

SSC (Sealed Sensor Connector) System

Features

- Robust housing, glass filled PBT for high temperature applications
- Terminal Position Assurance (TPA) to assure proper position of contact in housing
- Damage protected internal silicone seal interface
- Industry common .070 series receptacle and tab available in gold or tin plate
- High density 5mm centerline spacing
- Audible "Click" during mating
- Multiple positions available
- Multiple keying and housing colors available

Technical Documents:

Product Specification:
108-1790

Application Specification:
114-8004



The AMP SSC System has been developed to meet the severe requirements of the automotive under hood environment.

However, the system's waterproof and high temperature capabilities make it ideal for many different severe environmental applications.

Both the wire seal and the connector seal ring are made of high temperature silicone and have 3 sealing ridges on their external circumferences for effective sealing and ease of assembly and connector mating.

Wire sealing is achieved by means of an individual wire seal which is inserted on the

wire and crimped in the insulation support of the contact simultaneously with the contact. Interfacial sealing is achieved with a pre-assembled seal ring located in the plug assembly.

Another important feature of the plug assembly is the yellow double-lock plate. This preassembled plate is shipped in the "open" position and once closed provides additional retention of the contact in the housing as well as helping to detect contacts which are not fully seated.

Also, when mating, the AMP SSC Housing provides an audible "click" to indicate proper connector mating. For applications where more than

one connector is required, various keying and colors are available.

The contact used in the system is an industry standard .070 tab and receptacle and comes in tin or gold platings.

Performance Specifications:

Resistance:
3 m Ω max. (initial)
10 m Ω max. (final)

Insulation Resistance:
100 m Ω max. (initial)

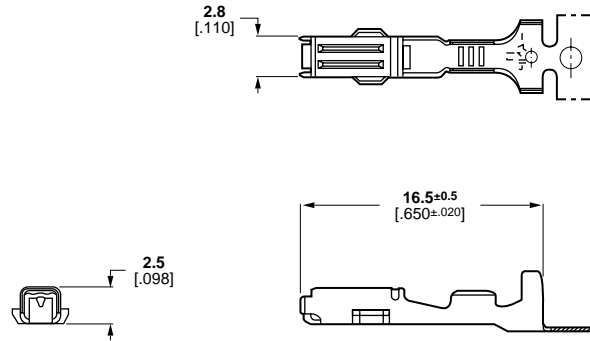
Dielectric Strength:
1.0 K Vac

Sealing:
7 Psi initial
4 Psi after heat age
Conforms to IEC 529 I.P. 65/67 standard

Temperature Range:

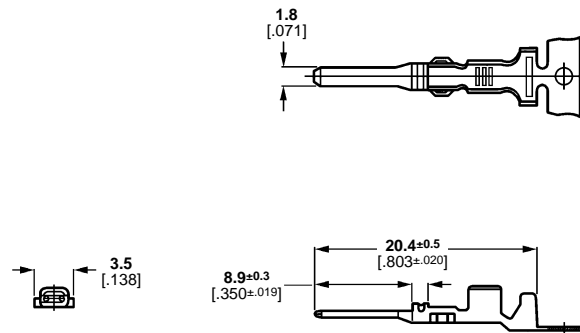
SSC (Sealed Sensor Connector) System (Continued)

Receptacles



Wire Range		Wire Ins. Dia.	Material and Finish	Part Number	Tooling	
AWG	mm ²				Applicator	Hand Tool
20-14	0.50-1.25	1.2-2.7	Phos. Bro./Pre-tin Phos. Bro./Select Gold	184030-3 184030-1	680144-2	755262-1
22-18	0.50-1.00	1.2-2.1	Phos. Bro./Select Gold Phos. Bro./Pre-tin	184095-1 184095-2	680143-2 680143-2	—

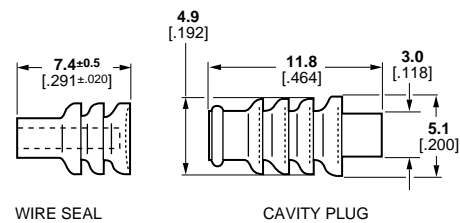
Tabs



Wire Range		Wire Ins. Dia.	Material and Finish	Part Number	Tooling	
AWG	mm ²				Applicator	Hand Tool
20-16	0.50-1.25	2.0-2.6	Brass/Pre-tin Brass/Select Gold	171661-1 171661-2	567266-2	755241-1

Wire Seal (Crimp with Contact) and

Cavity Plug (for Unloaded Cavity)



Description	Wire Insulation Diameter	Material (color)	Part Number
Wire Seal	1.2-1.7	Silicone (blue)	184139-1
	1.6-2.1	Silicone (orange)	184140-1
	2.2-2.7	Silicone (purple)	184141-1
Cavity Plug	—	NBR (black)	172748-1
	—	NBR (grey)	172748-2

