

teletronik®

Trunk cables



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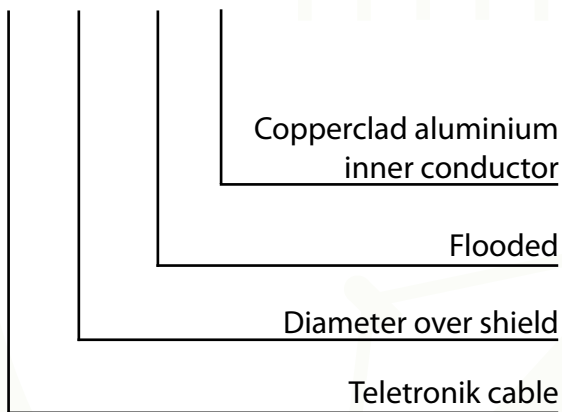
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Brief Introduction

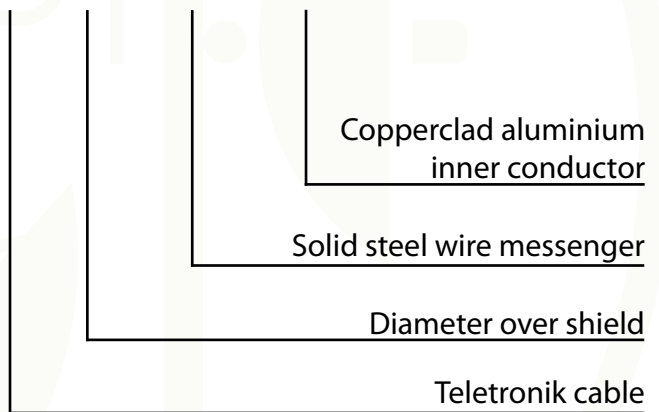
Teletronik TC series coaxial cable was developed to meet the increasing demand of tomorrow's broadband networks. TC series cable has the highest reliability and flexibility of any coaxial cable, low RF attenuation and an unprecedented 10 year warranty. TC series is optimized for use in broadband feeder plants. It offers lower attenuation than other traditional products, with unmatched flexibility, reliability and cost effectiveness.

Explanation of codes

TC500-F-CCA



TC540-SSM-CCA



Suffix

- F = flooding compound
- ASM = almelec standardised messenger
- SSM = solid steel wire messenger
- CCA = copperclad aluminium inner conductor

TC500-CCA
coax cable



Standard construction

- 2,77 mm copper clad aluminium center conductor
- Gas expanded polyethylene dielectric
- Continuous aluminium outer conductor
- Flame retardant polyethylene (PE) jacket

Mechanical characteristics

Min. bending radius (jacketed)	152 mm
Max. pulling tension	136 kg _f

Electrical characteristics

Capacitance	50 ± 3.0 nf/km
Impedance	75 ± 2 Ω
Velocity of propagation	87%
Shielding effectiveness	> 100 dB

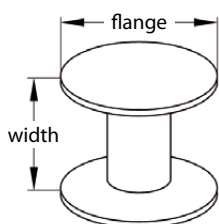
Mechanical D.C. Resistance (@ 20°C)

Inner conductor	4,40 Ω / km
Outer conductor	1,24 Ω / km
Loop	5,64 Ω / km

Physical Dimensions

component	Ø (mm)
Nominal center conductor diameter	2,77
Nominal diameter over dielectric	11,43
Nominal diameter over outer conductor	12,70
Nominal outer conductor thickness	0,64
Nominal diameter over jacket	14,22
Nominal jacket wall thickness	0,76

Reel parameters



width: 700 mm

flange: 110 mm

cable length: 900-1300 m

Attenuation (@ 20°C)

frequency (MHz)	max. loss (dB/100m)
5	0,52
30	1,31
45	1,61
50	1,71
55	1,77
83	2,17
108	2,46
150	2,95
181	3,28
193	3,38
211	3,58
220	3,64
250	3,94
270	4,07
300	4,30
325	4,49
350	4,69
375	4,82
400	5,02
425	5,15
450	5,35
500	5,67
550	5,97
600	6,27
750	7,09
865	7,68
1000	8,27

