

POLYPAC® - Selemaster DSM

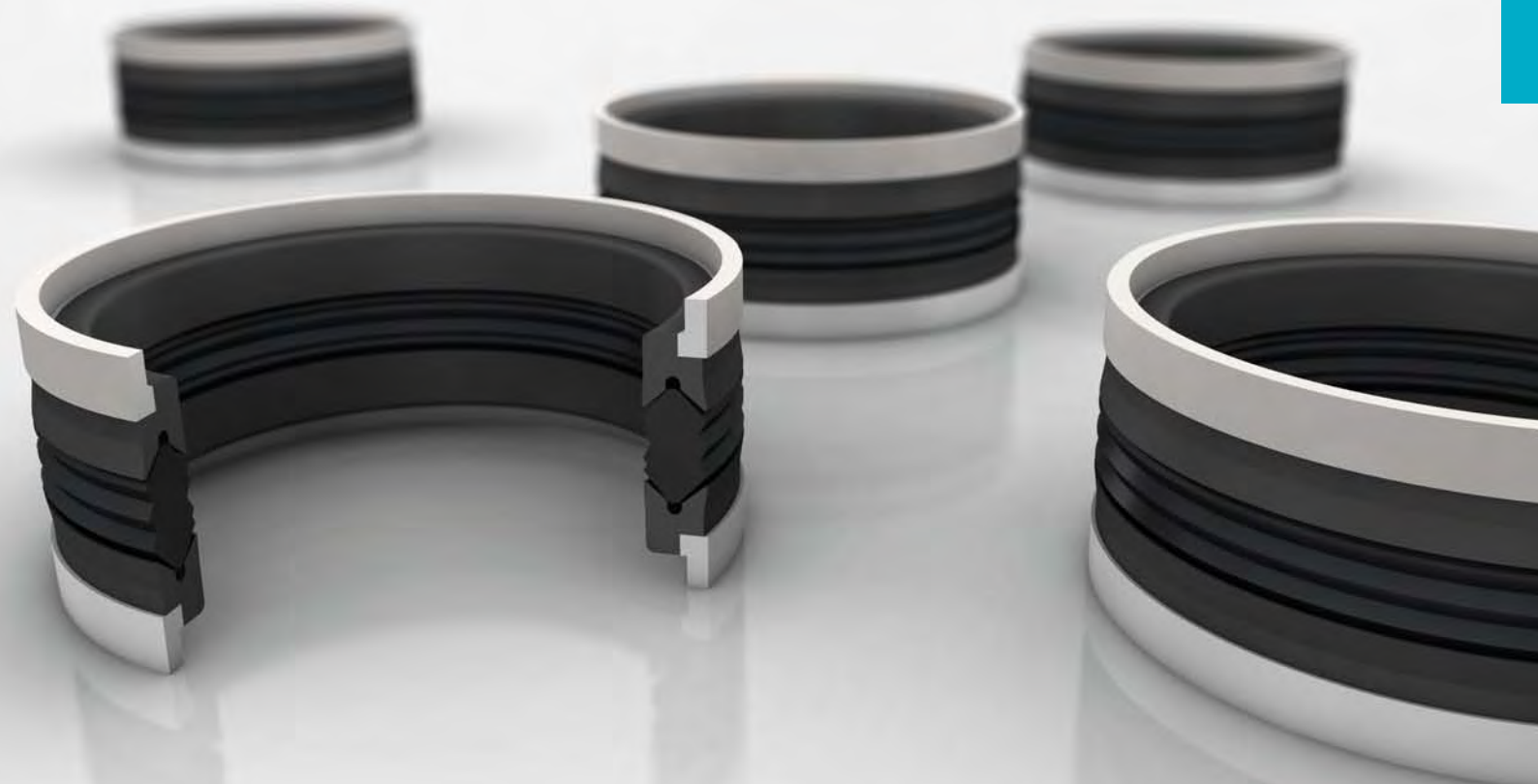


Double-acting

Compact Piston Seal

Material:

NBR + Fiber Reinforced NBR + POM





Selemaster DSM



Description

The piston seal DSM range has been designed to meet the needs of hydraulic equipments operating at high pressures and subjected to severe loading and vibration conditions.

The main sealing element is manufactured in a highly compression set resistant nitrile. The most important quality of this element is the design of the multiple sealing lips for maximum sealing efficiency and end face configuration, which ensures that the selemaster can tolerate vibrations and severe misalignment.

The two support rings are made in cotton fabric reinforced nitrile elastomer; the "U" shape is energised when pressure is applied.

The last elements are the two guide rings manufactured in acetal resin which have also the function of anti-extrusion rings.

