

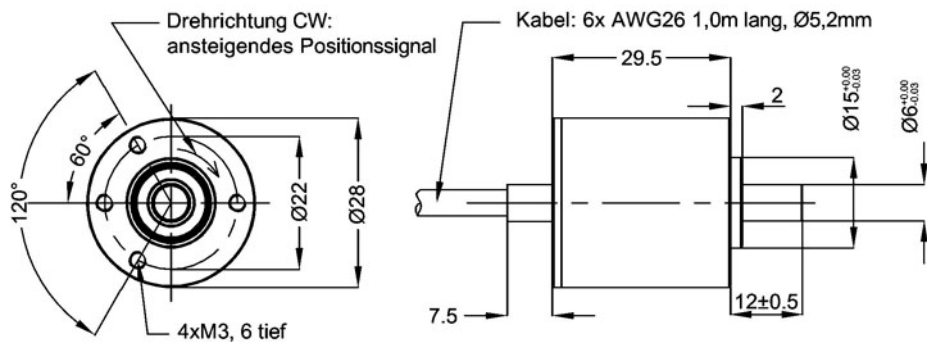
Series MAB28 SER / Hall Effect Absolute Encoder

- Synchronous serial interface (SER)
- Angle range 360°
- Resolution 10 Bit or 12 Bit
- Supply voltage 5V
- 28 mm housing diameter
- Precision ball bearings

The MAB28 is a multifunctional and robust encoder. The precision ball bearings as well as the magnetic measuring principle are warrants for a high life time expectancy.



Drawing



Aderbelegung					
rt	bn	og	ge	gn	sw
VSUP	DO	PROG*	CLK	CS	GND

*) PROG bitte NICHT anschließen !

Series MAB28 SER / Hall Effect Absolute Encoder

Electrical Data

Electrical angle	360°
Independent linearity tolerance	±0,2 %
Resolution	1024 (10 Bit) / 4096 (12 Bit)
Update rate	0,1 ms
Supply voltage	5 ± 10% VDC
Supply current (no load)	< 20 mA

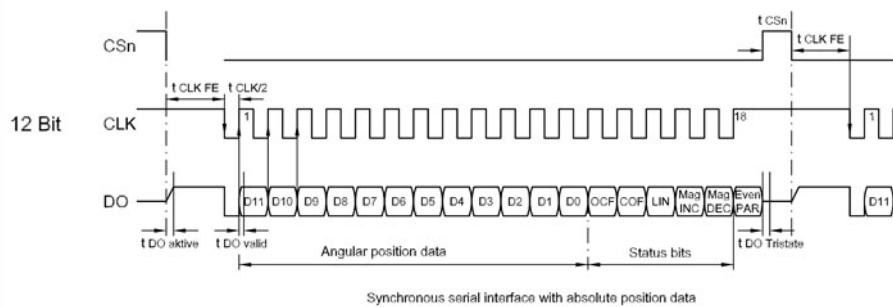
Mechanical Data

Maximum rotational speed	6000 rpm
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Other Data

Protection class (shaft/housing)	IP65
Operating temperature	-25 .. +85°C
Storage temperature	-40 .. +85°C
Bearing	2 precision ball bearings
Housing material	chromed aluminium
Shaft material	stainless steel
Weigth	approx. 90 g

Timing Diagramm SER-Bus



Falling edge of CS triggers a measurement value

Signal Timing:

$t_{CSn} > 500 \text{ ns}$

$t_{CLKFE} > 500 \text{ ns}$

$CLK < 1 \text{ MHz}$

Remark: Diagramm is for 12 Bit version. Signal timing apply to 10 Bit and 12 Bit version.

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Order Description

Series MAB28	MAB28						
<u>Resolution / Supply voltage / Output signal</u>							
12 bit High Speed / 3,3 V / SER				12HS 3,3 SER (*)			
12 bit High Speed / 5 V / SER				12HS 5 SER (*)			
14 bit High Speed / 5 V / SPI				14HS 5 SPI (*)			
redundant 14 bit / 5 V / SPI		X (*)		14HS 5 SPI (*)			
12 bit / 5 V / SSI				12 5 SSI (*)			
12 bit / 24 V / SSI				12 24 SSI			
Counterclockwise rising signal				CCW360 (*)			
Other electrical effective angle				C(C)Wxxx (*)			
Zero point alignment (only for SPI)					N (*)		
Other shaft length [mm]						Axx (*)	
<u>Cable output</u>							
Axial - 1 m							-
Axial [m]							CVxx(*)
Radial [m]							CVRxx(*)

"bold print = standard option"

short-term stock types can be found on: <http://www.megatron.de/en/stocklists/angle-sensors/lagerliste.html>

(*) = on request available for projects

23.02.2015