



TECHNICAL DATASHEET

07.04.2021

COG material	PU 50
Basic elastomer	Polyester urethane rubber (AU)
Colour	black
Operating temperature (air)	from -30 °C to +125 °C
Approvals/Certifications	n/a
Curing system	peroxide cured
Note	n/a

Properties	Unit	TEST SPECIMEN		O-RING	
		Value	Test method	Value	Test method
Hardness	Shore A	75 ± 5	DIN ISO 48	75 ± 5	DIN ISO 48
Hardness	°IRHD	75 +3/-8	DIN ISO 48	72 ± 5	DIN ISO 48
Tensile strength	MPa	> 28,6	DIN 53 504	n/a	n/a
Elongation	%	> 260	DIN 53 504	n/a	n/a
Module	n/a	n/a	n/a	n/a	n/a
TR-10	°C	-33	ASTM D 1329	-33	ASTM D 1329
Compression set (24 h / 100 °C)	%	< 20	DIN ISO 815	< 25	DIN ISO 815
Compression set (22 h / 175 °C)	n/a	n/a	n/a	n/a	n/a
Hardness after storage at hot temperatures (72 h / 100 °C)	n/a	n/a	n/a	n/a	n/a
Hardness after storage at hot temperatures (168 h / 100 °C)	n/a	n/a	n/a	n/a	n/a
Hardness after depositing in IRM 901 (72 h / 100 °C)	n/a	n/a	n/a	n/a	n/a
Volume after depositing in IRM 901 (72 h / 100 °C)	n/a	n/a	n/a	n/a	n/a
Hardness after depositing in IRM 903 (72 h / 100 °C)	n/a	n/a	n/a	n/a	n/a
Volume after depositing in IRM 903 (72 h / 100 °C)	n/a	n/a	n/a	n/a	n/a
Hardness after depositing in	n/a	n/a	n/a	n/a	n/a
Volume after depositing in	n/a	n/a	n/a	n/a	n/a
Hardness after depositing in	n/a	n/a	n/a	n/a	n/a
Volume after depositing in	n/a	n/a	n/a	n/a	n/a

The values shown are average values, resulting from a limited amount of laboratory tests. The tests were carried out on standard test specimens, and so the results could differ markedly from tests carried out on finished parts. It is the customer's responsibility to ensure that he or she performs their own tests, so as to be certain that the product is suitable for its intended use.

Our recommendations are based on the full extent of our available knowledge. However, they are non-binding, and we cannot be held liable for any kind of damages that may arise whatsoever.

COG material: PU 50

Description of material

Polyurethane rubber distinguishes itself by its especially high performance. This includes its mechanical properties, such as resistance to tearing and abrasion, excellent rebound elasticity and being highly gas-tight. Its resistance to fuels and various oils used in technical applications, especially those oils with high aromatic content, is excellent. Seals made from polyurethane rubber have a long lifespan. This is partly due to their good temperature resistance, but also to their outstanding resistance to oxygen and ozone.

Area of application

Used in a wide variety of industrial applications which require good mechanical resistance. (Important: not equivalent to approval for all types dynamic seal usage.)

Approvals/Certifications

Special attributes

- Good mechanical properties
- Very good rebound resilience
- Highly gas-tight
- Good resistance to fuels and many oils used in technical applications, especially to oils with high aromatic content
- Good low temperature flexibility
- Excellent oxygen and ozone resistance



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