



GAS SPRINGS

-STANDARD TYPE-

• The GSP is the successor model to the GSZ.

RoHS

GSP GSQ (Main Body)
GSPH GSQH (HM Plate Set)
GSPF GSQF (FM Plate Set)

⊕ The GSP and GSQ has a bottom seal type safety device. The diameter of the counterbore holes must be set to at least D + 4 mm in order to ensure correct operation of the OSAS. Safety devices: **SE P.1447**
 ⊕ Please do not use gas springs in excess of the specified stroke range(S), as it may cause any troubles including gas leakage.
 ⊕ Do not use the screw hole(M) to fix the gas spring with a bolt nor to install an extension pin. **SE P.1443**
 ⊕ *1 The mounting taps (Ma) for the GSP19/25 also operate as gas exhaust vents.
 ⊕ *2 The outer diameter tolerance (D) for the GSP19 is D ±0.25.

GSP 19 · 25 **GSP 32~63**
GSQ32

Nitrogen Gas Charging Pressure	MPa (kgf/cm ²)
GSP 19	19.1 (195)
GSP 25	19.5 (199)
GSP 32	19.7 (201)
GSQ 32	21.0 (214)
GSP 38	20.5 (209)
GSP 50	20.9 (213)
GSP 63	18.9 (193)

Cylinder body Piston rod
M Equivalent to SCM440 **H** Equivalent to SCM440
S Black Oxide (Fe₃O₄) **6** 600 HV~ (Surface)
S Nitriding + Barrel finishing

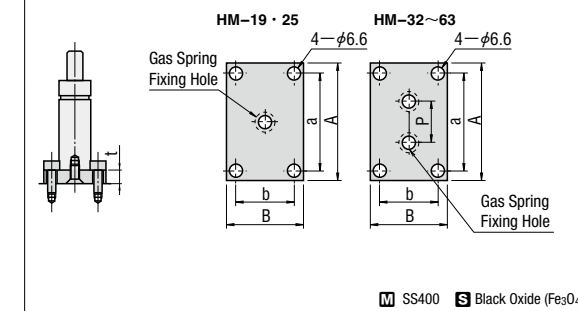
Weight (kg)	D	d	M	L	H	Q	h	K	Ma Tap hole for Mounting	J	Load N (kgf)		Catalog No.	
											Initial Load	Maximum Load	Type	D-S
0.09	19	10	M5	85	70	1	24	2	M6 × 8	-	1500	1935 (197)	19-15	
0.10				2013 (205)	19-20									
0.11				2074 (211)	19-25									
0.12				2126 (217)	19-32									
0.13				2129 (217)	19-38									
0.14				2161 (220)	19-45									
0.14				2189 (223)	19-50									
0.14				2184 (223)	19-56									
0.15				2204 (225)	19-63									
0.17				2302 (235)	19-80									
0.18	4624 (472)	25-15												
0.20	4890 (499)	25-20												
0.21	5096 (520)	25-25												
0.23	5240 (534)	25-32												
0.25	5196 (530)	25-38												
0.27	5289 (539)	25-45												
0.28	5380 (549)	25-50												
0.30	5331 (544)	25-56												
0.32	5388 (549)	25-63												
0.36	5545 (565)	25-80												
0.29	32	18	M8	75	65	2	26	2	M6 × 8	15	5000	6590 (672)	32-10	
0.31				7085 (722)	32-15									
0.33				7470 (762)	32-20									
0.34				7778 (793)	32-25									
0.37				8032 (819)	32-32									
0.40				8038 (820)	32-38									
0.43				8200 (836)	32-45									
0.45				8341 (851)	32-50									
0.48				8310 (847)	32-56									
0.52				8162 (832)	32-63									
0.59	8436 (860)	32-80												
0.37	38	25	M8	75	65	2	12	2	M6 × 8	20	10000	14165 (1444)	38-10	
0.39				15449 (1575)	38-15									
0.41				16446 (1677)	38-20									
0.44				17242 (1758)	38-25									
0.48				17894 (1825)	38-32									
0.51				17900 (1825)	38-38									
0.55				18315 (1868)	38-45									
0.58				18679 (1905)	38-50									
0.62				18592 (1896)	38-56									
0.70				17155 (1749)	38-63									
0.79	17916 (1827)	38-80												
0.76	50	35	M8	90	80	3	12	4	M8 × 12	20	20000	26407 (2693)	50-10	
0.89				26209 (2673)	50-15									
0.93				27799 (2835)	50-20									
0.98				29222 (2980)	50-25									
1.04				30804 (3141)	50-32									
1.11				31591 (3221)	50-38									
1.18				32752 (3340)	50-45									
1.22				33611 (3427)	50-50									
1.29				34036 (3471)	50-56									
1.36				34858 (3555)	50-63									
1.51	36737 (3746)	50-80												
1.25	63	45	M8	95	85	3	11	5	M8 × 12	20	30000	38618 (3938)	63-10	
1.40				39321 (4010)	63-15									
1.46				41648 (4247)	63-20									
1.52				43703 (4456)	63-25									
1.62				45929 (4683)	63-32									
1.72				46963 (4789)	63-38									
1.82				48559 (4952)	63-45									
1.89				49746 (5073)	63-50									
2.08				51368 (5238)	63-63									
2.31				53891 (5495)	63-80									

