

Medium Voltage Heat-Shrink Terminations



HVT-Z Terminations with Built-In Stress Control

The NEWLY designed HVT-Z high voltage termination system features a co-extruded one-piece termination. Unlike the HVT product line, which includes a non-tracking tube and a separate stress control tube, the HVT-Z termination consists of the same proven non-tracking tube together with a co-extruded, built-in stress control grading layer. This stress control layer is based on ceramic semiconductor 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. The termination design provides a superior product with a shorter overall length and fewer rain sheds than the HVT product line.

Selection Information: dimensions in inches (millimeters)

Catalog Number		Conductor Size (Min.-Max.)	Insulation Diameter (Min.-Max.)	Jacket O.D. (Max)
Indoor	Outdoor	5 kV (0.90)	5/8 kV (.0115)	(5 kV 133%)
8 kV				
HVT-Z-80-G/SG		#4-#1AWG	#6-#2 AWG	0.35-0.60 (9-15)
HVT-Z-81-G/SG		1/0-250 kcmil	#1-4/0 AWG	0.60-0.95 (15-24)
HVT-Z-82-G/SG		300-500 kcmil	250-500 kcmil	0.80-1.25 (20-32)
HVT-Z-83-G/SG		600-1750 kcmil	600-1750 kcmil	1.10-1.75 (28-44)
HVT-Z-84-G/SG		1500-2500 kcmil	2000-2500 kcmil	1.60-2.45 (41-62)
<i>Installed Length 11.8 (300)</i>		<i>Can be cut shorter for use with MCK-5 kits</i>		<i>No Skirts for Outdoor Operation</i>
15 kV		15 kV (1.75-220)		
HVT-Z-151-G	HVT-Z-151-SG		#4-1/0 AWG	0.60-0.95 (15-24)
HVT-Z-152-G	HVT-Z-152-SG		2/0-350 kcmil	0.80-1.25 (20-32)
HVT-Z-153-G	HVT-Z-153-SG		400-1000 kcmil	1.10-1.65 (28-42)
HVT-Z-154-G	HVT-Z-154-SG		1250-2500 kcmil	1.60-2.45 (41-62)
<i>Installed Length 11.8 (300)</i>		<i>1 Skirt for Outdoor Operation</i>		
25 kV/35 kV		25 kV (0.260)	35 kV (0.345)	
HVT-Z-252/352-G	HVT-Z-252/352-SG	#2AWG -250 kcmil	#1-1/0 AWG	0.80-1.25 (20-32)
HVT-Z-253/353-G	HVT-Z-253/353-SG	300-750 kcmil	2 AWG-500 kcmil	1.10-1.75 (28-44)
HVT-Z-254/354-G	HVT-Z-254/354-SG	1000-2000 kcmil	750-1750 kcmil	1.60-2.45 (41-62)
<i>Installed length: 19.7 (500)</i>		<i>4 Skirts for Outdoor Operation</i>		

Product Performance

Testing Chart

Product and voltage class 1 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	40
Partial discharge (min. kV) for 5 pC or less	9	13	30
Impulse withstand 1.2 x 50 μ s, crest kV	95	110	200

Continuous Current Rating

	Equal to Cable Ampacity		
Wet withstand, 10 seconds, kV rms	30	45	80
Dry withstand, 6 hours, kV rms	25	35	75

1. HVT-Z-250 meets requirements of 25/28 kV systems.

2. Outdoor kits (-SG designation) were tested with skirts (rain sheds). Indoor kits (-G designation) do not contain skirts.

Test Reports

	Indoor	Outdoor
5/8/15 kV	EDR-5322	EDR-5323
25/28/35 kV	EDR-5337	EDR-5338

Note: HVT-Z termination kits can be supplied with 2 hole NEMA copper terminal lugs for all sizes of conductors from #4 AWG through 1000 kcmil by adding the suffix "conductor size C" to the end of the catalog number. Ex. 500 kcmil conductor supplied with an indoor 15kV HVT-Z kit is catalog number HVT-Z-153-G-500C.

NOTE: If Legacy HVT Product is required please contact your local Tyco Electronics sales representative.