

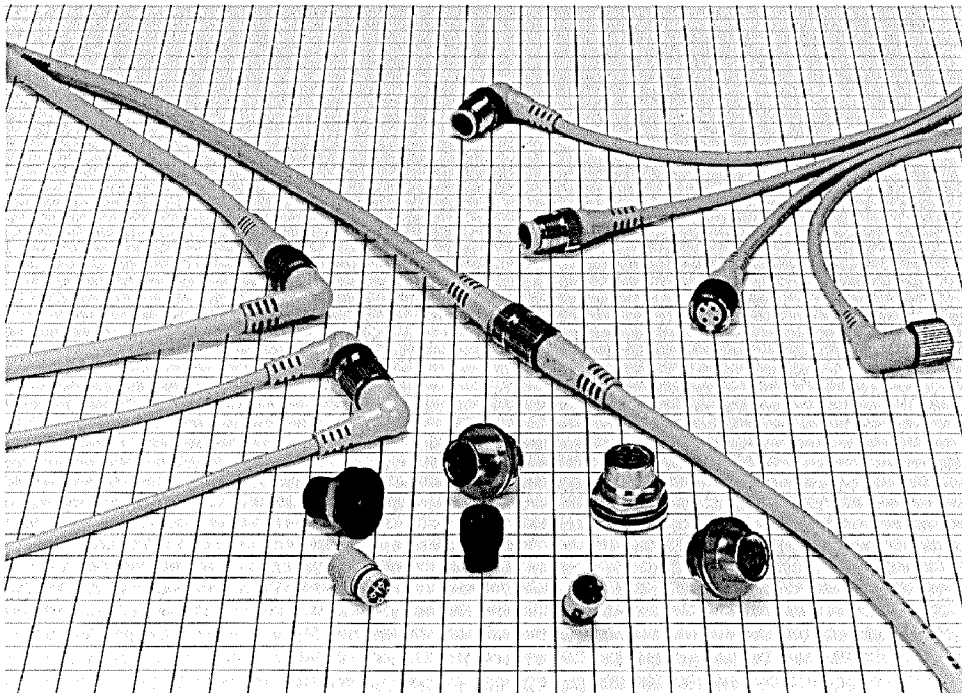
HR5 HR24 SERIES

CIRCULAR WATER-PROOF CONNECTORS FOR SENSORS

■ Scope

The HR24 Series are 4-pin type circular connectors developed to meet the needs for cost reduction in sensor wiring and improved maintenance efficiency. They are

water-proof and oil-proof and may be used in adverse environmental conditions free from deterioration in performance.



■ Features

1. Water-Proof

The HR24 Series connector engaged with a receptacle meets the IP67 water-proofness standard. It is also oil-proof.

2. Insulating Walls between Terminals

The connector receptacle has insulating walls between terminals, preventing short circuit in wire soldering caused by barbed wires, etc.

3. Wide variations

Two types of connectors, DC and AC connectors, are available. They are not mutually compatible. The connectors with cables (i.e., plugs and jacks) are available in straight type and right-angle type. Also, the receptacles are mounted on panels in two ways; front mounting and back mounting.

■ Applications

Limit switches, proximity switches, photoelectric switches, pressure switches and a variety of sensors.

Material and Finish

Major Performances

| Item | Performances |
|-----------------------|---|
| Rated voltage | 125V (DC type), 250V (AC type) |
| Rated current | 3A |
| Contact resistance | 10mΩ or less (Cable conductor resistance not included.) |
| Insulation resistance | 100MΩ or more at DC500V |
| Withstand voltage | 1 minute at AC1500V |
| Water-proofness | IP67 |

Major Materials

| Parts | Materials | Finish |
|---------------------|------------------|-----------------------|
| Outer sheath | Soft PVC & brass | Nickel plating (Gray) |
| Insulating material | PBT resin (*) | (Gray) |
| Pin | Copper alloy | Silver plating |

* UL94V-0

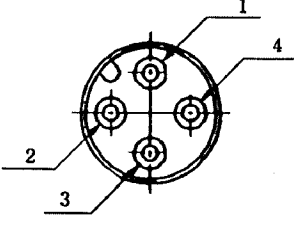
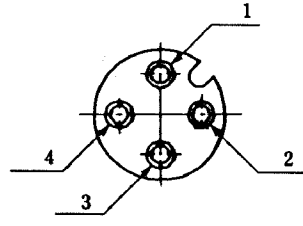
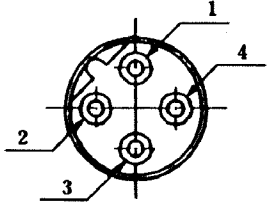
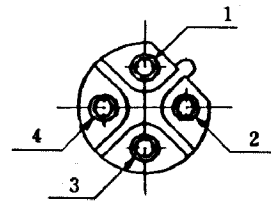
Standard Cable Specifications

| Conductors | 20 conductors, 0.18 dia. each | 40 conductors, 0.18 dia. each |
|-----------------|-------------------------------|-------------------------------|
| Number of wires | 4 wires | 4 wires |
| Outer dia. | φ6.8 | φ4.4 |
| Color | Gray | Gray |

Standard Wires

| Pin Numbers | Wire Color |
|-------------|------------|
| 1 | Brown |
| 2 | White |
| 3 | Blue |
| 4 | Black |

Mating Part Profiles

| | Male | Female |
|---------|---|--|
| DC type |  |  |
| AC type |  |  |

Note: Figure pin No.

■ Ordering Information

HR24 A -8 D LP A 4 S A 2200 A (01)

-
- (1) Model name
 - (2) Single-side/dual-side connector
 - (3) Shell size
 - (4) Mating part type
 - (5) Connector type
 - (6) Shell configuration
 - (7) Number of pins
 - (8) Terminal configuration
 - (9) Variation of cable
 - (10) Cable length
 - (11) Cable end treatment
 - (12) Other specifications

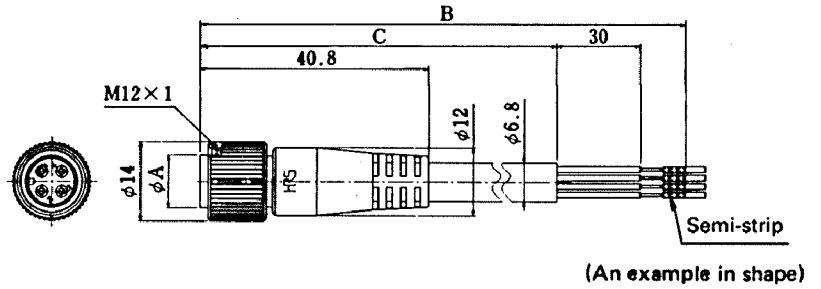
- (1) Model name : HR24 Series
- (2) Single-side/dual-side connector : A dual-side connector has this symbol, which differs with the type of the connector.
Omitted for a single-side connector.
- (3) Shell size : This number indicates the outer dia. of the shell of the plug mating part.
Size 8 : Female plug Size 9 : Male plug
- (4) Mating part type : Available in DC type and AC type mating parts.
A : AC type D : DC type
- (5) Connector type : Indicates any of the following connector types:
P : Straight plug J : Straight jack
LP : Right-angle plug LJ : Right-angle jack
R : Receptacle
PR : Plug receptacle
- (6) Shell configuration : If you need connectors of a model with shells of different shapes, specify the shapes of the shells under A, B,...
- (7) Number of pins : Indicates the number of pins.
- (8) Terminal configuration : Indicates the shape of pins as follows:
P : Male pin S : Female pin
- (9) Variation of cable : Construction and conductor number, etc.
- (10) Cable length : Indicates the length of a cable (in units of mm)
- (11) Cable end treatment : A, B,.....
- (12) Other specifications : (01), (02),.....

■ Plug

(Straight type)



