

New Product Bulletin

NP 321

Lumberg Automation™ Profibus DP Connectors with D-SUB and M12 Interface

The new Profibus DP connectors with D-SUB and M12 interface insures a tool-free fast and secure installation.

Lumberg Automation Profibus D-SUB to M12 Connectors Improve Install Time and Reducing Wiring Errors. These connectors have a D-Sub and M12 interface with 35°, 90° or 180° cable outlets. All versions support data rates of up to 12 Mbit/s and feature compact die-cast zinc housings with test socket and active terminating resistor. The connectors also boast quick-connection technology that enables Profibus DP devices to connect with M12 Profibus cord sets simply and securely without the use of tools, resulting in the reduction of downtime for machinery and equipment when faults occur, while increasing production efficiency.

The connectors meet the requirements for degree of protection IP30 and are suitable for use in temperature ranges from -20° to $+70^{\circ}$ C. The following housing dimensions (height x width x depth) are available: 59 x 45 x 16.8 mm for 35° cable outlets, 68 x 42 x 16.8 mm for 90° cable outlets, and 84.8 x 35.6 x 16.8 mm for 180° cable outlets. A special shielding geometry and the die-cast zinc housing ensure error- and loss-free data transmission.

The 9-pole D-Sub interfaces of the male and female connectors can connect high-level control systems, decentralized I/O stations, programming units or diagnostic devices. The B-coded M12 interfaces serve as a Profibus input or output and the signals can be daisychained via the output. A slide switch activates the terminating resistor with the respective status indicated through the position of the switch and the green and red color-coding on the housing. In addition, an external Profibus terminating resistor can attach to the Profibus output port.

Benefits at a Glance:

- Tool-less quick-connection technology
- Compact, die-cast zinc housing
- Data rates of up to 12 Mbit/s
- Protection standards: IP30 (D-SUB) and IP 67 (M12)
- Temperature range: -20°C to +70°C
- Activatable terminating resistor
- Models with different cable outlets





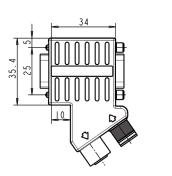
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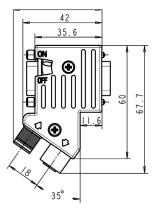
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0976 PMC 512







Plug & Play PROFIBUS Bus Connectors D-Sub / M12

9-Pole (D-Sub) 35° Compact Version

Profibus connector, 35° compact version, M12 B-coding, male and female quick connector, full metal body with testing socket, with external switch for bus termination.

Technical Features

- For stacked interfaces
- Cable connection: 35° to D-Sub mating interface
- Entirely shielded zinc die-cast housing for EMC/RFI-proofness with special shielding geometry at the housing
- Switch can be operated externally to activate the bus termination (switch can be operated internally for EMC/RFI-proof solution)
- Programming/diagnosis option with 2nd D-Sub
- Locking: Knurled screw UNC 4-40

Benefits

- Fault-free PROFIBUS connection achieved by M12 connectors with B-coding for the PROFIBUS cable connection
- Reliable, quick and simple PROFIBUS connection within seconds
- Easy installation without special knowledge
- Switch ON/OFF position visible from front side
- 100% tested bus connectors for high functional reliability
- Connection of an external terminator (e.g. 0979 PTX 101) possible

Technical Date	Description
Data rate	12 MBit/s
Connectors and pin layout	acc. to PROFIBUS specification
PROFIBUS DP Interface	D-Sub 9 poles male
PROFIBUS DP PG Interface	D-Sub 9 poles female
PROFIBUS cable Interface	M12 B-code male and female, Pin 1 = +5V, Pin 2 = Line A, Pin 3 = GND (0V), Pin 4 = Line B
Shielded Profibus M12-Cable assemblies	B-Code: only Pin 2 and 4 connected, shield transfer only via shell (e.g. 0975 254 10x/ M)
Bus termination	Bus termination resistors activated via external switch or via external terminator on Bus-Out-Connector (e.g. 0979 PTX 101)
Mechanical lifetime	200 Mating cycles
Temperature range	- 20°C at 70°C
Permissible humidity	Max. 75 % at +25°C, non-condensing
Degree of protection	IP 30
Housing material	Zn alloy
D-Sub locking screw	UNC 4-40
Dimensions in mm	67.7 x 45 x 16.8

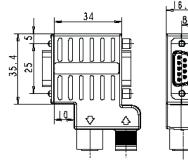
Order Number	Designation
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0976 PMC 514





Plug & Play PROFIBUS Bus Connectors D-Sub / M12

9-Pole (D-Sub) 90° Compact Version

Profibus connector, 90° compact version, M12 quick connector version, full metal body with testing socket, with external switch for bus termination.

