

# Cable Assembly



## Cable Assembly

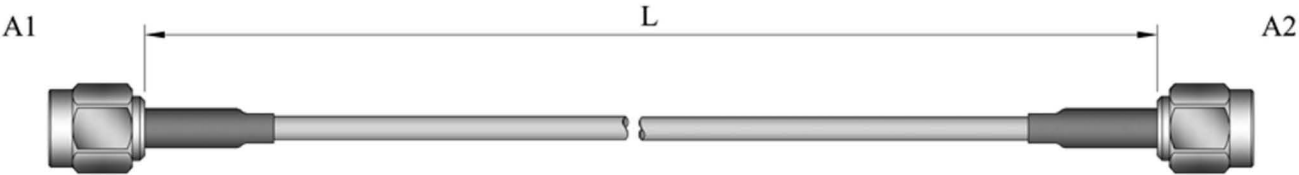
To provide excellent performance for signal transmission, a broad array of cable assembly machines are added to meet any customized demand for any cable assemblies. Standard RG8/U, 58C/U, 59B/U, 174/U, 316/U and many other specific cable are available within the appropriate connector series, as well as custom design assistance for cellular, mobile and network communications.

## Specification for RF cable assemblies

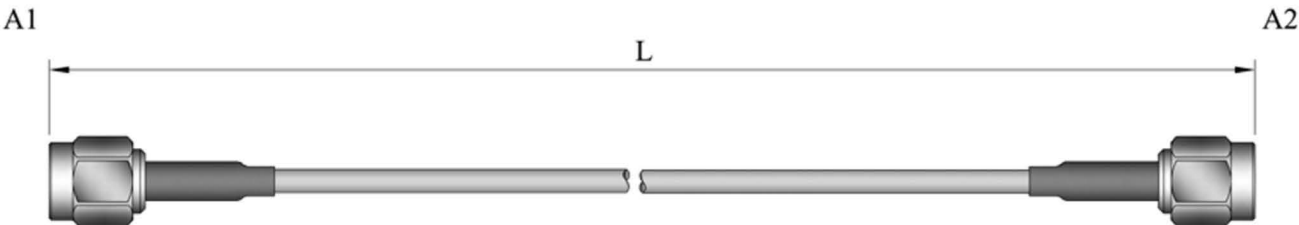
**A: Select cable type (See next page)**

