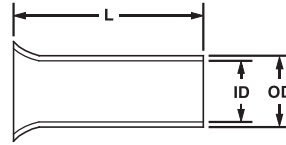




## Ferrules, Non-Insulated

### Type F

- Designed with a seamless barrel to contain loose wire strands for superior terminations
- Eases insertion of wire into terminal block
- Meets DIN standards for wire containment
- Suitable for limited space panel applications
- Multiple pin lengths available for a variety of terminal blocks



Part Number	Wire Size		Figure Dimensions						Wire Strip Length		Recommended Installation Tool	Std. Pkg. Qty.						
			L		ID		OD											
	AWG	mm <sup>2</sup>	In.	mm	In.	mm	In.	mm	In.	mm								
F73-5-M*	24 AWG	0.25	0.20	5.0	0.03	0.80	0.04	1.1	7/32	5.0	CT-1002, CT-1123, CT-2523CH***	1000						
F73-7-M*		0.25	0.28	7.0	0.03	0.80	0.04	1.1	9/32	7.0								
F74-5-M*	24 – 22 AWG	0.34	0.20	5.0	0.04	0.90	0.05	1.2	7/32	5.0			CD-090**, CT-1002, CT-1003, CT-1090, CT-1123, CT-1160, CT-1170, CT-2523CH***	1000				
F74-7-M*		0.34	0.28	7.0	0.04	0.90	0.05	1.2	9/32	7.0								
F75-6-M+	22 – 20 AWG	0.50	0.24	6.0	0.04	1.0	0.05	1.3	1/4	6.0					CD-090**, CT-1002, CT-1003, CT-1090, CT-1123, CT-1160, CT-1170, CT-2523CH***	1000		
F75-8-M+		0.50	0.31	8.0	0.04	1.0	0.05	1.3	5/16	8.0								
F75-10-M+		0.50	0.39	10.0	0.04	1.0	0.05	1.3	13/32	10.0								
F76-6-M	18 AWG	0.75	0.24	6.0	0.05	1.2	0.06	1.5	1/4	6.0							CD-090**, CT-1002, CT-1003, CT-1090, CT-1123, CT-1160, CT-1170, CT-2523CH***	1000
F76-8-M		0.75	0.31	8.0	0.05	1.2	0.06	1.5	5/16	8.0								
F76-10-M		0.75	0.39	10.0	0.05	1.2	0.06	1.5	13/32	10.0								
F76-12-M		0.75	0.47	12.0	0.05	1.2	0.06	1.5	15/32	12.0	CD-090**, CT-1002, CT-1003, CT-1090, CT-1123, CT-1160, CT-1170, CT-2523CH***	1000						
F77-6-M	-	1.0	0.24	6.0	0.06	1.4	0.07	1.7	1/4	6.0								
F77-7-M		1.0	0.28	7.0	0.06	1.4	0.07	1.7	9/32	7.0								
F77-8-M		1.0	0.31	8.0	0.06	1.4	0.07	1.7	5/16	8.0								
F77-10-M		1.0	0.39	10.0	0.06	1.4	0.07	1.7	13/32	10.0			CD-090**, CT-1002, CT-1003, CT-1090, CT-1123, CT-1160, CT-1170, CT-2523CH***	1000				
