

# STATIC SEALS BECA 115



## DESCRIPTION

The BECA 115 profile is a self-centring BS ring composed of a metal ring with a rectangular cross-section, the inside of which has a bonded and vulcanised rubber ring with a trapezoidal cross-section. Self-centring is through a thin membrane, in which the inside diameter is equal to the central diameter of the threading (without the thread).

## ADVANTAGES

- Economic solution
- Precise positioning of the ring
- Can be disassembled and reused
- Reliable sealing at both high and low pressures
- Reduced assembly time

## APPLICATIONS

- Sealing under the screw heads and bolts
- General mechanics
- Motors
- Pipe fittings
- Valves

## MATERIALS

### Rubber

- NBR 70 and 90 Shore A
- FKM 70 and 90 Shore A
- EPDM 70 and 90 Shore A

### Metal insert

- Steel
- Stainless steel

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

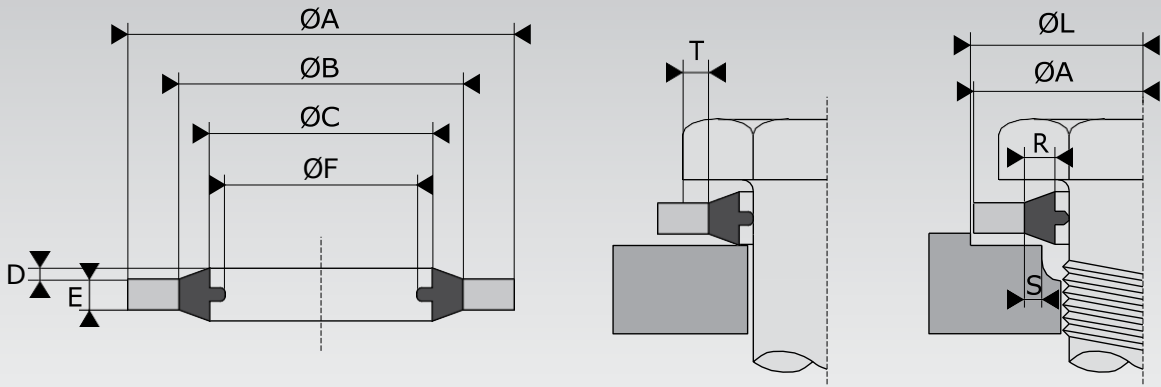
## TECHNICAL DATA

Temperature	-45°C / +150°C
Media	Mineral hydraulic oils Water Water/oil emulsions gas
Breaking resistance	540 MPa

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

## SURFACE ROUGHNESS

Roughness	Contact surface area
Ra	≤3.0 µm
Rmax	≤15.0 µm



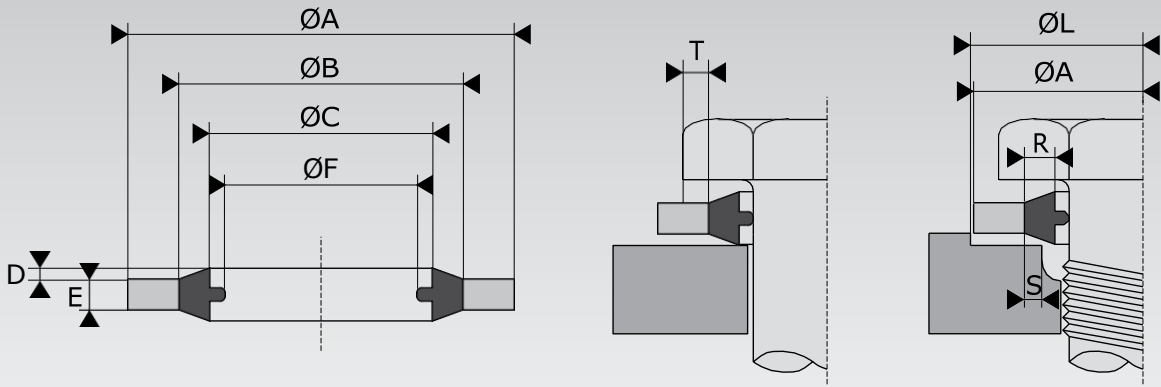
○ COUNTERBORE L

Metric	Counterbore ØL (mm)
M3 at M8.5	ØA +0.20
M9 at M33	ØA +0.40
M34 at M60	ØA +0.60

The overlapping of the metal ring (T) must be at least 0.70 mm and the overlapping of the rubber ring (S) must be at least 75% ( $S \geq 0,75 R$ ).

