QR 715 Series Cables
Product Descriptions

CommScope's patented QR® coaxial cable was developed to meet the increasing demands of tomorrow's broadband networks. QR has the highest reliability and flexibility of any Trunk and Distribution coaxial cable, low RF attenuation and an unprecedented 10 year warranty.

All QR cable products offer tough polyethylene jackets and a standardized, environmentally sealed connector interface engineered for reliability and craft friendliness.

QR 715 is optimized for use in broadband distribution plants. QR 715 offers lower attenuation than larger traditional products, with unmatched flexibility, reliability and cost effectiveness.

Standard QR Construction
A precision aluminum strip is formed and continuously RF welded around a high compression micro-cellular foam dielectric core, eliminating RF leakage, and the rigidity common in traditional coaxial products. The shield is fully bonded to the dielectric core, as is the copper clad aluminum center conductor. A tough polyethylene jacket is applied standard, which enhances cable reliability and allows QR's unique connector technology to form an environmental seal.

Aerial Installation				
Part #	**Description**	**Cable Weight**	**Shipping Wteight**	**Standard Length**
QR 715 JCA	Offers all of QR's standard construction features	145 lbs/kft (216 kg/km)	205 lbs/kft (305 kg/km)	300 ft (914m)
QR 715 JCAM 188	Has an integrated figure 8 galvanized solid steel messenger for self-supporting applications	232 lbs/kft (342 kg/km)	301 lbs/kft (448 kg/km)	300 ft (914m)
Underground Installation				
Part #	**Description**	**Cable Weight**	**Shipping Wteight**	**Standard Length**
QR 715 JCASS	Features CommScope's Migra-Heal floodant that seals jacket damage to inhibit corrosion	145 lbs/kft (216 kg/km)	205 lbs/kft (305 kg/km)	300 ft (914m)
QR 715 2J(MA) CASS	offers twin polythylene jackets separated with tough polypropylene tape for extra cut-through resistance	182 lbs/kft (271 kg/km)	232 lbs/kft (345 kg/km)	300 ft (914m)
QR 715 JACASS	Features CommScope's Migra-Heal floodant, a bonded, chrome-plated armor and twin polythylene jackets for ultimate toughness	313 lbs/kft (466 kg/km)	383 lbs/kft (570 kg/km)	300 ft (914m)

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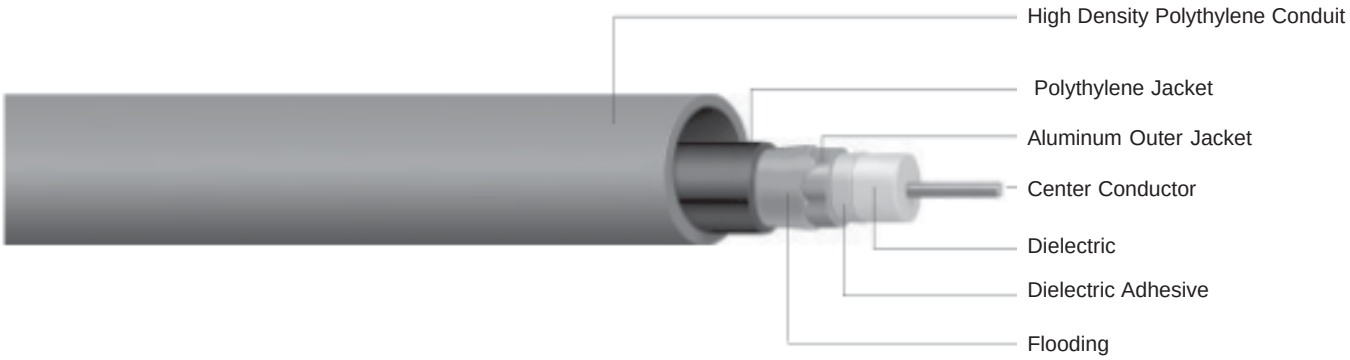
QR (JCASS)



CommScope's patented QR® coaxial cable was developed to meet the increasing demands of tomorrow's broadband networks. QR has the highest reliability and flexibility of any coaxial cable, low RF attenuation and an unprecedented 10-year warranty. QR coaxial cable offers lower attenuation than larger traditional products, with unmatched flexibility, reliability and cost effectiveness. CommScope offers four standard sizes (540, 715, 860 and 1125) of QR Cable-InConduit, each optimized for a specific use.

