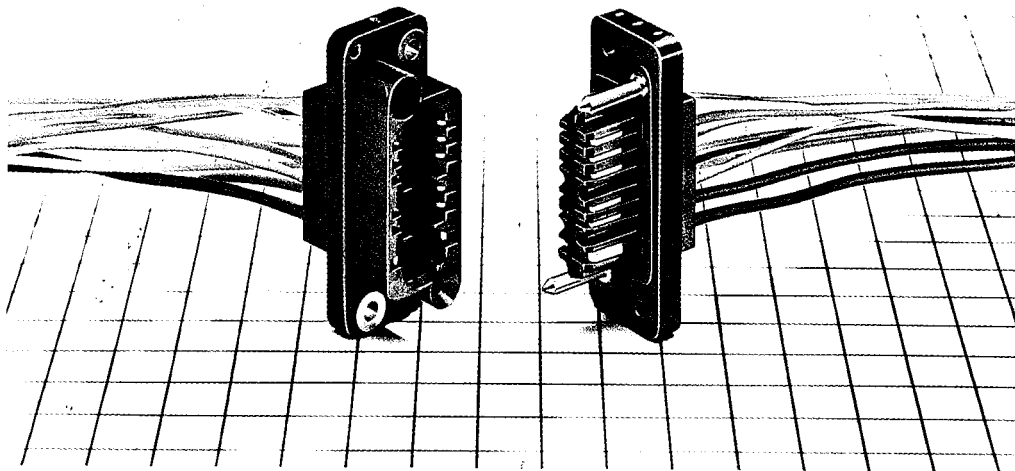


QR/P1 SERIES CONNECTOR

Small Rectangular Multi-electrode Solderless Connectors for Racks and Panels

General

OR/P1 series connectors are small and compact high density versions of original OR/P series. Available in 8, 12, 16, 24 and 32 way. Crimps terminals assure positive and reliable termination with minimum labor.



Features

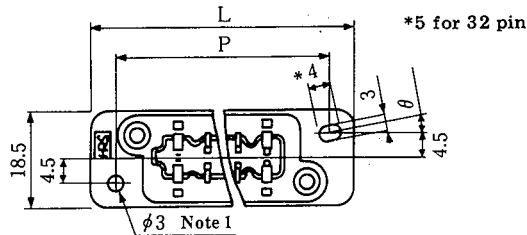
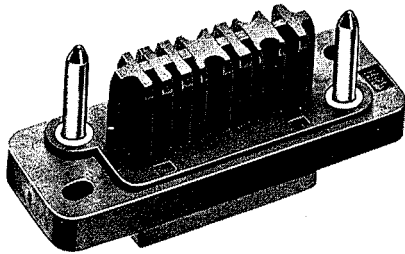
1. The coupling mechanism assures stable and reliable contact pressure through point and blade contact, in addition to smooth coupling that is sufficiently capable of dealing with variations in the coupling length specific to the plug-in connection.
2. Compact contacts due to separate power contacts from signal contacts.
3. One opposed pair (in 12 contacts), 2 pairs (in 8, 16, and 24 contacts), and 3 pairs (in 32 contacts) can be used as power supply contacts. They are spaced further apart than the others so as to have enough creeping distance to withstand a high voltage. Fire-retardant insulation materials (UL94-0) are used.
4. The Guide Pin is made of steel nickel plated to be strong enough against accidental coupling shock.
5. The mount of a receptacle housing is done through Floating Bushes. Thus, they may help to give more smooth coupling of connectors by self-adjusting function.

Applications

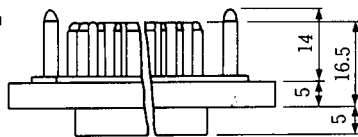
PPC, Transmission and reception equipment, Data Communication, Vending Machine, Measuring Instruments, Automatic Equipment, Switchboards, etc.

