Amphenol®

TERRAPIN

Miniature Rugged Connector Series

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Intended for harsh environment applications and used extensively in soldier communications, Amphenol Terrapin is a miniature series of circular push-pull connectors. Within a rugged shell design Terrapin offers superior EMC performance and high environmental sealing to IP68. Resilient in severe battlefield situations the RoHS compliant black-silver plating is both low-lustre and corrosion resistant. Featuring an optional locking mechanism, multiple shell sizes with up to 37 contacts and suitability for overmoulding, Terrapin is the preferred choice for miniature connectors in military and other harsh environment applications.

Terrapin shells are machined from brass giving an increased number of mating cycles and higher degree of robustness over traditional aluminium connectors. Five different keying options are available to prevent mis-mating; N, A, B, C and D. Standard plating is non-reflective black-silver, alternative plating finishes are available upon request.

Terrapin is available in two different styles of mating; either Snatch, being a break-away connector with no moving parts, or Latch, which has an additional coupling ring allowing connections to be locked together. The same plug can be mated to either snatch or latch receptacles. Both styles of product are waterproof to IP68 in both their mated and unmated conditions.

Amphenol offer a full range of cable harness solutions with standard or customised overmoulding. Alternatively, for field termination, both integral and threaded backshell connectors can be terminated with screen retention straps and heatshrink boots giving full 360˚ screening.

The customised design specification of Terrapin lends itself to a variety of applications. The high degree of sealing offered by Terrapin makes it perfect for Unmanned Ground Sensors and Surveillance equipment. Whatever the application, Terrapin offers space savings and improved durability over traditional interconnect products. Other applications include first responder and soldier mounted communication applications such as radios, headsets and GPS units, Terrapin is also suitable for Gigabit Ethernet and USB 2.0 and used widely on Computer Systems, LAN Switches and Routers.

Contents

Terrapin terminology

L1T

Body

Backshell

Crimp ferrule

L1K

Coupling ring

Integral backshell

01K

Integral backshell for direct screen termination

Terrapin mating options

Chassis Mount Plug SCE2-B-76A

The same chassis mount plug will mate with both snatch and latch receptacles

Snatch Inline Receptacle SCE2-B-01K

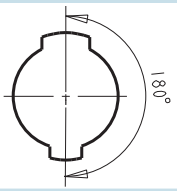
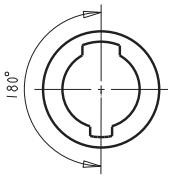
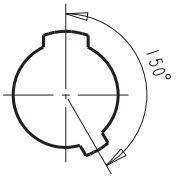
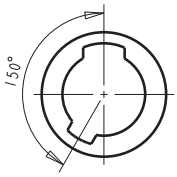
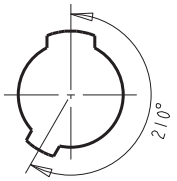
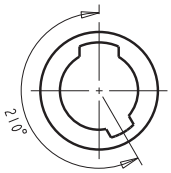
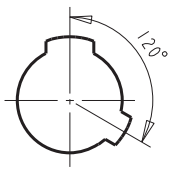
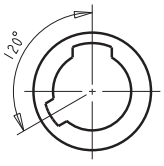
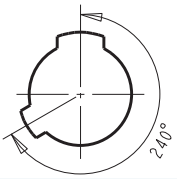
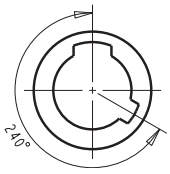
Latch Inline Receptacle SCE2-B-L1K

Terrapin part numbering

Example: **SCE2–B–76A06–07SN–002** | (985) for optional grounding spring in L1K and L1T | (981) castellated panel nut

SCE2–	B–	XXX	XX–	XX	–X	X–	XXX
Series identifier	**Plating finish** B = Brass with Black Silver (RoHs) ZN = Aluminium with Black Zinc Nickel (RoHs)	**Style** Plugs 76A 67A 06K 06T 76T Receptacles 01K L1K 01T L1T 07A 71A	**Shell size and**	**number of contacts** 06-07 07-10A 07-12 07-14 08-19 09-26 10-37 High Density: 06-09 07-19 (See page 7)	**Contact style** P = Pins S = Sockets	**Key orientation** N = Normal A B C D (See diagrams below)	**Variant code** 001 PC Tails 002 Solder Buckets 003 Backshell

Terrapin plug and receptacle keyway orientation

Keyway orientation letter	PLUG keyway orientation	RECEPTACLE keyway orientation
N		
A		
B		
C		
D		

Terrapin performance information

Test/parameter	Description
Electrical	
Current Rating	28 AWG contacts: 1.5A d.c.
	23 AWG contacts: 3A d.c.
	20 AWG contacts: 7.5A d.c.
Shell to Shell Continuity	10mΩ max (screened)
Contact Resistance	5mΩ initial
	10mΩ maximum
Insulation Resistance	1000MΩ minimum, production tested to 500MΩ*
Working Voltage	AC (RMS) 400V contact dependant
Dielectric Withstanding Voltage	2mA maximum leakage
Technical	
Mating Durability	2000+ cycles
Backshell Recommended Torque	19.914 lb.f.in / 2.25Nm
Panel Nut Recommended Torque	19.914 lb.f.in / 2.25Nm
Non-magnetic	Yes
Environmental	
Operating Temperature Range	-55°C to +125°C
Temperature Endurance	250 hours +125°C
Sealing (mated and unmated)	IP68, 1 hour at 2 metres*
Air Leakage	Less than 1cc per hour
Salt Spray	1000 hours
Altitude Immersion	70,000 Feet
RoHS Compliant	Yes
Suitable for RoHS compliant Soldering	Yes

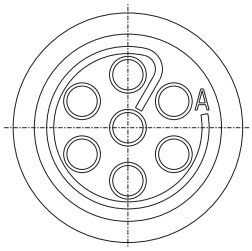
*Consult the factory if greater rating is required

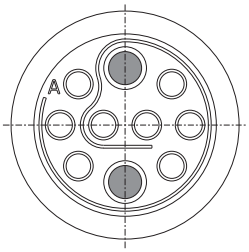
Terrapin insert availability

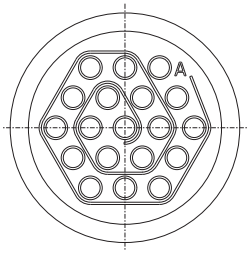
View shown for reference / View from rear of plug*

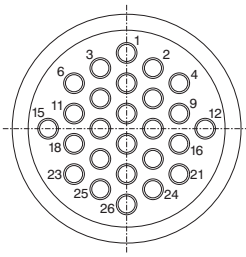
Shell size

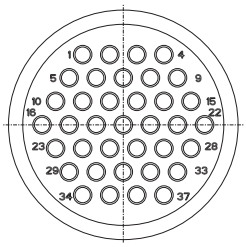
06	07	08	09	10
06–07	07–10A	08–19	09–26	10–37



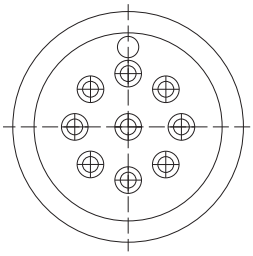


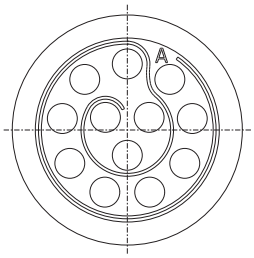






06–09	07–12





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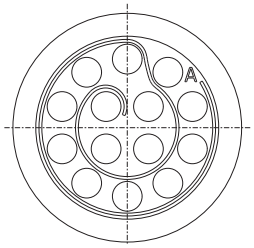

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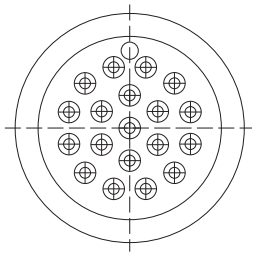


○ 23AWG contacts
● 20AWG contacts
⊕ 28 AWG contacts

*View from rear of receptacle is mirror image of above.

NEW High Density Terrapin

Key Features

- Higher density planform arrangements
- Reduced contact pitch
- Contact size reduced from 23AWG to 28AWG
- Up to 1.5A d.c.
- Two HD planform options; #06-09 or #07-19 giving two extra contacts in shell size #06 and five extra contacts in a shell size #07
- Ideal for low current applications with footprint constraints

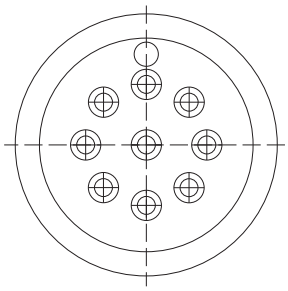
Two new high density planforms of Terrapin connector have been designed specifically to carry more signals in a smaller package than ever before.

Both the shell size #06 and #07 Terrapin connectors are now offered with a fully populated high density insert. The new higher density inserts feature a smaller 28AWG contact compared to the standard 23AWG contacts used throughout the standard product range.

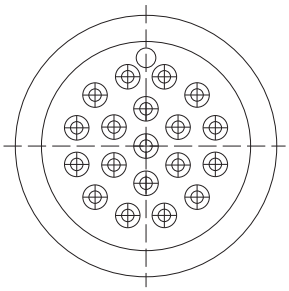
The shell size #06 Terrapin shell, previously housing seven size 23AWG contacts is now available with nine size 28AWG contacts and the shell size #07 Terrapin shell, previously having a maximum of fourteen size 23AWG contacts is now available with 19 contacts.

The High Density (HD) Terrapin connectors enable additional data lines compared to the standard product and so are perfect for those applications where space is at a premium.

