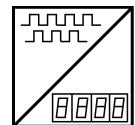


PRODIS-INC

Digital Process Meter for Incremental Sensors



- For ASM Position Sensors and Encoders with incremental output
- Integrated sensor supply
- Counting rate up to 250 KHz
- 6-digit LED display
- Relative measurement mode
- RS-232 interface
- Optional 4 comparator outputs

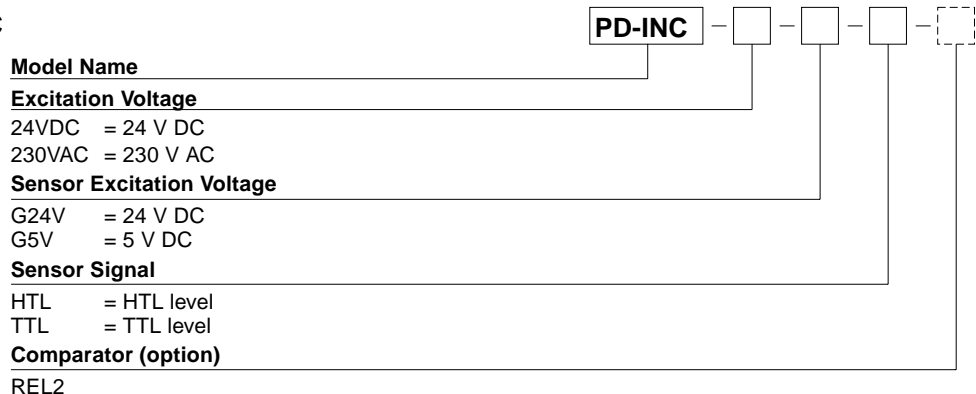


Description

PRODIS-INC is designed for use with incremental position sensors to display angles and displacements. The fast counter processes 90° phase shifted A,B signals (quadrature signals) for direction and counting information. Sensor excitation is supplied from the meter. With four membrane keys all parameters can be programmed for the special application. An zero signal and a reference signal can be used for calibration of the measurement system. Optional comparator functions with 4 NPN open-collector outputs are available, 2 of them also as relay output

Specifications		
Display		6-digit 7-segment LED, 14 mm high, decimal point programmable
Excitation voltage/current		24 V DC $\pm 10\%$ / 150 mA, 85-230 V AC / 180 mA max.
Counting rate		250 kHz maximum, 1 MHz edge frequency
Sensor excitation		24 V DC/200 mA or 5 V DC/200 mA
Inputs		A, B, Z, T (reference signal)
Connection		Terminal strip 12-pole, excitation 3-pole
Operation temperature		-10 ... 40 °C
Storage temperature		-20 ... 85 °C
Weight		Approx. 250 g
Protection class		Front IP60, back IP40
Humidity		95% R.H., non condensing
Comparator outputs (option)	Relay NPN	250 V AC/5 A, 30 V DC/5 A 24 V max./50 mA to GND
Electromagnetic compatibility		Directive 73/23/EEC: DIN EN 61010:1994-03
Safety of equipment		Directive 89/336/EEC

Order Code PRODIS-INC



Order Example: PD - INC - 24VDC - G24V - HTL

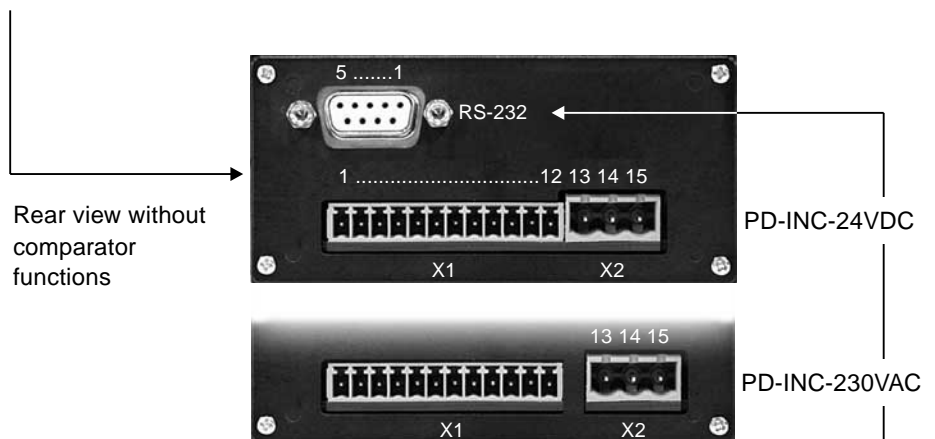
PRODIS-INC

Digital Process Meter for Incremental Sensors



Programmable Parameters / Value Range	Value range display, offset, limit values	-999999 up to +999999
	Divisor, Multiplier	0 up to 59999
	Other programmable parameters	Counting direction, decimal point position, last-value memory, Z signal evaluation, display brightness
	Signal T	Manual zero, key lock, display value hold, Z release, relative measurement

Wiring basic equipment	Signals	Connector X1 Pin No.	Connector X2 Pin No.
	Sensor +U _B	1	
	Sensor 0 V (GND)	2	
	Signal <u>A</u>	4	
	Signal <u>A</u>	5	
	Signal <u>B</u>	6	
	Signal <u>B</u>	7	
	Signal <u>Z</u> (zero signal)	8	
	Signal <u>Z</u> (zero signal)	9	
	Signal <u>T</u> (reference signal)	10	
	Signal <u>T</u> (reference signal)	11	
	GND	12	
	PD-INC-24VDC		
	Excitation +24 V		13
	Excitation 0 V		14
	PD-INC-230VAC		
	Excitation		13 / 15
	Protective ground		14

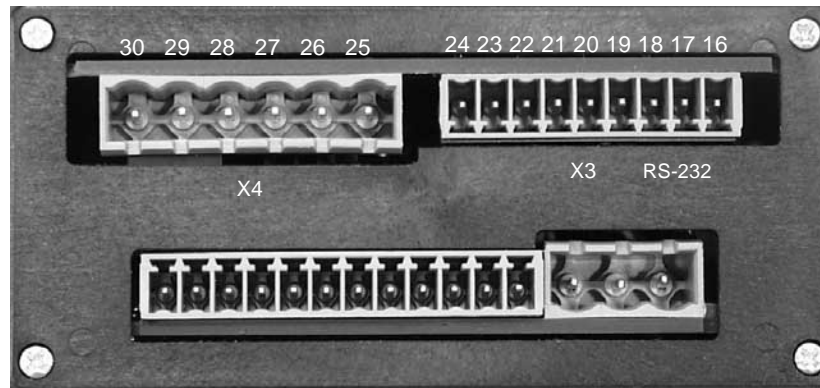


RS-232 Interface	Level	RS-232: ±8 V, galvanically isolated	
	Data format	1 start bit, 8 data bits, 1 stop bit, no parity	
	Transmission rate	4800 / 9600 / 19200 Baud	
	Signals	Connector X3 Pin No.	DSUB Connector Pin No.
	TxD	17	2
RxD	16	3	
GND	18	5	

PRODIS-INC Digital Process Meter for incremental Sensors

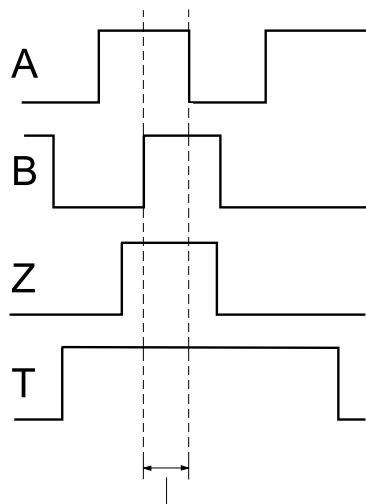


Rear view with
comparator
functions



Comparator functions (option)	4 comparator outputs: 1 & 2 = relay and NPN output, 3 & 4 = NPN outputs		LED 1 is on when relay 1 is in operation
	Signals	Connector X4 Pin No.	Connector X3 Pin No.
	NPN1 collector		20
	NPN2 collector		21
	NPN3 collector		22
	NPN4 collector		23
	NPN GND		24
	NPN +U _B (24 V)		19
	Relay1 NO	25	
	Relay1 NC	27	
	Relay1 COM	26	
	Relay2 NO	28	
	Relay2 NC	30	
	Relay2 COM	29	

Zero signal Z and
reference signal T

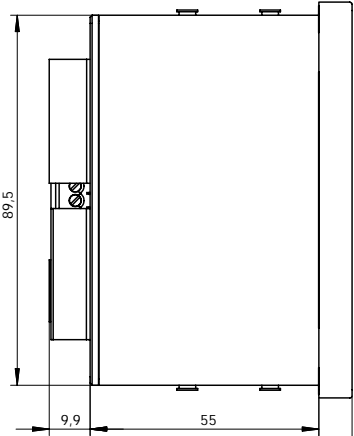
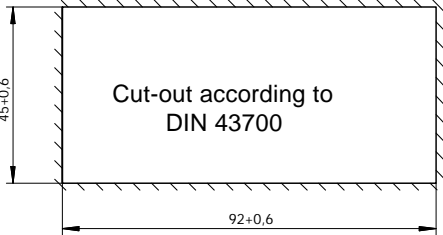
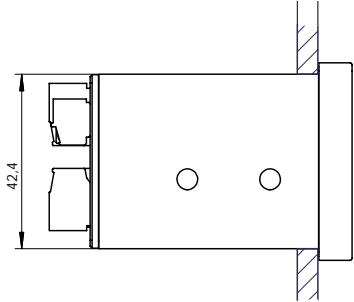
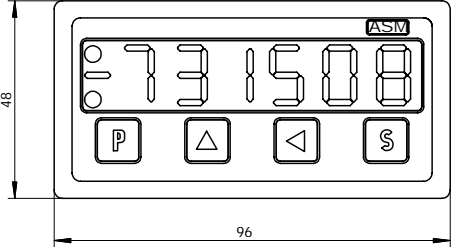


Valid range (A & B & Z) resp. (A & B & Z & T)

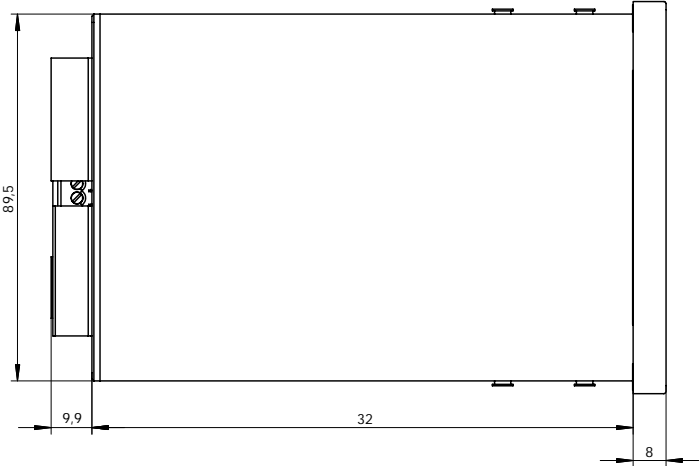
PRODIS-INC Digital Process Meter for incremental Sensors



Outline drawing



PD - INC - 24VDC



PD - INC - 230VAC