



# RAYCHEM MEDIUM VOLTAGE TERMINATION (HVT)

5 kV - 35 kV

## KEY FEATURES

- Broad range of standard indoor and outdoor kits for all plastic cable types, including armored cable
- Easy installation with a single technique which eliminates retraining-even on armored cable
- HVT termination system may be installed upright or inverted and can bend to the same bending radius as the cable

TE Connectivity's (TE) Raychem HVT medium voltage termination system features a non-tracking, insulating surface that can withstand long-term electrical stress and surface pollution. The need for proven stress control is even more important at higher voltages. The materials used in TE's HVT terminations are suitable for severely polluted areas and for all installation conditions, including top feed installation.

## Reliable, field proven performance

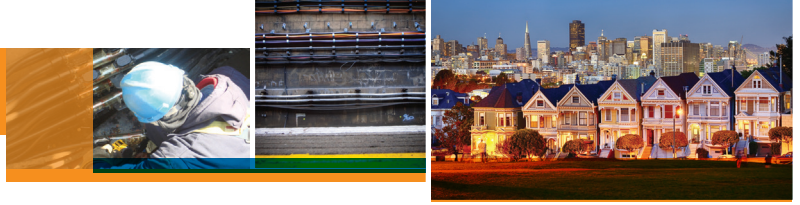
Independent testing and field experience have repeatedly proven the long-term stability, durability and reliability of the HVT system, even in highly polluted environments. The non-tracking, insulating outer jacket can withstand the rigors of long-term electrical stress and surface pollution without loss of performance. TE's non-tracking material offers the additional benefit of being maintenance free, with no need for periodic cleaning. Extensive load cycle testing verifies the long-term thermomechanical compatibility between the termination system and the cable.

## Testing

TE's medium-voltage terminations are fully qualified per IEEE-48 as Class I terminations to provide a long, trouble-free service life.

## Ease of installation

The HVT termination kits can be installed on all cable types without special adapters or accessories.

**SELECTION INFORMATION: DIMENSIONS IN INCHES (MILLIMETERS)**

Indoor	Outdoor Kit	Conductor Size (Min. – Max.)		Insulation Diameter (Min. – Max.)	Jacket O.D. (Max)
5/8 kV		5 kV (0.90")	8 kV (0.115")		
HVT-80-G	HVT-80-SG	#4 AWG – #1* AWG	#6 AWG – #2 AWG	0.35 – 0.60 (9 – 15)	0.95 (24)
HVT-81-G	HVT-81-SG	1/0 AWG – 250* kcmil	#1 AWG – 4/0 AWG	0.60 – 0.95 (15 – 24)	1.20 (30)
HVT-82-G	HVT-82-SG	300 kcmil – 500* kcmil	250 kcmil – 500 kcmil	0.80 – 1.25 (20 – 32)	1.50 (38)
HVT-83-G	HVT-83-SG	600 kcmil – 1750* kcmil	600 kcmil – 1750 kcmil	1.10 – 1.75 (28 – 44)	2.10 (53)
HVT-84-G	HVT-84-SG	1500 kcmil – 2500* kcmil	2000 kcmil – 2500 kcmil	1.60 – 2.45 (41 – 62)	2.75 (70)

Installed length: 10.5" (267mm)

Indoor	Outdoor Kit	Conductor Size (Min. – Max.)	Insulation Diameter (Min. – Max.)	Jacket O.D. (Max)
15 kV		15 kV (.175 – .220")		
HVT-151-G	HVT-151-SG	#4 AWG – 1/0 AWG	0.60–0.95 (15 – 24)	1.20 (30)
HVT-152-G	HVT-152-SG	2/0 AWG – 350 kcmil	0.80 – 1.25 (20 – 32)	1.50 (38)
HVT-153-G	HVT-153-SG	400 kcmil – 1000 kcmil	1.10 – 1.65 (28 – 42)	2.10 (53)
HVT-154-G	HVT-154-SG	1250 kcmil – 2500 kcmil	1.60 – 2.45 (41 – 62)	2.75 (70)

Installed Length 15.0" (381 mm)

Indoor	Outdoor Kit	Conductor Size (Min. – Max.)	Insulation Diameter (Min. – Max.)	Jacket O.D. (Max)
25 kV		25 kV (0.260")		
HVT-252-G	HVT-252-SG	#2 AWG – 250 kcmil	0.80 – 1.25 (20 – 32)	1.50 (38)
HVT-253-G	HVT-253-SG	300 kcmil – 750 kcmil	1.10 – 1.70 (28 – 43)	2.10 (53)
HVT-254-G	HVT-254-SG	1000 kcmil – 1750 kcmil	1.60 – 2.45 (41 – 62)	2.75 (70)
HVT-255-G	HVT-255-SG	2000 kcmil – 2500 kcmil	2.05 – 3.00 (52 – 76)	3.45 (88)

Installed Length 28.0" (711 mm)

