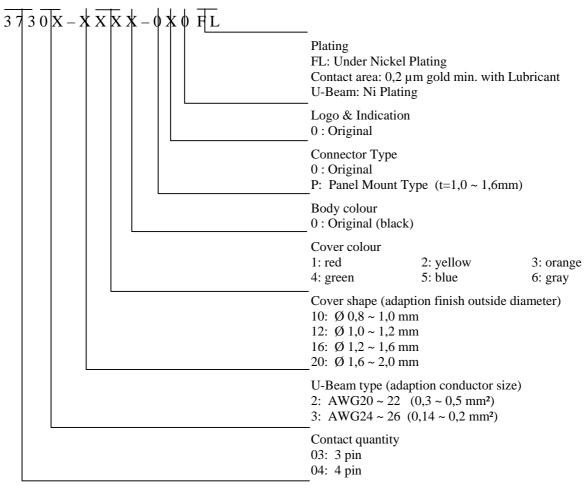




NUMBERING SYSTEM



Production series

373: Mini Clamp Wiremount Socket Connector

The instrument identification combination which it can supply

AWG20~22 (0.3~0.5mm²) AWG24~26 (0.14~0.2mm²)

3710X-2206-000 FL (gray cover: Ø 1.6~2.0) 3710X-3163-000 FL (orange cover: Ø 1.2~1.6) 3710X-2165-000 FL (blue cover: Ø 1.2~1.6) 3710X-3122-000 FL (yellow cover: Ø 1.0~1.2) 3710X-2124-000 FL (green cover: Ø 1.0~1.2) 3710X-3101-000 FL (red cover:

RATING

Item	Rating	
Current	3,0 A max	
Voltage	32V (AC/DC) max	
Temperature	- 20°C to + 85°C (Current 1A)	
	- 20°C to + 75°C (Current 2A)	
	- 20°C to + 60°C (Current 3A)	
	without dew drop / a drop of water	
Flame resisting grade	UL 94 V - 0	

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COMPATIBLE OBJECT

1. Compatible connectors
3M Brand: 3710X-XXXX-000 XX: Mini-Clamp wire mount plug connector.
2. Compatible cable
Conductor cross sectional area \[AWG20 \] 26 \[0.14 \] 0.5mm2 \[\] Conductor material \[\] Tin plating annealed copper wire, High strength copper alloy wire, Copper alloy wire Conductor structure \[\] Stranded wire, Tin overcoat wire, Solid wire Conductor construction \[\] AWG20(0.5sq) \[\] 19/0.20 \[\] 20/0.18 \[\] 21/0.18 AWG22(0.3sq) \[\] 1/0.643 \[\] 7/0.254 \[\] 12/0.18 \[\] 17/0.16 \[\] 3/20/0.08 \[\] 60/0.08 AWG24(0.2sq) \[\] 7/0.20 \[\] 11/0.16 \[\] 40/0.08 \[\] AWG25(0.18sq) \[\] 7/0.18 \[\] 36/0.08 \[\] 37/0.05 \[\] AWG26(0.14sq) \[\] 7/0.16 \[\] 30/0.08 \[\] 7/11/0.05 \[\] Isolation material \[\] Heat-resistant vinyl, Half rigid vinyl, Cure PE, ETFE, Isolation outside diameter \[\] \[\] 0.8 \[\] 2.0
 □ Above adaptation electric wire is an extract from evaluation electric wire and doesnot evaluate all combinations. Detailed information please ask the sales person incharge. □ This connector recommend electric wire witch is stranded wire of pitch equal to orless than 20 times of conductor outside diameter prescribed with section A4-2-4-3in "Insulated conductors for power-operated electronic devices" by CSA standardC22.2No.16-1980□There is the thing which even pitch more than this conforms to.Detailed information please ask the sales person in charge. □ □ On flat cable, IDC is possible by tearing it up if it is welding cable. In addition, with flat cable of pushing out molding, IDC is possible by dividing quality ofinsulation with cutters equally. □Not being shown electric wire. □ □ If it is electric wire of seven twisting on AWG 28, it is almost meets. Detailed information please ask the sales person in charge. □ Please ask the sales person in charge on junction of shielding wire.
3. Recommendation tool
□□IDC by pliers □□To use base plate (10986, 3771) together in 3M hand press machine (10985, 3640, 3335), and platen (3442-1A),Can make IDC which height adjusts for 3 with height gauge (3436-1A).
4. An instruction manual
ER-077 ☐ Mini-Clamp connector IDC sequence of operation book
5. Caution of operation
Please use it for do not add force to IDC part (don't pull electric wire). Demolition at having pulled electric wire changes by thickness of electric wire. Please install it so that connected load more than 10 N is not added per wire. Please don't IDC without jig (for example, dukes / finger).
Note \square A breaking strength ability value at having pulled it to the direction that electric wire passed through. Above numeric value is changed by combination of connector and electric wire. It mentions typical numeric value example here.
Example 1) At the time of combination with UL1723, AWG22 (1/0.643), finish contour f 1.36, FEP isolation outer bark electric wire made in Showa Electric Wire & Cable Co.,Ltd. and 37104-2165-000 FL made in 3M An average of 84.7 N (the fewest 78.5N)