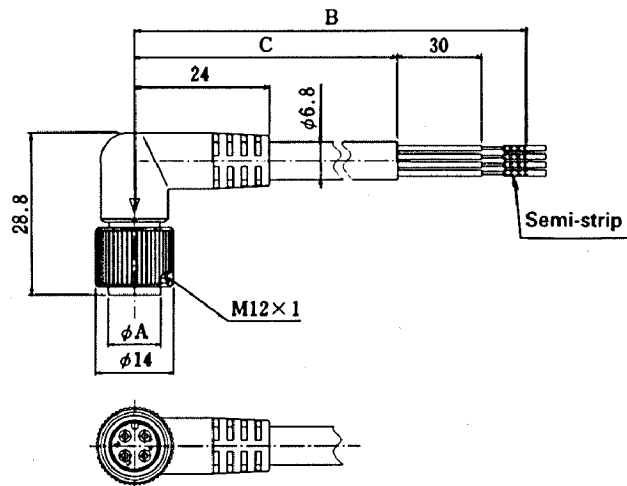
HR24-9DP4P550A



| HRS No. | Product No. | No. of pins | φ A | B | C | φ D | Remarks |
|---------------|---------------------|-------------|-----|------|------|-----|-------------------------------|
| 124-0240-2 | HR24-8DP4SA550A | 4 | 8.1 | 550 | 500 | 4.4 | For DC |
| 124-0240-2-01 | HR24-8DP4SA550A(01) | 4 | 8.1 | 550 | 500 | 4.4 | For DC, Terminal gold plating |
| 124-0209-2 | HR24-8DP4S550A | 4 | 8.1 | 550 | 500 | 6.8 | For DC |
| 124-0209-2-01 | HR24-8DP4S550A(01) | 4 | 8.1 | 550 | 500 | 6.8 | For DC, Terminal gold plating |
| 124-0213-0 | HR24-8DP4S1050A | 4 | 8.1 | 1050 | 1000 | 6.8 | For DC |
| 124-0213-0-01 | HR24-8DP4S1050A(01) | 4 | 8.1 | 1050 | 1000 | 6.8 | For DC, Terminal gold plating |
| 124-0214-2 | HR24-8DP4S2200A | 4 | 8.1 | 2200 | 2150 | 6.8 | For DC |
| 124-0214-2-01 | HR24-8DP4S2200A(01) | 4 | 8.1 | 2200 | 2150 | 6.8 | For DC, Terminal gold plating |
| 124-0215-5 | HR24-8DP4S3050A | 4 | 8.1 | 3050 | 3000 | 6.8 | For DC |
| 124-0215-5-01 | HR24-8DP4S3050A(01) | 4 | 8.1 | 3050 | 3000 | 6.8 | For DC, Terminal gold plating |
| 124-0216-8 | HR24-8DP4S5050A | 4 | 8.1 | 5050 | 5000 | 6.8 | For DC |
| 124-0216-8-01 | HR24-8DP4S5050A(01) | 4 | 8.1 | 5050 | 5000 | 6.8 | For DC, Terminal gold plating |
| 124-0210-1 | HR24-9DP4P550A | 4 | 9.3 | 550 | 500 | 6.8 | For DC |
| 124-0210-1-01 | HR24-9DP4P550A(01) | 4 | 9.3 | 550 | 500 | 6.8 | For DC, Terminal gold plating |
| 124-0217-0 | HR24-9DP4P1050A | 4 | 9.3 | 1050 | 1000 | 6.8 | For DC |
| 124-0217-0-01 | HR24-9DP4P1050A(01) | 4 | 9.3 | 1050 | 1000 | 6.8 | For DC, Terminal gold plating |
| 124-0218-3 | HR24-9DP4P2200A | 4 | 9.3 | 2200 | 2150 | 6.8 | For DC |
| 124-0218-3-01 | HR24-9DP4P2200A(01) | 4 | 9.3 | 2200 | 2150 | 6.8 | For DC, Terminal gold plating |
| 124-0219-6 | HR24-9DP4P3050A | 4 | 9.3 | 3050 | 3000 | 6.8 | For DC |
| 124-0219-6-01 | HR24-9DP4P3050A(01) | 4 | 9.3 | 3050 | 3000 | 6.8 | For DC, Terminal gold plating |
| 124-0220-5 | HR24-9DP4P5050A | 4 | 9.3 | 5050 | 5000 | 6.8 | For DC |
| 124-0220-5-01 | HR24-9DP4P5050A | 4 | 9.3 | 5050 | 5000 | 6.8 | For DC, Terminal gold plating |
| 124-0403-5 | HR24-8AP4S550A | 4 | 8.1 | 550 | 500 | 6.8 | For DC |
| 124-0403-5-01 | HR24-8AP4S550A(01) | 4 | 8.1 | 550 | 500 | 6.8 | For DC, Terminal gold plating |
| 124-0405-0 | HR24-8AP4S1050A | 4 | 8.1 | 1050 | 1000 | 6.8 | For AC |
| 124-0405-0-01 | HR24-8AP4S1050A | 4 | 8.1 | 1050 | 1000 | 6.8 | For AC, Terminal gold plating |
| 124-0406-3 | HR24-8AP4S2200A | 4 | 8.1 | 2200 | 2150 | 6.8 | For AC |
| 124-0406-3-01 | HR24-8AP4S2200A | 4 | 8.1 | 2200 | 2150 | 6.8 | For AC, Terminal gold plating |
| 124-0407-6 | HR24-8AP4S3050A | 4 | 8.1 | 3050 | 3000 | 6.8 | For AC |
| 124-0407-6-01 | HR24-8AP4S3050A(01) | 4 | 8.1 | 3050 | 3000 | 6.8 | For AC, Terminal gold plating |
| 124-0408-9 | HR24-8AP4S5050A | 4 | 8.1 | 5050 | 5000 | 6.8 | For AC |
| 124-0408-9-01 | HR24-8AP4S5050A(01) | 4 | 8.1 | 5050 | 5000 | 6.8 | For AC, Terminal gold plating |

■ Plug

(Right-Angle Type)

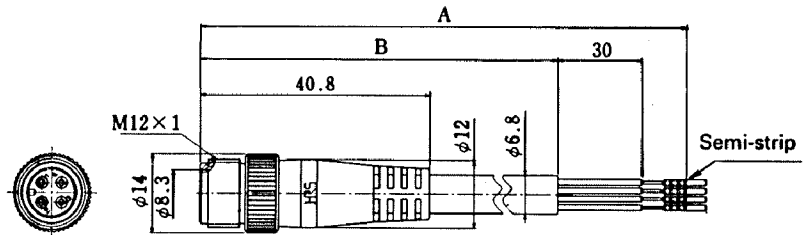
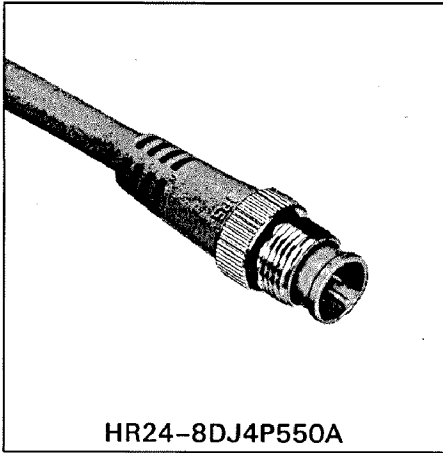


(An example in shape)

| HRS No. | Product No. | No. of pins | φ A | B | C | φ D | Remarks |
|---------------|----------------------|-------------|-----|------|------|-----|-------------------------------|
| 124-0241-5 | HR24-8DLP4SA550A | 4 | 8.1 | 550 | 500 | 4.4 | For DC |
| 124-0241-5-01 | HR24-8DLP4SA550A(01) | 4 | 8.1 | 550 | 500 | 4.4 | For DC, Terminal gold plating |
| 124-0211-4 | HR24-8DLP4S550A | 4 | 8.1 | 550 | 500 | 6.8 | For DC |
| 124-0211-4-01 | HR24-8DLP4S550A(01) | 4 | 8.1 | 550 | 500 | 6.8 | For DC, Terminal gold plating |
| 124-0221-8 | HR24-8DLP4S1050A | 4 | 8.1 | 1050 | 1000 | 6.8 | For DC |
| 124-0221-8-01 | HR24-8DLP4S1050A(01) | 4 | 8.1 | 1050 | 1000 | 6.8 | For DC, Terminal gold plating |
| 124-0222-0 | HR24-8DLP4S2200A | 4 | 8.1 | 2200 | 2150 | 6.8 | For DC |
| 124-0222-0-01 | HR24-8DLP4S2200A(01) | 4 | 8.1 | 2200 | 2150 | 6.8 | For DC, Terminal gold plating |
| 124-0223-3 | HR24-8DLP4S3050A | 4 | 8.1 | 3050 | 3000 | 6.8 | For DC |
| 124-0223-3-01 | HR24-8DLP4S3050A(01) | 4 | 8.1 | 3050 | 3000 | 6.8 | For DC, Terminal gold plating |
| 124-0224-6 | HR24-8DLP4S5050A | 4 | 8.1 | 5050 | 5000 | 6.8 | For DC |
| 124-0224-6-01 | HR24-8DLP4S5050A(01) | 4 | 8.1 | 5050 | 5000 | 6.8 | For DC, Terminal gold plating |
| 124-0212-7 | HR24-9DLP4P550A | 4 | 9.3 | 550 | 500 | 6.8 | For DC |
| 124-0212-7-01 | HR24-9DLP4P550A(01) | 4 | 9.3 | 550 | 500 | 6.8 | For DC, Terminal gold plating |
| 124-0225-9 | HR24-9DLP4P1050A | 4 | 9.3 | 1050 | 1000 | 6.8 | For DC |
| 124-0225-9-01 | HR24-9DLP4P1050A(01) | 4 | 9.3 | 1050 | 1000 | 6.8 | For DC, Terminal gold plating |
| 124-0226-1 | HR24-9DLP4P2200A | 4 | 9.3 | 2200 | 2150 | 6.8 | For DC |
| 124-0226-1-01 | HR24-9DLP4P2200A(01) | 4 | 9.3 | 2200 | 2150 | 6.8 | For DC, Terminal gold plating |
| 124-0227-4 | HR24-9DLP4P3050A | 4 | 9.3 | 3050 | 3000 | 6.8 | For DC |
| 124-0227-4-01 | HR24-9DLP4P3050A(01) | 4 | 9.3 | 3050 | 3000 | 6.8 | For DC, Terminal gold plating |
| 124-0228-7 | HR24-9DLP4P5050A | 4 | 9.3 | 5050 | 5000 | 6.8 | For DC |
| 124-0228-7-01 | HR24-9DLP4P5050A(01) | 4 | 9.3 | 5050 | 5000 | 6.8 | For DC, Terminal gold plating |
| 124-0404-8 | HR24-8ALP4S550A | 4 | 8.1 | 550 | 500 | 6.8 | For DC |
| 124-0404-8-01 | HR24-8ALP4S550A(01) | 4 | 8.1 | 550 | 500 | 6.8 | For DC, Terminal gold plating |
| 124-0409-1 | HR24-8ALP4S1050A | 4 | 8.1 | 1050 | 1000 | 6.8 | For DC |
| 124-0409-1-01 | HR24-8ALP4S1050A(01) | 4 | 8.1 | 1050 | 1000 | 6.8 | For DC, Terminal gold plating |
| 124-0410-0 | HR24-8ALP4S2200A | 4 | 8.1 | 2200 | 2150 | 6.8 | For DC |
| 124-0410-0-01 | HR24-8ALP4S2200A(01) | 4 | 8.1 | 2200 | 2150 | 6.8 | For DC, Terminal gold plating |
| 124-0411-3 | HR24-8ALP4S3050A | 4 | 8.1 | 3050 | 3000 | 6.8 | For DC |
| 124-0411-3-01 | HR24-8ALP4S3050A(01) | 4 | 8.1 | 3050 | 3000 | 6.8 | For DC, Terminal gold plating |
| 124-0412-6 | HR24-8ALP4S5050A | 4 | 8.1 | 5050 | 5000 | 6.8 | For DC |
| 124-0412-6-01 | HR24-8ALP4S5050A(01) | 4 | 8.1 | 5050 | 5000 | 6.8 | For DC, Terminal gold plating |

