

# MCS-655P Retro-Reflective Sensor



## Operation Manual

The MCS-655P is a photo-reflective NPN open collector photo sensor with Light / Dark activated output that operates up to 1000 Hz. For simplified installation purposes the integral LED aids in alignment. Sensors also provide a sensitivity adjustment pot providing application flexibility. The MCS-655P model comes with a connection cable, LED status indicator, sensitivity control and mounting nuts.

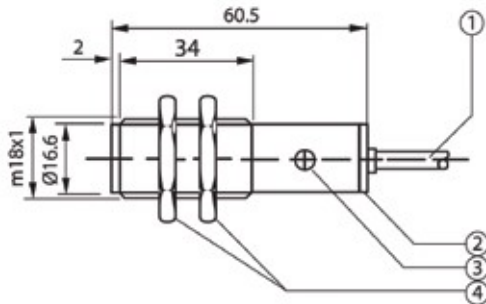


### CONNECTIONS

Brown	10-30 VDC (positive)
Blue	0V
Black	Output (NPN Open Collector)
White	Connect to Brown: Light Operate Connect to Blue: Dark Operate

### DIMENSIONS

1. Connection Cable
2. LED Status Indicator
3. Sensitivity Control
4. Mounting Nuts



### SPECIFICATIONS

**Sensor/detection Principle:** Photoelectric retro-reflective sensor  
**Housing Length:** 2.5" (62.9 mm)  
**Housing Thread Diameter:** M18 x 1  
**Sensing Range:** 2" - 23' (0.05 - 7 m)  
**Light/Source:** Visible red LED  
**Light Spot @ Distance 19.7' (6 m):** 15.75" (400 mm)  
**Wave Length:** 645 nm  
**Sensitivity Adjustment:** Turnable Potentiometer over 270°  
**Supply Voltage:** 10-30 V dc  
**Switching Output:** NPN open collector, Light/dark-switching, Selectable via L/D control wire  
**Signal Voltage NPN HIGH/LOW:** Approx. VS/< 1.8 V  
**Output Current Max.:** 100 mA  
**Response Time:** 0.5 ms  
**Switching Frequency:** 1,000 Hz with light/dark ratio 1:1  
**Angle of Dispersion:** Ca. 4.5°  
**Ambient Operating Temperature:** -13 to 131 °F (-25 to 55 °C)  
**Housing Material:** PBT and PC  
**Optics Material:** PMMA  
**Cable Material:** PVC  
**Connection Type:** Cable, 4-wire, 6.6' (2 m)  
**Circuit Protection:** Inputs and output reverse-polarity protected; outputs overcurrent and short-circuit protected  
**Weight:** 2.2 oz (62 g)  
**Enclosure Rating:** IP 67  
**Items Supplied:** Fastening nuts (2 x), Reflector target, reflection tape