

MZ150176

Magnetic field sensors • Sensors for trapezoidal groove

Magnetic Sensor, Cylinder, Trapezoidal Groove, 4.5x16x12mm, 10–30 V DC, 1x PNP NO, M8 3-pin cable connector, 0.3 m PUR (polyurethane), IP67, aluminum, LED, 2.8 mT, top-mounted installation, sensor surface centered on the device

/ Große_Schaltgenauigkeit_bei_kleiner_Hysterese
/ Hohe_Schaltfrequenz



Einfach_von_oben_montierbar
Unabhängig_vom_Zylinderhersteller_einsetzbar

For many applications in automation technology, it is necessary to perform recognition of the motion of pneumatic and hydraulic cylinders and to precisely measure the position of the piston. Magnetic cylinder sensors are used for this purpose; they are mounted on the cylinders either directly from the outside or using adapters.

Electrical features

Number of switching outputs	1
Display	LED display
Type of switching function	Normally open contact (NO)
Type of electrical connection	Cable connector M8
Type of switching output	PNP
Rated switching current	150 mA
Absolute hysteresis	1 mm
No-load current	15 mA
Magnetic sensitivity	2.8 mT
Number of pins	3
Switching frequency	1000 Hz
Sensor surface (active)	Middle area
Voltage drop	2 V
Absolute repeat accuracy	0.1 mm
Operating voltage (DC)	10 - 30 V
Electrical connection	Cable connector M8 3-pin 0.3m
ardTEEL_Schutzfunktionen	Short circuit protection Reverse polarity protection

Mechanical features

Design	Cuboid
Width	11.8 mm
Height	4.5 mm
Cable length	0.3 m
Sensor surface position	Center of the device
Length	16.5 mm
Mounting access, cylinder groove	From the top
Degree of protection (IP)	IP67
Housing material	Aluminum
Material of cable sheath	Kunststoff (PUR)
Ambient temperature	-25 - 75 °C
dimensions	16.5x11.8x4.5mm
ardTEME_Umgebungsbestaendigkeiten	Öle Kühlschmiermittel starke Erschütterungen/ Bewegungen

Other features

Harsh environmental conditions	Yes
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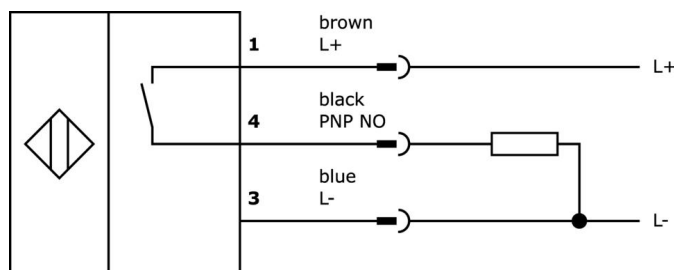
Classification

