



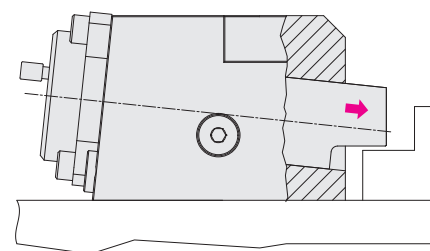
Wedge Clamps for Flat Clamping Edge

single acting, operating force 25 up to 120 kN, clamping with spring force and hydraulic unclamping, without and with position monitoring



Advantages

- Safe clamping of dies with flat clamping edge
- High operating safety due to clamping with spring force as well as inductive and visual position monitoring
- Position monitoring on the left or right side
- Clamping element with self-locking
- Dimensions in accordance with Euromap guidelines
- No clamping edge bevels are required
- Variable clamping edge heights (spacer plates)
- Tolerance of clamping edge height ± 0.15 mm
- The pressure of the machine hydraulics of 160 bar is sufficient for unclamping
- Very sturdy and compact design
- Housing with stainless coating
- Flexible connecting possibilities by 4 hydraulic connections



Application

The single-acting wedge clamps are suitable for safe clamping of moulds and dies with flat clamping edge in injection moulding machines, punches and presses.

Description

The wedge clamps consist of a guide housing with one-piece clamping bolt.

Clamping cycle: the clamping bolt which is inclined by 6° performs an idle stroke and simultaneously a clamping stroke. The clamping bolt is lowered axially onto the clamping edge. The 6° angle, the spring force in the clamping bolt and the frictional engagement at the clamping point create a self-locking connection. The wedge clamp should preferably be used with position monitoring.

Technical data

Max. operating force	[kN]	25 – 120
Clamping force	[kN]	2.4 – 11
Unclamping pressure	[bar]	160
Max. operating pressure	[bar]	200

Maximum operating force

This is the force that can be absorbed by the clamping element and the fastener (screws).

Clamping force

This is the force the clamping element applies to the workpiece. The die or the tool is clamped on the fixture plate by means of this force.

Important notes!

Please observe: in case of incorrect operation of the wedge clamps, the clamping bolt may fully retract into the guide housing and thus cause a die half falling off.

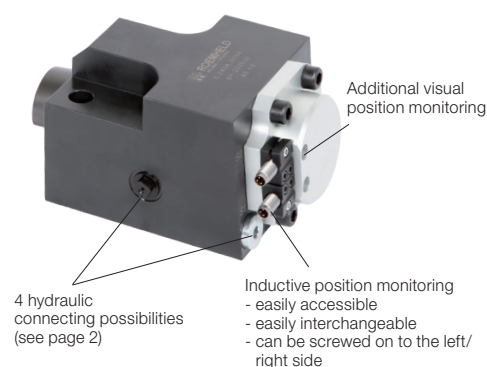
Versions

- without position monitoring
max. temperature: 160 °C
(250 °C on request)
- with position monitoring
max. temperature: 80 °C

Position monitoring

The integrated position monitoring is coupled to the clamping bolt in a space-saving way and signals:

1. Clamping bolt in unclamping position
2. Clamping bolt in clamping position
3. Error message when overrunning the clamping position

