

New Product Bulletin

NP 313

Compression Connectors and Tools

Belden® offers a new line of F, BNC and RCA Compression Connectors and Tools for audio/video, safety and security applications. Signal integrity is maximized by pairing Belden Connectors to Belden Cables.



Belden Audio/Video, Safety and Security Compression Connectors and Tools Save Time and Money

Belden is pleased to offer a line of Compression Connectors and Tools for the audio/video, safety and security markets.

Built to Belden's exacting standards, Belden Connectors and Tools, combined with Belden Coaxial Cables, provide maximum signal reliability and performance, which means enhanced customer satisfaction and profitability for you. Highlights include:

- Belden 360-degree Compression:
 - Triple compression rings
 - Excellent signal integrity with elimination of crimp reflections
 - Better aesthetics and strength
- Viewed Entry Point with Pop-up Pin:
 - Visual confirmation of positive termination
 - Reduces call-backs and installation costs
- Custom Compression Tools:
 - Reduces installation time
 - Requires less force; easier to use
 - Guarantees a positive compression
- Easy Dispensing Tubes:
 - Hang from belt with opening on bottom
 - Speeds up installation time

- Connector Warranty
 - Limited lifetime when used with Belden Cable
 - Limited 10 years when used with other brands of cable

Belden Compression Connectors assure the highest quality, performance and reliability – coupled with the convenience of buying through a single, familiar distribution network – saving you time and money.

Connector Applications

- Audio and video
- CCTV
- Security
- CATV
- Fire and Alarm
- Component cables
- Control cables

Available from Belden – A Company You Trust

For years you have been buying Belden bulk cable. Now allow us to also provide connector and tool solutions that will save you time, money and frustration – and that will allow you to purchase top-quality end-to-end solutions from a single, most-trusted American source: Belden.

Belden Compression Connectors

Belden BNC, RCA and F Compression Connectors exceed SCTE Standards for signal ingress, egress and water migration, while providing exceptional aesthetic and strength characteristics. They ensure optimal connector performance by offering:

- Three 360-degree compression rings
- Visual confirmation of cable entry
- Better performance with improved signal impedance

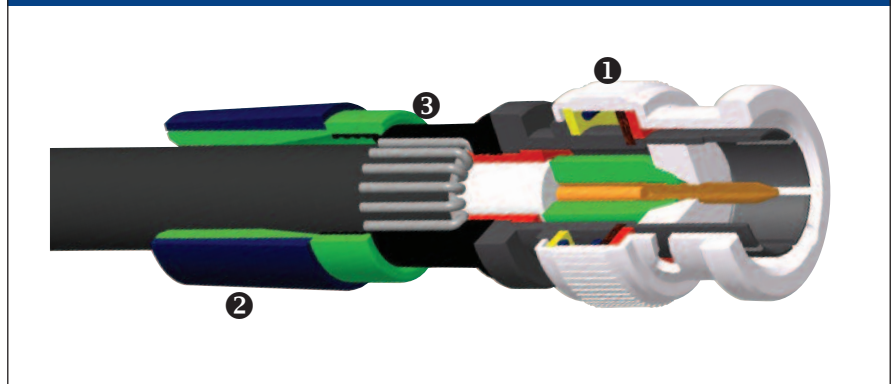


Three 360-degree Compression Rings

This unique technology assures the effectiveness of the cable-to-connector termination and therefore the quality of the signal transmission.

1. Connector pin compresses 360-degrees around cable center conductor, for greater surface contact and preservation of center pin shape
2. Compression circles entire cable ensuring integrity of dielectric jacket and cable
3. Machined brass sealing rings create a permanent water barrier seal and excellent holding strength

Internal Depiction of a Compressed BNC Connector



Viewed Cable Entry/Termination

Belden offers the ability to see the cable enter the connector, and for BNC and RCA connectors, a unique pop-up pin confirms a proper termination and contact point. Being able to visually confirm the cable termination means better and faster installation.



1. Cable Enters Connector



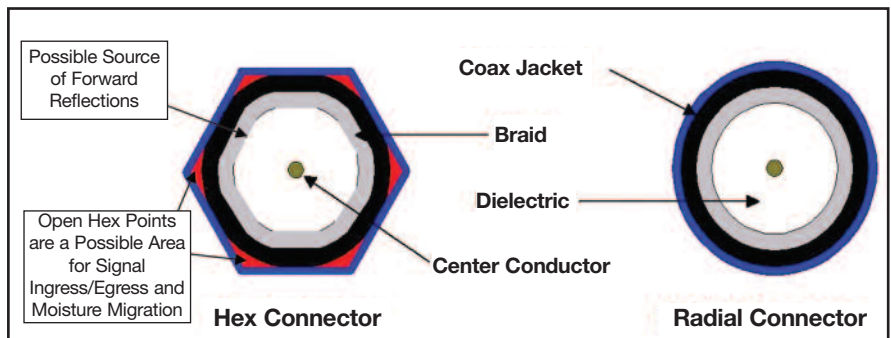
2. Pin is Pushed Through



3. Pin Becomes Clearly Visible

Better Performance

Belden utilizes a compression technique that preserves the integrity of the signal. Other connector systems use a crimping technique which damages the jacket, dielectric and wire, resulting in multiple signal leakage points and moisture entry. Belden's compression process provides a smooth and consistent seal that reduces signal ingress or egress, prevents moisture penetration and improves the overall quality of the installation.





