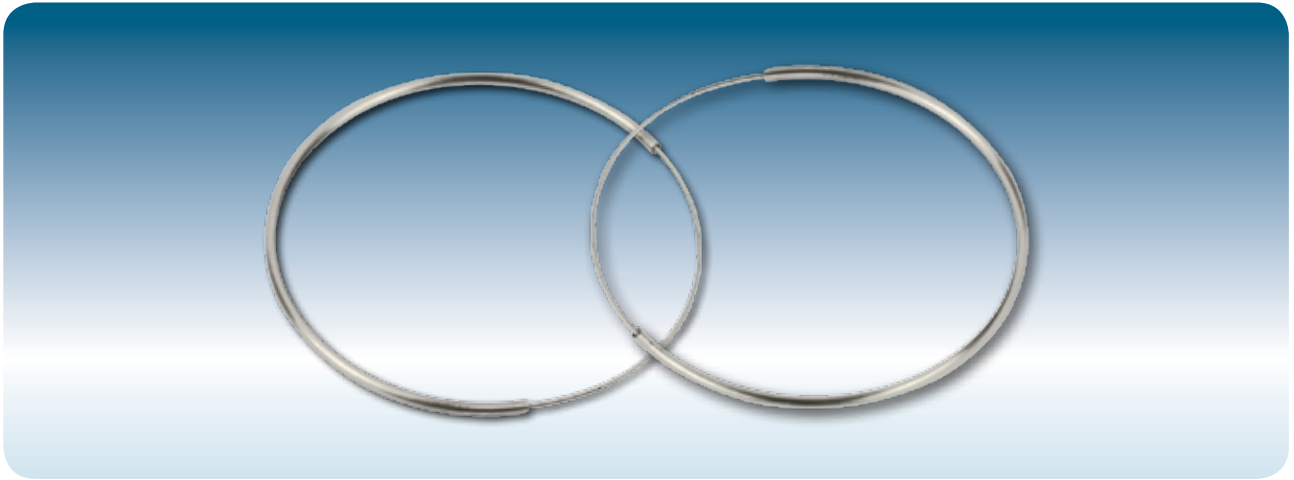


# METALLIC GASKET | Metal Tube O-Ring



Metal Tube O-ring is only gasket made of metal tube which is formed and special welded into a round or other shapes. The gasket is provided with various advantages and it can be sealed with low tightening power, can be formed into various shape according to the shape of matrix face and can be used for high pressure, high temperature and ultra-vacuum services.

It is the most suitable gasket for seating such machinery and equipments that space factor and compactness are accounted much for designs. Special surface plating and coating is available according to need.

Name	Section	Style	Name	Section	Style
Plain type Hollow Metallic O-ring		2000	Pressure filled Metallic O-ring		2002
Pressure compensate Metallic O-ring		2001	Core inserted Metallic O-ring		2003

Material Spec						Shapes	
Tube	Surface Treatment		Filler and core insertion				
SS 304	E	P.T.F.E.	P	Nitrogen gas	N	Round	R
SS 316L	Q	Rubber	R	Inert gas	G	Square	S
SS 321	J	Copper	C	SS 304 - SPR	E	Diamond	D
SS 347	K	Cadmium	D	Inconel - X750	Y	Oval	O
Monel	M	Sliver	S			Oblong	L
Inconel-800	I	Nickel	N			Pear	P
Inconel-X750	Y						
Copper	C						
Aluminium	A						

## Notes

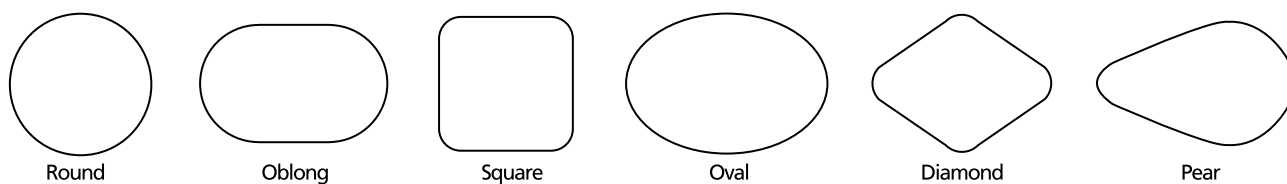
1. Customers may describe style of section, material of tube, surface treatment, pressure filled and inserted core and shapes by symbol mark as mentioned in

