



Electronics

## HVT-Z High Voltage Termination

The HVT-Z high voltage termination system features a new, co-extruded one-piece termination. The main termination component consists of the proven Raychem non-tracking tube together with a co-extruded stress control grading layer. This stress control layer is based on ceramic semi-conductor technology (ZnO) and provides superior discharge and impulse performance. When the tubing is shrunk down, the coating softens and sticks to irregular surfaces, providing moisture seals as well as electrical stress control.

### Reliable, field proven performance:

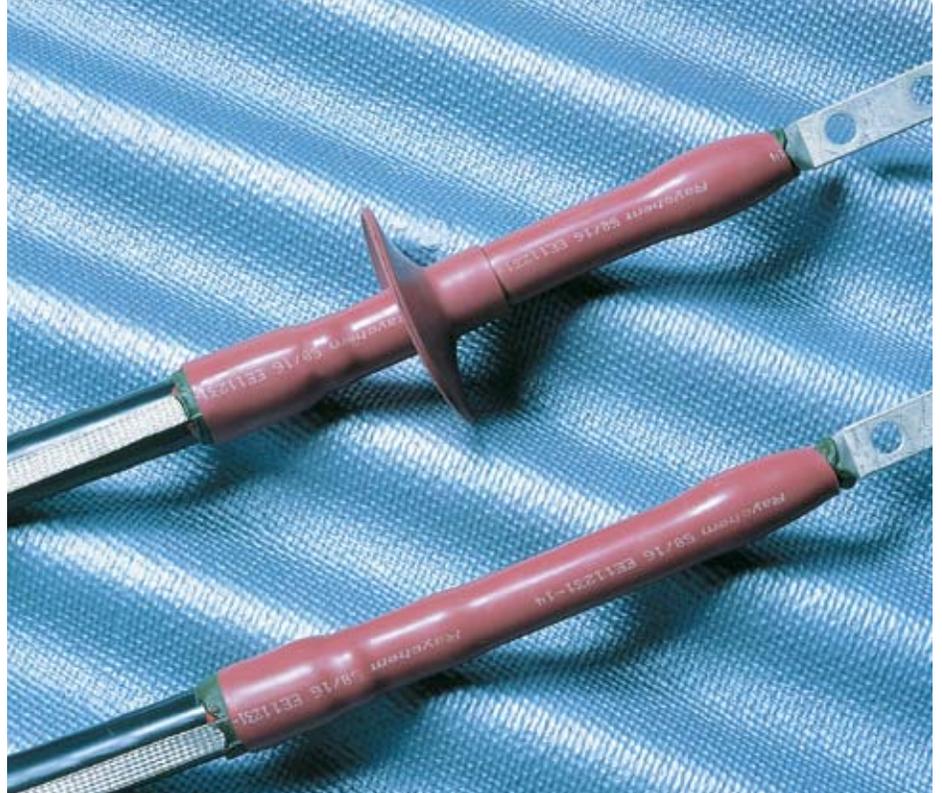
Independent testing and field experience have repeatedly proven the long-term stability, durability and reliability of Tyco Electronics' HVT system, even in highly polluted environments. The non-tracking, insulating outer jacket can withstand the rigors of long-term electrical stress and surface pollution without loss of performance. The 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 thermo-mechanical compatibility between the termination system and the cable. This long-term HVT experience, together with the co-extruded ZnO stress control system, provides the new, superior HVT-Z termination.

### Flexible and versatile:

An HVT-Z termination system may be installed upright or inverted and can bend to the same bending radius as the cable. Slim and lightweight, the system can also be mounted directly to fuse cutouts or other devices, eliminating the cost of additional supporting brackets.

### Testing:

Tyco Electronics' high-voltage terminations are fully qualified per IEEE-48 as Class I terminations to provide a long, trouble-free service life. Independent testing and field experience have repeatedly proven the long-term durability, reliability, and stability of the HVT-Z termination system.



**Catalog Number**

Indoor / Outdoor 5/8 kV	Conductor size min. / max.		Insulation diameter min. / max.	Jacket diameter maximum
	5 kV (0.90")	5/8 kV (0.115")		
HVT-Z-80-G/SG	#4 - #1 AWG	#6 - #2 AWG	0.35 - 0.60 (9-15)	0.95 (24)
HVT-Z-81-G/SG	1/0 AWG - 250 kcmil	#1 - 4/0 AWG	0.60 - 0.95 (15-24)	1.20 (30)
HVT-Z-82-G/SG	300 - 500 kcmil	250 - 500 kcmil	0.80 - 1.25 (20-32)	1.50 (38)
HVT-Z-83-G/SG	600 - 1750 kcmil	600 - 1750 kcmil	1.10 - 1.75 (28-44)	2.10 (53)
HVT-Z-84-G/SG	1500 - 3500 kcmil	1500 - 2500 kcmil	1.60 - 2.45 (41-62)	2.75 (70)
Installed Length 11.5 (290)	Can be cut shorter for use with MCK kits		No Skirts for Outdoor Operation	

Indoor 15 kV	Outdoor	15 kV (.175 - .220")		
HVT-Z-151-G	HVT-Z-151-SG	#4 - 1/0 AWG	0.60 - 0.95 (15-24)	1.20 (30)
HVT-Z-152-G	HVT-Z-152-SG	2/0 AWG - 350 kcmil	0.80 - 1.25 (20-32)	1.50 (38)
HVT-Z-153-G	HVT-Z-153-SG	400 - 1000 kcmil	1.10 - 1.75 (28-44)	2.10 (53)
HVT-Z-154-G	HVT-Z-154-SG	1250 - 2500 kcmil	1.60 - 2.45 (41-62)	2.75 (70)
Installed Length 11.5 (290)	1 Skirt for Outdoor Operation			

Indoor 25 kV/ 35 kV	Outdoor	25 kV (0.260")	35 kV (0.345")		
HVT-Z-252/352-G	HVT-Z-252/352-SG	#2 AWG - 250 kcmil	#1 - 1/0 AWG	0.80 - 1.25 (20-32)	1.50 (38)
HVT-Z-253/353-G	HVT-Z-253/353-SG	300 - 750 kcmil	2/0 AWG - 500 kcmil	1.10 - 1.75 (28-44)	2.10 (53)
HVT-Z-254/354-G	HVT-Z-254/354-SG	1000 - 2000 kcmil	750 - 1750 kcmil	1.60 - 2.45 (41-62)	2.75 (70)
Installed Length 19.0 (480)	4 Skirts for Outdoor Operation				

**Testing Chart:**

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

Indoor Kits (-G) do not contain skirts.

Outdoor 15 kV and higher voltage kits contain skirts.

**Test Reports:**

	Indoor	Outdoor	Related Installation Instructions:
5/8/15 kV	EDR-5322	EDR-5323-A	HVT-Z-80-G/SG
25/28/35 Kv	EDR-5337	EDR-5338	HVT-Z-150-G (SG) HVT-Z-250/250-G (SG)



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All of the above information, including drawings, illustrations and graphic designs, reflects our present understanding and is to the best of our knowledge and belief correct and reliable. Users, however, should independently evaluate the suitability of each product for the desired application. Under no circumstances does this constitute an assurance of any particular quality or performance. Such an assurance is only provided in the context of our product specifications or explicit contractual arrangements. Our liability for these products is set forth in our standard terms and conditions of sale.

**Energy Products – a pioneer in the development of economical solutions for the electrical power industry. Our product range includes: Cable accessories, connectors & fittings, electrical equipment, instruments, lighting controls, insulators & insulation enhancement and surge arresters.**

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