

BNC 75Ω connector

BNC75 Series

■ Features

1. 50Ω-based BNC connector, 75Ω type

BNC type products are widely used as 50Ω connectors. Hirose's BNC75 is rated for 75Ω and can be mated with the other BNC connectors.

2. Easy on, easy-off bayonet lock system

Bayonet lock system that is easy to use and operate.

3. Applicable cable

Cable for this connector is coaxial with the diameter of approximately $\phi 1.5 - \phi 6$ (1.5C-QEV.CW etc.)

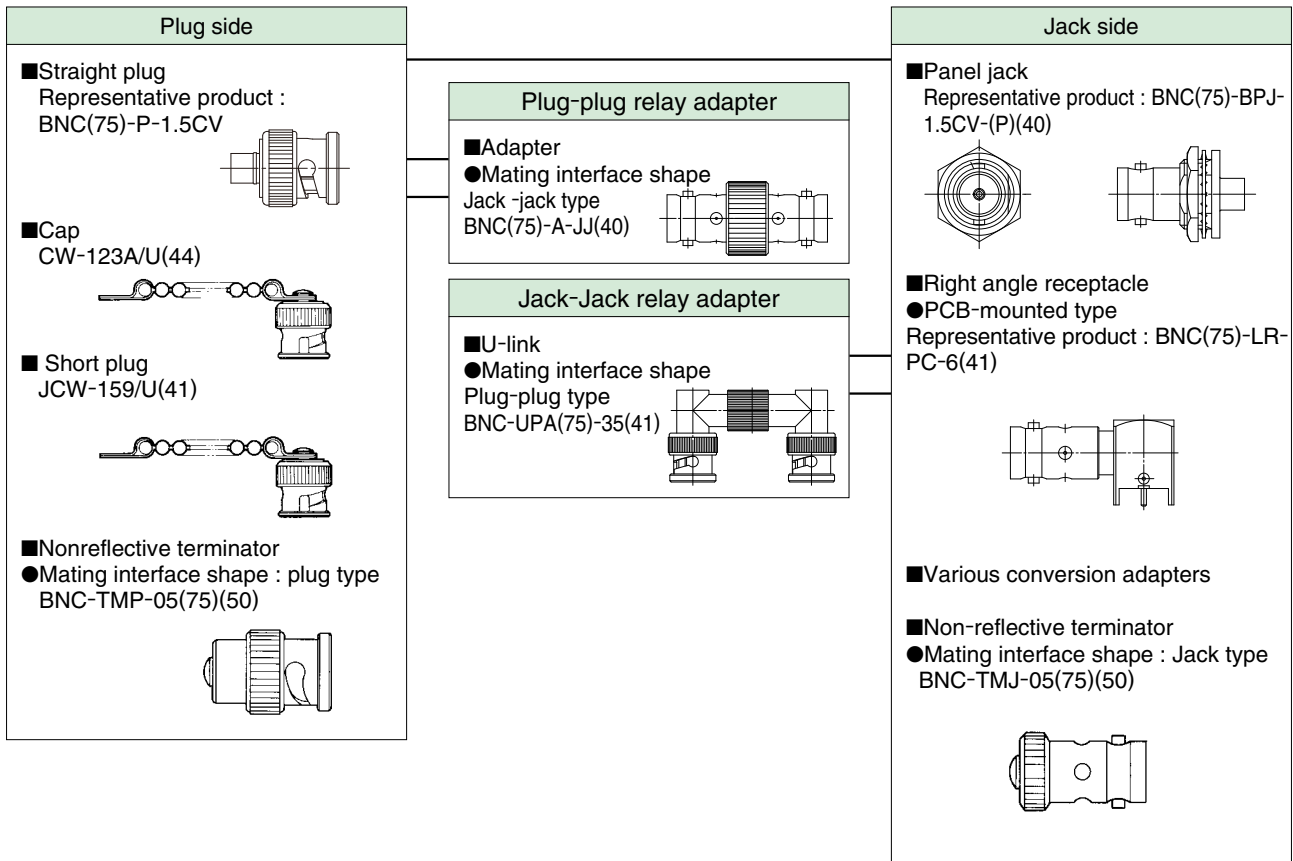
4. Reliable at high frequencies

There are product which corresponds to 12G (UHD) - SDI (SMPTE ST-2082) transmission.

