

TERMINALS & LUGS



NON-INSULATED
BRAZED



VINYL
FUNNEL ENTRY



NYLON FUNNEL ENTRY WITH
INSULATION SUPPORT SLEEVE



EPOXY HEAT SHRINKABLE
TERMINALS

PART NUMBER SYSTEM

T NF 14 - 10 R

TERMINAL TYPE

T = RING, FORK or PIN
TAE = TINNED CLOSED END
LUGS
TBS = BUTT SPLICE
TC, TL, TF = BATTERY
TERMINALS
TD = DISCONNECTS
TB = BULLETS
TL = BRAZED LUGS

INSULATION

BLANK = NON-INSULATED
E = ADHESIVE HEAT SHRINK
N = NYLON
NF = NYLON, FUNNEL
ENTRY w/INSULATION
SLEEVE
V = VINYL, FUNNEL ENTRY

WIRE RANGE

18 = #22-18 AWG
14 = #16-14 AWG
10 = #12-10 AWG
8 = #8 AWG
6 = #6 AWG
4 = #4 AWG
2 = #2 AWG
1 = #1 AWG
1/0 = #0
2/0 = #00
3/0 = #000
4/0 = #0000

STUD SIZE

6 = #6
8 = #8
10 = #10
14 = 1/4"
56 = 5/16"
38 = 3/8"
12 = 1/2"
**TAB SIZE
(DISCONNECTS)**
110 = .110 x .032
187 = .187 x .032
250 = .250 x .032

TONGUE CONFIGURATION

FF = FLANGED FORK
P = PIN
R = RING
SLF = SHORT LOCKING FORK
DISCONNECT CONFIG.
A = ADAPTER
FI = FULLY INSUL (FEMALE)
FIM = FULLY INSUL (MALE)
M = MALE
PB = PIGGYBACK
BLANK = FEMALE

NYLON INSULATED TERMINALS WITH INSULATION GRIP SLEEVE

Pacer's premium non-sealing terminal. The 3-piece design allows for superior crimping and insulation grip. Terminals are constructed from pure annealed, electroplated tin copper, with a brazed seam and a serrated inner barrel. A permanently attached, funnel shaped, tin-plated brass sleeve encompasses the barrel and extends over the wire to be use as a insulation grip. The terminal is insulated with durable, abrasion resistant nylon. Operating Temperature: 105°C/600V

VINYL INSULATED TERMINALS

Vinyl terminals combine the top quality construction of our non-insulated terminals with a specially designed PVC (polyvinyl chloride) insulation. The color coded vinyl is funneled to speed and simplify wire insertion without fraying strands. The vinyl insulation extends beyond the barrel to be crimped, forming an insulation support. Operating Temperature: 105°C/600V

NON-INSULATED TERMINALS

Non-insulated terminals are constructed from pure annealed electroplated tin copper, with a brazed seam and a serrated inner barrel. The bell mouth entry eases installation of conductors. One piece construction provides an economical, high quality terminal. Non-insulated connectors are excellent to use if crimping and soldering a connection is necessary. They can also be handy if space constraints are a factor. Insulate these terminals with standard or adhesive heat shrink tubing.

PERFORMANCE REQUIREMENTS FOR #22 - #10 AWG TERMINALS ON COPPER WIRE:

MIL-T-7928G

AWG	22	20	18	16	14	12	10
A	9	11	16	22	32	45	55
B	7	-	7	8	5	5.5	4
C	15	19	38	50	70	110	150

UL 486A

AWG	22	20	18	16	14	12	10
D	9	12	17	16	30	35	50
C	8	13	20	30	50	70	80

A = Test Current (AMPS)
B = Voltage Drop (MV) Max Allowable
C = Min. Tensile Strength (lbs) Pull-out force of the crimped terminal
D = Test Current for Max 50C Rise (AMPS)

TYPE	APPROVED CONNECTORS			DISAPPROVED CONNECTORS
Splice	Butt Splice	3 or 4 Ways		Twist Wire Nut
Friction	Disconnect Tab	Bullet/Snap Plug		
Set Screw	Indirect-bearing			Direct-bearing
Terminals	Ring	Locking Fork	Flanged Fork	Straight Fork

HEAT SHRINKABLE TERMINALS

Heat shrinkable terminals have quickly become the most requested connector among marine professionals. The ease and speed by which these connectors create a fully environmentally sealed connection is unmatched. Heat shrink terminals are constructed from high-grade, fully annealed, tinned plated copper with a brazed barrel seam. The insulation is a tough, quick-to-shrink polyolefin.