Example : K/# 2000-JS-R  
 plain type ———— Shape  
 Material of tube ———— Plating

2. Consult us when ordering materials other than those listed.

## ■ KUKIL INNTOT style

Round, Oblong, Square, Oval, Diamond, Pear shapes are available



### Materials, applicable temperature and surface treatment of Hollow Metallic O-Ring

Material	Maximum Temp [ °C ]	Surface treatment	Type of fluid	Service temp [ °C ]
AISI 304 (SS 304)	450	P.T.F.E Coating	General gases	-250~ 260
AISI 316L (SS 316L)	600	Rubber Coating	Volatile liquid / Chemical liquid	-250~ 800
AISI 321 (SS 321)	870	Silver plating	ditto / silver and copper plating	-250~ 870
AISI 347 (SS 347)	870	Copper plating	Resistance of chemical liquid	-250~ 260
Monel	800	P.T.F.E Coating	General gases / Volatile liquid	-250~ 800
Inconel 800	1100	Silver plating	Chemical liquid silver / copper and	-250~ 950
Inconel x-750	1000	Copper plating / Nickel plating	Nickel plating resistance of chemical liquid	-250~ 1200

### Design and standard application

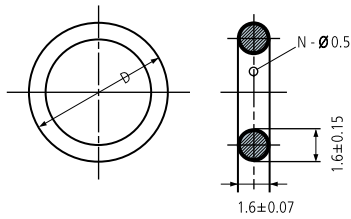
(Unit : mm)

KUKIL INNTOT NO.	Range of service pressure	Standard tube Dimension	Wall thickness	Available size (O.D)	Compression Load(1) [ kg <sub>f</sub> /cm <sup>2</sup> ]	Volume of compression
2000	vacuum~70 kg <sub>f</sub> /cm <sup>2</sup>	0.8	0.15	6~100	60	0.20
		1.6	0.25	11~200	200~250	0.40
2001	vacuum~70 kg <sub>f</sub> /cm <sup>2</sup> above	2.4	0.50	25~350	200~250	0.45
		3.2	0.50	40~1700	150~250	0.50
2002	vacuum~35,70,105 kg <sub>f</sub> /cm <sup>2</sup>	4.8	0.80	150~2500	300~350	0.75
2003	Ultra vacuum ~70 kg <sub>f</sub> /cm <sup>2</sup>	6.4	0.80	350~3000	150~200	1.00

### Notes

- (1)For stainless steel.
- Flange design is ASME CODE SECTION VIII APPENDIX part B "FLAT FACE FLANGE WITH METAL TO METAL CONTACT OUTSIDE THE BOLT CIRCLE".

■ KUKIL INNTOT No 2000, 2001, 2002, 2003.



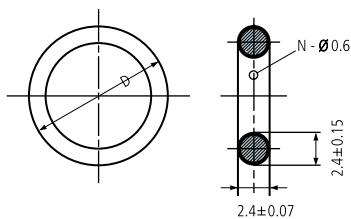
Tube diameter 1.6mm

Identification	Tube diameter	Wall thickness
A	1.6	0.25
B		0.50

(Unit : mm)

Selection No.	Actual dimensions hollow metallic O-ring(Without surface treatment)		Pressure compensate Number hole
	D	Tolerance	
A 13	13.0	+0.13 -0.0	1
A 14	14.0		
A 16	16.0		
A 18	18.0		
A 20	20.0		
A 22	22.0		
A 25	25.0		
A 28	28.0		
A 30	30.0		
A 32	32.0		
A 35	35.0		
A 38	38.0		
A 40	40.0		
A 42	42.0		
A 45	15.0		
A 48	18.0		
A 50	50.0		
A 55	55.0		
A 60	60.0		
A 65	65.0		
A 70	70.0		
A 75	75.0		
A 80	80.0		
A 85	85.0		
A 90	90.0		
A 95	95.0		
A 100	100.0		
		+0.20 -0.0	4

