

# ABSOLUTE LENGTH AND ANGLE MEASURING

## Digital display EP1-I - incremental



The digital display EP1-I series is in combination with incremental encoders or magnetic sensors a very cost effective and safe solution for data acquisition in machine and plant construction, especially in combination with Willtec incremental encoders or with the magnetic sensor system LHR5.

- LED display, 5-digit, digit height 10 mm
- 36mm x 72mm x 60mm DIN housing, installation depth 66 mm
- Power supply 10 - 30 VDC  
incl. encoder supply 5 or 24 VDC
- Protection class IP4x to IP5x, front side (with sealing IP6x possible on request)
- Absolute incremental change
- Counting frequency up to 100 kHz
- Actual value memory, selectable
- Optional: Interface RS 485
- Accessories: Housing, brackets, etc.

### Pin assignment - digital display EP1-I

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15		
Fig.: Connections backside		
No.	Function	Note
1	Encoder supply +5 VDC or +24 VDC max. 100 mA	
2	Channel A	
3	Channel /A	
4	Channel B	
5	Channel /B	
6	GND	
7	Reset input +	24 V with optocoupler
8	Reset input -	
9	RS485 - DÜB	
10	RS485 - DÜA	
11	Power supply +10 to 30 VDC	
12	Power supply mass	

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## Digital display EP1-I - inkremental

Operation - digital display EP1-I			
Key position	Left	Middle	Right
Symbol	Reset-/reference-symbol (arrow left)	Star (arrow up)	Set-value symbol (SET)
Display mode	Reset of ABS-/REL-value to zero or press SET value 1 to 10 sek., depending on programming (7 tSE)	Switchover ABS/REL value, REL value is indicated by blinking decimal points.	Press and hold 15 sec. to switch over to the programming mode
Programming mode	Change digit 1 to the left	Increase digit by 1 or change parameter	Accept value and next menu item

Start up sequence: display test (88888888), version display

Programming menu - digital display EP1-I				
Menu item	Designation	Selectable range	Default value	Note
1 rEF	Value (reference value)	-99999 up to 999999	0	Value (reference value) on which is set during reset
2 SF	Scaling factor	0,00001 up to 9,99999	1,00000	Example: encoder 1000, spindle 5 mm, display 1/100mm-> Scaling factor =500/(4x1000) = 0,1250
3 Sdi	Divisor	1, 10, 100, 1000	1	
4 dP	Decimal places	0, 0.0, 0.00, 0.000	0.0	
5 dir	Counting direction	UP, dn	UP	UP=positive, if turned clockwise dn= negative
6 tSE	Release Reset button	On, OFF 1 SEC, 3 SEC, 5 SEC, 10 SEC	5 SEC	Switched off or the time that you have to push the button to reset the display
7 trE	Release ABS-/REL button	On, OFF	On	
8 bri	Display brightness	1 up to 5	5	1=darkest level 5=brightest level
9 ISP	Actual value memory	On, OFF	On	
10 Adr	Devide address	1 to 255	001	Only for interface

