

SIEMENS

Product data sheet

6FX2001-2CF00

product brand name

SIMODRIVE sensor

SINUMERIK (ACCESSORIES) INCR. POSITION
ENCODER 5000 PULSES/REV WITH LED,
UNIVERSAL CABLE OUTLET AXIAL/RADIAL WITH
CONNECTOR



Fig. similar

Design of the interface	TTL / RS 422
Measuring method / for position feedback	Incremental
Operating voltage VP at the encoder	5 V
Relative symmetric tolerance of the operating voltage	10 %
Scanning frequency	
• maximum	300 kHz
Current consumption without load / maximum	150 mA
Signal level	TTL (RS 422)
Outputs protected against short circuit to 0 V	Yes
Switching time (10 ... 90 %) for 1 m cable and recommended input circuit, max.	
• Note	Rise / fall time $t_{+}/t_{-} \leq$
•	50 ns
Phase position signal A to B	90°

Edge spacing at • 300 kHz, min.	0.45 μ s
Length of cable to subsequent electronics, max. •	100 m
LED failure monitoring	High impedance driver
Resolution, max.	5000
Precision	13 "
Speed, max. • electric	3600 1/min
Speed, max. • mechanical	12000 1/min
Friction torque at 20°C, max.	0.01 N·m
Starting torque at 20°C / maximum	0.01 N·m
Shaft load capacity • at $n > 6000$ rpms • axially / minimum • axially / maximum • radially on shaft end • at $n > 6000$ rpms / minimum • at $n \leq 6000$ rpms / maximum	10 N 40 N 20 N 60 N
Angular acceleration / maximum	100000 rad/s ²
Moment of inertia of the rotor	0.00000145 kg·m ²
Vibration 55 to 2000 Hz according to DIN IEC 60068-2-6, max.	300 m/s ²
Shock according to EN 60068-2-27 • 2ms, max. • 6ms, max.	2000 m/s ² 1000 m/s ²
IP degree of protection • without shaft input • with shaft input	IP67 IP64
Ambient temperature • during operation • with flange socket or fixed installation cable, at • with flange socket or fixed installation cable, at • during operation	-40 ... +100 °C -40 ... +70 °C

• with flexible installation cable, at $V_p = 5\text{ V} \pm 10\%$	-10 ... +100 °C
• with flexible installation cable, at	-10 ... +70 °C
Weight, approx.	0.3 kg
EMC	Tested according to the EMC guidelines 89/336/EEC and the rules of the EMC guidelines (generic standards)
Approval, accord. to	CE, cULus
Type of flange	Synchro flange
Direction of connection opening	Universal
Design of the electrical connection	cable 1m with connector
Further information	

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last change:

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