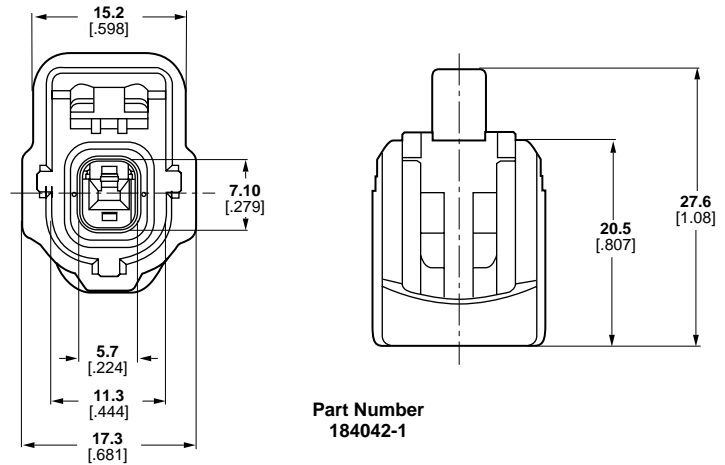
SSC (Sealed Sensor Connector) System (Continued)

Plug Assemblies

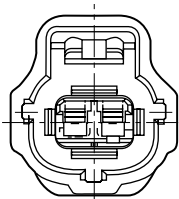
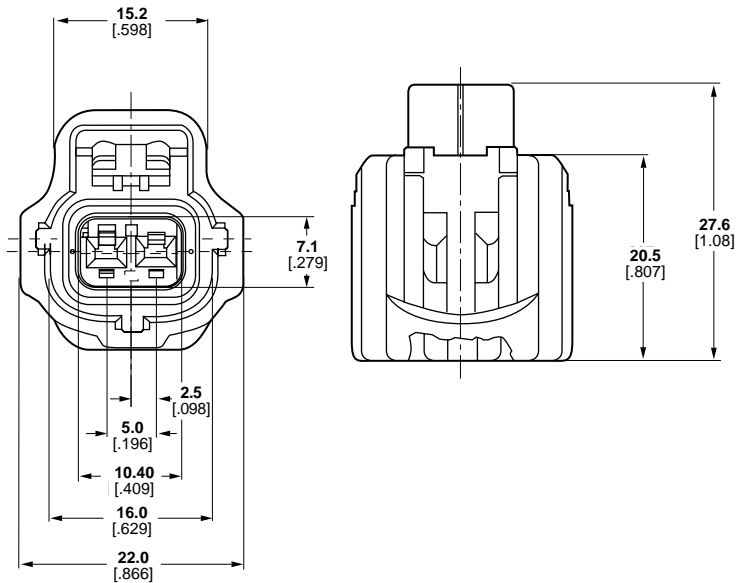
Material and Finish:

- Housing—Glass-filled PBT
- Seal Ring—Silicone
- Double-Lock Plate—PBT, yellow

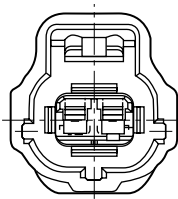
One Position



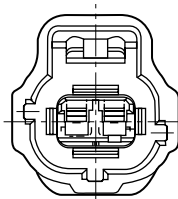
Two Position



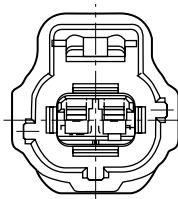
184000-1
BLACK, KEY A



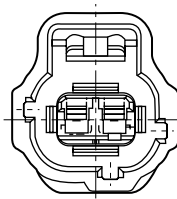
184002-1
GRAY, KEY B



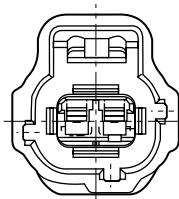
184004-1
BLACK, KEY C



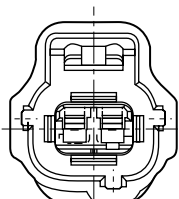
184006-1
GREEN, KEY D



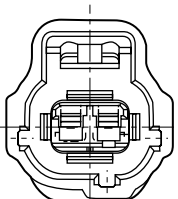
184008-1
BLACK, KEY E



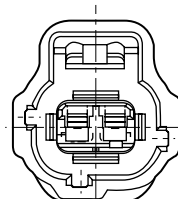
184010-1
BLACK, KEY F



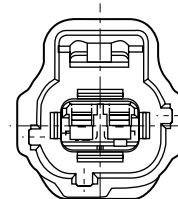
184012-1
GREY, KEY G



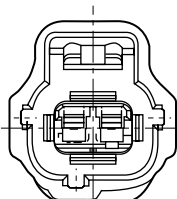
184014-1
BLACK, KEY H
184014-2
GREEN, KEY H
184014-3
BROWN, KEY H



