Tyco Electronics
Authorized Distributor

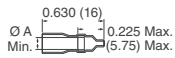
Raychem Terminals and Splices

CWT-900X Series – Solder Sleeve Wire Splices

Materials: • **Insulation Sleeve:** Heat-shrinkable, radiation cross-linked modified polyolefin. Transparent clear. • **Solder Preform with Flux:** *Solder:* Type CD18 per ANSI/J-STD-006 *Flux:* Type ROM1 per ANSI/J-STD-004 **Application:** These controlled soldering devices are designed to splice tin-plated or bare copper stranded wires rated for at least 85°C. **Temperature Range:** -55°C ~ 125°C

AWG (Color)	Dimensions - Inches (mm) Diameter A Minimum	Length - L Maximum	Digi-Key Part No.	Pricing 10	50	100	Raychem Part No.
24-20 (Clear)	.065 (1.7)	1.025 (26.0)	CWT9001-ND	9.46	42.31	69.68	CWT-9001
18-16 (Red)	.105 (2.7)	1.655 (42.0)	CWT9002-ND	9.42	42.14	69.40	CWT-9002
16-12 (Blue)	.180 (4.5)	1.655 (42.0)	CWT9003-ND	9.90	44.28	72.93	CWT-9003

CWT-150X Series – Wire Termination to Pin, Post or Tab

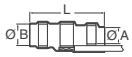


Materials: • **Insulation Sleeve:** Heat-shrinkable, transparent clear, radiation cross-linked modified polyolefin • **Solder Preform with Flux:** *Solder:* Type Cd18 per ANSI-J-STD-006 *Flux:* Type ROM1 per ANSI-J-STD-004 **Application:** These controlled soldering devices are designed for termination of a wire to the lead of electrical component or to the terminal of a connector. **Temperature Range:** -55°C ~ 125°C

Dimensions - Inches (mm) Diameter A - Min.	Pin Diameter - Max.	Digi-Key Part No.	Pricing 10	50	100	Raychem Part No.
.060 (1.5)	.025 (0.6)	CWT1501-ND	5.83	26.09	42.97	CWT-1501

Note: Please refer to data sheet for Post or Tab sizes

CWT-X-W122-5 Series – Shield Terminators



Materials: • **Insulation Sleeve:** Transparent heat-shrinkable radiation cross-linked modified polyolefin • **Solder Preform with Flux:** *Solder:* Type Cd18 per ANSI/J-STD-006 *Flux:* Type ROM1 per ANSI/J-STD-004 • **Ground Lead:** Raychem cross-linked polyethylene wire, AWG22, stranded tin plated copper • **Color:** Green **Application:** These controlled soldering devices are designed for termination of a bare or tin plated copper shield on a cable having an insulation rated for at least 85°C. **Temperature Range:** -55°C ~ 125°C

Dimensions - Inches (mm) Diameter A Minimum	Diameter B Minimum	Length - L Maximum	Digi-Key Part No.	Pricing 10	50	100	Raychem Part No.
.098 (2.50)	.118 (3.00)	.965 (24.50)	CWT3W1225-ND	28.72	128.46	211.59	CWT-3-W122-5
.169 (4.30)	.189 (4.80)	1.154 (29.30)	CWT5W1225-ND	29.33	131.22	216.13	CWT-5-W122-5
.252 (6.40)	.287 (7.30)	1.280 (32.50)	CWT7W1225-ND	32.47	145.27	239.28	CWT-7-W122-5

S01-0X-R Series – Shield Terminators

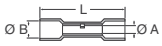
Materials: • **Insulation Sleeve:** Heat-shrinkable, transparent blue, radiation cross-linked modified polyvinylidene fluoride • **Solder Preform with Flux and Thermal Indicator:** *Solder:* Type Sn63 per ANSI-J-STD-006 *Flux:* Type ROL1 per ANSI-J-STD-004 *Thermal Indicator:* Color change: violet to colorless **Application:** These parts are designed to make an environment resistant shield termination • **Jacket Rating:** 125°C • Parts are qualified to M83519/1