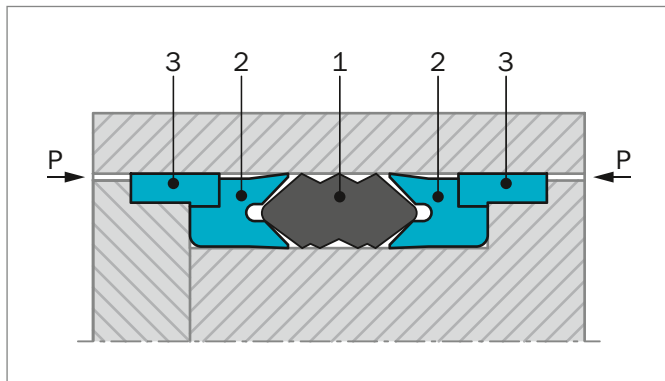


Figure 171: Selemaster design

- 1) Sealing element
- 2) Support ring
- 3) Guide ring

ADVANTAGES

- Effective sealing during vibration and shock loading
- High sealing efficiency
- Extrusion resistance at high pressure

APPLICATION EXAMPLES

- Earth-moving machines
- Excavators
- Lift platforms

OPERATING CONDITIONS

Pressure:	Up to 70 MPa
Velocity:	Up to 0.5 m/s
Temperature:	-30 °C to +130 °C
Media:	Hydraulic fluids Mineral oil-based hydraulic fluids, water and water/glycol emulsions
Groove type:	Open

IMPORTANT NOTE

The above data are maximum values and cannot be used at the same time, e.g. the maximum operating speed depends on material type, pressure, temperature and gap value. Temperature range also depends on media.

STANDARD MATERIAL

- | | |
|--------------------|-----------------------|
| 1) Sealing element | NBR 80 |
| 2) Support ring | Cotton reinforced NBR |
| 3) Guide ring | POM |



Installation Recommendation

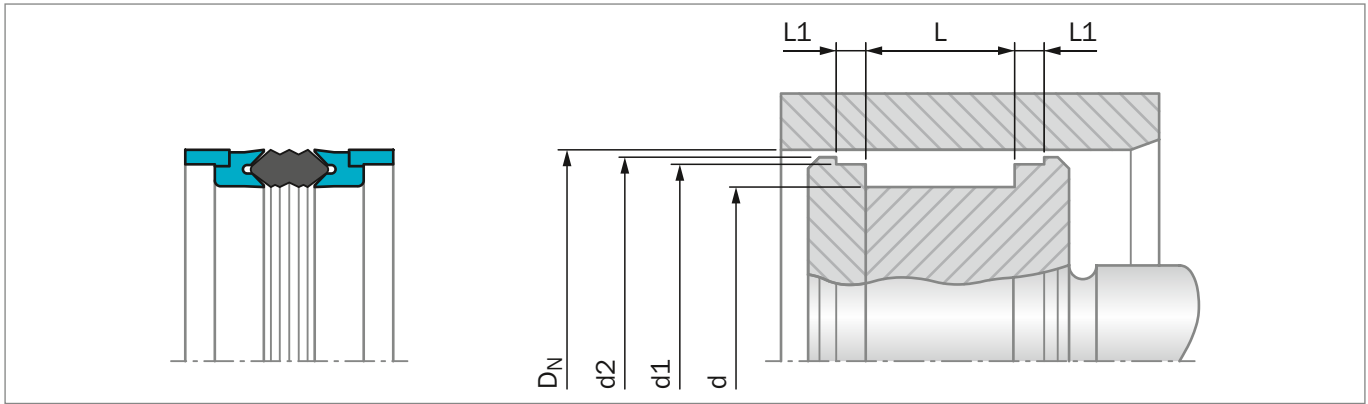


Figure 172: Installation Drawing

ORDERING EXAMPLE

Selemaster DSM

Bore Diameter:	$D_N = 70.0$ mm
Groove Diameter:	$d = 50.0$ mm
Groove Width	$E = 35.0$ mm
TSS Part No.:	PCK000700 from Table 159
Material Code:	N8CO
Polypac Ref.:	DSM 275196/1A

TSS Article No. **PCK 0 00700 - N8CO**

TSS Series No. ——— PCK

Type (Standard) ——— 0

Bore Diameter x 10 ——— 00700

Quality Index (Standard) ——— -

Material Set-Code ——— N8CO

Table 159: Installation Dimensions / TSS Part No.

Bore Diameter	Groove Diameter	Groove Width	Groove Width	Diameter	Diameter		TSS Part No.	Description
D_N	d	L	$L1$	$d1$	$d2$			
H11	h11	+0.2	+0.1	+/-0.05	+/-0.07			
45.00	29.00	32.00	6.35	38.80	42.80	^	PCK000450	DSM 177114/1A
50.00	34.00	32.00	6.35	43.77	47.80		PCK000500	DSM 196133/1A
55.00	40.00	32.00	6.35	48.77	52.80		PCK000550	DSM 216157/1A
60.00	44.00	32.00	6.35	53.80	57.80		PCK000600	DSM 236173/1A
63.00	47.00	32.00	6.35	56.74	60.80		PCK000630	DSM 248185/1A
63.50	47.62	31.75	6.35	57.25	61.30	^	PCK000635	DSM 250187/1A
65.00	49.00	32.00	6.35	58.70	62.80		PCK000650	DSM 255192/1A
70.00	50.00	35.00	9.52	62.62	67.50		PCK000700	DSM 275196/1A
75.00	55.00	35.00	9.52	67.70	72.50		PCK000750	DSM 295216/1A
80.00	60.00	35.00	9.52	72.62	77.50		PCK000800	DSM 314236/1A
80.00	64.00	32.00	9.52	72.62	77.50		PCK100800	DSM 314251/1A
85.00	65.00	35.00	9.52	77.62	82.50		PCK000850	DSM 334255/1A
90.00	70.00	35.00	9.52	82.58	87.80		PCK000900	DSM 354275/1A
90.00	74.00	32.00	9.52	82.87	87.80		PCK100900	DSM 354291/1A
92.07	73.02	34.92	9.52	84.66	89.60	^	PCK000921	DSM 362287/1A
95.00	75.00	35.00	9.52	87.60	92.50		PCK000950	DSM 374295/1A



