

Magnetic Gripper – SGM

- Handling of ferromagnetic work-pieces only.
- Compact, heavy-duty aluminum housing with permanent magnet.
- Clip-on, easy to replace friction ring.
- Bistable design: the magnet settings “grip” and “release” are maintained in event of power loss. No electric power required.
- High shear forces can be achieved.
- Flexible mounting options.
- Double acting.



Magnetic Grippers

Quick#	Part#	Price	Holding Force*	Remaining Force	Operating Pressure	Operating Temp.	Wt.
1993	SGM-30-G18-IG	\$381.45	7.8 lbf	0.06 lbf	50.7–87 psi	41°–158°F	130g
1994	SGM-40-G14-IG	\$474.92	22.4 lbf				240g
1995	SGM-50-G14-IG	\$539.57	40.4 lbf				440g

***Note: The value given is a static value with no safety factor; based on a plate with a thickness of 2mm, with friction ring. For system configurations with magnetic grippers, a safety factor of S = 3 must be applied.**

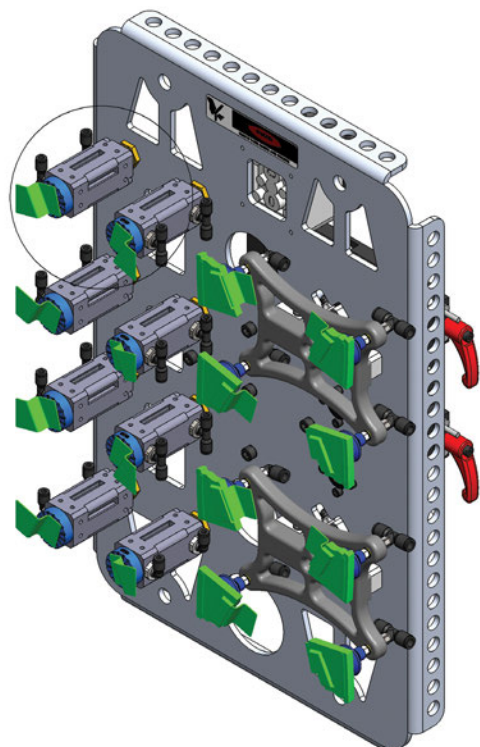
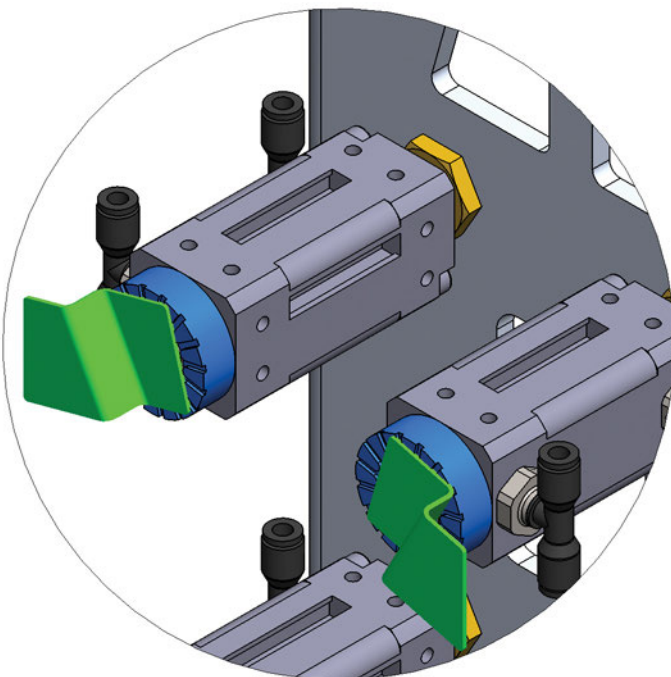
Replacement Friction Rings

Quick#	Part#	For:	Price
1996	SGM-30-RR	SGM-30	\$44.16
1997	SGM-40-RR	SGM-40	\$53.96
1998	SGM-50-RR	SGM-50	\$67.95

Mounting Extensions (see page 1065 for more information)

Quick#	Part#	Price	Thread	Tube Diameter	Length	Wt.
5750	MFI-A150	\$10.93	G1/8"	Ø14	45	15g
5751	MFI-A151	\$12.20	G1/8"	Ø14	90	25g
5752	MFI-A152	\$12.44	G1/4"	Ø20	45	30g
5753	MFI-A153	\$13.33	G1/4"	Ø20	90	55g

