Smart Link Better Life.

长飞光纤光缆股份有限公司

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RF Coaxial Cable, Leaky Coaxial Cable and Accessories

Smart Link Better Life.

Yangtze Optical Fibre and Cable Joint Stock Limited Company (also known as 'YOFC'), formally known as 'Yangtze Optical Fibre and Cable Co., Ltd.', is a Sino-foreign joint venture enterprise registered and established in Wuhan, Hubei Province in May 1988. After 25 years development, the company was restructured itself to be a foreign-funded joint stock company in December 2013 and was eventually renamed 'Yangtze Optical Fibre and Cable Joint Stock Limited Company', including 3 key shareholders - China Huaxin Post and Telecommunication Economy Development Center, Draka Comteq B.V and Wuhan Yangtze Communications Industry Group Co., Ltd.

YOFC was successfully listed on the main board of Hong Kong Exchanges and Clearing Limited on December 10, 2014, becoming the company listed in Hong Kong that focuses on optical fibre preform, optical fibre and cable, and other related products. According to the report from the CRU (the Commodity Research Unit), a third-party authoritative consultancy agency in the world, by the end of 2016, YOFC's optical fibre preform has obtained a 22.5% global market share, optical fibre, a 17.3% global market share, and optical cable, a 14.9% global market share.

YOFC is mainly producing and selling different types and standards of optical preform, optical fibre and optical cable that widely installed in telecommunication industry, customized specialty fibre and cable, RF coaxial cable and accessories. YOFC also provides the integrated system, project design and services. In addition, YOFC is equipped with a full series of fibre and cable and solutions, providing a variety of different products and solutions for world's telecom industry and other industries (e,g. Publicity, Transportation, Oil & Chemistry and Medication) and offering its products and services to over 70 countries and regions around the world.

Through introduction, digestion, absorption and innovation since its establishment, YOFC has carried out a way to successfully revitalize national industry. So far, it has obtained over 300 national-granted patents and several foreign invention patents from Europe, US and Japan, etc. including PCT authorization. These achievements have driven YOFC to honour the following award & reputation: National Enterprise Technical Center, Innovative Enterprise, National First Batch Intelligent Manufacturing Pilot Demonstration Enterprise, National Manufacturing Industry Single Championship Demonstration Enterprise, etc. Moreover, YOFC was granted the Second Class National Science and Technology Progress Award (twice) and the China Quality Award, etc. In addition, YOFC was nominated the support organization for National Key Laboratory in optical fibre and cable preparation technology and it is also one of the significant members in ITU-T and IEC in setting national standards.

Adhering to the mission of 'Smart Link Better Life', YOFC devotes itself to becoming the leader in information transmission and smart links through its core value 'Client Focus Accountability Innovation Stakeholder Benefits', and places its layout aggressively in 5 domains: preform, fibre and cable connotative growth, technological innovation and intelligent manufacturing, international region expansion, relative diversification and capital management.

Contents

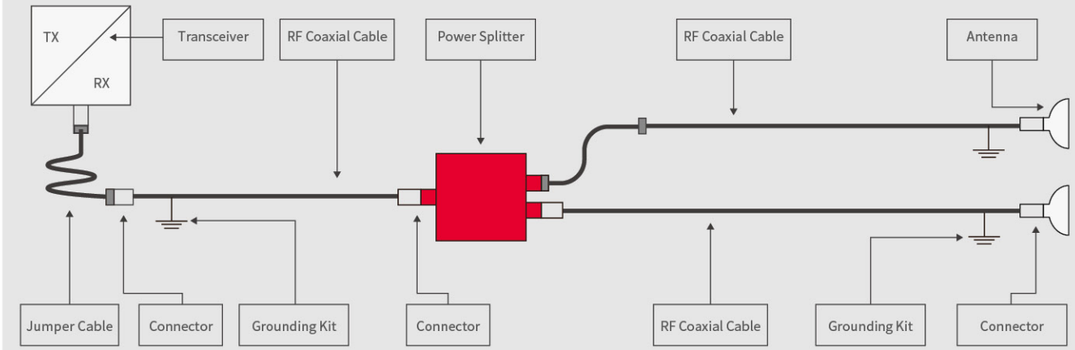


RF Coaxial Cable

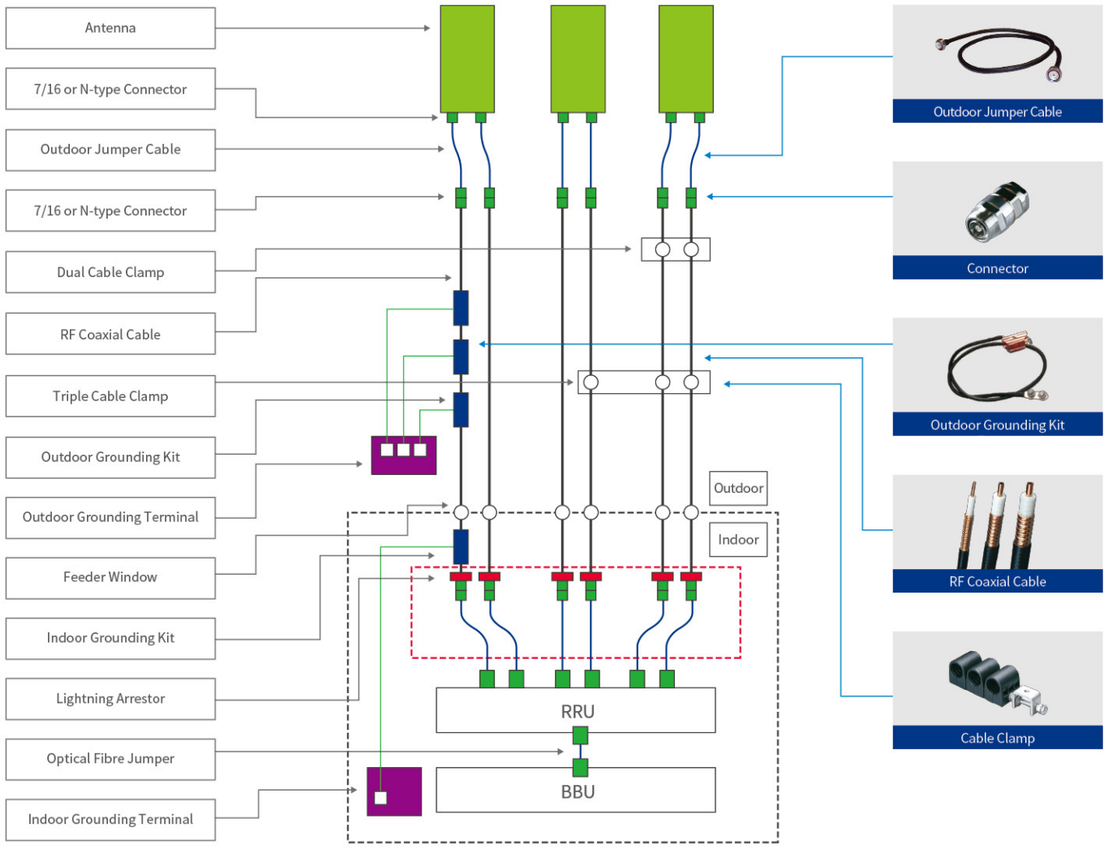
Physical Dimension

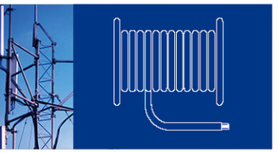
	Inner Conductor	Dielectric	Outer Conductor	Jacket
RF(A) 1/2" RF Coaxial Cable	4.80mm	12.10mm	13.90mm	16.00mm
RFF 1/2" Superflexible RF Coaxial Cable	3.55mm	9.00mm	11.90mm	13.50mm
RF 7/8" RF Coaxial Cable	9.00mm	22.20mm	24.90mm	27.50mm
RFA 7/8" RF Coaxial Cable	9.40mm	22.50mm	25.40mm	27.80mm
RFA 1 1/4" RF Coaxial Cable	13.00mm	32.20mm	35.80mm	39.00mm
RFA 1 5/8" RF Coaxial Cable	17.60mm	42.20mm	46.30mm	50.00mm

Indoor Distributed Antenna System (DAS)



Outdoor Distributed Antenna System (DAS)

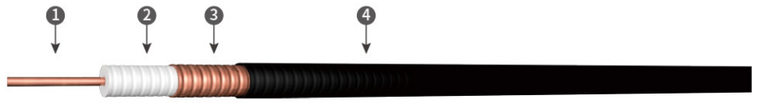




RF(A) 1/2"
RF Coaxial Cable

Cable Type: RF(A)1/2" -50(BHF) HCAAY(Z)-50-12

1. CCA
2. Foamed PE Dielectric
3. Ring Corrugated Cu-tube
4. PE Jacket or LSZH



Electrical Characteristics at +20°C

Characteristic Impedance	50 ± 1Ω
Return Loss for	
320 – 480 MHz	As Specified by Customer
820 – 960 MHz	As Specified by Customer
1700 – 1880 MHz	As Specified by Customer
1880 – 2180 MHz	As Specified by Customer
2300 – 2500 MHz	As Specified by Customer
2500 – 2700 MHz	As Specified by Customer
Other Bands Also Available on Request	
Attenuation	See Table
Velocity Factor	0.88
Capacitance	76 pF/m
Maximum Frequency	9800 MHz
Max Power Rating	See Table
Peak RF Voltage Rating	1.8 kV
Peak Power Rating	25.9 kW

Attenuation and Power Rating

MHz Frequency		100	450	800	900	1800	1900	2000	2200	2400	2600	2800	3000
Attenuation (Ambient temperature +20°C) dB/100m	Typical	2.16	4.74	6.45	6.88	10.1	10.4	10.7	11.3	11.9	12.4	12.9	13.5
Power Rating (Ambient temperature +40°C inner conductor temperature+100°C)KW		3.7	1.7	1.2	1.2	0.79	0.76	0.74	0.70	0.66	0.63	0.61	0.58

Mechanical Characteristics

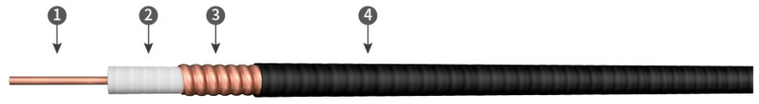
Crush Resistance	Maximum Pulling Force	Single Bending	Repeated Bending	Operating Temperature Range	Installation Temperature Range
2.0Kg/mm	1130N	80 mm	125 mm	-55°C-+80°C	PE: -40°C LSZH: -20°C

Note:
The product meets the Chinese industry standard: YD/T1092-2013, it can be specified according to customer's requirement, please contact with us.