○ TIGHTENING TORQUE

Metric	Dimensions		Torque (Nm)	
	BSW	BSP	1 ring	2 rings
up to M8	5/16	-	5.3	8.5
M10	3/8	1/8	7.1	11.4
M11	7/16	-	11.8	15.3
M12	1/2	1/4	15.8	20.5
M14	9/16	-	22.6	29.4
M16	5/8	3/8	30.5	39.7
M18	3/4	-	40.7	52.9
M20	13/16	1/2	56.5	67.8
M22	7/8	5/8	67.8	74.6
M24	1.0	3/4	73.4	73.4
from M27	1.1/16	-	79.0	79.0



**DIMENSIONS**

Part number	Standard	BS ring dimensions						Min. breaking pressure (bar)
		ØA +0.13/0	ØB ±0.13	ØC ±0.13	ØD +0.25/0	ØE ±0.13	ØF ±0.20	
115.1E202	M4	7.00	5.40	4.50	0.30	1.00	3.40	1270
115.1E203	M5	9.00	6.80	5.70	0.30	1.00	4.50	1400
115.1E303	M5	10.00	7.00	5.60	0.30	1.00	4.50	1780
115.1E204	M5	10.00	7.40	5.70	0.30	1.00	4.50	1510
115.1E206	M6	10.00	8.00	6.70	0.30	1.00	4.70	1120
115.1E304	M6	11.00	8.00	6.60	0.30	1.00	4.70	1680
115.1E207	M6	11.00	8.20	6.70	0.30	1.00	4.70	1480
115.1E208	M6	11.00	8.20	6.70	0.30	2.50	4.70	1480
115.1E306	M6	11.40	8.40	7.00	0.30	1.00	4.70	1540
115.1E307	M8	13.00	10.00	8.60	0.30	1.00	6.40	1330
115.1E212	M8	13.00	10.00	8.70	0.30	1.00	6.40	1330
115.1E004	BSW 1/4	13.21	8.00	6.86	0.20 / 0.38	1.22	4.70	1950
115.1E305	M6	13.27	8.00	6.85	0.30	1.30	4.70	1970
115.1E215	M8.5	13.30	10.50	9.30	0.30	1.00	6.90	1200
115.1E005	BSW 1/4	13.34	9.53	6.99	0.20 / 0.38	1.22	4.70	1680
115.1E006	BSW 5/16	13.34	9.53	8.31	0.20 / 0.38	1.22	6.10	1700
115.1E211	M8	13.40	9.40	8.50	0.30	1.00	6.40	1780
115.1E213	M8	14.00	10.40	8.70	0.30	1.00	6.40	1510
115.1E007	BSW 5/16	14.22	10.04	8.64	0.20 / 0.38	1.22	6.10	1750
115.1E214	M8	16.00	10.40	8.70	0.30	1.00	6.40	2150
115.1E216	M10	16.00	12.00	10.35	0.40	2.00	8.56	1470
115.1E217	M10	16.00	12.40	10.70	0.40	1.50	8.56	1300
115.1E219	M11	16.30	12.70	11.40	0.40	1.50	9.80	1280
115.1E310	M10	17.00	12.10	10.70	0.30	1.50	8.56	1730
115.1E218	M10	18.00	12.40	10.70	0.40	1.50	8.56	1880
115.1E222	M12	18.00	14.40	12.70	0.40	1.50	9.73	1150
115.1E312	M11	18.10	13.20	11.80	0.30	1.50	9.80	1610
115.1E008	BSW 2/5	18.36	12.45	11.26	0.25/0.51	2.03	8.56	1950
115.1E220	M11	18.50	13.70	11.80	0.40	1.50	9.80	1540
115.1E226	M13.5	18.70	15.70	14.00	0.40	1.50	11.30	900
115.1E313	M12	19.00	14.10	12.70	0.30	1.50	9.73	1530
115.1E221	M11	19.10	13.50	11.80	0.40	1.50	9.80	1760
115.1E223	M12	20.00	14.40	12.70	0.40	1.50	9.73	1680
115.1E021	BSW 1/2 - BSP 1/4	20.57	15.21	13.74	0.25/0.51	2.03	11.45	1550
115.1E227	M14	22.00	16.40	14.70	0.40	1.50	11.38	1510
115.1E010	BSW 9/16	22.23	16.39	14.86	0.25/0.51	2.03	11.58	1560
115.1E317	M16	23.00	18.10	16.70	0.30	1.50	13.41	1240
115.1E318	M17	23.70	18.80	17.40	0.40	1.50	13.08	1200
115.1E023	BSP 3/8	23.80	18.75	17.28	0.25/0.51	2.03	14.96	1230
115.1E229	M16	24.00	18.40	16.70	0.40	1.50	13.41	1370
115.1E230	M17	24.00	19.20	17.40	0.40	1.50	13.08	1150
115.1E011	BSW 5/8	25.40	18.75	16.51	0.25/0.51	2.03	12.90	1560
115.1E012	BSW 11/16	25.40	19.69	18.16	0.25/0.51	2.34	14.50	1310
115.1E232	M18	26.00	20.40	18.70	0.40	1.50	14.76	1260
115.1E024	BSW 3/4	26.92	21.21	19.69	0.25/0.51	2.34	15.80	1230

