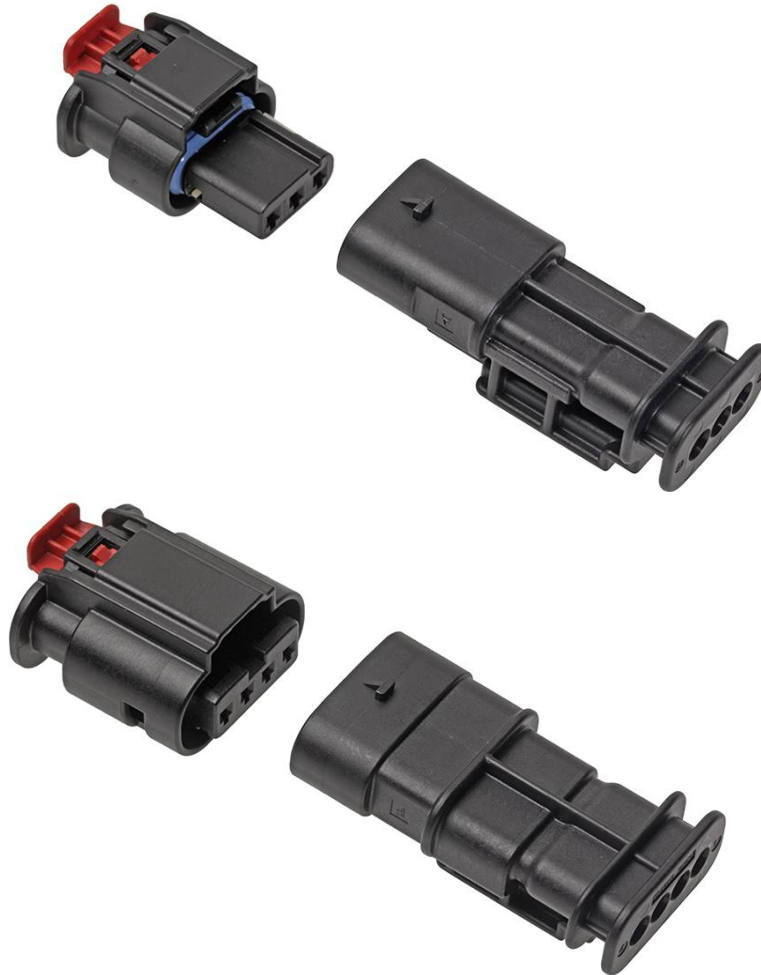




ENGINEERING SPECIFICATION



**1.2mm SEALED ASSEMBLY
CABLE SEAL**

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<small>TEMPLATE FILENAME: ENGINEERING_SPEC[SIZE_A](V.1).DOC</small>			



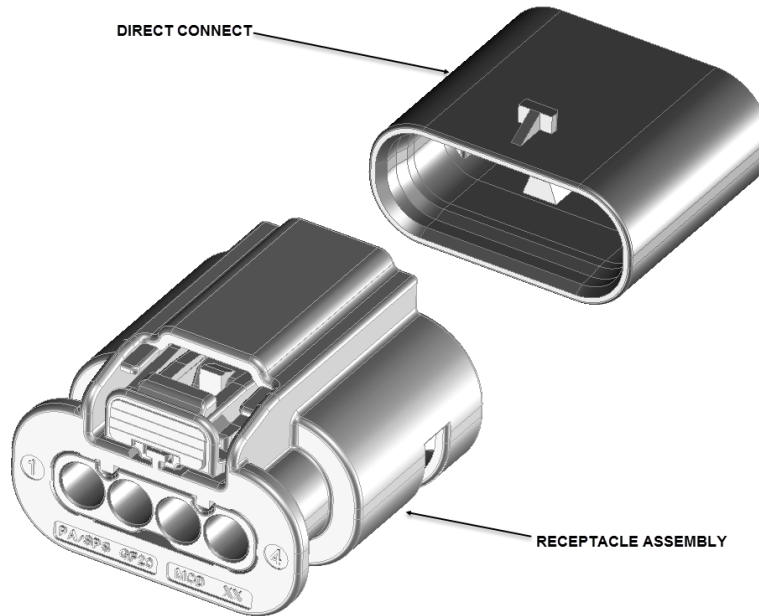
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1.0 SCOPE

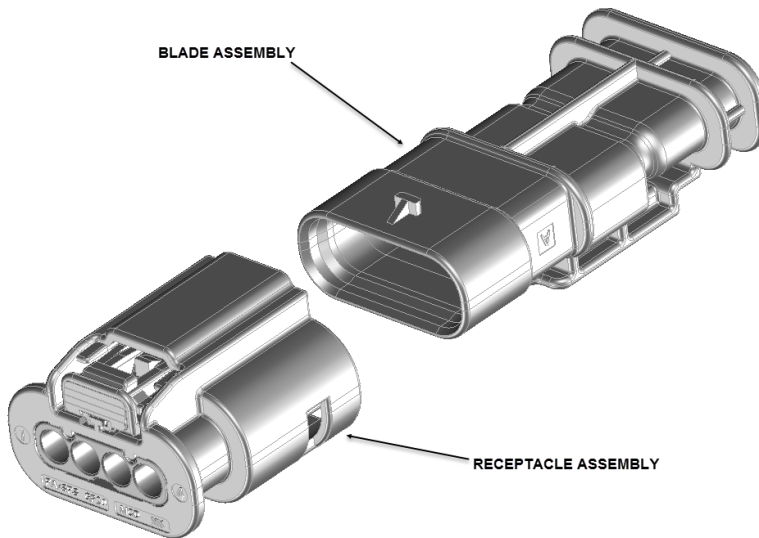
This product specification covers the 4 mm (0.157 inch) centerline (pitch) cable seal single row 1.2mm Sealed inline connection system. The 1.2mm Sealed connection system uses crimp technology.

2.0 PRODUCT DESCRIPTION

2.1. DIRECT CONNECT (WIRE TO BOARD APPLICATION)



2.2. INLINE APPLICATIONS (WIRE TO WIRE APPLICATION)

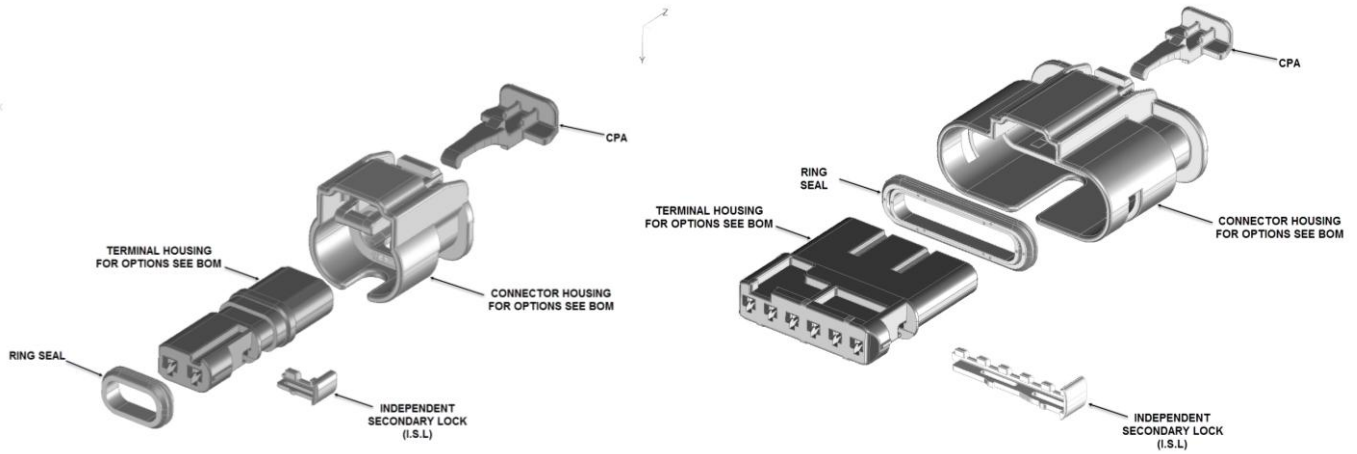


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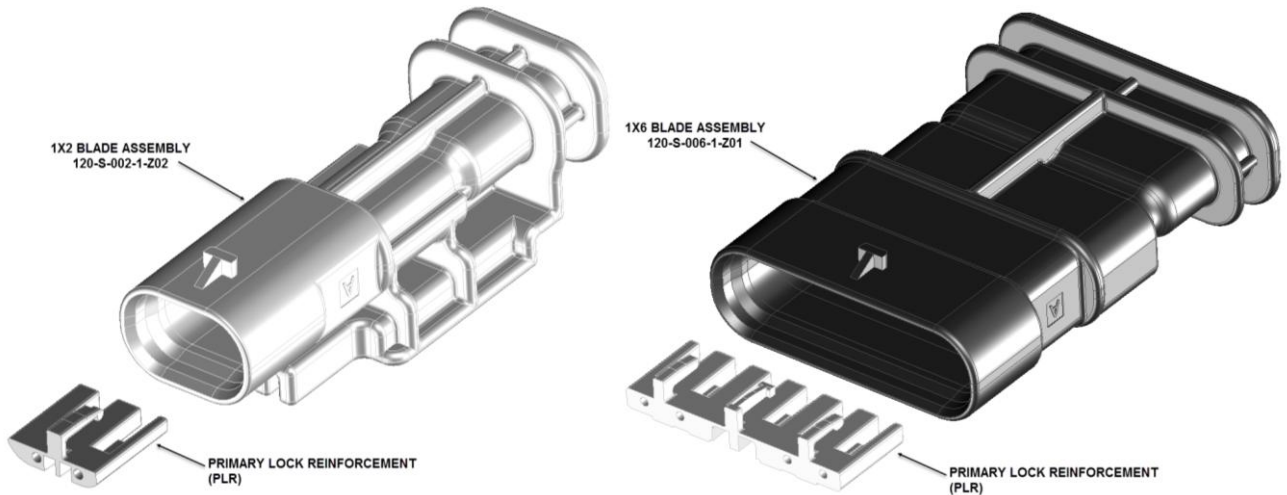


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2.3. RECEPTACLE ASSEMBLY



2.4. BLADE ASSEMBLY



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2.5. PRODUCT NAME AND SERIES NUMBER

Refer to listed document number for part availability, dimensions, material, marking information, packaging information, interface definition, and configuration options etc.

Product Name	Document Number	Series
1.2mm Sealed Inline 1x2 Receptacle Assembly	SD-34900-2001	34900
1.2mm Sealed Inline 1x3 Receptacle Assembly		
1.2mm Sealed Inline 1x4 Receptacle Assembly	SD-34900-6001	
1.2mm Sealed Inline 1x6 Receptacle Assembly		
1.2mm Sealed Inline 1x2 Blade Assembly	SD-34899-2001	34899
1.2mm Sealed Inline 1x3 Blade Assembly		
1.2mm Sealed Inline 1x4 Blade Assembly	SD-34899-6001	
1.2mm Sealed Inline 1x6 Blade Assembly		

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3.0 INTEGRAL COMPONENTS AND ACCESSORIES

Integral components and accessories are sold separately.

3.1. INTEGRAL COMPONENTS

3.1.1. Receptacle Terminals

For crimping information see the Terminal Application Specification listed in section [4.0](#).

Terminal Information	Terminal Description	Cable Seal	Document Number	Document Revision
MCON-1.2 LL (Locking- Lance) terminal	7-1452665-1, 0.25mm ² - 0.35mm ²	967067-2	C-1452674	C6
	7-1452665-3, 0.25mm ² - 0.35mm ²			
	7-1452668-1, 0.50mm ² - 0.75mm ²	967067-1		
	7-1452668-3, 0.50mm ² - 0.75mm ²			
	7-1452671-1, 1.0mm ² - 1.5mm ²			
MLK-1.2mm Single wire seal LL (Locking- Lance) terminal	3 21 24 73411 0, 0.35mm ²	1 08 00 50725 0	DOC00079128	03
	3 21 24 73412 0, 0.50mm ² - 0.75mm ²			
	3 21 24 73413 0, 0.75mm ² - 1.0mm ²			

3.1.2. Blade Terminals

For crimping information see the Terminal Application Specification listed in section [4.0](#).

