

PROFIBUS PA T-Connector

- For industrial application
- Standard



The **PROFIBUS-PA** installation products are increasingly found in the

- Food industries
- Fine and speciality chemicals
- Bulk chemicals industry

The range is designed to accommodate a wide range of customer requirements in the harshest of environments.

These include Standard and Hazardous Area Versions with either single or multiple quick-connection variants with M12 connector or cable gland.

Weidmüller offers, for almost every application, a solution. In the case you don't see your solution here, please contact your local sales office.

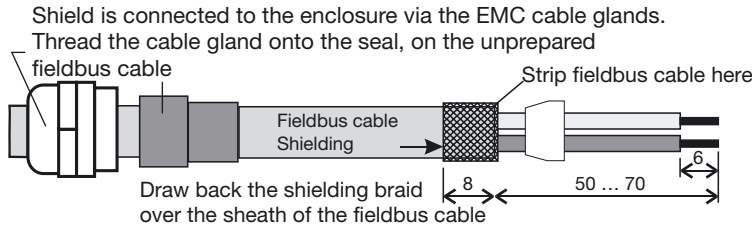
PROFIBUS-PA T-Connector standard

- 1, 2, 4, 8-way with EMC gland industrial + EX / ATEX
- Overvoltage protection optional

The **PROFIBUS-PA T-Connector** is intended for the coupling of sensors, actuators and measuring instruments.

- Type of protection IP 66
- Modular design
- Non-interrupted BUS operations, also when being serviced
- Easy to use
- Low installation costs
- External grounding cable
- Pressure-compensation element
- EMC cable gland





Use ferrules!

The PROFIBUS-PA

is an open field-bus standard (EN 50 170, IEC 1158-2, DIN 19 245). It was specifically developed for the requirements of the Process Industry technology, in particular remote supply and intrinsic safety. PROFIBUS-PA permits several PA sensors and actuators to be operated on one common bus. The devices are supplied with power via 2-wire technology with the process data communication being executed digitally.

Integration into the PROFIBUS-DP network is carried out by means of a Segment Coupler. Specific advantages of PROFIBUS-PA :

- Reduced wiring costs
- Minimised design costs of the process control system
- Remote interrogation and programming of field devices
- Continuing development and support through PROFIBUS User and Trade Organisations (PNO)

Weidmüller offers here the PROFIBUS-PA FB Connector. In the event of service or plant modification, the PROFIBUS-PA FB-Connector from Weidmüller permits the connection or replacement of field devices without interrupting the bus system.

Extensive accessories as well as pre-assembled cables and plugs round off the program.

Technical data for pages 52-54

Temperature range	
Operating temperature	from -40 to 85°C
Type of protection	IP 66
Material of housing	high-quality aluminium alloy (AL - Si 12)
Surface	stove-enamelled RAL 7001
PROFIBUS-PA - Connection	tension clamp connection 0.5 - 1.5 mm ²
Cable bushing	Cable gland M16
Clamping area	5.5 - 9.5 mm
Measuring instrument connector M12 x 1 4-pole	contacts brass, surface CUZnAu

Installation advice

Torques	
M16 cable gland on housing	6.25 Nm
Coupling ring M16 cable gland	4.5 Nm
Housing lid	1.8 - 2.0 Nm
External earthing cable	1.8 - 2.0 Nm

Ordering data

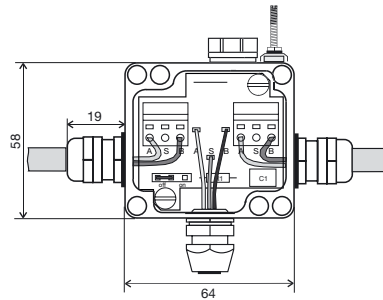
Type	Cat. No.
Profibus PA T distributor type FBCon PA CG/M12 1way	8564060000
Profibus PA T distributor type FBCon PA CG/M12 2way	8564070000
Profibus PA T distributor type FBCon PA CG/M12 4way	8564080000
Profibus PA T distributor type FBCon PA CG/M12 8way	8564310000
Profibus PA T distributor type FBCon PA CG 1way	8564090000
Profibus PA T distributor type FBCon PA CG 2way	8564100000
Profibus PA T distributor type FBCon PA CG 4way	8564110000
Profibus PA T distributor type FBCon PA CG 8way	8564300000

Field-bus components for industrial applications with tension clamp connection

The measuring instruments are connected using an M 12 connection.
The screen is connected to the housing via the EMC cable gland.



