



PROFIBUS

Connectors

































Repeaters

FO

Wireless system

Communication

PROFIBUS connector overview

CONNECTION TECHNOLOGY	ORIENTATION	PRODUCT IMAGE	WITHOUT PG	WITH PG	PAGE
Screw terminal	90°		700-972-0BA12 	700-972-0BB12 	9
	90° diagnosis		700-972-7BA12 	700-972-7BB12 	17
	35°		700-972-0BA41 	700-972-0BB41 	10
	Axial		700-972-0CA12 		11
	90° with ATEX approval		700-973-0BA12 	700-973-0BB12 	19
EasyConnect®	90°		700-972-0BA50 	700-972-0BB50 	12
	90° diagnosis		700-972-7BA50 	700-972-7BB50 	15
	Angled, for solid cables		700-972-0BA51 	700-972-0BB51 	13
	Angled, for flexible cables		700-972-0FA51 	700-972-0FB51 	13
	Angled diagnosis, for solid cables			700-972-7BB51	16
	Axial		700-972-0CA50 		14
M12	90°		700-974-0BA12 	700-974-0BB12 	18



PROFIBUS connector 90° with (l.) and without (r.) PG interface

The PROFIBUS connector 90° is equipped with a proven and reliable screw terminal. It is quickly mounted and has integrated, connectable terminating resistors.

For improved EMC compatibility, the housing of the plug is metalized.

The PROFIBUS connectors also work in the extended ambient temperature range of -25 °C to +85 °C¹.

FEATURES

- Metalized housing
- No parts that can be lost
- Integrated switchable terminating resistor
- 90° cable outlet
- Proven screw terminal



TECHNICAL DATA

PG socket		
Order No. 700-972-0BB12		Yes
Order No. 700-972-0BA12		No
Dimensions in mm (D x W x H)		64 x 40 x 17
Weight		Approx. 40 g
Cable outlet		Vertical cable outlet, suitable for FastConnect wire stripping tool
Terminating resistor		Resistor combination integrated and switchable using slide switch
Transfer rate	max.	12 Mbps
Interfaces		
PROFIBUS participants		SUB-D, 9-pin
Maximum outside diameter		8.0 mm
PROFIBUS cable		60/75 °C copper cable up to 1.0 mm ²
Connector type		4 serial terminals
Supply voltage		4.75 ... 5.25 V DC (must come from the device)
Current draw	max.	12.5 mA
Pollution degree		2
Ambient temperature		-25 °C ... +85 °C ¹
Transport and storage temperature		-25 °C ... +85 °C
Relative humidity		max. 75% at +25 °C
Protection rating		IP 20

ORDERING DATA

ORDER NO.

PROFIBUS connector, 90°	
without PG socket, screw terminal	700-972-0BA12
with PG socket, screw terminal	700-972-0BB12
Wire stripping tool for PROFIBUS	700-972-6AA00

The PROFIBUS connectors are also available in packs of 10 or 50 pieces.

1) The maximum ambient temperature for UL is 60 °C.

PROFIBUS connector, 35° screw terminal



PROFIBUS connector 35° with (l.) and without (r.) PG interface

The PROFIBUS connector 35° is equipped with a proven and reliable screw terminal. It is quickly mounted and has integrated, connectable terminating resistors.

For improved EMC compatibility, the housing of the plug is metalized.

The PROFIBUS connectors also work in the extended ambient temperature range of -25 °C to +85 °C¹.

FEATURES

- Metalized housing
- No parts that can be lost
- Integrated switchable terminating resistor
- 35° cable outlet
- Proven screw terminal



TECHNICAL DATA

PG socket		
Order No. 700-972-0BB41	Yes	
Order No. 700-972-0BA41	No	
Dimensions in mm (D x W x H)	54 x 40 x 17	
Weight	Approx. 40 g	
Cable outlet	35° angled cable outlet	
Terminating resistor	Resistor combination integrated and switchable using slide switch	
Transfer rate	max.	12 Mbps
Interfaces		
PROFIBUS participants	SUB-D, 9-pin	
Maximum outside diameter	8.0 mm	
PROFIBUS cable	60/75 °C copper cable up to 1.0 mm ²	
Connector type	4 serial terminals	
Supply voltage	4.75 ... 5.25 V DC (must come from the device)	
Current draw	max.	12.5 mA
Pollution degree	2	
Ambient temperature	-25 °C ... +85 °C ¹	
Transport and storage temperature	-25 °C ... +85 °C	
Relative humidity	max.	75% at +25 °C
Protection rating	IP 20	

ORDERING DATA

PROFIBUS connector, 35°
without PG socket, screw terminal
with PG socket, screw terminal

ORDER NO.

700-972-0BA41
700-972-0BB41

The PROFIBUS connectors are also available in packs of 10 or 50 pieces.

1) The maximum ambient temperature for UL is 60 °C.



PROFIBUS connector with axial cable outlet

The PROFIBUS connector with axial cable outlet is equipped with a proven and reliable screw terminal. It is quickly mounted and has integrated, connectable terminating resistors.

For improved EMC compatibility, the housing of the plug is metalized.

The PROFIBUS connectors also work in the extended ambient temperature range of -25 °C to +85 °C¹.

FEATURES

- Metalized housing
- No parts that can be lost
- Integrated switchable terminating resistor
- Axial cable outlet
- Proven screw terminal



TECHNICAL DATA

Dimensions in mm (D x W x H)	68 x 35 x 17
Weight	Approx. 40 g
Cable outlet	Axial cable outlet, suitable for FastConnect wire stripping tool
Terminating resistor	Resistor combination integrated and switchable using slide switch
Transfer rate	max. 12 Mbps
Interfaces	
PROFIBUS participants	SUB-D, 9-pin
Maximum outside diameter	8.0 mm
PROFIBUS cable	60/75 °C copper cable up to 1.0 mm ²
Connector type	4 serial terminals
Supply voltage	4.75 ... 5.25 V DC (must come from the device)
Current draw	max. 12.5 mA
Pollution degree	2
Ambient temperature	-25 °C ... +85 °C ¹
Transport and storage temperature	-25 °C ... +85 °C
Relative humidity	max. 75% at +25 °C
Protection rating	IP 20

ORDERING DATA

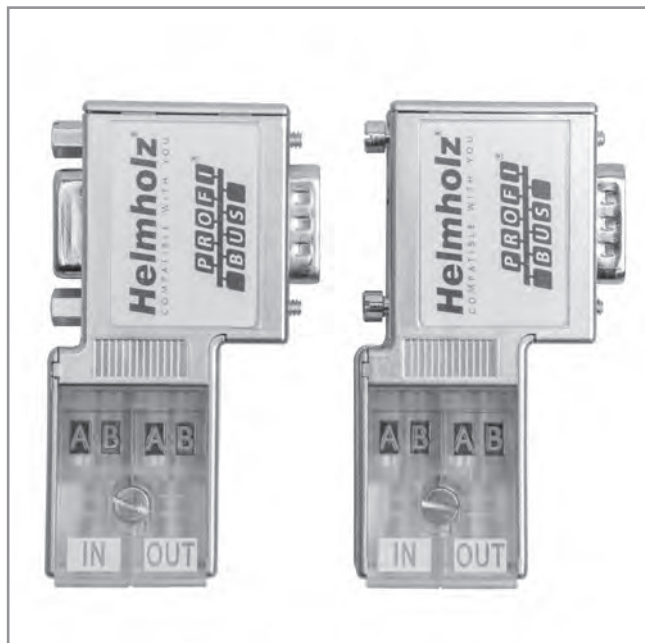
ORDER NO.

PROFIBUS connector, axial Axial cable outlet, screw terminal	700-972-0CA12
Wire stripping tool for PROFIBUS	700-972-6AA00

The PROFIBUS connectors are also available in packs of 10 or 50 pieces.

1) The maximum ambient temperature for UL is 60 °C.

PROFIBUS connector, 90° EasyConnect®



PROFIBUS connector, 90° EasyConnect®

The PROFIBUS connector 90° EasyConnect® features quick-connect technology, making stripping of the bus wires unnecessary. With the aid of a visual connection control, it is also possible to check that the PROFIBUS cable is correctly connected after it is mounted.

For improved EMC compatibility, the housing of the plug is metalized.

The EasyConnect® connectors also work in the extended ambient temperature range of -25 °C to +85 °C¹.

FEATURES

- Metalized housing
- No parts that can be lost
- Integrated switchable terminating resistor
- 90° cable outlet
- Quick-connect technology EasyConnect®
- Visual connection control



TECHNICAL DATA

PG socket		
Order No. 700-972-0BB50	Yes	
Order No. 700-972-0BA50	No	
Dimensions in mm (D x W x H)	72 x 40 x 17	
Weight	Approx. 40 g	
Cable outlet	Vertical cable outlet, suitable for FastConnect wire stripping tool	
Terminating resistor	Resistor combination integrated and switchable using slide switch	
Transfer rate	max.	12 Mbps
Interfaces		
PROFIBUS participants	SUB-D, 9-pin	
Maximum outside diameter	8.0 mm	
PROFIBUS cable	FC standard cable, solid or flexible; 0.64 mm Ø 60/75 °C copper cable	
Connector type	EasyConnect®	
Supply voltage	4.75 ... 5.25 V DC (must come from the device)	
Current draw	max.	12.5 mA
Pollution degree	2	
Ambient temperature	-25 °C ... +85 °C ¹	
Transport and storage temperature	-25 °C ... +85 °C	
Relative humidity	max.	75% at +25 °C
Protection rating	IP 20	

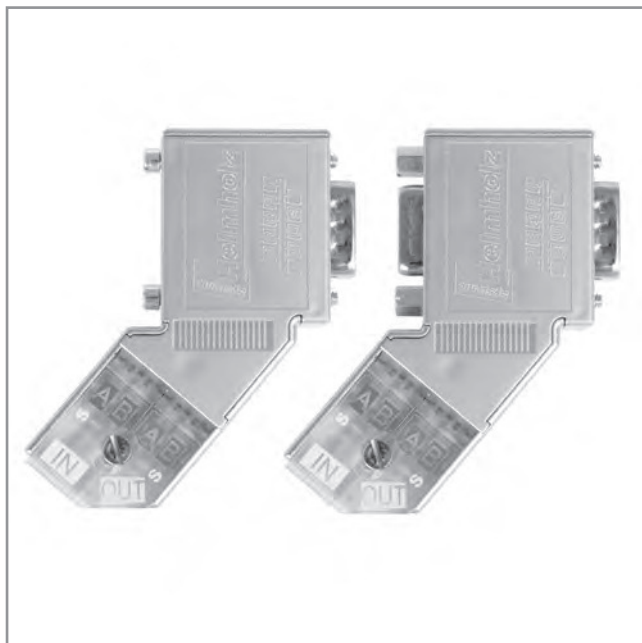
ORDERING DATA

ORDER NO.

PROFIBUS connector, 90° EasyConnect® for solid/flexible cable without PG socket with PG socket	700-972-0BA50
	700-972-0BB50
Wire stripping tool for PROFIBUS	700-972-6AA00

The PROFIBUS connectors are also available in packs of 10 or 50 pieces.

1) The maximum ambient temperature for UL is 60 °C.

PROFIBUS connector, angled **EasyConnect®**

The PROFIBUS connector angled **EasyConnect®** features quick-connect technology, making stripping of the bus wires unnecessary.

With the aid of a visual connection control, it is also possible to check that the PROFIBUS cable is correctly connected after it is mounted.

For improved EMC compatibility, the housing of the plug is metalized.

The **EasyConnect®** connectors also work in the expanded ambient temperature range of -25 °C to +85 °C¹.

FEATURES

- Metalized housing
- No parts that can be lost
- Integrated switchable terminating resistor
- Angled cable outlet
- Quick-connect technology **EasyConnect®**
- Visual connection control



TECHNICAL DATA

PG socket	
Order No. 700-972-0BB51/-0FB51	Yes
Order No. 700-972-0BA51/-0FA51	No
Dimensions in mm (D x W x H)	68 x 60 x 17
Weight	Approx. 50 g
Cable outlet	Angled cable outlet
Terminating resistor	Resistor combination integrated and switchable using slide switch
Transfer rate max.	12 Mbps
Interfaces	
PROFIBUS participants	SUB-D, 9-pin
Maximum outside diameter	8.0 mm
PROFIBUS cable	FC standard cable, solid or flexible; 0.64 mm Ø 60/75 °C copper cable
Connector type	EasyConnect®
Supply voltage	4.75 ... 5.25 V DC (must come from the device)
Current draw max.	12.5 mA
Pollution degree	2
Ambient temperature	-25 °C ... +85 °C ¹
Transport and storage temperature	-25 °C ... +85 °C
Relative humidity max.	75% at +25 °C
Protection rating	IP 20

ORDERING DATA

ORDER NO.