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Example 2) At the time of combination with UL1007, AWG24 (11/0.16), finish contour f 1.49, Heat-resistant vinyl isolation outer bark electric wire made in Showa Electric Wire & Cable Co.,Ltd. and 37104-3163-000 FL made in 3M

An average of 46.6 N (the fewest 35.9N).

Example 3) At the time of combination with IR-1, 0.14SQ (7/0.16), finish contour f 1.34, Cure PE isolation outer bark electric wire made in Showa Electric Wire & Cable Co.,Ltd. and 37104-3163-000 FL made in 3M An average of 23.0N (the fewest 18.8N).

Quality Performance

Unit Characteristics

TEST	REQUIREMENT	TEST CONDITION	RELATED STD.
DESCRIPTION			□Reference□
Dielectric with-	No appearance of arcing	Impressed voltage is AC 1000V rms between	MIL-202F-301
standing voltage	and break down.	two adjacent contacts for 1 minute.	
	Leak current : 1mA max		
Insulation	1000M□min	Impressed voltage is DC500V between two	MIL-202F-302
Resistance		adjacent contacts for 1minute.	

Mating characteristic

It depends on combination with the Mini-Clamp connector series 371XX series

TEST	REQUIREMENT	TEST CONDITION	RELATED STD.
DESCRIPTION			□Reference□
Insertion & Withdrawal Force (Initial)	Insertion□2N/pin max. Withdrawal□0.5N/pin min.	Tensile speed: 5mm/min. Spec. value is estimated by one contact pin.	
Retention Force of Latch	58.8N min	Tensile speed: 25mm/min.	
Durability	Electrical properties shall be stable after test	Insertion & Withdrawel 300 times. (Except Latch Mechanism)	
Vibration	Electrical properties shall be stable after test. Discontinuity 1□sec. max	Tested during vibration test together (See table 1)	MIL-202F-201 A
Shock	Electrical properties shall be stable after test. Discontinuity $1\square$ sec. max	50G , 11 msec , 3 cycles, 3 directions (X,Y,Z)	MIL-202F-213 B

Electrical Specifications

TEST	REQUIREMENT	TEST CONDITION	RELATED STD.
DESCRIPTION			□Reference□
Electrical	Electrical properties shall	Tested during Vibration test together	Refer TABLE-2
Continuity	be state under test.		
	Discontinuity 1 ☐ sec max		
Contact Resistance	The initial readings are in	The low-signal level contact resistance shall be	
	milli-ohms. 20m□max	tested with circuit current of 1mA and open	
		circuit voltage of 20 mV maximum. The	
		termination resistance includes bulk resistance	
		of contact, and resistance of solder joints of	
		connectors to circuit boards.	

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Product Information



Mini Clamp Wiremount Socket Connector

Electrical Specifications

Electrical Specifications			
Contact Resistance	After evaluation tests	FL type	Refer TABLE-2
	readings are the change in	- 3M SEQUENCE 1 ☐ Mating(50	
	resistance from the initial	cycles)□Moisture□Salt splay	
	reading in milli-ohms.	- 3M SEQUENCE 2 ☐ Thermal	
	±25m□ max.	shock ☐ Humidity ☐ Vibration	
		- 3M SEQUENCE 3 ☐ Temperature life	
		-H ₂ S GAS SEQUENCE ☐ Mating (50	
		cycles) □ H ₂ S gas	
		-Durability ☐ Mating (500 cycles)	

