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# 3M™ Mini-Clamp, Link and Power Clamp Connectors

Time-saving, reliable and field-installable wiring solutions

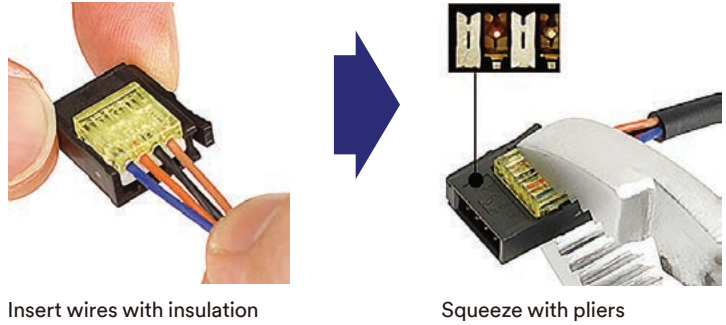


## 3M™ Mini-Clamp Connectors

The 3M Mini-Clamp is a simple termination connector based on industry standards for industrial, sensor, LED, switch and various small device connections. Featuring Insulation Displacement Contact (IDC) technology, this connector can provide a time-saving, reliable and field-installable wiring solution.

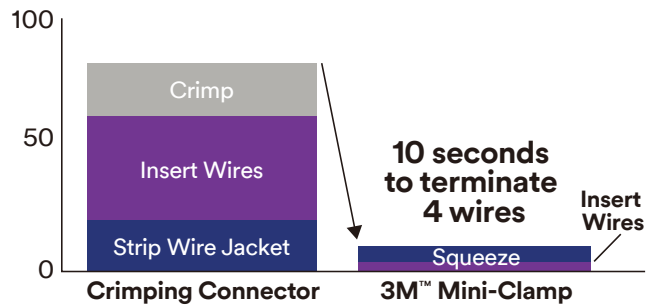
### Simple termination process for fast, reliable installation and maintenance

- Helps minimize risk of conductor damage with no wire stripping
- Stable termination quality with IDC increases reliability of sensor wiring
- Supports wires 28 to 20AWG

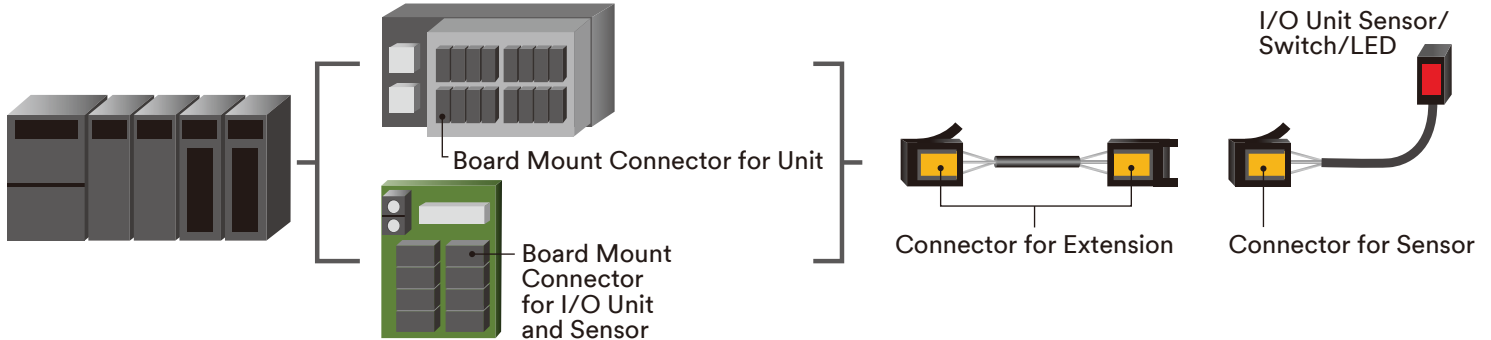


### Optimize network layout with field-installability

- Easily connect to pig-tail wired sensors
- Field termination allows for optimal cable lengths to save space and wire efficiently






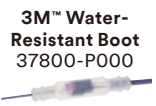


## Application Example



## Product Portfolio Offering

(Table includes wiremount connectors only. Ask 3M for availability of boardmount and other options.)

