



# GAS SPRINGS

— GLOBAL STANDARD TYPE GSV —



RoHS

GSV

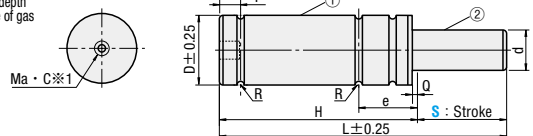
Please inquire separately when using GSV 170 - 320 with piping.

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 to avoid the Relief bushing is pushed down. **P.1448**

\*1 The mounting taps (Ma) for the GSV170/320 also operate as gas exhaust vents. Screwing in the mounting screws to a depth that exceeds that of the tap may cause of gas leakage.

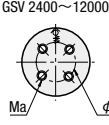
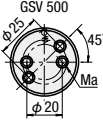
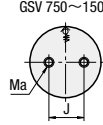
GSV 170 - 320



GSV 350  
GSV 750~1500

GSV 500

GSV 2400~12000



Do not use the screw hole to fix the gas spring with a bolt nor to install an extension pin. **P.1444**

Relief bush **P.1448**

Nitrogen gas charge pressure	MPa(kgf/cm <sup>2</sup> )
GSV 170~350	18(183.5)
GSV 500~20000	15(153)

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

Weight (kg)	D	D1	d	L	H	e	R	T	F	G	Ma Tap hole for mounting	J	Q	C	Load N (kgf)		Catalog No.	Adaptable plate	
															Initial load	Maximum load		Type	Initial load - S
0.06	19	17	11	44	37	17	1	6	-	-	1-M6×6	-	1	M6	1700 [173]	2800 [286]	FCC19	170 - 7	-
0.06				50	40											2800 [286]	FCC19	170 - 10	-
0.07				60	45											2800 [286]	FCC19	170 - 15	-
0.07				68	49											2800 [286]	FCC19	170 - 19	-
0.08				80	55											2800 [286]	FCC19	170 - 25	-
0.09				106	68											2800 [286]	FCC19	170 - 38	-
0.11				130	80											2800 [286]	FCC19	170 - 50	-
0.12				156	93											2800 [286]	FCC19	170 - 63	-
0.14				185	110											2800 [286]	FCC19	170 - 75	-
0.15				195	115											2800 [286]	FCC19	170 - 80	-
0.17				235	135											2800 [286]	FCC19	170 - 100	-
0.19				285	160											2800 [286]	FCC19	170 - 125	-
0.10	25	23	15	44	37	17	1	6	-	-	1-M6×6	-	1	M6	3200 [326]	4800 [488]	FCC25	320 - 7	-
0.10				50	40											4900 [500]	FCC25	320 - 10	-
0.11				60	45											5100 [520]	FCC25	320 - 15	-
0.12				68	49											5100 [520]	FCC25	320 - 19	-
0.13				80	55											5200 [530]	FCC25	320 - 25	-
0.15				106	68											5300 [540]	FCC25	320 - 38	-
0.17				130	80											5300 [540]	FCC25	320 - 50	-
0.19				156	93											5300 [540]	FCC25	320 - 63	-
0.22				185	110											5300 [540]	FCC25	320 - 75	-
0.23				195	115											5300 [540]	FCC25	320 - 80	-
0.26				235	135											5300 [540]	FCC25	320 - 100	-
0.30				285	160											5300 [540]	FCC25	320 - 125	-
0.16	32	27	16	50	40	12.5	1.05	6	4	3.5	2-M6×6	20	2	M6	3600 [367]	5900 [602]	FFC32	350 - 10	FSA32
0.17				56	43											5200 [530]	FFC32	350 - 13	FSD32
0.18				62	46											5300 [540]	FFC32	350 - 16	FSD32
0.19				68	49											5600 [571]	FFC32	350 - 19	FSD32
0.21				80	55											5500 [561]	FFC32	350 - 25	FSD32
0.23				94	62											5500 [561]	FFC32	350 - 32	FSD32
0.25				106	68											5500 [561]	FFC32	350 - 38	FSD32
0.29				130	80											5500 [561]	FFC32	350 - 50	FSD32
0.33				156	93											5500 [561]	FFC32	350 - 63	FSD32
0.36				180	105											5500 [561]	FFC32	350 - 75	FSD32
0.38				190	110											5500 [561]	FFC32	350 - 80	FSD32
0.44				230	130											5500 [561]	FFC32	350 - 100	FSD32
0.51	280	155	5500 [561]	FFC32	350 - 125	FSD32													
0.24	38	33	20	50	40	12.5	1.05	6	4	3.5	2-M6×6 (φ20) or 2-M6×6 (φ25)	-	2	M6	4700 [479]	7200 [734]	FFC38	500 - 10	FSA38
0.25				56	43											7100 [724]	FFC38	500 - 13	FSD38
0.26				62	46											7200 [734]	FFC38	500 - 16	FSD38
0.28				68	49											7400 [755]	FFC38	500 - 19	FSD38
0.31				80	55											7300 [744]	FFC38	500 - 25	FSD38
0.34				94	62											7200 [734]	FFC38	500 - 32	FSD38
0.37				106	68											7200 [734]	FFC38	500 - 38	FSD38
0.42				130	80											7200 [734]	FFC38	500 - 50	FSD38
0.48				156	93											7200 [734]	FFC38	500 - 63	FSD38
0.54				180	105											7100 [724]	FFC38	500 - 75	FSD38
0.61				190	110											7100 [724]	FFC38	500 - 80	FSD38
0.70				230	130											7100 [724]	FFC38	500 - 100	FSD38
0.77	280	155	7100 [724]	FFC38	500 - 125	FSD38													
0.36	45	40	25	52	42	16.5	1.05	6	4	3.5	2-M8×6	20	2	M6	7400 [755]	12100 [1234]	FB45	750 - 10	FSA45
0.38				58	45											12100 [1234]	FB45	750 - 13	FSD45
0.39				64	48											12100 [1234]	FB45	750 - 16	FSD45
0.41				70	51											11700 [1193]	FB45	750 - 19	FSD45
0.45				82	57											11800 [1203]	FB45	750 - 25	FSD45
0.50				96	64											11800 [1203]	FB45	750 - 32	FSD45
0.54				108	70											11800 [1203]	FB45	750 - 38	FSD45
0.61				132	82											11800 [1203]	FB45	750 - 50	FSD45
0.70				158	95											11800 [1203]	FB45	750 - 63	FSD45
0.77				182	107											11900 [1213]	FB45	750 - 75	FSD45
0.81				192	112											11900 [1213]	FB45	750 - 80	FSD45
0.93				232	132											11900 [1213]	FB45	750 - 100	FSD45
1.10	282	157	11900 [1213]	FB45	750 - 125	FSD45													

