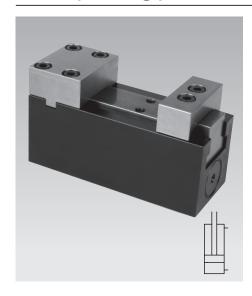


## **Hydraulic Vises, Long Stroke**

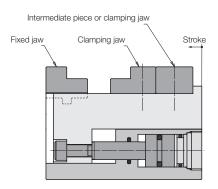
# clamping against the fixed jaw, double acting, max. operating pressure 250 bar



#### **Advantages**

- Very compact design
- High rigidity and precision
- Long strokes
- Double-acting function
- Fixtures without pipes possible
- Exchangeable jaws
- Pneumatic contact or seat check in the fixed jaw possible
- Good swarf protection
- Port for central lubrication
- Mounting position: any

#### **Functional principle**



#### **Application**

Hydraulic vises, also called fixture clamps, are used for machining of dimensionally stable workpieces in single or multiple clamping fixtures.

Due to their compact design they can be arranged in a very limited space.

Hydraulic vises are especially suitable for series manufacturing in automated mode.

The double-acting cylinder function combined with central lubrication and good swarf protection guarantees high process safety.

## Description

The hydraulic vise with fixed jaw consists of a very small base body with integrated hydraulic cylinder which actuates the movable jaw.

All threads and ports are at the bottom to enable a space-saving arrangement of several clamping points in a very limited space. If fixing from below is not possible, an adaptor plate for manifold mounting or tube connection is available. Blanks of clamping jaws that can be adapted to the workpiece contour are also available as an accessory.

The fixed jaw can be equipped with a pneumatic seat check.

#### Important notes

The hydraulic vise is only suitable for exterior clamping.

Lubricate at the latest after 500 clamping cycles the clamping slide via the central lubrication. Never use the complete clamping stroke to guarantee safe clamping of the workpiece. Max. operating temperature 80 °C.

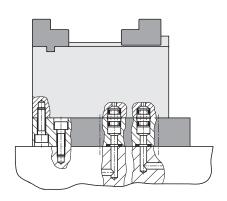
#### Size 1 (see page 2)