TC500-F-CCA
coax cable



Standard, flooded construction

- 2,77 mm copper clad aluminium center conductor
- Gas expanded polyethylene dielectric
- Continuous aluminium outer conductor
- Flame retardant polyethylene (PE) jacket
- Flooded for underground

Mechanical characteristics

Min. bending radius (jacketed)	152 mm
Max. pulling tension	136 kg _f

Electrical characteristics

Capacitance	50 ± 3.0 nf/km
Impedance	75 ± 2 Ω
Velocity of propagation	87%
Shielding effectiveness	> 100 dB

Mechanical D.C. Resistance (@ 20°C)

Inner conductor	4,40 Ω / km
Outer conductor	1,24 Ω / km
Loop	5,64 Ω / km

Attenuation (@ 20°C)

frequency (MHz)	max. loss (dB/100m)
5	0,52
30	1,31
45	1,61
50	1,71
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150	2,95
181	3,28
193	3,38
211	3,58
220	3,64
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270	4,07
300	4,30
325	4,49
350	4,69
375	4,82
400	5,02
425	5,15
450	5,35
500	5,67
550	5,97
600	6,27
750	7,09
865	7,68
1000	8,27

Physical Dimensions

component	∅ (mm)
Nominal center conductor diameter	2,77
Nominal diameter over dielectric	11,43
Nominal diameter over outer conductor	12,70
Nominal outer conductor thickness	0,64
Nominal diameter over jacket	14,22
Nominal jacket wall thickness	0,76

Reel parameters

	<p>width: 700 mm</p> <p>flange: 110 mm</p> <p>cable length: 900-1300 m</p>
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TC540-CCA
coax cable



Standard construction

- 3,15 mm copper clad aluminium center conductor
- Gas expanded polyethylene dielectric
- Continuous aluminium outer conductor
- Flame retardant polyethylene (PE) jacket

Mechanical characteristics

Min. bending radius (jacketed)	102 mm
Max. pulling tension	100 kg _f

Electrical characteristics

Capacitance	50 ± 3.0 nf/km
Impedance	75 ± 2 Ω
Velocity of propagation	87%
Shielding effectiveness	> 100 dB

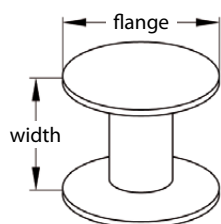
Mechanical D.C. Resistance (@ 20°C)

Inner conductor	3,34 Ω / km
Outer conductor	1,94 Ω / km
Loop	5,28 Ω / km

Physical Dimensions

component	∅ (mm)
Nominal center conductor diameter	3,15
Nominal diameter over dielectric	13,03
Nominal diameter over outer conductor	13,72
Nominal outer conductor thickness	0,343
Nominal diameter over jacket	15,49
Nominal jacket wall thickness	0,89

Reel parameters



width: 700 mm

flange: 110 mm

cable length: 900-1300 m

Attenuation (@ 20°C)

frequency (MHz)	max. loss (dB/100m)
5	0,46
30	1,12
45	1,35
50	1,44
55	1,54
83	1,90
108	2,17
150	2,59
181	2,89
193	2,95
211	3,12
220	3,22
250	3,38
270	3,51
300	3,71
325	3,87
350	4,03
375	4,17
400	4,33
425	4,49
450	4,59
500	4,89
550	5,12
600	5,38
750	6,07
865	6,56
1000	7,12

TC540-SSM-CCA
coax cable



Standard, messengered construction

- 3,15 mm copper clad aluminium center conductor
- Gas expanded polyethylene dielectric
- Continuous aluminium outer conductor
- Flame retardant polyethylene (PE) jacket
- Minimum breaking strength of solid steel wire messenger 816 kg_f

Mechanical characteristics

Min. bending radius (jacketed)	102 mm
Max. pulling tension	100 kg _f

Electrical characteristics

Capacitance	50 ± 3.0 nf/km
Impedance	75 ± 2 Ω
Velocity of propagation	87%
Shielding effectiveness	> 100 dB

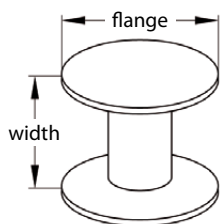
Mechanical D.C. Resistance (@ 20°C)

