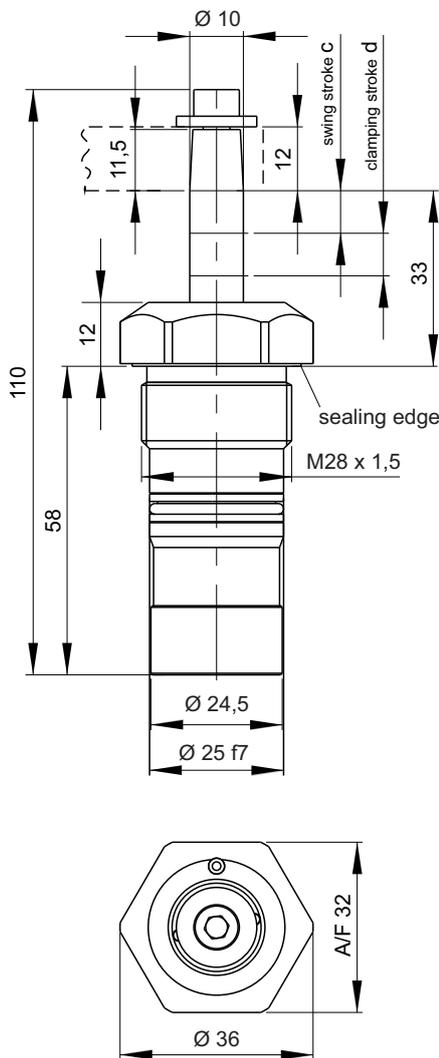


# SWING CLAMP CYLINDERS

threaded body, single-acting/double-acting, pmax. 350 bar



### Important notice:

When installing the cylinder into the fixture plate the ventilation channel must be protected from ingress of liquids and dirt. If the swing clamp cylinder is screwed into a blind bore, the ventilation must be guaranteed through a protected bore. Before initial operation the swing clamp cylinder must be fully ventilated.

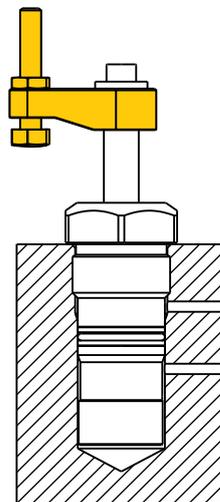
### Accessories

Clamp arms and contact bolts are not included in scope of supply. They're sold separately as accessories (see page 2).

Strokes		c	d
single-acting	[mm]	10	6
double-acting	[mm]	8	8

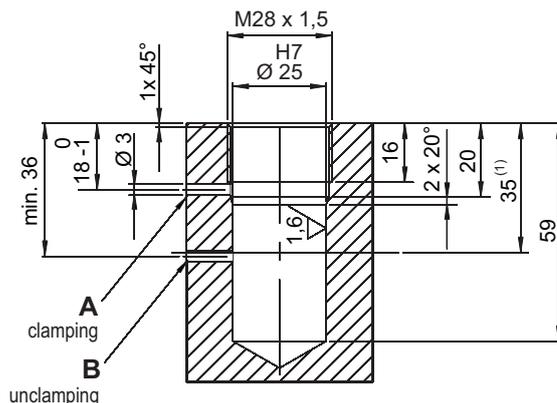
### Installation variation:

= Accessories



### Installation contour:

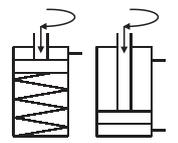
<sup>(1)</sup>Plate thickness at least 35 mm for single-acting types and depth of the fit diameter



D

Webcode: 024003

We also design and manufacture special designs



### Housing design:

Type D  
(threaded body with drilled channels)

### Description:

These swing clamp cylinders operate single-acting with spring reset or double-acting hydraulically. The hydraulic oil supply can be done by drilled channels in the fixture body.

For any risk of exceeding the permitted volume flow a throttle check valve must be interposed into the oil supply line (see data sheet 700-15). Counter-hold the clamp arm when tightening or loosening the counter nut in order to prevent torque transfer to the piston rod and to avoid damage to the ball guide.

The clamping motion is initiated with a superimposed swing and stroke movement. After that, a linear clamping stroke follows.

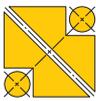
Cylinders with swing angles 0°, 45°, 60°, 90° are available as standard. The clamping force is depending from the clamp arm length.

Except from standard clamp arms also special clamp arms can be assembled. The maximum operating pressure of 350 bar applies only at a maximum of 26 mm clamp arm length.

The safety instructions for swing clamp cylinders in our catalogue or on our website and the current accident prevention regulations must be considered.