Jaw width	[mm]	40
Clamping stroke	[mm]	30
Max. clamping force	[kN]	9.5

## Fixing from above

with accessory adaptor plate

#### **Drilled channels**

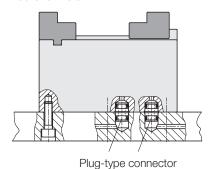


#### Size 2 (see page 4)

Jaw width	[mm]	65
Clamping stroke	[mm]	40
Max. clamping force	[kN]	15

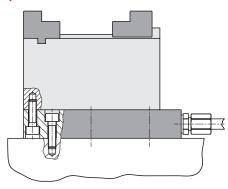
#### Fixing from below

#### **Drilled channels**



riug-type connector

#### Pipe thread



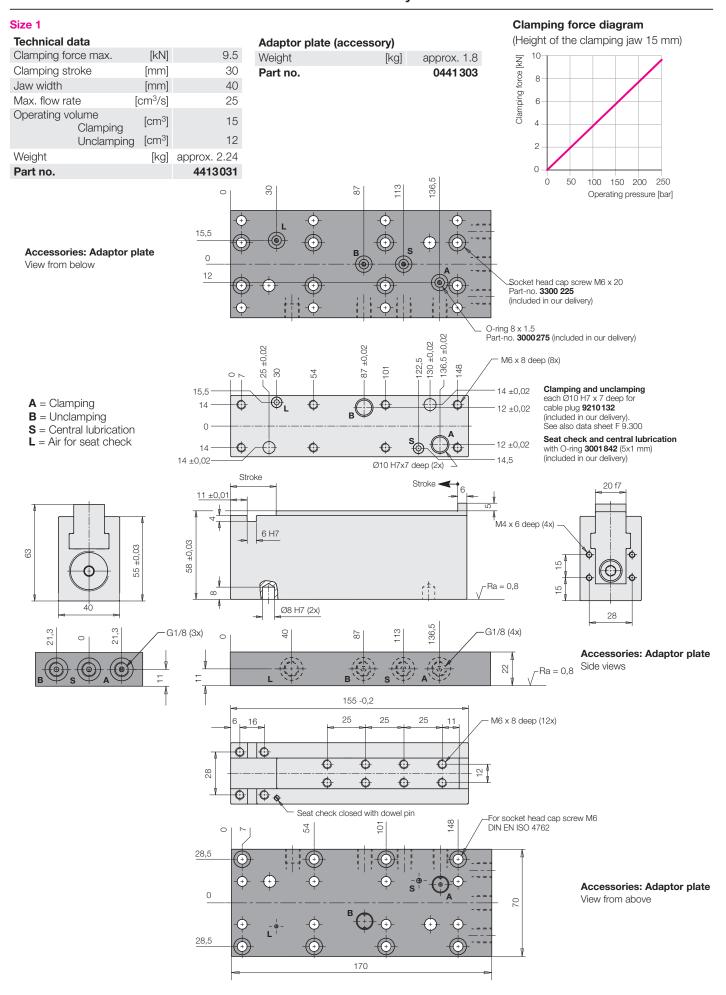
## Application example

Clamping fixture for a pedal of a commercial vehicle

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

## Size 1: Jaw Width 40 mm, Clamping Stroke 30 mm

## Technical Data • Accessory • Dimensions



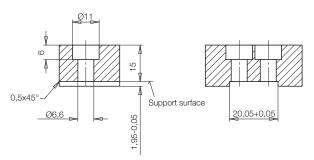
Operating conditions and other data, see data sheet A 0.100.

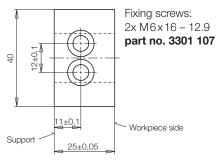
#### Accessories

### Accessory - clamping jaws

Versions	Clamping jaw blanks
Material	16 MnCr5 smooth

#### Clamping jaw: Part no. 3548 070





#### Self-made clamping jaws

Clamping jaws and fixed jaws are manufactured according to the contour of the workpiece to be clamped.

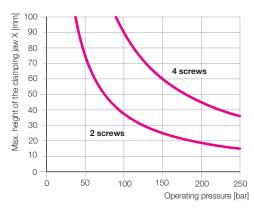
The max. height of the clamping jaw X at 250 bar operating pressure is indicated in the chart below.

If the operating pressure is lower, the clamping jaws and the fixed jaws can be designed higher as per the below diagram.

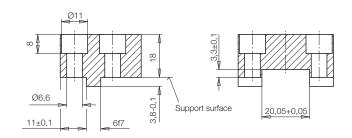
## Max. height of the clamping jaws X at max. operating pressure of 250 bar

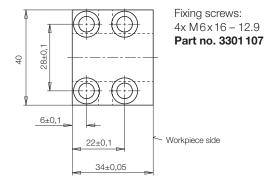
Fixing screws for clamping jaws	M6 x 16 – 12.9
X [mm] with 2 screws	15
X [mm] with 4 screws	36

