

For more information call **01227 773200** Amphenol Ltd, Thanet Way, Whitstable, Kent, CT5 3JF, England

SCE Snatch Connector Electrical Series



SCE is a miniature product with a silent push to mate and pull to release design across two styles of cable receptacles. All inserts and contacts are moulded in place, achieving high environmental sealing to IP68. The metalwork is machined from brass, giving an increased number of mating cycles over traditional aluminium connectors.

The snatch push pull design is fully grounded and cannot be locked when mated, as the cable receptacle has no moving parts, i.e. coupling nut, thus eliminating the path for the ingress of moisture and dust to the interface. The latch push pull design can be non-grounded or grounded and is locked when mated by rotating the coupling nut fitted to the cable receptacle by 30°. This coupling mechanism locks the connectors together, ensuring that they cannot be inadvertently demated. Both are fitted with internal and external o-rings for sealing.

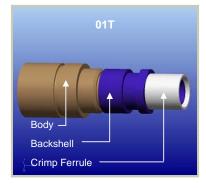
The chassis mounting plug remains unchanged to allow the user to select either a snatch or latch cable receptacle without changing the equipment interface.

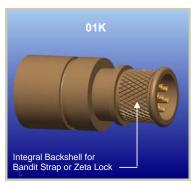
Scoop proof shell to shell keying is provided with five different key options of A, B, C, D and N positions, to prevent mis-mating between shells of different operations.

Amphenol Ltd offers full cable harness solutions with overmoulding capabilities or, where preferred, a heat shrink boot can be used.



SCE Terminology







SCE Mating Options



Chassis Mount Plug remains same to mate with Snatch or Latch Receptacle





SCE Performance Information

	INSERT AVAILABILITY					
06-05	5 #22 AWG Contacts					
06-06	6 #22 AWG Contacts					
06-07	7 #22 AWG Contacts					
07-10A	8 #22 AWG Contacts and 2 #16 AWG Contacts					
07-12	12 #22 AWG Contacts					
07-14	14 #22 AWG Contacts					
08-19	19 #22 AWG Contacts					

CONTACT SPECIFICATIONS							
Contact Resistance	5 mΩ initially	Less than 10 mΩ					
Shell to Shell Conductivity	5 mΩ initially	Less than 10 mΩ					

INSERT SPECIFICATIONS							
Working Voltage (Sea Level)	115 Vac						
DWV (Sea Level)	500 Vac						
Insulation Resistance (Sea Level)	1GΩ @ 500 Vdc						
Current Rating (Individual Contact)	3A						
Current Rating (all Contacts Simultaneously)	1A						

	ENVIRONMENTAL					
Temperature	-55°C / +85°C					
Salt Spray Resistance	500 hours					
Fluids	As per MIL-C-26482 Series I					
Vibration and Shock	As per MIL-C-26482 Series I					
Sealing	IP68 through Unmated Bulkhead Connectors					
	IP68 Mated Pair Interface					
Sand and Dust	DEF STAN 07-55 (Part 2) Test D1					
Icing/Frosting	DEF STAN 07-55 (Part 2) Test B10					

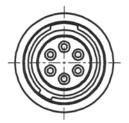
MECHANICAL				
Durability	2000 Matings			
Materials Shell : Brass – Standard plating finish Black Silver				
Contacts : Turned, Gold Plated				
	Inserts and Seal : Proprietary Thermoplastic Polyester Elastomer			

SCE Insert Availability - Shell Size 06

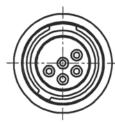
RECEPTACLES - PIN CONTACTS ONLY



FRONT FACE VIEW SCE 7 WAY



FRONT FACE VIEW SCE 6 WAY



FRONT FACE VIEW SCE 5 WAY



REAR FACE VIEW SCE 7 WAY

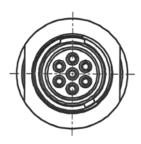


REAR FACE VIEW SCE 6 WAY

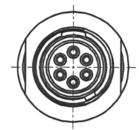


REAR FACE VIEW SCE 5 WAY

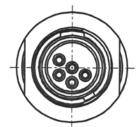
PLUGS - SOCKET CONTACTS ONLY



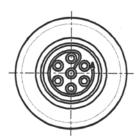
FRONT FACE VIEW SCE 7 WAY



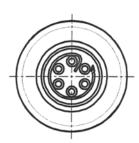
FRONT FACE VIEW SCE 6 WAY



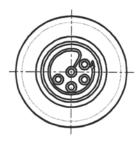
FRONT FACE VIEW SCE 5 WAY



REAR FACE VIEW SCE 7 WAY

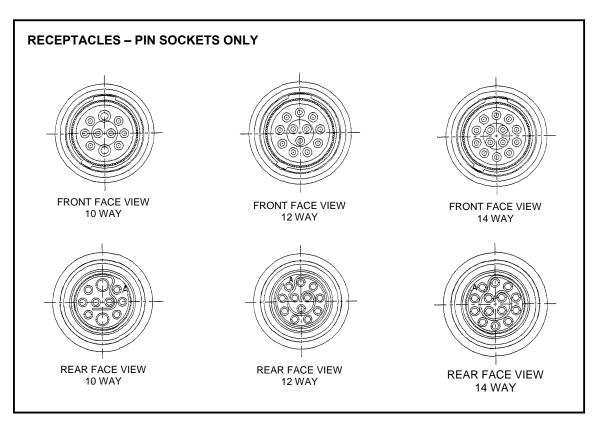


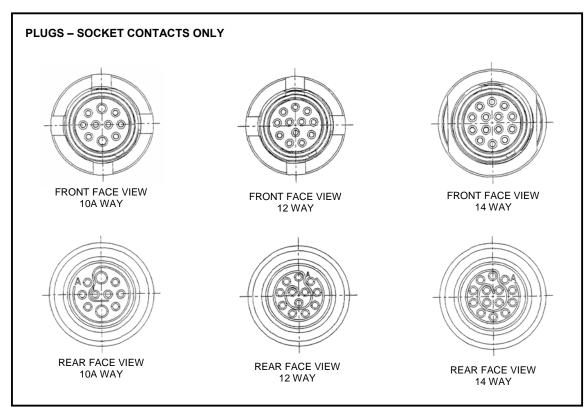
REAR FACE VIEW SCE 6 WAY



REAR FACE VIEW SCE 5 WAY

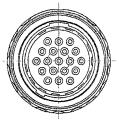
SCE Insert Availability - Shell Size 07



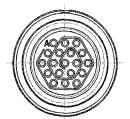


SCE Insert Availability – Shell Size 08

RECEPTACLES - PIN CONTACTS ONLY

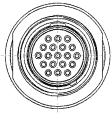


FRONT FACE VIEW 19 WAY

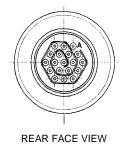


REAR FACE VIEW 19 WAY

PLUGS - SOCKET CONTACTS ONLY



FRONT FACE VIEW 19 WAY



19 WAY

SCE Keyway Orientation

Part Number	Keyway Position	AA'
SCE-B-76A**-**SN-****	NORMAL	180
SCE-B-76A**-**SA-***	A	150
SCE-B-76A**-**SB-***	В	210
SCE-B-76A**-**SC-***	С	120
SCE-B-76A**-**SD-***	D	240

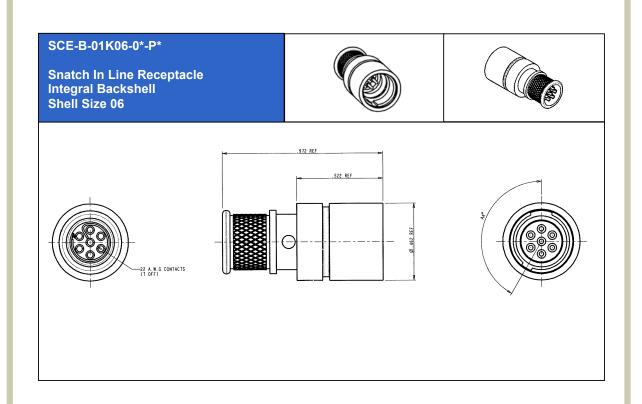
Part Number	Keyway Position	AA'
SCE-B-06K-**-**PN	NORMAL	180
SCE-B-06K-**-**PA	A	150
SCE-B-06K-**-**PB	В	210
SCE-B-06K-**-**PC	С	120
SCE-B-06K-**-**PD	D	240

Part Number	Keyway Position	AA'
SCE-B-01K**-**PN	NORMAL	180
SCE-B-01K**-**PA	А	150
SCE-B-01K**-**PB	В	210
SCE-B-01K**-**PC	С	120
SCE-B-01K**-**PD	D	240

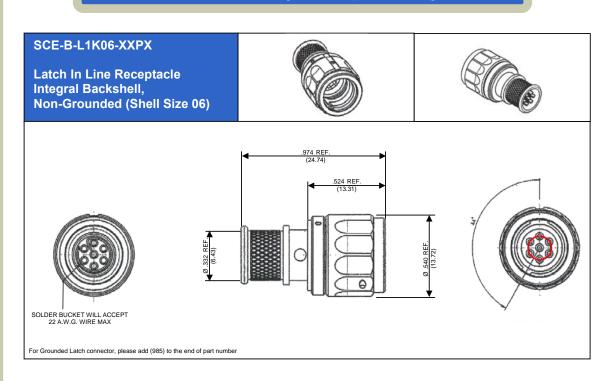
Part Number	Keyway Position	AA'
SCE-B-L1K**-**PN	NORMAL	180
SCE-B-L1K**-**PA	A	150
SCE-B-L1K**-**PB	В	210
SCE-B-L1K**-**PC	С	120
SCE-B-L1K**-**PD	D	240

