


Digital display EP2 A - SSI - absolute



The digital display series EP2-A SSI is in combination with absolute encoders or magnetic sensors a very cost effective solution for data acquisition in machine and plant construction, especially in combination with Willtec absolute encoders or magnetic linear encoders of the series AHP/S1H, MAT, AMS2...

- LED display, 6-digit, height 14 mm
- 48 mm x 96 mm x 75 mm DIN mounting housing, installation depth 75 mm
- Recesses 45 mm x 92 mm
- Power supply 15 - 30 VDC or 230 VAC including Encoder supply 5 or 24 VDC
- Protection class IP4x to IP5x, front side (with sealing IP6x possible on request)
- Absolute incremental change
- Freezing function
- Offset value, selectable
- Option: interface RS 485
- Other versions on request, for example: 2 Counter input, USB, etc.
- Accessories: Casing (1 -, 2 -, 3 - or 4-fold), brackets, etc

Pin assignment - digital display EP2-A-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	Shield cable	
14		+(15 to 30 VDC)
15		GND-

Ordering example - digital display EP2-A-SSI	
Type	EP 2 - SSI - 5 - RS4 85
SS I	In ter face
5 - 5 VDC	
24 - 24 VDC	

ABSOLUTE LENGTH AND ANGLE MEASURING

Digital display EP2 A - SSI - absolute

Operation - digital display EP2-A-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 (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. Short press switches on/off an offset value (must be different to 0). Blinking decimal point in case of activ offset value.
Programming mode	Change digit 1 to the left	Increase digit by 1 or change parameter	Accept value and next menue item

Start up sequence: display test (88888888), version display, displayed value = encoder value + reference value + offset value

Programming menu - digital display EP2-A-SSI

Menu item	Designation	Selectable range	Default value	Note
1 rEF	Value (reference value)	-99999 to 999999	0	Value (reference value) on which is set during reset
2OFF	Offset value	-99999 to 999999	0	Can be switched on (see display mode above)
3 SF	Scaling factor	0,00001 to 9,99999	1,00000	Example: encoder 1000, spindle 5 mm, display 1/100mm-> Scaling factor =500/(4x1000) = 0,1250
4 Sdi	Divisor	1, 10, 100, 1000	1	Additional divisor to set the scale more precisely
5 dP	Decimal places	0, 0.0, 0.00, 0.000	0.0	
6 dir	Counting direction	UP, dn	UP	UP=positive, if turned clockwise dn= negative
7 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
8 trE	Release ABS-/REL button	On, OFF	On	
9 Gbit	Number of encoder bits	8-30	25	Parameter only relevant with EP2-A-SSI
10 Sbi	Number of single-turn bits	5-13	13	
11 AuS	Coding of enoder	GraY, bin	GraY	
12 For	Format of encoder	no, trEE	No	
13 bri	Display brightness	1 to 5	5	1=darkest level 5=brightest level
14 Adr	Device address	1 to 255	001	Only for interface
15 EFr	Freezing function	OFF, 3, 5, 10 SEC	OFF	