

INCREMENTAL LENGTH AND ANGLE MEASURING

Digital display EP1-S - Highspeed



The digital display series EP1-S is in combination with incremental encoders or magnetic sensors a very cost effective solution for data acquisition in machine and plant construction, especially in combination with Willtec incremental encoders or magnetic length measuring systems of the series EHP1 or LHR5.

- LED display, 8-digit, digit height 14 mm
- 36 mm x 72 mm x 60 mm DIN housing, mounting depth 66 mm
- Power supply 15 - 30 VDC including encoder supply 5 or 24 VDC
- Protection: IP4x to IP5x, front side (with sealing IP6x possible on request)
- Absolute incremental change
- Counting frequency up to 1MHz
- 10 bit DA - converter
- Actual value memory, selectable
- Optional: interface RS 485
- Accessories: Housing, brackets, etc.

Pin assignment - digital display EP1-S

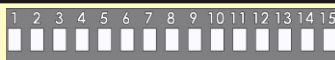


Fig.: Connections backside

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

External reset : Wiring - digital display EP1-S

External switch, to be affixed by customer

Reset input + (Pin 9) ———— / ———— +15 to 30 VDC (Pin 13)
 Reset input - (Pin 10) ———— ———— Power supply mass (Pin 14)

With external reset set menu item 7 on rFS.

INCREMENTAL LENGTH AND ANGLE MEASURING

Digital display EP1- S - Highspeed

Operation - digital display EP1-S

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 (5 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, always evaluated 4-fold

Programming menu - digital display EP1-S

Menu item	Designation	Selectable range	Default value	Note
1 rEF	Value (reference value)	-99999999 up to 99999999	0	Value (reference value) on which is set during reset
2 SF	Scaling factor	0,0000001 up to 9,9999999	1,0000000	Example: encoder 1000, spindle 5 mm, display 1/100mm-> Scaling factor =500/(4x1000) = 0,1250
3 dP	Decimal places	0, 0.0, 0.00, 0.000	0.0	
4 dir	Counting direction	UP, dn	UP	UP=positive, if turned clockwise dn= negative
5 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 diplay
6 trE	Release ABS- /REL button	On, OFF	On	
7 rESET	Reset	rFS: magnetic scale with reference point Index: magnetic scale without reference point	rFS	rFS = reset if reset input is active, Index = reset if reset input and A, B, Index = High
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 up to 255	001	Only for interface

Ordering example - digital display EP1-S

