



Encoder,6FX2001-5FP12

URL:<https://www.sxplc.com/encoder-6fx2001-5fp12>

Product data sheet

Electrical data		Mechanical data	
Operating voltage Up	DC 10 ... 30 V	Shaft version	Solid shaft
Max. power consumption	100 ... 300 mA (2.5 W)	Shaft diameter	6 mm
Interface	PROFIBUS DP-V2	Shaft length	10 mm
Clock input	Differential line receiver according to EIA Standard RS 485	Angular acceleration, max.	100000 rad/s ²
Data output	Differential line driver according to EIA Standard RS 485	Moment of inertia of rotor	0.00000190 kgm ²
Short-circuit strength	Yes	Vibration (55...2000 Hz), max.	100 m/s ²
Transmission rate	12 Mbit/s	Friction torque (at 20°C)	≤ 0.01 Nm
LED for diagnostics	Yes (green/red)	Starting torque (at 20°C)	≤ 0.01 Nm
Number of nodes	99	Net weight	0.4 kg
Connection type	Terminal block with address selector switch and bus terminating resistor in removable cover with radial cable glands (3 units), Radial	Speed max.	
Cable diameter	6.5 mm ... 9.0 mm, Tube dismantling possible without bus interruption	With ± 1 bit accuracy	5800 rpm
Resolution	13 bit, (8192 increments)	Max. permissible speed (mech.)	12000 rpm
Telegram	According to PNO cncoder profile V4.1 Class1, Class 2, Class 3, standard telegram 81	Load capacity	
Cable length up to the subsequent electronics, max.		n ≤ 6000 rpm	
Up to 93.75 kbit/s	1200 m	- Axial	40 N
Up to 1.5 Mbit/s	200.0 m	- Radial at shaft end	110 N
Up to 12 Mbit/s	100.0 m	n > 6000 rpm	
Code type		- Axial	10 N
Sampling	Gray	- Radial at shaft end	20 N
Transmission	binary, PROFIBUS	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

