

# GAS SPRINGS

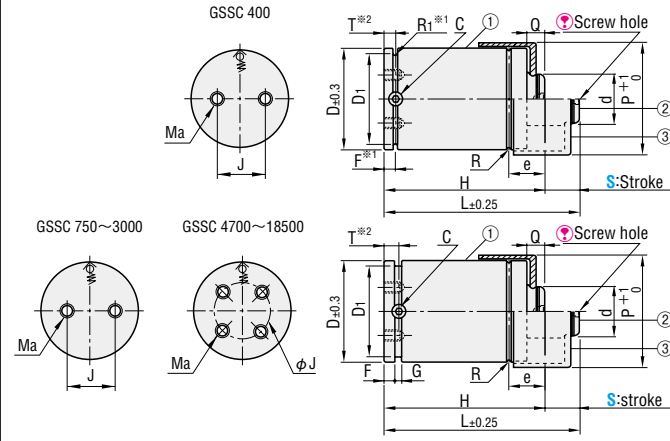
## —COVERED TYPE—



RoHS

GSSC

- ⚠ If a gas spring is used in excess of the specified stroke range S, it may cause gas leakage. Use the gas spring within the specified stroke range.
- ⚠ Do not use the screw hole to fix the gas spring with a bolt nor to install an extension pin. **P.1444**



- ① Cylinder body
- M Equivalent to SCM440
- S Black oxide (Fe<sub>3</sub>O<sub>4</sub>)
- ② Piston rod
- M Equivalent to SCM440
- H 600HV ~ (Surface)
- S Nitriding + Barrel finishing
- ③ Cover
- M Resin

- ※1: Fixing groove of GSSC400 is R shape. F is center distance from R1.
- ※2: T is center distance from C (Gas charging valve).

Nitrogen gas charge pressure	MPa(kgf/cm <sup>2</sup> )
GSSC	15(153)

Weight (kg)	D	P	D <sub>1</sub>	d	L	H	e	R	T	F	G	R <sub>i</sub>	Ma Top hole for mounting	J	Q	C	Load N (kgf)		Catalog No.	Adaptable plate																				
																	Initial load	Maximum load		Type	Initial load - S	Vertical	Horizontal																	
0.16	25	28	23	10	70	60	13.5	1	6	5	-	1	2- M5×7	14	4.8	M6	4250 {433}	7000	714	400-10 400-16 400-25 400-32 400-40 400-50	FCC25 FC25	-																		
0.19					91	75												7050	719																					
0.23					120	95												7160	730																					
0.25					140	108												8040	820																					
0.28					165	125												8040	820																					
0.32					195	145												8120	828																					
0.23					32	35												27	13				63	57	11.5	1	6	4	3.5	-	2- M6×8	15	4.8	M6	7400 {755}	11160	1138	750-10 750-16 750-25 750-32 750-40 750-50	FFC32 FFCA32 FCQ32 FC32	FSA32 FSD32
0.25																							75	65												11190	1141			
0.28																							93	77												12250	1249			
0.33																							120	95												13010	1327			
0.37	140	108	13360	1362																																				
0.42	165	125	13360	1362																																				
0.47	195	145	13480	1375																																				
0.33	38	41	33	18			61	55	10.5	1	6	4	3.5	-	2- M6×8	17	4.8			M6	10600 {1081}	17330	1767	1000-6 1000-10 1000-16 1000-25 1000-32 1000-40 1000-50												FFC38 FFCA38 FT38 FTP38 FCQ38 FC38	FSA38 FSD38			
0.38							78	68														16800	1713																	
0.44							100	84														16650	1698																	
0.53					135	110	16300	1662																																
0.62					167	135	15770	1608																																
0.70					195	155	15980	1630																																
0.79					230	180	16150	1647																																
0.62					50	53	43	25										66	60			14.5	1		6	8	5	-	2- M6×8	26	4.8	M6	18850 {1922}	26270	2679			1800-6 1800-10 1800-16 1800-25 1800-32 1800-40 1800-50	FFC50 FFCA50 FT50 FTP50 FCQB50 FCB50	FSA50 FSD50
0.68																		80	70															27480	2802					
0.80																		106	90															27690	2824					
0.92	135	110	28890	2946																																				
1.05	162	130	28680	2925																																				
1.17	190	150	28910	2948																																				
1.30	220	170	29680	3027																																				
1.23	63	66	56	32					85	75	19	1.5	6	8	5	-	2- M8×8	34	4.8	M6	29450 {3003}			44200										4507	3000-10 3000-16 3000-25 3000-32 3000-40 3000-50	FFC63 FFCA63 FT63 FTP63 FCQB63 FCB63	FSC63 FSD63			
1.35									103	87														45860										4676						
1.54									130	105														49060										5003						
1.68					150	118	50550	5155																																
1.86					175	135	51460	5247																																
2.07					205	155	50240	5123																																
1.60					75	78	67	45	80	70												18	1.5	6	8	5	-	4- M8×8	40	4.8	M6	46750 {4767}	73560	7501				4700-10 4700-16 4700-25 4700-32 4700-40 4700-50	FB75 FBA75 FBB75 FFC75 FFCA75 FT75 FTP75 FCQB75 FCB75	FSA75 FSD75
1.93									106	90																							69300	7067						
2.07									135	110																							71730	7314						
2.37									167	135																							69140	7050						
2.66	200	160	68460	6981																																				
3.01	240	190	68190	6953																																				

