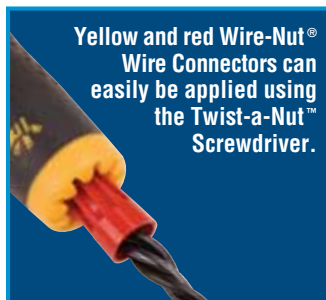


# IDEAL® WIRE TERMINATION

## Wire-Nut® Wire Connectors



Yellow and red Wire-Nut® Wire Connectors can easily be applied using the Twist-a-Nut™ Screwdriver.

- Five color-coded models cover wire sizes from 22 to 6 AWG
- Fixed, square-wire spring creates its own threads – maintains a secure positive grip that will not relax over time
- No pre-twisting required – positive grip design provides fast, easy installation
- Deep skirt helps protect against flash-over
- Reusable for easy circuit changes and additions
- Tough, UL94V-2 flame-retardant shell rated at 105°C (221°F)
- UL Listed to 486C and CSA certified to C22.2 #188; comply with Federal Specification W-S-610E



Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
71B®	Gray	300V 22 to 16 AWG Min. 2 #22 – Max. 2 #16	300V ,34mm² to 1,5mm² Min. 2-,34mm² Max. 3-1,5mm²	Box of 100	30-071
				Carton of 1,000	30-171
				Keg of 25,000 (loose pack)	30-271
				Barrel of 150,000	30-871
				Box of 100	30-072
72B®	Blue	300V 22 to 14 AWG Min. 2 #22 – Max. 3 #16	300V ,34mm² to 2,5mm² Min. 2-,34mm² Max. 3-1,5mm²	Carton of 1,000	30-172
				Keg of 10,000 (loose pack)	30-272
				Barrel of 85,000	30-872
				Box of 100	30-073
				Jar of 300	30-073J
73B®	Orange	600V* 22 to 14 AWG Min. 1 #18 & 1 #20 Max. 2 #14	600V* ,34mm² to 2,5mm² Min. 1-,75mm² w/1-,50mm² Max. 4-1,5mm² w/1-,50mm²	Carton of 1,000	30-173
				Bag of 500	30-273
				Keg of 10,000 (loose pack)	30-673
				Barrel of 50,000	30-873
				Box of 100	30-074
74B®	Yellow	600V* 18 to 12 AWG Min. 2 #18 Max. 4 #14 & 1 #18	600V* ,75mm² to 4,0mm² Min. 2-,75mm² Max. 4-2,5mm² w/1-,75mm²	Jar of 175	30-074J
				Carton of 1,000	30-174
				Bag of 500	30-274
				Keg of 5,000 (loose pack)	30-674
				Barrel of 35,000	30-874
76B®	Red	600V* 18 to 6 AWG Min. 2 #14 Max. 4 #12	600V* ,75mm² to 16,0mm² Min. 2-2,5mm² Max. 2-4,0mm²	Box of 100	30-076
				Jar of 150	30-076J
				Carton of 1,000	30-176
				Bag of 250	30-276
				Barrel of 15,000	30-876

\*1,000V maximum in fixtures and signs

## High Temperature Wire-Nut® Wire Connectors

All of the Wire-Nut® Wire Connector features plus:

- Black, thermoplastic shell designed to withstand extreme heat build-up found in high-wattage light fixtures and signs. UL Listed to 150°C (302°F)
- Four models to cover wire ranges from 22 to 12 AWG

