Amphenol

SCE

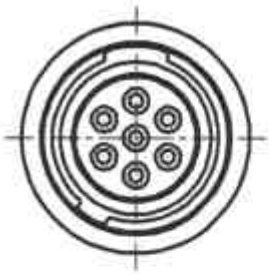
Snatch Connector Electrical Series

The SCE has been designed specifically for the harsh environment. A simple push to mate and pull to release feature means that this miniature product is of a snatch push pull design and it cannot be locked when mated. The SCE has no moving parts, i.e. coupling nut, thus eliminating the path for the ingress of moisture and dust to the interface. The SCE free cable connector is fitted with internal and external o-rings for sealing.

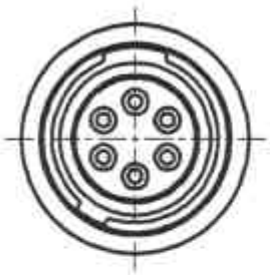
This fully grounded series is machined from brass, giving it an increased number of mating cycles over traditional aluminium connectors. The inserts and contacts are moulded in place to offer high environmental sealing.

Shell to shell keying is provided with two different key options of A and B positions to prevent mis-mating between shells of different orientations. Amphenol Ltd offers full cable harness solutions with overmoulding capabilities or, where preferred, a heat shrink boot can be used.

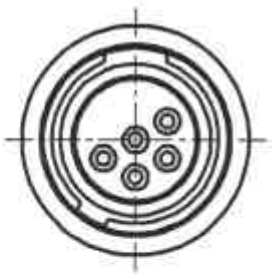
RECEPTACLES – PIN CONTACTS ONLY



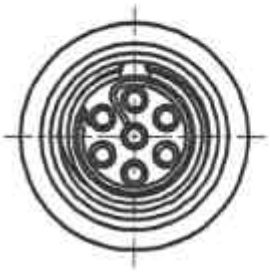
FRONT FACE VIEW
SCE 7 WAY



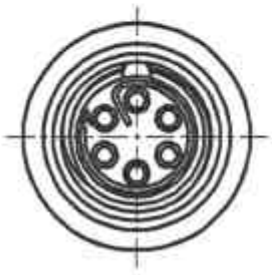
FRONT FACE VIEW
SCE 6 WAY



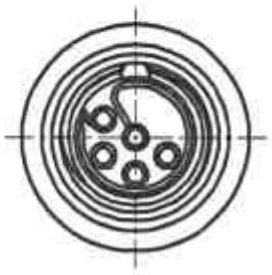
FRONT FACE VIEW
SCE 5 WAY



REAR FACE VIEW
SCE 7 WAY

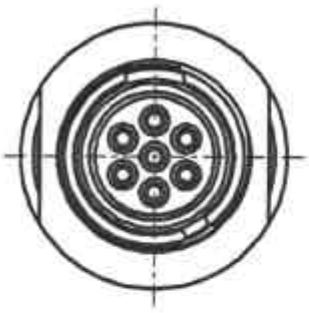


REAR FACE VIEW
SCE 6 WAY

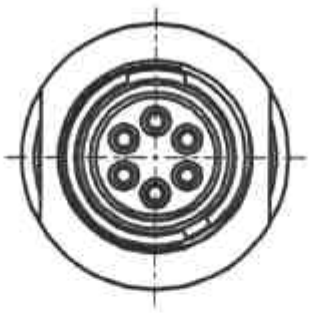


REAR FACE VIEW
SCE 5 WAY

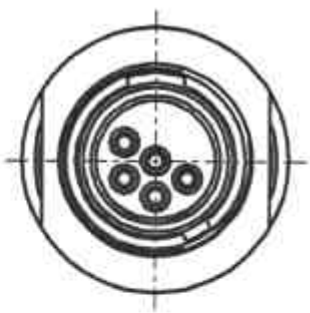
PLUGS – SOCKET CONTACTS ONLY



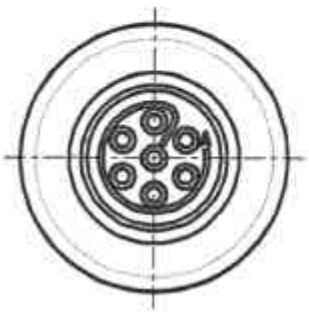
FRONT FACE VIEW
SCE 7 WAY



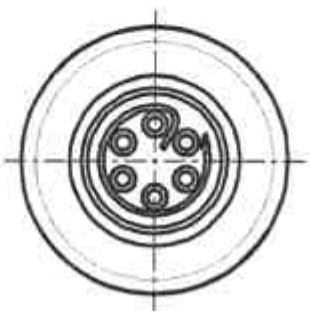
FRONT FACE VIEW
SCE 6 WAY



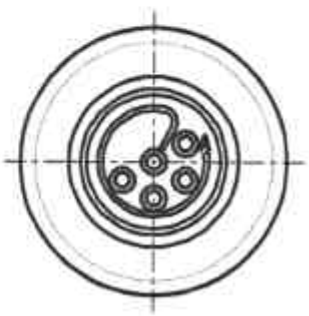
FRONT FACE VIEW
SCE 5 WAY



REAR FACE VIEW
SCE 7 WAY



REAR FACE VIEW
SCE 6 WAY



REAR FACE VIEW
SCE 5 WAY

INSERT AVAILABILITY	
06-05	5 # 22 AWG Contacts
06-06	6 # 22 AWG Contacts
06-07	7 # 22 AWG Contacts

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

INSERT SPECIFICATIONS	
Contact Arrangement	06-05 / 06-06 / 06-07
Working Voltage (Sea Level)	115 Vac
DWV (Sea Level)	500 Vac
Insulation Resistance (Sea Level)	1GO @ 500 Vdc
Current Rating (Individual Contact)	3A
Current Rating (all Contacts Simultaneously)	1A

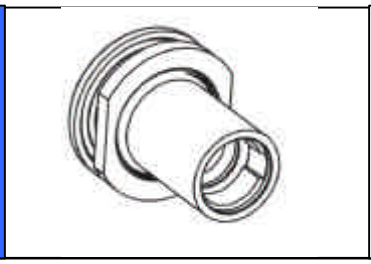
ENVIRONMENTAL	
Temperature	-55°C / +85°C
Salt Spray Resistance	500 hours
Fluids	As per MIL-C-26482 Series I
Vibration and Shock	As per MIL-C-26482 Series I
Sealing	IP68 through Unmated Bulkhead Connectors
	IP68 Mated Pair Interface
Sand and Dust	DEF STAN 07-55 (Part 2) Test D1
Icing/Frosting	DEF STAN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

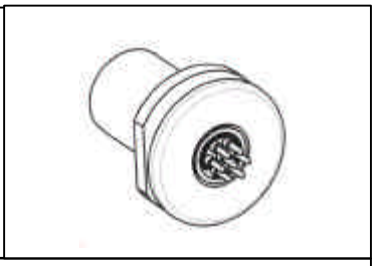
MECHANICAL	
Durability	2000 Matings
Materials	Shell : Brass – See Part No. information for plating options
	Contacts : Turned, Gold Plated
	Inserts and Seal : Proprietary Thermoplastic Polyester Elastomer

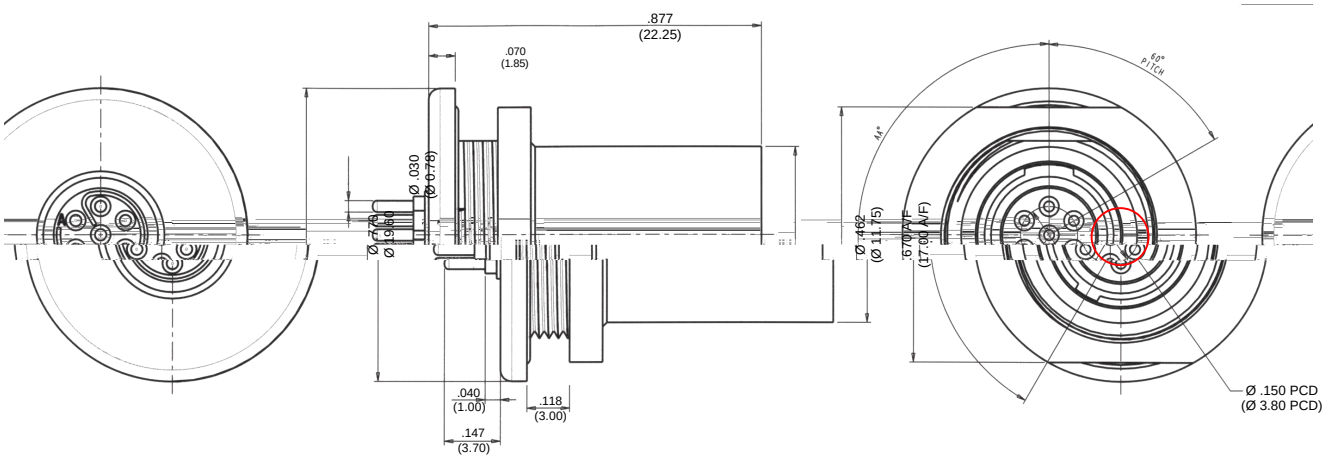
Receptacles have Pin Contacts only

SCE-X-07A06-XXPX-001

Jam Nut Rear Mount Receptacle
PCB Contacts





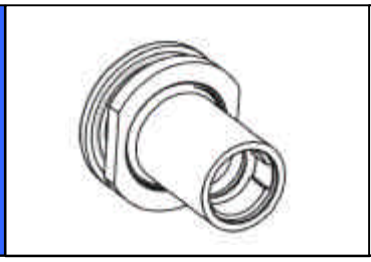


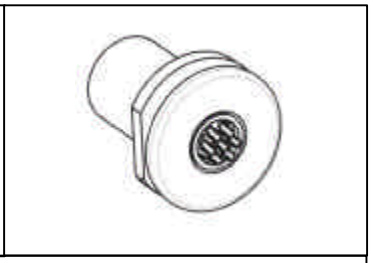
Panel Nut - Torque to 2.25 Nm = 1.65 foot pounds force