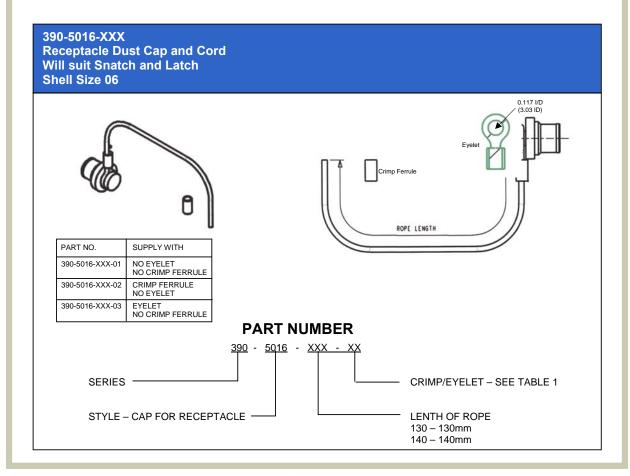
SCE Table of Styles – Up to 7 Ways

In Line Receptacle Solder Bucket Contacts Crimp Ferule 1.377 (26.00) All Dimensions are for reference only (Dimensions in broakds are in mm)



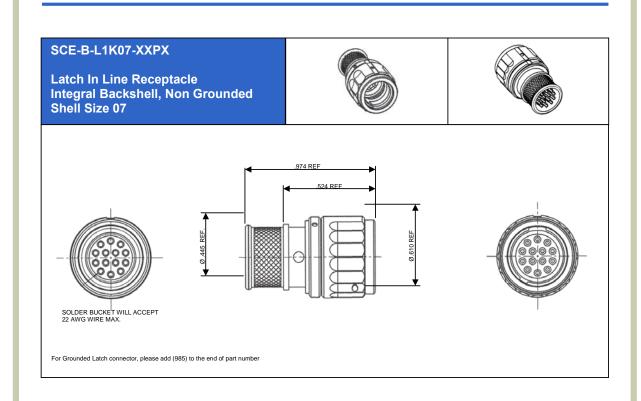
SCE Table of Styles – Up to 7 Ways

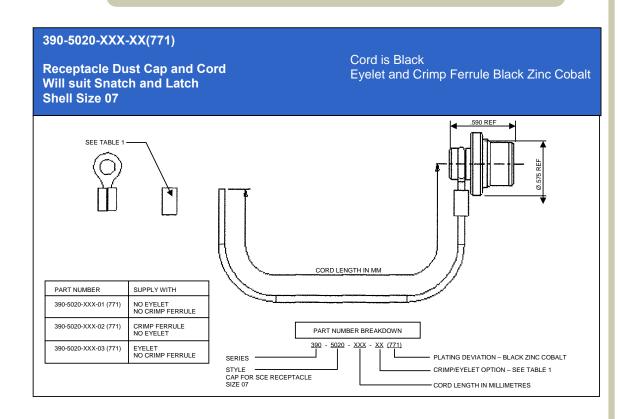




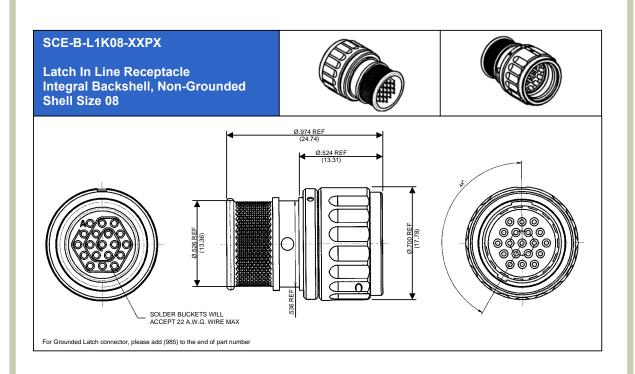
SCE Table of Styles – Up to 14 Ways

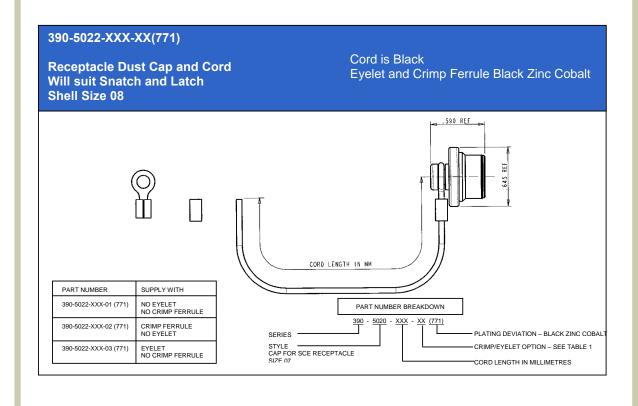
SCE-B-01K07-XXPX Snatch In Line Receptacle Integral Backshell Shell Size 07 972 REF 497 REF 22 AWG CONTACTS (14 oil)