5. Applicable specifications

Japan Electronics and Information Technology Industries Association (JEITA RC-5233)

■ Functional diagram



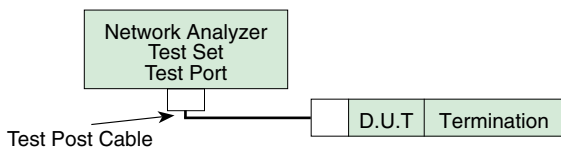
Product Specifications

Rated value	Nominal characteristic impedance Rated voltage Rated frequency	75Ω AC 150Vrms DC~3GHz	Operation temperature range Operating relative humidity	-30°C~+60°C Maximum of 85%
-------------	--	------------------------------	--	-------------------------------

Items	Specifications	Conditions
1. Contact resistance	Maximum of 6mΩ	Measured at a maximum of DC 100mA
2. Insulation resistance	Minimum of 1,000MΩ	Measured at DC 500V
3. Withstanding voltage	No flashover or dielectric breakdown.	AC 500V for 1 minute
4. Voltage Standing Wave Ratio (*)	Maximum of 1.3	Up to DC 3GHz
5. Retaining force of a female contact	Minimum of 0.6N	Measured by a pin gauge of φ1.32mm
6. Mating cycles	Contact resistance : a maximum of 20mΩ	500 times
7. Vibration Resistance	No electrical discontinuity for 1μs or longer. No damage, crack or looseness of parts.	Frequency : 10 - 500Hz, half amplitude : 0.75mm Acceleration : 98m/s ² , 3 axis directions, 10 cycles each
8. Shock resistance	No electrical discontinuity for 1μs or longer. No damage, crack or looseness of parts.	Acceleration : 490m/s ² , duration : 11ms Half-sine, 3 directions, 3 times each
9. Moisture resistance	Insulation resistance : a minimum of 100MΩ (at high temperatures) Insulation resistance : a minimum of 1000MΩ (when dry) No damage, crack or looseness of parts.	Temperature : +25°C - +65°C Humidity : 80 - 96% Left for 240 hours
10. Thermal shock resistance	No damage, crack or looseness of parts.	(-55°C for 30 minutes → 5 - 35°C for a maximum of 5 minutes → 85°C for 30 minutes → 5 - 35°C for a maximum of 5 minutes), 5 cycles
11. Corrosion resistance	No heavy corrosion.	In a 5% salt water solution for 48 hours on end

*Some products may have different specifications from those shown above.

The specification values of the Voltage Standing Wave Ratio (V.S.W.R.) are the values measured in the measuring system shown in the Figure below :



Materials / Finish

Parts	Materials	Finish	Remarks
Shell	Brass	Silver plating/nickel plating	—
Male contact	Brass	Silver plating/gold plating	—
Female contact	Beryllium copper	Silver plating/gold plating	—
Insulator	PTFE resin	—	Flame retardant
Gasket	Silicone rubber	—	—

Product Number Structure

Refer to the chart below when determining the product specifications from the product number.
Please select from the product numbers listed in this catalog when placing orders.

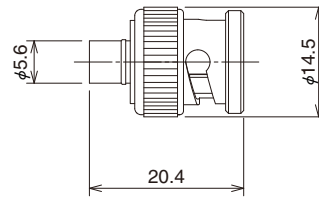
BNC(75) - L P - 59/U - 12G

① ② ③ ④ ⑤

① Series name : BNC(75) : Complies with BNC75Ω	④ 1) For plug / jack ..Applicable cable 2) For receptacle PC : PCB-mounted type 3) For adapter : Mating interface shape 4) All other cases ..additional number 5) Applicable frequency None : 3GHz 12G : 12GHz
② Shape of connectors None : Straight type L : Right angle type B : Bulk head type BL : Bulk head right angle type PL : Panel right angle type	
③ Connector type P : Plug PJ : Panel jack R : Receptacle PA : Panel adapter	

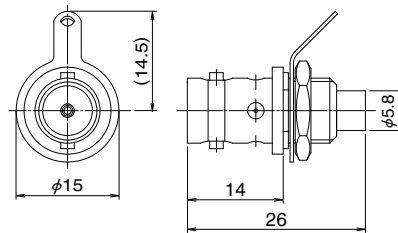
■ Plug

● Straight plug

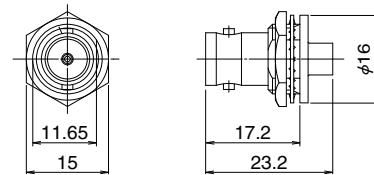


Part No.	HRS No.	Applicable cables	RoHS
BNC(75)-P-1.5CV	302-0404-7	1.5C-QEV.CW	Yes
BNC(75)-P-1.5CW	302-0003-0	1.5C-QEW.CW	

