

M300 10A Hi-Rel Connectors

Power Connectors with reliable performance in harsh applications

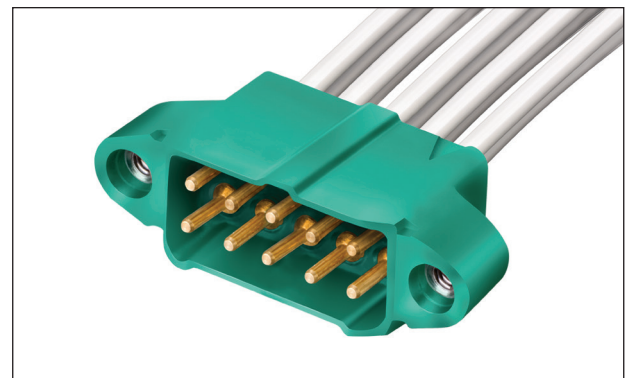
Specify Harwin’s M300 range of high reliability and performance connectors for your aerospace, defense, industrial or other harsh environment application.

Achieve a compact power connection with up to 10A per contact, giving you a lightweight robust solution with a proven track record under extreme conditions. Guard against vibration and shock with fitted stainless steel jackscrews.

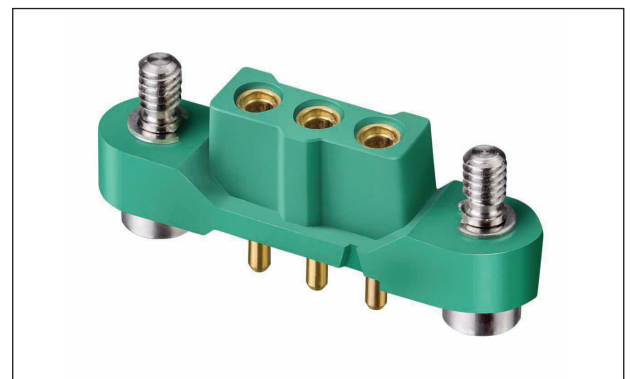
Future-proof your designs with halogen-free, RoHS compliant materials and low outgassing levels. These 3mm pitch PCB connectors, crimp cable connectors and ready-made cable assemblies are available from stock across the Harwin supply network.



6-contact male vertical throughboard PCB connector



10-contact male cable connector



3-contact female vertical throughboard PCB connector with recessed contacts

Features and Benefits	
Up to 10A per signal contact (all electrically loaded; 5A if 22AWG wire is used) at 3mm pitch	Capable of a variety of power uses within a compact design, saving PCB real estate
Proven 4-finger contact design	Maintains electrical continuity through high vibration and shock environments
Beryllium Copper Contact with -65°C to +175°C temperature range	Rugged and durable connector design with proven track record
1,000 Mating cycles durability	Suitable for both fit-and-forget and multiple testing and replacement cycles
Future-proofed material usage	Halogen-free, PFOS-free, SVHC-free and RoHS compliant
Low outgassing properties	Meets NASA outgassing requirements for vacuum or space usage
Full cable assembly options off-the-shelf	Reduced delivery , fully tested assemblies with hassle-free installation

Key Applications	
Aerospace, Defense & Security	Radar, avionics controls, guidance systems, UAVs, engine power management, vehicle electronics
Motorsport & Transport	Navigation, ERS controls, GPS and telemetry system
Space	Satellites & CubeSats, communications, launch systems, radar and communications
Industrial	Robotics, automation, drives & controls
Energy	Oil & Gas, renewable energy equipment

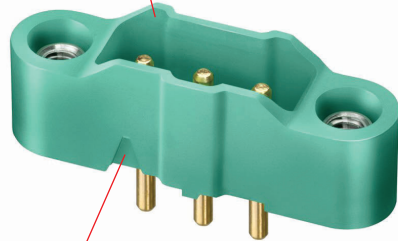
Product Features

High-grade Military Spec M22759/11 wire, Off-the-Shelf Cable Assemblies

Back potted for strain relief and security

Stainless steel jackscrews ensure strong and secure mating

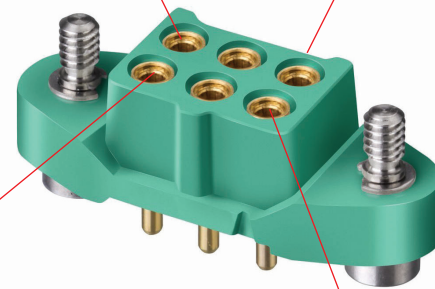
3 major polarization features to prevent mis-mating



