



# RFID

RFID ......165



# **PRE-PRINT SERVICES**



# PERMARK® STAINLESS STEEL MARKERS

Permark 316 Stainless Steel Marker ......167



## LASER MARKABLE LABELS

AL-AN, ARC-400, POLY-A200 AND POLY-A400 ......169



# RAIL-SIGNAL PRODUCTS



## **TUBE AND PIPE ID LABELS**

TP Tape ......176

Catalog 1654227 Revised 04-07

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-5-729-0425 South America: 55-11-3611-1514 Hong Kong: 852-2735-1628 Japan: 81-44-844-8013 UK: 44-141-810-8967

# RFID (Radio Frequency Identification)

**RFID** (Radio Frequency Identification) is a technology that promises to revolutionize the way in which the products move across the supply chain all the way from the manufacturer to the consumer. With the ability to collect and distribute information without human intervention along the supply pipeline, RFID is in an enviable position to create collaborative interlinks between suppliers, manufacturers, movers and customers thus improving efficiencies, accuracy, speed to market and quality and hence reducing true costs and total cost of ownership for everyone along the way.

#### What is RFID

RFID is a technology that utilizes radio waves at certain frequencies to communicate data through the IT structure to the various business processes in an organization. It is a business approach to obtain information about products accurately, fast, efficiently and in real time so the business processes can function in a balanced mode with minimum investment or working capital, thus maximizing enterprise profitability. A basic system includes an RFID tag, a printer/encoder, an interrogator reader and antenna, software to read/write on the tag and connectivity to a customer defined box that runs the enterprise/site level applications to manage the motion of the parts/SKUs/assets.

## RFID tag:

An RFID tag consists of a specific RFID chip bonded using thermal contacts to an etched or printed antenna on to a plastic film. This 'inlay' is then laminated to/embedded into an application specific/customer defined polymer film or form factor. The chip in the tag carries a 'license plate' of the product it is applied to while the antenna allows for the chip to be interrogated/written to using an encoder or interrogator/reader.

## Printer/Encoder:

A printer/encoder is a thermal transfer (or any other print technology) printer with an RF module that allows for the printer to simultaneously encode the RFID chip while printing readable/scan-able information on the tag surface. It typically has a near field capability such that only one tag is read/encoded to at once but can run at over 6 inches/sec to print/encode multiple tags in a sequence.

## Interrogator/reader and Antenna:

An RFID reader and antenna set is the heart of the RFID system. When strategically placed along critical read points in a manufacturing or distribution center location, it interrogates multiple RFID tags at the same time and sends the information over to the ERP/MRP systems to take suitable action, whether it's invoicing, cross docking, placing an order, confirming a receipt or simply inventory tracking. All these translate to real dollars for the business. These readers/antennae can be positioned on the dock doors, on conveyor belts, on racks, in manufacturing cells, in quality labs or can be hand-carried around just like the bar-code scanners, depending upon the scale and scope of the RFID implementation. Depending upon the type of tags and nature of the environment, the readers can pick tag info from as far as 10 feet for passive (no power source) tags and 100 feet for active (battery powered) tags.



For additional information on RFID, call 1-866-440-RFID (7343) or visit www.rfid.tycoelectronics.com

## Software/Connectivity platform:

Typically referred to as middleware and edgeware (for being the buffer between the RFID hardware and the ERP/MRP/WMS system), this system manages the RFID hardware for operation, up-time and optimization. The system manages events and event logging, communicates transactions and provides visual/audible cues to the operating workforce. In addition, it filters the large amount of data received from the hardware and converts to usable information and then sends this information to the database or specific fields in the customer's system so business transactions can be consummated. This is the most complex piece in the RFID puzzle and utmost care should be taken to partner with a corporation that has the stability and resources to not only integrate the various pieces together but also to create a platform that is both scaleable and extensible.

# **Pre-Print Services**

# Pre-printed bar code labels



Since 1986 we've met the diverse needs of commercial, industrial, governmental and institutional customers by providing innovative solutions to their unique bar code label requirements. Solutions include custom sizes, colors, graphics, laminations, special adhesives, die-cuts and original creative designs.

