

PISTON SEALS BECA 519



DESCRIPTION

The BECA 519 profile is a double acting composite piston seal composed of a polyurethane friction ring and a flexible rubber ring.

ADVANTAGES

Good sealing in static and dynamic applications

The square ring does not twist under pressure

Suitable for reduced axial size

APPLICATIONS

Mobile hydraulics
Injection presses
Hydraulic cylinders

MATERIALS

Profiled seal

NBR 70 Shore A if $\varnothing D1 \leq 63.00$ mm

NBR 80 Shore A if $\varnothing D1 > 63.00$ mm

Friction ring

PU 93 Shore A - Blue

PU 96 Shore A - Blue

High temp. PU 96 Shore A - Beige

TPC-E (Hytre)

TECHNICAL DATA

Temperature	-30°C / +100°C
Pressure	40 MPa
Speed	0.5 m/sec
Media	Mineral hydraulic oils

The figures above indicate the maximum values and may not be cumulated. They may be developed, depending on the materials used.

EXTRUSION GAPS

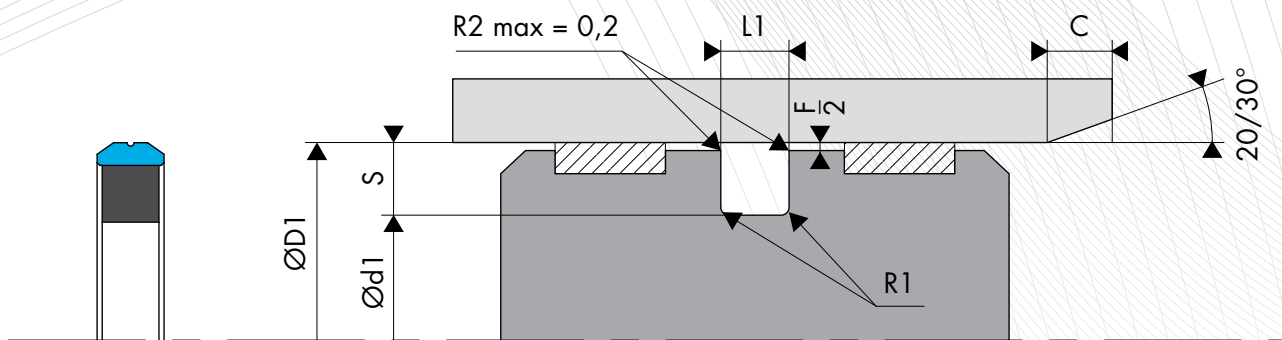
Radial section S	Radial gap F/2			
	10 MPa	25 MPa	35 MPa	40 MPa
3.75	0.30	0.20	---	---
5.50	0.40	0.30	0.20	---
7.75	0.50	0.40	0.30	0.25
10.50	0.60	0.50	0.40	0.35
12.50	0.65	0.55	0.45	0.40

SURFACE ROUGHNESS

Roughness	Dynamic surface area	Static surface area	Groove flanks
Ra	0.1 - 0.4 μm	≤ 1.6 μm	≤ 3.2 μm
Rz	0.63 - 2.5 μm	≤ 6.3 μm	≤ 10.0 μm
Rmax	1.0 - 4.0 μm	≤ 10.0 μm	≤ 16.0 μm

CHAMFERS AND RADIUS

Radial section S	Radius R1	Chamfer C
3.75	0.20	2.00
5.50	0.30	2.50
7.75	0.30	3.00
10.50	0.40	5.00
12.50	0.40	9.00



DIMENSIONS

Part number	Bore diameter ØD1 H9	Groove diameter Ød1 h9	Groove width L1 0/+0.20
519.020	20.00	12.50	3.20
519.025	25.00	17.50	3.20
519.030	30.00	22.50	3.20
519.032	32.00	24.50	3.20
519.040	40.00	24.50	6.30
519.1040	40.00	27.00	6.30
519.2040	40.00	29.00	4.20
519.045	45.00	29.50	6.30
519.1045	45.00	32.00	6.30
519.050	50.00	34.50	6.30
519.1050	50.00	37.00	6.30
519.2050	50.00	39.00	4.20
519.055	55.00	39.50	6.30
519.155	55.00	44.00	4.20
519.058	58.00	45.00	6.30
519.060	60.00	44.50	6.30
519.1060	60.00	49.00	4.20
519.063	63.00	47.50	6.30
519.1063	63.00	50.00	6.30
519.2063	63.00	52.00	4.20
519.3063	63.00	53.00	5.00
519.065	65.00	49.50	6.30
519.1065	65.00	52.00	6.30
519.2065	65.00	54.00	4.20
519.3065	65.00	54.00	6.30
519.070	70.00	54.50	6.30
519.1070	70.00	57.00	6.30
519.2070	70.00	59.00	4.20

Part number	Bore diameter ØD1 H9	Groove diameter Ød1 h9	Groove width L1 0/+0.20
519.712	71.20	66.40	7.20
519.075	75.00	59.50	6.30
519.1075	75.00	62.00	6.30
519.2075	75.00	64.00	4.20
519.080	80.00	59.00	8.10
519.1080	80.00	64.50	6.30
519.2080	80.00	66.50	6.30
519.085	85.00	71.50	6.30
519.090	90.00	74.50	6.30
519.1090	90.00	74.50	7.10
519.095	95.00	79.50	6.30
519.100	100.00	79.00	8.10
519.1100	100.00	84.50	6.30
519.1100	100.00	86.50	6.30
519.105	105.00	89.50	6.30
519.110	110.00	89.00	8.10
519.1110	110.00	94.50	6.30
519.2110	110.00	94.50	6.30
519.120	120.00	99.00	10.50
519.1120	120.00	104.50	6.30
519.125	125.00	104.00	8.10
519.1125	125.00	109.50	6.30
519.130	130.00	109.00	8.10
519.140	140.00	119.00	8.10
519.150	150.00	129.00	10.50
519.160	160.00	139.00	8.10
519.180	180.00	159.00	7.80
519.1180	180.00	159.00	8.10

The figures highlighted in bold correspond to the dimensions for standard ISO 7425/1, with the bore diameters in line with standard ISO 3320. Other intermediate sizes can be provided.