Size	Wall Thickness	Wall Rating	QR 540 JCASS			QR 715 JCASS		
			Nominal Length (ft)	Reel Size (FDT) (in)	Weight* lbs/ft	Nominal Length (ft)	Reel Size (FDT) (in)	Weight* lbs/ft
1"	SDR 13.5	Medium	3,700	63 x 30 x 40	261	NA	NA	NA
	SDR 11	Heavy	3,700	63 x 30 x 40	296	NA	NA	NA
	SCH 40	X-Heavy	3,700	63 x 30 x 40	311	NA	NA	NA
1 1/4"	SDR 13.5	Medium	3,700	80 x 40 x 38	357	3,000	68 x 30 x 40	409
	SCH 40	Heavy	3,700	80 x 40 x 38	387	3,000	68 x 30 x 40	439
	SDR 11	X-Heavy	3,700	80 x 40 x 38	412	3,000	68 x 30 x 40	464
1 1/2"	SDR 13.5	Medium	3,700	90 x 42 x 40	436	3,000	90 x 42 x 40	488
	SCH 40	Heavy	3,700	90 x 42 x 40	445	3,000	90 x 42 x 40	497
	SDR 11	X-Heavy	3,700	90 x 42 x 40	508	3,000	90 x 42 x 40	560
2"	SCH 40	Medium	3,700	102 x 48 x 42	564	3,000	102 x 48 x 42	616
	SDR 13.5	Heavy	3,700	102 x 48 x 42	624	3,000	102 x 48 x 42	676
	SDR 11	X-Heavy	3,700	102 x 48 x 42	732	3,000	102 x 48 x 42	784
			QR 860 JCASS			QR 1125 JCASS		
1"	SDR 13.5	Medium	NA	NA	NA	NA	NA	NA
	SDR 11	Heavy	NA	NA	NA	NA	NA	NA
	SCH 40	X-Heavy	NA	NA	NA	NA	NA	NA
1 1/4"	SDR 13.5	Medium	NA	NA	NA	NA	NA	NA
	SCH 40	Heavy	NA	NA	NA	NA	NA	NA
	SDR 11	X-Heavy	NA	NA	NA	NA	NA	NA
11/2"	SDR 13.5	Medium	2700	80 x 40 x 38	558	NA	NA	NA
	SCH 40	Heavy	2700	80 x 40 x 38	567	NA	NA	NA
	SDR 11	X-Heavy	2700	80 x 40 x 38	630	NA	NA	NA
2"	SCH 40	Medium	2700	102 x 48 x 42	686	3000	102 x 48 x 42	815
	SDR 13.5	Heavy	2700	102 x 48 x 42	746	3000	102 x 48 x 42	875
	SDR 11	X-Heavy	2700	102 x 48 x 42	854	3000	102 x 48 x 42	983

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Trunk & Distribution Cable Catalog Numbering Key

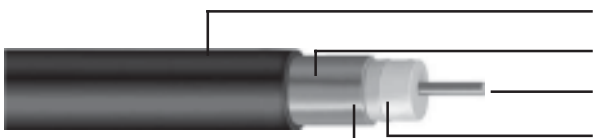
QR 540 J CA SS - T

- **540** — Size *(diameter over shield)*
  - 320
  - 540
  - 715
  - 860
  - 1125
- **J** — PE Jacket
- **CA** — Copper Aluminum
- **SS** — Floodant
- **T** — Tracer

Suffix
- J - Jacketed
- CA - Copper Aluminum
- SS - Miagra-Heal Flooding Compound
- T - Tracer
- M - Messenger
- EHS - Extra High Strength