● Panel jack (Nut securing type)

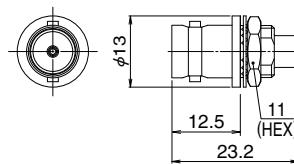


Part No.	HRS No.	Applicable cables	Remarks	Mounting hole dimension	RoHS
BNC(75)-BPJ-1.5CW-2(40)	302-0343-4 40	1.5C-2W	Ships with toothed lug terminal strip	2-2	Yes



Part No.	HRS No.	Applicable cables	Remarks	Mounting hole dimension	RoHS
BNC(75)-BPJ-1.5CV-(P)(40)	302-0369-8 40	1.5C-2V	Ships with hex nut	2-1	Yes
BNC(75)-BPJ-1.5CV-1(40)	302-0375-0 40	1.5C-2V	Ships with round nut (refer to Note)		
BNC(75)-BPJ-1.5CW(P)(40)	302-0388-2 40	1.5C-2W	Ships with hex nut		

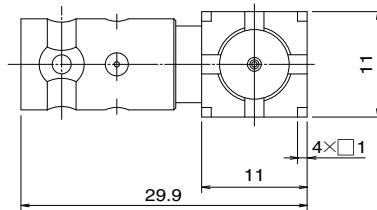
Note : Requires dedicated jigs.
 ※The shape diagram is a representative example.



Part No.	HRS No.	Applicable cables	Mounting hole dimension	RoHS
BNC(75)-BPJ-1.5CV-2(40)	302-0380-0 40	1.5C-2V	3-1	Yes

■ Receptacle

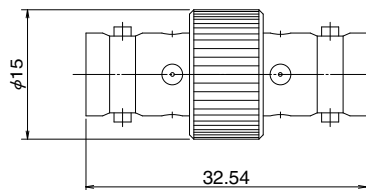
● Right angle receptacle (PCB-mounted type)



Part No.	HRS No.	Mounting hole dimension	RoHS
BNC(75)-LR-PC-6(41)	302-0363-1 41	4-1	Yes

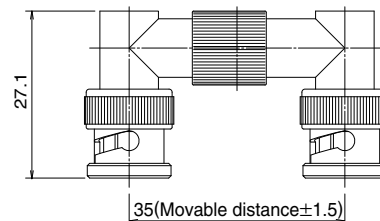
■ Adapters

● Straight adapter



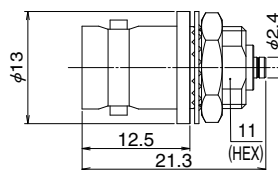
Part No.	HRS No.	RoHS
BNC(75)-A-JJ(40)	302-0384-1 40	Yes

● U-link (Mating interface shape : plug-plug)



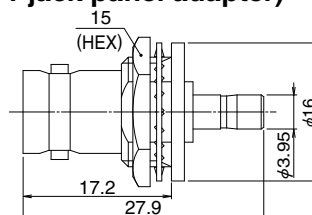
Part No.	HRS No.	RoHS
BNC-UPA(75)-35(41)	302-0301-4 41	Yes

● Conversion adapter (BNC (75) jack to H.FL jack panel adapter)



Part No.	HRS No.	Mounting hole dimension	RoHS
BNC(75)J-H.FLJ-BPA(40)	311-0302-8 40	3-1	Yes

● Conversion adapter (BNC (75) jack to PL71 jack panel adapter)



Part No.	HRS No.	Mounting hole dimension	RoHS
BNC(75)J-PL71J-BPA(40)	311-0304-3 40	2-1	Yes

