

N Style Coaxial Connector

N Series



Characteristic
Impedance

50 Ω

Frequency
Range
DC to 3GHz

Lock Type

Screw



FEATURE

- N series is a thread coupling coaxial connector which is the most popular as a 7mm type 50 Ω impedance.
- N series is available for various cable type.
- It is incompatible to NC series(75 Ω impedance N Style connector).

CONFORMING STANDARD

JIS-C5411, MIL-PRF-39012

SPECIFICATIONS

Characteristic Impedance	50 Ω
Rated Voltage	500VAC(r.m.s.)
Dielectric Withstanding Voltage	1,500V AC(r.m.s.) / 1 minute
Insulation Resistance	1,000M Ω min. at 500V DC
Contact Resistance	3m Ω max.
V.S.W.R.	1.3 max. (DC ~ 3GHz)
Operating Temperature	-55 ~ +85°C

* The specifications are typical but may not apply to all connectors.
Please check the specifications on each item with its drawing from us when you use.
Also, the performance is different by using cable.

MATERIAL/FINISH

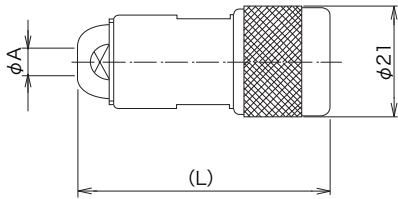


Item	Material / Finish
Shell	Copper Alloy / Ni or Ag Plating
Contact (Female)	Copper Alloy / Ag or Au Plating
Contact (Male)	Copper Alloy / Ag or Au Plating
Insulator	PTFE
Gasket	Silicon Rubber

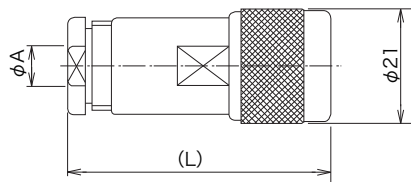
© Please acknowledge that the specification etc. of this catalog might change by the improvement etc. without notice.
Moreover, the characteristic and the specification of the published product are the reference values.
Please confirm the content with the latest delivery specifications when you use the product.

▶ Straight Cable Plug

Clamp Type



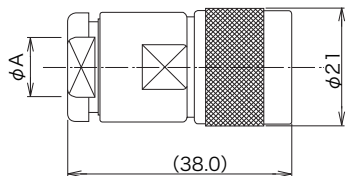
Part Number	Applicable Cable	φ A	(L)	Finish		Assembly Instruction
				Outer Conductor	Center Conductor	
N-P-3-CF	3C-2V	6.2	44.6	Ag	Ag	1
	3D-2V					
N-P-3-Ni-CF	3C-2V	6.2	44.6	Ni	Ag	1
	3D-2V					
N-P-3-NiAu-CF	3C-2V	6.2	44.6	Ni	Au	1
	3D-2V					
N-P-3W-CF	3C-2W	7.2	44.6	Ag	Ag	1
	3D-2W					
N-P-3W-Ni-CF	3C-2W	7.2	44.6	Ni	Ag	1
	3D-2W					
N-P-3W-D1-CF	3C-2W	7.2	44.6	Ni	Au	1
	3D-2W					
N-P-55U-CF	RG-55/U	5.4	44.6	Ag	Ag	1
N-P-55U-Ni-CF	RG-55/U	5.4	44.6	Ni	Ag	1
N-P-58U-CF	RG-58/U	5.4	44.6	Ag	Ag	1
N-P-58U-Ni-1-CF	RG-58/U	5.4	44.6	Ni	Ag	1
N-P-58U-NiAu-CF	RG-58/U	5.4	44.6	Ni	Au	1



