

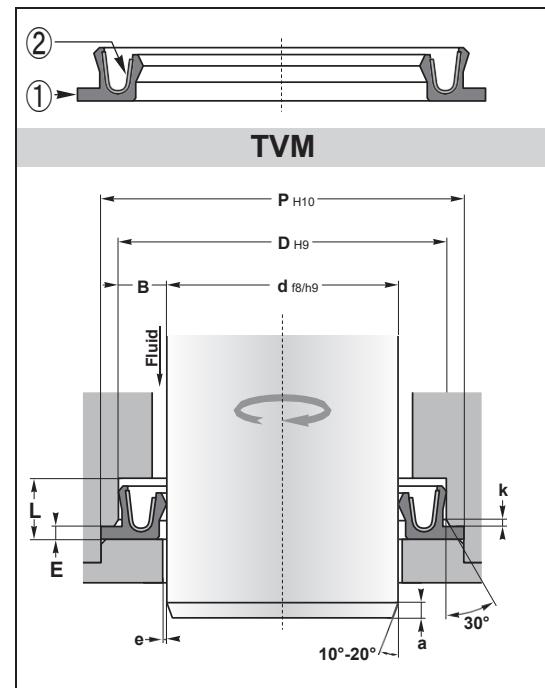


TVM

Turcon® Roto Variseal®



HydraulicSeals24.com



The Turcon Roto Variseal **TVM** is a single-acting seal consisting of a U-shaped seal jacket and a V-shaped corrosion resistant metal spring.

The characteristic of the Roto Variseal is the flanged heel, which prevents the seal from rotating by clamping in the groove and the short and heavy dynamic lip offering reduced friction, long service life and a good scraping effect in highly viscous media.

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.

Operating conditions

Pressure	$\leq 15 \text{ MPa}$
Temperature	-100°C to 260°C
Speed	$\leq 2 \text{ m/s}$
pv value	$\leq 5 \text{ MPa.m/s}$
Fluids	Mineral oils, HFA, HFB, HFC, HFD
Shaft surface hardness	$\geq 55 \text{ HRC}$
Shaft hardness depth	$\geq 0,3 \text{ mm}$

Materials

Seal ①	T40
Spring ②	SS (AISI 301)

Assembly

In open housings

Advantages

- Low friction
- Stick-slip free
- Protects against mechanical torsion
- Remains tight in groove even when subject to oscillating or helical movements
- High abrasion resistance
- Excellent chemical and temperature resistance
- Good scraping ability

Please contact us for applications approaching maximum values.

	d	D	P	L	E	Reference
	30	37	42,5	4,8	1,35	TVM200300-T24S
	40	50,5	57,5	7,1	1,8	TVM300400-T24S
	40	50,5	57,5	7,1	1,8	TVM300400-T40S
	50	60,5	67,5	7,1	1,8	TVM300500-T40S
	60	70,5	77,5	7,1	1,8	TVM300600-T40S
	120	130,5	137,5	7,1	1,8	TVM301200-T40S

Serie Nº	d (mm)		D (mm)	P (mm)	L _{min.} (mm)	E (mm)	R (mm)	k (mm)	a (mm)	e max (mm)		
	Standard range	Extended range								2 MPa	10 MPa	15 MPa
TVM1	5 → 19,9	20 → 200	d + 5	d + 9	3,6	0,85 ⁰ _{-0,1}	0,3	0,8	4,5	0,25	0,15	0,1
TVM2	20 → 39,9	10 → 400	d + 7	d + 12,5	4,8	1,35 ⁰ _{-0,15}	0,4	1,1	5	0,35	0,2	0,15
TVM3	40 → 399,9	20 → 700	d + 10,5	d + 17,5	7,1	1,8 ⁰ _{-0,2}	0,5	1,4	8	0,5	0,25	0,2
TVM4	400 → 999,9	35 → 999,9	d + 14	d + 22	9,5	2,8 ⁰ _{-0,2}	0,5	1,6	12	0,6	0,3	0,25