## **Quality materials**

Tyco Electronics Identification buys master rolls of label stock and converts it to meet the needs of our customers. Our purchasing power, combined with our converting capabilities, allows us to provide the highest quality materials at great prices.

#### Sequential number tracking

If your application requires sequential numbering, Tyco Electronics will keep an automated log of sequence numbers printed for each order. Even if you have an assortment of labels, multiple locations, or use subcontractors to produce your product, we will insure that there are no duplicate numbers printed — reliable!

## **Production proofs**

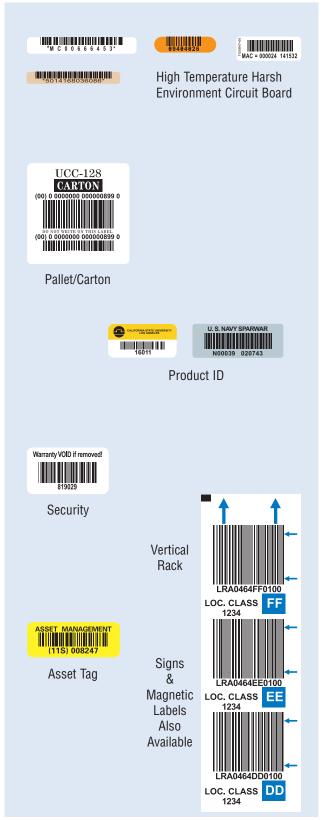
For every new label job, Tyco Electronics will provide a paper copy/electronic proof of your label prior to running the job. This allows you to review and approve the size, layout and graphics on the label prior to a full production run.

## 20 step quality check

Tyco Electronics enforces more than 20 quality checks during the manufacturing and quality assurance processes: these quality checks include many automated tests with state of the art equipment. We test every roll of labels for readability, accuracy and scan rates and we will not ship any labels that do not pass our quality assurance tests.

For more information, contact a Tyco Electronics customer service representative at:

US 1-800-430-7226 +44(0) 1495 244 000 Europe



## Permark® 316

Tyco Electronics Permark® 316 stainless steel markers are recommended for marking in hostile environments. Using state-ofthe-art technology and no inks, the marking process produces a permanent, deep surface mark with a darkened character in high contrast to the background. Permark® markers are produced to individual customer requirements on a fast turn-around basis with the flexible and easy-to-use Permark® software that allows electronic or manual data entry. Completed markers are supplied in customer defined kits for ease of installation. We recommend installation with 316 stainless steel cable ties.

#### **Features and benefits**

- Pre-marked to customer requirements
- Customer-defined kits for ease of installation
- Excellent character legibility
- One-piece, 316 stainless steel construction
- Variety of fixing methods
- Mark will endure the lifetime of a Permark® S/S marker
- Excellent resistance to weather extremes and high levels of UV light
- Resistant to corrosive marine and industrial atmospheres
- Excellent resistance to a variety of hydrocarbons organic chemicals, acids, alkalis and inorganic salts For resistance to a specific chemical, contact your local Tyco Electronics representative



#### Temperature rating

Operating temperature range

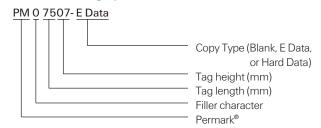
-80°C to +500°C

-112°F to +932°F

## **Printer information**

Pre-printed per customer requirements.

# Part numbering system





# $\operatorname{Permark}^{\circledR}$

# Permark® 316

## Available sizes and formats

Ordering description	Product description	Size mm	(L x H) inches	Printable mm	area (L x H) inches
PM09512-Blank	Blank 316 S/S marker	95 x 12	3.74 x 0.47	55 x 10	2.16 x 0.40
* PM09512-E Data	Pre-marked 316 S/S market	er 95 x 12	3.74 x 0.47	55 x 10	2.16 x 0.40
** PM09512-Hard Data	Pre-marked 316 S/S marke	er 95 x 12	3.74 x 0.47	55 x 10	2.16 x 0.40

<sup>\*</sup> Data supplied electronically

#### Options

Options			
Fonts	Various avail	able	
Lines per marker	One, two or t	hree (Determine	d by selected font height. Minimum 1 mm / 0.04 "spacing between lines.)
Saddle fixings	13 mm L x 2	.4 mm H <i>(0.51"</i>	L x 0.09" H)
Hole fixings	7 mm <i>(0.28</i>	")	
Standard colors	Metallic		
Font heights		ers per line Condensed	
2.5 mm (0.10")	30	N/A	
3.0 mm <i>(0.12")</i>	25	N/A	
4.0 mm (0.16")	20	30	
5.0 mm <i>(0.20")</i>	15	25	
6.0 mm (0.24")	15	25	
8.0 mm (0.31")	10	20	
10.0 mm <i>(0.40")</i>	10	15	

## Available sizes and formats

Ordering description	Product description	Size (L x H) mm <i>inches</i>		Printable mm	e area (L x H) inches	
PM07507-Blank	Blank 316 S/S marker	75 x 7	2.95 x 0.28	50 x 5	1.6 x 0.20	
PM07507-E Data	Pre-marked 316 S/S marker	75 x 7	2.95 x 0.28	50 x 5	1.6 x 0.20	
PM07507- Hard Data	Pre-marked 316 S/S marker	75 x 7	2.95 x 0.28	50 x 5	1.6 x 0.20	

<sup>\*</sup> Data supplied electronically

## **Options**

Fonts	Various available
Lines per marker	One only
Saddle fixings	9.5 mm L x 2.4 mm H <i>(0.37" L x 0.09" H)</i>
Hole fixings	None
Standard colors	Metallic
Font heights	Characters per line Standard Condensed
4.0 mm <i>(0.16")</i>	15 25
5.0 mm (0.20")	10 20

## Permark 316 Stainless Steel Cable Ties

All Weather Cable Ties	Package Quantity	Product Order Code
4.6 x 200 mm ( <i>0.18" x 7.9"</i> )	100	SST71-316
4.6 x 360 mm (0.18" x 14.3")	100	SST71-316

<sup>\*\*</sup> Data supplied in hard copy

<sup>\*\*</sup> Data supplied in hard copy

# AL-AN, ACR-400, POLY-A200 and POLY-A400

ANODIZED ALUMINUM – TTDS-131					
DIE CUT SIZE	PART NUMBERS	Colors			
0.50" x 0.50"	AL-AN-127127-0.50-0	Red			
1.50" x 0.50"	AL-AN-381127-1.5-0	Blue			
1.825" x 1.00"	AL-AN-381191-1.25-0	Black			
1.50" x 0.750"	AL-AN-445191-1.25-0	Green			
1.75" x 0.750"	AL-AN-464254-1-0				
2.00" x 1.00"	AL-AN-508254-1-0				
2.50" x 1.50"	AL-AN-635381-0.75-0				

## POLY A200 - TTDS-130

DIE CUT SIZE	PART NUMBERS	Colors
0.50" x 0.50"	POLY-A200-127127-0.50-0	Black
1.50" x 0.50"	POLY-A200-381127-1.5-0	
1.825" x 1.00"	POLY-A200-381191-1.25-0	
1.50" x 0.750"	POLY-A200-445191-1.25-0	
1.75" x 0.750"	POLY-A200-464254-1-0	
2.00" x 1.00"	POLY-A200-508254-1-0	
2.50" x 1.50"	POLY-A200-635381-0.75-0	

## POLY A400 - TTDS-129

DIE CUT SIZE	PART NUMBERS	Colors
0.50" x 0.50"	POLY-A400-127127-0.50-9	Black
1.50" x0.50"	POLY-A400-381127-1.5-9	
1.825" x 1.00"	POLY-A400-381191-1-25-9	
1.50" x 0.750"	POLY-A400-445191-1.25-9	
1.75" x 0.750"	POLY-A400-464254-1-9	
2.00" x 1.00"	POLY-A400-508254-1-9	
2.50" x 1.50"	POLY-A400-635381-0.75-9	

## ACR-400 Polyester - TTDS-139

DIE CUT SIZE	PART NUMBERS	Colors
0.50" x 0.50"	TYCO-ACR-127127-0.50-0	Black
1.50" x0 50"	TYCO-ACR-381127-1.5-0	
1.825" x 1.00"	TYCO-ACR-381191-1-25-0	
1.50" x 0.750"	TYCO-ACR-445191-1-25-0	
1.75" x 0.750"	TYCO-ACR-464254-1-0	
2.00" x 1.00"	TYCO-ACR-508254-1-0	
2.50" x 1.50"	TYCO-ACR-635381-0.75-0	

All labels listed above can be purchased in matte or gloss finishes. Other materials can be optimized by Tyco Electronics. Please contact your sales engineer.



## **Specifications**

#### AL-AN

Operating temperature range -40°C to +120°C -40°F to +302°F Thickness: Film: 0.076mm (0.003 in.)

> Adhesive: 0,05mm (0.002 in.) Liner: 62 lb Densified kraft Tolerance: ±10% Type of alloy: 1100

#### ACR-400 POLY

Operating temperature range -50°C to +200°C -58°F to +392°F Thickness: Film: 0.118mm (0.004 in.)

> Adhesive: 0,05mm (0.002 in.) Liner: Compressed paper, plastic coated,

dimensionally stable Tolerance: ±10%

#### POI Y-A200

-40°C to +125°C -40°F to +257°F Operating temperature range

Thickness: Film: 0.066mm (0.026 in.)

Adhesive: 0,026mm (0.001 in.) Liner: 78 lb semi-bleached clay coated

mando liner Tolerance: ±10%

#### POLY-A400

-40°C to +125°C -40°E to +257°E Operating temperature range

Thickness: Film: 0.109mm (0.043 in.)

Adhesive: 0,026mm (0.001 in.) Liner: 78 lb semi-bleached clay coated

mando liner Tolerance: ±10%

## Recommended Marking System

Tyco Electronics LMS6000, LMS9000 or other approved Nd: YAG laser marking

www.tycoelectronics.com

# HPTM Adhesive rail terminal tags for dot matrix printing

Tyco Electronics HPTM is a specially formulated heavy gauge fabric material with a high tack permanent acrylic adhesive, designed for applications in control panel backboards for rail signal circuit identification.

The standard 1.0" hole pitch design meets AAR terminal post specifications and makes installation fast and convenient.

HPTM adheres to most smooth surfaces including bare and painted metal, as well as painted plywood used for rail signal terminal boards. It is resistant to common fluids, lubricants and solvents.

For reliable print performance and durability, use with Tyco Electronics's RI Quick-Dry series ribbon.

## Features and benefits

- Specially formulated fabric material with exceptional tear strength
- Dot matrix printable

**Tyco** 

**Electronics** 

- Performance exceeds military specifications
- High-performance acrylic adhesive





#### Temperature rating

-40°F to +176°F Operating temperature range -40°C to +80°C Minimum application temperature +10°C +50°F

#### Specifications/approvals

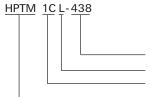
Tyco Electronics TTDS-049 Military SAE AS81531 4.6.2 MIL-STD-202 method 215J

AAR Terminal Post Industry

#### Printer information

Tyco Electronics printer AM6310 (dot matrix) 1892BKO4 (dot matrix) Tyco Electronics ribbon 1892BKO3 (dot matrix high performance)

# Part numbering system

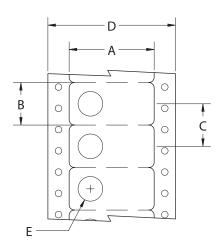


Hole diameter (inches) Hole position (L = left, R = right) Number of holes (circular)

