

# Information and General Notes

## Introduction

Effective round basic design. Compact construction with space-saving outside diameter and length for an excellent ratio between power and space requirements. The screw connections on all components ensure simple installation and replacement.

## Maximum pressure

The pressures stated in the catalog refer to the dynamic continuous pressure for all mounting types. A higher pressure is also permissible in some cases, depending on the application and installation situation. A written description of your application is mandatory for approval of this higher pressure. If outlet throttling is employed, the resulting pressure ratio must be taken into account. The dynamic pressure in the cylinder should only exceed the maximum operating pressure by 30% for a short time.

## Minimum pressure

The minimum permissible pressure depends on the employed sealing type. Please contact us to discuss the selection of the required seals for pressures of below 10 bar.

## Cylinder mounting

If a different mounting method than the standard method is required, we would be pleased to investigate solutions to suit your needs.

## Functional types

Various functional cylinder types are available. Customized solutions are available upon request.

## Connections

With Whitworth pipe thread; the length of the connections can be modified upon request. Larger and other (metric) connections are available upon request.

## Piston rod

The standard material for piston rods is CK 45, ground and hard-chrome plated. Hardened and stainless steel piston rods are also available. Piston rods with special coatings can be supplied upon request. Thicker or thinner piston rods are generally possible. The piston rods should, however, always be tested for buckling resistance.

## Piston rod end

The end of the piston rod is manufactured as a standard version described in the catalogue if not otherwise specified by the customer. Variations from the catalogue versions are possible when the required dimensions are specified.

## Cylinder tube

The cylinder tube is made of steel and the liner is very finely honed.

## Seals

We supply up to 8 different seal types, depending on the speed, temperature and pressure. Should other sealing types or materials be required, we would be pleased to select the right seals for your application.

## End position damping

The purpose of end position damping is to lower the kinetic energy to a level at which neither the cylinder nor the machine in which the cylinder is installed is damaged without having to install a corresponding extra device. We recommend a damping feature for speeds exceeding 20 mm/s.

Various damping systems are used depending on the cylinder type. These include plastic impact damping, self-adjusting progressive damping or adjustable damping with needle valves. Depending on the application we can also offer optimized damping (shorter damping times).