



## RBB profile data

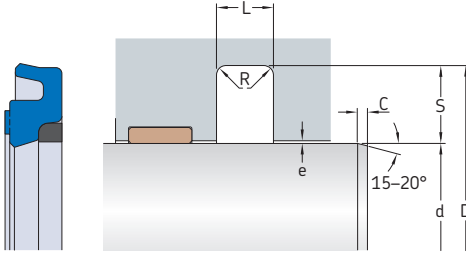


<b>Materials</b>	Sealing ring: TPU 93A, U-1023 Anti-extrusion ring: metric sizes → POM P-2518 inch sizes → PA P-2506
<b>Pressure</b>	Up to 690 bar (10 000 psi)
<b>Speed</b>	Up to 1 m/s (3.2 ft/s)
<b>Temperature range</b>	<p> <span style="color: blue;">■</span> Extreme low temperature range: may be intermittently exposed (e.g. cold start-up) without seal damage, but seal performance may be compromised while in this range  <span style="color: grey;">■</span> Temperatures below the recommended operating range: seal performance depends on system design (precision guiding arrangement recommended)  <span style="color: green;">■</span> <b>Recommended operating temperature range for this profile and material</b>  <span style="color: yellow;">■</span> Temperatures above the recommended operating range: acceptable only with reduced pressure and/or speed  <span style="color: red;">■</span> Extreme high temperature range: only occasional short term exposure (e.g. cylinder in curing oven of a powder coating process)         </p>
<b>Dimension standards</b>	Some metric sizes fit seal housings in accordance with ISO 7425-2.

Maximum values of application parameters (e.g. pressure, speed, temperature, e-gap) should not be applied continuously nor simultaneously.

## RBB profile buffer seals, metric sizes

d 25 – 110 mm



### Maximum extrusion gap e

Radial depth S	$e_{\max}$ at 80 °C (175 °F) for pressures			
	160 bar	250 bar	400 bar	690 bar
mm	mm			
5,35	0,6	0,4	0,25	0,1
7,55 to 7,75	0,8	0,55	0,35	0,15

### Cylinder dimensions

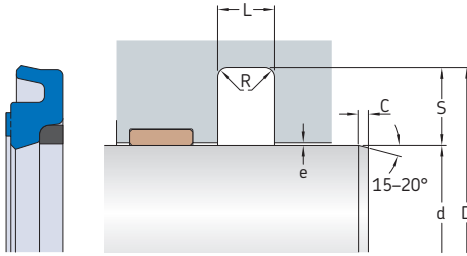
### Designation

d h9	D H9	L +0,2	S	R max.	C min.	
mm						-
25	35,7	4,2	5,35	0,55	6	RBB-25x35.7x4.2-J0S
30	40,7	4,2	5,35	0,55	6	RBB-30x40.7x4.2-J0S
35	45,7	4,2	5,35	0,55	6	RBB-35x45.7x4.2-J0S
40	55,1	6,3	7,55	0,7	8	RBB-40x55.1x6.3-J0S
50	65,1	6,3	7,55	0,7	8	RBB-50x65.1x6.3-J0S
55	70,1	6,3	7,55	0,7	8	RBB-55x70.1x6.3-J0S
	70,5	6,3	7,75	0,7	8	RBB-55x70.5x6.3-J0S
60	75,1	6,3	7,55	0,7	8	RBB-60x75.1x6.3-J0S
65	80,1	6,3	7,55	0,7	8	RBB-65x80.1x6.3-J0S
	80,5	6,3		0,7	8	RBB-65x80.5x6.3-J0S
70	85,1	6,3	7,55	0,7	8	RBB-70x85.1x6.3-J0S
	85,5	6,3	7,75	0,7	8	• RBB-70x85.5x6.3-J0S
75	90,1	6,3	7,55	0,7	8	RBB-75x90.1x6.3-J0S
	90,5	6,3	7,75	0,7	8	RBB-75x90.5x6.3-J0S
80	95,1	6,3	7,55	0,7	8	RBB-80x95.1x6.3-J0S
85	100,1	6,3	7,55	0,7	8	RBB-85x100.1x6.3-J0S
90	105,1	6,3	7,55	0,7	8	RBB-90x105.1x6.3-J0S
	105,5	6,3	7,75	0,7	8	• RBB-90x105.5x6.3-J0S
95	110,1	6,3	7,55	0,7	8	RBB-95x110.1x6.3-J0S
	110,5	6,3	7,75	0,7	8	RBB-95x110.5x6.3-J0S
100	115,1	6,3	7,55	0,7	8	RBB-100x115.1x6.3-J0S
105	120,1	6,3	7,55	0,7	8	RBB-105x120.1x6.3-J0S
110	125,1	6,3	7,55	0,7	8	RBB-110x125.1x6.3-J0S

