

MLFB-Ordering data

6FX2001-2GA50



Figure similar

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

### Electrical data

|                                     |   |
|-------------------------------------|---|
| Operating voltage $U_p$             | DC 5 V $\pm$ 10 %                               |
| Max. power consumption without load | 150 mA  |
| Signal level                        | TTL (RS 422)                                    |
| Resolution                          | 500 S/R   |
| Accuracy                            | 130 rad   |
| Sampling frequency, max.            | 300 kHz   |
| Switching time (10 ... 90 %)        | $\leq$ 50 ns<br>Rise / fall time $t_+/t_- \leq$ |
| Phase relation signal A to B        | 90°   |
| Edge clearance at 300 kHz           | 0.45 $\mu$ s                                    |
| LED failure monitoring              | High impedance driver                           |

### Cable length

To the downstream electronics, max. 100 m

### Ambient temp in operation

#### Fixed installation of flange outlet or cable

- At  $U_p = 5V \pm 10\%$  -40 ... 100 °C

#### Flexible cable

- At  $U_p = 5V \pm 10\%$  -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.      | 100000 rad/s <sup>2</sup>   |
| Moment of inertia of rotor      | 0.00000145 kgm <sup>2</sup> |
| Vibration (55...2000 Hz), max.  | 300 m/s <sup>2</sup>        |
| Friction torque (at 20°C), max. | 0.01 Nm                     |
| Starting torque (at 20°C), max. | 0.01 Nm                     |
| Net weight                      | 0.3 kg                      |

### Max. admissible speed

|            |           |
|------------|-----------|
| Electrical | 36000 rpm |
| Mechanical | 12000 rpm |

### Load capacity

|                       |      |
|-----------------------|------|
| n = 6000 rpm          |      |
| - Axial               | 10 N |
| - Radial at shaft end | 20 N |
| n > 6000 rpm          |      |
| - Axial               | 40 N |
| - Radial at shaft end | 60 N |

### Shock, max.

|      |                       |
|------|-----------------------|
| 2 ms | 2000 m/s <sup>2</sup> |
| 6 ms | 1000 m/s <sup>2</sup> |

### Degree of protection

|                     |      |
|---------------------|------|
| Without shaft input | IP67 |
| With shaft input    | IP64 |