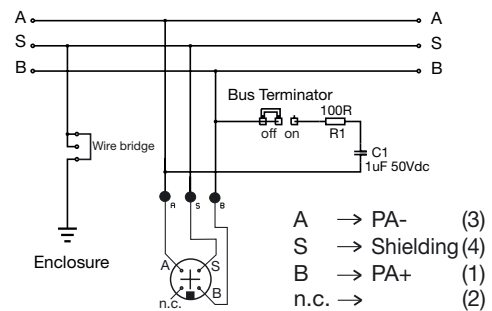
PROFIBUS-PA T-Connector standard 1-way Type FBCon PA CG/M12 1way



Bus terminator:



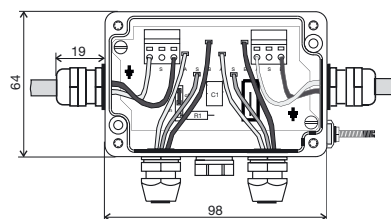
Circuit diagram



Ordering data

Type	Cat. No.
Profibus PA T distributor type FBCon PA CG/M12 1way	8564060000

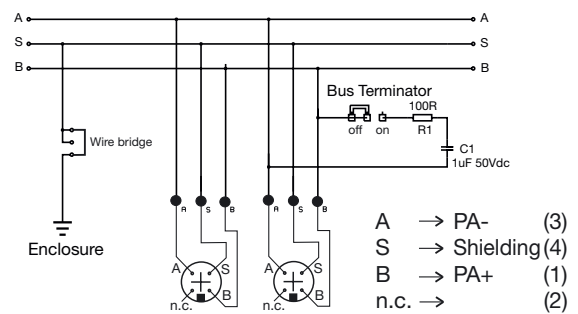
PROFIBUS-PA T-Connector standard 2-way Type FBCon PA CG/M12 2way



Bus terminator:



Circuit diagram



Ordering data

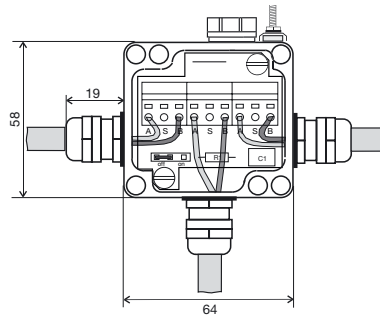
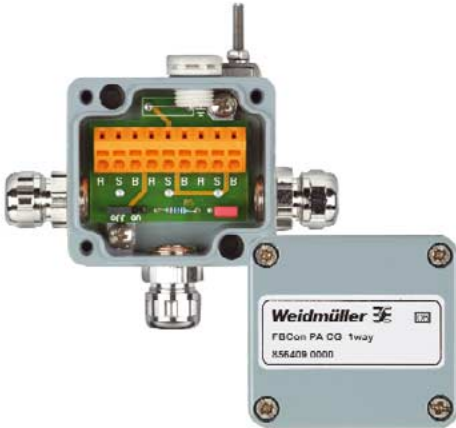
Type	Cat. No.
Profibus PA T distributor type FBCon PA CG/M12 2way	8564070000

Field-bus components for industrial applications with tension clamp connection

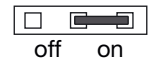
The measuring instruments are connected directly in the distributor via the EMC cable gland.
The screen is connected to the housing via the EMC cable gland.



