
SEALS FOR SAE J518 FLANGES



- Axial sealing -
- Hydraulic seal -

- Elastomers, Polyurethane -





■ Description

Flanges to the SAE J518 standard are among the most widely used static connections for high volume flows. They are functionally reliable and simple to assemble and dismantle. The individual elements for sealing these flanges can be Nitrile O-Rings, Nitrile rectangular rings (type DRV2), or polyurethane compact sealing rings (type DRV3), specially developed for mobile hydraulic systems.

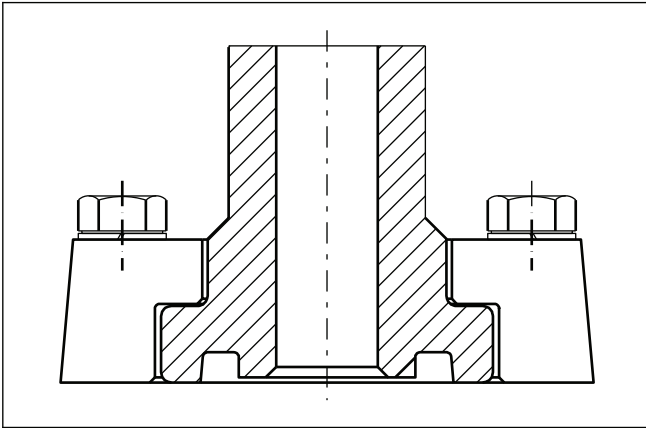


Figure 36 SAE-Flange acc. to J518

Application examples

- Mobile hydraulics
- Injection moulding machines
- Machine tools
- Presses
- Excavators
- Agricultural machines

■ O-Ring

Advantages

- Simple design
- Economical sealing
- Ex stock availability

Technical data

- Service pressure: max. 21 MPa
- Standard material: NBR 90 Shore A
- Operating temperature: NBR 90: -20 °C to +100 °C
- Media: HL, HLP, HETG, HEPG, HEES and HFC hydraulic fluids

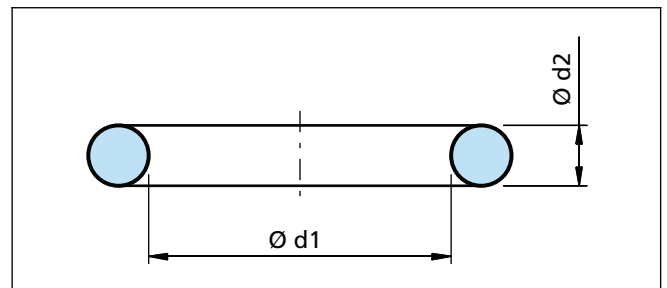


Figure 37 O-Ring acc. to AS 568 B

Ordering example

ORAR00214-N9

Table XXXIII Dimensions / TSS Part No.

Nominal flange size	d1	d2	TSS Part No.
1/2"	18.64	3.53	ORAR00210
3/4"	24.99	3.53	ORAR00214
1"	32.92	3.53	ORAR00219
1 1/4"	37.69	3.53	ORAR00222
1 1/2"	47.22	3.53	ORAR00225
2"	56.74	3.53	ORAR00228



■ Type DRV2

Advantages

- Minimal mechanical deformation of the cross-section
- Outstanding sealing behaviour over long periods
- No twisting in the groove due to its rectangular profile
- Less sensitive to gap extrusion
- No relative movements during pressure cycles
- Dimensionally stable under pressure
- High leak tightness
- Fits at the outer diameter due to its interference with the groove

Technical data

- Service pressure: max. 42 MPa
- Standard material: NBR 90 Shore A
- Operating temperature NBR 90: -20 °C to +100 °C
- Media: HL, HLP, HETG, HEPG, HEES and HFC hydraulic fluids

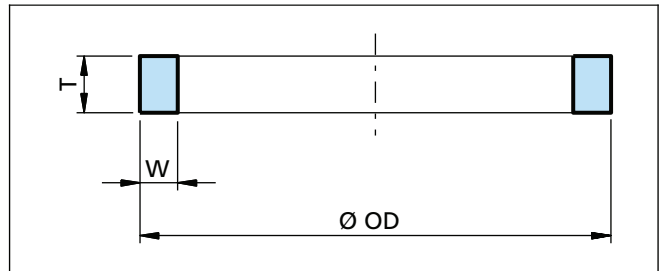


Figure 38 Type DRV2

Ordering example

DRV203230-N9

Table XXXIV Dimensions / TSS Part No.

