



Multiturn Absolute SSI encoder A/942XS13-12-10-G-S1-0-CAW



Product Description

Absolute Multiturn encoder: SSI with Preset interface,
 Synchro, 0 42 mm Heavy Duty, 0 10 mm (0.39") shaft and IP69K protection class.

Interface

Interface	SSI with Preset
Manual Functions	Preset + complement via cable or connector
Interface Cycle Time	≥ 25 ps
Multiple Transmissions	Once
Number of Preset Cycles 5,100,000	
SSI Format	MMMMMMMMMMMMSSSSSSSSSSSSSO

Outputs

Output Driver	RS422
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Electrical Data

Supply Voltage	4.5 - 30 VDC
Current Consumption	Typical 50 mA
Power Consumption	≤ 1.0 w
Start-Up Time	< 1 s
Clock Input	RS 422, via Optocoupler
Clock Frequency	100 kHz - 2 MHz
Reverse Polarity Protection	Yes
Short Circuit Protection	Yes
EMC: Emitted Interference DIN EN 61000-6-4	
EMC: Noise Immunity	DIN EN 61000-6-2
MTTF	350 years @ 40 °C

Sensor

Technology	Magnetic
Resolution Singleturn	13 bit
Resolution Multiturn	12 bit
Multiturn Technology	Self powered magnetic pulse counter (no battery, no gear)
Accuracy (INL)	$\pm 0.0878^\circ$ (< 12 bit)
Sense Signal (Default)	Clockwise shaft movement (front view on shaft)
Code	Gray

Environmental Specifications

Protection Class (Shaft)	IP68/IP69K
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Protection Class (Housing) IP68/IP69K

Min Temperature	-40 °C fixed (-40 °F), -30 °C flexible (-22 °F)
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Max Temperature	+80 °C (+176 °F)
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Humidity	98% RH, no condensation
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Mechanical Data

Housing Material	Stainless Steel V4A (1.4404, 316 L)
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Housing Coating	No Coating
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Flange Type	Synchro, 0 42 mm Heavy Duty
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Flange Material	Stainless steel V4A (1.4404, 316 L)
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Shaft Type	Solid, Length = 20 mm
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Shaft Diameter	0 10 mm (0.39")
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Shaft Material	Stainless Steel (1.4112, 440 B), hardened
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Max. Shaft Load	Axial 300 N, Radial 300 N
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Minimum Mechanical

Lifetime(10^8 revolutions 7.6 (300N/300N), 10 (270N/270N), 200 (100N/100N)
with F_a/F_r)

Friction Torque	≤ 6 Ncm @ 20 °C, (8.5 oz-in @ 68 °F)
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Max. Permissible Mechanical Speed	≤ 6000 1/min
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Shock Resistance	≤ 300 g (half sine 6 ms, EN 60068-2-27)
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Permanent Shock Resistance	≤ 30 g (half sine 16 ms, EN 60068-2-29)
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Vibration Resistance	≤ 30 g (10 Hz - 1000 Hz, EN 60068-2-6)
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Length	64,9 mm (2.56")
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Weight	550 g (1.21 lb)
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Electrical Connection

Connection Orientation	Axial
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Connector	Cable 2 m
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Cable Length	2 m [79"]
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Wire Cross Section	0.34 mm ² / AWG 22
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Material / Type	PUR/PU
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Cable Diameter	7.5 mm (0.30 in)
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Minimum Bend Radius	56 mm (2.2") fixed, 75 mm (3") flexing
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Certification

Approval	CE
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Product Life Cycle

Product Life Cycle	Established
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