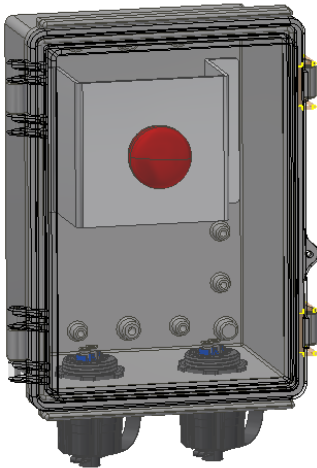


**MR 388 Emergency Stop Sensor**

**Features**

- Can be used in industrial environments
- Interchangeable with V15-series electrical microswitches
- 100% passive sensing design - no electronics
- Immune to EMI, RFI, high Voltages and ground loops
- Link lengths to 10'000 meters

**Product Description**


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The MR388 series Fiber Optic Emergency Switch paired with a MR380 series Controller provides a new, innovative signaling solution that can be deployed in difficult and hazardous environments over long distances. The switch sensor employs a photo interrupt scheme operating over a duplex optical link that allows for reliable signal detection. This provides the same mechanical attributes typically associated with ubiquitous electrical micro switches.

The entire fiber optic sensor system offers a generous loss budget, allowing for long distances, complex routing, and daisy chaining of multiple switches.

The MR380 Controller is the active optical and electrical interface for the MR380 E-Stop, E-Actuator and other Signaling Sensor products. ZapFREE® software is used for data acquisition.

**Applications**


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- Medical MRI environment
- High voltage applications
- Long Distances
- Transformer power tap
- Oil, gas, and mines
- Valve position
- Process monitoring
- Hazardous environments
- Aerospace actuator