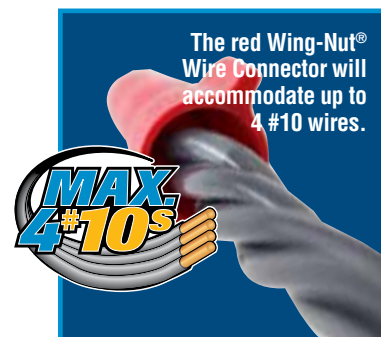





Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
71B®	Black	300V 22 to 16 AWG Min. 2 #22 Str Max. 2 #16	300V ,34mm² to 1,5mm² Min. 2-,34mm² Max. 2-1,5mm²	Box of 100	30-3627
				Carton of 1,000	30-151
				Keg of 25,000 (loose pack)	30-251
				Barrel of 150,000	30-801
72B®	Black	300V 22 to 14 AWG Min. 2 #22 Max. 3 #16	300V ,34mm² to 2,5mm² Min. 2-,34mm² Max. 3-1,5mm²	Box of 100	30-3628
				Carton of 1,000	30-152
				Keg of 10,000 (loose pack)	30-252
				Barrel of 85,000	30-802
73B®	Black	600V* 22 to 14 AWG Min. 1 #18 w/1 #20 Max. 2 #14	600V* ,34mm² to 2,5mm² Min. 1-,75mm² w/1-,50mm² Max. 4-1,5mm² w/1-,50mm²	Box of 100	30-3629
				Carton of 1,000	30-153
				Keg of 10,000 (loose pack)	30-253
				Barrel of 50,000	30-803
59B®	Black	600V* 22 to 12 AWG Min. 2 #20 Max. 3 #14	600V* ,34mm² to 4,0mm² Min. 2-,5mm² Max. 3-2,5mm²	Box of 100	30-059
				Carton of 1,000	30-159
				Keg of 5,000 (loose pack)	30-259
				Barrel of 35,000	30-809

\*1,000V maximum in fixtures and signs

# Wing-Nut® Wire Connectors

- Three color-coded models cover a full range of wire sizes from 18 to 6 AWG
- Specially designed contoured wings provide a secure grip for extra leverage on maximum wire combinations
- Live-action spring expands to accept wire shape and size with no pre-twisting required
- Square-wire spring threads directly onto conductors for fast, secure connections
- Deep skirt helps protect against flash-over and turned-back strands for maximum dielectric protection
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- UL Listed to 486C and CSA Certified to C22.2 #188; comply with Federal Specification W-S-610E




Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
451® 	Yellow	600V* 18 to 10 AWG Min. 2 #18 Max. 3 #12	600V* .75mm <sup>2</sup> to 6,0mm <sup>2</sup> Min. 2-.75mm <sup>2</sup> Max. 3-4,0mm <sup>2</sup>	Box of 100	<b>30-451</b>
				Jar of 225	<b>30-451J</b>
				Jar of 500	<b>30-651J</b>
				Carton of 1,000	<b>30-551</b>
				Bag of 500	<b>30-651</b>
				Barrel of 35,000	<b>30-851</b>
452® 	Red	600V* 18 to 8 AWG Min. 2 #18 Max. 4 #10	600V* .75mm <sup>2</sup> to 10,0mm <sup>2</sup> Min. 2-.75mm <sup>2</sup> Max. 4-6,0mm <sup>2</sup>	Box of 100	<b>30-452</b>
				Jar of 300	<b>30-452J</b>
				Jar of 500	<b>30-652J</b>
				Carton of 1,000	<b>30-552</b>
				Bag of 500	<b>30-652</b>
				Barrel of 25,000	<b>30-852</b>
454® 	Blue	600V* 14 to 6 AWG Min. 3 #12 Max. 1 #6 & 2 #8	600V* 2,5mm <sup>2</sup> to 16,0mm <sup>2</sup> Min. 3-4,0mm <sup>2</sup> Max. 2-16,0mm <sup>2</sup> w/1-4,0mm <sup>2</sup>	Box of 25	<b>30-454</b>
				Carton of 250	<b>30-554</b>
				Bag of 100	<b>30-654</b>
				Barrel of 10,000	<b>30-854</b>

\*1,000V maximum in fixtures and signs



# Greenie® Grounding Wire Connectors

- Designed for making ground connections and bonding non-metallic sheathed cable
- Contoured wings for maximum leverage
- Live-action, square-wire spring provides superior grounding connections
- Tough, UL 94V-2 flame-retardant shell
- UL Listed to 467 and CSA Certified to C22.2 #188; comply with Federal Specification W-S-610E