The new HD Terrapin connectors are some of the first to be built using the latest robotic equipment purchased by Amphenol Ltd in response to increasing customer demand.



06-09



07-19

How to order

Simply choose 06-09 or 07-19 planform arrangement from page 7 e.g. **SCE2-B-76A06-09SN-001**

NEW Aluminium Terrapin – 50% Lighter

Key Features

- Weight reduction
- Up to 50% lighter
- Aluminium Shell
- RoHS Black Zinc Nickel Plating
- Temperature range –55°C to +125°C
- IP68 sealing as standard
- 500hrs salt spray
- Ideal for handheld equipment or weight critical applications

Amphenol's Terrapin connector series is now available in a new lightweight Aluminium option. Terrapin connectors have long been used in military communications equipment so this new extension to the product range is perfectly suited not only to weight critical soldier system applications but also industrial applications such as hand-held instrumentation.

The entire Terrapin product range is now available in this new lightweight Aluminium shell material and finished in the latest RoHS compliant, Cadmium Free, Black Zinc Nickel plating finish. Typical weight savings are as much as 50% compared to standard Terrapin connectors made from Brass.

All popular performance features and high specifications of the original Terrapin product range have been retained, i.e. IP68 sealing in mated and unmated conditions, planforms up to 37 contacts, integral backshell for low cost overmoulding and of course the unique mating mechanism which allows the same plug to mate with either break-away or locking receptacles.

The new Lightweight Terrapin is fully intermateable and backwards compatible with original Terrapin connectors.

Aluminium Black Zinc Nickel

Brass Black Silver

How to order

Simply replace "B" in connector part number with "ZN" e.g. **SCE2-ZN-76A06-07SN-001**

NEW Micro-USB Terrapin

Key Features

- Industry standard Micro-USB interface
- High Speed USB 2.0 specification
- Backshell for strain-relief and screen termination
- Miniature footprint <16mmØ
- Intermateable with standard COTS Micro-USB plugs
- Ideal for ruggedisation of devices utilising the USB 2.0 protocol

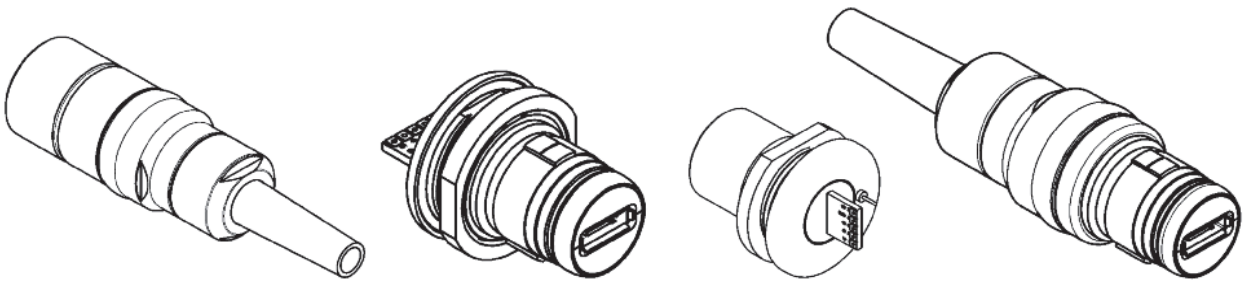
Amphenol's Terrapin connector series is now offered with a Micro-USB interface designed especially for harsh environment communication systems. This new product development combines the benefits of a rugged and IP68 sealed connector with the recognised technology of Micro-USB.

Micro-USB technology, widely used on equipments such as PDAs and Smartphones, provides total mobile interconnectivity by enabling portable devices to communicate directly with each other without the need for a host computer. By incorporating Micro-USB technology into the renowned Terrapin connector Amphenol Ltd can offer advantages of increased durability and reliability for USB data transmission in harsh environment applications.

The shell design of the Terrapin Series ensures blind mating of receptacle to plug and IP68 sealing in both mated and un-mated conditions. Available in various RoHS compliant plating finishes Terrapin Micro-USB connectors are suitable for both military and industrial applications.

Jam nut style connectors are available with either a Micro-B plug or Micro-AB receptacle insert and feature a grounding post on the shell for screening as well as a PCB board for termination.

Mating cable-mount connectors in either latch or break-away styles are available either as individual connectors or as pre-terminated overmoulded cable assemblies.

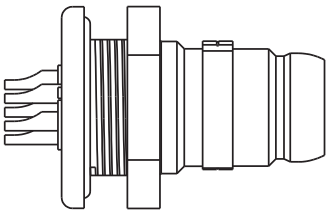


How to order

Request CPD drawings from factory for part numbers beginning **SCE2USB...**

Plugs – table of styles

SCE2-X-76A
Page 12



SCE2-X-67A
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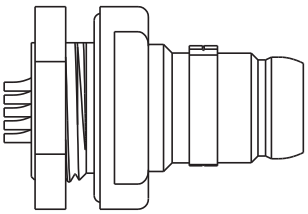

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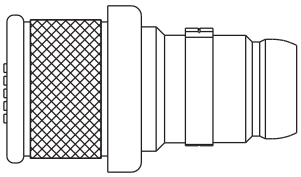
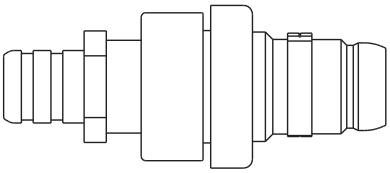


SCE2-X-06T
Page 15



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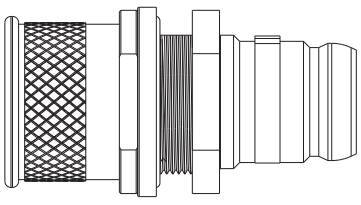
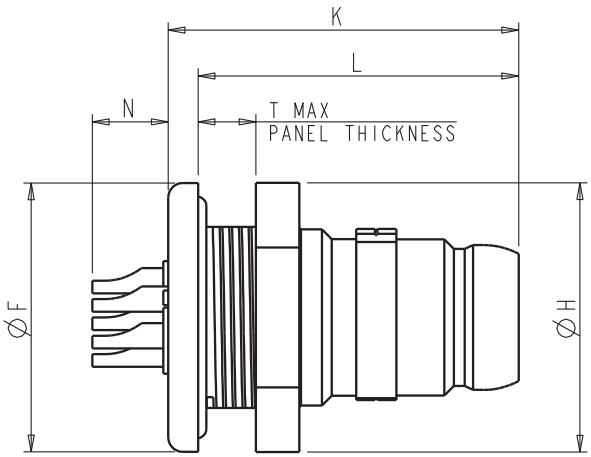


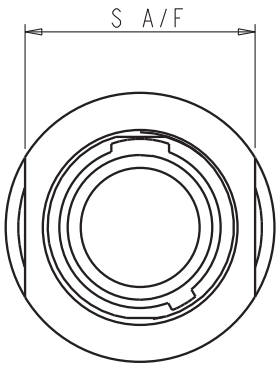
Plug

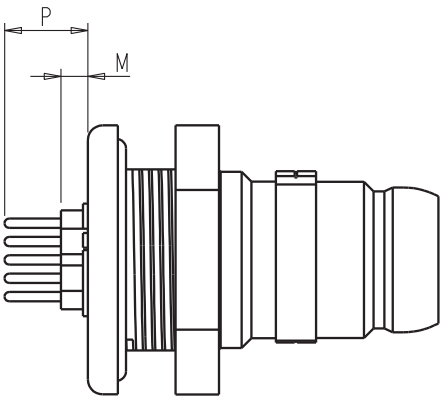
SCE2-X-**76A**XX-XXSX-XXX

- Rear Mount Jam Nut Plug



SOLDER BUCKET TYPE (-002)





PC TAIL TYPE (-001)

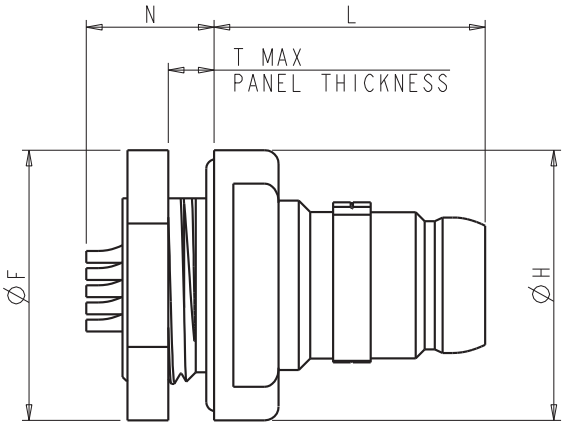
Shell Size	ØF	ØH	K	L	M	N	P	S A/F	T Max
Size 06	.550 (13.97)	.550 (13.97)	.716 (18.19)	.655 (16.64)	.055 (1.40)	.155 (3.94)	.170 (4.32)	.470 (11.94)	.118 (3.00)
Size 07	.620 (15.75)	.600 (15.24)	.716 (18.19)	.655 (16.64)	.055 (1.40)	.155 (3.94)	.170 (4.32)	.510 (12.95)	.118 (3.00)
Size 08	.760 (19.30)	.760 (19.30)	.716 (18.19)	.655 (16.64)	.055 (1.40)	.155 (3.94)	.170 (4.32)	.706 (17.93)	.118 (3.00)
Size 09	.890 (22.61)	.830 (21.08)	.802 (20.37)	.725 (18.42)	.114 (2.90)	.069 (1.75)	.234 (5.94)	.745 (18.92)	.125 (3.18)
Size 10	.930 (23.62)	.900 (22.86)	.802 (20.37)	.725 (18.42)	.114 (2.90)	.069 (1.75)	.234 (5.94)	.808 (20.52)	.125 (3.18)

All dimensions are in inches (mm shown in brackets) and are for reference only. Figure enlarged scale.

