

GAS SPRINGS

—SELECTIVE CHARGING PRESSURE TYPE—



RoHS

GSU

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 roller bushing is pushed down.

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

① M16 top hole for mounting pin to used as gas charging port. Do not screw deeper than mentioned depth for mounting in order to avoid discharge of gas.

② Dimension difference K is GSU50: 70 ±0.1 GSU300: 200 ±0.25

① Cylinder body
② Piston rod
③ Equivalent to SCM440
④ 600H17 - (Surface)
⑤ Black oxide (Fe/D)
⑥ Milling - (Surface)
⑦ Milling - Barrel finishing

① Ref. of roller bush **REF.P.1444**

① The appearance changes as per the Color Code.

Weight (kg)	D	D1	d	L	H	R	T	Ma Top hole for mounting	Q Gas charge hole	C Gas charge hole	Catalog No.	Initial load	Load N (kgf)						Adaptable plate		
													GR	PR	GR	BU	RD	YW			
0.03											50-7	—	—	166 (17)	320 (33)	486 (50)	640 (65)				
0.03											50-10	—	—	173 (18)	343 (34)	505 (51)	665 (68)				
0.03											50-12.7	—	—	178 (18)	343 (35)	521 (53)	685 (70)				
0.03											50-15	GR	190 (19)	—	181 (18)	349 (35)	528 (54)	685 (71)	FC12		
0.03											50-19	GR	190 (19)	—	185 (19)	355 (36)	540 (55)	710 (72)			
0.03											50-25	BU	190 (19)	—	190 (19)	365 (37)	555 (57)	730 (74)			
0.04	12	10.4	6					M6-6	3	M6	50-25.25	BU	195 (20)	—	195 (20)	375 (38)	570 (58)	750 (76)			
0.05											50-38	RD	198 (20)	—	198 (20)	380 (39)	578 (59)	760 (77)			
0.06											50-63.5	YW	194 (20)	—	194 (20)	373 (38)	568 (58)	745 (76)			
0.06											50-75	YW	196 (20)	—	196 (20)	378 (39)	574 (59)	755 (77)			
0.07											50-80	—	—	198 (20)	380 (39)	578 (59)	760 (77)				
0.08											50-100	—	—	199 (20)	383 (39)	581 (59)	765 (78)				
0.09											50-125	—	—	200 (20)	385 (39)	585 (60)	770 (78)				
0.04											70-7	—	—	223 (23)	434 (44)	620 (63)	868 (88)	FC15			
0.05											70-10	—	—	232 (24)	452 (46)	645 (66)	903 (92)				
0.05											70-12.7	—	—	238 (24)	462 (47)	660 (67)	924 (94)				
0.05											70-15	GR	190 (19)	—	241 (25)	469 (48)	670 (68)		938 (96)		
0.05											70-19	GR	190 (19)	—	247 (25)	480 (49)	685 (70)		959 (98)		
0.06											70-25	BU	190 (19)	—	250 (25)	487 (50)	695 (71)		973 (99)		
0.07											70-38	RD	190 (19)	—	257 (26)	501 (51)	715 (73)		1001 (102)		
0.08											70-63.5	YW	190 (19)	—	261 (27)	508 (52)	725 (74)		1015 (104)		
0.09											70-75	YW	190 (19)	—	261 (27)	508 (52)	725 (74)		1015 (104)		
0.10											70-80	—	—	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											90-7	—	—	57 (6)	113 (12)	339 (35)	565 (58)	791 (81)	1071 (104)	FC19	
0.07											90-10	—	—	58 (6)	116 (12)	348 (36)	580 (59)	812 (83)	1044 (106)		
0.08											90-12.7	GR	501 (51)	—	60 (6)	119 (12)	357 (36)	595 (61)	833 (85)		1071 (109)
0.08											90-15	PR	501 (51)	—	60 (6)	120 (12)	360 (37)	600 (61)	840 (86)		1080 (110)
0.09											90-25	GR	501 (51)	—	62 (6)	124 (13)	372 (38)	620 (63)	868 (89)		1116 (114)
0.11											90-38.1	BU	500 (51)	—	64 (7)	127 (13)	381 (39)	635 (65)	889 (91)		1143 (117)
0.12											90-50	BU	500 (51)	—	64 (7)	128 (13)	384 (39)	640 (65)	896 (91)		1152 (117)
0.14											90-63.5	RD	500 (51)	—	64 (7)	127 (13)	381 (39)	635 (65)	889 (91)		1143 (117)
0.15											90-80	YW	500 (51)	—	65 (7)	129 (13)	387 (39)	645 (66)	903 (92)		1161 (118)
0.17											90-100	YW	500 (51)	—	65 (7)	130 (13)	390 (40)	650 (66)	910 (93)		1170 (119)
0.20											90-125	—	—	66 (7)	131 (13)	393 (40)	655 (67)	917 (94)	1179 (120)		

