

Device coupler - FB-2SP - 2316051

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Device coupler for Foundation Fieldbus and PROFIBUS PA expansions with terminal connections for 2 spurs connected to fieldbus end devices

Product Description

The FB-2SP 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
Weight per Piece (excluding packing)	101.6 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
-------------------------	---

Dimensions

Width	17.5 mm
Height	89.7 mm
Depth	70.4 mm

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)

Device coupler - FB-2SP - 2316051

Technical data

Ambient conditions

Degree of protection	IP20
----------------------	------

General

Standards/regulations	IEC 60529, IEC 61158-2
	NE21
	EN 61326, EN 60068-2-27, EN 60068-2-6
	FF-846
Mounting position	On horizontal DIN rail NS 35 in acc. with EN 60715
Net weight	99.76 g
Housing material	PA 66-FR
Color	green
Conformance	CE-compliant, additionally EN 61326
Fieldbus Foundation	FF-846

Power supply

Supply voltage range	10.3 V DC ... 32 V DC (input on trunk line side)
Typical current consumption	6 mA

Serial interface

Interface 1	Foundation Fieldbus and PROFIBUS PA Segment
Connection method	Pluggable COMBICON screw connection for each spur
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Output nominal voltage	≤ 32 V (each spur)
Output current	15 mA (each spur, adjustable via selector switch, -40 ... 85°C)
Maximum output current	22 mA (each spur, adjustable via selector switch, -40 ... 85°C)

Safety data

Max. output voltage U_o	U_i
Max. output current I_o	48 mA
Max. output power P_o	1.536 W
Group	IIB
Max. external capacity C_o	100 nF
Group	IIB
Max. external inductivity L_o	325 µH

Device coupler - FB-2SP - 2316051

Technical data

Safety data

ATEX	Sira 08ATEX4303X: II 3(3)G Ex nA [Ic Gc] IIB T4 Gc, FISCO Ic spurs Ex nA [nL Gc] IIB T4 Gc, FNICO spurs
IECEX	IECEX SIR 08.0110X: II 3(3)G Ex nA [Ic Gc] IIB T4 Gc, FISCO Ic spurs Ex nA [nL Gc] IIB T4 Gc, FNICO spurs
CSA, USA/Canada	Class I, Div. 2, Groups C, D Ex nA [nL] IIB T4, FNICO/Entity Class I, Zone 2, AEx nA [nL] IIB T4, FNICO/Entity

Standards and Regulations

Shock	15g, 11 ms
Standards/regulations	IEC 60529, IEC 61158-2
	NE21
	EN 61326, EN 60068-2-27, EN 60068-2-6
	FF-846
Vibration (operation)	1g, 10 Hz - 150 Hz
Conformance	CE-compliant, additionally EN 61326
Fieldbus Foundation	FF-846
Group	IIB
	IIB
ATEX	Sira 08ATEX4303X: II 3(3)G Ex nA [Ic Gc] IIB T4 Gc, FISCO Ic spurs Ex nA [nL Gc] IIB T4 Gc, FNICO spurs
IECEX	IECEX SIR 08.0110X: II 3(3)G Ex nA [Ic Gc] IIB T4 Gc, FISCO Ic spurs Ex nA [nL Gc] IIB T4 Gc, FNICO spurs
CSA, USA/Canada	Class I, Div. 2, Groups C, D Ex nA [nL] IIB T4, FNICO/Entity Class I, Zone 2, AEx nA [nL] IIB T4, FNICO/Entity

Classifications

eCl@ss

eCl@ss 4.0	27250203
eCl@ss 4.1	27250203
eCl@ss 5.0	27250203
eCl@ss 5.1	27259205
eCl@ss 6.0	27259090
eCl@ss 7.0	27259090
eCl@ss 8.0	27242610

Device coupler - FB-2SP - 2316051

Classifications

ETIM

ETIM 2.0	EC001423
ETIM 3.0	EC001600
ETIM 4.0	EC001600
ETIM 5.0	EC001600

UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	39121008

Accessories

Accessories

Base element

Surge protection base element - PT 4+F-BE - 2839415



Base element for protective plug PT with protective circuit for a 4-wire floating signal circuit, gas-filled surge arrester between the connections 3-4 (GND) and 9-10, for mounting on NS 35/7.5 and NS35/15, housing width: 17.5 mm

Power distributor - FB-PS-BASE/EX - 2316145



Base for fieldbus power supply plugs. Provides redundancy when 2 plugs are installed. Redundancy is maintained across multiple bases via internal power buses. Additional internal bus provides remote indication.

Control box

Terminal box - FB-15-SS - 2316190



Stainless steel field junction box with 15 ports for use in hazardous locations. Includes FB-ET trunk module, Plugtrab base with option for surge protection plug, and DIN rail space for up to 12 device couplers.

Device coupler - FB-2SP - 2316051

Accessories

Control cabinet - FB-9-SS - 2316213



Stainless steel field junction box with 9 ports for use in hazardous locations. Includes FB-ET trunk module, Plugtrab base with option for surge protection plug, and DIN rail space for up to 6 device couplers.

Device coupler

Device coupler - FB-DIAG/FF/NC - 2316297



Field diagnostic module, includes TBUS connector

Power supply

Power module - FB-PS-PLUG-24DC/28DC/0.5/EX - 2316132



Power supply plug for fieldbus system in hazardous locations. Provides 500 mA @ 28 V DC to couplers along the trunk.

Surge protection for information technology

Surge protection plug - PT 2X2-FF-ST - 2800755

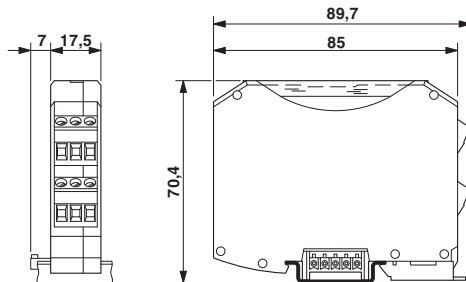


PLUGTRAB, plug-in surge protection for Foundation Fieldbus

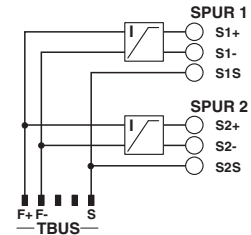
Drawings

Device coupler - FB-2SP - 2316051

Dimensional drawing



Circuit diagram



Connection diagram: FB-2SP

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Phoenix Contact:

2316051