SIEMENS

Data sheet for Absolute encoder



Figure similar

MLFB-Ordering data

6FX2001-5FS12

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

Item no. :
Consignment no. :
Project :

Electrical data

Operating voltage Up	DC 10 ... 30 V
Max. power consumption	160 mA
Interface	SSI
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
Transmission rate	100 kHz ... 1 MHz
Connection type	Flange socket, Radial
Resolution	13 bit (8192 increments)
Telegram	13 bit, without parity

Code type

Sampling	Gray
Transmission	Gray, fir-tree format

Parameterizability

Preset	Yes
Counting direction	Yes
Accuracy	± 79 " (with 8192 increments)

Cable length up to the subsequent electronics, max.

Up to 100 kHz	400.0 m
Up to 300 kHz	100.0 m
Up to 1 MHz	50.0 m

Mechanical data

Shaft version	Solid shaft
Shaft diameter	6 mm
Shaft length	10 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

Technical data are subject to change! There may be discrepancies between calculated and rating plate values.

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Ambient temperature

During operation	-40 ... 85 °C

Standards

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