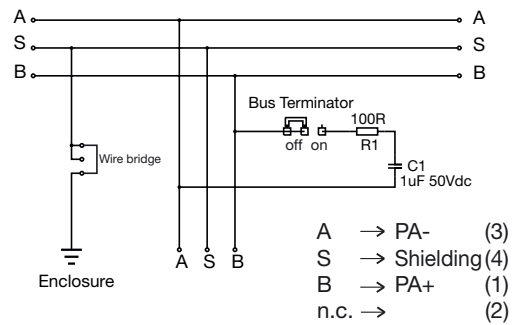
PROFIBUS-PA T-Connector EMC version 1-way Type FBCon PA CG 1way



Bus terminator:



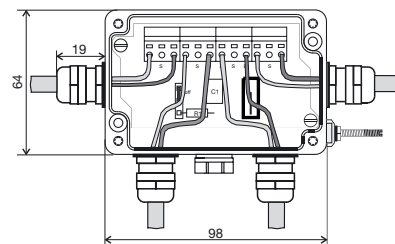
Circuit diagram



Ordering data

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Profibus PA T distributor type FBCon PA CG 1way	8564090000

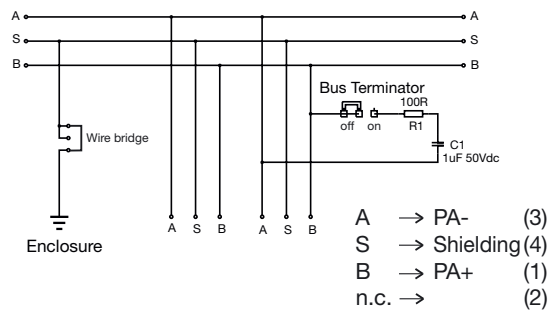
PROFIBUS-PA T-Connector EMC version 2-way Type FBCon PA CG 2way



Bus terminator:



Circuit diagram



Ordering data

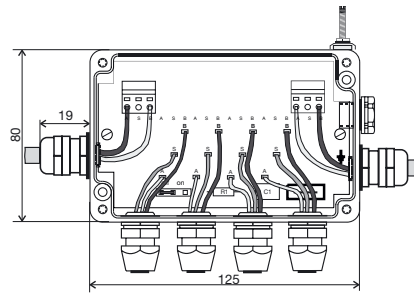
Type	Cat. No.
Profibus PA T distributor type FBCon PA CG 2way	8564100000

Field-bus components for industrial applications with tension clamp connection

The measuring instruments are connected using an M 12 connection.
The screen is connected to the housing via the EMC cable gland.



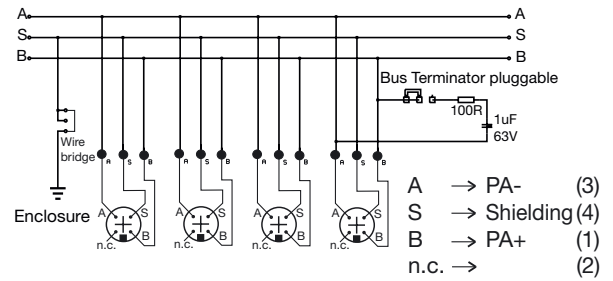
PROFIBUS-PA T-Connector standard 4-way Type FBCon PA CG/M12 4way



Bus terminator:



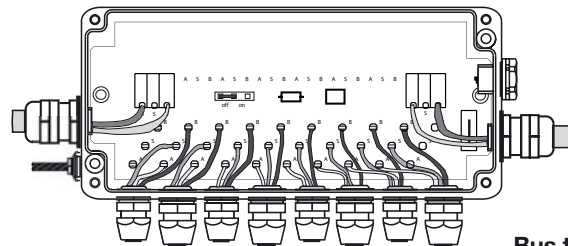
Circuit diagram



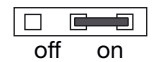
Ordering data

Type	Cat. No.
Profibus PA T distributor type FBCon PA CG/M12 4way	8564080000

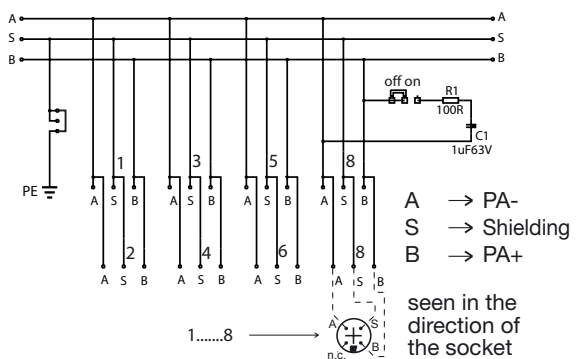
PROFIBUS-PA T-Connector standard 8-way Type FBCon PA CG/M12 8way



