


















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Profile	Ref.	Press. ≤ (MPa) *	Temp. (°C) *	Speed (m/s) *	Material	Dimensions (mm)	mm	inch	Page
2a O-rings									
	01 02 03 04 05 06 07	15 20 25 15 25 15 15	-30 +110 -30 +110 -30 +110 -20 +200 -20 +200 -40 +150 -60 +200	-	NBR 70 Sh A NBR 80 Sh A NBR 90 Sh A FPM 75 Sh A FPM 90 Sh A EPDM 70 Sh A MVQ 70 Sh A	1 ... 1056	●	●	84 - 141
	00FEP	25	-20 +200 -60 +200	-	FPM/FEP MVQ/FEP	9 ... 190	●	●	142 - 145
	00RPT	40	-200 +260	-	PT01	7 ... 190	●	●	146 - 147
	00RPU	40	-30 +100	-	PU26	9 ... 190	●	●	148 - 151
	41V1	60	-35 +100	-	P5008	5 ... 28	●	●	152 - 153
	09OR	15 15	-30 +110 -20 +200	-	NBR 70 Sh A FPM 70 Sh A	-	●	●	154 - 155





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7. Information	156
8. Select the right back-up ring	157








Profile	Reference	Press. ≤ (MPa) *	Temp. (°C) *	Speed (m/s) *	Material	Dimensions (mm)	mm	inch	Page
2b Standard back-up rings									
	10MBK 10MBK.../INT	50	-30 +110	-	TPE	4 ... 250	●		158 - 161 162 - 165
	10PBK 10PBK.../INT	50	-30 +110	-	TPE	7 ... 273		●	166 - 171 172 - 177
	10BU 10BU.../INT	40	-30 +110 -20 +200	-	NBR 90 Sh A	2 ... 508		●	178 - 193 194 - 209
	11BU...FPM 11BU...FPM/INT	40	-30 +110 -20 +200	-	FPM 90 Sh A	2 ... 508		●	210 - 213 217 - 217
	10BR	50	-200 +260	-	PT01	3 ... 393		●	218 - 223
	08ST8	50	-200 +200 -30 +100 -40 +110	-	PTFE PA POM	8 ... 418	●	●	224 - 229
	08ST8/C	50	-200 +200 -30 +100 -40 +110	-	PTFE PA POM	17 ... 177	●	●	230 - 233







2c Machined back-up rings									
	28ST8	50	-200 + 260 -30 + 100	-	PT01 PU30	10 ... 1500	●	●	234 - 235
	28ST8/C	50	-200 + 260	-	PT01	10 ... 1500	●	●	234 - 235
	25ST9	50	-30 +110 -200 +260 -30 +100	-	Elastomers PT01 PU30	10 ... 1500	●	●	236 - 237
	25ST9/C	50	-30 +110 -200 +260 -30 +100	-	Elastomers PT01 PU30	10 ... 1500	●	●	236 - 237

* See page 8











Profile	Reference	Press. ≤ (MPa) *	Temp. (°C) *	Speed (m/s) *	Material	Dimensions (mm)	mm	inch	Page
2d STATIC SEALS for connectors									
	08BS	Contact us	-30 +100 -20 +200	-	NBR 70 ShA/ST FPM 70 ShA/ST	3 ... 76	●	●	238 - 243
	08BS9	Contact us	-30 +100 -20 +200	-	NBR 70 ShA/ST FPM 70 ShA/ST	6 ... 76	●	●	244 - 247
	08COR	Contact us	-100 +150	-	CU	6 ... 33	●	●	248 - 249
	08FC	50	-30 +100 -20 +200	-	NBR 85 ShA FPM 85 ShA	6 ... 56	●	●	250 - 251







2e STATIC SEALS for SAE, ISO and CAT® flanges									
	08FS	50	-40 +120	-	PU 92 ShA	1/2" ... 3"	●		252 - 253
	08SFS	50	-40 +90	-	PU 95/59 ShA	1/2" ... 5"	●		254 - 255
	08D-RING	42	-40 +100	-	NBR 90 ShA		●		256 - 257

Profile	Reference	Press. ≤ (MPa) *	Temp. (°C) *	Speed (m/s) *	Material	Dimensions (mm)	mm	inch	Page
2f STATIC SEALS for flanges									
	08KS	50	-30 +100	-	NBR 90 ShA	6 ... 54	●	●	258 - 259
	08KS...FPM	50	-10 +200	-	FPM 90 ShA	5 ... 66	●	●	260 - 261
	08KS7	25	-30 +100	-	NBR 70 ShA	17 ... 291	●	●	262 - 263
	08CS	80	-10 +200	-	FPM 80 ShA	6 ... 38	●		264 - 265
	08Y-RING	20	-30 +100	-	NBR 90 ShA/ST	20 ... 245	●		266 - 267
	25FOI	80	-200 +260	-	PTFE/SS	10 ... 1100	●	●	268
	25FOE	80	-200 +260	-	PTFE/SS	10 ... 1100	●	●	269

2g STATIC SEALS Quad-Rings®, XS seals and OBVD seals									
	10QR	15	-30 +100	0,5	NBR 70 ShA	2 ... 393		●	270 - 273
	11QR...FPM	15	-20 +200	0,5	FPM 70 ShA	9 ... 215		●	274 - 275
	10XS.../AK...	50	-40 +120 -30 +90	-	PU 92 ShA PU 94 ShA	25 ... 200		●	276 - 277
	10XS	50	-30 +80	-	PU 93 ShA	6 ... 293		●	278 - 285
	120BVD AX	50	-30 +100	-	NBR 80 ShA/ PUR 95 ShA	34 ... 190		●	286 - 287
	120BVD 2AX	50	-30 +100	-	NBR 80 ShA/ PUR 95 ShA	34 ... 190		●	286 - 287

* See page 8

Profile	Reference	Temp. (°C)*	Material	Dimensions (mm)	mm	inch	Page
2h Assortments O-rings							
	19BOX A 19BOX A NBR 90 19BOX A FPM 80 19BOX A EPDM 70	-30 +110 -30 +110 -20 +200 -40 +150	NBR 70 ShA NBR 90 ShA FPM 80 ShA EPDM 70 ShA	2,9 x 1,78 to 28,17 x 3,53		●	288
	19BOX B 19BOX B NBR 90 19BOX B FPM 80 19BOX B EPDM 70	-30 +110 -30 +110 -20 +200 -40 +150	NBR 70 ShA NBR 90 ShA FPM 80 ShA EPDM 70 ShA	20,35 x 1,78 to 50,16 x 5,34		●	289
	19BOX C 19BOX C NBR 90 19BOX C FPM 80 19BOX C EPDM 70	-30 +110 -30 +110 -20 +200 -40 +150	NBR 70 ShA NBR 90 ShA FPM 80 ShA EPDM 70 ShA	3 x 1,5 to 30,2 x 3	●		290
	19BOX D 19BOX D NBR 90 19BOX D FPM 80 19BOX D EPDM 70	-30 +110 -30 +110 -20 +200 -40 +150	NBR 70 ShA NBR 90 ShA FPM 80 ShA EPDM 70 ShA	18 x 2 to 50 x 5	●		291
	19BOX G 19BOX G NBR 90 19BOX G FPM 80 19BOX G EPDM 70	-30 +110 -30 +110 -20 +200 -40 +150	NBR 70 ShA NBR 90 ShA FPM 80 ShA EPDM 70 ShA	2,9 x 1,78 to 43,82 x 5,34		●	292
	19BOX H 19BOX H NBR 90 19BOX H FPM 80 19BOX H EPDM 70	-30 +110 -30 +110 -20 +200 -40 +150	NBR 70 ShA NBR 90 ShA FPM 80 ShA EPDM 70 ShA	3 x 2 to 45 x 4	●		293
	19BOX MAX INCH NBR 70 19BOX MAX INCH NBR 90	-30 +110 -30 +110	NBR 70 ShA NBR 90 ShA	2,9 x 1,78 to 82,14 x 3,53		● ●	294 - 295
	19BOX MAX MM NBR 70 19BOX MAX MM NBR 90	-30 +110 -30 +110	NBR 70 ShA NBR 90 ShA	3 x 2 to 82 x 3	● ●		296 - 297
	19BOX ORFS	-30 +110	NBR 90 ShA	7,65 x 1,78 to 37,82 x 1,78		●	298
	19BOX CORD 19BOX CORD NBR 90 19BOX CORD FPM 80	-30 +110 -30 +110 -20 +200	NBR 70 ShA NBR 90 ShA FPM 80 ShA	1,78 to 8	●	●	299

Profile	Reference	Temp. (°C)*	Material	Dimensions (mm)	mm	inch	Page
2i Assortments flange seals							
	19BOX D-RING	-30 +110	NBR 90 Sh A			●	300
	19BOX FS	-40 +120	PU	1/2" ... 2"		●	301
	19BOX KS NBR	-30 +110	NBR 90 Sh A	9 ... 42	●		302
	19BOX KS FPM	-10 +200	FPM 90 Sh A	9 ... 42	●		303
2j Assortments connector seals							
	19BOX BS MM 19BOX BS INCH	-30 +110 -30 +110	NBR 90 ShA NBR 90 ShA	M8 ... M24 BSP1/8" ... BSP1"	●	●	304
	19BOX COR MM 19BOX COR INCH		CU CU	M8 ... M22 BSP1/8" ... BSP1"	●	●	305

* See page 8

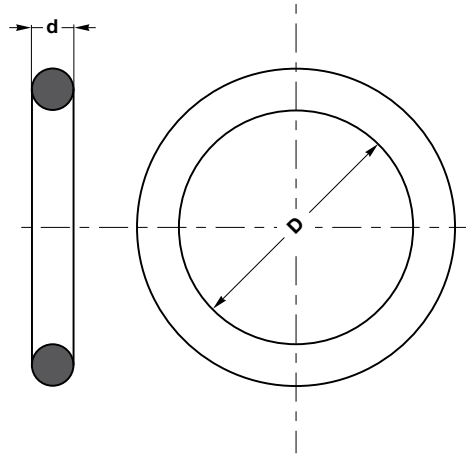


Fig. 78A

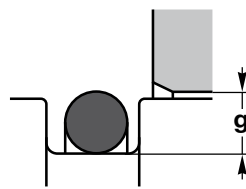


Fig. 78B

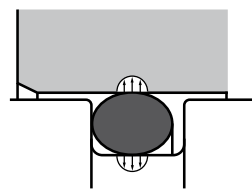


Fig. 78C

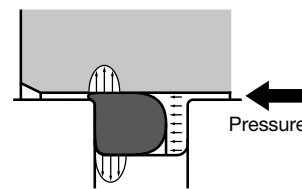


Fig. 78D

1.1 DESCRIPTION

O-rings are seals with a circular shape and a round cross section, defined by the inside diameter (**D**) and the cross section (**d**). It is the most common seal for hydraulic and pneumatic applications. This seal offers lots of advantages :

- the groove is simple and easy to machine
- large choice of compounds: NBR, FPM, EPDM, Silicon, PTFE, PUR, ...
- easy to install due to its symmetry
- good price-performance ratio
- extremely wide variety of applications: static, dynamic (both linear and rotary)
- compact design

1.2 SEALING PRINCIPLES

See figure 78 :

- The O-ring is installed in a groove with dimension **g** smaller than the cross section **d** of the seal (**Fig. 78B**)
- After the assembly, the torus is squeezed radially causing mechanically compressive stress to be exerted at the O-ring contact surface (**Fig. 78C**)
- The pressure of the contained fluid transfers through the essentially incompressible O-ring material, and the contact stress rises with increasing pressure (**Fig. 78D**)

The degree of **initial compressive stress** (**Fig.78C**) is very important !
Depending on the application and material, the compression rate of the elastomer should be as follows :

- **15 to 30 %** in case of a **static** sealing. In this catalogue, the initial compression values for static sealing will vary between 17 and 27 %.
- **3 to 20 %** in case of a **dynamic** sealing (**pneumatic** and **hydraulic**). In this catalogue the initial compression values for dynamic sealing in hydraulic application will vary between 12 and 14 %.

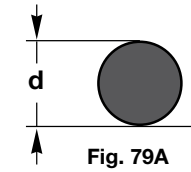


Fig. 79A

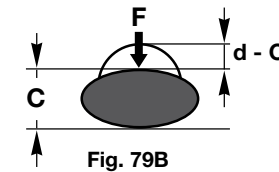


Fig. 79B

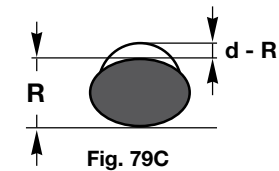


Fig. 79C

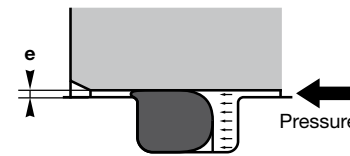


Fig. 79D

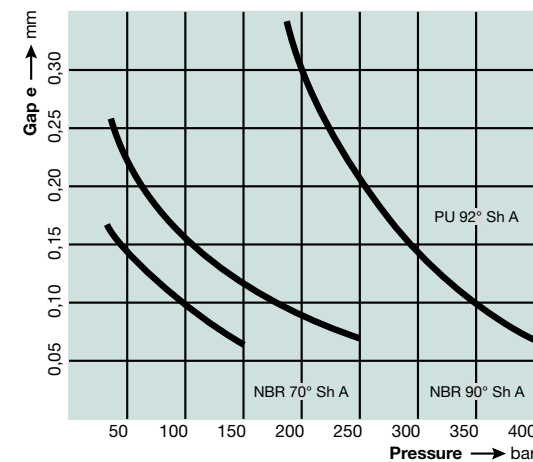


Fig. 79E

2.1 TECHNICAL CHARACTERISTICS

- **Static working pressure :**
 - ≤ 15 MPa for **NBR 70** Shore A without back-up ring
 - ≤ 25 MPa for **NBR 90** Shore A without back-up ring
 - ≤ 40 MPa for **PU 92** Shore A without back-up ring
 - ≤ 50 MPa for **NBR 70** Shore A **with back-up ring**
- **Linear speed :** ≤ 0,5 m/sec
- **Rotary speed :** ≤ 0,2 m/sec
- **Temperature :** see material charts pages 10 to 19
- **Compression set :** this is a very important property of elastomers. It is defined as the permanent deformation remaining after release of a compressive stress.

Fig. 79A - Fig. 79B - Fig. 79C shows an O-ring with initial cross-section **d** compressed by a force **F** during a set time at a set temperature, resulting in a deformed O-ring **C**.
After been left under normal conditions for a specified time, the residual thickness (**R**) can be measured:

$$Cs (\%) = \frac{d - R}{d - C} \times 100$$

A perfect elastic material will have a **Cs** of 0%, while material with loss of resiliency (memory) will have a **Cs** of 100 %.

2.2 CLEARANCE GAP

The **clearance gap e** can be determined by consulting the **Fig. 79E**. In function of the applied pressure, the clearance gap **e** must always be below the values indicated in the curve.

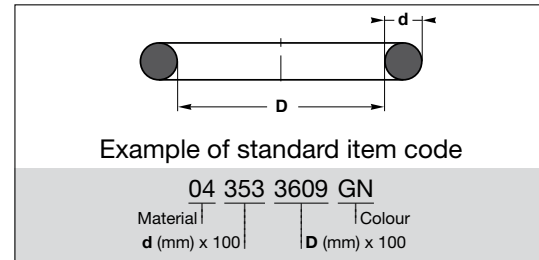
To limit the extrusion of the seal under high pressure, you have to limit the gap. As the diagram shows, the extrusion resistance increases with the **hardness** of the seal.

2.3 TOLERANCES OF THE METAL PARTS

For the **static working pressures** mentioned on this page, we recommend the tolerances **H8/f7** for the metal pieces with a diameter range between 0 and 180 mm.

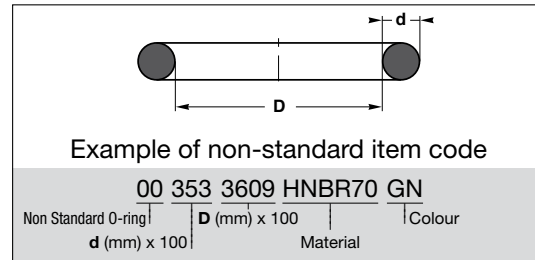
For higher pressures or diameters exceeding 180 mm, please contact us.

3.1 STANDARD MATERIALS



Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow

3.2 NON-STANDARD MATERIALS



Material	Colour
NBR 50	- : Black
NBR 60	BE : Blue
HNBR 70	BN : Brown
TNBR 70	GN : Green
FFPM 75	GY : Grey
...	RD : Red
✕ see page 10-19	WE : White
	YW : Yellow

3.3 TOLERANCES OF O-RINGS

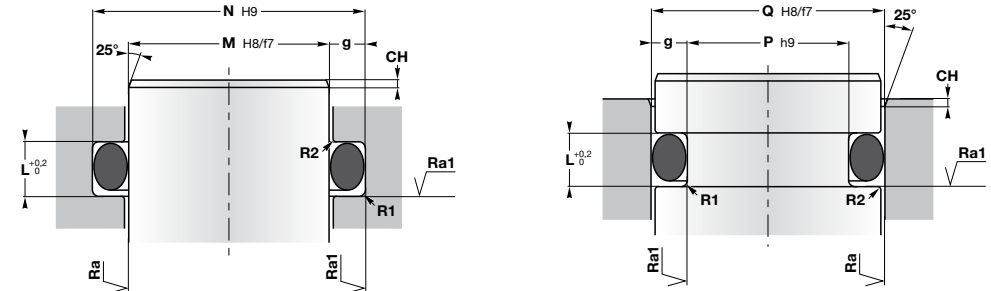
Dimensional tolerances on cross section **d** are shown in table 80A. Table 80B shows the tolerances on inside diameter **D**. If the inside diameter is more than 200 mm, please contact us.

d	± Tol.	d	± Tol.	d	± Tol.	d	± Tol.
0 - 1,8	0,08	2,6 - 3,5	0,1	5,3 - 7	0,15	8 - 10	0,2
1,8 - 2,6	0,09	3,5 - 5,3	0,13	7 - 8	0,17	10 - 15	0,25

D	± Tol.	D	± Tol.	D	± Tol.	D	± Tol.
0 - 2,5	0,13	35,5 - 36,5	0,35	63 - 65	0,58	112 - 115	0,95
2,5 - 4,5	0,14	36,5 - 37,5	0,36	65 - 67	0,59	115 - 118	0,97
4,5 - 6,3	0,15	37,5 - 38,7	0,37	67 - 69	0,61	118 - 122	1
6,3 - 8,5	0,16	38,7 - 40	0,38	69 - 71	0,63	122 - 125	1,03
8,5 - 10	0,17	40 - 41,2	0,39	71 - 73	0,64	125 - 128	1,05
10 - 11,2	0,18	41,2 - 42,5	0,4	73 - 75	0,66	128 - 132	1,08
11,2 - 14	0,19	42,5 - 43,7	0,41	75 - 77,5	0,67	132 - 136	1,1
14 - 16	0,2	43,7 - 45	0,42	77,5 - 80	0,69	136 - 140	1,13
16 - 18	0,21	45 - 46,2	0,43	80 - 82,5	0,71	140 - 145	1,17
18 - 20	0,22	46,2 - 47,2	0,44	82,5 - 85	0,73	145 - 150	1,2
20 - 21,2	0,23	47,2 - 48,2	0,45	85 - 87,5	0,75	150 - 155	1,24
21,2 - 23,6	0,24	48,2 - 50	0,46	87,5 - 90	0,77	155 - 160	1,27
23,6 - 25	0,25	50 - 51,5	0,47	90 - 92,5	0,79	160 - 165	1,31
25 - 26,5	0,26	51,5 - 53	0,48	92,5 - 95	0,81	165 - 170	1,34
26,5 - 28	0,28	53 - 54,5	0,5	95 - 97,5	0,83	170 - 175	1,38
28 - 30	0,29	54,5 - 56	0,51	97,5 - 100	0,84	175 - 180	1,41
30 - 31,5	0,31	56 - 58	0,52	100 - 103	0,87	180 - 185	1,44
31,5 - 33,5	0,32	58 - 60	0,54	103 - 106	0,89	185 - 190	1,48
33,5 - 34,5	0,33	60 - 61,5	0,55	106 - 109	0,91	190 - 195	1,51
34,5 - 35,5	0,34	61,5 - 63	0,56	109 - 112	0,93	195 - 200	1,55

4.1 TOLERANCES OF HOUSINGS

See the two drawings here below.



4.2 SURFACE ROUGHNESS

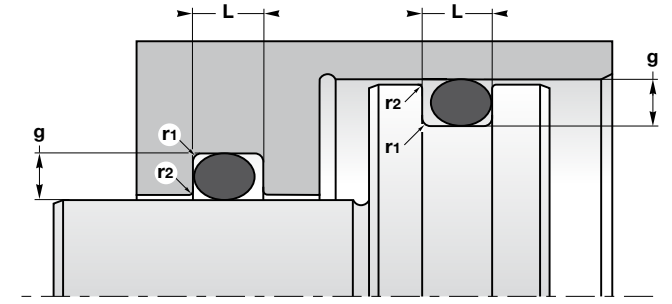
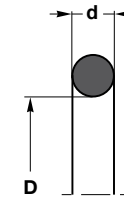
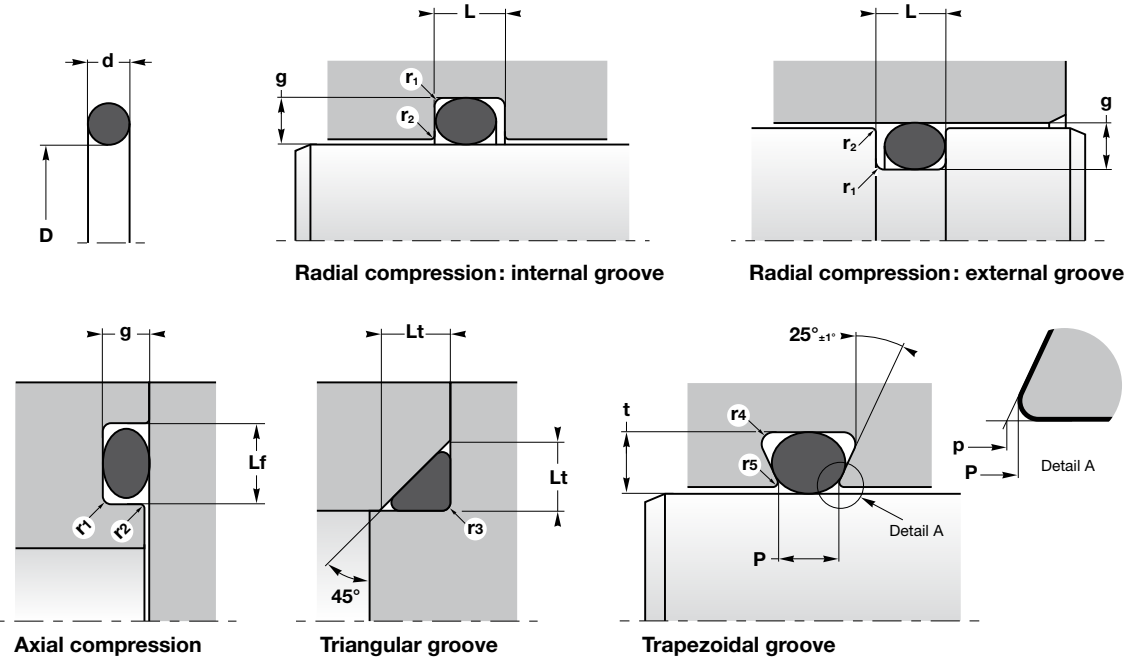
Radial - dynamic						Radial - static / Axial - static					
Ra	Rz	Rt	Ra1	Rz1	Rt1	Ra	Rz	Rt	Ra1	Rz1	Rt1
≤ 0,4	≤ 1,6	≤ 2,5	≤ 1,6	≤ 6,3	≤ 10	≤ 1,6	≤ 6,3	≤ 10	≤ 1,6	≤ 6,3	≤ 10

4.3 RADII VALUES

O-ring cross section	< 3	≥ 3
R1	0,2 - 0,4	0,4 - 0,8
R2	0,1 - 0,15	0,15 - 0,3

4.4 CHAMFERS

O-ring cross section	≤ 1,78 - 1,8	≤ 2,62 - 2,65	≤ 3,53 - 3,55	≤ 5,34	≤ 6,99 - 7	> 7
CH (mm)	1	1,2	1,5	2,2	3	4,5



2a O-rings

DYNAMIC SEALING FOR PNEUMATIC CYLINDERS

DYNAMIC SEALING FOR HYDRAULIC CYLINDERS

We recommend to respect the tolerances, surface finish and chamfers described on page 81.

Table 82A
Dimensions of the grooves in case of **static sealing**, according to DIN 3771 / Part 5. ISO standard in grey

d	g	L 0/+0,2	Lf 0/+0,2	r1	r2	Lt	tol. Lt	r3	t	tol. t	p ±0,05	P ±0,05	r4	r5
1	1,02	0,7	1,4	1,4	0,2	0,1	1,35	0 / +0,1	0,2					
1,5	1,52	1,1	2	2,1	0,2	0,1	2	0 / +0,1	0,2					
1,6	1,63	1,2	2,1	2,2	0,3	0,1	2,15	0 / +0,1	0,3					
1,78	1,8	1,3	2,4	2,6	0,4	0,1	2,4	0 / +0,1	0,3					
1,9		1,4	2,6	2,7	0,4	0,1	2,55	0 / +0,1	0,4					
2	1,98	1,5	2,7	2,8	0,4	0,1	2,7	0 / +0,1	0,4					
2,4		1,8	3,2	3,3	0,5	0,1	3,2	0 / +0,15	0,4					
2,5		1,85	3,3	3,4	0,5	0,1	3,4	0 / +0,15	0,6					
2,62	2,65	2	3,6	3,8	0,6	0,1	3,5	0 / +0,15	0,6					
2,7		2,05	3,6	3,8	0,6	0,1	3,65	0 / +0,15	0,6					
3		2,3	4	4	0,6	0,15	4	0 / +0,2	0,6					
3,1		2,4	4,1	4,1	0,6	0,15	4,1	0 / +0,2	0,6					
3,5		2,65	4,6	4,7	0,6	0,15	4,7	0 / +0,2	0,9					
3,53	3,55	2,7	4,8	5	0,8	0,15	4,8	0 / +0,2	0,9					
3,6		2,8	4,8	5,1	0,8	0,15	4,9	0 / +0,2	0,9					
4		3,1	5,2	5,3	0,8	0,15	5,4	0 / +0,2	1,2					
4,5		3,5	5,8	5,9	0,8	0,15	6,1	0 / +0,2	1,2					
5		4	6,6	6,7	0,8	0,15	6,7	0 / +0,25	1,2					
5,34	5,3	4,3	7,1	7,3	1,2	0,2	7,1	0 / +0,25	1,5					
5,5		4,5	7,1	7,3	1,2	0,2	7,4	0 / +0,25	1,5					
5,7		4,6	7,2	7,4	1,2	0,2	7,6	0 / +0,25	1,5					
6		4,9	7,4	7,6	1,2	0,2	8	0 / +0,3	1,5					
7	6,99	5,8	9,5	9,7	1,5	0,2	9,4	0 / +0,3	2					
8		6,7	9,8	10	1,5	0,2	10,8	0 / +0,3	2					
8,4		7,1	10	10,3	1,5	0,2	11,3	0 / +0,3	2					
10		8,6	13	13,6	1,5	0,3	13,7	0 / +0,3	2,5					
12		10,4	15,6	15,7	1,5	0,3	16,5	0 / +0,3	3					

t	tol. t	p ±0,05	P ±0,05	r4	r5
2,9	±0,07	2,9	3,1	0,6	0,2
3	±0,07	3	3,2	0,6	0,2
3,3	±0,08	3,3	3,5	0,7	0,2
3,7	±0,09	3,7	4	0,7	0,3
4,1	±0,1	4,1	4,4	0,8	0,3
4,4	±0,11	4,4	4,7	0,9	0,3
4,5	±0,11	4,5	4,8	0,9	0,3
4,7	±0,11	4,7	5	0,9	0,3
5	±0,12	5	5,5	1	0,4
5,8	±0,14	5,8	6,3	1,2	0,4
6,7	±0,16	6,7	7,3	1,3	0,5
7	±0,17	7	7,6	1,5	0,5
8,3	±0,2	8,3	9	1,7	0,6
10	±0,2	10	10,7	1,7	0,6

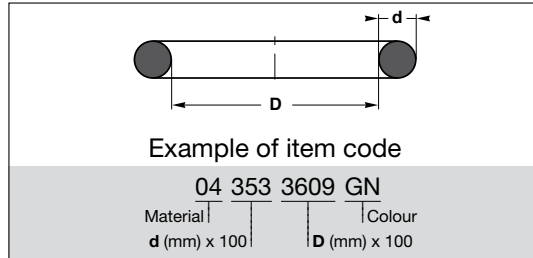
We discourage the use of trapezoidal grooves for small sections.

Table 83A
Pneumatic: dimensions of grooves for **dynamic sealing**. ISO-norm in grey

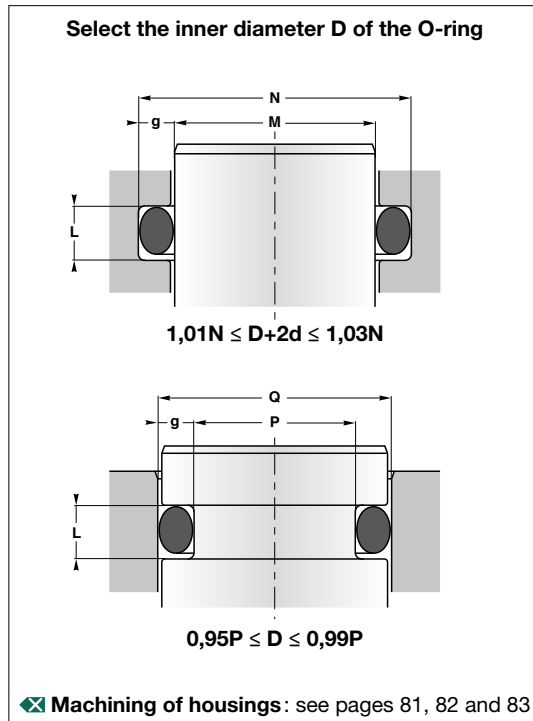
d	g	L 0/+0,20	r1	r2
1	1,02	0,95	1,3	0,2
1,5	1,52	1,35	1,9	0,2
1,6	1,63	1,45	2	0,3
1,78	1,8	1,55	2,3	0,3
1,9		1,75	2,4	0,4
2	1,98	1,8	2,5	0,4
2,4		2,15	2,9	0,5
2,5		2,25	3	0,5
2,62	2,65	2,35	3,1	0,6
2,7		2,45	3,3	0,6
3		2,75	3,6	0,6
3,1		2,85	3,7	0,6
3,5		3,25	4,2	0,6
3,53	3,55	3,25	4,2	0,8
3,6		3,35	4,3	0,8
4		3,7	4,8	0,8
4,5		4,2	5,4	0,8
5		4,65	6	0,8
5,34	5,3	4,95	6,4	1,2
5,5		5,15	6,6	1,2
5,7		5,35	6,9	1,2
6		5,65	7,2	1,2
7	6,99	6,6	8,4	1,5
8		7,6	9,6	1,5
8,4		7,9	10,1	1,5

Table 83B
Hydraulic: dimensions of grooves for **dynamic sealing**. ISO-norm in grey

d	g	L 0/+0,20	r1	r2
1	1,02	0,9	1,4	0,2
1,5	1,52	1,25	2	0,2
1,6	1,63	1,3	2,1	0,3
1,78	1,80	1,55	2,4	0,4
1,9		1,55	2,6	0,4
2	1,98	1,65	2,7	0,4
2,4		2,05	3,2	0,5
2,5		2,15	3,3	0,5
2,62	2,65	2,25	3,6	0,6
2,7		2,3	3,6	0,6
3		2,6	4	0,6
3,1		2,7	4,1	0,6
3,5		3,05	4,6	0,6
3,53	3,55	3,1	4,8	0,8
3,6		3,15	4,8	0,8
4		3,5	5,2	0,8
4,5		4	5,8	0,8
5		4,4	6,6	0,8
5,34	5,3	4,7	7,1	1,2
5,5		4,8	7,1	1,2
5,7		5	7,2	1,2
6		5,3	7,4	1,2
7	6,99	6,1	9,5	1,5
8		7,1	9,8	1,5
8,4		7,5	10	1,5



Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring D x d	DIN
1,5	1,85 x 1,5	•
	2 x 1,5	•
	2,5 x 1,5	•
	2,8 x 1,5	•
	3 x 1,5	•
	3,5 x 1,5	•
	4 x 1,5	•
	4,5 x 1,5	•
	5 x 1,5	•
	5,5 x 1,5	•
	6 x 1,5	•
	6,5 x 1,5	•
	7 x 1,5	•
	7,5 x 1,5	•
	8 x 1,5	•
	8,5 x 1,5	•
9 x 1,5	•	
9,5 x 1,5	•	
10 x 1,5	•	
10,5 x 1,5	•	
11 x 1,5	•	
11,5 x 1,5	•	
12 x 1,5	•	
12,5 x 1,5	•	
13 x 1,5	•	
13,5 x 1,5	•	
14 x 1,5	•	
14,5 x 1,5	•	
15 x 1,5	•	
15,5 x 1,5	•	
16 x 1,5	•	
16,5 x 1,5	•	
17 x 1,5	•	
17,5 x 1,5	•	
18 x 1,5	•	
18,5 x 1,5	•	
19 x 1,5	•	
19,5 x 1,5	•	
20 x 1,5	•	

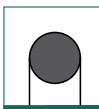
O-ring cross section	O-ring D x d	DIN
1,5	20,5 x 1,5	•
	21 x 1,5	•
	21,5 x 1,5	•
	22 x 1,5	•
	22,5 x 1,5	•
	23 x 1,5	•
	23,5 x 1,5	•
	24 x 1,5	•
	24,5 x 1,5	•
	25 x 1,5	•
	25,5 x 1,5	•
	26 x 1,5	•
	26,5 x 1,5	•
	27 x 1,5	•
	27,5 x 1,5	•
	28 x 1,5	•
	28,5 x 1,5	•
	29 x 1,5	•
	29,5 x 1,5	•
	30 x 1,5	•
	31 x 1,5	•
	31,5 x 1,5	•
	32 x 1,5	•
	32,5 x 1,5	•
33 x 1,5	•	
34 x 1,5	•	
35 x 1,5	•	
36 x 1,5	•	
36,5 x 1,5	•	
37 x 1,5	•	
38 x 1,5	•	
39 x 1,5	•	
39,5 x 1,5	•	
40 x 1,5	•	
41 x 1,5	•	
42 x 1,5	•	
43 x 1,5	•	
44 x 1,5	•	
45 x 1,5	•	

O-ring cross section	O-ring D x d	DIN
1,5	46 x 1,5	•
	47 x 1,5	•
	48 x 1,5	•
	49 x 1,5	•
	50 x 1,5	•
	51 x 1,5	•
	52 x 1,5	•
	53 x 1,5	•
	54 x 1,5	•
	55 x 1,5	•
	57 x 1,5	•
	58 x 1,5	•
	59 x 1,5	•
	60 x 1,5	•
	61 x 1,5	•
	62 x 1,5	•
	63 x 1,5	•
	64 x 1,5	•
	65 x 1,5	•
	66 x 1,5	•
	67 x 1,5	•
	68 x 1,5	•
	69 x 1,5	•
	70 x 1,5	•
71 x 1,5	•	
72 x 1,5	•	
73 x 1,5	•	
74 x 1,5	•	
75 x 1,5	•	
76 x 1,5	•	
77 x 1,5	•	
78 x 1,5	•	
79 x 1,5	•	
80 x 1,5	•	
81 x 1,5	•	
82 x 1,5	•	
83 x 1,5	•	
84 x 1,5	•	
85 x 1,5	•	

O-ring cross section	O-ring D x d	DIN
1,5	86 x 1,5	•
	87 x 1,5	•
	88 x 1,5	•
	89 x 1,5	•
	90 x 1,5	•
	91 x 1,5	•
	92 x 1,5	•
	93 x 1,5	•
	94 x 1,5	•
	95 x 1,5	•
	96 x 1,5	•
	97 x 1,5	•
	98 x 1,5	•
	100 x 1,5	•
	110 x 1,5	•

O-ring cross section	O-ring D x d	AS/BS
1,52	1,42 x 1,52	003

ISO/DIN	ISO 3601/DIN 3771 (EU) (D)	R	(F)	NF	NF T 47-501 (F)
DIN	DIN 3770 (D)	SMS	SMS 1586 (S)	BS met	BS 4518 (GB)
AS/BS	AS 568A / BS 1806 (USA) (GB)	JIS	JIS B 2401 (J)	ITALY	(I)

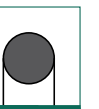


d = 1,6 - 1,63

O-rings



d = 1,78



Example of item code
04 353 3609 GN

Material: 04, d (mm) x 100: 353, D (mm) x 100: 3609, Colour: GN

Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	

Select the inner diameter D of the O-ring

$1,01N \leq D+2d \leq 1,03N$

$0,95P \leq D \leq 0,99P$

✕ Machining of housings: see pages 81, 82 and 83

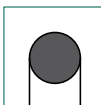
O-ring cross section	O-ring D x d	DIN	R	SMS	BS met
1,6	2,2 x 1,6		R00		
	2,75 x 1,6		R1b		
	3,1 x 1,6	•		•	0031-16
	4,1 x 1,6				• 0041-16
	4,7 x 1,6	•			
	5 x 1,6	•			
	5,1 x 1,6				• 0051-16
	6 x 1,6				
	6,1 x 1,6				• 0061-16
	7,1 x 1,6				• 0071-16
	8,1 x 1,6				• 0081-16
	9,1 x 1,6				• 0091-16
	10,1 x 1,6				• 0101-16
	11,1 x 1,6				• 0111-16
	12,1 x 1,6				• 0121-16
13,1 x 1,6				• 0131-16	
14,1 x 1,6				• 0141-16	
15,1 x 1,6				• 0151-16	
16,1 x 1,6				• 0161-16	
17,1 x 1,6				• 0171-16	
18,1 x 1,6				• 0181-16	
19,1 x 1,6				• 0191-16	
20,1 x 1,6				•	
21,1 x 1,6				•	
22,1 x 1,6				• 0221-16	
25,1 x 1,6				• 0251-16	
27,1 x 1,6				• 0271-16	
29,1 x 1,6				• 0291-16	
32,1 x 1,6				• 0321-16	
35,1 x 1,6				• 0351-16	
37,1 x 1,6				• 0371-16	
1,63	6,07 x 1,63	902			
	7,65 x 1,63	903			

O-ring cross section	O-ring D x d	AS/BS
1,63	6,07 x 1,63	902
	7,65 x 1,63	903

O-ring cross section	O-ring D x d	AS/BS	R	ITALY
1,78	1,78 x 1,78	004		2007
	2,57 x 1,78	005		2010
	2,9 x 1,78	006		2012
	3,17 x 1,78	801		
	3,68 x 1,78	007		2015
	4,47 x 1,78	008		2018
	4,76 x 1,78	802		
	5,28 x 1,78	009		2021
	6,07 x 1,78	010		2025
	6,35 x 1,78	803	R5b	
	6,75 x 1,78	610		.106
	7,65 x 1,78	011		2031
	7,94 x 1,78	804		
	8,73 x 1,78	611		
	9,25 x 1,78	012		2037
	9,52 x 1,78		R8b	
	10,82 x 1,78	013		2043
	11,11 x 1,78	806		.114
	12,42 x 1,78	014		2050
	14 x 1,78	015		2056
	15,6 x 1,78	016		2062
	17,17 x 1,78	017		2068
	18,77 x 1,78	018		2075
	20,35 x 1,78	019		2081
	21,95 x 1,78	020		2087
	23,52 x 1,78	021		2093
	25,12 x 1,78	022		2100
	26,7 x 1,78	023		2106
	28,3 x 1,78	024		2112
	29,87 x 1,78	025		2118
31,47 x 1,78	026		2125	
33,05 x 1,78	027		2131	
34,65 x 1,78	028		2137	
36,27 x 1,78	517			
37,82 x 1,78	029		2150	
39,45 x 1,78	519			
41 x 1,78	030		2162	
44,17 x 1,78	031		2175	
47,35 x 1,78	032		2187	

O-ring cross section	O-ring D x d	AS/BS	R	ITALY
1,78	50,52 x 1,78	033		2200
	53,7 x 1,78	034		2212
	56,87 x 1,78	035		2225
	60,05 x 1,78	036		2237
	63,22 x 1,78	037		2250
	66,4 x 1,78	038		2262
	69,57 x 1,78	039		2275
	72,75 x 1,78	040		2287
	75,92 x 1,78	041		2300
	79 x 1,78	532		2312
	82,27 x 1,78	042		2325
	85,34 x 1,78	534		2337
	88,62 x 1,78	043		2350
	91,7 x 1,78	536		2362
	94,97 x 1,78	044		2375
	98,05 x 1,78	538		2387
	101,32 x 1,78	045		2400
	104,4 x 1,78	540		2412
	107,67 x 1,78	046		2425
	110,74 x 1,78	542		2437
	114,02 x 1,78	047		2450
	117,1 x 1,78	544		2462
	120,37 x 1,78	048		2475
	123,44 x 1,78	546		2487
	126,72 x 1,78	049		2500
129,4 x 1,78	548		2512	
133,07 x 1,78	050		2525	
135,76 x 1,78	550		2537	
138,94 x 1,78	551		2550	
142,11 x 1,78	552		2562	
145,29 x 1,78	553		2575	
148,46 x 1,78	554		2587	
151,64 x 1,78	555		2600	
154,81 x 1,78	556		2612	
158 x 1,78	557		2625	
161,16 x 1,78	558		2637	
164,34 x 1,78	559		2652	
167,51 x 1,78	560		2662	
170,69 x 1,78	561		2675	
173,87 x 1,78	562		2687	

ISO/DIN	ISO 3601/DIN 3771	(EU)	(D)	R	(F)	NF	NF T 47-501	(F)	
DIN	DIN 3770		(D)	SMS	SMS 1586	(S)	BS met	BS 4518	(GB)
AS/BS	AS 568A / BS 1806	(USA)	(GB)	JIS	JIS B 2401	(J)	ITALY		(I)

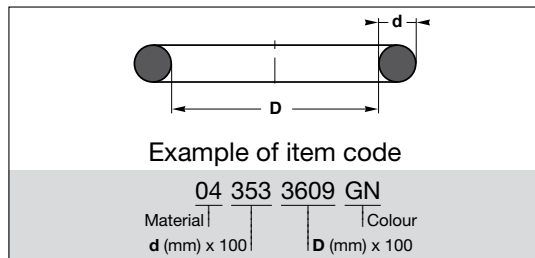
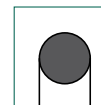


d = 1,8 - 1,83

O-rings

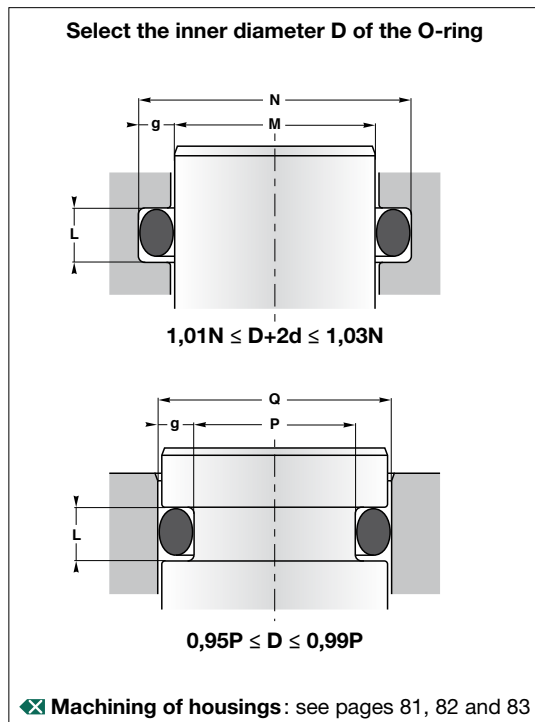


d = 1,90 - 1,98



O-ring cross section	O-ring D x d	ISO/DIN	NF
1,8	1,8 x 1,8	•	•
	2 x 1,8	•	•
	2,24 x 1,8	•	•
	2,5 x 1,8	•	•
	2,8 x 1,8	•	•
	3,15 x 1,8	•	•
	3,55 x 1,8	•	•
	3,75 x 1,8	•	•
	4 x 1,8	•	•
	4,5 x 1,8	•	•
4,87 x 1,8	•	•	
5 x 1,8	•	•	
5,15 x 1,8	•	•	
5,3 x 1,8	•	•	
5,6 x 1,8	•	•	
6 x 1,8	•	•	
6,3 x 1,8	•	•	
6,7 x 1,8	•	•	
6,9 x 1,8	•	•	
7,1 x 1,8	•	•	
7,5 x 1,8	•	•	
8 x 1,8	•	•	
8,5 x 1,8	•	•	
8,75 x 1,8	•	•	
9 x 1,8	•	•	
9,5 x 1,8	•	•	
10 x 1,8	•	•	
10,6 x 1,8	•	•	
11,2 x 1,8	•	•	
11,8 x 1,8	•	•	
12,5 x 1,8	•	•	
13,2 x 1,8	•	•	
14 x 1,8	•	•	
15 x 1,8	•	•	
16 x 1,8	•	•	
17 x 1,8	•	•	

Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



More information
 On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

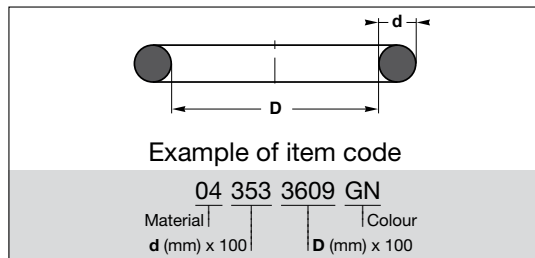
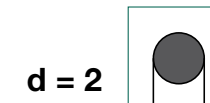
O-ring cross section	O-ring D x d	AS/BS
1,83	8,92 x 1,83	904
	10,52 x 1,83	905

O-ring cross section	O-ring D x d	R	JIS	O-ring cross section	O-ring D x d	AS/BS
1,9	2,4 x 1,9	R0		1,98	11,89 x 1,98	906
	2,6 x 1,9	R1				
	2,8 x 1,9		P3			
	3,4 x 1,9	R2				
	3,8 x 1,9		P4			
	4,2 x 1,9	R3				
	4,8 x 1,9		P5			
	4,9 x 1,9	R4				
	5,7 x 1,9	R5				
	5,8 x 1,9		P6			
6,4 x 1,9	R5a					
6,8 x 1,9		P7				
7,2 x 1,9	R6					
7,8 x 1,9		P8				
8 x 1,9	R6a					
8,8 x 1,9		P9				
8,9 x 1,9	R7					
9,8 x 1,9		P10				
16 x 1,9						

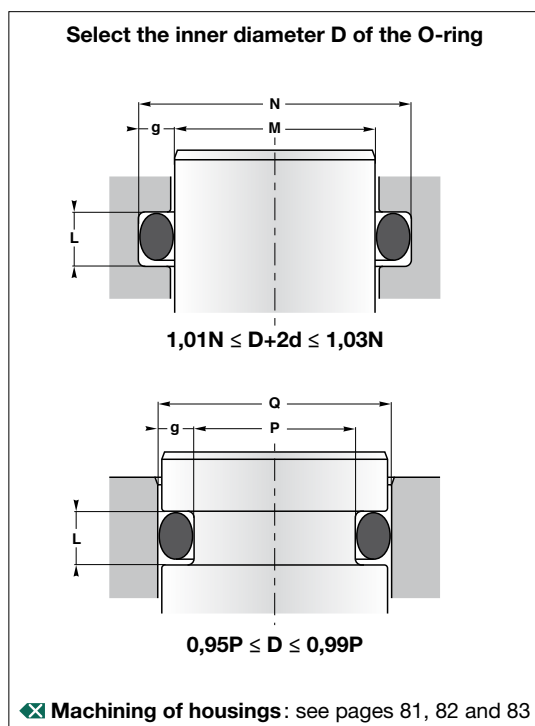
ISO/DIN	ISO 3601/DIN 3771 (EU) (D)	R	(F)	NF	NF T 47-501 (F)
DIN	DIN 3770 (D)	SMS	SMS 1586 (S)	BS met	BS 4518 (GB)
AS/BS	AS 568A / BS 1806 (USA) (GB)	JIS	JIS B 2401 (J)	ITALY	(I)



O-rings



Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



More information
 On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

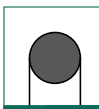
O-ring cross section	O-ring D x d	DIN
2	2,5 x 2	•
	3 x 2	•
	3,5 x 2	•
	4 x 2	•
	4,5 x 2	•
	5 x 2	•
	5,5 x 2	•
	6 x 2	•
	6,5 x 2	•
	7 x 2	•
	7,5 x 2	•
	8 x 2	•
	8,5 x 2	•
	9 x 2	•
	9,5 x 2	•
	10 x 2	•
	10,5 x 2	•
	11 x 2	•
	11,5 x 2	•
	12 x 2	•
	12,5 x 2	•
	13 x 2	•
	13,5 x 2	•
	14 x 2	•
	14,5 x 2	•
	15 x 2	•
	15,5 x 2	•
	16 x 2	•
	16,5 x 2	•
	17 x 2	•
	17,5 x 2	•
	18 x 2	•
	18,5 x 2	•
	19 x 2	•
	19,5 x 2	•
	20 x 2	•
	20,5 x 2	•
	21 x 2	•
	21,5 x 2	•

O-ring cross section	O-ring D x d	DIN
2	22 x 2	•
	22,5 x 2	•
	23 x 2	•
	23,5 x 2	•
	24 x 2	•
	24,5 x 2	•
	25 x 2	•
	25,5 x 2	•
	26 x 2	•
	26,5 x 2	•
	27 x 2	•
	27,5 x 2	•
	28 x 2	•
	28,5 x 2	•
	29 x 2	•
	29,5 x 2	•
	30 x 2	•
	30,5 x 2	•
	31 x 2	•
	31,5 x 2	•
	32 x 2	•
	32,5 x 2	•
	33 x 2	•
	33,5 x 2	•
	34 x 2	•
	34,5 x 2	•
	35 x 2	•
	35,5 x 2	•
	36 x 2	•
	36,5 x 2	•
	37 x 2	•
	37,5 x 2	•
	38 x 2	•
	38,5 x 2	•
	39 x 2	•
	39,5 x 2	•
	40 x 2	•
	41 x 2	•
	42 x 2	•

O-ring cross section	O-ring D x d	DIN
2	43 x 2	•
	44 x 2	•
	45 x 2	•
	46 x 2	•
	47 x 2	•
	48 x 2	•
	49 x 2	•
	50 x 2	•
	51 x 2	•
	52 x 2	•
	53 x 2	•
	54 x 2	•
	55 x 2	•
	56 x 2	•
	57 x 2	•
	58 x 2	•
	59 x 2	•
	60 x 2	•
	61 x 2	•
	62 x 2	•
	63 x 2	•
	64 x 2	•
	65 x 2	•
	66 x 2	•
	67 x 2	•
	68 x 2	•
	69 x 2	•
	70 x 2	•
	71 x 2	•
	72 x 2	•
	73 x 2	•
	74 x 2	•
	75 x 2	•
	76 x 2	•
	77 x 2	•
	78 x 2	•
	79 x 2	•
	80 x 2	•
	81 x 2	•

O-ring cross section	O-ring D x d	DIN
2	82 x 2	•
	83 x 2	•
	84 x 2	•
	85 x 2	•
	86 x 2	•
	87 x 2	•
	88 x 2	•
	89 x 2	•
	90 x 2	•
	91 x 2	•
	92 x 2	•
	93 x 2	•
	94 x 2	•
	95 x 2	•
	96 x 2	•
	97 x 2	•
	98 x 2	•
	99 x 2	•
	100 x 2	•
	102 x 2	•
	105 x 2	•
	107 x 2	•
	110 x 2	•
	112 x 2	•
	115 x 2	•
	118 x 2	•
	120 x 2	•
	123 x 2	•
	125 x 2	•
	128 x 2	•
	130 x 2	•
	132 x 2	•
	140 x 2	•
	150 x 2	•
	160 x 2	•
	165 x 2	•
	180 x 2	•
	194 x 2	•
	200 x 2	•

ISO/DIN	ISO 3601/DIN 3771 (EU) (D)	R	(F)	NF	NF T 47-501 (F)
DIN	DIN 3770 (D)	SMS	SMS 1586 (S)	BS met	BS 4518 (GB)
AS/BS	AS 568A / BS 1806 (USA) (GB)	JIS	JIS B 2401 (J)	ITALY	(I)

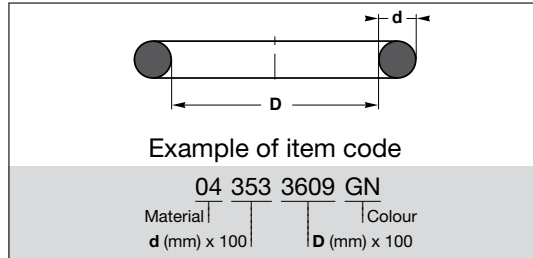
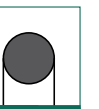


d = 2,08 - 2,2 - 2,21 - 2,3 - 2,4

O-rings



d = 2,4



O-ring cross section	O-ring D x d	R
----------------------	--------------	---

2,08	13,46 x 2,08	907
------	--------------	-----

O-ring cross section	O-ring D x d	JIS
----------------------	--------------	-----

2,2	6 x 2,2 9 x 2,2	R6b
-----	--------------------	-----

O-ring cross section	O-ring D x d	R
----------------------	--------------	---

2,21	16,36 x 2,21	908
------	--------------	-----

O-ring cross section	O-ring D x d	
----------------------	--------------	--

2,3	14 x 2,3 22 x 2,3 160 x 2,3	
-----	-----------------------------------	--

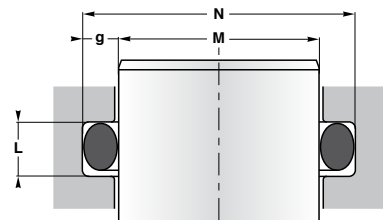
O-ring cross section	O-ring D x d	DIN	R	SMS	JIS	BS met
----------------------	--------------	-----	---	-----	-----	--------

2,4	3,3 x 2,4			•		
	3,6 x 2,4			•		0036-24
	4,3 x 2,4			•		
	4,6 x 2,4			•		0046-24
	5,3 x 2,4			•		
	5,5 x 2,4			•		
	5,6 x 2,4			•		0056-24
	6,3 x 2,4			•		
	6,6 x 2,4			•		0066-24
	7,3 x 2,4			•		
	7,5 x 2,4			•		
	7,6 x 2,4			•		0076-24
	8,3 x 2,4			•		
	8,6 x 2,4			•		0086-24
	9,3 x 2,4			•		
9,6 x 2,4			•		0096-24	
9,8 x 2,4			•	P10A		
10,3 x 2,4			•			

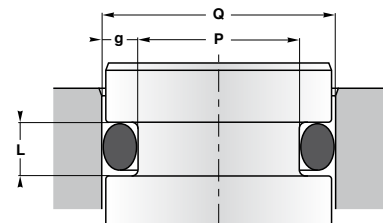
Material	Colour
----------	--------

- 01 : NBR 70 Sh A - : Black
- 02 : NBR 80 Sh A BE : Blue
- 03 : NBR 90 Sh A BN : Brown
- 04 : FPM 75 Sh A GN : Green
- 05 : FPM 90 Sh A GY : Grey
- 06 : EPDM 70 Sh A RD : Red
- 07 : MVQ 70 Sh A WE : White
- 00 : Non-standard YW : Yellow
- ✕ see pages 10-19

Select the inner diameter D of the O-ring



$$1,01N \leq D+2d \leq 1,03N$$



$$0,95P \leq D \leq 0,99P$$

✕ Machining of housings: see pages 81, 82 and 83

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

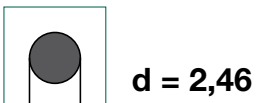
O-ring cross section	O-ring D x d	DIN	R	SMS	JIS	BS met
----------------------	--------------	-----	---	-----	-----	--------

2,4	10,5 x 2,4		•			
	10,6 x 2,4					0106-24
	10,8 x 2,4				P11	
	11 x 2,4				P11.2	
	11,3 x 2,4			•		
	11,5 x 2,4			•		
	11,6 x 2,4					0116-24
	11,8 x 2,4				P12	
	12,3 x 2,4			•		
	12,6 x 2,4					0126-24
	13,3 x 2,4			•		
	13,5 x 2,4			•		
	13,6 x 2,4					0136-24
	13,8 x 2,4				P14	
	14,3 x 2,4			•		
14,5 x 2,4			•			
14,6 x 2,4					0146-24	
14,8 x 2,4				P15		
15,3 x 2,4						
15,5 x 2,4			•			
15,6 x 2,4					0156-24	
15,8 x 2,4						
16,3 x 2,4					P16	
16,6 x 2,4					0166-24	
17,3 x 2,4						
17,5 x 2,4			•			
17,6 x 2,4					0176-24	
17,8 x 2,4						
18,3 x 2,4					P18	
18,6 x 2,4					0186-24	
19,3 x 2,4						
19,6 x 2,4					P20	
19,8 x 2,4					0196-24	
20,3 x 2,4						
20,5 x 2,4			•			
20,8 x 2,4					P21	

O-ring cross section	O-ring D x d	DIN	R	SMS	JIS	BS met
----------------------	--------------	-----	---	-----	-----	--------

2,4	21,3 x 2,4					
	21,5 x 2,4		•			
	21,6 x 2,4					0216-24
	21,8 x 2,4					P22
	22,3 x 2,4					
	23,3 x 2,4					
	23,5 x 2,4			•		
	24,5 x 2,4			•		
	24,6 x 2,4					0246-24
	25 x 2,4		R19b			
	25,3 x 2,4					
	27,3 x 2,4					
	27,5 x 2,4			•		
	27,6 x 2,4					0276-24
	29,6 x 2,4					0296-24
30,3 x 2,4						
31,6 x 2,4						
33,3 x 2,4					0316-24	
34,6 x 2,4						
37,6 x 2,4					0376-24	
39,6 x 2,4					0396-24	
41,6 x 2,4					0416-24	
44,6 x 2,4					0446-24	
47,6 x 2,4					0476-24	
49,6 x 2,4					0496-24	
51,6 x 2,4					0516-24	
54,6 x 2,4					0546-24	
57,6 x 2,4					0576-24	
59,6 x 2,4					0596-24	
61,6 x 2,4					0616-24	
64,6 x 2,4					0646-24	
67,6 x 2,4					0676-24	
69,6 x 2,4					0696-24	
87,1 x 2,4						

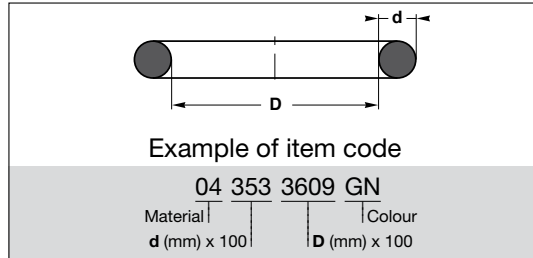
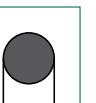
ISO/DIN	ISO 3601/DIN 3771	(EU)	(D)	R		(F)	NF	NF T 47-501	(F)
DIN	DIN 3770		(D)	SMS	SMS 1586	(S)	BS met	BS 4518	(GB)
AS/BS	AS 568A / BS 1806	(USA)	(GB)	JIS	JIS B 2401	(J)	ITALY		(I)



O-rings

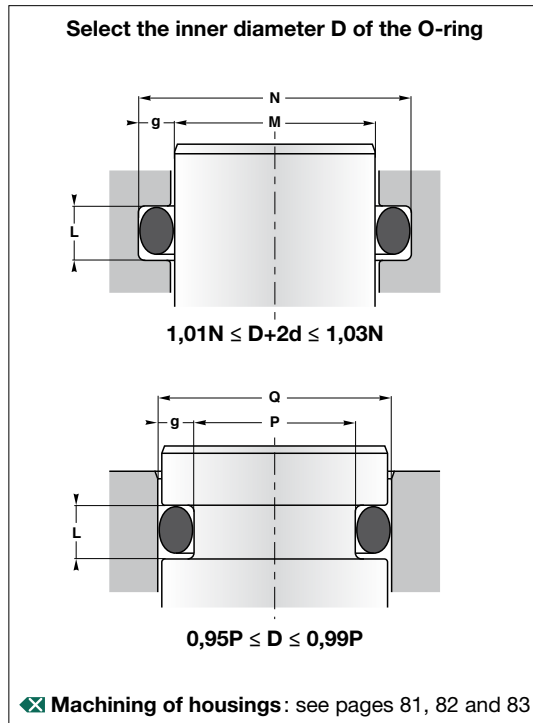


d = 2,5



O-ring cross section	O-ring D x d	AS/BS
2,46	17,93 x 2,46	909
	19,18 x 2,46	910

Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



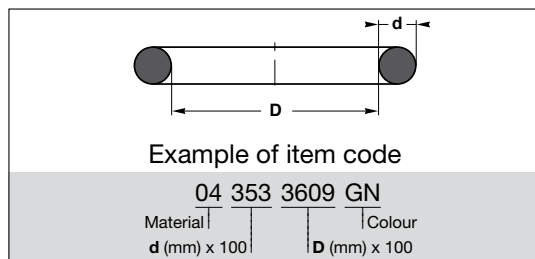
More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring D x d	DIN
2,5	4 x 2,5	•
	4,6 x 2,5	•
	5 x 2,5	•
	5,5 x 2,5	•
	6 x 2,5	•
	6,5 x 2,5	•
	7 x 2,5	•
	7,5 x 2,5	•
	8 x 2,5	•
	8,5 x 2,5	•
	9 x 2,5	•
9,5 x 2,5	•	
10 x 2,5	•	
10,5 x 2,5	•	
11 x 2,5	•	
11,5 x 2,5	•	
12 x 2,5	•	
12,5 x 2,5	•	
13 x 2,5	•	
13,5 x 2,5	•	
14 x 2,5	•	
14,5 x 2,5	•	
15 x 2,5	•	
15,5 x 2,5	•	
16 x 2,5	•	
16,5 x 2,5	•	
17 x 2,5	•	
17,5 x 2,5	•	
18 x 2,5	•	
18,5 x 2,5	•	
19 x 2,5	•	
19,5 x 2,5	•	
20 x 2,5	•	
20,5 x 2,5	•	
21 x 2,5	•	
21,5 x 2,5	•	
22 x 2,5	•	
22,5 x 2,5	•	
23 x 2,5	•	

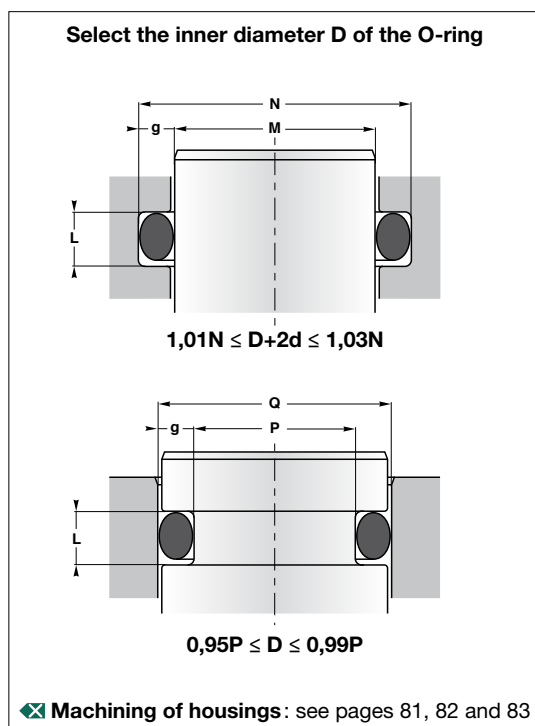
O-ring cross section	O-ring D x d	DIN
2,5	23,5 x 2,5	•
	24 x 2,5	•
	24,5 x 2,5	•
	25 x 2,5	•
	25,5 x 2,5	•
	26 x 2,5	•
	26,5 x 2,5	•
	27 x 2,5	•
	27,5 x 2,5	•
	28 x 2,5	•
	28,5 x 2,5	•
29 x 2,5	•	
29,5 x 2,5	•	
30 x 2,5	•	
30,5 x 2,5	•	
31 x 2,5	•	
31,5 x 2,5	•	
32 x 2,5	•	
32,5 x 2,5	•	
33 x 2,5	•	
33,5 x 2,5	•	
34 x 2,5	•	
34,5 x 2,5	•	
35 x 2,5	•	
35,5 x 2,5	•	
36 x 2,5	•	
36,5 x 2,5	•	
37 x 2,5	•	
37,5 x 2,5	•	
38 x 2,5	•	
38,5 x 2,5	•	
39 x 2,5	•	
39,5 x 2,5	•	
40 x 2,5	•	
41 x 2,5	•	
42 x 2,5	•	
43 x 2,5	•	
44 x 2,5	•	
45 x 2,5	•	

O-ring cross section	O-ring D x d	DIN
2,5	46 x 2,5	•
	47 x 2,5	•
	48 x 2,5	•
	49 x 2,5	•
	50 x 2,5	•
	51 x 2,5	•
	52 x 2,5	•
	53 x 2,5	•
	54 x 2,5	•
	55 x 2,5	•
	56 x 2,5	•
57 x 2,5	•	
58 x 2,5	•	
59 x 2,5	•	
60 x 2,5	•	
61 x 2,5	•	
62 x 2,5	•	
63 x 2,5	•	
64 x 2,5	•	
65 x 2,5	•	
66 x 2,5	•	
67 x 2,5	•	
68 x 2,5	•	
69 x 2,5	•	
70 x 2,5	•	
71 x 2,5	•	
72 x 2,5	•	
73 x 2,5	•	
74 x 2,5	•	
75 x 2,5	•	
76 x 2,5	•	
77 x 2,5	•	
78 x 2,5	•	
79 x 2,5	•	
80 x 2,5	•	
81 x 2,5	•	
82 x 2,5	•	
83 x 2,5	•	
84 x 2,5	•	

ISO/DIN	ISO 3601/DIN 3771	(EU)	(D)	R	(F)	NF	NF T 47-501	(F)	
DIN	DIN 3770		(D)	SMS	SMS 1586	(S)	BS met	BS 4518	(GB)
AS/BS	AS 568A / BS 1806	(USA)	(GB)	JIS	JIS B 2401	(J)	ITALY		(I)



Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	

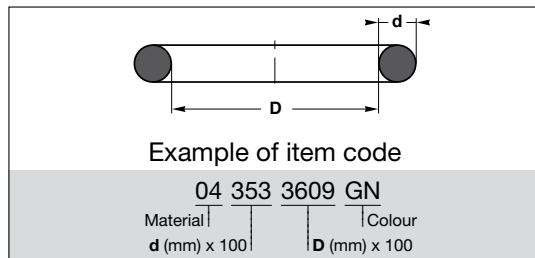


More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

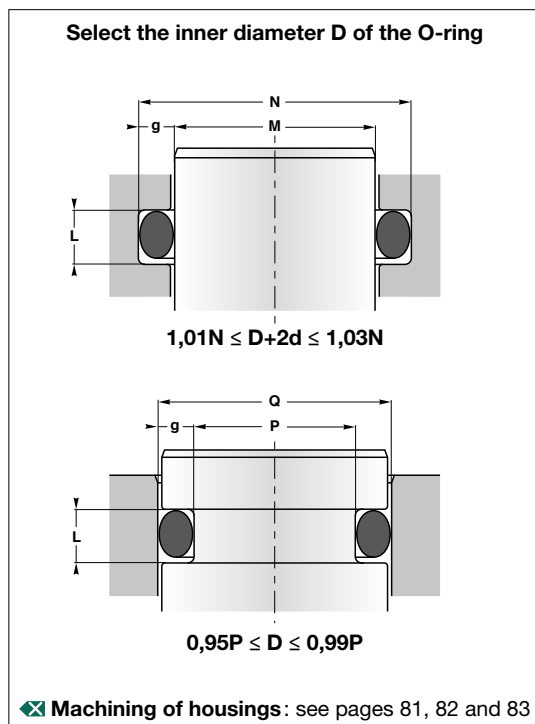
O-ring cross section	O-ring D x d	DIN
2,5	85 x 2,5	•
	86 x 2,5	•
	87 x 2,5	•
	88 x 2,5	•
	89 x 2,5	•
	90 x 2,5	•
	91 x 2,5	•
	92 x 2,5	•
	93 x 2,5	•
	94 x 2,5	•
	95 x 2,5	•
	96 x 2,5	•
	97 x 2,5	•
	98 x 2,5	•
	99 x 2,5	•
	100 x 2,5	•
	101 x 2,5	•
	102 x 2,5	•
	103 x 2,5	•
	104 x 2,5	•
	105 x 2,5	•
	106 x 2,5	•
	107 x 2,5	•
	108 x 2,5	•
	109 x 2,5	•
110 x 2,5	•	
112 x 2,5	•	
113 x 2,5	•	
114 x 2,5	•	
115 x 2,5	•	
116 x 2,5	•	
117 x 2,5	•	
118 x 2,5	•	
120 x 2,5	•	
121 x 2,5	•	
122 x 2,5	•	
123 x 2,5	•	
124 x 2,5	•	
125 x 2,5	•	

O-ring cross section	O-ring D x d	DIN	JIS	O-ring cross section	O-ring D x d	AS/BS	ITALY
2,5	127 x 2,5	•		2,62	1,24 x 2,62	102	
	128 x 2,5	•			2,06 x 2,62	103	
	129 x 2,5	•			2,84 x 2,62	104	
	130 x 2,5	•			3,63 x 2,62	105	
	133 x 2,5	•			4,42 x 2,62	106	
	134 x 2,5	•			5,23 x 2,62	107	
	135 x 2,5	•			6,02 x 2,62	108	
	137 x 2,5	•			7,59 x 2,62	109	
	139 x 2,5	•			9,13 x 2,62		.109
	140 x 2,5	•			9,19 x 2,62	110	3037
	141 x 2,5	•			9,9 x 2,62	613	.112
	142 x 2,5	•			10,77 x 2,62	111	3043
	143 x 2,5	•			11,91 x 2,62	614	.115
	145 x 2,5	•			12,37 x 2,62	112	3050
	146 x 2,5	•			12,7 x 2,62	807	
	147 x 2,5	•			13,1 x 2,62	615	.117
	148 x 2,5	•			13,94 x 2,62	113	3056
	150 x 2,5	•			15,08 x 2,62	616	.119
	155 x 2,5	•	P155		15,54 x 2,62	114	3062
					15,88 x 2,62	809	.121
					17,12 x 2,62	115	3068
					17,46 x 2,62	810	
					17,86 x 2,62	617	.123
					18,72 x 2,62	116	3075
	2,55	29,1 x 2,55	R20b			20,3 x 2,62	117
				20,64 x 2,62	812	.128	
				21,89 x 2,62	118	3087	
				22,23 x 2,62	813	.130	
				23,47 x 2,62	119	3093	
				23,81 x 2,62	814	.132	
				25,07 x 2,62	120	3100	
				26,64 x 2,62	121	3106	
				28,24 x 2,62	122	3112	
				29,82 x 2,62	123	3118	
	31,42 x 2,62	124	3125				
	32,99 x 2,62	125	3131				
	34,59 x 2,62	126	3137				
	36,17 x 2,62	127	3143				
	37,77 x 2,62	128	3150				

ISO/DIN	ISO 3601/DIN 3771	(EU)	(D)	R	(F)	NF	NF T 47-501	(F)	
DIN	DIN 3770		(D)	SMS	SMS 1586	(S)	BS met	BS 4518	(GB)
AS/BS	AS 568A / BS 1806	(USA)	(GB)	JIS	JIS B 2401	(J)	ITALY	(I)	



Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring D x d	AS/BS	ITALY
2,62	39,34 x 2,62	129	3156
	40,94 x 2,62	130	3162
	42,52 x 2,62	131	3168
	44,12 x 2,62	132	3175
	45,69 x 2,62	133	3181
	47,29 x 2,62	134	3187
	48,9 x 2,62	135	3193
	50,47 x 2,62	136	3200
	52,07 x 2,62	137	3206
	53,64 x 2,62	138	3212
55,25 x 2,62	139	3218	
56,82 x 2,62	140	3225	
58,42 x 2,62	141	3231	
59,99 x 2,62	142	3237	
61,6 x 2,62	143	3243	
63,17 x 2,62	144	3250	
64,77 x 2,62	145	3256	
66,34 x 2,62	146	3262	
67,95 x 2,62	147	3268	
69,52 x 2,62	148	3275	
71,12 x 2,62	149	3281	
72,69 x 2,62	150	3287	
74,3 x 2,62	151	3300	
75,87 x 2,62	151	3300	
77,5 x 2,62	152	3325	
80,6 x 2,62	152	3325	
82,22 x 2,62	152	3325	
83,8 x 2,62	153	3350	
88,57 x 2,62	153	3350	
94,92 x 2,62	154	3375	
101,27 x 2,62	155	3400	
107,62 x 2,62	156	3425	
113,97 x 2,62	157	3450	
120,32 x 2,62	158	3475	
126,67 x 2,62	159	3500	
133,02 x 2,62	160	3525	
139,37 x 2,62	161	3550	
145,72 x 2,62	162	3575	
152,07 x 2,62	163	3600	

O-ring cross section	O-ring D x d	AS/BS	ITALY
2,62	158,42 x 2,62	164	3625
	164,77 x 2,62	165	3650
	171,12 x 2,62	166	3675
	177,47 x 2,62	167	3700
	183,82 x 2,62	168	3725
	190,17 x 2,62	169	3750
	196,52 x 2,62	170	3775
	202,87 x 2,62	171	3800
	209,22 x 2,62	172	3825
	215,57 x 2,62	173	3850
221,92 x 2,62	174	3875	
228,27 x 2,62	175	3900	
234,62 x 2,62	176	3925	
240,97 x 2,62	177	3950	
247,32 x 2,62	178	3975	

O-ring cross section	O-ring D x d	ISO/DIN	NF
2,65	14 x 2,65	•	•
	15 x 2,65	•	•
	16 x 2,65	•	•
	17 x 2,65	•	•
	18 x 2,65	•	•
	19 x 2,65	•	•
	20 x 2,65	•	•
	21,2 x 2,65	•	•
	22,4 x 2,65	•	•
	23,6 x 2,65	•	•
25 x 2,65	•	•	
25,8 x 2,65	•	•	
26,5 x 2,65	•	•	
28 x 2,65	•	•	
30 x 2,65	•	•	
31,5 x 2,65	•	•	
32,5 x 2,65	•	•	
33,5 x 2,65	•	•	
34,5 x 2,65	•	•	
35,5 x 2,65	•	•	
36,5 x 2,65	•	•	
37,5 x 2,65	•	•	
38,7 x 2,65	•	•	

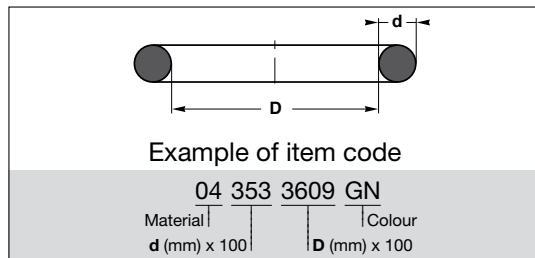
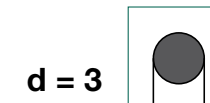
O-ring cross section	O-ring D x d	R
2,7	8,9 x 2,7	R8
	10,5 x 2,7	R9
	12,1 x 2,7	R10
	13,6 x 2,7	R11
	15,1 x 2,7	R12
	16,9 x 2,7	R13
	18,4 x 2,7	R14
	27,3 x 2,7	R20t
	21,92 x 2,95	911
	23,47 x 2,95	912
25,04 x 2,95	913	
26,59 x 2,95	914	
29,74 x 2,95	916	
34,42 x 2,95	918	

O-ring cross section	O-ring D x d	AS/BS
2,95	21,92 x 2,95	911
	23,47 x 2,95	912
	25,04 x 2,95	913
	26,59 x 2,95	914
	29,74 x 2,95	916
	34,42 x 2,95	918

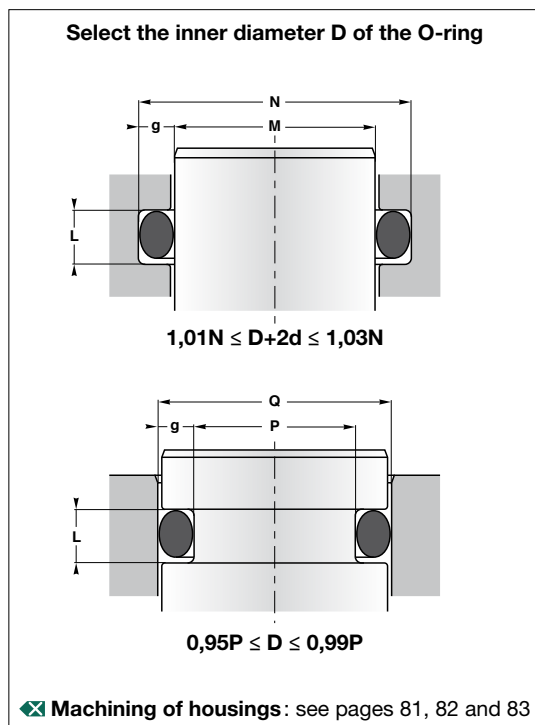
ISO/DIN	ISO 3601/DIN 3771	(EU)	(D)	R	(F)	NF	NF T 47-501	(F)	
DIN	DIN 3770		(D)	SMS	SMS 1586	(S)	BS met	BS 4518	(GB)
AS/BS	AS 568A / BS 1806	(USA)	(GB)	JIS	JIS B 2401	(J)	ITALY	(I)	



O-rings



Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring D x d	DIN	AS/BS	SMS	BS met
3	3 x 3	•			
	3,5 x 3	•			
	4 x 3	•			
	4,5 x 3	•			
	5 x 3	•			
	5,5 x 3	•			
	6 x 3	•			
	6,5 x 3	•			
	7 x 3	•			
	7,5 x 3	•			
	8 x 3	•			
	8,5 x 3	•			
	9 x 3	•			
	9,5 x 3	•			
	10 x 3	•			
	10,5 x 3	•			
	11 x 3	•			
	11,5 x 3	•			
	12 x 3	•			
	12,5 x 3	•			
	13 x 3	•			
	13,5 x 3	•			
	14 x 3	•			
	14,5 x 3	•			
	15 x 3	•			
	15,5 x 3	•			
	16 x 3	•			
	16,5 x 3	•			
	17 x 3	•			
	17,2 x 3			•	
	17,5 x 3	•			
	18 x 3	•			
	18,2 x 3			•	
	18,5 x 3	•			
	19 x 3	•			
	19,2 x 3			•	
	19,5 x 3	•			0195-30
	20 x 3	•			
	20,2 x 3			•	
	20,5 x 3	•			
	21 x 3	•			
	21,2 x 3			•	

