

## New Product Bulletin

### NP 1022LE

#### **Lumberg Automation™ Profibus DP Connectors with D-Sub and M12 Interface**

The new Profibus DP connectors with D-Sub and M12 interface from Belden's Lumberg Automation™ brand impress both through fast and secure data transmission and tool-free installation.

#### **Profibus DP Connectors from Lumberg Automation™: Use of M12 Cord Sets Thanks to Quick-Connection Technology**

The new Profibus DP connectors from Lumberg Automation™ feature both a D-Sub and a M12 interface which connects Profibus devices with M12 cord sets simple, quick, secure and tool-less. This is made possible through a quick-connection technology, which ensures that the error-prone step of attaching the shielding manually is a thing of the past. The advantage of this, for example, is reduced downtimes of machinery and equipment when faults occur, which increases production efficiency.

With a choice of 35°, 90° or 180° cable outlets, the new Profibus DP connectors are highly versatile. All versions support data rates of up to 12 Mbit/s. 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 be used to connect, for instance, 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.



The terminating resistor can be activated via a slide switch, with the respective status being indicated both through the position of the switch and through green and red color coding on the housing. In addition, an external Profibus terminating resistor can be attached to the Profibus out port.

#### **Benefits at a Glance:**

- Tool-less quick-connection technology
- Compact, die-cast zinc housing
- Data rates of up to 12 Mbit/s
- IP30 protection standard
- Temperature range: -20°C to +70°C
- Activatable terminating resistor
- Models with different cable outlets

## Plug & Play PROFIBUS Bus Connectors D-Sub / M12

### 0976 PMC 512

Profibus connector, 35° compact version, M12 quick connector version, full metal body with testing socket, with external switch for bus termination

#### Technical Features

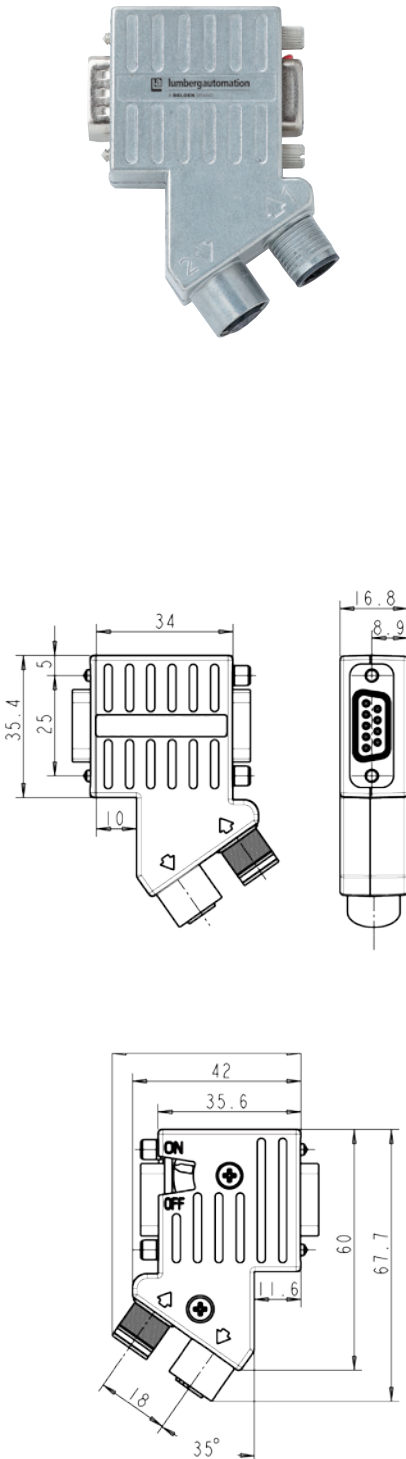
- For stacked interfaces
- Cable connection: 35° to D-Sub mating interface
- Entirely shielded zinc die-cast housing for EMC/RFI-proofness with special shielding geometry at the housing
- Switch can be operated externally to activate the bus termination (switch can be operated internally for EMC/RFI-proof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

