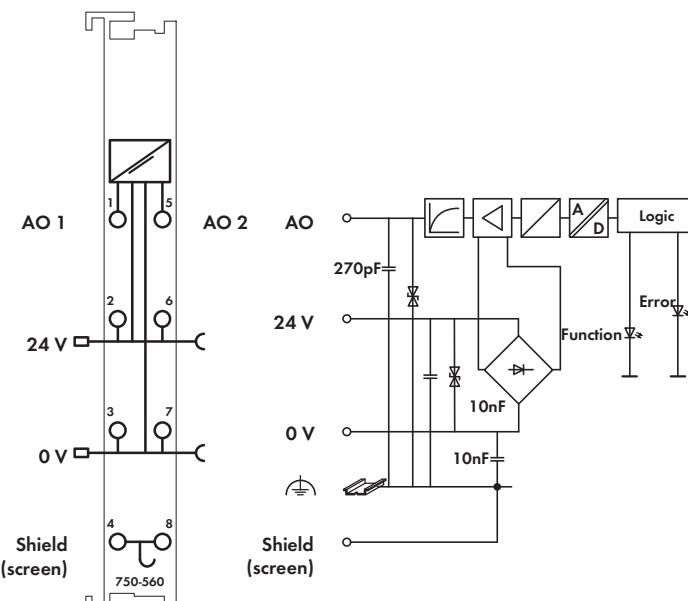
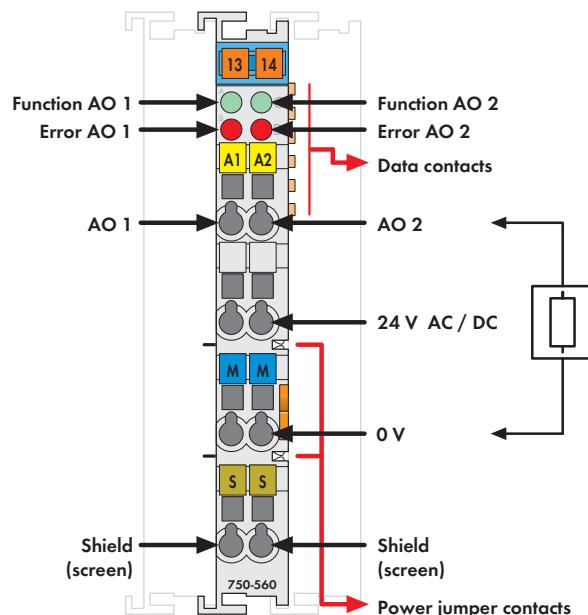


## 2-Channel Analog Output Module 0-10 V

10 bits, 10 mA



Delivered without miniature WSB markers

The analog output module generates signals of a standard magnitude 0–10V.

The output signal is electrically isolated and transmitted with a resolution of 10 bits.

The outputs are short-circuit proof.

Each channel is equipped with an LED to indicate short-circuits or overloads  $\geq 15\text{mA}$ .

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

Both the internal system and field side supply are used to power the module.

The output channels have one common ground potential.