Belden Compression Connectors (continued)

F Series Connectors

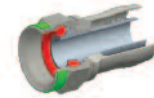
- Universal F Type Connectors for standard, tri-shield and quad-shield RG6U and RG/59U coaxial cable
- Designed to work with Compression Tool BBCOMT and Stripping Tool BBRGST

RCA Series Connectors

- Universal RCA Type Connectors for standard, tri-shield and quad-shield RG/6U coaxial cable
- Designed to work with Compression Tool BBCOMT and Stripping Tool BBRGST

BNC Series Connectors

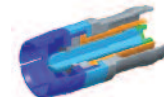
- Universal BNC Type Connectors for standard, tri-shield and quad-shield RG/6U, RG/6U Plenum Type 2, RG/59U, and RG/59U Plenum sizes 2/4 coaxial cable
- RG59/U BNC Type Connectors for CCTV cable
- Mini RGB BNC Type Connectors for 22-24 AWG cable
- BNC Type Connectors for 24-26 AWG cable
- Designed to work with Compression Tool BBCOMT and Stripping Tools BBRGST and BBRGBST



F Series



BNC Series



RCA Series

Belden Compression Tools

Belden's Compression Tools are ergonomically sound and feature high quality aircraft-grade materials for increased durability. Unique installer benefits include:

- Easier to use, with less force needed
- Reduced installation time
- Guarantees a positive compression – done right the first time
- Requires no calibration when changing connector or cable types
- No additional dies to purchase, unlike crimp connectors

Compression Tool (BBCOMT)

- Creates two 360-degree compression connections (one interior and one exterior) for a permanent connection with superior protection against moisture
- Works with BNC, RCA and F Series Connectors

Strip Tools for RG/59U or RG/6U Cable (BBRGST) and Mini RGB Cable (BBRGBST)

- Heavy spring for stripping quad cable (BBRGST)
- Lighter spring for delicate mini coax (BBRGBST)
- Built-on Flaring tool for RG6 (BBRGST)
- Patented positive stop for a perfect 1/4" – 1/4" prep every time
- Steel rollers for ease of use
- Replaceable blade cartridge



BBCOMT



BBRGST



BBRGBST

Belden Cables

Belden Cables have been the preferred choice of the Audio/Video, Safety and Security industries for decades and are deployed in every location imaginable from security cameras at a casino to multinational corporate video conferencing suites. Belden is also the choice of installers for audio/video applications in houses of worship, universities, hospitals, concert halls, and many other installations across the globe.



Belden Assemblies

Reduce your installation time even further through the use of Pre-terminated Cable Assemblies from Belden. Belden Assemblies are built to exacting specifications in a highly controlled factory environment and offer a life-time warranty.



Pre-term Assemblies



Description	Part No.	Quantity	OHM	DC-1 GHz	DC-2 GHz	DC-3 GHz	Pull Force		Sizing					
									Center		Dielectric		Outer Jacket	
							Lbs.	kg	inch	mm	inch	mm	inch	mm

F SERIES Connectors

Gun Metal Finish • BB Series • Brass Body • Nickel Plating

	RG59 F	BBRG59F	Tube/50	75	>30dB Return Loss <1.07 VSWR	>30dB Return Loss <1.10 VSWR	>30dB Return Loss <1.16 VSWR	55	24.9	.0317~ .0339	.81~ .86	.144~ .157	3.66~ 3.99	.232~ .273	5.89~ 6.93
	RG6 F	BBRG6F	Tube/50	75	>33dB Return Loss <1.07 VSWR	>25dB Return Loss <1.10 VSWR	>24dB Return Loss <1.16 VSWR	65	29.5	.0399~ .0418	1.01~ 1.06	.180~ .193	4.57~ 4.90	.265~ .305	6.73~ 7.75