RFF 1/2"
Superflexible RF Coaxial Cable

Cable Type: RFF 1/2" -50(BHF) HCAHY(Z)-50-9

1. CCA
2. Foamed PE Dielectric
3. Cu-tube, hellically corrugated
4. PE Jacket or LSZH



Electrical Characteristics at +20°C

Characteristic Impedance	50 ± 1Ω
Return Loss for	
320 – 480 MHz	As Specified by Customer
820 – 960 MHz	As Specified by Customer
1700 – 1880 MHz	As Specified by Customer
1880 – 2180 MHz	As Specified by Customer
2300 – 2500 MHz	As Specified by Customer
2500 – 2700 MHz	As Specified by Customer
Other Bands Also Available on Request	
Attenuation	See Table
Velocity Factor	0.82
Capacitance	82 pF/m
Maximum Frequency	12GHz
Max Power Rating	See Table
Peak RF Voltage Rating	1.39 kV
Peak Power Rating	19.0 kW

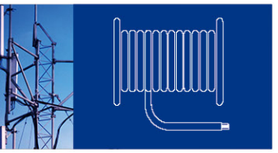
Attenuation and Power Rating

MHz Frequency		100	450	800	900	1800	1900	2000	2200	2400	2600	2800	3000
Attenuation (Ambient temperature +20°C) dB/100m	Typical	3.24	7.21	9.90	10.6	15.7	16.2	16.7	17.7	18.6	19.5	20.4	21.3
Power Rating (Ambient temperature +40°C inner conductor temperature+100°C)KW		2.6	1.2	0.85	0.79	0.54	0.52	0.51	0.48	0.46	0.44	0.42	0.40

Mechanical Characteristics

Crush Resistance	Maximum Pulling Force	Single Bending	Repeated Bending	Operating Temperature Range	Installation Temperature Range
1.9Kg/mm	800N	17 mm	50 mm	-55°C-+80°C	PE: -40°C LSZH: -20°C

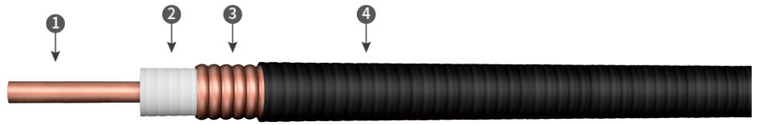
Note:
The product meets the Chinese industry standard: YD/T1092-2013, it can be specified according to customer's requirement, please contact with us.



RF 7/8"
RF Coaxial Cable

Cable Type: RF 7/8" -50(BHF) HCTAY(Z)-50-22

1. Smooth Copper Tube
2. Foamed PE Dielectric
3. Ring Corrugated Cu-tube
4. PE Jacket or LSZH



Electrical Characteristics at +20°C

Characteristic Impedance	50 ± 1Ω
Return Loss for	
320 – 480 MHz	As Specified by Customer
820 – 960 MHz	As Specified by Customer
1700 – 1880 MHz	As Specified by Customer
1880 – 2180 MHz	As Specified by Customer
2300 – 2500 MHz	As Specified by Customer
2500 – 2700 MHz	As Specified by Customer
Other Bands Also Available on Request	
Attenuation	See Table
Velocity Factor	0.88
Capacitance	76 pF/m
Maximum Frequency	5300 MHz
Max Power Rating	See Table
Peak RF Voltage Rating	3.2 kV
Peak Power Rating	94.8 kW

Attenuation and Power Rating

MHz Frequency		100	450	800	900	1800	1900	2000	2200	2400	2600	2800	3000
Attenuation (Ambient temperature +20°C) dB/100m	Typical	1.17	2.57	3.51	3.74	5.51	5.68	5.85	6.18	6.49	6.80	7.09	7.38
Power Rating (Ambient temperature +40°C inner conductor temperature+100°C)KW		8.0	3.6	2.6	2.5	1.7	1.6	1.6	1.5	1.4	1.3	1.3	1.2

Mechanical Characteristics

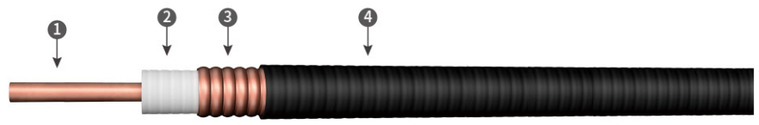
Crush Resistance	Maximum Pulling Force	Single Bending	Repeated Bending	Operating Temperature Range	Installation Temperature Range
1.5Kg/mm	1500N	120 mm	250 mm	-55°C-+80°C	PE: -40°C LSZH: -20°C

Note:
The product meets the Chinese industry standard: YD/T1092-2013, it can be specified according to customer's requirement, please contact with us.

RFA 7/8"
RF Coaxial Cable

Cable Type: RFA 7/8" -50(BHF) HCTAY(Z)-50-23

1. Smooth Copper Tube
2. Foamed PE Dielectric
3. Ring Corrugated Cu-tube
4. PE Jacket or LSZH



Electrical Characteristics at +20°C

Characteristic Impedance	50 ± 1Ω
Return Loss for	
320 – 480 MHz	As Specified by Customer
820 – 960 MHz	As Specified by Customer
1700 – 1880 MHz	As Specified by Customer
1880 – 2180 MHz	As Specified by Customer
2300 – 2500 MHz	As Specified by Customer
2500 – 2700 MHz	As Specified by Customer
Other Bands Also Available on Request	
Attenuation	See Table
Velocity Factor	0.88
Capacitance	76 pF/m
Maximum Frequency	5100 MHz
Max Power Rating	See Table
Peak RF Voltage Rating	3.2 kV
Peak Power Rating	92 kW

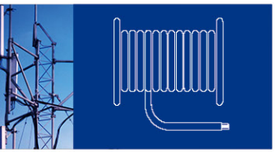
Attenuation and Power Rating

MHz Frequency		100	450	800	900	1800	1900	2000	2200	2400	2600	2800	3000
Attenuation (Ambient temperature +20°C) dB/100m	Typical	1.12	2.46	3.34	3.56	5.20	5.36	5.51	5.81	6.11	6.39	6.66	6.93
Power Rating (Ambient temperature +40°C inner conductor temperature+100°C)KW		8.3	3.8	2.8	2.6	1.8	1.7	1.7	1.6	1.5	1.4	1.4	1.3

Mechanical Characteristics

Crush Resistance	Maximum Pulling Force	Single Bending	Repeated Bending	Operating Temperature Range	Installation Temperature Range
1.5Kg/mm	1700N	120 mm	250 mm	-55°C-+80°C	PE: -40°C LSZH: -20°C

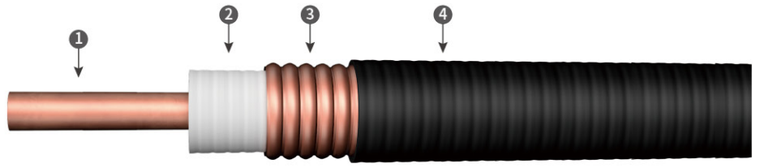
Note:
The product meets the Chinese industry standard: YD/T1092-2013, it can be specified according to customer's requirement, please contact with us.



RFA 1 1/4"
RF Coaxial Cable

Cable Type: RFA 1 1/4" -50(BHF) HCTAY(Z)-50-32

1. Smooth Copper Tube
2. Foamed PE Dielectric
3. Ring Corrugated Cu-tube
4. PE Jacket or LSZH



Electrical Characteristics at +20°C

Characteristic Impedance	50 ± 1Ω
Return Loss for	
320 – 480 MHz	As Specified by Customer
820 – 960 MHz	As Specified by Customer
1700 – 1880 MHz	As Specified by Customer
1880 – 2180 MHz	As Specified by Customer
2300 – 2500 MHz	As Specified by Customer
2500 – 2700 MHz	As Specified by Customer
Other Bands Also Available on Request	
Attenuation	See Table
Velocity Factor	0.88
Capacitance	76 pF/m
Maximum Frequency	3500 MHz
Max Power Rating	See Table
Peak RF Voltage Rating	4.6 kV
Peak Power Rating	211 kW

Attenuation and Power Rating

MHz Frequency		100	450	800	900	1800	1900	2000	2200	2400	2600	2800	3000
Attenuation (Ambient temperature +20°C) dB/100m	Typical	0.819	1.83	2.53	2.70	4.03	4.16	4.29	4.54	4.79	5.02	5.26	5.48
Power Rating (Ambient temperature +40°C inner conductor temperature+100°C)KW		12	5.4	3.9	3.7	2.4	2.4	2.3	2.2	2.0	1.9	1.9	1.8

Mechanical Characteristics

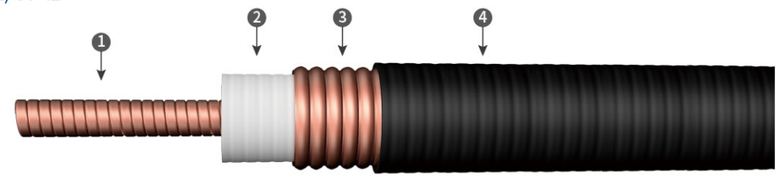
Crush Resistance	Maximum Pulling Force	Single Bending	Repeated Bending	Operating Temperature Range	Installation Temperature Range
2.5Kg/mm	6050N	200 mm	350 mm	-55°C-+80°C	PE: -40°C LSZH: -20°C

Note:
The product meets the Chinese industry standard: YD/T1092-2013, it can be specified according to customer's requirement, please contact with us.

