

This part numbering guide can be used to quickly translate our part numbers into meaningful data.

## BG - 8-12 - 4T

| Family                           | Size          | Suffix                 |
|----------------------------------|---------------|------------------------|
| A Series - Anchors               | Based on 16th | AS - Anchor Strap      |
| * B Series - Pipe Strap          | of an inch    | BL - Equipment Blue    |
| BA - Acoustical Tee Component    | 1 - 1/16"     | BN - Brass Nut         |
| BB - Box Attachment              | 2 - 1/8"      | BR - Brown             |
| BC - Beam Clamp                  | 4 - 1/4"      | BW - Bright White      |
| * BCH - Cable Hook               | 5 - 5/16"     | CW - Computer White    |
| * BCS/BES - Conduit Spacer       | 6 - 3/8"      | D - Deep Box           |
| BD - Deck Attachment             | 8 - 1/2"      | FB - Flat Black        |
| * BE - Edge Attachment           | 9 - 9/16"     | GR - Green             |
| BF - Flange Attachment           | 12 - 3/4"     | H - Hanger             |
| * BG - Guide-Rite™ Fastener      | 16 - 1"       | LH - Less Hardware     |
| BH - Hanger Attachment           | 20 - 1 1/4"   | LN - Less Nut          |
| BK - KwikWire™ System            | 24 - 1 1/2"   | LS - Less Stud         |
| BL - Conduit Hangers (mini's)    | 32 - 2"       | OR - Orange            |
| BM - Miscellaneous               | 64 - 4"       | R - Right Angle        |
| BN - Push Nuts                   |               | RR - Regal Red         |
| * BP - Push Type Fasteners       |               | S - Stud               |
| * BPC - Break Apart Straps       |               | T - Threaded           |
| * BR - Bridle Rings              |               | TG - Telco Gray        |
| BRC - Cable Fastener             |               | W - White              |
| * BRS - Bridle Ring Saddle       |               | WBN - White /Brass Nut |
| BT - Installation Tools          |               | WN - Wing Nut          |
| * BU - Universal Beam Attachment |               | YL - Safety Yellow     |
| BW - Bat Wing Fastener           |               | 4T - 1/4" Thread Imp.  |
| BX - FMC Support                 |               |                        |

\* The data in the size column only applies to these product families.

## BG - 8-12 - 4T

Guide-Rite™ Fastener      1/2" & 3/4" Conduit      1/4" Thread Impression

# Materials

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| Steel                    | Specification        |
|--------------------------|----------------------|
| High Carbon Cold Rolled  | ASTM A684, AISI 1055 |
| Electrolytic Zinc Coated | ASTM A591            |
| Pre-Galvanized           | ASTM A653            |

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## Steel

B-Line series spring steel fasteners are manufactured from spheroidized annealed high carbon cold rolled steel (ASTM A684, AISI 1055). Mild steel fasteners are manufactured from electrolytic zinc coated steel (ASTM A591) or pre-galvanized steel (ASTM A563).

Electrolytic zinc coated and pre-galvanized steel is produced by coating coils of sheet steel with zinc at the mills. These coils are then slit to size and fabricated into B-Line series products.

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## Heat Treatment

B-Line series spring steel fasteners are heat treated to make the steel hard and give the parts their spring quality and strength. The hardness for a given fastener depends on the required load carrying capacity and the application.

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## Load Data

The design load ratings for B-Line fasteners are specified in this catalog as static load capacity or ultimate static load capacity. By definition, the listed static load capacity has a safety factor of three (3.0), the listed ultimate static load capacity has no safety factor. In either case, these stated loads are not to be exceeded, and loads should be applied only as depicted in the catalog and/or instruction sheets. The load capacity of a fastener having more than one component is equal to the load capacity of the lowest rated component.

Fasteners having no load ratings are designed for proper placement of boxes, conduit, etc., and not for supporting loads.

B-Line fasteners are designed for use with support members (e.g.: angle iron, bar joists, beams, columns, flanges, purlins, wire, rod) that comply with the applicable AISI standards and threaded rod that complies with the applicable AISI standards.