F77-12-M		1.0	0.47	12.0	0.06	1.4	0.07	1.7	15/32	12.0								
F78-7-M	16 AWG	1.5	0.28	7.0	0.07	1.7	0.08	2.0	9/32	7.0								
F78-8-M		1.5	0.31	8.0	0.07	1.7	0.08	2.0	5/16	8.0								
F78-10-M		1.5	0.39	10.0	0.07	1.7	0.08	2.0	13/32	10.0								
F78-12-M		1.5	0.47	12.0	0.07	1.7	0.08	2.0	15/32	12.0					CD-090**, CT-1002, CT-1003, CT-1090, CT-1123, CT-1160, CT-1170, CT-2523CH***	1000		
F78-15-M		1.5	0.59	15.0	0.07	1.7	0.08	2.0	19/32	15.0								
F78-18-M		1.5	0.71	18.0	0.07	1.7	0.08	2.0	23/32	18.0								
F78-20-M		1.5	0.79	20.0	0.07	1.7	0.08	2.0	25/32	20.0								
F80-7-M	14 AWG	2.5	0.28	7.0	0.09	2.2	0.10	2.5	9/32	7.0	CD-090**, CT-1002, CT-1003, CT-1090, CT-1123, CT-1160, CT-1170, CT-2523CH***	1000						
F80-8-M		2.5	0.31	8.0	0.09	2.2	0.10	2.5	5/16	8.0								
F80-10-M		2.5	0.39	10.0	0.09	2.2	0.10	2.5	13/32	10.0								
F80-12-M		2.5	0.47	12.0	0.09	2.2	0.10	2.5	15/32	12.0								
F80-15-M		2.5	0.59	15.0	0.09	2.2	0.10	2.5	19/32	15.0								
F80-18-M		2.5	0.71	18.0	0.09	2.2	0.10	2.5	23/32	18.0			CD-090**, CT-1002, CT-1003, CT-1090, CT-1123, CT-1160, CT-1170, CT-2523CH***	1000				
F80-20-M		2.5	0.79	20.0	0.09	2.2	0.10	2.5	25/32	20.0								
F81-9-M	12 AWG	4.0	0.35	9.0	0.11	2.8	0.13	3.2	11/32	8.0								
F81-10-M		4.0	0.39	10.0	0.11	2.8	0.13	3.2	13/32	10.0								
F81-12-M		4.0	0.47	12.0	0.11	2.8	0.13	3.2	15/32	12.0								
F81-15-M		4.0	0.59	15.0	0.11	2.8	0.13	3.2	19/32	15.0								
F81-18-M		4.0	0.71	18.0	0.11	2.8	0.13	3.2	23/32	18.0								
F81-20-M		4.0	0.79	20.0	0.11	2.8	0.13	3.2	25/32	20.0	CD-090**, CT-1002, CT-1003, CT-1090, CT-1123, CT-1160, CT-1170, CT-2523CH***	1000						
F82-10-M‡	10 AWG	6.0	0.39	10.0	0.14	3.5	0.15	3.9	13/32	10.0								
F82-12-M‡		6.0	0.47	12.0	0.14	3.5	0.15	3.9	15/32	12.0								
F82-15-M‡		6.0	0.59	15.0	0.14	3.5	0.15	3.9	19/32	15.0								
F82-18-M‡		6.0	0.71	18.0	0.14	3.5	0.15	3.9	23/32	18.0								
F82-20-M‡		6.0	0.79	20.0	0.14	3.5	0.15	3.9	25/32	20.0								

