



## **Contents**



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- Feeder Clamp
- Grounding Kit
- Cold shrink Tube
- Gel Seal Closure
- Waterproof Rubber Sleeve



### **RF Coax Connector Series**

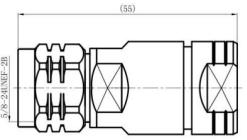


connectors are available with 50  $\Omega$  and 75  $\Omega$  impedance. The frequency range extends to 11 GHz, depending on the connector and cable type. The screw-type coupling mechanism provides a sturdy and reliable connection.

Connector styles are available for flexible, conformable, semi-rigid and corrugated cable types. Both crimp and clamp cable termination processes are used for this series. Special design techniques for this series of connectors have resulted in excellent levels of performance with regard go return loss (VSWR) and intermodulation distortion.

Standards	IEC60169-16		
Electrical Characteristics		<b>Mechanical Chracteristics</b>	
Contact resistance inner conductor	≤1.0 mΩ	Recommended coupling torque	4-6Nm
Contact resistance outer conductor	≤1.0 mΩ	Durability (mating cycles)	≥500
Insulation resistance	$\geq 5.0 G\Omega$	Material: spring contacts	Brass
Voltage proof	2.5KV/50Hz	Material: outer conductor	Brass
Impedance	50 Ω	Material: other metal parts	Brass
Return loss: Straight style	≥ 30.5 dB/1GHz; 19.1dB/6GHz	Material: insulators	PTFE
Return loss: Angle type	≥ 30.5 dB/1GHz; 19.1dB/6GHz	Plating: Inner conductor	Ag/Au
Working voltage	1KV/50Hz	Plating: Outer conductor	Ni/Tri-alloy
Frequency range up to	11GHz	Plating: Other metal parts	Ni/Tri-alloy



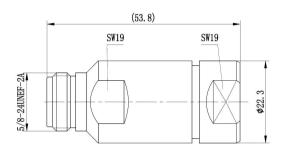






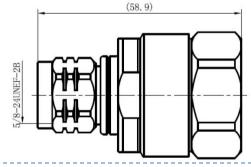
N FEMALE FOR 1/2" CABLE (P/N: **TA** NF-1/2-1)

N MALE FOR 1/2" CABLE (P/N: TA NM-1/2)



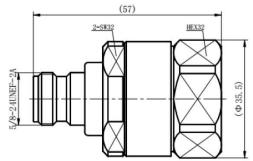


N MALE FOR 7/8" CABLE (P/N: **TA** NM-7/8)

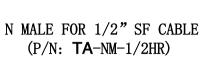


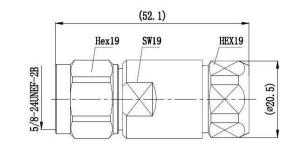


N FEMALE FOR 7/8" CABLE (P/N: TA NF-7/8)





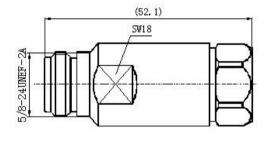






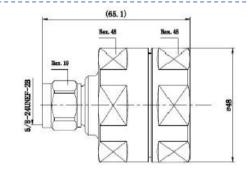


N FEMALE FOR 1/2" SF CABLE (P/N: **TA**-NF-1/2HR)



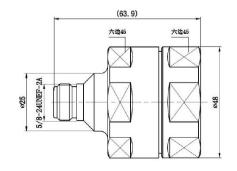


N MALE FOR 1 1/4" CABLE (P/N: **TA**- N-J1-1/4-3)



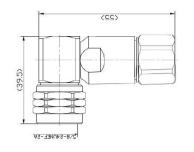


N FEMALE FOR 1 1/4" CABLE (P/N: **TA**- N-K1-1/4-3)



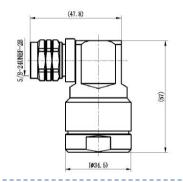






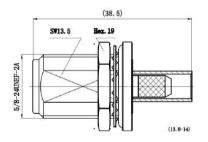


N MALE RIGHT ANGLE FOR 7/8" CABLE (P/N: TA-N-JW7/8)



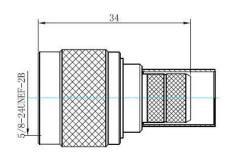


N FEMALE BULKHEAD FOR RG58 CABLE CRIMP (P/N: **TA**-N-C-KY58)



