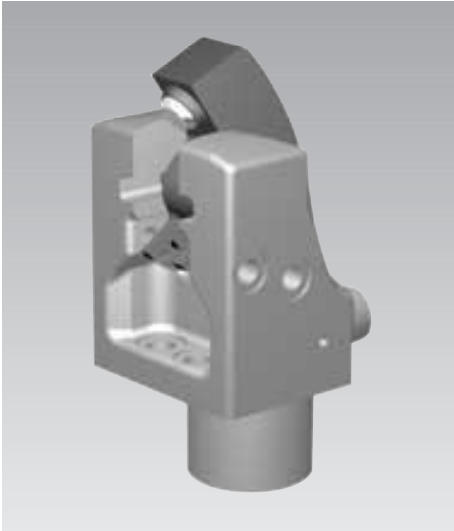




Slide Pivot Clamp

double acting, max. operating pressure 500 bar



Description

In the case of the slide pivot clamp the piston force is deviated by 180° by the clamping lever and is available as clamping force with virtually no loss of efficiency. Kinematics of the slide pivot clamp allow sliding back of the clamping lever during unclamping for unimpeded insertion of the workpieces.

The clamping lever is available with smooth swivel contact bolt and in a longer version with dome-head contour.

Position of the clamping lever can be monitored by inductive proximity switches or pneumatic jets.

The pivot slide clamp can be installed immersed up to the flange surface in a hole of the fixture body or via intermediate plates which are available as an accessory. For both solutions there is the possibility to supply the hydraulic oil not only by fitting connection but also via drilled channels in the fixture body.

Important notes

The clamping lever must not be impeded during swivelling movement. The slots of the sliding pad have to be checked from time to time with regard to contamination by swarf and cleaned, if required.

Operating conditions, tolerances and other data see data sheet A 0.100.

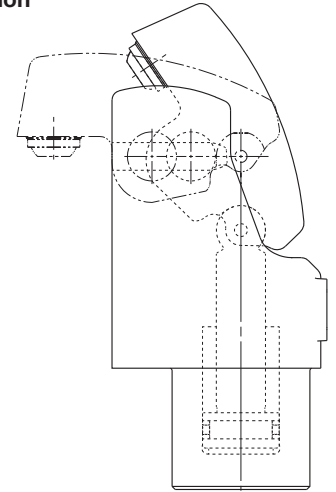
Application

The slide pivot clamp has in relation to its base a very high clamping force. The clamps are particularly suitable for clamping tasks on machines with high performance and reduced space availability on the fixture. The workpieces can be inserted from above without any impediments. A clamping recess a little bit wider than the clamping lever is sufficient as clamping surface. This characteristic indicates their use for clamping of aluminium parts, which are very sensitive against deformation, with correspondingly reduced oil pressure.

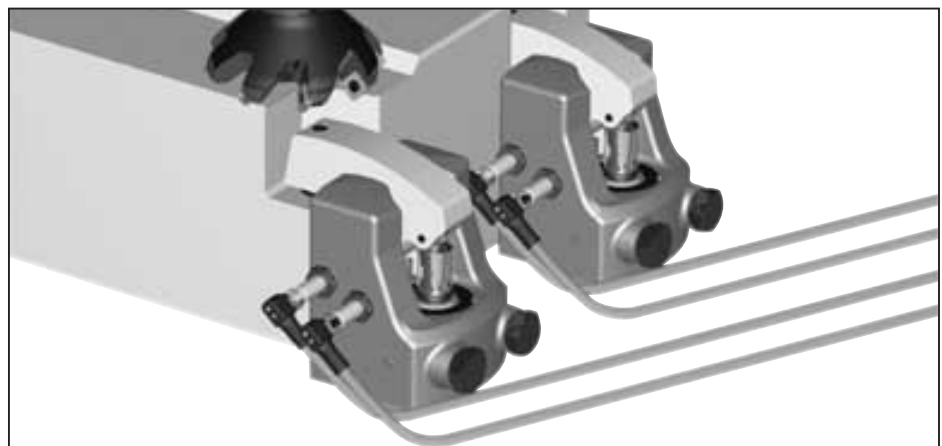
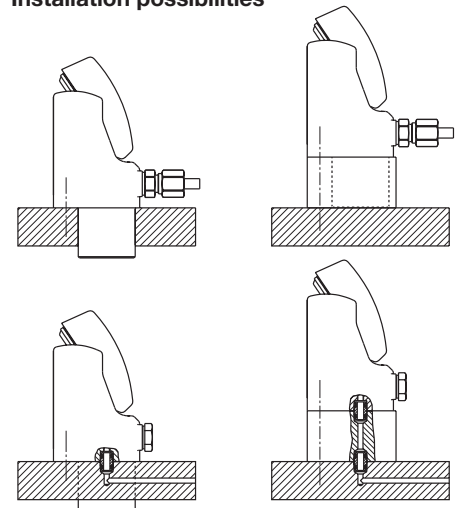
Advantages

