SIEMENS

Data sheet for Incremental encoder



Figure similar

Article No. : **6FX2001-3GB00**

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

Item no. :
Consignment no. :
Project :

Electrical data

Operating voltage Up	DC 5 V +- 10%
Max. power consumption without load	150 mA
Signal level	Sinusoidal 1 Vpp
Resolution	1,000 S/R
Accuracy	65 rad
Phase relation signal A to B	90 ° ± 10 %

Limit frequency type at

-3 dB	>= 100 kHz
-6 dB	>= 200 kHz

Cable length

To the downstream electronics, max.	150 m

Ambient temp in operation

Fixed installation of flange outlet or cable

- At Up = 10V ... 30V	-40 ... 100 °C

Flexible cable

- At Up = 10V ... 30V	-10 ... 100 °C

Standards

Compliance with standards	CE, cULus
EMC class filter	Tested according to the EMC guidelines 89/336/EEC and the rules of the EMC guidelines (generic standards)

Mechanical data

Shaft diameter	6 mm
Shaft length	10 mm
Angular acceleration, max.	100,000 rad/s²
Rotor moment of inertia	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

Max. admissible speed

Electrical	18,000 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

Shock, max.

2 ms	2,000 m/s²
6 ms	1,000 m/s²

Degree of protection

At housing	IP67
At shaft input	IP64

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