75 ohm BNC Solder Plug

CANARE solder type 75 ohm BNC plug. Straight Type, BCP-H Series.

BCP-H3B

Key Features and Benefits

- The tubular (ferrule) section is silver plated to make soldering easier.
- Cable stripper TS100E can be used. (Excluding BCP-H31F, BCP-H51F)
- Return Loss: 26.4 dB @ 1 GHz

Note1: Be sure to use Canare Crimp Tool

Note2: Instruction manual

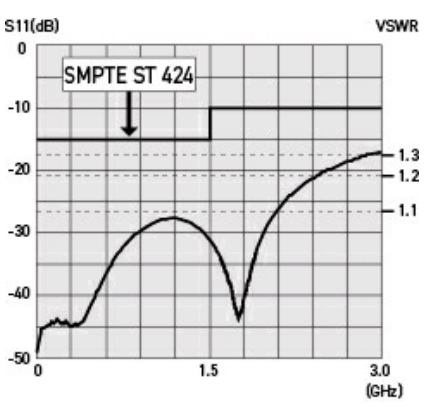
For inquiries about this products

Tech Data | Downloads

BCP-H Series

Model	Suitable Cable		boots	Standard package
	Canare	Others		
BCP-H3B	L-3C2V, L-3C2VS, 3C-2V, V*-3C L-3CFB, LS-3CFB, V*-3CFB	-	-	20 pcs
BCP-H31F	L-3CFW, V*-3CFW	-	-	
BCP-H45HW	L-4.5CHWS	1694F	-	
BCP-H5B	L-5C2V, L-5C2VS, 5C-2V, V*-5C L-5CFB, LS-5CFB, 5C-FB, S-5C-FB, V*-5CFB	-	-	
BCP-H51F	L-5CFW, V*-5CFW, L-5CFB, LS-5CFB 5C-FB, S-5C-FB, V*-5CFB	-	-	
BCP-H5/1	L-3C2V, L-3C2VS, 3C-2V, V*-3C L-3CFB, LS-3CFB, V*-3CFB L-5C2V, L-5C2VS, 5C-2V, V*-5C L-5CFB, LS-5CFB, 5C-FB, S-5C-FB, V*-5CFB	-	-	

< Return loss >



Return loss for BCP-H3B

Technical Note

Voltage Standing - wave Ratio (VSWR) and Return Loss

Terminating the receiving end of a limited length coaxial cable using a resistance value not equal to its characteristic impedance creates a reflected wave that returns back down the cable to the sending end. The result is interference developing between the travelling wave and the return wave which results in a standing wave that causes voltage levels to fluctuate. The degree to which terminating resistance matches the characteristic impedance is indicated using the VSWR or voltage standing-wave ratio standard shown in Fig. 1. Going hand in hand with the VSWR ratio is the return loss factor which measures the size of the reflected wave current in relation to the travelling wave current. (See Fig. 2)

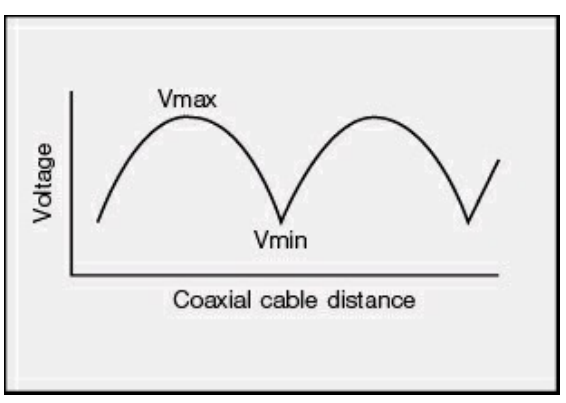


Fig. 1 Voltage Distribution Over Coaxial Cable

VSWR	Return Loss (dB)
2	9.54
1.5	13.98
1.2	20.83
1.1	26.44
1.05	32.26
1.02	40.09
1.01	46.06

Fig. 2 VSWR to Return Loss Conversion Table

PRODUCT SPECIFICATIONS

SAB305
(BCP-H51F) Ver. 1.1
CANARE ELECTRIC CO., LTD

1. Scope This product specification covers the performance of CANARE solder type 75 Ω BNC plug.

2. General specifications

(1) Product name Solder type 75 Ω BNC plug
(2) Model name BCP-H51F
(3) Applicable standard JIS*[1] C 5412
(4) Nominal impedance 75 Ω unbalanced
(5) Construction As shown in the drawing (BL305).
(6) Weight Approx 24.5g
(7) Designation Stamp model name (BCP-H51F) and brand name (CANARE) on coupling sleeve.
(8) Packaging 100pcs/package (262 x 163 x 55mm), 20pcs/package (150 x 50 x 44mm)
(9) Applicable cable 5C-FB (JCS*[2] 381), S-5C-FB (JIS C 3502),
L-5CFW, L-5CFB, L-5CFBA, LS-5CFB, L-5CF (CANARE)

*[1]Japanese Industrial Standard
*[2]The Japanese Electric Wire & Cable Maker's Association Standard

3. Ratings

(1) Operating temperature -20 ℃ ～ +90 ℃
(2) Operating humidity ～ 90%

4. Characteristics

4.1 Electrical characteristics As shown in **Table 1**

Table 1

Items	Specified values	Test methods
Insulation resistance	1000MΩ or more	Measurement shall be made between the contacts, after an electrification time of 1min with a d.c. voltage of 500V.
Voltage proof	Without any damage such as electric breakdown etc.	1500V a.c. shall be applied for 1 min between the contacts. Trip current :0.5mA.
Contact resistance	Between center contacts: 6mΩ or less Between external contacts: 3mΩ or less	Measurement shall be made between the contacts, with engaging a plug and a receptacle. (1kHz:1mA a.c.)
Voltage standing wave ratio (V.S.W.R)	1.1 or less (DC ～ 1GHz) 1.2 or less (DC ～ 2GHz)	An applied cable shall be attached to the plug, then it shall be terminated with 75 Ω. The measurement frequency up to 2GHz.

4.2 Mechanical characteristics As shown in **Table 2**

Table 2

Items	Specified values	Test methods
Intermatability	To be engaged without any abnormality.	The plug and an applicable receptacle shall be engaged.
Fixing force of contact with lock mechanism	No displacement more than 0.5 mm.	Tensile strength of 19.6N shall be applied to the axial direction.
Strength of coupling mechanism	Coupling sleeve shall not be disconnected or no deformation shall be made.	The plug and a receptacle shall be engaged, after which tensile strength of 250N and rotation strength of 2.5N•m shall be applied.
Cable connecting force	245N or more for L-5CFW 196N or more for 5C-FB	An applied cable shall be attached to the plug, after which tensile strength shall be applied.
Mechanical operation (repeated)	Contact resistance: 10mΩ or less	The endurance test consists of repeated engagement and separation of connector pairs. The number of operations shall be 5000 cycles.

