

Programmable. Flexible. Easy Assembly.

Programmable Magnetic Switch MMS-P

Magnetic switches are used for monitoring the position of automation components. They detect the approach of a magnet without contact and, above a certain switching threshold, enable their output.

Field of Application

Used for monitoring of gripping and rotary modules, linear modules, and robot accessories. Magnetic switches from SCHUNK detect metals without contact or wear, and are resistant to vibration, dust, and humidity. Magnetic switches are fitted in slots, and therefore do not form any additional interfering contours. For connection with a digital input module (utilization categorie DC-12).

Advantages – Your benefit

Installation into the sensor groove for space-saving, easy and fast assembly

Very flexible cable in PUR-version for a long service lifetime and resistance against many chemicals

Version with connector for fast and easy exchangeability of the extension cable

A programmable C-slot switch for two switching points

Programmable switching off hysteresis for exact positions

Version with LED-display for checking the switching position directly at the sensor



Options and special Information

Protection class as per DIN 40050 IP67 in plugged position for the use in clean or dusty environments or if contact with water is given. Functionability in case of contact with other mediums (coolant, acids, bases, etc.) is often given, however cannot be guaranteed by SCHUNK.

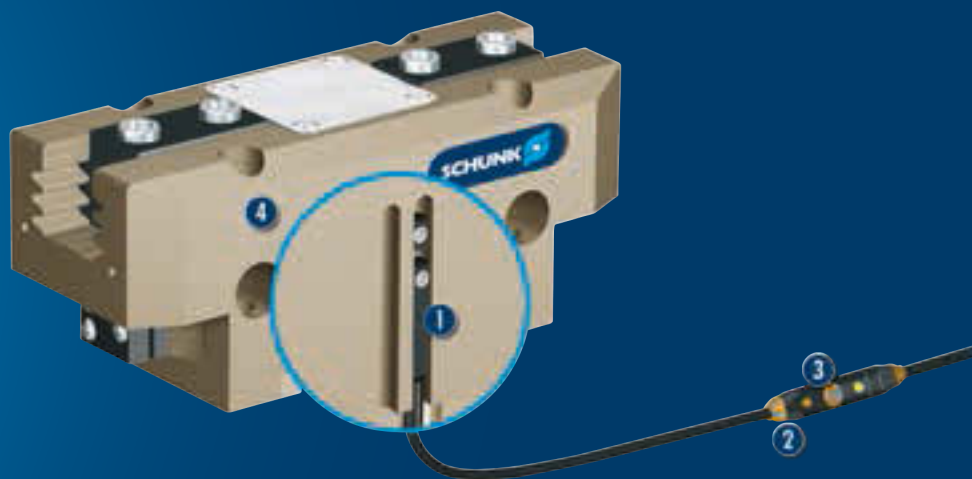
Power supply 10 – 30 V DC, residual ripple < 10%

Sources of interference. Sensors can be influenced by other magnetic fields in the immediate vicinity. Disturbing magnetic fields can be generated by motors, electric welders, permanent magnets or magnetized material (so-called soft magnets) such as allen keys, metal chips, etc.

Functional Description

One switch detects the two conditions "open" and "closed" – Therefore the costs for one switch can be saved. In contrast to conventional solutions, the switching point of the sensor is taught by pushing the button at the

current piston position. If the automatically determined standard switching hysteresis should be optimized, it can be newly programmed.



① Sensor of the MMS-P 22

② Electronics of the MMS-P 22

③ Key button for programming

④ Actuator with preset stop

SCHUNK offers more ...

The following components make the MMS-P even more productive – the perfect complement for highest functionality, flexibility, and process reliability.



Connector Clip



Sensor Cables



Sensor Distributor



Sensor Tester SST

① Further information regarding the products can be found on the following product pages or at www.schunk.com. Please contact us for further information: SCHUNK technical hotline +49-7133-103-2696



MMS-P 22

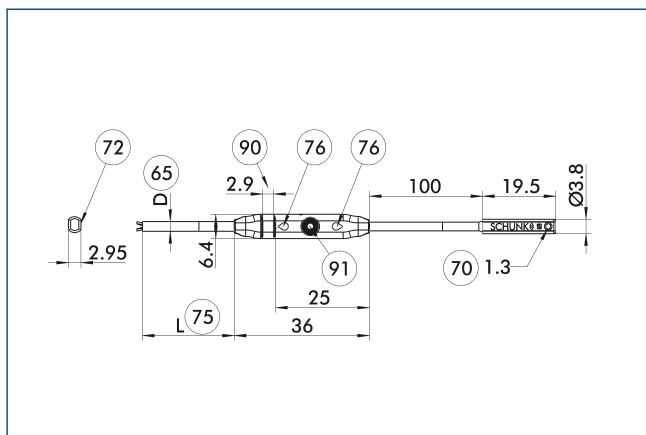
Accessories | Sensor System | Programmable Magnetic Switch