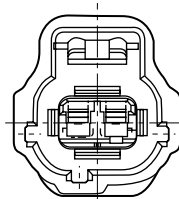
184016-1
BLACK, KEY J



184018-1
BLACK, KEY K



184020-1
NATURAL, KEY L

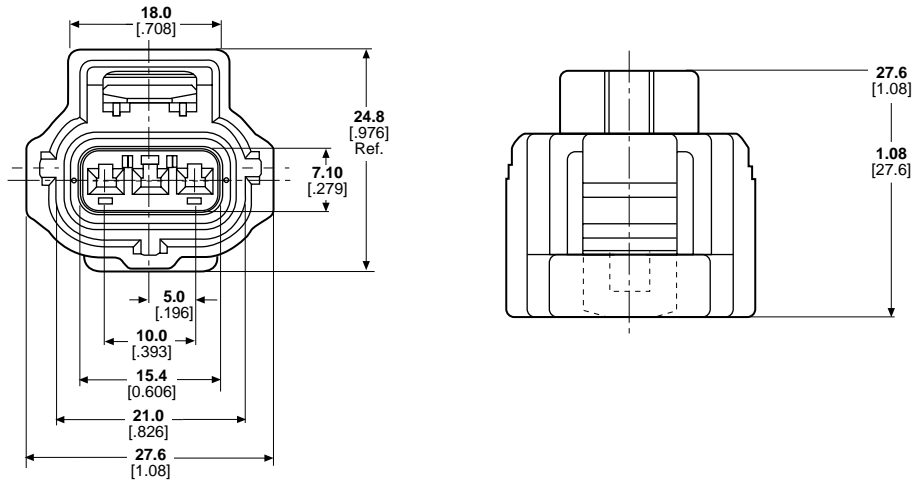


184022-1
BLACK, KEY M

SSC (Sealed Sensor Connector) System (Continued)

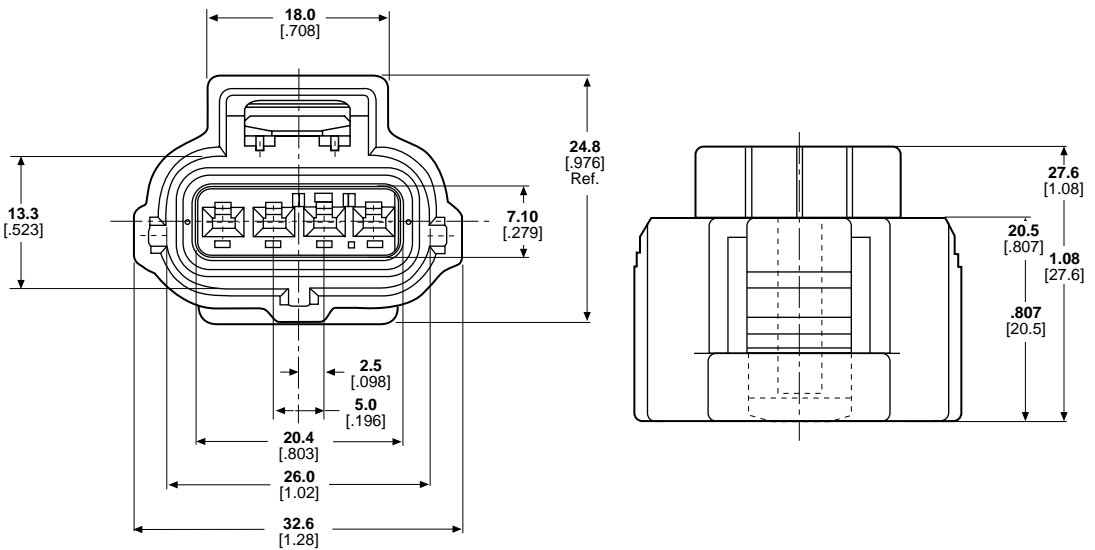
Plug Assemblies (Continued)

