

CABLE 161 RF: I-PEX MHF + SMA STRAIGHT BULKHEAD JACK WITH O-RING RATED TO IP67/68 + MULTIPLE CABLE SIZES

SPECIFICATIONS :

1. I-PEX MHF PLUG, P/N: FOR RG178 CABLE: 20278-112R-18.  
FOR  $\phi 1.37\text{MM}$  CABLE: 20351-112R-37.  
FOR  $\phi 1.13\text{MM}$  CABLE: 20278-112R-13  
FOR 1.32DS CABLE: 20278-112R-32.
2. COAXIAL CABLE, SEE P/N OPTIONS.
3. SMA STRAIGHT BULKHEAD JACK WITH O-RING RATED TO IP67/68, P/N: RFCT-SMA002-F78.

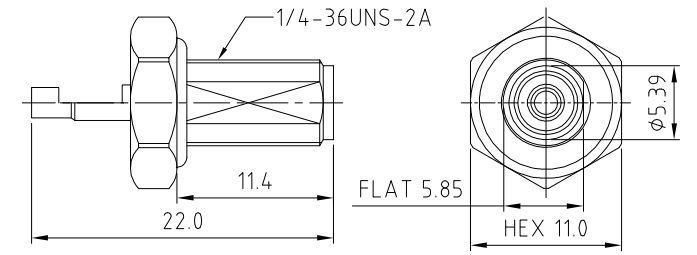
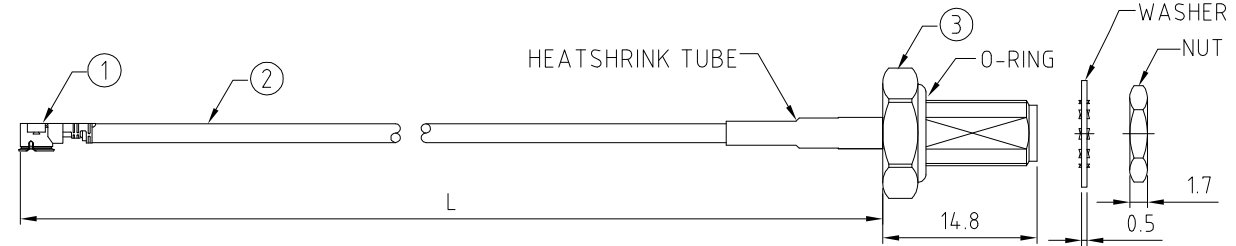
**USAGE PRECAUTIONS: CABLES USING 'MICRO' COAX ARE DELICATE:**  
 (i) HANDLE WITH CARE.  
 (ii) DO NOT TWIST; APPLY EXCESSIVE FORCES OR SHARP BENDS TO THE CABLE. DO NOT FORCEFULLY DEFORM WIRES.  
 (iii) CONSULT CONNECTOR MANUFACTURER'S DATASHEETS FOR DETAILED NOTES ON HANDLING INSTRUCTIONS.

ENVIRONMENTAL:

- A. BULKHEAD MOUNTED CONNECTOR (RFCT-SMA002-F78) TESTED TO THE FOLLOWING SPECIFICATION:
  - i. IP6X - DUST TIGHT - NO PARTICLE INGRESS.
  - ii. IPX7 WATERPROOF FOR 30 MINUTES UP TO 1 METER UNDERWATER.
  - iii. IPX8 WATERPROOF FOR 48 HOURS AT 1 METER UNDERWATER.
  - iv. IPX8 WATERPROOF FOR 12 HOURS AT 5 METERS UNDERWATER.
  - v. PRESSURE TEST - 1 BAR FOR 10 SECONDS.

NOTES:

1. THE ORIENTATION OF CONNECTORS ON DRAWING IS FOR REFERENCE ONLY, IF THE ORDER IS LEFT BLANK THE CONNECTOR WILL NOT HAVE FIXED ORIENTATION.
2. FIXED ORIENTATION IS SUGGESTED FOR CABLE LENGTH 25MM TO 100MM. PLEASE SPECIFY THE FIXED ORIENTATIONS FROM THE ORDER CODE (F1, F2, ETC)
3. CONTACT GRADCONN IF THE ORIENTATION YOU REQUIRE IS NOT SHOWN.
4. WORKING FREQUENCY RANGE: DC-3GHz.



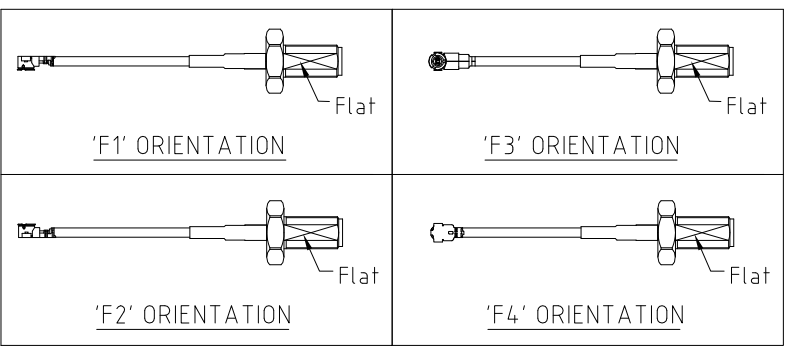
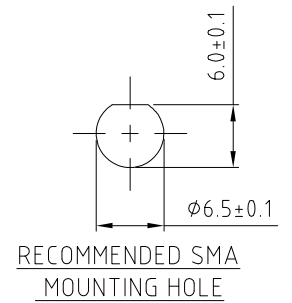
HOW TO ORDER  
 CABLE 161 RF - X X X - X X - X - X

"L" LENGTH IN MM:  
 eg: 100MM = 100  
 (MIN. 025-MAX.400  
 STANDARD = 100, 150, 200)  
 Tolerance: 50-200mm:  $\pm 5\text{mm}$ .  
 201-400mm:  $\pm 7\text{mm}$ .

