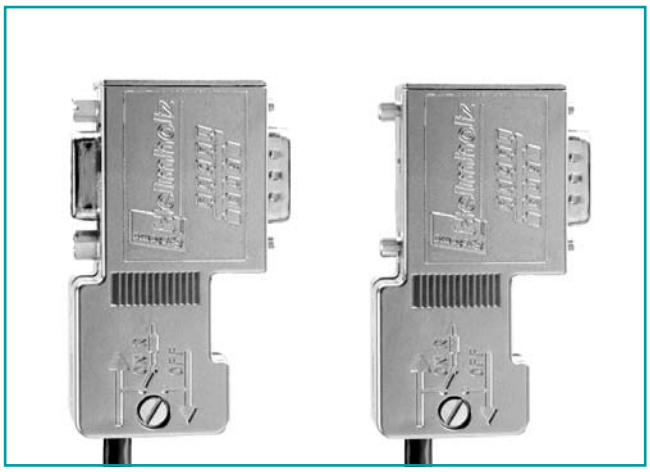
PROFIBUS Connector, 90°



Bus connector for PROFIBUS with (l.) and without (r.) prog. device connector

Features

- Metalized housing
- No loosable parts
- Integrated terminating resistor
- 90° cable outlet
- Small housing
- Screw terminals

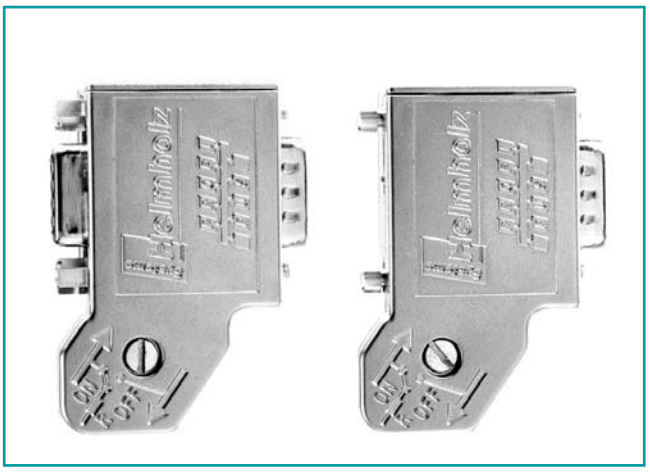
With their compact design, the bus connectors of Systeme Helmholz GmbH are ideal for connecting PROFIBUS stations.
A slide switch sets whether the connector will be used as a node or end of segment. The switch can also be operated when the connector is plugged. The switch setting is clearly visible.
The connector must be used as a node ("OFF") when the incoming bus and the outgoing bus are to be interconnected. This deactivates the terminating resistors.
The connector must be set as a segment end ("ON") on the first and last (extreme) stations of the segment. In that case the terminating resistors are connected on the incoming bus, the outgoing bus is disconnected.

Technical Data	
Programming device connector Order No. 700-972-0BB12 Order No. 700-972-0BA12	 **Yes** **No**
Dimensions (D x W x H mm)	64 x 40 x 17
Weight	Approx. 40 g
Outgoing cable	Vertical outgoing cable suitable for FastConnect[1] stripping tool
Terminating resistor	Resistor combination integrated and connectable with slide switch
Transmission rate max.	12 Mbps
Interfaces PROFIBUS station	 SUB-D connector, 9-way
Max. outside diameter	8.0 mm
PROFIBUS cable	60/75 °C copper wire up to 1.0 mm²
Connection type	4 terminals
Voltage consumption	4.75 ... 5.25 V DC (must come from connected equip.)
Current consumption max.	12.5 mA
Environmental pollution degree	2
Ambient temperature Transport and storage temperature Relative humidity max.	0 °C ... +60 °C -25 °C ... +80 °C 75 % at +25 °C
Degree of protection	IP 20

Ordering Data	Order No.
PROFIBUS Connector, 90° without prog. device connector with prog. device connector 90°	 **700-972-0BA12** **700-972-0BB12**
Stripping tool for PROFIBUS	**700-972-6AA00**

The PROFIBUS connectors are also available in boxes containing 10 or 50 pieces.
1) FastConnect is a registered trademark of Siemens AG.

