

## Data sheet for Incremental encoder

MLFB-Ordering data

6FX2001-4DA50



Figure similar

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	6 mm
Max. power consumption without	150 mA	Shaft length	10 mm
Signal level	UH >= 21 V at IH = 20 mA at 24 V; UL <= 2,8 V at IL = 20 mA at 24 V	Angular acceleration, max.	100000 rad/s <sup>2</sup>
Resolution	500 S/R	Moment of inertia of rotor	0.00000145 kgm <sup>2</sup>
Accuracy	130 rad	Vibration (55...2000 Hz), max.	300 m/s <sup>2</sup>
Sampling frequency, max.	300 kHz	Friction torque (at 20°C), max.	0.01 Nm
Switching time (10 ... 90 %)	= 200 ns	Starting torque (at 20°C), max.	0.01 Nm
	Rise / fall time t+/t- <=	Net weight	0.3 kg
Phase relation signal A to B	90°	Max. admissible speed	
Edge clearance at 300 kHz	0.45 µs	Electrical	36000 rpm
LED failure monitoring	High impedance driver	Mechanical	12000 rpm
Cable length		Load capacity	
To the downstream electronics,	300 m	n = 6000 rpm	
		- Axial	10 N
		- Radial at shaft end	20 N
		n > 6000 rpm	
		- Axial	40 N
		- Radial at shaft end	60 N
Ambient temp in operation		Shock, max.	
Fixed installation of flange outlet or cable		2 ms	2000 m/s <sup>2</sup>
- At Up = 10V ... 30V	-40 ... 100 °C	6 ms	1000 m/s <sup>2</sup>
Flexible cable		Degree of protection	
- At Up = 10V ... 30V	-10 ... 100 °C	Without shaft input	IP67
		With shaft input	IP64
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)		