

One-Touch Locking Style Small Sized Circular Connectors

RoHS2

CMV1S Series

Fujikura

◆ OUTLINE

The CMV1S series is a small sized water-proof connector which has solid structure made with metal shell and threaded mating.

It is compatible with the CMV1 series and is adopted thread mating method to apply industrial use which is under condition of strong vibration.

The CMV1S series is conforming to the servo motor J4 series of Mitsubishi Electric.

※ The CMV1S series is not mateable to receptacle of the CM10 series.

◆ FEATURES

1. Solid structure with metal shell
2. Firm fixation by threaded mating method
3. 10-contact plug type is adopted sequence mechanism which the ground contact mates first and breaks last.
4. Angle plug available for low-profile mounting.
5. Improved the vibration resistance performance by reviewing contact shape and changing to threaded mating method.

◆ SPECIFICATIONS

Item	2 Contacts	10 Contacts
Rated Current	3A Max. / Contact	
Rated Voltage	200V AC(r.m.s.) Max.	
Dielectric Withstanding Voltage	1500V AC(r.m.s.) / 1 minute	900V AC(r.m.s.) / 1 minute
Insulation Resistance	1,000M Ω Min. at 500V DC	
Operating Temperature Range	-25°C to +85°C	
Conductor Size	# 22	
Protection Rate	IP67 when mated (Receptacle : Individually waterproof)	
Applicable Wire	Plug • Crimp : 16AWG-20AWG • Soldering Use, : 16AWG Max.	Plug • Crimp : 20AWG-28AWG • Soldering Use, : 20AWG Max.
UL standard	UL1977 File No. E72124 certified	
CE marking	Not applicable	

◆ MATERIAL/FINISH



Item	Plug
Socket Insulator	Plastic/Gray
Socket Contact	Copper Alloy/Au plating
O-ring(Mating side)	Synthetic Rubber
Coupling Ring	Zinc Alloy / Ni plating
Plug Gasket	Synthetic Rubber / Black
Plug Shell	Zinc Alloy / Ni plating
Retainer Ring	Stainless Steel
Coupling Ring for Back shell	Zinc Alloy / Ni plating
Back shell	Aluminum Alloy / Ni plating
Bushing	Synthetic Rubber / Black
Cable Clamp	Plastic / White
Clamp Nut	Plastic / Black

※ Main components are only described as above.

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Waterproof

IP 67

Lock Type

Push-On



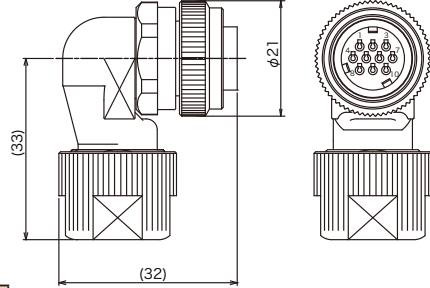
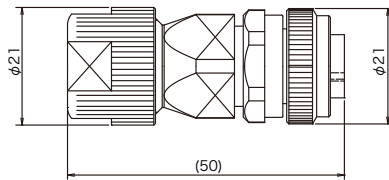
▶ 10-Contact Plug

- Contact Style : Socket
- Termination : Solder or Crimp
- The contact is sold separately.

Straight Plug



Right Angle Plug



Straight Plug P/N	Angle Plug P/N	Cable Outside Dia.
CMV1S-SP10S-S	CMV1S-AP10S-S	φ 4.0 ~ φ 6.0
CMV1S-SP10S-M1	CMV1S-AP10S-M1	φ 5.5 ~ φ 7.5
CMV1S-SP10S-M2	CMV1S-AP10S-M2	φ 7.0 ~ φ 9.0
CMV1S-SP10S-L	CMV1S-AP10S-L	φ 9.0 ~ φ 11.6

▶ Contact of 10-Contact Plug

Loose Piece Contact(Solder/Crimping Type)

Item	Contact P/N (100 pcs. in 1 bag)	Applicable Cable		Hand Tool P/N	Extraction Tool P/N
		Conductor Size	Insulation Dia.		
Crimping Type	CMV1-#22ASC-C1-100	20 ~ 24AWG	φ 1.40 ~ φ 2.00	357J-53162T	357J-53184T
	CMV1-#22ASC-C2-100	24 ~ 28AWG	φ 1.08 ~ φ 1.60	357J-53163T	
Soldering Type	CMV1-#22ASC-S1-100	20AWG Max.	φ 2.00 Max.		

