



Commercial Products Catalog

Light Industrial, Commercial & Residential

Commercial Products Catalog

Who We Are

Tyco Electronics is a global provider of engineered electronic components for thousands of consumer and industrial products; network solutions and systems for telecommunications and energy markets; and wireless systems for critical communications, radar and defense applications. Our company was founded by combining many well-known, trusted brands – Raychem, AMP, ALR, Buchanan, DEK and many others.

About This Catalog

This Commercial Products catalog is intended for applications in the light industrial, commercial and residential electrical markets. We have provided several features in the design of this catalog to assist you in choosing the right product for your needs:

Product Organization

- The products and the order of this catalog were selected with the user in mind
- Sub-headings are available for quick references

Point-of-Purchase (POP) Notations

- Each ordering chart indicates packaging choices for bulk or point-of-purchase
- Part numbers have been highlighted with color and/or in bold where POP packaging is available

Our Goal

We are committed to providing our customers:

- A single point of contact
- 24-hour emergency response
- Flexible ordering solutions
- Minimal order requirements with free freight
- Highly knowledgeable regional representation
- Free on-site training
- Global product offering with local awareness

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Crimp Connectors



Ring Terminals

Selection information (dimensions shown in inches/millimeters)

Catalog Number	Wire Size	Stud Size	Width	Length	Type	Std Pack
AMP-0-0036160-0	16-14 AWG	#10 Stud	.343 (8.71)	.859 (21.82)	Nylon	1000
CPGI-8-36160-1	16-14 AWG	#10 Stud	.343 (8.71)	.859 (21.82)	Nylon	500
AMPS-0-0031886-0	22-16 AWG	#8 Stud	.281 (7.14)	.797 (20.24)	Nylon	1000
CPGI-8-31886-1	22-16 AWG	#8 Stud	.281 (7.14)	.797 (20.24)	Nylon	500
AMPS-0-0031894-0	22-16 AWG	1/4" Stud	.469 (11.91)	1.078 (27.38)	Nylon	1000
CPGI-8-31894-1	22-16 AWG	1/4" Stud	.469 (11.91)	1.078 (27.38)	Nylon	500
AMPS-0-0034142-0	22-16 AWG	#6 Stud	.218 (5.54)	.684 (17.37)	Vinyl	1000
CPGI-8-34142-1	22-16 AWG	#6 Stud	.218 (5.54)	.684 (17.37)	Vinyl	500
AMPS-0-0034145-0	22-16 AWG	#8 Stud	.281 (7.14)	.809 (20.55)	Vinyl	1000
CPGI-8-34145-1	22-16 AWG	#8 Stud	.281 (7.14)	.809 (20.55)	Vinyl	500
AMPS-0-0034146-0	22-16 AWG	#10 Stud	.281 (7.14)	.809 (20.55)	Vinyl	1000
CPGI-8-34146-1	22-16 AWG	#10 Stud	.281 (7.14)	.809 (20.55)	Vinyl	500
AMPS-0-0034150-0	22-16 AWG	1/4" Stud	.469 (11.91)	1.090 (27.69)	Vinyl	1000
CPGI-8-34150-1	22-16 AWG	1/4" Stud	.469 (11.91)	1.090 (27.69)	Vinyl	500
AMPS-0-0034158-0	16-14 AWG	#6 Stud	.250 (6.35)	.715 (18.16)	Vinyl	1000
CPGI-8-34158-1	16-14 AWG	#6 Stud	.250 (6.35)	.715 (18.16)	Vinyl	500
AMPS-0-0034160-0	16-14 AWG	#8 Stud	.343 (8.71)	.871 (22.12)	Vinyl	1000
CPGI-8-34160-1	16-14 AWG	#8 Stud	.343 (8.71)	.871 (22.12)	Vinyl	250
AMPS-0-0034161-0	16-14 AWG	#10 Stud	.343 (8.71)	.871 (22.12)	Vinyl	1000
CPGI-8-34161-1	16-14 AWG	#10 Stud	.343 (8.71)	.871 (22.12)	Vinyl	250
AMPS-0-0034162-0	16-14 AWG	1/4" Stud	.469 (11.91)	1.090 (27.69)	Vinyl	1000
CPGI-8-34162-1	16-14 AWG	1/4" Stud	.469 (11.91)	1.090 (27.69)	Vinyl	250
AMPS-0-0034168-0	12-10 AWG	#6 Stud	.375 (9.53)	1.098 (27.89)	Vinyl	500
CPGI-8-34168-2	12-10 AWG	#6 Stud	.375 (9.53)	1.098 (27.89)	Vinyl	250
AMPS-0-0034853-0	12-10 AWG	#8 Stud	.375 (9.53)	1.098 (27.89)	Vinyl	500
CPGI-8-34169-2	12-10 AWG	#8 Stud	.375 (9.53)	1.098 (27.89)	Vinyl	250
AMPS-0-0034854-0	12-10 AWG	#10 Stud	.375 (9.53)	1.098 (27.89)	Vinyl	500
CPGI-8-34170-1	12-10 AWG	#10 Stud	.375 (9.53)	1.098 (27.89)	Vinyl	250
AMPS-0-0034855-0	12-10 AWG	1/4" Stud	.531 (13.49)	1.327 (33.71)	Vinyl	500
CPGI-8-34171-2	12-10 AWG	1/4" Stud	.531 (13.49)	1.327 (33.71)	Vinyl	250
AMPS-0-0035108-0	12-10 AWG	#8 Stud	.375 (9.53)	1.083 (27.21)	Nylon	500
CPGI-8-35108-1	12-10 AWG	#8 Stud	.375 (9.53)	1.083 (27.21)	Nylon	250
AMPS-0-0035109-0	12-10 AWG	#10 Stud	.375 (9.53)	1.083 (27.51)	Nylon	500
CPGI-8-35109-1	12-10 AWG	#10 Stud	.375 (9.53)	1.083 (27.51)	Nylon	250
AMPS-0-0035110-0	12-10 AWG	1/4" Stud	.531 (13.49)	1.322 (33.58)	Nylon	500
CPGI-8-35110-1	12-10 AWG	1/4" Stud	.531 (13.49)	1.322 (33.58)	Nylon	250
AMPS-0-0035149-0	12-10 AWG	#6 Stud	.281 (7.14)	.953 (24.21)	Nylon	500
CPGI-8-35149-2	12-10 AWG	#6 Stud	.281 (7.14)	.953 (24.21)	Nylon	250
AMPS-0-0036152-0	22-16 AWG	#6 Stud	.281 (7.14)	.797 (20.24)	Nylon	1000
CPGI-8-36152-1	22-16 AWG	#6 Stud	.281 (7.14)	.797 (20.24)	Nylon	500
AMPS-0-0036154-0	22-16 AWG	#10 Stud	.312 (7.92)	.844 (21.44)	Nylon	1000
CPGI-8-36154-1	22-16 AWG	#10 Stud	.312 (7.92)	.844 (21.44)	Nylon	500
AMPS-0-0320565-0	16-14 AWG	#8 Stud	.343 (8.71)	.859 (21.82)	Nylon	1000
CPGI-8-320565-1	16-14 AWG	#8 Stud	.343 (8.71)	.859 (21.82)	Nylon	500
AMPS-0-0320619-0	16-14 AWG	#6 Stud	.250 (6.35)	.703 (17.86)	Nylon	1000
CPGI-8-320619-1	16-14 AWG	#6 Stud	.250 (6.35)	.703 (17.86)	Nylon	500
AMPS-0-0321045-0	16-14 AWG	1/4" Stud	.469 (11.91)	1.078 (27.38)	Nylon	1000
CPGI-8-321045-1	16-14 AWG	1/4" Stud	.469 (11.91)	1.078 (27.38)	Nylon	250
AMPS-0-0052041-3	8 AWG	1/4" Stud	.478 (12.14)	1.600 (40.64)	Vinyl	100
AMPS-0-0052042-3	6 AWG	1/4" Stud	.500 (12.70)	1.869 (47.47)	Vinyl	100
AMPS-0-0052043-2	4 AWG	#10 Stud	.546 (13.87)	1.948 (49.48)	Vinyl	100
AMPS-0-0052043-3	4 AWG	1/4" Stud	.546 (13.87)	1.948 (49.48)	Vinyl	100
AMPS-0-0052263-1	8 AWG	#10 Stud	.431 (10.95)	1.556 (39.52)	Vinyl	100
AMPS-0-0052265-0	6 AWG	#10 Stud	.468 (11.89)	1.719 (43.66)	Vinyl	100



Crimp Connectors



Spade Terminals

Selection information

Catalog Number	Wire Size	Stud Size	Width	Length	Type	Std. Pack
AMP-0-0035559-0	16-14 AWG	#6 Stud	.297 (7.54)	.753 (19.13)	Nylon	1000
CPGI-8-35559-1	16-14 AWG	#6 Stud	.297 (7.54)	.753 (19.13)	Nylon	500
AMPS-0-0032053-0	22-16 AWG	#8 Stud	.375 (9.53)	.908 (23.06)	Nylon	1000
CPGI-8-32053-1	22-16 AWG	#8 Stud	.375 (9.53)	.908 (23.06)	Nylon	500
AMPS-0-0032054-0	22-16 AWG	#10 Stud	.375 (9.53)	.908 (23.06)	Nylon	1000
CPGI-8-32054-1	22-16 AWG	#10 Stud	.375 (9.53)	.908 (23.06)	Nylon	500
AMPS-0-0032060-0	16-14 AWG	#10 Stud	.385 (9.78)	.908 (23.06)	Nylon	1000
CPGI-8-32060-1	16-14 AWG	#10 Stud	.385 (9.78)	.908 (23.06)	Nylon	250
AMPS-0-0032588-0	12-10 AWG	#8 Stud	.406 (10.31)	1.095 (27.81)	Nylon	500
CPGI-8-32588-2	12-10 AWG	#8 Stud	.406 (10.31)	1.095 (27.81)	Nylon	250
AMPS-0-0032589-0	12-10 AWG	#10 Stud	.406 (10.31)	1.095 (27.81)	Nylon	500
CPGI-8-32589-2	12-10 AWG	#10 Stud	.406 (10.31)	1.095 (27.81)	Nylon	250
AMPS-0-0034155-0	22-16 AWG	#8 Stud	.375 (9.53)	.920 (23.37)	Vinyl	1000
CPGI-8-34155-1	22-16 AWG	#8 Stud	.375 (9.53)	.920 (23.37)	Vinyl	500
AMPS-0-0034156-0	22-16 AWG	#10 Stud	.375 (9.53)	.920 (23.37)	Vinyl	1000
CPGI-8-34156-1	22-16 AWG	#10 Stud	.375 (9.53)	.920 (23.37)	Vinyl	500
AMPS-0-0034166-0	16-14 AWG	#8 Stud	.385 (9.78)	.920 (23.37)	Vinyl	1000
CPGI-8-34166-1	16-14 AWG	#8 Stud	.385 (9.78)	.920 (23.37)	Vinyl	500
AMPS-0-0034167-0	16-14 AWG	#10 Stud	.385 (9.78)	.920 (23.37)	Vinyl	1000
CPGI-8-34167-1	16-14 AWG	#10 Stud	.385 (9.78)	.920 (23.37)	Vinyl	500
AMPS-0-0034176-0	12-10 AWG	#10 Stud	.406 (10.31)	1.095 (27.81)	Vinyl	500
CPGI-8-34176-1	12-10 AWG	#10 Stud	.406 (10.31)	1.095 (27.81)	Vinyl	250
AMPS-0-0034541-0	22-16 AWG	#6 Stud	.250 (6.35)	.846 (21.49)	Nylon	1000
CPGI-8-34541-1	22-16 AWG	#6 Stud	.250 (6.35)	.846 (21.49)	Nylon	500
AMPS-0-0320665-0	22-16 AWG	#6 Stud	.297 (7.54)	.765 (19.43)	Vinyl	1000
CPGI-8-320665-1	22-16 AWG	#6 Stud	.297 (7.54)	.765 (19.43)	Vinyl	500
AMPS-0-0321233-0	16-14 AWG	#8 Stud	.297 (7.54)	.753 (19.13)	Nylon	1000
CPGI-8-321233-1	16-14 AWG	#8 Stud	.297 (7.54)	.753 (19.13)	Nylon	500
AMPS-0-0322985-0	12-10 AWG	#6 Stud	.290 (7.37)	.954 (24.23)	Nylon	500
CPGI-8-322985-2	12-10 AWG	#6 Stud	.290 (7.37)	.954 (24.23)	Nylon	250
AMPS-0-0322994-0	16-14 AWG	#6 Stud	.297 (7.54)	.765 (19.43)	Vinyl	1000
CPGI-8-322994-1	16-14 AWG	#6 Stud	.297 (7.54)	.765 (19.43)	Vinyl	500



Female Disconnects

Selection information

Catalog Number	Wire Size	Series	Width	Length	Type	Std. Pack
AMP-0-0640903-1	22-18 AWG	.250 x .032	.300 (7.62)	.900 (22.86)	Nylon	1000
CPGI-8-640903-1	22-18 AWG	.250 x .032	.300 (7.62)	.900 (22.86)	Nylon	250
AMP-0-0640905-1	16-14 AWG	.250 x .032	.300 (7.62)	.900 (22.86)	Nylon	1000
CPGI-8-640905-1	16-14 AWG	.250 x .032	.300 (7.62)	.900 (22.86)	Nylon	250
AMP-0-0640907-1	12-10 AWG	.250 x .032	.300 (7.62)	1.012 (22.07)	Nylon	500
CPGI-8-640907-1	12-10 AWG	.250 x .032	.300 (7.62)	1.012 (22.07)	Nylon	250



Male Disconnects

Selection information

Catalog Number	Wire Size	Series	Type	Std. Pack
AMP-0-0066024-2	16-14 AWG	.250 x .032 (6.35 x 0.81)	Nylon	100
CPGI-66024-6	16-14 AWG	.250 x .032 (6.35 x 0.81)	Nylon	250
AMPS-0-0066023-2	22-16 AWG	.250 x .032 (6.35 x 0.81)	Nylon	500
CPGI-66023-2	22-16 AWG	.250 x .032 (6.35 x 0.81)	Nylon	250
AMPS-0-0066025-2	12-10 AWG	.250 x .032 (6.35 x 0.81)	Nylon	500
CPGI-66025-2	12-10 AWG	.250 x .032 (6.35 x 0.81)	Nylon	250



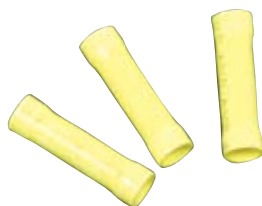
Crimp Connectors



Short Spring Spade Terminals

Selection information

Catalog Number	Wire Size	Stud Size	Width	Length	Type	Std. Pack
AMP-0-0052936-0	16-14 AWG	#8 Stud	.375 (9.53)	.860 (21.24)	Nylon	1000
CPGI-8-52936-1	16-14 AWG	#8 Stud	.375 (9.53)	.860 (21.24)	Nylon	250
AMPS-0-0052929-0	22-16 AWG	#6 Stud	.250 (6.35)	.799 (20.29)	Nylon	1000
CPGI-8-52929-1	22-16 AWG	#6 Stud	.250 (6.35)	.799 (20.29)	Nylon	250
AMPS-0-0052930-0	22-16 AWG	#8 Stud	.375 (9.53)	.860 (21.84)	Nylon	1000
CPGI-8-52930-1	22-16 AWG	#8 Stud	.375 (9.53)	.860 (21.84)	Nylon	250
AMPS-0-0052931-0	22-16 AWG	#10 Stud	.406 (10.31)	.908 (23.06)	Nylon	1000
CPGI-8-52931-1	22-16 AWG	#10 Stud	.406 (10.31)	.908 (23.06)	Nylon	250
AMPS-0-0052935-0	16-14 AWG	#6 Stud	.250 (6.35)	.799 (20.29)	Nylon	1000
CPGI-7-52935-1	16-14 AWG	#6 Stud	.250 (6.35)	.799 (20.29)	Nylon	250
AMPS-0-0052937-0	16-14 AWG	#10 Stud	.406 (10.31)	.908 (23.06)	Nylon	1000
CPGI-7-52937-1	16-14 AWG	#10 Stud	.406 (10.31)	.908 (23.06)	Nylon	250
AMPS-0-0052941-0	12-10 AWG	#6 Stud	.250 (6.35)	.959 (24.36)	Nylon	500
CPGI-8-52941-2	12-10 AWG	#6 Stud	.250 (6.35)	.959 (24.36)	Nylon	250
AMPS-0-0052942-0	12-10 AWG	#8 Stud	.375 (9.53)	1.100 (26.72)	Nylon	500
CPGI-8-52942-1	12-10 AWG	#8 Stud	.375 (9.53)	1.100 (26.72)	Nylon	250
AMPS-0-0052943-0	12-10 AWG	#10 Stud	.406 (10.31)	1.100 (27.94)	Nylon	500
CPGI-8-52943-1	12-10 AWG	#10 Stud	.406 (10.31)	1.100 (27.94)	Nylon	250
AMPS-0-0052945-0	12-10 AWG	1/4" Stud	.625 (15.88)	1.225 (31.12)	Nylon	500
CPGI-8-52945-2	12-10 AWG	1/4" Stud	.625 (15.88)	1.225 (31.12)	Nylon	125
AMPS-0-0052949-0	22-16 AWG	#6 Stud	.250 (6.35)	.811 (20.60)	Vinyl	1000
CPGI-8-52949-1	22-16 AWG	#6 Stud	.250 (6.35)	.811 (20.60)	Vinyl	400
AMPS-0-0052950-0	22-16 AWG	#8 Stud	.375 (9.53)	.872 (22.15)	Vinyl	1000
CPGI-8-52950-1	22-16 AWG	#8 Stud	.375 (9.53)	.872 (22.15)	Vinyl	400
AMPS-0-0052955-0	16-14 AWG	#6 Stud	.250 (6.35)	.811 (20.60)	Vinyl	1000
CPGI-8-52955-1	16-14 AWG	#6 Stud	.250 (6.35)	.811 (20.60)	Vinyl	400
AMPS-0-0052956-0	16-14 AWG	#8 Stud	.375 (9.53)	.872 (22.15)	Vinyl	1000
CPGI-7-52956-1	16-14 AWG	#8 Stud	.375 (9.53)	.872 (22.15)	Vinyl	400
AMPS-0-0052957-0	16-14 AWG	#10 Stud	.406 (10.31)	.920 (23.37)	Vinyl	1000
CPGI-8-52957-1	16-14 AWG	#10 Stud	.406 (10.31)	.920 (23.37)	Vinyl	400
AMPS-0-0052963-0	12-10 AWG	#10 Stud	.406 (10.31)	1.100 (27.94)	Vinyl	500
CPGI-8-52963-2	12-10 AWG	#10 Stud	.406 (10.31)	1.100 (27.94)	Vinyl	250
AMPS-0-0053242-1	22-16 AWG	#10 Stud	.294 (7.47)	.969 (24.61)	Vinyl	1000
CPGI-8-53242-5	22-16 AWG	#10 Stud	.294 (7.47)	.969 (24.61)	Vinyl	400
AMPS-0-0053247-1	12-10 AWG	#8 Stud	.312 (7.92)	1.052 (26.72)	Vinyl	500
CPGI-8-53247-1	12-10 AWG	#8 Stud	.312 (7.92)	1.052 (26.72)	Vinyl	250



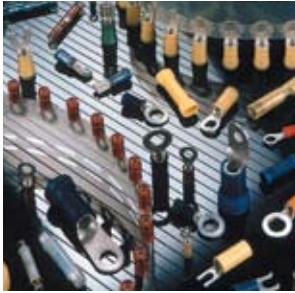
Butt Splices

Selection information

Catalog Number	Wire Size	Length	Type	Std. Pack
AMP-0-0055785-1	16-14 AWG	1.065 (27.05)	Vinyl	1000
CPGI-8-55785-1	16-14 AWG	1.065 (27.05)	Vinyl	250
AMP-0-0055792-1	22-16 AWG	1.076 (27.33)	Vinyl	1000
CPGI-8-55792-1	22-16 AWG	1.076 (27.33)	Vinyl	250
AMP-0-0055793-1	12-10 AWG	1.160 (29.46)	Vinyl	500
CPGI-8-55793-2	12-10 AWG	1.160 (29.46)	Vinyl	125
AMPS-0-0320559-0	22-16 AWG	1.265 (32.13)	Nylon	50
CPGI-8-320559-2	22-16 AWG	1.265 (32.13)	Nylon	250
AMPS-0-0320562-0	16-14 AWG	1.265 (32.13)	Nylon	50
CPGI-8-320562-5	16-14 AWG	1.265 (32.13)	Nylon	250
AMPS-0-0320570-0	12-10 AWG	1.656 (42.06)	Nylon	50
CPGI-8-320570-2	12-10 AWG	1.656 (42.06)	Nylon	125



Crimp Connectors



Electrical Maintenance & Repair Kits

Tyco Electronics offers a wide range of electrical maintenance and repair kits containing a selection of our most popular products, conveniently packaged for on-the-job use.

Each kit contains the most popular sizes of PIDG, PLASTI-GRIP, or FASTON terminals and splices. The AMP Mated Tool Terminal Concept

- Carefully engineered application tooling has been developed to ensure uniformly high quality terminations.
- Compression crimping produces crimps for a given size wire and terminal that are alike in appearance and performance.
- Terminal and crimping tool are designed as uniform matched devices. PRO-CRIMPER II dies are precision engineered from the finest hard metal alloys.
- Crimping pressure is controlled by a ratchet device on the hand tool.

Selection information (dimensions in inches/millimeters)

Connector Kit Name	Catalog Number	Dimensions				Contents
		L	W	H	Weight	
PIDG & PLASTI-GRIP	55823-1	12 (280)	7 (180)	2 (50)	4 lb. 0.94 kg	PRO-CRIMPER II hand tool #58433-3, 225 insulated ring and spade terminals in 12-10, 16-14, and 22-16 AWG (3.0-5.0, 1.3-2.0, and 0.3-1.3mm ²) wire sizes
PIDG	608028-1	13.6 (345)	9.6 (240)	2.1 (50)	6 lb. 2.72 kg	SUPER CHAMP IV Hand Tool 604252-1. 500 piece kit includes insulated PIDG ring and spade terminals, butt splices, and FASTON receptacles. Wire size 22-10 AWG (0.3-5mm ²). Hinged-top heavy-duty metal case with storage compartments.
PLASTI-GRIP	314974-1	11 (280)	7 (180)	2 (50)	2 lb. 0.94 kg	SUPER CHAMP IV Hand Tool 604252-1. Assorted insulated and uninsulated terminals and splices. Clear plastic case with compartments and hinged Top.



**PIDG & PLASTI-GRIP
Connector Kit 55823-1**



**PIDG Connector Kit
608028-1**



**PLASTI-GRIP Connector Kit
314974-1**

Compression Connectors



Copper Compression Terminals

- Uses industry-standard tooling for simple installation
- Industry-standard color coding system simplifies die selection
- Chamfered connector end allows cable to be inserted easily
- One-piece, seamless construction from electrolytic tough pitch (ETP) copper for superior electrical performance and mechanical operation
- Closed barrel transition design for protection from moisture and contaminants
- Tin-plated for corrosion resistance and durability, and tempered for easy crimping

Copper compression terminals are ideally suited for secondary power distribution in buildings, power plants, electrical equipment, and industrial applications. Connectors can be used on applications up to 35 kV, and meet the requirements of UL486A and CSA C22.2 No. 65-95 when applied with approved die sets. (See Instruction Sheet #408-8869 for approved listing of die sets.)

Copper compression terminals are available to accommodate a range of cable sizes from 6 AWG through 1,000 MCM and are designed for terminating concentric, compact, or standard stranded copper conductors. These terminals are offered in one-hole terminals from 6 AWG through 1,000 MCM with either a standard or long barrel. A two-hole NEMA terminal with a long barrel is also available for 4 AWG through 1,000 MCM.

Compression crimping forms the terminal barrel and conductor into a strong, almost homogeneous unit, producing excellent conductivity, low temperature rise, and outstanding resistance to oxidation and corrosion.

Physical and Electrical Properties

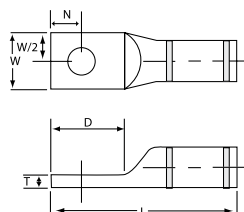
Material: ETP copper alloy C11000
 Plating: Electro tin plate
 Heat treating: Soft tempered
 Voltage Rating: For applications up to 35 kV consult shielded cable manufacturers stress relief instructions.

Agency approvals (when crimped with the approved die sets): Listed by Underwriters Laboratories, Inc. File No. E13288, Compression terminal connectors comply with the requirements of UL486A and CSA C.22.2 NO. 65-93.

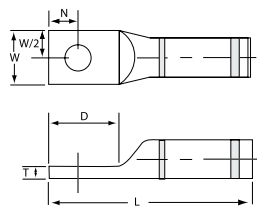
Compression Connectors

Copper Compression Terminals continues

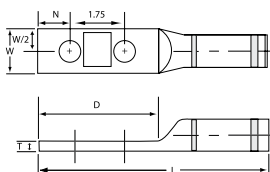
Selection information (dimensions shown in inches)



Catalog Number	Conductor	Stud Size	Dimensions					Color Code
			L	W	T	D	N	
One Hole, Short Barrel								
1099898-1	6 STR.	1/4	1.5	0.45	0.08	0.56	0.27	blue
1099898-2	4 STR.	1/4	1.5	0.50	0.09	0.56	0.27	gray
1099898-3	3 STR.	5/16	1.6	0.57	0.09	0.70	0.34	white
1099898-4	2 STR.	5/16	1.6	0.61	0.11	0.70	0.34	brown
1099898-5	1 STR.	1/4	1.6	0.68	0.10	0.56	0.27	green
1099898-6	1/0 STR.	5/16	1.7	0.74	0.12	0.70	0.34	pink
1099898-7	1/0 STR.	1/2	2.1	0.88	0.09	1.08	0.53	pink
1099898-8	2/0 STR.	3/8	1.9	0.83	0.12	0.83	0.41	black
1099898-9	3/0 STR.	1/2	2.2	0.91	0.13	1.08	0.53	orange
1-1099898-0	4/0 STR.	1/2	2.2	1.02	0.14	1.08	0.53	purple
1-1099898-1	250 MCM	1/2	2.4	1.11	0.16	1.08	0.53	yellow
1-1099898-2	350 MCM	1/2	2.5	1.27	0.18	1.08	0.53	red
1-1099898-3	500 MCM	1/2	3.2	1.54	0.23	1.30	0.65	brown
1-1099898-4	750 MCM	5/8	4.0	1.88	0.27	1.94	0.88	black
1-1099898-5	1000 MCM	5/8	4.9	2.16	0.32	2.12	0.94	white



One Hole, Long Barrel								
1099899-1	6 STR.	1/4	1.9	0.45	0.08	0.56	0.34	blue
1099899-2	4 STR.	1/4	1.9	0.50	0.09	0.56	0.38	gray
1099899-3	3 STR.	5/16	2.3	0.57	0.09	0.70	0.38	white
1099899-4	2 STR.	5/16	2.3	0.60	0.11	0.75	0.38	brown
1099899-5	1 STR.	5/16	2.4	0.68	0.10	0.75	0.27	green
1099899-6	1/0 STR.	5/16	2.4	0.74	0.12	0.75	0.27	pink
1099899-7	1/0 STR.	1/2	2.7	0.75	0.11	1.08	0.53	pink
1099899-8	2/0 STR.	3/8	2.7	0.82	0.12	0.88	0.44	black
1099899-9	3/0 STR.	1/2	2.9	0.91	0.13	1.08	0.53	orange
1-1099899-0	4/0 STR.	1/2	3.0	1.00	0.14	1.08	0.53	purple
1-1099899-1	250 MCM	1/2	3.2	1.09	0.16	1.12	0.56	yellow
1-1099899-2	300 MCM	1/2	3.6	1.19	0.16	1.12	0.56	white
1-1099899-3	350 MCM	1/2	3.7	1.28	0.18	1.12	0.56	red
1-1099899-4	400 MCM	5/8	4.2	1.38	0.19	1.50	0.75	blue
1-1099899-5	500 MCM	5/8	4.4	1.52	0.23	1.50	0.75	brown
1-1099899-6	500 MCM	1/2	4.2	1.54	0.23	1.30	0.65	brown
1-1099899-7	600 MCM	5/8	5.2	1.69	0.27	1.75	0.88	green
1-1099899-8	750 MCM	5/8	5.4	1.89	0.27	1.94	0.88	black
1-1099899-9	1000 MCM	5/8	6.0	2.17	0.32	2.12	0.94	white



Two-Hole NEMA, Long Barrel								
1099939-1	4 STR.	1/2	4.4	0.83	0.11	3.00	0.62	gray
1099939-2	3 STR.	1/2	4.4	0.83	0.11	3.00	0.62	white
1099939-3	2 STR.	1/2	4.5	0.82	0.11	3.00	0.62	brown
1099939-4	1 STR.	1/2	4.7	0.80	0.09	3.00	0.62	green
1099939-5	1/0 STR.	1/2	4.7	0.75	0.12	3.00	0.62	pink
1099939-6	2/0 STR.	1/2	4.8	0.82	0.12	3.00	0.62	black
1099939-7	3/0 STR.	1/2	4.8	0.90	0.12	3.00	0.62	orange
1099939-8	4/0 STR.	1/2	5.0	1.00	0.14	3.00	0.62	purple
1099939-9	250 MCM	1/2	5.0	1.09	0.16	3.00	0.62	yellow
1-1099939-0	300 MCM	1/2	5.4	1.18	0.16	3.00	0.62	white
1-1099939-1	350 MCM	1/2	5.4	1.27	0.18	3.00	0.62	red
1-1099939-2	500 MCM	1/2	5.7	1.53	0.23	3.00	0.62	brown
1-1099939-3	600 MCM	1/2	6.2	1.71	0.27	3.00	0.62	green
1-1099939-4	750 MCM	1/2	6.5	1.89	0.27	3.00	0.62	black
1-1099939-5	1000 MCM	1/2	6.8	2.16	0.33	3.00	0.62	white

Compression Connectors



Copper Compression Splices

- Uses industry-standard tooling for simple installation
- Industry-standard color coding system simplifies die selection
- Chamfered connector end allows cable to be inserted easily
- One-piece, seamless construction from electrolytic tough pitch (ETP) copper for superior electrical performance and mechanical operation
- Tin-plated for corrosion resistance and durability, and tempered for easy crimping

Copper compression splices are ideally suited for secondary power distribution in buildings, power plants, electrical equipment, and industrial applications. Connectors can be used on applications up to 35 kV, and meet the requirements of UL486A and CSA C22.2 No. 65-95 when applied with approved die sets. (See Instruction Sheet #408-8969 for approved listing of die sets.)

Copper compression splices are available to accommodate a range of cable sizes from 6 AWG through 1,000 MCM and are designed for splicing concentric, compact, or standard stranded copper conductors. These splices are offered from 6 AWG through 1,000 MCM with either a standard or long barrel.

Compression crimping forms the splice and conductor into a strong, almost homogeneous unit, producing excellent conductivity, low temperature rise, and outstanding resistance to oxidation and corrosion.

Physical and Electrical Properties

Material: ETP copper alloy C11000

Plating: Electro tin plate

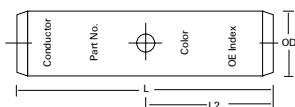
Heat treating: Soft tempered

Voltage rating: For applications up to 35 kV

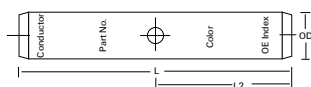
Consult shielded cable manufacturers stress relief instructions.

Agency approvals (when crimped with the approved die sets): Listed by Underwriters Laboratories, Inc. File No. E13288, Compression splice connectors comply with the requirements of UL486A and CSA C22.2 NO. 65-93.

Selection information (dimensions shown in inches)



Catalog Number	Conductor	Length		Outside Diameter(D)	Color Code
		(L)	(L/2)		
Standard Barrel Splice					
1443402-1	#6 STR	1.75	0.83	0.292	Blue
1443402-2	#4 STR	2.00	0.96	0.340	Gray
1443402-3	#3 STR	2.09	1.00	0.377	White
1443402-4	#2 STR	2.09	1.00	0.418	Brown
1443402-5	#1 STR	2.09	1.00	0.462	Green
1443402-6	1/0 STR	2.09	1.00	0.515	Pink
1443402-7	2/0 STR	2.18	1.05	0.583	Black
1443402-8	3/0 STR	2.32	1.11	0.618	Orange
1443402-9	4/0 STR	2.32	1.12	0.691	Purple
1-1443402-0	250 MCM	2.50	1.19	0.753	Yellow
1-1443402-1	300 MCM	2.50	1.19	0.815	White
1-1443402-2	350 MCM	2.62	1.25	0.844	Red
1-1443402-3	400 MCM	2.75	1.31	0.953	Blue
1-1443402-4	500 MCM	3.15	1.50	1.064	Brown
1-1443402-5	600 MCM	3.25	1.55	1.185	Green
1-1443402-6	750 MCM	3.75	1.80	1.302	Black
1-1443402-7	1000 MCM	4.26	2.06	1.504	White



Long Barrel Splice					
1443403-1	#6 STR	2.41	1.16	0.292	Blue
1443403-2	#4 STR	2.41	1.16	0.340	Gray
1443403-3	#3 STR	2.53	1.22	0.377	White
1443403-4	#2 STR	2.65	1.28	0.418	Brown
1443403-5	#1 STR	2.91	1.41	0.462	Green
1443403-6	1/0 STR	2.91	1.41	0.515	Pink
1443403-7	2/0 STR	3.15	1.53	0.583	Black
1443403-8	3/0 STR	3.15	1.53	0.618	Orange
1443403-9	4/0 STR	3.39	1.63	0.691	Purple
1-1443403-0	250 MCM	3.39	1.63	0.753	Yellow
1-1443403-1	300 MCM	4.13	2.00	0.815	White
1-1443403-2	350 MCM	4.13	2.00	0.844	Red
1-1443403-3	400 MCM	4.38	2.13	0.953	Blue
1-1443403-4	500 MCM	4.62	2.23	1.064	Brown
1-1443403-5	600 MCM	5.50	2.67	1.185	Green
1-1443403-6	750 MCM	5.88	2.86	1.302	Black
1-1443403-7	1000 MCM	6.12	2.96	1.504	White



Insulation Piercing Connectors



Insulation Displacement Splice Tap Connectors

Insulation displacement splice tap connectors provide a reliable method for making branch and through wire taps to solid and stranded wires up to 300 volts. The splice tap uses insulation displacement, self-stripping contacts for faster and easier tapping than twist-on or other type splices.

The ELECTRO-TAP connector uses insulation displacement type self-stripping contacts which provide fast, easy tapping. Creates a reliable connection on solid or stranded wires 20-10 AWG (.160-.195 max. insulation diameter). Requires no special tooling; can be installed with ordinary pliers.

Each ELECTRO-TAP connector is constructed of durable nylon with self-stripping, tin-plated brass contacts. These connectors have a wide range of wiring applications in low- and high-voltage environments.

Materials

Housing - color-coded nylon

Contact - tin-plated brass

Applications

Control Panels

Low-voltage switching systems

Plant maintenance

Harness Repair

Easy two-step operation

1. Butt tap-wire against wire stop, fold top cover half over to meet base, and squeeze with pliers until latch locks.
2. Lay run-wire in remaining section, fold over to meet base, and squeeze to latch as before.

Selection information

Catalog Number	Wire Range	Std. Pack
CPGI-53440-9	20-18 AWG	5
CPGI-53440-9-Bulk	20-18 AWG	100
CPGI-53440-7	18-14 AWG	5
CPGI-53440-7-Bulk	18-14 AWG	100
CPGI-735411	12-10 AWG	5
CPGI-735411-Bulk	12-10 AWG	100



Insulation Piercing Connectors



Romex Non-Metallic Cable Splice & Tap Connectors

The Romex splice and tap kits provide a fast and reliable method for splicing or tapping 2 wire w/ ground and splicing 3 wire w/ground non-metallic cables up to 300 volts. They are designed and approved for use in rework within existing structures. Splice and Tap Kits also eliminate wire nuts for installation and replace the conventional method for adding a splice or tap for non-metallic cable without the need for exposed and unsightly junction boxes. NEC approved Article 334-40b.

Non-metallic (NM) splice and tap technology provides a fast and reliable way to connect 12 and 14 AWG (3.31 or 2.08 mm²) circuits using non-metallic cable.

Agency Approvals

NEC Articles 545, 550, 551, and 334-406B (2-conductor splice and tap)

Canadian Electrical Code Part 1, Sections 70 and 12-522

Listed by Underwriters Laboratory Inc. to US & Canadian safety standards File No. E57250

Features

- Eliminates junction boxes and wire nuts
- Fast and simple to install
- Insulation displacement contacts eliminate stripping individual conductors
- Tap into existing circuits without cutting wire
- No special tools required
- Polarized for proper mating
- Approved for residential and commercial uses
- Clear cover allows visual inspection of termination

Voltage rating: 300 VAC RMS

Temperature rating: 105°C

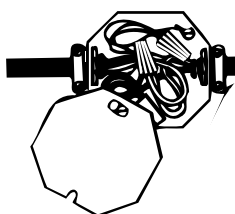
Current rating: 20 A

Selection information

Catalog Number	Wire Range	Description	Std. Pack
CPGI-1116377-2	12-14 AWG	Splice Kit for 2-conductor	5
CPGI-1116377-2-Bulk	12-14 AWG	Splice Kit for 2-conductor	100
CPGI-208169-2	12-14 AWG	Splice Kit for 3-conductor	5
CPGI-208169-2-Bulk	12-14 AWG	Splice Kit for 3-conductor	100
CPGI-1116415-2	12-14 AWG	Tap & Splice Kit for 2-conductor	5
CPGI-1116415-2-Bulk	12-14 AWG	Tap & Splice Kit for 2-conductor	100

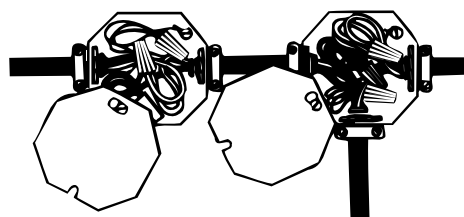
Splicing

Conventional Splicing Method

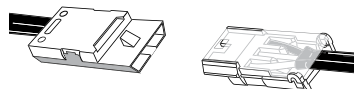


Tapping

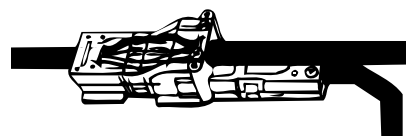
Tapping Method



Romex Splicing Method



Tapping Method



Insulation Piercing Connectors



Insulation Piercing Connectors

Insulation Piercing Connectors (IPCs) provide electrical connection for aluminum and copper stranded conductors without stripping and removing insulation from the conductors. During installation the IPC establishes electrical contact, protects, and seals the contact interface, and electrically insulates the connection, eliminating the need for weatherproofing and re-insulating.

Features

- Wide conductor range, bare and insulated cables
- Suitable for aluminum and copper conductors
- Tin-plated copper alloy contacts pierce insulation sheath
- Single bolt application with ring washers provide residual contact force
- Torque-control nut for precise pressure on conductor and insulation
- Operating temperature from -40°C to +55° C
- Quick, reliable, and safe connections on energized conductors (not under load).

Selection information (dimensions in inches/millimeters)

Catalog Number	Main Al/Cu		Tap Al/Cu		Dimensions		Std. Pack
	Min. AWG	Max. AWG	Min. AWG	Max. AWG	Shear Head	Weight (g)	
SIML-719622-1	4	4/0 Al-2/0 Cu	4	4/0 Al-2/0 Cu	9/16" Install	202	20
	(25)	(95-70)	(25)	(95-70)	3/4" Remove		
SIML-1-708052-1	6	4/0	14	10	10mm	54	50
	(16)	(95)	(1,5)	(6)			

Wedge Pressure Connectors



Service Entrance Connector System MINIWEDGE Connectors

MINIWEDGE connectors incorporate wedge pressure technology to provide an easily applied and reliable aluminum-to-aluminum/aluminum-to-copper connection for service entrance and street light applications. The color-coded packaging simplifies connector selection for terminating standard stranded and compacted ACSR, AAAC, AAC and copper conductors.

MINIWEDGE connectors are for service entrance applications from #6-to-#2 through 2/0-to-4/0. To enhance the mechanical and electrical performance of the service entrance connector the AMP GEO-TAC surface is added to the inside of the "C" component during the manufacturing process. The GEO-TAC surface provides superior grip on the conductor to overcome the possibility of failure due to vibration and also increase the contact surface for greater electrical performance under changing load conditions.

MINIWEDGE connectors are also offered for typical street light applications for a range of sizes to connect from #14, #12, and #10 street light tap wire up to a 336.4 thru conductor. The designed controlled force exerted by the MINIWEDGE connector does not damage the conductor and it can be easily removed without loss of cable length.

MINIWEDGE connectors offer simple installations anytime, anywhere, without the need for special tools and complicated die selection. The aluminum alloy "C" and wedge components are installed with parallel jaw pliers. A quick visual inspection of the locking tab in the inspection window verifies the connection is complete and ready for installation of the insulated cover, if required. Factory applied inhibitor is applied to all MINIWEDGE connectors to prolong the life of the connection in its service environment.

- No special tools
- Removable without conductor loss or damage
- Unique GEO-TAC surface in "C" provides higher tensile and vibration resistance
- Conductor range #14 AWG to 336.4 kcmil
- Service entrance and street light applications
- Separate insulating covers (See GHFC-MW on page 2-30)
- Color-coded for easy connector selection
- Wedge pressure reliability
- Aluminum to aluminum, aluminum to copper
- Suitable for guy, messenger and fence grounding (not for direct burial)

Approvals

- UL Listed
- Meets ANSI C119.4
- Part Number Series 83623 and 83630 are Certified by Canadian Standards Association, File No. LR 7189
- RUS

Note: MINIWEDGE connectors are not recommended for copper-to-copper connections. The MINIWEDGE connector with GHFC MW cover is pictured.

