

EVERYTHING IN BALANCE – INCLINATION SENSOR F99

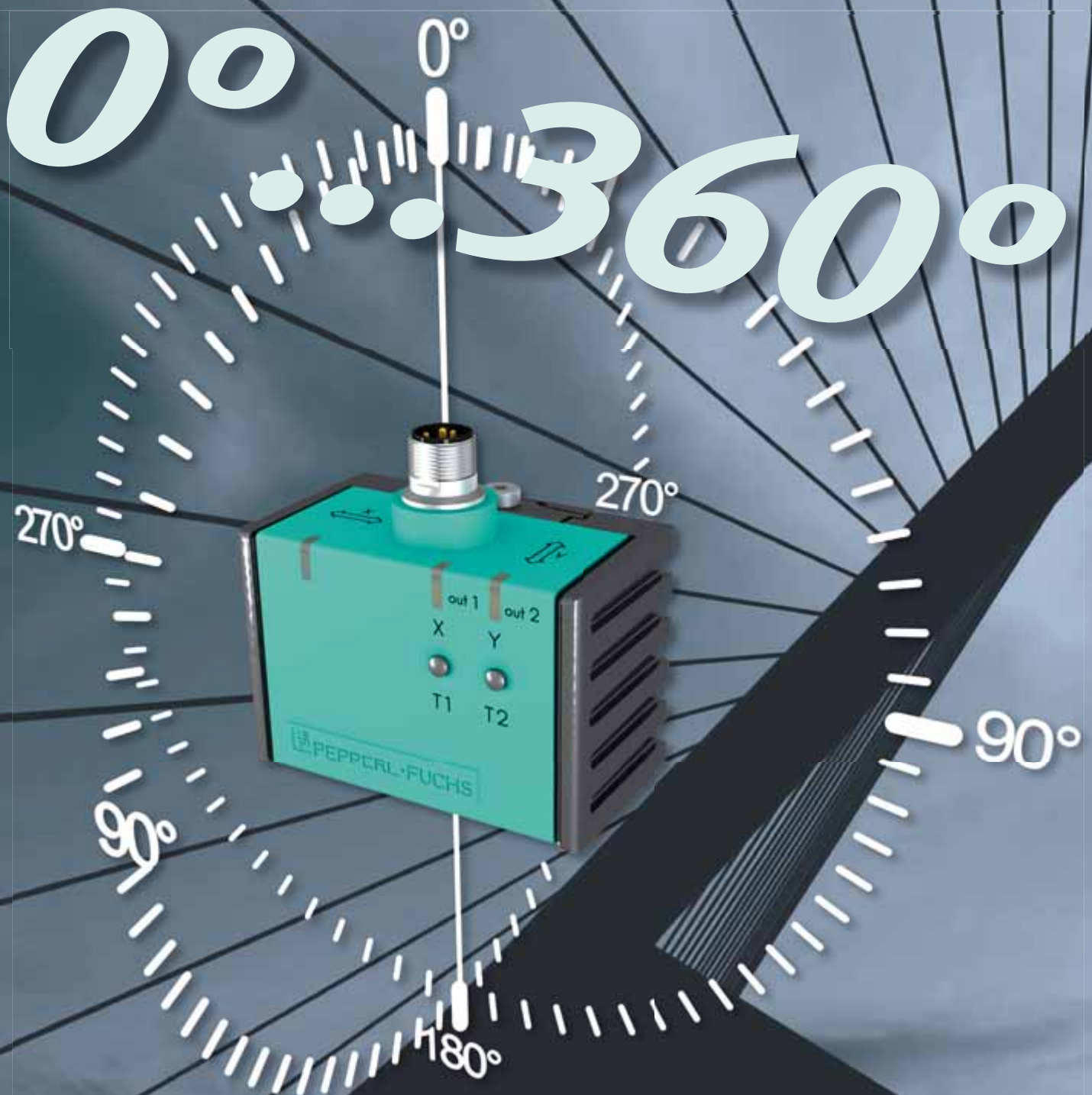


NOW ALSO WITH
CANopen

F99 INCLINATION SENSOR – ROBUST OUTDOOR HOUSING WITH A

Numerous measurement devices are available for monitoring inclination angles in automation and commercial vehicle applications as well as in wind energy and solar plants. However this information is often not supplied in a simple way, in line with the needs of the industry.

