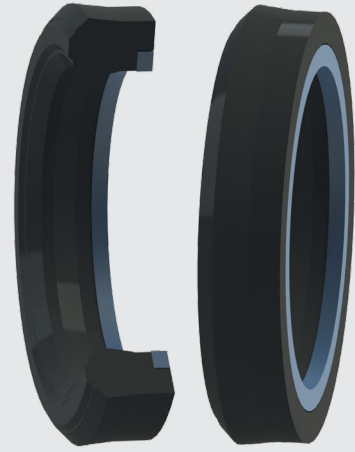


# ROD SEALS

## BECA 301/AE



### DESCRIPTION

The BECA 301/AE profile is a single acting compact rod seal composed of a profiled fabric NBR seal and a POM back-up ring on the back. It can be assembled in a groove according to standard ISO 5597.

### ADVANTAGES

- Optimised sealing effect
- Good chemical compatibility, depending on the material chosen
- Excellent wear resistance
- Excellent extrusion resistance

### APPLICATIONS

- Mobile hydraulics
- Material handling - Lifting
- Presses
- Hydraulic cylinders

### MATERIALS

**Profiled seal**

Fabric NBR

**Back-up ring**

Polyoxymethylene - POM

### TECHNICAL DATA

Temperature	-30°C / +110°C
Pressure	35 MPa
Speed	0.5 m/sec
Media	Mineral hydraulic oils Fire-resistant liquids Biocompatible fluids Water Others (contact our experts)

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

### EXTRUSION GAPS

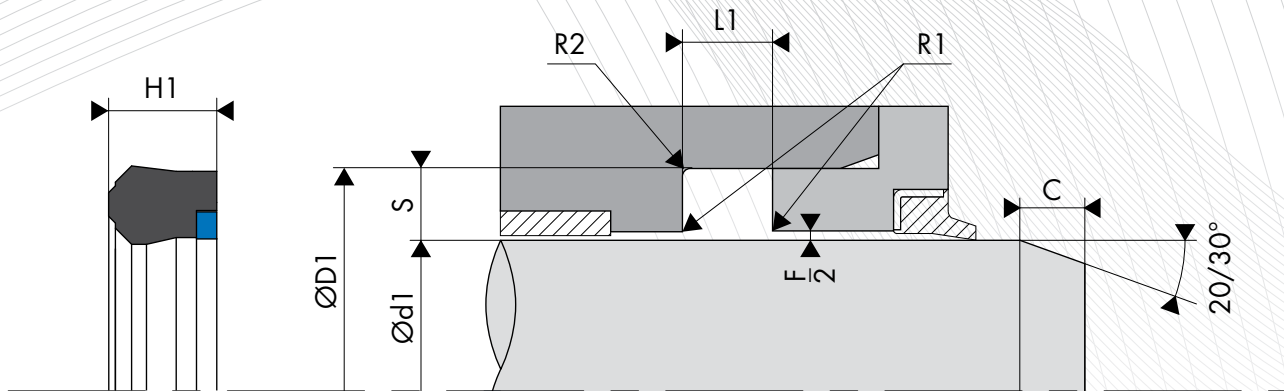
Pressure MPa	Radial gap F/2
15 MPa	0.20
25 MPa	0.10
35 MPa	0.10

### 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	0.20	0.40	2.00
5.00	0.40	0.70	2.50
6.00	0.70	1.10	3.00
7.50	0.70	1.10	4.00
10.00	1.00	1.10	5.00