Wedge Pressure Connectors

Service Entrance Connector System - MINIWEDGE connector continues

Selection information by Product Description and Usage

Catalog Number	Product Description	Std. Pack
AMPS-83592-1	1/0 ACSR, AAAC, AAC to 1/0 ACSR, AAAC, AAC, Cu. Str.	100
AMPS-83592-2	1/0 ACSR, AAAC, AAC, Cu. Str. to #2 ACSR, AAAC, AAC, Cu. Str.	100
AMPS-83592-3	1/0 ACSR, AAAC, AAC, Cu. Str. to #4 ACSR, AAAC, AAC, Cu. Str.	100
AMPS-83592-4	1/0 ACSR, AAAC, AAC, Cu. Str. To #6 ACSR, AAAC, AAC, Cu. Str.	100
AMPS-83592-6	#2 ACSR, AAAC, AAC, Cu. Str. To #4 ACSR, AAAC, AAC, Cu. Str.	100
AMPS-83592-8	#4 ACSR, AAAC, AAC, Cu. Str. To #4 ACSR, AAAC, AAC, Cu. Str.	100
AMPS-83631-2	4/0 ACSR, AAAC, AAC, Cu. Str. To 1/0 ACSR, AAAC, AAC, Cu. Str.	100
AMPS-83631-3	4/0 ACSR, AAAC, AAC, Cu. Str. To 2/0 ACSR, AAAC, AAC, Cu. Str.	100
AMPS-83631-8	2/0 ACSR, AAAC, AAC, Cu. Str. To 1/0 ACSR, AAAC, AAC, Cu. Str.	100
AMPS-83631-9	2/0 ACSR, AAAC, AAC, Cu. Str. To 2/0 ACSR, AAAC, AAC, Cu. Str.	100
AMPS-83630-1	2/0 ACSR, AAAC, AAC, Cu. Str. To #10-12-14 ACSR, AAAC, AAC, Cu. Str.	100
AMPS-83630-3	#2 ACSR, AAAC, AAC, Cu. Str. To #10-12-14 ACSR, AAAC, AAC, Cu. Str.	100
AMPS-109717-1	MINIWEDGE Installation Tool	1

Selection information by Wire Diameter Limits

Catalog Numbers	Wire Marking		Sum of Diameters		Groove 1 Diameter		Groove 2 Diameter	
	Groove 1	Groove 2	Max.	Min.	Max.	Min.	Max.	Min.
Core								
AMPS-83592-1	1/0	1/0	.796 (20.22)	.696 (17.68)	.398 (10.11)	.315 (8.00)	.398 (10.11)	.315 (8.00)
AMPS-83592-2	1/0	#2	.723 (18.36)	.618 (15.70)	.398 (10.11)	.315 (8.00)	.336 (8.53)	.260 (6.60)
AMPS-83592-3	1/0	#4	.656 (16.66)	.549 (13.94)	.398 (10.11)	.315 (8.00)	.268 (6.81)	.205 (5.21)
AMPS-83592-4	1/0	#6	.602 (15.29)	.498 (12.65)	.398 (10.11)	.315 (8.00)	.215 (5.46)	.138 (3.51)
AMPS-83592-6	#2	#4	.583 (14.81)	.481 (12.22)	.336 (8.53)	.260 (6.60)	.268 (6.81)	.205 (5.21)
AMPS-83592-8	#4	#4	.516 (13.11)	.416 (10.57)	.268 (6.81)	.205 (5.21)	.268 (6.81)	.205 (5.21)
200 amp Service								
AMPS-83631-2	4/0	1/0	.961 (24.41)	.861 (21.87)	.570 (14.48)	.473 (12.01)	.398 (10.11)	.315 (8.00)
AMPS-83631-3	4/0	2/0	1.010 (25.65)	.907 (23.04)	.570 (14.48)	.473 (12.01)	.470 (11.94)	.375 (9.53)
AMPS-83631-8	2/0	1/0	.845 (21.46)	.760 (19.30)	.470 (11.94)	.375 (9.53)	.398 (10.11)	.315 (8.00)
AMPS-83631-9	2/0	2/0	.894 (22.71)	.800 (20.32)	.470 (11.94)	.375 (9.53)	.470 (11.94)	.375 (9.53)
Small Street Light								
AMPS-83630-1	1/0	#10 - #14	.514 (13.06)	.400 (10.16)	.398 (10.11)	.315 (8.00)	.125 (3.18)	.055 (1.40)
AMPS-83630-3	#2	#10 - #14	.441 (11.20)	.332 (8.43)	.336 (8.53)	.260 (6.60)	.125 (3.18)	.055 (1.40)

Wedge Pressure Connectors



Gel Cover for use with MINIWEDGE Connectors GHFC MW Closure

The GHFC MW closure was specifically designed to provide sealing and corrosion protection for MINIWEDGE connectors — installed overhead for corrosion protection or in direct buried applications up to 1000 volts.

In either case, it is as easy as simply snapping the closure over the connector.

These closures are suitable for aluminum-to-aluminum and aluminum-to-copper connections. The GHFC MW gel closure fits most MINIWEDGE connector applications.

Selection information (dimensions in inches/millimeters)

Catalog Number	Description	Main	Tap	Std. Pack
GHFC-MW	Gel cover for sealing and insulating	#8-4/0 (10-95)	#14-2/0 (1.5-70)	10

Ordering information

- Package does not contain MINIWEDGE connectors, which must be ordered separately
- Standard package: 10kits/box



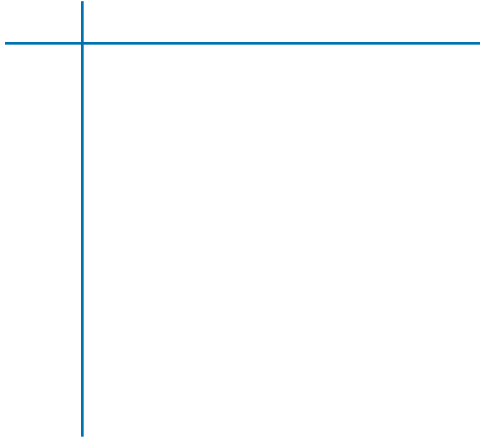
Copper Connector Grounding System WRENCH-LOK Grounding Connector

The WRENCH-LOK electrical grounding connector system provides a superior, fool-proof connection while reducing application time dramatically. The WRENCH-LOK grounding connector system uses a specially designed shear-head bolt to drive a tapered wedge into the connector body. All that's needed to apply it is a common ratchet or socket wrench. When the connection is tightened to the proper torque, the bolt head shears off, giving a positive visual indication of a perfect connection. It's that simple and sure.

WRENCH-LOK grounding connections require no special training, no special tools, no auxiliary power, and they can be installed in any weather. The product line offers options to connect conductor-to-conductor or conductor-to-ground rod. There is no need to change connector styles, molds or tooling.

Selection information (dimensions in inches/millimeters)

Catalog Number	Description	Conductor to	Sum Diameters	Large Wire	Small Wire	Std.
Small Body	Standard Round	Ground Rod	Max.	Max.	Max.	Pack
AMPS-83747-1	#2 sol., str. - #2 sol., str.	2 - #2	0.595 (15.113)	0.500 (12.700)	0.296 (7.518)	0.204 (5.182)
AMPS-83747-3	1/0, 2/0 str. - 1/0 str. 3/0 str. - #2 sol. str.	1/0, 2/0 - 1/0 3/0 - #2	0.782 (19.863)	0.672 (17.069)	0.470 (11.938)	0.302 (7.671)
AMPS-83749-2	3/0 str. - 3/0 str. 4/0 str. - 2/0 str. 250 str. - 1/0 str. 300 str. - #2 sol., str.	3/0 - 3/0 4/0, 250 - 2/0 250/300 - 1/0 350 - #2	0.942 (23.927)	0.846 (21.488)	0.630 (16.002)	0.423 (10.744)
					0.370 (9.398)	0.258 (6.553)



TERMINAL BLOCKS & BARRIER STRIPS



Dual Row Barrier Strips

Double-Row, Dual-Barrier Strips.19

Europa Terminal Blocks

8mm (.315) Pitch, 30A, with Tunnel Connection Series TSB230.21
10mm (.394) Pitch, 30A with Tunnel Connection Series TSB50022
12mm (.472) Pitch, 40A Series TSB100023
13.5mm (.531) Pitch, 40A Series TSB150024

Modular Terminal Blocks

100 Series, High Density Miniature Blocks25
900 Series, Medium Duty.26
200 Series, Heavy Duty27
200 Series, Heavy-Duty Phenolic Blocks28
800 Series, Intermediate Heavy Duty29
400 Series, Ultra Heavy Duty30

Modular Fuse & Switches

300 Series, Fuse & Switch32

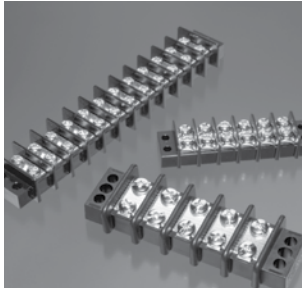
One-piece Terminal Blocks

B100 Series, One-Piece Phenolic Blocks.34

Accessories

Mounting Channels35
Channel Clamps35
Jumpers35

Dual Row Barrier Strips



Double-Row, Dual-Barrier Strips

- Double-row, dual barrier strips for wire-to-wire applications. These parts also allow end users to complete the wiring to a separate screw without disturbing the factory wiring.
- Available with either binding head screws or wire clamp
- Increased current-carrying capability

Applications

- Industrial Controls
- Test Equipment
- HVAC
- Power Supplies
- Traffic Signals
- Telecom

Key Features

- Closed bottom design allows for mounting direct to sheet metal panel
- Molded to length
- Accessories such as Quick-Connect Tabs and Jumpers available
- Wire-to-wire termination: - .563 (14.3) centerline: Up to 18 positions
- RoHS Compliant

Material & Finish

Insulator Body—UL94V-0, thermoplastic, black

Terminals—Brass, tin plated

Screw—M4.0 steel, nickel plated

Mechanical Properties

Screw Torque—16 in-lb

Electrical Properties

Current Rating—30 A, 300 VAC

Wire Range—10-22 AWG

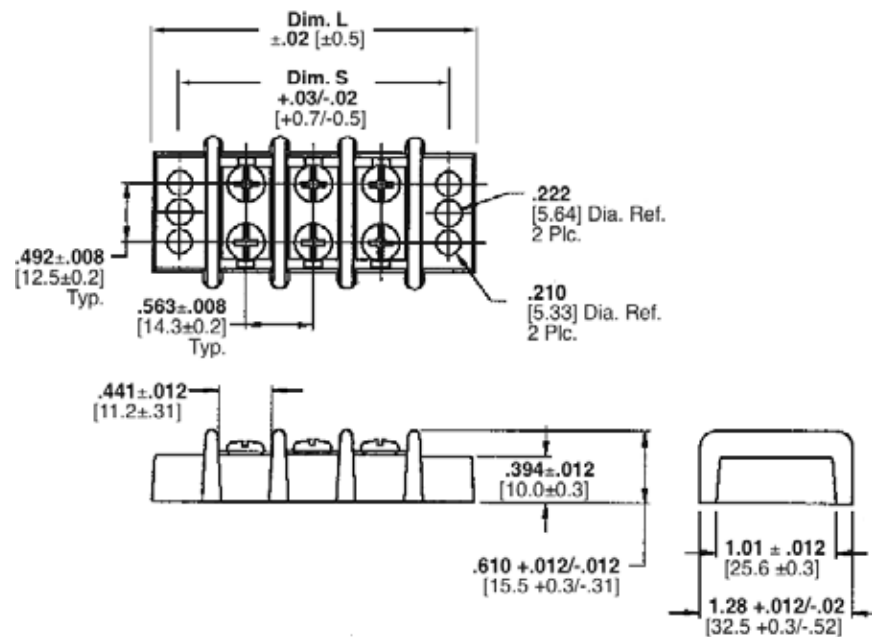
Withstanding Voltage—2000 VAC min.

Environmental Properties

Operating Temperature— -40°F to +284°F (-40°C to +140°C)

Dual Row Barrier Strips

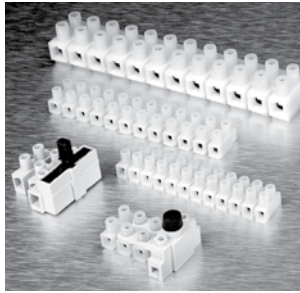
Double-Row, Dual Barrier Strips continued



Selection information (dimensions in inches/millimeters)

No. of Positions	Dimension L	Dimension S	Part Numbers w/Wire Clamp Screws	Part Numbers w/Binding Head Screws
2	2.13 (54.0)	1.69 (42.9)	CPGI-BUCH-1546311-2	CPGI-BUCH-1546310-2
3	2.69 (68.3)	2.25 (57.2)	CPGI-BUCH-1546311-3	CPGI-BUCH-1546310-3
4	3.25 (82.6)	2.81 (71.5)	CPGI-BUCH-1546311-4	CPGI-BUCH-1546310-4
4	3.25 (82.6)	2.81 (71.5)		CPGI-1546310-4
5	3.81 (96.9)	3.38 (85.8)	CPGI-BUCH-1546311-5	CPGI-BUCH-1546310-5
6	4.38 (111.2)	3.94 (100.1)	CPGI-BUCH-1546311-6	CPGI-BUCH-1546310-6
6	4.38 (111.2)	3.94 (100.1)		CPGI-1546310-6
7	4.94 (125.5)	4.50 (114.4)	CPGI-BUCH-1546311-7	CPGI-BUCH-1546310-7
8	5.50 (139.8)	5.07 (128.7)	CPGI-BUCH-1546311-8	CPGI-BUCH-1546310-8
8	5.50 (139.8)	5.07 (128.7)		CPGI-1546310-8
9	6.08 (154.1)	5.63 (143.0)	CPGI-BUCH-1546311-9	CPGI-BUCH-1546310-9
10	6.63 (168.4)	6.19 (157.3)	CPGI-BUCH-1-1546311-0	CPGI-BUCH-1-1546310-0
11	7.19 (182.7)	6.76 (171.6)	CPGI-BUCH-1-1546311-1	CPGI-BUCH-1-1546310-1
12	7.75 (197.0)	7.32 (185.9)	CPGI-BUCH-1-1546311-2	CPGI-BUCH-1-1546310-2
13	8.32 (211.3)	7.88 (200.2)	CPGI-BUCH-1-1546311-3	CPGI-BUCH-1-1546310-3
14	8.88 (225.6)	8.44 (214.5)	CPGI-BUCH-1-1546311-4	CPGI-BUCH-1-1546310-4
15	9.44 (239.9)	9.01 (228.8)	CPGI-BUCH-1-1546311-5	CPGI-BUCH-1-1546310-5
16	10.02 (254.5)	9.57 (243.1)	CPGI-BUCH-1-1546311-6	CPGI-BUCH-1-1546310-6
17	10.57 (268.5)	10.13 (257.4)	CPGI-BUCH-1-1546311-7	
18	11.13 (282.8)	10.70 (271.7)	CPGI-BUCH-1-1546311-8	CPGI-BUCH-1-1546310-8

Europa Terminal Blocks



8mm (.315) Pitch, 30A, with Tunnel Connection Series TSB230

Material & Finish

Housing Material—Polyamide 6
Flammability—UL94V-2
Color—natural (off white)
Tubular Contact—Brass, tin plated
Screw—Steel, M3
Screw Plating—Zinc with chromate

Mechanical Properties

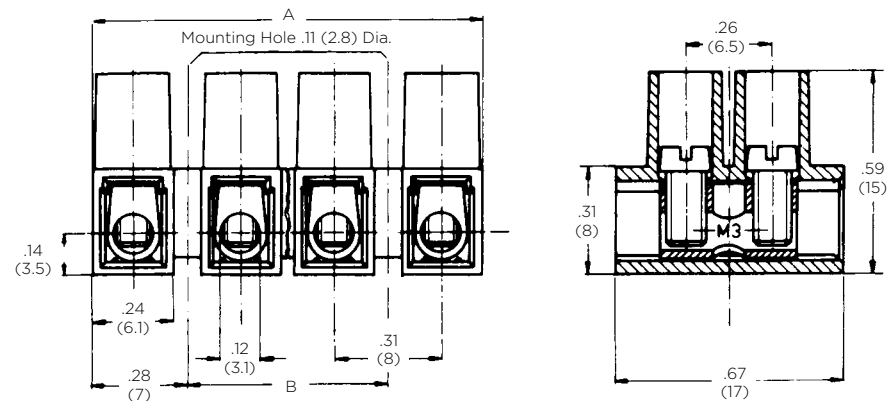
Pitch (terminal spacing)— 8mm (.315)
Wire Strip Length—5mm (0.20")
Min. Wire Pull-Out Force—75lbs.
Recommended Tightening Torque—5in.- lbs.
Recommended Screwdrivers—Stanley 1016, Sears Craftsman 41429, Xcelite R184

Electrical Properties

Maximum Current—30A
Operating Voltage—250V
Wire Range—12-24 AWG
Dielectric Withstand—3000V

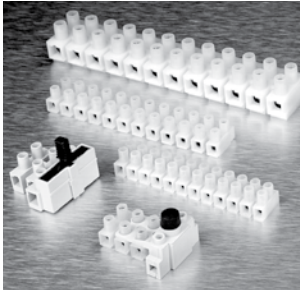
Environmental Properties

Continuous Working Temperature— -35°C to +100°C (-31°F to +212°F)



No. of Positions	Dimensions		Tunnel Connection	
	A	B	Part Number	Catalog Number
1	6 (.24)	—	CPGI-BUCH-1776294-1	TSB230 01
2	14 (.55)	—	CPGI-BUCH-1776294-2	TSB230 02
3	22 (.87)	8 (.31)	CPGI-BUCH-1776294-3	TSB230 03
4	30 (1.18)	16 (.63)	CPGI-BUCH-1776294-4	TSB230 04
5	38 (1.50)	24 (.94)	CPGI-BUCH-1776294-5	TSB230 05
6	46 (1.81)	32 (1.26)	CPGI-BUCH-1776294-6	TSB230 06
7	54 (2.13)	40 (1.57)	CPGI-BUCH-1776294-7	TSB230 07
8	62 (2.44)	48 (1.89)	CPGI-BUCH-1776294-8	TSB230 08
9	70 (2.76)	56 (2.20)	CPGI-BUCH-1776294-9	TSB230 09
10	78 (3.07)	64 (2.52)	CPGI-BUCH-1-1776294-0	TSB230 10
11	86 (3.39)	72 (2.83)	CPGI-BUCH-1-1776294-1	TSB230 11
12	94 (3.70)	80 (3.15)	CPGI-BUCH-1-1776294-2	TSB230 12
12	94 (3.70)	80 (3.15)	CPGI-1-1776294-2	TSB230 12

Europa Terminal Blocks



10mm (.394) Pitch, 30A with Tunnel Connection Series TSB500

Material & Finish

Housing Material—Polyamide 6
Flammability—UL94V-2
Color—Natural (off white)
Tubular Contact—Brass, tin plated
Screw—Steel, M3
Screw Plating—Zinc with chromate

Mechanical Properties

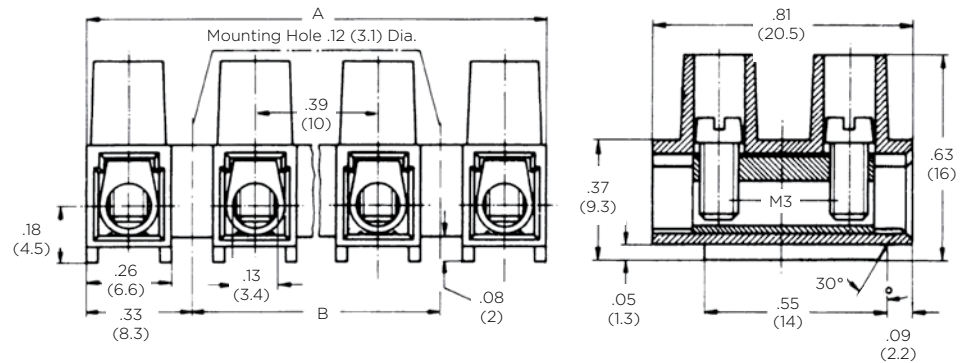
Pitch (terminal spacing)—10mm (.394)
Wire Strip Length—5mm (0.20")
Min. Wire Pull-Out Force—75lbs.
Recommended Tightening Torque—5 in.- lbs.
Recommended Screwdrivers—Stanley 1016, Sears Craftsman 41429, Xcelite R184

Electrical Properties

Maximum Current—30A
Operating Voltage—250V
Wire Range—10-22 AWG
Dielectric Withstand—3500V

Environmental Properties

Continuous Working Temperature— -35°C to +100°C (-31°F to +212°F)



No. of Positions	Dimensions		Tunnel Connection	
	A	B	Part Number	Catalog Number
1	6.6 (.26)	—	—	TSB500 0131
2	16.6 (.65)	—	CPGI-BUCH-1776297-2	TSB500 0231
3	26.6 (1.05)	10 (.39)	CPGI-BUCH-1776297-3	TSB500 0331
4	36.6 (1.44)	20 (.79)	CPGI-BUCH-1776297-4	TSB500 0431
5	46.6 (1.83)	30 (1.18)	CPGI-BUCH-1776297-5	TSB500 0531
6	56.6 (2.23)	40 (1.57)	CPGI-BUCH-1776297-6	TSB500 0631
7	66.6 (2.62)	50 (1.97)	CPGI-BUCH-1776297-7	TSB500 0731
8	76.6 (3.02)	60 (2.36)	CPGI-BUCH-1776297-8	TSB500 0831
9	86.6 (3.41)	70 (2.76)	CPGI-BUCH-1776297-9	TSB500 0931
10	96.6 (3.80)	80 (3.15)	CPGI-BUCH-1-1776297-0	TSB500 1031
11	106.6 (4.20)	90 (3.54)	CPGI-BUCH-1-1776297-1	TSB500 1131
12	116.6 (4.59)	100 (3.94)	CPGI-BUCH-1-1776297-2	TSB500 1231
12	116.6 (4.59)	100 (3.94)	CPGI-1-1776297-2	TSB500 1231

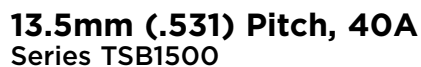
Material & Finish

Mechanical Properties

Electrical Properties

Environmental Properties

No. of Positions	Dimensions		Wire Protector	Catalog Number
	A	B	Part Number	
1	7.5 (.30)	—	CPGI-BUCH-1776319-1	TSB1000 01MDS
2	19.5 (.77)	—	CPGI-BUCH-1776319-2	TSB1000 02MDS
3	31.5 (1.24)	12 (.47)	CPGI-BUCH-1776319-3	TSB1000 03MDS
4	43.5 (1.71)	24 (.95)	CPGI-BUCH-1776319-4	TSB1000 04MDS
5	55.5 (2.19)	36 (1.42)	CPGI-BUCH-1776319-5	TSB1000 05MDS
6	67.5 (2.66)	48 (1.89)	CPGI-BUCH-1776319-6	TSB1000 06MDS
7	79.5 (3.13)	60 (2.36)	CPGI-BUCH-1776319-7	TSB1000 07MDS
8	91.5 (3.60)	72 (2.83)	CPGI-BUCH-1776319-8	TSB1000 08MDS
9	103.5 (4.07)	84 (3.31)	CPGI-BUCH-1776319-9	TSB1000 09MDS
10	115.5 (4.55)	96 (3.78)	CPGI-BUCH-1-1776319-0	TSB1000 10MDS
11	127.5 (5.02)	108 (4.25)	CPGI-BUCH-1-1776319-1	TSB1000 11MDS
12	139.5 (5.49)	120 (4.72)	CPGI-BUCH-1-1776319-2	TSB1000 12MDS
12	139.5 (5.49)	120 (4.72)	CPGI-1-1776319-2	-



Material & Finish

Housing Material—Polyamide 6
Flammability—UL94V-2
Color—Natural (off white)
Tubular Contact—Brass, tin plated
Screw—Steel
Screw Plating—Zinc with chromate
Wire Protector—Stainless steel
Tunnel Connection—Without wire protector

Mechanical Properties

Pitch (terminal spacing)—13.5mm (.531")
Wire Strip Length—8mm (.315")
Recommended Tightening Torque—10 in.-lbs.
Recommended Screwdrivers—Stanley 1016, Sears Craftsman 41429, Xcelite R184

Electrical Properties

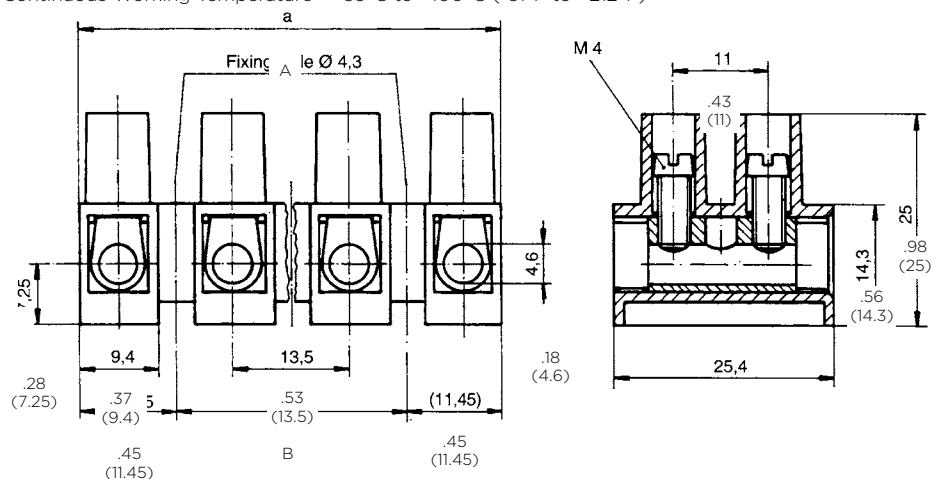
Maximum Current—40A (UR); 55A (CSA)
Operating Voltage—300V

Wire Range

Wire Protector—8-18 AWG
Tunnel Connection—8-16 AWG

Environmental Properties

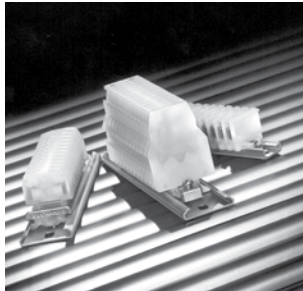
Continuous Working Temperature— -35°C to +100°C (-31°F to +212°F)



Tunnel Connection Version shown

24

Modular Terminal Blocks



LR25557



E63810

100 Series, High Density Miniature Blocks

- No Wire Crimping Required — tubular clamp contacts hold wire ranging from #30 to #12 AWG better than crimp-on terminals
- Saves Installation Time and Costs — tubular clamp contacts are supplied with captive screws backed out
- Nylon housing standard; polypropylene for fire retardant characteristics
- Positive Stop — helps prevent wire from being inserted too far, and helps prevent screw from being tightened on insulation. Easy access contact provides for safe, reliable, and cost-effective connection
- Quick Installation and Change — additional sections may be added or removed without removing channel mounting screw
- Choice of Five Mounting Channels:
 - Miniature aluminum
 - Zinc-plated steel
 - Pre-punched aluminum
 - Break-away steel
- Single and Double Tier blocks fit all standard Buchanan mounting channels. Single Tier blocks fit both miniature and standard channels
- Choice of Marking Surfaces — matte-finish area for marking directly on block; slide-in vinyl strip (blank or preprinted) also available

These miniature terminal blocks fit on a much smaller channel to save valuable panel space or can be surface mounted directly to the panel. Miniature blocks accept wire as large as #12 AWG and are available in four styles: Miniature (nylon), Miniature (polypropylene), Single Tier and Double Tier.



Miniature Nylon



Single Tier

100 Series High Density Miniature Blocks

Type of Block	Miniature Nylon	Part Number	Single Tier	Part Number
Standard Block	125-BU	CPGI-BUCH-2-1437392-3	115-BU	CPGI-BUCH-1437381-5
Specifications				
Housing Material	Nylon	—	Nylon	—
Max. Service Temperature	125°C (257°F)	—	125°C (257°F)	—
Flammability	UL94V-2	—	UL94V-2	—
Wire Strip Length (in.)	5/16	—	5/16	—
Torque, in-lbs.	6-9	—	6-9	—
Electrical Characteristics				
UL Rating	20 A @ 300V	—	20 A @ 600V	—
Wire Range (solid & stranded)	30-12	—	30-12	—
Spacing				
Pitch	0.25"	—	0.25"	—
Terminals per Foot	48	—	48	—
End Section				
End Section (gray)	130-BU	CPGI-BUCH-2-1437392-5	120	CPGI-BUCH-2-1437392-1

Modular Terminal Blocks



900 Series, Medium Duty

- High circuit density - 183 circuits per 6-foot length, 3/8 inch pitch
- Choice of three contact styles - tubular clamp, tubular screw, strap screw
- Sections snap-fit with Heavy Duty, Intermediate Heavy Duty, and Fuse & Switch blocks
- Readily identify circuits - mark directly on block sections or use removable marking strip. Preprinted marking strips also available.
- Rated up to 50 amperes per circuit
- Flat base models mount directly to surfaces or on miniature channel. Dovetail base mounts on standard size channel.
- Packaged for rapid handling and assembly - 100 per carton
- Only one end section needed per block assembly
- Fanning strips - interlocking sectional fanning strips allow entire circuit groups to be connected and disconnected as a single unit
- Factory assembled blocks available, including marking strips and different contact sections



NEMA 900 Series is available in .375" (9.53) centerline, in direct or channel mount, tubular or strap versions, and screw, clamp or quick connect configurations. Corrosion-resistant versions are also available.

NEMA 900 Series snap fit with the Medium Duty 500, 600 and 700 Series, as well as with the Heavy Duty, Intermediate Heavy Duty and Fuse & Switch blocks.



Strap Screw



Tubular Screw



Tubular Clamp

900 Series, 600V Medium Duty, 0.375" (9.53) Pitch

Type of Block	Strap Screw	Part Number	Tubular Screw	Part Number	Tubular Clamp	Part Number
Direct Mount (Flat Base)						
Standard	921	CPGI-BUCH-1546143-1	924	CPGI-BUCH-1546147-1	925	CPGI-BUCH-1546234-1
Channel Mount (Dovetail Base)						
Standard	0921	CPGI-BUCH-1546144-1	0924	CPGI-BUCH-1546148-1	0925	CPGI-BUCH-1546235-1

Contact Type



Specifications

Wire Range (AWG)						
Solid & Stranded	10*, 22-14		22-8		22-8	
Wire Strip Length (in.)	—		11/32		11/32	
Screw Type	6-32		10-32		10-32	
	Binding Head		Pan Head		Slotted Pan Head	
Ampacity	35 A*, 15A		50 A		30 A	

End Sections

Direct Mount	930	CPGI-BUCH-1546163-1	930	CPGI-BUCH-1546163-1	930	CPGI-BUCH-1546163-1
Channel Mount	0930	CPGI-BUCH-1546164-1	0930	CPGI-BUCH-1546164-1	0930	CPGI-BUCH-1546164-1

Modular Terminal Blocks



200 Series, Heavy Duty

- Choose from 5 different contact styles
- 600 volt UL and NEMA rating
- Conservatively rated from 50 to 90 amperes per circuit, depending on which contact style is selected
- Choose any of three mounting methods — two-way flat base models surface mount directly to the panel or snap-on miniature channel. Dovetail base models mount on standard channel.
- Packaged for rapid handling and assembly — snap-fit sections are packed 10 per carton.
- Only one end section needed per block assembly
- Readily identify circuits — mark directly on block sections or use removable marking strip. Pre-printed strips are also available



This compact, heavy-duty block line accepts single or combination wires up to #4 AWG, solid or stranded. The compact design allows at least 138 circuits per 6-foot length to be mounted. The pitch of this 600 volt block is 0.50" (12.70) (centerline spacing).



Strap Screw



Tubular Screw



Tubular Clamp

200 Series, Heavy Duty, 600V, 0.50" (1.27) Pitch

Type of Block	Strap Screw	Part Number	Tubular Screw	Part Number	Tubular Clamp	Part Number
Direct Mount (Flat Base)						
Nylon, Unpainted	241	CPGI-BUCH-3-1437390-9	242	CPGI-BUCH-4-1437390-0	243	CPGI-BUCH-4-1437390-1
Channel Mount (Dovetail Base)						
Nylon, Painted	0241	CPGI-BUCH-1-1437390-6	0242	CPGI-BUCH-2-1437390-0	0243	CPGI-BUCH-2-1437390-1

Contact Type



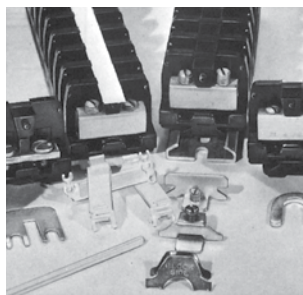
Specifications

Wire Range (AWG)						
Solid & Stranded		22-10		18-4		18-6
Wire Strip Length (in.)		—		1/2		1/2
Screw Type		10-32		1/4-28		1/4-28
		binding head		set screw		set screw
Ampacity		35 A		85 A		65 A

End Sections

Direct Mount, Nylon	250	CPGI-BUCH-4-1437390-3	250	CPGI-BUCH-4-1437390-3	250	CPGI-BUCH-4-1437390-3
Channel Mount, Nylon	0250	CPGI-BUCH-2-1437390-5	0250	CPGI-BUCH-2-1437390-5	0250	CPGI-BUCH-2-1437390-5

Modular Terminal Blocks



200 Series, Heavy-Duty Phenolic Blocks

- Sturdy Heavy-Duty block accepts single or combinations of wire up to #4 AWG solid or stranded—at least 122 circuits per 6-foot length, 9/16" center-to-center spacing.
- Choose from four different contact styles conservatively rated up to 90 amperes.
- 600 volt UL and NEMA rating
- Surface mounted flat base and channel mounted dovetail base models available
- Only one end section needed per block assembly
- Interlocking sectional fanning strips allow entire circuit groups to be connected and disconnected as a single unit
- Readily identify circuits — available with painted marking surface or use removable marking strip. Pre-printed strips are also available.
- Factory assembled blocks available
- Heavy-Duty Phenolic Block Sections Snap-fit with 300 & 600 volt, medium duty phenolic, heavy duty nylon and polypropylene, and Fuse and Switch blocks.

This family of phenolic heavy duty blocks is ideal for high temperature, high current applications. The rugged material withstands temperatures up to 302°F (150°C).

200 Series Heavy Duty Phenolic, 600 V, 0.56" (14.24) Pitch



Strap Screw



Tubular Screw



Tubular Clamp

Type of Block	Strap Screw	Part Number	Tubular Screw	Part Number	Tubular Clamp	Part Number
Direct Mount (Flat Base)						
Painted	221	CPGI-BUCH-3-1437390-1	222-BU	CPGI-BUCH-3-1437390-3	223-BU	CPGI-BUCH-3-1437390-6
Channel Mount (Dovetail Base)						
Painted	0221	CPGI-BUCH-1437390-8	0222	CPGI-BUCH-1437390-9	0223	CPGI-BUCH-1-1437390-2

Contact Type



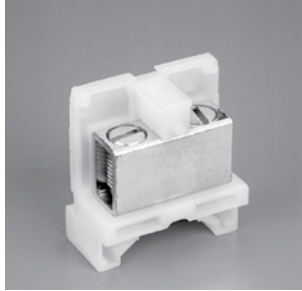
Specifications

Wire Range (AWG)	22-10	18-4	18-6
Solid & Stranded	—	1/2	1/2
Wire Strip Length (in.)	10-32	1/4-28	1/4-28
Screw Type	binding head	set screw	set screw
Ampacity	35 A	85 A	65 A

End Sections

Direct Mount	230-BU	CPGI-BUCH-1-1437381-7	230-BU	CPGI-BUCH-1-1437381-7	230-BU	CPGI-BUCH-1-1437381-7
Channel Mount	0230	CPGI-BUCH-1-1437390-4	0230	CPGI-BUCH-1-1437390-4	0230	CPGI-BUCH-1-1437390-4

Modular Terminal Blocks

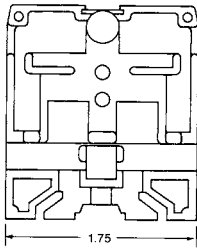


800 Series, Intermediate Heavy Duty

- An exceptionally compact block that accepts single or combinations of AWG wire sizes as large as #1/0 — at least 92 circuits per 6-foot length, 3/4 inch center-to-center spacing
- Tubular screw contact style accepts AWG wire sizes from #12 thru #1/0, solid or stranded
- Same block mounts on surface or channel — two-way mounting base fits standard channel or mounts directly to flat surfaces.
- Packaged for rapid handling and assembly — snap-fit sections packaged 10 per carton
- Contacts conservatively rated at 155 amperes per circuit when used with copper wire
- Only one end section needed per block assembly
- Readily identify circuits — blocks available with painted marking surface or use removable vinyl marking strip. Preprinted marking strips are also available.
- Factory assembled blocks available
- Nylon housing material for the most rugged applications
- Allen head screw for aluminum wire — screw tip design helps protect aluminum wire from overtightening. Slotted screw head for copper wire.
- Intermediate Heavy-Duty blocks snap-fit with 300 & 600V, Medium Duty phenolic, Heavy-Duty nylon, polypropylene and phenolic and Fuse and Switch blocks

This line of 600 volt blocks is rated up to 150 A and is available in a standard version and a corrosion resistant version.

800 Series, Intermediate Heavy Duty, 600 V, 0.75" Pitch



Same part used for both panel and channel mounting

Description	Part Number	Catalog Number
Tubular Screw, Painted	CPGI-BUCH-1437395-3	824-BU
End Section	CPGI-BUCH-1-1437395-4	830-BU

Material & Finish

Housing Material—Polyamide type 6/6, unfilled
 Max Continuous Temp.—125°C (257°F)
 Water Absorption (24hrs. % wt. gain)—1.5%
 Flammability—UL94V-2
 Chemical Resistance—Resistant to aromatic hydrocarbons, strong alkalis
 Radiation Resistance (ergs g-1 (C)—8 x 10⁷
 Color—Translucent white

Electrical Properties

Voltage Rating—Blocks meet 600V clearance and creepage requirements of NEMA, UL, and CSA standards for general industrial control equipment and panelboards. Withstand voltages in excess of IEEE switchgear standards for 750V.
 Breakdown Voltage, AC, 60Hz—
 Contact-to-Contact: 8,800V
 Contact-to-Ground: 9,000V
 Dielectric Strength — RH 40% @ Sea Level—470-385 Volts/mil thickness per ASTM D149
 Operating Voltage—Blocks meet 600V creepage and clearance requirements; withstand voltage greatly exceeds standards for 750V
 UL High Voltage Arc Tracking (in./min.)—.01-.35 (.25-8.89)

Contacts

Standard Contacts

Material—Electrical grade copper conductor
 Screws—Steel, zinc plated to resist corrosion in most applications

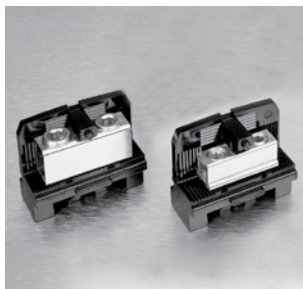
Duramax Contacts (for highly corrosive atmospheres)

Tubular Screw—Electrical grade copper tube with nickel plating; nickel plated brass screws. Nickel plating exceeds specification QQ-N-290
 Class 1, Type VII.
 Wire Range—#12-1/0 AWG, solid or stranded
 Wire Strip Length—11/16" (17.46)
 Screw Type—7/16" (11.11) - 20 slotted headless screw

Independent Testing Service Listing and Recognition

UL Wire Sizes—Solid or Stranded, Tubular Screw
 1 — #1/0 AWG, 1 — #1 AWG
 1 — #2 AWG, 1 or 2 — #4 AWG
 1, 2 or 3 — #6 AWG,
 1, 2, 3 or 5 — #8 AWG
 1 to 6 — #10 AWG, 1 to 7 — #12 AWG

Modular Terminal Blocks



400 Series, Ultra Heavy Duty

- Compact 2/0 or 250 kcmil (MCM) block - at least 57 circuits per 6- foot length, 1-3/16" (30.16) center-to-center spacing
- High current capacity snap-fit sectional block — tubular contacts accept single or combinations of wire sizes as large as 250 kcmil (MCM)
- Two contact styles available; rated up to 270 amperes for copper wire
- Allen head screws allow maximum torque when using large wire sizes
- Withstands voltages in excess of IEEE switchgear standards for 750 volts. Meets clearance and creepage spacing specified in UL, CSA, and NEMA Industrial Control Standards for 600 volts
- Same block directly mounts on surface or channel mounts
- Only one end section needed per block assembly
- Readily identify circuits—order blocks with painted marking area or use removable vinyl marking strip. Preprinted marking strips are also available.
- Factory assembled blocks available
- Ultra Heavy-Duty phenolic block sections do not snap-fit with other block styles

This Ultra Heavy Duty line includes the 400 Series rated up to 270 A.

Material & Finish

Housing Material—Phenolic, filled flame retardant

Flammability—UL94V-1

Color—Black

Contacts

Material—Electrical grade copper conductor; plated steel screws resist corrosion

Tubular Screw Type—

Small: 1/2" (12.7) - 13 Hex

Large: 3/4" (19.05) - 16 Hex socket set screw

Mechanical Properties

Pitch (terminal spacing)—

1.19" (30.23); 9 circuits/foot

Wire Strip Length—

Tubular Screw (small): 1" (25.4)

Tubular Screw (large): 1" (25.4)

Electrical Properties

Maximum Current—255A for a single 250MCM wire

Operating Voltage—Blocks meet 600V creepage and clearance requirements; withstand voltage greatly exceeds standards for 750V

Wire Range—Tubular Screw (small):

#4-#2/0 AWG solid or stranded; Tubular Screw (large): #6 AWG-250 kcmil (MCM) solid or stranded

Dielectric Strength (RH 40% @ sea level)—300 V/mil thickness per ASTM D149

Breakdown Voltage, AC, 60Hz—

Contact-to-Contact: 10,000V

Contact-to-Ground: 10,000V

UL High Voltage Arc Tracking (in./min.)—49-58 (12.45-14.73)

Environmental Properties

Max. Continuous Temperature—

150°C (302°F)

Water Absorption (24hrs. % wt. gain)—.45% per ASTM D149

Chemical Resistance—Resistant to acids, alkalis, and aliphatic hydrocarbons and ketones per ASTM D543

Radiation Resistance (ergs g-1 (C))—2.7 x 10⁸

UL Independent Testing Service Recognitions

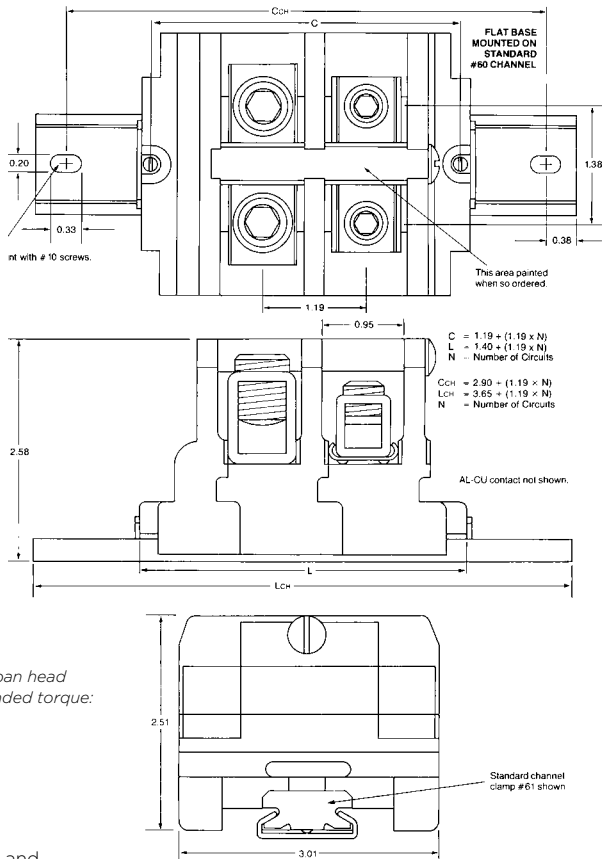
Tubular Screw: Catalog # 416 & 426-BU

1 #2/0 AWG, 1 #1/0 AWG, 1 #1 AWG,
1 or 2 #2 AWG, 1 to 3 #4 AWG, 1 to 3 #6 AWG,
1 to 4 #8 AWG, 1 to 6 #10 AWG, 2 to 8 #12 AWG,

Tubular Screw: Catalog # 417 & 427-BU

1 #250kcmil (MCM), 1 #4/0 AWG, 1 #3/0 AWG,
1 or 2 #2/0 AWG, 1 or 2 #1/0 AWG, 1 or 2 #1 AWG, 1 to 3 #2 AWG, 1 to 4 #4 AWG, 1 to 5 #6 AWG

Modular Terminal Blocks

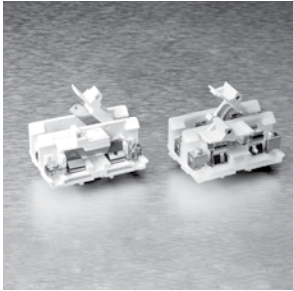


Note: For Direct Mounting, use #10 pan head screws every six circuits. Recommended torque: 15-20 in.-lbs.

Same part used for both panel and channel mounting.

Description	Wire Range	Part Number	Catalog Number
Tubular Screw, Painted	#14-2/0	CPGI-BUCH-1437396-7	426-BU
Tubular Screw, Painted	#6-250 kcmil/MCM	CPGI-BUCH-1437396-8	427-BU
End Section	—	CPGI-BUCH-1437396-9	430-BU

Modular Fuses & Switches



300 Series, Fuse & Switch

High Density Blocks

- Fuse and Switch Blocks rated 15A and 300V
- High Density 0.36" (9.14) centerline spacing saves panel space; at least 33 circuits per foot

Fuse Blocks

- Provide in-line circuit protection for virtually any circuit or group of circuits — select contacts for terminated or unterminated wire
- Remove, check, and replace fuses safely and quickly — switch action fuse blocks open circuits before fuse can be removed or installed
- Contacts conservatively rated to 30 amperes

Switch Blocks

- Quickly and easily interrupt a circuit or group of circuits — insert switch blocks directly in line. Contacts available for terminated or unterminated wire.
- Keep circuits open for extended periods — switch blade can be removed entirely from block for lock-out protection
- Rated to 15 amperes



LR25557



E63810

Common Features of 300 & 0300 Series

- At least 91 circuits per 6-foot length, 3/4 inch center-to-center spacing
- Blocks meet 600 volt clearance and creepage spacings specified in UL, CSA, and NEMA Industrial Control Standards
- Choose nylon housing material
- Dovetail base fits standard mounting channel — can also be mounted on flat surfaces
- Only one end section needed per block assembly
- Readily identify circuits — mark directly on white, matte-surface puller assembly, marking tab on block, or use removable marking tape
- Open or close several circuits simultaneously — holes in puller handles allow use of nylon “ganging” rods
- Fuse and Switch block sections snap-fit with 300 & 600 Volt, phenolic Medium Duty, Heavy Duty, and Intermediate Heavy Duty blocks.

This broad line features High Density Blocks (Series 0135), Nylon & Polypropylene Blocks (Series 0300) and Phenolic Blocks (Series 300).

Fuses & Switches - Nylon and Phenolic

0300 Series - Nylon



Fuse Block Strap Screw



Fuse Block Strap Clamp



Fuse Block Tubular Screw

Type of Block	Fuse Block Strap Screw	Part Number	Fuse Block Strap Clamp	Part Number	Fuse Block Tubular Screw	Part Number
Channel Mount (Dovetail Base) Nylon	0311	CPGI-BUCH-1437397-1	0318	CPGI-BUCH-1437397-3	0312	CPGI-BUCH-1437397-2
Contact Type						



Specifications

Wire Range (AWG) Solid & Stranded	22-8	18-8	18-8
Wire Strip Length (in.)	—	1/2	1/2
Screw Type	10-32 binding head	8-32 pan head w/clamp	1/4"-28 set screw

Ampacity

25 A	25 A	25 A
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End Sections

Channel Mount, Nylon	CPGI-BUCH-2-1437397-0	CPGI-BUCH-2-1437397-0	CPGI-BUCH-2-1437397-0
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0300 Series - Phenolic



Strap Screw



Strap Clamp



Tubular Screw

Type of Block	Strap Screw	Part Number	Strap Clamp	Part Number	Tubular Screw	Part Number
Direct Mount (Flat Base) Fuse Block with Puller	351	CPGI-BUCH-2-1437397-8	358	CPGI-BUCH-3-1437397-1	352	CPGI-BUCH-3-1437397-0
Channel Mount (Dovetail Base) Fuse Block with Puller	0351	CPGI-BUCH-1437397-9	0358	CPGI-BUCH-1-1437397-2	0352	CPGI-BUCH-1-1437397-0

Contact Type



Specifications

Wire Range (AWG) Solid & Stranded	22-8	18-8	18-8
Wire Strip Length (in.)	—	1/2	1/2
Screw Type	8-32 binding head	8-32 pan head w/clamp	1/4"-28 set screw

Ampacity

Fuse Blocks	25A	25A	25A
Switch Blocks	15A	15A	15A

End Sections

No Contact, Flat Base	CPGI-BUCH-2-14376397-4	CPGI-BUCH-2-14376397-4	CPGI-BUCH-2-14376397-4
No Contact, Dovetail Base	CPGI-BUCH-14376397-5	CPGI-BUCH-14376397-5	CPGI-BUCH-14376397-5

One-Piece Terminal Blocks



Steel Screw w/ Strap



LR25557



E63810

B100 Series, One-Piece Phenolic Blocks

- Two, four, six, eight, and twelve circuit models available — 5/8" (15.88) center-to-center contact spacing
- No assembly required — each is a single, easily installed unit
- Three contact styles available — strap screw, captive strap clamp, and moving tubular contact
- Use wire up to #6 AWG with tubular contact. Strap screw and strap clamp contacts are available for #8 and smaller.
- Withstand voltages in excess of IEEE standards for 750 volts. Meet clearance and creepage spacings specified in UL, CSA, and NEMA Industrial Control Standards for 600 Volts.
- Strap contacts rated at 50 amperes — tubular contact conservatively rated at 70 amperes.
- Pilot point screws supplied with strap screw and clamp contacts — speeds installation time
- Plain white marking strip supplied with each block — circuits are easily identified
- Special purpose blocks available—choose from blocks with solder posts, printed circuit board pins, or nuts on screw posts, removable circuit links, and a shorting bar

Traditionally, these rugged One-Piece Blocks are the standard means of connection for heavy industrial applications like rail transport, utility, and traffic control industries. Ideal for dirty and vibration prone environments.

B100, #B100 Series, One-Piece Blocks, 600 V - Phenolic

Material & Finish

Housing Material—Phenolic, filled flame retardant

Flammability—UL94V-1

Color—Black

Contacts

Standard Material—Electrical grade copper or copper alloy conductor. Steel screws plated to resist corrosion in most industrial applications.

Brass Material—For Corrosive Environment (2B100, 4B100 Series) Nickel plated brass straps and screws. Meets specification QQ-N-290A Class 1, Grade G

Wire Range—Strap Screw: #18-8 AWG solid or stranded; Tubular Clamp: #14-6 AWG solid or stranded

Screw Type—Strap Screw: #10-32 Binding Head; Tubular Clamp: #1/4" (6.35)-28 Set Screw

Strap Screw—7/16" (11.11) max. lug width

Mechanical Properties

Pitch (terminal spacing)—.63" (16.00)

Wire Strip Length—Strap Screw: as needed for lugging; Tubular Clamp: 1/2" (12.1)

Electrical Properties

Maximum Current—70A for a single #6 AWG wire

Operating Voltage—Blocks meet 600V creepage and clearance requirements for general industrial control equipment and panelboards; greatly exceeds IEEE switchgear standards for 750 volts.

Dielectric Strength (RH 40% @ sea level)—300 Volts/mil thickness per ASTM D149

UL High Voltage Arc Tracking (in./min.)—.49-.58 (12.45-14.73)

Environmental Properties

Max. Continuous Temperature—150°C (302°F)

Water Absorption (24hrs. % wt. gain)—.45% per ASTM D570

Chemical Resistance—Resistant to acids, alkalies, and aliphatic hydrocarbons and ketones per ASTM D543

Radiation Resistance (ergs G-1 (C))—2.7 x 10⁸ min

UL Independent Testing Service Recognitions

Wire Sizes—Solid or Stranded, Tubular Clamp

1—#6 AWG, 1—#8 AWG, 1or 2 — #10 AWG, 1or 2—#12 AWG, 1 to 3—#14 AWG, 1 —#10 & 1 —#12 AWG

1 — #12 & 1 — #14 AWG

Steel Screw w/ Strap

Standard	Part Number
2	CPGI-BUCH-2-1437382-6
4	CPGI-BUCH-3-14373882-0
6	CPGI-BUCH-4-1437382-0
8	CPGI-BUCH-4-1437382-9
12	CPGI-BUCH-5-1437382-9

Accessories



Miniature Channel



Steel Channel



Break Away Steel



Pre-Punched
Aluminum
Channel

Mounting Channels

Description	Part Number	Catalog Number	Standard Length	Series
Miniature (#12)	CPGI-BUCH-1437381-8	12	3 feet	100, 900, 200
Steel Channel	CPGI-BUCH-9-1437381-1	60	6 feet	
	CPGI-BUCH-9-1437381-8	63-BU	3 feet	100, 900, 200, 800
Break Away Steel	CPGI-BUCH-9-1437381-2	60-B-36	3 feet	400, 300
Pre-Punched Aluminum Channel	CPGI-BUCH-9-1437381-9	64	6 feet	
	CPGI-BUCH-1437382-2	67	3 feet	



Screw
Channel
Clamps



Universal
Clamps



Snap-In
Clamps



Miniature for
#12 Channel



See-Thru
Cover



Ganging
Rod

Channel Clamps

Description	Part Number	Catalog Number	Standard Length	Series
Screw Channel Clamps	CPGI-BUCH-9-1437381-5	61	-	100, 900, 200, 800
Universal Clamps	CPGI-BUCH-1437382-3	68	-	400, 300
Snap-In Clamps	CPGI-BUCH-9-1437381-7	62	-	
Miniature for #12	CPGI-BUCH-1437381-4	11	-	100, 900, 200
See-Thru Cover	CPGI-BUCH-1-1437381-0	13	-	100
See-Thru Cover	CPGI-BUCH-1-1437382-2	71	-	900
See-Thru Cover	CPGI-BUCH-1-1437381-6	23-BU	-	200
Ganging Rod	CPGI-BUCH-3-1437381-9	30-BU	2 feet	900, 200, 800



Nylon Holding Plug



Jumper 2 pole



Jumper for
Tubular Contacts



Jumper for
Strap Screw



Snap-Apart for
Tubular Contacts

Jumpers

Description	Part Number	Catalog Number	Standard Length	Series
Nylon Holding Plug	CPGI-BUCH-4-1437393-0	65-BU	-	900, 200,
Jumper, 2 pole	CPGI-BUCH-1437381-1	10	-	100
Jumpers For Tubular Contacts	CPGI-BUCH-1437382-6	70	-	900
Jumper For Tubular Contacts	CPGI-BUCH-2-1437393-4	42-BU	-	200
Jumper For Tubular Contacts	CPGI-BUCH-2-1437381-3	41-BU	-	200
Jumper for Strap Screw	CPGI-BUCH-5-1437381-5	43	-	200
Snap-apart For Tubular Contacts	CPGI-BUCH-1-1437382-3	73	-	900



WIRE MANAGEMENT



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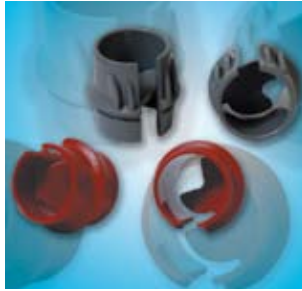
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Clamps, Bushings & Plugs



Romex Connector Clamps

These connectors are constructed of a fire-rated, one-piece plastic material designed for non-metallic sheathed cable. Two sizes are available to fit 1/2" and 3/4" knockouts.

Product Features

- Easily removed from knockouts
- Easy removal of Romex wire from connectors (1 or 2 wires)
- Snaps into place in seconds
- Easily installed in confined and tight areas
- Connectors are UL & CSA approved for 60 lb. pull test

1/2" Connector Clamps are listed to be used with the various wire configurations.

One Cable		Two Cable	
14/2	12/2	14/2	12/2
10/2	14/3	14/3	
12/3	10/3		

3/4" Connector Clamps are listed to be used with the following wire configurations

One Cable	
8/3	6/3

Selection information

Catalog Number	Description	Packs/ Carton
CPGI-ETD-RC-1/2-BG-50	Romex Connector Clamp for 1/2" Knockouts 50/Bag	10
CPGI-ETD-RC-1/2-JR-275	Romex Connector Clamp for 1/2" Knockouts 275/Jar	4
CPGI-ETD-RC-3/4-BG-25	Romex Connector Clamp for 3/4" Knockouts 25/Bag	10
CPGI-ETD-RC-3/4-JR-165	Romex Connector Clamp for 3/4" Knockouts 165/Jar	4



Knock-out Plugs

These plugs are constructed of a fire-rated, one-piece plastic material designed to fit all metallic and non-metallic material from 1/32" to 1/8" thickness. Simply snap them into the corresponding size of knock-out holes.

Product Features

- Sizes from 1/2" to 2"
- Easily installed and removed in confined and tight areas
- Snaps out and in place in seconds
- Light weight for storage and shipping
- UL and CSA approved

Selection information

Catalog Number	Description	Packs/ Carton
CPGI-ETDI000-BG-25-ASST	Knockout Fillers Assorted Bag 1/2" - 2" 25/Bag	10

Cable Ties & Accessories



Metal Stud Bushings

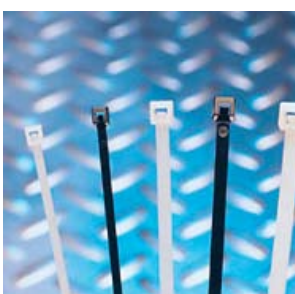
These bushings will fit existing round or square shaped holes in metal studs. Can be used with any type of wire. Use these bushings to comply with paragraph 300-4b(1) of the 2005 NEC code.

Product Features

- Round or Square available
- Snaps out and in place in seconds
- Light weight for storage and shipping
- UL and CSA approved

Selection information

Catalog Number	Description	Packs/Carton
CPGI-ETD-RSS-BG-25	Metal Round Stud Bushings 25/Bag	10
CPGI-ETD-RSS-JR-200	Metal Round Stud Bushings 200/Jar	4
CPGI-ETD-SSS-BG-25	Metal Square Stud Bushings 25/Bag	10
CPGI-ETD-SSS-JR-125	Metal Square Stud Bushings 125/Jar	4



AMP Cable Ties

AMP cable ties are available in three grades of Nylon 6/6

- General purpose cable ties (NATURAL) are suitable for use in most practical applications at continuous temperatures up to 150 degrees Fahrenheit
- UV Stabilized cable ties (BLACK) ties are used in continuous or extended exposure to outdoor use. This nylon cable tie is a weather resistant grade, enduring additional ultraviolet (UV) light.
- Heat Stabilized cable ties (BLACK) are used in continuous or extended exposure to high temperatures (up to 250 degrees Fahrenheit). These cable ties contain specially formulated heat stabilizers which provide additional thermal endurance. Heat stabilized nylons are engineered for continuous exposure to temperatures above 185 degrees Fahrenheit.

The entire AMP cable tie line provides the following features and benefits:

- Faster - low insertion and pull through force
- Stronger - high tensile strength is achieved from one piece, advanced pawl, and teeth design
- Purer - manufactured from filtered nylon reducing particle contamination
- Easier - angled tail provides quicker initial insertion alignment and tail finger grips allow easier handling and tightening
- Safer - rounded edges provides added safety and eliminates insulation damage
- Consistent - formulated molding processes

Selection information (dimensions in inches/millimeters)

Catalog Number	Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Mil-spec Reference	Qty/ Bag	Packs/ Carton
Miniature (18 lb.) Natural & UV Black									
CPGI-CTY-04-18-NAT-C	Natural Nylon	4.12 (104.77)	.095 (2.413)	.042 (1.06)	7/8 (22.22)	18 lbs.	MS3367-4	100	10
CPGI-CTY-04-18-NAT-M	Natural Nylon	4.12 (104.77)	.095 (2.413)	.042 (1.06)	7/8 (22.22)	18 lbs.	MS3367-4	1000	5
CPGI-CTY-04-18-BLK-C	UV Black Nylon	4.12 (104.77)	.095 (2.413)	.042 (1.06)	7/8 (22.22)	18 lbs.	MS3367-4	100	10
CPGI-CTY-04-18-BLK-M	UV Black Nylon	4.12 (104.77)	.095 (2.413)	.042 (1.06)	7/8 (22.22)	18 lbs.	MS3367-4	1000	5
CPGI-CTY-06-18-NAT-C	Natural Nylon	6.18 (157.14)	.095 (2.413)	.042 (1.06)	1.5 (38.10)	18 lbs.	MS3367-4	100	10
CPGI-CTY-06-18-BLK-C	UV Black Nylon	6.18 (157.14)	.095 (2.413)	.042 (1.06)	1-1/2 (38.10)	18 lbs.	MS3367-4	100	10
CPGI-CTY-08-18-NAT-C	Natural Nylon	8.1 (206)	.094 (2.39)	.042 (1.06)	2-3/16 (55.56)	18 lbs.	MS3367-4	100	10
CPGI-CTY-08-18-NAT-M	Natural Nylon	8.1 (206)	.094 (2.39)	.042 (1.06)	2-3/16 (55.56)	18 lbs.	MS3367-4	1000	5
CPGI-CTY-08-18-BLK-C	UV Black Nylon	8.1 (206)	.094 (2.39)	.042 (1.06)	2-3/16 (55.56)	18 lbs.	MS3367-4	100	10
CPGI-CTY-08-18-BLK-M	UV Black Nylon	8.1 (206)	.094 (2.39)	.042 (1.06)	2-3/16 (55.56)	18 lbs.	MS3367-4	1000	5

Cable Ties & Accessories

AMP Cable Ties (continued)

Catalog Number	Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Mil-spec Reference	Qty/ Bag	Packs/ Carton
Intermediate (40 lb.) Natural & UV Black									
CPGI-CTY-05-40-NAT-C	Natural Nylon	5.84 (148.33)	.140 (3.56)	.049 (1.24)	1-7/16 (36.51)	40 lbs.	MS3367-5	100	10
CPGI-CTY-05-40-NAT-M	Natural Nylon	5.84 (148.33)	.140 (3.56)	.049 (1.24)	1-7/16 (36.51)	40 lbs.	MS3367-5	1000	5
CPGI-CTY-05-40-BLK-C	UV Black Nylon	5.84 (148.33)	.140 (3.56)	.049 (1.24)	1-7/16 (36.51)	40 lbs.	MS3367-5	100	10
CPGI-CTY-05-40-BLK-M	UV Black Nylon	5.84 (148.33)	.140 (3.56)	.049 (1.24)	1-7/16 (36.51)	40 lbs.	MS3367-5	1000	5
CPGI-CTY-08-40-NAT-C	Natural Nylon	8.88 (225.42)	.140 (3.56)	.049 (1.24)	2-3/8 (60.33)	40 lbs.	MS3367-5	100	10
CPGI-CTY-08-40-NAT-M	Natural Nylon	8.88 (225.42)	.140 (3.56)	.049 (1.24)	2-3/8 (60.33)	40 lbs.	MS3367-5	1000	5
CPGI-CTY-08-40-BLK-C	UV Black Nylon	8.88 (225.42)	.140 (3.56)	.049 (1.24)	2-3/8 (60.33)	40 lbs.	MS3367-5	100	10
CPGI-CTY-08-40-BLK-M	UV Black Nylon	8.88 (225.42)	.140 (3.56)	.049 (1.24)	2-3/8 (60.33)	40 lbs.	MS3367-5	1000	5
CPGI-CTY-11-40-NAT-C	Natural Nylon	11.5 (292)	.140 (3.56)	.058 (1.473)	3-3/8 (85.72)	40 lbs.		100	10
CPGI-CTY-11-40-BLK-C	UV Black Nylon	11.5 (292)	.140 (3.56)	.058 (1.473)	3-3/8 (85.72)	40 lbs.		100	10
CPGI-CTY-14-40-NAT-C	Natural Nylon	14.5 (368.30)	.140 (3.56)	.058 (1.473)	4 (101.60)	40 lbs.		100	10
CPGI-CTY-14-40-BLK-C	UV Black Nylon	14.5 (368.30)	.140 (3.56)	.058 (1.473)	4 (101.60)	40 lbs.		100	10
Standard (50 lb.) Natural, UV Black & Heat Stabilized Black									
CPGI-CTY-07-50-NAT-C	Natural Nylon	7.56 (192.07)	.180 (4.572)	.052 (1.32)	1-7/8 (47.63)	50 lbs.	MS3367-1	100	10
CPGI-CTY-07-50-NAT-M	Natural Nylon	7.56 (192.07)	.180 (4.572)	.052 (1.32)	1-7/8 (47.63)	50 lbs.	MS3367-1	1000	5
CPGI-CTY-07-50-BLK-C	UV Black Nylon	7.56 (192.07)	.180 (4.572)	.052 (1.32)	1-7/8 (47.63)	50 lbs.	MS3367-1	100	10
CPGI-CTY-07-50-BLK-M	UV Black Nylon	7.56 (192.07)	.180 (4.572)	.052 (1.32)	1-7/8 (47.63)	50 lbs.	MS3367-1	1000	5
CPGI-CTY-07-50-HS-BLK-C	Heat Stabilized Black Nylon	7.56 (192.07)	.180 (4.572)	.052 (1.32)	1-7/8 (47.63)	50 lbs.		100	10
CPGI-CTY-11-50-NAT-C	Natural Nylon	11.25 (285.75)	.180 (4.572)	.052 (1.32)	3-1/16 (77.79)	50 lbs.	MS3367-7-9	100	10
CPGI-CTY-11-50-NAT-D	Natural Nylon	11.25 (285.75)	.180 (4.572)	.052 (1.32)	3-1/16 (77.79)	50 lbs.	MS3367-7-9	500	5
CPGI-CTY-11-50-BLK-C	UV Black Nylon	11.25 (285.75)	.180 (4.572)	.052 (1.32)	3-1/16 (77.79)	50 lbs.	MS3367-7-9	100	10
CPGI-CTY-11-50-BLK-D	UV Black Nylon	11.25 (285.75)	.180 (4.572)	.052 (1.32)	3-1/16 (77.79)	50 lbs.	MS3367-7-9	500	5
CPGI-CTY-11-50-HS-BLK-C	Heat Stabilized Black Nylon	11.25 (285.75)	.180 (4.572)	.052 (1.32)	3-1/16 (77.79)	50 lbs.		100	10
CPGI-CTY-14-50-NAT-C	Natural Nylon	14.56 (369.87)	.180 (4.572)	.052 (1.32)	4-1/8 (104.78)	50 lbs.	MS3367-2-9	100	10
CPGI-CTY-14-50-NAT-D	Natural Nylon	14.56 (369.87)	.180 (4.572)	.052 (1.32)	4-1/8 (104.78)	50 lbs.	MS3367-2-9	500	5
CPGI-CTY-14-50-BLK-C	UV Black Nylon	14.56 (369.87)	.180 (4.572)	.052 (1.32)	4-1/8 (104.78)	50 lbs.	MS3367-2-0	100	10
CPGI-CTY-14-50-BLK-D	UV Black Nylon	14.56 (369.87)	.180 (4.572)	.052 (1.32)	4-1/8 (104.78)	50 lbs.	MS3367-2-0	500	5
CPGI-CTY-14-50-HS-BLK-C	Heat Stabilized Black Nylon	14.56 (369.87)	.180 (4.572)	.052 (1.32)	4-1/8 (104.78)	50 lbs.		100	10
CPGI-CTY-17-50-NAT-C	Natural Nylon	17.09 (434.16)	.187 (4.749)	.060 (1.52)	4-3/4 (120.65)	50 lbs.		100	10
CPGI-CTY-17-50-BLK-C	UV Black Nylon	17.09 (434.16)	.187 (4.749)	.060 (1.52)	4-3/4 (120.65)	50 lbs.		100	10
Light Heavy-Duty, Heavy-Duty & Extra Heavy-Duty Natural, UV Black									
CPGI-CTY-15-120-NAT-L	Natural Nylon	15.09 (383.36)	.300 (7.62)	.076 (1.930)	4-1/16 (103.18)	120 lbs.	MS3367-3	50	10
CPGI-CTY-15-120-BLK-L	UV Black Nylon	15.09 (383.36)	.300 (7.62)	.076 (1.930)	4-1/16 (103.18)	120 lbs.	MS3367-3	50	10
CPGI-CTY-18-120-NAT-L	Natural Nylon	17.70 (449.58)	.305 (7.74)	.080 (2.032)	5-1/4 (133.35)	120 lbs.		50	10
CPGI-CTY-18-120-BLK-L	UV Black Nylon	17.70 (449.58)	.305 (7.74)	.080 (2.032)	5-1/4 (133.35)	120 lbs.		50	10
CPGI-CTY-24-120-NAT-L	Natural Nylon	24.18 (630.22)	.305 (7.74)	.080 (2.032)	7 (177.80)	120 lbs.		50	5
CPGI-CTY-24-120-BLK-L	UV Black Nylon	24.18 (630.22)	.305 (7.74)	.080 (2.032)	7 (177.80)	120 lbs.		50	5
CPGI-CTY-28-120-NAT-L	Natural Nylon	28.50 (723.9)	.305 (7.74)	.080 (2.032)	8 (203.20)	120 lbs.		50	5
CPGI-CTY-28-120-BLK-L	UV Black Nylon	28.50 (723.9)	.305 (7.74)	.080 (2.032)	8 (203.20)	120 lbs.		50	5
CPGI-CTY-25-175-NAT-L	Natural Nylon	25.25 (641.35)	.340 (8.64)	.090 (2.29)	7-1/8 (182.56)	175 lbs.	MS3367-10	50	5
CPGI-CTY-25-175-BLK-L	UV Black Nylon	25.25 (641.35)	.340 (8.64)	.090 (2.29)	7-1/8 (182.56)	175 lbs.	MS3367-10	50	5
CPGI-CTY-37-175-NAT-L	Natural Nylon	37.25 (946.15)	.340 (8.64)	.090 (2.29)	11 (279.40)	175 lbs.	MS3367-13	50	5
CPGI-CTY-37-175-BLK-L	UV Black Nylon	37.25 (946.15)	.340 (8.64)	.090 (2.29)	11 (279.40)	175 lbs.	MS3367-13	50	5
CPGI-CTY-48-175-NAT-L	Natural Nylon	48.50 (1231.9)	.340 (8.64)	.090 (2.29)	14-1/2 (368.30)	175 lbs.	MS3367-16	50	5
CPGI-CTY-48-175-GRY-L	Gray Nylon	48.50 (1231.9)	.340 (8.64)	.090 (2.29)	14-1/2 (368.30)	175 lbs.	MS3367-16	50	5
CPGI-CTY-48-175-BLK-L	UV Black Nylon	48.50 (1231.9)	.340 (8.64)	.090 (2.29)	14-1/2 (368.30)	175 lbs.	MS3367-16	50	5
CPGI-CTY-22-250-NAT-C	Natural Nylon	21.93 (557.19)	.494 (12.54)	.086 (2.18)	6 (152.40)	250 lbs.		100	5
CPGI-CTY-22-250-BLK-C	UV Black Nylon	21.93 (557.19)	.494 (12.54)	.086 (2.18)	6 (152.40)	250 lbs.		100	5

Cable Ties & Accessories



Mounting Head Ties - Natural and UV Black

- One piece design allows for quicker mechanical mounting and reduced cost
- Secures and positions wire bundles, cables, hoses, etc. to panels or other surfaces with one mechanical fastener

Selection information (dimensions in inches/millimeters)

Catalog Number	Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Screw Size	Qty/ Bag	Packs/ Carton
CPGI-CTY-05-30-MH-NAT-C	Natural Nylon	5.8 (149.2)	.138 (3.505)	.045 (1.143)	1-1/4 (31.75)	30 lbs.	No. 8	100	10
CPGI-CTY-05-30-MH-BLK-C	UV Black Nylon	5.8 (149.2)	.138 (3.505)	.045 (1.143)	1-1/4 (31.75)	30 lbs.	No. 8	100	10
CPGI-CTY-07-50-MH-NAT-C	Natural Nylon	8 (203.2)	.177 (4.495)	.052 (1.32)	1-3/4 (44.45)	50 lbs.	No. 10	100	5
CPGI-CTY-07-50-MH-BLK-C	UV Black Nylon	8 (203.2)	.177 (4.495)	.052 (1.32)	1-3/4 (44.45)	50 lbs.	No. 10	100	5
CPGI-CTY-11-50-MH-NAT-C	Natural Nylon	11.7 (298.4)	.191 (4.851)	.061 (1.5459)	3 (76.20)	50 lbs.	No. 10	100	5
CPGI-CTY-11-50-MH-BLK-C	UV Black Nylon	11.7 (298.4)	.191 (4.851)	.061 (1.5459)	3 (76.20)	50 lbs.	No. 10	100	5
CPGI-CTY-14-50-MH-NAT-C	Natural Nylon	14.5 (368.3)	.186 (4.724)	.060 (1.52)	4 (101.60)	50 lbs.	No. 10	100	5
CPGI-CTY-14-50-MH-BLK-C	UV Black Nylon	14.5 (368.3)	.186 (4.724)	.060 (1.52)	4 (101.60)	50 lbs.	No. 10	100	5
CPGI-CTY-16-120-MH-NAT-C	Natural Nylon	15.7 (398)	.298 (7.569)	.075 (1.90)	4-1/16 (103.12)	120 lbs.	1/4	100	5
CPGI-CTY-16-120-MH-BLK-C	UV Black Nylon	15.7 (398)	.298 (7.569)	.075 (1.90)	4-1/16 (103.12)	120 lbs.	1/4	100	5



In-Line Ties - Natural and UV Black

- Reduced head height compared to standard head designs
- Increased safety, eliminates snags, cuts and abrasions to cables, hoses, products, and users
- No sharp tail cutoffs - remaining tail slips back into head of tie leaving no exposed sharp edges
- Quick and safe removal - simply cut and pry top crossbar to release cable tie, eliminating damage to wires, tubing, etc.
- Flexible head design allows the head to easily flex around the total circumference of tubing or bundled wires
- Tamper proof pawl located under the tie's head makes it inaccessible when bundled
- Easy handling finger grips on the tail provide a no slip grip during insertion and tensioning
- Ideal applications: wire harnesses, confined spaces, control panels, marine, hoses, playgrounds, construction, appliances, and safety equipment

Selection information (dimensions in inches/millimeters)

Catalog Number	Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Mil-Spec Reference	Qty/ Bag	Packs/ Carton
CPGI-CTY-07-50-LP-NAT-C	Natural Nylon	7.5 (191)	.177 (4.495)	.053 (1.35)	1-3/4 (44.45)	50 lbs.	MS3367-23	100	10
CPGI-CTY-07-50-LP-BLK-C	UV Black Nylon	7.5 (191)	.177 (4.495)	.053 (1.35)	1-3/4 (44.45)	50 lbs.	MS3367-23	100	10
CPGI-CTY-16-120-LP-NAT-C	Natural Nylon	16 (406.4)	.300 (7.62)	.075 (1.90)	41/6 (103.18)	120 lbs.		100	5
CPGI-CTY-16-120-LP-BLK-C	UV Black Nylon	16 (406.4)	.300 (7.62)	.075 (1.90)	41/6 (103.18)	120 lbs.		100	5

Cable Ties & Accessories



Push Mount Ties - Natural and UV Black

- Quick mounting one piece-design securely attaches bundle to panel
- Extra stability is created from the tensioning wings
- Thickness variations in materials is easily overcome with tensioning wings

Selection information (dimensions in inches/millimeters)

Catalog Number	Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Hole Diameter	Panel Thickness	Qty/ Bag	Packs/ Carton
CPGI-CTY-07-50-PM-NAT-C	Natural Nylon	7.9 (203.00)	.189 (4.8)	.062 (1.574)	1-15/16 (50.00)	50 lbs.	1/4 (6.40)	3/16 (3.55)	100	5
CPGI-CTY-07-50-PM-BLK-C	UV Black Nylon	7.9 (203.00)	.189 (4.8)	.062 (1.574)	1-15/16 (50.00)	50 lbs.	1/4 (6.40)	3/16 (3.55)	100	5
CPGI-CTY-07-50-PMW-NAT-C	Natural Nylon	7.8 (200.00)	.189 (4.8)	.062 (1.574)	1-15/16 (50.00)	50 lbs.	1/4 (6.40)	3/16 (3.55)	100	5
CPGI-CTY-07-50-PMW-BLK-C	UV Black Nylon	7.8 (200.00)	.189 (4.8)	.062 (1.574)	1-15/16 (50.00)	50 lbs.	1/4 (6.40)	3/16 (3.55)	100	5



Plenum Rated - Halar Ties

- Halar ties feature low smoke density and high flame-resistance, and are ideal for plenum areas where smoke generation is a concern

Selection information (dimensions in inches/millimeters)

Catalog Number	Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Qty/ Bag	Packs/ Carton
CPGI-CTY-04-18-HL-C	Maroon Halar	4.0 (102)	.094 (2.4)	.042 (1.07)	1/16 - 7/8	18 lbs	100	5
CPGI-CTY-08-50-HL-C	Maroon Halar	8.0 (203)	.178 (4.5)	.053 (1.35)	1/16 -	50 lbs	100	5



Releasable Ties - Natural and UV Black

- Temporary or Permanent Bundling allows for quick addition or removal of wires or items
- Strap finger release latch allows easy access but reduces snags compared to top latch styles

Selection information (dimensions in inches/millimeters)

Catalog Number	Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Qty/ Bag	Packs/ Carton
CPGI-CTY-05-50-RL-NAT-C	Natural Nylon	5.905 (150.00)	.299 (7.60)	.050 (1.27)	1-3/8 (35.00)	50 lbs.	100	10
CPGI-CTY-05-50-RL-BLK-C	UV Black Nylon	5.905 (150.00)	.299 (7.60)	.050 (1.27)	1-3/8 (35.00)	50 lbs.	100	10
CPGI-CTY-08-50-RL-NAT-C	Natural Nylon	7.87 (200)	.299 (7.60)	.053 (1.35)	2 (50.00)	50 lbs.	100	10
CPGI-CTY-08-50-RL-BLK-C	UV Black Nylon	7.87 (200)	.299 (7.60)	.053 (1.35)	2 (50.00)	50 lbs.	100	10
CPGI-CTY-12-50-RL-NAT-C	Natural Nylon	11.81 (300)	.299 (7.60)	.053 (1.35)	3 (76.20)	50 lbs.	100	10
CPGI-CTY-12-50-RL-BLK-C	UV Black Nylon	11.81 (300.00)	.299 (7.60)	.053 (1.35)	3 (76.20)	50 lbs.	100	10

Cable Ties & Accessories



Identification & Flag Cable Ties

- One easy step to identify and bundle items
- Flat ties extend from bundle to be easily seen when identification is critical
- Identification ties reduce snags while providing support to the bundle

Selection information (dimensions in inches/millimeters)

Catalog Number	Description	Length	Width	Thickness	Max Bundle	Tensile Strength	Pad Size	Qty/ Bag	Packs/ Carton
CPGI-CTY-04-18-ID-NAT-C	Natural Nylon	4.0 (102)	.100 (2.54)	.044 (1.12)	7/8 (22.22)	18 lbs.	5/16 x 1	100	5
CPGI-CTY-07-50-ID-NAT-C	Natural Nylon	7.8 (200)	.181 (4.59)	.055 (1.40)	1-7/8 (47.63)	50 lbs.	1/2 x 1 1/8	100	5
CPGI-CTY-14-50-ID-NAT-C	Natural Nylon	14.1 (358.10)	.187 (4.749)	.055 (1.40)	4 (101.60)	50 lbs.	1/2 x 1 1/8	100	5



Mounting Pads

- Saves cable tie clinching time - patented stay-n-place tab keeps cable tie head from sliding down behind bundle during applications and maintenance placement during horizontal applications
- Easy insertion of cable ties - patented lead-n-feature funnels cable ties into position and countersunk screw hole allows cable ties to easily pass over screw head
- Saves positioning time with the 4 sided entry and center screw hole

Selection information (dimensions in inches/millimeters)

Catalog Number	Description	Length	Height	Adhesive	Height	Width	Qty/ Bag	Packs/ Carton
CPGI-CTY-MP-750-NAT-C	Natural Nylon	.74 (18.7)	.19 (4.8)	Rubber	.05 (1.2)	.20 (5.0)	100	5
CPGI-CTY-MP-750-BLK-C	Black Nylon	.74 (18.7)	.19 (4.8)	Rubber	.05 (1.2)	.20 (5.0)	100	5
CPGI-CTY-MP-1000-NAT-C	Natural Nylon	.99 (25.1)	.20 (5.0)	Rubber	.06 (1.5)	.20 (5.0)	100	5
CPGI-CTY-MP-1000-BLK-C	Black Nylon	.99 (25.1)	.20 (5.0)	Rubber	.06 (1.5)	.20 (5.0)	100	5



Low Profile Screw Mounts

- Reduces snags allowing bundles closer proximity to mounting material
- Confined spaces & control panels or other areas where space is limited
- Achieve extreme low height when combined with ACT's Cobra-low profile cable tie

Selection information (dimensions in inches/millimeters)

Catalog Number	Description	Length	Slot Height	Slot Width	Height	Width	Qty/ Bag	Packs/ Carton
CPGI-CTY-LPM1-NAT-C	Natural Nylon	.75 (19.05)	.12 (3.04)	.50 (12.70)	.062 (1.587)	.18 (4.57)	100	5

Cable Ties & Accessories



Wall Mounts

- Saves cable tie cinching time - the stay-in-place tab keeps cable tie head from sliding down during vertical applications and maintains placement during horizontal applications
- Quickly secures and positions wire bundles, cables, hoses, etc. to walls
- One piece design allows for quicker mounting with no mechanical fastener, reducing time and cost

Selection information (dimensions in inches/millimeters)

Catalog Number	Shaft Description	Head Height	Shaft Height	Head Diameter	Slot Width	Head Width	Depth	Qty/ Bag	Packs/ Carton
CPGI-CTY-WM-BLK-C	Black Nylon	1.45/37.0	.248/6.3	.393/10.0	.50/12.7	.381/9.7	.492/12.5	100	5



Screw Mounts

- Secure support deep cradle design provides maximum support for large bundles and tubing
- Easy insertion of cable ties: deep recessed screw hole allows cable ties to pass over screw head

Selection information (dimensions in inches/millimeters)

Catalog Number	Description	Length	Height	Width	Slot Height	Slot Width	Qty/ Bag	Packs/ Carton
CPGI-CTY-SM1-NAT-C	Natural Nylon	.59 (14.98)	.27 (6.85)	.37 9.39	.062 (1.587)	.19 (4.82)	100	5
CPGI-CTY-SM1-BLK-C	Black Nylon	.59 (14.98)	.27 (6.85)	.37 9.39	.062 (1.587)	.19 (4.82)	100	5
CPGI-CTY-SM2-NAT-C	Natural Nylon	.87 (22.09)	.38 (9.65)	.64 16.25	.125 (3.175)	.30 (7.62)	100	5
CPGI-CTY-SM2-BLK-C	Black Nylon	.87 (22.09)	.38 (9.65)	.64 16.25	.125 (3.175)	.30 (7.62)	100	5



Wing Push Mounts & Button Mounts

- One piece design allows for quicker mounting with no mechanical fastener, reducing time and cost
- Quickly secures and positions wire bundles, cables, hoses, etc. to panels
- Easy insertion of cable ties through wide entry slot
- Extra stability is created from the push mount tensioning wings
- Saves cable tie cinching time. The button mount's stay-in-place tab keeps cable ties from sliding during application

Selection information (dimensions in inches/millimeters)

Wing Push Mounts

Catalog Number	Description	Height	Depth	Wing Width	Head Width	Slot Width	Mount Width	Qty/ Bag	Packs/ Carton
CPGI-CTY-PMW-NAT-C	Natural Nylon	.732 (18.6)	.375 (9.5)	.79 (20.1)	.422 (10.72)	.31 (8.1)	.244 (6.2)	100	5

Button Mounts

Catalog Number	Description	Height	Exposed	Shaft Length	Button Diameter	Slot Width	Shaft Diameter	Qty/ Bag	Packs/ Carton
CPGI-CTY-BM-BLK-C	Black Nylon	.535 (13.6)	.248 (6.3)	.287 (7.3)	.634 (16.12)	.196 (5.0)	.299 (7.6)	100	5

Cable Ties & Accessories



Identification Plates

- Allows larger print when information and visibility is critical
- Increased surface area provides twice the area as conventional identification cable ties
- Orientation variety: apply to bundle vertically or horizontally
- For use with 18 lb., 40 lb., and 50 lb. cable ties

Selection information (dimensions in inches/millimeters)

Catalog Number	Description	Length	Width	Slot Thickness	Slot Height	Width	Qty/ Bag	Packs/ Carton
CPGI-CTY-IDP-1-NAT-C	Natural Nylon	1.57 (40.0)	.787 (20.0)	.039 (1.0)	.08 (2.03)	.18 (4.57)	100	5
CPGI-CTY-IDP-2-NAT-C	Natural Nylon	2.36 (60.0)	.984 (25.0)	.039 (1.0)	.08 (2.03)	.18 (4.57)	100	5



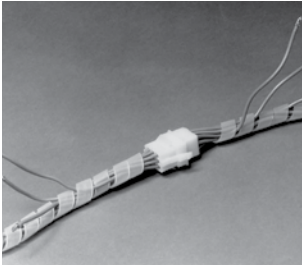
Cable Clamps

- Designed to secure the routing of cables, harnesses, and hoses
- Radius edges protect against insulation, abrasion, and cutting hoses
- Quick alignment is achieved with bottom oval screw hole
- Accurate selection is made easy with clearly identified diameter sizes

Selection information (dimensions in inches/millimeters)

Catalog Number	Description	Screw Hole	Diameter	Width	Center to Center	Thickness	Qty/ Bag	Packs/ Carton
CPGI-CTY-CCL-125-NAT-C	Natural Nylon	.181 (4.6)	.126 (3.2)	.378 (9.6)	.374 (9.5)	.055 (1.4)	100	5
CPGI-CTY-CCL-125-BLK-C	Black Nylon	.181 (4.6)	.126 (3.2)	.378 (9.6)	.374 (9.5)	.055 (1.4)	100	5
CPGI-CTY-CCL-250-NAT-C	Natural Nylon	.181 (4.6)	.250 (6.3)	.394 (10.0)	.394 (10.0)	.055 (1.4)	100	5
CPGI-CTY-CCL-250-BLK-C	Black Nylon	.181 (4.6)	.250 (6.3)	.394 (10.0)	.394 (10.0)	.055 (1.4)	100	5
CPGI-CTY-CCL2-375-NAT-C	Natural Nylon	.181 (4.6)	.374 (9.5)	.472 (12.0)	.492 (12.5)	.059 (1.5)	100	5
CPGI-CTY-CCL2-375-BLK-C	Black Nylon	.181 (4.6)	.374 (9.5)	.472 (12.0)	.492 (12.5)	.059 (1.5)	100	5
CPGI-CTY-CCL2-500-NAT-C	Natural Nylon	.181 (4.6)	.500 (12.7)	.472 (12.0)	.598 (15.2)	.059 (1.5)	100	5
CPGI-CTY-CCL2-500-BLK-C	Black Nylon	.181 (4.6)	.500 (12.7)	.472 (12.0)	.598 (15.2)	.059 (1.5)	100	5
CPGI-CTY-CCL2-750-NAT-C	Natural Nylon	.181 (4.6)	.764 (19.4)	.472 (12.0)	.717 (18.2)	.059 (1.5)	100	5
CPGI-CTY-CCL2-750-BLK-C	Black Nylon	.181 (4.6)	.764 (19.4)	.472 (12.0)	.717 (18.2)	.059 (1.5)	100	5
CPGI-CTY-CCL2-1000-NAT-C	Natural Nylon	.181 (4.6)	1.00 (25.4)	.472 (12.0)	.866 (22.0)	.071 (1.8)	100	5
CPGI-CTY-CCL2-1000-BLK-C	Black Nylon	.181 (4.6)	1.00 (25.4)	.472 (12.0)	.866 (22.0)	.071 (1.8)	100	5

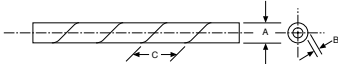
Plastic Cable Wrap



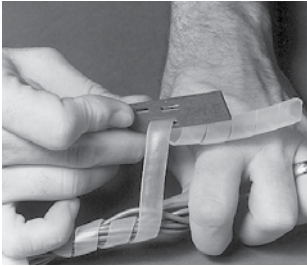
Plastic Cable Wrap
SPIRAP Hand Tool

- Provides abrasion protection for wires, cables, tubing, and hoses
- Attractive - makes neat, compact uniform bundles
- Break-out at any point along the bundle
- Moisture resistant - will not hold "cable-rotting" moisture
- Meets military and commercial specifications
- Available in three sizes converting from 1/16 th-inch (1.58) to 4-inch (101.60) diameter bundles
- Quickly applied by hand or by supplied hand tool

Selection information (dimensions in inches/millimeters)



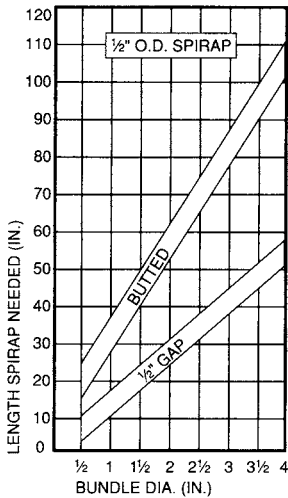
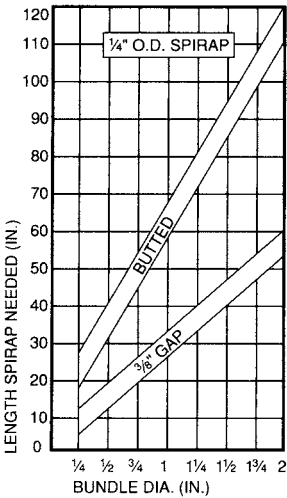
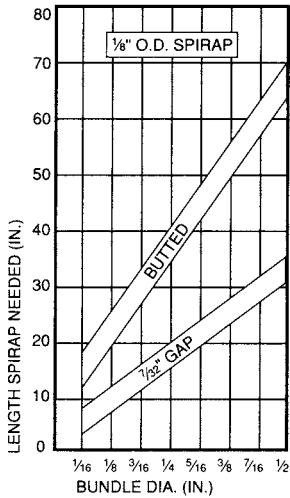
Catalog Number	Max. Bundle O.D. Size	Dia. Range	Dimensions			Length		Std. Pack
			A	B	C	Ft/Box	M/Box	
AMPS-O-0500000-1	1/8 (3.18)	1/16 - 1/2 (1.59 - 12.70)	.125 (3.18)	.031 (.70)	.218 (5.54)	50	15.24	50
AMPS-O-0500001-1	1/4 (6.35)	3/16 - 2 (4.76 - 50.8)	.250 (6.25)	.045 (1.14)	.375 (9.53)	50	15.24	50
AMPS-O-0500002-1	1/2 (12.70)	3/8 - 4 (9.53 - 101.6)	.500 (12.70)	.062 (1.57)	.500 (12.70)	50	15.24	50



SPIRAP Hand Tool

Part Number 500901

Furnished with each box, the SPIRAP hand tool increases the spread of application and permits uniform wrapping along the bundle length. The hand tool is slotted for 1/8-inch (3.18), 1/4-inch (6.35) and 1/2-inch (12.70) SPIRAP tubing.



Retaining Clips

**Exterior Siding Wire Retaining Clips**

Exterior siding clips offer a low cost, efficient means of routing and retaining wire on aluminum and vinyl siding. All clips snap under the siding lap joint.

Selection information (dimensions in inches/millimeters)

Catalog Number	Type	Depth	Height	Width	Std. Pack
CPGI-061-0114A	Aluminum	0.750	0.750	0.600	5
CPGI-061-0114V	Vinyl	0.750	0.980	0.600	5

**Exterior Masonry Wire Retaining Clips**

Masonry Clips are supplied with pre-inserted hardened, zinc coated nails. These masonry clips can be mounted to cinderblock, masonry, and other forms of concrete. All siding clips are made from high-impact flame-retardant polycarbonate and are compatible with current designs of datacom, CATV, and telecom wire.

Selection information (dimensions in inches/millimeters)

Catalog Number	Type	Opening Dimension	Std. Pack
CPGI-063-0020	Masonry	0.500	5

Duct Sealing System



Duct Sealing System

RDSS Sealing System

RDSS duct sealing system has been designed for use in conjunction with plastic, concrete, or steel ducts to provide a watertight duct seal. The RDSS duct sealing system seals cable ducts and helps to prevent flooding in cable vaults, access manholes, substation basements, and customer feeds. It can be installed while the water is flowing - see photograph.

Provides watertight seal

The RDSS sealing system consists of an inflatable, sealed bladder of flexible, metallic laminate material, which has pre installed, high-temperature sealant strips on both sides. The bladder is first inflated to 45 psi (three-bar) internal pressure, and then presses the sealant against the duct wall and onto the substrate. The bag uses a self-sealing gel material to seal the filling hole when the filling tube is removed.

Seals multiple cable ducts

For applications with three or more cables, an RDSS-CLIP is inserted between the cables. The RDSS CLIP is a high-temperature mastic mounted on an installation stick. It seals the area between the cables when used in conjunction with the RDSS inflatable bladder. Acceptable to use on medium voltage cables including unjacketed concentric neutral.

Selection information (dimensions in inches/millimeters)

Duct Inner Diameter	Number of Cables in Duct / Maximum Cable Bundle Diameter					
	0, 1, or 2 Cables		3 or 4 Cables		5, 6, or 7 Cables	
1.25 (32)	RDSS-45	0.5 (13)	RDSS-45, 1 RDSS-CLIP-45	0.3 (8)	RDSS-45, 2 RDSS-CLIP-45	0.1 (3)
1.50 (38)	RDSS-45	1.0 (25)	RDSS-45, 1 RDSS-CLIP-45	0.8 (20)	RDSS-45, 2 RDSS-CLIP-45	0.6 (15)
1.75 (45)	RDSS-45	1.3 (32)	RDSS-45, 1 RDSS-CLIP-45	1.05 (27)	RDSS-45, 2 RDSS-CLIP-45	0.9 (22)
2.00 (50)	RDSS-60	1.2 (30)	RDSS-60, 1 RDSS-CLIP-75	1.0 (25)	RDSS-60, 2 RDSS-CLIP-75	0.8 (20)
2.25 (57)	RDSS-60	1.6 (41)	RDSS-75, 1 RDSS-CLIP-75	1.4 (36)	RDSS-75, 2 RDSS-CLIP-75	1.2 (31)
2.50 (64)	RDSS-75	1.5 (38)	RDSS-75, 1 RDSS-CLIP-75	1.3 (33)	RDSS-75, 2 RDSS-CLIP-75	1.1 (28)
2.75 (70)	RDSS-75	1.8 (46)	RDSS-75, 1 RDSS-CLIP-75	1.6 (41)	RDSS-75, 2 RDSS-CLIP-75	1.4 (36)
3.00 (75)	RDSS-75	2.2 (56)	RDSS-75, 1 RDSS-CLIP-75	2.0 (50)	RDSS-75, 2 RDSS-CLIP-75	1.8 (46)
3.25 (83)	RDSS-100	2.2 (56)	RDSS-100, 1 RDSS-CLIP-100	2.0 (50)	RDSS-100, 2 RDSS-CLIP-100	1.8 (46)
3.50 (89)	RDSS-100	2.6 (66)	RDSS-100, 1 RDSS-CLIP-100	2.4 (61)	RDSS-100, 2 RDSS-CLIP-100	2.2 (56)
3.75 (95)	RDSS-100	2.9 (74)	RDSS-100, 1 RDSS-CLIP-100	2.7 (69)	RDSS-100, 2 RDSS-CLIP-100	2.5 (64)
4.00 (100)	RDSS-100	3.2 (80)	RDSS-100, 1 RDSS-CLIP-100	3.0 (75)	RDSS-100, 2 RDSS-CLIP-100	2.8 (70)
4.25 (108)	RDSS-100	3.5 (89)	RDSS-100, 1 RDSS-CLIP-100	3.3 (85)	RDSS-100, 2 RDSS-CLIP-100	3.1 (79)
4.50 (114)	RDSS-100	3.5 (89)	RDSS-100, 1 RDSS-CLIP-100	3.3 (85)	RDSS-100, 2 RDSS-CLIP-100	3.1 (79)
4.75 (121)	RDSS-125	3.8 (97)	RDSS-125, 1 RDSS-CLIP-125	3.6 (92)	RDSS-125, 2 RDSS-CLIP-125	3.4 (87)
5.00 (125)	RDSS-125	4.1 (104)	RDSS-125, 1 RDSS-CLIP-125	3.9 (98)	RDSS-125, 2 RDSS-CLIP-125	3.7 (93)
5.25 (133)	RDSS-150†	4.3 (109)	RDSS-150†, 1 RDSS-CLIP-150	4.1 (104)	RDSS-150†, 2 RDSS-CLIP-150	3.9 (98)
5.50 (140)	RDSS-150†	4.7 (120)	RDSS-150†, 1 RDSS-CLIP-150	4.5 (114)	RDSS-150†, 2 RDSS-CLIP-150	4.3 (109)
5.75 (146)	RDSS-150†	4.9 (124)	RDSS-150†, 1 RDSS-CLIP-150	4.7 (119)	RDSS-150†, 2 RDSS-CLIP-150	4.5 (114)
6.00 (150)	RDSS-150†	5.1 (129)	RDSS-150†, 1 RDSS-CLIP-150	4.9 (124)	RDSS-150†, 2 RDSS-CLIP-150	4.7 (120)
6.25 (159)	RDSS-150†	5.4 (138)	RDSS-150†, 1 RDSS-CLIP-150	5.2 (133)	RDSS-150†, 2 RDSS-CLIP-150	5.0 (125)
6.50 - 8.00 (165 - 210mm) Ducts in this range require the use of RDSS-AD-210 adapter. Contact Tyco Electronics for application information.						

[†]See Ordering information.

RDSS sealing system continues next page

Duct Sealing Sytem

RDSS Sealing System continues

Ordering information

1. In ducts where the cable/cable bundle is less than 2.4" (60mm) in diameter, an RDSS-AT/AP-150 device must be used in conjunction with the RDSS-150.
2. Standard package: RDSS = 10 kits/box or 3 kits/box RDSS-CLIP = 5 clips/box
RDSS-TOOLS = 1 each/box, CO2 cartridges = 10 each/box,
RDSS-AT/AP-150 = 1 each/box
3. Related test report: EDR-5253
4. S-1278 sealant, used in RDSS-CLIPS, is available separately.

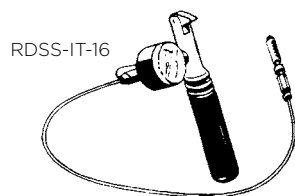
RDSS sealing clip

RDSS duct sealing clips are to be used if the duct is occupied by more than two cables. The maximum number of cables sealed with one RDSS-CLIP is four. If more cables are to be sealed, one extra clip is needed for every three additional cables. Check with your Tyco Electronics representative for applications with more than seven cables.

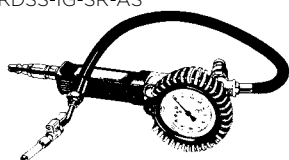
Catalog Number	Kit Used With
RDSS-CLIP-45	RDSS-45
RDSS-CLIP-75	RDSS-75 and RDSS-60
RDSS-CLIP-100	RDSS-100
RDSS-CLIP-125	RDSS-125
RDSS-CLIP-150	RDSS-150

RDSS Installation Tools

RDSS duct seals can be installed with a variety of inflation tools having the capability of inflating RDSS to 4533 psi (3 bar) of pressure. The tools Tyco Electronics offers are summarized in the table below. The tool will only accept 16-gr CO2 gas cylinders (listed below).



RDSS-IG-SR-AS



Catalog Number	Description	Std. Pack
RDSS-IT-16	Inflation tool designed with an ON/OFF switch and an automatic pressure-monitoring system. The required CO2 gas cylinders (E7512-0160) must be ordered separately.	1 tool/box
E7512-0160	16-gr CO2 gas cylinders for the RDSS-IT-16 tool. Each gas cylinder inflates approximately four RDSS-100 duct seals.	10 cylinders/box
RDSS-IG-SR-AS	Inflation tool designed for use with customer's own source of nitrogen or compressed air. Features a pressure gauge, automatic shutoff, VGF valve connection, and two alternate connections for plastic or rubber hoses.	1 tool/box
E7512-0220	Tube snap assembly.	1 each/box
E7512-0240	Spare part for RDSS-IT-16 inflation tool.	1 each/box
E7512-0260	Spare pressure gauge assembly for RDSS-IT-16 inflation tool.	1 each/box
S-1278-3 x 61 x 7620	Spare delivery pipe for RDSS-IT-16 inflation tool.	1 each box
RDSS-AT/AP-150	RDSS sealant roll.	1 25-ft roll/box
	For use with the RDSS-150 in duct 5.25" or larger with cable/cable bundles less than 2.4" (60mm) in diameter.	1 each/box
RDSS-AD-210	Adapter for ducts 6.5 - 8.0" (165 - 210mm) diameter	4 each/box
E4540-1250	RDSS-LUBE for installation of RDSS.	25 each/box

TELECOM / DATACOM / COAX



Telecom Datacom

Water-Resistant Telephone/CAT-5 Splice Kits & Covers.	53
Water-Resistant Drop Wire Splices & Taps.	53

Coax

Water-Resistant Coax Splice Kits & Covers	54
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Telecom/Datacom



Water-Resistant Telephone/CAT-5 Splice Kits & Covers

CERTI-SEAL Aerial Splice Closure

The telephone wire splice kits and covers are designed for direct buried splicing of Telco and Datacom cables. These quickly installed, low-cost splice kits can be used to repair damaged telecom and datacom cables. The water-resistant, gel-filled construction seals out the environment, withstands 14 days immersion without signal degradation, and withstands extreme temperatures. One-piece housing snaps on and requires no special tools.

Select information

Catalog Number	Cable Type	Connectors	Std. Pack
CPGI-1116542-1	Telephone	No	5
CPGI-1116542-1-K	Telephone	Yes	5
CPGI-1217204-1	Telephone	No	5
CPGI-1217204-1-K	Telephone	Yes	5



Water-Resistant Drop Wire Splices & Taps

Tel-Splice Connectors

Water-resistant insulation displacement, gel-filled splice and tap connectors provide an economical and reliable means of splicing telephone/CAT-5 cable conductors. These tiny splices and taps are highly durable and resistant to moisture and chemical attack. No pre-stripping required reduces operator preparation.

Select information

Catalog Number	Cable Type	Connectors	Pcs./Pack	Packs/ Carton
CPGI-552795-2	Telephone	2-Wire	20	5
CPGI-1-552678-2	Telephone	3-Wire	20	5
CPGI-1-553017-2	Telephone	Half-Tap	20	5
CPGI-5-554374-7	Telephone	Cap	20	5

Coax



Water-Resistant Coax Splice Kits & Covers
CERTI-SEAL Coax Splice Closure

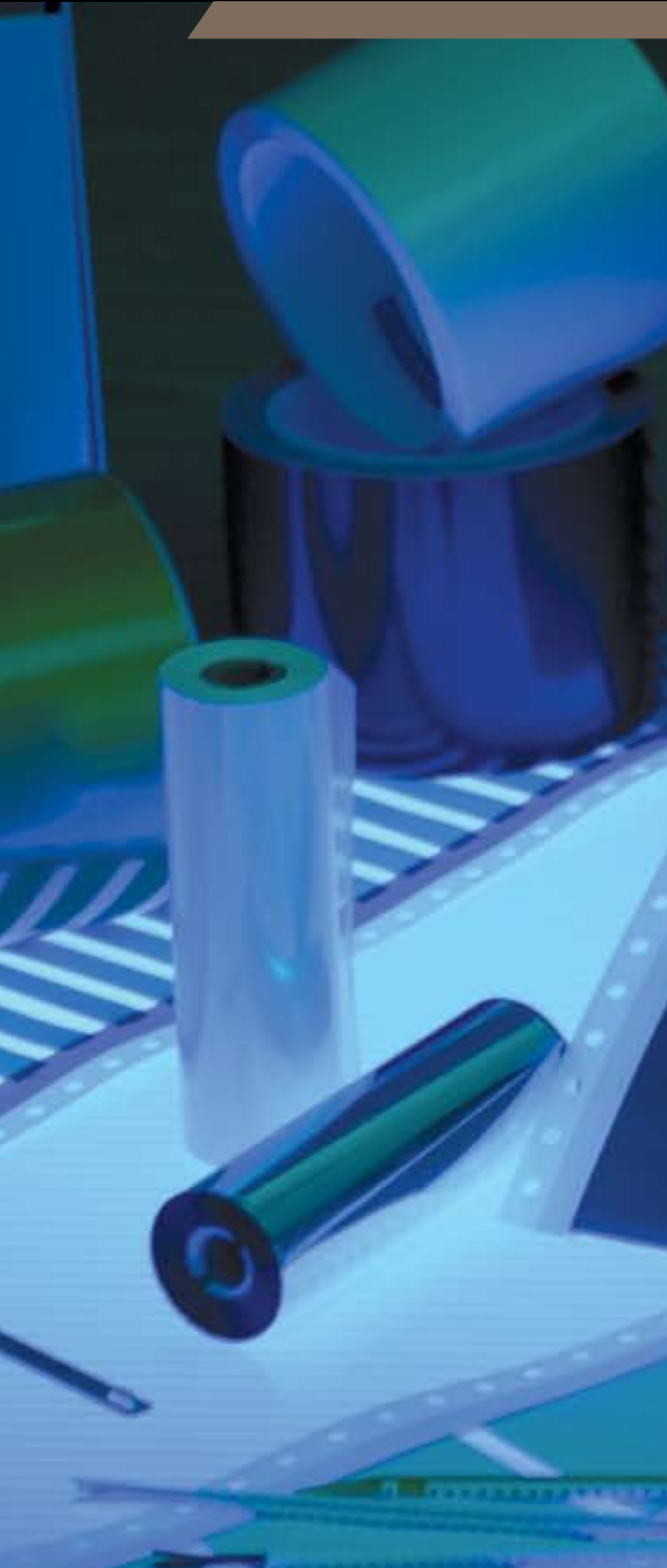
Coax splice kits and covers are designed for direct buried splicing of Series RG-59 and RG-6 coaxial cables. These quickly installed, low-cost kits and covers can be used to repair damaged coax cable. The water-resistant gel-filled construction seals out environment, withstands 14 days immersion without signal degradation and withstands extreme temperatures. One-piece housing snaps on and requires no special tools.

Select information

Catalog Number	Cable Type	Connectors	Pcs./Pack	Packs/ Carton
CPGI-569224-1	Coax	No	1	5
CPGI-569224-1-K	Coax	Yes	1	5
CPGI-569661-1	Coax	No	1	5
CPGI-569661-1-K	Coax	Yes	1	5
CPGI-VST-02/1	Coax	No	2	5



IDENTIFICATION SOLUTIONS



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Heat-Shrink Markers



ShrinkMark Heat-Shrinkable Sleeves

ShrinkMark sleeves are suitable for a wide variety of applications. Heat-shrinkable sleeves provide legible identification for all types of cables used by electrical contractors and instrumentation control manufacturers.

Because ShrinkMark sleeves are extruded from Tyco Electronics tubing, they have a low installed profile with no edges to snag. The crosslinked polyolefin construction makes ShrinkMark sleeves resistant to abrasion, aggressive cleaning solvents and industrial fluids.

ShrinkMark sleeves are ideal for tough industrial environments, including switch gear, motor control centers, and terminal boxes. They shrink faster than conventional thermoplastic tags.

- Shrink ratio of 3:1
- Expanded sleeve diameters from 3.125mm (.125") to 38mm (1.50")
- Sleeves come in 50mm (2.00") lengths
- Flame retardant. Sleeves meet UL 224
- Temperature range is -30°C to 105°C
- Print performance to military requirements
- ShrinkMark sleeves can be supplied pre-scored for a more economical use of material
- Several packaging options to choose from: 250, 1,000 or 2,500 pieces per box
- Standard colors are white and yellow
- Elliptical shape leaves unshrunk sleeves in place

Selection information (dimensions in inches/millimeters)

Product Order Code

Replace - 9 with - 4

if Yellow is needed

	Wire Size	Nominal Diameter	Recovered Diameter
ShrinkMark-18-2-9	#22 - #18	0.125 (3)	0.042 (1)
ShrinkMark-18-2-S1-9	#22 - #18	0.125 (3)	0.042 (1)
ShrinkMark-12-2-9	#18 - #12	0.187 (5)	0.062 (2)
ShrinkMark-12-2-S1-9	#18 - #12	0.187 (5)	0.062 (2)
ShrinkMark-10-2-9	#16 - #10	0.250 (6)	0.083 (2)
ShrinkMark-10-2-S1-9	#16 - #10	0.250 (6)	0.083 (2)
ShrinkMark-2-2-9	#10 - #2	0.500 (13)	0.167 (4)
ShrinkMark-2-2-S1-9	#10 - #2	0.500 (13)	0.167 (4)
ShrinkMark-250-2-9	#1 - 250	1.00 (25)	0.333 (9)
ShrinkMark-1000-2-9	350 - 1000	1.40 (36)	0.740 (19)
ShrinkMark-1000-2-S1-9	350 - 1000	1.40 (36)	0.740 (19)

ShrinkMark 10 - 2 - S2 - 9 (1K)

Product name

Largest nominal conductor size in range

Sleeve length in inches

Number of scores

Blank = No scores yields 1 each - 2" marker

S1 = One score yields 2 each - 1" markers per sleeve

S2 = Two scores yields 3 each - 5/8" markers per sleeve

S3 = Three scores yields 4 each - 1/2" markers per sleeve

Standard package

Blank = 250 sleeves per box

(1K) = 1,000 sleeves per box

(2.5K) = 2,500 sleeves per box

Color

4 = Yellow

9 = White



UL recognized
to Standard
224



Certified
C22.2
No. 198.1

Recommended

Printers

IDP-T208M-PRINTER

IDP-T312M-PRINTER

IDP-AM630-110V-PRINTER

See page 66 for more information.

Ribbons

IDP-T208M-RIBBON

IDP-TMS-RJS-RIBN-4RPSC

IDP-1892BK04-RIBBON

Cable Markers



CM-SCE Cable Markers

CM-SCE cable markers provide a reliable method of identification of larger cables and bundles. They can be installed using standard nylon tie wraps.

- Cable markers are a standard 55mm (2") length that come in a 6.25mm (.25") or 12.5mm (.50") width
- Flame retardant. Cable Markers meet UL 224
- Print performance to military requirements
- Standard color is white

Selection information: (dimensions in inches/millimeters)

Catalog Number	Description	Std. Pack
IDP-CM-SCE-25-4H-9	1/4" Cable Marker, 4 hole	250
IDP-CM-SCE-50-4H-9	1/2" Cable Marker, 4 hole	250
IDP-CM-SCE-50-6H-9	1/2" Cable Marker, 6 hole	250

Recommended

Printers

IDP-AM630-110V-PRINTER

See page 66 for more information.

Ribbons

IDP-1892BK04-RIBBON



HL Cable Markers

HL cable markers are a cost effective way to identify cables already terminated. Like CM-SCE cable markers, cable ties are used to secure the label to cables or bundles.

- Easy to use fan-fold format for easy kitting and marker selection
- Cable markers are available in 44mm (1.75")-87.5mm (3.50") lengths and 9.4mm (.375")-25mm (1.0") widths
- Standard color is white

Selection information: (dimensions in inches/millimeters)

Catalog Number	Dimensions W x H	Printable Area W x H	Pcs/ Pack	Std. Pack
IDP-HL104WEITS025B	1.800 x 0.400 (45.00 x 10.40)	1.000 x 0.400 (25.00 x 10.40)	1000	1
IDP-HL104WEITS033B	2.100 x 0.400 (52.00 x 10.40)	1.300 x 0.400 (33.00 x 10.40)	1000	1
IDP-HL104WEITS038B	2.300 x 0.400 (58.00 x 10.40)	1.500 x 0.400 (38.00 x 10.40)	1000	1
IDP-HL104WEITS050B	2.750 x 0.400 (70.00 x 10.40)	2.000 x 0.400 (50.00 x 10.40)	1000	1
IDP-HL104WEITS070B	3.500 x 0.400 (90.00 x 10.40)	2.750 x 0.400 (70.00 x 10.40)	1000	1
IDP-HL203WEITS025B	1.800 x 0.800 (45.00 x 20.30)	1.000 x 0.800 (25.00 x 20.30)	500	1
IDP-HL203WEITS033B	2.100 x 0.800 (52.00 x 20.30)	1.300 x 0.800 (33.00 x 20.30)	500	1
IDP-HL203WEITS038B	2.300 x 0.800 (58.00 x 20.30)	1.500 x 0.800 (38.00 x 20.30)	500	1
IDP-HL203WEITS050B	2.750 x 0.800 (70.00 x 20.30)	2.000 x 0.800 (50.00 x 20.30)	500	1
IDP-HL203WEITS070B	3.500 x 0.800 (90.00 x 20.30)	2.750 x 0.800 (70.00 x 20.30)	500	1
IDP-HL253WEITS025B	1.800 x 1.000 (45.00 x 25.30)	1.000 x 1.000 (25.00 x 25.30)	250	1
IDP-HL253WEITS033B	2.100 x 1.000 (52.00 x 25.30)	1.300 x 1.000 (33.00 x 25.30)	250	1
IDP-HL253WEITS038B	2.300 x 1.000 (58.00 x 25.30)	1.500 x 1.000 (38.00 x 25.30)	250	1
IDP-HL253WEITS050B	2.750 x 1.000 (70.00 x 25.30)	2.000 x 1.000 (50.00 x 25.30)	250	1
IDP-HL253WEITS070B	3.500 x 1.000 (90.00 x 25.30)	2.750 x 1.000 (70.00 x 25.30)	250	1

Recommended

Printers

IDP-T312M-PRINTER

See page 66 for more information.

Ribbons

IDP-TMS-RJS-RIBN-4RPSCE

Cable Markers

**HLX-NEL Cable Markers**

Tyco Electronics HLX markers are assembled in Narrow Edge Leading (NEL) format for use in the T208M printer. Markers are manufactured from low fire hazard polyolefin material making them ideal in applications where low smoke, low toxicity and zero hallogen are critical.

- Ideal for pre or post termination assembly
- Attach using standard cable ties
- Operating temperature -40°C to 105°C

Selection information: (dimensions in inches/millimeters)

Catalog Number	Marker Dimensions	Number of Printable Area	Markers Across	Std. Pack
IDP-HLX125WE4NEL60S	3.15 x 0.49 (80 x 12.5)	2.35 x 0.4 (60 x 10.50)	4	200
IDP-HLX125WE2NEL60S	3.15 x 0.49 (80 x 12.5)	2.35 x 0.4 (60 x 10.50)	2	200
IDP-HLX125YW4NEL60S	3.15 x 0.49 (80 x 12.5)	2.35 x 0.4 (60 x 10.50)	4	200
IDP-HLX125YW2NEL60S	3.15 x 0.49 (80 x 12.5)	2.35 x 0.4 (60 x 10.50)	2	200

Recommended**Printers**

IDP-T208M-PRINTER

See page 66 for more information.

Ribbons

IDP-T200-RIBBON-1966

Cable Markers



Permark Pre-Printed 316 Stainless Steel Markers

Permark stainless steel markers and identification plates are designed to withstand the most hostile environments. Using state-of-the-art technology and no inks, the marking process produces a permanent, deep surface mark. Permark markers are produced for individual customer requirements on a fast turn-around basis.

- Pre-marked to customer requirements
- Transfer of data files electronically or via fax
- Excellent chemical, abrasion, corrosion, and weather resistance
- One-piece, 316 stainless steel construction
- Stainless steel cable ties are also available

Selection information: (dimensions in inches/millimeters)

Catalog Number	Description	Std. Pack
IDP-PM09512	Stainless Steel 4mm, 95x12mm marker - Pre-Printed (max 25 characters)	1
IDP-PM09512-BLANK	Stainless Steel 4mm, 95x12mm marker - Blank	1
IDP-PM07507	Stainless Steel 4mm, 75x7mm marker - Pre-Printed (max 20 characters)	1
IDP-PM07507-BLANK	Stainless Steel 4mm, 75x7mm marker - Blank	1
IDP-SST141-316	SS cable tie 0.18" x 14.3" (4.6 x 360mm), Ties/ Pack 100	100
IDP-SST71-316	SS cable tie 0.18" x 7.9" (4.6 x 200mm), Ties/ Pack 100	100



Snap-On Markers

Snap-on markers represent the best snap-on wire marking system available. Convenient and easy to use, these markers are supplied on a "wand" applicator that simplifies and reduces installation time and saves on the cost of marking.

- Perfect way to permanently and rapidly mark cables and wires after installation
- Resistant against oils, cleaning agents, and fuels
- Markers come in white with black print. Color-coding options available for markers 0-9

Selection information: (dimensions in inches)

Catalog number	Description	Wand Color	Pcs. / Pack
STD03W-x	Cable diameters 0.076 - 0.104" - 30 markers/wand, 10 wands/pack	Green	300
STD06W-x	Cable diameters 0.104 - 0.140" - 30 markers/wand, 10 wands/pack	Red	300
STD09W-x	Cable diameters 0.140 - 0.180" - 30 markers/wand, 10 wands/pack	Blue	300
STD12W-x	Cable diameters 0.180 - 0.240" - 30 markers/wand, 10 wands/pack	Yellow	300
STD15W-x	Cable diameters 0.232 - 0.340" - markers in loose packs, wand separate		50
STD17W-x	Cable diameters 0.340 - 0.460" - markers in loose packs, wand separate		50
STD21W-x	Cable diameters 0.433 - 0.610" - markers in loose packs, wand separate		50
STD24W-x	Cable diameters 0.590 - 0.750" - markers in loose packs, wand separate		50
STD15MO	Wand for marker size 15	Orange	1
STD17MO	Wand for marker size 17	Orange	1
STD21MO	Wand for marker size 21	Gray	1
STD24MO	Wand for marker size 24	Gray	1

*Replace "x" in Catalog Number with the number or letter required on the markers.

Labels



Self-Laminating Labels

Self-Laminating labels offer a fast and inexpensive way to identify wire and cable. Because these labels wrap over themselves, creating a seal, the printed surface is protected from solvents and abrasives.

- Self-laminating labels offer a white area for printed or handwritten information and a clear wrap that winds around and protects the information
- Protects printed information from chemicals and frequent handling
- Designed to withstand exposure to oil, solvents, and water

Self-laminating labels are also available to run through various thermal transfer printers. These labels have been designed for standard or outside wound printers like the Zebra printers.

Selection information: (dimensions in inches/millimeters)

Catalog Number	Maximum Cable OD	Print Area Height	Label Width	Height	Labels/Roll
IDP-SB050100WE10	.20 (5.1)	.33 (8.5)	.50 (12.7)	1.0 (25.4)	10,000
IDP-SB050143WE10	.30 (7.6)	.50 (12.7)	.50 (12.7)	1.437 (36.5)	10,000
IDP-SB100143WE5	.30 (7.6)	.50 (12.7)	1.0 (25.4)	1.437 (36.5)	5,000
IDP-SB200143WE2.5	.30 (7.6)	.50 (12.7)	2.0 (50.8)	1.437 (36.5)	2,500
IDP-SB080150WE10	.30 (7.6)	.50 (12.7)	.80 (20.3)	1.50 (38.1)	10,000
IDP-SB100225WE5	.48 (12.2)	.75 (19)	1.0 (25.4)	2.25 (57.2)	5,000
IDP-SB200225WE2.5	.48 (12.2)	.75 (19)	2.0 (50.8)	2.25 (57.2)	2,500
IDP-SB100375WE2.5	.88 (22.4)	1.0 (25.4)	1.0 (25.4)	3.75 (95.3)	2,500
IDP-SB200375WE2.5	.88 (22.4)	1.0 (25.4)	2.0 (50.8)	3.75 (95.3)	2,500
IDP-SB100594WE1	1.40 (35.5)	1.50 (38.1)	1.0 (25.4)	5.94 (151)	1,000
IDP-SB190594WE1	1.40 (35.5)	1.50 (38.1)	1.90 (48.3)	5.94 (151)	1,000
IDP-SB200743WE1	1.90 (48.3)	1.50 (38.1)	2.0 (50.8)	7.437 (189)	1,000

Self-Laminating labels for the T208M Printer

IDP-SB050100WE5-T200	.20 (5.1)	.33 (8.5)	.50 (12.7)	1.0 (25.4)	5,000
IDP-SB050143WE5-T200	.30 (7.6)	.50 (12.7)	.50 (12.7)	1.437 (36.5)	5,000
IDP-SB100143WE2.5-T200	.30 (7.6)	.50 (12.7)	1.0 (25.4)	1.437 (36.5)	2,500
IDP-SB080150WE5-T200	.30 (7.6)	.50 (12.7)	.80 (20.3)	1.50 (38.1)	5,000
IDP-SB100225WE2.5-T200	.48 (12.2)	.75 (19)	1.0 (25.4)	2.25 (57.2)	2,500
IDP-SB200225WE1-T200	.48 (12.2)	.75 (19)	2.0 (50.8)	2.25 (57.2)	1,000
IDP-SB100375WE1-T200	.88 (22.4)	1.0 (25.4)	1.0 (25.4)	3.75 (95.3)	1,000
IDP-SB200375WE1-T200	.88 (22.4)	1.0 (25.4)	2.0 (50.8)	3.75 (95.3)	1,000
IDP-SB100594WE0.5-T200	1.40 (35.5)	1.50 (38.1)	1.0 (25.4)	5.94 (151)	500
IDP-SB200743WE0.5-T200	1.90 (48.3)	1.50 (38.1)	2.0 (50.8)	7.734 (189)	500

Recommended

Printers

IDP-T208M-PRINTER

IDP-T312M-PRINTER

See page 66 for more information.

Ribbons

IDP-T208M-RIBBON

IDP-TMS-RJS-RIBN-4RPSCE

Labels



Pressure Sensitive Labels

Tyco Electronics offers a wide range of label products for thermal transfer printing applications. Several material types and adhesives are available providing guaranteed results for your application. Tyco Electronics is a UL-recognized label supplier.

- Labels are made of polyester and nylon provide the best material for your application
- Permanent acrylic adhesive provides excellent bond to many surfaces: tubing, wiring, cables or panels
- No heat curing process required
- Standard color is white
- MP - Metalized Polyester
- WP - White Polyester
- NC - Nylon Cloth

Selection information: (dimensions in inches/millimeters)

Catalog number	Width	Height	Material	T208M	Labels per Roll
IDP-MP-191064-10-8A	.75 (19)	.25 (6.4)	Metalized Polyester	No	10,000
IDP-MP-203127-10-8A	.80 (20.3)	.50 (12.7)	Metalized Polyester	No	10,000
IDP-MP-254127-10-8A	1.0 (25.4)	.50 (12.7)	Metalized Polyester	Yes	10,000
IDP-MP-254254-10-8A	1.0 (25.4)	1.0 (25.4)	Metalized Polyester	Yes	10,000
IDP-MP-381064-10-8A	1.50 (38.1)	.25 (6.4)	Metalized Polyester	Yes	10,000
IDP-MP-381191-5-8A	1.50 (38.1)	.75 (19)	Metalized Polyester	No	5,000
IDP-MP-508254-5-8A	2.0 (50.8)	1.0 (25.4)	Metalized Polyester	Yes	5,000
IDP-MP-508318-2.5-8A	2.0 (50.8)	1.25 (31.8)	Metalized Polyester	Yes	2,500
IDP-MP-699254-5-8A	2.75 (70)	1.0 (25.4)	Metalized Polyester	Yes	5,000
IDP-MP-762381-2.5-8A	3.0 (76.2)	1.50 (38.1)	Metalized Polyester	Yes	2,500
IDP-MP-762508-2.5-8A	3.0 (76.2)	2.0 (50.8)	Metalized Polyester	Yes	2,500
IDP-MP-101635-2.5-8A	4.0 (101.6)	2.50 (63.5)	Metalized Polyester	Yes	2,500
IDP-NC-254097-10-9	1.0 (25.4)	.38 (9.7)	Nylon Cloth	Yes	10,000
IDP-NC-254127-10-9	1.0 (25.4)	.50 (12.7)	Nylon Cloth	Yes	10,000
IDP-NC-508127-10-9	2.0 (50.8)	.50 (12.7)	Nylon Cloth	Yes	5,000
IDP-WP-040040-25-9	.157 (4)	.157 (4)	White Polyester	No	25,000
IDP-WP-064064-25-9	.25 (6.4)	.25 (6.4)	White Polyester	No	25,000
IDP-WP-080080-10-9	.315 (8)	.315 (8)	White Polyester	No	10,000
IDP-WP-950950-10-9	.375 (9.5)	.375 (9.5)	White Polyester	Yes	10,000
IDP-WP-114040-25-9	.45 (11.4)	.157 (4)	White Polyester	No	25,000
IDP-WP-127111-10-9	.50 (12.7)	.437 (11.1)	White Polyester	Yes	10,000
IDP-WP-165102-10-9	.65 (16.5)	.40 (10.2)	White Polyester	Yes	10,000
IDP-WP-165051-25-9	.65 (16.5)	.20 (5.1)	White Polyester	No	25,000
IDP-WP-178095-10-9	.70 (17.8)	.375 (9.5)	White Polyester	No	10,000
IDP-WP-191064-10-9	.75 (19)	.25 (6.4)	White Polyester	No	10,000
IDP-WP-203127-10-9	.80 (20.3)	.50 (12.7)	White Polyester	No	10,000
IDP-WP-229364-10-9	.90 (22.9)	.25 (6.4)	White Polyester	Yes	10,000
IDP-WP-254097-10-9	1.0 (25.4)	.38 (9.7)	White Polyester	Yes	10,000
IDP-WP-254127-10-9	1.0 (25.4)	.50 (12.7)	White Polyester	Yes	10,000
IDP-WP-254254-10-9	1.0 (25.4)	1.0 (25.4)	White Polyester	Yes	10,000
IDP-WP-318064-10-9	1.25 (31.8)	.25 (6.4)	White Polyester	Yes	10,000
IDP-WP-381020-10-9	1.50 (38.1)	.08 (2)	White Polyester	Yes	10,000
IDP-WP-381064-10-9	1.50 (38.1)	.25 (6.4)	White Polyester	Yes	10,000
IDP-WP-381190-5-9	1.50 (38.1)	.75 (19)	White Polyester	No	5,000
IDP-WP-508127-10-9	2.0 (50.8)	.5 (12.7)	White Polyester	Yes	10,000
IDP-WP-508254-5-9	2.0 (50.8)	1.0 (25.4)	White Polyester	Yes	5,000
IDP-WP-508318-2.5-9	2.0 (50.8)	1.25 (31.8)	White Polyester	Yes	2,500
IDP-WP-508064-10-9	2.0 (50.8)	.25 (6.4)	White Polyester	Yes	10,000
IDP-WP-523841-1.5-9	2.06 (52.3)	3.31 (84.1)	White Polyester	Yes	1,500
IDP-WP-700254-5-9	2.75 (70)	1.0 (25.4)	White Polyester	Yes	5,000
IDP-WP-762381-2.5-9	3.0 (76.2)	1.50 (38.1)	White Polyester	Yes	2,500
IDP-WP-762508-2.5-9	3.0 (76.2)	2.0 (50.8)	White Polyester	Yes	2,500
IDP-WP-101635-2.5-9	4.0 (101.6)	2.50 (63.5)	White Polyester	Yes	2,500
IDP-WP-101165-0.85-9	4.0 (101.6)	6.5 (165)	White Polyester	Yes	900

Recommended

Printers

IDP-T208M-PRINTER
IDP-T312M-PRINTER

Ribbons

IDP-1330-607-T200
IDP-1330-0607-10

See page 66 for more information.