■ Nonreflective terminator

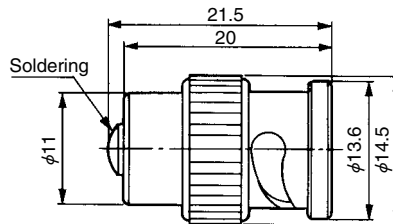
● Product Number Structure

BNC-TM P-05 (75) ()**

① ② ③ ④ ⑤ ⑥

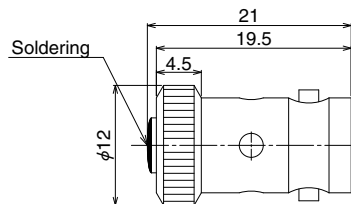
①	Series name : BNC series
②	TM : Non-reflective terminator
③	Connector type P : Plug type J : Jack type
④	Power Example 05 : 0.5W 1 : 1W
⑤	(75) : 75Ω
⑥	(**) : 40 or 50 RoHS compliant

● Mating interface shape : plug type



Part No.	HRS No.
BNC-TMP-05(75)(50)	353-0100-5 50

● Mating interface shape : Jack type



Part No.	HRS No.
BNC-TMJ-05(75)(50)	353-0101-8 50

◆ Mounting hole dimension diagram (BNC 75Ω connector)

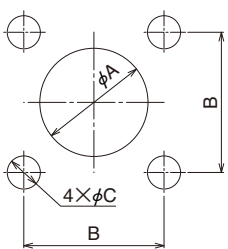


Diagram 1

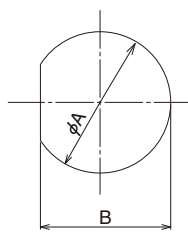


Diagram 2

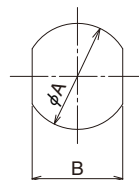


Diagram 3

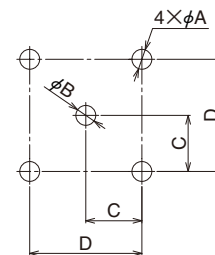


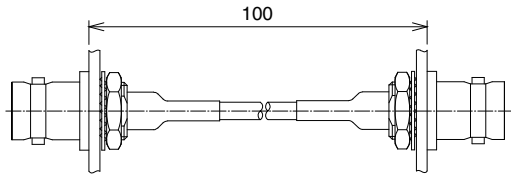
Diagram 4

Attached diagram	No.	A	B	C	D
1	1-1	4.13 ^{+0.05} ₀	12.7	3	—
	1-2	11.4	12.7	3.2	—
	1-3	9.8	12.7	3	—
2	2-1	12.8 ^{+0.1} ₀	11.8 ^{+0.1} ₀	—	—
	2-2	11.3 ^{+0.1} ₀	10.3 ^{+0.1} ₀	—	—

Attached diagram	No.	A	B	C	D
3	3-1	9.6 ^{+0.1} ₀	8.2 ^{+0.1} ₀	—	—
4	4-1	1.8 ^{+0.1} ₀	1.8 ^{+0.1} ₀	5.08±0.05	10.16±0.05

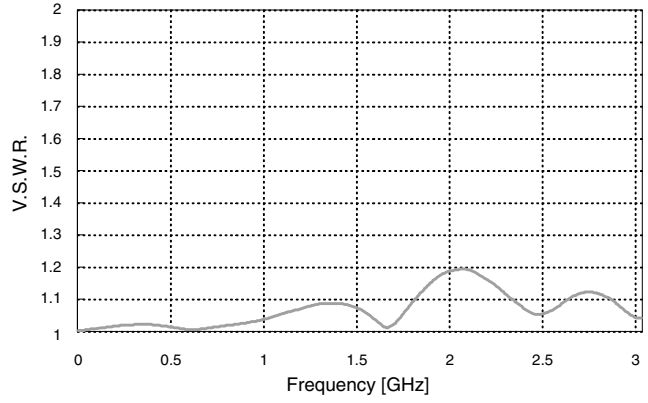
◆ High-frequency characteristic of 75Ω hirose products