RFA 1 5/8"
RF Coaxial Cable

Cable Type: RFA 1 5/8" -50(BHF) HHTAY(Z)-50-42

1. Corrugated Cu-tube
2. Foamed PE Dielectric
3. Ring Corrugated Cu-tube
4. PE Jacket or LSZH



Electrical Characteristics at +20°C

Characteristic Impedance	50 ± 1Ω
Return Loss for	
320 – 480 MHz	As Specified by Customer
820 – 960 MHz	As Specified by Customer
1700 – 1880 MHz	As Specified by Customer
1880 – 2180 MHz	As Specified by Customer
2300 – 2500 MHz	As Specified by Customer
2500 – 2700 MHz	As Specified by Customer
Other Bands Also Available on Request	
Attenuation	See Table
Velocity Factor	0.88
Capacitance	76 pF/m
Maximum Frequency	2800 MHz
Max Power Rating	See Table
Peak RF Voltage Rating	5.6 kV
Peak Power Rating	314 kW

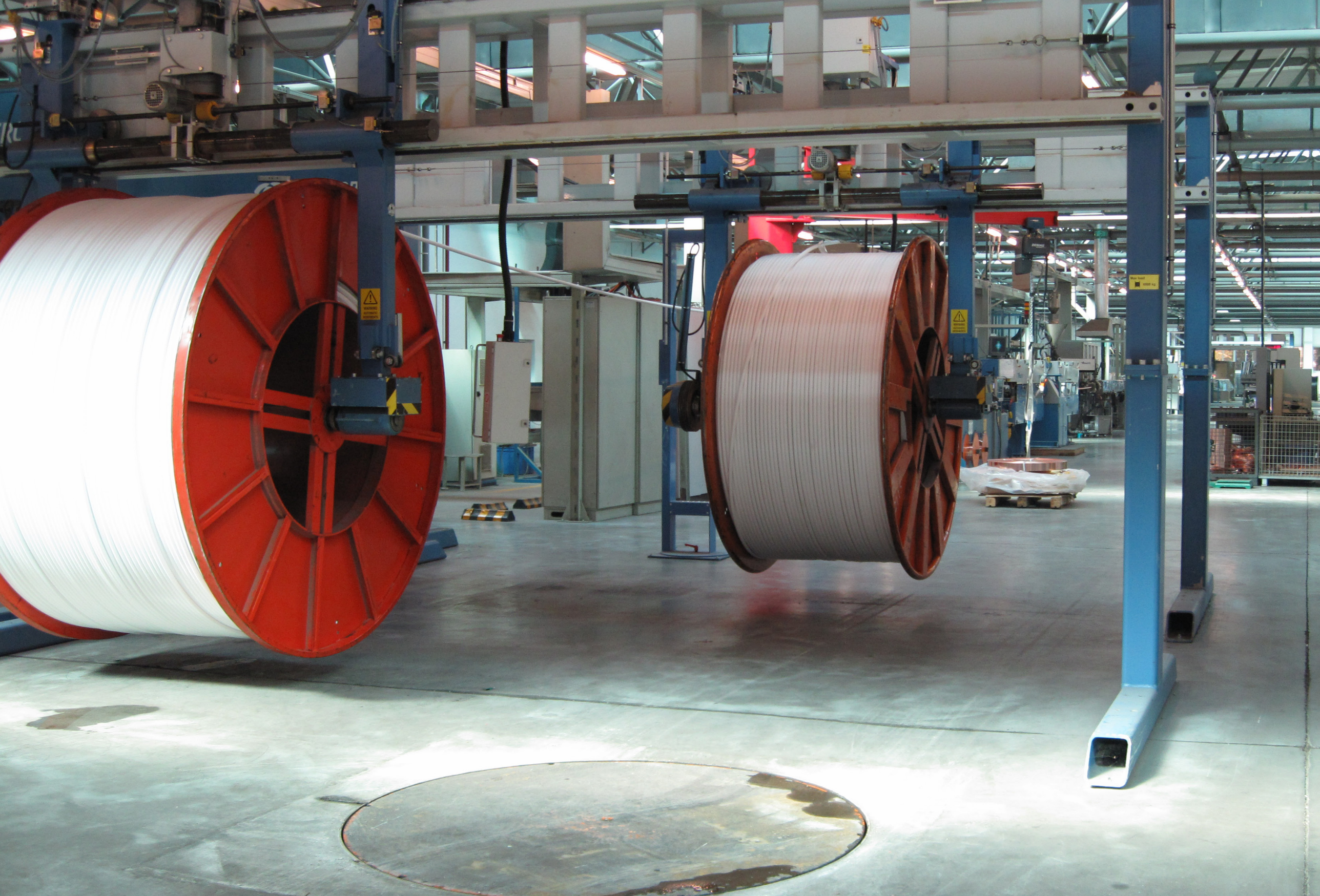
Attenuation and Power Rating

MHz Frequency		100	450	800	900	1800	1900	2000	2200	2400	2600	2800
Attenuation (Ambient temperature +20°C) dB/100m	Typical	0.653	1.49	2.08	2.23	3.40	3.51	3.63	3.85	4.07	4.28	4.50
Power Rating (Ambient temperature +40°C inner conductor temperature+100°C)KW		17	7.4	5.3	4.9	3.2	3.1	3.0	2.8	2.7	2.5	2.4

Mechanical Characteristics

Crush Resistance	Maximum Pulling Force	Single Bending	Repeated Bending	Operating Temperature Range	Installation Temperature Range
2.1Kg/mm	3750N	250 mm	500 mm	-55°C-+80°C	PE: -40°C LSZH: -20°C

Note:
The product meets the Chinese industry standard: YD/T1092-2013, it can be specified according to customer's requirement, please contact with us.

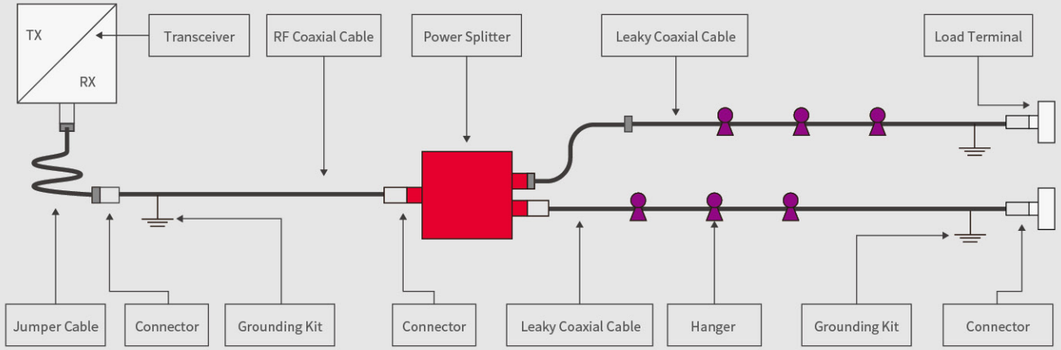


Leaky Coaxial Cable

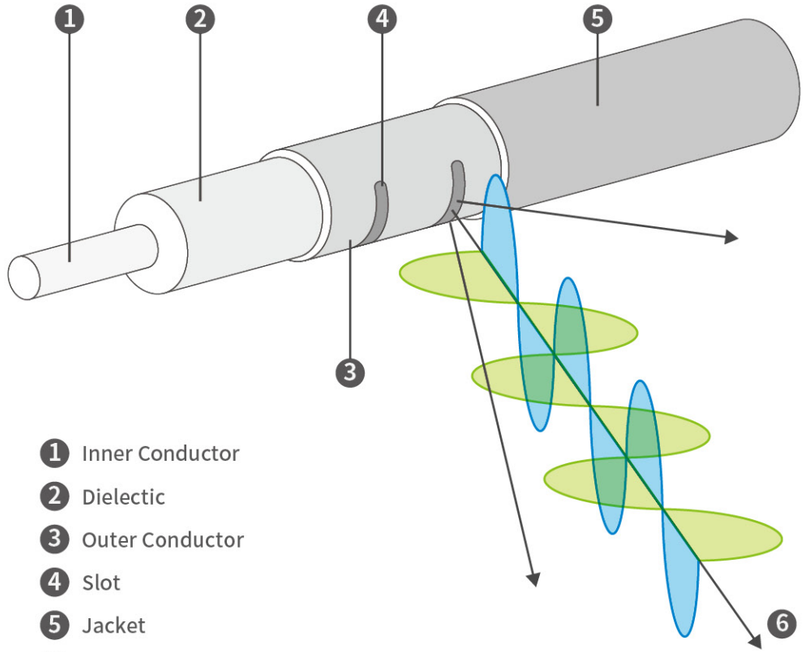
Physical Dimension

	Inner Conductor	Dielectric	Outer Conductor	Jacket
7/8" Radiating Type Leaky Coaxial Cable	9.0mm	22.2mm	24.0mm	27.5mm
1 1/4" Radiating Type Leaky Coaxial Cable	13.1mm	33.2mm	34.0mm	37.5mm
1 5/8" Radiating Type Leaky Coaxial Cable	17.3mm	43.0mm	43.5mm	48.0mm
1 5/8" Radiating Type Leaky Coaxial Cable (Train System III Type)	17.7mm	43.0mm	44.0mm	48.0mm

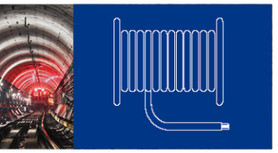
Coaxial Antenna System (CAS)



Transmission Principle of Leaky Coaxial Cable



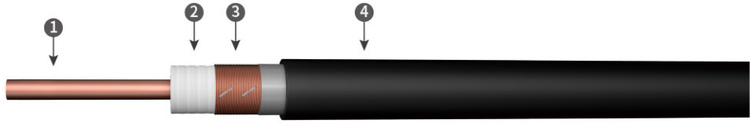
1. Inner Conductor
2. Dielectic
3. Outer Conductor
4. Slot
5. Jacket
6. Electromagnetic Wave



