




# GAS SPRINGS

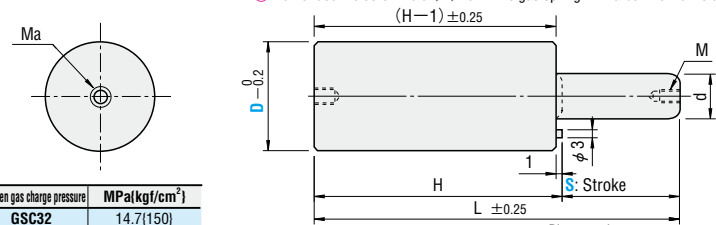
— SHORT TYPE —

**RoHS**



**GSC** (Main body)  
**GSCB** (BM plate set)

⚠ 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 contact with the overstroke check pin.  
⚠ Do not use the screw hole (M) to fix the gas spring with a bolt nor to install an extension pin. **P.1444**



$(H-1) \pm 0.25$   
 $D \pm 0.2$   
 $H$   
 $L \pm 0.25$   
 $S$ : Stroke  
 $M$


Nitrogen gas charge pressure	MPa(kgf/cm <sup>2</sup> )
<b>GSC32</b>	14.7(150)
<b>GSC38</b>	19.7(201)
<b>GSC50</b>	21.2(216)
<b>GSC63</b>	15.9(162)

Cylinder body: **M** SACM645, **H** Equivalent to SCM440, **S** Black oxide (Fe<sub>3</sub>O<sub>4</sub>)  
 Piston rod: **M** SACM645, **H** 1000HV~(Surface), **S** Nitriding+Barrel finishing

Weight (kg)	D	d	M	L	H	Ma Tap hole for mounting	Load N (kgf)		Catalog No.										
							Initial load	Maximum load											
0.21	32	18	M6	55	45	M6×8	3750 (382)	6710 (684)	GSC (Main body)										
0.23										32-10									
0.24											32-15								
0.26												32-20							
0.28													32-25						
0.30														32-32					
0.32															32-38				
0.33																32-45			
0.36																	32-50		
0.38																		32-56	
0.43																			32-63
0.29																			
0.32	38-10																		
0.34		38-15																	
0.36			38-20																
0.39				38-25															
0.42					38-32														
0.45						38-38													
0.47							38-45												
0.49								38-50											
0.53									38-56										
0.60										38-63									
0.61											38-80								
0.64												50-10							
0.72	50-15																		
0.81		50-25																	
0.91			50-38																
1.13				50-50															
0.80					50-80														
0.86						63-5													
0.96							63-10												
1.06								63-15											
1.20									63-25										
1.33										63-38									
1.70											63-50								
1.89												63-80							
	63-100																		

⚠ The initial load and maximum load vary depending on the temperature and operation speed. The load error is ±10%. ● 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

**RoHS**

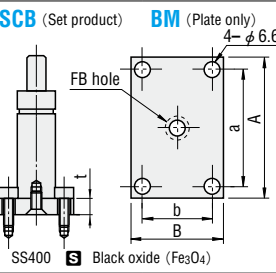


**GSCB** (Set product) **BM** (Plate only)

⚠ Shot limit: Number of shots per minute. The shot limit may be affected by the operating environment. The figures shown here are for reference only.

⚠ Gas spring temperature range: The operating environment temperature range is 0~40°C. Ensure that the surface temperature of the gas spring does not exceed 70°C.

⚠ GSC load characteristic graph: This graph shows the quasi-static characteristics. Actual characteristics vary depending on temperature and operation speed.




$A$ : Provided bolts,  $B$ : a,  $b$ : t,  $C$ : Catalog No.  
 FB 6-16X1 piece 51 32 41 22 **32**  
 FB 8-20X1 piece 57 38 47 28 **38**  
 FB10-20X1 piece 69 50 59 40 **50**  
 FB10-20X1 piece 82 63 72 53 **63**

Stroke (mm)	Shot limit (spm)											
	10	15	20	25	32	38	45	50	56	63	80	100
500	330	250	200	156	130	110	100	90	80	60	50	50

# GAS SPRINGS

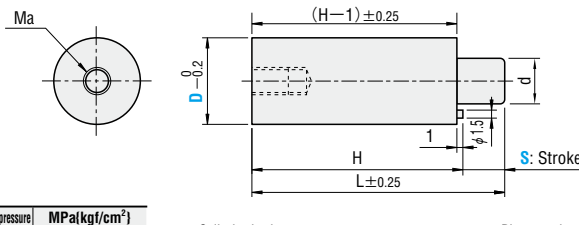
— HEAVY LOAD MINI TYPE —

**RoHS**



**MGSC**

⚠ 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 contact with the overstroke check pin.