O-ring cross section	O-ring D x d	DIN	AS/BS	SMS	BS met
3	21,5 x 3	•			0215-30
	22 x 3	•			
	22,2 x 3			•	
	22,5 x 3	•			0225-30
	23 x 3	•			
	23,5 x 3	•			
	24 x 3	•			
	24,2 x 3			•	
	25,2 x 3			•	
	24,5 x 3	•			0245-30
	24,6 x 3	•			
	25 x 3	•			
	25,5 x 3	•			0255-30
	26 x 3	•			
	26,2 x 3			•	
	26,5 x 3	•			0265-30
	27 x 3	•			
	27,5 x 3	•			0275-30
	28 x 3	•			
	28,2 x 3			•	
	28,5 x 3	•			
	29 x 3	•			
	29,2 x 3			•	
	29,5 x 3	•			0295-30
	30 x 3	•			
	30,2 x 3			•	
	30,5 x 3	•			
	31 x 3	•			
	31,2 x 3			•	
	31,5 x 3	•			0315-30
	32 x 3	•			
	32,2 x 3			•	
	32,5 x 3	•			0325-30
	33 x 3	•			
	33,5 x 3	•			
	34 x 3	•			
	34,2 x 3			•	
	34,5 x 3	•			0345-30
	35 x 3	•			

O-ring cross section	O-ring D x d	DIN	AS/BS	SMS	BS met
3	35,2 x 3			•	
	35,5 x 3	•			
	36 x 3	•			
	36,2 x 3			•	
	36,5 x 3	•			0365-30
	37 x 3	•			
	37,2 x 3			•	
	37,47 x 3		920		
	37,5 x 3	•			0375-30
	38 x 3	•			
	38,5 x 3	•			
	39 x 3	•			
	39,2 x 3			•	
	39,5 x 3	•			0395-30
	40 x 3	•			
	40,2 x 3			•	
	41 x 3	•			
	41,5 x 3	•			0415-30
	42 x 3	•			
	42,2 x 3			•	
	42,5 x 3	•			0425-30
	43 x 3	•			
	43,69 x 3		924		
	44 x 3	•			
	44,2 x 3			•	
	44,5 x 3	•			0445-30
	45 x 3	•			
	45,2 x 3			•	
	46 x 3	•			
	46,2 x 3			•	
	47 x 3	•			
	48 x 3	•			
	49 x 3	•			
	49,5 x 3	•			0495-30
	50 x 3	•			
	50,2 x 3			•	
	50,5 x 3	•			
	51 x 3	•			
	52 x 3	•			

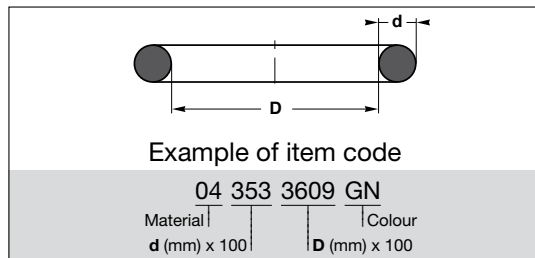
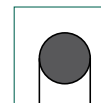
ISO/DIN	ISO 3601/DIN 3771	(EU)	(D)	R	(F)	NF	NF T 47-501	(F)	
DIN	DIN 3770		(D)	SMS	SMS 1586	(S)	BS met	BS 4518	(GB)
AS/BS	AS 568A / BS 1806	(USA)	(GB)	JIS	JIS B 2401	(J)	ITALY		(I)



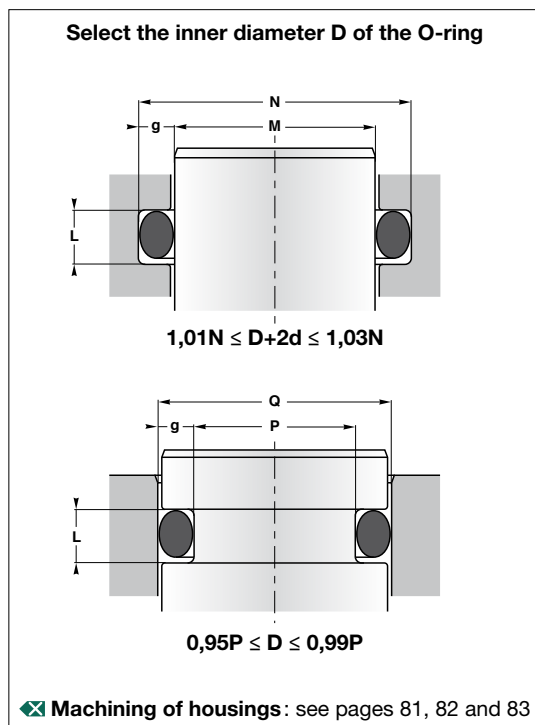
O-rings



d = 3



Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring D x d	DIN	AS/BS	SMS	BS met
3	53 x 3	•			
	53,09 x 3		928		
3	54 x 3	•			
	54,2 x 3				
3	54,5 x 3	•		•	0545-30
	55 x 3	•			
3	55,2 x 3			•	
	56 x 3	•			
3	56,2 x 3			•	
	57 x 3	•			
3	57,2 x 3			•	
	58 x 3	•			
3	59 x 3	•			
	59,36 x 3		932		
3	59,5 x 3	•		•	0595-30
	60 x 3	•			
3	60,5 x 3			•	
	61 x 3	•			
3	62 x 3	•			
	62,2 x 3			•	
3	63 x 3	•			
	64 x 3	•			
3	64,5 x 3			•	0645-30
	65 x 3	•			
3	66 x 3	•			
	67 x 3	•			
3	68 x 3	•			
	69 x 3	•			
3	69,5 x 3			•	0695-30
	70 x 3	•			
3	71 x 3	•			
	72 x 3	•			
3	73 x 3	•			
	74 x 3	•			
3	74,5 x 3			•	0745-30
	75 x 3	•			
3	76 x 3	•			
	77 x 3	•			
3	78 x 3	•			
	79 x 3	•			
3	79,5 x 3			•	0795-30
	80 x 3	•			

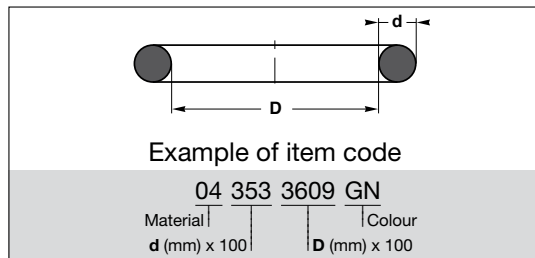
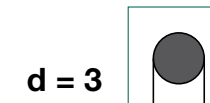
O-ring cross section	O-ring D x d	DIN	AS/BS	SMS	BS met
3	81 x 3	•			
	82 x 3	•			
	83 x 3	•			
3	84 x 3	•			
	84,5 x 3	•		•	0845-30
	85 x 3	•			
3	86 x 3	•			
	87 x 3	•			
	88 x 3	•			
3	89 x 3	•			
	89,5 x 3	•		•	0895-30
	90 x 3	•			
3	91 x 3	•			
	92 x 3	•			
	93 x 3	•			
3	94 x 3	•			
	94,5 x 3	•		•	0945-30
	95 x 3	•			
3	96 x 3	•			
	97 x 3	•			
	98 x 3	•			
3	99 x 3	•			
	99,5 x 3	•		•	0995-30
	100 x 3	•			
3	101 x 3	•			
	102 x 3	•			
	103 x 3	•			
3	104 x 3	•			
	104,5 x 3	•		•	1045-30
	105 x 3	•			
3	106 x 3	•			
	107 x 3	•			
	108 x 3	•			
3	109 x 3	•			
	109,5 x 3	•		•	1095-30
	110 x 3	•			
3	111 x 3	•			
	112 x 3	•			
	113 x 3	•			

O-ring cross section	O-ring D x d	DIN	AS/BS	SMS	BS met
3	114 x 3	•			
	114,5 x 3	•		•	1145-30
	115 x 3	•			
3	116 x 3	•			
	117 x 3	•			
	118 x 3	•			
3	119 x 3	•			
	119,5 x 3	•		•	1195-30
	120 x 3	•			
3	121 x 3	•			
	122 x 3	•			
	123 x 3	•			
3	124 x 3	•			
	124,5 x 3	•		•	1245-30
	125 x 3	•			
3	126 x 3	•			
	127 x 3	•			
	128 x 3	•			
3	129 x 3	•			
	129,5 x 3	•		•	1295-30
	130 x 3	•			
3	131 x 3	•			
	132 x 3	•			
	133 x 3	•			
3	134 x 3	•			
	134,5 x 3	•		•	1345-30
	135 x 3	•			
3	136 x 3	•			
	137 x 3	•			
	138 x 3	•			
3	139 x 3	•			
	139,5 x 3	•		•	1395-30
	140 x 3	•			
3	141 x 3	•			
	142 x 3	•			
	143 x 3	•			
3	144 x 3	•			
	144,5 x 3	•		•	1445-30
	145 x 3	•			

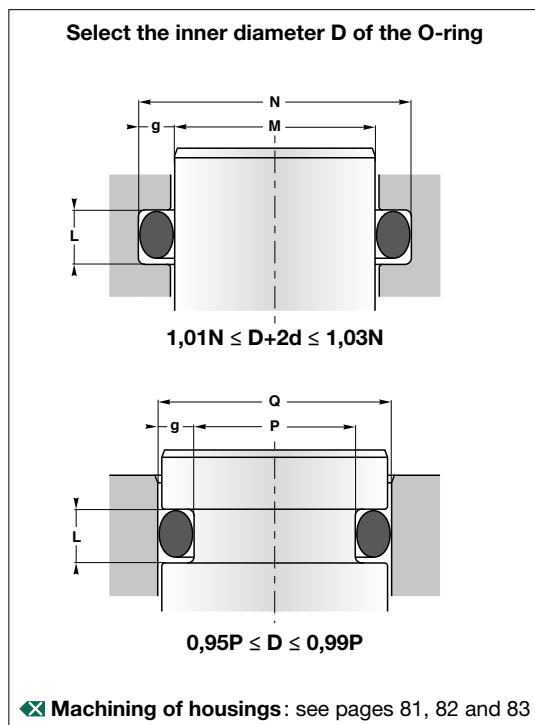
ISO/DIN	ISO 3601/DIN 3771	(EU) (D)	R	(F)	NF	NF T 47-501	(F)
DIN	DIN 3770	(D)	SMS	SMS 1586	(S)	BS met	BS 4518 (GB)
AS/BS	AS 568A / BS 1806	(USA) (GB)	JIS	JIS B 2401	(J)	ITALY	(I)



O-rings



Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring D x d	DIN	AS/BS	SMS	BS met
3	146 x 3	•			
	147 x 3	•			
	148 x 3	•			
	149 x 3	•			
	149,5 x 3	•			1495-30
	150 x 3	•			
	151 x 3	•			
	152 x 3	•			
	153 x 3	•			
	154 x 3	•			
	154,5 x 3	•			1545-30
	155 x 3	•			
	156 x 3	•			
	157 x 3	•			
	158 x 3	•			
159 x 3	•				
159,5 x 3	•			1595-30	
160 x 3	•				
161 x 3	•				
162 x 3	•				
163 x 3	•				
164 x 3	•				
164,5 x 3	•			1645-30	
165 x 3	•				
166 x 3	•				
167 x 3	•				
168 x 3	•				
169 x 3	•				
169,5 x 3	•			1695-30	
170 x 3	•				
172 x 3	•				
173 x 3	•				
174 x 3	•				
174,5 x 3	•			1745-30	
175 x 3	•				
176 x 3	•				
177 x 3	•				
178 x 3	•				
179 x 3	•				
179,5 x 3	•			1795-30	
180 x 3	•				
182 x 3	•				

O-ring cross section	O-ring D x d	DIN	AS/BS	SMS	BS met
3	183 x 3	•			
	184 x 3	•			
	184,5 x 3	•			1845-30
	185 x 3	•			
	186 x 3	•			
	188 x 3	•			
	189 x 3	•			
	189,5 x 3	•			1895-30
	190 x 3	•			
	192 x 3	•			
	193 x 3	•			
	194 x 3	•			
	194,5 x 3	•			1945-30
	195 x 3	•			
	196 x 3	•			
197 x 3	•				
198 x 3	•				
199,5 x 3	•			1995-30	
200 x 3	•				
202 x 3	•				
203 x 3	•				
204 x 3	•				
204,5 x 3	•			2045-30	
205 x 3	•				
206 x 3	•				
207 x 3	•				
208 x 3	•				
209,5 x 3	•			2095-30	
210 x 3	•				
212 x 3	•				
213 x 3	•				
214 x 3	•				
215 x 3	•				
216 x 3	•				
217 x 3	•				
219 x 3	•				
219,5 x 3	•			2195-30	
220 x 3	•				
222 x 3	•				

O-ring cross section	O-ring D x d	DIN	AS/BS	SMS	BS met
3	224 x 3	•			
	225 x 3	•			
	226 x 3	•			
	227 x 3	•			
	228 x 3	•			
	229 x 3	•			
	229,5 x 3	•			2295-30
	230 x 3	•			
	232 x 3	•			
	233 x 3	•			
	234 x 3	•			
	235 x 3	•			
	237 x 3	•			
	238 x 3	•			
	239 x 3	•			
239,5 x 3	•			2395-30	
240 x 3	•				
242 x 3	•				
243 x 3	•				
244 x 3	•				
245 x 3	•				
246 x 3	•				
247 x 3	•				
248 x 3	•				
249,5 x 3	•			2495-30	
250 x 3	•				
270 x 3	•				
280 x 3	•				
309 x 3	•				
310 x 3	•				
315 x 3	•				

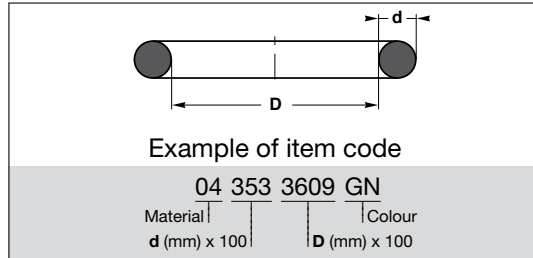
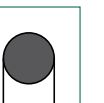
ISO/DIN	ISO 3601/DIN 3771	(EU) (D)	R	(F)	NF	NF T 47-501	(F)
DIN	DIN 3770	(D)	SMS	SMS 1586	(S)	BS met	BS 4518 (GB)
AS/BS	AS 568A / BS 1806	(USA) (GB)	JIS	JIS B 2401	(J)	ITALY	(I)



O-rings

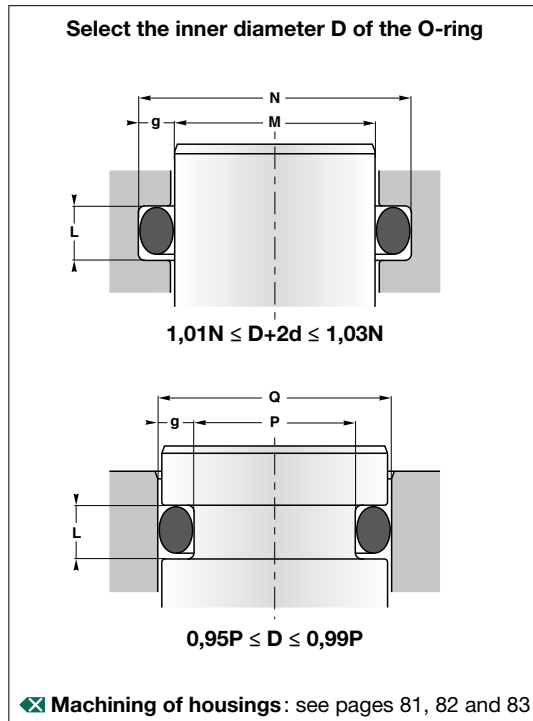


d = 3,5



O-ring cross section	O-ring D x d	JIS
3,1	24,4 x 3,1	G25
	29,4 x 3,1	G30
	34,4 x 3,1	G35
	39,4 x 3,1	G40
	44,4 x 3,1	G45
	49,4 x 3,1	G50
	54,4 x 3,1	G55
	59,4 x 3,1	G60
	64,4 x 3,1	G65
	69,4 x 3,1	G70
	74,4 x 3,1	G75
	79,4 x 3,1	G80
	84,4 x 3,1	G85
	89,4 x 3,1	G90
	94,4 x 3,1	G95
	99,4 x 3,1	G100
	104,4 x 3,1	G105
	109,4 x 3,1	G110

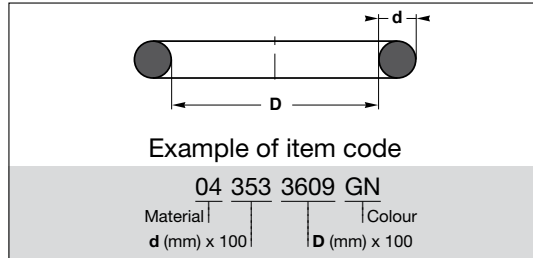
Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



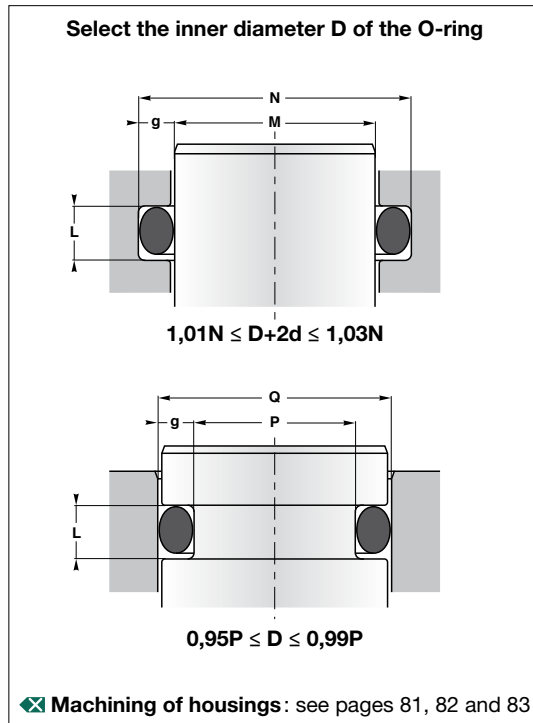
More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring D x d	DIN	JIS	O-ring cross section	O-ring D x d	DIN	JIS	O-ring cross section	O-ring D x d	DIN	JIS	
3,5	8 x 3,5	•		3,5	34 x 3,5	•		3,5	59 x 3,5	•		
	9 x 3,5	•			34,7 x 3,5	•	P35		60 x 3,5	•		
	10 x 3,5	•			35 x 3,5	•			61 x 3,5	•		
	11 x 3,5	•			35,2 x 3,5	•	P35.5		62 x 3,5	•		
	12 x 3,5	•			35,7 x 3,5	•	P36		63 x 3,5	•		
	13 x 3,5	•			36 x 3,5	•			64 x 3,5	•		
	14 x 3,5	•			37 x 3,5	•			65 x 3,5	•		
	15 x 3,5	•			37,7 x 3,5	•	P38		66 x 3,5	•		
	16 x 3,5	•			38 x 3,5	•			67 x 3,5	•		
	17 x 3,5	•			38,7 x 3,5	•	P39		68 x 3,5	•		
	18 x 3,5	•			39 x 3,5	•			69 x 3,5	•		
	19 x 3,5	•			39,7 x 3,5	•	P40		70 x 3,5	•		
	20 x 3,5	•			40 x 3,5	•			71 x 3,5	•		
	21 x 3,5	•			40,7 x 3,5	•	P41		72 x 3,5	•		
	21,7 x 3,5	•	P22A		41 x 3,5	•			73 x 3,5	•		
	22 x 3,5	•			41,7 x 3,5	•	P42		74 x 3,5	•		
	22,1 x 3,5	•	P22.4		42 x 3,5	•			75 x 3,5	•		
	23 x 3,5	•			43 x 3,5	•			76 x 3,5	•		
	23,7 x 3,5	•	P24		43,7 x 3,5	•	P44		77 x 3,5	•		
	24 x 3,5	•			44 x 3,5	•			78 x 3,5	•		
	24,7 x 3,5	•	P25		44,7 x 3,5	•	P45		79 x 3,5	•		
	25 x 3,5	•			45 x 3,5	•			80 x 3,5	•		
	25,2 x 3,5	•	P25.5		45,7 x 3,5	•	P46		81 x 3,5	•		
	25,7 x 3,5	•	P26		46 x 3,5	•			82 x 3,5	•		
	26 x 3,5	•			47 x 3,5	•			83 x 3,5	•		
	27 x 3,5	•			47,7 x 3,5	•	P47		84 x 3,5	•		
	27,7 x 3,5	•	P28		48 x 3,5	•			85 x 3,5	•		
	28 x 3,5	•			48,7 x 3,5	•	P49		86 x 3,5	•		
	28,7 x 3,5	•	P29		49 x 3,5	•			87 x 3,5	•		
	29 x 3,5	•			49,7 x 3,5	•	P50		88 x 3,5	•		
	29,2 x 3,5	•	P29.5		50 x 3,5	•			89 x 3,5	•		
	29,7 x 3,5	•	P30		51 x 3,5	•			90 x 3,5	•		
	30 x 3,5	•			52 x 3,5	•			91 x 3,5	•		
	30,7 x 3,5	•	P31		53 x 3,5	•			92 x 3,5	•		
	31 x 3,5	•			54 x 3,5	•			93 x 3,5	•		
	31,7 x 3,5	•	P32		55 x 3,5	•			94 x 3,5	•		
	32 x 3,5	•			56 x 3,5	•			95 x 3,5	•		
	33 x 3,5	•			57 x 3,5	•			96 x 3,5	•		
	33,7 x 3,5	•	P34		58 x 3,5	•			97 x 3,5	•		

ISO/DIN	ISO 3601/DIN 3771	(EU)	(D)	R	(F)	NF	NF T 47-501	(F)	
DIN	DIN 3770	(D)		SMS	SMS 1586	(S)	BS met	BS 4518	(GB)
AS/BS	AS 568A / BS 1806	(USA)	(GB)	JIS	JIS B 2401	(J)	ITALY	(I)	



Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	

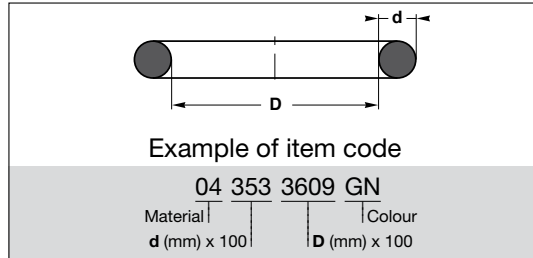


More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

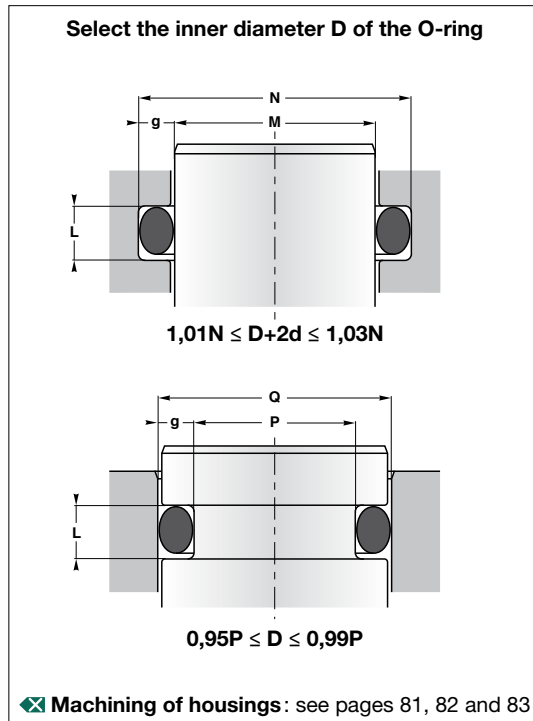
O-ring cross section	O-ring D x d	DIN	JIS
3,5	98 x 3,5	•	
	99 x 3,5	•	
	100 x 3,5	•	
	101 x 3,5	•	
	102 x 3,5	•	
	103 x 3,5	•	
	104 x 3,5	•	
	105 x 3,5	•	
	107 x 3,5	•	
	108 x 3,5	•	
	109 x 3,5	•	
	110 x 3,5	•	
	111 x 3,5	•	
	112 x 3,5	•	
113 x 3,5	•		
114 x 3,5	•		
115 x 3,5	•		
116 x 3,5	•		
117 x 3,5	•		
118 x 3,5	•		
119 x 3,5	•		
120 x 3,5	•		
122 x 3,5	•		
123 x 3,5	•		
124 x 3,5	•		
125 x 3,5	•		
126 x 3,5	•		
127 x 3,5	•		
128 x 3,5	•		
130 x 3,5	•		
131 x 3,5	•		
132 x 3,5	•		
133 x 3,5	•		
134 x 3,5	•		
135 x 3,5	•		
136 x 3,5	•		
138 x 3,5	•		
139 x 3,5	•		
140 x 3,5	•		
142 x 3,5	•		
143 x 3,5	•		
144 x 3,5	•		

O-ring cross section	O-ring D x d	DIN	JIS	O-ring cross section	O-ring D x d	DIN	JIS	O-ring cross section	O-ring D x d	DIN	JIS
3,5	145 x 3,5	•		3,5	205 x 3,5	•		3,5	280 x 3,5	•	
	146 x 3,5	•			207 x 3,5	•			285 x 3,5	•	
	147 x 3,5	•			208 x 3,5	•			288 x 3,5	•	
	148 x 3,5	•			209 x 3,5	•			292 x 3,5	•	
	149 x 3,5	•			210 x 3,5	•			298 x 3,5	•	
	150 x 3,5	•			213 x 3,5	•			299 x 3,5	•	
	152 x 3,5	•			214 x 3,5	•			300 x 3,5	•	
	153 x 3,5	•			215 x 3,5	•			302 x 3,5	•	
	155 x 3,5	•			216 x 3,5	•			305 x 3,5	•	
	156 x 3,5	•			217 x 3,5	•			310 x 3,5	•	
	158 x 3,5	•			220 x 3,5	•			315 x 3,5	•	
	160 x 3,5	•			222 x 3,5	•			319 x 3,5	•	
	162 x 3,5	•			223 x 3,5	•			322 x 3,5	•	
	163 x 3,5	•			224 x 3,5	•			325 x 3,5	•	
165 x 3,5	•		225 x 3,5	•		328 x 3,5	•				
167 x 3,5	•		228 x 3,5	•		338 x 3,5	•				
168 x 3,5	•		230 x 3,5	•		339 x 3,5	•				
169 x 3,5	•		233 x 3,5	•		340 x 3,5	•				
170 x 3,5	•		235 x 3,5	•		345 x 3,5	•				
171 x 3,5	•		238 x 3,5	•		348 x 3,5	•				
174 x 3,5	•		240 x 3,5	•		350 x 3,5	•				
175 x 3,5	•		241 x 3,5	•		353 x 3,5	•				
177 x 3,5	•		244 x 3,5	•		355 x 3,5	•				
178 x 3,5	•		245 x 3,5	•		367 x 3,5	•				
180 x 3,5	•		247 x 3,5	•		370 x 3,5	•				
182 x 3,5	•		248 x 3,5	•		374 x 3,5	•				
184 x 3,5	•		250 x 3,5	•		380 x 3,5	•				
185 x 3,5	•		252 x 3,5	•		388 x 3,5	•				
186 x 3,5	•		253 x 3,5	•		390 x 3,5	•				
190 x 3,5	•		254 x 3,5	•		393 x 3,5	•				
192 x 3,5	•		259 x 3,5	•		405 x 3,5	•				
193 x 3,5	•		260 x 3,5	•		410 x 3,5	•				
194 x 3,5	•		263 x 3,5	•		425 x 3,5	•				
195 x 3,5	•		264 x 3,5	•		430 x 3,5	•				
196 x 3,5	•		266 x 3,5	•		440 x 3,5	•				
197 x 3,5	•		270 x 3,5	•							
199 x 3,5	•		273 x 3,5	•							
202 x 3,5	•		275 x 3,5	•							
203 x 3,5	•		276 x 3,5	•							

ISO/DIN	ISO 3601/DIN 3771	(EU)	(D)	R	(F)	NF	NF T 47-501	(F)	
DIN	DIN 3770		(D)	SMS	SMS 1586	(S)	BS met	BS 4518	(GB)
AS/BS	AS 568A / BS 1806	(USA)	(GB)	JIS	JIS B 2401	(J)	ITALY	(I)	



Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	

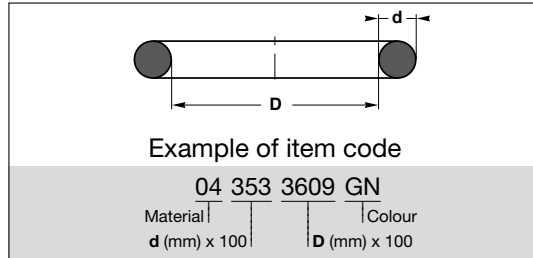


More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

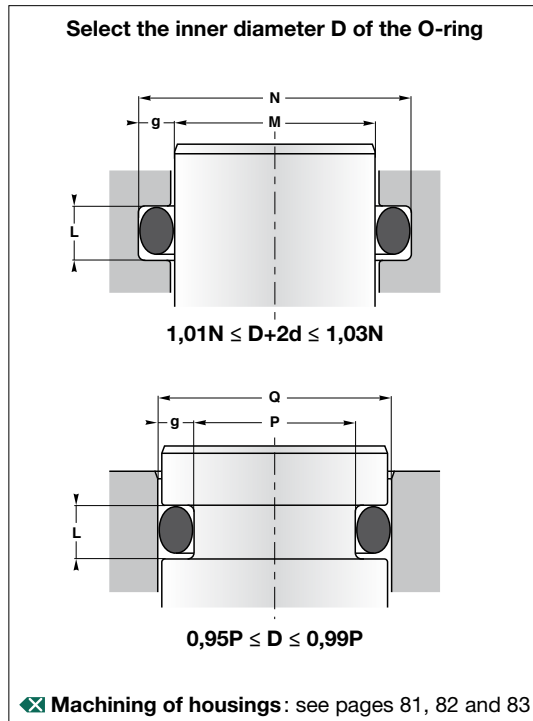
O-ring cross section	O-ring D x d	AS/BS	ITALY
3,53	4,34 x 3,53	201	
	5,94 x 3,53	202	
	7,52 x 3,53	203	
	9,12 x 3,53	204	
	10,69 x 3,53	205	
	12,29 x 3,53	206	
	13,87 x 3,53	207	
	15,47 x 3,53	208	
	17,04 x 3,53	209	
	18,64 x 3,53	210	4075
	20,22 x 3,53	211	4081
	21,82 x 3,53	212	4087
	23,39 x 3,53	213	4093
	24,99 x 3,53	214	4100
	25,8 x 3,53	618	.134
	26,57 x 3,53	215	4106
	28,17 x 3,53	216	4112
	29,74 x 3,53	217	4118
	31,34 x 3,53	218	4125
	32,92 x 3,53	219	4131
	34,52 x 3,53	220	4137
	36,09 x 3,53	221	4143
	37,69 x 3,53	222	4150
	39,7 x 3,53	824	.144
	40,87 x 3,53	223	4162
	41,28 x 3,53	825	.146
	42,86 x 3,53	826	.147
	44,04 x 3,53	224	4175
	44,45 x 3,53	827	.149
	46,04 x 3,53	828	.150
	47,22 x 3,53	225	4187
	47,62 x 3,53	829	.152
	49,2 x 3,53	830	.153
	50,39 x 3,53	226	4200
	50,8 x 3,53	831	.155
	52,4 x 3,53	832	.156
	53,57 x 3,53	227	4212
	53,97 x 3,53	833	.158
	55,56 x 3,53	834	.159
	56,74 x 3,53	228	4225
	57,15 x 3,53	835	.161
	58,74 x 3,53	836	.162

O-ring cross section	O-ring D x d	AS/BS	ITALY	O-ring cross section	O-ring D x d	AS/BS	ITALY	O-ring cross section	O-ring D x d	ISO/DIN	NF
3,53	59,92 x 3,53	229	4237	3,53	151,99 x 3,53	258	4600	3,55	18 x 3,55	•	•
	60,32 x 3,53	837	.164		158,34 x 3,53	259	4625		19 x 3,55	•	•
	61,9 x 3,53	838	.165		164,69 x 3,53	260	4650		20 x 3,55	•	•
	63,09 x 3,53	230	4250		171,04 x 3,53	261	4675		21,2 x 3,55	•	•
	63,5 x 3,53	839	.167		177,39 x 3,53	262	4700		22,4 x 3,55	•	•
	65,1 x 3,53	840	.168		183,74 x 3,53	263	4725		23,6 x 3,55	•	•
	66,27 x 3,53	231	4262		190,09 x 3,53	264	4750		25 x 3,55	•	•
	66,67 x 3,53	841	.170		196,44 x 3,53	265	4775		25,8 x 3,55	•	•
	68,26 x 3,53	842	.171		202,79 x 3,53	266	4800		26,5 x 3,55	•	•
	69,44 x 3,53	232	4275		209,14 x 3,53	267	4825		28 x 3,55	•	•
	69,85 x 3,53	843	.173		215,49 x 3,53	268	4850		30 x 3,55	•	•
	71,44 x 3,53	844	.174		221,84 x 3,53	269	4875		31,5 x 3,55	•	•
	72,62 x 3,53	233	4287		228,19 x 3,53	270	4900		32,5 x 3,55	•	•
	73,02 x 3,53	845	.176		234,54 x 3,53	271	4925		33,5 x 3,55	•	•
	74,6 x 3,53	846	.177		240,89 x 3,53	272	4950		34,5 x 3,55	•	•
	75,79 x 3,53	234	4300		247,26 x 3,53	273	4975		35,5 x 3,55	•	•
	78,97 x 3,53	235	4312		253,59 x 3,53	274	41000		36,5 x 3,55	•	•
	82,14 x 3,53	236	4325		266,29 x 3,53	275	41050		37,5 x 3,55	•	•
	85,32 x 3,53	237	4337		278,99 x 3,53	276	41100		38,7 x 3,55	•	•
	88,49 x 3,53	238	4350		291,69 x 3,53	277	41150		40 x 3,55	•	•
	91,67 x 3,53	239	4362		304,39 x 3,53	278	41200		41,2 x 3,55	•	•
	94,84 x 3,53	240	4375		329,79 x 3,53	279	41300		42,5 x 3,55	•	•
	98,02 x 3,53	241	4387		355,19 x 3,53	280	41400		43,7 x 3,55	•	•
	101,19 x 3,53	242	4400		380,59 x 3,53	281	41500		45 x 3,55	•	•
	104,37 x 3,53	243	4412		405,26 x 3,53	282	41600		46,2 x 3,55	•	•
	107,54 x 3,53	244	4425		430,66 x 3,53	283	41700		47,5 x 3,55	•	•
	110,72 x 3,53	245	4437		456,06 x 3,53	284	41800		48,7 x 3,55	•	•
	113,89 x 3,53	246	4450						50 x 3,55	•	•
	117,07 x 3,53	247	4462						51,5 x 3,55	•	•
	120,24 x 3,53	248	4475						53 x 3,55	•	•
	123,42 x 3,53	249	4487						54,5 x 3,55	•	•
	126,59 x 3,53	250	4500						56 x 3,55	•	•
	129,77 x 3,53	251	4512						58 x 3,55	•	•
	132,94 x 3,53	252	4525						60 x 3,55	•	•
	136,12 x 3,53	253	4537						61,5 x 3,55	•	•
	139,29 x 3,53	254	4550						63 x 3,55	•	•
	142,47 x 3,53	255	4562						65 x 3,55	•	•
	145,64 x 3,53	256	4575						67 x 3,55	•	•
	148,82 x 3,53	257	4587						69 x 3,55	•	•

ISO/DIN	ISO 3601/DIN 3771	(EU)	(D)	R	(F)	NF	NF T 47-501	(F)	
DIN	DIN 3770	(D)		SMS	SMS 1586	(S)	BS met	BS 4518	(GB)
AS/BS	AS 568A / BS 1806	(USA)	(GB)	JIS	JIS B 2401	(J)	ITALY		(I)



Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring D x d	ISO/DIN	NF
3,55	71 x 3,55	•	•
	73 x 3,55	•	•
	75 x 3,55	•	•
	77,5 x 3,55	•	•
	80 x 3,55	•	•
	82,5 x 3,55	•	•
	85 x 3,55	•	•
	87,5 x 3,55	•	•
	90 x 3,55	•	•
	92,5 x 3,55	•	•
	95 x 3,55	•	•
	97,5 x 3,55	•	•
	100 x 3,55	•	•
	103 x 3,55	•	•
	106 x 3,55	•	•
	109 x 3,55	•	•
	112 x 3,55	•	•
	115 x 3,55	•	•
	118 x 3,55	•	•
	122 x 3,55	•	•
	125 x 3,55	•	•
	128 x 3,55	•	•
	132 x 3,55	•	•
	136 x 3,55	•	•
	140 x 3,55	•	•
	145 x 3,55	•	•
	150 x 3,55	•	•
	155 x 3,55	•	•
	160 x 3,55	•	•
	165 x 3,55	•	•
	170 x 3,55	•	•
	175 x 3,55	•	•
	180 x 3,55	•	•
	185 x 3,55	•	•
	190 x 3,55	•	•
	195 x 3,55	•	•
	200 x 3,55	•	•

O-ring cross section	O-ring D x d	R
3,6	18,3 x 3,6	R15
	19,8 x 3,6	R16
	21,3 x 3,6	R17
	23 x 3,6	R18
	24,6 x 3,6	R19
	26,2 x 3,6	R20
	27,8 x 3,6	R21
	29,3 x 3,6	R22
	30,8 x 3,6	R23
	32,5 x 3,6	R24
	34,1 x 3,6	R25
	35,6 x 3,6	R26
	37,3 x 3,6	R27
	43,6 x 3,6	R29t

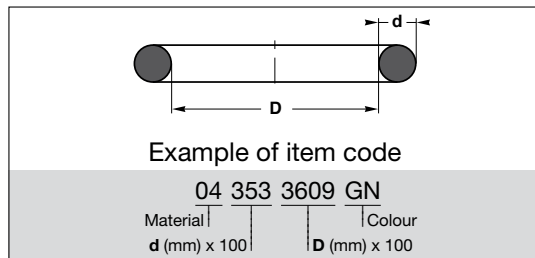
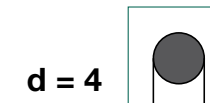
O-ring cross section	O-ring D x d	DIN
4	4 x 4	•
	5 x 4	•
	6 x 4	•
	7 x 4	•
	8 x 4	•
	9 x 4	•
	10 x 4	•
	11 x 4	•
	12 x 4	•
	13 x 4	•
	14 x 4	•
	15 x 4	•
	16 x 4	•
	17 x 4	•
	18 x 4	•
	19 x 4	•
	20 x 4	•
	21 x 4	•
	22 x 4	•
	23 x 4	•
	24 x 4	•
	25 x 4	•
	26 x 4	•
	27 x 4	•
	28 x 4	•
	29 x 4	•
	30 x 4	•
	31 x 4	•
	32 x 4	•
	33 x 4	•
	34 x 4	•
	35 x 4	•
	36 x 4	•
	37 x 4	•
	38 x 4	•
	39 x 4	•
	40 x 4	•
	41 x 4	•
	42 x 4	•

O-ring cross section	O-ring D x d	DIN
4	43 x 4	•
	44 x 4	•
	45 x 4	•
	46 x 4	•
	47 x 4	•
	48 x 4	•
	49 x 4	•
	50 x 4	•
	51 x 4	•
	52 x 4	•
	53 x 4	•
	54 x 4	•
	55 x 4	•
	56 x 4	•
	57 x 4	•
	58 x 4	•
	59 x 4	•
	60 x 4	•
	61 x 4	•
	62 x 4	•
	63 x 4	•
	64 x 4	•
	65 x 4	•
	66 x 4	•
	67 x 4	•
	68 x 4	•
	69 x 4	•
	70 x 4	•
	71 x 4	•
	72 x 4	•
	73 x 4	•
	74 x 4	•
	75 x 4	•
	76 x 4	•
	77 x 4	•
	78 x 4	•
	79 x 4	•
	80 x 4	•
	81 x 4	•

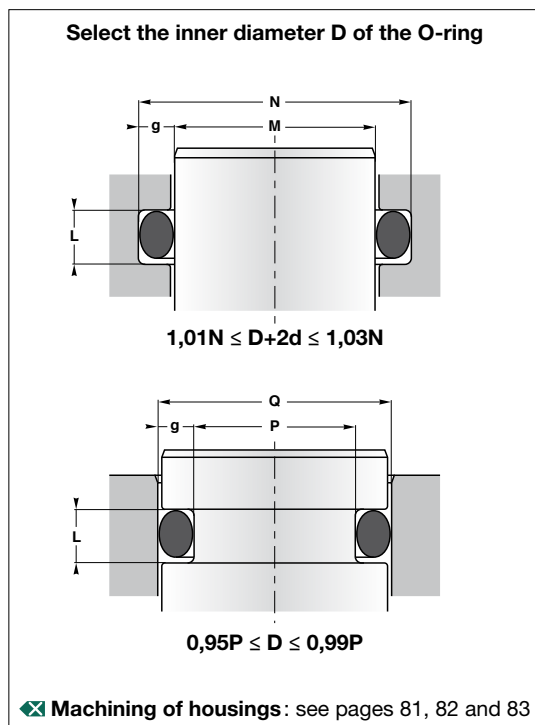
ISO/DIN	ISO 3601/DIN 3771 (EU) (D)	R	(F)	NF	NF T 47-501 (F)
DIN	DIN 3770 (D)	SMS	SMS 1586 (S)	BS met	BS 4518 (GB)
AS/BS	AS 568A / BS 1806 (USA) (GB)	JIS	JIS B 2401 (J)	ITALY	(I)



O-rings



Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
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07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



More information
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O-ring cross section	O-ring D x d	DIN
4	82 x 4	•
	83 x 4	•
	84 x 4	•
	85 x 4	•
	86 x 4	•
	87 x 4	•
	88 x 4	•
	89 x 4	•
	90 x 4	•
	91 x 4	•
	92 x 4	•
	93 x 4	•
	94 x 4	•
	95 x 4	•
	96 x 4	•
	97 x 4	•
	98 x 4	•
	99 x 4	•
	100 x 4	•
	101 x 4	•
	102 x 4	•
	103 x 4	•
	104 x 4	•
	105 x 4	•
	106 x 4	•
	107 x 4	•
	108 x 4	•
	109 x 4	•
	110 x 4	•
	111 x 4	•
	112 x 4	•
	113 x 4	•
	114 x 4	•
	115 x 4	•
	116 x 4	•
	117 x 4	•
	118 x 4	•
	119 x 4	•
	120 x 4	•

O-ring cross section	O-ring D x d	DIN
4	121 x 4	•
	122 x 4	•
	123 x 4	•
	124 x 4	•
	125 x 4	•
	126 x 4	•
	127 x 4	•
	128 x 4	•
	129 x 4	•
	130 x 4	•
	131 x 4	•
	132 x 4	•
	133 x 4	•
	134 x 4	•
	135 x 4	•
	136 x 4	•
	137 x 4	•
	138 x 4	•
	139 x 4	•
	140 x 4	•
	141 x 4	•
	142 x 4	•
	143 x 4	•
	144 x 4	•
	145 x 4	•
	146 x 4	•
	147 x 4	•
	148 x 4	•
	149 x 4	•
	150 x 4	•
	151 x 4	•
	152 x 4	•
	153 x 4	•
	154 x 4	•
	155 x 4	•
	156 x 4	•
	157 x 4	•
	158 x 4	•
	159 x 4	•

O-ring cross section	O-ring D x d	DIN
4	160 x 4	•
	162 x 4	•
	164 x 4	•
	165 x 4	•
	166 x 4	•
	167 x 4	•
	168 x 4	•
	170 x 4	•
	172 x 4	•
	173 x 4	•
	174 x 4	•
	175 x 4	•
	177 x 4	•
	178 x 4	•
	179 x 4	•
	180 x 4	•
	182 x 4	•
	183 x 4	•
	184 x 4	•
	185 x 4	•
	186 x 4	•
	187 x 4	•
	188 x 4	•
	190 x 4	•
	192 x 4	•
	194 x 4	•
	195 x 4	•
	196 x 4	•
	197 x 4	•
	198 x 4	•
	199 x 4	•
	200 x 4	•
	202 x 4	•
	203 x 4	•
	204 x 4	•
	205 x 4	•
	206 x 4	•
	208 x 4	•
	210 x 4	•

O-ring cross section	O-ring D x d	DIN
4	211 x 4	•
	212 x 4	•
	214 x 4	•
	215 x 4	•
	216 x 4	•
	217 x 4	•
	218 x 4	•
	220 x 4	•
	222 x 4	•
	225 x 4	•
	226 x 4	•
	228 x 4	•
	230 x 4	•
	232 x 4	•
	234 x 4	•
	235 x 4	•
	237 x 4	•
	238 x 4	•
	240 x 4	•
	242 x 4	•
	243 x 4	•
	244 x 4	•
	245 x 4	•
	246 x 4	•
	250 x 4	•
	252 x 4	•
	255 x 4	•
	256 x 4	•
	258 x 4	•
	260 x 4	•
	262 x 4	•
	264 x 4	•
	265 x 4	•
	268 x 4	•
	270 x 4	•
	272 x 4	•
	273 x 4	•
	274 x 4	•
	275 x 4	•

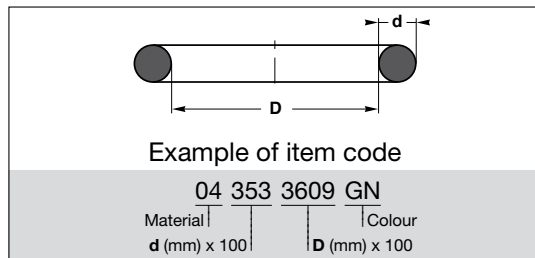
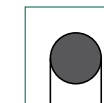
ISO/DIN	ISO 3601/DIN 3771 (EU) (D)	R	(F)	NF	NF T 47-501 (F)
DIN	DIN 3770 (D)	SMS	SMS 1586 (S)	BS met	BS 4518 (GB)
AS/BS	AS 568A / BS 1806 (USA) (GB)	JIS	JIS B 2401 (J)	ITALY	(I)



O-rings

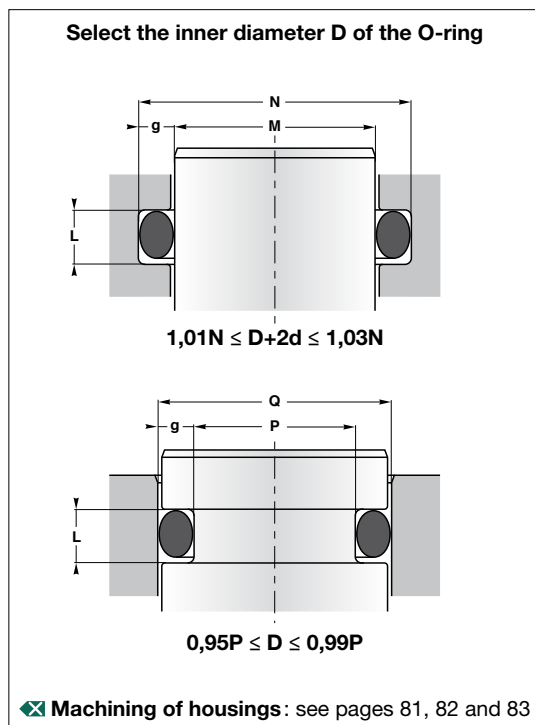


d = 4 - 4,1



O-ring cross section	O-ring D x d	DIN
4	276 x 4	•
	278 x 4	•
	280 x 4	•
	282 x 4	•
	284 x 4	•
	285 x 4	•
	286 x 4	•
	287 x 4	•
	290 x 4	•
	292 x 4	•
	294 x 4	•
	295 x 4	•
	297 x 4	•
	300 x 4	•
	305 x 4	•
	310 x 4	•
	315 x 4	•
	320 x 4	•
	325 x 4	•
	330 x 4	•
	335 x 4	•
	340 x 4	•
	345 x 4	•
	350 x 4	•
	355 x 4	•
	360 x 4	•
	365 x 4	•
	370 x 4	•
	375 x 4	•
	380 x 4	•
	385 x 4	•
	390 x 4	•
	395 x 4	•
	400 x 4	•
	405 x 4	•
	410 x 4	•
	415 x 4	•
	420 x 4	•
	425 x 4	•

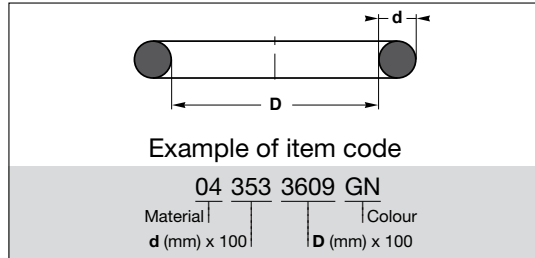
Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



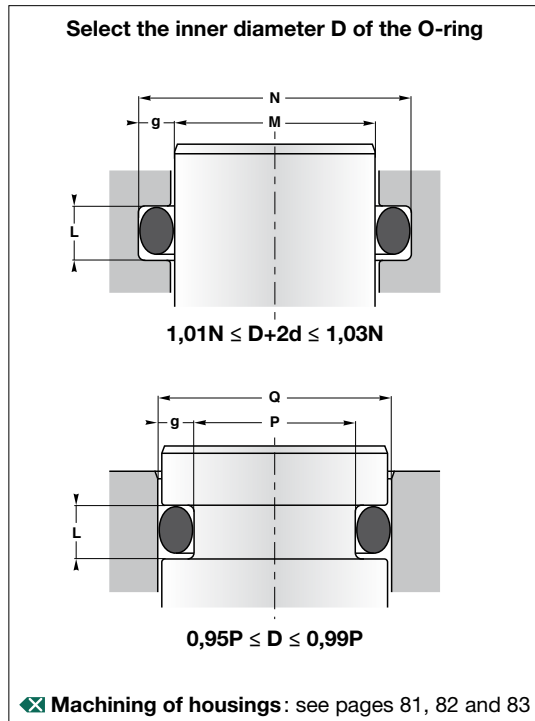
More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring D x d	DIN	O-ring cross section	O-ring D x d	BS met	O-ring cross section	O-ring D x d	BS met
4	430 x 4	•	4,1	29,4 x 4,1	0294-41	4,1	152,4 x 4,1	1524-41
	435 x 4	•		31,4 x 4,1	0314-41		154,4 x 4,1	1544-41
	440 x 4	•		32,4 x 4,1	0324-41		159,4 x 4,1	1594-41
	445 x 4	•		34,4 x 4,1	0344-41		164,4 x 4,1	1644-41
	450 x 4	•		35,4 x 4,1	0354-41		169,4 x 4,1	1694-41
	455 x 4	•		36,4 x 4,1	0364-41		174,4 x 4,1	1744-41
	460 x 4	•		37,4 x 4,1	0374-41		179,4 x 4,1	1794-41
	465 x 4	•		39,4 x 4,1	0394-41		184,4 x 4,1	1844-41
	470 x 4	•		41,4 x 4,1	0414-41		189,4 x 4,1	1894-41
	475 x 4	•		42,4 x 4,1	0424-41		192,4 x 4,1	1924-41
	480 x 4	•		44,4 x 4,1	0444-41		194,4 x 4,1	1944-41
	485 x 4	•		45,4 x 4,1	0454-41		199,4 x 4,1	1994-41
	490 x 4	•		49,4 x 4,1	0494-41		209,4 x 4,1	2094-41
	495 x 4	•		52,4 x 4,1	0524-41		212,4 x 4,1	2124-41
	500 x 4	•		54,4 x 4,1	0544-41		219,4 x 4,1	2194-41
				55,4 x 4,1	0554-41		229,4 x 4,1	2294-41
				59,4 x 4,1	0594-41		239,4 x 4,1	2394-41
				62,4 x 4,1	0624-41		242,4 x 4,1	2424-41
				64,4 x 4,1	0644-41		249,4 x 4,1	2494-41
				69,4 x 4,1	0694-41		259,4 x 4,1	2594-41
				72,4 x 4,1	0724-41		269,4 x 4,1	2694-41
				74,4 x 4,1	0744-41		272,4 x 4,1	2724-41
				79,4 x 4,1	0794-41		279,4 x 4,1	2794-41
				84,4 x 4,1	0844-41		289,4 x 4,1	2894-41
				89,4 x 4,1	0894-41		299,4 x 4,1	2994-41
				92,4 x 4,1	0924-41			
				94,4 x 4,1	0944-41			
				100 x 4,1	0994-41			
				104,4 x 4,1	1044-41			
				109,4 x 4,1	1094-41			
				114,4 x 4,1	1144-41			
				117,4 x 4,1	1174-41			
				119,4 x 4,1	1194-41			
				124,4 x 4,1	1244-41			
				129,4 x 4,1	1294-41			
				134,4 x 4,1	1344-41			
				139,4 x 4,1	1394-41			
				144,4 x 4,1	1444-41			
				149,4 x 4,1	1494-41			

ISO/DIN	ISO 3601/DIN 3771	(EU)	(D)	R	(F)	NF	NF T 47-501	(F)
DIN	DIN 3770		(D)	SMS	SMS 1586	BS met	BS 4518	(GB)
AS/BS	AS 568A / BS 1806	(USA)	(GB)	JIS	JIS B 2401	ITALY		(I)



Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring D x d	DIN
4,5	6 x 4,5	•
	8 x 4,5	•
	9 x 4,5	•
	9,5 x 4,5	•
	10 x 4,5	•
	10,5 x 4,5	•
	11 x 4,5	•
	12 x 4,5	•
	13 x 4,5	•
	15 x 4,5	•
	15,5 x 4,5	•
	16 x 4,5	•
	17 x 4,5	•
	18 x 4,5	•
	19 x 4,5	•
	20 x 4,5	•
	21 x 4,5	•
	21,5 x 4,5	•
	22 x 4,5	•
22,5 x 4,5	•	
23 x 4,5	•	
24 x 4,5	•	
24,5 x 4,5	•	
25 x 4,5	•	
26 x 4,5	•	
27 x 4,5	•	
27,5 x 4,5	•	
28 x 4,5	•	
28,5 x 4,5	•	
29 x 4,5	•	
29,5 x 4,5	•	
30 x 4,5	•	
31 x 4,5	•	
31,5 x 4,5	•	
32 x 4,5	•	
34 x 4,5	•	
34,5 x 4,5	•	
35 x 4,5	•	
35,5 x 4,5	•	

O-ring cross section	O-ring D x d	DIN
4,5	36 x 4,5	•
	37 x 4,5	•
	37,5 x 4,5	•
	38 x 4,5	•
	39 x 4,5	•
	40 x 4,5	•
	40,5 x 4,5	•
	41 x 4,5	•
	42 x 4,5	•
	43 x 4,5	•
	44 x 4,5	•
	45 x 4,5	•
	46 x 4,5	•
	47 x 4,5	•
	48 x 4,5	•
	49 x 4,5	•
	50 x 4,5	•
	51 x 4,5	•
	53 x 4,5	•
	56 x 4,5	•
	57 x 4,5	•
	60 x 4,5	•
	61 x 4,5	•
	63 x 4,5	•
	64 x 4,5	•
	65 x 4,5	•
	66 x 4,5	•
	68 x 4,5	•
	69 x 4,5	•
	70 x 4,5	•
	71 x 4,5	•
	73 x 4,5	•
	74 x 4,5	•
75 x 4,5	•	
76 x 4,5	•	
80 x 4,5	•	
81 x 4,5	•	
83 x 4,5	•	
85 x 4,5	•	

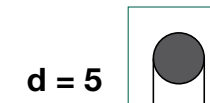
O-ring cross section	O-ring D x d	DIN
4,5	86 x 4,5	•
	89 x 4,5	•
	90 x 4,5	•
	92 x 4,5	•
	95 x 4,5	•
	97,5 x 4,5	•
	98 x 4,5	•
	100 x 4,5	•
	100,5 x 4,5	•
	101 x 4,5	•
	103,5 x 4,5	•
	105 x 4,5	•
	106 x 4,5	•
	110 x 4,5	•
	115 x 4,5	•
	118 x 4,5	•
	120 x 4,5	•
	122 x 4,5	•
	124 x 4,5	•
	126 x 4,5	•
	130 x 4,5	•

O-ring cross section	O-ring D x d	DIN
4,5	215 x 4,5	•
	218,5 x 4,5	•
	225 x 4,5	•
	227 x 4,5	•
	250 x 4,5	•
	267 x 4,5	•
	280 x 4,5	•
	300 x 4,5	•
	315 x 4,5	•

ISO/DIN	ISO 3601/DIN 3771 (EU) (D)	R	(F)	NF	NF T 47-501 (F)
DIN	DIN 3770 (D)	SMS	SMS 1586 (S)	BS met	BS 4518 (GB)
AS/BS	AS 568A / BS 1806 (USA) (GB)	JIS	JIS B 2401 (J)	ITALY	(I)



O-rings



Example of item code
04 353 3609 GN
 Material d (mm) x 100 Colour D (mm) x 100

Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	

Select the inner diameter D of the O-ring

$1,01N \leq D+2d \leq 1,03N$

$0,95P \leq D \leq 0,99P$

✕ Machining of housings: see pages 81, 82 and 83

More information
 On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring D x d	DIN
5	4 x 5	•
	5 x 5	•
	6 x 5	•
	7 x 5	•
	8 x 5	•
	9 x 5	•
	10 x 5	•
	11 x 5	•
	12 x 5	•
	13 x 5	•
	14 x 5	•
	15 x 5	•
	16 x 5	•
	17 x 5	•
	18 x 5	•
	19 x 5	•
	20 x 5	•
	21 x 5	•
	22 x 5	•
	23 x 5	•
	24 x 5	•
	25 x 5	•
	26 x 5	•
	27 x 5	•
	28 x 5	•
	29 x 5	•
	30 x 5	•
	31 x 5	•
	32 x 5	•
	33 x 5	•
	34 x 5	•
	35 x 5	•
	36 x 5	•
	37 x 5	•
	38 x 5	•
	39 x 5	•
	40 x 5	•
	41 x 5	•
	42 x 5	•

O-ring cross section	O-ring D x d	DIN
5	43 x 5	•
	44 x 5	•
	45 x 5	•
	46 x 5	•
	47 x 5	•
	48 x 5	•
	49 x 5	•
	50 x 5	•
	51 x 5	•
	52 x 5	•
	53 x 5	•
	54 x 5	•
	55 x 5	•
	56 x 5	•
	57 x 5	•
	58 x 5	•
	59 x 5	•
	60 x 5	•
	61 x 5	•
	62 x 5	•
	63 x 5	•
	64 x 5	•
	65 x 5	•
	66 x 5	•
	67 x 5	•
	68 x 5	•
	69 x 5	•
	70 x 5	•
	71 x 5	•
	72 x 5	•
	73 x 5	•
	74 x 5	•
	75 x 5	•
	76 x 5	•
	77 x 5	•
	78 x 5	•
	79 x 5	•
	80 x 5	•
	81 x 5	•

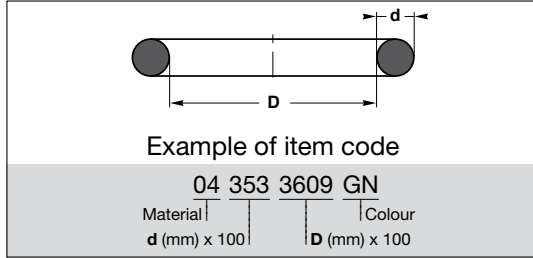
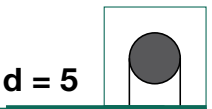
O-ring cross section	O-ring D x d	DIN
5	82 x 5	•
	83 x 5	•
	84 x 5	•
	85 x 5	•
	86 x 5	•
	87 x 5	•
	88 x 5	•
	89 x 5	•
	90 x 5	•
	91 x 5	•
	92 x 5	•
	93 x 5	•
	94 x 5	•
	95 x 5	•
	96 x 5	•
	97 x 5	•
	98 x 5	•
	99 x 5	•
	100 x 5	•
	101 x 5	•
	102 x 5	•
	103 x 5	•
	104 x 5	•
	105 x 5	•
	106 x 5	•
	107 x 5	•
	108 x 5	•
	109 x 5	•
	110 x 5	•
	111 x 5	•
	112 x 5	•
	113 x 5	•
	114 x 5	•
	115 x 5	•
	116 x 5	•
	117 x 5	•
	118 x 5	•
	120 x 5	•
	122 x 5	•

O-ring cross section	O-ring D x d	DIN
5	123 x 5	•
	124 x 5	•
	125 x 5	•
	126 x 5	•
	127 x 5	•
	128 x 5	•
	130 x 5	•
	132 x 5	•
	133 x 5	•
	134 x 5	•
	135 x 5	•
	136 x 5	•
	137 x 5	•
	138 x 5	•
	140 x 5	•
	142 x 5	•
	143 x 5	•
	144 x 5	•
	145 x 5	•
	146 x 5	•
	147 x 5	•
	148 x 5	•
	149 x 5	•
	150 x 5	•
	152 x 5	•
	153 x 5	•
	154 x 5	•
	155 x 5	•
	156 x 5	•
	157 x 5	•
	158 x 5	•
	159 x 5	•
	160 x 5	•
	162 x 5	•
	163 x 5	•
	164 x 5	•
	165 x 5	•
	167 x 5	•
	168 x 5	•

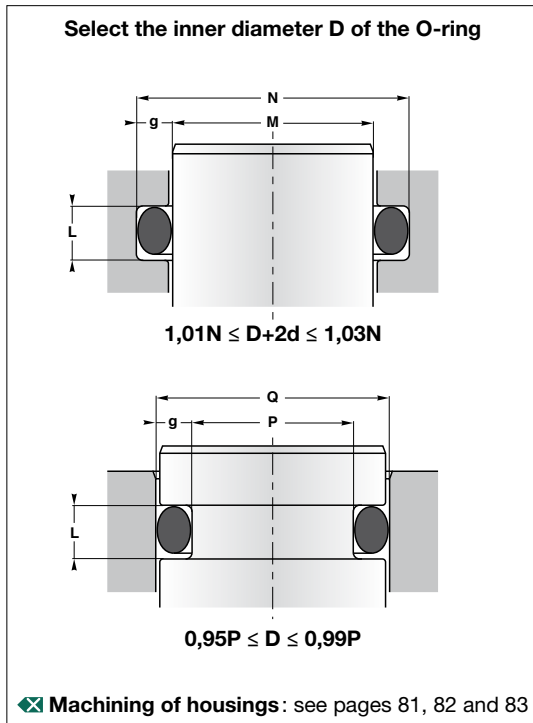
ISO/DIN	ISO 3601/DIN 3771 (EU) (D)	R	(F)	NF	NF T 47-501 (F)
DIN	DIN 3770 (D)	SMS	SMS 1586 (S)	BS met	BS 4518 (GB)
AS/BS	AS 568A / BS 1806 (USA) (GB)	JIS	JIS B 2401 (J)	ITALY	(I)



O-rings



Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

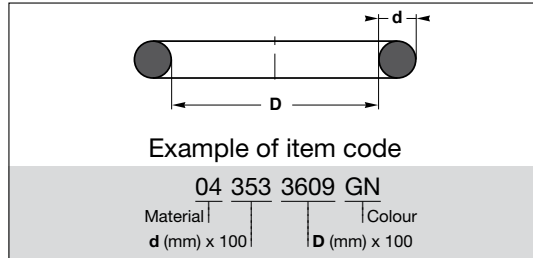
O-ring cross section	O-ring D x d	DIN
5	170 x 5	•
	172 x 5	•
	173 x 5	•
	174 x 5	•
	175 x 5	•
	176 x 5	•
	177 x 5	•
	178 x 5	•
	180 x 5	•
	182 x 5	•
	184 x 5	•
	185 x 5	•
	186 x 5	•
	187 x 5	•
	188 x 5	•
	190 x 5	•
	192 x 5	•
	193 x 5	•
	194 x 5	•
	195 x 5	•
	198 x 5	•
	200 x 5	•
	203 x 5	•
	204 x 5	•
	205 x 5	•
	208 x 5	•
	210 x 5	•
	212 x 5	•
	214 x 5	•
	215 x 5	•
	216 x 5	•
	217 x 5	•
	220 x 5	•
	221 x 5	•
	222 x 5	•
	225 x 5	•
	226 x 5	•
	227 x 5	•
	228 x 5	•

O-ring cross section	O-ring D x d	DIN
5	230 x 5	•
	232 x 5	•
	234 x 5	•
	235 x 5	•
	238 x 5	•
	240 x 5	•
	242 x 5	•
	245 x 5	•
	246 x 5	•
	247 x 5	•
	248 x 5	•
	250 x 5	•
	252 x 5	•
	253 x 5	•
	255 x 5	•
	257 x 5	•
	260 x 5	•
	262 x 5	•
	263 x 5	•
	265 x 5	•
	266 x 5	•
	270 x 5	•
	275 x 5	•
	278 x 5	•
	280 x 5	•
	281 x 5	•
	282 x 5	•
	284 x 5	•
	285 x 5	•
	288 x 5	•
	290 x 5	•
	293 x 5	•
	294 x 5	•
	295 x 5	•
	300 x 5	•
	302 x 5	•
	304 x 5	•
	305 x 5	•
	310 x 5	•

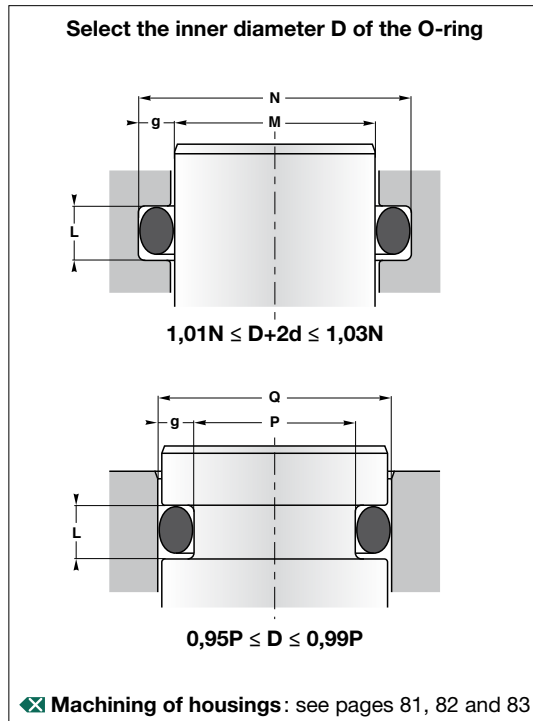
O-ring cross section	O-ring D x d	DIN
5	312 x 5	•
	315 x 5	•
	320 x 5	•
	325 x 5	•
	328 x 5	•
	330 x 5	•
	335 x 5	•
	338 x 5	•
	340 x 5	•
	342 x 5	•
	343 x 5	•
	345 x 5	•
	346 x 5	•
	347 x 5	•
	350 x 5	•
	352 x 5	•
	355 x 5	•
	360 x 5	•
	365 x 5	•
	368 x 5	•
	370 x 5	•
	372 x 5	•
	375 x 5	•
	380 x 5	•
	385 x 5	•
	390 x 5	•
	395 x 5	•
	400 x 5	•
	410 x 5	•
	415 x 5	•
	420 x 5	•
	425 x 5	•
	430 x 5	•
	435 x 5	•
	440 x 5	•
	445 x 5	•
	450 x 5	•
	455 x 5	•
	460 x 5	•

O-ring cross section	O-ring D x d	DIN
5	465 x 5	•
	475 x 5	•
	480 x 5	•
	485 x 5	•
	490 x 5	•
	495 x 5	•
	500 x 5	•
	510 x 5	•
	520 x 5	•
	525 x 5	•
	540 x 5	•
	550 x 5	•
	560 x 5	•
	570 x 5	•
	580 x 5	•
	590 x 5	•
	600 x 5	•

ISO/DIN	ISO 3601/DIN 3771 (EU) (D)	R	(F)	NF	NF T 47-501 (F)
DIN	DIN 3770 (D)	SMS	SMS 1586 (S)	BS met	BS 4518 (GB)
AS/BS	AS 568A / BS 1806 (USA) (GB)	JIS	JIS B 2401 (J)	ITALY	(I)



Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



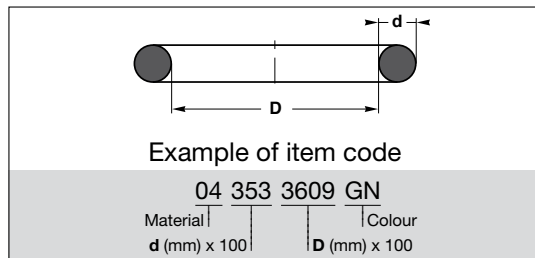
More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring D x d	ISO/DIN	R	NF
5,3	40 x 5,3	•	•	•
	41,2 x 5,3	•	•	•
	41,4 x 5,3	•	R29b	•
	42,5 x 5,3	•	•	•
	43,7 x 5,3	•	•	•
	45 x 5,3	•	•	•
	46,2 x 5,3	•	•	•
	47,5 x 5,3	•	•	•
	48,7 x 5,3	•	•	•
	50 x 5,3	•	•	•
	51,5 x 5,3	•	•	•
	53 x 5,3	•	•	•
5,3	54,4 x 5,3	•	R33b	•
	54,5 x 5,3	•	•	•
	56 x 5,3	•	•	•
	58 x 5,3	•	•	•
	60 x 5,3	•	•	•
	61,5 x 5,3	•	•	•
	63 x 5,3	•	•	•
	65 x 5,3	•	•	•
	67 x 5,3	•	•	•
	69 x 5,3	•	•	•
	71 x 5,3	•	•	•
	73 x 5,3	•	•	•
5,3	75 x 5,3	•	•	•
	77,5 x 5,3	•	•	•
	80 x 5,3	•	•	•
	82,5 x 5,3	•	•	•
	85 x 5,3	•	•	•
	87,5 x 5,3	•	•	•
	90 x 5,3	•	•	•
	92,5 x 5,3	•	•	•
	95 x 5,3	•	•	•
	97,5 x 5,3	•	•	•
	100 x 5,3	•	•	•
	103 x 5,3	•	•	•
5,3	106 x 5,3	•	•	•
	109 x 5,3	•	•	•
	112 x 5,3	•	•	•
	115 x 5,3	•	•	•
	118 x 5,3	•	•	•
	122 x 5,3	•	•	•

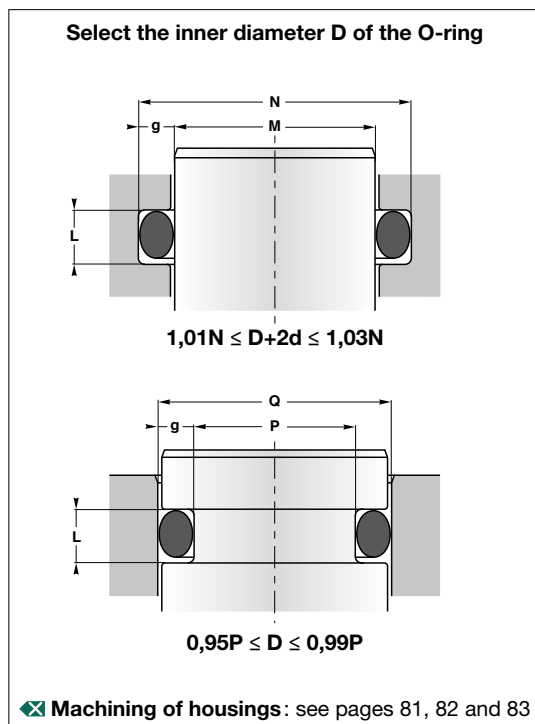
O-ring cross section	O-ring D x d	ISO/DIN	R	NF
5,3	125 x 5,3	•	•	•
	128 x 5,3	•	•	•
	132 x 5,3	•	•	•
	136 x 5,3	•	•	•
	140 x 5,3	•	•	•
	145 x 5,3	•	•	•
	150 x 5,3	•	•	•
	155 x 5,3	•	•	•
	160 x 5,3	•	•	•
	165 x 5,3	•	•	•
	170 x 5,3	•	•	•
	175 x 5,3	•	•	•
5,3	180 x 5,3	•	•	•
	185 x 5,3	•	•	•
	190 x 5,3	•	•	•
	195 x 5,3	•	•	•
	200 x 5,3	•	•	•
	206 x 5,3	•	•	•
	212 x 5,3	•	•	•
	218 x 5,3	•	•	•
	224 x 5,3	•	•	•
	230 x 5,3	•	•	•
	236 x 5,3	•	•	•
	243 x 5,3	•	•	•
5,3	250 x 5,3	•	•	•
	258 x 5,3	•	•	•
	265 x 5,3	•	•	•
	272 x 5,3	•	•	•
	280 x 5,3	•	•	•
	290 x 5,3	•	•	•
	300 x 5,3	•	•	•
	307 x 5,3	•	•	•
	315 x 5,3	•	•	•
	325 x 5,3	•	•	•
	335 x 5,3	•	•	•
	345 x 5,3	•	•	•
5,3	355 x 5,3	•	•	•
	365 x 5,3	•	•	•
	375 x 5,3	•	•	•

O-ring cross section	O-ring D x d	ISO/DIN	R	NF
5,3	387 x 5,3	•	•	•
	400 x 5,3	•	•	•
O-ring cross section	O-ring D x d	AS/BS	R	ITALY
5,34	10,46 x 5,34	309		
	12,07 x 5,34	310		
	13,64 x 5,34	311		
	15,24 x 5,34	312		
	16,81 x 5,34	313		
	18,42 x 5,34	314		
	19,99 x 5,34	315		
	21,59 x 5,34	316		
	23,16 x 5,34	317		
	24,77 x 5,34	318		
	26,34 x 5,34	319		
	27,93 x 5,34	320		
5,34	29,51 x 5,34	321		
	31,12 x 5,34	322		
	32,69 x 5,34	323		
	34,29 x 5,34	324		
	37,47 x 5,34	325	R28	
	40,64 x 5,34	326	R29	
	43,82 x 5,34	327	R30	
	46,99 x 5,34	328	R31	
	50,17 x 5,34	329	R32	
	53,34 x 5,34	330	R33	
	56,52 x 5,34	331	R34	
	59,69 x 5,34	332	R35	
5,34	62,87 x 5,34	333	R36	
	66,04 x 5,34	334	R37	
	69,22 x 5,34	335	R38	
	72,39 x 5,34	336	R39	
	74,63 x 5,34	619		.178
	75,57 x 5,34	337	R40	
	78,74 x 5,34	338	R41	
	79,73 x 5,34	620		.181
	81,92 x 5,34	339	R42	

ISO/DIN	ISO 3601/DIN 3771	(EU)	(D)	R	(F)	NF	NF T 47-501	(F)	
DIN	DIN 3770		(D)	SMS	SMS 1586	(S)	BS met	BS 4518	(GB)
AS/BS	AS 568A / BS 1806	(USA)	(GB)	JIS	JIS B 2401	(J)	ITALY		(I)



Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



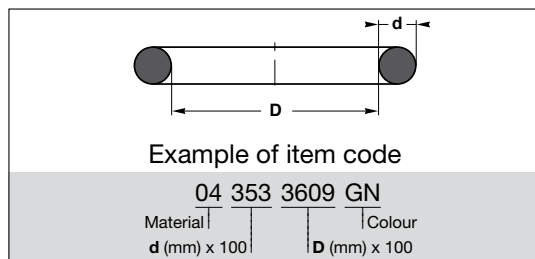
More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring D x d	AS/BS	R	ITALY
5,34	85,09 x 5,34	340	R43	
	88,27 x 5,34	341	R44	
	89,69 x 5,34	621		.185
	91,44 x 5,34	342	R45	
	94,62 x 5,34	343	R46	
	97,79 x 5,34	344	R47	
	100 x 5,34	622		.189
	100,97 x 5,34	345	R48	
	104,14 x 5,34	346	R49	
	107,32 x 5,34	347	R50	
	109,54 x 5,34	623		.193
	110,49 x 5,34	348	R51	
	113,67 x 5,34	349	R52	
	116,84 x 5,34	350		
	117,48 x 5,34	860		.199
	120,02 x 5,34	351		
	120,65 x 5,34	861		.201
	123,19 x 5,34	352		
	123,2 x 5,34			
	123,83 x 5,34	862		.203
126,37 x 5,34	353			
	127 x 5,34	863		.206
	129,54 x 5,34	354		
	130,18 x 5,34	864		.208
	132,72 x 5,34	355		
	133,35 x 5,34	865		.210
	135,89 x 5,34	356		
	136,53 x 5,34	866		.213
	139,07 x 5,34	357		
	139,7 x 5,34	867		.215
	142,24 x 5,34	358		
	142,88 x 5,34	868		.217
	145,42 x 5,34	359		
	146,05 x 5,34	869		.219
	148,59 x 5,34	360		
	149,23 x 5,34	870		.221
	151,77 x 5,34	361		
	155 x 5,34	644		
	158,12 x 5,34	362		
	161,3 x 5,34	645		
	164,47 x 5,34	363		
167,7 x 5,34	646			

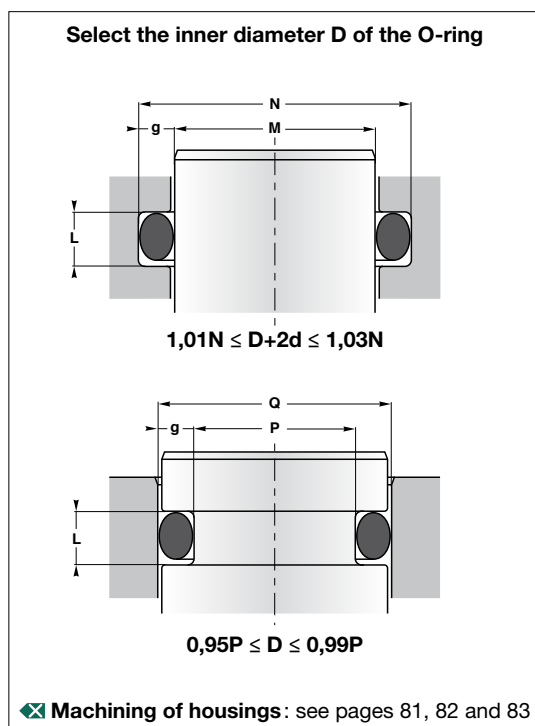
O-ring cross section	O-ring D x d	AS/BS	R	ITALY
5,34	170,82 x 5,34	364		
	174 x 5,34	647		
	177,17 x 5,34	365		
	183,52 x 5,34	366		
	189,87 x 5,34	367		
	196,22 x 5,34	368		
	202,57 x 5,34	369		
	208,92 x 5,34	370		
	215,27 x 5,34	371		
	221,62 x 5,34	372		
	227,97 x 5,34	373		
	234,32 x 5,34	374		
	240,67 x 5,34	375		
	247,02 x 5,34	376		
	253,37 x 5,34	377		
	266,07 x 5,34	378		
	278,77 x 5,34	379		
	285 x 5,34			
	291,47 x 5,34	380		
	304,17 x 5,34	381		
	329,57 x 5,34	382		
	354,97 x 5,34	383		
	340 x 5,34			
	366,34 x 5,34			
	380,37 x 5,34	384		
	405,26 x 5,34	385		
	430,66 x 5,34	386		
	456,06 x 5,34	387		
	481,41 x 5,34	388		
	506,81 x 5,34	389		
	532,21 x 5,34	390		
	557,61 x 5,34	391		
	582,68 x 5,34	392		
	608,08 x 5,34	393		
	633,48 x 5,34	394		
	658,88 x 5,34	395		
	62 x 5,7			
	62,2 x 5,7			
	62,3 x 5,7			
	62,6 x 5,7			
	64 x 5,7			
	64,2 x 5,7			
	62,6 x 5,7			
	64 x 5,7			
	64,2 x 5,7			
	62,6 x 5,7			
	64 x 5,7			
	64,2 x 5,7			
	62,6 x 5,7			
	64 x 5,7			