Inner conductor	3,34 Ω / km
Outer conductor	1,94 Ω / km
Loop	5,28 Ω / km

Physical Dimensions

component	∅ (mm)
Nominal center conductor diameter	3,15
Nominal diameter over dielectric	13,03
Nominal diameter over outer conductor	13,72
Nominal outer conductor thickness	0,343
Nominal diameter over jacket	15,49
Nominal jacket wall thickness	0,89
Diameter of steel messenger	2,77

Reel parameters



width: 700 mm

flange: 110 mm

cable length: 900-1300 m

Attenuation (@ 20°C)

frequency (MHz)	max. loss (dB/100m)
5	0,46
30	1,12
45	1,35
50	1,44
55	1,54
83	1,90
108	2,17
150	2,59
181	2,89
193	2,95
211	3,12
220	3,22
250	3,38
270	3,51
300	3,71
325	3,87
350	4,03
375	4,17
400	4,33
425	4,49
450	4,59
500	4,89
550	5,12
600	5,38
750	6,07
865	6,56
1000	7,12

TC715-CCA
coax cable



Standard construction

- 4,22 mm copper clad aluminium center conductor
- Gas expanded polyethylene dielectric
- Continuous aluminium outer conductor
- Flame retardant polyethylene (PE) jacket

Mechanical caracteristics

Min. bending radius (jacketed)	127 mm
Max. pulling tension	154 kg _r

Electrical caracteristics

Capacitance	50 ± 3.0 nf/km
Impedance	75 ± 2 Ω
Velocity of propagation	88%
Shielding effectiveness	> 110 dB

Mechanical D.C. Resistance (@ 20°C)

Inner conductor	1,90 Ω / km
Outer conductor	1,37 Ω / km
Loop	3,27 Ω / km

Phisical Dimensions

component	∅ (mm)
Nominal center conductor diameter	4,22
Nominal diameter over dielectric	17,42
Nominal diameter over outer conductor	18,16
Nominal outer conductor thickness	0,37
Nominal diameter over jacket	19,94
Nominal jacket wall thickness	0,89

Reel parameters

width: 700 mm

flange: 110 mm

cable length: 800-1100 m

Attenuation (@ 20°C)

frequency (MHz)	max. loss (dB/100m)
5	0,36
30	0,89
45	1,08
50	1,15
55	1,18
83	1,48
108	1,67
150	2,00
181	2,23
193	2,30
211	2,43
220	2,49
250	2,66
270	2,76
300	2,92
325	3,08
350	3,18
375	3,31
400	3,44
425	3,58
450	3,67
500	3,90
550	4,10
600	4,30
750	4,89
865	5,31
1000	5,74

TC715-ASM-CCA
coax cable



Standard, messengered construction

- 4,22 mm copper clad aluminium center conductor
- Gas expanded polyethylene dielectric
- Continuous aluminium outer conductor
- Flame retardant polyethylene (PE) jacket
- Minimum breaking strength of almelec standardised messenger 700 kg_f

Mechanical characteristics

Min. bending radius (jacketed)	127 mm
Max. pulling tension	154 kg _f

Electrical characteristics

Capacitance	50 ± 3.0 nf/km
Impedance	75 ± 2 Ω
Velocity of propagation	88%
Shielding effectiveness	> 110 dB

Mechanical D.C. Resistance (@ 20°C)

Inner conductor	1,90 Ω / km
Outer conductor	1,37 Ω / km
Loop	3,27 Ω / km

Attenuation (@ 20°C)

frequency (MHz)	max. loss (dB/100m)
5	0,36
30	0,89
45	1,08
50	1,15
55	1,18
83	1,48
108	1,67
150	2,00
181	2,23
193	2,30
211	2,43
220	2,49
250	2,66
270	2,76
300	2,92
325	3,08
350	3,18
375	3,31
400	3,44
425	3,58
450	3,67
500	3,90
550	4,10
600	4,30
750	4,89
865	5,31
1000	5,74

Physical Dimensions

component	∅ (mm)
Nominal center conductor diameter	4,22
Nominal diameter over dielectric	17,42
Nominal diameter over outer conductor	18,16
Nominal outer conductor thickness	0,37
Nominal diameter over jacket	19,94
Nominal jacket wall thickness	0,89
Diameter of almelec messenger	7 X 2,0

Reel parameters

	<p>width: 700 mm</p> <p>flange: 110 mm</p> <p>cable length: 800-1100 m</p>
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