

# PISTON SEALS

## BECA

### 580-581



#### DESCRIPTION

The BECA 580 - 581 profiles are U-ring type piston seals with offset rubber lips.

#### ADVANTAGES

- Very good sealing at low pressures
- Excellent wear resistance
- Wide temperature range, depending on the material chosen
- Reduced size
- Closed groove assembly

#### APPLICATIONS

- Material handling - Lifting
- Presses
- Hydraulic cylinders

#### MATERIALS

- NBR 75 Shore A
- NBR 80 Shore A
- FKM 80 Shore A

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

#### TECHNICAL DATA

Temperature	-30°C / +200°C
Pressure	8 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

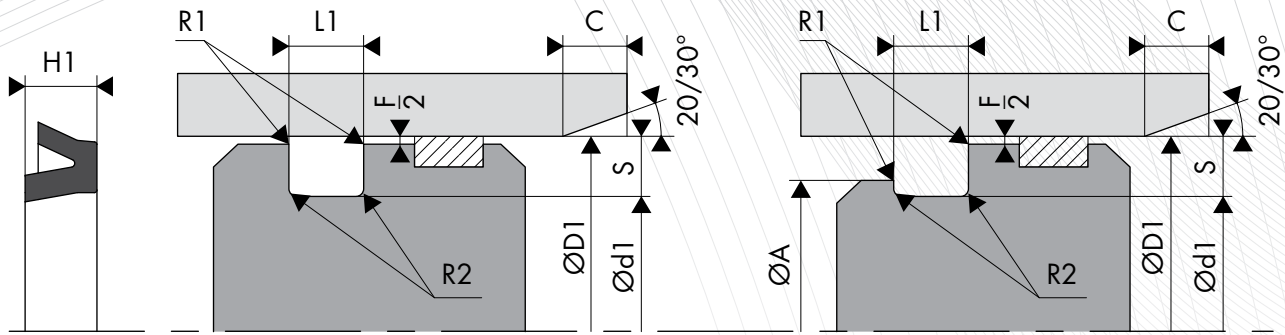
Pressure MPa	Radial gap F/2
1.0 MPa	0.25
1.5 MPa	0.20
6.5 MPa	0.10
8.0 MPa	0.05

#### 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
3.00	0.30	0.50	2.00
4.00	0.30	0.50	2.00
5.00	0.40	0.60	2.50
6.00	0.50	0.70	3.00
7.50	0.80	1.00	4.00
10.00	0.80	1.00	5.00