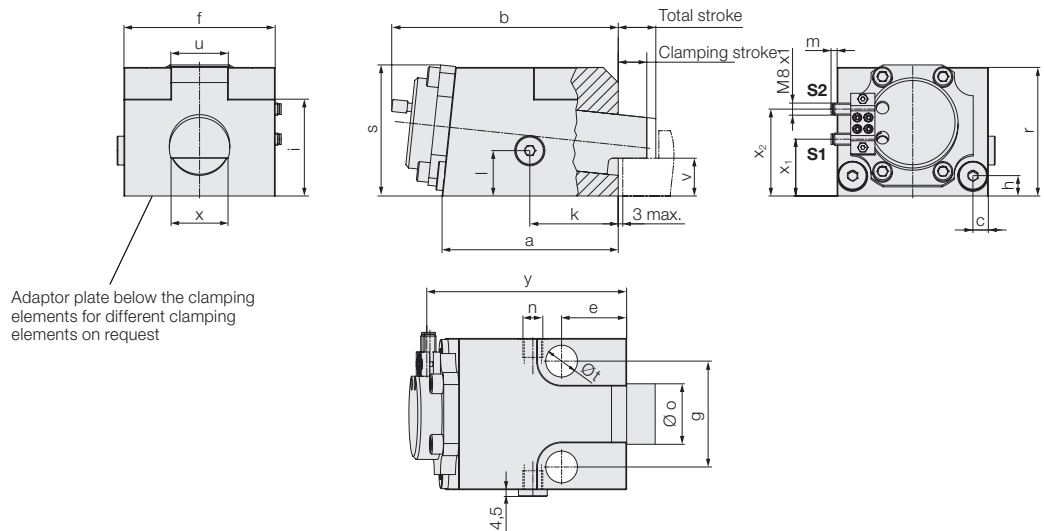


Dimensions Technical data

Wedge clamps

with position monitoring

Clamping bolt with a 6° bevel



Max. admissible operating force	[kN]	25	50	80	120	120
Clamping force by spring	[kN]	2.4	5	5	11	11
Unclamping pressure	[bar]	160	160	160	160	160
Max. operating pressure	[bar]	200	200	200	200	200
Cylinder Ø	[mm]	35	60	60	85	85
Max. oil volume	[cm ³]	14	39	39	90	90
Total stroke	[mm]	20	25	25	40	40
Clamping stroke	[mm]	14	19	19	30	30
a	[mm]	100	120	120	200	200
b	[mm]	131	153	153	245	245
c	[mm]	9	10	10	15	15
e min. / e max.	[mm]	10/37	12/45	15/43	15/77	18/74
f	[mm]	88	100	100	180	180
g (± 0.2 mm)						
mounting grid as per Euromap	[mm]	35/M12/12.9	70/M16/12.9	70/M20/12.9	140/M20/12.9	140/M24/8.8
Tightening torque	[Nm]	85	220	300	470	550
h	[mm]	13	13.5	13.5	30	30
i	[mm]	–	64	64	94	94
k	[mm]	55	62	62	115	115
l	[mm]	14	30	30	23	23
m	[mm]	–	4	4	–	–
n	[mm]	G 1/8	G 1/4	G 1/4	G 1/4	G 1/4
Ø o	[mm]	18	40	40	65	65
r	[mm]	60	85	85	120	120
s	[mm]	62	87	87	120	120
Ø t	[mm]	13	17	21	21	26
u	[mm]	–	38	38	90	90
v (± 0.15)	[mm]	20	25	25	40	40
x ₁ /x ₂	[mm]	25/47	38/58	38/58	58/84	58/84
y	[mm]	114	132	132	212	212
Weight	[kg]	2.5	6.5	6.5	29	29
Part no.				on request		
without position monitoring up to 160 °C*						
with position monitoring up to 80 °C		824035510	824045510	824045520	824055510	824055520

* Higher temperatures up to 250 °C on request

Different operating forces, clamping edge heights, mounting grids or dimensions of the housing on request

Technical data

for inductive proximity switches

Operating voltage	10 ... 30 V DC
Ripple	max. 15%
Switching function	interlock
Output	PNP
Housing material	steel, corrosion resistant
Code class (DIN 40050)	IP 67
Part no.	638290980

Connecting cable with plug

Environmental temperature TA	[°C]	–25 ... +80
Min. distance of the switching positions	[mm]	8
Type of connection		Plug
LED function display		in the plug
Constant current max.	[mA]	200
Rated operating distance	[mm]	1.5
Protected against short circuits		yes
Connecting cable with plug, 5m	Part no.	3829099
Connecting cable with plug, 10m	Part no.	3829139

Electric circuit diagram

