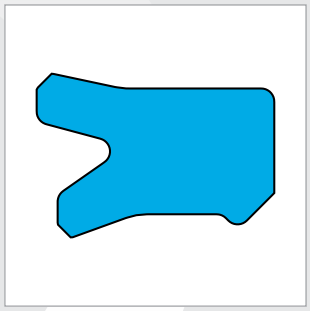


ROD SEALS

BECA 231/B

DESCRIPTION

The BECA 231/B profile is a polyurethane U-ring type single acting rod seal with offset lips, symmetrical lips and a second sealing lip. 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

PU 93 Shore A - Blue

PU 96 Shore A - Blue

High temp. PU 96 Shore A - Beige

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

TECHNICAL DATA

Temperature	-30°C / +110°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

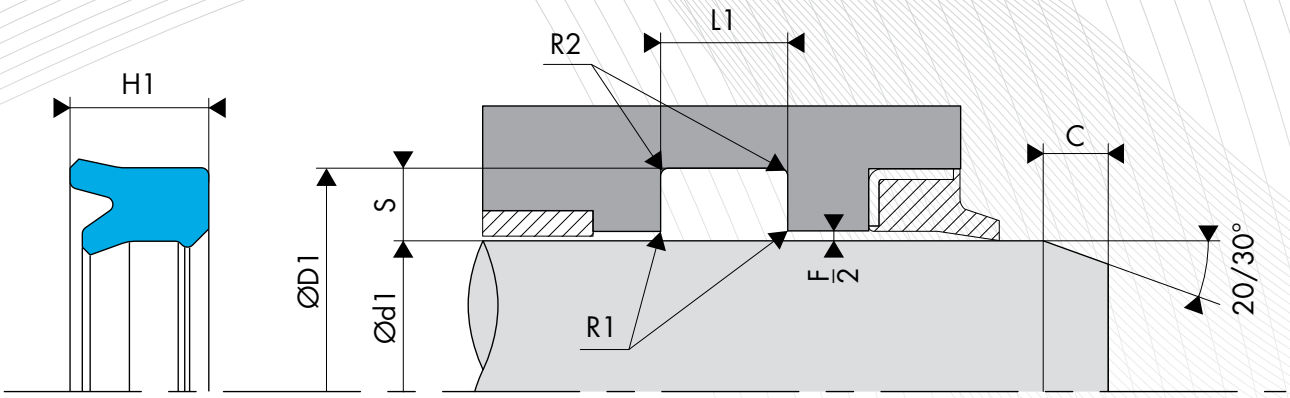
Diameter of the rod Ød1	Radial gap F/2				
	≤ 5 MPa	≤ 10 MPa	≤ 20 MPa	≤ 30 MPa	≤ 40 MPa
≤ 60 mm	0.40	0.30	0.20	0.15	0.10
> 60 mm	0.50	0.40	0.30	0.20	0.15

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
231.0120184	12.00	18.00	4.00	4.50
231.0120185	12.00	18.00	5.00	6.00
231.0150215	15.00	21.00	4.50	5.00
231.0160226	16.00	22.00	5.00	6.00
231.0160235	16.00	23.00	5.00	5.60
231.0160246	**16.00**	**24.00**	**5.70**	**6.30**
231.0180255	18.00	25.00	5.00	5.60
231.0180266	**18.00**	**26.00**	**5.70**	**6.30**
231.0180288	18.00	28.00	8.00	9.00
231.0200265	20.00	26.00	5.00	5.50
231.0200275	20.00	27.00	5.00	5.60
231.0200286	**20.00**	**28.00**	**5.70**	**6.30**
231.0220295	22.00	29.00	5.00	5.60
231.0220306	**22.00**	**30.00**	**5.70**	**6.30**
231.0220309	22.00	30.00	8.00	9.00
231.0240305	24.00	30.00	4.50	5.00
231.0250321	25.00	32.00	10.00	11.00
231.0250325	25.00	32.00	5.00	5.60
231.0250336	**25.00**	**33.00**	**5.70**	**6.30**
231.0250339	25.00	33.00	8.00	9.00
231.0260361	26.00	36.00	10.00	11.00
231.0280366	28.00	36.00	5.70	6.30
231.0280388	**28.00**	**38.00**	**7.00**	**8.00**
231.0300367	30.00	36.00	6.30	7.00
231.0300386	30.00	38.00	5.70	6.30
231.0300387	30.00	38.00	6.30	7.00
231.0300407	30.00	40.00	7.00	8.00
231.0300431	30.00	43.00	10.00	11.00
231.0300461	30.00	46.00	9.00	10.00
231.0320406	32.00	40.00	5.70	6.30
231.0320428	**32.00**	**42.00**	**7.00**	**8.00**
231.0320471	32.00	47.00	10.00	11.00
231.0320481	32.00	48.00	10.00	11.00
231.0350436	35.00	43.00	5.70	6.30
231.0350519	35.00	51.00	9.00	10.00
231.0360446	36.00	44.00	5.70	6.30
231.0360461	36.00	46.00	10.00	11.00
231.0360468	**36.00**	**46.00**	**7.00**	**8.00**
231.0370471	37.00	47.00	10.00	11.00
231.0370478	37.00	47.00	8.00	9.00
231.0380482	38.00	48.00	12.00	13.00
231.0380487	38.00	48.00	6.60	7.20
231.0400486	40.00	48.00	5.70	6.30
231.0400489	40.00	48.00	8.00	9.00
231.0400506	40.00	50.00	6.00	7.00
231.0400508	**40.00**	**50.00**	**7.00**	**8.00**