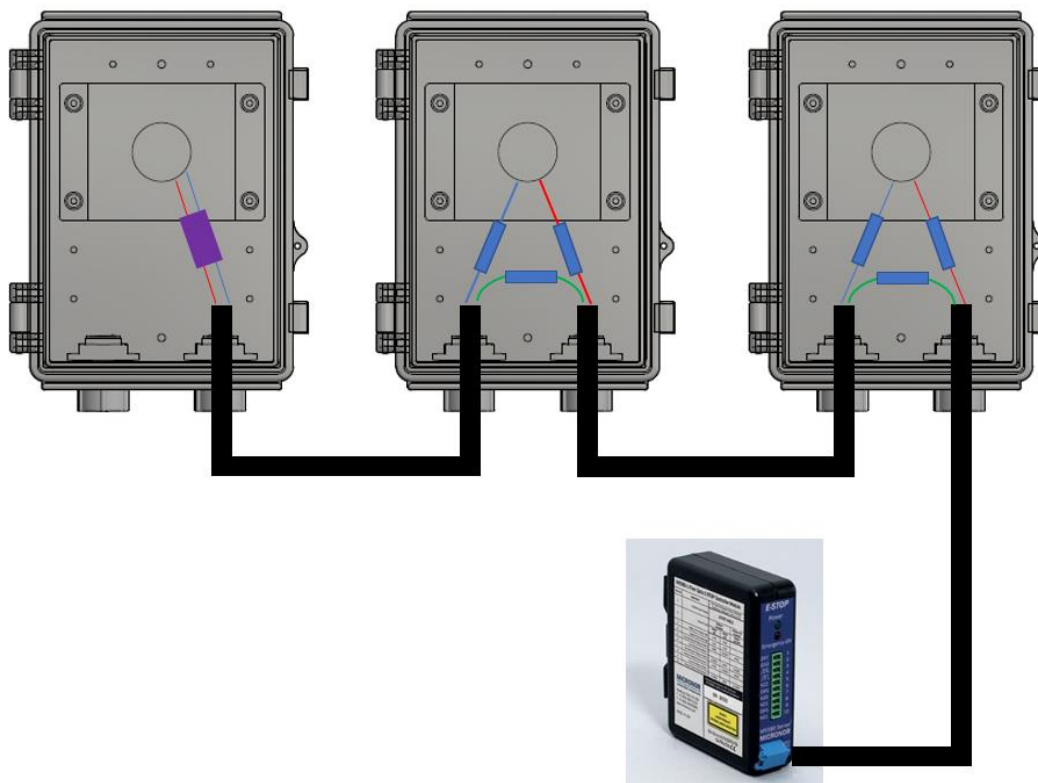


## Specifications

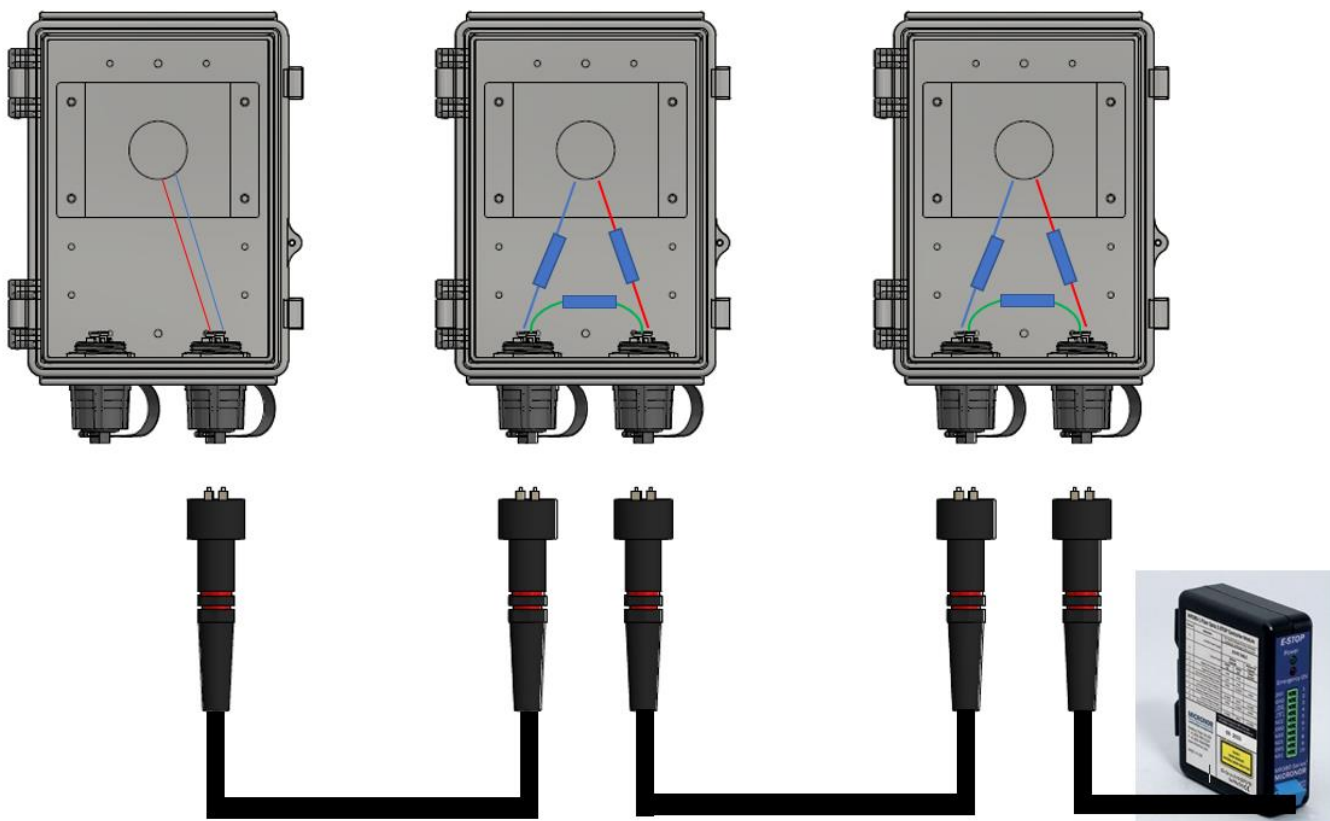
Functionality	
ISO 13850	ISO 13850 defines the characteristics and requirements for a traditional electromechanical E-STOP switch. The MR380 Sensor/Controller integrates the definition of purpose and functionality only
Functional States	MR380-1 Series DIN Rail Mount Controller Output States
Normal RESET (Up Position)	Red LED is OFF Digital 5V and 24V Outputs=HI Relay NC contacts=Closed, Relay NO contacts=Open
ACTIVATED (Down Position)	Red LED is ON
Broken Fiber, Loss of Optical Signal	Digital 5V and 24V Outputs=LOW
Controller Failure	Relay NC contacts=Open, Relay NO contacts=Closed
Optical Interface	
Interface	Duplex LC for pigtailed sensors ODVA IP-LC connector receptacle
Insertion Loss	For calculating System Loss Budget:
	IL=2.5dB max (2dB typical), 62.5/125 OM1 MM Fiber IL=5.0dB max (3dB typical), 9/125 OS1 SM Fiber IL=3.5dB max (3dB typical), 50/125 OM2/OM3 MM Fiber Consult Appl. Note AN118 for determining system loss budget and max. distance
Environmental	
Temperature/Humidity	-40°C to +65°C (-40°F to +150°F), 0-95% RH, Non-Condensing
Ingress Protection	Pigtail Version=IP61, Panel Mount Housing=IP65
Mechanical	
Housing	Aluminum body, anodized finish
Durability	100'000 operations min.
Physical	
Housing Dimension / Mounting	Consult Mechanical Reference Drawing
Unit Weight	TBD