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## Quality Assurance

We have an established Q.C. program in which raw material and finished products are sampled, inspected and tested by certified inspectors to assure that all applicable standards are met. Our fasteners are manufactured in controlled lots and each part is identified by a lot number stamped into the part. This number allows us to track each step of the manufacturing process including raw material, die set-up, heat treating, and finishing. Samples are tested to verify correct hardness, corrosion resistance and load carrying capacity.

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| Finish                  | Specification      |
|-------------------------|--------------------|
| Zinc-Phosphate          | MIL-P-16232 Type Z |
| Electro-galvanized Zinc | ASTM B633          |
| Pre-Galvanized Zinc     | ASTM A653, G90     |
| Gloss White Paint       | Acrylic Enamel     |

## Zinc Phosphate

B-Line series spring steel fasteners receive a coating\* of sealant impregnated zinc phosphate. This type of coating was commercially developed by industry to inhibit oxidation of ferrous metals for up to 72 hours in a specified salt fog atmosphere. As applied to its fasteners, B-Line series rates this coating for 30 hours when salt fog tested per ASTM B-117.

Although rust resistant, B-Line series fasteners should be used only indoors and in non-corrosive environments.

Unless otherwise noted, the standard finish for our spring steel fasteners is Zinc Phosphate.

\*At least 1000 milligrams of zinc phosphate per square foot.

## Paint

Some standard fasteners have a gloss white acrylic enamel applied over the zinc phosphate finish for an enhanced appearance that compliments white ceiling grids.

## Electro-Galvanized Zinc

Electro-galvanized zinc (also known as zinc plated or electroplated) is the process by which a coating of zinc is deposited on the steel by electrolysis from a bath of zinc salts.

The coating is pure zinc and is mechanically bonded to the steel. A maximum of .5 mils of zinc can be applied by this method.

When exposed to air and moisture, zinc forms a tough, adherent, protective film consisting of a mixture of zinc oxides, hydroxides, and carbonates. This film is in itself a barrier coating which slows subsequent corrosive attack of the zinc.

This coating is usually recommended for indoor use in relatively dry areas.

## Pre-Galvanized Zinc

Pre-Galvanized steel is produced by coating coils of sheet steel with zinc by continuously rolling the material through molten zinc at the mills. This is also known as mill galvanized or hot-dip mill galvanized. These coils are then slit to size and fabricated into B-Line series products.

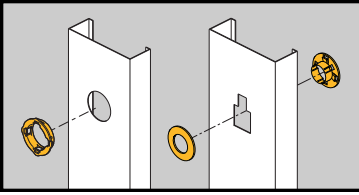
The G60 specification calls for a coating of .90 ounces of zinc per square foot on each side of the sheet.

During fabrication, cut edges and welded areas are not normally zinc coated; however, the zinc near the uncoated metal becomes a sacrificial anode to protect the bare areas after a short period of time.

Pre-Galvanized steel is recommended for indoor use in dry areas.

**CAUTION:** Do not use Eaton B-Line series fasteners outdoors or in corrosive environments. Proper application of each fastener is shown in this catalog and on the installation sheet inside each carton. Failure due to improper installation may cause harm to personnel and/or property. Allowable loads shown apply to the fastener only and do not account for the structure, which supports the fastener. Flanges, wires and rods used with these fasteners must meet A.I.S.I. standards. To improve personal safety on the jobsite, always observe all federal and local safety regulations: wear gloves, safety glasses and a hard hat.

# Wall studs



## Metal Stud Grommet



- BM1 snaps into standard 1<sup>11</sup>/<sub>32</sub>" diameter holes in metal studs from 25 Ga. to 16 Ga.
- BM2 is shipped as one piece and easily separated for installation.
- Universal BM2 provides 360° protection. Fits all factory punched metal stud holes.
- Protects wire insulation in accordance with NEC Article 300.4(B) (1).



BM1



BM2

| UPC/Part Number | Catalog Number | Description                     | Box Qty. |
|-----------------|----------------|---------------------------------|----------|
| 78101119100     | <b>BM1</b>     | Plastic Grommet                 | 100      |
| 78101119102     | <b>BM1M</b>    | Plastic Grommet (Bulk Quantity) | 100      |
| 78101104926     | <b>BM2</b>     | Universal Plastic Grommet       | 100      |

*Read safety/installation instruction sheets in packages before use. These products are designed for positioning only. No load rating.*