Technical Features

- For stacked interfaces
- Cable connection: 90° to D-Sub mating interface
- Entirely shielded zinc die-cast housing for EMC/RFI-proofness with special shielding geometry at the housing
- Switch can be operated externally to activate the bus termination
- Programming/diagnosis option with 2nd D-Sub
- Locking: Knurled screw UNC 4-40

Benefits

- Very compact dimensions for constricted assembly conditions
- Fault-free PROFIBUS connection achieved by M12 connectors with B-coding for the PROFIBUS cable connection
- Reliable, quick and simple PROFIBUS connection within seconds
- Easy installation without special knowledge
- Switch ON/OFF position visible from front side
- 100% tested bus connectors for high functional reliability
- Connection of an external terminator (e.g. 0979 PTX 101) possible

Technical Date	Description
Data rate	12 MBit/s
Connectors and pin layout	acc. to PROFIBUS specification
PROFIBUS DP Interface	D-Sub 9 poles male
PROFIBUS DP PG Interface	D-Sub 9 poles female
PROFIBUS cable Interface	M12 B-code male and female, Pin 1 = +5V, Pin 2 = Line A, Pin 3 = GND (OV), Pin 4 = Line B
Shielded Profibus M12-Cable assemblies	B-Code: only Pin 2 and 4 connected, shield transfer only via shell (e.g. 0975 254 10x/ M)
Bus termination	Bus termination resistors activated via external switch or via external terminator on Bus-Out-Connector (e.g. 0979 PTX 101)
Mechanical lifetime	200 Mating cycles
Temperature range	- 20°C at 70°C
Permissible humidity	Max. 75 % at +25°C, non-condensing
Degree of protection	IP 30
Housing material	Zn alloy
D-Sub locking screw	UNC 4-40
Dimensions in mm	67.7 x 45 x 16.8

Order Number	Designation
109517	0976 PMC 514



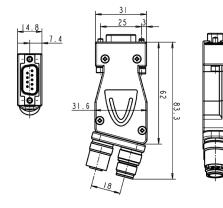
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0976 PMC 515





Order Number	Designation
109518	0976 PMC 515

Plug & Play PROFIBUS Bus Connectors D-Sub / M12

9-Pole (D-Sub) 180° Compact Version

Profibus connector, 180° compact version, M12 quick connector version, full metal body, with external switch for bus termination.

Technical Features

- Axial cable connection
- Entirely shielded zinc die-cast housing for EMC/RFI-proofness with special shielding geometry at the housing
- Switch can be operated externally to activate the bus termination (switch can be operated internally for EMC/RFI-proof solution)
- Locking: Knurled screw UNC 4-40

Benefits

- Fault-free PROFIBUS connection achieved by M12 connectors with B-coding for the PROFIBUS cable connection
- Reliable, quick and simple PROFIBUS connection within seconds
- · Easy installation without special knowledge
- 100% tested bus connectors for high functional reliability
- Connection of an external terminator (e.g. 0979 PTX 101) possible

Technical Date	Description
Data rate	12 MBit/s
Connectors and pin layout	acc. to PROFIBUS specification
PROFIBUS DP Interface	D-Sub 9 poles male
PROFIBUS cable Interface	M12 B-code male and female, Pin 1 = $+5V$, Pin 2 = Line A, Pin 3 = GND (0V), Pin 4 = Line B
Shielded Profibus M12-Cable assemblies	B-Code: only Pin 2 and 4 connected, shield transfer only via shell (e.g. 0975 254 10x/ M)
Bus termination	Bus termination resistors activated via external switch or via external terminator on Bus-Out-Connector (e.g. 0979 PTX 101)
Mechanical lifetime	200 Mating cycles
Temperature range	- 20°C at 70°C
Permissible humidity	Max. 75 % at +25°C, non-condensing
Degree of protection	IP 30
Housing material	Zn alloy
D-Sub locking screw	UNC 4-40
Dimensions in mm	67.7 x 45 x 16.8

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