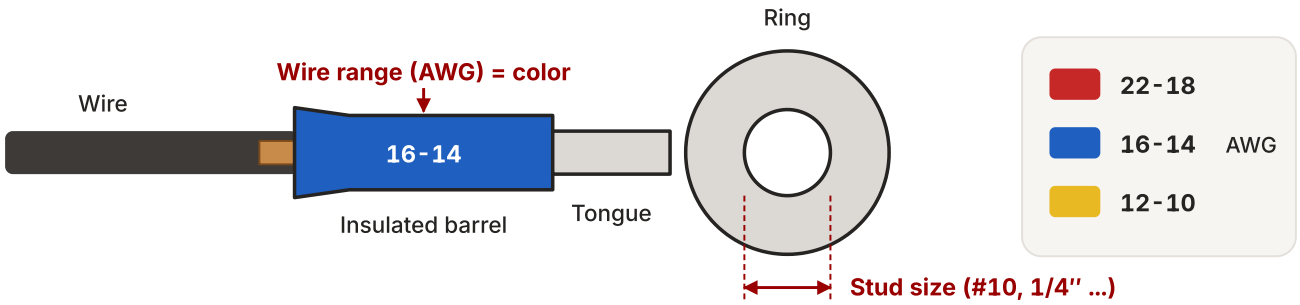
Wire Terminal Sizes

jandesupply.com/reference-wire-terminal-sizes.php

J & E Supply & FASTENER CO.

Crimp terminals by wire range and stud size: the red / blue / yellow color code, which stud a ring terminal fits, and how to pick one.

A **ring terminal** crimps onto the end of a wire and goes over a screw or stud; the closed ring can't slip off if the nut loosens. You pick one by **two numbers**: the **wire range** its barrel takes (in AWG) and the **stud size** its ring fits. On insulated terminals the color of the sleeve tells you the wire range at a glance.



An insulated ring terminal. The sleeve color is the wire range; the ring is sized for the stud. Not to scale.

Insulated terminal color code — by wire range

WIRE RANGE	INSULATION COLOR
22-18 AWG	Red
16-14 AWG	Blue
12-10 AWG	Yellow

The same code is used on insulated ring, fork (spade), butt splice and quick-disconnect terminals. From the Grote and ABB Sta-Kon catalogs; printed where both agree. Not on this chart: 26-24 AWG, 26-22 AWG and 8 AWG and up — only one of the two lists them.

Ring terminal stud sizes — the screw or stud each ring fits

STUD SIZE	STUD DIA
#4	—
#5	—
#6	.138"
#8	.164"
#10	.190"
#12	—
1/4"	.250"
5/16"	.312"
3/8"	.375"
7/16"	—
1/2"	.500"
5/8"	—
3/4"	—

The nominal diameter of the screw or stud, from the Grote and Panduit terminal stud charts; printed where both agree. The ring's hole is made a few thousandths larger than the stud — Grote, Panduit and ABB Sta-Kon all do — but no two give the same hole size, so it isn't printed. A dash: the two charts differ or only one lists it.

Insulation ratings two makers agree on

INSULATION	TEMPERATURE	VOLTAGE
Nylon	105 °C (221 °F)	—
Vinyl	—	—

What Grote and ABB Sta-Kon publish for their own insulated terminals, printed where both agree. Vinyl temperature differs by maker and Grote lists two voltages, so those are dashes. Any one part's rating is its maker's, on the package — not a test of any lot.

Good to know

Pick by two numbers: the wire's AWG must fall inside the terminal's wire range (a 14 AWG wire takes a 16-14 terminal), and the ring must match the stud (a #10 ring on a #10 screw).

Crimp die: on insulated terminals use the crimp tool's die nest of the **same color** as the terminal — tools mark them red, blue and yellow to match (Grote, ABB Sta-Kon).

Non-insulated terminals have no color; the wire range is in the listing. **Heat-shrink** terminals shrink a sealing sleeve over the crimp with a heat gun. Bigger wires (8 AWG and up) use larger ring terminals and lugs, listed by single wire size.

Quick answers

What wire size is a red, blue or yellow crimp terminal?

On insulated crimp terminals the color is the wire range: **red = 22-18 AWG**, **blue = 16-14 AWG**, **yellow = 12-10 AWG** (Grote and ABB Sta-Kon catalogs).

What size stud does a #10 ring terminal fit?

A #10 ring terminal goes over a #10 screw or stud, **.190″** in diameter; a #8 ring fits a .164″ stud and a 1/4″ ring a .250″ stud.

How do I pick a ring terminal?

By two numbers: the **wire range** the barrel takes (the wire's AWG must fall inside it) and the **stud size** the ring fits. Then pick the insulation: none, vinyl, nylon or heat-shrink.

What temperature are nylon insulated terminals rated for?

Grote and ABB Sta-Kon both rate their nylon-insulated terminals **105 °C (221 °F)**. The maker's rating on the package governs for any one part.

Which crimp die do I use for a blue terminal?

The die nest of the **same color**: crimp tools mark their insulated-terminal nests red, blue and yellow to match the terminals (Grote, ABB Sta-Kon).

Reference values drawn from the governing standards. For critical applications, confirm against the standard and the manufacturer's published data. Technical information disclaimer →