The new generation of F99 inclination sensors from Pepperl+Fuchs are easily configured to provide incline or tilt angles between 0° ... 360° on a standardized 4 mA ... 20 mA or 0 V ... 5 V analog interface. Switch outputs are also provided in order to monitor limit angles. Sensor models with CANopen interface are available for integration into commercial vehicle technology. Parameterization can be performed either via CANopen or using teach-in buttons.



SELECTABLE MEASUREMENT RANGE ...

HIGHLIGHTS

- Non contact sensing of the inclination angles between $0^\circ \dots 360^\circ$
- Two independent axes can be detected separately
- Wear-free and without target
- Programmable switching and analog ranges via teach-in buttons
- Robust housing suitable for outdoor use
- Ambient temperature range $-40 \dots +85^\circ\text{C}$
- e1 approval for use on public roads



The sensing head is easily removed from the metal mounting bracket with only one screw

TECHNICAL DATA OF ALL F99 INCLINATION SENSORS

- IP68/IP69k
- Operating voltage 10 V ... 30 V
- Accuracy $\pm 0.5^\circ$
- Repeat accuracy 0.1°
- Housing dimensions: 65 x 44 x 37 mm
- Highly shock resistant 100 g
- Increased EMC resistance 100 V/m

... AND NOW ALSO WITH CANOPEN INTERFACE

The F99 inclination sensors and their CANopen interface reduce wiring requirements in machinery and equipment and are particularly suitable for use in commercial vehicles. The CANopen version of the F99 can take advantage of the CAN bus system by offering easy online parameterization plus diagnostic options as well as the transfer of reference data.

COMMON AREAS OF APPLICATION

- In commercial vehicles, e.g. to monitor the tilt angles of cranes, liftgates or container-loading equipment
- With construction machinery, e.g. to monitor the inclination position of excavators
- In ships, e.g. to ensure even loading



CANopen

TECHNICAL DATA FOR F99 SENSORS WITH CANOPEN

- Online parameterization via CANopen interface
- CANopen protocol as per CiA 301
- Conforms to WDP 410 CANopen profile for measuring inclinations
- Baud rates can be parameterized between 125 kbit/s ... 1 Mbit/s



MODELS AND ACCESSORIES

MODEL OVERVIEW

Order number	x-axis	y-axis	Current outputs	Voltage outputs	Switch outputs	Connection
INX360D-F99-I2E2-V15	■		1		2	M12 connector
INX360D-F99-I2E2-5M	■		1		2	5 m cable
INX360D-F99-U2E2-V15	■			1	2	M12 connector
INX360D-F99-U2E2-5M	■			1	2	5 m cable
INY360D-F99-2I2E2-V17	■	■	2		2	M12 connector
INY360D-F99-2I2E2-5M	■	■	2		2	5 m cable
INY360D-F99-2U2E2-V17	■	■		2	2	M12 connector
INY360D-F99-2U2E2-5M	■	■		2	2	5 m cable
INX360D-F99-B16-V15	■				CANopen	M12 connector
INY360D-F99-B16-V15	■	■			CANopen	M12 connector



ACCESSORIES

Order number		Description
STANDARD ACCESSORIES	V15-G-2M-PUR	Cordset
	V15-W-2M-PUR	Cordset
	V17-G-2M-PUR	Cordset, shielded
	V17-G-5M-PUR	Cordset, shielded
	V17-G-10M-PUR	Cordset, shielded
CAN ACCESSORIES	V15-W-0,6M-PUR-CAN-V15-W	Connection cable for CAN bus
	V15-G-1M-PUR-CAN-V15-G	Connection cable for CAN bus
	V15-G-2M-PUR-CAN-V15-G	Connection cable for CAN bus
	V15-G-3M-PUR-CAN-V15-G	Connection cable for CAN bus
	V15-G-5M-PUR-CAN-V15-G	Connection cable for CAN bus
	V15-G-10M-PUR-CAN-V15-G	Connection cable for CAN bus
	V15-G-15M-PUR-CAN-V15-G	Connection cable for CAN bus
	V15S-T-CAN/DN-V15	CAN bus T distributor
	ICZ-TR-CAN/DN-V15	CAN terminator

FACTORY AUTOMATION – SENSING YOUR NEEDS



Pepperl+Fuchs sets the standard in quality and innovative technology for the world of automation. Our expertise, dedication, and heritage of innovation have driven us to develop the largest and most versatile line of industrial sensor technologies and interface components in the world. With our global presence, reliable service, and flexible production facilities, Pepperl+Fuchs delivers complete solutions for your automation requirements – wherever you need us.

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