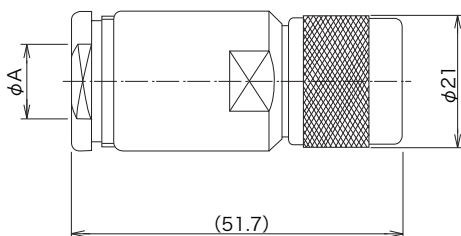
Part Number	Applicable Cable	φ A	(L)	Finish		Assembly Instruction
				Outer Conductor	Center Conductor	
N-SP-3.5DFE-CF	3.5D-FE	6.2	41.5	Ni	Au	—
	3.5D-QEFA					
N-P-5-CF	5C-2V	8.6	44.0	Ag	Ag	1
	5D-2V					
N-P-5-Ni-CF	5C-2V	8.6	44.0	Ni	Ag	1
	5D-2V					
N-P-5W-CF	5C-2W	9.1	45.0	Ag	Ag	1
	5D-2W					
N-P-5W-Ni-CF	5C-2W	9.1	45.0	Ni	Ag	1
	5D-2W					
N-P-5W-NiAu-CF	5C-2W	9.1	45.0	Ni	Au	1
	5D-2W					
N-P-5DFB-1-CF	5D-FB	8.1	44.0	Ni	Ag	1
N-SP-5DSFA-CF	5D-SFA	8.6	41.5	Ni	Au	—

▶ Straight Plug

Clamp Type



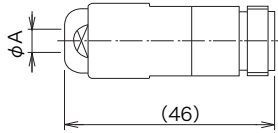
Part Number	Applicable Cable	ϕA	Finish		Assembly Instruction
			Outer Conductor	Center Conductor	
N-P-8DFB-1-CF	8D-FB	11.8	Ni	Ag	4



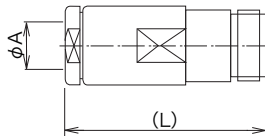
Part Number	Applicable Cable	ϕA	Finish		Assembly Instruction
			Outer Conductor	Center Conductor	
N-P-10DFB-1-CF	10D-FB	14.2	Ni	Ag	4

▶ Straight Cable Jack

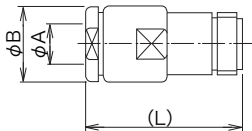
Clamp Type



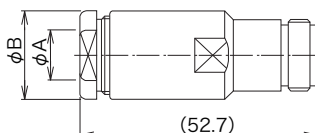
Part Number	Applicable Cable	φ A	Finish		Assembly Instruction
			Outer Conductor	Center Conductor	
N-J-3-CF	3C-2V	6.2	Ag	Ag	2
	3D-2V				
N-J-3-Ni-CF	3C-2V	6.2	Ni	Ag	2
	3D-2V				



Part Number	Applicable Cable	φ A	(L)	Finish		Assembly Instruction
				Outer Conductor	Center Conductor	
N-J-5-CF	5D-2V	8.6	47.0	Ag	Ag	2
N-J-5-Ni-CF	5D-2V	8.6	47.0	Ni	Ag	2



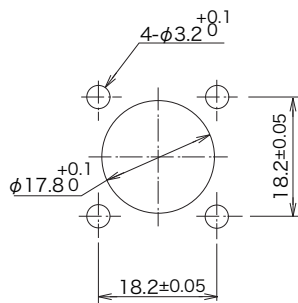
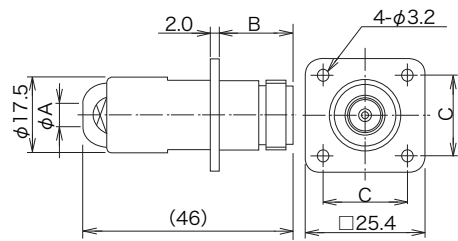
Part Number	Applicable Cable	φ A	φ B	(L)	Finish		Assembly Instruction
					Outer Conductor	Center Conductor	
N-J-8-1-CF	8D-2V	12.7	19.1	41.2	Ag	Ag	5
N-J-8-1-Ni-CF	8D-2V	12.7	19.1	41.2	Ni	Ag	5



Part Number	Applicable Cable	φ A	φ B	Finish		Assembly Instruction
				Outer Conductor	Center Conductor	
N-J-10DFB-1-CF	10D-FB	14.2	22.2	Ni	Ag	5

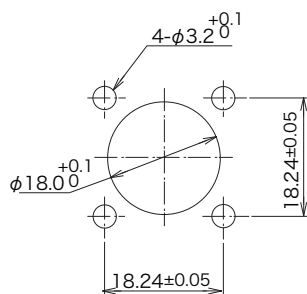
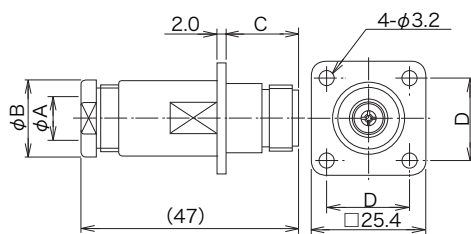
© Please acknowledge that the specification etc. of this catalog might change by the improvement etc. without notice.
 Moreover, the characteristic and the specification of the published product are the reference values.
 Please confirm the content with the latest delivery specifications when you use the product.

