

SIEMENS

Product data sheet

6FX2001-5FD13-0AA1

product brand name

Measuring systems

ABSOLUTE ENCODER SINGLETURN 22 BIT WITH
DRIVE-CLiQ;
SYNCHR. FLANGE;
SHAFT 6MM



Fig. similar

Measuring method / for position feedback	Absolute
Operating principle of absolute encoder	Singleturn
Operating voltage VP at the encoder	24 V
Relative negative tolerance of the operating voltage	15 %
Relative positive tolerance of the operating voltage	20 %
Current drawn / typical	245 mA
Design of the interface	DRIVE-CLiQ
Data output	PNO encoder profile V4.1
Short-circuit strength	Yes
Transfer rate	100 Mbit/s
Speed / electric / max.	14000 1/min
Speed	
• mechanical / max.	12000 1/min
Length of cable to subsequent electronics	

• max.	100 m
Digital resolution	22 bit
Incremental track	2048 S/R, 1 Vpp (encoder-internal only)
Code type	
• Sampling	Gray
• Transfer	DRIVE-CLiQ
Parameterization capability	
• Counting direction	Yes
Accuracy	36 "
Friction torque at 20°C / max.	0.01 N·m
Starting torque at 20 °C / max.	0.01 N·m
Shaft load capacity	
• at $n > 6000$ rpms	
• axially, max.	10 N
• radially on shaft end, max.	20 N
• at $n \leq 6000$ rpms	
• axially, max.	40 N
• radially on shaft end, max.	60 N
Length / of rotary encoder shaft	10 mm
Angular acceleration / maximum	100000 rad/s ²
Moment of inertia of rotor	
• Solid shaft	0.0000019 kg·m ²
Vibration 55 to 2000 Hz according to DIN IEC 60068-2-6 / max.	100 m/s ²
Shock according to EN 60068-2-27	
• 2ms, max.	2000 m/s ²
• 6ms, max.	1000 m/s ²
IP degree of protection	
• without shaft input	IP67
• with shaft input	IP64
Ambient temperature	
• during operating	-20 ... +100 °C
Weight, approx.	0.4 kg
EMC	Tested to DIN EN 50081 and EN 50082

Approval, accord. to	CE, cULus
Design of the electrical connection	DRIVE-CLiQ connector
Direction of connection opening	Radial
Flange type	Synchro flange
Design of rotary encoder shaft	Solid shaft
Further information	

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last change:

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