**DIMENSIONS**

Part number	Bore diameter ØD1 H10	Groove diameter Ød1 f9	Seal height H1	Groove width L1 0/+0.25
<b>580.1016008</b>	<b>16.00</b>	<b>8.10</b>	<b>5.55</b>	<b>7.00</b>
<b>580.1016010</b>	<b>16.00</b>	<b>10.00</b>	<b>4.00</b>	<b>5.50</b>
580.1017012	17.50	12.60	3.17	5.00
580.1134121	134.00	121.30	9.52	11.00
<b>580.1140125</b>	<b>140.00</b>	<b>25.00</b>	<b>10.00</b>	<b>11.50</b>
<b>580.1140127</b>	<b>140.00</b>	<b>127.30</b>	<b>9.52</b>	<b>11.00</b>
580.1145130	145.00	130.00	10.00	11.50
580.1146120	146.00	120.60	15.90	19.00
580.1149136	149.00	136.30	9.52	11.00
580.1153127	153.00	127.60	15.90	19.00
580.1159133	159.00	133.60	15.90	19.00
580.1165139	165.00	139.60	15.90	19.00
580.1171146	171.45	146.05	15.87	17.45
580.1019012	19.00	12.70	3.17	5.00
580.1172153	172.00	153.00	11.10	12.50
<b>580.1180160</b>	<b>180.00</b>	<b>160.00</b>	<b>14.00</b>	<b>17.00</b>
580.1184165	184.00	165.00	11.11	12.50
580.1191159	191.00	159.30	19.00	22.00
580.1197165	197.00	165.30	19.00	22.00
580.1204172	204.00	172.30	19.00	22.00
580.1210178	210.00	178.30	19.00	22.00
580.1019009	19.05	9.52	6.35	7.14
580.1216184	216.00	184.30	19.00	22.00
<b>580.1220200</b>	<b>220.00</b>	<b>200.00</b>	<b>14.00</b>	<b>17.00</b>
580.1222190	222.25	190.50	19.05	20.62
580.1223201	223.00	201.30	12.70	14.50
580.1228196	228.60	196.85	19.05	20.62
580.1229210	229.00	210.00	12.70	14.50
580.1235203	235.00	203.30	19.00	22.00
580.1242210	242.00	210.30	19.00	22.00
580.1248216	248.00	216.30	19.00	22.00
<b>580.1250230</b>	<b>250.00</b>	<b>230.00</b>	<b>14.00</b>	<b>17.00</b>
<b>580.0200107</b>	<b>20.00</b>	<b>10.00</b>	<b>7.00</b>	<b>8.50</b>
580.1253234	253.00	234.00	12.70	14.50
580.1254222	254.00	222.25	19.05	20.62
580.1254235	254.00	235.00	12.70	14.50
580.1261229	261.00	229.30	19.00	22.00
580.1266234	266.70	234.95	19.05	20.62
580.1274242	274.00	242.30	19.00	22.00
<b>580.1280248</b>	<b>280.00</b>	<b>248.30</b>	<b>19.00</b>	<b>22.00</b>
580.1286254	286.00	254.30	19.00	22.00
580.1292260	292.00	260.30	19.00	22.00
<b>580.1020012</b>	<b>20.00</b>	<b>12.00</b>	<b>5.50</b>	<b>7.00</b>
580.1299267	299.00	267.30	19.00	22.00
580.1300268	300.40	268.50	19.00	20.90

Part number	Bore diameter ØD1 H10	Groove diameter Ød1 f9	Seal height H1	Groove width L1 0/+0.25
580.1304273	304.80	273.05	19.05	20.62
580.1305279	305.00	279.60	12.70	14.00
580.1330311	330.00	311.00	12.70	14.50
580.1343323	343.00	323.00	12.70	14.50
580.1356335	356.00	335.50	12.70	14.50
<b>580.1020014</b>	<b>20.00</b>	<b>14.00</b>	<b>4.00</b>	<b>5.50</b>
580.1020011	20.62	11.10	6.35	7.14
<b>580.1004008</b>	<b>8.00</b>	<b>4.00</b>	<b>2.80</b>	<b>3.50</b>
580.1022012	22.00	12.50	6.35	8.00
<b>580.0250174</b>	<b>25.00</b>	<b>17.00</b>	<b>4.50</b>	<b>4.80</b>
<b>580.1025018</b>	<b>25.00</b>	<b>18.00</b>	<b>4.00</b>	<b>5.50</b>
580.1026016	26.00	16.50	6.35	8.00
580.009SPK8	9.00	3.00	6.20	6.90
580.1028015	28.57	15.87	7.92	9.52
580.1030020	30.00	20.50	6.20	8.00
580.4030024	30.00	24.00	4.00	5.00
580.1031019	31.75	19.05	7.92	9.52
<b>580.0320229</b>	<b>32.00</b>	<b>22.20</b>	<b>9.00</b>	<b>9.40</b>
580.1033020	33.32	20.62	7.92	9.52
580.1009003	9.50	3.17	3.96	5.50
580.1034015	34.00	15.00	9.52	11.00
580.1034022	34.92	22.22	7.92	9.52
580.1036023	36.50	23.80	7.92	9.52
580.1037026	37.00	26.00	6.35	8.00
580.1038025	38.10	25.40	7.92	9.52
<b>580.1040030</b>	<b>40.00</b>	<b>30.00</b>	<b>7.00</b>	<b>8.50</b>
580.1011004	11.10	4.76	3.96	5.50
580.1041025	41.27	25.40	9.52	11.10
580.1013006	13.00	6.70	4.76	6.30
580.1063047	63.50	47.62	9.52	11.10
580.1014007	14.00	7.70	4.76	6.30
580.1002006	6.00	2.00	2.80	3.50
580.1095076	95.00	76.70	7.40	9.00
580.2095076	95.25	76.20	12.70	14.30
580.1099086	99.00	86.30	9.52	11.00
<b>580.1100088</b>	<b>100.00</b>	<b>88.00</b>	<b>8.50</b>	<b>10.00</b>
580.1101082	101.60	82.55	12.70	14.30
580.1020891	102.00	89.30	9.00	10.00
580.1102089	102.00	89.30	9.52	11.00
580.1105089	105.00	89.10	7.93	9.50
580.1105093	105.00	93.00	8.50	10.00
580.1107088	107.95	88.90	12.70	14.30
580.1108095	108.00	95.30	7.90	9.50
<b>580.1110098</b>	<b>110.00</b>	<b>98.00</b>	<b>8.50</b>	<b>10.00</b>
580.1111094	111.00	94.70	7.93	9.50

