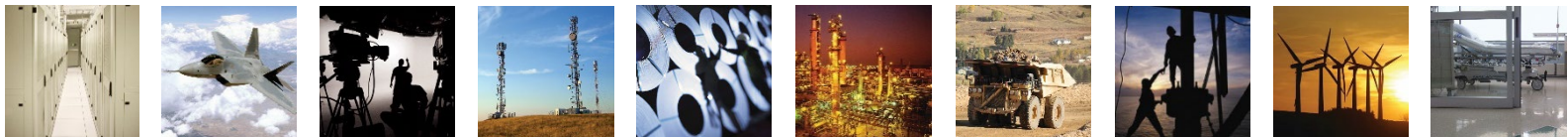


ELink Fiber Optic Connectors



QPC is ISO 9001:2015 and AS9100D Certified

Military Aerospace Shipboard Industrial Mining Transportation Oil & Gas Broadcast Manufacturing Marine Energy Medical



Contents	
Product Introduction	Page 1
Specifications	Page 2
Part Number Builder	Page 3
ELink Pin / Socket Plug Line Drawings	Page 4 - 5
ELink Pin / Socket Receptacle Line Drawings	Page 6 - 9
ELink Hermaphroditic Plug Line Drawings	Page 10 - 11
ELink Hermaphroditic Receptacle Line Drawings	Page 12 - 15
Receptacle Panel Cutouts	Page 16
Strain Relief Options	Page 17
Termini, Accessories & Tools	Page 18 - 19



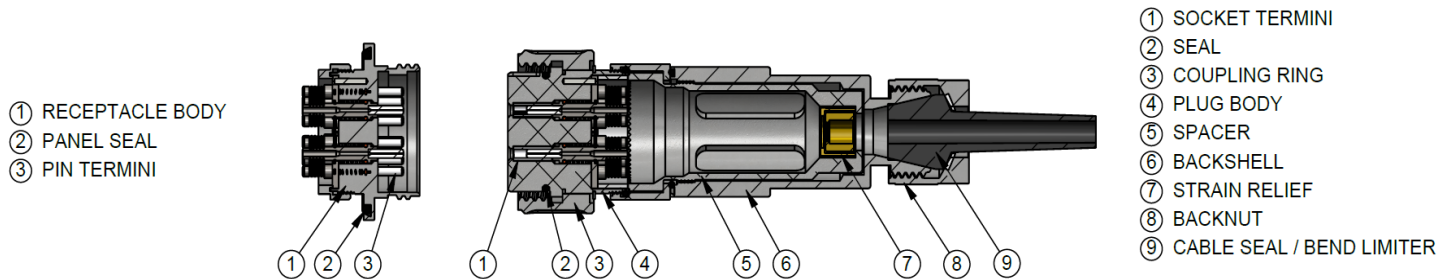
QPC's ELink Connectors are rugged, multi-channel pin/socket or hermaphroditic fiber optic connectors. ELink Plugs and Receptacles are available in aluminum with a black hard anodize finish or passivated stainless steel. The ELink Product Line features four shell sizes and allow for up to 24 discrete channels. ELink Connectors are environmentally sealed for long service life in demanding applications.

ELink Connectors are available in traditional Pin / Socket Arrangements, where the pins are installed in the receptacles and the sockets installed in the plugs. ELink Connectors are also available as Hermaphroditic configurations where multiple Plug-to-Plug Cable Assemblies can be combined to extend the length of the system.

The ELink features a genderless sealed 2.5mm terminus that is retained using a retainer plate inside the ELink Plugs and Receptacles. The alignment sleeves for the socket termini are retained in the connector bodies and use QPC's unique thick wall 2.5mm sleeves for added durability.

ELink Connectors are used in Oil & Gas, Mining, Factory Automation, Heavy Equipment, Marine, Broadcast, Medical, Military, Aerospace, and Defense for Communications, Audio / Video, and Sensing Applications.

