

GREATER VERSATILITY
An all-purpose magnetic switch



Simple – Reliable – Process-stable. You can save 90 % of your set-up time.

Programmed in just 15 seconds!

The universal MMS 22-PI1 magnetic switch from SCHUNK

With the new MMS 22-PI1, SCHUNK, the leading expert in automation, is offering a universal magnetic switch with a programmable switching point.

► **Individual switching point –
limited interfering contours**

The switching point is adjustable, and the switch in the C-slot does not have to be moved anymore.

The MMS 22-PI1 can always be completely inserted. There are no longer potential interferences caused by overhanging sensors!

► **Non-contact teaching –
Programming within seconds**

The switching points and hysteresis can be set up using the non-contact, magnetic teaching tool.

► **Adjustable hysteresis –
better control of the gripping process**

Allows for secure position monitoring even with very small strokes. The gripper can even distinguish between different sized workpieces.

► **Cable-based teaching – ideal for small spaces**

The cable-based teaching tool can either be installed permanently on the sensor distributor or connected as and when required for programming.



EXCEPTIONAL PRECISION FROM THE COMPETENCE LEADER.



- 1 Actuator
- 2 MMS 22-P11 C-slot sensor
- 3 Non-contact teaching tool
- 4 Cable-based teaching tool

Simple and reliable monitoring

Monitoring grippers during handling and assembly tasks will be much easier now. The MMS 22-P11 magnetic switch from SCHUNK has a programmable switching point, which makes it an all-purpose sensor. Instead of using various variants, one sensor will be enough. Spare parts re-stocking is reduced, and the user has more flexibility.

The switching point can be fully-customizable, and the detector in the C-slot does not have to be moved anymore. The MMS 22-P11 can always be completely inserted. There are no longer disturbing contours caused by over-hanging sensors! The resulting advantage is that the adapter plates do not require clearances to accommodate the switch.

Contact-free or wired teach tools

Instead of adjusting the switching points mechanically, the MMS 22-P11 can be programmed quickly. The required teach tool can be used as a wired or contact-free magnetic version.

For programming purposes the sensor is inserted into the actuator until the control LED illuminates. Then the teach tool is removed again and the gripper is directed into its target position. After putting on the teach tool again, this sequence is finished. Compared to conventional magnetic sensors, the operator saves up to 90 % set-up time.

Adjustable hysteresis

In order to increase process reliability, the release sensor point of the MMS 22-P11 can be programmed on demand, too. The teach tool is put on for five seconds, the gripper is placed into the position you want the signal to drop out at and the position is confirmed with the tool. The adjustable hysteresis allows even reliable position monitoring at very short strokes, and the gripper can differentiate workpieces of different sizes. The complete gripping process can be better evaluated and controlled.

Technical data

Description		MMS 22-P11
Switching function		1 Switching point
Cable length	[cm]	30 / 200
Cable connector/cable end		M8 / open wire strands
Type of voltage		DC
Nominal voltage	[V]	24
Min. voltage	[V]	10.0
Max. voltage	[V]	30.0
Voltage drop	[V]	1.5
Max. current on contact	[A]	0.05
Min. ambient temperature	[°C]	-10
Max. ambient temperature	[°C]	70
Typical switching time	[s]	0.001
IP rating (sensor)		67
IP rating (connector, plugged in)		67
Cable diameter	[mm]	2.1
Min. bending radius (dynamic)	[mm]	21
Min. bending radius (static)	[mm]	10.5
Number of wires		3
Wire cross section	[mm²]	0.14