



## TECHNICAL INFORMATION

# Rod Seals | Turcon® Variseal® W2

### Description

Turcon® Variseal® W2 is a single acting seal consisting of a U-shaped jacket and a corrosion resistant Slantcoil® spring. The Slantcoil® spring in the Variseal® W2 provides an almost constant load irrespective of hardware tolerances, eccentricity and seal wear.

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 and electronics industry.

Variseal® W2 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
- Constant initial squeeze of spring over a large control area
- Interchangeable with O-Ring and Back-up Ring in most cases



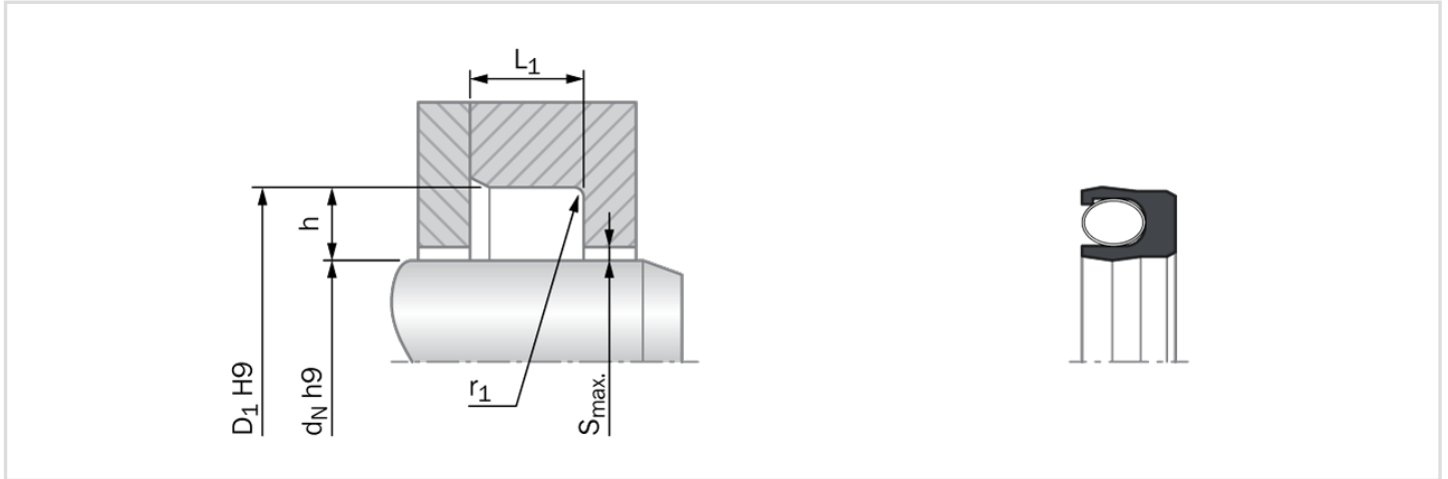
### Technical Data

Pressure	: For static loads	: 40 MPa
	: For dynamic loads	: 20 MPa
Speed	: Reciprocating	: Up to 15 m/s
	: Rotating	: Up to 1.27 m/s
Temperature	: -70 °C to +260 °C	
Media	: Virtually all fluids, chemicals and gases	
Clearance	: The maximum permissible radial clearance $S_{max}$ is shown in the table on the next page as a function of the operating pressure and functional diameter.	



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### Installation dimensions - Standard recommendations

Series No.	Rod Diameter $d_N$ h9		h Groove Depth	$D_1$ Groove Diameter H9	$L_1$ Groove Width +0.2	$r_1$ Radius Max	Radial Clearance $S_{max.}$			
	Standard Range	Extended Range					2 MPa	10 MPa	20 MPa	40 MPa
RVJ0	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
RVJ1	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
RVJ2	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
RVJ3	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
RVJ4	120.0 - 999.9	35.0 - 1600.0	6.10	$d_N + 12.2$	9.5	0.8	0.60	0.30	0.25	0.12
RVJ5	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.