⊕ The Initial Load (±10%) is value at 20°C. The maximum load is theoretical value under static condition. Load depends on temperature. ⊕ For fixing the GSP32-63 and GSQ32, make sure to use the mounting holes (Ma) and two bolts.
 ⊕ Cannot be refilled or adjusted (pressure). • Load (kgf) = Load N × 0.101972 • Load (N) = Load kgf × 9.80665 • Nitrogen Gas Charge Pressure kgf/cm² = MPa × 10.1972 MPa = kgf/cm² × 0.0980665

Weight (kg)	D	d	M	L	H	Q	h	k	Ma Tap hole for Mounting	J	Load N (kgf)		Catalog No.	
											Initial Load	Maximum Load	Type	D-S
0.29	32	20	6	75	65	2	10.5	2	M6 × 9	15	6600	9871 (1007)	GSQ	32-10
0.31				10837 (1105)	32-15									
0.33				11598 (1183)	32-20									
0.35				12140 (1238)	32-25									
0.38				12559 (1281)	32-32									
0.41				12464 (1271)	32-38									
0.44				12732 (1298)	32-45									
0.46				12988 (1324)	32-50									
0.49				12866 (1312)	32-56									
0.53				12505 (1275)	32-63									
0.60	12998 (1325)	32-80												



GSPH (Product Set) **HM** (Individual Plate Product)
GSQH (Product Set)



Accessory Bolt	A	B	a	b	P	t	Catalog No.
FB6-16 × 1	38	28	28	18	-	9	19
	44	28	34	18			25
FB6-16 × 2	51	32	41	22	15	9	32
	57	38	47	28			38
FB8-20 × 2	69	50	59	40	20	9	50
	84	65	70	50			63

GSQ32
 The GSQ32 features a 32% higher initial load than the GSP32.
 The outer diameter and mounting holes etc., are all fully compatible between the two models.

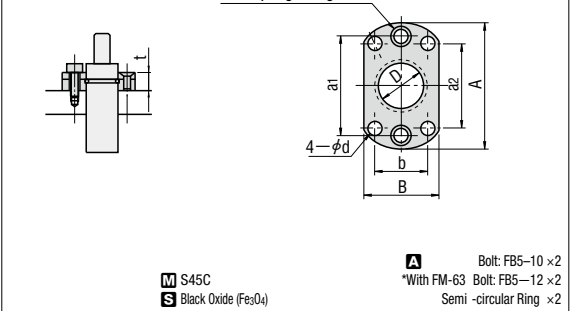
Gas Spring Temperature Range
 Please ensure that the surface temperature of the gas spring does not exceed 80°C.

Order **Catalog No.**
GSP 32-25
GSPH 38-38
HM- 32

Days to Ship **Quotation**



GSPF (Product Set) **FM** (Individual Plate Product)
GSQF (Product Set)



Accessory Bolt	A	B	a ₁	a ₂	b	d	t	Catalog No.
FB6-16 × 1	44	28	33	28	18	6.6	11	19
	50	30	38	34	18			25
	57	39	46	40	22			32
FB6-16 × 2	63	46	53	45	26	6.6	11	38
	75	58	64	54	34			50
FB8-20 × 2	98	76	86	74	40	9.0	13	63

FM (Individual Plate Product)
 Bolt: FB5-10 × 2
 *With FM-63 Bolt: FB5-12 × 2
 Semi-circular Ring × 2