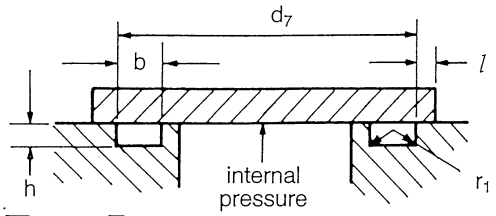
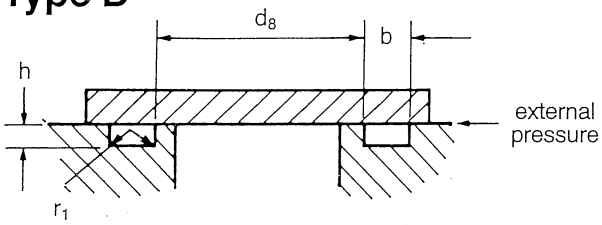
O-ring housing data for axial and triangular sealing applications

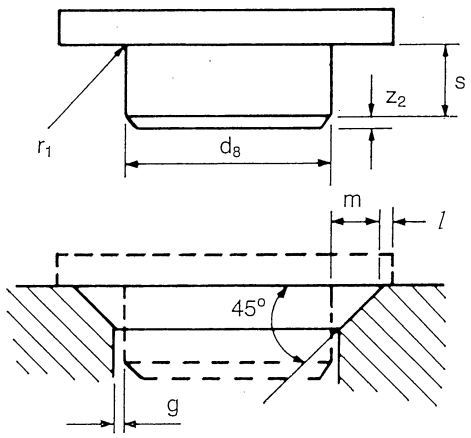
Type C



Type D



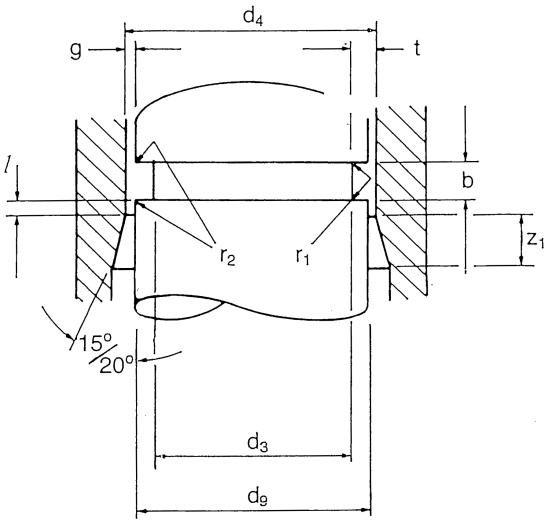
Type E



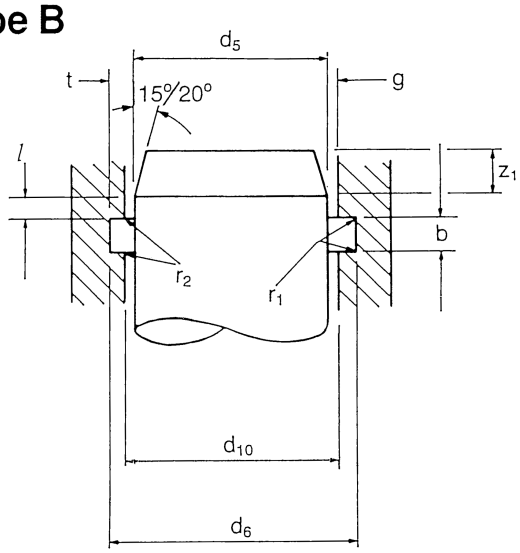
d_2	h	b	m	S minimum	Types C and D r_1 maximum	Type E r_1 maximum
1,50 (0.059)	1,00/1,05 (0.039/0.041)	2,25/2,55 (0.088/0.100)	2,08/2,20 (0.082/0.087)	3,80 (0.150)	0,2 (0.008)	0,75 (0.029)
1,60 (0.063)	1,20/1,25 (0.047/0.049)	2,36/2,66 (0.093/0.105)	2,20/2,32 (0.087/0.091)	4,00 (0.157)	0,2 (0.008)	0,80 (0.031)
1,78 (0.070)	1,24/1,37 (0.049/0.054)	2,54/2,84 (0.100/0.112)	2,41/2,54 (0.095/0.100)	4,80 (0.189)	0,8 (0.031)	0,76 (0.030)
2,00 (0.079)	1,35/1,45 (0.053/0.057)	2,89/3,19 (0.114/0.125)	2,76/2,88 (0.109/0.113)	4,60 (0.181)	0,5 (0.020)	1,10 (0.043)
2,40 (0.094)	1,70/1,80 (0.067/0.071)	3,45/3,75 (0.136/0.148)	3,30/3,42 (0.130/0.135)	5,00 (0.197)	0,5 (0.020)	1,30 (0.051)
2,50 (0.098)	1,78/1,88 (0.070/0.074)	3,38/3,68 (0.133/0.145)	3,44/3,56 (0.135/0.140)	5,25 (0.207)	0,5 (0.020)	1,40 (0.055)
2,62 (0.103)	1,90/2,03 (0.075/0.080)	3,60/3,90 (0.142/0.153)	3,68/3,81 (0.145/0.150)	6,35 (0.250)	0,90 (0.035)	1,02 (0.040)
