

ABSOLUTE ENCODER MULTITURN 6FX2001-5FD25 34 BIT WITH
DRIVE-CLiQ; SYNCHR. FLANGE; SHAFT 6MM



Figure similar

product brand name	Measuring systems
Measuring procedure / for position feedback	absolute
Manner of function / of absolute encoder	multiturn
Operating voltage / of the rotary encoder / at DC	24 V
Relative negative tolerance / at DC / at 24 V	15 %
Relative positive tolerance / at DC / at 24 V	20 %
Consumed current / typical	325 mA
Design of the interface	DRIVE-CLiQ
Design of encoder output	DRIVE-CLiQ
Property of the output / Short-circuit proof	Yes
Transfer rate	100 Mbit/s
Speed	
• with electrical rotation transmission / maximum	14 000 1/min
• maximum	10 000 1/min
Wire length	
• maximum	100 m
Digital resolution	34 bit; (22 bit single-turn + 12 bit multi-turn)
Incremental track version	2048 S/R, 1 Vpp (encoder-internal only)

Type of coding	
• for sampling • for transmission	Gray DRIVE-CLiQ
Product function	
• parameterizable counting direction	Yes
Measurement deviation angle of rotation / of absolute encoder	36°
Friction torque / at 20 °C / maximum	0.01 N·m
Starting torque / at 20 °C / maximum	0.01 N·m
Axial force / at shaft	
• with $n > 6000$ rpm / maximum • with $n \leq 6000$ rpm / maximum	10 N 40 N
Cantilever force / at shaft extension	
• with $n > 6000$ rpm / maximum • with $n \leq 6000$ rpm / maximum	20 N 60 N
Rotary encoder shaft version	Solid shaft
Diameter / of rotary encoder shaft	6 mm
Length / of rotary encoder shaft	10 mm
Angular acceleration / maximum	100 000 rad/s ²
Moment of inertia / of rotor	
• with solid shaft encoder	0.0000019 kg·m ²
Vibrational acceleration / at 55 Hz ... 2 kHz / acc. to IEC 60068-2-6	100 m/s ²
Shock acceleration	
• limited to 2 ms / acc. to IEC 60068-2-27 • limited to 6 ms / acc. to IEC 60068-2-27	2 000 m/s ² 1 000 m/s ²
Protection class IP	
• without shaft input • with shaft input	IP67 IP64
Ambient temperature / during operation	-20 ... +100
EMI immunity	Tested to DIN EN 50081 and EN 50082
Certificate of suitability	CE, cULus
Type of electrical connection	DRIVE-CLiQ connector
Direction of connection opening	Radial
Flange type	Synchro flange
Net weight	0.5 kg

Further information

Information und Download Center

https://www.automation.siemens.com/mcms/infocenter/content/en/Pages/order_form.aspx

Technical documentation

<http://w3.siemens.com/mcms/mc-solutions/en/motion-control/support/technical-documentation/Pages/technical-documentation.aspx>

Industry Mall

<https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/6FX2001-5FD25-0AA1/all>

Industry Online Support

<http://support.automation.siemens.com/WW/view/en/6FX2001-5FD25-0AA1/all>

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