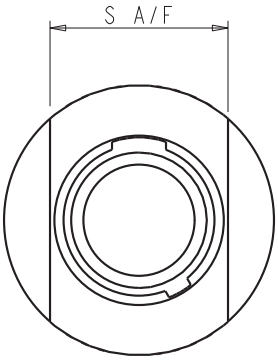
Plug

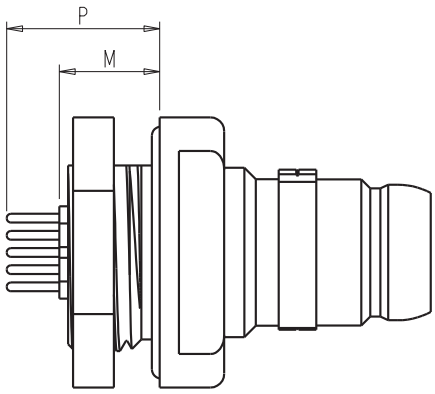
SCE2-X-**67A**XX-XXSX-XXX

- Front Mount Jam Nut Plug



SOLDER BUCKET TYPE (-002)





PC TAIL TYPE (-001)

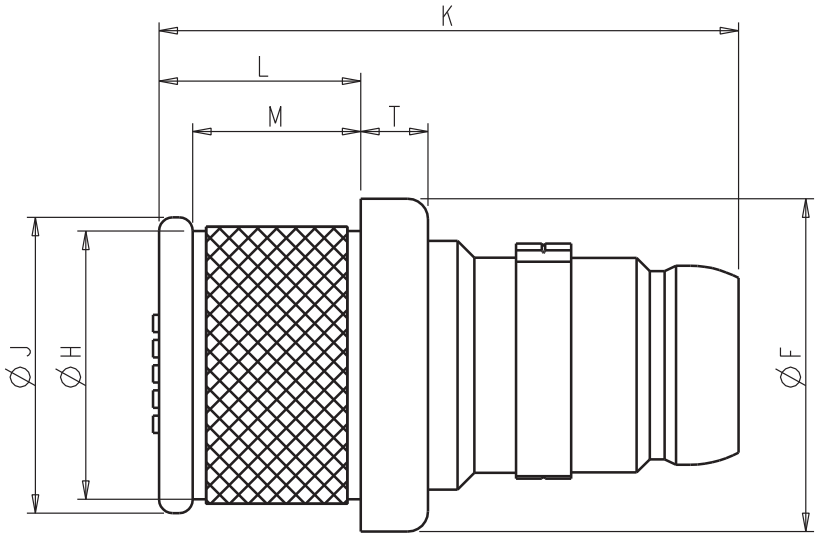
Shell Size	ØF	ØH	L	M	N	P	S A/F	T Max
Size 06	.590 (14.99)	.590 (14.99)	.592 (15.04)	.324 (8.23)	.279 (7.09)	.424 (10.78)	.525 (13.34)	.100 (2.54)
Size 07	.750 (19.05)	.750 (19.05)	.592 (15.04)	.324 (8.23)	.279 (7.09)	.444 (11.27)	.665 (16.89)	.100(2.54)
Size 08	.760 (19.30)	.760 (19.30)	.592 (15.04)	.324 (8.23)	.279 (7.09)	.444 (11.27)	.706 (17.93)	.100 (2.54)
Size 09	.890 (22.61)	.890 (22.61)	.662 (16.82)	.254 (6.45)	.209 (5.31)	.354 (8.99)	.955 (24.26)	.100 (2.54)
Size 10	.930 (23.62)	.930 (23.62)	.662 (16.82)	.254 (6.45)	.209 (5.31)	.354 (8.99)	.995 (25.27)	.100 (2.54)

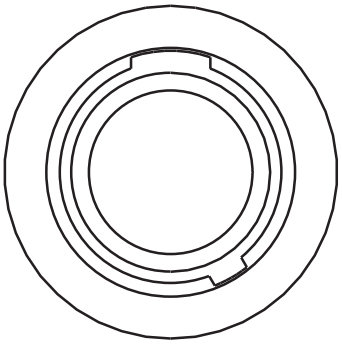
All dimensions are in inches (mm shown in brackets) and are for reference only. Figure enlarged scale.

Plug

SCE2-X-**06K**XX-XXSX

- Inline Plug Integral Backshell





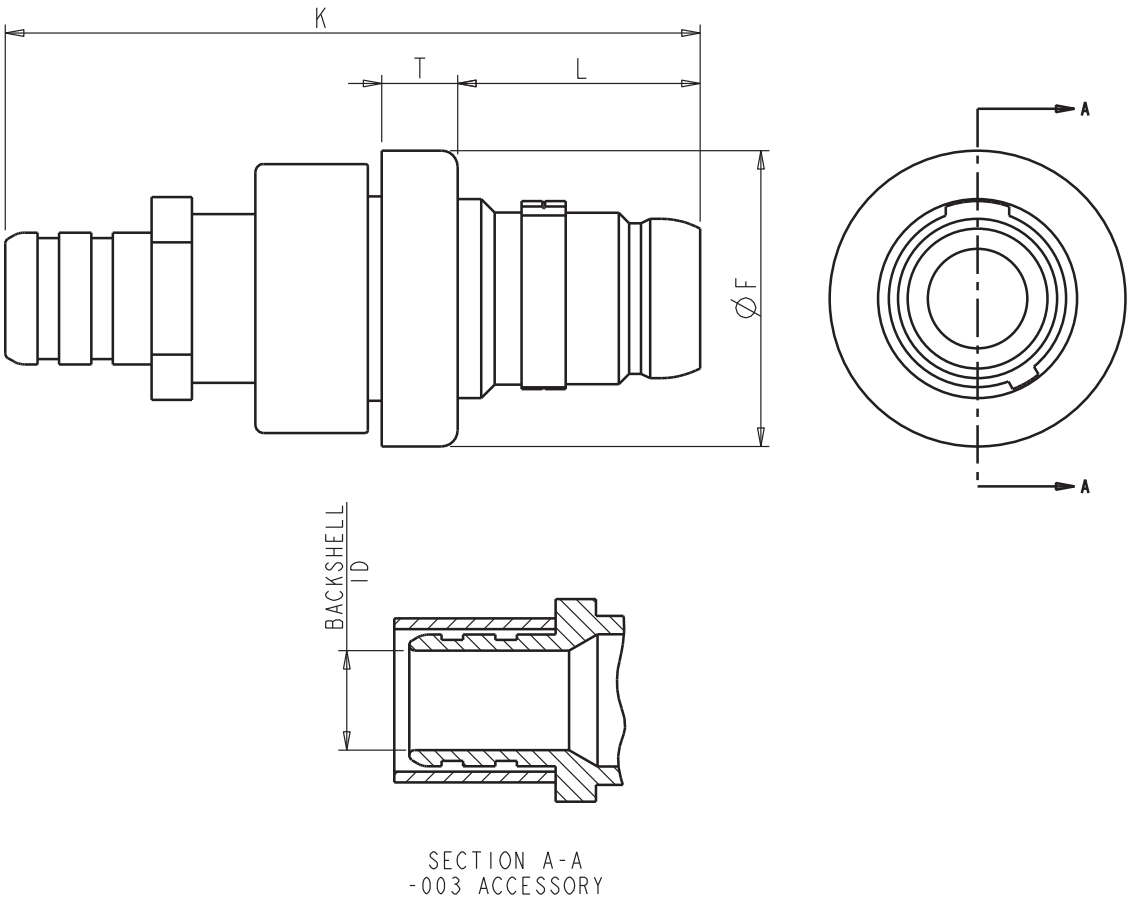
Shell Size	ØF	ØH	ØJ	K	L	M	T
Size 06	.495 (12.57)	.412 (10.46)	.440 (11.18)	.862 (21.89)	.300 (7.62)	.250 (6.35)	.100 (2.54)
Size 07	.575 (14.61)	.460 (11.68)	.505 (12.83)	.862 (21.89)	.300 (7.62)	.250 (6.35)	.100 (2.54)
Size 08	.650 (16.51)	.593 (15.06)	.620 (15.75)	.862 (21.89)	.300 (7.62)	.250 (6.35)	.100 (2.54)
Size 09	.720 (18.23)	.663 (16.84)	.690 (17.53)	.932 (23.67)	.317 (8.05)	.267 (6.78)	.100 (2.54)
Size 10	.790 (20.06)	.733 (18.61)	.760 (19.30)	.932 (23.67)	.317 (8.05)	.267 (6.78)	.100 (2.54)

All dimensions are in inches (mm shown in brackets) and are for reference only. Figure enlarged scale.

