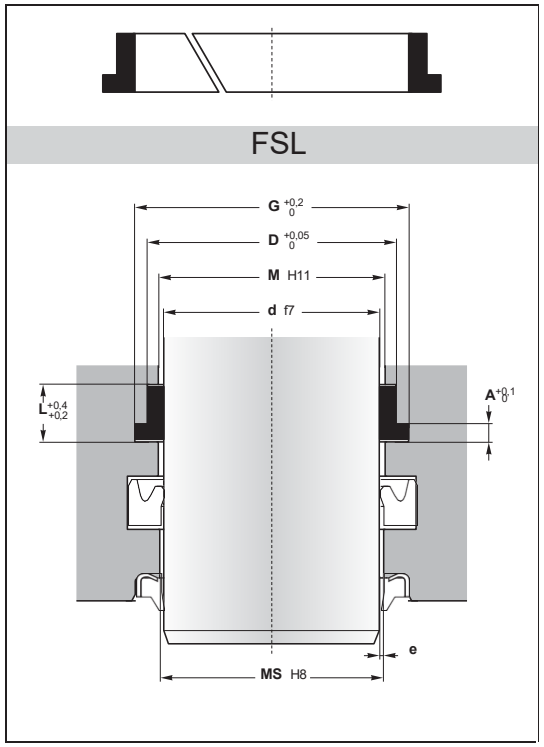
Acetal resin L-shaped rod guide ring



d (mm)	M (mm)
8 - 20	d + 0,5
21 - 100	d + 0,7
101 - 250	d + 0,9
251 - 300	d + 1,2

The diameter **M** is only valid in the area of the guide ring and not in the extrusion area of the seal.
The diameter **MS** in the seal area must be calculated with the **e value** of the seal used.

The **FSL** has been developed to substitute traditional bronze guides in hydraulic cylinders. They guide the rod 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. It has a L-shaped cross-section and is split. 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

Simple assembly
Low break-out and low coefficient of friction
Excellent wear resistance
High mechanical strength
Good load capacity
Reduce vibrations

Please contact us for applications approaching maximum values.

Calculation of the permissible radial force	
F = (p x d x L x 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

d	D	L	G	A	Reference
60	66	16	71	5	**FSL-6066**
78	84	16	89	5	**FSL-7884**
99	105	16	110	5	**FSL-99105**
120	126	16	131	5	**FSL-120126**
141	147	16	152	5	**FSL-141147**
162	168	16	173	5	**FSL-162168**
183	189	16	194	5	**FSL-183189**
207	213	16	218	5	**FSL-207213**