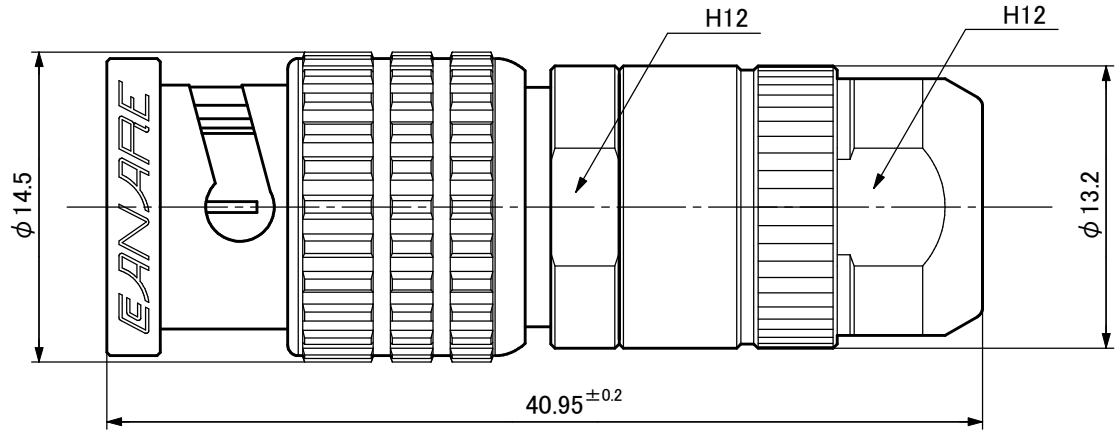
4.3 Environmental characteristics As shown in **Table 3**

Table 3

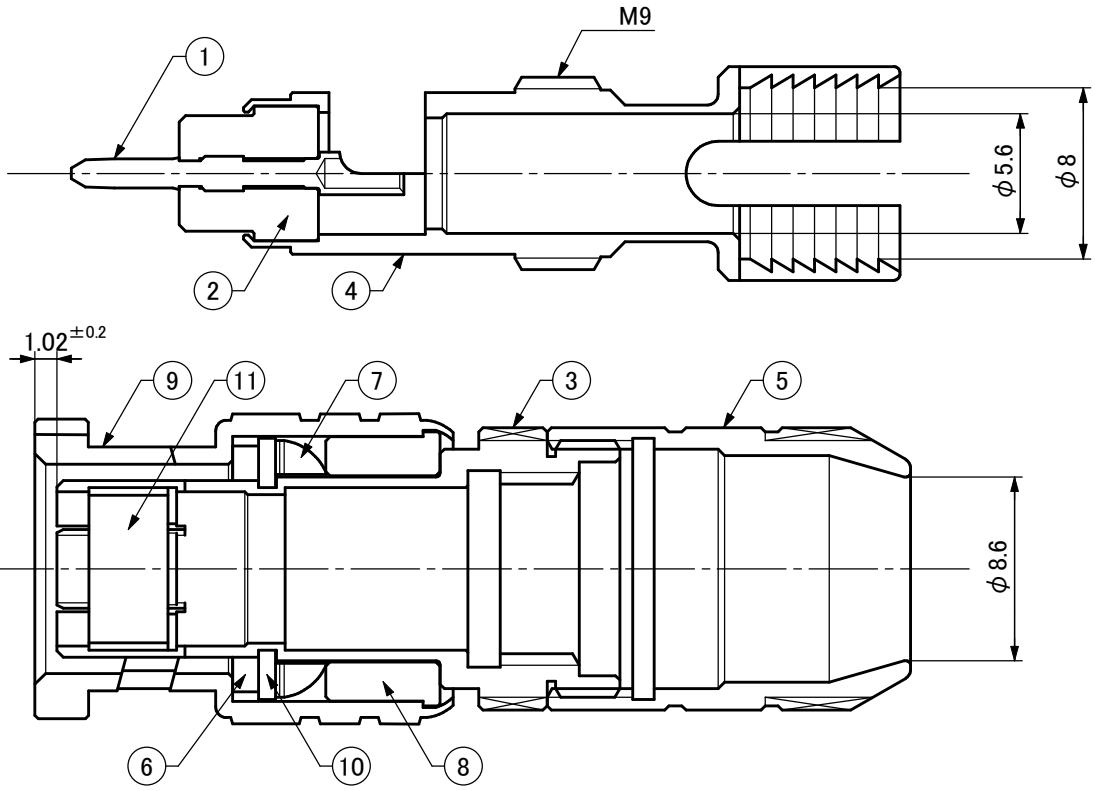
Items	Specified values	Test methods
Corrosion resistance (Salt mist)	Contact resistance: 50mΩ or less Appearance: By visual inspection, without noticeable rust.	The connector shall be subjected continuously to a fine mist of salt solution at a temperature of 35±2 ℃ for 48h (Salt solution concentration: 5±1% by weight). Then it shall be subjected to standard atmospheric conditions. After removing the salt deposits by water, the appearance of the connector shall be checked.

5. Measurement conditions Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are as follows: Ambient temperature (15 ℃ to 35 ℃), Relative humidity (25% to 75%), Air pressure (86kPa to 106kPa). If there is any doubt about the results, measurements shall be made within the following limits: Ambient temperature (20±1 ℃), Relative humidity (63% to 67%), Air pressure (86kPa to 106kPa).

External Appearance



Construction



No.	Name of Parts	Pc(s).	Material	Finish
11	Inner Spring	1	Beryllium Copper	Nickel Plating
10	Half-cut Washer	2	Brass	Nickel Plating
9	Coupling Sleeve	1	Brass	Nickel Plating
8	Washer	1	Brass	Nickel Plating
7	Spring Washer	2	Beryllium Copper	Nickel Plating
6	Gasket	1	Silicone Rubber	—
5	Nut	1	Brass	Nickel Plating
4	Ferrule	1	Brass	Silver Plating
3	Body	1	Brass	Nickel Plating
2	Insulator	1	PTFE	—
1	Male Center Contact	1	Brass	Gold Plating

Title	PJTN	Unit	Sc.	Tol.	Date Ver. 1.0	Model	No.
SOLDER TYPE 75Ω BNC PLUG		mm	2√2:1	±0.1	2003-10-15	BCP-H51F	BL305

PRODUCT SPECIFICATIONS

SABE432
(BCP−H45HW) Ver. 1.0
CANARE ELECTRIC CO., LTD

1. Scope This product specification covers the performance of CANARE solder type 75 Ω BNC plug.

2. General specifications

(1) Product name Solder type 75 Ω BNC plug
(2) Model name BCP−H45HW
(3) Applicable standard JIS*[1] C 5412
(4) Nominal impedance 75 Ω unbalanced
(5) Construction As shown in the drawing (BL432).
(6) Weight Approx 25.0g
(7) Designation Stamp model name (BCP−H45HW) and brand name (CANARE) on coupling sleeve.
(8) Packaging 100pcs/package (262 x 163 x 55mm), 20pcs/package (150 x 50 x 44mm)
(9) Applicable cable L−4.5CHWS (CANARE),1694F(BELDEN)

*[1]Japanese Industrial Standard
*[2]The Japanese Electric Wire & Cable Maker's Association Standard

3. Ratings

(1) Operating temperature −20 ℃ ～ +90 ℃
(2) Operating humidity ～ 90%

4. Characteristics

4.1 Electrical characteristics As shown in **Table 1**

Table 1

Items	Specified values	Test methods
Insulation resistance	1000MΩ or more	Measurement shall be made between the contacts, after an electrification time of 1min with a d.c. voltage of 500V.
Voltage proof	Without any damage such as electric breakdown etc.	1500V a.c. shall be applied for 1 min between the contacts. Trip current :0.5mA.
Contact resistance	Between center contacts: 6mΩ or less Between external contacts: 3mΩ or less	Measurement shall be made between the contacts, with engaging a plug and a receptacle. (1kHz:1mA a.c.)
Voltage standing wave ratio (V.S.W.R)	1.1 or less (DC ～ 1GHz) 1.2 or less (DC ～ 2GHz)	An applied cable shall be attached to the plug, then it shall be terminated with 75 Ω. The measurement frequency up to 2GHz.

