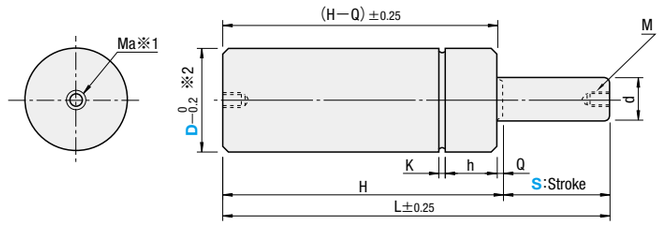
PRESS NEW Printed in Red GAS SPRINGS —MINI TYPE—

• The MGSL is the successor model to the MGSA.

RoHS

MGSL (Main Body)
MGSLH (H Plate Set)
MGSLF (F Plate Set)

※The MGSL25 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 Device Details 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. P.1443
※*1 The mounting taps (Ma) for the MGSL also operate as gas exhaust vents.
Screwing in the mounting screws to a depth that exceeds that of the tap is a major cause of gas leakages.
※*2 The outer diameter tolerance (D) for the MGSL19 is D $^{0}_{-0.2}$.



Nitrogen Gas Charging Pressure	MPa {kgf/cm²}
MGSL19	10.2 {104}
MGSL25	

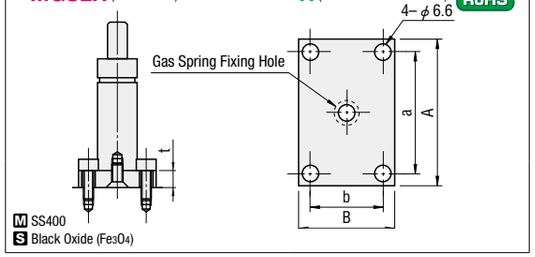
Cylinder body
M Equivalent to SCM440
S Black Oxide (Fe_3O_4)

Piston rod
M Equivalent to SCM440
H 600 HV~ (Surface)
S Nitriding + Barrel finishing

Weight (kg)	D	d	M	L	H	Q	h	K	Ma Tap hole for Mounting	Load N {kgf} Initial Load	Load N {kgf} Maximum Load	Catalog No. Type	Catalog No. D–S
0.08	19	10	M5	65	55	1	18	2 (R1)	M6 × 6	800 {82}	1043 {106}	MGSL (Main Body)	19-10
0.08				75	60						1103 {112}		19–15
0.09				95	70						1177 {120}		19-25
0.11				121	83						1231 {126}		19-38
0.12				145	95						1262 {129}		19-50
0.15				205	125						1304 {133}		19-80
0.15	25	14	M6	65	55	2	17	2 (R1)	M6 × 6	1600 {163}	2371 {242}	MGSLH (H Plate Set)	25-10
0.16				75	60						2528 {258}		25–15
0.18				95	70						2706 {276}	MGSLF (F Plate Set)	25-25
0.22				121	83						2825 {288}		25-38
0.25				145	95						2889 {295}		25-50
0.32				205	125						2973 {303}		25-80

※The Initial load (±10%) is value at 20°C. The maximum load is theoretical value under static condition. Load depends on temperature.
※Cannot be refilled or adjusted (pressure).
• Load {kgf} = Load N × 0.101972 • Load {N} = Load kgf × 9.80665
•Nitrogen Gas Charging Pressure kgf/cm² = MPa × 10.1972 MPa = kgf/cm² × 0.0980665

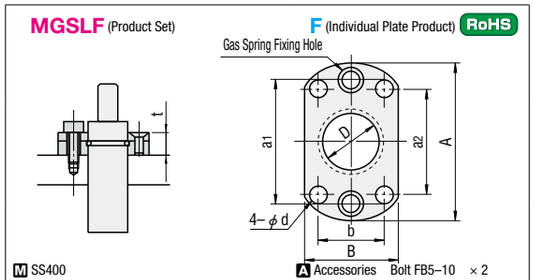
MGSLH (Product Set) **H** (Individual Plate Product) RoHS



M SS400
S Black Oxide (Fe_3O_4)

A Accessory Bolt	A	B	a	b	t	Catalog No.	
FB6–16 × 1	38	28	28	18	9	H	19
FB6–16 × 1	44		34				25

MGSLF (Product Set) **F** (Individual Plate Product) RoHS



M SS400
S Black Oxide (Fe_3O_4)
A Accessories Bolt FB5–10 × 2
Semi-circular Ring ×2

A	B	a_1	a_2	b	d	D	t	Catalog No.	
44	28	33	28	18	6.6	19	11	F	19
50	30	38	34			25			25

■ Gas Spring Temperature Range

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

Order

Catalog No.
MGSL 19–80
MGSLH 25-10
F–25

Days to Ship Quotation

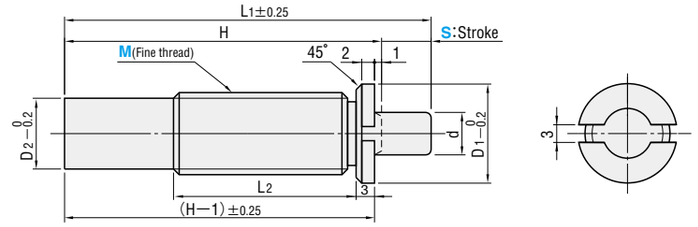
PRESS NEW GAS SPRINGS –THREADED TYPE–

• The MGSM is the successor model to the MGSB.

RoHS

MGSM

※Please do not use gas springs in excess of the specified stroke range(S), as it may cause any troubles including gas leakage.



Nitrogen Gas Charging Pressure	MPa {kgf/cm²}
MGSM12	12.0 {122}
MGSM16	10.1 {103}

Cylinder body
M Equivalent to SCM440
S Black Oxide (Fe_3O_4)

Piston rod
M Equivalent to SCM440
H 600 HV~ (Surface)
S Nitriding + Barrel finishing

Weight (kg)	D_1	D_2	d	L_1	H	M × P (Fine thread)	L_2	Load N {kgf} Initial Load	Load N {kgf} Maximum Load	Catalog No. Type	Catalog No. M–S
0.04	14	10.2	5	75	65	M12 × P1.25	27	400 {41}	595 {61}	MGSM	12–10
0.04				90	75				629 {64}		12–15
0.08	18	14.2	8	75	65	M16 × P1.5	37	800 {82}	1244 {127}		16–10
0.09				90	75				1334 {136}		16–15
0.10				120	95				1437 {147}		16–25

※The Initial load (±10%) is value at 20°C. The maximum load is theoretical value under static condition. Load depends on temperature.
※Cannot be refilled or adjusted (pressure).
• Load {kgf} = Load N × 0.101972 • Load {N} = Load kgf × 9.80665
• Nitrogen Gas Charging Pressure kgf/cm² = MPa × 10.1972 MPa = kgf/cm² × 0.0980665

■ Gas Spring Temperature Range

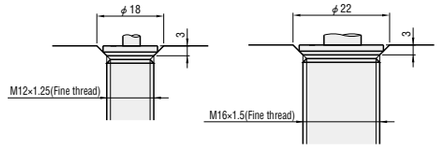
Please ensure that the surface temperature of the gas spring does not exceed 80°C.

Order

Catalog No.
MGSM 12–15

Days to Ship Quotation

■ How to Mount



Machine the mounting screws in the manner listed above and ensure the MGSM's flange and the mounting surface are in contact.
As well as preventing the flange part from spinning too much, this also stops it from coming loose so easily.
Mounting Wrench: Please use the **PJG** wrench.