

# Archer Kontrol

## Durable High Performance Connectors

Increased reliability for industrial applications

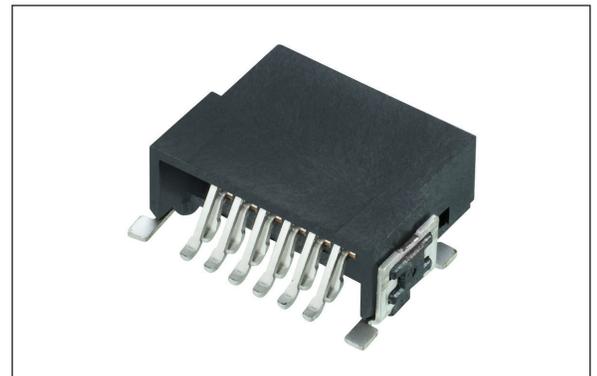
Harwin's Archer Kontrol range of compact 1.27mm pitch connectors offers a robust and flexible connection choice for your application.

Get the stacking height you need on your board-to-board application by selecting different combinations of male and female vertical connectors. Add horizontal connectors to achieve right angle or co-planar arrangements. IDC female double-ended cable assemblies give you cable-to-board flexibility.

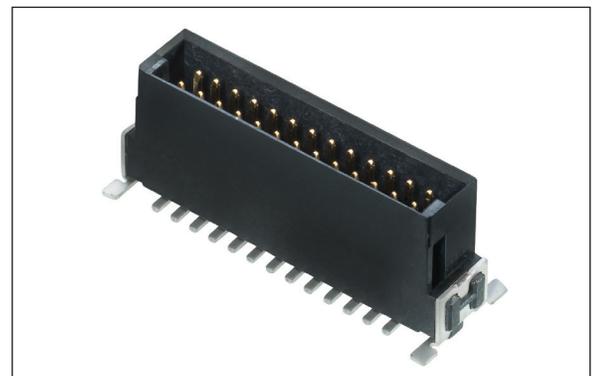
These connectors can assist with blind mating and offer up to 1.2A per contact. Pin counts range from 12 to 80, and mated connectors can carry a data rate up to 3Gbits/s.



12 contact female cable assembly with latching



12 contact horizontal female connector



26 pin vertical male connector, 9.85mm high

### Features and Benefits

Vertical and Horizontal PCB connector ranges available in both male and female	Complete flexibility of edge-to-edge, parallel board-to-board, or mother-daughterboard right-angle configurations
Surface mount, including hold-down solder tabs and location pegs	Space saving, enables easy automation and robustness in retention to the PCB
Tape and reel packaged	For full assembly automation
Ready-made cable assemblies in 150mm and 300mm lengths	Stocked in depth with no lead-time for immediate availability
Cable connectors available loose to create your own cable assembly	Your choice of production options
Fully shrouded connector system, latching features on cable connectors	Can take lateral and twisting forces that can be suffered during vibration environments, assists with blind mating
Different heights and pin combinations available	Design flexibility for board stacking connectors, with vertical stacking height variations

### Key Applications

Industrial equipment	Factory equipment, production line controls, drive units for large scale installations
Handheld equipment	IOT markets, portable monitoring equipment, data collection
Large scale monitoring and control	Mobile maintenance and display control systems, trackside and roadside monitoring
Automotive	Onboard charging products, battery management systems

## Product Features

Complete cabled connections at 150mm and 300mm

Dual row

Horizontal cable exit for reduced height

Polarized, shrouded housings

Surface mount, packaged in tape and reel

Gold contact area, tin solder tails / terminations

RoHS compliant materials

Latch features for strain relief and vibration resistance

Choice of vertical heights available

Surface Mount solder tabs for additional board retention strength

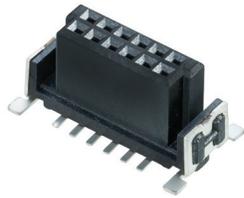
Location pegs on all connector styles

## Specifications

Electrical		Mechanical & Environmental		Physical	
Current Rating	1.2A max (PCB), 0.5A max (cable)	Data Rate	Up to 3Gbits/s	Packaging (PCB connectors)	Tape & Reel (pick and place cap on vertical connectors)
Working Voltage	100V AC	No. of Mating Cycles	500	Contact Base Material	Phosphor Bronze
Maximum Voltage	500V AC for 1 minute	Temperature Range	-55°C to +125°C (PCB), -20°C to +105°C (cable)	Finish	Gold on contact area, tin on terminations, over nickel
Contact Resistance	25mΩ max initial	Insertion Force	0.8N max	Housing	High Temperature LCP UL94V-0
Insulation Resistance	1GΩ min	Withdrawal Force	0.2N min	Cable	PVC to UL2678, 30AWG

## Vertical PCB connectors

### Female Vertical



M55-60hxx42R

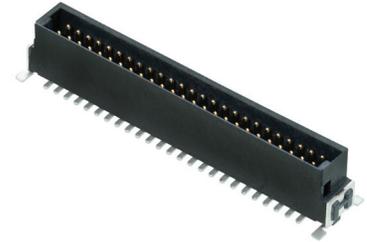
h = Height

Female	Male
0 = 6.25mm	0 = 6.75mm
1 = 9.05mm	1 = 8.25mm
2 = 13.65mm	2 = 9.85mm

xx = Total number of contacts

12, 16, 20, 26, 32, 40, 50, 68, 80

### Male Vertical



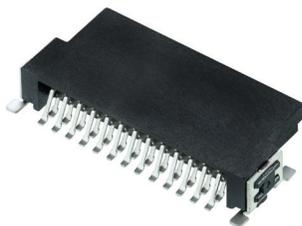
M55-70hxx42R

## Parallel PCB-to-PCB Mated Height

Female Connector Part Number	Male Connector Part Number	Mating Height
M55-600xx42R	M55-700xx42R	8.00mm to 9.50mm
M55-600xx42R	M55-701xx42R	9.50mm to 11.00mm
M55-600xx42R	M55-702xx42R	11.10mm to 12.60mm
M55-601xx42R	M55-700xx42R	10.80mm to 12.30mm
M55-601xx42R	M55-701xx42R	12.30mm to 13.80mm
M55-601xx42R	M55-702xx42R	13.90mm to 15.40mm
M55-602xx42R	M55-700xx42R	15.40mm to 16.90mm
M55-602xx42R	M55-701xx42R	16.90mm to 18.40mm
M55-602xx42R	M55-702xx42R	18.50mm to 20.00mm

## Horizontal PCB connectors

### Female Horizontal



M55-610xx42R

xx = Total number of contacts

12, 16, 20, 26, 32, 40, 50, 68, 80

### Male Horizontal



M55-710xx42R

Total Mated Length for Horizontal Connectors (M55-610xx42R to M55-710xx42R): 15.80mm

## Cable Assemblies (Female-to-Female)

**M55 - 800 XX 42 - XXXX A**

**SERIES CODE**

**TOTAL NO. OF CONTACTS**

12, 16, 20, 26, 32, 40, 50, 68, 80

**CABLE LENGTH**

**0150** 150mm

**0300** 300mm



## Cable Connectors (Female)

## Tooling



**M55 - 820 XX 42**

**SERIES CODE**

**TOTAL NO. OF CONTACTS**

12, 16, 20, 26, 32, 40, 50, 68, 80



**How to Order**

Z55-020

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