

# GAS SPRINGS

—SELECTIVE CHARGING PRESSURE TYPE—



RoHS

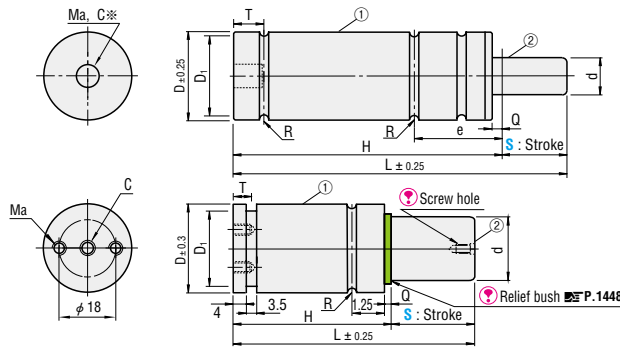
GSU



GSU50~200

GSU300

- When piping, connect the hose from the bottom. Please fix with upper plate fixing plate.
- 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**
- Do not use the screw hole to fix the gas spring with a bolt nor to install an extension pin. **P.1444**



※1 ※Ma (tap hole for mounting) can be used as gas charging port. Do not screw deeper than mentioned depth for mounting in order to avoid discharge of gas.  
 ① Cylinder body  
 M Equivalent to SCM440  
 S Black oxide (Fe<sub>3</sub>O<sub>4</sub>)  
 ② Piston rod  
 H Equivalent to SCM440  
 H 600HV ~ (Surface)  
 S Nitriding + Barrel finishing

※ The appearance changes as per the Color Code.

※2 D dimension tolerance K is GSU50-70:±0.1 GSU90-200:±0.25

Weight (kg)	D	D <sub>1</sub>	d	L	H	R	T	Ma Tap hole for mounting	Q	C Gas charge hole	Catalog No.		Load N (kgf)						Adaptable plate		
											Type	Initial load—S	Color Code	Initial load	Maximum load						
															OR	PR	GR	BU		RD	YW
0.03	12	10.4	6	56	49	0.8	6	M6×6	3	M6	GSU	50-7	—	—	166 [17]	320 [33]	486 [50]	640 [65]	FCC12		
0.03				50-10	—							—	173 [18]	333 [34]	505 [51]	665 [68]					
0.03				50-12.7	—							—	178 [18]	343 [35]	521 [53]	685 [70]					
0.03				50-15	GR							GR:	—	—	181 [18]	348 [35]	528 [54]	695 [71]			
0.03				50-19	(Green)							130 [13]	—	—	185 [19]	355 [36]	540 [55]	710 [72]			
0.03				50-25	BU							BU:	—	—	190 [19]	365 [37]	555 [57]	730 [74]			
0.04				50-38	(Blue)							250 [25]	—	—	195 [20]	375 [38]	570 [58]	750 [76]			
0.05				50-50	RD							RD:	—	—	198 [20]	380 [39]	578 [59]	760 [77]			
0.05				50-63.5	(Red)							380 [39]	—	—	194 [20]	373 [38]	566 [58]	745 [76]			
0.06				50-75	YW							YW:	—	—	196 [20]	378 [39]	574 [59]	755 [77]			
0.06				50-80	(Yellow)							500 [51]	—	—	199 [20]	383 [39]	581 [59]	765 [78]			
0.07				50-100	—							—	—	—	200 [20]	385 [39]	585 [60]	770 [79]			
0.08	50-125	—	—	—	—	223 [23]	434 [44]	620 [63]	868 [89]												
0.04	15	13.4	7	56	49	0.8	6	M6×6	3	M6	GSU	70-7	—	—	232 [24]	452 [46]	645 [66]	903 [92]	FCC15		
0.05				70-10	—							—	238 [24]	462 [47]	660 [67]	924 [94]					
0.05				70-12.7	—							—	241 [25]	469 [48]	670 [68]	938 [96]					
0.05				70-15	GR							GR:	—	—	247 [25]	480 [49]	685 [70]	959 [98]			
0.05				70-19	(Green)							180 [18]	—	—	250 [25]	487 [50]	695 [71]	973 [99]			
0.06				70-25	BU							BU:	—	—	257 [26]	501 [51]	715 [73]	1001 [102]			
0.07				70-38	(Blue)							350 [36]	—	—	261 [27]	508 [52]	725 [74]	1015 [104]			
0.08				70-50	RD							RD:	—	—	257 [26]	501 [51]	715 [73]	1001 [102]			
0.09				70-63.5	(Red)							500 [51]	—	—	261 [27]	508 [52]	725 [74]	1015 [104]			
0.10				70-75	YW							YW:	—	—	261 [27]	508 [52]	725 [74]	1015 [104]			
0.10				70-80	(Yellow)							700 [71]	—	—	261 [27]	508 [52]	725 [74]	1015 [104]			
0.12				70-100	—							—	—	—	265 [27]	515 [53]	735 [75]	1029 [105]			
0.14	70-125	—	—	—	—	266 [27]	518 [53]	740 [75]	1036 [106]												
0.07	19	17	8	56	49	1	5	M6×6	1	M6	GSU	90-7	OR	OR:	57 [6]	113 [12]	339 [35]	565 [58]	791 [81]	1017 [104]	FCC19 FC19
0.07				90-10	(Orange)							50 [5]	—	—	58 [6]	116 [12]	348 [35]	580 [59]	812 [83]	1044 [106]	
0.08				90-12.7	PR							PR:	—	—	60 [6]	120 [12]	360 [37]	600 [61]	840 [86]	1080 [110]	
0.08				90-15	(Purple)							100 [10]	—	—	62 [6]	124 [13]	372 [38]	620 [63]	868 [89]	1116 [114]	
0.09				90-25	GR							GR:	—	—	64 [7]	127 [13]	381 [39]	635 [65]	889 [91]	1143 [117]	
0.11				90-38.1	(Green)							300 [31]	—	—	64 [7]	127 [13]	381 [39]	635 [65]	889 [91]	1143 [117]	
0.12				90-50	BU							BU:	—	—	64 [7]	128 [13]	384 [39]	640 [65]	896 [91]	1152 [117]	
0.14				90-63.5	(Blue)							500 [51]	—	—	64 [7]	127 [13]	381 [39]	635 [65]	889 [91]	1143 [117]	
0.15				90-80	RD							RD:	—	—	65 [7]	129 [13]	387 [39]	645 [66]	903 [92]	1161 [118]	
0.17				90-100	(Red)							700 [71]	—	—	65 [7]	130 [13]	390 [40]	650 [66]	910 [93]	1170 [119]	
0.20				90-125	YW							YW:	—	—	66 [7]	131 [13]	393 [40]	655 [67]	917 [94]	1179 [120]	

