



touchMATRIX[®] Indicator DP350

Display with Start-Stop-Interface for transsonar measurement with absolute and magnetostrictive position encoders, with touchscreen and graphic display

Product features:

- For absolute and magnetostrictive position encoder with Start-Stop-Interface
- Bright and high-contrast display with event-dependent color variations
- Emulation of a 7-segment display inclusively icons and units
- Intuitive and easy parameterization by plain text and touchscreen
- 5 V / 24 V auxiliary output for encoder supply
- Linearization with 24 control points
- Numerous features, e. g. scaling, filter, zero offset and counting direction etc.
- 3.78 x 1.89 inch norm panel housing and IP65 protection

Available options:

DP350: Basic unit with Start-Stop-Interface, 3 control inputs, 5V/24 VDC encoder supply

- Option **AC:** Power supply 115 / 230 VAC
- Option **AO:** 16 bit analog output, 4 control outputs, serial RS232 interface
- Option **AR:** 16 bit analog output, 4 control outputs, serial RS485 interface
- Option **CO:** 4 control outputs, serial RS232 interface
- Option **CR:** 4 control outputs, serial RS485 interface
- Option **RL:** 2 relay outputs

All options can be combined

Technical Specifications:		
Connections:	Connector type:	screw terminal, 1.5 mm ² / AWG 16
Power supply (DC):	Input voltage:	18 ... 30 VDC
	Protection circuit:	reverse polarity protection
	Consumption:	approx. 100 mA (unloaded)
	Fuse protection:	extern: T 0.5 A
Power supply (AC): (Option AC)	Input voltage:	115...230 VAC, 50...60 Hz
	Power consumption:	approx. 3 VA (unloaded)
	Fuse protection:	extern: T 0.1 A
Encoder supply:	DC version:	24 VDC (approx. 1 V lower than the power supply voltage), max 250 mA or 5 VDC (± 15%), max. 250 mA
	AC version:	24 VDC (± 15%) (max 150 mA until 45°C / 80 mA by more than 45°C) or 5 VDC (± 15%), max. 250 mA)
P interface:	RS485 input:	1 (Start_Stop, /Start_Stop)
	RS485 output:	1 (Init, /Init)
	Pulse width init-pulse:	~2 µs
	Frequency init-pulse:	62,5 Hz - 5000 Hz (adjustable)
Control inputs:	Number of inputs:	3
	Format:	HTL, PNP (Low 0 ... 3 V, High 9 ... 30 V)
	Frequency:	Max. 10 kHz
	Load:	Max. 2 mA / Ri > 15 kOhm / 470 pF
Analog output: (Option AO/AR)	Configuration:	current or voltage operation
	Voltage output:	-10...+10 V (max. 2 mA)
	Current output:	0/4 ... 20 mA (burden: max. 270 Ohm)
	Resolution:	16 Bit
	Accuracy:	± 0,1 %
	Reaction time:	< 150 ms
Control outputs: (Option AO/AR/CO/CR)	Number of outputs:	4
	Format / level:	5 ... 30 V (depends on the Com+ voltage), PNP
	Output current:	Max. 200 mA
	Reaction time:	< 1 ms
Relay outputs: (Option RL)	Number of outputs:	2
	Configuration:	potential free changeovers
	AC-Switching capacity:	Max. 250 VAC / 3 A / 750 VA
	DC-Switching capacity:	Max. 150 VDC / 2 A / 50 W
	Reaction time:	< 20 ms
Serial interface: (Option AO/AR/CO/CR)	Format (Option AO/CO):	RS232
	Format (Option AR/CR):	RS485
	Baud rate:	9600, 19200 or 38400 baud
Display:	Type:	LCD (backlight)
	Display range:	8 digits plus sign (-99999999 ... 99999999)
	Digit height:	13 mm height
	Color:	red / green / yellow (switchable)
	Operation:	resistive touchscreen
Housing:	Material:	ABS, UL 94 V-0
	Mounting:	panel cut out
	Dimensions (w x h x d):	96 x 48 x 116 mm / 3.78 x 1.89 x 4,56 inch
	Cut out (w x h):	91 x 44 mm / 3.58 x 1.69 inch
	Protection class:	IP65 (front), IP20 (rear)
	Weight:	approx. 200 g
Ambient temperature:	Operation:	-20 °C ... +60 °C resp. -4 ... 140 °F
	Storage:	-25 °C ... +70 °C resp. -13 ... 158 °F
Conformity and standards:	EMC 2014/30/EU:	EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61326-1
	LV 2014/35/EU:	EN 61010-1
	(Only for option AC and RL)	EN 50581
	RoHS (II) 2011/65/EU	
	RoHS (III) 2015/863:	EN IEC 63000