Terminal Information	Terminal Description	Cable Seal	Document Number	Document Revision
MCON-1.2 CB (Clean- Body) terminal	2141114-3	967067-1	C-1718398	B7
	2141116-3			

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3.1.3. Applicable Wires

3.1.3.1. Wire size

See section [6.0](#) for temperature range and recommended wire type within this system.

3.1.3.2. ISO Wire

Per the listed wire specifications where the insulation diameter is within 1.20mm to 2.10mm.
- GMW15626 February 2008

3.1.3.3. SAE Wire

Not Applicable

3.1.4. Terminal Service Tool

See the Connector Application Specification listed in section [4.0](#). Accessories

3.2. ACCESSORIES

3.2.1. Wire Harness Retention Clip - Recommended

For further information contact your sales engineer.

3.2.2. Backshell - Recommended

For further information contact your sales engineer.

3.2.3. Cavity Plugs

For cavity seal plug reference Molex drawing SD-34996-1501 for Cavity Plug and SD-34996-1901 for Cavity Plug Seal.

4.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

Document Title	Document Number
UL File Number	Not Applicable
CSA File Number	Not Applicable
TUV License number	Not Applicable
IMDS Report	Available upon request
Environmental Compliance	Available on molex.com
Connector Application Specification	AS-34900-0001
Connector Test Summary	TS-34900-0002

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5.0 RATINGS

5.1. VOLTAGE - OPERATING

Operating Voltage: 14 Volts DC Maximum

5.2. VOLTAGE - ISOLATION RESISTANCE

100MΩ Minimum when 500 Volts DC between adjacent terminals and terminals to ground.

5.3. CURRENT RATING

See the Terminal Product Specification listed in section [4.0](#).

5.4. TEMPERATURE

Non-operating: - 40 C° to + 125 C°

Operating: - 40 C° to + 125 C°

5.5. FLAMMABILITY

The burn rate of the plastic material when tested to ISO 3795 shall not exceed 100 mm/min.

6.0 PERFORMANCE

For a list of completed tests reference the test summary document listed in section [4.0](#).

6.1. THIS PRODUCT CONFORMS TO GMW3191 DEC 2007 WITH THE FOLLOWING CONDITIONS.

6.1.1. Vibration Performance

Circuit Size	Operating Conditions	Wire Range	Designed to Mate with	Connectors Used	Terminal Used	Recommended Wire Type*	Recommended Terminal Plating Type
1X2	Temperature Class 3 Vibration Class 2	1.20mm – 1.90mm	Inline	Molex Receptacle Assembly	Tyco LL Recpt.	FLR2X	Ag
1X3				Molex Blade Assembly	Tyco CB Blade		
1X4							
1X6							
1X2	Temperature Class 3 Vibration Class 1	1.20mm – 2.10mm	Inline	Molex Receptacle Assembly	Tyco LL Recpt.	FLR2X	Sn
1X3				Tyco Blade Assembly	Tyco LL Blade		
1X4							
1X6							
1X2	Temperature Class 4 Vibration Class 4	1.40mm – 1.60mm	Inline	Molex Receptacle Assembly	Kostal LL Recpt.	FLR91X	Ag
				Kostal Blade Assembly	Kostal LL Blade		

*Must be compliant to the wire specifications listed in section [3.1.3](#)

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6.1.2. Electrical Performance

Circuit Size	Operating Conditions	Wire Range	Designed to Mate with	Connectors Used	Terminal Used	Recommended Wire Type*	Recommended Terminal Plating Type
1X2	Temperature Class 3	1.20mm – 1.90mm	Inline	Molex Receptacle Assembly	Tyco LL Recpt.	FLR2X	Ag
1X3				Molex Blade Assembly	Tyco CB Blade		
1X4							
1X6							
1X2	Temperature Class 3	1.20mm – 2.10mm	Inline	Molex Receptacle Assembly	Tyco LL Recpt.	FLR2X	Sn
1X3							
1X4							
1X6				Tyco Blade Assembly	Tyco LL Blade		
1X2	Temperature Class 4	1.20mm – 2.10mm	Inline	Molex Receptacle Assembly	Kostal LL Recpt.	FLR91X	Ag
				Kostal Blade Assembly	Kostal LL Blade		

