SIEMENS

# Data sheet for Incremental encoder



Figure similar

## Article No. : 6FX2001-3EB00

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