▶ Straight Panel Cable Jack



Panel Mounting Dimensions

Part Number	Applicable Cable	ϕA	B	C	Finish		Assembly Instruction
					Outer Conductor	Center Conductor	
N-PJ-3-CF	3C-2V	6.2	16.7	18.2	Ag	Ag	3
	3D-2V						
N-PJ-3-Ni-CF	3C-2V	6.2	16.7	18.2	Ni	Ag	3
	3D-2V						
N-PJ-58U-CF	RG-58/U	5.4	16.6	18.2	Ag	Ag	3
N-PJ-58U-Ni-CF	RG-58/U	5.4	16.6	18.2	Ni	Ag	3



Panel Mounting Dimensions

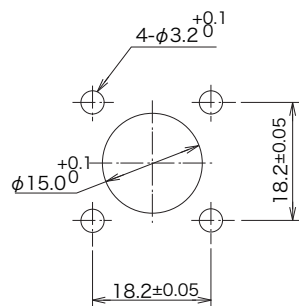
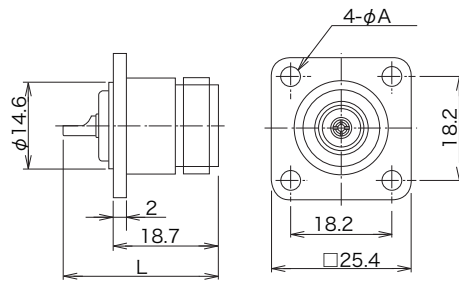
Part Number	Applicable Cable	ϕA	B	C	D	Finish		Assembly Instruction
						Outer Conductor	Center Conductor	
N-PJ-5-CF	5C-2V	8.6	17.5	16.7	18.24	Ag	Ag	3
	5D-2V							
N-PJ-5-Ni-CF	5D-2V	8.6	17.5	16.7	18.24	Ni	Ag	3

© Please acknowledge that the specification etc. of this catalog might change by the improvement etc. without notice.

Moreover, the characteristic and the specification of the published product are the reference values.

Please confirm the content with the latest delivery specifications when you use the product.

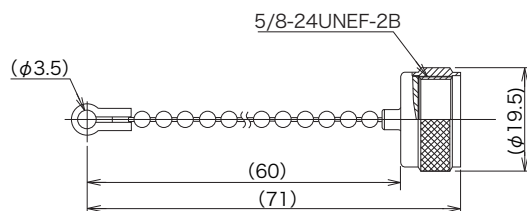
▶ Receptacle Jack



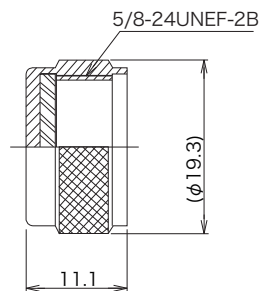
Panel Mounting Dimensions

Part Number	L	Finish		φ A
		Outer Conductor	Center Conductor	
N-R-CF	29	Ag	Ag	φ 3.2
N-R-Ni-CF	29	Ni	Ag	φ 3.2
N-R-NiCAu-CF	29	Ni	Au	φ 3.2

▶ Dust Cap



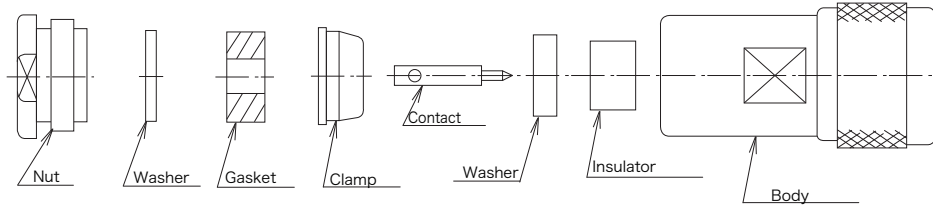
Part Number	Finish
N-RC-5	Ni
N-RC-5-D1	Ag



