

## Covers

- Helps prevent contact with live terminals



No. of Circuits	For Use with			
	89-200	89-300	89-400	89-500
	Clear Cat. No.	Clear Cat. No.	Clear Cat. No.	Clear Cat. No.
2	<b>89-233</b>	<b>89-334</b>	<b>89-434</b>	—
4	<b>89-235</b>	<b>89-335</b>	<b>89-435</b>	<b>89-514</b>
6	<b>89-236</b>	<b>89-336</b>	<b>89-436</b>	<b>89-516</b>
8	<b>89-237</b>	—	<b>89-437</b>	<b>89-518</b>
10	<b>89-238</b>	<b>89-338</b>	<b>89-438</b>	—
12	<b>89-239</b>	<b>89-339</b>	<b>89-439</b>	<b>89-520</b>

## Quick Connects

- Allows fast, flexible circuit changes

For Use with	Terminal Strip Series	Tab Size (Inches)	Qty.	Flat -None Cat. No.	Flat - Flat Cat. No.
	89-300	.187 x .020	10	<b>89-314</b>	<b>89-317</b>
	89-200 & 89-400	.250 x .031	10	<b>89-414</b>	<b>89-417</b>

## Jumpers

- Provides easy connection of multiple circuits

For Use with	Center Spacing (In.)	Quantity	Flat Slip-on Cat. No.	Over Barrier Slip-on Cat. No.	Flat 12-Circuit Cat. No.
Terminal Strip Series					
89-200	.562	10	<b>89-229</b>	<b>89-224</b>	—
		100	<b>89-230</b>	—	—
89-300	.375	10	<b>89-323</b>	<b>89-324</b>	—
		100	<b>89-330</b>	—	—
89-400	.437	10	<b>89-423</b>	<b>89-424</b>	—
		100	<b>89-430</b>	—	—
89-500	.625	2	—	—	<b>89-525</b>

## Barrier Strips

- Recessed screws and tubular contacts provide added safety and help prevent short circuits
- Tubular contacts connect stripped, un-terminated solid or stranded wire directly to each contact
- Integrated wire protectors prevent twisting and breakage of stranded wire during connection
- Modular 12-circuit design can be cut into smaller sections, or stacked end-to-end
- Rugged nylon construction, UL 94V2
- Operating temperature rated to 105°C (221°F)



Electrical Ratings	Wire Range (AWG)	No. of Circuits	Torque in. - lb.	Model No.	Cat. No.
20A/300V UL	22 - 12	12	3.5	PA8DS	<b>89-608</b>
10A/400V CSA	20 - 18				
30A/300V UL	22 - 10	12	4.4	PA10DS	<b>89-610</b>
20A/400V CSA	18 - 14				
35A/300V UL/CUL	22 - 10	12	7.0	PA12DS	<b>89-612</b>
50A/300V UL/CUL	20 - 8	12	12.0	PA14DS	<b>89-614</b>

## Set Screw Wire Connectors

- Eliminates need for restripping wire each time connection is disturbed
- Solid brass sleeves in three sizes handle 22 through 10 AWG wires
- Set-screw easily and securely applies maximum compression to conductors to ensure a vibration-resistant splice
- Permits fast visual inspection of splice
- Tough, flame-retardant shell rated at 150°C (302°F)
- UL Listed to 486C and CSA Certified to C22.2 #188 ; comply with Federal Specification W-S-610E

Model	Wire Combination Range	Quantity	Cat. No.
10 	300V 22 thru 10 AWG Min. 1 #20 w/1 #22 Max. 2 #14 w/1 #16	Box of 100	<b>30-210</b>
		Carton of 1,000	<b>30-310</b>
11 	600V 22 thru 10 AWG Min. 1 #14 w/1 #20 Max. 3 #14 w/2 #18	Box of 100	<b>30-211</b>
		Carton of 1,000	<b>30-311</b>
22 	600V 20 thru 10 AWG Min. 1 #16 w/3 #18 Max. 2 #10 w/1 #12	Box of 100	<b>30-222</b>
		Carton of 1,000	<b>30-322</b>



## Noalox® Anti-Oxidant

- Anti-oxidant compound improves efficiency and service life of aluminum electrical applications
- Suspended zinc particles penetrate and cut aluminum oxide
- Provides additional inner-strand and inner-conductor current paths for improved conductivity and cooler connections
- Carrier material excludes air to minimize further oxidation
- For use with pressure-type wire connectors including lugs, taps, service entrances and split bolts
- Reduces galling and seizing when applied to aluminum conduit joints – promotes good ground continuity