Indoor	Outdoor Kit	Conductor Size (Min. – Max.)	Insulation Diameter (Min. – Max.)	Jacket O.D. (Max)
35 kV		35 kV (0.345")		
HVT-352-G	HVT-352-SG	#1 AWG – 1/0 AWG	0.80 – 1.25 (20 – 32)	1.50 (38)
HVT-353-G	HVT-353-SG	2/0 AWG – 500 kcmil	1.10 – 1.85 (28 – 47)	2.10 (53)
HVT-354-G	HVT-354-SG	750 kcmil – 1750 kcmil	1.60 – 2.45 (41 – 62)	2.75 (70)
HVT-355-G	HVT-355-SG	2000 kcmil – 2500 kcmil	2.05 – 3.00 (52 – 76)	3.45 (88)

Installed Length 33.0" (838 mm)

**TESTING CHART:**

Product and Voltage Class Test Description	HVT-80 Series (5 – 8 kV)	HVT-150 Series (15 kV)	HVT-250 Series (25 kV)	HVT-350 Series (35 kV)
AC Withstand, 1 minute, (kV)	35	50	65	90
DC Withstand, 15 minutes (kV)	65	75	105	140
Partial Discharge (min. kV) for 3 pc or less	9	15.6	25.8	36
Impulse withstand 1.2 X 50 us, crest kV (outdoor)**	95	110	150	200
Impulse withstand 1.2 X 50 us, crest kV (indoor)**	80	95	125	150
Continuous current rating	Equal to cable ampacity	Equal to cable ampacity	Equal to cable ampacity	Equal to cable ampacity
Wet withstand, 10 seconds, kV rms	30	45	60	80
Dry withstand, 6 hours, kV rms	25	35	55	75

**Note:**

- URD and LC kits are rated for 15 – 35 kV only; HVT-M kits for 5/8 – 25 kV only.
- HVT-250 meets requirements of 25/28 kV systems.
- Outdoor kits (-SJ, -SG, or -SLC designation) were tested with skirts (rain sheds). Indoor kits (-J, -G, -LC designation) do not contain skirts.

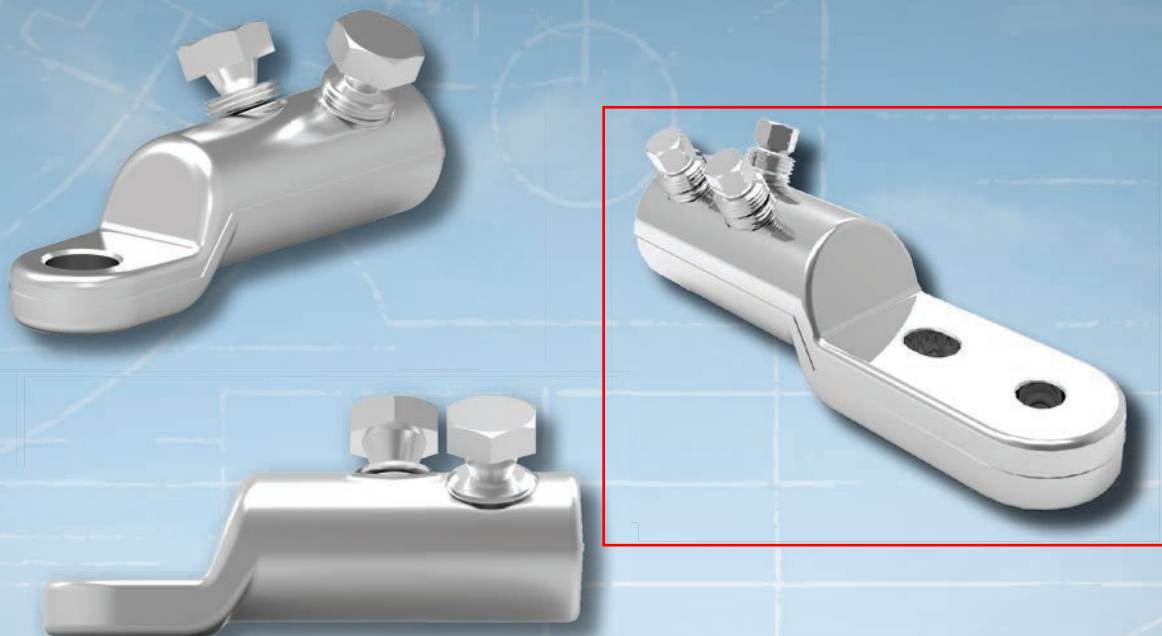
[te.com/energy](http://te.com/energy)

©2005, 2007, 2009-2013, 2015, 2016 TE Connectivity Ltd. family of companies. All Rights Reserved. EPP-2604-DDS-5/16-EN-AMS-HVT-Raychem E128

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. Consult TE for the latest dimensions and design specifications.

**FOR MORE INFORMATION:****TE Technical Support Centers**

USA:	+ 1 800 327 6996
France:	+ 33 380 583 200
UK:	+ 44 0870 870 7500
Germany:	+ 49 896 089 903
Spain:	+ 34 916 630 400
Italy:	+ 39 333 250 0915
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



## MECHANICAL LUGS (BLMT)

FOR LOW AND MEDIUM VOLTAGE CABLE ACCESORIES UP TO 42 kV

### KEY FEATURES

- Wide application range
- Compact design
- Can be used with almost every type of conductor and material
- Torque-controlled shear-head bolts guarantee a good electrical contact
- Easy installation with standard socket spanner
- Pre-engineered design for perfect fit in medium voltage cable accessories up to 42 kV
- Tested according to IEC 61238-1 class A

TE Connectivity's (TE) mechanical lugs are designed for use in low and medium voltage applications. Only three sizes cover conductor sizes from 25 mm<sup>2</sup> to 400 mm<sup>2</sup>. All products consist of a tin-plated body, shear-head bolts and inserts for small conductor sizes.

