TMM55E-P0H045

TMM55

INCLINATION SENSORS

SICK
Sensor Intelligence.

TMM55E-POH045 | TMM55
INCLINATION SENSORS

Ordering information

Type	Part no.
TMM55E-POH045	1073784

Other models and accessories ➜ www.sick.com/TMM55

CE

Detailed technical data

Performance

Number of axis	2
Measuring range	± 45°
Resolution	0.05°
Static measurement accuracy	± 0.3°
Compensated cross-sensitivity (2-dimensional)	Typ. ± 0.9°, max. ± 1.8°
Temperature coefficient (zero point)	Max. ± 0.009°/K
Limit frequency	18 Hz
Sampling rate	1.95 kHz

Interfaces

Communication interface	Analog / Voltage
Voltage output	0 V … 10 V
Load resistance	≤ 930 Ω
Initialization time	75 ms

Electrical data

Connection type	Cable, 5-wire, with male connector, M12, 5-pin, 0.2 m
Supply voltage	11 V DC … 30 V DC
Current consumption	15 … 25 mA
Reverse polarity protection	✓
Short-circuit protection of the outputs	✓
MTTFd: mean time to dangerous failure	290 years (EN ISO 13849-1) [1]

[1] This product is a standard product and does not constitute a safety component as defined in the Machinery Directive. Calculation based on nominal load of components, average ambient temperature 40°C, frequency of use 8760 h/a. All electronic failures are considered hazardous. For more information, see document no. 8015532.

Mechanical data

Dimensions	65 mm x 35 mm x 20 mm
Weight	55 g (with cable)
Housing material	Plastic (ABS)
Material, cable	PUR

Ambient data

|	
EMC	EN 61326-1, EN ISO 14982, EN ISO 13309
Enclosure rating	IP65 IP67
Operating temperature range	–40 °C … +80 °C
Storage temperature range	–40 °C … +85 °C
Resistance to shocks	100 g, 6 ms (according to EN 60068-2-27)
Resistance to vibration	10 g, 10 Hz … 2,000 Hz (EN 60068-2-6)

Classifications

ECLASS 5.0	27270790
ECLASS 5.1.4	27270790
ECLASS 6.0	27270790
ECLASS 6.2	27270790
ECLASS 7.0	27270790
ECLASS 8.0	27270790
ECLASS 8.1	27270790
ECLASS 9.0	27270790
ECLASS 10.0	27271101
ECLASS 11.0	27271101
ECLASS 12.0	27271101
ETIM 5.0	EC001852
ETIM 6.0	EC001852
ETIM 7.0	EC001852
ETIM 8.0	EC001852
UNSPSC 16.0901	41111613

Dimensional drawing (Dimensions in mm (inch))
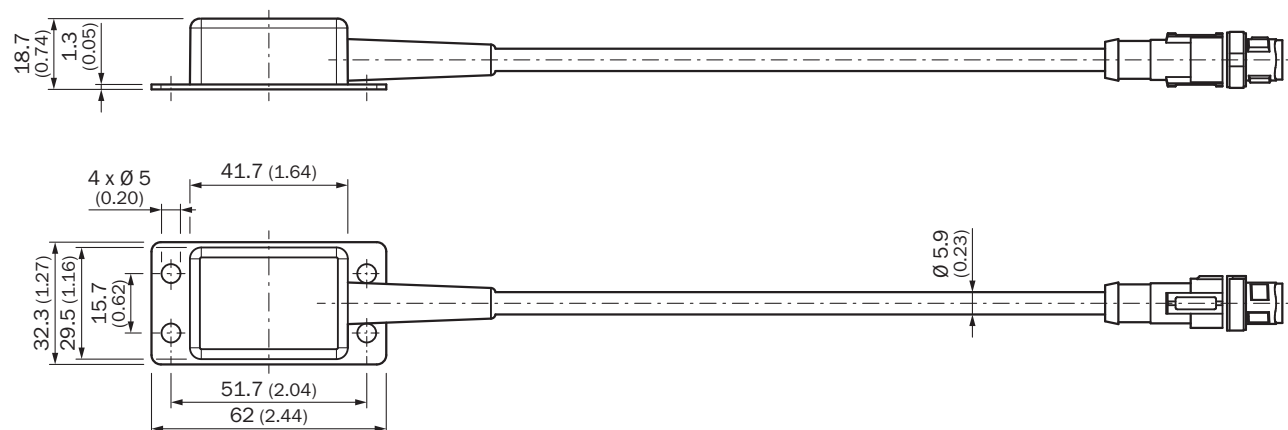
PIN assignment
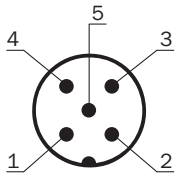
PIN Male connector M12, 5-pin	Wire colors (cable connection) Cable connection	Signal	
1	Brown	VDC	Supply voltage
2	White	Y-OUT	Sensorsignal y-axis
3	Blue	GND	0V (GND)
4	Black	X-OUT	Sensorsignal x-axis
5	Green/yellow	Signal- GND	Signal GND (internally connected to GND)

