

# O-RINGS

**RoHS**

**ORS** (Space saving, static type)  
**ORP** (Movable type)  
**ORG** (Static type)

Enlarged view of AA cross section

Part Number	Usable temperature range	M
ORS	-30°C ~ 80°C	Nitrile rubber (NBR-70-1)
ORP · ORG	-15°C ~ 150°C	Fluoric rubber (FKM-70)

Usable temperature range is for reference only.

Order **Part Number**  
**ORS 30**

Price **Quotation**

Days to Ship **Quotation**

O-ring groove machining dimension (Reference value)				W (thickness)	do (inner diameter)	Part Number Type	No.	U/Price 1~299
d	D, D1 (Common)							
3	5	5.3	1.5±0.1	2.5	±0.15	ORS (Space saving, static type)	3	Quotation
4	6	6.3						
5	7	7.3						
6	8	8.3						
7	9	9.3						
8	10	10.3						
9	11	11.3						
10	12	12.3						
12	14	14.3						
14	16	16.3						
15	17	17.3	2.0±0.1	34.5	±0.25	ORS (Space saving, static type)	15	Quotation
16	18	18.3						
18	20	20.3						
20	22	22.3						
22	24	24.3						
24	27	27.3						
25	28	28.5						
26	29	29.5						
28	31	31.5						
30	33	33.5						
32	35	35.5						
34	37	37.5						
35	38	38.5						
36	39	39.5						
38	41	41.5						
39	42	42.5						
40	43	43.5						
42	45	45.5						
44	47	47.5						
46	49	49.5						
48	51	51						

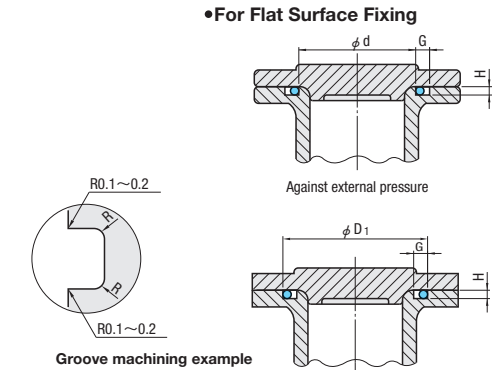
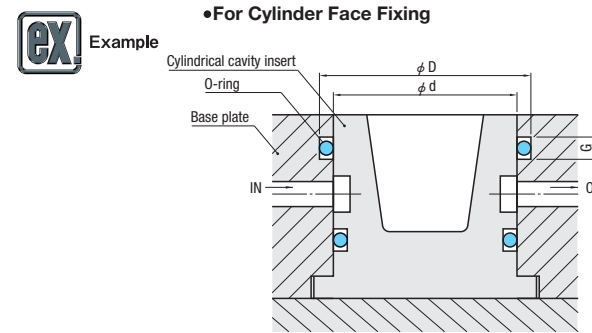
\*For d, D, D1 dimensions, refer to the following. ORS is space-saving standard instead of JIS standard.

O-ring groove machining dimension (Reference value)				W (thickness)	do (inner diameter)	O-rings JIS No.	Part Number Type	No.	U/Price 1~299
d	D, D1 (Common)								
3	6	2.8	1.9±0.07	2.8	±0.24	ORP (Movable type)	3	Quotation	
4	7	3.8							
5	8	4.8							
6	9	5.8							
7	10	6.8							
8	11	7.8							
9	12	8.8							
10	13	9.8							
11	15	10.8							
12	16	11.8							
14	18	13.8	2.4±0.07	13.8	±0.05	ORP (Movable type)	14	Quotation	
15	19	14.8							
16	20	15.8							
18	22	17.8							

\*For d, D, D1 dimensions, refer to the following. ORP is the equivalent of P series of JIS standard.

O-ring groove machining dimension (Reference value)				W (thickness)	do (inner diameter)	O-rings JIS No.	Part Number Type	No.	U/Price 1~299
d	D, D1 (Common)								
20	24	19.8	2.4±0.07	19.8	±0.3	ORP (Movable type)	20	Quotation	
21	25	20.8							
22	26	21.8							
24	30	23.7							
25	31	24.7							
26	32	25.7							
28	34	27.7							
30	36	29.7							
31	37	30.7							
32	38	31.7							
34	40	33.7	3.5±0.1	34.7	±0.5	ORP (Movable type)	34	Quotation	
35	41	34.7							
36	42	35.7							
38	44	37.7							
39	45	38.7							
40	46	39.7							
42	48	41.7							
44	50	43.7							
46	52	45.7							
48	54	47.7							
25	30	24.4	3.1±0.1	24.4	±0.3	ORG (Static type)	25	Quotation	
30	35	29.4							
35	40	34.4							
40	45	39.4							
45	50	44.4							
50	55	49.4							
55	60	54.4							
60	65	59.4							
65	70	64.4							
70	75	69.4							
75	80	74.4	3.1±0.1	74.4	±0.5	ORG (Static type)	75	Quotation	
80	85	79.4							
85	90	84.4							
90	95	89.4							
95	100	94.4							
100	105	99.4							
105	110	104.4							
110	115	109.4							
115	120	114.4							
120	125	119.4							

\*For d, D, D1 dimensions, refer to the following. ORP is the equivalent of P series of JIS standard. ORG is the equivalent of G series of JIS standard.



**O-ring Groove Dimensions**

Part Number	G <sup>+0.25</sup>	H	H	Rmax.	D · d Eccentricity max.
ORS 3~22	2.5	1.0	0	—	—
ORS 24~48	2.7	1.5	-0.1	—	—
ORP 3~10	2.5	1.4	±0.05	0.4	0.05
ORP 11~22	3.2	1.8	±0.05	0.4	0.05
ORP 24~48	4.7	2.7	±0.05	0.7	0.08
ORG 25~120	4.1	2.4	±0.05	0.8	0.08

- H size is required for flat surface fixing.
- Use the ORP O-rings for movable applications.
- Calculate the groove depth for cylinder face fixing from  $\frac{\phi D(D_1) - \phi d}{2}$ .
- Notation of O-rings for movable applications and for flat surface fixing is according to the specifications of JIS B2401.
- There is difference between sizes of O-rings for movable applications and for flat surface fixing.
- O-rings for movable applications can be used for flat surface fixing as well.

Cooling Components  
Joints · Hoses  
Cooling Inside of Mold