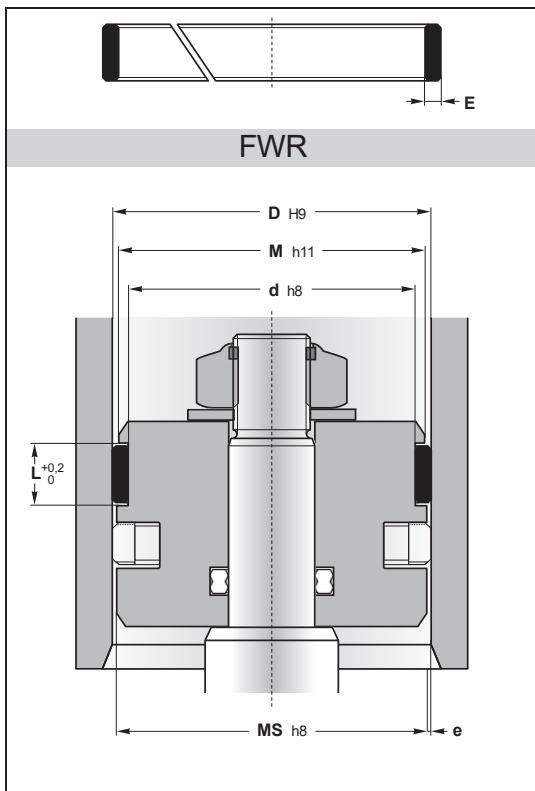




FWR

Acetal resin piston guide ring



The **FWR** has been developed to substitute traditional bronze guides in hydraulic cylinders. They guide the piston and prevent metallic contact with the cylinder when radial forces act perpendicular to the direction of movement.

Chamfered edges prevent splintering of the material during assembly and make the installation into the groove easier. The compound used for these guides is a medium viscosity glass fibre reinforced acetal resin characterised by high strength, rigidity, hardness, impact resistance, resilience and excellent stability to high and low temperature.

Operating conditions

Max. permissible radial load at 25°C: ≤ 40 N/mm²
 60°C: ≤ 25 N/mm²

Temperature -40°C to 110°C
 Speed < 0,8 m/s

Materials

Guide ring POM + glass fibers

Assembly

Install in the groove

Advantages

- Suitable for rod and piston
- Simple groove design, easy fitting
- Low break-out and low coefficient of friction
- Excellent wear resistance
- Good load capacity
- Reduce vibrations
- Available in many sizes

Please contact us for applications approaching maximum values.

Calculation of the permissible radial force

$$F = (p \times D \times L \times n) / s$$

F = maximum radial force (N)

p = maximum permissible loading for material (N/mm²)

D x L = diameter x width of the ring (mm²)

n = number of rings

s = safety factor