\*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](http://www.panduit.com/tools).

\*\*For use with CT-2300/ST or CT-2500CH crimp head

\*\*\*Crimp head for use with CT-2500/L tool



Ferrules, Non-Insulated (continued)

Type F

Part Number	Wire Size		Figure Dimensions						Wire Strip Length		Recommended Installation Tool	Std. Pkg. Qty.
			L		ID		OD					
	AWG	mm <sup>2</sup>	In.	mm	In.	mm	In.	mm	In.	mm		
F83-12-D‡	8 AWG	10.0	0.47	12.0	0.18	4.5	0.19	4.9	15/32	12.0	CD-090**, +CT-1003, +CT-1004, CT-1090, CT-1104, CT-1123, CT-1160, CT-1170, CT-2504***, CT-2523CH***	500
F83-15-D‡		10.0	0.59	15.0	0.18	4.5	0.19	4.9	19/32	15.0		
F83-18-D‡		10.0	0.71	18.0	0.18	4.5	0.19	4.9	23/32	18.0		
F83-20-D‡		10.0	0.79	20.0	0.18	4.5	0.19	4.9	25/32	20.0		
F83-25-D‡		10.0	0.98	25.0	0.18	4.5	0.19	4.9	31/32	25.0		
F84-12-TL‡	6 AWG	16.0	0.47	12.0	0.23	5.8	0.24	6.2	15/32	12.0	+CT-1004, CT-1104, CT-2504CH***	250
F84-15-TL‡		16.0	0.59	15.0	0.23	5.8	0.24	6.2	19/32	15.0		
F84-18-TL‡		16.0	0.71	18.0	0.23	5.8	0.24	6.2	23/32	18.0		
F84-20-TL‡		16.0	0.79	20.0	0.23	5.8	0.24	6.2	25/32	20.0		
F84-25-TL‡		16.0	0.98	25.0	0.23	5.8	0.24	6.2	31/32	25.0		
F84-32-TL‡		16.0	1.26	32.0	0.23	5.8	0.24	6.2	1 1/4	32.0		
F85-12-C	4 AWG	25.0	0.47	12.0	0.29	7.3	0.30	7.7	15/32	12.0	CT-1005	100
F85-15-C		25.0	0.59	15.0	0.29	7.3	0.30	7.7	19/32	15.0		
F85-18-C		25.0	0.71	18.0	0.29	7.3	0.30	7.7	23/32	18.0		
F85-25-C		25.0	0.98	25.0	0.29	7.3	0.30	7.7	31/32	25.0		
F85-32-C		25.0	1.26	32.0	0.29	7.3	0.30	7.7	1 1/4	32.0		
F86-18-C	2 AWG	35.0	0.71	18.0	0.33	8.3	0.34	8.7	23/32	18.0	CT-1006 CD-920-F87*** CT-2001-F87***	100
F86-20-C		35.0	0.79	20.0	0.33	8.3	0.34	8.7	25/32	20.0		
F86-25-C		35.0	0.98	25.0	0.33	8.3	0.34	8.7	31/32	25.0		
F86-32-C		35.0	1.26	32.0	0.33	8.3	0.34	8.7	1 1/4	32.0		
F87-18-C	1 AWG-1/0	50.0	0.71	18.0	0.41	10.3	0.43	10.9	23/32	18.0	CD-920-F89** CD-2001-F89***	50
F87-22-C		50.0	0.87	22.0	0.41	10.3	0.43	10.9	7/8	22.0		
F87-25-C		50.0	0.98	25.0	0.41	10.3	0.43	10.9	31/32	25.0		
F87-32-C		50.0	1.26	32.0	0.41	10.3	0.43	10.9	1 1/4	32.0		
F89-25-L*	2/0	70.0	0.98	25.0	0.49	12.5	0.52	13.3	31/32	25.0	CD-920-F90** CD-2001-F90***	50
F89-32-L*	2/0	70.0	1.26	32.0	0.49	12.5	0.52	13.3	1 1/4	32.0		
F90-25-L*	3/0	95.0	0.98	25.0	0.57	14.5	0.60	15.3	31/32	25.0	CD-920-F91** CD-2001-F91***	50
F90-30-L*		95.0	1.18	30.0	0.57	14.5	0.60	15.3	13/16	30.0		
F90-32-L*		95.0	1.26	32.0	0.57	14.5	0.60	15.3	1 1/4	32.0		
F91-32-L*	4/0-250 kcmil	120.0	1.26	32.0	0.65	16.5	0.69	16.5	1 1/4	32.0	CD-920-F92** CD-2001-F92***	50
F91-40-L*		120.0	1.57	40.0	0.65	16.5	0.69	16.5	1 19/32	40.0		
F92-32-L*	300 kcmil	150	1.26	32.0	0.73	18.5	0.77	19.5	1 1/4	32.0	CD-920-F93** CD-2001-F93***	25
F92-38-L*		150	1.50	38.0	0.73	18.5	0.77	19.5	1 1/2	38.0		
F93-32-Q*	350 kcmil	185	1.26	32.0	0.79	20.0	0.83	21.2	1 1/4	32.0	CD-920-F94** CD-2001-F94***	25
F93-40-Q*		185	1.57	40.0	0.79	20.0	0.83	21.2	1 19/32	40.0		
F94-40-Q*	400 kcmil	240	1.57	40.0	0.90	22.8	0.94	24.0	1 19/32	40.0		

\*Not UL listed, UL486F scope is 20 - 1/0 AWG only  
 \*\*Dies compatible for use with CT-3001/ST, CT-3001/CCP, CT-930LPCH tools  
 \*\*\*Dies compatible for use with CT-2001 and CT-3001 tools  
 CD-920-F series dies require adapter UA22 for CT3001/CCP tool  
 \*\*For use with CT-2300/ST or CT-2500CH crimp head  
 \*\*\*Crimp head for use with CT-2500/L tool  
 Visit [www.panduit.com/tools](http://www.panduit.com/tools) for additional information