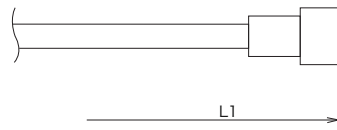
Part Number	Finish
N-RC-3-CF	Ni

▶Assembly Instruction(1) Straight Cable Plug

Parts Configuration



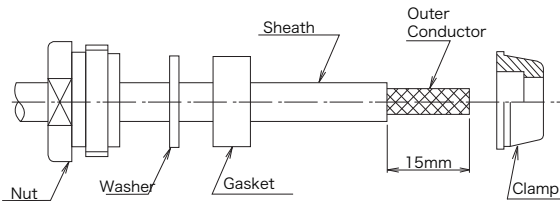
①



① L=The Cable length require for the single-ended cable assembly.

$$L=L1-10$$

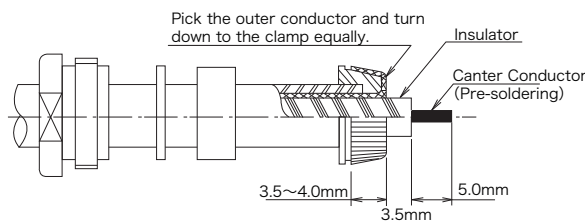
②



② Insert the nut, washer and gasket into the cable. Cut the sheath 15mm from the end of the cable and insert the clamp.

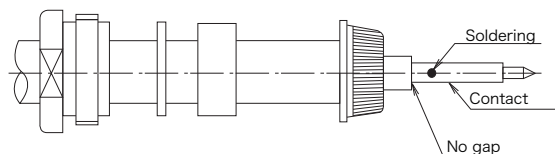
Please be careful to not damage the outer conductor.

③



③ Pick the outer conductor and turn down to the clamp. Cut the outer conductor along the clamp. Cut the insulator and center conductor as fig.3. Please be careful to not damage the center conductor.

④

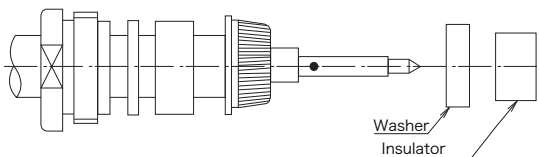


④ Solder up the contact with the center conductor. Please be careful to not deform the insulator by heat.

When the solder is stick out, please shave the extra solder.

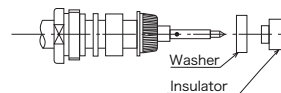
No gap between contact and insulator of the cable.

⑤

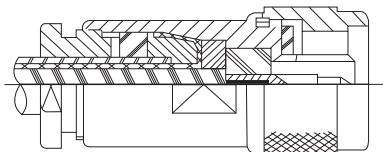


⑤ Insert the ring and insulator as fig. 5.

● In case of the insulator which has directivity, insert the insulator as below direction and fit the thinner side of the insulator into the inside diameter of the washer.



⑥



⑥ Insert the above assembly into the body and screw up by wrench.

Applicable Cable	Recommended Tightening Torque
3C-2V, 3D-2V, 3C-2W, 3D-2W, RG-55/U, RG-58/U	196 ~ 392N · cm (20 ~ 40kgf · cm)
5C-2V, 5D-2V	392N · cm (40kgf · cm)
5C-2W, 5D-2W	490 ~ 686N · cm (50 ~ 70kgf · cm)
5D-FB	441 ~ 539N · cm (45 ~ 55kgf · cm)
RG-8/U, RG-9/U	343 ~ 392N · cm (35 ~ 40kgf · cm)

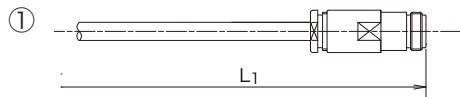
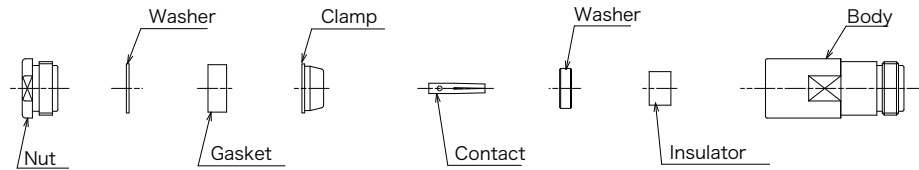
© Please acknowledge that the specification etc. of this catalog might change by the improvement etc. without notice.

