

Proximity switch SMH

FESTO



Characteristics

At a glance

The position sensor SMH-S1 is specifically designed for position sensing on Festo grippers. An analogue electrical signal is generated in the position sensor depending on the gripper position. The conversion to 2 digital output signals (corresponding to 2 gripper jaw positions) is performed using signal converters SVE4. Freely selectable switching points

Position sensors matched to Festo grippers

Note: Sensors that detect magnetic fields, such as position sensors SMH, must not be fitted on the drive using mountings made from ferritic materials, as this can cause malfunctions. To ensure the functionality of the position sensor, the cable outlet and that of the compressed air tube must point in the same direction during installation.

Type code

001	Series
SMH-S1	Position sensor for gripper

002	Gripper type
HGD	Three-point gripper DHDS
HGP	Parallel gripper DHPS
HGR	Radial gripper DHRS
HGW	Angle gripper DHWS
HGPP	Parallel gripper HGPP

003	Gripper size
06	6
10	10
16	16
32	32
10/12	10/12
20/25	20/25

Datasheet

General technical data

Measured variable	Position
Measuring principle	Magnetic Hall
Design	For grippers
Type of mounting	Screwed to gripper
Mounting position	optional
CE mark (see declaration of conformity)	To EU EMC Directive, In accordance with EU RoHS Directive
CE marking (see declaration of conformity)	To UK RoHS instructions, To UK instructions for EMC

Output, further data

Output signal	Analogue
Overload protection	Not available
Short circuit current rating	no
Reverse polarity protection	no

Electrical data

Electrical connection 1, connection type	Cable with plug
Electrical connection 1, connector system	M8x1, A-coded, to EN 61076-2-104
Electrical connection 1, used connections/cores	4
Electrical connection 1, number of connections/cores	4
Connection outlet orientation	In-line
Cable length	0.5 m

Operating and ambient conditions


Ambient temperature	5 ... 60°C
LABS (PWIS) conformity	VDMA24364-B2-L
RoHS status	RoHS-compliant in accordance with EU directive
Corrosion resistance class CRC ¹⁾	2 - Moderate corrosion stress


1) More information www.festo.com/x/topic/kbk

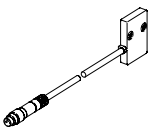
Material

Associated gripper	Three-point gripper DHDS-16-A	Parallel gripper DHPS-06-A	Radial gripper DHRS-10-A	Angle gripper DHWS-10-A	Parallel gripper HGPP-10 and HGPP-12	Parallel gripper HGPP-16	Parallel gripper HGPP-32	Parallel gripper HGPP-20 and HGPP-25
Material housing	Wrought aluminium alloy, Epoxy resin, Brass, nickel-plated, POM, PUR	Epoxy resin, Brass, nickel-plated, PUR			Epoxy resin, PA, POM, Brass, nickel-plated, PUR		Epoxy resin, PA, Brass, nickel-plated, POM, PUR	Epoxy resin, Brass, nickel-plated, PA, POM, PUR
Material electrical contact	Gold-plated brass							
Housing colour	—	Black						
Cable sheath colour	grey							

Ordering data

Ordering data HGD16				
	Associated gripper	Product weight	Part no.	Type
	Three-point gripper DHDS-16-A	30 g	175713	SMH-S1-HGD16

Ordering data HGPP				
	Associated gripper	Product weight	Part no.	Type
	Parallel gripper HGPP-10 and HG-PP-12	20 g	189040	SMH-S1-HGPP10/12
	Parallel gripper HGPP-16		189041	SMH-S1-HGPP16
	Parallel gripper HGPP-32		526895	SMH-S1-HGPP32
	Parallel gripper HGPP-20 and HG-PP-25		189042	SMH-S1-HGPP20/25

Ordering data HGP06, HGR10, HGW10				
	Associated gripper	Product weight	Part no.	Type
	Parallel gripper DHPS-06-A	20 g	175710	SMH-S1-HGP06
	Radial gripper DHRS-10-A		175712	SMH-S1-HGR10
	Angle gripper DHWS-10-A		175711	SMH-S1-HGW10