

O-Ring

- P Series -

Similar Products Comparison Points

- ① Dimension and hardness are compliant with JIS Standard.
- ② Sold by Single Item
- ③ RoHS Compliant

Ordering Example **Part Number (Type - No.)**
NPA10

Type	Material	Hardness (JIS Hs)	Color	Operable Temperature Range	JIS Symbol	Application
NPA	Nitrile Rubber	70±5	Black	-30 ~ 100°C	Class 1 A	Mineral Oil Resistant

* Most representative material with superior oil / abrasion resistance and heat stability.

CAD 2D 3D RoHS 10

JIS B 2401 P Series (For Mounting, Dynamic)

Part Number	JIS Nominal Number	W	I.D.	Matching Material
Type No.			do Tolerance	d Tolerance D Tolerance
3	P3	1.9 ±0.08	2.8 ±0.14	3 6
4	P4		3.8 ±0.14	4 7
5	P5		4.8 ±0.15	5 8
6	P6		5.8 ±0.16	6 9
7	P7		6.8 ±0.16	7 10
8	P8		7.8 ±0.16	8 11
9	P9		8.8 ±0.17	9 12
10	P10		9.8 ±0.17	10 13
10A	P10A		9.8 ±0.18	10 14
11	P11		10.8 ±0.18	11 15
11.2	P11.2	11 ±0.19	11.2 15.2	
12	P12	11.8 ±0.19	12 16	
12.5	P12.5	12.3 ±0.20	12.5 16.5	
14	P14	2.4 ±0.09	13.8 ±0.20	14 18
15	P15		14.8 ±0.20	15 19
16	P16		15.8 ±0.21	16 20
18	P18		17.8 ±0.22	18 22
20	P20		19.8 ±0.22	20 24
21	P21		20.8 ±0.23	21 25
22	P22		21.8 ±0.24	22 26
22A	P22A		21.7 ±0.24	22 28
22.4	P22.4		22.1 ±0.25	22.4 28.4
24	P24		23.7 ±0.25	24 30
25	P25	3.5 ±0.13	24.7 ±0.25	25 31
25.5	P25.5		25.2 ±0.26	25.5 31.5
26	P26		25.7 ±0.26	26 32
28	P28		27.7 ±0.28	28 34
29	P29		28.7 ±0.29	29 35
29.5	P29.5		29.2 ±0.29	29.5 35.5
30	P30		29.7 ±0.29	30 36

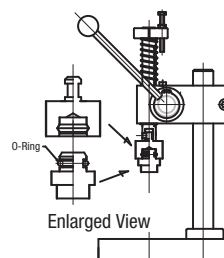
For Detailed Fitting Size, refer to P.2244.

Part Number	JIS Nominal Number	W	I.D.	Matching Material
Type No.			do Tolerance	d Tolerance D Tolerance
31	P31	3.5 ±0.1	30.7 ±0.30	31 37
31.5	P31.5		31.2 ±0.31	31.5 37.5
32	P32		31.7 ±0.33	32 38
34	P34		33.7 ±0.33	34 40
35	P35		34.7 ±0.34	35 41
35.5	P35.5		35.2 ±0.34	35.5 41.5
36	P36		35.7 ±0.37	36 42
38	P38		37.7 ±0.37	38 44
39	P39		38.7 ±0.39	39 45
40	P40		39.7 ±0.41	40 46
41	P41	5.7 ±0.13	40.7 ±0.38	41 47
42	P42		41.7 ±0.39	42 48
44	P44		43.7 ±0.41	44 50
45	P45		44.7 ±0.42	45 51
46	P46		45.7 ±0.42	46 52
48	P48		47.7 ±0.44	48 54
50	P50		49.7 ±0.45	50 56
50A	P50A		49.7 ±0.45	50 60
52	P52		51.6 ±0.47	52 62
53	P53		52.6 ±0.48	53 63
55	P55	54.6 ±0.49	55 65	
56	P56	55.6 ±0.50	56 66	
58	P58	57.6 ±0.52	58 68	
60	P60	59.6 ±0.53	60 70	
62	P62	61.6 ±0.55	62 72	
63	P63	62.6 ±0.56	63 73	
65	P65	64.6 ±0.57	65 75	
67	P67	66.6 ±0.59	67 77	
70	P70	69.6 ±0.61	70 80	
71	P71	70.6 ±0.62	71 81	
75	P75	74.6 ±0.65	75 85	
80	P80	79.6 ±0.69	80 90	



Example

*Rotating can be applied only in axial direction, reduces time for attaching or detaching the press processing, and improves operating efficiency.