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
92® 	Green	14 to 10 Min. 2 #14 Max. 4 #12	2,5mm <sup>2</sup> to 6,0mm <sup>2</sup> Min. 2-2,5mm <sup>2</sup> Max. 2-4,0mm <sup>2</sup> w/1-2,5mm <sup>2</sup>	Box of 100	<b>30-092</b>
				Jar of 150	<b>30-092J</b>
				Carton of 1,000	<b>30-192</b>
				Bag of 500	<b>30-292</b>
				Barrel of 25,000	<b>30-992</b>

**Greenie® Grounding Connector fully meets the intent of the N.E.C. and specifically aids in compliance with the following:**

**ARTICLE 250: GROUNDING**

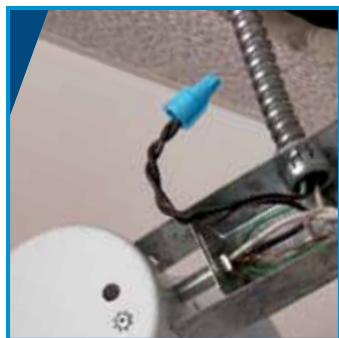
- 250-146 Connecting Receptacle Grounding Terminal to Box
- 250-148 Continuity and Attachment of Equipment Grounding Conductors to Boxes
  - (B) Grounding continuity
  - (D) Nonmetallic boxes



**See Page A-10 for more IDEAL Grounding Products!**




# IDEAL® WIRE TERMINATION

## Twister® Wire Connectors



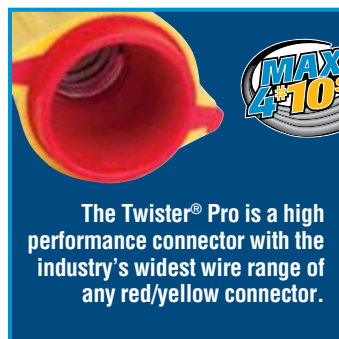
Small profile of Twister® LT is perfect for recessed lighting applications.

- Exceptional wire-range capacity – three color-coded models handle wire combinations from as small as 22 AWG to as large as 6 AWG
- Ribbed cap provides a secure grip and fast fingertip starts
- Swept wings offer extra leverage and less effort for large wire combinations
- Hexagonal shape accommodates standard nutdriver for tool installation
- Live-action, square-wire spring locks onto wire for safe, secure connections
- Deep skirt helps protect against flash-over and turned-back strands for maximum dielectric protection
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- UL Listed to 486C and CSA Certified to C22.2 #188; comply with Federal Specification W-S-610E

Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
340® 	Lt. Blue	600V* 22 to 10 AWG Min. 2 #22 Max. 3 #12	600V* ,34mm <sup>2</sup> to 4,0mm <sup>2</sup> Min. 2-,34mm <sup>2</sup> Max. 3-4,0mm <sup>2</sup>	Box of 100	<b>30-340</b>
				Jar of 500	<b>30-640J</b>
				Barrel of 35,000	<b>30-840</b>
341® 	Tan	600V* 22 to 8 AWG Min. 3 #22 Max. 3 #10	600V* ,34mm <sup>2</sup> to 10,0mm <sup>2</sup> Min. 3-,34mm <sup>2</sup> Max. 3-6,0mm <sup>2</sup>	Box of 100	<b>30-341</b>
				Jar of 400	<b>30-441J</b>
				Jar of 750	<b>30-341J</b>
				Carton of 1,000	<b>30-541</b>
				Bag of 500	<b>30-641</b>
Barrel of 25,000	<b>30-841</b>				
342® 	Gray	600V* 18 to 6 AWG Min. 3 #14 Max. 2 #8 w/2 #12	600V* ,75mm <sup>2</sup> to 10,0mm <sup>2</sup> Min. 3-2,5mm <sup>2</sup> Max. 2-10,0mm <sup>2</sup> w/2-4,0mm <sup>2</sup>	Box of 50	<b>30-342</b>
				Bag of 250	<b>30-642</b>
				Barrel of 15,000	<b>30-842</b>

\*1,000V maximum in fixtures and signs



## Twister® PRO Wire Connectors



The Twister® Pro is a high performance connector with the industry's widest wire range of any red/yellow connector.