Application Examples

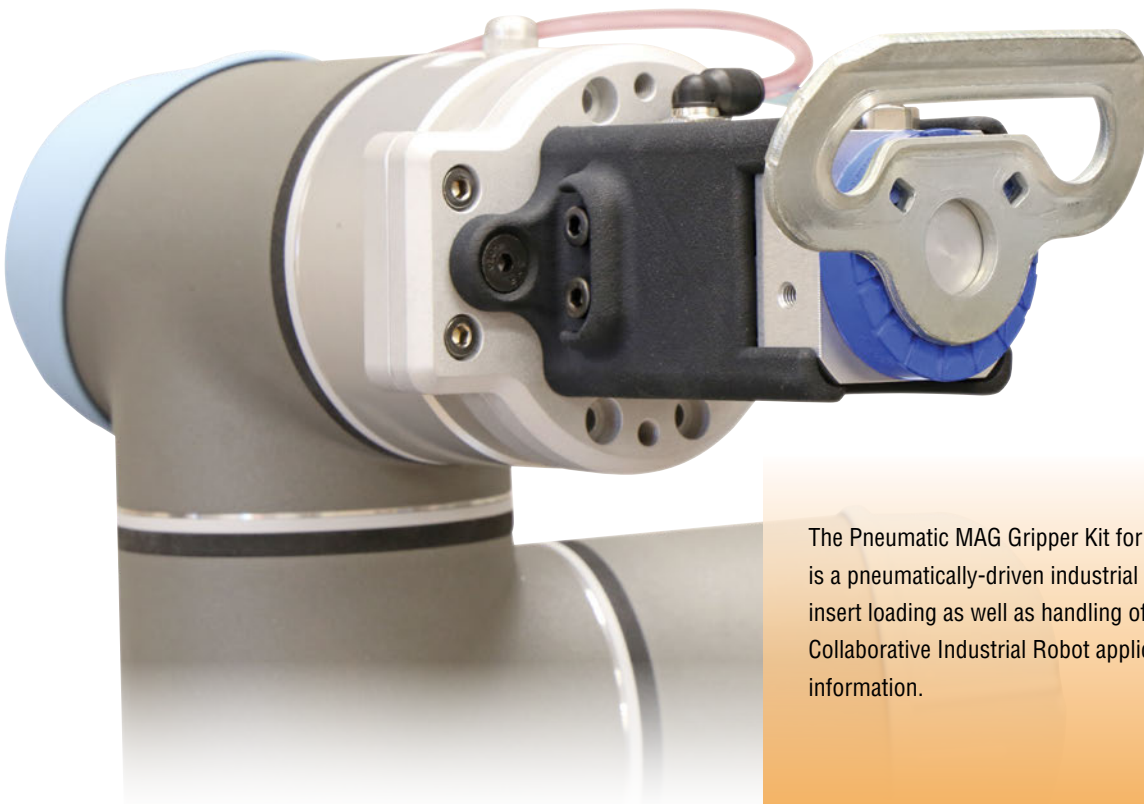
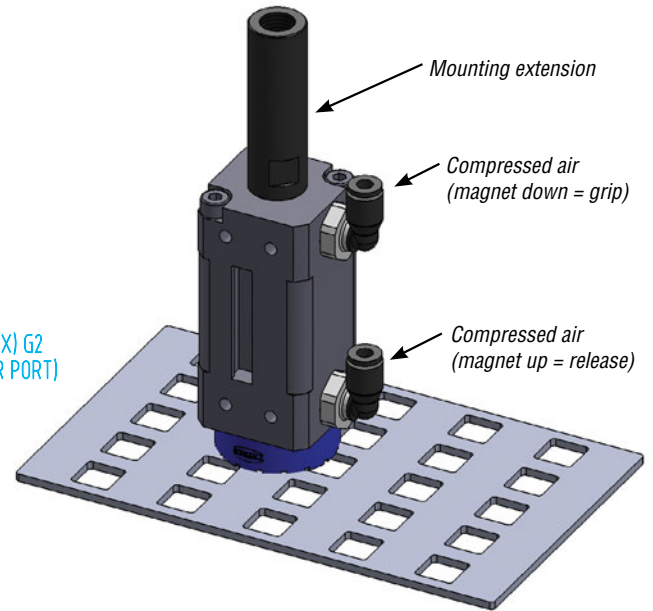
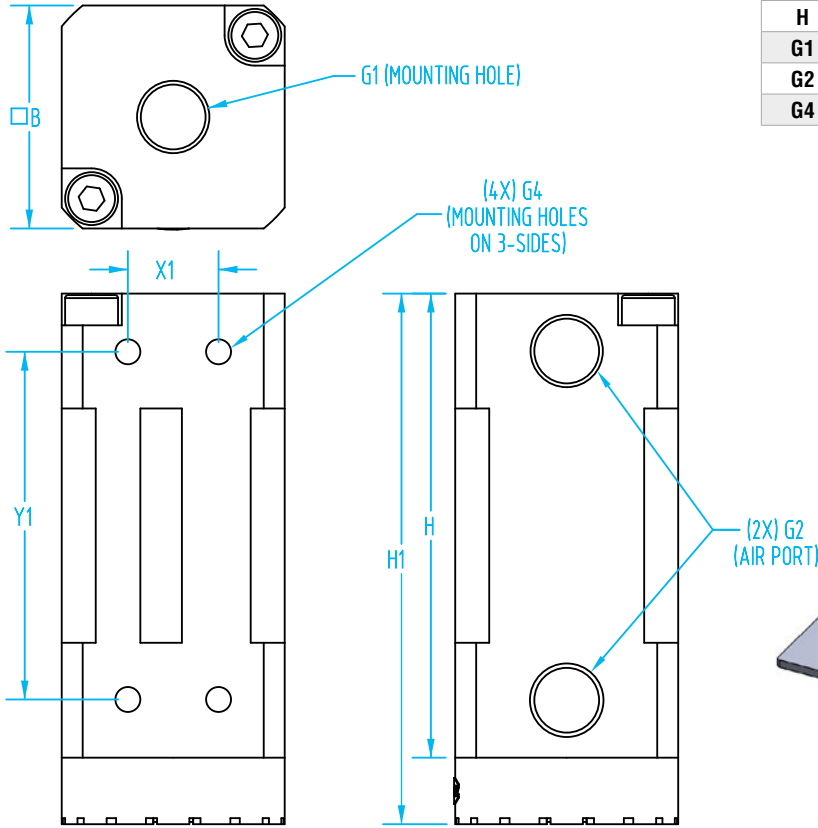


