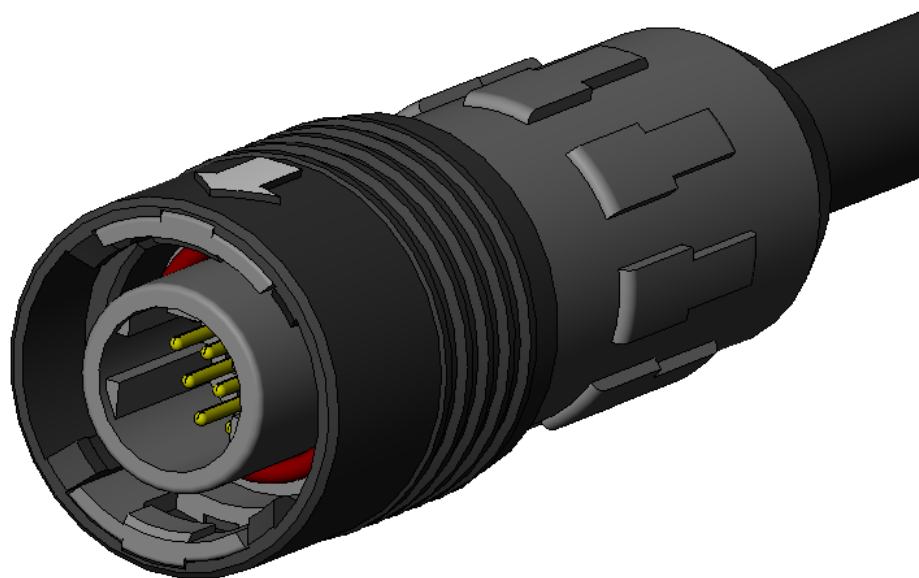
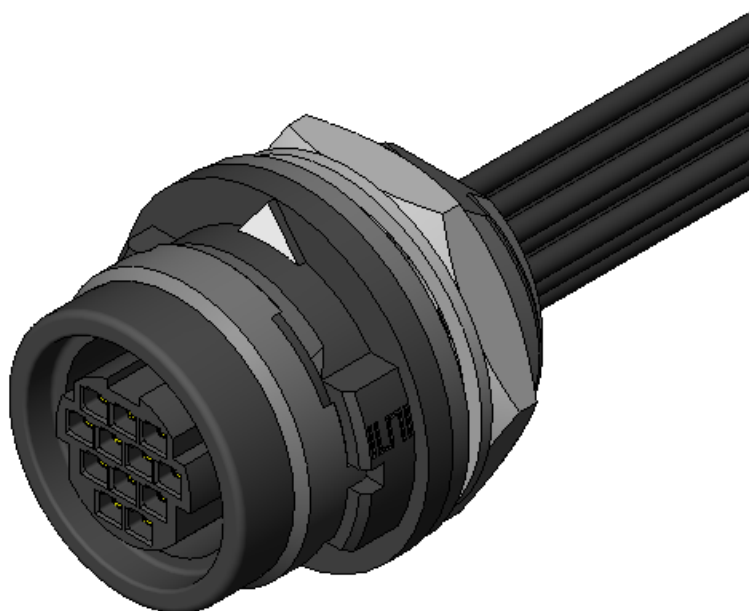


Series: MCP / MCR AccliMate™ IP67 Mini Push-Pull Cable System

MCP Series – External Cable



MCR Series – Internal Cable



Other configurations available for:

Cable to cable applications

See www.samtec.com for more information.



1.0 SCOPE

This specification covers performance, testing and quality requirements for Samtec MCP/MCR-8 AccliMate™ IP67 Mini Push-Pull Cable System. All information contained in this specification is for an 8 series shell size.

2.0 DETAILED INFORMATION

2.1 Product prints, panel, catalog pages, test reports and other specific, detailed information can be found at <http://www.samtec.com/?MCP-8> and <http://www.samtec.com/?MCR-8>.

