

Conductive Elastomer Molded D- and O-Rings



Molded D- and O-Rings

Chomerics' D-ring and O-ring gaskets provide moisture/pressure sealing and EMI/EMP shielding when compressed in a properly designed groove. They are interchangeable with standard non-conductive seals of the same dimensions. Rings with I.D.s greater than 2 in. (51 mm) can be made by splicing extruded materials rather than by molding if groove corner radii are generous. Consult Chomerics before ordering.

Note: Grooves should be designed to assure 10 to 20% deflection of the gasket, and 100% maximum groove fill when groove dimensions are on the low side of allowable tolerance and gasket dimensions are on the high side.

Tolerances

DIMENSIONS	TOLERANCES
<i>Inside Diameters</i>	
0.100-1.50 (0-38)	±0.010 (±0.254)
1.501-2.50 (38-63)	±0.015 (±0.381)
2.501-4.50 (63-114)	±0.020 (±0.508)
4.501-7.00 (114-178)	±0.025 (±0.635)
over 7.00 (178)	±0.35% of nom. dim.
<i>Cross Sections</i>	
0.040-0.069 (1.02-1.75)	±0.003 (±0.076)
0.070-0.100 (1.79-2.54)	±0.004 (±0.102)
0.101-0.200 (2.56-5.08)	±0.005 (±0.127)
0.201-0.350 (5.11-8.89)	±0.008 (±0.203)

Ordering Procedure

Select the part number from Table 11 (D-rings) and Table 12 (O-rings) which follow. The last four digits designate the material. We recommend CHO-SEAL 1215 material for the highest level of shielding effectiveness; CHO-SEAL 1285 material for the best combination of shielding effectiveness, corrosion resistance, weight,

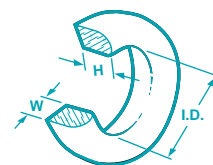


Table 11

D-RINGS			
Chomerics P/N*	Nominal Dimensions		
	H	W	I.D.
10-01-6515-XXXX	0.048 (1.22)	0.078 (1.98)	0.587 (14.91)
10-01-1238-XXXX	0.059 (1.50)	0.093 (2.36)	2.705 (68.71)
10-01-1239-XXXX	0.059 (1.50)	0.095 (2.41)	3.193 (81.10)
10-01-1240-XXXX	0.061 (1.55)	0.025 (0.66)	0.180 (4.57)
10-01-1241-XXXX	0.061 (1.55)	0.039 (0.99)	0.151 (3.84)
10-01-1628-XXXX	0.062 (1.57)	0.096 (2.44)	1.562 (39.67)
10-01-1154-XXXX	0.062 (1.57)	0.069 (1.75)	0.893 (22.68)
10-01-1375-XXXX	0.066 (1.68)	0.059 (1.50)	0.565 (14.35)
10-01-6525-XXXX	0.067 (1.70)	0.097 (2.46)	1.094 (27.79)
10-01-1142-XXXX	0.069 (1.75)	0.094 (2.39)	1.072 (27.23)
10-01-1188-XXXX	0.070 (1.78)	0.065 (1.65)	0.809 (20.55)
10-01-1623-XXXX	0.073 (1.85)	0.034 (0.86)	0.230 (5.84)
10-01-1143-XXXX	0.076 (1.93)	0.097 (2.46)	1.460 (37.08)
10-01-1601-XXXX	0.076 (1.93)	0.095 (2.41)	1.397 (35.48)
10-01-1144-XXXX	0.076 (1.93)	0.097 (2.46)	1.581 (40.16)
10-01-2238-XXXX	0.076 (1.93)	0.113 (2.87)	1.262 (32.05)
10-01-6540-XXXX	0.077 (1.96)	0.103 (2.62)	1.511 (38.37)
10-01-6535-XXXX	0.083 (2.11)	0.093 (2.36)	1.357 (34.48)
10-01-1187-XXXX	0.101 (2.57)	0.130 (3.30)	0.592 (15.04)
10-01-1131-XXXX	0.118 (2.98)	0.174 (4.42)	1.385 (35.18)
10-01-6520-XXXX	0.125 (3.18)	0.155 (3.94)	0.885 (22.48)
10-01-1264-XXXX	0.123 (3.12)	0.123 (3.12)	0.853 (21.67)
10-01-1766-XXXX	0.125 (3.18)	0.138 (3.51)	2.859 (72.62)
10-01-1120-XXXX	0.130 (7.69)	0.180 (4.57)	3.412 (86.66)
10-01-6565-XXXX	0.188 (4.78)	0.234 (5.94)	3.837 (37.46)

* Last four digits should be used to designate material (1215, 1285, etc.). For certain materials and configurations, a minimum order requirement may apply.

cost and temperature range; and CHO-SEAL 1298 for the highest level of corrosion resistance. **Note:** Tooling charges may be incurred for some parts.

Additional sizes are available. For custom sizes, drawings must be provided. Part numbers will be assigned by Chomerics.