- The **widest red/yellow wire range** in the industry; min. 2 #18 to max. 4 #10
- SureGrip™ overmolding provides better grip for improved leverage, more torque and faster connections
- Comfortable swept wings designed to help reduce hand fatigue
- Expanding square-wire spring provides a secure connection every time
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- UL Listed to 486C and CSA Certified to C22.2 #188; comply with Federal Specification W-S-610E



Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
344® 	Red/Yellow 	600V* 22 to 8 AWG <b>Min. 2 #18</b> <b>Max. 4 #10</b>	600V* ,34mm <sup>2</sup> to 10,0mm <sup>2</sup> Min. 2-,75mm <sup>2</sup> Max. 4,0-6,0mm <sup>2</sup>	Box of 50	<b>30-144</b>
				Jar of 250	<b>30-244J</b>
				Jar of 500	<b>30-644J</b>
				Barrel of 20,000	<b>30-944</b>

\*1,000V maximum in fixtures and signs

# IDEAL® WIRE TERMINATION

## mudbug® Utility Wire Connectors



- Connects underground gas tracer lines providing superior protection
- Moisture and corrosion resistant, pre-filled with non-hardening, 100% silicone
- 20 - 8 AWG wire range capacity
- UL Listed to direct burial test standard 486D up to 600V maximum voltage

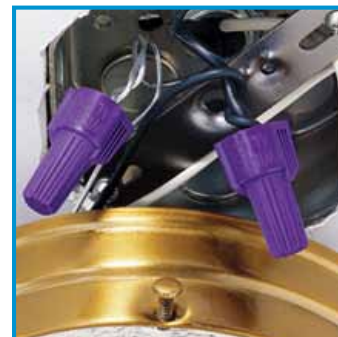
Model	Color	Wire Combination Range	Wire Combination Range (mm)	Quantity	Cat. No.
60®	Yellow	600V* 20 to 10 AWG Min. 1 #20 w/1 #18 Max. 1 #10 w/2 #12	600V* ,5mm <sup>2</sup> to 6,0mm <sup>2</sup> Min. 1-,5mm <sup>2</sup> w/1 ,75mm <sup>2</sup> Max. 1-6,0mm <sup>2</sup> w/2-4,0mm <sup>2</sup>	Box of 25	<b>30-160Y</b>
				Box of 1,000	<b>30-360Y</b>
64®	Yellow	600V* 18 to 8 AWG Min. 2 #18 Sol. Max. 3 #10	600V* ,75mm <sup>2</sup> to 10,0mm <sup>2</sup> Min. 2-,75mm <sup>2</sup> Sol. Max. 3-6,0mm <sup>2</sup>	Box of 25	<b>30-164Y</b>
				Box of 1,000	<b>30-364Y</b>

\*1,000V maximum in fixtures and signs



## Twister® Al/Cu Wire Connectors

- Only aluminum-to-copper twist-on connector specifically designed to guarantee a secure connection while preventing aluminum corrosion
- Specially formulated corrosion-resistant compound penetrates corrosion build-up on aluminum conductors for increased conductivity and cooler connections
- Compact, one-piece design features ribbed cap, swept wings and hexagonal head for easy installation by hand or with standard nutdriver
- Live-action, square-wire spring expands and contracts with aluminum wire
- Deep skirt provides maximum dielectric strength
- Tough, UL 94V-2 flame-retardant shell rated at 105°C (221°F)
- Complies with N.E.C. Section #110-14(b) for aluminum-to-copper connections; UL Listed to 486C and CSA Certified to C22.2 #188; complies with Federal Specification W-S-610E
- Listed to UL467 for grounding and bonding