Plug

SCE2-X-**06T**XX-XXSX-003

- Inline Plug Threaded Backshell



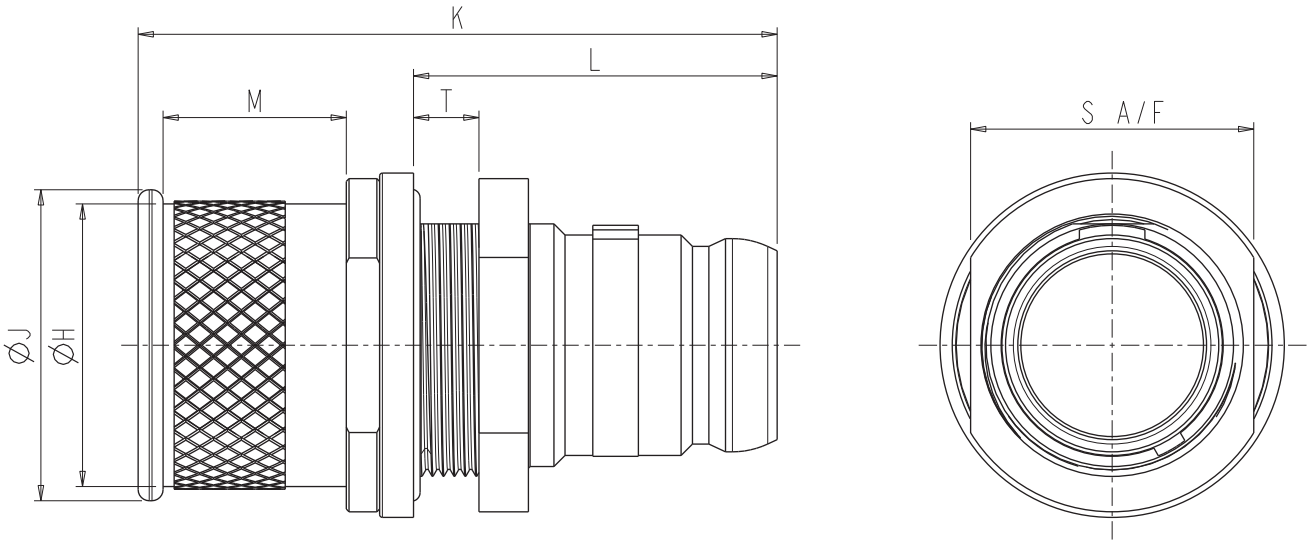
Shell Size	ØF	K	L	T	Backshell ID -003
Size 06	.550 (13.97)	1.292 (32.82)	.451 (11.46)	.141 (3.58)	.185 (4.70)
Size 07	.630 (16.00)	1.292 (32.82)	.451 (11.46)	.141 (3.58)	.265 (6.73)
Size 08	.705 (17.91)	1.292 (32.82)	.451 (11.46)	.141 (3.58)	.345 (8.76)
Size 09	.780 (19.81)	1.362 (34.60)	.521 (13.23)	.141 (3.58)	.425 (10.80)
Size 10	.855 (21.72)	1.362 (34.60)	.521 (13.23)	.141 (3.58)	.505 (12.83)

All dimensions are in inches (mm shown in brackets) and are for reference only. Figure enlarged scale.

Plug

SCE2-X-**76T**XX-XXSX-002

- Rear Mount Jam Nut Plug (Screw On Backshell)



Shell Size	ØH	ØJ	K	L	M	S A/F	T Max
Size 06	.460 (11.68)	.490 (12.45)	1.150 (29.21)	.655 (16.64)	.330 (8.38)	.470 (11.94)	.118 (3.00)
Size 07	.519 (13.18)	.560 (14.21)	1.150 (29.21)	.655 (16.64)	.330 (8.38) .	510 (12.95)	.118 (3.00)
Size 08	.700 (17.78)	.730 (18.53)	1.150 (29.21)	.655 (16.64)	.330 (8.38)	.706 (17.93)	.118 (3.00)
Size 09	.752 (19.10)	.793 (20.13)	1.237 (31.40)	.725 (18.42)	.330 (8.38)	.745 (18.92)	.125 (3.18)
Size 10	.860 (21.84)	.900 (22.86)	1.220 (30.99)	.725 (18.42)	.330 (8.38)	.808 (20.52)	.125 (3.18)

All dimensions are in inches (mm shown in brackets) and are for reference only. Figure enlarged scale.

Receptacles – table of styles

SCE2-X-01K
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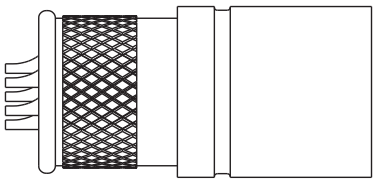

SCE2-X-L1K
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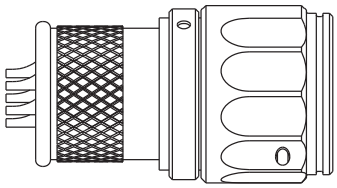

SCE2-X-01T
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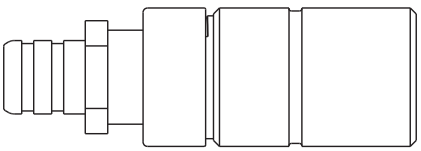

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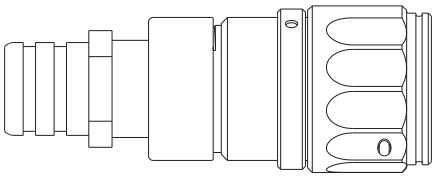

SCE2-X-07A
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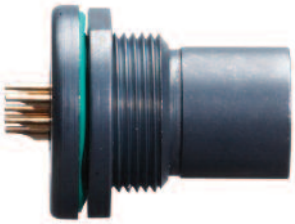
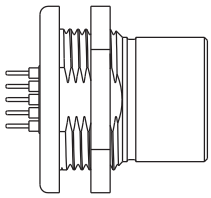
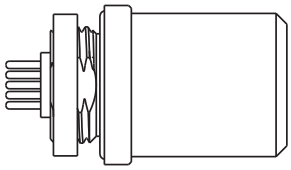




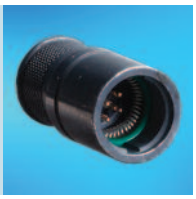
SCE2-X-71A
Page 23

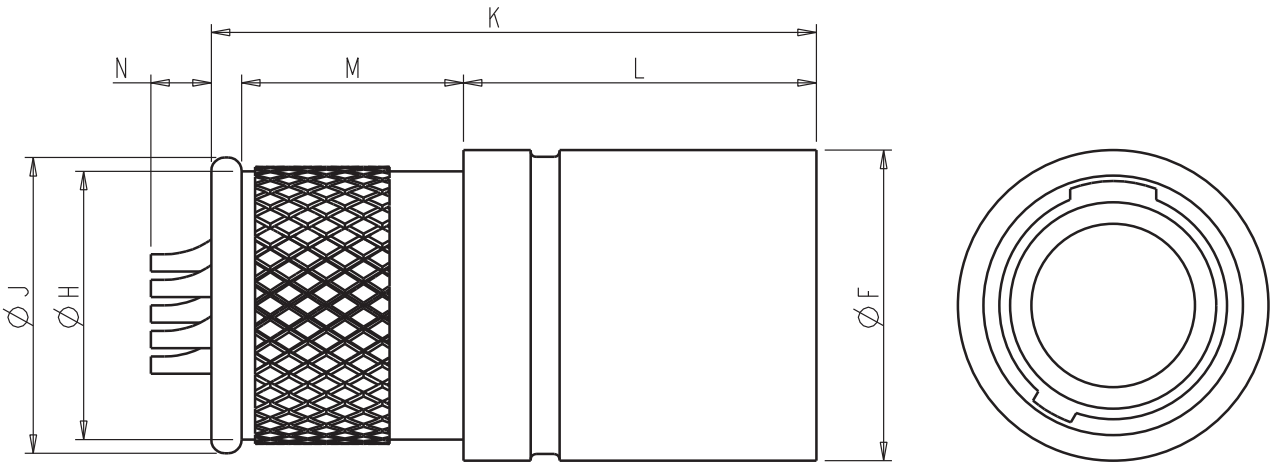


Receptacle

SCE2-X-**01K**XX-XXPX

- Inline Receptacle, Integral Backshell





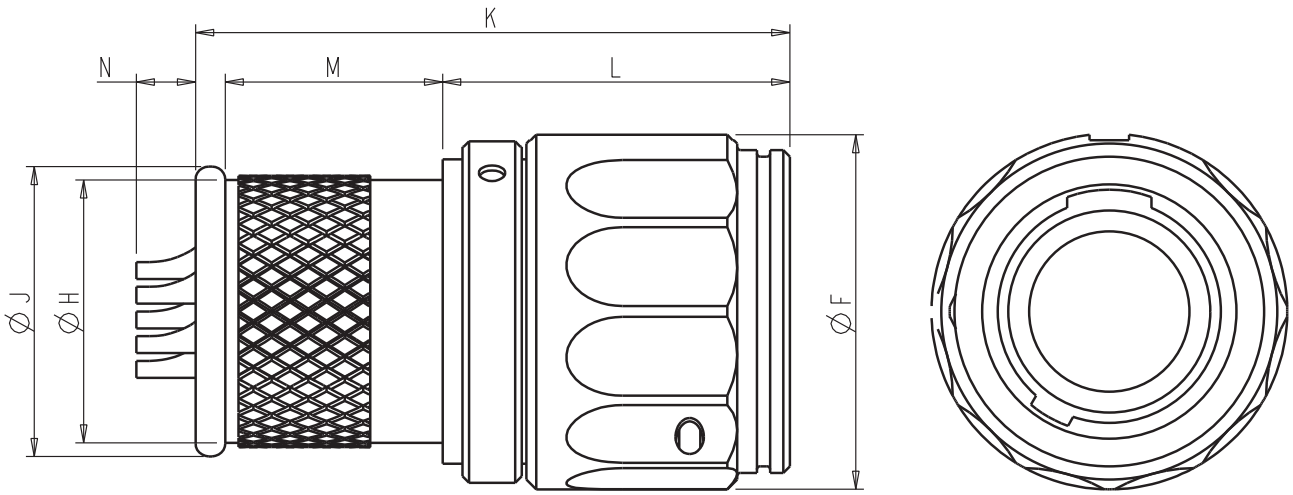
Shell Size	ØF	ØH	ØJ	K	L	M	N
Size 06	.462 (11.73)	.399 (10.13)	.440 (11.18)	.900 (22.86)	.525 (13.34)	.330 (8.38)	.090 (2.29)
Size 07	.575 (14.61)	.460 (11.68)	.505 (12.83)	.900 (22.86)	.525 (13.34)	.330 (8.38)	.090 (2.29)
Size 08	.620(15.75)	.581 (14.76)	.620 (15.75)	.900 (22.86)	.525 (13.34)	.330 (8.38)	.090 (2.29)
Size 09	.690 (17.51)	.651 (16.54)	.690 (17.53)	.970 (24.64)	.525 (13.34)	.400 (10.16)	.090 (2.29)
Size 10	.760 (19.29)	.721 (18.31)	.760 (19.30)	.970 (24.64)	.525 (13.34)	.400 (10.16)	.090 (2.29)

All dimensions are in inches (mm shown in brackets) and are for reference only. Figure enlarged scale.

