Digicon® AVL

Anti-Vibration, Locking F-Connectors

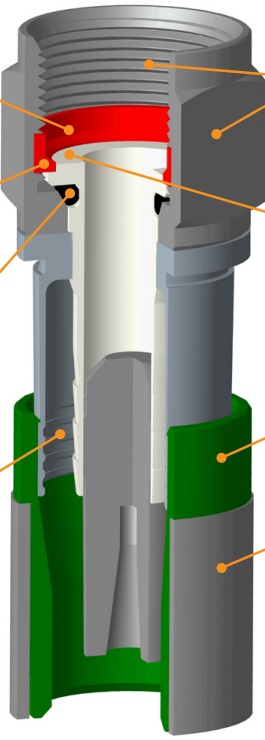
Application

Digicon® Connectors have a long history of craft-friendliness, performance, consistency, and reliability. Now — we've made a great connector even better. Introducing the Digicon AVL compression connector with enhanced signal continuity and water migration properties.

The Digicon AVL is a standard "S" Series connector with the addition of a new, patented internal locking ring with a built-in internal compression boot. This design creates a secure connection that is impervious to loosening from vibration, often due to movement of subscriber's equipment. The internal compression boot functions as an internal "O" ring resulting in improved sealing properties that eliminate the need for weather boots in outdoor installation. Carbon fibers integrated into the locking ring increases conductivity for enhanced signal continuity and RF performance. All this is accomplished while maintaining SCTE RF and digital interface requirements.

All-In-One Connector

- Reduces truck rolls for loose connections, caused by vibration, or relocation of customer equipment
- Inhibits moisture migration in outdoor applications, negating the need for a weather boot or sealing sleeve, and resulting in lower installation cost
- Locking Ring and Internal O-Ring constructed with carbon fibers to enhance signal continuity & RF performance, even when the connector is not fully secured



NEW **Patented Internal Locking Ring**
creates an anti-vibration permanent connection. Integrated carbon fibers ensure signal continuity and excellent RF performance.

NEW **Internal Compression Boot Design**
creates an internal "O" ring that prevents water migration and eliminates the need for an external weather/rubber boot.

Patented Free-Spinning Nut and Internal "O" Ring
for added environmental protection.

Patented Compression Rings
provide enhanced cable seizure and a superior environmental seal.

Extended Nut Shoulder
with large hex surface and more threads than ordinary connectors enables a more reliable connection and increased moisture migration protection.

Large Ferrule Contact Surface
complies with SCTE RF and digital interface specifications.

Color Band
for easy identification.

360° Compression Sleeve
provides excellent pull-out strength and a superior environmental seal.

Torque Tool

Today, using conventional connectors, installers usually tighten fittings onto subscriber devices by hand, so not to break solder connections by over-tightening. Finger tightening usually produces only 1 to 3 inch pounds of torque, and this practice creates inconsistencies in the connector termination. Each bag of Digicon AVL connectors includes a can wrench style finger tool that easily slides over the nut. Breaking away at 8 to 10 inch pounds of torque, this wrench prevents damage to ports on subscriber electronics, while providing just the right amount of torque to activate the locking mechanism.

Anti-Vibration, Locking F-Connectors

Specifications

Mechanical

Requirements	Specifications	Limits	Test Results
Corrosion Resistant	Bellcore GR-1503 3.2.1	Conforming materials	Exceeds
Cable Application	Bellcore GR-1503 3.2.2	<20 lb. max insertion	Exceeds
Cable Interface	Bellcore GR-1503 3.2.3	>40 lb. pull force	Exceeds
Equipment Interface	Bellcore GR-1503 3.2.4	>10 matings without damage >60 in.-lb. without damage	Exceeds Exceeds
Temperature Cycling with Humidity	Bellcore GR-1503 4.1	+70B to + 140° to -40 °F must pass 3.2.3 after 7 days	Exceeds
Loosening Torque	Bellcore GR-1503 4.2	>30 in.-lb. after 3 days of 4.1	Exceeds
Moisture Migration	ANSI/SCTE 60 2004	No dye penetration	Exceeds
Salt Fog	Bellcore GR-1503 4.4	Return loss >30 dB @ 1 GHz	Exceeds
Environmental Pollutants	Bellcore GR-1503 4.5	Return loss >30 dB @ 1 GHz	Exceeds
Vibration	Bellcore GR-1503 4.6	Loosening torque >32 in.-lb.	Exceeds
Chemical Resistance Outdoor	Bellcore GR-1503 4.7	7 days exposure (Note 1)	Exceeds
UV Degradation	Bellcore GR-1503 4.8	7 days exposure (Note 1)	Exceeds
Ozone Degradation	Bellcore GR-1503 4.10	70 hours exposure (Note 1)	Exceeds

Electrical

Requirements	Specifications	Limits	Test Results
Insulation Resistance	Bellcore GR-1503 3.5.1	>5000 megohms @ 100 Vdc	Exceeds
Dielectric Strength	Bellcore GR-1503 3.5.2	>1 kVac for 1 minute	Exceeds
Insertion Loss	Bellcore GR-1503 3.5.3	<0.1 dB to 350 MHz <0.2 dB to 700 MHz <0.3 dB to 1 GHz	Exceeds Exceeds Exceeds
Return Loss	Bellcore GR-1503 3.5.4	>30 dB to 1GHz	Exceeds
Shielding Effectiveness	Bellcore GR-1503 3.5.5	>95 dB to 300 MHz >70 dB to 1 GHz	Exceeds Exceeds

Note: Digicon® connectors were tested to meet SCTE-IPS and Bellcore specifications. Where both organizations have specifications for the same requirement, Digicon® connectors were tested to the more rigorous requirement. Samples will not exhibit cracking, swelling, or brittleness.

Specifications subject to change without notice.

Ordering Information

ARRIS #	Mfg #	Description	Std Pkg
787910	DS59-L	RG59 Digicon AVL Locking Connector, 360° Conical Compression w/ Integrated Compression Die	100/pack
787911	DS59Q-L	RG59 Quad Digicon AVL Locking Connector, 360° Conical Compression w/ Integrated Compression Die	100/pack
787912	DS6-L	RG6 Digicon AVL Locking Connector, 360° Conical Compression w/ Integrated Compression Die	100/pack
787913	DS6Q-L	RG6 Quad Digicon AVL Locking Connector, 360° Conical Compression w/ Integrated Compression Die	100/pack
787914	DS59U-L	RG59 Digicon AVL Locking Connector Multi-Fit 60% Braid Thru Quad-Shield, 360° Conical Compression w/ Integrated Compression Die	100/pack
787915	DS6U-L	RG6 Digicon AVL Locking Connector Multi-Fit 60% Braid Thru Quad-Shield, 360° Conical Compression w/ Integrated Compression Die	100/pack
788397	DS11-L	RG11 Digicon AVL Locking Connector Multi-Fit 60% Braid Thru Quad-Shield, 360° Conical Compression w/ Integrated Compression Die	50/pack

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