SIEMENS

Data sheet for Absolute encoder

Article No. : 6FX2001-5QE13



Figure similar

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

Item no. :
Consignment no. :
Project :

Electrical data	
Operating voltage Up	DC 5 V +- 5%
Current consumption, approx.	160 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	13 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)	≤ 0.01
Starting torque (at 20°C)	≤ 0.01

Mechanical data	
Speed max.	
With ± 1 LSB accuracy	5,000 rpm
With ± 100 LSB accuracy	10,000 rpm
Mechanical	12,000 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/s²
Rotor moment of inertia	0.00000145 kgm²

Vibration and shock	
Vibration (55...2000 Hz) according to EN 60068-2-6, max	300 m/s²
6 ms according to EN 60068-2-27, max	1,000 m/s²
Degree of protection	
At housing	IP67
At shaft input	IP64
Net weight	0.35 kg

Ambient temperature	
During operation	-40 ... 100 °C

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