

3M Science.
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3M™ Mini-Clamp, Link and Power Clamp Connectors

Time-saving, reliable and field-installable wiring solutions

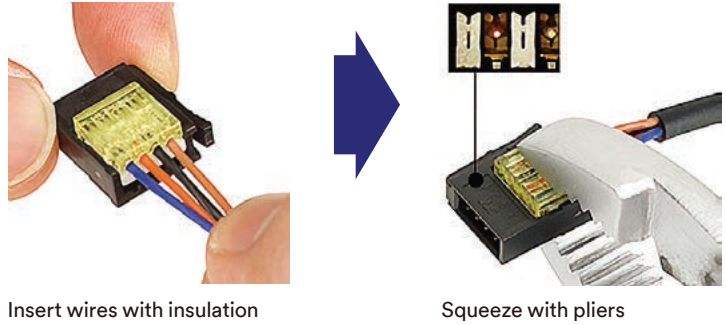


3M™ Mini-Clamp Connectors

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.

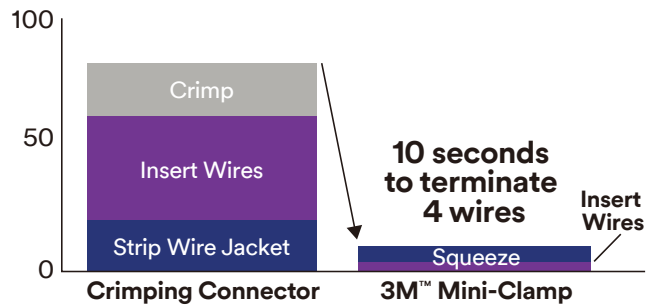
Simple termination process for fast, reliable installation and maintenance

- 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

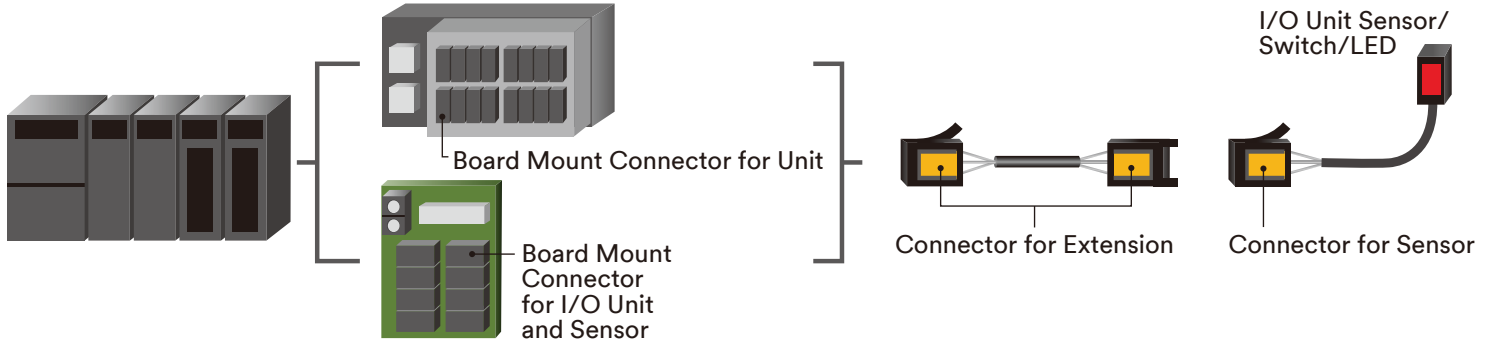


Optimize network layout with field-installability

- 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 ²)	∅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 ²)	∅0.8 - 1.0 mm	3710y-3101-000 FL	3730y-3101-0x0 FL	37C04-3101-0x0 FL	Red	Crimping Tool 37900-10
	∅1.0 - 1.2 mm	3710y-3122-000 FL	3730y-3122-0x0 FL	37C04-3122-0x0 FL	Yellow	
	∅1.2 - 1.6 mm	3710y-3163-000 FL	3730y-3163-0x0 FL	37C04-3163-0x0 FL	Orange	
AWG22-20 (0.3 - 0.5 mm ²)	∅1.0 - 1.2 mm	3710y-2124-000 FL	3730y-2124-0x0 FL	37C04-2124-0x0 FL	Green	
	∅1.2 - 1.6 mm	3710y-2165-000 FL	3730y-2165-0x0 FL	37C04-2165-0x0 FL	Blue	
	∅1.6 - 2.0mm	3710y-2206-000 FL	3730y-2206-0x0 FL	37C04-2206-0x0 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.