3,00 (0.118)	2,20/2,30 (0.087/0.090)	4,00/4,30 (0.157/0.169)	4,20/4,32 (0.165/0.170)	6,00 (0.236)	1 (0.039)	2 (0.078)
3,50 (0.138)	2,60/2,70 (0.102/0.106)	4,50/4,80 (0.177/0.189)	4,81/4,93 (0.189/0.194)	6,80 (0.268)	1 (0.039)	1,90 (0.075)
3,53 (0.139)	2,54/2,80 (0.100/0.110)	4,80/5,10 (0.189/0.201)	4,95/5,08 (0.195/0.200)	8,00 (0.315)	0,90 (0.035)	1,52 (0.060)
4,00 (0.157)	3,00/3,10 (0.118/0.122)	5,10/5,40 (0.201/0.212)	5,51/5,63 (0.217/0.222)	7,40 (0.291)	1 (0.039)	2,20 (0.087)
5,00 (0.197)	3,80/3,90 (0.150/0.153)	6,23/6,53 (0.245/0.257)	6,86/6,98 (0.270/0.275)	8,90 (0.350)	1 (0.039)	2,70 (0.106)
5,34 (0,210)	4,19/4,45 (0.165/0.175)	7,10/7,40 (0.279/0.291)	7,50/7,63 (0.295/0.300)	11,00 (0.433)	0,90 (0.035)	2,20 (0.090)
5,70 (0.224)	4,40/4,50 (0.173/0.177)	7,00/7,30 (0.275/0.287)	7,80/7,92 (0.307/0.312)	10,00 (0.394)	1 (0.039)	3,00 (0.118)
6,99 (0.275)	5,60/5,85 (0.220/0.230)	8,90/9,20 (0.350/0.362)	10,03/10,16 (0.395/0.400)	15,00 (0.590)	0,90 (0.035)	2,54 (0.100)
8,40 (0.331)	6,60/6,70 (0.260/0.264)	10,00/10,30 (0.394/0.405)	11,50/11,62 (0.453/0.457)	14,00 (0.551)	1 (0.039)	4,00 (0.157)

O-ring housing data for piston and piston rod sealing applications

Type A



Type B



Overlap "*l*" Minimum overlap 1,25mm (0.049in)

Table 4 All dimensions in mm with inch equivalents in brackets.

