

WRAPAROUND SLEEVES (CRSM) 1000V, COATED, MEDIUM WALL, NON-REINFORCED

KEY FEATURES

- Secure environmental seal
- ANSI C119.1 qualified
- RUS accepted
- Unlimited shelf life

TE Connectivity's (TE) Raychem CRSM sleeves close easily with a permanent locking system that consists of a raised rail profile and a stainless steel channel.

CRSM sleeves are mainly used as insulation for 1/C low-voltage power cables up to 1000V and for rejacket repair up to 35 kV or for general sealing applications. Hot-melt adhesive provides a secure environmental seal.

TE's CRSM sleeves are qualified to ANSI C119.1 and rated to ICEA electrical withstand test for 1000V. RUS accepted for use as jacked restoration materials on JCN cable.

CRSM sleeves are mainly for use on standard poly or elastomeric insulated or jacketed cables or lead-jacketed cables, including aluminum or steel armored. They also have an unlimited shelf life, when stored under normal conditions.



| PRODUCT SELECTION INFORMATION: DIMENSIONS IN INCHES (mm) | | | | | | | |
|--|---|--------------------------|---------------------------|-----------|---------------------------------|--------------------------------|--|
| Description | Primary Insulation Conductor Size (AWG/Kcmil) | 1000V Use Range | General Use Range | Length | Wall Thickness (min max.) | Standard Pack (pcs./Box) | |
| CRSM 34/10-200 | #8 - 2/0 | 0.25 - 0.60 (6 - 15) | 0.25 - 1.20 (6 - 30) | 8 (200) | 0.02 - 0.1 (0.3 - 2.4) | 3 | |
| CRSM 34/10-1200 | #8 - 2/0 | 0.25 - 0.60 (6 - 15) | 0.25 - 1.20 (6 - 30) | 48 (1219) | 0.02 - 0.1 (0.3 - 2.4) | 5 | |
| CRSM 53/13-200 | 3/0 - 400 | 0.60 - 0.95 (15 - 24) | 0.60 - 1.80 (15 - 46) | 8 (200) | 0.02 - 0.08 (0.3 - 2) | 10 | |
| CRSM 53/13-1200 | 3/0 - 400 | 0.60 - 0.95 (15 - 24) | 0.60 - 1.80 (15 - 46) | 48 (1219) | 0.02 - 0.08 (0.3 - 2) | 5 | |
| CRSM 84/20-750 | 500 - 1000 | 0.95 - 1.40 (24 - 36) | 0.95 - 2.70 (24 - 69) | 30 (750) | 0.02 - 0.08 (0.3 - 2) | 10 | |
| CRSM 84/20-1200 | 500 - 1000 | 0.95 - 1.40 (24 - 36) | 0.95 - 2.70 (24 - 69) | 48 (1219) | 0.02 - 0.08 (0.3 - 2) | 5 | |
| CRSM 107/29-1000 | 1000 - 2000 | 1.30 - 2.00 (33 - 51) | 1.30 - 3.60 (33 - 91) | 40 (1000) | 0.02 - 0.08 (0.3 - 2) | 10 | |
| CRSM 107/29-1200 | 1000 - 2000 | 1.30 - 2.00 (33 - 51) | 1.30 - 3.60 (33 - 91) | 48 (1219) | 0.02 - 0.08 (0.3 - 2) | 5 | |
| CRSM 143/36-1200 | - | - | 1.65 - 4.95 (42 - 126) | 48 (1219) | 0.02 - 0.08 (0.3 - 2) | 5 | |
| CRSM 198/55-1200 | - | - | 1.65 - 4.95 | 48 (1219) | 0.02 - 0.09 | 5 | |

Dimension values provided are typical. Related test reports: EDR-5124, 5192, 5361.

| REFERENCE DIMENSIONS FOR FEILD CUTTING OF CRSM: INCHES (mm | | | | |
|--|-------------------|--|--|--|
| Damage Length | Total Seal Length | | | |
| <3 (<76) | 3 (76) | | | |
| 3 - 12 (76 - 305) | 4 (102) | | | |
| 12 - 24 (305 - 610) | 6 (152) | | | |
| > 24 (>610) | 8 (203) | | | |

Cut Sleeve Length = Damage Length + Total Seal Length

ORDERING INFORMATION

Kit includes wraparound sleeve and stainless steel channel closure. Both can be field cut for shorter requirements. Kit does not include connectors

Bulk options are also available. Consult your TE Connectivity representative.

te.com/energy

© 2014 TE Connectivity Ltd. family of companies. All Rights Reserved. E561 10/2014

CRSM, Raychem, TE Connectivity and TE connectivity (logo) are trademarks. Other logos, product and/or company names might be trademarks of their respective owners. While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties or merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

FOR MORE INFORMATION: TE Technical Support Centers

| USA: |
|-------------------|
| France: |
| UK: |
| Germany: |
| Spain: |
| Benelux: |
| Canada: |
| Mexico: |
| Latin/S. America: |
| China: |

| + 1 800 327 6996 |
|-----------------------|
| + 33 380 583 200 |
| + 44 0870 870 7500 |
| + 49 896 089 903 |
| + 34 916 630 400 |
| + 32 16 351 731 |
| +1(905)475-6222 |
| + 52 (0) 55-1106-0800 |
| + 54 (0) 11-4733-2200 |
| |





GEL H-FRAME CLOSURE - 1000V (GHFC) FAST AND EASY TO USE AND INSTALL

KEY FEATURES

- PowerGel sealant filled splice for buried, underground, and overhead applications
- Fast and simple to install
- PowerGel sealant easily peels away leaving a clean connection
- Can be used on aluminum or copper cables
- Meets requirements of ANSI C119.1

TE Connectivity's (TE) Raychem GHFC gel H-frame closure provides a fast and simple method for insulating and environmentally sealing low-voltage cable taps and splices made with H-frame compression connectors.