Three Position



Part Number 184032-1
Black

Four Position

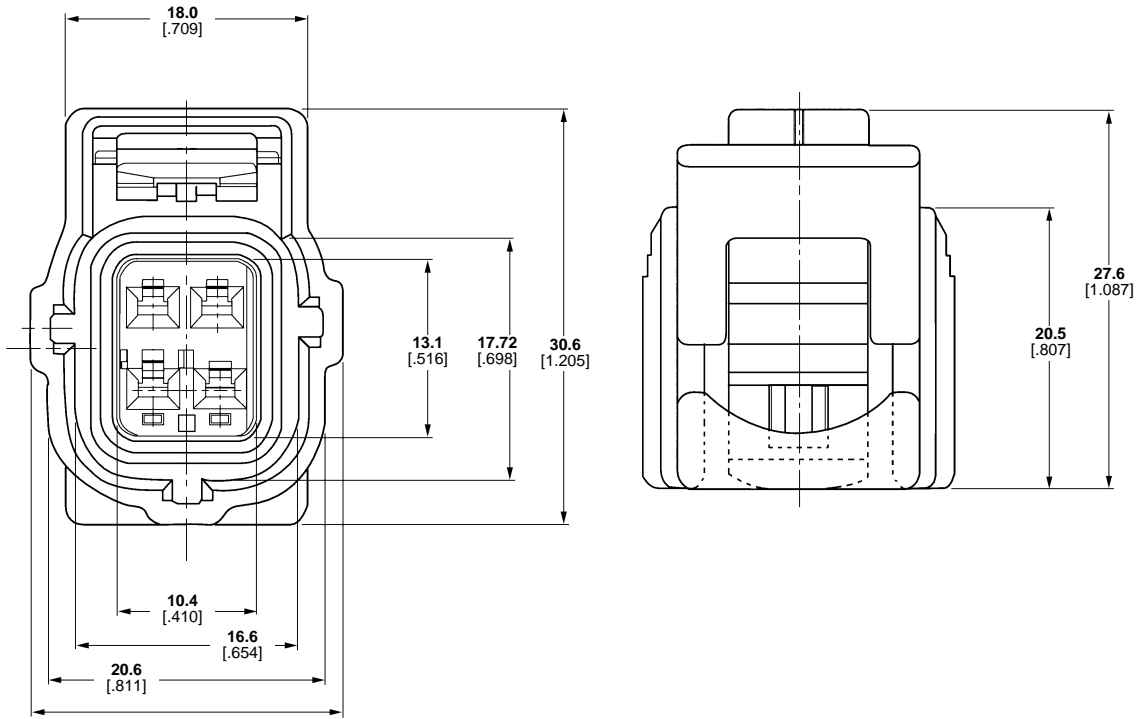


Part Number 184046-1
Black

SSC (Sealed Sensor Connector) System (Continued)

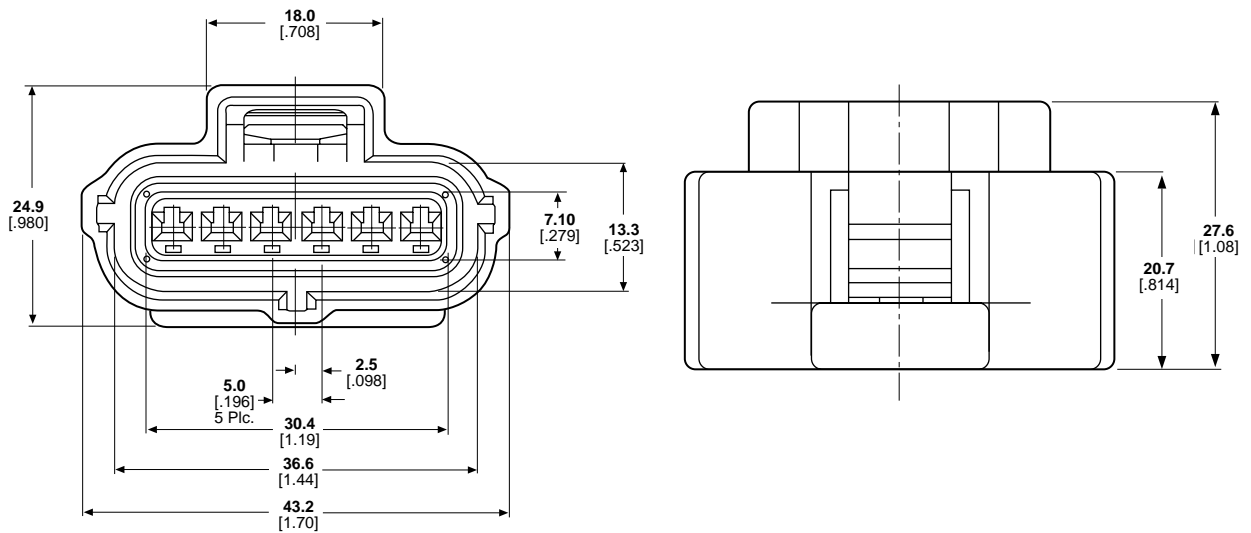
Plug Assemblies (Continued)

Four Position 2x2



Part Number 184248-1
Black

Six Position

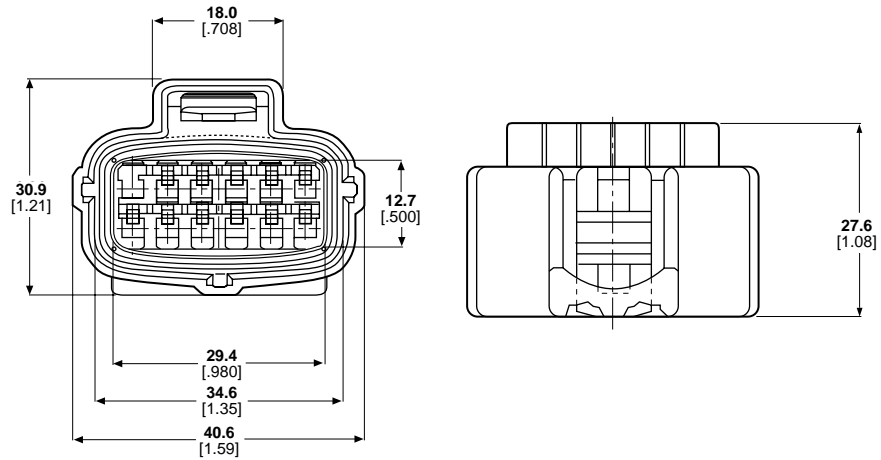


Part Number 184060-1
Black

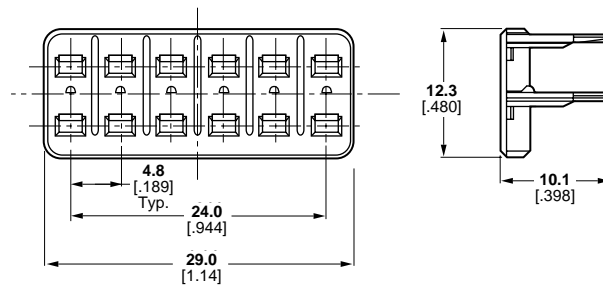
SSC (Sealed Sensor Connector) System (Continued)