O-ring cross section	O-ring D x d	DIN	SMS	JIS	BS met	
5,7	35,2 x 5,7		•			
	36,2 x 5,7		•			
	37,2 x 5,7		•			
	39,2 x 5,7		•			
	41,2 x 5,7		•			
	44,2 x 5,7		•			
	44,3 x 5,7					0443-57
	45,2 x 5,7		•			
	45,3 x 5,7					0453-57
	47,2 x 5,7		•			
	47,6 x 5,7			P48A		
	49,2 x 5,7		•			
	49,3 x 5,7					0493-57
	49,6 x 5,7					P50A
	51,2 x 5,7		•			
	51,6 x 5,7					P52
	52,2 x 5,7		•			
	52,3 x 5,7					0523-57
	52,5 x 5,7		•			
	52,6 x 5,7					P53
	54,2 x 5,7		•			
	54,3 x 5,7					0543-57
	54,6 x 5,7					P55
	55,3 x 5,7					0553-57
	55,6 x 5,7					P56
	57,2 x 5,7		•			
	57,6 x 5,7					P58
	59,2 x 5,7		•			
	59,3 x 5,7					0593-57
	59,6 x 5,7					P60
	59,7 x 5,7		•			
	61,2 x 5,7		•			
	61,6 x 5,7					P62
	62 x 5,7		•			
	62,2 x 5,7		•			
	62,3 x 5,7					0623-57
	62,6 x 5,7					P63
	64 x 5,7		•			
	64,2 x 5,7					
	64,2 x 5,7		•			

ISO/DIN	ISO 3601/DIN 3771	(EU)	(D)	R	(F)	NF	NF T 47-501	(F)	
DIN	DIN 3770		(D)	SMS	SMS 1586	(S)	BS met	BS 4518	(GB)
AS/BS	AS 568A / BS 1806	(USA)	(GB)	JIS	JIS B 2401	(J)	ITALY		(I)



Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



More information
 On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring D x d	DIN	SMS	JIS	BS met
5,7	64,3 x 5,7				0643-57
	64,6 x 5,7			P65	
	66,6 x 5,7			P67	
	67,2 x 5,7	•	•		
	69 x 5,7	•			
	69,2 x 5,7	•			
	69,3 x 5,7				0693-57
	69,6 x 5,7			P70	
	70,6 x 5,7			P71	
	71,2 x 5,7	•	•		
72,2 x 5,7	•	•			
74 x 5,7	•				
74,2 x 5,7	•				
74,3 x 5,7				0743-57	
74,6 x 5,7			P75		
77,2 x 5,7	•	•			
79 x 5,7	•				
79,2 x 5,7	•				
79,3 x 5,7				0793-57	
79,6 x 5,7			P80		
81,2 x 5,7	•	•			
82,2 x 5,7	•	•			
84 x 5,7	•				
84,1 x 5,7	•				
84,2 x 5,7	•				
84,3 x 5,7				0843-57	
84,6 x 5,7			P85		
87,2 x 5,7	•	•			
89 x 5,7	•				
89,1 x 5,7	•				
89,2 x 5,7	•				
89,3 x 5,7				0893-57	
89,6 x 5,7			P90		
92,2 x 5,7	•	•			
94 x 5,7	•				
94,1 x 5,7	•				
94,2 x 5,7	•				
94,3 x 5,7				0943-57	
94,6 x 5,7			P95		
97,2 x 5,7	•	•			
99 x 5,7	•				
99,1 x 5,7	•				

O-ring cross section	O-ring D x d	DIN	SMS	JIS	BS met
5,7	99,2 x 5,7		•		
	99,3 x 5,7				0993-57
	99,6 x 5,7			P100	
	101,6 x 5,7			P102	
	104 x 5,7	•	•		
	104,1 x 5,7	•			
	104,2 x 5,7				
	104,3 x 5,7				1043-57
	104,6 x 5,7			P105	
	109 x 5,7	•	•		
109,1 x 5,7	•				
109,2 x 5,7	•				
109,3 x 5,7				1093-57	
109,6 x 5,7			P110		
111,6 x 5,7			P112		
114 x 5,7	•	•			
114,2 x 5,7	•				
114,3 x 5,7				1143-57	
114,6 x 5,7					
119 x 5,7	•	•			
119,2 x 5,7	•				
119,3 x 5,7				1193-57	
119,6 x 5,7	•	•	P120		
124 x 5,7	•				
124,2 x 5,7	•	•			
124,3 x 5,7				1243-57	
124,6 x 5,7			P125		
129,2 x 5,7	•	•			
129,3 x 5,7	•			1293-57	
129,6 x 5,7	•		P130		
131,6 x 5,7				P132	
134,2 x 5,7	•	•			
134,3 x 5,7				1343-57	
135,6 x 5,7				P135	
139,2 x 5,7	•	•			
139,3 x 5,7	•			1393-57	
139,6 x 5,7				P140	
144,2 x 5,7	•	•			
144,3 x 5,7				1443-57	

O-ring cross section	O-ring D x d	DIN	SMS	JIS	BS met
5,7	144,6 x 5,7				P145
	149,2 x 5,7		•		
	149,3 x 5,7				G150 1493-57
	149,6 x 5,7				P150
	154,2 x 5,7	•	•		
	154,3 x 5,7	•			G155 1543-57
	159,2 x 5,7				
	159,3 x 5,7				G160/S 1593-57
	164,2 x 5,7	•	•		
	164,3 x 5,7				G165/S 1643-57
169,2 x 5,7	•	•			
169,3 x 5,7				G170/S 1693-57	
174,2 x 5,7	•	•			
174,3 x 5,7				G175/S 1743-57	
179,2 x 5,7	•	•			
179,3 x 5,7				G180/S 1793-57	
184,2 x 5,7	•	•			
184,3 x 5,7				G185/S 1843-57	
189,2 x 5,7	•	•			
189,3 x 5,7				G190/S 1893-57	
194,2 x 5,7	•	•			
194,3 x 5,7				G195/S 1943-57	
199,2 x 5,7	•	•			
199,3 x 5,7				G200/S 1993-57	
204,2 x 5,7	•	•			
209,2 x 5,7	•	•			
209,3 x 5,7				G210/S 2093-57	
219,2 x 5,7	•	•			
219,3 x 5,7				G220/S 2193-57	
229,2 x 5,7	•	•			
229,3 x 5,7				G230/S 2293-57	
239,2 x 5,7	•	•			
239,3 x 5,7				G240/S 2393-57	
249,2 x 5,7	•	•			
249,3 x 5,7				G250/S 2493-57	
259,2 x 5,7	•	•			
259,3 x 5,7				G260/S 2593-57	
269,2 x 5,7	•	•			
269,3 x 5,7				G270/S 2693-57	

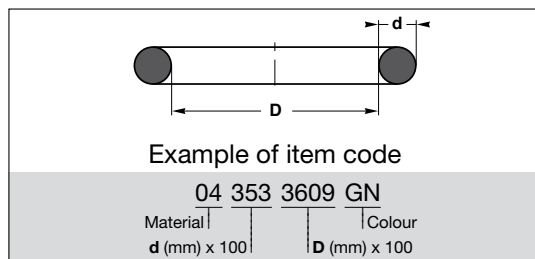
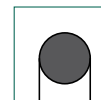
ISO/DIN	ISO 3601/DIN 3771	(EU)	(D)	R	(F)	NF	NF T 47-501	(F)
DIN	DIN 3770		(D)	SMS	SMS 1586	(S)	BS met	BS 4518 (GB)
AS/BS	AS 568A / BS 1806	(USA)	(GB)	JIS	JIS B 2401	(J)	ITALY	(I)



O-rings

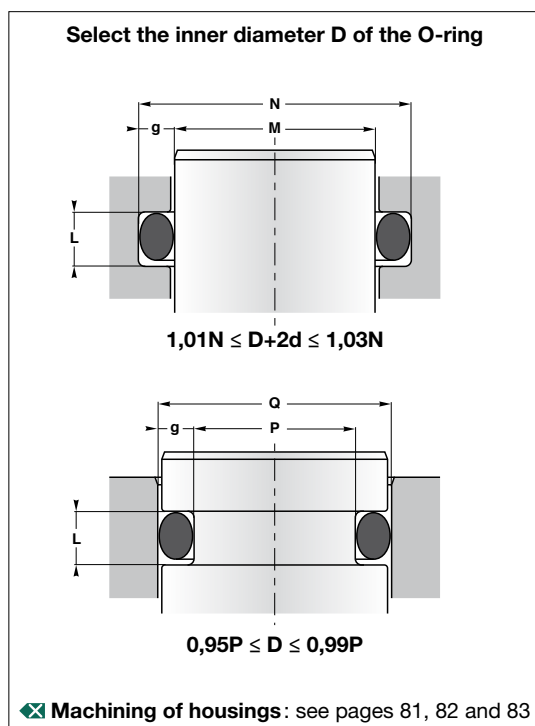


d = 6



O-ring cross section	O-ring D x d	DIN	SMS	JIS	BS met
5,7	279,2 x 5,7	•	G280/S	2793-57	
	279,3 x 5,7				
	289,2 x 5,7				
	289,3 x 5,7	•	G290/S	2893-57	
	299,2 x 5,7				
	299,3 x 5,7				
	299,3 x 5,7	•	G300/S	2993-57	
	319,2 x 5,7				
	319,3 x 5,7				
	329,3 x 5,7	•		3193-57	
339,2 x 5,7					
339,3 x 5,7					
359,2 x 5,7	•		3593-57		
359,3 x 5,7					
379,2 x 5,7					
379,3 x 5,7	•		3793-57		
399,2 x 5,7					
399,3 x 5,7					
419,2 x 5,7	•		3993-57		
419,3 x 5,7					
439,2 x 5,7					
439,3 x 5,7	•		4393-57		
459,2 x 5,7					
459,3 x 5,7					
479,2 x 5,7	•		4593-57		
479,3 x 5,7					
499,2 x 5,7					
499,3 x 5,7	•		4793-57		
499,3 x 5,7					
499,3 x 5,7					
499,3 x 5,7	•		4993-57		
499,3 x 5,7					
499,3 x 5,7					

Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



More information
 On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring D x d	DIN	O-ring cross section	O-ring D x d	DIN	O-ring cross section	O-ring D x d	DIN
6	6 x 6	•	6	43 x 6	•	6	81,5 x 6	•
	7 x 6							
	9 x 6							
	10 x 6	•		44 x 6	•		84 x 6	•
	11 x 6							
	12 x 6							
	13 x 6	•		45 x 6	•		86 x 6	•
	14 x 6							
	15 x 6							
	16 x 6	•		46 x 6	•		88 x 6	•
18 x 6								
19 x 6								
19,5 x 6	•	47 x 6	•	90 x 6	•			
20 x 6								
21 x 6								
22 x 6	•	48 x 6	•	92 x 6	•			
23 x 6								
23,5 x 6								
24 x 6	•	49 x 6	•	93 x 6	•			
25 x 6								
26 x 6								
27 x 6	•	50 x 6	•	95 x 6	•			
28 x 6								
29 x 6								
30 x 6	•	51 x 6	•	96 x 6	•			
31 x 6								
32 x 6								
33 x 6	•	52 x 6	•	98 x 6	•			
34 x 6								
35 x 6								
36 x 6	•	53 x 6	•	99 x 6	•			
37 x 6								
38 x 6								
39 x 6	•	54 x 6	•	100 x 6	•			
39,5 x 6								
40 x 6								
41 x 6	•	55 x 6	•	101 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	56 x 6	•	103 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	57 x 6	•	104 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	58 x 6	•	104,5 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	59,5 x 6	•	105 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	60 x 6	•	106 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	61 x 6	•	108 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	62 x 6	•	110 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	63 x 6	•	111 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	64 x 6	•	112 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	65 x 6	•	114 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	66 x 6	•	115 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	67 x 6	•	118 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	68 x 6	•	120 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	69 x 6	•	122 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	70 x 6	•	123 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	72 x 6	•	124 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	73 x 6	•	125 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	74 x 6	•	128 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	75 x 6	•	130 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	76 x 6	•	132 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	78 x 6	•	134 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	78,5 x 6	•	135 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	79 x 6	•	136 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	80 x 6	•	138 x 6	•			
41,5 x 6								
42 x 6								
41 x 6	•	81 x 6	•	139,2 x 6	•			
41,5 x 6								
42 x 6								

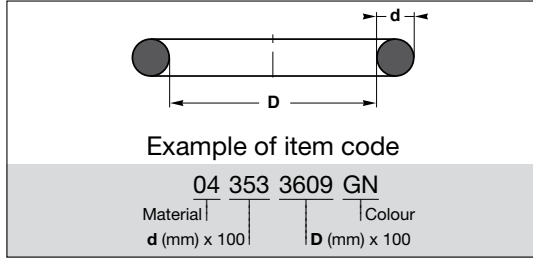
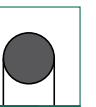
ISO/DIN	ISO 3601/DIN 3771	(EU)	(D)	R	(F)	NF	NF T 47-501	(F)	
DIN	DIN 3770	(D)		SMS	SMS 1586	(S)	BS met	BS 4518	(GB)
AS/BS	AS 568A / BS 1806	(USA)	(GB)	JIS	JIS B 2401	(J)	ITALY		(I)



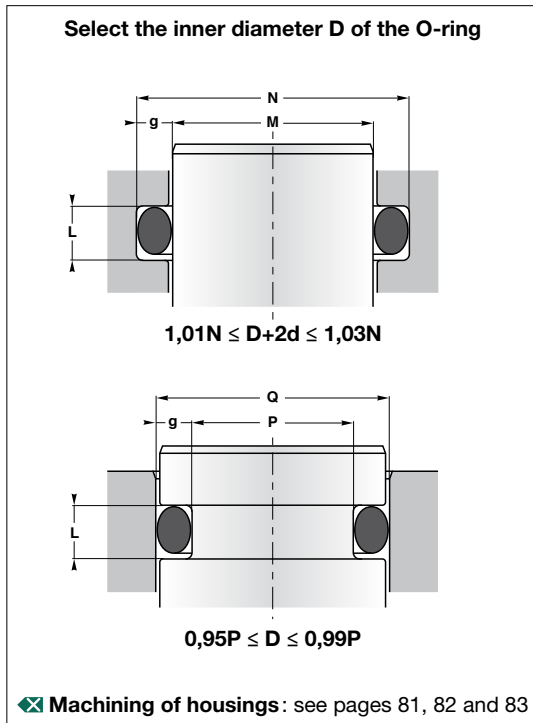
O-rings



d = 6 - 6,5



Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring D x d	DIN
6	140 x 6	•
	142 x 6	•
	145 x 6	•
	146 x 6	•
	148 x 6	•
	150 x 6	•
	153 x 6	•
	154 x 6	•
	155 x 6	•
	155,5 x 6	•
	156 x 6	•
	157 x 6	•
	158 x 6	•
	159 x 6	•
	160 x 6	•
162 x 6	•	
165 x 6	•	
166 x 6	•	
169 x 6	•	
170 x 6	•	
172 x 6	•	
175 x 6	•	
176 x 6	•	
180 x 6	•	
182 x 6	•	
184 x 6	•	
185 x 6	•	
188 x 6	•	
190 x 6	•	
193 x 6	•	
195 x 6	•	
196 x 6	•	
198 x 6	•	
200 x 6	•	
201 x 6	•	
202 x 6	•	
203 x 6	•	
203,5 x 6	•	
204 x 6	•	

O-ring cross section	O-ring D x d	DIN
6	205 x 6	•
	208 x 6	•
	210 x 6	•
	212 x 6	•
	215 x 6	•
	216 x 6	•
	218 x 6	•
	220 x 6	•
	221 x 6	•
	225 x 6	•
	226 x 6	•
	229 x 6	•
	230 x 6	•
	235 x 6	•
	236 x 6	•
237 x 6	•	
237,5 x 6	•	
238 x 6	•	
240 x 6	•	
242 x 6	•	
244 x 6	•	
247 x 6	•	
250 x 6	•	
258 x 6	•	
260 x 6	•	
262 x 6	•	
265 x 6	•	
266 x 6	•	
270 x 6	•	
278 x 6	•	
280 x 6	•	
284 x 6	•	
285 x 6	•	
288 x 6	•	
290 x 6	•	
294 x 6	•	
295 x 6	•	
300 x 6	•	
305 x 6	•	

O-ring cross section	O-ring D x d	DIN
6	310 x 6	•
	315 x 6	•
	320 x 6	•
	325 x 6	•
	330 x 6	•
	335 x 6	•
	338 x 6	•
	340 x 6	•
	345 x 6	•
	348 x 6	•
	350 x 6	•
	355 x 6	•
	358 x 6	•
	360 x 6	•
	365 x 6	•
368 x 6	•	
370 x 6	•	
375 x 6	•	
376 x 6	•	
380 x 6	•	
385 x 6	•	
386 x 6	•	
388 x 6	•	
389 x 6	•	
390 x 6	•	
392 x 6	•	
394 x 6	•	
395 x 6	•	
400 x 6	•	
410 x 6	•	
415 x 6	•	
422 x 6	•	
429 x 6	•	
448 x 6	•	
450 x 6	•	
453 x 6	•	
460 x 6	•	
470 x 6	•	
480 x 6	•	

O-ring cross section	O-ring D x d	DIN
6	486 x 6	•
	489 x 6	•
	500 x 6	•
	504 x 6	•
	505 x 6	•
	510 x 6	•
	516 x 6	•
	530 x 6	•
	540 x 6	•
	549 x 6	•
	555 x 6	•
	560 x 6	•
	569 x 6	•
	575 x 6	•
	579 x 6	•
600 x 6	•	
625 x 6	•	

O-ring cross section	O-ring D x d
6,5	39 x 6,5
	123 x 6,5

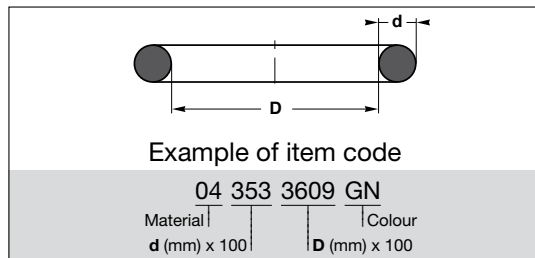
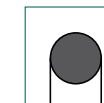
ISO/DIN	ISO 3601/DIN 3771 (EU) (D)	R	(F)	NF	NF T 47-501 (F)
DIN	DIN 3770 (D)	SMS	SMS 1586 (S)	BS met	BS 4518 (GB)
AS/BS	AS 568A / BS 1806 (USA) (GB)	JIS	JIS B 2401 (J)	ITALY	(I)



O-rings

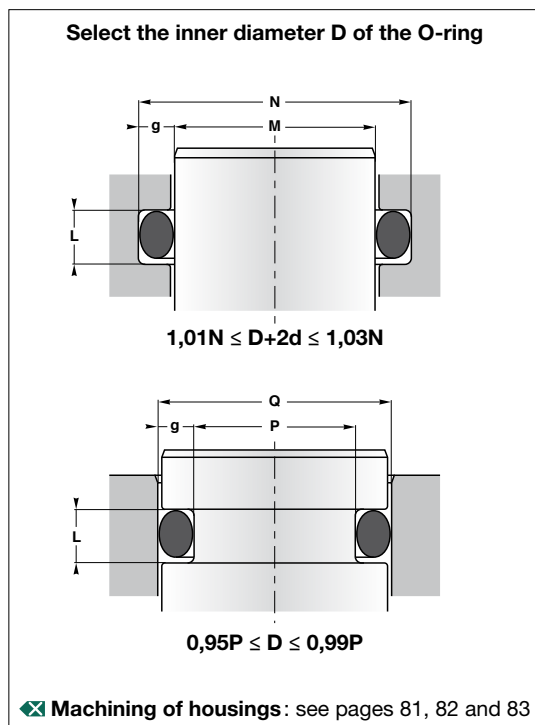


d = 7



O-ring cross section	O-ring D x d	ISO/DIN	DIN	AS/BS	R	NF	ITALY
7	50 x 7						
	53 x 7						
7	58 x 7						
	59 x 7						
7	60 x 7						
	62 x 7						
7	63 x 7						
	68 x 7						
7	70 x 7						
	75 x 7						
7	79 x 7						
	80,5 x 7						
7	82 x 7						
	85 x 7						
7	88 x 7						
	89 x 7						
7	90 x 7						
	92 x 7						
7	94 x 7						
	95 x 7						
7	98 x 7						
	99 x 7						
7	100 x 7						
	104 x 7						
7	105 x 7						
	106 x 7						
7	108 x 7						
	110 x 7						
7	112 x 7						
	113,67 x 7	425		R53			8450
7	114 x 7						
	114,7 x 7	624					.197
7	115 x 7						
	116 x 7						
7	116,84 x 7	426		R54			8462
	119 x 7						
7	120,02 x 7	427		R55			8475
	123,19 x 7	428		R56			8487
7	124,6 x 7			625			.204
	125 x 7						
7	126,37 x 7	429		R57			8500

Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



More information
 On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring D x d	ISO/DIN	DIN	AS/BS	R	NF	ITALY
7	129,54 x 7			430	R58		8512
	130 x 7						
	132,72 x 7			431	R59		8525
7	133 x 7						
	134,5 x 7			626			.211
	135 x 7						
7	135,89 x 7			432	R60		8537
	139,07 x 7			433	R61		8550
	140 x 7						
7	142,24 x 7			434	R62		8562
	145 x 7						
	145,42 x 7			435	R63		8575
7	148 x 7						
	148,59 x 7			436	R64		8587
	150 x 7						
7	151,77 x 7			437	R65		8600
	154 x 7						
	155,6 x 7			872			.223
7	158,12 x 7			438	R66		8625
	159,5 x 7			627			.225
	160 x 7						
7	161,9 x 7			874			.226
	164 x 7						
	164,47 x 7			439	R67		8650
7	166,7 x 7			628			.228
	168,3 x 7			876			.229
	170 x 7						
7	170,82 x 7			440	R68		8675
	174,6 x 7			878			.231
	175 x 7						
7	177,17 x 7			441	R69		8700
	178 x 7						
	181 x 7			880			.233
7	183,52 x 7			442	R70		8725
	184 x 7						
	186 x 7						
7	187,3 x 7			882			.235
	189,87 x 7			443	R71		8750
	190 x 7						
7	193,7 x 7			884			.237
	194 x 7						
	196,22 x 7			444	R72		8775
7	200 x 7			886			.239
	202,57 x 7			445	R73		8800
	205 x 7						
7	206 x 7						
	208,92 x 7			674			8825
	210 x 7						
7	212 x 7						
	215,27 x 7			446	R74		8850
	218 x 7						
7	220 x 7						
	221,62 x 7			676			8875
	224 x 7						
7	227,97 x 7			447	R75		8900
	230 x 7						
	234,32 x 7			678			8925
7	236 x 7						
	240 x 7						
	240,67 x 7			448	R76		8950
7	243 x 7						
	246 x 7						
	247 x 7			680			8975
7	250 x 7						
	253,37 x 7			449	R77		81000
	258 x 7						
7	259,7 x 7			682			81025
	260 x 7						
	265 x 7						
7	266,07 x 7			450	R78		81050
	270 x 7						
	272 x 7						
7	272,4 x 7			684			81075
	278,77 x 7			451	R79		81100
	280 x 7						
7	285,1 x 7			686			81125
	290 x 7						
	291,47 x 7			452	R80		81150

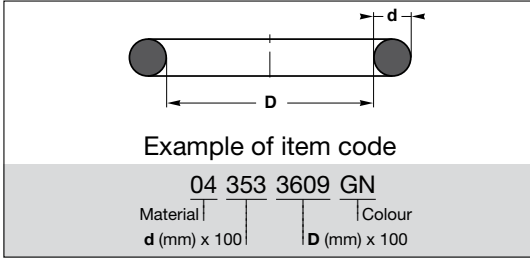
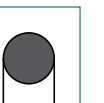
ISO/DIN	ISO 3601/DIN 3771	(EU)	(D)	R		(F)	NF	NF T 47-501	(F)
DIN	DIN 3770		(D)	SMS	SMS 1586	(S)	BS met	BS 4518	(GB)
AS/BS	AS 568A / BS 1806	(USA)	(GB)	JIS	JIS B 2401	(J)	ITALY		(I)



O-rings



d = 7 - 8 - 8,4



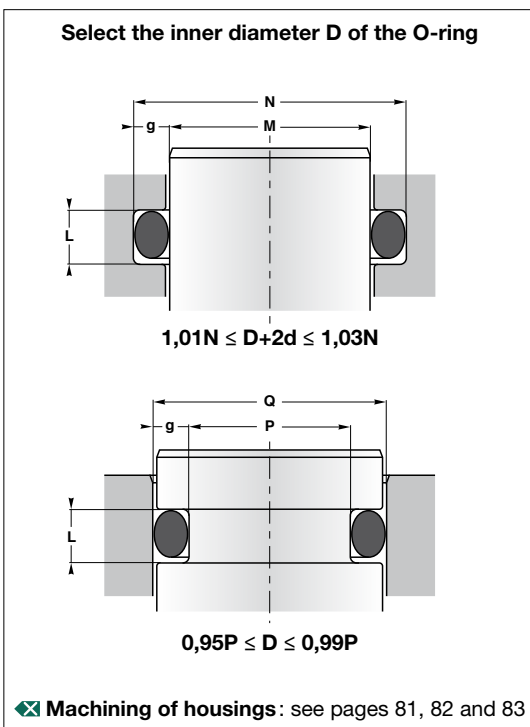
O-ring cross section	O-ring D x d	ISO/DIN	DIN	AS/BS	R	NF	ITALY	
7	297,8 x 7	•	688				81175	
	300 x 7						81200	
	304,17 x 7						81200	
	307 x 7	•	648					
	310,5 x 7							
	315 x 7							
	316,87 x 7	•	454	R82				81250
	320 x 7							
	323,2 x 7							
	325 x 7	•	455	R83				81300
	329,57 x 7							
	335 x 7							
335,9 x 7	•	650						
340 x 7								
342,27 x 7								
345 x 7	•	457	R85				81400	
354,97 x 7								
355 x 7								
365 x 7	•	458	R86				81450	
367,67 x 7								
375 x 7								
380,37 x 7	•	459	R87				81500	
387 x 7								
393,07 x 7								
400 x 7	•	461						
405,26 x 7								
412 x 7								
417,96 x 7	•	462						
425 x 7								
430,66 x 7								
437 x 7	•	464						
443,36 x 7								
450 x 7								
456,06 x 7	•	465						
457,2 x 7								
462 x 7								
468,76 x 7	•	466						
475 x 7								
481,46 x 7								
487 x 7	•	468						
494,16 x 7								
494,67 x 7								

O-ring cross section	O-ring D x d	ISO/DIN	DIN	AS/BS	R	NF	ITALY	
7	500 x 7	•		469				
	506,86 x 7							
	515 x 7							
	530 x 7	•	470					
	532,26 x 7							
	545 x 7							
	545,47 x 7	•	471					
	557,66 x 7							
	560 x 7							
	580 x 7	•	472					
	582,68 x 7							
	596,27 x 7							
600 x 7	•	473						
608,08 x 7								
615 x 7								
630 x 7	•	474						
633,48 x 7								
647,07 x 7								
650 x 7	•	475						
658,88 x 7								
670 x 7								

O-ring cross section	O-ring D x d	SMS	JIS	BS met	
8,4	144,1 x 8,4	•	P150A	1441-84	
	149,1 x 8,4			1491-84	
	149,5 x 8,4				
	154,1 x 8,4	•	P160		1541-84
	159,1 x 8,4				1591-84
	159,5 x 8,4				
	164,1 x 8,4	•	P165		1641-84
	164,5 x 8,4				1691-84
	169,1 x 8,4				
	169,5 x 8,4	•	P170		1741-84
	174,1 x 8,4				
	174,5 x 8,4				
179,1 x 8,4	•	P180		1791-84	
179,5 x 8,4					
184,1 x 8,4					
184,5 x 8,4	•	P185		1841-84	
189,1 x 8,4					
189,5 x 8,4					
194,1 x 8,4	•	P190		1941-84	
194,5 x 8,4					
199,1 x 8,4					
199,5 x 8,4	•	P195		1991-84	
204,1 x 8,4					
204,5 x 8,4					
208,5 x 8,4	•	P200		2041-84	
209,1 x 8,4					
209,5 x 8,4					
214,5 x 8,4	•	P205		2091-84	
219,1 x 8,4					
219,5 x 8,4					
224,5 x 8,4	•	P209		2191-84	
229,1 x 8,4					
229,5 x 8,4					
224,5 x 8,4	•	P210		2291-84	
229,1 x 8,4					
229,5 x 8,4					
234,1 x 8,4	•	P215		2341-84	
234,5 x 8,4					
239,1 x 8,4					
234,5 x 8,4	•	P220		2391-84	
239,1 x 8,4					
239,5 x 8,4					
239,5 x 8,4	•	P225		2491-84	
244,5 x 8,4					
249,1 x 8,4					
239,5 x 8,4	•	P230		2491-84	
244,5 x 8,4					
249,1 x 8,4					

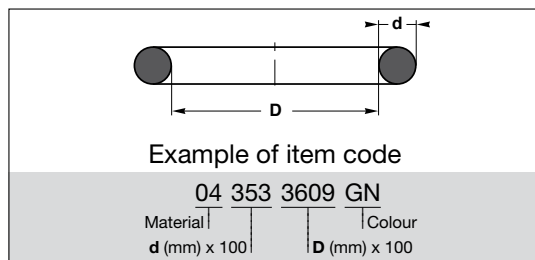
O-ring cross section	O-ring D x d	ISO/DIN	DIN	AS/BS	R	NF	ITALY
8	95 x 8						
	210 x 8						
	258 x 8						

Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	

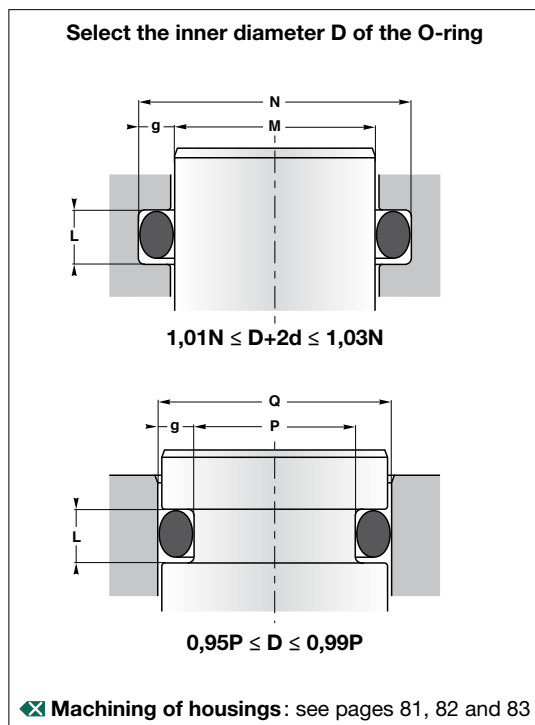


More information
 On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

ISO/DIN	ISO 3601/DIN 3771	(EU)	(D)	R	(F)	NF	NF T 47-501	(F)
DIN	DIN 3770	(D)		SMS	SMS 1586	(S)	BS met	BS 4518
AS/BS	AS 568A / BS 1806	(USA)	(GB)	JIS	JIS B 2401	(J)	ITALY	(I)



Material	Colour
01 : NBR 70 Sh A	- : Black
02 : NBR 80 Sh A	BE : Blue
03 : NBR 90 Sh A	BN : Brown
04 : FPM 75 Sh A	GN : Green
05 : FPM 90 Sh A	GY : Grey
06 : EPDM 70 Sh A	RD : Red
07 : MVQ 70 Sh A	WE : White
00 : Non-standard	YW : Yellow
✕ see pages 10-19	



More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring D x d	SMS	JIS	BS met
8,4	249,5 x 8,4		P250	
	254,5 x 8,4		P255	
	259,5 x 8,4		P260	
	264,5 x 8,4		P265	
	269,5 x 8,4		P270	
	274,5 x 8,4		P275	
	279,5 x 8,4		P280	
	284,5 x 8,4		P285	
	289,5 x 8,4		P290	
	294,5 x 8,4		P295	
	299,5 x 8,4		P300	
	304,5 x 8,4		P305	
	314,5 x 8,4		P315	
	319,5 x 8,4		P320	
	324,5 x 8,4		P325	
	329,5 x 8,4		P330	
	334,5 x 8,4		P335	
	339,5 x 8,4		P340	
	354,5 x 8,4		P355	
	359,5 x 8,4		P360	
369,5 x 8,4		P370		
374,5 x 8,4		P375		
384,5 x 8,4		P385		
399,5 x 8,4		P400		
419,5 x 8,4				
440 x 8,4				
461 x 8,4				
481 x 8,4				
522 x 8,4				
560 x 8,4				
590 x 8,4				
640 x 8,4				
648 x 8,4				
670 x 8,4				
690 x 8,4				
715 x 8,4				
730 x 8,4				
742 x 8,4				
762 x 8,4				
774 x 8,4				
799 x 8,4				
811 x 8,4				

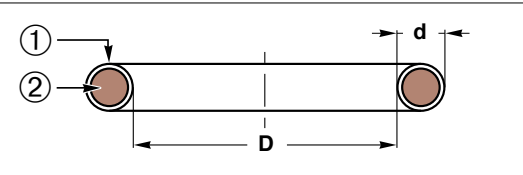
O-ring cross section	O-ring D x d	SMS	JIS	BS met
8,4	830 x 8,4			
	865 x 8,4			
	888 x 8,4			
	934 x 8,4			
	962 x 8,4			
	985 x 8,4			
	1012 x 8,4			
	1020 x 8,4			

O-ring cross section	O-ring D x d
9	63 x 9

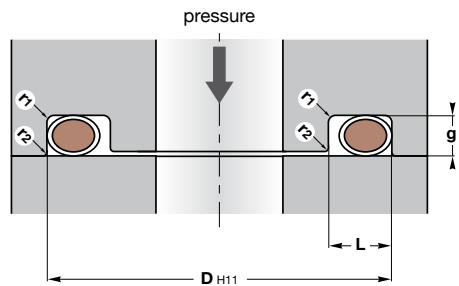
O-ring cross section	O-ring D x d
10	220 x 10
	420 x 10
	480 x 10
	600 x 10
	660 x 10

O-ring cross section	O-ring D x d
12	715 x 12
	960 x 12
	1000 x 12
	1027 x 12
	1056 x 12

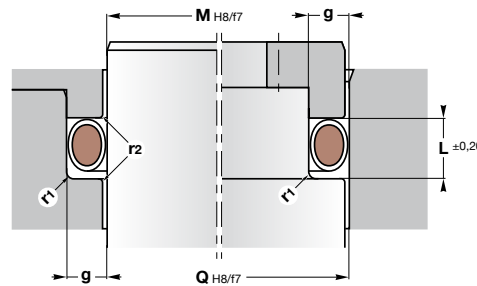
ISO/DIN	ISO 3601/DIN 3771	(EU) (D)	R	(F)	NF	NF T 47-501	(F)
DIN	DIN 3770	(D)	SMS	SMS 1586	(S)	BS met	BS 4518 (GB)
AS/BS	AS 568A / BS 1806	(USA) (GB)	JIS	JIS B 2401	(J)	ITALY	(I)


00FEP

Example of item code

00FEP 353 3769 FPM
 Profile d (mm) D (mm) Material

Axial assembly

Dimensions of housings in table 143A


Radial assembly

Dimensions of housings in table 143B

 **Machining of housings:** see page 81

00FEP-encapsulated O-rings have a core of elastomer that is completely covered with a seamless sheath of FEP fluoropolymer. The elastomeric core is in either **fluorocarbon (FPM)** or **silicone (MVQ)**.

Operating conditions  see page 8

Static pressure ≤ 25 MPa
 Temperature
FPM/FEP -20°C to 200°C
MVQ/FEP -60°C to 200°C
 Fluids almost all

Materials  see pages 10-19

① FEP FEP
 ② Elastomers FPM, MVQ

Attention, the production of 00FEP O-rings is only possible with a minimal diameter **D min** depending on the material ②. See table 142A below.

Assembly  see pages 54-59

Axial assembly following annexed drawing: dimensions and tolerances of housings on next page (table 143A).

Radial assembly following annexed drawings: if possible in open grooves. Dimensions and tolerances of housings on next page (table 143B).

Advantages

Very good chemical resistance, large temperature range, used with pharmaceutical and chemical products, can be sterilised

Table 142A - D min

d	D min FPM	D min MVQ	r1	r2
1,6	10	5	0,3	0,2
1,78	10	5,28	0,4	0,2
2	10	6,8	0,5	0,2
2,5	12	7,4	0,5	0,2
2,62	12	7,6	0,6	0,2
3	15	12	0,8	0,2
3,53	15	13	1	0,2
4	16	14	1	0,2
4,5	18	15	1	0,2
5	22	20	1	0,2
5,34	25	22	1,2	0,2
5,5	27	23	1,2	0,2
5,7	27	24	1,2	0,2
6	30	27	1,2	0,2
7 (6,99)	50	50	1,5	0,2
8	75	75	1,5	0,4
8,4	80	80	2	0,4
9	100	100	2	0,4
10	140	110	2	0,4

d	g	L	Tol. L
1,6	1,2	2,5	±0,2
1,78	1,3	2,7	±0,2
2	1,4	3	±0,2
2,5	1,83	3,5	±0,2
2,62	1,96	3,75	±0,2
3	2,25	4,15	±0,2
3,53	2,65	4,95	±0,2
4	3,05	5,25	±0,2
4,5	3,45	5,8	±0,2
5	3,85	6,4	±0,2
5,34	4,3	7,25	±0,2
5,5	4,38	7,3	±0,2
5,7	4,45	7,4	±0,2
6	4,85	7,8	±0,2
7 (6,99)	5,75	9,1	±0,2
8	6,4	10,2	±0,2
8,4	6,65	10,9	±0,2
9	7,3	11,7	±0,2
10	8,2	13	±0,2

d	g	L	Tol. L
1,6	1,2	2,1	±0,2
1,78	1,3	2,3	±0,2
2	1,5	2,6	±0,2
2,5	1,9	3,2	±0,2
2,62	2	3,4	±0,2
3	2,3	3,9	±0,2
3,53	2,75	4,5	±0,2
4	3,15	5,2	±0,2
4,5	3,6	5,8	±0,2
5	4	6,5	±0,2
5,34	4,3	6,9	±0,2
5,5	4,5	7,1	±0,2
5,7	4,65	7,4	±0,2
6	4,95	7,8	±0,2
7 (6,99)	5,85	9,1	±0,2
8	6,75	10,4	±0,2
8,4	7,15	10,9	±0,2
9	7,7	11,7	±0,2
10	8,65	13	±0,2

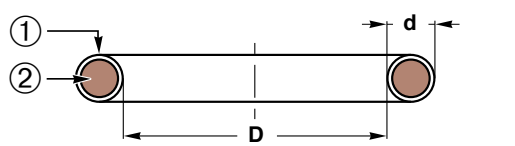
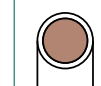
Tolerances of O-rings on demand.

O-ring cross section	O-ring D x d	Reference ① = FPM	Reference ② = MVQ = SIL	
1,78	9,25 X 1,78		00FEP 178 925 SIL	
	10,82 X 1,78	00FEP 178 1082 FPM	00FEP 178 1082 SIL	
	12,42 X 1,78	00FEP 178 1242 FPM	00FEP 178 1242 SIL	
	14 X 1,78	00FEP 178 1400 FPM	00FEP 178 1400 SIL	
	15,6 X 1,78	00FEP 178 1560 FPM	00FEP 178 1560 SIL	
	18,77 X 1,78	00FEP 178 1877 FPM	00FEP 178 1877 SIL	
	2,62	15,54 X 2,62	00FEP 262 1554 FPM	00FEP 262 1554 SIL
		17,12 X 2,62	00FEP 262 1712 FPM	00FEP 262 1712 SIL
		20,3 X 2,62	00FEP 262 2030 FPM	00FEP 262 2030 SIL
		21,89 X 2,62	00FEP 262 2189 FPM	00FEP 262 2189 SIL
25,07 X 2,62		00FEP 262 2507 FPM	00FEP 262 2507 SIL	
26,64 X 2,62		00FEP 262 2664 FPM	00FEP 262 2664 SIL	
29,82 X 2,62		00FEP 262 2982 FPM	00FEP 262 2982 SIL	
31,42 X 2,62		00FEP 262 3142 FPM	00FEP 262 3142 SIL	
32,99 X 2,62		00FEP 262 3299 FPM	00FEP 262 3299 SIL	
34,59 X 2,62		00FEP 262 3459 FPM	00FEP 262 3459 SIL	
36,17 X 2,62	00FEP 262 3617 FPM	00FEP 262 3617 SIL		
39,34 X 2,62	00FEP 262 3934 FPM	00FEP 262 3934 SIL		
42,52 X 2,62	00FEP 262 4252 FPM	00FEP 262 4252 SIL		
44,12 X 2,62	00FEP 262 4412 FPM	00FEP 262 4412 SIL		
3,53	32,92 X 3,53	00FEP 353 3292 FPM	00FEP 353 3292 SIL	
	34,52 X 3,53	00FEP 353 3452 FPM	00FEP 353 3452 SIL	
	37,69 X 3,53	00FEP 353 3769 FPM	00FEP 353 3769 SIL	
	40,87 X 3,53	00FEP 353 4087 FPM	00FEP 353 4087 SIL	
	44,04 X 3,53	00FEP 353 4404 FPM	00FEP 353 4404 SIL	
	47,22 X 3,53	00FEP 353 4722 FPM	00FEP 353 4722 SIL	
	53,57 X 3,53	00FEP 353 5357 FPM	00FEP 353 5357 SIL	
	56,74 X 3,53	00FEP 353 5674 FPM	00FEP 353 5674 SIL	
	63,09 X 3,53	00FEP 353 6309 FPM	00FEP 353 6309 SIL	
	66,27 X 3,53	00FEP 353 6627 FPM	00FEP 353 6627 SIL	
72,62 X 3,53	00FEP 353 7262 FPM	00FEP 353 7262 SIL		
78,97 X 3,53	00FEP 353 7897 FPM	00FEP 353 7897 SIL		
5,34	82,14 X 3,53	00FEP 353 8214 FPM	00FEP 353 8214 SIL	
	88,49 X 3,53	00FEP 353 8849 FPM	00FEP 353 8849 SIL	
	91,67 X 3,53	00FEP 353 9167 FPM	00FEP 353 9167 SIL	
	78,74 X 5,34	00FEP 534 7874 FPM	00FEP 534 7874 SIL	
	85,09 X 5,34	00FEP 534 8509 FPM	00FEP 534 8509 SIL	
	88,27 X 5,34	00FEP 534 8827 FPM	00FEP 534 8827 SIL	
	94,62 X 5,34	00FEP 534 9462 FPM	00FEP 534 9462 SIL	
	97,79 X 5,34	00FEP 534 9779 FPM	00FEP 534 9779 SIL	
	104,14 X 5,34	00FEP 534 10414 FPM	00FEP 534 10414 SIL	

Please contact us for applications approaching maximum values.

More information

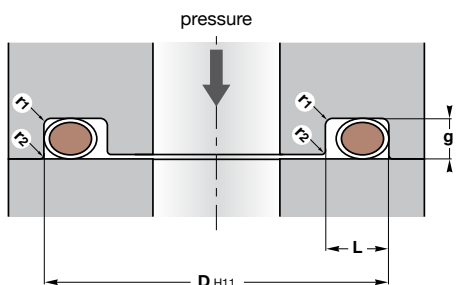
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.



00FEP

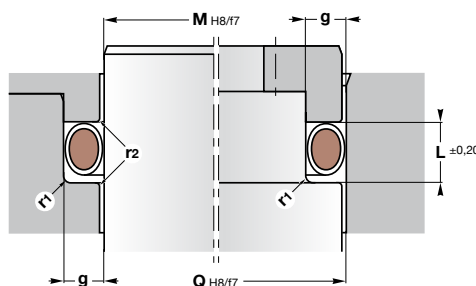
Example of item code

00FEP 353 3769 FPM
Profile d (mm) D (mm) Material



Axial assembly

Dimensions of housings in table 145A



Radial assembly

Dimensions of housings in table 145B

Machining of housings: see page 81

00FEP-encapsulated O-rings have a core of elastomer that is completely covered with a seamless sheath of FEP fluoropolymer. The elastomeric core is in either fluorocarbon (FPM) or silicone (MVQ).

Operating conditions see page 8

Static pressure <= 25 MPa
Temperature FPM/FEP -20°C to 200°C
MVQ/FEP -60°C to 200°C
Fluids almost all

Materials see pages 10-19

1 FEP FEP
2 Elastomers FPM, MVQ
Attention, the production of 00FEP O-rings is only possible with a minimal diameter D min depending on the material 2. See table 144A below.

Assembly see pages 54-59

Axial assembly following annexed drawing: dimensions and tolerances of housings on next page (table 145A).

Radial assembly following annexed drawings: if possible in open grooves. Dimensions and tolerances of housings on next page (table 145B).

Advantages

Very good chemical resistance, large temperature range, used with pharmaceutical and chemical products, can be sterilised

Table 144A - D min

Table with 5 columns: d, D min FPM, D min MVQ, r1, r2. Rows for d values from 1,6 to 10.

Table 145A - Axial assembly

Table with 4 columns: d, g, L, Tol. L. Rows for O-ring cross sections from 1,6 to 10.

Table 145B - Radial assembly

Table with 4 columns: d, g, L, Tol. L. Rows for O-ring cross sections from 1,6 to 10.

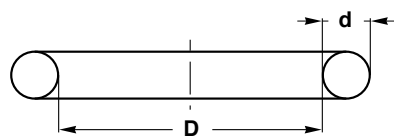
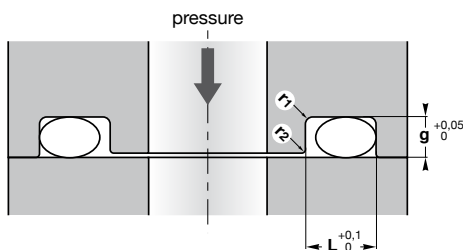
Tolerances of O-rings on demand.

Table with 4 columns: O-ring cross section, O-ring D x d, Reference 1 = FPM, Reference 2 = MVQ = SIL. Rows for cross sections 5,34, 129,54 X 5,34, 139,07 X 5,34, 148,59 X 5,34, 158,12 X 5,34, 164,47 X 5,34, 177,17 X 5,34, 189,87 X 5,34.

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.


00RPT

Axial assembly

The O-rings **00RPT** of SEALTECH are **machined**, are machined, which allows great flexibility in manufacturing and customer service.

To dimension the groove in case of an axial assembly, we refer to table 146A.

✘ **Machining of housings:** see page 81

00RPT are PTFE O-rings for use in **axial static faces** or flange applications which require a chemical resistance.

Operating conditions ✘ see page 8

Static pressure	≤ 40 MPa
Temperature	-200°C to 260°C
Fluids	almost all

Materials ✘ see pages 10-19

PTFE (colour: white)	PT01
----------------------	------

Assembly ✘ see pages 54-59

Axial assembly: all flanges
 Dimensions of housing: see table 146A

Advantages

Very good chemical resistance
 Large range of temperature
 Applications in chemical and food industry

Please contact us for applications approaching maximum values.

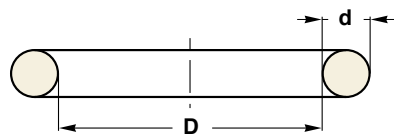
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Table 146A

d	g	Lf	r1	r2
1,5	1,52	1,3	1,7	0,2
1,6	1,63	1,4	1,8	0,3
1,78	1,8	1,6	2	0,4
2	1,98	1,8	2,2	0,5
2,4	2,15	2,6	0,5	0,1
2,5	2,25	2,8	0,5	0,1
2,62	2,65	2,35	2,9	0,6
3	2,7	3,3	0,8	0,15
3,53	3,55	3,15	3,9	1
4	3,6	4,4	1	0,15
5	4,5	5,5	1	0,15
5,34	5,3	4,8	5,9	1,2
5,7	5,1	6,3	1,2	0,2
6	5,6	6,6	1,2	0,2
7	6,99	6,3	7,7	1,5
8	7,2	8,8	1,5	0,2
8,4	7,55	9,2	2	0,2

O-ring cross section	O-ring D x d	g	L	Reference	O-ring cross section	O-ring D x d	g	L	Reference
1,78	6,75 X 1,78	1,6	2	00RPT 178 675	3,53	53,57 X 3,53	3,15	3,9	00RPT 353 5357
	7,65 X 1,78	1,6	2	00RPT 178 765		56,74 X 3,53	3,15	3,9	00RPT 353 5674
	9,25 X 1,78	1,6	2	00RPT 178 925		63,09 X 3,53	3,15	3,9	00RPT 353 6309
	10,82 X 1,78	1,6	2	00RPT 178 1082		66,27 X 3,53	3,15	3,9	00RPT 353 6627
	12,42 X 1,78	1,6	2	00RPT 178 1242		72,62 X 3,53	3,15	3,9	00RPT 353 7262
	14 X 1,78	1,6	2	00RPT 178 1400		78,97 X 3,53	3,15	3,9	00RPT 353 7897
	15,6 X 1,78	1,6	2	00RPT 178 1560		82,14 X 3,53	3,15	3,9	00RPT 353 8214
	18,77 X 1,78	1,6	2	00RPT 178 1877		88,49 X 3,53	3,15	3,9	00RPT 353 8849
						91,67 X 3,53	3,15	3,9	00RPT 353 9167
2,62	15,54 X 2,62	2,35	2,9	00RPT 262 1554	5,34	78,74 X 5,34	4,8	5,9	00RPT 534 7874
	17,12 X 2,62	2,35	2,9	00RPT 262 1712		85,09 X 5,34	4,8	5,9	00RPT 534 8509
	20,3 X 2,62	2,35	2,9	00RPT 262 2030		88,27 X 5,34	4,8	5,9	00RPT 534 8827
	21,89 X 2,62	2,35	2,9	00RPT 262 2189		94,62 X 5,34	4,8	5,9	00RPT 534 9462
	25,07 X 2,62	2,35	2,9	00RPT 262 2507		97,79 X 5,34	4,8	5,9	00RPT 534 9779
	26,64 X 2,62	2,35	2,9	00RPT 262 2664		104,14 X 5,34	4,8	5,9	00RPT 534 10414
	29,82 X 2,62	2,35	2,9	00RPT 262 2982		107,32 X 5,34	4,8	5,9	00RPT 534 10732
	31,42 X 2,62	2,35	2,9	00RPT 262 3142		113,67 X 5,34	4,8	5,9	00RPT 534 11367
	32,99 X 2,62	2,35	2,9	00RPT 262 3299		120,02 X 5,34	4,8	5,9	00RPT 534 12002
	34,59 X 2,62	2,35	2,9	00RPT 262 3459		129,54 X 5,34	4,8	5,9	00RPT 534 12954
36,17 X 2,62	2,35	2,9	00RPT 262 3617	139,07 X 5,34	4,8	5,9	00RPT 534 13907		
39,34 X 2,62	2,35	2,9	00RPT 262 3934	148,59 X 5,34	4,8	5,9	00RPT 534 14859		
42,52 X 2,62	2,35	2,9	00RPT 262 4252	158,12 X 5,34	4,8	5,9	00RPT 534 15812		
44,12 X 2,62	2,35	2,9	00RPT 262 4412	164,47 X 5,34	4,8	5,9	00RPT 534 16447		
				177,17 X 5,34	4,8	5,9	00RPT 534 17717		
3,53	32,92 X 3,53	3,15	3,9	00RPT 353 3292	189,87 X 5,34	4,8	5,9	00RPT 534 18987	
	34,52 X 3,53	3,15	3,9	00RPT 353 3452					
	37,69 X 3,53	3,15	3,9	00RPT 353 3769					
	40,87 X 3,53	3,15	3,9	00RPT 353 4087					
	44,04 X 3,53	3,15	3,9	00RPT 353 4404					
	47,22 X 3,53	3,15	3,9	00RPT 353 4722					

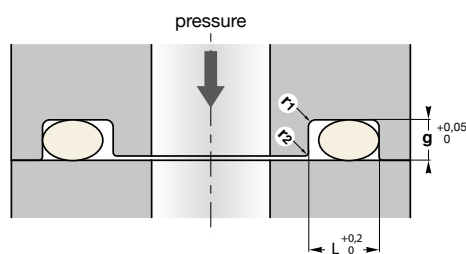
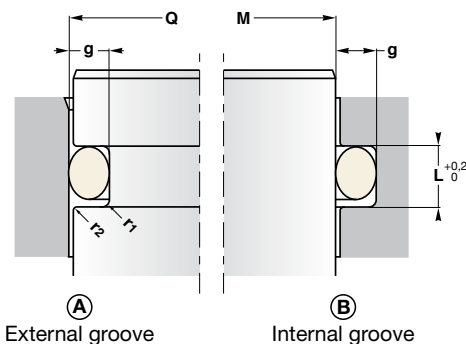

00RPU

Example of item code

00RPU	353	6800	BE
Profile	d (mm) x 100	D (mm) x 100	Colour

Colour

- : Black	GY : Grey
BE : Blue	RD : Red
BN : Brown	WE : White
GN : Green	YW : Yellow


Axial assembly

Radial assembly

✕ Machining of housings: see page 81

00RPU polyurethane O-rings are suitable for both dynamic and static sealing applications. They are manufactured from thermosetting liquid cast polyurethane of 92 Sh A, and have exceptionally good abrasion resistance and **extrusion resistance** qualities. Polyurethane O-Rings are used instead of NBR due to their high mechanical strengths.

Operating conditions ✕ see page 8

Static pressure	≤ 40 MPa
Temperature	-30°C to 100°C
Linear speed	≤ 0,2 m/sec
Fluids	mineral oils

Materials ✕ see pages 10-19

Polyurethane PU26 (natural colour or green)

Assembly ✕ see pages 54-59

Axial assembly: all flanges
 Radial assembly: dimensioning of the housing on table 148A

Advantages

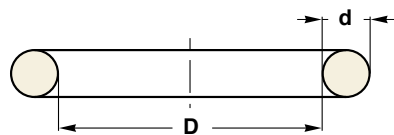
Excellent resistance to abrasion and extrusion, allows the possibility working without back-up, very high pressure in static applications

Please contact us for applications approaching maximum values.

Table 148A

d	g	L	r1	r2
1	1,02	0,9	1,4	0,2
1,5	1,52	1,25	2	0,2
1,6	1,63	1,3	2,1	0,3
1,78	1,8	1,45	2,4	0,3
1,9	1,98	1,55	2,6	0,4
2	2,15	1,65	2,7	0,4
2,4	2,4	2,05	3,2	0,5
2,5	2,5	2,15	3,3	0,5
2,62	2,65	2,25	3,6	0,6
2,7	2,7	2,3	3,6	0,6
3	3	2,6	4	0,6
3,1	3,1	2,7	4,1	0,6
3,5	3,5	3,05	4,6	0,6
3,53	3,55	3,1	4,8	0,8
3,6	3,6	3,15	4,8	0,8
4	4	3,5	5,2	0,8
4,5	4,5	4	5,8	0,8
5	5	4,4	6,6	0,8
5,34	5,3	4,7	7,1	1,2
5,5	5,5	4,8	7,1	1,2
5,7	5,7	5	7,2	1,2
6	6	5,3	7,4	1,2
7	7	6,1	9,5	1,5
8	8	7,1	9,8	1,5
8,4	8,4	7,5	10	1,5

O-ring cross section	O-ring D x d	g	L	Reference	O-ring cross section	O-ring D x d	g	L	Reference		
1,78	5,28 X 1,78	1,45	2,4	00RPU 178 528	3	35 X 3	2,6	4	00RPU 300 3500		
	9,25 X 1,78	1,45	2,4	00RPU 178 925		42 X 3	2,6	4	00RPU 300 4200		
	10,82 X 1,78	1,45	2,4	00RPU 178 1082		52 X 3	2,6	4	00RPU 300 5200		
	12,42 X 1,78	1,45	2,4	00RPU 178 1242		56 X 3	2,6	4	00RPU 300 5600		
	14 X 1,78	1,45	2,4	00RPU 178 1400		3,53	18,64 X 3,53	3,1	4,8	00RPU 353 1864	
	15,6 X 1,78	1,45	2,4	00RPU 178 1560			24,99 X 3,53	3,1	4,8	00RPU 353 2499	
	17,17 X 1,78	1,45	2,4	00RPU 178 1717			28,17 X 3,53	3,1	4,8	00RPU 353 2817	
	18,77 X 1,78	1,45	2,4	00RPU 178 1877			32,92 X 3,53	3,1	4,8	00RPU 353 3292	
	2	6 X 2	1,65	2,7			00RPU 200 600	34,52 X 3,53	3,1	4,8	00RPU 353 3452
		7 X 2	1,65	2,7			00RPU 200 700	36,09 X 3,53	3,1	4,8	00RPU 353 3609
8 X 2		1,65	2,7	00RPU 200 800	37,69 X 3,53		3,1	4,8	00RPU 353 3769		
9 X 2		1,65	2,7	00RPU 200 900	40,87 X 3,53		3,1	4,8	00RPU 353 4087		
10 X 2		1,65	2,7	00RPU 200 1000	44,04 X 3,53		3,1	4,8	00RPU 353 4404		
12 X 2		1,65	2,7	00RPU 200 1200	47,22 X 3,53		3,1	4,8	00RPU 353 4722		
16 X 2		1,65	2,7	00RPU 200 1600	50,39 X 3,53	3,1	4,8	00RPU 353 5039			
19 X 2		1,65	2,7	00RPU 200 1900	53,57 X 3,53	3,1	4,8	00RPU 353 5357			
26 X 2		1,65	2,7	00RPU 200 2600	56,74 X 3,53	3,1	4,8	00RPU 353 5674			
2,5		10 X 2,5	2,15	3,3	00RPU 250 1000	59 X 3,53	3,1	4,8	00RPU 353 5900		
	12 X 2,5	2,15	3,3	00RPU 250 1200	59 X 3,53	3,1	4,8	00RPU 353 5900 BE			
	18 X 2,5	2,15	3,3	00RPU 250 1800	59,92 X 3,53	3,1	4,8	00RPU 353 5992			
	2,62	13,94 X 2,62	2,25	3,6	00RPU 262 1394	60,32 X 3,53	3,1	4,8	00RPU 353 6032		
		14,03 X 2,62	2,25	3,6	00RPU 262 1403	63,09 X 3,53	3,1	4,8	00RPU 353 6309		
		15,54 X 2,62	2,25	3,6	00RPU 262 1554	66,27 X 3,53	3,1	4,8	00RPU 353 6627		
		17,12 X 2,62	2,25	3,6	00RPU 262 1712	68 X 3,53	3,1	4,8	00RPU 353 6800		
		18,72 X 2,62	2,25	3,6	00RPU 262 1872	68 X 3,53	3,1	4,8	00RPU 353 6800 BE		
		20,3 X 2,62	2,25	3,6	00RPU 262 2030	69,44 X 3,53	3,1	4,8	00RPU 353 6944		
		21,89 X 2,62	2,25	3,6	00RPU 262 2189	72,62 X 3,53	3,1	4,8	00RPU 353 7262		
23,47 X 2,62		2,25	3,6	00RPU 262 2347	75,79 X 3,53	3,1	4,8	00RPU 353 7579			
25,07 X 2,62		2,25	3,6	00RPU 262 2507	75,79 X 3,53	3,1	4,8	00RPU 353 7579 BE			
26,64 X 2,62		2,25	3,6	00RPU 262 2664	78,97 X 3,53	3,1	4,8	00RPU 353 7897			
3	28,24 X 2,62	2,25	3,6	00RPU 262 2824	82,14 X 3,53	3,1	4,8	00RPU 353 8214			
	29,82 X 2,62	2,25	3,6	00RPU 262 2982	85,32 X 3,53	3,1	4,8	00RPU 353 8532			
	31,42 X 2,62	2,25	3,6	00RPU 262 3142	88,49 X 3,53	3,1	4,8	00RPU 353 8849			
	32,99 X 2,62	2,25	3,6	00RPU 262 3299	91,67 X 3,53	3,1	4,8	00RPU 353 9167			
	34,59 X 2,62	2,25	3,6	00RPU 262 3459	94,84 X 3,53	3,1	4,8	00RPU 353 9484			
	36,17 X 2,62	2,25	3,6	00RPU 262 3617							
	39,34 X 2,62	2,25	3,6	00RPU 262 3934							
	40,94 X 2,62	2,25	3,6	00RPU 262 4094							
	42,52 X 2,62	2,25	3,6	00RPU 262 4252							
	44,12 X 2,62	2,25	3,6	00RPU 262 4412							



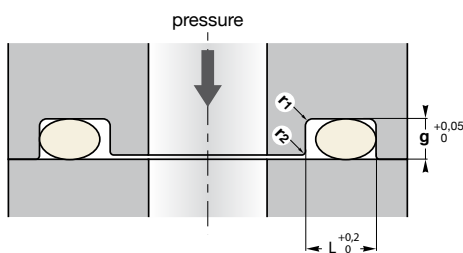
00RPU

Example of item code

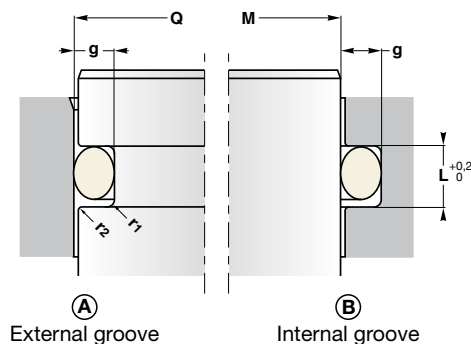
00RPU 353 6800 BE
 Profile d (mm) D (mm) Colour
 x 100 x 100

Colour

- : Black
- BE : Blue
- BN : Brown
- GN : Green
- GY : Grey
- RD : Red
- WE : White
- YW : Yellow



Axial assembly



Radial assembly

✘ Machining of housings: see page 81

00RPU polyurethane O-rings are suitable for both dynamic and static sealing applications. They are manufactured from thermosetting liquid cast polyurethane of 92 Sh A, and have exceptionally good abrasion resistance and **extrusion resistance** qualities. Polyurethane O-Rings are used instead of NBR due to their high mechanical strengths.

Operating conditions ✘ see page 8

- Static pressure ≤ 40 MPa
- Temperature -30°C to 100°C
- Linear speed ≤ 0,2 m/sec
- Fluids mineral oils

Materials ✘ see pages 10-19

Polyurethane PU26 (natural colour or green)

Assembly ✘ see pages 54-59

- Axial assembly: all flanges
- Radial assembly: dimensioning of the housing on table 150A

Advantages

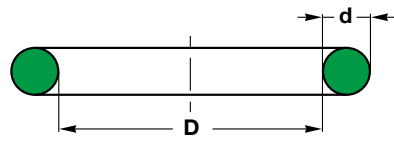
Excellent resistance to abrasion and extrusion, allows the possibility working without back-up, very high pressure in static applications

Please contact us for applications approaching maximum values.

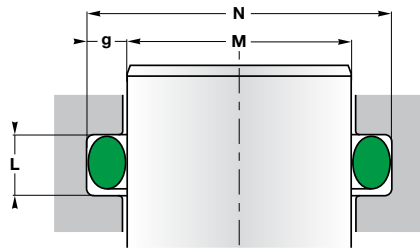
Table 150A

d	g	L	r1	r2
1	1,02	0,9	1,4	0,2
1,5	1,52	1,25	2	0,2
1,6	1,63	1,3	2,1	0,3
1,78	1,8	1,45	2,4	0,3
1,9	1,98	1,55	2,6	0,4
2	2,05	1,65	2,7	0,4
2,4	2,05	2,05	3,2	0,5
2,5	2,15	2,15	3,3	0,5
2,62	2,65	2,25	3,6	0,6
2,7	2,3	2,3	3,6	0,6
3	2,6	2,6	4	0,6
3,1	2,7	2,7	4,1	0,6
3,5	3,05	3,05	4,6	0,6
3,53	3,55	3,1	4,8	0,8
3,6	3,15	3,15	4,8	0,8
4	3,5	3,5	5,2	0,8
4,5	4	4	5,8	0,8
5	4,4	4,4	6,6	0,8
5,34	5,3	4,7	7,1	1,2
5,5	4,8	4,8	7,1	1,2
5,7	5	5	7,2	1,2
6	5,3	5,3	7,4	1,2
7	6,99	6,1	9,5	1,5
8	7,1	7,1	9,8	1,5
8,4	7,5	7,5	10	1,5

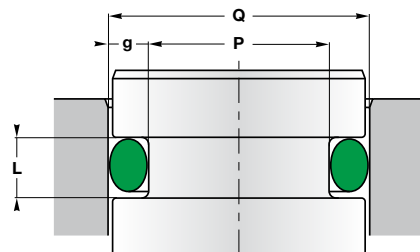
O-ring cross section	O-ring D x d	g	L	Reference
5,34	62,87 X 5,34	4,7	7,1	00RPU 534 6287
	78,74 X 5,34	4,7	7,1	00RPU 534 7874
	81,92 X 5,34	4,7	7,1	00RPU 534 8192
	85,09 X 5,34	4,7	7,1	00RPU 534 8509
	88,27 X 5,34	4,7	7,1	00RPU 534 8827
	91,44 X 5,34	4,7	7,1	00RPU 534 9144
	94,62 X 5,34	4,7	7,1	00RPU 534 9462
	97,79 X 5,34	4,7	7,1	00RPU 534 9779
	100,97 X 5,34	4,7	7,1	00RPU 534 10097
	104,14 X 5,34	4,7	7,1	00RPU 534 10414
	107,32 X 5,34	4,7	7,1	00RPU 534 10732
	110,49 X 5,34	4,7	7,1	00RPU 534 11049
	113,67 X 5,34	4,7	7,1	00RPU 534 11367
	116,84 X 5,34	4,7	7,1	00RPU 534 11684
	120,02 X 5,34	4,7	7,1	00RPU 534 12002
	123,19 X 5,34	4,7	7,1	00RPU 534 12319
	129,54 X 5,34	4,7	7,1	00RPU 534 12954
	139,07 X 5,34	4,7	7,1	00RPU 534 13907
	142,24 X 5,34	4,7	7,1	00RPU 534 14224
	145,42 X 5,34	4,7	7,1	00RPU 534 14542
	148,59 X 5,34	4,7	7,1	00RPU 534 14859
	158,12 X 5,34	4,7	7,1	00RPU 534 15812
	164,47 X 5,34	4,7	7,1	00RPU 534 16447
	177,17 X 5,34	4,7	7,1	00RPU 534 17717
	183,52 X 5,34	4,7	7,1	00RPU 534 18352
	189,87 X 5,34	4,7	7,1	00RPU 534 18987


41V1

Select the inner diameter D of the O-ring



$$1,01N \leq D+2d \leq 1,03N$$



$$0,95P \leq D \leq 0,99P$$

 **Machining of housings:** see pages 81, 82 and 83

The **41V1** O-ring is an alternative to conventional rubber elastomer O-rings.

Due to the extrusion resistance of the polyurethane compounds, there is no need to use a back-up ring at higher or pulsating pressures. By eliminating the need for back-up rings the required width of the groove is reduced.

The compound Ultrathan® P5008 is a Parker standard material based on polyurethane with a Shore A hardness of approx. 93. Its main advantages in comparison with other polyurethane materials currently available on the market are the increased heat resistance and the lower compression set.

Operating conditions  see page 8

Static pressure	≤ 60 MPa
Temperature	-35°C to 100°C
Fluids	Hydraulic oils based on mineral oil, HFA, and HFB fluids

Materials  see pages 10-19

Polyurethane	P5008 94 Sh A
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Assembly  see pages 54-59

Due to the higher modulus of the polyurethane compounds, the housings are slightly different from those of standard O-rings.

All edges should be rounded by at least $R = 0,1$.

Polyurethane O-rings show no tendency to twisting.

Advantages

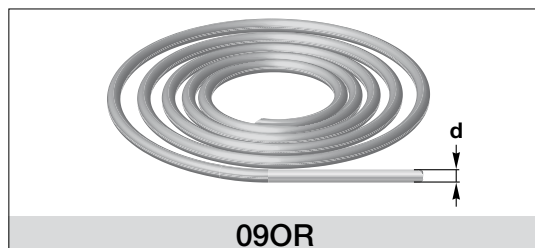
- Robust seal profile for harshest operating conditions
- Extreme wear resistance
- Suitable for fully automatic installation
- Insensitive to pressure peaks
- High extrusion resistance
- Installation in closed and undercut housings

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring D x d	g	L	Reference
1,78	5,28 X 1,78	1,45	2,4	41V1 0305 P5008
	8,73 X 1,78	1,45	2,4	41V1 0537 P5008
	9,25 X 1,78	1,45	2,4	41V1 0615 P5008
	10,82 X 1,78	1,45	2,4	41V1 1065 P5008
	12,42 X 1,78	1,45	2,4	41V1 1200 P5008
	14 X 1,78	1,45	2,4	41V1 1284 P5008
	15,6 X 1,78	1,45	2,4	41V1 1418 P5008
2	6 X 2	1,65	2,7	41V1 0335 P5008
	7 X 2	1,65	2,7	41V1 0397 P5008
	8 X 2	1,65	2,7	41V1 0485 P5008
	9 X 2	1,65	2,7	41V1 0566 P5008
	10 X 2	1,65	2,7	41V1 1010 P5008
	12 X 2	1,65	2,7	41V1 1146 P5008
	16 X 2	1,65	2,7	41V1 1435 P5008
	19 X 2	1,65	2,7	41V1 1670 P5008
	26 X 2	1,65	2,7	41V1 2497 P5008
2,5	10 X 2,5	2,1	3,4	41V1 1015 P5008
	12 X 2,5	2,1	3,4	41V1 1150 P5008
2,62	14,03 X 2,62	2,25	3,6	41V1 1312 P5008
	17,12 X 2,62	2,25	3,6	41V1 1556 P5008
	18,72 X 2,62	2,25	3,6	41V1 1640 P5008
3	35 X 3	2,55	4,2	41V1 3380 P5008
3,53	18,64 X 3,53	3,1	4,8	41V1 1638 P5008
	24,99 X 3,53	3,1	4,8	41V1 2394 P5008
	28,17 X 3,53	3,1	4,8	41V1 2658 P5008



The range of **09OR** rubber cords is available in NBR and FPM (also possibilities in MVQ or EPDM). The cord can be spliced, after been cut to the desired length. Spliced O-rings are not recommended for dynamic applications or in case of high pressures.

They are basically used as convenient solution for sealing **large flanges**, lids or housings.

Materials [see pages 10-19](#)
Standard NBR 70 Sh A, FPM 70 Sh A

Advantages

It's possible to produce a large range of diameters with only one item code

Interesting for large diameters by vulcanisation or sticking

Disadvantages

Inaccurate tolerances: see table on next page

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

NBR		
d	Tol d NBR 70	Reference
1,78	± 0,2	09OR 178
2	± 0,2	09OR 200
2,4	± 0,25	09OR 240
2,5	± 0,25	09OR 250
2,62	± 0,25	09OR 262
2,7	± 0,25	09OR 270
3	± 0,25	09OR 300
3,2	± 0,35	09OR 320
3,5	± 0,35	09OR 350
3,53	± 0,35	09OR 353
4	± 0,35	09OR 400
4,5	± 0,4	09OR 450
4,7	± 0,4	09OR 470
5	± 0,4	09OR 500
5,34	± 0,4	09OR 534
5,7	± 0,4	09OR 570
6	± 0,4	09OR 600
6,4	± 0,55	09OR 640
6,5	± 0,55	09OR 650
7	± 0,55	09OR 700
7,5	± 0,55	09OR 750
8	± 0,55	09OR 800
8,4	± 0,55	09OR 840
8,5	± 0,55	09OR 850
9	± 0,55	09OR 900
9,5	± 0,55	09OR 950
10	± 0,55	09OR 1000
11	± 0,65	09OR 1100
12	± 0,65	09OR 1200
12,5	± 0,65	09OR 1250
12,7	± 0,65	09OR 1270
13	± 0,65	09OR 1300
14	± 0,65	09OR 1400
15	± 0,65	09OR 1500
16	± 0,65	09OR 1600
17	± 0,85	09OR 1700
18	± 0,85	09OR 1800
19	± 0,85	09OR 1900
20	± 0,85	09OR 2000
22	± 0,85	09OR 2200
25	± 1	09OR 2500
30	± 1	09OR 3000

FPM		
d	Tol d FPM 70	Reference
1,78	± 0,2	09OR 178 FPM
2	± 0,2	09OR 200 FPM
2,4	± 0,2	09OR 240 FPM
2,5	± 0,2	09OR 250 FPM
2,62	± 0,25	09OR 262 FPM
2,7	± 0,25	09OR 270 FPM
3	± 0,25	09OR 300 FPM
3,2	± 0,3	09OR 320 FPM
3,5	± 0,3	09OR 350 FPM
3,53	± 0,3	09OR 353 FPM
4	± 0,3	09OR 400 FPM
4,5	± 0,3	09OR 450 FPM
4,7	± 0,3	09OR 470 FPM
5	± 0,3	09OR 500 FPM
5,34	± 0,3	09OR 534 FPM
5,7	± 0,3	09OR 570 FPM
6	± 0,3	09OR 600 FPM
6,4	± 0,4	09OR 640 FPM
6,5	± 0,4	09OR 650 FPM
7	± 0,4	09OR 700 FPM
7,5	± 0,4	09OR 750 FPM
8	± 0,4	09OR 800 FPM
8,4	± 0,4	09OR 840 FPM
8,5	± 0,4	09OR 850 FPM
9	± 0,4	09OR 900 FPM
9,5	± 0,4	09OR 950 FPM
10	± 0,4	09OR 1000 FPM
11	± 0,5	09OR 1100 FPM
12	± 0,5	09OR 1200 FPM
12,5	± 0,5	09OR 1250 FPM
12,7	± 0,5	09OR 1270 FPM
13	± 0,5	09OR 1300 FPM
14	± 0,5	09OR 1400 FPM
15	± 0,5	09OR 1500 FPM
16	± 0,5	09OR 1600 FPM
17	± 1	09OR 1700 FPM
18	± 1	09OR 1800 FPM
19	± 1	09OR 1900 FPM
20	± 1	09OR 2000 FPM
22	± 1	09OR 2200 FPM
25	± 1	09OR 2500 FPM
30	± 1,3	09OR 3000 FPM

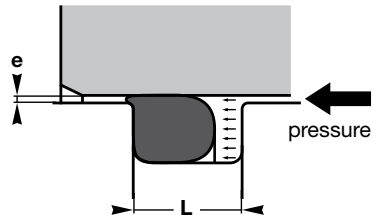


Fig. 156A

EXTRUSION

Extrusion problems appear when the clearance **gap e** between the sealing surface and the groove corners is too large. If the pressure exceeds the deformation limit of the O-ring, he will be forced into this small gap during each pressure cycle.

The O-ring will be damaged by the sharp edges and will break after a while (**Fig. 156A**).

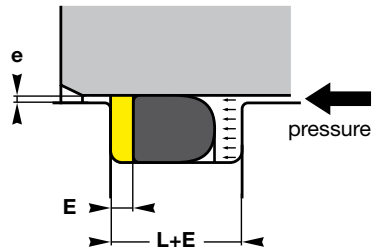


Fig. 156B

To prevent the O-ring from extrusion, a back-up ring (also called anti-extrusion ring) can be placed into the groove at the low-pressure side of the O-ring. In this case, the groove has to be enlarged by **value E** equal to the thickness of the back-up ring.

Back-up rings are made of materials with better extrusion resistance than common elastomers for O-rings (**Fig. 156B**).

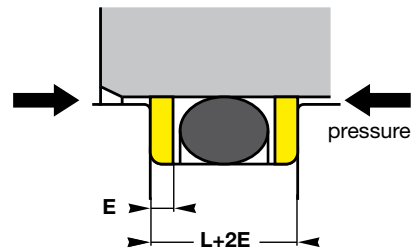


Fig. 156C

In double acting applications two back-up rings are installed, one on each side of the O-ring (**Fig. 156C**).

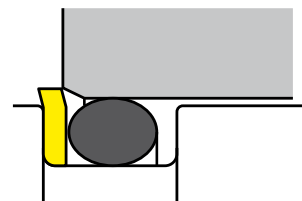


Fig. 156D

A bad determination of the dimensions can have a terrible impact and the mounting of a non-adapted back-up ring can cause following problems:

If the section of the ring is too large, the installation will be difficult or even impossible and the ring will inevitably be damaged (**Fig. 156D**).

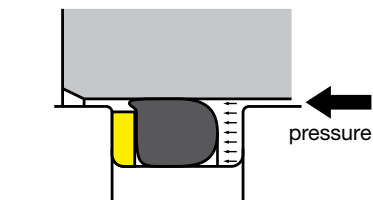


Fig. 156E

If the section of the ring is too small, it makes no sense to install the ring; the extrusion problem will remain (**Fig. 156E**).

PROFILES AND COMPOUNDS

We recommend **endless back-up rings** for internal as well as external grooves.

PTFE is used in applications with **high temperatures** and **special fluids**. For external grooves, the PTFE back-up rings have to be cut to make installation possible.

Although a back-up ring is an easy product, the **choice and the dimensions can be very complex**:

A In case of **replacement of existing back-up rings** during cilinder repair, many different groove depths will be encountered. The initial compression of the corresponding O-ring may vary between 10 and 30%.

Example:

For an O-ring **d=2,62 mm**, the depth of the housing will be:

2,25 mm for the **10PBK**

2,18 mm for the **10BU**

2 mm for the **28ST8** following the ISO groove (see table on page 235)

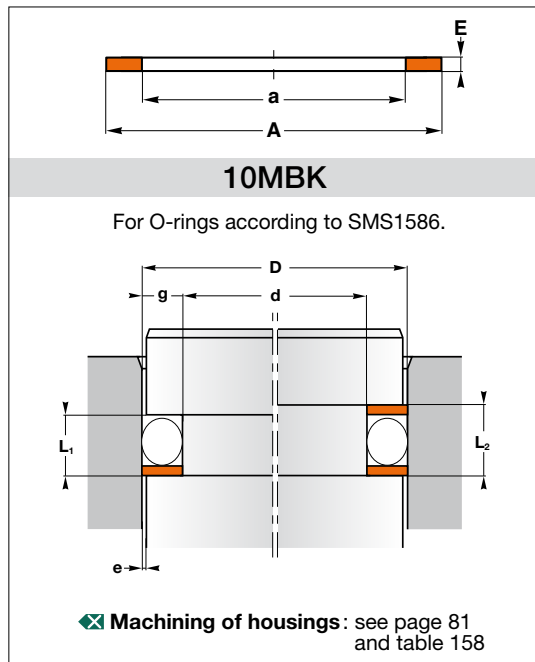
B With regard to **new constructions**, the standard product range of back-up ring manufacturers is rather limited. The same rings are used for static and dynamic sealing.

Example: our rings **10PBK, 10BR, 10BU** and **10MBK** are often used as a static seal, but in fact they are tend to be used for dynamic applications. The use of these back-up rings for static applications may be justified for economical reasons, but it is in contradiction with the groove depths we recommend.

This is the reason why we developed **our 28ST8 ring**. This one offers an **optimal technical solution** and moreover, the corresponding groove dimensions meet the requirements of the standard ISO 3601 (see table on page 195).

The choice of a back-up ring is completely different when intended to be introduced in a new construction or for replacement: **the table below will help you to make your choice.**

		-30°C to +110°C hydraulic oil	-200°C to +260°C special fluids
A REPLACEMENT OF EXISTING BACK-UP RINGS REPAIR without adaptation of the groove	The dimensions of the groove or the ring <u>correspond</u> to our standard back-up rings	10BU 10MBK 10PBK	10BR
	The dimensions of the groove or the ring <u>do not correspond</u> to our standard back-up rings	28ST8 PU30 according to the existing groove dimensions	28ST8 PT01 according to the existing groove dimensions
B NEW CONSTRUCTION or IMPROVEMENT of the actual solution	STATIC SEALING	28ST8 PU30 according to the table page 235	28ST8 PT01 according to the table page 235
	DYNAMIC SEALING	10PBK	10BR



10MBK back-up rings are used in conjunction with O-rings for both static and dynamic sealing applications. They prevent extrusion of the O-ring when it is subjected to high pressures, or when the extrusion gaps are excessive.

If pressure arises on only one side of the O-ring, it will suffice to fit one anti-extrusion ring on the side not exposed to pressure.

For double-acting applications, **two back-up rings** should be used, one on each side of the O-ring.

10MBK back-up rings are flat continuous anti-extrusion rings without a cut or a spiral shape that could cause system failure under extreme loads. They are made out of an elastic thermoplastic polyester resin which allows them to be stretched over pistons for easy installation and without any auxiliaries.

Operating conditions		✕ see page 8
Pressure	≤ 50 MPa	
Temperature	-30°C to 110°C	
Fluids	mineral oil, HFA, HFB	

Materials		✕ see pages 10-19
TPE	polyester 55 Sh D	

Assembly		✕ see pages 54-59
In one-piece housings		

Advantages	
Easy assembly	
Endless for internal and external housings	

Please contact us for applications approaching maximum values.

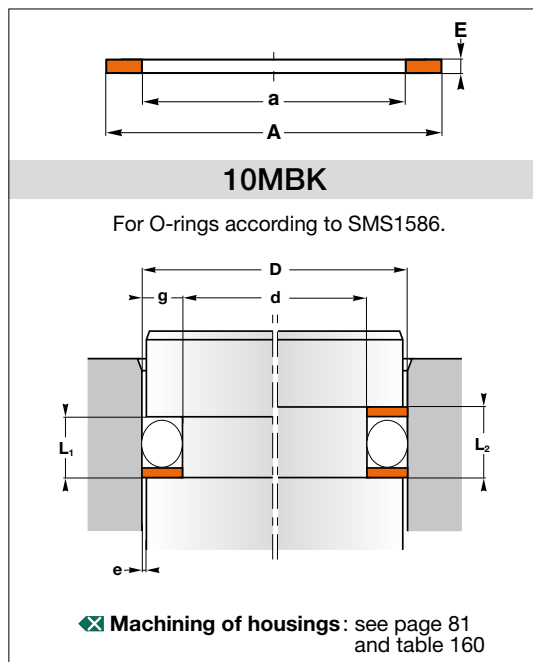
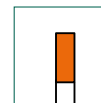
More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	25	30	35	40	50
e max (mm)	0,25	0,2	0,15	0,1	0,05

Table 158 (dynamic sealing)

O-ring Cs	g	L1	L2	E
2,4	2	4,6	5,9	1,3
3	2,5	5,4	6,7	1,3
5,7	5	8,9	10,6	1,7

O-ring cross section	O-ring	D	d	E	Reference	O-ring cross section	O-ring	D	d	E	Reference	
2,4	3,3 x 2,4	8	4	1,3	10MBK 4 8	3	99,5 x 3	105	100	1,3	10MBK 100105	
	5,3 x 2,4	10	6	1,3	10MBK 6 10		104,5 x 3	110	105	1,3	10MBK 105110	
	6,3 x 2,4	11	7	1,3	10MBK 7 11		109,5 x 3	115	110	1,3	10MBK 110115	
	7,3 x 2,4	12	8	1,3	10MBK 8 12		114,5 x 3	120	115	1,3	10MBK 115120	
	8,3 x 2,4	13	9	1,3	10MBK 9 13		119,5 x 3	125	120	1,3	10MBK 120125	
	9,3 x 2,4	14	10	1,3	10MBK 10 14		124,5 x 3	130	125	1,3	10MBK 125130	
	10,3 x 2,4	15	11	1,3	10MBK 11 15		129,5 x 3	135	130	1,3	10MBK 130135	
	11,3 x 2,4	16	12	1,3	10MBK 12 16		134,5 x 3	140	135	1,3	10MBK 135140	
	12,3 x 2,4	17	13	1,3	10MBK 13 17		144,5 x 3	150	145	1,3	10MBK 145150	
	13,3 x 2,4	18	14	1,3	10MBK 14 18		3,5	63 x 3,5	70	64	1,4	10MBK 64 70
	14,3 x 2,4	19	15	1,3	10MBK 15 19			68 x 3,5	75	69	1,5	10MBK 69 75
	15,3 x 2,4	20	16	1,3	10MBK 16 20			73 x 3,5	80	74	1,5	10MBK 74 80
3	16,3 x 2,4	21	17	1,3	10MBK 17 21	4	74 X 4	81	74,6	1,7	10MBK 74 81	
	17,3 x 2,4	22	18	1,3	10MBK 18 22		4,5	59 X 4,5	67	60	1,5	10MBK 60 67
	19,2 x 3	25	20	1,3	10MBK 20 25			69 X 4,5	77	70	1,5	10MBK 70 77
	22,2 x 3	28	23	1,3	10MBK 23 28	79 X 4,5		87	80	1,5	10MBK 80 87	
	24,2 x 3	30	25	1,3	10MBK 25 30	5,5	141 X 5,5	151	142	1,8	10MBK 142151	
	26,2 x 3	32	27	1,3	10MBK 27 32		151 X 5,5	161	152	1,8	10MBK 152161	
	29,2 x 3	35	30	1,3	10MBK 30 35		5,7	39,2 x 5,7	50	40	1,7	10MBK 40 50
	32,2 x 3	38	33	1,3	10MBK 33 38	44,2 x 5,7		55	45	1,7	10MBK 45 55	
	34,2 x 3	40	35	1,3	10MBK 35 40	49,2 x 5,7		60	50	1,7	10MBK 50 60	
	35,2 x 3	41	36	1,3	10MBK 36 41	52,2 x 5,7	63	53	1,7	10MBK 53 63		
	36,2 x 3	42	37	1,3	10MBK 37 42	54,2 x 5,7	65	55	1,7	10MBK 55 65		
	39,2 x 3	45	40	1,3	10MBK 40 45	59,2 x 5,7	70	60	1,7	10MBK 60 70		
44,2 x 3	50	45	1,3	10MBK 45 50	64,2 x 5,7	75	65	1,7	10MBK 65 75			
49,5 x 3	55	50	1,3	10MBK 50 55	69,2 x 5,7	80	70	1,7	10MBK 70 80			
53 x 3	59	54	1,4	10MBK 54 59	71,2 x 5,7	82,5	72,5	1,7	10MBK 72 82			
54,5 x 3	60	55	1,3	10MBK 55 60	74,2 x 5,7	85	75	1,7	10MBK 75 85			
57,2 x 3	63	58	1,3	10MBK 58 63	77,2 x 5,7	88	78	1,7	10MBK 78 88			
59,5 x 3	65	60	1,3	10MBK 60 65	79,2 x 5,7	90	80	1,7	10MBK 80 90			
62,2 x 3	68	63	1,3	10MBK 63 68	84,2 x 5,7	95	85	1,7	10MBK 85 95			
64,5 x 3	70	65	1,3	10MBK 65 70	89,2 x 5,7	100	90	1,7	10MBK 90100			
65 x 3	71	66	1,5	10MBK 66 71	94,2 x 5,7	105	95	1,7	10MBK 95105			
69 x 3	74	69	1,3	10MBK 69 74	99,2 x 5,7	110	100	1,7	10MBK 100110			
69,5 x 3	75	70	1,3	10MBK 70 75	104,2 x 5,7	115	105	1,7	10MBK 105115			
74,5 x 3	80	75	1,3	10MBK 75 80	109,2 x 5,7	120	110	1,7	10MBK 110120			
78 x 3	84	79	1,3	10MBK 79 84	114,2 x 5,7	125	115	1,7	10MBK 115125			
79,5 x 3	85	80	1,3	10MBK 80 85	119,2 x 5,7	130	120	1,7	10MBK 120130			
84,5 x 3	90	85	1,3	10MBK 85 90	124,2 x 5,7	135	125	1,7	10MBK 125135			
89,5 x 3	95	90	1,3	10MBK 90 95								
94,5 x 3	100	95	1,3	10MBK 95100								



10MBK back-up rings are used in conjunction with O-rings for both static and dynamic sealing applications. They prevent extrusion of the O-ring when it is subjected to high pressures, or when the extrusion gaps are excessive.

If pressure arises on only one side of the O-ring, it will suffice to fit one anti-extrusion ring on the side not exposed to pressure.

For double-acting applications, **two back-up rings** should be used, one on each side of the O-ring.

10MBK back-up rings are flat continuous anti-extrusion rings without a cut or a spiral shape that could cause system failure under extreme loads. They are made out of an elastic thermoplastic polyester resin which allows them to be stretched over pistons for easy installation and without any auxiliaries.

Operating conditions		see page 8
Pressure		≤ 50 MPa
Temperature		-30°C to 110°C
Fluids		mineral oil, HFA, HFB
Materials		see pages 10-19
TPE		polyester 55 Sh D

Assembly		see pages 54-59
In one-piece housings		

Advantages	
Easy assembly	
Endless for internal and external housings	

Please contact us for applications approaching maximum values.

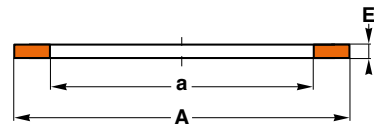
More information	
On www.sealtech-business.be , click first on the reference and then on the material code to obtain the data sheet of the material.	

O-ring cross section	O-ring	D	d	E	Reference
5,7	129,2 x 5,7	140	130	1,7	10MBK 130140
	134,2 x 5,7	145	135	1,7	10MBK 135145
	139,2 x 5,7	150	140	1,7	10MBK 140150
	144,2 x 5,7	155	145	1,7	10MBK 145155
	149,2 x 5,7	160	150	1,7	10MBK 150160
	154,2 x 5,7	165	155	1,7	10MBK 155165
	159,2 x 5,7	170	160	1,7	10MBK 160170
	164,2 x 5,7	175	165	1,7	10MBK 165175
	169,2 x 5,7	180	170	1,7	10MBK 170180
	174,2 x 5,7	185	175	1,7	10MBK 175185
	179,2 x 5,7	190	180	1,7	10MBK 180190
	184,2 x 5,7	195	185	1,7	10MBK 185195
5,7	189,2 x 5,7	200	190	1,7	10MBK 190200
	194,2 x 5,7	205	195	1,7	10MBK 195205
	199,2 x 5,7	210	200	1,7	10MBK 200210
	209,2 x 5,7	220	210	1,7	10MBK 210220
	219,2 x 5,7	230	220	1,7	10MBK 220230
	229,2 x 5,7	240	230	1,7	10MBK 230240
	239,2 x 5,7	250	240	1,7	10MBK 240250
	249,2 x 5,7	260	250	1,7	10MBK 250260

Pressure (MPa)	25	30	35	40	50
e max (mm)	0,25	0,2	0,15	0,1	0,05

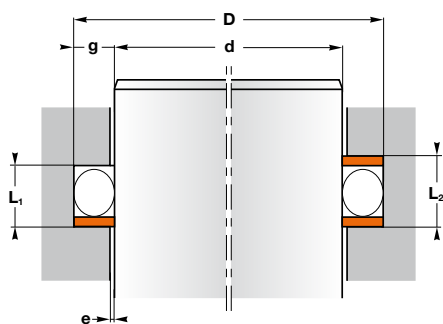
Table 160 (dynamic sealing)

O-ring Cs	g	L1	L2	E
2,4	2	4,6	5,9	1,3
3	2,5	5,4	6,7	1,3
5,7	5	8,9	10,6	1,7



10MBK.../INT

For O-rings according to SMS1586.



✘ **Machining of housings:** see page 81 and table 162

10MBK.../INT back-up rings are used in conjunction with O-rings for both static and dynamic sealing applications. They prevent extrusion of the O-ring when it is subjected to high pressures, or when the extrusion gaps are excessive.

If pressure arises on only one side of the O-ring, it will suffice to fit one anti-extrusion ring on the side not exposed to pressure.

For double-acting applications, **two back-up rings** should be used, one on each side of the O-ring.

10MBK.../INT back-up rings are flat continuous anti-extrusion rings without a cut or a spiral shape that could cause system failure under extreme loads. They are made out of an elastic thermoplastic polyester resin which allows them to be stretched over pistons for easy installation and without any auxiliaries.

Operating conditions	✘ see page 8
Pressure	≤ 50 MPa
Temperature	-30°C to 110°C
Fluids	mineral oil, HFA, HFB
Materials	✘ see pages 10-19
TPE	polyester 55 Sh D

Assembly	✘ see pages 54-59
In one-piece housings	

Advantages	
Easy assembly	
Endless for internal and external housings	

Please contact us for applications approaching maximum values.

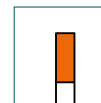
More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	25	30	35	40	50
e max (mm)	0,25	0,2	0,15	0,1	0,05

Table 162 (dynamic sealing)

O-ring Cs	g	L1	L2	E
2,4	2	4,6	5,9	1,3
3	2,5	5,4	6,7	1,3
5,7	5	8,9	10,6	1,7

O-ring cross section	O-ring	d	D	E	Reference	O-ring cross section	O-ring	d	D	E	Reference	
2,4	3,3 x 2,4	4	8	1,3	10MBK 4 8	3	99,5 x 3	100	105	1,3	10MBK 100105	
	5,3 x 2,4	6	10	1,3	10MBK 6 10		104,5 x 3	105	110	1,3	10MBK 105110	
	6,3 x 2,4	7	11	1,3	10MBK 7 11		109,5 x 3	110	115	1,3	10MBK 110115	
	7,3 x 2,4	8	12	1,3	10MBK 8 12		114,5 x 3	115	120	1,3	10MBK 115120	
	8,3 x 2,4	9	13	1,3	10MBK 9 13		119,5 x 3	120	125	1,3	10MBK 120125	
	9,3 x 2,4	10	14	1,3	10MBK 10 14		124,5 x 3	125	130	1,3	10MBK 125130	
	10,3 x 2,4	11	15	1,3	10MBK 11 15		129,5 x 3	130	135	1,3	10MBK 130135	
	11,3 x 2,4	12	16	1,3	10MBK 12 16		134,5 x 3	135	140	1,3	10MBK 135140	
	12,3 x 2,4	13	17	1,3	10MBK 13 17		144,5 x 3	145	150	1,3	10MBK 145150	
	13,3 x 2,4	14	18	1,3	10MBK 14 18		3,5	63 x 3,5	64	70	1,4	10MBK 64 70
	14,3 x 2,4	15	19	1,3	10MBK 15 19			68 x 3,5	69	75	1,5	10MBK 69 75
	15,3 x 2,4	16	20	1,3	10MBK 16 20			73 x 3,5	74	80	1,5	10MBK 74 80
3	16,3 x 2,4	17	21	1,3	10MBK 17 21	4	74 x 4	74,6	81	1,7	10MBK 74 81	
	17,3 x 2,4	18	22	1,3	10MBK 18 22		92 x 4	92,5	99,1	1,4	10MBK 92 99	
	19,2 x 3	20	25	1,3	10MBK 20 25	4,5	59 X 4,5	60	67	1,5	10MBK 60 67	
	22,2 x 3	23	28	1,3	10MBK 23 28		69 X 4,5	70	77	1,5	10MBK 70 77	
	24,2 x 3	25	30	1,3	10MBK 25 30		79 X 4,5	80	87	1,5	10MBK 80 87	
	26,2 x 3	27	32	1,3	10MBK 27 32	5,5	141 X 5,5	142	151	1,8	10MBK 142151	
	29,2 x 3	30	35	1,3	10MBK 30 35		151 X 5,5	152	161	1,8	10MBK 152161	
	32,2 x 3	33	38	1,3	10MBK 33 38		5,7	39,2 x 5,7	40	50	1,7	10MBK 40 50
	34,2 x 3	35	40	1,3	10MBK 35 40	44,2 x 5,7		45	55	1,7	10MBK 45 55	
	35,2 x 3	36	41	1,3	10MBK 36 41	49,2 x 5,7		50	60	1,7	10MBK 50 60	
	36,2 x 3	37	42	1,3	10MBK 37 42	52,2 x 5,7	53	63	1,7	10MBK 53 63		
	39,2 x 3	40	45	1,3	10MBK 40 45		54,2 x 5,7	55	65	1,7	10MBK 55 65	
44,2 x 3	45	50	1,3	10MBK 45 50	59,2 x 5,7		60	70	1,7	10MBK 60 70		
49,5 x 3	50	55	1,3	10MBK 50 55	64,2 x 5,7	65	75	1,7	10MBK 65 75			
53 x 3	54	59	1,4	10MBK 54 59		69,2 x 5,7	70	80	1,7	10MBK 70 80		
54,5 x 3	55	60	1,3	10MBK 55 60		71,2 x 5,7	72,5	82,5	1,7	10MBK 72 82		
57,2 x 3	58	63	1,3	10MBK 58 63	74,2 x 5,7	75	85	1,7	10MBK 75 85			
59,5 x 3	60	65	1,3	10MBK 60 65		77,2 x 5,7	78	88	1,7	10MBK 78 88		
62,2 x 3	63	68	1,3	10MBK 63 68		79,2 x 5,7	80	90	1,7	10MBK 80 90		
64,5 x 3	65	70	1,3	10MBK 65 70	84,2 x 5,7	85	95	1,7	10MBK 85 95			
65 x 3	66	71	1,5	10MBK 66 71		89,2 x 5,7	90	100	1,7	10MBK 90100		
69 x 3	69	74	1,3	10MBK 69 74		94,2 x 5,7	95	105	1,7	10MBK 95105		
69,5 x 3	70	75	1,3	10MBK 70 75	99,2 x 5,7	100	110	1,7	10MBK 100110			
74,5 x 3	75	80	1,3	10MBK 75 80		104,2 x 5,7	105	115	1,7	10MBK 105115		
78 x 3	79	84	1,3	10MBK 79 84		109,2 x 5,7	110	120	1,7	10MBK 110120		
79,5 x 3	80	85	1,3	10MBK 80 85	114,2 x 5,7	115	125	1,7	10MBK 115125			
84,5 x 3	85	90	1,3	10MBK 85 90		119,2 x 5,7	120	130	1,7	10MBK 120130		
89,5 x 3	90	95	1,3	10MBK 90 95		124,2 x 5,7	125	135	1,7	10MBK 125135		
94,5 x 3	95	100	1,3	10MBK 95100								



10MBK.../INT
For O-rings according to SMS1586.

✕ **Machining of housings:** see page 81 and table 164

10MBK.../INT back-up rings are used in conjunction with O-rings for both static and dynamic sealing applications. They prevent extrusion of the O-ring when it is subjected to high pressures, or when the extrusion gaps are excessive.

If pressure arises on only one side of the O-ring, it will suffice to fit one anti-extrusion ring on the side not exposed to pressure.

For double-acting applications, **two back-up rings** should be used, one on each side of the O-ring.

10MBK.../INT back-up rings are flat continuous anti-extrusion rings without a cut or a spiral shape that could cause system failure under extreme loads. They are made out of an elastic thermoplastic polyester resin which allows them to be stretched over pistons for easy installation and without any auxiliaries.

Operating conditions	✕ see page 8
Pressure	≤ 50 MPa
Temperature	-30°C to 110°C
Fluids	mineral oil, HFA, HFB
Materials	✕ see pages 10-19
TPE	polyester 55 Sh D

Assembly	✕ see pages 54-59
In one-piece housings	

Advantages
Easy assembly
Endless for internal and external housings

Please contact us for applications approaching maximum values.

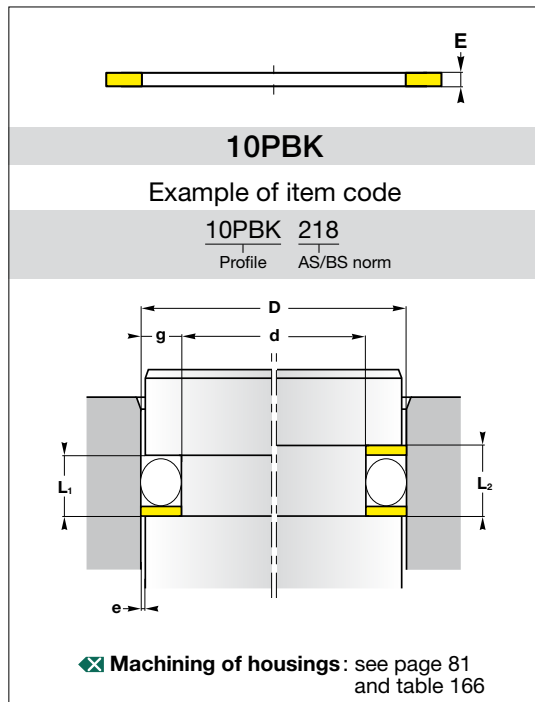
More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	25	30	35	40	50
e max (mm)	0,25	0,2	0,15	0,1	0,05

Table 164 (dynamic sealing)

O-ring Cs	g	L1	L2	E
2,4	2	4,6	5,9	1,3
3	2,5	5,4	6,7	1,3
5,7	5	8,9	10,6	1,7

O-ring cross section	O-ring	d	D	E	Reference
5,7	129,2 x 5,7	130	140	1,7	10MBK 130140
	134,2 x 5,7	135	145	1,7	10MBK 135145
	139,2 x 5,7	140	150	1,7	10MBK 140150
	144,2 x 5,7	145	155	1,7	10MBK 145155
	149,2 x 5,7	150	160	1,7	10MBK 150160
	154,2 x 5,7	155	165	1,7	10MBK 155165
	159,2 x 5,7	160	170	1,7	10MBK 160170
	164,2 x 5,7	165	175	1,7	10MBK 165175
	169,2 x 5,7	170	180	1,7	10MBK 170180
	174,2 x 5,7	175	185	1,7	10MBK 175185
	179,2 x 5,7	180	190	1,7	10MBK 180190
	184,2 x 5,7	185	195	1,7	10MBK 185195
5,7	189,2 x 5,7	190	200	1,7	10MBK 190200
	194,2 x 5,7	195	205	1,7	10MBK 195205
	199,2 x 5,7	200	210	1,7	10MBK 200210
	209,2 x 5,7	210	220	1,7	10MBK 210220
	219,2 x 5,7	220	230	1,7	10MBK 220230
	229,2 x 5,7	230	240	1,7	10MBK 230240
	239,2 x 5,7	240	250	1,7	10MBK 240250
	249,2 x 5,7	250	260	1,7	10MBK 250260



10PBK back-up rings are used in conjunction with O-rings for both static and dynamic sealing applications. They prevent extrusion of the O-ring when it is subjected to high pressures, or when the extrusion gaps are excessive.

If pressure arises on only one side of the O-ring, it will suffice to fit one anti-extrusion ring on the side not exposed to pressure.

For double-acting applications, **two back-up rings** should be used, one on each side of the O-ring.

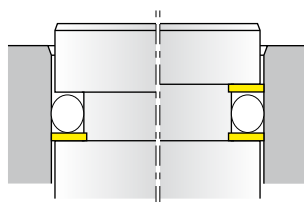
10PBK back-up rings are flat continuous anti-extrusion rings without a cut or a spiral shape that could cause system failure under extreme loads. They are made out of an elastic thermoplastic polyester resin which allows them to be stretched over pistons for easy installation and without any auxiliaries.

Operating conditions		✂ see page 8
Pressure	≤ 50 MPa	
Temperature	-30°C to 110°C	
Fluids	mineral oil, HFA, HFB	
Materials		✂ see pages 10-19
TPE	polyester 55 Sh D	

Assembly		✂ see pages 54-59
In one-piece housings		

Advantages	
Easy assembly	
Endless for internal and external housings	

Please contact us for applications approaching maximum values.



Advise: for static sealing, with machining of housings following the two drawings above, it is possible to use 10PBK back-up rings respecting the DIN/ISO norm (static sealing).

Pressure (MPa)	25	30	35	40	50
e max (mm)	0,25	0,2	0,15	0,1	0,05

O-ring Cs	g	L1	L2	E
1,78	1,55	3,8	5,2	1,4
2,62	2,25	5	6,4	1,4
3,53	3,1	6,2	7,6	1,4
5,34	4,7	8,8	10,5	1,7
7	6,1	12	14,5	2,5

O-ring cross section	O-ring	D	d	Reference	O-ring cross section	O-ring	D	d	Reference
1,78	6,07 x 1,78	10	6,9	10PBK 010/610	2,62	39,34 x 2,62	45	40,5	10PBK 129
	7,65 x 1,78	11	7,9	10PBK 011		40,94 x 2,62	46	41,5	10PBK 130
	8,73 x 1,78	12	8,9	10PBK 011		42,52 x 2,62	48	43,5	10PBK 131
	9,25 x 1,78	13	9,9	10PBK 012		44,12 x 2,62	49	44,5	10PBK 132
	10,82 x 1,78	14	10,9	10PBK 013		45,69 x 2,62	51	46,5	10PBK 133
	12,42 x 1,78	16	12,9	10PBK 014		47,29 x 2,62	53	48,5	10PBK 134
	14,0 x 1,78	18	14,9	10PBK 015		48,9 x 2,62	54	48,5	10PBK 135
	15,6 x 1,78	19	15,9	10PBK 016		50,47 x 2,62	56	51,5	10PBK 136
	17,17 x 1,78	21	17,9	10PBK 017		52,07 x 2,62	57	52,5	10PBK 137
	20,35 x 1,78	24	20,9	10PBK 019		53,64 x 2,62	59	54,5	10PBK 138
	21,95 x 1,78	26	22,9	10PBK 020		55,25 x 2,62	61	56,5	10PBK 139
	28,3 x 1,78	32	28,9	10PBK 024		56,82 x 2,62	62	57,5	10PBK 140
	29,87 x 1,78	33	29,9	10PBK 025		58,42 x 2,62	64	59,5	10PBK 141
	31,47 x 1,78	35	31,9	10PBK 026		59,99 x 2,62	65	60,5	10PBK 142
	33,05 x 1,78	37	33,9	10PBK 027		61,6 x 2,62	67	62,5	10PBK 143
	37,82 x 1,78	41	37,9	10PBK 029		63,17 x 2,62	68	63,5	10PBK 144
	41,0 x 1,78	45	41,9	10PBK 030		64,77 x 2,62	70	65,5	10PBK 145
	47,35 x 1,78	51	47,9	10PBK 032		66,34 x 2,62	72	67,5	10PBK 146
2,62	7,6 x 2,62	13	8,5	10PBK 109	67,95 x 2,62	73	68,5	10PBK 147	
	9,19 x 2,62	15	10,5	10PBK 110/613	69,52 x 2,62	75	70,5	10PBK 148	
	10,77 x 2,62	16	11,5	10PBK 111	71,12 x 2,62	76	71,5	10PBK 149	
	11,91 x 2,62	17	12,5	10PBK 614	72,69 x 2,62	78	73,5	10PBK 150	
	12,37 x 2,62	18	13,5	10PBK 112	82,22 x 2,62	88	83,5	10PBK 152	
	13,94 x 2,62	19	14,5	10PBK 113	88,57 x 2,62	94	89,5	10PBK 153	
	15,08 x 2,62	20	15,5	10PBK 616	94,92 x 2,62	101	96,5	10PBK 154	
	15,54 x 2,62	21	16,5	10PBK 114/809	113,97 x 2,62	120	115,5	10PBK 157	
	17,12 x 2,62	22	17,5	10PBK 115					
	17,86 x 2,62	23	18,5	10PBK 617	3,53	18,64 x 3,53	26	19,8	10PBK 210
	18,72 x 2,62	24	19,5	10PBK 116		20,22 x 3,53	28	21,8	10PBK 211
	20,3 x 2,62	25	20,5	10PBK 117		21,82 x 3,53	29	22,8	10PBK 212
	20,64 x 2,62	26	21,5	10PBK 812	23,39 x 3,53	30	23,8	10PBK 213	
	21,89 x 2,62	27	22,5	10PBK 118/813	24,99 x 3,53	32	25,8	10PBK 214	
	23,47 x 2,62	29	24,5	10PBK 119/814	25,8 x 3,53	33	26,8	10PBK 618	
	25,07 x 2,62	30	25,5	10PBK 120	26,57 x 3,53	34	27,8	10PBK 215	
	26,64 x 2,62	32	27,5	10PBK 121	28,17 x 3,53	35	28,8	10PBK 216	
	28,24 x 2,62	33	28,5	10PBK 122	29,74 x 3,53	37	30,8	10PBK 217	
29,82 x 2,62	35	30,5	10PBK 123	31,34 x 3,53	38	31,8	10PBK 218		
31,42 x 2,62	37	32,5	10PBK 124	32,92 x 3,53	40	33,8	10PBK 219		
32,99 x 2,62	38	33,5	10PBK 125	34,52 x 3,53	42	35,8	10PBK 220		
34,57 x 2,62	40	35,5	10PBK 126	36,09 x 3,53	43	36,8	10PBK 221		
36,17 x 2,62	41	36,5	10PBK 127	37,69 x 3,53	45	38,8	10PBK 222		
37,77 x 2,62	43	38,5	10PBK 128	39,7 x 3,53	46	39,8	10PBK 824		

10PBK

Example of item code
10PBK 218
 Profile AS/BS norm

✕ **Machining of housings:** see page 81 and table 168

10PBK back-up rings are used in conjunction with O-rings for both static and dynamic sealing applications. They prevent extrusion of the O-ring when it is subjected to high pressures, or when the extrusion gaps are excessive.

If pressure arises on only one side of the O-ring, it will suffice to fit one anti-extrusion ring on the side not exposed to pressure.

For double-acting applications, **two back-up rings** should be used, one on each side of the O-ring.

10PBK back-up rings are flat continuous anti-extrusion rings without a cut or a spiral shape that could cause system failure under extreme loads. They are made out of an elastic thermoplastic polyester resin which allows them to be stretched over pistons for easy installation and without any auxiliaries.

Operating conditions ✕ see page 8

Pressure ≤ 50 MPa
 Temperature -30°C to 110°C
 Fluids mineral oil, HFA, HFB

Materials ✕ see pages 10-19
 TPE polyester 55 Sh D

Assembly ✕ see pages 54-59
 In one-piece housings

Advantages

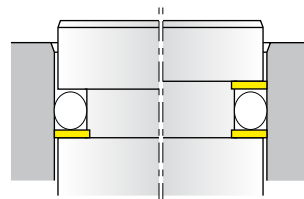
Easy assembly
 Endless for internal and external housings

Please contact us for applications approaching maximum values.

Pressure (MPa)	25	30	35	40	50
e max (mm)	0,25	0,2	0,15	0,1	0,05

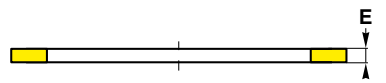
Table 168 (dynamic sealing)

O-ring Cs	g	L1	L2	E
1,78	1,55	3,8	5,2	1,4
2,62	2,25	5	6,4	1,4
3,53	3,1	6,2	7,6	1,4
5,34	4,7	8,8	10,5	1,7
7	6,1	12	14,5	2,5



Advise: for static sealing, with machining of housings following the two drawings above, it is possible to use 10PBK back-up rings respecting the DIN/ISO norm (static sealing).

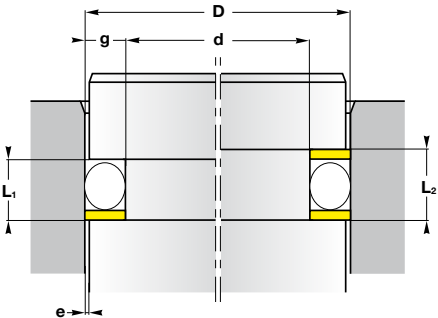
O-ring cross section	O-ring	D	d	Reference	O-ring cross section	O-ring	D	d	Reference
3,53	40,87 x 3,53	48	41,8	10PBK 223/825	3,53	139,29 x 3,53	146	139,8	10PBK 254
	42,86 x 3,53	50	43,8	10PBK 826		142,47 x 3,53	149	142,8	10PBK 255
	44,04 x 3,53	51	44,8	10PBK 224/827		148,82 x 3,53	155	148,8	10PBK 257
	46,04 x 3,53	53	46,8	10PBK 828	151,99 x 3,53	159	152,8	10PBK 258	
	47,22 x 3,53	54	47,8	10PBK 225/829	202,79 x 3,53	210	203,8	10PBK 266	
	49,2 x 3,53	56	49,8	10PBK 830	221,84 x 3,53	228	221,8	10PBK 269	
	50,39 x 3,53	58	51,8	10PBK 226/831	5,34	37,47 x 5,34	48	38,6	10PBK 325
	52,4 x 3,53	60	53,8	10PBK 832		40,64 x 5,34	52	42,6	10PBK 326
	53,57 x 3,53	61	54,8	10PBK 227/833		43,82 x 5,34	55	45,6	10PBK 327
	55,56 x 3,53	62	55,8	10PBK 834	46,99 x 5,34	58	48,6	10PBK 328	
	56,74 x 3,53	64	57,8	10PBK 228/835	50,17 x 5,34	61	51,6	10PBK 329	
	58,74 x 3,53	65	58,8	10PBK 836	53,34 x 5,34	64	54,6	10PBK 330	
59,92 x 3,53	67	60,8	10PBK 229/837	56,52 x 5,34	68	58,6	10PBK 331		
61,9 x 3,53	69	62,8	10PBK 838	59,69 x 5,34	70	60,6	10PBK 332		
63,09 x 3,53	70	63,8	10PBK 230/839	62,87 x 5,34	73	63,6	10PBK 333		
65,1 x 3,53	72	65,8	10PBK 840	66,04 x 5,34	77	67,6	10PBK 334		
66,27 x 3,53	73	66,8	10PBK 231/841	69,22 x 5,34	80	70,6	10PBK 335		
68,26 x 3,53	75	68,8	10PBK 842	72,39 x 5,34	83	73,6	10PBK 336		
69,44 x 3,53	77	70,8	10PBK 232/843	74,63 x 5,34	85	75,6	10PBK 619		
71,44 x 3,53	78	71,8	10PBK 844	75,57 x 5,34	86	76,6	10PBK 337		
72,62 x 3,53	80	73,8	10PBK 233/845	78,74 x 5,34	90	80,6	10PBK 338/620		
74,6 x 3,53	81	74,8	10PBK 846	81,92 x 5,34	92	82,6	10PBK 339		
75,79 x 3,53	83	76,8	10PBK 234	85,09 x 5,34	95	85,6	10PBK 340		
78,97 x 3,53	86	79,8	10PBK 235	88,27 x 5,34	98	88,6	10PBK 341		
82,14 x 3,53	89	82,8	10PBK 236	89,69 x 5,34	100	90,6	10PBK 621		
85,32 x 3,53	92	85,8	10PBK 237	91,44 x 5,34	102	92,6	10PBK 342		
88,49 x 3,53	95	88,8	10PBK 238	94,62 x 5,34	105	95,6	10PBK 343		
91,67 x 3,53	99	92,8	10PBK 239	97,79 x 5,34	108	98,6	10PBK 344		
94,84 x 3,53	102	95,8	10PBK 240	100,0 x 5,34	110	100,6	10PBK 622		
98,02 x 3,53	105	98,8	10PBK 241	100,97 x 5,34	111	101,6	10PBK 345		
101,19 x 3,53	108	101,8	10PBK 242	104,14 x 5,34	115	105,6	10PBK 346		
104,37 x 3,53	111	104,8	10PBK 243	107,32 x 5,34	118	108,6	10PBK 347		
107,54 x 3,53	114	107,8	10PBK 244	110,49 x 5,34	121	111,6	10PBK 348/623		
110,72 x 3,53	118	111,8	10PBK 245	113,67 x 5,34	125	115,6	10PBK 349		
113,89 x 3,53	121	114,8	10PBK 246	116,84 x 5,34	128	118,6	10PBK 350/860		
117,07 x 3,53	124	117,8	10PBK 247	120,02 x 5,34	132	122,6	10PBK 351/861		
120,24 x 3,53	127	120,8	10PBK 248	123,8 x 5,34	135	125,6	10PBK 862		
123,42 x 3,53	130	123,8	10PBK 249	126,37 x 5,34	137	127,6	10PBK 353/863		
126,59 x 3,53	133	126,8	10PBK 250	129,54 x 5,34	140	130,6	10PBK 354/864		
129,77 x 3,53	136	129,8	10PBK 251	133,35 x 5,34	145	135,6	10PBK 865		
132,94 x 3,53	140	133,8	10PBK 252	135,89 x 5,34	147	137,6	10PBK 356/866		
136,12 x 3,53	143	136,8	10PBK 253	139,07 x 5,34	150	140,6	10PBK 357/867		



10PBK

Example of item code

10PBK 218
 Profile AS/BS norm



✕ **Machining of housings:** see page 81 and table 170

10PBK back-up rings are used in conjunction with O-rings for both static and dynamic sealing applications. They prevent extrusion of the O-ring when it is subjected to high pressures, or when the extrusion gaps are excessive.

If pressure arises on only one side of the O-ring, it will suffice to fit one anti-extrusion ring on the side not exposed to pressure.

For double-acting applications, **two back-up rings** should be used, one on each side of the O-ring.

10PBK back-up rings are flat continuous anti-extrusion rings without a cut or a spiral shape that could cause system failure under extreme loads. They are made out of an elastic thermoplastic polyester resin which allows them to be stretched over pistons for easy installation and without any auxiliaries.

Operating conditions		✕ see page 8
Pressure		≤ 50 MPa
Temperature		-30°C to 110°C
Fluids		mineral oil, HFA, HFB
Materials		✕ see pages 10-19
TPE		polyester 55 Sh D

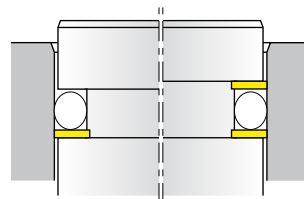
Assembly		✕ see pages 54-59
In one-piece housings		

Advantages	
Easy assembly	
Endless for internal and external housings	

Please contact us for applications approaching maximum values.

Pressure (MPa)	25	30	35	40	50
e max (mm)	0,25	0,2	0,15	0,1	0,05

O-ring Cs	g	L1	L2	E
1,78	1,55	3,8	5,2	1,4
2,62	2,25	5	6,4	1,4
3,53	3,1	6,2	7,6	1,4
5,34	4,7	8,8	10,5	1,7
7	6,1	12	14,5	2,5



Advise: for static sealing, with machining of housings following the two drawings above, it is possible to use 10PBK back-up rings respecting the DIN/ISO norm (static sealing).

O-ring cross section	O-ring	D	d	Reference
5,34	142,24 x 5,34	153	143,6	10PBK 358/868
	148,59 x 5,34	160	150,6	10PBK 360/870
	151,77 x 5,34	163	153,6	10PBK 361
	158,12 x 5,34	169	159,6	10PBK 362
	164,47 x 5,34	175	165,6	10PBK 363
	170,82 x 5,34	182	172,6	10PBK 364
	177,17 x 5,34	188	178,6	10PBK 365
	189,87 x 5,34	200	190,6	10PBK 367
	196,22 x 5,34	207	197,6	10PBK 368
	208,92 x 5,34	220	210,6	10PBK 370
7 (6,99)	221,62 x 5,34	232	222,6	10PBK 372
	227,97 x 5,34	239	229,6	10PBK 373
	113,67 x 7	127	114,8	10PBK 425
	116,84 x 7	130	117,8	10PBK 426
	123,2 x 7	137	124,8	10PBK 428
	126,37 x 7	140	127,8	10PBK 429
	132,72 x 7	146	133,8	10PBK 431
	135,89 x 7	150	137,8	10PBK 432
	139,07 x 7	153	140,8	10PBK 433
	145,42 x 7	160	147,8	10PBK 435
155,6 x 7	170	157,8	10PBK 872	
	166,7 x 7	180	167,8	10PBK 628
	181,0 x 7	195	182,8	10PBK 880
	183,52 x 7	197	184,8	10PBK 442
	189,87 x 7	203	190,8	10PBK 443
	193,7 x 7	207	194,8	10PBK 884
	196,22 x 7	210	197,8	10PBK 444
	208,92 x 7	222	209,8	10PBK 674
	215,27 x 7	230	217,8	10PBK 446
	227,97 x 7	242	229,8	10PBK 447
	234,32 x 7	250	237,8	10PBK 678
272,4 x 7	286	273,8	10PBK 684	

10PBK.../INT
Example of item code
10PBK 218/INT
Profile AS/BS norm

✕ **Machining of housings:** see page 81 and table 172

10PBK.../INT back-up rings are used in conjunction with O-rings for both static and dynamic sealing applications. They prevent extrusion of the O-ring when it is subjected to high pressures, or when the extrusion gaps are excessive.

If pressure arises on only one side of the O-ring, it will suffice to fit one anti-extrusion ring on the side not exposed to pressure.

For double-acting applications, **two back-up rings** should be used, one on each side of the O-ring.

10PBK.../INT back-up rings are flat continuous anti-extrusion rings without a cut or a spiral shape that could cause system failure under extreme loads. They are made out of an elastic thermoplastic polyester resin which allows them to be stretched over pistons for easy installation and without any auxiliaries.

Operating conditions	✕ see page 8
Pressure	≤ 50 MPa
Temperature	-30°C to 110°C
Fluids	mineral oil, HFA, HFB
Materials	✕ see pages 10-19
TPE	polyester 55 Sh D

Assembly	✕ see pages 54-59
In one-piece housings	

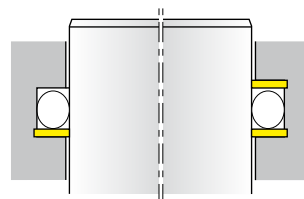
Advantages	
Easy assembly	
Endless for internal and external housings	

Please contact us for applications approaching maximum values.

Pressure (MPa)	25	30	35	40	50
e max (mm)	0,25	0,2	0,15	0,1	0,05

Table 172 (dynamic sealing)

O-ring Cs	g	L1	L2	E
1,78	1,55	3,8	5,2	1,4
2,62	2,25	5	6,4	1,4
3,53	3,1	6,2	7,6	1,4
5,34	4,7	8,8	10,5	1,7
7	6,1	12	14,5	2,5



Advise: for static sealing, with machining of housings following the two drawings above, it is possible to use 10PBK.../INT back-up rings respecting the DIN/ISO norm (static sealing).

O-ring cross section	O-ring	d	D	Reference	O-ring cross section	O-ring	d	D	Reference
1,78	6,07 x 1,78	7	10,1	10PBK 010/610	2,62	39,34 x 2,62	40	44,5	10PBK 129
	7,65 x 1,78	8	11,1	10PBK 011		40,94 x 2,62	41	45,5	10PBK 130
	8,73 x 1,78	9	12,1	10PBK 012		42,52 x 2,62	43	47,5	10PBK 131
	9,25 x 1,78	9	12,1	10PBK 012		44,12 x 2,62	44	48,5	10PBK 132
	10,82 x 1,78	11	14,1	10PBK 013		45,69 x 2,62	46	50,5	10PBK 133
	12,42 x 1,78	13	16,1	10PBK 014		47,29 x 2,62	48	52,5	10PBK 134
	14,0 x 1,78	14	17,1	10PBK 015		48,9 x 2,62	49	53,5	10PBK 135
	15,6 x 1,78	16	19,1	10PBK 016		50,47 x 2,62	51	55,5	10PBK 136
	17,17 x 1,78	17	20,1	10PBK 017		52,07 x 2,62	52	56,5	10PBK 137
	20,35 x 1,78	21	24,1	10PBK 019		53,64 x 2,62	54	58,5	10PBK 138
	21,95 x 1,78	22	25,1	10PBK 020		55,25 x 2,62	55	59,5	10PBK 139
	28,3 x 1,78	28	31,1	10PBK 024		56,82 x 2,62	57	61,5	10PBK 140
	29,87 x 1,78	30	33,1	10PBK 025		58,42 x 2,62	59	63,5	10PBK 141
	31,47 x 1,78	32	35,1	10PBK 026		59,99 x 2,62	60	64,5	10PBK 142
	33,05 x 1,78	33	36,1	10PBK 027		61,6 x 2,62	62	66,5	10PBK 143
	37,82 x 1,78	38	41,1	10PBK 029		63,17 x 2,62	63	67,5	10PBK 144
	41,0 x 1,78	41	44,1	10PBK 030		64,77 x 2,62	65	69,5	10PBK 145
	47,35 x 1,78	48	51,1	10PBK 032		66,34 x 2,62	67	71,5	10PBK 146
2,62	7,6 x 2,62	8	12,5	10PBK 109	67,95 x 2,62	68	72,5	10PBK 147	
	9,19 x 2,62	10	14,5	10PBK 110/613	69,52 x 2,62	70	74,5	10PBK 148	
	10,77 x 2,62	11	15,5	10PBK 111	71,12 x 2,62	71	75,5	10PBK 149	
	11,91 x 2,62	12	16,5	10PBK 614	72,69 x 2,62	73	77,5	10PBK 150	
	12,37 x 2,62	12,5	17	10PBK 112	82,22 x 2,62	82	86,5	10PBK 152	
	13,94 x 2,62	14	18,5	10PBK 113	88,57 x 2,62	89	93,5	10PBK 153	
	15,08 x 2,62	15	19,5	10PBK 616	94,92 x 2,62	95	99,5	10PBK 154	
	15,54 x 2,62	16	20,5	10PBK 114/809	113,97 x 2,62	114	118,5	10PBK 157	
	17,12 x 2,62	17	21,5	10PBK 115					
	17,86 x 2,62	18	22,5	10PBK 617	3,53	18,64 x 3,53	19	25,2	10PBK 210
	18,72 x 2,62	19	23,5	10PBK 116		20,22 x 3,53	20	26,2	10PBK 211
	20,3 x 2,62	20	24,5	10PBK 117		21,82 x 3,53	22	28,2	10PBK 212
20,64 x 2,62	21	25,5	10PBK 812	23,39 x 3,53	23	29,2	10PBK 213		
21,89 x 2,62	22	26,5	10PBK 118/813	24,99 x 3,53	25	31,2	10PBK 214		
23,47 x 2,62	24	28,5	10PBK 119/814	25,8 x 3,53	26	32,2	10PBK 618		
25,07 x 2,62	25	29,5	10PBK 120	26,57 x 3,53	27	33,2	10PBK 215		
26,64 x 2,62	27	31,5	10PBK 121	28,17 x 3,53	28	34,2	10PBK 216		
28,24 x 2,62	28	32,5	10PBK 122	29,74 x 3,53	30	36,2	10PBK 217		
29,82 x 2,62	30	34,5	10PBK 123	31,34 x 3,53	31	37,2	10PBK 218		
31,42 x 2,62	32	36,5	10PBK 124	32,92 x 3,53	33	39,2	10PBK 219		
32,99 x 2,62	33	37,5	10PBK 125	34,52 x 3,53	35	41,2	10PBK 220		
34,57 x 2,62	35	39,5	10PBK 126	36,09 x 3,53	36	42,2	10PBK 221		
36,17 x 2,62	36	40,5	10PBK 127	37,69 x 3,53	38	44,2	10PBK 222		
37,77 x 2,62	38	42,5	10PBK 128	39,7 x 3,53	40	46,2	10PBK 824		

10PBK.../INT
Example of item code
10PBK 218/INT
Profile AS/BS norm

✕ **Machining of housings:** see page 81 and table 174

10PBK.../INT back-up rings are used in conjunction with O-rings for both static and dynamic sealing applications. They prevent extrusion of the O-ring when it is subjected to high pressures, or when the extrusion gaps are excessive.

If pressure arises on only one side of the O-ring, it will suffice to fit one anti-extrusion ring on the side not exposed to pressure.

For double-acting applications, **two back-up rings** should be used, one on each side of the O-ring.

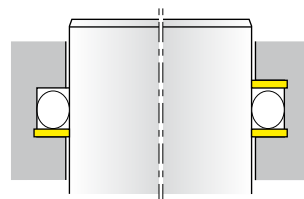
10PBK.../INT back-up rings are flat continuous anti-extrusion rings without a cut or a spiral shape that could cause system failure under extreme loads. They are made out of an elastic thermoplastic polyester resin which allows them to be stretched over pistons for easy installation and without any auxiliaries.

- Operating conditions** ✕ see page 8
 - Pressure ≤ 50 MPa
 - Temperature -30°C to 110°C
 - Fluids mineral oil, HFA, HFB
- Materials** ✕ see pages 10-19
 - TPE polyester 55 Sh D

- Assembly** ✕ see pages 54-59
 - In one-piece housings

- Advantages**
 - Easy assembly
 - Endless for internal and external housings

Please contact us for applications approaching maximum values.



Advise: for static sealing, with machining of housings following the two drawings above, it is possible to use 10PBK.../INT back-up rings respecting the DIN/ISO norm (static sealing).

Pressure (MPa)	25	30	35	40	50
e max (mm)	0,25	0,2	0,15	0,1	0,05

Table 174 (dynamic sealing)

O-ring Cs	g	L1	L2	E
1,78	1,55	3,8	5,2	1,4
2,62	2,25	5	6,4	1,4
3,53	3,1	6,2	7,6	1,4
5,34	4,7	8,8	10,5	1,7
7	6,1	12	14,5	2,5

O-ring cross section	O-ring	d	D	Reference	O-ring cross section	O-ring	d	D	Reference	
3,53	40,87 x 3,53	42	48,2	10PBK 223/825	3,53	139,29 x 3,53	140	146,2	10PBK 254	
	42,86 x 3,53	43	49,2	10PBK 826		142,47 x 3,53	143	149,2	10PBK 255	
	44,04 x 3,53	45	51,2	10PBK 224/827		148,82 x 3,53	149	155,2	10PBK 257	
	46,04 x 3,53	46	52,2	10PBK 828		151,99 x 3,53	152	158,2	10PBK 258	
	47,22 x 3,53	48	54,2	10PBK 225/829		202,79 x 3,53	203	209,2	10PBK 266	
	49,2 x 3,53	49	55,2	10PBK 830		221,84 x 3,53	222	228,2	10PBK 269	
	50,39 x 3,53	51	57,2	10PBK 226/831		5,34	37,47 x 5,34	38	47,4	10PBK 325
	52,4 x 3,53	52	58,2	10PBK 832			40,64 x 5,34	41	50,4	10PBK 326
	53,57 x 3,53	54	60,2	10PBK 227/833			43,82 x 5,34	44	53,4	10PBK 327
	55,56 x 3,53	56	62,2	10PBK 834		46,99 x 5,34	47	56,4	10PBK 328	
	56,74 x 3,53	57	63,2	10PBK 228/835		50,17 x 5,34	50	59,4	10PBK 329	
	58,74 x 3,53	59	65,2	10PBK 836		53,34 x 5,34	53	62,4	10PBK 330	
59,92 x 3,53	60	66,2	10PBK 229/837	56,52 x 5,34	57	66,4	10PBK 331			
61,9 x 3,53	62	68,2	10PBK 838	59,69 x 5,34	60	69,4	10PBK 332			
63,09 x 3,53	64	70,2	10PBK 230/839	62,87 x 5,34	63	72,4	10PBK 333			
65,1 x 3,53	65	71,2	10PBK 840	66,04 x 5,34	66	75,4	10PBK 334			
66,27 x 3,53	67	73,2	10PBK 231/841	69,22 x 5,34	69	78,4	10PBK 335			
68,26 x 3,53	68	74,2	10PBK 842	72,39 x 5,34	73	82,4	10PBK 336			
69,44 x 3,53	70	76,2	10PBK 232/843	74,63 x 5,34	75	84,4	10PBK 619			
71,44 x 3,53	72	78,2	10PBK 844	75,57 x 5,34	76	85,4	10PBK 337			
72,62 x 3,53	73	79,2	10PBK 233/845	78,74 x 5,34	79	88,4	10PBK 338/620			
74,6 x 3,53	75	81,2	10PBK 846	81,92 x 5,34	82	91,4	10PBK 339			
75,79 x 3,53	76	82,2	10PBK 234	85,09 x 5,34	85	94,4	10PBK 340			
78,97 x 3,53	79	85,2	10PBK 235	88,27 x 5,34	88	97,4	10PBK 341			
82,14 x 3,53	82	88,2	10PBK 236	89,69 x 5,34	90	99,4	10PBK 621			
85,32 x 3,53	85	91,2	10PBK 237	91,44 x 5,34	92	101,4	10PBK 342			
88,49 x 3,53	89	95,2	10PBK 238	94,62 x 5,34	95	104,4	10PBK 343			
91,67 x 3,53	92	98,2	10PBK 239	97,79 x 5,34	98	107,4	10PBK 344			
94,84 x 3,53	95	101,2	10PBK 240	100,0 x 5,34	100	109,4	10PBK 622			
98,02 x 3,53	98	104,2	10PBK 241	100,97 x 5,34	101	110,4	10PBK 345			
101,19 x 3,53	101	107,2	10PBK 242	104,14 x 5,34	104	113,4	10PBK 346			
104,37 x 3,53	105	111,2	10PBK 243	107,32 x 5,34	107	116,4	10PBK 347			
107,54 x 3,53	108	114,2	10PBK 244	110,49 x 5,34	110	119,4	10PBK 348/623			
110,72 x 3,53	111	117,2	10PBK 245	113,67 x 5,34	114	123,4	10PBK 349			
113,89 x 3,53	114	120,2	10PBK 246	116,84 x 5,34	117	126,4	10PBK 350/860			
117,07 x 3,53	117	123,2	10PBK 247	120,02 x 5,34	121	130,4	10PBK 351/861			
120,24 x 3,53	120	126,2	10PBK 248	123,8 x 5,34	124	133,4	10PBK 862			
123,42 x 3,53	123	129,2	10PBK 249	126,37 x 5,34	127	136,4	10PBK 353/863			
126,59 x 3,53	127	133,2	10PBK 250	129,54 x 5,34	130	139,4	10PBK 354/864			
129,77 x 3,53	130	136,2	10PBK 251	133,35 x 5,34	134	143,4	10PBK 865			
132,94 x 3,53	133	139,2	10PBK 252	135,89 x 5,34	137	146,4	10PBK 356/866			
136,12 x 3,53	136	142,2	10PBK 253	139,07 x 5,34	140	149,4	10PBK 357/867			

10PBK.../INT
Example of item code

10PBK 218/INT
Profile AS/BS norm

✕ **Machining of housings:** see page 81 and table 176

10PBK.../INT back-up rings are used in conjunction with O-rings for both static and dynamic sealing applications. They prevent extrusion of the O-ring when it is subjected to high pressures, or when the extrusion gaps are excessive.

If pressure arises on only one side of the O-ring, it will suffice to fit one anti-extrusion ring on the side not exposed to pressure.

For double-acting applications, **two back-up rings** should be used, one on each side of the O-ring.

10PBK.../INT back-up rings are flat continuous anti-extrusion rings without a cut or a spiral shape that could cause system failure under extreme loads. They are made out of an elastic thermoplastic polyester resin which allows them to be stretched over pistons for easy installation and without any auxiliaries.

- Operating conditions** ✕ see page 8
 - Pressure ≤ 50 MPa
 - Temperature -30°C to 110°C
 - Fluids mineral oil, HFA, HFB
- Materials** ✕ see pages 10-19
 - TPE polyester 55 Sh D

- Assembly** ✕ see pages 54-59
 - In one-piece housings

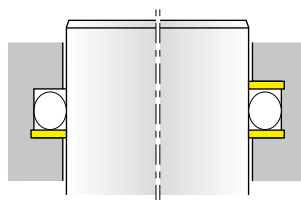
- Advantages**
 - Easy assembly
 - Endless for internal and external housings

Please contact us for applications approaching maximum values.

Pressure (MPa)	25	30	35	40	50
e max (mm)	0,25	0,2	0,15	0,1	0,05

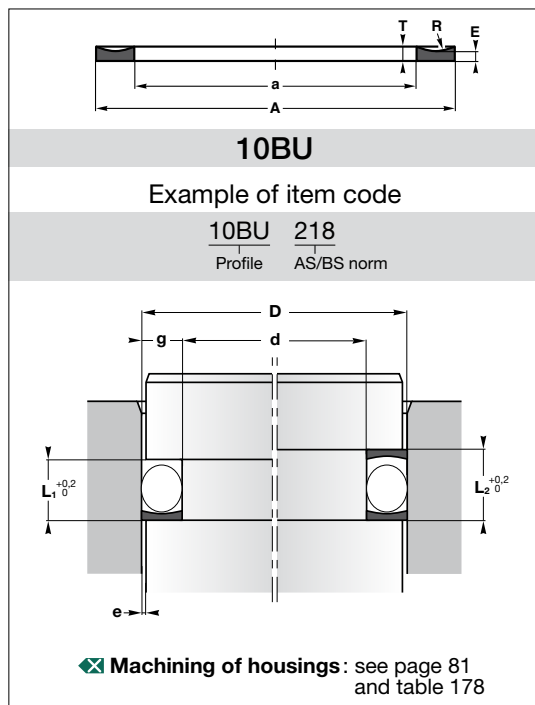
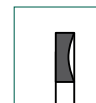
Table 176 (dynamic sealing)

O-ring Cs	g	L1	L2	E
1,78	1,55	3,8	5,2	1,4
2,62	2,25	5	6,4	1,4
3,53	3,1	6,2	7,6	1,4
5,34	4,7	8,8	10,5	1,7
7	6,1	12	14,5	2,5



Advise: for static sealing, with machining of housings following the two drawings above, it is possible to use 10PBK.../INT back-up rings respecting the DIN/ISO norm (static sealing).

O-ring cross section	O-ring	d	D	Reference
5,34	142,24 x 5,34	143	152,4	10PBK 358/868
	148,59 x 5,34	150	159,4	10PBK 360/870
	151,77 x 5,34	152	161,4	10PBK 361
	158,12 x 5,34	158	167,4	10PBK 362
	164,47 x 5,34	165	174,4	10PBK 363
	170,82 x 5,34	171	180,4	10PBK 364
	177,17 x 5,34	178	187,4	10PBK 365
	189,87 x 5,34	190	199,4	10PBK 367
	196,22 x 5,34	196	205,4	10PBK 368
	208,92 x 5,34	209	218,4	10PBK 370
	221,62 x 5,34	222	231,4	10PBK 372
	227,97 x 5,34	228	237,4	10PBK 373
7	113,67 x 7	114	126,2	10PBK 425
	116,84 x 7	117	129,2	10PBK 426
-6,99	123,2 x 7	123	135,2	10PBK 428
	126,37 x 7	126	138,2	10PBK 429
	132,72 x 7	133	145,2	10PBK 431
	135,89 x 7	136	148,2	10PBK 432
	139,07 x 7	139	151,2	10PBK 433
	145,42 x 7	145	157,2	10PBK 435
	155,6 x 7	156	168,2	10PBK 872
	166,7 x 7	167	179,2	10PBK 628
	181,0 x 7	180	192,2	10PBK 880
	183,52 x 7	184	196,2	10PBK 442
	189,87 x 7	190	202,2	10PBK 443
	193,7 x 7	194	206,2	10PBK 884
	196,22 x 7	196	208,2	10PBK 444
	208,92 x 7	210	222,2	10PBK 674
	215,27 x 7	215	227,2	10PBK 446
	227,97 x 7	230	242,2	10PBK 447
	234,32 x 7	235	247,2	10PBK 678
	272,4 x 7	273	285,2	10PBK 684



10BU back-up ring is a closed ring with a concave shaped cross-section. For these back-up rings, we use a NBR elastomer of 90°shore A hardness to guarantee a high level of resistance to extrusion and abrasion.

Their design tends to keep the O-ring in its original form, even at high pressure. They minimize distortion of the O-ring who can therefore withstand better against higher pressure loads. This produces a better sealing effect and **increases the seal's service life**.

10BU rings are continuous. They do not have a cut (unlike open PTFE rings) and they can be stretched over a piston during assembly. Hence they contact the O-ring uniformly, and do not cause localised wear spots.

10BU back-up ring has a symmetrical profile and can therefore be used in both internal and external sealing systems.

Operating conditions ✕ see page 8

Pressure	≤ 40 MPa
Temperature	-30°C to 110°C
Fluids	mineral oils, HFA, HFB, HFC

Materials ✕ see pages 10-19

NBR 90 Sh A colour: black

Assembly ✕ see pages 54-59

In one-piece housings

Advantages

- Easy assembly
- Closed ring (uncut)
- For inner and outer housings
- Extended service life of the O-ring

Please contact us for applications approaching maximum values.

More information

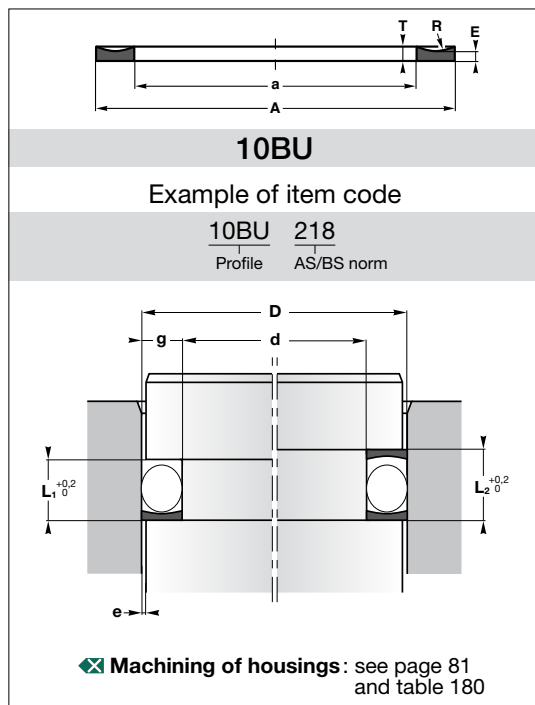
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	25	30	35	40
e max (mm)	0,2	0,15	0,1	0,05

Table 178

O-ring Cs	g	L1	L2	E	T
1,78	1,45	3,6	5	1,14	1,24
2,62	2,25	4,5	5,9	1,14	1,35
3,53	3,1	5,6	7	1,02	1,27
5,34	4,7	7,9	9,6	1,52	1,93
7	6,1	10,7	13,2	2,44	2,97

O-ring cross section	O-ring	A	a	E	D	d	Reference
1,78	1,78 X 1,78	5,14	2,44	1,14	5,2	2,3	10BU 004
	2,57 X 1,78	5,93	3,23	1,14	6	3,1	10BU 005
	2,9 X 1,78	6,26	3,56	1,14	6,5	3,6	10BU 006
	3,68 X 1,78	7,04	4,34	1,14	7	4,1	10BU 007
	4,47 X 1,78	7,83	5,13	1,14	8	5,1	10BU 008
	5,28 X 1,78	8,64	5,94	1,14	9	6,1	10BU 009
	6,07 X 1,78	9,43	6,73	1,14	10	7,1	10BU 010
	7,65 X 1,78	11,01	8,31	1,14	11	8,1	10BU 011
	9,25 X 1,78	12,61	9,91	1,14	13	10,1	10BU 012
	10,82 X 1,78	14,26	11,56	1,14	14	11,1	10BU 013
	12,42 X 1,78	15,86	13,16	1,14	16	13,1	10BU 014
	14,0 X 1,78	17,43	14,73	1,14	17	14,1	10BU 015
	15,6 X 1,78	19,03	16,33	1,14	19	16,1	10BU 016
	17,17 X 1,78	20,61	17,91	1,14	21	18,1	10BU 017
	18,77 X 1,78	22,21	19,51	1,14	22	19,1	10BU 018
	20,35 X 1,78	23,78	21,08	1,14	24	21,1	10BU 019
	21,95 X 1,78	25,38	22,68	1,14	25	22,1	10BU 020
	23,52 X 1,78	26,96	24,26	1,14	27	24,1	10BU 021
	25,12 X 1,78	28,56	25,86	1,14	29	26,1	10BU 022
	26,7 X 1,78	30,13	27,43	1,14	30	27,1	10BU 023
	28,3 X 1,78	31,73	29,03	1,14	32	29,1	10BU 024
	29,87 X 1,78	33,31	30,61	1,14	33	30,1	10BU 025
	31,47 X 1,78	34,91	32,21	1,14	35	32,1	10BU 026
	33,05 X 1,78	36,48	33,78	1,14	36,5	33,6	10BU 027
	34,65 X 1,78	38,08	35,38	1,14	38	35,1	10BU 028
	37,82 X 1,78	41,26	38,56	1,14	41	38,1	10BU 029
	41,0 X 1,78	44,43	41,73	1,14	44,5	41,6	10BU 030
	44,17 X 1,78	47,61	44,91	1,14	48	45,1	10BU 031
	47,35 X 1,78	50,78	48,08	1,14	51	48,1	10BU 032
	50,52 X 1,78	53,96	51,26	1,14	54	51,1	10BU 033
	53,7 X 1,78	57,13	54,43	1,14	57	54,1	10BU 034
	56,87 X 1,78	60,31	57,61	1,14	60	57,1	10BU 035
	60,05 X 1,78	63,48	60,78	1,14	63,5	60,6	10BU 036
	63,22 X 1,78	66,66	63,96	1,14	67	64,1	10BU 037
	66,4 X 1,78	69,83	67,13	1,14	70	67,1	10BU 038
	69,57 X 1,78	73,01	70,31	1,14	73	70,1	10BU 039
	72,75 X 1,78	76,18	73,48	1,14	76	73,1	10BU 040
	75,92 X 1,78	79,36	76,66	1,14	80	77,1	10BU 041
	82,27 X 1,78	85,71	83,01	1,14	86	83,1	10BU 042
	88,62 X 1,78	92,06	89,36	1,14	92	89,1	10BU 043
	94,97 X 1,78	98,41	95,71	1,14	99	96,1	10BU 044
	101,32 X 1,78	104,76	102,06	1,14	105	102,1	10BU 045



10BU back-up ring is a closed ring with a concave shaped cross-section. For these back-up rings, we use a NBR elastomer of 90°shore A hardness to guarantee a high level of resistance to extrusion and abrasion.

Their design tends to keep the O-ring in its original form, even at high pressure. They minimize distortion of the O-ring who can therefore withstand better against higher pressure loads. This produces a better sealing effect and **increases the seal's service life**.

10BU rings are continuous. They do not have a cut (unlike open PTFE rings) and they can be stretched over a piston during assembly. Hence they contact the O-ring uniformly, and do not cause localised wear spots.

10BU back-up ring has a symmetrical profile and can therefore be used in both internal and external sealing systems.

Operating conditions see page 8

Pressure	≤ 40 MPa
Temperature	-30°C to 110°C
Fluids	mineral oils, HFA, HFB, HFC

Materials see pages 10-19

NBR 90 Sh A	colour: black
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Assembly see pages 54-59

In one-piece housings

Advantages

- Easy assembly
- Closed ring (uncut)
- For inner and outer housings
- Extended service life of the O-ring

Please contact us for applications approaching maximum values.

More information

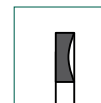
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	25	30	35	40
e max (mm)	0,2	0,15	0,1	0,05

Table 180

O-ring Cs	g	L1	L2	E	T
1,78	1,45	3,6	5	1,14	1,24
2,62	2,25	4,5	5,9	1,14	1,35
3,53	3,1	5,6	7	1,02	1,27
5,34	4,7	7,9	9,6	1,52	1,93
7	6,1	10,7	13,2	2,44	2,97

O-ring cross section	O-ring	A	a	E	D	d	Reference
1,78	107,67 X 1,78	111,11	108,41	1,14	111	108,1	10BU 046
	114,02 X 1,78	117,46	114,76	1,14	118	115,1	10BU 047
	120,37 X 1,78	123,81	121,11	1,14	124	121,1	10BU 048
	126,72 X 1,78	130,16	127,46	1,14	130	127,1	10BU 049
	133,07 X 1,78	136,51	133,81	1,14	137	134,1	10BU 050
2,62	1,24 X 2,62	6,32	1,96	1,14	6,3	1,8	10BU 102
	2,06 X 2,62	7,13	2,77	1,14	7	2,5	10BU 103
	2,84 X 2,62	7,92	3,56	1,14	8	3,5	10BU 104
	3,63 X 2,62	8,7	4,34	1,14	9	4,5	10BU 105
	4,42 X 2,62	9,49	5,13	1,14	9,5	5	10BU 106
	5,23 X 2,62	10,29	5,93	1,14	10	5,5	10BU 107
	6,02 X 2,62	11,09	6,73	1,14	11	6,5	10BU 108
	7,59 X 2,62	12,67	8,31	1,14	13	8,5	10BU 109
	9,19 X 2,62	14,27	9,91	1,14	14	9,5	10BU 110
	10,77 X 2,62	15,84	11,48	1,14	16	11,5	10BU 111
	12,37 X 2,62	17,44	13,08	1,14	17	12,5	10BU 112
	13,94 X 2,62	19,02	14,66	1,14	19	14,5	10BU 113
	15,54 X 2,62	20,62	16,26	1,14	21	16,5	10BU 114
	17,12 X 2,62	22,19	17,83	1,14	22	17,5	10BU 115
	18,72 X 2,62	23,79	19,43	1,14	24	19,5	10BU 116
	20,3 X 2,62	25,47	21,11	1,14	25	20,5	10BU 117
	21,89 X 2,62	27,04	22,68	1,14	27	22,5	10BU 118
	23,47 X 2,62	28,64	24,28	1,14	29	24,5	10BU 119
	25,07 X 2,62	30,22	25,86	1,14	30	25,5	10BU 120
	26,64 X 2,62	31,82	27,46	1,14	32	27,5	10BU 121
	28,24 X 2,62	33,39	29,03	1,14	33	28,5	10BU 122
	29,82 X 2,62	34,99	30,63	1,14	35	30,5	10BU 123
	31,42 X 2,62	36,57	32,21	1,14	36,5	32	10BU 124
	32,99 X 2,62	38,17	33,81	1,14	38	33,5	10BU 125
	34,59 X 2,62	39,74	35,38	1,14	40	35,5	10BU 126
	36,17 X 2,62	41,34	36,98	1,14	41	36,5	10BU 127
	37,77 X 2,62	42,92	38,56	1,14	43	38,5	10BU 128
	39,34 X 2,62	44,52	40,16	1,14	44,5	40	10BU 129
	40,94 X 2,62	46,09	41,73	1,14	46	41,5	10BU 130
	42,52 X 2,62	47,69	43,33	1,14	48	43,5	10BU 131
	44,12 X 2,62	49,27	44,91	1,14	50	45,5	10BU 132
	45,69 X 2,62	50,87	46,51	1,14	51	46,5	10BU 133
	47,29 X 2,62	52,44	48,08	1,14	52	47,5	10BU 134
	48,9 X 2,62	54,04	49,68	1,14	54	49,5	10BU 135
	50,47 X 2,62	55,62	51,26	1,14	55,5	51	10BU 136
	52,07 X 2,62	57,22	52,86	1,14	57	52,5	10BU 137



10BU

Example of item code

10BU 218
Profile AS/BS norm

✕ **Machining of housings:** see page 81 and table 182

10BU back-up ring is a closed ring with a concave shaped cross-section. For these back-up rings, we use a NBR elastomer of 90°shore A hardness to guarantee a high level of resistance to extrusion and abrasion.

Their design tends to keep the O-ring in its original form, even at high pressure. They minimize distortion of the O-ring who can therefore withstand better against higher pressure loads. This produces a better sealing effect and **increases the seal's service life.**

10BU rings are continuous. They do not have a cut (unlike open PTFE rings) and they can be stretched over a piston during assembly. Hence they contact the O-ring uniformly, and do not cause localised wear spots.

10BU back-up ring has a symmetrical profile and can therefore be used in both internal and external sealing systems.

Operating conditions	✕ see page 8
Pressure	≤ 40 MPa
Temperature	-30°C to 110°C
Fluids	mineral oils, HFA, HFB, HFC
Materials	✕ see pages 10-19
NBR 90 Sh A	colour: black

Assembly	✕ see pages 54-59
In one-piece housings	

Advantages
Easy assembly
Closed ring (uncut)
For inner and outer housings
Extended service life of the O-ring

Please contact us for applications approaching maximum values.

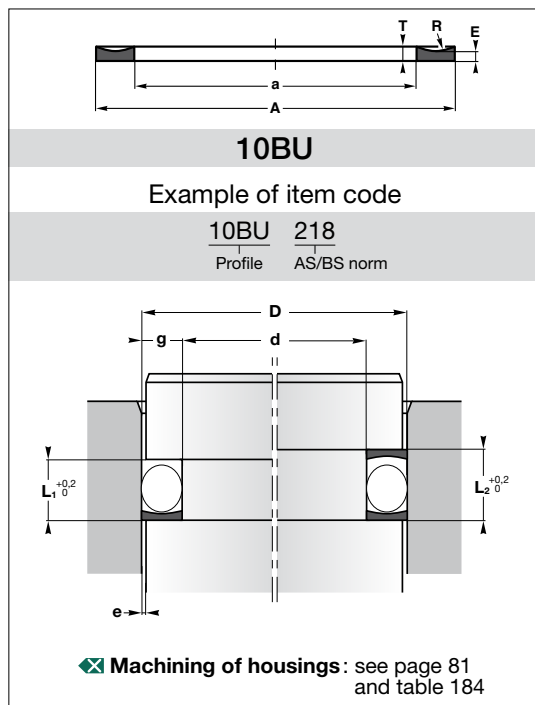
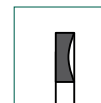
More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	25	30	35	40
e max (mm)	0,2	0,15	0,1	0,05

Table 182

O-ring Cs	g	L1	L2	E	T
1,78	1,45	3,6	5	1,14	1,24
2,62	2,25	4,5	5,9	1,14	1,35
3,53	3,1	5,6	7	1,02	1,27
5,34	4,7	7,9	9,6	1,52	1,93
7	6,1	10,7	13,2	2,44	2,97

O-ring cross section	O-ring	A	a	E	D	d	Reference
2,62	53,64 X 2,62	58,79	54,43	1,14	58	53,5	10BU 138
	55,25 X 2,62	60,39	56,03	1,14	60	55,5	10BU 139
	56,82 X 2,62	61,97	57,61	1,14	62	57,5	10BU 140
	58,42 X 2,62	63,57	59,21	1,14	63,5	59	10BU 141
	59,99 X 2,62	65,14	60,78	1,14	65	60,5	10BU 142
	61,6 X 2,62	66,74	62,38	1,14	67	62,5	10BU 143
	63,17 X 2,62	68,32	63,96	1,14	68	63,5	10BU 144
	64,77 X 2,62	69,92	65,56	1,14	70	65,5	10BU 145
	66,34 X 2,62	71,49	67,13	1,14	71	66,5	10BU 146
	67,95 X 2,62	73,09	68,73	1,14	73	68,5	10BU 147
	69,52 X 2,62	74,67	70,31	1,14	75	70,5	10BU 148
	71,12 X 2,62	76,27	71,91	1,14	76	71,5	10BU 149
	72,69 X 2,62	77,84	73,48	1,14	78	73,5	10BU 150
	75,87 X 2,62	81,02	76,66	1,14	81	76,5	10BU 151
	82,22 X 2,62	87,37	83,01	1,14	87	82,5	10BU 152
	88,57 X 2,62	93,72	89,36	1,14	94	89,5	10BU 153
	94,92 X 2,62	100,07	95,71	1,14	100	95,5	10BU 154
	101,27 X 2,62	106,42	102,06	1,14	106	101,5	10BU 155
107,62 X 2,62	112,77	108,41	1,14	113	108,5	10BU 156	
113,97 X 2,62	119,12	114,76	1,14	119	114,5	10BU 157	
120,32 X 2,62	125,47	121,11	1,14	125	120,5	10BU 158	
126,67 X 2,62	131,82	127,46	1,14	132	127,5	10BU 159	
133,02 X 2,62	138,17	133,81	1,14	138	133,5	10BU 160	
139,37 X 2,62	144,52	140,16	1,14	144	139,5	10BU 161	
145,72 X 2,62	150,87	146,51	1,14	151	146,5	10BU 162	
152,07 X 2,62	157,22	152,86	1,14	157	152,5	10BU 163	
158,42 X 2,62	163,57	159,21	1,14	164	159,5	10BU 164	
164,77 X 2,62	170,01	165,65	1,14	170	165,5	10BU 165	
171,12 X 2,62	176,27	171,91	1,14	176	171,5	10BU 166	
177,47 X 2,62	182,62	178,26	1,14	183	178,5	10BU 167	
183,82 X 2,62	188,97	184,61	1,14	189	184,5	10BU 168	
190,17 X 2,62	195,32	190,96	1,14	195	190,5	10BU 169	
196,52 X 2,62	201,67	197,31	1,14	202	197,5	10BU 170	
202,87 X 2,62	208,02	203,66	1,14	208	203,5	10BU 171	
209,22 X 2,62	214,37	210,01	1,14	214	209,5	10BU 172	
215,57 X 2,62	220,72	216,36	1,14	221	216,5	10BU 173	
221,92 X 2,62	227,07	222,71	1,14	227	222,5	10BU 174	
228,27 X 2,62	233,42	229,06	1,14	233	228,5	10BU 175	
234,62 X 2,62	239,77	235,41	1,14	240	235,5	10BU 176	
240,97 X 2,62	246,12	241,76	1,14	246	241,5	10BU 177	
247,32 X 2,62	252,47	248,11	1,14	252	247,5	10BU 178	



10BU back-up ring is a closed ring with a concave shaped cross-section. For these back-up rings, we use a NBR elastomer of 90°shore A hardness to guarantee a high level of resistance to extrusion and abrasion.

Their design tends to keep the O-ring in its original form, even at high pressure. They minimize distortion of the O-ring who can therefore withstand better against higher pressure loads. This produces a better sealing effect and **increases the seal's service life**.

10BU rings are continuous. They do not have a cut (unlike open PTFE rings) and they can be stretched over a piston during assembly. Hence they contact the O-ring uniformly, and do not cause localised wear spots.

10BU back-up ring has a symmetrical profile and can therefore be used in both internal and external sealing systems.

Operating conditions ✘ see page 8

Pressure	≤ 40 MPa
Temperature	-30°C to 110°C
Fluids	mineral oils, HFA, HFB, HFC

Materials ✘ see pages 10-19

NBR 90 Sh A colour: black

Assembly ✘ see pages 54-59

In one-piece housings

Advantages

- Easy assembly
- Closed ring (uncut)
- For inner and outer housings
- Extended service life of the O-ring

Please contact us for applications approaching maximum values.

More information

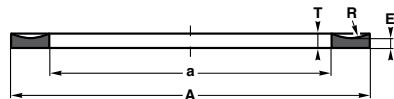
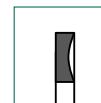
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	25	30	35	40
e max (mm)	0,2	0,15	0,1	0,05

Table 184

O-ring Cs	g	L1	L2	E	T
1,78	1,45	3,6	5	1,14	1,24
2,62	2,25	4,5	5,9	1,14	1,35
3,53	3,1	5,6	7	1,02	1,27
5,34	4,7	7,9	9,6	1,52	1,93
7	6,1	10,7	13,2	2,44	2,97

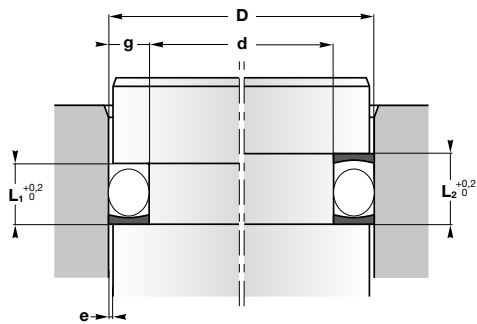
O-ring cross section	O-ring	A	a	E	D	d	Reference
3,53	4,34 X 3,53	11,13	5,13	1,02	11	4,8	10BU 201
	5,94 X 3,53	12,73	6,73	1,02	13	6,8	10BU 202
	7,52 X 3,53	14,3	8,3	1,02	14	7,8	10BU 203
	9,12 X 3,53	15,9	9,9	1,02	16	9,8	10BU 204
	10,69 X 3,53	17,56	11,56	1,02	17	10,8	10BU 205
	12,29 X 3,53	19,16	13,16	1,02	19	12,8	10BU 206
	13,87 X 3,53	20,73	14,73	1,02	21	14,8	10BU 207
	15,47 X 3,53	22,33	16,33	1,02	22	15,8	10BU 208
	17,04 X 3,53	23,9	17,9	1,02	24	17,8	10BU 209
	18,64 X 3,53	25,46	19,46	1,02	25	18,8	10BU 210
	20,22 X 3,53	27,03	21,03	1,02	27	20,8	10BU 211
	21,82 X 3,53	28,63	22,63	1,02	29	22,8	10BU 212
	23,39 X 3,53	30,21	24,21	1,02	30	23,8	10BU 213
	24,99 X 3,53	31,81	25,81	1,02	32	25,8	10BU 214
	26,57 X 3,53	33,38	27,38	1,02	33	26,8	10BU 215
	28,17 X 3,53	34,98	28,98	1,02	35	28,8	10BU 216
	29,74 X 3,53	36,56	30,56	1,02	36,5	30,3	10BU 217
	31,34 X 3,53	38,16	32,16	1,02	38	31,8	10BU 218
	32,92 X 3,53	39,88	33,88	1,02	40	33,8	10BU 219
	34,52 X 3,53	41,48	35,48	1,02	41	34,8	10BU 220
36,09 X 3,53	43,06	37,06	1,02	43	36,8	10BU 221	
37,69 X 3,53	44,66	38,66	1,02	44,5	38,3	10BU 222	
40,87 X 3,53	47,83	41,83	1,02	48	41,8	10BU 223	
44,04 X 3,53	51,01	45,01	1,02	51	44,8	10BU 224	
47,22 X 3,53	54,18	48,18	1,02	54	47,8	10BU 225	
50,39 X 3,53	57,36	51,36	1,02	57	50,8	10BU 226	
53,57 X 3,53	60,53	54,53	1,02	60	53,8	10BU 227	
56,74 X 3,53	63,71	57,71	1,02	63,5	57,3	10BU 228	
59,92 X 3,53	66,88	60,88	1,02	67	60,8	10BU 229	
63,09 X 3,53	70,06	64,06	1,02	70	63,8	10BU 230	
66,27 X 3,53	72,83	66,83	1,02	73	66,8	10BU 231	
69,44 X 3,53	76	70	1,02	76	69,8	10BU 232	
72,62 X 3,53	79,18	73,18	1,02	79	72,8	10BU 233	
75,79 X 3,53	82,35	76,35	1,02	83	76,8	10BU 234	
78,97 X 3,53	85,53	79,53	1,02	86	79,8	10BU 235	
82,14 X 3,53	88,7	82,7	1,02	89	82,8	10BU 236	
85,32 X 3,53	91,88	85,88	1,02	92	85,8	10BU 237	
88,49 X 3,53	95,05	89,05	1,02	95	88,8	10BU 238	
91,67 X 3,53	98,23	92,23	1,02	98	91,8	10BU 239	
94,84 X 3,53	101,4	95,4	1,02	102	95,8	10BU 240	
98,02 X 3,53	104,58	98,58	1,02	105	98,8	10BU 241	
101,19 X 3,53	107,75	101,75	1,02	108	101,8	10BU 242	



10BU

Example of item code

10BU 218
Profile AS/BS norm



✕ Machining of housings: see page 81 and table 186

10BU back-up ring is a closed ring with a concave shaped cross-section. For these back-up rings, we use a NBR elastomer of 90°shore A hardness to guarantee a high level of resistance to extrusion and abrasion.

Their design tends to keep the O-ring in its original form, even at high pressure. They minimize distortion of the O-ring who can therefore withstand better against higher pressure loads. This produces a better sealing effect and **increases the seal's service life**.

10BU rings are continuous. They do not have a cut (unlike open PTFE rings) and they can be stretched over a piston during assembly. Hence they contact the O-ring uniformly, and do not cause localised wear spots.

10BU back-up ring has a symmetrical profile and can therefore be used in both internal and external sealing systems.

Operating conditions ✕ see page 8

Pressure ≤ 40 MPa
Temperature -30°C to 110°C
Fluids mineral oils, HFA, HFB, HFC

Materials ✕ see pages 10-19

NBR 90 Sh A colour: black

Assembly ✕ see pages 54-59

In one-piece housings

Advantages

Easy assembly
Closed ring (uncut)
For inner and outer housings
Extended service life of the O-ring

Please contact us for applications approaching maximum values.

More information

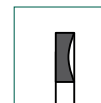
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	25	30	35	40
e max (mm)	0,2	0,15	0,1	0,05

Table 186

O-ring Cs	g	L1	L2	E	T
1,78	1,45	3,6	5	1,14	1,24
2,62	2,25	4,5	5,9	1,14	1,35
3,53	3,1	5,6	7	1,02	1,27
5,34	4,7	7,9	9,6	1,52	1,93
7	6,1	10,7	13,2	2,44	2,97

O-ring cross section	O-ring	A	a	E	D	d	Reference
3,53	104,37 X 3,53	110,93	104,93	1,02	111	104,8	10BU 243
	107,54 X 3,53	114,1	108,1	1,02	114	107,8	10BU 244
	110,72 X 3,53	117,28	111,28	1,02	118	111,8	10BU 245
	113,89 X 3,53	120,45	114,45	1,02	121	114,8	10BU 246
	117,07 X 3,53	123,63	117,63	1,02	124	117,8	10BU 247
	120,24 X 3,53	127,11	121,11	1,02	127	120,8	10BU 248
	123,42 X 3,53	130,28	124,28	1,02	130	123,8	10BU 249
	126,59 X 3,53	133,46	127,46	1,02	133	126,8	10BU 250
	129,77 X 3,53	136,63	130,63	1,02	136,5	130,3	10BU 251
	132,94 X 3,53	139,81	133,81	1,02	140	133,8	10BU 252
	136,12 X 3,53	142,98	136,98	1,02	143	136,8	10BU 253
	139,29 X 3,53	146,16	140,16	1,02	146	139,8	10BU 254
	142,47 X 3,53	149,33	143,33	1,02	150	143,8	10BU 255
	145,64 X 3,53	152,51	146,51	1,02	152	145,8	10BU 256
	148,82 X 3,53	155,68	149,68	1,02	156	149,8	10BU 257
	151,99 X 3,53	158,86	152,86	1,02	159	152,8	10BU 258
	155,17 X 3,53	162,04	156,04	1,02	162	155,8	10BU 259
	158,34 X 3,53	165,21	159,21	1,02	165	158,8	10BU 260
	161,51 X 3,53	168,39	162,39	1,02	168	161,8	10BU 261
	164,69 X 3,53	171,56	165,56	1,02	172	165,8	10BU 262
	167,86 X 3,53	174,74	168,74	1,02	175	169,1	10BU 263
	171,04 X 3,53	177,91	171,91	1,02	178	171,8	10BU 264
	174,21 X 3,53	181,09	175,09	1,02	181	175,1	10BU 265
	177,39 X 3,53	184,26	178,26	1,02	184	178,8	10BU 266
	180,56 X 3,53	187,44	181,44	1,02	187	182,1	10BU 267
	183,74 X 3,53	190,61	184,61	1,02	190	185,4	10BU 268
	186,91 X 3,53	193,79	187,79	1,02	193	188,7	10BU 269
	190,09 X 3,53	196,96	190,96	1,02	196	192,0	10BU 270
	193,26 X 3,53	200,14	194,14	1,02	199	195,3	10BU 271
	196,44 X 3,53	203,31	197,31	1,02	202	198,6	10BU 272
	199,61 X 3,53	206,49	200,49	1,02	205	201,9	10BU 273
	202,79 X 3,53	209,66	203,66	1,02	208	205,2	10BU 274
	205,96 X 3,53	212,84	206,84	1,02	211	208,5	10BU 275
	209,14 X 3,53	216,01	210,01	1,02	214	211,8	10BU 276
	212,31 X 3,53	219,19	213,19	1,02	217	215,1	10BU 277
	215,49 X 3,53	222,36	216,36	1,02	220	218,4	10BU 278
	218,66 X 3,53	225,54	219,54	1,02	223	221,7	10BU 279
	221,84 X 3,53	228,71	222,71	1,02	226	225,0	10BU 280
	225,01 X 3,53	231,89	225,89	1,02	229	228,3	10BU 281
	228,19 X 3,53	235,06	229,06	1,02	232	231,6	10BU 282
	231,36 X 3,53	238,24	232,24	1,02	235	234,9	10BU 283
	234,54 X 3,53	241,41	235,41	1,02	238	238,2	10BU 284
	237,71 X 3,53	244,59	238,59	1,02	241	241,5	10BU 285
	240,89 X 3,53	247,76	241,76	1,02	244	244,8	10BU 286
	244,06 X 3,53	250,94	244,94	1,02	247	248,1	10BU 287
	247,24 X 3,53	254,11	248,11	1,02	250	251,4	10BU 288
	250,41 X 3,53	257,29	251,29	1,02	253	254,7	10BU 289
	253,59 X 3,53	260,46	254,46	1,02	256	258,0	10BU 290
	256,76 X 3,53	263,64	257,64	1,02	259	261,3	10BU 291
	259,94 X 3,53	266,81	260,81	1,02	262	264,6	10BU 292
	263,11 X 3,53	270,00	264,00	1,02	265	267,9	10BU 293
	266,29 X 3,53	273,16	267,16	1,02	268	271,2	10BU 294
	269,46 X 3,53	276,35	270,35	1,02	271	274,5	10BU 295
	272,64 X 3,53	279,51	273,51	1,02	274	277,8	10BU 296
	275,81 X 3,53	282,69	276,69	1,02	277	281,1	10BU 297
	278,99 X 3,53	285,86	279,86	1,02	280	284,4	10BU 298
	282,16 X 3,53	289,04	283,04	1,02	283	287,7	10BU 299
	285,34 X 3,53	292,21	286,21	1,02	286	291,0	10BU 300
	288,51 X 3,53	295,39	289,39	1,02	289	294,3	10BU 301
	291,69 X 3,53	298,56	292,56	1,02	292	297,6	10BU 302
	294,86 X 3,53	301,74	295,74	1,02	295	300,9	10BU 303
	298,04 X 3,53	304,91	298,91	1,02	298	304,2	10BU 304
	301,21 X 3,53	308,09	302,09	1,02	301	307,5	10BU 305
	304,39 X 3,53	311,26	305,26	1,02	304	310,8	10BU 306
	307,56 X 3,53	314,44	308,44	1,02	307	314,1	10BU 307
	310,74 X 3,53	317,61	311,61	1,02	310	317,4	10BU 308
	313,91 X 3,53	320,79	314,79	1,02	313	320,7	10BU 309
	317,09 X 3,53	323,96	317,96	1,02	316	324,0	10BU 310
	320,26 X 3,53	327,14	321,14	1,02	319	327,3	10BU 311
	323,44 X 3,53	330,31	324,31	1,02	322	330,6	10BU 312
	326,61 X 3,53	333,49	327,49	1,02	325	333,9	10BU 313
	329,79 X 3,53	336,66	330,66	1,02	328	337,2	10BU 314
	332,96 X 3,53	339,84	333,84	1,02	331	340,5	10BU 315
	336,14 X 3,53	343,01	337,01	1,02	334	343,8	10BU 316
	339,31 X 3,53	346,19	340,19	1,02	337	347,1	10BU 317
	342,49 X 3,53	349,36	343,36	1,02	340	350,4	10BU 318
	345,66 X 3,53	352,54	346,54	1,02	343	353,7	10BU 319
	348,84 X 3,53	355,71	349,71	1,02	346	357,0	10BU 320
	352,01 X 3,53	358,89	352,89	1,02	349	360,3	10BU 321
	355,19 X 3,53	362,06	356,06	1,02	352	363,6	10BU 322
	358,36 X 3,53	365,24	359,24	1,02	355	366,9	10BU 323
	361,54 X 3,53	368,41	362,41	1,02	358	370,2	10BU 324
	364,71 X 3,53	371,59	365,59	1,02	361	373,5	10BU 325
	367,89 X 3,53	374,76	368,76	1,02	364	376,8	10BU 326
	371,06 X 3,53	377,94	371,94	1,02	367	380,1	10BU 327
	374,24 X 3,53	381,11	375,11	1,02	370	383,4	10BU 328
	377,41 X 3,53	384,29	378,29	1,02	373	386,7	10BU 329
	380,59 X 3,53	387,46	381,46	1,02	376	390,0	10BU 330
	383,76 X 3,53	390,64	384,64	1,02	379	393,3	10BU 331
	386,94 X 3,53	393,81	387,81	1,02	382	396,6	10BU 332
	390,11 X 3,53	396,99	390,99	1,02	385	399,9	10BU 333
	393,29 X 3,53	400,16	394,16	1,02	388	403,2	10BU 334
	396,46 X 3,53	403,34	397,34	1,02	391	406,5	10BU 335
	399,64 X 3,53	406,51	400,51	1,02	394	409,8	10BU 336
	402,81 X 3,53	409,69	403,69	1,02	397	413,1	10BU 337
	405,99 X 3,53	412,86	406,86	1,02	400	416,4	10BU 338
	409,16 X 3,53	416,04	410,04	1,02	403	419,7	10BU 339
	412,34 X 3,53	419,21	413,21	1,02	406	423,0	10BU 340
	415,51 X 3,53	422,39	416,39	1,02	409	426,3	10BU 341
	418,69 X 3,53	425,56	419,56	1,02	412	429,6	10BU 342
	421,86 X 3,53	428,74	422,74	1,02	415	432,9	10BU 343
	425,04 X 3,53	431,91	425,91	1,02	418	436,2	10BU 344
	428,21 X 3,53	435,09	429,09	1,02	421	439,5	10BU 345
	431,39 X 3,53	438,26	432,26	1,0			



10BU

Example of item code

10BU 218
Profile AS/BS norm

✕ **Machining of housings:** see page 81 and table 188

10BU back-up ring is a closed ring with a concave shaped cross-section. For these back-up rings, we use a NBR elastomer of 90°shore A hardness to guarantee a high level of resistance to extrusion and abrasion.

Their design tends to keep the O-ring in its original form, even at high pressure. They minimize distortion of the O-ring who can therefore withstand better against higher pressure loads. This produces a better sealing effect and **increases the seal's service life.**

10BU rings are continuous. They do not have a cut (unlike open PTFE rings) and they can be stretched over a piston during assembly. Hence they contact the O-ring uniformly, and do not cause localised wear spots.

10BU back-up ring has a symmetrical profile and can therefore be used in both internal and external sealing systems.

Operating conditions ✕ see page 8

Pressure ≤ 40 MPa
 Temperature -30°C to 110°C
 Fluids mineral oils, HFA, HFB, HFC

Materials ✕ see pages 10-19

NBR 90 Sh A colour: black

Assembly ✕ see pages 54-59

In one-piece housings

Advantages

- Easy assembly
- Closed ring (uncut)
- For inner and outer housings
- Extended service life of the O-ring

Please contact us for applications approaching maximum values.

More information

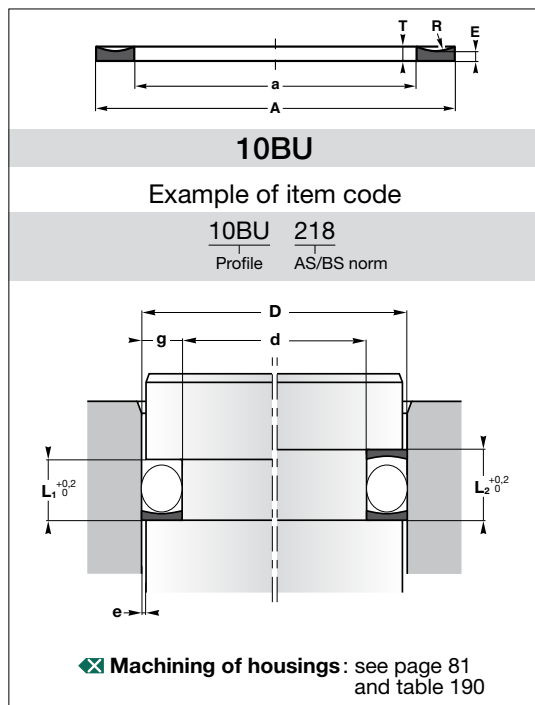
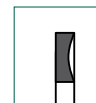
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	25	30	35	40
e max (mm)	0,2	0,15	0,1	0,05

Table 188

O-ring Cs	g	L1	L2	E	T
1,78	1,45	3,6	5	1,14	1,24
2,62	2,25	4,5	5,9	1,14	1,35
3,53	3,1	5,6	7	1,02	1,27
5,34	4,7	7,9	9,6	1,52	1,93
7	6,1	10,7	13,2	2,44	2,97

O-ring cross section	O-ring	A	a	E	D	d	Reference
5,34	12,07 X 5,34	22,33	13,03	1,52	22	12,6	10BU 310
	13,64 X 5,34	23,9	14,6	1,52	24	14,6	10BU 311
	15,24 X 5,34	25,5	16,2	1,52	25	15,6	10BU 312
	16,81 X 5,34	27,08	17,78	1,52	27	17,6	10BU 313
	18,42 X 5,34	28,68	19,38	1,52	29	19,6	10BU 314
	19,99 X 5,34	30,26	20,96	1,52	30	20,6	10BU 315
	21,59 X 5,34	31,86	22,56	1,52	32	22,6	10BU 316
	23,16 X 5,34	33,43	24,13	1,52	33	23,6	10BU 317
	24,77 X 5,34	35,03	25,73	1,52	35	25,6	10BU 318
	26,34 X 5,34	36,61	27,31	1,52	36,5	27,1	10BU 319
	27,94 X 5,34	38,21	28,91	1,52	38	28,6	10BU 320
	29,51 X 5,34	39,72	30,42	1,52	40	30,6	10BU 321
	31,12 X 5,34	41,38	32,08	1,52	41	31,6	10BU 322
	32,69 X 5,34	42,73	33,43	1,52	43	33,6	10BU 323
	34,29 X 5,34	44,56	35,26	1,52	44,5	35,1	10BU 324
	37,47 X 5,34	47,73	38,43	1,52	48	38,6	10BU 325
	40,64 X 5,34	50,91	41,61	1,52	51	41,6	10BU 326
	43,82 X 5,34	54,08	44,78	1,52	54	44,6	10BU 327
	46,99 X 5,34	57,26	47,96	1,52	57	47,6	10BU 328
	50,17 X 5,34	60,43	51,13	1,52	60	50,6	10BU 329
	53,34 X 5,34	63,61	54,31	1,52	63,5	54,1	10BU 330
	56,52 X 5,34	66,91	57,61	1,52	67	57,6	10BU 331
	59,69 X 5,34	70,08	60,78	1,52	70	60,6	10BU 332
	62,87 X 5,34	73,26	63,96	1,52	73	63,6	10BU 333
	66,04 X 5,34	76,43	67,13	1,52	76	66,6	10BU 334
	69,22 X 5,34	79,61	70,31	1,52	80	70,6	10BU 335
	72,39 X 5,34	82,78	73,48	1,52	83	73,6	10BU 336
	75,57 X 5,34	85,96	76,66	1,52	86	76,6	10BU 337
	78,74 X 5,34	89,13	79,83	1,52	89	79,6	10BU 338
	81,92 X 5,34	92,43	83,13	1,52	92	82,6	10BU 339
	85,09 X 5,34	95,61	86,31	1,52	95	85,6	10BU 340
	88,27 X 5,34	98,78	89,48	1,52	98	88,6	10BU 341
	91,44 X 5,34	101,96	92,66	1,52	102	92,6	10BU 342
	94,62 X 5,34	105,13	95,83	1,52	105	95,6	10BU 343
	97,79 X 5,34	108,31	99,01	1,52	108	98,6	10BU 344
	100,97 X 5,34	111,61	102,31	1,52	111	101,6	10BU 345
	104,14 X 5,34	114,79	105,49	1,52	114	104,6	10BU 346
	107,32 X 5,34	117,96	108,66	1,52	118	108,6	10BU 347
	110,49 X 5,34	121,14	111,84	1,52	121	111,6	10BU 348
	113,67 X 5,34	124,31	115,01	1,52	124	114,6	10BU 349
	116,84 X 5,34	127,49	118,19	1,52	127	117,6	10BU 350
	120,02 X 5,34	130,66	121,36	1,52	130	120,6	10BU 351



10BU back-up ring is a closed ring with a concave shaped cross-section. For these back-up rings, we use a NBR elastomer of 90°shore A hardness to guarantee a high level of resistance to extrusion and abrasion.

Their design tends to keep the O-ring in its original form, even at high pressure. They minimize distortion of the O-ring who can therefore withstand better against higher pressure loads. This produces a better sealing effect and **increases the seal's service life**.

10BU rings are continuous. They do not have a cut (unlike open PTFE rings) and they can be stretched over a piston during assembly. Hence they contact the O-ring uniformly, and do not cause localised wear spots.

10BU back-up ring has a symmetrical profile and can therefore be used in both internal and external sealing systems.

Operating conditions ✕ see page 8

Pressure	≤ 40 MPa
Temperature	-30°C to 110°C
Fluids	mineral oils, HFA, HFB, HFC

Materials ✕ see pages 10-19

NBR 90 Sh A colour: black

Assembly ✕ see pages 54-59

In one-piece housings

Advantages

- Easy assembly
- Closed ring (uncut)
- For inner and outer housings
- Extended service life of the O-ring

Please contact us for applications approaching maximum values.

More information

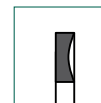
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	25	30	35	40
e max (mm)	0,2	0,15	0,1	0,05

Table 190

O-ring Cs	g	L1	L2	E	T
1,78	1,45	3,6	5	1,14	1,24
2,62	2,25	4,5	5,9	1,14	1,35
3,53	3,1	5,6	7	1,02	1,27
5,34	4,7	7,9	9,6	1,52	1,93
7	6,1	10,7	13,2	2,44	2,97

O-ring cross section	O-ring	A	a	E	D	d	Reference
5,34	123,19 X 5,34	133,84	124,54	1,52	133	123,6	10BU 352
	126,37 X 5,34	137,01	127,71	1,52	137	127,6	10BU 353
	129,54 X 5,34	140,19	130,89	1,52	140	130,6	10BU 354
	132,72 X 5,34	143,36	134,06	1,52	143	133,6	10BU 355
	135,89 X 5,34	146,54	137,24	1,52	146	136,6	10BU 356
	139,07 X 5,34	149,71	140,41	1,52	150	140,6	10BU 357
	142,24 X 5,34	152,89	143,59	1,52	152	142,6	10BU 358
	145,42 X 5,34	156,06	146,76	1,52	156	146,6	10BU 359
	148,59 X 5,34	159,24	149,94	1,52	159	149,6	10BU 360
	151,77 X 5,34	162,41	153,11	1,52	162	152,6	10BU 361
	158,12 X 5,34	168,76	159,46	1,52	168	158,6	10BU 362
	164,47 X 5,34	175,11	165,81	1,52	175	165,6	10BU 363
	170,82 X 5,34	181,46	172,16	1,52	181	171,6	10BU 364
	177,17 X 5,34	187,81	178,51	1,52	187	177,6	10BU 365
	183,52 X 5,34	194,16	184,86	1,52	194	184,6	10BU 366
	189,87 X 5,34	200,51	191,21	1,52	200	190,6	10BU 367
	196,22 X 5,34	206,86	197,56	1,52	206	196,6	10BU 368
	202,57 X 5,34	213,21	203,91	1,52	213	203,6	10BU 369
	208,92 X 5,34	219,56	210,26	1,52	220	210,6	10BU 370
	215,27 X 5,34	225,91	216,61	1,52	225	215,6	10BU 371
	221,62 X 5,34	232,26	222,96	1,52	232	222,6	10BU 372
	227,97 X 5,34	238,61	229,31	1,52	238	228,6	10BU 373
	234,32 X 5,34	244,96	235,66	1,52	244,5	235,1	10BU 374
	240,67 X 5,34	251,31	242,01	1,52	251	241,6	10BU 375
247,02 X 5,34	257,66	248,36	1,52	257	247,6	10BU 376	
253,37 X 5,34	264,01	254,71	1,52	264	254,6	10BU 377	
266,07 X 5,34	276,71	267,41	1,52	276	266,6	10BU 378	
278,77 X 5,34	289,41	280,11	1,52	290	280,6	10BU 379	
291,47 X 5,34	302,11	292,81	1,52	302	292,6	10BU 380	
304,17 X 5,34	314,81	305,51	1,52	315	305,6	10BU 381	
329,57 X 5,34	340,21	330,91	1,52	340	330,6	10BU 382	
354,97 X 5,34	365,61	356,31	1,52	366	356,6	10BU 383	
113,67 X 7	127,58	115,6	1,52	128	115,8	10BU 425	
7 (6,99)	116,84 X 7	130,75	118,77	2,44	131	118,8	10BU 426
	120,02 X 7	133,93	121,95	2,44	134	121,8	10BU 427
	123,19 X 7	137,18	125,2	2,44	137	124,8	10BU 428
	126,37 X 7	140,28	128,3	2,44	140	127,8	10BU 429
	129,54 X 7	143,45	131,47	2,44	143	130,8	10BU 430
	132,72 X 7	146,63	134,65	2,44	147	134,8	10BU 431
	135,89 X 7	149,8	137,82	2,44	150	137,8	10BU 432
	139,07 X 7	152,98	141	2,44	152	139,8	10BU 433
	142,24 X 7	156,15	144,17	2,44	156	143,8	10BU 434



10BU

Example of item code

10BU 218
 Profile AS/BS norm

✘ **Machining of housings:** see page 81 and table 192

10BU back-up ring is a closed ring with a concave shaped cross-section. For these back-up rings, we use a NBR elastomer of 90°shore A hardness to guarantee a high level of resistance to extrusion and abrasion.

Their design tends to keep the O-ring in its original form, even at high pressure. They minimize distortion of the O-ring who can therefore withstand better against higher pressure loads. This produces a better sealing effect and **increases the seal's service life**.

10BU rings are continuous. They do not have a cut (unlike open PTFE rings) and they can be stretched over a piston during assembly. Hence they contact the O-ring uniformly, and do not cause localised wear spots.

10BU back-up ring has a symmetrical profile and can therefore be used in both internal and external sealing systems.

Operating conditions ✘ see page 8

Pressure ≤ 40 MPa
 Temperature -30°C to 110°C
 Fluids mineral oils, HFA, HFB, HFC

Materials ✘ see pages 10-19

NBR 90 Sh A colour: black

Assembly ✘ see pages 54-59

In one-piece housings

Advantages

- Easy assembly
- Closed ring (uncut)
- For inner and outer housings
- Extended service life of the O-ring

Please contact us for applications approaching maximum values.

More information

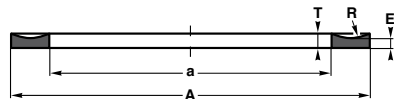
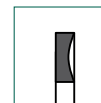
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	25	30	35	40
e max (mm)	0,2	0,15	0,1	0,05

Table 192

O-ring Cs	g	L1	L2	E	T
1,78	1,45	3,6	5	1,14	1,24
2,62	2,25	4,5	5,9	1,14	1,35
3,53	3,1	5,6	7	1,02	1,27
5,34	4,7	7,9	9,6	1,52	1,93
7	6,1	10,7	13,2	2,44	2,97

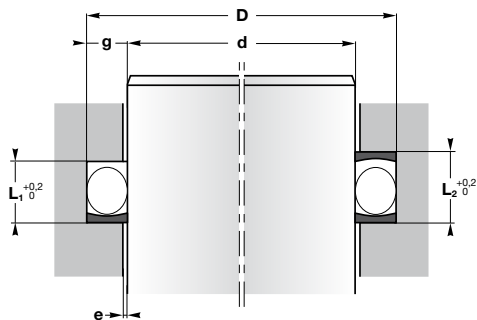
O-ring cross section	O-ring	A	a	E	D	d	Reference
7 (6,99)	145,42 X 7	159,33	147,35	2,44	159	146,8	10BU 435
	148,59 X 7	162,5	150,52	2,44	162	149,8	10BU 436
	151,77 X 7	165,68	153,7	2,44	165	152,8	10BU 437
	158,12 X 7	171,34	159,36	2,44	172	159,8	10BU 438
	164,47 X 7	177,69	165,71	2,44	178	165,8	10BU 439
	170,82 X 7	184,04	172,06	2,44	184	171,8	10BU 440
	177,17 X 7	190,39	178,41	2,44	190,5	178,3	10BU 441
	183,52 X 7	196,74	184,76	2,44	197	184,8	10BU 442
	189,87 X 7	203,09	191,11	2,44	203	190,8	10BU 443
	196,22 X 7	209,44	197,46	2,44	210	197,8	10BU 444
202,57 X 7	215,79	203,81	2,44	216	203,8	10BU 445	
215,27 X 7	228,49	216,51	2,44	229	216,8	10BU 446	
227,97 X 7	241,19	229,21	2,44	241	228,8	10BU 447	
240,67 X 7	253,89	241,91	2,44	254	241,8	10BU 448	
253,37 X 7	266,59	254,61	2,44	267	254,8	10BU 449	
266,07 X 7	279,29	267,31	2,44	280	267,8	10BU 450	
278,77 X 7	291,99	280,01	2,44	292	279,8	10BU 451	
291,47 X 7	304,69	292,71	2,44	305	292,8	10BU 452	
304,17 X 7	317,39	305,41	2,44	318	305,8	10BU 453	
316,87 X 7	330,09	318,11	2,44	330	317,8	10BU 454	
329,57 X 7	342,79	330,81	2,44	343	330,8	10BU 455	
342,27 X 7	355,49	343,51	2,44	356	343,8	10BU 456	
354,97 X 7	368,19	356,21	2,44	368	355,8	10BU 457	
367,67 X 7	380,89	368,91	2,44	381	368,8	10BU 458	
380,37 X 7	393,59	381,61	2,44	394	381,8	10BU 459	
393,07 X 7	406,29	394,31	2,44	406	393,8	10BU 460	
405,26 X 7	418,48	406,5	2,44	419	406,8	10BU 461	
417,96 X 7	431,18	419,2	2,44	432	419,8	10BU 462	
430,66 X 7	443,88	431,9	2,44	444,5	432,3	10BU 463	
443,36 X 7	456,58	444,6	2,44	457	444,8	10BU 464	
456,06 X 7	469,28	457,3	2,44	470	457,8	10BU 465	
468,76 X 7	481,98	470	2,44	483	470,8	10BU 466	
481,46 X 7	494,68	482,7	2,44	495	482,8	10BU 467	
494,16 X 7	507,38	495,4	2,44	508	495,8	10BU 468	
506,86 X 7	520,08	508,1	2,44	521	508,8	10BU 469	



10BU.../INT

Example of item code

10BU 218/INT
Profile AS/BS norm



✕ Machining of housings: see page 81 and table 194

10BU back-up ring is a closed ring with a concave shaped cross-section. For these back-up rings, we use a NBR elastomer of 90°shore A hardness to guarantee a high level of resistance to extrusion and abrasion.

Their design tends to keep the O-ring in its original form, even at high pressure. They minimize distortion of the O-ring who can therefore withstand better against higher pressure loads. This produces a better sealing effect and **increases the seal's service life**.

10BU rings are continuous. They do not have a cut (unlike open PTFE rings) and they can be stretched over a piston during assembly. Hence they contact the O-ring uniformly, and do not cause localised wear spots.

10BU back-up ring has a symmetrical profile and can therefore be used in both internal and external sealing systems.

Operating conditions ✕ see page 8

Pressure ≤ 40 MPa
Temperature -30°C to 110°C
Fluids mineral oils, HFA, HFB, HFC

Materials ✕ see pages 10-19

NBR 90 Sh A colour: black

Assembly ✕ see pages 54-59

In one-piece housings

Advantages

Easy assembly
Closed ring (uncut)
For inner and outer housings
Extended service life of the O-ring

Please contact us for applications approaching maximum values.

More information

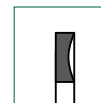
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	25	30	35	40
e max (mm)	0,2	0,15	0,1	0,05

Table 194

O-ring Cs	g	L1	L2	E	T
1,78	1,45	3,6	5	1,14	1,24
2,62	2,25	4,5	5,9	1,14	1,35
3,53	3,1	5,6	7	1,02	1,27
5,34	4,7	7,9	9,6	1,52	1,93
7	6,1	10,7	13,2	2,44	2,97

O-ring cross section	O-ring	a	A	E	d	D	Reference
1,78	1,78 X 1,78	2,44	5,14	1,14	2	4,9	10BU 004/INT
	2,57 X 1,78	3,23	5,93	1,14	2,5	5,4	10BU 005/INT
	2,9 X 1,78	3,56	6,26	1,14	3	5,9	10BU 006/INT
	3,68 X 1,78	4,34	7,04	1,14	4	6,9	10BU 007/INT
	4,47 X 1,78	5,13	7,83	1,14	5	7,9	10BU 008/INT
	5,28 X 1,78	5,94	8,64	1,14	5,5	8,4	10BU 009/INT
	6,07 X 1,78	6,73	9,43	1,14	6,5	9,4	10BU 010/INT
	7,65 X 1,78	8,31	11,01	1,14	8	10,9	10BU 011/INT
	9,25 X 1,78	9,91	12,61	1,14	9,5	12,4	10BU 012/INT
	10,82 X 1,78	11,56	14,26	1,14	11	13,9	10BU 013/INT
	12,42 X 1,78	13,16	15,86	1,14	13	15,9	10BU 014/INT
	14,0 X 1,78	14,73	17,43	1,14	14	16,9	10BU 015/INT
	15,6 X 1,78	16,33	19,03	1,14	16	18,9	10BU 016/INT
	17,17 X 1,78	17,91	20,61	1,14	17	19,9	10BU 017/INT
	18,77 X 1,78	19,51	22,21	1,14	19	21,9	10BU 018/INT
20,35 X 1,78	21,08	23,78	1,14	20	22,9	10BU 019/INT	
21,95 X 1,78	22,68	25,38	1,14	22	24,9	10BU 020/INT	
23,52 X 1,78	24,26	26,96	1,14	24	26,9	10BU 021/INT	
25,12 X 1,78	25,86	28,56	1,14	25	27,9	10BU 022/INT	
26,7 X 1,78	27,43	30,13	1,14	27	29,9	10BU 023/INT	
28,3 X 1,78	29,03	31,73	1,14	29	31,9	10BU 024/INT	
29,87 X 1,78	30,61	33,31	1,14	30	32,9	10BU 025/INT	
31,47 X 1,78	32,21	34,91	1,14	32	34,9	10BU 026/INT	
33,05 X 1,78	33,78	36,48	1,14	33	35,9	10BU 027/INT	
34,65 X 1,78	35,38	38,08	1,14	35	37,9	10BU 028/INT	
37,82 X 1,78	38,56	41,26	1,14	38	40,9	10BU 029/INT	
41,0 X 1,78	41,73	44,43	1,14	41	43,9	10BU 030/INT	
44,17 X 1,78	44,91	47,61	1,14	44,5	47,4	10BU 031/INT	
47,35 X 1,78	48,08	50,78	1,14	48	50,9	10BU 032/INT	
50,52 X 1,78	51,26	53,96	1,14	51	53,9	10BU 033/INT	
53,7 X 1,78	54,43	57,13	1,14	54	56,9	10BU 034/INT	
56,87 X 1,78	57,61	60,31	1,14	57	59,9	10BU 035/INT	
60,05 X 1,78	60,78	63,48	1,14	60	62,9	10BU 036/INT	
63,22 X 1,78	63,96	66,66	1,14	63	65,9	10BU 037/INT	
66,4 X 1,78	67,13	69,83	1,14	67	69,9	10BU 038/INT	
69,57 X 1,78	70,31	73,01	1,14	70	72,9	10BU 039/INT	
72,75 X 1,78	73,48	76,18	1,14	73	75,9	10BU 040/INT	
75,92 X 1,78	76,66	79,36	1,14	76	78,9	10BU 041/INT	
82,27 X 1,78	83,01	85,71	1,14	83	85,9	10BU 042/INT	
88,62 X 1,78	89,36	92,06	1,14	89	91,9	10BU 043/INT	
94,97 X 1,78	95,71	98,41	1,14	95	97,9	10BU 044/INT	
101,32 X 1,78	102,06	104,76	1,14	102	104,9	10BU 045/INT	



10BU.../INT

Example of item code

10BU 218/INT
Profile AS/BS norm

✕ Machining of housings: see page 81 and table 196

10BU back-up ring is a closed ring with a concave shaped cross-section. For these back-up rings, we use a NBR elastomer of 90°shore A hardness to guarantee a high level of resistance to extrusion and abrasion.

Their design tends to keep the O-ring in its original form, even at high pressure. They minimize distortion of the O-ring who can therefore withstand better against higher pressure loads. This produces a better sealing effect and **increases the seal's service life**.

10BU rings are continuous. They do not have a cut (unlike open PTFE rings) and they can be stretched over a piston during assembly. Hence they contact the O-ring uniformly, and do not cause localised wear spots.

10BU back-up ring has a symmetrical profile and can therefore be used in both internal and external sealing systems.

Operating conditions ✕ see page 8

Pressure ≤ 40 MPa
 Temperature -30°C to 110°C
 Fluids mineral oils, HFA, HFB, HFC

Materials ✕ see pages 10-19

NBR 90 Sh A colour: black

Assembly ✕ see pages 54-59

In one-piece housings

Advantages

- Easy assembly
- Closed ring (uncut)
- For inner and outer housings
- Extended service life of the O-ring

Please contact us for applications approaching maximum values.

More information

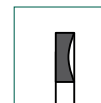
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	25	30	35	40
e max (mm)	0,2	0,15	0,1	0,05

Table 196

O-ring Cs	g	L1	L2	E	T
1,78	1,45	3,6	5	1,14	1,24
2,62	2,25	4,5	5,9	1,14	1,35
3,53	3,1	5,6	7	1,02	1,27
5,34	4,7	7,9	9,6	1,52	1,93
7	6,1	10,7	13,2	2,44	2,97

O-ring cross section	O-ring	a	A	E	d	D	Reference
1,78	107,67 X 1,78	108,41	111,11	1,14	108	110,9	10BU 046/INT
	114,02 X 1,78	114,76	117,46	1,14	114	116,9	10BU 047/INT
	120,37 X 1,78	121,11	123,81	1,14	121	123,9	10BU 048/INT
	126,72 X 1,78	127,46	130,16	1,14	127	129,9	10BU 049/INT
	133,07 X 1,78	133,81	136,51	1,14	133	135,9	10BU 050/INT
	2,62	1,24 X 2,62	1,96	6,32	1,14	1,6	6,1
2,06 X 2,62		2,77	7,13	1,14	2,5	7	10BU 103/INT
2,84 X 2,62		3,56	7,92	1,14	3	7,5	10BU 104/INT
3,63 X 2,62		4,34	8,7	1,14	4	8,5	10BU 105/INT
4,42 X 2,62		5,13	9,49	1,14	5	9,5	10BU 106/INT
5,23 X 2,62		5,93	10,29	1,14	5,5	10	10BU 107/INT
6,02 X 2,62		6,73	11,09	1,14	6,5	11	10BU 108/INT
7,59 X 2,62		8,31	12,67	1,14	8	12,5	10BU 109/INT
9,19 X 2,62		9,91	14,27	1,14	9,5	14	10BU 110/INT
10,77 X 2,62		11,48	15,84	1,14	11	15,5	10BU 111/INT
12,37 X 2,62		13,08	17,44	1,14	13	17,5	10BU 112/INT
13,94 X 2,62		14,66	19,02	1,14	14	18,5	10BU 113/INT
15,54 X 2,62	16,26	20,62	1,14	16	20,5	10BU 114/INT	
17,12 X 2,62	17,83	22,19	1,14	17	21,5	10BU 115/INT	
18,72 X 2,62	19,43	23,79	1,14	19	23,5	10BU 116/INT	
20,3 X 2,62	21,11	25,47	1,14	20	24,5	10BU 117/INT	
21,89 X 2,62	22,68	27,04	1,14	22	26,5	10BU 118/INT	
23,47 X 2,62	24,28	28,64	1,14	24	28,5	10BU 119/INT	
25,07 X 2,62	25,86	30,22	1,14	25	29,5	10BU 120/INT	
26,64 X 2,62	27,46	31,82	1,14	27	31,5	10BU 121/INT	
28,24 X 2,62	29,03	33,39	1,14	29	33,5	10BU 122/INT	
29,82 X 2,62	30,63	34,99	1,14	30	34,5	10BU 123/INT	
31,42 X 2,62	32,21	36,57	1,14	32	36,5	10BU 124/INT	
32,99 X 2,62	33,81	38,17	1,14	33	37,5	10BU 125/INT	
34,59 X 2,62	35,38	39,74	1,14	35	39,5	10BU 126/INT	
36,17 X 2,62	36,98	41,34	1,14	36,5	41	10BU 127/INT	
37,77 X 2,62	38,56	42,92	1,14	38	42,5	10BU 128/INT	
39,34 X 2,62	40,16	44,52	1,14	40	44,5	10BU 129/INT	
40,94 X 2,62	41,73	46,09	1,14	41	45,5	10BU 130/INT	
42,52 X 2,62	43,33	47,69	1,14	43	47,5	10BU 131/INT	
44,12 X 2,62	44,91	49,27	1,14	44,5	49	10BU 132/INT	
45,69 X 2,62	46,51	50,87	1,14	46	50,5	10BU 133/INT	
47,29 X 2,62	48,08	52,44	1,14	48	52,5	10BU 134/INT	
48,9 X 2,62	49,68	54,04	1,14	49	53,5	10BU 135/INT	
50,47 X 2,62	51,26	55,62	1,14	51	55,5	10BU 136/INT	
52,07 X 2,62	52,86	57,22	1,14	52	56,5	10BU 137/INT	



10BU.../INT

Example of item code

10BU 218/INT
Profile AS/BS norm

✕ Machining of housings: see page 81 and table 198

10BU back-up ring is a closed ring with a concave shaped cross-section. For these back-up rings, we use a NBR elastomer of 90°shore A hardness to guarantee a high level of resistance to extrusion and abrasion.

Their design tends to keep the O-ring in its original form, even at high pressure. They minimize distortion of the O-ring who can therefore withstand better against higher pressure loads. This produces a better sealing effect and **increases the seal's service life**.

10BU rings are continuous. They do not have a cut (unlike open PTFE rings) and they can be stretched over a piston during assembly. Hence they contact the O-ring uniformly, and do not cause localised wear spots.

10BU back-up ring has a symmetrical profile and can therefore be used in both internal and external sealing systems.

Operating conditions	✕ see page 8
Pressure	≤ 40 MPa
Temperature	-30°C to 110°C
Fluids	mineral oils, HFA, HFB, HFC
Materials	✕ see pages 10-19
NBR 90 Sh A	colour: black

Assembly	✕ see pages 54-59
In one-piece housings	

Advantages
Easy assembly
Closed ring (uncut)
For inner and outer housings
Extended service life of the O-ring

Please contact us for applications approaching maximum values.

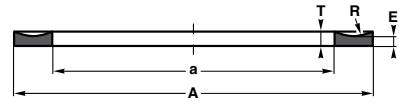
More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	25	30	35	40
e max (mm)	0,2	0,15	0,1	0,05

Table 198

O-ring Cs	g	L1	L2	E	T
1,78	1,45	3,6	5	1,14	1,24
2,62	2,25	4,5	5,9	1,14	1,35
3,53	3,1	5,6	7	1,02	1,27
5,34	4,7	7,9	9,6	1,52	1,93
7	6,1	10,7	13,2	2,44	2,97

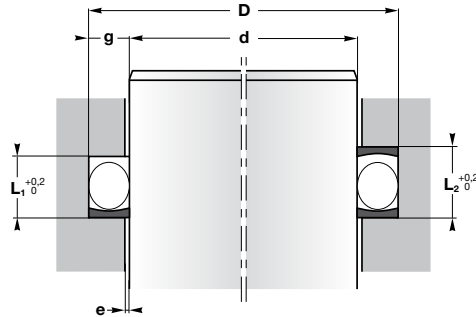
O-ring cross section	O-ring	a	A	E	d	D	Reference
2,62	53,64 X 2,62	54,43	58,79	1,14	54	58,5	10BU 138/INT
	55,25 X 2,62	56,03	60,39	1,14	55	59,5	10BU 139/INT
	56,82 X 2,62	57,61	61,97	1,14	57	61,5	10BU 140/INT
	58,42 X 2,62	59,21	63,57	1,14	59	63,5	10BU 141/INT
	59,99 X 2,62	60,78	65,14	1,14	60	64,5	10BU 142/INT
	61,6 X 2,62	62,38	66,74	1,14	62	66,5	10BU 143/INT
	63,17 X 2,62	63,96	68,32	1,14	63	67,5	10BU 144/INT
	64,77 X 2,62	65,56	69,92	1,14	65	69,5	10BU 145/INT
	66,34 X 2,62	67,13	71,49	1,14	67	71,5	10BU 146/INT
	67,95 X 2,62	68,73	73,09	1,14	68	72,5	10BU 147/INT
	69,52 X 2,62	70,31	74,67	1,14	70	74,5	10BU 148/INT
	71,12 X 2,62	71,91	76,27	1,14	71	75,5	10BU 149/INT
	72,69 X 2,62	73,48	77,84	1,14	73	77,5	10BU 150/INT
	75,87 X 2,62	76,66	81,02	1,14	76	80,5	10BU 151/INT
	82,22 X 2,62	83,01	87,37	1,14	83	87,5	10BU 152/INT
	88,57 X 2,62	89,36	93,72	1,14	89	93,5	10BU 153/INT
	94,92 X 2,62	95,71	100,07	1,14	95	99,5	10BU 154/INT
	101,27 X 2,62	102,06	106,42	1,14	102	106,5	10BU 155/INT
	107,62 X 2,62	108,41	112,77	1,14	108	112,5	10BU 156/INT
	113,97 X 2,62	114,76	119,12	1,14	114	118,5	10BU 157/INT
120,32 X 2,62	121,11	125,47	1,14	121	125,5	10BU 158/INT	
126,67 X 2,62	127,46	131,82	1,14	127	131,5	10BU 159/INT	
133,02 X 2,62	133,81	138,17	1,14	133	137,5	10BU 160/INT	
139,37 X 2,62	140,16	144,52	1,14	140	144,5	10BU 161/INT	
145,72 X 2,62	146,51	150,87	1,14	146	150,5	10BU 162/INT	
152,07 X 2,62	152,86	157,22	1,14	152	156,5	10BU 163/INT	
158,42 X 2,62	159,21	163,57	1,14	159	163,5	10BU 164/INT	
164,77 X 2,62	165,65	170,01	1,14	165	169,5	10BU 165/INT	
171,12 X 2,62	171,91	176,27	1,14	172	176,5	10BU 166/INT	
177,47 X 2,62	178,26	182,62	1,14	178	182,5	10BU 167/INT	
183,82 X 2,62	184,61	188,97	1,14	184	188,5	10BU 168/INT	
190,17 X 2,62	190,96	195,32	1,14	190	194,5	10BU 169/INT	
196,52 X 2,62	197,31	201,67	1,14	197	201,5	10BU 170/INT	
202,87 X 2,62	203,66	208,02	1,14	203	207,5	10BU 171/INT	
209,22 X 2,62	210,01	214,37	1,14	210	214,5	10BU 172/INT	
215,57 X 2,62	216,36	220,72	1,14	216	220,5	10BU 173/INT	
221,92 X 2,62	222,71	227,07	1,14	222	226,5	10BU 174/INT	
228,27 X 2,62	229,06	233,42	1,14	229	233,5	10BU 175/INT	
234,62 X 2,62	235,41	239,77	1,14	235	239,5	10BU 176/INT	
240,97 X 2,62	241,76	246,12	1,14	241	245,5	10BU 177/INT	
247,32 X 2,62	248,11	252,47	1,14	248	252,5	10BU 178/INT	



10BU.../INT

Example of item code

10BU 218/INT
Profile AS/BS norm



✕ **Machining of housings:** see page 81 and table 200

10BU back-up ring is a closed ring with a concave shaped cross-section. For these back-up rings, we use a NBR elastomer of 90°shore A hardness to guarantee a high level of resistance to extrusion and abrasion.

Their design tends to keep the O-ring in its original form, even at high pressure. They minimize distortion of the O-ring who can therefore withstand better against higher pressure loads. This produces a better sealing effect and **increases the seal's service life.**

10BU rings are continuous. They do not have a cut (unlike open PTFE rings) and they can be stretched over a piston during assembly. Hence they contact the O-ring uniformly, and do not cause localised wear spots.

10BU back-up ring has a symmetrical profile and can therefore be used in both internal and external sealing systems.

Operating conditions ✕ see page 8

- Pressure ≤ 40 MPa
- Temperature -30°C to 110°C
- Fluids mineral oils, HFA, HFB, HFC

Materials ✕ see pages 10-19

NBR 90 Sh A colour: black

Assembly ✕ see pages 54-59

In one-piece housings

Advantages

- Easy assembly
- Closed ring (uncut)
- For inner and outer housings
- Extended service life of the O-ring

Please contact us for applications approaching maximum values.

More information

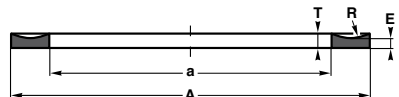
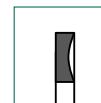
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	25	30	35	40
e max (mm)	0,2	0,15	0,1	0,05

Table 200

O-ring Cs	g	L1	L2	E	T
1,78	1,45	3,6	5	1,14	1,24
2,62	2,25	4,5	5,9	1,14	1,35
3,53	3,1	5,6	7	1,02	1,27
5,34	4,7	7,9	9,6	1,52	1,93
7	6,1	10,7	13,2	2,44	2,97

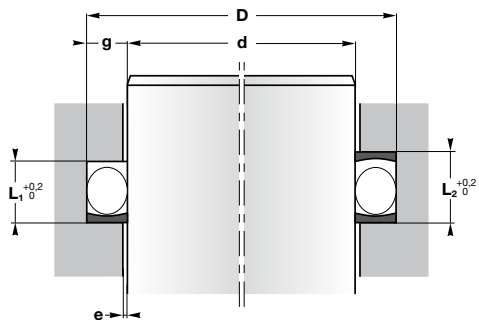
O-ring cross section	O-ring	a	A	E	d	D	Reference
3,53	4,34 X 3,53	5,13	11,13	1,02	5	11,2	10BU 201/INT
	5,94 X 3,53	6,73	12,73	1,02	6,5	12,7	10BU 202/INT
	7,52 X 3,53	8,3	14,3	1,02	8	14,2	10BU 203/INT
	9,12 X 3,53	9,9	15,9	1,02	9,5	15,7	10BU 204/INT
	10,69 X 3,53	11,56	17,56	1,02	11	17,2	10BU 205/INT
	12,29 X 3,53	13,16	19,16	1,02	13	19,2	10BU 206/INT
	13,87 X 3,53	14,73	20,73	1,02	14	20,2	10BU 207/INT
	15,47 X 3,53	16,33	22,33	1,02	16	22,2	10BU 208/INT
	17,04 X 3,53	17,9	23,9	1,02	17	23,2	10BU 209/INT
	18,64 X 3,53	19,46	25,46	1,02	19	25,2	10BU 210/INT
	20,22 X 3,53	21,03	27,03	1,02	20	26,2	10BU 211/INT
	21,82 X 3,53	22,63	28,63	1,02	22	28,2	10BU 212/INT
	23,39 X 3,53	24,21	30,21	1,02	24	30,2	10BU 213/INT
	24,99 X 3,53	25,81	31,81	1,02	25	31,2	10BU 214/INT
	26,57 X 3,53	27,38	33,38	1,02	27	33,2	10BU 215/INT
	28,17 X 3,53	28,98	34,98	1,02	29	35,2	10BU 216/INT
	29,74 X 3,53	30,56	36,56	1,02	30	36,2	10BU 217/INT
	31,34 X 3,53	32,16	38,16	1,02	32	38,2	10BU 218/INT
	32,92 X 3,53	33,88	39,88	1,02	33	39,2	10BU 219/INT
	34,52 X 3,53	35,48	41,48	1,02	35	41,2	10BU 220/INT
	36,09 X 3,53	37,06	43,06	1,02	36	42,2	10BU 221/INT
	37,69 X 3,53	38,66	44,66	1,02	38	44,2	10BU 222/INT
	40,87 X 3,53	41,83	47,83	1,02	41	47,2	10BU 223/INT
	44,04 X 3,53	45,01	51,01	1,02	44,5	50,7	10BU 224/INT
47,22 X 3,53	48,18	54,18	1,02	48	54,2	10BU 225/INT	
50,39 X 3,53	51,36	57,36	1,02	51	57,2	10BU 226/INT	
53,57 X 3,53	54,53	60,53	1,02	54	60,2	10BU 227/INT	
56,74 X 3,53	57,71	63,71	1,02	57	63,2	10BU 228/INT	
59,92 X 3,53	60,88	66,88	1,02	60	66,2	10BU 229/INT	
63,09 X 3,53	64,06	70,06	1,02	63,5	69,7	10BU 230/INT	
66,27 X 3,53	66,83	72,83	1,02	67	73,2	10BU 231/INT	
69,44 X 3,53	70	76	1,02	70	76,2	10BU 232/INT	
72,62 X 3,53	73,18	79,18	1,02	73	79,2	10BU 233/INT	
75,79 X 3,53	76,35	82,35	1,02	76	82,2	10BU 234/INT	
78,97 X 3,53	79,53	85,53	1,02	79,5	85,7	10BU 235/INT	
82,14 X 3,53	82,7	88,7	1,02	83	89,2	10BU 236/INT	
85,32 X 3,53	85,88	91,88	1,02	86	92,2	10BU 237/INT	
88,49 X 3,53	89,05	95,05	1,02	90	96,2	10BU 238/INT	
91,67 X 3,53	92,23	98,23	1,02	92	98,2	10BU 239/INT	
94,84 X 3,53	95,4	101,4	1,02	95	101,2	10BU 240/INT	
98,02 X 3,53	98,58	104,58	1,02	98	104,2	10BU 241/INT	
101,19 X 3,53	101,75	107,75	1,02	102	108,2	10BU 242/INT	



10BU.../INT

Example of item code

10BU 218/INT
Profile AS/BS norm



✕ Machining of housings: see page 81 and table 202

10BU back-up ring is a closed ring with a concave shaped cross-section. For these back-up rings, we use a NBR elastomer of 90°shore A hardness to guarantee a high level of resistance to extrusion and abrasion.

Their design tends to keep the O-ring in its original form, even at high pressure. They minimize distortion of the O-ring who can therefore withstand better against higher pressure loads. This produces a better sealing effect and **increases the seal's service life**.

10BU rings are continuous. They do not have a cut (unlike open PTFE rings) and they can be stretched over a piston during assembly. Hence they contact the O-ring uniformly, and do not cause localised wear spots.

10BU back-up ring has a symmetrical profile and can therefore be used in both internal and external sealing systems.

Operating conditions ✕ see page 8

Pressure ≤ 40 MPa
Temperature -30°C to 110°C
Fluids mineral oils, HFA, HFB, HFC

Materials ✕ see pages 10-19

NBR 90 Sh A colour: black

Assembly ✕ see pages 54-59

In one-piece housings

Advantages

Easy assembly
Closed ring (uncut)
For inner and outer housings
Extended service life of the O-ring

Please contact us for applications approaching maximum values.

More information

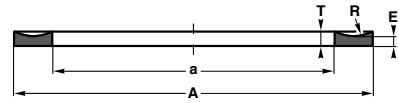
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	25	30	35	40
e max (mm)	0,2	0,15	0,1	0,05

Table 202

O-ring Cs	g	L1	L2	E	T
1,78	1,45	3,6	5	1,14	1,24
2,62	2,25	4,5	5,9	1,14	1,35
3,53	3,1	5,6	7	1,02	1,27
5,34	4,7	7,9	9,6	1,52	1,93
7	6,1	10,7	13,2	2,44	2,97

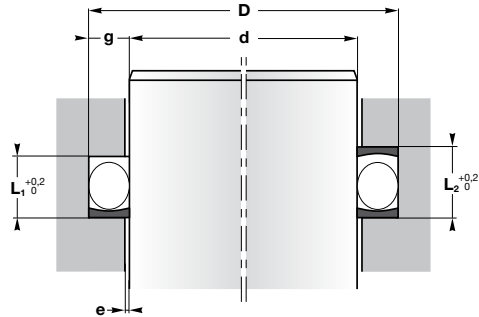
O-ring cross section	O-ring	a	A	E	d	D	Reference
3,53	104,37 X 3,53	104,93	110,93	1,02	105	111,2	10BU 243/INT
	107,54 X 3,53	108,1	114,1	1,02	108	114,2	10BU 244/INT
	110,72 X 3,53	111,28	117,28	1,02	111	117,2	10BU 245/INT
	113,89 X 3,53	114,45	120,45	1,02	114	120,2	10BU 246/INT
	117,07 X 3,53	117,63	123,63	1,02	118	124,2	10BU 247/INT
	120,24 X 3,53	121,11	127,11	1,02	121	127,2	10BU 248/INT
	123,42 X 3,53	124,28	130,28	1,02	124	130,2	10BU 249/INT
	126,59 X 3,53	127,46	133,46	1,02	127	133,2	10BU 250/INT
	129,77 X 3,53	130,63	136,63	1,02	130	136,2	10BU 251/INT
	132,94 X 3,53	133,81	139,81	1,02	133	139,2	10BU 252/INT
	136,12 X 3,53	136,98	142,98	1,02	136,5	142,7	10BU 253/INT
	139,29 X 3,53	140,16	146,16	1,02	140	146,2	10BU 254/INT
	142,47 X 3,53	143,33	149,33	1,02	143	149,2	10BU 255/INT
	145,64 X 3,53	146,51	152,51	1,02	146	152,2	10BU 256/INT
	148,82 X 3,53	149,68	155,68	1,02	149	155,2	10BU 257/INT
	151,99 X 3,53	152,86	158,86	1,02	152	158,2	10BU 258/INT
	158,34 X 3,53	159,21	165,21	1,02	159	165,2	10BU 259/INT
	164,69 X 3,53	165,56	171,56	1,02	165	171,2	10BU 260/INT
	171,04 X 3,53	171,91	177,91	1,02	172	178,2	10BU 261/INT
	177,39 X 3,53	178,26	184,26	1,02	178	184,2	10BU 262/INT
	183,74 X 3,53	184,61	190,61	1,02	184	190,2	10BU 263/INT
	190,09 X 3,53	190,96	196,96	1,02	190,5	196,7	10BU 264/INT
	196,44 X 3,53	197,31	203,31	1,02	197	203,2	10BU 265/INT
	202,79 X 3,53	203,66	209,66	1,02	203	209,2	10BU 266/INT
	209,14 X 3,53	210,01	216,01	1,02	210	216,2	10BU 267/INT
	215,49 X 3,53	216,36	222,36	1,02	215,9	222,1	10BU 268/INT
	221,84 X 3,53	222,71	228,71	1,02	222,3	228,5	10BU 269/INT
	228,19 X 3,53	229,06	235,06	1,02	228,6	234,8	10BU 270/INT
	234,54 X 3,53	235,41	241,41	1,02	235	241,2	10BU 271/INT
	240,89 X 3,53	241,76	247,76	1,02	241	247,2	10BU 272/INT
	247,26 X 3,53	248,11	254,11	1,02	248	254,2	10BU 273/INT
	253,59 X 3,53	254,46	260,46	1,02	254	260,2	10BU 274/INT
	266,29 X 3,53	267,16	273,16	1,02	267	273,2	10BU 275/INT
	278,99 X 3,53	279,86	285,86	1,02	280	286,2	10BU 276/INT
	291,69 X 3,53	292,56	298,56	1,02	292	298,2	10BU 277/INT
	304,39 X 3,53	305,26	311,26	1,02	305	311,2	10BU 278/INT
	329,79 X 3,53	330,66	336,66	1,02	330	336,2	10BU 279/INT
	355,19 X 3,53	356,06	362,06	1,02	356	362,2	10BU 280/INT
	380,59 X 3,53	381,46	387,46	1,02	381	387,2	10BU 281/INT
	405,26 X 3,53	406,12	412,12	1,02	406	412,2	10BU 282/INT
	430,66 X 3,53	431,52	437,52	1,02	432	438,2	10BU 283/INT
	456,06 X 3,53	456,92	462,92	1,02	457	463,2	10BU 284/INT



10BU.../INT

Example of item code

10BU 218/INT
Profile AS/BS norm



✕ **Machining of housings:** see page 81 and table 204

10BU back-up ring is a closed ring with a concave shaped cross-section. For these back-up rings, we use a NBR elastomer of 90°shore A hardness to guarantee a high level of resistance to extrusion and abrasion.

Their design tends to keep the O-ring in its original form, even at high pressure. They minimize distortion of the O-ring who can therefore withstand better against higher pressure loads. This produces a better sealing effect and **increases the seal's service life**.

10BU rings are continuous. They do not have a cut (unlike open PTFE rings) and they can be stretched over a piston during assembly. Hence they contact the O-ring uniformly, and do not cause localised wear spots.

10BU back-up ring has a symmetrical profile and can therefore be used in both internal and external sealing systems.

Operating conditions ✕ see page 8

- Pressure ≤ 40 MPa
- Temperature -30°C to 110°C
- Fluids mineral oils, HFA, HFB, HFC

Materials ✕ see pages 10-19

NBR 90 Sh A colour: black

Assembly ✕ see pages 54-59

In one-piece housings

Advantages

- Easy assembly
- Closed ring (uncut)
- For inner and outer housings
- Extended service life of the O-ring

Please contact us for applications approaching maximum values.

More information

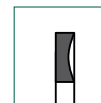
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	25	30	35	40
e max (mm)	0,2	0,15	0,1	0,05

Table 204

O-ring Cs	g	L1	L2	E	T
1,78	1,45	3,6	5	1,14	1,24
2,62	2,25	4,5	5,9	1,14	1,35
3,53	3,1	5,6	7	1,02	1,27
5,34	4,7	7,9	9,6	1,52	1,93
7	6,1	10,7	13,2	2,44	2,97

O-ring cross section	O-ring	a	A	E	d	D	Reference
5,34	12,07 X 5,34	13,03	22,33	1,52	13	22,4	10BU 310/INT
	13,64 X 5,34	14,6	23,9	1,52	14	23,4	10BU 311/INT
	15,24 X 5,34	16,2	25,5	1,52	16	25,4	10BU 312/INT
	16,81 X 5,34	17,78	27,08	1,52	17	26,4	10BU 313/INT
	18,42 X 5,34	19,38	28,68	1,52	19	28,4	10BU 314/INT
	19,99 X 5,34	20,96	30,26	1,52	20	29,4	10BU 315/INT
	21,59 X 5,34	22,56	31,86	1,52	22	31,4	10BU 316/INT
	23,16 X 5,34	24,13	33,43	1,52	24	33,4	10BU 317/INT
	24,77 X 5,34	25,73	35,03	1,52	25	34,4	10BU 318/INT
	26,34 X 5,34	27,31	36,61	1,52	27	36,4	10BU 319/INT
	27,94 X 5,34	28,91	38,21	1,52	29	38,4	10BU 320/INT
	29,51 X 5,34	30,42	39,72	1,52	30	39,4	10BU 321/INT
	31,12 X 5,34	32,08	41,38	1,52	32	41,4	10BU 322/INT
	32,69 X 5,34	33,43	42,73	1,52	33	42,4	10BU 323/INT
	34,29 X 5,34	35,26	44,56	1,52	35	44,4	10BU 324/INT
	37,47 X 5,34	38,43	47,73	1,52	38	47,4	10BU 325/INT
	40,64 X 5,34	41,61	50,91	1,52	41	50,4	10BU 326/INT
	43,82 X 5,34	44,78	54,08	1,52	44,5	53,9	10BU 327/INT
	46,99 X 5,34	47,96	57,26	1,52	48	57,4	10BU 328/INT
	50,17 X 5,34	51,13	60,43	1,52	51	60,4	10BU 329/INT
	53,34 X 5,34	54,31	63,61	1,52	54	63,4	10BU 330/INT
	56,52 X 5,34	57,61	66,91	1,52	57	66,4	10BU 331/INT
	59,69 X 5,34	60,78	70,08	1,52	60	69,4	10BU 332/INT
	62,87 X 5,34	63,96	73,26	1,52	64	73,4	10BU 333/INT
	66,04 X 5,34	67,13	76,43	1,52	67	76,4	10BU 334/INT
	69,22 X 5,34	70,31	79,61	1,52	70	79,4	10BU 335/INT
	72,39 X 5,34	73,48	82,78	1,52	73	82,4	10BU 336/INT
	75,57 X 5,34	76,66	85,96	1,52	76	85,4	10BU 337/INT
	78,74 X 5,34	79,83	89,13	1,52	80	89,4	10BU 338/INT
	81,92 X 5,34	83,13	92,43	1,52	83	92,4	10BU 339/INT
85,09 X 5,34	86,31	95,61	1,52	86	95,4	10BU 340/INT	
88,27 X 5,34	89,48	98,78	1,52	90	99,4	10BU 341/INT	
91,44 X 5,34	92,66	101,96	1,52	92	101,4	10BU 342/INT	
94,62 X 5,34	95,83	105,13	1,52	95	104,4	10BU 343/INT	
97,79 X 5,34	99,01	108,31	1,52	98	107,4	10BU 344/INT	
100,97 X 5,34	102,31	111,61	1,52	102	111,4	10BU 345/INT	
104,14 X 5,34	105,49	114,79	1,52	105	114,4	10BU 346/INT	
107,32 X 5,34	108,66	117,96	1,52	108	117,4	10BU 347/INT	
110,49 X 5,34	111,84	121,14	1,52	111	120,4	10BU 348/INT	
113,67 X 5,34	115,01	124,31	1,52	114	123,4	10BU 349/INT	
116,84 X 5,34	118,19	127,49	1,52	118	127,4	10BU 350/INT	
120,02 X 5,34	121,36	130,66	1,52	115	124,4	10BU 351/INT	



10BU.../INT

Example of item code

10BU 218/INT
Profile AS/BS norm

✕ Machining of housings: see page 81 and table 206

10BU back-up ring is a closed ring with a concave shaped cross-section. For these back-up rings, we use a NBR elastomer of 90°shore A hardness to guarantee a high level of resistance to extrusion and abrasion.

Their design tends to keep the O-ring in its original form, even at high pressure. They minimize distortion of the O-ring who can therefore withstand better against higher pressure loads. This produces a better sealing effect and **increases the seal's service life**.

10BU rings are continuous. They do not have a cut (unlike open PTFE rings) and they can be stretched over a piston during assembly. Hence they contact the O-ring uniformly, and do not cause localised wear spots.

10BU back-up ring has a symmetrical profile and can therefore be used in both internal and external sealing systems.

Operating conditions	✕ see page 8
Pressure	≤ 40 MPa
Temperature	-30°C to 110°C
Fluids	mineral oils, HFA, HFB, HFC
Materials	✕ see pages 10-19
NBR 90 Sh A	colour: black

Assembly	✕ see pages 54-59
In one-piece housings	

Advantages	
Easy assembly	
Closed ring (uncut)	
For inner and outer housings	
Extended service life of the O-ring	

Please contact us for applications approaching maximum values.

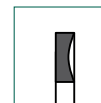
More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	25	30	35	40
e max (mm)	0,2	0,15	0,1	0,05

Table 206

O-ring Cs	g	L1	L2	E	T
1,78	1,45	3,6	5	1,14	1,24
2,62	2,25	4,5	5,9	1,14	1,35
3,53	3,1	5,6	7	1,02	1,27
5,34	4,7	7,9	9,6	1,52	1,93
7	6,1	10,7	13,2	2,44	2,97

O-ring cross section	O-ring	a	A	E	d	D	Reference
5,34	123,19 X 5,34	124,54	133,84	1,52	124	133,4	10BU 352/INT
	126,37 X 5,34	127,71	137,01	1,52	127	136,4	10BU 353/INT
	129,54 X 5,34	130,89	140,19	1,52	130	139,4	10BU 354/INT
	132,72 X 5,34	134,06	143,36	1,52	134	143,4	10BU 355/INT
	135,89 X 5,34	137,24	146,54	1,52	137	146,4	10BU 356/INT
	139,07 X 5,34	140,41	149,71	1,52	140	149,4	10BU 357/INT
	142,24 X 5,34	143,59	152,89	1,52	143	152,4	10BU 358/INT
	145,42 X 5,34	146,76	156,06	1,52	146	155,4	10BU 359/INT
	148,59 X 5,34	149,94	159,24	1,52	150	159,4	10BU 360/INT
	151,77 X 5,34	153,11	162,41	1,52	152	161,4	10BU 361/INT
	158,12 X 5,34	159,46	168,76	1,52	159	168,4	10BU 362/INT
	164,47 X 5,34	165,81	175,11	1,52	165	174,4	10BU 363/INT
	170,82 X 5,34	172,16	181,46	1,52	172	181,4	10BU 364/INT
	177,17 X 5,34	178,51	187,81	1,52	178	187,4	10BU 365/INT
	183,52 X 5,34	184,86	194,16	1,52	184	193,4	10BU 366/INT
189,87 X 5,34	191,21	200,51	1,52	191	200,4	10BU 367/INT	
196,22 X 5,34	197,56	206,86	1,52	197	206,4	10BU 368/INT	
202,57 X 5,34	203,91	213,21	1,52	203	212,4	10BU 369/INT	
208,92 X 5,34	210,26	219,56	1,52	210	219,4	10BU 370/INT	
215,27 X 5,34	216,61	225,91	1,52	216	225,4	10BU 371/INT	
221,62 X 5,34	222,96	232,26	1,52	222	231,4	10BU 372/INT	
227,97 X 5,34	229,31	238,61	1,52	229	238,4	10BU 373/INT	
234,32 X 5,34	235,66	244,96	1,52	235	244,4	10BU 374/INT	
240,67 X 5,34	242,01	251,31	1,52	241	250,4	10BU 375/INT	
247,02 X 5,34	248,36	257,66	1,52	248	257,4	10BU 376/INT	
253,37 X 5,34	254,71	264,01	1,52	254	263,4	10BU 377/INT	
266,07 X 5,34	267,41	276,71	1,52	267	276,4	10BU 378/INT	
278,77 X 5,34	280,11	289,41	1,52	280	289,4	10BU 379/INT	
291,47 X 5,34	292,81	302,11	1,52	292	301,4	10BU 380/INT	
304,17 X 5,34	305,51	314,81	1,52	305	314,4	10BU 381/INT	
329,57 X 5,34	330,91	340,21	1,52	330	339,4	10BU 382/INT	
354,97 X 5,34	356,31	365,61	1,52	356	365,4	10BU 383/INT	
113,67 X 7	115,6	127,58	1,52	114	126,2	10BU 425/INT	
7 (6,99)	116,84 X 7	118,77	130,75	2,44	118	130,2	10BU 426/INT
	120,02 X 7	121,95	133,93	2,44	121	133,2	10BU 427/INT
	123,19 X 7	125,2	137,18	2,44	124	136,2	10BU 428/INT
	126,37 X 7	128,3	140,28	2,44	127	139,2	10BU 429/INT
	129,54 X 7	131,47	143,45	2,44	130	142,2	10BU 430/INT
	132,72 X 7	134,65	146,63	2,44	134	146,2	10BU 431/INT
	135,89 X 7	137,82	149,8	2,44	137	149,2	10BU 432/INT
	139,07 X 7	141	152,98	2,44	140	152,2	10BU 433/INT
	142,24 X 7	144,17	156,15	2,44	143	155,2	10BU 434/INT



10BU.../INT

Example of item code

10BU 218/INT
Profile AS/BS norm

✕ Machining of housings: see page 81 and table 208

10BU back-up ring is a closed ring with a concave shaped cross-section. For these back-up rings, we use a NBR elastomer of 90°shore A hardness to guarantee a high level of resistance to extrusion and abrasion.

Their design tends to keep the O-ring in its original form, even at high pressure. They minimize distortion of the O-ring who can therefore withstand better against higher pressure loads. This produces a better sealing effect and **increases the seal's service life**.

10BU rings are continuous. They do not have a cut (unlike open PTFE rings) and they can be stretched over a piston during assembly. Hence they contact the O-ring uniformly, and do not cause localised wear spots.

10BU back-up ring has a symmetrical profile and can therefore be used in both internal and external sealing systems.

Operating conditions	✕ see page 8
Pressure	≤ 40 MPa
Temperature	-30°C to 110°C
Fluids	mineral oils, HFA, HFB, HFC
Materials	✕ see pages 10-19
NBR 90 Sh A	colour: black

Assembly	✕ see pages 54-59
In one-piece housings	

Advantages
Easy assembly
Closed ring (uncut)
For inner and outer housings
Extended service life of the O-ring

Please contact us for applications approaching maximum values.

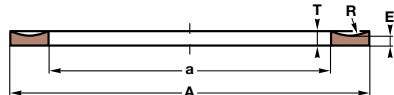
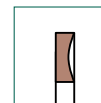
More information
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	25	30	35	40
e max (mm)	0,2	0,15	0,1	0,05

Table 208

O-ring Cs	g	L1	L2	E	T
1,78	1,45	3,6	5	1,14	1,24
2,62	2,25	4,5	5,9	1,14	1,35
3,53	3,1	5,6	7	1,02	1,27
5,34	4,7	7,9	9,6	1,52	1,93
7	6,1	10,7	13,2	2,44	2,97

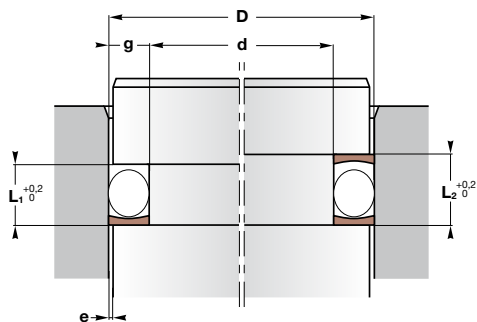
O-ring cross section	O-ring	a	A	E	d	D	Reference
7 (6,99)	145,42 X 7	147,35	159,33	2,44	146	158,2	10BU 435/INT
	148,59 X 7	150,52	162,5	2,44	150	162,2	10BU 436/INT
	151,77 X 7	153,7	165,68	2,44	153	165,2	10BU 437/INT
	158,12 X 7	159,36	171,34	2,44	159	171,2	10BU 438/INT
	164,47 X 7	165,71	177,69	2,44	165	177,2	10BU 439/INT
	170,82 X 7	172,06	184,04	2,44	172	184,2	10BU 440/INT
	177,17 X 7	178,41	190,39	2,44	178	190,2	10BU 441/INT
	183,52 X 7	184,76	196,74	2,44	185	197,2	10BU 442/INT
	189,87 X 7	191,11	203,09	2,44	190	202,2	10BU 443/INT
	196,22 X 7	197,46	209,44	2,44	197	209,2	10BU 444/INT
202,57 X 7	203,81	215,79	2,44	203	215,2	10BU 445/INT	
215,27 X 7	216,51	228,49	2,44	216	228,2	10BU 446/INT	
227,97 X 7	229,21	241,19	2,44	229	241,2	10BU 447/INT	
240,67 X 7	241,91	253,89	2,44	241	253,2	10BU 448/INT	
253,37 X 7	254,61	266,59	2,44	254	266,2	10BU 449/INT	
266,07 X 7	267,31	279,29	2,44	267	279,2	10BU 450/INT	
278,77 X 7	280,01	291,99	2,44	280	292,2	10BU 451/INT	
291,47 X 7	292,71	304,69	2,44	292	304,2	10BU 452/INT	
304,17 X 7	305,41	317,39	2,44	305	317,2	10BU 453/INT	
316,87 X 7	318,11	330,09	2,44	318	330,2	10BU 454/INT	
329,57 X 7	330,81	342,79	2,44	330	342,2	10BU 455/INT	
342,27 X 7	343,51	355,49	2,44	343	355,2	10BU 456/INT	
354,97 X 7	356,21	368,19	2,44	356	368,2	10BU 457/INT	
367,67 X 7	368,91	380,89	2,44	368	380,2	10BU 458/INT	
380,37 X 7	381,61	393,59	2,44	381	393,2	10BU 459/INT	
393,07 X 7	394,31	406,29	2,44	394	406,2	10BU 460/INT	
405,26 X 7	406,5	418,48	2,44	407	419,2	10BU 461/INT	
417,96 X 7	419,2	431,18	2,44	420	432,2	10BU 462/INT	
430,66 X 7	431,9	443,88	2,44	432	444,2	10BU 463/INT	
443,36 X 7	444,6	456,58	2,44	445	457,2	10BU 464/INT	
456,06 X 7	457,3	469,28	2,44	458	470,2	10BU 465/INT	
468,76 X 7	470	481,98	2,44	470	482,2	10BU 466/INT	
481,46 X 7	482,7	494,68	2,44	483	495,2	10BU 467/INT	
494,16 X 7	495,4	507,38	2,44	495	507,2	10BU 468/INT	
506,86 X 7	508,1	520,08	2,44	508	520,2	10BU 469/INT	



11BU...FPM

Example of item code

11BU 218 FPM
Profile AS/BS norm



✦ **Machining of housings:** see page 81 and table 210

11BU...FPM back-up ring is a closed ring with a concave shaped cross-section. For these back-up rings, we use a Viton® elastomer of 90°shore A hardness to guarantee a high level of resistance to extrusion and abrasion.

Their design tends to keep the O-ring in its original form, even at high pressure. They minimize distortion of the O-ring who can therefore withstand better against higher pressure loads. This produces a better sealing effect and **increases the lifetime of the O-ring.**

11BU...FPM rings are continuous. They do not have a cut (unlike open PTFE rings) and they can be stretched over a piston during assembly. Hence they contact the O-ring uniformly, and do not cause localised wear spots.