Bore Diameter	Groove Diameter	Groove Width	Groove Width	Diameter	Diameter		TSS Part No.	Description
D _N	d	L	L1	d1	d2			
H11	h11	+0.2	+0.1	+/-0.05	+/-0.07			
95.25	76.20	34.92	9.52	87.86	92.80	^	PCK000953	DSM 375300/1A
100.00	80.00	35.00	9.52	92.60	97.50		PCK001000	DSM 393314/1A
101.60	82.55	34.92	9.52	94.20	99.10		PCK001016	DSM 400325/1A
105.00	85.00	35.00	9.52	97.60	102.50	^	PCK001050	DSM 413334/1A
110.00	85.00	45.00	12.70	101.82	107.30		PCK001100	DSM 433334/1A
110.00	90.00	35.00	9.52	102.70	107.50		PCK101100	DSM 433354/1A
114.30	88.90	44.45	12.70	106.12	111.60		PCK001143	DSM 450350/1A
115.00	90.00	45.00	12.70	106.82	112.30		PCK001150	DSM 452354/1A
120.00	95.00	45.00	12.70	111.82	117.30		PCK001200	DSM 472374/1A
120.00	100.00	35.00	9.52	112.80	117.50		PCK101200	DSM 472393/1A
125.00	100.00	45.00	12.70	116.82	122.30		PCK001250	DSM 492393/1A
127.00	101.60	44.45	12.70	118.80	124.30		PCK001270	DSM 500400/1A
130.00	105.00	45.00	12.70	121.82	127.30		PCK001300	DSM 511413/1A
130.00	110.00	35.00	9.52	122.70	127.30		PCK101300	DSM 511433/1A
135.00	110.00	45.00	12.70	126.82	132.30		PCK001350	DSM 531433/1A
139.70	114.30	44.45	12.70	131.47	137.00	^	PCK001397	DSM 550450/1A
140.00	115.00	45.00	12.70	131.72	137.30		PCK001400	DSM 551452/1A
140.00	120.00	35.00	9.52	132.70	137.30		PCK101400	DSM 551472/1A
145.00	120.00	45.00	12.70	136.72	142.30		PCK001450	DSM 570472/1A
150.00	125.00	45.00	12.70	141.72	147.30		PCK001500	DSM 590492/1A
152.40	127.00	44.45	12.70	144.15	149.70	^	PCK001524	DSM 600500/1A
160.00	135.00	45.00	12.70	151.72	157.10		PCK001600	DSM 629531/1A
165.00	135.00	45.00	12.70	158.00	162.10		PCK001650	DSM 649531/1A
170.00	140.00	45.00	12.70	163.00	167.90		PCK001700	DSM 669551/1A
177.80	152.40	44.45	12.70	169.55	175.10		PCK001778	DSM 700600/1A
180.00	155.00	45.00	12.70	171.60	177.10		PCK001800	DSM 708610/1A
185.00	160.00	45.00	12.70	176.72	182.10		PCK001850	DSM 728629/1A
190.00	165.00	45.00	12.70	181.72	187.10		PCK001900	DSM 748649/1A
200.00	175.00	45.00	12.70	191.72	197.10		PCK002000	DSM 787688/1A
210.00	185.00	45.00	12.70	201.60	207.10		PCK002100	DSM 826728/1A
220.00	195.00	45.00	12.70	211.60	217.10		PCK002200	DSM 866767/1A
230.00	205.00	45.00	12.70	221.72	227.10		PCK002300	DSM 905807/1A
240.00	215.00	45.00	12.70	231.72	237.10		PCK002400	DSM 944846/1A
250.00	225.00	45.00	12.70	241.72	247.10		PCK002500	DSM 984886/1A
260.00	235.00	45.00	12.70	251.72	257.10		PCK002600	DSM 1024925/1A
270.00	245.00	45.00	12.70	261.72	267.10		PCK002700	DSM 1062965/1A
280.00	255.00	45.00	12.70	271.72	277.10		PCK002800	DSM 11021004/1A
290.00	265.00	45.00	12.70	281.72	287.10		PCK002900	DSM 11411043/1A
300.00	275.00	45.00	12.70	291.72	297.10		PCK003000	DSM 11811082/1A
360.00	335.00	44.50	12.70	351.76	357.30		PCK003600	DSM 14171318/1A

^ Available upon request

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