

Superior Clamping and Gripping

Product Information

Programmable magnetic switches MMS 22-IO link

Reliable. Flexible. Easy.

Programmable magnetic switch MMS 22-IO-Link

A magnetic switch is used for monitoring the status of automation components.They detect the magnets fixed inside the component without contact. In addition to further process data, the sensor outputs the process of the magnetic field via the IO-Link interface.

Field of application

Used for monitoring SCHUNK grippers. The magnetic switch with IO-Link interface from SCHUNK detects magnets without contact and wear, and is resistant to vibrations, dust, and humidity. The magnetic switch is installed in a C-slot and therefore does not produce any additional interfering contour.



Advantages – Your benefits

Control via IO-Link for the evaluation of data such as temperature, evaluation quality or the sensor identification

Integrated electronics leads to a compact design and enables the use of cables with standard plug connectors

Suitable for narrow installation spaces due to teaching via IO-Link interface

Version with LED display is used to indicate the status of the IO-Link connection

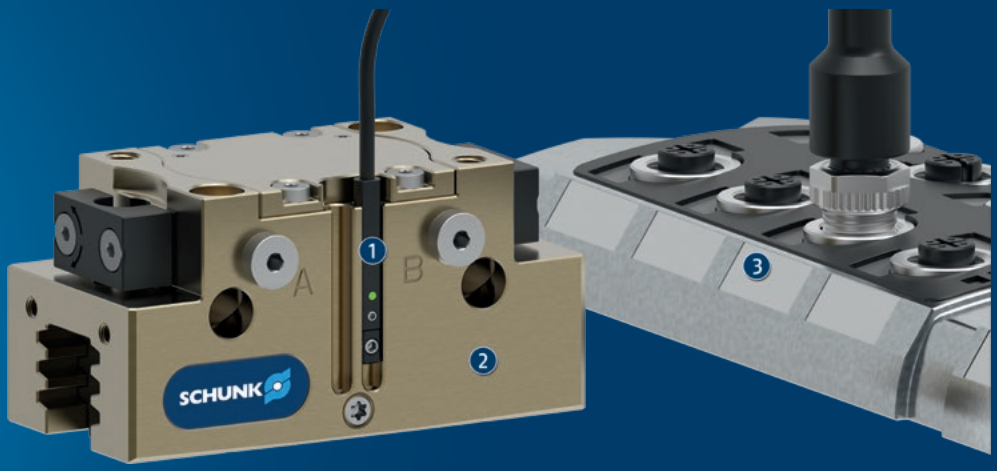
C-slot sensor for space-saving, easy, and fast assembly on the product

Options and special information

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 hexagon socket wrenches, chips, etc.

High protection class: IP67 when plugged in, for use in clean or dusty environments or in case of contact with water. Operability in case of contact with other media (coolant, acids, bases, etc.) is often given, however cannot be guaranteed by SCHUNK.

Application example



The application example shows the magnetic switch with IO-Link interface used on a pneumatic gripper.

① **Magnetic switch MMS 22-IO-Link**

② **2-finger parallel gripper PGN-plus-P**

③ **IO-Link master**

SCHUNK offers more ...

The following components make the product even more productive – the suitable addition for the highest functionality, flexibility, reliability, and controlled production.



2-finger parallel gripper PGN-plus-P



2-finger parallel gripper PGN-plus



2-finger parallel gripper MPG-plus



2-finger gripper for small components KGG

ⓘ For more information on these products can be found on the following product pages or at schunk.com.