11BU...FPM back-up ring has a symmetrical profile and can therefore be used in both internal and external sealing systems.

Operating conditions ✦ see page 8

Pressure ≤ 40 MPa
Temperature -20°C to 200°C
Fluids mineral oils, HFA, HFB, HFD

Materials ✦ see pages 10-19

FPM 90 Sh A colour: black

Assembly ✦ see pages 54-59

In one-piece housings

Advantages

- Easy assembly
- Closed ring (uncut)
- For inner and outer housings
- Extended service life of the O-ring

Please contact us for applications approaching maximum values.

More information

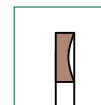
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring	A	a	E	D	d	Reference
1,78	2,57 x 1,78	5,93	3,23	1,14	6	3,1	11BU 005 FPM
	4,47 x 1,78	7,83	5,13	1,14	8	5,1	11BU 008 FPM
	9,25 x 1,78	12,61	9,91	1,14	13	10,1	11BU 012 FPM
	15,6 x 1,78	19,03	16,33	1,14	19	16,1	11BU 016 FPM
	18,77 x 1,78	22,21	19,51	1,14	22	19,1	11BU 018 FPM
	25,12 x 1,78	28,56	25,86	1,14	29	26,1	11BU 022 FPM
	28,3 x 1,78	31,73	29,03	1,14	32	29,1	11BU 024 FPM
	34,65 x 1,78	38,08	35,38	1,14	38	35,1	11BU 028 FPM
	37,82 x 1,78	41,26	38,56	1,14	41	38,1	11BU 029 FPM
	2,62	6,02 x 2,62	11,09	6,73	1,14	11	6,5
10,77 x 2,62		15,84	11,48	1,14	16	11,5	11BU 111 FPM
12,37 x 2,62		17,44	13,08	1,14	17	12,5	11BU 112 FPM
15,54 x 2,62		20,62	16,26	1,14	21	16,5	11BU 114 FPM
26,64 x 2,62		31,82	27,46	1,14	32	27,5	11BU 121 FPM
29,82 x 2,62		34,99	30,63	1,14	35	30,5	11BU 123 FPM
32,99 x 2,62		38,17	33,81	1,14	38	33,5	11BU 125 FPM
36,17 x 2,62		41,34	36,98	1,14	41	36,5	11BU 127 FPM
39,34 x 2,62		44,52	40,16	1,14	44,5	40	11BU 129 FPM
40,94 x 2,62		46,09	41,73	1,14	46	41,5	11BU 130 FPM
42,52 x 2,62		47,69	43,33	1,14	48	43,5	11BU 131 FPM
44,12 x 2,62		49,27	44,91	1,14	50	45,5	11BU 132 FPM
45,69 x 2,62		50,87	46,51	1,14	51	46,5	11BU 133 FPM
53,64 x 2,62		58,79	54,43	1,14	58	53,5	11BU 138 FPM
55,25 x 2,62		60,39	56,03	1,14	60	55,5	11BU 139 FPM
63,17 x 2,62	68,32	63,96	1,14	68	63,5	11BU 144 FPM	
75,87 x 2,62	81,02	76,66	1,14	81	76,5	11BU 151 FPM	
3,53	24,99 x 3,53	31,81	25,81	1,02	32	25,8	11BU 214 FPM
	32,92 x 3,53	39,88	33,88	1,02	40	33,8	11BU 219 FPM
	36,09 x 3,53	43,06	37,06	1,02	43	36,8	11BU 221 FPM
	37,69 x 3,53	44,66	38,66	1,02	44,5	38,3	11BU 222 FPM
	40,87 x 3,53	47,83	41,83	1,02	48	41,8	11BU 223 FPM
	44,04 x 3,53	51,01	45,01	1,02	51	44,8	11BU 224 FPM
	47,22 x 3,53	54,18	48,18	1,02	54	47,8	11BU 225 FPM
	53,57 x 3,53	60,53	54,53	1,02	60	53,8	11BU 227 FPM
	56,74 x 3,53	63,71	57,71	1,02	63,5	57,3	11BU 228 FPM
	59,92 x 3,53	66,88	60,88	1,02	67	60,8	11BU 229 FPM
	63,09 x 3,53	70,06	64,06	1,02	70	63,8	11BU 230 FPM
	66,27 x 3,53	72,83	66,83	1,02	73	66,8	11BU 231 FPM
	72,62 x 3,53	79,18	73,18	1,02	79	72,8	11BU 233 FPM
	75,79 x 3,53	82,35	76,35	1,02	83	76,8	11BU 234 FPM
	78,97 x 3,53	85,53	79,53	1,02	86	79,8	11BU 235 FPM
	82,14 x 3,53	88,7	82,7	1,02	89	82,8	11BU 236 FPM
	88,49 x 3,53	95,05	89,05	1,02	95	88,8	11BU 238 FPM
	91,67 x 3,53	98,23	92,23	1,02	98	91,8	11BU 239 FPM
	94,84 x 3,53	101,4	95,4	1,02	102	95,8	11BU 240 FPM
	104,37 x 3,53	110,93	104,93	1,02	111	104,8	11BU 243 FPM
117,07 x 3,53	123,63	117,63	1,02	124	117,8	11BU 247 FPM	
120,24 x 3,53	127,11	121,11	1,02	127	120,8	11BU 248 FPM	
132,94 x 3,53	139,81	133,81	1,02	140	133,8	11BU 252 FPM	
151,99 x 3,53	158,86	152,86	1,02	159	152,8	11BU 258 FPM	
171,04 x 3,53	177,91	171,91	1,02	190,5	184,3	11BU 261 FPM	

Pressure (MPa)	25	30	35	40
e max (mm)	0,2	0,15	0,1	0,05

Table 210

O-ring Cs	g	L1	L2	E	T
1,78	1,45	3,6	5	1,14	1,24
2,62	2,25	4,5	5,9	1,14	1,35
3,53	3,1	5,6	7	1,02	1,27
5,34	4,7	7,9	9,6	1,52	1,93
7	6,1	10,7	13,2	2,44	2,97



11BU...FPM

Example of item code
11BU 218 FPM
Profile AS/BS norm

Machining of housings: see page 81 and table 212

Pressure (MPa)	25	30	35	40
e max (mm)	0,2	0,15	0,1	0,05

Table 212

O-ring Cs	g	L1	L2	E	T
1,78	1,45	3,6	5	1,14	1,24
2,62	2,25	4,5	5,9	1,14	1,35
3,53	3,1	5,6	7	1,02	1,27
5,34	4,7	7,9	9,6	1,52	1,93
7	6,1	10,7	13,2	2,44	2,97

11BU...FPM back-up ring is a closed ring with a concave shaped cross-section. For these back-up rings, we use a Viton® elastomer of 90°shore A hardness to guarantee a high level of resistance to extrusion and abrasion.

Their design tends to keep the O-ring in its original form, even at high pressure. They minimize distortion of the O-ring who can therefore withstand better against higher pressure loads. This produces a better sealing effect and **increases the lifetime of the O-ring.**

11BU...FPM rings are continuous. They do not have a cut (unlike open PTFE rings) and they can be stretched over a piston during assembly. Hence they contact the O-ring uniformly, and do not cause localised wear spots.

11BU...FPM back-up ring has a symmetrical profile and can therefore be used in both internal and external sealing systems.

Operating conditions see page 8

Pressure ≤ 40 MPa
Temperature -20°C to 200°C
Fluids mineral oils, HFA, HFB, HFD

Materials see pages 10-19

FPM 90 Sh A colour: black

Assembly see pages 54-59

In one-piece housings

Advantages

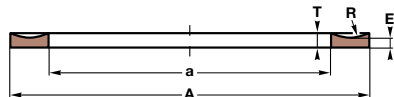
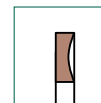
- Easy assembly
- Closed ring (uncut)
- For inner and outer housings
- Extended service life of the O-ring

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

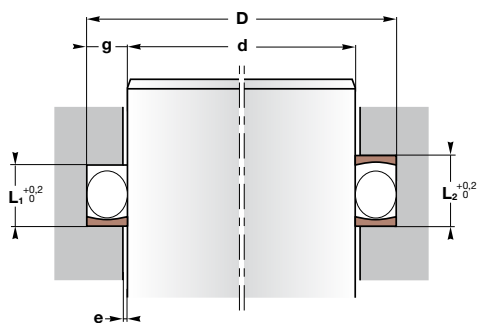
O-ring cross section	O-ring	A	a	E	D	d	Reference
5,34	26,34 x 5,34	36,61	27,31	1,52	36,5	27,1	11BU 319 FPM
	34,29 x 5,34	44,56	35,26	1,52	44,5	35,1	11BU 324 FPM
	56,52 x 5,34	66,91	57,61	1,52	67	57,6	11BU 331 FPM
	78,74 x 5,34	89,13	79,83	1,52	89	79,6	11BU 338 FPM
	81,92 x 5,34	92,43	83,13	1,52	92	82,6	11BU 339 FPM
	88,27 x 5,34	98,78	89,48	1,52	98	88,6	11BU 341 FPM
	91,44 x 5,34	101,96	92,66	1,52	102	92,6	11BU 342 FPM
	100,97 x 5,34	111,61	102,31	1,52	111	101,6	11BU 345 FPM
	104,14 x 5,34	114,79	105,49	1,52	114	104,6	11BU 346 FPM
	110,49 x 5,34	121,14	111,84	1,52	121	111,6	11BU 348 FPM
	113,67 x 5,34	124,31	115,01	1,52	124	114,6	11BU 349 FPM
	116,84 x 5,34	127,49	118,19	1,52	127	117,6	11BU 350 FPM
	123,19 x 5,34	133,84	124,54	1,52	133	123,6	11BU 352 FPM
	126,37 x 5,34	137,01	127,71	1,52	137	127,6	11BU 353 FPM
	129,54 x 5,34	140,19	130,89	1,52	140	130,6	11BU 354 FPM
	151,77 x 5,34	162,41	153,11	1,52	162	152,6	11BU 361 FPM
	158,12 x 5,34	168,76	159,46	1,52	168	158,6	11BU 362 FPM
	183,52 x 5,34	194,16	184,86	1,52	194	184,6	11BU 366 FPM
189,87 x 5,34	200,51	191,21	1,52	200	190,6	11BU 367 FPM	
196,22 x 5,34	206,86	197,56	1,52	206	196,6	11BU 368 FPM	
208,92 x 5,34	219,56	210,26	1,52	220	210,6	11BU 370 FPM	
253,37 x 5,34	264,01	254,71	1,52	264	254,6	11BU 377 FPM	
354,97 x 5,34	365,61	356,31	1,52	366	356,6	11BU 383 FPM	
380,37 x 5,34	391,01	381,71	1,52	390	380,6	11BU 384 FPM	
7 (6,99)	145,42 x 7	159,33	147,35	2,44	159	146,8	11BU 435 FPM
	164,47 x 7	177,69	165,71	2,44	178	165,8	11BU 439 FPM
	183,52 x 7	196,74	184,76	2,44	197	184,8	11BU 442 FPM
	202,57 x 7	215,79	203,81	2,44	216	203,8	11BU 445 FPM
	227,97 x 7	241,19	229,21	2,44	241	228,8	11BU 447 FPM
	304,17 x 7	317,39	305,41	2,44	318	305,8	11BU 453 FPM
	329,57 x 7	342,79	330,81	2,44	343	330,8	11BU 455 FPM
	342,27 x 7	355,49	343,51	2,44	356	343,8	11BU 456 FPM
582,68 x 7	596,28	584,3	2,44	597	584,8	11BU 472 FPM	



11BU...FPM/INT

Example of item code

11BU 218 FPM/INT
Profile AS/BS norm



✦ Machining of housings: see page 81 and table 214

11BU...FPM/INT back-up ring is a closed ring with a concave shaped cross-section. For these back-up rings, we use a Viton® elastomer of 90°shore A hardness to guarantee a high level of resistance to extrusion and abrasion.

Their design tends to keep the O-ring in its original form, even at high pressure. They minimize distortion of the O-ring who can therefore withstand better against higher pressure loads. This produces a better sealing effect and **increases the lifetime of the O-ring.**

11BU...FPM/INT rings are continuous. They do not have a cut (unlike open PTFE rings) and they can be stretched over a piston during assembly. Hence they contact the O-ring uniformly, and do not cause localised wear spots.

11BU...FPM/INT back-up ring has a symmetrical profile and can therefore be used in both internal and external sealing systems.

Operating conditions ✦ see page 8

Pressure ≤ 40 MPa
Temperature -20°C to 200°C
Fluids mineral oils, HFA, HFB, HFD

Materials ✦ see pages 10-19

FPM 90 Sh A colour: black

Assembly ✦ see pages 54-59

In one-piece housings

Advantages

- Easy assembly
- Closed ring (uncut)
- For inner and outer housings
- Extended service life of the O-ring

Please contact us for applications approaching maximum values.

More information

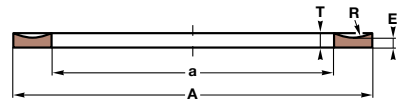
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring	a	A	E	d	D	Reference
1,78	2,57 x 1,78	3,23	5,93	1,14	2,5	5,4	11BU 005 FPM/INT
	4,47 x 1,78	5,13	7,83	1,14	5	7,9	11BU 008 FPM/INT
	9,25 x 1,78	9,91	12,61	1,14	9,5	12,4	11BU 012 FPM/INT
	15,6 x 1,78	16,33	19,03	1,14	16	18,9	11BU 016 FPM/INT
	18,77 x 1,78	19,51	22,21	1,14	19	21,9	11BU 018 FPM/INT
	25,12 x 1,78	25,86	28,56	1,14	25	27,9	11BU 022 FPM/INT
	28,3 x 1,78	29,03	31,73	1,14	29	31,9	11BU 024 FPM/INT
	34,65 x 1,78	35,38	38,08	1,14	35	37,9	11BU 028 FPM/INT
	37,82 x 1,78	38,56	41,26	1,14	38	40,9	11BU 029 FPM/INT
	2,62	6,02 x 2,62	6,73	11,09	1,14	6,5	11
10,77 x 2,62		11,48	15,84	1,14	11	15,5	11BU 111 FPM/INT
12,37 x 2,62		13,08	17,44	1,14	13	17,5	11BU 112 FPM/INT
15,54 x 2,62		16,26	20,62	1,14	16	20,5	11BU 114 FPM/INT
26,64 x 2,62		27,46	31,82	1,14	27	31,5	11BU 121 FPM/INT
29,82 x 2,62		30,63	34,99	1,14	30	34,5	11BU 123 FPM/INT
32,99 x 2,62		33,81	38,17	1,14	33	37,5	11BU 125 FPM/INT
36,17 x 2,62		36,98	41,34	1,14	36,5	41	11BU 127 FPM/INT
39,34 x 2,62		40,16	44,52	1,14	40	44,5	11BU 129 FPM/INT
40,94 x 2,62		41,73	46,09	1,14	41	45,5	11BU 130 FPM/INT
42,52 x 2,62		43,33	47,69	1,14	43	47,5	11BU 131 FPM/INT
44,12 x 2,62		44,91	49,27	1,14	44,5	49	11BU 132 FPM/INT
45,69 x 2,62		46,51	50,87	1,14	46	50,5	11BU 133 FPM/INT
53,64 x 2,62		54,43	58,79	1,14	54	58,5	11BU 138 FPM/INT
55,25 x 2,62		56,03	60,39	1,14	55	59,5	11BU 139 FPM/INT
63,17 x 2,62	63,96	68,32	1,14	63	67,5	11BU 144 FPM/INT	
75,87 x 2,62	76,66	81,02	1,14	76	80,5	11BU 151 FPM/INT	
3,53	24,99 x 3,53	25,81	31,81	1,02	25	31,2	11BU 214 FPM/INT
	32,92 x 3,53	33,88	39,88	1,02	33	39,2	11BU 219 FPM/INT
	36,09 x 3,53	37,06	43,06	1,02	36	42,2	11BU 221 FPM/INT
	37,69 x 3,53	38,66	44,66	1,02	38	44,2	11BU 222 FPM/INT
	40,87 x 3,53	41,83	47,83	1,02	41	47,2	11BU 223 FPM/INT
	44,04 x 3,53	45,01	51,01	1,02	44,5	50,7	11BU 224 FPM/INT
	47,22 x 3,53	48,18	54,18	1,02	48	54,2	11BU 225 FPM/INT
	53,57 x 3,53	54,53	60,53	1,02	54	60,2	11BU 227 FPM/INT
	56,74 x 3,53	57,71	63,71	1,02	57	63,2	11BU 228 FPM/INT
	59,92 x 3,53	60,88	66,88	1,02	60	66,2	11BU 229 FPM/INT
	63,09 x 3,53	64,06	70,06	1,02	63,5	69,7	11BU 230 FPM/INT
	66,27 x 3,53	66,83	72,83	1,02	67	73,2	11BU 231 FPM/INT
	72,62 x 3,53	73,18	79,18	1,02	73	79,2	11BU 233 FPM/INT
	75,79 x 3,53	76,35	82,35	1,02	76	82,2	11BU 234 FPM/INT
	78,97 x 3,53	79,53	85,53	1,02	79,5	85,7	11BU 235 FPM/INT
	82,14 x 3,53	82,7	88,7	1,02	83	89,2	11BU 236 FPM/INT
	88,49 x 3,53	89,05	95,05	1,02	90	96,2	11BU 238 FPM/INT
	91,67 x 3,53	92,23	98,23	1,02	92	98,2	11BU 239 FPM/INT
94,84 x 3,53	95,4	101,4	1,02	95	101,2	11BU 240 FPM/INT	
104,37 x 3,53	104,93	110,93	1,02	105	111,2	11BU 243 FPM/INT	
117,07 x 3,53	117,63	123,63	1,02	118	124,2	11BU 247 FPM/INT	
120,24 x 3,53	121,11	127,11	1,02	121	127,2	11BU 248 FPM/INT	
132,94 x 3,53	133,81	139,81	1,02	133	139,2	11BU 252 FPM/INT	
151,99 x 3,53	152,86	158,86	1,02	152	158,2	11BU 258 FPM/INT	
171,04 x 3,53	171,91	177,91	1,02	172	178,2	11BU 261 FPM/INT	

Pressure (MPa)	25	30	35	40
e max (mm)	0,2	0,15	0,1	0,05

Table 214

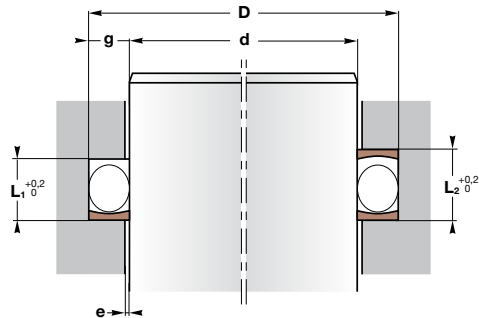
O-ring Cs	g	L1	L2	E	T
1,78	1,45	3,6	5	1,14	1,24
2,62	2,25	4,5	5,9	1,14	1,35
3,53	3,1	5,6	7	1,02	1,27
5,34	4,7	7,9	9,6	1,52	1,93
7	6,1	10,7	13,2	2,44	2,97



11BU...FPM/INT

Example of item code

11BU 218 FPM/INT
 Profile AS/BS norm



✦ **Machining of housings:** see page 81 and table 216

11BU...FPM/INT back-up ring is a closed ring with a concave shaped cross-section. For these back-up rings, we use a Viton® elastomer of 90°shore A hardness to guarantee a high level of resistance to extrusion and abrasion.

Their design tends to keep the O-ring in its original form, even at high pressure. They minimize distortion of the O-ring who can therefore withstand better against higher pressure loads. This produces a better sealing effect and **increases the lifetime of the O-ring.**

11BU...FPM/INT rings are continuous. They do not have a cut (unlike open PTFE rings) and they can be stretched over a piston during assembly. Hence they contact the O-ring uniformly, and do not cause localised wear spots.

11BU...FPM/INT back-up ring has a symmetrical profile and can therefore be used in both internal and external sealing systems.

Operating conditions ✦ see page 8

Pressure	≤ 40 MPa
Temperature	-20°C to 200°C
Fluids	mineral oils, HFA, HFB, HFD

Materials ✦ see pages 10-19

FPM 90 Sh A	colour: black
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Assembly ✦ see pages 54-59

In one-piece housings

Advantages

- Easy assembly
- Closed ring (uncut)
- For inner and outer housings
- Extended service life of the O-ring

Please contact us for applications approaching maximum values.

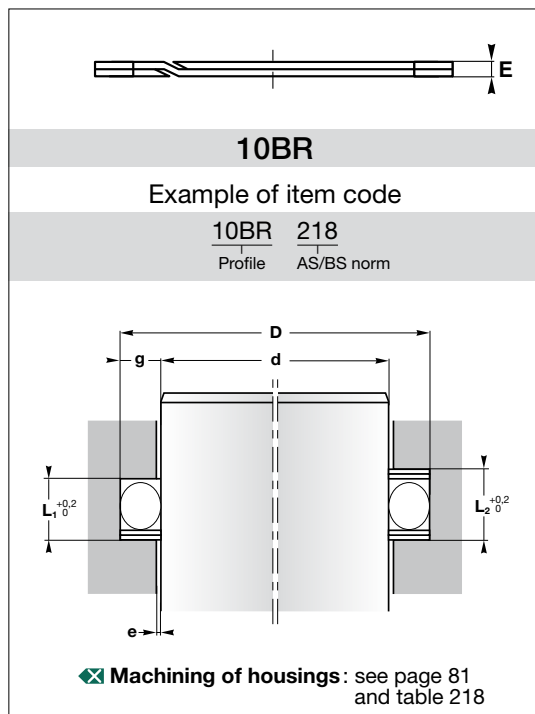
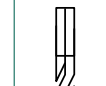
More information
 On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

O-ring cross section	O-ring	a	A	E	d	D	Reference
5,34	26,34 x 5,34	27,31	36,61	1,52	27	36,4	11BU 319 FPM/INT
	34,29 x 5,34	35,26	44,56	1,52	35	44,4	11BU 324 FPM/INT
	56,52 x 5,34	57,61	66,91	1,52	57	66,4	11BU 331 FPM/INT
	78,74 x 5,34	79,83	89,13	1,52	80	89,4	11BU 338 FPM/INT
	81,92 x 5,34	83,13	92,43	1,52	83	92,4	11BU 339 FPM/INT
	88,27 x 5,34	89,48	98,78	1,52	90	99,4	11BU 341 FPM/INT
	91,44 x 5,34	92,66	101,96	1,52	92	101,4	11BU 342 FPM/INT
	100,97 x 5,34	102,31	111,61	1,52	102	111,4	11BU 345 FPM/INT
	104,14 x 5,34	105,49	114,79	1,52	105	114,4	11BU 346 FPM/INT
	110,49 x 5,34	111,84	121,14	1,52	111	120,4	11BU 348 FPM/INT
	113,67 x 5,34	115,01	124,31	1,52	114	123,4	11BU 349 FPM/INT
	116,84 x 5,34	118,19	127,49	1,52	118	127,4	11BU 350 FPM/INT
	123,19 x 5,34	124,54	133,84	1,52	124	133,4	11BU 352 FPM/INT
	126,37 x 5,34	127,71	137,01	1,52	127	136,4	11BU 353 FPM/INT
	129,54 x 5,34	130,89	140,19	1,52	130	139,4	11BU 354 FPM/INT
	151,77 x 5,34	153,11	162,41	1,52	152	161,4	11BU 361 FPM/INT
	158,12 x 5,34	159,46	168,76	1,52	159	168,4	11BU 362 FPM/INT
	183,52 x 5,34	184,86	194,16	1,52	184	193,4	11BU 366 FPM/INT
	189,87 x 5,34	191,21	200,51	1,52	191	200,4	11BU 367 FPM/INT
	196,22 x 5,34	197,56	206,86	1,52	197	206,4	11BU 368 FPM/INT
208,92 x 5,34	210,26	219,56	1,52	210	219,4	11BU 370 FPM/INT	
253,37 x 5,34	254,71	264,01	1,52	254	263,4	11BU 377 FPM/INT	
354,97 x 5,34	356,31	365,61	1,52	356	365,4	11BU 383 FPM/INT	
380,37 x 5,34	381,71	391,01	1,52	382	391,4	11BU 384 FPM/INT	
7 (6,99)	145,42 x 7	147,35	159,33	2,44	146	158,2	11BU 435 FPM/INT
	164,47 x 7	165,71	177,69	2,44	165	177,2	11BU 439 FPM/INT
	183,52 x 7	184,76	196,74	2,44	185	197,2	11BU 442 FPM/INT
	202,57 x 7	203,81	215,79	2,44	203	215,2	11BU 445 FPM/INT
	227,97 x 7	229,21	241,19	2,44	229	241,2	11BU 447 FPM/INT
	304,17 x 7	305,41	317,39	2,44	305	317,2	11BU 453 FPM/INT
	329,57 x 7	330,81	342,79	2,44	330	342,2	11BU 455 FPM/INT
	342,27 x 7	343,51	355,49	2,44	343	355,2	11BU 456 FPM/INT
582,68 x 7	584,3	596,28	2,44	584	596,2	11BU 472 FPM/INT	

Pressure (MPa)	25	30	35	40
e max (mm)	0,2	0,15	0,1	0,05

Table 216

O-ring Cs	g	L1	L2	E	T
1,78	1,45	3,6	5	1,14	1,24
2,62	2,25	4,5	5,9	1,14	1,35
3,53	3,1	5,6	7	1,02	1,27
5,34	4,7	7,9	9,6	1,52	1,93
7	6,1	10,7	13,2	2,44	2,97



Pressure (MPa)	25	30	35	40	50
e max (mm)	0,25	0,2	0,15	0,1	0,05

PTFE anti-extrusion rings **10BR** consists of two spiral windings which are cut at the ends at an angle.

These discontinuities may contribute to seal damage due to biting and pinching.

They are preferred for installations in a closed groove where uncut back-up rings are not suitable.

This back-up ring can **compensate** large temperature changes and tolerances.

In addition to the good chemical resistance of the PTFE material, they may be used over a wide temperature range.

By cutting the spiral, it is possible to use it also for smaller dimensions.

Limited to 25 MPa in dynamic applications.

Operating conditions ✕ see page 8

Pressure	≤ 50 MPa
Temperature	-200°C to 260°C
Fluids	mineral oils HFA, HFB, HFC, HFD, steam

Materials ✕ see pages 10-19

PTFE	PT01
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Assembly ✕ see pages 54-59

In one-piece housings

Advantages

- Very good chemical resistance
- Wide temperature range
- The **10BR** ring can be cut in order to assemble it in a groove with a smaller diameter

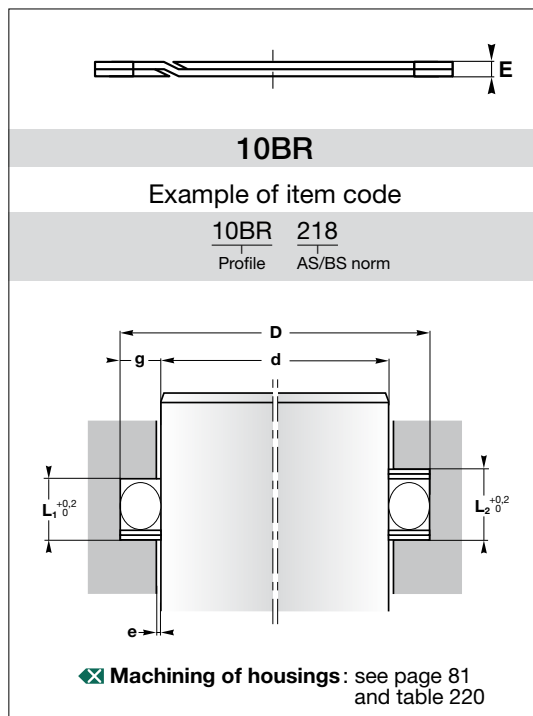
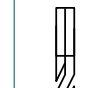
Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

The back-up rings **10BR** are made for internal housings but there is also possible to assemble them on external housings.

O-ring cross section	O-ring	d	D	E	Reference	O-ring cross section	O-ring	d	D	E	Reference
1,78	2,9 x 1,78	3	6,1	1,4	10BR 006	2,62	21,89 x 2,62	22	26,5	1,4	10BR 118
	3,68 x 1,78	4	7,1	1,4	10BR 007		23,47 x 2,62	24	28,5	1,4	10BR 119
	4,47 x 1,78	4,5	7,6	1,4	10BR 008		25,07 x 2,62	25	29,5	1,4	10BR 120
	5,28 x 1,78	5	8,1	1,4	10BR 009		26,64 x 2,62	27	31,5	1,4	10BR 121
	6,07 x 1,78	7	10,1	1,4	10BR 010		28,24 x 2,62	28	32,5	1,4	10BR 122
	6,75 x 1,78	7	10,1	1,4	10BR 010		29,82 x 2,62	30	34,5	1,4	10BR 123
	7,65 x 1,78	8	11,1	1,4	10BR 011		31,42 x 2,62	32	36,5	1,4	10BR 124
	8,73 x 1,78	9	12,1	1,4	10BR 011		32,99 x 2,62	33	37,5	1,4	10BR 125
	9,25 x 1,78	9	12,1	1,4	10BR 012		34,59 x 2,62	35	39,5	1,4	10BR 126
	10,82 x 1,78	11	14,1	1,4	10BR 013		36,17 x 2,62	36	40,5	1,4	10BR 127
	12,42 x 1,78	13	16,1	1,4	10BR 014		37,77 x 2,62	38	42,5	1,4	10BR 128
	14,0 x 1,78	14	17,1	1,4	10BR 015		39,34 x 2,62	40	44,5	1,4	10BR 129
	15,6 x 1,78	16	19,1	1,4	10BR 016		40,94 x 2,62	41	45,5	1,4	10BR 130
	17,17 x 1,78	17	20,1	1,4	10BR 017		42,52 x 2,62	43	47,5	1,4	10BR 131
	18,77 x 1,78	19	22,1	1,4	10BR 018		44,12 x 2,62	44	48,5	1,4	10BR 132
	20,35 x 1,78	21	24,1	1,4	10BR 019		45,69 x 2,62	46	50,5	1,4	10BR 133
	21,95 x 1,78	22	25,1	1,4	10BR 020		47,29 x 2,62	48	52,5	1,4	10BR 134
	23,52 x 1,78	24	27,1	1,4	10BR 021		48,9 x 2,62	49	53,5	1,4	10BR 135
	25,12 x 1,78	25	28,1	1,4	10BR 022		50,47 x 2,62	51	55,5	1,4	10BR 136
	26,7 x 1,78	27	30,1	1,4	10BR 023		52,07 x 2,62	52	56,5	1,4	10BR 137
	28,3 x 1,78	28	31,1	1,4	10BR 024		53,64 x 2,62	54	58,5	1,4	10BR 138
	29,87 x 1,78	30	33,1	1,4	10BR 025		55,25 x 2,62	55	59,5	1,4	10BR 139
	31,47 x 1,78	32	35,1	1,4	10BR 026		56,82 x 2,62	57	61,5	1,4	10BR 140
	33,05 x 1,78	33	36,1	1,4	10BR 027		58,42 x 2,62	59	63,5	1,4	10BR 141
34,65 x 1,78	35	38,1	1,4	10BR 028	59,99 x 2,62	60	64,5	1,4	10BR 142		
47,35 x 1,78	48	51,1	1,4	10BR 032	61,6 x 2,62	62	66,5	1,4	10BR 143		
60,05 x 1,78	60	63,1	1,4	10BR 036	63,17 x 2,62	63	67,5	1,4	10BR 144		
2,62	9,19 x 2,62	10	14,5	1,4	10BR 110	64,77 x 2,62	65	69,5	1,4	10BR 145	
	9,9 x 2,62	10	14,5	1,4	10BR 613	66,34 x 2,62	67	71,5	1,4	10BR 146	
	10,77 x 2,62	11	15,5	1,4	10BR 111	67,95 x 2,62	68	72,5	1,4	10BR 147	
	11,91 x 2,62	12	16,5	1,4	10BR 614	69,52 x 2,62	70	74,5	1,4	10BR 148	
	12,37 x 2,62	12,5	17	1,4	10BR 112	71,12 x 2,62	71	75,5	1,4	10BR 149	
	13,1 x 2,62	13	17,5	1,4	10BR 615	72,69 x 2,62	73	77,5	1,4	10BR 150	
	13,94 x 2,62	14	18,5	1,4	10BR 113	75,87 x 2,62	76	80,5	1,4	10BR 151	
	15,08 x 2,62	15	19,5	1,4	10BR 616	82,22 x 2,62	82	86,5	1,4	10BR 152	
	15,54 x 2,62	16	20,5	1,4	10BR 114	88,57 x 2,62	89	93,5	1,4	10BR 153	
	15,88 x 2,62	16	20,5	1,4	10BR 809	94,92 x 2,62	95	99,5	1,4	10BR 154	
	17,12 x 2,62	17	21,5	1,4	10BR 115	107,62 x 2,62	108	112,5	1,4	10BR 156	
	17,86 x 2,62	18	22,5	1,4	10BR 617	113,97 x 2,62	114	118,5	1,4	10BR 157	
	18,72 x 2,62	19	23,5	1,4	10BR 116	3,53	18,64 x 3,53	19	25,2	1,4	10BR 210
	20,3 x 2,62	20	24,5	1,4	10BR 117		20,22 x 3,53	20	26,2	1,4	10BR 211
	20,64 x 2,62	21	25,5	1,4	10BR 812		21,82 x 3,53	22	28,2	1,4	10BR 212



Pressure (MPa)	25	30	35	40	50
e max (mm)	0,25	0,2	0,15	0,1	0,05

PTFE anti-extrusion rings **10BR** consists of two spiral windings which are cut at the ends at an angle.

These discontinuities may contribute to seal damage due to biting and pinching.

They are preferred for installations in a closed groove where uncut back-up rings are not suitable.

This back-up ring can **compensate** large temperature changes and tolerances.

In addition to the good chemical resistance of the PTFE material, they may be used over a wide temperature range.

By cutting the spiral, it is possible to use it also for smaller dimensions.

Limited to 25 MPa in dynamic applications.

Operating conditions ✘ see page 8

Pressure	≤ 50 MPa
Temperature	-200°C to 260°C
Fluids	mineral oils HFA, HFB, HFC, HFD, steam

Materials ✘ see pages 10-19

PTFE PT01

Assembly ✘ see pages 54-59

In one-piece housings

Advantages

Very good chemical resistance

Wide temperature range

The **10BR** ring can be cut in order to assemble it in a groove with a smaller diameter

Please contact us for applications approaching maximum values.

More information

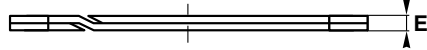
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

The back-up rings **10BR** are made for internal housings but there is also possible to assemble them on external housings.

O-ring cross section	O-ring	d	D	E	Reference	O-ring cross section	O-ring	d	D	E	Reference
3,53	23,39 x 3,53	23	29,2	1,4	10BR 213	3,53	91,67 x 3,53	92	98,2	1,4	10BR 239
	24,99 x 3,53	25	31,2	1,4	10BR 214		94,84 x 3,53	95	101,2	1,4	10BR 240
	25,8 x 3,53	26	32,2	1,4	10BR 618		98,02 x 3,53	98	104,2	1,4	10BR 241
	26,57 x 3,53	27	33,2	1,4	10BR 215		101,19 x 3,53	101	107,2	1,4	10BR 242
	28,17 x 3,53	28	34,2	1,4	10BR 216		104,37 x 3,53	105	111,2	1,4	10BR 243
	29,74 x 3,53	30	36,2	1,4	10BR 217		107,54 x 3,53	108	114,2	1,4	10BR 244
	31,34 x 3,53	31	37,2	1,4	10BR 218		110,72 x 3,53	111	117,2	1,4	10BR 245
	32,92 x 3,53	33	39,2	1,4	10BR 219		113,89 x 3,53	114	120,2	1,4	10BR 246
	34,52 x 3,53	35	41,2	1,4	10BR 220		117,07 x 3,53	117	123,2	1,4	10BR 247
	36,09 x 3,53	36	42,2	1,4	10BR 221		120,24 x 3,53	120	126,2	1,4	10BR 248
	37,69 x 3,53	38	44,2	1,4	10BR 222		123,42 x 3,53	123	129,2	1,4	10BR 249
	39,7 x 3,53	40	46,2	1,4	10BR 824		126,59 x 3,53	127	133,2	1,4	10BR 250
	40,87 x 3,53	42	48,2	1,4	10BR 223		129,77 x 3,53	130	136,2	1,4	10BR 251
	41,28 x 3,53	42	48,2	1,4	10BR 825		132,94 x 3,53	133	139,2	1,4	10BR 252
	42,86 x 3,53	43	49,2	1,4	10BR 826		136,12 x 3,53	136	142,2	1,4	10BR 253
	44,04 x 3,53	45	51,2	1,4	10BR 224		139,29 x 3,53	140	146,2	1,4	10BR 254
	46,04 x 3,53	46	52,2	1,4	10BR 828		142,47 x 3,53	143	149,2	1,4	10BR 255
	47,22 x 3,53	48	54,2	1,4	10BR 225		145,64 x 3,53	146	152,2	1,4	10BR 256
	47,62 x 3,53	48	54,2	1,4	10BR 829		148,82 x 3,53	149	155,2	1,4	10BR 257
	49,2 x 3,53	49	55,2	1,4	10BR 830		151,99 x 3,53	152	158,2	1,4	10BR 258
50,39 x 3,53	51	57,2	1,4	10BR 226	158,34 x 3,53	159	165,2	1,4	10BR 259		
52,4 x 3,53	52	58,2	1,4	10BR 832	164,69 x 3,53	165	171,2	1,4	10BR 260		
53,57 x 3,53	54	60,2	1,4	10BR 227	171,04 x 3,53	172	178,2	1,4	10BR 261		
55,56 x 3,53	56	62,2	1,4	10BR 834	177,39 x 3,53	178	184,2	1,4	10BR 262		
56,74 x 3,53	57	63,2	1,4	10BR 228	183,74 x 3,53	184	190,2	1,4	10BR 263		
58,74 x 3,53	59	65,2	1,4	10BR 836	190,09 x 3,53	190	196,2	1,4	10BR 264		
59,92 x 3,53	60	66,2	1,4	10BR 229	196,44 x 3,53	197	203,2	1,4	10BR 265		
61,9 x 3,53	62	68,2	1,4	10BR 838	202,79 x 3,53	203	209,2	1,4	10BR 266		
63,09 x 3,53	64	70,2	1,4	10BR 230	209,14 x 3,53	210	216,2	1,4	10BR 267		
65,1 x 3,53	65	71,2	1,4	10BR 840	215,49 x 3,53	216	222,2	1,4	10BR 268		
66,27 x 3,53	67	73,2	1,4	10BR 231	234,54 x 3,53			1,4	10BR 271		
68,26 x 3,53	68	74,2	1,4	10BR 842	240,89 x 3,53	241	247,2	1,4	10BR 272		
69,44 x 3,53	70	76,2	1,4	10BR 232	278,99 x 3,53	280	286,2	1,4	10BR 276		
69,85 x 3,53	70	76,2	1,4	10BR 843	5,34	37,47 x 5,34	38	47,4	1,7	10BR 325	
71,44 x 3,53	72	78,2	1,4	10BR 844		40,64 x 5,34	41	50,4	1,7	10BR 326	
72,62 x 3,53	73	79,2	1,4	10BR 233		43,82 x 5,34	44	53,4	1,7	10BR 327	
74,6 x 3,53	75	81,2	1,4	10BR 846	46,99 x 5,34	47	56,4	1,7	10BR 328		
75,79 x 3,53	76	82,2	1,4	10BR 234	50,17 x 5,34	50	59,4	1,7	10BR 329		
78,97 x 3,53	79	85,2	1,4	10BR 235	53,34 x 5,34	53	62,4	1,7	10BR 330		
82,14 x 3,53	82	88,2	1,4	10BR 236	56,52 x 5,34	57	66,4	1,7	10BR 331		
85,32 x 3,53	85	91,2	1,4	10BR 237	59,69 x 5,34	60	69,4	1,7	10BR 332		
88,49 x 3,53	89	95,2	1,4	10BR 238	62,87 x 5,34	63	72,4	1,7	10BR 333		

Table 220

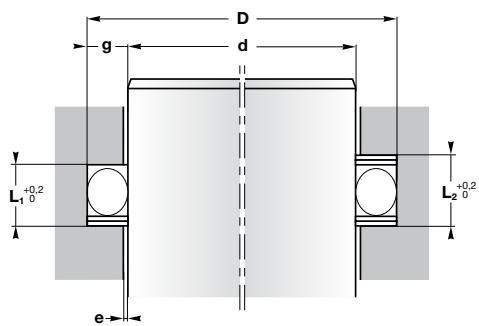
d (O-ring)	g	L1	L2	E
1,78	1,55	3,8	5,2	1,4
2,62	2,25	5	6,4	1,4
3,53	3,1	6,2	7,6	1,4
5,34	4,7	8,8	10,5	1,7
7	6,1	12	14,5	2,5



10BR

Example of item code

10BR 218
Profile AS/BS norm



Machining of housings: see page 81 and table 222

Pressure (MPa)	25	30	35	40	50
e max (mm)	0,25	0,2	0,15	0,1	0,05

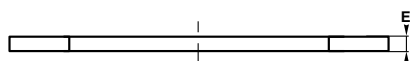
O-ring cross section	O-ring	d	D	E	Reference
5,34	66,04 x 5,34	66	75,4	1,7	10BR 334
	69,22 x 5,34	69	78,4	1,7	10BR 335
	72,39 x 5,34	73	82,4	1,7	10BR 336
	74,63 x 5,34	75	84,4	1,7	10BR 619
	75,57 x 5,34	76	85,4	1,7	10BR 337
	78,74 x 5,34	79	88,4	1,7	10BR 338
	79,73 x 5,34	80	89,4	1,7	10BR 620
	81,92 x 5,34	82	91,4	1,7	10BR 339
	85,09 x 5,34	85	94,4	1,7	10BR 340
	88,27 x 5,34	88	97,4	1,7	10BR 341
89,69 x 5,34	90	99,4	1,7	10BR 621	
91,44 x 5,34	92	101,4	1,7	10BR 342	
94,62 x 5,34	95	104,4	1,7	10BR 343	
97,79 x 5,34	98	107,4	1,7	10BR 344	
100,0 x 5,34	100	109,4	1,7	10BR 622	
100,97 x 5,34	101	110,4	1,7	10BR 345	
104,14 x 5,34	104	113,4	1,7	10BR 346	
107,32 x 5,34	107	116,4	1,7	10BR 347	
109,54 x 5,34	110	119,4	1,7	10BR 623	
110,49 x 5,34	110	119,4	1,7	10BR 348	
113,67 x 5,34	114	123,4	1,7	10BR 349	
116,84 x 5,34	117	126,4	1,7	10BR 350	
117,48 x 5,34	118	127,4	1,7	10BR 860	
120,02 x 5,34	121	130,4	1,7	10BR 351	
123,19 x 5,34	124	133,4	1,7	10BR 352	
126,37 x 5,34	127	136,4	1,7	10BR 353	
129,54 x 5,34	130	139,4	1,7	10BR 354	
132,72 x 5,34	133	142,4	1,7	10BR 355	
133,35 x 5,34	133	143,4	1,7	10BR 865	
135,89 x 5,34	137	146,4	1,7	10BR 356	
139,07 x 5,34	140	149,4	1,7	10BR 357	
139,7 x 5,34	140	149,4	1,7	10BR 867	
142,24 x 5,34	143	152,4	1,7	10BR 358	
145,42 x 5,34	146	155,4	1,7	10BR 359	
148,59 x 5,34	150	159,4	1,7	10BR 360	
151,77 x 5,34	152	161,4	1,7	10BR 361	
158,12 x 5,34	158	167,4	1,7	10BR 362	
164,47 x 5,34	165	174,4	1,7	10BR 363	
170,82 x 5,34	171	180,4	1,7	10BR 364	
177,17 x 5,34	178	187,4	1,7	10BR 365	
183,52 x 5,34	184	193,4	1,7	10BR 366	
189,87 x 5,34	190	199,4	1,7	10BR 367	

Table 222

d (O-ring)	g	L1	L2	E
1,78	1,55	3,8	5,2	1,4
2,62	2,25	5	6,4	1,4
3,53	3,1	6,2	7,6	1,4
5,34	4,7	8,8	10,5	1,7
7	6,1	12	14,5	2,5

O-ring cross section	O-ring	d	D	E	Reference
5,34	196,22 x 5,34	196	205,4	1,7	10BR 368
	208,92 x 5,34	209	218,4	1,7	10BR 370
	215,27 x 5,34	215	224,4	1,7	10BR 371
	227,97 x 5,34	228	237,4	1,7	10BR 373
	234,32 x 5,34	234	243,4	1,7	10BR 374
	240,67 x 5,34	241	250,4	1,7	10BR 375
	247,02 x 5,34	247	256,4	1,7	10BR 376
	253,37 x 5,34	253	262,4	1,7	10BR 377
	278,77 x 5,34	280	289,4	1,7	10BR 379
	291,47 x 5,34	292	301,4	1,7	10BR 380
7 (6,99)	113,67 x 7	114	126,2	2,5	10BR 425
	114,7 x 7	115	127,2	2,5	10BR 624
	116,84 x 7	117	129,2	2,5	10BR 426
	120,02 x 7	120	132,2	2,5	10BR 427
	123,2 x 7	123	135,2	2,5	10BR 428
	126,37 x 7	126	138,2	2,5	10BR 429
	129,54 x 7	130	142,2	2,5	10BR 430
	132,72 x 7	133	145,2	2,5	10BR 431
	134,5 x 7	134,5	146,7	2,5	10BR 626
	135,89 x 7	136	148,2	2,5	10BR 432
139,07 x 7	139	151,2	2,5	10BR 433	
142,24 x 7	142	154,2	2,5	10BR 434	
145,42 x 7	145	157,2	2,5	10BR 435	
148,59 x 7	149	161,2	2,5	10BR 436	
151,77 x 7	152	164,2	2,5	10BR 437	
155,6 x 7	156	168,2	2,5	10BR 872	
158,12 x 7	158	170,2	2,5	10BR 438	
159,5 x 7			2,5	10BR 627	
161,9 x 7	162	174,2	2,5	10BR 874	
164,47 x 7	165	177,2	2,5	10BR 439	
166,7 x 7	167	179,2	2,5	10BR 628	
168,3 x 7	168	180,2	2,5	10BR 876	
170,82 x 7	170	182,2	2,5	10BR 440	
174,6 x 7	175	187,2	2,5	10BR 878	
177,17 x 7	178	190,2	2,5	10BR 441	
183,52 x 7	184	196,2	2,5	10BR 442	
187,3 x 7	188	200,2	2,5	10BR 882	
189,87 x 7	190	202,2	2,5	10BR 443	
193,7 x 7	194	206,2	2,5	10BR 884	
196,22 x 7	196	208,2	2,5	10BR 444	

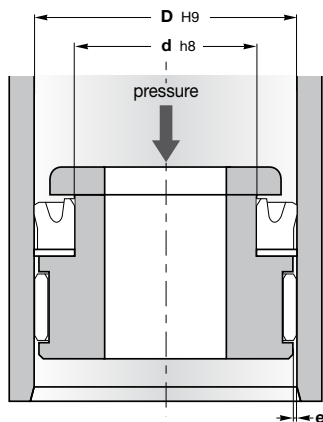
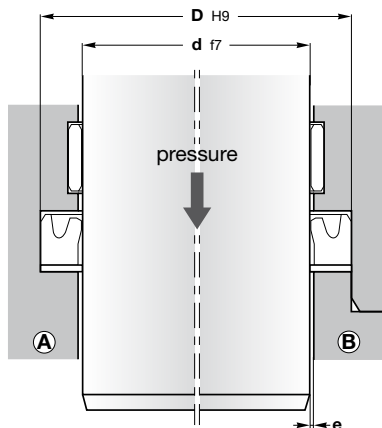
O-ring cross section	O-ring	d	D	E	Reference
7 (6,99)	200,0 x 7	200	212,2	2,5	10BR 886
	202,57 x 7	203	215,2	2,5	10BR 445
	208,92 x 7	210	222,2	2,5	10BR 674
215,27 x 7	215	227,2	2,5	10BR 446	
221,62 x 7	222	234,2	2,5	10BR 676	
227,97 x 7	230	242,2	2,5	10BR 447	
234,32 x 7	235	247,2	2,5	10BR 678	
240,67 x 7	240	252,2	2,5	10BR 448	
247 x 7	248	260,2	2,5	10BR 680	
253,37 x 7	255	267,2	2,5	10BR 449	
259,7 x 7	260	272,2	2,5	10BR 682	
266,07 x 7	265	277,2	2,5	10BR 450	
272,4 x 7	273	285,2	2,5	10BR 684	
278,77 x 7	280	292,2	2,5	10BR 451	
285,1 x 7	285	297,2	2,5	10BR 686	
291,47 x 7	292	304,2	2,5	10BR 452	
297,8 x 7	300	312,2	2,5	10BR 688	
304,17 x 7	305	317,2	2,5	10BR 453	
316,87 x 7	318	330,2	2,5	10BR 454	
329,57 x 7	330	342,2	2,5	10BR 455	
342,27 x 7			2,5	10BR 456	
367,67 x 7	370	382,2	2,5	10BR 458	
380,37 x 7	380	392,2	2,5	10BR 459	
393,07 x 7	393	405,2	2,5	10BR 460	



08ST8

Example of item code

08ST8 105 095 PT01
 Profile D (mm) d (mm) Material



✕ Machining of housings : see pages 48-49

08ST8 is an uncut back-up ring with a rectangular cross section. The standard material is PTFE. Other materials like POM, PA or other filled PTFE materials are also possible.

It's also used for reciprocating and rotating movements.

Operating conditions ✕ see page 8

- Pressure ≤ 50 MPa
- Temperature -60°C to 200°C
- Speed ≤ 0,5 m/s
- Fluids ✕ see pages 22-45

Materials ✕ see pages 10-19

PT01, PT15, POM, PA

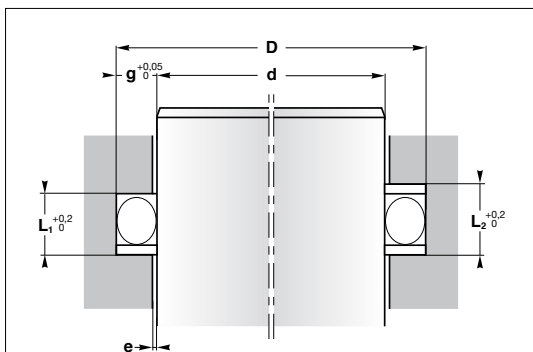
Assembly ✕ see pages 54-59

- In one-piece (A) or two-piece (B) housings
- On multi-piece pistons

Advantages

- Provides an efficient solution to the extrusion of the seal
- Generally the radial clearance *e* can be increased
- Good price-performance ratio and simple solution

Please contact us for applications approaching maximum values.

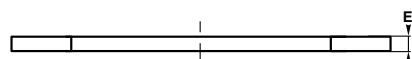
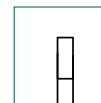


Internal housing

✕ Machining of housings : see page 81

D	d	E	Reference
18	8	2	08ST8 018008 PT01
20	10	2	08ST8 020010 PT01
22	14	2	08ST8 022014 PT01
23	15	2	08ST8 023015 PT01
24	14	2	08ST8 024014 PT01
	16	1,4	08ST8 024016 PT01
	16	2	08ST8 024016/2 PT01
26	16	2	08ST8 026016 PT01
	18	1	08ST8 026018 PT01
	18	2	08ST8 026018/1 PT01
28	15	2	08ST8 028015 PT01
	20	2	08ST8 028020 PT01
30	20	2	08ST8 030020 PT01
	22	2	08ST8 030022 PT01
32	24	2	08ST8 032024 PT01
33	25	2	08ST8 033025 PT01
	25	3	08ST8 033025/1 PT01
35	25	1,2	08ST8 035025 PT01
	25	2	08ST8 035025/2 PT01
36	25	3	08ST8 035025/1 PT01
	28	3	08ST8 036028 PT01
38	25	2	08ST8 038025 PT01
	32	2	08ST8 038032 PT01
	32	3	08ST8 038032/1 PT01
40	28	3	08ST8 040028 PT01
	30	1,5	08ST8 040030 PT01
	30	2	08ST8 040030/1 PT01
	30	3	08ST8 040030/2 PT01
41	28	3	08ST8 041028 PT01
42	32	3	08ST8 042032 PT01
45	30	3	08ST8 045030 PT01
	35	2	08ST8 045035 PT01
	35	3	08ST8 045035/1 PT01
46	36	3	08ST8 046036 PT01

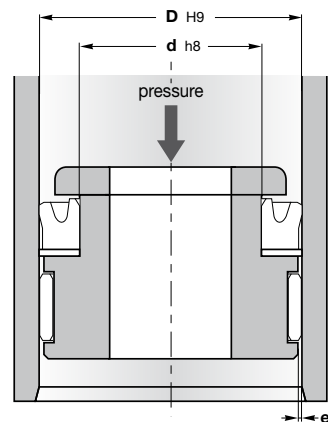
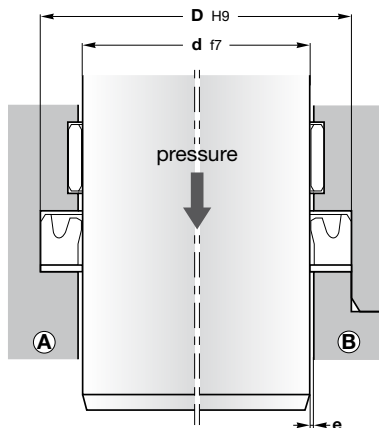
D	d	E	Reference
50	34	3	08ST8 050034 PT01
	35	3	08ST8 050035 PT01
	40	1,5	08ST8 050040 PT01
	40	2	08ST8 050040/1 PT01
	40	3	08ST8 050040/2 PT01
55	40	3	08ST8 055040 PT01
	45	2	08ST8 055045 PT01
	45	3	08ST8 055045/1 PT01
60	45	3	08ST8 060045 PT01
	50	2	08ST8 060050 PT01
	50	3	08ST8 060050/1 PT01
62,5	59	3	08ST8 062059 PT01
63	48	3	08ST8 063048 PT01
	50	3	08ST8 063050 PT01
	53	1,5	08ST8 063053 PT01
	53	3	08ST8 063053/1 PT01
65	55	3	08ST8 065055 PT01
	60	1,3	08ST8 065060/1 PT01
	60	1,5	08ST8 065060 PT01
68	55	3	08ST8 068055 PT01
69,5	60,2	3	08ST8 069060 PT01
70	50	3	08ST8 070050 PT01
	55	3	08ST8 070055 PT01
	60	1,7	08ST8 070060 PT01
	60	3	08ST8 070060/1 PT01
71	55	3	08ST8 071055 PT01
	60	3	08ST8 071060 PT01
73	60	3	08ST8 073060 PT01
	63	3	08ST8 073063 PT01
75	55	3	08ST8 075055 PT01
	60	3	08ST8 075060 PT01
	65	3	08ST8 075065/1 PT01
	65,5	1,8	08ST8 075065 PT01
77	67	3	08ST8 077067 PT01
78	65	3	08ST8 078065 PT01



08ST8

Example of item code

08ST8	105	095	PT01
Profile	D (mm)	d (mm)	Material



✕ Machining of housings : see pages 48-49

08ST8 is an uncut back-up ring with a rectangular cross section. The standard material is PTFE. Other materials like POM, PA or other filled PTFE materials are also possible.

It's also used for reciprocating and rotating movements.

Operating conditions ✕ see page 8

- Pressure ≤ 50 MPa
- Temperature -60°C to 200°C
- Speed ≤ 0,5 m/s
- Fluids ✕ see pages 22-45

Materials ✕ see pages 10-19

PT01, PT15, POM, PA

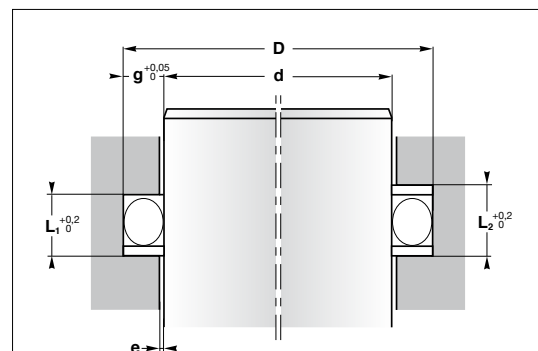
Assembly ✕ see pages 54-59

- In one-piece A or two-piece B housings
- On multi-piece pistons

Advantages

- Provides an efficient solution to the extrusion of the seal
- Generally the radial clearance e can be increased
- Good price-performance ratio and simple solution

Please contact us for applications approaching maximum values.

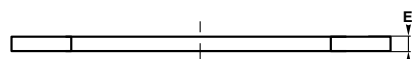
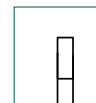


Internal housing

✕ Machining of housings : see page 81

D	d	E	Reference
80	60	3	08ST8 080060 PT01
	64	3	08ST8 080064 PT01
	65	3	08ST8 080065 PT01
	68	1,5	08ST8 080068 PT01
	70	2	08ST8 080070 PT01
	70	3	08ST8 080070/1 PT01
	75	1,5	08ST8 080075 PT01
83	70	3	08ST8 083070 PT01
85	65	3	08ST8 085065 PT01
	70	3	08ST8 085070 PT01
	75	2	08ST8 085075/1 PT01
	75	3	08ST8 085075 PT01
88	75	3	08ST8 088075 PT01
90	70	3	08ST8 090070 PT01
	75	3	08ST8 090075 PT01
	80	2	08ST8 090080 PT01
	80	3	08ST8 090080/2 PT01
93	80	3	08ST8 093080 PT01
95	75	3	08ST8 095075 PT01
	80	3	08ST8 095080 PT01
100	80	3	08ST8 100080 PT01
	85	2	08ST8 100085 PT01
	85	3	08ST8 100085/1 PT01
	88	2	08ST8 100088 PT01
105	85	3	08ST8 105085 PT01
	90	2	08ST8 105090/1 PT01
	90	3	08ST8 105090 PT01
	95	3	08ST8 105095 PT01
	95	3,5	08ST8 105095/1 PT01
110	90	3	08ST8 110090 PT01
	95	3	08ST8 110095 PT01
	95	3,5	08ST8 110095/1 PT01
115	95	3	08ST8 115095 PT01
	100	3	08ST8 115100 PT01
120	100	3	08ST8 120100 PT01
	105	3	08ST8 120105 PT01
125	100	3	08ST8 125100 PT01
	105	3	08ST8 125105 PT01
	110	2	08ST8 125110 PT01
	110	3	08ST8 125110/1 PT01

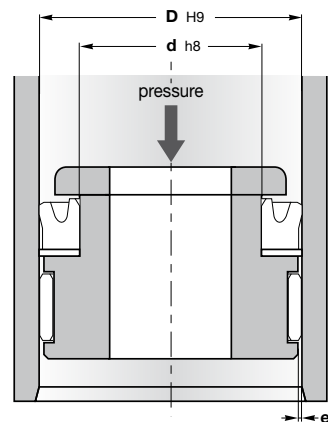
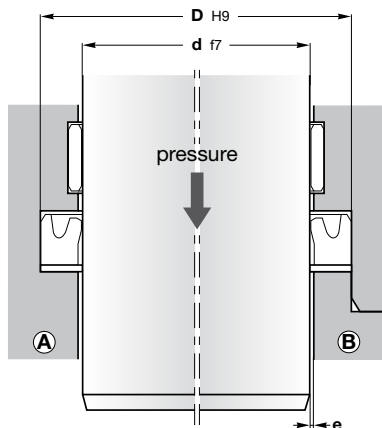
D	d	E	Reference
130	110	3	08ST8 130110 PT01
	115	3	08ST8 130115 PT01
135	115	3	08ST8 135115 PT01
	120	3	08ST8 135120 PT01
140	120	3	08ST8 140120 PT01
	125	3	08ST8 140125 PT01
141	133	1,7	08ST8 141133 PT01
145	130	3	08ST8 145130 PT01
150	125	2	08ST8 150125 PT01
	125	3	08ST8 150125/1 PT01
	130	3	08ST8 150130 PT01
	135	2	08ST8 150135 PT01
	135	3	08ST8 150135/1 PT01
155	140	3	08ST8 155140 PT01
160	135	3	08ST8 160135 PT01
	140	3	08ST8 160140 PT01
	145	3	08ST8 160145 PT01
165	140	3	08ST8 165140 PT01
	145	3	08ST8 165145 PT01
	150	3	08ST8 165150 PT01
170	145	3	08ST8 170145 PT01
	155	4	08ST8 170155 PT01
175	160	4	08ST8 175160 PT01
180	155	4	08ST8 180155 PT01
	160	4	08ST8 180160 PT01
	165	4	08ST8 180165 PT01
	170	4	08ST8 180170 PT01
185	160	4	08ST8 185160 PT01
190	170	4	08ST8 190170 PT01
	175	4	08ST8 190175 PT01
200	170	4	08ST8 200170 PT01
	175	4	08ST8 200175 PT01
	180	2,5	08ST8 200180 PT01
	180	4	08ST8 200180/1 PT01
	190	4	08ST8 200190 PT01
205	180	4	08ST8 205180 PT01
210	190	4	08ST8 210190 PT01



08ST8

Example of item code

08ST8	105	095	PT01
Profile	D (mm)	d (mm)	Material



✕ Machining of housings : see pages 48-49

08ST8 is an uncut back-up ring with a rectangular cross section. The standard material is PTFE. Other materials like POM, PA or other filled PTFE materials are also possible.

It's also used for reciprocating and rotating movements.

Operating conditions ✕ see page 8

- Pressure ≤ 50 MPa
- Temperature -60°C to 200°C
- Speed ≤ 0,5 m/s
- Fluids ✕ see pages 22-45

Materials ✕ see pages 10-19

PT01, PT15, POM, PA

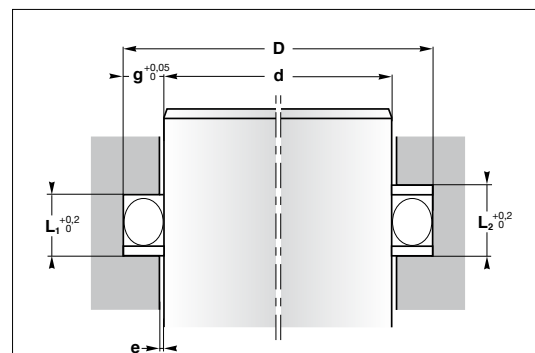
Assembly ✕ see pages 54-59

- In one-piece (A) or two-piece (B) housings
- On multi-piece pistons

Advantages

- Provides an efficient solution to the extrusion of the seal
- Generally the radial clearance e can be increased
- Good price-performance ratio and simple solution

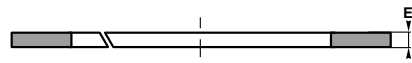
Please contact us for applications approaching maximum values.



Internal housing

✕ Machining of housings : see page 81

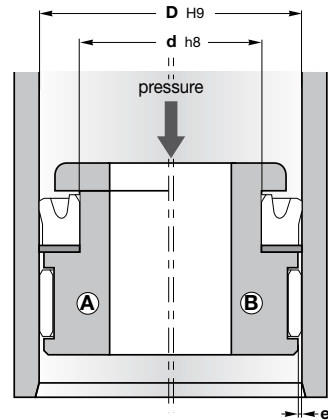
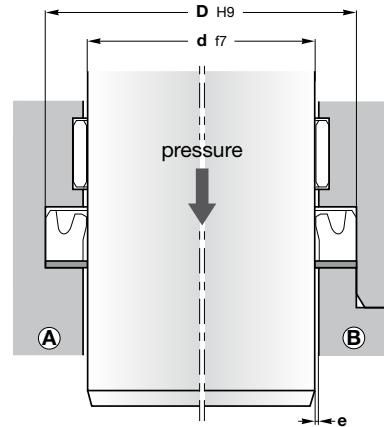
D	d	E	Reference
220	200	2	08ST8 220200 PT01
	200	4	08ST8 220200/1 PT01
	205	4	08ST8 220205 PT01
225	200	4	08ST8 225200 PT01
	205	4	08ST8 225205 PT01
230	210	4	08ST8 230210 PT01
240	220	4	08ST8 240220 PT01
245	225	4	08ST8 245225 PT01
250	225	4	08ST8 250225 PT01
	230	4	08ST8 250230 PT01
260	240	4	08ST8 260240 PT01
270	250	4	08ST8 270250 PT01
275	250	4	08ST8 275250 PT01
280	255	4	08ST8 280255 PT01
285	260	4	08ST8 285260 PT01
290	265	4	08ST8 290265 PT01
295	270	4	08ST8 295270 PT01
	275	4	08ST8 300275 PT01
300	270	4	08ST8 300270 PT01
	275	4	08ST8 300275 PT01
315	307,9	1,5	08ST8 315307 PT01
400	387,8	3	08ST8 400387 PT01
430	418,3	3	08ST8 430418 PT01



08ST8/C

Example of item code

08ST8/C	105	095	PA
Profile	D (mm)	d (mm)	Material



✕ Machining of housings : see pages 48-49

08ST8/C is a cut back-up ring with a rectangular cross section. The standard materials are PTFE, POM or PA. Other materials are also possible. It can work in **static** and **dynamic** applications and is preferred for installations in closed grooves where uncut back-up rings are not suitable. It's also used in reciprocating and rotating movements.

Operating conditions ✕ see page 8

- Pressure ≤ 50 MPa
- Temperature -60°C to 200°C
- Speed ≤ 0,5 m/s
- Fluids ✕ see pages 22-45

Materials ✕ see pages 10-19

PT01, POM, PA

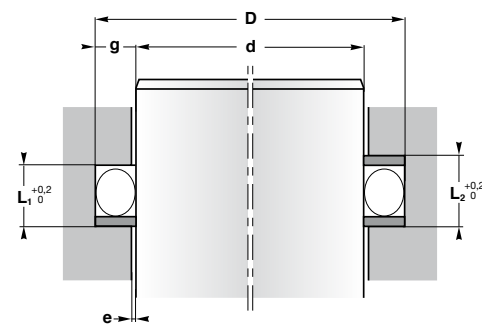
Assembly ✕ see pages 54-59

- In one-piece (A) or two-piece (B) housings
- On one-piece (A) or multi-piece (B) pistons

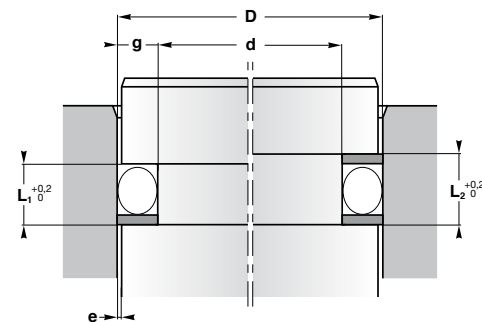
Advantages

- Provides an efficient solution against the extrusion of the seal
- Generally the radial clearance **e** can be increased
- Good price-performance ratio and simple solution

Please contact us for applications approaching maximum values.



Internal housing



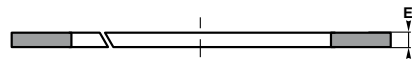
External housing

✕ Machining of housings : see page 81

D	d	E	Reference
22	17	1,4	08ST8/C 022017 PT01
33	25	1,2	08ST8/C 033025 POM
38,1	28,57	1,8	08ST8/C 038028 PA
45	40	1,35	08ST8/C 045040 PT01
48	40	1,2	08ST8/C 048040 POM
50	40	3	08ST8/C 050040 PA
50,8	38,1	7	08ST8/C 050038 POM
55	40	3	08ST8/C 055040 PA
	42	2	08ST8/C 055042 PT01
60	45	3	08ST8/C 060045 PA
	50	3	08ST8/C 060050 PA
63	50	3	08ST8/C 063050 PA
63,5	50,8	7	08ST8/C 063050 POM
65	50	3	08ST8/C 065050 PA
	55	3	08ST8/C 065055 PA
68	55	3	08ST8/C 068055 PA
	60	3	08ST8/C 068060 PA
70	55	3	08ST8/C 070055 PA
	60	3	08ST8/C 070060 PA
71	55	3	08ST8/C 071055 PA
73	60	3	08ST8/C 073060 PA
	68	1,4	08ST8/C 073068 PT01
75	60	3	08ST8/C 075060 PA
	65	3	08ST8/C 075065 PA
78	65	3	08ST8/C 078065 PA
79,9	71,5	1,2	08ST8/C 079071 PT01
80	65	3	08ST8/C 080065 PA
	70	3	08ST8/C 080070 PA
81	72,4	1,7	08ST8/C 081072 PT01
82,55	63,5	3,6	08ST8/C 082063/1 POM
	69,85	1,8	08ST8/C 082069 PA
83	70	3	08ST8/C 083070 PA

D	d	E	Reference
85	70	3	08ST8/C 085070 PA
	75	3	08ST8/C 085075 PA
88	75	3	08ST8/C 088075 PA
90	70	3	08ST8/C 090070 PA
	75	3	08ST8/C 090075 PA
	80	3	08ST8/C 090080 PA
	84,6	1,4	08ST8/C 090084 PT01
93	80	3	08ST8/C 093080 PA
95	75	3	08ST8/C 095075 PA
	80	3	08ST8/C 095080 PA
95,25	76,2	3,8	08ST8/C 095076 POM
100	80	3	08ST8/C 100080 PA
	85	3	08ST8/C 100085 PA
101	92,4	1,7	08ST8/C 101092 PT01
101,6	88,9	1,8	08ST8/C 101088 PA
105	85	3	08ST8/C 105085 PA
	90	3	08ST8/C 105090 PA
	95	3	08ST8/C 105095 PA
107,95	88,9	3,6	08ST8/C 107088 POM
110	90	3	08ST8/C 110090 PA
	95	3	08ST8/C 110095 PA
111	102,4	1,7	08ST8/C 111102 PT01
114,3	101,6	1,9	08ST8/C 114101 PA
115	95	3	08ST8/C 115095 PA
	100	3	08ST8/C 115100 PA
	109,6	1,4	08ST8/C 115109 PT01
120	100	3	08ST8/C 120100 PA
	105	3	08ST8/C 120105 PA
120,2	112,2	1,7	08ST8/C 120112 PT01
125	105	3	08ST8/C 125105 PA
	110	3	08ST8/C 125110 PA
130	110	3	08ST8/C 130110 PA
	115	3	08ST8/C 130115 PA
131	122,4	1,7	08ST8/C 131122 PT01

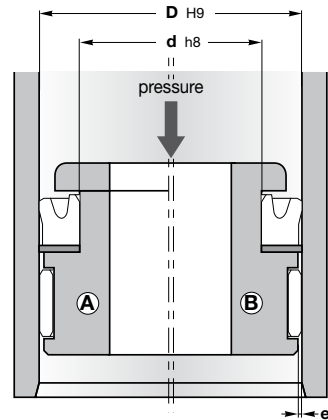
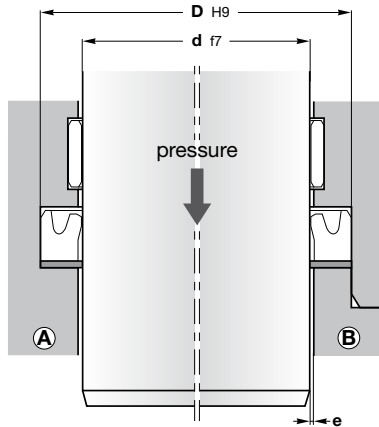
08ST8/C seals with diameters between 10 and 1500 mm can be manufactured within short delivery time.
For prices and availability: www.sealtech-business.be



08ST8/C

Example of item code

08ST8/C	105	095	PA
Profile	D (mm)	d (mm)	Material



✕ Machining of housings: see pages 48-49

08ST8/C is a cut back-up ring with a rectangular cross section. The standard materials are PTFE, POM or PA. Other materials are also possible. It can work in **static** and **dynamic** applications and is preferred for installations in closed grooves where uncut back-up rings are not suitable. It's also used in reciprocating and rotating movements.

Operating conditions ✕ see page 8

- Pressure ≤ 50 MPa
- Temperature -60°C to 200°C
- Speed ≤ 0,5 m/s
- Fluids ✕ see pages 22-45

Materials ✕ see pages 10-19

PT01, POM, PA

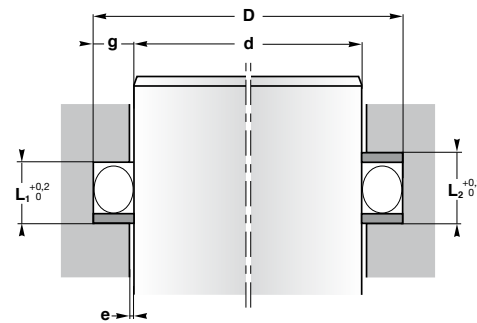
Assembly ✕ see pages 54-59

- In one-piece (A) or two-piece (B) housings
- On one-piece (A) or multi-piece (B) pistons

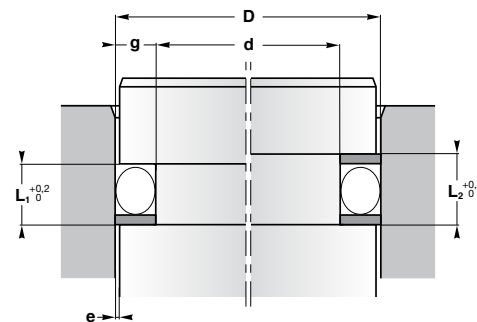
Advantages

- Provides an efficient solution against the extrusion of the seal
- Generally the radial clearance **e** can be increased
- Good price-performance ratio and simple solution

Please contact us for applications approaching maximum values.



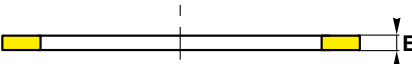
Internal housing



External housing

✕ Machining of housings: see page 81

D	d	E	Reference
133,35	120,65	1,8	08ST8/C 133120 PA
135	115 120	3 3	08ST8/C 135115 PA 08ST8/C 135120 PA
140	120	3	08ST8/C 140120 PA
141	132,4	1,7	08ST8/C 141132 PT01
145	130	3	08ST8/C 145130 PA
150	130	3	08ST8/C 150130 PA
151	142,4	1,7	08ST8/C 151142 PT01
152	133,36	3,6	08ST8/C 152133/1 POM
152,4	133,36	5,8	08ST8/C 152133 POM
160	140	3	08ST8/C 160140 PA
161	152,4	1,7	08ST8/C 161152 PT01
177,8	158,75	3,8	08ST8/C 177158 POM
180	160	4	08ST8/C 180160 PA
181	172,4	1,7	08ST8/C 181172 PT01
203,2	177,8	7	08ST8/C 203177 POM

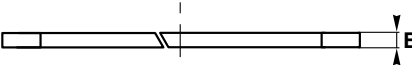


28ST8 MACHINED

Example of item code

28ST8 PU30 120 x 111,4 x 1,7

Profile Material $N \times M \times E$ (mm)
 $Q \times P \times E$ (mm)

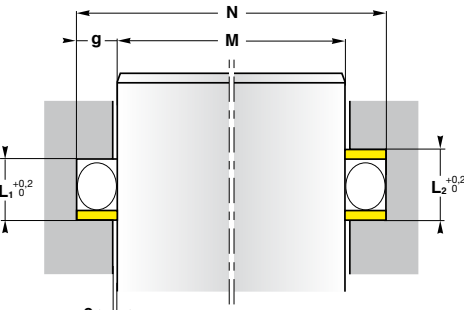


28ST8/C MACHINED

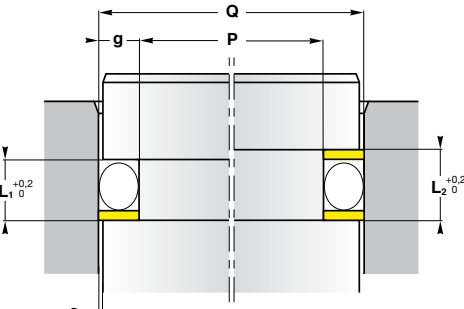
Example of item code

28ST8/C PT01 120 x 111,4 x 1,7

Profile Material $N \times M \times E$ (mm)
 $Q \times P \times E$ (mm)



Internal housing



External housing

✚ Machining of housings : see pages 48-49

28ST8 and **28ST8/C** back-up rings with O-ring are the most simple and economic solution.

The back-up ring can be machined in PTFE or PU. They prevent extrusion of the O-ring when it is subjected to high pressures, or when the extrusion gaps are excessive.

The cutted back-up rings in PTFE **28ST8/C** PT01 are used for external grooves, because stretching closed PTFE back-up rings would be very difficult or even impossible.

In contrast, **28ST8** PU30 can be mounted easily as closed rings. So, there is no discontinuity that may contribute to cause localised wear spots to the O-ring.

MACHINED

Operating conditions ✚ see page 8

Pressure ≤ 50 MPa
 Temperature
 PU -30°C to 100°C
 PTFE -200°C to 260°C
 Fluids
 PU mineral oils
 PTFE almost all

Materials ✚ see pages 10-19

PU PU30
 PTFE PT01

Assembly ✚ see pages 54-59

In one-piece housings: the **28ST8** in PU30 don't need to be cut before installation
 The back-up rings in PTFE need to be cut for external grooves

Advantages

- Economic
- Easy assembly
- Very precise machined back-up rings
- Good extrusion resistance
- Perfect solution for difficult static sealing applications
- The back-up rings **28ST8** in PU30 do not have a cut

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

Pressure (MPa)	25	30	35	40	50
e max (mm)	0,25	0,2	0,15	0,1	0,05

With regards to new constructions, we advise to design the grooves **according norm ISO 3601** (table 235) which represents an optimal technical solution for static sealing applications.

For external housings, use back-up rings **28ST8** and cut rings **28ST8/C**. For internal housings, use back-up rings **28ST8**. To order with the correct item code, give the dimensions of the ring and specify with /C if the ring must be cut.