Receptacle

SCE2-X-**L1K**XX-XXPX

- Inline Latching Receptacle, Integral Backshell



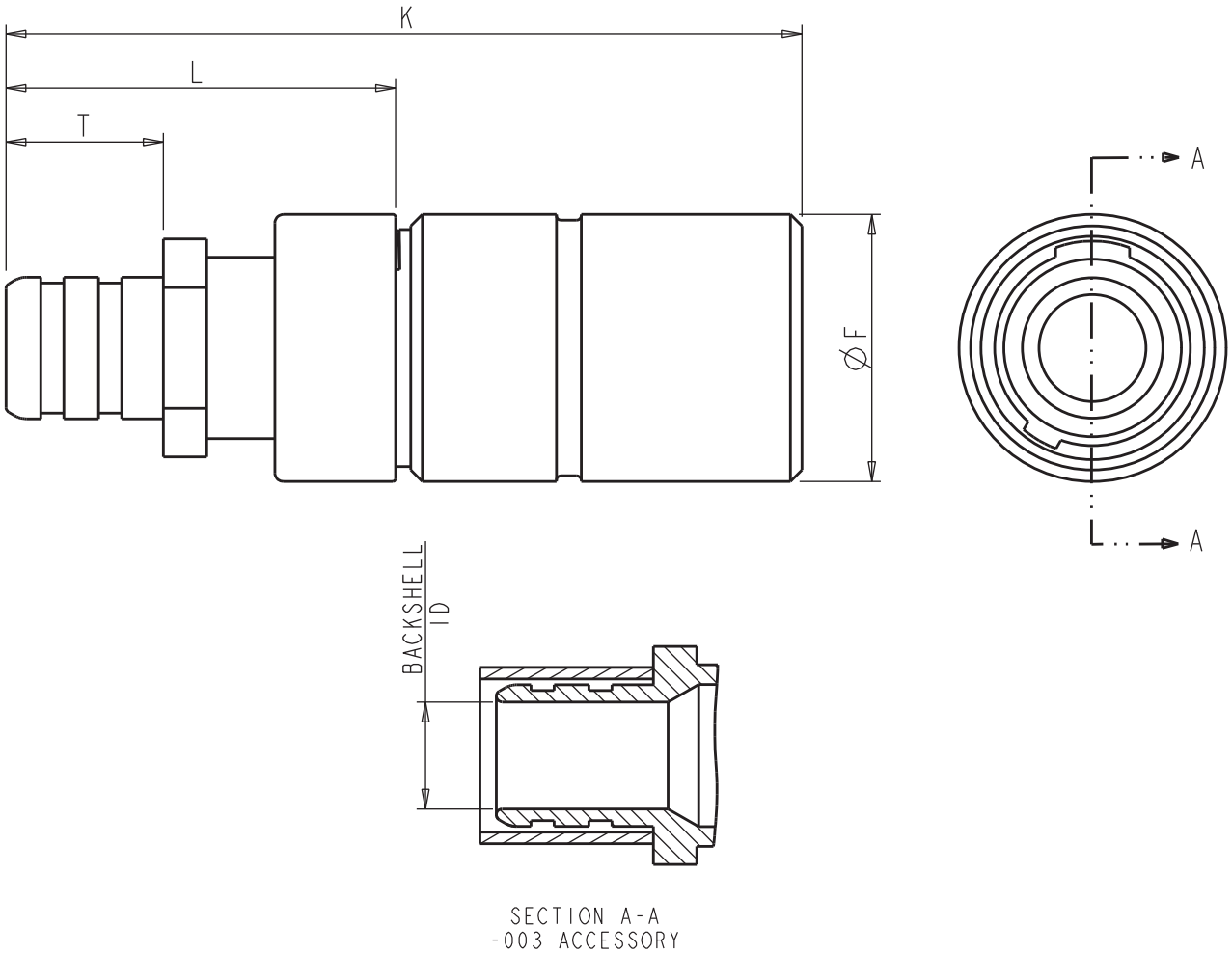
Shell Size	ØF	ØH	ØJ	K	L	M	N
Size 06	.540 (13.71)	.399 (10.14)	.440 (11.18)	.902 (22.91)	.527 (13.39)	.330 (8.38)	.090 (2.29)
Size 07	.610 (15.50)	.447 (11.35)	.505 (12.83)	.902 (22.91)	.527 (13.39)	.330 (8.38)	.090 (2.29)
Size 08	.700 (17.77)	.581 (14.75)	.620 (15.75)	.902 (22.91)	.527 (13.39)	.330 (8.38)	.090 (2.29)
Size 09	.770 (19.56)	.651 (16.54)	.690 (17.53)	.972 (24.69)	.527 (13.39)	.400 (10.16)	.090 (2.29)
Size 10	.840 (21.34)	.721 (18.31)	.760 (19.30)	.972 (24.69)	.527 (13.39)	.400 (10.16)	.090 (2.29)

All dimensions are in inches (mm shown in brackets) and are for reference only. Figure enlarged scale.

Receptacle

SCE2-X-**01T**XX-XXPX-003

- Inline Receptacle, Threaded Backshell



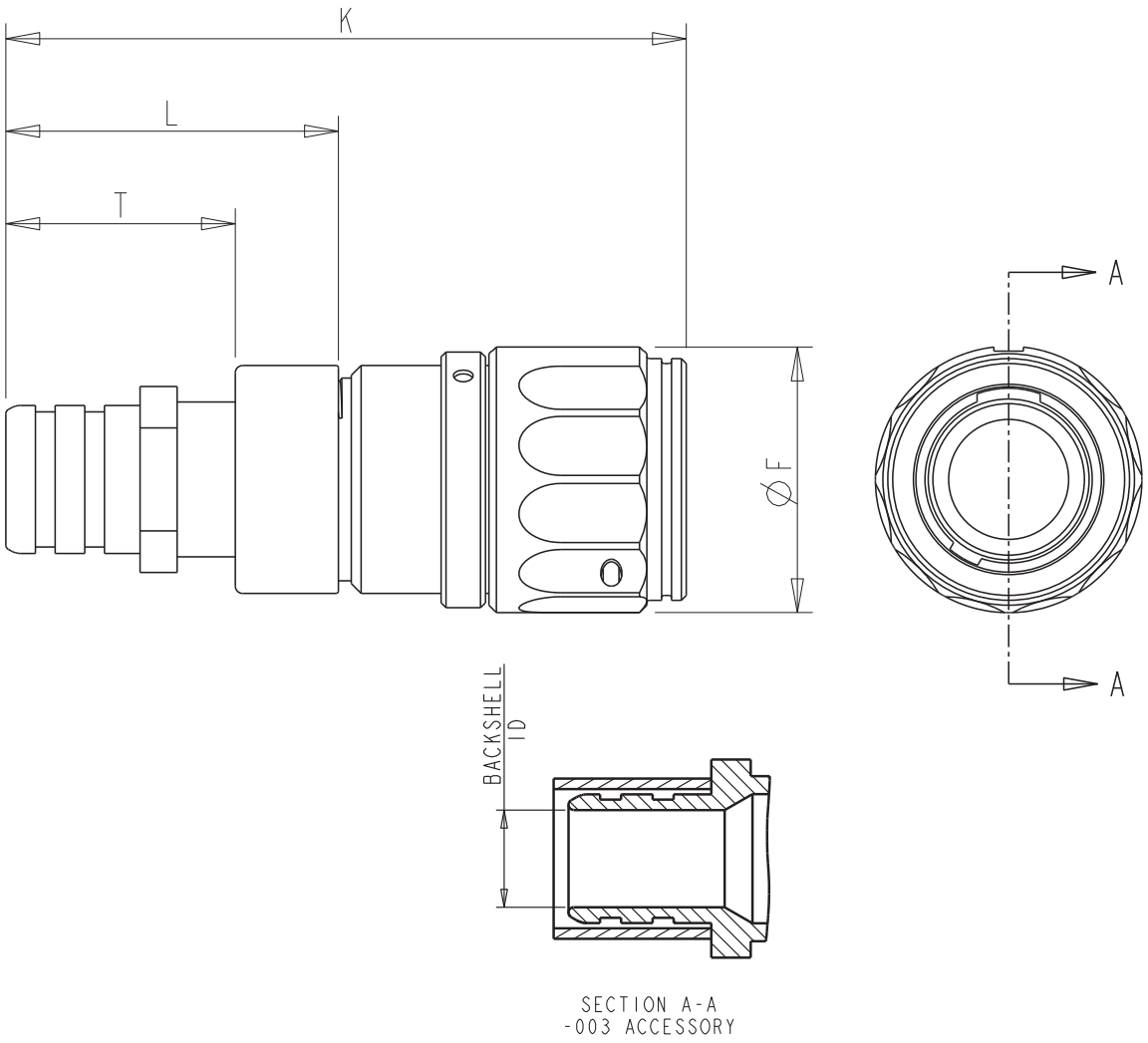
Shell Size	ØF	K	L	T	Backshell ID -003
Size 06	.462 (11.73)	1.377 (34.98)	.674 (17.12)	.272 (6.91)	.185 (4.70)
Size 07	.575 (14.61)	1.377 (34.98)	.674 (17.12)	.272 (6.91)	.265 (6.73)
Size 08	.620 (15.75)	1.377 (34.98)	.674 (17.12)	.272 (6.91)	.345 (8.76)
Size 09	.690 (17.53)	1.447 (36.75)	.674 (17.12)	.272 (6.91)	.425 (10.80)
Size 10	.760 (19.30)	1.447 (36.75)	.674 (17.12)	.272 (6.91)	.505 (12.83)

All dimensions are in inches (mm shown in brackets) and are for reference only. Figure enlarged scale.