Technical data

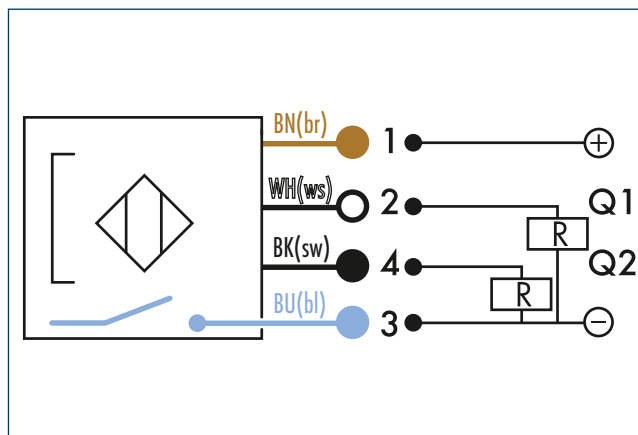
Description		MMS-P 22-S-M8-PNP	MMSK-P 22-S-PNP
ID		0301370	0301371
Switching function		Closer	Closer
Type of switching		PNP	PNP
Typical switching time	[s]	0.001	0.001
Product weight	[kg]	0.01	0.02
min. / max. ambient temperature	[°C]	5/55	5/55
IP class (sensor)		67	67
IP class (sensor connected)		67	67
LED display in sensor		yes	yes
Type of voltage		DC	DC
Nominal voltage	[V]	24	24
min. voltage	[V]	12	12
max. voltage	[V]	30	30
Voltage drop	[V]	2.2	2.2
max. switching current	[A]	0.1	0.1
Cable diameter D	[mm]	2.6	2.6
min. bending radius (dynamically)	[mm]	39	39
min. bending radius (statically)	[mm]	26	26
Number of wires		4	4
Wire cross section	[mm ²]	0.08	0.08
Cable length L	[cm]	60	200
Cable connector / cable end		M8	open wires

MMS-P main view

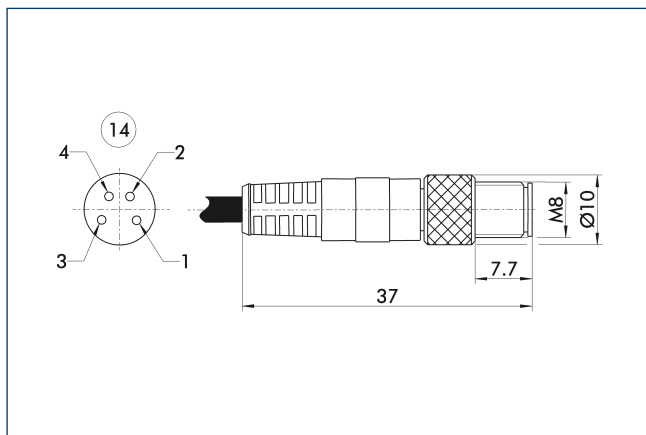


- ⑥5 Cable diameter
- ⑦0 Wrench size
- ⑦2 Active sensor surface
- ⑦5 Cable length
- ⑦6 LED
- ⑨0 Rib for cable connector
- ⑨1 Key button

Wiring diagram closer PNP

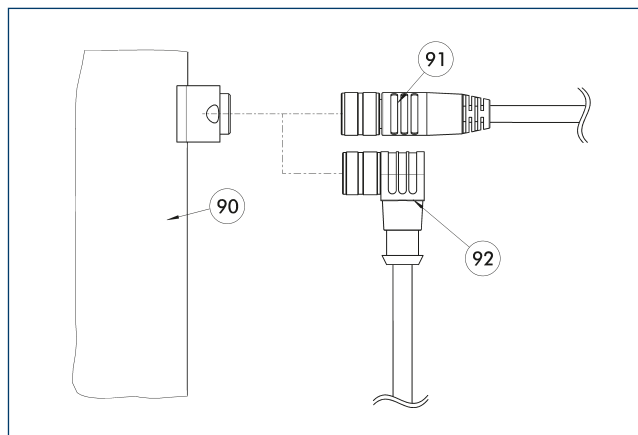


M8 4PIN Trapez connector



- ⑭ Connector

Cable connector / cable extension



- ⑨0 Connecting point for component
- ⑨1 Cable with straight connection
- ⑨2 Cable with angular connection

Description	ID	Length	Connection electric cabinet sided	often combined
Connection cables				
KA BG08-L 4P-0500	0307767	5 m	open wires	●
KA BG08-L 4P-1000	0307768	10 m	open wires	
KA BW08-L 4P-0500	0307765	5 m	open wires	
KA BW08-L 4P-1000	0307766	10 m	open wires	

① BG stands for a connection cable with a straight female connector and BW for an angled female connector.