7/8" Radiating Type Leaky Coaxial Cable

Cable Type: RFXT 7/8" -50M/H(BHF) HLRCTY(Z)-50-22M/H

1. Smooth Copper Tube
2. Foamed PE Dielectric
3. Longitudinally Wrapped Copper Strip
4. PE Jacket or LSZH



Electrical Characteristics at +20℃

Characteristic Impedance	Velocity	Capacitance	Insulation Resistance	Insulation Voltage	Jacket Spark Test Voltage
50 ± 2Ω	0.88	76 pF/m	>5000 MΩ.km	10000 V	8000 V

Attenuation and Coupling Loss

	Frequency(MHz)	Attenuation dB/100m(+20°C)	Coupling Loss(50%/95%) dB
M Band	75	1.33	64/70
	150	1.62	64/73
	350	2.86	60/67
	450	3.14	60/69
	700	3.90	63/69
	800	4.48	62/70
	900	4.95	62/70
	960	5.05	61/68
H Band	700	3.52	72/80
	800	4.10	70/75
	900	4.48	69/75
	960	4.57	64/72
	1800	8.38	63/70
	1900	8.48	61/66
	2000	9.52	62/68
	2200	10.95	64/70
	2400	12.67	62/68
	2600	13.24	60/63
	2620	14.38	60/65

Mechanical Characteristics

Weight	Maximum Pulling Force	Single Bending	Repeated Bending	Operating Temperature Range	Installation Temperature Range
500kg/km	1300N	250 mm	300 mm	-40-+85℃	PE: -40℃ LSZH: -20℃

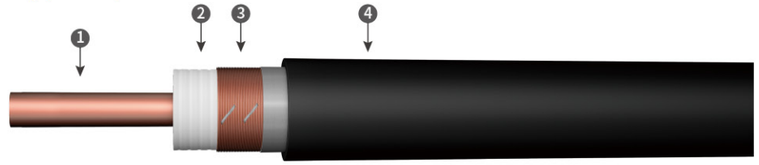
Note:

The product meets the Chinese industry standard: YD/T 2491-2013, it can be specified according to customer's requirement, please contact with us.

1 1/4" Radiating Type Leaky Coaxial Cable

Cable Type: RFXT 1 1/4" -50M/H(BHF) HLRCTCY(Z)-50-32M/H

1. Smooth Copper Tube
2. Foamed PE Dielectric
3. Longitudinally Wrapped Copper Strip
4. PE Jacket or LSZH



Electrical Characteristics at +20℃

Characteristic Impedance	Velocity	Capacitance	Insulation Resistance	Insulation Voltage	Jacket Spark Test Voltage
50 ± 2Ω	0.88	76 pF/m	>5000 MΩ.km	10000 V	10000 V

Attenuation and Coupling Loss

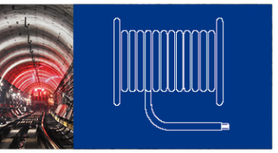
	Frequency(MHz)	Attenuation dB/100m(+20°C)	Coupling Loss(50%/95%) dB
M Band	75	0.67	60/64
	150	1.05	65/74
	350	1.71	69/77
	450	2.00	66/73
	700	2.57	67/75
	800	2.86	60/63
	900	3.14	60/64
	960	3.24	67/75
H Band	700	2.19	71/77
	800	2.57	66/73
	900	2.95	64/68
	960	3.05	60/63
	1800	4.76	61/67
	1900	5.33	60/63
	2000	5.52	62/67
	2200	5.90	61/67
	2400	7.43	60/66
	2600	7.62	64/71
	2620	7.90	63/71

Mechanical Characteristics

Weight	Maximum Pulling Force	Single Bending	Repeated Bending	Operating Temperature Range	Installation Temperature Range
780kg/km	2000N	400 mm	500 mm	-40-+85℃	PE: -40℃ LSZH: -20℃

Note:

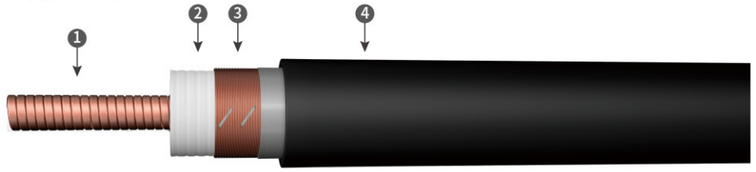
The product meets the Chinese industry standard: YD/T 2491-2013, it can be specified according to customer's requirement, please contact with us.



1 5/8" Radiating Type Leaky Coaxial Cable

Cable Type: RFXT 1 5/8" -50M/H(BHF) HLRHTCY(Z)-50-42M/H

1. Corrugated Cu-tube
2. Foamed PE Dielectric
3. Longitudinally Wrapped Copper Strip
4. PE Jacket or LSZH



Electrical Characteristics at +20℃

Characteristic Impedance	Velocity	Capacitance	Insulation Resistance	Insulation Voltage	Jacket Spark Test Voltage
50 ± 2Ω	0.88	76 pF/m	＞5000 MΩ.km	15000 V	10000 V

Attenuation and Coupling Loss

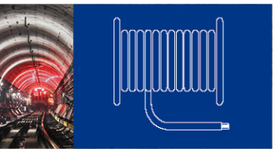
	Frequency(MHz)	Attenuation dB/100m(+20°C)	Coupling Loss(50%/95%) dB
M Band	75	0.57	67/75
	150	0.95	71/77
	350	1.52	67/75
	450	1.71	68/75
	700	2.00	64/69
	800	2.57	63/71
	900	2.76	65/72
	960	2.86	60/66
H Band	700	2.19	73/78
	800	2.29	65/70
	900	2.48	65/69
	960	2.57	65/69
	1800	4.10	61/67
	1900	4.38	61/68
	2200	5.24	61/66
	2400	6.00	60/65
	2600	6.95	60/63
	2620	7.71	60/65

Mechanical Characteristics

Weight	Maximum Pulling Force	Single Bending	Repeated Bending	Operating Temperature Range	Installation Temperature Range
1000kg/km	2500N	500 mm	700 mm	-40-+85°C	PE: -40°C LSZH: -20°C

Note:

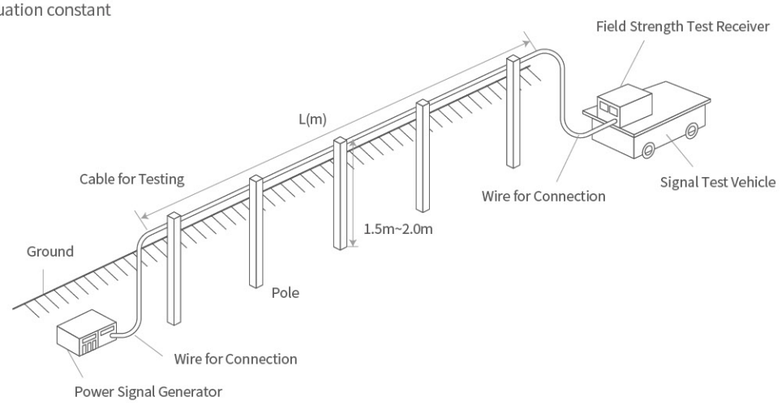
The product meets the Chinese industry standard: YD/T 2491-2013, it can be specified according to customer's requirement, please contact with us.



Test Method
Leaky Coaxial Cable

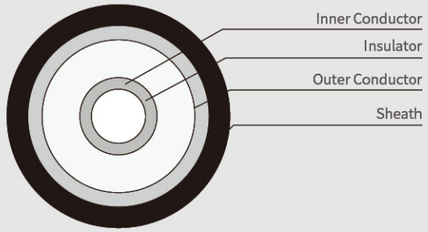
Test Method Leaky Coaxial Cable

- Design of the Attenuation constant

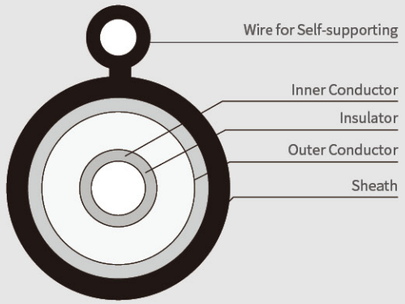


Leaky Coaxial Cable for Train System

- The leaky coaxial cable of the railway system is divided into type I cable, type II cable and type III cable.
- Type I cable is a cable with different coupling loss at 450MHz frequency. It can be used in system design to achieve piecewise coupling, uniform field strength and reducing system loss.
- Type II cable refers to the same coupling loss at the same frequency, but can be compatible with different frequencies of cable.
- Type III cable is the cable used for GSM-R digital mobile communication system at 900MHz frequency.



Non - self-supporting Cable Structure

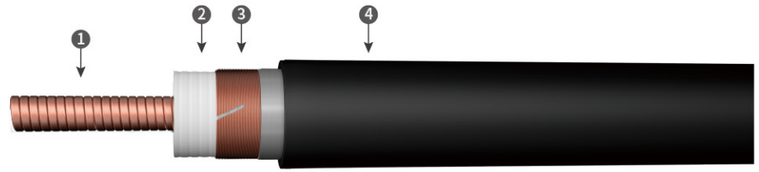


Self-supporting Cable Structure

1 5/8" Radiating Type
Leaky Coaxial Cable Train System III Type

Cable Type: WDZ-SLYWY-50-42-III

1. Corrugated Cu-tube
2. Foamed PE Dielectric
3. Longitudinally Wrapped Copper Strip
4. PE Jacket or LSZH



Electrical Characteristics at +20℃

Characteristic Impedance	Velocity	Capacitance	Insulation Resistance	Insulation Voltage	Jacket Spark Test Voltage
50 ± 2 Ω	0.88	76 pF/m	＞10000 MΩ.km	15000 V	10000 V

Voltage Standing-wave Ratio

Frequency(MHz)	Voltage Standing-wave Ratio (Max)
885~889	1.30
930~934	

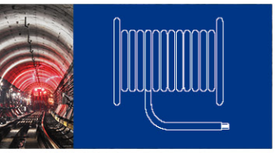
Attenuation and Coupling Loss

Frequency(MHz)	Max Attenuation dB/100m(+20℃)	Max Coupling Loss (95%) dB
885~889	2.4	69
930~934	2.4	69

Mechanical Characteristics

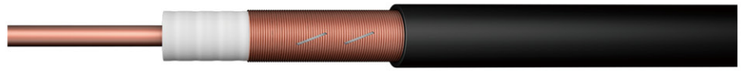
Weight	Maximum Pulling Force	Single Bending	Repeated Bending	Operating Temperature Range	Installation Temperature Range
1000kg/km	1700 N	700 mm	1000 mm	-25-+70℃	PE: -40℃ LSZH: -20℃

Note:
The product meets the Chinese industry standard: TB/T 3201-2015, it can be specified according to customer' s requirement, please contact with us.



1/2" Wide-beam Leaky Cable (H Band)

Cable Type: HLRCACY(Z)-50-12HG



Construction

Inner conductor	Copper-clad aluminium wire	Ø 4.8 mm
Dielectric	Cellular polyethylene	Ø 12.2 mm
Outer conductor	Copper foil	Ø 13.2 mm
Jacket	Black PE or Black LSZH	Ø 15.8 mm
Marking	Brand, cable type, cable ID, meter mark	/

Electrical Characteristics at +20℃

Characteristic impedance	50 ± 2 Ω
Velocity	0.88
Capacitance	76 pF/m
Insulation Resistance	＞5000 MΩ.km
Insulation Voltage (DC,1min)	6000 V
Jacket Spark Test Voltage	8000 V

VSWR

Frequency (MHz)	VSWR (Max)
790~960	1.30
1700~1900	
1900~2050	1.40
2100~2200	
2300~2700	

Attenuation and Coupling Loss

Frequency (MHz)	Attenuation dB/100m Max	Coupling Loss 2m, (95%) dB		
		0°Forward	90°Side	180°Back
900	8.9	80	80	80
1800	14.3	73	73	73
1900	15.0	73	73	73
2000	15.7	71	71	71
2200	16.7	72	72	72
2400	17.6	72	72	72
2600	18.6	70	70	70
2700	18.9	70	70	70

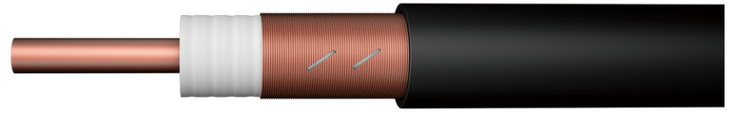
Note: Attenuation tolerance 5%; Coupling Loss tolerance ±5dB

Mechanical Characteristics

Weigh	210kg/km
Maximum pulling force	1000N
Minimum bending radius	/
Single bending	125 mm
Repeated bending	350 mm
Operating temperature range	-40…+70°C
Min. installation temperature	-40°C(PE); -20°C(LSZH)

7/8" Wide-beam Leaky Cable (H Band)

Cable Type: HLRCTCY(Z)-50-22HG



Constructiont

Inner conductor	Copper tube	Ø 9.0 mm
Dielectric	Cellular polyethylene	Ø 23.2 mm
Outer conductor	Copper foil	Ø 23.5 mm
Jacket	Black PE or Black LSZH	Ø 27.5 mm
Marking	Brand, cable type, cable ID, meter mark	/

Electrical Characteristics at +20℃

Characteristic impedance	50 ± 2 Ω
Velocity	0.88
Capacitance	76 pF/m
Insulation Resistance	＞5000 MΩ.km
Insulation Voltage (DC,1min)	10000 V
Jacket Spark Test Voltage	8000 V

VSWR

Frequency (MHz)	VSWR (Max)
790~960	1.30
1700~1900	
1900~2050	1.40
2100~2200	
2300~2700	

Attenuation and Coupling Loss

Frequency (MHz)	Attenuation dB/100m Max	Coupling Loss 2m, (95%) dB		
		0°Forward	90°Side	180°Back
900	4.7	79	80	80
1800	8.8	75	76	77
1900	8.9	70	71	72
2000	10.0	71	72	73
2200	11.5	71	72	73
2400	13.3	70	71	72
2600	13.9	68	69	70
2700	15.1	69	70	71

Note: Attenuation tolerance 5%; Coupling Loss tolerance ±5dBt

Mechanical Characteristics

Weigh	500kg/km
Maximum pulling force	1300N
Minimum bending radius	/
Single bending	250 mm
Repeated bending	300 mm
Operating temperature range	-40…+70°C
Min. installation temperature	-40°C(PE); -20°C(LSZH)

Accesssories

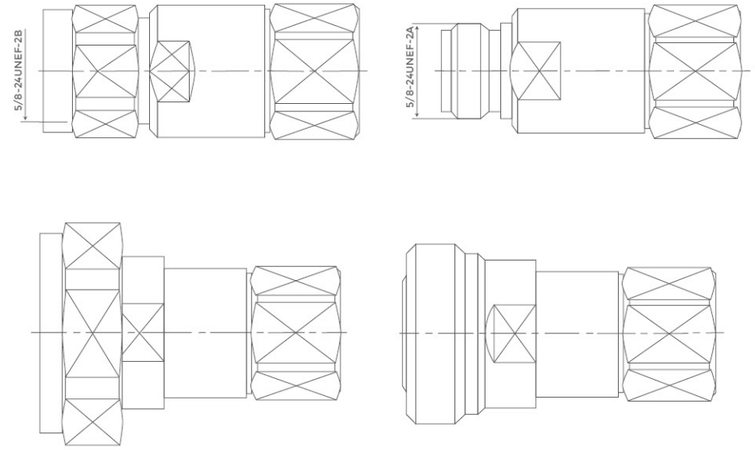
Connectors for Coaxial Cable

Connector Type

- N Type, 7/16 DIN Type

Interface

- IEC 60169-16; IEC 60169-4



Electrical Characteristics

Characteristic Impedance	Frequency Range	VSWR	Dielectric Withstanding Voltage	Contact Resistance			Dielectric Resistance
					Outer Contact	Centre Contact	
50Ω	DC-3GHz	0.7～1.0GHz≤1.12	≥2000V, AC, 1Min	N Type	≤0.25mΩ	≤1.0mΩ	≥5000MΩ
		1.7～2.7GHz≤1.15		7/16 DIN Type	≤0.2mΩ	≤0.4mΩ	

Mechanical Characteristics

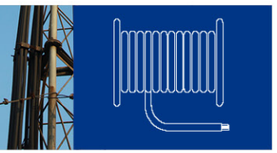
		N Type	7/16 DIN Type
Retenti on	Centre Contact	≥0.56N	≥6N
Durability	Mating Cycles	≥500	≥500

Environmental Characteristics

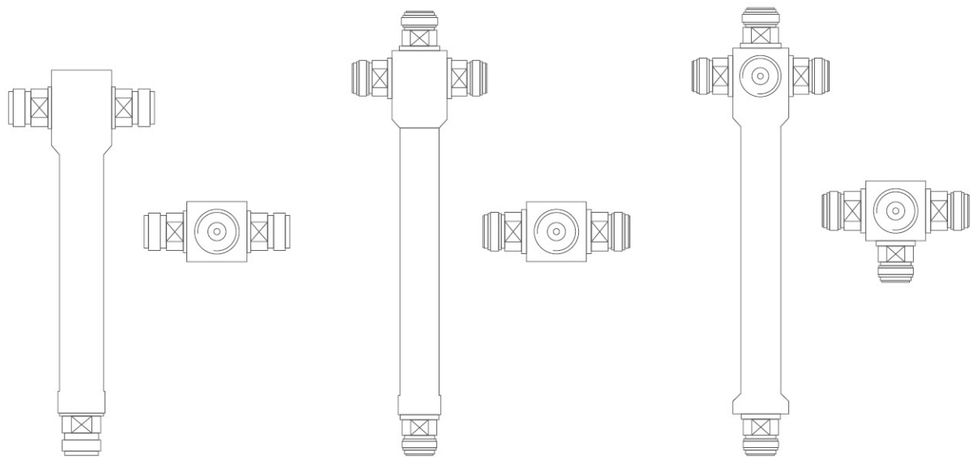
Salt Spray	Temperature Range	RoHS
Meet 48 Hours(SO/o Salt Concentration)	-40℃～+85℃	Compliance

Materialand Plating

Part	Material	Plating
Body	Brass	Tri-Alloy≥3μm
Center Conductor	Brass/Phosphor Bronze	Ag≥3μm
Insulator	PTFE/TPX	-
Sealing Ring	Silicone Rubber	-
Other Metal Parts	Brass	Ni≥2.5μm



Power Spliter

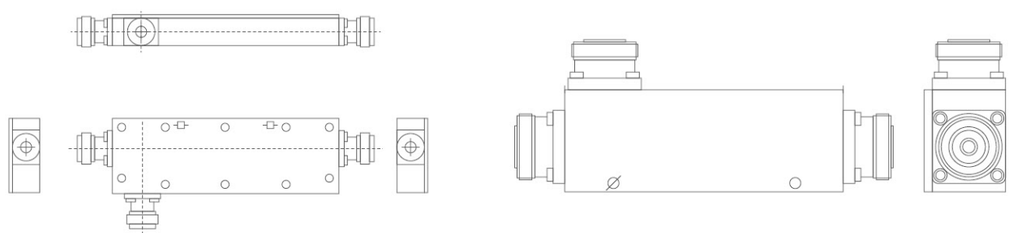


2 Division　　3 Division　　4 Division

Technical Data

Name	2 Division	3 Division	4 Division
Frequency Band	—	698MHz-2700MHz	—
VSWR	—	⩽1.25	—
Insertion Loss(dB)	3.3	5.1	6.5
Inside Band Fluctuation(dB)	0.3	0.3	0.5
PIM	—	⩽-150dBc	—
Power Rating	—	200W	—
Temperature	—	-40～+75℃	—
Connector Type	—	N-Female; 7/16-Female	—
Water Proof	—	IP65	—
Impedance(Ohm)	—	50	—