Receptacle

SCE2-X-**L1T**XX-XXPX-003

- Inline Latching Receptacle, Threaded Backshell



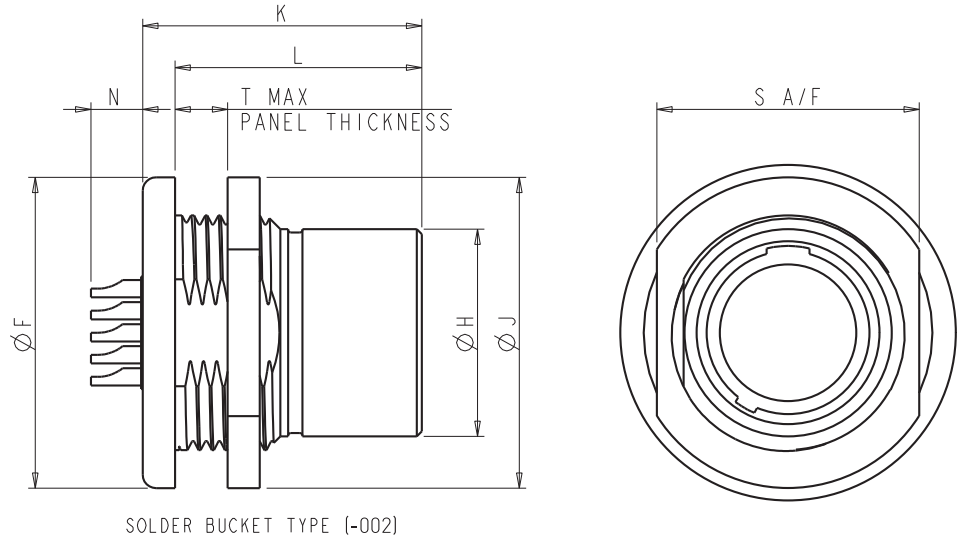
Shell Size	ØF	K	L	T	Backshell ID -003
Size 06	.540 (13.70)	1.379 (35.03)	.674 (17.12)	.465 (11.81)	.185 (4.70)
Size 07	.610 (15.50)	1.379 (35.03)	.674 (17.12)	.465 (11.81)	.265 (6.73)
Size 08	.700 (17.77)	1.379 (35.03)	.674 (17.12)	.465 (11.81)	.345 (8.76)
Size 09	.770 (19.56)	1.449 (36.80)	.674 (17.12)	.465 (11.81)	.425 (10.80)
Size 10	.840 (21.34)	1.470 (37.34)	.674 (17.12)	.465 (11.81)	.505 (12.83)

All dimensions are in inches (mm shown in brackets) and are for reference only. Figure enlarged scale.

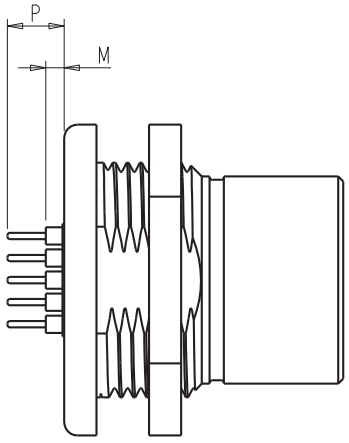
Receptacle

SCE2-X-**07A**XX-XXPX-XXX

- Rear Mount Jam Nut Receptacle



SOLDER BUCKET TYPE (-002)



PC TAIL TYPE (-001)

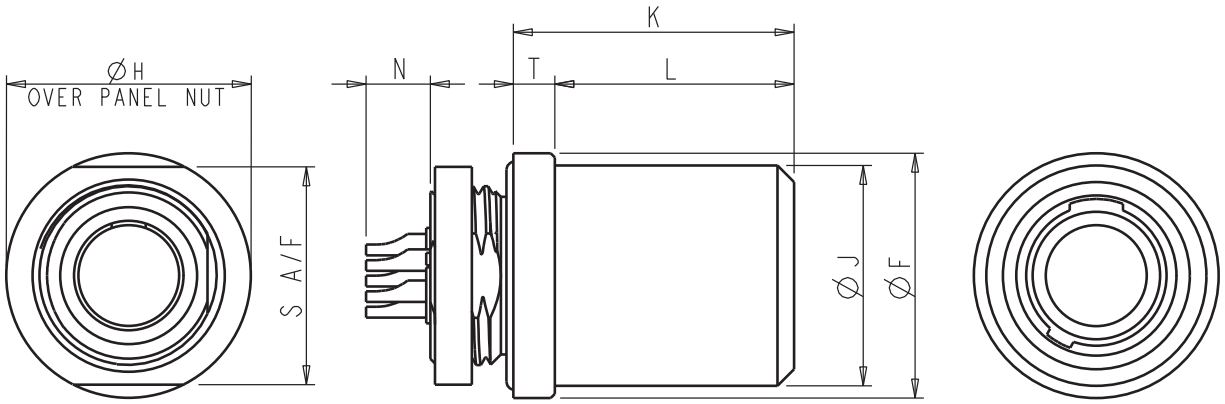
Shell Size	ØF	ØH	ØJ	K	L	M	N	P	S A/F	T Max
Size 06	.750 (19.05)	.462 (11.73)	.750 (19.05)	.835 (21.21)	.738 (18.75)	.055 (1.40)	.155 (3.94)	.170 (4.32)	.665 (16.88)	.157 (3.99)
Size 07	.895 (22.73)	.575 (14.61)	.895 (22.73)	.835 (21.21)	.738 (18.75)	.055 (1.40)	.155 (3.94)	.170 (4.32)	.750 (19.05)	.157 (3.99)
Size 08	.930 (23.62)	.620 (15.75)	.930 (23.62)	.835 (21.21)	.738 (18.75)	.055 (1.40)	.155 (3.94)	.170 (4.32)	.785 (19.94)	.157 (3.99)
Size 09	1.000 (25.38)	.690 (17.53)	1.005 (25.53)	.905 (22.99)	.808 (20.52)	N/A	.155 (3.94)	.170 (4.32)	.863 (21.92)	.157 (3.99)
Size 10	1.070 (27.18)	.760 (19.30)	1.080 (27.43)	.905 (22.99)	.808 (20.52)	N/A	.155 (3.94)	.170 (4.32)	.940 (23.88)	.157 (3.99)

All dimensions are in inches (mm shown in brackets) and are for reference only. Figure enlarged scale.

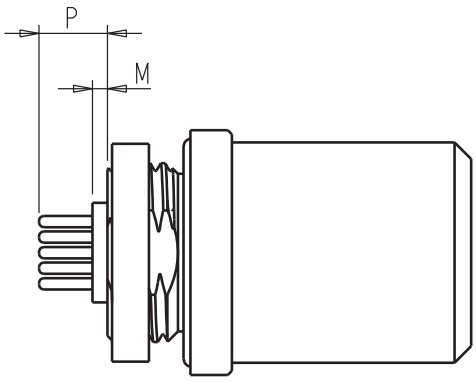
Receptacle

SCE2-X-**71A**XX-XXPX-XXX

- Front Mount Receptacle, Threaded



SOLDER BUCKET TYPE (-002)



PC TAIL TYPE (-001)

Shell Size	ØF	ØJ	ØH	K	L	M	N	P	S A/F	T
Size 06	N/A	.531 (13.48)	.550 (13.97)	.677 (17.19)	N/A	.015 (0.38)	.113 (2.87)	.130 (3.30)	.470 (11.94)	N/A
Size 07	.750 (19.04)	.575 (14.61)	.750 (19.04)	.677 (17.19)	.577 (14.65)	.015 (0.38)	.113 (2.87)	.130 (3.30)	.665 (16.89)	.100 (2.54)
Size 08	.760 (19.30)	.620 (15.75)	.760 (19.30)	.877 (22.28)	.677 (17.20)	.015 (0.38)	.113 (2.87)	.130 (3.30)	.825 (20.96)	.100 (2.54)
Size 09	.890 (22.61)	.690 (17.53)	.890 (22.61)	.947 (24.05)	.747 (18.97)	N/A	.113 (2.87)	.060 (1.52)	.955 (24.26)	.100 (2.54)
Size 10	.930 (23.62)	.760 (19.30)	.930 (23.62)	.947 (24.05)	.747 (18.97)	N/A	.113 (2.87)	.060 (1.52)	.995 (25.27)	.100 (2.54)

All dimensions are in inches (mm shown in brackets) and are for reference only. Figure enlarged scale.