FEATURES:

- Protects terminations from water, condensation, salt spray and corrosion
- Provides strain relief
- Added vibration protection in rugged environments
- Cost effective
- Operating Temperature: -55°C to 125°C
- Shrink Ratio: Approx. 3 to 1 at 135°C
- Dielectric Strength: 900V/mil
- Volume Resistivity: 1015 ohm-cm3
- Available in gauge sizes 22 through 8

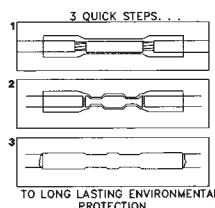


WIRE RANGE	STUD SIZE	PART NUMBER	INSUL. COLOR	STANDARD PACKAGE
BUTT SPLICES				
#22-18 AWG		TBSE18	RED	25, 50, 100, 500, 1000
#16-14 AWG		TBSE14	BLUE	25, 50, 100, 500, 1000
#12-10 AWG		TBSE10	YELLOW	25, 50, 100, 500
#8 AWG		TBSE8	PINK	10, 25, 50, 100, 250
RING TERMINALS				
#22-18 AWG	#6	TE18-6R	RED	25, 50, 100, 500, 1000
	#8	TE18-8R	RED	25, 50, 100, 500, 1000
	#10	TE18-10R	RED	25, 50, 100, 500, 1000
	1/4"	TE18-14R	RED	25, 50, 100, 500, 1000
	5/16"	TE18-56R	RED	25, 50, 100, 500, 1000
#16-14 AWG	3/8"	TE18-38R	RED	25, 50, 100, 500, 1000
	#6	TE14-6R	BLUE	25, 50, 100, 500, 1000
	#8	TE14-8R	BLUE	25, 50, 100, 500, 1000
	#10	TE14-10R	BLUE	25, 50, 100, 500, 1000
	1/4"	TE14-14R	BLUE	25, 50, 100, 500, 1000
#12-10 AWG	5/16"	TE14-56R	BLUE	25, 50, 100, 500, 1000
	3/8"	TE14-38R	BLUE	25, 50, 100, 500, 1000
	1/2"	TE14-12R	BLUE	25, 50, 100, 500, 1000
	#6	TE10-6R	YELLOW	25, 50, 100, 500
	#8	TE10-8R	YELLOW	25, 50, 100, 500
#8 AWG	#10	TE10-10R	YELLOW	25, 50, 100, 500
	1/4"	TE10-14R	YELLOW	25, 50, 100, 500
	5/16"	TE10-56R	YELLOW	25, 50, 100, 500
	3/8"	TE10-38R	YELLOW	25, 50, 100, 500
	1/2"	TE10-12R	YELLOW	25, 50, 100, 500
LOCKING "SNAP" FORKS				
#22-18 AWG	#6	TE18-6SLF	RED	25, 50, 100, 500, 1000
	#8	TE18-8SLF	RED	25, 50, 100, 500, 1000
	#10	TE18-10SLF	RED	25, 50, 100, 500, 1000
#16-14 AWG	#6	TE14-6SLF	BLUE	25, 50, 100, 500, 1000
	#8	TE14-8SLF	BLUE	25, 50, 100, 500, 1000
	#10	TE14-10SLF	BLUE	25, 50, 100, 500, 1000
#12-10 AWG	1/4"	TE14-14SLF	BLUE	25, 50, 100, 500, 1000
	#6	TE10-6SLF	YELLOW	25, 50, 100, 500
	#8	TE10-8SLF	YELLOW	25, 50, 100, 500
	#10	TE10-10SLF	YELLOW	25, 50, 100, 500
#8 AWG	1/4"	TE10-14SLF	YELLOW	25, 50, 100, 500
	1/2"	TE8-12R	PINK	10, 25, 50, 100, 250
#8 AWG	1/4"	TE8-14R	PINK	10, 25, 50, 100, 250
	5/16"	TE8-56R	PINK	10, 25, 50, 100, 250
#8 AWG	3/8"	TE8-38R	PINK	10, 25, 50, 100, 250
	1/2"	TE8-12R	PINK	10, 25, 50, 100, 250
DISCONNECTS				
	FEMALE	MALE		
#22-18 AWG	TDE18-250FI	TDE18-250FIM	RED	25, 50, 100, 500, 1000
#16-14 AWG	TDE14-250FI	TDE14-250FIM	BLUE	25, 50, 100, 500, 1000
#12-10 AWG	TDE10-250FI	TDE10-250FIM	YELLOW	25, 50, 100, 500
BULLETS				
#16-14 AWG	TBRE14-156	TBPE14-156	BLUE	25, 50, 100, 500, 1000