Plug Assemblies (Continued)

Twelve Position



Part Number—See chart page 55 for possible combinations



Part Number 184058-1
Double-Lock Plate (Yellow)

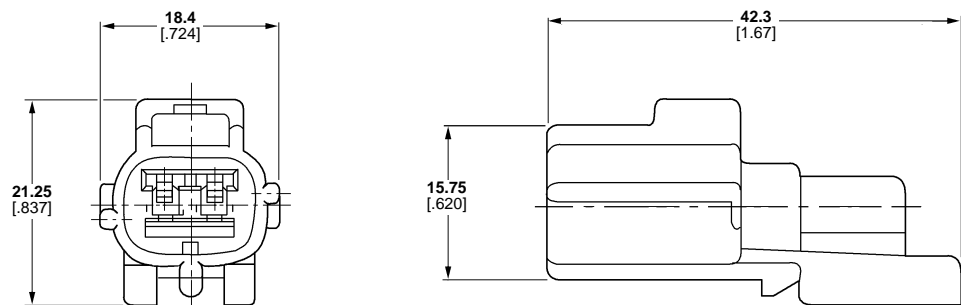
CAP Housings and Lock Plates

Material:

Housing—Glass-filled PBT

Lock Plate—PBT, yellow

Two Position



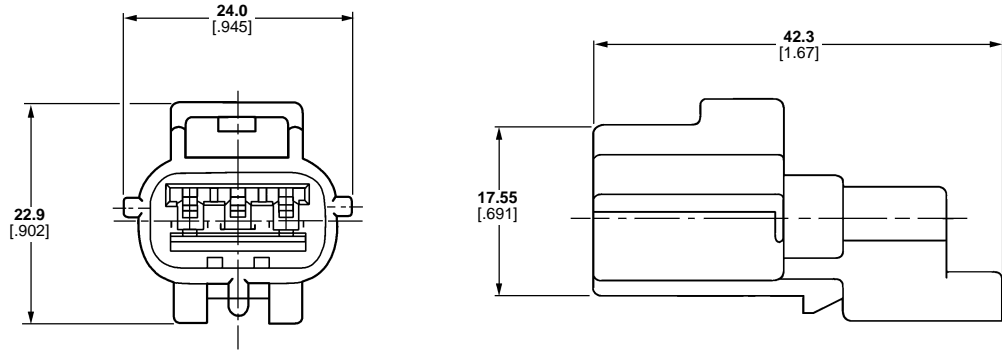
CAP Housing Part Number—See chart on page 55 for possible combinations



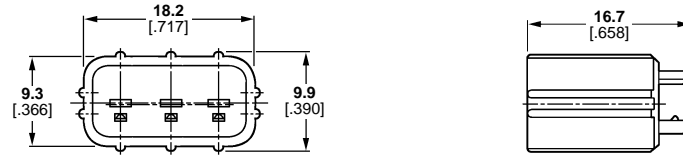
Lock Plate Part Number 184175-1

SSC (Sealed Sensor Connector) System (Continued)

Three Position



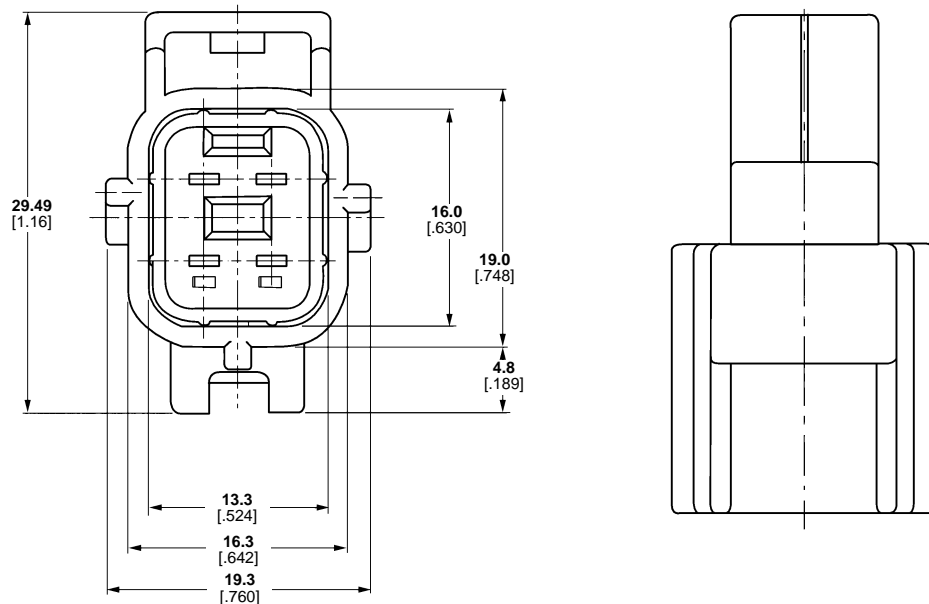
CAP Housing Part Number—See chart on page 55 for possible combinations



Lock Plate Part Number 184196-1

Note: CAP housings with circuits blocked for END CAP applications are available—contact product engineering.