4.2 Mechanical characteristics As shown in **Table 2**

Table 2

Items	Specified values	Test methods
Intermatability	To be engaged without any abnormality.	The plug and an applicable receptacle shall be engaged.
Fixing force of contact with lock mechanism	No displacement more than 0.5 mm.	Tensile strength of 19.6N shall be applied to the axial direction.
Strength of coupling mechanism	Coupling sleeve shall not be disconnected or no deformation shall be made.	The plug and a receptacle shall be engaged, after which tensile strength of 250N and rotation strength of 2.5N･m shall be applied.
Cable connecting force	245N or more for L−4.5CHWS	An applied cable shall be attached to the plug, after which tensile strength shall be applied.
Mechanical operation (repeated)	Contact resistance: 10mΩ or less	The endurance test consists of repeated engagement and separation of connector pairs. The number of operations shall be 5000 cycles.

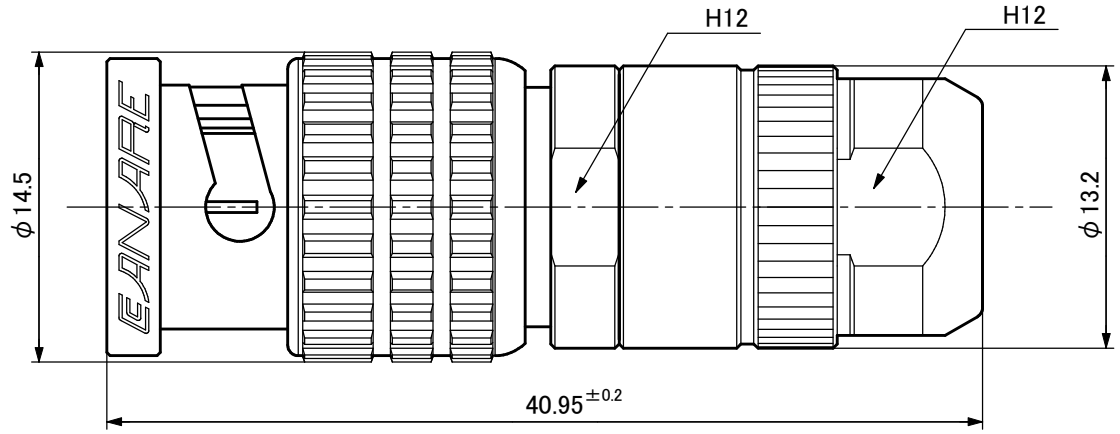
4.3 Environmental characteristics As shown in **Table 3**

Table 3

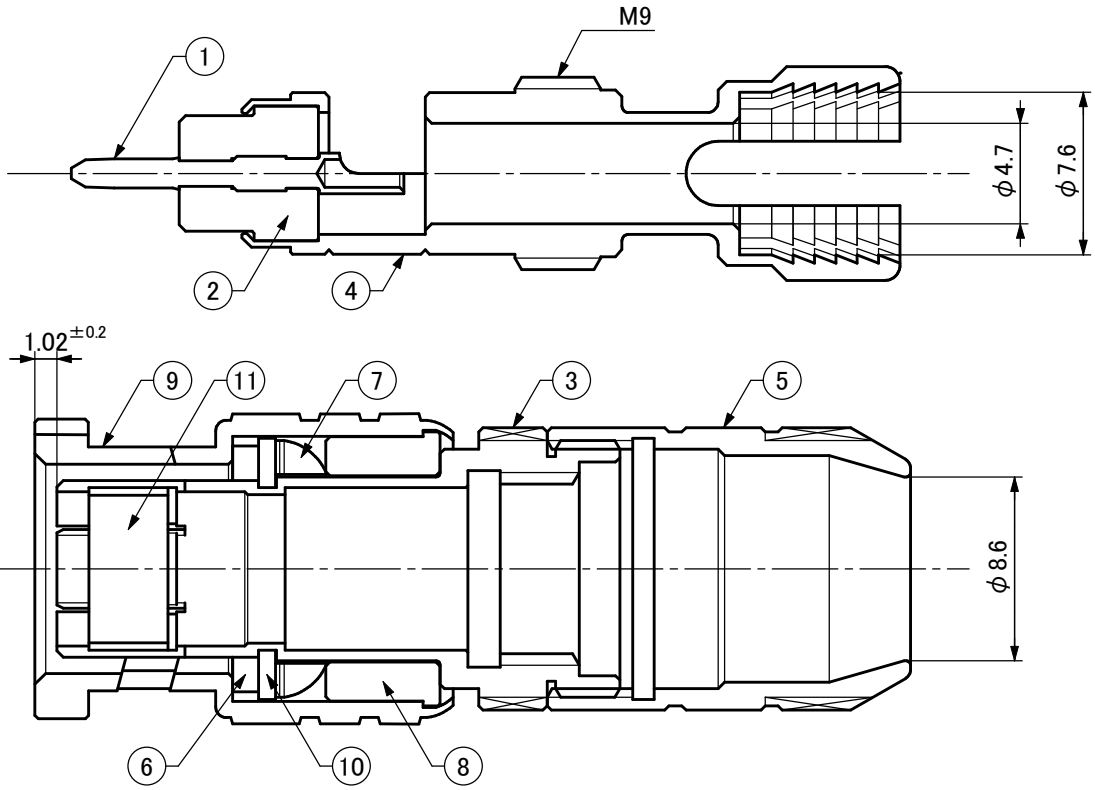
Items	Specified values	Test methods
Corrosion resistance (Salt mist)	Contact resistance: 50mΩ or less Appearance: By visual inspection, without noticeable rust.	The connector shall be subjected continuously to a fine mist of salt solution at a temperature of 35±2 ℃ for 48h (Salt solution concentration: 5±1% by weight). Then it shall be subjected to standard atmospheric conditions. After removing the salt deposits by water, the appearance of the connector shall be checked.

5. Measurement conditions Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are as follows: Ambient temperature (15 ℃ to 35 ℃), Relative humidity (25% to 75%), Air pressure (86kPa to 106kPa). If there is any doubt about the results, measurements shall be made within the following limits: Ambient temperature (20±1 ℃), Relative humidity (63% to 67%), Air pressure (86kPa to 106kPa).

External Appearance



Construction



No.	Name of Parts	Pc(s).	Material	Finish
11	Inner Spring	1	Beryllium Copper	Nickel Plating
10	Half-cut Washer	2	Brass	Nickel Plating
9	Coupling Sleeve	1	Brass	Nickel Plating
8	Washer	1	Brass	Nickel Plating
7	Spring Washer	2	Beryllium Copper	Nickel Plating
6	Gasket	1	Silicone Rubber	—
5	Nut	1	Brass	Nickel Plating
4	Ferrule	1	Brass	Silver Plating
3	Body	1	Brass	Nickel Plating
2	Insulator	1	PTFE	—
1	Male Center Contact	1	Brass	Gold Plating

Title	PJTN	Unit	Sc.	Tol.	Date	Ver. 1.0	Model	No.
SOLDER TYPE 75Ω BNC PLUG		mm	2√2:1	±0.1	2011-12-13		BCP-H45HW	BL432

