

Data sheet for Incremental encoder

MLFB-Ordering data

6FX2001-2DB50



Figure similar

Client order no. :

Order no. :

Offer no. :

Remarks :

Item no. :

Consignment no. :

Project :

Electrical data

Operating voltage Up	DC 10 ... 30 V
Max. power consumption without load	150 mA
Signal level	TTL (RS 422)
Resolution	1500 S/R
Accuracy	43 rad
Sampling frequency, max.	300 kHz
Switching time (10 ... 90 %)	<= 50 ns Rise / fall time t+/t- <=
Phase relation signal A to B	90°
Edge clearance at 300 kHz	0.45 µs
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 Up = 10V ... 30V -40 ... 70 °C

Flexible cable

- At Up = 10V ... 30V -10 ... 70 °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 ²
Moment of inertia of rotor	0.00000145 kgm ²
Vibration (55...2000 Hz), max.	300 m/s ²
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	12000 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 ²
6 ms	1000 m/s ²

Degree of protection

Without shaft input	IP67
With shaft input	IP64