

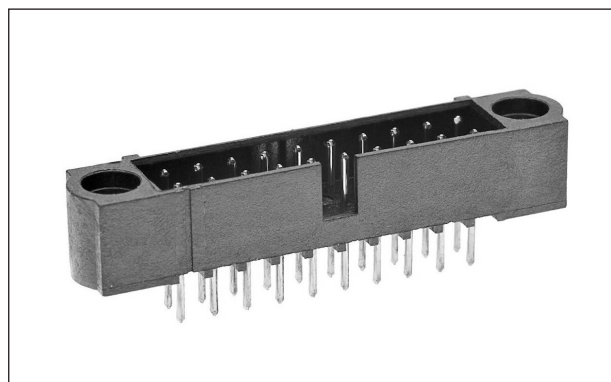
## M225 Series Durable Industrial Connectors

### 2mm Pitch Connectors for High Vibration and Automated Crimping

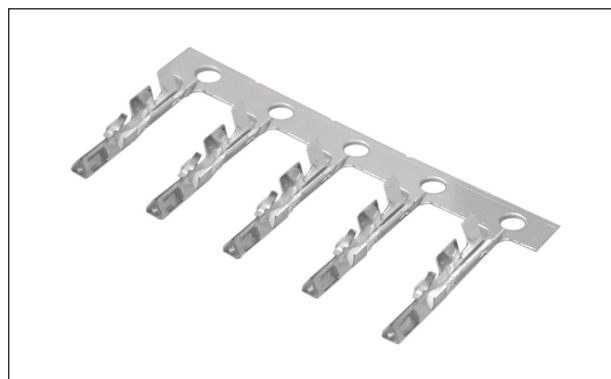
The M225 series of connectors is a 2.00mm pitch, high performance industrial connector range from Harwin. Designed to resist industrial levels of vibration and shock, in a practical package suitable for automated assembly at high volume.

This cable-to-board, double row design mates a throughboard PCB male connector to a choice of female crimp contacts, accommodating 22 to 28AWG wires. Crimp contacts are available in both loose (for prototyping) and reeled (for high-volume automation) packaging, and a hand crimp tool is available for low-volume work.

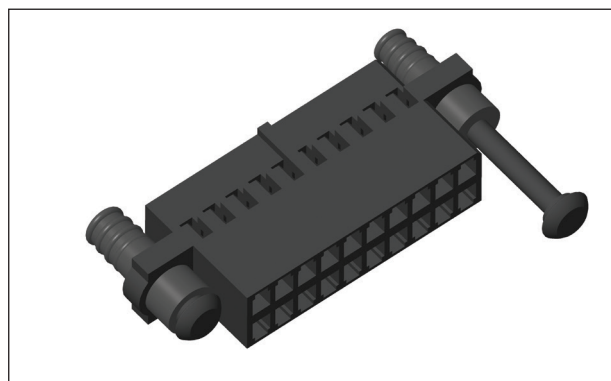
To meet the higher requirements of vibration, shock and acceleration for industrial products, the contact style has three contact surfaces touching the mating male contact. Added security is provided with a unique and simple locking mechanism fitted to the female housing, which is engaged by pressing home a pin on either end of the connector.



Male PCB Connector - vertical, 20 contacts



Female bandoliered crimp contact



Connector locking mechanism on female housing

#### Features and Benefits

3A per signal contact (all electrically loaded; 3.3A per individual contact) at 2mm pitch	Capable of signal and low power within a compact design, saving PCB real estate
Innovative 3-finger stamped single-piece contact design	Supplied in bandolier/carrier strip format for easy use on automated crimping systems
Polarized housings with shrouded contacts	Prevents accidental damage and incorrect mating orientations for ease of assembly
Expanding rubber locking fixing	Fast and secure connection between mated connectors, resistance to vibration
From a manufacturer of avionics-grade connectors	High quality manufacturing with modern production standards, EN9100 approval

#### Key Applications

Industrial	Factory and mobile machinery, Control panels and sub-systems, Drives, Robotics and other automation
Instrumentation	Test equipment, Portable hand-held devices
Site Control	Remote control devices, ground and machinery monitoring

## Product Features

Fixing pin - push home to complete retention on mating

Extraction windows enable tool entry to remove contacts

Shrouded contacts on both male and female designs

0.5mm diameter male pins, 100% tin plating

3 points of contact with male pin for vibration & shock

Rear crimp contact entry

Rubber retention fixing for additional vibration resistance and strain relief

Polarized housings to prevent mis-mated connections

Available loose, or reeled on a bandolier carrier strip

Open crimp for conductor & insulation, ideal for automation

## How to Order

M225 - XXX XX XX

TYPE	
253	Female contact, 22-24AWG reeled
254	Female contact, 26-28AWG reeled
283	Female contact, 22-24AWG loose
284	Female contact, 28-26AWG loose
455	Female Cable Housing with retaining pin & collar
520	Male Vertical Throughboard

FINISH	
46	100% Tin over Nickel (Female Contacts and Male only)
98	Female Cable Housing

TOTAL NO. OF CONTACTS	
10, 20, 26, 34, 50	Female Housing and Male
00	Female Contacts

## Tooling

Z80-255 - Hand Crimp Tool

Z80-258 - Crimp Removal Tool

## Specifications

Electrical		Mechanical & Environmental		Physical	
Current Rating	3A per contact	Number of Mating Cycles	50	Housing, Fixing Pin	Glass-filled High Temperature Plastic UL94V-0
Working Voltage	800V AC/DC	Temperature Range	-55°C to +125°C	Contacts	Copper alloy, 100% Tin plating
Maximum Voltage	1200V AC/DC	Insertion Force	2.8N max	Fixing Collar	Fluoroelastomer Polymer (FPM)
Contact Resistance	25mΩ max	Withdrawal Force	0.2N min		
Insulation Resistance	100MΩ min	Vibration	10G, 6 hours total		



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