

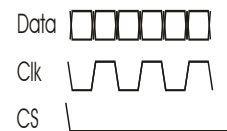
Datasheet

Infiniturn® Encoder

ens28F



- Synchronous serial interface
- Resolution 10 Bit or 12 Bit
- Programmable zero point setting



The absolute encoder ens28F is used as a high resolution device or a rotary encoder for universal applications.



Infiniturn® Encoder

Standard Options and Order Description

Series	Resolution speed	Supply Voltage	Interface
ENS28F	10 Bit High Speed	3.3V; 5V	SER
	12 Bit High Speed	3.3V; 5V	SER

All Standard Versions are with 6 Pole Cable.

Possible combinations

Type	Resolution speed	Supply Voltage	Output Signal	Order description
ENS28F	10 Bit HS	5V	SER	ENS28F 10HS 5 SER
	12 Bit HS	5V	SER	ENS28F 12HS 5 SER

Our speciality are customs solutions, economically priced on small series.
 Mechanical: Special shaft, mounting of gear wheels and other mechanical parts.

Electrical: For the detailed information of all possibilities please refer to the **configuration sheet**.

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(*) For more Options, please refer to our configuration sheet

Please note

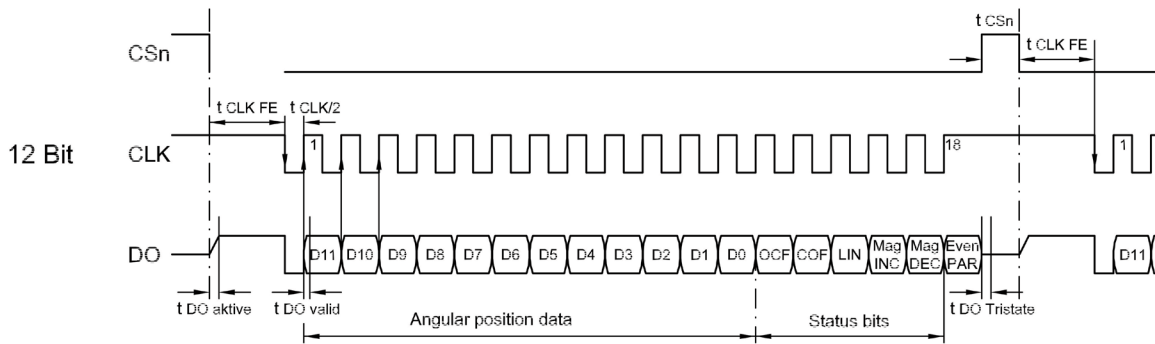
The specifications and informations in this datasheet cannot consider all special demands that are caused by the application. Because of this, they are no general description of the properties of the product. Please find the exact specifications of the output signals in the datasheets of application notes (A55040) of Austria Microsystems: www.austriamicrosystems.com



Infiniturn® Encoder

Electrical Specifications

Electrical angle	360°	(*)
Independent Linearity tolerance	± 0,2%	
Output Signal	SER = Synchronus serial interface (like SSI but with status signal)	
Resolution	4096 (12 Bit) 1024 (10 Bit)	
Updaterate positions	0,1 ms	
Supply voltage	4,5V ms ≤ UB ≤ 5,5V	



Synchronous serial interface with absolute position data

Falling edge of CS triggers a measurement value

Signal-timing:

tCSn	>500 ns
tCLKFE	>500 ns
CLK	<1 MHz

Remark: Above signal timing apply to 10 Bit and 12 Bit version.