TERMINALS & LUGS

ORDERING INFORMATION:

Order by standard package.



INSTALLATION:

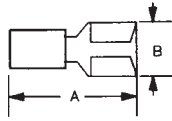
STEP 1: Strip wire 0.3" for butt splices or .25" for ring terminals. Insert into crimp barrel.

STEP 2: Crimp using the 3M TR-490 or any tool for pre-insulated terminals.

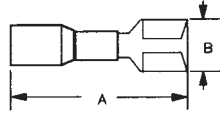
STEP 4: Heat splice or terminal from the crimped section out to the wire, with a heat source until tubing recovers.

DISCONNECTS

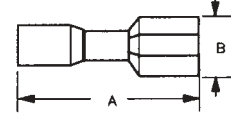
Also known as quick connect or slip-on connectors. Connection is accomplished by fitting the female part over the male tab. Holding force is excellent due to an indentation on the tongue of the female part which locks into a hole on the male tab. Available in non-insulated brazed seam, partially insulated vinyl (covers wire barrel only) or fully insulated nylon.



Non-Insulated Female/Male



Nylon Partially Insulated



Nylon Fully Insulated

NON-INSULATED FEMALE/MALE

WIRE RANGE	TAB SIZE	FEMALE	MALE	INSUL. COLOR	A	STANDARD B	PACKAGE
22-18 AWG	.187 x .032	TD18-187	—	N/A	.59	.23	50, 100, 500, 1000
	.250 x .032	TD18-250	TD18-250M	N/A	.66	.29	50, 100, 500, 1000
16-14 AWG	.187 x .032	TD14-187	—	N/A	.59	.23	50, 100, 500, 1000
	.250 x .032	TD14-250	TD14-250M	N/A	.66	.29	50, 100, 500, 1000
12-10 AWG	.250 x .032	TD10-250	TD10-250M	N/A	.76	.29	50, 100, 500

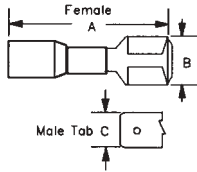
NYLON PARTIALLY INSULATED

22-18 AWG	.250 X .032	TDNF18-250	TDNF18-250M	RED	.89	.29	50, 100, 500, 1000
16-14 AWG	.250 X .032	TDNF14-250	TDNF14-250M	BLUE	.89	.29	50, 100, 500, 1000
12-10 AWG	.250 X .032	TDNF10-250	TDNF10-250M	YELLOW	1.04	.29	50, 100, 500

NYLON FULLY INSULATED

22-18 AWG	.250 x .032	TDNF18-250FI	TDNF18-250FIM	RED	.84/.97	.35/.40	50, 100, 500, 1000
16-14 AWG	.250 x .032	TDNF14-250FI	TDNF14-250FIM	BLUE	.84/.97	.35/.40	50, 100, 500, 1000
12-10 AWG	.250 x .032	TDNF10-250FI	TDNF10-250FIM	YELLOW	1.07/1.17	.36/.40	50, 100, 500

*Dimension "B" refers to female disconnects only. Right angle disconnects available upon request.



PIGGYBACKS DISCONNECTS

Piggybacks are female and male tabs combined into one disconnect. Primarily used to allow additional circuits to be added to existing equipment without costly rework. Available in vinyl insulation only.



WIRE RANGE	TAB SIZE	PART NUMBER	A	B	C	STANDARD PACKAGE
*22-18 AWG	.250 x .032	TDV18-250PB	.87	.30	.25	50, 100, 500, 1000
16-14 AWG	.250 x .032	TDV14-250PB	.87	.30	.25	50, 100, 500, 1000
12-10 AWG	.250 x .032	TDV10-250PB	1.01	.30	.25	50, 100, 500

DISCONNECT ADAPTERS

Part Number: TD250A

Part Number: TD250FMF



BUTT SPLICES

For use whenever two wires need to be connected. Available in three styles: premium nylon insulated, vinyl insulated and non-insulated. Non-insulated butt splices have a brazed seam to prevent separation during crimping. All butt splices have a bell shaped wire entry with a serrated inner barrel for added pull-out strength.

WIRE RANGE	NYLON INSULATED	VINYL INSULATED	NON-INSULATED	INSULATION COLOR	STANDARD PACKAGE
#22-18 AWG	TBSN18	TBSV18	TBS18	RED	50, 100, 1000
#16-14 AWG	TBSN14	TBSV14	TBS14	BLUE	50, 100, 1000
#12-10 AWG	TBSN10	TBSV10	TBS10	YELLOW	50, 100, 1000

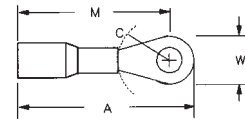
ORDERING INFORMATION:

Ordered by standard package.



RING TERMINALS

Rings terminals are available in all three configurations, nylon insulation grip, funnel entry vinyl, and non-insulated terminals. Ring terminals are the most secure type of tongue style because they cannot slip off a screw or stud, they should be used on all key circuits.



RANGE	WIRES/STUD SIZE	NYLON INSULATED	VINYL INSULATED	NON-INSULATED	INSUL. COLOR	A*	W	C	M*	STANDARD PACKAGE
22-18 AWG	#6	TNF18-6R	TV18-6R	T18-6R	RED	.80	.25	.20	.69	50, 100, 500, 1000
	#8	TNF18-8R	TV18-8R	T18-8R	RED	.91	.31	.27	.75	50, 100, 500, 1000
	#10	TNF18-10R	TV18-10R	T18-10R	RED	.91	.31	.27	.75	50, 100, 500, 1000
	1/4"	TNF18-14R	TV18-14R	T18-14R	RED	1.11	.46	.38	.88	50, 100, 500, 1000
	5/16"	TNF18-56R	TV18-56R	T18-56R	RED	1.11	.46	.38	.88	50, 100, 500, 1000
	3/8"	TNF18-38R	TV18-38R	T18-38R	RED	1.19	.53	.43	.93	50, 100, 500, 1000
16-14 AWG	#6	TNF14-6R	TV14-6R	T14-6R	BLUE	.92	.31	.27	.75	50, 100, 500, 1000
	#8	TNF14-8R	TV14-8R	T14-8R	BLUE	.92	.31	.27	.75	50, 100, 500, 1000
	#10	TNF14-10R	TV14-10R	T14-10R	BLUE	.92	.31	.27	.75	50, 100, 500, 1000
	1/4"	TNF14-14R	TV14-14R	T14-14R	BLUE	1.13	.46	.38	.88	50, 100, 500, 1000
	5/16"	TNF14-56R	TV14-56R	T14-56R	BLUE	1.13	.46	.38	.88	50, 100, 500, 1000
	3/8"	TNF14-38R	TV14-38R	T14-38R	BLUE	1.21	.53	.43	.93	50, 100, 500, 1000
12-10 AWG	#6	TNF10-6R	TV10-6R	T10-6R	YELLOW	1.06	.31	.33	.91	50, 100, 500
	#8	TNF10-8R	TV10-8R	T10-8R	YELLOW	1.06	.31	.33	.91	50, 100, 500
	#10	TNF10-10R	TV10-10R	T10-10R	YELLOW	1.06	.31	.33	.91	50, 100, 500
	1/4"	TNF10-14R	TV10-14R	T10-14R	YELLOW	1.24	.52	.40	.98	50, 100, 500
	5/16"	TNF10-56R	TV10-56R	T10-56R	YELLOW	1.24	.52	.40	.98	50, 100, 500
	3/8"	TNF10-38R	TV10-38R	T10-38R	YELLOW	1.32	.58	.44	1.03	50, 100, 500
1/2"	TNF10-12R	TV10-12R	T10-12R	YELLOW	1.46	.71	.50	1.10	50, 100, 500	

* A and M dimensions apply to insulated terminals only.

ORDERING INFORMATION:

Order by standard package.

FORK TERMINALS

Pacer stocks two variations to the standard "fork" or "spade" terminal. Marine applications require a means of securing the terminal to a post or screw beyond just the pressure of the screw to the terminal itself. Two innovations to the straight fork have been made, locking forks or "Snap Spades" and flanged forks. Locking forks have projections inside the fork causing the connector to "snap" onto the screw or bolt holding the terminal captive.

Flanged forks have the ends turned up, holding the terminal captive should the screw loosen. Functionally, fork terminals are great to use in rework situations where it can be difficult to completely remove the fastener. Pacer has captive forks available in nylon funnel entry with insulation grip, funnel entry vinyl, and brazed seam non-insulated.



WIRE RANGE	STUD SIZE	NYLON INSULATED	VINYL INSULATED	NON-INSULATED	INSUL.. COLOR	A*	W	C	M*	STANDARD PACKAGE
SHORT LOCKING FORKS										
22-18 AWG	#6	TNF18-6SLF	TV18-6SLF	T18-6SLF	RED	.80	.25	.20	.68	50, 100, 500, 1000
	#8	TNF18-8SLF	TV18-8SLF	T18-8SLF	RED	.85	.29	.23	.73	50, 100, 500, 1000
	#10	TNF18-10SLF	TV18-10SLF	T18-10SLF	RED	.86	.33	.23	.73	50, 100, 500, 1000
16-14 AWG	#6	TNF14-6SLF	TV14-6SLF	T14-6SLF	BLUE	.80	.25	.20	.68	50, 100, 500, 1000
	#8	TNF14-8SLF	TV14-8SLF	T14-8SLF	BLUE	.85	.29	.23	.73	50, 100, 500, 1000
	#10	TNF14-10SLF	TV14-10SLF	T14-10SLF	BLUE	.86	.33	.23	.73	50, 100, 500, 1000
12-10 AWG	1/4"	TNF14-14SLF	TV14-14SLF	T14-14SLF	BLUE	.95	.44	.33	.79	50, 100, 500, 1000
	#6	TNF10-6SLF	TV10-6SLF	T10-6SLF	YELLOW	.89	.25	.20	.77	50, 100, 500
	#8	TNF10-8SLF	TV10-8SLF	T10-8SLF	YELLOW	.94	.29	.28	.82	50, 100, 500
#10	TNF10-10SLF	TV10-10SLF	T10-10SLF	YELLOW	.95	.33	.28	.82	50, 100, 500	
	1/4"	TNF10-14SLF	TV10-14SLF	T10-14SLF	YELLOW	1.04	.45	.34	.88	50, 100, 500

