

H 155 - Low-Loss Koaxialkabel 50 Ohm

Für H 155 sind UHF-Stecker = PL 259/6 TG, UHF-Spezial/6, N-Stecker N 155 STG und BNC-Stecker = UG 88/155 lieferbar



Impedanz	50 ± 2 Ohm
Innenleiter	19 x 0,28 mm
Dielektrikum	Gas inj. PE 3,9 mm
Außenleiter	
1. Alufolie	0,008-0,03 x 18 mm
2. Kupfergeflecht	80% 16 x 8 x 0,1 mm; 4,5 mm
Außenisolierung	PVC, 5,4 mm, UV-beständig
Verkürzungsfaktor	0,79
Kapazität	92 pF/m
Schirmung bis 1 GHz	> 85 dB
Biegeradius (min)	35 mm
Temperaturbereich	-30 / +80°C
Widerstand Innenleiter	1,5 Ohm/100 m
Kupferanteil	22 kg / km
Bruchlast	100 N

Vergleichstabelle der geometrisch ähnlichen Koaxialkabel

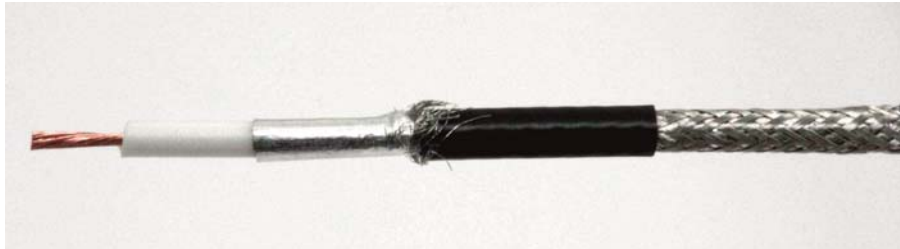
MHz	Dämpfung in dB per 100 m			
	RG 58 CU	RG 58 ALL	Aircell 5	H 155
14 MHz	6,2 dB		---	3,4 dB
21 MHz	---		---	4,2 dB
28 MHz	8,0 dB		---	4,9 dB
50 MHz	11,0 dB	8,3 dB	6,6 dB	6,5 dB
100 MHz	17,6 dB	11,3 dB	9,4 dB	9,3 dB
145 MHz	17,8 dB		11,3 dB	11,2 dB
230 MHz	23,0 dB	16,4 dB	----	14,2 dB
432 MHz	33,2 dB		20,9 dB	19,8 dB
500 MHz	36,1 dB		21,6 dB	21,9 dB
800 MHz	44,1 dB	ca. 29 dB	27,6 dB	26,5 dB
1000 MHz	49,6 dB	39,9 dB	31,1 dB	30,9 dB
1296 MHz	64,5 dB		35,71 dB	34,9 dB
1600 MHz	82,5 dB		---	40,5 dB
1750 MHz			---	42,3 dB
2150 MHz			---	---
2400 MHz			49,8 dB	46,9 dB
3000 MHz				51,6 dB
5200 MHz				69,3 dB
5800 MHz				73,8 dB

Quellen: Belden CDT, SSB-Electronic, ITC-CDT, Bedea, Draka Comteq

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Übertragbare Leistung bei 40°C power rating at 40°C

7 MHz	950 Watt
14 MHz	670 Watt
21 MHz	550 Watt
28 MHz	470 Watt
50 MHz	350 Watt
100 MHz	250 Watt
144 MHz	210 Watt
432 MHz	120 Watt
800 MHz	85 Watt
900 MHz	85 Watt
800 MHz	80 Watt
1296 MHz	65 Watt
2320 MHz	50 Watt
5000 MHz	30 Watt
10000 MHz	20 Watt



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Application

Transmission cable is used for low and high power radio frequency (RF) connections. Examples include radio antenna tower connections, CB and cellular phone antenna connections and microwave transmitter and receiver applications.

Construction & Dimensions



- 1. Conductor**
- 2. Dielectric**
- 3.1 Foil**
- 3.2 Braid**
- 4. Jacket**

- 1. Inner Conductor** Innenleiter
Material: stranded (19x0.28), bare copper
Diameter: 1.41 mm
- 2. Dielectric** Dielektrikum
Material: Gas injected PE
Diameter: over insulation 3.90 mm
- 3. Outer Conductor** Aussenleiter
Material: foil + braid
Diameter: screen 4.5 mm
3.1 Shielding foil: Duofoil®
Coverage: 100%
3.2 Shielding braid: tinned copper braid
Coverage: 80% ± 5%
- 4. Jacket** Aussenmantel
Material: PVC
Diameter: 5.40 + 0.2 mm
Color and text: see table Marking

Requirements and test methods

Electrical characteristics

Wellenwiderstand/Mean characteristic impedance:	50 ± 3 W
Kapazität/Nominal capacitance conductor to shield:	84 pF/m
Ausbreitungsgeschwindigkeit/Nominal velocity of propagation:	80%
Schleifenwiderstand /Max. DC loop resistance:	32.4 Ω/km
Gleichstromwiderstand/Max. inner conductor DC resistance at 20 °C:	15.4 Ω/km
Gleichstromwiderstand Aussenleiter/ Max. outer conductor DC resistance at 20 °C:	17.0 Ω/km
Rückflussdämpfung/Return loss at	5- 470 MHz: ≥ 20 dB* 470-1000 MHz: ≥ 18 dB* 1000-2000 MHz: ≥ 16 dB* 2000-3000 MHz: ≥ 15 dB*
Schirmungsmass/Screening attenuation at	30-1000 MHz: ≥ 85 dB
Wellendämpfung/Nominal Attenuation	

MHz	dB/100m	MHz	dB/100m	MHz	dB/100m	MHz	dB/100m
5	2.5	230	13.4	862	27.3	1750	40.3
50	6.9	400	18.0	1000	29.6	2150	46.0
100	9.1	800	26.1	1350	34.9	2400	49.1