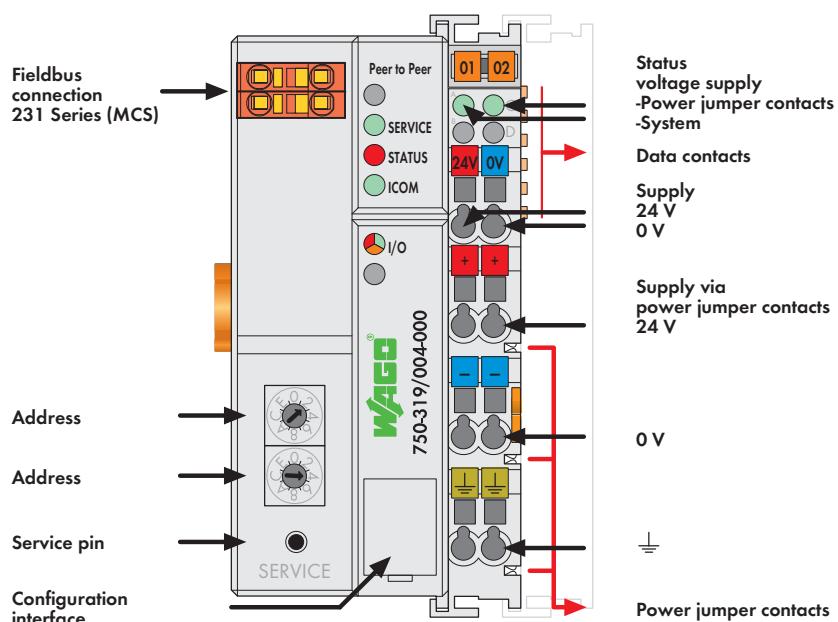


LON® Data Exchange Coupler (Peer to Peer)

78 kbps; digital and analog signals



The data exchange coupler transfers the input process image data to the output process image of the coupled partner. The data exchange coupler is a variant of the LON® fieldbus coupler.

Applications:

- **Peer to Peer**
one master and one slave
- **Broadcast**
one master and several slaves

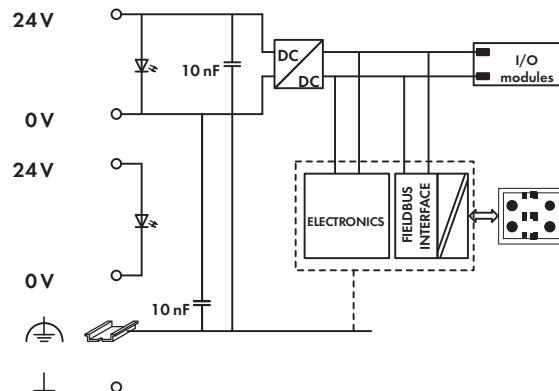
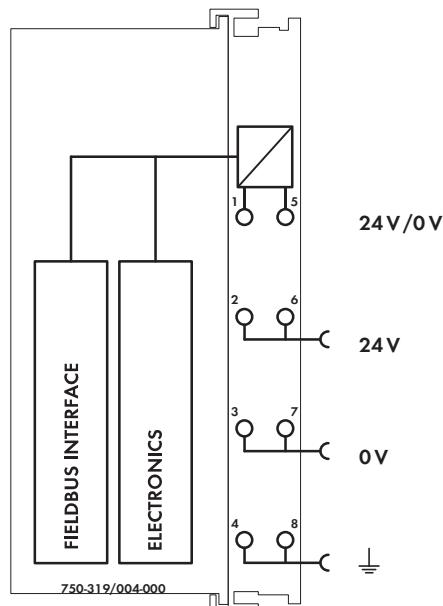
The coupler, together with I/O modules, is a fieldbus node which is connected to other nodes by means of a twisted wire pair. The coupler can also be integrated into existing LON® networks if appropriate node addresses are available.

The coupler automatically creates the process image using the types and widths of data of the connected I/O modules. The input process image is transferred to the output process image of the partner or partners.

The monitoring system switches digital outputs off or stores the last analog value if the connection to the coupled partner is interrupted longer than 1 second.

LON® is a registered trademark of Echelon Corporation.