Nominal flange size	OD	W	T	TSS Part No.
1/2"	25.85	2.8	3.4	DRV202585
3/4"	32.30	2.8	3.4	DRV203230
1"	40.15	2.8	3.4	DRV204015
1 1/4"	45.05	2.8	3.4	DRV204505
1 1/2"	54.40	2.8	3.4	DRV205440
2"	63.90	2.8	3.4	DRV206390



■ SAE-Seal type DRV3

Advantages

- Good abrasion resistance
- Usable for rough surface finish
- The sealing edge offers a very good sealing function
- Very high resistance to extrusion
- Low compression set

Technical data

- Service pressure: max. 42 MPa
- Standard material: Zurcon® Z20 polyurethane 93 Shore A
- Operating temperature: Z20: -35 °C to +110 °C
- Media: HL and HLP hydraulic fluids

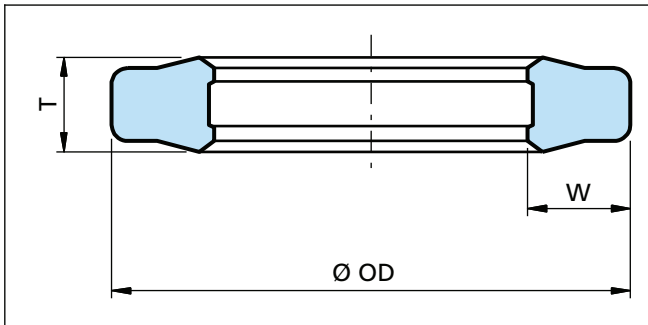


Figure 39 SAE-Seal type DRV3

Ordering example

DRV302560-Z20

Table XXXV Dimensions / TSS Part No.

Nominal flange size	OD	W	T	TSS Part No.
1/2"	25.6	3.8	3.4	DRV302560
3/4"	31.8	3.8	3.4	DRV303180
1"	39.8	3.8	3.4	DRV303980
1 1/4"	44.8	3.8	3.4	DRV304480
1 1/2"	54.3	3.8	3.4	DRV305430
2"	63.8	3.8	3.4	DRV306380

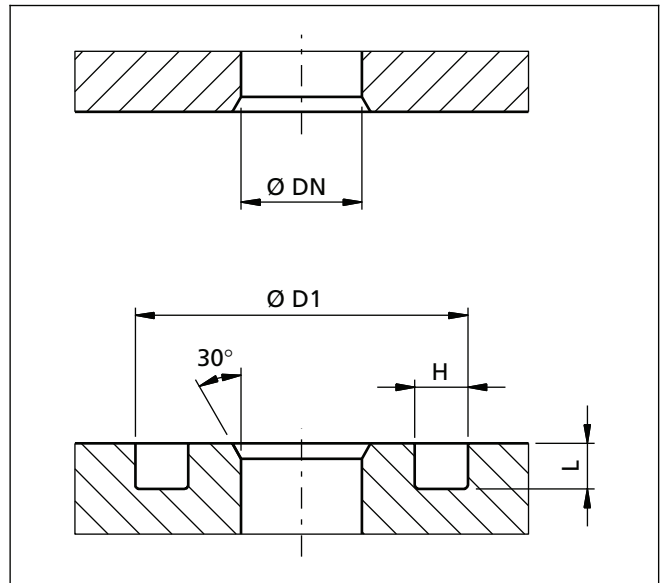


Figure 40 SAE installation dimensions

Table XXXVI Installation SAE recommendations

Nominal flange size	Ø DN	Ø D1 min. - max.	H min. - max.	L min. - max.
1/2"	13	25.40 - 25.83	3.94 - 4.45	2.79 - 2.92
3/4"	19	31.75 - 31.88	3.94 - 4.45	2.79 - 2.92
1"	25	39.62 - 39.75	3.94 - 4.45	2.79 - 2.92
1 1/4"	32	44.45 - 44.58	3.94 - 4.45	2.79 - 2.92
1 1/2"	38	53.72 - 53.98	3.94 - 4.45	2.79 - 2.92
2"	51	63.25 - 63.50	3.94 - 4.45	2.79 - 2.92

Important Note:

The performance and operational reliability of this seal is related to the assembly techniques used. The application limits for pressure and temperature given in this catalogue are maximum values. During practical applications it should be remembered that due to the interaction of operating action of operating parameters, the maximum values must be set correspondingly lower.