PROFIBUS connector, angled EasyConnect® for solid cable	
without PG socket	700-972-0BA51
with PG socket	700-972-0BB51
PROFIBUS connectors angled EasyConnect® for flexible cable	
without PG socket	700-972-0FA51
with PG socket	700-972-0FB51

The PROFIBUS connectors are also available in packs of 10 or 50 pieces.

1) The maximum ambient temperature for UL is 60 °C.

PROFIBUS connectors, axial **EasyConnect®**PROFIBUS connectors, axial **EasyConnect®**

The PROFIBUS connector axial **EasyConnect®** features quick-connect technology, making stripping of the bus wires unnecessary. With the aid of a visual connection control, it is also possible to check that the PROFIBUS cable is correctly connected after it is mounted.

For improved EMC compatibility, the housing of the plug is metalized.

The **EasyConnect®** connectors also work in the expanded ambient temperature range of -25 °C to +85 °C¹.

FEATURES

- Metalized housing
- No parts that can be lost
- Integrated switchable terminating resistor
- Axial cable outlet
- Quick-connect technology **EasyConnect®**
- Visual connection control



ORDERING DATA

PROFIBUS connector, axial **EasyConnect®**
for solid/flexible cable

ORDER NO.

700-972-0CA50

Wire stripping tool for PROFIBUS

700-972-6AA00

The PROFIBUS connectors are also available in packs of 10 or 50 pieces.

TECHNICAL DATA

Dimensions in mm (D x W x H)	70 x 35 x 17
Weight	Approx. 50 g
Cable outlet	Vertical cable outlet, suitable for FastConnect wire stripping tool
Terminating resistor	Resistor combination integrated and switchable using slide switch
Transfer rate	max. 12 Mbps
Interfaces	
PROFIBUS participants	SUB-D, 9-pin
Maximum outside diameter	8.0 mm
PROFIBUS cable	FC standard cable, solid or flexible; 0.64 mm Ø 60/75 °C copper cable
Connector type	EasyConnect®
Supply voltage	4.75 ... 5.25 V DC (must come from the device)
Current draw	max. 12.5 mA
Pollution degree	2
Ambient temperature	-25 °C ... +85 °C ¹
Transport and storage temperature	-25 °C ... +85 °C
Relative humidity	max. 75% at +25 °C
Protection rating	IP 20

1) The maximum ambient temperature for UL is 60 °C.

PROFIBUS connector, 90° diagnosis **EasyConnect®**

The PROFIBUS connector 90° **EasyConnect®** diagnosis features quick-connect technology, making stripping of the bus wires unnecessary.

With the aid of a visual connection control, it is also possible to check that the PROFIBUS cable is correctly connected after it is mounted.

For improved EMC compatibility, the housing of the plug is metalized.

Using the PROFIBUS connector diagnosis, a PROFIBUS network can be established in which the user can at any time check the state of the bus system at a glance.

The three built-in LEDs with the easily distinguished colors blue, green, and orange indicate the most important states of the PROFIBUS network at each station. The state of the terminating resistor (orange), whether bus activity is present (green) and whether the addressed participant is participating in the bus traffic (blue) are displayed.

In this way you can immediately recognize error states such as bus interrupts, missing or incorrectly connected terminating resistors, and malfunctioning or failed bus participants.

The **EasyConnect®** connectors also work in the expanded ambient temperature range of -25 °C to +85 °C¹.

FEATURES

- 3 status LEDs to indicate “bus operation,” “participant is sending,” “terminating resistor inserted”
- Metalized housing
- No parts that can be lost
- Integrated switchable terminating resistor
- 90° cable outlet
- Quick-connect technology **EasyConnect®**
- Visual connection control



TECHNICAL DATA

PG socket	
Order No. 700-972-7BB50	Yes
Order No. 700-972-7BA50	No
Dimensions in mm (D x W x H)	72 x 40 x 17
Weight	Approx. 40 g
Cable outlet	Vertical cable outlet, suitable for FastConnect wire stripping tool
Terminating resistor	Resistor combination integrated and switchable using slide switch
Transfer rate	max. 12 Mbps
Interfaces	
PROFIBUS participants	SUB-D, 9-pin
Maximum outside diameter	8.0 mm
PROFIBUS cable	FC standard cable, solid or flexible; 0.64 mm Ø 60/75 °C copper cable
Connector type	EasyConnect®
Supply voltage	4.75 ... 5.25 V DC (must come from the device)
Current draw	max. 35 mA
Pollution degree	2
Ambient temperature	-25 °C ... +85 °C ¹⁾
Transport and storage temperature	-25 °C ... +85 °C
Relative humidity	max. 75% at +25 °C
Protection rating	IP 20

ORDERING DATA

ORDER NO.

PROFIBUS connector, 90° diagnosis EasyConnect® for solid/flexible cable without PG socket	700-972-7BA50
with PG socket	700-972-7BB50
Wire stripping tool for PROFIBUS	700-972-6AA00

The PROFIBUS connectors are also available in packs of 10 or 50 pieces.

1) The maximum ambient temperature for UL is 60 °C.

PROFIBUS connector, angled diagnosis **EasyConnect®**



PROFIBUS connector, angled diagnosis **EasyConnect®**

The PROFIBUS connector, angled **EasyConnect®** diagnosis features quick-connect technology, making stripping of the bus wires unnecessary.

With the aid of a visual connection control, it is also possible to check that the PROFIBUS cable is correctly connected after it is mounted.

For improved EMC compatibility, the housing of the plug is metalized.

Using the PROFIBUS connector diagnosis, a PROFIBUS network can be established in which the user can at any time check the state of the bus system at a glance.

The three built-in LEDs with the easily distinguished colors blue, green, and orange indicate the most important states of the PROFIBUS network at each station. The state of the terminating resistor (orange), whether bus activity is present (green) and whether the addressed participant is participating in the bus traffic (blue) are displayed.

In this way you can immediately recognize error states such as bus interrupts, missing or incorrectly connected terminating resistors, and malfunctioning or failed bus participants.

The **EasyConnect®** connectors also work in the expanded ambient temperature range of -25 °C to +85 °C.

FEATURES

- 3 status LEDs to indicate “bus operation,” “participant is sending,” “terminating resistor inserted”
- Metalized housing
- No parts that can be lost
- Integrated switchable terminating resistor
- Angled cable outlet
- Quick-connect technology **EasyConnect®**
- Visual connection control



TECHNICAL DATA

PG socket	Yes
Dimensions in mm (D x W x H)	68 x 60 x 17
Weight	Approx. 50 g
Cable outlet	Angled cable outlet
Terminating resistor	Resistor combination integrated and switchable using slide switch
Transfer rate	max. 12 Mbps
Interfaces	
PROFIBUS participants	SUB-D, 9-pin
Maximum outside diameter	8.0 mm
PROFIBUS cable	FC standard cable, solid, 0.64 mm Ø 60/75 °C copper cable
Connector type	EasyConnect®
Supply voltage	4.75 ... 5.25 V DC (must come from the device)
Current draw	max. 35 mA
Pollution degree	2
Ambient temperature	-25 °C ... +85 °C
Transport and storage temperature	-25 °C ... +85 °C
Relative humidity	max. 75% at +25 °C
Protection rating	IP 20

ORDERING DATA

PROFIBUS connector, angled diagnosis
EasyConnect® for solid cable
with PG socket

ORDER NO.

700-972-7BB51

The PROFIBUS connectors are also available in packs of 10 or 50 pieces.



PROFIBUS connector, 90° diagnosis

The PROFIBUS connector 90° diagnosis is equipped with a proven and reliable screw terminal. It is quickly mounted and has integrated, connectable terminating resistors.

For improved EMC compatibility, the housing of the plug is metalized.

Using the PROFIBUS connector diagnosis, a PROFIBUS network can be established in which the user can at any time check the state of the bus system at a glance.

The three built-in LEDs with the easily distinguished colors blue, green, and orange indicate the most important states of the PROFIBUS network at each station. The state of the terminating resistor (orange), whether bus activity is present (green) and whether the addressed participant is participating in the bus traffic (blue) are displayed.

In this way you can immediately recognize error states such as bus interrupts, missing or incorrectly connected terminating resistors, and malfunctioning or failed bus participants.

The PROFIBUS connectors also work in the extended ambient temperature range of -25 °C to +85 °C¹.

FEATURES

- 3 status LEDs to indicate “bus operation,” “participant is sending,” “terminating resistor inserted”
- Metalized housing
- No parts that can be lost
- Integrated switchable terminating resistor
- 90° cable outlet
- Proven screw terminal



TECHNICAL DATA

PG socket	
Order No. 700-972-7BB12	Yes
Order No. 700-972-7BA12	No
Dimensions in mm (D x W x H)	64 x 40 x 17
Weight	Approx. 40 g
Cable outlet	Vertical cable outlet, suitable for FastConnect wire stripping tool
Terminating resistor	Resistor combination integrated and switchable using slide switch
Transfer rate	max. 12 Mbps
Interfaces	
PROFIBUS participants	SUB-D, 9-pin
Maximum outside diameter	8.0 mm
PROFIBUS cable	60/75 °C copper cable up to 1.0 mm ²
Connector type	4 serial terminals
Supply voltage	4.75 ... 5.25 V DC (must come from the device)
Current draw	max. 35 mA
Pollution degree	2
Ambient temperature	-25 °C ... +85 °C ¹
Transport and storage temperature	-25 °C ... +85 °C
Relative humidity	max. 75% at +25 °C
Protection rating	IP 20

ORDERING DATA

ORDER NO.

PROFIBUS connector, 90° diagnosis	
without PG socket, screw terminal	700-972-7BA12
with PG socket, screw terminal	700-972-7BB12
Wire stripping tool for PROFIBUS	700-972-6AA00

The PROFIBUS connectors are also available in packs of 10 or 50 pieces.

1) The maximum ambient temperature for UL is 60 °C.

PROFIBUS connector, 90° M12



PROFIBUS connector, 90° M12

The PROFIBUS M12 plug is used to connect PROFIBUS participants to a PROFIBUS cable with M12 connector. Through the use of pre-assembled system cables, connection errors are excluded. Installation costs are reduced to a minimum.

The connector has two M12 connections and integrated terminating resistors. For improved electromagnetic compatibility, the housing is metalized.

The PROFIBUS connectors also work in the extended ambient temperature range of -25 °C to +85 °C¹.

FEATURES

- Metalized housing
- No parts that can be lost
- Integrated switchable terminating resistor
- 90° cable outlet
- M12 connectors



ORDERING DATA

PROFIBUS connector, 90° M12
without PG socket
with PG socket

ORDER NO.

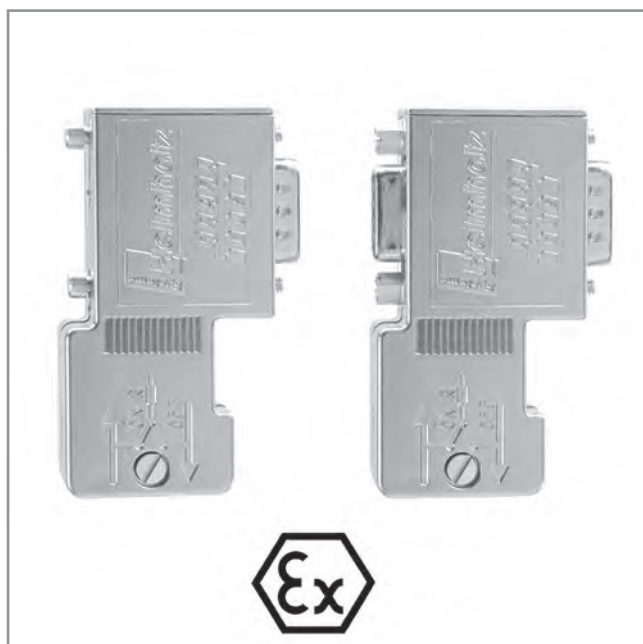
700-974-0BA12
700-974-0BB12

The PROFIBUS connectors are also available in packs of 10 or 50 pieces.

TECHNICAL DATA

PG socket		Yes
Order No. 700-974-0BB12		No
Order No. 700-974-0BA12		
Dimensions in mm (D x W x H)		70 x 41 x 17
Weight		Approx. 60 g
Cable outlet		Vertical cable outlet
Terminating resistor		Resistor combination integrated and switchable using slide switch
Transfer rate	max.	12 Mbps
Interfaces		
PROFIBUS participants		SUB-D, 9-pin
Connector type		M12
Supply voltage		4.75 ... 5.25 V DC (must come from the device)
Current draw		
Order No. 700-974-0BB12	max.	12.5 mA
Order No. 700-974-0BA12	max.	12.5 mA
Pollution degree		2
Ambient temperature		-25 °C ... +85 °C ¹
Transport and storage temperature		-25 °C ... +85 °C
Relative humidity		max. 75% at +25 °C
Protection rating		IP 20

1) The maximum ambient temperature for UL is 60 °C.



