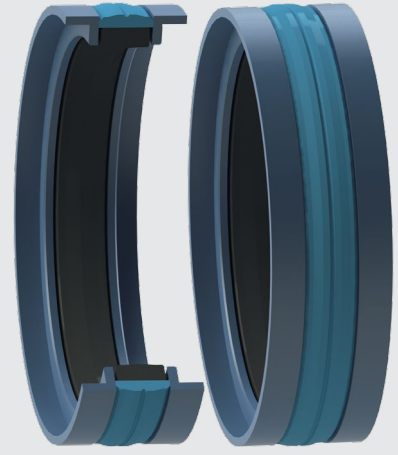


# PISTON SEALS

## BECA 510



### DESCRIPTION

The BECA 510 profile is a high-performing, double acting compact piston seal composed of two POM wear/back-up rings, a polyurethane friction ring for dynamic applications and a flexible pre-tightened NBR ring. It can be assembled in a groove according to standard ISO 6547.

### ADVANTAGES

- Excellent wear resistance
- Very low compression set
- Closed groove assembly

### APPLICATIONS

- Construction equipment
- Lifting equipment
- Hydraulic cylinders

### MATERIALS

**Profiled seal**

NBR 80 Shore A

**Friction ring**

PU 93 Shore A - Blue

PU 96 Shore A - Blue

High temp. PU 96 Shore A - Beige

**Wear/back-up rings**

Polyoxymethylene - POM

### TECHNICAL DATA

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

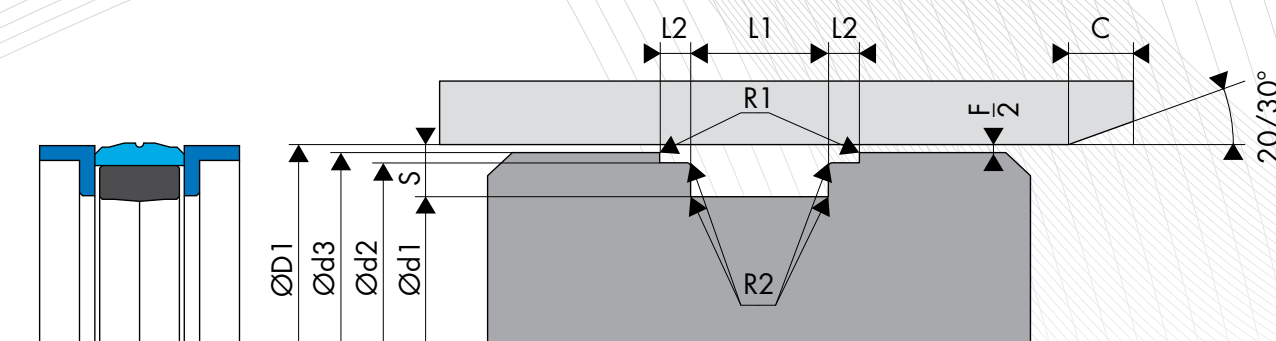
The figures above indicate the maximum values and may not be cumulated. They may be developed, depending on the materials used.

### 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	Radius R2	Chamfer C
4.00	0.40	0.40	2.50
5.00	0.40	0.40	3.00
7.50	0.40	0.40	4.50
10.00	0.80	0.80	5.50
15.00	0.80	0.80	8.00



## DIMENSIONS

Part number	Bore diameter ØD1 H9	Groove diameter			Groove width	
		Ød1 h9	Ød2 h9	Ød3 h11	L1 0/+0.4	L2 0/+0.15
510.3025AP9	25.00	<b>405.74</b>	<b>0/+0.10</b>	<b>24.00</b>	<b>10.00</b>	<b>4.00</b>
510.3032AP9	32.00	<b>24.00</b>	<b>29.00</b>	<b>31.00</b>	<b>10.00</b>	<b>4.00</b>
510.3040AP9	40.00	<b>32.00</b>	<b>37.00</b>	<b>39.00</b>	<b>10.00</b>	<b>4.00</b>
510.3050AP9	50.00	<b>40.00</b>	<b>47.00</b>	<b>49.00</b>	<b>12.50</b>	<b>4.00</b>
510.3063AP9	63.00	<b>53.00</b>	<b>60.00</b>	<b>62.00</b>	<b>12.50</b>	<b>4.00</b>
510.3080AP9	80.00	<b>65.00</b>	<b>76.00</b>	<b>78.50</b>	<b>20.00</b>	<b>5.00</b>
510.3100AP9	100.00	<b>85.00</b>	<b>96.00</b>	<b>98.50</b>	<b>20.00</b>	<b>5.00</b>
510.3125AP9	125.00	<b>105.00</b>	<b>120.00</b>	<b>123.00</b>	<b>25.00</b>	<b>6.30</b>
510.3140AP9	140.00	120.00	135.00	138.00	25.00	6.30
510.3160AP9	160.00	<b>140.00</b>	<b>155.00</b>	<b>158.00</b>	<b>25.00</b>	<b>6.30</b>
510.3180AP9	180.00	150.00	172.00	178.00	36.00	12.50
510.3200AP9	200.00	<b>170.00</b>	<b>192.00</b>	<b>197.00</b>	<b>36.00</b>	<b>12.50</b>
510.3250AP9	250.00	<b>220.00</b>	<b>242.00</b>	<b>247.00</b>	<b>36.00</b>	<b>12.50</b>
510.3320AP9	320.00	<b>290.00</b>	<b>312.00</b>	<b>317.00</b>	<b>36.00</b>	<b>12.50</b>
510.3400AP9	400.00	360.00	392.00	397.00	50.00	16.00
510.3500AP9	500.00	460.00	492.00	497.00	50.00	16.00

The figures highlighted in bold correspond to the dimensions for standard ISO 6547, with the bore diameters in line with standard ISO 3320. Other intermediate sizes can be provided.