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## About O-Rings

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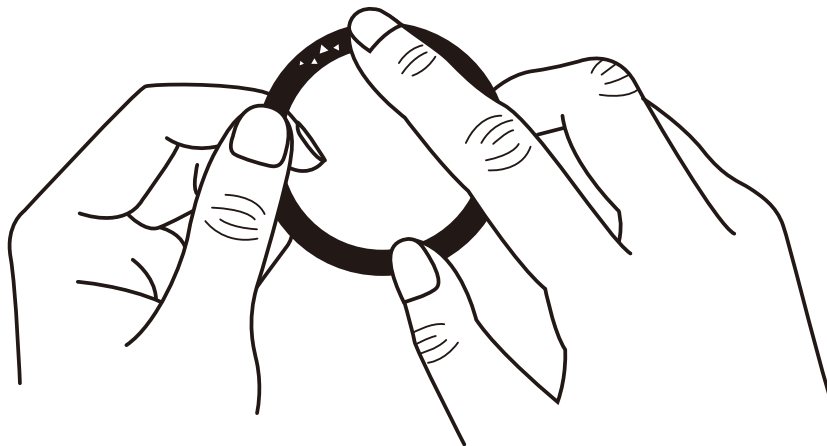
### ● Handling of O-Rings

The watertightness of the pressure-resistant vessels and connectors we handle is maintained by O-rings.

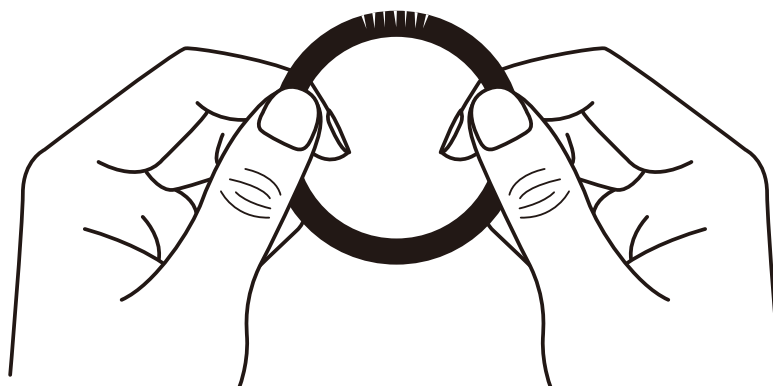
O-rings are mainly made of Nitrile Butadiene Rubber (NBR) and function to withstand water pressure due to its elasticity.

The following precautions should be taken when handling O-rings.

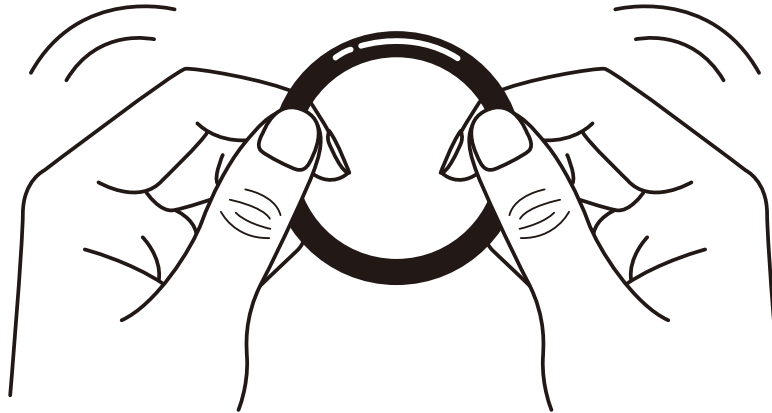
(1) Check for foreign substances by tracing with your fingertips.



(2) Check the surface for cracks, scratches, and deformations (distorted or crushed areas).



(3) Apply grease the manufacturer recommends thinly and evenly to the surface of the entire circumference of the O-ring.



### ● O-Ring Size and Hardness

The size of O-rings is defined by the wire diameter (W) and inner diameter (ID) as shown in the diagram below.