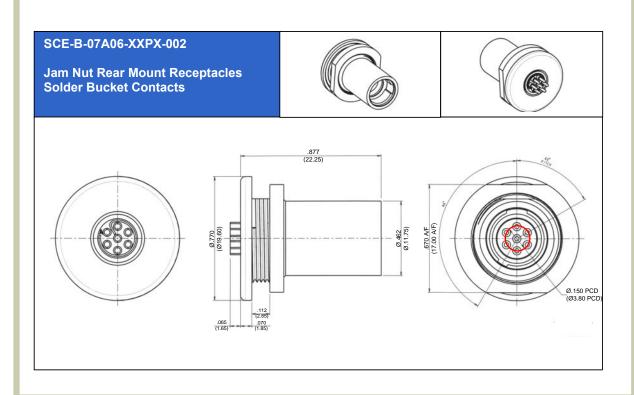


SCE Table of Styles - Up to 19 Ways

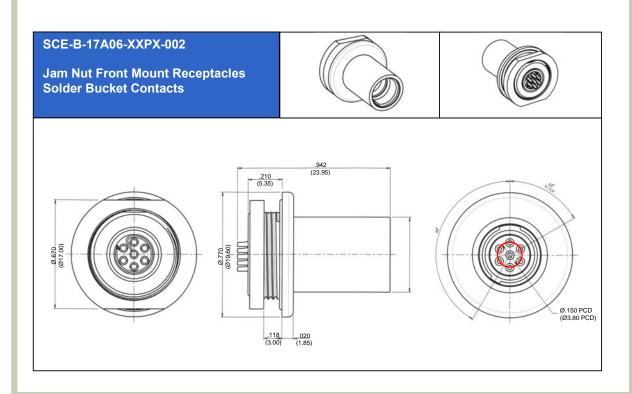


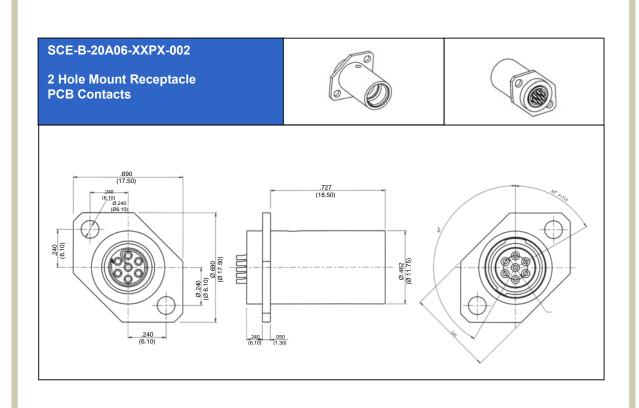


SCE-B-07A06-XXPX-001 Jam Nut Rear Mount Receptacles PCB Contacts 877 (22.25) Jam Nut Rear Mount Receptacles PCB Contacts



Jam Nut Front Mount Receptacles PCB Contacts SCE-B-17A06-XXPX-001 Jam Nut Front Mount Receptacles PCB Contacts ST7 (22.25) (22.25) (22.25) (22.25) (23.05) (23.05) (23.05) (23.05)

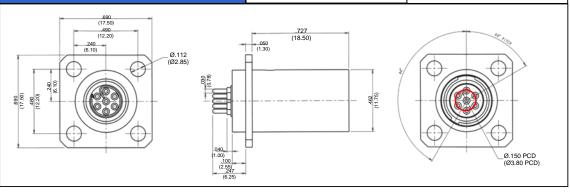




SCE-B-00A06-XXPX-001 4 Hole Mount Receptacle PCB Contacts





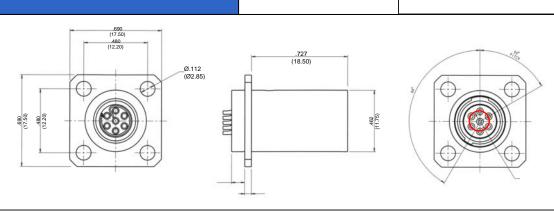


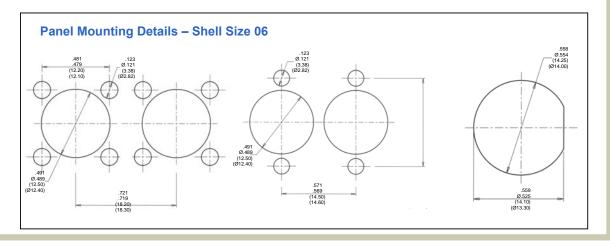
SCE-B-00A06-XXPX-002

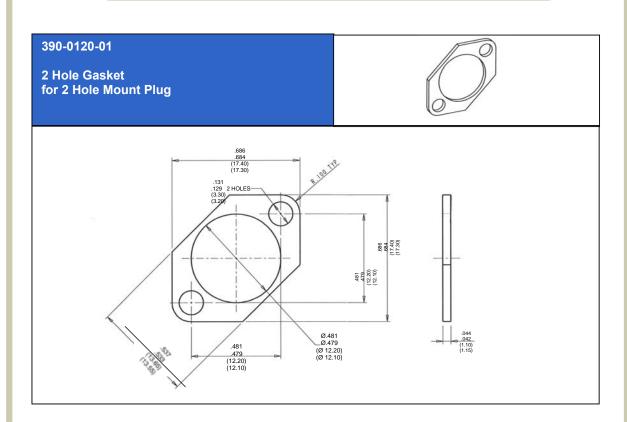
4 Hole Mount Receptacle Solder Bucket Contacts