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, even while wearing high voltage gloves.

The closure utilizes TE's innovative PowerGel sealing gel to protect the connection from moisture ingress, corrosion, and pollution. TE's pre-cured polymer gels are blended together and crosslinked to give high elasticity, high cohesiveness, and temperature stability. They have been in use in other applications for over 10 years.

TE's gels are ideal for sealing electrical connections from moisture, dirt, and other contaminants. There is no need to apply heat or use sealants that would make re-entry difficult or impossible. When compressed, gels will coat and adhere to surfaces; they can be easily removed by pulling or peeling them off.



The low-voltage H-frame closure is ideal for both especially useful for street lighting applications.

Molded cover of UV stable, impact resistant polypropylene provides rugged protection for underground or overhead applications.



TESTING TE's GHFC gel H-frame closure has been tested to and meets

the following requirements:

| Testing | Test Conditions |
|----------------------|--------------------|
| Underground Splicing | ANSI C119.1 - 1986 |
| Fungus Resistance | ASTM G - 21 |

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

Snap-lock ensures that cover remains closed.

| PRODUCT SELECTION INFORMATION | | | | | | |
|-------------------------------|---------------------|---------------------|------|---------|--|--|
| Description | Condu | Standard Package | | | | |
| | Main | Тар | Die | | | |
| GHFC - 1 - 90 | #6 - #2 (16 - 35) | #14 - #8 (2.5 - 10) | "BG" | 10 each | | |
| GHFC - 2 - 90 | #2 - 2/0 (35 - 70) | #14 - #6 (2.5 - 16) | "O" | 10 each | | |
| GHFC - 2.5 - 90 | 1/0 - 4/0 (50 - 95) | #6 - 3/0 (16 - 85) | "D" | 30 each | | |
| GHFC - 3 - 90 | 350 (185) | #4/0 (95) | "N" | 6 each | | |

ORDERING INFORMATION

Select the appropriate catalog number. Selections are based on typical dimensions for low-voltage, insulated cable and connectors. Approved connectors include, but are not limited to:

| Product | Approved Connectors |
|---------------|--|
| GHFC - 1 - 90 | Homac UB214; T&B 63105; Blackburn WR9; Burndy YPC2A8U |
| GHFC - 2 - 90 | Homac OB22, OB44, OB102, OB103; Burndy YHO - 1, YHO - 2, YHO100, YHO125, YHO150; Blackburn WR139, WR159, WR179, WR199; ILSCO AH1; T&B 63110; UTILCO HT1, HT2 |

TEST REPORT

Related Product Information: EDR-5264 Test Report

te.com/energy

© 2005, 2007, 2012 2014 TE Connectivity Ltd. family of companies. All Rights Reserved. 1308929 E142 10/2014

PowerGel, GHFC, Raychem, TE Connectivity and TE connectivity (logo) are trademarks. Other logos, product and/or company names might be trademarks of their respective owners. While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty information in this about the formation is accurate, correct, reliable or current. The reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a zparticular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

FOR MORE INFORMATION: TE Technical Support Centers

| USA: | +1800 327 6996 |
|-------------------|-----------------------|
| France: | + 33 380 583 200 |
| UK: | + 44 0870 870 7500 |
| Germany: | + 49 896 089 903 |
| Spain: | + 34 916 630 400 |
| Benelux: | + 32 16 351 731 |
| Canada: | +1(905)475-6222 |
| Mexico: | + 52 (0) 55-1106-0800 |
| Latin/S. America: | + 54 (0) 11-4733-2200 |
| China: | + 86 (0) 400-820-6015 |



GELWRAP WRAP-AROUND SPLICE COVER EASILY INSTALL CONNECTIONS UP TO 1000V

KEY FEATURES

- Simply wrap and snap the sleeve on any cable in the use range
- Easy and quick to install
- For splice cover, cable rejacketing, underground or overhead applications
- Closure sleeves are compatible with solid dielectric cable insulations

TE Connectivity's (TE) Raychem GelWrap closure sleeves 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 sleeves are equally well suited for insulation and jacket repair.

PowerGel sealing material was specifically developed for the electrical power industry. This unique hydrophobic gel material provides an excellent moisture seal over wide operating temperature ranges (-40°C to 95°C). Both the gel and housing are UV resistant and suitable for overhead applications.