Part number	Rod diameter Ød1 f8	Groove diameter ØD1 H10	Seal height H1	Groove width L1 0/+0.5
231.0400528	40.00	52.00	8.00	9.00
231.0400550	40.00	55.00	10.00	11.00
231.0445571	44.45	57.15	8.00	9.00
231.0450536	45.00	53.00	5.70	6.30
231.0450539	45.00	53.00	8.00	9.00
231.0450558	**45.00**	**55.00**	**7.00**	**8.00**
231.0450612	45.00	61.00	12.00	13.00
231.0470561	47.00	56.30	9.00	10.00
231.0470569	47.00	56.30	8.00	9.00
231.0500582	50.00	58.00	10.90	12.00
231.0500586	50.00	58.00	5.70	6.30
231.0500608	**50.00**	**60.00**	**7.00**	**8.00**
231.0520621	52.00	62.00	10.00	11.00
231.0550638	55.00	63.00	7.30	8.00
231.0550639	55.00	63.00	8.00	9.00
231.0550652	55.00	65.00	12.00	13.00
231.0550656	55.00	65.00	6.00	7.00
231.0550701	55.00	70.00	10.00	11.00
231.0550709	55.00	70.00	9.00	10.00
231.0550752	55.00	75.00	12.00	13.00
231.0560667	56.00	66.00	6.80	7.50
231.0560712	**56.00**	**71.00**	**11.50**	**12.50**
231.0570669	57.16	66.70	9.50	10.50
231.0600719	60.00	71.00	8.00	9.00
231.0600751	60.00	75.00	11.50	12.50
231.0600752	60.00	75.00	12.00	13.00
231.0630737	63.00	73.00	6.80	7.50
231.0650802	65.00	80.00	12.00	13.00
231.0700781	70.00	78.00	10.90	12.00
231.0700807	70.00	80.00	6.80	7.50
231.0700852	**70.00**	**85.00**	**11.50**	**12.50**
231.0770872	77.00	87.00	12.00	13.00
231.0800907	80.00	90.00	6.80	7.50
231.0800952	**80.00**	**95.00**	**11.50**	**12.50**
231.0850944	85.00	94.00	14.00	15.00
231.0900981	90.00	98.00	10.90	12.00
231.0961062	96.00	106.00	12.00	13.00
231.1001082	100.00	108.00	11.50	12.50
231.1030040	30.00	40.00	10.00	11.00
231.1030045	30.00	45.00	10.00	11.00
231.1035045	35.00	45.00	10.00	11.00
231.1040050	40.00	50.00	10.00	11.00
231.1040055	**40.00**	**55.00**	**11.50**	**12.50**
231.1045053	45.00	53.00	10.00	11.00
231.1050057	50.00	57.00	10.00	11.00
231.1050060	50.00	60.00	10.00	11.00

Part number	Rod diameter Ød1 f8	Groove diameter ØD1 H10	Seal height H1	Groove width L1 0/+0.5
231.1050065	50.00	65.00	10.00	11.00
231.1055065	55.00	65.00	10.00	11.00
231.1058068	58.00	68.00	10.00	11.00
231.1060070	60.00	70.00	10.00	11.00
231.1060075	60.00	75.00	10.00	11.00
231.1080090	80.00	90.00	10.00	11.00
231.1151231	115.00	123.00	10.90	12.00
231.1601805	160.00	180.00	15.00	16.00
231.2055063	55.00	63.00	12.00	13.00
231.2060070	60.00	70.00	12.00	13.00
231.2063073	63.00	73.00	12.00	13.00
231.2063078	**63.00**	**78.00**	**11.50**	**12.50**
231.2070080	70.00	80.00	12.00	13.00

Part number	Rod diameter Ød1 f8	Groove diameter ØD1 H10	Seal height H1	Groove width L1 0/+0.5
231.2075085	75.00	85.00	12.00	13.00
231.2080090	80.00	90.00	12.00	13.00
231.2090105	**90.00**	**105.00**	**11.50**	**12.50**
231.2203257	**22.00**	**32.00**	**5.70**	**6.30**
231.4513020	13.00	20.00	4.00	4.50
231.7035043	35.00	43.00	6.30	7.00
231.7035045	35.00	45.00	7.00	8.00
231.7509011	75.00	90.00	11.50	12.50
231.8020030	20.00	30.00	8.00	9.00
231.8022032	22.00	32.00	8.00	9.00
231.8025035	25.00	35.00	8.00	9.00
231.8028038	28.00	38.00	8.00	9.00
231.8030040	30.00	40.00	8.00	9.00

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.