(mm dimensions in parentheses)

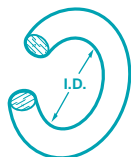


Table 12

O-RINGS			
Chomerics P/N* MIL P/N: M83528/ 00 [IX†-()	MS 29513 MS 9021 Dash No.	Dimensions	
		Cross Section (Diameter)	I.D.
10-00-2231-XXXX [5] (001)	—	0.030 (0.76)	0.442 (11.23)
10-00-2232-XXXX [5] (002)	—	0.030 (0.76)	0.577 (14.66)
10-00-2259-XXXX [5] (003)	—	0.030 (0.76)	0.692 (17.58)
10-00-2233-XXXX [5] (004)	—	0.030 (0.76)	0.817 (20.75)
10-00-1413-XXXX [5] (005)	—	0.039 (0.99)	0.425 (10.80)
10-00-2777-XXXX [5] (006)	—	0.048 (1.22)	0.295 (7.49)
10-00-1406-XXXX [5] (007)	—	0.050 (1.27)	0.533 (13.54)
10-00-1405-XXXX [5] (008)	—	0.051 (1.30)	0.446 (11.33)
10-00-1407-XXXX [5] (009)	—	0.057 (1.45)	0.415 (10.54)
10-00-1376-XXXX [5] (010)	—	0.063 (1.60)	0.541 (13.74)
10-00-1342-XXXX [5] (011)	—	0.063 (1.60)	0.648 (16.46)
10-00-1631-XXXX [5] (012)	—	0.068 (1.73)	0.847 (21.51)
10-00-1770-XXXX [5] (013)	—	0.068 (1.73)	1.182 (30.02)
10-00-1478-XXXX [5] (014)	—	0.068 (1.73)	3.165 (80.39)
10-00-3811-XXXX [2] (007)	007	0.070 (1.78)	0.145 (3.68)
10-00-2226-XXXX [2] (011)	011	0.070 (1.78)	0.301 (7.65)
10-00-5983-XXXX [2] (012)	012	0.070 (1.78)	0.364 (9.25)
10-00-2227-XXXX [2] (013)	013	0.070 (1.78)	0.426 (10.82)
10-00-1980-XXXX [2] (014)	014	0.070 (1.78)	0.489 (12.42)
10-00-0008-XXXX [5] (015)	—	0.070 (1.78)	0.495 (12.57)
10-00-2065-XXXX [2] (015)	015	0.070 (1.78)	0.551 (14.00)
10-00-0001-XXXX [5] (016)	—	0.070 (1.78)	0.610 (15.49)

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Table 12 continued

O-RINGS			
Chomerics P/N* MIL P/N: M83528/ 00 [IX†-()	MS 29513 MS 9021 Dash No.	Dimensions	
		Cross Section (Diameter)	I.D.
10-00-2085-XXXX [5] (017)	—	0.070 (1.78)	0.635 (16.13)
10-00-1689-XXXX [5] (018)	—	0.070 (1.78)	0.667 (16.94)
10-00-2066-XXXX [2] (017)	017	0.070 (1.78)	0.676 (17.17)
10-00-1690-XXXX (NA)	—	0.070 (1.78)	0.738 (18.75)
10-00-0012-XXXX (NA)	—	0.070 (1.78)	0.735 (18.67)
10-00-2075-XXXX [2] (018)	108	0.070 (1.78)	0.739 (18.77)
10-00-1981-XXXX [2] (019)	019	0.070 (1.78)	0.801 (20.35)
10-00-0014-XXXX [5] (019)	—	0.070 (1.78)	0.860 (21.85)
10-00-2076-XXXX [2] (020)	020	0.070 (1.78)	0.864 (21.95)
10-00-1843-XXXX [2] (021)	021	0.070 (1.78)	0.926 (23.52)
10-00-2068-XXXX [2] (022)	022	0.070 (1.78)	0.989 (25.12)
10-00-2536-XXXX (NA)	—	0.070 (1.78)	1.046 (26.57)
10-00-2029-XXXX (NA)	—	0.070 (1.78)	1.110 (28.19)
10-00-2069-XXXX [2] (024)	024	0.070 (1.78)	1.114 (28.30)
10-00-1844-XXXX NA	—	0.070 (1.78)	1.176 (29.87)
10-00-2084-XXXX [5] (020)	—	0.070 (1.78)	1.230 (31.24)
10-00-2070-XXXX [2] (026)	026	0.070 (1.78)	1.239 (31.47)
10-00-2535-XXXX (NA)	—	0.070 (1.78)	1.296 (32.92)
10-00-2228-XXXX (NA)	—	0.070 (1.78)	1.362 (34.59)
10-00-2071-XXXX [2] (028)	028	0.070 (1.78)	1.364 (34.65)

* Last four digits should be used to designate material (1215, 1285, etc.). For certain materials and configurations, a minimum order requirement may apply.

† "X" should be replaced by applicable MIL-G-83528B material type (e.g., A, B, C, etc.). Number in bracket is MIL-G-83528B slash sheet. Number in parentheses is MIL-G-83528B dash number. Insert them (without brackets or parentheses) to complete MIL P/N.

