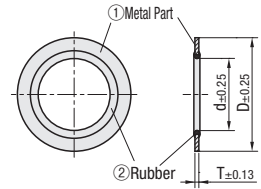


Seal Washers

Bolt Head Fixed Type



Type	① Metal Part		② Rubber		Operable Temperature Range
	M Material	S Surface Treatment	M Material	H Hardness	
GSW	SPCC Equivalent	Chromate	Nitrile Rubber (NBR)	Shore A65	-30~100°C
GSWF			Fluoro Rubber (FKM)	Shore A70	-10~200°C
SGSW	SUS304	-	Nitrile Rubber (NBR)	Shore A65	-30~100°C
SGSWF			Fluoro Rubber (FKM)	Shore A70	-10~200°C



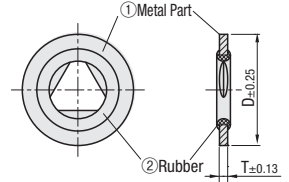
Part Number	Type	No.	T	D	d	Applicable Bolt	Max. Allowable Pressure	Reference Value				GSW		GSWF		SGSW		SGSWF		
								Tightening Torque N·m		Size of Application Part Hole I.D.		Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	
GSW	(Nitrile Rubber)	3	1	7.8	2.85	M3	5MPa	0.7	1.2	3.3	5.4	1 ~ 49 pc (s)	50~100	1 ~ 49 pc (s)	50~100	1 ~ 49 pc (s)	50~100	1 ~ 49 pc (s)	50~100	
		4						1	2.2	4.4	7									
		5						2.2	3.8	5.3	8									
		6						3	8.5	6.5	10									
GSWF	(Fluoro Rubber)	8	1.3	17.5	7.8	M8	10MPa	4.5	20	8.7	13									
		10						6	25	10.8	15									
		12						8	56	13.7	17.5									
SGSW	(Stainless Steel Nitrile Rubber)	16	1.5	30.3	15.8	M16	10MPa	10	125	17.5	22									
		20						40	135	21.5	26									
		24						60	190	25	30									

☞ Please use air under 0.98MPa.

Thread Fixed Type



Type	① Metal Part		② Rubber		Operable Temperature Range
	M Material	S Surface Treatment	M Material	H Hardness	
GSWM	SPCC Equivalent	Chromate	Nitrile Rubber (NBR)	Shore A65	-30~100°C
GSWMF			Fluoro Rubber (FKM)	Shore A70	-10~200°C
SGSWMF	SUS304	-	Fluoro Rubber (FKM)	Shore A70	-10~200°C



☞ Be sure to see Caution for Fastening shown below.

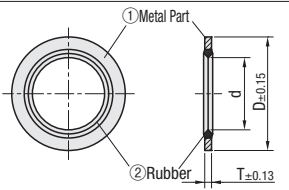
Part Number	Type	No.	T	D	Applicable Bolt	Max. Allowable Pressure	Reference Value				GSWM		GSWMF		SGSWMF	
							Tightening Torque N·m		Size of Application Part Hole I.D.		Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
GSWM	(Nitrile Rubber)	3	1	7.8	M3	5MPa	0.7	1.2	3.3	5.4	1 ~ 49 pc (s)	50~100	1 ~ 49 pc (s)	50~100	1 ~ 49 pc (s)	50~100
		4					1	2.2	4.4	7						
		5					2.2	3.8	5.3	8						
		6					3	8.5	6.5	10						
GSWMF	(Fluoro Rubber)	8	1.3	17.5	M8	10MPa	4.5	20	8.7	13						
		10					6	25	10.8	15						
		12					8	56	13.7	17.5						
SGSWMF	(Stainless Steel Fluoro Rubber)	16	1.5	30.3	M16	10MPa	10	125	17.5	23						
		20					40	135	21.5	28						
		24					60	190	25	34						

☞ Please use air under 0.98MPa.

Counterbore Hole Fixed Type



Type	① Metal Part		② Rubber		Operable Temperature Range
	M Material	S Surface Treatment	M Material	H Hardness	
GSWC	SUS301	-	Nitrile Rubber (NBR)	Shore A80	-30~100°C
GSWCF			Fluoro Rubber (FKM)	Shore A75	-10~200°C



Part Number	Type	No.	T	D	d	Applicable Bolt	Max. Allowable Pressure	Reference Value				GSWC		GSWCF	
								Tightening Torque N·m		Size of Application Part Hole I.D.		Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
GSWC	(Nitrile Rubber)	3	0.7	6	2.9	M3	10MPa	0.7	1.4	3.3	6.6	1 ~ 49 pc (s)	50~100	1 ~ 49 pc (s)	50~100
		4						1.1	3.1	4.2	8.2				
		5						2.2	6.5	5.2	10				
		6						3	15	6.2	11.5				
GSWCF	(Fluoro Rubber)	8	1	10.5	5.9	M6	10MPa	4.5	37	8.2	14.5				
		10						6	73	10.4	18				
		12						8	115	12.5	21				
GSWCF	(Fluoro Rubber)	16	1.5	17	9.9	M10	10MPa	10	290	16.5	27				
		24						60	190	25	30				

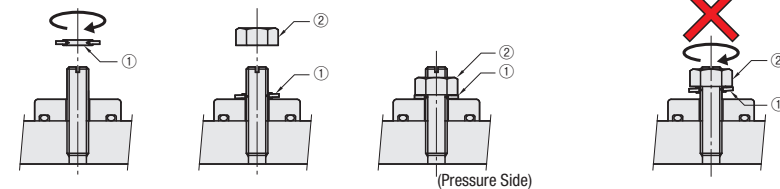
☞ Please use air under 0.98MPa.

☹ **Cautions for Thread Fixed Type**

- 1) Install the washer by rotating onto the thread.
- 2) Install the washer completely to the base, then install the nut.
- 3) Tighten the nut until it firmly contacts the washer.

- 2) Do not force the washer down by pushing with the nut.

☞ For rubber properties, see P.319



Ordering Example
Part Number
GSW4
SGSWMF6