Bus terminator:



Circuit diagram



Ordering data

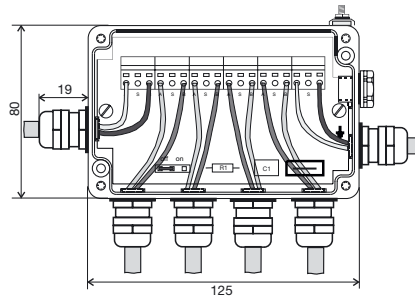
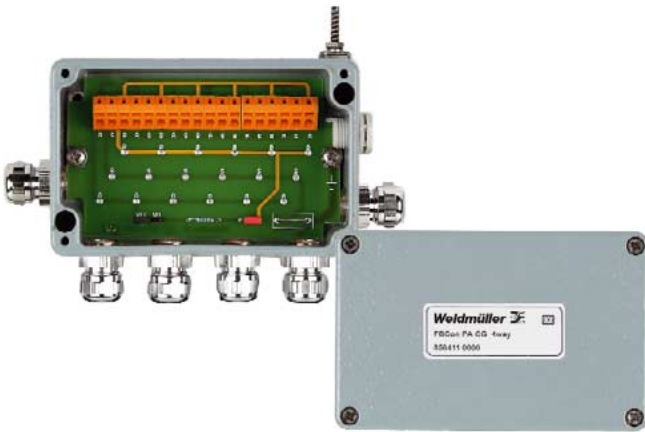
Type	Cat. No.
Profibus PA T distributor type FBCon PA CG/M12 8way	8564310000

Field-bus components for industrial applications with tension clamp connection

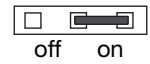
The measuring instruments are connected directly in the distributor via the EMC cable gland.
The screen is connected to the housing via the EMC cable gland.



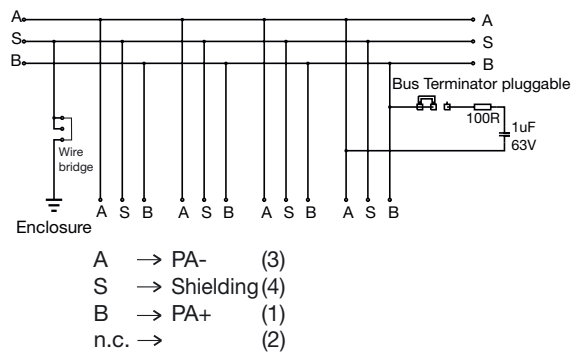
PROFIBUS-PA T-Connector EMC version 4-way Type FBCon PA CG 4way



Bus terminator:



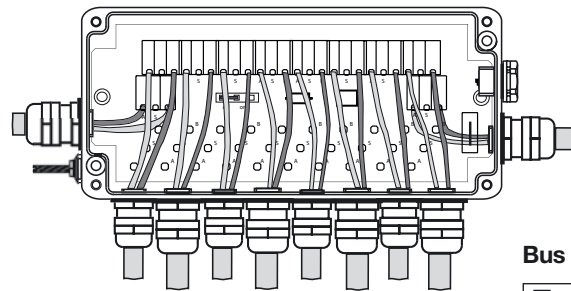
Circuit diagram



Ordering data

Type	Cat. No.
Profibus PA T distributor type FBCon PA CG 4way	8564110000

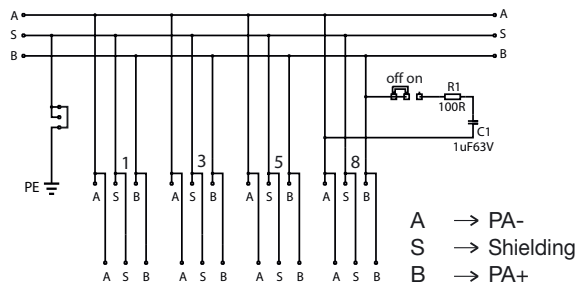
PROFIBUS-PA T-Connector EMC version 8-way Type FBCon PA CG 8way



