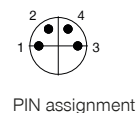
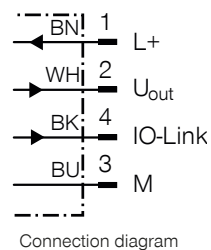
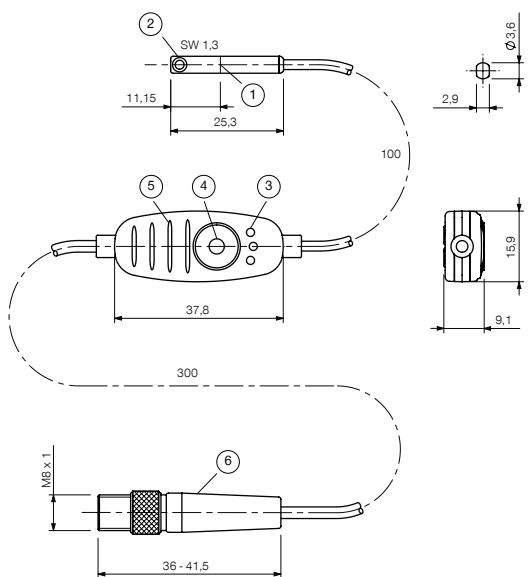


# MAGNETIC FIELD SENSORS

## MFS02-S-KHC-IL

 IO-Link



- ① Center of sensor element
- ② Fixing screw
- ③ Display LED
- ④ Teach-in button
- ⑤ Ribs for cable ties
- ⑥ Connection

### ▶ PRODUCT INFORMATION

- Position sensor for sensing multiple piston positions on pneumatic cylinders
- continuous position detection over a detection range of up to 50 mm
- Data output analog or via IO-Link
- non-contacting and wear-free for long service life

### ▶ RECOMMENDED ACCESSORIES



#### CONNECTIONS / OTHER



**KAG500B4**  
Plug-in connector Straight Cable 5m - Socket M8 (female)



**S8-G-4**  
Plug-in connector customizable Straight - Connector M8



**ZUB000038**  
Holder control element

Order no.	MFS02-S-KHC-IL
<b>General data</b>	
Cylinder design	C-slot
Detection zone [mm]	0 ... 50
Mounting length [mm]	25.0
Switching function	IO-Link/analog
Electrical version	DC 4-wire
Output voltage [V]	0 ... 10
Protection to IEC 60529	IP67
Weight [kg]	0.054
<b>Electrical / Mechanical data</b>	
Supply voltage [V DC]	13 ... 30
Voltage drop [V]	≤1.0
Continuous current [mA]	≤200
Load resistance min. [kΩ]	2
Protection class	III
Ready delay [s]	0.175
Power consumption max. [mW]	550
Required magnetic field strength [mT]	2 ... 20
Configurable traverse path	Yes
Hysteresis configurable	Yes
Resolution [mm]	0.01
Linearity error [mm]	0.3
Repetition accuracy [mm]	0.05
Sampling rate [ms]	1
Protected against polarity reversal	Yes
Short-circuit-proof	Yes
Teach-in	Yes
Ambient temperature range [°C]	-20 ... +70
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
EMC according to EN 60947-5-2	Yes
Connection	Cable with connector
Fixing thread	M8
Cable length [m]	0.3
No. of contacts	5
Nr. of wires x diameter [mm <sup>2</sup> ]	4x0.08
Cable-Ø D [mm]	2.6
Bending radius when using a drag chain, min.	10xØ
Bending radius for fixed routing, min.	5xØ
Installation type	Cable outlet axial
Housing Material	PA
<b>Safety data</b>	
MTTFd value [a]	358
DC value [%]	0
TM value [a]	20
<b>Communication interface</b>	
Communication interface	IO-Link V1.1
Communication interface detail	COM3
Cycle count [ms]	1
Process data length [Bit]	32
Process data structure switching signal	Bit 0 ... 7
Process data structure position	Bit 16 ... 31