Moreover, the characteristic and the specification of the published product are the reference values.

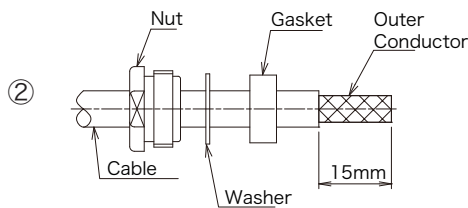
Please confirm the content with the latest delivery specifications when you use the product.

► Assembly Instruction(2) Straight Cable Jack

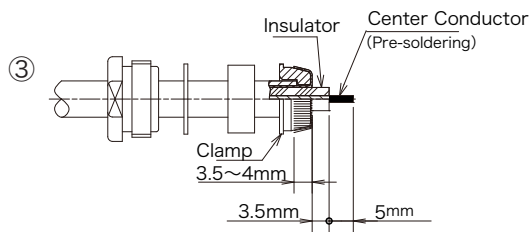
Parts Configuration



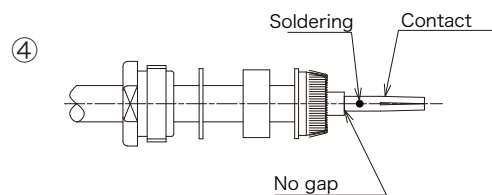
- ① L=The Cable length require for the single-ended cable assembly.
 $L=L1-12$



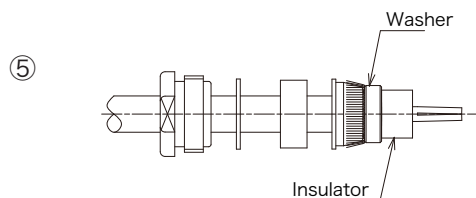
- ② Insert the nut, washer and gasket into the cable.
 Cut the sheath 15mm from the end of the cable and insert the clamp.
 Please be careful to not damage the outer conductor .



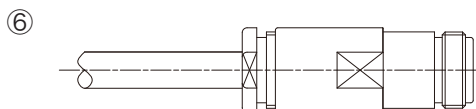
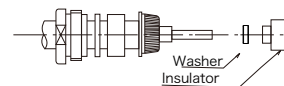
- ③ Pick the outer conductor and turn down to the clamp. Cut the outer conductor along the clamp.
 Cut the insulator and center conductor as fig.3.
 Please be careful to not damage the center conductor.



- ④ Solder up the contact with the center conductor.
 Please be careful to not deform the insulator by heat.
 When the solder is stick out, please shave the extra solder.
 No gap between contact and insulator of the cable.



- ⑤ Insert the ring and insulator as fig. 5.
 ● In case of the insulator which has directivity, insert the insulator as below direction and fit the thinner side of the insulator into the inside diameter of the washer.

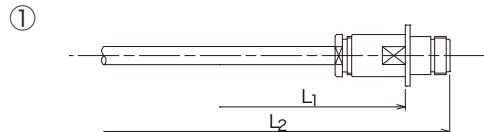
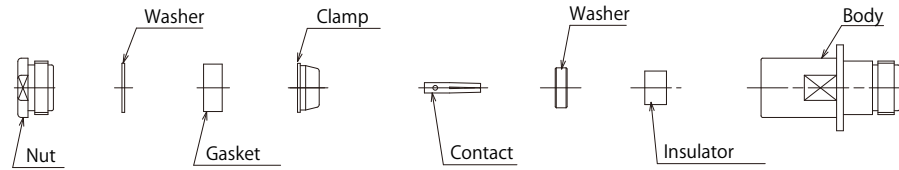


- ⑥ Insert the above assembly into the body and screw up by wrench.

