



**Brad® Micro-Change®  
M12 Threaded and Ultra-Lock®  
12-Pole Cordsets & Receptacles**

**Molex's new 12-Pole product line increases density up to 12-circuits in an IP67-sealed M12 format**

This addition of the 12-Pole size to the Micro-Change family provides the utility of up to 12, 1-amp circuits in IP67- sealed receptacles and cordsets. Very few competitors currently offer the M12 12-Pole connector and none offer it with the additional utility and security of the Ultra-Lock connection system.

Developed initially for multiple instrumentation manufacturers, this new M12 circuit size is appropriate for any application requiring harsh environment-connectivity.

The Ultra-Lock receptacles accept either the Ultra-Lock connector or the standard M12 threaded cordsets. This allows the customer to specify Ultra-Lock push-to-lock capability while alleviating single-source concerns. Combining the Ultra-Lock receptacles and cordsets provides the optimal solution for secure, operator-independent connections. The receptacles will also mate with any M12 12-Pole cordsets, all of which are designed to the IEC (International Electro-Technical Commission) standard.

For additional product information, please visit: [www.molex.com/link/M12.html](http://www.molex.com/link/M12.html).

**Features and Benefits**

- Gold plated copper alloy contacts ensure reliable low-resistance performance over the life of the unit
- IP67 sealed interface provides reliable connectivity in harsh environments
- PCB or crimp receptacle contacts provide broad variety of mounting and assembly options to meet customer specific requirements
- Front- or rear-mounting receptacle housings provide broad variety of mounting and assembly options to meet customer specific requirements.
- Ultra-Lock Push-to-Lock technology ensures simple, secure, operator-independent connection
- Ultra-Lock IP69K, radial, O-ring seal ensures the connector's ability to withstand harsh environments

- 120065 M12 Micro-Change Threaded cordsets unshielded**
- 120069 M12 Micro-Change Threaded cordsets shielded**
- 120079 M12 Ultra-Lock cordsets unshielded**
- 120083 M12 Ultra-Lock cordsets shielded**
- 120084 M12 Ultra-Lock Shielded Receptacles**

**SPECIFICATIONS**

**Reference Information**

UL File No.: Pending  
CSA File No.: Pending

**Electrical**

Voltage (max.): 30V AC/DC  
Current (max.): 1.5A  
Contact Resistance: <5mOhm  
Dielectric Withstanding Voltage: 0.8kV  
Insulation Resistance: <10GOhm

**Mechanical**

Durability (min.): 100 cycles

**Physical**

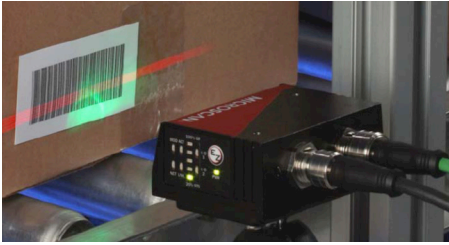
Housing: Nickel Plated Brass  
Contact: Copper Alloy  
Plating: Gold/Nickel  
PCB Thickness: 0.6mm  
Operating Temperature: -25°C / 90°C



M12 12-Pole Receptacles



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- Instrumentation
- Sensors
- Encoders
- Scanners



**120065 M12 Micro-Change Threaded cordsets unshielded**

**120069 M12 Micro-Change Threaded cordsets shielded**

**120079 M12 Ultra-Lock cordsets unshielded**

**120083 M12 Ultra-Lock cordsets shielded**

**120084 M12 Ultra-Lock Shielded Receptacles**

**ORDERING INFORMATION**

**Ultra-Lock Shielded Receptacles**

Order No.	Engineering Number	Product Attribute	Plant No. for Samples
1200845013	WRCU20E01C300	Female Front Mount w/ 1 ft. crimped leads	3109(US); 5601(EU)
1200845015	WRCU26E01C300	Male Front Mount w/ 1 ft. crimped leads	
1200845017	WRCU40E01C300	Female Rear Mount w/ 1 ft. crimped leads	
1200845019	WRCU46E01C300	Male Rear Mount w/ 1 ft. crimped leads	
1200845092	WRCU40000	Female Rear Mount w/ straight PCB contacts	
1200845091	WRCU46000	Male Rear Mount w/ straight PCB contacts	