Other common uses for GelWrap sleeves include LV cable repair splices, MV cable jacket repair, MV splice rejacketing, and Elbow sealing sleeve.





| TESTING The TE GelWrap sleeve meets the following requirements: | | | | | |
|--|--|--|--|--|--|
| Testing | Test Conditions | | | | |
| ANSI C119.1 - 1986 | 600V insulated underground | | | | |
| Chemical Resistance | 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) | | | | |
| Accelerated Aging | 1000 hours @ 135° C - 93% retention tensile strength - 82% retention elongation at break | | | | |

Maximum Mechanical Connector Dimensions:

Figure (A)



PRODUCT SELECTION INFORMATION: DIMENSIONS IN INCHES (mm) Description **Sleeve Length Conductor Size** Maximum **General Use Connector Opening Diameter Range** GelWrap-18/4-100 4.0 (100) #12 - 4/0 (4 - 95) 1.0 (25) 0.15 - 0.70 (4 - 8) GelWrap-18/4-150 6.0 (150) #12 - 4/0 (4 - 95) 3.0 (75) 0.15 - 0.70 (4 -18) GelWrap-18/4 -200 8.0 (200) #12 - 4/0 (4 - 95) 5.0 (125) 0.15 - 0.70 (4 - 18) GelWrap-18/4-250 10.0 (250) #12 - 4/0 (4 - 95) 7.0 (175) 0.15 - 0.70 (4 - 18) GelWrap-18/4-300 12.0 (300) #12 - 4/0 (4 - 95) 9.0 (225) 0.15 - 0.70 (4 - 18) GelWrap-33/10-150 6.0 (150) #2 - 500 (35 - 240) 2.0 (50) 0.40 - 1.30 (10 - 33) GelWrap-33/10-200 8.0 (200) #2 - 500 (35 - 240) 4.0 (100) 0.40 - 1.30 (10 - 33) GelWrap-33/10-250 10.0 (250) #2 - 500 (35 - 240) 6.0 (150) 0.40 - 1.30 (10 - 33) GelWrap-33/10-300 12.0 (300) #2 - 500 (35 - 240) 8.0 (200) 0.40 - 1.30 (10 - 33) GelWrap-33/10-350 14.0 (350) #2 - 500 (35 - 240) 10.0 (250) 0.40 - 1.30 (10 - 33) 250 - 750 0.80 - 1.50 (20 - 38) GelWrap-50/20-200 8.0 (200) 2.0 (50) 4.0 (100) 250 - 750 0.80 - 1.50 (20 - 38) GelWrap-50/20-250 10.0 (250) 250 - 750 12.0 (300) 6.0 (150) 0.80 - 1.50 (20 - 38) GelWrap-50/20-300 GelWrap-50/20-350 14.0 (350) 250 - 750 8.0 (200) 0.80 - 1.50 (20 - 38) GelWrap-50/20-400 16.0 (400) 250 - 750 10.0 (250) 0.80 - 1.50 (20 - 38)

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

| PRODUCT SELECTION INFORMATION: UL LISTED - DIMENSIONS IN INCHES (mm) | | | | | | | |
|--|---------------|----------------------|---------------------------------|--|-------------------------------------|---|--|
| Description | Sleeve Length | 1000V Cable Range | Maximum Connector Opening | Max. Compression Connector Diameter | Maximum Mecha Dime Height (A) | anical Connector nsions Width (B) | |
| GelWrap-18/4-150UL | 6.0 (150) | #14-4/0 AWG | 2.0 (50) | 0.85 (22) | 1.2 (30) | 1.1 (28) | |
| GelWrap-18/4-200UL | 8.0 (200) | #14-4/0 AWG | 4.0 (100) | 0.85 (22) | 1.2 (30) | 1.1 (28) | |
| GelWrap-18/4-250UL | 10.0 (250) | #14-4/0 AWG | 6.0 (150) | 0.85 (22) | 1.2 (30) | 1.1 (28) | |
| GelWrap-18/4-300UL | 12.0 (300) | #14-4/0 AWG | 8.0 (200) | 0.85 (22) | 1.2 (30) | 1.1 (28) | |
| GelWrap-18/4-350UL | 14.0 (350) | #14-4/0 AWG | 10.0 (250) | 0.85 (22) | 1.2 (30) | 1.1 (28) | |
| GelWrap-18/4-400UL | 16.0 (400) | #14-4/0 AWG | 12.0 (300) | 0.85 (22) | 1.2 (30) | 1.1 (28) | |
| GelWrap-18/4-450UL | 18.0 (450) | #14-4/0 AWG | 14.0 (350) | 0.85 (22) | 1.2 (30) | 1.1 (28) | |
| GelWrap-18/4-500UL | 20.0 (500) | #14-4/0 AWG | 16.0 (400) | 0.85 (22) | 1.2 (30) | 1.1 (28) | |
| GelWrap-18/4-550UL | 22.0 (550) | #14-4/0 AWG | 18.0 (450) | 0.85 (22) | 1.2 (30) | 1.1 (28) | |
| GelWrap-18/4-600UL | 24.0 (600) | #14-4/0 AWG | 20.0 (500) | 0.85 (22) | 1.2 (30) | 1.1 (28) | |

te.com/energy

© 2005, 2007, 2009, 2012, 2014 TE Connectivity Ltd. family of companies. All Rights Reserved. 1309100 E157 10/2014

