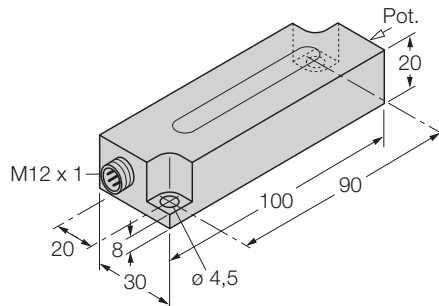
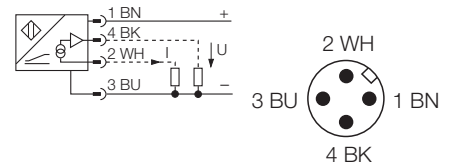


Magnet-inductive linear position sensor with analogue output WIM70-Q20L100-LiU5-H1141



- plastic, PBT-GF30-V0
- hardly affected by external magnetic fields
- analogue output (current and voltage)
- measuring range changes depending on the magnetic field
- 4-wire, 15...30 VDC
- connector, M12 x 1

Wiring diagram

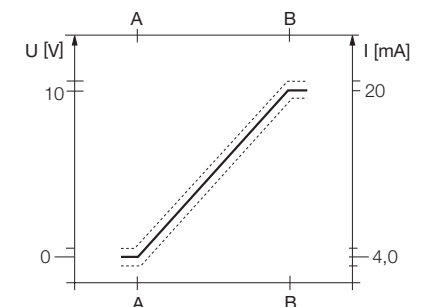


Function principles

Magnet-inductive linear position sensors with analogue output provide a signal that is proportional to the position of the positioning magnet and suited to accomplish simple control tasks. They feature an excellent repeat accuracy, resolution and linearity.

Due to their extremely robust design, they are especially suited to industrial applications. They also excel in their high electromagnetic compatibility and stability over a wide temperature range.

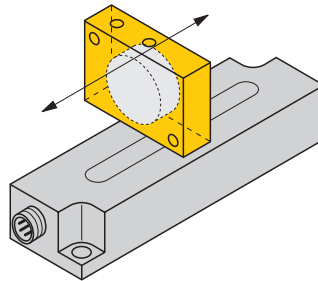
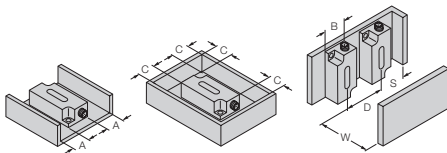
Measuring range



Type	WIM70-Q20L100-LiU5-H1141
Ident-No.	1539276
Measuring range [A...B]	15... 85 mm adjustable with potentiometer non-flush
Mounting mode	non-flush
Blind zone connector end	15 mm
Blind zone non-connector end	15 mm
Min. repeat accuracy	≤ 0,5 % of measuring range A - B ≤ depending on positioning magnet
Linearity tolerance	≤ 8 % of final value
Max. relative temperature drift	≤ ± 0,06 %/°C
Operating temperature	-25 ...+ 70 °C
Rated operational voltage (DC) U_B	15... 30 VDC
Max. ripple	≤ 10 % U _{pp}
No-load current I ₀	≤ 23 mA
Rated insulation voltage	≤ 0,5 kV
Output function	4-wire, analogue output
Short-circuit protection	yes
Wire breakage / reverse polarity protection	yes / complete
Voltage output	0... 10 V
Current output	4... 20 mA
Voltage output load resistance	≥ 4,7 kΩ
Current output load resistance	≤ 0,4 kΩ
Reading rate frequency	1000 Hz
Recovery time on output	≤ 12 ms
Housing style	rectangular; Q20L
Dimensions	100 x 30 x 20 mm
Housing material	plastic, PBT-GF20-V0
Active face	plastic, PBT-GF20-V0
Wiring	connector, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 x g (11 ms)
Degree of protection	IP67

Magnet-inductive linear position sensor with analogue output WIM70-Q20L100-LiU5-H1141

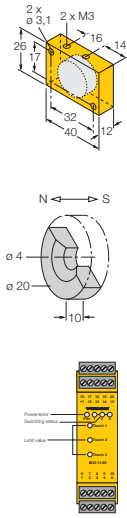
Mounting instructions	minimum gap
Gap D	-
Gap W	-
Gap S	-
Gap G	-
Gap N	-
Gap A	-
Gap C	-
Width of active face B	30 mm



The rotation of the position sensing element does not affect the output signal. Distance between sensor and positioning magnet depends on the magnetic field of the positioning magnet. When using the DMR20-10-4 or DM-Q12, the obtainable distance is 5 mm. The sensor may be embedded in non-ferritic material. When mounted in ferritic material the distance is adjustable via potentiometer. Neighbouring magnets may have an influence on the output signal.

Magnet-inductive linear position sensor with analogue output WIM70-Q20L100-LiU5-H1141

Accessories

Typ	Ident-No.	Description	Dimension drawing
DM-Q12	6900367	actuation magnet; rectangular, plastic	
DMR20-10-4	6900214	actuation magnet; Ø 20 mm (Ø 4 mm), h: 10 mm	
IM43-13-SR	7540041	limit value monitor; single channel; input 0/4...20 mA or 0/2...10 V; supply of 2- or 3-wire transmitters/sensors; limit value adjustment via teach button; three relay outputs with one normally open contact each; removeable terminal blocks; 27 mm wide; universal voltage supply 20...250 VUC; further limit value monitors are described in our "Interface Technology" catalogue.	