$(H-1) \pm 0.25$   
 $D \pm 0.2$   
 $H$   
 $L \pm 0.25$   
 $S$ : Stroke  
 $M$

Nitrogen gas charge pressure	MPa(kgf/cm <sup>2</sup> )
<b>MGSC16</b>	20.0(204)
<b>MGSC19</b>	21.6(220)
<b>MGSC25</b>	20.4(208)

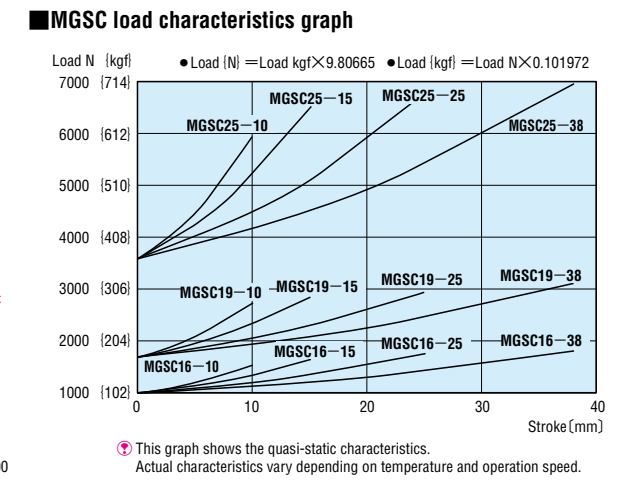
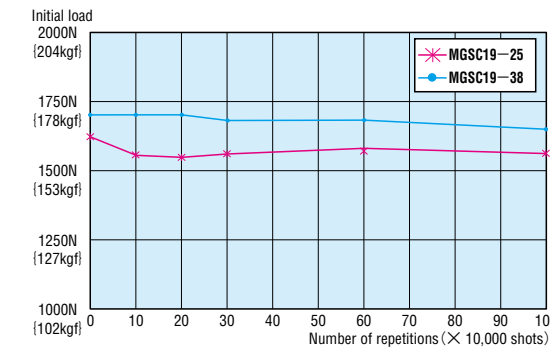
Cylinder body: **M** Equivalent to SCM440, **S** Black oxide (Fe<sub>3</sub>O<sub>4</sub>)  
 Piston rod: **M** SACM645, **H** 900HV~(Surface), **S** Nitriding+Polishing finish

Weight (kg)	D	d	L	H	Ma Tap hole for mounting	Load N (kgf)		Catalog No.		
						Initial load	Maximum load			
0.06	16	8	55	45	M5×7	1000 (102)	1550(158)	MGSC		
0.06									16-10	
0.07										16-15
0.07			16-25							
0.08				16-38						
0.09										
0.10	19-15									
0.11		19-25								
0.14					19-38					
0.15			25-10							
0.16				25-15						
0.18						25-25				
	25-38									

⚠ The initial load and maximum load vary depending on the temperature and operation speed. The load error is ±10%. ● 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

**Endurance test results**

Catalog No.	MGSC19-25	MGSC19-38
Amplitude	23mm	35mm
Excitation speed	120spm	65spm
Mounting direction	Upright	Upright



Order **Catalog No.** **MGSC 19-25**

Days to Ship **Quotation**

Price **Quotation**

**Shot limit**

Stroke (mm)	10	15	25	38
<b>MGSC</b> Shot limit (spm)	170	150	90	50

Shot limit: Number of shots per minute. The shot limit may be affected by the operating environment. The figures shown here are for reference only.

**Gas spring temperature range**  
 The operating environment temperature range is 0~40°C. Ensure that the surface temperature of the gas spring does not exceed 70°C.