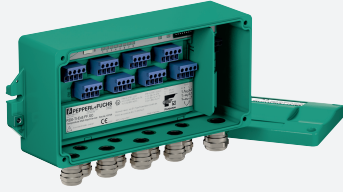


# Temperature Multi-Input Device with Aluminum Housing



## F2D0-TI-Ex8.FF.\*



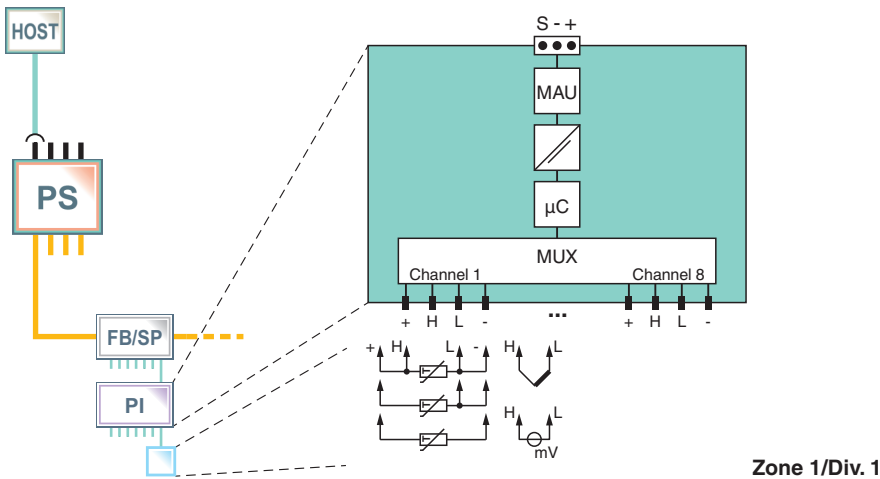
- For 8 temperature or analog sensors
- Installation in Zone 1/Div. 1, intrinsically safe
- Sensors in Zone 0/Div. 1
- Connection to fieldbus acc. to FISCO or Entity
- For FOUNDATION Fieldbus H1
- PCS integration via device description and function blocks
- Concentrator method for simplified configuration
- Monitors sensor condition
- For T/C, RTD 2-, 3-, 4-wire, voltage and resistance
- Cold junction compensation
- Removable terminals



### Function

This fieldbus junction box holds a temperature multi-input device for transferring signals from resistance temperature measuring sensors and thermocouples, as well as resistance and millivolt signals via FOUNDATION Fieldbus H1. The fieldbus junction box with 8 inputs can be installed in Zone 1/Div. 1 with sensors located in Zone 0/Div. 1. The housing, type F2, is made of sturdy cast aluminum for installation in rough environments. Fieldbus and field device entrances can be selected individually from a range of cable glands. Optionally, either screw terminals or spring terminals can be chosen. A tag plate is available as option.

### Connection



### Technical Data

#### General specifications

Design / Mounting	Outside installation
Electronic component	Temperature Multi-Input Device RD0-TI-Ex8.FF* For technical data on installed electronic component see data sheet.
<b>Directive conformity</b>	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013
<b>Standard conformity</b>	
Galvanic isolation	EN 60079-11

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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## Technical Data

Electromagnetic compatibility	NE 21:2011
Degree of protection	IEC 60529
Fieldbus standard	IEC 61158-2
Shock resistance	EN 60068-2-27
Vibration resistance	EN 60068-2-6
<b>Ambient conditions</b>	
Ambient temperature	see table 1
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
Relative humidity	≤ 95 % non-condensing
Shock resistance	15 g , 11 ms
Vibration resistance	10 g , 10 ... 150 Hz
Corrosion resistance	acc. to ISA-S71.04-1985, severity level G3
<b>Mechanical specifications</b>	
Connection type	plug-in terminals , spring terminal and screw terminal
Core cross-section	
Bus	up to 2.5 mm <sup>2</sup>
Inputs	up to 2.5 mm <sup>2</sup>
Cable diameter	see table 2
Cable gland	sensor inputs M16, fieldbus M20
Housing material	EN 1780-1 46000 , ISO AlSi9Cu3(Fe) , anodized
Degree of protection	IP67
Mass	1800 g
Mounting	wall mounting
<b>Data for application in connection with hazardous areas</b>	
EU-type examination certificate	PTB 03 ATEX 2237
Marking	Ⓜ II 2 (1) G Ex ia [ia Ga] IIC T4 Gb , Ⓜ II (1) G [Ex ia Ga] IIC , Ⓜ II (1) D [Ex ia Da] IIIC , Ⓜ II 3 G Ex ic IIC T4 Gc
Bus	FISCO see EC-Type Examination Certificate
Inputs	see EC-Type Examination Certificate
Certificate	PTB 03 ATEX 2238 X
Marking	Ⓜ II 3 G Ex nA IIC T4 Gc
Galvanic isolation	
Bus	see Statement of Conformity
Input	see EC-Type Examination Certificate
Directive conformity	
Directive 2014/34/EU	EN 60079-0:2012 , EN 60079-11:2012 , EN 60079-15:2010
<b>International approvals</b>	
IECEX approval	IECEX PTB 05.0001 , IECEX PTB 05.0002X
Approved for	Ex ia [ia Ga] IIC T4 Gb , [Ex ia Ga] IIC , [Ex ia Da] IIIC , Ex ic IIC T4 Gc , Ex nA IIC T4 Gc
<b>Certificates and approvals</b>	
Marine approval	DNV A-14038
<b>General information</b>	
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

