

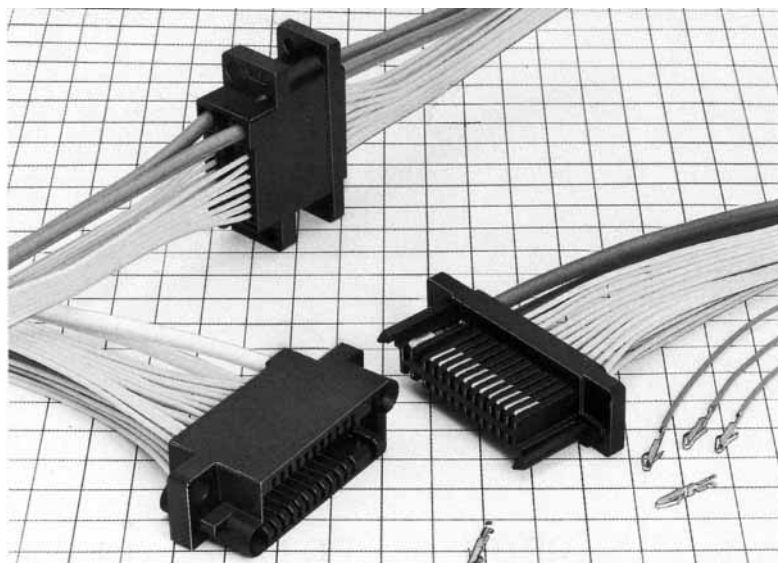
QR/P6 SERIES

QR/P6 SERIES RECTANGULAR MINIATURE MULTI-CONTACT RACK/PANEL CRIMP CONNECTOR

General

The QR/P6 Series are miniaturized versions of the QR/P and QR/P1 series. Rectangular multi-contact rack and panel connectors for plug-in connection.

Available in 6, 12, 16, and 24 contacts for highly efficient and reliable crimp termination.



Features

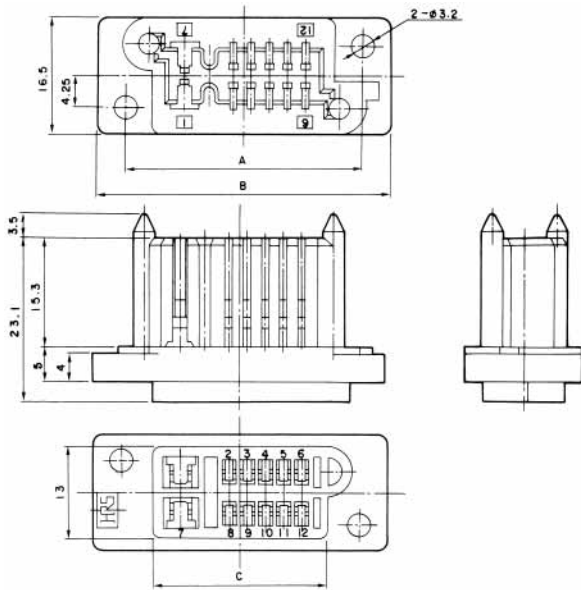
- (1) Offers smooth insertion/extraction and stable contact pressure through point-blade contact, and has ample allowance for the deviations in contact length specific to plug-in connection.
- (2) Miniaturized by separating power contacts from signal contacts.
- (3) Signal contacts in the housing are located in pitches of 2.54mm. The opposed contacts at one end of the connector are spaced 6.9mm so that they can withstand high voltage. Can be used for power supplies. Uses flame-retardant insulator (UL94-0).
- (4) Miniaturized using guide pins integral with the insulator.
- (5) Ensures smooth insertion and extraction, and designed to be fixed with stepped screws on a panel or rack.
- (6) The female housing is designed to allow the contact part of the female terminal to be below the mating surface, meeting the Finger Test Requirements (complying with UL 1950)
- (7) The connectors of the series have passed UL, CSA and TÜV standard.

Application

PPC, Transmission/Reception equipment, Data Communication, equipment, Vending machines, Measuring Instruments, Automation equipment, Switch-boards.