**DIMENSIONS**

Part number	Rod diameter Ød1 f9	Groove diameter ØD1 H10	Seal height H1	Groove width L1 0/+0.25
301.012019E	12.00	19.00	6.30	7.00
301.016028E	16.00	28.00	7.20	7.50
<b>301.318028E</b>	<b>18.00</b>	<b>28.00</b>	<b>7.20</b>	<b>8.00</b>
<b>301.320028E</b>	<b>20.00</b>	<b>28.00</b>	<b>5.70</b>	<b>6.30</b>
301.020030E	20.00	30.00	8.00	9.00
<b>301.322030E</b>	<b>22.00</b>	<b>30.00</b>	<b>5.70</b>	<b>6.30</b>
301.022035E	22.00	35.00	9.50	10.00
<b>301.325033E</b>	<b>25.00</b>	<b>33.00</b>	<b>5.70</b>	<b>6.30</b>
301.328036E	28.00	36.00	5.70	6.30
301.028040E	28.00	40.00	8.00	9.00
301.332040E	32.00	40.00	5.70	6.30
301.032045E	32.00	45.00	10.00	11.00
301.032047E	32.00	47.00	10.00	11.00
301.035043E	35.00	43.00	5.70	6.30
301.035045E	35.00	45.00	11.00	12.00
301.336044E	36.00	44.00	5.70	6.30
301.0360468	36.00	46.00	8.00	8.50
301.340048E	40.00	48.00	5.70	6.30
<b>301.340050E</b>	<b>40.00</b>	<b>50.00</b>	<b>7.20</b>	<b>8.00</b>
301.040050E	40.00	50.00	10.00	11.00
301.S40050E	40.00	50.00	10.00	11.00
301.040055E	40.00	55.00	10.00	11.00
301.345053E	45.00	53.00	5.70	6.30
<b>301.345055E</b>	<b>45.00</b>	<b>55.00</b>	<b>7.20</b>	<b>8.00</b>
301.045057E	45.00	57.00	10.00	11.00
<b>301.350060E</b>	<b>50.00</b>	<b>60.00</b>	<b>7.20</b>	<b>8.00</b>
301.950060E	50.00	60.00	9.30	10.00
301.050060E	50.00	60.00	10.00	11.00
301.050065E	50.00	65.00	10.00	11.00
301.055065E	55.00	65.00	7.20	8.00
301.356066E	56.00	66.00	6.80	7.50
301.060072E	60.00	72.00	9.00	10.00
301.060075E	60.00	75.00	12.00	13.00
301.363073E	63.00	73.00	6.80	7.50

Part number	Rod diameter Ød1 f9	Groove diameter ØD1 H10	Seal height H1	Groove width L1 0/+0.25
301.063075E	63.00	75.00	10.50	11.50
301.070082E	70.00	82.00	10.00	11.00
301.070084E	70.00	84.00	11.50	12.50
<b>301.370085E</b>	<b>70.00</b>	<b>85.00</b>	<b>11.50</b>	<b>12.50</b>
<b>301.070090E</b>	<b>70.00</b>	<b>90.00</b>	<b>15.00</b>	<b>16.00</b>
301.075085E	75.00	85.00	10.50	11.50
301.075090E	75.00	90.00	11.00	12.00
301.075095E	75.00	95.00	13.50	14.50
301.080901E	80.00	90.00	10.00	11.00
301.080911E	80.00	91.00	9.50	10.50
<b>301.380095E</b>	<b>80.00</b>	<b>95.00</b>	<b>11.50</b>	<b>12.50</b>
301.080096E	80.00	96.00	9.50	10.50
301.080100E	80.00	100.00	13.50	14.50
301.085100E	85.00	100.00	13.00	14.00
301.090100E	90.00	100.00	10.50	11.50
<b>301.390105E</b>	<b>90.00</b>	<b>105.00</b>	<b>11.50</b>	<b>12.50</b>
301.090105E	90.00	105.00	12.50	13.50
301.090110E	90.00	110.00	11.50	12.50
301.110113E	100.00	113.00	12.50	13.00
301.100120E	100.00	120.00	13.50	14.50
301.105125E	105.00	125.00	12.50	13.50
301.110125E	110.00	125.00	11.00	12.00
301.110130E	110.00	130.00	12.00	13.00
301.100133E	120.00	132.70	10.00	11.00
301.120133E	120.00	132.70	10.00	11.00
301.135120I	120.00	135.00	12.50	13.50
301.120140E	120.00	140.00	11.50	12.50
301.130145E	130.00	145.00	13.00	14.00
301.130150E	130.00	150.00	13.50	14.50
301.140160E	140.00	160.00	12.00	13.00
301.160175E	160.00	175.00	15.00	16.00
<b>301.160185E</b>	<b>160.00</b>	<b>185.00</b>	<b>15.00</b>	<b>16.00</b>
301.175200E	175.00	200.00	22.00	23.00

The figures highlighted in bold correspond to the dimensions for standard ISO 5597, with the rod diameters in line with standard ISO 3320. Other intermediate sizes can be provided.