Model	Color	Wire Combination Ranges	Quantity	Cat. No.
65	Purple	1 #10 Al solid w/1 or 2 #10 Cu solid 1 #10 Al w/1 or 2 #12 Cu 2 #10 Al solid w/1 #12 Cu 1 #10 Al w/1 or 2 #14 Cu 2 #10 Al solid w/1 #14 Cu 2 #12 Al solid w/1 #10 Cu 1 #12 Al solid w/1 or 2 #10 Cu 1 #12 Al stranded w/1 or 2 #10 Cu solid 1 #12 Al w/1 or 2 #12 Cu 2 #12 Al solid w/1 #12 Cu	Card of 2	<b>30-065</b>
			Card of 10	<b>30-765</b>
			Card of 25	<b>30-165</b>
			Box of 100	<b>30-265</b>
			Carton of 1,000	<b>30-365</b>

600V maximum building wire; 1,000V signs or light fixtures

**WARNING:**




1. One time use only. Do not reuse connector.
2. Do not use on aluminum to aluminum wire combinations.
3. Wiring must comply with all applicable electrical codes.
4. Contact IDEAL or visit IDEAL website for a complete list of UL Listed wire combinations.



# Crimp Terminals - Rings, Forks, Disconnects and Splices

- Butted seam-construction prevents splitting under maximum pressure
- Internal barrel serrations grip wires tightly to resist pull-out and reduce electrical resistance
- Tin-plated brass construction for corrosion resistance
- Shouldered barrel insulation quickly positions terminal for proper crimping
- Expanded insulation entry accommodates a wide variety of insulation diameters and provides additional insulation support
- Color-coded insulation and wire range stamped on terminal for easy identification
- See product packaging for recommended crimp tools

## Vinyl Insulated Ring Terminals

Wire Range Combination	Stud Size In.	Max. Wire Ins. Dia. In.	Qty.	Cat. No.	Qty.	Cat. No.
 22 – 18 AWG (0,5–1,0mm <sup>2</sup> )	6 (3.7mm)	0.157 (4.0mm)	25	<b>83-2121</b>	—	—
	8 (4.3mm)		25	<b>83-2131</b>	—	—
	10 (5.3mm)		25	<b>83-2141</b>	—	—
	1/4 (6.4mm)		25	<b>83-2151</b>	—	—
 16 – 14 AWG (1,5–2,5mm <sup>2</sup> )	6 (3.7mm)	0.177 (4.5mm)	25	<b>83-2221</b>	—	—
	8 (4.3mm)		25	<b>83-2231</b>	—	—
	10 (5.3mm)		25	<b>83-2241</b>	1,000	<b>84-2241</b>
	1/4 (6.4mm)		25	<b>83-2251</b>	—	—
 12 – 10 AWG (4,0–6,0mm <sup>2</sup> )	8 (4.3mm)	0.248 (6.3mm)	25	<b>83-2331</b>	—	—
	10 (5.3mm)		25	<b>83-2341</b>	1,000	<b>84-2341</b>
	1/4 (6.4mm)		25	<b>83-2351</b>	—	—
	5/16 (8.4mm)		25	<b>83-2361</b>	—	—
	3/8 (10.5mm)		25	<b>83-2371</b>	—	—

75° C/600 Volts max.