Housing

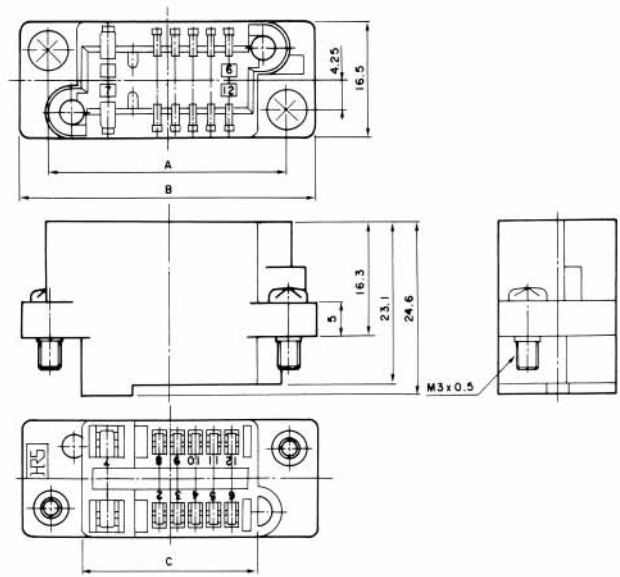
Male Housing



Unit: mm

| HRS No. | No. of Pin | Part No. | A | B | C | RoHS |
|-----------------|------------|------------------|-------|-------|-------|------|
| CL221-0162-0-01 | 6 | QR/P6- 6P-C (01) | 24.67 | 32.67 | 15.87 | ○ |
| CL221-0163-2-01 | 12 | QR/P6-12P-C (01) | 33.47 | 41.47 | 24.67 | |
| CL221-0207-6-01 | 16 | QR/P6-16P-C (01) | 38.55 | 46.55 | 29.75 | |
| CL221-0209-1-01 | 24 | QR/P6-24P-C (01) | 48.71 | 56.71 | 39.91 | |

Female housing



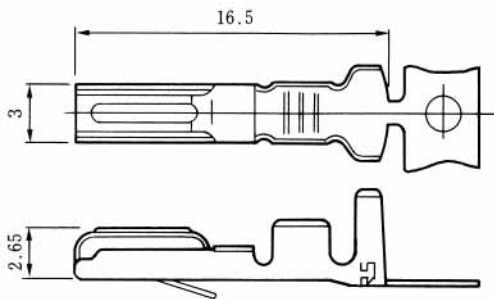
Unit: mm

| HRS No. | No. of Pin | Part No. | A | B | C | RoHS |
|-----------------|------------|------------------|-------|-------|-------|------|
| CL221-0161-7-01 | 6 | QR/P6- 6S-C (01) | 24.67 | 32.67 | 15.87 | ○ |
| CL221-0164-5-01 | 12 | QR/P6-12S-C (01) | 33.47 | 41.47 | 24.67 | |
| CL221-0208-9-01 | 16 | QR/P6-16S-C (01) | 38.55 | 46.55 | 29.75 | |
| CL221-0210-0-01 | 24 | QR/P6-24S-C (01) | 48.71 | 56.71 | 39.91 | |

Note: Determine the combinations with the panel so that the mating clearance between the P side and S side is 1.5mm.

Contact

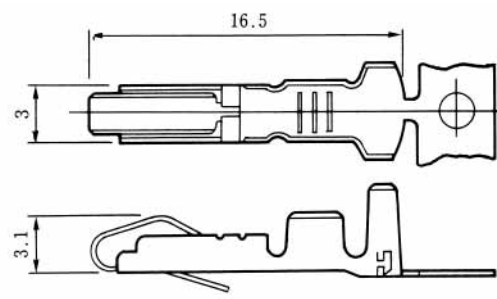
Male power terminal



Selective gold plated with nickel underplating

| Applicable Wire | HRS No. | Part No. | Type | Packing | RoHS |
|----------------------|-----------------|---------------------|---------------|----------|------|
| UL1015 AWG#14~16 | CL221-0114-7-12 | QR/P1-PC1B-121 (12) | Loose contact | 100pin | ○ |
| | CL221-0118-8-12 | QR/P1-PC1B-221 (12) | Chain contact | 3,000pin | |
| UL10107 AWG#18~24 | CL221-0102-8-12 | QR/P1-PC1A-111 (12) | Loose contact | 100pin | |
| | CL221-0106-9-12 | QR/P1-PC1A-211 (12) | Chain contact | 5,000pin | |

Female power terminal

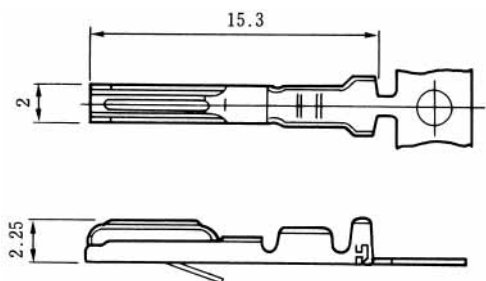


Selective gold plated with nickel underplating

| Applicable Wire | HRS No. | Part No. | Type | Packing | RoHS |
|----------------------|-----------------|---------------------|---------------|----------|------|
| UL1015 AWG#14~16 | CL221-0116-2-12 | QR/P1-SC1B-121 (12) | Loose contact | 100pin | ○ |
| | CL221-0120-0-12 | QR/P1-SC1B-122 (12) | Chain contact | 3,000pin | |
| UL10107 AWG#18~24 | CL221-0104-3-12 | QR/P1-SC1A-111 (12) | Loose contact | 100pin | |
| | CL221-0108-4-12 | QR/P1-SC1A-211 (12) | Chain contact | 5,000pin | |

