TECHNICAL SPECIFICATION

1/2”S Jumper Cable

Version	Date	Prepared	Reviewed	Approved
A	November 2, 2023	Louise	Mr.Gu	Hugo

Address: No.5, Zhongtian road, Nantong economic and technological development zone, Jiangsu Province, China
Tel: +86-513-89191138 Fax: +86-513-8359 9670 Zip code: 226010 Website: www.zttcable.com

1. GENERAL

1.1 Scope

This specification covers the general requirements and performance of jumper cables provided by JiangSu Zhongtian Technology Co., Ltd. (hereafter called ZTT for short).

1.2 Cable Description

ZTT jumper cables have the following advantages: low VSWR, excellent flexibility, easy attachment and waterproof.

1.3 Quality

Excellent quality control is achieved through intense in-house quality check and stringent audit acceptance by ISO 9001.

1.4 Reliability

ZTT ensures product reliability through rigorous qualification testing of each product family. Both initial and periodic qualification testing are performed to assure the cable's performance and durability in the field environments.

1.5 Reference

The cables which ZTT offered are designed, manufactured and tested according to international standards as follows:

RoHS 2011/65/EU	It standardizes the materials and process standards of electronic and electrical products, so as to make it more conducive to human health and environmental protection.
ISO 9001:2015	ISO9001 international quality management system standard is a set of management systems and standards
ISO 14001:2015	International standard focus on environmental management

2. CABLE STRUCTURE

2.1 Cable Type:

Cable type	Product Code
1/2” S jumper , 4.3-10 Male - 7/16 Male Angle, 6m	4310M-DMA-9*6
1/2” S jumper , 4.3-10 Male - 7/16 Male Angle, 10m	4310M-DMA-9*10

2.2 Construction of Cable

Item	Diameter(mm)	Material
Inner conductor	3.60±0.05	Copper clad aluminum wire
Insulation	9.20±0.20	Foamed polyethylene
Outer copper conductor	12.00±0.25	Helical corrugated copper tube
Jacket	13.60±0.50	PE

2.3 Mechanical and electrical performance

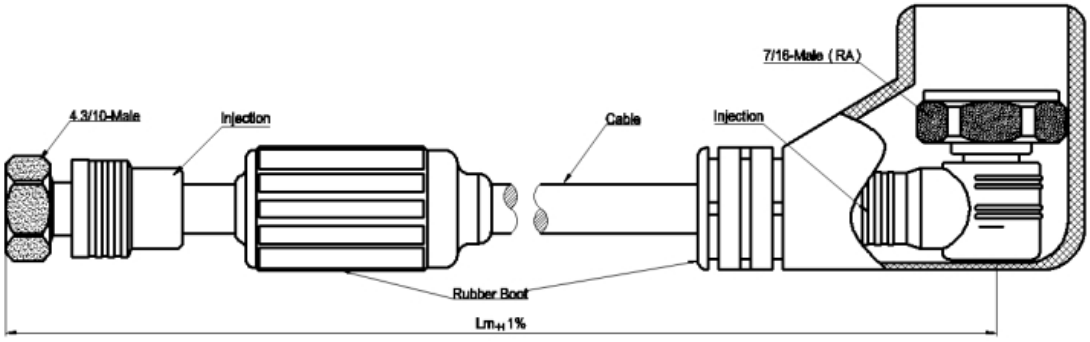
Characters		Specification	
jumper Length (m) , tolerance (%)		6m or 10m, tolerance≤ 1%	
Connector type		7/16 Male Angle 4.3-10 Male	
inner conductor material Jacket		Copper Wire or Copper Clad Aluminum Wire Jacket: PE	
Dielectric		Foam PE	
Outer Conductor material		(Helical or Corrugated) Copper Tube	
Jacket		Halogen free/No Halogen/Zero Halogen (comply IEC 60754- 1:2011 or EN 60754-2)	
Jacket Diameter (mm)		13.6±0.5	
IP Protection Class		IP68	
Impedance (Ω)		50±2	
Insulation Resistance (MΩ)		≥ 5000	
Minimum bending radius (mm)		single	≤ 25
		multiple	≤ 35
VSWR		< 2.2Ghz	≤ 1.1
		2.2Ghz ~ 2.7Ghz	≤ 1.15
		2.7Ghz ~ 3.8Ghz	≤ 1.18
Insertion Loss (dB)	jumper 6m (dB)	900/1800/2600Mhz	≤ 0.75/1.05/1.40
	jumper 10m (dB)	900/1800/2600Mhz	≤ 1. 18/1.67/2.27
Max operating Frequency (GHz)		≥ 8.8	
Weight (kg/m)		≤ 0.23	
Max Voltage (kW)		≥ 16	
voltage between inner and outer conductor (V)		≥ 2500	

Operation Temperature (ºC)	-40 ÷ 85
Dynamic PIM comply IEC 62037 (dBc):	≤ - 159
Center contact	Brass or Bronze Silver Plated
Connector insertion loss (dB)	≤0.05*√f (GHz)

2.4 Waterproof specifications

Characters	Specification
Weatherproofing Material	Silicon
UV Resistance Standard	IEC 60068-2-5
Operation Temperature range (°C)	-40 ÷ 85
Weatherproofing Level	IP68
Safety Standard	RoHS 2011/65/EU

3. DESIGN DRAWINGS



4. PACKING INFORMATION

ZTT jumper cables are packed in carton, and the connectors are assembled at the end of the cable. During transportation, available transportation tool should be handled carefully to avoid damaging the package.

Design: