

ROD SEALS

BECA 231/AE



DESCRIPTION

The BECA 231/AE profile is a polyurethane U-ring type single acting rod seal with offset lips, with a POM back-up ring integrated into the back. It can be assembled in a groove according to standard ISO 5597.

ADVANTAGES

Optimised sealing effect at both high and low pressures
 Excellent abrasion and wear resistance
 Assembly by deformation in closed groove

APPLICATIONS

Mobile hydraulics
 Injection presses
 Machine tools
 Presses
 Hydraulic cylinders

MATERIALS

Profiled seal

PU 93 Shore A - Blue
 PU 96 Shore A - Blue
 High temp. PU 96 Shore A - Beige

Back-up ring

Polyoxymethylene - POM

Other grades of materials are available. Please contact our experts.

TECHNICAL DATA

Temperature	-30°C / +110°C
Pressure	45 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

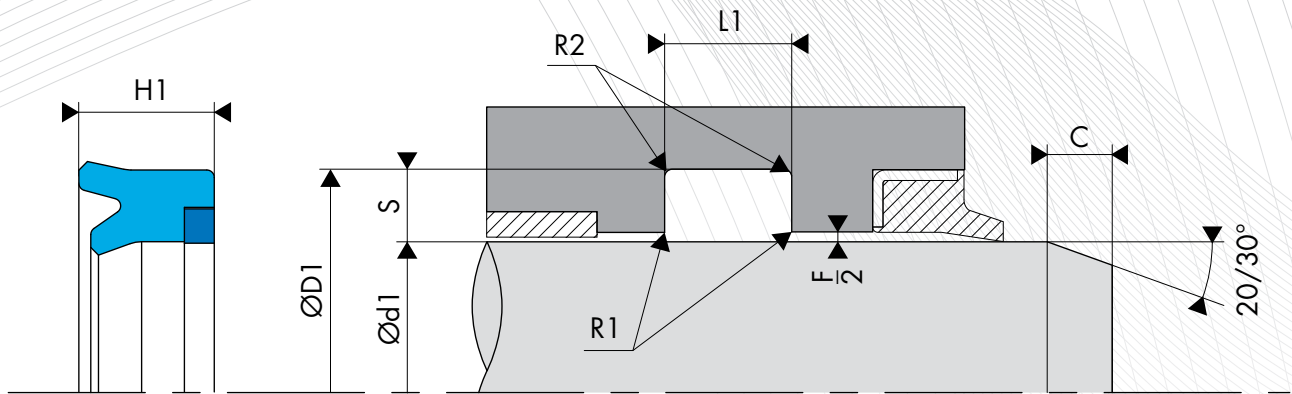
Rod diameter Ød1	Radial gap F/2					
	≤ 5 MPa	≤ 10 MPa	≤ 20 MPa	≤ 30 MPa	≤ 40 MPa	≤ 45 MPa
≤ 60 mm	0.40	0.30	0.20	0.15	0.10	0.07
> 60 mm	0.50	0.40	0.30	0.20	0.15	0.10

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
3.50	0.20	0.40	2.00
4.00	0.20	0.60	2.50
5.00	0.20	1.00	2.50
7.50	0.20	1.00	4.00
12.50	0.20	1.30	6.00
20.00	0.20	1.80	8.00



DIMENSIONS

Part number	Rod diameter Ød1 f8	Groove diameter ØD1 H10	Seal height H1	Groove width L1 0/+0.5
231.1828AEG	18.00	28.00	8.00	9.00
231.R103004	30.00	40.00	10.00	11.00
231.350456E	35.00	45.00	6.50	7.50
231.R703504	35.00	45.00	6.50	7.50
231.035045E	35.00	45.00	10.00	11.00
231.R035045	35.00	45.00	10.00	11.00
231.04555AE	45.00	55.00	7.00	8.00
231.04658AE	46.00	58.00	12.00	13.00

Part number	Rod diameter Ød1 f8	Groove diameter ØD1 H10	Seal height H1	Groove width L1 0/+0.5
231.2055065	55.00	65.00	12.00	13.00
231.E070083	70.00	83.00	13.00	14.00
231.1001154	100.00	115.00	13.00	14.00
231.0105BAE	105.00	125.00	12.00	13.00
231.105125E	105.00	125.00	15.00	16.00
231.E130150	130.00	150.00	16.00	17.00
231.200225E	200.00	225.00	15.00	16.00
231.E200225	200.00	225.00	20.00	21.00

Other intermediate sizes can be provided.