PRODUCT SPECIFICATIONS

SAB306
(BCP-H31F) Ver. 1.0
CANARE ELECTRIC CO., LTD

1. Scope This product specification covers the performance of CANARE solder type 75 Ω BNC plug.

2. General specifications

(1) Product name Solder type 75 Ω BNC plug
(2) Model name BCP-H31F
(3) Applicable standard JIS* C 5412
(4) Nominal impedance 75 Ω unbalanced
(5) Construction As shown in the drawing (BL306).
(6) Weight Approx 22.8g
(7) Designation Stamp model name (BCP-H31F) and brand name (CANARE) on coupling sleeve.
(8) Packaging 100pcs/package (262 x 163 x 55mm), 20pcs/package (150 x 50 x 44mm)
(9) Applicable cable L-3CFW (CANARE)
*Japanese Industrial Standard

3. Ratings

(1) Operating temperature -20 ℃ ～ +90 ℃
(2) Operating humidity ～ 90%

4. Characteristics

4.1 Electrical characteristics As shown in **Table 1**

Table 1

Items	Specified values	Test methods
Insulation resistance	1000MΩ or more	Measurement shall be made between the contacts, after an electrification time of 1min with a d.c. voltage of 500V.
Voltage proof	Without any damage such as electric breakdown etc.	1500V a.c. shall be applied for 1 min between the contacts. Trip current :0.5mA.
Contact resistance	Between center contacts: 6mΩ or less Between external contacts: 3mΩ or less	Measurement shall be made between the contacts, with engaging a plug and a receptacle. (1kHz:1mA a.c.)
Voltage standing wave ratio (V.S.W.R)	1.1 or less (DC ～ 1GHz) 1.2 or less (DC ～ 2GHz)	An applied cable shall be attached to the plug, then it shall be terminated with 75 Ω. The measurement frequency up to 2GHz.

4.2 Mechanical characteristics As shown in **Table 2**

Table 2

Items	Specified values	Test methods
Intermatability	To be engaged without any abnormality.	The plug and an applicable receptacle shall be engaged.
Fixing force of contact with lock mechanism	No displacement more than 0.5 mm.	Tensile strength of 19.6N shall be applied to the axial direction.
Strength of coupling mechanism	Coupling sleeve shall not be disconnected or no deformation shall be made.	The plug and a receptacle shall be engaged, after which tensile strength of 250N and rotation strength of 2.5N•m shall be applied.
Cable connecting force	245N or more for L-3CFW	An applied cable shall be attached to the plug, after which tensile strength shall be applied.
Mechanical operation (repeated)	Contact resistance: 10mΩ or less	The endurance test consists of repeated engagement and separation of connector pairs. The number of operations shall be 5000 cycles.

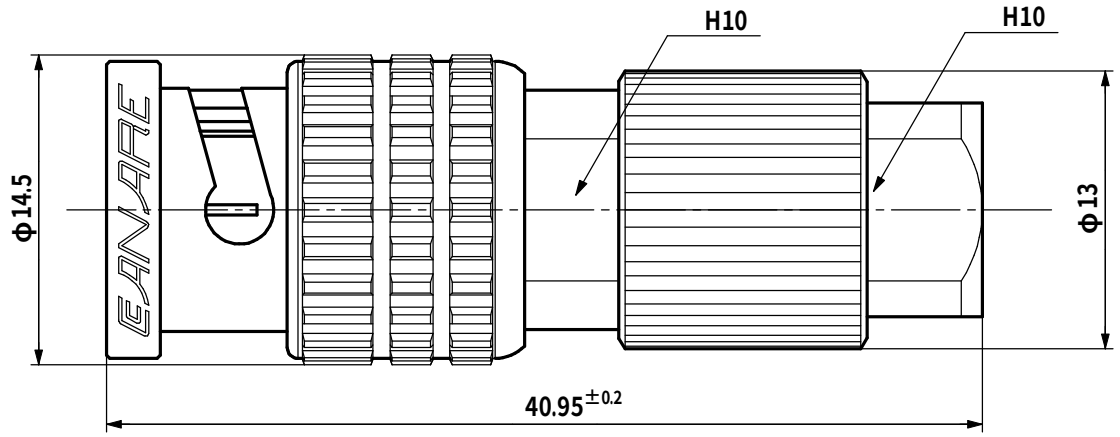
4.3 Environmental characteristics As shown in **Table 3**

Table 3

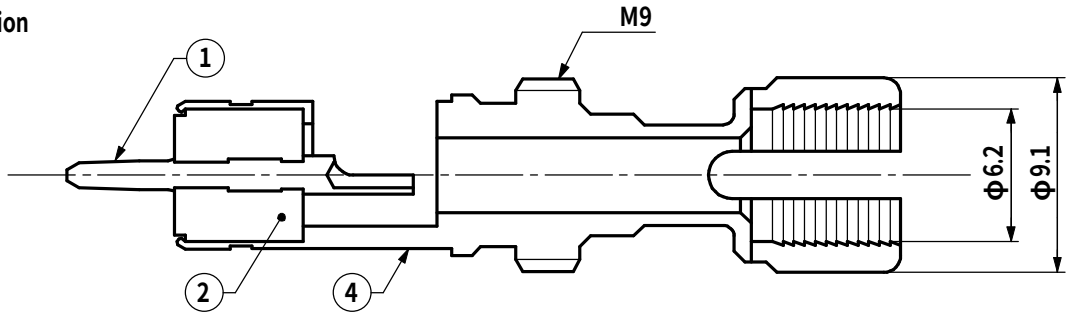
Items	Specified values	Test methods
Corrosion resistance (Salt mist)	Contact resistance: 50mΩ or less Appearance: By visual inspection, without noticeable rust.	The connector shall be subjected continuously to a fine mist of salt solution at a temperature of 35±2 ℃ for 48h (Salt solution concentration: 5±1% by weight). Then it shall be subjected to standard atmospheric conditions. After removing the salt deposits by water, the appearance of the connector shall be checked.

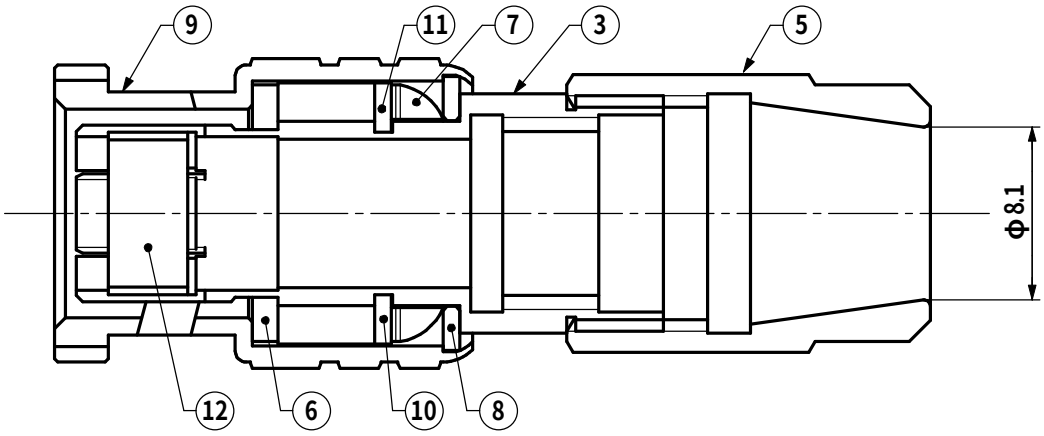
5. Measurement conditions Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are as follows: Ambient temperature (15 ℃ to 35 ℃), Relative humidity (25% to 75%), Air pressure (86kPa to 106kPa). If there is any doubt about the results, measurements shall be made within the following limits: Ambient temperature (20±1 ℃), Relative humidity (63% to 67%), Air pressure (86kPa to 106kPa).

