## **Profibus Fast Connect**

Fast connection system







### The fieldbus system PROFIBUS

PROFIBUS DP is one of the most commonly used "fieldbus systems", with applications in automation for manufacturing, process technology and building systems. PROFIBUS was developed by the PROFIBUS User Organization (PNO) and a consortium of membership companies. Lapp is a member

of the PNO and has been actively involved in further development and standardisation for many years. This makes it possible for us to always provide our customers with innovative and system-compliant solutions that fulfil the highest demands for quality and stability.



### PROFIBUS solutions from Lapp

As a reliable system supplier for automation solutions, Lapp provides integrated cabling and connection solutions for PROFIBUS DP. This includes a complete assort-

ment of cables, connectors, assembled cables and accessories to fulfil all the requirements in the machinery and plant engineering sector.

### The Fast Connect system

Personnel expenses represent a significant cost factor in machines or plants. Cabling plays an important role. With the Fast Connect system, the amount of time needed to perform this work can be drastically reduced. Profibus cables and connectors can be quickly and easily connected with three perfectly matched components:

PROFIBUS cables for fast assembly: UNITRONIC® BUS PB FC Cables

Fast Connect tool for fast stripping of the cable:

FC STRIP stripping tool

Fast Connect bus connector:

EPIC® DATA PROFIBUS Fast Connect Connectors



Contacting with precision blades

### EPIC® Data PROFIBUS Fast Connect Connectors

### Advantages/benefits

- Compact design
- All connectors are UL-certified (File E331560)
- Adjustable terminating resistor is integrated
- Improved EMC features due to metallised housing
- Low weight, suitable for applications where vibrations are critical

- Easily insertable due to complete compatibility with market standard
- Versions with additional programming and diagnostics interface (PG) are available
- Connector also optionally available with diagnostic LED
- Reliable connection with UNITRONIC® PROFIBUS FC cables

### **Properties**

- For PROFIBUS FC standard cables, Ø 0.64 mm
- Cable outside diameter 5 to 8mm
- Operating temperature: 0 to +60°C

### Cable outlet 35°

Item no.	Article designation	PG	Core type	Dimensions	Diagnostic LEDs
21700511	ED-PB-35-FC	no	Solid or 7-wire	95 x 70 x 17mm	no
21700513	ED-PB-35-PG-FC	yes	Solid or 7-wire	95 x 70 x 17mm	no
21700514	ED-PB-35-FC-FLEX	no	7- or 19-wire	95 x 70 x 17mm	no
21700515	ED-PB-35-PG-FC-FLEX	yes	7- or 19-wire	95 x 70 x 17mm	no



#### Cable outlet 90°

Item no.	Article designation	PG	Core type	Dimensions	Diagnostic LEDs
21700502	ED-PB-90-FC	no	Solid or 7-wire	72 x 40 x 17mm	no
21700501	ED-PB-90-PG-FC	yes	Solid or 7-wire	72 x 40 x 17mm	no
21700528	ED-PB-90-FC-FLEX	no	7- or 19-wire	72 x 40 x 17mm	no
21700527	ED-PB-90-PG-FC-FLEX	yes	7- or 19-wire	72 x 40 x 17mm	no
21700547	ED-PB-90-LED-FC	no	Solid or 7-wire	72 x 40 x 17mm	yes
21700546	ED-PB-90-PG-LED-FC	yes	Solid or 7-wire	72 x 40 x 17mm	yes
21700549	ED-PB-90-LED-FC- FLEX	no	7- or 19-wire	72 x 40 x 17mm	yes
21700539	ED-PB-90-PG-LED-FC- FLEX	yes	7- or 19-wire	72 x 40 x 17mm	yes





#### Cable outlet 180°

Item no.	Article designation	PG	Core type	Dimensions	Diagnostic LEDs
21700544	ED-PB-180-FC	no	Solid or 7-wire	70 x 35 x 17mm	no
21700545	ED-PB-180-FC-FLEX	no	7- or 19-wire	70 x 35 x 17mm	no



### UNITRONIC® PROFIBUS DP Fast Connect Cables

Due to their special structure, Fast Connect (FC) cables can be quickly processed with the FC STRIP stripping tool.

#### Advantages/benefits

- High level of resistance to electrical interference
- Optimal processing with the FC STRIP stripping tool
- Reliable connection of the EPIC® Data FC connector
- UL approvals make use in the US possible
- UNITRONIC® PB FC cables can also be connected to EPIC® Data connectors with screw terminals and cage clamps

### **Properties**

- The cables meet the requirements of the PROFIBUS User Organization (PNO)
- Double shielding with copper braiding and plastic-laminated aluminium foil
- Core insulation made of foamed PE
- Structure: 1 x 2 x 0.64mm

	Item no.	Article designation	Approval	Sheath material	Temperature Fixed installation	Feature
	2170820	UNITRONIC® BUS PB FC	UL/CSA CMG	PVC, violet	-40°C to +80°C	-
Fixed installation	2170326	UNITRONIC® BUS PB-H FC	UL/CSA CMG	Halogen-free, violet	-25°C to +70°C	Halogen-free
	2170330	UNITRONIC® BUS PB P FC	UL/CSA CMX	PUR, violet	-40°C to +70°C	Abrasion-resistant sheath
inst	2170333	UNITRONIC® BUS PB PE FC	-	PE, black	-40°C to +60°C	For the food industry
Fixed	2170853	UNITRONIC® BUS PB FRNC FC	UL/CSA CMG	FRNC, violet	-30°C to +80°C	Halogen-free / less fumes
	2170323	UNITRONIC® BUS PB BURIAL FC	-	PVC /PE, black	-40°C to +60°C	Suitable for direct burial UV-resistant
<u>a</u> <u>a</u>	2170826	UNITRONIC® BUS PB 7-W FC	UL/CSA CMG	PVC, violet	-40°C to +80°C	-
Flexible installation	2170310	UNITRONIC® BUS PB Y 7-W FC BK	-	PVC, black	-40°C to +80°C	Outdoors UV-resistant
Highly flexible installation	2170322	UNITRONIC® BUS PB FD P FC	UL/CSA CMX	PUR, violet	-40°C to +80°C	Suitable for drag chains
	2170854	UNITRONIC® BUS PB FD FRNC FC	UL/CSA CMX	FRNC, violet	-40°C to +80°C	Suitable for drag chains Halogen-free/less fumes



## Benefits of Fast Connect technology

### 1. Stripping with the FC STRIP stripping tool

- The special structure of the Fast Connect cables with an inner sheath makes it possible to use the Fast Connect STRIP stripping tool.
- Reduction of connection times by removing outer sheath and braided screen in just one step
- · Specification of the stripping length is not necessary
- Prevention of short circuits between screening and core due to preset stripping lengths



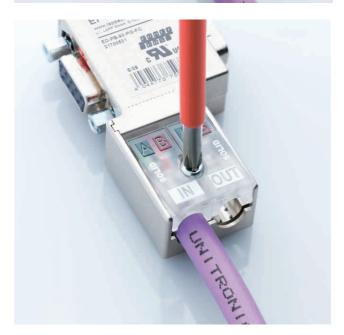
#### 2. Contacting the cores

- Flexibility due to assembly of the optimal cable length on site
- Prevention of incorrect connections with transparent contact lid with imprinted colour coding
- Contact assignment can be inspected when closed
- Time and cost savings due to fast and simple connector assembly



### 3. Fixing and securing

- When the lid is closed, the precision blades create the contact with the cores
- The cable is automatically strain relieved
- A standard screwdriver can be used, no special tool needed



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