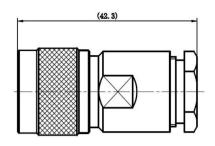


N MALE FOR LMR400 CABLE CRIMP (P/N: **TA** N-C-J7A)





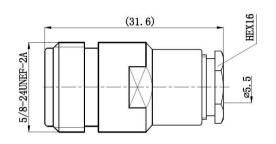






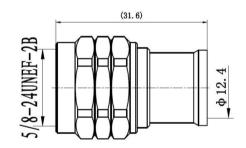


N FEMALE FOR RG223 CABLE (P/N: **TA** N-K223)



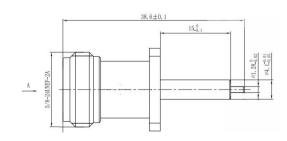


N MALE FOR 1/2" CABLE SOLDERING (P/N: TA-N-H-J1/2S-1)





N FEMALE FLANGE CONNECTOR (P/N: **TA**-N-KFD-178)







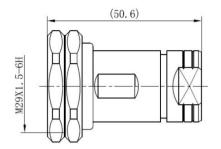
## **RF Coax Connector Series**



**7-16** (DIN) coaxial connectors – high-quality coaxial connectors with low attenuation and inter-modulation for frequencies up to 8.3 GHz. Transmission of medium to high power with radio transmitters and low PIM transmission of received signals such as in mobile phone base stations are typical applications due to their high mechanical stability and best possible weather resistance.

Standards	IEC60169-4		
Electrical Characteristics		<b>Mechanical Chracteristics</b>	
Contact resistance inner conductor	≤0.4 mΩ	Recommended coupling torque	25-35Nm
Contact resistance outer conductor	≤0.2 mΩ	Durability (mating cycles)	≥500
Insulation resistance	$\geq 10 \text{ G}\Omega$	Material: spring contacts	Brass
Voltage proof	4.0KV/50Hz	Material: outer conductor	Brass
Impedance	50 Ω	Material: other metal parts	Brass
Return loss: Straight style	≥ 32 dB/4GHz; 19.1dB/6GHz	Material: insulators	PTFE
Return loss: Angle type	≥ 40 dB/1GHz; 19.1dB/6GHz	Plating: Inner conductor	Ag/Au
Working voltage	2.7KV/50Hz	Plating: Outer conductor	Ni/Tri-alloy
Frequency range up to	8.3GHz	Plating: Other metal parts	Ni/Tri-alloy

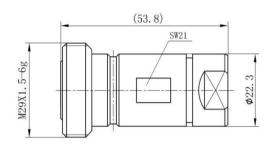
DIN MALE FOR 1/2" CABLE (P/N: **TA**- 7/16M-1/2)





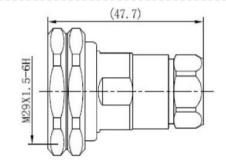


DIN FEMALE CONNECTOR FOR 1/2" CABLE (P/N: **TA**- 7/16F-1/2)



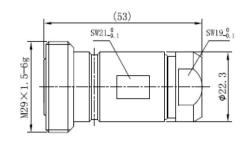


DIN MALE FOR 1/2 "SF CABLE (P/N: **TA**- 7/16M-1/2HR)

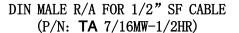


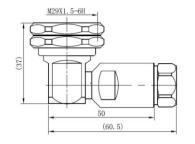


DIN FEMALE FOR 1/2"SF CABLE (P/N: **TA** 7/16F-1/2HR)





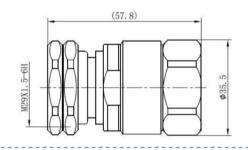






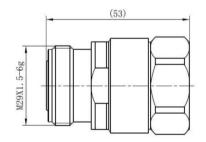


DIN MALE FOR 7/8" CABLE (P/N: **TA**- 7/16M-7/8)



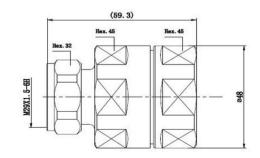


DIN FEMALE FOR 7/8" CABLE (P/N: **TA** 7/16F-7/8)