Selection No.	Actual dimensions hollow metallic O-ring(Without surface treatment)		Pressure compensate Number hole
	D	Tolerance	
B 13	13.0	+0.13 -0.0	16
B 14	14.0		
B 16	16.0		
B 18	18.0		
B 20	20.0		
B 22	22.0		
B 25	25.0		
B 28	28.0		
B 30	30.0		
B 32	32.0		
B 35	35.0		
B 38	38.0		
B 40	40.0		
B 42	42.0		
B 45	15.0		
B 48	18.0		
B 50	50.0		
B 55	55.0		
B 60	60.0		
B 65	65.0		
B 70	70.0		
B 75	75.0		
B 80	80.0		
B 85	85.0		
B 90	90.0		
B 95	95.0		
B 100	100.0		
		+0.20 -0.0	4



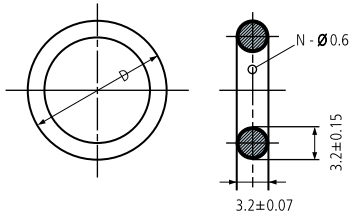
Tube diameter 2.4mm

Identification	Tube diameter	Wall thickness
C	2.4	0.25
D		0.50

(Unit : mm)

Selection No.	Actual dimensions hollow metallic O-ring(Without surface treatment)		Pressure compensate Number hole
	D	Tolerance	
C 75	75.0	+0.20 0	4
C 80	80.0		
C 85	85.0		
C 90	90.0		
C 95	95.0		
C 100	100.0		
C 105	105.0		
C 110	110.0		
C 115	115.0		
C 120	120.0		
C 125	125.0		
C 130	130.0		
C 135	135.0		
C 140	140.0		
C 145	145.0		
C 150	150.0		
C 160	160.0		
C 170	170.0		
C 180	180.0		
C 190	190.0		
C 200	200.0		

Selection No.	Actual dimensions hollow metallic O-ring(Without surface treatment)		Pressure compensate Number hole
	D	Tolerance	
D 75	75.0	+0.20 0	4
D 80	80.0		
D 85	85.0		
D 90	90.0		
D 95	95.0		
D 100	100.0		
D 105	105.0		
D 110	110.0		
D 115	115.0		
D 120	120.0		
D 125	125.0		
D 130	130.0		
D 135	135.0		
D 140	140.0		
D 145	145.0		
D 150	150.0		
D 160	160.0		
D 170	170.0		
D 180	180.0		
D 190	190.0		
D 200	200.0		



### Tube diameter 3.2mm

Identification	Tube diameter	Wall thickness
E	3.2	0.25
F		0.50

(Unit : mm)

Selection No.	Actual dimensions hollow metallic O-ring(Without surface treatment)		Pressure compensate Number hole
	D	Tolerance	
E 150	150.0	+0.20 -0.0	4
E 160	160.0		
E 170	170.0		
E 180	180.0		
E 190	190.0		
E 200	200.0		
E 210	210.0		
E 220	220.0		
E 230	230.0		
E 240	240.0		
E 250	250.0	+0.30 -0.0	4
E 260	260.0		
E 270	270.0		
E 280	280.0		
E 290	290.0		
E 300	300.0		
E 320	320.0		
E 340	340.0		
E 360	360.0		
E 380	380.0		
E 400	400.0		
E 450	450.0		
E 500	500.0		
E 550	550.0		
E 600	600.0		
E 650	650.0		
E 700	700.0		
E 750	750.0		
E 800	800.0		
E 850	850.0		
E 900	900.0		
E 950	950.0		
E 1000	1000.0		

Selection No.	Actual dimensions hollow metallic O-ring(Without surface treatment)		Pressure compensate Number hole
	D	Tolerance	
F150	150.0	+0.20 -0.0	4
F160	160.0		
F170	170.0		
F180	180.0		
F190	190.0		
F200	200.0		
F210	210.0		
F220	220.0		
F230	230.0		
F240	240.0		
F250	250.0	+0.30 -0.0	4
F260	260.0		
F270	270.0		
F280	280.0		
F290	290.0		
F300	300.0		
F320	320.0		
F340	340.0		
F360	360.0		
F380	380.0		
F400	400.0		
F450	450.0		
F500	500.0		
F550	550.0		
F600	600.0		
F650	650.0		
F700	700.0		
F750	750.0		
F800	800.0		
F850	850.0		
F900	900.0		
F950	950.0		
F1000	1000.0		