*Must be compliant to the wire specifications listed in section [3.1.3](#)

6.1.3. Mechanical Performance

- 1X2,1X3,1x4, 1x6 Blade Assy: Terminal to Connector Extraction Force (Post Moisture Conditioning) shall be 47N Min
- 1X2,1X3 Recept ISL Extraction Force, Removal from Pre-Lock shall be 7N Min
- 1X2,1X3 Recept ISL Disengage Force, Final-Lock to Pre-Lock (with terminals) shall be 5N Min
- 1X4,1X6 Recept ISL Disengage Force, Final-Lock to Pre-Lock (with terminals) shall be 14N Min
- 1X2,1X3 Blade PLR Extraction Force, Removal from Pre-Lock shall be 9N Min
- 1X2,1X3 Blade PLR Disengage Force, Final-Lock to Pre-Lock (with terminals) shall be 4N Min
- 1X4,1X6 Blade PLR Disengage Force, Final-Lock to Pre-Lock (with terminals) shall be 11N Min
- CPA Disengage Force, Final-Lock to Pre-Lock (Mated Connector) shall be 9N Min.

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6.1.4. Sealing Performance

Circuit Size	Operating Conditions	Wire Range	Designed to Mate with	Connectors Used	Terminal Used	Recommended Wire Type*	Recommended Terminal Plating Type
1X2	Temperature Class 3 Sealing Class 2	1.20mm – 1.90mm	Inline	Molex Receptacle Assembly	Tyco LL Recpt.	FLR2X	Ag
1X3				Molex Blade Assembly	Tyco CB Blade		
1X4							
1X6							
1X2	Temperature Class 3 Sealing Class 2	1.20mm – 2.10mm	Inline	Molex Receptacle Assembly	Tyco LL Recpt.	FLR2X	Sn
1X3				Tyco Blade Assembly	Tyco LL Blade		
1X4							
1X6							
1X2	Temperature Class 4 Sealing Class 3	1.40mm – 2.10mm	Inline	Molex Receptacle Assembly	Kostal LL Recpt.	FLR91X	Ag
				Kostal Blade Assembly	Kostal LL Blade		

*Must be compliant to the wire specifications listed in section [3.1.3](#)

7.0 PACKAGING

- Molex packaging drawing numbers are located on the Assembly Drawing listed in section [2.5](#)
- Parts should be packaged to protect against damage during handling, transit and storage.

8.0 GAGES AND FIXTURES

All applicable gages and fixtures are referenced in the appropriate control plans.

9.0 OTHER INFORMATION

Not Applicable

MOLEX REPRESENTS AND WARRANTS TO BUYER FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF DELIVERY OF THE PRODUCTS TO BUYER THAT

- 1) THE PRODUCTS SHALL CONFORM TO THE MOLEX SPECIFICATIONS FOR THE PRODUCTS IN FORCE AT THE DATE OF DELIVERY OF THE PRODUCTS TO BUYER, AND
- 2) THE PRODUCTS SHALL BE OF FREE FROM MATERIAL DEFECTS IN MATERIALS AND MANUFACTURING.

EXCEPT AS EXPRESSLY PROVIDED ABOVE, MOLEX MAKES NO WARRANTY, EXPRESS OR IMPLIED, REGARDING THE PRODUCTS. ALL IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED. IN ADDITION, MOLEX EXPRESSLY DISCLAIMS ANY WARRANTY OBLIGATIONS IN THOSE INSTANCES WHERE THE FAILURES RESULTED FROM THE MODIFICATION OF THE PRODUCTS BY BUYER OR ITS CUSTOMERS, IMPROPER HANDLING, USE OR INSTALLATION OF THE PRODUCTS BY BUYER OR ITS CUSTOMERS, OR ANY OTHER CAUSE BEYOND THE CONTROL OF MOLEX.

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