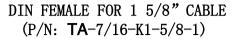


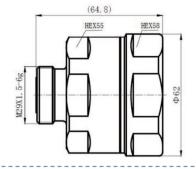


DIN MALE FOR 1 1/4" CABLE (P/N: **TA**-7/16-J1-1/4-3)





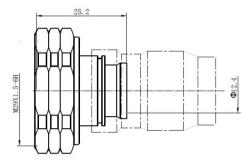






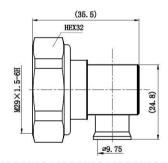


DIN MALE FOR 1/2" SF CABLE SOLDERING (P/N: TA-7/16-H-J1/2S-10)



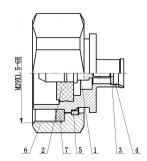


DIN MALE R/A FOR 3/8" SF CABLE SOLDERING (P/N: TA-7/16-C-JW3/8SR)



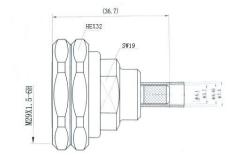


DIN MALE FOR 1/4" SF CABLE SOLDERING (P/N: TA-7/16-H-J1/4S-4)



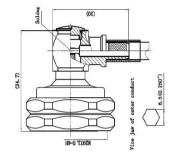


# DIN MALE FOR LMR240 CABLE CRIMP (P/N: TA-7/16-C-J240)



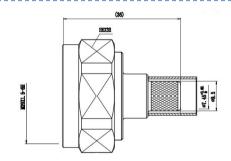


DIN MALE R/A FOR LMR400 CABLE CRIMP (P/N: TA-7/16-C-JW240)



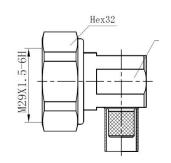


DIN MALE FOR 141 CABLE CRIMP (Part No.:7/16-C-J214-2)





DIN MALE R/A FOR 213 CABLE (Part No.:7/16-C-JW213-1)







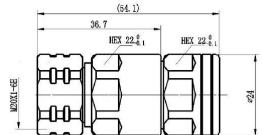
#### **RF Coax Connector Series**



4.3-10 connector system is designed to meet the rising performance needs of mobile network equipment e.g. to connect the RRU to the antenna. The small size and low weight of these connectors do justice to the miniaturization of mobile radio network components. Despite their size, the connectors guarantee excellent return loss and passive inter-modulation performance (PIM) levels.

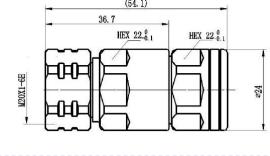
Three different coupling mechanisms of the plug connectors screw, quick-lock/push-pull and hand-screw types are mateable with all jack connectors. All of the 4.3-10 connectors meet the requirements of IP68 and, because of the excellent properties of materials used, are suitable for temperatures ranging from -40° C up to +85° C. Customized connector designs for use at higher temperatures are also possible on demand.

Standards	IEC61169-54		
Electrical Characteristics		<b>Mechanical Chracteristics</b>	
Contact resistance inner conductor	≤1.0 mΩ	Recommended coupling torque	5-10Nm
Contact resistance outer conductor	≤1.0 mΩ	Durability (mating cycles)	≥100
Insulation resistance	$\geq 5.0G\Omega$	Material: spring contacts	Brass
Voltage proof	2.5KV/50Hz	Material: outer conductor	Brass
Impedance	50 Ω	Material: other metal parts	Brass
Passive inter-modulation	-166dBc@2 x 43 dBm.	Material: insulators	PTFE
Return loss: Angle type	26.4 dB@3 GHz; 20.8dB@/6 GHz	Plating: Inner conductor	Ag
Working voltage	1.8KV/50Hz	Plating: Outer conductor	Ni/Tri-alloy
Frequency range up to	12GHz	Plating: Other metal parts	Ni/Tri-alloy



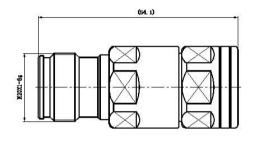


4. 3/10 MALE FOR 1/2" CABLE (P/N: **TA** 4. 3/10-J1/2)



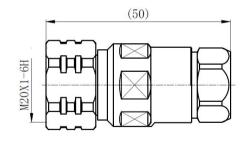


4. 3/10 FEMALE FOR 1/2" CABLE (P/N: **TA** 4. 3/10-K1/2)



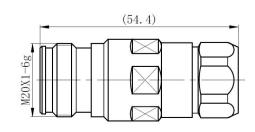


4. 3/10 MALE For 1/2" SF CABLE (P/N: **TA**-4. 3/10-J1/2S)





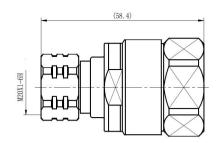
4. 3/10 FEMALE FOR 1/2" SF CABLE (P/N: **TA** 4. 3/10-K1/2S)





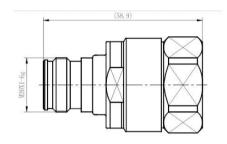


4. 3/10 MALE FOR 7/8 " CABLE (P/N: **TA** 4. 3/10-J7/8)



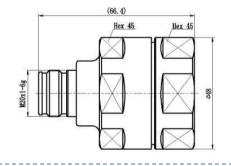


4. 3/10 FEMALE FOR 7/8 " CABLE (P/N: **TA**-4. 3/10-K7/8)



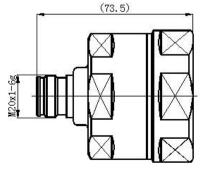


4. 3/10 FEMALE FOR 1-1/4 " CABLE (P/N: **TA** 4. 3/10-K1-1/4)



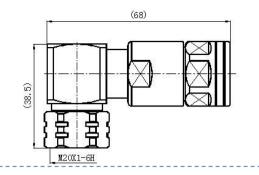


4. 3/10 FEMALE FOR 1-5/8 " CABLE (P/N: **TA** 4. 3/10-K1-5/8)



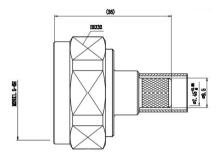


4. 3/10 MALE R/A FOR 1/2" CABLE (P/N: **TA**-4. 3/10-JW1/2)



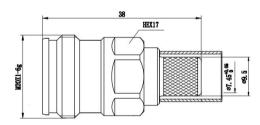


4. 3/10 MALE FOR RG223 CABLE CRIMP (P/N: **TA**-4. 3/10-C-J223)



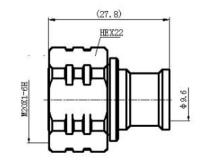


4. 3/10 FEMALE FOR RG214 CABLE CRIMP (P/N: **TA-**4. 3/10-C-K214)





4. 3/10 MALE FOR 3/8" SF CABLE SOLDERING (P/N: **TA**-4. 3/10-H-J3/8S)







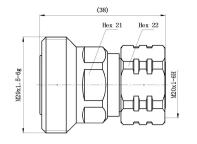
### **RF Coax Connector Series**



Adaptors

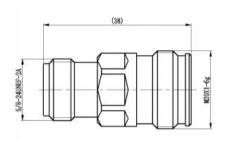
between series, straight or angled designs and some with panel mount features. They are classified according its typical intended applications of which each require its specific properties. There are four major groups which are identified by means of a color code in this catalogue: standard, precision, low passive inter-modulation (PIM) and quick-mate adaptors.

# ADAPTER DIN FEMALE TO 4.3/10 MALE (P/N: **TA**- 7/16/4.3/10-KJ)



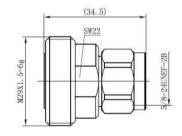


ADAPTOR 4. 3/10 FEMALE TO N FEMALE (P/N: TA: 4. 3/10/N-KK)



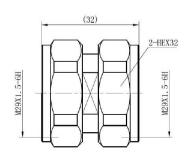


ADAPTER DIN FEMALE TO N MALE (P/N: **TA**- 7/16/N-KJ-3)



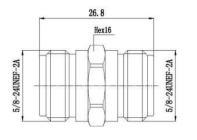


ADAPTER DIN MALE TO DIN MALE (P/N: **TA**- 7/16-JJ-1)



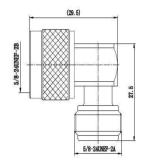


# ADAPTER N FEMALE TO N FEMALE (P/N: **TA** N-50KK-4)



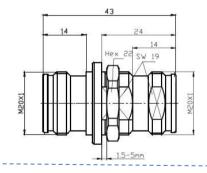


ADAPTER N MALE TO N FEMALE R/A (P/N: **TA**- N-JKW-4)



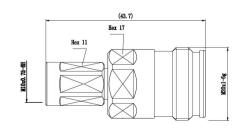


ADAPTOR 4. 3/10 FEMALE TO 4. 3/10 FEMALE BULKHEAD (P/N: TA-: 4. 3/10-KKY)





ZX10 MALE TO 4.3/10 FEMALE ADAPTER (P/N: **TA**- 4.3/10/ZX-KJ)





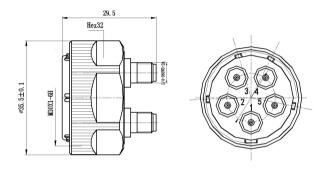




ADAPTOR MQ4 PLUG to SMA JACK

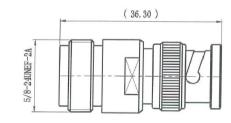


ADAPTOR MQ5 PLUG to SMA JACK



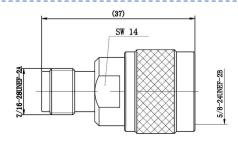


ADAPTOR BNC MALE to N FEMALE





ADAPTOR N MALE to TNC FEMALE



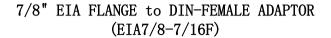


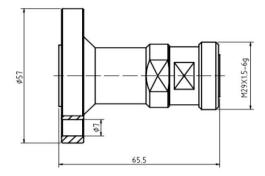


## **RF Coax Connector Series**

**EIA** RF Connectors are used to connect two items of high power radio frequency rigid or semi-rigid(flexline)coaxial transmission line. Typically these are only required in very high power transmitting installations(10s of kW to MW)where the feedline diameters may be several inches.

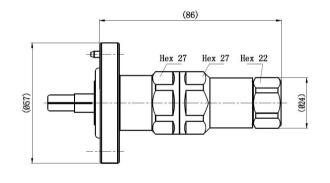






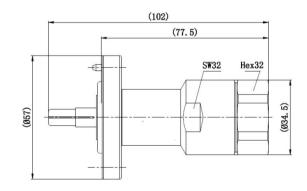


7/8" EIA FLANGE IF45 FOR 1/2" CABLE (IF45-J1/2)





7/8" EIA FLANGE IF45 FOR 7/8" CABLE (IF45-7/8)







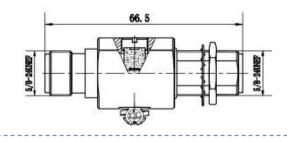
### **RF Coax Connector Series**

## Lighting Arrestor

To protect electronical devices, TELANAR offers a wide range of Surge Arrestors for series 7-16, 4.3/10 and N. Embedded in coaxial transmission lines it is possible to discharge high current pulses, for example caused by lightning strikes nearby.

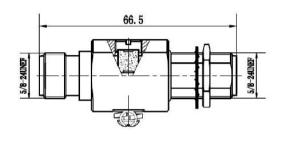


# N MALE TO FEMALE SURGE ARRESTER GAS TUBE (P/N: TA- N-JKYPT)



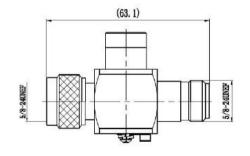


N FEMALE TO FEMALE SURGE ARRESTER GAS TUBE (P/N: **TA**- N-KKYPT)



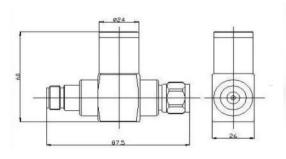


N MALE TO N FEMALE SURGE ARRESTER GAS TUBE (P/N: **TA**- N-JKP)





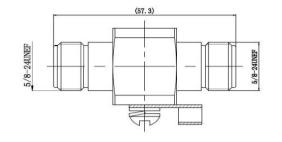
N MALE TO N FEMALE SURGE ARRESTER QUARTER WAVE (P/N: TA- N-JKP(Q))





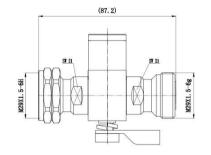


# N FEMALE TO FEMALE SURGE ARRESTER GAS TUBE (P/N: TA N-KKPT)



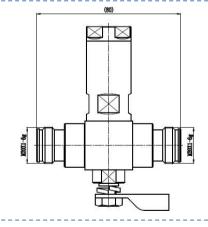


DIN MALE TO DIN FEMALE SURGE ARRESTER
QUARTER WAVE
(P/N: TA 7/16-JKYP-5A)





4. 3/10 FEMALE TO 4. 3/10 FEMALE SURGE ARRESTER QUARTER WAVE (P/N: TA- 4. 3/10-KKPT)







### **Jumper Cable**



RF-Combination connectors of different connector series can be assembled as either straight or angle versions by using the corresponding clamps. With only one combination connector and the different cable clamps, a variety of connectors can be produced allowing a reduction in stock-levels. The technical specifications can be obtained from the descriptions in the respective chapters for each series.