MISUMI C-VALUE

O-Ring Sold by Package

- P Series -

Similar Products Comparison Points

- ① dimension tolerance compliant to JIS Standards; Hardness Tolerance widened in accordance with JIS Standards
- ② Sold by Package (200 pcs. per Package)
- ③ Not RoHS Compliant

Ordering Example **Part Number (Type - No.)**
PACK-NPA10

Type	Material	Hardness (JIS Hs)	Color	Operable Temperature Range	JIS Symbol	Application
PACK-NPA	Nitrile Rubber	70±8	Black	-30 ~ 100°C	Equivalent to Class 1 Grade A	Mineral Oil Resistant

* Most representative material with superior oil / abrasion resistance and heat stability.

CAD 2D 3D

P Series (For Mounting, Dynamic)

Part Number	JIS Nominal Number	W	I.D.	Matching Material	Pcs. per Package
Type No.			do Tolerance	d Tolerance D Tolerance	
3	P3	1.9 ±0.08	2.8 ±0.14	3 6	200
4	P4		3.8 ±0.14	4 7	
5	P5		4.8 ±0.15	5 8	
6	P6		5.8 ±0.16	6 9	
7	P7		6.8 ±0.16	7 10	
8	P8		7.8 ±0.16	8 11	
9	P9		8.8 ±0.17	9 12	
10	P10		9.8 ±0.17	10 13	
10A	P10A		9.8 ±0.18	10 14	
11	P11		10.8 ±0.18	11 15	
11.2	P11.2	11 ±0.19	11.2 15.2		
12	P12	2.4 ±0.09	11.8 ±0.19	12 16	200
12.5	P12.5		12.3 ±0.20	12.5 16.5	
14	P14		13.8 ±0.20	14 18	
15	P15		14.8 ±0.20	15 19	

Part Number	JIS Nominal Number	W	I.D.	Matching Material	Pcs. per Package		
Type No.			do Tolerance	d Tolerance D Tolerance			
16	P16	2.4 ±0.09	15.8 ±0.20	16 20	200		
18	P18		17.8 ±0.21	18 22			
20	P20		19.8 ±0.22	20 24			
21	P21		20.8 ±0.23	21 25			
22	P22		21.8 ±0.24	22 26			
22A	P22A		21.7 ±0.24	22 28			
24	P24		23.7 ±0.25	24 30			
25	P25		3.5 ±0.13	24.7 ±0.25		25 31	200
26	P26			25.7 ±0.26		26 32	
28	P28			27.7 ±0.28		28 34	
30	P30	29.7 ±0.29		30 36			
32	P32	31.7 ±0.31		32 38			
44	P44	43.7 ±0.41		44 50			
50A	P50A	49.7 ±0.45		50 60			

P Series Detailed Fitting Size

Type	No.	G Dimension (Tolerance ^{+0.25})			H Dimension	R Dimension
		No Back-Up Ring	Back-Up Ring on One Side	Back-Up Rings on Both Sides	H ±0.05	Max. Value
NPA NPB	3~10	2.5	3.9	5.4	1.4	0.4
NPSW NPS	10A~22	3.2	4.4	6.0	1.8	0.4
NPF NPFH	22A~44	4.7	6.0	7.8	2.7	0.8
NPEG NPBR	50A~80	7.5	9.0	11.5	4.6	0.9

- ① To fix a plane: If an internal pressure is exerted, install O-ring so that the perimeter of the O-ring contacts with the external wall of the groove; if an external pressure is exerted, install O-ring so that the internal circumference of the O-ring contacts with the internal wall of the groove.
- ② To fix a plane in consideration of the internal pressure, provide a margin of 0.2~0.3mm for Dimension D where Dimension D is 30mm or less.
- ③ Slot Dimension is for reference only.