Pin 1 position marked

Compact 3mm pitch to reduce space and weight requirements

Gold plated contacts resist high levels of vibration and shock



Up to 10 amp contact system (wire dependent)

100% electrically tested for total confidence in fault-free connections

Shrouded housing designed to protect the contacts during mating cycles

Low outgassing materials used

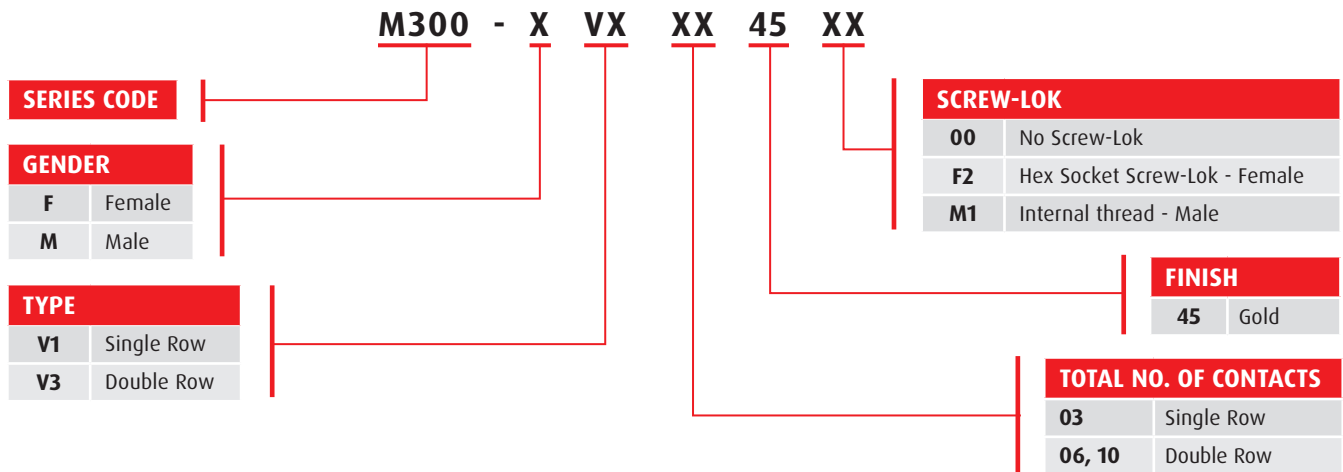
Recessed female contacts for added protection against shorting

Specifications

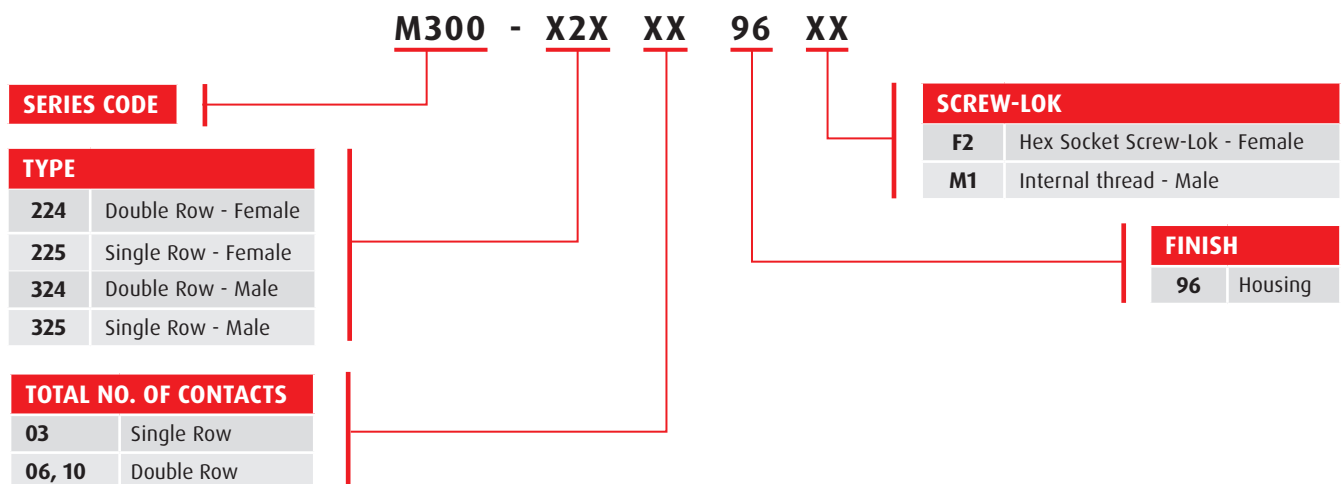
Electrical		Mechanical		Physical	
Current Rating	10A per contact (5A with 22AWG wire)	No. of Operations	1000	Housing	30% GF PA4T
Working Voltage	600V AC/DC	Insertion Force	9N max per contact	Contacts	Copper alloy, Gold over nickel plated
Maximum Voltage	1800V AC/DC	Withdrawal Force	1N min per contact	Jackscrews, Circlip	Stainless steel
Contact Resistance	6mΩ Max	Temperature Range	-65°C to +175°C	Wire	M22759/11 (18, 20, 22 AWG)
Insulation Resistance	100MΩ min at 100V DC	Vibration	10G for 9 hours		

