

# INCREMENTAL LENGTH AND ANGLE MEASURING

## Digital display EP1-SSI - absolute



The digital display series EP1 SSI is in combination with absolute encoders or magnetic sensors a very economical and precise solution for data acquisition in machine and plant construction, including in combination with Willtec absolute encoders or the magnetic length measuring systems S1H and AMS2.

- LED display, 8-digit, digit height 8 mm
- 36 mm x 72 mm x 60 mm DIN housing, mounting depth 66 mm
- Power supply 12 - 30 VDC including encoder supply 5 or 24 VDC
- Protection: IP4x to Ip5x, front side (with sealing IP6x possible on request)
- Absolute incremental change
- Easily programmable scaling factor
- Actual value memory, selectable
- Optional: interface RS 485
- Accessories: Housing, brackets, etc.

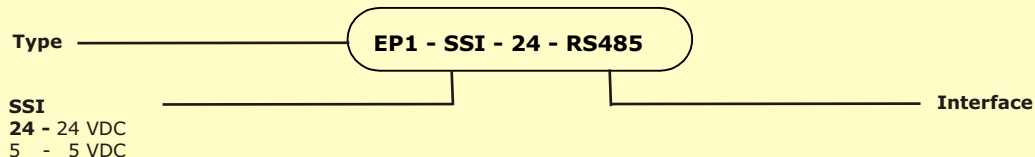
### Pin assignment - digital display EP1-SSI



Fig.: Connections backside

No.	Function	Note
1	Encoder supply +5 VDC or +24 VDC max. 100 mA	
2	Data +	Optocoupler
3	Data -	
4	Clock +	RS422 output for SSI-clock
5	Clock -	
6	N. C.	
7	N. C.	
8	GND	Encoder mass
9	Reset input +	24 V with optocoupler
10	Reset input -	24 V with optocoupler
11	RS485 - DÜB	
12	RS485 - DÜA	
13	Power supply +10 to 30 VDC	
14	Power supply mass	

### Ordering example - digital display EP1-SSI



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Operation - digital display EP1-SSI			
Key position	Left	Middle	Right
Symbol	Arrow left	Arrow up	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, measured value			

Programming menu - digital display EP1-SSI				
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 display
6 trE	Release ABS-/REL button	On, OFF	On	
7 G-bit	Number of encoder bits	8-30	25	Parameter only relevant with EP2-A-SSI
8 S-bit	Number of single-turn bits	5-13	13	
9 AuSG	Coding of encoder	GraY, bin	GraY	
10 For	Format of encoder	No, trEE	No	
11 bri	Display brightness	1 up to 5	5	1=darkest level 5=brightest level
12 Adr	Devide address	1 up to 255	001	Only for interface