- CABLE SIZE OPTIONS:
- 1 = RG178 CABLE, COLOR: BROWN
  - 2 =  $\phi 1.37\text{MM}$  CABLE, COLOR: BLACK
  - 3 =  $\phi 1.13\text{MM}$  LOW LOSS CABLE, COLOR: GREY
  - 4 =  $\phi 1.13\text{MM}$  CABLE, COLOR: GREY
  - 5 =  $\phi 1.32\text{DS}$  CABLE, COLOR: GREY
  - 6 =  $\phi 1.13\text{MM}$  CABLE, COLOR: BLACK

- WASHER AND NUT OPTIONS:  
 BLANK = SEPARATELY PACKED (STANDARD)  
 A = ASSEMBLED WITH CONNECTOR  
 B = ASSEMBLED WITH CONNECTOR + PROTECTIVE CAP (CAP001)

- ORIENTATION OPTIONS:  
 BLANK = DOES NOT HAVE A FIXED ORIENTATION  
 F1 = MHF CONNECTION DOWN (L=25-100MM)  
 F2 = MHF CONNECTION UP (L=25-100MM)  
 F3 = MHF CONNECTION AND D FLAT SAME ORIENTATION (L=25-100MM)  
 F4 = MHF CONNECTION AND D FLAT OPPOSITE ORIENTATION (L=25-100MM)  
 (SEE NOTES 1, 2, 3 AND DIAGRAMS FOR MORE INFORMATION)



REV.	DATE & DRN
11	28/07/14 - NYW
12	23/07/15 - NYW
13	20/07/16 - NYW
14	18/07/16 - CAO
15	19/08/16 - RJH
16	02/05/17 - NYW
17	27/06/17 - NYW
18	08/11/17 - NYW
19	11/11/17 - NYW

11	28/07/14 - NYW	ADD SMA P/N
12	23/07/15 - NYW	ADD P/N CABLE OPTION
13	20/07/16 - NYW	UPDATE SMA PART NUMBER
14	18/07/16 - CAO	ADD P/N CABLE OPTION
15	19/08/16 - RJH	ADD CABLE OPTION NO. 3
16	02/05/17 - NYW	ADD ASSEMBLY OPTION B
17	27/06/17 - NYW	ADD CABLE OPTION 4
18	08/11/17 - NYW	ADD CABLE OPTION 5
19	11/11/17 - NYW	ADD F3, F4 ORIENTATION
20	11/11/17 - NYW	ADD F1, F2 ORIENTATION
21	11/11/17 - NYW	ADD I13 BLACK CABLE OPTION

Scale:	NTS	THIRD ANGLE	Unstated Tolerances:
Drawn:	RJH		X $\pm 0.2$ XX $\pm 0.1$ XXX $\pm 0.05$ ANGLES $\pm 5$
App'd:	XXX	Title	CABLE ASSEMBLY
Date:	10 NOV. '17	Revision:	1.9
		Unit:	mm

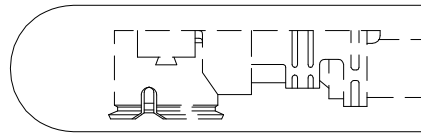
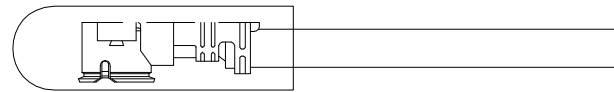
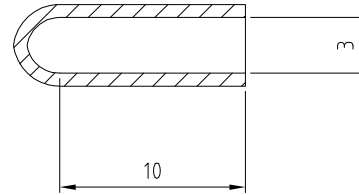
**NAUTILUS**  
 IP67/68 Rated Cables

**GRADCONN**  
 www.gradconn.com

Type:	Cable 161 RF
CABLE 161 RF	
Drawing Number:	
Sheet 1	of 1
Drawing	E and O E

CABLE 161 RF: I-PEX MHF CAP DETAIL

SPECIFICATIONS :  
PVC (TRANSPARENT) CAP



CAP DETAIL

REV. DATE & DRN  
1.0 19/08/16 - R/JH RELEASE

Scale: NTS	THIRD ANGLE	Unstated X XX XXX ANGLES	Tolerances:
Drawn: RJH			
App'd: XXX	Title CAP DETAIL		
Date: 19 AUG '16	Revision: 1.0	Unit: mm	

**NAUTILUS**

IP67/68 Rated Cables

**GRADCONN**

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Type: Cable 161 RF
CABLE 161 RF
Drawing Number:
Sheet 1 of 1
Drawing © E and O E

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