# **Rotary Measuring Technology**



### **Incremental Encoder**

### **Sendix**

### 5006 Stainless-steel



The Sendix incremental 5006 in stainless-steel offers optimum material resistance and thus virtually unlimited durability.

The high-grade Viton seals, the IP 67 level of protection as well as the wide temperature range additionally ensure impermeability and ruggedness.



















Shock/vibration

Short-circuit

Reverse polarity

**Durable and sealed** 

- · Protection rating IP67
- · Rugged stainless-steel housing
- · Viton seals
- Wide temperature range -40 ... +85°C
- Sturdy bearing construction in Safety Lock™ Design for resistance against vibration and installation errors

### Flexible in use

- · Compatible with all common US and European standards,
- · Supply voltage 5 ... 30 V DC, various interface options, max. 5000 PPR
- Compact dimensions: Outer diameter 50 mm, installation depth max. 47 mm

### Order code







### • Flange

7 = Clamping flange, metric ø 58 mm A = Synchro flange, metric ø 58 mm

C = Square flange 63,5 mm [2,5 inch]

2 Shaft (ø x L)  $1 = \emptyset 6 \text{ mm x } 10 \text{ mm}$ 

 $3 = \emptyset 10 \text{ mm x } 20 \text{ mm}$ 

 $8 = \emptyset 3/8" \times 7/8"$ 

### Output circuit / supply voltage

2 = Push-pull (7272 with inversion) / 5 ... 30 V

4 = RS 422 (with inversion) / 5 V

**5** = Push-pull with inversion / 10 ... 30 V

### Type of connection

4 = 8-pin M12 connector radial

360, 512, 1000, 1024, 2000, 2048, 2500, 3600, 4096, 5000 (e.g. 100 pulses => 0100) Other pulse rates on request

## Preferred types are underlined

### Note:

Encoder will be delivered without mating connector. Corresponding mating connector: Type 05.CMB-8181-0

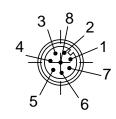
## **Mechanical characteristics**

Speed 1)		max. 6000 min <sup>-1</sup>		
Rotor moment of inertia (s	ca. 1,8 x 10 <sup>-6</sup> kgm <sup>2</sup>			
Starting torque	< 0,05 Nm			
Weight		ca. 0,4 kg		
Load capacity of shaft:	radial	80 N		
	axial	40 N		
Protection acc. to EN 60 5	IP 67			
EX approval for hazardou	optional Zone 2 and 22			
Working temperature	-40 °C +85 °C			
Materials	housing, flange, shaft	stainless steel, 1.4305		
	connector	stainless steel,		
	Seals	Viton		
Shock resistance acc. to	2500 m/s <sup>2</sup> , 6 ms			
Vibration resistance acc.	100 m/s <sup>2</sup> , 102000 Hz			

### **Terminal assignment**

Signal:	0 V GND	+U <sub>B</sub>	Α	Α	В	В	0	0	shield
M12 eurofast, 8-pin connector, Pin	1	2	3	4	5	6	7	8	1)

### 8-pin M12 connector



Matching mating connector: 05.CMB-8181-0

Suitable accessories:

- further cables and connectors, also pre-assembled, can be found in the Connection Technology section.
- further mounting attachments and stator couplings can be found in the Accessories section.

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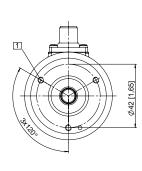
# **Rotary Measuring Technology**

# Incremental Encoder Sendix 5006 Stainless-steel

Electrical characteristics				
Output circuit:		RS 422 (TTL-compatible)	Push-Pull	Push-Pull (7272)
Supply voltage		5 V ±5%	10 30 V DC	5 30 V DC
Current consumption with ir	no load overted signal	typ. 40 mA max. 90 mA	typ. 50 mA max.100 mA	typ. 50 mA max. 100 mA
Permissible load/channel		max. ±20 mA	max. ±20 mA	max. ±20 mA
Pulse frequency		max. 300 kHz	max. 300 kHz	max. 300 kHz
Signal level	high Iow	min. 2,5 V max. 0,5 V	min UB - 1 V max. 0,5 V	min. UB-2,0 V max. 0,5 V
Rise time tr		max. 200 ns	max. 1 μs	max. 1 µs
Fall time tf		max. 200 ns	max. 1 μs	max. 1 µs
Short circuit proof outputs 1)		yes <sup>2)</sup>	yes	yes
Reverse connection of the supply vo	oltage	no	yes	no
<b>UL-certified</b>		File 224618		
CE compliant acc. to		EN 61000-6-2, EN 61000-6-4 and EN 61000-6-3		
RoHS compliant acc. to		EG-guideline 2002/95/EG		

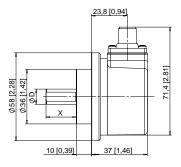
### **Dimensions**

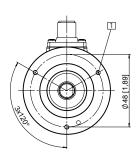
Synchro flange, ø 58 mm, (Flange type A)



1 3 x M3, 6 [0.24] deep

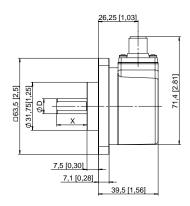
Clamping flange, ø 58 mm (Flange type 7)

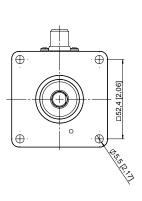




1 M3, 5,5 [0.21] deep

Square flange,  $\square$  63,5 mm [2.5 inch] (Flange type C)





1) If supply voltage correctly applied

2) Only one channel allowed to be shorted-out:

at UB = 5 V short circuit to channel, 0 V, or +UB is permitted. at UB =  $5 \dots 30$  V short circuit to channel or 0 V is permitted.