- Seal housing dimensions in accordance with ISO 7425-2

## RBB profile buffer seals, metric sizes

d 115 – 170 mm



### Maximum extrusion gap e

Radial depth S	$e_{\max}$ at 80 °C (175 °F) for pressures			
	160 bar	250 bar	400 bar	690 bar
mm	mm			
5,35	0,6	0,4	0,25	0,1
7,55 to 7,75	0,8	0,55	0,35	0,15

### Cylinder dimensions

### Designation

d h9	D H9	L +0,2	S	R max.	C min.
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mm

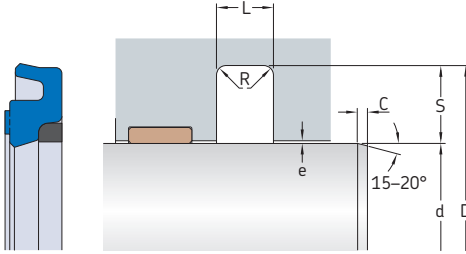
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115	130,1	6,3	7,55	0,7	8	RBB-115x130.1x6.3-J0S
120	135,1	6,3	7,55	0,7	8	RBB-120x135.1x6.3-J0S
125	140,1	6,3	7,55	0,7	8	RBB-125x140.1x6.3-J0S
130	145,1	6,3	7,55	0,7	8	RBB-130x145.1x6.3-J0S
140	155,1	6,3	7,55	0,7	8	RBB-140x155.1x6.3-J0S
150	165,1	6,3	7,55	0,7	8	RBB-150x165.1x6.3-J0S
170	185,1	6,3	7,55	0,7	8	RBB-170x185.1x6.3-J0S

Other sizes are available on request

## RBB profile buffer seals, inch sizes

d 2 – 8 in.



### Maximum extrusion gap e

Radial depth S	Series	e <sub>max</sub> at 80 °C (175 °F) for pressures			
		2 300 psi	3 600 psi	5 800 psi	10 000 psi
in.	-	in.			
<b>0.166</b>	<b>2</b>	0.019	0.012	0.008	0.004
<b>0.247</b>	<b>3</b>	0.029	0.019	0.012	0.005
<b>0.320</b>	<b>4</b>	0.037	0.024	0.015	0.007

Cylinder dimensions								Series	Designation
d	Tolerance	D	Tolerance	L +0.01	S	R max.	C min.		
in.								-	-
2	-0.004	2.494	+0.005	0.247	0.308	0.028	0.312	3	RBB3-2000-E6T
2.25	-0.003	2.582	+0.004	0.166	0.212	0.022	0.25	2	RBB2-2250-E6T
2.5	-0.003 -0.004	2.832 2.994	+0.004 +0.005	0.166 0.247	0.212 0.308	0.022 0.028	0.25 0.312	2 3	RBB2-2500-E6T RBB3-2500-E6T
2.75	-0.004	3.244	+0.005	0.247	0.308	0.028	0.312	3	RBB3-2750-E6T
3	-0.004	3.494	+0.005	0.247	0.308	0.028	0.312	3	RBB3-3000-E6T
3.5	-0.004	3.994	+0.005	0.247	0.308	0.028	0.312	3	RBB3-3500-E6T
4	-0.004	4.494	+0.005	0.247	0.308	0.028	0.312	3	RBB3-4000-E6T
4.5	-0.004	4.994	+0.005	0.247	0.308	0.028	0.312	3	RBB3-4500-E6T
4.75	-0.004	5.244	+0.005	0.247	0.308	0.028	0.312	3	RBB3-4750-E6T
5	-0.004	5.494	+0.005	0.247	0.308	0.028	0.312	3	RBB3-5000-E6T
5.5	-0.004	5.994	+0.005	0.247	0.308	0.028	0.312	3	RBB3-5500-E6T
6	-0.004	6.494	+0.005	0.247	0.308	0.028	0.312	3	RBB3-6000-E6T
6.5	-0.004	6.994	+0.005	0.247	0.308	0.028	0.312	3	RBB3-6500-E6T
7	-0.004	7.494	+0.005	0.247	0.308	0.028	0.312	3	RBB3-7000-E6T
7.25	-0.004	7.744	+0.005	0.247	0.308	0.028	0.312	3	RBB3-7250-E6T
8	-0.004	8.494	+0.005	0.247	0.308	0.028	0.312	3	RBB3-8000-E6T

Other sizes are available on request



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