⚠ The Initial load (±10%) is value at 20°C. The maximum load is theoretical value under static condition. Load depends on temperature.  
 ● Load (kgf) = Load N × 0.101972 ● Load (N) = Load kgf × 9.80665 ● Nitrogen gas charge pressure kgf/cm<sup>2</sup> = MPa × 10.1972 MPa = kgf/cm<sup>2</sup> × 0.0980665

Weight (kg)	D	P	D <sub>1</sub>	d	L	H	e	R	T	F	G	R <sub>i</sub>	Ma Top hole for mounting	J	Q	C	Load N (kgf)		Catalog No.	Adaptable plate																				
																	Initial load	Maximum load		Type	Initial load - S	Vertical	Horizontal																	
2.87	95	98	87	55	90	80	21	1.5	6	8	5	-	4- M8×8	52	4.8	M6	75400 {7689}	110720	11290	7500-10 7500-16 7500-25 7500-32 7500-40 7500-50	FFC95 FFCA95 FTP95 FCQB95 FCB95	FSA95 FSD95																		
3.23					116	100												108000	11013																					
3.62					145	120												112740	11496																					
4.16					182	150												107390	10951																					
4.54					210	170												109050	11120																					
5.17					255	205												107520	10964																					
5.50					120	123												112	70				100	90	22.5	2.5	10.5	8	5	-	4- M10×12	68	4.8	G1/8	117800 {12012}	166990	17028	12000-10 12000-16 12000-25 12000-32 12000-40 12000-50	FFC120 FFCA120 FT120 FTP120 FCQ120 FC120	FSA120 FSD120
6.10																							126	110												165440	16870			
6.77																							155	130												173370	17679			
7.54																							187	155												169520	17286			
8.31	220	180	168990	17232																																				
9.25	260	210	169130	17246																																				
9.23	150	153	142	95			110	100	24.5	2.5	10.5	8	5	-	4- M10×12	90	4.8			G1/8	184100 {18773}	245100	24993	18500-10 18500-16 18500-25 18500-32 18500-40 18500-50												FFC150 FFCA150 FT150 FTP150 FCQ150 FC150	FSA150 FSD150			
10.20							136	120														247650	25253																	
11.22							165	140														260060	26519																	
12.43							197	165														256720	26178																	
13.85					235	195	253560	25856																																
15.11					270	220	257970	26306																																

### Gas spring temperature range

Please ensure that the surface temperature of the gas spring does not exceed 80°C.



Order

Catalog No.

GSSC 1000-50



Alterations

Catalog No.

GSSC1000-50 - N



Days to Ship

Quotation



Price

Quotation

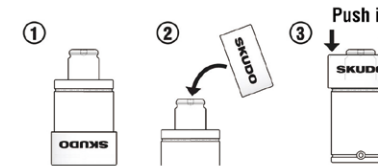
Alteration	Code	Spec.
For piping gas releasing	N	For piping, we ship inside gas and valve and pull out. Reduce labor of assembling joints and hoses.

### Features

- The cover put on piston rod reduces and/or prevents penetration of contamination such as press oil and metal scrap.
- The cover can be taken away if it is not needed.

### How to install the cover

- At the time of delivery, the covers cover is bundled with the gas spring reversed to the bottom as shown below ①. Please push firmly from the top of the gas spring and insert it into the groove of the piston rod by the following procedure

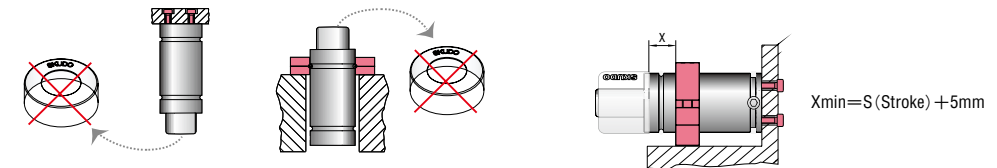


### Precautions

- Remove cover when using in following

- ① When fixing in the upper die
- ② When using FC, FCB, FCC, FCQ, FCQB plate.

When using the horizontal type plate (FSA, FSC, FSD), set the plate taking clearance of Xmin or more as illustrated below.



※ Always remove the cover when using the horizontal type plate, for following catalog No.

- GSSC750-6 GSSC1000-6 GSSC1800-6 GSSC4700-10 GSSC7500-10
- GSSC750-10 GSSC1000-10 GSSC1800-10