Drop-in sensors

The P8S sensors can easily be installed from the side in the sensor groove, at any position along the piston stroke. The sensors are completely recessed and thus mechanically protected. Choose between electronic or reed sensors and several cable lengths and 8 mm and M12 connectors.

Electronic sensors

The electronic sensors are "Solid State", i.e. they have no moving parts at all. They are provided with short-circuit protection and transient protection as standard. The built-in electronics make the sensors suitable for applications with high on and off switching frequency, and where very long service life is required.



Reed sensors

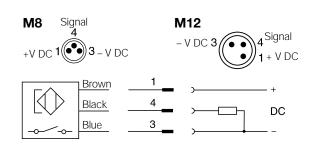
The sensors are based on proven reed switches, which offer reliable function in many applications. Simple installation, a protected position on the cylinder and clear LED indication.

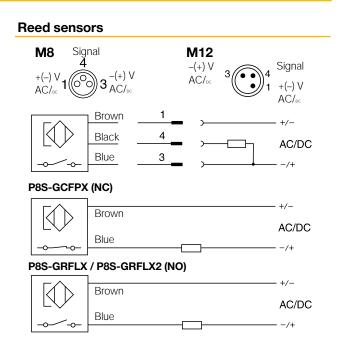
	Electronic	Reed		
Cylinder type:	Profil	le with T-slot		
Cylinder type with adaptor:	Profile with S-slot (dovetail) Tie rods Round cylinders			
Installation:	Drop-in. Fixed by 1.5 mm stainless steel allen key or flathead screwdriver.			
Housing length:	34.7 mm 31.5 mm (ATEX)			
Output Type / Function:	PNP, Normally Open (NO) NPN, Normally Closed (NC)	Normally Open (NO) Normally Closed (NC)		
Switching (on/off) switching frequency:	≤1000 Hz	± 400 Hz		
Degree of Protection (IP):		IP67		
Power consumption:	≤ 10 mA	-		
Input Supply Voltage Range:	10 to 30 V DC 18 to 30 V DC (ATEX)	10 to 30 10 to 120 10 to 230 V AC/DC (2-wire) 10 to 30 V AC/DC (3-wire)		
Voltage Drop:	≤ 2,2 V	\leq 3,5 V (2-wire NO) $ $ \leq 0,1 V (3-wire) $~ $ \leq 0,1 V (2-wire NC)		
Continuous output current:	≤ 100 mA ≤ 70 mA (ATEX)	≤ 100 mA (2-wire NO) ≤ 500 mA (3-wire) ≤ 500 mA (2-wire NC)		
Switching capacity:	-	≤ 10 W		
Hazardous area category:	3G / 3D (ATEX)	-		
Protection Class:		II (2-wire) III (3-wire)		
Response Sensitivity:	2.65 2.95 mT	2.1 3.4 mT		
Overrun Distance:	3 mm	9 mm		
Histeresis:	≤ 0.5 mT	≤ 0.2 mT		
Repeatability:	≤ 0.1 mT			
Reverse Polarity Protection:	Yes			
Short-circuit Protection:	Yes	-		
Power-up Pulse Protection:	Yes			
Ambiant Operating Temperature Range:	-25 to +75 °C (PUR cable) -20 to +70 °C (PVC cable) -20 to +45 °C (ATEX)			
Shock and Vibration resistance:	30 g 11 ms / 10 55 Hz, 1 mm			
EMC:	According to EN 60947-5-2			
Industry Standard:	CE C UL US RoHs Ex	CE C UL US RoHs		
UL Certification:	0	n request		
Housing Material:	Plastic polyamid PA12 (ATEX) PA66	Plastic polyamid PA12 (2-wire 240V) PA66		
Cable Specification:	PUR (Polyurethane) PVC (Polyvinyl Chloride)			
Conductor Cross-Section:	0.14 mm ² (3 wire)	0.14 mm ² (3-wire) 0.12 mm ² (2-wire)		
Colour of LED:	Yellow			
Connection Style:	M8 snap-in M8R (knurled nuts) M12 (knurled nuts) None (Flying lead)			



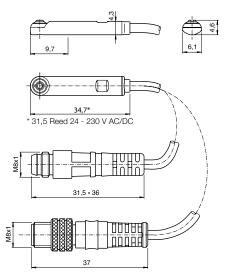


Electronic sensors

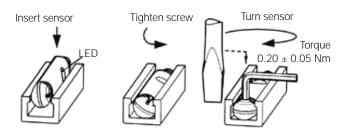




Dimensions [mm]

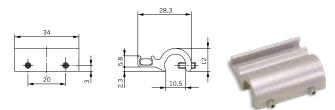


Sensor Installation

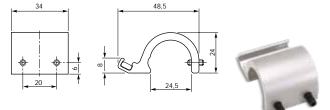


Brackets for sensors for Tie-Rods version

Oder code: PD48955 - bores Ø32 to Ø100 mm



Oder code: PD48956 - bore Ø125 mm





Output/function	Cable/connector	Weight [kg]	Order code
Electronic sensors, 10-30 V	DC		
PNP type, normally open	0.27 m PUR cable and 8 mm snap-in male connector	0.007	P8S-GPSHX
PNP type, normally open	0.27 m PUR cable and M12 screw male connector	0.015	P8S-GPMHX
PNP type, normally open	3 m PVC cable without connector	0.030	P8S-GPFLX
PNP type, normally open	10 m PVC cable without connector	0.110	P8S-GPFTX
Reed sensors, 10-30 V AC/D	C		
Normally open	0.27 m PUR cable and 8 mm snap-in male connector	0.007	P8S-GSSHX
Normally open	0.27 m PUR cable and M12 screw male connector	0.015	P8S-GSMHX
Normally open	3 m PVC cable without connector	0.030	P8S-GSFLX
Normally open	10 m PVC cable without connector	0.110	P8S-GSFTX
Normally closed	5 m PVC cable without connector without LED	0.050	P8S-GCFPX
Reed sensors, 10-120 V AC/	DC		
Normally open	3 m PVC cable without connector	0.030	P8S-GRFLX
Reed sensors, 24-230 V AC/I	DC		
Normally open	3 m PVC cable without connector	0.030	P8S-GRFLX2

Male connectors for connecting cables

Cable connectors for producing your own connecting cables. The connectors can be quickly attached to the cable without special tools. Only the outer sheath of the cable is removed. The connectors are available for M8 screw connectors and meet protection class IP 65.



Technical data

Operating voltage:max. 32V AC/DCOperating current per contact:max. 4 AConnection cross section:0.25... 0.5 mm² (conductor diameter min 0.1)Protection class:IP65 And IP 67 whenplugged and screwed down (EN 60529)

- 25... +85°C

Temperature range:

Connector	Weight [kg]	Order Code
M8 screw connector	0.018	P8CS0803J
M12 screw connector	0.022	P8CS1204J

Connecting cables

Description	Weight [g]	For Product Series	Order Code
Cable flex PVC 3 meter with 8mm snap-in connector / flying leads	70	P8S Sensors with M8	9126344341
Cable flex PVC 10 meter with 8mm snap-in connector / flying leads	210	P8S Sensors with M8	9126344342
Cable PUR 3 meter with 8mm snap-in female connector / flying leads	70	P8S Sensors with M8	9126344345
Cable flex PUR 10 meter with 8mm snap-in connector / flying leads	210	P8S Sensors with M8	9126344346
Cable PVC 2.5 meter with M8 screw connector / flying leads	60	P8S Sensors with knurled M8	KC3102
Cable PVC 5 meter with M8 screw female connector / flying leads	120	P8S Sensors with knurled M8	KC3104