Dimensions - Inches (mm) Diameter A Minimum	Diameter B Minimum	Length - L Nominal	Digi-Key Part No.	Pricing 10	50	100	Raychem Part No.
.075 (1.90)	.105 (2.65)	.65 (16.5)	S0101R-ND	24.92	111.48	183.62	S01-01-R
.105 (2.65)	.145 (3.68)	.65 (16.5)	S0102R-ND	24.58	109.93	181.06	S01-02-R
.170 (4.30)	.200 (5.08)	.65 (16.5)	S0103R-ND	26.03	116.44	191.80	S01-03-R
.235 (5.95)	.255 (6.45)	.75 (19.1)	S0104R-ND	30.95	138.47	228.07	S01-04-R
.275 (7.00)	.300 (7.60)	.75 (19.1)	S0105R-ND	35.92	160.69	264.67	S01-05-R

D-406 Series – DURASEAL®

RoHS COMPLIANT

Closed Barrel / Crimp Splice



Materials: • **Insulation Sleeve:** Heat shrinkable, radiation cross-linked polyamide (nylon) with a polyamide-based hot-melt adhesive liner. Color per table. • **Crimp Splice:** Tin-plated copper alloy **Application:** These parts may be used to obtain an environment-resistant one-to-one in-line (butt) splice in wires meeting the size range and diameter restraints specified herein and having a temperature rating of not less than 85°C.

AWG (Color)	Dimensions - Inches (mm) Diameter A Minimum	Diameter B Minimum	Length - L Nominal	Digi-Key Part No.	Pricing 10	50	100	Raychem Part No.
18-22 (Red)	.058 (1.47)	.146 (3.70)	1.24 (31.5)	D4060001-ND	8.57	38.33	63.12	D-406-0001
14-16 (Blue)	.092 (2.33)	.181 (4.60)	1.24 (31.5)	D4060002-ND	8.57	38.33	63.12	D-406-0002
10-12 (Yellow)	.138 (3.50)	.255 (6.50)	1.48 (37.5)	D4060003-ND	11.64	52.11	85.82	D-406-0003

Raychem Heat Shrinkable Caps

RoHS COMPLIANT

PD and ES Caps Series

PD Caps Series – Semirigid, Encapsulant-lined:

Dual wall PD Caps inexpensively encapsulate crimped electrical connections, including those on motor coils. They remain tightly in place for the life of the motor. • **Shrink Ratio:** 3:1 • **Full Recovery Temperature:** 135°C • **Operating Temperature:** -55°C ~ 110°C • UL Recognized File No. E85381 • CSA Certified LR31929

ES Caps Series – Semirigid, Adhesive-lined, Polyolefin:

ES Caps are specifically designed to provide mechanical and environmental protection of stub splices in electrical harnesses. Clear ES Caps allow see-through inspection; black ES Caps are flame-retardant. • **Shrink Ratio:** 4:1 • **Full Recovery Temperature:** 135°C • **Operating Temperature:** -40°C ~ 105°C • UL Recognized File No. E85381

Tubing Size‡	Inside Diameter (mm) Expanded D - Min.	Recovered d - Max.	Recovered Wall Thick.† W (mm)	Digi-Key Part No.	Pricing 100	500	1,000	Raychem Part No.
PD Caps Series – Black								
1/8	3.2	0.58	1.22	PDC018K-ND	5.12	22.39	38.38	PD-CAP-1/8-0
3/16	4.7	1.52	1.57	PDC316K-ND	6.09	26.64	45.67	PD-CAP-3/16-0
1/4	6.4	2.03	1.98	PDC014K-ND	10.06	44.02	75.46	PD-CAP-1/4-0
3/8	9.5	2.29	2.08	PDC038K-ND	18.06	79.01	135.46	PD-CAP-3/8-0
1/2	12.7	2.29	2.54	PDC012K-ND	30.39	132.97	227.96	PD-CAP-1/2-0

† Wall thickness will be less if tubing recovery is restricted during shrinkage ‡ Size before shrinking

