

# OR DHH

### DESCRIPTION

Product group: OR DHH O-ring

Material: EPDM, FKM, HNBR, NBR, PTFE, VMQ

# DIMENSIONS

O-rings of the Dichtomatik product brand are available in the following standard dimensions:

- DIN ISO 3601-1: Industry B
- AS 568 A (american standard)
- BS 1806 (british standard)
- BS 4518 metric (british standard)
- Standard R (french standard)
- SMS 1586 (swedish standard)
- JIS 240 P+G (japanese standard)

### **TOLERANCES**

- Dimensional tolerances according to DIN ISO 3601-1, industry class B
- Surface deviations according to DIN ISO 3601-3, grade characteristic N
- For special applications, the permissible tolerances for special articles can be restricted to industry class A and the form and surface deviations to the grade characteristic S

# **ADVANTAGES**

- Universally applicable
- Good price-performance ratio
- Almost all standard dimensions available from stock
- Certified materials available
- Special elastomer materials also available in different Shore hardnesses and colors on request

# **INSTALLATION**

Any damage to the O-ring must be avoided during assembly, otherwise leaks may occur. The following instructions should also be observed:

- The O-ring must not be expanded to the expansion limit
- Edges must be free of burrs, radii and bevels must be applied without transitions
- Dust, dirt, metal chips and other particles must be removed
- Threaded tips and installation spaces for other sealing and guiding elements should be covered with the aid of a mounting sleeve
- Mounting surfaces and O-rings should be provided with a suitable grease
- Heating in oil to approx. 80°C makes elastomers more pliable. This makes it easier to expand the O-ring for mounting (depending on material - can also be heated in water)
- If necessary, use assembly tools such as expanding mandrels or sleeves which are made of suitable material (e.g. POM) and must be free of sharp edges.
- The O-ring should not be rolled over the mounting surfaces. When snapping into the groove, the O-ring must not be used twisted.





### **Online Product information**

Material	Description	Colour	Hardness (Shore A)	Temperature [°C]	Material properties
NBR		Black	70	-30 to +100	<ul> <li>Good chemical resistance to mineral oils and greases, hydraulic oils (H, HL, HLP), fire resistant pressure fluids HFA and HFB. HFC up to approx. +50°C and water up to max. +60°C</li> <li>low resistance to ozone, weathering and aging</li> </ul>
			75	-30 to +100	
			80	-30 to +100	
			90	-30 to +100	
HNBR		Black	70	-30 to +140	<ul> <li>HNBR is obtained by full or partial hydrogenation of NBR</li> <li>Heat, ozone and aging resistance are thus significantly improved and very good mechanical properties such as good wear resistance are achieved</li> <li>The media resistance is comparable to NBR</li> </ul>
EPDM	sulfur crosslinked	Black	70	-45 to +130	<ul> <li>Good resistance in hot water and steam, detergent, soda and potash solutions, silicone oils and greases, many polar solvents, many dilute acids and chemicals</li> <li>Good ozone resistance</li> <li>Incompatibility with any mineral oil products (lubricants and fuels)</li> </ul>
EPDM	peroxide crosslinked	Black	70	-50 to +150	
FKM	bisphenol crosslinked	Black	70	-20 to +200	<ul> <li>Good chemical resistance to mineral oils and greases, synthetic oils and greases, engine, gear and ATF oils up to approx. +150 °C, fuels, flame resistant pressure fluids HFD, aliphatic, aromatic and chlorinated hydrocarbons, water up to max. +60 °C</li> <li>Very good resistance to weathering, ozone and aging</li> <li>Very low gas permeability (therefore well suited for vacuum applications)</li> </ul>
		Green	75	-20 to +200	
		Black	80	-20 to +200	
		Green	90	-20 to +200	
FKM	peroxide crosslinked	Black	75	-20 to +200	
VMQ		Red brown	70	-55 to +200	<ul> <li>Good chemical resistance in water (up to +100 °C), aliphatic engine and gear oils, animal and vegetable oils and greases</li> <li>Not resistant to fuels, aromatic mineral oils, water vapor (possible up to max +120 °C for short periods), silicone oils and greases, as well as acids and alkaline compounds</li> </ul>
PTFE		White		-200 to +260	<ul> <li>Good chemical resistance to aggressive acids, bases, alcohols or oils</li> <li>Resistant to high and extremely low temperatures</li> </ul>

The information contained is believed to be reliable, but no representations, warranties or guarantees of any kind are made as to its accuracy or suitability for any purpose. The information is based on the present state of the art and is not necessarily indicative of the performance of the final product. Complete testing and performance of the final product is the responsibility of the user