Four Position 2x2



Part Number 184246-1
Black

SSC (Sealed Sensor Connector) System (Continued)

Connector Part Number List

No. of Positions	Type	Keying	Color	Additional Notes	Part Numbers
1	Plug Assembly	A	Black		184042-1
1	Plug Assembly	A	Natural		184042-2
1	Plug Assembly	B	Black		184240-1
2	Plug Assembly	A	Black		184000-1
2	Plug Assembly	B	Gray		184002-1
2	Plug Assembly	C	Black		184004-1
2	Plug Assembly	D	Green		184006-1
2	Plug Assembly	D	Gray		184006-2
2	Plug Assembly	E	Black		184008-1
2	Plug Assembly	F	Black		184010-1
2	Plug Assembly	G	Gray		184012-1
2	Plug Assembly	H	Black		184014-1
2	Plug Assembly	H	Green		184014-2
2	Plug Assembly	H	Brown		184014-3
2	Plug Assembly	J	Black		184016-1
2	Plug Assembly	K	Black		184018-1
2	Plug Assembly	L	Natural		184020-1
2	Plug Assembly	M	Black		184022-1
2	Plug Assembly	H	Brown	Circuit #2 Blocked	184116-1
2	Cap Housing	A	Black		184163-1
2	Cap Housing	B	Black		184164-1
2	Cap Housing	C	Black		184165-1
2	Cap Housing	D	Black		184166-1
2	Lock Plate for Cap	—	Yellow	Required with all 2 pos. Cap Housings	184175-1
2	Plug Assembly	J	Black	High Temp Material for 150 C Rating	184207-1
3	Plug Assembly	A	Black		184032-1
3	Plug Assembly	B	Black		184034-1
3	Plug Assembly	C	Black		184036-1
3	Plug Assembly	D	Black		184038-1
3	Plug Assembly	A	Black	Circuit #2 Blocked	184292-1
3	Cap Housing	A	Black		184192-1
3	Cap Housing	B	Black		184193-1
3	Cap Housing	C	Black		184194-1
3	Cap Housing	D	Black		184195-1
3	Lock Plate for Cap	—	Yellow	Required with all 3 pos. Cap Housings	184196-1
4	Plug Assembly	A	Black		184046-1
4	Plug Assembly	B	Black		184048-1
4	Plug Assembly	C	Black		184050-1
4	Plug Assembly	D	Black		184052-1
6	Plug Assembly	A	Black	Circuits #1 and #6 Blocked	184026-1
6	Plug Assembly	A	Black		184060-1
6	Plug Assembly	B	Black		184124-1
6	Plug Assembly	C	Black		184126-1
6	Plug Assembly	D	Black		184128-1
2x2	Plug Assembly	A	Black		184248-1
2x2	Plug Assembly	A	Black	Circuit #2 Blocked	184282-1
2x2	Cap Assembly	A	Black		184246-1
12	Housing and Seal	A	Black	Circuit #6 Blocked	184056-1
12	Double Lock Plate	—	Yellow		184058-1
12	Housing and Seal	A	Black	Circuit #1 Blocked	184097-1
12	Housing and Seal	A	Black	Circuits #1, #7 and #8 Blocked	184099-1
12	Housing and Seal	A	Black		184115-1
12	Plug Assembly	A	Black	Circuits #1, #2, #3, #6, #7 and #8 Blocked	184286-1
12	Plug Assembly	A	Black	Circuits #1, #7, #8, #9 and #11 Blocked	184291-1

*Note: Assembly includes; Housing, Housing Seal and Double Lock Plate.

Mounting Clips

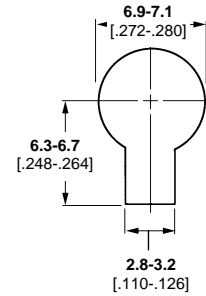
Panel cut-out dimensions are for reference only, see current AMP customer drawing for details.