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# Swing clamp cylinders / threaded body

## Technical data:

<b>Piston Ø</b>	[mm]	<b>14</b>
Rod Ø	[mm]	10
Oil requirement clamping stroke	[cm³]	1,2
Max. volume flow	[cm³]	2,5
Swing stroke (single-acting)	[mm]	10
Clamping stroke (single-acting)	[mm]	6
Swing stroke (double-acting)	[mm]	8
Clamping stroke (double-acting)	[mm]	8
Min. operating pressure <sup>(1)</sup>	[bar]	25
Max. operating pressure <sup>(1)</sup>	[bar]	350
Clamping force at 100 bar	[kN]	0,5
Clamping force at 350 bar	[kN]	2,2

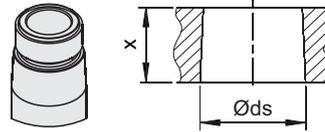
<sup>(1)</sup> Value only valid with single clamp arm L = 26 mm, (pictures on page 1) Order no. SPE-126-001

## Clamp arms:

For these swing clamp cylinders, standard clamp arms are available as accessories. All necessary information about this can be found on the data sheet **240-0 «Clamp arms»** in the catalogue or at [www.hydrokomp.de](http://www.hydrokomp.de). Special clamp arms are available on request.

## Compatible clamp arms: **a** **b**

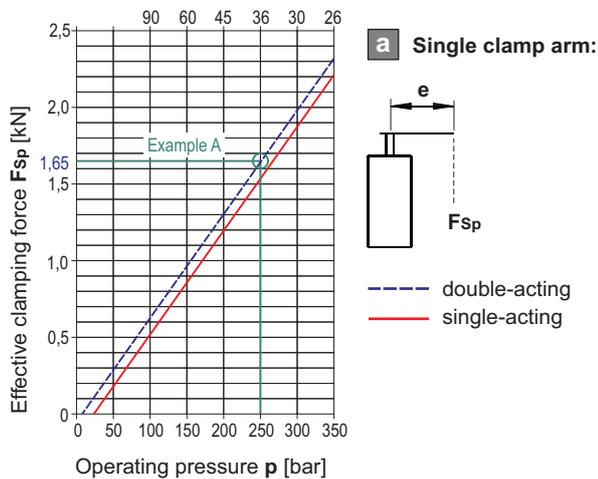
## Taper (SPK):



<b>Piston Ø</b>	[mm]	<b>14</b>
Ø ds	[mm]	10
x	[mm]	12
Taper ratio		1:10

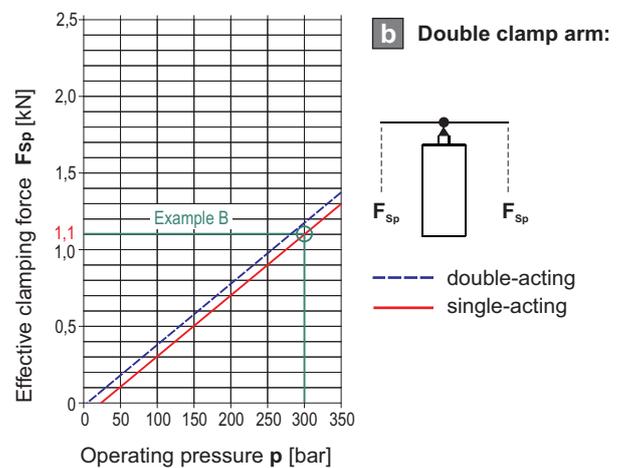
## Effective clamping force $F_{Sp}$ depending from operating pressure $p$ :

Max. clamp arm length  $e$  [mm] only relevant for clamp arms of this type.



### Example A:

- double-acting cylinder
- present operating pressure  $p = 250$  bar
- clamp arm length  $e = 36$  mm
- resulting clamping force  $F_{Sp} \sim 1,65$  kN



### Example B:

- single-acting cylinder
- present operating pressure  $p = 300$  bar
- resulting clamping force  $F_{Sp} \sim 1,10$  kN

The retraction force of the spring in single-acting swing clamp cylinders reduces the clamping force slightly. To achieve the same clamping force as with double-acting cylinders, the operating pressure must be increased slightly.

## Order number key:

Example **SSZY** - **LD60** - **B1408** - **K00** - **003**

**1** **Swing motion:** right turning = **R**, left turning = **L**, neutral  $0^\circ$  = **N**  
**Operating method:** single-acting = **E**, double-acting = **D**  
**Swing angle [degree]:** standard = **0, 45, 60, 90**

**2** **Housing design:** threaded body = **D**  
**Piston Ø [mm]:** standard = **14**  
**Clamping stroke [mm]:** single-acting 6 = **06**, double-acting 8 = **08**

**3** **Clamp arm holder:** taper = **K**  
**Overload protection:** without = **0**  
**Position control:** without = **0**

**4** **Oil supply:** drilled channels = **003**

For additional help in model selection, see data sheet «Swing Clamp Cylinders - Selection Guide».