



Delivered without miniature WSB markers

This module is an interface for any incremental encoder with an RS-422 connection.

A counter with quadrature decoder as well as a latch for the zero impulse can be read or enabled by the control. The control can set the counter or transmit the counter value to the Latch. As an alternative this can also be done using input "C" or "Latch".

The frequency data is automatically acquired and can also be transmitted to the control.

A counter lock-out is possible using input G. Input "Ref" can be used to activate the initial point "C" function.

The cam outputs N1 and N2 indicate whether the counter value is within a defined range of values. The range can be adjusted.

The module must be powered using an external 24VDC power supply, from which power to the transmitter (U_e, U₁) can also be derived.

The shield (screen) is directly connected to the DIN rail.

Description	Item No.	Pack. Unit
Incremental Encoder Interface	750-637	2 ¹⁾
Incremental Encoder Interface 24 V/32 Bit differential	750-637/000-001	1
Incremental Encoder Interface 24 V/32 Bit single ended	750-637/000-002	1
Incremental Encoder Interface RS422/32Bit/Single Interpreter	750-637/000-003	1
Incremental Encoder Interface 24 V/32 Bit single ended/cam outputs	750-637/000-004	1
¹⁾ Also available individually		
Accessories	Item No.	Pack. Unit
Miniature WSB Quick marking system		
plain	248-501	5
with marking	see pages 352 ... 353	
Approvals	Also see "Approvals Overview" in Section 1	
Conformity marking	CE	
Shipbuilding (versions upon request)	ABS, DNV, GL, KR	
UL 508		
ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4	
IEC 60079-0, -15	BR-Ex nA II T4	750-637
EN 60079-0, -15	II M2 / II 3 GD Ex nA IIC T4	750-637*, ...001*
EN 61241-0, -1		750-637/000-004
EN 60079-0, -11, -15	I M2 Ex d I	750-637*, ...001*
EN 61241-0, -1, -11	II 3 G Ex nA IIC T4	750-637*, ...001*
	II 3 D Ex tD A22 IP6X T135°C	750-637*, ...001*
* Permissible operating temperature: 0°C ... +60°C		

Technical Data	
Sensor connection	A, A-bar, B, B-bar, C, C-bar
Current consumption (internal)	110 mA
Counter	32 bits binary
Max. operating frequency	250 kHz
Quadrature decoder	4-fold report
Zero impulse latch	32 bits
Commands	read, set, enable
Power supply	24 V DC (-15 % ... +20 %)
Current consumption (typ.)	35 mA without load
Operating voltage of sensor	DC5 V
Sensor max. output current	300 mA
Internal bit width	1 x 32 bits data
	1 x 8 bits control/status
Digital outputs (N1, N2)	
Output voltage	24 V DC
Output current (max.)	0.5 A short-circuit protected
Digital inputs (Latch, Gate, Ref)	
Signal voltage (0)	-3 V ... +5 V DC
Signal voltage (1)	15 V ... 30 V DC
Input current (typ.)	Latch 5 mA, Gate 7 mA, Ref. 7 mA
Wire connection	
Cross sections	0.08 mm ² ... 2.5 mm ² / AWG 28 ... 14
Stripped lengths	8 ... 9 mm / 0.33 in
Width	24 mm
Weight	100 g
EMC: CE - immunity to interference	acc. to EN 61000-6-2 (2005)
EMC: CE - emission of interference	acc. to EN 61000-6-4 (2007)
EMC: marine applications	
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