## Product Summary



# Datamate Ganged 50Ω Coax Off-the-Shelf Cable Assemblies

Complete ready-to-use solutions for cable-to-board

Achieve reliable performance and easy assembly with ganged coax cable assemblies from the Datamate range. Discover our complete plug-and-play solution with quick delivery from stock.

These lightweight assemblies use high-grade, lightweight RG178 coaxial cable for a flexible, space-saving solution. Specify single-ended or double-ended in lengths of 150, 300 or 450mm. All coax cable assemblies are quality assured, with full visual inspection and electrical continuity testing.

Features and Benefits	
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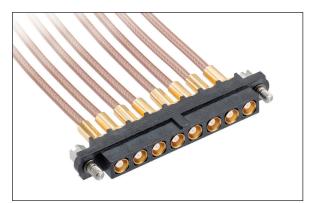
Datamate 50 $\Omega$ Coax solutions are a Ganged connector	Multiple coax connections made faster and more secure than traditional or competitor solutions
Decrease production build time, increase assembly speeds	Just one connection required
These compact design connectors are on a 4.00mm pitch	Reduces space real-estate requirements and weight
High-quality, high-reliability 50Ω gold plated coaxial contacts	Ideally suited for high vibration environments and multiple insertions
Shrouded housing design	Protects both male and female contacts prior to, and during, mating cycles
Central polarisation feature	Eliminates the possibility of mis-mating due to incorrect orientation
Stainless Steel jackscrew fixings	Strong and secure mating, excellent robust strain relief
150, 300 & 450mm single and double ended options in stock	Fast delivery, hassle-free installation and fully tested
100% electrically tested and inspected assembly	Total confidence in fault-free connections

#### **Key Applications**

Aviation	Avionics, Aircraft Infotainment, Radar
Motorsport and Transport	Navigation, GPS, Tracking
Energy	Oil, Gas and Renewable Sources
Industrial	Drives and Controls, Robotics
Space	Satellites, CubeSat, Launch Systems
Defence and Security	Wi-Fi Antennas, Routers, Radio Communications and Radar



Ready-Made Cable Assemblies with 2, 4, 6 or 8 Coax



M80-FC305F1-08-0150L: Single Ended, 8 Coax



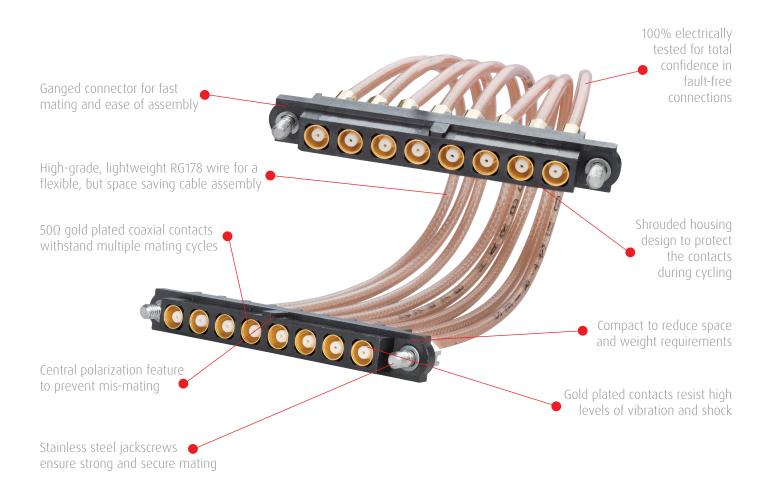
M80-FC305F1-02-0150F1: Double Ended, 2 Coax

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#### **Product Features**



Mating Male Connectors							
	Vertical / Straig	ht PCB Connector	Horizontal / Right Angled PCB Connector				
No. of Contacts	3mm Throughboard	4.5mm Throughboard	3mm Throughboard	4.5mm Throughboard			
2 Contacts	M80-MV311M2-02	M80-MV312M2-02	M80-MH313M5-02	M80-MH314M5-02			
4 Contacts	M80-MV311M2-04	M80-MV312M2-04	M80-MH313M5-04	M80-MH314M5-04			
6 Contacts	M80-MV311M2-06	M80-MV312M2-06	M80-MH313M5-06	M80-MH314M5-06			
8 Contacts	M80-MV311M2-08	M80-MV312M2-08	M80-MH313M5-08	M80-MH314M5-08			

## Datamate **Coax**

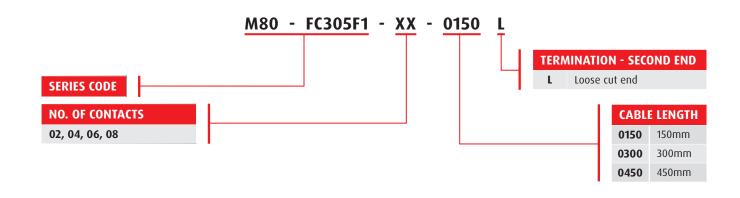
## www.harwin.com/datamate-coax



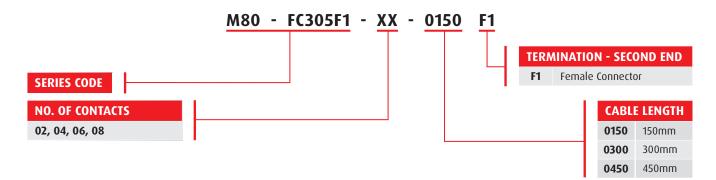
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### How to Order

Single-ended Cable Assemblies



**Double-ended Cable Assemblies** 



Specifications						
Electrical		Mechanical		Physical		
Working Voltage	180V AC @ 500mA	No of Operations	500	Packaging	10 per Bag	
Maximum Voltage	1000V AC	Insertion force	20N per contact	Housing	30% GF PPS UL94V-0	
Frequency Range	Up to 6.0GHz	Withdrawal Force	0.5 N per contact	Contacts	Copper alloy, Gold over nickel plated	
Impedance	50Ω	Temp range	-55°C to +125 °C	Insulator	PTFE	
VSWR	1.05 + (0.04 x Frequency) GHz Max	Vibration	10G 6 hours, 2 hours per axis	Latching collar	Beryllium Copper, Nickel plated	
Contact Resistance	6mΩ Max	Shock	100G 6ms	Wire	RG 178, natural tan FEP	
Insulation Resistance	10 <sup>6</sup> MΩ @ 250V AC					

Cable Assemblies are checked using a Cirrus Tester for open loops + 1500V flashover test



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