

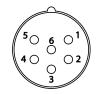
## MC Series

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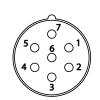
M23..... 4-11

M27...... 12-13

Tools ...... 14



6 Pole



7 Pole



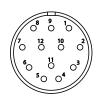
6 Pole



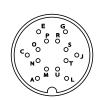
7 Pole



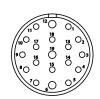
12 Pole



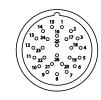
12 Pole



14 Pole



19 Pole



26 Pole



28 Pole

## MCVH Series M23 Field Wireable Plugs 6 Pole 30A, 600V & 8 Pole 30A, 600V Contacts

Face View of Male	# of Poles	Wire AWG Rating	Female Plugs	Male Plugs (Male Threads)	
5001	6	30A 600V	MCVH-6FPFW-CC	MCVH-6MPMFW-CC	
80 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0°			MCVH-8FP-FW-CC	MCVH-8MPM-FW-CC	

Connection is via crimp pins. Voltage and amperage ratings are cable dependent and are based on 600V 12 AWG cable. Cables with lower voltage ratings and smaller conductors will lower these ratings.

**Specifications:** 

Nickel Plated Brass Body:

Copper Alloy with Gold Plating Contacts:

O-Ring: FPM

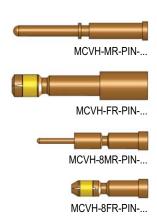
Nickel Plated Brass Coupling Nut:

Insert: Polyamide

-40°C to +105°C (-40°F to +221°F) Temperature:

	[75] 2.95
[28]	
	└─26mm WRENCH FLATS

	Crimp Pins									
# of Poles	Wire AWG Rating	Male Contacts	Female Contacts							
6 & 8*  *Pins 1 - 4 for the 8 Pole	12 AWG 14 - 16 AWG 18 - 20 AWG 22 - 24 AWG	MCVH-MR-PIN-12 MCVH-MR-PIN-16 MCVH-MR-PIN-20 MCVH-MR-PIN-24	MCVH-FR-PIN-12 MCVH-FR-PIN-16 MCVH-FR-PIN-20 MCVH-FR-PIN-24							
8 Pins A - D	18 - 22 AWG 24 - 26 AWG	MCVH-8MR-PIN-18 MCVH-8MR-PIN-24	MCVH-8FR-PIN-18 MCVH-8FR-PIN-24							
		Tools								
# of Poles	Des	Description								
6 & 8	Crimp Tool	CCPZ-MIL								
6 & 8	Crimp Tool Locator		MCTP-VH6-8							



# MCVH Series M23 Receptacles Male & Female Receptacles \* Panel Mount \* Crimp Pins

	M23 Male Receptacles with Crimp Pins										
Face View of Male	# of Poles	Panel Mount Male Receptacles	Panel Mount RT Male Receptacles								
5001		MCVH-6MR-PM-CC	MCVH-6MR-PM-RT-CC								
80 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0° 0°	8	MCVH-8MR-PM-CC	MCVH-8MR-PM-RT-CC								

### **Specifications:**

Body: PM-CC: Nickel Plated Brass

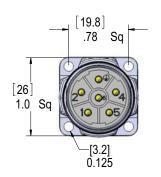
RT-CC: Nickel Plated Zinc

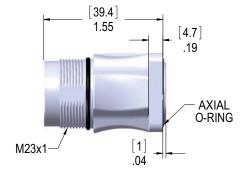
Insulator: Polyamide

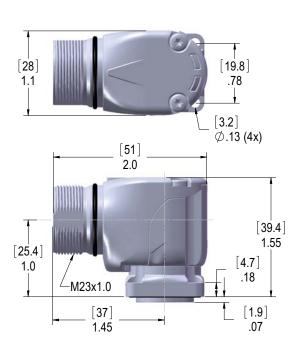
Copper Alloy with Gold Plating Contacts:

FPM O-Ring:

-40°C to 105°C (-40°F to +221°F) Temperature:







# MCV Series M27 Field Wireable Plugs 26 Pole \* 28 Pole

Face View of Male	# of Poles	Wire AWG Rating	Female Plugs	Male to Male Extension	
11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	26	1.5A 150V	MCX-26FP-FW-SC	MCX-26MPM-FW-SC	
11-15-1 10-16-02 13-04-05-017-03 12-03-080-07-018-04 11-020-08-019-05 10-020-08-06 90-0-08-06 8 7	28	1.5A 150V	MCX-28FP-FW-SC	MCX-28MPM-FW-SC	

Connection is via solder cup terminal. Voltage and amperage ratings are cable dependent and are based on 150V 18 AWG wire. Wires with lower voltage ratings and smaller conductors will lower these ratings.

#### **Specifications:**

Body: **Nickel Plated Brass** 

Copper Alloy with Gold Plating Contacts:

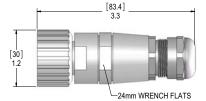
FPM O-Ring:

Coupling Nut: Nickel Plated Brass

Polyamide Insert:

 $-40^{\circ}$ C to  $+105^{\circ}$ C ( $-40^{\circ}$ F to  $+221^{\circ}$ F) Temperature:

IP 67 Protection:



## MCV Series M27 Receptacles

26 Pole **3** 28 Pole **4** PG 21

Face View of Male	# of Poles	Thread Size	Male Contacts	Male PCB Mount Contact	
110 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	26	PG 21	MCX-26MR-PG21-SC	MCX-26MR-BM-PCB	
13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	28	PG 21	MCX-28MR-PG21-SC	MCX-28MR-BM-PCB	

Connection is via solder cup terminal. Voltage and amperage ratings are cable dependent and are based on 150V 18 AWG wire. Wires with lower voltage ratings and smaller conductors will lower these ratings.

### **Specifications:**

Body: Nickel Plated Brass

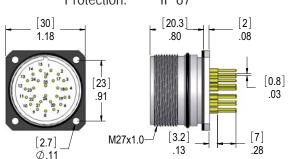
Contacts: Copper Alloy with Gold Plating

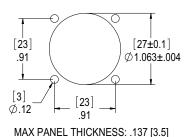
O-Ring: FPM

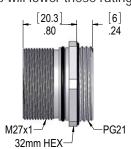
Coupling Nut: Nickel Plated Brass

Insert: Polyamide

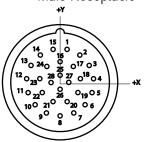
Temperature:  $-40^{\circ}$ C to  $+105^{\circ}$ C ( $-40^{\circ}$ F to  $+221^{\circ}$ F)







Male Receptacle



		PCB L	_ayout		
Pin#	Х	Y	Pin#	Х	Υ
1	1.95	7.47	15	-1.95	7.47
2	4.8	6.05	16	0	5.03
3	6.82	3.65	17	2.82	3.6
4	7.7	0.6	18	4.55	0.97
5	7.28	-2.53	19	4.2	-2.13
6	5.67	-5.2	20	1.83	-4.17
7	3.08	-7.08	21	-1.83	-4.17
8	0	-7.73	22	-4.2	-2.13
9	-3.08	-7.08	23	-4.55	0.97
10	-5.67	-5.2	24	-2.82	3.6
11	-7.28	-2.53	25	0	1.88
12	-7.7	0.6	26	0	-1.6
13	-6.82	3.65			
14	-4.8	6.05	27	2.02	0.14
			28	-2.02	0.14

### **MCV Series Tools**

### Crimping Tool ❖ Locator ❖ Gage

### **Crimping Tool**

The CCPZ-MIL crimping tool conforms to the international standard MIL-C-22520/1. The crimping is performed with 8 pressure points. The tool is equipped with a ratcheting mechanism to insure a complete crimping cycle is performed every time. This tool must be equipped with one of the interchangeable locators according to the series of contacts that are to be crimped. The selector dial on the side of the tool allows the tool to adjust the crimp depth according the contact and wire size being crimped.