Description	Item No.	Pack. Unit	System Data
Peer to Peer Coupler	750-319/004-000	1	No. of couplers connected to Master Transmission medium Max. length of fieldbus segment
			64 without repeater, 127 with repeater Twisted pair - FTT 500 m (free topology) 2700 m (bus-topology)
			Topology Baud rate
			in accordance with LON specification 78 kbps
			Buscoupler connection
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		
UL 508			
ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4		
IEC 60079-0, -15	BR-Ex nA II T4		
EN 60079-0, -15	I M2 / II 3 GD Ex nA nL IIC T4		
	EN 61241-0, -1		



Technical Data

Number of I/O modules	62
Digital signals	max. 248 (in- and outputs)
Analog signals	max. 124 (in- and outputs)
Configuration	via PC with LON Interface
Power supply	24 V DC (-15 % ... +20 %)
Max. input current (24 V)	500 mA
Efficiency of the power supply	87 %
Internal current consumption (5 V)	300 mA
Total current for I/O modules (5 V)	1700 mA
Isolation	500 V system/supply
Voltage via power jumper contacts	24 V DC (-15 % ... +20 %)
Current via power jumper contacts (max.)	10 A DC
Transceiver	FTT 10 A

General Specifications

Operating temperature	0 °C ... +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm² ... 2.5 mm² / AWG 28 ... 14
Stripped lengths	8 ... 9 mm / 0.33 in
Dimensions (mm) W x H x L	51 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	200 g
Storage temperature	-25 °C ... +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC: CE - immunity to interference	acc. to EN 61000-6-2 (2005)
EMC: CE - emission of interference	acc. to EN 61000-6-4 (2007)

2-Channel Digital Input Module 24 V DC

2-to 4-conductor connection; high-side switching

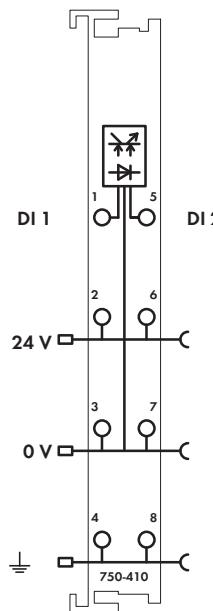
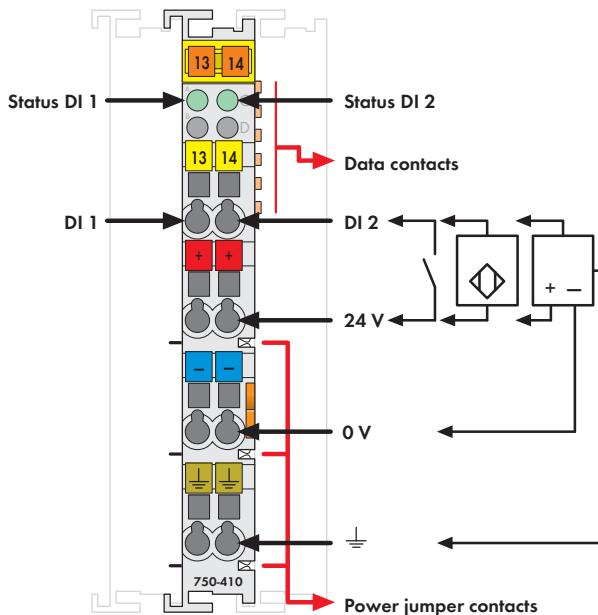


Fig. 750 Series/Technical data see page 24/Delivered without miniature WSB markers
750/753 Series marking see pages 10 ... 11 / 12 ... 13

The digital input module receives the control signal from digital field devices (sensors, etc.).

The module is a 2-channel, 4-conductor device and sensors with a ground (earth) wire may be directly connected to the module.

Each input module has a noise-rejection filter. This filter is available with different time constants.

An optocoupler is used for electrical isolation between the bus and the field side.

A 2-wire proximity switch can be connected to this module.

Description	Item No.	Pack. Unit
2DI 24V DC 3.0ms, proximity switch	750-410	10 ¹⁾
2DI 24V DC 0.2ms, proximity switch	750-411	1
2DI 24V DC 3.0ms, proximity switch (without connector)	753-410	1
2DI 24V DC 0.2ms, proximity switch (without connector)	753-411	1

¹⁾ Also available individually

Accessories	Item No.	Pack. Unit
753 Series Connectors	753-110	25
Coding elements	753-150	100
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	ABS, BV, DNV, GL, KR, LR*, NKK*, PRS*, RINA* *753 Series, pending
• UL 508	
• ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4
• EN 60079-0, -15 EN 61241-0, -1	I M2 / II 3 GD Ex nA IIC T4

Technical Data	
Number of inputs	2
Max. current consumption (internal)	2.5 mA
Voltage via power jumper contacts	24 V DC (-25 % ... +30 %)
Signal voltage (0)	-3 V ... +5 V DC
Signal voltage (1)	15 V ... 30 V DC
Input filter	3.0 ms (750-410 / 753-410) 0.2 ms (750-411 / 753-411)
Input current (typ.)	8 mA
Isolation	500 V system/supply
Internal bit width	2 bits
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² ... 2.5 mm ² / AWG 28 ... 14
Stripped lengths, 750/753 Series	8 ... 9 mm / 0.33 in 9 ... 10 mm / 0.37 in
Width	12 mm
Weight	48.5 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)
EMC: marine applications	
- immunity to interference	acc. to Germanischer Lloyd (2003)
EMC: marine applications	
- emission of interference	acc. to Germanischer Lloyd (2003)