

Hall Effect Sensor

Long Range Hall Effect Sensor - 300 bar

High-Sensitivity Sensor made from rugged Stainless Steel and wear resistant Poly- Urethane cable.

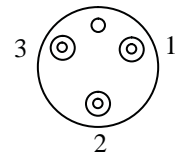
SPECIFICATONS

Mechanical:

Size:	ø14 x 50mm + Cable
Cable Length:	8 meters. Other lengths on request.
Interface:	M12x1 threaded end
Mounting:	Hole size ø12-ø13mm
Weight:	0.3kg

Electrical:

Supply Voltage (VCC):	4.5 – 24Vdc (28Vdc absolute maximum)
Output Voltage Active (VO-on):	0.2V
Output Voltage Passive(VO-off):	Vcc -1V "Open Collector"
Reverse Output (VOut-neg):	-0.5V absolute minimum
Supply Current (Passive) (ICC-off):	4.4mA typ. (9mA max.)
Protection:	Reverse Supply protection diode
Output Current (Active) (ICC-on):	25mA Continuous (obsolute maximum)
Output Leakage Current (IOff):	< 1uA typ. (10uA max.)
Output Rise Time (TR):	0.04ms typ. into 820ohm/20pF (2ms max.)
Output Fall Time (TF):	0.18ms typ. into 820ohm/20pF (2ms max.)
Cable:	3 x 0.5mm ² with ø5mm PUR sheath
Plug:	Subconn IL3M 3-pin male. Ref. pin-out.



Male Plug IL3M
Face View

Magnetic (25oC, Vcc = 8V) :

Operating Point Flux (BOP):	180 Gauss (output turns On) (230 Gauss max.)
Release Point Flux (BRL):	125 Gauss (output turns Off) (75 Gauss min.)
Hysteresis (BHys = BOP – BRL):	55 Gauss
Maximum Flux Density (BMax):	Unlimited

Environmental:

Operating Temperature:	-40 to +85 deg Celsius
Storage Temperature:	-65 to +170 deg Celsius
Pressure rating:	3000 msw (300 bar)
Encapsulation:	Specially made for Underwater operation (IP68 and beyond)

Suitable Magnets:

Ferrite type:	FC 12x6 , material type Y28 (Remanence: 370-400 mT)
Coercivity:	175-210 kA/m
Energy Product (B x H):	26-30 kJ/m ³
Temperature tolerance:	< 250 deg Celsius (Elfa type 37-520-94)