**B: Decide Length**

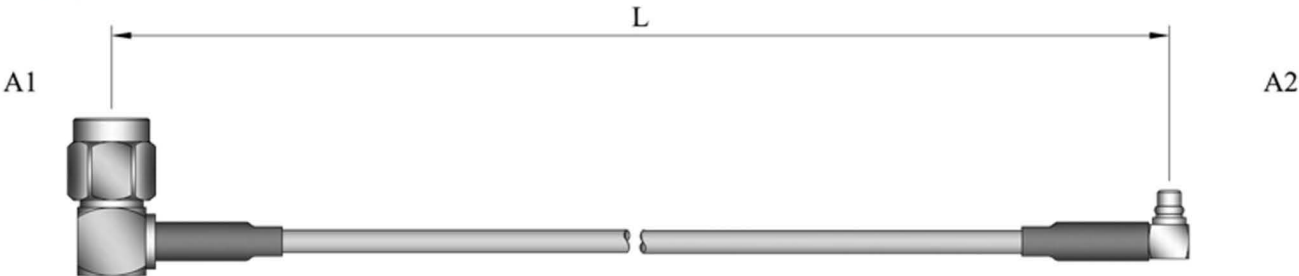
(a)Excluded connector



(b)Included connector



(c)Pin to pin



**C: Select the type on each end:**

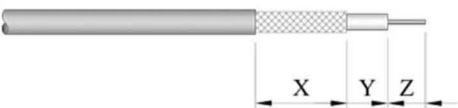
(a)Connector



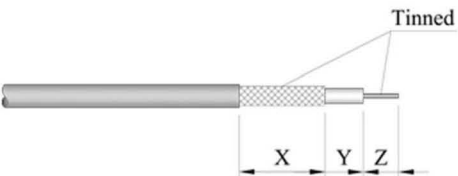
(b)Bare end



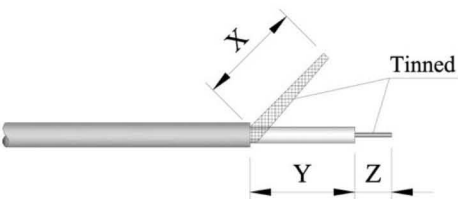
(c)Stripper



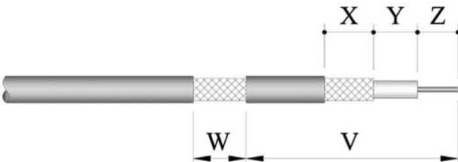
(d)Stripper with tin



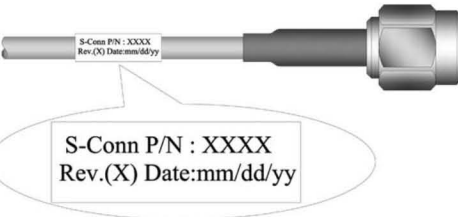
(e)Combing the braided with tin



(f)Open window



(g)With Marking tube



**D: Other request: please contact our sales.**

Tolerances

Length (mm)	100-500	>500-1,000	>1,000-1,500	>1,500-2,500	>2,500-4,000	>4,000-6,000	>6,000-8,000	> 8,000-10,000	>10,000-20,000	>20,000-50,000
Tolerances	+5 -0	+10 -0	+15 -0	+25 -0	+40 -0	+60 -0	+100 -0	+300 -0	+600 -0	+1000 -0

Coaxial Cable

1. 高週波同軸電纜 Radio frequency coaxial cable

3 C - 2 V C S

S: 中心導體為絞線構成 Strand inner conductor.  
CS: 中心導體為銅包鋼線 Copper-clad steel wire inner conductor.

V: 外部導體(一層編織) Single braided outer conductor  
W: 外部導體(二層編織) Double braided outer conductor