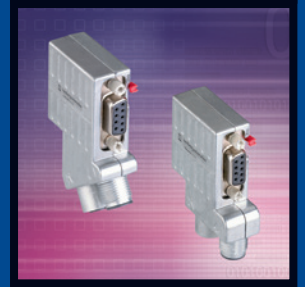
#### Benefits

- 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 Data	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
109519	0976 PMC 512





## 0976 PMC 514

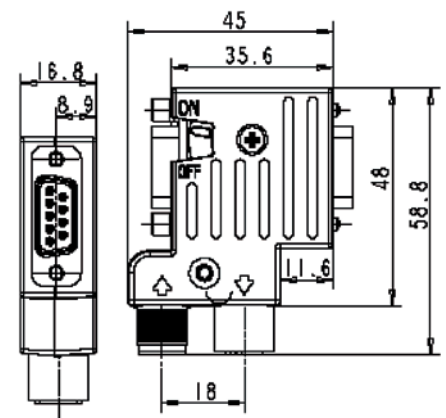
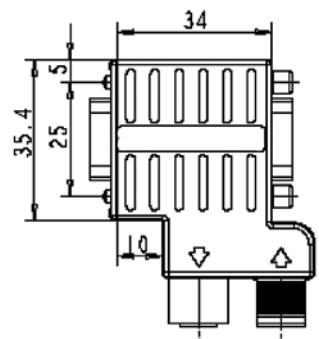
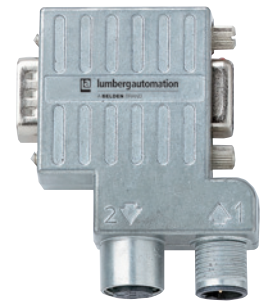
Profibus connector, 90° compact version,  
M12 quick connector version, full metal body  
with testing socket, with external switch for  
bus termination

### Technical Features

- 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

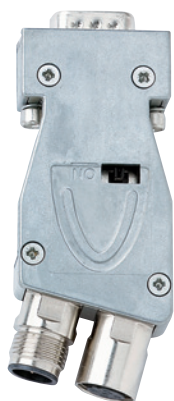
- Very compact dimensions for constricted assembly conditions
- Fault-free PROFIBUS connection achieved by M12 connectors with B-coding for the PROFIBUS cable connection
- Reliable, quick and simple PROFIBUS connection within seconds
- Easy installation without special knowledge
- Switch ON/OFF position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



Technical Data	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	58.8 x 45 x 16.8

Order-Number	Designation
109517	0976 PMC 514

## Plug & Play PROFIBUS Bus Connectors D-Sub / M12



### 0976 PMC 515

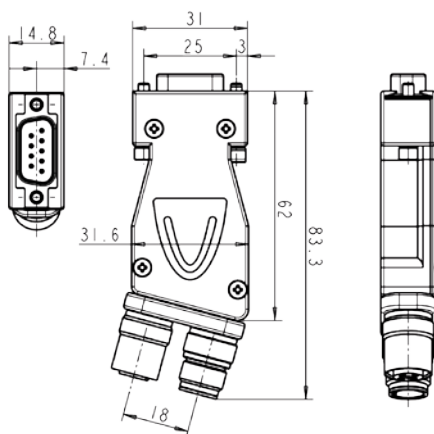
Profibus connector, 180° compact version, M12 quick connector version, full metal body, with external switch for bus termination

#### 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



Order Number	Designation
109518	0976 PMC 515

Technical Data	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	ZnAl
D-Sub locking screw	UNC 4-40
Dimensions in mm	84.8 x 35.6 x 16.8

### Always the Right Solution

Belden is one of the world's leading suppliers of signal transmission solutions including cable, connectivity and active components for mission-critical applications ranging from industrial automation and alternative power generation through to professional broadcasting. Belden offers an extensive portfolio of highly specialized products for management, control and field level, which the company produces and markets under its proprietary Belden®, Hirschmann™ and Lumberg Automation™ brands.

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