SIEMENS

Data sheet for Absolute encoder

Figure similar

MLFB-Ordering data 6FX2001-5QE13

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

Item no. :
Consignment no. :
Project :

Electrical data

Operating voltage Up	DC 5 V ± 5 %
Max. power consumption	160 mA
Interface	EnDat
Clock input	Differential line receiver according to EIA Standard RS 485
Data output	Differential line driver according to EIA Standard RS 485
Connection type	Flange socket, Radial
Resolution	13 bit, (8192 increments)
Telegram	13 bit, According to EnDat specifications
Incremental track	512 S/R, 1 Vpp
Short-circuit strength	Yes
Transmission rate	100 kHz ... 2 MHz

Cable length up to the subsequent electronics, max.

Up to 300 kHz	150.0 m
Up to 1 MHz	50.0 m

Code type

Sampling	Gray
Transmission	binary

Parameterizability

Accuracy	± 60 " (Incremental track)

Ambient temperature

During operation	-40 ... 100 °C

Standards

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

Mechanical data

Shaft version	Solid shaft
Shaft diameter	10 mm
Shaft length	20 mm
Angular acceleration, max.	100000 rad/s²
Moment of inertia of rotor	0.00000145 kgm²
Vibration (55...2000 Hz), max.	300 m/s²
Friction torque (at 20°C)	<= 0.01 Nm
Starting torque (at 20°C)	<= 0.01 Nm
Net weight	0.3 kg

Speed max.

With ± 1 bit accuracy	5000 rpm
With ± 100 bit accuracy	10000 rpm
Max. permissible speed (mech.)	12000 rpm

Load capacity

n = 6000 rpm	
- Axial	10 N
- Radial at shaft end	20 N
n > 6000 rpm	
- Axial	40 N
- Radial at shaft end	60 N

Shock, max.

2 ms	2000 m/s²
6 ms	1000 m/s²

Degree of protection

Without shaft input	IP67
With shaft input	IP64