

VR RADIAL SHAFT SEAL-Single Lip BSB

PRODUCT APPLICATION

Sealing of shafts with a different running track to standard seals (shaft seals). Rotary shaft seal (RWDR) in dimensions in accordance with DIN 3760.

PRODUCT ADVANTAGES

- Low coefficient of friction
- Low power loss and high service life values
- Low pumping effect due to tangential and radial preload
- High pressure stability
- No post-treatment of the shaft material, such as hardening, nitriding, hard chrome plating or additional liners required*



MATERIAL

Sleeve / Membrane	NBR HNBR FKM EPDM FFKM *
Support Ring/Body	Aluminium Stainless steel (1.4301) *

* Other materials on enquiry.

OPERATING CONDITIONS

Temperature	-50 °C to 220 °C**
Circumferential speed	40* m/s for 0 MPa
Pressure (Pmin to Pmax)	0.06* MPa to 1.5* MPa

* Value depends on other application parameters and the elastomer used.

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TOLERANCE

Surface Element	Surface Tolerance	Roundness
Shaft	HT1	IT8
Housing	ISO tolerance H8	

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

SURFACE QUALITY

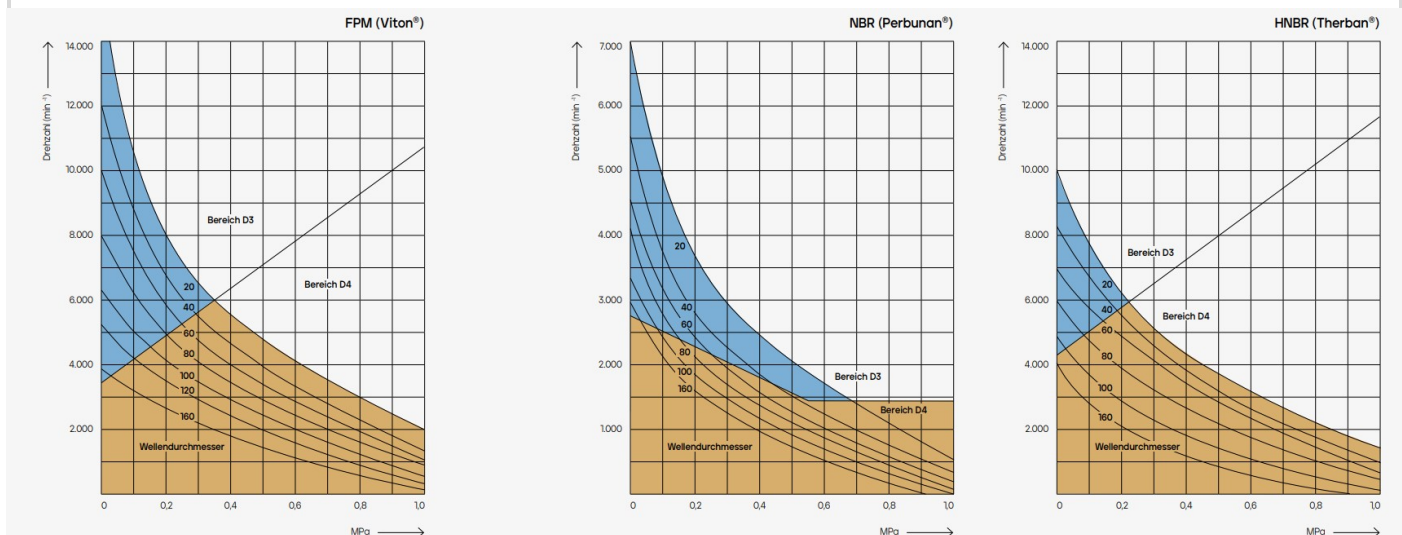
Surface Element	Rz	Ra / Rt
Shaft	1 - 5 µm	0.1 - 0.8 µm
Housing	4.0 µm ≤ Rz ≤ 8.0 µm	Ra ≤ 3 µm Rt ≤ 16 µm

*Please observe our general design notes in catalogue.

Shaft Surface Hardness:

- Simple applications: 25 - 30 HRC
- Normal applications: Min. 40 HRC
- External dirt ingress or contaminated media: Min. 55 HRC

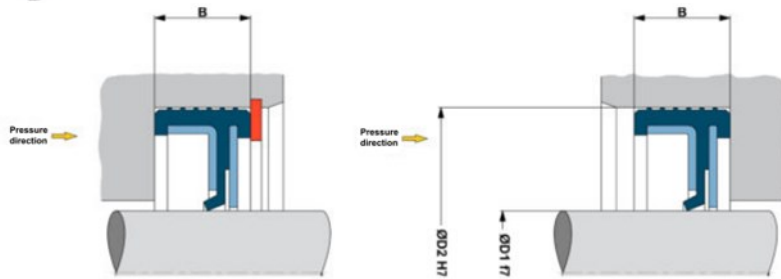
P - V DIAGRAM





BSB

Single Lip Seal



support body / diameter

$$D4 = D1 + 0,5 \text{ mm}$$

from D1 = 150mm

$$D4 = D1 + 1,0 \text{ mm}$$

> 130 mm housing – diameter on request

Red-marked and deviating dimensions only on request.

D1	D2	B	B1	B2	D1	D2	B	B1	B2	D1	D2	B	B1	B2	D1	D2	B	B1	B2
					20	30	7	8,5	9,5	42	55	10	12	13					
					32														
					35														
					40					45	60	10	12	13					
					42					62									
6	16	7	8	9	22	32	7	8,5	10	72									
	19	5	6	7	35										100	125	12	14,5	15,5
	20	5	6	7						48	62	10	12	13					
					24	35	7	9	10	50	65	10	12	13	105	130	12	14,5	15,5
8	16	7	8,5	9,5						68									
	22									72					110	130	12	14,5	15,5
	24																		
					25	35	7	9	10										
10	19	5	6,5	7,5	40														
10	19	7	8,5	9,5	42					55	70	10	12	13	120	150	12	14,5	15,5
	22				45					80					160				
	24																		
	26				26	37	7	9	10										
					28	40	7	9	10										
12	22	7	8,5	9,5															
	24																		
	30				30	40	7	9	10										
					42					60	75	10	12,5	13,5					
					52					80									
14	24	7	8,5	9,5	52	9	11	12											
15	30	7	8,5	9,5	32	45	7	9	10										
					35	45	7	9	10										
					47														
16	28	7	8,5	9,5	50														
	30				52	9	11	12											
					62	7	9	10											
17	28	7	8,5	9,5															
	32																		
18	30	7	8,5	9,5	40	52	9	11	12										
	32				55	7	9	10											
					55	10	12	13											
					62														
					72														