## Non-Insulated Ring Terminals



Wire Range	Stud Size In.	Qty.	Cat. No.	Qty.	Cat. No.
22 – 18 AWG (0,5–1,0mm <sup>2</sup> )	8 (4.3mm)	25	<b>83-0131</b>	—	—
	10 (5.3mm)	25	<b>83-0141</b>	—	—
16 – 14 AWG (1,5–2,5mm <sup>2</sup> )	6 (3.7mm)	25	<b>83-0221</b>	—	—
	8 (4.3mm)	25	<b>83-0231</b>	—	—
	10 (5.3mm)	25	<b>83-0241</b>	1,000	<b>84-0241</b>
12 – 10 AWG (4,0–6,0mm <sup>2</sup> )	8 (4.3mm)	25	<b>83-0331</b>	—	—
	10 (5.3mm)	25	<b>83-0341</b>	1,000	<b>84-0341</b>
	1/4 (6.4mm)	25	<b>83-0351</b>	—	—
8 AWG (8,0mm <sup>2</sup> )	10 (5.3mm)	25	<b>83-0421</b>	—	—
	1/4 (6.4mm)	25	<b>83-0431</b>	—	—
	5/16 (8.4mm)	25	<b>83-0441</b>	—	—
6 AWG (14,0mm <sup>2</sup> )	3/8 (10.5mm)	25	<b>83-0451</b>	—	—
	10 (5.3mm)	20	<b>83-0511</b>	—	—
	1/4 (6.4mm)	20	<b>83-0521</b>	—	—
4 AWG (22,0mm <sup>2</sup> )	5/16 (8.4mm)	20	<b>83-0531</b>	—	—
	3/8 (10.5mm)	20	<b>83-0541</b>	—	—
	1/4 (6.4mm)	20	<b>83-0611</b>	—	—
4 AWG (22,0mm <sup>2</sup> )	5/16 (8.4mm)	20	<b>83-0621</b>	—	—
	3/8 (10.5mm)	20	<b>83-0631</b>	—	—




105° C/600 Volts max.  
\*Plus or minus .020 in.  
\*\*Plus or minus .51mm

## Vinyl Insulated Spade Terminals

Wire Range	Stud Size In.	Max. Wire Ins. Dia. In.	Qty.	Cat. No.	Qty.	Cat. No.
 22 – 18 AWG (0,5–1,0mm <sup>2</sup> )	6 (3.7mm)	0.157 (4.0mm)	25	<b>83-7111</b>	1,000	<b>84-7111</b>
	8 (4.3mm)		25	<b>83-7121</b>	—	—
	10 (5.3mm)		25	<b>83-7131</b>	—	—
 16 – 14 AWG (1,5–2,5mm <sup>2</sup> )	6 (3.7mm)	0.177 (4.5mm)	25	<b>83-7151</b>	—	—
	8 (4.3mm)		25	<b>83-7161</b>	1,000	<b>84-7161</b>
	10 (5.3mm)		25	<b>83-7171</b>	1,000	<b>84-7171</b>
 12 – 10 AWG (4,0–6,0mm <sup>2</sup> )	6 (3.7mm)	0.248 (6.3mm)	25	<b>83-7201</b>	—	—
	8 (4.3mm)		25	<b>83-7211</b>	—	—
	10 (5.3mm)		25	<b>83-7221</b>	500	<b>84-7221</b>
	1/4 (6.4mm)		25	<b>83-7231</b>	—	—

75° C/600 Volts max.

## Vinyl Insulated Snap Spade Terminals

Wire Range	Stud Size In.	Max. Wire Ins. Dia. In.	Qty.	Cat. No.	Qty.	Cat. No.
 22 – 18 AWG (0,5–1,0mm <sup>2</sup> )	6 (3.7mm)	0.134 (4.0mm)	25	<b>83-7011</b>	—	—
	8 (4.3mm)		25	<b>83-7021</b>	—	—
	10 (5.3mm)		25	<b>83-7031</b>	—	—
 16 – 14 AWG (1,5–2,5mm <sup>2</sup> )	6 (3.7mm)	0.161 (4.5mm)	25	<b>83-7051</b>	—	—
	8 (4.3mm)		25	<b>83-7061</b>	—	—
	10 (5.3mm)		25	<b>83-7071</b>	—	—
 12 – 10 AWG (4,0–6,0mm <sup>2</sup> )	8 (4.3mm)	0.248 (6.3mm)	25	<b>83-7081</b>	—	—
	10 (5.3mm)		25	<b>83-7091</b>	—	—
	1/4 (6.4mm)		25	<b>83-7101</b>	—	—

75° C/600 Volts max.

