ELASTOMER VMQ · NF EN 2261 / NF L 17-250

Material 50D7

Silicone 70 Shore A

HARDNESS
70 Shore A
Measured IRHD: 69

TEMPERATURES
−55 / +225 °C

DENSITY
1.29 g/cm³

COMPRESSION SET
11.2 %
70 h at 150 °C

Properties

Family	**VMQ (silicone)**
Standard	**NF EN 2261 / NF L 17-250**
Nominal hardness	**70 Shore A**
Measured IRHD hardness	**69**
Continuous service temperature	**−55 to +225 °C**
Short-term temperature	**−55 to +260 °C**
Tensile strength	**5.5 MPa**
Elongation at break	**203 %**
Storage group	**IV**
Colour	**Black**

Applications

- Hot air, weathering, dielectric applications.
- Static O-ring sealing.
- Parts moulded to drawing in the same material.

Need an O-ring in 50D7?
Send the reference, drawing or dimensions with your quantities: reply within 48 hours.

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Properties measured at qualification

PROPERTY	UNIT	REQUIREMENT	MEASURED
Initial state			
Hardness IRHD	°	66-75	**69**
Hardness Shore A	points	70	**66**
Tensile strength	MPa	≥5	**5.5**
Elongation at break	%	≥150	**203**
Stress at 100 % elongation	MPa	—	**3.0**
Tear strength	kN/m	≥8	**10**
Density	Mg/m³	±0.02 between deliveries	**1.29**
Colour		—	**Red**
Lubricant immersion — 70 h at 150 °C in IRM 901			
Change in IRHD hardness	°	-10 to 0	**-8**
Max. change in tensile strength	%	-20	**-10.9**
Max. change in elongation at break	%	-15	**-13.8**
Change in volume	%	0 to +10	**5.5**
Lubricant immersion — 70 h at 150 °C in fluid 101			
Change in volume	%	0 to 35	**34.1**
Heat ageing — 70 h at 225 °C in air			
Change in IRHD hardness	°	±10	**-1**
Max. change in tensile strength	%	-25	**3.6**
Max. change in elongation at break	%	-40	**-10.8**
Compression set			
After 70 h at 150 °C in air	%	≤40	**11.2**
Temperature retraction			
Initial state — TR 10	°C	≤-40	**-41.4**