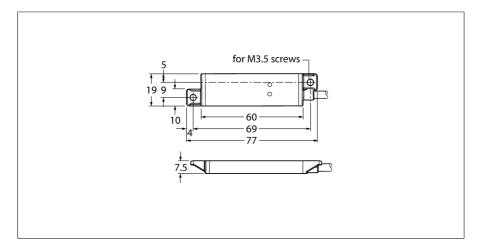


## Magnetic Field Sensor With Switching Output Q7MEB





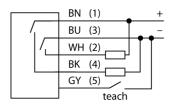
Type	Q7MEB	
ID	3081909	
Operating voltage U <sub>B</sub>	1030 VDC	
Short-circuit protection	yes/Cyclic	
Reverse polarity protection	yes	
Readiness delay	≤ 0.5 s	
Response time typical	< 20 ms	

Design	Rectangular, Q7M
Housing material	Aluminium, AL
Electrical connection	Cable, 2 m, PVC
Number of cores	5
Core cross-section	0.5 mm²
Ambient temperature	-40+70 °C
Protection class	IP68
	IP69K

	3514	
Power-on indication	LED, Green	
Switching state	LED, Yellow	

- Compact, robust design in a flat aluminum housing
- Protection classes IP67/IP69K
- Cable connection
- Operating voltage 10...30 VDC
- Switching outputs, bipolar (PNP/NPN)
- Measuring range adjustable via teach-in

## Wiring Diagram



## **Functional principle**

This sensor features three magneto-resistance transducers vertically to each other. Every transducer detects changes in the magnetic field along its axis. Maximum sensor sensitivity is achieved by the use of three measuring elements. A ferrous object changes the local magnetic field (surrounding magnetic field) which surrounds the object. The strength of this change in the magnetic field depends on the actual object (size, shape, orientation) as well as on the surrounding magnetic field (strength and orientation). The sensor measures the surrounding magnetic field by simple programming. If a ferrous object changes this magnetic field, it is detected by the sensor.

Tests/approvals