Description	Cat. No.
1/2-oz. Tube	<b>30-024</b>
4-oz. Squeeze bottle	<b>30-026</b>
8-oz. Squeeze bottle	<b>30-030</b>
8-oz. Brush cap	<b>30-031</b>
1-gal. Bucket	<b>30-032</b>
5-gal. Bucket	<b>30-040</b>

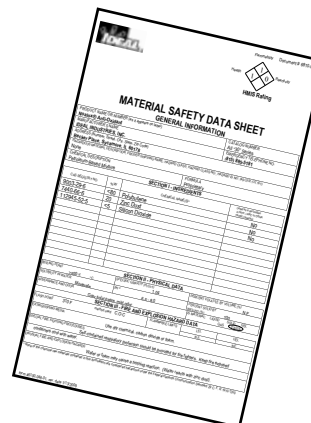
## Set Screw Holder



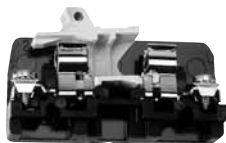
- Convenient tool for holding and tightening set-screw connectors
- Accepts IDEAL Models 11 and 22 set-screw connectors

For Connector Models	Cat. No.
11 & 22 	<b>K-2422</b>

For a Material Safety Data Sheet on Noalox® and all other products visit us at [www.idealindustries.com](http://www.idealindustries.com)



## 300 Series Phenolic Fuse Blocks



- Provide in-line circuit protection for any circuit or group of circuits
- Three contact styles for terminated or unterminated wire are conservatively rated to 30A
- Remove, check and replace fuses safely and quickly – switch-action fuse blocks open circuits before fuse can be removed or installed
- Good circuit density when mounted adjacently – 91 circuits per 6 foot length
- Use in high temperature applications – phenolic housing withstands temperatures up to 302°F (150°C)
- Flat base models for surface mounting, dovetail base models for standard channel
- Only one end section needed per block assembly
- Open or close several circuits simultaneously – holes in puller handles allow use of nylon “ganging” rods
- Readily identifiable circuits – mark directly on white, matte-surface puller assembly, marking tab on block or use removable marking tape
- Sections snap-fit with Heavy Duty and Intermediate Heavy Duty Blocks

### Specifications

**Center-to-Center Spacing:** .75 in. CL: 16 circuits per foot.

**Fuse Size:** Any 13/32 in. x 1-1/2 in. ferrule-type cartridge fuse up to 30A, indicating or non-indicating, which meets MIL. Spec. F-15160 is recommended.

WIRE RANGE: Solid or Stranded

**Tubular Screw** – Cat. No. 362 and 0362 – 1 #4 AWG, 1 #6 AWG, 1 or 2 #8 AWG, 1 to 4 #10 AWG, 1 to 5 #12 AWG, 1 to 6 #14 AWG, 1 to 6 #16 AWG, 1 to 8 #18 AWG

## 100 Series Phenolic One Piece Terminal Blocks



Traditional standard in the heavy industrial, rail transport, utility and traffic control industries. The rugged, one-piece construction finds wide application in dirty and vibration-prone environments.

- Two, four, six, eight and twelve circuit models
- Strap screw contacts accept wire 8 AWG and smaller and are rated to 50 Amps
- Pilot point screws with strap screw contacts speed installation time
- Easily identifiable circuits with use of plain white marking strip
- No assembly required - each block is a single, easily installed unit