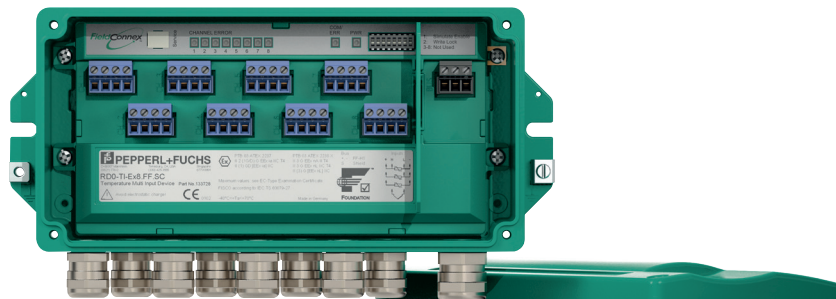
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## Assembly



## Matching System Components

	<p><b>RD0-TI-Ex8.FF.*</b></p>	
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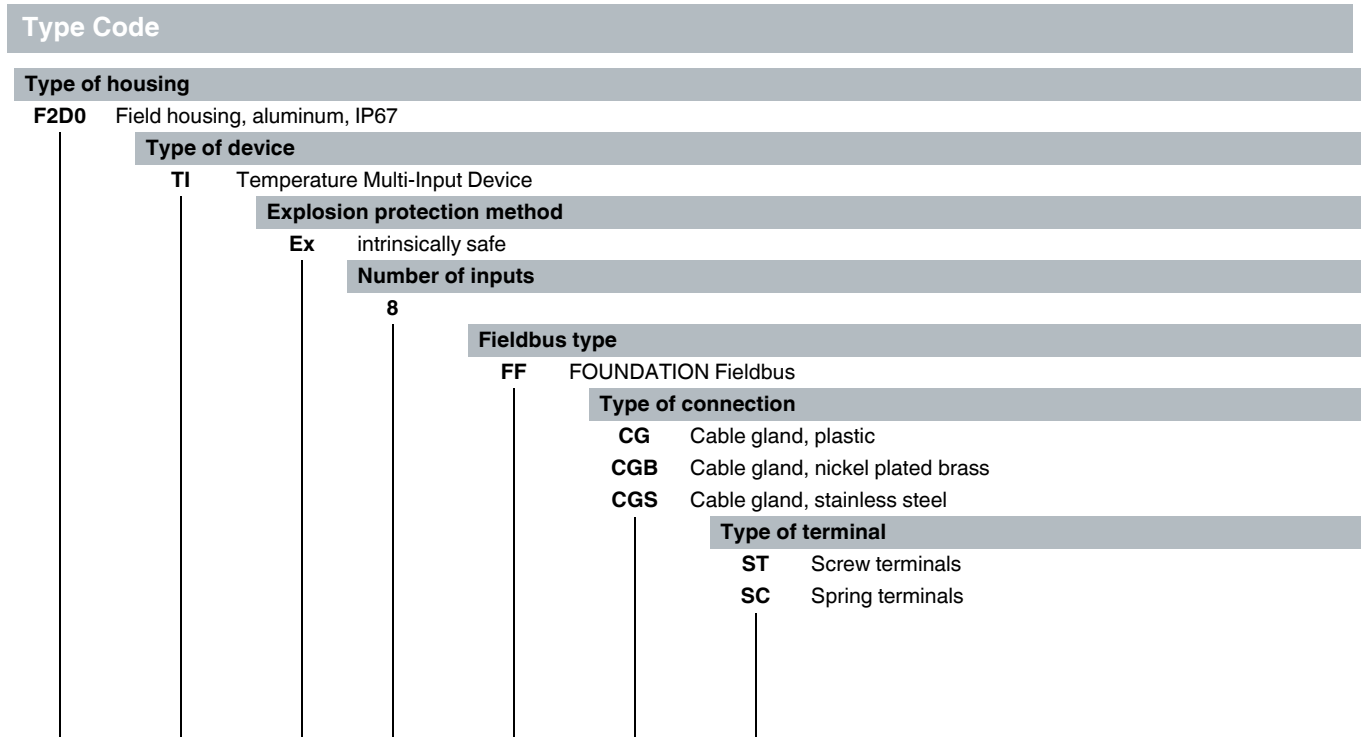
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**Additional Information**



