



O-Rings Zurcon® Z20/Z22/Z24

POLYURETHANE MATERIALS FOR O-RINGS



O-Rings Zurcon® Z20/Z22/Z24

Zurcon® O-Rings are the most suitable solution for high gas pressure with rapid pressure relief. Typical applications are pressure controls or sliding valves, control devices, couplings, screw-connections and cylinders. O-Rings produced in these high-performance materials Zurcon® Z20, Zurcon® Z22 and Zurcon® Z24 are suitable for use in hydraulic as well as pneumatic systems – and especially recommended for gas processing systems.

Special Material Properties

- good cold flexibility
- high tensile and tear strength
- very low gas permeability
- very high extrusion resistance
- extremely good abrasion resistance
- low friction
- low compression set
- good resistance against hydrolysis

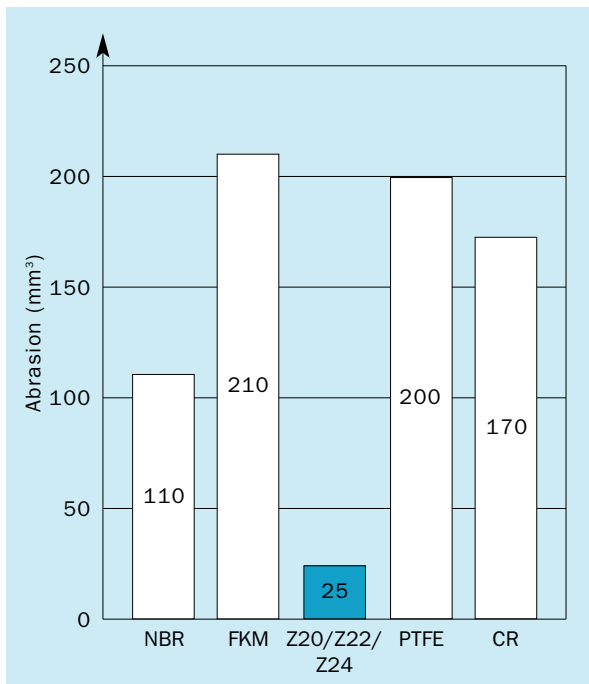
Advantages

- reliable sealing for your products
- competitive advantages for your products due to long service life
- cost savings due to component reduction
- in static applications additional back-up rings are only necessary for pressures above 60 MPa – thus smaller grooves are possible
- safety for gas applications (no destruction of the O-Rings when exposed to high pressures and rapid pressure relief)
- enlarged field of dynamic applications

O-RINGS ZURCON® Z20/Z22/Z24 COMPOUND DATA

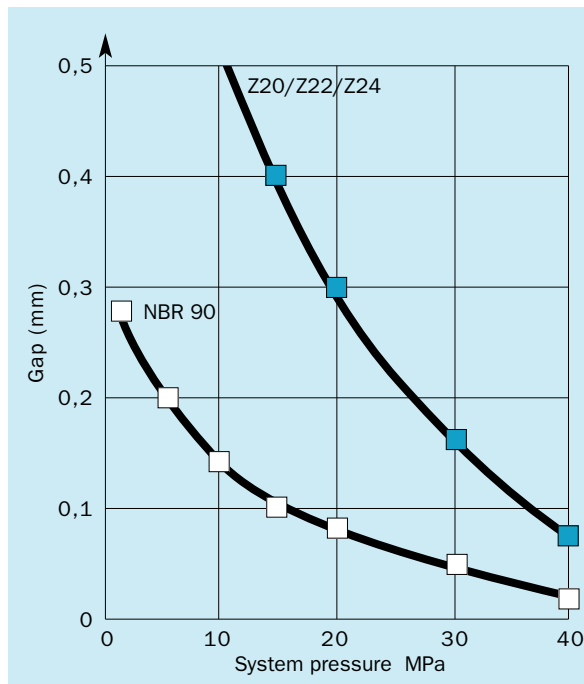
Abrasion (DIN 53516)

Extremely good abrasion resistance



Admissible radial gap (static load)

Very high extrusion resistance



Material*		Standard	Unit	Z20 Standard	Z22 Low Temperature	Z24 Good Hydrolysis Resistance
	Hardness	DIN 53 505	Shore A	94 +/-2	93 +/-2	94 +/-2
Operating Temperature:	Max.		°C (°F)	+110 (+230)	+110 (+230)	+110 (+230)
	Min.		°C (°F)	-35 (-31)	-45 (-49)	-30 (-22)
	TR10 Point	ASTM D 1329	°C (°F)	-34 (-29)	-50 (-58)	
Compression Set / Air	24h / -20°C (-4°F)	DIN ISO 815 (B)	%	46	25	
	72h / +70°C (158°F)	DIN ISO 815 (B)	%	23	20	26
	72h / +100°C (212°F)	DIN ISO 815 (B)	%	39	33	36
	3h / +130°C (266°F)	DIN ISO 815 (B)	%	28	25	
	Tensile Strength	DIN 53 504 (S2)	N/mm²	64	61	57
	Elongation at break	DIN 53 504 (S2)	%	550	560	550
	Rebound Resilience	DIN 53 512 (6 mm)	%	49	54	42
	100% Modulus	DIN 53 504 (S2)	MPa	14	14	13
	Colour			Turcouise	Dark Turcouise	Green

* Other Zurcon materials e.g. with a Operating Temperature < 50° (-58°F) or a Hardness of 83+/-2 Shore A on requests

These indications are based on laboratory values and reflect typical material properties. The application limits for pressure, temperature, speed and media are maximum values determined in the laboratory. During practical applications it should be remembered that due to the interaction of the operating parameters the maximum values must be set correspondingly lower. It is vital that customers satisfy themselves as to the suitability of individual products through adequate testing. For exceptional operating conditions please contact your Trelleborg Sealing Solutions representative. The data sheet is not subject to an updating service.



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