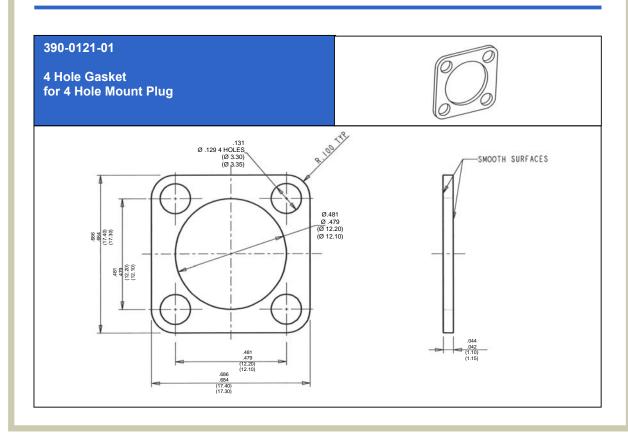


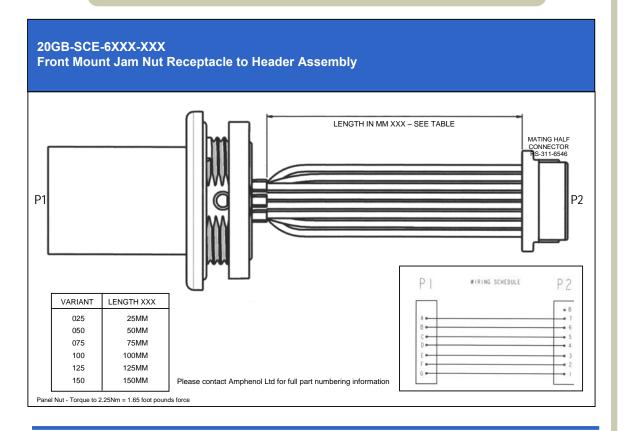


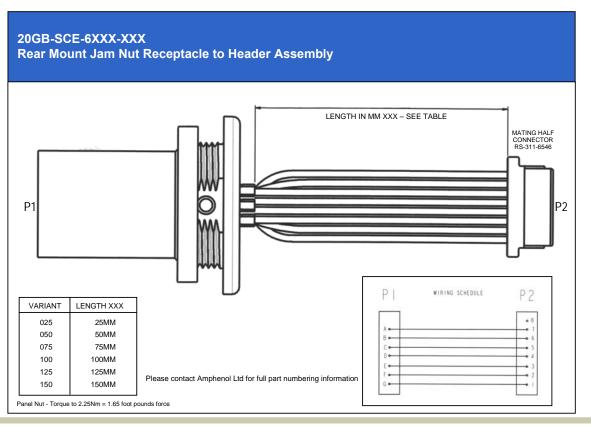




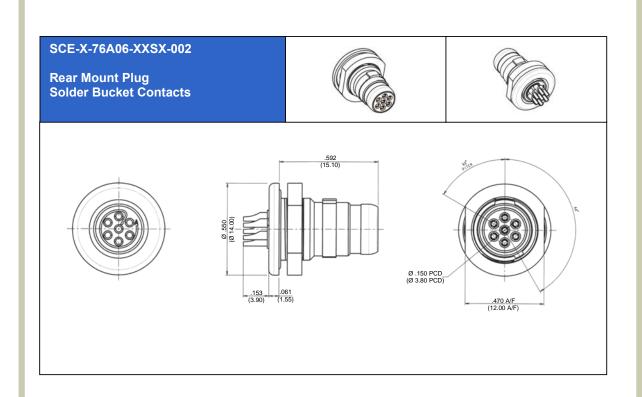






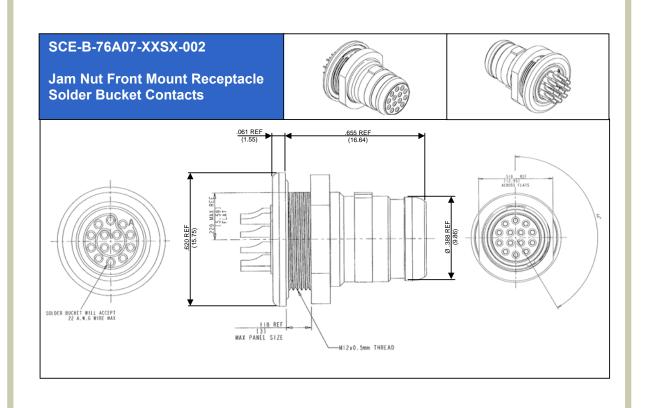


SCE Table of Styles – Up to 7 Ways

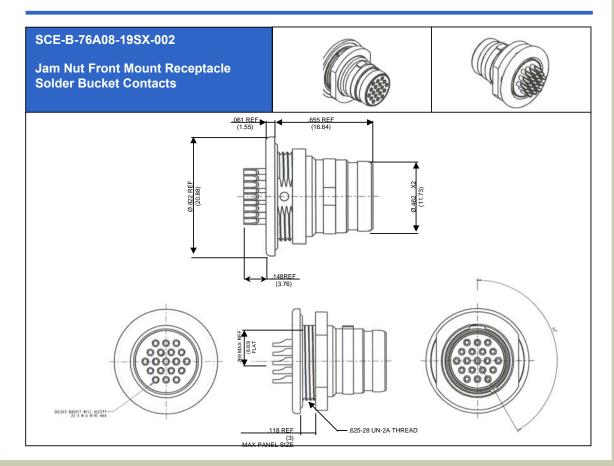


SCE Table of Styles – Up to 14 Ways

Jam Nut Front Mount Receptacle PCB Bucket Contacts | Separation | Sep

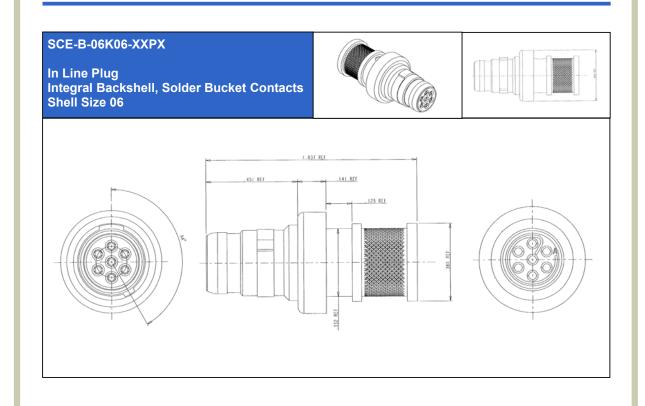


SCE Table of Styles – Up to 19 Ways



SCE Table of Styles – Up to 7 Ways

SCE-X-06T06-XXSX-003 In Line Plug Solder Bucket Contacts only (complete with Backshell) CRIMP FERRULE (8.50) (9.150 PCD) (9.380 PCD)



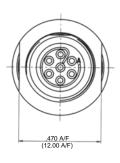
SCE Table of Styles – Up to 7 Ways