■ JACK (HR24, available in 8 sizes)

(Straight Type)

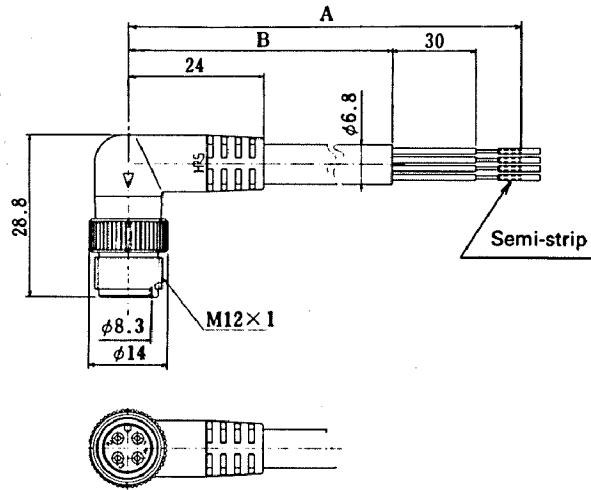


(An example in shape)

| HRS No. | Product No. | No. of pins | A | B | ϕ C | Remarks |
|---------------|---------------------|-------------|------|------|----------|-------------------------------|
| 124-0637-6 | HR24-8DJ4PA550A | 4 | 550 | 500 | 4.4 | For DC |
| 124-0637-6-01 | HR24-8DJ4PA550A(01) | 4 | 550 | 500 | 4.4 | For DC, Terminal gold plating |
| 124-0607-5 | HR24-8DJ4P550A | 4 | 550 | 500 | 6.8 | For DC |
| 124-0607-5-01 | HR24-8DJ4P550A(01) | 4 | 550 | 500 | 6.8 | For DC, Terminal gold plating |
| 124-0611-2 | HR24-8DJ4P1050A | 4 | 1050 | 1000 | 6.8 | For DC |
| 124-0611-2-01 | HR24-8DJ4P1050A(01) | 4 | 1050 | 1000 | 6.8 | For DC, Terminal gold plating |
| 124-0612-5 | HR24-8DJ4P2200A | 4 | 2200 | 2150 | 6.8 | For DC |
| 124-0612-5-01 | HR24-8DJ4P2200A(01) | 4 | 2200 | 2150 | 6.8 | For DC, Terminal gold plating |
| 124-0613-8 | HR24-8DJ4P3050A | 4 | 3050 | 3000 | 6.8 | For DC |
| 124-0613-8-01 | HR24-8DJ4P3050A(01) | 4 | 3050 | 3000 | 6.8 | For DC, Terminal gold plating |
| 124-0614-0 | HR24-8DJ4P5050A | 4 | 5050 | 5000 | 6.8 | For DC |
| 124-0614-0-01 | HR24-8DJ4P5050A(01) | 4 | 5050 | 5000 | 6.8 | For DC, Terminal gold plating |
| 124-0803-3 | HR24-8AJ4P550A | 4 | 550 | 500 | 6.8 | For DC |
| 124-0803-3-01 | HR24-8AJ4P550A(01) | 4 | 550 | 500 | 6.8 | For DC, Terminal gold plating |
| 124-0805-9 | HR24-8AJ4P1050A | 4 | 1050 | 1000 | 6.8 | For DC |
| 124-0805-9-01 | HR24-8AJ4P1050A(01) | 4 | 1050 | 1000 | 6.8 | For DC, Terminal gold plating |
| 124-0806-1 | HR24-8AJ4P2200A | 4 | 2200 | 2150 | 6.8 | For DC |
| 124-0806-1-01 | HR24-8AJ4P2200A(01) | 4 | 2200 | 2150 | 6.8 | For DC, Terminal gold plating |
| 124-0807-4 | HR24-8AJ4P3050A | 4 | 3050 | 3000 | 6.8 | For DC |
| 124-0807-4-01 | HR24-8AJ4P3050A(01) | 4 | 3050 | 3000 | 6.8 | For DC, Terminal gold plating |
| 124-0808-7 | HR24-8AJ4P5050A | 4 | 5050 | 5000 | 6.8 | For DC |
| 124-0808-7-01 | HR24-8AJ4P5050A(01) | 4 | 5050 | 5000 | 6.8 | For DC, Terminal gold plating |

JACK (HR24, available in 8 sizes)

(Right-Angle Type)

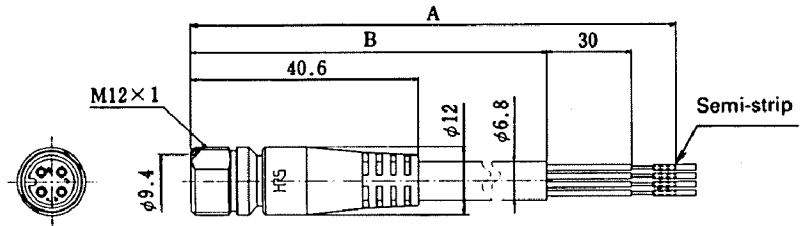


(An example in shape)

| HRS No. | Product No. | No. of pins | A | B | ϕC | Remarks |
|---------------|----------------------|-------------|------|------|----------|-------------------------------|
| 124-0638-9 | HR24-8DLJ4PA550A | 4 | 550 | 500 | 4.4 | For DC |
| 124-0638-9-01 | HR24-8DLJ4PA550A(01) | 4 | 550 | 500 | 4.4 | For DC, Terminal gold plating |
| 124-0211-4 | HR24-8DLJ4P550A | 4 | 550 | 500 | 6.8 | For DC |
| 124-0211-4-01 | HR24-8DLJ4P550A(01) | 4 | 550 | 500 | 6.8 | For DC, Terminal gold plating |
| 124-0221-8 | HR24-8DLJ4P1050A | 4 | 1050 | 1000 | 6.8 | For DC |
| 124-0221-8-01 | HR24-8DLJ4P1050A(01) | 4 | 1050 | 1000 | 6.8 | For DC, Terminal gold plating |
| 124-0222-0 | HR24-8DLJ4P2200A | 4 | 2200 | 2150 | 6.8 | For DC |
| 124-0222-0-01 | HR24-8DLJ4P2200A(01) | 4 | 2200 | 2150 | 6.8 | For DC, Terminal gold plating |
| 124-0223-3 | HR24-8DLJ4P3050A | 4 | 3050 | 3000 | 6.8 | For DC |
| 124-0223-3-01 | HR24-8DLJ4P3050A(01) | 4 | 3050 | 3000 | 6.8 | For DC, Terminal gold plating |
| 124-0224-6 | HR24-8DLJ4P5050A | 4 | 5050 | 5000 | 6.8 | For DC |
| 124-0224-6-01 | HR24-8DLJ4P5050A(01) | 4 | 5050 | 5000 | 6.8 | For DC, Terminal gold plating |
| 124-0404-8 | HR24-8ALJ4P550A | 4 | 550 | 500 | 6.8 | For DC |
| 124-0404-8-01 | HR24-8ALJ4P550A(01) | 4 | 550 | 500 | 6.8 | For DC, Terminal gold plating |
| 124-0409-1 | HR24-8ALJ4P1050A | 4 | 1050 | 1000 | 6.8 | For DC |
| 124-0409-1-01 | HR24-8ALJ4P1050A(01) | 4 | 1050 | 1000 | 6.8 | For DC, Terminal gold plating |
| 124-0410-0 | HR24-8ALJ4P2200A | 4 | 2200 | 2150 | 6.8 | For DC |
| 124-0410-0-01 | HR24-8ALJ4P2200A(01) | 4 | 2200 | 2150 | 6.8 | For DC, Terminal gold plating |
| 124-0411-3 | HR24-8ALJ4P3050A | 4 | 3050 | 3000 | 6.8 | For DC |
| 124-0411-3-01 | HR24-8ALJ4P3050A(01) | 4 | 3050 | 3000 | 6.8 | For DC, Terminal gold plating |
| 124-0412-6 | HR24-8ALJ4P5050A | 4 | 5050 | 5000 | 6.8 | For DC |
| 124-0412-6-01 | HR24-8ALJ4P5050A(01) | 4 | 5050 | 5000 | 6.8 | For DC, Terminal gold plating |

JACK (HR24, available in 9 sizes)

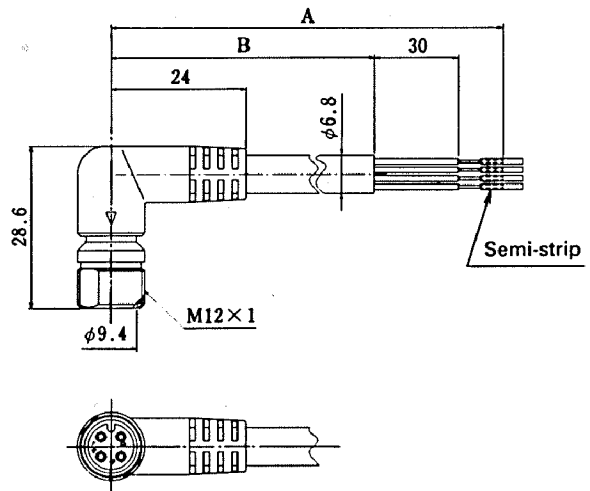
(Straight Type)