2: 聚乙烯充實絕緣 Solid PE dielectric core

C: 特性阻抗75 Characteristic impedance 75  
D: 特性阻抗50 Characteristic impedance 50

3: 絕緣體概略外徑 Approx. diameter of dielectric core

Type Designation

2. RG型電纜 RG type coaxial cable

R G - 8/U

一般性規格 Universal specification

編號 Number assigned

管理機構 Means goverment

高週波 Radio frequency

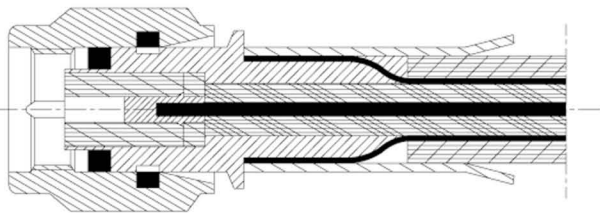
Coaxial Cable Table

CABLE TYPE	INNER CONDUCTOR			DIELECTRIC CORE		JACKET		IMPEDANCE
	NO./MM DETAILS	DIAMETER		INCH	M/M	INCH	M/M	
		INCH	M/M					
0.81	7/0.05	.0059	.15	.016	.41	.032	1	50
1.13	7/0.08	.0094	.24	.027	.68	.044	1.13	50
1.32	7/0.08	.0094	.24	.027	.68	.052	1.32	50
1.32D	7/0.08	.0094	.24	.027	.68	.052	1.32	50
1.37	7/0.102	.0122	.31	.036	.92	.054	1.37	50
1.37-75	7/0.064	.0079	.20	.039	.98	.054	1.37	75
1.5C-2V	1/0.26	.0100	.26	.063	1.60	.144	3.66	75
1.5D-2V	7/0.18	.0213	.54	.065	1.64	.120	3.04	50
2.5C-2V	1/0.4	.0157	.40	.094	2.40	.157	4.00	75
2.5D-2V	1/0.8	.0315	.80	.106	2.70	.169	4.30	50
3C-2V	1/0.5	.0190	.48	.122	3.10	.212	5.38	75
5C-2V	1/0.8	.0310	.79	.193	4.90	.291	7.39	75
7C-2V	7/0.4	.0470	1.19	.287	7.29	.409	10.39	75
8D-2V	7/0.8	.0945	2.40	.307	7.80	.437	11.10	50
10C-2V	7/0.5	.0590	1.50	.370	9.40	.512	13.00	75
Rg142/U	1/0.939	.0370	.95	.116	2.95	.195	4.95	50
RG-174/U	7/0.16	.0190	.48	.060	1.52	.101	2.57	50
RG-178B/U	7/0.1	.0120	.30	.033	.84	.070	1.78	50
RG-179/U	7/0.102	.0040	.10	.062	1.58	.100	2.54	50
RG-188A/U	7/0.18	.0210	.53	.059	1.50	.102	2.59	50
RG-196/U	7/0.102	.0122	.31	.033	.84	.071	1.80	50
RG-213/U	7/0.752	.0890	2.26	.285	7.24	.405	10.29	50
RG-214/U	7/0.752	.0890	2.26	.285	7.24	.425	10.80	50
RG-223/U	1/0.89	.0350	.89	.116	2.95	.209	5.30	50
RG-316/U	7/0.17	.0067	.17	.060	1.52	.098	2.49	50
RG-316D	7/0.17	.0067	.17	.060	1.52	.114	2.90	50
RG-393	7/0.79	.0941	2.39	.285	7.24	.390	9.91	50
RG-400	19/0.203	.0384	.98	.116	2.95	.195	4.95	50
RG-402	1/0.92	.0362	.92	.118	2.99	.163	4.14	50
RG-405	1/0.51	.0201	.51	.064	1.63	.104	2.64	50
RG-6/U	1/0.93	.0370	.93	.180	4.57	.275	6.99	75
RG-8/U	7/0.724	.1080	2.74	.285	7.24	.405	10.29	50
RG-8/X	19x29	.0560	1.42	.155	3.94	.242	6.15	50
RG-58/U	1/0.813	.0320	.813	.116	2.95	.195	4.95	50
RG-58A/U	19/0.18	.0370	.94	.116	2.95	.195	4.95	50
RG-58C/U	19/0.18	.0370	.94	.116	2.95	.195	4.95	50
RG-58LOW LOSS	7/0.32	.0320	.813	.110	2.8	.195	4.95	50
RG-59/U	1/0.635	.0250	.635	.146	3.71	.242	6.15	73
RG-59/U-20AWG	1/0.813	.0320	.813	.146	3.71	.241	6.12	75
BELDEN 734A	1/0.81	.0320	.81	.148	3.76	.235	5.97	75
BELDEN 735A	1/0.41	.0159	.41	.077	1.96	.129	3.28	75
BELDEN 1505A	1/0.81	.0320	.81	.145	3.68	.233	5.92	75
BELDEN 1694A	1/1.02	.0400	1.02	.180	4.57	.274	6.96	75
BELDEN 1855A	1/0.58	.0227	.58	.102	2.59	.159	4.04	75
BELDEN 1865A	1/0.53	.0210	.53	.094	2.39	.150	3.81	75
BELDEN 8281	1/0.79	.0310	.79	.198	5.03	.305	7.75	75
BELDEN 9913	1/2.74	.1080	2.74	.286	7.26	.405	10.29	50
BELDEN H155	1/1.15	.0453	1.15	.154	3.90	.213	5.40	50
BELDEN H1000	1/2.62	.1031	2.62	.281	7.15	.406	10.30	50
LMR 100A	1/0.46	.1080	.46	.060	1.52	.110	2.79	50
LMR 195	1/0.94	.0370	.94	.110	2.79	.195	4.95	50
LMR 200	1/1.12	.0440	1.12	.116	2.95	.195	4.95	50
LMR 240	1/1.42	.0560	1.42	.150	3.81	.240	6.10	50
LMR 300	1/1.78	.0700	1.78	.190	4.83	.300	7.62	50
LMR 400	1/2.74	.1080	2.74	.285	7.24	.405	10.29	50
LMR 500	1/3.61	.1420	3.61	.370	9.40	.500	12.70	50
LMR 600	1/4.47	.1760	4.47	.445	11.56	.590	14.99	50