Housing

Plug Housing



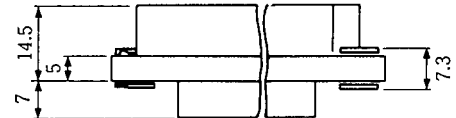
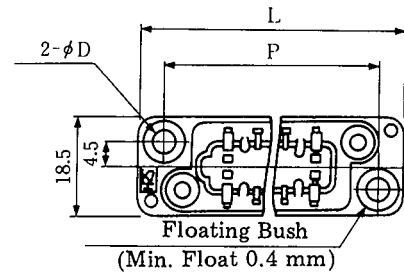
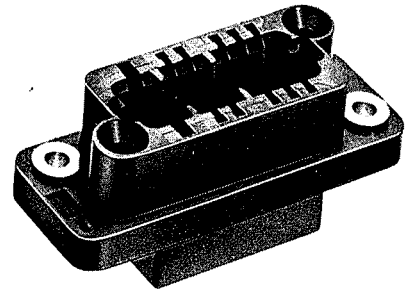
* $\phi 4.2$ for 32 pin



Unit:mm

HRS NO.	No.of Pin	Part No.	L	P	θ
CL221-0124-0-01	8	QR/PI-8P-C(01)	46.4	36.9	13.7°
CL221-0100-2-01	12	QR/PI-12P-C(01)	51	42	12.1°
CL221-0110-6-01	16	QR/PI-16P-C(01)	57.6	48.1	10.6°
CL221-0112-1-01	24	QR/PI-24P-C(01)	68.8	59.3	8.6°
CL221-0131-6-01	32	QR/PI-32P-C(01)	85.5	76.0	6°

Socket Housing



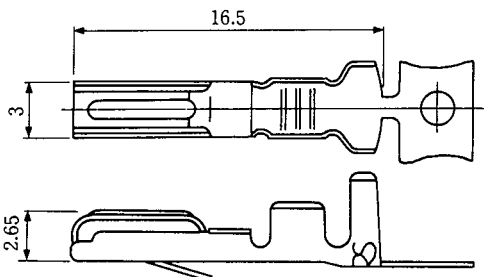
Unit:mm

HRS No.	No.of Pin	Part No.	L	P	D
CL221-0125-3-01	8	QR/PI-8S-C(01)	46.4	36.9	4.3
CL221-0101-5-01	12	QR/PI-12S-C(01)	51	42	3.3
CL221-0111-9-01	16	QR/PI-16S-C(01)	57.6	48.1	4.3
CL221-0113-4-01	24	QR/PI-24S-C(01)	68.8	59.3	4.3
CL221-0132-9-01	32	QR/PI-32S-C(01)	85.5	76.0	4.3

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

Crimp Contact (Power Circuit)

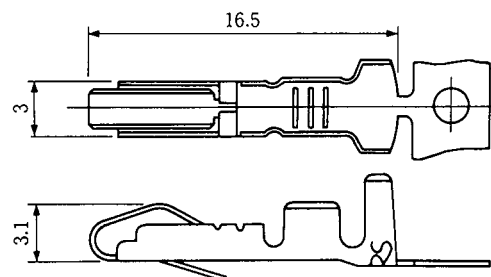
Male Contact



Plating: Partly gold plated over nickel plating

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

Female Contact

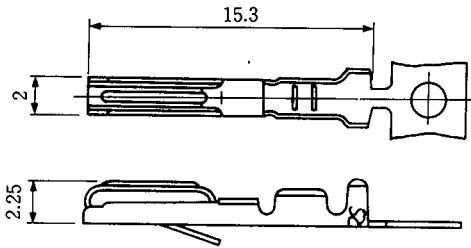


Plating: Partly gold plated over nickel plating

Applicable wire	HRS No.	Part No.	Type	Packing
AWG# 14-16	CL221-0116-2-12	QR/PI-SC1B-121(12)	Loose contact	100pin
	CL221-0120-0-12	QR/PI-SC1B-221(12)	Chain contact	3,000pin
AWG# 18-24	CL221-0104-3-12	QR/PI-SC1A-111(12)	Loose contact	100pin
	CL221-0108-4-12	QR/PI-SC1A-211(12)	Chain contact	5,000pin

Crimp Contact (Signal Circuit)