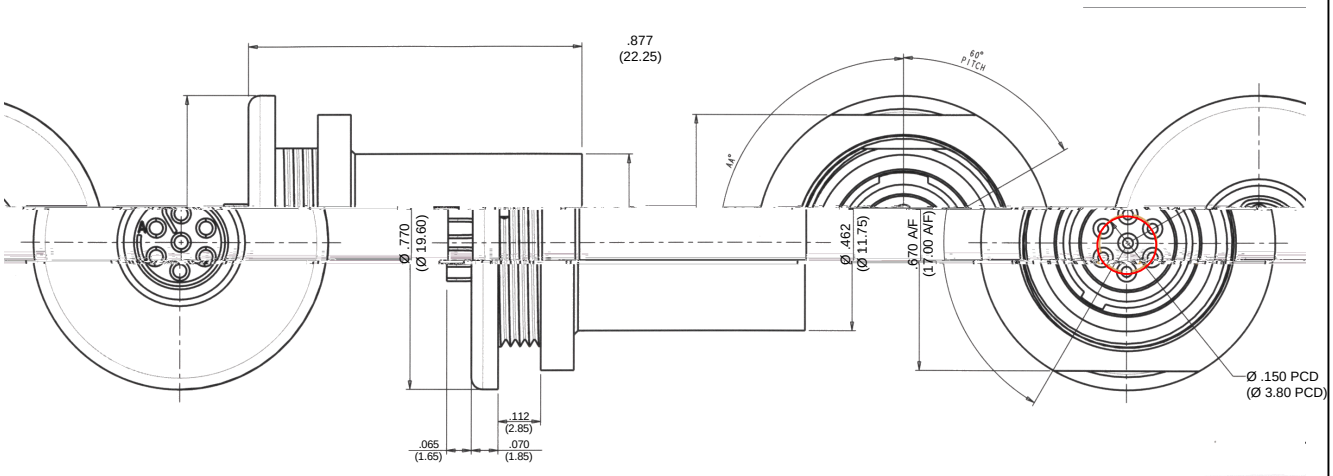
All Dimensions are for reference only
(Dimensions in brackets are in mm)

SCE-X-07A06-XXPX-002

Jam Nut Rear Mount Receptacle
Solder Bucket Contacts





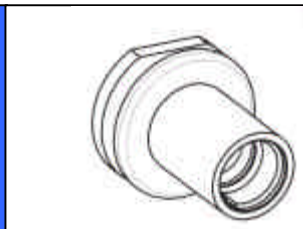


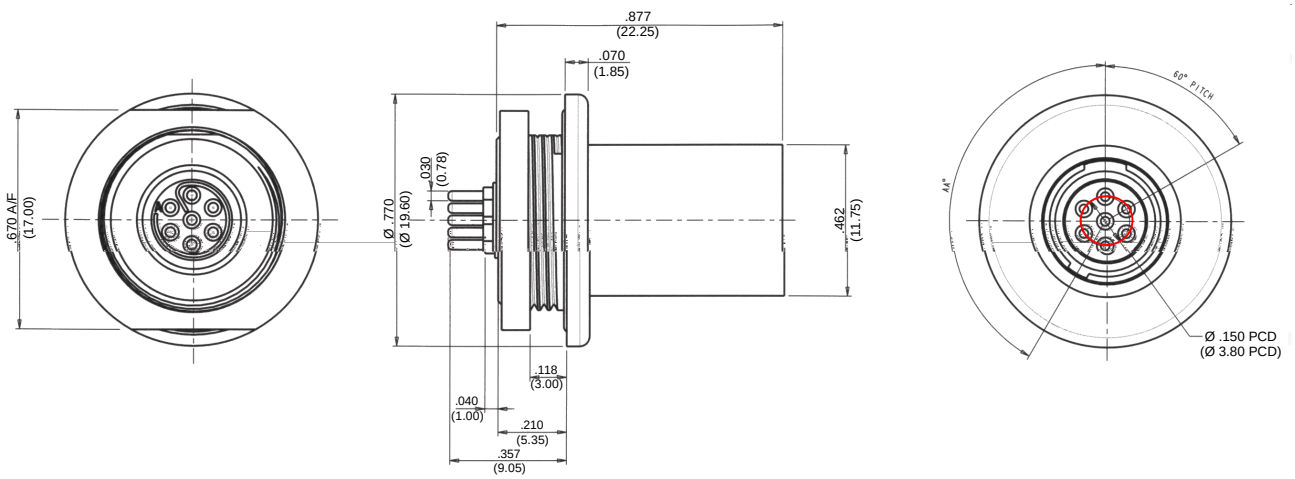
Panel Nut - Torque to 2.25 Nm = 1.65 foot pounds force

All Dimensions are for reference only
(Dimensions in brackets are in mm)

SCE-X-17A06-XXPX-001

Jam Nut Front Mount Receptacle
PCB Contacts



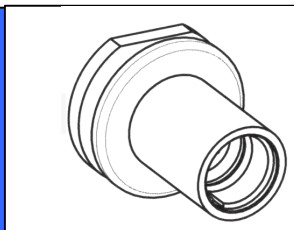


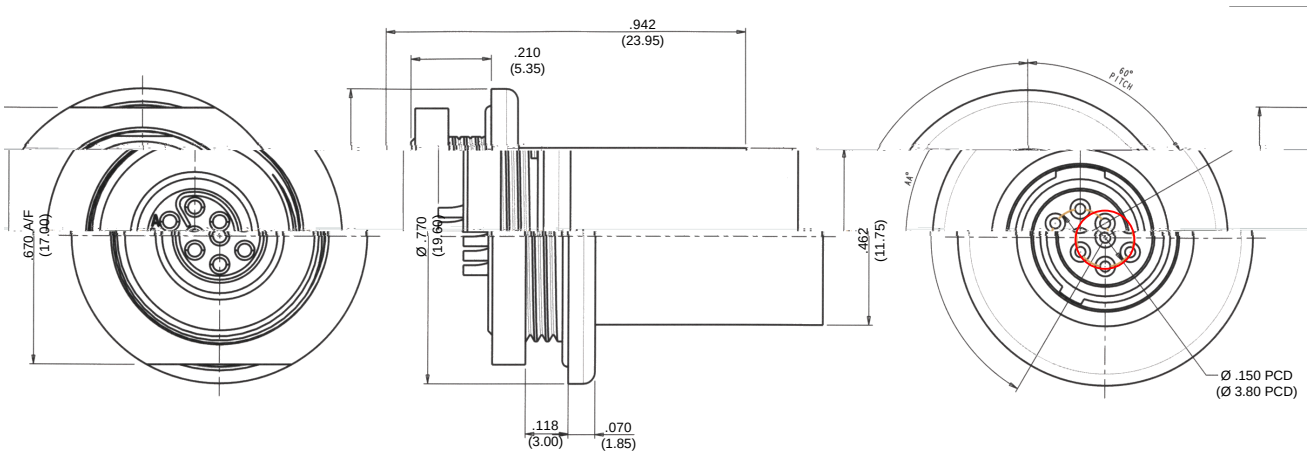
Panel Nut - Torque to 2.25 Nm = 1.65 foot pounds force

All Dimensions are for reference only
(Dimensions in brackets are in mm)

SCE-X-17A06-XXPX-002

Jam Nut Front Mount Receptacle
Solder Bucket Contacts



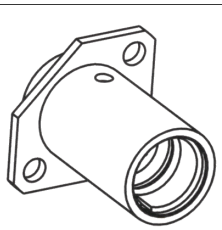


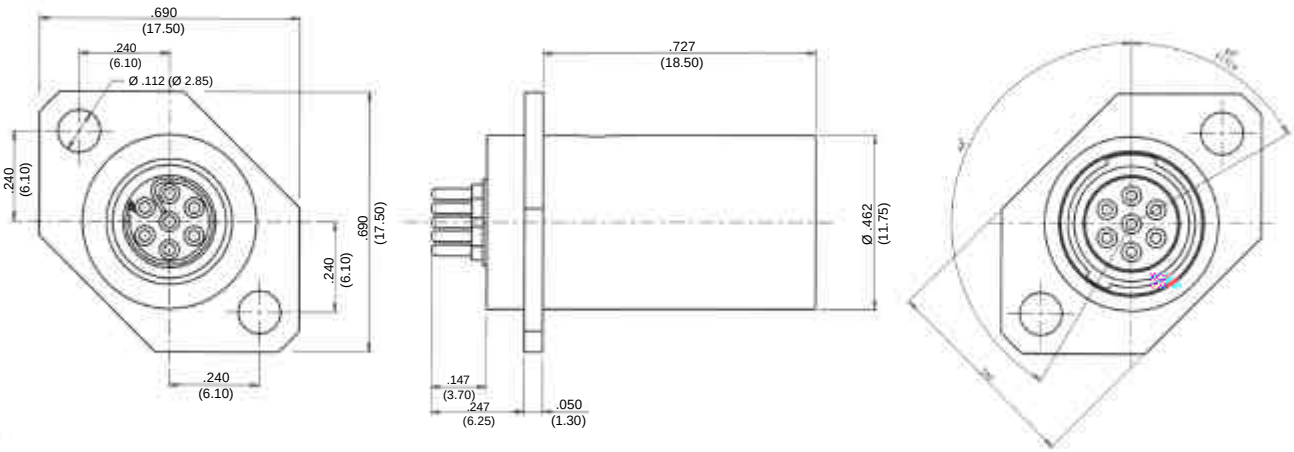
Panel Nut - Torque to 2.25 Nm = 1.65 foot pounds force

