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Data sheet for Incremental encoder



Figure similar

Article No. : 6FX2001-2UK00

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 without load	150 mA, Per track
Signal level	TTL (RS 422)
Switching time (10 ... 90 %)	≤ 100 ns Rise / fall time t+/t- <=
Phase relation signal A to B	90 °
Resolution	
Track 1	1,024 S/R
Track 2	9,000 S/R
Accuracy	
Track 1	63 "
Track 2	12 "
Sampling frequency, max.	
Track 1	160 kHz
Track 2	1 kHz
Edge clearance	
At 160 kHz (Track 1), min.	0.8 µs
At 1 MHz (Track 2), min.	0.12 µs

Ambient temp in operation	
Fixed installation of flange outlet or cable	
- At Up = 10V ... 30V	-10 ... 70 °C
Flexible cable	
- At Up = 10V ... 30V	-10 ... 70 °C

Mechanical data	
Shaft diameter	6 mm
Shaft length	15 mm
Angular acceleration, max.	100,000 rad/s²
Rotor moment of inertia	0.000002 kgm²
Vibration (55...2000 Hz), max.	100 m/s²
Friction torque (at 20°C)	0.01 Nm
Starting torque (at 20°C)	0.01 Nm
Net weight	0.7 kg
Max. admissible speed	
Speed max.	
Track 1	9,000 rpm
Track 2	6,500 rpm
Max. admissible speed	12,000 rpm

Load capacity	
n ≤ 6000 rpm	
- Axial	10 N
- Radial at shaft end	20 N
Shock, max.	
6 ms	1,000 m/s²
Degree of protection	
At housing	IP67
At shaft input	IP64

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)

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