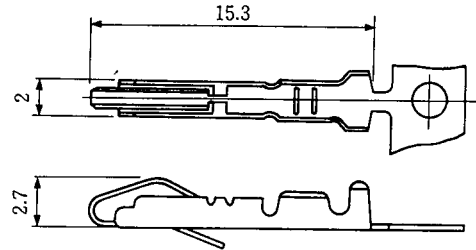
Male Contact



Plated: Gold plated over nickel plated

Applicable wire	HRS No.	Part No.	Type	Unit
AWG#20-24	CL221-0115-0-12	QR/P1-PC2B-121(12)	Loose contact	100pin
	CL221-0119-0-12	QR/P1-PC2B-221(12)	chain contact	5,000pin
AWG#24-28	CL221-0103-0-12	QR/P1-PC2A-111(12)	Loose contact	100pin
	CL221-0107-1-12	QR/P1-PC2A-211(12)	chain contact	5,000pin

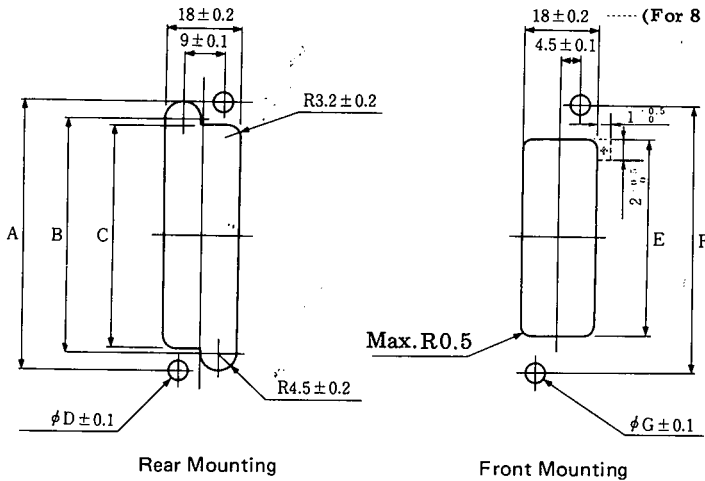
Female Contact



Plated: gold plated over nickel plated

Applicable wire	HRS No.	Part No.	Type	Unit
AWG#20-24	CL221-0117-5-12	QR/P1-SC2B-121(12)	Loose contact	100pin
	CL221-0121-2-12	QR/P1-SC2B-221(12)	chain contact	5,000pin
AWG#24-28	CL221-0105-6-12	QR/P1-SC2A-111(12)	Loose contact	100pin
	CL221-0109-7-12	QR/P1-SC2A-211(12)	chain contact	5,000pin

Recommended Mounting Hole



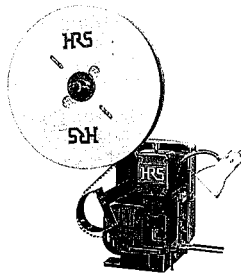
No. of Pin	8 Pin	12 Pin	16 Pin	24 Pin	32 Pin
Rear Mounting	A	36.9	42	48.1	59.3
	B	29.4	34.5	40.6	51.8
	C	28.4	33.5	39.6	50.8
	D	4.3	3.3	4.3	4.3
Front Mounting	E	22.4	27.5	33.6	44.8
	F	36.9	42	48.1	59.3
	G	4.3	3.3	4.3	4.3

Note: Panel mounting dimensions for the P insulation case are symmetrical with request to the vertical axis, in relation to the S insulation case.

Applicable Tools



Hand crimping tool



Automatic crimping machine
CM-105
CL901-0005-4

Type	HRS No.	Part No.	Applicable 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
	CL250-0021-3	TC-QR/P1-PC2B	QR/P1-PC2B-121
	CL250-0016-3	TC-QR/P1-PC2A	QR/P1-PC2A-111
	CL250-0023-9	TC-QR/P1-SC2B	QR/P1-SC2B-121
	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
	CL901-2530-5	AP105-QR/P1-2B-2	QR/P1-PC2B-221 QR/P1-SC2B-221
	CL901-2527-0	AP105-QR/P1-1A-1	QR/P1-PC1A-211 QR/P1-SC2A-211
	CL901-2528-3	AP105-QR/P1-2A-1	QR/P1-PC2A-211
			QR/P1-SC2A-211
Hand Tool	CL250-0019-1	TC-QR/P1-21	