**Micro-Change M12 Threaded Cordset Assembly - Unshielded**

SAP Number	Engineering Number	Connector Style	Product Attribute	Plant No. for Samples
1200655040	80C000H45M020	Female straight threaded	2 meter cable	3109 (US); 5601 (EU)
1200655041	80C000H45M040	Female straight threaded	4 meter cable	N/A
1200655042	80C000H45M050	Female straight threaded	5 meter cable	
1200655043	80C000H45M060	Female straight threaded	6 meter cable	
1200655044	80C000H45M100	Female straight threaded	10 meter cable	
1200655045	80C006H45M020	Male straight threaded	2 meter cable	3109 (US); 5601 (EU)
1200655046	80C006H45M040	Male straight threaded	4 meter cable	N/A
1200655047	80C006H45M050	Male straight threaded	5 meter cable	
1200655048	80C006H45M060	Male straight threaded	6 meter cable	
1200655049	80C006H45M100	Male straight threaded	10 meter cable	



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**Micro-Change M12 Threaded Cordset Assembly - Shielded**

SAP Number	Engineering Number	Connector Style	Product Attribute	Plant No. for Samples
1200695017	80CS00P45M020	Female straight threaded	2 meter cable	3109 (US); 5601 (EU)
1200695018	80CS00P45M040	Female straight threaded	4 meter cable	N/A
1200695019	80CS00P45M050	Female straight threaded	5 meter cable	
1200695020	80CS00P45M060	Female straight threaded	6 meter cable	
1200695021	80CS00P45M100	Female straight threaded	10 meter cable	
1200695022	80CS06P45M020	Male straight threaded	2 meter cable	3109 (US); 5601 (EU)
1200695023	80CS06P45M040	Male straight threaded	4 meter cable	N/A
1200695024	80CS06P45M050	Male straight threaded	5 meter cable	
1200695025	80CS06P45M060	Male straight threaded	6 meter cable	
1200695026	80CS06P45M100	Male straight threaded	10 meter cable	

**Micro-Change M12 Ultra-Lock Cordset Assembly - Unshielded**

SAP Number	Engineering Number	Connector Style	Product Attribute	Plant No. for Samples
1200795001	WOC000H45M020	Female straight Ultra-Lock	2 meter cable	3109 (US); 5601 (EU)
1200795002	WOC000H45M040	Female straight Ultra-Lock	4 meter cable	N/A
1200795003	WOC000H45M050	Female straight Ultra-Lock	5 meter cable	
1200795004	WOC000H45M060	Female straight Ultra-Lock	6 meter cable	
1200795005	WOC000H45M100	Female straight Ultra-Lock	10 meter cable	
1200795006	WOC006H45M020	Male straight Ultra-Lock	2 meter cable	3109 (US); 5601 (EU)
1200795007	WOC006H45M040	Male straight Ultra-Lock	4 meter cable	N/A
1200795008	WOC006H45M050	Male straight Ultra-Lock	5 meter cable	
1200795009	WOC006H45M060	Male straight Ultra-Lock	6 meter cable	
1200795010	WOC006H45M100	Male straight Ultra-Lock	10 meter cable	

**Micro-Change M12 Ultra-Lock Cordset Assembly-Shielded**

SAP Number	Engineering Number	Connector Style	Cable Length	Plant No. for Samples
1200835010	WOC00P45M020	Female straight Ultra-Lock	2 meter cable	3109(US); 5601(EU)
1200835011	WOC00P45M040	Female straight Ultra-Lock	4 meter cable	N/A
1200835012	WOC00P45M050	Female straight Ultra-Lock	5 meter cable	
1200835013	WOC00P45M060	Female straight Ultra-Lock	6 meter cable	
1200830514	WOC00P45M100	Female straight Ultra-Lock	10 meter cable	
1200835015	WOC06H45M020	Male straight Ultra-Lock	2 meter cable	3109(US); 5601(EU)
1200835016	WOC06H45M040	Male straight Ultra-Lock	4 meter cable	N/A
1200835017	WOC06H45M050	Male straight Ultra-Lock	5 meter cable	
1200835018	WOC06H45M060	Male straight Ultra-Lock	6 meter cable	
1200835019	WOC06H45M100	Male straight Ultra-Lock	10 meter cable	

[www.molex.com/link/M12.html](http://www.molex.com/link/M12.html)

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