Part number	Bore diameter ØD1 H10	Groove diameter Ød1 f9	Seal height H1	Groove width L1 0/+0.25
580.1115089	115.00	89.60	15.90	19.00
580.1150951	115.00	95.00	10.00	11.50
580.1118105	118.00	105.30	9.52	11.00
580.1120105	120.00	105.00	10.00	11.00
580.1120095	120.65	95.25	15.87	17.45
580.1121108	121.00	108.30	9.52	11.00
580.1124111	124.00	111.30	9.52	11.00
<b>580.F125110</b>	<b>125.00</b>	<b>110.00</b>	<b>10.00</b>	<b>11.00</b>
580.1127101	127.00	101.60	15.87	17.45
580.1127108	127.00	108.00	9.52	11.00
580.1130117	130.00	117.30	9.52	11.00
580.1133107	133.35	107.95	15.87	17.45
580.1137124	137.00	124.30	9.52	11.00
580.1139114	139.70	114.30	15.87	17.45
580.1431893	18.90	14.30	3.50	5.00
580.1143130	143.00	130.30	9.52	11.00
580.1150135	150.00	135.00	10.00	11.00
<b>580.1160145</b>	<b>160.00</b>	<b>145.00</b>	<b>10.00</b>	<b>11.00</b>
580.1178152	178.00	152.60	15.90	19.00
580.1184152	184.15	152.40	19.05	20.62
<b>580.1200180</b>	<b>200.00</b>	<b>180.00</b>	<b>14.00</b>	<b>17.00</b>
580.1267248	267.00	248.00	12.70	14.50
580.1021014	21.00	14.70	6.35	8.00
580.FJ02214	22.00	14.00	6.00	7.00
580.1024014	24.00	14.50	6.35	8.00
580.1017024	24.70	17.00	5.00	5.50
<b>580.1025017</b>	<b>25.00</b>	<b>17.00</b>	<b>5.50</b>	<b>7.00</b>
580.1027017	27.00	17.50	6.35	8.00
580.1029019	29.00	19.05	6.35	8.00
580.1030017	30.15	17.45	7.92	9.52
<b>580.1032019</b>	<b>32.00</b>	<b>19.30</b>	<b>6.35</b>	<b>8.00</b>
<b>580.1032024</b>	<b>32.00</b>	<b>24.00</b>	<b>5.50</b>	<b>7.00</b>
580.1025034	34.00	25.00	8.20	8.70
580.1035022	35.00	22.30	6.35	8.00
580.1038030	38.00	30.00	6.35	8.00
<b>580.1040027</b>	<b>40.00</b>	<b>27.30</b>	<b>6.35</b>	<b>8.00</b>
<b>580.FJ04030</b>	<b>40.00</b>	<b>30.00</b>	<b>7.50</b>	<b>8.50</b>
580.1042030	42.00	30.90	6.35	8.00
580.1043030	43.00	30.30	9.52	11.00
580.1044028	44.45	28.57	9.52	11.10
580.1045035	45.00	35.50	7.00	8.50
580.1046028	46.00	28.20	10.20	12.00
580.1047031	47.62	31.75	9.52	11.10