Applicable Cable	Recommended Tightening Torque
3C-2V, 3D-2V, RG-58/U,	196 ~ 392N · cm(20 ~ 40kgf · cm)
5D-2V	490 ~ 686N · cm(50 ~ 70kgf · cm)
RG-8/U, RG-9/U	343 ~ 392N · cm(35 ~ 40kgf · cm)

▶ Assembly Instruction(3) Straight Panel Jack

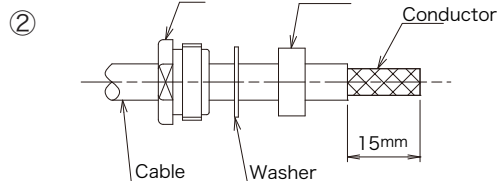
Parts Configuration



- ① L=The Cable length require for the single-ended cable assembly.

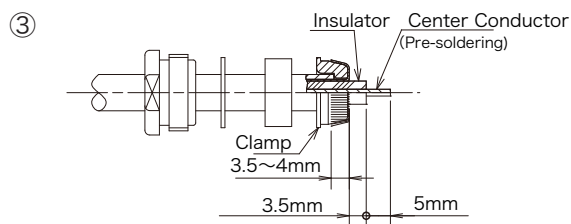
$$L=L_1-6.7$$

$$L=L_2-1.2$$



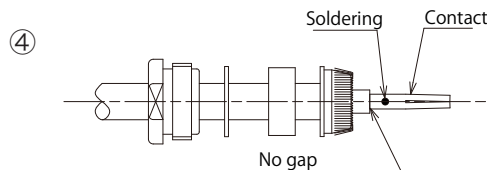
- ② Insert the nut, washer and gasket into the cable. Cut the sheath 15mm from the end of the cable and insert the clamp.

Please be careful to not damage the outer conductor.



- ③ Pick the outer conductor and turn down to the clamp. Cut the outer conductor along the clamp. Cut the insulator and center conductor as fig.3.

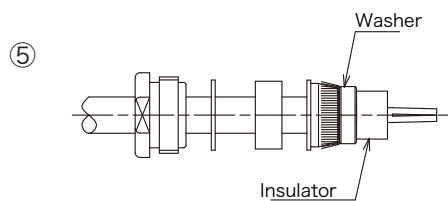
Please be careful to not damage the center conductor.



- ④ Solder up the contact with the center conductor. Please be careful to not deform the insulator by heat.

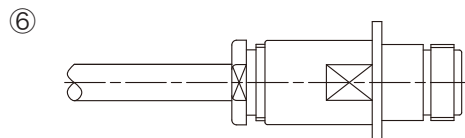
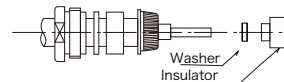
When the solder is stick out, please shave the extra solder.

No gap between contact and insulator of the cable.



- ⑤ Insert the ring and insulator as fig. 5.

● In case of the insulator which has directivity, insert the insulator as below direction and fit the thinner side of the insulator into the inside diameter of the washer.



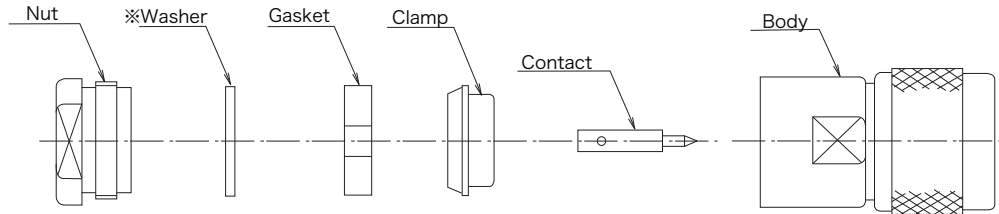
- ⑥ Insert the above assembly into the body and screw up by wrench.

Recommended Tightening Torque

$$: 196 \sim 392 \text{ N} \cdot \text{cm} (20 \sim 40 \text{ kgf} \cdot \text{cm})$$

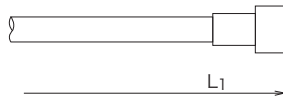
▶ Assembly Instruction(4) MIL Clamp Straigh Cable Plug

Parts Configuration

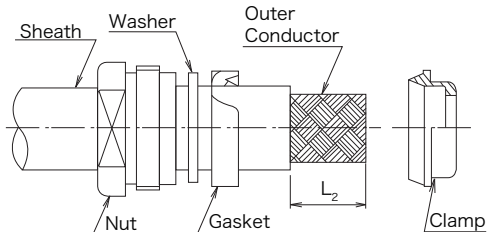


※ As for N-P-8-1-CF, N-P-8-1-Ni-CF, UG-21D/U-CF and N-P-8DFB-1-CF washer is not attached. The washer is not inserted into the cable.