Weight (kg)	D	D1	d	L	H	e	R	T	F	G	Ma Tap hole for mounting	J	Q	C	Load N (kgf)		Catalog No.	Adaptable plate	
															Initial load	Maximum load		Type	Initial load - S
0.49	50	43	28	58	48	17.5	2.05	6	8	5	2-M8×6	20	3	M6	9200 [938]	13800 [1407]	1000 - 10	-	
0.51				64	51											13800 [1407]	1000 - 13	-	
0.54				70	54											13800 [1407]	1000 - 16	-	
0.56				76	57											14000 [1428]	1000 - 19	FB50	
0.61				88	63											14200 [1448]	1000 - 25	FBA50	
0.67				102	70											14500 [1478]	1000 - 32	FBB50	
0.71				114	76											14600 [1489]	1000 - 38	FFC50	
0.81				138	88											14700 [1499]	1000 - 50	FFCA50	
0.91				164	101											14700 [1499]	1000 - 63	FFC50	
1.05				188	113											14800 [1509]	1000 - 75	FFC50	
1.09				198	118											14800 [1509]	1000 - 80	FFC50	
1.21				238	138											14800 [1509]	1000 - 100	FFC50	
1.41	288	163	14800 [1509]	1000 - 125	FFC50														
0.92	63	56	36	70	57	19	2.05	6	8	5	2-M8×6	20	3	M6	15000 [1530]	24000 [2447]	1500 - 12	-	
0.96				76	60											24100 [2458]	1500 - 16	-	
0.99				82	63											24200 [2468]	1500 - 19	FB50	
1.06				94	69											24300 [2478]	1500 - 25	FBA50	
1.14				108	76											23800 [2427]	1500 - 32	FBB50	
1.21				120	82											23900 [2437]	1500 - 38	FFC63	
1.35				144	94											24000 [2447]	1500 - 50	FFCA63	
1.51				170	107											24100 [2458]	1500 - 63	FFC63	
1.65				194	119											24200 [2468]	1500 - 75	FFC63	
1.71				204	124											24200 [2468]	1500 - 80	FFC63	
1.94				244	144											24300 [2478]	1500 - 100	FFC63	
2.23				294	169											24300 [2478]	1500 - 125	FFC63	
1.36	75	67	45	77	61	21	2.55	6	8	5	4-M8×6	40	3	M6	24000 [2447]	38300 [3906]	2400 - 16	-	
1.40				83	64											38500 [3926]	2400 - 19	-	
1.50				95	70											38700 [3946]	2400 - 25	FB75	
1.61				109	77											38600 [3936]	2400 - 32	FBA75	
1.70				121	83											38400 [3916]	2400 - 38	FBB75	
1.89				145	95											38200 [3897]	2400 - 50	FFC75	
2.09				171	108											38200 [3897]	2400 - 63	FFCA75	
2.28				195	120											38200 [3897]	2400 - 75	FFC75	
2.36				205	125											38200 [3897]	2400 - 80	FFC75	
2.67				245	145											38300 [4007]	2400 - 100	FFC75	
3.07				295	170											38300 [4007]	2400 - 125	FFC75	
2.76				95	87											60	90	74	24
2.83	96	77	63700 [6496]			4200 - 19	-												
2.98	108	83	60800 [6200]			4200 - 25	FB95												
3.16	122	90	64300 [6557]			4200 - 32	FBA95												
3.30	134	96	65800 [6710]			4200 - 38	FBB95												
3.60	158	108	67000 [6832]			4200 - 50	FFC95												
3.93	184	121	67800 [6914]			4200 - 63	FFCA95												
4.20	208	133	68000 [6934]			4200 - 75	FFC95												
4.35	218	138	68600 [6995]			4200 - 80	FFC95												
4.85	258	158	69100 [7046]			4200 - 100	FFC95												
5.47	308	183	69600 [7097]			4200 - 125	FFC95												
5.06	120	112	75			100	84	25.5	2.55	10.5	8	5	4-M10×13	80	3		G1/8	66000 [6730]	
5.17				106	87	91000 [9279]	6600 - 25									-			
5.42				118	93	93900 [9575]	6600 - 32									FB120			
5.69				132	100														