- 4Ch / 12Ch / 18Ch / 24Ch Pin & Socket or Hermaphroditic Physical Contact Connector System
- Plugs: Integrated Backshells, Cable Strain Reliefs, and Bend Limiters
- Receptacles: Flange Mount with and without Backshells
- Cable OD: 4 Channel up to 0.28" (7.0mm) / 12 – 24 Channel up to 0.37" (9.5mm)
- Genderless Sealed 2.5mm Termini
- 18Ch / 24Ch Hermaphroditic Plugs include a Locking Ring Feature for easier De-Mating
- Sealed to IP68



Specifications:

Insertion Loss: SM (9/125µm)	0.10-1.0dB Max.
MM (50/125µm)	0.10-1.0dB Max.
MM (62.5/125µm)	0.10-1.0dB Max.
Return Loss: SM (9/125µm)	-40dB PC; -55dB UPC
Operating Temperature:	-40°C to +85°C
Vibration:	10 to 2000Hz / 15g EIA/TIA-455-11; Cond. III
Mating Durability:	2000 Cycles
Impact:	8 Impacts @ 8FT (2.4MT); EIA/TIA-455-2
Shock:	50g for 11ms; EIA/TIA-455-14; Condition A
IP Rating:	IP68 - Dust Tight; No ingress of dust; complete protection against contact; Water Immersion Beyond 1 Meter Testing Conditions & Duration – Plug with Dust Cover and Mated Plug / Receptacle, 3 Meters for 24 Hours
Material & Plating Specification:	Hard Anodize: 6061-T6 Aluminum; Anodize per MIL-A-8625 TYPE III CLASS 2; .0022/.0018 Thick (50% Penetration); Black Stainless Steel: 303 Stainless Steel; Passivate Per QQ-P-35
Cable Retention:	4 Channel: 75lbs ¹ 12 & 18 Channel: 100lbs ¹ 24 Channel: 400lbs ¹

Specifications Notes:

¹ Cable retention depends on cable type.

* All Dimensions in this document are shown in Inches (Millimeters)

Part Number Builder; ELink Plugs and Receptacles:

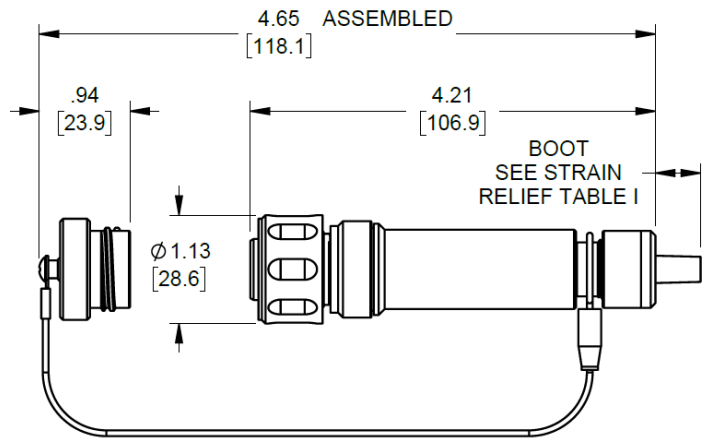
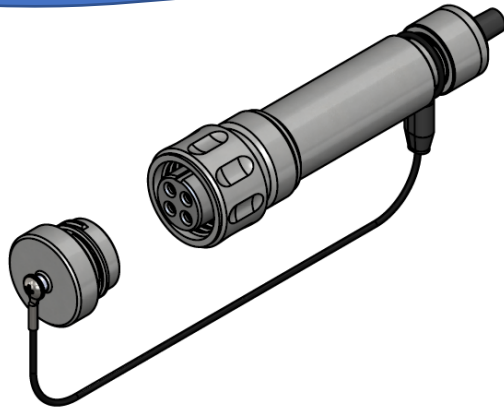
Sample Part Number: ELINK-PHHN-18CH-S85	ELINK	-	PHH	N	-	18CH	-	S85
1 Series ELINK								
2 Product Type PHH - PLUG, HERMAPHRODITIC PSM - PLUG, SOCKET TERMINI RHH - RECEPTACLE, FLANGE MOUNT, HERMAPHRODITIC RPF - RECEPTACLE, FLANGE MOUNT, PIN TERMINI								
3 Material & Finish Code N - ALUMINUM, HARD ANODIZE, BLACK S - STAINLESS STEEL, PASSIVATED (CONSULT QPC FOR OTHER OPTIONS)								
4 Channel Count 04CH - 4 CHANNEL, 4x 126µm TERMINI 12CH - 12 CHANNEL, 12x 126µm TERMINI 18CH - 18 CHANNEL, 18x 126µm TERMINI 24CH - 24 CHANNEL, 24x 126µm TERMINI								
5 Strain Relief SEE TABLE I OR TABLE II								