MMS 22-IO link

Programmable magnetic switches

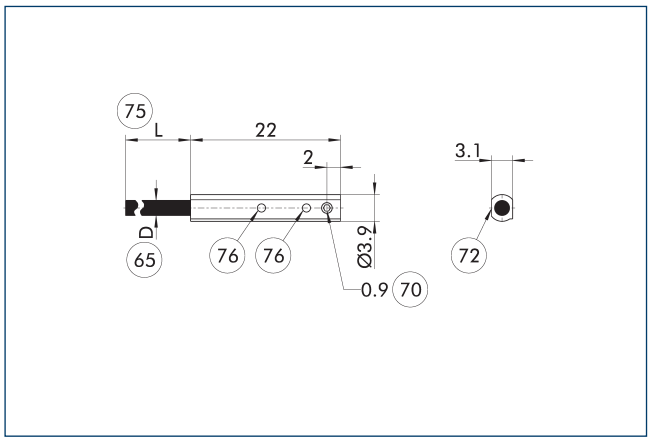


Technical data

Description		MMS 22-IOL-M08	MMS 22-IOL-M12
ID		0315830	0315835
General data			
Measuring principle		magnetic	magnetic
Teach function		yes	yes
Linearity	[%]	15	15
Repeat accuracy R of final value maximum		±3%	±3%
Min./max. ambient temperature	[°C]	5/55	5/55
LED display in sensor		yes	yes
Response time / typ. Switching time	[ms]	6	6
Electrical operating data			
Communication interface/ specification		IO-Link/V1.1	IO-Link/V1.1
Transmission rate		COM2	COM2
Port		Class A	Class A
Nominal voltage	[V]	24	24
Min./max. operating voltage	[V]	18/30	18/30
Max. ripple (% of Ue)		<2 % Vss	<2 % Vss
Type of voltage		DC	DC
Nominal current	[mA]	15	15
Short circuit protection		yes	yes
Protected against polarity reversal		yes	yes
Mechanical operating data			
Housing material		GV-5H (PA), black	GV-5H (PA), black
Cable connector/cable end		M8, 4-pin Male Connector	M12 connector, 4-pin
Cable length	[cm]	31	31
Cable diameter	[mm]	2.55	2.55
Cable design (wire cross section / number of wires)		4x 0,05mm2	4x 0,05mm2
Cable sheath material		PUR	PUR
Weight	[g]	10	12
IP protection class		67	67
Protection class		III	III
Drilling emulsion resistance *		yes	yes

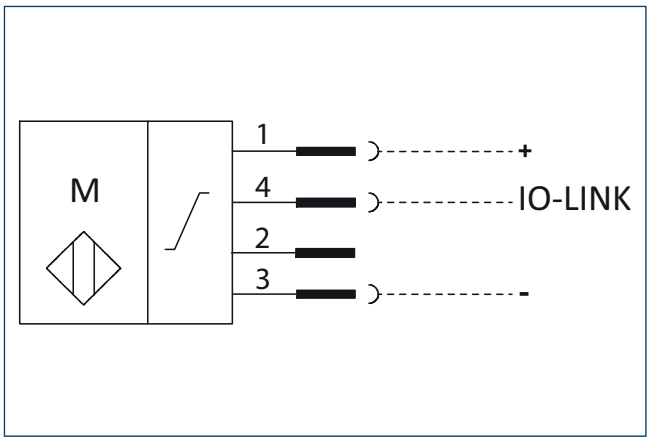
* Tested cutting emulsions: r.rhenus TU 43P, Motorex Swisscool Magnum UX 550 and Oemeta 760 (1008339).

MMS 22-IOL – main view



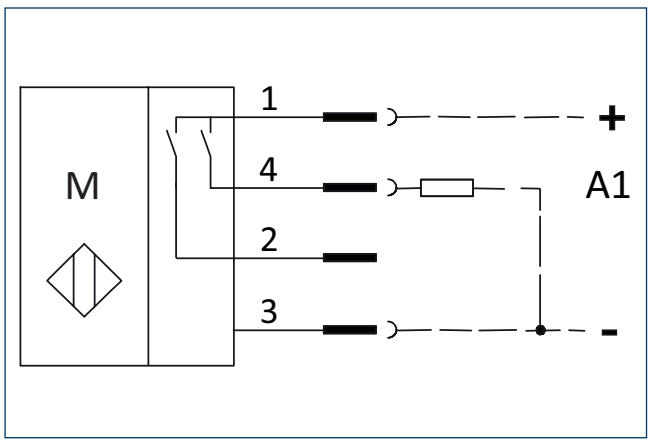
65 Cable diameter
70 Wrench size
72 Active sensor surface
75 Cable length
76 LED

