



### **TECHNICAL INFORMATION**

# Rod Seals | Turcon® Variseal® M2S

### **Description**

Turcon<sup>®</sup> Variseal<sup>®</sup> M2S is a single acting seal consisting of a U-shaped jacket and a V-shaped corrosion resistant spring. Variseal® M2S has an asymmetric seal profile. The dynamic lip is optimized, offering long service life and a good scraping ability even in media with high viscosity. At low and zero pressure, the metal spring provides the primary sealing force. As the system pressure increases, the main sealing force is achieved by the system pressure and

ensures a tight seal from zero to high pressure. The possibility of matching suitable materials for the seal and the spring allows use in a wide range of applications going beyond the field of hydraulics, e.g. in the chemical, pharmaceutical and foodstuff industry.

Variseal<sup>®</sup> M2S seals can be installed in grooves to AS4716 and ISO 3771. The seal can only be installed to a limited extent in closed grooves.

#### **Advantages**

- Suitable for reciprocating and light duty rotary movement
- Excellent scraping ability
- High abrasion resistance
- Dimensionally stable
- Resistant to most fluids and chemicals
- Excellent resistance to aging
- Available in Hi-Clean version
- Interchangeable with O-Ring and Back-up Ring in most cases



#### **Technical Data**

Speed

Pressure : For static loads : 40 MPa

For static loads
For dynamic loads
: 20 IVITa
: Up to 15 m/s : Reciprocating

Rotating : Up to 1 m/s

-70 °C to +260 °C Temperature

Virtually all fluids, chemicals and gases Media

The maximum permissible radial clearance  $S_{\text{max.}}$  is shown in the table on the next Clearance

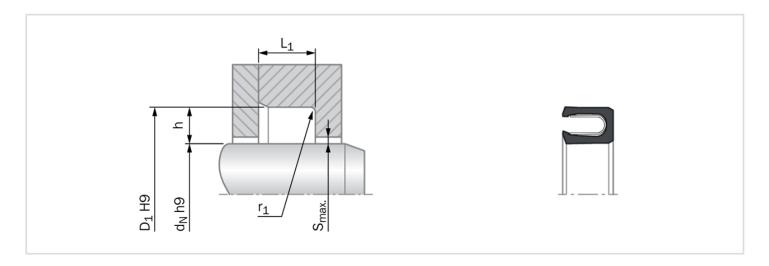
page as a function of the operating pressure and functional diameter.





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## **Installation dimensions - Standard recommendations**

Series No.	Rod Diameter d <sub>N</sub> h9		h	$D_1$	L <sub>1</sub>	r <sub>1</sub>	Radial Clearance S <sub>max.</sub>			
	Standard Range	Extended Range	Groove Depth	Groove Diameter	Groove Width	Radius	2 MPa	10 MPa	20 MPa	40 MPa
				H9	+0.2	Max				
RVC0	3.0 - 9.9	3.0 - 40.0	1.45	$d_N + 2.9$	2.4	0.4	0.20	0.10	0.08	0.05
RVC1	10.0 - 19.9	6.0 - 200.0	2.25	$d_N + 4.5$	3.6	0.4	0.25	0.15	0.10	0.07
RVC2	20.0 - 39.9	10.0 - 400.0	3.10	$d_N + 6.2$	4.8	0.6	0.35	0.20	0.15	0.08
RVC3	40.0 - 119.9	20.0 - 700.0	4.70	$d_{N} + 9.4$	7.1	0.8	0.50	0.25	0.20	0.10
RVC4	120.0 - 999.9	35.0 - 1600.0	6.10	d <sub>N</sub> + 12.2	9.5	0.8	0.60	0.30	0.25	0.12
RVC5	1000.0 - 2500.0	80.0 - 2500.0	9.50	$d_N + 19.0$	15.0	0.8	0.90	0.50	0.40	0.20

Maximum pressure for dynamic use is 20 MPa. Maximum pressure for static use is 40 MPa.

#### **Important Note**

Installation suggestions, material recommendations, parameters and further data provided are always subject to the particular field of use and the application in which the seal is intended to be used, in particular the interaction of the seal with other components of the application. Therefore they neither constitute an agreement on the legal and factual nature nor a guarantee of quality. Technical changes and errors remain reserved.