### Specifications

**Center-to-Center Spacing:** .63 in. CL

WIRE RANGE: Solid or Stranded

**Strap Screw** – 1 #18 AWG through 1 #8 AWG

## Specification Chart - pgs. A-30 & A-31

	800 Series Nylon	400 Series Phenolic	300 Series Phenolic	100 Series Phenolic
<b>Housing Material</b>	Nylon, Type 6/6 Unfilled	Phenolic, Filled, Flame retardant	Phenolic, Filled, Flame retardant	Phenolic, Filled, Flame retardant
<b>Contact Material</b>	Copper	Copper	Copper Alloy	Copper / Copper Alloy
<b>Screw Material</b>	Steel, Zinc-Plated	Steel Plated	Steel Plated	Steel Plated
<b>Maximum Service Temperature</b>	125°C (257°F)	150°C (302°F)	150°C (302°F)	150°C (302°F)
<b>Breakdown Voltage AC, 60 Hz</b>	8800V	1000V	8400V	—
<b>Dielectric Strength (RH40% at sea level)</b>	470-385V/mil thickness (per ASTM D149)	300V/mil thickness (per ASTM D149)	300V/mil thickness (per ASTM D149)	300V/mil thickness (per ASTM D149)
<b>UL High Voltage Arc Testing (in./min.)</b>	.01 - .35	.49 - .58	.49 - .58	.49 - .58
<b>Water Absorption (24 hrs. % weight gain)</b>	1.5%	0.45% (per ASTM D570)	0.45% (per ASTM D570)	0.45% (per ASTM D570)
<b>Flammability</b>	94V-2	94V-1 (per UL94)	94V-1 (per UL94)	94V-1 (per UL94)
<b>Chemical Resistance</b>	Resistant aromatic hydrocarbons, strong alkalis	Resistant to acids, alkalis, aliphatic hydrocarbons and ketones (per ASTM D5343)	Resistant to acids, alkalis, aliphatic hydrocarbons and ketones (per ASTM D5343)	Resistant to acids, alkalis, aliphatic hydrocarbons and ketones (per ASTM D5343)
<b>Radiation Resistance (ergs g<sup>-1</sup> C)</b>	8 X 10 <sup>7</sup> min.	2.7 X 10 <sup>8</sup> min.	2.7 X 10 <sup>7</sup> min.	2.7 X 10 <sup>7</sup> min.

**Voltage Rating:** Blocks meet 600V creepage and clearance requirements of NEMA, UL and CSA for general industrial control equipment and panelboards. Withstands voltages greatly in excess of IEEE switchgear standards for 750V.



## Recommended Qty. of Lubricant Formula

$$Q = .0015 \times L \times D$$

Q = Quantity of recommended lube in gallons

L = Length of pull in feet

D = Nominal ID of conduit in inches

The formula listed above is used as a guideline on estimating the quantity of lube needed for various jobs. Many factors go into a cable pull, however this formula is just based on length of the pull and diameter of the conduit.

Increase quantities for the following troubles:

- Stiff, heavy cable
- Pulls with several bends
- Rough, old or dirty conduits
- High temperatures
- High percent conduit fill

## Noalox® Anti-Oxidant

- Anti-oxidant compound improves efficiency and service life of aluminum electrical applications
- Suspended zinc particles penetrate and cut aluminum oxide
- Provides additional inner-strand and inner-conductor current paths for improved conductivity and cooler connections
- Carrier material excludes air to minimize further oxidation
- For use with pressure-type wire connectors including lugs, taps, service entrances and split-bolts
- Reduces galling and seizing when applied on aluminum conduit joints promoting good ground continuity



Description	Cat. No.
1/2-oz. Tube	30-024
4-oz. Squeeze bottle	30-026
8-oz. Squeeze bottle	30-030
8-oz. Brush cap	30-031
1-gal. Bucket	30-032
5-gal. Bucket	30-040

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## Duct Seal

- Seals around junction boxes, flashings and service entrances
- Permanently soft, non-toxic compound can be painted immediately after application
- Won't adversely affect other plastic materials or corrode metals



Description	Cat. No.
1 lb. Block (10/carton)	31-601
5 lb. Block (10/carton)	31-605

## Selection & Application Guide



Web Based Selection & Application Guide:  
<http://ideal.sdatafiles.com>

## Valu-Line™ Pull-Line

- White with gray tracer for easy identification
- Continuous-fiber polyline great for blowing directly into conduit
- Will not rot or mildew
- Can be left in conduit for future use



Description	Tensile Strength	Cat. No.
Valu-Line™ Pull-Line – 6,500 ft. (bucket)	190 lbs.	<b>31-338</b>

## Powr-Fish® Pull-Line

- White with blue tracer for easy identification
- Continuous-fiber polyline great for blowing directly into conduit
- Will not rot or mildew
- Can be left in conduit for future use



Description	Tensile Strength	Cat. No.
Powr-Fish® Pull-Line – 6,500 ft. (bucket)	210 lbs.	<b>31-340</b>
Powr-Fish® Pull-Line – 500 ft. (canister)	210 lbs.	<b>31-348</b>