Part number	Bore diameter ØD1 H10	Groove diameter Ød1 f9	Seal height H1	Groove width L1 0/+0.25
580.1048032	48.00	32.10	7.93	9.50
580.1049035	49.00	35.00	9.52	11.00
<b>580.1012006</b>	<b>12.00</b>	<b>6.00</b>	<b>4.00</b>	<b>5.50</b>
<b>580.6050040</b>	<b>50.00</b>	<b>40.00</b>	<b>6.00</b>	<b>7.00</b>
<b>580.1050040</b>	<b>50.00</b>	<b>40.00</b>	<b>7.00</b>	<b>8.50</b>
<b>580.FJ05040</b>	<b>50.00</b>	<b>40.00</b>	<b>7.50</b>	<b>8.50</b>
580.1050034	50.80	34.92	9.52	11.10
580.1051041	51.00	41.50	7.14	9.00
580.1053038	53.97	38.10	9.52	11.11
580.1054041	54.00	41.30	9.52	11.00
580.1055045	55.00	45.00	7.00	8.50
580.1057044	57.00	44.30	6.35	8.00
580.1057041	57.15	41.27	9.52	11.10
580.1060050	60.00	50.00	7.00	8.50
580.1060044	60.32	44.45	9.52	11.10
580.1061048	61.00	48.30	6.35	8.00
<b>580.FJ06353</b>	<b>63.00</b>	<b>53.00</b>	<b>7.00</b>	<b>7.50</b>
580.0630478	63.50	47.62	7.93	9.52
580.1064046	64.00	46.30	8.85	10.50
580.1065055	65.00	55.00	7.00	8.00
580.1066050	66.67	50.80	9.52	11.10
580.1067051	67.00	51.10	8.85	10.50
580.1069050	69.85	50.80	12.70	14.30
580.1070054	70.00	54.10	7.93	9.50
580.1070058	70.00	58.00	8.50	10.00
580.1073063	73.00	63.50	5.55	7.00
580.1073053	73.02	53.97	12.70	14.30
580.1075063	75.00	63.00	8.50	10.00
580.1076057	76.00	57.90	8.73	10.50
580.2076057	76.20	57.15	12.70	14.30
580.1079060	79.37	60.32	12.70	14.30
<b>580.1080067</b>	<b>80.00</b>	<b>67.30</b>	<b>6.35</b>	<b>8.00</b>
<b>580.1080068</b>	<b>80.00</b>	<b>68.00</b>	<b>8.50</b>	<b>10.00</b>
580.1082063	82.55	63.50	12.70	14.30
580.1083071	83.00	71.90	7.10	8.50
580.1085073	85.00	73.00	8.50	10.00
580.1086073	86.00	73.30	9.52	11.00
580.1088069	88.90	69.85	12.70	14.30
580.1089076	89.00	76.30	6.35	8.00
<b>580.2090078</b>	<b>90.00</b>	<b>78.00</b>	<b>6.50</b>	<b>7.00</b>
<b>580.1090078</b>	<b>90.00</b>	<b>78.00</b>	<b>8.50</b>	<b>10.00</b>
580.1092076	92.00	76.10	9.52	11.00

The figures highlighted in bold correspond to the bore diameters that are recommended by standard ISO 3320. Other intermediate sizes can be provided.