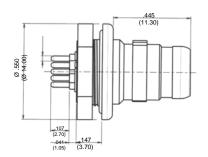
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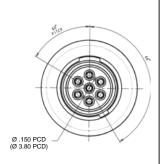
Front Mount Plug PCB Contacts









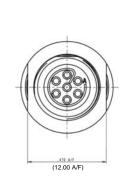


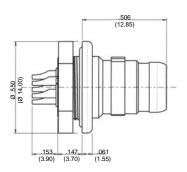
SCE-X-67A06-XXSX-002

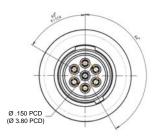
Front Mount Plug Solder Bucket Contacts

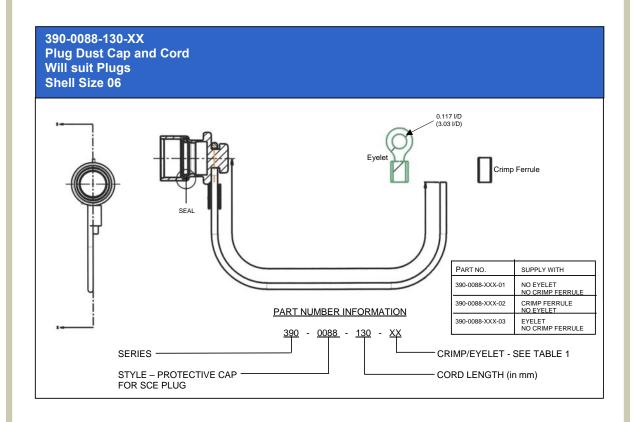


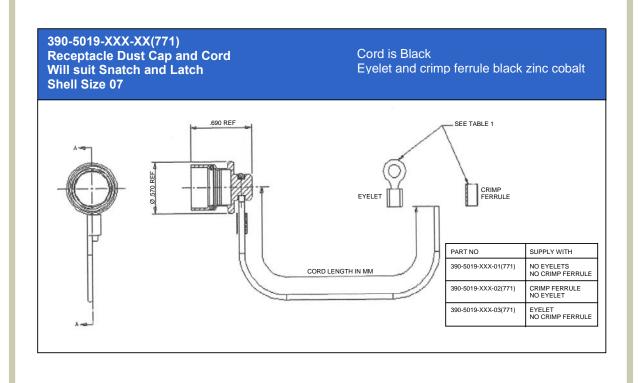










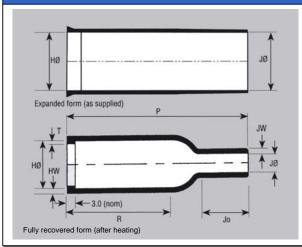


Heatshrink Boots

100 Series - Bottle Shapes with Rib - MIL Style

For use with SCE-06T and SCE-01T

We have selected Heatshrink Boots from Hellermann Tyton. Heatshrink Boots from other manufacturers may be used if appropriate.