Made of special aluminium alloy, these contact bolts are double shear-head bolts with hexagon heads. The bolts are treated with a highly lubricating agent. Contact bolts are irremovable once their heads have been sheared off. The Lug body is made of a high-tensile, tin-plated aluminium alloy. The internal surface of the conductor holes are grooved.

Lugs are suitable for outdoor and indoor applications and are available with different palm hole sizes. The bolted fitting featured herein was developed specifically for use in medium voltage cable accessories up to 42 kV. They may also be used in the 1 kV range.

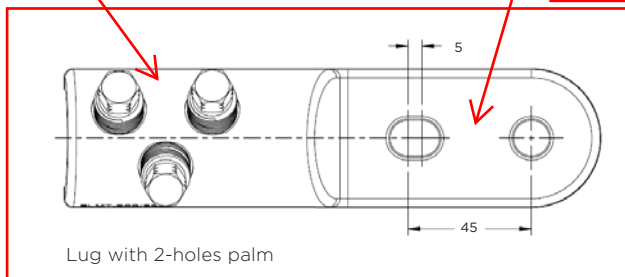
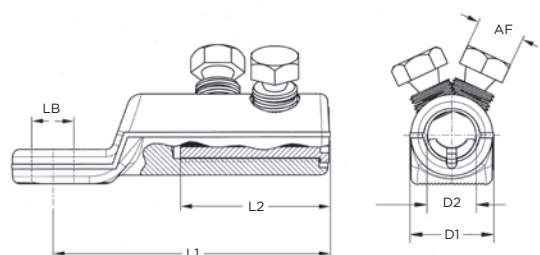
Before using mechanical lugs in cable accessories, confirm that they are suitable for the given application and if necessary consult the manufacturer.

Customers can count on consistent, high quality products, driven by TE's proven innovation and backed by our extraordinary customer support.

## Mechanical Lugs BLMT

三顆鎖斷螺絲

兩個電纜固定孔



PRODUCT SELECTION INFORMATION								
Description	Cross Sectional Range (mm <sup>2</sup> )	Palm Hole Diameter (mm)	Dimensions (mm)				Contact Bolts Quantity	Head Size AF (mm)
			L1	L2	D1	D2		
BLMT-25/95-13	25 - 95	13	60	30	24	12,8	1	13
BLMT-25/95-17	25 - 95	17	60	30	24	12,8	1	13
BLMT-35/150-13	35 - 150	13	86	35	28	15,8	1	17
BLMT-35/150-17	35 - 150	17	86	35	28	15,8	1	17
BLMT-95/240-13	95 - 240	13	112	60	33	20	2	19
BLMT-95/240-17	95 - 240	17	112	60	33	20	2	19
BLMT-120/300-13	120 - 300	13	115	65	37	24	2	22
BLMT-120/300-17	120 - 300	17	115	65	37	24	2	22
BLMT-150/400 mk2-13	150-400	13	122	80	42	25,5	3	13
BLMT-150/400 mk2-17	150-400	17	122	80	42	25,5	3	13
BLMT-150/400 mk2-21	150-400	21	122	80	42	25,5	3	13
BLMT-150/400 mk2-2x13	150-400	2x13	122	80	42	25,5	3	13
BLMT-500/630 mk2-13	500-630	13	125	70	50	33	3	13
BLMT-500/630 mk2-17	500-630	17	125	70	50	33	3	13
BLMT-500/630 mk2-21	500-630	21	125	70	50	33	3	13
BLMT-500/630 mk2-2x13	500-630	2x13	125	70	50	33	3	13
BLMT-800/1000-17	800-1000	17	153	85	60	40	4	13
BLMT-800/1000-21	800-1000	21	153	85	60	40	4	13
BLMT-800/1000-2x13	800-1000	2x13	153	85	60	40	4	13

[te.com/energy](https://te.com/energy)

©2016 TE Connectivity Ltd. family of companies. All Rights Reserved. EPP-2286-DDS-1/17-EN-BLMT

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:	+ 1 800 327 6996
Canada:	+ 1 (905) 475-6222
Mexico:	+ 52 (0) 55-1106-0800
Latin/S. America:	+ 54 (0) 11-4733-2200
France:	+ 33 380 583 200
UK:	+ 44 0870 870 7500
Germany:	+ 49 896 089 903
Spain:	+ 34 916 630 400
Italy:	+ 39 333 250 0915
Benelux:	+ 32 16 351 731
Russia:	+7 495-790 790 2-200
China:	+ 86 (0) 400-820-6015

ENERGY /// MECHANICAL LUGS BLMT

**Raychem**®

**TE**  
connectivity