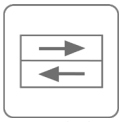
M SEALS **SLPU-M95**

Low Friction Internally Lubricated Polyurethane

MATERIAL DATA SHEET (Version 6.0 – 05.2022)


Low Friction


Hydrolysis Resistance

Description

SLPU-M95 is a hydrolysis–resistant polyurethane which has been modified for low friction use via the addition of an MoS2 (Molybdenum disulphide or Moly) internal lubricant. This material is recommended for applications that require low friction operation, stick-slip prevention, a reduction in seal wear and/or in applications where the fluid has poor lubrication properties.

Physical Properties

Property	Test method	Unit	Typical value
Colour			Maroon
Density	ISO 1183-1	g/cm^3	1.16
Hardness @ 23°C	ISO 7619-1	Shore A	95
Hardness @ +100°C	ISO 7619-1	Shore A	93
100% Modulus	DIN 53504	N/mm^2	≥ 10
Tensile Strength	DIN 53504	N/mm^2	≥ 45
Elongation at break	DIN 53504	%	≥ 320
Tear strength	ISO 34-1	kN/m	≥ 110
Compression set (24 Hours @ 70°C, 25%)	ISO 815-1	%	≤ 25
Compression set (24 Hours @ 100°C, 25%)	ISO 815-1	%	≤ 35

Main Characteristics

- Excellent low friction behaviour
- Excellent hydrolysis resistance
- Reduced seal wear
- Can help prevent stick-slip in critical applications
- Internally lubricated

Typical Products

- O-Ring energised U-Seals
- Rod & Piston composite seals
- Pneumatic seals
- Wiper seals
- Rotary seals

Typical Applications

SLPU-M95 has been developed to replace standard polyurethane materials working in dynamic applications that require low-friction operation or those suffering from stick-slip issues. It is commonly used to produce O-Ring energised U-Seals, Wiper seals, Rotary seals and can normally be utilised up to 400 bar pressure in standard hydraulic applications and up to 700 bar pressure with the use of a separate back-up ring.

Due to its outstanding hydrolysis resistance SLPU-M95 can be used in the most common hydraulic fluids, oil in water emulsions and water power applications.

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