Magnetic Grippers – SGM

(SGM-30 Shown to Scale)

Ferromagnetic materials: Iron, Iron Alloys, Steel, Cobalt, Nickel
Non Ferromagnetic materials: Aluminum, Brass, Stainless Steel, Titanium, Copper

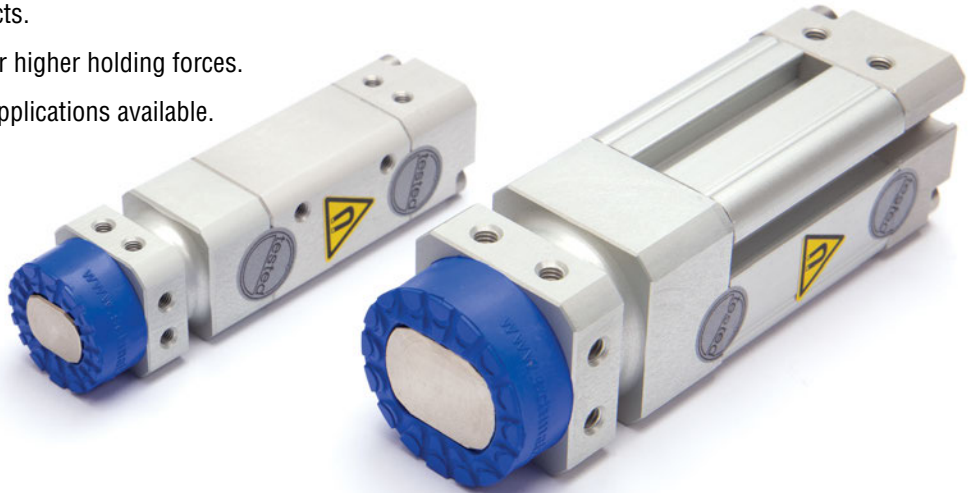
	SGM-30	SGM-40
B	30	40.6
X1	12	12
Y1	46	46
H1	70.2	70.2
H	61.4	61.4
G1	G1/8"	G1/4"
G2	G1/8"	G1/8"
G4	M4	M4



The Pneumatic MAG Gripper Kit for Industrial Cobots by EMI is a pneumatically-driven industrial magnetic gripper ideal for insert loading as well as handling of ferromagnetic work-pieces in Collaborative Industrial Robot applications. See page 177 for more information.

