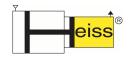
# **General information:**

## Standard Cylinder Series SZ100, SZ160, SZ250



The cylinders are manufactured for the below listed applications in threaded design with ground and hard-chrome plated cylinder rods.

Special purpose designs of almost any kind can be considered. Intermediate sizes or piston sizes up to 500mm diameter are possible.

Cylinders can be fitted with vent valves upon request. Please indicate the desired location for the vent when ordering.

Please request our electronic product catalque for CAD data or download it from www.heiss.de.

## **Technical specifications:**

### **Operating pressure:**

Maximum 100, 160 or 250 bar, for higher operating pressures please contact us.

## Operating fluids:

Hydraulik oil on the basis of mineral oils for example H, HL, HLP-oils per DIN 51524/51525. Other operating fluids like fire resisting fluids or water are possible upon request.

#### Operating temperature:

By default the cylinder is fitted with seals for a temperature range from -20°C to +80°C. High temperature resistant seals can be fitted without changes in design.

#### Piston travel speed:

Maximum 0,5 m/s. Please contact us for higher piston travel speeds.

## Cylinder stroke:

The maximum permissible stroke is dependent on the permissible buckling stress. For dimensioning help please use the load/buckling diagram with the simplified calculation formulas.

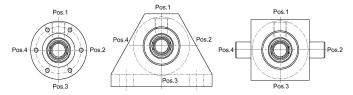
### **Position of connections:**

By default the bottom ports are concentric except with configurations 111-2, 116, 117, 118 to 225. Should the port be positioned radially, please, indicate this with the order.

Cylinders with dampers have the adjustment screw positioned across the port (Pos. 3) except with configuration 113, 113-1 and 113-2, here the adjustment screw is rotated by 90° away from the port when looking at the face of the piston rod end (Pos. 2).

Pos. 1 is the port position for all configurations. Should a different port position be required please indicate this with the order.

Example in combination with various attachments:



For port position rotated by 90° in clockwise direction please indicate with order "hydraulic port in Pos. 2".

#### **Tolerances:**

Tolerances for stroke and stroke dependent dimensions according to DIN ISO 2768 - g T1 (previously DIN 7168 - g)

Other tolerances according to DIN ISO 2768 - m T1 (previously DIN 7168 - m)

#### Attachment elements:

Swivel heads, rod clevis and rod end straight eyes as well as pivot brackets and pillow blocks for pivot pin attachments can be found in our main catalogue under Accessories.

## Position sensing:

Three ways for position sensing are available:

- Presssure resistant inductive proximity switches for end-of-stroke polling.
- Magnetic field sensors for additional sensing of intermediate positions. (The cylinder length increases. If required please contact us.)
- Position measuring systems with various output signals for position measuring.

Technical specifications about end position sensing and position encoders can be found in our respective standard catalogue pages.