Accessories

Cap assembly part numbering

Example: **390-5056-06-130-02** | See Pages 25-28 for drawings | (1101) deviation for aluminium caps with black zinc nickel plating finish

390–	XXXX–	XX–	XXX–	XX
Series identifier	**Cap style** 5056 Metal cap to fit receptacles 5057 Metal cap to fit plugs 5063 Rubber cap to fit receptacles 5064 Rubber cap to fit plugs	**Shell size** 06 07 08 09 10	**Cord length in mm** 070 130 180 210	**Accessories** 01 02 03 04 05 See table on pages 25-28

Heatshrink Boots

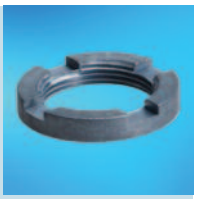
- Part number: 123GB-0798-XX-X-0
  XX = shell size, for example: 06, 07, 08, 09, or 10
  X = S for straight or R for right angled

Braid Retention Strap

- Part number: 123GB-0799-0
  Tooling available on request

Castellated Panel Nut

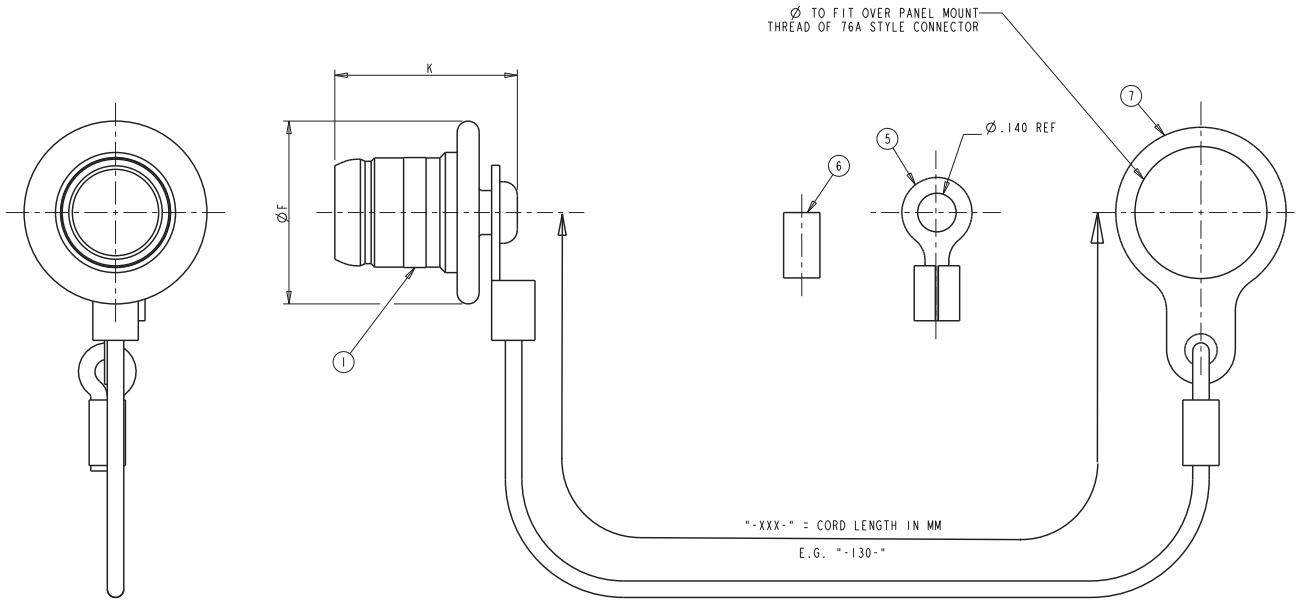
- Add deviation (981)
  Tool: 390-5058-XXAXX-02 where XXAXX is shell style and size for which the tool is to fit
  e.g. 390-5058-76A06-02



Accessories

390-5056-XX-XXX-XX

- Metal Dust Cap Assembly for Receptacles



Shell size	Part number	Item 1 Cap	
		ØF	K
06	390-5056-06-XXX-XX	.575 (14.61)	.664 (16.87)
07	390-5056-07-XXX-XX	.665 (16.89)	.664 (16.87)
08	390-5056-08-XXX-XX	.750 (19.05)	.664 (16.87)
09	390-5056-09-XXX-XX	.890 (22.60)	.764 (19.40)
10	390-5056-10-XXX-XX	.900 (22.86)	.764 (19.40)

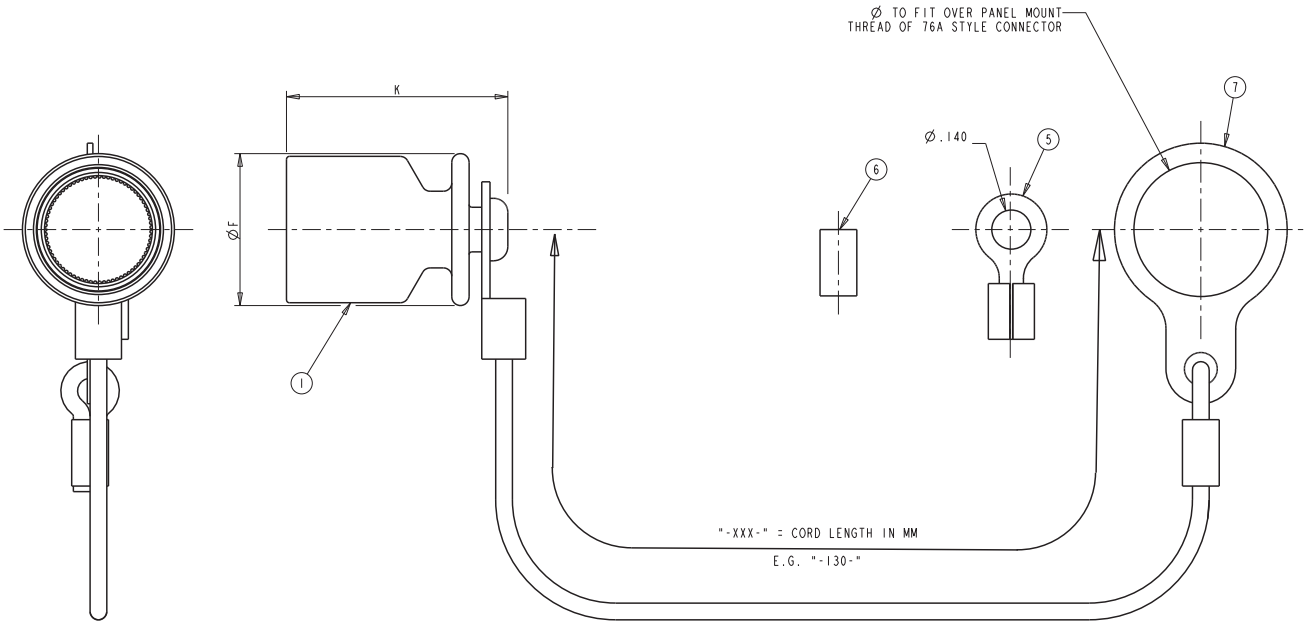
Supplied with			
Part number	Item 5 Eyelet	Item 6 Crimp ferrule	Item 7 Large eyelet
390-5056-XX-XXX-01	–	–	–
390-5056-XX-XXX-02	–	1	–
390-5056-XX-XXX-03	1	–	–
390-5056-XX-XXX-04	1	1	–
390-5056-XX-XXX-05	–	–	1

All dimensions are in inches (mm shown in brackets) and are for reference only. Figure enlarged scale.

Accessories

390-5057-XX-XXX-XX

- Metal Dust Cap Assembly for Plugs



Shell size	Part number	Item 1 Cap	
		ØF	K
06	390-5057-06-XXX-XX	.464 (11.79)	.794 (20.17)
07	390-5057-07-XXX-XX	.545 (13.84)	.794 (20.17)
08	390-5057-08-XXX-XX	.620 (15.75)	.794 (20.17)
09	390-5057-09-XXX-XX	.695 (17.65)	.894 (22.70)
10	390-5057-10-XXX-XX	.770 (19.56)	.894 (22.70)

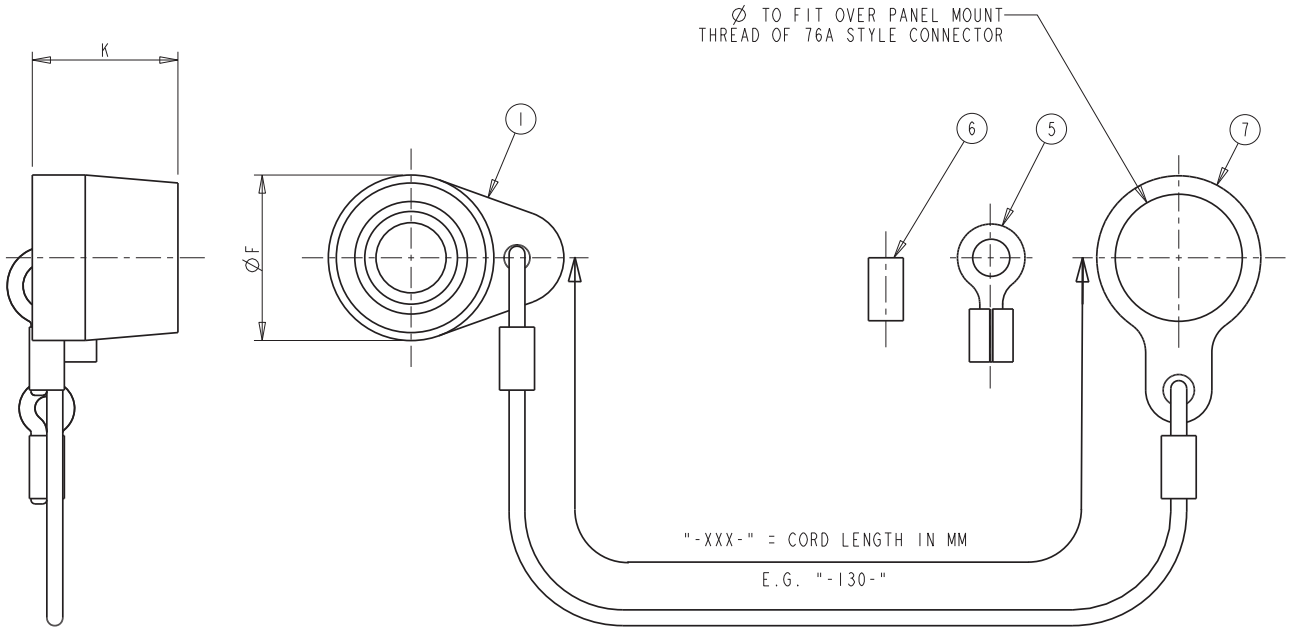
Supplied with			
Part number	Item 5 Eyelet	Item 6 Crimp ferrule	Item 7 Large eyelet
390-5057-XX-XXX-01	–	–	–
390-5057-XX-XXX-02	–	1	–
390-5057-XX-XXX-03	1	–	–
390-5057-XX-XXX-04	1	1	–
390-5057-XX-XXX-05	–	–	1

All dimensions are in inches (mm shown in brackets) and are for reference only. Figure enlarged scale.