Labels



ProjectMark Continuous Labels

ProjectMark (TTPA) is a durable, high strength polyester material that can be used as warning and service labels, rating plates, and a way to identify cable trays—all of which can be produced on demand.

- High tack acrylic adhesive
- Resistant to moisture /humidity
- 4 printable continuous widths in several colors
- Material comes on a 100' reel and ranges from 25mm (1.0") to 100mm (4.0") wide
- Standard white ProjectMark has a 5 - 7 year outdoor life

Standard Colors are White (WE) and Metalized Polyester (MP)

Additional colors include the following: OE = Orange, GN = Green, BE = Blue, RD = Red, BK = Black, YW = Yellow, CL = Clear

Selection information: (dimensions in inches/millimeters)

Catalog Number	Description	Std. Pack
IDP-TTPA100WE-10*	Continuous Polyester 100 Ft Roll - 1" Wide, White	1
IDP-TTPA100YW-10*	Continuous Polyester 100 Ft Roll - 1" Wide, White	1
IDP-TTPA200MP-10	Continuous Polyester 100 Ft Roll - 2" Wide, Metalized Poly	1
IDP-TTPA200WE-10	Continuous Polyester 100 Ft Roll - 2" Wide, White	1
IDP-TTPA300MP-10	Continuous Polyester 100 Ft Roll - 3" Wide, Metalized Poly	1
IDP-TTPA300WE-10	Continuous Polyester 100 Ft Roll - 3" Wide, White	1
IDP-TTPA400MP-10	Continuous Polyester 100 Ft Roll - 4" Wide, Metalized Poly	1
IDP-TTPA400WE-10	Continuous Polyester 100 Ft Roll - 4" Wide, White	1

*1 inch wide rolls are only available in White and Yellow.

Recommended

Printers

IDP-T208M-PRINTER*
IDP-T312M-PRINTER

Ribbons

IDP-1330-0607-10
IDP-1330-0607-T200

* Software adjustments required to use the T208M with ProjectMark. Call 866-374-9655 for support. See page 66 for more information.

Insta-Mark Wire Markers



Insta-Mark Wire Marker Books & Dispensers

Insta-Mark Wire Marker Books and Dispensers offer a portable and convenient pocket-sized solution of vinyl impregnated cloth tape wire markers and self-laminating labels. Each item is packaged for Point-of-Purchase merchandising and provides an array of letters, numbers, symbols, or colors to easily identify any type of wire and/or terminal block.

Pre-Printed Marker Books (PPMB) contain 10 pages of pre-cut markers 1-1/4" long, totaling 450 wire markers with 450 matching terminal markers sized 3/16" x 3/16".

Write-On Self-Laminating Marker Books (WOMB) contain 10 pages of pre-cut self laminating markers made of .004" thick clear vinyl film, using an acrylic adhesive and mounted on a silicone release liner. The service temperature is -40°F to +200°F.

Pre-Printed Marker Dispensers (PPMD) are a portable wire marker system. Each dispenser contains 10 rolls of marker tape. Each roll contains 76 individual markers with a pre-determined length of 1-1/4" and a width of 1/4". Legends available are 0-9, A-J or the NEMA colors.

Write-On Marker Dispensers (WOMD) are a portable and disposable dispenser containing a roll of pre-cut Self-Laminating Wire Markers. Each marker has a white area available for legend inscription using a pen or pencil. The adhesive is an aggressive acrylic that is impervious to oil and water, with a service temperature range of -40°F to +250°F.

Selection information (dimensions in inches/millimeters)

Catalog Number	Description	Std. Pack
CPGI-PPMB-01	Insta-Mark Pre-Printed Marker Book - 0-9	10
CPGI-PPMB-02	Insta-Mark Pre-Printed Marker Book - A-Z, 1-15, +, -, /	10
CPGI-PPMB-03	Insta-Mark Pre-Printed Marker Book - 1-45	10
CPGI-PPMB-04	Insta-Mark Pre-Printed Marker Book - 1, 2, 3	10
CPGI-PPMB-05	Insta-Mark Pre-Printed Marker Book - A, B, C	10
CPGI-PPMB-06	Insta-Mark Pre-Printed Marker Book - T1, T2, T3	10
CPGI-PPMB-07	Insta-Mark Pre-Printed Marker Book - L1, L2, L3	10
CPGI-PPMB-08	Insta-Mark Pre-Printed Marker Book - 46-90	10
CPGI-PPMB-09	Insta-Mark Pre-Printed Marker Book - 10 NEMA COLORS	10
CPGI-PPMB-10	Insta-Mark Pre-Printed Marker Book - AC, DC, POS, NEG, GND,	10
CPGI-PPMB-11	Insta-Mark Pre-Printed Marker Book - Burglar Alarm	10
CPGI-PPMB-12	Insta-Mark Pre-Printed Marker Book - 0-9, L1-L3, T1-T3	10
CPGI-PPMB-13	Insta-Mark Pre-Printed Marker Book - 1-30	10
CPGI-PPMB-14	Insta-Mark Pre-Printed Marker Book - 1-45, +/-, L1-L3, T1-T3,	10
CPGI-PPMB-15	Insta-Mark Pre-Printed Marker Book - 1, 2, 3, A, B, C, L1-L3, T1-T3	10
CPGI-PPMB-16	Insta-Mark Pre-Printed Marker Book - 1-45, 46-90, A-Z, +, -, /, 0	10
CPGI-PPMB-20	Insta-Mark Pre-Printed Marker Book - Circuit Breaker (3 SET)	10
CPGI-PPMB-21	Insta-Mark Pre-Printed Marker Book - Circuit Breaker (1 SET)	10
CPGI-PPMB-22	Insta-Mark Pre-Printed Marker Book - Fire Alarm	10
CPGI-WOMB-B30	Insta-Mark Write-on Marker Book - Label Size 1.0" x 5.0"	10
CPGI-WOMB-B50	Insta-Mark Write-on Marker Book - Label Size .5" x 1.25"	10
CPGI-WOMB-B60	Insta-Mark Write-on Marker Book - Label Size 1.0" x 2.5"	10
CPGI-WOMB-B75	Insta-Mark Write-on Marker Book - Label Size .75" x 1.67"	10
CPGI-PPMD-0-9	Insta-Mark Preprinted Marker Dispenser 0,1,2,3,4,5,6,7,8,9	5
CPGI-PPMD-A-J	Insta-Mark Preprinted Marker Dispenser A,B,C,D,E,F,G,H,I,J	5
CPGI-PPMD-NEMA	Preprinted Marker Dispenser NEMA COLORS (Wht,Yel, Org, Red, Blu, Grn,Vio, Brn, Gry,Blk)	5
CPGI-PPMDRF-0-9	Preprinted Marker Dispenser REFILL 0,1,2,3,4,5,6,7,8,9	5
CPGI-PPMDRF-A-J	Preprinted Marker Dispenser REFILL A,B,C,D,E,F,G,H,I,J	5
CPGI-PPMDRF-NEMA	Preprinted Marker Dispenser REFILL NEMA COLORS (Wht,Yel, Org, Red, Blu, Grn,Vio, Brn, Gry,Blk)	5
CPGI-WOMD-13	Insta-Mark Write-on Marker Dispensers - Label Size .75" x3.0"	5
CPGI-WOMD-16	Insta-Mark Write-on Marker Dispensers - Label Size .75" x6.0"	5
CPGI-WOMD-51	Insta-Mark Write-on Marker Dispensers - Label Size .75" x1.25"	5
CPGI-WOMD-52	Insta-Mark Write-on Marker Dispensers - Label Size .75" x1.75"	5

Portable Marker Kit



LM2020 PLUS Portable Hand-Held Marking Kit

The LM2020 Plus system is an advanced portable thermal label printer. It is designed for both labeling and bar coding. The LM2020 Plus system is quick and easy to use in the field, office, or shop. The LM2020 Plus marker material and ribbon are pre-loaded into a snap-in cartridge. This allows for repeatable, error free loading into the printer.

Features

- Minimum media width of 3.2mm (0.125"). Maximum media width of 25mm (1.0")
- 67 point size ranging from 6 point to 72 point
- 10 resident bar codes
- Alphanumeric sequencing
- Battery-operated or AC power supply-operated
- Product and ribbon comes housed in easy-to-install cartridges

Materials available

- Shrink tube wire and cable markers (White & Yellow)
- Self-laminating wrap-around wire and cable markers
- Industrial labels for tray and pipe identification

Advantages over other portable systems

- No smearing - Ink dries immediately
- One-step loading process - No separate ribbon and markers to load
- 300 dpi thermal print quality - Superior print quality compared to 9-pin dot matrix printers
- Savings - Very affordable portable thermal printing system

Selection information

Catalog Number	Description	Std. Pack
LM2020PLUS-PRINTER-KIT	Handheld printer, protective jacket, 6 ni-cad batteries	1
LM2020PLUS-2800MAH-NICAD	LM 2020 Rechargeable Batteries	1
LM-CASE	LM 2020 Hard Sided Carrying Case	1
LM-1/2-SL	Self-Lam 1" x .50" Width .25" x 1", 230 each. Fits #16-#22	1
LM-1/2-TAPE-BK	0.5" x 40' Industrial Tape- White on Black -- MOQ 10 pcs	1
LM-1/2-TAPE-CR	0.5" x 40' Industrial Tape- Black on Clear	1
LM-1/2-TAPE-WE	0.5" x 40' Industrial Tape- Black on White-- MOQ 10 pcs	1
LM-1/2-TAPE-YW	0.5" x 40' Industrial Tape- Black on Yellow-- MOQ 10 pcs	1
LM-1/2-TUBE-WE	Shrinktube 1/2" x 100" Cartridge, White #1 - #12	1
LM-1/2-TUBE-YW	Shrinktube 1/2" x 100" Cartridge, Yellow #1 - #12	1
LM-1/2-VINYL-CR	0.5" x 40' Vinyl Industrial Tape- Black on Clear	1
LM-1/2-VINYL-RD	0.5" x 40' Vinyl Industrial Tape- Black on Red-- MOQ 10 pcs	1
LM-1/2-VINYL-SR	0.5" x 40' Vinyl Industrial Tape- Black on Silver--MOQ 10 pcs	1
LM-1/2-VINYL-WE	0.5" x 40' Vinyl Industrial Tape- Black on White--MOQ 10 pcs	1
LM-1/2-VINYL-YW	0.5" x 40' Vinyl Industrial Tape- Black on Yellow--MOQ 10 pcs	1
LM-1/4-TUBE-WE	Shrinktube 1/4" x 100" Cartridge, White #10 - #16	1
LM-1/4-TUBE-YW	Shrinktube 1/4" x 100" Cartridge, Yellow #10 - #16	1
LM-1/8-TUBE-WE	Shrinktube -1/8" x 100" Cartridge, White #16 - #22	1
LM-1/8-TUBE-YW	Shrinktube -1/8" x 100" Cartridge, Yellow #16 - #22	1
LM-1-1/4-SL	Self-Lam 1" x 1.25" Width .50" x 1", 170 each. Fits #8-#12	1
LM-120/240-ADP	LM 2020 AC Adapter (120V/230V)	1
LM-1-SL	Self-Lam 1" x 1" Width .375" x 1", 200 each. Fits #10-#12	1
LM-1-TAPE-BK	1" x 40' Industrial Tape- White on Black-- MOQ 10 pcs	1
LM-1-TAPE-CR	1" x 40' Industrial Tape- Black on Clear	1
LM-1-TAPE-WE	1" x 40' Industrial Tape- Black on White--MOQ 10 pcs	1
LM-1-TAPE-YW	1" x 40' Industrial Tape- Black on Yellow--MOQ 10 pcs	1
LM-1-VINYL-CR	1" x 40' Vinyl Industrial Tape- Black on Clear	1
LM-1-VINYL-RD	1" x 40' Vinyl Industrial Tape-Black on Red-- MOQ 10 pcs	1
LM-1-VINYL-SR	1" x 40' Vinyl Industrial Tape-Black on Silver-- MOQ 10 pcs	1
LM-1-VINYL-WE	1" x 40' Vinyl Industrial Tape-Black on White	1
LM-1-VINYL-YW	1" x 40' Vinyl Industrial Tape-Black on Yellow-- MOQ 10 pcs	1
LM-2-1/2-SL	Self-Lam 1" x 2.50" Width .75" x 1", 108 each. Fits #6-#10	1
LM-3/16-TUBE-WE	Shrinktube 3/16" x 100" Cartridge, Yellow #12 - #18	1
LM-3/16-TUBE-YW	Shrinktube 3/16" x 100" Cartridge, White #12 - #18	1
LM-3/4-SL	Self-Lam 1" x .75" Width .375" x 1", 250 each. Fits #10-#16	1
LM-4-SL	Self-Lam 1" x 4" Width 1" x 1", 81 each. Fits #4-#6	1

Accessories

System Printers & Software

These printers have been selected to suit a range of identification requirements and offer excellent legibility and mark permanence. An extensive range of ribbons has been designed for use with the Tyco Electronics' identification products. These ribbons ensure excellent mark permanence and legibility to applicable industry specifications.



Thermal Transfer Printers

T208M Printer

T208M Printer Kit (Contains T208M-Printer & T208M-Ribbon) medium volume, 200 dpi printer. Lightweight printer with a 4.1" printhead that can print sleeves and labels. Parallel and USB ports provided.

T312M Printer

T312M Printer is a high performance, yet cost effective thermal transfer printer with a 4.1" printhead. Robust, industrial computer-driven thermal transfer printer. This 300 dpi printer has been specially designed to print the full range of Tyco Electronics' cable identification and labeling products giving the optimum in flexibility, print quality and permanence. With dual 32 bit processors this printer is ideal for high volume users.



Dot-Matrix Printer

AM6310 Printer

Specifically designed by Tyco Electronics, the AM6310 is a heavy-duty, industrial dot matrix printer with a high impact 24-pin print head. Automatic media thickness detection and a high impact print head make the AM6310 the best industrial printer available for heavy gauge wire marker and tag materials, and the 24-pin print head produces high quality text printing with fast print speeds. Standard AM6310 printer models are designed to print on Tyco Electronics wire marker sleeves and dot matrix pressure sensitive label and tag products.



WinTotal Software

WinTotal software is a powerful Windows based package that makes identification marking quick and easy. The Windows environment gives access to a huge array of font options, including non-English fonts and also allows simple importing and manipulation of graphics and logos.

- Pre-loaded with all of Tyco Electronics' identification products
- Powerful import and export functions: reads wire lists from spreadsheets, and text files from CAD systems
- Incremental alpha and numeric fields
- Double-sided marker printing
- Automatic or manual routing to multiple printers
- Network compatible

WinTotal USB Dongle option available - Allows software registration to be purchased once and shared among different computers simply by plugging the dongle into an available USB port.

Selection information

Catalog Number	Description	Std. Pack
IDP-T208M-PRINTER	Medium Vol. Thermal Trans Printer Kit, 4" Print head,	1
IDP-T312M-PRINTER	High Vol. Thermal Trans Printer Kit, 4" Print head, 3MB RAM	1
IDP-AM6310-110V-PRINTER	AM-6310 Dot Matrix Printer Kit	1
IDP-WINTOTAL-SWARE	WinTotal Software	1
IDP-WINTOTAL-SWARE-DGLUS	WinTotal Software with USB Dongle	1
IDP-T208M-RIBBON	Ribbon for T208M printer, use with heat-shrink sleeves & SB labels	1
IDP-1330-0607-T200	Ribbon for T200 printers, use with TTPA, MP, NC, WP, WV labels	1
IDP-T200-RIBBON-1966	Ribbon for T200 printers, use with HLX-NEL cable markers	1
IDP-TMS-RJS-RIBBON-4RPSC	T300-T400 Series Ribbon for heat-shrink sleeves & SB labels, 4.33" wide	1
IDP-1330-0607-10	T300-T400 Series Ribbon for TTPA, MP, NC, WP, WV labels, 4.33" wide	1
IDP-1892BK04-RIBBON	AM-6310-Ribbon designed for heat-shrink sleeves	1

SPLICES & TAPS



Low Voltage In-Line Splices

Water Resistant

GelWrap Splice Closure.	69
GILS In-Line Splice.	70
RVS Splices.	70

Heat-Shrink

CRSM Sleeves	71
CRSM CT Cable Tap Splices.	72
MRS Repair Sleeve	73
ALK Splice Sealing Kit.	73
LV-MSK Splice	74
LVSA-3 Splice.	74

Low Voltage Stub Splices & Motor Connection Kits

GelCap Splice Cover	75
RVC Splice Cover Kit	76
MCK Motor Connection Kit.	77

Low Voltage Taps

GTAP Splice.	78
GelCap SL Splice Cover.	79
GHFC H-Frame Closure.	80
GelPort Connectors	80

Low Voltage In-Line Splices



Water Resistant Wraparound Splice Closure (1000 V) GelWrap Splice Closure

Tyco Electronics' GelWrap splice closures quickly and conveniently insulate and seal buried electrical connections rated up to 1000 volts. The robust, yet compact, design is engineered to handle the harsh environments of direct burial and manhole applications. GelWrap splice closures are equally well suited for insulation and jacket repair. GelWrap UF splices include the UF connector.

Fast and easy installation

Installers will appreciate the simple wraparound design and dependable gel sealing performance. Simply wrap and snap the closure on any cable in the use range. The gel in the closure seals on contact. Installation is literally a snap. The GelWrap splice closure can be applied on all common compression connectors and low-voltage cables. Many in-line mechanical connectors can be covered as well.



Dependable performance

The factory cured PowerGel silicone sealant in the GelWrap closure encapsulates the connection. Since the gel is easily stretched and very sticky, it basically forms around the cable and connector sticking to everything including itself. Moisture cannot enter the splice.

Selection information (dimensions in inches/millimeters)

Catalog Number	Sleeve Length	Conductor Size	Connector Opening	Max. General Use Diameter Range	Std. Pack
GelWrap-18/4-100	4.0 (100)	#12 - 4/0 (4 - 95)	1.0 (25)	0.15 - 0.70 (4 - 18)	6
GelWrap-18/4-150	6.0 (150)	#12 - 4/0 (4 - 95)	3.0 (75)	0.15 - 0.70 (4 - 18)	6
GelWrap-18/4 -200	8.0 (200)	#12 - 4/0 (4 - 95)	5.0 (125)	0.15 - 0.70 (4 - 18)	6
CPGI-GelWrap-18/4-200	8.0 (200)	#12 - 4/0 (4 - 95)	5.0 (125)	0.15 - 0.70 (4 - 18)	5
CPGI-GelWrap-18/4-200UL	8.0 (200)	#12 - 4/0 (4 - 95)	4.0 (100)	0.15 - 0.70 (4-18)	5
GelWrap-18/4-250	10.0 (250)	#12 - 4/0 (4 - 95)	7.0 (175)	0.15 - 0.70 (4 - 18)	6
CPGI-GelWrap-18/4-250UL	10 (250)	#2 - 4/0 (4 - 95)	6.0 (150)	0.40 - 1.30 (10 - 33)	5
GelWrap-18/4-300	12.0 (300)	#12 - 4/0 (4 - 95)	9.0 (225)	0.15 - 0.70 (4 - 18)	6
GelWrap-33/10-150	6.0 (150)	#2 - 500 (35 - 240)	2.0 (50)	0.40 - 1.30 (10 - 33)	6
CPGI-GelWrap-33/10-50	1.0 (50)	#2 - 500 (35 - 240)	6.0 (150)	0.40 - 1.30 (10 - 33)	5
GelWrap-33/10-200	8.0 (200)	#2 - 500 (35 - 240)	4.0 (100)	0.40 - 1.30 (10 - 33)	6
GelWrap-33/10-250	10.0 (250)	#2 - 500 (35 - 240)	6.0 (150)	0.40 - 1.30 (10 - 33)	6
GelWrap-33/10-300	12.0 (300)	#2 - 500 (35 - 240)	8.0 (200)	0.40 - 1.30 (10 - 33)	12
GelWrap-33/10-350	14.0 (350)	#2 - 500 (35 - 240)	10.0 (250)	0.40 - 1.30 (10 - 33)	10
GelWrap-50/20-200	8.0 (200)	250 - 750	2.0 (50)	0.80 - 1.50 (20 - 38)	12
GelWrap-50/20-250	10.0 (250)	250 - 750	4.0 (100)	0.80 - 1.50 (20 - 38)	12
GelWrap-50/20-300	12.0 (300)	250 - 750	6.0 (150)	0.80 - 1.50 (20 - 38)	12
GelWrap-50/20-350	14.0 (350)	250 - 750	8.0 (200)	0.80 - 1.50 (20 - 38)	12
GelWrap-50/20-400	16.0 (400)	250 - 750	10.0 (250)	0.80 - 1.50 (20 - 38)	12
CPGI-GelWrap-UF-200	8.0 (200)	14/2 - 8/3 w/ground included connectors			5
CPGI-GelWrap-UF-250UL	10 (250)	14/2 - 8/3 w/ground included connectors			5

UL denotes UL & CSA for submersible applications

Patent Pending

Note: For other sizes or applications, a minimum seal length is required on each side of connector opening or jacket damage.

GelWrap 18/4 Series 1.5" (38mm)

GelWrap 33/10 Series 2.0" (51mm)

GelWrap 50/20 Series 3.0" (75mm)

Product Performance

Testing

ANSI C119.1 - 1986

Chemical Resistance

Accelerated Aging

Test Conditions

600 V insulated underground

Fluid immersion, 168 hours @ 23°C, 75% elongation retention minimum

- 10W-40 motor oil

- 10% hydrochloric acid

- 15% sodium chloride

- 20% sodium hydroxide

- ETX 60280 antifreeze (1000 hours)

1000 hours @ 135°C

- 93% retention tensile strength

- 82% retention elongation at break

For connector information refer to the Connectors and Terminals section of this catalog.

Low Voltage In-Line Splices



Water Resistant Splice Kit for Power Cable (1000 V) GILS In-Line Splice

The Tyco Electronics' GILS gel in-line splice kit offers a state-of-the-art sealed splice for underground, buried, and overhead applications. GILS closures offer a fast and simple method for splicing, insulating, and environmentally sealing low-voltage cable splices.

The GILS closure, with its revolutionary PowerGel sealant, covers and seals the splice quickly and easily, saving both time and effort.

Simply install the connector, place on the closure, and snap closed. It's that easy - no tapes, mastic, tools or mixing are required. The splice is ready to bury-no waiting to cure.

- The connector will accommodate copper and/or aluminum cables
- Qualified to ANSI C119.1-1986 for underground splicing
- UV resistant
- Qualified for temperatures from -40°C to 90°C
- Connector included
- RUS accepted connector blocks and splices for secondary. Watertight for use in all locations

Selection information

Catalog Number	Conductor Size (AWG/kcmil)	Std. Pack
GILS-4/0	#2-4/0	18 or 72 each
CPGI-GILS-4/0	#2-4/0	5
GILS-350	1/0-350kcmil	18



"Roll-on" Splices for 1/C Power Cable (1000 V) RVS Splices

RVS splice cover kits are the easy "roll-on" way to insulate and seal cable connections up to 1000 volts. The gripping force of the specially formulated EPDM elastomer combines with the high-performance sealant to form a water-resistant, insulating sleeve that is UL listed and CSA certified for direct burial application over in-line compression connectors.

RVS splice cover sleeves feature a dual-wall design with an entrapped lubricant, making installation fast and simple. The elastomeric sleeve rolls onto the cable with minimal effort, even at temperatures below -15°F (-25°C). The cable can be energized immediately. It is ideal for use where gas or electric heating devices are not approved.

Qualified to ANSI C119.1-1986. CSA certified to C22.2 No. 198.2. UL listed per 96J4 (file E91151). RUS accepted for use as a secondary tap or splice cover. For use on standard poly- or elastomeric-insulated cables. Use to insulate and seal in-line compression connectors or to seal terminal lugs.



Selection information (dimensions in inches/millimeters)

Catalog Number	Conductor Size (AWG/kcmil)	Cable O.D. (Min. - Max.)	Sleeve Length	Maximum Connector Length	Std. Pack
RVS-11	#8 - 2/0	.22 - .68 (6 - 17)	8.0 (205)	5.00 (127)	5
CPGI-RVS-11	#8 - 2/0	.22 - .68 (6 - 17)	8.0 (205)	5.00 (127)	5
RVS-12	1/0 - 250	0.50 - 0.90 (13 - 23)	9.5 (241)	4.50 (114)	5
CPGI-RVS-12	1/0 - 250	0.50 - 0.90 (13 - 23)	9.5 (241)	4.50 (114)	5
RVS-13	250 - 600	0.70 - 1.20 (18 - 30)	12.0 (305)	7.00 (178)	5
CPGI-RVS-13	250 - 600	0.70 - 1.20 (18 - 30)	12.0 (305)	7.00 (178)	5
RVS-14	600 - 1000	0.95 - 1.50 (24 - 38)	14.0 (356)	9.00 (229)	5

For connector information refer to the Connectors and Terminals section of this catalog.

Low Voltage In-Line Splices



Heat-shrink Wraparound Sleeve (1000 V) CRSM Sleeves

CRSM sleeves close easily with a permanent locking system that consists of a raised rail profile and a stainless steel channel. These sleeves are made from crosslinked polyolefin, which equals or exceeds the material properties of the original cable jacket. CRSM sleeves fit a wide range of cable sizes and have unlimited shelf life.

Qualified to ANSI C119.1-1986, rated to ICEA electrical withstand test for 1000 volts, and RUS accepted for use as jacket restoration materials on JCN cable.

For use on standard poly- or elastomeric-insulated/jacketed cables or lead-jacketed cables, which may include aluminum or steel armoring.

Use as insulation for 1/C low-voltage power cable up to 1000 volts, and for jacket repair up to 35 kV or for general sealing applications. All CRSM sleeves are sealant-coated.

Selection information (dimensions in inches/millimeters)

Catalog Number	Sleeve Length	Primary Electrical Repair (1000 V) Cable and Jacket Repair Conductor Size Use Range (AWG/kcmil) (Min.-Max.)		General Sealing Use Range (0-35 kV) (Min.-Max.)	Std. Pack
CRSM 34/10-200	8 (200)	#8 - 2/0	0.25 - 0.60 (6 - 15)	0.25 - 1.20 (6 - 30)	3
CRSM 34/10-1200	48 (1219)	#8 - 2/0	0.25 - 0.60 (6 - 15)	0.25 - 1.20 (6 - 30)	5
CRSM 53/13-200	8 (200)	3/0 - 400	0.60 - 0.95 (15 - 24)	0.60 - 1.80 (15 - 46)	10
CRSM 53/13-1200	48 (1219)	3/0 - 400	0.60 - 0.95 (15 - 24)	0.60 - 1.80 (15 - 46)	5
CRSM 84/20-750	30 (750)	500 - 1000	0.95 - 1.40 (24 - 36)	0.95 - 2.70 (24 - 69)	10
CRSM 84/20-1200	48 (1219)	500 - 1000	0.95 - 1.40 (24 - 36)	0.95 - 2.70 (24 - 69)	5
CRSM 107/29-1000	40 (1000)	1000 - 2000	1.30 - 2.00 (33 - 51)	1.30 - 3.60 (33 - 91)	10
CRSM 107/29-1200	48 (1219)	1000 - 2000	1.30 - 2.00 (33 - 51)	1.30 - 3.60 (33 - 91)	5
CRSM 143/36-1200	48 (1219)			1.65 - 4.95 (42 - 126)	5
CRSM 198/55-1200	48 (1219)			2.50 - 6.50 (64 - 165)	5

Ordering information

1. Select the appropriate catalog number for either primary electrical repair (1000 volts max.) or general sealing applications. Electrical repair selections are based on typical dimensions for low-voltage insulated cable. Confirm selection with cable dimensions to assure proper sizing.
2. Use the "Primary electrical repair" columns for electrical repair applications (when CRSM is in direct contact with the conductor).
3. Use the "General sealing and jacket repair use range" column for general re-jacketing or sealing applications (when CRSM is not in direct contact with the conductor).
4. Package does not contain connectors.
5. Kits include a wraparound sleeve and stainless steel channel closure. Both can be field-cut for shorter requirements (see "Reference dimensions" below).
6. Related test report: EDR-5124, EDR-5192
7. UV resistant test report: EDR-5361



Cut sleeve length = Damage length + total seal length

Damage	Total Seal Length
<3 (<76)	3 (76)
3 - 12 (76-305)	4 (102)
12 - 24 (305-610)	6 (152)
>24 (>610)	8 (203)

For connector information refer to the Connectors and Terminals section of this catalog.

Low Voltage In-Line Splices

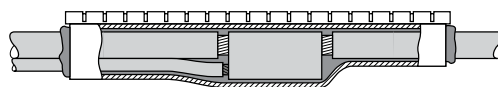


Heat-shrink Wraparound Cable Tap Splices (1000 V) CRSM CT Cable Tap Splices

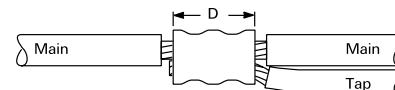
- Use as a wraparound, sealed cable tap splice
- Qualified to ANSI C119.1-1986, rated to ICEA electrical withstand test for 1000 volts
- RUS accepted for use with compression and split-bolt connectors.
- Sealant-coated
- For use on standard poly- or elastomeric-insulated conductors

Selection information (dimensions in inches/millimeters)

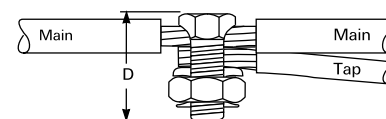
Catalog Number	Sleeve Length	Conductor size (1000 V max.)		Connector Dimension (Max. D)	Std. Pack
		Main (AWG/kcmil)	Tap (AWG/kcmil)		
Compression connector					
CRSM-CT-34/10-150	6 (152)	#8 – #2	#10 – #2	2 (51)	10
CPGI-CRSM-CT-34/10-150	6 (152)	#8 – #2	#10 – #2	2 (51)	5
CRSM-CT-53/13-200	8 (203)	#2 – 4/0	#10 – 4/0	4 (102)	10
CRSM-CT-84/20-250	10 (254)	4/0 – 500	#2 – 500	6 (152)	10
Standard split-bolt connector					
CRSM-CT-53/13-200	8 (203)	#8 – #2	#14 – #2	1 1/2 (38)	10



Compression connector



Split-bolt connector



Ordering information

1. Kits do not contain connectors.
2. Kits include insulating sleeve, sealant strip, and stainless steel channel closure.
3. Related test report: EDR-5192
4. UV resistance test report: EDR-5361

For connector information refer to the Connectors and Terminals section of this catalog.

Low Voltage In-Line Splices



Heat-shrink Wraparound Flame-Retardant Sleeve (2 kV)
MRS Repair Sleeve

Tyco Electronics' wraparound mining repair sleeve provides an efficient method of repairing insulation on flexible cables to 2 kV and repairing jacket damage on high-voltage cable where a splice is not required.

The specially formulated, flame-retardant, flexible wraparound sleeve installs with a low profile quickly and easily, which means the cable can be returned to service in minutes.

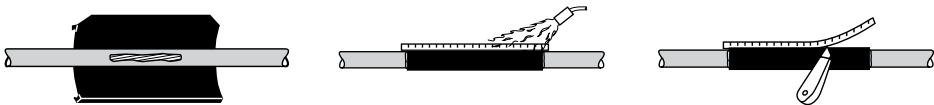
The sleeve is ideal for use on trailing cable as well as flexible-construction cables and conduits.

MSHA approved (No. P-137-MSHA).

Selection information (dimensions in inches/millimeters)

Catalog Number	Cable use Range (Min. - Max.)	Sleeve Length	Std. Pack (Kits/Box)
MRS-12-10	1.00 - 1.60 (25 - 41)	10 (254)	20
MRS-12-24	1.00 - 1.60 (25 - 41)	24 (610)	10
MRS-34-24	1.60 - 2.30 (41 - 58)	24 (610)	10
MRS-34-30	1.60 - 2.30 (41 - 58)	30 (762)	10
MRS-56-30	2.30 - 3.50 (58 - 89)	30 (762)	10

Kits do not contain connectors.



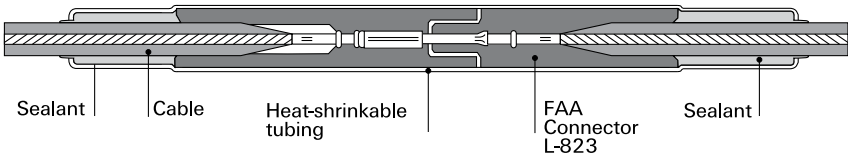
Heat-Shrink Airport Lighting Kit
ALK Splice Sealing Kit

These environmental sealing kits enhance the ability of type L-823 plug and receptacle connectors to meet FAA specifications.

Selection information (dimensions in inches/millimeters)

Catalog Number	Cable/Connector Diameter (Min. - Max.)	Std. Pack (Kits/Box)
ALK-L823	0.50 - 1.50 (13 - 38)	10

Kits do not contain connectors.
Suitable for use on FAA-type L-823 connectors.



For connector information refer to the Connectors and Terminals section of this catalog.

Low Voltage In-Line Splices



Heat-Shrink Flexible Mining Cable (600 V - 2 kV) LV-MSK Splice

- LV-MSK kits are flame-retardant, in-line and multiconductor splice kits for use on mining cables and standard flexible cables up to 2 kV
- MSHA approved to P-137-4-MSHA
- For types G, W, G-GC, and SHD-GC round and flat cables

Selection information: (dimensions in inches/millimeters)

Catalog Number	Cable Diameter (Min.-Max.)	Power Conductor Size (AWG/kcmil)			Std. Pack (Kits/Box)
		G or G-GC 3/C	W or G 2/C	W 4/C	
LV-MSK (600 V-2 kV) - Flat cables					
LV-MSK-046	0.85-1.40 (22-36)		#6-#2		15
LV-MSK-047	1.30-2.40 (33-61)	#6-#1	#1-4/0	#6-#1	10
LV-MSK-058	1.60-3.15 (41-80)	#2-4/0		#2-4/0	5
Round cables					
LV-MSK-045*	0.85-1.40 (22-36)	#8-#6	#8-#6		20
LV-MSK-046	0.85-1.40 (22-36)	#6-#2	#6-#4		15
LV-MSK-047	1.30-2.40 (33-61)	#2-3/0	#3-3/0	#6-1/0	10
LV-MSK-058	1.60-3.15 (41-80)	2/0-500	2/0-350	1/0-350	5



Heat-Shrink Splices for 3/C Armored Cable (1000 V) LVSA-3 Splice

The LVSA-3 splice kit features a wraparound, heat-shrinkable, adhesive-coated outer sleeve that significantly reduces the installation space required and protects the splice from corrosion and moisture.

The kit also includes a low-profile wraparound armor case that is simple to install and requires no compound or resin filling.

Qualified to ANSI C119.1-1986. For splicing 3/C polymeric, armored (corrugated or interlocked-type) power and control cables (600-1000 volts).

Selection information: (dimensions in inches/millimeters)

Catalog Number	Conductor Size Range (AWG/kcmil)	Cable O.D. (Min.-Max.)	Maximum Connector Length	Std. Pack
LVSA-3-1	#6 - #2	0.60 - 1.50 (15-38)	3.50 (89)	1
LVSA-3-2	#1 - 4/0	0.90 - 2.20 (23-56)	4.00 (102)	1
LVSA-3-3	250 - 500	1.20 - 3.00 (30-76)	5.00 (127)	1
LVSA-3-4	600 - 1000	1.50 - 3.80 (38-97)	7.00 (178)	1

Kits do not contain connectors; please order them separately.

For connector information refer to the Connectors and Terminals section of this catalog.

Low Voltage Stub Splices & Motor Connection Kits



Water Resistant Stub Splice Cover Kit (1000 V) GelCap Splice Cover

GelCap splice cover kits quickly and conveniently insulate, seal, and protect stub splice connections up to 1000 volts. The robust, yet compact, design was engineered to handle the harsh environment of motor connections. GelCap splice cover kits are equally well suited for many other connection applications including street light connections.

The specially formulated material provides excellent abrasion resistance, insulation value, and UV resistance.

Each cap size is designed to fit a wide range of cable sizes. The expandable design keeps the cap as small as possible and allows it to expand only as much as needed to fit on large cable.

GelCap splice cover kits provide the fastest installation. Simply push the cover down over the connection and snap the clamp closed. No extra materials or greases are required. The PowerGel sealant is already in the cap. Removal is just as quick and easy as installation.

Common uses for GelCap splice cover kits:

- Street lights
- Over wire nuts for sealing
- Irrigation systems
- HVAC
- Outdoor lighting

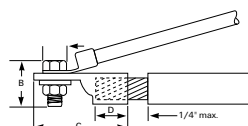
Selection information: (dimensions in inches/millimeters)

Catalog Number	Feeder Conductor Size (mm²)	Max. Bolt Dimensions Width (A)	Length (B)	Max. Lug Dimensions Total Length (C)	Barrel Length (D)	Cap length (Nominal)	Std. Pack
GelCap 1**	#16 - #10 AWG (1.5 - 5)	.375 (10)	.500 (13)	1.00 (25)	0.5 (13)	2.8 (71)	5
CPGI-GelCap-1**	#16 - #10 AWG (1.5 - 5)	.375 (10)	.500 (13)	1.00 (25)	0.5 (13)	2.8 (71)	5
GelCap 2	#8 - #2 AWG (8 - 35)	.625 (16)	1.00 (25)	2.00 (51)	1.0 (25)	3.5 (89)	5
CPGI-GelCap-2	#8 - #2 AWG (8 - 35)	.625 (16)	1.00 (25)	2.00 (51)	1.0 (25)	3.5 (89)	5
CPGI-GelCap-2-SGL*	#8 - #2 AWG (8 - 35)	.625 (16)	1.00 (25)	2.00 (51)	1.0 (25)	3.5 (89)	5
GelCap 3	#2 - #4/O AWG (35 - 105)	.850 (22)	1.30 (33)	3.00 (76)	1.5 (38)	6.0 (152)	5
GelCap 4	250 - 500 kcmil (125 - 250)	1.100 (28)	1.85 (47)	5.00 (127)	2.0 (51)	8.0 (203)	5

* CPGI-GelCap-2-SGL kit contains one gelcap only.

** For wire sizes #16 - #10, the unique design of the GelCap 1 splice kit saves space by allowing all three phase connections to be installed in one cover.

• For GelCap splice kits sizes 2-4, one cap per phase is provided.



Product Performance

Testing	Test Conditions
Chemical Resistance	ASTM D543, Sulfuric acid, Sodium hydroxide, Transformer and motor oil
Ozone Resistance	ASTM D1149, 120 hours @40°C, 50pphm
Accelerated Aging	ASTM D2671
UV Resistance	ASTM G154, UVB, 4000 hours, 4 hour on/off cycle
Abrasion Resistance	2040 gm wt., 4000 cycles, 5% max thickness loss

Related Product Information: EDR-5334 Test Report



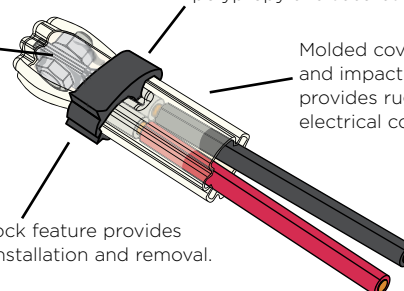
600V/105°C

Silicone gel is high dielectric insulation and provides constant pressure on cable and connector to provide waterseal. PowerGel sealant is specially formulated for high temperature environments.

Molded clamp of UV stable, impact resistant polypropylene secures cover in place.

Molded cover of high abrasion and impact resistant elastomer provides rugged protection for electrical connection.

Snap-lock feature provides quick installation and removal.



For connector information refer to the Connectors and Terminals section of this catalog.

Low Voltage Stub Splices & Motor Connection Kits



“Roll-on” Stub Connection Insulation Kits (1000 V) RVC Splice Cover Kit

RVC splice cover kits offer the quick and easy “roll-on” way to insulate and seal stub connections in motors and street lights to 1000 volts. The elastomeric RVC cap splice cover provides the required insulation thickness, withstands abrasion, and forms a water-resistant seal. The tool-free RVC cap is ideal for installation in cramped motor boxes. It slides on easily and will not leak, unravel, or slip off.

Selection information (dimensions in inches/millimeters)

Catalog Number	Feeder Size (AWG/kcmil)	Bolt dimensions Size (Max.)	Length (Max.)	Lug Length* (Max.)	Cap Length (Nominal)	Std. Pack
Motor connections or two-wire stub splices						
RVC-1V	#14-#4	.375 (8)	.625 (15)	1.75 (45)	3.00 (75)	5
RVC-2V	#8-2/0	.375 (8)	.750 (20)	2.75 (70)	4.00 (100)	5
RVC-3V	#2-4/0	.500 (12)	1.00 (25)	3.00 (75)	5.25 (130)	5
RVC-4V	250-500	.625 (16)	1.50 (35)	5.00 (125)	7.50 (190)	5

Catalog Number	Conductor size (AWG/kcmil)	Insulation Cut-Back (Max.)
Three-wire stub splices		
RVC-1V	#14-#8	1.75 (44)
RVC-2V	#6-#2	2.75 (70)

Ordering information

1. Kits are designed for use with copper compression connectors.
2. Kits do not contain connectors.
3. Each kit contains three RVC caps and sealant strips to insulate three stub connections.



LISTED 96J4
Direct burial insulation
covered for listed
pressure connectors



Certified C22.2
No. 198.2

Qualified to ANSI C119.1-1986, CSA
certified to C22.2 No. 198.2, UL listed per 96J4 (file
E91151).

For connector information refer to the Connectors and Terminals section of this catalog.

Low Voltage Stub Splices & Motor Connection Kits



Heat-Shrink Motor Connection Kits for 1/C (2000 V)
MCK Motor Connection Kit

- MCK motor connection kits are qualified to ANSI-C119.1-1986 and rated to ICEA electrical withstand test for 1000 V
- For use as an in-line or stub splice between 1/C poly feeder cable and motor leads
- Excellent insulation sealing—and resistance to abrasion—in motor connections

Type V

The stub “Type V” kit is designed to splice the stub or butt configuration that is commonly used where there is insufficient room to make in-line connections.

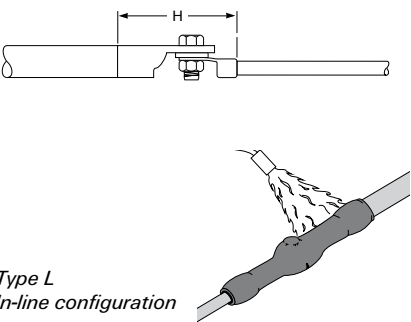
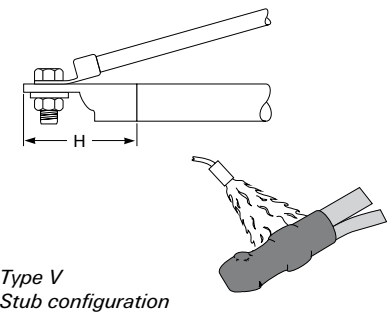
Type L

The In-Line “Type L” kit is used, where space permits, to splice in-line connections.

