

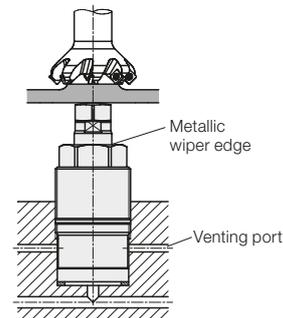


Threaded-Body Work Support
M 40 x 1.5, with metallic wiper edge,
single acting, max. operating pressure 500 bar



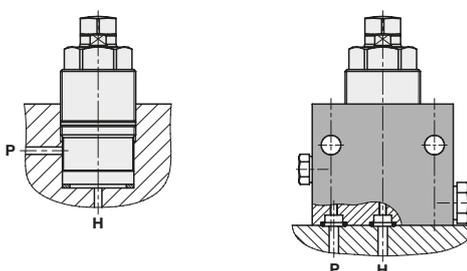
Advantages

- Space-saving threaded-body version
- 3 types of operation
- Contact force by spring or pneumatically adjustable (1941-201)
- Load force up to 15 kN
- Metallic wiper edge and FKM wiper
- Venting of the spring area
- Connection of positive air pressure protection is possible
- Mounting body as accessory



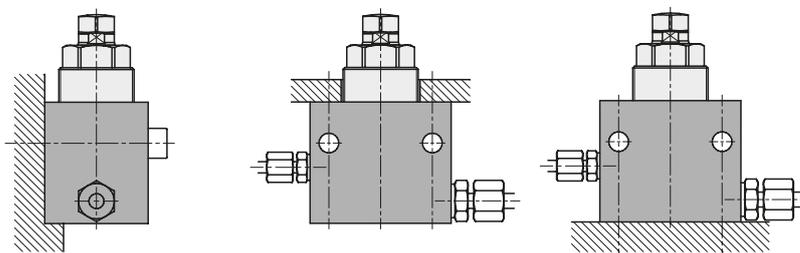
Installation and connecting possibilities

Drilled channels with accessory and mounting body



Pipe thread

with accessory mounting body



Application

Hydraulic work supports are used to provide a self-adjusting rest for the workpiece during the machining operations. They compensate the workpiece surface irregularities, also vibration and deflection under machining loads. The threaded-body design allows for space-saving and direct installation into the fixture body. Oil supply is made through drilled channels.

Description

In the body of the threaded-body work support a thin-walled locking bush is integrated, which locks cylindrically around the freely-movable support plunger when pressurising the element with hydraulic oil. For contact of the support plunger at the workpiece there are 3 possibilities (description see page 2):

1. Spring force
2. Air pressure advanced
3. Oil pressure combined with spring force

The elements are protected against penetration of swarf by a metallic wiper edge and sealed against liquids.

The venting port allows also the connection of air sealing.

A mounting body for pipe threads or drilled channels is available as accessory.

Important notes!

To guarantee functioning of the work supports, a vent port is imperative. No liquids may enter into the bore hole (see also page A0.110 "Venting of the spring area").

Activate positive air pressure protection < 0.2 bar only after hydraulic locking and deactivate before unclamping.

Special contact bolts M 12 must have a thread length of 12 mm. Work supports are not suitable to compensate side loads.

The admissible load force as per diagram on page 2 is static. Machining forces can generate vibrations, whose amplitude exceeds far an average value, and this can cause yielding of the support plunger.

Remedy: increase the safety factor or the number of work supports.

Combination with clamping elements

Support and clamping forces have to be adapted to each other, so that there will be sufficient force reserve available for the threaded-body work support to absorb the machining forces.

Rough estimate:

Support force ≥ 2 x clamping force

Example

Threaded-body swing clamp 1883-102 and threaded-body work support 1942-201. Operating pressure 200 bar (because of the clamping arm) As per diagram:

| | |
|--------------------------|--------|
| Adm. load force | 5.0 kN |
| - Clamping force | 2.3 kN |
| Possible machining force | 2.7 kN |

To get a higher support force, the threaded-body work support can be supplied with 500 bar and the pressure for the swing clamp can be reduced.

