

VR RADIAL SHAFT SEAL-Single Lip SOA

PRODUCT APPLICATION

Sealing of shafts at higher pressures, e.g. as an alternative to mechanical seals. Rotary shaft seals (RSS) in sizes according to 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 15* 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

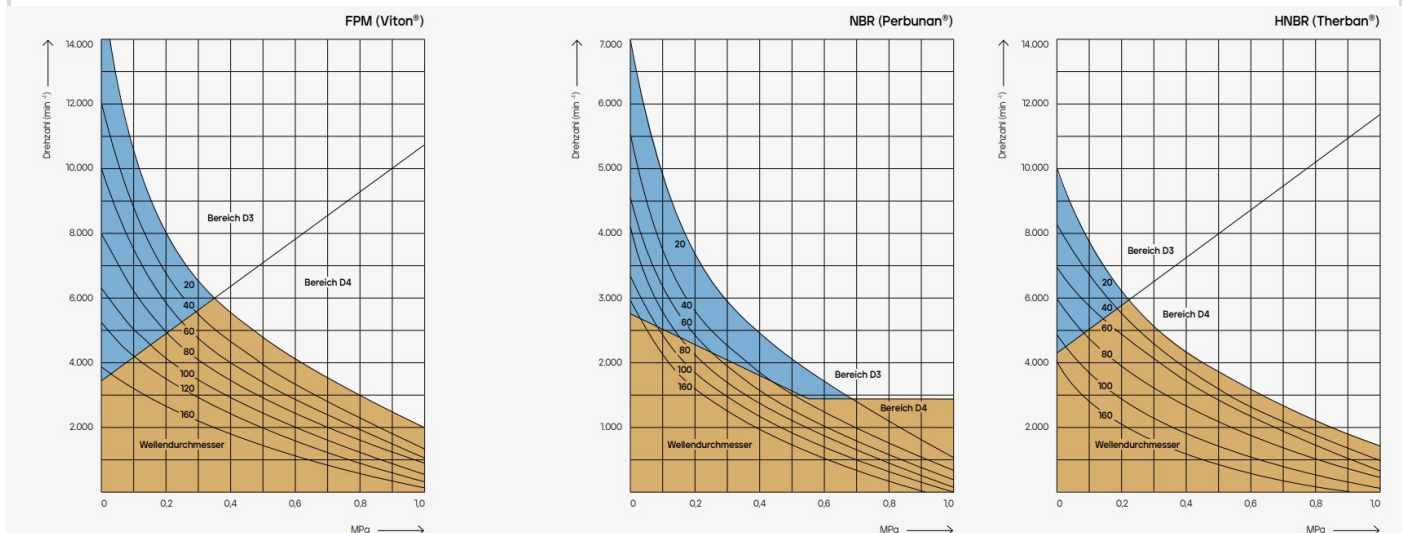
Surface Element	Rz	Ra / Rt
Shaft	1 - 5 µm	0.1 - 0.8 µm
Housing	4.0 µm ≤ Rz ≤ 8.0 µm	Ra ≤ 3 µm Rt ≤ 16 µm

*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

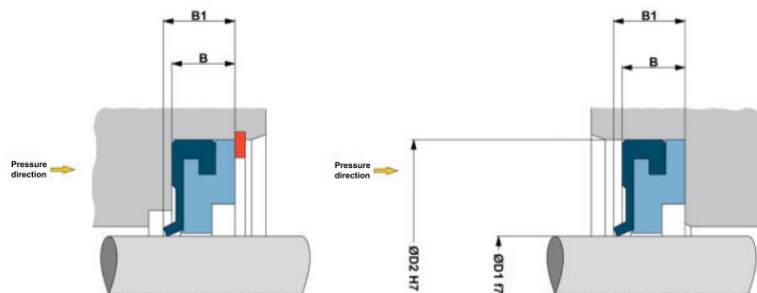




SOA Single Lip Seal

support body / diameter

differing dimensions and >150 mm
bore-Ø on request



D1	D2	B	B1	B2	D1	D2	B	B1	B2	D1	D2	B	B1	B2	D1	D2	B	B1	B2
					20	30	5			42	55	6			85	110	7		
						32					62					120			
5	16	5				35					72				90	110			
	22					40				45	60					120			
						47					62				95	120			
6	16			22		32					65					125			
	22					35					72				100	120			
						40				48	62					125			
7	16					47					72					130			
	22				24	35				50	65				105	130			
8	16					37					68					140			
	22					40					72				110	130			
	24					47					80					140			
9	22				25	35				52	68				115	140			
	24					40					72					150			
	26					42				55	70				120	150			
10	22					47					72								
	24					52	6				80								
	26			26		37	5				85								
11	22					42				56	70								
	24					47					72								
	26				28	40					80								
12	22					47					85								
	24					52	6			58	72								
	26				30	40	5				80								
	28					42				60	75								
	30					45					80								
14	24					47					85								
	28					50					90								
	30					52	6			62	85								
	35					62					90								
15	26				32	45	5			63	85								
	30					47					90								
	32					52	6			65	85								
	35				35	47	5				90								
16	28					50					100								
	30					52	6			68	90								
	32					62					100								
	35				36	47	5			70	90								
17	28					50					100								
	30					52	6			72	95								
	32					62					100								
	35				38	52				75	95								
	40					55					100								
18	30					62				78	100								
	32				40	52				80	100								
	35					55					110	7							
	40					62													
						72													