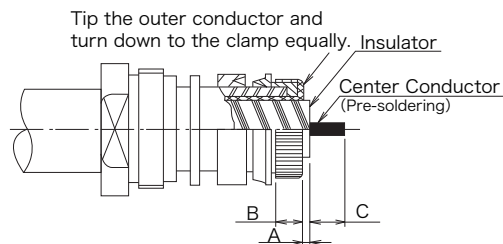
①



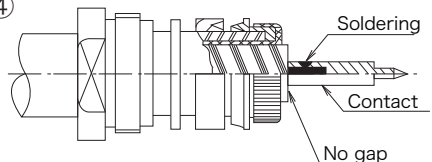
②



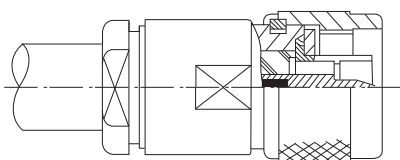
③



④



⑤



- ① The cable length require for the single-ended cable assembly as following table.

Part Number	L(mm)	L ₂ (mm)
N-P-8-1-CF	L ₁ -11.4	10
N-P-8-1-Ni-CF		
UG-21D/U-CF		
N-P-10-CF	L ₁ -21.5	13
N-P-10-Ni-CF		
N-P-10DFB-1-CF		
N-P-8DFB-1-CF	L ₁ -14.2	13

- ② Insert the nut, washer and gasket into the cable. Cut the sheath from the end of the cable and insert the clamp.

Please be careful to not damage the outer conductor.

- ③ Pick the outer conductor and turn down to the clamp. Cut the outer conductor along the clamp. Cut the insulator and center conductor as fig.3. Please be careful to not damage the center conductor.

Part Number	A(mm)	B(mm)	C(mm)
N-P-8-1-CF N-P-8-1-Ni-CF UG-21D/U-CF	1.0	3.5 ~ 4.0	5
N-P-10-CF N-P-10-Ni-CF N-P-10DFB-1-CF	1.8	4.0 ~ 4.5	
N-P-8DFB-1-CF	1.8	3.5 ~ 4.0	4.5

- ④ Solder up the contact with the center conductor. Please be careful to not deform the insulator by heat.

When the solder is stick out, please shave the extra solder.

No gap between contact and insulator of the cable.

- ⑤ Insert the above assembly into the body and screw up by wrench.

Applicable Cable	Recommended Tightening Torque
RG-8/U, RG-9/U	196 ~ 392N · cm(20 ~ 40kgf · cm)
8D-2V	294 ~ 392N · cm(30 ~ 40kgf · cm)
8D-FB	294N · cm(30kgf · cm)
10C-2V, 10D-2V	980N · cm(100kgf · cm)
10D-FB	294N · cm(30kgf · cm)

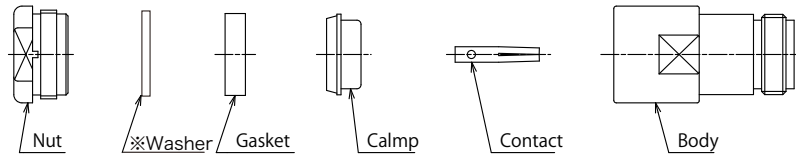
© Please acknowledge that the specification etc. of this catalog might change by the improvement etc. without notice.

Moreover, the characteristic and the specification of the published product are the reference values.