Environmental Tests

ITEM	TEST CONDITION		RELATED STD.
			□Reference□
Moisture	-10 to 65°C, 95% RH / 10 cycles		MIL-202F-106 E
Salt spray	Salt solution : 5% (NaCl)	Temperature : 35□	MIL-202F-101 D
	Duration: 48 hours		
Thermal shock	$-55^{\circ}\text{C} => 25^{\circ}\text{C} => 85^{\circ}\text{C} => 25^{\circ}\text{C} / 5 \text{ cycles}$		MIL-202F-107 G
Humidity	Temperature range : 40□	Relative humidity: 95% RH	MIL-202F-103 B
(Steady state□	Duration: 96 hours		
Temperature Life	Temperature: 85°C	Current: 1A	MIL-202F-108 A
	Duration: 1000 hours		
H ₂ S gas	H_2S gas : $3\pm\Box PPM$	Temperature : 40□	JEIDA-34-1984
	Humidity: 70~80% RH	Duration: 96 hours	
Vibration	Sweep freq.: 10~55Hz, amplitude: 1.52mm (or 10G)		MIL-202F-213 B
	Sweep cycle: 1 min, sweep time: 2 hours		
	Sweep directions: X, Y, Z		

STORAGE CONDITION

-22 degrees to 55 degrees, Relative humidity 5-95%, Without dew drop and a drop of water.

PACKAGE & IDENTIFICATION

This product is packed with 5 bodies which contacts are assembled and 5 covers based on the packaging specification. Carton box is identified of 1) part number, 2) quantity, and 3) maker name and 4) lot number.

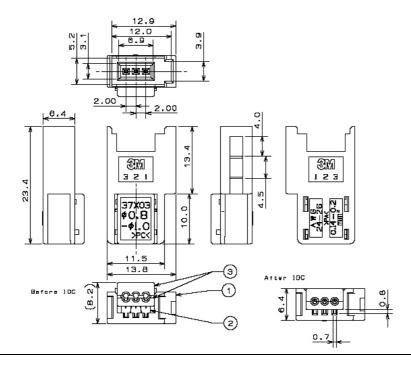
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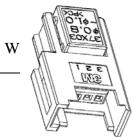


Mini Clamp Wiremount Socket Connector

Wiremount Socket 3 position



37303-3101-000 FL 37303-3122-000 FL gelb 37303-3163-000 FL orange 37303-2124-000 FL grün 37303-2165-000 FL blau 37303-2206-000 FL grau



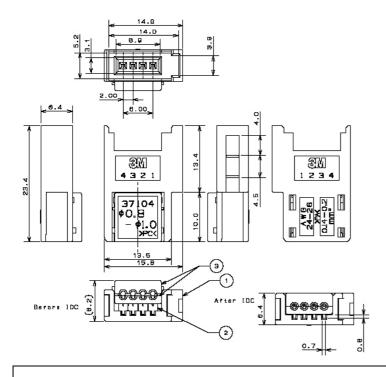
1 position

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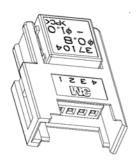
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Mini Clamp Wiremount Socket Connector



37304-3101-000 FL rot 37304-3122-000 FL gelb 37304-3163-000 FL orange 37304-2124-000 FL grün 37304-2165-000 FL blau 37304-2206-000 FL grau

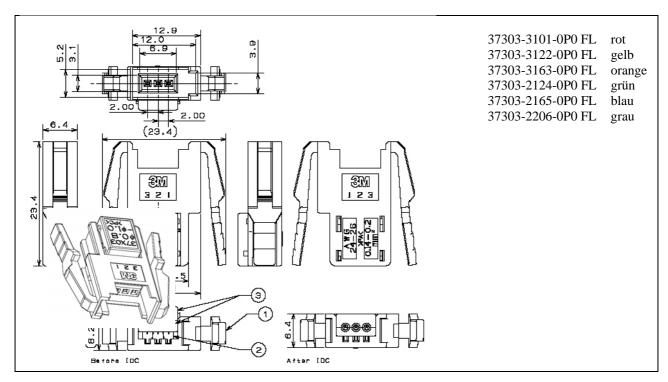


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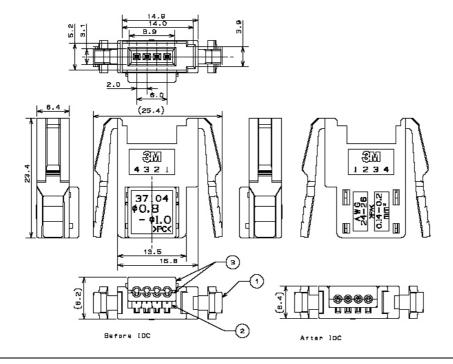




Wiremount Socket, 3 position, panel mount



Wiremount Socket 4 position, panel mount



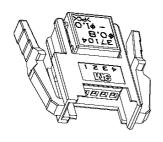
37304-3101-0P0 FL rot

Product Information



Mini Clamp Wiremount Socket Connector

37304-3122-0P0 FL gelb 37304-3163-0P0 FL orange 37304-2124-0P0 FL grün 37304-2165-0P0 FL blau 37304-2206-0P0 FL grau



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