External Appearance



Construction





No.	Name of Parts	Pc(s).	Material	Finish
12	Inner Spring	1	Beryllium Copper	Nickel Plating
11	Half-cut Washer	2	Brass	Nickel Plating
10	Bush	1	Poryacetal	—
9	Coupling Sleeve	1	Brass	Nickel Plating
8	Washer	1	Brass	Nickel Plating
7	Spring Washer	2	Beryllium Copper	Nickel Plating
6	Gasket	1	Silicone Rubber	—
5	Nut	1	Brass	Nickel Plating
4	Ferrule	1	Brass	Silver Plating
3	Body	1	Brass	Nickel Plating
2	Insulator	1	PTFE	—
1	Male Center Contact	1	Brass	Gold Plating

Title	PJTN	Unit	Sc.	Tol.	Date	Ver. 1.1	Model	No.
SOLDER TYPE 75Ω BNC PLUG		mm	2√2:1	±0.1	2004-05-25		BCP-H31F	BL306

PRODUCT SPECIFICATIONS

SAB015E
(BCP−H5B) Ver. 1.1
CANARE ELECTRIC CO., LTD

1. Scope This product specification covers the performance of CANARE solder type 75 Ω BNC plug.

2. General specifications

(1) Product name Solder type 75 Ω BNC plug
(2) Model name BCP−H5B
(3) Applicable standard Japanese Industrial Standards (JIS) C 5412
(4) Nominal impedance 75 Ω unbalanced
(5) Construction As shown in the drawing (BL015A).
(6) Weight Approx 21.6g
(7) Designation Stamp model name (BCP−H5B) and brand name (CANARE) on coupling sleeve.
(8) Packaging 100pcs/package (262 x 163 x 55mm), 20pcs/package (150 x 50 x 44mm)
(9) Applicable cable 5C-2V(JIS C 3501), 5C−FB (JCS* 381), S−5C−FB (JIS C 3502), L−5C2VS, L−5C2V, L−5CF, L−5CFB, LS−5CFB, L−5CFBA (CANARE)
*The Japanese Electric Wire & Cable Maker's Association Standard

3. Ratings

(1) Operating temperature −20 ℃ ～ +90 ℃
(2) Operating humidity ～ 90%

4. Characteristics

4.1 Electrical characteristics As shown in **Table 1**

Table 1

Items	Specified values	Test methods
Insulation resistance	1000MΩ or more	Measurement shall be made between the contacts, after an electrification time of 1min with a d.c. voltage of 500V.
Voltage proof	Without any damage such as electric breakdown etc.	1500V a.c. shall be applied for 1 min between the contacts. Trip current :0.5mA.
Contact resistance	Between center contacts: 6mΩ or less Between external contacts: 3mΩ or less	Measurement shall be made between the contacts, with engaging a plug and a receptacle. (1kHz:1mA a.c.)
Voltage standing wave ratio (V.S.W.R)	1.1 or less	An applied cable shall be attached to the plug, then it shall be terminated with 75 Ω. The measurement frequency up to 1GHz.

4.2 Mechanical characteristics As shown in **Table 2**

Table 2

Items	Specified values	Test methods
Intermatability	To be engaged without any abnormality. Torque for the bayonet: 0.058 ～ 0.113N･m	The plug and an applicable receptacle shall be engaged.
Fixing force of contact with lock mechanism	No displacement more than 0.5 mm.	Tensile strength of 19.6N shall be applied to the axial direction.
Strength of coupling mechanism	Coupling sleeve shall not be disconnected or no deformation shall be made.	The plug and a receptacle shall be engaged, after which tensile strength of 250N and rotation strength of 2.5N･m shall be applied.
Cable connecting force	245N or more for 5C−2V 196N or more for 5C−FB	An applied cable shall be attached to the plug, after which tensile strength shall be applied.
Mechanical operation (repeated)	Contact resistance: 10mΩ or less	The endurance test consists of repeated engagement and separation of connector pairs. The number of operations shall be 5000 cycles.

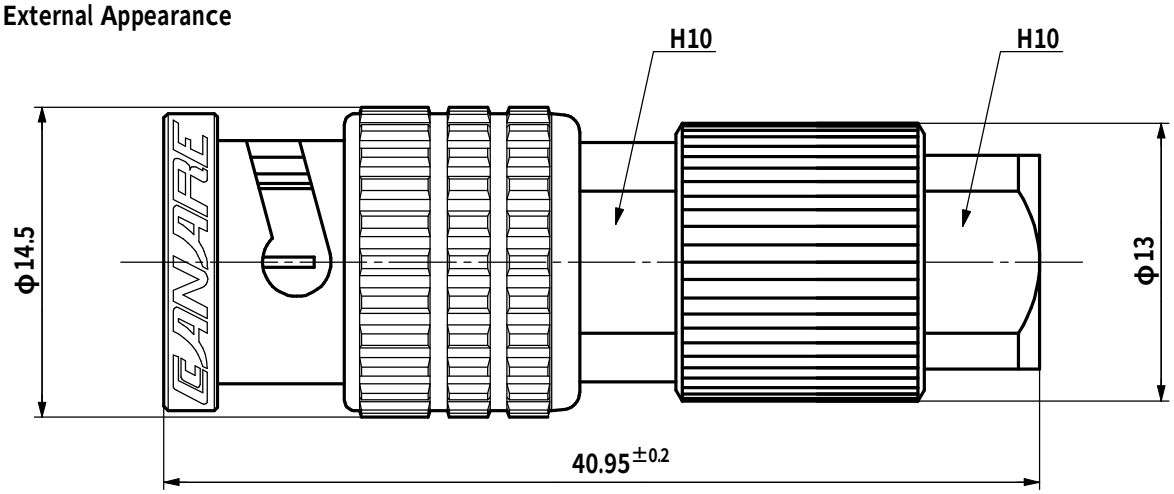
4.3 Environmental characteristics As shown in **Table 3**