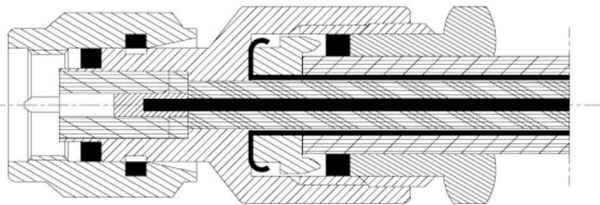
Cable Entry type

Crimp Type



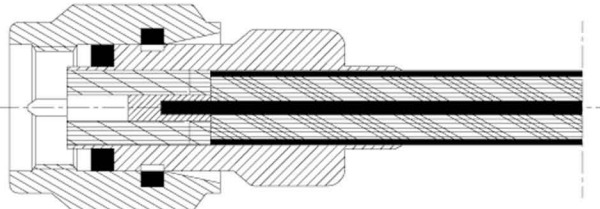
**Soldered or Crimped Center Contacts**  
The center contact is soldered or crimped, the cable braid is crimped to the connector body. Captivated or loose center pin is seated inside insulator. The crimping technique enables economic assembling of high reliability.

Clamp Type

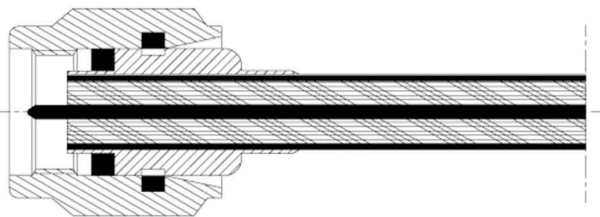


**Soldered Center Contact**  
Clamp type cable entry is recommended for weather-exposed applications. The cable jacket is secured by a rubber gasket and the cable screen by an axially tightened pressing ring.

Semi-Rigid Cable Entry




**Soldered, with center contact and insulator**  
Center contact and body of the connector are soldered onto the inner and outer conductor of the cable.



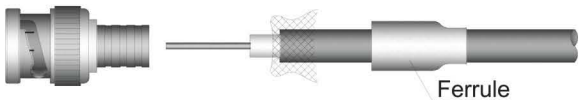
**Soldered, without center contact and insulator**  
Center contact and insulator are formed direct by the cable. The body is soldered to the copper jacket. This design features a very low reflection coefficient, low cost and ease of assembly.

Appendix A

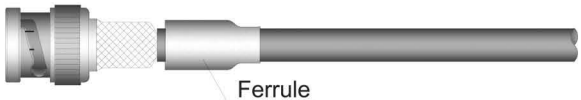
# Guide Cable Assembly Instruction A




Step 1. Cutting & Stripping. (Refer to S-Conn's recommended stripping dimensions on drawing.)




Step 2. Sliding the ferrule and combing the braided wire backward.



Step 3. Inserting the conductor into the body and combing the braided wire forward on the mandril.



Step 4. Sliding the ferrule over braided and crimping it with a right hand tool as shown.




Step 5. Testing the electrical functions.

## Guide Cable Assembly Instruction B

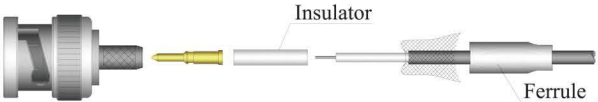
Cutting & Stripping. (Refer to S-Conn's recommended stripping dimensions on drawing.)