PROFIBUS connector, 90° with ATEX approval

PROFIBUS connector 90° with ATEX approval is suitable for use in hazardous areas of zone 2 (explosive gas atmosphere occurs only rarely and briefly).

The bus connector is plugged directly into the PROFIBUS interface (SUB-D socket, 9-pin) of the PROFIBUS participants. The PROFIBUS cables are connected using 4-pin screw terminals. A slide switch is used to set whether the connector is to be used as a node or at the segment end. The switch can also be operated in the installed condition. The setting is clearly visible.

The plug is quickly mounted and has integrated, connectable terminating resistors.

FEATURES

- Metalized housing
- No parts that can be lost
- Integrated switchable terminating resistor
- 90° cable outlet
- ATEX approval (II 3 G Ex nA II T4)
- Proven screw terminal



TECHNICAL DATA

PG socket		
Order No. 700-973-0BB12		Yes
Order No. 700-973-0BA12		No
Dimensions in mm (D x W x H)		64 x 40 x 17
Weight		Approx. 40 g
Cable outlet		Vertical cable outlet, suitable for FastConnect wire stripping tool
Terminating resistor		Resistor combination integrated and switchable using slide switch
Transfer rate	max.	12 Mbps
Interfaces		
PROFIBUS participants		SUB-D, 9-pin
Maximum outside diameter		8.0 mm
PROFIBUS cable		60/75 °C copper cable up to 1.0 mm ²
Connector type		4 serial terminals
Supply voltage		4.75 ... 5.25 V DC (must come from the device)
Current draw	max.	12.5 mA
Pollution degree		2
Ambient temperature		-20 °C ... +60 °C
Transport and storage temperature		-25 °C ... +85 °C
Relative humidity		max. 75% at +25 °C
Protection rating		IP 20

ORDERING DATA

ORDER NO.

PROFIBUS connector, 90° with ATEX approval	
without PG socket, screw terminal	700-973-0BA12
with PG socket, screw terminal	700-973-0BB12
Wire stripping tool for PROFIBUS	700-972-6AA00

The PROFIBUS connectors are also available in packs of 10 or 50 pieces.

FLEXtra® twinRepeater, PROFIBUS repeater



FLEXtra® twinRepeater, PROFIBUS repeater

Despite its small size, the FLEXtra® twinRepeater is a full PROFIBUS repeater designed for mounting on a DIN rail. It regenerates the incoming electrical signal on a bus line and retransmits it (bit reshaping and retransmission). The signals are restored in level, slope, and duty cycle. The FLEXtra® twinRepeater supports data rates of 9.6 kbps to 12 Mbps and recognizes them automatically. It can be used for bus extension (up to 1 km with 2 FLEXtra® twinRepeaters), to increase the number of participants, and to expand the system. At the same time, use in MPI networks is possible. As a special application option, the FLEXtra® twinRepeater allows the setup of stubs as separate segments. The status LEDs integrated for each segment provide a quick overview of the current bus status. Furthermore, the FLEXtra® twinRepeater provides electrical isolation between the two PROFIBUS segments. In addition, it has a switch to turn off the repeating function. The segments are separated but continue to function for themselves. For connection to the PROFIBUS cable, PROFIBUS connectors are required (also available in a set).

FEATURES

- Can be used for bus extension or as a stub
- Increase the number of participants
- System expansion
- Can also be used in MPI networks
- Status LEDs for each segment
- Repeating function can be switched off
- Electrical isolation



TRANSITION RATE

MAX. SEGMENT LENGTH

9.6 kbps	1000 m
19.2 kbps	1000 m
45.45 kbps	1000 m
93.75 kbps	1000 m
187.5 kbps	1000 m
500 kbps	400 m
1.5 Mbps	200 m
3 Mbps	100 m
6 Mbps	100 m
12 Mbps	100 m

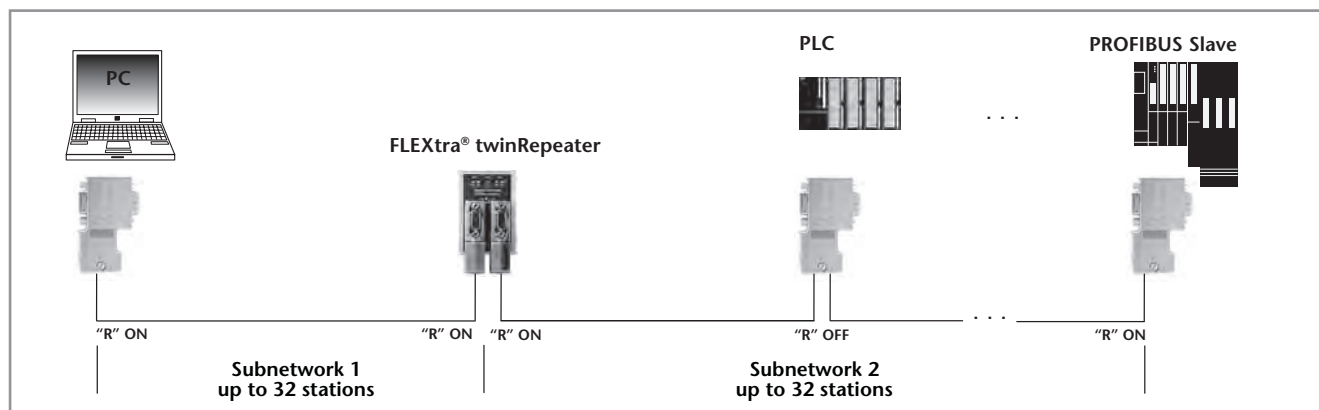
ORDERING DATA

ORDER NO.

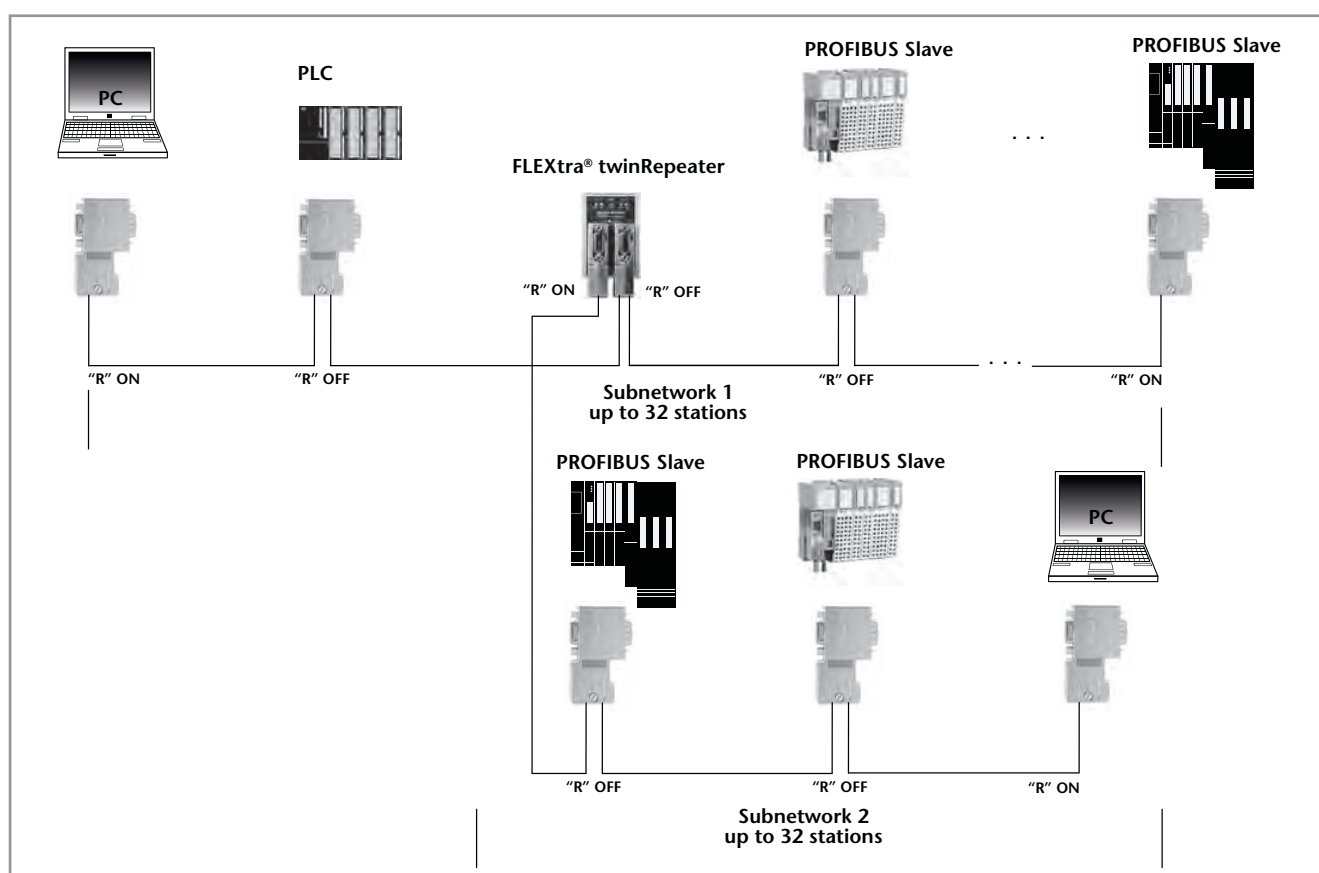
FLEXtra® twinRepeater, PROFIBUS repeater (incl. manual)	700-972-2AA02
FLEXtra® twinRepeater set FLEXtra® twinRepeater, 2 PROFIBUS connector 90° screw terminal with PG (incl. manual)	700-972-2XA02

TECHNICAL DATA

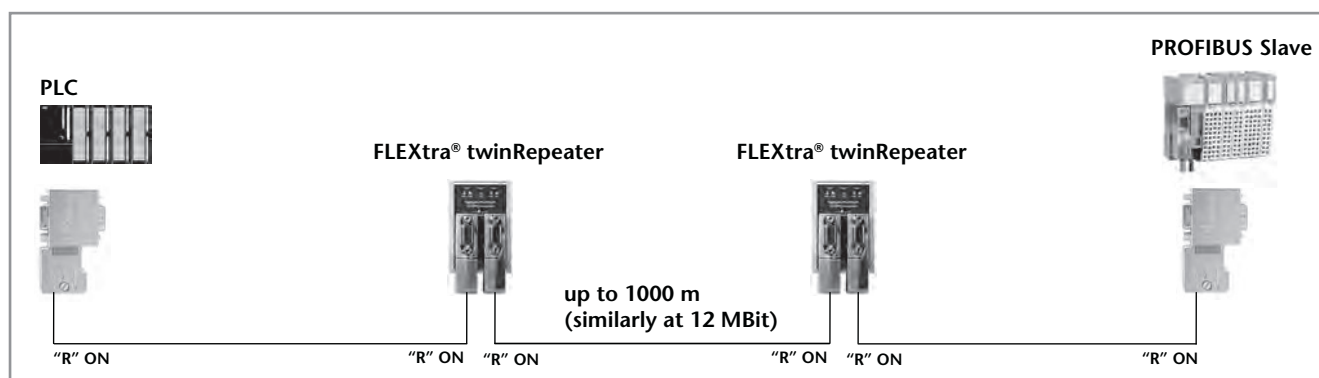
Dimensions in mm (D x W x H)	35 x 51 x 72
Weight	Approx. 110 g
Supply voltage	18 ... 30 VDC
Output voltage	5 V
Electrical isolation	500 V
Current draw	max. 60 mA
Segment connection	Via PROFIBUS connector
PROFIBUS interface	
Transfer rate	max. 12 Mbps Autom. detection
Protocol	PROFIBUS-DP as per EN 61 158-2
Ambient temperature	0 °C ... +60 °C
Transport and storage temperature	-25 °C ... +75 °C
Protection rating	IP 20



Application example of FLEXtra® twinRepeater with more than 32 participants



Application example FLEXtra® twinRepeater stub



Application example FLEXtra® twinRepeater long distance

FLEXtra® multiRepeater 4-way/6-way, PROFIBUS repeater



FLEXtra® multiRepeater 4-way/6-way, PROFIBUS repeater

The FLEXtra® multiRepeater is a multi-PROFIBUS repeater designed for mounting on a DIN rail. It regenerates the incoming electrical signal on a bus line and retransmits it (bit reshaping and retransmission). The signals are restored in level, slope, and duty cycle. The multiRepeater supports data rates of 9.6 kbps to 12 Mbps and recognizes them automatically. It can be used for bus extension, to increase the number of participants, and to expand the system. At the same time, use in MPI networks is possible. As a special application option, the multiRepeater allows the setup of a star network with independent segments. The status LEDs integrated for each segment provide a quick overview of the current bus status. Furthermore, the FLEXtra® multiRepeater provides electrical isolation between the PROFIBUS segments. In addition, it has a DIP switch for switching off the individual segments and a switch for turning off all segments. The segments are separated but continue to function for themselves. For connection to the PROFIBUS cable, PROFIBUS connectors are required.

FEATURES

- Setup of star networks
- System expansion by up to six segments with one device
- Increase the number of participants
- Can be used for bus extension or as a stub
- Can also be used in MPI networks
- Status LEDs for each segment
- Repeating function for each segment or totally disabled
- Electrical isolation of all segments



TRANSITION RATE

MAX. SEGMENT LENGTH

9.6 kbps	1000 m
19.2 kbps	1000 m
45.45 kbps	1000 m
93.75 kbps	1000 m
187.5 kbps	1000 m
500 kbps	400 m
1.5 Mbps	200 m
3 Mbps	100 m
6 Mbps	100 m
12 Mbps	100 m

TECHNICAL DATA

4-WAY

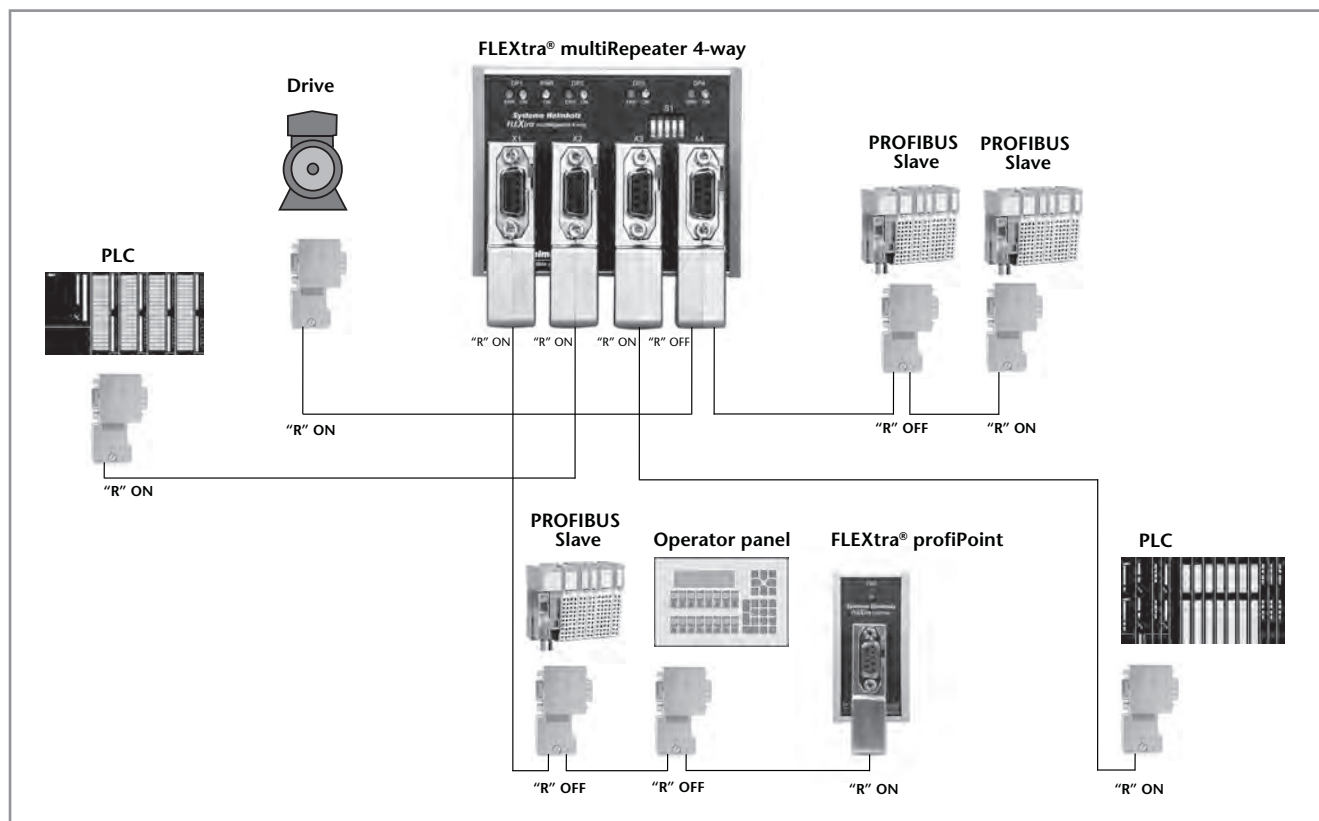
6-WAY

Dimensions in mm (D x W x H)	35 x 94 x 72	35 x 137 x 72
Weight	Approx. 180 g	Approx. 275 g
Supply voltage	18 ... 30 VDC	18 ... 30 VDC
Output voltage	5 V, 150 mA per segment	5 V, 150 mA per segment
Electrical isolation	500 V	500 V
Current draw max.	280 mA	400 mA
Segment connection	Via PROFIBUS connector	Via PROFIBUS connector
PROFIBUS interface		
Transfer rate max.	12 Mbps Autom. detection	12 Mbps Autom. detection
Protocol	PROFIBUS-DP as per EN 61 158-2	PROFIBUS-DP as per EN 61 158-2
Ambient temperature	0 °C ... +60 °C	0 °C ... +60 °C
Transport and storage temperature	-25 °C ... +75 °C	-25 °C ... +75 °C
Protection rating	IP 20	IP 20

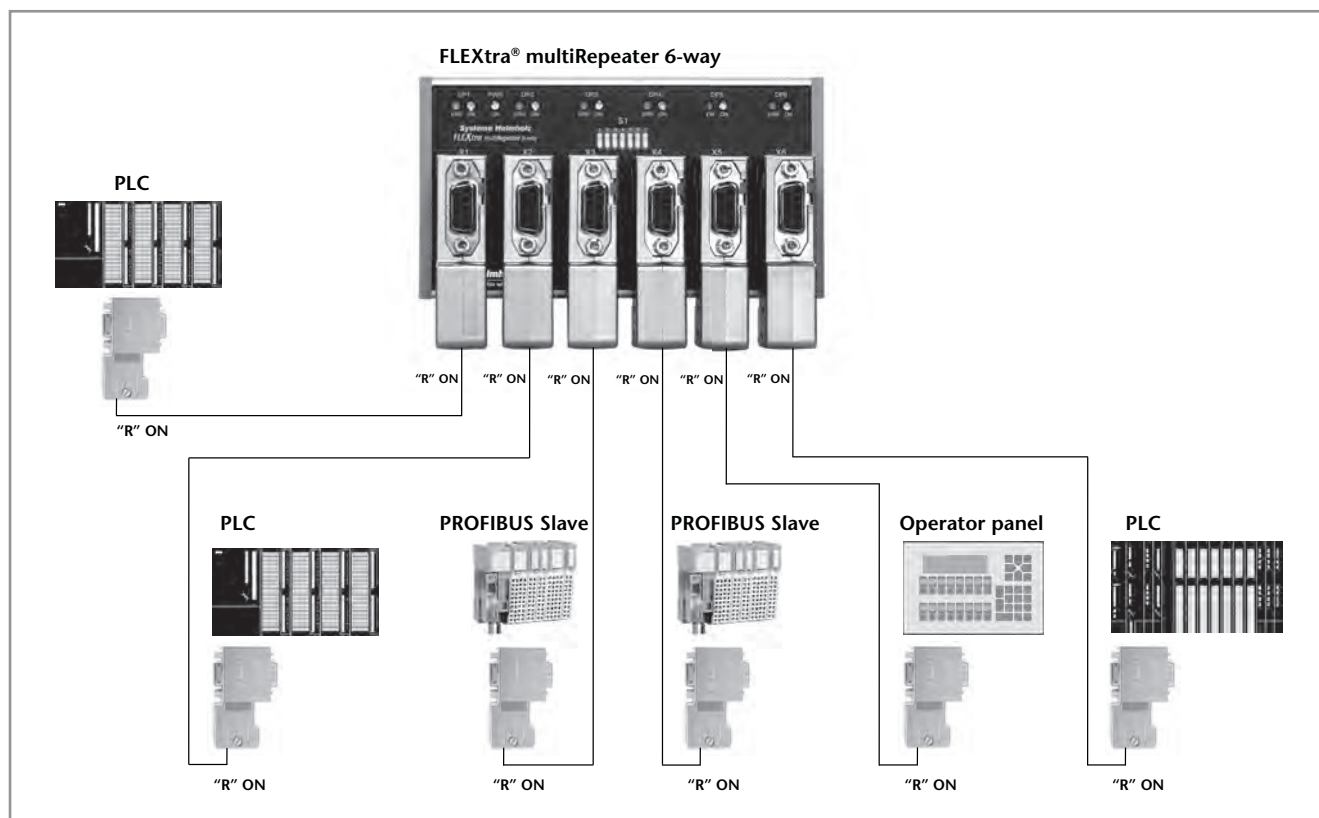
ORDERING DATA

ORDER NO.

FLEXtra® multiRepeater 4-way, PROFIBUS-Repeater (incl. manual)	700-972-4AA02
FLEXtra® multiRepeater 6-way, PROFIBUS Repeater (incl. manual)	700-972-6AA02



Application example FLEXtra® multiRepeater 4-way



Application example FLEXtra® multiRepeater 6-way

PROFIBUS compact repeater



PROFIBUS compact repeater

The patented PROFIBUS compact repeater is a full PROFIBUS repeater that is versatile due to its very small size. It enables transfer rates of 9.6 kbps to 12 Mbps.

The transmission signals are regenerated by the repeater and re-sent (bit-resampling and retransmission) so that faults in the line are largely eliminated.

The PROFIBUS compact repeater is a great alternative to conventional repeaters for a large number of applications, both technically and in terms of price. It can be used for bus extension (up to 1 km with 2 PROFIBUS compact repeaters), to increase the number of participants, and to expand the system. Use in MPI networks is also possible. As a special application option, the PROFIBUS compact repeater allows the setup of stubs as separate segments. For this it can be plugged directly into the PG connection of an existing PROFIBUS connector.

Due to the compact design, no additional space is needed in the control cabinet, as the PROFIBUS compact repeater can be used instead of a PROFIBUS connector and is simply plugged into a participant on the PROFIBUS network. Furthermore, no separate power supply is required, because the PROFIBUS compact repeater uses the 5 V power supply, which every PROFIBUS device makes available for the terminating resistor. The PROFIBUS compact repeater establishes a potential separation between the two PROFIBUS segments.

The integrated status LEDs provide a quick overview on the current bus status.

FEATURES

- Alternative to conventional PROFIBUS repeaters
- No additional space required in the control cabinet
- Can be used for bus extension or as a stub
- Increase the number of participants
- System expansion
- Can also be used in MPI networks
- Status LEDs
- No 24 V supply required
- 5 V power supply directly from the PROFIBUS connection, making it usable on every PROFIBUS device
- Electrical isolation



TRANSITION RATE

MAX. SEGMENT LENGTH

9.6 kbps	1000 m
19.2 kbps	1000 m
45.45 kbps	1000 m
93.75 kbps	1000 m
187.5 kbps	1000 m
500 kbps	400 m
1.5 Mbps	200 m
3 Mbps	100 m
6 Mbps	100 m
12 Mbps	100 m

TECHNICAL DATA

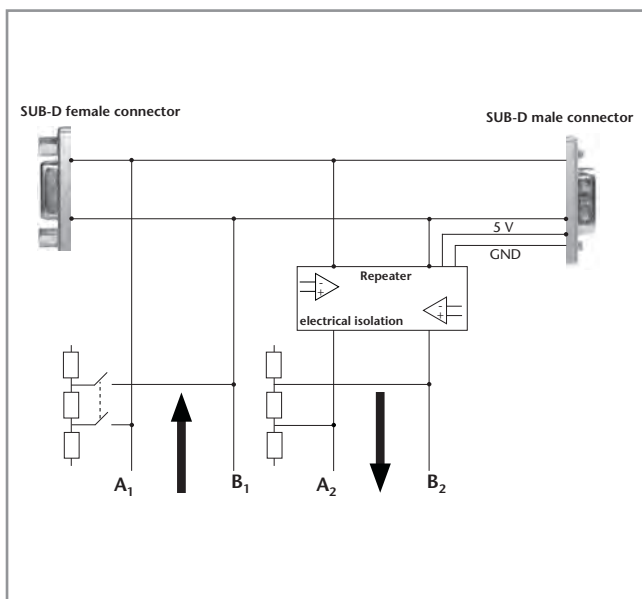
Dimensions in mm (D x W x H)	64 x 40 x 17
Weight	Approx. 40 g
Power supply	
Voltage	+ 5 V DC
Current draw	typ. 100 mA
Socket	SUB-D 9-pin
PROFIBUS interface	
Transfer rate	max. 9.6 kbps to 12 Mbps Autom. detection
Protocol	PROFIBUS-DP as per EN 50 170
Connector	Socket, SUB-D, 9-pin
Maximum outside diameter	8.0 mm
PROFIBUS cable	60/70 °C copper cable up to 1.0 mm ²
Connector type	4 serial terminals
Pollution degree	2
Ambient temperature	-25 °C ... +85 °C ¹
Transport and storage temperature	-25 °C ... +85 °C
Protection rating	IP 20

1) The maximum ambient temperature for UL is 60 °C.

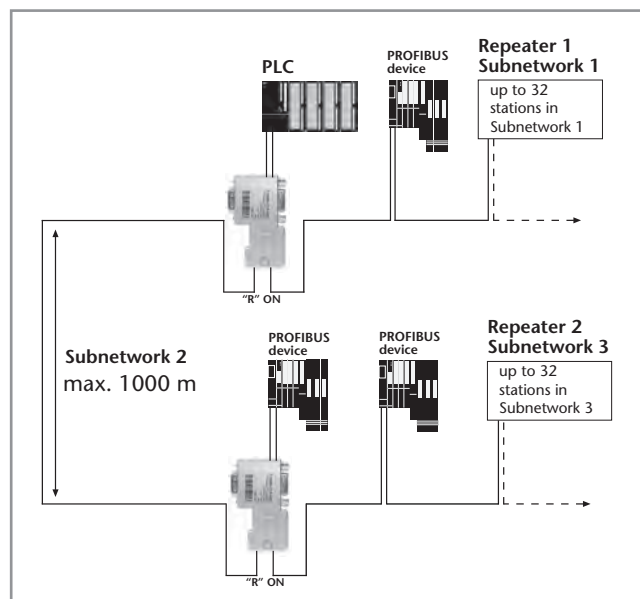
ORDERING DATA

ORDER NO.

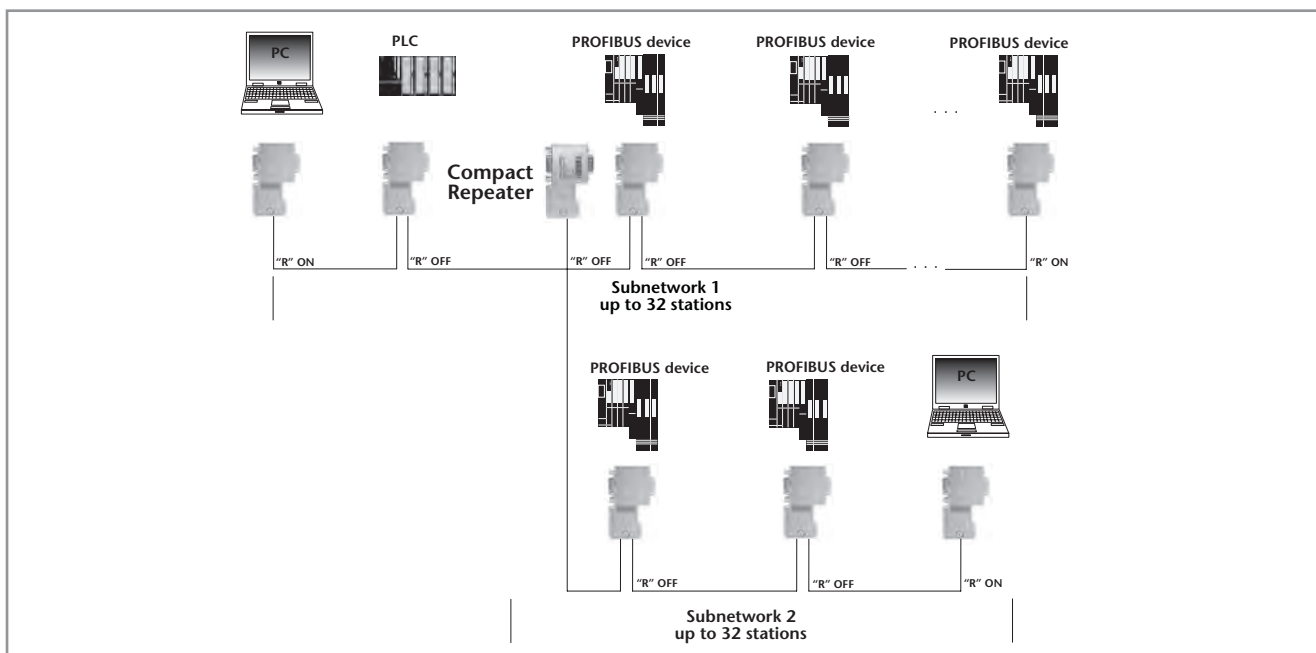
PROFIBUS compact repeater with PG socket, screw terminal (incl. manual)	700-972-0RB12
Wire stripping tool for PROFIBUS	700-972-6AA00



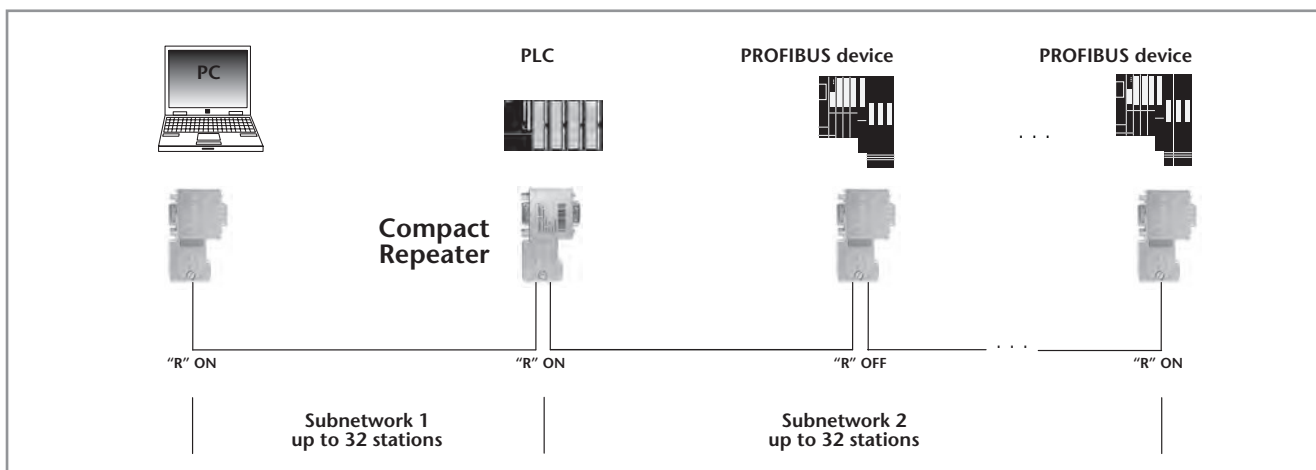
Internal design



Application example long distance



Application example stub



Application example of more than 32 participants



OPTopus, PROFIBUS optical link

The OPTopus PROFIBUS optical link is a full PROFIBUS repeater with integrated FO interface. It enables PROFIBUS transmission rates from 9.6 kbps to 12 Mbps with automatic baud rate detection. Due to the optical signal transmission, it offers complete electrical isolation between the PROFIBUS participants and PROFIBUS subnets. Another advantage of OPTopus is the insensitivity to EMC influences.

Due to the compact design, no additional space is needed in the control cabinet, as it can be used instead of a PROFIBUS connector and is simply plugged into a participant on the PROFIBUS network.

Furthermore, no separate power supply is required, because the OPTopus uses the 5 V power supply, which every PROFIBUS device makes available for the terminating resistor.

The transmission signals are converted into optical signals by the OPTopus and are transmitted on the fiber-optic link; in addition, they are also regenerated with slope, level, and duty cycle.

The OPTopus is available with 3 different optical interfaces and is therefore perfectly compatible with existing transmission systems. It is suitable for POF¹ and PCF¹ FO. For the short range up to 65 m, an optical transmission link can be established very quickly and without much effort using the POF. For this purpose, the matching connector is included with the OPTopus. All that is needed is a standard POF¹ FO. For longer distances up to 250 m, PCF¹ FO can be used.

The optical interface of the OPTopus sends in the visible range (650 nm red light), which allows an initial check of the optical transmission link without expensive instruments.

The OPTopus offers the advantages of a normal repeater, such as: Bus extension, increasing the number of participants and expanding the system. Use in MPI networks is also possible.

As a special application option, the OPTopus allows the setup of stubs as separate segments. For this it can be plugged directly into the PG connection of an existing PROFIBUS connector.

For diagnostic purposes, the OPTopus has one Traffic and one Error LED for the PROFIBUS interface, along with one of each for the optical interface. In this way you are always informed about the bus state, and targeted troubleshooting is ensured.

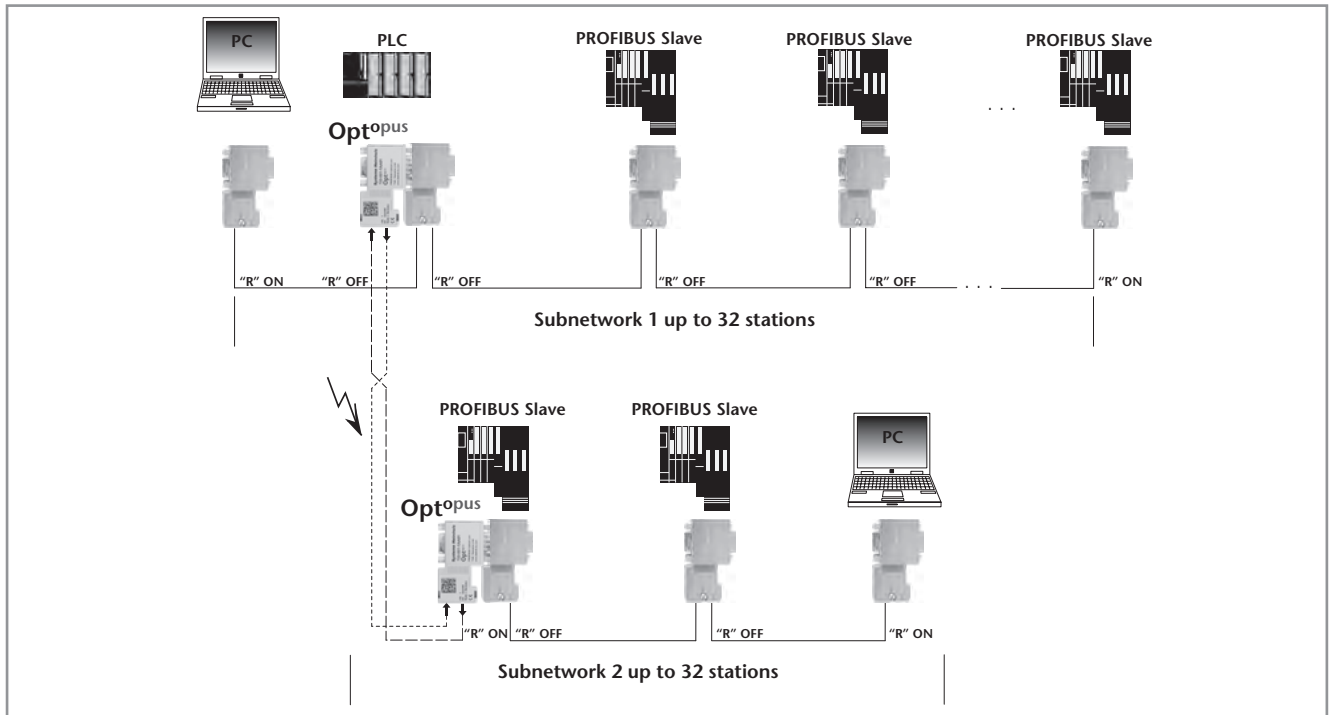
There is also a Power LED that provides information about the operating state and the status of the terminating resistor.