※ Initial load is the value when the enclosed pressure is maximum.

※ 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	D <sub>1</sub>	d	L	H	R	T	Ma Tap hole for mounting	Q	C Gas charge hole	Catalog No.		Load N (kgf)						Adaptable plate		
											Type	Initial load—S	Color Code	Initial load	Maximum load						
															OR	PR	GR	BU		RD	YW
0.12	25	23	12	56	49	1	5	M6×6	1	M6	GSU	200-7	OR	OR:	197 [20]	325 [33]	580 [59]	1160 [118]	1740 [178]	2320 [237]	FCC25 FC25
0.13				200-10	(Orange)							170 [17]	—	—	204 [21]	336 [34]	600 [61]	1200 [122]	1800 [184]	2400 [245]	
0.13				200-12.7	PR							PR:	—	—	209 [21]	344 [35]	615 [63]	1230 [125]	1845 [188]	2460 [251]	
0.14				200-15	(Purple)							280 [29]	—	—	211 [22]	347 [35]	620 [63]	1240 [126]	1860 [190]	2480 [253]	
0.16				200-25	GR							GR:	—	—	219 [22]	361 [37]	645 [66]	1290 [132]	1935 [197]	2580 [263]	
0.19				200-38.1	(Green)							500 [51]	—	—	226 [23]	372 [38]	665 [68]	1330 [136]	1995 [203]	2660 [271]	
0.20				200-50	BU							BU:	—	—	230 [23]	378 [39]	675 [69]	1350 [138]	2025 [206]	2700 [273]	
0.23				200-63.5	(Blue)							1000 [102]	—	—	228 [23]	375 [38]	670 [68]	1340 [137]	2010 [205]	2680 [270]	
0.26				200-80	RD							RD:	—	—	231 [24]	381 [39]	680 [69]	1360 [139]	2040 [208]	2720 [277]	
0.30				200-100	(Red)							1500 [153]	—	—	233 [24]	384 [39]	685 [70]	1370 [140]	2055 [210]	2740 [279]	
0.34				200-125	YW							YW:	—	—	235 [24]	386 [39]	690 [70]	1380 [141]	2070 [211]	2760 [281]	
0.21				32	27							15	56	49	1	—	2-M6×8	2	M6	GSU	
0.22	300-10	(Green)	800 [82]			—	—	976 [100]	1952 [199]	2928 [299]	3904 [398]										
0.23	300-12.7	BU	BU:			—	—	1000 [102]	2000 [204]	3000 [306]	4000 [408]										
0.24	300-15	(Blue)	1600 [163]			—	—	1040 [106]	2080 [212]	3120 [318]	4160 [424]										
0.26	300-25	RD	RD:			—	—	1064 [108]	2128 [217]	3192 [325]	4256 [434]										
0.30	300-38	(Red)	2400 [245]			—	—	1080 [110]	2160 [220]	3240 [330]	4320 [441]										
0.39	300-50	YW	YW:			—	—	1072 [109]	2144 [219]	3216 [328]	4288 [437]										
0.44	300-63.5	(Yellow)	3200 [326]			—	—	1088 [111]	2176 [222]	3264 [333]	4352 [444]										
0.50	300-80	—	—			—	—	1096 [112]	2192 [224]	3288 [335]	4384 [447]										
0.57	300-100	—	—			—	—	1096 [112]	2192 [224]	3288 [335]	4384 [447]										

## Nitrogen gas charge pressure MPa (kgf/cm<sup>2</sup>)

型式	Color Code					
	OR {Orange}	PR {Purple}	GR {Green}	BU {Blue}	RD {Red}	YW {Yellow}
GSU50	—	—	4.5 [45.9]	9 [91.7]	13.5 [137.6]	18 [183.4]
GSU70	—	—	4.5 [45.9]	9 [91.7]	13.5 [137.6]	18 [183.4]
GSU90	1 [10.2]	2 [20.4]	6 [61.6]	10 [101.9]	14 [142.7]	18 [183.4]
GSU200	1.5 [15.3]	2.5 [25.5]	4.5 [45.9]	9 [91.7]	13.5 [137.6]	18 [183.4]
GSU300	—	—	4.5 [45.9]	9 [91.7]	13.5 [137.6]	18 [183.4]

## Gas spring temperature range

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



Order

Catalog No.

GSU50-15-GR



Days to Ship

Quotation



Price

Quotation