All Dimensions are for reference only
(Dimensions in brackets are in mm)

SCE-X-20A06-XXPX-001

2 Hole Mount Receptacle
PCB Contacts

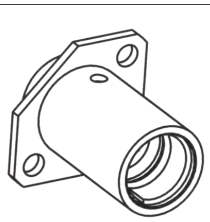


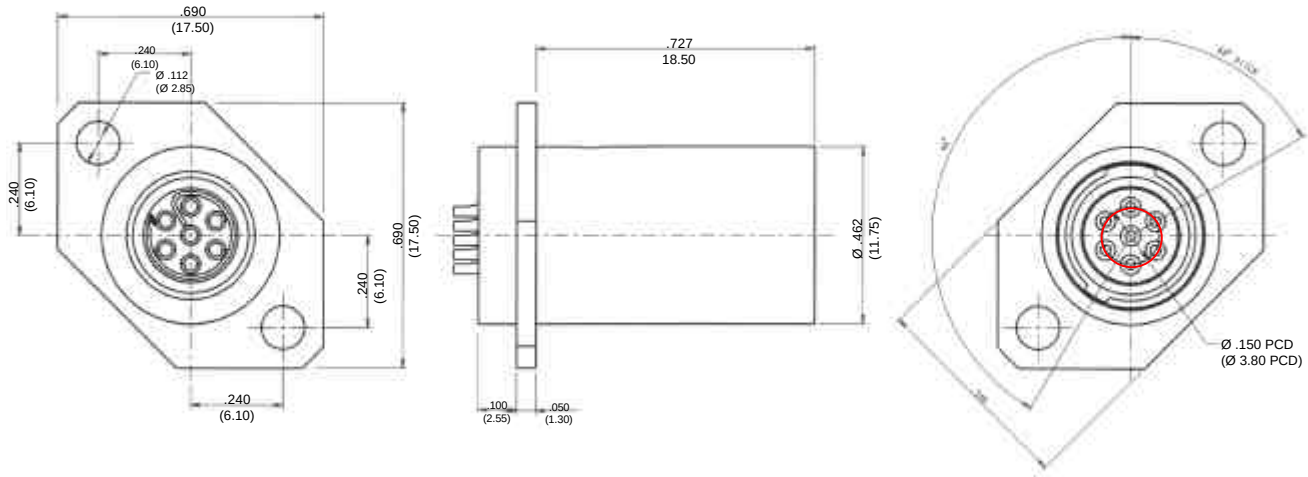


All Dimensions are for reference only
(Dimensions in brackets are in mm)

SCE-X-20A06-XXPX-002

2 Hole Mount Receptacle
Solder Bucket Contacts

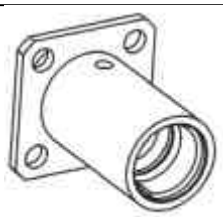


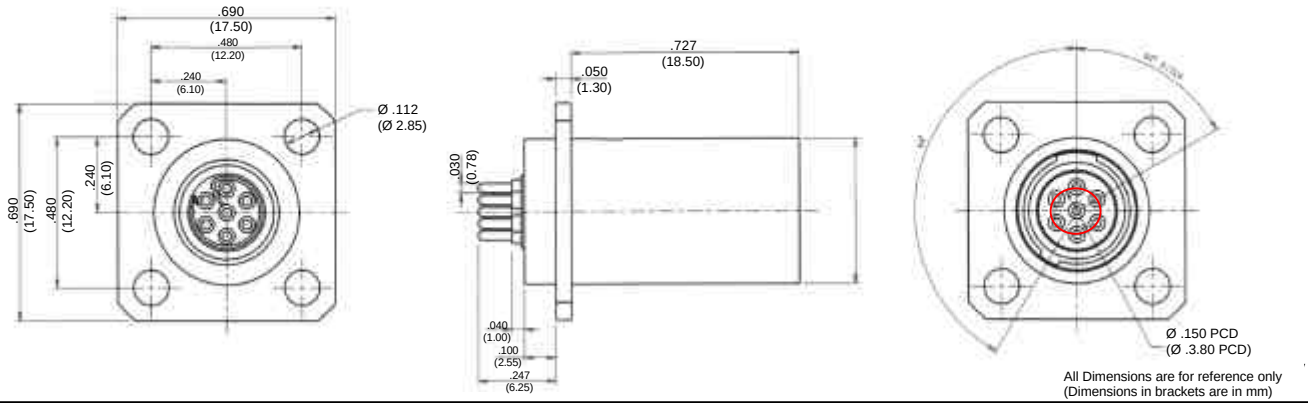


All Dimensions are for reference only
(Dimensions in brackets are in mm)