For example: for ½" or ½"superflex jumper cable, DIN male straight(right angle) on both sides, VSWR can reach less than 1.10@(0-3)GHz, 1.20@(0-6)GHz PIM less than -160dBc@(2-tone × 20W);



### **Low Loss Cable Assemblies**

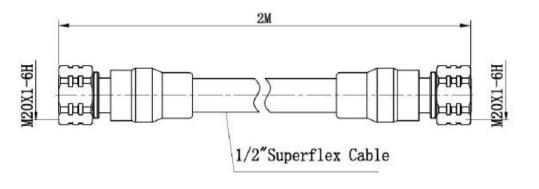






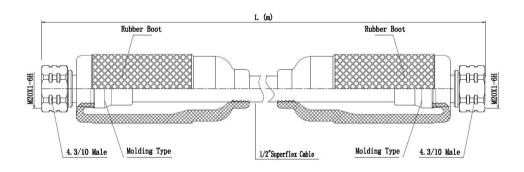






1/2"SF Jumper, 4.3/10 Male to 4.3/10 Male -L(m) (P/N: TA- 12S-4310M-4310M-L)



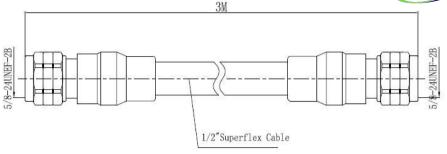


1/2"SF Jumper,4.3/10 Male to 4.3/10 Male with rubber boots at both ends-L(m)

(P/N: TA-12S-4310M-4310M(waterproof)-L)

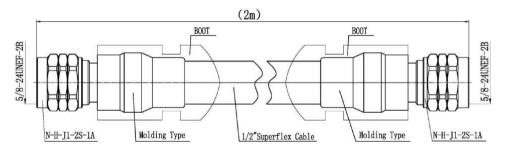






½" SF Jumper, N Male to N Male, L(m)(P/N: TA- 12S-NM-NM-L)



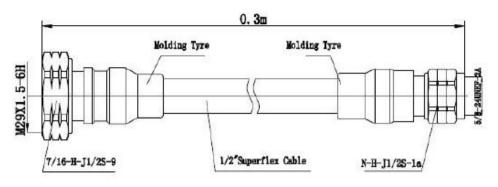


1/2"SF Jumper, N Male to N Male with rubber boots at both ends-L(m)

(P/N: TA-12S-NM-NM(waterproof)-L)

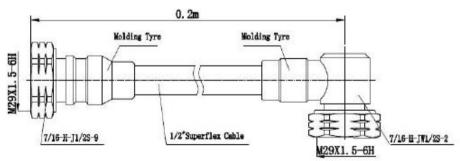






1/2" SF Jumper, 7/16 Male to N Male, L(m)(P/N: TA- 12S-DINM-NM-L)

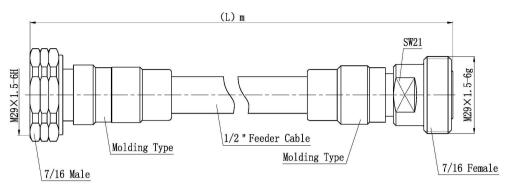




½" SF Jumper, DIN Male R/A to DIN Male, L(m) (P/N: TA-12S-DINMR-DINM-L)

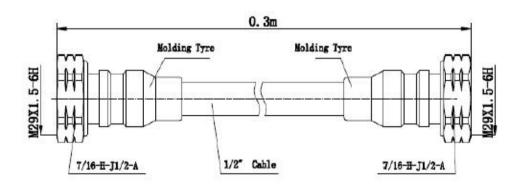






½" Feeder Jumper,7/16 Male to 7/16 female – L(m)(P/N: TA- 12-DINM-DINF-L)