(An example in shape)

| HRS No. | Product No. | No. of pins | A | B | Remarks |
|---------------|---------------------|-------------|------|------|-------------------------------|
| 124-0608-8 | HR24-9DJ4S550A | 4 | 550 | 500 | For DC |
| 124-0608-8-01 | HR24-9DJ4S550A(01) | 4 | 550 | 500 | For DC, Terminal gold plating |
| 124-0615-3 | HR24-9DJ4S1050A | 4 | 1050 | 1000 | For DC |
| 124-0615-3-01 | HR24-9DJ4S1050A(01) | 4 | 1050 | 1000 | For DC, Terminal gold plating |
| 124-0616-6 | HR24-9DJ4S2200A | 4 | 2200 | 2150 | For DC |
| 124-0616-6-01 | HR24-9DJ4S2200A(01) | 4 | 2200 | 2150 | For DC, Terminal gold plating |
| 124-0617-9 | HR24-9DJ4S3050A | 4 | 3050 | 3000 | For DC |
| 124-0617-9-01 | HR24-9DJ4S3050A(01) | 4 | 3050 | 3000 | For DC, Terminal gold plating |
| 124-0618-1 | HR24-9DJ4S5050A | 4 | 5050 | 5000 | For DC |
| 124-0618-1-01 | HR24-9DJ4S5050A(01) | 4 | 5050 | 5000 | For DC, Terminal gold plating |

(Right-Angle Type)



(An example in shape)

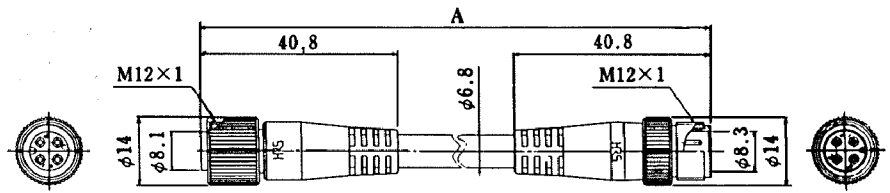
| HRS No. | Product No. | No. of pins | A | B | Remarks |
|---------------|----------------------|-------------|------|------|-------------------------------|
| 124-0610-0 | HR24-9DLJ4S550A | 4 | 550 | 500 | For DC |
| 124-0610-0-01 | HR24-9DLJ4S550A(01) | 4 | 550 | 500 | For DC, Terminal gold plating |
| 124-0623-1 | HR24-9DLJ4S1050A | 4 | 1050 | 1000 | For DC |
| 124-0623-1-01 | HR24-9DLJ4S1050A(01) | 4 | 1050 | 1000 | For DC, Terminal gold plating |
| 124-0624-4 | HR24-9DLJ4S2200A | 4 | 2200 | 2150 | For DC |
| 124-0624-4-01 | HR24-9DLJ4S2200A(01) | 4 | 2200 | 2150 | For DC, Terminal gold plating |
| 124-0625-7 | HR24-9DLJ4S3050A | 4 | 3050 | 3000 | For DC |
| 124-0625-7-01 | HR24-9DLJ4S3050A(01) | 4 | 3050 | 3000 | For DC, Terminal gold plating |
| 124-0626-0 | HR24-9DLJ4S5050A | 4 | 5050 | 5000 | For DC |
| 124-0626-0-01 | HR24-9DLJ4S5050A(01) | 4 | 5050 | 5000 | For DC, Terminal gold plating |

■ Junction Connector (HR24, available in 8 sizes)

(Straight-Plug ~ Straight Jack)



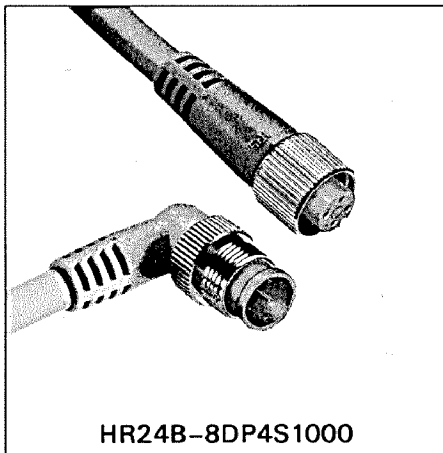
HR24A-8DP4S1000



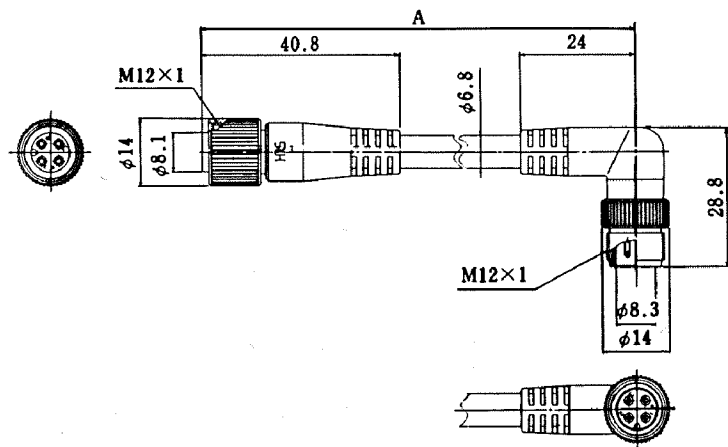
(An example in shape)

| HRS No. | Product No. | No. of pins | A | Remarks |
|---------------|---------------------|-------------|------|-------------------------------|
| 124-1200-3 | HR24A-8DP4S1000 | 4 | 1000 | For DC |
| 124-1200-3-01 | HR24A-8DP4S1000(01) | 4 | 1000 | For DC, Terminal gold plating |
| 124-1201-6 | HR24A-8DP4S2000 | 4 | 2000 | For DC |
| 124-1201-6-01 | HR24A-8DP4S2000(01) | 4 | 2000 | For DC, Terminal gold plating |
| 124-1202-9 | HR24A-8DP4S3000 | 4 | 3000 | For DC |
| 124-1202-9-01 | HR24A-8DP4S3000(01) | 4 | 3000 | For DC, Terminal gold plating |
| 124-1203-1 | HR24A-8DP4S5000 | 4 | 5000 | For DC |
| 124-1203-1-01 | HR24A-8DP4S5000(01) | 4 | 5000 | For DC, Terminal gold plating |
| 124-1000-4 | HR24A-8AP4S1000 | 4 | 1000 | For AC |
| 124-1000-4-01 | HR24A-8AP4S1000(01) | 4 | 1000 | For AC, Terminal gold plating |
| 124-1001-7 | HR24A-8AP4S2000 | 4 | 2000 | For AC |
| 124-1001-7-01 | HR24A-8AP4S2000(01) | 4 | 2000 | For AC, Terminal gold plating |
| 124-1002-0 | HR24A-8AP4S3000 | 4 | 3000 | For AC |
| 124-1002-0-01 | HR24A-8AP4S3000(01) | 4 | 3000 | For AC, Terminal gold plating |
| 124-1003-2 | HR24A-8AP4S5000 | 4 | 5000 | For AC |
| 124-1003-2-01 | HR24A-8AP4S5000(01) | 4 | 5000 | For AC, Terminal gold plating |

(Straight Plug ~ Right-Angle Jack)



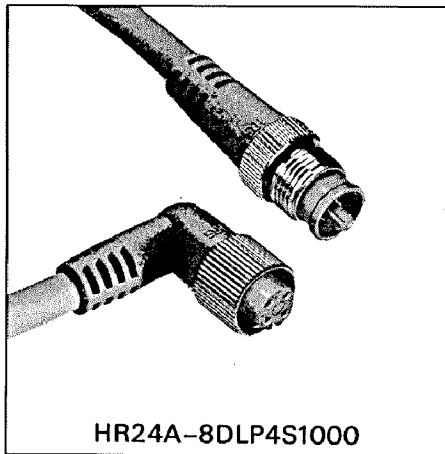
HR24B-8DP4S1000



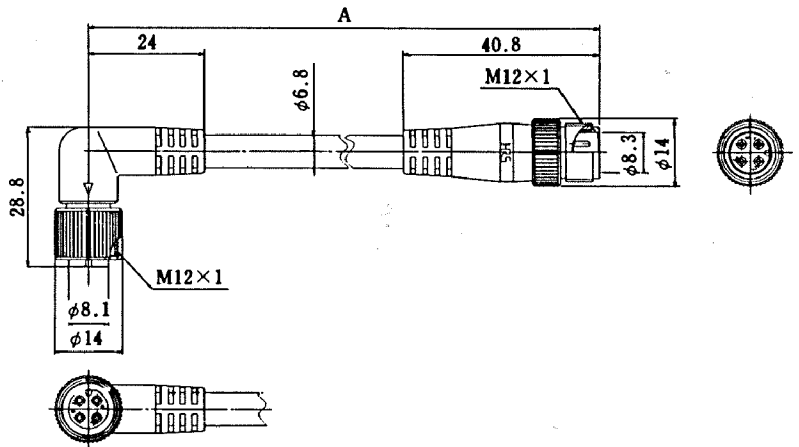
(An example in shape)

| HRS No. | Product No. | No. of pins | A | Remarks |
|---------------|---------------------|-------------|------|-------------------------------|
| 124-1208-5 | HR24B-8DP4S1000 | 4 | 1000 | For DC |
| 124-1208-5-01 | HR24B-8DP4S1000(01) | 4 | 1000 | For DC, Terminal gold plating |
| 124-1209-8 | HR24B-8DP4S2000 | 4 | 2000 | For DC |
| 124-1209-8-01 | HR24B-8DP4S2000(01) | 4 | 2000 | For DC, Terminal gold plating |
| 124-1210-7 | HR24B-8DP4S3000 | 4 | 3000 | For DC |
| 124-1210-7-01 | HR24B-8DP4S3000(01) | 4 | 3000 | For DC, Terminal gold plating |
| 124-1211-0 | HR24B-8DP4S5000 | 4 | 5000 | For DC |
| 124-1211-0-01 | HR24B-8DP4S5000(01) | 4 | 5000 | For DC, Terminal gold plating |
| 124-1004-5 | HR24B-8AP4S1000 | 4 | 1000 | For AC |
| 124-1004-5-01 | HR24B-8AP4S1000(01) | 4 | 1000 | For AC, Terminal gold plating |
| 124-1005-8 | HR24B-8AP4S2000 | 4 | 2000 | For AC |
| 124-1005-8-01 | HR24B-8AP4S2000(01) | 4 | 2000 | For AC, Terminal gold plating |
| 124-1006-0 | HR24B-8AP4S3000 | 4 | 3000 | For AC |
| 124-1006-0-01 | HR24B-8AP4S3000(01) | 4 | 3000 | For AC, Terminal gold plating |
| 124-1007-3 | HR24B-8AP4S5000 | 4 | 5000 | For AC |
| 124-1007-3-01 | HR24B-8AP4S5000(01) | 4 | 5000 | For AC, Terminal gold plating |