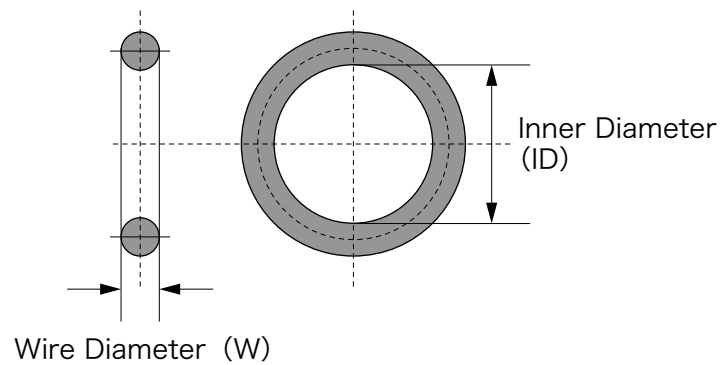


Diagram of O-Ring Dimensions and Shapes

Also, the hardness of O-rings is mainly 70HS and 90HS.

## About Screws

Among the equipment we handle, American-made products often use inch sizes, and British-made products often use mm sizes.

The two sizes may be present simultaneously, so please contact us if necessary.

### ● Unified Screws

Nominal Diameter		Outer Diameter of Screw		Number of Threads	
				Coarse Thread	Fine Thread
Column 1	Column 2	inch	mm	UNC	UNF
No.0		0.0600	1.524		80
	No.1	0.0730	1.854	64	72
No.2		0.0860	2.184	56	64
	No.3	0.0990	2.515	48	56
No.4		0.1120	2.845	40	48
No.5		0.1250	3.175	40	44
No.6		0.1380	3.505	32	40
No.8		0.1640	4.166	32	36
No.10		0.1900	4.826	24	32
	No.12	0.2160	5.486	24	28
1/4		0.2500	6.350	20	28
5/16		0.3125	7.938	18	24
3/8		0.3750	9.525	16	24
7/16		0.4375	11.112	14	20

1/2		0.5000	12.700	13	20
9/16		0.5625	14.288	12	18
5/8		0.6250	15.875	11	18
	11/16	0.6875	17.462		
3/4		0.7500	19.050	10	16
	13/16	0.8125	20.638		
7/8		0.8750	22.225	9	14
	15/16	0.9375	23.812		
1		1.0000	25.400	8	12

Table of Thread Pitch Conversion	
Number of Threads	Pitch
(per 25.4mm)	(mm)
100	0.2540
80	0.3175
72	0.3528
64	0.3969
60	0.4233
56	0.4536
48	0.5292
44	0.5773
40	0.6350
36	0.7056

32	0.7938
28	0.9071
27	0.9407
24	1.0583
20	1.2700
19	1.3368
18	1.4111
16	1.5875
14	1.8143
13	1.9538
12	2.1167

● Metric Screws

Nominal Diameter			Outer Diameter of Screw	Pitch
Column 1	Column 2	Column 3	mm	
M1			1.000	0.25
				0.2
	M1.1		1.100	0.25
				0.2
M1.2			1.200	0.25
				0.2
	M1.4		1.400	0.3
				0.2

M1.6			1.600	0.35
				0.2
	M1.8		1.800	0.35
				0.2
M2			2.000	0.4
				0.25
	M2.2		2.200	0.45
				0.25
M2.5			2.500	0.45
				0.35
M3			3.000	0.5
				0.35
	M3.5		3.500	0.6
				0.35
M4			4.000	0.7
				0.5
	M4.5		4.500	0.75
				0.5
M5			5.000	0.8
				0.5
		M5.5	5.500	0.5
M6			6.000	1
				0.75

		M7	7.000	1
				0.75
M8			8.000	1.25
				1
				0.75
		M9	9.000	1.25
				1
				0.75
M10			10.000	1.5
				1.25
				1
				0.75
		M11	11.000	1.5
				1
				0.75
M12			12.000	1.75
				1.5
				1.25
				1
	M14		14.000	2
				1.5
				1.25
				1

		M15	15.000	1.5
				1
M16			16.000	2
				1.5
				1
		M17	17.000	1.5
				1
	M18		18.000	2.5
				2
				1.5
				1
M20			20.000	2.5
				2
				1.5
				1
	M22		22.000	2.5
				2
				1.5
				1
M24			24.000	3
				2
				1.5
				1



		M25	25.000	2
				1.5
				1