

Econoseal III ... 070 Series, Wire To Board Connectors

Contacts

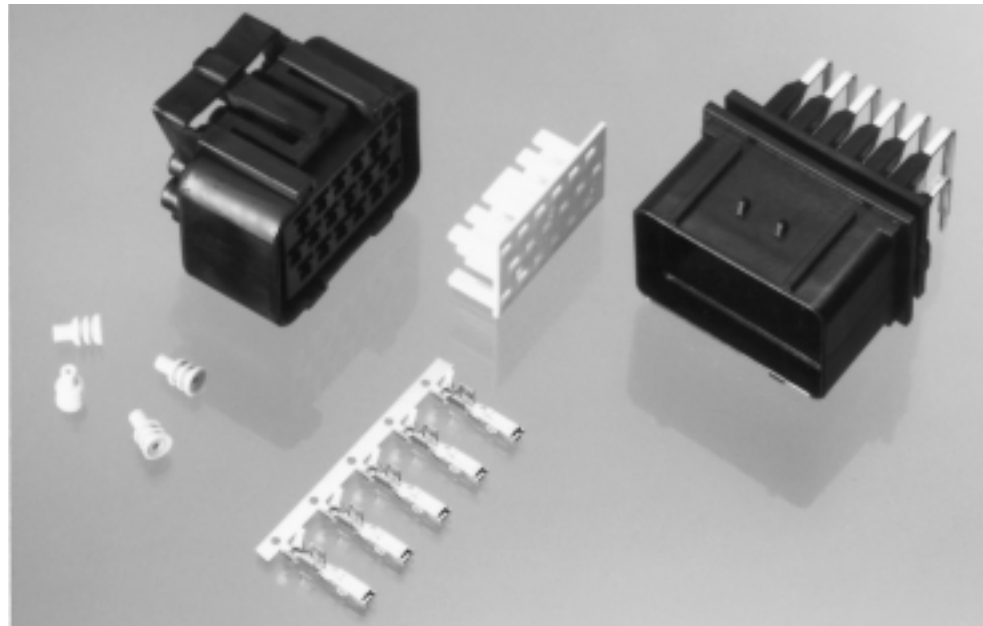
- 070 series tab contacts 1.8 mm [.071 in.] wide x 0.64 mm [.025 in.] thick.
- Receptacle contacts are gold plated, phosphor bronze.
- Header contacts are made from brass, selectively plated with tin lead and gold.
- Lanceless contact design to reduce tangling.
- Wire range 0.5 - 1.25 mm² [#20 - #16 AWG].
See Note 1

Wire Seals and Cavity Plugs

- Produced from silicon rubber.
- Wire seals and contacts crimped simultaneously.
- For insulation diameters 1.6 - 2.4 mm [.063 - .094 in.]

Connector Housings

- Horizontal header configuration with sealed receptacle housings.
- Headers are made from 13% glass filled nylon. Receptacle housings and double lock plates are produced from unfilled nylon.
- Available in 18 and 36 position versions.
- The receptacle housing requires a loose piece secondary lock (sold separately).
- Cavity plugs available to seal unused cavities.
- Protected locking lever.



Similar in design to the Econoseal J Series [Mark II+] connectors, the Econoseal III connectors utilize 070 series contacts for sealed wire to board applications.

The horizontal header includes factory loaded contacts with gold over nickel plating at the separable interface and tin lead plating at the board end. Gaskets for sealing around the outside of the header are not included.

Standard 070 receptacle contacts are used in the plug connector. Receptacle contacts are gold plated at the separable interface and tin plated in the wire crimp area. Every plug connector includes a factory installed interface seal.

Each plug connector requires a loose piece secondary lock plate be installed after the receptacle contacts are inserted into the connector housing. The lock plate

helps to detect partially mated contacts, increases contact retention, and helps prevent contact damage during mating or unmating of the connector. [Lock plates are sold separately.](#)

All sealed surfaces are located inside of the connector housing to reduce the possibility of damage during handling.

Note 1

2.0 mm² [#14 AWG] wires with thin wall insulation of 2.4 - 2.7 mm [.094 - .106 in.] can also be terminated. Applicators for this wire size are made to order. Call the Tooling Assistance Center at 1-800-722-1111 for more Information.

Product Performance

Temperature Rating

100° C maximum operating temperature including temperature rise due to current load.

Current Guidelines

See page 9 of the product specification for information.

Product Documentation

Product Specification

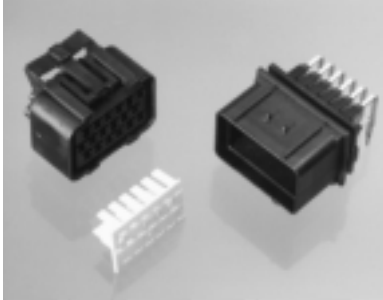
108-3114

Application Specification

114-3040

Econoseal III ... 070 Series, Wire To Board Connectors (Continued)

070 Series, Wire To Board, Connector Housings, Headers and Lock Plates

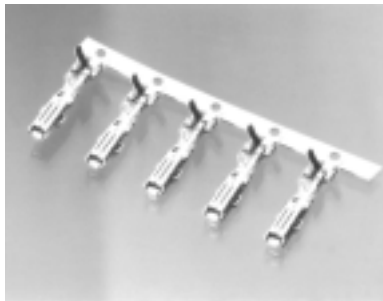


One lock plate is required for each plug connector housing. Double lock plates are sold separately. Lock plates are not required for the PCB Header. Plug housings include a factory assembled, silicon interface ring.