Part number	Standard	BS ring dimensions						Min. breaking pressure (bar)
		ØA +0.13/0	ØB ±0.13	ØC ±0.13	ØD +0.25/0	ØE ±0.13	ØF ±0.20	
115.1E316	M14	27.00	16.10	14.70	0.30	1.50	11.38	1370
115.1E320	M18	27.00	20.40	18.70	0.30	2.00	14.76	1450
115.1E233	M20	28.00	22.50	20.70	0.40	1.50	16.76	1140
115.1E235	M22	28.00	24.20	22.50	0.40	1.50	18.74	760
115.1E025	BSW 13/16 - BSP 1/2	28.58	23.01	21.54	0.25/0.51	2.34	18.64	1120
115.1E321	M20	29.00	22.40	20.70	0.30	2.00	16.76	1340
115.1E236	M22	30.00	24.40	22.70	0.40	2.00	18.74	1080
115.1E237	M22	30.00	24.40	22.70	0.40	3.00	18.74	1080
115.1E324	M22	31.00	24.40	22.70	0.30	2.00	18.74	1240
115.1E026	BSW 7/8 - BSP 5/8	31.75	24.97	23.49	0.25/0.51	2.34	20.60	1240
115.1E238	M24	32.00	26.40	24.70	0.40	2.00	20.11	1000
115.1E326	M24	33.00	26.40	24.70	0.30	2.00	20.11	1160
115.1E013	BSW 15/16	33.27	26.04	24.26	0.25/0.51	2.34	20.20	1275
115.1E027	BSW 1 - BSP 3/4	34.93	28.53	27.05	0.25/0.51	2.34	24.13	1050
115.1E239	M26	35.00	28.40	26.70	0.40	2.00	22.30	1090
115.1E327	M26	35.30	28.70	27.00	0.40	2.00	22.30	1080
115.1E029	BSW 1 3/16 - BSP 7/8	38.10	32.29	30.81	0.25/0.51	2.34	27.89	860
115.1E028	BSW 1 1/16	38.61	30.61	27.82	0.25/0.51	2.34	22.90	1210
115.1E015	BSW 1 1/4	41.40	35.69	32.64	0.25/0.51	3.25	27.10	775
115.1E030	BSW 1 5/16 - BSP 1	42.80	36.88	33.89	0.25/0.51	3.25	30.30	780
115.1E031	BSW 1 5/16 - BSP 1	42.80	36.88	33.89	0.25/0.51	2.34	30.30	780
115.1E245	M36	46.00	38.80	36.70	0.40	2.00	31.10	890
115.1E017	BSW 1 1/2	47.75	42.04	38.96	0.25/0.51	3.25	32.70	660
115.1E333	M36	48.00	39.60	37.00	0.40	2.50	31.10	1010
115.1E032	BSW 1 5/8 - BSP 1 1/4	52.38	45.93	42.93	0.25/0.51	3.25	38.96	690
115.1E247	M42	53.00	44.40	42.70	0.40	3.00	35.60	930
115.1E335	M42	54.00	45.60	43.00	0.40	2.50	36.50	890
115.1E018	BSW 1 3/4	57.15	48.39	45.34	0.25/0.51	3.25	37.90	870
115.1E033	BSW 1 7/8 - BSP 1 1/2	58.60	51.39	48.44	0.25/0.51	3.25	44.86	690
115.1E034	BSW 2 1/8 - BSP 1 3/4	69.85	58.30	54.89	0.25/0.51	3.25	50.80	950
115.1E035	BSW 2 1/8	70.36	61.09	58.04	0.25/0.51	3.25	50.80	740
115.1E036	BSP 2	73.03	63.63	60.58	0.25/0.51	3.25	56.67	720
115.1E037	BSW 2 1/2	77.22	67.44	64.39	0.25/0.51	3.25	72.20	750