GelWrap, PowerGel, Raychem, TE Connectivity and TE connectivity (logo) are trademarks. Other logos, product and/or company names might be trademarks of their respective owners. While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

FOR MORE INFORMATION: TE Technical Support Centers USA: +1800 327 6996

| ι | JSA: |
|----|-------------------|
| F | France: |
| ι | JK: |
| (| Germany: |
| \$ | Spain: |
| E | Benelux: |
| (| Canada: |
| 1 | Mexico: |
| L | _atin/S. America: |
| (| China: |

| 33 380 583 200 | |
|------------------|---|
| 44 0870 870 7500 |) |
| 49 896 089 903 | |
| 34 916 630 400 | |
| 32 16 351 731 | |
| | |

- +1(905)475-6222
- + 52 (0) 55-1106-0800
- + 54 (0) 11-4733-2200
 - + 86 (0) 400-820-6015





END SEALING CAP (ESC) HEAT-SHRINK CAPS FOR 1/C POWER CABLE (1000V)

KEY FEATURES

- Qualified to ANSI C119.1
- Unlimited shelf life
- Shrinks in seconds
- Secure environmental seal

TE Connectivity's (TE) Raychem ESC heat-shrink end caps can be used as a live end seal up to 1000V, or as an end seal for storage or pulling any de-energized cable. ESC caps are also for use on standard poly or elastomeric insulated or jacketed cables or lead-jacketed cables, including aluminum or steel armored.

Hot-melt adhesive provides a secure environmental seal. ESC caps shrink in seconds, leaving a compact and rugged end seal. They also have an unlimited shelf life, when stored under normal conditions.







TE's ESC caps are gualified to ANSI C119.1 and rated to ICEA electrical withstand test for 1000V. Bulk options are also available. Consult your TE Connectivity representative.

| PRODUCT SELECTION INFORMATION: DIMENSION IN INCHES (mm) | | | | | | | | |
|---|---|---------------------------|---------------------------|-----------|---------------------------|------------------------------|------------------|--|
| Description | Primary Insulation Conductor Size (AWG/Kcmil) | 1000V Use Range | General Use Range | Length | Inside Diameter Max | Nominal Wall Thickness | Standard Pack | |
| ESC-1/A | #12 - #8 | 0.17 - 0.35 (4 - 9) | 0.15 - 0.30 (4 - 8) | 1.5 (38) | 0.4 (10) | 0.2 (2.8) | 50 | |
| ESC-2/A | #6 - 3/0 | 0.31 - 0.71 (8 - 18) | 0.30 - 0.70 (8 - 18) | 2 (55) | 0.8 (20) | 0.2 (2.8) | 50 | |
| ESC-3/A | 4/0 - 750 | 0.65 - 1.25 (17 - 32) | 0.65 - 1.25 (17 - 32) | 3.5 (89) | 1.4 (35) | 0.2 (3.2) | 40 | |
| ESC-4/A | 750 - 1500 | 1.08 - 1.94 (27 - 49) | 1.05 - 1.95 (27 - 50) | 5.3 (134) | 2.2 (55) | 0.2 (3.9) | 20 | |
| ESC-5/A | 1500 - 2000 | 1.38 - 2.58 (35 - 66) | 1.3 - 2.65 (33 - 67) | 6.7 (170) | 3 (75) | 0.2 (3.3) | 10 | |
| ESC-6/A | - | 1.94 - 3.54 (49 - 90) | 1.85 - 3.70 (47 - 94) | 5.6 (142) | 4 (100) | 0.2 (3.8) | 10 | |
| ESC-7/A | - | 3.02 - 4.25 (77 - 108) | 2.95 - 4.50 (75 - 114) | 5.4 (137) | 4.8 (120) | 0.2 (3.8) | 10 | |

Dimension values provided are typical. Related test report: EDR-5161

te.com/energy

© 2014 TE Connectivity Ltd. family of companies. All Rights Reserved. E564 10/2014

Raychem, TE Connectivity and TE connectivity (logo) are trademarks. Other logos, product and/or company names might be trademarks of their respective owners. While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Concut IT for the latet dimperious and dering experience processing. without notice. Consult TE for the latest dimensions and design specifications.

FOR MORE INFORMATION: TE Technical Support Centers

| USA: |
|-------------------|
| France: |
| UK: |
| Germany: |
| Spain: |
| Benelux: |
| Canada: |
| Mexico: |
| Latin/S. America: |
| China: |

| +1800 327 6996 |
|-----------------------|
| + 33 380 583 200 |
| + 44 0870 870 7500 |
| + 49 896 089 903 |
| + 34 916 630 400 |
| + 32 16 351 731 |
| +1(905)475-6222 |
| + 52 (0) 55-1106-0800 |
| + 54 (0) 11-4733-2200 |
| |





MEDIUM WALL TUBING (MWTM) SEALANT-COATED OR UNCOATED, 600V

KEY FEATURES

- Unlimited shelf life
- 3:1 shrink ratio

TE Connectivity's (TE) Raychem sealant-coated MWTM tubing (-S designation) can be used as an insulation jacket repair up to 600V. The MWTM tubing can also be used for general sealing and rejacketing of polymeric or elastomeric insulated cables up to 35kV.

TE's MWTM tubing has a 3:1 shrink ratio and an unlimited shelf life when stored under normal conditions.