How to Order

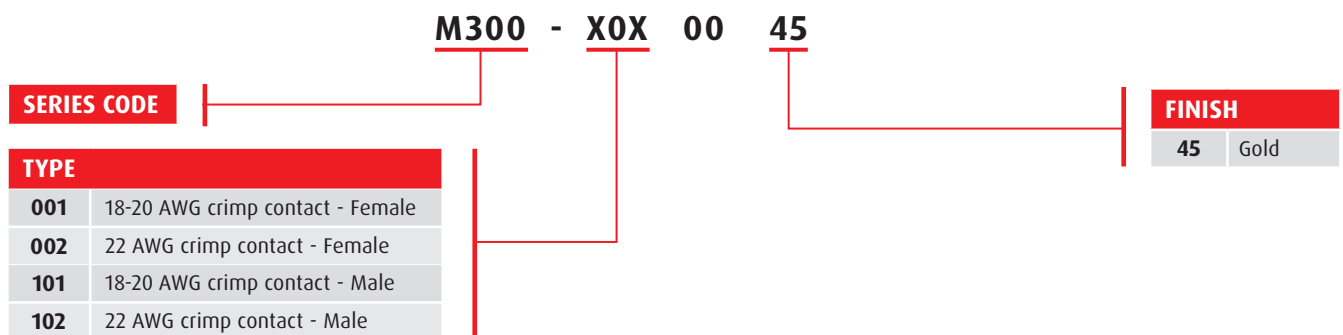
PCB Connectors



Cable Conductor Housing



Crimp Contacts



How to Order

Female Cable Assemblies

M300 - F C X XX 05 F2 - XXXX L

SERIES CODE

GENDER - FIRST END

F Female

CABLE SIZE

1	18 AWG, for Double Row
2	20 AWG, for Double Row
3	22 AWG, for Double Row
5	18 AWG, for Single Row
6	20 AWG, for Single Row
7	22 AWG, for Single Row

TERMINATION - SECOND END

L Loose cut end

CABLE LENGTH

0150	150mm
0300	300mm
0450	450mm

SCREW-LOK

F2 Hex Socket Screw-Lok

TOTAL NO. OF CONTACTS

03	Single Row
06, 10	Double Row

Male Cable Assemblies

M300 - M C X XX 05 M1 - XXXX L

SERIES CODE

GENDER - FIRST END

M Male

CABLE SIZE

1	18 AWG, for Double Row
2	20 AWG, for Double Row
3	22 AWG, for Double Row
5	18 AWG, for Single Row
6	20 AWG, for Single Row
7	22 AWG, for Single Row

TERMINATION - SECOND END

L Loose cut end

CABLE LENGTH

0150	150mm
0300	300mm
0450	450mm

SCREW-LOK

M1 Screw-Lok

TOTAL NO. OF CONTACTS

03	Single Row
06, 10	Double Row

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