

Cable type **707RT8(V)**
Size: 1.7/6.9

	Units	Nominal	
Construction			
INNER CONDUCTOR			
Material and construction	-	copper wire	
Diameter	mm	1.70	
DIELECTRIC			
Material	-	gas-injected cellular PE	
Diameter	mm	6.9	
OUTER CONDUCTOR			
Material and construction	-	copper tape & braid	
Diameter over tape	mm	7.1	
OUTER SHEATH			
Material	-	PE (PVC)	
Thickness	mm	1.5	
Overall diameter	mm	10.4	< 10.7

Mechanical characteristics

Minimum bending radius			
	1 x	cm	10
	10 x	cm	25
Maximum pulling strength		daN	40
Weight		kg/km	112

Electrical characteristics

Characteristic impedance	Ω	75	+/- 3
Capacity	pF/m	50	
Relative propagation velocity (velocity ratio)	%	88	
DC-resistance of inner conductor at 20°C	Ω /km	7.6	
DC-resistance of outer conductor at 20°C	Ω /km	7.6	
Current rating (50 - 60) Hz	A	9.5	
Dielectric voltage strength	kV	2	
Longitudinal attenuation at 20°C	$\alpha(f_{[MHz]}) = a \cdot \sqrt{f_{[MHz]}} + b \cdot f_{[MHz]}$		
	a =	-	0.345
	b =	-	0.0007
	5 MHz	dB/100m	0.77 < 0.85
	10 MHz	dB/100m	1.10 < 1.21
	30 MHz	dB/100m	1.91 < 2.10
	50 MHz	dB/100m	2.47 < 2.72
	100 MHz	dB/100m	3.52 < 3.87
	200 MHz	dB/100m	5.02 < 5.52
	300 MHz	dB/100m	6.19 < 6.80
	400 MHz	dB/100m	7.18 < 7.90
	470 MHz	dB/100m	7.81 < 8.59
	600 MHz	dB/100m	8.87 < 9.76
	800 MHz	dB/100m	10.32 < 11.35
	860 MHz	dB/100m	10.72 < 11.79
	1000 MHz	dB/100m	11.61 < 12.77
Return loss (3 peak values up to 4 dB lower are permissible)			
	5 - 310 MHz	dB	> 23
	310 - 460 MHz	dB	> 21
	460 - 585 MHz	dB	> 19
	585 - 862 MHz	dB	> 18
Screening attenuation (30 - 1000 MHz)		dB	> 75
Transfer impedance (5 - 30 MHz)		m Ω /m	< 10
EN 50117 screening class		-	Class B