



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
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
	10 x	cm
Maximum pulling strength		daN
Weight		kg/km
		2
		4
		10
		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
	10 MHz	dB/100m
	30 MHz	dB/100m
	50 MHz	dB/100m
	100 MHz	dB/100m
	200 MHz	dB/100m
	300 MHz	dB/100m
	400 MHz	dB/100m
	470 MHz	dB/100m
	600 MHz	dB/100m
	800 MHz	dB/100m
	860 MHz	dB/100m
	1000 MHz	dB/100m
	1200 MHz	dB/100m
		1.45 < 1.92
		1.90 < 2.02
		3.32 < 3.50
		4.30 < 4.52
		6.13 < 6.44
		8.76 < 9.19
		10.81 < 11.35
		12.56 < 13.19
		13.67 < 14.36
		15.54 < 16.33
		18.11 < 19.02
		18.82 < 19.77
		20.40 < 21.43
		22.51 < 23.64
Return loss (3 peak values up to 4 dB lower are permissible)		
	5 - 470 MHz	dB
	470 - 1000 MHz	dB
	1000 - 1200 MHz	dB
		> 20
		> 18
		> 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++