



Cable type: 705TRI5-HLFRC flame retardant
Size: 1.00/4.55 Tri-shield **C_{ca}**
Cable with UV resistant, halogen free, low smoke, flame retardant jacket according to IEC 60754, IEC 60332-1, IEC 60332-3 cat. D, IEC 61034 and EN 50399 C_{ca}-s1,d2,a1.
Compliant to EN 50575

	Units	Nominal
Construction		
INNER CONDUCTOR		
Material and construction	-	copper wire
Diameter	mm	1.00
DIELECTRIC		
Material	-	gas-injected cellular PE
Diameter	mm	4.55
OUTER CONDUCTOR		
Material and construction	-	bonded aluminium tape
Diameter over 1st tape	mm	4.80
Material and construction	-	tinned copper braid (=77% coverage)
Diameter over braid	mm	5.30
Material and construction	-	aluminium tape bonded to outer jacket
OUTER SHEATH		
Material		white, flame retardant polyolefin with yellow marking
Thickness	mm	0.80
Overall diameter	mm	7.0 < 7.3

Mechanical characteristics			
Minimum bending radius			
	1 x	cm	2
	10 x	cm	4
Maximum pulling strength		daN	10
Weight		kg/km	61

Electrical characteristics			
Characteristic impedance		Ω	75 +/-3
Capacity		pF/m	54
Relative propagation velocity (velocity ratio)		%	82 +/-3
DC-resistance of inner conductor at 20°C		Ω/km	21.2
DC-resistance of outer conductor at 20°C		Ω/km	6.5
Current rating (50 - 60) Hz		A	5
Dielectric voltage strength		kV	1.5
Longitudinal attenuation at 20°C	$\alpha(f_{[MHz]}) = a \cdot \sqrt{f_{[MHz]}} + b \cdot f_{[MHz]} + c$		
	a =	-	0.598
	b =	-	0.001495
	c =	-	-0.000994
	5 MHz	dB/100m	1.45 < 1.92
	10 MHz	dB/100m	1.90 < 2.02
	30 MHz	dB/100m	3.32 < 3.50
	50 MHz	dB/100m	4.30 < 4.52
	100 MHz	dB/100m	6.13 < 6.44
	200 MHz	dB/100m	8.76 < 9.19
	300 MHz	dB/100m	10.81 < 11.35
	400 MHz	dB/100m	12.56 < 13.19
	470 MHz	dB/100m	13.67 < 14.36
	600 MHz	dB/100m	15.54 < 16.33
	800 MHz	dB/100m	18.11 < 19.02
	860 MHz	dB/100m	18.82 < 19.77
	1000 MHz	dB/100m	20.40 < 21.43
	1200 MHz	dB/100m	22.51 < 23.64

Return loss (3 peak values up to 4 dB lower are permissible)			
	5 - 470 MHz	dB	> 20
	470 - 1000 MHz	dB	> 18
	1000 - 1200 MHz	dB	> 16
Screening attenuation (30 - 1000 MHz)		dB	> 105
Screening attenuation (1000 - 1200 MHz)		dB	> 95
Transfer impedance (5 - 30 MHz)		mΩ/m	< 0.8
EN-50117 Screening Class		-	Class A++