Pin allocation IO-link mode



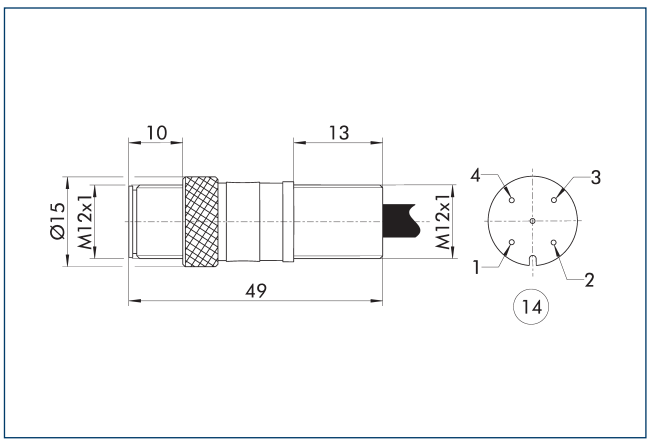
The connection diagram shows the sensor in IO-link mode.

Pin allocation SIO mode



The connection diagram shows the sensor in SIO-mode.

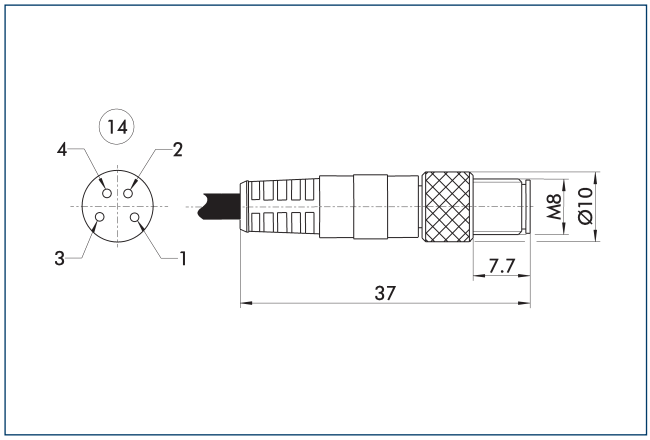
View of M12 connector (4-pin)



14 Connector

This view shows the plug connector on the cable end of the sensor.

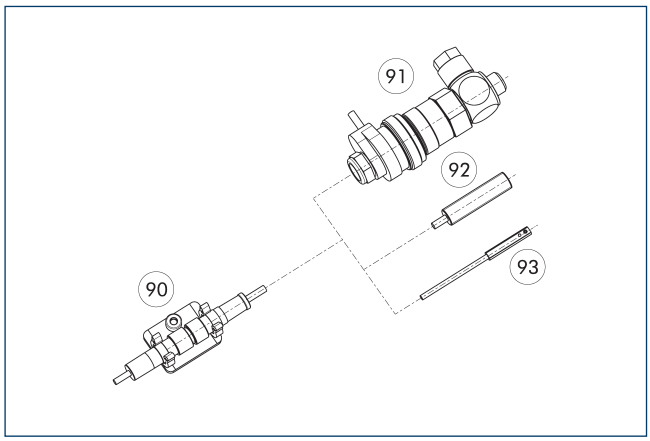
View M8 connector (4 pins)



14 Connector

This view shows the plug connector on the cable end of the sensor.

clip for plug/socket



90 CLI plug bracket
91 MV micro valve
92 IN proximity switch
93 Magnetic switch MMS

The CLI clip is used for fastening and strain relief for the plug connectors. For example for the sensor and cable extension connection.

Description	ID	
clip for plug/socket		
CLI-M12	0301464	
CLI-M8	0301463	

SCHUNK GmbH & Co. KG
Spann- und Greiftechnik

Bahnhofstr. 106 - 134
D-74348 Lauffen/Neckar
Tel. +49-7133-103-0
Fax +49-7133-103-2399
info@de.schunk.com
schunk.com

Folgen Sie uns | *Follow us*

2022-09-01 © 2022 SCHUNK GmbH & Co. KG