QR Aerial Construction Configurations

QR JCA



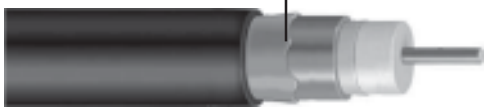
- Polyethylene Jacket
- Aluminum Outer Conductor
- Center Conductor
- Dielectric
- Dielectric Adhesive

QR JCAM (Solid Messenger)

- Integrated Figure 8 Solid Galvanized Steel Messenger

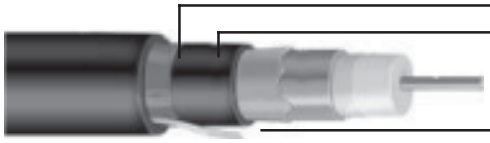
QR Underground Construction Configurations

QR JCASS



- Migra-Heal Flooding Compound

QR 2J (MA) CASS



- Polypropylene Tape
- Inner Polythylene Jacket
- Ripcord

QR JACASS

- Bonded Corrugated Chrome Plated Steel Armor

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QR 715 Series Cables
Product Specifications

Physical Dimensions		
Component	**Inches**	**mm**
Nominal Center Conductor Diameter	0.166	4.22
Nominal Diameter Over Dielectric	0.686	17.42
Nominal Diameter Over Outer Conductor	0.715	18.16
Nominal Outer Conductor Thickness	0.0145	0.37
Nominal Diameter Over jacket	0.785	19.94
Nominal Jacket Wall Thickness	0.035	0.89
Messenger Version		
Diameter of Steel Messenger	0.188	4.78
Dual Jacket Version		
Nominal Jacket Wall Thickness - Outer	0.046	1.17
Nominal Diameter Over Outer Jacket	0.881	22.38
Armored Version		
Nominal Diameter Over Corrugated Armor	0.855	21.71
Nominal Armor Thickness	0.008	0.20
Nominal Diameter Over Outer Jacket	0.935	23.75
Nominal Diameter of Outer Jacket	0.040	1.02

Mechanical Characteristics		
Minimum Bending Radius		
(Jacketed)	5.0 in	12.7 cm
(Armored)	7.5 in	19.1 cm
Maximum Pulling Tension	340 lbs	154 kg_f
Minimum Breaking Strength of Messenger (109)	3,900 lbs	1,769 kg_f

Electrical Characteristics		
Capacitance	15.3 ± 1.0 pf/ft	50 ± 3.0 nf/ft
Impedance	75 ± 2 ohms	
Velocity of Propagation	88%	

Maximum D.C. Resistance @ 68°F (20°C)		
Inner Conductor	0.579 ohms/1000ft	1.90 ohms/km
Outer Conductor	0.418 ohms/1000ft.	1.37 ohms/km
Loop	0.997 ohms/1000ft	3.27ohms/km

Attenuation @ 68°F (20°C)				
Frequency (Mhz)	**(dB/100 ft)**		**dB/100 m)**	
	Nom.	**Max.**	**Nom.**	**Max.**
5	0.09	0.11	0.30	0.36
30	0.25	0.27	0.82	0.89
45	0.31	0.33	1.02	1.08
50	0.33	0.35	1.08	1.15
55	0.35	0.36	1.15	1.18
83	0.43	0.45	1.41	1.48
108	0.48	0.51	1.57	1.67
150	0.57	0.61	1.87	2.00
181	0.66	0.68	2.17	2.23
193	0.68	0.70	2.23	2.30
211	0.71	0.74	2.33	2.43
220	0.72	0.76	2.36	2.49
250	0.77	0.81	2.53	2.66
270	0.80	0.84	2.62	2.76
300	0.83	0.89	2.73	2.92
325	0.88	0.94	2.89	3.08
350	0.91	0.97	2.99	3.18
375	0.95	1.01	3.12	3.31
400	0.98	1.05	3.22	3.44
425	1.01	1.09	3.31	3.58
450	1.04	1.12	3.41	3.67
500	1.10	1.19	3.61	3.90
550	1.18	1.25	3.87	4.10
600	1.22	1.31	4.01	4.30
750	1.36	1.49	4.47	4.89
865	1.48	1.62	4.86	5.31
1000	1.59	1.75	5.23	5.74

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