

Digital Impulse Interface

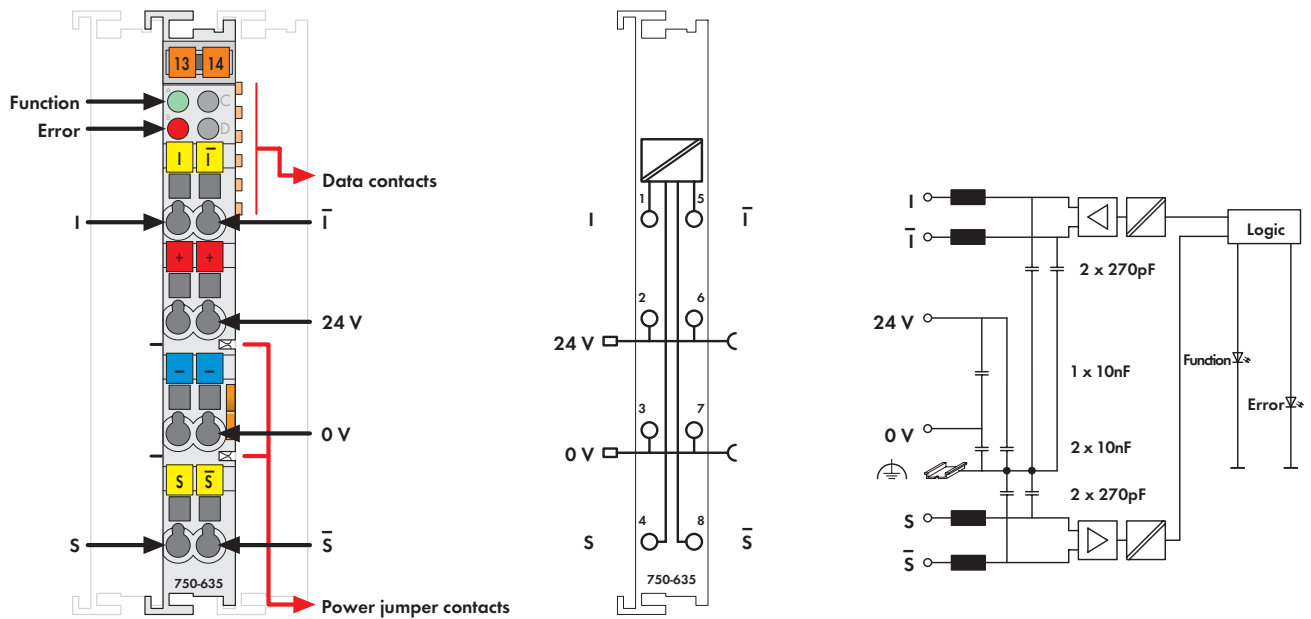


Fig. 750 Series/Technical data see page 24/Delivered without miniature WSB markers
750/753 Series marking see pages 12 ... 13 / 14 ... 15





The digital impulse interface is designed for the connection of magnetostrictive distance measurement sensors with a start/stop interface. After receiving a read pulse, these sensors deliver a time-delayed reply impulse. The time delay is proportional to the sensor distance.

Each sensor may have up to four position transmitters (permanent magnets). Their position data can be accessed serially by the control. The position data is stored in the process image of the fieldbus coupler as a 24-bit value.

The parameterization of the ultrasonic speed and the transmission points is done via the control byte. The parameters can be changed during operation.

The transmission of the impulses is done with RS-422 differential drivers which guarantees trouble-free data transmission.

Distance sensors with the following features can be used: Start/Stop interface with RS-422 differential signals, sensor supply 24V, manufacturer: e.g. Balluff

Description	Item No.	Pack. Unit
Digital Impulse Interface	750-635	1
Digital Impulse Interface (without connector)	753-635	1
Accessories		
 753 Series Connectors	753-110	25
 Coding elements	753-150	100
Miniature WSB Quick marking system		
 plain	248-501	5
 with marking	see pages 304 ... 305	
Approvals		
750 and 753 Series		
Conformity marking	CE	
UL 508		
ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4	
750 Series		
EN 60079-15	I M2 / II 3 GD Ex nA IIC T4 BR-Ex nA II T4	

Technical Data	
Sensor connection	Start/Stop; Init; Vv; ground connection of the shield via the housing of the sensor
Number of inputs	1
Current consumption (internal)	45 mA
Voltage via power jumper contacts	24 V DC (-15 % ... +20 %)
Data transmission	RS 422
Signal output	differential signal (RS-422)
Signal input	differential signal (RS-422)
Resolution	1 µm
Hysteresis	depends on the distance sensor
Update time	2 ms
Distance sensor length	≤ 4 m
Line length (max.)	500 m
Isolation	500 V system/supply
Internal bit width	1 x 24 bits data 1 x 8 bits control/status
Wire connection	
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	51 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)