Ferrules

Panduit® Pan-Term® Ferrule end sleeves terminate stranded wire into terminal blocks with superior termination performance. A wide assortment of ferrule styles and tool designs provide a proven way to make reliable connections, especially for limited space applications. Insulation flare allows for ease of wire insertion and eliminates loose strands of wire. Encapsulated crimp contains loose wires to eliminate stray wire breakage.

- **Ferrules are UL 486F (1/0-20 AWG) listed and CSA certified**
- **Ideal for control panel and terminal block applications**
- **Insulated single wire range of #26 – 300 kcmil sizes meets DIN color code standards**
- **Insulated twin wire end sleeve range of #22 – 6 AWG, sizes meets DIN color code standard**
- **Non-insulated wire range of #24 – 500 kcmil**
- **Insulated ferrules single wire range #20 – 14 AWG, available in strips of 50 for use with the semiautomatic ferrule crimping tool, CT-1000, for improved reliability and productivity**
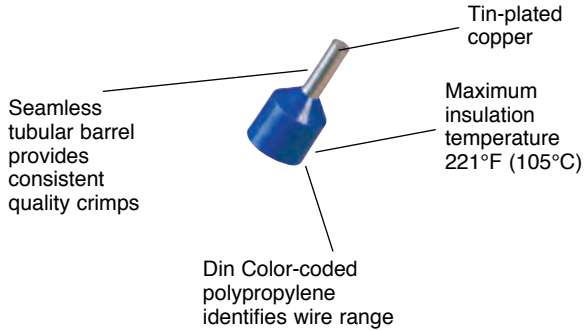- **Wide assortment of controlled cycle, crimping tools for reliable connections at the lowest installed cost**

Panduit continually provides new designs to meet the application challenges encountered by our customers. Panduit offers a wide assortment of Pan-Term® termination products to meet customer needs at the lowest installed cost.

Features and Benefits – Pan-Term® Ferrules

Panduit® ferrules are available for wiring applications from #26 – 500 kcmil. Offerings include insulated and non-insulated ferrules, in single-wire or double-wire configurations. Insulated ferrules are color-coded to DIN standards. Crimped on the metal barrel these ferrules provide improved performance for terminal block and panel building applications. All Panduit ferrules are CSA Certified. Panduit 1/0 to 20 AWG ferrules are UL listed per UL486F Standard.
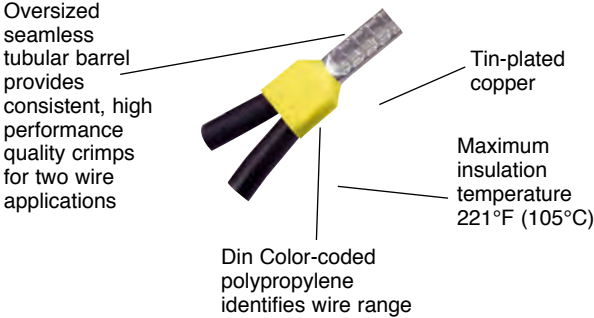
Insulated Ferrules — Single Wire Type FSD

Tin-plated copper

Maximum insulation temperature 221°F (105°C)

Seamless tubular barrel provides consistent quality crimps

Din Color-coded polypropylene identifies wire range

Insulated Ferrules — Twin Wire Type FTD

Oversized seamless tubular barrel provides consistent, high performance quality crimps for two wire applications

Tin-plated copper

Maximum insulation temperature 221°F (105°C)

Din Color-coded polypropylene identifies wire range

Non-Insulated Ferrules Type F

Seamless tubular barrel provides consistent quality crimps

Internally beveled barrel for quick easy wire insertion

Tin-plated copper
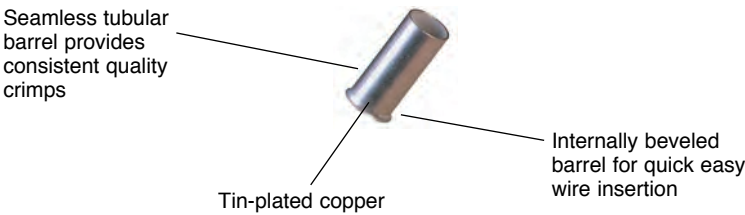
Panduit designs and manufactures a full line of labeling products, software, and printers to assist you with your labeling requirements.

See pages E1.1 – E2.27.

Order number of pieces required, in multiples of Standard Package Quantity.

Selection Guide – Pan-Term® Ferrules

Material	Style	Feature	Type	Page Number
Polypropylene	Ferrules, Single Wire	DIN Color Code	FSD	D1.56
	Ferrules, Single Wire	On Strips	FSD	D1.59
	Ferrules, Twin Wire	DIN Color Code	FTD	D1.59
Non-Insulated	Ferrules	Seamless Tube	F	D1.60, D1.61

Ferrules

Part Number System for Pan-Term® Ferrules

F	**S**	**D**	**72**	**–**	**8**
Type	Wire Type	Color Code	Wire Size		PIN Length

F = Ferrule

S = Single
T = Twin
Blank = Non-Insulated

D = DIN

A. System Overview
B1. Cable Ties
B2. Cable Accessories
B3. Stainless Steel Cable Ties & Accessories
C1. Wiring Duct
C2. Abrasion Protection
C3. Cable Management
D1. Terminals
D2. Power Connectors
D3. Grounding Connectors
E1. Labeling Systems
E2. Labels
E3. Pre-Printed & Write-On Markers
E4. Permanent Identification
E5. Industrial Safety Solutions
F. Keystone Cabling Systems
G. Part Number Index