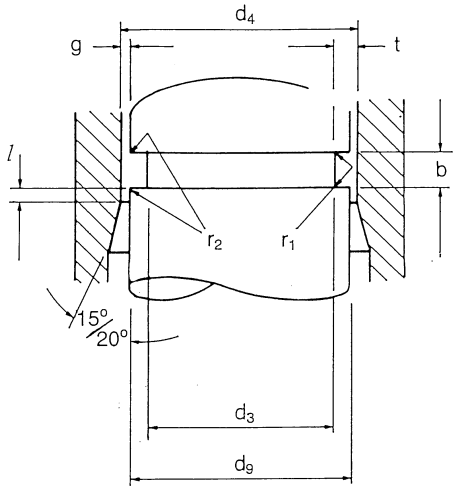
	d_2	b, t (100 bar maximum)		b_1, t Pressure (100 bar +)		b_2, t Alternating pressure (100 bar +)		Corner radii r_1 maximum	
Mode	d_2	t	b	t	b_1	t	b_2	Without anti-extrusion rings	With anti-extrusion rings
Static	1,50 (0.059)	1,17/1,09 (0.046/0.043)	2,30/2,50 (0.090/0.098)	— —	— —	— —	— —	0,50 (0.020)	0,25 (0.010)
✻Static	1,60 (0.063)	1,18/1,25 (0.046/0.049)	2,30/2,50 (0.090/0.098)	— —	— —	— —	— —	0,50 (0.020)	0,25 (0.010)
Static and Dynamic	1,78 (0.070)	1,46/1,52 (0.057/0.060)	2,40/2,60 (0.094/0.102)	1,47/1,52 (0.058/0.060)	• 4,10/4,23 (0.161/0.166)	1,47/1,52 (0.058/0.060)	•• 6,10/6,23 (0.240/0.245)	0,80 (0.031)	0,25 (0.010)
Pneumatic		1,55/1,60 (0.061/0.063)	2,40/2,60 (0.094/0.102)	— —	— —	— —	— —		
Static and Dynamic	2 (0.079)	1,64/1,72 (0.064/0.068)	2,70/2,90 (0.106/0.114)	1,68/1,72 (0.066/0.068)	4,10/4,30 (0.161/0.169)	1,68/1,72 (0.066/0.068)	5,50/5,70 (0.216/0.224)	0,50 (0.020)	0,25 (0.010)
✻Dynamic	2,40 (0.094)	1,97/2,09 (0.077/0.082)	3,20/3,40 (0.126/0.134)	2,01/2,09 (0.079/0.082)	4,60/4,80 (0.181/0.189)	2,01/2,09 (0.079/0.082)	6,00/6,20 (0.236/0.244)	0,50 (0.020)	0,25 (0.010)
Pneumatic		2,13/2,20 (0.084/0.087)	3,20/3,40 (0.126/0.134)	— —	— —	— —	— —		
✻Static		1,84/1,97 (0.072/0.077)	3,10/3,30 (0.122/0.130)	— —	— —	— —	— —		
Static and Dynamic	2,50 (0.098)	2,06/2,19 (0.081/0.086)	3,40/3,60 (0.134/0.142)	2,12/2,19 (0.083/0.086)	4,80/5,00 (0.189/0.197)	2,12/2,19 (0.083/0.086)	6,20/6,40 (0.244/0.252)	0,80 (0.031)	0,25 (0.010)
Pneumatic		2,24/2,31 (0.088/0.091)	3,40/3,60 (0.134/0.142)	— —	— —	— —	— —		
Static and Dynamic	2,62 (0.103)	2,20/2,30 (0.087/0.090)	3,17/3,37 (0.125/0.133)	2,26/2,31 (0.089/0.091)	• 4,60/4,73 (0.181/0.186)	2,26/2,30 (0.089/0.090)	•• 6,50/6,63 (0.256/0.261)	0,80 (0.031)	0,25 (0.010)
Pneumatic		2,34/2,41 (0.092/0.095)	3,17/3,37 (0.125/0.133)	— —	— —	— —	— —		
✻Dynamic	3 (0.118)	2,50/2,65 (0.098/0.104)	4,00/4,20 (0.157/0.165)	2,57/2,65 (0.101/0.104)	5,40/5,60 (0.212/0.220)	2,5772,65 (0.101/0.104)	6,80/7,00 (0.268/0.275)	1 (0.039)	0,25 (0.010)
Pneumatic		2,70/2,77 (0.106/0.109)	4,00/4,20 (0.157/0.165)	— —	— —	— —	— —		
✻Static		2,35/2,50 (0.092/0.098)	3,70/3,90 (0.146/0.153)	— —	— —	— —	— —		

✻ BS4518 recommendations

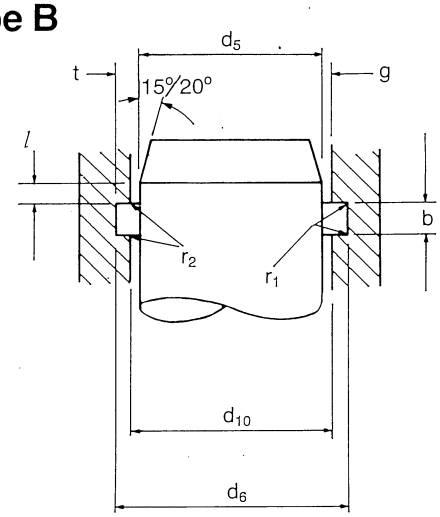
When using leather or hard rubber anti-extrusion rings the housing widths must be increased as follows:-
• 0,25 (0.010) •• 0,4 (0.016)

O-ring housing data for piston and piston rod sealing applications

Type A



Type B



Overlap "l" Minimum overlap 1,25mm (0.049in)

Table 4 All dimensions in mm with inch equivalents in brackets.