PROFIBUS Connector, 35°



Bus connector for PROFIBUS, with 35° cable outlet

Features

- Metalized housing
- No loosable parts
- Integrated switchable terminating resistor
- 35° cable outlet
- Small housing
- Screw terminals

The 35° bus connector for PROFIBUS is a further component in our range of connectors providing you with low-cost alternatives for your automation.
The bus connectors are used to connect a PROFIBUS station to the PROFIBUS cable. The connector is quickly mounted and features integrated terminating resistors.
The Systeme Helmholz GmbH offers the bus connector with an 35° cable outlet and for transmission rates up to 12 Mbps.

Technical Data	
Programming device connector Order No. 700-972-0BB41 Order No. 700-972-0BA41	 **Yes** **No**
Dimensions (D x W x H mm)	54 x 40 x 17
Weight	Approx. 40 g
Outgoing cable	35° outgoing cable
Terminating resistor	Resistor combination integrated and connectable with slide switch
Transmission rate max.	12 Mbps
Interfaces PROFIBUS station	 SUB-D connector, 9-way
Max. outside diameter	8.0 mm
PROFIBUS cable	60/75 °C copper wire up to 1.0 mm²
Connection type	4 terminals
Voltage consumption	4.75 ... 5.25 V DC (must come from connected equip.)
Current consumption max.	12.5 mA
Environmental pollution degree	2
Ambient temperature Transport and storage temperature Relative humidity max.	0 °C ... +60 °C -25 °C ... +80 °C 75 % at +25 °C
Degree of protection	IP 20

Ordering Data	
	Order No.
PROFIBUS Connector, 35° without prog. device connector with prog. device connector	 **700-972-0BA41** **700-972-0BB41**

The PROFIBUS connectors are also available in boxes containing 10 or 50 pieces.

PROFIBUS Connector, axial

Bus connector for PROFIBUS, with axial cable outlet

Features

- Metalized housing
- Integrated switchable terminating resistor
- No loosable parts
- Axial cable outlet
- Screw terminals

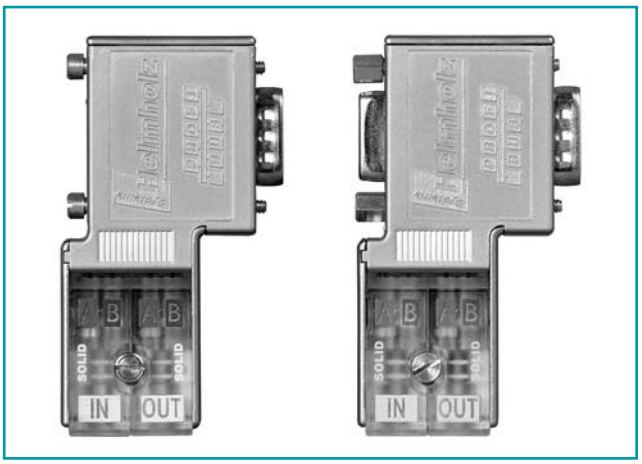
The axial bus connector for PROFIBUS is a further component in our range of connectors providing you with low-cost alternatives for your automation.
The bus connector is used to connect PROFIBUS stations to the PROFIBUS cable. The connector is quickly mounted. In addition, the terminating resistors are already integrated.
The Systeme Helmholz GmbH offers the bus connector with an axial cable outlet and for transmission rates up to 12 Mbps.

Technical Data	
Dimensions (D x W x H mm)	68 x 39.5 x 17
Weight	Approx. 40 g
Outgoing cable, axial	Axial outgoing cable, suitable for FastConnect[1)] stripping tool
Terminating resistor	Resistor combination integrated and connectable with slide switch
Transmission rate max.	12 Mbps
Interfaces PROFIBUS station	 SUB-D connector, 9-way
Max. outside diameter	8.0 mm
PROFIBUS cable	60/75 °C copper wire up to 1.0 mm²
Connection type	4 terminals
Voltage consumption	4.75 ... 5.25 V DC (must come from connected equip.)
Current consumption max.	12.5 mA
Environmental pollution degree	2
Ambient temperature Transport and storage temperature Relative humidity max.	0 °C ... +60 °C -25 °C ... +80 °C 75 % at +25 °C
Degree of protection	IP 20

Ordering Data	
	Order No.
PROFIBUS Connector, axial axial cable outlet	**700-972-0CA12**

The PROFIBUS connectors are also available in boxes containing 10 or 50 pieces
1) FastConnect is a registered trademark of Siemens AG.