High Performance Magnetic Grippers – SGM

- Handling of ferromagnetic work-pieces only.
- Efficient new magnet gripper with very high holding forces for handling perforated plates, work-pieces with complex laser-cut patterns, and similar objects.
- Can be used without friction ring for higher holding forces.
- HT versions for high-temperature applications available.
- Other sizes available, contact EMI.



Magnetic Grippers

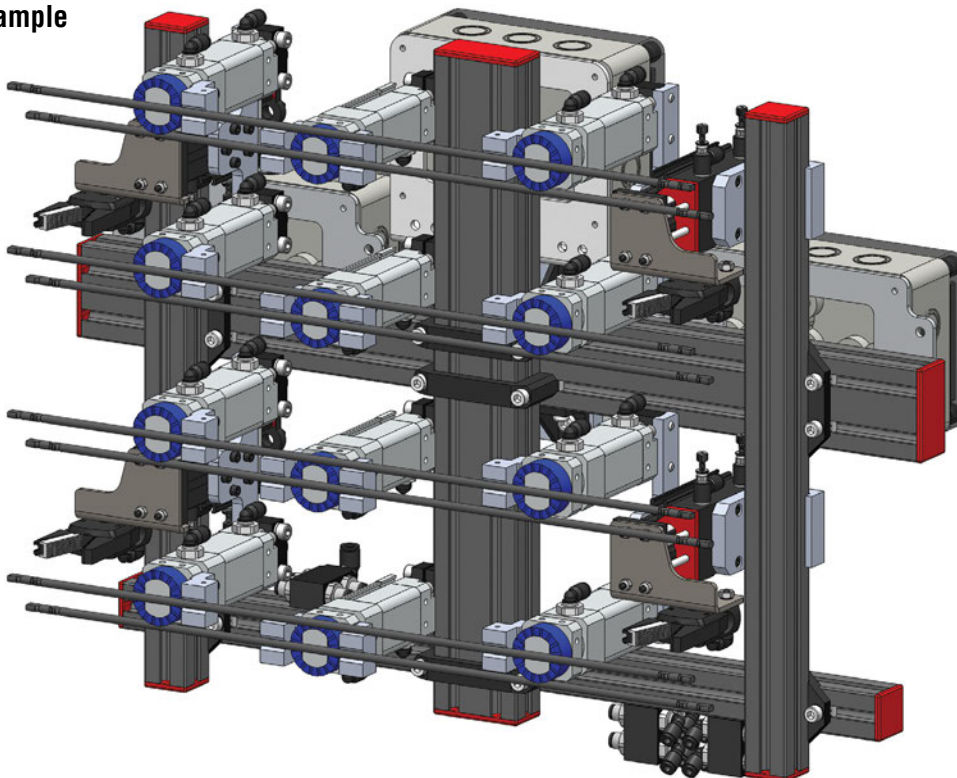
Quick#	Part#	Price	Holding Force*	Remaining Force	Operating Pressure	Operating Temp.	Wt.
1989	SGM-HP-20-G18-IG	\$446.19	4.2 lbf	0.06 lbf	50.7–87 psi	41°–158°F	81g
1990	SGM-HP-30-G18-IG	\$583.61	20.2 lbf				215g

***Note: The value given is a static value with no safety factor; based on a plate with a thickness of 2mm, with friction ring. For system configurations with magnetic grippers, a safety factor of S = 3 must be applied.**

Replacement Friction Rings

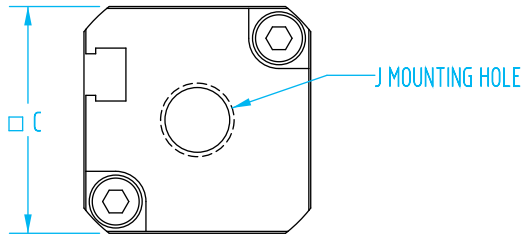
Quick#	Part#	For:	Price
1991	SGM-HP20-RR	SGM-HP-20	\$39.97
1992	SGM-HP30-RR	SGM-HP-30	\$43.55

Application Example



High Performance Magnetic Grippers – SGM

Ferromagnetic materials: Iron, Iron Alloys, Steel, Cobalt, Nickel
Non Ferromagnetic materials: Aluminum, Brass, Stainless Steel, Titanium, Copper



	#1989	#1990
A	78.2	99.4
B	69	88.7
C	20	30
D	M3	M4
E	6.5	12
F	55	74
G	10	9.7
H	M5	G1/8
J	G1/8	G1/8