Insulated Ferrules – Twin Wire DIN End Sleeve

Type FTD

- Meets DIN standards for twin wire containment
- Polypropylene insulation housing conforms to DIN color requirements
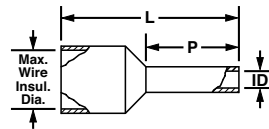- Funnel entry for faster insertion and lower installed cost
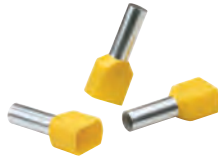
- Designed with a seamless barrel to contain loose wire strands for superior terminations
- Eases insertion of wire into terminal block
- Suitable for limited space panel applications
- Multiple pin lengths available for a variety of terminal blocks

Part Number	Wire Size		Color Code	Max. Wire Insul. Dia.		Figure Dimensions						Wire Strip Length		Recommended Installation Tool	Std. Pkg. Qty.
						L		P		ID					
	AWG	mm²		In.	mm	In.	mm	In.	mm	In.	mm	In.	mm		
FTD75-8-D*	22-20 AWG	0.5	White	0.87	2.2	0.59	15.0	0.31	8.0	0.06	1.5	7/16	11.2	CT-1002, CT-1003, CT-1123	500
FTD76-8-D	18 AWG	0.75	Gray	0.09	2.4	0.59	15.0	0.31	8.0	0.07	1.8	7/16	11.2		500
FTD76-10-D				0.09	2.4	0.67	17.0	0.39	10.0	0.07	1.8	9/16	14.0		500
FTD77-8-D		1.0	Red	0.11	2.7	0.59	15.0	0.31	8.0	0.08	2.1	7/16	11.2		500
FTD77-10-D				0.11	2.7	0.67	17.0	0.39	10.0	0.08	2.1	9/16	14.0		500
FTD78-8-D	16 AWG	1.5	Black	0.12	3.0	0.63	16.0	0.31	8.0	0.09	2.3	7/16	11.2		500
FTD78-12-D				0.12	3.0	0.79	20.0	0.47	12.0	0.09	2.3	21/32	16.8		500
FTD80-10-TL	14 AWG	2.5	Blue	0.15	3.7	0.73	18.5	0.39	10.0	0.11	2.9	9/16	14.0		250
FTD80-13-TL				0.15	3.7	0.85	21.5	0.51	13.0	0.11	2.9	21/32	16.2		250
FTD81-12-C+	12 AWG	4.0	Gray	0.17	4.3	0.91	23.0	0.47	12.0	0.15	3.8	23/32	16.8		100
FTD82-14-C+	10 AWG	6.0	Yellow	0.19	4.8	0.98	25.0	0.55	14.0	0.18	4.6	21/32	19.6	CT-1003, CT-1004, CT-1104	100
FTD83-14-C	8 AWG	10.0	Red	0.28	7.1	1.02	26.0	0.55	14.0	0.26	6.6	3/4	19.0	CT-1005	100
FTD84-16-C	6 AWG	16.0	Blue	0.35	8.9	1.22	31.0	0.63	16.0	0.33	8.4	13/16	21.0		100

*UL listed with 20 AWG only, UL486F scope is 1/0-20AWG. White is DIN color for 20 AWG

+Tool/Part is not a UL listed combination. For crimping tool information see www.panduit.com/tools.
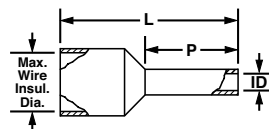
Insulated Ferrules on Strips – Single Wire

Type FSD

- Polypropylene insulation housing available in DIN standard colors in strips of 50
- Continuously molded design provides consistent placement of ferrules in tool to ensure fast, reliable terminations

- Available in #20 – 14 AWG featuring a seamless barrel design to contain loose wire strands for superior terminations
- Designed for use with the Semiautomatic Ferrule Crimping Tool CT-1000 for medium volume applications

Part Number	Wire Size		Color Code	Max. Wire Insul. Dia.		Figure Dimensions						Wire Strip Length		Recommended Installation Tool	Std. Pkg. Qty.
						L		P		ID					
	AWG	mm²		In.	mm	In.	mm	In.	mm	In.	mm	In.	mm		
DIN End Sleeves															
FSD75-8-DSL10	20 AWG	0.50	White	0.10	2.6	0.60	15.2	0.31	8.0	0.04	1.0	13/32	10.0	CT-1000	500
FSD76-8-DSL8	18 AWG	0.75	Gray	0.11	2.7	0.60	15.2	0.31	8.0	0.06	1.5	13/32	10.0		500
FSD77-8-DSL2		1.00	Red	0.12	3.0	0.60	15.2	0.31	8.0	0.07	1.8	13/32	10.0		500
FSD78-8-DSL0	16 AWG	1.50	Black	0.13	3.2	0.60	15.2	0.31	8.0	0.09	2.3	13/32	10.0		500
FSD80-8-DSL6	14 AWG	2.50	Blue	0.16	4.0	0.60	15.2	0.31	8.0	0.09	2.3	13/32	10.0		500

For crimping tool information see www.panduit.com/tools.