### Locator

The locator is designed to be used with several different contacts within a contact series. The label on the side of the locator will indicate the proper settings for the locator and the crimp tool relative to the contact being crimped.



### Gage

The indenting "teeth" on the crimp tool are subject to wear, so it is important to check the calibration of the tool at regular intervals. The CCPNP gage is a Go – No Go gage that is used to make sure the tool is crimping properly.



To use the CCPNP, put the CCPZ-MIL selector dial to position 4.

Put the crimping tool in a completely closed position

"GO" – Insert the "GO" (green) end of the CCPNP into the crimp area. The gage must pass freely between the indenter "teeth".

"NO-GO" - – Insert the "NO-GO" (red) end of the CCPNP into the crimp area. The gage must not pass between the indenter "teeth".

If the NO-GO end of the gage passes through the indenter "teeth", the indenters are worn and need to be replaced. Please consult the factory to get the tool repaired.

Mencom understands that many customers have a one-time requirement for the MC series of products and prefer not to purchase tooling to perform the crimping. To help these customers, Mencom has a month to month tool lease program. Please consult the factory for information about this program.

## MCL Series M16 Field Wireable Plugs 24 - 28 AWG 60V • PG 7 & PG 9

Face View of Male	# of Poles	Wire AWG Rating	PG Size	Cable O.D.	Male Plug	Female Plug
E O O H  C O C A O K  B O O O K	12	24 - 28 AWG 60V 3A	PG 7 PG 9	4 - 6 mm 6 - 8 mm	MCL-12MP-FW07 MCL-12MP-FW09	MCL-12FP-FW07 MCL-12FP-FW09
E P O O T C A O O C	14	24 - 28 AWG 60V 3A	PG 7 PG 9	4 - 6 mm 6 - 8 mm	MCL-14MP-FW07 MCL-14MP-FW09	MCL-14FP-FW07 MCL-14FP-FW09

### **Specifications:**

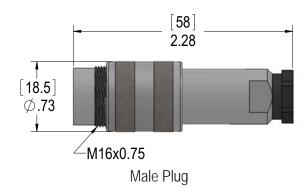
Body: Nickel Plated Brass

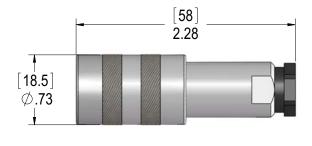
Contacts: Copper Alloy with Gold Plating

Insert: **PBT** 

Solder Cup 24 - 28 AWG Termination:

-30°C to +95°C (-22°F to +203°F) Temperature:





Female Plug

# MCL Series M16 Receptacles Solder Cup Solder Cup

	Solder Cup: Front Mount Version										
Face View of Male	# of Poles	Wire AWG Rating	Male Receptacles	Female Receptacles							
© G G MO O H  CO O A O O H  BO O O K	12	24 - 28 AWG 60V 3A	MCL-12MR-M18-SC MCL-12MR-M18-SC	MCL-12FR-M18-SC MCL-12FR-M18-SC							
E P R O O O O O O O O O O O O O O O O O O	14	24 - 28 AWG 60V 3A	MCL-14MR-M18-SC MCL-14MR-M18-SC	MCL-14FR-M18-SC MCL-14FR-M18-SC							

	Solder Cup: Back Mount Version										
Face View of Male	# of Poles	Wire AWG Rating	Male Receptacles	Female Receptacles							
C <sub>O</sub> O H B <sub>O</sub> O O H	12	24 - 28 AWG 60V 3A	MCL-12MR-M18-BM-SC MCL-12MR-M18-BM-SC	MCL-12FR-M18-BM-SC MCL-12FR-M18-BM-SC							
GO S O T O L	14	24 - 28 AWG 60V 3A	MCL-14MR-M18-BM-SC MCL-14MR-M18-BM-SC	MCL-14FR-M18-BM-SC MCL-14FR-M18-BM-SC							

**Specifications:** 

Shell: Nickel Plated Zinc Diecast

Copper Alloy with Gold Plating Contacts:

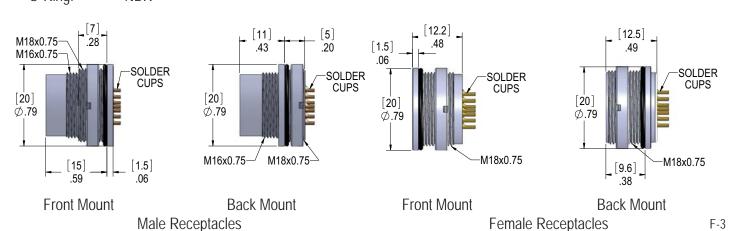
Nickel Plated Brass Lock Nut:

**NBR** O-Ring:

**PBT** Insert:

Temperature: -30°C to +85°C (-22°F to +185°F)

Protection: IP 67



**Mencom Corporation** TEL: 770-534-4585 www.mencom.com

## MCV Series M23 Cordsets

### Male Cables with Female Couplings ❖ Male Cables with Male Couplings

Face View of Male	# of Poles	Color Code		Wire AWG Rating	Length	Male Cables (Female Couplings)	Male Cables (Male Couplings)
8 9 10 7 12 10 2 6 11 3 5 0 4	12	1-Brown 2-Not Used 3-Blue 4-White 5-Green 6-Yellow	7-Gray 8-Pink 9-Red 10-Black 11-Violet 12-Green/Yellow	18/3 300V 8A & 22/8 300V 4A	2 M 5 M 10 M 20 M	MCV-12MP-2M MCV-12MP-5M MCV-12MP-10M MCV-12MP-20M	MCV-12MPM-2M MCV-12MPM-5M MCV-12MPM-10M MCV-12MPM-20M
10 12 O O O O O O O O O O O O O O O O O O	19	1-Violet 2-Red 3-Gray 4-Red w/ Blue 5-Green 6-Blue 7-Gray/Pink 8-White w/ Green 9-White w/ Yellow 10-White w/ Gray	11-Black 12-Green/Yellow 13-Yellow w/ Brown 14-Brown w/ Green 15-White 16-Yellow 17-Pink 18-Gray w/ Brown 19-Brown	18/3 300V 8A & 22/16 300V 4A	2 M 5 M 10 M 20 M	MCV-19MP-2M MCV-19MP-5M MCV-19MP-10M MCV-19MP-20M	MCV-19MPM-2M MCV-19MPM-5M MCV-19MPM-10M MCV-19MPM-20M

Brown, Blue and Green/Yellow are 18AWG wires.

### **Specifications:**

Body: Nickel Plated Brass

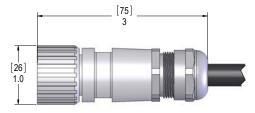
Contacts: Copper Alloy with Gold Plating Cable: Oil Resistant Black PUR Jacket,

Rated at 300V, 80°C, Non-Wicking, Non-Hygroscopic, AWM Style 20233

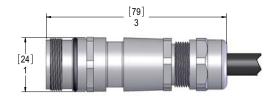
Conductors: 18 AWG, PVC Insulated

22 AWG, PVC Insulated

Temperature: -40°C to +80°C (-40°F to +176°F)



