SIEMENS

Data sheet for Absolute encoder



Ordering data

6FX2001-5FD25-0AA1

Client order no. :
Order no. :
Offer no. :
Remarks :

Item no. :
Consignment no. :
Project :

Electrical data

Operating voltage Up	DC 24 V - 15 % + 20 %
Max. power consumption	325 mA
Interface	DRIVE-CLiQ
Data output	PNO encoder profile V4.1
Short-circuit strength	Yes
Transmission rate	100 Mbit/s
Cable length up to the subsequent electronics, max.	100 m
Connection type	DRIVE-CLiQ connector, Radial
Resolution	34 bit (22 bit single-turn + 12 bit multi-turn)
Incremental track	2048 S/R, 1 Vpp (encoder-internal only)
Accuracy	± 36 "

Code type

Sampling	Gray
Transmission	DRIVE-CLiQ

Parameterizability

Counting direction	Yes

Ambient temperature

During operation	-20 ... 100 °C

Standards

Compliance with standards	CE, cULus
EMC class filter	Tested to DIN EN 50081 and EN 50082

Mechanical data

Shaft diameter	6 mm
Shaft length	10 mm
Angular acceleration, max.	100000 rad/s²
Moment of inertia of rotor	0.00000190 kgm²
Vibration (55...2000 Hz), max.	100 m/s²
Friction torque (at 20 °C)	<= 0.01 Nm
Starting torque (at 20 °C)	<= 0.01 Nm
Net weight	0.5 kg

Speed max.

Max. permissible speed (elec.)	14000 rpm
Max. permissible speed (mech.)	10000 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/s²
6 ms	1000 m/s²

Degree of protection

Without shaft input	IP67
With shaft input	IP64

Technical data are subject to change! There may be discrepancies between calculated and rating plate values.