### 3M™ Mini-Clamp Connectors

Size of Conductor	Wire Jacketing Outside Diameter	3M Wiremount Plug y:# of positions (3,4,6,8)	3M Wiremount Socket x:0=Standard, P=Panel Mount y:# of positions (3,4,6,8)	3M Common Socket Connector x:0=Standard, P=Panel Mount	Cover Color	Related Accessories
						
AWG28-26 (0.08 - 0.14 mm <sup>2</sup> )	∅0.6 - 0.8 mm	3710y-4080-G00 FL	—	—	Purple	Dust Covers 37803-1000-00 37804-1000-00
	∅0.8 - 1.0 mm	3710y-4101-G00 FL	—	—	Red	
	∅0.6 - 0.8 mm	3710y-3080-000 FL	—	—	Purple	
AWG26-24 (0.14 - 0.3 mm <sup>2</sup> )	∅0.8 - 1.0 mm	3710y-3101-000 FL	3730y-3101-0×0 FL	37C04-3101-0×0 FL	Red	Crimping Tool 37900-10 
	∅1.0 - 1.2 mm	3710y-3122-000 FL	3730y-3122-0×0 FL	37C04-3122-0×0 FL	Yellow	
	∅1.2 - 1.6 mm	3710y-3163-000 FL	3730y-3163-0×0 FL	37C04-3163-0×0 FL	Orange	
AWG22-20 (0.3 - 0.5 mm <sup>2</sup> )	∅1.0 - 1.2 mm	3710y-2124-000 FL	3730y-2124-0×0 FL	37C04-2124-0×0 FL	Green	
	∅1.2 - 1.6 mm	3710y-2165-000 FL	3730y-2165-0×0 FL	37C04-2165-0×0 FL	Blue	
	∅1.6 - 2.0mm	3710y-2206-000 FL	3730y-2206-0×0 FL	37C04-2206-0×0 FL	Grey	

## 3M™ Link Connectors

3M™ Link Connectors offer a simple, single-action IDC termination for T-branching and splicing of sensor and field networks. Available in standard detachable, One Piece (with and without IPX4 option), and Branch Mini-Clamp versions.

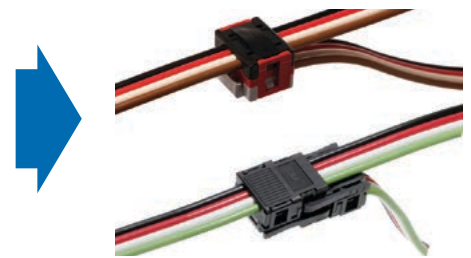
### Enables branched networks and splicing into an existing network

- Provides networking efficiency by optimizing signal and power line routing to terminal
- Allows installation of additional small devices without adding signal and power lines from controller
- Supports wires 22 to 16AWG

Just insert wires and squeeze with pliers



T branch by connector



3M™ Link Connectors, 381 and 382 Series (Detachable 2-piece type)



3M™ One Piece Branch Link Connector



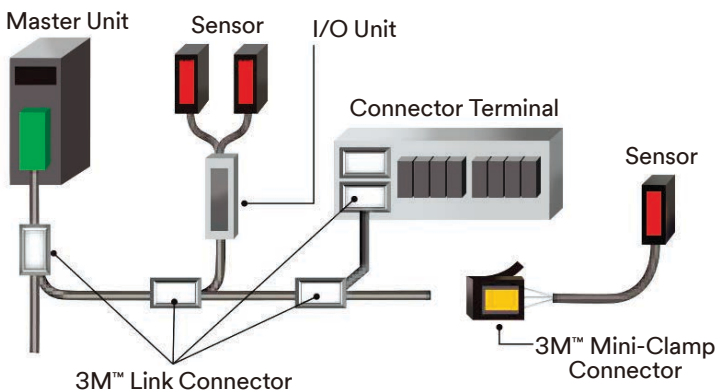
3M™ Splash-proof One Piece Branch (OPB) Link Connector



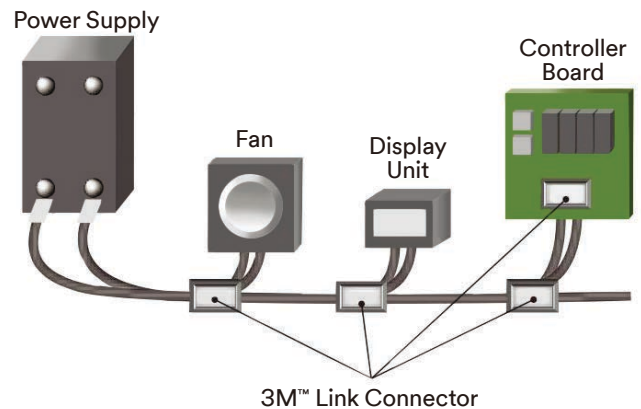
3M™ Branch Mini-Clamp Link Connector

## Application Example

### Serial Sensor Network



### Power Distribution

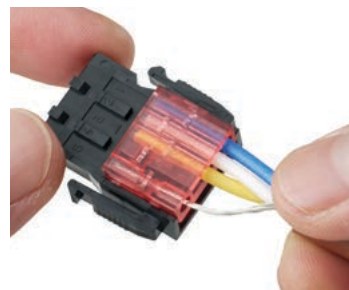


## 3M™ Power Clamp Connectors

3M™ Power Clamp Connector is a quick-termination connector for field networking applications and protocols. The simple IDC installation process allows for labor savings and high connection reliability. It is compatible with CLPA's CC-Link open technology.

