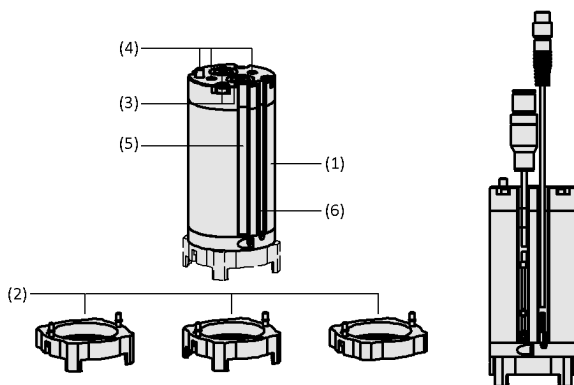


Magnetic Grippers SGM-SV-BY

Gripping surface (Ø): 46 mm



Magnetic Grippers SGM-SV-BY



System design Magnetic Grippers SGM-SV-BY



Magnetic gripper when handling round battery cells

Suitability for industry specific applications

Applications

- Handling of round cells with a diameter of 46 mm
- Process-safe gripping of charged and uncharged cells
- Round cells can be gripped at the top and bottom
- Handling of round cells with different heights
- Can be used in both cell production and module assembly

Design

- Robust aluminum housing with permanent magnet (1) with high gripping forces for handling round battery cells
- Interchangeable gripping elements with different numbers of guide teeth (2) for holding the round cells
- Bistable version: In the event of power failure at the compressed air connection (3), the solenoid position "grip" or "deposit" is maintained
- Mounting thread and centering pin on head side (4)
- Slot for mounting a sensor for monitoring the switching state of the gripper (5)
- Slot for mounting a sensor for component detection (6)

Product highlights

- High holding force for reliable handling of round cells, even in fast pick-and-place processes
- Short-circuit-proof contact thanks to gripping elements made of insulating plastics
- Guide teeth on the gripping element ensure precise positioning
- Loss protection in the event of power failure due to bistable permanent magnet
- Sensors for component presence and switching state

Magnetic Grippers SGM-SV-BY

Gripping surface (Ø): 46 mm

Ordering data Magnetic Grippers SGM-SV-BY

Type	Part no.
SGM-SV 46 4 BY M5-IG PNP	10.01.17.00748
SGM-SV 46 2 BY M5-IG PNP	10.01.17.00749
SGM-SV 46 0 BY M5-IG PNP	10.01.17.00750
SGM-SV 46 4 BY M5-IG	10.01.17.00751
SGM-SV 46 2 BY M5-IG	10.01.17.00752
SGM-SV 46 0 BY M5-IG	10.01.17.00753

Ordering data Spare parts Magnetic Grippers SGM-SV-BY

Type	Spare parts	Part no.
SGM-SV 46 4 BY M5-IG PNP	Proximity switch	NAEH-SCHA SIND 1 10-30V-DC
SGM-SV 46 2 BY M5-IG PNP	Proximity switch	NAEH-SCHA SIND 1 10-30V-DC
SGM-SV 46 0 BY M5-IG PNP	Proximity switch	NAEH-SCHA SIND 1 10-30V-DC

Type	Spare parts	Part no.
SGM-SV 46 4 BY M5-IG PNP	Gripping element SGM	GR-E SGM-SV46 4BY
SGM-SV 46 2 BY M5-IG PNP	Gripping element SGM	GR-E SGM-SV46 2BY
SGM-SV 46 0 BY M5-IG PNP	Gripping element SGM	GR-E SGM-SV46 0BY
SGM-SV 46 4 BY M5-IG	Gripping element SGM	GR-E SGM-SV46 4BY
SGM-SV 46 2 BY M5-IG	Gripping element SGM	GR-E SGM-SV46 2BY
SGM-SV 46 0 BY M5-IG	Gripping element SGM	GR-E SGM-SV46 0BY

Ordering data Accessories Magnetic Grippers SGM-SV-BY

Type	Accessories	Part no.
SGM-SV 46 4 BY M5-IG	Proximity switch	NAEH-SCHA SIND 1 10-30V-DC
SGM-SV 46 2 BY M5-IG	Proximity switch	NAEH-SCHA SIND 1 10-30V-DC
SGM-SV 46 0 BY M5-IG	Proximity switch	NAEH-SCHA SIND 1 10-30V-DC

Accessories	Part no.
GR-E SGM-SV46 4BY	Gripping element 4 guide teeth
GR-E SGM-SV46 2BY	Gripping element 2 guide teeth
GR-E SGM-SV46 0BY	Gripping element 0 guide teeth

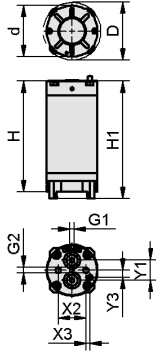
Technical data Magnetic Grippers SGM-SV-BY

Type	Holding force [N]	Remaining force [N]	Operating pressure	Installation position	Control valve	Additional function	Operating temperature	Weight [g]
SGM-SV 46 4 BY M5-IG PNP	72	0.5	3.5 ... 6.0 bar	Any	Bistable	Sensor PNP	5 ... 70 °C	460
SGM-SV 46 2 BY M5-IG PNP	72	0.5	3.5 ... 6.0 bar	Any	Bistable	Sensor PNP	5 ... 70 °C	460
SGM-SV 46 0 BY M5-IG PNP	72	0.5	3.5 ... 6.0 bar	Any	Bistable	Sensor PNP	5 ... 70 °C	459
SGM-SV 46 4 BY M5-IG	72	0.5	3.5 ... 6.0 bar	Any	Bistable	-	5 ... 70 °C	440
SGM-SV 46 2 BY M5-IG	72	0.5	3.5 ... 6.0 bar	Any	Bistable	-	5 ... 70 °C	440
SGM-SV 46 0 BY M5-IG	72	0.5	3.5 ... 6.0 bar	Any	Bistable	-	5 ... 70 °C	439

Magnetic Grippers SGM-SV-BY

Gripping surface (\emptyset): 46 mm

Design data Magnetic Grippers SGM-SV-BY



SGM-SV-BY

Magnetic Grippers SGM-SV-BY

Gripping surface (\emptyset): 46 mm

Design data Magnetic Grippers SGM-SV-BY

Type	D [mm]	d [mm]	G1	G2	H [mm]	H1 [mm]	X2 [mm]	X3 [mm]	Y1 [mm]	Y3 [mm]
SGM-SV 46 4 BY M5-IG PNP	52	46	M5-F	M6-F	100	106	25	3.5	18	6.5
SGM-SV 46 2 BY M5-IG PNP	52	46	M5-F	M6-F	100	106	25	3.5	18	6.5
SGM-SV 46 0 BY M5-IG PNP	52	46	M5-F	M6-F	100	-	25	3.5	18	6.5
SGM-SV 46 4 BY M5-IG	52	46	M5-F	M6-F	100	106	25	3.5	18	6.5
SGM-SV 46 2 BY M5-IG	52	46	M5-F	M6-F	100	106	25	3.5	18	6.5
SGM-SV 46 0 BY M5-IG	52	46	M5-F	M6-F	100	-	25	3.5	18	6.5