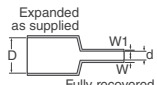
Min.‡ Length (mm)	Inside Diameter Expand. D - Min. (mm)	Recov. d - Max. (mm)	Recov. Wall Thick.† Total W (mm)	Meltable W1 (mm)	Digi-Key Part No.	Pricing 100	500	1,000	Raychem Part No.
ES Caps Series - Clear									
30	5.70	1.27	1.20	0.56	ESC30C-ND	8.91	38.98	66.83	ES-CAP-NO.1-C1-X-30MM
35	5.70	1.27	1.20	0.56	ESC35C-ND	10.08	44.13	75.65	ES-CAP-NO.1-C1-X-35MM
50	10.85	2.41	1.91	1.02	ESB50C-ND	27.54	120.49	206.55	ES-CAP-NO.3-B8-X-50MM
ES Caps Series - Black									
30	5.70	1.27	1.20	0.56	ESC30K-ND	8.91	38.98	66.83	ES-CAP-NO.1-C1-0-30MM
35	5.70	1.27	1.20	0.56	ESC35K-ND	10.08	44.12	75.64	ES-CAP-NO.1-C1-0-35MM
30	7.40	1.65	1.52	0.76	ESB30K-ND	11.35	49.64	85.11	ES-CAP-NO.2-B9-0-30MM
35	7.40	1.65	1.52	0.76	ESB35K-ND	12.69	55.53	95.20	ES-CAP-NO.2-B9-0-35MM
40	10.85	2.41	1.91	1.02	ESB40K-ND	22.72	99.41	170.42	ES-CAP-NO.3-B8-0-40MM
50	10.85	2.41	1.91	1.02	ESB50K-ND	27.54	120.49	206.55	ES-CAP-NO.3-B8-0-50MM

† Wall thickness will be less if tubing recovery is restricted during shrinkage ‡ Size before shrinking

Raychem Heat Shrink Tubing

RoHS COMPLIANT

ATUM, DWP-125, and TAT-125 Series



ATUM Series – Adhesive-lined, High-Shrink-Ratio, Polyolefin:

• **Shrink Temperature:** 80°C • **Full Recovery Temperature:** 110°C • **Operating Temperature:** -55°C ~ 110°C • **Color:** Black • **Shrink Ratio:** 3:1 and 4:1 • UL Recognized file No. E85381 • Military AMS-DTL-23053/4 **Applications:** • Environmentally seals and protects a wide variety of electrical applications, including back end connector sealing, breakouts, and connector-to-cable transitions. High expansion ratio makes it possible to repair most damaged cable jackets without removing connectors. • Bonds to a wide variety of plastics, rubbers, and metals, including polyethylene, aluminum, steel, and copper. • Dual Wall

DWP-125 Series – Adhesive-lined, Flexible, High-Shrink-Ratio, Polyolefin:

• **Shrink Temperature:** 80°C • **Full Recovery Temperature:** 125°C • **Operating Temperature:** -40°C ~ 110°C • **Color:** Black • **Shrink Ratio:** 3:1 • UL Recognized file No. E35586 • CSA Certified LR31929 **Applications:** • Environmentally seals and protects a wide variety of electrical applications, including wire splices, breakouts, and connector-to-cable transitions. Ideal for applications where UL recognized/CSA certified adhesive-lined tubing is required. • Bonds to a wide variety of plastics, rubbers, and metals, including polyethylene, neoprene, and steel. • Dual Wall

TAT-125 Series – Adhesive-lined, Flexible, Polyolefin:

• **Shrink Temperature:** 95°C • **Full Recovery Temperature:** 121°C • **Operating Temperature:** -55°C ~ 110°C • **Color:** Black • **Shrink Ratio:** 2:1 • UL Recognized file No. E85381 • Military AMS-DTL-23053/4 **Applications:** • Seals and protects simple in-line splices, bimetallic joints, and components from fluids, moisture, and corrosion. Repairs damaged wire insulation, especially where flexibility is required. Provides one-step electrical insulation and moisture sealing. • Bonds to a wide variety of plastics, rubbers, and metals, including polyethylene, neoprene, lead, and steel. • Dual Wall