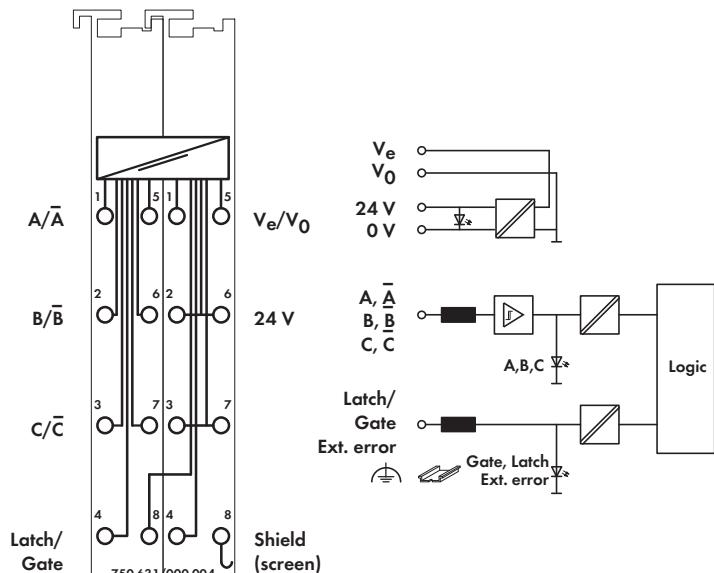
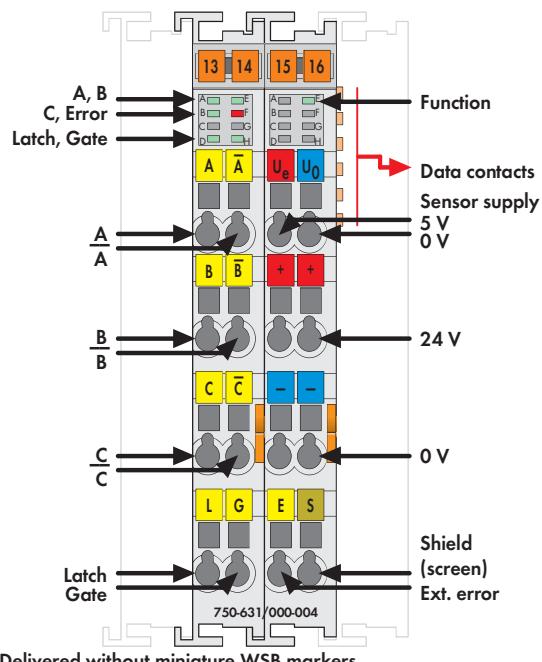
The analog outputs and the 24V supply have one common ground potential so that actuators such as servo drives can be connected using a 3-conductor cable.

Description	Item No.	Pack. Unit
2AO 0-10 V DC 10 Bit 10mA 24V	750-560	1
Accessories		
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	
@ UL 508		
@ ANSI/ISA 12.12.01	pending	
@ EN 60079-0, -15	pending	
EN 61241-0, -1		

Technical Data	
No. of outputs	2
Current consumption (internal)	16 mA
Voltage via power jumper contacts	24 V AC/DC
Signal voltage	0 V ... 10 V
Load impedance	$\geq 1 \text{ k}\Omega$
Resolution	10 bits
Conversion time	approx. 10 ms
Measuring error ( $25^\circ\text{C}$ )	$< \pm 0.2\%$ of the full scale value
Temperature coefficient	$< \pm 0.02\% / \text{K}$ of the full scale value
Isolation	500 V system/supply
Bit width	2 x 16 bits data 2 x 8 bits control/status (option)
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> / AWG 28 ... 14
Stripped lengths	8 ... 9 mm / 0.33 in
Width	12 mm
Weight	53.5 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)



## Incremental Encoder Interface



This module is an interface for connection of any incremental encoder.

A 16 bit counter with quadrature encoder interface as well as a 16 bit latch for the zero impulse can be read, set, or enabled. The count of the counter will be transmitted fast and interference-free over the fieldbus to the PC, PLC, or NC.

A counter lock-out is possible using input G.

The power supply for the transmitter is derived internally from the power jumper contacts Ue/U0.

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

Description	Item No.	Pack. Unit
Incremental Encoder Interface RS-422	750-631/000-004	1
<hr/>		
Accessories	Item No.	Pack. Unit
Miniature WSB Quick marking system		
plain	248-501	5
with marking	see pages 352 ... 353	
<hr/>		
Approvals	Also see "Approvals Overview" in Section 1	
Conformity marking	CE	
ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4	
EN 50021	II 3 G EEx nA II T4	
UL 508		
<hr/>		

Technical Data	
Sensor connection	A, Ā, B, B̄, C, C̄
Current consumption (internal)	50 mA
Counter	16 bits binary
Max. operating frequency	1000 kHz
Quadrature decoder	4-fold report
Zero impulse latch	16 bits
Commands	read, set, enable
Power supply	24 V DC (-15 % ... +20 %)
Current consumption (typ.)	6 mA without sensor
Operating voltage of sensor	DC5 V
Sensor max. output current	200 mA
Signal voltage (0)	V <sub>ABC</sub> = 0 V, V <sub>ĀB̄C̄</sub> = 5 V
Latch, Gate	≤ 5.0 V
Ext. error	V ≥ 5.0 V or input open
Signal voltage (1)	V <sub>ABC</sub> = 5 V, V <sub>ĀB̄C̄</sub> = 0 V
Latch, Gate	≥ 15.0 V
Ext. error	V < 0.5 V
Isolation	500 V system/supply
Internal bit width	1 x 32 bits data 1 x 8 bits control/status 1 x 8 bits reserved
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> / 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)