PROFIBUS Connector, 90° EasyConnect®



Bus connector for PROFIBUS, **EasyConnect®**

The **EasyConnect®** connector features quick-connect technology, which makes stripping the bus wires superfluous.
The bus connector is used to connect PROFIBUS stations to the PROFIBUS cable. The connector is quickly mounted. The housing is metal-coated for improved electromagnetic compatibility. In addition, the terminating resistors are already integrated.
The Systeme Helmholz GmbH offers the **EasyConnect®** connector with a perpendicular cable outlet. Once the cable has been installed it is easy to check (visual inspection) that the PROFIBUS cable has been correctly connected.
The **EasyConnect®** connector also works in the extended ambient temperature range of -25 °C to +70 °C with immediate effect.

Features

- Metalized housing
- No loosable parts
- **EasyConnect®** technology
- Visual connection control
- Integrated terminating resistor
- 90° cable outlet
- Small housing

Ordering Data

	Order No.
PROFIBUS Connector,90° EasyConnect® for solid cables	
without prog. device connector	700-972-0BA50
with prog. device connector	700-972-0BB50
PROFIBUS Connector, 90° EasyConnect® for flexible cables	
without progr. device connector 90°	700-972-0FA50
with progr. device connector 90°	700-972-0FB50
Stripping tool for PROFIBUS	700-972-6AA00

EasyConnect® is a registered trademark of Systeme Helmholz GmbH.
1) FastConnect is a registered trademark of Siemens AG.

Technical Data

Programming device connector Order No. 700-972-0BB50/-0FB50 Order No. 700-972-0BA50/-0FA50	 **Yes** **No**
Dimensions (D x W x H mm)	72 x 40 x 17
Weight	Approx. 40 g
Outgoing cable	Vertical outgoing cable suitable for FastConnect[1] stripping tool
Terminating resistor	Resistor combination integrated and connectable with slide switch
Transmission rate max.	12 Mbps
Interfaces PROFIBUS station	 SUB-D connector, 9-way
Max. outside diameter	8.0 mm
PROFIBUS cable	FC standard cable solid or flexible; 0.64 mm Ø 60/75 °C copper wire
Connection type	**EasyConnect®**
Voltage consumption	4.75 ... 5.25 V DC (must come from connected equip.)
Current consumption max.	12.5 mA
Environmental pollution degree	2
Ambient temperature Transport and storage temperature Relative humidity max.	0 °C ... +60 °C -25 °C ... +80 °C 75 % at +25 °C
Degree of protection	IP 20

PROFIBUS Connector, angled **EasyConnect®**

Bus connector for PROFIBUS, angled **EasyConnect®**

Features

- Metalized housing
- No loosable parts
- **EasyConnect®** technology
- Visual connection control
- Integrated terminating resistor
- Angled cable outlet
- Small housing

The new angled **EasyConnect®** bus connector for PROFIBUS of Systeme Helmholz GmbH features quick-connect technology, which makes stripping the bus wires superfluous.
The bus connector is used to connect PROFIBUS stations to the PROFIBUS cable. The connector is quickly mounted.
The housing is metal-coated for improved electromagnetic compatibility. In addition, the terminating resistors are already integrated. Once the cable has been installed it is easy to check (visual inspection) that the PROFIBUS cable has been correctly connected.

Ordering Data	Order No.
PROFIBUS Connector, angled **EasyConnect®** **for solid cables**	
without prog. device connector	**700-972-0BA51**
with prog. device connector	**700-972-0BB51**
PROFIBUS Connector, angled **EasyConnect®** **for flexible cables**	
without prog. device connector	**700-972-0FA51**
with prog. device connector	**700-972-0FB51**

Technical Data	
Programming device connector Order No. 700-972-0BB51/-0FB51 Order No. 700-972-0BA51/-0FA51	 **Yes** **No**
Dimensions (D x W x H mm)	95 x 70 x 17
Weight	Approx. 50 g
Outgoing cable	Angled outgoing cable
Terminating resistor	Resistor combination integrated and connectable with slide switch
Transmission rate max.	12 Mbps
Interfaces PROFIBUS station	 SUB-D connector, 9-way
Max. outside diameter	8.0 mm
PROFIBUS cable	FC standard cable solid or flexible; 0.64 mm Ø 60/75 °C copper wire
Connection type	**EasyConnect®**
Voltage consumption	4.75 ... 5.25 V DC (must come from connected equip.)
Current consumption max.	12.5 mA
Environmental pollution degree	2
Ambient temperature Transport and storage temperature Relative humidity max.	0 °C ... +60 °C -25 °C ... +80 °C 75 % at +25 °C
Degree of protection	IP 20