Bus terminator:



Circuit diagram



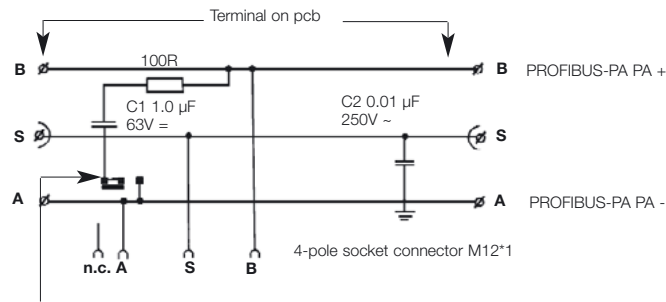
Ordering data

Type	Cat. No.
Profibus PA T distributor type FBCon PA CG 8way	8564300000

PROFIBUS PA distributor with screw connection

PROFIBUS-PA T-Connector standard

Circuit diagram



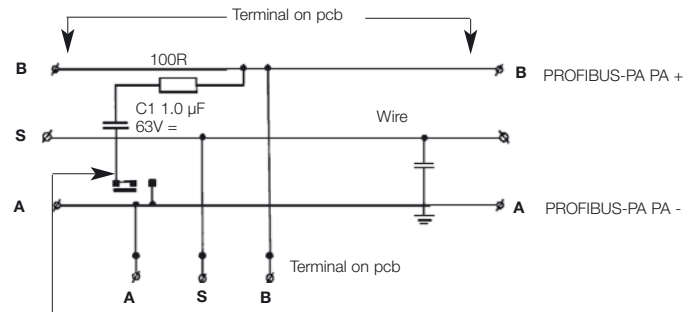
off: no Bus Terminator
(delivery status)
on: Bus Terminator active

Ordering data

Type	Cat. No.
PROFIBUS-PA T-Connector standard	842600000

PROFIBUS-PA T-Connector with 3 PG cable glands

Circuit diagram



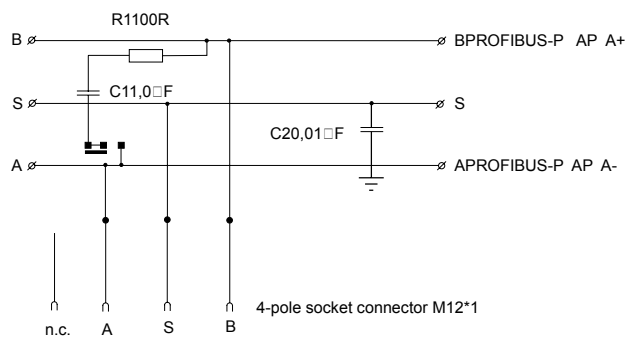
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(delivery status)
on: Bus Terminator active