RUS accepted as jacket restoration of JCN Cable. Uncoated MWTM tubing(-U or -A/U) is for cable rejacketing only.

| PRODUCT SELECTION INFORMATION: DIMENSIONS IN INCHES (mm) | | | | | | | | |
|--|-------------------------------|----------------------|-----------------------|----------------------------|--------------------------|-------------------------|--|--|
| Description | Cable Use Range (min max.) | Min. Cont. Length | Cut - Piece Length | Standard Pack (per box) | Standard Pack (spool) | Standard Pack (bulk) | | |
| Sealant-Coated, Cut Length Tubing | | | | | | | | |
| MWTM-10/3-1200-S | 0.13 - 0.35 (3 - 9) | - | 48 (1200) | 25 | - | - | | |
| MWTM-16/5-1200-S | 0.25 - 0.55 (6 - 14) | - | 48 (1200) | 25 | - | - | | |
| MWTM-25/8-1200-S | 0.35 - 0.85 (9 - 22) | - | 48 (1200) | 25 | - | - | | |
| MWTM-35/12-1200-S | 0.50 - 1.25 (13 - 32) | - | 48 (1200) | 25 | - | - | | |
| MWTM-50/16-1200-S | 0.65 - 1.70 (17 - 43) | - | 48 (1200) | 15 | - | - | | |
| MWTM-85/25-1200-S | 1.00 - 2.90 (25 - 74) | - | 48 (1200) | 5 | - | - | | |
| MWTM-115/34-1200-S | 1.40 - 3.90 (36 - 99) | - | 48 (1200) | 5 | - | - | | |
| MWTM-140/42-1200-S | 1.80 - 4.70 (46 - 119) | - | 48 (1200) | 5 | - | - | | |
| Uncoated, Spooled Tubing | 1 | | | | | | | |
| MWTM-10/3-A/U | 0.13 - 0.35 (3-9) | 25 (7.6) | - | - | 100 (30) | | | |
| MWTM-16/5-A/U | 0.25 - 0.55 (6 - 14) | 25 (7.6) | - | - | 100 (30) | 1155 (350) | | |
| MWTM-25/8-A/U | 0.35 - 0.85 (9 - 22) | 27 (7.6) | - | - | 100 (30) | 660 (200) | | |
| MWTM-35/12-A/U | 0.50 - 1.25 (13 - 32) | 28 (7.6) | - | - | 100 (30) | 495 (150) | | |
| MWTM-50/16-A/U | 0.65 - 1.70 (17 - 43) | 15(4.6) | - | - | 75(23) | 330 (100) | | |
| Uncoated, Spooled Tubing | | | | | | | | |
| MWTM-85/25-1500/U | 1.00 - 2.90 (25 - 74) | 60 (1500) | - | 5 | - | - | | |
| MWTM-115/34-1500/U | 1.40 - 3.90 (36 - 99) | 60 (1500) | - | 5 | - | - | | |
| MWTM-140/42-1500/U | 1.80 - 4.70 (46 - 119) | 60 (1500) | _ | 5 | - | _ | | |

*Dimension values provided are typical.

TECHNICAL REPORT

Standard test reports: EDR-5167

te.com/energy

© 2014 TE Connectivity Ltd. family of companies. All Rights Reserved. E558 10/2014

MWTM, Raychem, TE Connectivity and TE connectivity (logo) are trademarks. Other logos, product and/or company names might be trademarks of their respective owners. While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties or merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

FOR MORE INFORMATION: TE Technical Support Centers

| USA: | + |
|-------------------|-----|
| France: | + |
| UK: | + |
| Germany: | + |
| Spain: | + |
| Benelux: | + |
| Canada: | + |
| Mexico: | + |
| Latin/S. America: | + |
| China: | + 3 |

+ 1 800 327 6996 + 33 380 583 200 + 44 0870 870 7500 + 49 896 089 903 + 34 916 630 400 + 32 16 351 731 + 1 (905) 475-6222 + 52 (0) 55-1106-0800 + 54 (0) 11-4733-2200





RAYVOLVE RVS SPLICE COVERS "ROLL-ON" SPLICES FOR 1/C POWER CABLE (1000V)

KEY FEATURES

- Easy connection
- Water resistant seal
- Fast installation
- UL listed and CSA certified

TE Connectivity's (TE) Raychem RVS splice cover kits are the easy "rollon" way to insulate and seal cable connections up to 1000 V.

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 cable can also be energized immediately and is ideal to be used where gas or electric heating devices are not approved.

The elastomeric sleeve rolls onto the cable with minimal effort, even at temperatures below -15°F (-25°C).







Bulk options are also available. Consult your TE Connectivity representative. Each kit contains one Rayvolve RVS splice cover sleeve and sealant strips. Kit does not contain connectors.

| PRODUCT SELECTION INFORMATION: DIMENSIONS IN INCHES (mm) | | | | | | | |
|--|-------------------------------|------------------------|---------------|-------------------------|--|--|--|
| Description | Conductor Size (AWG/kcmil) | Cable OD (min max.) | Sleeve Length | Max Collector Length | | | |
| RVS-11 | #8 - 2/0 | 0.22 - 0.68 (6 - 17) | 8.0 (205) | 5.00 (127) | | | |
| RVS-12 | 1/0 - 250 | 0.50 - 0.90 (13 - 23) | 9.5(241) | 4.50 (114) | | | |
| RVS-13 | 250 - 600 | 0.70 - 1.20 (18 -30) | 12.0 (305) | 7.00 (178) | | | |
| RVS-13 | 600 - 1000 | 0.95 - 1.50 (24 - 38) | 14.0 (356) | 9.00 (229) | | | |

*Dimension values provided are typical.