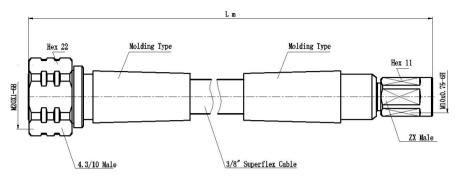




½" Feeder Jumper,7/16 Male to 7/16 Male-L(m)(P/N: TA- 12-DINM-DINM-L)

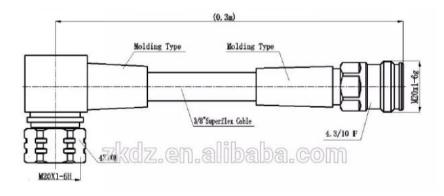






3/8" SF Jumper, 4.3/10 Male to NEX10 Male, L(m)(P/N: TA- 38S-4310M-ZXM-L(m))

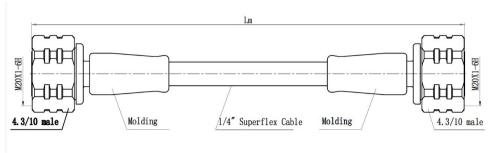




3/8"SF Jumper,4.3/10 R/A Male to 4.3/10 female -L(m) (P/N: TA- 38S-4310MR-4310F-L(m))

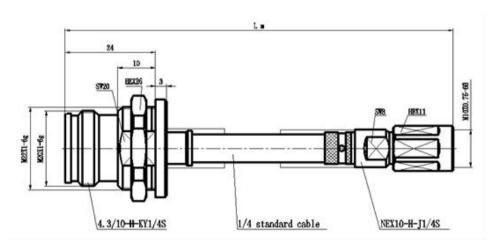






1/4" SF Jumper, 4.3/10 Male to 4.3/10 Male, L(m) (P/N: TA-14S-4310M-4310M-L(m))

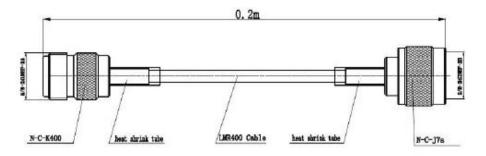




1/4"SF Jumper, NEX10 Male to 4.3/10 Female Bulkhead-L(m) (P/N: TA-14S-NEX10M-4310FY-L(m)  $_{31}$ 

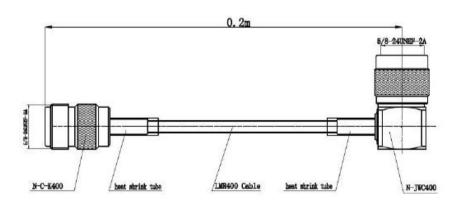






LMR 400 Jumper, N Male Crimp to N Female Crimp, L(m) (P/N: TA LMR400-NM-NF-L(m))

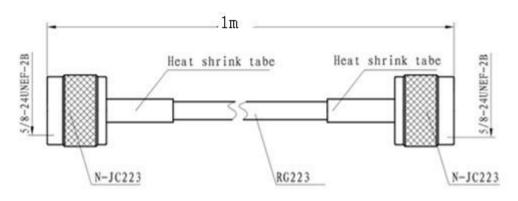




LMR 400 Jumper, N Male R/A Crimp to N Female Crimp, L(m) (P/N: TA LMR400-NMR-NF-L(m))

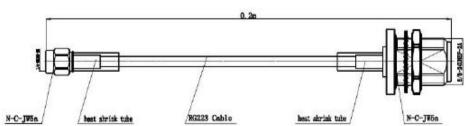






RG223 Jumper, N Male Crimp to N Male Crimp, L(m) (P/N.: RG223-NM-NM-L(m))

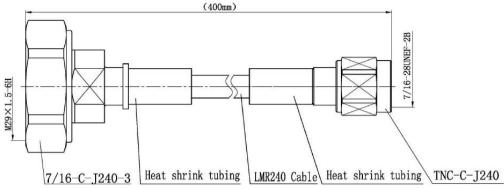




RG223 Jumper, N Male Bulkhead to SMA Male, L(m)(P/N: TA- N-M-C-KY223/SMA-JC223-0.2m)