Selection information (dimensions in inches/millimeters)

Catalog Number	Motor feeder size (AWG/kcmil)	Bolt Length (Max.)	Connection Length (Max.) H	Length (Nominal)	Std. Pack
Stub Type V			<i>Cap</i>		
MCK-1V	#14-#10	5/8	2.0 (51)	2.5 (64)	5
CPGI-MCK-1V	#14-#10	5/8	2.0 (51)	2.5 (64)	5
MCK-2V	#12-#4	3/4	2.5 (64)	3.4 (86)	5
CPGI-MCK-2V	#12-#4	3/4	2.5 (64)	3.4 (86)	5
MCK-3V	#2-4/0	1	3.5 (89)	4.5 (114)	5
MCK-4V	250-500	1 1/2	5.5 (140)	6.5 (165)	5
In-Line Type L			<i>Sleeve</i>		
MCK-1L	#8-4/0	1 1/4	5.0 (127)	9.0 (229)	
MCK-2L	250-1000	1 1/2	8.0 (203)	12.0 (305)	

MCK and MCK 5 motor connection kits are designed for single-hole connectors and include caps and sealant strips for three connections. Kits do not contain connectors.



For connector information refer to the Connectors and Terminals section of this catalog.

Low Voltage Taps



Water Resistant Splice (1000 V) GTAP Splice

The GTAP gel tap splice kit provides a fast and simple method for connecting, insulating, and environmentally sealing low-voltage splices. The GTAP splice kit is designed for underground as well as overhead environments. It is especially useful for street lighting applications.

- Range-taking mechanical connectors splice a wide range of cables, including copper and aluminum
- The connector's four port design allows maximum inventory flexibility
- The hinged closure allows for one-step installation
- Can be installed over the connector in seconds by simply snapping the cover shut
- Utilizes Tyco Electronics' innovative PowerGel sealant to protect the connection from moisture ingress, corrosion, and pollution. PowerGel sealant also provides additional insulation.

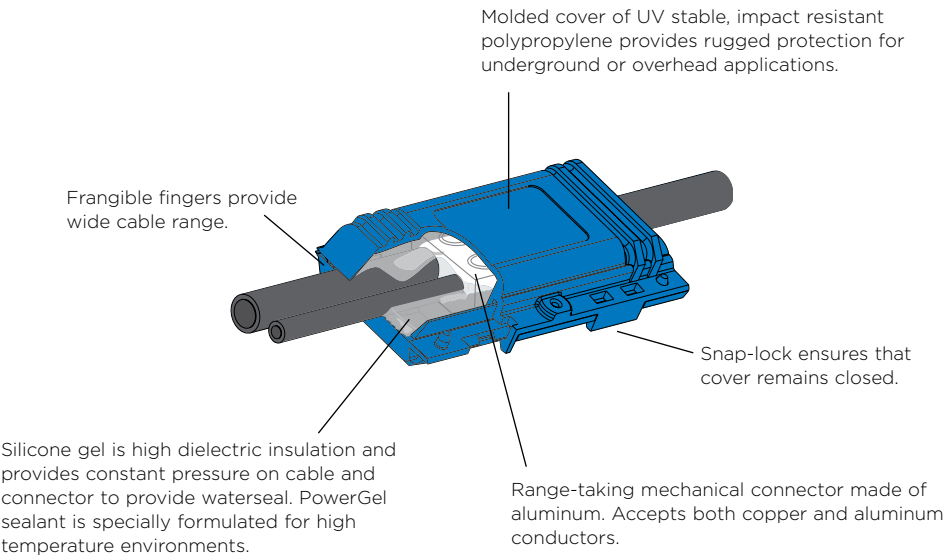
Selection information

Catalog Number	Conductor Size (All Outlets) AWG (mm2)	Std. Pack
GTAP-1	#14 - #2 (2-35)	18 or 72
CPGI-GTAP-1	#14 - #2 (2-35)	5
GTAP-2	#14 - #2/0 (2-70)	18 or 72
CPGI-GTAP-2	#14 - #2/0 (2-70)	5

Selections are based on typical dimensions for low voltage, insulated cable.

Catalog Number	Length	Width	Height
GTAP-1	2-3/4 (70)	1-5/8 (41)	1-1/16 (27)
GTAP-2	4-1/4 (108)	2 (51)	1-3/16 (30)

For information on other connectors or applications, please contact your local Tyco Electronics' representative.



For connector information refer to the Connectors and Terminals section of this catalog.

Low Voltage Taps



Water Resistant Cover Kit with Connector (1000 V)
GelCap SL Splice Cover

Tyco Electronics' GelCap SL splice cover kits provide quick installation, dependable performance, and easy reentry for street lighting connections, but they have many other uses.

GelCap SL splice cover kits quickly and conveniently insulate, seal, and protect stub splice connections up to 1000 volts.

PowerGel sealant technology

The GelCap SL splice cover kits feature revolutionary PowerGel sealant which provides an excellent moisture seal over a wide temperature range (-40°C to 105°C).

Innovative cap design and material

The specially formulated material provides excellent abrasion resistance, insulation value, and UV resistance.

Range taking connector

The special three wire connector is perfect for street light connections. There are two ports that accept wires from #14-2/0 AWG. Use these for the feeder cable. There is a single port that accepts #14-6 AWG. Use this port to power the light.

Fast and easy installation

GelCap SL splice cover kits provide the fastest installation. Simply push the cover down over the connection and snap the clamp closed. No extra materials or greases are required. The PowerGel sealant is already in the cap.

Easy to reenter

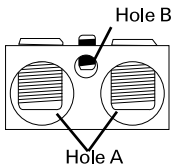
The GelCap SL splice cover is easy to reenter because the PowerGel sealant pulls away leaving a clean connection. Reentry is also safer than other methods because no sharp objects or cutting tools are required for removal of the cap.

Other common uses for GelCap splice cover kits

- Irrigation systems
- HVAC
- Outdoor lighting
- Motor connections

Selection information

Catalog Number	Hole A		Hole B		Std. Pack
	Wire Range	Recommended Torque Values	Wire Range	Recommended Torque Values	
GelCap-SL-2/0-3 Hole	#14-2/0 AWG	120-180 in-lbs	#14-6 AWG	120-150 in-lbs	10
CPGI-GelCap-SL-2/0-3 Hole	#14-2/0 AWG	120-180 in-lbs	#14-6 AWG	120-150 in-lbs	5



Testing

Chemical Resistance

Ozone Resistance

Accelerated Aging

UV Resistance

Abrasion Resistance

Test Conditions

ASTM D543, Sulfuric acid, Sodium Hydroxide, Transformer and motor oil

ASTM D1149, 120 hours @40°C, 50pphm

ASTM D2671

ASTM G53, UVB, 4000 hours, 4 hour on/off cycle

2040 gm wt., 4000 cycles, 5% max thickness loss

Ordering Information

1. Selections are based on typical dimensions of low-voltage insulated cables.
2. Kits include UL Listed connectors for use with copper and/or aluminum conductors.
3. Each kit contains a gel filled cap, cap clamp, and connector.



600V/105°C

For connector information refer to the Connectors and Terminals section of this catalog.

Low Voltage Taps



Water Resistant Closure for Power Cable (1000 V) GHFC H-Frame Closure

Tyco Electronics' low-voltage H-frame closures provide a fast and simple method for insulating and environmentally sealing low-voltage cable-taps and splices made with H-frame compression connectors.

- Utilizes Tyco Electronics' PowerGel sealant material to seal and protect the connection from moisture ingress, corrosion, and pollution.
- Ideal for both underground and overhead applications and is especially useful for street lighting applications.
- Qualified to ANSI C119.1-1986 for underground splicing.
- UV resistant.
- Qualified for temperatures from -40°C to 90°C.

Simply place the connection on the closure and press the closure together. It's that easy—no tapes, mastics, tools, or mixing are required. The closure can be easily installed with one hand.

Selection information

Catalog Number	Conductor size (AWG/kcmil)		Die	Std. Pack
	Main	Tap		
GHFC-1-90	#6-#2	#14-#8	"BG"	10 or 100
CPGI-GHFC-1-90	#6-#2	#14-#8	"BG"	5
GHFC-2-90	#2-2/0	#14-#6	"O"	10 or 100
CPGI-GHFC-2-90	#2-2/0	#14-#6	"O"	5
GHFC-2.5-90	1/0-4/0	#6-3/0	"D"	30 each
GHFC-3-90	350	4/0	"N"	6 or 18

Ordering information

Standard packs of 100 ea. are also available. Substitute a (B100) in place of the (B10) in the catalog number.



Submersible Connectors for URD Distribution (1000V) GelPort Connectors

Corrosion resistance

No loose parts due to one piece housing

Gel-filled cable entry ports provide a reliable cable seal

PowerGel sealing gel seals out harsh environments

Rugged, impact-resistant housing stands up to rough installations

Clear view back allows for easy positive visual indication of wire position in connector

Catalog Number	Clear View	Number of Wire Ports	Conductor use Range (mm2)	Length Inches (mm)	Width Inches (mm)	Height Inches (mm)
GPRT-350-3P	-C	3	14 - 350 (2 - 150)	4.60 (117)	3.825 (97)	3.50 (89)
GPRT-350-4P	-C	4	14 - 350 (2 - 150)	5.85 (149)	3.825 (97)	3.50 (89)
GPRT-350-5P	-C	5	14 - 350 (2 - 150)	7.10 (180)	3.825 (97)	3.50 (89)
GPRT-350-6P	-C	6	14 - 350 (2 - 150)	8.35 (212)	3.825 (97)	3.50 (89)
GPRT-350-8P	-C	8	14 - 350 (2 - 150)	10.85 (276)	3.825 (97)	3.50 (89)
GPRT-500-3P	-C	3	6 - 500 (16 - 250)	4.60 (117)	3.825 (97)	3.50 (89)
GPRT-500-4P	-C	4	6 - 500 (16 - 250)	5.85 (149)	3.825 (97)	3.50 (89)
GPRT-500-5P	-C	5	6 - 500 (16 - 250)	7.10 (180)	3.825 (97)	3.50 (89)
GPRT-500-6P	-C	6	6 - 500 (16 - 250)	8.35 (212)	3.825 (97)	3.50 (89)
GPRT-500-8P	-C	8	6 - 500 (16 - 250)	10.85 (276)	3.825 (97)	3.50 (89)
GPRT-350/4P-500/1P	-C	5 Hybrid		7.10 (180)	3.825 (97)	3.50 (89)
		4	14 - 350 (2 - 150)			
		1	6 - 500 (16 - 250)			
GPRT-350/6P-500/2P	-C	8 Hybrid		10.85 (276)	3.825 (97)	3.50 (89)
		6	14 - 350 (2 - 150)			
		2	6 - 500 (16 - 250)			

Note: For clear view back, add "-C" to catalog number

For connector information refer to the Connectors and Terminals section of this catalog.

TUBING & MOLDED PARTS

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Heat-Shrink Tubing



Thin-Wall Tubing, Uncoated RNF-100 Tubing

- UL recognized to standard 224 (file E35586). Flexible, flame-retardant, thin-wall, general purpose heat-shrinkable polyolefin tubing
- Clear tubing is not flame-retardant. RNF-100
- Ideal for wire jacketing marking and color coding
- Black, white, and colors meet MIL-DTL-23053/5, Class 1. Clear meets MIL-DTL-23053/5, Class 2
- 2:1 shrink ratio and an unlimited shelf life when stored under normal conditions

Selection information (dimensions in inches/millimeters)

Spools

Catalog number	Inner Diameter as Supplied	Recovered	Recovered Wall Thickness (Mils)	Color	Feet/ Spool
RNF-100-1/16-25-(color)	.063 (1.6)	.031 (0.8)	17	BLK,WHT,CL	25
RNF-100-3/32-25-(color)	.093 (2.4)	.046 (1.2)	20	BLK,WHT,CL	25
RNF-100-1/8-25-(color)	.125 (3.2)	.062 (1.6)	20	BLK,WHT,CL	25
RNF-100-1/8-500-(color)	.125 (3.2)	.062 (1.6)	20	BLK,WHT,RED	500
RNF-100-3/16-25-(color)	.187 (4.8)	.093 (2.4)	20	BLK,WHT,CL	25
RNF-100-1/4-25-(color)	.250 (6.4)	.125 (3.2)	25	BLK,WHT,CL	25
RNF-100-1/4-250-(color)	.250 (6.4)	.125 (3.2)	25	BLK,WHT,RED	250
RNF-100-3/8-25-(color)	.375 (9.6)	.187 (4.8)	25	BLK,WHT,CL	25
RNF-100-3/8-200-(color)	.375 (9.6)	.187 (4.8)	25	BLK,WHT,RED,GRN,BLUE	200
RNF-100-1/2-25-(color)	.500 (13)	.250 (6.4)	25	BLK,WHT,CL	25
RNF-100-1/2-150-(color)	.500 (13)	.250 (6.4)	25	BLK,WHT,RED, GRN,BLUE	150
RNF-100-3/4-25-(color)	.750 (19)	.375 (9.6)	30	BLK,WHT,CL	25
RNF-100-1-25-(color)	1.000 (25)	.500 (13)	35	BLK,WHT,CL	25
RNF-100-1 1/2-25-(color)	1.500 (38)	.750 (19)	40	BLK,WHT,CL	25
RNF-100-2-25-(color)	2.000 (51)	1.00 (25)	45	BLK,WHT,CL	25

4 Foot Sticks

Catalog Number	Inner Diameter as Supplied	Recovered	Cut-Piece Length	Colors	Pieces/ Carton
CPGI-RNF-100-1/4-48-(color)	.250 (6.4)	.125 (3.2)	48" Stick	BLSK,WHSK,GRSK, RDSK	25
CPGI-RNF-100-3/8-48-(color)	.375 (9.6)	.187 (4.8)	48" Stick	BLSK,WHSK,GRSK, RDSK	25
CPGI-RNF-100-1/2-48-(color)	.500 (13)	.250 (6.4)	48" Stick	BLSK,WHSK,GRSK, RDSK	25
CPGI-RNF-100-3/4-48-(color)	.750 (19)	.375 (9.6)	48" Stick	BLSK,WHSK,GRSK, RDSK	25
CPGI-RNF-100-1-48-(color)	1.000 (25)	.500 (13)	48" Stick	BLSK,WHSK,GRSK, RDSK	25

6 Inch Sticks

Catalog Number	Inner Diameter as Supplied	Recovered	Cut-Piece Length	Colors	Pieces/ Pack	Packs/ Carton
CPGI-RNF-100-1/4-6-(color)	.250 (6.4)	.125 (3.2)	6" Piece	BLK,WHT,GRN, RED	15	5
CPGI-RNF-100-3/8-6-(color)	.375 (9.6)	.187 (4.8)	6" Piece	BLK,WHT,GRN, RED	12	5
CPGI-RNF-100-1/2-6-(color)	.500 (13)	.250 (6.4)	6" Piece	BLK,WHT,GRN, RED	10	5
CPGI-RNF-100-3/4-6-(color)	.750 (19)	.375 (9.6)	6" Piece	BLK,WHT,GRN, RED	8	5
CPGI-RNF-100-1-6-(color)	1.000 (25)	.500 (13)	6" Piece	BLK,WHT,GRN, RED	8	5
CPGI-RNF-100-1/4-ASRT	.250 (6.4)	.125 (3.2)	6" Piece	ASSORTED	15	5
CPGI-RNF-100-3/8-ASRT	.375 (9.6)	.187 (4.8)	6" Piece	ASSORTED	12	5
CPGI-RNF-100-1/2-ASRT	.500 (13)	.250 (6.4)	6" Piece	ASSORTED	10	5
CPGI-RNF-100-3/4-ASRT	.750 (19)	.375 (9.6)	6" Piece	ASSORTED	8	5
CPGI-RNF-100-1-6-ASRT	1.000 (25)	.500 (13)	6" Piece	ASSORTED	8	5
CPGI-RNF-100-MP-A-BLK:	.063 (1.6)	.031 (0.8)	6" Piece	BLK	12	5
	.093 (2.4)	.046 (1.2)	6" Piece	BLK	12	5
	.125 (3.2)	.062 (1.6)	6" Piece	BLK	12	5
	.187 (4.8)	.093 (2.4)	6" Piece	BLK	12	5
CPGI-RNF-100-MP-B-BLK:	.250 (6.4)	.125 (3.2)	6" Piece	BLK	12	5
	.375 (9.6)	.187 (4.8)	6" Piece	BLK	12	5
	.750 (19)	.375 (9.6)	6" Piece	BLK	8	5
	1.00 (25)	.500 (13)	6" Piece	BLK	8	5



UL recognized to Standard 224
600V/125°C

Heat-Shrink Tubing



Medium-Wall Sealant-Coated or Uncoated Tubing (600 V) MWTM Tubing

- Sealant-coated MWTM tubing (-S designation) is for use as insulation/jacket repair up to 600 V or for general sealing and re-jacketing of polymeric- or elastomeric-insulated cables up to 35kV
- RUS accepted as jacket restoration of JCN cable
- Uncoated MWTM tubing (-U or -A/U) is for cable re-jacketing only
- 3:1 shrink ratio and an unlimited shelf life when stored under normal conditions

Selection information (dimensions in inches or feet /millimeters or meters)

Sealant-Coated, Cut-Length Tubing

Catalog Number	Use Range Min. – Max.	Cut-Piece Length	Standard Pkg /Box
MWMTM-10/3-1200-S	0.13 – 0.35 (3 – 9)	48 (1200)	25
MWMTM-16/5-1200-S	0.25 – 0.55 (6 – 14)	48 (1200)	25
MWMTM-25/8-1200-S	0.35 – 0.85 (9 – 22)	48 (1200)	25
MWMTM-35/12-1200-S	0.50 – 1.25 (13 – 32)	48 (1200)	25
MWMTM-50/16-1200-S	0.65 – 1.70 (17 – 43)	48 (1200)	15
MWMTM-85/25-1200-S	1.00 – 2.90 (25 – 74)	48 (1200)	5
MWMTM-115/34-1200-S	1.40 – 3.90 (36 – 99)	48 (1200)	5
MWMTM-140/42-1200-S	1.80 – 4.70 (46 – 119)	48 (1200)	5

Uncoated, Spooled Tubing

Catalog Number	Use Range Min. – Max.	Min. Cont. Length	Standard Pkg/Spool	Bulk Option /Spool
MWMTM-10/3-A/U	0.13 – 0.35 (3 – 9)	25 (7.6)	100 (30)	
MWMTM-16/5-A/U	0.25 – 0.55 (6 – 14)	25 (7.6)	100 (30)	1155 (350)
MWMTM-25/8-A/U	0.35 – 0.85 (9 – 22)	25 (7.6)	100 (30)	660 (200)
MWMTM-35/12-A/U	0.50 – 1.25 (13 – 32)	25 (7.6)	100 (30)	495 (150)
MWMTM-50/16-A/U	0.65 – 1.70 (17 – 43)	15 (4.6)	75 (23)	330 (100)

Uncoated, Cut-Piece Tubing

Catalog Number	Use Range Min. – Max.	Cut-Piece Length	Standard Pkg/Box
MWMTM-85/25-1500/U	1.00 – 2.90 (25 – 74)	60 (1500)	5
MWMTM-115/34-1500/U	1.40 – 3.90 (36 – 99)	60 (1500)	5
MWMTM-140/42-1500/U	1.80 – 4.70 (46 – 119)	60 (1500)	5

UV Resistant Test Report: EDR-5361

Heat-Shrink Tubing



Heavy-Wall Sealant-Coated or Uncoated Tubing (1000 V) WCSM Tubing

- For use on standard poly- or elastomeric -insulated/jacketed cables or lead-jacketed cables, which may include aluminum or steel armoring
- Use sealant-coated tubing (-S) as a sealed in-line splice or terminal lug seal for non-flame-retardant applications. Use uncoated tubing (-A/U and /U) for cable re-jacketing and mechanical protection only.
- Sealant-coated WCSM tubing, sizes -9/3 through -70/21 (-S designation) is UL listed per 486D (file E91151), certified to CSA C22.2, qualified to ANSI C119.1-1986, and rated to Western Underground Guide 2.5. Also RUS accepted for use as a secondary tap or splice cover, and for use as jacket restoration materials on JCN cable. WCSM tubing may be used for jacket repair on cables to 35 kV.
- Connectors over 6 inches: Recommended cut length = connector length + 5 inches
Connectors up to 6 inches: Recommended cut length = connector length + 4 inches
- WCSM tubing has a 3:1 shrink ratio and an unlimited shelf life when stored under normal conditions

Selection information (dimensions in inches/millimeters)

Catalog Number ¹	1000-V General Conductor Size (AWG/kcmil)	Use Range (Min. - Max.)	Cut-Piece Length ²	Std. Pack (Ft/Roll) (Pcs/Box) (Pcs/Pack)
Sealant-Coated Cut-Length Tubing				
WCSM-9/3-150-S	#14 - #8	0.15 - 0.30 (4-8)	6 (150)	50
CPGI-WCSM-9/3-150-S	#14 - #8	0.15 - 0.30 (4-8)	6 (150)	3
WCSM-9/3-300-S	#14 - #8	0.15 - 0.30 (4-8)	12 (300)	50
WCSM-9/3-1200-S	#14 - #8	0.15 - 0.30 (4-8)	48 (1200)	25
WCSM-13/4-150-S	#12 - #6	0.20 - 0.45 (5-11)	6 (150)	50
CPGI-WCSM-13/4-150-S	#12 - #6	0.20 - 0.45 (5-11)	6 (150)	2
WCSM-13/4-1200-S	#12 - #6	0.20 - 0.45 (5-11)	48 (1200)	25
WCSM-20/6-150-S	#8 - #2	0.25 - 0.70 (6-18)	6 (150)	50
CPGI-WCSM-20/6-150-S	#8 - #2	0.25 - 0.70 (6-18)	6 (150)	2
WCSM-20/6-225-S	#8 - #2	0.25 - 0.70 (6-18)	9 (225)	50
WCSM-20/6-300-S	#8 - #2	0.25 - 0.70 (6-18)	12 (300)	50
WCSM-20/6-1200-S	#8 - #2	0.25 - 0.70 (6-18)	48 (1200)	25
WCSM-33/8-150-S	#4 - 4/0	0.35 - 1.20 (9-30)	6 (150)	50
CPGI-WCSM-33/8-150-S	#4 - 4/0	0.35 - 1.20 (9-30)	6 (150)	2
WCSM-33/8-225-S	#4 - 4/0	0.35 - 1.20 (9-30)	9 (225)	50
WCSM-33/8-300-S	#4 - 4/0	0.35 - 1.20 (9-30)	12 (300)	50
WCSM-33/8-1200-S	#4 - 4/0	0.35 - 1.20 (9-30)	48 (1200)	25
WCSM-43/12-150-S	1/0 - 400	0.50 - 1.55 (13-39)	6 (150)	40
WCSM-43/12-225-S	1/0 - 400	0.50 - 1.55 (13-39)	9 (225)	40
CPGI-WCSM-43/12-225-S	1/0 - 400	0.50 - 1.55 (13-39)	9 (225)	1
WCSM-43/12-300-S	1/0 - 400	0.50 - 1.55 (13-39)	12 (300)	40
WCSM-43/12-1200-S	1/0 - 400	0.50 - 1.55 (13-39)	48 (1200)	10
WCSM-51/16-100-S	250 - 500	0.70 - 1.75 (18-44)	4 (100)	100
WCSM-51/16-225-S	250 - 500	0.70 - 1.75 (18-44)	9 (225)	30
CPGI-WCSM-51/16-225-S	250 - 500	0.70 - 1.75 (18-44)	9 (225)	1
WCSM-51/16-300-S	250 - 500	0.70 - 1.75 (18-44)	12 (300)	30
WCSM-51/16-1200-S	250 - 500	0.70 - 1.75 (18-44)	48 (1200)	10
WCSM-70/21-300-S	400 - 1000	0.90 - 2.45 (23-62)	12 (300)	15
WCSM-70/21-450-S	400 - 1000	0.90 - 2.45 (23-62)	18 (450)	15
WCSM-70/21-600-S	400 - 1000	0.90 - 2.45 (23-62)	24 (600)	10 or 100
WCSM-70/21-1200-S	400 - 1000	0.90 - 2.45 (23-62)	48 (1200)	10
WCSM-105/30-300-S	800 - 1250	1.30 - 3.70 (33-94)	12 (300)	15
WCSM-105/30-1200-S	800 - 1250	1.30 - 3.70 (33-94)	48 (1200)	5
WCSM-130/36-300-S	1500 - 2500	1.60 - 4.20 (41-107)	12 (300)	10
WCSM-130/36-450-S	1500 - 2500	1.60 - 4.20 (41-107)	18 (450)	20
WCSM-130/36-1200-S	1500 - 2500	1.60 - 4.20 (41-107)	48 (1200)	5
Uncoated Tubing				
WCSM-9/3-A/U	#14 - #8	0.15 - 0.30 (4-8)		100
WCSM-13/4-A/U	#12 - #6	0.20 - 0.45 (5-11)		100
WCSM-20/6-A/U	#8 - #2	0.25 - 0.70 (6-18)		100
WCSM-33/8-A/U	#4 - 4/0	0.35 - 1.20 (9-30)		65
WCSM-43/12-A/U	1/0 - 400	0.50 - 1.55 (13-39)		50
WCSM-51/16-A/U	250 - 500	0.70 - 1.75 (18-44)		40
WCSM-70/21-A/U	400 - 1000	0.90 - 2.45 (23-62)		40
WCSM-90/30-1500/U	800 - 1200	1.30 - 3.10 (33-79)	60	5
WCSM-130/36-1500/U	1500 - 2500	1.60 - 4.20 (41-107)	60	5

Note: UL listing applies to sealant-coated (-S) WCSM-9/3 through -70/21 only. WCSM-105/30 and -130/36 are not UL listed.

¹Catalog numbers with -S designation are suitable for sealed electrical insulation to 1000 V. Catalog numbers with A/U and /U designations are for cable re-jacketing only.

²Length tolerance to 32 percent. Can be used for multi-conductor LV splices using different tubings.

UV Resistant Test Report: EDR-5361



Certified C22.2
No. 198.2



LISTED 96J4
Direct burial insulation
covered for listed
pressure connectors

SUBMERSIBLE

Heat-Shrink Tubing



Heavy-Wall Flame Retardant Tubing (2000 V) FCSM Tubing

FCSM tubing's tough, crosslinked polyolefin construction provides mechanical strength and cut-through resistance equal to, or surpassing, the properties of low-voltage cable jackets.

- 3:1 shrink ratio and an unlimited shelf life when stored under normal conditions
- Use sealant-coated tubing (-S) as a sealed in-line splice or terminal lug seal. It provides a watertight seal for direct-buried applications and wet environments.
- Use uncoated tubing (-/U) for cable rejacketing only
- Sealant-coated or uncoated tubing may be used for jacket repair on cable to 35 kV. Qualified to ANSI C119.1-1986; also rated to IEEE 383 (Vertical Tray Flame Test) and ICEA S-19-81. FCSM is also MSHA approved (No. P-137-MSHA).

For use on standard poly- or elastomeric- insulated/jacketed cables or lead-jacketed cables, which may include aluminum or steel armoring.

Connectors up to 6 inches: Recommended cut length = connector length + 4 inches.

Connectors over 6 inches: Recommended cut length = connector length + 5 inches.

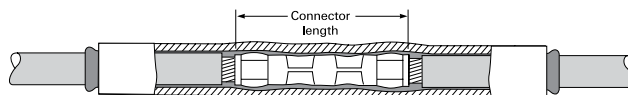
Selection information (dimensions in inches/millimeters)

Catalog Number	1000-V Insulated Conductor Size (AWG/kcmil)	General Use Range (min.-max.)	Tube Length*	Std Ft.(m)/Roll	Pack Pcs/Box	Bulk Option Ft.(m)/Roll
In-Line Splice Or Terminal Lug Seal (With Sealant)						
FCSM-9/3-1200-S	#14 - #8	0.15 - 0.30 (4 - 8)	48 (1200)	25		
FCSM-19/6-150-S	#6 - #2	0.25 - 0.65 (6 - 17)	6 (150)	50		
FCSM-19/6-1200-S	#6 - #2	0.25 - 0.65 (6 - 17)	48 (1200)	25		
FCSM-28/9-225-S	#2 - 4/0	0.40 - 0.95 (10 - 24)	9 (225)	50		
FCSM-28/9-1200-S	#2 - 4/0	0.40 - 0.95 (10 - 24)	48 (1200)	25		
FCSM-38/12-300-S	1/0 - 350	0.50 - 1.30 (13 - 33)	12 (300)	40		
FCSM-38/12-1200-S	1/0 - 350	0.50 - 1.30 (13 - 33)	48 (1200)	10		
FCSM-51/16-300-S	250 - 500	0.70 - 1.75 (18 - 44)	12 (300)	30		
FCSM-51/16-1200-S	250 - 500	0.70 - 1.75 (18 - 44)	48 (1200)	10		
FCSM-68/22-1200-S	600 - 1000	0.95 - 2.30 (25 - 58)	48 (1200)	10		
FCSM-90/30-1200-S	800 - 1200	1.30 - 3.10 (33 - 79)	48 (1200)	5		
FCSM-120/40-1200-S	1500 - 2500	1.75 - 4.10 (44 - 104)	48 (1200)	5		
FCSM-177/63 600-S		2.75 - 6.05 (70 - 154)	24 (600)	6		
FCSM-177/63-1200-S		2.75 - 6.05 (70 - 154)	48 (1200)	5		

Cable Rejacketing (Without Sealant)

FCSM-9/3-A/U	#14 - #8	0.15 - 0.30 (4 - 8)		100 (30)		
FCSM-19/6-A/U	#6 - #2	0.25 - 0.65 (6 - 17)		100 (30)		825 (250)
FCSM-28/9-A/U	#2 - 4/0	0.40 - 0.95 (10 - 24)		65 (20)		495 (150)
FCSM-38/12-A/U	1/0 - 350	0.50 - 1.30 (13 - 33)		50 (15)		395 (120)
FCSM-51/16-A/U	250 - 500	0.70 - 1.75 (18 - 44)		40 (12)		330 (100)
FCSM-68/22-A/U	600 - 1000	0.95 - 2.30 (25 - 58)		80 (24)		
FCSM-90/30-1500/U	800 - 1200	1.30 - 3.10 (33 - 79)	60 (1500)		5	
FCSM-120/40-1500/U	1500 - 2500	1.75 - 4.10 (44 - 104)	60 (1500)		5	
FCSM-177/63-1500/U		2.75 - 6.05 (70 - 154)	60 (1500)		5	

*Length tolerance to 32 percent.
Connectors or lugs not included.



Heat-Shrink Tubing



Busbar Insulating Tubing (1000 V) LVIT Tubing

LVIT is a heat-shrinkable medium-wall, flame-retardant, low voltage tubing for insulating straight and bent busbars during original equipment assembly or in retrofit applications where access to one end of the busbar is available.

When used according to the selection guidelines, LVIT may be used in applications up to 1 kV in accordance with ANSI/IEEE C37.20 specification. LVIT tubing may be used in applications up to 3.6 kV in accordance with IEC specifications.

Rated to ANSI/IEEE C37.20.1-1987. UL recognized to Standard 224 (file E137416), 600 V-125°C-VW.1.

Selection information (dimensions in inches/millimeters)

Catalog Number	Busbar dimensions			LVIT Tubing Dia. as Supplied & Fully Recovered (Min.-Max.)	Std. Pack
	Rectangular Bar* (Bus Width)	Square Bar (Each Side)	Round Bar (Dia. Min.-Max.)		
LVIT-30/10-A/U	0.50 - 1.0 (12 - 25)		0.40 - 1.0 (11 - 25)	1.18 - 0.39 (30 - 10)	200 ft.
LVIT-75/25-A/U	2.0 - 3.0 (50 - 75)	1 (25)	1.0 - 2.0 (25 - 50)	2.95 - 0.98 (75 - 25)	100 ft.
LVIT-150/50-A/U	4.0 - 6.0 (100 - 150)	2 - 3 (50-75)	2.0 - 4.0 (50 - 100)	5.91 - 1.97 (150 - 50)	100 ft.

*Rectangular bus thickness range is 1/4 to 5/8 inch.

Molded Parts



End Sealing Caps for 1/C Power Cable (1000 V) ESC Sealing Caps

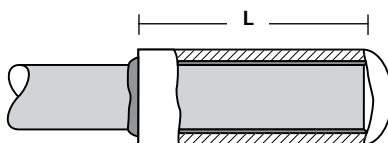
- Shrink and compress a hot-melt adhesive on the cable jacket, forming a secure environmental seal
- Fit easily over the cable end and shrink in seconds, leaving a compact, rugged end seal
- Qualified to ANSI C119.1-1986 and rated to ICEA electrical withstand test for 1000 volts
- For use on standard poly- or elastomeric-insulated/ jacketed cables or lead-jacketed cables, which may include aluminum or steel armoring.

Use as a live end seal to 1000 volts. Use as an end seal for storage and pulling of de-energized cable.

Selection information (dimensions in inches/millimeters)

Catalog Number	Primary Insulation (1000 V)		General Use Range (Min.-Max.)	Length as Supplied	Std. Pack (Pcs/Box)
	Conductor Size (AWG/kcmil)	Use Range (Min.-Max.)			
ESC-1/A	#12 - #8	0.17 - 0.35 (4-9)	0.15 - 0.30 (4-8)	1.0	50
CPGI-ESC-1/A	#12 - #8	0.17 - 0.35 (4-9)	0.15 - 0.30 (4-8)	1.0	25
ESC-2/A	#6 - 3/0	0.31 - 0.71 (8-18)	0.30 - 0.70 (8-18)	2.0	50
CPGI-ESC-2/A	#6 - 3/0	0.31 - 0.71 (8-18)	0.30 - 0.70 (8-18)	2.0	25
ESC-3/A	4/0 - 750	0.65 - 1.25 (17-32)	0.65 - 1.25 (17-32)	3.5	40
ESC-4/A	750 - 1500	1.08 - 1.94 (27-49)	1.05 - 1.95 (27-50)	5.3	20
ESC-5/A	1500 - 2000	1.38 - 2.58 (35-66)	1.30 - 2.65 (33-67)	6.7	10
ESC-6/A		1.94 - 3.54 (49-90)	1.85 - 3.70 (47-94)	5.6	10
ESC-7/A		3.02 - 4.25 (77-108)	2.95 - 4.50 (75-114)	5.4	10

*5 packs, each with 5 pcs. per Point of Purchase Package.



Each energized conductor requires a separate ESC sealing cap.

Molded Parts

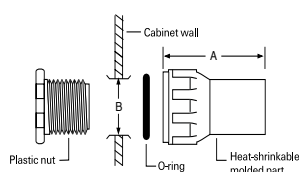


Heat-Shrink Cabinet Feed-Through Seals CFTS Seals

CFTS seals are heat-shrinkable molded parts for moisture-sealing applications where cable enters enclosures, such as cabinets or connection boxes.

- Suitable for environments that have existing periodic pressure difference and/or temperature differential.
- Precoated with a thermoplastic adhesive that seals around the entering cable. The O-ring creates the water/air seal at the cabinet entry.
- Utilizes a rigid plastic that, when inserted through the cabinet wall, protects the entering cable from abrasion or cut-through.

Selection information (dimensions in inches/millimeters)



Catalog Number	Cable Diameter (Min. - Max.)	A Length of Molded Part	B Clearance (Knockout) Hole Size	Std. Pack
CFTS-1	0.20 - 0.40 (5-10)	2.75 (70)	1 (25)	5
CFTS-2	0.25 - 0.65 (6-17)	2.75 (70)	1 (25)	5
CFTS-3	0.55 - 1.00 (14-25)	3.75 (95)	1 3/8 (35)	5
CFTS-4	0.80 - 1.45 (20-37)	4.50 (114)	2 (51)	5
CFTS-5	1.45 - 2.40 (37-61)	7.00 (178)	3 1/2 (89)	5



Heat-Shrink Cable Breakout Boots CBR Breakout Boot

CBR products seal breakouts in multiconductor cables and conduit.

These seals are made of tough, crosslinked polyolefin to provide mechanical protection and strain relief. CBR seals have an adhesive-coating on the body and the legs to form a durable watertight seal, and conform tightly to conduits and cable jackets.

For use on standard poly- or elastomeric insulated/jacketed multiconductor cables or cables in metal or plastic conduits.

Selection information (dimensions in inches/millimeters)

Cross Section	Catalog Number	Body Use Range (Min. - Max.)	Legs Use Range (Min. - Max.)	Std. Pack
	CBR-2-1-A	0.35 - 1.00 (9 - 25)	0.15 - 0.55 (4 - 14)	3
	CBR-2-2-A*	1.25 - 1.70 (32 - 43)	0.30 - 0.75 (8 - 19)	3
	CBR-2-3-A	1.65 - 3.00 (42 - 76)	0.65 - 1.40 (17 - 36)	3
	CBR-3-1-A	0.50 - 1.35 (13 - 34)	0.20 - 0.55 (5 - 14)	3
	CBR-3-2-A*	0.85 - 2.20 (22 - 56)	0.35 - 0.90 (9 - 23)	3
	CBR-3-3-A*	1.10 - 2.90 (28 - 74)	0.50 - 1.25 (13 - 32)	3
	CBR-3-4-A	2.35 - 5.65 (60 - 144)	1.20 - 2.10 (30 - 53)	3
	CBR-4-1-A	0.70 - 1.25 (18 - 32)	0.15 - 0.45 (4 - 11)	3
	CBR-4-2-A*	1.00 - 2.10 (25 - 53)	0.35 - 0.90 (9 - 23)	3
	CBR-4-3-A*	1.20 - 3.50 (30 - 89)	0.55 - 1.40 (14 - 36)	3
	CBR-4-4-A	2.35 - 6.05 (60 - 154)	0.90 - 1.50 (23 - 38)	3
	CBR-6-1-A*	1.45 - 3.85 (37 - 98)	0.60 - 1.50 (15 - 38) phase	3
	CBR-6-2-A*	2.65 - 5.30 (67 - 135)	0.30 - 0.75* (8 - 19) ground	3
			0.90 - 2.20 (23 - 56) phase	3
			0.40 - 0.95* (10 - 24) ground	6

CBR-Plug for use only with asterisked items above.

CBR-Plugs are for blocking and sealing unused legs of breakouts. The plug will fit those items asterisked () above.

TAPES & SEALANTS



Tapes

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Tapes



Flexible Cable Repair Tape

CRPS Repair Tape

Tyco Electronics' CRPS repair strip is a high-quality replacement jacket for low- and high-voltage flexible mining cables. It is a tool-free, flexible, flame-retardant elastomeric strip that has been specially formulated to provide excellent resistance to abrasion, tearing, and cutting.

- Precoated with a thermoplastic sealant that provides an excellent seal against moisture and corrosive elements.
- MSHA approved (No. P-137-13-MSHA)
- Tool-free, flexible, flame-retardant elastomeric strip for jacket repair on mining and other flexible cables.

Selection information (dimensions in inches/millimeters)

Catalog Number	Strip Length	Strip Width	Std. Pack (Strips/Box)
CRPS-248	48 (1219)	2 (51)	20
CPGI-CRPS-248	48 (1219)	2 (51)	5
CRPS-260	60 (1524)	2 (51)	20
CRPS-290	90 (2286)	2 (51)	15
CRPS-2120	120 (3048)	2 (51)	10

Approximate Coverage Length

Cable Diameter	CRPS-248	CRPS-260	CRPS-290	CRPS-2120
0.50 (13)	28 (711)	36 (914)	55 (1397)	73 (1854)
0.75 (19)	18 (457)	23 (584)	37 (940)	49 (1245)
1.00 (25)	14 (356)	17 (432)	26 (660)	35 (889)
1.25 (32)	11 (279)	14 (355)	21 (533)	28 (711)
1.50 (38)	9 (229)	11 (279)	18 (457)	24 (610)
1.75 (44)	7 (178)	9 (228)	15 (381)	20 (508)
2.00 (51)		8 (203)	14 (356)	19 (483)
2.50 (64)			10 (254)	13 (330)
3.00 (76)			9 (229)	12 (305)

Tapes



Fast Splicing Tape Wrap
FSTW Splicing Tape

Tyco Electronics' FSTW is a thermoplastic rubber tape combined with a butyl rubber sealant specially formulated for underground applications. FSTW is ideal for repairing cable jackets, sealing low-voltage splices, and rejacketing MV cable splices.

Saves Time and Money

FSTW provides a complete rejacketing solution in one pass as opposed to the multi-layer construction required when using traditional tape products. It's quick to install. There is no need for separate sealing mastic and tape as it combines sealant and rubber tape in one convenient product.

Tough Protection

FSTW rubber tape is made 50 mils thick, which offers strong puncture resistance from underground material and debris. FSTW is rated for use on 90°C rated cables, in underground use, in acid or caustic soils, and saltwater environments. It is UV resistant and rated for aerial exposure. Splices made with FSTW qualify to ANSI C119.1.

Environmental Seal

FSTW provides a complete watertight seal for use in submersible applications.

Easy Removal

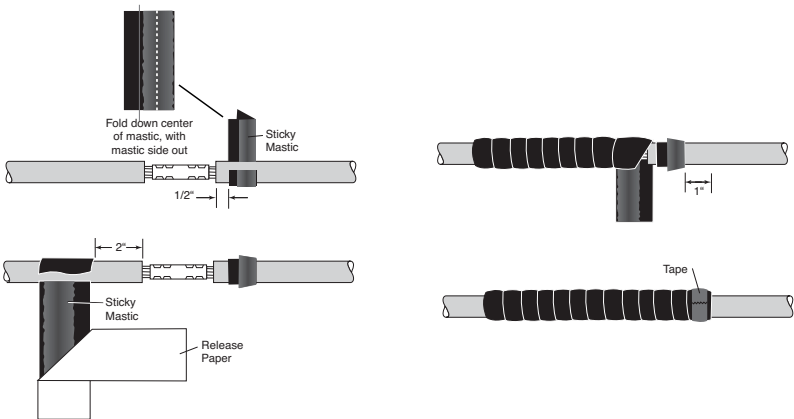
Mastic is in contact with cable surface only at ends which allows for easy removal.

Selection information (dimensions in inches/millimeters)

Approximate Coverage Length per Roll

Cable Diameter	FTSW-2-1-4	FTSW-2-1-6
0.50" (13 mm)	28 (710)	42 (1000)
0.75" (19 mm)	18 (460)	27 (680)
1.00" (25 mm)	14 (355)	21 (530)
1.25" (32 mm)	11 (280)	17 (430)
1.50" (38 mm)	9 (230)	14 (355)
1.75" (44 mm)	7 (180)	10 (280)
2.00" (51 mm)	6 (150)	9 (230)
2.50" (63 mm)		7 (180)
3.00" (76 mm)		6 (150)

Catalog Number	Part Number	Description
CPGI-FSTW-2-1-4	CB3953-000	Point-of-Purchase Pkg. (5) 4 ft. Rolls
FSTW-2-1-6	CB3838-000	Bulk Pkg. (12) 6 ft. Rolls



Tapes



Low-Voltage Busbar Insulating Heat-Shrink Tape (1000 V) LVBT Busbar Tape

LVBT is an adhesive-coated, low-voltage heat-shrinkable tape. One wrap insulates straight and bent bars in retrofit applications where tubing cannot be used. In addition, LVBT easily insulates unusual connections and geometries in the factory or field.

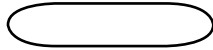
- Adhesive layer fuses the tape layers but does not stick to bus or hardware, providing tough insulation up to 1kV in accordance with ANSI C37.20-1987 and up to 3.6 kV in accordance with IEC specifications
- Rated to ANSI/IEEE C37.20-1987
- UL-recognized to Standard 224 (file E137417), 600 V-125°C-VW.1

LVBT tape dimensions

Catalog Number	Roll width	Roll Length
LVBT-1-R	1 (25)	25 ft (7.5 m)
LVBT-2-R	2 (50)	25 ft (7.5 m)
LVBT-4-R	4 (100)	25 ft (7.5 m)

Selection information (dimensions in inches/millimeters)

Bus Width	Catalog Number	Bus Length Insulated per Roll	Rolls/ Std. Pack
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Rectangular Busbar*

1 (25)	LVBT-1-R	3.8 ft (1.2 m)	8
2 (50)	LVBT-2-R	4.8 ft (1.5 m)	4
3 (75)	LVBT-2-R	3.5 ft (1.1 m)	4
4 (100)	LVBT-2-R	2.7 ft (0.8 m)	4
6 (150)	LVBT-2-R	1.9 ft (0.6 m)	4
8 (200)	LVBT-4-R	2.9 ft (0.9 m)	4

*Maximum thickness: 5/8 (15)



Square Busbar

1 (25)	LVBT-2-R	6.25 ft (2.0 m)	4
2 (50)	LVBT-2-R	3.1 ft (1.0 m)	4
3 (75)	LVBT-2-R	2.0 ft (0.6 m)	4
4 (100)	LVBT-4-R	3.1 ft (1.0 m)	2
6 (150)	LVBT-4-R	2.0 ft (0.6 m)	2



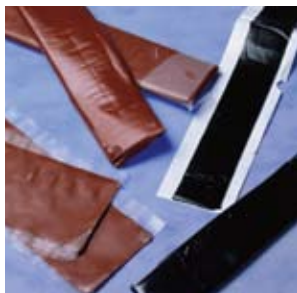
Round Busbar

0.5 in (12 mm)	LVBT-1-R	8.0 ft (2.6 m)	8
1.0 in (25 mm)	LVBT-2-R	8.0 ft (2.6 m)	4
2.0 in (50 mm)	LVBT-2-R	4.0 ft (1.3 m)	4
3.0 in (75 mm)	LVBT-2-R	2.6 ft (0.9 m)	4
4.0 in (100 mm)	LVBT-4-R	4.0 ft (1.3 m)	2

Ordering information

1. LVBT-1-R is best for shorter lengths. LVBT-2-R is the most versatile width for general purpose use. LVBT-4-R is useful for long lengths and larger bus sizes.
2. If sealing is needed, order the S-1052-6-150 sealant strips.

Sealants



Hot-Melt and Cold-Applied Sealants

These adhesives are to be used for sealing the ends of uncoated tubing or for low-voltage applications requiring void-filling. The hot-melt sealants flow when heated and set when cooled to provide a superior watertight seal. The cold-applied sealants bond to surfaces when placed under pressure to create a water-tight seal.

Use sealants with uncoated tubing and molded parts for sealing applications or as an adhesion enhancement for specific applications.

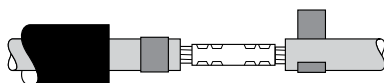
Selection information

Sealant Type	Description	Use with These Products:
S-1052	General purpose low-voltage sealant	WCSM-A/U (uncoated), MWTM-A/U (uncoated), FCSM-A/U (uncoated), LVBT, LVIT
S-1174	High-temperature, low-voltage sealant	MCK
S-1251	High-voltage Raysulate electrical insulator sealant	BBIT, BPTM, HVBC, HVBT, HVIS
S-1171	Low-voltage mining sealant	LV-MSK, HV-MSK
S-1278	Low-voltage sealant	RDSS
GelWrap Pad	Low-voltage PowerGel sealing gel	GelWrap, GelWrap-RS closure

Ordering information (dimensions in inches)

1. Select the appropriate catalog number based on the application information in columns two and three of the above table.
2. Use the information in the table below for ordering.
3. Sealants are supplied in bulk form with protective release paper.

Catalog Number	Color	Dimensions (W x L x T)	Std. Pack
S-1052-3-3000	Black	Roll: 1.5 x 120 x .12	5 rolls/box
S-1171-4-300	Black	Strip: 2 x 12 x .10	100 strips/box
S-1174-2-300	Black	Strip: .5 x 12 x .09	25 strips/box
S-1174-4-460	Black	Strip: 1 x 18 x .19	15 strips/box
S-1251-25-300-4	Red	Strip: 1 x 12 x .150	25 strips/box
S-1251-50-300-1	Red	Strip: 2 x 12 x .045	25 strips/box
S-1278-3 x 61 x 7620	Gray	Roll: 2.4 x 300 x .12	1 roll/box
GelWrap Pad 2x8	Gray	Strip: 2 x 8 x .18	6 strips/box



PHOTOCONTROLS, TIMERS & SWITCHES

Thermal Photocontrols

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PT / SPT Series	97
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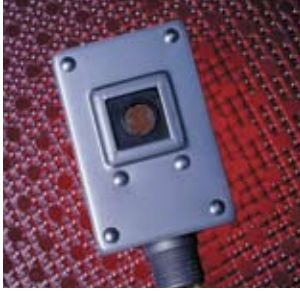
Photocontrol Accessories

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Lighting Accessories

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Thermal Photocontrols



Die-Cast Aluminum Housing AT Series

- Tough Die-Cast Aluminum Housing
- Heavy-Duty Thermal Bi-Metal Switch
- UL and CSA Listed
- 30-45 Second Time Delay
- 2000 & 3000 Watt Load Ratings
- Fail Mode is ON



Selection information

Model	Rated Volts	Range (Volts)	Load Rating Tungsten (Watts)	Load Rating Ballast (VA)	Turn ON (Fc)	OFF/ON Ratio
AT-15	120	105 - 130	2000	1900	1.5	6 : 1
AT-168	240	185 - 305	2000	1900	1.5	6 : 1
AT-19*	480	420 - 530	2000	1900	1.5	6 : 1
AT-20	120/208/240/277	105 - 305	2000	1900	1.5	6 : 1
AT-30*	120	105 - 130	3000	2900	1.5	6 : 1
AT-368*	240	180 - 305	3000	2900	1.5	6 : 1
AT-39*	480	420 - 530	3000	2900	1.5	6 : 1

*Not UL Listed



PT-15

SPT-15

Non-Metallic Housing PT / SPT Series

- Fixed or Adjustable Swivel Base
- Heavy Duty Thermal Bimetal Swivel
- UL and CSA Listed
- 30 - 45 Second Time Delay
- 2000 Watt Load Rating
- Fail Mode is ON



Selection information

Model	Base	Range Rated Volts	Tungsten (Volts)	Ballast (Watts)	Turn On (VA)	(Fc)	POP Ratio.
PT-15	Fixed	120	105 - 130	2000	1900	1.5	5 : 1
CPGI-ALR-PT-15	Fixed	120	105 - 130	2000	1900	1.5	5 : 1
PT-168	Fixed	240	185 - 305	2000	1900	1.5	5 : 1
PT-20	Fixed	120/208/240/277	105 - 305	2000	1900	1.5	5 : 1
PT-347**	Fixed	347	310 - 380	2000	1900	1.5	5 : 1
SPT-15	Swivel	120	105 - 130	2000	1900	1.5	5 : 1
CPGI-ALR-SPT-15	Swivel	120	105 - 130	2000	1900	1.5	5 : 1
SPT-168	Swivel	240	185 - 305	2000	1900	1.5	5 : 1
SPT-19*	Swivel	480	420 - 530	2000	1900	1.5	5 : 1
SPT-347**	Swivel	347	310 - 380	2000	1900	1.5	5 : 1

*Not UL Listed

** CSA Listed only

Thermal Photocontrols



Slim Profile TL Series

- Adjustable Swivel Base
- Thinline Profile - Perfect for Tight Spots
- 30 - 45 Second Time Delay
- UL and CSA Listed
- Durable Polycarbonate Housing
- Fail Mode is ON



Selection information

Model	Rated Volts	Range (Volts)	Load Rating Tungsten (Watts)	Load Rating Ballast (VA)	Turn ON (Fc)	OFF/ON Ratio
TL-115	120	105 - 130	1800	1100	1.5	5 : 1
CPGI-ALR-TL-115	120	105 - 130	1800	1100	1.5	5 : 1
TL-1168	240	185 - 305	1200	1100	1.5	5 : 1



Button Style AA Series

- 3/4" Long Threaded Nipple
- 30 - 45 Second Time Delay
- UL and CSA Listed
- Durable Polycarbonate Housing
- 1800 and 1200 Watt Load Rating
- Fail Mode is ON



Selection information

Model	Product Information	Rated Volts	Range (Volts)	Load Rating Tungsten (Watts)	Load Rating Ballast (VA)	Surge Protection (Joules)	Turn ON (Fc)	OFF/ON Ratio
AA-105		120	105 - 130	1800	1100		1.5	5 : 1
CPGI-ALR-AA-105		120	105 - 130	1800	1100		1.5	5 : 1
AA-105W	w/Wall Plate	120	105 - 130	1800	1100		1.5	5 : 1
CPGI-ALR-AA-105W	w/Wall Plate	120	105 - 130	1800	1100		1.5	5 : 1
AA-1068		240	185 - 305	1200	1100		1.5	5 : 1
AA-1068W	w/Wall Plate	240	185 - 305	1200	1100		1.5	5 : 1
AA-305		120	105 - 130	300	840		1.5	5 : 1
CPGI-ALR-AA-305		120	105 - 130	300	840		1.5	5 : 1
AA-105M	15" Leads	120	105 - 130	1800	1100	180	1.5	5 : 1
AA-1068M	15" Leads	240	185 - 305	1200	1100	180	1.5	5 : 1
AA-105HA	High Ambient	120	105 - 130	1800	1100		1.5	5 : 1
AA-LS*	Light Shield							

Note: 6" Leads unless otherwise noted

* Not UL Listed

Thermal Photocontrols



Locking Style/Residential Grade LC Series

- Heavy-Duty Thermal Bi-Metal Switch
- 30 - 45 Second Time Delay
- UL and CSA Listed
- ANSI C136.10 Compliant
- Fail Mode is ON



Selection information

Model	Rated Volts	Range (Volts)	Load Rating Tungsten (Watts)	Load Rating Ballast (VA)	Turn ON (Fc)	OFF/ON Ratio
LC-120	120	105 - 130	1000	1800	1.5	4 : 1
CPGI-ALR-LC-120	120	105 - 130	1000	1800	1.5	4 : 1
LC-208-277	240	185 - 305	1000	1800	1.5	4 : 1
CPGI-ALR-LC-208-277	240	185 - 305	1000	1800	1.5	4 : 1



Locking Style/Industrial/Commercial Grade with Surge Protection BF Series

- 180 Joule MOV Surge Protection
- Heavy-Duty Thermal Bi-Metal Switch
- 30 - 45 Second Time Delay
- UL and CSA Listed
- ANSI C136.10 Compliant
- Fail Mode is ON



Selection information

Model	Rated Volts	Range (Volts)	Load Rating Tungsten (Watts)	Load Rating Ballast (VA)	Surge Protection (Joules)	Turn ON (Fc)	OFF/ON Ratio
BF-120	120	105 - 130	1000	1800	180	1.5	5 : 1
BF-208-277	240	185 - 305	1000	1800	180	1.5	5 : 1
BF-PV	120 / 208 / 240 / 277	105 - 305	1000	1800	180	1.5	5 : 1

Thermal Photocontrols



Locking Style/Industrial Grade with Surge Protection M Series

- Up to 360 Joule MOV Surge Protection
- Heavy-Duty Thermal Bi-Metal Switch
- 30 - 45 Second Time Delay
- UL and CSA Listed
- ANSI C136.10 Compliant
- Fail Mode Is ON



Selection information

Model	Rated Volts	Range (Volts)	Load Rating Tungsten (Watts)	Load Rating Ballast (VA)	Surge Protection (Joules)	Turn ON (Fc)	OFF/ON Ratio
M-120	120	105 - 130	1000	1800	180	1.5	5 : 1
M-208-277	240	185 - 305	1000	1800	180	1.5	5 : 1
M-480*	480	420 - 530	1000	1800	180	1.5	5 : 1
M-PV	120 / 208 / 240 / 277	105 - 305	1000	1800	180	1.5	5 : 1
M-347**	347	310 - 380	1000	1800	180	1.5	5 : 1
MH-120*	120	105 - 130	1000	1800	360	1.5	5 : 1
MH-208-277*	240	185 - 305	1000	1800	360	1.5	5 : 1
MH-PV*	120 / 208 / 240 / 277	105 - 305	1000	1800	360	1.5	5 : 1

* Not UL Listed

** CSA Listed Only

Electronic Photocontrols



Time Off Lighting Control LM 1000

- Programmable
- Built-in Daylight Savings Time Adjustment
- Resets Automatically After Power Outages
- 360 Joule MOV Surge Protection
- 2 - 5 Second "ON" and "OFF" Time Delay
- Rain-tight / Dust-tight Housing
- ANSI C136.10 compliant
- Fail Mode Is ON

Selection information

Model	Rated Volts	Range (Volts)	Load Rating Tungsten (Watts)	Load Rating Ballast (VA)	Surge Protection (Joules)	Turn ON (Fc)	OFF/ON Ratio
LM-1000	120 / 208 / 240 / 277	105-305	1000	1800	360	3.0	1.5:1

Electronic Photocontrols



Electronic/Entry Level 1000 Series

- 120 Volts Utility Grade Electronic
- 15 Amp Relay
- 180 Joule MOV Surge Protection
- Instant "ON" / 2 - 5 Second "OFF" Time Delay
- Non-Drifting Phototransistor
- Rain-tight / Dust-tight Housing
- ANSI C136.10 Compliant
- Fail Mode Is ON

Selection information

Model	Rated Volts	Range (Volts)	Load Rating Tungsten (Watts)	Load Rating Ballast (VA)	Surge Protection (Joules)	Fail Mode	Turn ON (Fc)	OFF/ON Ratio
1060-NPS	120	105 - 130	1000	1800	180	On	1.5 +/- 0.5	1.5 : 1

Note: Custom models can be configured based on chart below.

1 0 60 - N P S - BK	
Series (Fail Mode)	Cap Color
10 = 1000 (ON)	(Leave blank if ANSI Std)
Voltage	BL = Blue
60 = 120	BK = Black
72 = 208/240/277	BR = Brown (Bronze)
90 = 120/208/240/277	GN = Green
MOV Surge Protection	GR = Gray
N = 180J, 320V, 3000A, 17mm	MR = Maroon
V = 360J, 320V, 10000A, 20mm	YL = Yellow
Light Sensor	Turn-On Level
P = Phototransistor	1 = 1.0 Fc
	S = 1.5 Fc (ANSI Std)
	2 = 2.0 Fc
	3 = 2.6 Fc

ANSI Standard Colors

120V	Gray or Clear
208 / 240 / 277V	Maroon
120 / 208 / 240 / 277V	Blue
480V	Yellow

Electronic Photocontrols



Selection information

Electronic/Heavy Duty 2000 Series

- Heavy Duty Utility Grade Electronic
- 30 Amp Relay
- 180 or 360 Joule MOV Surge Protection
- 2-4 Second "ON" and "OFF" Time Delay
- Non-Drifting Phototransistor
- Rain-tight / Dust-tight Housing
- ANSI C136.10 Compliant
- Fail Mode Is ON
- 2100 Series Has Inverse OFF/ON Ratio

Model	Rated Volts	Range (Volts)	Load Rating Tungsten (Watts)	Load Rating Ballast (VA)	Surge Protection (Joules)	Fail Mode	Turn ON (Fc)	OFF/ON Ratio
2060-NPS	120	105 - 130	1000	1800	180	On	1.5 +/- 0.5	1.5:1
2060-VPS	120	105 - 130	1000	1800	360	On	1.5 +/- 0.5	1.5:1
2072-NPS	240	185 - 305	1000	1800	180	On	1.5 +/- 0.5	1.5:1
2072-VPS	240	185 - 305	1000	1800	360	On	1.5 +/- 0.5	1.5:1
2090-NPS	120 / 208 / 240 / 277	105 - 305	1000	1800	180	On	1.5 +/- 0.5	1.5:1
CPGI-ALR-2090-NPS	120 / 208 / 240 / 277	105 - 305	1000	1800	180	On	1.5 +/- 0.5	1.5:1

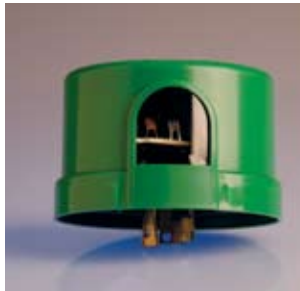
Note: Custom models can be configured based on chart below.

	2	0	60	-	V	P	S	-	BK
Series (Fail Mode)	2	0	60	-	V	P	S	-	BK
2 = 2000 (ON)									
OFF/ON Ratio									
0 = 1.5:1									
1 = 0.6:1									
Voltage									
48 = 480									
60 = 120									
72 = 208/240/277									
90 = 120/208/240/277									
MOV Surge Protection									
N = 180J, 320V, 3000A, 17mm									
V = 360J, 320V, 10000A, 20mm									
Cap Color									
(Leave blank if ANSI Standard)									
BL = Blue									
BK = Black									
BR = Brown (Bronze)									
GN = Green									
GR = Gray									
MR = Maroon									
YL = Yellow									
Turn-On Level									
1 = 1.0 Fc									
S = 1.5 Fc (ANSI Std)									
2 = 2.0 Fc									
3 = 2.6 Fc									
Light Sensor									
P = Phototransistor									

ANSI Standard Colors

120V	Gray or Clear
208 / 240 / 277V	Maroon
120 / 208 / 240 / 277V	Blue
480V	Yellow

Electronic Photocontrols



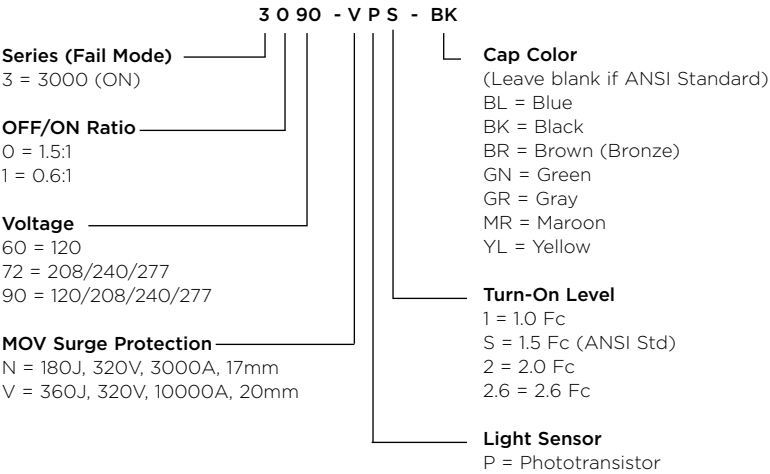
Electronic/Heavy Duty/N.O. Contact
3000 Series

- Heavy Duty Utility Grade Electronic
- 30 Amp Relay
- 180 or 360 Joule MOV Surge Protection
- 2-4 Second "ON" and "OFF" Time Delay
- Non-Drifting Phototransistor
- Rain-tight / Dust-tight Housing
- ANSI C136.10 Compliant
- Fail Mode Is OFF
- 3100 Series Has Inverse OFF/ON Ratio

Selection information

Model	Rated Volts	Range (Volts)	Load Rating Tungsten (Watts)	Load Rating Ballast (VA)	Surge Protection (Joules)	Fail Mode	Turn ON (Fc)	OFF/ON Ratio
3090-NPS	120 / 208 / 240 / 277	105 - 305	1000	1800	180	Off	1.5 +/- 0.5	1.5:1

Note: Custom models can be configured based on chart below.



ANSI Standard Colors

120V	Gray or Clear
208 / 240 / 277V	Maroon
120 / 208 / 240 / 277V	Blue
480V	Yellow

Electronic Photocontrols



Electronic/Heavy Duty/Premium Grade 6000 Series

- 30 Amp Relay
- Long life, High Reliability
- Non-drifting phototransistor
- Instant "ON" / 2-5 Second "OFF" Time Delay
- Rain-tight / Dust-tight housing
- ANSI C136.10 compliant
- Fail Mode Is ON
- 6100 Series Has Inverse OFF/ON Ratio



Selection information

Model	Rated Volts	Range (Volts)	Load Rating Tungsten (Watts)	Load Rating Ballast (VA)	Surge Protection (Joules)	Turn ON (FC)	OFF/ON Ratio	Color
6060-NPS-UL	120	105 -130	2000	1800	180	1.5	1.5:1	Gray
6072-VPS-UL	208/240/277	185 - 305	2000	1800	360	1.5	1.5:1	Maroon
6090-VPS-UL	120/208/240/277	105 - 305	2000	1800	360	1.5	1.5:1	Blue

Note: UL indicates a UL listed product

Note: Custom models can be configured based on chart below.

6 0 90 - V P S - BK	
Series (Fail Mode) 6 = 6000 (ON)	Cap Color (Leave blank if ANSI Std) BL = Blue BK = Black BR = Brown (Bronze) GN = Green GR = Gray MR = Maroon YL = Yellow
OFF/ON Ratio 0 = 1.5:1 1 = 0.6:1	Turn-On Level 1 = 1.0 Fc S = 1.5 Fc (ANSI Std) 2 = 2.0 Fc 3 = 2.6 Fc
Voltage 60 = 120 72 = 208/240/277 90 = 120/208/240/277	Light Sensor P = Phototransistor F = Filtered Phototransistor
MOV Surge Protection N = 180J, 320V, 3000A, 17mm V = 360J, 320V, 10000A, 20mm	

ANSI Standard Colors

120V	Gray or Clear
208 / 240 / 277V	Maroon
120 / 208 / 240 / 277V	Blue
480V	Yellow

Electronic Photocontrols



Electronic/Heavy Duty with Time Delay SST Series

- Energy Saving Inverse OFF/ON Ratio
- 30 Amp Relay / Microprocessor Controlled
- 180 Joule MOV Surge Protection
- Non-Drifting Phototransistor
- 30-45 Second "OFF" and "ON" Time Delay
- Rain-tight / Dust-tight Housing
- ANSI C136.10 Compliant
- Fail Mode Is ON



Selection information

Model	Rated Volts	Range (Volts)	Load Rating Tungsten (Watts)	Load Rating Ballast (VA)	Surge Protection (Joules)	Turn ON (Fc)	OFF/ON Ratio	Fail Mode
SST-120-UL	120	105 - 130	1000	1800	180	1.5 +/- 0.5	0.6 : 1	ON
SST-240-UL	240	185 - 305	1000	1800	180	1.5 +/- 0.5	0.6 : 1	ON
SST-PV-UL	120 / 208 / 240 / 277	105 - 305	1000	1800	180	1.5 +/- 0.5	0.6 : 1	ON
SST-PV-IES-UL	120 / 208 / 240 / 277	105 - 305	1000	1800	180	3.0 +/- 0.5	0.6 : 1	ON
SST-FAA-UL	120 / 208 / 240 / 277	105 - 305	1000	1800	180	35 +/- 0.5	1.5:1	ON

Note: UL indicates a UL listed product

Note: Custom models can be configured based on chart above

SST - PV - IES - BK	
Series (Fail Mode)	Cap Color
SST = SST (ON)	(Leave blank if ANSI Std)
	BL = Blue
	BK = Black
	BR = Brown (Bronze)
	GN = Green
	GR = Gray
	MR = Maroon
	YL = Yellow
Voltage	Turn-On Level
120 = 120	(Leave blank if ANSI Std)
240 = 240	IES = 3.0
PV = 120/208/240/277	

ANSI Standard Colors

120V	Gray or Clear
208 / 240 / 277V	Maroon
120 / 208 / 240 / 277V	Blue
480V	Yellow

Time Controls



24 Hour Time Clocks

- Tamper Proof Enclosure
- Skip-A-Day Option
- All-Steel Mechanism
- 1-7 ON/OFF Operations per Day
- Manual Override
- UL and CSA Listed



Selection information

Model	Use	Volts (60 Hz)	Switch Rating Per Pole					Type (NEMA)	Enclosure		
			Switch	Amps	Amps T	VA	HP		Height (inches)	Width (inches)	Depth (inches)
TC-101	Indoor	120	SPST	40	40	690	1	1	7-27/32	4-9/64	2-15/16
TC-103	Indoor	120	DPST	40	40	690	1	1	7-27/32	4-9/64	2-15/16
TC-104	Indoor	208-277	DPST	40	40	690	1	1	7-27/32	5-9/64	2-15/16
TC-101R	Outdoor	120	SPST	40	40	690	1	3	9-5/8	5-3/8	3-11/16
TC-103R	Outdoor	120	DPST	40	40	690	1	3	9-5/8	5-3/8	3-11/16
TC-104R	Outdoor	208-277	DPST	40	40	690	1	3	9-5/8	5-3/8	3-11/16
PC-101R	Outdoor	120	SPST	40	40	690	1	3R	8-1/2	5-5/8	3-7/8
PC-103R	Outdoor	120	DPST	40	40	690	1	3R	8-1/2	5-5/8	3-7/8
PC-104R	Outdoor	208-277	DPST	40	40	690	1	3R	8-1/2	5-5/8	3-7/8

Note Trippers Replacement Part X-2772



Spring Wound Interval Timers

- Easy to Install 2-Wire Design
- 20 Amp Rating at 120 VAC
- UL and CSA Listed
- SPST



Selection information

Model	Cycle		Wall Plate	NEMA Wall Box		Amps	Volts (AC)
	Time	Style / Color		(Depth - inches)			
FC-15M	15 min.	Brushed Aluminum	Included	3		10	250
FC-30M	30 min.	Brushed Aluminum	Included	3		10	277
FC-60M	60 min.	Brushed Aluminum	Included	3		7	125*

* Tungsten

Photocontrol Accessories



Shorting and Open Caps

- Shorting and Non-Shorting Models
- Optional Surge Protection



Selection information

Model	Circuit Type	Cap Color	Load Rating Tungsten (Watts)	Load Rating Ballast (VA)	Surge Protection (Joules)
SC-10A*	Shorting	Clear	1000	1800	-
MC-10	Shorting	Black	1000	1800	360
NS-10	Open	Maroon	1000	1800	-

* UL Listed



Receptacles

AM Series

- Phosphor Bronze Contacts
- Thermal-set Phenolic Base
- UL Recognized Component



Selection information

Model	Rates (Volts)	Load Rating Ballast (VA)	Load Rating Ballast (Amps)	Flange Diameter	Receptacle Barrel Diameter	(inches) Overall Height	Lead Length	Bracket (inches)		
AM-1-A	120 - 480	1800	15.0	2-9/16	1-3/8	1-1/2	9	2.0	2-1/2	5-1/2
AM-1-A-NB	120 - 480	1800	15.0	2-9/16	1-3/8	1-1/2	9	-	-	-
AM-2-A	120 - 480	1800	15.0	2-9/16	-	3-1/3	6	1-1/2	3-1/2	5-1/2
AM-2-A-NB	120 - 480	1800	15.0	2-9/16	-	3-1/4	6	-	-	-



Multiple Relays

AMR Series

- Perfect for Group Control Applications
- 30 Amp Relay
- 3000 Watt Rating per Pole
- SPDT or DPST Switching

Selection information

Model	Rates (Volts)	Range (Volts)	Load Rating Tungsten (Watts)/Pole	Load Rating Ballast (VA)/Pole	Rating (Amps)	Switch	Switch Contacts
AMR3030.2	120	105 - 130	3000	3600	30	SPDT	1 NO/1 NC
AMR3030.3	120	105 - 130	3000	3600	30	DPST	2 NO

Photocontrol sold separately

Lighting Accessories



US-30 Starter

- Universal 3-Wire Design
- Hermetically Sealed Components
- Durable ABS Housing
- Operates With 35 to 400 Watt HPS Ballasts

Selection information

Model	Lead Connector	Lamp Voltage	Lamp Wattage
US-30	None	50 or 100	35 - 400



Luminaire Test Equipment Lumatester

- Reduces Troubleshooting Time
- Simple 2-Step Test Process
- Universal Multi-Volt
- Easy View LED Indicators
- Complete Kit with Case
- Results In Less Than 10 Seconds

T50-400 Tester

Luminaire Voltage Range:	120 - 480 VAC
Lamp Wattage:	50 - 400 watts
Dimensions:	8-3/4" long x 1-1/2" diameter
Base Style:	Mogul base
Housing:	Clear Lexan material with nickel-plated brass

SPV Test Cap

Connection:	ANSI 3-pole locking-type
Voltage:	105 - 300 VAC
Cap:	Clear Lexan material with recessed voltage test points and resettable breaker



Incandescent Lighting Control Screw-in / Plug-in

- Fast and simple to install
- For incandescent loads only
- Designed For Outdoor and Indoor Use
- Fail Mode is ON
- UL Listed



Selection information

Model	Rated Volts	Range (Volts)	Load Rating Tungsten (Watts)	CdS Cell (inch)
PL-120S	120	105 - 130	150	1/8
CPGI-ALR-PL-120S	120	105 - 130	150	1/8
OLC-5C	120	105 - 130	150	1/4
CPGI-ALR-OLC-5C	120	105 - 130	150	1/4

Note: PL-120S and OLC-5C are not compatible with compact fluorescent lamps.

ACCESSORIES & TOOLS



Accessories

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Accessories



Cable Preparation Kit P63

- P63 cable preparation kits can be used with all Tyco Electronics cable accessories
- Use P63 kits to clean and abrade cable insulation

Selection information

Catalog Number	Std. Pack (kits/box)
P63	12

Ordering information

1. One kit contains six solvent wipes, six dry wipes and three strips of abrasive paper.
2. For splices, the number of prep kits vary depending upon size of cable and type of splice. For terminations, one prep kit will clean three phases (one 3/C termination or three 1/C terminations).
3. Solvent wipes contain PT Technologies type PF cleaner.

Heat Guns

- Ideal for shrinking small low-voltage products and identification marking sleeves
- Not recommended for shrinking high-voltage products or thick-wall low-voltage products



FH-PS-2001

Primus-Sievert model with increased air flow allows faster shrinking. 120V, 1750 watt, 80°F - 1100°F, Variable air flow: 21 cfm max., double insulated LED read out. This heat gun can be used for shrinking thick-wall low-voltage products.

HG-501A 115 V (462047)

500°F - 750°F hot-air gun ideal for shrinking ShrinkMark or TMS marking products, and thin-wall tubing. Includes stand. Reflector must be ordered separately.

HG-751A-C 120 V (926935)

750°F - 1000°F hot-air gun for shrinking low-voltage and marking products. Includes stand. Reflector must be ordered separately.

Heat Gun Accessories

Catalog Number	Description
TG-12 Reflector	Use on tubing up to 3/4 inch in diameter.
TG-13 Reflector	Use on tubing up to 2 inches in diameter.
TG-23 Reflector	Use on tubing and cable breakouts up to 1 3/4 inches in diameter.
TG-24 Reflector	Use on tubing and cable breakouts up to 3 1/4 inches in diameter.

Ordering information

Standard package: 1 each/box.



- Portable and convenient with a powerful temperature rating
- Hand-held refillable heat gun with standard butane
- Automatic Piezo Electronics Ignition System
- Installs thin wall, dual wall and adhesive lined heat-shrink tubing and sleeves

Catalog Number	Description	Std. Pack
CPGI-GLOW-GUN	Flameless Heat Gun	6



- Lightweight, portable, and ergonomic design
- Provides a wide-flame torch output for instant controlled heating
- Automatic Piezo Electronics Ignition System
- Attaches directly to 1 lb or 2 lb disposable propane bottles
- Installs thin wall, dual wall and adhesive lined heat-shrink tubing and sleeves

Catalog Number	Description	Std. Pack
CPGI-GLOW-TORCH	Wide-Flame Torch	10



Accessories

Torches

These clean-burning, efficient, heat-shrinking torches are recommended for shrinking high-voltage products through low-voltage products

Selection information

Primus-Sievert Siever-Matic Torch Materials



FH-3366-97-PS-HANDLE

- Siever-Matic S auto ignite, auto shut-off torch handle
- Ergonomic design ensures comfortable operation
- Adjustable output
- Piezo ignition



FH-AD-3061-13-PS-REGULATOR

- Works with torch handle FH-3366-97-PS-HANDLE above
- Adjustable from 14-57psi
- Fitting POL, UNF 9/16" LH
- Requires torch hose AD-1432 or AD-1434



FH-AD-3347-91-PS-BURN-1

- Works with torch handle FH-3366-97-PS-HANDLE above
- Recommended especially for low voltage and general purpose products
- Tip diameter 1.0 inch 20,000BTU/hour



FH-AD-3341-91-PS-BURN1.5

- Works with torch handle FH-3366-97-PS-HANDLE above
- Recommended especially for low voltage products and high voltage terminations and splices
- Tip diameter 1.5 inch 40,000BTU/hour



FH-AD-3348-91-PS-BURN-2

- Works with torch handle FH-3366-97-PS-HANDLE above
- Recommended especially for Raysulate products
- Tip diameter 2.0 inch 90,000BTU/hour

Bullfinch Torch Materials



FH-2629-TORCH ASSY

- Built-in ignitor recommended for all products
- General purpose, heavy-duty propane torch with comfortable grip
- Provides a clean burning flame for shrinking high-voltage products or thick-wall low-voltage products.
- Output: Approximately 30,000 BTU/Hour

FH-2629-ELECTRODE

- Replacement ignitor for FH-2629 torch

Accessories

Torch Accessories**AD-1358-LPG-REGW/GAGE**

- Propane tank regulator with gauge (0-30 psi)
- Can also be used with Primus-Sievert or BullFinch products

**AD-1432-ACD10FT-LPG-HOSE**

10-foot LPG hose

AD-1434-ACD30FT-LPG-HOSE

30-foot LPG hose

AD-1460-ACD-HEAT-SHLDGPA

- 12 x 40 pad woven of heat-resistant fabric with corner grommets
- Protects adjacent components from torch heat during installation of heat-shrinkable products in confined areas

**AD-1563-ADAPTER**

- Valve to standard hose
- For use with FH-2618A-1 propane torch if disposable cylinders are not used

AD-3015-04

- Adapts Siever-Matic S FH-2649-PS-KIT or FH2629 for use with disposable 14.1 oz propane cylinders
- Includes 4-foot hose and regulator preset at 28 psi

Torch Kits**FH-2618A-1**

- Light, portable propane torch for installing low-voltage products and smaller, conductor-sized, high-voltage (up to 15 kV) accessories
- Includes hose, handle assembly, and regulator for disposable propane cylinder
- Operates from disposable 14.1 oz. propane cylinders
- Output: Approximately 20,000 BTU/hour
- Handle and torch head not available separately
- Regulator and hose assembly is product AD-3015-04

FH-2629-Kit

- Includes (AD-1432) 10 foot hose, (AD-1358) adjustable regulator, and (FH-2629-TORCH-ASSY) torch handle and tip

FH-2640-PS-KIT

- Primus-Sievert torch kit for use with disposable propane bottles
- Includes (FH-3366-97-PS-HANDLE, FH-AD-3341-91-PS-BURN1.5, & AD-3015-04)

**FH-2649-PS-KIT**

- Seiver-Matic S auto ignite, auto shut-off torch system
- Recommended especially for Raysulate products and can be used with all products
- Includes ergonomic handle, 30 foot hose, adjustable regulator, and large burner (3348-91); all in a canvas carrying bag
- Output: Approximately 90,000 BTU/hour
- Smaller burner and adapter for disposable bottles available. - includes FH-3366-97-PS-HANDLE, FH-AD-3348-91-PS-BURN-2, FH-AD-3061-13-PS-REGULAT, AD-1434-ACD30FT-LPG-HOSE, and a carrying bag

Tools

Testing Tools



Tone Tracer

1490533-1

- Permits wire and cable identification without direct metallic contact
- Ergonomic design
- Can be used with any tone generator
- Quick change tips available
- Also available in a Tone Generator/Tracer Kit, 1673606-1



4-Pair Tester

1490530-1

- Test for opens, shorts, mis-wires, reversals, and split pairs
- Auto-on/auto-off
- Battery low indicator



Tone Generator

1490531-1

- Three built-in tones
- Auto-off
- Separate talk battery for increased voltage and power for test sets
- Modular jack allows multiple cord sets to be used for different applications
- Also available in a Tone Generator/Tracer Kit, 1673606-1



Butt Set

1490532-1

- LCD display shows: on-hook voltage, number dialed, off-hook current, called ID, stored numbers, etc.
- Tone and pulse dialing
- Modular cord set attachment
- Auto-off

Impact Tools



Impact Tool

- Non-slip rubber grips on handle
- Blade storage in rear of tool
- Tool Only: 1583608-2
- Tool with 110 blade: 158608-1
- Replacement 110 Blade: 1583609-1



Premium Impact Tool

1583694-2

- Light system, pick, hook and spudger
- Non-slip rubber grips on handle
- Blade storage in rear of tool
- Adjustable Hi/Lo impact setting
- Accepts all Twist and Lock blades
- Tool with 110 Blade: 1583694-1



Non-Impact Tool

1583236-2

- Rubber palm grip
- Blade storage area in side of tool
- Accepts all Twist and Lock blades
- Replacement 110 Blade: 1583609-1
- Tool with 110 Blade: 1583694-1

Tools

Wire Strippers**Coax Stripper**

- 3 blades designed to strip RG-6, 58, 59 cable in one step
- Replaceable blade cartridges

1490490-1**Cyclops Cable Stripper**

- Outer sheath stripper
- Automatically adjusts to different cable thicknesses
- Works on cable diameters up to 11mm

1375317-1**Automatic Wire Stripper**

- Strips PVC, THHN, and THHW
- Adjustable wire stop
- Built-in cutter

734185-1**Wire Cutters****350 MCM Cutter**

- Steel handles
- Not for steel or ACSR cable

605744-1**500 MCM Cutter**

- 21" overall length
- Fiberglass handles
- Not for steel or ACSR cable

605742-1

Tools

All-Purpose Tools



Cable Tie Gun

- For cable ties 3.3 - 4.8mm
- Thickness up to 1.6mm
- Automatic cut-off
- Adjustable tension setting

734587-1



Raceway Cutting Tool

- Cuts surface mount raceway to length
- Cuts PVC tubing up to 1.25" in diameter

1375479-1



SUPER CHAMP

- Economy Crimper
- Great for bolt cutting, wire stripping
- Convenient for tool boxes and repair kits

696201-1



Tel-Splice Pliers

- Works with all Tel-Splice part numbers
- Rounded nose won't snag on wires
- Wire cutter built into side
- Yellow handles
- Spring loaded handles

790162-1



Ratcheted Crimp Tool

- Tool with die: RBY Terminals
Coax Terminals
- Interchangeable with Ideal dies
- Ratchet release lever
- Easy clean plastic handles

1490496-2
1490496-3

1060-NPS	101	1443403-5	9	AMPS-O-0034158-0	3	AT-368	97
1099898-1	8	1443403-6	9	AMPS-O-0034160-0	3	AT-39	97
1099898-2	8	1443403-7	9	AMPS-O-0034161-0	3	B	
1099898-3	8	1443403-8	9	AMPS-O-0034162-0	3	BF-120	99
1099898-4	8	1443403-9	9	AMPS-O-0034166-0	4	BF-208-277	99
1099898-5	8	1490490-1	115	AMPS-O-0034167-0	4	BF-PV	99
1099898-6	8	1490496-2	116	AMPS-O-0034168-0	3	C	
1099898-7	8	1490496-3	116	AMPS-O-0034176-0	4	CBR-2-1-A	88
1099898-8	8	1490530-1	114	AMPS-O-0034541-0	4	CBR-2-2-A	88
1099898-9	8	1490531-1	114	AMPS-O-0034853-0	3	CBR-2-3-A	88
1099899-1	8	1490532-1	114	AMPS-O-0034854-0	3	CBR-3-1-A	88
1099899-2	8	1490533-1	114	AMPS-O-0034855-0	3	CBR-3-2-A	88
1099899-3	8	1583236-2	114	AMPS-O-0035108-0	3	CBR-3-3-A	88
1099899-4	8	1583608-2	114	AMPS-O-0035109-0	3	CBR-3-4-A	88
1099899-5	8	1583609-1	114	AMPS-O-0035110-0	3	CBR-4-1-A	88
1099899-6	8	1583694-1	114	AMPS-O-0035149-0	3	CBR-4-2-A	88
1099899-7	8	1583694-2	114	AMPS-O-0036152-0	3	CBR-4-3-A	88
1099899-8	8	158608-1	114	AMPS-O-0036154-0	3	CBR-4-4-A	88
1099899-9	8	2060-NPS	102	AMPS-O-0052041-3	3	CBR-6-1-A	88
1099939-1	8	2060-VPS	102	AMPS-O-0052042-3	3	CBR-6-2-A	88
1099939-2	8	2072-NPS	102	AMPS-O-0052043-2	3	CFTS-1	88
1099939-3	8	2072-VPS	102	AMPS-O-0052043-3	3	CFTS-2	88
1099939-4	8	2090-NPS	102	AMPS-O-0052263-1	3	CFTS-3	88
1099939-5	8	3090-NPS	103	AMPS-O-0052265-0	3	CFTS-4	88
1099939-6	8	314974-1	6	AMPS-O-0052929-0	5	CFTS-5	88
1099939-7	8	55823-1	6	AMPS-O-0052930-0	5	CPGI-061-0114A	48
1099939-8	8	605742-1	115	AMPS-O-0052931-0	5	CPGI-061-0114V	48
1099939-9	8	605744-1	115	AMPS-O-0052935-0	5	CPGI-063-0020	48
1-1099898-0	8	6060-NPS-UL	104	AMPS-O-0052937-0	5	CPGI-1116377-2	11
1-1099898-1	8	6072-VPS-UL	104	AMPS-O-0052941-0	5	CPGI-1116377-2-BULK	11
1-1099898-2	8	608028-1	6	AMPS-O-0052942-0	5	CPGI-1116415-2	11
1-1099898-3	8	6090-VPS-UL	104	AMPS-O-0052943-0	5	CPGI-1116415-2-BULK	11
1-1099898-4	8	696201-1	116	AMPS-O-0052945-0	5	CPGI-1116542-1	53
1-1099898-5	8	734185-1	115	AMPS-O-0052949-0	5	CPGI-1116542-1-K	53
1-1099899-0	8	734587-1	116	AMPS-O-0052950-0	5	CPGI-1176294-2	21
1-1099899-1	8	790162-1	116	AMPS-O-0052955-0	5	CPGI-1176297-2	22
1-1099899-2	8			AMPS-O-0052956-0	5	CPGI-1176311-2	24
1-1099899-3	8	A		AMPS-O-0052957-0	5	CPGI-1176319-2	23
1-1099899-4	8	AA-105	98	AMPS-O-0052963-0	5	CPGI-1217204-1	53
1-1099899-5	8	AA-105HA	98	AMPS-O-0053242-1	5	CPGI-1217204-1-K	53
1-1099899-6	8	AA-105M	98	AMPS-O-0053247-1	5	CPGI-1546310-4	20
1-1099899-7	8	AA-105W	98	AMPS-O-0066023-2	4	CPGI-1546310-6	20
1-1099899-8	8	AA-1068	98	AMPS-O-0066025-2	4	CPGI-1546310-8	20
1-1099899-9	8	AA-1068M	98	AMPS-O-0320559-0	5	CPGI-1-552678-2	53
1-1099939-0	8	AA-1068W	98	AMPS-O-0320570-0	5	CPGI-1-553017-2	53
1-1099939-1	8	AA-305	98	AMPS-O-0320562-0	3	CPGI-208169-2	11
1-1099939-2	8	AA-LS	98	AMPS-O-0320565-0	3	CPGI-208169-2-BULK	11
1-1099939-3	8	AD-1358-LPG-REGW/GAGE	113	AMPS-O-0320619-0	3	CPGI-53440-7	10
1-1099939-4	8	AD-1432-ACD10FT-LPG-HOSE	113	AMPS-O-0320665-0	4	CPGI-53440-7-Bulk	10
1-1099939-5	8	AD-1434-ACD30FT-LPG-HOSE	113	AMPS-O-0321045-0	3	CPGI-53440-9	10
1-1443402-0	9	AD-1460-ACD-HEAT-SHLDGPA	113	AMPS-O-0321233-0	4	CPGI-53440-9-Bulk	10
1-1443402-1	9	AD-1563-ADAPTER	113	AMPS-O-0322985-0	4	CPGI-552795-2	53
1-1443402-2	9	AD-3015-04	113	AMPS-O-0322994-0	4	CPGI-5-554374-7	53
1-1443402-3	9	ALK-L823	73	AMPS-O-0500000-1	47	CPGI-569224-1	54
1-1443402-4	9	AM-1-A	107	AMPS-O-0500001-1	47	CPGI-569224-1-K	54
1-1443402-5	9	AM-1-A-NB	107	AMPS-O-0640907-1	4	CPGI-569661-1	54
1-1443402-6	9	AM-2-A	107	AMPS-109717-1	14	CPGI-569661-1-K	54
1-1443402-7	9	AM-2-A-NB	107	AMPS-83592-1	14	CPGI-66023-2	4
1-1443403-0	9	AM6310 Printer	66	AMPS-83592-2	14	CPGI-66024-6	4
1-1443403-1	9	AMP-O-0035559-0	4	AMPS-83592-3	14	CPGI-66025-2	4
1-1443403-2	9	AMP-O-0036160-0	3	AMPS-83592-4	14	CPGI-735411	10
1-1443403-3	9	AMP-O-0052936-0	5	AMPS-83592-6	14	CPGI-735411-Bulk	10
1-1443403-4	9	AMP-O-0055785-1	5	AMPS-83592-8	14	CPGI-7-52935-1	5
1-1443403-5	9	AMP-O-0055792-1	5	AMPS-83630-1	14	CPGI-7-52937-1	5
1-1443403-6	9	AMP-O-0055793-1	5	AMPS-83630-3	14	CPGI-7-52956-1	5
1-1443403-7	9	AMP-O-0066024-2	4	AMPS-83631-2	14	CPGI-8-31886-1	3
1375317-1	115	AMP-O-0640903-1	4	AMPS-83631-3	14	CPGI-8-31894-1	3
1375479-1	116	AMP-O-0640905-1	4	AMPS-83631-8	14	CPGI-8-32053-1	4
1443402-1	9	AMPS-O-0031886-0	3	AMPS-83631-9	14	CPGI-8-32054-1	4
1443402-2	9	AMPS-O-0031894-0	3	AMPS-83747-1	15	CPGI-8-320559-2	5
1443402-3	9	AMPS-O-0032053-0	4	AMPS-83747-3	15	CPGI-8-320562-5	5
1443402-4	9	AMPS-O-0032054-0	4	AMPS-83749-2	15	CPGI-8-320565-1	3
1443402-5	9	AMPS-O-0032060-0	4	AMR3030.2	107	CPGI-8-320570-2	5
1443402-6	9	AMPS-O-0032588-0	4	AMR3030.3	107	CPGI-8-32060-1	4
1443402-7	9	AMPS-O-0032589-0	3	AT-15	97	CPGI-8-320619-1	3
1443402-8	9	AMPS-O-0034142-0	3	AT-168	97	CPGI-8-320665-1	4
1443402-9	9	AMPS-O-0034145-0	3	AT-19	97	CPGI-8-321045-1	3
1443403-1	9	AMPS-O-0034146-0	3	AT-20	97	CPGI-8-321233-1	4
1443403-2	9	AMPS-O-0034150-0	4	AT-30	97	CPGI-8-322985-2	4
1443403-3	9	AMPS-O-0034155-0	4				
1443403-4	9	AMPS-O-0034156-0	4				

CPGI-8-322994-1	4	CPGI-BUCH-1-1546311-0	20	CPGI-BUCH-1776297-8	22	CPGI-CTY-07-50-BLK-M	41
CPGI-8-32588-2	4	CPGI-BUCH-1-1546311-1	20	CPGI-BUCH-1776297-9	22	CPGI-CTY-07-50-HS-BLK-C	41
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CPGI-8-34145-1	3	CPGI-BUCH-1-1546311-4	20	CPGI-BUCH-1776310-3	24	CPGI-CTY-07-50-LP-NAT-C	42
CPGI-8-34146-1	3	CPGI-BUCH-1-1546311-5	20	CPGI-BUCH-1776310-4	24	CPGI-CTY-07-50-MH-BLK-C	42
CPGI-8-34150-1	3	CPGI-BUCH-1-1546311-6	20	CPGI-BUCH-1776310-5	24	CPGI-CTY-07-50-MH-NAT-C	42
CPGI-8-34155-1	4	CPGI-BUCH-1-1546311-7	20	CPGI-BUCH-1776310-6	24	CPGI-CTY-07-50-NAT-C	41
CPGI-8-34156-1	4	CPGI-BUCH-1-1546311-8	20	CPGI-BUCH-1776310-7	24	CPGI-CTY-07-50-NAT-M	41
CPGI-8-34158-1	3	CPGI-BUCH-1-1776294-0	21	CPGI-BUCH-1776310-8	24	CPGI-CTY-07-50-PM-BLK-C	43
CPGI-8-34160-1	3	CPGI-BUCH-1-1776294-1	21	CPGI-BUCH-1776310-9	24	CPGI-CTY-07-50-PM-NAT-C	43
CPGI-8-34161-1	3	CPGI-BUCH-1-1776294-2	21	CPGI-BUCH-1776311-1	24	CPGI-CTY-07-50-PMW-BLK-C	43
CPGI-8-34162-1	3	CPGI-BUCH-1-1776297-0	22	CPGI-BUCH-1776311-2	24	CPGI-CTY-07-50-PMW-NAT-C	43
CPGI-8-34166-1	4	CPGI-BUCH-1-1776297-1	22	CPGI-BUCH-1776311-3	24	CPGI-CTY-08-18-BLK-C	40
CPGI-8-34167-1	4	CPGI-BUCH-1-1776297-2	22	CPGI-BUCH-1776311-4	24	CPGI-CTY-08-18-BLK-M	40
CPGI-8-34168-2	3	CPGI-BUCH-1-1776310-0	24	CPGI-BUCH-1776311-5	24	CPGI-CTY-08-18-NAT-C	40
CPGI-8-34169-2	3	CPGI-BUCH-1-1776310-1	24	CPGI-BUCH-1776311-6	24	CPGI-CTY-08-18-NAT-M	40
CPGI-8-34170-1	3	CPGI-BUCH-1-1776310-2	24	CPGI-BUCH-1776311-7	24	CPGI-CTY-08-40-BLK-C	41
CPGI-8-34171-2	3	CPGI-BUCH-1-1776311-0	24	CPGI-BUCH-1776311-8	24	CPGI-CTY-08-40-BLK-M	41
CPGI-8-34176-1	4	CPGI-BUCH-1-1776311-1	24	CPGI-BUCH-1776311-9	24	CPGI-CTY-08-40-NAT-C	41
CPGI-8-34541-1	4	CPGI-BUCH-1-1776311-2	24	CPGI-BUCH-1776319-2	24	CPGI-CTY-08-40-NAT-M	41
CPGI-8-35108-1	3	CPGI-BUCH-1-1776319-0	23	CPGI-BUCH-1776319-3	23	CPGI-CTY-08-50-HL-C	43
CPGI-8-35109-1	3	CPGI-BUCH-1-1776319-1	23	CPGI-BUCH-1776319-4	23	CPGI-CTY-08-50-RL-BLK-C	43
CPGI-8-35110-1	3	CPGI-BUCH-1-1776319-2	23	CPGI-BUCH-1776319-5	23	CPGI-CTY-08-50-RL-NAT-C	43
CPGI-8-35149-2	3	CPGI-BUCH-1437381-1	35	CPGI-BUCH-1776319-6	23	CPGI-CTY-11-40-BLK-C	41
CPGI-8-35559-1	4	CPGI-BUCH-1437381-4	35	CPGI-BUCH-1776319-7	23	CPGI-CTY-11-40-NAT-C	41
CPGI-8-36152-1	3	CPGI-BUCH-1437381-5	25	CPGI-BUCH-1776319-8	23	CPGI-CTY-11-50-BLK-C	41
CPGI-8-36154-1	3	CPGI-BUCH-1437381-8	35	CPGI-BUCH-1776319-9	23	CPGI-CTY-11-50-BLK-D	41
CPGI-8-36160-1	3	CPGI-BUCH-1437382-2	35	CPGI-BUCH-2-1437381-3	35	CPGI-CTY-11-50-HS-BLK-C	41
CPGI-8-52929-1	5	CPGI-BUCH-1437382-3	35	CPGI-BUCH-2-1437382-6	34	CPGI-CTY-11-50-MH-BLK-C	42
CPGI-8-52930-1	5	CPGI-BUCH-1437382-6	35	CPGI-BUCH-2-1437390-0	27	CPGI-CTY-11-50-MH-NAT-C	42
CPGI-8-52931-1	5	CPGI-BUCH-1437390-8	28	CPGI-BUCH-2-1437390-1	27	CPGI-CTY-11-50-NAT-C	41
CPGI-8-52936-1	5	CPGI-BUCH-1437390-9	28	CPGI-BUCH-2-1437390-5	27	CPGI-CTY-11-50-NAT-D	41
CPGI-8-52941-2	5	CPGI-BUCH-1437395-3	29	CPGI-BUCH-2-1437392-1	25	CPGI-CTY-12-50-RL-BLK-C	43
CPGI-8-52942-1	5	CPGI-BUCH-1437396-7	31	CPGI-BUCH-2-1437392-3	25	CPGI-CTY-12-50-RL-NAT-C	43
CPGI-8-52943-1	5	CPGI-BUCH-1437396-8	31	CPGI-BUCH-2-1437392-5	25	CPGI-CTY-14-40-BLK-C	41
CPGI-8-52945-2	5	CPGI-BUCH-1437396-9	31	CPGI-BUCH-2-1437393-4	35	CPGI-CTY-14-40-NAT-C	41
CPGI-8-52949-1	5	CPGI-BUCH-1437397-1	33	CPGI-BUCH-2-1437397-0	33	CPGI-CTY-14-50-BLK-C	41
CPGI-8-52950-1	5	CPGI-BUCH-1437397-2	33	CPGI-BUCH-2-1437397-8	33	CPGI-CTY-14-50-BLK-D	41
CPGI-8-52955-1	5	CPGI-BUCH-1437397-3	33	CPGI-BUCH-2-1437397-9	33	CPGI-CTY-14-50-HS-BLK-C	41
CPGI-8-52957-1	5	CPGI-BUCH-1437397-9	33	CPGI-BUCH-3-1437381-9	35	CPGI-CTY-14-50-ID-NAT-C	44
CPGI-8-52963-2	5	CPGI-BUCH-1437397-5	33	CPGI-BUCH-3-1437388-2-0	34	CPGI-CTY-14-50-MH-BLK-C	42
CPGI-8-53242-5	5	CPGI-BUCH-1546143-1	26	CPGI-BUCH-3-1437390-1	28	CPGI-CTY-14-50-MH-NAT-C	42
CPGI-8-53247-1	5	CPGI-BUCH-1546144-1	26	CPGI-BUCH-3-1437390-3	28	CPGI-CTY-14-50-NAT-C	41
CPGI-8-55785-1	5	CPGI-BUCH-1546147-1	26	CPGI-BUCH-3-1437390-6	28	CPGI-CTY-14-50-NAT-D	41
CPGI-8-55792-1	5	CPGI-BUCH-1546148-1	26	CPGI-BUCH-3-1437390-9	27	CPGI-CTY-15-120-BLK-L	41
CPGI-8-55793-2	5	CPGI-BUCH-1546163-1	26	CPGI-BUCH-3-1437397-0	33	CPGI-CTY-15-120-NAT-L	41
CPGI-8-640903-1	4	CPGI-BUCH-1546164-1	26	CPGI-BUCH-4-1437397-1	33	CPGI-CTY-16-120-LP-BLK-C	42
CPGI-8-640905-1	4	CPGI-BUCH-1546234-1	26	CPGI-BUCH-4-1437382-0	34	CPGI-CTY-16-120-LP-NAT-C	42
CPGI-8-640907-1	4	CPGI-BUCH-1546235-1	26	CPGI-BUCH-4-1437382-9	34	CPGI-CTY-16-120-MH-BLK-C	42
CPGI-ALR-2090-NPS	102	CPGI-BUCH-1546310-2	20	CPGI-BUCH-4-1437390-0	27	CPGI-CTY-16-120-MH-NAT-C	42
CPGI-ALR-AA-105	98	CPGI-BUCH-1546310-3	20	CPGI-BUCH-4-1437390-1	27	CPGI-CTY-17-50-BLK-C	41
CPGI-ALR-AA-105W	98	CPGI-BUCH-1546310-4	20	CPGI-BUCH-4-1437390-3	27	CPGI-CTY-17-50-NAT-C	41
CPGI-ALR-AA-305	98	CPGI-BUCH-1546310-5	20	CPGI-BUCH-4-1437393-0	35	CPGI-CTY-18-120-BLK-L	41
CPGI-ALR-LC-120	99	CPGI-BUCH-1546310-6	20	CPGI-BUCH-5-1437381-5	35	CPGI-CTY-18-120-NAT-L	41
CPGI-ALR-LC-208-277	99	CPGI-BUCH-1546310-7	20	CPGI-BUCH-5-1437382-9	34	CPGI-CTY-22-250-BLK-C	41
CPGI-ALR-OLC-5C	108	CPGI-BUCH-1546310-8	20	CPGI-BUCH-9-1437381-1	35	CPGI-CTY-22-250-NAT-C	41
CPGI-ALR-PL-120S	108	CPGI-BUCH-1546310-9	20	CPGI-BUCH-9-1437381-2	35	CPGI-CTY-24-120-BLK-L	41
CPGI-ALR-PT-15	97	CPGI-BUCH-1546311-2	20	CPGI-BUCH-9-1437381-5	35	CPGI-CTY-24-120-NAT-L	41
CPGI-ALR-SPT-15	97	CPGI-BUCH-1546311-3	20	CPGI-BUCH-9-1437381-7	35	CPGI-CTY-25-175-BLK-L	41
CPGI-ALR-TL-115	98	CPGI-BUCH-1546311-4	20	CPGI-BUCH-9-1437381-8	35	CPGI-CTY-25-175-NAT-L	41
CPGI-BUCH-1-1437381-0	35	CPGI-BUCH-1546311-5	20	CPGI-BUCH-9-1437381-9	35	CPGI-CTY-28-120-BLK-L	41
CPGI-BUCH-1-1437381-6	35	CPGI-BUCH-1546311-6	20	CPGI-CRPS-248	91	CPGI-CTY-28-120-NAT-L	41
CPGI-BUCH-1-1437381-7	28	CPGI-BUCH-1546311-7	20	CPGI-CRSM-CT-34/10-150	72	CPGI-CTY-37-175-BLK-L	41
CPGI-BUCH-1-1437382-2	35	CPGI-BUCH-1546311-8	20	CPGI-CTY-04-18-BLK-C	40	CPGI-CTY-37-175-NAT-L	41
CPGI-BUCH-1-1437382-3	35	CPGI-BUCH-1546311-9	20	CPGI-CTY-04-18-BLK-M	40	CPGI-CTY-48-175-BLK-L	41
CPGI-BUCH-1-1437390-2	28	CPGI-BUCH-1776294-1	21	CPGI-CTY-04-18-HL-C	43	CPGI-CTY-48-175-GRY-L	41
CPGI-BUCH-1-1437390-4	28	CPGI-BUCH-1776294-2	21	CPGI-CTY-04-18-ID-NAT-C	44	CPGI-CTY-48-175-NAT-L	41
CPGI-BUCH-1-1437390-6	27	CPGI-BUCH-1776294-3	21	CPGI-CTY-04-18-NAT-C	40	CPGI-CTY-BM-BLK-C	45
CPGI-BUCH-1-1437395-4	29	CPGI-BUCH-1776294-4	21	CPGI-CTY-04-18-NAT-M	40	CPGI-CTY-CCL-125-BLK-C	46
CPGI-BUCH-1-1437397-0	33	CPGI-BUCH-1776294-5	21	CPGI-CTY-05-30-MH-BLK-C	42	CPGI-CTY-CCL-125-NAT-C	46
CPGI-BUCH-1-1437397-2	33	CPGI-BUCH-1776294-6	21	CPGI-CTY-05-30-MH-NAT-C	42	CPGI-CTY-CCL2-1000-BLK-C	46
CPGI-BUCH-1-1546310-0	20	CPGI-BUCH-1776294-7	21	CPGI-CTY-05-40-BLK-C	41	CPGI-CTY-CCL2-1000-NAT-C	46
CPGI-BUCH-1-1546310-1	20	CPGI-BUCH-1776294-8	21	CPGI-CTY-05-40-BLK-M	41	CPGI-CTY-CCL2-375-BLK-C	46
CPGI-BUCH-1-1546310-2	20	CPGI-BUCH-1776294-9	21	CPGI-CTY-05-40-NAT-C	41	CPGI-CTY-CCL2-375-NAT-C	46
CPGI-BUCH-1-1546310-3	20	CPGI-BUCH-1776297-2	22	CPGI-CTY-05-40-NAT-M	41	CPGI-CTY-CCL2-500-BLK-C	46
CPGI-BUCH-1-1546310-4	20	CPGI-BUCH-1776297-3	22	CPGI-CTY-05-50-RL-BLK-C	43	CPGI-CTY-CCL2-500-NAT-C	46
CPGI-BUCH-1-1546310-5	20	CPGI-BUCH-1776297-4	22	CPGI-CTY-05-50-RL-NAT-C	43	CPGI-CTY-CCL-250-BLK-C	46
CPGI-BUCH-1-1546310-6	20	CPGI-BUCH-1776297-5	22	CPGI-CTY-06-18-BLK-C	40	CPGI-CTY-CCL-250-NAT-C	46
CPGI-BUCH-1-1546310-7	20	CPGI-BUCH-1776297-6	22	CPGI-CTY-06-18-NAT-C	40	CPGI-CTY-CCL2-750-BLK-C	46
CPGI-BUCH-1-1546310-8	20	CPGI-BUCH-1776297-7	22	CPGI-CTY-07-50-BLK-C	41	CPGI-CTY-CCL2-750-NAT-C	46

CPGI-CTY-IDP-1-NAT-C	46	CPGI-RNF-100-3/8-48-(color)	83	FH-2640-PS-KIT	113	IDP-MP-191064-10-8A	62
CPGI-CTY-IDP-2-NAT-C	46	CPGI-RNF-100-3/8-6-(color)	83	FH-2649-PS-KIT	113	IDP-MP-203127-10-8A	62
CPGI-CTY-LPM1-NAT-C	44	CPGI-RNF-100-3/8-6-ASRT	83	FH-3366-97-PS-HANDLE	112	IDP-MP-254127-10-8A	62
CPGI-CTY-MP-1000-BLK-C	44	CPGI-RNF-100-MP-A-BLK	83	FH-AD-3061-13-PS-REGULAT	112	IDP-MP-254254-10-8A	62
CPGI-CTY-MP-1000-NAT-C	44	CPGI-RNF-100-MP-B-BLK	83	FH-AD-3341-91-PS-BURN1.5	112	IDP-MP-381064-10-8A	62
CPGI-CTY-MP-750-BLK-C	44	CPGI-RVS-11	70	FH-AD-3347-91-PS-BURN-1	112	IDP-MP-381191-5-8A	62
CPGI-CTY-MP-750-NAT-C	44	CPGI-RVS-12	70	FH-AD-3348-91-PS-BURN-2	112	IDP-MP-508254-5-8A	62
CPGI-CTY-PMW-NAT-C	45	CPGI-RVS-13	70	FSTW-2-1-6	92	IDP-MP-508318-2.5-8A	62
CPGI-CTY-SM1-BLK-C	45	CPGI-VST-02/1	54	G		IDP-MP-699254-5-8A	62
CPGI-CTY-SM1-NAT-C	45	CPGI-WCSM-13/4-150-S	85	GelCap 1	75	IDP-MP-762381-2.5-8A	62
CPGI-CTY-SM2-BLK-C	45	CPGI-WCSM-20/6-150-S	85	GelCap 2	75	IDP-MP-762508-2.5-8A	62
CPGI-CTY-SM2-NAT-C	45	CPGI-WCSM-33/8-150-S	85	GelCap 3	75	IDP-MP-762508-2.5-8A	62
CPGI-CTY-WM-BLK-C	45	CPGI-WCSM-43/12-225-S	85	GelCap 4	75	IDP-MP-762508-2.5-8A	62
CPGI-ESC-1/A	87	CPGI-WCSM-51/16-225-S	85	GelCap-SL-2/0-3 Hole	79	IDP-MP-762508-2.5-8A	62
CPGI-ESC-2/A	87	CPGI-WCSM-9/3-150-S	85	GelWrap Pad 2x8	94	IDP-MP-762508-2.5-8A	62
CPGI-ETD1000-BG-25-ASST	39	CPGI-WOMB-B30	64	GelWrap-18/4-100	69	IDP-MP-762508-2.5-8A	62
CPGI-ETD-RC-1/2-BG-50	39	CPGI-WOMB-B50	64	GelWrap-18/4-150	69	IDP-MP-762508-2.5-8A	62
CPGI-ETD-RC-1/2-JR-275	39	CPGI-WOMB-B60	64	GelWrap-18/4-200	69	IDP-MP-762508-2.5-8A	62
CPGI-ETD-RC-3/4-BG-25	39	CPGI-WOMB-B75	64	GelWrap-18/4-250	69	IDP-MP-762508-2.5-8A	62
CPGI-ETD-RC-3/4-JR-165	39	CPGI-WOMB-13	64	GelWrap-18/4-300	69	IDP-MP-762508-2.5-8A	62
CPGI-ETD-RSS-BG-25	40	CPGI-WOMB-16	64	GelWrap-18/4-350	69	IDP-MP-762508-2.5-8A	62
CPGI-ETD-RSS-JR-200	40	CPGI-WOMB-51	64	GelWrap-33/10-150	69	IDP-MP-762508-2.5-8A	62
CPGI-ETD-SSS-BG-25	40	CPGI-WOMB-52	64	GelWrap-33/10-200	69	IDP-MP-762508-2.5-8A	62
CPGI-ETD-SSS-JR-125	40	CRPS-2120	91	GelWrap-33/10-250	69	IDP-MP-762508-2.5-8A	62
CPGI-FSTW-2-1-4	92	CRPS-248	91	GelWrap-33/10-300	69	IDP-MP-762508-2.5-8A	62
CPGI-GelCap-1	75	CRPS-260	91	GelWrap-33/10-350	69	IDP-MP-762508-2.5-8A	62
CPGI-GelCap-2	75	CRPS-290	91	GelWrap-50/20-200	69	IDP-MP-762508-2.5-8A	62
CPGI-GelCap-2-SGL	75	CRSM 107/29-1000	71	GelWrap-50/20-250	69	IDP-MP-762508-2.5-8A	62
CPGI-GelCap-SL-2/0-3 Hole	79	CRSM 107/29-1200	71	GelWrap-50/20-300	69	IDP-MP-762508-2.5-8A	62
CPGI-GelWrap-18/4-200	69	CRSM 143/36-1200	71	GelWrap-50/20-350	69	IDP-MP-762508-2.5-8A	62
CPGI-GelWrap-18/4-200UL	69	CRSM 198/55-1200	71	GelWrap-50/20-400	69	IDP-MP-762508-2.5-8A	62
CPGI-GelWrap-18/4-250UL	69	CRSM 34/10-1200	71	GHFC-1-90	80	IDP-MP-762508-2.5-8A	62
CPGI-GelWrap-33/10-50	69	CRSM 34/10-200	71	GHFC-2.5-90	80	IDP-MP-762508-2.5-8A	62
CPGI-GelWrap-UF-200	69	CRSM 53/13-1200	71	GHFC-2-90	80	IDP-MP-762508-2.5-8A	62
CPGI-GelWrap-UF-250UL	69	CRSM 53/13-200	71	GHFC-3-90	80	IDP-MP-762508-2.5-8A	62
CPGI-GHFC-1-90	80	CRSM 84/20-1200	71	GHFC-MW	15	IDP-MP-762508-2.5-8A	62
CPGI-GHFC-2-90	80	CRSM 84/20-750	71	GILS-350	70	IDP-MP-762508-2.5-8A	62
CPGI-GILS-4/0	70	CRSM-CT-34/10-150	72	GILS-4/0	70	IDP-MP-762508-2.5-8A	62
CPGI-GLOW-GUN	111	CRSM-CT-53/13-200	72	GPRT-350/4P-500/1P	80	IDP-MP-762508-2.5-8A	62
CPGI-GLOW-TORCH	111	CRSM-CT-84/20-250	72	GPRT-350/6P-500/2P	80	IDP-MP-762508-2.5-8A	62
CPGI-GTAP-1	78	E		GPRT-350-3P	80	IDP-MP-762508-2.5-8A	62
CPGI-GTAP-2	78	ESC-1/A	87	GPRT-350-4P	80	IDP-MP-762508-2.5-8A	62
CPGI-MCK-1V	77	ESC-2/A	87	GPRT-350-5P	80	IDP-MP-762508-2.5-8A	62
CPGI-MCK-2V	77	ESC-3/A	87	GPRT-350-6P	80	IDP-MP-762508-2.5-8A	62
CPGI-PPMB-01	64	ESC-4/A	87	GPRT-350-8P	80	IDP-MP-762508-2.5-8A	62
CPGI-PPMB-02	64	ESC-5/A	87	GPRT-500-3P	80	IDP-MP-762508-2.5-8A	62
CPGI-PPMB-03	64	ESC-6/A	87	GPRT-500-4P	80	IDP-MP-762508-2.5-8A	62
CPGI-PPMB-04	64	ESC-7/A	87	GPRT-500-5P	80	IDP-MP-762508-2.5-8A	62
CPGI-PPMB-05	64	F		GPRT-500-6P	80	IDP-MP-762508-2.5-8A	62
CPGI-PPMB-06	64	FC-15M	106	GPRT-500-8P	80	IDP-MP-762508-2.5-8A	62
CPGI-PPMB-07	64	FC-30M	106	GTAP-1	78	IDP-MP-762508-2.5-8A	62
CPGI-PPMB-08	64	FC-60M	106	GTAP-2	78	IDP-MP-762508-2.5-8A	62
CPGI-PPMB-09	64	FCSM-120/40-1200-S	86	I		IDP-MP-762508-2.5-8A	62
CPGI-PPMB-10	64	FCSM-120/40-1500/U	86	IDP-1330-0607-10	66	IDP-MP-762508-2.5-8A	62
CPGI-PPMB-11	64	FCSM-177/63-600-S	86	IDP-1330-0607-T200	66	IDP-MP-762508-2.5-8A	62
CPGI-PPMB-12	64	FCSM-177/63-1200-S	86	IDP-1892BK04-RIBBON	66	IDP-MP-762508-2.5-8A	62
CPGI-PPMB-13	64	FCSM-177/63-1500/U	86	IDP-AM6310-110V-PRINTER	66	IDP-MP-762508-2.5-8A	62
CPGI-PPMB-14	64	FCSM-19/6-1200-S	86	IDP-CM-SCE-25-4H-9	58	IDP-MP-762508-2.5-8A	62
CPGI-PPMB-15	64	FCSM-19/6-150-S	86	IDP-CM-SCE-50-4H-9	58	IDP-MP-762508-2.5-8A	62
CPGI-PPMB-16	64	FCSM-19/6-A/U	86	IDP-CM-SCE-50-6H-9	58	IDP-MP-762508-2.5-8A	62
CPGI-PPMB-20	64	FCSM-28/9-1200-S	86	IDP-HL104WEITS025B	58	IDP-MP-762508-2.5-8A	62
CPGI-PPMB-21	64	FCSM-28/9-225-S	86	IDP-HL104WEITS033B	58	IDP-MP-762508-2.5-8A	62
CPGI-PPMB-22	64	FCSM-28/9-225-S	86	IDP-HL104WEITS038B	58	IDP-MP-762508-2.5-8A	62
CPGI-PPMD-0-9	64	FCSM-28/9-A/U	86	IDP-HL104WEITS050B	58	IDP-MP-762508-2.5-8A	62
CPGI-PPMD-A-J	64	FCSM-38/12-1200-S	86	IDP-HL104WEITS070B	58	IDP-MP-762508-2.5-8A	62
CPGI-PPMD-NEMA	64	FCSM-38/12-300-S	86	IDP-HL203WEITS025B	58	IDP-MP-762508-2.5-8A	62
CPGI-PPMDRF-0-9	64	FCSM-38/12-A/U	86	IDP-HL203WEITS033B	58	IDP-MP-762508-2.5-8A	62
CPGI-PPMDRF-A-J	64	FCSM-51/16-1200-S	86	IDP-HL203WEITS050B	58	IDP-MP-762508-2.5-8A	62
CPGI-PPMDRF-NEMA	64	FCSM-51/16-300-S	86	IDP-HL203WEITS070B	58	IDP-MP-762508-2.5-8A	62
CPGI-RNF-100-1/2-48-(color)	83	FCSM-51/16-A/U	86	IDP-HL253WEITS025B	58	IDP-MP-762508-2.5-8A	62
CPGI-RNF-100-1/2-6-(color)	83	FCSM-68/22-1200-S	86	IDP-HL253WEITS033B	58	IDP-MP-762508-2.5-8A	62
CPGI-RNF-100-1/2-6-ASRT	83	FCSM-68/22-A/U	86	IDP-HL253WEITS038B	58	IDP-MP-762508-2.5-8A	62
CPGI-RNF-100-1/4-48-(color)	83	FCSM-9/3-1200-S	86	IDP-HL253WEITS050B	58	IDP-MP-762508-2.5-8A	62
CPGI-RNF-100-1/4-6-ASRT	83	FCSM-90/30-1200-S	86	IDP-HL253WEITS070B	58	IDP-MP-762508-2.5-8A	62
CPGI-RNF-100-1-48-(color)	83	FH-2618A-1	113	IDP-HLX125WE2NEL60S	59	IDP-MP-762508-2.5-8A	62
CPGI-RNF-100-1-6-ASRT	83	FH-2629-ELECTRODE	112	IDP-HLX125WE4NEL60S	59	IDP-MP-762508-2.5-8A	62
CPGI-RNF-100-3/4-48-(color)	83	FH-2629-Kit	113	IDP-MP-101635-2.5-8A	62	IDP-MP-762508-2.5-8A	62
CPGI-RNF-100-3/4-6-(color)	83	FH-2629-TORCH ASSY	112			IDP-MP-762508-2.5-8A	62
CPGI-RNF-100-3/4-6-ASRT	83					IDP-MP-762508-2.5-8A	62

IDP-WP-523841-1.5-9	62	MRS-34-30	73	S-1251-50-300-1	94	TSBI500 08	24
IDP-WP-700254-5-9	62	MRS-56-30	73	S-1278-3 x 61 x 7620	94	TSBI500 08DS	24
IDP-WP-762381-2.5-9	62	MWTM-10/3-1200-S	84	SC-10A	107	TSBI500 09	24
IDP-WP-762508-2.5-9	62	MWTM-10/3-A/U	84	ShrinkMark-1000-2-9	57	TSBI500 09DS	24
IDP-WP-950950-10-9	62	MWTM-115/34-1200-S	84	ShrinkMark-1000-2-S1-9	57	TSBI500 10	24
		MWTM-115/34-1500/U	84	ShrinkMark-10-2-9	57	TSBI500 10DS	24
		MWTM-140/42-1200-S	84	ShrinkMark-10-2-S1-9	57	TSBI500 11	24
		MWTM-140/42-1500/U	84	ShrinkMark-12-2-9	57	TSBI500 11DS	24
LC-120	99	MWTM-16/5-1200-S	84	ShrinkMark-12-2-S1-9	57	TSBI500 12	24
LC-208-277	99	MWTM-16/5-A/U	84	ShrinkMark-18-2-9	57	TSBI500 12DS	24
LM-1/2-SL	65	MWTM-25/8-1200-S	84	ShrinkMark-18-2-S1-9	57	TSB230 01	21
LM-1/2-TAPE-BK	65	MWTM-25/8-A/U	84	ShrinkMark-2-2-9	57	TSB230 02	21
LM-1/2-TAPE-CR	65	MWTM-35/12-1200-S	84	ShrinkMark-2-2-S1-9	57	TSB230 03	21
LM-1/2-TAPE-WE	65	MWTM-35/12-A/U	84	ShrinkMark-250-2-9	57	TSB230 04	21
LM-1/2-TAPE-YW	65	MWTM-50/16-1200-S	84	ShrinkMark-250-2-S1-9	57	TSB230 05	21
LM-1/2-TUBE-WE	65	MWTM-50/16-A/U	84	SIML-1-708052-1	12	TSB230 06	21
LM-1/2-TUBE-YW	65	MWTM-85/25-1200-S	84	SIML-719622-1	12	TSB230 07	21
LM-1/2-VINYL-CR	65	MWTM-85/25-1500/U	84	SPT-15	97	TSB230 08	21
LM-1/2-VINYL-RD	65			SPT-168	97	TSB230 09	21
LM-1/2-VINYL-SR	65	N		SPT-19	97	TSB230 10	21
LM-1/2-VINYL-WE	65	NS-10	107	SPT-347	97	TSB230 11	21
LM-1/2-VINYL-YW	65	O		SST-120-UL	105	TSB230 12	21
LM-1/4-TUBE-WE	65	OLC-5C	108	SST-240-UL	105	TSB500 0131	22
LM-1/4-TUBE-YW	65	P		SST-FAA-UL	105	TSB500 0231	22
LM-1/8-TUBE-WE	65	P63	111	SST-PV-IES-UL	105	TSB500 0331	22
LM-1/8-TUBE-YW	100	PC-101R	106	SST-PV-UL	105	TSB500 0431	22
LM-1000	100	PC-103R	106	STD03W	60	TSB500 0531	22
LM-1-1/4-SL	65	PC-104R	106	STD06W	60	TSB500 0631	22
LM-120/240-ADP	65	PGI-BUCH-1776319-1	24	STD09W	60	TSB500 0731	22
LM-1-SL	65	PL-120S	108	STD12W	60	TSB500 0831	22
LM-1-TAPE-BK	65	PT-15	97	STD15MO	60	TSB500 0931	22
LM-1-TAPE-CR	65	PT-168	97	STD15W	60	TSB500 1031	22
LM-1-TAPE-WE	65	PT-20	97	STD17MO	60	TSB500 1131	22
LM-1-TAPE-YW	65	PT-347	97	STD17W	60	TSB500 1231	22
LM-1-VINYL-CR	65	R		STD21MO	60		
LM-1-VINYL-RD	65	RDSS-100	49	STD21W	60		
LM-1-VINYL-SR	65	RDSS-125	49	STD24MO	60		
LM-1-VINYL-WE	65	RDSS-150	49	STD24W	60		
LM-1-VINYL-YW	65	RDSS-45	49	T			
LM2020PLUS-2800MAH-NICAD	65	RDSS-60	49	T208M Printer	66	WCSM-105/30-1200-S	85
LM2020PLUS-PRINTER-KIT	65	RDSS-75	49	T312M Printer	66	WCSM-105/30-300-S	85
LM-2-1/2-SL	65	RDSS-CLIP-100	49	TC-101	106	WCSM-13/4-1200-S	85
LM-3/16-TUBE-WE	65	RDSS-CLIP-125	49	TC-101R	106	WCSM-13/4-150-S	85
LM-3/16-TUBE-YW	65	RDSS-CLIP-150	49	TC-103	106	WCSM-13/4-A/U	85
LM-3/4-SL	65	RDSS-CLIP-45	49	TC-103R	106	WCSM-130/36-1200-S	85
LM-4-SL	65	RDSS-CLIP-60	49	TC-104	106	WCSM-130/36-1500/U	85
LM-CASE	65	RDSS-CLIP-75	49	TC-104R	106	WCSM-130/36-300-S	85
LVB-T1-R	93	RDSS-CLIP-125	49	TC-12 Reflector	111	WCSM-130/36-450-S	85
LVB-T2-R	93	RDSS-CLIP-150	49	TG-12 Reflector	111	WCSM-20/6-1200-S	85
LVB-T4-R	93	RDSS-CLIP-45	49	TG-13 Reflector	111	WCSM-20/6-150-S	85
LVIT-150/50-A/U	87	RDSS-CLIP-75	49	TG-23 Reflector	111	WCSM-20/6-225-S	85
LVIT-30/10-A/U	87	RDSS-IT-16	50	TG-24 Reflector	111	WCSM-20/6-300-S	85
LVIT-75/25-A/U	87	RNF-100-1/16-25-(color)	83	TL-115	98	WCSM-20/6-A/U	85
LV-MSK-045	74	RNF-100-1/2-150-(color)	83	TL-1168	98	WCSM-33/8-1200-S	85
LV-MSK-046	74	RNF-100-1/2-25-(color)	83	TSBI000 01MDS	23	WCSM-33/8-150-S	85
LV-MSK-047	74	RNF-100-1/4-25-(color)	83	TSBI000 02MDS	23	WCSM-33/8-225-S	85
LV-MSK-058	74	RNF-100-1/4-250-(color)	83	TSBI000 03MDS	23	WCSM-33/8-300-S	85
LVSA-3-1	74	RNF-100-1/8-25-(color)	83	TSBI000 04MDS	23	WCSM-33/8-A/U	85
LVSA-3-2	74	RNF-100-1-25-(color)	83	TSBI000 05MDS	23	WCSM-43/12-1200-S	85
LVSA-3-3	74	RNF-100-2-25-(color)	83	TSBI000 06MDS	23	WCSM-43/12-150-S	85
LVSA-3-4	74	RNF-100-3/16-25-(color)	83	TSBI000 07MDS	23	WCSM-43/12-225-S	85
		RNF-100-3/32-25-(color)	83	TSBI000 08MDS	23	WCSM-43/12-300-S	85
M		RNF-100-3/4-25-(color)	83	TSBI000 09MDS	23	WCSM-43/12-A/U	85
M-120	100	RNF-100-3/8-200-(color)	83	TSBI000 10MDS	23	WCSM-51/16-100-S	85
M-208-277	100	RNF-100-3/8-25-(color)	83	TSBI000 11MDS	23	WCSM-51/16-1200-S	85
M-347	100	RVC-1V	76	TSBI000 12MDS	23	WCSM-51/16-225-S	85
M-480	100	RVC-2V	76	TSBI500 01	24	WCSM-51/16-300-S	85
MC-10	107	RVC-3V	76	TSBI500 01DS	24	WCSM-51/16-A/U	85
MCK-1L	77	RVC-4V	76	TSBI500 02	24	WCSM-70/21-1200-S	85
MCK-1V	77	RVS-11	70	TSBI500 02DS	24	WCSM-70/21-300-S	85
MCK-2L	77	RVS-12	70	TSBI500 03	24	WCSM-70/21-450-S	85
MCK-2V	77	RVS-13	70	TSBI500 03DS	24	WCSM-70/21-600-S	85
MCK-3V	77	RVS-14	70	TSBI500 04	24	WCSM-70/21-A/U	85
MCK-4V	77	S		TSBI500 04DS	24	WCSM-9/3-1200-S	85
MH-120	100	S-1052-3-3000	94	TSBI500 05	24	WCSM-9/3-150-S	85
MH-208-277	100	S-1171-4-300	94	TSBI500 05DS	24	WCSM-9/3-300-S	85
MH-PV	100	S-1174-2-300	94	TSBI500 06	24	WCSM-9/3-A/U	85
M-PV	100	S-1174-4-460	94	TSBI500 06DS	24	WCSM-90/30-1500/U	85
MRS-12-10	73	S-1251-25-300-4	94	TSBI500 07	24		
MRS-12-24	73			TSBI500 07DS	24		
MRS-34-24	73						

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Tyco Electronics Corporation

8000 Purfoy Road
Fuquay Varina, NC 27526-9349
Tel: 800.327.6996
Fax: 800.527.8350
E-mail: naenergy@tycoelectronics.com
<http://energy.tycoelectronics.com>
www.tycoelectronics.com

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