3.0 TESTING

3.1 **Current Rating:** 3.4 A (One Pin Powered)

3.2 **Voltage Rating:** 300 VAC

3.3 **Ingress Protection:** IP68

3.4 **Operating Temperature Range:** -20°C to +80°C

3.5 **Electrical:**

ITEM	TEST CONDITION	REQUIREMENT	STATUS
Withstanding Voltage	EIA-364-20 (No Flashover, Sparkover, or Breakdown)	900 VAC	Pass
Insulation Resistance	EIA-364-21 (5000 MΩ minimum)	1,000 MΩ	Pass
Contact Resistance (LLCR)	EIA-364-23	Δ 15 mΩ maximum (Samtec defined)/ No damage	Pass

3.6 **Mechanical:**

ITEM	TEST CONDITION	REQUIREMENT	STATUS
Durability	EIA-364-09C	100 cycles	Pass
Random Vibration	EIA-364-28 Condition V, Letter B 7.56 G 'RMS', 50 to 2000 Hz, 2 hours per axis, 3 axis total, PSD 0.04	Visual Inspection: No Damage LLCR: Δ 15 mΩ maximum Event Detection: No interruption > 50 Nanoseconds	Pass
Mechanical Shock	EIA-364-27 100 G, 6 milliseconds, sawtooth wave, 11.3 fps, 3 shocks/direction, 3 axis (18 total shocks)	Visual Inspection: No Damage LLCR: Δ 15 mΩ maximum Event Detection: No interruption > 50 Nanoseconds	Pass
Normal Force	EIA-364-04	30 grams minimum for Gold interface	Pass

3.7 Environmental:

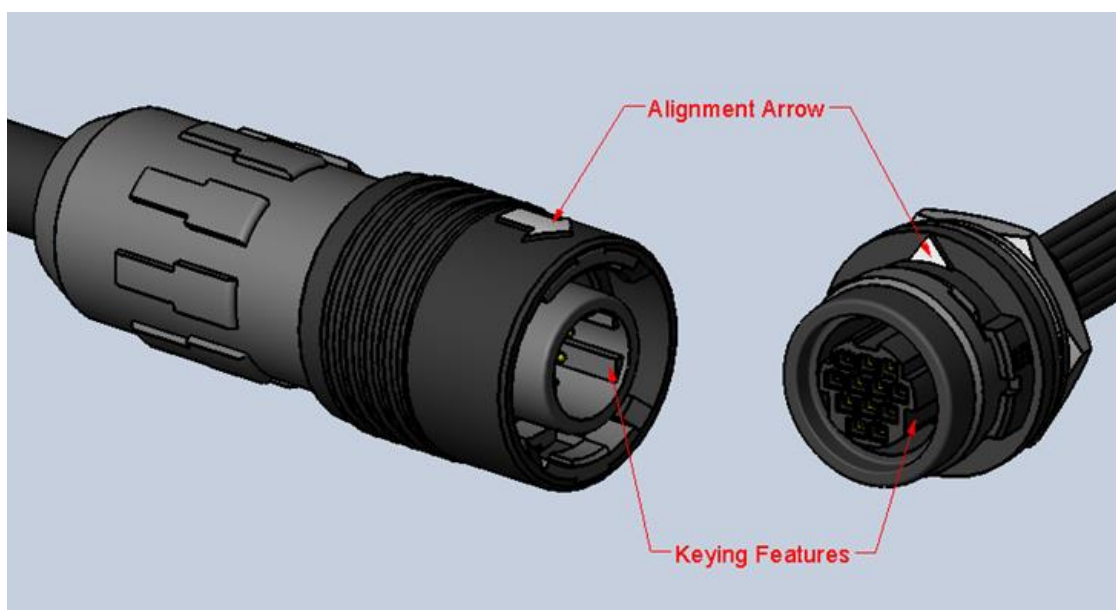
ITEM	TEST CONDITION	REQUIREMENT	STATUS
Thermal Shock	EIA-364-32 Thermal Cycles: 100 (30 minute dwell) Hot Temp: +85°C Cold Temp: -55°C Hot/Cold Transition: Immediate	Visual Inspection: No Damage LLCR: Δ 15 m Ω DWV: 900 VAC IR: >45,000 M Ω	Pass
Thermal Aging (Temp Life)	EIA-364-17 Test Condition 4 @ 105°C Condition B for 250 hours	Visual Inspection: No Damage LLCR: Δ 15 m Ω DWV: 900 VAC IR: >45,000 M Ω	Pass
Cyclic Humidity	EIA-364-31 Test Temp: +25°C to +65°C Relative Humidity: 90 to 95% Test Duration: 240 hours	Visual Inspection: No Damage LLCR: Δ 15 m Ω DWV: 900 VAC IR: >45,000 M Ω	Pass
Gas Tight	EIA-364-36 Gas Exposure: Nitric Acid Vapor Duration: 60 min. Drying Temp.: 50°C +/- 3°C Measurements: Within 1 hour of Exposure	LLCR: Δ 15 m Ω	Pass
IP68	Dust/Water Testing per CEI/IEC 60529	Visual: No dust or water present 30 mins @ 10 Meters	pass