We give four examples of item codes:

1st example: inner housing, material PU30

For an internal diameter **M** of 60 mm and an external diameter **N** of 64 mm the item code will be with a thickness **E** of 1,4 mm:

28ST8 PU30 64 x 60 x 1,4
 N (mm) M (mm) E (mm)

2nd example: inner housing, material PT01

For an internal diameter **M** of 60 mm and an external diameter **N** of 64 mm the item code will be with a thickness **E** of 1,4 mm:

28ST8 PT01 64 x 60 x 1,4
 N (mm) M (mm) E (mm)

3rd example: outer housing, PU30

For an external diameter **Q** of 120 mm and an internal diameter **P** of 111,4 mm the item code will be with a thickness **E** of 1,7 mm:

28ST8 PU30 120 x 111,4 x 1,7
 Q (mm) P (mm) E (mm)

4th example: outer housing, PT01, cut

For an external diameter **Q** of 120 mm and an internal diameter **P** of 111,4 mm the item code will be with a thickness **E** of 1,7 mm:

28ST8/C PT01 120 x 111,4 x 1,7
 Q (mm) P (mm) E (mm)

NEW CONSTRUCTION

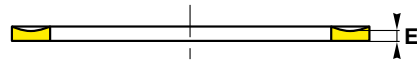
Table 235
 Grooves for O-ring with back-up rings following the **norm ISO 3601**

d	g	L1	L2	E
1,5 1,52	1,1	3	4	1
1,6 1,63	1,2	3,1	4,1	1
1,78 1,8	1,3	3,8	5,2	1,4
1,9	1,4	4	5,4	1,4
2 1,98	1,5	4,1	5,5	1,4
2,4	1,8	4,6	6	1,4
2,5	1,85	4,7	6,1	1,4
2,62 2,65	2	5	6,4	1,4
2,7	2,05	5	6,4	1,4
3	2,3	5,4	6,8	1,4
3,1	2,4	5,5	6,9	1,4
3,5	2,65	6	7,4	1,4
3,53 3,55	2,7	6,2	7,6	1,4
3,6	2,8	6,2	7,6	1,4
4	3,1	6,9	8,6	1,4
4,5	3,5	7,5	9,2	1,7
5	4	8,3	10	1,7
5,34 5,3	4,3	9	10,9	1,7
5,5	4,5	9	10,9	1,7
5,7	4,6	9	10,9	1,7
6	4,9	9	10,9	1,7
7 6,99	5,8	12,3	15,1	2,5
8	6,7	12,3	15,1	2,5
8,4	7,1	12,3	15,1	2,5

Our back-up rings **28ST8** have a fixed price under following conditions:

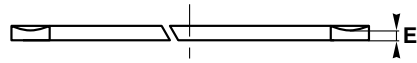
- maximal thickness: 3 mm
- maximal cross section: 7 mm
- materials: PU30 and PT01

The prices for the **28ST8** back-up rings can be calculated on www.sealtech-business.be.


25ST9 MACHINED

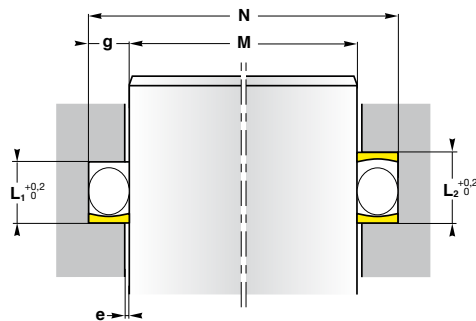
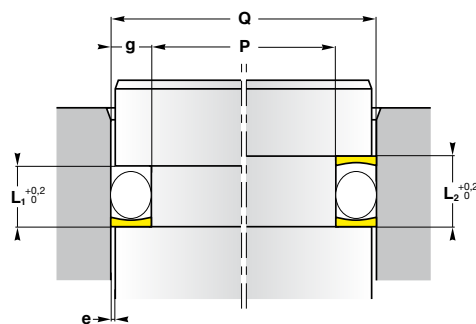
Example of item code

25ST9 PT15 120 x 111,4 x 1,7
 Profile Material N x M x E (mm)
 Q x P x E (mm)


25ST9/C MACHINED

Example of item code

25ST9/C PT01 120 x 111,4 x 1,7
 Profile Material N x M x E (mm)
 Q x P x E (mm)


Internal housing

External housing

✕ Machining of housings : see pages 48-49

25ST9 and **25ST9/C** back-up rings can be machined in PTFE, PU, Elastomers or POM/PA

They prevent extrusion of the O-ring when it is subjected to high pressures, or when the extrusion gaps are excessive.

If pressure arises on only one side of the O-ring, it will suffice to fit one anti-extrusion ring on the side not exposed to pressure.

For double-acting applications, two back-up rings should be used, one on each side of the O-ring.

The concave shape minimizes distortion of the O-ring, thereby **increasing the lifetime** of the sealing.

MACHINED
Operating conditions ✕ see page 8

Pressure ≤ 50 MPa
 Temperature
 PU -30°C to 100°C
 PTFE -200°C to 260°C

Materials ✕ see pages 10-19

25ST9 PU30, PU40, PT01, PT15, PT30, PT55
25ST9/C PT01, PT15, PT30, PT55

Assembly ✕ see pages 54-59

In one-piece housings
 The **25ST9** in PU or in elastomer can be assembled in internal or external grooves and don't need to be cut before assembling.
 The back-up rings in PTFE or PA/POM need to be cut for external grooves (**25ST9/C**).

Advantages

Easy assembly
 Very precise machined back-up rings
 Good extrusion resistance
 Perfect solution for difficult static sealing applications
 Life time increased

Please contact us for applications approaching maximum values.
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	25	30	35	40	50
e max (mm)	0,25	0,2	0,15	0,1	0,05

With regards to new constructions, we advise to design the grooves **according norm ISO 3601** (table 237) which represents an optimal technical solution for static sealing applications.

For external grooves, use back-up rings **25ST9** and cut rings **25ST9/C**. For internal grooves, use back-up rings **25ST9**. To order with the correct item code, give the dimensions of the ring and specify with /C if the ring must be cut.

We give four examples of item codes :

1st example : inner housing, material PU30

For an internal diameter **M** of 60 mm and an external diameter **N** of 64 mm the item code will be with a thickness **E** of 1,4 mm :

25ST9 PU30 64 x 60 x 1,4
 N (mm) M (mm) E (mm)

2nd example : inner housing, material PT01

For an internal diameter **M** of 60 mm and an external diameter **N** of 64 mm the item code will be with a thickness **E** of 1,4 mm :

25ST9 PT01 64 x 60 x 1,4
 N (mm) M (mm) E (mm)

3rd example : outer housing, PU30

For an external diameter **Q** of 120 mm and an internal diameter **P** of 111,4 mm the item code will be with a thickness **E** of 1,7 mm :

25ST9 PU30 120 x 111,4 x 1,7
 Q (mm) P (mm) E (mm)

4th example : outer housing, PT01, cut

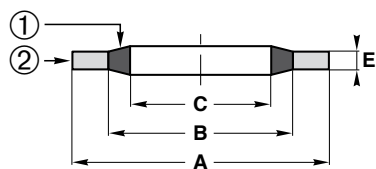
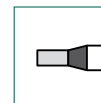
For an external diameter **Q** of 120 mm and an internal diameter **P** of 111,4 mm the item code will be with a thickness **E** of 1,7 mm :

25ST9/C PT01 120 x 111,4 x 1,7
 Q (mm) P (mm) E (mm)

NEW CONSTRUCTION
Table 237

 Grooves for O-ring with back-up rings following the **norm ISO 3601**

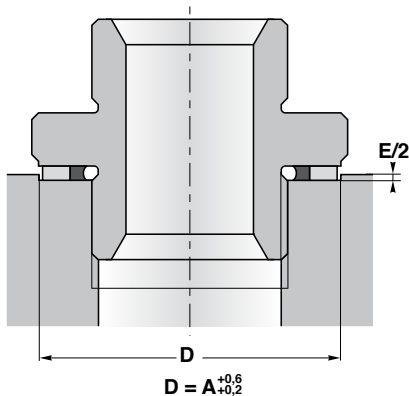
d	g	L1	L2	E
1,5 1,52	1,1	3	4	1
1,6 1,63	1,2	3,1	4,1	1
1,78 1,8	1,3	3,8	5,2	1,4
1,9	1,4	4	5,4	1,4
2 1,98	1,5	4,1	5,5	1,4
2,4	1,8	4,6	6	1,4
2,5	1,85	4,7	6,1	1,4
2,62 2,65	2	5	6,4	1,4
2,7	2,05	5	6,4	1,4
3	2,3	5,4	6,8	1,4
3,1	2,4	5,5	6,9	1,4
3,5	2,65	6	7,4	1,4
3,53 3,55	2,7	6,2	7,6	1,4
3,6	2,8	6,2	7,6	1,4
4	3,1	6,9	8,6	1,4
4,5	3,5	7,5	9,2	1,7
5	4	8,3	10	1,7
5,34 5,3	4,3	9	10,9	1,7
5,5	4,5	9	10,9	1,7
5,7	4,6	9	10,9	1,7
6	4,9	9	10,9	1,7
7 6,99	5,8	12,3	15,1	2,5
8	6,7	12,3	15,1	2,5
8,4	7,1	12,3	15,1	2,5



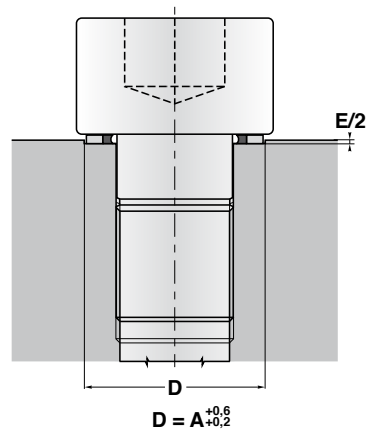
08BS

08BS...FPM

08BS...FPM/SS



$D = A^{+0.6}_{+0.2}$



$D = A^{+0.6}_{+0.2}$

08BS bonded seals are used for screws and connectors. By tightening the screws the elastomer sealing lip is compressed, thereby producing the sealing effect on the surfaces to be sealed. It stops the medium from leaking to the outside, thus preventing loss of pressure. In addition, it provides **protection against dirt** from the outside.

Operating conditions see page 8

Pressure	contact us
Temperature	
NBR	-30 to 100°C
FPM	-20 to 200°C

Materials see pages 10-19

① 08BS	NBR 70 Sh A
08BS...FPM	FPM 70 Sh A
② 08BS	passivated steel
08BS...FPM	passivated steel
08BS...FPM/SS	stainless steel

Assembly see pages 54-59

For bolts and connectors: see drawing on this page

Advantages

- No sweating
- Large range of elastomers and metals possible
- Sealing for metric, Whitworth and BSP threads

Please contact us for applications approaching maximum values.

More information

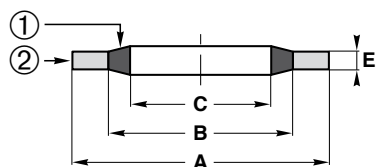
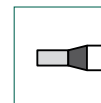
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

08BS 0.. = English range

BSP	Inch	A	B	C	E	Reference	
	6BA	6,35	4,09	3,05	1,3	08BS 001	
	4BA	7,26	5,26	4,12	1,3	08BS 002	
	2BA	8,38	6,35	5,21	1,3	08BS 003	
	1/4	13,21	8	6,86	1,3	08BS 004	
	1/4	13,34	9,53	6,99	1,3	08BS 005	
	5/16	13,34	9,53	8,31	1,3	08BS 006	
	5/16	14,22	10,04	8,64	1,3	08BS 007	
	0,4	18,36	12,45	11,26	2	08BS 008	
	7/16	19,05	13,08	11,69	2	08BS 009	
	9/16	22,23	16,39	14,86	2	08BS 010	
	5/8	25,4	18,75	16,51	2	08BS 011	
	11/16	25,4	19,69	18,16	2,5	08BS 012	
	15/16	33,27	26,04	24,26	2,5	08BS 013	
	1-1/8	36,58	30,86	29,33	2,5	08BS 014	
	1-1/4	41,4	35,69	32,64	3,4	08BS 015	
	1-3/8	44,45	38,99	35,94	3,4	08BS 016	
	1-1/2	47,75	42,04	38,96	3,4	08BS 017	
	1-3/4	57,15	48,39	45,34	3,4	08BS 018	
	1/8	3/8	15,88	11,84	10,37	2	08BS 020
	1/4	1/2	20,57	15,21	13,74	2	08BS 021
		0,6	22,23	17,3	15,83	2	08BS 022
	3/8		23,8	18,75	17,28	2	08BS 023
		3/4	26,92	21,21	19,69	2,5	08BS 024
	1/2	13/16	28,58	23,01	21,54	2,5	08BS 025
	5/8	7/8	31,75	24,97	23,49	2,5	08BS 026
	3/4	1	34,93	28,53	27,05	2,5	08BS 027
		1-1/16	38,61	30,61	27,82	2,5	08BS 028
	7/8	1-3/16	38,1	32,29	30,81	2,5	08BS 029
	1	1-5/16	42,8	36,88	33,89	2,5	08BS 030
	1-1/4	1-5/8	52,38	45,93	42,93	2,5	08BS 032
	1-1/2	1-7/8	58,6	51,39	48,44	2,5	08BS 033
	1-3/4	2-1/8	69,85	58,3	54,89	2,5	08BS 034
		2-1/4	70,36	61,09	58,04	2,5	08BS 035
	2		73,03	63,63	60,58	2,5	08BS 036
		2-1/2	77,72	67,44	64,39	3,4	08BS 037
	2-1/4		79,5	69,98	66,68	3,4	08BS 038
	2-1/2		90,3	79,38	76,08	3,4	08BS 039

Tolerances

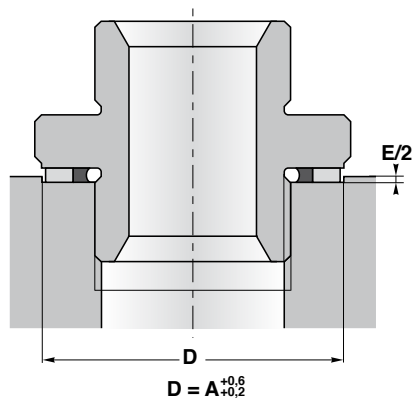
SERIE	A	B	C	E
0, 2, 3	+0,13 0	±0,13	±0,13	±0,15
5	0 -0,12	+0,2 0	+0,2 0	±0,15



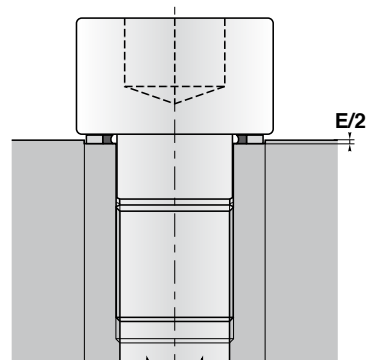
08BS

08BS...FPM

08BS...FPM/SS



$D = A +0.6 / +0.2$



$D = A +0.6 / +0.2$

08BS bonded seals are used for screws and connectors. By tightening the screws the elastomer sealing lip is compressed, thereby producing the sealing effect on the surfaces to be sealed. It stops the medium from leaking to the outside, thus preventing loss of pressure. In addition, it provides **protection against dirt** from the outside.

Operating conditions see page 8

Pressure	contact us
Temperature	
NBR	-30 to 100°C
FPM	-20 to 200°C

Materials see pages 10-19

① 08BS	NBR 70 Sh A
08BS...FPM	FPM 70 Sh A
② 08BS	passivated steel
08BS...FPM	passivated steel
08BS...FPM/SS	stainless steel

Assembly see pages 54-59

For bolts and connectors: see drawing on this page

Advantages

- No sweating
- Large range of elastomers and metals possible
- Sealing for metric, Whitworth and BSP threads

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

08BS 2.. = German range

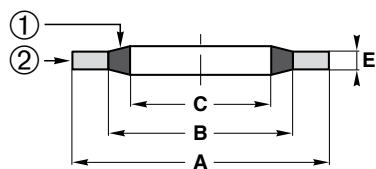
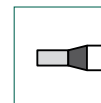
metric	A	B	C	E	Reference
M3,5	7,2	5,2	4,1	1	08BS 201
M4	7	5,4	4,5	1	08BS 202
M5	9	6,8	5,7	1	08BS 203
	10	7,4	5,7	1	08BS 204
M5,5	9,2	7,2	6,2	1	08BS 205
M6	10	8	6,7	1	08BS 206
	11	8,2	6,7	1	08BS 207
	11	8,2	6,7	2,5	08BS 208
	12	8,8	7,1	1	08BS 209
	10,2	8,6	7,3	1	08BS 210
M8	13,4	9,4	8,5	1	08BS 211
	13	10	8,7	1	08BS 212
	14	10,4	8,7	1	08BS 213
	16	10,4	8,7	1	08BS 214
	13,3	10,5	9,3	1	08BS 215
M10	16	12	10,35	2	08BS 216
	16	12,4	10,7	1,5	08BS 217
	18	12,4	10,7	1,5	08BS 218
M11	16,3	12,7	11,4	1,5	08BS 219
	18,5	13,7	11,8	1,5	08BS 220
	19,1	13,5	11,8	1,5	08BS 221
M12	18	14,4	12,7	1,5	08BS 222
	20	14	12,7	1,5	08BS 223
M13	20	15,4	13,7	1,5	08BS 224
	22	15,4	13,7	1,5	08BS 225
	18,7	15,7	14	1,5	08BS 226
M14	22	16,4	14,7	1,5	08BS 227
M15	22,7	17,78	16	1,5	08BS 228
M16	24	18,4	16,7	1,5	08BS 229

08BS 2.. = German range

metric	A	B	C	E	Reference
M17	24	19,2	17,4	1,5	08BS 230
	24,7	20,1	18	1,5	08BS 231
M18	26	20,4	18,7	1,5	08BS 232
M20	28	22,5	20,7	1,5	08BS 233
M21	28,7	23,3	21,5	2,5	08BS 234
M22	28	24,2	22,5	1,5	08BS 235
	30	24,4	22,7	2	08BS 236
	30	24,4	22,7	3	08BS 237
M24	32	26,4	24,7	2	08BS 238
M26	35	28,4	26,7	2	08BS 239
M27	36	29	27,7	2	08BS 240
M30	39	33	31	2	08BS 242
M33	42	35,8	33,7	2	08BS 243
	43	36,4	34,3	2	08BS 244
M36	46	38,8	36,7	2	08BS 245
M39	51	41,9	40	2,5	08BS 246
M42	53	44	42,7	3	08BS 247
M48	59	50,8	48,7	3	08BS 248
M51	60	54,1	52	3	08BS 249
M52	64,5	56,4	53,3	3	08BS 250
M60	73	63	60,7	3	08BS 251

Tolerances

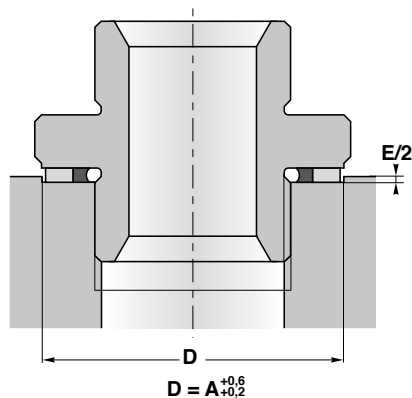
SERIE	A	B	C	E
0, 2, 3	+0,13 / 0	±0,13	±0,13	±0,15
5	0 / -0,12	+0,2 / 0	+0,2 / 0	±0,15



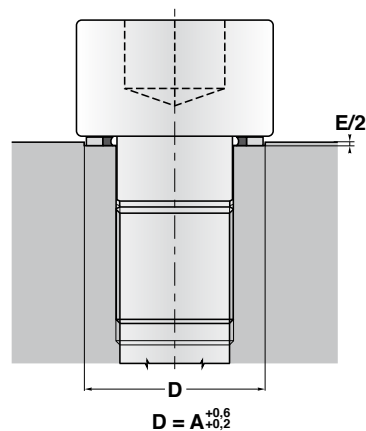
08BS

08BS...FPM

08BS...FPM/SS



$$D = A^{+0.6}_{+0.2}$$



$$D = A^{+0.6}_{+0.2}$$

08BS bonded seals are used for screws and connectors. By tightening the screws the elastomer sealing lip is compressed, thereby producing the sealing effect on the surfaces to be sealed. It stops the medium from leaking to the outside, thus preventing loss of pressure. In addition, it provides **protection against dirt** from the outside.

Operating conditions see page 8

Pressure	contact us
Temperature	
NBR	-30 to 100°C
FPM	-20 to 200°C

Materials see pages 10-19

① 08BS	NBR 70 Sh A
08BS...FPM	FPM 70 Sh A
② 08BS	passivated steel
08BS...FPM	passivated steel
08BS...FPM/SS	stainless steel

Assembly see pages 54-59

For bolts and connectors: see drawing on this page

Advantages

- No sweating
- Large range of elastomers and metals possible
- Sealing for metric, Whitworth and BSP threads

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

08BS 3.. = French range

metric	A	B	C	E	Reference
M3	7,5	5	3,6	1	08BS 301
M4	9	6	4,6	1	08BS 302
M5	10	7	5,6	1	08BS 303
M6	11	8	6,6	1	08BS 304
M6	13,27	8	6,85	1,3	08BS 305
M6	11,4	8,4	7	1	08BS 306
M8	13	10	8,6	1	08BS 307
M10	17	12,1	10,7	1,5	08BS 310
M11	18,1	13,2	11,8	1,5	08BS 312
M12	19	14,1	12,7	1,5	08BS 313
M13	20,1	15,2	13,8	1,5	08BS 315
M14	21	16,1	14,7	1,5	08BS 316
M16	23	18,1	16,7	1,5	08BS 317
M18	27	20,4	18,7	2	08BS 320
M20	29	22,4	20,7	2	08BS 321
M21	30	23,4	21,7	2	08BS 323
M22	31	24,4	22,7	2	08BS 324
M24	33	26,4	24,7	2	08BS 326
M26	35,3	28,7	27	2	08BS 327
M27	36	29,4	27,7	2	08BS 328
M28	36	30,3	28,6	2	08BS 329
M30	39	32,4	30,7	2	08BS 331
M33	42	35,4	33,7	2	08BS 332
M36	48	39,6	37	2,5	08BS 333
M39	51	42,6	40	2,5	08BS 334
M42	54	45,6	43	2,5	08BS 335
M45	57	48,6	46	2,5	08BS 336
M48	60	51,6	49	2,5	08BS 337

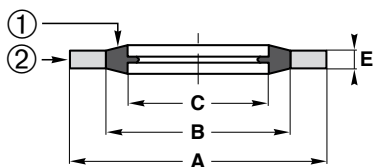
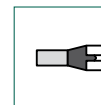
08BS 5.. = CETOP range

BSP	A	B	C	E	Reference
1/8	14,7	12	10,4	1,25	08BS 510
1/4	18,7	15,75	13,9	1,25	08BS 511
3/8	22,7	19,25	17,3	1,25	08BS 512
1/2	26,7	23,55	21,7	1,25	08BS 513
5/8	32,5	29,2	27,3	1,25	08BS 514
1	39,5	36,1	34,2	2	08BS 515
1-1/4	49,5	44,7	42,8	2	08BS 516
1-1/2	55,5	50,6	48,7	2	08BS 517
2	68,5	62,4	60,5	2	08BS 518

Recommended by ISO 1179 norm

Tolerances

SERIE	A	B	C	E
0, 2, 3	+0,13 0	±0,13	±0,13	±0,15
5	0 -0,12	+0,2 0	+0,2 0	±0,15

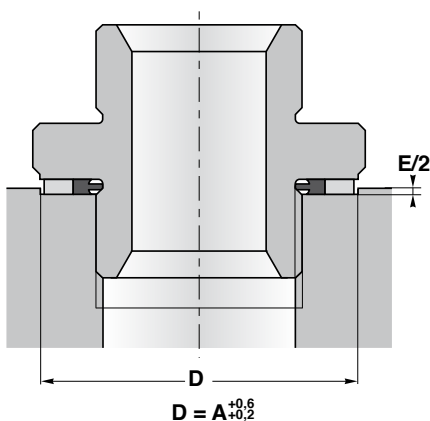


08BS9

08BS9...FPM

08BS9...NBR/SS

08BS9...FPM/SS



D = A +0.6 / +0.2

08BS9 bonded seals are used for screws and connectors. By tightening the screws the elastomer sealing lip is compressed, thereby producing the sealing effect on the surfaces to be sealed. It stops the medium from leaking to the outside, thus preventing loss of pressure. In addition, it provides protection against dirt from the outside.

The centring feature of the 08BS9 type ensures that the bonded seal is fixed in the correct position for mounting and when tightening the screws, the captive mounting is guaranteed.

Operating conditions see page 8

Table with 2 columns: Parameter (Pressure, Temperature) and Value (contact us, -30 to 100°C, -20 to 200°C)

Materials see pages 10-19

Table with 2 columns: Seal type (08BS9, 08BS9...FPM, 08BS9...NBR/SS, 08BS9...FPM/SS) and Material (NBR 70 Sh A, FPM 70 Sh A, passivated steel, stainless steel)

Assembly see pages 54-59

For connectors: see drawing on this page

Advantages

- No sweating
Large range of elastomers and metals possible
Sealing for metric, Whitworth and BSP threads
Captive mounting

Please contact us for applications approaching maximum values.

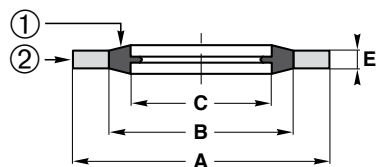
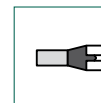
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

08BS 9.. = Self-centralsing English range

Table with 8 columns: BSP, Inch, A, B, C, E, Standard reference, Other references. Lists various seal sizes and their dimensions.

Table with 4 columns: A, B, C, E. Shows tolerance values for dimensions A, B, C, and E.

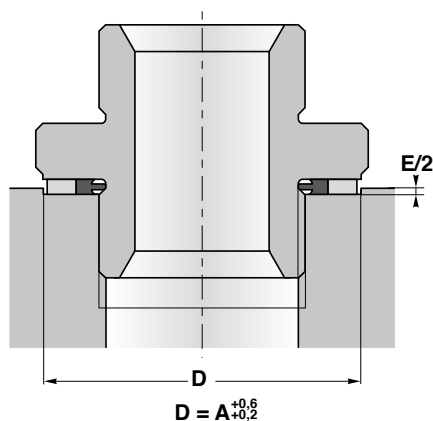


08BS9

08BS9...FPM

08BS9...NBR/SS

08BS9...FPM/SS



08BS9 bonded seals are used for screws and connectors. By tightening the screws the elastomer sealing lip is compressed, thereby producing the sealing effect on the surfaces to be sealed. It stops the medium from leaking to the outside, thus preventing loss of pressure. In addition, it provides **protection against dirt** from the outside.

The centring feature of the **08BS9** type ensures that the bonded seal is fixed in the correct position for mounting and when tightening the screws, the captive mounting is guaranteed.

Operating conditions see page 8

Pressure	contact us
Temperature	
NBR	-30 to 100°C
FPM	-20 to 200°C

Materials see pages 10-19

① 08BS9	NBR 70 Sh A
08BS9...FPM	FPM 70 Sh A
② 08BS9	passivated steel
08BS9...FPM	passivated steel
08BS9...NBR/SS	stainless steel
08BS9...FPM/SS	stainless steel

Assembly see pages 54-59

For connectors: see drawing on this page

Advantages

- No sweating
- Large range of elastomers and metals possible
- Sealing for metric, Whitworth and BSP threads
- Captive mounting

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

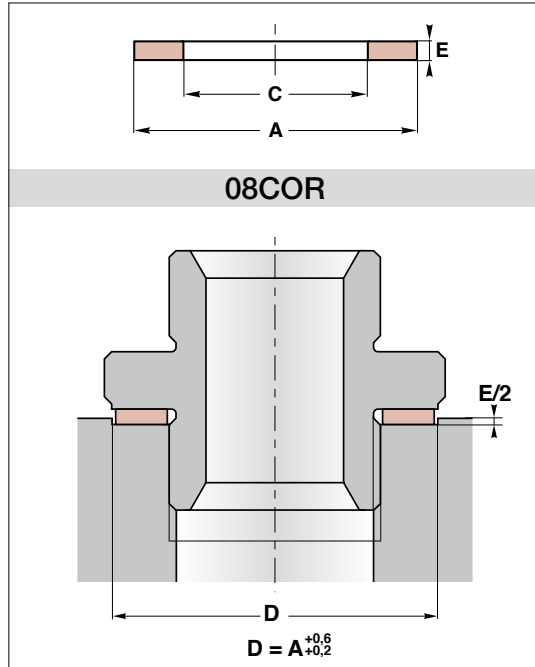
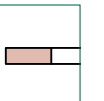
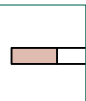
A	B	C	E
+0,13 0	±0,13	±0,13	±0,15

08BS 92.. = Self-centralising German range

metric	A	B	C	E	Reference	metric	A	B	C	E	Reference
M4	7	5,4	4,5	1	08BS 9202	M14	22	16,4	14,7	1,5	08BS 9227
							22	16,4	14,7	1,5	08BS 9227 FPM/SS
M5	9	6,8	5,7	1	08BS 9203	M16	24	18,4	16,7	1,5	08BS 9229
	10	7,4	5,7	1	08BS 9204		24	18,4	16,7	1,5	08BS 9229 FPM/SS
M6	10	8	6,7	1	08BS 9206		24	18,4	16,7	1,5	08BS 9229 NBR/SS
	10	8	6,7	1	08BS 9206 FPM/SS	M17	24	19,2	17,4	1,5	08BS 9230
	11	8,2	6,7	1	08BS 9207	M18	26	20,4	18,7	1,5	08BS 9232
							26	20,4	18,7	1,5	08BS 9232 FPM/SS
							26	20,4	18,7	1,5	08BS 9232 NBR/SS
M8	13	10	8,7	1	08BS 9212	M20	28	22,5	20,7	1,5	08BS 9233
	14	10,4	8,7	1	08BS 9213		28	22,5	20,7	1,5	08BS 9233 FPM/SS
	14	10,4	8,7	1	08BS 9213 FPM/SS		28	22,5	20,7	1,5	08BS 9233 NBR/SS
						M22	30	24,4	22,7	2	08BS 9236
							30	24,4	22,7	2	08BS 9236 FPM/SS
M8,5	13,3	10,5	9,3	1	08BS 9215		30	24,4	22,7	2	08BS 9236 NBR/SS
M10	16	12	10,35	2	08BS 9216	M24	32	26,4	24,7	2	08BS 9238
	16	12,4	10,7	1,5	08BS 9217		32	26,4	24,7	2	08BS 9238 FPM/SS
	16	12,4	10,7	1,5	08BS 9217 FPM/SS	M26	35	28,4	26,7	2	08BS 9239
						M27	36	29	27,7	2	08BS 9240
	18	12,4	10,7	1,5	08BS 9218	M30	39	32,8	30,7	2	08BS 9242
M11	19,1	13,5	11,8	1,5	08BS 9221	M33	42	35,8	33,7	2	08BS 9243
M12	18	14,4	12,7	1,5	08BS 9222	M36	46	38,8	36,7	2	08BS 9245
	18	14,4	12,7	1,5	08BS 9222 FPM/SS						
	18	14,4	12,7	1,5	08BS 9222 NBR/SS						
M13	22	15,4	13,7	1,5	08BS 9225						
M13,5	18,7	15,7	14	1,5	08BS 9226						

08BS 93.. = Self-centralising French range

metric	A	B	C	E	Reference	metric	A	B	C	E	Reference
M5	10	7	5,6	1	08BS 9303	M16	23	18,1	16,7	1,5	08BS 9317
M6	11	8	6,6	1	08BS 9304	M20	29	22,4	20,7	2	08BS 9321
M8	13	10	8,6	1	08BS 9307	M22	31	24,4	22,7	2	08BS 9324
M10	17	12,1	10,7	1,5	08BS 9310	M24	33	26,4	24,7	2	08BS 9326
M12	19	14,1	12,7	1,5	08BS 9313	M42	54	45,6	43	2,5	08BS 9335
M14	21	16,1	14,7	1,5	08BS 9316						



08COR copper washers are used for screws and connectors.

By tightening the screws the copper material is compressed, thereby producing the sealing effect on the surfaces to be sealed. It stops the medium from leaking to the outside, thus preventing loss of pressure. In addition, it provides **protection against dirt** from the outside.

Operating conditions see page 8

Pressure contact us
Temperature -100°C to 150°C

Materials see pages 10-19

Copper CU

Assembly see pages 54-59

For bolt and connector: see drawing on this page

Advantages

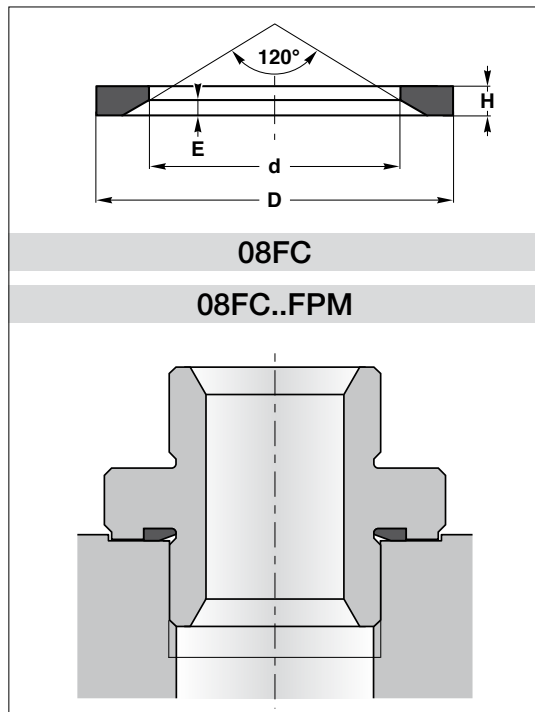
- Good price-performance ratio
- Possibility of sealing if the sealing sides are not parallel

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

metric	BSP	C	A	E	Reference
M6		6	12	1,5	08COR 06
M8		8	12	1,5	08COR 08
M8		8	14	1,5	08COR 08/1
M10		10	14	1	08COR 10
M10	1/8	10	16	1,5	08COR 10/1
M12		12	18	1,5	08COR 12
	1/4	13	19	1,5	08COR 13
M14		14	18	1,5	08COR 14
M14		14	20	1,5	08COR 14/1
M16		16	22	1,5	08COR 16/1
M18	3/8	17	23	1,5	08COR 17/1
M18		18	24	1,5	08COR 18/1
M18		18	25	1,5	08COR 18/2
M20		20	26	1,5	08COR 20
	1/2	21	27	1,5	08COR 21
M22		22	28	1,5	08COR 22
	5/8	23	29	1	08COR 23
M24		24	30	1,5	08COR 24
	3/4	27	35	1,5	08COR 27
	1	33,6	41	1,5	08COR 33



08FC seals for fittings according to DIN 3869, are available on stock in NBR, FKM.

On request, we can produce them in EPDM or FFKM. NBR seals are black, FKM ones are green and EPDM ones are purple.

Operating conditions  [see page 8](#)

Pressure ≤ 50 MPa
 Temperature
NBR -30°C to 100°C
FPM -20°C to 200°C

Materials  [see pages 10-19](#)

NBR NBR 85 Sh A
FPM FPM 85 Sh A

Assembly  [see pages 54-59](#)

With connectors: see drawing on this page

Advantages

- Minimal mechanical deformation of the cross-section and minimal deformation under pressure
- No twisting in the groove
- Allows a lot of applications because of the variety in materials
- Long service life
- Captive mounting

Please contact us for applications approaching maximum values.

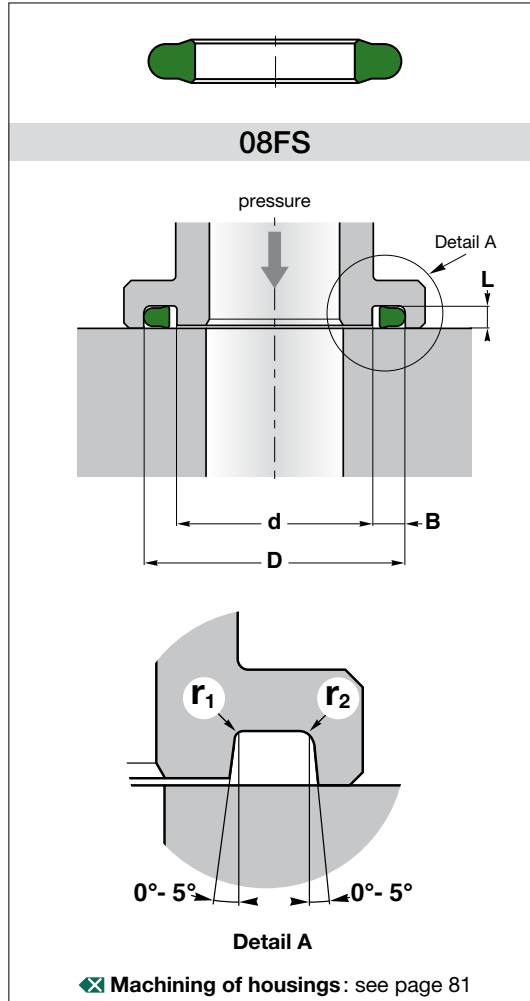
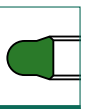
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

NBR						
metric	BSP	d	D	H	E	Reference
M 8x1	-	6,5	9,9	1	0,5	08FC 08
M 10x1	1/8	8,4	11,9	1	0,5	08FC 10
M 12x1,5	-	9,8	14,4	1,5	0,8	08FC 12
M 14x1,5	1/4	11,6	16,5	1,5	0,8	08FC 14
M 16x1,5	-	13,8	18,9	1,5	0,8	08FC 16
-	3/8	14,7	18,9	1,5	0,8	08FC 17
M 18x1,5	-	15,7	20,9	1,5	0,8	08FC 18
M 20x1,5	-	17,8	22,9	1,5	0,8	08FC 20
-	1/2	18,5	23,9	1,5	0,8	08FC 21
M 22x1,5	-	19,6	24,3	1,5	0,8	08FC 22
M 24x1,5	5/8	21,8	25,9	1,5	0,8	08FC 24
M 26x1,5 - M 27x2	3/4	23,9	29,2	1,5	0,8	08FC 27
M 33x2	1	29,7	35,7	2	1	08FC 33
M 42x2	1-1/4	38,8	45,8	2	1	08FC 42
M 48x2	1-1/2	44,7	50,7	2	1	08FC 48
M 60x2	2	56,5	66,5	4	2	08FC 60

FPM						
metric	BSP	d	D	H	E	Reference
M 8x1	-	6,5	9,9	1	0,5	08FC 08 FPM
M 10x1	1/8	8,4	11,9	1	0,5	08FC 10 FPM
M 12x1,5	-	9,8	14,4	1,5	0,8	08FC 12 FPM
M 14x1,5	1/4	11,6	16,5	1,5	0,8	08FC 14 FPM
M 16x1,5	-	13,8	18,9	1,5	0,8	08FC 16 FPM
-	3/8	14,7	18,9	1,5	0,8	08FC 17 FPM
M 18x1,5	-	15,7	20,9	1,5	0,8	08FC 18 FPM
M 20x1,5	-	17,8	22,9	1,5	0,8	08FC 20 FPM
-	1/2	18,5	23,9	1,5	0,8	08FC 21 FPM
M 22x1,5	-	19,6	24,3	1,5	0,8	08FC 22 FPM
M 26x1,5 - M 27x2	3/4	23,9	29,2	1,5	0,8	08FC 27 FPM
M 33x2	1	29,7	35,7	2	1	08FC 33 FPM
M 42x2	1-1/4	38,8	45,8	2	1	08FC 42 FPM
M 48x2	1-1/2	44,7	50,7	2	1	08FC 48 FPM
M 60x2	2	56,5	66,5	4	2	08FC 60 FPM

Housing dimensions in accordance with DIN 3852-11, and ISO 1179-2, ISO 9974-2, ISO 9974-3 and ISO 11926
 Seals in accordance with DIN 3869



08FS PU seal has been developed to ensure a flange sealing and to substitute traditional O-rings when they are not suitable due to difficult conditions such as high pressure or rough surface finish.

A flush fitting with the outside diameter reduces the radial movements induced by the frequent "pull-in" phenomenon of pressure.

The material used to produce this seal is a PU compound for **extreme temperatures** that ensures excellent properties on wear-resistance, extended service life and resistance against extrusion.

Operating conditions see page 8

Pressure	≤ 50 MPa
Temperature	-40°C to 120°C
Fluids	mineral oils

Materials see pages 10-19

Polyurethane 92 Sh A PU33

Assembly see pages 54-59

On flanges SAE J518 3000 psi (21 MPa)
and 6000 psi (42 MPa)

On flanges ISO 6162-2

Advantages

- Good extrusion resistance
- Long service life
- Large temperature range
- Easy assembly because the seal is maintained in its housing (captive mounting)
- Can be assembled on SAE and ISO flanges

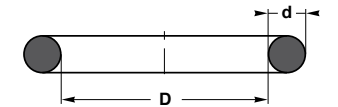
Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

SAE J518 flanges

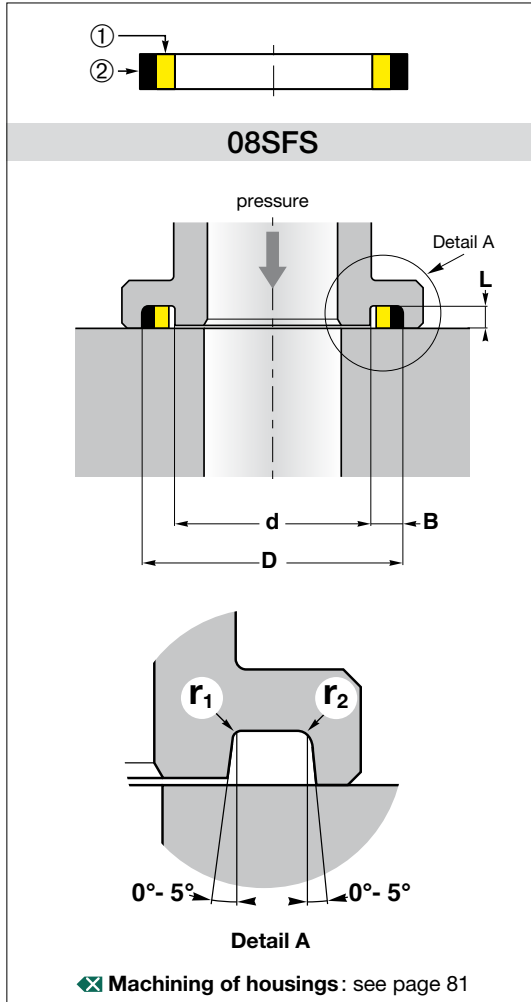
SAE	D	L	B	r1	r2	Ref.	Alternative		
							O-ring D x d	SEALTECH code O-ring NBR 90 Sh A	SEALTECH code O-ring FPM 90 Sh A
1/2	25,4/25,53	2,79/2,92	3,94/4,45	0,76	0,76	08FS-08	18,64 x 3,53	03 353 1864	05 353 1864
3/4	31,75/31,88	2,79/2,92	3,94/4,45	0,76	0,76	08FS-12	24,99 x 3,53	03 353 2499	05 353 2499
1	39,62/39,75	2,79/2,92	3,94/4,45	0,76	0,76	08FS-16	32,92 x 3,53	03 353 3292	05 353 3292
1-1/4	44,45/44,58	2,79/2,92	3,94/4,45	0,76	0,76	08FS-20	37,69 x 3,53	03 353 3769	05 353 3769
1-1/2	53,72/53,98	2,79/2,92	3,94/4,45	0,76	0,76	08FS-24	47,22 x 3,53	03 353 4722	05 353 4722
2	63,25/63,5	2,79/2,92	3,94/4,45	0,76	0,76	08FS-32	56,74 x 3,53	03 353 5674	05 353 5674
2-1/2	76,06/76,33	2,79/2,92	3,94/4,45	0,76	0,76	08FS-40	69,44 x 3,53	03 353 6944	05 353 6944
3	91,82/92,08	2,79/2,92	3,94/4,45	0,76	0,76	08FS-48	85,32 x 3,53	03 353 8532	05 353 8532



Alternative:
O-ring NBR 90 Sh A - FPM 90 Sh A

ISO 6162-2 flanges

DN	D	L	B	r1	r2	Ref.	Alternative		
							O-ring D x d	SEALTECH code O-ring NBR 90 Sh A	SEALTECH code O-ring FPM 90 Sh A
13	25,5/25,65	2,8/2,9	4,1/4,6	0,4/0,8	1,2/1,5	08FS-08	18,64 x 3,53	03 353 1864	05 353 1864
19	31,6/31,75	2,8/2,9	4,1/4,6	0,4/0,8	1,2/1,5	08FS-12	24,99 x 3,53	03 353 2499	05 353 2499
25	39,1/39,25	2,8/2,9	4,1/4,6	0,4/0,8	1,2/1,5	08FS-16	32,92 x 3,53	03 353 3292	05 353 3292
32	44/44,15	2,8/2,9	4,1/4,6	0,4/0,8	1,2/1,5	08FS-20	37,69 x 3,53	03 353 3769	05 353 3769
38	53,7/53,9	2,8/2,9	4,1/4,6	0,4/0,8	1,2/1,5	08FS-24	47,22 x 3,53	03 353 4722	05 353 4722
51	62,5/62,75	2,8/2,9	4,1/4,6	0,4/0,8	1,2/1,5	08FS-32	56,74 x 3,53	03 353 5674	05 353 5674



The PU seal type **08SFS** has been developed to ensure a flange sealing and to substitute traditional O-rings when they are not suitable due to difficult conditions such as high pressure or rough surface finish.

A flush fitting with the outside diameter reduces the radial movements induced by the frequent “pull in” phenomenon of pressure.

The materials used to produce this seal are **two different PU compounds** that ensure excellent properties on wear-resistance, extended service life and resistance against extrusion.

Operating conditions ✕ see page 8

- Pressure ≤ 50 MPa
- Temperature -40°C to 90°C
- Fluids mineral oils

Materials ✕ see pages 10-19

- ① Polyurethane 59 Sh A PU 28: yellow
- ② Polyurethane 95 Sh A PU 27: black

Assembly ✕ see pages 54-59

On flanges SAE J518 3000 psi (21 MPa) and 6000 psi (42 MPa)

Advantages

- Good extrusion resistance
- Long service life
- Easy assembly because the seal is maintained in its housing (captive mounting)
- Good resistance to vibration and low temperatures

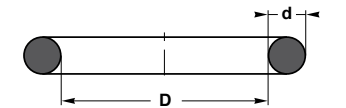
Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

SAE J518 flanges

SAE	D	L	B	r1	r2	Ref.	Alternative		
							O-ring D x d	SEALTECH code O-ring NBR 90 Sh A	SEALTECH code O-ring FPM 90 Sh A
1/2	25,4/25,53	2,79/2,92	3,94/4,45	0,76	0,76	08SFS-08	18,64 x 3,53	03 353 1864	05 353 1864
3/4	31,75/31,88	2,79/2,92	3,94/4,45	0,76	0,76	08SFS-12	24,99 x 3,53	03 353 2499	05 353 2499
1	39,62/39,75	2,79/2,92	3,94/4,45	0,76	0,76	08SFS-16	32,92 x 3,53	03 353 3292	05 353 3292
1-1/4	44,45/44,58	2,79/2,92	3,94/4,45	0,76	0,76	08SFS-20	37,69 x 3,53	03 353 3769	05 353 3769
1-1/2	53,72/53,98	2,79/2,92	3,94/4,45	0,76	0,76	08SFS-24	47,22 x 3,53	03 353 4722	05 353 4722
2	63,25/63,5	2,79/2,92	3,94/4,45	0,76	0,76	08SFS-32	56,74 x 3,53	03 353 5674	05 353 5674
2-1/2	76,06/76,33	2,79/2,92	3,94/4,45	0,76	0,76	08SFS-40	69,44 x 3,53	03 353 6944	05 353 6944
3	91,82/92,08	2,79/2,92	3,94/4,45	0,76	0,76	08SFS-48	85,32 x 3,53	03 353 8532	05 353 8532
3-1/2	104,01/104,52	2,79/2,92	3,94/4,45	0,76	0,76	08SFS-56	88,49 x 3,53	03 353 8849	05 353 8849
4	116,71/117,22	2,79/2,92	3,94/4,45	0,76	0,76	08SFS-64	101,19 x 3,53	03 353 10119	05 353 10119
5	142,11/142,62	2,79/2,92	3,94/4,45	0,76	0,76	08SFS-80	126,59 x 3,53	03 353 12659	05 353 12659

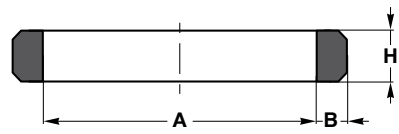
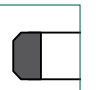


Alternative:
O-ring NBR 90 Sh A - FPM 90 Sh A



O8D-RING

Seals for 9000 psi flanges



O8D-RING

✕ **Machining of housings** : see pages 48-49

The **O8D-RING** is designed to replace traditional seals in flange seal applications. With bidirectional sealing capability, the **O8D-RING** provides exceptional sealing for static seal applications.

The rectangular base offers stability, preventing seal rolling and the leaks or seal failures commonly associated with a rolled or twisted seal.

Operating conditions ✕ see page 8

Pressure	≤ 42 MPa
Temperature	-40 to 100°C
Fluids	mineral oils

Materials ✕ see pages 10-19

NBR	NBR 90 Sh A
------------	-------------

Assembly ✕ see pages 54-59

On CAT® flanges

Advantages

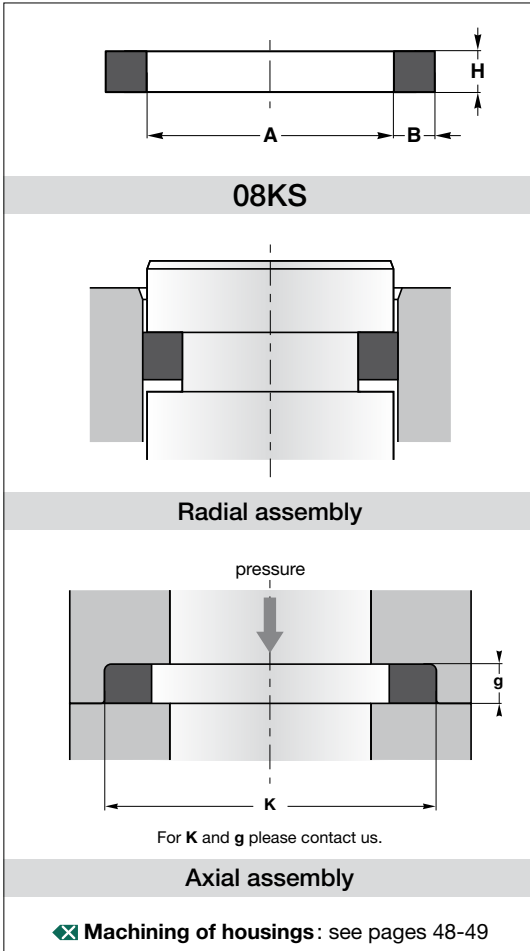
- Good extrusion resistance
- Long service life
- Easy assembly because the seal is maintained in its housing (captive mounting)
- Good resistance to vibration and low temperatures

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

A	B	H	Reference
18,9	3,4	4,95	O8D-RING 1P3700
25,25	3,4	4,95	O8D-RING 1P3702
31,6	3,4	4,95	O8D-RING 1P3703
37,95	3,4	4,95	O8D-RING 1P3704
44,37	3,4	4,95	O8D-RING 1P3705
50,72	3,4	4,95	O8D-RING 1P3706
54,2	3,4	4,95	O8D-RING 1P3707
57,07	3,4	4,95	O8D-RING 1P3708
63,42	3,4	4,95	O8D-RING 1P3709



08KS is a sealing device with a square or rectangular cross-section.

The primary reason for using a **08KS** in a sealing application is that they perform the sealing function in a superior manner - and at a cost lower than any other comparable sealing device. For existing applications, there is no need to change the design or procedures.

Square rings are available in a variety of rubber and thermoplastic materials such as NBR, FPM, EPDM, PTFE... In most static applications, a square ring will serve as a direct **replacement for an O-ring** and generally will perform a high pressure sealing function as well as or better than an O-ring.

Operating conditions ✕ see page 8

Pressure ≤ 50 MPa
Temperature -30°C to 100°C

Materials ✕ see pages 10-19

NBR NBR 90 Sh A

Assembly ✕ see pages 54-59

Axial: in open housings
Radial: also possible, contact us

Advantages

- Excellent resistance to extrusion
- Minimal mechanical deformation of the cross-section and minimal deformation under pressure
- No twisting in the groove
- Can be used in many different applications due to the large selection of materials
- Long service life

Please contact us for applications approaching maximum values.

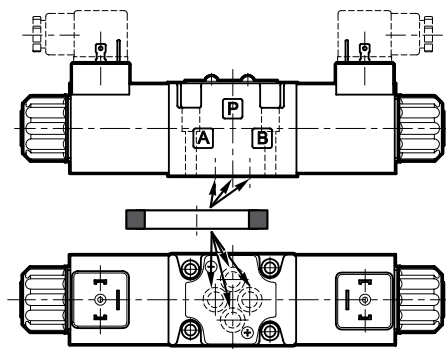
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

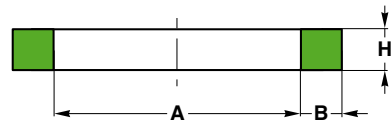
NBR 90 Sh A				
A	B	H	Additional item code	Reference
6,07	1,68	1,68	6,07 x 1,68 x 1,68	08KS 06
7,3	1,4	1,5	7,3 x 1,4 x 1,5	08KS 07
8,01	1,6	1,78	8,01 x 1,6 x 1,78	08KS 08
8,41	1,4	1,78	8,41 x 1,4 x 1,78	08KS 08/1
9,81	1,5	1,78	9,81 x 1,5 x 1,78	08KS 09
10	2	2	10 x 2 x 2	08KS 10
11,18	1,6	1,78	11,18 x 1,6 x 1,78	08KS 11
12,81	2,4	2,62	12,81 x 2,4 x 2,62	08KS 12
13	1,6	2	13 x 1,6 x 2	08KS 13
13	2,3	2,62	13 x 2,3 x 2,62	08KS 13/1
14,6	1,6	1,78	14,6 x 1,6 x 1,78	08KS 14
15,54	2	2	15,54 x 2 x 2	08KS 15
16,56	1,5	1,78	16,56 x 1,5 x 1,78	08KS 16
17,56	2,4	2,62	17,56 x 2,4 x 2,62	08KS 17

NBR 90 Sh A				
A	B	H	Additional item code	Reference
18,64	3,53	3,53	18,64 x 3,53 x 3,53	08KS 18
19	3	3	19 x 3 x 3	08KS 19
22,53	2,3	2,62	22,53 x 2,3 x 2,62	08KS 22
25,8	3,53	3,53	25,8 x 3,53 x 3,53	08KS 25
26,58	3,53	3,53	26,58 x 3,53 x 3,53	08KS 26
27,8	2,6	3	27,8 x 2,6 x 3	08KS 27
28,43	3,4	3,53	28,43 x 3,4 x 3,53	08KS 28
33,34	3,53	3,53	33,34 x 3,53 x 3,53	08KS 33
34,52	3,53	3,53	34,52 x 3,53 x 3,53	08KS 34
36,58	3,53	3,53	36,58 x 3,53 x 3,53	08KS 36
37,69	3,53	3,53	37,69 x 3,53 x 3,53	08KS 37
42,5	3	3	42,5 x 3 x 3	08KS 42
47,5	3,53	3,53	47,5 x 3,53 x 3,53	08KS 47
54,5	3,53	3,53	54,5 x 3,53 x 3,53	08KS 54

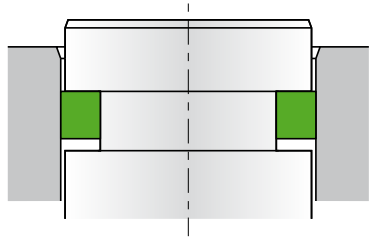
Example of application: directional valves



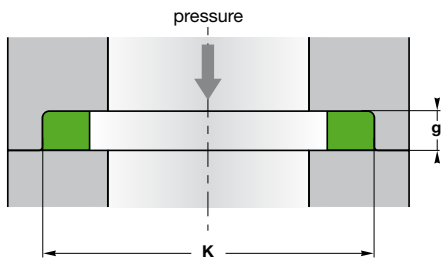
Valve size	Description of the set of seals
NG 6	4 pcs 08KS 09
NG 10	5 pcs 08KS 13
NG 16	4 pcs 08KS 22 + 3 pcs 08KS 10
NG 25	4 pcs 08KS 27 + 3 pcs 08KS 19
NG 32	4 pcs 08KS 42 + 3 pcs 08KS 19



08KS...FPM



Radial assembly



For K and g please contact us.

Axial assembly

✕ Machining of housings : see pages 48-49

08KS...FPM is a sealing device with a square or rectangular cross-section.

The primary reason for using a **08KS...FPM** in a sealing application is that they perform the sealing function in a superior manner - and at a cost lower than any other comparable sealing device. For existing applications, there is no need to change the design or procedures.

Square rings are available in a variety of rubber and thermoplastic materials such as NBR, FPM, EPDM, PTFE... In most static applications, a square ring will serve as a direct **replacement for an O-ring** and generally will perform a high pressure sealing function as well as or better than an O-ring.

Operating conditions ✕ see page 8

Pressure ≤ 50 MPa
Temperature -10°C to 200°C

Materials ✕ see pages 10-19

FPM FPM 90 Sh A

Assembly ✕ see pages 54-59

Axial: in open housings
Radial: also possible, contact us

Advantages

- Excellent resistance to extrusion
- Minimal mechanical deformation of the cross-section and minimal deformation under pressure
- No twisting in the groove
- Can be used in many different applications due to the large selection of materials
- Long service life

Please contact us for applications approaching maximum values.

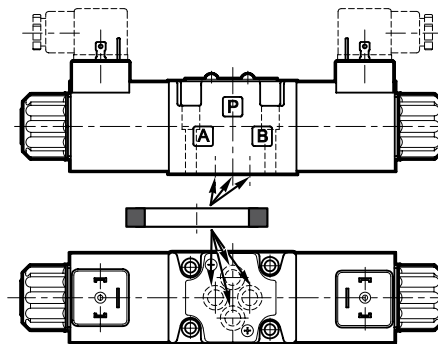
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

FPM 90 Sh A				
A	B	H	Additional item code	Reference
5,64	1,6	1,78	5,64 x 1,6 x 1,78	08KS 05 FPM
6,07	1,68	1,68	6,07 x 1,68 x 1,68	08KS 06 FPM
7,3	1,4	1,5	7,3 x 1,4 x 1,5	08KS 07 FPM
8,41	1,4	1,78	8,41 x 1,4 x 1,78	08KS 08/1 FPM
8,76	1,5	1,5	8,76 x 1,5 x 1,5	08KS 08/2 FPM
9,81	1,5	1,78	9,81 x 1,5 x 1,78	08KS 09 FPM
10	2	2	10 x 2 x 2	08KS 10 FPM
10,82	1,5	1,78	10,82 x 1,5 x 1,78	08KS 10/2 FPM
	1,68	1,68	10,82 x 1,68 x 1,68	08KS 10/1 FPM
11,18	1,6	1,78	11,18 x 1,6 x 1,78	08KS 11 FPM
13	1,6	2	13 x 1,6 x 2	08KS 13 FPM
	2,3	2,62	13 x 2,3 x 2,62	08KS 13/1 FPM
14,2	2,3	2,62	14,2 x 2,3 x 2,62	08KS 14/1 FPM
14,6	1,6	1,78	14,6 x 1,6 x 1,78	08KS 14 FPM
15,54	2	2	15,54 x 2 x 2	08KS 15 FPM
16,56	1,5	1,78	16,56 x 1,5 x 1,78	08KS 16 FPM
17,56	2,4	2,62	17,56 x 2,4 x 2,62	08KS 17 FPM
18,64	3,53	3,53	18,64 x 3,53 x 3,53	08KS 18 FPM
18,72	2,62	2,62	18,72 x 2,62 x 2,62	08KS 18/1 FPM

FPM 90 Sh A				
A	B	H	Additional item code	Reference
19	3	3	19 x 3 x 3	08KS 19 FPM
22,53	2,3	2,62	22,53 x 2,3 x 2,62	08KS 22 FPM
23,47	2,62	2,62	23,47 x 2,62 x 2,62	08KS 23 FPM
25,8	3,53	3,53	25,8 x 3,53 x 3,53	08KS 25 FPM
26,57	3,53	3,53	26,57 x 3,53 x 3,53	08KS 26 FPM
26,64	2,62	2,62	26,64 x 2,62 x 2,62	08KS 26/1 FPM
27,5	2,62	2,62	27,5 x 2,62 x 2,62	08KS 27/1 FPM
27,8	2,6	3	27,8 x 2,6 x 3	08KS 27 FPM
28,43	3,4	3,53	28,43 x 3,4 x 3,53	08KS 28 FPM
29,82	2,62	2,62	29,82 x 2,62 x 2,62	08KS 29 FPM
33,34	3,53	3,53	33,34 x 3,53 x 3,53	08KS 33 FPM
34,52	3,53	3,53	34,52 x 3,53 x 3,53	08KS 34 FPM
34,59	2,62	2,62	34,59 x 2,62 x 2,62	08KS 34/1 FPM
37,69	3,53	3,53	37,69 x 3,53 x 3,53	08KS 37 FPM
42,5	3	3	42,5 x 3 x 3	08KS 42 FPM
47	3	3	47 x 3 x 3	08KS 47/1 FPM
66,27	3,53	3	66,27 x 3,53 x 3	08KS 66 FPM

Example of application: directional valves



Valve size	Description of the set of seals
NG 6	4 pcs 08KS 09 FPM
NG 10	5 pcs 08KS 13 FPM
NG 16	4 pcs 08KS 22 FPM + 3 pcs 08KS 10 FPM
NG 25	4 pcs 08KS 27 FPM + 3 pcs 08KS 19 FPM
NG 32	4 pcs 08KS 42 FPM + 3 pcs 08KS 19 FPM

08KS7

Radial assembly

Axial assembly

For K, k, L and g please contact us.

✕ **Machining of housings:** see pages 48-49

08KS7 is a sealing device with a square cross-section. For existing applications, there is no need to change the design or procedures. Square rings fit in O-ring grooves and are interchangeable size for size. In most applications, the **08KS7** are used as energising element for PTFE composite seals.

Operating conditions ✕ see page 8

Pressure ≤ 25 MPa
Temperature -30°C to 100°C

Materials ✕ see pages 10-19

NBR NBR 70 Sh A

Assembly ✕ see pages 54-59

Axial: in closed housings
Radial: also possible, contact us

Advantages

- Excellent resistance to extrusion
- Minimal mechanical deformation of the cross-section and minimal deformation under pressure
- No twisting in the groove
- Can be used in many different applications due to the large selection of materials
- Long service life

Please contact us for applications approaching maximum values.

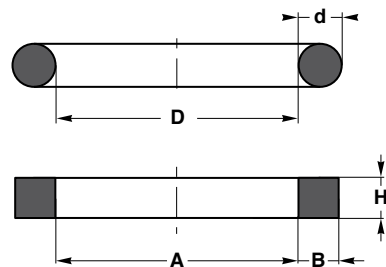
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

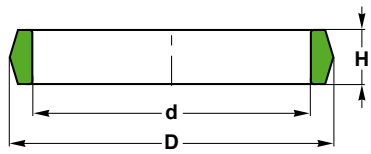
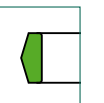
NBR 70 Sh A				
A	B	H	Reference O-ring	Reference
17,12	2,51	2,51	17,12 X 2,62	08KS7 017
23,47	2,51	2,51	23,47 X 2,62	08KS7 023
26,64	2,51	2,51	26,64 X 2,62	08KS7 026
28,17	3,4	3,4	28,17 X 3,53	08KS7 028
32,92	3,4	3,4	32,92 X 3,53	08KS7 032
34,29	5,16	5,16	34,29 X 5,34	08KS7 034
37,69	3,4	3,4	37,69 X 3,53	08KS7 037
37,47	5,16	5,16	37,47 X 5,34	08KS7 037/1
43,82	5,16	5,16	43,82 X 5,34	08KS7 043
44,04	3,4	3,4	44,04 X 3,53	08KS7 044
46,99	5,16	5,16	46,99 X 5,34	08KS7 046
47,22	3,4	3,4	47,22 X 3,53	08KS7 047
50,8	3,4	3,4	50,8 X 3,53	08KS7 050
50,17	5,16	5,16	50,17 X 5,34	08KS7 050/1
53,57	3,4	3,4	53,57 X 3,53	08KS7 053
53,34	5,16	5,16	53,34 X 5,34	08KS7 053/1
56,74	3,4	3,4	56,74 X 3,53	08KS7 056
56,52	5,16	5,16	56,52 X 5,34	08KS7 056/1
62,87	5,16	5,16	62,87 X 5,34	08KS7 062
63,09	3,4	3,4	63,09 X 3,53	08KS7 063
69,22	5,16	5,16	69,22 X 5,34	08KS7 069
72,39	5,16	5,16	72,39 X 5,34	08KS7 072
78,74	5,16	5,16	78,74 X 5,34	08KS7 078
78,74	6,73	6,73	78,74 X 7	08KS7 078/1

NBR 70 Sh A				
A	B	H	Reference O-ring	Reference
81,92	5,16	5,16	81,92 X 5,34	08KS7 081
88,27	5,16	5,16	88,27 X 5,34	08KS7 088
94,62	5,16	5,16	94,62 X 5,34	08KS7 094
97,79	5,16	5,16	97,79 X 5,34	08KS7 097
104,14	5,16	5,16	104,14 X 5,34	08KS7 104
107,32	5,16	5,16	107,32 X 5,34	08KS7 107
107,32	6,73	6,73	107,32 X 7	08KS7 107/1
113,67	5,16	5,16	113,67 X 5,34	08KS7 113
113,67	6,73	6,73	113,67 X 7	08KS7 113/1
116,67	6,73	6,73	116,67 X 7	08KS7 116
123,19	6,73	6,73	123,19 X 7	08KS7 123
126,37	6,73	6,73	126,37 X 7	08KS7 126
132,72	6,73	6,73	132,72 X 7	08KS7 132
139,07	6,73	6,73	139,07 X 7	08KS7 139
142,24	5,16	5,16	142,24 X 5,34	08KS7 142
148,59	6,73	6,73	148,59 X 7	08KS7 148
158,18	6,73	6,73	158,18 X 7	08KS7 158
164,47	6,73	6,73	164,47 X 7	08KS7 164
177,17	6,73	6,73	177,17 X 7	08KS7 177
196,22	6,73	6,73	196,22 X 7	08KS7 196
227,97	6,73	6,73	227,97 X 7	08KS7 227
253,37	6,73	6,73	253,37 X 7	08KS7 253
291,47	6,73	6,73	291,47 X 7	08KS7 291

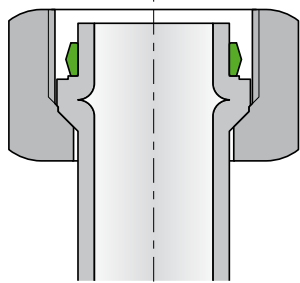
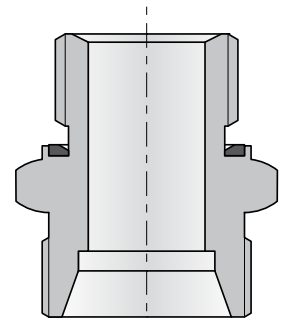
Comparison O-ring and square ring



d	1,78	2,62	3,53	5,34	7 (6,99)
B = H	1,68	2,51	3,4	5,16	6,73



08CS



08CS seals are assembled with fittings according to DIN - ISO 8434-1. The standard material used is a FPM rubber.

On request, we can produce them in other elastomers.

Operating conditions [see page 8](#)
 Pressure ≤ 80 MPa
 Temperature -10°C to 200°C

Materials [see pages 10-19](#)
FPM FPM 80 Sh A

Assembly [see pages 54-59](#)
 Axial: in open housings

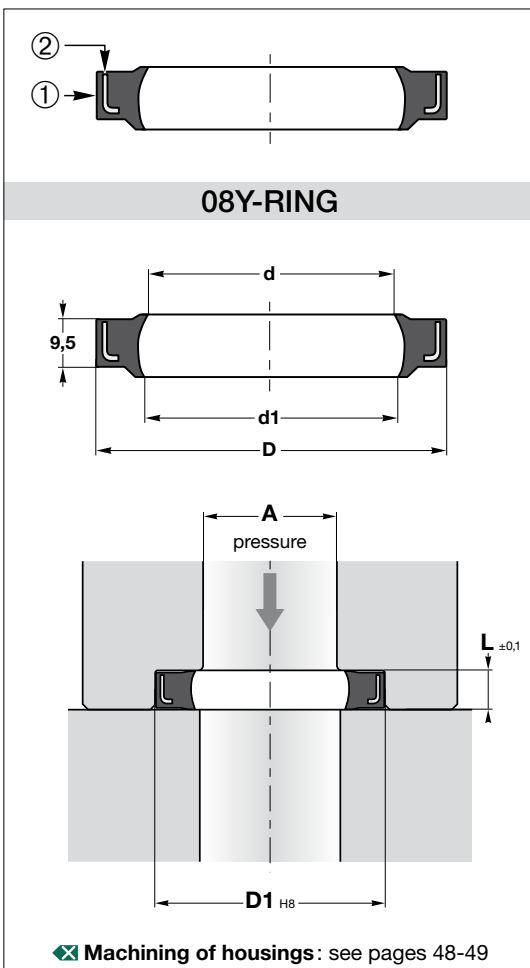
Application
 For fittings DIN - ISO 8434-1

Advantages
 Good extrusion resistance
 Long service life
 Easy assembly because the seal is maintained in its housing
 Good resistance to vibration and high temperatures

Please contact us for applications approaching maximum values.

More information
 On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

d	D	H	Reference
6	8	2,7	08CS 06 L/S
8	10	2,7	08CS 08 L/S
10	12,2	2,95	08CS 10 L/S
12	14,2	2,95	08CS 12 L
15	17,2	2,95	08CS 15 L
18	20,2	2,95	08CS 18 L
22	24,2	2,95	08CS 22 L
28	30,2	2,95	08CS 28 L
35	37,8	3,5	08CS 35 L
42	44,8	3,5	08CS 42 L
16	18,2	2,95	08CS 16 S
20	23	3,7	08CS 20 S
25	28	3,7	08CS 25 S
30	33	3,85	08CS 30 S
38	40,8	3,5	08CS 38 S



The **08Y-RING** have been designed and manufactured to meet the requirements of industrial air and water front static seals operating with pressure of around 15 bar.

Over years such products have also been used for dynamic applications at low speeds.

Some examples can be: the use as sealing rings in perforating machines, concrete injecting machines or equipment for steel industry.

Both applications can be considered burdensome due to vibrations and implicit abrasive substances of such machines.

08Y-RING, thanks to their special profile and tough metallic core completely drawn in the seal body, have however given excellent results.

Operating conditions ✕ see page 8

- Pressure ≤ 1,5 MPa
- Temperature -30 to 100°C
- Fluids mineral oils

Materials ✕ see pages 10-19

- ① Seal NBR 90 Sh A
- ② Metal cage Steel 1.4541

Assembly ✕ see pages 54-59

Must be pressed in an open housing

Advantages

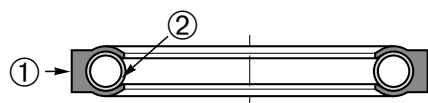
- Good extrusion resistance
- Easy assembly because the seal is maintained in its housing
- The metal cage gives a good resistance to depression

Please contact us for applications approaching maximum values.

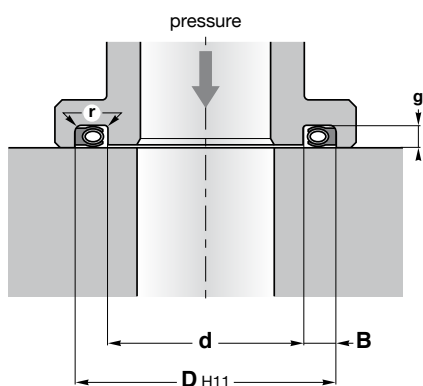
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

D	d1	d	D1	A	L	Reference
45	21	20	45	16	10	08Y-RING 20-171
45	26	25	45	21	10	08Y-RING 20-14032
57,15	33,15	32,15	57	28	10	08Y-RING 20-173
65	41	40	65	36	10	08Y-RING 20-170
69,85	45,85	44,85	70	40	10	08Y-RING 20-174
69,85	51	50	70	46	10	08Y-RING 20-175
75	51	50	75	46	10	08Y-RING 20-176
82,55	58,55	57,55	82,5	53	10	08Y-RING 20-177
85	61	60	85	56	10	08Y-RING 20-178
90	66	65	90	61	10	08Y-RING 20-179
95,25	71,25	70,25	95,5	66	10	08Y-RING 20-180
100	81	80	100	76	10	08Y-RING 20-181
105	81	80	105	76	10	08Y-RING 20-182
111,13	87,13	86,13	111	82	10	08Y-RING 20-183
120	96	95	120	91	10	08Y-RING 20-184
140	121	120	140	116	10	08Y-RING 20-185
145	121	120	145	116	10	08Y-RING 20-186
149,23	125,23	124,23	149,5	120	10	08Y-RING 20-187
155	131	130	155	126	10	08Y-RING 20-188
170	146	145	170	141	10	08Y-RING 20-189
193,67	169,67	166,67	193,5	164	10	08Y-RING 20-190
195	171	170	195	166	10	08Y-RING 20-191
210	186	185	210	181	10	08Y-RING 20-192
250	226	225	250	221	10	08Y-RING 20-193
270	246	245	270	241	10	08Y-RING 20-194

**25FOI MACHINED**

Example of item code

25FOI PT01/SS 50 x 40 x 4
Profile Materials ①/② D x d x g (mm)

✕ Machining of housings: see pages 48-49

25FOI is a seal for axial (face) applications. The seal is available for internal pressure. The use of the heavy helical spring makes the **25FOI** the best choice for vacuum, gas and low temperature flange and cover applications.

Operating conditions ✕ see page 8

Pressure	≤ 80 MPa
Temperature	-200°C to 260°C
Speed	slow rotating movements
Fluids	mineral oils, HFA, HFB, HFC, HFD

Materials ✕ see pages 10-19

① Seal	PT01, PT15, PT30, PT55
② Spring	SS

Assembly ✕ see pages 54-59

Axial: on flanges, between two mechanical parts

Advantages

- High sealing pressure
- Excellent sealability in gas and fluid applications
- Can handle rapid changes in temperature
- Good sealability on non-ideal surfaces
- Easy installation
- Unlimited shelf life

Please contact us for applications approaching maximum values.

More informationOn www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

The table below shows the dimensions of grooves typically used, depending on outside diameters.

25FOI

D (mm)	B min (mm)	g (mm)	tol. g (mm)	r (mm)
10 - 40	2,4	1,45	0 / +0,03	0,25
13 - 200	3,6	2,25	0 / +0,05	0,38
18 - 400	4,8	3,1	0 / +0,08	0,38
28 - 700	7,1	4,7	0 / +0,1	0,38
45 - 1000	9,5	6,1	0 / +0,15	0,51
110 - 2500	15	9,5	0 / +0,2	0,51

25FOE is a seal for axial (face) applications. The seal is available for external pressure. The use of the heavy helical spring makes the **25FOE** the best choice for vacuum, gas and low temperature flange and cover applications.

Operating conditions ✕ see page 8

Pressure	≤ 80 MPa
Temperature	-200°C to 260°C
Speed	slow rotating movements
Fluids	mineral oils, HFA, HFB, HFC, HFD

Materials ✕ see pages 10-19

① Seal	PT01, PT15, PT30, PT55
② Spring	SS

Assembly ✕ see pages 54-59

Axial: on flanges, between two mechanical parts

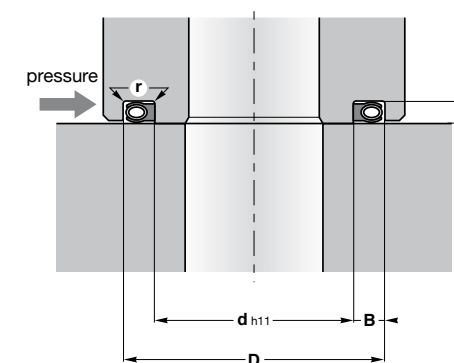
Advantages

- High sealing pressure
- Excellent sealability in gas and fluid applications
- Can handle rapid changes in temperature
- Good sealability on non-ideal surfaces
- Easy installation
- Unlimited shelf life

Please contact us for applications approaching maximum values.

More informationOn www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.**25FOE MACHINED**

Example of item code

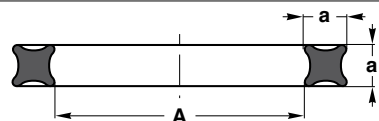
25FOE PT01/SS 50 x 40 x 4
Profile Materials ①/② D x d x g (mm)

✕ Machining of housings: see pages 48-49

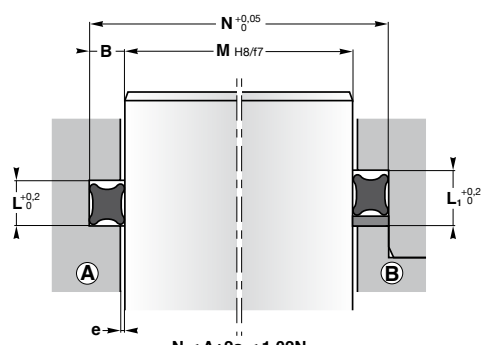
The table below shows the dimensions of grooves typically used, depending on inside diameters.

25FOE

d (mm)	B min (mm)	g (mm)	tol. g (mm)	r (mm)
3 - 40	2,4	1,45	0 / +0,03	0,25
8 - 200	3,6	2,25	0 / +0,05	0,38
12 - 400	4,8	3,1	0 / +0,08	0,38
20 - 700	7,1	4,7	0 / +0,1	0,38
35 - 1000	9,5	6,1	0 / +0,15	0,51

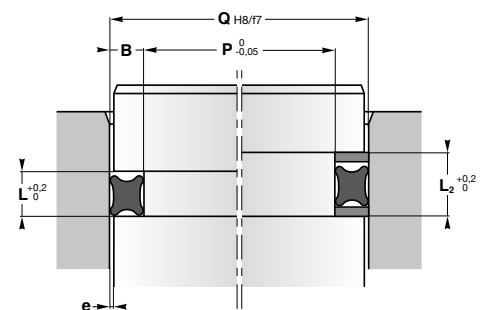


10QR



Internal housing

a	e max
1,78	0,05
2,62 - 3,53	0,07
5,34 - 6,99	0,1



External housing

✕ Machining of housings : see pages 48-49

10QR, commonly called X-ring, is a four-lip seal with a special developed sealing profile. It is an endless circular ring with an almost square cross-section.

X-rings are used and handled in much the same way as O-rings but in many cases, a more efficient seal can be achieved.

The range of application is quite extensive due to the **many types** of existing elastomer materials allowing almost any medium to be effectively sealed off.