Directional Coupler



Technical Data

Name	5dB	6dB	7dB	8dB	10dB	12dB	15dB	20dB	25dB	30dB	40dB
Frequency Band	698MHz~2700MHz										
VSWR	⩽1.25										
Insertion Loss(dB)	⩽2.15	⩽1.76	⩽1.47	⩽1.25	⩽0.96	⩽0.76	⩽0.44	⩽0.34	⩽0.32	⩽0.3	⩽0.3
Coupling(dB)	5±0.5	6±0.5	7±0.5	8±0.5	10±1	12±1	15±1	20±1	25±1	30±1.5	40±1.5
Isolation(dB)	23	24	25	26	⩾28	⩾30	⩾33	⩾38	⩾43	⩾48	⩾55
PIM	⩽-150dBc										
Power Rating	200W										
Temperature	-40～+75℃										
Connector Type	N-Female; 7/16-Female										
Water Proof	IP65										
Impedance(Ohm)	50										

NKJD 1/2" -50 Soldered and Molded Jumper Cable

Connector Type

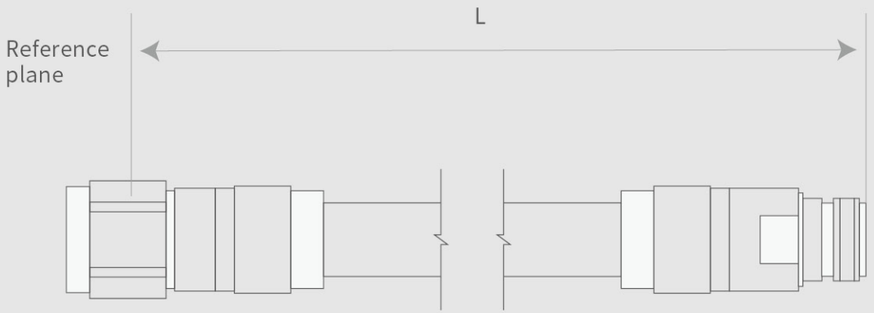
- 7/16 male and female
- N male and female

Cable Type

- RFF 1/2" -50 or RFF 1/2” -50BHF (1/2" superflexible feeder cable)

Length

- Standard length: 0.5, 1.0, 1.5, 2 .0, 2.5 and 3m,Other lengths available on request



Note:
Please use Insulation tape for outdoor application

Electrical Characteristics at +20℃

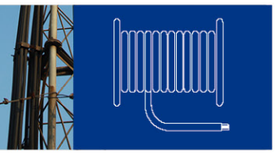
Characteristic Impedance	50 ± 1Ω
Return Loss (VSWR) for	
0-2200MHz	26.5dB (1.10)
2200-3000MHz	23.0dB (1.15)
Attenuation at (Cable)	
-800 MHz	0.11dB/m
-900 MHz	0.11dB/m
-1800 MHz	0.17dB/m
-2000 MHz	0.18dB/m
-2400 MHz	0.20dB/m
Connector Attenuation (2pcs)	≤0.1dB
Maximum Operating Frequency	3000MHz
Average Power Rating	
-1000 MHz	710W
-2000MHz	480W
Peak RF Voltage Rating	1.39KV
Intermodulation, typical (2×20W TX)	-155dBc

Materials in Connectors

	Outer Conductor	Inner Conductor	Other Metallic Parts	Insulation	Sealing
7/16 Male and N Male	Copper Alloy / Alloy Plated	Copper Alloy / Silver Plated	Copper Alloy/Nickel Plated	PTFE	Silicon
7/16 Female and N Female	Copper Alloy / Alloy Plated	Copper Alloy / Silver Plated	—	PTFE	—

Mechanical Characteristics

Maximum Pulling Force		Minimum Bending Radius	Single Bending	Repeated Bending	Operating Temperature Range	Crush Resistance
300N	DIN 7-16 500N	–	17 mm	55 mm	-55°C-+80°C	19N/mm

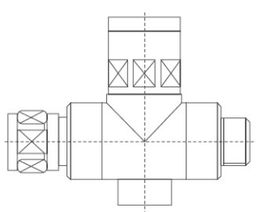


1/4λ
Surge Arrestor

1/4λ surge arrestors are used for protecting antenna equipment and transmission-receiver system against the damages caused by over voltage and induction voltage of lightning. The product is designed according to the principle of quarter-wave and bandpass.

Characteristics

- Large discharge current capacity
- Low insertion loss and VSWR
- Reliable operation and free of maintenance
- Broad-band operation
- Excellent function stability



Technical Data

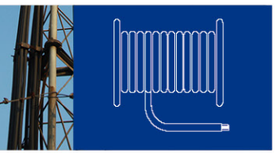
Type	7/16-50FM-BLQ28
	N-50FM-BLQ28
Connector Type	7/16 (7/16 Male-7/16 Female)
	N type (N Male-N Female)
Operating Frequency	800~2700MHz
Impedance	50Ω
Nominal Discharge Current	40KA (8/20μs)
Maximum Discharge Current	50KA (8/20μs)
Insertion Loss	⩽0.2dB
PIM	⩽-150dBc@2X20W
VSWR	0.8~2.5GHz⩽1.15
	2.5~2.7GHz⩽1.20
Max. Operating Power	1000W

Grounding Kits

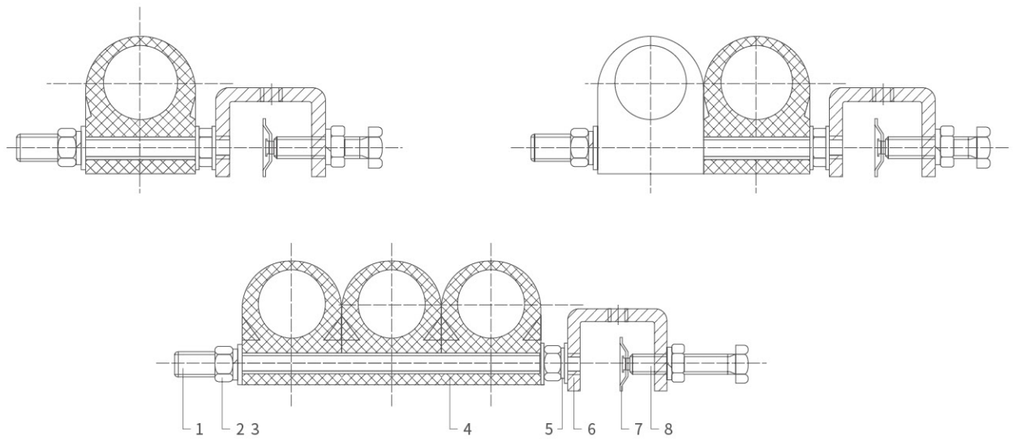
Material and Plating

Name	Material	Electroplate
Contact Sheet	Copper	—
Clamping Spring	Stainless Steel	Ni
Fastening Bolts	Stainless Steel	—
Cable Lug	Copper	Tin
Grounding Cable	Copper 16mm²	—
Insulation	Polyolefin Plastics	—

Match Cable: Feeder Cable 1/2" , 7/8" , 1 1/4" , 1 5/8" **Contact Resistance:** ⩽1mΩ **Surge Current:** ⩾70KA **Operating Temperature:** -55~+85℃



Clamps for RF Coaxial Cable



Parts List

No.	Name	Type					Material	Qty.
		1/2" Feeder Cable	7/8" Feeder Cable	1 1/4" Feeder Cable	1 5/8" Feeder Cable	1/2" Super Flexible Cable		
1	M8 Bolt (Left)	M8 * L	M8 * L	M10 * L	M10 * L	M8 * L	Stainless Steel	1
2	M8 Nut	M8	M8	M10	M10	M8	Stainless Steel	3
3	Flat Underlay	Φ8	Φ8	Φ10	Φ10	Φ8	Stainless Steel	2
4	Plastic Parts	—	—	—	—	—	Polypropylene	2, 4, 6
5	Stretch Underlay	Φ8	Φ8	Φ10	Φ10	Φ8	Stainless Steel	3
6	Angle Adaptor	—	—	—	—	—	Stainless Steel	1
7	Clamp-patch	—	—	—	—	—	Stainless Steel	1
8	M8 Bolt	M8	M8	M8	M8	M8	Stainless Steel	1

Clamps for 1/2" Feeder Cable
Match cable: RF 1/2" -50; RFA 1/2" -50 **Clamping force:** >2kgf **Salt spray:** Meet 96 Hours(5% Salt Concentration) **UV test:** ISO 4892.2; 1000h **Operating temperature:** -40~+70℃

Clamps for 7/8" Feeder Cable
Match cable: RF 7/8" -50; RFA 7/8" -50 **Clamping force:** >3kgf **Salt spray:** Meet 96 Hours(5% Salt Concentration) **UV test:** ISO 4892.2; 1000h **Operating temperature:** -40~+70℃

Clamps for 1 1/4" Feeder Cable
Match cable: RFA 1 1/4" -50 **Clamping force:** >4kgf **Salt spray:** Meet 96 Hours(5% Salt Concentration) **UV test:** ISO 4892.2; 1000h **Operating temperature:** -40~+70℃

Clamps for 1 5/8" Feeder Cable
Match cable: RFA 1 5/8" -50 **Clamping force:** >4kgf **Salt spray:** Meet 96 Hours(5% Salt Concentration) **UV test:** ISO 4892.2; 1000h **Operating temperature:** -40~+70℃

Clamps for 1/2" Super Flexible Cable
Match cable: RFF 1/2" -50 **Clamping force:** >2kgf **Salt spray:** Meet 96 Hours(5% Salt Concentration) **UV test:** ISO 4892.2; 1000h **Operating temperature:** -40~+70℃

Clamps for Leaky Coaxial Cable

Introduction

Clamp for radiating cable is a combination type cable fixing clamp. It fixed cable on top of the clamp. Changing the top clamp can be applied to various sizes of cable.

