

BC 58 with SSI Interface

Synchronous-serial transfer (SSI):

Synchronous readout of the encoder data is according to the clock rate given by the SSI-counterpart. The number of clock rates is determined by the type of encoder and the configuration of the special bits as defined.

For multiple transactions (the stored value is readout several times successively) a fixed clock rate per transaction must be kept (for singleturn 13 resp. 14 clocks, for multiturn 25 resp. 26 clocks). In the rest position, when the last clock brush has passed by more than 30 µm, the data outputs is logically at "1".

With the first descending clock edge the encoder data and the special bits are loaded in the shift register of the encoder interface. With each ascending clock edge the data bits are serially readout, beginning with the MSB. At the end of the data transfer the data output is set to logically "0" for approx 20 µs.

Recommended data transmission rate for SSI:

The maximum data transmission rate depends on the cable length.

Cable length	Baud rate
< 50 m	< 400 KHz
< 100 m	< 300 KHz
< 200 m	< 200 KHz
< 400 m	< 100 KHz

Pin Configuration SSI Interface:

Cable	Connector	Signal
brown (0,5mm ²)	1	0 V (Supply voltage)
pink	2	Data
yellow	3	Takt
		N.C.
blue	5	Direction
	6	N.C.
	7	N.C.
white (0,5 mm ²)	8	10 ... 30 V DC
	9	N.C.
		Data
green	11	Takt
	12	0 V- Signal Output

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Electrical Specification	
Power supply	5V or 10-30 V
Max. current consumption ST / MT	50 mA / 100 mA
Interface	SSI
Output Code	Binär or Gray
Resolution Singleturn	10-17 Bit , max. 13 Bit in MT Variante
	Gray Excess: 360, 720 Steps
Absolut Linearity	+/- 35 ''
Revers Linearity	+/- 7 ''
Status LED	Green = ok; Red = Alarm
Steuereingänge	Direction
Programmable funktions	Resolution, Cods, Direction, Warning, Alarm
Resettaste	stop per Parametrierung
Connection	Cable or Connector axial or radial

Order No:

BC 58 / 1212 E K.42 SB B

Resolution	Supply voltage	Flange	Protection	Shaft	Interface	Connection
0010 10 Bit ST	A = 5 V E = 10-30 V	S.41 Sychro	IP 64	6 mm	SB = SSI	A = Cable axial
0012 12 Bit ST		S.71 Sychro	IP 67	6 mm	Binär	B = Cable radial
0013 13 Bit ST		K.42 Clamp	IP 64	10 mm	SG = SSI	C = Connector 12 pins axial
0014 14 Bit ST		K.72 Clamp	IP 67	10 mm	Gray	D = Connector 12 pins radial
0017 17 Bit ST		F.42 Plug-shaft	IP 64	10 mm H-Shaft		
1212 12 MT+ 12 S		F.47 Plug-shaft	IP 64	12 mm H-Shaft		
1213 12 MT+13 S						