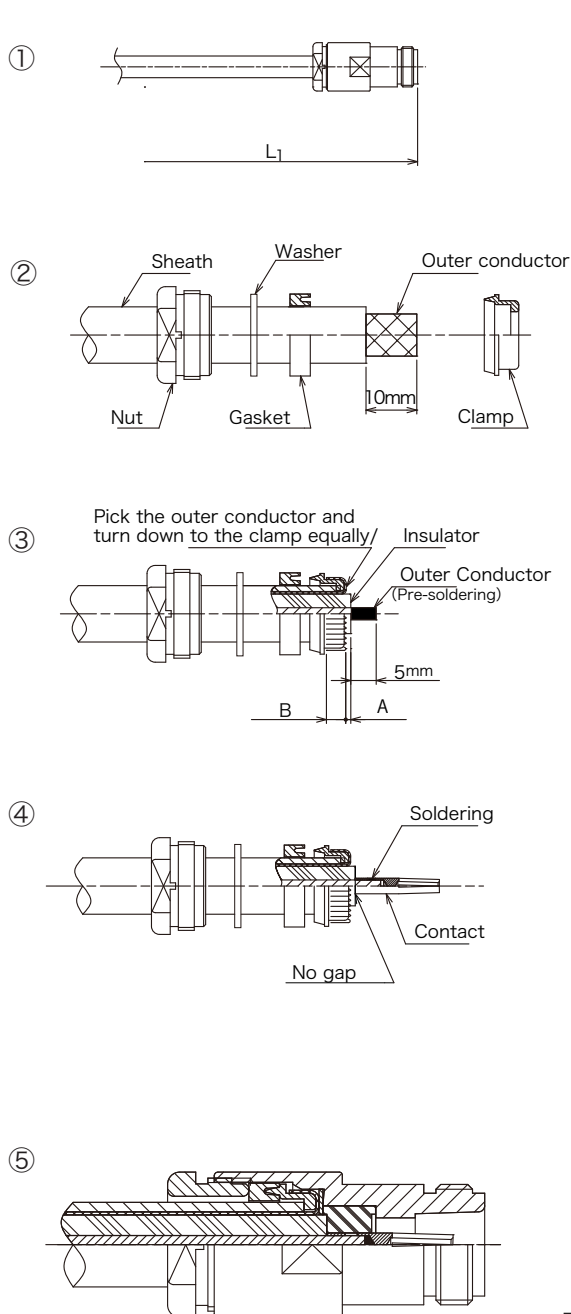
Please confirm the content with the latest delivery specifications when you use the product.

▶ Assembly Instruction(5) MIL Clamp Straight Cable Jack

Parts Configuration



※ As for N-J-8-1-CF, N-J-8-1-Ni-CF and UG-23D/U-CF,
the washer is not attached. The washer is not inserted into the cable.



- ① The cable length require for the single-ended cable assembly as following table.

Part Number	L(mm)
N-J-8-1-CF	L ₁ - 13.2
N-J-8-1-Ni-CF	
UG-23D/U-CF	L ₁ - 13.8
N-J-10-CF	L ₁ - 23.4
N-J-10-Ni-CF	
N-J-10DFB-1-CF	

- ② Insert the nut, washer and gasket into the cable. Cut the sheath 10mm from the end of the cable and insert the clamp. Please be careful to not damage the outer conductor.

- ③ Pick the outer conductor and turn down to the clamp. Cut the outer conductor along the clamp. Cut the insulator and center conductor as fig.3. Please be careful to not damage the center conductor.

Part Number	A(mm)	B(mm)
N-J-8-1-CF N-J-8-1-Ni-CF UG-23D/U-CF	1.0	3.5 ~ 4.0
N-J-10-CF N-J-10-Ni-CF N-J-10DFB-1-CF	1.8	4.0 ~ 4.5

- ④ Solder up the contact with the center conductor. Please be careful to not deform the insulator by heat. When the solder is stick out, please shave the extra solder. No gap between contact and insulator of the cable.

- ⑤ Insert the above assembly into the body and screw up by wrench.

Applicable Cable	Recommended Tightening Torque
8D-2V, RG-8/U, RG-9/U	294 ~ 392N · cm(30 ~ 40kgf · cm)
10C-2V, 10D-2V	980N · cm(100kgf · cm)
10D-FB	294N · cm(30kgf · cm)

© Please acknowledge that the specification etc. of this catalog might change by the improvement etc. without notice.
Moreover, the characteristic and the specification of the published product are the reference values.
Please confirm the content with the latest delivery specifications when you use the product.