## Powr-Fish® Pull-Line

- White with red tracer for easy identification
- 500 lb. tensile, our highest tensile-rated pull-line
- Continuous-fiber polyline great for blowing directly into conduit
- Will not rot or mildew
- Can be left in conduit for future use



Description	Tensile Strength	Cat. No.
Powr-Fish® Pull-Line – 2,200 ft. (bucket)	500 lbs.	<b>31-344</b>

## Pro-Pull™ Rope

- Low-friction polypropylene rope slides easily through conduit
- Non-sliwer surface can be handled without gloves
- Will not rot or mildew
- Rugged, lightweight construction



Description	Tensile Strength	Cat. No.
1/4 in. x 250 ft. Reel	1,125 lbs.	<b>31-839</b>
1/4 in. x 600 ft. Reel	1,125 lbs.	<b>31-840</b>
1/4 in. x 1,000 ft. Reel	1,125 lbs.	<b>31-841</b>
3/8 in. x 250 ft. Reel†	2,430 lbs.	<b>31-844</b>
3/8 in. x 600 ft. Reel†	2,430 lbs.	<b>31-845</b>
3/8 in. x 1,200 ft. Reel†	2,430 lbs.	<b>31-846</b>
1/2 in. x 250 ft. Reel†	3,780 lbs.	<b>31-849</b>
1/2 in. x 600 ft. Reel†	3,780 lbs.	<b>31-850</b>
1/2 in. x 1,200 ft. Reel†	3,780 lbs.	<b>31-851</b>
5/8 in. x 600 ft. Reel†	5,580 lbs.	<b>31-853</b>
5/8 in. x 1,200 ft. Reel†	5,580 lbs.	<b>31-854</b>
3/4 in. x 300 ft. Reel†	7,650 lbs.	<b>31-855</b>
3/4 in. x 600 ft. Reel†	7,650 lbs.	<b>31-856</b>
3/4 in. x 1,200 ft. Reel†	7,650 lbs.	<b>31-857</b>

† Eye splice on working end.

## 3-in-1 Premise MULETAPE®

- Reduces installation time and saves money on premise jobs
- Thread, measure and pull with single product
- Imprinted with sequential footage or meter markings
- Fewer installation steps, significant material and labor savings



**THREE functions in ONE**

Description	Pulling Strength	Tape Width	Length	Cat. No.
3-in-1 Premise MULETAPE®	400 lb.	1/4 in.	4,500 ft./ bucket	<b>31-314</b>
	1,800 lb.	1/2 in.	1,300 ft./ bucket	<b>31-315</b>

MULETAPE® is a registered trademark of NEPTCO.

## Kinetic™ Super Wire Strippers

- Non-slip Santoprene® textured grips
- Plier nose for holding and twisting wires
- Slide lock for safety and storage
- Thumb and finger valley makes stripping easier and more accurate
- Shear-Cut™ bolt cutters




Description	Solid	Stranded	Cat. No.
 Kinetic Super™ Wire Stripper	10-18	12-20	<b>45-715</b>
	14-24	16-26	<b>45-716</b>
	6-14	8-16	<b>45-718</b>

Santoprene® is a registered trademark of Exxon Mobil.

## Reflex™ Premium T®-Stripper Wire Strippers

- Ergonomic design for maximum comfort
- Curved handles reduce wrist fatigue
- Sleeves extend to stripping head to cushion thumb and fingers
- Textured, no-slip sleeves provide a sure, easy grip



Description	Solid	Stranded	Cat. No.
 Reflex™ Premium T®-Stripper Wire Stripper	10-18	12-20	<b>45-415</b>
	14-24	16-26	<b>45-416</b>
	22-30	24-32	<b>45-417</b>
	6-14	8-16	<b>45-418</b>
Reflex™ Premium T®-Stripper – Metric	0.5mm <sup>2</sup> -4.0mm <sup>2</sup>		<b>45-425-341</b>

## Kinetic™ Reflex™ T®-Stripper Wire Strippers

- Non-slip Santoprene® textured grips and thumb rest
- Plier nose for holding and twisting wires
- Slide lock for safety and storage
- Thumb and finger valley makes stripping easier and more accurate
- Shear-Cut™ bolt cutters




Description	Solid	Stranded	Cat. No.
 Kinetic™ Reflex™ T®-Stripper Wire Stripper	10-18	12-20	<b>45-915</b>
	6-14	8-16	<b>45-918</b>

Santoprene® is a registered trademark of Exxon Mobil.

