

ISPQ

DESCRIPTION

Three-part double-acting piston seal

MATERIAL

PTFE WITH LOAD + NBR OR FKM

WORKING CONDITIONS

Speed: Reciprocating up to 2 m/sec.
Continuous up to 2 m/sec.

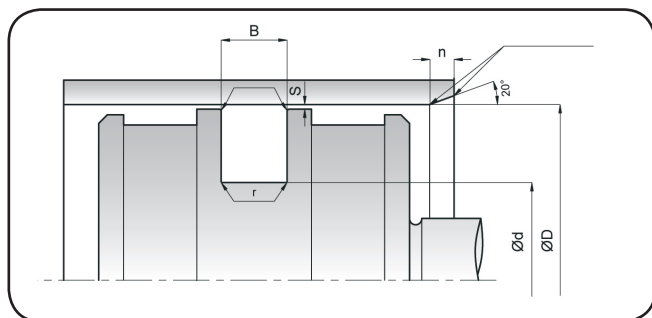
Pressure: From zero to < 400 Bar.
For higher pressures contact the Technical Department.

Temperature: -40 to + 120°C+
(depending on O-Ring material)
For temperatures exceeding this range, please contact our Technical Department.

Recommended for use with a minimum of two piston guide rings on long stroke cylinders, a minimum of one piston guide ring on short stroke cylinders subjected to low radial loads. For special applications requiring high temperature operation or chemical resistance, the piston seal can be made of a special PTFE mixture, and the O-ring, with FKM. The maximum extrusion gap values of the ISPQ piston seal are shown in the table below.



DOUBLE-ACTING PISTON SEAL



MAIN FEATURES

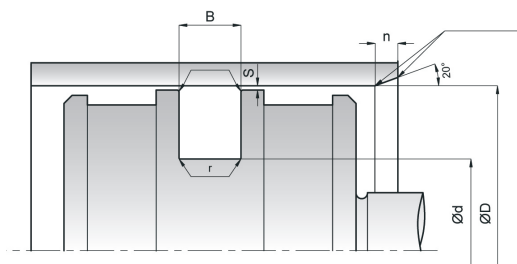
ISPQ is a three-part double-acting sealing assembly consisting of a sealing ring made of a special PTFE mixture, an X-ring as the main sealing element, and an O-ring as the energising element.

ADVANTAGES OF THIS PRODUCT

- Wide range of temperature and chemical resistance, depending on O-ring and X-ring material.
- Low friction, no stick-slip effect.
- High sealing effect in applications requiring the separation of two different media.
- Low gas permeability value.
- Minimal energy loss and temperature increase due to minimal dynamic and static friction coefficient.
- Simple and narrow design housing.

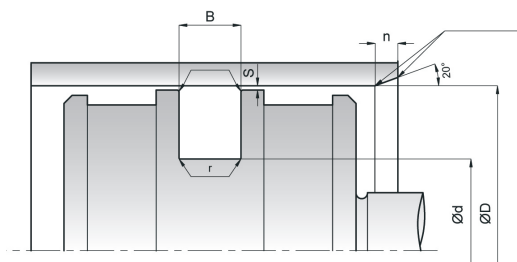
B (mm)	MAXIMUM EXTRUSION GAP		
	Smax (mm)		
	150Bar	250Bar	400Bar
4.20	0.25	0.15	0.10
6.30	0.30	0.20	0.15
8.10	0.30	0.20	0.15
9.50	0.50	0.25	0.20

