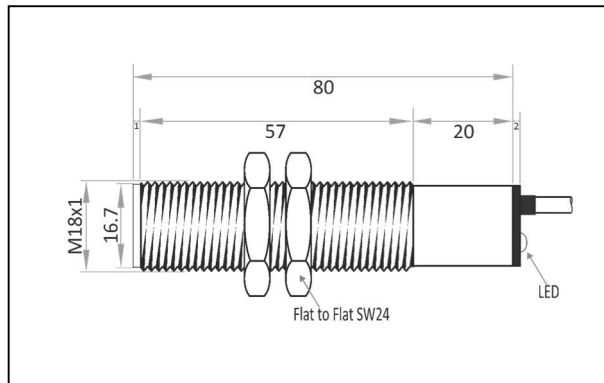


Magnetic Proximity Sensors

M18 | NPN | SPEED & DIRECTION SENSOR

Ordering Code: D33C-18MD-NM-3S



Technical Specifications

Cylindrical Metal Housing Diameter/Pitch (mm)		M18
Mounting Style		Flush
Sensing Distance (Sn)		Magnet Dependent: 0-15mm or 0-40mm (Magnet Size, Shape & Strength Dependent)
Type		Omnipolar, Unipolar & Bipolar switch
Operate Point (BOP)		3.5 mT
Release Point (BRP)		2 mT
Hysteresis		1.5 mT
Operating Voltage		8 - 30 V DC
Switching output		NPN
Output High Level		> (VCC – 0.7V)
Output Low Level		< 0.7V
Max. Load Current (On state)		≤80 mA
Switching Frequency		0 - 5 KHz
Output rise time (10% to 90%)		≤ 10 μs
Output fall time (90% to 10%)		≤ 1 μs
Reverse Supply Protection		Yes
Short-Circuit Protection		Yes
Operating Temperature Range		-20 °C to +80 °C
LED Indication	Green	Direction Indication
	Red	Speed Indication
Housing Material		Nickel Plated Brass

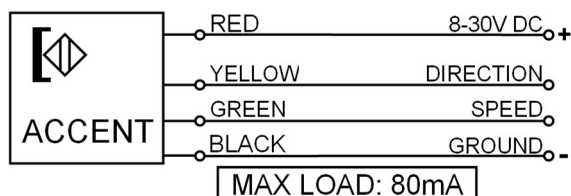
Working Description

1. When the magnet sweeps the sensing surface clockwise along the arrow, the direction output low level and the green light is off; the speed signal output a square wave and the red light flashes once.
2. When the magnet sweeps the sensing surface anticlockwise along the arrow, the direction output high level and green light is on; the speed signal output one square wave and the red-light flashes once.
3. When the rotation stops, the direction signal output is consistent with the last rotation direction level; speed signal has no square wave.

Electrical Connections

Termination

2 meter Prewired 3-Core PVC Cable (3 x 0.22mm²)



Wire Colour Coding:

1. RED : VCC
2. YELLOW : DIRECTION OUTPUT
3. GREEN : SPEED OUTPUT
4. BLACK : GROUND

ACCENT CONTROLS