



CommScope Empty Conduit Toneable

CommScope's revolutionary Toneable Conduit can provide you with confidence in knowing its location can easily be found.

CommScope's Toneable Conduit is a unique product that combines a polyethylene conduit with an integrated toning wire. Buried toneable conduit is easily located using tone detection locating equipment.

CommScope toneable conduit is made from high quality high-density polyethylene (HDPE). The conduit meets industry standard wall thickness in $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, and 2 inch diameters. The polyethylene is blended with a premium UV stabilization and protection package. Our unique toning wire is 18-gauge copper clad steel (CCS) coated with a fluoropolymer jacket. The wire is located within a channel built onto the inner wall of the conduit. An 18-gauge wire was selected to maintain wall thickness and provide optimal tone carrying characteristics. CCS provides the necessary amount of copper to carry a tone over long distances and a steel core that is more durable than a solid copper wire. The fluoropolymer allows the wire to move independently of the conduit eliminating stresses on the wire and conduit. The fluoropolymer coating also provides critical insulative and corrosion protection to the 'exposed' wire. A Fluoropolymer compound was selected as the tone wire coating because it offers higher resistance to chemicals, water, and abrasion relative to plastics.

- Tone wire located within a channel built onto the inner wall of conduit for easy location
- High density polyethylene material for superior resistance to cracking or shattering of conduit
- UV protection to protect from cracking during storage or when used as a ground riser
- Continuous length conduit installs faster than PVC stick pipe
- Provides excellent cable removal and replacement capabilities
- Available with pre-installed CommScope cable or pull line

Broadband Solutions

3199120 | 075G(TD)135 EMPTY DUCT 2K'

Toneable ConQuest® Empty Conduit, 3/4 in, SDR 13.5, gray

Dimensions

Nominal Size	3/4 in
Wall Thickness Designation	SDR 13.5
Inner Diameter, nominal	22.200 mm 0.874 in
Length	609.60 m 2000.00 ft
Outer Diameter, nominal	26.670 mm 1.050 in
Wall Thickness, minimum	1.981 mm 0.078 in
Weight	111.0 lb/kft

General Specifications

Color	Gray
Conduit Type	Toneable
Wall Type	Smooth
Brand	ConQuest®
Warranty	One year

Material Specifications

Density Test Method	ASTM D792A
Density, maximum	0.955 g/cm ³
Density, minimum	0.941 g/cm ³
Design Standard	ASTM D3350-05
Environmental Stress Crack Resistance	Failure rate of 10% within 96 hours
Environmental Stress Test Method	ASTM D1693, ESCR Condition B
Flexural Modulus, minimum	552 N/mm ² 80000 psi
Flexural Property Test Method	ASTM D790
Hydrostatic Design Basis	Not pressure rated
Hydrostatic Design Test Method	ASTM D2837
Material Type	High density polyethylene (HDPE)
Melt Flow Rate Test Method	ASTM D1238
Melt Flow Rate, maximum	0.39 g/10 min
Tensile Property Test Method	ASTM D638
Tensile Strength at yield, minimum	21 N/mm ² 3000 psi

Mechanical Specifications

Minimum Bend Radius, unsupported	304.8 mm 12.0 in
Pulling Tension, maximum	229.1 kg 505.0 lb
Pulling Tension Note	Applies to products manufactured after December 31, 2012

Tone Wire Specifications

Conductor Diameter	1.0236 mm 0.0403 in
Conductor Elongation, maximum	1 %
Conductor Gauge	18 AWG

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Conductor Resistance	26.7 ohms/kft
Conductor Tensile Strength, minimum	827 N/mm ² 120000 psi
Conductor Type	Solid
Insulation Dielectric Strength	3200 V/mil
Insulation Elongation, minimum	250 %
Insulation Material Type	Fluoropolymer coated copper-clad steel wire
Insulation Tensile Strength, minimum	21 N/mm ² 3000 psi
Insulation Thickness, nominal	0.203 mm 0.008 in

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system

* Footnotes

Environmental Stress Crack Resistance ESCR—Environmental Stress Crack Resistance