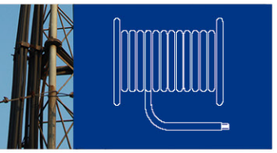
Installation Manual

- To select suitable type clamp before installation,cable sizes is 1/2", 7/8", 1 1/4", 1 5/8".
- To install expansion bolt on the wall.
- To install clamp bolt on the expansion bolt.
- To install cable in the clamp and to lock the locker, checking the cable fixed on clamp.

Parts List

No.	Name	Type	Material	Qty.
1	Cable clamp	1/2", 7/8", 1 1/4", 1 5/8"	Nylon	1
2	Bolt	M8	Stainless steel SUS304	1
3	Expansion bolt	Φ8*80	Stainless steel SUS304	1

Type	TSFPH-42
Match cable	1/2", 7/8", 1 1/4", 1 5/8"
Salt spray	Meet 96 Hours(5% Salt Concentration)
Axial pullout strength	150N
Tensile strength	2000N
Resistance to shear stress	1000N
Operating temperature	-40~+70℃



Fire Retardant Clamps for Radiating Cable

Introduction

Clamp for radiating cable is a combination type cable fixing clamp. It fixed cable on top of the clamp. Changing the top clamp can be applied to various sizes of cable.Fire bolt part is compact, reliable and easy to install.

Installation Manual

- To select suitable type clamp before installation, cable sizes is 1/2”, 7/8”, 1 1/4”, 1 5/8”
- To install expansion bolt and clamp on the wall
- To install clamp bolt on the expansion bolt
- To install cable in the clamp and to lock the locker,checking the cable fixed on clamp
- To tighten the fire bolt, to ensure bolt around clamp

Parts List

No.	Name	Type	Material	Qty.
1	Cable clamp	1/2”, 7/8”, 1 1/4”, 1 5/8”	Nylon	1
2	Bolt	M8	Stainless steel SUS304	1
3	Expansion bolt	Φ8*80	Stainless steel SUS304	1
4	Fire parts	1/2”, 7/8”, 1 1/4”, 1 5/8”	Stainless steel SUS304	1

Type	TSFPH-42
Match cable	1/2”, 7/8”, 1 1/4”, 1 5/8”
Salt spray	Meet 96 Hours(5% Salt Concentration)
Axial pullout strength	150N
Tensile strength	2000N
Resistance to shear stress	1000N
Operating temperature	-40~+70℃

Clamps for Leaky Coaxial Cable

Clamp for radiating cable is a combination type cable fixing clamp. It fixed cable on top of the clamp. Changing the top clamp can be applied to various sizes of cable.

Standard Type

Reinforced Type

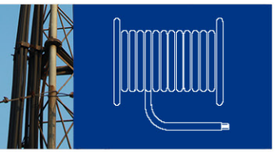
Installation Manual

- To select a suitable clamp before installation, cable sizes are 7/8" , 1 1/4" , 1 5/8"
- To install expansion bolt and clamp on the wall
- To tighten the bolt and clamp base
- To install cable in the clamp and to lock the locker, checking the cable fixed on clamp

Parts List

No.	Name	Type	Material	Qty.
1	Cable Clamp	7/8" , 1 1/4" , 1 5/8"	Nylon	1
2	Clamp Bolt	M8*25	Stainless Steel SUS304	1
3	Clamp Base	–	Nylon PA6\PA12\PA66	1
4	Link Screw	M8*70	Steel Q235	1
5	Expansion Bolt	M8*70	Steel Q235	1

Match Cable: 1/2" , 7/8" , 1 1/4" , 1 5/8" **Salt Spray:** Meet 96 Hours(5% Salt Concentration) **Operating Temperature:** -40~+70℃



Fire Retardant Clamps for Leaky Coaxial Cable

Clamp for radiating cable is a combination type cable fixing clamp. It fixed cable on top of the clamp. Changing the top clamp can be applied to various sizes of cable. Fire bolt part is compact, reliable and easy to install.

Standard Type

Reinforced Type

Installation Manual

- To select a suitable clamp before installation, cable sizes are 7/8" , 1 1/4" , 1 5/8"
- To install expansion bolt and clamp on the wall
- To tighten the bolt and clamp base
- To install cable in the clamp and to lock the locker, checking the cable fixed on clamp
- To tighten the fire bolt, to ensure bolt around clamp

Parts List

No.	Name	Type	Material	Qty.
1	Cable Clamp	7/8" , 1 1/4" , 1 5/8"	Nylon	1
2	Clamp Bolt	M8*25	Stainless Steel SUS304	1
3	Clamp Base	–	Nylon PA6\PA12\PA66	1
4	Link Screw	M8*70	Steel Q235	1
5	Expansion Bolt	M8*70	Steel Q235	1
6	Fire Bolt Parts	7/8" , 1 1/4" , 1 5/8"	Stainless Steel SUS304	1

Match Cable: 1/2" , 7/8" , 1 1/4" , 1 5/8" **Salt Spray:** Meet 96 Hours(5% Salt Concentration) **Operating Temperature:** -40~+70°C

Hanger for Leaky Coaxial Cable

Hanger for radiating cable is a combination type cable fixing clamp. It fixed cable on top of the clamp. Changing the top clamp can be applied to various sizes of cable. Fire bolt part is compact, reliable and easy to install.

Standard Type

Fire Retardant Type

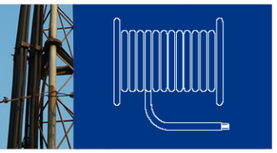
Installation Manual

- To select a suitable clamp before installation, cable sizes are 7/8" , 1 1/4" , 1 5/8"
- To release steel wire hanging bolt, to clip wire
- To tighten the bolt, ensure the clamp fixed on wire
- To install cable in the clamp and to lock the locker, checking the cable fixed on clamp
- To tighten the fire bolt, to ensure bolt around clamp

Parts List

No.	Name	Type	Material	Qty.
1	Cable Clamp	7/8" , 1 1/4" , 1 5/8"	Nylon	1
2	Bolt	–	Stainless Steel SUS304	1
3	Steel Wire Hanger	M8*25	Stainless Steel SUS304	1
4	Fire Bolt Parts	7/8" , 1 1/4" , 1 5/8"	Stainless Steel SUS304	1

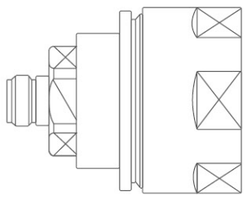
Match Cable: 1/2" , 7/8" , 1 1/4" , 1 5/8" **Salt Spray:** Meet 96 Hours(5% Salt Concentration) **Operating Temperature:** -40~+70°C



Connectors for Leaky Coaxial Cable

Connector Type

- N Type, 7/16 DIN Type



Interface

- IEC 60169-16; IEC 60169-4

Electrical Characteristics

Characteristic Impedance	Frequency Range	VSWR	Dielectric Withstanding Voltage	Contact Resistance			Dielectric Resistance
					Outer Contact	Centre Contact	
50Ω	DC-3GHz	0.7～1.0GHz≤1.12;	≥2000V RMS, AC, 1Min	N Type	≤0.25mΩ	≤1.0mΩ	≥5000MΩ
		1.7～2.7GHz≤1.15		7/16 DIN Type	≤0.2mΩ	≤0.4mΩ	

Mechanical Characteristics

		N Type	7/16 DIN Type
Retention	Centre Contact	≥0.56N	≥6N
Durability	Mating Cycles	≥500	≥500

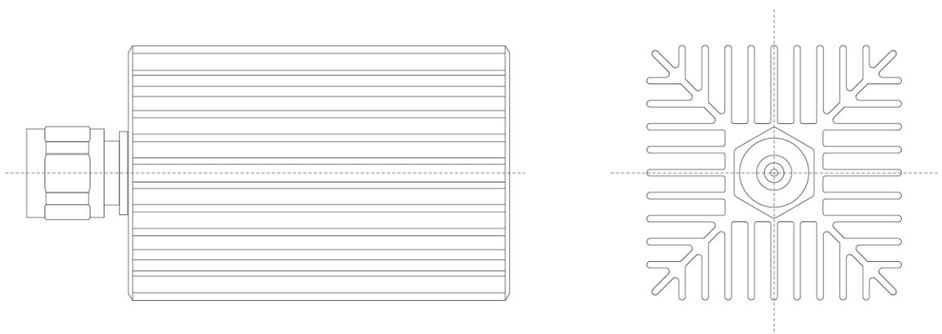
Environmental Characteristics

Salt Spray	Temperature Range	RoHS
Meet 48 Hours(5% Salt Concentration)	-45°C～+80°C	Compliance

Material and Plating

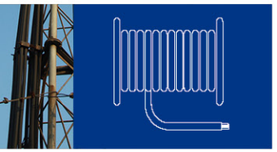
Part	Material	Plating
Body	Brass	Tri-Alloy≥3μm
Center Conductor	Brass/phosphor Bronze	Ag≥3μm
Insulator	PTFE/TPX	—
Sealing Ring	Silicone Rubber	—
Other Metal Parts	Brass	Ni≥2.5μm

Load Terminal



Technical Data

Characteristic	Parameter Index
Name	Load Terminal
Frequency Range	0—3000MHz
VSWR	≤1.2
Intermodulation	≤-125dBc @2*43dBm
Power Range	1～50W
Connector Type	N-male
Impedance	50Ω
Temperature Range	-25～+75°C



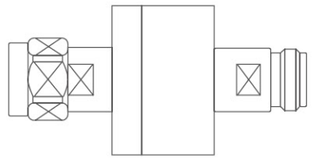
DC-Block（NM-NF）

Connector Type

- N Type

Interface

- IEC 60169-16



Electrical Characteristics

Characteristic Impedance	Frequency Range	VSWR	Insertion Loss	Blocking DC Voltage	Contact Resistance	
					Outer Contact	Centre Contact
50Ω	50-3000MHz	⩽1.15 (50-3000MHz)	⩽0.25 dB (50-3000MHz)	3000V	⩽0.25mΩ	⩽1.00mΩ