PROFIBUS Connector, axial **EasyConnect®**

Bus connector for PROFIBUS, axial **EasyConnect®**

Features

- Metalized housing
- No loosable parts
- Integrated terminating-resistor
- Visual connection control
- **EasyConnect®** technology
- Axial cable outlet

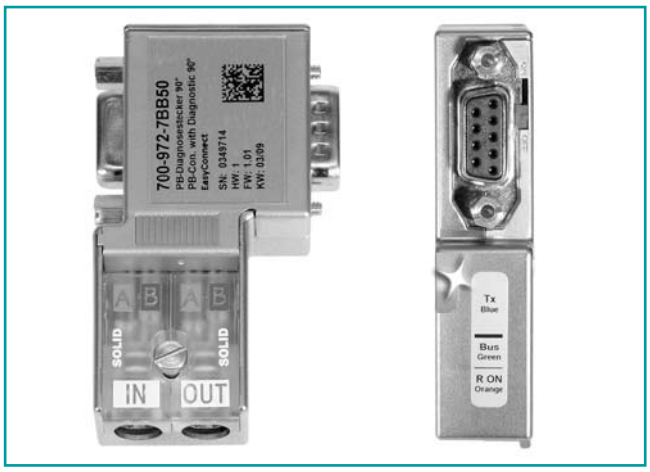
The **EasyConnect®** connector axial features quick-connect technology, which makes stripping the bus wires superfluous.
The bus connector is used to connect PROFIBUS stations to the PROFIBUS cable. The connector is quickly mounted, and has a metallized housing and integrated terminating resistors.
Once the cable has been installed it is easy to check (visual inspection) that the PROFIBUS cable has been correctly connected.
The **EasyConnect®** connector also works in the extended ambient temperature range of -25 °C to +70 °C with immediate effect.

Ordering Data	Order No.
PROFIBUS Connector, axial EasyConnect®	
for solid cables	**700-972-0CA50**
for flexible cables	**700-972-0CF50**

1) FastConnect is a registered trademark of Siemens AG.

Technical Data	
Dimensions (D x W x H mm)	70 x 35 x 17
Weight	Approx. 50 g
Outgoing cable	Vertical outgoing cable suitable for FastConnect[1] stripping tool
Terminating resistor	Resistor combination integrated and connectable with slide switch
Transmission rate max.	12 Mbps
Interfaces PROFIBUS station	SUB-D connector, 9-way
Max. outside diameter	8.0 mm
PROFIBUS cable	FC standard cable solid or flexible; 0.64 mm Ø 60/75 °C copper wire
Connection type	**EasyConnect®**
Voltage consumption	4.75 ... 5.25 V DC (must come from connected equip.)
Current consumption max.	12.5 mA
Environmental pollution degree	2
Ambient temperature Transport and storage temperature Relative humidity max.	0 °C ... +60 °C -25° C ... +80 °C 75 % at +25 °C
Degree of protection	IP 20

PROFIBUS Connector, 90° with diagnostic LEDs, EasyConnect®



Bus connector for PROFIBUS, 90° **EasyConnect**® with diagnostic LEDs

Features

- 3 LEDs status displays
- Integrated terminating resistors
- No loosable parts
- Small housing
- Visual connection control
- **EasyConnect**® technology

The **EasyConnect**® diagnostic PROFIBUS connector allows you to build a PROFIBUS network in which the user can always check the state of the bus system at a glance.
The three built-in LEDs in the easily distinguishable 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 in progress (**green**), and whether the station addressed is participating in bus traffic (**blue**) are all indicated.
This means errors, such as bus interruptions, missing or incorrectly connected terminating resistors, and malfunctioning or failed bus stations can be detected immediately.
The PROFIBUS diagnostic connector with tried-and-tested and reliable screw terminals can be supplied with or without a programmer (PG) jack.
The new **EasyConnect**® connectors feature quick-connect technology, which makes stripping the bus wires superfluous. The bus connector is used to connect a PROFIBUS station to the PROFIBUS cable.

Ordering Data

	Order No.
PROFIBUS Connector, 90° with diagnostic LEDs EasyConnect® for solid cables	
without prog. device connector	700-972-7BA50
with prog. device connector	700-972-7BB50
PROFIBUS Connector, 90° with diagnostic LEDs EasyConnect® for flexible cables	
without prog. device connector	700-972-7FA50
with prog. device connector	700-972-7FB50
Stripping tool for PROFIBUS	700-972-6AA00

1) FastConnect is a registered trademark of Siemens AG.

Technical Data

Programming device connector Order No. 700-972-7BB50/-7FB50 Order No. 700-972-7BA50/-7FA50	 **Yes** **No**
Dimensions (D x W x H mm)	64 x 40 x 17
Weight	Approx. 40 g
Outgoing cable	Vertical outgoing cable suitable for Fast-Connect[1] stripping tool
Terminating resistor	Resistor combination integrated and connectable with slide switch
Transmission rate max.	12 Mbps
Interfaces PROFIBUS station	 SUB-D connector, 9-way
Max. outside diameter	8.0 mm
PROFIBUS cable	FC standard cable solid, 0.64 mm Ø 60/75 °C copper wire
Connection type	**EasyConnect®**
Voltage consumption	4.75 ... 5.25 V DC (must come from connected equip.)
Current consumption max.	35 mA
Environmental pollution degree	2
Ambient temperature Transport and storage temperature Relative humidity max.	0 °C ... +60 °C -25 °C ... +80 °C 75 % at +25 °C
Degree of protection	IP 20

PROFIBUS Connector, 90° with diagnostic LEDs

Bus connector for PROFIBUS, 90° with diagnostic LEDs

Features

- 3 status LEDs indicate “bus operation”, “station transmitting”, “terminating resistor inserted”
- Screw terminals
- Integrated switchable terminating resistors
- No loosable parts
- Small housing

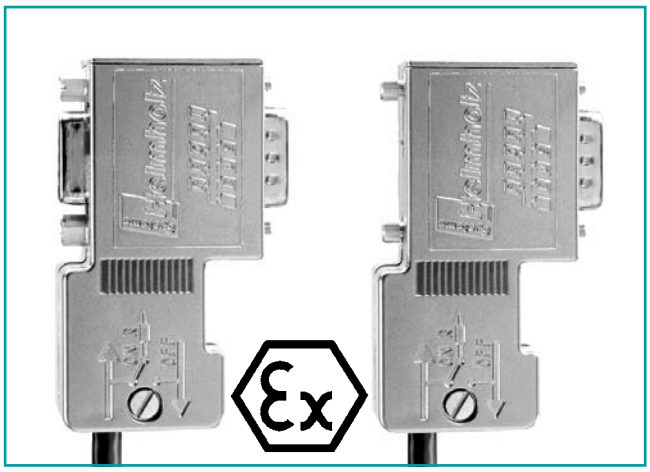
The PROFIBUS diagnostic connector can be used to connect a PROFIBUS network in which the user can check the status of the bus system at any time at a glance.
The three built-in LEDs with the easily distinguished colors blue, green and orange indicate the most important states of the PROFIBUS network at each station. The state of the terminating resistor (**orange**), whether bus activity is in progress (**green**) and whether the station addressed is participating in bus traffic (**blue**) are all indicated.
This means errors, such as bus interruptions, missing or incorrectly connected terminating resistors and malfunctioning or failed bus stations can be detected immediately.
The PROFIBUS diagnostic connector with screw terminals can be supplied with or without a programming (PG) device connector.

Technical Data	
Programming device connector Order No. 700-972-7BB12 Order No. 700-972-7BA12	 **Yes** **No**
Dimensions (D x W x H mm)	64 x 40 x 17
Weight	Approx. 40 g
Outgoing cable	Vertical outgoing cable suitable for Fast-Connect[1] stripping tool
Terminating resistor	Resistor combination integrated and connectable with slide switch
Transmission rate max.	12 Mbps
Interfaces PROFIBUS station	 SUB-D connector, 9-way
Max. outside diameter	8.0 mm
PROFIBUS cable	60/75 °C copper wire up to 1.0 mm²
Connection type	4 terminals
Voltage consumption	4.75 ... 5.25 V DC (must come from connected equip.)
Current consumption max.	35 mA
Environmental pollution degree	2
Ambient temperature Transport and storage temperature Relative humidity max.	0 °C ... +60 °C -25 °C ... +80 °C 75 % at +25 °C
Degree of protection	IP 20

Ordering Data	
	Order No.
PROFIBUS Connector, 90° with diagnostic LEDs without prog. device connector 90° with prog. device connector 90°	 **700-972-7BA12** **700-972-7BB12**
Stripping tool for PROFIBUS	**700-972-6AA00**

1) FastConnect is a registered trademark of Siemens AG.

PROFIBUS Connector with ATEX accreditation



Bus connector for PROFIBUS with (l.) and without (r.) prog. device connector

Features

- Metalized housing
- No loosable parts
- Integrated switchable terminating resistor
- 90° cable outlet
- ATEX accreditation (II 3 G Ex nA II T4)
- Screw terminals

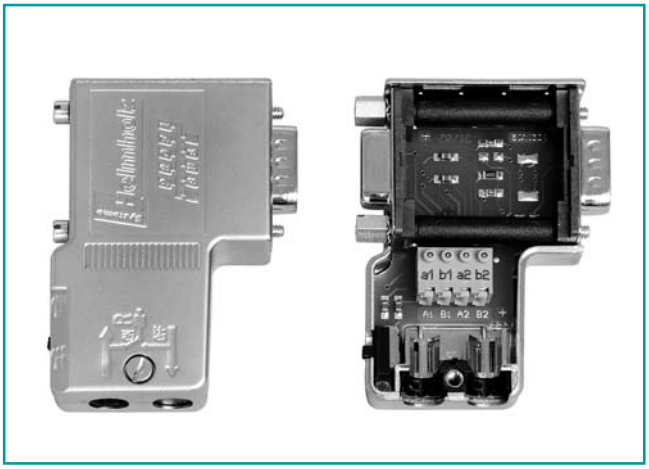
The bus connectors are used to connect a PROFIBUS station to the PROFIBUS cable. The connector is quickly mounted and has integrated, connectable terminating resistors.
The Systeme Helmholz GmbH offers the bus connector for usage in explosion hazardous areas of zone 2 (explosive gas atmosphere appears seldom and for very short time).
The bus connector is plugged directly onto the PROFIBUS interface (SUB-D connector, 9-way) of the PROFIBUS stations. The PROFIBUS cables are connected using 4-way screw terminals.
Using a slide switch you can set whether the connector is to be used as a node or segment end. The switch can also be operated when the connector is installed. The setting can be clearly seen.

Ordering Data	Order No.
PROFIBUS Connector with ATEX accreditation without prog. device connector, Ex-Zone 2 with prog. device connector, Ex-Zone 2	 **700-973-0BA12** **700-973-0BB12**
Stripping tool for PROFIBUS	**700-972-6AA00**

1) FastConnect is a registered trademark of Siemens AG.

Technical Data	
Programming device connector Order No. 700-973-0BB12 Order No. 700-973-0BA12	 **Yes** **No**
Dimensions (D x W x H mm)	64 x 40 x 17
Weight	Approx. 40 g
Outgoing cable	Vertical outgoing cable suitable for FastConnect[1)] stripping tool
Terminating resistor	Resistor combination integrated and connectable with slide switch
Transmission rate max.	12 Mbps
Interfaces PROFIBUS station	 SUB-D connector, 9-way
Max. outside diameter	8.0 mm
PROFIBUS cable	60/75 °C copper wire up to 1.0 mm²
Connection type	4 terminals
Voltage consumption	4.75 ... 5.25 V DC (must come from connected equip.)
Current consumption max.	12.5 mA
Environmental pollution degree	2
Ambient temperature Transport and storage temperature Relative humidity max.	0 °C ... +60 °C -25 °C ... +80 °C 75 % at +25 °C
Degree of protection	IP 20

PROFIBUS Connector with spring type terminals



Bus connector for PROFIBUS with spring type terminals

Features

- Metalized housing
- No loosable parts
- Integrated switchable terminating resistor
- 90° cable outlet
- Spring type terminal

