ELASTOMER FPM / FKM · NF L 17-260

# Material 60C9

Fluorocarbon 90 Shore A

| HARDNESS | TEMPERATURES | DENSITY | COMPRESSION SET |
|---|---|---|---|
| **90 Shore A** | **−20 / +200 °C** | **1.85 g/cm³** | **26.3 %** |
| Measured IRHD: 91 | | | 70 h at 200 °C |

## Properties

| | |
|---|---|
| Family | **FKM (fluorocarbon)** |
| Standard | **NF L 17-260** |
| Nominal hardness | **90 Shore A** |
| Measured IRHD hardness | **91** |
| Continuous service temperature | **−20 to +200 °C** |
| Short-term temperature | **−20 to +260 °C** |
| Tensile strength | **17.7 MPa** |
| Elongation at break | **138 %** |
| Storage group | **V** |
| Colour | **Black** |

## Applications

- Oils and fuels.
- High nominal hardness.
- Static and dynamic O-ring sealing.
- Parts moulded to drawing in the same material.

**Need an O-ring in 60C9?**
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 | ° | 86 to 95 | **91** |
| Hardness Shore A | points | 90±5 | **92** |
| Tensile strength | MPa | ≥13 | **17.7** |
| Elongation at maximum force | % | ≥100 | **138** |
| Modulus at 100 % | MPa | — | **13.1** |
| Tear strength | kN/m | — | **31** |
| Density | Mg/m³ | ±0.03 between deliveries | **1.85** |
| **Fuel immersion — 70 h at 23 °C in solvent B** | | | |
| Change in IRHD hardness | ° | -5 to 5 | **-1** |
| Max. change in tensile strength | % | -20 | **-4.0** |
| Max. change in elongation | % | -15 | **6.5** |
| Change in volume | % | 0 to 5 | **1.5** |
| **Lubricant immersion — 70 h at 200 °C in fluid 101** | | | |
| Change in IRHD hardness | ° | -10 to 5 | **-9** |
| Max. change in tensile strength | % | -30 | **-7.9** |
| Max. change in elongation | % | -15 | **4.3** |
| Change in volume | % | 0 to 15 | **11.1** |
| **Heat ageing — 70 h at 250 °C in air** | | | |
| Change in IRHD hardness | ° | 0 to 10 | **1** |
| Max. change in tensile strength | % | -35 | **-17.5** |
| Max. change in elongation | % | -35 | **-6.5** |
| Max. change in mass | % | -5 | **-2.1** |
| **Compression set** | | | |
| After 70 h at 200 °C in air | % | ≤35 | **26.3** |
| **Temperature retraction (TR 10)** | | | |
| Initial state | °C | ≤-14 | **-17.4** |