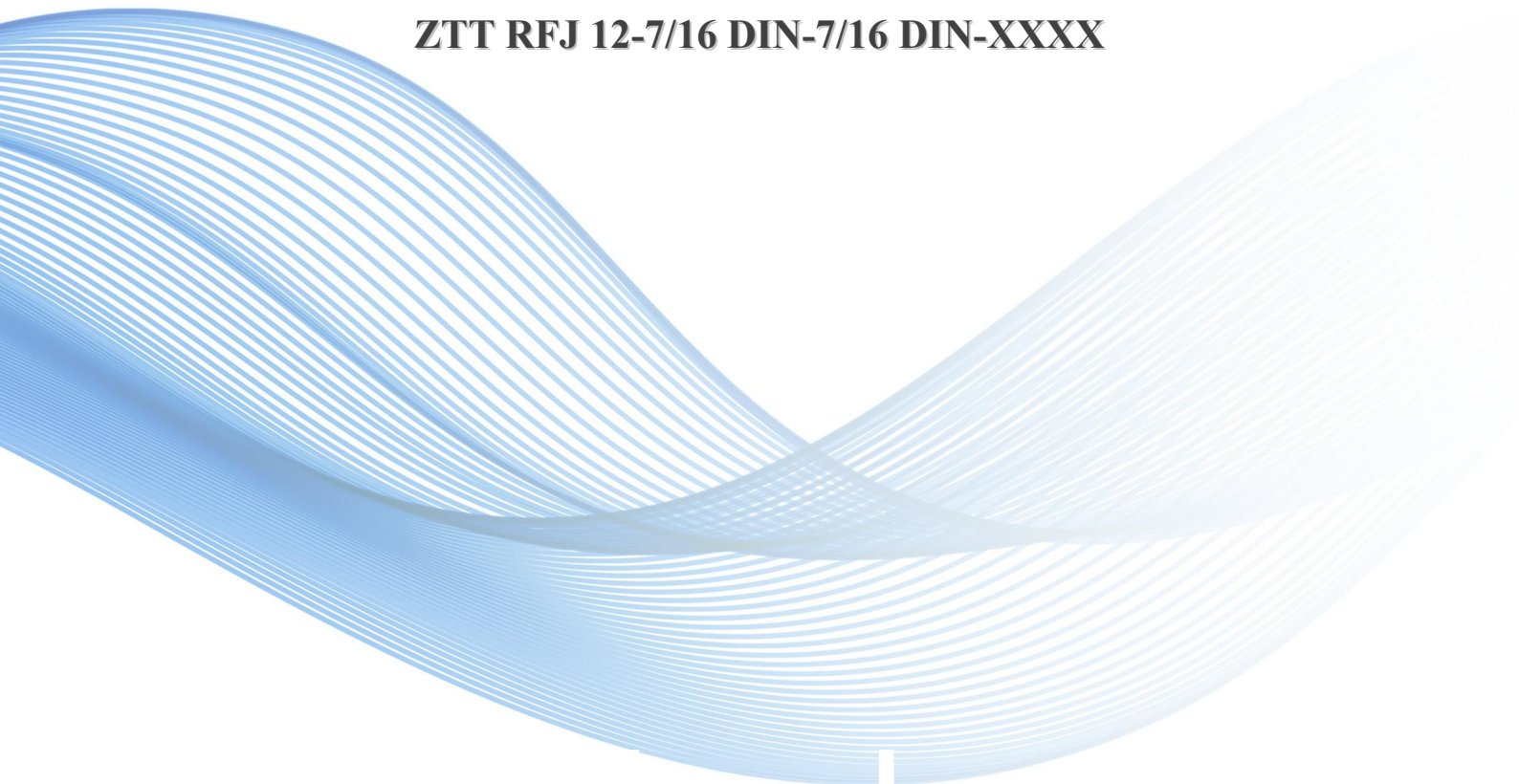


TECHNICAL SPECIFICATION

ZTT RFJ 12-7/16 DIN-7/16 DIN-XXXX



A	April 20, 2023	Louise	MoMo	Hugo
Version	Date	Prepared	Reviewed	Approved

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 9001:2015, ISO 14001:2015, RoHS 2011/65/EU.