(Right-Angle Plug ~ Straight Jack)



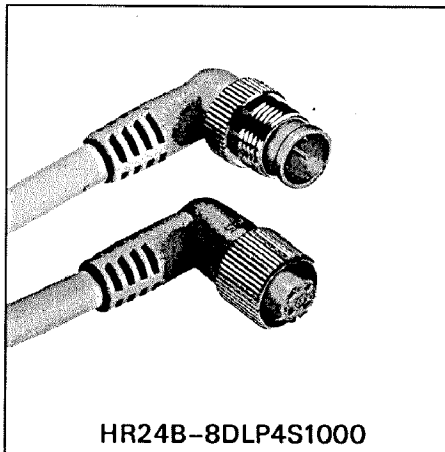
HR24A-8DLP4S1000



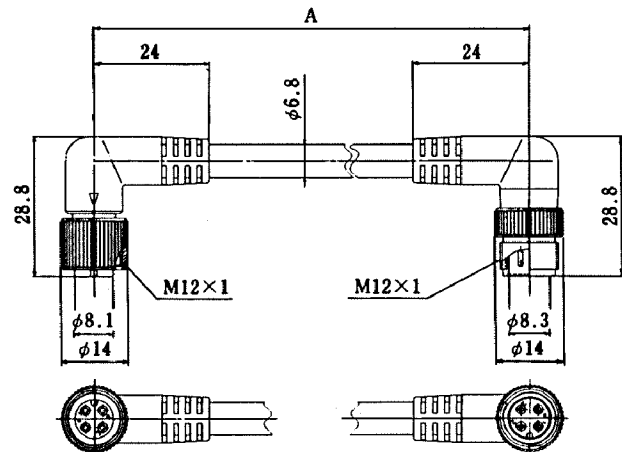
(An example in shape)

| HRS No. | Product No. | No. of pins | A | Remarks |
|---------------|----------------------|-------------|------|-------------------------------|
| 124-1216-3 | HR24A-8DLP4S1000 | 4 | 1000 | For DC |
| 124-1216-3-01 | HR24A-8DLP4S1000(01) | 4 | 1000 | For DC, Terminal gold plating |
| 124-1217-6 | HR24A-8DLP4S2000 | 4 | 2000 | For DC |
| 124-1217-6-01 | HR24A-8DLP4S2000(01) | 4 | 2000 | For DC, Terminal gold plating |
| 124-1218-9 | HR24A-8DLP4S3000 | 4 | 3000 | For DC |
| 124-1218-9-01 | HR24A-8DLP4S3000(01) | 4 | 3000 | For DC, Terminal gold plating |
| 124-1219-1 | HR24A-8DLP4S5000 | 4 | 5000 | For DC |
| 124-1219-1-01 | HR24A-8DLP4S5000(01) | 4 | 5000 | For DC, Terminal gold plating |
| 124-1008-6 | HR24A-8ALP4S1000 | 4 | 1000 | For AC |
| 124-1008-6-01 | HR24A-8ALP4S1000(01) | 4 | 1000 | For AC, Terminal gold plating |
| 124-1009-9 | HR24A-8ALP4S2000 | 4 | 2000 | For AC |
| 124-1009-9-01 | HR24A-8ALP4S2000(01) | 4 | 2000 | For AC, Terminal gold plating |
| 124-1010-6 | HR24A-8ALP4S3000 | 4 | 3000 | For AC |
| 124-1010-6-01 | HR24A-8ALP4S3000(01) | 4 | 3000 | For AC, Terminal gold plating |
| 124-1011-0 | HR24A-8ALP4S5000 | 4 | 5000 | For AC |
| 124-1011-0-01 | HR24A-8ALP4S5000(01) | 4 | 5000 | For AC, Terminal gold plating |

(Right-Angle Plug ~ Right-Angle Jack)



HR24B-8DLP4S1000

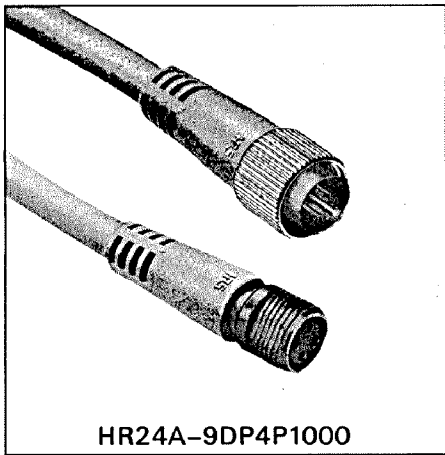


(An example in shape)

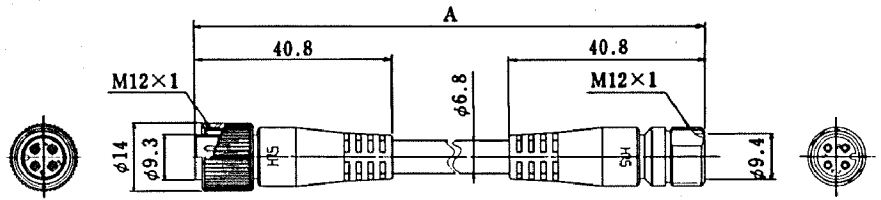
| HRS No. | Product No. | No. of pins | A | Remarks |
|---------------|----------------------|-------------|------|-------------------------------|
| 124-1224- 1 | HR24B-8DLP4S1000 | 4 | 1000 | For DC |
| 124-1224-1-01 | HR24B-8DLP4S1000(01) | 4 | 1000 | For DC, Terminal gold plating |
| 124-1225-4 | HR24B-8DLP4S2000 | 4 | 2000 | For DC |
| 124-1225-4-01 | HR24B-8DLP4S2000(01) | 4 | 2000 | For DC, Terminal gold plating |
| 124-1226-7 | HR24B-8DLP4S3000 | 4 | 3000 | For DC |
| 124-1226-7-01 | HR24B-8DLP4S3000(01) | 4 | 3000 | For DC, Terminal gold plating |
| 124-1227-0 | HR24B-8DLP4S5000 | 4 | 5000 | For DC |
| 124-1227-0-01 | HR24B-8DLP4S5000(01) | 4 | 5000 | For DC, Terminal gold plating |
| 124-1012-3 | HR24B-8ALP4S1000 | 4 | 1000 | For AC |
| 124-1012-3-01 | HR24B-8ALP4S1000(01) | 4 | 1000 | For AC, Terminal gold plating |
| 124-1013-6 | HR24B-8ALP4S2000 | 4 | 2000 | For AC |
| 124-1013-6-01 | HR24B-8ALP4S2000(01) | 4 | 2000 | For AC, Terminal gold plating |
| 124-1014-9 | HR24B-8ALP4S3000 | 4 | 3000 | For AC |
| 124-1014-9-01 | HR24B-8ALP4S3000(01) | 4 | 3000 | For AC, Terminal gold plating |
| 124-1015-1 | HR24B-8ALP4S5000 | 4 | 5000 | For AC |
| 124-1015-1-01 | HR24B-8ALP4S5000(01) | 4 | 5000 | For AC, Terminal gold plating |

■ Junction Connector (HR24, available in 9 sizes)

(Straight Plug ~ Straight Jack)



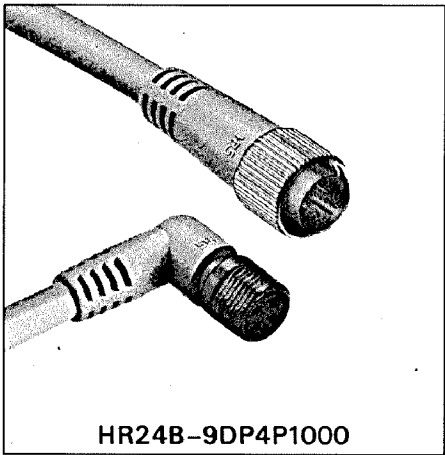
HR24A-9DP4P1000



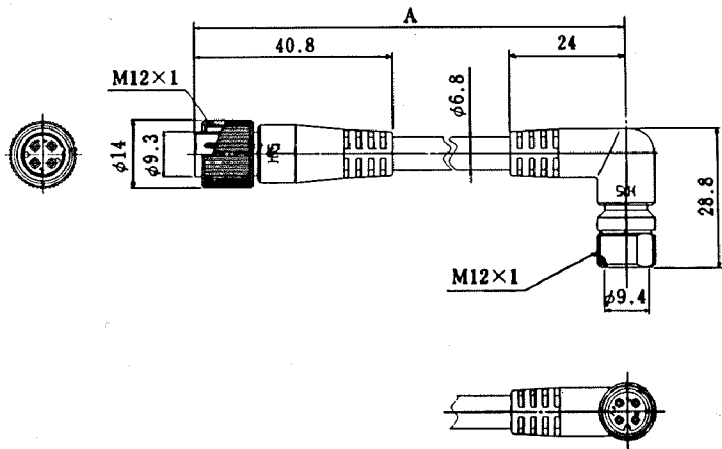
(An example in shape)

| HRS No. | Product No. | No. of pins | A | Remarks |
|---------------|---------------------|-------------|------|-------------------------------|
| 124-1204-4 | HR24A-9DP4P1000 | 4 | 1000 | For DC |
| 124-1204-4-01 | HR24A-9DP4P1000(01) | 4 | 1000 | For DC, Terminal gold plating |
| 124-1205-7 | HR24A-9DP4P2000 | 4 | 2000 | For DC |
| 124-1205-7-01 | HR24A-9DP4P2000(01) | 4 | 2000 | For DC, Terminal gold plating |
| 124-1206-0 | HR24A-9DP4P3000 | 4 | 3000 | For DC |
| 124-1206-0-01 | HR24A-9DP4P3000(01) | 4 | 3000 | For DC, Terminal gold plating |
| 124-1207-2 | HR24A-9DP4P5000 | 4 | 5000 | For DC |
| 124-1207-2-01 | HR24A-9DP4P5000(01) | 4 | 5000 | For DC, Terminal gold plating |