Part Number Builder Notes:

- * All ELink Connectors Include the Standard Dust Cover
- * For Spare Termini and Replacement Dust Cover ordering information, see Page 18

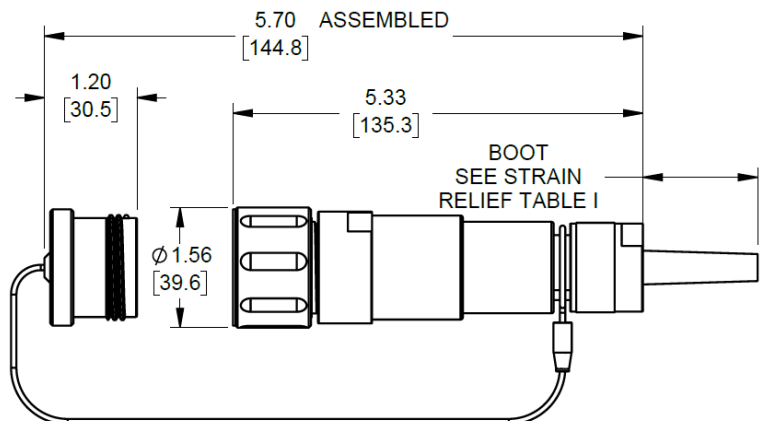
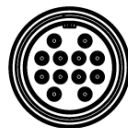
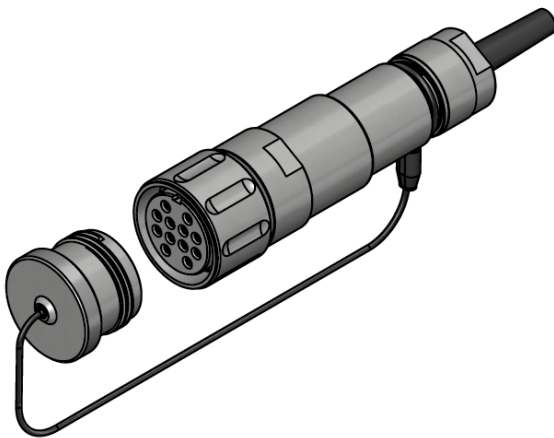
ELink; 4Ch Plug; Pin / Socket; Backshell; Dust Cover:

ELINK-PSMX-04CH-SXX



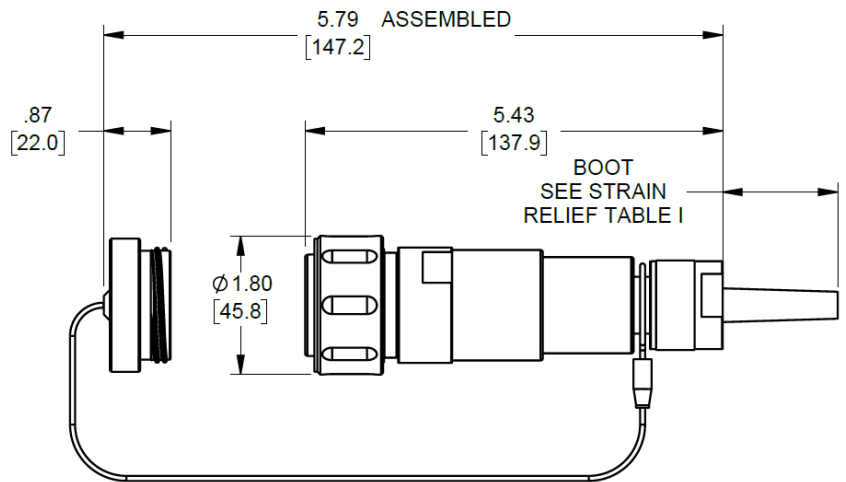
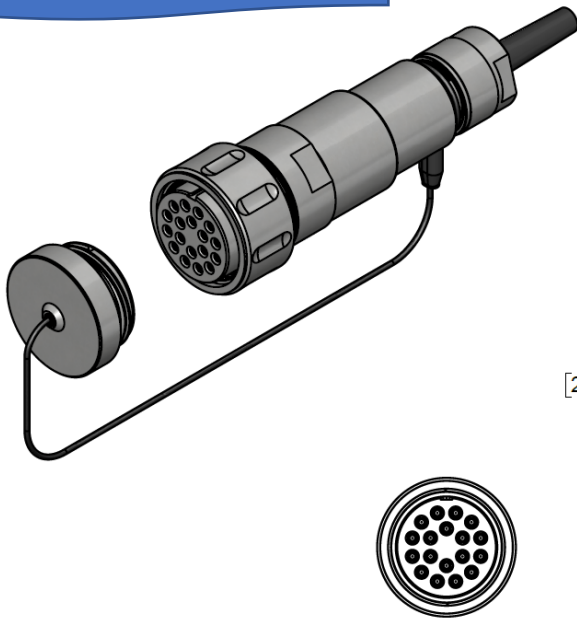
ELink; 12Ch Plug; Pin / Socket; Backshell; Dust Cover:

ELINK-PSMX-12CH-SXX



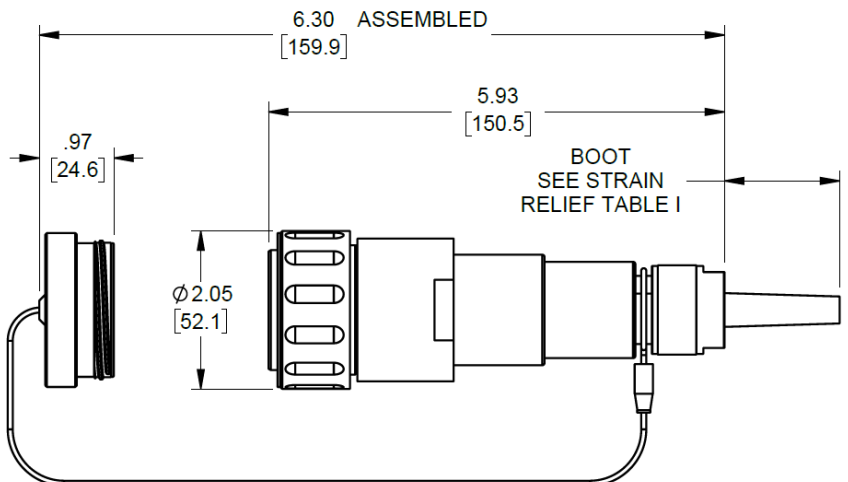
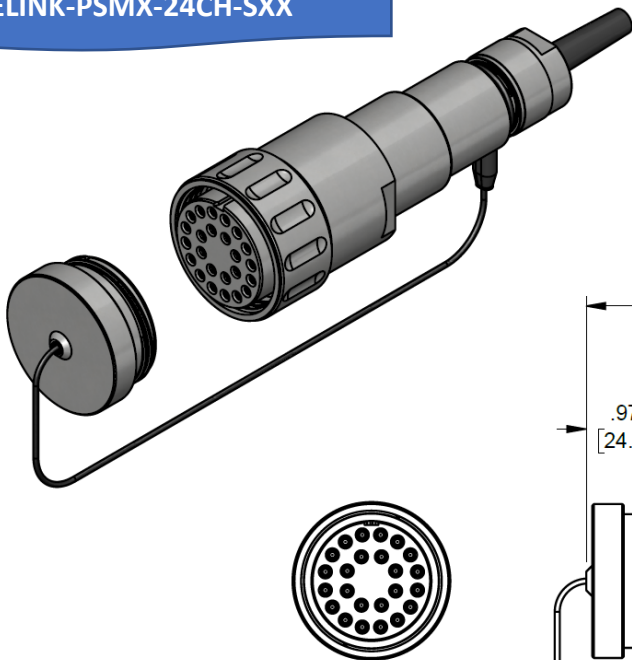
ELink; 18Ch Plug; Pin / Socket; Backshell; Dust Cover:

ELINK-PSMX-18CH-SXX



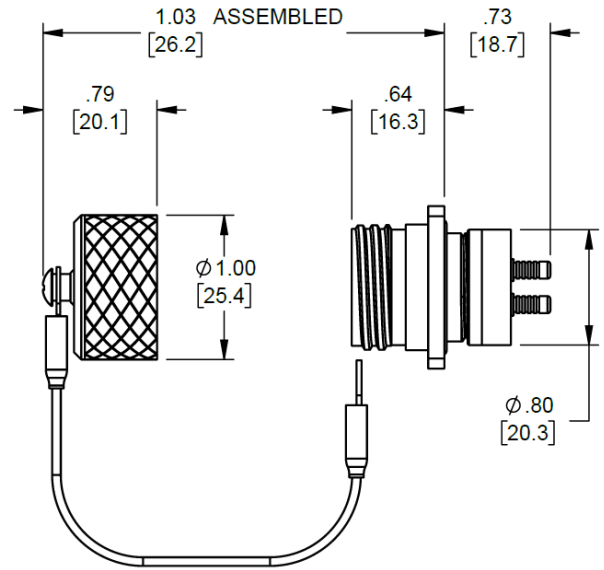
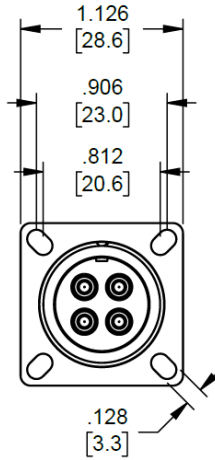
ELink; 24Ch Plug; Pin / Socket; Backshell; Dust Cover:

ELINK-PSMX-24CH-SXX



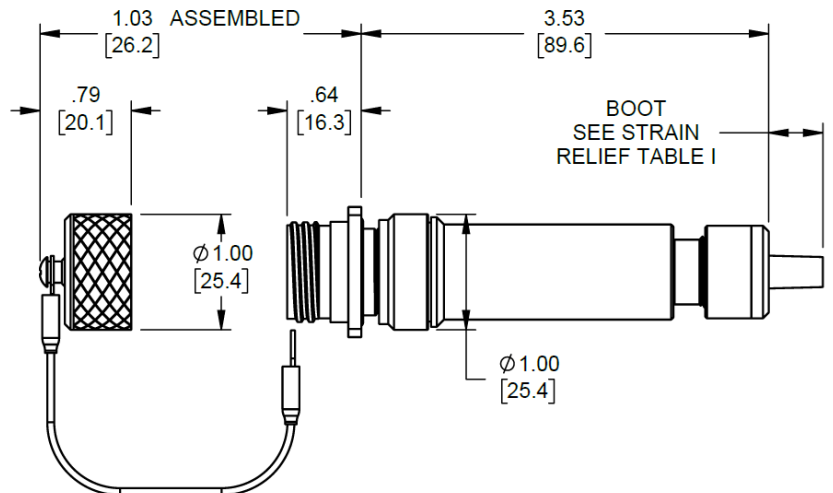
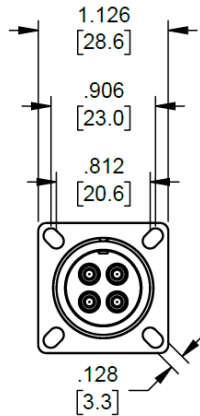
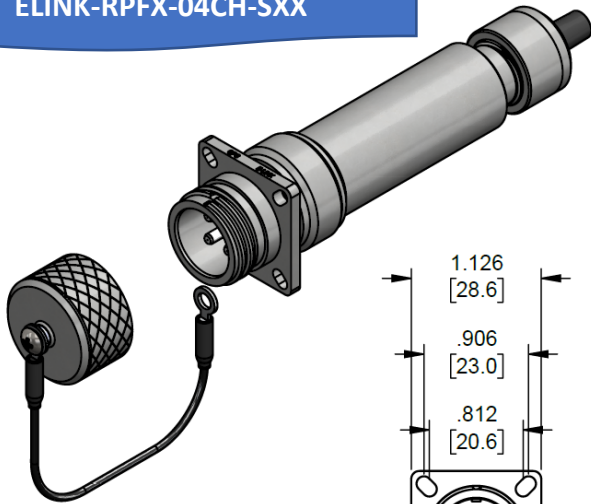
ELink; 4Ch Receptacle; Pin / Socket; Dust Cover:

ELINK-RPFX-04CH-S0X



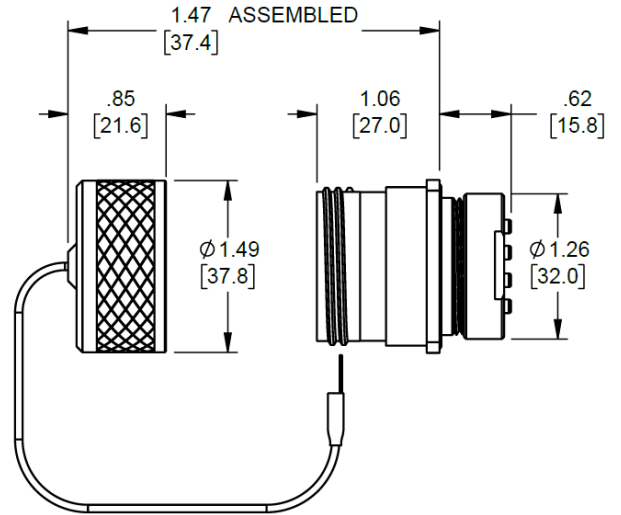
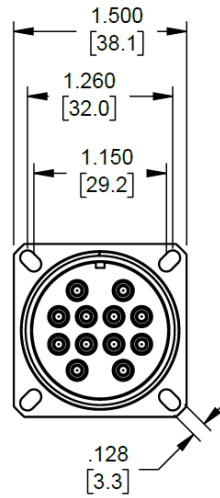
ELink; 4Ch Receptacle; Pin / Socket; Backshell; Dust Cover:

ELINK-RPFX-04CH-SXX



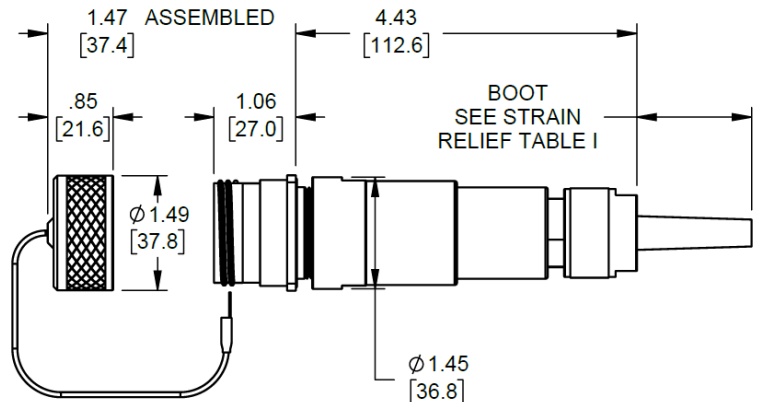
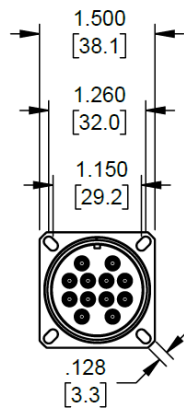
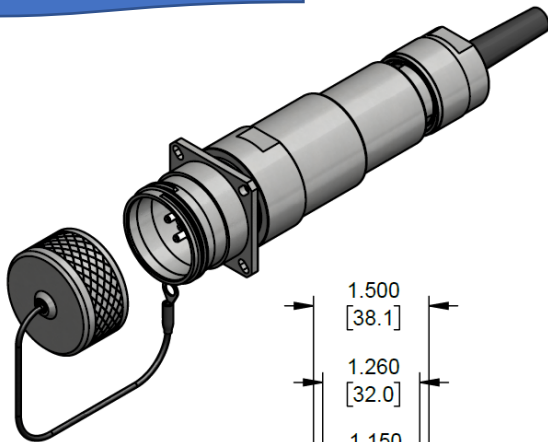
ELink; 12Ch Receptacle; Pin / Socket; Dust Cover:

ELINK-RPFX-12CH-S0X



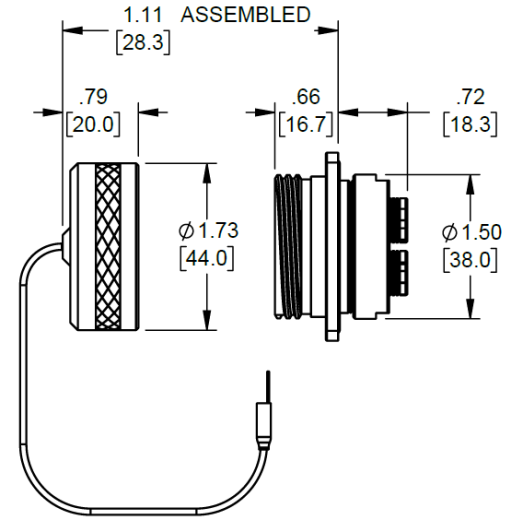
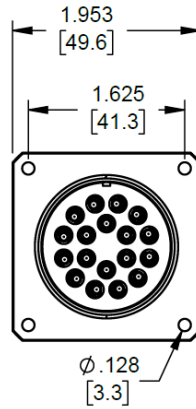
ELink; 12Ch Receptacle; Pin / Socket; Backshell; Dust Cover:

