



Work Support Manifold Mounting Threaded Type

Hydraulic forwarding, contact by spring force

PART NO. - 3310500



Description :

Hydraulic work support is a replacement to the adjustable screw jack. It is not a force exerting element but a resistance giving element. This work support replaces both spring forwarding as well as pneumatic forwarding work support.

Application :

Irregular job is supported on only three points. If an additional support is required, it must be adjustable, like the manual screw jack support. Hydraulic work support is the right solution for such application. The work support is used to support the job, to avoid deflection and vibrations due to cutting and clamping forces. It helps to clamp the job without distortion. These work supports are more suitable where space is limited

Principle :

A plunger is in retracted position in the un-pressurized mode. After applying pressure hydraulic piston moves forward to push spring. Hence supporting plunger touches the job by a light spring force. After 30 - 40 bar pressure sleeve collapses to hold the supporting plunger. It resists to move in the axial direction due to frictional force. The resistance is equal to the radial inward force multiplied by the coefficient of friction.

Advantages :

- Compact in size.
- Plunger touching force is very low. Hydraulic piston force is not transferred on the job. There is spring between touching plunger and hydraulic piston.
- Touching plunger is in normally retracted condition hence loading and unloading of job is very easy.

Installation :

- Manifold threading must be square to manifold base.
- These work supports are mounted directly in manifold as per drawings

Specifications :

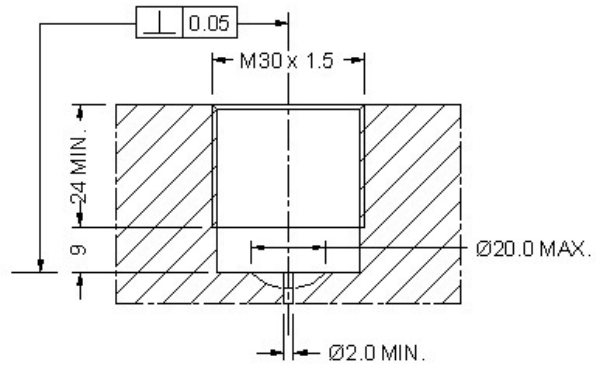
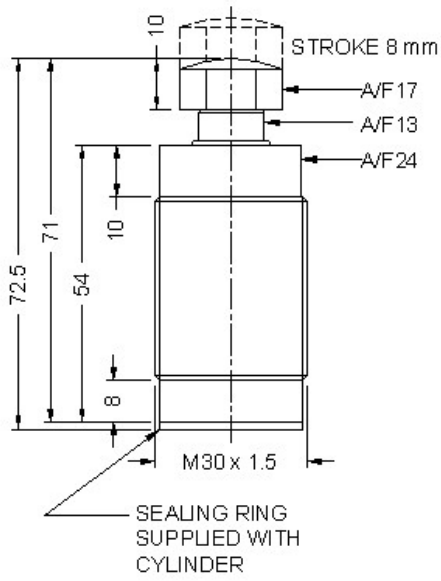
- Minimum operating pressure - 100 bar.
- Maximum operating pressure - 200 bar.
- Maximum plunger contact force - 40 N.
- Support force 1.5 kN at 150 bar.

Notes :

- As the Work support is single acting, spring return, a breather is provided. It should be protected from cutting liquids and coolants.
- If a clamping force is applied on the work support, it should not be more than 50 % of the support force.
- Heavy extensions to plunger can influence the contact force of the work support.
- Manifold to be machined in the fixture plate along with oil hole.
- For ordering the seal kit, add the prefix "S" to the part number.

Dimensional details (PART NO. - 3310500) :

Manifold machining details :



All dimensions are in mm, Overall dimension tolerance ± 0.5 mm.
 Subject to change for improvement. (Revision - November 13)