### Splicing adapter with fast, reliable installation

- Smaller connector size than most standard screw-type alternatives
- Supports 250 Volts, 10A max (1 line), 7A max (all lines)
- Supports 20 to 18AWG wire
- Compatible with CC-Link Communication Interconnect Standard



Just insert wires with insulation



Squeeze with a pair of standard pliers

## Application Example







Spliced connector network enables unit modularity

## Product Portfolio Offering

(Table includes wiremount connectors only. Ask 3M for availability of boardmount and other options.)




### 3M™ Link Connectors

Size of Conductor	Cable Style	Wire Jacketing Outside Diameter	Detachable 2-Piece Type		Branch Mini-Clamp Type
			2 position	4 position	
22AWG (0.3 mm <sup>2</sup> )	Round	Ø1.1 - 1.4 mm			—
20AWG (0.5 mm <sup>2</sup> )	Round	Ø1.8 - 2.1 mm	38102-W022-W00 FL	38104-H022-K00 FL	—
	Round	Ø2.1 - 2.4 mm	38102-F020-H00 FL	38104-F020-H00 FL	—
18AWG (0.75 mm <sup>2</sup> )	Flat	Ø2.54 mm	—	38104-E020-G00 FL	—
	Round	Ø1.8 - 2.1 mm	—	38104-0020-100 FL	38A04-0020-100 FL
	Round	Ø2.1 - 2.4 mm	—	38104-F018-F00 FL	—
16AWG (1.25 mm <sup>2</sup> )	Round	Ø2.1 - 2.4 mm	—	38104-E018-E00 FL	—
	Flat	Ø2.54 mm	38102-0018-000 FL	38104-0018-000 FL	38A04-0018-000 FL
16AWG (1.25 mm <sup>2</sup> )	Flat	Ø2.54 mm	38102-0016-200 FL	—	38A04-0016-200 FL

One Piece Branch (OPB) Type					
Main Line Cable	Branch Line Cable	Standard	Splash-proof (IPX4)		
18AWG (0.75 mm <sup>2</sup> )	18AWG (0.75 mm <sup>2</sup> )/Flat			3M™ 4-wire Cable, 18AWG/0.75 mm <sup>2</sup> 79100-075-4F1	
20-16AWG (0.5-1.25 mm <sup>2</sup> )/Flat	20-16AWG (0.5-1.25 mm <sup>2</sup> )/Flat Thinner gauges/Discrete	Custom option	Custom option	3M™ OPB Splash-proof Cable Cap 38700-C01	
				3M™ IDC Termination Tool for OPB 38900-10	

**Note 1:** Don't mate to PCB connector. **Note 2:** Ask 3M for splice type. **Note 3:** Splash-proof end cap is available for sale. Need to use IDC Termination Tool 38900-10 for Splash-proof type.

### 3M™ Power Clamp Connectors

# Positions	Size of Conductor	Wire Jacketing Outside Diameter	Wiremount Socket	Wiremount Plug x: 0=Standard, P=Panel Mount	Related Products	
5	20AWG (0.5 mm <sup>2</sup> )	Ø1.6 - 2.0 mm			<b>Termination Resistor</b> 35T05-6M00-B0M GF  <b>Branch Connector:</b> Type H: 35720-L200-A00 AK Type Y: 35715-L010-A00 AK  	
	18AWG (0.75 mm <sup>2</sup> )	Ø1.6 - 2.0 mm	35505-6200-A00 GF	35805-6200-Ax0 GF		
		Ø2.0 - 2.3 mm	35505-6080-A00 GF	35805-6080-Ax0 GF		
Bar Terminal Diameter	Ø1.05 - 1.15 mm	35505-6180-A00 GF	35805-6180-Ax0 GF	35A05-60S0-A00 GF		35805-60S0-Ax0 GF
4 (CC-Link)	20AWG (0.5 mm <sup>2</sup> )	Ø2.2 - 3.0 mm	35505-6000-B0M GF	35805-6000-BxM GF		
	Bar Terminal Diameter	Ø1.05 - 1.15 mm	35A05-60S0-B0M GF	35805-60S0-BxM GF		

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