TEST REPORT

Standard test reports: EDR-5167

te.com/energy

©2014 TE Connectivity Ltd. family of companies. All Rights Reserved. E556 10/2014

Rayvolve, Raychem, TE Connectivity and TE connectivity (logo) are trademarks. Other logos, product and/or company names might be trademarks of their respective owners. While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties or merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

FOR MORE INFORMATION: TE Technical Support Centers

| USA: | |
|-------------------|--|
| France: | |
| UK: | |
| Germany: | |
| Spain: | |
| Benelux: | |
| Canada: | |
| Mexico: | |
| Latin/S. America: | |
| China: | |

| +1800 327 6996 |
|-----------------------|
| + 33 380 583 200 |
| + 44 0870 870 7500 |
| + 49 896 089 903 |
| + 34 916 630 400 |
| + 32 16 351 731 |
| +1(905)475-6222 |
| + 52 (0) 55-1106-0800 |
| + 54 (0) 11-4733-2200 |





RAYCHEM GEL IN-LINE SPLICE KIT (GILS) 1000V

KEY FEATURES

- PowerGel sealant filled splice
- Fast and simple to install
- PowerGel sealant easily peels away leaving a clean connection
- For use on aluminum or copper cables
- Meets requirements of ANSI C119.1

TE Connectivity's (TE) Raychem GILS gel in-line splice kit offers a state-of-the-art sealed splice for both underground, buried and overhead applications. With its revolutionary PowerGel sealing gel, it covers and seals the splice quickly and easily, saving both time and effort. PowerGel sealant is rated to 95°C.

The kit's range-taking mechanical connector splices aluminum and copper cables. Since everything is included in one convenient kit (even the connectors) you will not get caught without all the right equipment.

Closing the rugged GILS closure is literally a snap. Small housings allow for installation in cramped locations. The GILS-4/O splice closure is 4.25" long, while the GILS-350 is 7.1" long.

The GILS closure is simple to re-enter because the PowerGel sealant pulls away leaving a clean connection. The only tools required to deploy the GILS closure in the field are a 5/16" Allen wrench or a torque wrench and a knife.







Product Selection Information

| Kit Description | Use Range | Recommended Torque |
|-----------------|--|-----------------------|
| GILS 4/0 | #2 - 4/0 AWG (33 - 107 mm ²) | 225 in-lb. (25.4 N•m) |
| GILS 350 | 1/0 - 350kcmil (50 - 150 mm²) | 225 in-lb. (25.4 N•m) |

Meets requirements of ANSI C119.1

Related Product Information: EDR-5298 GILS-4/0 EDR-5394 GILS-350

| Installed Dimensions | | | | | | |
|----------------------|--------------------|-------------------|--------------------|--|--|--|
| Kit Description | Length inches (mm) | Width inches (mm) | Height inches (mm) | | | |
| GILS-4/0 | 4.25 (108) | 2 (51) | 1.1 (30) | | | |
| GILS-350 | 7.1 (180) | 2.75 (71) | 1.57 (40) | | | |



1. Remove insulation equivalent to half the connector length.



- 2. a. Insert conductors into connector. b. Using 5/16" Allen wrench, tighten set screws.
 - c. Torque screws
 - to 225 in-lb (25.4 Nm)
 - d. Flex cable. e. Torque again.
- - 3. Center connector over GILS gel cover.

Frangible fingers provide wide cable range.



4. Snap shut both locks. Use pliers, if needed, to close.

Molded cover of UV stable, impact resistant polypropylene provides rugged protection for underground or overhead applications



5. Completed splice.

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

I

Range-taking mechanical connector made of aluminum. Accepts both copper and aluminum conductors.

Snap-lock ensures that cover remains closed.

FOR MORE INFORMATION: TE Technical Support Centers

te.com/energy

©2005, 2009, 2012, 2014, 2015 TE Connectivity Ltd. family of companies. All Rights Reserved. 1308378 E105 6/15

Raychem, TE, TE Connectivity and TE connectivity (logo) are trademarks. Other logos, product and/or company names might be trademarks of their respective owners. While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Concut TE for the latet dimoncing and doing no gooffications. without notice. Consult TE for the latest dimensions and design specifications.

| USA: | +1 (800) 327-6996 |
|-------------------|----------------------|
| Canada: | +1 (905) 475-6222 |
| Mexico: | +52 (0) 55-1106-0800 |
| Latin/S. America: | +54 (0) 11-4733-2200 |
| UK: | +44 (0) 800-267666 |
| France: | +33 (0) 1-3420-8686 |
| Netherlands: | +31 (0) 73-6246-999 |
| China: | +86 (0) 400-820-6015 |
| | |





RAYCHEM GELPORT (GPRT) SUBMERSIBLE SECONDARY CONNECTORS FOR URD DISTRIBUTION (1000 V)

KEY FEATURES

- Corrosion resistant
- No loose parts due to one piece housing
- PowerGel-filled cable entry ports provide reliable cable seal
- Rugged, impact-resistant housing stands up to rough installations
- Clear view back allows for easy positive visual indication of wire position in connector

TE Connectivity (TE) GelPort connection system represents a revolutionary product for secondary connectors. Strip the cable and push it into the gel-filled cable port. The cable is encapsulated in gel and instantly sealed. Fast, reliable installation - every time. It's that simple.

