### PROFIBUS connector overview

CONNECTION TECHNOLOGY	ORIENTATION	PRODUCT IMAGE	WITHOUT PG	WITH PG	PAGE
	90°		700-972-0BA12	700-972-0BB12	9
_	90° diagnosis	Management of the state of the	700-972-7BA12	700-972-7BB12	17
Screw terminal	35°	THE STATE OF THE S	700-972-0BA41	700-972-0BB41	10
	Axial	2 de mandre et c	700-972-0CA12		11
	90° with ATEX approval		700-973-0BA12	700-973-0BB12	19
	90°	Helmonk St.	700-972-0BA50	700-972-0BB50 c <b>FN</b> us	12
	90° diagnosis		700-972-7BA50	700-972-7BB50 c <b>FU</b> us	15
EasyConnect®	Angled, for solid cables		700-972-0BA51	700-972-0BB51	13
EasVC	Angled, for flexible cables		700-972-0FA51	700-972-0FB51	13
	Angled diagnosis, for solid cables	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		700-972-7BB51	16
	Axial		700-972-0CA50		14
M12	90°		700-974-0BA12	700-974-0BB12	18



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

The PROFIBUS connector  $90^{\circ}$  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  $^{\circ}$ C to +85  $^{\circ}$ C<sup>1</sup>.

### **FEATURES**

- · Metalized housing
- $\cdot$  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 Order No. 700-972-0BA12	Yes 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 mm²	
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 Transport and storage temperature Relative humidity max.	-25 °C +85 °C¹ -25 °C +85 °C 75% at +25 °C	
Protection rating	IP 20	

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

ORDERING DATA	ORDER NO.
PROFIBUS connector, 90° without PG socket, screw terminal with PG socket, screw terminal	700-972-0BA12 700-972-0BB12
Wire stripping tool for PROFIBUS	700-972-6AA00



PROFIBUS connector 35° with (I.) 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  $^{\circ}C$  to +85  $^{\circ}C^{1}.$ 

### **FEATURES**

- · Metalized housing
- $\cdot$  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 Order No. 700-972-0BA41	Yes 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 <sup>2</sup>	
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 Transport and storage temperature Relative humidity max.	-25 °C +85 °C¹ -25 °C +85 °C 75% at +25 °C	
Protection rating	IP 20	

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

### ORDERING DATA ORDER NO. PROFIBUS connector, 35° without PG socket, screw terminal with PG socket, screw terminal 700-972-0BA41 700-972-0BB41

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### PROFIBUS connector, axial cable outlet, screw terminal



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  $^{\circ}$ C to +85  $^{\circ}$ C<sup>1</sup>.

### **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 <sup>2</sup>
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 Transport and storage temperature Relative humidity max.	-25 °C +85 °C¹ -25 °C +85 °C 75% at +25 °C
Protection rating	IP 20

PROFIBUS connector, axial
Axial cable outlet, screw terminal

Wire stripping tool for PROFIBUS

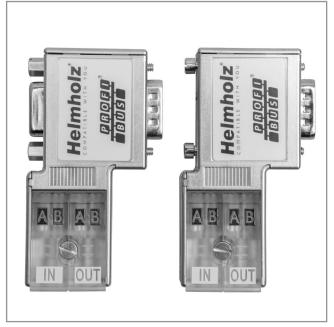
700-972-0CA12

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

ORDERING DATA

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

ORDER NO.



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 <code>EasyConnect\*</code> connectors also work in the extended ambient temperature range of -25  $^{\circ}$ C to +85  $^{\circ}$ C<sup>1</sup>.

### **FEATURES**

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

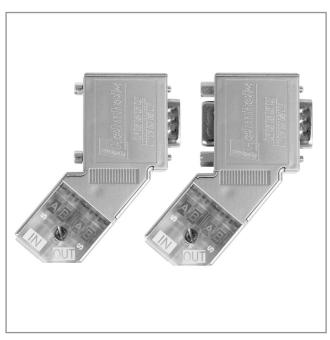


### **TECHNICAL DATA**

PG socket Order No. 700-972-0BB50 Order No. 700-972-0BA50	Yes 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 Transport and storage temperature Relative humidity max.	-25 °C +85 °C¹ -25 °C +85 °C 75% at +25 °C	
Protection rating	IP 20	

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

## ORDERING DATA PROFIBUS connector, 90° EasyConnect° for solid/flexible cable without PG socket with PG socket Wire stripping tool for PROFIBUS ORDER NO. ORDER NO. PROFIBUS 700-972-0BA50 700-972-0BB50



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 <code>EasyConnect</code> connectors also work in the expanded ambient temperature range of -25  $^{\circ}C$  to +85  $^{\circ}C^{1}.$ 

### **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

<b>PG socket</b> Order No. 700-972-0BB51/-0FB51 Order No. 700-972-0BA51/-0FA51	Yes 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 Transport and storage temperature Relative humidity max.	-25 °C +85 °C¹ -25 °C +85 °C 75% at +25 °C
Protection rating	IP 20

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

# ORDERING DATA PROFIBUS connector, angled EasyConnect® for solid cable without PG socket with PG socket PROFIBUS connectors angled EasyConnect® for flexible cable without PG socket 700-972-0BB51

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

with PG socket

700-972-0FB51

### PROFIBUS connectors, axial EasyConnect®



PROFIBUS connectors, axial EasyConnect®

The PROFIBUS connector axial <code>EasyConnect</code> 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 <code>EasyConnect</code> connectors also work in the expanded ambient temperature range of -25  $^{\circ}$ C to +85  $^{\circ}$ C<sup>1</sup>.

