







# PIDG TERMINALS & SPLICES

Quick Reference Guide

## **FEATURES AND BENEFITS**

- Made of high conductivity copper; tin-plated for optimal corrosion protection
- Copper sleeve for vibration resistance and improved wire insulation support
- Body has inner serrations for maximum electrical contact and tensile strength
- Insulation sleeves are colour-coded by wire size to the corresponding TE Connectivity (TE) tooling for easy identification and termination
- · Readily available at distributors in small packages or bulk quantities
- Most PIDG terminals and splices are UL/CSA listed and Mil-Spec approved
- Operating temperature 105°C; operating voltage 300V

**300V** 

Operating Voltage

105°

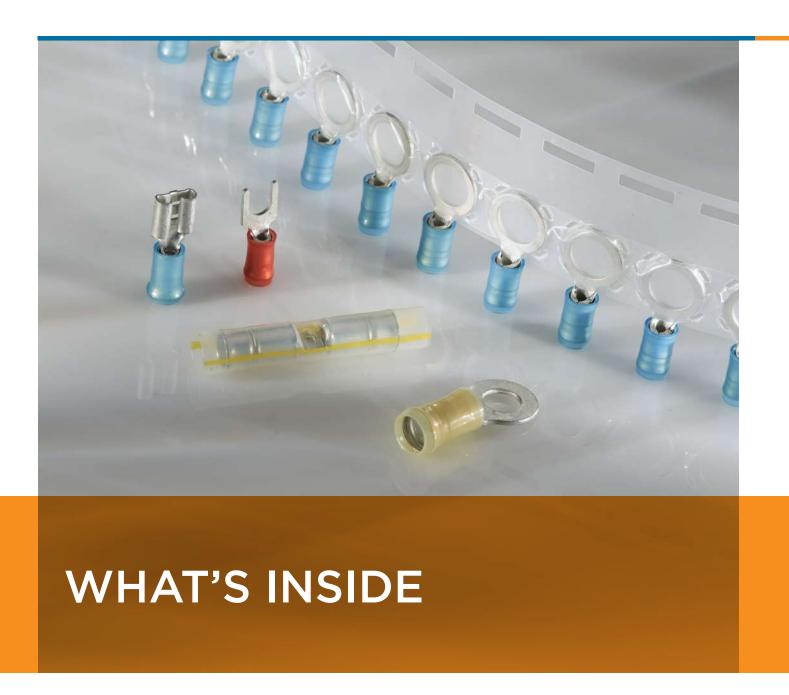
Max Operating
Temperature (in C)

MIL

MIL-SPEC Approval

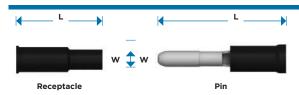
### **PRODUCT APPLICATIONS**

- Instruments/Control
- Lighting
- Power Supplies
- Panel Boxes
- Transportation
- Lifting equipment
- Motors
- Aerospace
- Appliances



TE Connectivity's PIDG terminals are designed for uniform reliability in the harshest circuit environments, especially where high vibration and wire movement are factors. They consist of a nylon or PVC insulated body, plus a metal sleeve that crimps to the wire insulation for added support. The wire barrel design is vibration resistant, and supports the wire to bend in any direction without damaging the wire insulation or conductor. Millions of PIDG terminals and splices are still in the field many years after installation; a testament to the rigorous testing and research that went into their design and manufacturing. Many PIDG terminals meet or exceed the requirements of SAE AS7928, Type II, Class 1.





SHUR-PLUG Terminals																			
															Manual Hand Tools			Die Sets for Powered Tools (See Note 1 for Powered Tool Options)	
Wi	Wire Size		yle	Standard Part	Width (W)		Length (L)		Color	Max. Wire Insulation Dia.		Also available in		Re-	Certi- Crimp	Mil-Spec Certified	Pro- Crimper (SDE)	SDE Die Set (Premium)	SDE Die Set
AWG	mm²			Number	inch	mm	inch	mm	Color	inch	mm	Tape & Reel	Small Pack	marks	Hand Tool Most UL Apvd		Hand Tool	Most UL Apvd	(Commercial)
22-16	0,25-1,60	Р	in	165590-1	.156	3,96	.799	20,30	•	.138	3,50		~						
	0,50-1,50	Р	in	141462-1	.118	3,00	.945	24,00	•	.134	3,40		~						
		Re	cpt	141456-1	.118	3,00	.984	25,00	•	.130	3,30		~						
	0,50-1,60	Re	cpt	165399-1	.156	3,96	.902	22,90	•	.114	2,90		~						
16-14	1,04-2,62	Р	in	324225	.156	3,96	.790	20,07	0	.170	4,32	~	~		47387-7		58433-3	2063030-1	58423-1
	1,04-2,62	Re	cpt	165429-1	.156	3,96	.972	24,70	•	.157	4,00		~						

#### **REMARKS**

- O Must be crimped with 22-18 or 22-16 PIDG (red) tooling
- 1 Body Springs Spade : Phosphor Bronze per ASTM B-139
- 2 Body: Copper also according DIN 1787 and EN 1676
- 3 Body: Brass according ASTM B 36
- 4 Sleeve: Nickel Plating per SAE AMS QQ-N-290
- 5 Adapter inserts can be ordered seperately for use in specific standard PIDG Butt Splices
- 6 Mill Specified
- 7 Body: Brass according MIL-C-50

For all remarks and additional information see Customer Drawing on www.te.com

## FREQUENTLY ASKED QUESTIONS TOOLING

### Can wires be combined in PIDG terminals & splices?

Yes, they can as long total CMA (Circular Mil Area) and insulation diameter fall within specifi cation.

## Are PIDG terminals MIL specified?

Yes, most of them meet or exceed MIL-T-7928, Type II, class 1.

What product should you choose if you need higher temperature?

Use TE STRATO-THERM terminals (catalog 82011).

## Why can PIDG terminals just handle 300V and PLASTI-GRIP terminals 600 V?

Because the additional copper sleeve is close to the end of

## What is the advantage of this copper sleeve?

It provides circumferential insulation support to the wire and allows the wire to bend in any direction, without fraying the wire's insulation or breaking the conductor.

#### Why is there no crimp height given for PIDG terminals?

It is the geometry of the TE crimping tools which ensures the perfect crimp on PIDG terminals.

#### NOTE 1

#### The die sets listed above can be used with the following powered tools:

1.75 Ton Battery Tools 2217480-1 (110V) or 2217480-2 (220V)

AT-300 Electric Crimping Machine 539630-2 (115V/230V) with SDE Adapter 1673663-2

626 Pneumatic Tool System with Pro-Crimper Adapter 679304-1

AT-SC MK II Pneumatic Safety Crimping Machine 1-528050-0 with SDE Die Holder 2-528051-8

#### NOTE 2

Most 22-16, 16-14, and 12-10 AWG PIDG terminals and splices can be crimped using TETRA-CRIMP Hand Crimping Tool 59824-1 (UL approved)



offers high dielectric strength. The colour coding corresponds to the wire size.

- 3. Grooves inside the wire sleeve ensure high tensile strength and current transfer.
- 4. The copper sleeve provides optimal insulation support.

58433-3 - Pro-Crimper **Commercial Hand Tool** 

http://tooling.te.com

For questions about our connectivity solutions, please go to te.com.