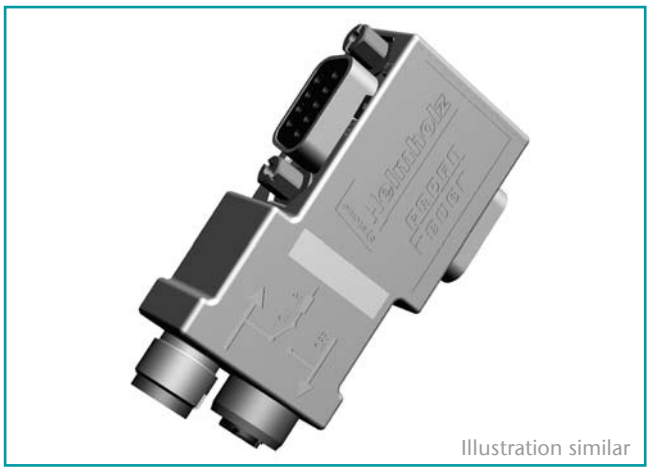
The bus connector is used to connect PROFIBUS stations to a PROFIBUS cable. The connector is quickly mounted and has integrated, connectable terminating resistors.
The spring type terminal is suiteable for solid conductors up to a cross section of 0.5 mm². The stripped conductors contacts automatically when inserted, for breaking the connection the orange lever must be pressed.
The bus connector is plugged directly onto the PROFIBUS interface (SUB-D connector, 9-way) of the PROFIBUS stations. The PROFIBUS cables are connected using 4-way spring type terminals.
Using a slide switch, you can set whether the connector is to be used as a node or segment end. The switch can also be operated when the connector is installed. The setting can be clearly seen.

Ordering Data	
	Order No.
PROFIBUS Connector with spring type terminals without prog. device connector with prog. device connector	 **700-982-0BA22** **700-982-0BB22**
Stripping tool for PROFIBUS	**700-972-6AA00**

1) FastConnect is a registered trademark of Siemens AG.

Technical Data	
Programming device connector Order No. 700-982-0BB22 Order No. 700-982-0BA22	 **Yes** **No**
Dimensions (D x W x H mm)	65 x 48 x 16
Weight	Approx. 40 g
Outgoing cable	Vertical outgoing cable suitable for FastConnect[1] stripping tool
Terminating resistor	Resistor combination integrated and connectable with slide switch
Transmission rate max.	12 Mbps
Interfaces PROFIBUS station	 SUB-D connector, 9-way
Max. outside diameter	8.0 mm
PROFIBUS cable	60/75 °C copper wire up to 0.5 mm²
Connection type	4 spring type terminals
Voltage supply	DC 4.75 ... 5.25 V (must come from connected equip.)
Current consumption max.	12.5 mA
Environmental pollution degree	2
Ambient temperature Transport and storage temperature Relative humidity max.	0 °C ... +60 °C -25 °C ... +80 °C 75 % at +25 °C
Degree of protection	IP 20

PROFIBUS Connector, 90° M12



Bus connector for PROFIBUS, with M12 connection

Features

- Metalized housing
- No loosable parts
- Integrated switchable terminating resistor
- 90° cable outlet
- M12 connections

The new M12 bus connector for PROFIBUS of Systeme Helmholz GmbH is used to connect PROFIBUS stations to a PROFIBUS cable with an M12 connection. The use of prefabricated system cables eliminates connection faults. Assembly effort is reduced to a minimum.
The connector has two M12 connections and integrated terminating resistors. The housing is metal-coated for improved electromagnetic compatibility.
Systeme Helmholz GmbH offers the M12 bus connector with a 90° cable duct for transmission rates up to 12 Mbps.

Ordering Data	Order No.
PROFIBUS Connector, 90° M12	
without prog. device connector	700-974-0BA12
with prog. device connector	700-974-0BB12

Technical Data	
Programming device connector	
Order No. 700-974-0BB12	**Yes**
Order No. 700-974-0BA12	**No**
Dimensions (D x W x H mm)	70 x 40 x 17
Weight	Approx. 60 g
Outgoing cable	Vertical outgoing cable
Terminating resistor	Resistor combination integrated and connectable with slide switch
Transmission rate max.	12 Mbps
Interfaces	
PROFIBUS station	SUB-D connector, 9-way
Connection type	M12
Voltage consumption	4.75 ... 5.25 V DC (must come from connected equip.)
Current consumption max.	12.5 mA
Environmental pollution degree	2
Ambient temperature	0 °C ... +60 °C
Transport and storage temperature	-25 °C ... +80 °C
Relative humidity max.	75 % at +25 °C
Degree of protection	IP 20