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.

2. PRODUCT SPECIFICATIONS

2.1 Technical Specifications

Characteristics		Specification
Operating Frequency (GHz)		0-2.7
Type of Connector		Connector A: Type: 7/16 DIN Connector B: Type: 7/16 DIN
		Interface: Male
		Body style: Straight
Impedance type (Ω)		50
Return loss (dB)	890MHz – 960MHz	≥ 28
	1710MHz – 1880MHz	≥ 28
	1920MHz – 2170MHz	≥ 28
	2170MHz - 2700Mhz	≥ 26
Operating temperature range ($^{\circ}\text{C}$)		-50 ~85
Center contact		Bronze/Brass, Silver plated
PIM (2x43dBm, carriers)		≤ -155 dBc
Dielectric		Polyethylene Foam
Jacket	Materials	Polyethylene (PE)
	Halogen Free (IEC 60754 or EN 60754-2)	Yes
	Jacket Diameter (mm)	$15.8 \pm 2\%$
Insertion loss (dB/m).	890MHz – 960MHz	≤ 0.0713
	1710MHz – 1880MHz	≤ 0.107
	1920MHz – 2170MHz	≤ 0.113
	2170MHz - 2700Mhz	≤ 0.127
Connector Attenuation (dB/pcs)	0-2700MHz	$\leq 0.05 \cdot \sqrt{f}$ (GHz)
Relative propagation velocity		$\geq 87\%$
Minimum bending radius, single(mm)		≤ 70
Minimum bending radius, repeated (mm)		≤ 130
Cable length without connector(m)		customized according to customer's need
Inner Conductor	Materials	Copper-Clad Aluminum Wire
	Style	Smooth solid tube
	Diameter (mm)	4.80
	DC-resistance	≤ 1.57 Ohms/km
Outer Conductor	Materials	Corrugated copper
	Style	SIN wave
	Diameter (mm)	13.8
	DC-resistance	≤ 2.7 Ohms/km
Weight, approximately(kg/m)		≥ 0.2
Max. tensile force(N)		≥ 1050

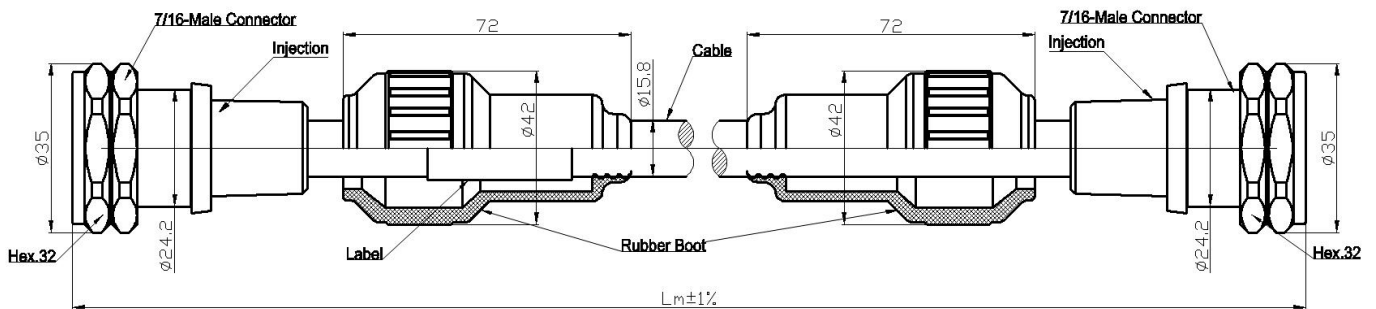
2.2 Weatherproof for Jumper Specifications

Characteristics	Specification
Weatherproof boot assemble with the jumper	
Weatherproofing Material	Silicone
UV Resistance	1000 hours
UV Resistance Test Method ASTM G154 or better	
Operating Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +85 °C
IP68	IP68

2.3 Connectors for Jumper Specifications

Characteristics	Specification
Insertion Loss, typical	$\leq 0.05 \cdot \sqrt{f}$ (GHz)
Weight	Connector DIN 7/16 ≥ 86 g

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:

