SIEMENS

Data sheet for Absolute encoder

Article No. : 6FX2001-5FS12



Figure similar

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

Item no. :
Consignment no. :
Project :

Electrical data	
Operating voltage Up	DC 10 ... 30 V
Current consumption, approx.	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
Cable length up to the subsequent electronics, max.	
Up to 100 kHz	400 m
Up to 300 kHz	100 m
Up to 1 MHz	50 m
Connection	M23 flange socket, Radial
Resolution	13 bit
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)
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	6 mm
Shaft length	10 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 ... 85 °C

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

Subject to change. Calculated values may differ from nameplate ratings. © Copyright Siemens