- 3 sizes
- High clamping force, up to 50 kN
- Minimum dimensions
- High efficiency
- Minimum transverse forces act on the workpiece in the clamping area
- Increased rigidity allows compensation of transverse forces at the clamping point
- Unimpeded loading and unloading of the fixture
- Inductive or pneumatic monitoring of the clamping lever available as accessory
- Monitoring of the unclamping position and the usable clamping range is possible
- 2 different clamping levers are available
- Clamping lever can be swivelled into small recesses
- Partially immersed mounting of the body
- Oil supply alternatively via fittings or drilled channels

Function

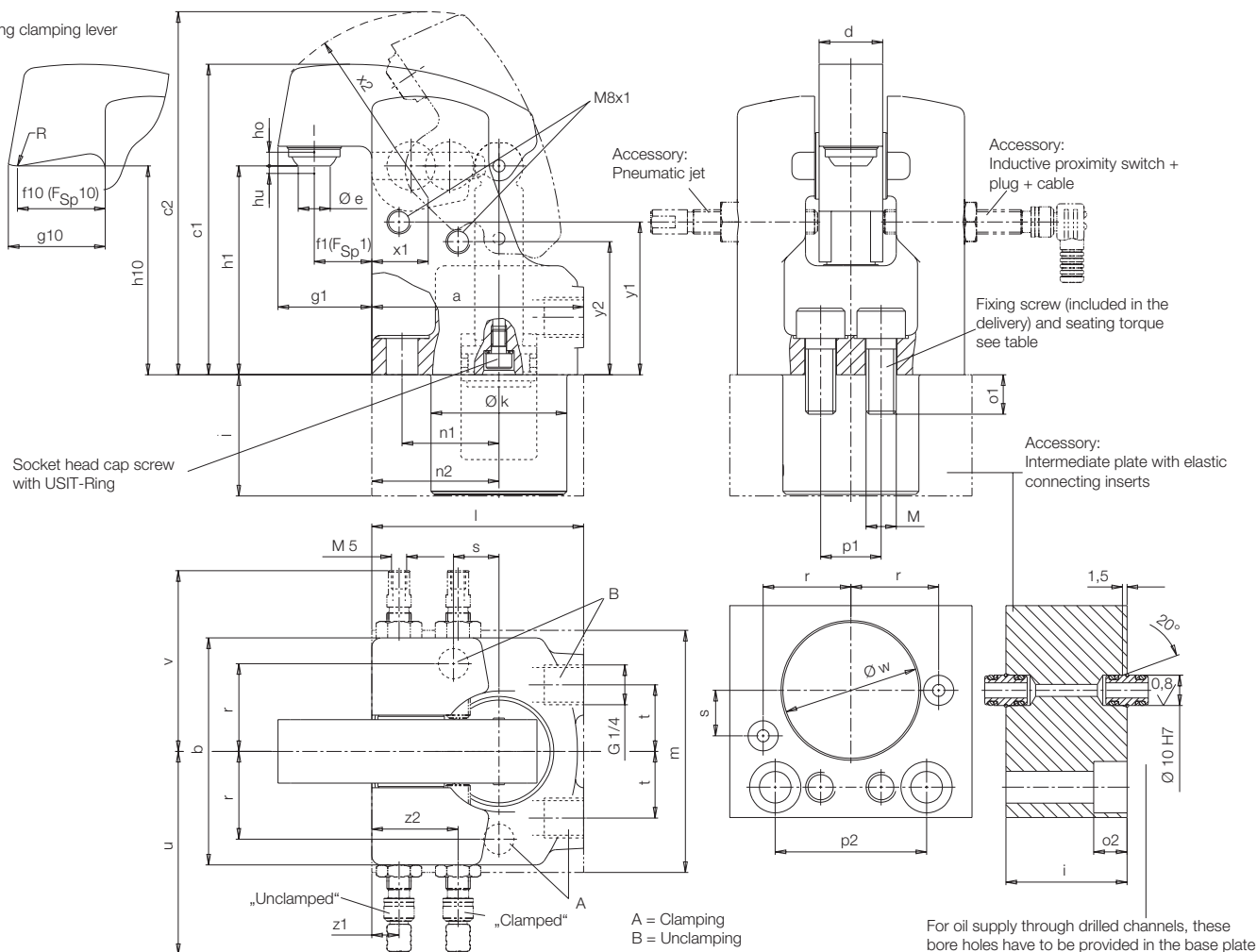


Installation possibilities





Variant: long clamping lever



For oil supply through drilled channels, these bore holes have to be provided in the base plate

Clamping force F_{Sp1} / F_{Sp10} at 500 bar	[kN]	20/15	32/23	50/37
Oil volume clamping	[cm ³]	14	25	49
Oil volume unclamping	[cm ³]	8	15	30
a	[mm]	70	84	99
b	[mm]	75	97	113
c1 / c2	[mm]	103/120	120/141.5	150/175
d	[mm]	21	29	33
Ø e	[mm]	10	10	20
f1 / f10	[mm]	19/29	20/34	25/40
g1 / g10	[mm]	31/32	36/37	44/45
h1 / h10	[mm]	69	81.5	101.5
ho / hu, upper / lower clamping point	[mm]	4.5/2.5	5.0/3.0	6.0/3.5
i	[mm]	40	40	40
Ø k	[mm]	44.9	54.9	59.9