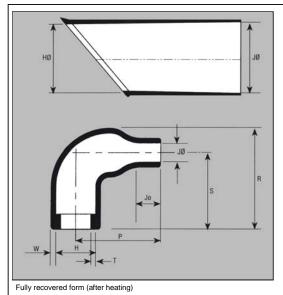


This style is used in conjunction with the backshell (see page 8) providing strain relief and environmental sealing

Dimensions apply to all materials unless otherwise indicated

	Expanded (Min)				Recovered (Max) Recovered Dimensions Fully Shrunk							
Hellermann Part No	н	H -H matl	JØ	J -H matl	н	JØ	P ±10%	R ±10%	Jo ±10%	HW ±10%	JW ±10%	T ±10%
113-4-G-WM250	0.3976	0.3976	0.1811	0.1811	0.3110	0.0787	1.0	0.5709	0.1811	0.0512	0.0512	0.0394
	(10.7)	(10.7)	(4.6)	(4.6)	(7.9)	(2.0)	(25.4)	(14.5)	(4.6)	(1.3)	(1.3)	(1.0)
104-4-G-WM250	0.6456	0.6456	0.6456	0.6456	0.3110	0.149	1.0	0.5590	0.2716	0.0512	0.0512	0.0394
	(16.4)	(16.4)	(16.4)	(16.4)	(7.9)	(3.8)	(25.4)	(14.2)	(6.9)	(1.3)	(1.3)	(1.0)

1100 Series - Right Angle Shapes with Rib - MIL Style

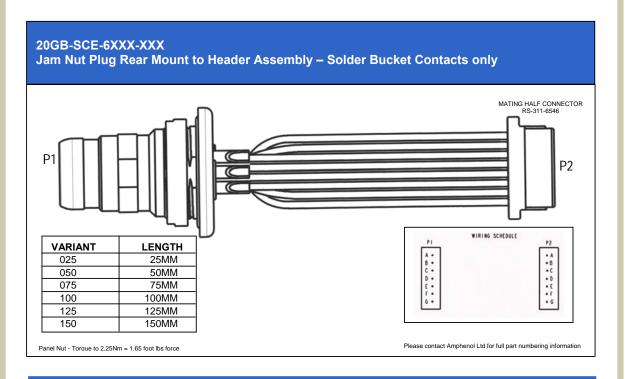


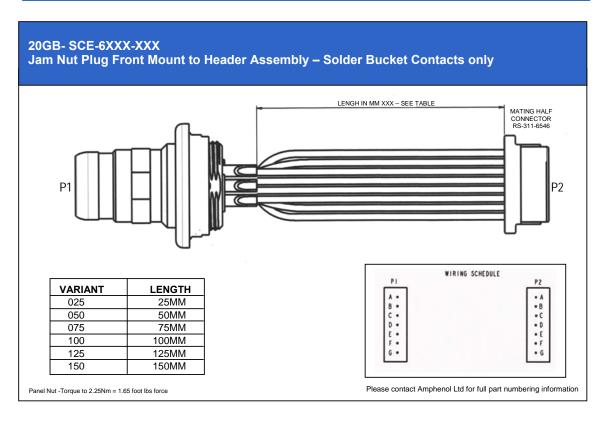
The style provides strain relief for harness systems when used in conjunction with the backshell (see page 8)

Dimensions apply to all materials unless otherwise indicated

	Expande	ed (Min)	Recover	ed (Max)	Recovered Dimensions Fully Shrunk					
Hellermann Part No	н	JØ	н	Jø	P ±10%	R ±10%	S ±10%	Jo ±10%	W ±20%	T ±20%
1108-4-G-WM250	0.6496	0.6496	0.3110	0.1496	0.6875	0.7969	0.6005	0.1614	0.0394	0.0394
	(16.5)	(16.5)	(7.9)	(3.8)	(17.3)	(20.1)	(15.2)	(4.1)	(1.0)	(1.0)
1106-4-G-WM250	0.9173	0.9173	0.4094	0.2204	0.7992	0.9015	0.6005	0.2283	0.0511	0.0394
	(23.3)	(23.3)	(10.04)	(5.6)	(20.3)	(22.9)	(15.2)	(5.8)	(1.3)	(1.0)

