



02Y(St)CY /..H 1.0/2.95AF

Coaxials basing upon DIN 47264, EN 50117-1 and IEC 61196-1



Application

The radio-frequency cables described in this chapter are used in transmitter and receiver installations in radio communications as well as in the entire field of commercial radio-frequency technology and electronics.

Standards

DIN 47264, EN 50117-1, IEC 61196-1

Flame resistance

acc. to IEC 60332-1

Construction

Inner conductor	copper wire, bare, diameter 1.04 + 0.01 – 0.02 mm
Insulation	Foam-PE, diameter 2.95 ± 0.05
Outer conductor	Al-PET-Al-foil + copper braid, tinned, 96% optical coverage
Sheath	PVC or FRNC, diameter 5.0 ± 0.2 mm black, RAL 9005

Mechanical properties

Minimum bending radius	without load	5 x outer diameter
	with load	10 x outer diameter
Temperature	during operation	-30° C to + 70° C
	during installation	-15° C to + 55° C
***Corrosivity		IEC 60754-2

***only for FRNC – cables

Electrical properties

at 20°C

DC resistance	Inner conductor	23 Ω/km
	Outer conductor	12 Ω/km
Mutual capacitance		82 pF/m
Velocity ratio		80 %
Characteristic impedance	200 MHz	50 Ω ± 1.5 Ω
Transfer impedance	10 MHz	≤ 5 mΩ/m
	100 MHz	≤ 4 mΩ/m
Operating voltage		0.8 kV _{rms}
Test voltage	Inner/Outer conductor	1.6 kV _{rms}
Screening factor	100-1000 MHz	100 dB
	1000-3000 MHz	85 dB
Insulation resistance		≥ 10 GΩ*km



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Electrical data

at 20°C

Frequency (MHz)	Attenuation (dB/100m)	Max. power rating (Watts) (ambient temperature 40°C and max. inner conductor temperature 100°C)	Return loss (dB) several peaks are allowed	
			Frequency (MHz)	
	nominal	maximum		
1	1.05	4525	50-450	≥ 23
10	3.2	1590	450-1000	≥ 18
100	10.1	504		
200	14.3	356		
800	29.2	174		
1000	32.6	156		
1600	41.7	118		
2000	46.6	106		
2400	51.1	97		
3000	57.6	86		

Technical data

Product code	Designation	Type	Brand name	Outer diameter	Weight	Standard delivery length	Drum size	Gross weight	Copper content	Tensile force
				mm	kg/km	m	*PWD	kg		N
**1002701	02Y(St)CY	1.0/2.95 AF	1.0/3.0AF Loss loss	5.0	42	500	400/120/ 280	23	24.9	155
1002702	02Y(St)CY	1.0/2.95 AF	1.0/3.0AF Loss loss	5.0	42	1000	400/150/ 330	44.5	24.9	155
1002696	02Y(St)CH	1.0/2.95AF LSHF-FR	1.0/3.0AF Loss loss	5.0	42	1000	400/150/ 330	44.5	24.9	155
**1002766	02Y(St)CH	1.0/2.95AF LSHF-FR	1.0/3.0AF Loss loss	5.0	46	500	400/120/ 280	25	24.9	155

*PWD (Plywood drum)

**with customer marking