Table 3

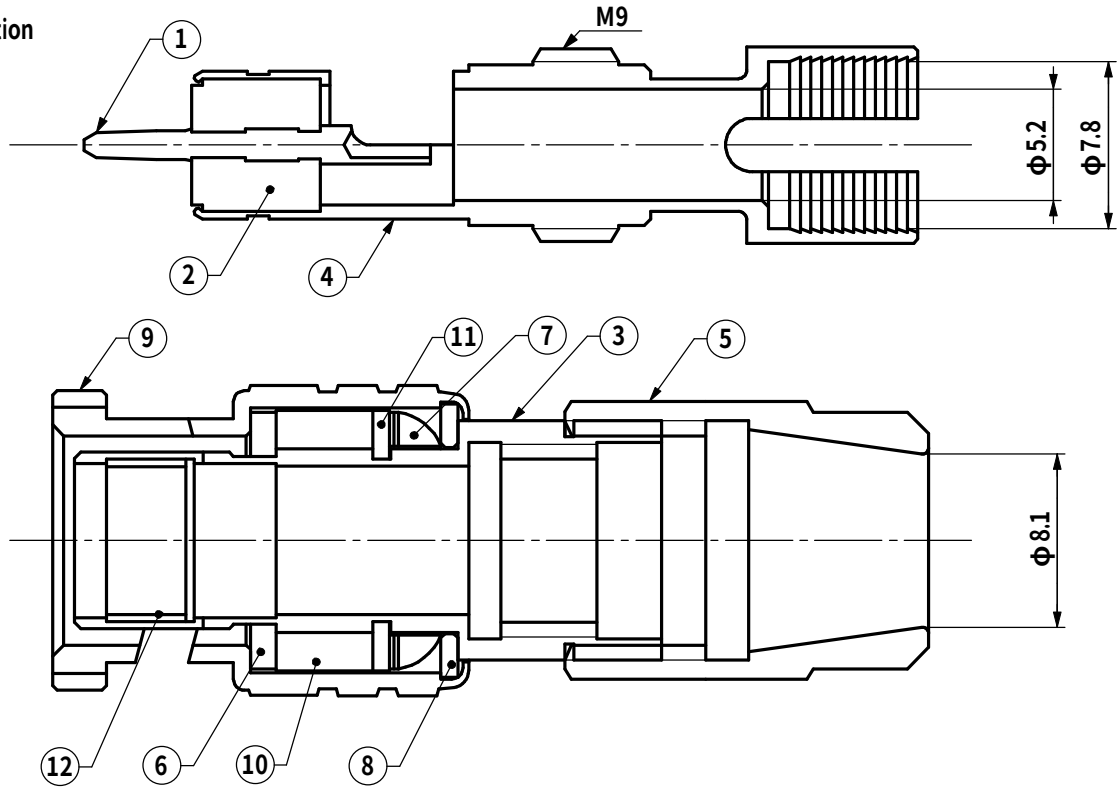
Items	Specified values	Test methods
Corrosion resistance (Salt mist)	Appearance: By visual inspection, without noticeable rust. Contact resistance: 50mΩ or less	The connector shall be subjected continuously to a fine mist of salt solution at a temperature of 35±2 ℃ for 48h (Salt solution concentration: 5±1% by weight). Then it shall be subjected to standard atmospheric conditions. After removing the salt deposits by water, the appearance of the connector shall be checked.

5. Measurement conditions Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are as follows: Ambient temperature (15 ℃ to 35 ℃), Relative humidity (25% to 75%), Air pressure (86kPa to 106kPa). If there is any doubt about the results, measurements shall be made within the following limits: Ambient temperature (20±1 ℃), Relative humidity (63% to 67%), Air pressure (86kPa to 106kPa).

External Appearance



Construction



No.	Name of Parts	Pc(s).	Material	Finish
12	Inner Spring	1	Beryllium Copper	Nickel Plating
11	Half-cut Washer	2	Brass	Nickel Plating
10	Bush	1	Polyacetal	—
9	Coupling Sleeve	1	Brass	Nickel Plating
8	Washer	1	Brass	Nickel Plating
7	Spring Washer	2	Beryllium Copper	Nickel Plating
6	Gasket	1	Silicone Rubber	—
5	Nut	1	Brass	Nickel Plating
4	Ferrule	1	Brass	Silver Plating
3	Body	1	Brass	Nickel Plating
2	Insulator	1	PTFE	—
1	Male Center Contact	1	Brass	Gold Plating

Title	PJTN	Unit	Sc.	Tol.	Date Ver. 1.0	Model	No.
SOLDER TYPE 75Ω BNC PLUG		mm	2√2:1	±0.1	1994-08-08	BCP-H5B	BL015A

CANARE

PRODUCT SPECIFICATIONS

(BCP-H5/1)

SAB0070A
Ver. 1.1
CANARE ELECTRIC CO., LTD

1. Scope This product specification covers the performance of CANARE solder type 75 Ω BNC plug.

2. General specifications

(1) Product name Solder type 75 Ω BNC plug
(2) Model name BCP-H5/1
(3) Applicable standard JIS*[1] C 5412
(4) Nominal impedance 75 Ω unbalanced
(5) Construction As shown in the drawing (BL070).
(6) Weight Approx 23.9g
(7) Designation Stamp model name (BCP-H5/1) and brand name (CANARE) on coupling sleeve.
(8) Packaging 100pcs/package (262 x 163 x 55mm), 20pcs/package (150 x 50 x 44mm)
(9) Applicable cable 3C-2V, 5C-2V(JIS C 3501), 5C-FB (JCS*[2] 381), S-5C-FB (JIS C 3502), L-3C2VS, L-3C2V, L-3CF, L-3CFB, LS-3CFB, L-5C2VS, L-5C2V, L-5CF, L-5CFB, LS-5CFB, L-5CFBA (CANARE)

*[1]Japanese Industrial Standard
*[2]The Japanese Electric Wire & Cable Maker's Association Standard

3. Ratings

(1) Operating temperature -20 ℃ ～ +90 ℃
(2) Operating humidity ～ 90%

4. Characteristics

4.1 Electrical characteristics As shown in **Table 1**

Table 1

Items	Specified values	Test methods
Insulation resistance	1000MΩ or more	Measurement shall be made between the contacts, after an electrification time of 1min with a d.c. voltage of 500V.
Voltage proof	Without any damage such as electric breakdown etc.	1500V a.c. shall be applied for 1 min between the contacts. Trip current :0.5mA.
Contact resistance	Between center contacts: 6mΩ or less Between external contacts: 3mΩ or less	Measurement shall be made between the contacts, with engaging a plug and a receptacle. (1kHz:1mA a.c.)
Voltage standing wave ratio (V.S.W.R)	1.1 or less	An applied cable shall be attached to the plug, then it shall be terminated with 75 Ω. The measurement frequency up to 1GHz.

4.2 Mechanical characteristics As shown in **Table 2**

Table 2

Items	Specified values	Test methods
Intermatability	To be engaged without any abnormality. T	The plug and an applicable receptacle shall be engaged.
Fixing force of contact with lock mechanism	No displacement more than 0.5 mm.	Tensile strength of 19.6N shall be applied to the axial direction.
Strength of coupling mechanism	Coupling sleeve shall not be disconnected or no deformation shall be made. 196N or more for 3C-2V, 5C-FB 245N or more for 5C-2V	The plug and a receptacle shall be engaged, after which tensile strength of 250N and rotation strength of 2.5N•m shall be applied.
Cable connecting force	Contact resistance: 10mΩ or less	An applied cable shall be attached to the plug, after which tensile strength shall be applied.
Mechanical operation (repeated)		The endurance test consists of repeated engagement and separation of connector pairs. The number of operations shall be 5000 cycles.

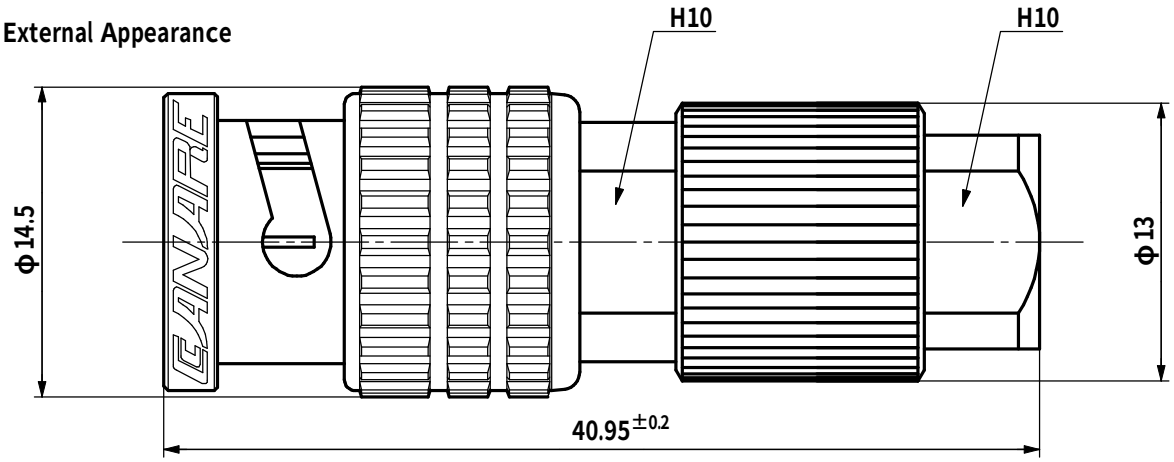
4.3 Environmental characteristics As shown in **Table 3**