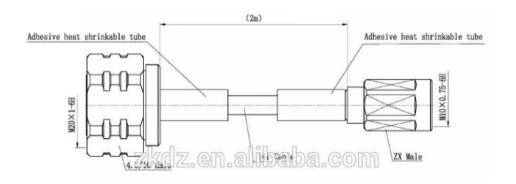






LMR240 Jumper,7/16 Male to TNC Male,L(m) (P/N: TA 240-7/16M-TNCM-L(m))

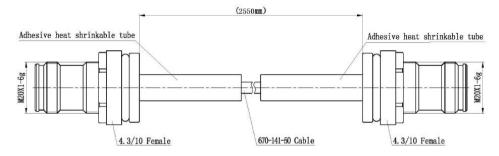




RG141 Jumper,4.3/10 Male to NEX10 Male,L(m) (P/N: TA 141-4310M-NEX10M-L(m))





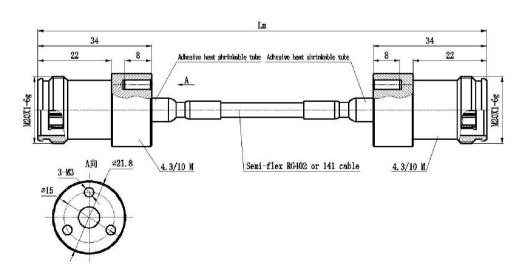


RG141 Jumper, 4.3/10 Female Flange to 4.3/10 Female Flange -L(m)

(P/N: TA- 141-4310F(plus)-4310F(plus)-L)

35

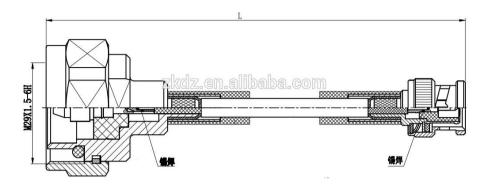




RG141 Jumper,4.3/10 Female Flange to 4.3/10 Female Flange,L(m) (P/N: TA- 141-4310MF-4310MF-L(m))

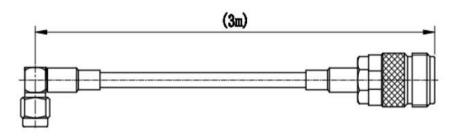






RG142 Jumper,7/16 Male to BNC Male,L(m)(P/N: TA- 142-7/16M-BNCM-L(m))





RG58 Jumper,SMA Male R/A to N Female, L(m)(P/N: TA- RG223-SMAMR-NM-L(m))

# AISG Jumper



















## Feeder Clamp

The feed line clamping apparatus are suitable for mobile communication base depot feed line fixed,has many kinds of collocation methods in view of the different customer request,the clamp cover may use the polypropylene(PP),the metaformaldehyde (POM,ABS) manufactures, the support and the fastener use high quality stainless steel manufacture, is suitable for each kind of poor weather condition strip.









## **Grounding Kit**

Grouding kit is suitable in mobile communication system's ground protection, prevents and reduces as a result of the induction thunder stroke, the surge overvoltage and the surge eclectric current to equipment's damage, has the enough thunder stroke discharge current capability, the guarantee system equipment safe reliability service.

In the grounding uses the electric cable line length may have custom-made according to the customer request.







### Cold Shrink Tube

Cold shrink tube are supplied for field installation in this pre-stretched condition.

The core is removed after the tube has been positioned for installation over an in line connection, terminal lug, etc., allowing the tube to shrink and form a waterproof seal. The insulating tube is made of EPDM rubber, which contains no chlorides or sulphurs. Various diameter sizes will cover a range of 1000 volt cables, copper and aluminum conductors.















### Gel Seal Closure

Gel seal closure is a weatherproofing system for sealing coaxial cable jumper to-feeder and jumper-to-antenna connectors exposed to the outside environment.

The housing contains an innovative gel material and provides an efficient moisture block effectively water-proofing the connectors.

The ease of installation and the long term protection makes it are liable and cost effective sealing solution for outside plant cables and connector.









## Waterproof Rubber Sleeve

The Weatherproofing Boot System protects RF connections at the antenna and Remote Radio Head using an easy-to-install slide and twist concept that prevents moisture migration into the connector interface.

- Quick and easy to install
- Easily removable and re-usable
- No tape or mastic required for installation
- Re-enterable for PIM/Sweep testing
- Compact footprint