FEATURES

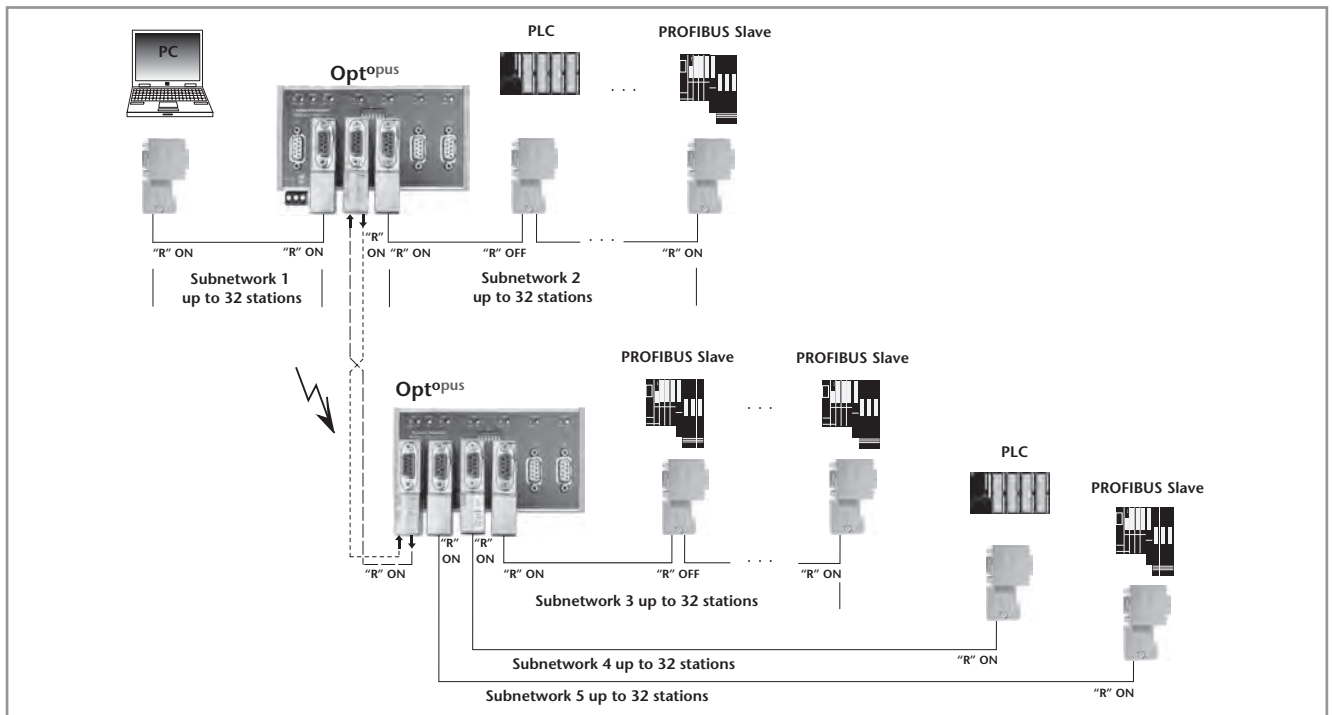
- PROFIBUS baud rate (9.6 kbps ... 12 Mbps) automatic detection
- Compact design, no bigger than a Helmholz PROFIBUS connector
- Display of traffic/bus errors separately for the FO and PROFIBUS segment
- Switchable terminating resistor with optical display
- Complete electrical isolation
- Insensitive to EMC influences
- No 24 V voltage supply required
- Available with 3 different optical interfaces (SMA, BFOC², Versatile Link³)
- Suitable for POF¹ and PCF¹ FO
- Range: Cable length POF¹ 65 m
Cable length PCF¹ 250 m
- POF¹ FO connectors provided

TECHNICAL DATA

Dimensions in mm (D x W x H)	Approx. 64 x 40 x 17
Weight	Approx. 40 g
Power supply	
Voltage	+ 5 V DC
Current draw	typ. 100 mA
Socket	SUB-D 9-pin
PROFIBUS interface	
Transmission rate	9.6 kbps to 12 Mbps Autom. detection
Protocol	PROFIBUS-DP as per EN 61158-2:2011-09
Connector	Socket, SUB-D, 9-pin
Optical interface	
Wavelength	650 nm
Numerical aperture of the transmitting diode	0.50
Integrable optical power / receiver sensitivity	
POF ¹ 980/1,000 µm	-7.5 dBm/-20 dBm
PCF ¹ 200/230 µm	-18 dBm/-22 dBm
Overdrive limit of the receiver	-3 dBm
Bridgeable distance	
POF ¹ 980/1,000 µm (160 dB/km)	Up to 65 m
PCF ¹ 200/230 µm (10 dB/km)	Up to 250 m
Ambient temperature	0 °C ... +60 °C
Transport and storage temperature	-25 °C ... +75 °C
Protection rating	IP 20



Generate a SUB network that is fully isolated electrically.



Establish a connection between two repeaters without being influenced by EMI interference.

ORDERING DATA

OPTopus, PROFIBUS optical link
Versatile Link³, 650 nm, POF/PCF¹
(incl. manual, POF connector)

OPTopus, PROFIBUS optical link
BFOC², 650 nm, POF/PCF¹
(incl. manual, POF connector)

OPTopus, PROFIBUS optical link
SMA, 650 nm, POF/PCF¹
(incl. manual, POF connector)

ORDER NO.

700-991-1AA01

700-992-1AA01

700-993-1AA01

Note

1) PCF stands for polymer clad fiber and is synonymous with HCS. POF stands for polymeric optical fiber. For the PCF/HCS assembly, extra PCF/HCS connectors are required, along with a special assembly tool according to the required connector technology. You get the appropriate PCF/HCS connector from your fiber-optic cable supplier.

2) BFOC stands for bayonet fiber-optic connector. This type of connector is functionally compatible with ST connectors.

3) The connector type Versatile Link is functionally compatible with HP Simplex/Duplex connectors.



FLEXtra® FO, PROFIBUS optical hub

The FLEXtra® FO is a PROFIBUS repeater expanded by 2 (with the FLEXtra® FO 650-2) and 5 (with the FLEXtra® FO 650-5) optical MPI/PROFIBUS segments.

It enables conversion of electrical MPI/PROFIBUS interfaces into optical MPI/PROFIBUS interfaces.

On PROFIBUS, the FLEXtra® FO reaches transmission rates from 9.6 kbps to 12 Mbps with automatic baud rate detection. Due to the optical signal transmission, it offers complete electrical isolation between the PROFIBUS participants and PROFIBUS subnets. Another advantage of the FLEXtra® FO is its insensitivity to EMC influences. The transmission signals are converted by the FLEXtra® FO into optical signals and sent across the fiber-optic link. In addition, the signals are regenerated in slope, level, and duty cycle.

The FLEXtra® FO is perfect with existing transmission systems, since it is available with 3 different optical interfaces. It is also suitable for POF¹ and PCF¹ FO.

For the short range up to 65 m, an optical transmission link can be established very quickly and without much effort using the POF¹. For longer distances up to 250 m, PCF¹ FO can be used.

The optical interface of the FLEXtra® FO sends in the visible range (650 nm red light), which allows an initial check of the optical transmission link without expensive instruments.

The FLEXtra® FO features integrated status LEDs for each segment for diagnostic purposes. In this way you are always informed about the state of the bus and the optical interface, and targeted troubleshooting is ensured.

In addition, the FLEXtra® FO has DIP switches for turning off individual or all segments. The segments are separated but continue to function for themselves.

FEATURES

- PROFIBUS repeater with 2/5 optical MPI/PROFIBUS segments
- Perfect to combine with existing transmission systems
- PROFIBUS baud rate (9.6 kbps ... 12 Mbps) automatic detection
- Switching off of individual or all segments possible
- For use in EMC-hazardous environments
- Suitable for POF¹ and PCF¹ FO
- Available with 3 different optical interfaces (SMA, BFOC², Versatile Link³)
- Range: Cable length POF¹ 65 m
Cable length PCF¹ 250 m
- Display of traffic/bus errors for each FO and PROFIBUS segment

ORDERING DATA

ORDER NO.

FLEXtra® FO 650-2, PROFIBUS optical hub Versatile Link ³ , 650 nm, POF/PCF ¹ (incl. manual)	700-996-2CA01
FLEXtra® FO 650-2, PROFIBUS optical hub BFOC ² , 650 nm, POF/PCF ¹ (incl. manual)	700-996-2AA01
FLEXtra® FO 650-2, PROFIBUS optical hub SMA, 650 nm, POF/PCF ¹ (incl. manual)	700-996-2BA01
FLEXtra® FO 650-5, PROFIBUS optical hub Versatile Link ³ , 650 nm, POF/PCF ¹ (incl. manual)	700-996-5CA01
FLEXtra® FO 650-5, PROFIBUS optical hub BFOC ² , 650 nm, POF/PCF ¹ (incl. manual)	700-996-5AA01
FLEXtra® FO 650-5, PROFIBUS optical hub SMA, 650 nm, POF/PCF ¹ (incl. manual)	700-996-5BA01

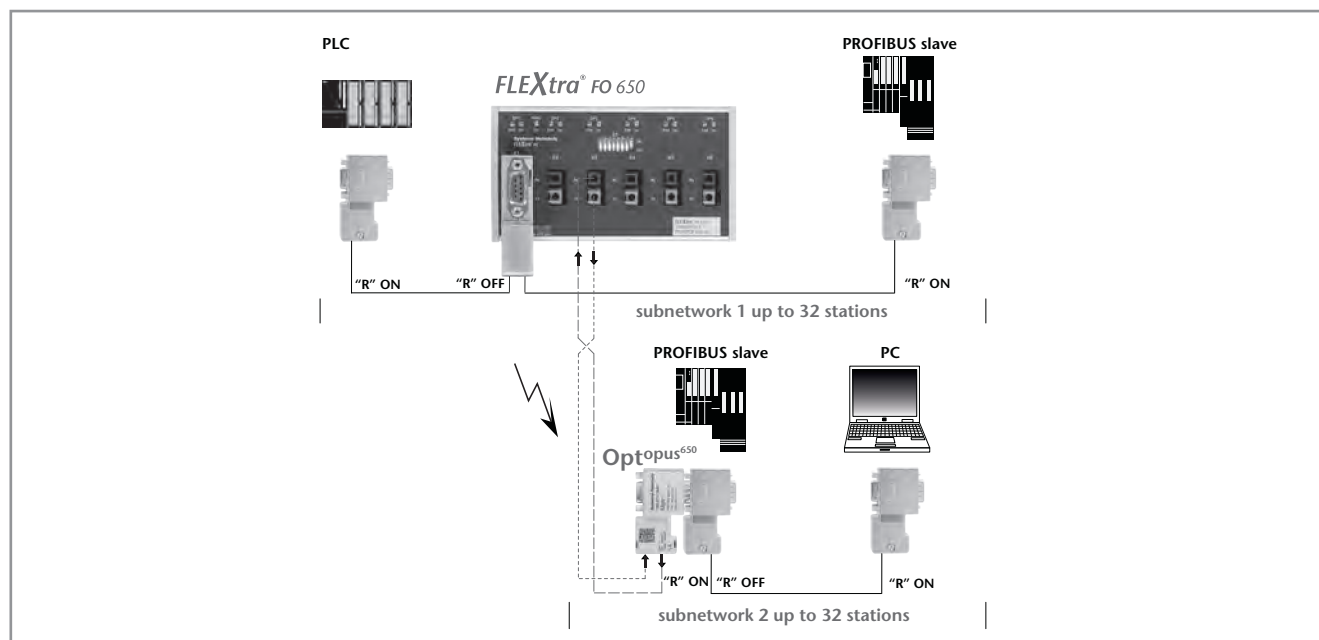
Note

1) PCF stands for polymer clad fiber and is synonymous with HCS. POF stands for polymeric optical fiber.

For the PCF/HCS assembly, extra PCF/HCS connectors are required, along with a special assembly tool according to the required connector technology. You get the appropriate PCF/HCS connector from your fiber-optic cable supplier.

2) BFOC stands for bayonet fiber-optic connector. This type of connector is functionally compatible with ST connectors.

3) The connector type Versatile Link is functionally compatible with HP Simplex/Duplex connectors.



Generate a SUB network that is fully isolated electrically.

