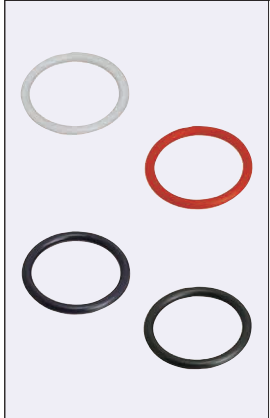
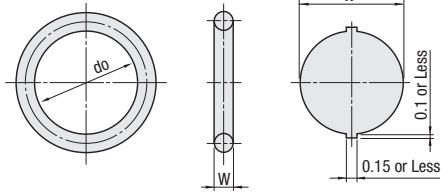


O-Rings

S Series



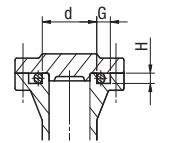
Type	Material	Hardness (JIS Hs)	Color	Operable Temperature Range	Applications	Features
NSA	Nitrile Rubber	70±5	Black	-30~100°C	Mineral Oil Resistant	Most representative material with superior oil / abrasion resistance and heat stability.
NSB	Nitrile Rubber	90±5	Black	-25~100°C		
NSSW	Silicon Rubber	50±5	Milky White	-50~200°C	Heat Resistant	Having excellent high and low temperature resistances, this material covers the widest range of operating temperatures among synthetic rubbers.
NSSK	Silicon Rubber	70±5	Scarlet Red	-50~200°C	Heat Resistant	It is suitable for food-related applications.
NSF	Fluoro Rubber	70±5	Black	-15~200°C		Best in oil / chemical resistance and heat stability as synthetic rubber. Suitable for a wide range of applications.
NSFH	Fluoro Rubber	90±5	Black	-15~200°C	Heat Resistant	



Detailed Fitting Size

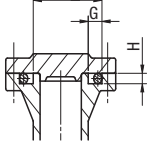
Type	No.	G Dimension (Tolerance ^{+0.25})			H Dimension H±0.05	R Dimension Max. Value
		No Back-Up Ring	Back-Up Ring on One Side	Back-Up Rings on Both Sides		
NSA, NSB, NSSW	3-22	2.5	-	-	1.0	0.2
NSSK, NSF, NSFH	22.4-50	2.7	-	-	1.5	0.4

For Surface Mounting



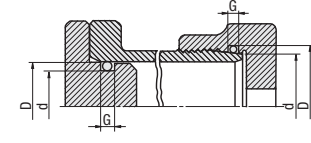
For External Pressure

For Fixing Cylinder Surface



For Internal Pressure

No Back-Up Ring



S Series

Part Number		Nominal Number	W	I.D.				Matching Material		NSA	NSB	NSSW	NSSK	NSF	NSFH		
Type	No.			do	NSA, NSB Tolerance	NSSW, NSBK Tolerance	NSF, NSFH Tolerance	d	Tolerance	D	Tolerance	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
	3	3	2.5				3	5		1-49	50-100	1-49 pc (s)	50-100				
	4	4	3.5				4	6									
	5	5	4.5				5	7									
	6	6	5.5				6	8									
	7	7	6.5				7	9									
	8	8	7.5				8	10									
	9	9	8.5				9	11									
	10	10	9.5				10	12									
NSA	11.2	11.2	10.7				11.2	13.2									
(Nitrile Rubber, Black)	12	12	11.5				12	14									
	12.5	12.5	12.0				12.5	14.5									
NSB	14	14	13.5				14	16									
(Nitrile Rubber, Black)	15	15	14.5				15	17									
	16	16	15.5				16	18									
	18	18	17.5				18	20									
	20	20	19.5				20	22									
NSSW	22	22	21.5	±0.15	±0.45	±0.30	22	24									
(Silicon Rubber, Milky White)	22.4	22.4	21.9				22.4	25.4									
	24	24	23.5				24	27									
	25	25	24.5				25	28									
NSSK	26	26	25.5				26	29									
(Silicon Rubber, Scarlet Red)	28	28	27.5				28	31									
	29	29	28.5				29	32									
	30	30	29.5				30	33									
NSF	31.5	31.5	31.0				31.5	34.5									
(Fluoro Rubber, Black)	32	32	31.5				32	35									
	34	34	33.5				34	37									
	35	35	34.5				35	38									
NSFH	35.5	35.5	35.0				35.5	38.5									
(Fluoro Rubber, Black)	36	36	35.5				36	39									
	38	38	37.5				38	41									
	39	39	38.5				39	42									
	40	40	39.5				40	43									
	42	42	41.5				42	45									
	44	44	43.5				44	47									
	45	45	44.5				45	48									
	46	46	45.5	±0.25	±0.75	±0.50	46	49									
	48	48	47.5				48	51									
	50	50	49.5				50	53									

Ordering Example Part Number NSA25