



TECHNICAL DATASHEET

08.02.2023

COG material	AP 208
Basic elastomer	Ethylene-propylene-diene rubber (EPDM)
Colour	blue
Operating temperature (air)	from -55 °C to +140 °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	70 ± 5	DIN ISO 48	70 ± 5	DIN ISO 48
Hardness	°IRHD	70 ± 5	DIN ISO 48	68 ± 5	DIN ISO 48
Tensile strength	MPa	> 7,0	DIN 53 504	> 5,0	DIN 53 504
Elongation	%	> 150	DIN 53 504	> 120	DIN 53 504
Modul	n/a	n/a	n/a	n/a	n/a
TR-10	°C	- 52,5	ASTM D 1329	- 52,5	ASTM D 1329
Compression set (24 h / 100 °C)	%	< 15	DIN ISO 815	< 20	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: AP 208

Description of material

EPDM rubber demonstrates excellent resistance to hot water and vapour, as well as good resistance to a multitude of acids, alkaline solutions and oxidising agents. What's more, this rubber possesses excellent resistance to ageing and ozone. Not for use with media containing hydrocarbon, such as fuels and mineral oils.

Area of application

This compound has been specially designed and tested for use in hydrogen applications. In the H₂ permeation test, AP 208 achieved a convincing permeation coefficient of 1317 Ncm³mm m⁻² Tag⁻¹ bar⁻¹. This EPDM can be used in a wide range of applications, including wherever high resistance to hot water and water vapour is required.

Approvals/Certifications

H₂ Sealing tested



Special attributes

- Passes H₂/hydrogen test with good permeation coefficients
- Good resistance to aqueous media
- Good resistance to hot water and steam
- Very good resistance to ageing and ozone
- Good low temperature flexibility (-55 °C)
- Limited resistance to plant and animal oils and fats



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