


# UNITRONIC® BUS Cables for PROFIBUS®

Industrial Grade cables according to the PROFIBUS® Organization for FAST CONNECT (FC) and Flexible & Continuous Flex Applications (UL) 



**UNITRONIC® BUS L2/FIP FC (P/N 2170820)** is a UL & CSA approved PROFIBUS® cable with an oil resistant and flame retardant violet PVC jacket. The cable has solid conductors for fast connection to an IDC connector. The cable has a foil and a tinned copper braid shield providing excellent protection against EMI interference.

**UNITRONIC® BUS L2/FIP-H FC (P/N 2170326)** is the same as above but with a halogen free jacket.

**UNITRONIC® BUS L2/FIP-PUR FC (P/N 2170330)** is the same as above but with a PUR jacket for more durable and chemical applications.

**UNITRONIC® BUS L2/FIP (P/N 2170219)** is a UL & CSA approved PROFIBUS® cable with an oil resistant and flame retardant violet PVC jacket. The cable has solid conductors for standard network connections. The cable has a foil and a tinned copper braid shield providing excellent protection against EMI interference.



**UNITRONIC® BUS L2/FIP (P/N 2170224)** is a 7-strand PROFIBUS® cable with an oil resistant and flame retardant violet PVC jacket. It is designed for applications with vibration and since it is stranded, it is easier to install.



**UNITRONIC® BUS PA FC (P/N 2170334 & 2170335)** are UL & CSA approved PROFIBUS® cables with an oil resistant and flame retardant PVC jacket. The PA series is for use in hazardous and intrinsically safe areas. P/N 2170334 has a blue jacket for intrinsically safe, while, P/N 2170335 has a black jacket. Both have a solid copper core for fast connection to IDC connectors.

**UNITRONIC® BUS FD P L2/FIP FC (P/N 2170322)** is a UL & CSA approved PROFIBUS® cable with an oil resistant and flame retardant violet PUR jacket. It is designed for continuous flex applications and has special foil for flexing and a tinned copper braid shield providing excellent noise protection and integrity during flex motion.

## Technical Data:

 Minimum bend radius for installation:	5 x cable diameter	 Color code:	one pair: red & green
Continuous Flex:	12.5 x cable diameter (2170322)	 Shielding:	Aluminum laminated foil & copper braid. Special foil used for Flex version (2170322)
 Operating voltage:	300 V	 Approvals:	UL/CSA (CMX) UL/CSA (CM) P/N 2170326 2170224 has no UL/CSA approvals

Part Number	Description	AWG/ Pairs	Jacket	Nominal Outer Diameter		Mutual Capacitance		Impedance		Temperature
				inches	mm	pF/Ft	pF/m	Ohms		
2170820	BUS L2/FIP FC	22/1	PVC	.315	8.0	8.7	28.5	150	60° C	
2170326	BUS L2/FIP-H FC	22/1	Halogen Free	.315	8.0	8.7	28.5	150	60° C	
2170330	BUS L2/FIP-PUR FC	22/1	PUR	.315	8.0	8.7	28.5	150	70° C	
2170334	BUS PA FC (Blue)	18/1	PVC	.315	8.0	15.2	50.0	100	60° C	
2170335	BUS PA FC (Black)	18/1	PVC	.315	8.0	15.2	50.0	100	60° C	
2170219	BUS L2/FIP	22/1	PVC	.315	8.0	9.1	30.0	150	80° C	
2170224	BUS L2/FIP	22/1	PVC	.315	8.0	8.5	28.0	150	80° C	
2170322	BUS FD P L2/FIP	24/1	PUR	.315	8.0	8.5	28.0	150	80° C	

1-800-774-3539  
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# UNITRONIC® EtherLine® FD P Cat.5 Plus

Industrial Grade ETHERNET cable for Continuous Flex Applications

LAPP KABEL STUTTGART UNITRONIC® Etherline® ContinuousFlex



UNITRONIC® Etherline® Cat.5 Plus (continuous flex) is a halogen free, fine stranded, oil resistant PUR cable designed for continuous flex applications. The specially designed Internal Core Wrap ensures proper cable performance during flex motion. The cable meets standard EIA/TIA-568; TSB-36 & ISO/IEC 11801 “Generic Cabling for Customer Premises” for class “D” links, UNITRONIC® EtherLine® FD P Cat.5 Plus (continuous flex) has special foil for flexing and a tinned copper braid shield providing excellent noise protection and integrity during flexing.

## Technical Data:

<input checked="" type="checkbox"/> Minimum bend radius Stationary:	5 x cable diameter	<input checked="" type="checkbox"/> Characteristic Impedance:	100 Ohms, +/- 15% @ 1-200 MHz
Continuous Flex:	12.5 x cable diameter	<input checked="" type="checkbox"/> Color code::	P/N 2170289 white/orange- orange white/green- green
<input checked="" type="checkbox"/> Temperature Range: Static:	-40°C to +50°C	P/N 2170489	white-blue, white-orange white-green, white-brown
Flexing:	-5°C to +50°C	<input checked="" type="checkbox"/> Approvals:	EIA/TIA-568; TSB-36 ISO/IEC 11801
<input checked="" type="checkbox"/> Operating voltage:	125V peak/ Not for power purposes		

Part Number	Description	AWG/Pairs	Nominal Outer Diameter		Approx. Weight	
			inches	mm	lbs/mft	kg/km
2170289 (19/38)	For continuous flex *	26/2pr	.228	5.8	28	45
2170489 (19/38)	For continuous flex *	26/4pr	.248	6.3	34	54

Product testing is 2.5 million flex motions and still going. During the cable track testing, the cable maintains its electrical properties and mechanical integrity.

Special Note for Continuous Flex Cables: The electrical properties can only be achieved by foam insulation. Do not exceed the recommended bend radius or excessive speeds (10 ft/sec) for flexing applications.

Cat.5 Plus = Cat.5e

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