## **SIEMENS**

## **Data sheet for Incremental encoder**

**MLFB-Ordering data** 

6FX2001-2HB50



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

Electrical data		Mechanical data	
Operating voltage Up	DC 10 30 V	Shaft diameter	6 mm
Max. power consumption without	t 150 mA	Shaft length	10 mm
load		Angular acceleration, max.	100000 rad/s²
Signal level	TTL (RS 422)	Moment of inertia of rotor	0.00000145 kgm²
Resolution	1500 S/R	Vibration (552000 Hz), max.	300 m/s²
Accuracy	43 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	12000 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	<b>nax.</b> 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	
The a motalitation of hange out		- Axial	40 N
- At Up = 10V 30V	-40 70 °C	- Radial at shaft end	60 N
Elexible cable		Shock, max.	
		2 ms	2000 m/s <sup>2</sup>
- At Up = 10V 30V	-10 70 °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