BNC SERIES Connectors

Gun Metal Finish • BB Series • Brass Body • Nickel Plating

	RG59 BNC	BBRG59B	Tube/25	75	>36dB Return Loss <1.03 VSWR	>32dB Return Loss <1.05 VSWR	>26dB Return Loss <1.10 VSWR	65	29.5	.0317~ .0339	.81~ .86	.144~ .157	3.66~ 3.99	.232~ .273	5.89~ 6.93
	RG59 BNC Plenum (PL2/4 Size)	BBRG59P	Tube/25	75	>27dB Return Loss <1.09 VSWR	>26dB Return Loss <1.09 VSWR	>27dB Return Loss <1.10 VSWR	65	29.5	.0317~ .0339	.81~ .86	.130~ .141	3.30~ 3.58	.190~ .220	4.83~ 5.59
	RG59 CCTV Cable BNC	BBRG59C	Tube/25	75	>27dB Return Loss <1.07 VSWR	>27dB Return Loss <1.09 VSWR	>29dB Return Loss <1.09 VSWR	65	29.5	.0317~ .0339	.81~ .86	.137~ .148	3.48~ 3.76	.232~ .248	5.89~ 6.30
	RG6 BNC	BBRG6B	Tube/25	75	>30dB Return Loss <1.07 VSWR	>25dB Return Loss <1.10 VSWR	>24dB Return Loss <1.16 VSWR	65	29.5	.0399~ .0418	1.01~ 1.06	.180~ .193	4.57~ 4.90	.265~ .305	6.73~ 7.75
	RG6 BNC Plenum Type 2 (PL2 Size)	BBRG6P2	Tube/25	75	>31dB Return Loss <1.05 VSWR	>26dB Return Loss <1.09 VSWR	>21dB Return Loss <1.18 VSWR	65	29.5	.0399~ .0418	1.01~ 1.06	.165~ .172	4.19~ 4.37	.220~ .250	6.59~ 6.35
	Mini RGB AWG BNC 22-24	BBMINIB	Tube/25	75	>30dB Return Loss <1.07 VSWR	>30dB Return Loss <1.10 VSWR	>30dB Return Loss <1.16 VSWR	Generally Exceeds Jacket Strength		.015~ .025	.38~ .64	.095~ .105	2.41~ 2.67	.145~ .160	3.68~ 4.06
	24-26 AWG BNC	BB2426B	Tube/25	75	>30dB Return Loss <1.07 VSWR	>30dB Return Loss <1.10 VSWR	>30dB Return Loss <1.16 VSWR	Generally Exceeds Jacket Strength		.015~ .025	.38~ .64	.065~ .078	1.65~ 1.98	.095~ .110	2.41~ 2.79

RCA SERIES Connectors

Gun Metal Finish • BB Series • Brass Body • Nickel Plating

	RG59 RCA	BBRG59R	Tube/25	75	> 45dB Return Loss <1.03 VSWR	> 40dB Return Loss <1.04 VSWR	> 45dB Return Loss <1.06 VSWR	65	29.5	.0317~ .0339	.81~ .86	.144~ .157	3.66~ 3.99	.232~ .273	5.89~ 6.93
	RG6 RCA	BBRG6R	Tube/25	75	>36dB Return Loss <1.03 VSWR	>35dB Return Loss <1.04 VSWR	>33dB Return Loss <1.06 VSWR	65	29.5	.0399~ .0418	1.01~ 1.06	.180~ .193	4.57~ 4.90	.265~ .305	6.73~ 7.75
	Mini RGB 22-24 AWG RCA	BBMINIR	Tube/25	75	>30dB Return Loss <1.07 VSWR	>30dB Return Loss <1.10 VSWR	>30dB Return Loss <1.16 VSWR	Generally Exceeds Jacket Strength		.015~ .025	.38~ .64	.095~ .105	2.41~ 2.67	.145~ .160	3.68~ 4.06
	24-26 AWG RCA	BB2426R	Tube/25	75	>30dB Return Loss <1.07 VSWR	>30dB Return Loss <1.10 VSWR	>30dB Return Loss <1.16 VSWR	Generally Exceeds Jacket Strength		.015~ .025	.38~ .64	.065~ .078	1.65~ 1.98	.095~ .110	2.41~ 2.79

Strip Tools

Description	Part No.	Quantity
59/6 for RG59 or RG6 Cable	BBRGST	1
RGB for Mini RGB Cable 22-26 AWG	BBRGBST	1

Compression Tool

Description	Part No.	Quantity
For BB Series F, RCA and BNC Connectors	BBCOMT	1

Kits

Description	Part No.	Quantity
Tool Express Kit includes Compression Tool (1-BBCOMT), RG59/RG6 Strip Tool (1-BBRGST)	BBTEKIT	1
Starter Kit includes Connectors (25-BBRG59F, 10-BBRG59B, 10-BBRG6B, 10-BBRG59C, 10-BB2426B, 10-BBMINIR), Compression Tool (1-BBCOMT), RG59/RG6 Strip Tool (1-BBRGST), RGB Strip Tool (1-BBRGBST)	BBSTKIT	1