TECHNICAL DATA	650-2	650-5
Dimensions in mm (D x W x H)	35 x 70 x 72	35 x 137 x 72
Weight	Approx. 125 g	Approx. 250 g
Power supply		
Voltage	+18–30 V DC	+18–30 V DC
Electrical isolation	500 V	500 V
Current draw		
· incl. 5 V loads	Max. 200 mA	Max. 400 mA
· incl. 24 V loads	Max. 400 mA	Max. 600 mA
Output voltage port X1		
Voltage 1	5 V, max. 150 mA	5 V, max. 150 mA
Voltage 2	+18–30 V DC, max. 200 mA (as with supply voltage)	+18–30 V DC, max. 200 mA (as with supply voltage)
Electrical isolation	500 V	500 V
Current draw	max. 200 mA	400 mA
Socket		
Port 1	SUB-D 9-pin	SUB-D 9-pin
Port 2–5	BFOC ² , SMA, Versatile Link ³	BFOC ² , SMA, Versatile Link ³
PROFIBUS interface		
Transmission rate	9.6 19.2 45.45 93.75 187.5 500 kbps 1.5 3 6 and 12 Mbps automatic detection	9.6 19.2 45.45 93.75 187.5 500 kbps 1.5 3 6 and 12 Mbps automatic detection
Protocol	PROFIBUS-DP as per EN 61 158-2:2011-09	PROFIBUS-DP as per EN 61 158-2:2011-09
Optical interface		
Wavelength	650 nm	650 nm
Numerical aperture of the transmitting diode	0.50	0.50
Integrable optical power/ receiver sensitivity		
POF ¹ 980/1,000 µm	-7.5 dBm/-20 dBm	-7.5 dBm/-20 dBm
PCF ¹ 200/230 µm	-18 dBm/-22 dBm	-18 dBm/-22 dBm
Overdrive limit of the receiver	-3 dBm	-3 dBm
Bridgeable distance		
POF ¹ 980/1,000 µm (160 dB/km)	Up to 65 m	Up to 65 m
PCF ¹ 200/230 µm (10 dB/km)	Up to 250 m	Up to 250 m
Ambient temperature	0 °C ... +60 °C	0 °C ... +60 °C
Transport and storage temperature	-25 °C ... +75 °C	-25 °C ... +75 °C
Protection rating	IP 20	IP 20

viBlu, PROFIBUS wireless system



viBlu, PROFIBUS wireless system

The PROFIBUS wireless system viBlu is a virtual cable that enables the connection of distributed peripherals/intelligence (such as turntables, conveyor systems, etc.) by radio.

The data transfer takes place in the unlicensed 2.4 GHz band via Bluetooth and supports PROFIBUS baud rates from 9.6 kbps to 1.5 Mbps. Depending on local conditions, transmission links up to 100 m are possible.

The use of the PROFIBUS wireless module is possible in both single-master and multi-master systems, and permits full expansion on the PROFIBUS side; PROFIBUS DP slaves are supported behind a viBlu slave.

The wireless system is powered by an external voltage supply of 24 V DC. A 9-pin Sub-D socket is used for the PROFIBUS connection. A USB interface is also integrated, which is used to parameterize the wireless link.

Five LEDs on the device provide information about the operating status on PROFIBUS and the wireless side.

Through a RP-SMA socket on the device, antennas with a larger gain can optionally be connected with the wireless module for range optimization.

Outside Europe, the use of antennas with a gain over 10 dBi is permitted, so that radio relay systems with a range of up to several km should be possible, for example.

Accessories note

For antennas, see page 32.

FEATURES

- Adjustable transmission power
- Up to 3 radio slaves on a radio master
- Bluetooth in the license-free 2.4 GHz band
- Up to 1.5 Mbps PROFIBUS-DP
- Easy configuration via USB interface
- No configuration in STEP¹ 7 necessary
- Comprehensive diagnosis of the wireless interface
- Ranges up to 100 m

TECHNICAL DATA

Dimensions in mm (D x W x H)	130 x 68 x 30
Weight	Approx. 170 g
Power supply	
Voltage	DC 24 V (18 ... 30 V)
Current draw	Typ. 100 mA
PROFIBUS	
Type	RS485, isolated
Number of slaves	3
Transmission rate	9.6 kbps ... 1.5 Mbps, autom. detection
Connector type	SUB-D socket, 9-pin
Wireless interface	
Protocol	Bluetooth
Range	Up to 100 m
Baud rate	Up to 700 kbps
Antenna connection	RP-SMA socket
Ambient temperature	0 °C ... +60 °C
Displays	5 LEDs
Protection rating	IP 20

1) STEP is a registered trademark of Siemens AG.

ORDERING DATA

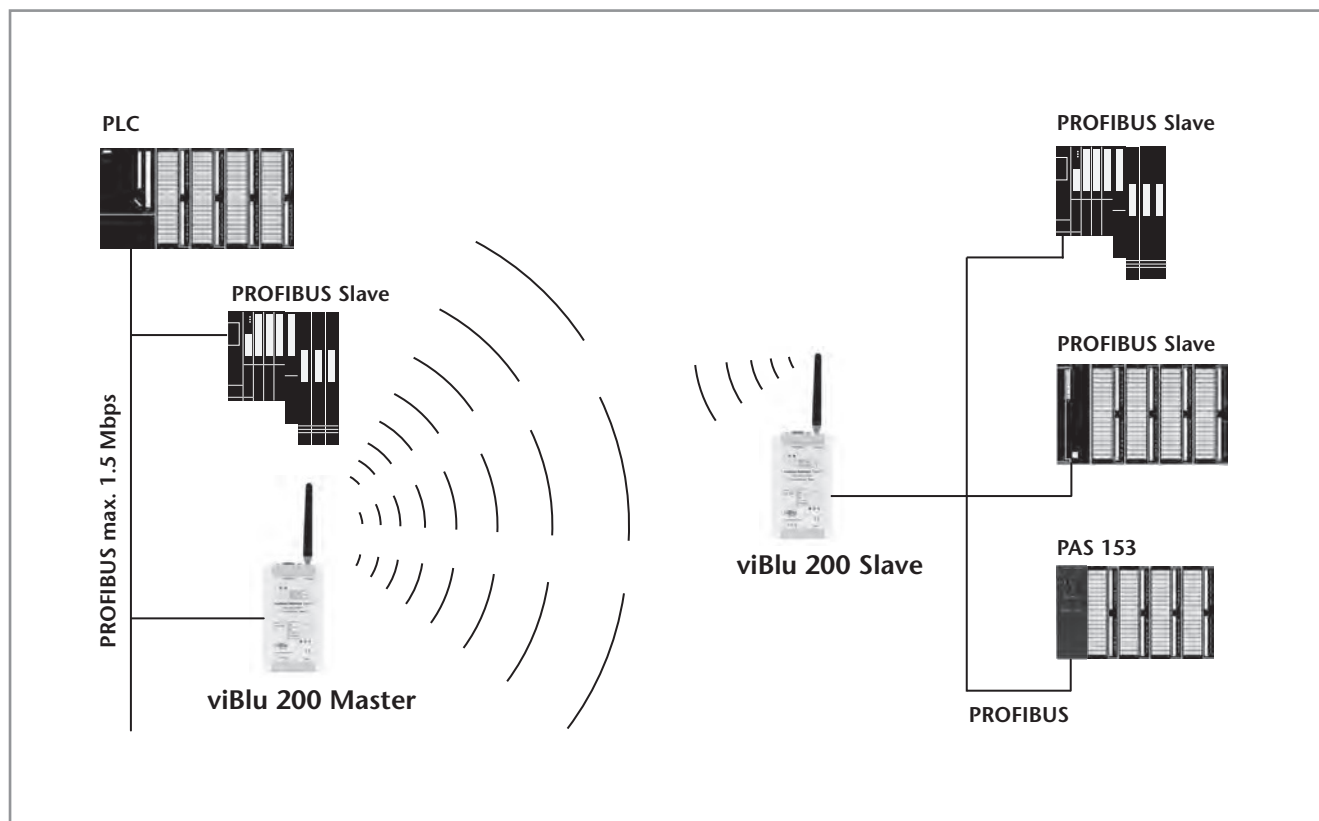
viBlu 200 master, PROFIBUS wireless system
2.4 GHz Bluetooth; connection of up to 3 slaves; 1.5 Mbps
(incl. manual, CD with software)

viBlu 200 slave, PROFIBUS wireless system
2.4 GHz Bluetooth
(incl. manual, CD with software)

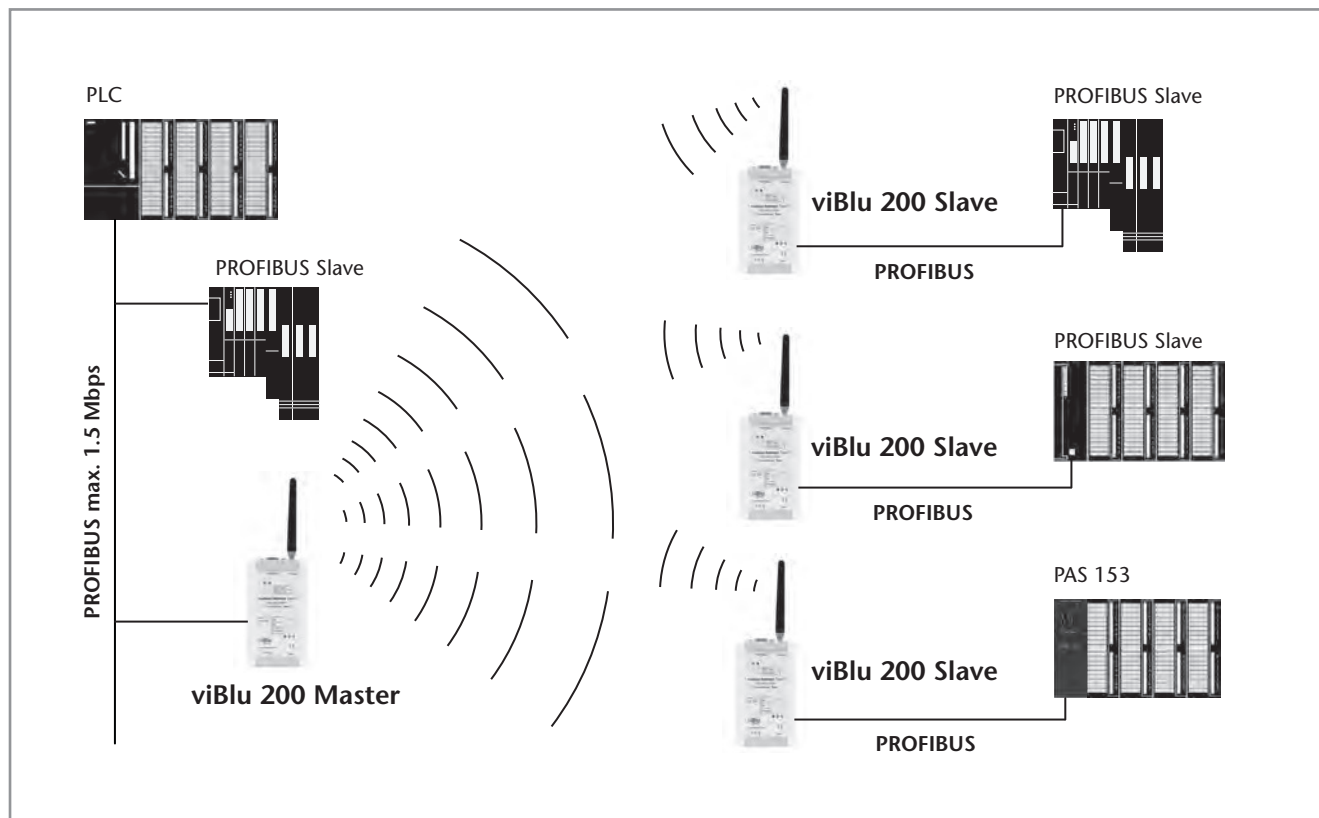
ORDER NO.

700-762-PFM11

700-762-PFS11



Application example viBlu 200 with a radio slave and up to three PROFIBUS-DP participants

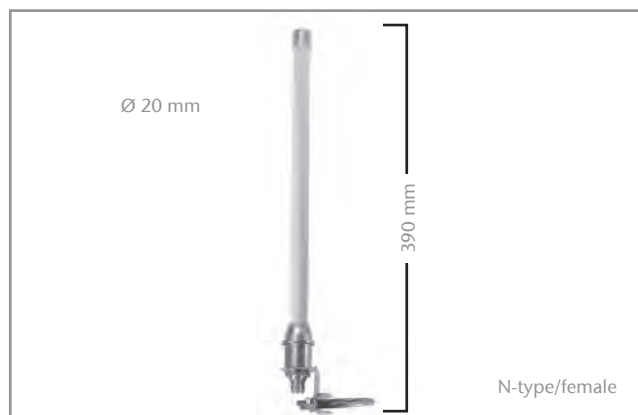


Application example viBlu 200 with 3 radio slaves

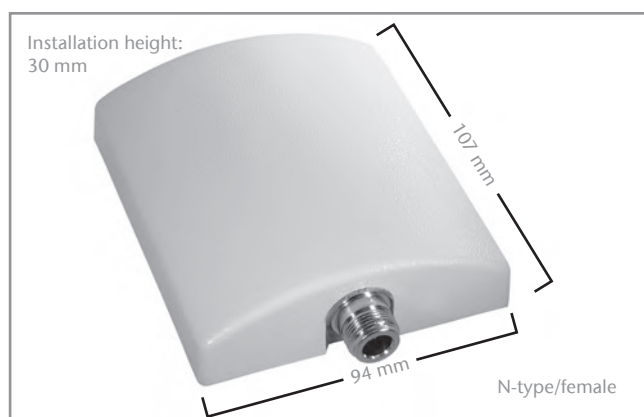
Antennas for NETLink® WLAN and viBlu



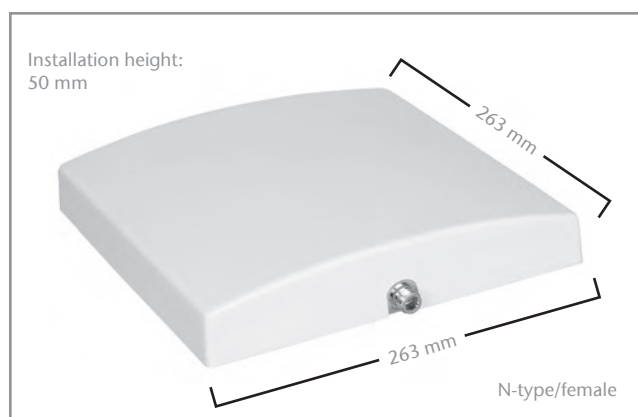
5 dBi magnetic base antenna



Omni 8 dBi antenna; incl. wall mount



Panel 8 dBi antenna



Panel 18 dBi antenna

To optimize the reception performance of the PROFIBUS wireless system viBlu and NETLink® WLAN, we offer a selection of different antennas. Depending on the antenna design, appropriate connection cables can be purchased.