PowerGel sealing gel was specifically developed for the electrical power industry. It consists of a chemically cross-linked silicone elastomer with silicone oil. PowerGel sealing gel is hydrophobic and provides an excellent moisture seal over a wide operating temperature range (-40° C to 95° C). It is compatible with solid dielectric cable insulation and connector deoxidizing greases and has excellent insulation properties.



Hybrid 350/500 MCM







PRODUCT SELECTION INFORMATION

| 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-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

Clear Back

Hinged Cap







Gel-Filled Ports

Submersible Performance



| TESTING | TEST CONDITION |
|---------------------|---|
| Complete unit | ANSI C119.1, 2002, Report: EDR-5379, EDR-5409, EDR-5427 |
| Connector | ANSI C119.4, 2003, Report: 502-47264, 502-47302, 502-47308 |
| Chemical Resistance | ASTM D543 to the following liquids: Sulfuric Acid, Sodium Sulfate, Sodium Chloride, Sodium Hydroxide, Ethylene Glycol |
| UV Resistance | ASTM G-53-95, ASTM-D-638-95 |

Proven tough hinge design Tin plated aluminum connector Qualified to ANSI C119.4 Gel sealed screw port cap Gel sealed cable Proven robust (T) entry port latch design Clear view back makes installation even easier Tough, puncture (optional) resistant, high impact strength PP body and cap

FOR MORE INFORMATION: TE Technical Support Centers

te.com/energy

©2005, 2007, 2008, 2015 TE Connectivity Ltd. family of companies. All Rights Reserved. 1654967 E213 6/15

GelPort, PowerGel, Raychem, TE, TE Connectivity and TE connectivity (logo) are trademarks. Other logos, product and/ or company names might be trademarks of their respective owners. While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or flutantees for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

| USA: | +1 (800) 327-6996 |
|-------------------|----------------------|
| Canada: | +1 (905) 475-6222 |
| Mexico: | +52 (0) 55-1106-0800 |
| Latin/S. America: | +54 (0) 11-4733-2200 |
| UK: | +44 (0) 800-267666 |
| France: | +33 (0) 1-3420-8686 |
| Netherlands: | +31 (0) 73-6246-999 |
| China: | +86 (0) 400-820-6015 |
| | |





WCSM THICK WALL TUBING HEAVY-WALL, SEALANT COATED TUBING (1000V)

KEY FEATURES

- 4:1 shrink ratio
- Flexible
- Flame retardant
- Unlimited shelf life

TE Connectivity's (TE) Raychem WCSM tubing can be used to seal an in-line splice or terminal lug seal for non-flame retardant applications, cable re-jacketing and mechanical protection.

The WCSM tubing is qualified to ANSI C119.1 and rated to Western Underground guide 2.5. It is 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 up to 35 kV. It also has a 4:1 shrink ratio and an unlimited shelf life when stored under normal conditions. Also, the WCSM tubing can be used on standard poly or elastomeric insulated or jacketed cable or lead-jacketed cables, which may include aluminum or steel armoring.







