High-Temperature Polyurethane Sealing Material

Polyurethane (PU) materials offer outstanding wear, extrusion and abrasion resistance with good elasticity and low compression set.

Zurcon® Z25 is an advanced high temperature proprietary polyurethane (PU) from Trelleborg Sealing Solutions. It combines excellent viscoelastic properties and high tensile strength at extreme operating temperatures from -35°C up to +130°C/-31°F to +270°F, and can operate in pressures up to 40 Mpa/5,800 psi without a Back-up Ring.



Selection of PU Rod Seals in Zurcon Z25

Recommended for Challenging Environments

The premium polyurethane material is recommended for hydraulic applications in challenging environments where high temperature performance is required, due to its improved extrusion resistance and compression set. Zurcon® Z25 is ideal for use in heavy duty cylinder sealing applications including industrial and mobile applications with limited cooling systems or cylinders exposed to high-temperature painting processes, extending sealing life and prolonging service life.

With excellent low friction characteristics and superior dynamic performance, Zurcon® Z25 is also suitable for rotary applications such as swivel joints, where heat is generated by high pressures and low speeds.

Zurcon® Z25 – Physical Properties			
Hardness	DIN 53 505	Shore A	95 +/- 2
Density	DIN EN ISO 1183-1	g/cm³	1.20 +/- 0.020
		lb/in³	0.043 +/- 0.0007
Modulus 100 %	DIN 53 504	N/mm²	14
		psi	2,030
Tensile Strength	DIN 53 504	N/mm²	60
		psi	8,700
Elongation at Break	DIN 53 504	%	520
Rebound Resilience	DIN 53 512 (6mm)	%	47
Tear Strength	DIN ISO 34-1	N/mm²	90
		psi	13,050
C.S.70h/+70°C70h/+158°F	DIN ISO 815 (B)	%	22
C.S.70h/+100°C70h/+212°F	DIN ISO 815 (B)	%	36
Temperature Range		°C	-35°C to +130°C
		°F	−31 °F to +270 °F

By combining the optimum products and materials, original equipment manufacturers can meet the increasing demands of hydraulic applications. For a recommendation on the best product and material for your application contact your local Trelleborg Sealing Solutions marketing company.