

# PL Panel Labels

## Technical Datasheet

TTDS-245 Revision 5 - May 2026

**PL is a thermal transfer printable polyester label available as gloss white or satin metalized. It has been designed for general purpose applications that require a high durability.**

**Typical applications include: industrial control panels, data racks, switchgear and general equipment labelling.**

PL utilizes a compressible polyethylene foam adhesive which enables good bonding onto rough, textured and powder coated surfaces.

PL is UL recognised to PGJ12 and PGJ18 for indoor and outdoor applications.

The PL Panel Label solution comprises a complete Identification system with compatible printers, software and ribbons.

PL print performance and durability can only be guaranteed when printed using TE Connectivity printers and ribbons as defined in TE document 411-121005.

# PL Panel Labels

## Features

- Thermal Transfer Printable
- Range of sizes in gloss white or metalized silver finish
- Designed to withstand exposure to industrial fluids and solvents, and abrasion with frequent handling
- Excellent bonding properties on textured and painted surfaces
- Good shock absorbance & impact resistance

## Temperature Rating

- Operating Temperature Range:  
-40 to 80°C (-40°F to 176°F)
- Withstand 100°C (212°F) for 1 000 hours
- Minimum Application Temperature 10°C (50°F)

## Specifications / Approvals

**Industry** UL recognized PGJ12 and PGJ18 - file MH17292 - "PL-9" for Gloss White  
"PL-8A" for Satin Metalized

## Applications

- Ideal for vertical application with exceptional shear strength
- Electrical applications: cabinets, data racks, control panels, switchgear and general equipment labelling.
- Industrial
- Rail

## 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>

## 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 be stored at approximately 22°C and 50% relative humidity.



Technical Performance

	Requirement	Results	
<b>Print Permanence</b>			
Marking of Electrical Insulating Materials, SAE AS 5942	Legible after 50 rubs with an eraser of 1kg weight	Pass	
Resistance to Solvents, MIL STD 202 Method 215	Legible after 30 brush strokes	Pass	
Abrasion, TE method 109-121020	Legible after 175 cycles - 0.5 kg weight with Taber wheel CS10	Pass	
<b>Fluid Exposure</b>			
Immersion, TE method 109-121012		<b>Adhesive</b>	<b>Printed legend</b>
<ul style="list-style-type: none"> <li>Isopropyl alcohol</li> <li>IRM 902</li> <li>MIL PRF 23699</li> <li>MIL-H-83282</li> <li>Diesel Fuel</li> <li>Kilfrost DF plus</li> <li>Tap water</li> <li>5% Salt solution</li> <li>Detergent (1% solution)</li> <li>Skydrol LD4</li> </ul>	24 hours immersion At 23°C followed by 20 wipes 1kg weight  Labels to remain on aluminum and legible	Pass Pass Pass Pass Pass Pass Pass Pass Pass	Pass Pass Pass Pass Pass Pass Pass Pass Pass
<b>Adhesion</b>			
<b>Peel, Finat FTM1:</b>		<b>Typical Peel force in N/25mm (oz/in.)</b>	
<ul style="list-style-type: none"> <li>Stainless steel</li> <li>Glass</li> <li>Aluminium</li> <li>Polypropylene</li> <li>Tufnol</li> <li>Epoxy painted surface</li> </ul>	180° angle Dwell time 23°C 50% RH	<b>20min Dwell</b> 50 (285) 60 (342) 45 (256) 15 (85) 50 (285) 60 (342)	<b>72hr Dwell</b> 50 (285) 70 (400) 70 (400) 15 (85) 55 (313) 60 (342)
<b>Probe Tack, ASTM D2979</b>	1 sec dwell - 1cm per sec separation	<b>Typical in N (oz) on 5mm diameter contact</b>	
<ul style="list-style-type: none"> <li>Stainless steel</li> </ul>	10 times at 23°C / 50% RH	10 (36)	
<b>Static Shear, PSTC-107</b>	20mn dwell time - 23°C / 50% RH	<b>Typical in Hours on 25mm square contact</b>	
<ul style="list-style-type: none"> <li>Mirror finished steel</li> </ul>	1 Kg load	174hr adh. failure / clean peel	
<b>Artificial weathering UV-A and UV-B</b>			
Fluorescent UV testing, ASTM G154	Remain on Aluminium and legible after 1000hr exposure, with no crazing / cracking or powder residue	<b>Adhesive</b>	<b>Printed legend</b>
Xenon Arc Exposure, ASTM G155		Pass	Pass, little fading
		Pass	Pass, slight color change
<b>Thermal performances</b>			
	Remain on Aluminium and legible	<b>Adhesive</b>	<b>Printed legend</b>
Heat Aging	1440hr at 90°C	Pass	Pass, little fading
Heat Shock	4hr at 140°C	Pass	Pass
Low Temperature storage	168hr at -50°C	Pass	Pass
Thermal Cycling	10 cycles of 1hr at -50°C then 1hr at 90°C	Pass	Pass

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.



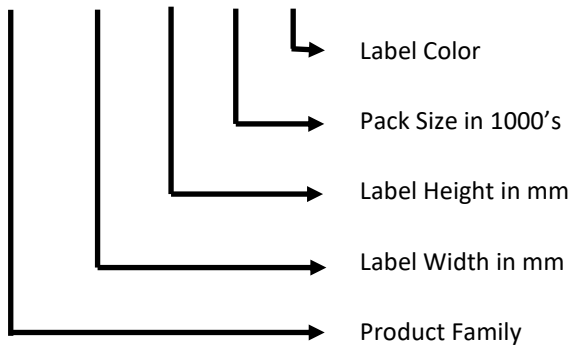
**Typical Label Thickness**

- Label (including adhesive): 0.760 mm / 0.03 inch
- Liner: 0.100 mm / 0.004 inch

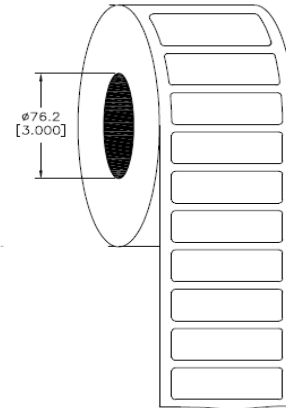
**Ordering Information**

**Part Description**

PL - 060 030 - 2.5 - 8A



**Roll presentation**

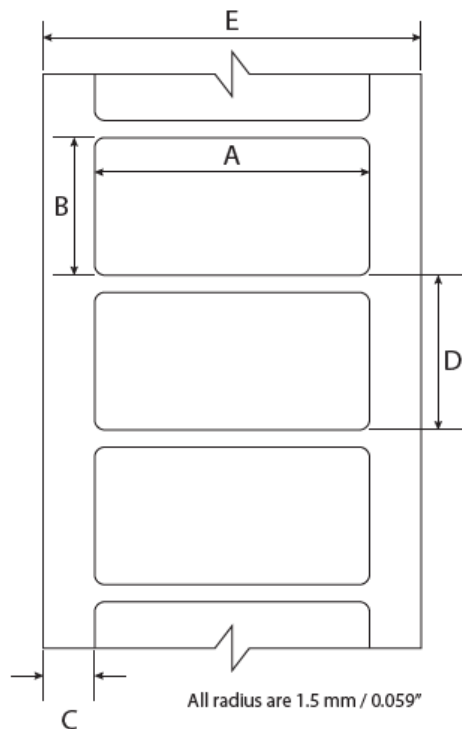


Outside wound on  
76.2mm / 3" core diameter

**Color Code**

8A Satin Metalized      9 Gloss White

**Liner Design**



Available Standard Descriptions

Product Description	Color	Pack Qty	Labels across	(A) Label Width		(B) Label Height		(C) Left Margin		(D) Vertical Repeat		(E) Web Width	
				mm	inch	mm	inch	mm	inch	mm	inch	mm	Inch
PL-027008-2.5-8A	Satin Metalized	2,500	1	27.0	1.063	8.0	0.315	5.0	0.197	11.43	0.450	37.0	1.457
PL-027008-2.5-9	Gloss White	2,500	1	27.0	1.063	8.0	0.315	5.0	0.197	11.43	0.450	37.0	1.457
PL-027013-1.5-8A	Satin Metalized	1,500	1	27.0	1.063	13.0	0.512	5.0	0.197	16.33	0.643	37.0	1.457
PL-027013-1.5-9	Gloss White	1,500	1	27.0	1.063	13.0	0.512	5.0	0.197	16.33	0.643	37.0	1.457
PL-027018-1.25-8A	Satin Metalized	1,250	1	27.0	1.063	18.0	0.709	5.0	0.197	21.17	0.833	37.0	1.457
PL-027018-1.25-9	Gloss White	1,250	1	27.0	1.063	18.0	0.709	5.0	0.197	21.17	0.833	37.0	1.457
PL-027027-1-8A	Satin Metalized	1,000	1	27.0	1.063	27.0	1.063	5.0	0.197	30.16	1.188	37.0	1.457
PL-027027-1-9	Gloss White	1,000	1	27.0	1.063	27.0	1.063	5.0	0.197	30.16	1.188	37.0	1.457
PL-035018-1.25-8A	Satin Metalized	1,250	1	35.0	1.378	18.0	0.709	5.0	0.197	21.17	0.833	45.0	1.722
PL-035018-1.25-9	Satin Metalized	1,250	1	35.0	1.378	18.0	0.709	5.0	0.197	21.17	0.833	45.0	1.722
PL-036028.5-0.75-8A	Satin Metalized	750	1	36.0	1.417	28.5	1.122	5.0	0.197	31.75	1.250	46.0	1.811
PL-036028.5-0.75-9	Gloss White	750	1	36.0	1.417	28.5	1.122	5.0	0.197	31.75	1.250	46.0	1.811
PL-045015-1.5-8A	Satin Metalized	1,500	1	45.0	1.772	15.0	0.591	5.0	0.197	18.56	0.731	55.0	2.165
PL-045015-1.5-9	Gloss White	1,500	1	45.0	1.772	15.0	0.591	5.0	0.197	18.56	0.731	55.0	2.165
PL-050025-1-8A	Satin Metalized	1,000	1	50.0	1.969	25.0	0.984	5.0	0.197	28.22	1.111	60.0	2.362
PL-050025-1-9	Satin Metalized	1,000	1	50.0	1.969	25.0	0.984	5.0	0.197	28.22	1.111	60.0	2.362
PL-060030-0.75-8A	Satin Metalized	750	1	60.0	2.362	30.0	1.181	5.0	0.197	33.34	1.313	70.0	2.756
PL-060030-0.75-9	Gloss White	750	1	60.0	2.362	30.0	1.181	5.0	0.197	33.34	1.313	70.0	2.756
PL-090045-0.5-8A	Satin Metalized	500	1	90.0	3.543	45	1.772	5.0	0.197	48.26	1.900	100.0	3.937
PL-090045-0.5-9	Gloss White	500	1	90.0	3.543	45	1.772	5.0	0.197	48.26	1.900	100.0	3.937
PL-100050-0.5-8A	Satin Metalized	500	1	100.0	3.937	50	1.969	3.0	0.118	53.34	2.100	106.0	4.173
PL-100050-0.5-9	Gloss	500	1	100.0	3.937	50	1.969	3.0	0.118	53.34	2.100	106.0	4.173

Other sizes upon request



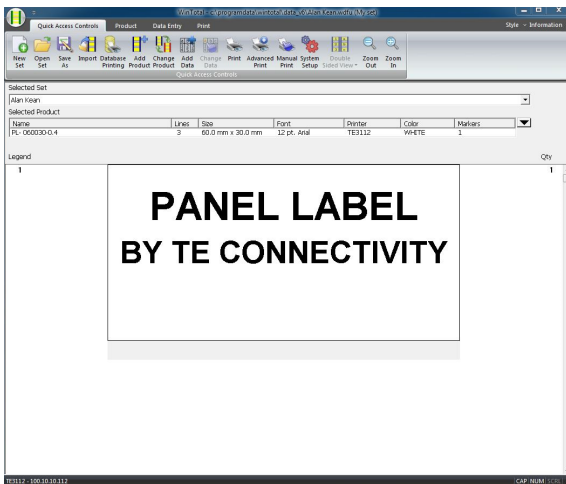


Printer Information

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.



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