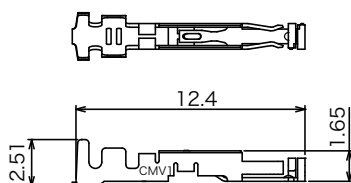
1. The packaging specification is 100 pcs of contacts per bag for sale.
2. Both of the solder contacts and the crimp contacts shall be inserted into the inserts of the connectors after soldering the contacts to the cable or crimping the contacts with the cable.
3. Above tools are dedicated to CMV1 series. Tools for conventional CM10 series can not be applicable.

Reel Contact for Semi-Automatic Machine (Crimping Type)

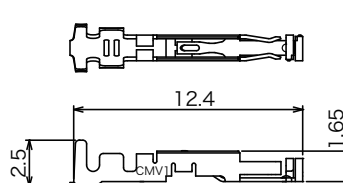
Contact P/N 5000 pcs. /1 Reel	Applicable Wire		Semi-Automatic Crimping Machine			Extraction Tool P/N
	Conductor Size	Insulation Dia.	Machine Type	1-Set P/N	Applicator P/N	
CMV1-#22ASC-C1-5000	20 ~ 24AWG	φ 1.40 ~ φ 2.00	Stripper Crimper	AP-A53165T-A	AP-A53165T	357J-53184T
			Crimper	AP-A53176T-A	AP-A53176T	
CMV1-#22ASC-C2-5000	24 ~ 28AWG	φ 1.08 ~ φ 1.60	Stripper Crimper	AP-A53166T-A	AP-A53166T	
			Crimper	AP-A53177T-A	AP-A53177T	

1. Applicator (AP-A53165T/AP-A53166T) are combined with the semi-automatic crimping machine which is provided with stripper.
 2. Applicator (AP-A53176T/AP-A53177T) are combined with the semi-automatic crimping machine.
- ※ Semi-automatic crimping machine is common with CM10(D6) series.
3. Above applicators are dedicated to CMV1 series. Tools for conventional CM10 series can not be applicable.

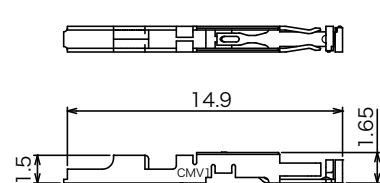
CMV1-#22ASC-C1- □□□□



CMV1-#22ASC-C2- □□□□



CMV1-#22ASC-S1- □□□□



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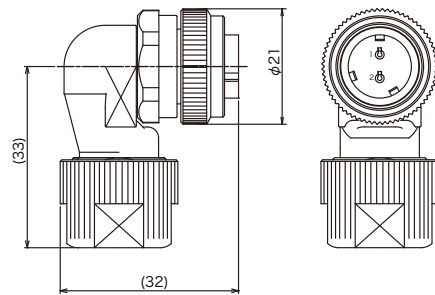
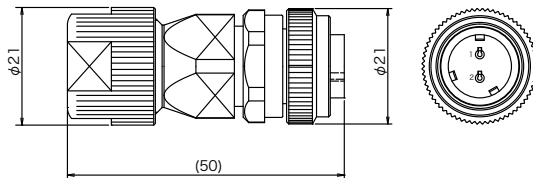
▶ 2-Contact Plug

- Contact Style : Socket
- Termination : Solder or Crimp
- The contact is sold separately.

Straight Plug



Right Angle Plug



Straight Plug P/N	Angle Plug P/N	Cable Outside Dia.
CMV1S-SP2S-S	CMV1S-AP2S-S	φ 4.0 ~ φ 6.0
CMV1S-SP2S-M1	CMV1S-AP2S-M1	φ 5.5 ~ φ 7.5
CMV1S-SP2S-M2	CMV1S-AP2S-M2	φ 7.0 ~ φ 9.0
CMV1S-SP2S-L	CMV1S-AP2S-L	φ 9.0 ~ φ 11.6

▶ Contact of 2-Contact Plug

Loose Piece Contact(Solder/Crimping Type)

Item	Contact P/N (100 pcs./1bag)	Applicable Cable		Hand Tool P/N	Extraction Tool P/N
		Conductor Size	Insulation Dia.		
Crimping Type	CMV1-#22BSC-C3-100	16 ~ 20AWG	φ 1.87 ~ φ 2.45	357J-53164T	357J-53184T
Soldering Type	CMV1-#22BSC-S2-100	16AWG Max.	φ 3.00 Max.		