4.0 MATED SYSTEM

Mated view information can be found at link below:

<http://www.samtec.com/documents/webfiles/cpdf/MCR-8%20to%20MCP-8%20Mated%20Document-MKT.pdf>

5.0 KEYING FEATURES



6.0 PRINTS AND ASSEMBLY INSTRUCTIONS

6.1 Field termination kits

6.1.1 MCPK-8 AccliMate™ Mini Push-Pull Cable Field Termination Kit can be found at link below
<http://www.samtec.com/documents/webfiles/cpdf/mcpk-8-x-mkt.pdf>

6.1.2 MCRK-8 AccliMate™ Mini Push-Pull Panel Field Termination Kit can be found at link below
<http://www.samtec.com/documents/webfiles/cpdf/MCRK-8-X-MKT.PDF>

6.2 Contact and Terminal prints and Crimp Specifications

6.2.1 MCPK-8 terminal can be found at link below
<http://www.samtec.com/documents/webfiles/cpdf/TC114-XXXX-X-X-MKT.pdf>

6.2.2 MCPK-8 and MCRK-8 contact can be found at link below
<http://www.samtec.com/documents/webfiles/cpdf/CC393-XXXX-X-X-MKT.pdf>

6.3 Assembly/Wiring Instructions

6.3.1 MCPK-8 Assembly/Wiring Instructions can be found at link below
http://www.samtec.com/Documents/WebFiles/Current_Literature/MCPK-8_Assembly_Instructions.pdf

6.3.2 MCRK-8 Assembly/Wiring Instructions can be found at link below
http://www.samtec.com/Documents/WebFiles/Current_Literature/MCRK-8_Assembly_Instructions.pdf

6.4 Intermateability: Information on Samtec's Intermateability with Hirose is available at
http://suddendocs.samtec.com/testreports/325946_report_rev_1_qua.pdf
http://suddendocs.samtec.com/testreports/325949_report_rev_1_qua.pdf

**7.0 APPLICATION TOOLING**

CONTACT/TERMINAL TO TOOLING CHART					
CONTACT/ TERMINAL	AWG	HAND TOOLING	AUTO TOOLING*		
			CAT 3000 & AMP G (40mm Stroke Length)	AMP T (40mm Stroke Length)	AMP K (30mm Stroke Length)
CC393/ TC114	28-30	CAT-HT-393-2430-13	CAT-MA-393-2830-FR-01	CAT-MA-393-2830-FS-01	CAT-MA-393-2830-TR-01

7.1 Extraction tools

CONTACT/TERMINAL	AWG	CONTACT EXTRACTION TOOL
CC393 / TC114	28-30	CAT-EX-MCX-8-01

7.2 Assembly tools

FIELD TERMINATION KITS	AWG	ASSEMBLY TOOL
MCPK / MCRK	28-30	CAT-TF-MCX-8-01
		CAT-WR-MCX-8-01

8.0 ADDITIONAL RESOURCES

8.1 For additional mechanical testing or product information, contact our Customer Engineering Support Group at CES@samtec.com

8.2 For RoHS, REACH or other environmental compliance information, contact our Product Environmental Compliance Group at PEC@samtec.com

USE OF PRODUCT SPECIFICATION SHEET

This Product Specification Sheet (“PSS”) is a brief summary of information related to the Product identified. As a summary, it should only be used for the limited purpose of considering the purchase/use of Product. For specific, detailed information, including but not limited to testing and Product footprint, refer to Section 2.0 of this document and the links there provided to test reports and prints. This PSS is the property of Samtec, Inc. (“Samtec”) and contains proprietary information of Samtec, our various licensors, or both. Samtec does not grant express or implied rights or license under any patent, copyright, trademark or other proprietary rights and the use of the PSS for building, reverse engineering or replication is strictly prohibited. By using the PSS, the user agrees to not infringe, directly or indirectly, upon any intellectual property rights of Samtec and acknowledges that Samtec, our various licensors, or both own all intellectual property therein. The PSS is presented “AS IS”. While Samtec makes every effort to present excellent information, the PSS is only provided as a guideline and does not, therefore, warrant it is without error or defect or that the PSS contains all necessary and/or relevant information about the Product. The user agrees that all access and use of the PSS is at its own risk. **NO WARRANTIES EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY KIND WHATSOEVER ARE PROVIDED.**