SCE-X-00A06-XXPX-001

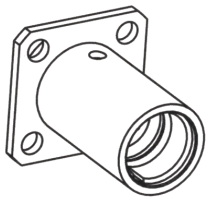
4 Hole Mount Receptacle
PCB Contacts

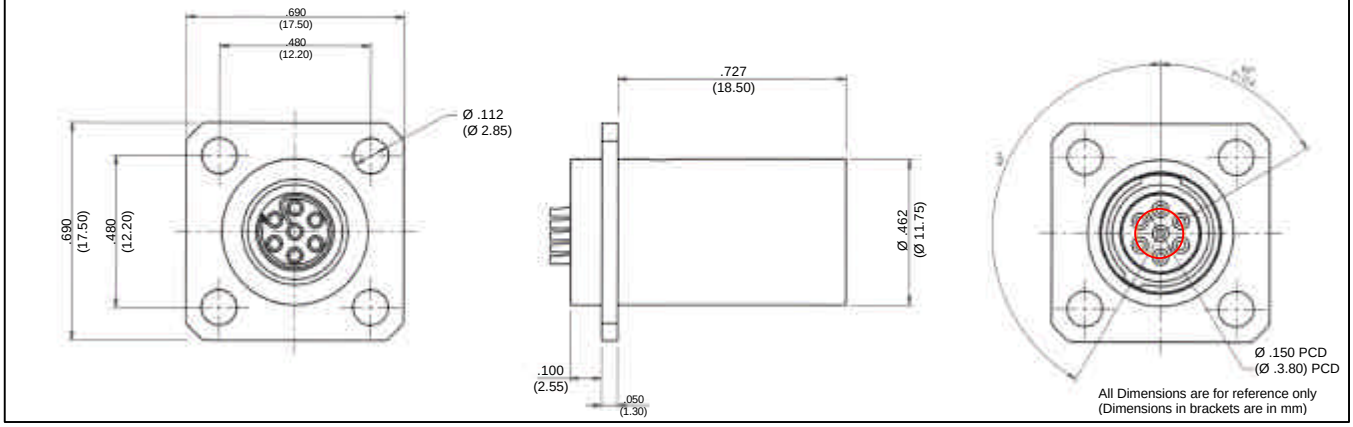




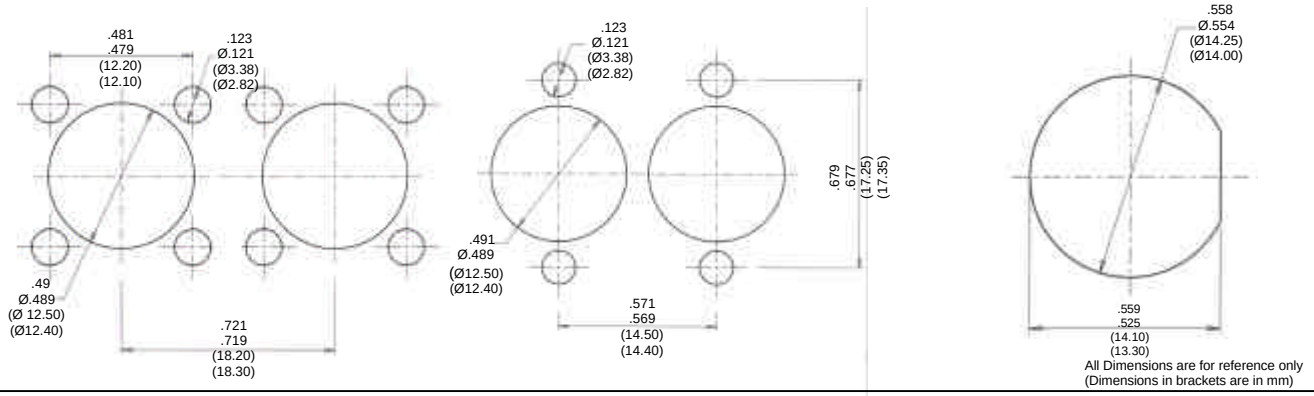
SCE-X-00A06-XXPX-002

4 Hole Mount Receptacle
Solder Bucket Contacts



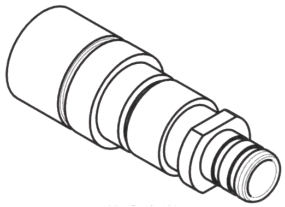


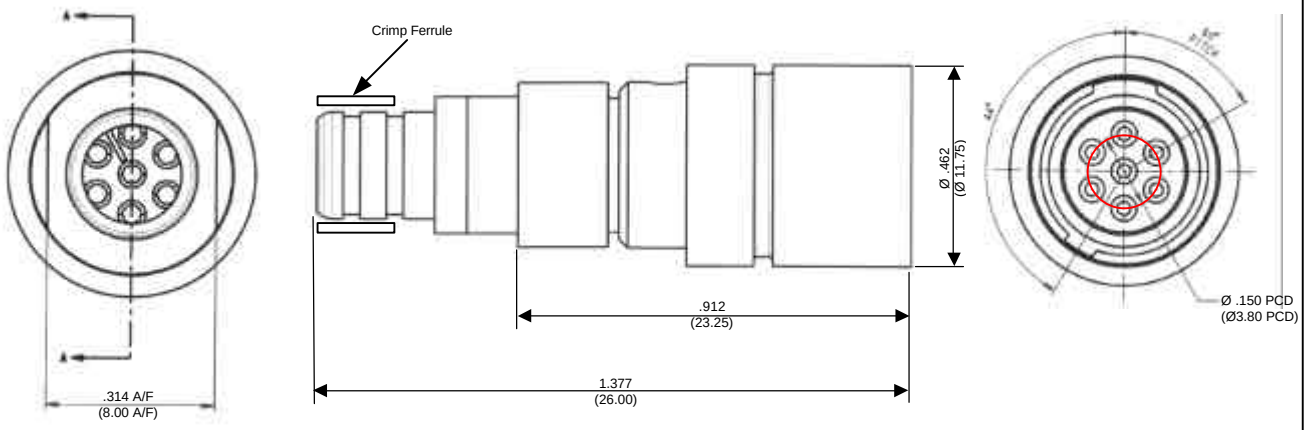
Panel Mounting Details



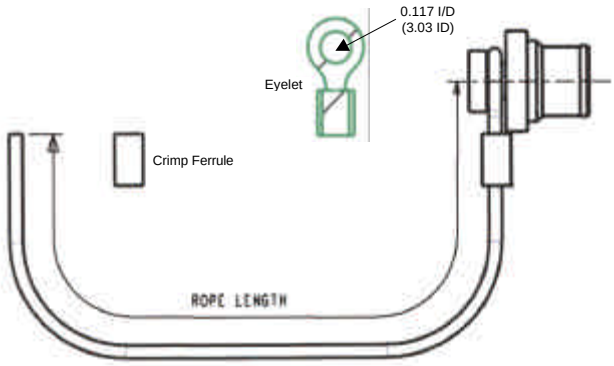
SCE-X-01T06-XXPX-003

In Line Receptacle
Solder Bucket Contacts





390-5016-XXX



PART NO.	SUPPLY WITH
390-5016-XXX-01	NO EYELET NO CRIMP FERRULE
390-5016-XXX-02	CRIMP FERRULE NO EYELET
390-5016-XXX-03	EYELET NO CRIMP FERRULE

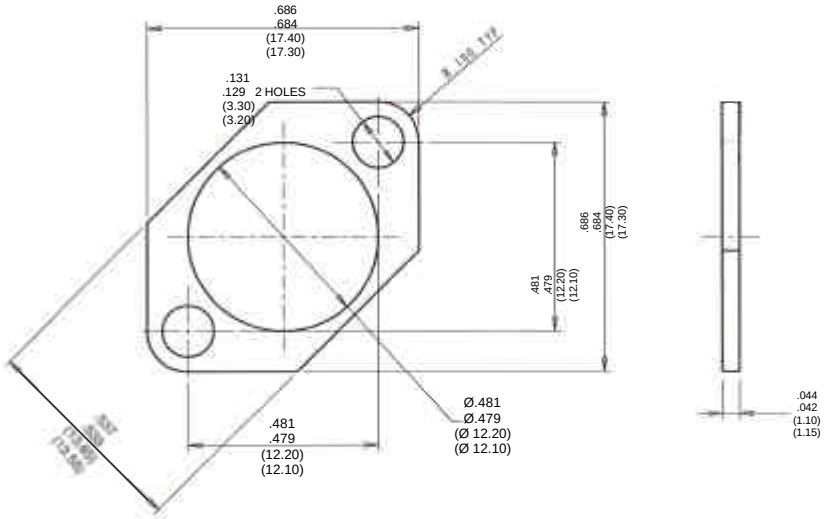
PART NUMBER BREAKDOWN

390 - 5016 - XXX - XX

- 390 – SERIES
- 5016 – STYLE – CAP FOR RECEPTACLE
- XXX – LENTH OF ROPE
  - 130 – 130mm
  - 140 – 140mm
- XX – CRIMP/EYELET – SEE TABLE 1

390-0120-01

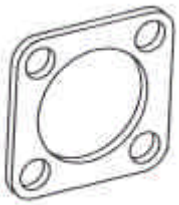
2 Hole Gasket
for 2 Hole Mount Plug

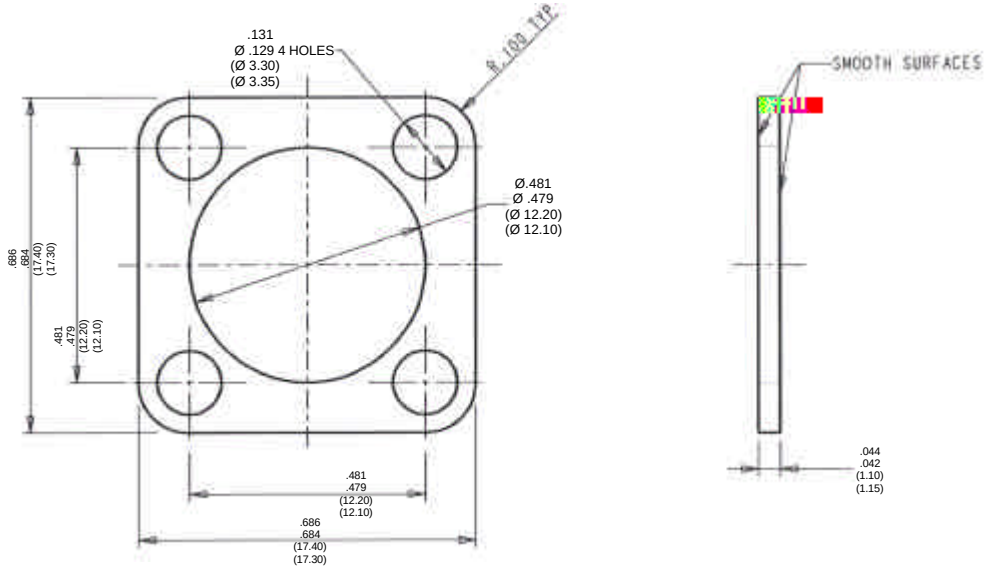


All Dimensions are for reference only
(Dimensions in brackets are in mm)

390-0121-01

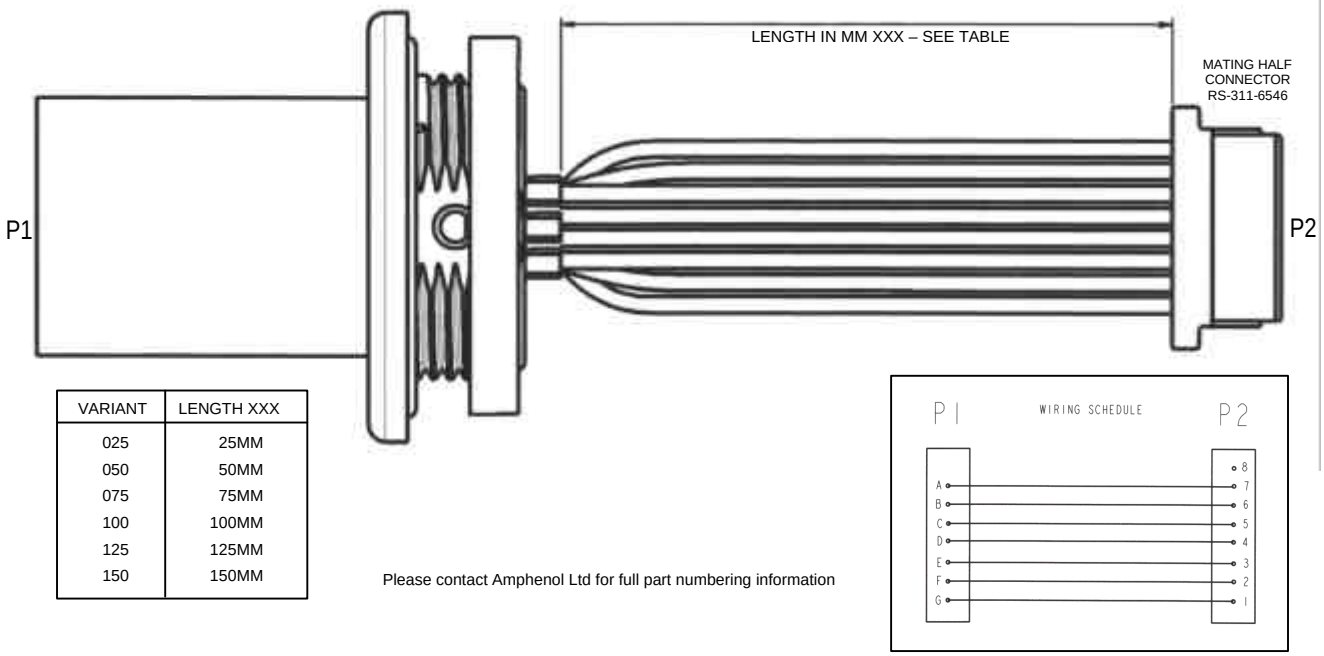
4 Hole Gasket
for 4 Hole Mount Plug





All Dimensions are for reference only
(Dimensions in brackets are in mm)