ETIM 8

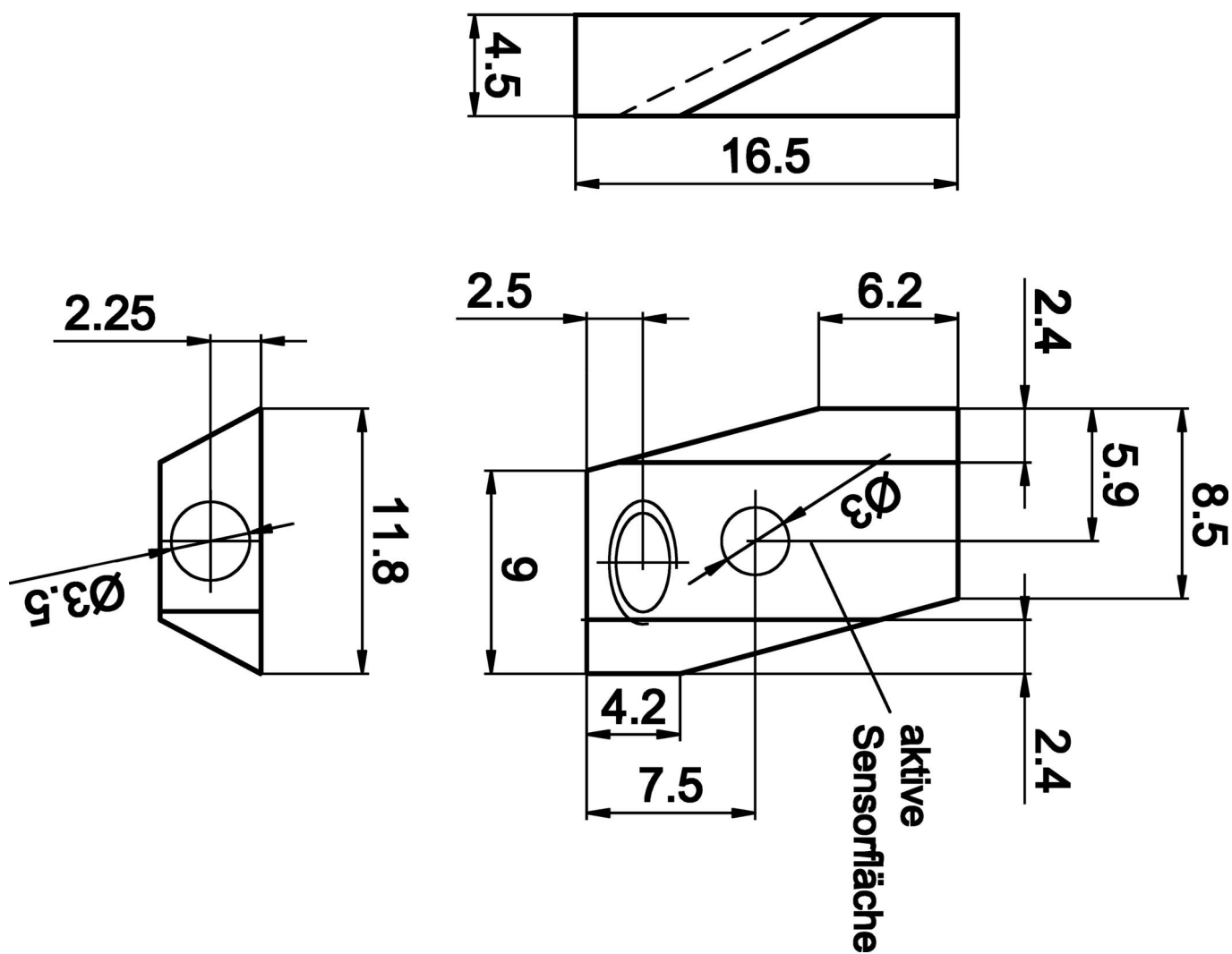
More

IPF Product Group	220 pneumatic cylinder sensors
packaging dimensions	120 x 100 x 17 mm
gross weight	11 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Dimensional drawing



Extract accessories program

AY98C293



accessories sensor, Teflon cap,
M8x1 5long,
Polytetrafluorethylene (PTFE)

AV000142



accessories cable socket,
Mounting clip, 8.5mm, PPO,
Packaging unit 5, Accessories for
Cable socket/connector M8

AY000141



Plastic sheath, Ø17mm, Inner
diameter 10mm, -40-250°C, Glass
fiber with silicone rubber, Short-
term resistance to weld spatter
1200°C, Tensile strength 400N,
Flexible, Flame retardant, yard
good

AY000154



Tool, Screwdriver set, Internal
hexagon 0.7mm, Internal hexagon
0.9mm, Internal hexagon 1.3mm,
Internal hexagon 1.5mm, Internal
hexagon 2mm, Slot 1.5mm, Slot
2mm, Slot 2.5mm, Chromium steel

VYR90270



Signal inversion, Ø9mm 32long,
10-35V DC, 1x NC, M8 0.3m, IP67,
Aluminum

VYR91170



Inverter, Ø9mm 32long, PNP/NPN,
10-35V DC, 1x NO, M8 0.3m, IP67,
Aluminum

VY000004



DC power supply, sensor tester,
120x26x72mm, 18V, 0.04A, Spring
clamp connection 4pin, IP20,
Plastic

VK003070



Cable socket, Angular, Suitable for
self-assembly, Soldering
connection, Ø3.5-5mm, 4A, 60V, -
40-85°C, M8 Female (socket) 3pin,
IP67, Brass

VK003074



Cable socket, Straight, Suitable for
self-assembly, Soldering
connection, Ø3.5-5mm, 4A, 60V, -
40-85°C, M8 Female (socket) 3pin,
IP67, Brass

You can find further accessories on our homepage



Installation

Mounting / installation may only be carried
out by a qualified electrician!



Disposal

WEEE number according to § 6 para. 3
ElektroG: 40951076

Safety warnings

/ Before initial operation, please make sure to follow all safety instructions that may be provided in the product information.

/ Never use these devices in applications where the safety of a person depends on their functionality.