Part Numbering Guide

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

<u>BG</u> - <u>8-12</u> - <u>4T</u>							
	5 -						
<u>Family</u>	<u>Size</u>	<u>Suffix</u>					
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	24 - 11/2"	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.

Materials

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

Steel

Cooper B-Line's 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 Cooper B-Line products.

Heat Treatment

Cooper B-Line 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.

Load Data

The design load ratings for Cooper 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.

Cooper 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.

Quality Assurance

Cooper B-Line has 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. Cooper B-Line's fasteners are manufactured in controlled lots and each part is identified by a lot number stamped into the part. This number allows Cooper B-Line 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.

Technical Data - Finishes

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

Cooper B-Line's 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, Cooper B-Line rates this coating for 30 hours when salt fog tested per ASTM B-117.

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

Unless otherwise noted, the standard finish for Cooper B-Line's 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 Cooper B-Line products.

The G90 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.

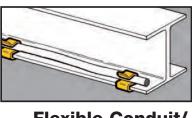
Pre-galvanized steel is recommended for indoor use in dry areas.

CAUTION: Do not use Cooper B-Line 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.



Conduit & Cable

- Secures cable along flanges ¹/₁₆" to ³/₄" thick.
- The BFA flange adapters attach BXS series to thicker flanges.
- BX_-67 accepts 14/2, 12/2 & 10/2 romex with ground.
- BX_-1011 accepts 14/2, 12/2 & 10/2 romex with ground.
- BX_-1214 accepts 10/3, romex with ground.
- · Finish: Zinc Plated



Flexible Conduit/ Cable Fasteners

BFA Series (For Use with BXS Series Only)





BXL Series



BXS Series



Genes	-	Series		
UPC/Part Number	Catalog Number	Flange Thickness	Cable Diameter	Box Qty.
781011 19973	BXS-67	¹ / ₁₆ " - ⁵ / ₃₂ "	.218 to .281	100
781011 19974	BXS-89	¹ /16" - ⁵ /32"	.290 to .375	100
781011 19975	BXS-1011	¹ /16" - ⁵ /32"	.375 to .437	100
781011 19976	BXS-1214	¹ /16" - ⁵ /32"	.444 to .560	100
781011 19977	BXS-1519	¹ /16" - ⁵ /32"	.500 to .718	100
781011 19978	BXS-2024	¹ /16" - ⁵ /32"	.748 to .945	100
781011 19979	BXS-2530	¹ / ₁₆ " - ⁵ / ₃₂ "	.968 to 1.250	100
781011 19980	BXM-67	5/32" - 9/32"	.218 to .281	100
781011 19981	BXM-89	5/32" - 9/32"	.290 to .375	100
781011 19982	BXM-1011	5/32" - 9/32"	.375 to .437	100
781011 19983	BXM-1214	5/32" - 9/32"	.444 to .560	100
781011 19984	BXM-1519	5/32" - 9/32"	.500 to .718	100
781011 19985	BXM-2024	5/32" - 9/32"	.748 to .945	100
781011 19986	BXM-2530	5/32" - 9/32"	.968 to 1.250	100
781011 19987	BXL-67	⁵ /16" - ¹ /2"	.218 to .281	100
781011 19988	BXL-89	⁵ /16" - ¹ /2"	.290 to .375	100
781011 19989	BXL-1011	⁵ /16" - ¹ /2"	.375 to .437	100
781011 19990	BXL-1214	⁵ /16" - ¹ /2"	.444 to .560	100
781011 19991	BXL-1519	⁵ /16" - ¹ /2"	.500 to .718	100
781011 19992	BXL-2024	⁵ /16" - ¹ /2"	.748 to .945	100
781011 19993	BXL-2530	⁵ /16" - ¹ /2"	.968 to 1.250	100
781011 19955	BFA-1215	1/2" - 5/8"		100
781011 19956	BFA-1520	5/8" - 3/4"		100

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