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(mm dimensions in parentheses)

Table 12 *continued*

O-RINGS			
Chomerics P/N* MIL P/N: M83528/ 00[]X [†] -()	MS 29513 MS 9021 Dash No.	Dimensions	
		Cross Section (Diameter)	I.D.
10-00-0024-XXXX (NA)	—	0.070 (1.78)	1.485 (37.72)
10-00-2677-XXXX (NA)	—	0.070 (1.78)	1.609 (40.87)
10-00-4123-XXXX (NA)	030	0.070 (1.78)	1.614 (41.00)
10-00-2229-XXXX (NA)	—	0.070 (1.78)	1.674 (42.52)
10-00-0028-XXXX (NA)	—	0.070 (1.78)	1.735 (44.07)
10-00-4124-XXXX (NA)	032	0.070 (1.78)	1.864 (47.35)
10-00-0032-XXXX (NA)	—	0.070 (1.78)	1.980 (50.29)
10-00-2230-XXXX (NA)	—	0.070 (1.78)	3.009 (76.43)
10-00-0052-XXXX (NA)	—	0.070 (1.78)	3.170 (80.52)
10-00-2040-XXXX (NA)	043	0.070 (1.78)	3.489 (88.62)
10-00-2320-XXXX (NA)	—	0.076 (1.93)	0.656 (16.66)
10-00-2321-XXXX (NA)	—	0.076 (1.93)	0.779 (19.79)
10-00-1827-XXXX (NA)	—	0.084 (2.13)	0.852 (21.64)
10-00-0044-XXXX (NA)	—	0.084 (2.13)	2.678 (68.02)
10-00-0020-XXXX (NA)	—	0.087 (2.21)	1.250 (31.75)
10-00-0038-XXXX (NA)	—	0.087 (2.21)	2.360 (59.94)
10-00-3550-XXXX (NA)	—	0.094 (2.39)	0.750 (19.05)
10-00-1459-XXXX (NA)	—	0.095 (2.41)	0.897 (22.78)
10-00-1378-XXXX (NA)	—	0.095 (2.41)	1.074 (27.28)
10-00-4452-XXXX (NA)	—	0.100 (2.54)	1.005 (25.53)

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Tolerances

DIMENSIONS	TOLERANCES
<i>Inside Diameters</i>	
0.100-1.50 (0-38)	±0.010 (±0.254)
1.501-2.50 (38-63)	±0.015 (±0.381)
2.501-4.50 (63-114)	±0.020 (±0.508)
4.501-7.00 (114-178)	±0.025 (±0.635)
over 7.00 (178)	±0.35% of nom. dim.

(mm dimensions in parentheses)

Table 12 *continued*

O-RINGS			
Chomerics P/N* MIL P/N: M83528/ 00[]X [†] -()	MS 29513 MS 9021 Dash No.	Dimensions	
		Cross Section (Diameter)	I.D.
10-00-1754-XXXX (NA)	—	0.101 (2.57)	2.805 (71.25)
10-00-1359-XXXX (NA)	—	0.101 (2.57)	3.153 (80.87)
10-00-1360-XXXX (NA)	—	0.101 (2.57)	3.613 (80.87)
10-00-1921-XXXX [2] (114)	—	0.103 (2.62)	0.612 (15.54)
10-00-1847-XXXX [2] (117)	—	0.103 (2.62)	0.799 (20.29)
10-00-4685-XXXX [5] (021)	—	0.103 (2.62)	1.040 (26.42)
10-00-2086-XXXX (NA)	—	0.103 (2.62)	1.240 (31.50)
10-00-1845-XXXX [2] (126)	—	0.103 (2.62)	1.362 (34.59)
10-00-2072-XXXX [2] (128)	128	0.103 (2.62)	1.487 (37.77)
10-00-1846-XXXX [5] (022)	130	0.103 (2.62)	1.612 (40.94)
10-00-2031-XXXX [2] (132)	132	0.103 (2.62)	1.737 (44.12)
10-00-2087-XXXX [5] (023)	—	0.103 (2.62)	1.790 (45.47)
10-00-2030-XXXX [2] (142)	142	0.103 (2.62)	2.362 (59.99)
10-00-1691-XXXX [2] (155)	—	0.103 (2.62)	3.987 (101.27)
10-00-1573-XXXX (NA)	—	0.115 (2.92)	2.876 (73.05)
10-00-1607-XXXX (NA)	—	0.147 (3.73)	2.265 (57.53)
10-00-1608-XXXX (NA)	—	0.147 (3.73)	3.690 (93.73)
10-00-1782-XXXX (NA)	—	0.188 (4.78)	0.673 (17.09)
10-00-1746-XXXX (NA)	—	0.210 (5.33)	3.475 (12.07)
10-00-1354-XXXX (NA)	—	0.243 (6.17)	3.409 (86.59)
10-00-1747-XXXX (NA)	—	0.394 (10.01)	3.464 (87.99)

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