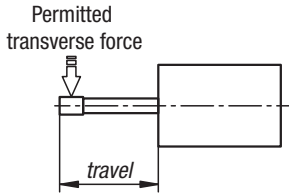


# Technical data:

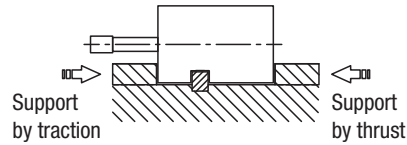
## Permitted transverse force by extended piston rod.

To ensure sealing and guarantee long service life for the piston and rod guide, transverse forces on the block cylinders should be avoided where possible. Up to travel lengths of 50 mm, a transverse force of 3 % of the nominal cylinder force must not be exceeded. The transverse forces should be moving towards 0 % as the travel length increases.



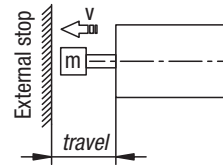
## Supports for block cylinder:

If the cylinder is fastened at right angles to the cylinder axis, the block cylinders must be supported. When used as a thrust cylinder, the support should be on the under side, when used as a traction cylinder, it should be on the rod side (see illustration). As standard, the block cylinders also have transverse slots in the housing which can be used for support. In this case, a parallel key, which absorbs the compressive or tensile force is fitted to the screw-on face.



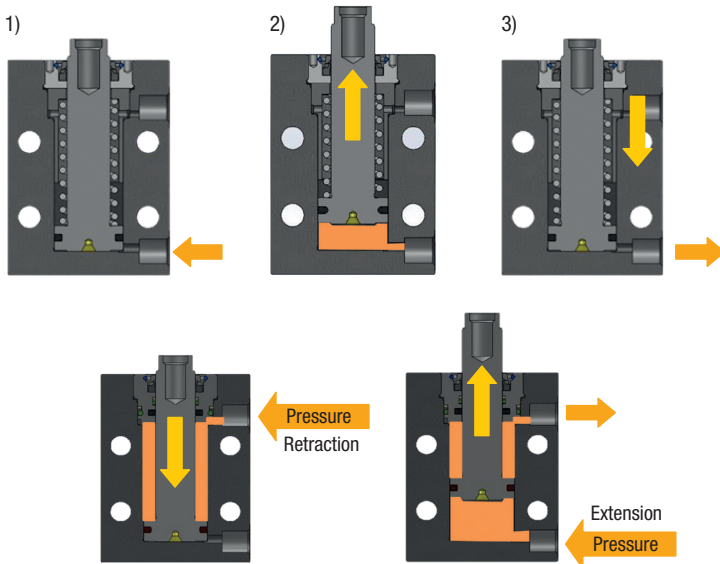
## Permissible dynamic loads during the piston advance stroke:

As standard, the block cylinders have no end position damping. Due to the advance stroke, the piston thrusts the attached mass against the sealing bush of the block cylinder with unrestrained stroke speed. The sealing bush acts as a stop in the cylinder. The functional capability of the block cylinder is impaired if this is overloaded. This problem can be prevented by always having an external stop available for the block cylinder piston (see illustration).



v = stroke speed  
m = attached mass

## Operating principle of a block cylinder:



## Construction of a block cylinder:

