3M Wire Connector T/Y+

Data Sheet



Application

Use a $3M^{TM}$ Wire Connector T/Y+ to electrically connect two or more conductor ends in a pigtail application and insulate the connection.

Wire

AWG Range

COPPER conductors only, No. 22 thru No. 12 solid and/or stranded

METRIC Range

COPPER conductors only, 0,5 mm² thru 2,5 mm² ridged (solid or stranded) and flexible (See wire matrix for specific wire combinations.)

Construction

Spring

Spring steel, corrosion-resistant coating

Insulator

Flame retardant, polypropylene and thermoplastic elastomer, color coded tan/yellow

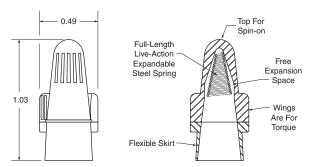
Weight

0.0025 lbs. (1,13 gm)

Performance Test

The following tests were performed to the specifications of UL Standard 486C and CSA Standard C22.2 No. 188-M1983.

Static-Heating	Pass
Secureness	Pass
Pullout	Pass
Dielectric Voltage Withstand	Pass
Secureness-Of-Insulation	Pass
Flammability	Pass



Other Test

Salt Spray	Pass
Per MIL-STS-1344A Method 1001.1	
Vibration	Pass
Per MIL-STS-1344A Method 2005.1	
UV Exposure	Pass
Per ASTM G-53-77	

Fluid Immersion Test

Connectors were immersed in the following chemicals for seven days at $23^{\circ}C \pm 2^{\circ}C$ with no effect on appearance or loss of material strength.

Typical Reagents and Materials From ASTM D 543-87 and MIL-STD-1344A

Acetic Acid Acetone Detergent Solution, Heavy Duty Ethyl Alcohol (95%) Ethyl Alcohol (50%) Heptane Hydrogen Peroxide Solution 28% Methyl Alcohol Sodium Hydroxide Solution Mineral Spirit Lubricating Oil

Engineering Specification

3MTM Wire Connector T/Y+ is capable of connecting two or more wires in a pigtail application, in the wire range of No. 22 thru No. 12 AWG solid and/or stranded copper conductors. The connector shall be constructed with an active (live) spring with a corrosion resistant coating. The connector shall be UL LISTED as a pressure wire connector. The connector shall be voltage rated 600 volts maximum, building wire, 1000 volts maximum, signs and lighting fixtures (luminaries). The connector shall have a maximum operating temperature of 105°C (221°F).

Regulatory Agencies

UL Listed

as a Pressure Wire Connector tested per UL Standard 486C

UL File No. E23438

Operating Temperature: 105°C (221°F) Voltage Rating: 600 volts max. building wire 1000 volts max. signs and lighting fixtures (luminaries) Flammability Rating: UL94 V-2

Federal Specification W-S-610

"Commercial Package Only"

Type Class		Kind	Style			
1	1	cu	G			

Installation Instructions

Turn power off before installing or removing connector. All electrical work should be done according to appropriate electrical codes.

- 1. Strip wire insulation: 22–16 AWG = 5/8" 14–12 AWG = 1/2"
- 2. Firmly grasp wires, making sure insulation ends are even and tightly bundled. (Wires may be twisted or untwisted.) Lead stranded wires slightly. Slip the connector over wire tips.
- 3. Turn connector onto wires in clockwise direction until secure.
- 4. To remove, turn connector counter-clockwise.

Wir	e Matrix			Metric	Wire Com	oination						
				Cross S	Section Cap	acity		1,0 mm	² throu	gh 5,0) mm ²	
	1]		Conduc	tor Combir	nations	Quant	tity	Siz	e	Ту	/pe
22 STR	$\begin{array}{c}2\\3\\\bullet\\\bullet\\\bullet\\\bullet\\\bullet\\\bullet\\\bullet\\\bullet\\\bullet\\\bullet\\\bullet\\\bullet\\\bullet\\\bullet\\\bullet\\\bullet\\\bullet\\\bullet\\$						2–6	;	0,5 m	ım²	sol	./str.
STR	$\begin{array}{c}4\\5\end{array} \bullet \bullet \\\end{array}$						2–5		0,75 r	nm²	sol	./str.
	6		1				2–4		1,0 m	im²	sol	./str.
		••••					2–4		1,5 m	ım²	sol	./str.
22 SOL	3 ● ● 4 ● 5 ●						3		2,5 m	Im ²	s	ol.
	6	•		*Only A	WG wire si	ze combin	ations are	e UL LI	STED.			
20 STR	$ \begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ \end{array} $											
20 SOL	$ \begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ \end{array} $								U L	LIS 3.	STED 14R	
18 STR	$ \begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \end{array} $	•••			•••• ••• •			Stand	vriters Lat lard NO. U File NO. E	JL 486C	;	
18 SOL	$ \begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \end{array} $	••• ••										
16 STR	$ \begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \end{array} $			• • • • • • • •	•••• ••• •	• • • • • • • • •	••• ••					
16 SOL	$ \begin{array}{c} 1\\2\\3\\4\\\end{array} $					• • • • • • • • • • • • • • • • • • •	• • • • • •	•••				
14 STR	$\begin{array}{c}1\\2\\3\end{array}$	••••	••••	••••	•••	•••	•••	•••	••		_	
14 SOL	$\begin{bmatrix} 1\\ 2\\ 3 \end{bmatrix} \bullet \bullet \bullet \bullet$	••••	••••	••••	•••	•••	•••	•••	••	••		_
12 STR	1 2				••••	••••	•••	•••	••	••	•	
12 SOL	1 2				••••	••••	•••	•••	••	••	•	•
	123456	123456	12345	12345	1234	1234	123	123	12	12	1	1
T/Y	+ 22 STR	22 SOL	20 STR	20 SOL	18 STR	22 STR	16 STR	16 SOL	14 STR	14 SOL	12 STR	12 SOL

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