



Cable type	underground:	7088
Size: 2.0/8.3	aerial:	A 7088
	Units	Nominal

Construction

INNER CONDUCTOR			
Material and construction	-	copper wire	
Diameter	mm	2.02	
DIELECTRIC			
Material	-	gas-injected cellular PE	
Diameter	mm	8.3	
OUTER CONDUCTOR			
Material and construction	-	corrugated copper tube	
Diameter over outer conductor	mm	9.3	
OUTER SHEATH			
Material	-	black polyethylene	
Thickness	mm	1.0	
Overall diameter	mm	11.3	< 11.7

Cable with messenger

MESSINGER			
Material	-	AMS	
Construction	.. X mm	7 x 1.52	
Diameter over messenger	mm	7	
OVERALL DIMENSIONS	mm	20.8/11.3	

Mechanical characteristics

Minimum bending radius			
	1 x	cm	8
	10 x	cm	15
Maximum pulling strength (without messenger)		daN	50
Weight		kg/km	145

Cable with messenger

Minimum breaking strength of messenger	daN	400
Modulus of elasticity	N/mm ²	62000
Thermal coefficient of linear expansion	1/°C	23 x 10 ⁻⁶
Weight	kg/km	205

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	5.3	
DC-resistance of outer conductor at 20°C	Ω/km	2.6	
Current rating (50 - 60) Hz	A	11	
Dielectric voltage strength	kV	2	
Longitudinal attenuation at 20°C		$\alpha(f_{[MHz]}) = a \cdot \sqrt{f_{[MHz]}} + b \cdot f_{[MHz]}$	
	a =	-	0.296
	b =	-	0.00085
	5 MHz	dB/100m	0.67 < 0.70
	10 MHz	dB/100m	0.94 < 0.99
	30 MHz	dB/100m	1.65 < 1.73
	50 MHz	dB/100m	2.14 < 2.24
	100 MHz	dB/100m	3.05 < 3.20
	200 MHz	dB/100m	4.36 < 4.57
	300 MHz	dB/100m	5.38 < 5.65
	400 MHz	dB/100m	6.26 < 6.57
	470 MHz	dB/100m	6.82 < 7.16
	600 MHz	dB/100m	7.76 < 8.15
	800 MHz	dB/100m	9.05 < 9.50
	860 MHz	dB/100m	9.41 < 9.88
	1000 MHz	dB/100m	10.21 < 10.72
Return loss (3 peak values up to 4 dB lower are permissible)			
	5 - 470 MHz	dB	> 23
	470 - 862 MHz	dB	> 20
Screening attenuation (30 - 1000 MHz)		dB	>> 120