l	[mm]	70	88	100
m	[mm]	80	100	120
M, socket head cap screw DIN 912/ seating torque	[Nm]	M10/87	M12/150	M16/370
n1 / n2	[mm]	32/42	39/50	47/62
o1 / o2	[mm]	13/11	15/13	16/17
p1 / p2	[mm]	20/50	30/64	28/72
r ±0.02	[mm]	29	35	38
R	[mm]	8	10	12
s ±0.02	[mm]	15	20	20
t	[mm]	22	26	35
u, approx.	[mm]	78	82	94
v, approx.	[mm]	72	76	78
Ø w +0.1, mounting hole	[mm]	45	55	60
x1 / x2	[mm]	18.7/61.5	22/70	28/88
y1 / y2	[mm]	50.5/44	59/57	73/68
z1 / z2	[mm]	9/28.5	9/33	9.5/37

Part-no. with swivel contact bolt	1824-060	1824-110	1824-160
Part-no. with long clamping lever	1824-080	1824-130	1824-180

For manifold mounting remove socket head cap screws with USIT rings and screw-in 2 plugs G 1/4 in the body. Elastic connecting inserts see accessories.

Accessories	Part-no.
Screw plug G 1/4	3610-006
Elastic connecting insert	9210-132
2 off required without intermediate plate, or 4 off with intermediate plate	
Induct. proximity switch	3829-164
Plug + cable	3829-099
Pneumatic jet	3612-020
Lock nut	3301-566
Intermediate plate for 1824-060,-080	3456-384
Socket head cap screw DIN912-M10x45 12.92x	3300-253
Intermediate plate for 1824-110,-130	3456-385
Socket head cap screw DIN912-M12x45 12.92x	3300-765
Intermediate plate for 1824-160,-180	3456-386
Socket head cap screw DIN912-M16x50 12.92x	3300-264