### **FEATURES**

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



### **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 Transport and storage temperature Relative humidity max.	-25 °C +85 °C¹ -25 °C +85 °C 75% at +25 °C	
Protection rating	IP 20	

PROFIBUS connector, axial EasyConnect® for solid/flexible cable 700-972-0CA50

Wire stripping tool for PROFIBUS 700-972-6AA00

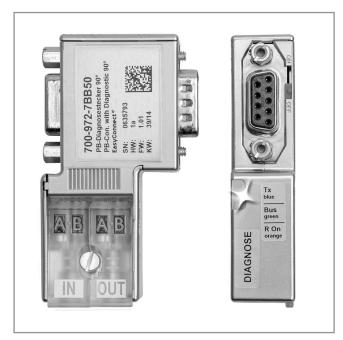
ORDER NO.

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

ORDERING DATA

1) The maximum ambient temperature for UL is 60  $^{\circ}\text{C}.$ 

### PROFIBUS connector, 90° diagnosis EasyConnect®



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** $^{\circ}$  connectors also work in the expanded ambient temperature range of -25  $^{\circ}$ C to +85  $^{\circ}$ C<sup>1</sup>.

## ORDERING DATA PROFIBUS connector, 90° diagnosis EasyConnect® for solid/flexible cable without PG socket with PG socket 700-972-7BB50 Wire stripping tool for PROFIBUS ORDER NO. PROFIBUS 700-972-7BA50 700-972-6AA00

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

### **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 Order No. 700-972-7BA50	Yes 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 Transport and storage temperature Relative humidity max.	-25 °C +85 °C <sup>1)</sup> -25 °C +85 °C 75% at +25 °C
Protection rating	IP 20

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 PRO-FIBUS 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 <code>EasyConnect</code> connectors also work in the expanded ambient temperature range of -25  $^{\circ}$ C to +85  $^{\circ}$ 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 Transport and storage temperature	-25 °C +85 °C -25 °C +85 °C	
Relative humidity max.	75% at +25 °C	

### ORDERING DATA ORDER NO. PROFIBUS connector, angled diagnosis EasyConnect® for solid cable with PG socket 700-972-7BB51



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  $^{\circ}\mathrm{C}$  to +85  $^{\circ}\mathrm{C}^{1}$ .

### **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**

Order No. 700-972-7BB12 Order No. 700-972-7BA12	Yes 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 <sup>2</sup>
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 Transport and storage temperature Relative humidity max.	-25 °C +85 °C¹ -25 °C +85 °C 75% at +25 °C
Protection rating	IP 20

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

ORDERING DATA	ORDER NO.
PROFIBUS connector, 90° diagnosis without PG socket, screw terminal with PG socket, screw terminal	700-972-7BA12 700-972-7BB12
Wire stripping tool for PROFIBUS	700-972-6AA00



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  $^{\circ}\text{C}$  to +85  $^{\circ}\text{C}^{1}.$ 

### **FEATURES**

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



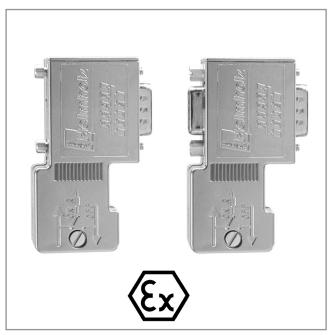
### TECHNICAL DATA

PG socket Order No. 700-974-0BB12 Order No. 700-974-0BA12	Yes No
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.           Order No. 700-974-0BA12         max.	
Pollution degree	2
Ambient temperature Transport and storage temperature Relative humidity max.	-25 °C +85 °C¹ -25 °C +85 °C 75% at +25 °C
Protection rating	IP 20

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

ORDERING DATA	ORDER NO.
PROFIBUS connector, 90° M12 without PG socket with PG socket	700-974-0BA12 700-974-0BB12

### PROFIBUS connector, 90° with ATEX approval, screw terminal



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 Order No. 700-973-0BA12	Yes 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 <sup>2</sup>
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 Transport and storage temperature Relative humidity max.	-20 °C +60 °C -25 °C +85 °C 75% at +25 °C
Protection rating	IP 20

ORDERING DATA	ORDER NO.
PROFIBUS connector, 90° with ATEX approval	
without PG socket, screw terminal with PG socket, screw terminal	700-973-0BA12 700-973-0BB12
Wire stripping tool for PROFIBUS	700-972-6AA00