

Simmerring Radiamatic® EWDR made of PTFE



Fig.1 Simmerring Radiamatic® EWDR made of PTFE

Product description

Pressure-relieved Simmerring with a pressure ring made of PTFE compound, a stainless steel clamping ring and an O-ring (FKM) as a secondary seal.

Product advantages

Secure with simultaneous high pressure and high speed

- Low losses
- Low leak rate
- Easy fitting
- The shaft must not be machined on maintenance or seal replacement.

Application

- Primary seal in pumps and compressors
- Rotary joints for coolants and hydraulic fluid as well as gases
- Safety seal in addition to floating ring seals.

Material

PTFE carbon (standard quality)	Approved to KTW (drinking water) and BAM (oxygen)
PTFE Ekonol	Positively assessed by TNO, Nutrition and Food Research Laboratory (NL), for foodstuffs
Clamping ring	Usage of stainless steels

Operating conditions

Media	Resistance per FKM
Temperature	-20 ... +200 °C
Circumferential speed	max. 20 m/s for 1 MPa
Pressure difference	max. 3 MPa ... 0,2 MPa
For vacuum or pressure reversal	up to 0,2 MPa, housing closed

Surface, hardness

Peak-to-valley heights	R _a	R _t
Housing	<1,8 µm	<10,0 µm
Shaft, ground with no lead	0,1 ... 0,2 µm	0,5 ... 1,0 µm
Hardness of the contact area*	50-65 HRC, >0,5 mm depth of hardening	

* depending on material

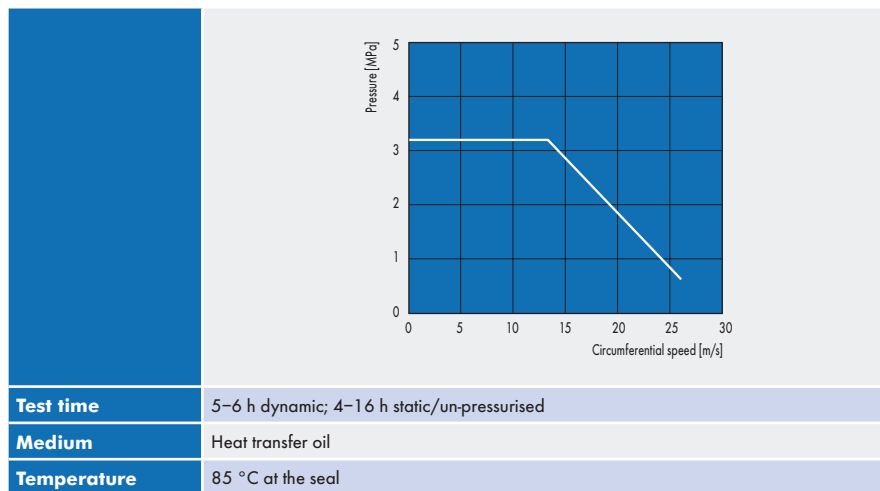
Design notes

Tolerances

Shaft	Radial shaft deflection, max.*
h11	±0,05 mm

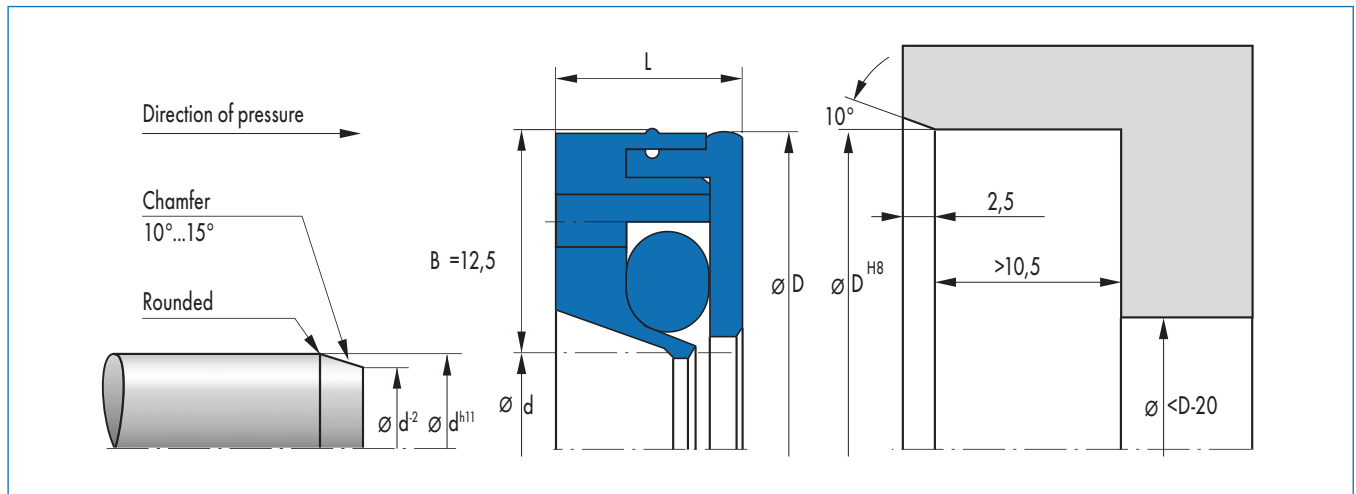
* depending on increase in rotational speed, the radial shaft deflection may need to be more tightly limited. Please enquire.

p · v Diagram



Fitting & installation

Fitting sequence: press Simmerring Radiamatic EWDR into housing; insert shaft.



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20	45	10,5
25	50	10,5
28	53	10,5
30	55	10,5
35	60	10,5
40	65	10,5
45	70	10,5
50	75	10,5
55	80	10,5
60	85	10,5
65	90	10,5
70	95	10,5
75	100	10,5
80	105	10,5
90	115	10,5
100	125	10,5

Other dimensions on enquiry.