Mechanical Characteristics

Durability	
Mating Cycles	⩾500

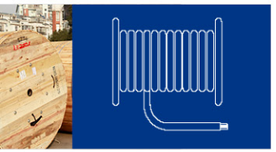
Environmental Characteristics

Salt Spray	Temperature Range	Watertightness	RoHS
Meet 48 Hours(5% Salt Concentration)	-45℃~+80℃	IP40	Compliance

Material and Plating

Part	Material	Plating
Outer Conductor	Brass	Tri-Alloy⩾3μm
Center Conductor	Brass/Phosphor Bronze	Ag⩾3μm
Insulator	PTFE/TPX	—
Body	POM	—
Other Metal Parts	Brass	Ni⩾2.5μm

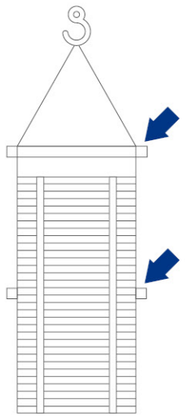
Packing Information

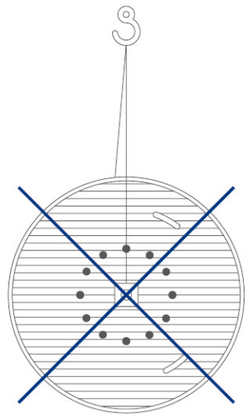


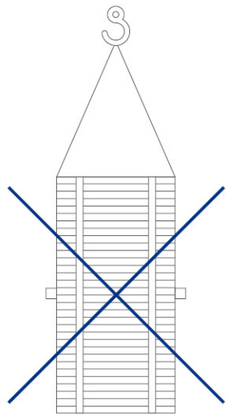
Packing Information for RF Coaxial Cable

Handling Instructions for Transportation

Only lift with bar through center



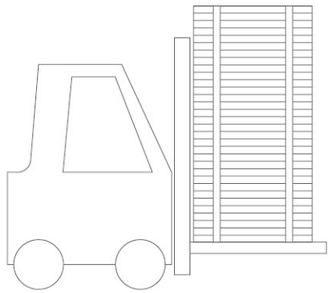


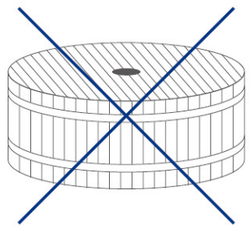


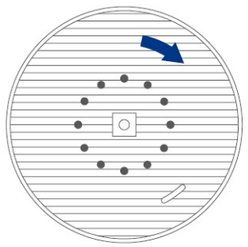
When handling with forklift; keep upright

Keep upright, do not lay flat

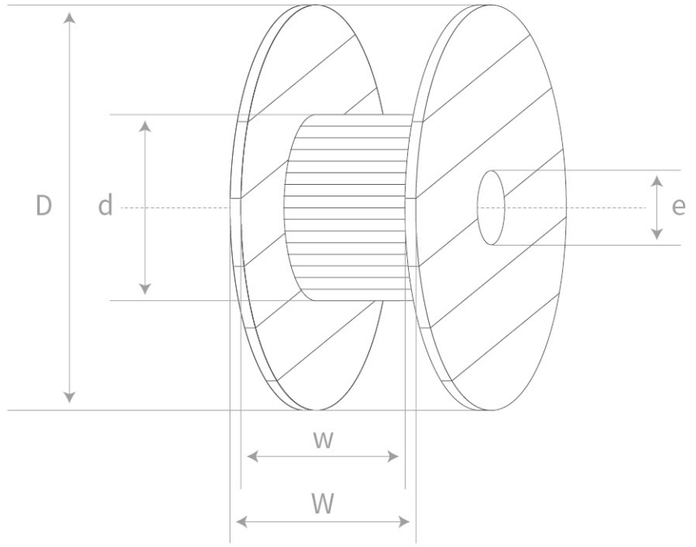
Roll according to arrow





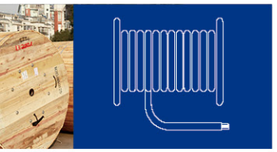


Drum for RF Coaxial Cable

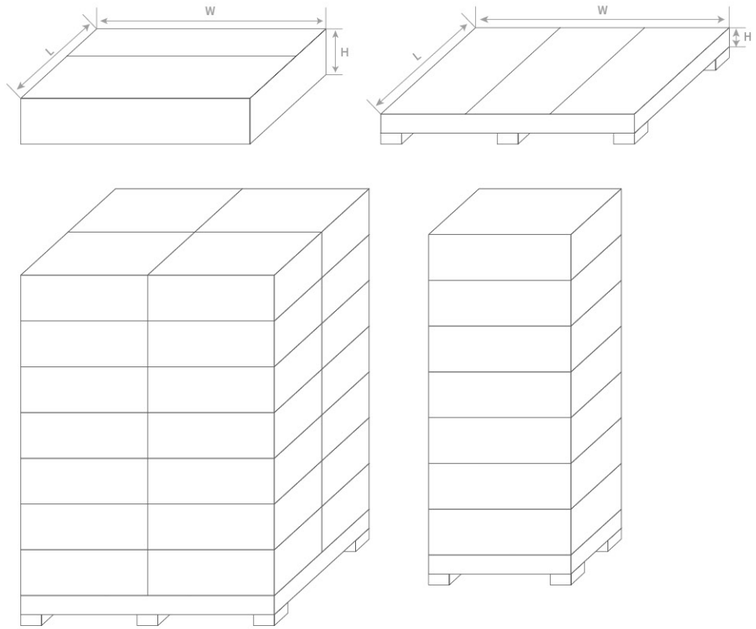


Drum for RF Cable

Cable Type	Cable Length(m)	Diameter(cm)	Width(cm)	Drum(m^3)	The Quantity of Drums for 20GP	The Quantity of Drums for 40HQ
RF 1/2''	200 - 500	74	55	0.31	87	180
RFF 1/2''	200 - 600	74	55	0.31	87	180
RF 7/8''	300 - 500	114	74	0.97	28	60
RF 1 1/4''	300 - 500	176	71	2.20	9	19
RF 1 5/8''	300 - 500	214	71	3.26	7	16



Carton Package



Product	Length (mm)	Width (mm)	Height (mm)
RF 1/2	630	630	230
RFF 1/2	600	600	250

Pallet	Length (mm)	Width (mm)	Height (mm)
One Carton Per Level	670	670	125
Four Carton Per Level	1280	1280	125

Stack: 7 stacks at most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CERTIFICATE
OF REGISTRATION

This is to certify that the management system of:

Wuhan YOFC Cable Co., Ltd.

Business Address: No. 65, Chuangye Street, East Lake High-Tech Development Zone, Wuhan City, Hubei Province, P. R. China

has been registered by Intertek as conforming to the requirements of:

OHSAS 18001:2007

The management system is applicable to:

Manufacture and sales of RF-Feeder cable(including Leaky Coaxial cable) and accessories.

Unified Social Credit Identifier: 91420100717934337
Certificate Number: 05131700014
Initial Certification Date: 27 May 2017
Date of Certification Decision: 21 May 2018
Issuing Date: 21 May 2018
Valid Until: 26 May 2020

Calin Moldovean
President, Business Assurance

Intertek Certification Limited, 10A Victory Park, Victory Road, Derby DE24 8ZF, United Kingdom

Intertek Certification Limited is a UKAS accredited body under schedule of accreditation no. 014.


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OF REGISTRATION

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Business Address: No. 65, Chuangye Street, East Lake High-Tech Development Zone, Wuhan City, Hubei Province, P. R. China

has been registered by Intertek as conforming to the requirements of:

ISO 14001:2015

The management system is applicable to:

Manufacture and sales of RF-Feeder cable(including Leaky Coaxial cable) and accessories.

Unified Social Credit Identifier: 91420100717934337
Certificate Number: 121511003
Initial Certification Date: 18 February 2004
Date of Certification Decision: 21 May 2018
Issuing Date: 21 May 2018
Valid Until: 20 May 2021

Calin Moldovean
President, Business Assurance

Intertek Certification Limited, 10A Victory Park, Victory Road, Derby DE24 8ZF, United Kingdom

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CERTIFICATE
OF REGISTRATION

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Wuhan YOFC Cable Co., Ltd.

Business Address: No. 65, Chuangye Street, East Lake High-Tech Development Zone, Wuhan City, Hubei Province, P. R. China

has been registered by Intertek as conforming to the requirements of:

ISO 9001:2015

The management system is applicable to:

Manufacture and sales of RF-Feeder cable(including Leaky Coaxial cable) and accessories.

Unified Social Credit Identifier: 91420100717934337
Certificate Number: 11511001
Initial Certification Date: 13 December 2000
Date of Certification Decision: 21 May 2018
Issuing Date: 21 May 2018
Valid Until: 20 May 2021

Calin Moldovean
President, Business Assurance

Intertek Certification Limited, 10A Victory Park, Victory Road, Derby DE24 8ZF, United Kingdom

Intertek Certification Limited is a UKAS accredited body under schedule of accreditation no. 014.


铁路产品认证证书

证书编号：CRCC10218P12627R0M

申请人名称：武汉长飞通用电缆有限公司

注册地址：湖北省武汉市东湖新技术开发区光谷创业街65号

商标/商标名称

生产厂名称：武汉长飞通用电缆有限公司

制造地址：湖北省武汉市东湖新技术开发区光谷创业街65号

产品名称：III型铁路无线通信系统漏泄同轴电缆

规格型号：WDZ-SLYWY-50-42-III***

认证标准和技术要求：TB/T3201-2015；

认证模式：初始工厂检查＋产品抽样检测＋获证后监督

上述产品符合 CRCC 产品认证实施规则的要求，特发此证。

有效期至：2023年06月13日

本证书的有效性依据发证机构的年度监督结果保持。

二〇一八年六月十四日