(Straight Plug ~ Right-Angle Jack)



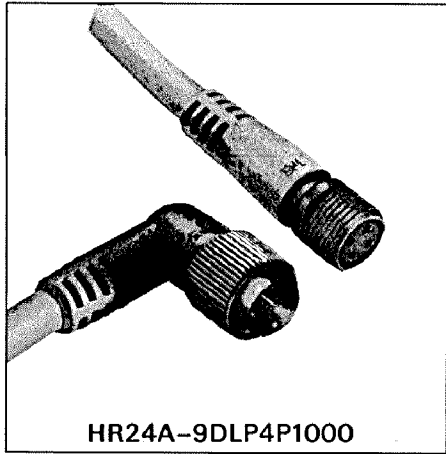
HR24B-9DP4P1000



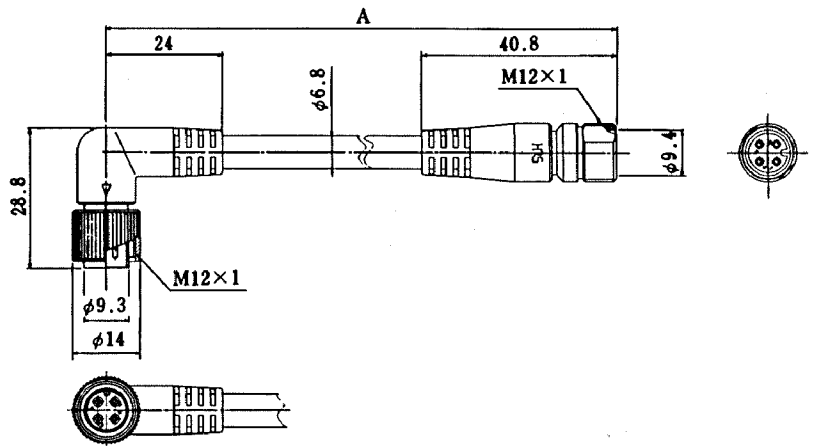
(An example in shape)

| HRS No. | Product No. | No. of pins | A | Remarks |
|---------------|---------------------|-------------|------|-------------------------------|
| 124-1212-2 | HR24B-9DP4P1000 | 4 | 1000 | For DC |
| 124-1212-2-01 | HR24B-9DP4P1000(01) | 4 | 1000 | For DC, Terminal gold plating |
| 124-1213-5 | HR24B-9DP4P2000 | 4 | 2000 | For DC |
| 124-1213-5-01 | HR24B-9DP4P2000(01) | 4 | 2000 | For DC, Terminal gold plating |
| 124-1214-8 | HR24B-9DP4P3000 | 4 | 3000 | For DC |
| 124-1214-8-01 | HR24B-9DP4P3000(01) | 4 | 3000 | For DC, Terminal gold plating |
| 124-1215-0 | HR24B-9DP4P5000 | 4 | 5000 | For DC |
| 124-1215-0-01 | HR24B-9DP4P5000(01) | 4 | 5000 | For DC, Terminal gold plating |

(Right-Angle Plug ~ Straight Jack)



HR24A-9DLP4P1000



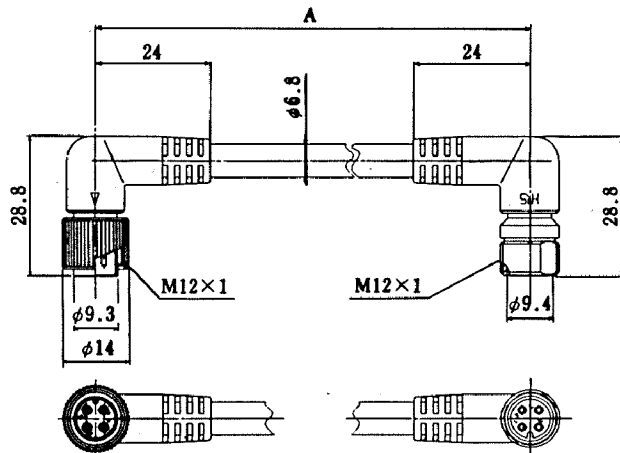
(An example in shape)

| HRS No. | Product No. | No. of pins | A | Remarks |
|---------------|----------------------|-------------|------|-------------------------------|
| 124-1220-0 | HR24A-9DLP4P1000 | 4 | 1000 | For DC |
| 124-1220-0-01 | HR24A-9DLP4P1000(01) | 4 | 1000 | For DC, Terminal gold plating |
| 124-1221-3 | HR24A-9DLP4P2000 | 4 | 2000 | For DC |
| 124-1221-3-01 | HR24A-9DLP4P2000(01) | 4 | 2000 | For DC, Terminal gold plating |
| 124-1222-6 | HR24A-9DLP4P3000 | 4 | 3000 | For DC |
| 124-1222-6-01 | HR24A-9DLP4P3000(01) | 4 | 3000 | For DC, Terminal gold plating |
| 124-1223-9 | HR24A-9DLP4P5000 | 4 | 5000 | For DC |
| 124-1223-9-01 | HR24A-9DLP4P5000(01) | 4 | 5000 | For DC, Terminal gold plating |

(Right-Angle Plug ~ Right-Angle Jack)



HR24B-9DLP4P1000

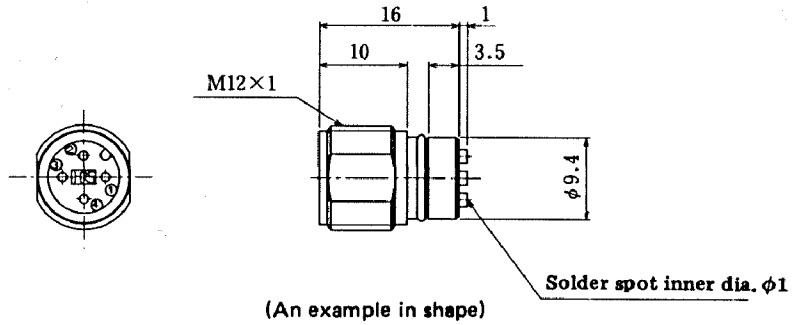


(An example in shape)

| HRS No. | Product No. | No. of pins | A | Remarks |
|---------------|----------------------|-------------|------|-------------------------------|
| 124-1228-2 | HR24B-9DLP4P1000 | 4 | 1000 | For DC |
| 124-1228-2-01 | HR24B-9DLP4P1000(01) | 4 | 1000 | For DC, Terminal gold plating |
| 124-1228-5 | HR24B-9DLP4P2000 | 4 | 2000 | For DC |
| 124-1228-5-01 | HR24B-9DLP4P2000(01) | 4 | 2000 | For DC, Terminal gold plating |
| 124-1230-4 | HR24B-9DLP4P3000 | 4 | 3000 | For DC |
| 124-1230-4-01 | HR24B-9DLP4P3000(01) | 4 | 3000 | For DC, Terminal gold plating |
| 124-1231-7 | HR24B-9DLP4P5000 | 4 | 5000 | For DC |
| 124-1231-7-01 | HR24B-9DLP4P5000(01) | 4 | 5000 | For DC, Terminal gold plating |

■ Receptacle (Sensor direct attachment)

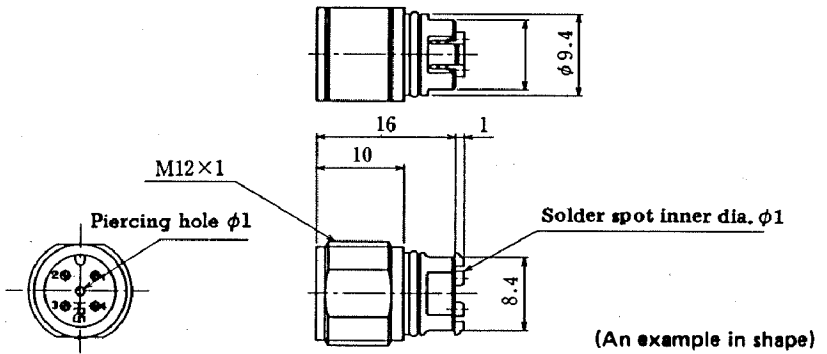
(Lock Screw Type)



| HRS No. | Product No. | No. of pins | Remarks |
|---------------|-------------------|-------------|-------------------------------|
| 124-0104-4 | HR24-8DRC-4PB | 4 | For DC |
| 124-0104-4-01 | HR24-8DRC-4PB(01) | 4 | For DC, Terminal gold plating |
| 124-0150-1 | HR24-8ARC-4PB | 4 | For AC |
| 124-0150-1-01 | HR24-8ARC-4PB(01) | 4 | For AC, Terminal gold plating |

Note: For the mounting hole dimensions, see page 215.

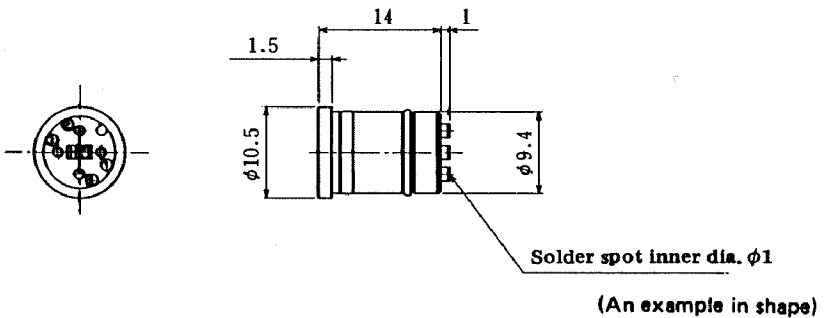
(Lock Screw Type)



| HRS No. | Product No. | No. of pins | Remarks |
|---------------|------------------|-------------|-------------------------------|
| 124-0103-1 | HR24-8DRB-4P | 4 | For DC |
| 124-0103-1-01 | HR24-8DRB-4P(01) | 4 | For DC, Terminal gold plating |

Notes: 1. For the mounting hole dimensions, see page 215.
2. Color of insulating material: Black

(Lock without Screw Type)

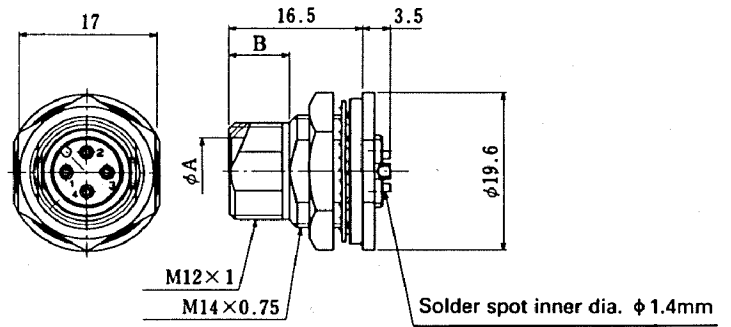
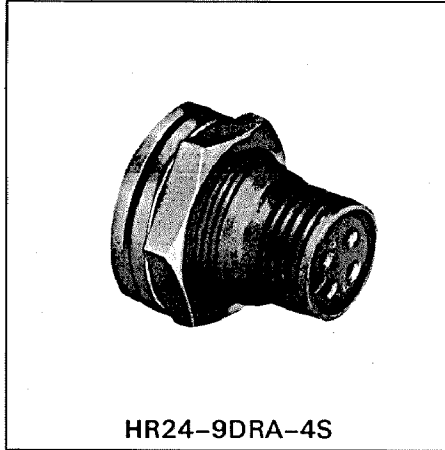


| HRS No. | Product No. | No. of pins | Remarks |
|---------------|-------------------|-------------|-------------------------------|
| 124-1005-7 | HR24-8DRD-4PB | 4 | For DC |
| 124-1005-7-01 | HR24-8DRD-4PB(01) | 4 | For DC, Terminal gold plating |
| 124-1051-1 | HR24-8ARD-4PB | 4 | For AC |
| 124-1051-1-01 | HR24-8ARD-4PB(01) | 4 | For AC, Terminal gold plating |

Note: For the mounting hole dimensions, see page 215.

■ Receptacle (Solder type)

(Front panel mount type)



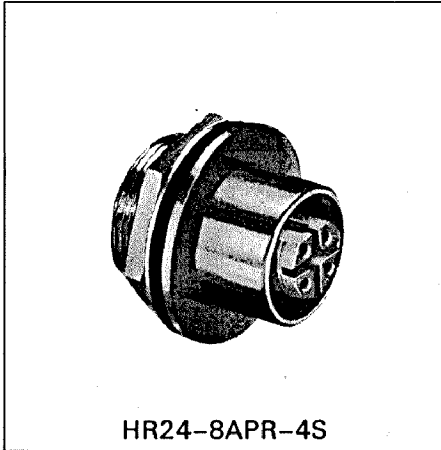
(An example in shape)

| HRS No. | Product No. | No. of pins | ϕA | B | Remarks |
|---------------|------------------|-------------|----------|-----|-------------------------------|
| 124-0101-6 | HR24-8DRA-4P | 4 | 8.3 | 8.5 | For DC |
| 124-0101-6-01 | HR24-8DRA-4P(01) | 4 | 8.3 | 8.5 | For DC, Terminal gold plating |
| 124-0102-9 | HR24-9DRA-4S | 4 | 9.4 | 8 | For DC |
| 124-0102-9-01 | HR24-9DRA-4S(01) | 4 | 9.4 | 8 | For DC, Terminal gold plating |
| 124-0152-7 | HR24-8ARA-4P | 4 | 8.3 | 8.5 | For DC |
| 124-0152-7-01 | HR24-8ARA-4P(01) | 4 | 8.3 | 8.5 | For DC, Terminal gold plating |

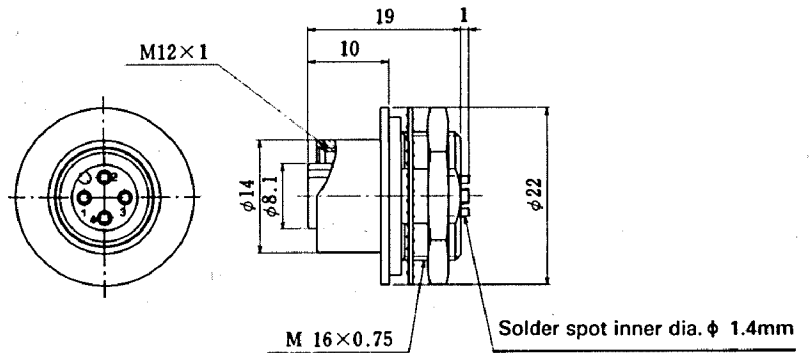
Note: For the mounting hole dimensions, see page 215.

■ Plug Receptacle (Solder type)

(Back panel mounting type)



HR24-8APR-4S

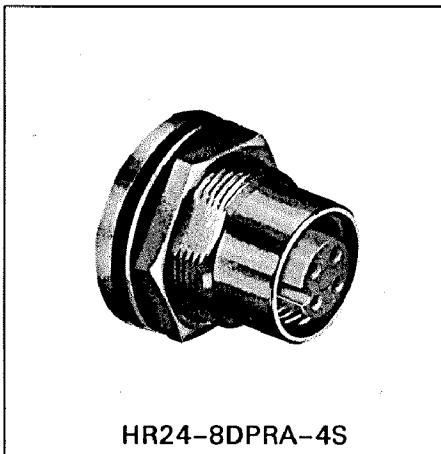


(An example in shape)

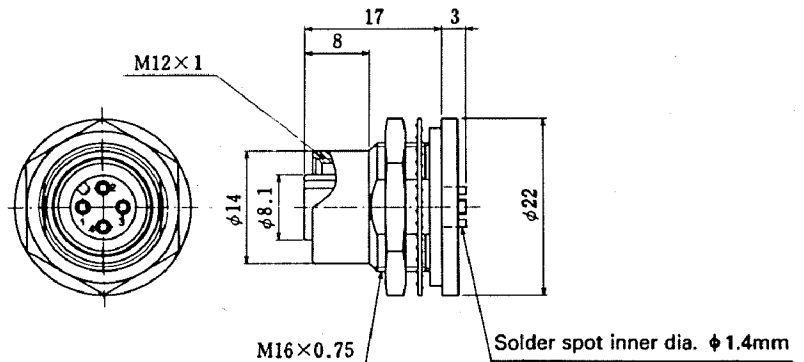
| HRS No. | Product No. | No. of pins | Remarks |
|---------------|------------------|-------------|-------------------------------|
| 124-0003-7 | HR24-8DPR-4S | 4 | For DC |
| 124-0003-7-01 | HR24-8DPR-4S(01) | 4 | For DC, Terminal gold plating |
| 124-0051-0-01 | HR24-8APR-4S(01) | 4 | For DC, Terminal gold plating |

Note: For the mounting hole dimensions, see page 215.

(Front panel mounting type)



HR24-8DPRA-4S



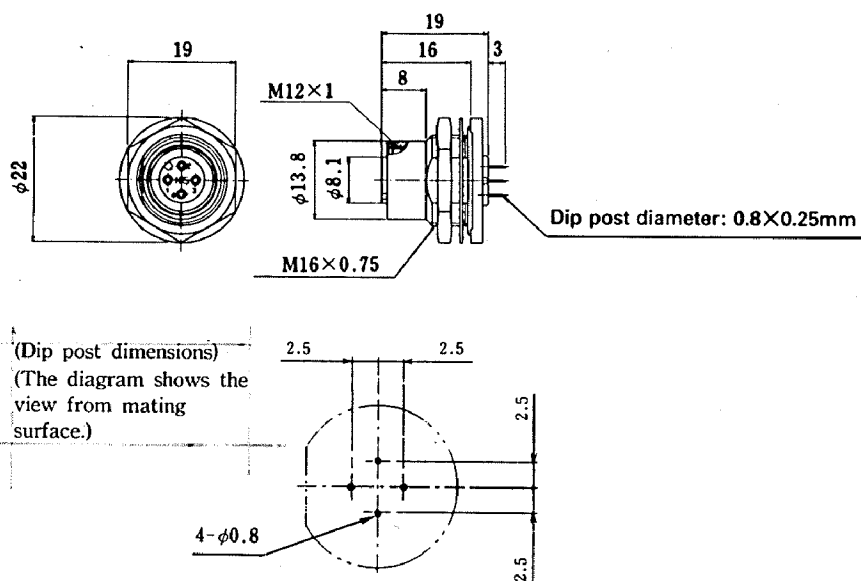
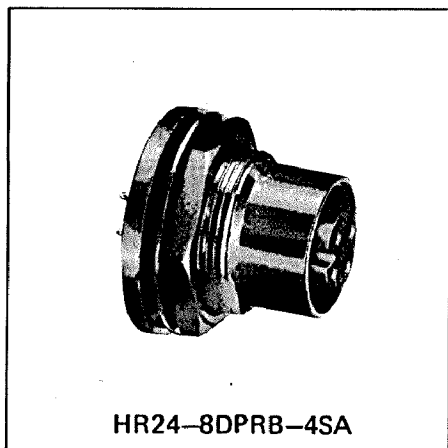
(An example in shape)

| HRS No. | Product No. | No. of pins | Remarks |
|---------------|-------------------|-------------|-------------------------------|
| 124-0004-0 | HR24-8DPRA-4S | 4 | For DC |
| 124-0004-0-01 | HR24-8DPRA-4S(01) | 4 | For DC, Terminal gold plating |
| 124-0052-2-01 | HR24-8APRA-4S(01) | 4 | For DC, Terminal gold plating |

Note: For the mounting hole dimensions, see page 215.