20GB-SCE-6XXX-XXX
Front Mount Jam Nut Receptacle to Header Assembly

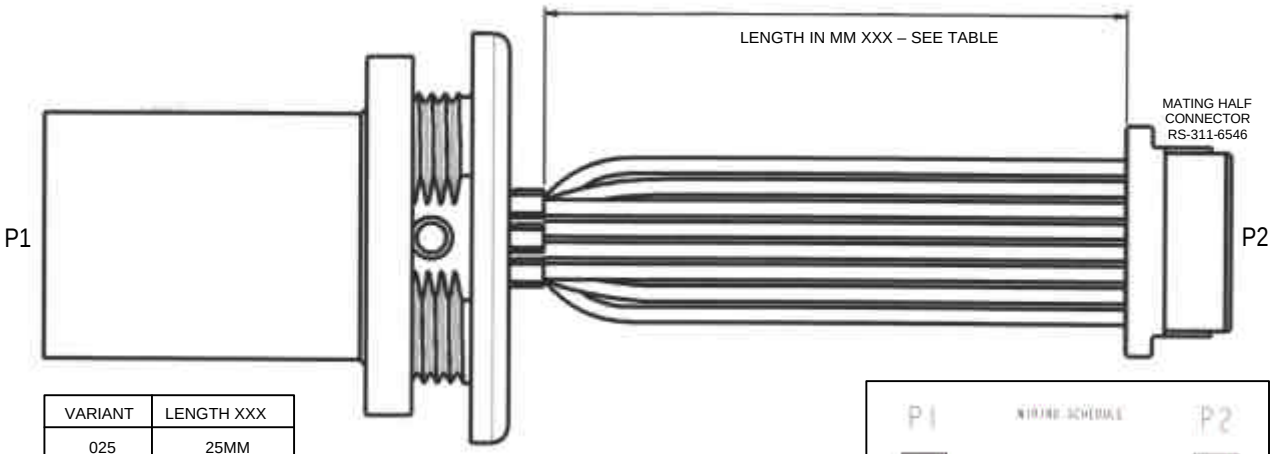


VARIANT	LENGTH XXX
025	25MM
050	50MM
075	75MM
100	100MM
125	125MM
150	150MM

Please contact Amphenol Ltd for full part numbering information

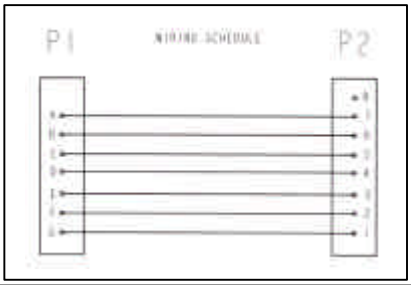
Panel Nut - Torque to 2.25Nm = 1.65 foot pounds force

20GB-SCE-6XXX-XXX
Rear Mount Jam Nut Receptacle to Header Assembly



VARIANT	LENGTH XXX
025	25MM
050	50MM
075	75MM
100	100MM
125	125MM
150	150MM

Please contact Amphenol Ltd for full part numbering information

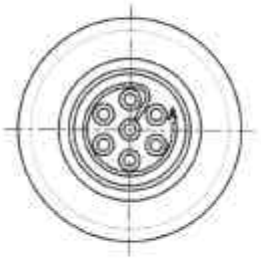


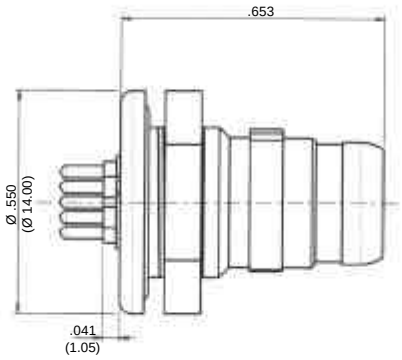
Panel Nut -Torque to 2.25Nm = 1.65 foot pounds force

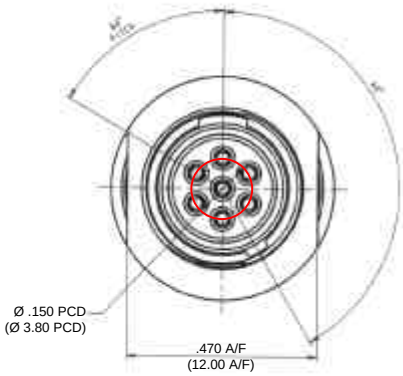
Plugs have Socket Contacts only

SCE-X-76A06-XXSX-001

Rear Mount Plug
PCB Contacts





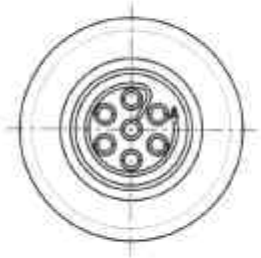


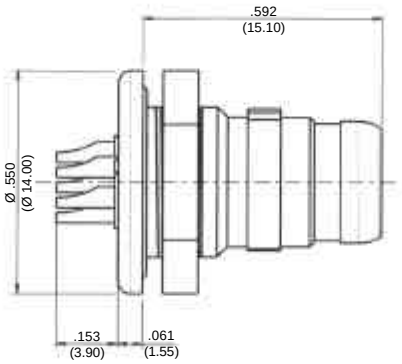
Panel Nut - Torque to 2.25Nm = 1.65 foot pounds force

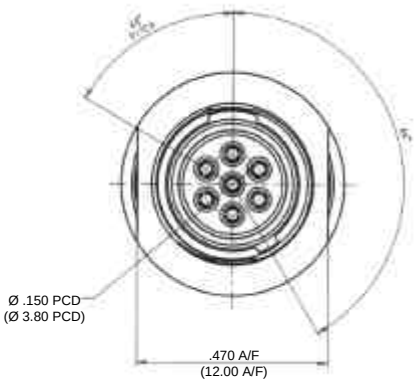
All Dimensions are for reference only
(Dimensions in brackets are in mm)

SCE-X-76A06-XXSX-002

Rear Mount Plug
Solder Bucket Contacts





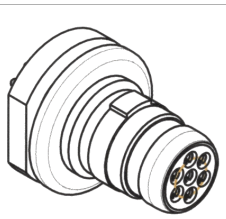


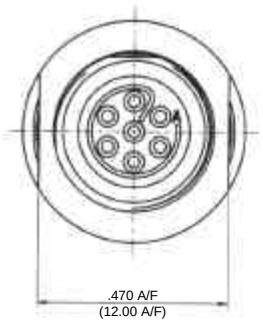
Panel Nut - Torque to 2.25Nm = 1.65 foot pounds force

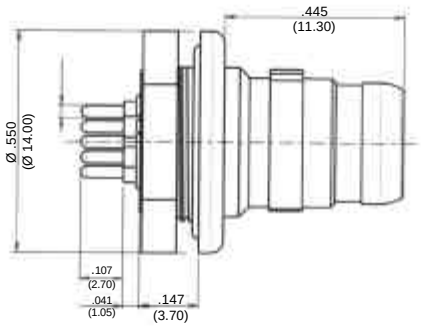
All Dimensions are for reference only
(Dimensions in brackets are in mm)

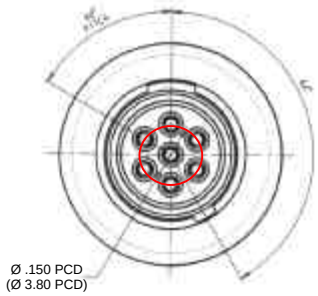
SCE-X-67A06-XXSX-001

Front Mount Plug
PCB Contacts







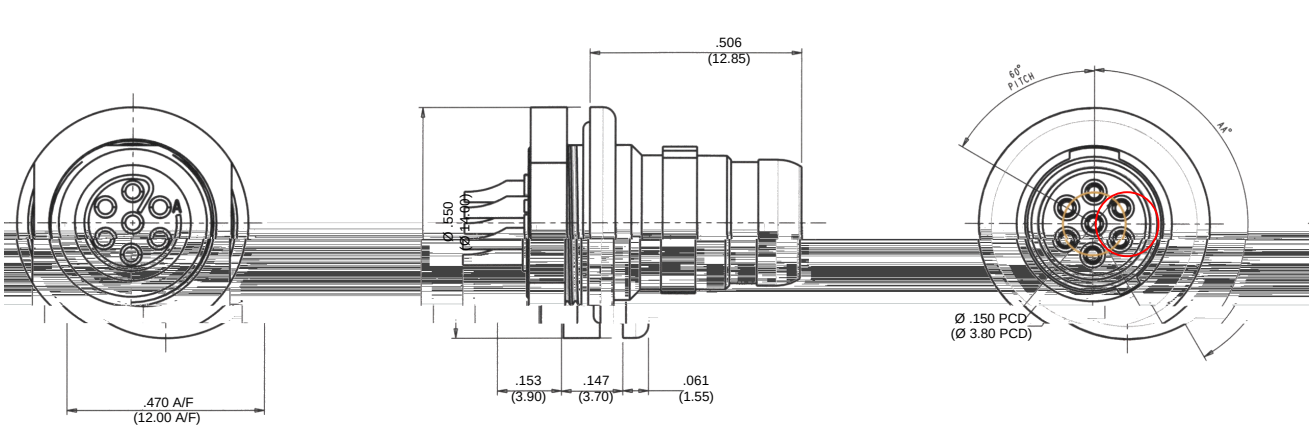


Panel Nut - Torque to 2.25Nm = 1.65 foot pounds force

All Dimensions are for reference only
(Dimensions in brackets are in mm)

