SIEMENS

Product data sheet 6FX2001-2EB02

product brand name	SIMODRIVE sensor SINUMERIK (ACCESSORIES) INCR. POS. ENCODER, WITH LED, RADIAL FLANGE CONNECTOR, 1024 PULSES/REV

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- <=
•	50 ns
Phase position signal A to B	90°

Edge spacing at	
• 300 kHz, min.	0.45 µs
Length of cable to subsequent electronics, max.	
•	100 m
LED failure monitoring	High impedance driver
Resolution, max.	1024
Precision	63 "
Speed, max.	
• electric	17600 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	10 N
• axially / maximum	40 N
• radially on shaft end	
• at n > 6000 rpms / minimum	20 N
• at n ≤ 6000 rpms / maximum	60 N
Angular acceleration / maximum	100000 rad/s²
Moment of inertia of the rotor	0.00000145 kg·m²
Vibration 55 to 2000 Hz according to DIN IEC 60068-2-6, max.	300 m/s²
Shock according to EN 60068-2-27	
• 2ms, max.	2000 m/s²
• 6ms, max.	1000 m/s²
IP degree of protection	
• without shaft input	IP67
• with shaft input	IP64
Ambient temperature	
• during operation	
• with flange socket or fixed installation cable, at	-40 … +100 °C
• with flange socket or fixed installation cable, at	-40 … +70 °C
• during operation	

• with flexible installation cable, at /Vp = 5 V ± 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	Radial
Design of the electrical connection	Flange socket

Further information

Information and download center for Industry Automation and Drives

Technical documentation (Motion Control)

Industry Mall (online ordering system)

Service & Support (FAQs, manuals, operating instructions, certificates, characteristics, ...)

last change: Mar 5, 2013