SIEMENS

Data sheet for Incremental encoder

MLFB-Ordering data

6FX2001-2GA50



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

Project :

| Electrical data | | Mechanical data | |
|--|---|---------------------------------|-----------------------|
| Operating voltage Up | DC 5 V ± 10 % | Shaft diameter | 6 mm |
| Max. power consumption without | t 150 mA | Shaft length | 10 mm |
| load | 130 11/10 | Angular acceleration, max. | 100000 rad/s² |
| Signal level | TTL (RS 422) | Moment of inertia of rotor | 0.00000145 kgm² |
| Resolution | 500 S/R | Vibration (552000 Hz), max. | 300 m/s² |
| Accuracy | 130 rad | Friction torque (at 20°C), max. | 0.01 Nm |
| Sampling frequency, max. | 300 kHz | Starting torque (at 20°C), max. | 0.01 Nm |
| Switching time (10 90 %) | <= 50 ns | Net weight | 0.3 kg |
| | Rise / fall time t+/t- <= | Max. admissible speed | · |
| Phase relation signal A to B | 90° | Electrical | 36000 rpm |
| Edge clearance at 300 kHz | 0.45 μs | Mechanical | 12000 rpm |
| LED failure monitoring | High impedance driver | Load capacity | |
| Cable length | | n = 6000 rpm | |
| To the downstream electronics, m | nax. 100 m | - Axial | 10 N |
| Ambient temp in operation | | - Radial at shaft end | 20 N |
| Fixed installation of flange outlet or cable | | n > 6000 rpm | |
| - At Up = 5V ± 10% | -40 100 °C | - Axial | 40 N |
| | | - Radial at shaft end | 60 N |
| Flexible cable | | Shock, max. | |
| - At Up = 5V ± 10% | -10 100 °C | 2 ms | 2000 m/s ² |
| | | 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 |