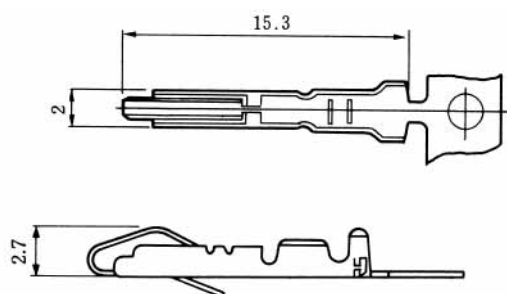
Contact

Male signal terminal



Selective gold plated with nickel underplating

Female signal terminal

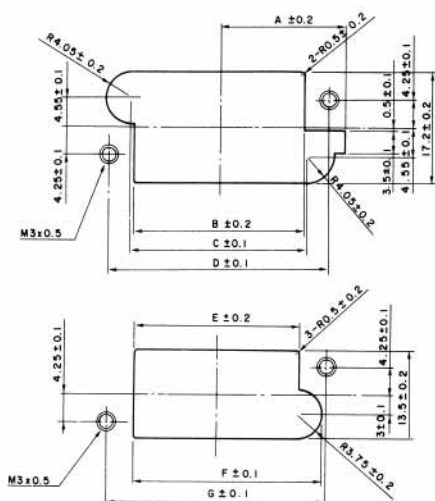


Selective gold plated with nickel underplating

| Applicable Wire | HRS No. | Part No. | Type | Packing | RoHS |
|-----------------|-----------------|---------------------|-------|----------|------|
| UL10107 | CL221-0103-0-12 | QR/P1-PC2A-111 (12) | Loose | 100pin | ○ |
| AWG#24~28 | CL221-0107-1-12 | QR/P1-PC2A-211 (12) | Chain | 5,000pin | |

| Applicable Wire | HRS No. | Part No. | Type | Packing | RoHS |
|-----------------|-----------------|---------------------|-------|----------|------|
| UL10107 | CL221-0105-6-12 | QR/P1-SC2A-111 (12) | Loose | 100pin | ○ |
| AWG#24~28 | CL221-0109-7-12 | QR/P1-SC2A-211 (12) | Chain | 5,000pin | |

Panel Mounting Dimensions (for Cases with P Insulation)



Mounting on panel outside

Unit: mm

| No. of pin | | 8 Pin | 12 Pin | 16 Pin | 24 Pin |
|---------------------------|---|-------|--------|--------|--------|
| Mounting on panel inside | A | 14.87 | 19.27 | 21.85 | 26.95 |
| | B | 17.17 | 25.97 | 31.18 | 41.34 |
| | C | 18.17 | 26.97 | 32.05 | 42.21 |
| | D | 24.67 | 33.47 | 38.55 | 48.71 |
| Mounting on panel outside | E | 16.37 | 25.17 | 30.25 | 40.41 |
| | F | 19.87 | 28.67 | 33.75 | 43.91 |
| | G | 24.67 | 33.47 | 38.55 | 48.71 |

Applicable Tools



Hand crimping tool



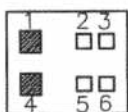
Automatic crimping machine
 CM-105
 CL901-0005-4

| Type | HRS No. | Part No. | Applicator terminay |
|-------------------------------|--------------|------------------|----------------------------------|
| Hand Crimp Tool | CL250-0020-0 | TC-QR/P1-PC1B | QR/P1-PC1B-121 |
| | CL250-0015-0 | TC-QR/P1-PC1A | QR/P1-PC1A-111 |
| | CL250-0022-6 | TC-QR/P1-SC1B | QR/P1-SC1B-121 |
| | CL250-0017-6 | TC-QR/P1-SC1A | QR/P1-SC1A-111 |
| | CL250-0016-3 | TC-QR/P1-PC2A | QR/P1-PC2A-111 |
| | CL250-0018-9 | TC-QR/P1-SC2A | QR/P1-SC2A-111 |
| Auto Crimp Machine Applicator | CL901-2529-6 | AP105-QR/P1-1B-2 | QR/P1-PC1B-221 QR/P1-SC1B-221 |
| | CL901-2527-0 | AP105-QR/P1-1A-1 | QR/P1-PC1A-211 QR/P1-SC1A-211 |
| | CL901-2528-3 | AP105-QR/P1-2A-1 | QR/P1-PC2A-211 |
| | | | QR/P1-SC2A-211 |
| Hand Tool | CL250-0242-2 | TC-QR/P6-21 | |

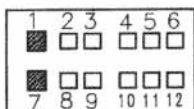
Contacts for thick wire Contact Configuration

Male Housing (Viewed from Wiring Side)

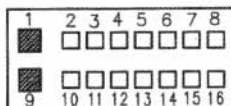
■: indicates a contact hole for thick wire



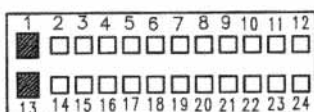
QR/P6-6P-C (01)



QR/P6-12P-C (01)



QR/P6-16P-C (01)



QR/P1-32P-C (01)