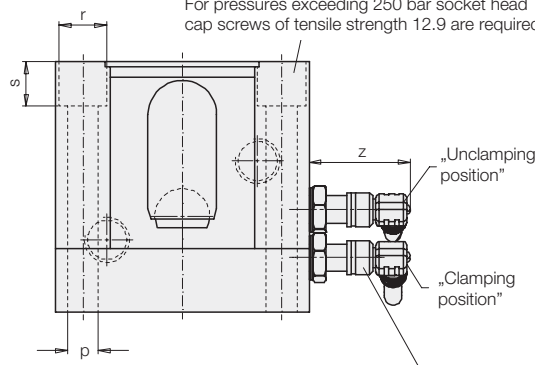


ROEMHELD

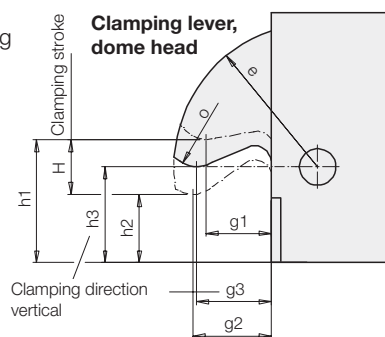
Clamping lever with swivel contact bolt



For pressures exceeding 250 bar socket head cap screws of tensile strength 12.9 are required



Accessory inductive proximity switch M 8x1 Type B, see data sheet 1.552 (optionally at the right or left side)



Accessories	Part-no.
Screw plug G 1/4	3610-006
Plug connection NW5	9210-132
Ind. proximity switch	3829-098
Right angle plug with cable	3829-099

	Clamping lever dome head		with swivel contact bolt		dome head		with swivel contact bolt			
Clamping force at h3/h1	100 bar	2.5/2.8	2.7/2.9	4.3/4.7	4.4/4.7	500 bar	12.3/13.9	13.6/14.6	21.3/23.5	22/23.6
H Clamping stroke max.		[mm]	12	9	16					10
Oil volume clamping / unclamping		[cm ³]	9.57	5.65	20.11					12.25
a		[mm]	108.5	108.5	129					129
b		[mm]	60	60	75					75
c		[mm]	58.5	58.5	73.5					73.5
d		[mm]	10	10	13.5					13.5
e		[mm]	34	34	42					42
f		[mm]	24	24	28.5					28.5
g1		[mm]	16	14	18					17.5
g2		[mm]	20	16	22.5					19
g3		[mm]	19.5	16	22					19
h1 Clamping height, max.		[mm]	30	28	38					34.5
h2 Clamping height, min.		[mm]	18	19	22					24.5
h3 Clamping height, vertical clamping direction		[mm]	21	20	28					26
i		[mm]	15	15	20					20
k		[mm]	-	12	-					16
l1		[mm]	45	45	44					44
l2		[mm]	30	30	21					21
m		[mm]	20.5	20.5	26					26
n		[mm]	47	47	58					58
o		[mm]	6	-	8					-
p		[mm]	6.6	6.6	8.5					8.5
r		[mm]	11	11	13.5					13.5
s		[mm]	12	12	13					13
t		[mm]	40.5	40.5	46					46
u ±0.02		[mm]	42	42	44					44
v		[mm]	19	19	22					22
w		[mm]	19	19	0					0
x		[mm]	76.5	76.5	66					66
y1 ±0.02		[mm]	13	13	-					-
y2 ±0.02		[mm]	-	-	10					10
z		[mm]	32	32	29					29
Part-no.			1824-201	1824-202	1824-261					1824-262