

YM120020

Mechanical sensors • Analog

sensor mechanical, analog, M12x1 127lang, 24V DC, Sn:-5-5mm, 0-10V, M12 connector 4pin, stainless steel

including Nut



Type M12x1 Analog output 0 ... 10V

These mechanical position sensors are measuring systems that operate on the principle of the differential transformer, a special form of transformer. It consists of a primary coil and two secondary coils. The primary coil is symmetrically arranged between the secondary coils. A movable soft iron core changes the coupling factors between the coils. When it is in the center position, the arrangement is symmetrical and the resulting voltage of the secondary coils is 0. When the core is displaced, there is unequal magnetic coupling and an output voltage on the secondary coils.

With the aid of an electronic evaluation circuit, a length-proportional analog voltage signal (0 ... 10V) is generated from this; in the center position, the measurable output voltage is 5V.

The life of such a sensor is almost unlimited due to the non-contacting measuring method. In addition, the measured value is retained even in the event of interruption of the supply voltage.

Electrical features

Type of analog output	0 - 10V
Type of electrical connection	Connector M12
No-load current	20 mA
Linearity deviation	0,05 mm
Number of pins	4
Measurement principle	Differential transformer
Operating voltage (DC)	19,2 - 28,8 V
Measuring range	-5 - 5 mm

Mechanical features

Design	Cylinder, screw-thread
Thread length	49 mm
Thread pitch	1 mm
Length	126.5 mm
Degree of protection (IP)	IP65
Housing material	Stainless steel
Operating force	,40 N
Thread dimension	M12
Ambient temperature	-25 - 85 °C

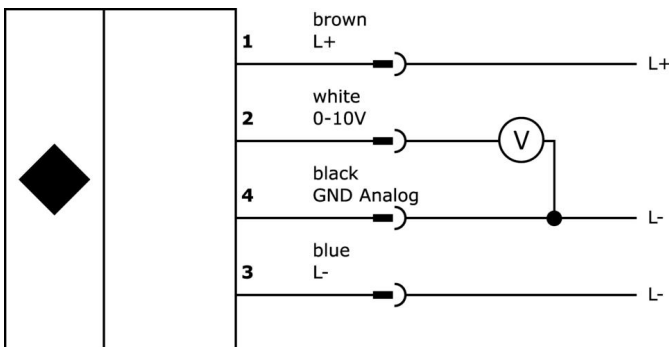
Classification

ETIM 8

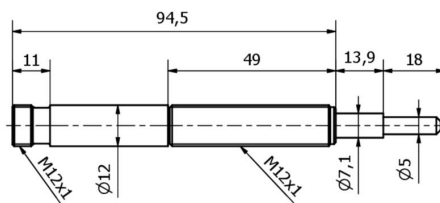
More

IPF Product Group	690 diverse sensors
packaging dimensions	248 x 145 x 45 mm
gross weight	151 g
Customs tariff number	90318020
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Dimensional drawing



Extract accessories program

VK205321

Connection cable, 2m, M12
 Female (socket) 4pin Angular, Free conductor end, 4x0.34mm², PUR (Polyurethane), $\varnothing 5.5$ mm, 250V, -25-90°C, IP67, Shielded, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silico...

VK205325

Connection cable, 2m, M12
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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.