Accessories

390-5063-XX-XXX-XX

- Rubber Dust Cap Assembly for Receptacles



Shell size	Part number	Item 1 Cap	
		ØF	K
06	390-5063-06-XXX-XX	.625 (15.87)	.550 (13.97)
07	390-5063-07-XXX-XX	.725 (18.42)	.550 (13.97)
08	390-5063-08-XXX-XX	.780 (19.81)	.550 (13.97)
09	390-5063-09-XXX-XX	.870 (22.09)	.550 (13.97)
10	390-5063-10-XXX-XX	.940 (23.88)	.550 (13.97)

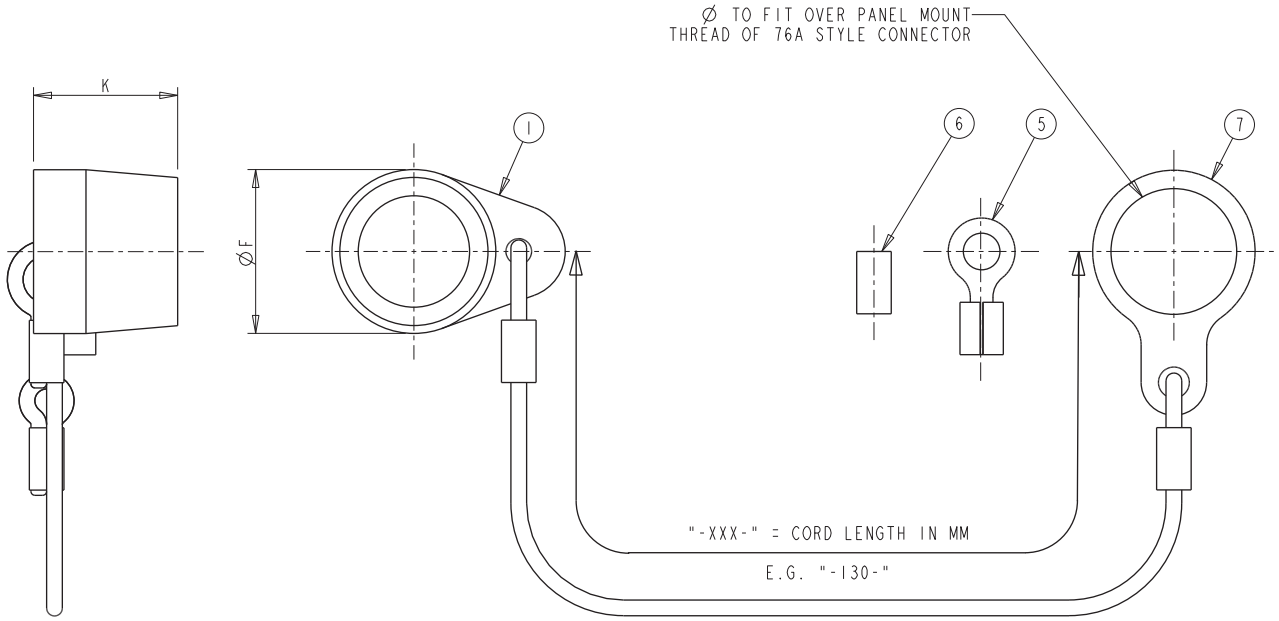
Supplied with			
Part number	Item 5 Eyelet	Item 6 Crimp ferrule	Item 7 Large eyelet
390-5063-XX-XXX-01	–	–	–
390-5063-XX-XXX-02	–	1	–
390-5063-XX-XXX-03	1	–	–
390-5063-XX-XXX-04	1	1	–
390-5063-XX-XXX-05	–	–	1

All dimensions are in inches (mm shown in brackets) and are for reference only. Figure enlarged scale.

Accessories

390-5064-XX-XXX-XX

- Rubber Dust Cap Assembly for Plugs



Shell size	Part number	Item 1 Cap	
		ØF	K
06	390-5064-06-XXX-XX	.450 (11.43)	.550 (13.97)
07	390-5064-07-XXX-XX	.525 (13.34)	.550 (13.97)
08	390-5064-08-XXX-XX	.595 (15.11)	.550 (13.97)
09	390-5064-09-XXX-XX	.665 (16.89)	.550 (13.97)
10	390-5064-10-XXX-XX	.735 (18.67)	.550 (13.97)

Supplied with			
Part number	Item 5 Eyelet	Item 6 Crimp ferrule	Item 7 Large eyelet
390-5064-XX-XXX-01	–	–	–
390-5064-XX-XXX-02	–	1	–
390-5064-XX-XXX-03	1	–	–
390-5064-XX-XXX-04	1	1	–
390-5064-XX-XXX-05	–	–	1

All dimensions are in inches (mm shown in brackets) and are for reference only. Figure enlarged scale.

Accessories

Overmoulded cable harnesses using Terrapin connectors





Amphenol Ltd design, prototype and manufacture a wide range of both standard and customised cable harness assemblies utilising overmould technology. The Terrapin connector range has been designed specifically to lend itself to this method of termination.

Amphenol Ltd's capability in manufacturing is matched by our engineering expertise, we are able to offer a full design and development service from drawing conception to production delivery.

Overmoulding has fast become widely recognised for the benefits it brings to equipments used in both military and harsh environment situations.

Military/harsh environment situations

- Both standard and custom profile mouldings available
- In-house design and prototype facility
- Aesthetically uniform product
- Repeatable high complexity mouldings
- Low cost and repair by replacement
- Robust and tamper-proof
- Straight and angled mouldings
- Low profile mouldings
- Finger grips, logos and tactile indicators optional
- Mould material suitable for NBC washdown
- High degree of sealing – IP68

Typical applications

- Chemical detection units
- Comms units
- Display Modules
- GPS
- Headsets
- Hubs
- LAN Switches
- Radios
- Routers
- Ruggedised laptops
- Sensor units
- Surveillance and rangefinders
- Weapons systems

NEW Hermetic Sealing

Terrapin connectors are often selected for their high degree of IP68 sealing to 20m immersion in water.

However for greater sealing or for high temperature and high pressure environments, these connectors can also be supplied with a glass to metal hermetic seal. Glass to metal seals facilitate an excellent level of hermeticity greater than $10^{-9}cm^3sec^{-1}$ at 1atm ΔP Helium. Various shell and pin materials are available dependant on the application.

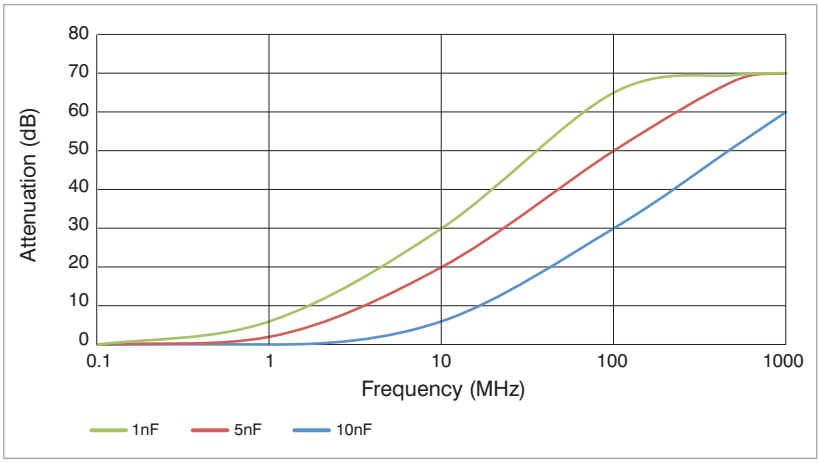
NEW EMI Filtering

Terrapin connectors are also available with embedded EMI filter circuits. Planar filtering technology further enhances the renowned EMC performance of the Terrapin range and has minimal impact on the physical size of the connectors. Connectors can be supplied with either standard or customised Pi, C or LC filter circuits.

Embedding filtering eliminates the need for 'dirty' areas or additional filter boards and circuitry within a box, resulting in weight and space savings. Filtering within the connector also enables a low impedance path between filter and ground, mechanically and environmentally protected circuits and increased reliability. The mechanical design of the Filtered Terrapin connectors ensure that equipment is protected from unwanted signals and noise as well as the ingress of dust and moisture.

Pi filtering is achieved via dual capacitors with a single inductive element between them. This circuit arrangement provides excellent performance due to its sharp attenuation slope and is suitable for a variety of applications.

The typical frequency response of these three different Pi circuits is shown based on a 50Ω source and load impedance.



How to order

Contact factory for more information on part numbering and specification

Notes

BWC 4040 12/14

Amphenol®

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December 2014