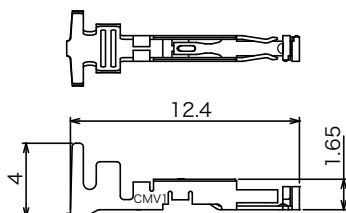
1. The packaging specification is 100 pcs of contacts per bag for sale.
2. Both of the solder contacts and the crimp contacts shall be inserted into the inserts of the connectors after soldering the contacts to the cable or crimping the contacts with the cable.
3. Above tools are dedicated to CMV1 series. Tools for conventional CM10 series can not be applicable.

Reel Contact for Semi-Automatic Machine (Crimping Type)

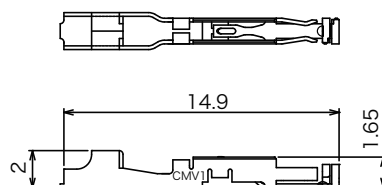
Contact P/N 4,000 pcs. on 1 Reel	Applicable Wire		Semi-Automatic Machine			Extraction Tool P/N
	Conductor Size	Insulation Dia.	Machine Type	1-Set P/N	Applicator P/N	
CMV1-#22BSC-C3-4000	16 ~ 20AWG	φ 1.87 ~ φ 2.45	Crimper	AP-A53210T-A	AP-A53210T	357J-53184T

1. Applicator (AP-A53165T/AP-A53166T) are combined with the semi-automatic crimping machine which is provided with stripper.
2. Applicator (AP-A53176T/AP-A53177T) are combined with the semi-automatic crimping machine.
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CMV1-#22BSC-C3- □□□□



CMV1-#22BSC-S2- □□□□



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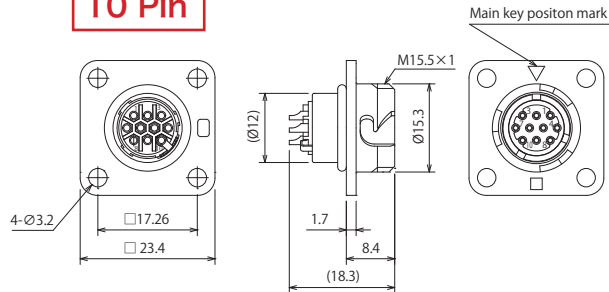
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▶ Receptacle

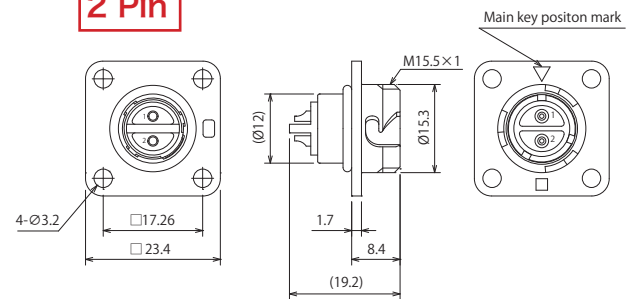
Pin	Part Number	Packaging
10	CMV1-R10P(F)(P)	Individual
	CMV1-R10P(F)	Tray
2	CMV1-R2P(F)(P)	Individual
	CMV1-R2P(F)	Tray

- Pin contact style only
- Soldering termination only
- Conductor Size : 20 AWG Max.
- Individually waterproof