		b, t (100 bar maximum)		b_1, t Pressure (100 bar +)		b_2, t Alternating pressure (100 bar +)		Corner radii r_1 maximum	
Mode	d_2	t	b	t	b_1	t	b_2	Without anti-extrusion rings	With anti-extrusion rings
Static and Dynamic	3,50 (0.138)	2,94/3,11 (0.116/0.122)	4,70/4,90 (0.185/0.193)	3,01/3,11 (0.118/0.122)	6,10/6,30 (0.240/0.248)	3,01/3,11 (0.118/0.122)	7,50/7,70 (0.295/0.303)	1 (0.039)	0,25 (0.010)
Static and Dynamic	3,53 (0.139)	3,02/3,12 (0.119/0.123)	4,30/4,50 (0.169/0.177)	3,10/3,15 (0.122/0.124)	• 5,50/5,63 (0.216/0.222)	3,10/3,15 (0.122/0.124)	•• 7,40/7,53 (0.291/0.296)	0,9 (0.035)	0,25 (0.010)
Pneumatic		3,18/3,25 (0.125/0.128)	4,30/4,50 (0.169/0.177)	— —	— —	— —	— —		
Static and Dynamic	4 (0.157)	3,40/3,57 (0.134/0.140)	5,30/5,50 (0.209/0.216)	3,47/3,57 (0.137/0.140)	6,70/6,90 (0.264/0.272)	3,47/3,57 (0.137/0.140)	8,10/8,30 (0.319/0.327)	1 (0.039)	0,25 (0.010)
Static and Dynamic	5 (0.197)	4,30/4,52 (0.169/0.178)	6,60/6,80 (0.260/0.268)	4,42/4,52 (0.174/0.178)	8,40/8,60 (0.331/0.338)	4,42/4,52 (0.174/0.178)	10,20/10,40 (0.401/0.409)	1 (0.039)	0,4 (0.015)
Pneumatic		4,57/4,67 (0.180/0.184)	6,60/6,80 (0.260/0.268)	— —	— —	— —	— —		
Static and Dynamic	5,34 (0.210)	4,66/4,77 (0,183/0,188)	6,35/6,55 (0.250/0.258)	4,71/4,79 (0.185/0.188)	† 7,60/7,73 (0.299/0.304)	4,71/4,79 (0.185/0.188)	†† 10,20/10,33 (0.401/0.407)	0,9 (0,035)	0,4 (0.015)
Pneumatic		4,83/4,93 (0.190/0.194)	6,35/6,55 (0.250/0.258)	— —	— —	— —	— —		
✲Dynamic	5,70 (0.224)	4,95/5,18 (0.195/0.204)	7,50/7,70 (0.295/0.303)	5,08/5,18 (0.200/0.204)	9,30/9,50 (0.366/0.374)	5,08/5,18 (0.200/0.204)	11,10/11,30 (0.437/0.445)	1 (0.039)	0,4 (0.015)
Pneumatic		5,22/5,38 (0.206/0.212)	7,50/7,70 (0.295/0.303)	— —	— —	— —	— —		
✲Static		4,70/4,95 (0.185/0.195)	6,40/6,60 (0.252/0.260)	— —	— —	— —	— —		
Static and Dynamic	6,99 (0.275)	6,00/6,12 (0.236/0.241)	8,65/8,85 (0.340/0.348)	6,07/6,14 (0.239/0.242)	† 10,05/10,18 (0.396/0.401)	6,07/6,14 (0.239/0.242)	†† 13,50/13,63 (0.531/0.537)	0,9 (0.035)	0,4 (0.015)
Pneumatic		6,12/6,32 (0.241/0.249)	8,65/8,85 (0.340/0.348)	— —	— —	— —	— —		
✲Dynamic	8,40 (0.331)	7,50/7,75 (0.295/0.305)	11,00/11,20 (0.433/0.441)	7,63/7,75 (0.300/0.305)	13,20/13,40 (0.520/0.527)	7,63/7,75 (0.300/0.305)	15,40/15,60 (0.606/0.614)	1 (0.039)	0,4 (0.015)
Pneumatic		7,75/7,96 (0.305/0.313)	11,00/11,20 (0.433/0.441)	— —	— —	— —	— —		
✲Static		7,20/7,50 (0.283/0.295)	9,00/9,20 (0.354/0.362)	— —	— —	— —	— —		

✲ BS4518 recommendations

When using leather or hard rubber anti-extrusion rings the housing widths must be increased as follows:-
• 0,25 (0.010) •• 0,4 (0.016) † 0,75 (0.030) †† 1,0 (0.040)