For Econoseal J Series Mark II+ Connectors . . . Type 1

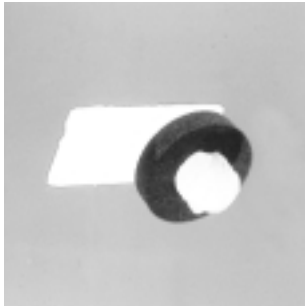


Part Number	Material and Color	Panel Thickness
85000-1	Nylon, Black	0.7-1.6 [0.028-0.063]

Panel Cut-Out Dimensions

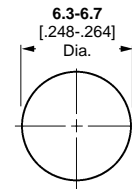


For Econoseal J Series Mark II+ Connectors . . . Type 2



Part Number	Material and Color	Panel Thickness
626897-1	Nylon, Natural	0.56-5.10 [.022-.201]

Panel Cut-Out Dimensions

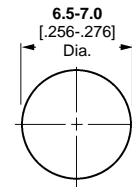


For Econoseal III, .250 Series Wire To Wire Connectors

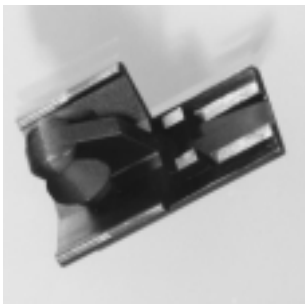


Part Number	Material and Color	Panel Thickness
345485-1	Nylon, Black	0.8-1.6 [.031-.063]

Panel Cut-Out Dimensions

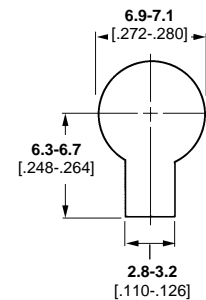


For .187 Series Sealed Connectors



Part Number	Material and Color	Panel Thickness
85003-2	Nylon, Black	2.5 [.098]

Panel Cut-Out Dimensions



Application Tooling

Applicators for Strip Mounted Contacts . . . List is in numerical order by contact part number.

Contact		Applicator Part Number			
Description	Strip Mounted Part Number	AMP-O-LECTRIC Model "K" Bench Machine*	AMP-O-LECTRIC Model "G" Bench Machine	AMPOMATOR CLS IV+ and Komax Lead-Making Machines	AMP-O-MATIC Stripper-Crimper Machine
Econoseal J Series Mark II+ Receptacle	171630 (-1 and -5)	567458-2	—	—	—
Econoseal J Series Mark II+ Tab	171631 (-1 and -2)	567376-2	—	—	—
Econoseal J Series Mark II+ Tab	171661 (-1 and -2)	567266-2	567266-3	—	—
Econoseal J Series Mark II+ Receptacle	171662 (-1, -2, & -5)	567317-2	567317-3	567317-1	567932-1
.187 Series Sealed Tab	175087-1				
.187 Series Sealed Tab	175088-1				
.187 Series Sealed Receptacle	175090-1				
.187 Series Sealed Receptacle	175091-1				
Applicators made to order. Call the TECHNICAL SUPPORT CENTER for information					
Econoseal III .250 Series Receptacle	175104-2	567317-2	567317-3	567317-1	567932-1
AMP SUPERSEAL 1.5 SERIES Tab	282109-1	567464-2	567464-3	—	—
AMP SUPERSEAL 1.5 SERIES Receptacle	282110-1	567465-2	—	—	—
AMP SUPERSEAL 1.5 SERIES Receptacle	282403-1	680295-2	680295-3	680295-1	—
AMP SUPERSEAL 1.5 SERIES Tab	282404-1	—	680155-3	680155-1	—
Applicators made to order. Call the TECHNICAL SUPPORT CENTER for information					
Superseal (3.5 mm Centers) Receptacle	282438-1				
AMP SUPERSEAL 1.5 SERIES Tab	282465-1	680419-2	680419-3	680419-1	—
AMP SUPERSEAL 1.5 SERIES Receptacle	282466-1	680070-2	—	680070-1	—
Econoseal III .250 Series Tab	344008-1	680007-2	—	680070-1	—
Econoseal III .250 Series Receptacle	344009-1	680010-2	680010-1	680010-1	—
Econoseal III .250 Series Tab	344069-1	680072-2	—	—	—
Econoseal III .250 Series Receptacle	344070-1	680369-2	680369-1	680369-1	—
Mini MULTILOCK Receptacle	917308-1				
Mini MULTILOCK Tab	917309-1				
Applicators made to order. Call the TECHNICAL SUPPORT CENTER for information					
Sealed Circular Connector (2.5 mm) Pin	929966-1	—	—	—	—
Sealed Circular Connector (2.5 mm) Pin	929967-1	680320-2	680320-3	680320-1	—
Sealed Circular Connector (2.5 mm) Pin	929968-1	680321-2	—	680321-1	—
Applicators made to order. Call the TECHNICAL SUPPORT CENTER for information					
Sealed Circular Connector (2.5 mm) Socket	929973-1				
Sealed Circular Connector (2.5 mm) Socket	929974-1	680320-2	680320-3	680320-1	—
Sealed Circular Connector (2.5 mm) Socket	929975-1	680321-2	680321-3	680321-1	—
Applicators made to order. Call the TECHNICAL SUPPORT CENTER for information					
Sealed Circular Connector (1.5 mm) Pin	929982-1				
Sealed Circular Connector (1.5 mm) Pin	929983-1	680320-2	680320-3	680320-1	—
Sealed Circular Connector (1.5 mm) Pin	929984-1	680321-2	680321-3	680321-1	—
Applicators made to order. Call the TECHNICAL SUPPORT CENTER for information					
Sealed Circular Connector (1.5 mm) Socket	929988-1				
Sealed Circular Connector (1.5 mm) Socket	929989-1	680320-2	680320-3	680320-1	—
Sealed Circular Connector (1.5 mm) Socket	929990-1	680321-2	680321-3	680321-1	—
Sealed Circular Connector (2.5 mm) Pin	962800-1				
Applicators made to order. Call the TECHNICAL SUPPORT CENTER for information					
Sealed MQS Receptacle	962885-1	680060-2	680055-3	680060-1	—
Sealed MQS Receptacle	962885-5	680060-2	680055-3	680060-1	—
Sealed MQS Receptacle	965906-1	680093-2	—	—	—