Male Plugs with Female Threads



Male Plugs with Male Threads

## MCV Series M23 Cordsets Female Cables \* Male - Female Extensions

Face View of Female	# of Poles	Color Code		Wire AWG Rating	Length	Female Cables	Extension Cables
2 10 12 7 2 10 12 7 3 11 6	12	1-Brown 2-Not Used 3-Blue 4-White 5-Green 6-Yellow	7-Gray 8-Pink 9-Red 10-Black 11-Violet 12-Green/Yellow	18/3 300V 8A & 22/8 300V 4A	2 M 5 M 10 M 20 M	MCV-12FP-2M MCV-12FP-5M MCV-12FP-10M MCV-12FP-20M	MCV-12MFP-2M MCV-12MFP-5M MCV-12MFP-10M MCV-12MFP-20M
10 12 0 011 20 13 0 17 010 30 14 0 15 09 40 0 0 09 50 0 07	19	1-Violet 2-Red 3-Gray 4-Red w/ Blue 5-Green 6-Blue 7-Gray/Pink 8-White w/ Green 9-White w/ Yellow 10-White w/ Gray	11-Black 12-Green/Yellow 13-Yellow w/ Brown 14-Brown w/ Green 15-White 16-Yellow 17-Pink 18-Gray w/ Brown 19-Brown	18/3 300V 8A & 22/16 300V 4A	2 M 5 M 10 M 20 M	MCV-19FP-2M MCV-19FP-5M MCV-19FP-10M MCV-19FP-20M	MCV-19MFP-2M MCV-19MFP-5M MCV-19MFP-10M MCV-19MFP-20M

Brown, Blue and Green/Yellow are 18AWG wires. For right angle cordsets, please consult the factory.

**Specifications:** 

Body: **Nickel Plated Brass** 

Copper Alloy with Gold Plating Contacts: Cable: Oil Resistant Black PUR Jacket,

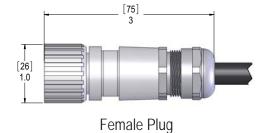
Rated at 300V, 80°C, Non-Wicking, Non-Hygroscopic, AWM Style 20233

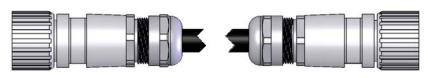
18 AWG, PVC Insulated Conductors:

22 AWG, PVC Insulated

 $-40^{\circ}$ C to  $+80^{\circ}$ C ( $-40^{\circ}$ F to  $+176^{\circ}$ F) Temperature:

Protection: IP 67





Male - Female Extension Cable

## MCV Series M23 Field Wireable Plugs

### Solder Cup & Crimp Pins

Face View of Male	# of Poles	Wire AWG Rating	Cable O.D.	Contact Type	Male Plug (Female Threads)	Male Plug (Male Threads)	Female Plug	Female Right Angle
7 12 10 0 2 6 10 0 0 6 10 0 0	12	16 - 26 300V 8A MAX	6 - 9 mm	Solder Cup Crimp Pin	MCV-12MP-FW MCV-12MP-FW-CC	MCV-12MPM-FW MCV-12MPM-FW-CC	MCV-12FP-FW MCV-12FP-FW-CC	MCV-12FP-FW-R MCV-12FP-FW-R-CC
10 10 0 1 0 2 10 0 10 0 10 0 10 0 10 0	19	16 - 26 300V 8A MAX	6 - 9 mm	Solder Cup Crimp Pin	MCV-19MP-FW MCV-19MP-FW-CC	MCV-19MPM-FW MCV-19MPM-FW-CC	MCV-19FP-FW MCV-19FP-FW-CC	MCV-19FP-FW-R MCV-19FP-FW-R-CC

Connection via solder cup terminal or crimp pin. Voltage and amperage ratings are cable dependent and are based on 600V 18 AWG cable. Cables with lower voltage ratings and smaller conductors will lower these ratings.

#### **Specifications:**

Body: Nickel Plated Brass

Contacts: Copper Alloy with Gold Plating

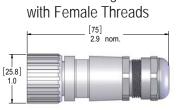
O-Ring: BUNA-N

Insert: PBT

Temperature:  $-40^{\circ}$ C to  $+105^{\circ}$ C ( $-40^{\circ}$ F to  $+221^{\circ}$ F)