Operating conditions ✕ see page 8

Pressure (static)	≤ 15 MPa
with back-up rings (static)	≤ 40 MPa
Temperature	-30°C to 100°C
Fluids	mineral oils, HFA, HFB, HFC
Max. linear speed	0,5 m/sec
In rotation (contact us)	≤ 2 m/sec

Materials ✕ see pages 10-19

NBR NBR 70 Sh A

Assembly ✕ see pages 54-59

Outer sealing: in open or closed housings
 Inner sealing: item codes marked with • have to be mounted in an open groove (type Ⓑ of the drawing)

Advantages

Compact and low friction seal
 Many applications in static, dynamic and rotative sealing
 No twisting in the groove
 Good price-performance ratio

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

QR cross section	A x a	Reference	QR cross section	A x a	Reference	QR cross section	A x a	Reference	
1,78	2,9 x 1,78	10QR 006 •	3,53	13,87 x 3,53	10QR 207	5,34	37,47 x 5,34	10QR 325	
	3,68 x 1,78	10QR 007 •		18,64 x 3,53	10QR 210		39,2 x 5,34	10QR 326A	
	4,47 x 1,78	10QR 008 •		20,22 x 3,53	10QR 211		40,65 x 5,34	10QR 326	
	5,28 x 1,78	10QR 009		21,82 x 3,53	10QR 212		43,82 x 5,34	10QR 327	
	6,07 x 1,78	10QR 010		23,4 x 3,53	10QR 213		45,2 x 5,34	10QR 328A	
	7,65 x 1,78	10QR 011		24,99 x 3,53	10QR 214		47 x 5,34	10QR 328	
	8,2 x 1,78	10QR 012A		26,58 x 3,53	10QR 215 XSEL		50,16 x 5,34	10QR 329	
	9,25 x 1,78	10QR 012		26,58 x 3,53	10QR 215		53,34 x 5,34	10QR 330	
	107,67 x 1,78	10QR 046		28,17 x 3,53	10QR 216 XSEL		56,52 x 5,34	10QR 331	
	2,62	9,19 x 2,62		10QR 110	28,17 x 3,53		10QR 216	59,69 x 5,34	10QR 332
		10,77 x 2,62		10QR 111	29,75 x 3,53		10QR 217	62,87 x 5,34	10QR 333
12,37 x 2,62		10QR 112	31,34 x 3,53	10QR 218	66,04 x 5,34	10QR 334			
13,94 x 2,62		10QR 113	32,92 x 3,53	10QR 219	69,22 x 5,34	10QR 335			
14,7 x 2,62		10QR 114A	34,52 x 3,53	10QR 220	72,39 x 5,34	10QR 336			
15,54 x 2,62		10QR 114	36,09 x 3,53	10QR 221	75,57 x 5,34	10QR 337			
16,2 x 2,62		10QR 115A	37,69 x 3,53	10QR 222	78,74 x 5,34	10QR 338			
17,12 x 2,62		10QR 115	40,87 x 3,53	10QR 223	81,92 x 5,34	10QR 339			
18,72 x 2,62		10QR 116	44,05 x 3,53	10QR 224	85,09 x 5,34	10QR 340			
20,29 x 2,62		10QR 117	47,22 x 3,53	10QR 225	88,27 x 5,34	10QR 341			
25,07 x 2,62		10QR 120	56,74 x 3,53	10QR 228	91,44 x 5,34	10QR 342			
29,82 x 2,62	10QR 123	91,67 x 3,53	10QR 239	94,62 x 5,34	10QR 343				
31,42 x 2,62	10QR 124	104,37 x 3,53	10QR 243	97,79 x 5,34	10QR 344				
34,59 x 2,62	10QR 126	120,25 x 3,53	10QR 248	100,97 x 5,34	10QR 345				
40,95 x 2,62	10QR 130	240,89 x 3,53	10QR 272	104,14 x 5,34	10QR 346				
113,97 x 2,62	10QR 157	266,29 x 3,53	10QR 275	107,32 x 5,34	10QR 347				
				110,5 x 5,34	10QR 348				
				113,67 x 5,34	10QR 349				
				123,19 x 5,34	10QR 352				
				135,89 x 5,34	10QR 356				
				142,24 x 5,34	10QR 358				

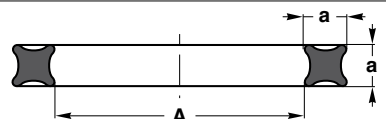
Table 271 - Groove dimensions

A	1,78	2,62	3,53	5,34	6,99	
Static application	B	1,4	2,15	2,9	4,3	5,7
	L	2,1	3,1	4,1	6,4	8,4
	L1	3,5	4,5	5,5	8,1	10,9
	L2	4,9	5,9	6,9	9,8	13,4
Dynamic application and rotation	B	1,55	2,35	3,25	4,9	6,5
	L	2	3	4	6	8
	L1	3,4	4,4	5,4	7,7	10,5
	L2	4,8	5,8	6,8	9,4	13

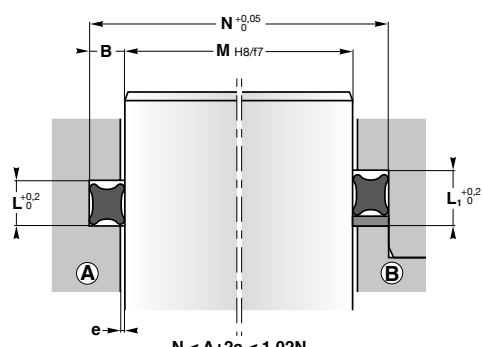


10QR

Four lipped seals

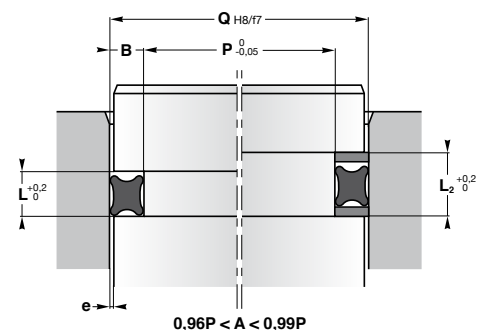


10QR



Internal housing

a	e max
1,78	0,05
2,62 - 3,53	0,07
5,34 - 6,99	0,1



External housing

✕ Machining of housings : see pages 48-49

10QR, commonly called X-ring, is a four-lip seal with a special developed sealing profile. It is an endless circular ring with an almost square cross-section.

X-rings are used and handled in much the same way as O-rings but in many cases, a more efficient seal can be achieved.

The range of application is quite extensive due to the **many types** of existing elastomer materials allowing almost any medium to be effectively sealed off.

Operating conditions ✕ see page 8

- Pressure (static) ≤ 15 MPa
- with back-up rings (static) ≤ 40 MPa
- Temperature -30°C to 100°C
- Fluids mineral oils, HFA, HFB, HFC
- Max. linear speed 0,5 m/sec
- In rotation (contact us) ≤ 2 m/sec

Materials ✕ see pages 10-19

NBR NBR 70 Sh A

Assembly ✕ see pages 54-59

- Outer sealing: in open or closed housings
- Inner sealing: item codes marked with • have to be mounted in an open groove (type B of the drawing)

Advantages

- Compact and low friction seal
- Many applications in static, dynamic and rotative sealing
- No twisting in the groove
- Good price-performance ratio

Please contact us for applications approaching maximum values.

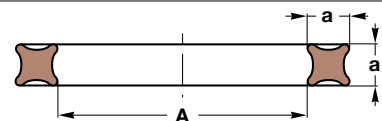
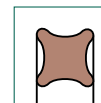
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

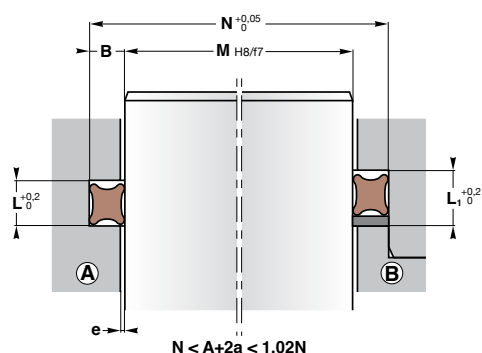
QR cross section	A x a	Reference	QR cross section	A x a	Reference
6,99	113,67 x 6,99	10QR 425	6,99	183,52 x 6,99	10QR 442
	116,84 x 6,99	10QR 426		189,87 x 6,99	10QR 443
	120,02 x 6,99	10QR 427		196,22 x 6,99	10QR 444
	123,2 x 6,99	10QR 428		202,57 x 6,99	10QR 445
	126,37 x 6,99	10QR 429		215,27 x 6,99	10QR 446
	129,54 x 6,99	10QR 430		227,97 x 6,99	10QR 447
	132,72 x 6,99	10QR 431		240,67 x 6,99	10QR 448
	135,9 x 6,99	10QR 432		253,3 x 6,99	10QR 449
	139,06 x 6,99	10QR 433		266,07 x 6,99	10QR 450
	142,24 x 6,99	10QR 434		278,77 x 6,99	10QR 451
	145,42 x 6,99	10QR 435		291,47 x 6,99	10QR 452
	148,6 x 6,99	10QR 436		304,17 x 6,99	10QR 453
151,77 x 6,99	10QR 437	316,87 x 6,99	10QR 454		
158,12 x 6,99	10QR 438	329,57 x 6,99	10QR 455		
164,47 x 6,99	10QR 439	342,3 x 6,99	10QR 456		
		355 x 6,99	10QR 457		
170,82 x 6,99	10QR 440	367,67 x 6,99	10QR 458		
173,52 x 6,99	10QR 440A	380,37 x 6,99	10QR 459		
177,17 x 6,99	10QR 441	393,07 x 6,99	10QR 460		

Table 273 - Groove dimensions

A	1,78	2,62	3,53	5,34	6,99	
Static application	B	1,4	2,15	2,9	4,3	5,7
	L	2,1	3,1	4,1	6,4	8,4
	L1	3,5	4,5	5,5	8,1	10,9
	L2	4,9	5,9	6,9	9,8	13,4
Dynamic application and rotation	B	1,55	2,35	3,25	4,9	6,5
	L	2	3	4	6	8
	L1	3,4	4,4	5,4	7,7	10,5
	L2	4,8	5,8	6,8	9,4	13

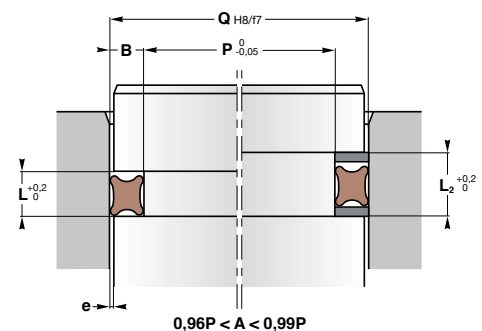


11QR...FPM



Internal housing

a	e max
1,78	0,05
2,62 - 3,53	0,07
5,34 - 6,99	0,1



External housing

✕ Machining of housings : see pages 48-49

11QR...FPM, commonly called X-ring, is a four-lip seal with a special developed sealing profile. It is an endless circular ring with an almost square cross-section.

X-rings are used and handled in much the same way as O-rings but in many cases, a more efficient seal can be achieved.

The range of application is quite extensive due to the **many types** of existing elastomer materials allowing almost any medium to be effectively sealed off.

Operating conditions ✕ see page 8

Pressure (static)	≤ 15 MPa
with back-up rings (static)	≤ 40 MPa
Temperature	-20°C to 200°C
Fluids	mineral oils, HFA, HFB, HFD
Max. linear speed	0,5 m/sec
In rotation (contact us)	≤ 2 m/sec

Materials ✕ see pages 10-19

FPM FPM 70 Sh A

Assembly ✕ see pages 54-59

Outer sealing: in open or closed housings
 Inner sealing: item codes marked with • have to be mounted in an open groove (type Ⓑ of the drawing)

Advantages

Compact and low friction seal
 Many applications in static, dynamic and rotative sealing
 No twisting in the groove

Please contact us for applications approaching maximum values.

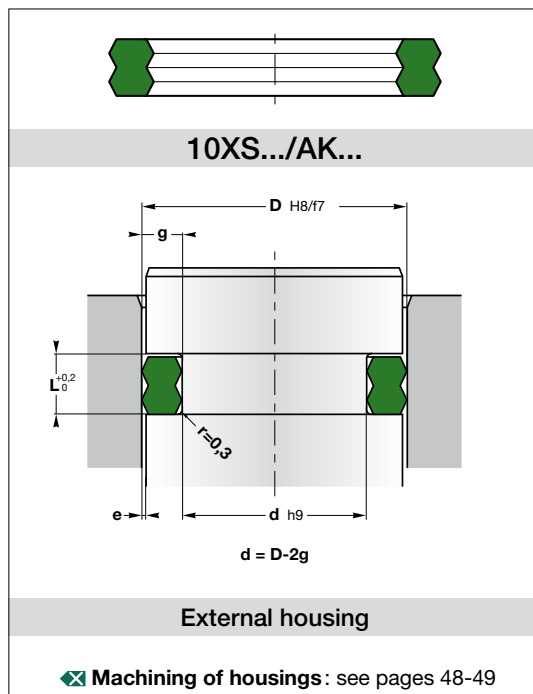
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

QR cross section	A x a	Reference
1,78	9,25 x 1,78	11QR 012 FPM
2,62	12,37 x 2,62	11QR 112 FPM
	17,12 x 2,62	11QR 115 FPM
3,53	18,64 x 3,53	11QR 210 FPM
	34,52 x 3,53	11QR 220 FPM
	37,69 x 3,53	11QR 222 FPM
	240,89 x 3,53	11QR 272 FPM
5,34	69,22 X 5,34	11QR 335 FPM
	78,74 X 5,34	11QR 338 FPM
6,99	215,27 x 6,99	11QR 446 FPM

Table 275 - Groove dimensions

A		1,78	2,62	3,53	5,34	6,99
Static application	B	1,4	2,15	2,9	4,3	5,7
	L	2,1	3,1	4,1	6,4	8,4
	L1	3,5	4,5	5,5	8,1	10,9
	L2	4,9	5,9	6,9	9,8	13,4
Dynamic application and rotation	B	1,55	2,35	3,25	4,9	6,5
	L	2	3	4	6	8
	L1	3,4	4,4	5,4	7,7	10,5
	L2	4,8	5,8	6,8	9,4	13



Pressure (MPa)	5	10	20	30	40	50
e max (mm)	0,6	0,4	0,2	0,12	0,08	0,05

10XS.../AK... seal has been developed to be used as a valid alternative for O-ring in heavy duty applications to avoid the extrusion and damage which normally occur in the presence of large gaps or high pressure.

It is a static (preferable) seal energised by pressure and can work as a single or double acting sealing element. The radial sealing forces, which guarantee good sealing performance, increase when the pressure rises.

Thanks to its elasticity, it can be installed **very easily** in a short time and without any auxiliaries.

The material used for most dimensions is a polyurethane compound for **extreme temperatures** that ensure excellent properties on wear-resistance, extended service life and resistance against extrusion.

Operating conditions ✕ see page 8	
Pressure	≤ 50 MPa
Temperature	
PU33	-40 to 120°C
PU18	-30 to 90°C

Materials ✕ see pages 10-19	
Polyurethane 92 Sh A	PU33: dark green
Polyurethane 94 Sh A	PU18: green

Assembly ✕ see pages 54-59	
Replaces O-ring without back-up	

Advantages

The **depths** and **widths** of the grooves of O-rings do not always meet the ISO standard. For O-rings with a cross section of 3,53 mm the groove depth can vary from **2,70 (ISO norm) to 3,10 mm** and the widths from **4,00 to 4,70 mm (ISO norm)**.

For this reason SEALTECH has developed a new universal static seal: the **10XS.../AK...** which advantageously replaces the O-ring in all common and more complicated applications.

The **10XS.../AK...** profile has the following advantages:

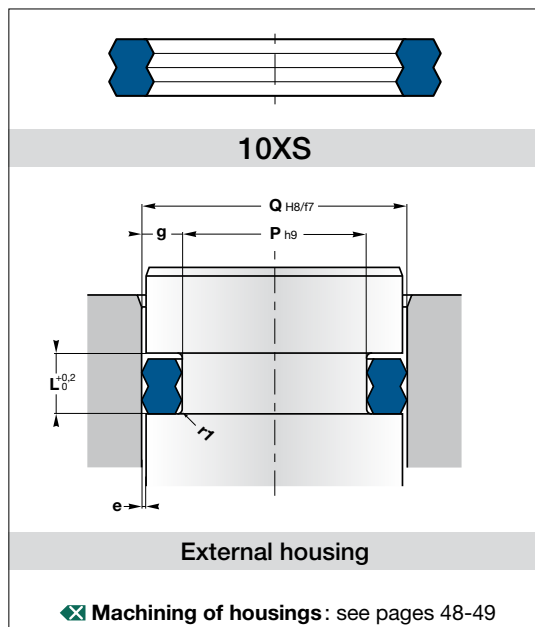
- Compact and interchangeable with O-ring
- Exceptional resistance to **extrusion**
- Reliable for **depths** and **widths** range according the tables thereafter
- Easy and safe installation
- The clearance between the parts can be **larger**
- Available for a **wide range** of bores (from 40 up to 200 mm)
- The anti-extrusion ring is **not needed**
- Very efficient for **repairs and new constructions** (in the case of new constructions: use the ISO dimensions for the groove)
- Contact us for dynamic sealing applications

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

XS cross section	D	g	L	PU	Reference
2,62	25 to 26	2 to 2,25	3,1 to 3,6	PU33	10XS 25/AK262
	30 to 31	2 to 2,25	3,1 to 3,6	PU33	10XS 30/AK262
	35 to 36	2 to 2,25	3,1 to 3,6	PU33	10XS 35/AK262
3,53	40 to 41,9	2,7 to 3,1	4 to 4,8	PU33	10XS 40/AK353
	42 to 43,9	2,7 to 3,1	4 to 4,8	PU18	10XS 42/AK353
	44 to 45,9	2,7 to 3,1	4 to 4,8	PU18	10XS 44/AK353
	46 to 47,9	2,7 to 3,1	4 to 4,8	PU18	10XS 46/AK353
	48 to 49,9	2,7 to 3,1	4 to 4,8	PU18	10XS 48/AK353
	50 to 52,9	2,7 to 3,1	4 to 4,8	PU33	10XS 50/AK353
	53 to 55,9	2,7 to 3,1	4 to 4,8	PU18	10XS 53/AK353
	56 to 59,9	2,7 to 3,1	4 to 4,8	PU18	10XS 56/AK353
	60 to 62,9	2,7 to 3,1	4 to 4,8	PU33	10XS 60/AK353
	63 to 65,9	2,7 to 3,1	4 to 4,8	PU33	10XS 63/AK353
	66 to 69,9	2,7 to 3,1	4 to 4,8	PU18	10XS 66/AK353
	70 to 72,9	2,7 to 3,1	4 to 4,8	PU33	10XS 70/AK353
5,34	73 to 75,9	2,7 to 3,1	4 to 4,8	PU18	10XS 73/AK353
	76 to 79,9	2,7 to 3,1	4 to 4,8	PU18	10XS 76/AK353
	80 to 84	2,7 to 3,1	4 to 4,8	PU33	10XS 80/AK353
	80 to 84,9	4,3 to 4,7	5,9 to 7,1	PU33	10XS 80/AK534
	85 to 89,9	4,3 to 4,7	5,9 to 7,1	PU18	10XS 85/AK534
	90 to 94,9	4,3 to 4,7	5,9 to 7,1	PU33	10XS 90/AK534
	95 to 99,9	4,3 to 4,7	5,9 to 7,1	PU18	10XS 95/AK534
	100 to 104,9	4,3 to 4,7	5,9 to 7,1	PU33	10XS 100/AK534
	105 to 109,9	4,3 to 4,7	5,9 to 7,1	PU18	10XS 105/AK534
	110 to 114,9	4,3 to 4,7	5,9 to 7,1	PU33	10XS 110/AK534
	115 to 119,9	4,3 to 4,7	5,9 to 7,1	PU18	10XS 115/AK534
	120 to 124,9	4,3 to 4,7	5,9 to 7,1	PU18	10XS 120/AK534
	125 to 129,9	4,3 to 4,7	5,9 to 7,1	PU18	10XS 125/AK534
	130 to 135,9	4,3 to 4,7	5,9 to 7,1	PU18	10XS 130/AK534
	136 to 142,9	4,3 to 4,7	5,9 to 7,1	PU18	10XS 136/AK534
	143 to 149,9	4,3 to 4,7	5,9 to 7,1	PU18	10XS 143/AK534
	150 to 157,9	4,3 to 4,7	5,9 to 7,1	PU18	10XS 150/AK534
	158 to 165,9	4,3 to 4,7	5,9 to 7,1	PU18	10XS 158/AK534
166 to 173,9	4,3 to 4,7	5,9 to 7,1	PU18	10XS 166/AK534	
174 to 181,9	4,3 to 4,7	5,9 to 7,1	PU18	10XS 174/AK534	
182 to 189,9	4,3 to 4,7	5,9 to 7,1	PU18	10XS 182/AK534	
190 to 199,9	4,3 to 4,7	5,9 to 7,1	PU18	10XS 190/AK534	
200 to 210	4,3 to 4,7	5,9 to 7,1	PU18	10XS 200/AK534	



10XS seal has been developed to be used as a valid alternative for O-ring, O-ring with one or two back-up rings. **10XS** are used for heavy duty applications to avoid the extrusion and damage which normally occur in the presence of large gaps or high pressure.

It is a static (preferable) seal energised by pressure and can work as a single or double acting sealing element. The radial sealing forces, which guarantee good sealing performance, increase when the pressure rises.

Thanks to its elasticity, it can be installed **very easily** in a short time and without any auxiliaries.

The material used to produce this seal is a polyurethane compound that ensures excellent properties on wear-resistance, **extended service life** and resistance against extrusion.

Operating conditions ✕ see page 8

Pressure ≤ 50 MPa
Temperature -30 to 80°C

Materials ✕ see pages 10-19

Polyurethane PU10, PU09

Assembly ✕ see pages 54-59

Replaces O-rings with 1 or 2 back-up rings

Advantages

- Good extrusion resistance
- Long service life
- Safety in comparison with O-rings and back-up rings
- No twisting in the groove
- Many applications possible

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

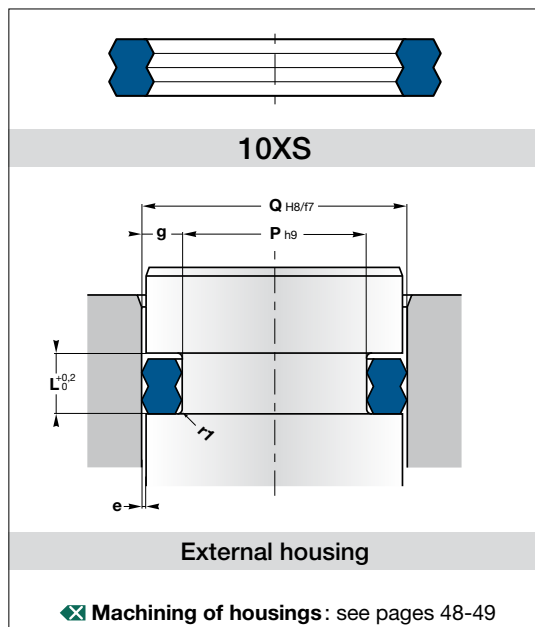
Pressure (MPa)	5	10	20	30	40	50
e max (mm)	0,6	0,4	0,2	0,12	0,08	0,05

Info:

The static seals **10XS** can replace O-ring and O-ring with one or two back-up rings. They have however **their own housing dimensions**, which are not necessarily the same as the normalised housing of O-ring with back-up ring. The elasticity of the **10XS** permits mountings in housings which are slightly different than prescribed. Please contact us in these cases.

Q	P	L	r1	Reference
9	5,9	2,6	0,3	10XS 9
10	7,6	3,6	0,3	10XS 10
12	9,4	3,8	0,3	10XS 12/2
13	8,5	3,6	0,3	10XS 13/1
	10,2	2,5	0,3	10XS 13
14	10,9	2,6	0,3	10XS 14
15	11,9	2,5	0,3	10XS 15/3
16	12,9	2,5	0,3	10XS 16/2
	13,6	3,4	0,3	10XS 16/1
17,5	14,6	3,5	0,3	10XS 17.5/4
18	12	6	0,3	10XS 18/1
	14,9	2,5	0,3	10XS 18/2
	15,6	3,4	0,3	10XS 18
19	14,5	3,6	0,3	10XS 19/4
	15,6	3,4	0,3	10XS 19/3
	16,6	2,6	0,3	10XS 19/2
20	15,5	3,6	0,3	10XS 20
	16	3,2	0,3	10XS 20/4
	16,6	3,4	0,3	10XS 20/1
	16,6	4,4	0,3	10XS 20/3
	17,6	3,4	0,3	10XS 20/2
21	17,6	4,4	0,3	10XS 21
22	17,5	3,6	0,3	10XS 22
	19,4	3,8	0,3	10XS 22/2
	19,6	3,4	0,3	10XS 22/1
22,5	19,9	3,5	0,3	10XS 22.5/1
23	19,6	4,4	0,3	10XS 23
	20	3,8	0,3	10XS 23/2
	20,6	3,4	0,3	10XS 23/1
24	21,6	3,4	0,3	10XS 24
25	20,5	3,6	0,3	10XS 25
26	22	4,4	0,3	10XS 26
	23,1	3,5	0,3	10XS 26/1

Q	P	L	r1	Reference
28	23	5	0,3	10XS 28/1
	23,8	5,3	0,3	10XS 28
28,6	25,6	3,6	0,3	10XS 28.6
29	24,5	3,6	0,3	10XS 29
30	25,1	4,4	0,3	10XS 30/2
	25,4	5,4	0,3	10XS 30
	25,5	3,5	0,3	10XS 30/4
	26,9	2,5	0,3	10XS 30/5
31	26,4	4,9	0,3	10XS 31
32	27,4	5,4	0,3	10XS 32
	27,5	3,6	0,3	10XS 32/1
34	28,4	5,3	0,3	10XS 34/1
	31,1	3,6	0,3	10XS 34
35	26,6	6,5	0,3	10XS 35/3
	28,8	4,8	0,3	10XS 35/2
	30,4	4,9	0,3	10XS 35
	30,5	3,6	0,3	10XS 35/1
35,5	30,9	4,9	0,3	10XS 35.5
37	30,8	4,8	0,3	10XS 37
38	31,8	4,8	0,3	10XS 38/2
	32,4	5,3	0,3	10XS 38/1
38,6	34	4	0,3	10XS 38.6
40	33,8	4,8	0,3	10XS 40/3
	35,2	5,4	0,3	10XS 40
	35,4	5,4	0,3	10XS 40/1
	35,5	3,6	0,3	10XS 40/2
41	35,1	6,5	0,3	10XS 41
42	36,4	4,8	0,3	10XS 42
45	40	5,4	0,3	10XS 45/1
48	43	3,6	0,3	10XS 48
49	44,5	3,6	0,3	10XS 49
50	43,8	4,8	0,3	10XS 50/6
	43,8	6	0,3	10XS 50/5
	44,6	6,2	0,3	10XS 50/1
	45,4	5,4	0,3	10XS 50/3
	47,5	3,6	0,3	10XS 50/4



10XS seal has been developed to be used as a valid alternative for O-ring, O-ring with one or two back-up rings. **10XS** are used for heavy duty applications to avoid the extrusion and damage which normally occur in the presence of large gaps or high pressure.

It is a static (preferable) seal energised by pressure and can work as a single or double acting sealing element. The radial sealing forces, which guarantee good sealing performance, increase when the pressure rises.

Thanks to its elasticity, it can be installed **very easily** in a short time and without any auxiliaries.

The material used to produce this seal is a polyurethane compound that ensures excellent properties on wear-resistance, **extended service life** and resistance against extrusion.

Operating conditions ✕ see page 8

Pressure ≤ 50 MPa
 Temperature -30 to 80°C

Materials ✕ see pages 10-19

Polyurethane PU10, PU09

Assembly ✕ see pages 54-59

Replaces O-rings with 1 or 2 back-up rings

Advantages

- Good extrusion resistance
- Long service life
- Safety in comparison with O-rings and back-up rings
- No twisting in the groove
- Many applications possible

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

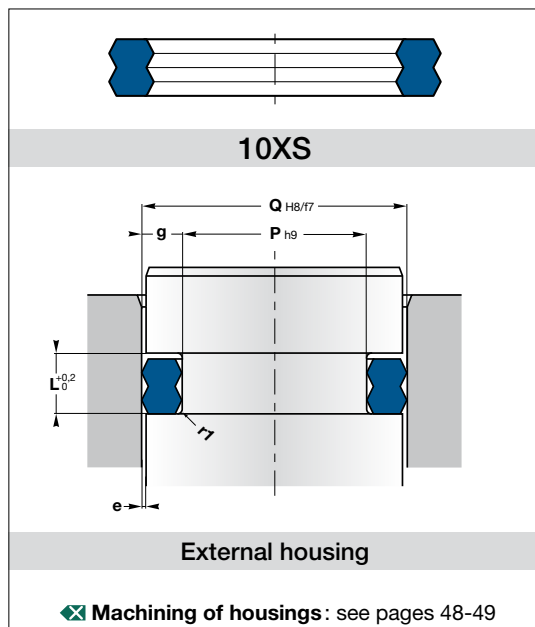
Pressure (MPa)	5	10	20	30	40	50
e max (mm)	0,6	0,4	0,2	0,12	0,08	0,05

Info:

The static seals **10XS** can replace O-ring and O-ring with one or two back-up rings. They have however **their own housing dimensions**, which are not necessarily the same as the normalised housing of O-ring with back-up ring. The elasticity of the **10XS** permits mountings in housings which are slightly different than prescribed. Please contact us in these cases.

Q	P	L	r1	Reference
50,5	45,5	4,2	0,3	10XS 50/7
51	46,5	3,6	0,3	10XS 51
52	47,5	3,5	0,3	10XS 52
54	47,8	4,8	0,3	10XS 54
55	49,6	6,2	0,3	10XS 55/2
	49,9	5,3	0,3	10XS 55/1
	50	6,7	0,3	10XS 55/3
	50,5	3,5	0,3	10XS 55/4
	51	3,5	0,3	10XS 55
57	52,2	4,1	0,3	10XS 57
60	53,8	4,8	0,3	10XS 60/2
	54,4	5,8	0,3	10XS 60
	54,6	6,2	0,3	10XS 60/1
61	54,8	4,8	0,3	10XS 61
	56	4,5	0,3	10XS 61/1
62	55,8	4,8	0,3	10XS 62
63	53,8	9,7	0,6	10XS 63/5
	56,6	6,4	0,3	10XS 63/1
	57,4	4,8	0,3	10XS 63
	57,6	6,2	0,3	10XS 63/3
	58,4	5,4	0,3	10XS 63/4
64	57,8	4,8	0,3	10XS 64
65	58,8	4,8	0,3	10XS 65/3
	59,4	5	0,3	10XS 65
	59,6	6,2	0,3	10XS 65/2
	60	5	0,3	10XS 65/1
	60,5	5	0,3	10XS 65/4
70	61,3	8,7	0,3	10XS 70/4
	63,8	4,8	0,3	10XS 70/3
	64,3	6,7	0,3	10XS 70/5
	64,6	6,2	0,3	10XS 70/1
	65	5	0,3	10XS 70
72	66,4	5	0,3	10XS 72
73	68,5	3,6	0,3	10XS 73
75	68,8	4,8	0,3	10XS 75/2
	69,4	5,3	0,3	10XS 75
	69,6	6,2	0,3	10XS 75/4
78	73	5	0,3	10XS 78

Q	P	L	r1	Reference
80	70,6	9,5	0,6	10XS 80/9
	70,8	8,8	0,6	10XS 80/6
	73,6	6,4	0,3	10XS 80/1
	73,8	4,8	0,3	10XS 80/7
	73,8	6	0,3	10XS 80/8
	73,8	6,9	0,3	10XS 80/3
	74,4	5,3	0,3	10XS 80
	75,4	5,4	0,3	10XS 80/5
	76	3,6	0,3	10XS 80/4
81	73	6,6	0,3	10XS 81
85	78,6	6,4	0,3	10XS 85/1
	79,3	6,7	0,3	10XS 85/2
	79,4	5,3	0,3	10XS 85
89	82,8	4,8	0,3	10XS 89
90	80,6	7,1	0,6	10XS 90/3
	81,4	9	0,3	10XS 90/2
	83	6,5	0,3	10XS 90/1
	84,4	4,8	0,3	10XS 90
93	87,4	5,3	0,3	10XS 93
94	89,5	3,8	0,3	10XS 94
95	85,6	9,5	0,6	10XS 95/4
	86,4	9	0,3	10XS 95/3
	88,8	4,5	0,3	10XS 95/2
	89,4	6,2	0,3	10XS 95
96	88	6,6	0,3	10XS 96
99	92,8	4,8	0,3	10XS 99
100	90,6	7,1	0,6	10XS 100/6
	90,8	9,6	0,6	10XS 100/5
	91,4	9	0,3	10XS 100/2
	91,6	8,5	0,3	10XS 100/4
	93,8	6,9	0,3	10XS 100/3
	94,3	5,3	0,3	10XS 100
102	92,6	9,5	0,6	10XS 102/1
	95,8	6,5	0,3	10XS 102
105	96,4	8,8	0,3	10XS 105
106	101	5	0,3	10XS 106
110	101,4	9	0,3	10XS 110
	104,5	4,5	0,3	10XS 110/1



10XS seal has been developed to be used as a valid alternative for O-ring, O-ring with one or two back-up rings. **10XS** are used for heavy duty applications to avoid the extrusion and damage which normally occur in the presence of large gaps or high pressure.

It is a static (preferable) seal energised by pressure and can work as a single or double acting sealing element. The radial sealing forces, which guarantee good sealing performance, increase when the pressure rises.

Thanks to its elasticity, it can be installed **very easily** in a short time and without any auxiliaries.

The material used to produce this seal is a polyurethane compound that ensures excellent properties on wear-resistance, **extended service life** and resistance against extrusion.

Operating conditions ✕ see page 8

Pressure ≤ 50 MPa
 Temperature -30 to 80°C

Materials ✕ see pages 10-19

Polyurethane PU10, PU09

Assembly ✕ see pages 54-59

Replaces O-rings with 1 or 2 back-up rings

Advantages

- Good extrusion resistance
- Long service life
- Safety in comparison with O-rings and back-up rings
- No twisting in the groove
- Many applications possible

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

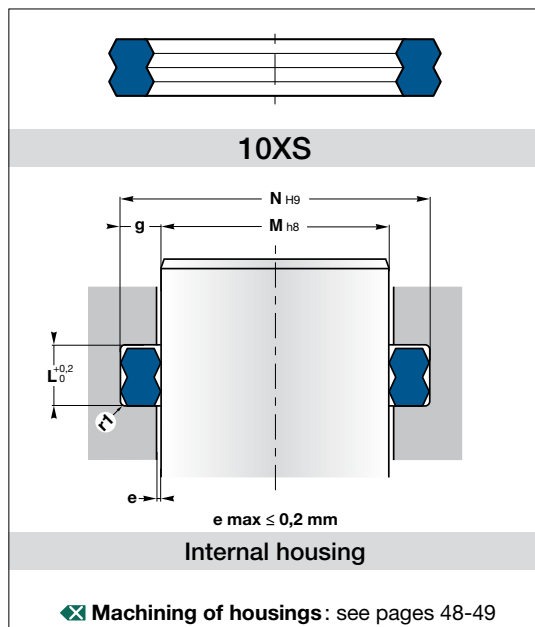
Pressure (MPa)	5	10	20	30	40	50
e max (mm)	0,6	0,4	0,2	0,12	0,08	0,05

Info:

The static seals **10XS** can replace O-ring and O-ring with one or two back-up rings. They have however **their own housing dimensions**, which are not necessarily the same as the normalised housing of O-ring with back-up ring. The elasticity of the **10XS** permits mountings in housings which are slightly different than prescribed. Please contact us in these cases.

Q	P	L	r1	Reference
111	101,7	8,5	0,6	10XS 111
	103	6,6	0,3	10XS 111/1
	105	6,5	0,3	10XS 111/2
112	106,2	6	0,3	10XS 112
113	108,5	3,6	0,3	10XS 113
115	105,6	9,5	0,6	10XS 115/3
	106,6	8,5	0,3	10XS 115
	107	6,5	0,3	10XS 115/1
	108	4,6	0,3	10XS 115/2
120	110,6	9	0,6	10XS 120/1
	111,4	9	0,3	10XS 120/2
	113	6	0,3	10XS 120
120,25	115,5	4,2	0,3	10XS 120.25
124	117,8	4,8	0,3	10XS 124
125	115,8	9,6	0,6	10XS 125
	116,4	9	0,3	10XS 125/1
	116,6	8,5	0,3	10XS 125/2
130	120,6	7,9	0,6	10XS 130
	121,4	9	0,3	10XS 130/1
131	125,2	6	0,3	10XS 131/1
135	126,4	9	0,3	10XS 135/1
	129,2	6	0,3	10XS 135
140	128,4	12,3	0,6	10XS 140
	131,6	8,6	0,3	10XS 140/1
140,3	134	5,5	0,3	10XS 140.3
143	130,8	9,7	0,6	10XS 143
145	132,8	9,5	0,6	10XS 145
150	138,4	12,3	0,6	10XS 150
	140,8	9,6	0,6	10XS 150/2
	141,6	8,5	0,3	10XS 150/1

Q	P	L	r1	Reference
151	145	6	0,3	10XS 151
152	145,8	4,5	0,3	10XS 152
155	145,8	9	0,6	10XS 155/1
160	148,4	12,3	0,6	10XS 160
	150,6	7,9	0,6	10XS 160/1
165	156,6	8,5	0,3	10XS 165/1
170	158,4	12,3	0,6	10XS 170
171	165	6	0,3	10XS 171
175	165,8	9,8	0,6	10XS 175/3
	166,4	9,1	0,3	10XS 175/2
180	168,4	12,3	0,6	10XS 180
	171,6	8,5	0,3	10XS 180/1
190	178,4	12,3	0,6	10XS 190
191	185	6	0,3	10XS 191
195	185,8	9,8	0,6	10XS 195/1
200	188,4	12,3	0,6	10XS 200
	191,6	8,5	0,3	10XS 200/1
205	196,4	9	0,3	10XS 205/1
210	200,8	9	0,6	10XS 210
220	210,4	9	0,6	10XS 220
225	213	10,7	0,6	10XS 225
241	234	9	0,3	10XS 241
250	238,4	12,3	0,6	10XS 250
270	258,4	12,3	0,6	10XS 270
272	262	9,5	0,6	10XS 272
280	268	10,7	0,6	10XS 280
303	293	9,5	0,6	10XS 303



10XS seal has been developed to be used as a valid alternative for O-ring, O-ring with one or two back-up rings. **10XS** are used for heavy duty applications to avoid the extrusion and damage which normally occur in the presence of large gaps or high pressure.

It is a static (preferable) seal energised by pressure and can work as a single or double acting sealing element. The radial sealing forces, which guarantee good sealing performance, increase when the pressure rises.

Thanks to its elasticity, it can be installed **very easily** in a short time and without any auxiliaries.

The material used to produce this seal is a polyurethane compound that ensures excellent properties on wear-resistance, **extended service life** and resistance against extrusion.

Operating conditions ✕ see page 8

Pressure ≤ 50 MPa
 Temperature -30 to 80°C

Materials ✕ see pages 10-19

Polyurethane PU10, PU09

Assembly ✕ see pages 54-59

Replaces O-rings with 1 or 2 back-up rings

Advantages

- Good extrusion resistance
- Long service life
- Safety in comparison with O-rings and back-up rings
- No twisting in the groove
- Many applications possible

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	5	10	20	30	40	50
e max (mm)	0,6	0,4	0,2	0,12	0,08	0,05

Info:

The static seals **10XS** can replace O-ring and O-ring with one or two back-up rings. They have however **their own housing dimensions**, which are not necessarily the same as the normalised housing of O-ring with back-up ring. The elasticity of the **10XS** permits mountings in housings which are slightly different than prescribed. Please contact us in these cases.

M	N	L	r1	Reference
8	12,5	3,6	0,3	10XS 13/1
11	14,1	2,6	0,3	10XS 14
12	16,6	3,1	0,3	10XS 12-INT
14	18	5,8	0,3	10XS 14-INT
	18,5	3,6	0,3	10XS 19/4
15	19,5	3,6	0,3	10XS 20
16	20	5,8	0,3	10XS 16-INT
17	21,5	3,6	0,3	10XS 22
20	24	4,8	0,3	10XS 20-INT
	24,5	3,6	0,3	10XS 25
22	26,8	5,4	0,3	10XS 22-INT
24	28,5	3,6	0,3	10XS 29
26,6	35	6,5	0,3	10XS 35/3
28	31,5	3,6	0,3	10XS 32/1
	34,2	4,8	0,3	10XS 35/2
30	34,5	3,6	0,3	10XS 35/1
	36,2	4,8	0,3	10XS 37
31	37,2	4,8	0,3	10XS 38/2
33	39,2	4,8	0,3	10XS 40/3
35	39,5	3,6	0,3	10XS 40/2
36	32	6,2	0,3	10XS 32-INT
38	42,8	6,8	0,3	10XS 38-INT
41	45,6	4	0,3	10XS 41-INT
43	49,2	4,8	0,3	10XS 50/6
44	48,5	3,6	0,3	10XS 49
46	50,5	3,6	0,3	10XS 51
48	54,2	4,8	0,3	10XS 54

M	N	L	r1	Reference
52	58,2	4,8	0,3	10XS 60/2
54	60,2	4,8	0,3	10XS 61
56	62,2	4,8	0,3	10XS 62
57	63,2	4,8	0,3	10XS 64
59	65,2	4,8	0,3	10XS 65/3
64	70,2	4,8	0,3	10XS 70/3
65	69,6	3,9	0,3	10XS 65/3-INT
68	72,5	3,6	0,3	10XS 73
70	74,6	3,8	0,3	10XS 70/2-INT
72	76,6	4,8	0,3	10XS 72/1-INT
73	79,2	4,8	0,3	10XS 80/7
80	89,4	7,1	0,3	10XS 90/3
82	88,2	4,8	0,3	10XS 89
90	99,4	7,1	0,3	10XS 100/6
92	98,2	4,8	0,3	10XS 99
	101,4	9	0,3	10XS 102/1
101,4	110	9	0,3	10XS 110
108	112,5	3,6	0,3	10XS 113
110	119,4	9	0,6	10XS 120/1
117	123,2	4,8	0,3	10XS 124
130	142,2	9,7	0,6	10XS 143
145	151	6	0,3	10XS 151
165	171	6	0,3	10XS 171
185	191	6	0,3	10XS 191
233	240	9	0,3	10XS 241
262	272	9,5	0,6	10XS 272

The references **10XS** on this page can be used for internal as well as external grooves. The references **10XS...-INT** can only be used for applications with internal grooves.

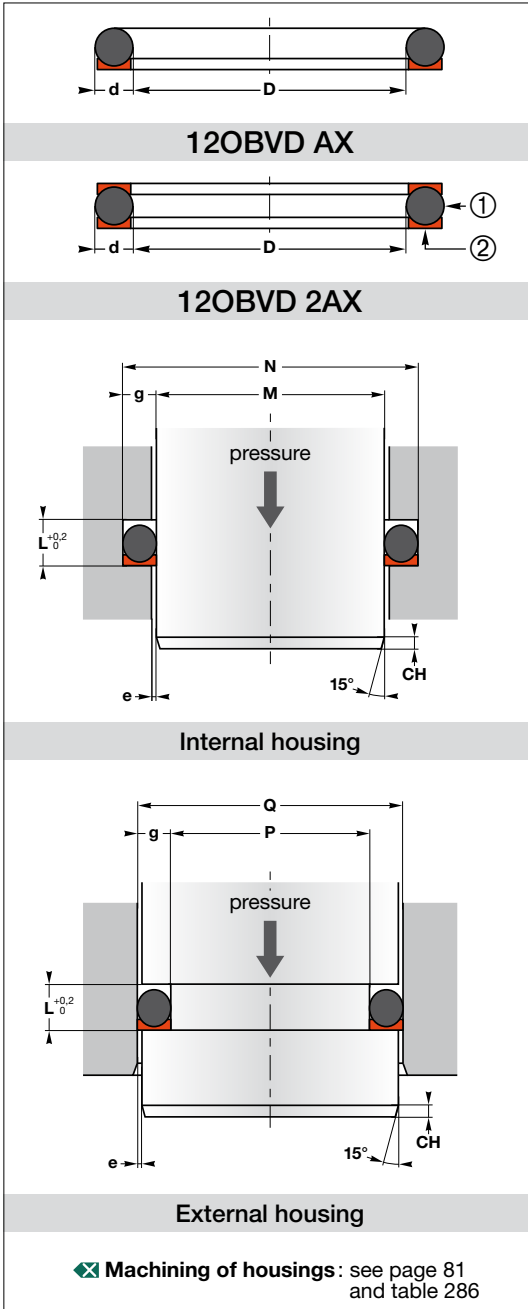
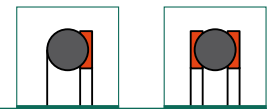


12OBVD AX

12OBVD 2AX

HUNGER
Dichtungen

SEALTECH
Hydraulic Seals Technology



The **12OBVD AX/2AX** reliably prevents the O-Rings from entering into the gap (gap extrusion) by means of their highly extrusion-resistant back rings.

The **12OBVD 2AX** version is suitable for pressurization on both sides.

The NBR O-ring, which is firmly fixed to the PUR back ring, compensates for design clearances and tube breathing.

The **12OBVD AX/2AX** is suitable for any standard groove sizes, e.g. in accordance to DIN 3771.

Operating conditions ✕ see page 8

Pressure ≤ 50 MPa
 Temperature -30°C to 100°C
 Fluids mineral oils

Materials ✕ see pages 10 - 19

O-ring ① NBR 80 Sh A
 Back ring ② PUR 95 Sh A

Assembly ✕ see pages 54-59

In one-piece housings

Advantages

No gap extrusion. All materials are extremely hard-wearing
 Use for standard O-ring grooves - no modification required
 Fitting easier compared with O-rings as turning or rolling is avoided

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Cord size	Groove depth	Groove width	Lead-in chamfer
d (mm)	g (mm)	L (mm)	CH (mm)
3	2,3	3,9	4
4	3,2	5,2	4
5	4,2	6,2	5
6	5,1	7,2	5
7	6,0	8,7	5
8	6,8	9,8	6

D	d	HUNGER reference	Reference
34	3	034802	12OBVD AX 34 X 3
44	3	034809	12OBVD AX 44 X 3
50	3	034812	12OBVD AX 50 X 3
57	3	034818	12OBVD AX 57 X 3
72	3	034833	12OBVD AX 72 X 3
	4	034834	12OBVD AX 72 X 4
75	4	034837	12OBVD AX 75 X 4
92	4	034853	12OBVD AX 92 X 4
117	4	034878	12OBVD AX 117 X 4
130	5	034892	12OBVD AX 130 X 5
150	5	034908	12OBVD AX 150 X 5
190	5	034931	12OBVD AX 190 X 5
	7	034933	12OBVD AX 190 X 7
240	7	034965	12OBVD AX 240 X 7

✕ Machining of housings: see page 81 and table 286

e max: Allowable gap sizes see table of Hunger catalogue.



19BOX A

O-ring boxes



19BOX A

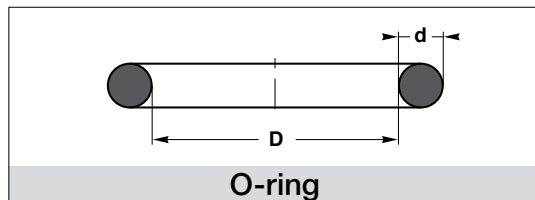
19BOX A plastic boxes are filled with different products of most common inch dimensions.

Reference	Material
19BOX A	NBR 70 Sh A
19BOX A NBR 90	NBR 90 Sh A
19BOX A FPM 80	FPM 80 Sh A
19BOX A EPDM 70	EPDM 70 Sh A

19BOX A: assortment according to norm AS/BS, small dimensions

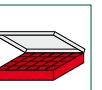
19BOX A 30 dimensions - 340 pieces					
Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty

1,78	2,9 x 1,78	20	2,62	13,95 x 2,62	15	
	3,68 x 1,78	20		15,54 x 2,62	10	
	4,48 x 1,78	20		17,13 x 2,62	10	
2,62	5,28 x 1,78	20	2,62	18,72 x 2,62	10	
	6,07 x 1,78	20		20,29 x 2,62	5	
	7,66 x 1,78	20		21,89 x 2,62	5	
	9,25 x 1,78	20		23,47 x 2,62	5	
	10,82 x 1,78	15		23,47 x 2,62	5	
3,53	12,42 x 1,78	15	3,53	18,64 x 3,53	5	
	14 x 1,78	10		20,22 x 3,53	5	
				21,82 x 3,53	5	
	15,6 x 1,78	10		23,4 x 3,53	5	
	17,16 x 1,78	5			24,99 x 3,53	5
	18,77 x 1,78	5			26,58 x 3,53	5
	2,62	9,19 x 2,62		15	28,17 x 3,53	5
10,78 x 2,62		15				
12,37 x 2,62		15				



O-ring

19BOX B



19BOX B plastic boxes are filled with different products of most common inch dimensions.

Reference	Material
19BOX B	NBR 70 Sh A
19BOX B NBR 90	NBR 90 Sh A
19BOX B FPM 80	FPM 80 Sh A
19BOX B EPDM 70	EPDM 70 Sh A

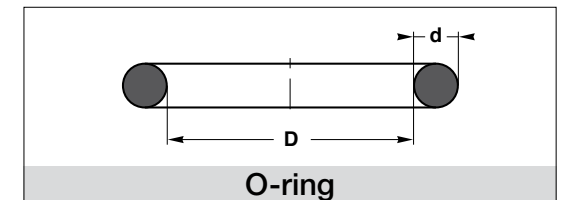


19BOX B

19BOX B: assortment according to norm AS/BS, large dimensions

19BOX B 24 dimensions - 275 pieces					
Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty

1,78	20,35 x 1,78	15	3,53	34,52 x 3,53	10
	21,95 x 1,78	15		36,1 x 3,53	10
				37,69 x 3,53	10
2,62	25,07 x 2,62	15	2,62	40,87 x 3,53	10
	26,64 x 2,62	15		44,04 x 3,53	10
	28,25 x 2,62	15		47,22 x 3,53	10
	29,82 x 2,62	15		50,4 x 3,53	10
	31,42 x 2,62	10			
3,53	33 x 2,62	10	5,34	37,47 x 5,34	10
	34,59 x 2,62	10		40,65 x 5,34	10
				43,82 x 5,34	10
	29,75 x 3,53	15		47 x 5,34	5
31,34 x 3,53	15	50,16 x 5,34	5		
32,92 x 3,53	15				



O-ring



19BOX C

O-ring boxes



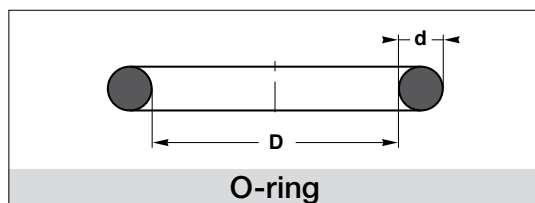
19BOX C

19BOX C plastic boxes are filled with different products of most common metric dimensions.

Reference	Material
19BOX C	NBR 70 Sh A
19BOX C NBR 90	NBR 90 Sh A
19BOX C FPM 80	FPM 80 Sh A
19BOX C EPDM 70	EPDM 70 Sh A

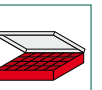
19BOX C: assortment of small metric dimensions

19BOX C					
30 dimensions - 425 pieces					
Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty
1,5	3 x 1,5	20	2,5	5 x 2,5	15
	5 x 1,5	20		7 x 2,5	15
	7 x 1,5	20		10 x 2,5	15
	9 x 1,5	20		12 x 2,5	15
	11 x 1,5	20		15 x 2,5	15
	2	6 x 2		20	3
8 x 2	20	12 x 3	10		
10 x 2	20	14 x 3	10		
12 x 2	20	16 x 3	10		
14 x 2	20	18 x 3	10		
			20,2 x 3	5	
2,4	6,3 x 2,4	15	22,2 x 3	5	
	8,3 x 2,4	15	24,2 x 3	5	
	11,3 x 2,4	15	26,2 x 3	5	
	13,3 x 2,4	15	30,2 x 3	5	
	17,3 x 2,4	15			



O-ring

19BOX D



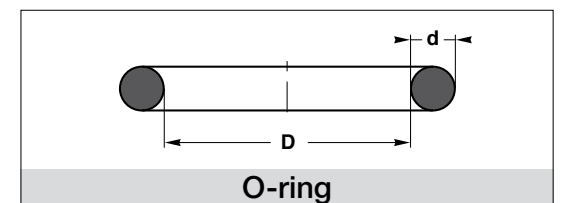
19BOX D

19BOX D plastic boxes are filled with different products of most common metric dimensions.

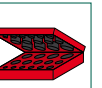
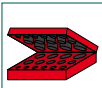
Reference	Material
19BOX D	NBR 70 Sh A
19BOX D NBR 90	NBR 90 Sh A
19BOX D FPM 80	FPM 80 Sh A
19BOX D EPDM 70	EPDM 70 Sh A

19BOX D: assortment of large metric dimensions

19BOX D							
24 dimensions - 285 pieces							
Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty		
2	18 x 2	15	4	40 x 4	10		
	20 x 2	15		44 x 4	10		
	22 x 2	15		48 x 4	10		
	25 x 2	15		50 x 4	10		
	3	28,2 x 3		15	5	25 x 5	10
	30,2 x 3	15		30 x 5		10	
32,2 x 3	10	35 x 5	10				
36,2 x 3	10	40 x 5	10				
4	25 x 4	15	45 x 5	5			
	30 x 4	15	50 x 5	5			
	32 x 4	15					
	34 x 4	15					
	36 x 4	15					
	38 x 4	10					



O-ring



19BOX G

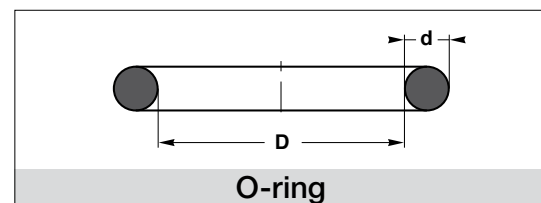
19BOX G plastic boxes are filled with different products of most common inch dimensions.

Reference	Material
19BOX G	NBR 70 Sh A
19BOX G NBR 90	NBR 90 Sh A
19BOX G FPM 80	FPM 80 Sh A
19BOX G EPDM 70	EPDM 70 Sh A

19BOX G: assortment according to norm AS/BS, small dimensions

19BOX G
30 dimensions - 385 pieces

Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty
1,78	2,9 x 1,78	20	3,53	18,64 x 3,53	13
	3,68 x 1,78	20		20,22 x 3,53	10
	4,48 x 1,78	20		21,82 x 3,53	10
	5,28 x 1,78	20		23,4 x 3,53	10
	6,07 x 1,78	20		24,99 x 3,53	10
	7,66 x 1,78	20		26,58 x 3,53	10
	9,25 x 1,78	20		28,17 x 3,53	10
				29,75 x 3,53	10
2,62	9,19 x 2,62	13		31,34 x 3,53	10
	10,78 x 2,62	13		32,92 x 3,53	10
	12,37 x 2,62	13		34,52 x 3,53	10
	13,95 x 2,62	13		36,1 x 3,53	10
	15,54 x 2,62	13			
	17,13 x 2,62	13		37,69 x 3,53	10
	18,72 x 2,62	13	5,34	37,47 x 5,34	7
				40,65 x 5,34	7
		43,82 x 5,34		7	



O-ring



19BOX H

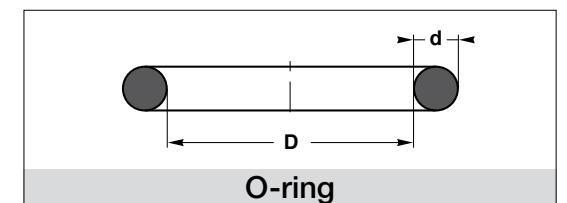
19BOX H plastic boxes are filled with different products of most common metric dimensions.

Reference	Material
19BOX H	NBR 70 Sh A
19BOX H NBR 90	NBR 90 Sh A
19BOX H FPM 80	FPM 80 Sh A
19BOX H EPDM 70	EPDM 70 Sh A

19BOX H: assortment of small metric dimensions

19BOX H
30 dimensions - 404 pieces

Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty
2	3 x 2	18	3	19 x 3	12
	4 x 2	18		20 x 3	12
	5 x 2	18		22 x 3	12
	6 x 2	18		24 x 3	12
	7 x 2	17		25 x 3	12
	8 x 2	17		27 x 3	12
	10 x 2	17		28 x 3	12
				30 x 3	12
2,5	10 x 2,5	14		32 x 3	12
	11 x 2,5	14		33 x 3	12
	12 x 2,5	14		35 x 3	12
	14 x 2,5	14		36 x 3	12
	16 x 2,5	14			
	17 x 2,5	14		38 x 3	12
	19 x 2,5	14	4	38 x 4	9
				42 x 4	9
		45 x 4		9	



O-ring



19BOX MAX INCH

O-ring boxes

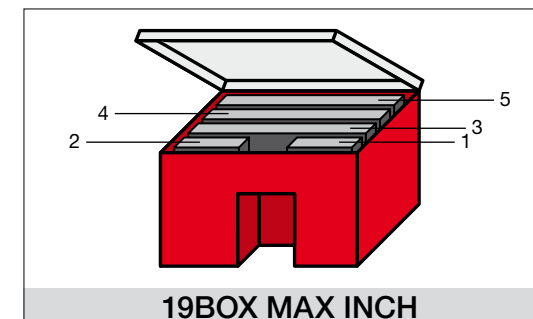


19BOX MAX INCH

19BOX MAX INCH plastic boxes are filled with different products of most common dimensions.

Reference	Material
19BOX MAX INCH NBR90	NBR 90 Sh A
19BOX MAX INCH NBR70	NBR 70 Sh A

19BOX MAX INCH: assortment according to norm AS/BS, 1415 seals in 5 boxes



19BOX MAX INCH

2h Assortments O-rings

Box 1: flanges O-rings 6 dimensions - 45 pieces					
Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty
3,53	18,64 x 3,53	10	3,53	37,69 x 3,53	5
	24,99 x 3,53	10		47,22 x 3,53	5
	32,92 x 3,53	10		56,74 x 3,53	5

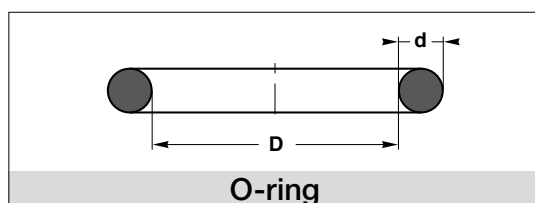
Box 4: 2,62 mm O-rings 24 dimensions - 440 pieces					
Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty
2,62	7,59 x 2,62	25	2,62	26,64 x 2,62	15
	9,19 x 2,62	25		28,24 x 2,62	15
	10,77 x 2,62	25		29,82 x 2,62	15

Box 2: O-rings for BOSS connectors 8 dimensions - 155 pieces					
Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty
1,63	7,65 x 1,63	15	2,21	16,36 x 2,21	25
	8,92 x 1,83	25		19,18 x 2,46	25
1,83	10,52 x 1,83	15	2,46	23,47 x 2,95	15
				29,74 x 2,95	10
1,98	11,89 x 1,98	25	2,95		

12,37 x 2,62	25	31,42 x 2,62	15
13,94 x 2,62	25	32,99 x 2,62	15
15,54 x 2,62	25	34,59 x 2,62	15
17,12 x 2,62	25	36,17 x 2,62	15
18,72 x 2,62	25	37,77 x 2,62	10
20,3 x 2,62	25	39,34 x 2,62	10
21,89 x 2,62	25	42,52 x 2,62	10
23,47 x 2,62	20	45,69 x 2,62	10
25,07 x 2,62	20	48,9 x 2,62	5

Box 3: 1,78 mm O-rings 24 dimensions - 495 pieces					
Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty
1,78	2,9 x 1,78	25	1,78	18,77 x 1,78	25
	3,68 x 1,78	25		20,35 x 1,78	20
	4,47 x 1,78	25		21,95 x 1,78	20
	5,28 x 1,78	25		23,52 x 1,78	20
	6,07 x 1,78	25		25,12 x 1,78	15
	7,65 x 1,78	25		26,7 x 1,78	15
	9,25 x 1,78	25		28,3 x 1,78	15
	10,82 x 1,78	25		29,87 x 1,78	15
	12,42 x 1,78	25		31,47 x 1,78	15
	14 x 1,78	25		34,65 x 1,78	15
	15,6 x 1,78	25		37,82 x 1,78	10
	17,17 x 1,78	25		41 x 1,78	10

Box 5: 3,53 mm O-rings 19 dimensions - 280 pieces					
Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty
3,53	18,64 x 3,53	20	3,53	37,69 x 3,53	15
	20,22 x 3,53	20		40,87 x 3,53	10
	21,82 x 3,53	20		44,04 x 3,53	10
	23,39 x 3,53	20		50,39 x 3,53	10
	24,99 x 3,53	20		56,74 x 3,53	10
	26,57 x 3,53	15		69,44 x 3,53	10
	28,17 x 3,53	15		82,14 x 3,53	10
	29,74 x 3,53	15			
	31,34 x 3,53	15			
	32,92 x 3,53	15			
	34,52 x 3,53	15			
	36,09 x 3,53	15			



O-ring



19BOX MAX MM NBR90

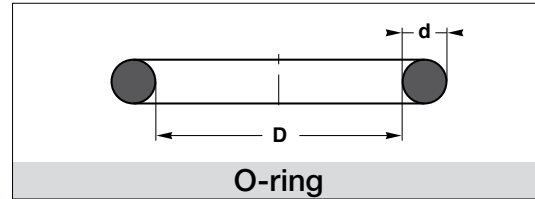
O-ring boxes



19BOX MAX MM NBR90

19BOX MAX MM plastic boxes are filled with different products of most common dimensions.

Reference	Material
19BOX MAX MM NBR90	NBR 90 Sh A



19BOX MAX MM: assortment of metric dimensions, 1345 seals in 5 boxes

Box 1: 1,5 mm O-rings 6 dimensions - 60 pieces

Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty
1,5	20 x 1,5	10	1,5	26 x 1,5	10
	22 x 1,5	10		27 x 1,5	10
	24 x 1,5	10		30 x 1,5	10

Box 2: 3 mm O-rings 8 dimensions - 80 pieces

Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty
3	10 x 3	10	3	18 x 3	10
	12 x 3	10		19 x 3	10
	14 x 3	10		20 x 3	10
	16 x 3	10		23 x 3	10

Box 3: 2 mm O-rings 24 dimensions - 485 pieces

Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty
2	3 x 2	25	2	20 x 2	20
	4 x 2	25		22 x 2	20
	5 x 2	25		24 x 2	20
	6 x 2	25		25 x 2	15
	8 x 2	25		27 x 2	15
	10 x 2	25		28 x 2	15
	11 x 2	25		30 x 2	15
	13 x 2	25		32 x 2	15
	14 x 2	25		33 x 2	15
	16 x 2	25		35 x 2	15
	17 x 2	25		38 x 2	10
	19 x 2	25		41 x 2	10

Box 4: 2,5 mm O-rings 24 dimensions - 440 pieces

Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty
2,5	8 x 2,5	25	2,5	27 x 2,5	15
	10 x 2,5	25		28 x 2,5	15
	11 x 2,5	25		30 x 2,5	15
	13 x 2,5	25		32 x 2,5	15
	14 x 2,5	25		33 x 2,5	15
	16 x 2,5	25		35 x 2,5	15
	18 x 2,5	25		36 x 2,5	15
	19 x 2,5	25		38 x 2,5	10
	21 x 2,5	25		40 x 2,5	10
	22 x 2,5	25		43 x 2,5	10
	24 x 2,5	20		46 x 2,5	10
	25 x 2,5	20		49 x 2,5	5

Box 5: 3 mm O-rings 19 dimensions - 280 pieces

Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty
3	19 x 3	20	3	38 x 3	15
	21 x 3	20		41 x 3	10
	22 x 3	20		44 x 3	10
	24 x 3	20		50 x 3	10
	25 x 3	20		57 x 3	10
	27 x 3	15		70 x 3	10
	28 x 3	15		82 x 3	10
	30 x 3	15			
	32 x 3	15			
	33 x 3	15			
	35 x 3	15			
	36 x 3	15			



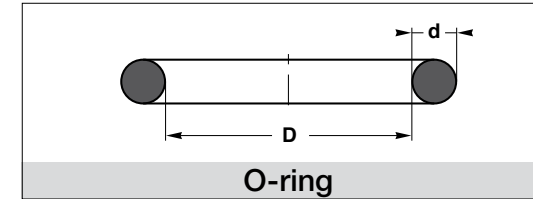
19BOX MAX MM NBR70



19BOX MAX MM NBR70

19BOX MAX MM plastic boxes are filled with different products of most common dimensions.

Reference	Material
19BOX MAX MM NBR70	NBR 70 Sh A



19BOX MAX MM: assortment of metric dimensions, 1345 seals in 5 boxes

Box 1: 1 mm O-rings 8 dimensions - 80 pieces

Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty
1	10 x 1	10	1	18 x 1	10
	12 x 1	10		20 x 1	10
	14 x 1	10		23 x 1	10
	16 x 1	10		24 x 1	10

Box 2: 1,5 mm O-rings 6 dimensions - 60 pieces

Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty
1,5	20 x 1,5	10	1,5	26 x 1,5	10
	22 x 1,5	10		28 x 1,5	10
	24 x 1,5	10		30 x 1,5	10

Box 3: 2 mm O-rings 24 dimensions - 485 pieces

Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty
2	3 x 2	25	2	20 x 2	20
	4 x 2	25		22 x 2	20
	5 x 2	25		24 x 2	20
	6 x 2	25		25 x 2	15
	8 x 2	25		27 x 2	15
	10 x 2	25		28 x 2	15
	11 x 2	25		30 x 2	15
	13 x 2	25		32 x 2	15
	14 x 2	25		33 x 2	15
	16 x 2	25		35 x 2	15
	17 x 2	25		38 x 2	10
	19 x 2	25		41 x 2	10

Box 4: 2,5 mm O-rings 24 dimensions - 440 pieces

Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty
2,5	8 x 2,5	25	2,5	27 x 2,5	15
	10 x 2,5	25		28 x 2,5	15
	11 x 2,5	25		30 x 2,5	15
	13 x 2,5	25		32 x 2,5	15
	14 x 2,5	25		33 x 2,5	15
	16 x 2,5	25		35 x 2,5	15
	18 x 2,5	25		36 x 2,5	15
	19 x 2,5	25		38 x 2,5	10
	21 x 2,5	25		40 x 2,5	10
	22 x 2,5	25		43 x 2,5	10
	24 x 2,5	20		46 x 2,5	10
	25 x 2,5	20		49 x 2,5	5

Box 5: 3 mm O-rings 19 dimensions - 280 pieces

Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty
3	19 x 3	20	3	38 x 3	15
	21 x 3	20		41 x 3	10
	22 x 3	20		44 x 3	10
	24 x 3	20		50 x 3	10
	25 x 3	20		57 x 3	10
	27 x 3	15		70 x 3	10
	28 x 3	15		82 x 3	10
	30 x 3	15			
	32 x 3	15			
	33 x 3	15			
	35 x 3	15			
	36 x 3	15			



19BOX ORFS

O-ring boxes



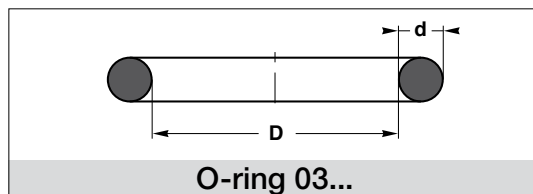
19BOX ORFS

19BOX ORFS plastic boxes are filled with O-rings for ORFS connectors.

Reference	Material
19BOX ORFS	NBR 90 Sh A

19BOX ORFS: O-rings assortment for ORFS connectors

19BOX ORFS					
8 dimensions - 155 pieces					
Cross section	O-ring D x d	Qty	Cross section	O-ring D x d	Qty
1,78	7,65 x 1,78	25	1,78	29,87 x 1,78	10
	9,25 x 1,78	25		37,82 x 1,78	10
	12,42 x 1,78	25			
	15,6 x 1,78	25			
	18,77 x 1,78	20			
	23,52 x 1,78	15			



O-ring 03...



19BOX CORD



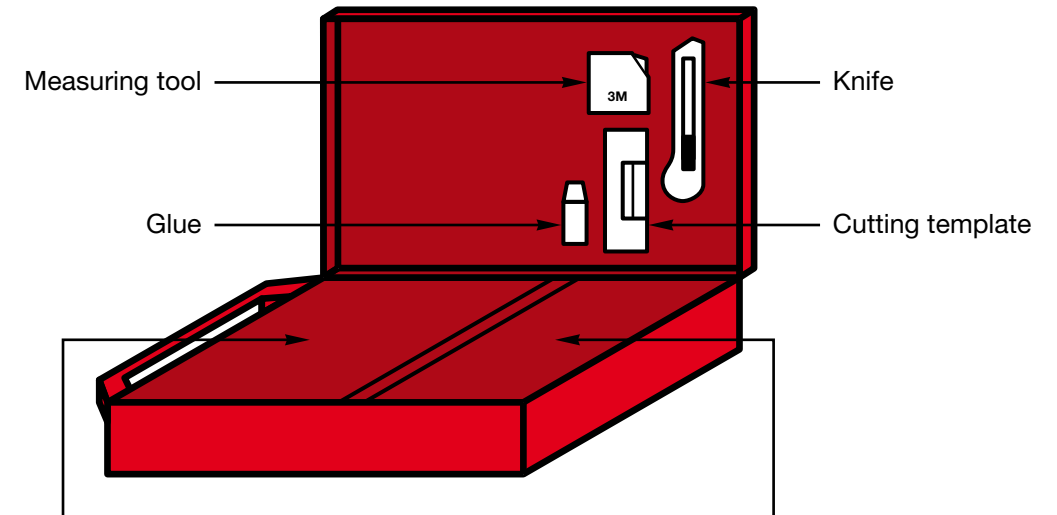
19BOX CORD plastic boxes allow to manufacture by bonding a big assortment of different O-rings.

Reference	Material
19BOX CORD	NBR 70 Sh A
19BOX CORD NBR 90	NBR 90 Sh A
19BOX CORD FPM 80	FPM 80 Sh A



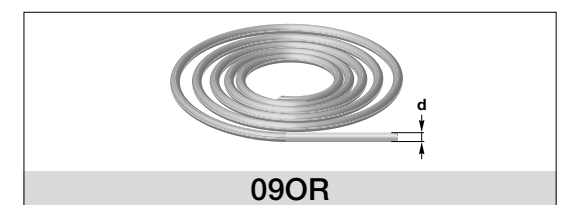
19BOX CORD

19BOX CORD: assortment with cords and tools

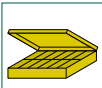


Cords from 4,5 to 8 mm							
d (mm)	4,5	5	5,34	5,7	6	7	8
NBR	2 m	2 m	2 m	2 m	2 m	2 m	2 m
FPM	1 m	1 m	1 m	1 m	1 m	1 m	1 m

Cords from 1,78 to 4 mm							
d (mm)	1,78	2	2,4	2,62	3	3,53	4
NBR	2 m	2 m	2 m	2 m	2 m	2 m	2 m
FPM	1 m	1 m	1 m	1 m	1 m	1 m	1 m



09OR



19BOX D-RING

Flange seal boxes



19BOX FS



19BOX D-RING plastic boxes are filled with the different seals for the CAT® flanges.

Reference	Material
19BOX D-RING	NBR 90 Sh A

19BOX FS plastic boxes are filled with the different seals for the SAE and ISO flanges.

Reference	Material
19BOX FS	PU



19BOX D-RING: D-rings assortment

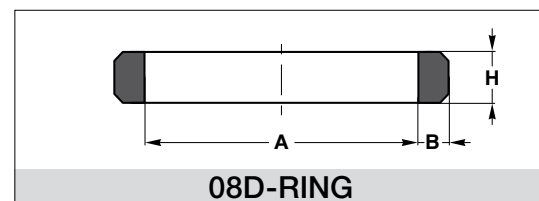
19BOX FS: seals assortment FS for SAE and ISO flanges

19BOX D-RING 9 dimensions - 95 pieces				
A	B	H	Reference	Qty

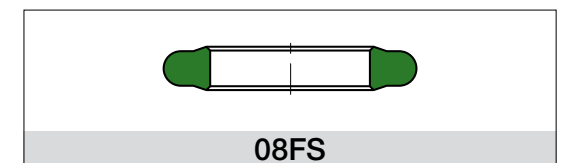
18,9	3,4	4,95	08D-RING 1P3700	25
25,25	3,4	4,95	08D-RING 1P3702	10
31,6	3,4	4,95	08D-RING 1P3703	10
37,95	3,4	4,95	08D-RING 1P3704	10
44,37	3,4	4,95	08D-RING 1P3705	10
50,72	3,4	4,95	08D-RING 1P3706	10
54,2	3,4	4,95	08D-RING 1P3707	10
57,07	3,4	4,95	08D-RING 1P3708	5
63,42	3,4	4,95	08D-RING 1P3709	5

19BOX FS 6 dimensions - 36 pieces		
SAE	Reference	Quantity

1/2"	08SFS 08	6
3/4"	08SFS 12	6
1"	08SFS 16	6
1 1/4"	08SFS 20	6
1 1/2"	08SFS 24	6
2"	08SFS 32	6



O8D-RING



O8FS



19BOX KS NBR

Valve seal boxes



19BOX KS FPM



19BOX KS NBR plastic boxes are filled with the different square rings for valves.

Reference	Material
19BOX KS NBR	NBR 90 Sh A

19BOX KS FPM plastic boxes are filled with the different square rings for valves.

Reference	Material
19BOX KS FPM	FPM 90 Sh A

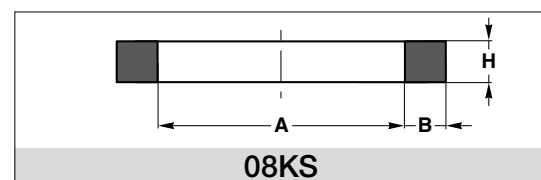


19BOX KS FPM: FPM assortment

19BOX KS NBR: NBR assortment

19BOX KS NBR 8 dimensions - 250 pieces

A	B	H	Reference	Quantity
9,81	1,5	1,78	08KS 09	40
10	2	2	08KS 10	30
11,18	1,6	1,78	08KS 11	20
13	1,6	2	08KS 13	50
19	3	3	08KS 19	30
22,53	2,3	2,62	08KS 22	40
27,8	2,6	3	08KS 27	20
42,5	3	3	08KS 42	20



Example of application: directional valves

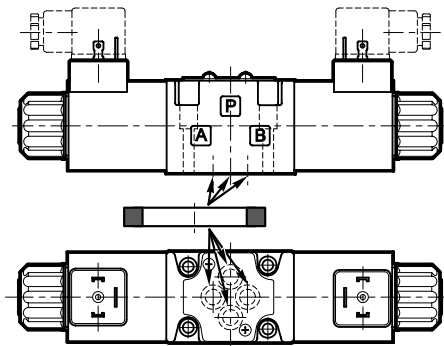


Table 302 Directional valves set of seals	
Valve size	Description of the set of seals
NG 6	4 pcs 08KS 09
NG 10	5 pcs 08KS 13
NG 16	4 pcs 08KS 22 + 3 pcs 08KS 10
NG 25	4 pcs 08KS 27 + 3 pcs 08KS 19
NG 32	4 pcs 08KS 42 + 3 pcs 08KS 19

Example of application: directional valves

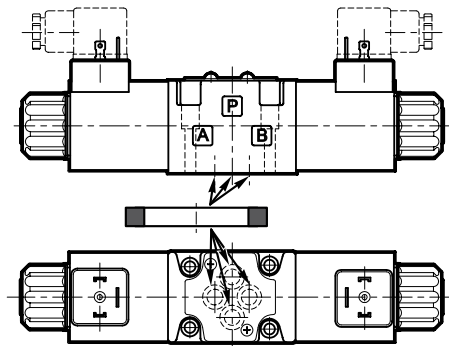
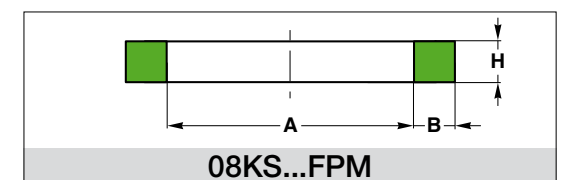


Table 303 Directional valves set of seals	
Valve size	Description of the set of seals
NG 6	4 pcs 08KS 09 FPM
NG 10	5 pcs 08KS 13 FPM
NG 16	4 pcs 08KS 22 FPM + 3 pcs 08KS 10 FPM
NG 25	4 pcs 08KS 27 FPM + 3 pcs 08KS 19 FPM
NG 32	4 pcs 08KS 42 FPM + 3 pcs 08KS 19 FPM

19BOX KS FPM 8 dimensions - 250 pieces

A	B	H	Reference	Quantity
9,81	1,5	1,78	08KS 09 FPM	40
10	2	2	08KS 10 FPM	30
11,18	1,6	1,78	08KS 11 FPM	20
13	1,6	2	08KS 13 FPM	50
19	3	3	08KS 19 FPM	30
22,53	2,3	2,62	08KS 22 FPM	40
27,8	2,6	3	08KS 27 FPM	20
42,5	3	3	08KS 42 FPM	20



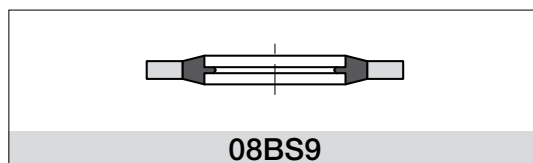
**19BOX BS MM****19BOX BS INCH****Connector seal boxes****SEALTECH**
Hydraulic Seals Technology**19BOX COR MM****19BOX COR INCH****19BOX BS MM**
19BOX BS INCH**19BOX BS...** plastic boxes are filled with the different bonded seals for connectors.

Reference	Material
19BOX BS MM	NBR 90 Sh A
19BOX BS INCH	NBR 90 Sh A

19BOX BS MM: BS metric assortment**19BOX BS INCH:** BS inch assortment

19BOX BS MM 7 dimensions - 125 pieces		
Metric		
Inner Ø	Reference	Quantity
M8	08BS 9213	25
M10	08BS 9217	25
M12	08BS 9222	15
M16	08BS 9229	15
M18	08BS 9232	25
M22	08BS 9236	10
M24	08BS 9238	10

19BOX BS INCH 7 dimensions - 114 pieces		
Inch		
Inner Ø	Reference	Quantity
1/8" BSP	08BS 920	25
1/4" BSP	08BS 921	25
3/8" BSP	08BS 923	15
1/2" BSP	08BS 925	15
5/8" BSP	08BS 926	15
3/4" BSP	08BS 927	15
1" BSP	08BS 930	4

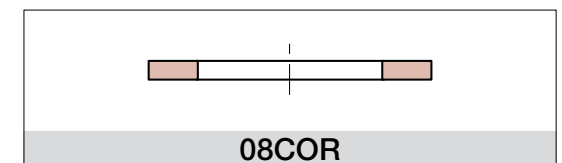
**08BS9****19BOX COR...** plastic boxes are filled with the different copper washers for connectors.

Reference	Material
19BOX COR MM	Copper
19BOX COR INCH	Copper

**19BOX COR MM**
19BOX COR INCH**19BOX COR MM:** COR mm assortment**19BOX COR INCH:** COR inch assortment

19BOX COR MM 7 dimensions - 115 pieces		
Metric		
Inner Ø	Reference	Quantity
M8	08COR 08/1	20
M10	08COR 10/1	20
M12	08COR 12	20
M14	08COR 14	20
M16	08COR 16/1	15
M18	08COR 18/1	10
M22	08COR 22	10

19BOX COR INCH 7 dimensions - 130 pieces		
Inch		
Inner Ø	Reference	Quantity
1/8" BSP	08COR 10/1	25
1/4" BSP	08COR 13	25
3/8" BSP	08COR 17/1	25
1/2" BSP	08COR 21	20
5/8" BSP	08COR 23	15
3/4" BSP	08COR 27	10
1" BSP	08COR 33	10

**08COR**