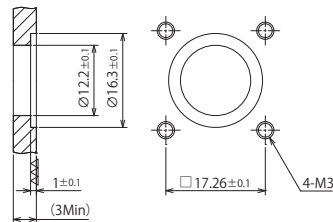
10 Pin



2 Pin



Contact No.10 grounded to shell with ground lug



Mounting dimension

▶ Cable Receptacle

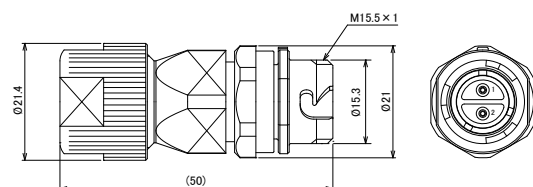
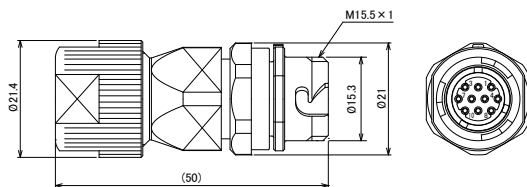
10 Pin

- Pin contact style only
- Soldering termination only
- Conductor Size : 20 AWG Max.
- Individually waterproof

2 Pin

- Pin contact style only
- Soldering termination only
- Conductor Size : 20 AWG Max.
- Individually waterproof

Contact No.10 grounded to shell with ground lug

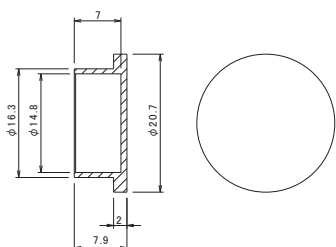


10 Pin	2 Pin	Applicable Cable Dia.
CMV1-CR10P-S	CMV1-CR2P-S	φ 4.0 ~ φ 6.0
CMV1-CR10P-M1	CMV1-CR2P-M1	φ 5.5 ~ φ 7.5
CMV1-CR10P-M2	CMV1-CR2P-M2	φ 7.0 ~ φ 9.0
CMV1-CR10P-L	CMV1-CR2P-L	φ 9.0 ~ φ 11.6

▶ Accessories

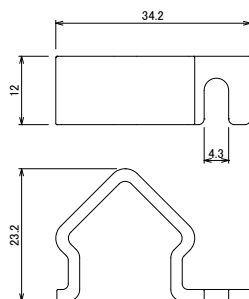
Dust Cap

Part Number
CM10-R-DC



Fixing Tool for Cable Receptacle (Resin Saddle)

Part Number
CMV1-RFT



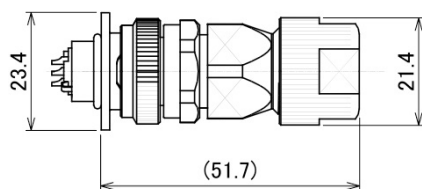
Fixing Tool Image

This is the fixing tool to fix the cable receptacle connector on the wall or floor.

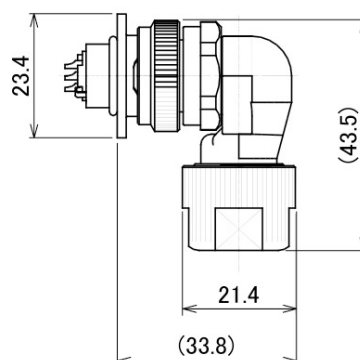
※ Fixed with commercial M4 screws.