Step 1.




Sliding the ferrule and combing the braided wire backward.

Step 2.




Sliding the plastic tube over the dielectric and crimping or soldering the center pin with the conductor.

Step 3.



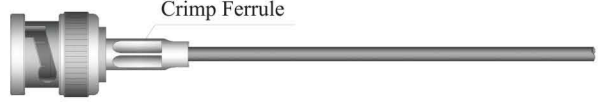
Inserting the center pin into the body up to lock position and combing the braided wire forward over the mandril.

Step 4.




Sliding the ferrule over braided and crimping it with a right hand tool as shown.

Step 5.




Testing the electrical functions.


Step 6.




# Guide Cable Assembly Instruction C



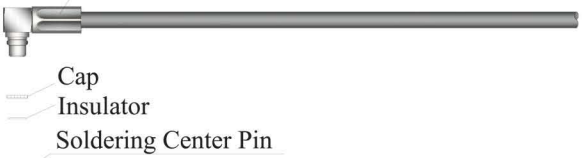
Step 1. Cutting & Stripping. (Refer to S-Conn's recommended stripping dimensions on drawing.)




Step 2. Sliding the ferrule and combing the braided wire backward.




Step 3. Inserting the conductor into the body and combing the braided wire forward over the mandril.



Step 4. Sliding the ferrule over braided wire and crimping it with the right hand tool as shown.



Step 5. Soldering the conductor with center pin, covering a separator and cap, then pressed.




Step 6. Testing the electrical functions.

## Guide Cable Assembly Instruction D


Cutting & Stripping. (Refer to S-Conn's recommended stripping dimensions on drawing.)

Step 1.



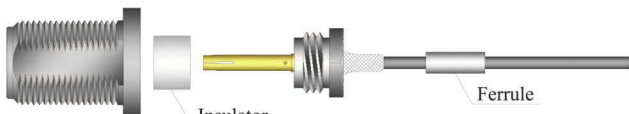
Combing the braided wire and inserting the cable into the body.

Step 2.



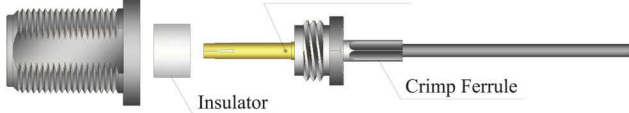
Inserting the cable into the body straightforward, then combing the braided wire over the mandril, the sliding the ferrule over it.

Step 3.




Crimping the ferrule with a right hand tool and Soldering at the ventilating hole.

Step 4.




Sliding the Insulator over the center pin.

Step 5.




Mating with the main body and testing the electrical functions.

Step 6.

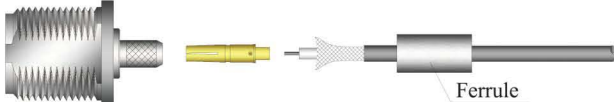




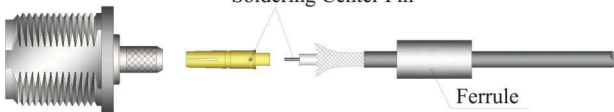
Guide Cable Assembly Instruction E




Step 1. Cutting & Stripping.  
(Refer to S-Conn's recommended stripping dimensions on drawing.)




Step 2. Sliding the ferrule and combing the braided wire backward.




Step 3. Soldering the center pin with the conductor of cable.



Step 4. Inserting the center pin into the body and combing the braided wire forward on the mandril.




Step 5. Sliding the ferrule over braided and crimp it with a recommended hand tool.

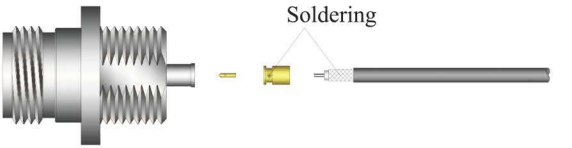


Step 6. Testing the electrical functions.