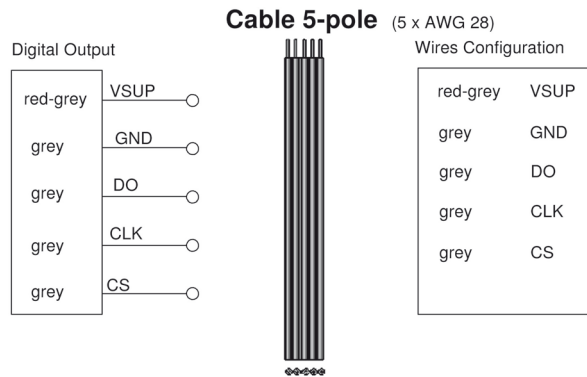


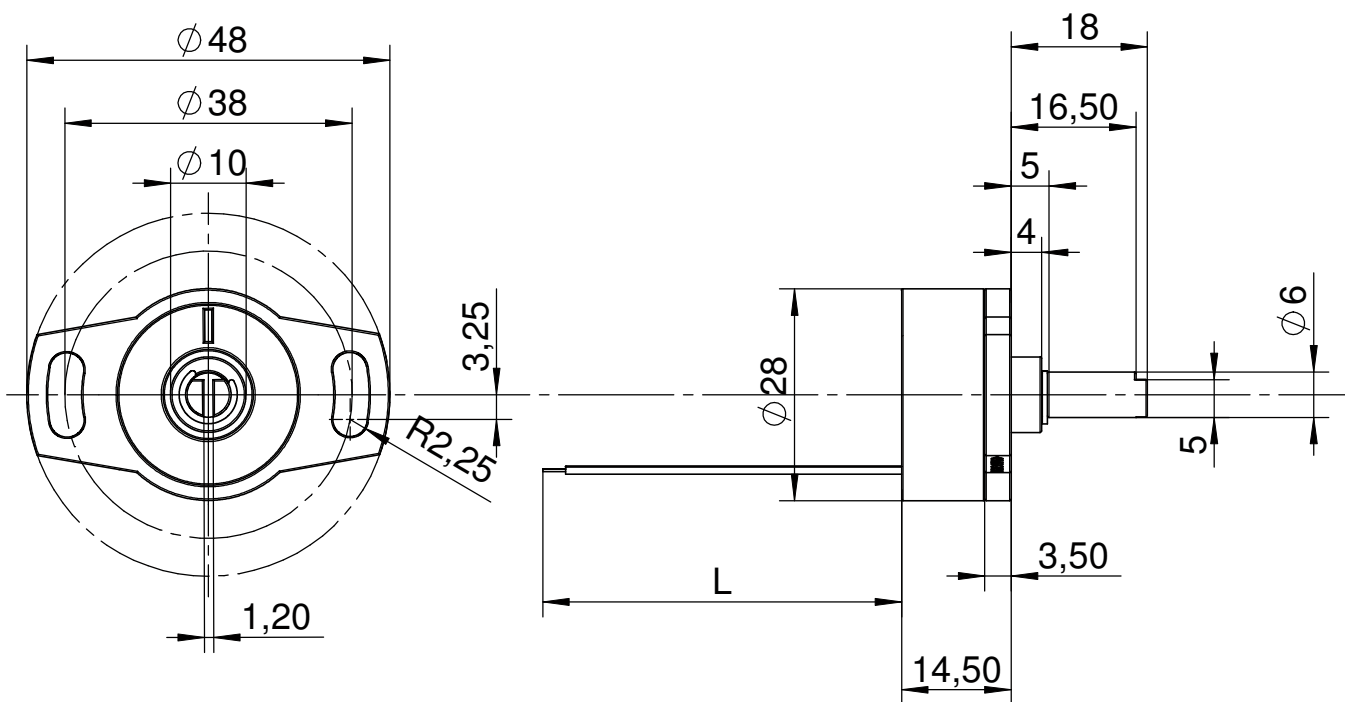
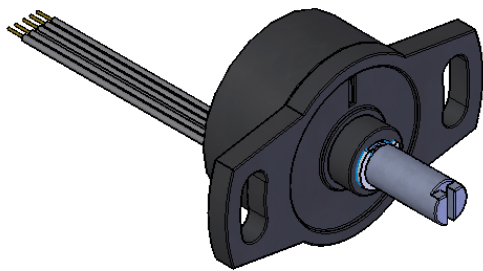
Infiniturn® Encoder

Mechanical Specifications

Housing	glas fiber reinforced polyamid	
Material Shaft	stainless steel	
Bearing	Glas-fiber	
Protection Class	IP65	
Operating temperature	-30 ... +80° C	
Storage temperature	-30 ... +80° C	
Dimensions	pls. find drawing at page 5	
Ø Shaft	Ø 6mm	(*1)
Max. rotational speed	6.000 turn/min	
Life expectancy	>50 Mio. turns	
weight	approx. 30g	

Cable





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General Tolerances DIN 7168mH		Form and Coat Tolerances DIN/ISO 1101		Edges Dimension DIN 6784		Surface DIN/ISO 1302		Weight [g]		
		⊙ 0,1 □ 0,05		↙ $\begin{matrix} +0 \\ -0,1 \end{matrix}$ ↘ $\begin{matrix} -0 \\ +0,1 \end{matrix}$		w ✓ (✓)		Material		
								Surface		
Index	Änderung	Date	Name	Date	Name	Title				
				Drw.	16.09.2008	RO28 DB				
				Chkd..	16.09.2008	00115_RO28_komplett_4_00_00				
				Norm		Project Number				
						00115			Sheet 1	
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Meganotive GmbH & Co., KG Hermann-Oberth-Str. 7 85640 Putzbrunn / München Telefon: 089/46094-0 info@megamotive.de / www.megamotive.de						Format	DINA4			Scale: 1:1