

## Device coupler - FB-2SP/E - 2316052

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Device coupler for Foundation Fieldbus and PROFIBUS PA with terminal connections for two spurs connected to fieldbus end devices

### Product Description

The FB-2SP/E has terminal blocks for two spur connections to each device coupler. The device coupler provides short-circuit protection to the fieldbus trunk. Voltage and communication are routed via the TBUS connection system to multiple installed device couplers.



### Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4055626000916
Weight per Piece (excluding packing)	1.000 g
Custom tariff number	85389099
Country of origin	United States

### Technical data

#### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
	Use in potentially explosive areas is not permitted in China.

#### Dimensions

Width	17.5 mm
Height	89.7 mm
Depth	70.4 mm

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## Technical data

### Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C (depending on set rated current)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Degree of protection	IP20

### General

Mounting position	On horizontal DIN rail NS 35 in acc. with EN 60715
Mounting type	DIN rail mounting
Net weight	109.4 g
Housing material	PA 6.6-FR
Color	green
Fieldbus Foundation	FF-846

### Power supply

Supply voltage range	10.5 V DC ... 32 V DC (via FB-ET/E)
Max. current consumption	3.5 mA (No-load)
Conductor cross section flexible max.	0.20 mm <sup>2</sup>
Conductor cross section flexible min.	2.50 mm <sup>2</sup>
Conductor cross section solid max.	0.20 mm <sup>2</sup>
Conductor cross section solid min.	2.50 mm <sup>2</sup>
Max. AWG conductor cross section, flexible	12
Min. AWG conductor cross section, flexible	24
Conductor cross section AWG max.	12
Conductor cross section AWG min.	24

### Interfaces

Interface 1	Foundation Fieldbus and PROFIBUS PA Segment
No. of ports	2
Connection method	Pluggable COMBICON screw connection for each spur
Termination resistor	via FB-ET/E
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Torque	0.5 Nm ... 0.6 Nm
Output nominal voltage	≤ 32 V (each spur)
Maximum output current	45 mA (per spur)

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#### Interfaces

Inductance $L_i$	0 $\mu\text{H}$
Max. output voltage $U_o$	$U_i$

#### Safety data

Max. output voltage $U_o$	$U_i$
Max. output current $I_o$	50 mA (per spur)
Max. output power $P_o$	$U_o \times I_o$
Group	IIC
Max. external capacitance $C_o$	60 nF
Group	IIC
Max. external inductivity $L_o$	250 $\mu\text{H}$
ATEX	Sira 14ATEX4018X; # II 3(3)G Ex nA [ic] IIC T4 Gc; Ex nA [ic] IIC T4 Gc, FISCO ic spurs
IECEX	IECEX SIR 14.0011X; Ex nA [ic] IIC T4 Gc; Ex nA [ic] IIC T4 Gc, FISCO ic spurs
CSA, USA/Canada	Class I, Div. 2, Groups A,B,C,D Ex nL IIC T4 FNICO, Ex ic IIC T4 FISCO ic Ex nA [nL] IIC T4, Ex nA [ic] IIC T4 Ex nA [nL] IIC T4 FNICO spurs, Ex nA [ic] IIC T4 FISCO ic spurs Class I, Zone 2 AEx nL IIC T4 FNICO, AEx ic IIC T4 FISCO ic AEx nA [nL] IIC T4, AEx nA [ic] IIC T4 AEx nA [nL] IIC T4 FNICO spurs, AEx nA [ic] IIC T4 FISCO ic spurs

#### Standards and Regulations

Type of test	Corrosive resistance in acc. to ANSI-ISA 71.04-1985 - Severity level G3
Designation	Standards/regulations
Standards/regulations	Ring wave noise immunity in acc. with IEC 61000-4-12
Designation	Standards/regulations
Standards/regulations	Dry heat in acc. with IEC 61131-2
Designation	Standards/regulations
Standards/regulations	Damp heat in acc. with IEC 61131-2
Designation	Standards/regulations
Standards/regulations	Shock and vibration in acc. with EN 61131-2 and EN 50178
	IEC 61158-2
	IEC 60529, IEC 61158-2
	NE21
	EN 61326, EN 60068-2-27, EN 60068-2-6, EN 60079-0, EN 60079-11, EN 60079-15
	FF-846

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## Technical data

### Standards and Regulations

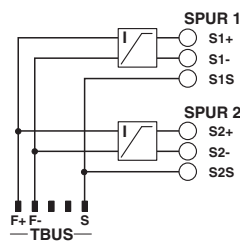
Shock	15g, 11 ms
Vibration (operation)	1g, 10 Hz ... 150 Hz
Fieldbus Foundation	FF-846
Group	IIC
	IIC
ATEX	Sira 14ATEX4018X; # II 3(3)G Ex nA [ic] IIC T4 Gc; Ex nA [ic] IIC T4 Gc, FISCO ic spurs
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### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

Circuit diagram



Connection diagram: FB-2SP

## Classifications

eCl@ss

eCl@ss 10.0.1	27242610
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### Classifications

#### eCl@ss

eCl@ss 11.0	27242610
eCl@ss 5.0	27259200
eCl@ss 5.1	27259200
eCl@ss 6.0	27242600
eCl@ss 7.0	27242608
eCl@ss 9.0	27242610

#### ETIM

ETIM 4.0	EC001600
ETIM 6.0	EC001600
ETIM 7.0	EC001600

#### UNSPSC

UNSPSC 13.2	32151602
UNSPSC 18.0	32151602
UNSPSC 19.0	32151602
UNSPSC 20.0	32151602
UNSPSC 21.0	32151602