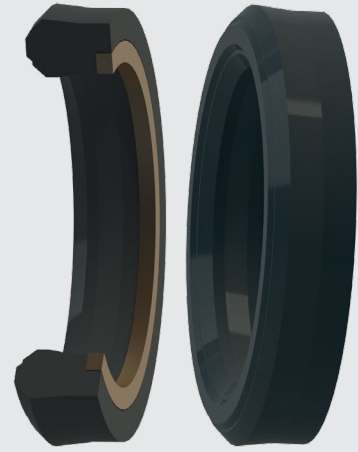


# ROD SEALS

## BECA 302/AE



### DESCRIPTION

The BECA 302/AE profile is a single acting compact rod seal composed of a profiled FKM seal and a bronze-filled PTFE 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 and wide temperature range, depending on the material chosen
- Excellent wear resistance
- Excellent extrusion resistance

### APPLICATIONS

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

### MATERIALS

- Profiled seal**  
FKM 80 Shore A
- Back-up ring**  
Bronze-filled PTFE

### TECHNICAL DATA

Temperature	-20°C / +200°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

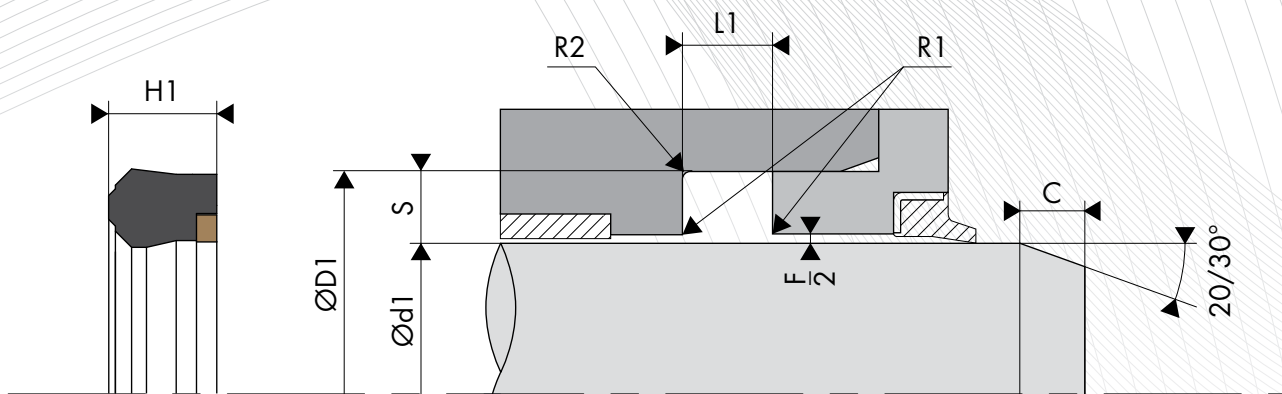
Pressure MPa	Radial gap F/2
15 MPa	0.20
25 MPa	0.10
35 MPa	0.10

### 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
302.016AG6E	16.00	26.00	8.00	9.00
302.018025E	18.00	25.00	5.60	6.30
<b>302.018AG6E</b>	<b>18.00</b>	<b>26.00</b>	<b>5.70</b>	<b>6.30</b>
302.022029E	22.00	29.00	5.00	5.60
<b>302.022BG6E</b>	<b>22.00</b>	<b>30.00</b>	<b>5.70</b>	<b>6.30</b>
302.022AG6E	22.00	32.00	8.00	9.00
302.025BG6E	25.00	33.00	6.40	7.00
302.028BG6E	28.00	36.00	5.70	6.30
<b>302.028CG6E</b>	<b>28.00</b>	<b>38.00</b>	<b>7.20</b>	<b>8.00</b>
302.028AG6E	28.00	40.00	8.00	9.00
<b>302.036BG6E</b>	<b>36.00</b>	<b>46.00</b>	<b>7.20</b>	<b>8.00</b>

Part number	Rod diameter Ød1 f9	Groove diameter ØD1 H10	Seal height H1	Groove width L1 0/+0.25
302.036AG6E	36.00	48.00	8.00	9.00
302.040050E	40.00	50.00	10.00	11.00
302.045053E	45.00	53.00	5.70	6.30
<b>302.045055E</b>	<b>45.00</b>	<b>55.00</b>	<b>7.20</b>	<b>8.00</b>
302.045BG6E	45.00	55.00	7.20	8.00
302.045AG6E	45.00	60.00	12.50	13.50
<b>302.350060E</b>	<b>50.00</b>	<b>60.00</b>	<b>7.20</b>	<b>8.00</b>
302.356066E	56.00	66.00	6.80	7.50
302.056AG6E	56.00	71.00	12.50	13.50
302.070AG6E	70.00	85.00	12.50	13.50
<b>302.390105E</b>	<b>90.00</b>	<b>105.00</b>	<b>11.50</b>	<b>12.50</b>

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.