



WV and EET V-9 white PVC Labels

Technical Datasheet

TTDS-207 Revision 2 - April 2019

WV and EET V-9 are thermal transfer printable, flexible, white PVC labels with a permanent acrylic adhesive, ideal for rounded, irregular or bendable surfaces. They are also suitable for wire and cable identifications in flag mode, as shown in TE Connectivity Self-Laminating Flag Labelling User Guide 411-121050.

WV and EET V-9 PVC labels are designed to withstand oil, mild cleaning agents, water and climatic influences. The labels can be used for rack, panel and rating plate applications as well. Print performance and durability can only be guaranteed when printed using TE Connectivity printers, ribbons and software, as shown in TE Connectivity Identification Printer Product Ribbon Matrix 411-121005.

WV and EET V9 PVC labels are available as part of a complete identification system. The system comprises specific printers, thermal transfer ribbons and WINTOTAL and Print Easy software.

WV AND EET V-9 WHITE PVC LABELS

Features

- Thermal transfer printable
- Permanent acrylic adhesive
- Flexible Identification on irregular surfaces
- Good adhesion to low energy surfaces (e.g. Polypropylene)

Applications

- Excellent conformability to round, irregular or flexible surfaces
- Electronic component labeling
- Industrial and Commercial applications
- Aerospace and Defence applications

Temperature Rating

- Service Temperature
-40°C to +110°C (-40°F to +230°F)
- Min. Application Temperature: 0°C (32°F)

Design for Environment

- Does not contain any declarable or prohibited substances from the UNIFE Railway Industry Substances List
- Further information and a downloadable declaration covering RoHS and REACH compliance can be found at the TE Product Compliance Support Centre:

<http://www.te.com/usa-en/utilities/product-compliance.html>

Specifications / Approvals

Industry

UL MH17292 - PGJ12 / PGJ18 certification pending

UL MH61871 - PGIS2 certification pending

Shelf Life

2 years when following good commercial storage practice detailed below

Storage

Product should be stored in the original packaging, with any plastic covers which were included during shipping. Store out of direct sunlight in a clean, dry, dust free, environment. Product should not be stored outside of the designed storage temperature, which is 20 to 25 °C (68°F to 77°F), 40 to 50 % RH.

Typical Label Thickness

- Label (including adhesive): 0.104 mm / 0.0041 inch
- Liner: 0.058 mm / 0.0023 inch



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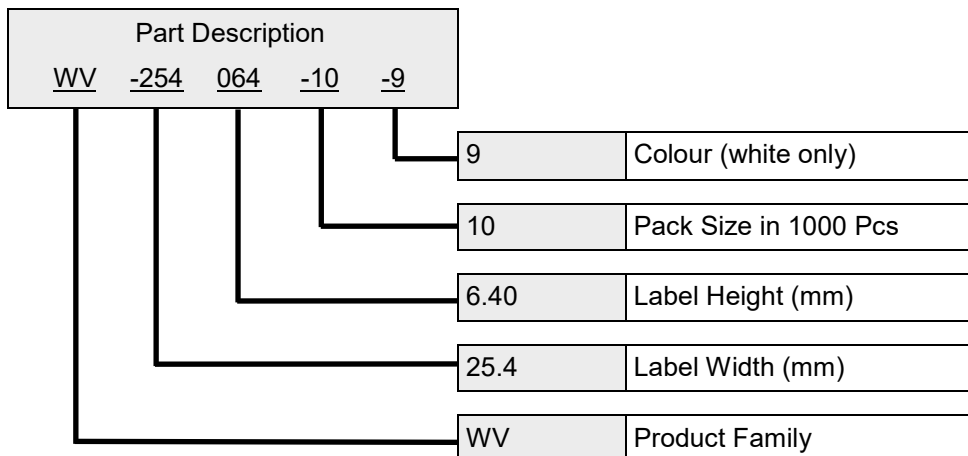
Technical Performance