■ Plug Receptacle (PCB dip type)

(Front panel mount type)



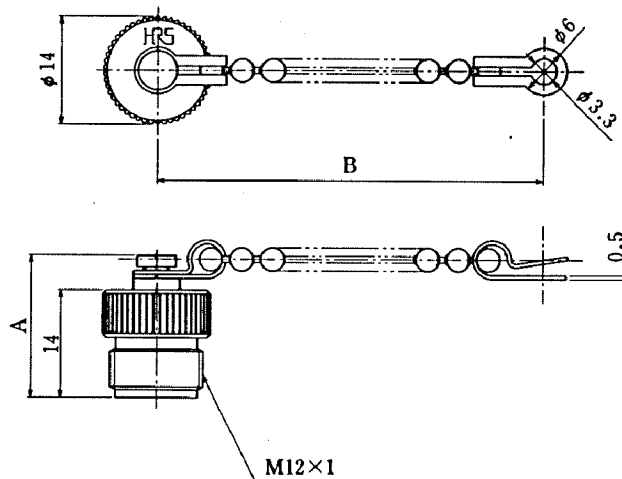
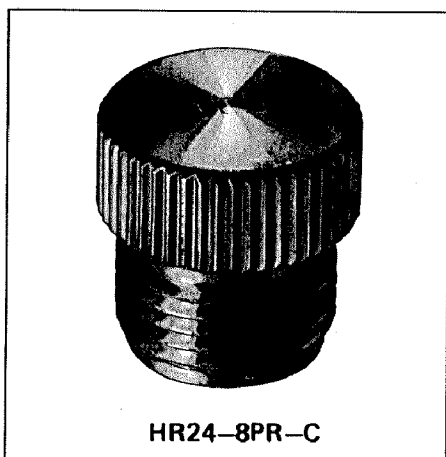
(An example in shape)

| HRS No. | Product No. | No. of pins | Remarks |
|---------------|--------------------|-------------|---|
| 124-0001-1 | HR24-8DPRB-4SA | 4 | For DC |
| 124-0001-1-01 | HR24-8DPRB-4SA(01) | 4 | For DC Terminal gold, Insulation Black. |

Note: 1. For the mounting hole dimensions, see page 215.

2. Applicable dip post dimensions processing allowance is ± 0.05 .

■ Cap



(An example in shape)

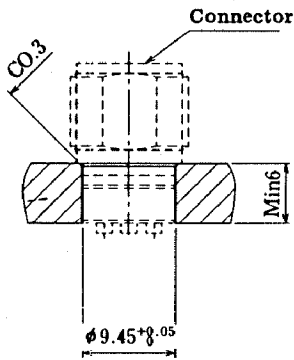
| HRS No. | Product No. | A | B | Remarks |
|------------|-------------|------|-----|---------------|
| 124-5000-6 | HR24-8PR-C | — | — | No chain |
| 124-5001-9 | HR24-8PR-C1 | 18.5 | 100 | Attract chain |
| 124-5002-1 | HR24-8DR-C1 | 15 | 100 | Attract chain |

◆ Mounting Hole Dimensions

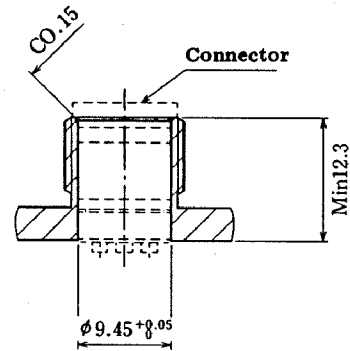
● Mounting sensor direct mount type connectors

1. Connect wires to the connector.
2. Apply adhesive to the side of the connector to be embedded in a sensor.
3. After embedding the connector in the sensor, fix the connector by loading resin into the connection part.

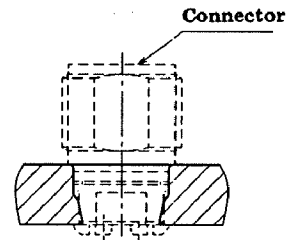
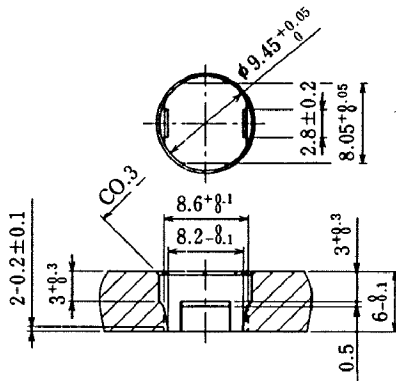
For HR24-8*RC (sensor direct-mounted type)



For HR24-8*RD (sensor direct-mounted type)

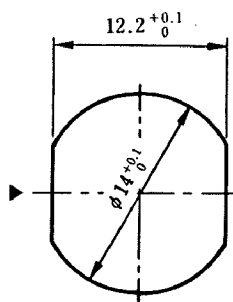


For HR24-8DRB (sensor direct-mounted type)

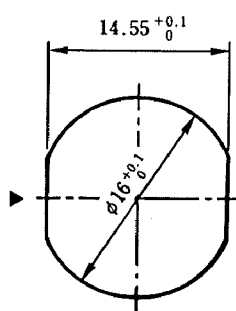


View of mounted connector

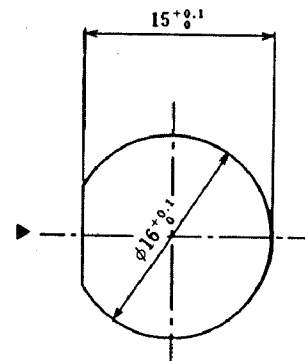
For HR24-8DRA
For HR24-9DRA



For HR24-8*PR
For HR24-8*PRA



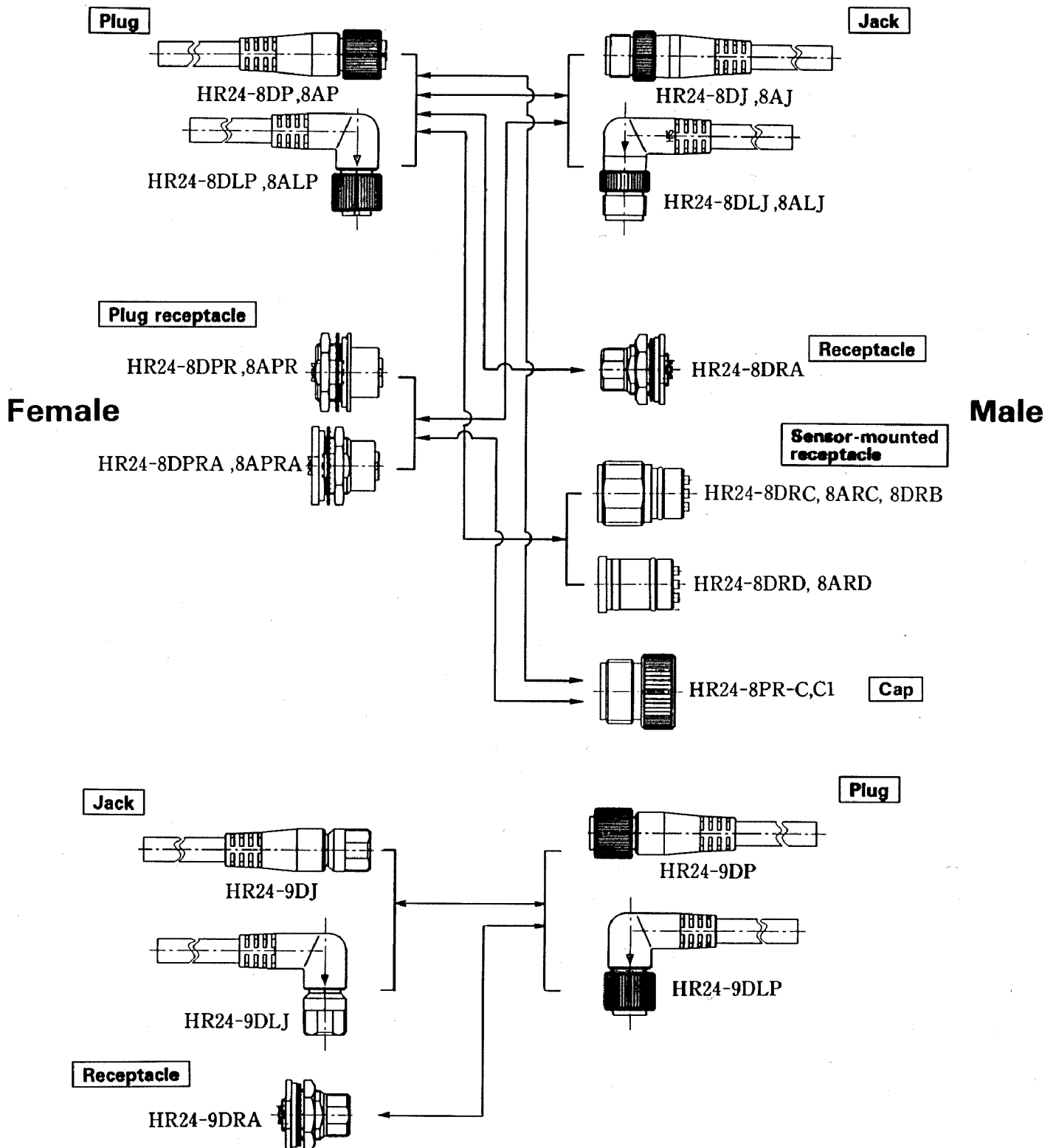
For HR24-8DPRB



- Note 1. ▲ shows the direction of the No. 1 terminal when the connector is mounted on a panel.
2. * will be replaced by D or A denoting DC or AC.

◆ Connection

The following figure shows possible connection of the connectors. The connectors and receptacles linked with the arrow lines are applicable to each other.



Note: Note that the HR24-8D* (DC type) is not applicable to the HR24-8A* (AC type).
For example, the HR24-8DP is not applicable to the HR24-8AJ.