## Reflex™ Super T®-Stripper Wire Strippers

- 6/32 and 8/32 self-chasing screw-cutting holes
- Locking pawl for safe storage
- Ergonomic design for maximum comfort
- Curved handles reduce wrist fatigue
- Sleeves extend to stripping head to cushion thumb and fingers
- Textured sleeves with extra cushioning for added comfort

Description	Solid	Stranded	Cat. No.
 Reflex™ Super T®-Stripper Wire Stripper	8-16	10-18	<b>45-615</b>
	8-14	8-16	<b>45-618</b>
 Reflex™ Super 12/2 & 14/2 NM Cable T®-Stripper Wire Stripper	12-2 and 14-2	—	<b>45-621</b>

**Engineered to strip every wire right!**

## T<sup>®</sup>-Stripper Wire Strippers

- Form-ground, knife-type blades for accurate, easy stripping without nicking insulation
- Built-in wire cutter and looping holes
- Convenient plier nose for extra gripping strength
- Laser-etched wire gauge for easy-to-read visibility
- Spring-loaded automatic opening
- Corrosion-resistant, black oxide finish
- Tough steel construction



Description	Solid	Stranded	Cat. No.
T <sup>®</sup> -5 T <sup>®</sup> -Stripper Wire Stripper	10-18	12-20	<b>45-120</b>
T <sup>®</sup> -6 T <sup>®</sup> -Stripper Wire Stripper	14-24	16-26	<b>45-121</b>
T <sup>®</sup> -7 T <sup>®</sup> -Stripper Wire Stripper	22-30	24-32	<b>45-125</b>
T <sup>®</sup> -8 T <sup>®</sup> -Stripper Wire Stripper	6-14	8-16	<b>45-124</b>
T <sup>®</sup> -Stripper Wire Stripper – Metric	0.75-6mm <sup>2</sup>		<b>45-120-341</b>
T <sup>®</sup> -Stripper Wire Stripper – Metric	0.5-4mm <sup>2</sup>		<b>45-125-341</b>

## NM Cable T<sup>®</sup>-Stripper Wire Strippers

- Easy, one-step stripping of outer jacket of NM cable – no slitting required
- Versatility to strip, cut and loop conductor wires with precision and ease
- Stripping holes for 12 or 14 AWG solid wire
- Locking pawl for safe storage



Description	Cat. No.
14/2 NM Cable T <sup>®</sup> -Stripper Wire Stripper	<b>45-248</b>
12/2 NM Cable T <sup>®</sup> -Stripper Wire Stripper	<b>45-249</b>

## NM Cable Dual-Hole T<sup>®</sup>-Stripper Wire Stripper

- Stripping holes for stripping two 2 AWG or two 14 AWG wires simultaneously
- Ability to strip both conductor wires of NM cable at one time



## Lil' Ripper Stripper<sup>™</sup>

- Rips Romex<sup>®</sup> wire outer jacket cleanly and quickly
- Clips outer sheathing to remove excess Romex<sup>®</sup> wire jacket
- Strips inner conduit wires
- Looping holes loop wire for screw-on connections
- Twist-Assist<sup>™</sup> tightens most popular sizes of winged twist-on connectors
- Injection molded elastomer grip provides a comfortable, slip resistant grip
- Strip length measuring scale allows for quick and easy measurements
- Conveniently fits in your pocket



Description	Cat. No.
Lil' Ripper Stripper <sup>™</sup>	<b>45-025</b>

Romex<sup>®</sup> is a registered trademark of Southwire Company.

## Reflex<sup>™</sup> Super T<sup>®</sup>-Stripper Wire Stripper

- 6/32 and 8/32 self-chasing screw-cutting holes
- Locking pawl for safe storage
- Ergonomic design for maximum comfort
- Curved handles reduce wrist fatigue
- Sleeves extend to stripping head to cushion thumb and fingers
- Textured sleeves with extra cushioning for added comfort

Description	Solid	Stranded	Cat. No.
Reflex <sup>™</sup> Super 12/2 & 14/2 NM Cable T <sup>®</sup> -Stripper Wire Stripper	12-2 and 14-2	—	<b>45-621</b>

Description	Wire Range	Cat. No.
Premium T <sup>®</sup> -14 T <sup>®</sup> -Stripper Wire Stripper	12 or 14 AWG solid	<b>45-247</b>