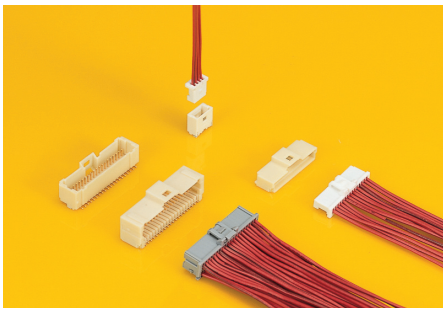
Pico-Clasp™ Wire-to-Board Connectors

Vertical and Right Angle, 1.00mm Pitch, Single and Dual Row



The versatile Pico-Clasp™ connector system simplifies development by delivering a wide selection of circuit size, orientation and plating on a small footprint. It is Molex's core 1.00mm pitch wire-to-board connector family.

Features and Benefits

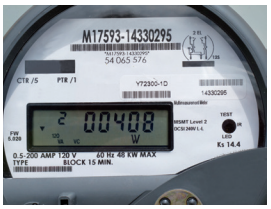
Smallest pitch for positive lock Wire-to-Board crimp system	Provides space savings for mounting other components
Wide varaiety of design options including orientation, circuit size, lock. Its current rate and operating temperature is higher than other competitive products	Provide greater design flexibility
Inner positive lock for 6 to 50 circuit sizes	Prevents wire hooking Blocks direct wire weight and prevents lock lever leaning Strong mating retention
Outer positive lock for 3 to 5 circuit sizes	Strong mating retention and secure locking
Low mating and unmating forces	Easy connector insertion and extraction
Gold-plating options	Superior reliability and durability in harsh environments

Applications

Consumer
- Drone, UAV
- Smart meter
- Air conditioner
- TV
- Mobile POS Terminal

Medical
- Patient monitor

Industrial
- Servo motor



Smart meter

Drone

Medical Equipment

Additional Product Features

Derating

- Single Row (Tin plating)

Wire Size (AWG)	Current (A)			
	2-Circuit	5-Circuit	10-Circuit	15-Circuit
28	2.0	1.5	1.0	1.0
30	1.5	1.0	1.0	1.0
32	1.5	1.0	0.8	0.8

- Dual Row (Gold plating)

Wire Size (AWG)	Current (A)	
	20-Circuit	50-Circuit
28	1.0	
30	1.0	
32	0.8	

Notes: 1) Values are for REFERENCE ONLY. 2) Current deratings are based on not exceeding 30°C temperature rise. 3) Temperature rise is measured in barrel area of crimp terminal. 4) PCB trace design can greatly affect temperature rise results. 5) Data is for all circuits powered.

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Specifications

REFERENCE INFORMATION

Packaging:
- Terminals: Reel
- Housings: Bag
- Headers: Embossed tape on reel

Designed In: Millimeters
RoHS: Yes
Halogen Free: No

ELECTRICAL

Voltage (max.): 50V
Current (max.): 2.0A (See Derating Information)
Contact Resistance: 20 milliohms max.
Dielectric Withstanding Voltage: 250V AC /1minute
Insulation Resistance: 100 Megohm min.
Terminal Retention Force: 4.9N min.
Durability: 30 cycles

PHYSICAL

Material:
- Terminal: Phosphor Bronze
- Housing: Nylon
- Plating: Tin or Gold

Operating Temperature: -40 to +105°C

Ordering Information

Single Row, Inner Lock

Terminal	Housing	Header		Plating	Circuit Size	Lock
		Vertical	Right Angle			
501334-0000	501330-**00	501331-**07	501568-**07	Tin	2 to 5	Friction
					6 to 15	Positive
501193-3000		504449-**07	202396-**07	Gold	2 to 5	Friction
					6 to 15	Positive

Single Row, Outer Lock

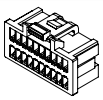
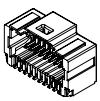
Terminal	Housing	Header		Plating	Circuit Size	Lock
		Vertical	Right Angle			
501334-0000	501939-**00	501940-**07	501953-**07	Tin	3 to 5	Positive
501193-3000		501940-**03	501953-**05	Gold		

Dual Row, Inner Lock

Terminal	Housing	Header		Plating	Circuit Size	Lock
		Vertical	Right Angle			
501193-3000	501189-**10	501190-**17	501571-**07	Gold	20, 30, 40, 50	Vertical Header with tape
		501190-**27			20, 30, 40, 50	Header without tape

Additional Information

Product Images

Terminal	Housing	Header		Features
		Vertical	Right Angle	
				Single Row, Inner Friction Lock
				Single Row, Inner PositiveLock
				Single Row, Outer PositiveLock
				Dual Row, Inner PositiveLock

www.molex.com/link/picoclasp.html