● BNC75 Series

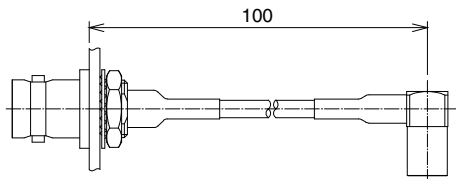


BNC(75)-BPJ-1.5CV-※

BNC(75)-BPJ-1.5CV-※

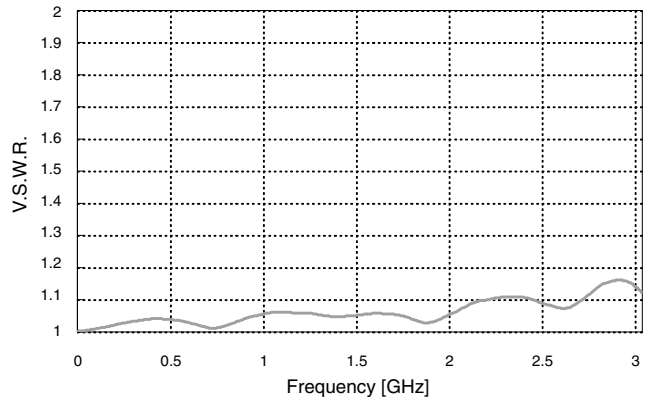


● PL71 Series

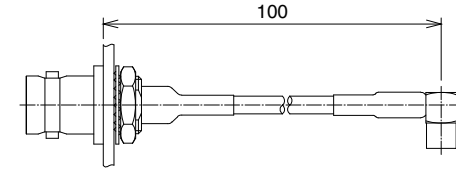


BNC(75)-BPJ-1.5CV-※

PL71-LP-1.5C(40)

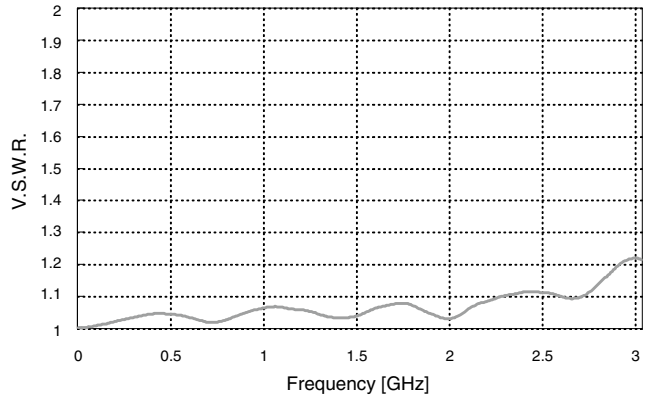


● PL75 Series

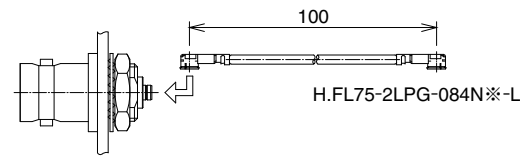


BNC(75)-BPJ-1.5CV-※

PL75-LP-1.5CV

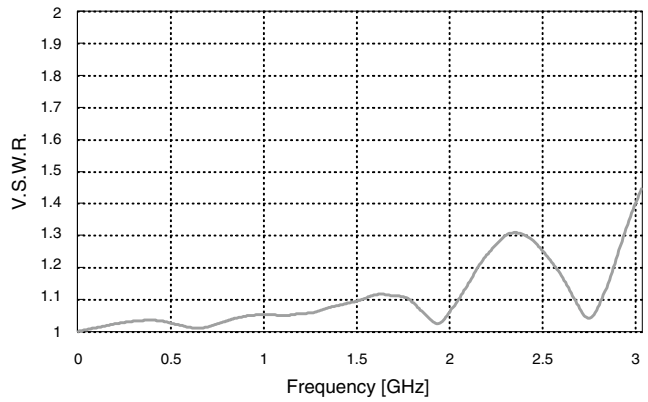


● H.FL75 Series



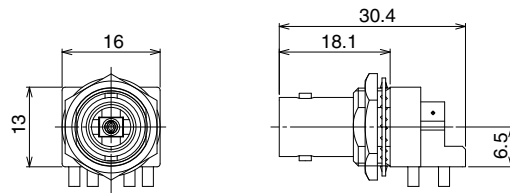
BNC(75)J-H.FLJ-BPA(40)

H.FL75-2LPG-084N-※-L



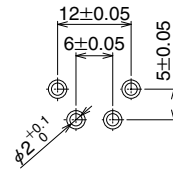
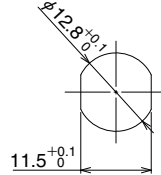
■ BNC75 corresponding to 12G-SDI

BNC75 corresponding to 12G-SDI is prepared for 12G-SDI transmission. The connector possess good reflection characteristic with a frequency band of 12GHz.

