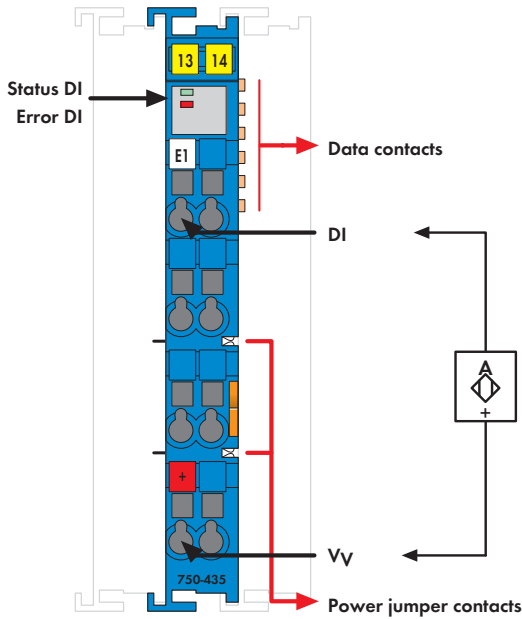
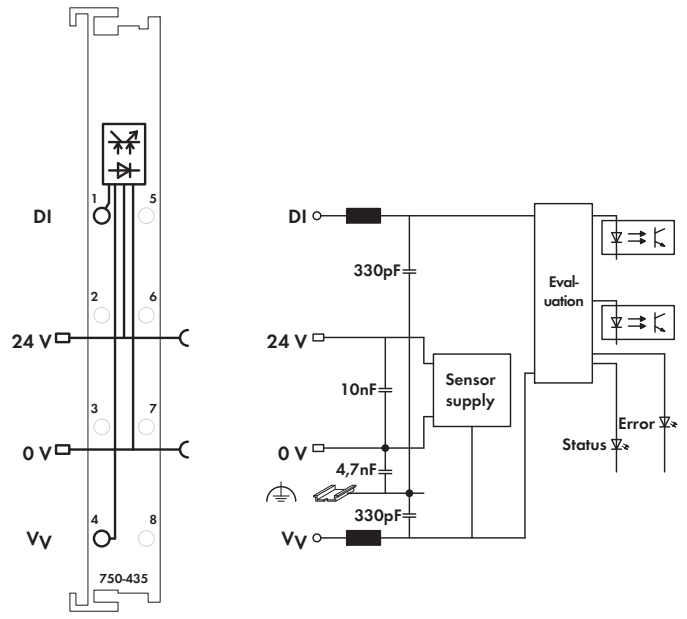


# 1-Channel Digital Input Module NAMUR, Ex i

Proximity switch acc. to DIN EN 50227



Delivery without Mini WSB marker



The digital input module receives the binary signals from sensors operating in hazardous environments of Zones 0 and 1. Namur sensors, optocouplers, mechanical contacts (in conjunction with resistance coupling module, available as an accessory) or other actuating elements can be connected by means of approved intrinsically safe devices. The WAGO-I/O-SYSTEM 750 has to be installed in Zone 2 or in non-hazardous environments.

Each sensor is supplied with a short-circuit-protected 8.2 V supply. Indicators:

- Green LED (signal on)
- Red LED (short circuit, wire breakage)

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

**Note:**

Only use the digital input module in connection with the 24 V DC Ex i 750-625 Supply Module (note the power supply instructions on page 27)! General information (e.g. installation regulations) on explosion protection is available in the WAGO-I/O-SYSTEM 750 manuals!

Description	Item no.	Pack. unit
<b>1DI NAMUR Ex i</b>	<b>750-435</b>	<b>1</b>
Accessories	Item no.	Pack. unit
<b>Resistance coupling module</b>	<b>288-936</b>	<b>15</b>
<b>Miniature WSB quick marking system,</b>		
plain	<b>248-501</b>	<b>5</b>
with marking	see pages 256 ... 257	
Explosion Protection		
Ex directive	94 / 9 / EG; EN 50014, EN 50020, EN 60079-0, EN 60079-15	
Marking	Ⓜ II 3 (1) GD Ex nA [ia] IIC / IIB T4	
Electric circuit, safety relevant data	V <sub>0</sub> = 12 V ; I <sub>0</sub> = 16 mA; P <sub>0</sub> = 48 mW; Characteristic: Linear	
Intrinsically safe Ex ia IIB	L <sub>0</sub> = 560 mH; C <sub>0</sub> = 9 µF	
Intrinsically safe Ex ia IIC	L <sub>0</sub> = 180 mH; C <sub>0</sub> = 1,4 µF	
Intrinsically safe	without consideration of the simultaneousness; with consideration of the simultaneousness see manual	
Standards, Guidelines and Approvals		
EC EMC guideline	89 / 336 / EWG	
EC low voltage guideline	73 / 23 / EWG	
Ⓜ EN 50020	Ⓜ II 3 (1) GD Ex nA [ia] IIC T4	
Conformity marking	CE	
UL 508		
ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4	
EN 60079-15	I M2 / II 3 GD Ex nA IIC T4	
Marine applications	see "Approvals Overview" in section 1	

Technical Data	
No. of inputs	1
Current consumption typ. (internal)	2.5 mA
Voltage via power jumper contacts	Supply via DC 24.7 V Ex i supply module (750-625)
Sensor supply V <sub>v</sub>	DC 8.2 V
Signal current (0)	≤ 1.2 mA
Signal current (1)	≥ 2.1 mA
Input filter	3.0 ms
Switching hysteresis	0.2 mA
Open-circuit voltage	DC 8.2 V
Input resistance	1 kΩ
Input pulse duration	≥ 5 ms
Input pulse separation	≥ 3 ms
Short-circuit current	≤ 8.2 mA
Short circuit monitoring	> 6.4 mA
Line break monitoring	< 0.2 mA
Current consumption typ. (field side)	13 mA + load
Power consumption P (max.)	0.5 W
Power loss P <sub>v</sub>	0.5 W
Isolation	375 V system/supply
Internal bit width	2 bits; 1 bit input; 1 bit error (short circuit/open circuit)
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	48.5 g
EMC CE-Immunity to interference	acc. to EN 61000-6-2 (1999)
EMC CE-Emission of interference	acc. to EN 61000-6-4 (2002)
EMC marine appl. - Immunity to interference	acc. to Germanischer Lloyd (2003)
EMC marine appl. - Emission of interference	acc. to Germanischer Lloyd (2003)