SCE-X-67A06-XXSX-002

Front Mount Plug
Solder Bucket Contacts

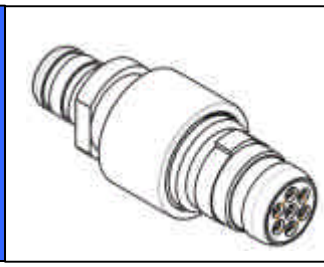


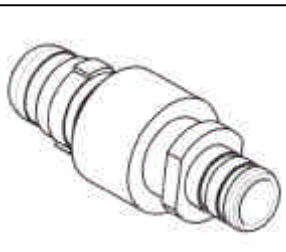
Panel Nut - Torque to 2.25Nm = 1.65 foot pounds force

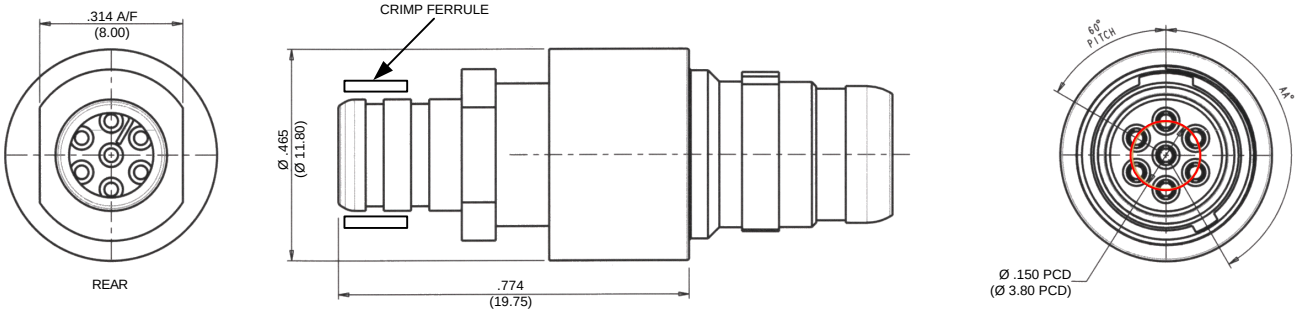
All Dimensions are for reference only
(Dimensions in brackets are in mm)

SCE-X-06T06-XXSX-003

In Line Plug
Solder Bucket Contacts only
(complete with Backshell)



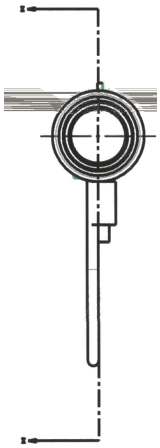


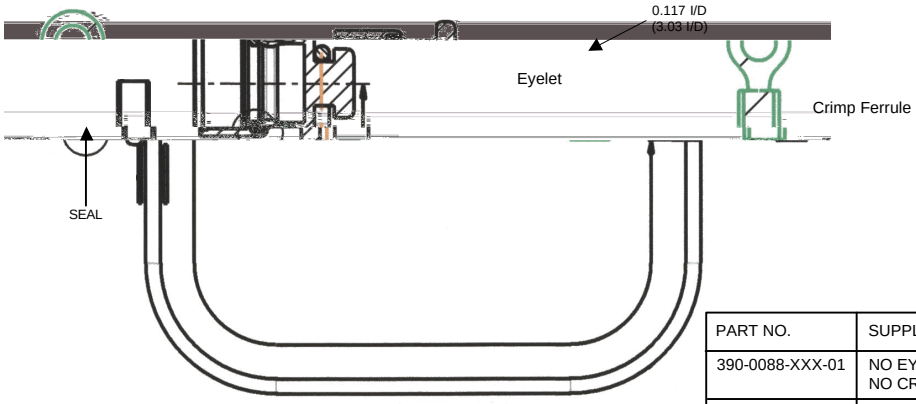


Drawings show Receptacle with Backshell

All Dimensions are for reference only
(Dimensions in brackets are in mm)

390-0088-130-XX
Plug Dust Cap Assembly





PART NO.	SUPPLY WITH
390-0088-XXX-01	NO EYELET NO CRIMP FERRULE
390-0088-XXX-02	CRIMP FERRULE NO EYELET
390-0088-XXX-03	EYELET NO CRIMP FERRULE

PART NUMBER INFORMATION

390 - 0088 - 130 - XX

SERIES

STYLE – PROTECTIVE CAP
FOR SCE PLUG

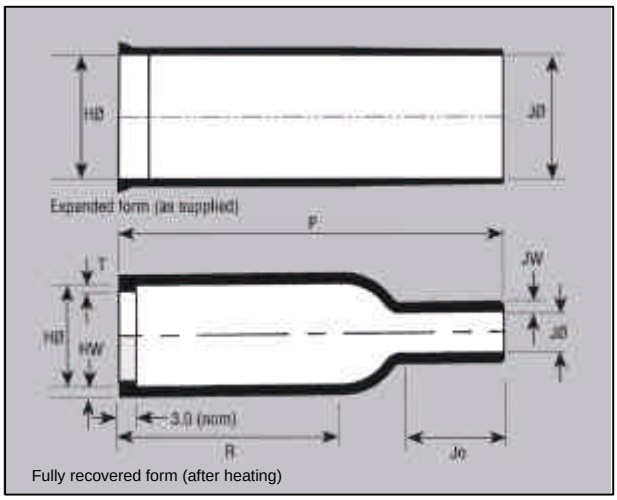
CRIMP/EYELET - SEE TABLE 1

CORD LENGTH (in mm)

All Dimensions are for reference only
(Dimensions in brackets are in mm)

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.

100 Series – Bottle Shapes with Rib – MIL Style



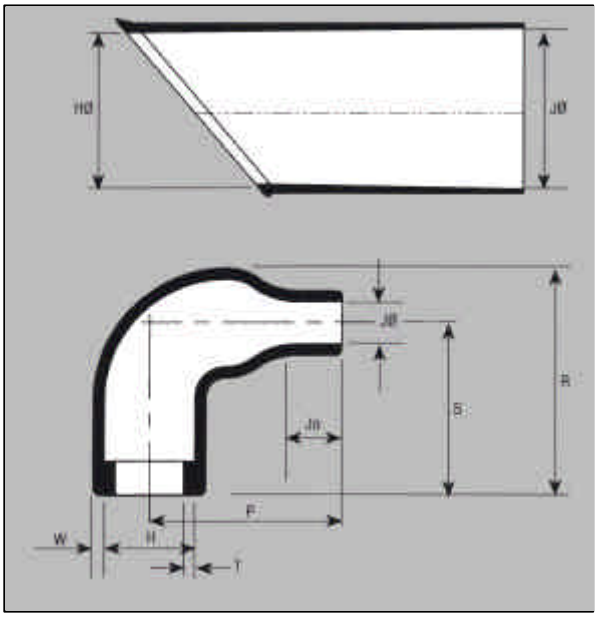
Fully recovered form (after heating)

This style is used in conjunction with the backshell (see page 13) 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	H	H -H matl	JØ	J -H matl	H	JØ	P ±10%	R ±10%	Jo ±10%	HW ±10%	JW ±10%	T ±10%
113-4-G-WM250	0.3976 (10.7)	0.3976 (10.7)	0.1811 (4.6)	0.1811 (4.6)	0.3110 (7.9)	0.0787 (2.0)	1.0 (25.4)	0.5709 (14.5)	0.1811 (4.6)	0.0512 (1.3)	0.0512 (1.3)	0.0394 (1.0)

1100 Series – Right Angle Shapes with Rib – MIL Style



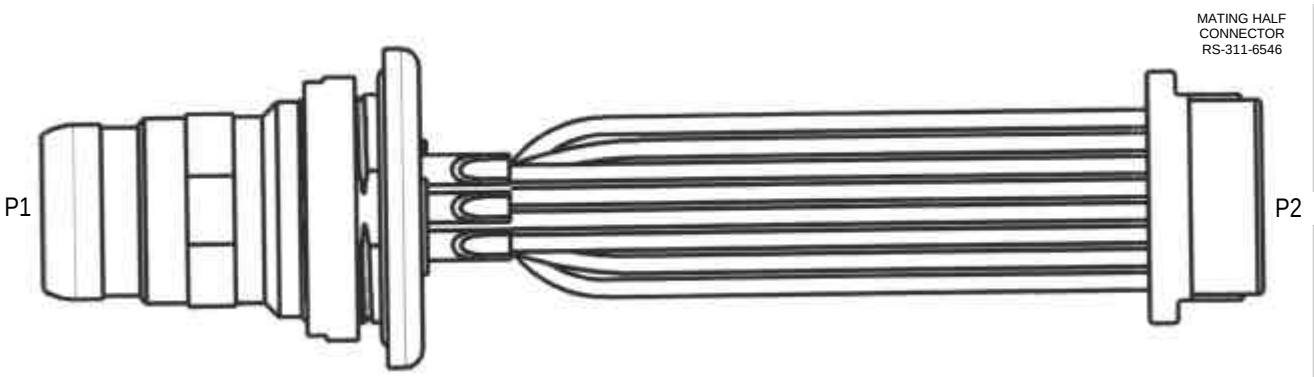
Fully recovered form (after heating)

The style provides strain relief for harness systems when used in conjunction with the backshell (see page 13)