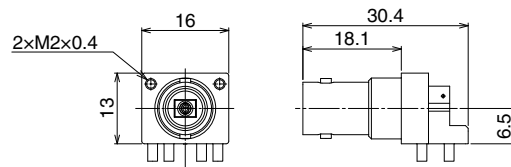


◆ Panel mounting pattern

◆ PCB mounting pattern

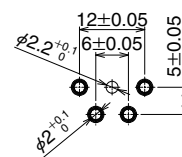
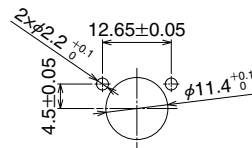


Part No.	HRS No.	RoHS
BNC(75)-BLR-PC-12G	302-0081-0	Yes



◆ Panel mounting pattern

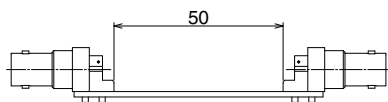
◆ PCB mounting pattern



Part No.	HRS No.	RoHS
BNC(75)-PLR-PC-12G-1	302-0083-0	Yes

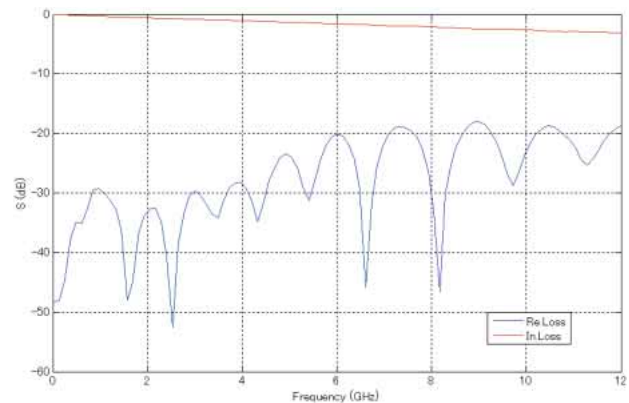
◆ High-frequency characteristic of BNC75 corresponding to 12G-SDI

Measurement diagram



BNC(75)-PLR-PC-12G-1

BNC(75)-PLR-PC-12G-1



USA:

HIROSE ELECTRIC (U.S.A.), INC. HEADQUARTERS CHICAGO OFFICE
 2300 Warrenville Road, Suite 150,
 Downers Grove, IL 60515
 Phone : +1-630-282-6700
<http://www.hirose.com/us/>

USA:

HIROSE ELECTRIC (U.S.A.), INC. SAN JOSE OFFICE
 2841 Junction Ave, Suite 200
 San Jose, CA. 95134
 Phone : +1-408-253-9640
 Fax : +1-408-253-9641
<http://www.hirose.com/us/>

USA:

HIROSE ELECTRIC (U.S.A.), INC. DETROIT OFFICE (AUTOMOTIVE)
 17197 N. Laurel Park Drive, Suite 253,
 Livonia, MI 48152
 Phone : +1-734-542-9963
 Fax : +1-734-542-9964
<http://www.hirose.com/us/>

THE NETHERLANDS:

HIROSE ELECTRIC EUROPE B.V.
 Hogehillweg #8 1101 CC Amsterdam Z-O
 Phone : +31-20-6557460
 Fax : +31-20-6557469
<http://www.hirose.com/eu/>

GERMANY:

HIROSE ELECTRIC EUROPE B.V. GERMAN BRANCH
 Schoenbergstr. 20, 73760 ostfildern
 Phone : +49-711-456002-1
 Fax : +49-711-456002-299
<http://www.hirose.com/eu/>

GERMANY:

HIROSE ELECTRIC EUROPE B.V. NUREMBERG OFFICE
 Neumeyerstrasse 22-26, 90411 Nurnberg
 Phone : +49-911 32 68 89 63
 Fax : +49-911 32 68 89 69
<http://www.hirose.com/eu/>

GERMANY:

HIROSE ELECTRIC EUROPE B.V. HANOVER OFFICE
 Bayernstr. 3, Haus C 30855 Langenhagen, Germany
 Phone : +49-511 97 82 61 30
 Fax : +49-511 97 82 61 35
<http://www.hirose.com/eu/>

FRANCE:

HIROSE ELECTRIC EUROPE B.V. PARIS OFFICE
 Regus La Garenne Colombes, Place de La Belgique,
 71 Boulevard National La Garenne Colombes, 92250, France
 Phone : +33 (0) 1 7082 3170
 Fax : +33 (1) 7082 3101
<http://www.hirose.com/eu/>

UNITED KINGDOM:

HIROSE ELECTRIC EUROPE BV (UK BRANCH)
 4 Newton Court, Kelvin Drive, Knowlhill,
 Milton Keynes, MK5 8NH
 Phone : +44-1908 202050
 Fax : +44-1908 202058
<http://www.hirose.com/eu/>

CHINA:

HIROSE ELECTRIC (SHANGHAI) CO., LTD.
 1601, Henderson Metropolitan, NO.300, East Nanjing
 Road, Huangpu District, Shanghai, China 200001
 Phone : +86-21-6391-3355
 Fax : +86-21-6391-3335
<http://www.hirose.com/cn/>

CHINA:

HIROSE ELECTRIC (SHANGHAI) CO.,LTD. BEIJING BRANCH
 A1001, Ocean International Center, Building 56# East 4th
 Ring Middle Road, ChaoYang District, Beijing, 100025
 Phone : +86-10-5165-9332
 Fax : +86-10-5908-1381
<http://www.hirose.com/cn/>

CHINA:

HIROSE ELECTRIC TECHNOLOGIES (SHENZHEN) CO., LTD.
 Room 09-13, 19/F, Office Tower Shun Hing Square, Di Wang Commercial Centre,
 5002 Shen Nan Dong Road, Shenzhen City, Guangdong Province, 518008
 Phone : +86-755-8207-0851
 Fax : +86-755-8207-0873
<http://www.hirose.com/cn/>

HONG KONG:

HIROSE ELECTRIC HONGKONG TRADING CO., LTD.
 Room 1001, West Wing, Tsim Sha Tsui Centre, 66
 Mody Road, Tsim Sha Tsui East, Kowloon, Hong Kong
 Phone : +852-2803-5338
 Fax : +852-2591-6560
<http://www.hirose.com/hk/>

TAIWAN:

HIROSE ELECTRIC TAIWAN CO., LTD.
 103 8F, No.87, Zhengzhou Rd., Taipei
 Phone : +886-2-2555-7377
 Fax : +886-2-2555-7350
<http://www.hirose.com/tw/>

KOREA:

HIROSE KOREA CO.,LTD.
 250, Huimanggongwon-ro, Siheung-si,
 Gyeonggi-do, Korea, 15083
 Phone : +82-31-496-7000 or 7124
 Fax : +82-31-496-7100
<http://www.hirose.co.kr/>

SINGAPORE:

HIROSE ELECTRIC SINGAPORE PTE. LTD.
 10 Anson Road #26-16, International Plaza
 079903, Singapore
 Phone : +65-6324-6113
 Fax : +65-6324-6123
<http://www.hirose.com/sg/>

INDIA:

HIROSE ELECTRIC SINGAPORE PTE. LTD. DELHI LIAISON OFFICE
 Office NO.552, Regus-Green Boulevard, Level5, Tower C,
 Sec62, Plot B-9A, Block B, Noida, 201301, Uttar Pradesh, India
 Phone : +91-12-660-8018
 Fax : +91-120-4804949
<http://www.hirose.com/sg/>

INDIA:

HIROSE ELECTRIC SINGAPORE PTE. LTD. BANGALORE LIAISON OFFICE
 Unit No-403, 4th Floor, No-84, Barton Centre, Mahatma
 Gandhi (MG) Road, Bangalore 560 001, Karnataka, India
 Phone : +91-80-4120 1907
 Fax : +91-80-4120 9908
<http://www.hirose.com/sg/>

MALAYSIA:

PENANG REPRESENTATIVE OFFICE
 1-21-01, Suntech @ Penang Cybercity (1164), Lintang
 Mayang Pasir 3,11950, Bayan Baru, Penang, Malaysia.
 Phone : +604-619-2564
 Fax : +604-619-2574
<http://www.hirose.com/sg/>

THAILAND:

BANGKOK OFFICE (REPRESENTATIVE OFFICE)
 Unit 4703, 47th FL., 1 Empire Tower, South Sathorn
 Road, Yannawa, Sathorn, Bangkok 10120 Thailand
 Phone : +66-2-686-1255
 Fax : +66-2-686-3433
<http://www.hirose.com/sg/>



HIROSE ELECTRIC CO.,LTD.

2-6-3,Nakagawa Chuoh,Tsuzuki-Ku,Yokohama-Shi 224-8540,JAPAN
 TEL: +81-45-620-3526 Fax: +81-45-591-3726
<http://www.hirose.com>
<http://www.hirose-connectors.com>