Positions	Plug Connectors		Printed Circuit Board Header
	Receptacle Housing Black Nylon	Contact 175104-2 Required Lock Plate White Nylon	
18	344106-1	344107-1	Housing, Black Nylon, Glass Filled 344103-1
36	344111-1	344112-1	344108-1

Header contacts are brass with selective gold plating at the separable interface and tin lead plating at the PCB interface.

070 Receptacle Contacts



Receptacle contacts are manufactured from 0.3 mm [.012 in.] thick material. Uncrimped contact length is 16.5 mm [.650 in.]

Wire Range mm ² / AWG	Wire Ins. Dia. mm / Inches	Material & Finish	Receptacle Part Number	
			Strip	Loose Piece
0.5-1.25 [20-16]	1.6-2.4 [.063-.094]	Phos. Bronze Selective Gold	175104-2	—

175104-2 can also be applied to 2.0 mm² [#14 AWG] wires with thin wall insulation in the range of 2.4-2.7 mm [.094-.106]. Applicators for terminating 2.0 mm² [#14 AWG] wire are made to order. Call the Tooling Assistance Center at 1-800-722-1111 for more information.

Wire Seals & Cavity Plugs

(One wire seal required per contact.)

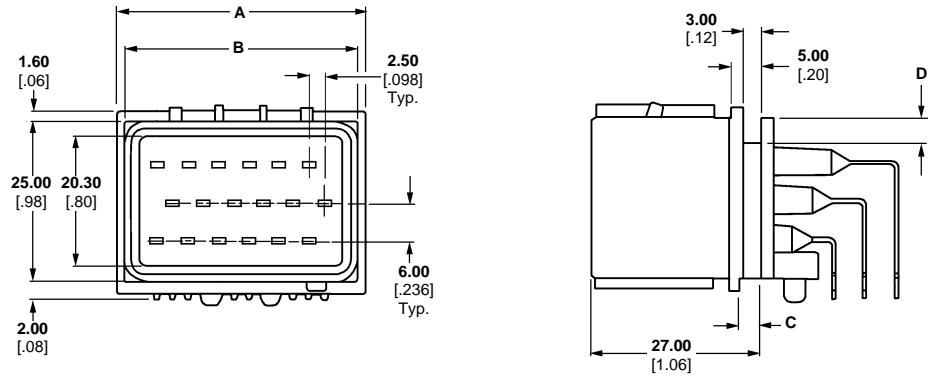


All wire seals and cavity plugs are manufactured from silicon rubber.

Description	Wire Range mm ² / AWG	Wire Ins. Dia. Inches / mm	Color	Part Number
Wire	0.5-1.25 [20-16]	1.6-2.4 [.063-.094]	Green	347874-1
Cavity Plug	—	—	Gray	348461-1

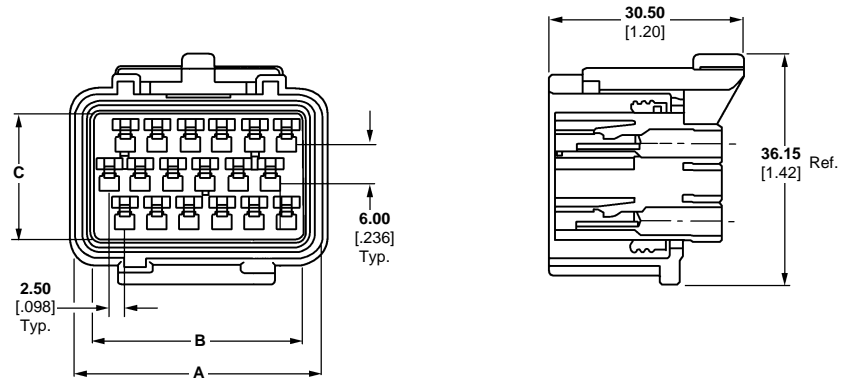
For 2.0 mm² [#14 AWG] wire with a 2.4 mm [.094] insulation diameter, use wire seal 347874-1. For 2 mm² [#14 AWG] wire with insulation diameters between 2.5-2.7 mm [.098-.106] wire seal 347875-1 should be used.

Econoseal III ... 070 Series, Wire To Board Connectors ... (Continued)
Header Dimensions



Part Number	Positions	Dim. "A"		Dim. "B"		Dim. "C"		Dim. "D"	
		mm	[in.]	mm	[in.]	mm	[in.]	mm	[in.]
344103-1	18	41.00	[1.61]	37.90	[1.49]	3.25	[0.13]	4.00	[0.16]
344108-1	36	70.80	[2.79]	67.88	[2.67]	3.50	[0.14]	3.90	[0.15]

Econoseal III ... 070 Series, Wire To Board Connectors ...
Plug Housing Dimensions



Part Number	Positions	Dim. "A"		Dim. "B"		Dim. "C"	
		mm	[in.]	mm	[in.]	mm	[in.]
344106-1	18	40.80	[1.61]	32.50	[1.28]	19.70	[0.78]
344111-1	36	70.80	[2.79]	62.20	[2.45]	19.50	[0.77]