

## Data sheet for Absolute encoder

Article No. : 6FX2001-5QE25

Client order no. :  
Order no. :  
Offer no. :  
Remarks :

Item no. :  
Consignment no. :  
Project :



Figure similar

### Electrical data

Operating voltage Up	DC 5 V +- 5%
Current consumption, approx.	200 mA
Interface	EnDat 2.1
Clock input	Differential line receiver according to EIA Standard RS 485
Data output	Differential line driver according to EIA Standard RS 485
Short-circuit strength	Yes

### Cable length up to the subsequent electronics, max.

Up to 300 kHz	150 m
Up to 1 MHz	50 m
Connection	M23 flange socket, Radial
Resolution	25 bit
Telegram	According to EnDat specifications
Incremental track	512 S/R, 1 Vpp

### Code type

Sampling	Gray
Transmission	binary
Accuracy	± 60 " (Incremental track)
Friction torque (at 20°C)	≤ .01
Starting torque (at 20°C)	≤ .01

### Mechanical data

Speed max.	
With ± 1 LSB accuracy	5,000 rpm
With ± 100 LSB accuracy	10,000 rpm
Mechanical	10,000 rpm

### Load capacity

n ≤ 6000 rpm	
- Axial	40 N
- Radial at shaft end	60 N
n > 6000 rpm	
- Axial	10 N
- Radial at shaft end	20 N
Shaft diameter	10 mm
Shaft length	20 mm
Angular acceleration, max.	100,000 rad/s <sup>2</sup>
Rotor moment of inertia	0.00000145 kgm <sup>2</sup>

### Vibration and shock

Vibration (55...2000 Hz) according to EN 60068-2-6, max	300 m/s <sup>2</sup>
6 ms according to EN 60068-2-27, max	1,000 m/s <sup>2</sup>

### Degree of protection

At housing	IP67
At shaft input	IP64
Net weight	0.35 kg

### Ambient temperature

During operation	-40 ... 100 °C
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### Standards

Compliance with standards	CE, cULus
EMC class filter	Tested to DIN EN 50081 and EN 50082