Protection: IP 67 MAX

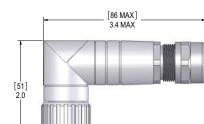




Male Plug



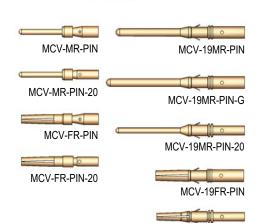
Female Plug



Female Right Angle

Crimp Pins						
# of Poles	Wire AWG	Male Contacts	Female Contacts			
12	18 AWG	MCV-MR-PIN	MCV-FR-PIN			
	20 - 24 AWG	MCV-MR-PIN-20	MCV-FR-PIN-20			
	18 AWG	MCV-19MR-PIN	MCV-19FR-PIN			
19	20 - 24 AWG	MCV-19MR-PIN-20	MCV-19FR-PIN-20			
	18 AWG Male Ground Pin	MCV-19MR-PIN-G				
Tools						
# of Poles	Des	Part Number				

	Wate Greata i iii						
Tools							
# of Poles	Description	Part Number					
12	Removal Tool	MCV12ES					
19	Removal Tool	MCV19ES					
12 & 19	Crimp Tool	CCPZ-MIL					
12	Crimp Tool Locator	MCTP-V12					
19	Crimp Tool Locator	MCTP-V19					



MCV-19FR-PIN-20

F-6

# MCV Series M23 Receptacles Male & Female Receptacles

	M23 Male and Female Pre-Wired Receptacles							
Face View of Male	# of Poles	Color	r Code	Wire AWG Rating	Length	Mounting Thread	Male Receptacles	Female Receptacles
70 12 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12	1-Brown 2-Not Used 3-Blue 4-White 5-Green 6-Yellow	7-Gray 8-Pink 9-Red 10-Black 11-Violet 12-Green/Yellow	18/3 300V/8A & 22/8 300V/4A	0.3 M 1 M 2 M 0.3 M 1 M 2 M	PG 13.5 PG 13.5 PG 13.5 M20 M20 M20	MCV-12MR-0.3M-PG13.5 MCV-12MR-1M-PG13.5 MCV-12MR-2M-PG13.5 MCV-12MR-0.3M-M20 MCV-12MR-1M-M20 MCV-12MR-2M-M20	MCV-12FR-0.3M-PG13.5 MCV-12FR-1M-PG13.5 MCV-12FR-2M-PG13.5 MCV-12FR-0.3M-M20 MCV-12FR-1M-M20 MCV-12FR-2M-M20
10 20 01 10 90 10 02 10 90 10 02 10 90 10 03 10 90 04 10 90 04	19	1-Violet 2-Red 3-Gray 4-Red w/ Blue 5-Green 6-Blue 7-Gray/Pink 8-White w/ Green 9-White w/ Yellow 10-White w/ Gray	11-Black 12-Green/Yellow 13-Yellow w/ Brown 14-Brown w/ Green 15-White 16-Yellow 17-Pink 18-Gray w/ Brown 19-Brown	I 300V/8A I	0.3 M 1 M 2 M 0.3 M 1 M 2 M	PG 13.5 PG 13.5 PG 13.5 M20 M20 M20	MCV-19MR-0.3M-PG13.5 MCV-19MR-1M-PG13.5 MCV-19MR-2M-PG13.5 MCV-19MR-0.3M-M20 MCV-19MR-1M-M20 MCV-19MR-2M-M20	MCV-19FR-0.3M-PG13.5 MCV-19FR-1M-PG13.5 MCV-19FR-2M-PG13.5 MCV-19FR-0.3M-M20 MCV-19FR-1M-M20 MCV-19FR-2M-M20

Brown, Blue and Green/Yellow are 18AWG wires.

### **Specifications:**

Shell: **Nickel Plated Brass** 

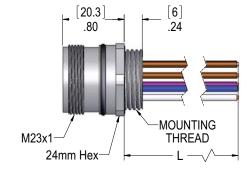
Insulator: **PBT** 

Copper Alloy with Gold Plating Contacts:

O-Ring: **BUNA-A** 

Lock Nut: **Nickel Plated Brass** 

-40°C to 105°C (-40°F to +221°F) Temperature:



# MCV Series M23 Receptacles Male & Female Receptacles Solder Cups Crimp Pins

M23 Male and Female Receptacles with Solder Cups						
Face View of Male	# of Poles	Mounting Thread	Male Receptacles	Female Receptacles		
3 9 10 7 12 10 2 6 11 3 5 0 4	12	PG 13.5 M20	MCV-12MR-PG13.5-SC MCV-12MR-M20-SC	MCV-12FR-PG13.5-SC MCV-12FR-M20-SC		
10 10 01 02 00 00 00 00 00 00 00 00 00 00 00 00	19	PG 13.5 M20	MCV-19MR-PG13.5-SC MCV-19MR-M20-SC	MCV-19FR-PG13.5-SC MCV-19FR-M20-SC		

**Specifications:** 

Shell: **Nickel Plated Brass** 

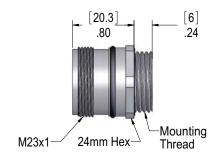
Insulator: 105°C, Oil Resistant Yellow PVC Copper Alloy with Gold Plating Contacts:

BUNA-A O-Ring:

Lock Nut: Nickel Plated Brass

-40°C to 105°C (-40°F to +221°F) Temperature:

Protection: IP 67



M23 Male and Female Receptacles with Crimp Pins						
Face View # of Poles		Mounting Thread	Male Receptacles	Female Receptacles		
3 9 10 2 0 12 10 2 0 10 0 0 6 10 0 3 5 0 0 4	12	PG 13.5 M20	MCV-12MR-PG13.5-CC MCV-12MR-M20-CC	MCV-12FR-PG13.5-CC MCV-12FR-M20-CC		
10 2 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	19	PG 13.5 M20	MCV-19MR-PG13.5-CC MCV-19MR-M20-CC	MCV-19FR-PG13.5-CC MCV-19FR-M20-CC		

Crimp pins sold separately. See page F-6 for part numbers.

## MCV Series M23 Field Wireables & Receptacles

6 & 7 Pole Field Wireables & Receptacles Contacts

Face View of Male	# of Poles	Male Plug (Male Threads)	Male Plug (Female Threads)	Female Plug	Male Receptacle	Female Receptacle
50 6 0 1 40 0 2 3	6	MCV-6MPM-FW-CC	MCV-6MP-FW-CC	MCV-6FP-FW-CC	MCV-6MR-M20-CC	MCV-6FR-M20-CC
50 6 0 1 40 0 2 3	7	MCV-7MPM-FW-CC	MCV-7MP-FW-CC	MCV-7FP-FW-CC	MCV-7MR-M20-CC	MCV-7FR-M20-CC

Connection is via crimp pins. Voltage and amperage ratings are based on 300V 14 AWG wire and cable. Cables with lower voltage ratings and smaller conductors will lower these ratings.

#### Specifications:

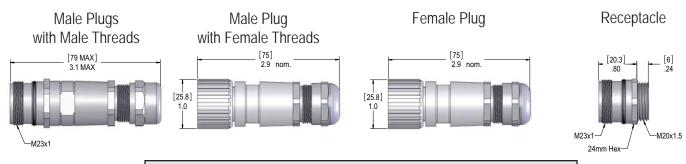
Body: Nickel Plated Brass

Contacts: Copper Alloy with Gold Plating

O-Ring: BUNA-N Insert: PBT Amperage: 20A MAX Voltage: 300V MAX

Temperature:  $-40^{\circ}$ C to  $+105^{\circ}$ C ( $-40^{\circ}$ F to  $+221^{\circ}$ F)

Protection: IP 67 MAX



Crimp Pins						
# of Poles	Wire AWG	Wire AWG Male Contacts				
	14 - 16 AWG	MCV-6MR-PIN-14	MCV-6FR-PIN-14			
6 & 7	18 - 20 AWG	MCV-6MR-PIN-18	MCV-6FR-PIN-18			
	14 - 16 AWG Male Ground Pin	MCV-6MR-PIN-14-G				
		Tools				
# of Poles	Des	Description				
6 & 7	Removal Tool		MCV6ES			
6 & 7	Crimp Tool	CCPZ-MIL				
6 & 7	Crimp Tool Locator	MCTP-V6				



MCV-6MR-PIN-...