Product family

# HPTM Adhesive rail terminal tags for dot matrix printing

## Ordering information



## Available sizes and formats

Ordering Hole description position			Tag dth		) Tag eight	. ,	'ertical oeat		Web idth		Hole neter
		mm	inches	mm	inches	mm	inches	mm	inches	mm	inches
HPTM1CL-312	Left	38.10	1.500	25.40	1.000	25.40	1.000	76.20	3.000	7.90	0.312
HPTM1CR-312	Right	38.10	1.500	25.40	1.000	25.40	1.000	76.20	3.000	7.90	0.312
HPTM1CL-438	Left	38.10	1.500	25.40	1.000	25.40	1.000	76.20	3.000	11.10	0.438
HPTM1CR-438	Right	38.10	1.500	25.40	1.000	25.40	1.000	76.20	3.000	11.10	0.438
HPTM1CL-500	Left	38.10	1.500	25.40	1.000	25.40	1.000	76.20	3.000	12.70	0.500
HPTM1CR-500	Right	38.10	1.500	25.40	1.000	25.40	1.000	76.20	3.000	12.70	0.500

## **Options**

Package sizes	Standard	1000 piece pack
Colors	Standard	White



# Rail-Signal Products

# HPKTM Adhesive-backed polypropylene tags for thermal transfer printing

Tyco Electronics HPKTM is a semi-rigid polypropylene film with a permanent acrylic adhesive that is designed for application to control panel backboards for rail signal circuit identification. The standard 1.0 "hole pitch design meets AAR terminal post specifications and makes installation fast and convenient. HPKTM adheres to most smooth surfaces including bare and painted metal, as well as painted plywood used for rail signal terminal boards. It is resistant to common fluids, lubricants and solvents. For reliable print performance and durability, use with Tyco Electronics's RHD series ribbon.

#### Features and benefits

- Self-adhesive backing for quick and easy fixing
- Thermal transfer printable
- Recommended for indoor use
- Resistant to common fluids, lubricants and solvents





#### Temperature rating

Operating temperature range  $-29^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$   $-20^{\circ}\text{F}$  to  $+176^{\circ}\text{F}$ 

## Specifications/approvals

Industry AAR Terminal Post

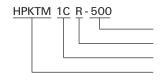
## **Printer information**

Tyco Electronics printer T308S\* (thermal transfer)

Tyco Electronics ribbon 1330-0607-10\* (thermal transfer)

\*Alternative printers and ribbons are available for special applications. Contact Tyco Electronics Identification for more information.

## Part numbering system



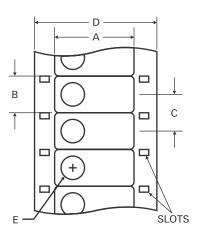
Hole diameter (inches) Hole position (L = left, R = right) Number of holes (circular) Product family



# Rail-Signal Products

# HPKTM Adhesive-backed polypropylene tags for thermal transfer printing

## **Ordering information**



#### Available sizes and formats

Ordering description	Hole position	(A) Tag width	(B)Tag height			(E) Hole diameter
		mm inches				
HPKTM1CL-312	Left	38.10 <i>1.500</i>	25.40 <i>1.000</i>	25.40 <i>1.000</i>	76.20 <i>3.000</i>	7.90 <i>0.312</i>
HPKTM1CR-312	Right	38.10 <i>1.500</i>	25.40 <i>1.000</i>	25.40 <i>1.000</i>	76.20 <i>3.000</i>	7.90 <i>0.312</i>
HPKTM1CL-438	Left	38.10 <i>1.500</i>	25.40 <i>1.000</i>	25.40 <i>1.000</i>	76.20 <i>3.000</i>	11.10 <i>0.438</i>
HPKTM1CR-438	Right	38.10 <i>1.500</i>	25.40 <i>1.000</i>	25.40 <i>1.000</i>	76.20 <i>3.000</i>	11.10 <i>0.438</i>
HPKTM1CL-500	Left	38.10 <i>1.500</i>	25.40 <i>1.000</i>	25.40 <i>1.000</i>	76.20 <i>3.000</i>	12.70 <i>0.500</i>
HPKTM1CR-500	Right	38.10 <i>1.500</i>	25.40 <i>1.000</i>	25.40 <i>1.000</i>	76.20 <i>3.000</i>	12.70 <i>0.500</i>

Additional sizes and formats available by custom quotation.

## Options

Package size	1,000 piece pack				
Colors	Standard	White			



# HLTM-FB/HXTM-FB Non-adhesive-backed polyolefin tags

Tyco Electronics HLTM-FB/HXTM-FB is a semi-rigid, heavy gauge crosslinked polyolefin material without an adhesive backing, designed for use in a variety of applications including terminal post and terminal board signal circuit identification. The heavy gauge thickness is ideal for applications requiring exceptional durability. Mark permanence exceeds military requirements. They are resistant to common fluids, lubricants, solvents and abrasion. For reliable print performance and durability, use with Tyco Electronics approved printers and ribbons.

#### Features and benefits

- Specially formulated polyolefin material
- Flame retarded
- Resistant to common fluids, lubricants and solvents
- Dot matrix (HLTM-FB) or thermal transfer (HXTM-FB) printable
- Print performance exceeds military standards





# Temperature rating

Operating temperature range

HLTM-FB -55°C to +135°C -67°F to +275°F

HXTM-FB  $-30^{\circ}\text{C}$  to  $+105^{\circ}\text{C}$   $-22^{\circ}\text{F}$  to  $+221^{\circ}\text{F}$ 

#### Specifications/approvals

 Tyco Electronics
 TTDS-408 (HLTM)

 Military
 SAE AS81531 4.6.2

 MIL-STD-202 Method 215J

#### **Printer information**

Tyco Electronics printer

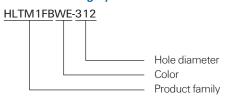
HLTM-FB AM6310\* (dot matrix)
HXTM-FB T312M (thermal transfer)

Tyco Electronics ribbon

HLTM-FB 1892BKO4\* (dot matrix)
HXTM-FB 1966-RIBBON (thermal transfer)

\*Alternative printers and ribbons are available for special applications. Contact Tyco Electronics Identification for more information.

## Part numbering system



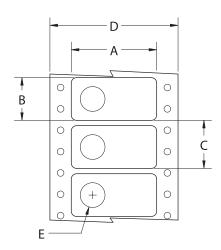
USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-5-729-0425 South America: 55-11-3611-1514 Hong Kong: 852-2735-1628 Japan: 81-44-844-8013 UK: 44-141-810-8967



# Rail-Signal Products

# HLTM-FB/HXTM-FB Non-adhesive-backed polyolefin tags

## **Ordering information**



## Available sizes and formats

Ordering description	Hole position		Tag idth		) Tag eight	( - )	ertical oeat		Web ridth	1. /	Hole neter
		mm	inches	mm	inches	mm	inches	mm	inches	mm	inches
H <format>TM1FB<color>-312</color></format>	Left*	38.10	1.500	22.20	0.875	25.40	1.000	127.00	5.000	7.90	0.312
H <format>TM1FB<color>-438</color></format>	Left*	38.10	1.500	22.90	0.900	25.40	1.000	127.00	5.000	11.00	0.438
H <format>TM1FB<color>-500</color></format>	Left*	38.10	1.500	22.20	0.875	25.40	1.000	127.00	5.000	12.70	0.500
H <format>TM1FB<color>-625**</color></format>	Left*	38.10	1.500	25.40	1.000	50.80	2.000	127.00	5.000	15.90	0.625

<sup>\*</sup> Hole position is versatile (left or right) on HLTM-FB series tags. Additional sizes and formats available by custom quotation.

## **Options**

Package sizes	Standard	550 piece pack **300 piece pack (HLTM1FB625/HXTM1FB625)				
Colors	Standard	White	Yellow			
	Code	WE	YW			
Format	L	For dot matrix printable				
	Χ	For thermal transfer printable				

Ordering example: HLTM1FBWE-312



# Tube and Pipe ID Labels

# TP Tape High Performance color-coded cost saving system for tube identification

The system is designed for use as a thermal transfer printable, self-laminating identification for the various types of tubes in the aerospace, defense and marine industry. Made from polyester with a permanent acrylic adhesive, this cost saving system allows you to print on a unique range of pre color-coded labels on demand and eliminates the use and maintenance of paints, stencils, hot-stamps and etching tools. The system even does the job in a fraction of the time compared to similar technologies.

## Features and benefits

- Continuous operating temperature of -40°C to +163°C (-40°F to +325°F)
- Resists exposure to water, oil, conventional cleaning agents, oil-based solvents and other fluids commonly associated with commercial and military aircraft
- Color coded to meet MIL-STD-595B requirements
- Meets MIL-STD-1247 standards for hydraulic lines, fuel lines, oxygen lines, inerting fluid lines, etc.
- Performance tested to RW 2068, a punishing standard for aggressive fluid and temperature resistance in military and commercial aircraft
- Available in die-cut or continuous formats to cover all ranges of tube diameters
- Die-cut version available in white or yellow printable area
- Continuous version available in white\* or clear printable area









#### Temperature rating

Operating temperature range  $-40^{\circ}\text{C}$  to  $+163^{\circ}\text{C}$   $-40^{\circ}\text{F}$  to  $+325^{\circ}\text{F}$ 

#### Specifications/approvals

Tyco Electronics RW 2526 TTDS-028

Mill-T-9906C (except initial peel)

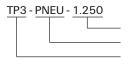
MIL-STD-595B MIL-STD-1247 MIL-STD-101B

## **Printer information**

Tyco Electronics printer T308S\* (thermal transfer)
Tyco Electronics ribbon 1330-0607-10 (thermal transfer)

\*Alternative printers and ribbons are available for special applications. Contact Tyco Electronics Identification for more information.

## Part numbering system



Size (1.250: for tube with OD of 1.250")
Tube type (PNEU: for pneumatic lines)
Product type (TP3: TP Tape type 3, 1.1 turns of printable legend around tube)

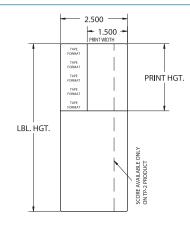
<sup>\*</sup>To be used only with TP-CLEAR-CONT over-laminating product



# Tube and Pipe ID Labels

# TP Tape High Performance color-coded cost saving system for tube identification

## Ordering information



#### Available sizes and formats

Order description	Printer type	Lal wid		Fits t diam	tube neter	Labels per pack
		mm	inches	mm	inches	
TP <format>-(XXXX)-0.188</format>	Thermal	63.50	2.500	4.77	0.188	2500
TP <format>-(XXXX)-0.250</format>	Thermal	63.50	2.500	6.35	0.250	2000
TP <format>-(XXXX)-0.312</format>	Thermal	63.50	2.500	7.92	0.312	2000
TP <format>-(XXXX)-0.375</format>	Thermal	63.50	2.500	9.52	0.375	1500
TP <format>-(XXXX)-0.500</format>	Thermal	63.50	2.500	12.70	0.500	1500
TP <format>-(XXXX)-0.625</format>	Thermal	63.50	2.500	15.88	0.625	1000
TP <format>-(XXXX)-0.750</format>	Thermal	63.50	2.500	19.05	0.750	1000
TP <format>-(XXXX)-0.875</format>	Thermal	63.50	2.500	22.21	0.875	750
TP <format>-(XXXX)-1.000</format>	Thermal	63.50	2.500	25.40	1.000	750
TP <format>-(XXXX)-1.125</format>	Thermal	63.50	2.500	28.58	1.125	500
TP <format>-(XXXX)-1.250</format>	Thermal	63.50	2.500	31.75	1.250	500
TP <format>-(XXXX)-1.375</format>	Thermal	63.50	2.500	34.93	1.375	500
TP <format>-(XXXX)-1.500</format>	Thermal	63.50	2.500	38.10	1.500	500
TP <format>-(XXXX)-1.625</format>	Thermal	63.50	2.500	41.28	1.625	400
TP <format>-(XXXX)-1.750</format>	Thermal	63.50	2.500	44.45	1.750	400
TP <format>-(XXXX)-CONT</format>	Thermal	63.50	2.500	50.80+	2.000+	100 ft continuous

#### **Options**

Format	None	Standard TP Tape	Standard TP Tape							
	2	For a slit at 2 inche	For a slit at 2 inches from the left edge (total width 2 " instead of 2.5")							
	3	For 1.1 turns of col	For 1.1 turns of color-coded label around the pipe instead of 1.5 turns							
	4	For white printable	For white printable area instead of yellow							
	WE	For white/slit produ	For white/slit product for European markets, use order description: TP-WE(XXXX)ST-(size)							
Identificat	Identification code (XXXX)									
	AIRCON	Air conditioning	HYDRO	Hydraulic	PYRO	Pyrotechnic				
	BATACT	Battery activator	INAIR	Instrument air	RAIN	Rain repellent				

AINCON	Air conditioning	птипо	пушашіс	PINU	Pyrotechnic
BATACT	Battery activator	INAIR	Instrument air	RAIN	Rain repellent
COMGAS	Compressed gas	INERT	Inert fluid	RCAT	Rocket catalyst
COOL	Coolant	LUBE	Lubrication	RFUEL	Rocket fuel
DEICE	Deicing fluid	MC	Miscellaneous	ROXI	Rocket oxidizer
ELECT	Electrical conduit	MONO	Mono propellant	SOLV	Solvent
FIRE	Fire protection	OXYGEN	Breathing oxygen	VAC	Vacuum
FUEL	Fuel	PNEU	Pneumatic	WATER	Water injection



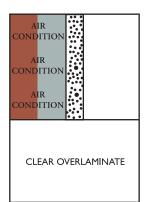
# Tube and Pipe ID Labels

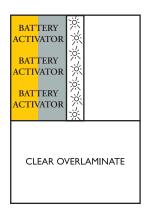
# TP Tape High Performance color-coded cost saving system for tube identification

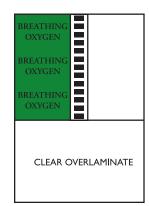
Colors	Brown	Red	Orange	Yellow	Green
Code	10076	11136	12197	13655	14187

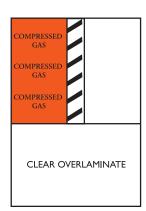
Colors conform to Federal Standard FED-STD-595B

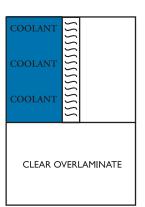
Continuous format TP Tape is supplied with respective legends imprinted, as shown below. Die cut formats are not printed. For example, TP3AIRCON-CONT will have AIR CONDITION printed on each label. TP3AIRCON-0.625 will not.

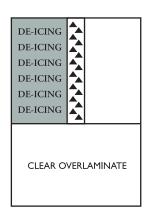


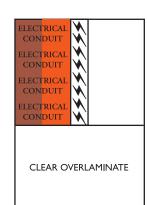




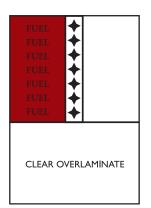


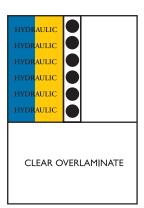


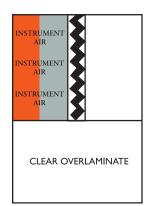


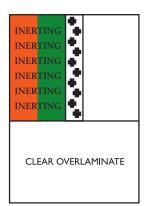














# Tube and Pipe ID Labels

# TP Tape High Performance color-coded cost saving system for tube identification

Colors	Blue	Grey	Black	White	Pink	Light Green
Code	15102	16473	17038	17925	21668	24664

Colors conform to Federal Standard FED-STD-595B

Continuous form at TP Tape is supplied with respective legends imprinted, as shown below. Die cut formats are not printed. For example, TP3AIRCON-CONT will have AIR CONDITION printed on each label. TP3AIRCON-0.625 will not.