When planning a wireless link, it is necessary to consider both with a mobile and stationary installation that the range may be influenced more or less by obstacles and the surrounding buildings. Due to the maximum transmission power of 100 mW in the 2.4 GHz range, wireless links of 10 to 30 meters are possible in buildings. Outdoors, 100 to 300 meters are considered realistic with line-of-sight connections.

With a directional panel antenna, wireless links exceeding 300 meters are also possible under optimum conditions.

Magnetic base antenna 5 dBi

For mounting on smooth magnetic surfaces. The action radius is increased by the permanently mounted 1.5-meter-long connecting cable. The magnetic base can be unscrewed. In this way the dipole can also be operated directly on the WLAN module, which is especially suitable for medium distances with clear line of sight. With the integrated articulated joint, the circular antenna can always be aligned correctly.

Omni-directional antenna 8 dBi

This omni-directional antenna protected by the sturdy GRP pipe is delivered with a mounting bracket for mounting it on masts or walls – preferably outdoors.

For best omni-directional characteristics, metallic surfaces and obstacles in the vicinity of the antenna should be avoided. For the N-type connector, a cable available in the accessories is required.

Panel antenna 8 dBi (wall mounting) and panel antenna 18 dBi (mast mounting)

Ideal for use in directional transmission and reception indoors and outdoors.

The range and WLAN performance is significantly improved by this design. The corresponding fixtures are included. For the N-type connector, a cable available in the accessories is required.

ORDERING DATA

ORDER NO.

Antenna for WLAN/Bluetooth 2.4 GHz magnetic base antenna, 5 dBi incl. 1.5 m cable	700-889-ANT01
Antenna for WLAN/Bluetooth 2.4 GHz Omni 8 dBi antenna, antenna cable required	700-889-ANT02
Antenna for WLAN/Bluetooth 2.4 GHz Panel 8 dBi antenna, antenna cable required	700-889-ANT03
Antenna for WLAN/Bluetooth 2.4 GHz Panel 18 dBi antenna, antenna cable required	700-889-ANT04
Antenna cable for WLAN/Bluetooth, 3 m; 2.4 GHz; 1.7 dB; Ø 5 mm	700-889-ANK01
Antenna cable for WLAN/Bluetooth, 5 m; 2.4 GHz; 2.8 dB; Ø 5 mm	700-889-ANK02
Antenna cable for WLAN/Bluetooth, 6 m; 2.4 GHz; 1.4 dB; Ø 10.3 mm	700-889-ANK03
Antenna cable for WLAN/Bluetooth, 10 m; 2.4 GHz; 2.3 dB; Ø 10.3 mm	700-889-ANK04



DP/DP coupler

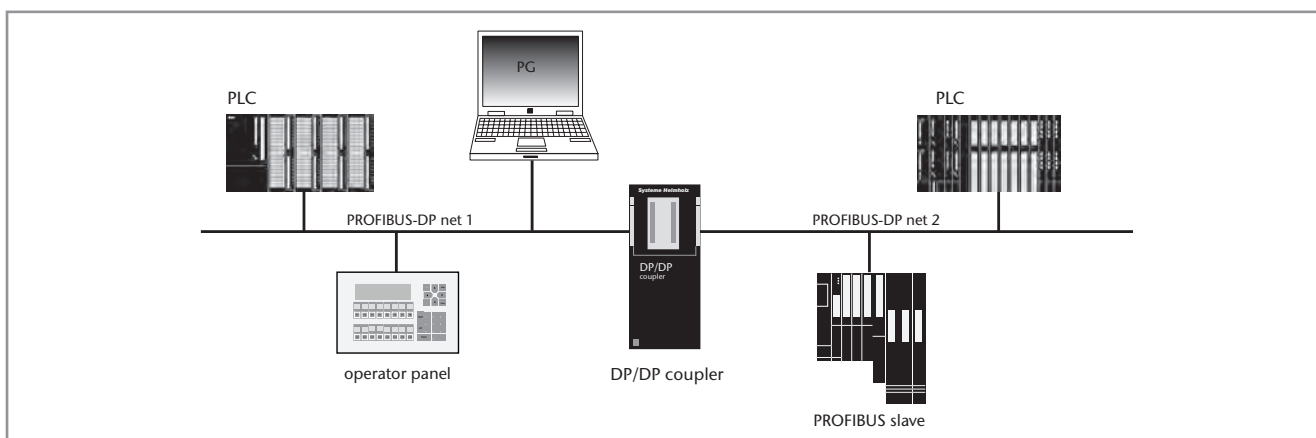
FEATURES

- Exchange of up to 244 bytes of input and 244 bytes of output data between two PROFIBUS networks
- Redundant power supply
- Electrical isolation between the PROFIBUS networks
- Setting of the PROFIBUS addresses using DIP switches or software
- PROFIBUS-DP up to 12 Mbps



The DP/DP coupler interlinks two PROFIBUS DP networks together and enables data transfer between the masters of the two DP networks.

The maximum size of the transmitted data is 244 bytes of input data and 244 bytes of output data. The DP/DP coupler is configured in the S7 software or with a GSD file.



Application example DP/DP coupler

TECHNICAL DATA

Dimensions in mm (D x W x H)	116 x 40 x 125
Weight	Approx. 250 g
Power supply	
Voltage	DC 24 V (20.4 V ... 28.8 V)
Current draw	Approx. 150 mA with DC 24 V
Isolation of the 24 V power supply	
To PROFIBUS	Yes
To each other	Yes
PROFIBUS interface	
Transmission rate	9.6 ... 12 Mbps
Protocol	PROFIBUS-DP
Message length I/O data	Max. 244 bytes inputs / 244 bytes outputs
Ambient temperature	0 °C ... +60 °C
Protection rating	IP 20

ORDERING DATA

ORDER NO.

DP/DP coupler (incl. manual)	700-158-0AD02
Mounting rail adapter for DIN rail	700-390-6BA01

FLEXtra® profiPoint, active termination and measuring point



FLEXtra® profiPoint, active termination and measuring point

The FLEXtra® profiPoint is used primarily to supply the terminating resistor and is designed for mounting on a DIN rail.

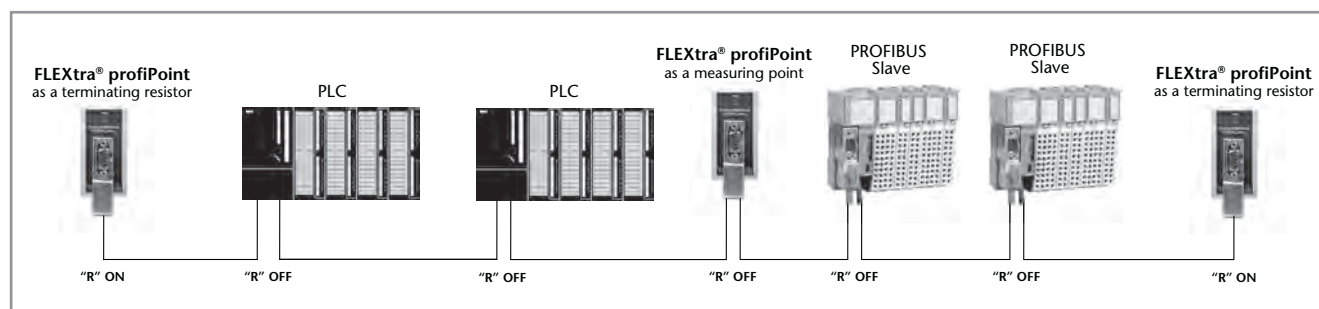
It can be used in conjunction with a PROFIBUS connector as the active measurement point or as an active terminator. Power is supplied independent of the bus through a socket.

Through the use of an active terminating resistor, participants of the bus system can optionally be switched on and off without causing malfunctions.

An integrated LED allows the correct function of the profiPoint to be read. For connection to the PROFIBUS cable, a PROFIBUS connector is required (also available in a set).

FEATURES

- Power supply independent of the bus participants
- Device-independent bus termination due to a separate power supply
- Suitable for use as an active measurement point
- Supply of active PROFIBUS components (compact repeater, NETLink®, PROFIBUS diagnostic connector)



Application example FLEXtra® profiPoint

ORDERING DATA

FLEXtra® profiPoint, active termination and measuring point (incl. manual)

FLEXtra® profiPoint set, FLEXtra® profiPoint + 90° PROFIBUS connector, diagnosis, screw terminal with PG (incl. manual)

ORDER NO.

700-972-1AA02

700-972-1XA02

TECHNICAL DATA

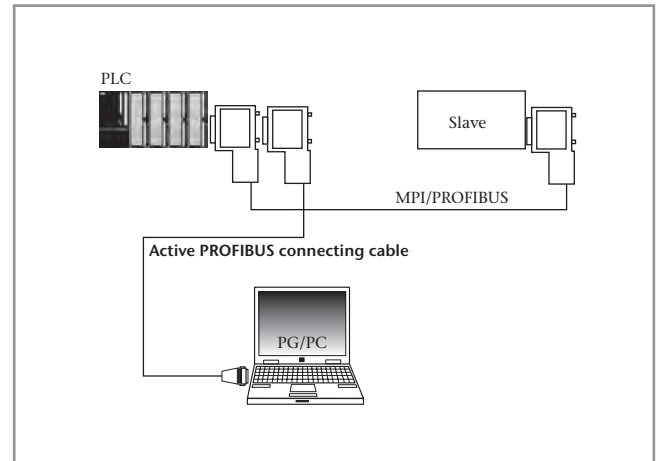
Dimensions in mm (D x W x H)	35 x 32 x 72
Weight	Approx. 85 g
Supply voltage	18 ... 30 VDC
Output voltage	24 VDC / 5 VDC
Electrical isolation	500 V
Current draw	max. 400 mA
Segment connection	Via PROFIBUS connector
Ambient temperature	0 °C ... +60 °C
Transport and storage temperature	-25 °C ... +75 °C
Protection rating	IP 20

Active PROFIBUS connecting cable; PROFIBUS cable, assembled



Active PROFIBUS connecting cable for PG

The active PROFIBUS connecting cable is used for easy connection of a PG to an existing PROFIBUS network. Due to the integrated electronics, it is not a stub.



Example of active connecting cable

TECHNICAL DATA

Dimensions in m (length)		3
Weight		Approx. 260 g
Supply voltage		DC 5 V
Current draw	max.	100 mA at 5V
PROFIBUS interface		
Transfer rate	max.	12 Mbps
Connector		SUB-D, 9-pin
Ambient temperature		0 °C ... +60 °C
Transport and storage temperature		-25 °C ... +75 °C
Protection rating		IP 20

ORDERING DATA

ORDER NO.

Active PROFIBUS connecting cable for PG with 90° PROFIBUS connector, 3 m (incl. manual)	700-901-4BD00
Active PROFIBUS connecting cable for PG with 35° PROFIBUS connector, 3 m (incl. manual)	700-901-4BD10



PROFIBUS cable assembled, 1 m

ORDERING DATA

ORDER NO.

PROFIBUS cable assembled (flexible)	
2 x PROFIBUS connector 90° without PG	
1 m	700-970-1VK01
2 m	700-970-1VK02
3 m	700-970-1VK03
5 m	700-970-1VK05
10 m	700-970-1VK10
PROFIBUS cable assembled (flexible)	
2 x PROFIBUS connector 90° with PG	
1 m	700-970-2VK01
2 m	700-970-2VK02
3 m	700-970-2VK03
5 m	700-970-2VK05
10 m	700-970-2VK10

This product is available on request.