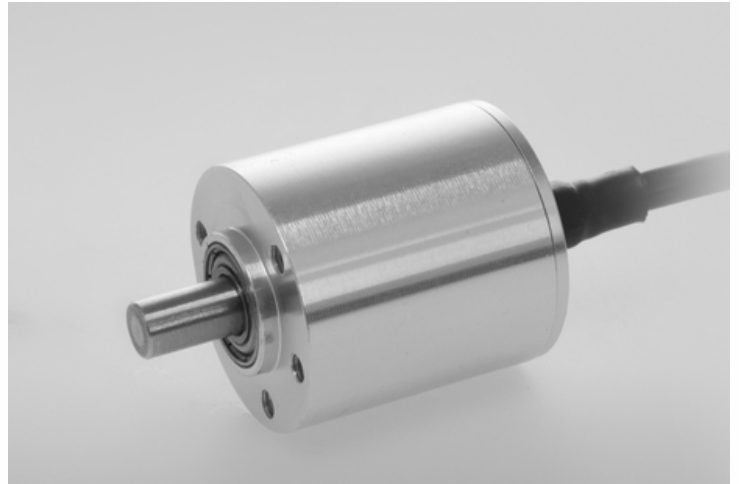


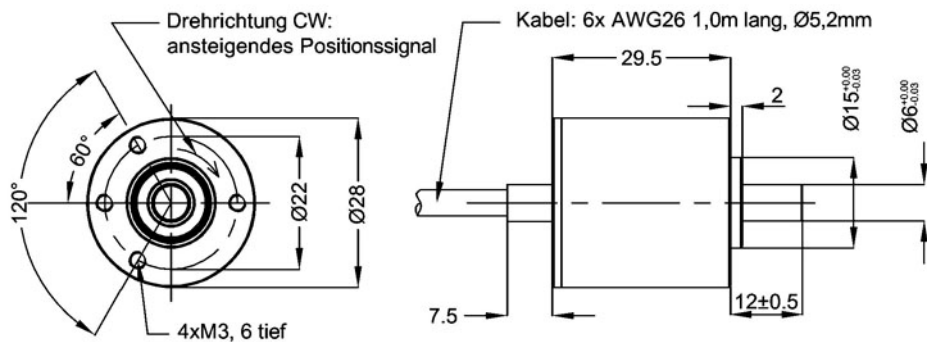
## Series MAB28 SER / Hall Effect Absolute Encoder

- 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



Adernbelegung					
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

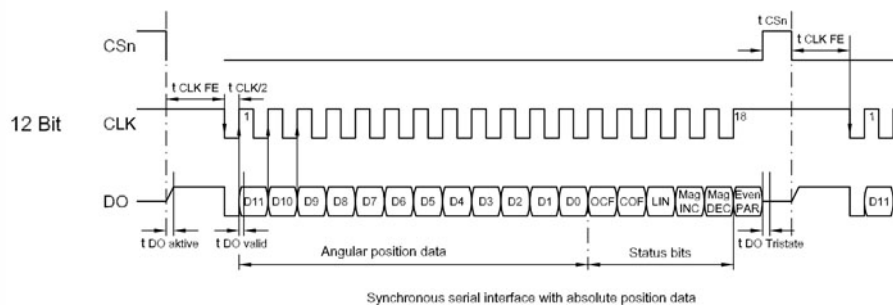
## Mechanical Data

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.

## Series MAB28 SER / Hall Effect Absolute Encoder

### Order Description

Series	Resolution Speed	Operating Voltage	Interface	Order Code
<b>MAB28</b>	10 Bit High Speed	5V	SER	MAB28 10HS 5 SER
	12 Bit High Speed			MAB28 12HS 5 SER

Please ask for more options.

### Our speciality are customs solutions, economically priced on small series.

On serial demand we offer:

Special shaft dimensions, mounting of gear wheels and other mechanical parts, assembling of cables and connectors and more. Please contact us.

### Please note

All the specifications and information in this data sheet can not consider the special demands that are caused by the application. Because of this, they are no general description of the properties of the product. Please consider also our detail specifications. The lifetime specification was tested under laboratory conditions.

Please find the exact specifications of the output signals in the datasheets of application notes (AS5040 and AS5045) of Austria Microsystems: [www.austriamicrosystems.com](http://www.austriamicrosystems.com)

10. November 2008. All specifications are subject to change without notice.