	Requirement	Results	
Print Permanence			
Marking of Electrical Insulating Materials, SAE AS 5942	Legible after 50 rubs, 1kg weight with an eraser	Pass	
Resistance to Solvents, MIL STD 202G Method 215K	Legible after 30 wipes	Pass	
Fluid Exposure		Adhesive	Printed legend
• IPA Isopropyl Alcohol	Labels to remain legible / SAE AS 5942 (TE doc 109-121012)	Pass	Pass
• IRM 902		Pass	Pass
• MIL PRF 23699	24 hours immersion at 23°C followed by 20 rubs with cloth, minimum print contrast 3*, legible	Pass	Pass
• MIL-H-83282		Pass	Pass
• Diesel Fuel	*Print contrast as defined in TE doc. 411-121002	Pass	Pass
• Kilfrost DF plus		Pass	Pass
• Tap water		Pass	Pass
• 5% Salt solution		Pass	Pass
• Detergent (1% solution)		Pass	Pass
Adhesion to FTM1 (180°)		Typical Peel force (N/25mm (oz/in.))	
Test surface:	FTM1 (180°)	20min Dwell	72hr Dwell
• Stainless steel		11 (40.2)	12 (42.4)
• Glass		15 (54.0)	20 (72.9)
• Aluminium		12 (42.4)	15 (54.0)
• Polypropylene		8 (31.2)	10 (37.8)
• Epoxy painted surface		12 (42.4)	34 (124.2)
Flammability			
Average burn time, ASTM D1000	Burn time less than 10 seconds.	Pass, typical burn time 5 seconds	
Burn rate FMVSS 302	Maximum burn rate 102 mm/min.	Pass	
Weatherability			
Artificial weathering to ASTM D154	Labels to remain legible after 720hr, UV-A and UV-B	Pass, samples remain legible	

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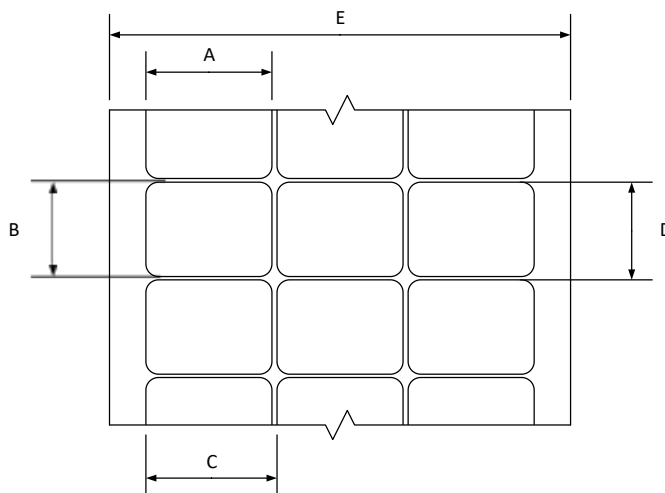
Where possible, TE have tested product as a finished item, including the print. Operational tests are followed by an assessment of mark adherence to validate fit, form and function.





Specify product name, Label width (mm), Label height (mm), Pack size, Colour (only available in white)

Ordering Information - WV

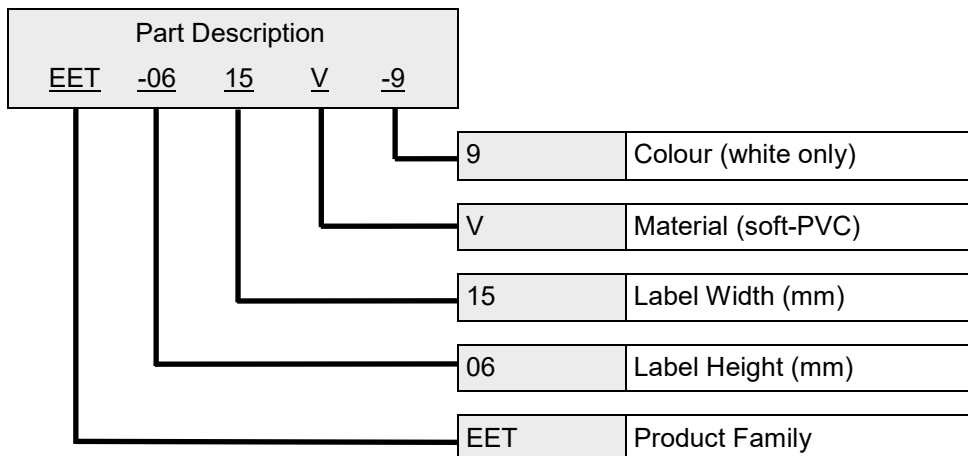


Ordering Description	Quantity per Roll	Labels Across	Label Width A (mm) (inches)	Label Height B (mm) (inches)	Horizontal Repeat C (mm) (inches)	Vertical Repeat D (mm) (inches)	Web Width E (mm) (inches)
WV-089047-10-9	10,000	5	8.90 0.350	4.70 0.185	11.40 0.450	7.90 0.313	60.6 2.386
WV-165051-25-9	25,000	4	16.50 0.650	5.10 0.200	17.80 0.700	8.30 0.325	75.8 2.990
WV-165102-10-9	10,000	5	16.50 0.650	10.20 0.400	19.10 0.750	13.80 0.545	99.1 3.900
WV-178095-10-9	10,000	4	17.80 0.700	9.50 0.374	19.10 0.750	12.70 0.500	80.9 3.190
WV-229064-10-9	10,000	3	22.90 0.900	6.40 0.250	28.60 1.125	9.50 0.374	86.0 3.390
WV-254064-10-9	10,000	3	25.40 1.000	6.40 0.250	27.90 1.100	9.50 0.374	87.3 3.436
WV-254097-10-9	10,000	3	25.40 1.000	9.70 0.380	27.90 1.100	12.70 0.500	87.4 3.440
WV-254127-10-9	10,000	3	25.40 1.000	12.70 0.500	27.90 1.100	16.90 0.666	87.4 3.440
WV-254254-10-9	10,000	3	25.40 1.000	25.40 1.000	27.90 1.100	28.60 1.125	87.4 3.440
WV-318064-10-9	10,000	1	31.80 1.250	6.40 0.250	N/A N/A	9.50 0.374	37.9 1.490

Ordering Information

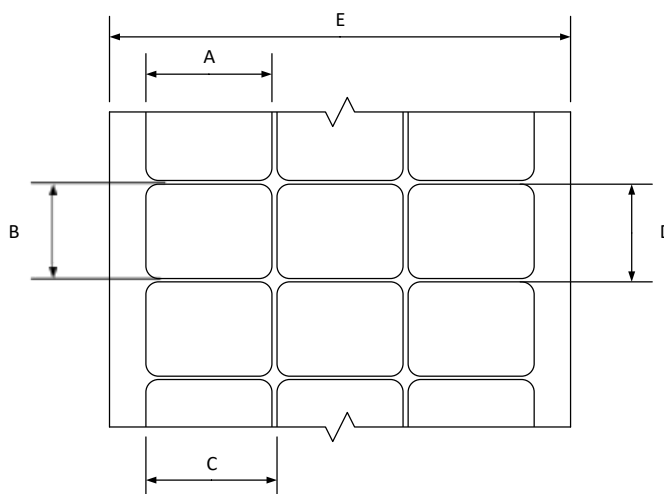
Ordering Description	Quantity per Roll	Labels Across	Label Width A (mm) (inches)	Label Height B (mm) (inches)	Horizontal Repeat C (mm) (inches)	Vertical Repeat D (mm) (inches)	Web Width E (mm) (inches)
WV-381064-10-9	10,000	1	38.10 1.500	6.40 0.250	N/A N/A	9.50 0.374	44.5 1.750
WV-381127-5-9	5,000	2	38.10 1.500	12.70 0.500	44.20 1.738	15.90 0.625	88.2 3.472
WV-381191-5-9	5,000	2	38.10 1.500	19.10 0.750	43.20 1.700	22.20 0.875	87.6 3.450
WV-445102-5-9	5,000	1	44.50 1.750	10.20 0.400	N/A N/A	12.70 0.500	50.4 1.986
WV-445445-2-9	2,000	1	44.50 1.750	44.50 1.750	N/A N/A	47.60 1.875	50.4 1.986
WV-508095-5-9	5,000	1	50.80 2.000	9.50 0.374	N/A N/A	12.70 0.500	57.2 2.250
WV-508127-5-9	5,000	1	50.80 2.200	12.70 0.500	N/A N/A	15.90 0.625	56.9 2.240
WV-508254-5-9	5,000	1	50.80 2.200	25.40 1.000	N/A N/A	28.60 1.125	57.2 2.250
WV-610419-2.5-9	2,500	1	61.00 2.400	41.90 1.650	N/A N/A	45.50 1.792	67.3 2.650
WV-699191-5-9	5,000	1	69.90 2.750	19.10 0.750	N/A N/A	23.30 0.917	76.2 3.000
WV-699254-5-9	5,000	1	69.90 2.750	25.40 1.000	N/A N/A	28.60 1.125	76.2 3.000
WV-762381-2.5-9	2,500	1	76.20 3.000	38.10 1.500	N/A N/A	41.30 1.625	82.3 3.240
WV-762508-2.5-9	2,500	1	76.20 3.000	50.80 2.000	N/A N/A	54.00 2.125	82.6 3.240
WV-101508-2.5-9	2,500	1	101.60 4.000	50.80 2.000	N/A N/A	54.60 2.150	104.1 4.100
WV-101635-2.5-9	2,500	1	101.60 4.000	63.50 2.500	N/A N/A	66.70 2.625	107.7 4.240





Specify product name, Label Height (mm), Label Width (mm), Material, Colour (only available in white)

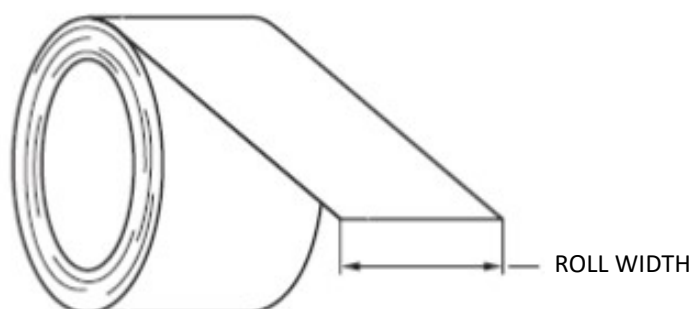
Ordering Information - EET V-9



Ordering Description	Quantity per Roll	Labels Across	Label Width A (mm) (inches)	Label Height B (mm) (inches)	Horizontal Repeat C (mm) (inches)	Vertical Repeat D (mm) (inches)	Web Width E (mm) (inches)
EET-0615V-9	10,000	6	15.00 0.590	6.40 0.250	16.80 0.661	9.55 0.376	105 4.134
EET-0623V-9	10,000	3	22.86 0.900	6.40 0.250	25.76 1.014	9.95 0.392	85 3.346
EET-0818V-9	10,000	4	18.00 0.709	8.00 0.315	21.00 0.827	13.00 0.512	105 4.134
EET-1056V-9	3,000	1	56.00 2.205	9.50 0.374	N/A N/A	12.70 0.500	70 2.756
EET-1325V-9	10,000	3	25.40 1.000	12.70 0.500	27.00 1.063	16.90 0.665	85 3.346
EET-1938V-9	3,000	2	38.10 1.500	19.05 0.750	40.90 1.610	23.05 0.907	85 3.346
EET-2551V-9	3,000	1	50.80 2.000	25.40 1.000	N/A N/A	28.20 1.110	56 2.205
EET-5176V-9	3,000	1	76.20 3.000	50.80 2.000	N/A N/A	54.40 2.142	80 3.150
EET-6090V-9	3,000	1	90.00 3.543	60.00 2.362	N/A N/A	63.50 2.500	105 4.134

Ordering Information - EET V-9 Continuous Roll

Ordering Description	Roll Width (mm)	Printable Width (mm)	Core Diameter (mm)	Roll Length (m)	Quantity per pack
EET-M0080V-9	85.00	80.00	76.20	125.00	continuous
EET-M0100V-9	105.00	100.00	76.20	125.00	continuous



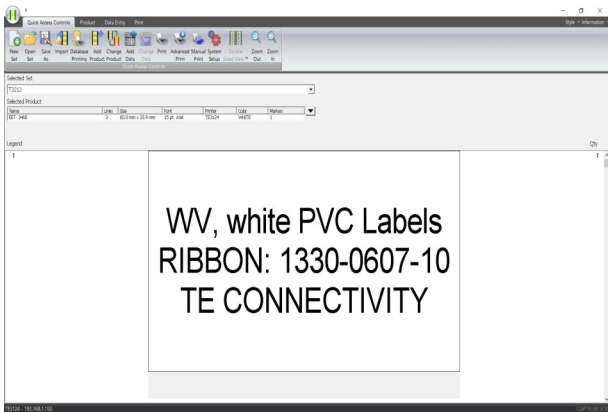


Printer Information

Print quality and print performance can only be guaranteed when specific TE printer and ribbons are used.

The current list of printers and ribbons can be found in TE document 411-121005 'Identification Printer Product Ribbon Matrix'. This document can be found in 'Access Our Tools':

<http://www.te.com/usa-en/utilities/access-product-tools-and-resources.html>



Software

WINTOTAL software, available to download for a 14 day evaluation period from the Identification Printer Software page:

<http://www.te.com/usa-en/products/identification-labeling/printers-software/printing-software.html?tab=pgp-story>

Print Easy software also available

Contact a TE representative for further information



www.te.com/rail

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