① Initial load is the value when the indicated pressure is maximum.
 ② The Initial load (+10%) is value at 20°C. The maximum load is theoretical value under static condition. Load depends on temperature.
 ③ Load (kgf) = Load (N) × 0.101972 • Load (N) = Load (kgf) × 8.90665 • Nitrogen gas charge pressure (kgf/cm²) = MPa × 10.1972 • MPa = kgf/cm² × 0.0980665

Weight (kg)	D	D1	d	L	H	R	T	Ma Top hole for mounting	Q Gas charge hole	C Gas charge hole	Catalog No.	Initial load	Load N (kgf)						Adaptable plate		
													GR	PR	GR	BU	RD	YW			
0.12											200-7	—	—	197 (20)	325 (33)	580 (59)	1160 (118)	1740 (178)	2320 (237)	FC25 FC26	
0.13											200-10	—	—	204 (21)	336 (34)	600 (61)	1200 (123)	1800 (184)	2400 (245)		
0.13											200-12.7	GR	1701 (17)	—	209 (21)	344 (35)	615 (63)	1230 (125)	1845 (188)		2460 (251)
0.14											200-15	PR	2001 (20)	—	211 (22)	347 (35)	620 (63)	1240 (126)	1860 (190)		2480 (253)
0.16											200-25	GR	9001 (51)	—	219 (22)	361 (37)	645 (66)	1290 (131)	1935 (197)		2580 (263)
0.19	25	23	12	118.2	80.1			M6-6	1	M6	200-38.1	GR	1000 (102)	—	226 (23)	372 (38)	665 (68)	1330 (136)	1995 (203)		2660 (271)
0.20											200-50	BU	1500 (153)	—	230 (23)	378 (39)	675 (69)	1350 (138)	2025 (206)		2700 (275)
0.23											200-63.5	RD	1500 (153)	—	228 (23)	375 (38)	670 (68)	1340 (137)	2010 (205)		2680 (273)
0.26											200-80	YW	2000 (204)	—	231 (24)	381 (39)	680 (69)	1360 (139)	2040 (208)		2720 (277)
0.30											200-100	YW	3000 (304)	—	233 (24)	384 (39)	685 (70)	1370 (140)	2050 (210)		2740 (279)
0.34											300-7	—	—	—	—	—	—	—	—	FC30 FC32 FC33 FC34 FC35	
0.21											300-10	—	—	—	—	—	—	—	—		
0.22											300-12.7	GR	801 (82)	—	—	—	—	—	—		
0.24											300-15	BU	1600 (163)	—	—	—	—	—	—		
0.26											300-25	BU	1600 (163)	—	—	—	—	—	—		
0.30	32	27	15	118	80			1	—	2.46x6.8	2	M6	2400 (245)	—	—	—	—	—	—		
0.34											300-38.1	RD	1600 (163)	—	—	—	—	—	—		
0.34											300-50	RD	2400 (245)	—	—	—	—	—	—		
0.38											300-63.5	YW	3200 (326)	—	—	—	—	—	—		
0.50											300-80	YW	—	—	—	—	—	—	—		
0.57											300-100	—	—	—	—	—	—	—	—		
0.59											300-125	—	—	—	—	—	—	—	—		

Nitrogen gas charge pressure MPa (kgf/cm²)

Type	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