▶ Mated Dimensions

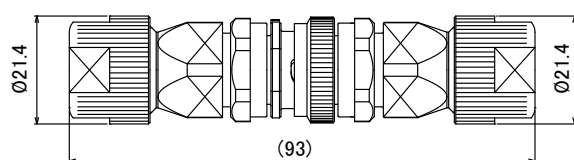
Receptacle + Straight Plug



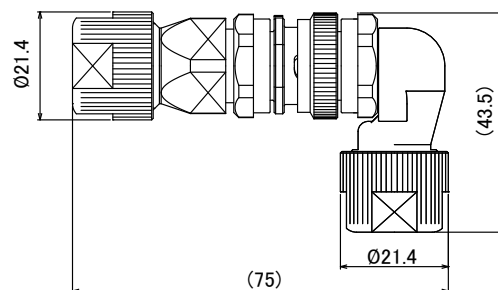
Receptacle + Right Angle Plug



Cable Receptacle + Straight Plug



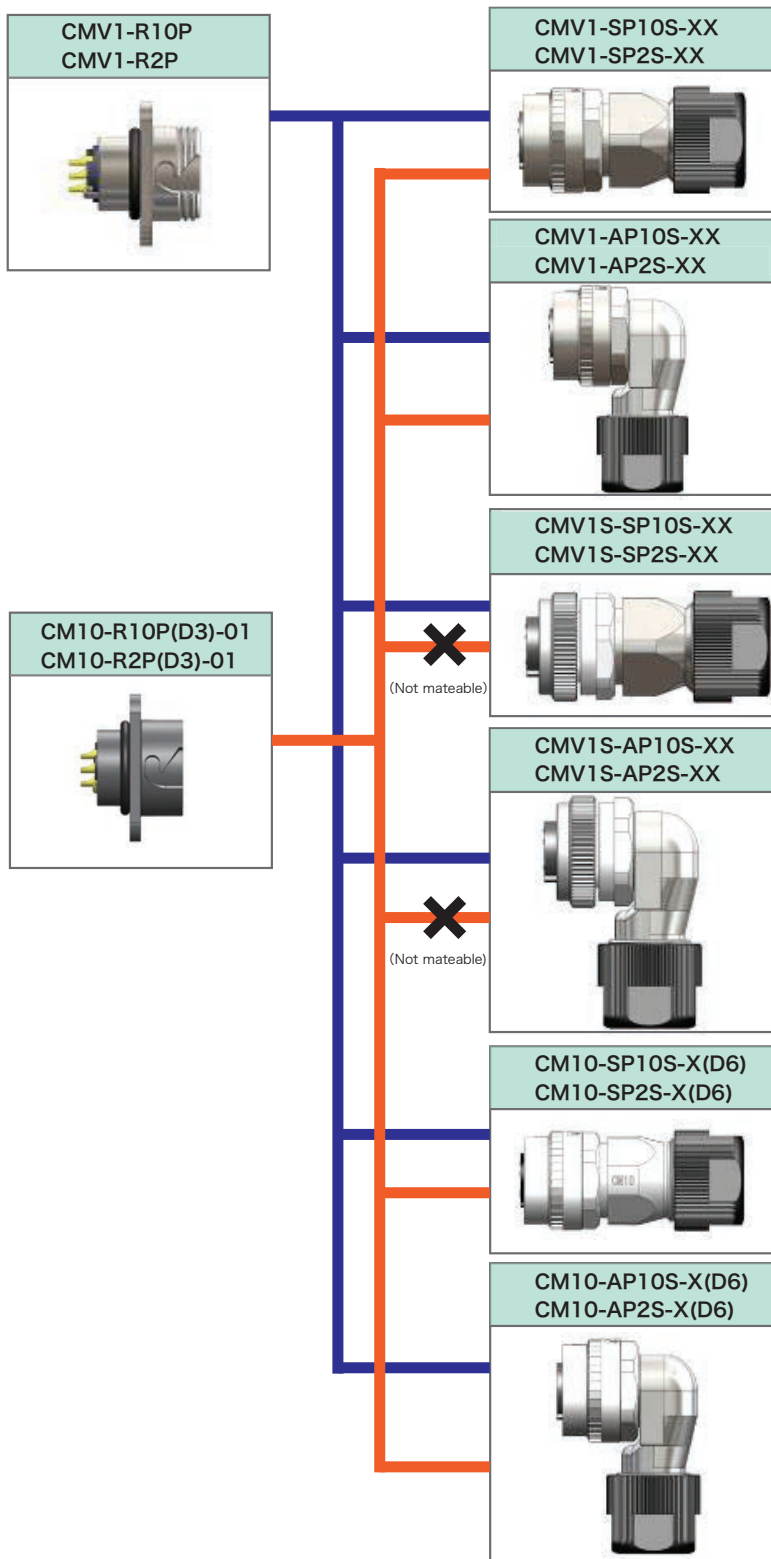
Cable Receptacle + Angle Plug



▶ Combination table

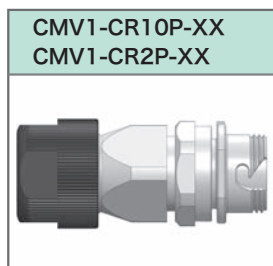
Box Receptacle Connector
(Panel Mounting Type)

Plug Connector



▶ Combination table

ケーブルレセプタクル
コネクタ (中継タイプ)



プラグコネクタ