| PRODUCT SELECTIO | N INFORMATION: | DIMENSIO | NS IN INCHES (mm) |) | | |
|--------------------|--|----------------------------|--|---|---------------------------------|------------------------------------|
| Description | 1000V Cable Nominal Use Rage AWG/kcmil (min, max) | Maximum Connector OD | UL Conductor Use Range (min - max) | General Conductor Use Range (min - max) | Max Connector Opening "A" | Minimum Seal Length per Side |
| WCSM-12/3-150-S | #14, #6 | 0.29 | .1330 (3.5 - 7.7) | .1339 (3.5 - 10) | 2.4 | 1.5 |
| WCSM-12/3-300-S | #14, #6 | 0.29 | .1330 (3.5 - 7.7) | .1339 (3.5 - 10) | 7.8 | 1.5 |
| WCSM-12/3-1200-S | #14, #6 | 0.29 | .1330 (3.5 - 7.7) | .1339 (3.5 - 10) | 39.3 | 1.5 |
| WCSM-16/4-150-S | #8, #2 | 0.41 | .1741 (4.5 - 10.5) | .1755 (4.5 - 14) | 1.4 | 2 |
| WCSM-16/4-300-S | #8, #2 | 0.41 | .1741 (4.5 - 10.5) | .1755 (4.5 - 14) | 6.8 | 2 |
| WCSM-16/4-1200-S | #8, #2 | 0.41 | .1741 (4.5 - 10.5) | .1755 (4.5 - 14) | 38.3 | 2 |
| WCSM-24/6-150-S | #6, #4/0 | 0.69 | .2564 (6.5 - 16.5) | .2586 (6.5 - 22) | 1.4 | 2 |
| WCSM-24/6-225-S | #6, #4/0 | 0.69 | .2564 (6.5 - 16.5) | .2586 (6.5 - 22) | 3.96 | 2 |
| WCSM-24/6-300-S | #6, #4/0 | 0.69 | .2564 (6.5 - 16.5) | .2586 (6.5 - 22) | 6.8 | 2 |
| WCSM-24/6-1200-S | #6, #4/0 | 0.69 | .2564 (6.5 - 16.5) | .2586 (6.5 - 22) | 38.3 | 2 |
| WCSM-34/8-150-S | #2, 500 | 1.06 | .3594 (9 - 24) | .35 - 1.22 (9 - 31) | 1.4 | 2 |
| WCSM-34/8-200-S | #2, 500 | 1.06 | .3594 (9 - 24) | .35 - 1.22 (9 - 31) | 3.02 | 2 |
| WCSM-34/8-225-S | #2, 500 | 1.06 | .3594 (9 - 24) | .35 - 1.22 (9 - 31) | 3.96 | 2 |
| WCSM-34/8-300-S | #2, 500 | 1.06 | .3594 (9 - 24) | .35 - 1.22 (9 - 31) | 6.8 | 2 |
| WCSM-34/8-1200-S | #2, 500 | 1.06 | .3594 (9 - 24) | .35 - 1.22 (9 - 31) | 38.48 | 2 |
| WCSM-48/12-150-S | #2/0, 750 | 1.3 | .51 - 1.12 (13 - 28.5) | .51 - 1.73 (13 - 44) | 1.4 | 2 |
| WCSM-48/12-225-S | #2/0, 750 | 1.3 | .51 - 1.12 (13 - 28.5) | .51 - 1.73 (13 - 44) | 3.96 | 2 |
| WCSM-48/12-300-S | #2/0, 750 | 1.3 | .51 - 1.12 (13 - 28.5) | .51 - 1.73 (13 - 44) | 6.8 | 2 |
| WCSM-48/12-1200-S | #2/0, 750 | 1.3 | .51 - 1.12 (13 - 28.5) | .51 - 1.73 (13 - 44) | 38.3 | 2 |
| WCSM-56/16-225-S | 250, 1000 | 1.5 | .68 - 1.27 (17.5 - 32.5) | .70 - 1.96 (17.5 - 50) | 3.96 | 2 |
| WCSM-56/16-300-S | 250, 1000 | 1.5 | .68 - 1.27 (17.5 - 32.5) | .70 - 1.96 (17.5 - 50) | 6.62 | 2 |
| WCSM-56/16-1200-S | 250, 1000 | 1.5 | .68 - 1.27 (17.5 - 32.5) | .70 - 1.96 (17.5 - 50) | 38.3 | 2 |
| WCSM-70/20-300-S | 500, 1500 | 1.84 | .92 - 1.40 (22 - 35.8) | .86 - 2.48 (22 - 63) | 5.8 | 2.5 |
| WCSM-70/20-450-S | 500, 1500 | 1.84 | .92 - 1.40 (22 - 35.8) | .86 - 2.48 (22 - 63) | 10.93 | 2.5 |
| WCSM-70/20-600-S | 500, 1500 | 1.84 | .92 - 1.40 (22 - 35.8) | .86 - 2.48 (22 - 63) | 16.26 | 2.5 |
| WCSM-70/20-1200-S | 500, 1500 | 1.84 | .92 - 1.40 (22 - 35.8) | .86 - 2.48 (22 - 63) | 37.3 | 2.5 |
| WCSM-110/30-300-S | 1250, 2000 | - | - | 1.29 - 3.93 (33 - 100) | - | 2.5 |
| WCSM-110/30-1200-S | 1250, 2000 | - | - | 1.29 - 3.93 (33 - 100) | - | 2.5 |
| WCSM-130/35-300-S | 1500, 2500 | - | - | 1.49 - 4.64 (39 - 118) | - | 2.5 |
| WCSM-130/35-450-S | 1500, 2500 | - | - | 1.49 - 4.64 (39 - 118) | - | 2.5 |
| WCSM-130/35-1200-S | 1500, 2500 | - | - | 1.49 - 4.64 (39 - 118) | - | 2.5 |

*WCSM is no longer offered as an uncoated option.

te.com/energy

©2014 TE Connectivity Ltd. family of companies. All Rights Reserved. E560 10/2014

WCSM, Raychem, TE Connectivity and TE connectivity (logo) are trademarks. Other logos, product and/or company names might be trademarks of their respective owners. While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

FOR MORE INFORMATION: TE Technical Support Centers

| USA: | +1800 327 6996 |
|-------------------|-----------------------|
| France: | + 33 380 583 200 |
| UK: | + 44 0870 870 7500 |
| Germany: | + 49 896 089 903 |
| Spain: | + 34 916 630 400 |
| Benelux: | + 32 16 351 731 |
| Canada: | +1(905)475-6222 |
| Mexico: | + 52 (0) 55-1106-0800 |
| Latin/S. America: | + 54 (0) 11-4733-2200 |
| China: | + 86 (0) 400-820-6015 |

connectiv