TECHNICAL DATASHEET

09.10.2023

COG material	Vi 208
Basic elastomer	Fluorinated rubber (FKM)
Colour	blue
Operating temperature (air)	from -10 °C to +200 °C
Approvals/Certifications	H2 Sealing tested
Curing system	peroxide cured
Note	n/a

Properties	Unit	TEST SPECIMEN		O-RING	
		Value	Test method	Value	Test method
Hardness	Shore A	80 ± 5	DIN ISO 48	80 ± 5	DIN ISO 48
Hardness	°IRHD	80 ± 5	DIN ISO 48	80 ± 5	DIN ISO 48
Tensile strength	MPa	> 15	DIN 53 504	n/a	n/a
Elongation	%	> 150	DIN 53 504	n/a	n/a
Modul	n/a	n/a	n/a	n/a	n/a
TR-10	n/a	n/a	n/a	n/a	n/a
Compression set (24 h / 200 °C)	%	< 15	DIN ISO 815	< 18	DIN ISO 815
Compression set (72 h / 100 °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 (72 h / 100 °C)	n/a	n/a	n/a	n/a	n/a
Volume after depositing in (72 h / 100 °C)	n/a	n/a	n/a	n/a	n/a
Härte nach Einlagerung in	n/a	n/a	n/a	n/a	n/a
Volumen nach Einlagerung 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: Vi 208

Description of material

FKM possesses extraordinarily good resistance to numerous specific media and chemicals, for example: mineral oils; aliphatic, aromatic and chlorinated hydrocarbons, plus concentrated or diluted acids and weak alkalis. However, standard FKM materials are not recommended for use with applications involving water vapour. FKM can demonstrate weaknesses when used with alkaline CIP media. Excellent temperature resistance, plus good mechanical resistance and outstanding resistance to ageing ensure that FKM rubber stands head and shoulders above conventional synthetic rubbers.

Area of application

This compound has been specially designed and tested for use in hydrogen applications. In the H2 permeation test, Vi 208 achieved an outstanding permeation coefficient of 281 Ncm^3 mm m^{-2} Tag^{-1} bar^{-1}.This special FKM can be used for demanding applications in the widest range of industrial settings, especially in respect of contact with hydrogen.

Special attributes

- Passes H2/hydrogen test with excellent permeation coefficients
- Excellent resistance to media
- All types of hydrocarbons (oils, fats, fuels, solvents)
- Low gas permeability
- High chemical resistance

Approvals/Certifications

H2 Sealing tested

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