Table 3

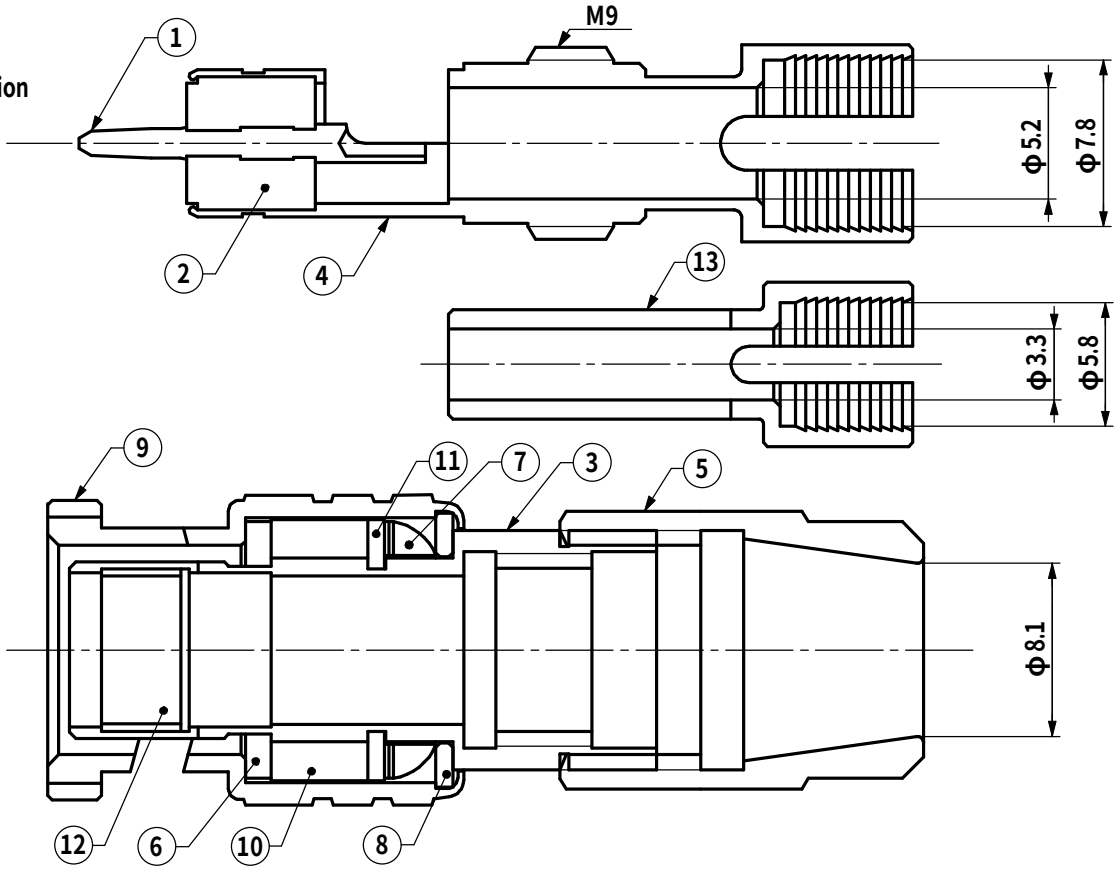
Items	Specified values	Test methods
Corrosion resistance (Salt mist)	Appearance: By visual inspection, without noticeable rust. Contact resistance: 50mΩ or less	The connector shall be subjected continuously to a fine mist of salt solution at a temperature of 35±2 ℃ for 48h (Salt solution concentration: 5±1% by weight). Then it shall be subjected to standard atmospheric conditions. After removing the salt deposits by water, the appearance of the connector shall be checked.

5. Measurement conditions Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are as follows: Ambient temperature (15 ℃ to 35 ℃), Relative humidity (25% to 75%), Air pressure (86kPa to 106kPa). If there is any doubt about the results, measurements shall be made within the following limits: Ambient temperature (20±1 ℃), Relative humidity (63% to 67%), Air pressure (86kPa to 106kPa).

External Appearance



Construction



13	Adapter	1	Brass	Nickel Plating
12	Inner Spring	1	Beryllium Copper	Nickel Plating
11	Half-cut Washer	2	Brass	Nickel Plating
10	Bush	1	Polyacetal	—
9	Coupling Sleeve	1	Brass	Nickel Plating
8	Washer	1	Brass	Nickel Plating
7	Spring Washer	2	Beryllium Copper	Nickel Plating
6	Gasket	1	Silicone Rubber	—
5	Nut	1	Brass	Nickel Plating
4	Ferrule	1	Brass	Silver Plating
3	Body	1	Brass	Nickel Plating
2	Insulator	1	PTFE	—
1	Male Center Contact	1	Brass	Gold Plating

No.	Name of Parts	Pc(s).	Material	Finish

Title	PJTN	Unit	Sc.	Tol.	Date	Ver. 1.0	Model	No.
SOLDER TYPE 75Ω BNC PLUG		mm	2√2:1	±0.1	1994-08-08		BCP-H5/1	BL070

PRODUCT SPECIFICATIONS

SAB014D
(BCP−H3B) Ver. 1.1
CANARE ELECTRIC CO., LTD

1. Scope This product specification covers the performance of CANARE solder type 75 Ω BNC plug.

2. General specifications

(1) Product name Solder type 75 Ω BNC plug
(2) Model name BCP−H3B
(3) Applicable standard JIS* C 5412
(4) Nominal impedance 75 Ω unbalanced
(5) Construction As shown in the drawing (BL014A).
(6) Weight Approx 24.1g
(7) Designation Stamp model name (BCP−H3B) and brand name (CANARE) on coupling sleeve.
(8) Packaging 100pcs/package (262 x 163 x 55mm), 20pcs/package (150 x 50 x 44mm)
(9) Applicable cable 3C−2V(JIS C 3501), L−3C2VS, L−3C2V, L−3CF, L−3CFB, LS−3CFB (CANARE)
*Japanese Industrial Standard

3. Ratings

(1) Operating temperature −20 ℃ ～ +90 ℃
(2) Operating humidity ～ 90%

4. Characteristics

4.1 Electrical characteristics As shown in **Table 1**

Table 1

Items	Specified values	Test methods
Insulation resistance	1000MΩ or more	Measurement shall be made between the contacts, after an electrification time of 1min with a d.c. voltage of 500V.
Voltage proof	Without any damage such as electric breakdown etc.	1500V a.c. shall be applied for 1 min between the contacts. Trip current :0.5mA.
Contact resistance	Between center contacts: 6mΩ or less Between external contacts: 3mΩ or less	Measurement shall be made between the contacts, with engaging a plug and a receptacle. (1kHz:1mA a.c.)
Voltage standing wave ratio (V.S.W.R)	1.1 or less	An applied cable shall be attached to the plug, then it shall be terminated with 75 Ω. The measurement frequency up to 1GHz.