Dimensions apply to all materials unless otherwise indicated

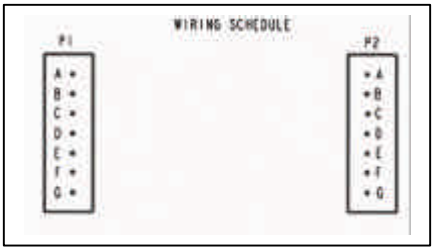
	Expanded (Min)		Recovered (Max)		Recovered Dimensions Fully Shrunk					
Hellermann Part No	H	JØ	H	JØ	P ±10%	R ±10%	S ±10%	Jo ±10%	W ±20%	T ±20%
1108-4-G-WM250	0.6496 (16.5)	0.6496 (16.5)	0.3110 (7.9)	0.1496 (3.8)	0.6875 (17.3)	0.7969 (20.1)	0.6005 (15.2)	0.1614 (4.1)	0.0394 (1.0)	0.0394 (1.0)

20GB-SCE-6XXX-XXX
Jam Nut Plug Rear Mount to Header Assembly – Solder Bucket Contacts only



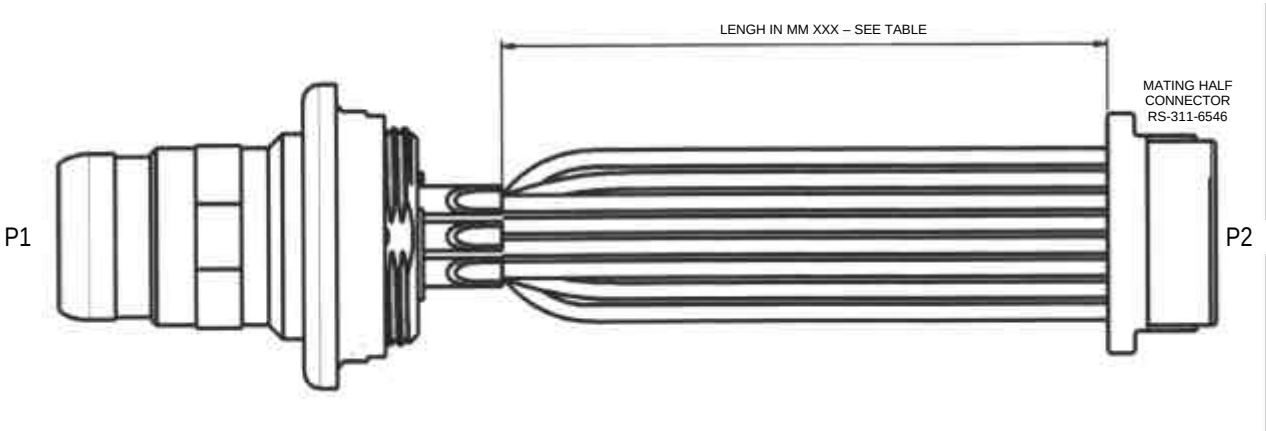
VARIANT	LENGTH XXX
025	25MM
050	50MM
075	75MM
100	100MM
125	125MM
150	150MM

Please contact Amphenol Ltd for full part numbering information



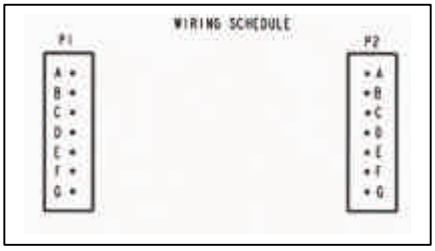
Panel Nut - Torque to 2.25Nm = 1.65 foot lbs force

20GB- SCE-6XXX-XXX
Jam Nut Plug Front Mount to Header Assembly – Solder Bucket Contacts only



VARIANT	LENGTH XXX
025	25MM
050	50MM
075	75MM
100	100MM
125	125MM
150	150MM

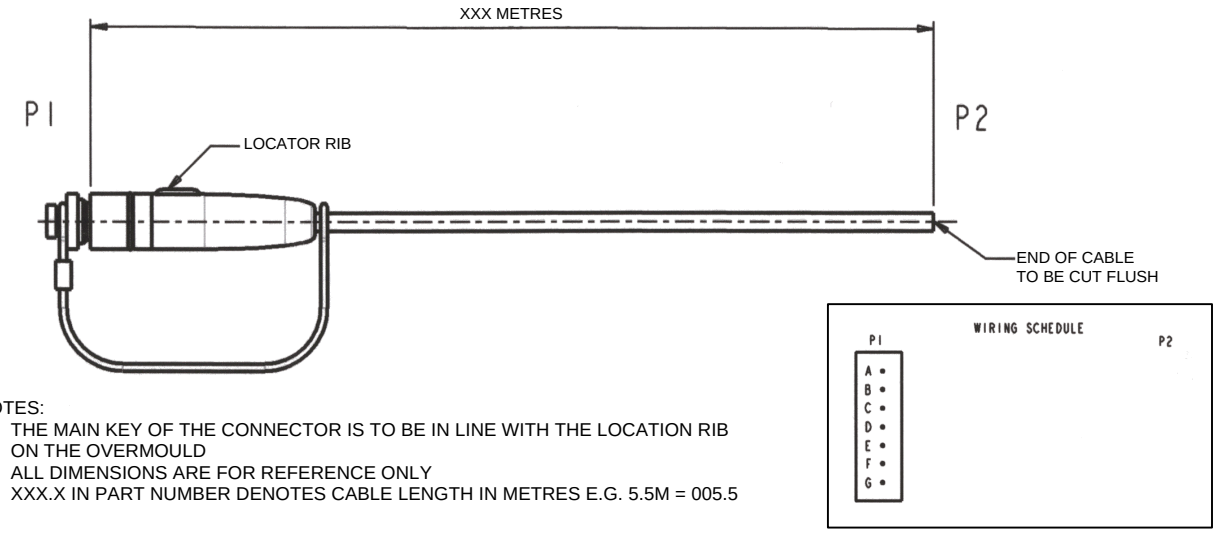
Please contact Amphenol Ltd for full part numbering information



Panel Nut -Torque to 2.25Nm = 1.65 foot lbs force

Amphenol Ltd can supply complete overmoulded cable harness solutions to your specifications. The following templates are of common harness configurations. Please consult factory for cable number allocation.

Up to 7 Way Single-Ended Receptacle Cable Assembly



NOTES:
1. THE MAIN KEY OF THE CONNECTOR IS TO BE IN LINE WITH THE LOCATION RIB ON THE OVERMOULD
2. ALL DIMENSIONS ARE FOR REFERENCE ONLY
3. XXX.X IN PART NUMBER DENOTES CABLE LENGTH IN METRES E.G. 5.5M = 005.5

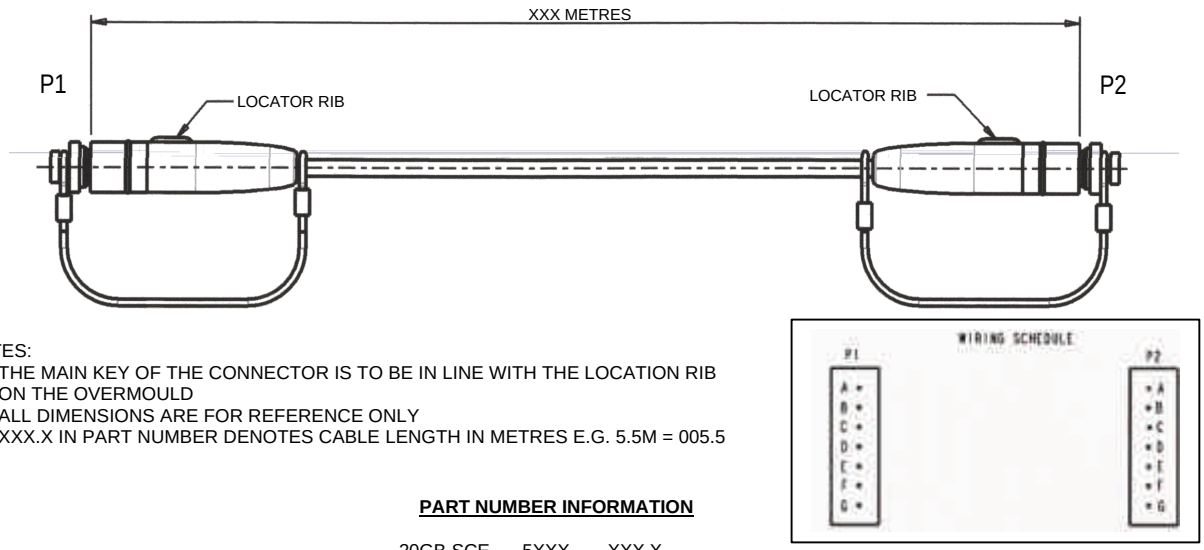
PART NUMBER INFORMATION

20GB SCE - 5XXX - XXX.X

- 20GB SCE — CONNECTOR SERIES
- 5XXX — TECHNICAL DESCRIPTION - CONSULT PRODUCT SUPPORT AT SCE@AMPHENOL.CO.UK FOR HARNESS NUMBER ALLOCATION
- XXX.X — CABLE LENGTH

All Dimensions are for reference only
(Dimensions in brackets are in mm)

Up to 7 Way Double-Ended Receptacle to Receptacle Cable Assembly



NOTES:
1. THE MAIN KEY OF THE CONNECTOR IS TO BE IN LINE WITH THE LOCATION RIB ON THE OVERMOULD
2. ALL DIMENSIONS ARE FOR REFERENCE ONLY
3. XXX.X IN PART NUMBER DENOTES CABLE LENGTH IN METRES E.G. 5.5M = 005.5

