SIEMENS

Data sheet for Incremental encoder

MLFB-Ordering data

6FX2001-4QA50



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

Item no.: Consignment no.: Project :

| Electrical data | | Mechanical data | |
|--|---|---------------------------------|---------------------------|
| Operating voltage Up | DC 10 30 V | Shaft diameter | 10 mm |
| Max. power consumption withou | t 150 mA | Shaft length | 20 mm |
| | | Angular acceleration, max. | 100000 rad/s ² |
| Signal level | UH >= 21 V at IH = 20 mA at 24 V; UL <= 2,8 V at IL = 20 mA at 24 V | Moment of inertia of rotor | 0.00000145 kgm² |
| | 02 \ 2,0 \ det2 \ 20 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | Vibration (552000 Hz), max. | 300 m/s² |
| Resolution | 500 S/R | Friction torque (at 20°C), max. | 0.01 Nm |
| Accuracy | 130 rad | Starting torque (at 20°C), max. | 0.01 Nm |
| Sampling frequency, max. | 300 kHz | Net weight | 0.3 kg |
| Switching time (10 90 %) | = 200 ns | Max. admissible speed | |
| | Rise / fall time t+/t- <= | Electrical | 36000 rpm |
| Phase relation signal A to B | 90° | Mechanical | 12000 rpm |
| Edge clearance at 300 kHz | 0.45 μs | Load capacity | |
| LED failure monitoring | High impedance driver | n <= 6000 rpm | |
| Cable length | | - Axial | 40 N |
| To the downstream electronics, | 300 m | - Radial at shaft end | 60 N |
| | | n > 6000 rpm | |
| Ambient temp in operation | | - Axial | 10 N |
| Fixed installation of flange outlet or cable | | - Radial at shaft end | 20 N |
| - At Up = 10V 30V | -40 100 °C | Shock, max. | |
| Flexible cable | | 2 ms | 2000 m/s² |
| - At Up = 10V 30V | -10 100 °C | 6 ms | 1000 m/s² |
| Standards | | Degree of protection | |
| Compliance with standards | CE, cULus | Without shaft input | IP67 |
| EMC class filter | Tested according to the EMC guidelines 89/336/EEC and the rules of the EMC guidelines (generic standards) | With shaft input | IP64 |

guidelines (generic standards)