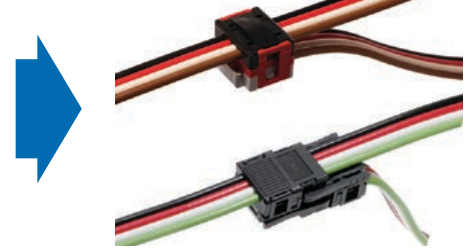
Enables branched networks and splicing into an existing network

- 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



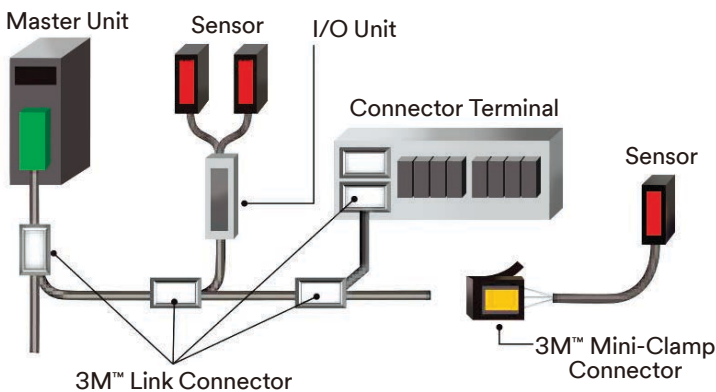
3M™ Splash-proof One Piece Branch (OPB) Link Connector



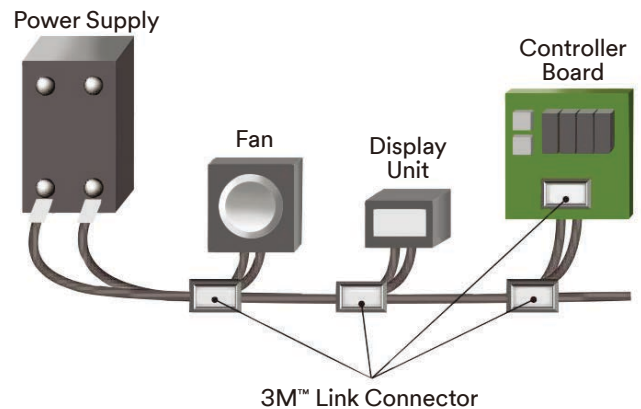
3M™ Branch Mini-Clamp Link Connector

Application Example

Serial Sensor Network



Power Distribution

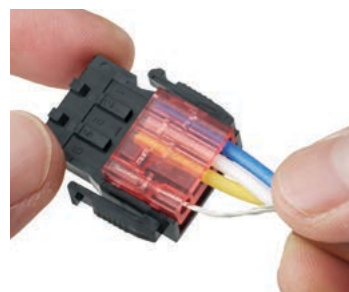


3M™ Power Clamp Connectors

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 ²)	Round	Ø1.1 - 1.4 mm			—
20AWG (0.5 mm ²)	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 ²)	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 ²)	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 ²)	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 ²)	18AWG (0.75 mm ²)/Flat			3M™ 4-wire Cable, 18AWG/0.75 mm ² 79100-075-4F1	
20-16AWG (0.5-1.25 mm ²)/Flat	20-16AWG (0.5-1.25 mm ²)/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 ²)	Ø1.6 - 2.0 mm			Termination Resistor 35T05-6M00-B0M GF Branch Connector: Type H: 35720-L200-A00 AK Type Y: 35715-L010-A00 AK 
	18AWG (0.75 mm ²)	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		
4 (CC-Link)	20AWG (0.5 mm ²)	Ø2.2 - 3.0 mm	35A05-60S0-A00 GF	35805-60S0-Ax0 GF	
	Bar Terminal Diameter	Ø1.05 - 1.15 mm	35505-6000-B0M GF	35805-6000-BxM GF	
			35A05-60S0-B0M GF	35805-60S0-BxM GF	

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