F2D0	-	TI	-	Ex	8	.	FF	.		.	
A	-	B	-	C	D	.	E	.	F	.	G

Identification for assignment of the type code to the following tables

**Example:**

F2D0-TI-Ex8.FF.CGB.ST: Temperature Multi-Input Device in aluminum housing with cable glands made of nickel plated brass and 8 inputs with screw terminals

**Note:**

Contact your Pepperl+Fuchs representative to check the availability of individual variants.

**Dimensions and Assembly**

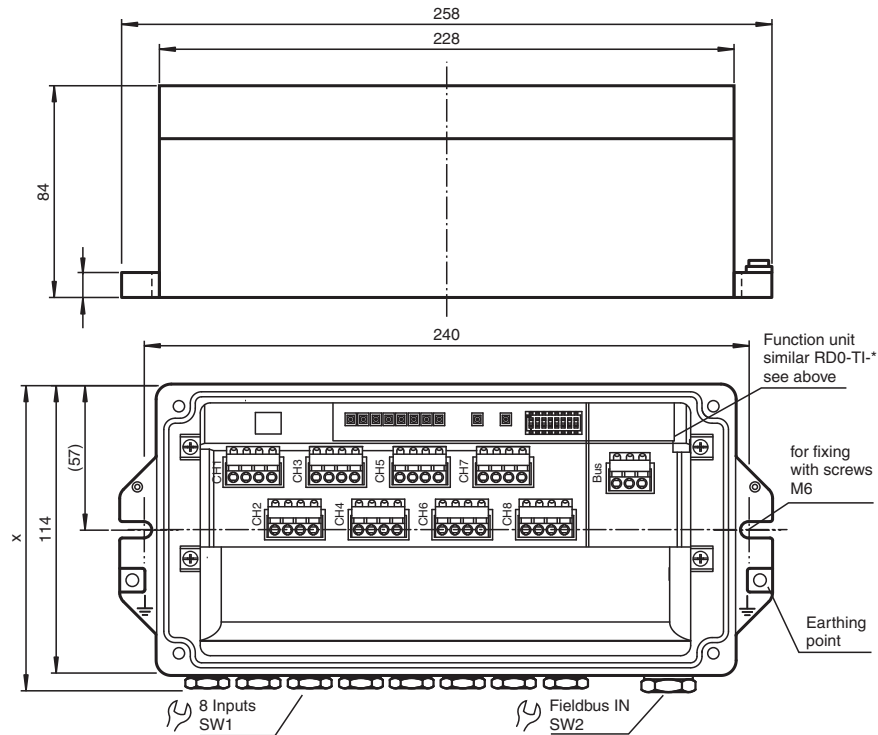


Figure 1: F2D0-TI-Ex8.FF.CGB.SC

**Installation**

see manual

**Electrical Connection**

**Variations of cable connections, housing types and temperature ranges**

Type of connection, identification F	Type of cable connection	Number of inputs, identification D	F2 housing, outside dimension "X" (mm)	Temperature range for use in hazardous area (°C)	Temperature range for use in safe area (°C)
CG	Terminals, cable glands plastic	8	140	-30 ... 70	-30 ... 85
CGB	Terminals, cable glands nickel plated brass	8	140	-40 ... 70	-40 ... 85
CGS	Terminals, cable glands stainless steel	8	140	-40 ... 70	-40 ... 85

Table 1

**Cable diameter depending on cable gland**

Type of connection, identification F	Sensors				Fieldbus			
	Type	Material	Cable diameter (mm)	SW1	Type	Material	Cable diameter (mm)	SW2
CG	M16 x 1.5	Plastic	5 ... 10	20	M20 x 1.5	Plastic	5 ... 13	24
CGB	M16 x 1.5	Nickel plated brass	5 ... 10	20	M20 x 1.5	Nickel plated brass	7 ... 12	24
CGS	M16 x 1.5	Stainless steel	5 ... 9	17	M20 x 1.5	Stainless steel	7 ... 12	24

Table 2

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