



Cable type	Standard:	7138G
Size: 3.3/13.6		
Cable with PE outer jacket.		
Compliant to EN 50575 (reaction to fire: F_{ca})		

	Units	Nominal
Construction		
INNER CONDUCTOR		
Material and construction	-	copper wire
Diameter	mm	3.3
DIELECTRIC		
Material	-	gas-injected cellular PE
Diameter	mm	13.6
OUTER CONDUCTOR		
Material and construction	-	smooth copper tube
Diameter over outer conductor	mm	14.05
OUTER SHEATH		
Material	-	black polyethylene
Thickness	mm	1.5
Overall diameter	mm	17.0 < 17.4

Mechanical characteristics			
Minimum bending radius			
	1 x	cm	15
	10 x	cm	30
Maximum pulling strength (without messenger)		daN	95
Weight		kg/km	278

Electrical characteristics			
Characteristic impedance	Ω	75	+/- 2
Capacity	pF/m	50	
Relative propagation velocity (velocity ratio)	%	88	
DC-resistance of inner conductor at 20°C	Ω/km	1.99	
DC-resistance of outer conductor at 20°C	Ω/km	1.63	
Current rating (50 - 60) Hz	A	21	
Dielectric voltage strength	kV	2	
Longitudinal attenuation at 20°C	$\alpha(f_{[MHz]}) = a \cdot \sqrt{f_{[MHz]}} + b \cdot f_{[MHz]}$		
	a =	-	0.185
	b =	-	0.000504
	5 MHz	dB/100m	0.42 < 0.44
	10 MHz	dB/100m	0.59 < 0.62
	30 MHz	dB/100m	1.03 < 1.08
	50 MHz	dB/100m	1.33 < 1.40
	100 MHz	dB/100m	1.90 < 2.00
	200 MHz	dB/100m	2.72 < 2.85
	300 MHz	dB/100m	3.36 < 3.52
	400 MHz	dB/100m	3.90 < 4.10
	470 MHz	dB/100m	4.25 < 4.46
	600 MHz	dB/100m	4.83 < 5.08
	800 MHz	dB/100m	5.64 < 5.92
	860 MHz	dB/100m	5.86 < 6.15
	1000 MHz	dB/100m	6.35 < 6.7
	1200 MHz	dB/100m	7.0 < 7.4
	1500 MHz	dB/100m	7.9 < 8.3
	1700 MHz	dB/100m	8.5 < 8.9
	2000 MHz	dB/100m	9.3 < 9.8
	3000 MHz	dB/100m	11.6 < 12.2

Return loss (3 peak values up to 4 dB lower are permissible)		
	5 - 470 MHz	dB > 28
	470 - 1000 MHz	dB > 25
	1000 - 1500 MHz	dB > 21
	1500 - 1700 MHz	dB *

Screening attenuation (30 - 3000 MHz)		
		dB > 120

*) values to be defined