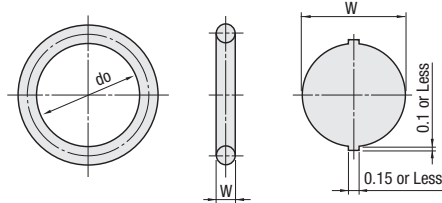


O-Rings

G Series



Type	Material	Hardness (JIS H)	Color	Operable Temperature Range	JIS Symbol	Applications	Features
NGA	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.
NGB	Nitrile Rubber	90±5	Black	-25~100°C	Class 1 B	Heat Resistant	It has the characteristics almost equivalent to the Class 1A besides higher hardness and better pressure resistance.
NGSW	Silicon Rubber	50±5	Milky White	-50~200°C	-		Having excellent high and low temperature resistances, this material covers the widest range of operating temperatures among synthetic rubbers.
NGSK	Silicon Rubber	70±5	Scarlet Red	-50~200°C	Class 4 C	Heat Resistant	It is suitable for food-related applications.
NGF	Fluoro Rubber	70±5	Black	-15~200°C	Class 4 D	Heat Resistant	Best in oil / chemical resistance and heat stability as synthetic rubber. Suitable for a wide range of applications.

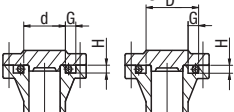


Detailed Fitting Size

Type	No.	G Dimension (Tolerance $^{+0.25}_0$)			H Dimension Min. Value	R Dimension Max. Value
		No Back-Up Ring	Back-Up Ring on One Side	Back-Up Rings on Both Sides		
NGA, NGB, NGSW, NGSK, NGF	25~145	4.1	5.6	7.3	2.4	0.7
	170	7.5	9	11.5	4.6	0.9

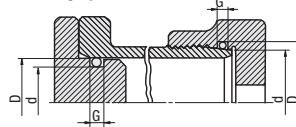
- When an internal pressure is applied to an o-ring for surface mounting, design the structure to bring the outer circumference of the o-ring to a close contact with the outer wall of the groove. When an external pressure is applied to an o-ring for surface mounting, design the structure to bring the inner circumference of the o-ring to a close contact with the inner wall of the groove.
- When using an o-ring for surface mounting for an internal pressure, if the length of D is 30 mm or less, make the length 0.2 to 0.3 mm longer.
- The groove dimensions are for reference.

For Surface Mounting

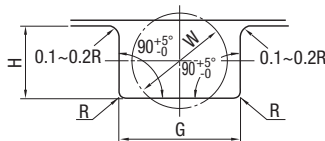


For External Pressure For Internal Pressure

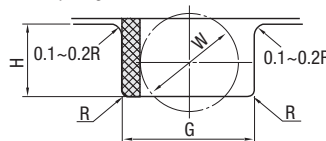
For Fixing Cylinder Surface



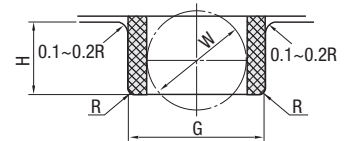
No Back-Up Ring



Back-Up Ring on One Side



Back-Up Rings on Both Sides



JIS B 2401 G Series (For Mounting)

Part Number	Type	No.	JIS Nominal Number	W	I.D.				Matching Material		NGA		NGB		NGSW		NGSK		NGF				
					do	NGA, NGB Tolerance	NGSW, NGSK Tolerance	NGF Tolerance	d	Tolerance	D	Tolerance	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	
		25	G25	3.1±0.1	24.4	±0.25	±0.38	±0.30	25	0	30	+0.10											
		30	G30		29.4	±0.29	±0.44	±0.35	30														
		35	G35		34.4	±0.33	±0.50	±0.40	35														
		40	G40		39.4	±0.37	±0.56	±0.45	40														
		45	G45		44.4	±0.41	±0.62	±0.50	45														
		50	G50		49.4	±0.45	±0.68	±0.54	50														
		55	G55		54.4	±0.49	±0.74	±0.59	55														
		60	G60		59.4	±0.53	±0.80	±0.64	60														
		65	G65		64.4	±0.57	±0.86	±0.69	65														
		70	G70		69.4	±0.61	±0.92	±0.74	70														
		75	G75		74.4	±0.65	±0.98	±0.78	75														
		80	G80		79.4	±0.69	±1.04	±0.83	80														
		105	G105		104.4	±0.87		±0.87	105														
		120	G120		119.4	±0.98		±0.98	120														
		145	G145		144.4	±1.16		±1.16	145														
		170	G170		169.3	±1.33		±1.33	170														



Ordering Example

Part Number
NGA25