4.2 Mechanical characteristics As shown in **Table 2**

Table 2

Items	Specified values	Test methods
Intermatability	To be engaged without any abnormality. Torque for the bayonet: 0.058 ～ 0.113N･m	The plug and an applicable receptacle shall be engaged.
Fixing force of contact with lock mechanism	No displacement more than 0.5 mm.	Tensile strength of 19.6N shall be applied to the axial direction.
Strength of coupling mechanism	Coupling sleeve shall not be disconnected or no deformation shall be made.	The plug and a receptacle shall be engaged, after which tensile strength of 250N and rotation strength of 2.5N･m shall be applied.
Cable connecting force	196N or more for 3C−2V	An applied cable shall be attached to the plug, after which tensile strength shall be applied.
Mechanical operation (repeated)	Contact resistance: 10mΩ or less	The endurance test consists of repeated engagement and separation of connector pairs. The number of operations shall be 5000 cycles.

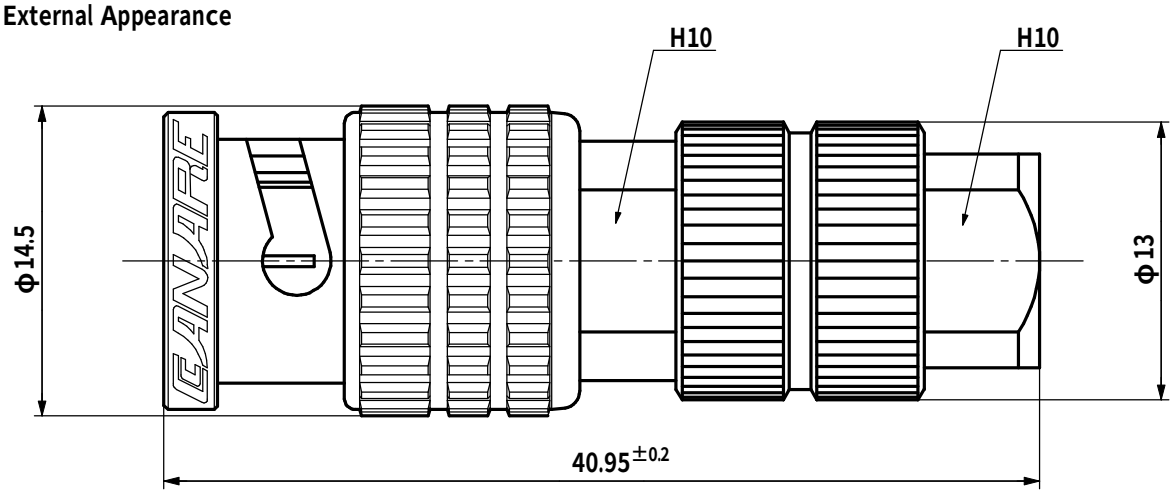
4.3 Environmental characteristics As shown in **Table 3**

Table 3

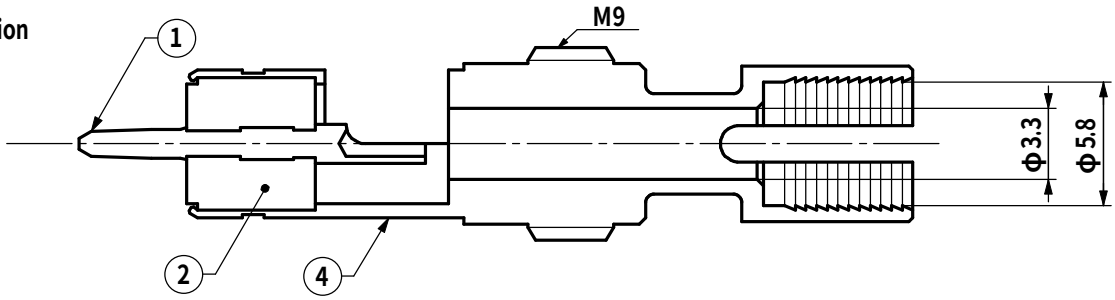
Items	Specified values	Test methods
Corrosion resistance (Salt mist)	Appearance: By visual inspection, without noticeable rust. Contact resistance: 50mΩ or less	The connector shall be subjected continuously to a fine mist of salt solution at a temperature of 35±2 ℃ for 48h (Salt solution concentration: 5±1% by weight). Then it shall be subjected to standard atmospheric conditions. After removing the salt deposits by water, the appearance of the connector shall be checked.

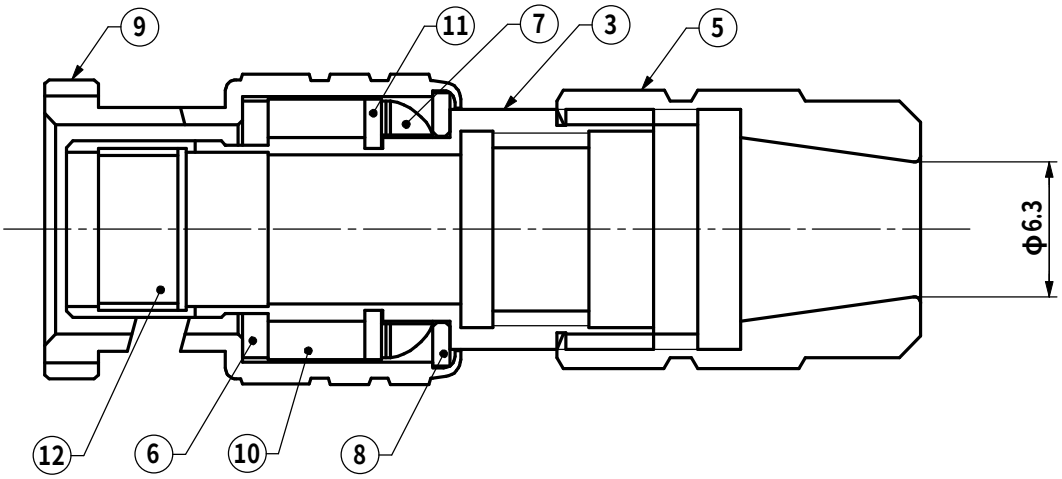
5. Measurement conditions Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are as follows: Ambient temperature (15 ℃ to 35 ℃), Relative humidity (25% to 75%), Air pressure (86kPa to 106kPa). If there is any doubt about the results, measurements shall be made within the following limits: Ambient temperature (20±1 ℃), Relative humidity (63% to 67%), Air pressure (86kPa to 106kPa).

External Appearance



Construction





No.	Name of Parts	Pc(s).	Material	Finish
12	Inner Spring	1	Beryllium Copper	Nickel Plating
11	Half-cut Washer	2	Brass	Nickel Plating
10	Bush	1	Poryacetal	—
9	Coupling Sleeve	1	Brass	Nickel Plating
8	Washer	1	Brass	Nickel Plating
7	Spring Washer	2	Beryllium Copper	Nickel Plating
6	Gasket	1	Silicone Rubber	—
5	Nut	1	Brass	Nickel Plating
4	Ferrule	1	Brass	Silver Plating
3	Body	1	Brass	Nickel Plating
2	Insulator	1	PTFE	—
1	Male Center Contact	1	Brass	Gold Plating

Title	PJTN	Unit	Sc.	Tol.	Date	Ver. 1.0	Model	No.
SOLDER TYPE 75Ω BNC PLUG		mm	2√2:1	±0.1	1994-08-08		BCP-H3B	BL014A

CANARE