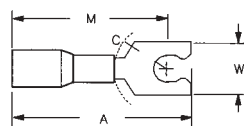
WIRE RANGE	STUD SIZE	NYLON* INSULATED	NON-INSULATED	INSUL.. COLOR	A*	W	C	M*	STANDARD PACKAGE
FLANGED FORKS									
22-18 AWG	#6	TN18-6FF	—	RED	.78	.28	.20	.63	50, 100, 500, 1000
	#8	TN18-8FF	T18-8FF	RED	.89	.31	.23	.64	50, 100, 500, 1000
	#10	TN18-10FF	—	RED	.89	.38	.23	.64	50, 100, 500, 1000
16-14 AWG	#6	TN14-6FF	T14-6FF	BLUE	.78	.28	.20	.63	50, 100, 500, 1000
	#8	TN14-8FF	T14-8FF	BLUE	.89	.31	.23	.64	50, 100, 500, 1000
	#10	TN14-10FF	—	BLUE	.89	.38	.23	.64	50, 100, 500, 1000
12-10 AWG	#8	TN10-8FF	—	YELLOW	1.02	.37	.26	.78	50, 100, 500
	#10	TN10-10FF	T10-10FF	YELLOW	1.02	.37	.26	.78	50, 100, 500

* A and M dimensions apply to insulated terminals only.

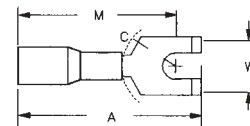
** Nylon insulated flanged forks are not funnel entry.

ORDERING INFORMATION:

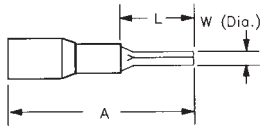
Order by standard package.



Short Locking Forks



Flanged Forks



PIN TERMINALS

Pin connectors are primarily designed for compression type terminal blocks. Available in vinyl insulation only.



WIRE RANGE	VINYL INSULATED	INSULATION COLOR	A	L	W	STANDARD PACKAGE
22-18 AWG	TV18-47P	RED	.84	.47	.08	50, 100, 500, 1000
16-14 AWG	TV14-47P	BLUE	.84	.47	.08	50, 100, 500, 1000
12-10 AWG	TV10-55P	YELLOW	1.12	.55	.11	50, 100, 500

ORDERING INFORMATION:

Order by standard package.

3-WAY AND 4-WAY CONNECTORS

3 or 4 ring terminals are tightly riveted together to allow the connection of multiple wires into one circuit. The center hole diameter is .160". Available in vinyl insulation only.



WIRE RANGE	3-W VINYL INSULATED	4-W VINYL INSULATED	STANDARD PACKAGE
22-18 AWG	TV18-3W	TV18-4W	50, 100, 500, 1000
16-14 AWG	TV14-3W	TV14-4W	50, 100, 500, 1000
12-10 AWG	TV10-3W	TV10-4W	50, 100, 500

ORDERING INFORMATION:

Order by standard package.

BULLET CONNECTORS

Bullet Connectors have advantages similar to disconnects, providing a reliable in-line connection. Terminals are made to close tolerances to produce holding friction when parts are mated.



WIRE RANGE	SIZE	PLUG PART NUMBER	RECEPTACLE PART NUMBER	INSULATION COLOR	STANDARD PACKAGE
22-18 AWG	.156	TBPV18-156	TBRV18-156	RED	50, 100, 500, 1000
22-18 AWG	.180	TBPV18-180	TBRV18-180	RED	50, 100, 500, 1000
16-14 AWG	.156	TBPV14-156	TBRV14-156	BLUE	50, 100, 500, 1000
16-14 AWG	.180	TBPV14-180	TBRV14-180	BLUE	50, 100, 500, 1000

ORDERING INFORMATION:

Order by standard package.

CRIMPABLE WIRE JOINTS

Wire joints can be used as a splice, wire butt, parallel or dead end cap. Each size has a minimum and maximum range of wires it will accept. Available in nylon insulation.



MIN/MAX* RANGE	PART NUMBER	INSULATION COLOR	STANDARD PACKAGE
2@18 - 2@16 AWG	TJN218-216	CLEAR	100, 500, 1000
4@18 - 2@12 AWG	TJN418-212	CLEAR	100, 500, 1000
3@14 - 4@12 AWG	TJN314-412	CLEAR	100, 500

ORDERING INFORMATION:

Order by standard package.