*The Model "K" has been superseded by the Model "G".

Related Tooling Data

Descriptions and Specifications

- Applicators—Page 71
- Bench Machines—Pages 71, 72
- CQM—Page 72
- Lead Makers—Page 73
- Wire Strippers—Page 74

FOR APPLICATION TOOLING ASSISTANCE CALL 1-800-522-6752

Application Tooling (Continued)

Hand Tools for Loose Piece Contacts . . . List is in numerical order by contact part number.

Description	Contact		Hand Tool	
	Loose Piece Part Number	Strip Mounted Part Number (For Reference)	Part Number With Die Set	Description
Econoseal J Series Mark II+ (Note 2)	173600-1	171631-1	753890-1	CERTI-CRIMP Straight Action Hand Tool
	171699-1	171630-1		
	173706-1	171661-1	755241-1	CERTI-CRIMP Double Action Hand Tool
	173707-1	171662-1	755262-1	
AMP SUPERSEAL 1.5 SERIES (Note 3)	183036-1	282404-1	—	PRO-CRIMPER II Hand Tool and Die Set (Die Set Part Number 58583-2 also available separately.)
	183024-1	282109-1	58583-1	
	183035-1	282403-1	—	
	183025-1	282110-1	58583-1	
Econoseal III .250 Series (Note 4)	344991-1	344069-1	525316-3	CERTI-CRIMP Hand Tool With Die Set
	344989-1	344008-1	525316-1	
	344995-1	344070-1	525316-4	
	344993-1	344009-1	525316-1	
Sealed Circular Connectors	(Note 1)	929967-1 (Note 1)	58606-1	PRO-CRIMPER II Hand Tool and Die Set (Die Set Part Number 58606-2 also available separately.)
Sealed Circular Plastic Connectors (Note 5)	213845-3,-4	213845-1,-2	Hand Tool 69710-1	CERTI-CRIMP "C" Head Hand Tool
	213847-3,-4	213847-1,-2	Requires Die Set 356612-1	
	213841-3,-4	213841-1,-2	Hand Tool 69710-1	
	213843-3,-4	213843-1,-2	Requires Die Set 356611-1	
Splash Proof/Sealed Universal MATE-N-LOK Connectors (Note 6)	350690-1,-2,-3,-7	350561-1,-2,-3,-7	90300-2 or 90548-1	CERTI-CRIMP Straight Action Hand Tool or PRO-CRIMPER II Hand Tool and Die Set (Die Set Part Number 90548-2 also available separately.)
	350706-1,-2,-7	350689-1,-2,-3,-7		
	640347-2	350851-1,-2,-7	—	—
	350689-1,-3,-7	350570-3,-6	—	—
	—	770210-1	—	—
	350547-1,-2,-3,-6,-7	350218-1,-2,-3,-6,-7	90296-2 or 90546-1	CERTI-CRIMP Straight Action Hand Tool or PRO-CRIMPER II Hand Tool and Die Set (Die Set Part Number 90546-2 also available separately.)
	350705-1,-2,-7	350687-1,-2,-7		
	350669-1	350684-1		
350550-1,-2,-3,-6,-7	350356-1,-2,-3,-6,-7	—	—	

Notes:

1. A loose piece part number is not currently available. This hand tool is designed to crimp the strip mounted product after removal from the carrier.
2. These hand tools are not designed to crimp strip mounted product. Loose piece insulation support barrels are different than those of strip mounted product. Wire barrel designs of the 173706-1 and 173707-1 also differ from the strip mounted product.
3. This hand tool will also crimp the strip mounted product after removal from the carrier.
4. These hand tools are not designed to crimp strip mounted product. The loose piece wire and insulation support barrels are different than those of the strip mounted product.
5. For strip mounted contacts, use Extraction Tool **Part Number 318813-1**.
6. For loose piece contacts (except 350669-1) and strip mounted contacts (except 350684-1 and 350356-□), use Extraction Tool **Part Number 318851-1**. For strip mounted contacts (except 350356-□, 350684-1 and 350689-□), use Insertion Tool **Part Number 455830-1**.

Related Tooling Data

Descriptions and Specifications

Hand Tools—Pages 74, 75
Wire Strippers—Page 74
626 Pneumatic Tool System—
Page 74

FOR APPLICATION TOOLING ASSISTANCE CALL 1-800-522-6752