Diagrams
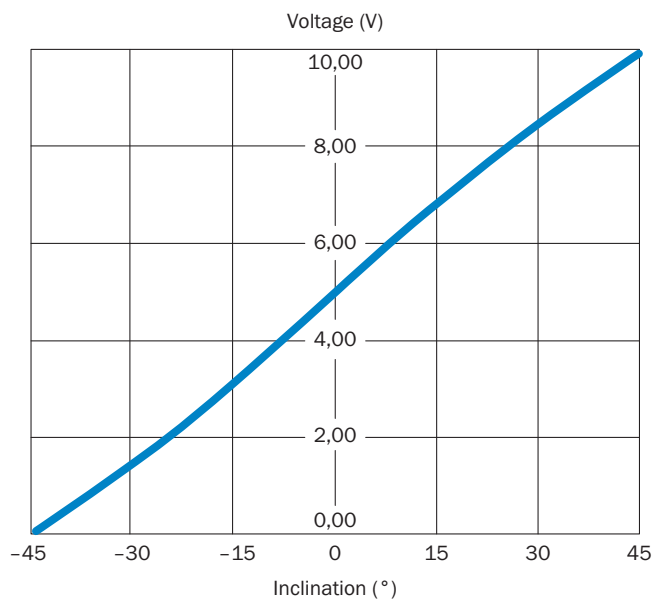
Recommended accessories

Other models and accessories ➜ www.sick.com/TMM55

	Brief description	Type	Part no.
Others			
	• **Connection type head A:** Female connector, M12, 5-pin, straight, A-coded • **Description:** Unshielded, Head A: female connector, M12, 5-pin, straight, unshielded, for cable diameter 4 mm ... 6 mm Head B: - • **Connection systems:** Screw-type terminals • **Permitted cross-section:** ≤ 0.75 mm²	DOS-1205-G	6009719
	• **Connection type head A:** Male connector, M12, 5-pin, straight, A-coded • **Description:** Unshielded, Head A: male connector, M12, 5-pin, straight, unshielded, for cable diameter 4 mm ... 6 mm Head B: - • **Connection systems:** Screw-type terminals • **Permitted cross-section:** ≤ 0.75 mm² • **Note:** For field bus technology	STE-1205-G	6022083
	• **Connection type head A:** Female connector, M12, 5-pin, angled, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable, Power • **Cable:** 1.5 m, 5-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, Power, shielded, Female connector, M12 Speed-con, A-coded, angled, to open end	DOL-1205-W1M5ACSC0	6049455
	• **Connection type head A:** Female connector, M12, 5-pin, straight, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 1.5 m, 5-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, shielded • **Application:** Zones with oils and lubricants, Drag chain operation, Robot	YF2A25-015UB6XLEAX	2095833
	• **Connection type head A:** Female connector, M12, 5-pin, straight, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 3 m, 5-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, shielded • **Application:** Zones with oils and lubricants, Drag chain operation, Robot	YF2A25-030UB6XLEAX	2095834
	• **Connection type head A:** Female connector, M12, 5-pin, angled, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 3 m, 5-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, shielded • **Application:** Zones with oils and lubricants, Drag chain operation, Robot	YG2A25-030UB6XLEAX	2095791
	• **Connection type head A:** Female connector, M12, 5-pin, angled, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 5 m, 5-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, shielded • **Application:** Zones with oils and lubricants, Drag chain operation, Robot	YG2A25-050UB6XLEAX	2095792
	• **Connection type head A:** Female connector, M12, 5-pin, angled, A-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 10 m, 5-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, shielded • **Application:** Zones with oils and lubricants, Drag chain operation, Robot	YG2A25-100UB6XLEAX	2095793

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

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