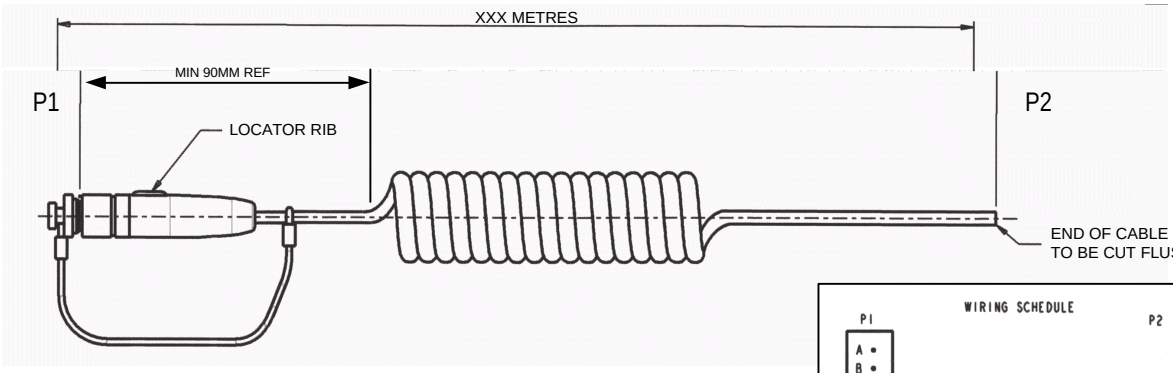
PART NUMBER INFORMATION

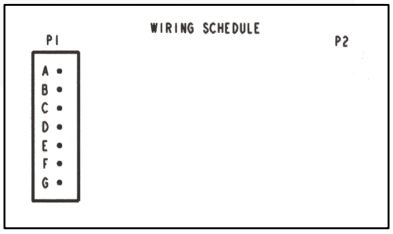
20GB SCE - 5XXX - XXX.X

- 20GB SCE — CONNECTOR SERIES
- 5XXX — TECHNICAL DESCRIPTION - CONSULT PRODUCT SUPPORT AT SCE@AMPHENOL.CO.UK FOR HARNESS NUMBER ALLOCATION
- XXX.X — CABLE LENGTH

All Dimensions are for reference only
(Dimensions in brackets are in mm)

Up to 7 Way Single-Ended Receptacle Coiled Cable Assembly





NOTES:
1. THE MAIN KEY OF THE CONNECTOR IS TO BE IN LINE WITH THE LOCATION RIB ON THE OVERMOULD
2. ALL DIMENSIONS ARE FOR REFERENCE ONLY
3. XXX.X IN PART NUMBER DENOTES CABLE LENGTH IN METRES E.G. 5.5M = 005.5

PART NUMBER INFORMATION

20GB SCE - 5XXX - XXX.X

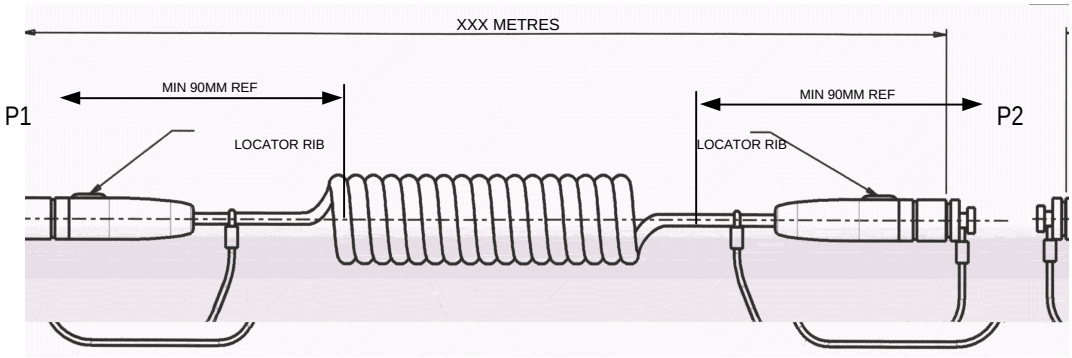
CONNECTOR SERIES

CABLE LENGTH

TECHNICAL DESCRIPTION CONSULT PRODUCT SUPPORT AT SCE@AMPHENOL.CO.UK HARNESS NUMBER ALLOCATION

All Dimensions are for reference only
(Dimensions in brackets are in mm)

Up to 7 Way Double-Ended Receptacle to Receptacle Coiled Cable Assembly



NOTES:
1. THE MAIN KEY OF THE CONNECTOR IS TO BE IN LINE WITH THE LOCATION RIB ON THE OVERMOULD
2. ALL DIMENSIONS ARE FOR REFERENCE ONLY
3. XXX_X IN PART NUMBER DENOTES CABLE LENGTH IN METRES E.G. 5.5M = 005.5

PART NUMBER INFORMATION

20GB SCE - 5XXX - XXX.X

CONNECTOR SERIES

CABLE LENGTH

TECHNICAL DESCRIPTION - CONSULT PRODUCT SUPPORT AT SCE@AMPHENOL.CO.UK FOR HARNESS NUMBER ALLOCATION

All Dimensions are for reference only
(Dimensions in brackets are in mm)

SCE - X - XXX 06 - XX X X XXX

Series

Material
B - Black Silver Plated
F - Electroless Nickel Plated
S - Stainless Steel
Z - Zinc Cobalt Olive Drab
W - Cadmium Olive Drab

Style
67A = Front Mount Jam Nut Plug
76A = Rear Mount Jam Nut Plug
60T = Sq Flange 4 Hole Plug
26T = 2 Hole Mount Plug
06T = Inline Plug
07A = Rear Mount Jam Nut Rec
17A = Front Mount Jam Nut Rec
00A = Sq Flange 4 Hole Receptacle
20A = 2 Hole Mount Receptacle
01T = Inline Receptacle

NOTE:
Mounting
T = Accessory Threaded Shell
A = Non Threaded Shell

Shell Size – 06 only

Termination
001 = Pin Tail Contacts
Plug only
002 = Solder Bucket Contacts
Plug only
003 = Backshell and Ferrule
Solder Bucket Contacts
Receptacle only

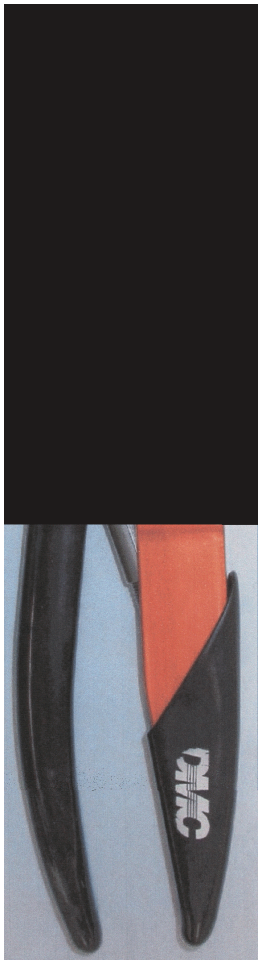
Keyway Orientations
A
B

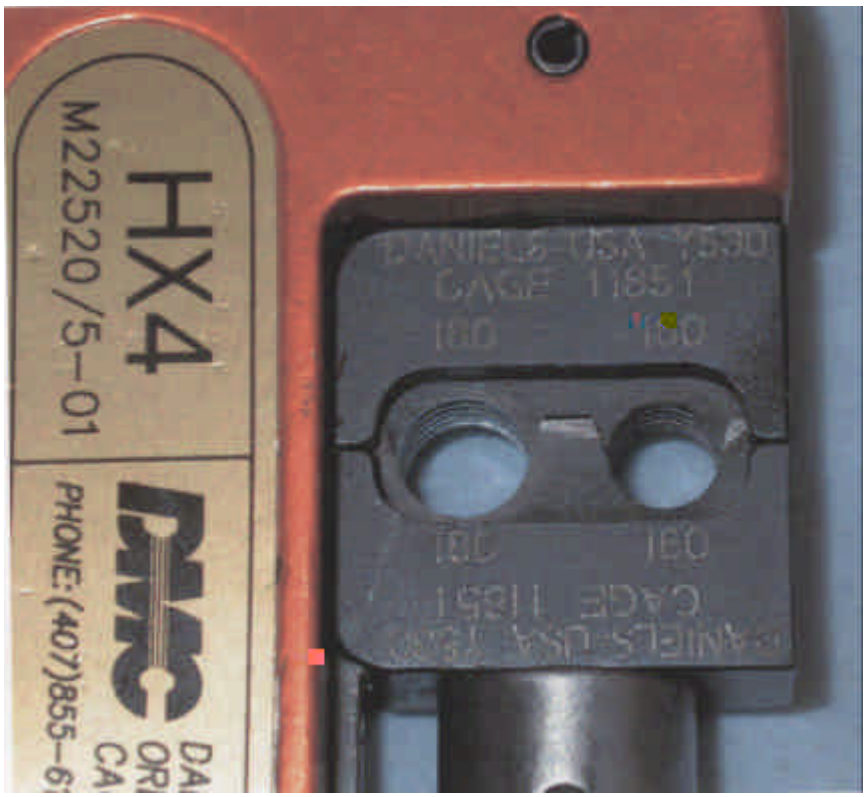
Contact Style
P = Pin for Receptacles only
S = Socket for Plugs only

Number of Contacts
05 = Five Contacts
06 = Six Contacts
07 = Seven Contacts

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.





Amphenol Thanet Way, Whitstable, Kent. CT5 3JF Tel: 01227 773200 Fax: 01227 276571