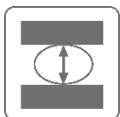


M SEALS HNBR-B75

75a Soft Hydrogenated Nitrile Butadiene Rubber



MATERIAL DATA SHEET (Version 6.0 – 05.2022)



Compression Set Resistance



Elastic Behaviour



Temperature Resistance

Description

M Seals material HNBR-B75 is a soft 75a Shore hardness Hydrogenated Nitrile Butadiene Rubber which is commonly referred to as HNBR, H-NBR or HSN. This material provides good temperature resistance, excellent elasticity and compression-set characteristics, making it an excellent choice for hydraulic and pneumatic seals working at elevated temperatures outside of standard Nitrile rubber capabilities.

Good physical characteristics and chemical resistance to the most common hydraulic industry fluids such as Mineral Oils, HFA, HFB and HFC make HNBR-B75 a suitable seal material in many industrial applications.

Physical Properties

Property	Test method	Unit	Typical value
Colour			Black
Density	ISO 1183	g/cm ³	1.17
Hardness	ISO 868	Shore A	75 (+/-5)
Tensile Strength	DIN 53504	MPa	>23
Elongation at break	DIN 53504	%	>240
Tear strength	DIN 53515	N/mm	>4
Rebound resilience	DIN 53512	%	40
Compression set (24 Hours @ 100°C, 25%)	ISO 815	%	<11.4
Minimum service temperature		°C	-20
Maximum service temperature		°C	+150

Main Characteristics

- Excellent elastic behaviour
- Excellent compression set characteristics
- Excellent temperature resistance
- Good rebound behaviour

Typical Products

- T-Seals
- U-Seals/U-Rings
- Wiper/Scraper seals
- Static Seals & O-Rings

Typical Applications

Due to its excellent temperature resistance, elasticity and rebound behaviour, HNBR-B75 Hydrogenated Nitrile elastomer can be used in a wide range of applications such as seals for hydraulic and pneumatic systems or applications where compression set of the sealing material at elevated temperatures may be a problem.