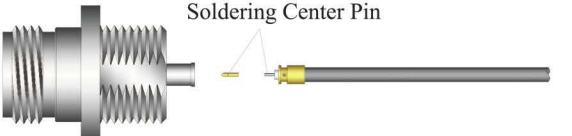
Guide Cable Assembly Instruction G



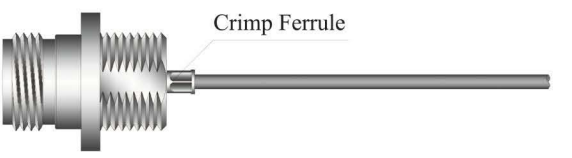
Step 1. Cutting & Stripping.  
(Refer to S-Conn's recommended stripping dimensions on drawing.)




Step 2. Sliding the internal bush over braided wire and soldering it together.



Step 3. Soldering the center pin with the conductor of cable.



Step 4. Inserting the center pin with cable into the body and crimped with a recommended hand tool.




Step 5. Testing the electrical or mechanical functions per request.

Guide Cable Assembly Instruction F

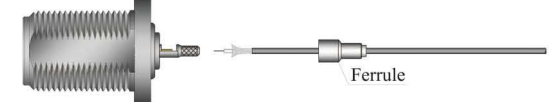
Cutting & Stripping.  
(Refer to S-Conn's recommended stripping dimensions on drawing.)

Step 1.



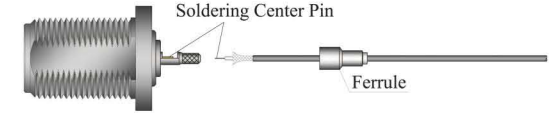
Sliding the ferrule and combing the braided wire backward.

Step 2.




Inserting the cable into the body and soldering the center pin with the conductor of cable.

Step 3.



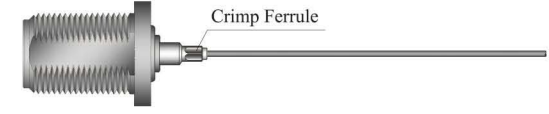
Combing the braided wire forward on the mandril.

Step 4.




Sliding the ferrule over the braided wire and crimped with a recommended hand tool.

Step 5.



Testing the electrical functions.


Step 6.



Guide Cable Assembly Instruction H


Cutting & Stripping.  
(Refer to S-Conn's recommended stripping dimensions on drawing.)

Step 1.



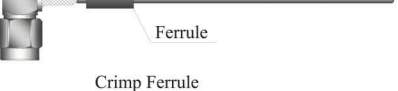
Sliding the ferrule and combing the braided wire backward.

Step 2.




Inserting the cable into the body and combing the braided wire forward.

Step 3.




Sliding the ferrule over the braided wire and crimped with a recommended hand tool.

Step 4.




Soldering the center pin with the conductor of cable.

Step 5.




Placing the insulator and end cap.

Step 6.



Testing the electrical functions.

Step 7.



Guide Cable Assembly Instruction I

Cutting & Stripping.  
(Refer to S-Conn's  
recommended  
stripping dimensions  
on drawing.)

Step 1.

Soldering Braided Wire

Step 2.

Inner bushing sliding  
over the braided  
wire for soldering.

Insulator

Step 3.

Inner isolator sliding  
over the dielectric/conductor.

Soldering Center Pin

Step 4.

Inserting the  
conductor into the  
center pin for  
soldering.

Crimp Ferrule

Step 5.

Inserting the center  
pin with cable into  
the body for  
crimping with a right  
hand tool.

Step 6.

Testing the electrical  
functions.

Guide Cable Assembly Instruction K

Step 1.

Cutting & Stripping (Refer to  
S-Conn's recommended  
stripped dimensions on drawing)

Step 2.