Tubing Size‡	Inside Diameter Expand. D - Min. (mm)	Recov. d - Max. (mm)	Recov. Wall Thick.† Total W (mm)	Meltable W1 (mm)	Digi-Key Part No.	Sold in 4' Lengths Only Price Per Length 4' (1pc.)	8' (2pc.)	20' (5pc.)	48' (12pc.)	100' (25pc.)
ATUM Series										
3/1	3.0	1.0	1.00	0.50	ATU031K-ND	7.77	13.46	29.78	62.15	103.58
6/2	6.0	2.0	1.00	0.50	ATU062K-ND	11.82	20.49	45.32	94.57	157.62
9/3	9.0	3.0	1.40	0.61	ATU093K-ND	18.01	31.22	69.03	144.06	240.10
12/4	12.0	4.0	1.78	0.76	ATU124K-ND	21.44	37.16	82.18	171.50	285.83
19/6	19.0	6.0	2.25	0.76	ATU196K-ND	30.01	52.02	115.04	240.09	400.14
24/8	24.0	8.0	2.54	1.02	ATU248K-ND	41.80	72.46	160.24	334.41	557.34
40/13	40.0	13.0	2.54	1.02	ATU4013K-ND	35.74	61.94	136.99	285.89	476.49
4/1	4.0	1.0	1.00	0.50	ATM041K-ND	9.88	17.12	37.87	79.04	131.73
8/2	8.0	2.0	1.00	0.50	ATM082K-ND	13.83	23.98	53.02	110.65	184.42
12/3	12.0	3.0	1.40	0.61	ATM123K-ND	24.54	42.53	94.06	196.30	327.16
16/4	16.0	4.0	1.78	0.76	ATM164K-ND	32.71	56.70	125.41	261.73	436.21
24/6	24.0	6.0	2.25	0.76	ATM246K-ND	50.43	87.42	193.35	403.51	672.50
32/8	32.0	8.0	2.54	1.02	ATM328K-ND	35.57	61.65	136.35	284.56	474.28
52/13	52.0	13.0	2.54	1.02	ATM5213K-ND	45.53	78.92	174.53	364.24	607.07
DWP-125 Series										
1/8	3.2	1.0	1.02	0.25	DWP018K-ND	4.96	8.61	19.04	39.73	66.22
3/16	4.8	1.5	1.40	0.51	DWP316K-ND	5.17	8.97	19.84	41.41	69.01
1/4	6.4	2.0	1.45	0.56	DWP014K-ND	6.49	11.24	24.85	51.86	86.44
3/8	9.5	3.0	1.65	0.68	DWP038K-ND	7.16	12.40	27.44	57.26	95.43
1/2	12.7	4.0	1.78	0.76	DWP012K-ND	7.48	12.96	28.67	59.83	99.71
3/4	19.1	6.0	2.03	0.76	DWP034K-ND	11.52	19.96	44.14	92.12	153.54
1	25.4	8.0	2.50	0.76	DWP001K-ND	16.04	27.80	61.48	128.30	213.83
1-1/2	38.1	13.0	2.50	0.76	DWP112K-ND	34.33	59.49	131.57	274.57	457.61
TAT-125 Series										
1/8	3.2	1.6	0.69	0.23	TAT018K-ND	5.07	8.78	19.42	40.53	67.55
3/16	4.8	2.4	0.71	0.25	TAT316K-ND	6.16	10.68	23.62	49.30	82.15
1/4	6.4	3.2	0.74	0.13	TAT014K-ND	7.73	13.39	29.61	61.79	102.99
3/8	9.5	4.8	0.74	0.13	TAT038K-ND	8.62	14.93	33.03	68.94	114.91
1/2	12.7	6.4	0.76	0.15	TAT012K-ND	9.32	16.16	35.75	74.60	124.33
3/4	19.1	9.5	0.89	0.15	TAT034K-ND	12.41	21.52	47.59	99.32	165.54
1	25.4	12.7	1.07	0.20	TAT001K-ND	18.57	32.18	71.18	148.55	247.58
1-1/2	38.1	19.1	1.19	0.28	TAT112K-ND	32.98	57.16	126.41	263.82	439.71

† Wall thickness will be less if tubing recovery is restricted during shrinkage ‡ Size before shrinking

DWP-125 Heat Shrink Tubing Kits

DWP3-KIT-ND 1/8" 25 pcs., 3/16" 25 pcs., 1/4" 24 pcs., 1/2" 10 pcs., 3/4" 5 pcs., 1" 3 pcs., Black..... **81.27**

Refill parts:

DWP018M-ND 1/8" 25 pieces, Black..... **12.27** **DWP012M-ND** 1/2" 10 pieces, Black..... **12.27**

DWP316M-ND 3/16" 25 pieces, Black..... **12.27** **DWP034M-ND** 3/4" 5 pieces, Black..... **12.27**

DWP014M-ND 1/4" 24 pieces, Black..... **12.27** **DWP001M-ND** 1" 3 pieces, Black..... **12.27**

ES1000C-ND ES1000-NO.1, 6 pcs.; ES1000-NO.2, 5 pcs.; ES1000-NO.3, 5 pcs.; ES1000-NO.4, 3 pcs.; Clear **11.92**

Note: All kits have 6" pieces

(Continued)

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