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D (H9)	Ød (h9)	Ød (h9)2	r	n	O-Ring	Q-Ring
16.00	5.00	4.20	1.00	1.00	4.34x3.53	12.42x1.78
22.00	11.00	4.20	1.00	1.00	10.69x3.53	17.17x1.78
25.00	14.00	4.20	1.00	1.00	13.87x3.53	20.35x1.78
28.00	17.00	4.20	1.00	1.00	15.47x3.53	23.52x1.78
30.00	19.00	4.20	1.00	1.00	18.66x3.53	25.12x1.78
32.00	21.00	4.20	1.00	1.00	20.22x3.53	26.70x1.78
35.00	24.00	4.20	1.00	1.00	23.40x3.53	29.87x1.78
40.00	29.00	4.20	1.30	1.00	28.17x3.53	34.65x1.78
42.00	31.00	4.20	1.30	1.00	29.75x3.53	37.82x1.78
45.00	34.00	4.20	1.30	1.00	32.92x3.53	37.82x1.78
50.00	39.00	4.20	1.30	1.00	37.69x3.53	44.17x1.78
50.00	34.50	6.30	1.30	1.30	32.69x5.33	44.17x1.78
52.00	41.00	4.20	1.30	1.00	40.87x3.53	47.35x1.78
55.00	44.00	4.20	1.30	1.00	44.04x3.53	50.52x1.78
60.00	49.00	4.20	1.30	1.00	47.22x3.53	53.70x1.78
63.00	52.00	4.20	1.30	1.00	50.39x3.53	56.87x1.78
63.00	47.50	6.30	1.30	1.30	46.99x5.33	56.87x1.78
65.00	54.00	4.20	1.30	1.00	53.57x3.53	60.05x1.78
70.00	59.00	4.20	1.30	1.00	56.74x3.53	63.22x1.78
70.00	54.50	6.30	1.30	1.30	53.34x5.33	63.22x1.78
75.00	64.00	4.20	1.30	1.00	63.09x3.53	69.57x1.78
80.00	64.50	6.30	1.80	1.30	62.87x5.33	72.75x1.78
80.00	59.00	8.10	1.80	1.80	58.00x6.99	71.12x2.62
85.00	69.50	6.30	1.80	1.30	69.22x5.33	75.92x1.78
90.00	74.50	6.30	1.80	1.30	72.39x5.33	82.27x1.78
95.00	79.50	6.30	1.80	1.30	78.74x5.33	88.62x1.78
100.00	84.50	6.30	1.80	1.30	81.92x5.33	88.62x1.78
105.00	89.50	6.30	1.80	1.30	88.27x5.33	94.97x1.78
110.00	94.50	6.30	1.80	1.30	91.44x5.33	101.32x1.78
115.00	99.50	6.30	1.80	1.30	97.79x5.33	107.67x1.78
120.00	104.50	6.30	1.80	1.30	100.97x5.33	114.02x1.78
125.00	109.50	6.30	1.80	1.30	107.32x5.33	114.02x1.78
130.00	114.50	6.30	1.80	1.30	113.67x5.33	120.37x1.78
135.00	114.00	8.10	1.80	1.80	113.67x6.99	126.67x2.62
140.00	119.00	8.10	1.80	1.80	116.84x6.99	126.67x2.62
150.00	129.00	8.10	1.80	1.80	126.37x6.99	139.37x2.62
160.00	139.00	8.10	1.80	1.80	135.89x6.99	145.72x2.62
170.00	149.00	8.10	1.80	1.80	145.42x6.99	158.42x2.62

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D (H9)	Ød (h9)	Ød (h9)2	r	n	O-Ring	Q-Ring
180.00	159.00	8.10	1.80	1.80	158.12x6.99	171-11x2.62
190.00	169.00	8.10	1.80	1.80	164.47x6.99	177.47x2.62
200.00	179.00	8.10	1.80	1.80	177.17x6.99	190.17x2.62
210.00	189.00	8.10	1.80	1.80	183.52x6.99	196.52x2.62
220.00	199.00	8.10	1.80	1.80	196.22x6.99	202.87x2.62
240.00	219.00	8.10	1.80	1.80	215.27x6.99	221.92x2.62
250.00	229.00	8.10	1.80	1.80	227.97x6.99	234.62x2.62
250.00	225.50	8.10	1.80	1.80	227.97x6.99	234.62x2.62