

ABSOLUTE VALUE ENCODER MULTITURN 25 BIT WITH SSI,
OPERAT. VOLT. 10-30 V SYNCHROFLANGE SHAFT 6MM RADIAL
FLANGE SOCKET



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 / for DC	10 ... 30
Consumed current / typical	200 mA
Design of the interface	SSI
Design of input / for clock cycle	Differential line receiver according to EIA Standard RS 485
Design of encoder output	Differential line driver according to EIA Standard RS 485
Property of the output / Short-circuit proof	Yes
Clock frequency	100 kHz ... 1 MHz
Speed • for digital measuring accuracy +/- 1 bit / with electrical rotation transmission / maximum • for digital measuring accuracy +/- 100 bit / with electrical rotation transmission / maximum • maximum	5 000 1/min 10 000 1/min 10 000 1/min
Cable length • at 0 Hz ... 1 MHz / maximum • at 0 Hz ... 300 kHz / maximum • at 0 Hz ... 100 kHz / maximum • maximum	50 m 100 m 400 m 400 m
Digital resolution	25 bit; (8192 increments x 4096 rpms)
Telegram length	25 bit; Without parity
Type of coding • for sampling • for transmission	Gray Gray, fir-tree format

Product function	
• parameterizable preset	Yes; Set to zero
• parameterizable counting direction	Yes
Measurement deviation angle of rotation / of absolute encoder	79"; (with 8192 increments)
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	10 N
• with $n \leq 6000$ rpm / maximum	40 N
Cantilever force / at shaft extension	
• with $n > 6000$ rpm / maximum	20 N
• with $n \leq 6000$ rpm / maximum	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	0.0000015 kg·m ²
Resistance against vibration / at 55 Hz ... 2 kHz / acc. to IEC 60068-2-6	300 m/s ²
Shock acceleration	
• limited to 2 ms / acc. to IEC 60068-2-27	2 000 m/s ²
• limited to 6 ms / acc. to IEC 60068-2-27	1 000 m/s ²
Protection class IP	
• without shaft input	IP67
• with shaft input	IP64
Ambient temperature / during operation	-40 ... +85
EMI immunity	Tested to DIN EN 50081 and EN 50082
Certificate of suitability	CE, cULus
Type of electrical connection	Flange socket
Direction of connection opening	Radial
Flange type	Synchro flange
Net weight	0.35 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/6FX20015FS24/all>

Industry Online Support

<http://support.automation.siemens.com/WW/view/en/6FX20015FS24/all>

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