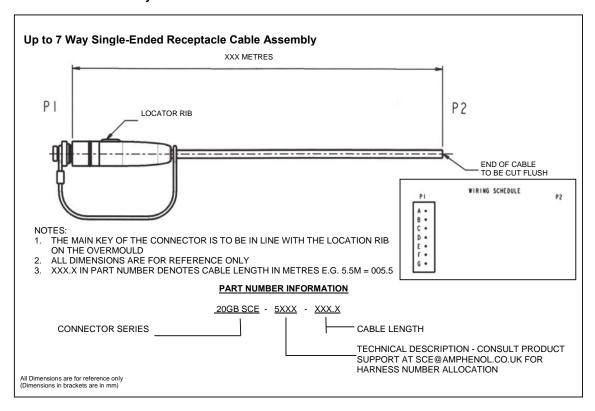
SCE Plug to Header Cable Assemblies

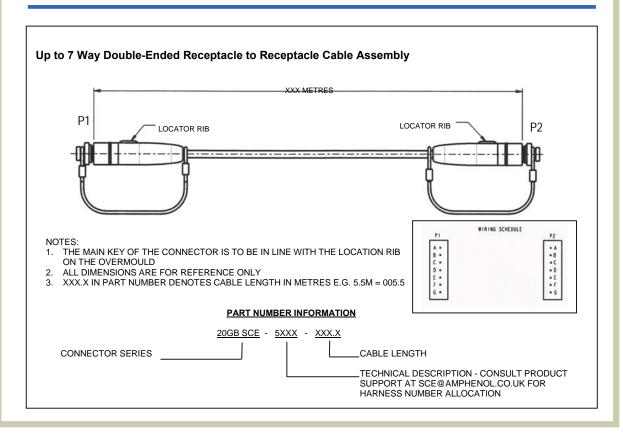




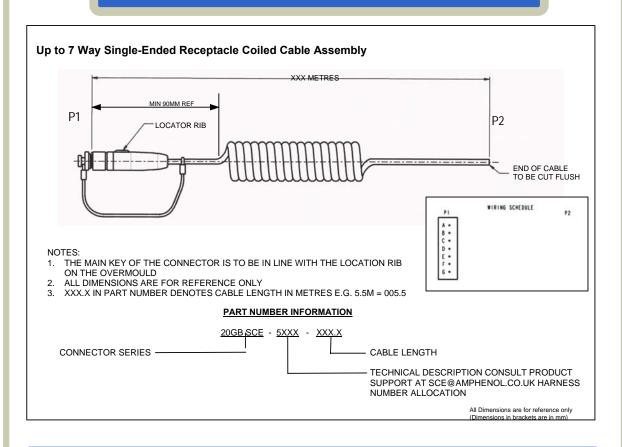
SCE - Cable Assemblies

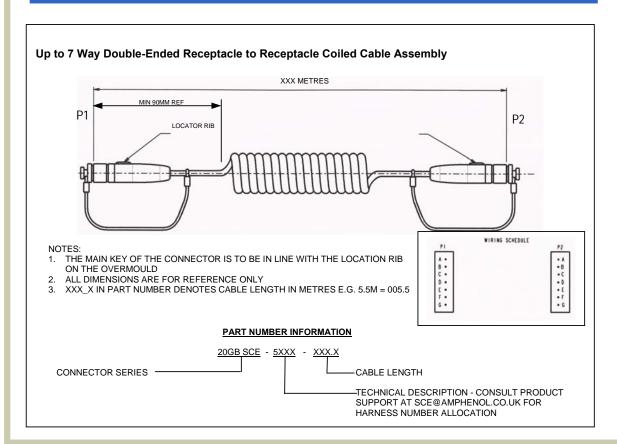
Amphenol Ltd can supply complete overmoulded cable harness solutions to your specifications. Please consult factory for cable number allocation.

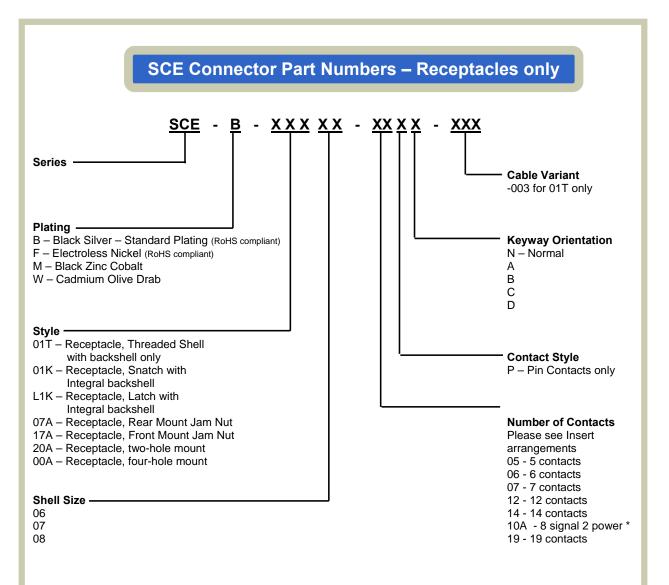




SCE - Cable Assemblies







^{*} Please consult factory.

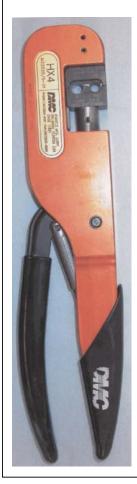
Note: If ordering 01K and L1K receptacles, please omit the cable variant from the part number.

SCE Connector Part Numbers – Plugs only SCE - B - XXX XX - XXXX - XXX Series -Contacts 001 - PCB 002 - Solder Bucket Plating -B – Black Silver – Standard Plating (RoHS compliant) **Keyway Orientation** N - Normal F - Electroless Nickel (RoHS compliant) M - Black Zinc Cobalt Α W - Cadmium Olive Drab В С D Style -76A - Rear Mount Jam Nut Plug **Contact Style** 06T - In-Line Plug with Backshell S – Socket Contacts only 06K - In-Line Plug with Integral Backshell 67A - Front Mount Jam Nut Plug **Number of Contacts** Please see Insert Shell Size arrangements 06 05 - 5 contacts 07 06 - 6 contacts 80 07 - 7 contacts 12 - 12 contacts 14 - 14 contacts 10A - 8 signal 2 power * 19 – 19 contacts * Please consult factory. Note: For castellated panel nut, please add (981) at the end of plug part number

SCE Crimp Tool

For Braid Termination Style 003

Crimp the Braid into place so that the ferrule butts up against the shoulder of the backshell. Use crimp tool Daniels HX4 M22520/5-01 handle, crimp die set Daniels Y530 CAGE 11851 at setting 180.





Iuly 2006

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Amphenol

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