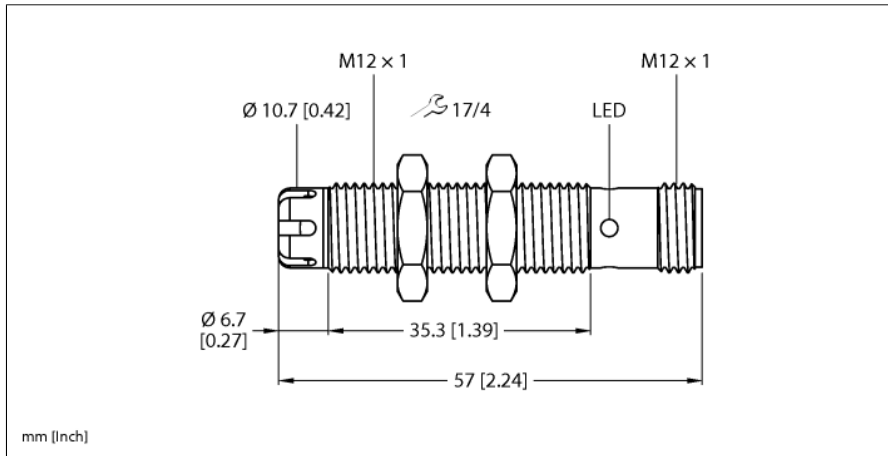


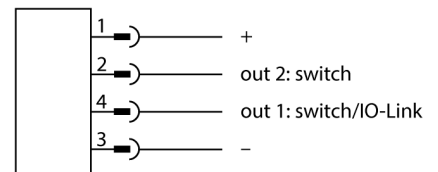
Humidity and Temperature Sensor For Condition Monitoring with IO-Link CMTH-M12-IOL6X2-H1141



- Sensor for condition monitoring
- Accurate temperature and humidity measurement
- Sensor-2-cloud compatible
- DC 4-wire, 18...30 VDC
- M12 × 1 male connector
- Configuration and communication via IO-Link v1.1
- Smart sensor profile 4
- Continuous process values for temperature and humidity
- Temperature monitoring with adjustable switching thresholds or windows
- Humidity monitoring with adjustable switching thresholds or windows
- Operating hours and switching threshold counter
- Dew point calculation and output as well as temperature and humidity histogram via IO-Link

Type designation	CMTH-M12-IOL6X2-H1141
Ident no.	100016580
Function	Temperature/humidity sensor
Ambient temperature	-40...+100 °C
Measuring range	≥-40...≤100 °C
Operating voltage	18...30 VDC
Residual ripple	< 10 % U _{in}
DC rated operational current	≤ 150 mA
No-load current I ₀	≤ 10 mA
Short-circuit protection	yes/ Cyclic
Reverse polarity protection	yes
Output function	Programmable, IO-Link
Output 2	Switching output
Design	Cylinder, threaded, M12
Dimensions	57 mm
Housing material	Metal, CuZn, Chrome-plated
Electrical connection	Connector, M12 × 1
Protection class	IP67
MTTF	0 years
Power-on indication	LED, Green

Wiring Diagram



Functional principle

Condition monitoring sensors are specially designed for use in system parts in which the environmental parameters can have a significant influence on machine availability or process quality. By monitoring the application temperature or the humidity within the application, process deviations can be detected at an early stage and countermeasures initiated. For this purpose, the continuous detection value is transferred to the controller via IO-Link process data and customer-specific limit value exceedance/shortfall is additionally transported. The robust sensor design can be used indoors as well as outdoors for more challenging applications.