## Max. height of the clamping jaw X as a function of the operating pressure



#### Fixed jaw: Part no. 3548071

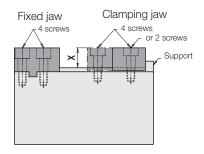




#### Important note

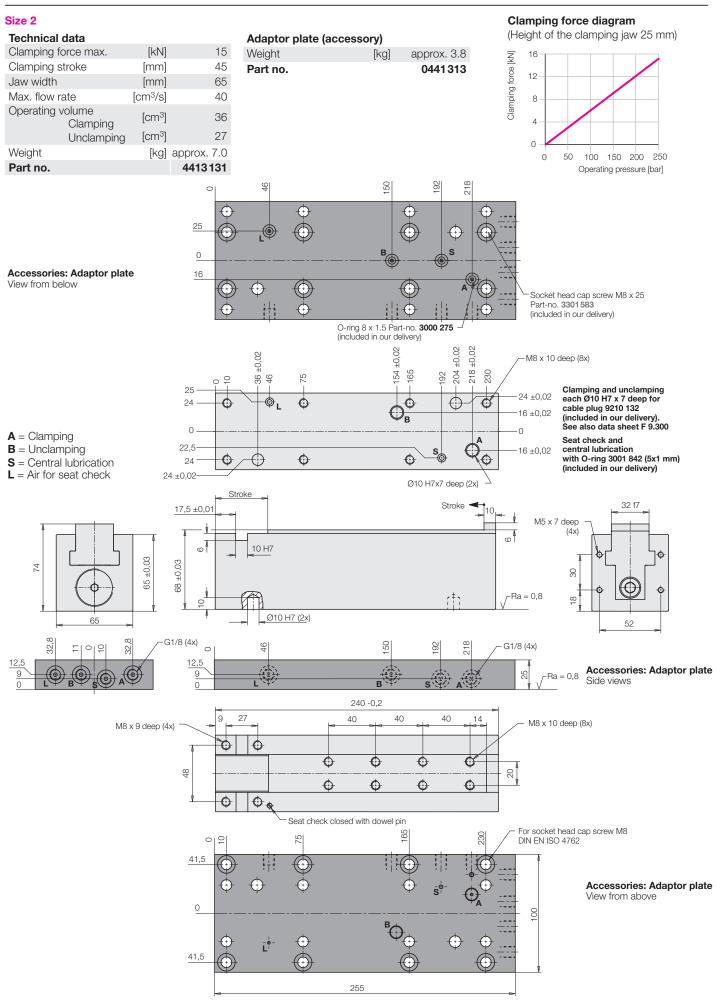
The clamping jaws must always be supported by the provided support, since the fixing screws are not in the position to compensate for the generated clamping forces.

### Fixing of the clamping jaws



## Size 2: Jaw Width 65 mm, Clamping Stroke 45 mm

## Technical data • Accessory • Dimensions



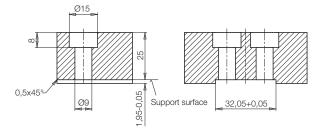
Operating conditions and other data, see data sheet A 0.100.

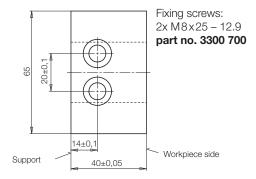
#### Accessories

## Accessory - clamping jaws

Versions	Clamping jaw blanks
Material	16 MnCr5 smooth

## Clamping jaw Part no. 3548 080





## Self-made clamping jaws

Clamping jaws and fixed jaws are manufactured according to the contour of the workpiece to be clamped.

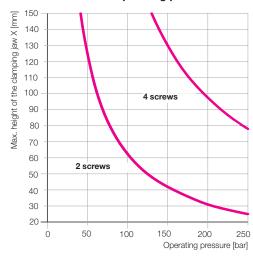
The max. height of the clamping jaw  ${\sf X}$  at 250 bar operating pressure is indicated in the chart below.

If the operating pressure is lower, the clamping jaws and the fixed jaws can be designed higher as per the below diagram.

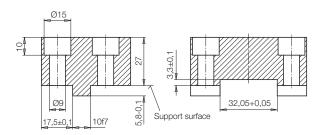
## Max. height of the clamping jaws X at max. operating pressure of 250 bar

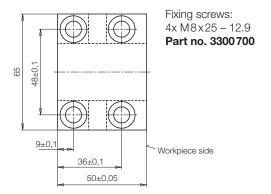
Fixing screws	M8 x 25 – 12.9
for clamping jaws	
X [mm] with 2 screws	25
X [mm] with 4 screws	78

## Max. height of the clamping jaw X as a function of the operating pressure



## Fixed jaw Part no. 3548 081





#### Important note

The clamping jaws must always be supported by the provided support, since the fixing screws are not in the position to compensate for the generated clamping forces.

## Fixing of the clamping jaws