Inserting the cable into the inner  
barrel and rear nut

Solder Center Pin

Nut

Solder Braided Wire

Nut

Step 3.

Soldering the center pin and  
braided wire on inner barrel

Nut

Step 4.

Inserting into the body

Step 5.

Tightening the rear nut

Step 6.

Testing the electrical or mechanical  
functions per request

Guide Cable Assembly Instruction J

Cutting & Stripping.  
(Refer to S-Conn's  
recommended stripping  
dimensions on drawing.)

Step 1.

Sliding the rear nut and  
combing the braided wire  
backward.

Step 2.

Hex Nut

Step 3.

Inserting the cable into the  
body and soldering the center  
pin with the conductor of cable.

Solder Center Pin

Hex Nut

Step 4.

Combing the braided wire  
forward on the mandril and  
tightening the rear nut.

Step 5.

Testing the electrical functions.

Guide Cable Assembly Instruction L

Step 1.

Cutting & Stripping (Refer to  
S-Conn's recommended  
stripped dimensions on  
drawing)

Step 2.

Inserting the cable into  
the nut, washer, gasket, clamp

Step 3.

Comb out braid and fold out

Step 4.

Soldering the center pin

Soldering Center Pin

Step 5.


Inserting the cable and parts  
into connector body, and  
tightening the rear nut

Step 6.

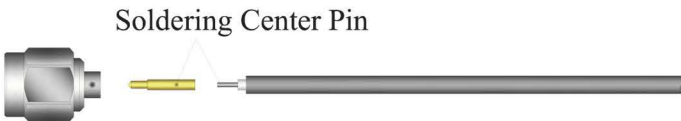
Testing the electrical or  
mechanical functions per  
request



Guide Cable Assembly Instruction M




Step 1. Cutting & Stripping.  
(Refer to S-Conn's recommended stripping dimensions on drawing.)




Soldering Center Pin

Step 2. Soldering the center pin with the conductor of cable.




Soldering

Step 3. Inserting the center pin with cable into the body. Soldering along the junction.




Step 4. Testing the electrical functions.


Guide Cable Assembly Instruction Crimp O




Step 1. Cutting & Stripping.  
(Refer to S-Conn's recommended stripping dimensions on drawing.)



Step 2. Combing the braided wire backward.



Step 3. Pushing and screw the connector onto the cable in a clockwise direction until it stops.




Step 4. Testing the electrical or mechanical functions per request.

Guide Cable Assembly Instruction N

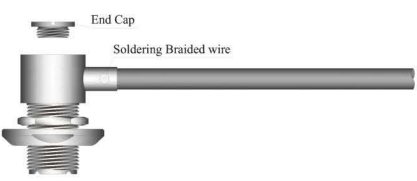
Cutting & Stripping.  
(Refer to S-Conn's recommended stripping dimensions on drawing.)

Step 1.



Inserting the cable into the body and soldering the braided wire at the side hole.

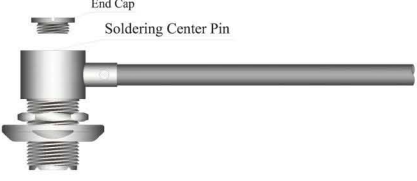
Step 2.



End Cap  
Soldering Braided wire

Soldering the center pin.


Step 3.



End Cap  
Soldering Center Pin

Tightening the end cap.


Step 4.



End Cap

Testing the electrical or mechanical functions per request.


Step 5.



Guide Cable Assembly Instruction P


Cutting & Stripping.  
(Refer to S-Conn's recommended stripping dimensions on drawing.)

Step 1.




Sliding the shell onto the cable, then screw the main body onto the cable and solder it as shown.

Step 2.



Soldering the center pin with the conductor and braided wire at the side holes.


Step 3.



Soldering Center Pin  
Soldering Braided Wire

Sliding the shell forward and screw in place on the main body.

Step 4.



Testing the electrical or mechanical functions per request.

Step 5.