Ordering data

Type	Cat. No.
PROFIBUS-PA T-Connector with 3 PG cable glands	9455940000

PROFIBUS-PA T-Connector with 2 EMC cable glands

Circuit diagram

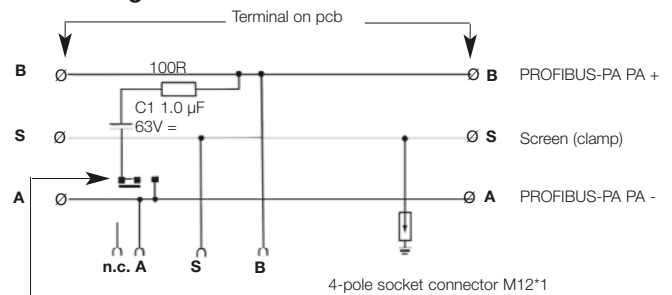


Ordering data

Type	Cat. No.
PROFIBUS-PA T-Connector with 2 EMC cable glands	8426010000

PROFIBUS-PA T-Connector with overvoltage protection

Circuit diagram



off: no Bus Terminator
(delivery status)
on: Bus Terminator active

Screen is connected with the housing by the cable gland

Ordering data

Type	Cat. No.
PROFIBUS-PA T-Connector with overvoltage protection	8426020000

The overvoltage protection ensures safe discharge against earth potential

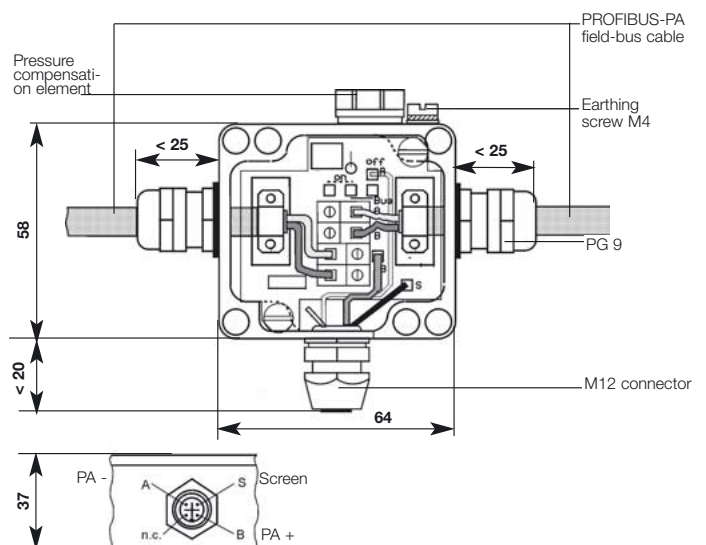
Technical data

Temperature range	
Operating temperature	- 40 to 85 °C
Type of protection	IP 66
Material of housing	high-quality aluminium alloy (AL - Si 12)
Surface	stove-enamelled RAL 7001
PROFIBUS-PA - Connection	Screw terminals 0.5 - 1.5 mm ² (AWG 26 - 16)
Cable bushing	Cable gland PG 9 / Clamping range 4.0 - 8.0 mm
Measuring instrument connector	Contact brass,
M12 x 1 4-pole	Surface CuZnAu
Voltage arrester, optional	90 V ignition voltage DC / 700 V at 1 kV/µS
	2.5 KA discharge current 8/20 µs

Installation advice

Torques screw terminals	0.4 Nm
Torques cable gland on housing	6.0 Nm
Coupling ring PG cable gland	4.0 Nm
Housing lid	1.8 - 2.0 Nm
Adapter/stub cable	hand-tight
External earthing cable	1.8 - 2.0 Nm

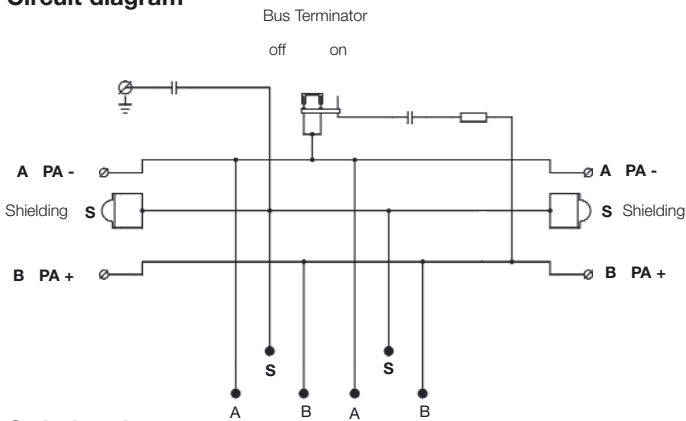
(The use of a cable shoe is recommended) Connection according to circuit diagram



PROFIBUS PA distributor with screw connection

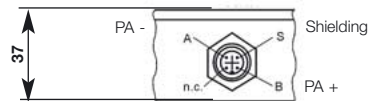
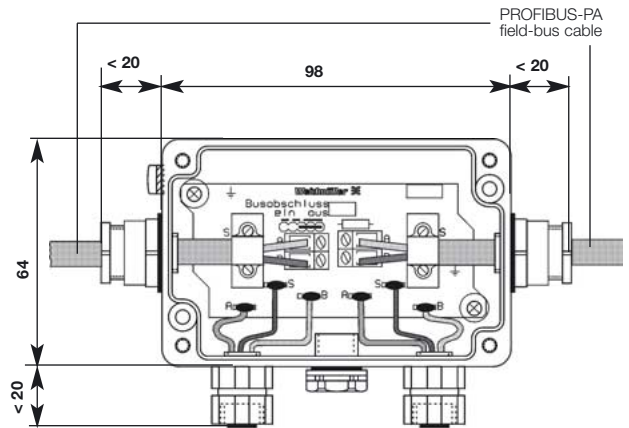
PROFIBUS-PA -Connector 2-way

Circuit diagram



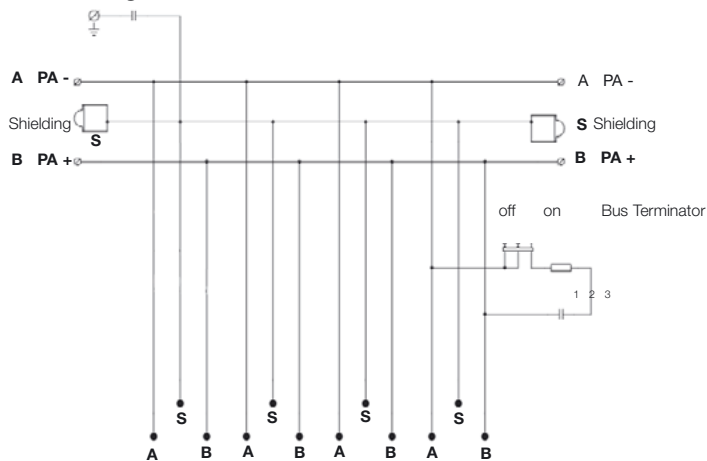
Ordering data

Type	Cat. No.
PROFIBUS-PA 2-WAY Connector	8491180000



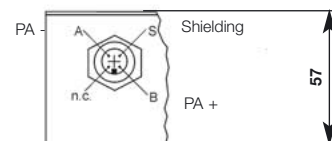
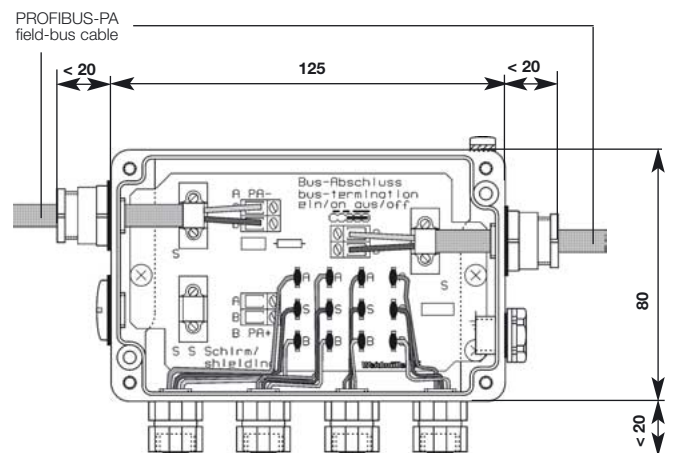
PROFIBUS-PA -Connector 4-way

Circuit diagram



Ordering data

Type	Cat. No.
PROFIBUS-PA 4-WAY Connector	8426300000



Technical data

Temperature range	
Operating temperature	- 40 to 85 °C
Type of protection	IP 66
Material of housing	high-quality aluminium alloy (AL - Si 12)
Surface	stove-enamelled RAL 7001
PROFIBUS-PA - Connection	Screw terminals 0.5 - 1.5 mm ² (AWG 26 - 16)
Cable bushing	Cable gland PG 9 / Clamping range 4.0 - 8.0 mm
Measuring instrument connector	Contacts brass,
M12 x 1 4-pole	Surface CuZnAu

Installation advice

Torques screw terminals	0.4 Nm
Torques cable gland on housing	6.0 Nm
Coupling ring PG cable gland	4.0 Nm
Housing lid	1.8 - 2.0 Nm
Stub cable	hand-tight
External earthing cable	1.8 - 2.0 Nm
(The use of a cable shoe is recommended) Connection according to circuit diagram	