System Overview Conduit Hubs Solutions

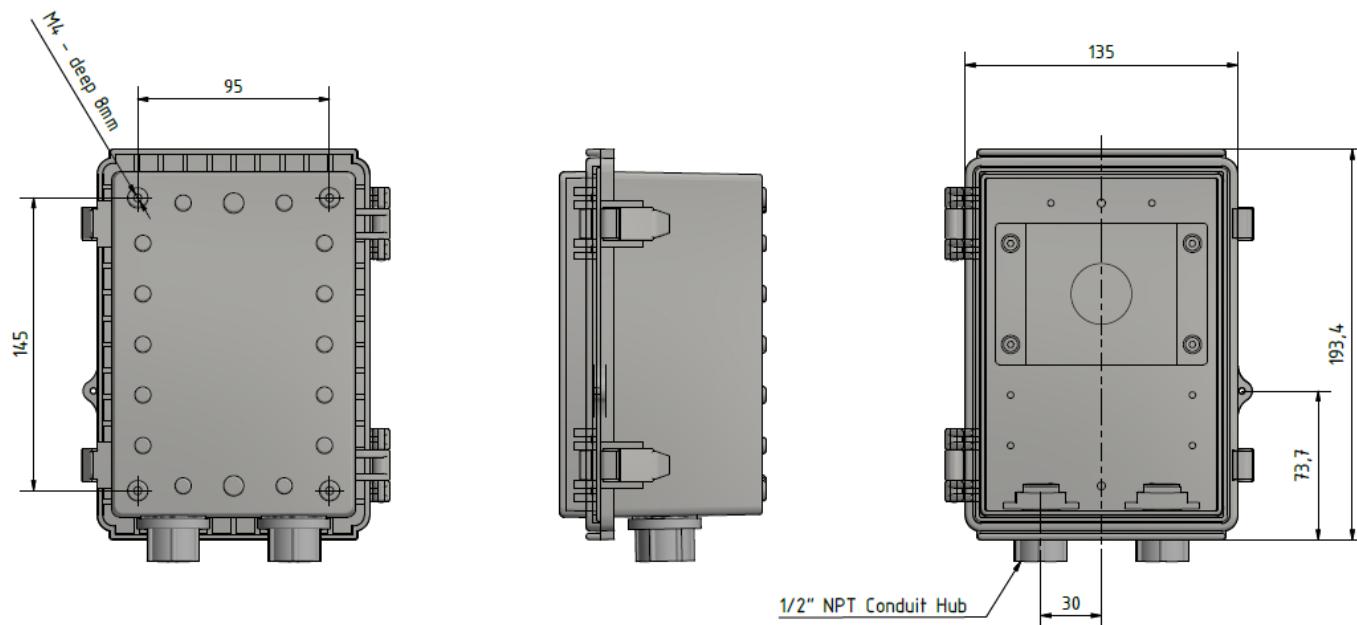


System Overview IPLC Receptacle Solutions

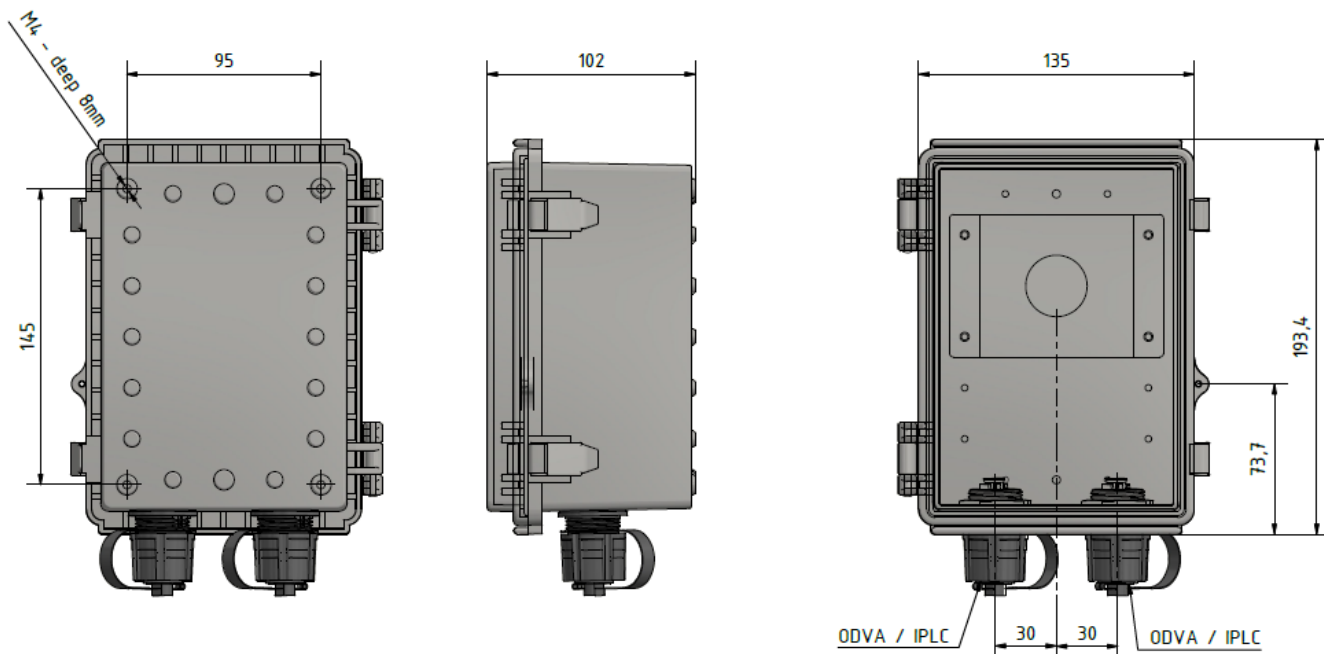




**Drawing [mm] Conduit Hub Version**



**Drawing [mm] ODVA / IPLC Version**



**Order Key****Order Key**

9 8 0 0 . 3 4 . 0 0 0

a b c

**Configuration****a****Fiber**

- 0 62.5/125 MMF (OM1)
- 1 9/125 SMF (OS1)

**b****Mushroom Button Size**

- 0 Ø30mm
- 1 Ø40mm

**c****Housing**

- 1 1x ODVA
- 2 1x 1/2" NPT Conduit Hub

**Related Products**

MR380-0-UNI	OEM Controller for Fiber Optic Signaling Products Series MR380
MR380-1	DIN Rail Mount Controller for Fiber Optic Signaling Products Series MR380
MR386	Fiber optic Microswitch
MR387	Fiber optic Emergency Stop
973X.XX.XXX	Fiber optic Extension Cable
974X.XX.XXX	Fiber optic Extension Cable