

INCREM. ENCODER WITH HTL, 2500 P/R, OPERATING VOLTAGE 10-30 V, SYNCHRON. FLANGE SHAFT 6MM UNIVERSAL CABLE OUTGOING AXIAL/RADIAL CABLE 1M WITH CONNECTOR



Figure similar

product brand name	Measuring systems
Design of the interface	HTL
Measuring procedure / for position feedback	Incremental
Operating voltage / of the rotary encoder / at DC	10 ... 30
Scanning frequency / maximum	300 kHz
Consumed current / without load / maximum	150 mA
Standard for interfaces	UH \geq 21 V at IH = 20 mA at 24 V; UL \leq 2,8 V at IL = 20 mA at 24 V
Property of the output / Short-circuit proof against 0 V	Yes
Pulse duration / at 1 m connecting cable / with recommended input circuit / maximum / Note	Rise / fall time $t_{+}/t_{-} \leq$
Pulse duration / at 1 m connecting cable / with recommended input circuit / maximum	200 ns
Phase displacement angle / between signal A and signal B	90°
Edge interval / between signal A and signal B <ul style="list-style-type: none"> • with scanning frequency 300 kHz / minimum 	0.45 μ s
Cable length <ul style="list-style-type: none"> • maximum 	300 m
Failure monitoring type / for LED	High impedance driver

Incremental resolution	
<ul style="list-style-type: none"> • per revolution / maximum 	2 500
Measurement deviation angle of rotation / of the incremental encoder	26"
Speed	
<ul style="list-style-type: none"> • with electrical rotation transmission / maximum • maximum 	7 200 1/min 12 000 1/min
Friction torque / at 20 °C / maximum	0.01 N·m
Starting torque / at 20 °C / maximum	0.01 N·m
Axial force / at shaft	
<ul style="list-style-type: none"> • with $n \leq 6000$ rpm / maximum • with $n > 6000$ rpm / maximum 	40 N 10 N
Cantilever force / at shaft extension	
<ul style="list-style-type: none"> • with $n \leq 6000$ rpm / maximum • with $n > 6000$ rpm / maximum 	60 N 20 N
Outer 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	0.0000015 kg·m ²
Vibrational acceleration / at 55 Hz ... 2 kHz / acc. to IEC 60068-2-6	300 m/s ²
Shock acceleration	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • without shaft input • with shaft input 	IP67 IP64
Ambient temperature	
<ul style="list-style-type: none"> • with supply voltage 10 V ... 30 V / with installed cable / during operation • with supply voltage 10 V ... 30 V / with moving cable / during operation 	-40 ... +100 -10 ... +100
Net weight	0.3 kg
EMI immunity	Tested according to the EMC guidelines 89/336/EEC and the rules of the EMC guidelines (generic standards)
Certificate of suitability	CE, cULus
Flange type	Synchro flange
Direction of connection opening	Universal
Type of electrical connection	cable 1m with connector

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/Catag/Product/6FX20014DC50/all>

Industry Online Support

<http://support.automation.siemens.com/WW/view/en/6FX20014DC50/all>

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