ELINK-RPFX-12CH-SXX



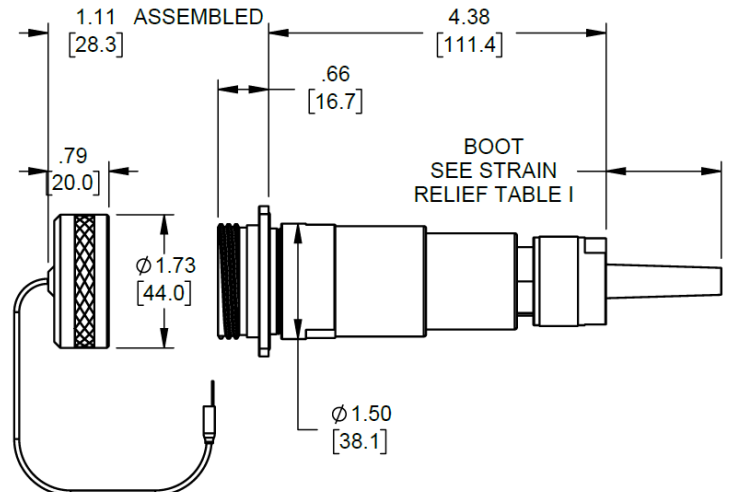
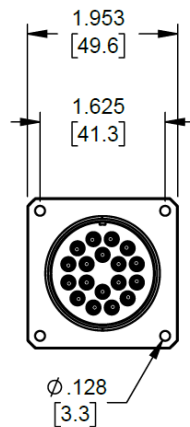
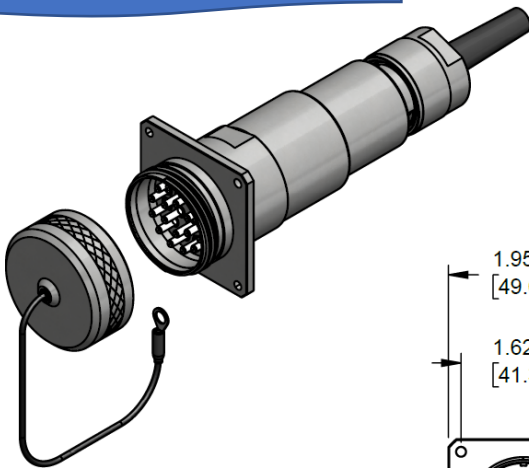
ELink; 18Ch Receptacle; Pin / Socket; Dust Cover:

ELINK-RPFX-18CH-S0X



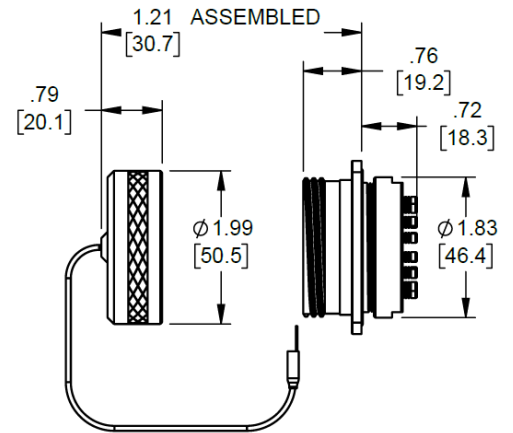
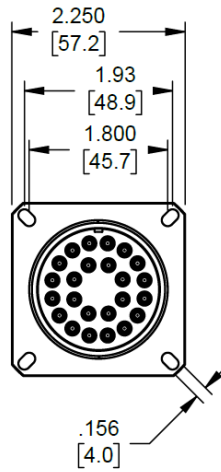
ELink; 18Ch Receptacle; Pin / Socket; Backshell; Dust Cover:

ELINK-RPFX-18CH-SXX



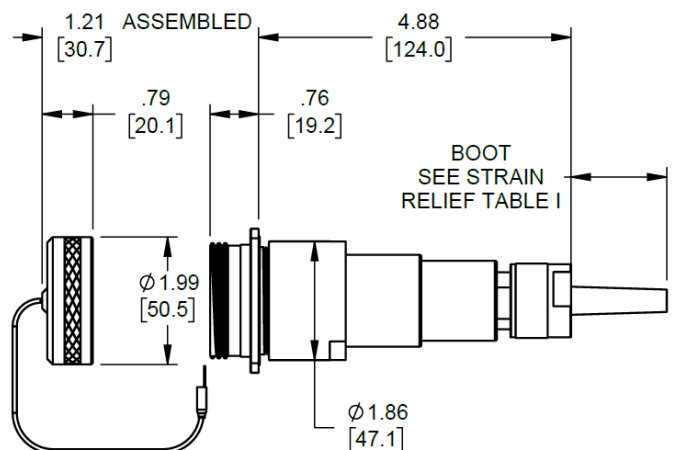
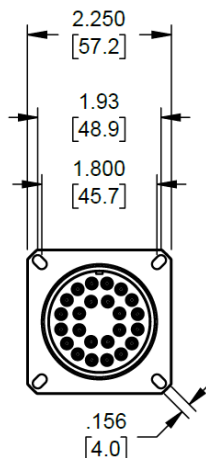
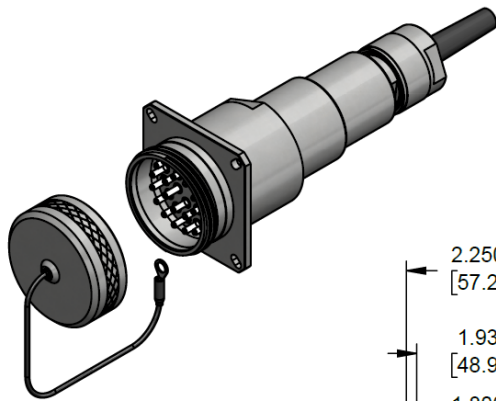
ELink; 24Ch Receptacle; Pin / Socket; Dust Cover:

ELINK-RPFX-24CH-S0X



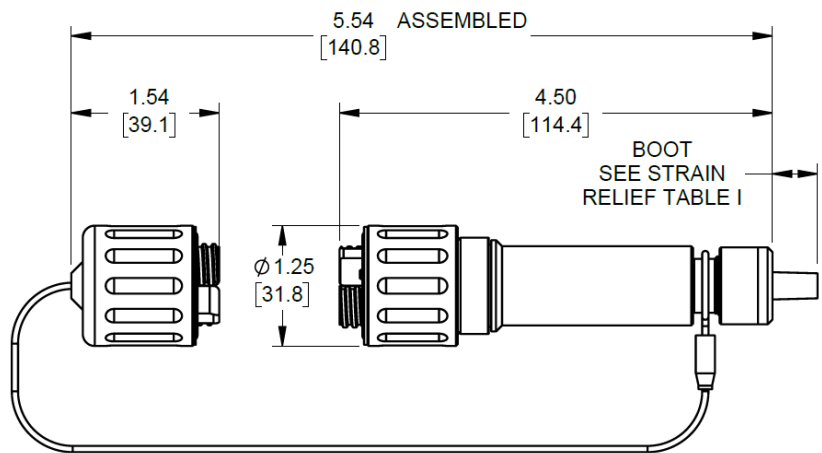
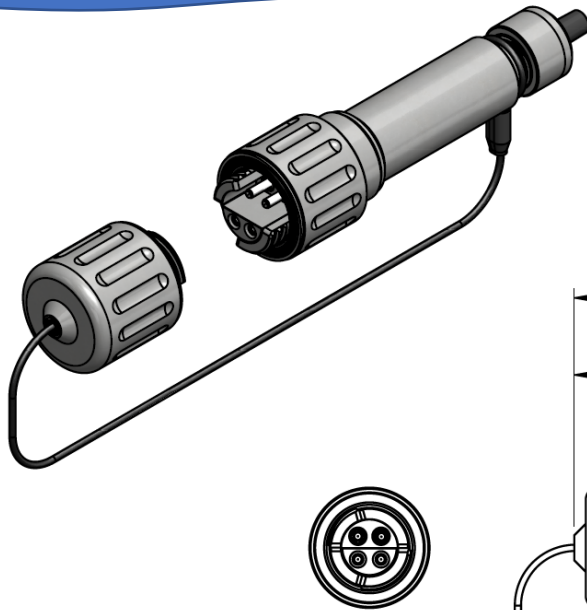
ELink; 24Ch Receptacle; Pin / Socket; Backshell; Dust Cover:

ELINK-RPFX-24CH-SXX



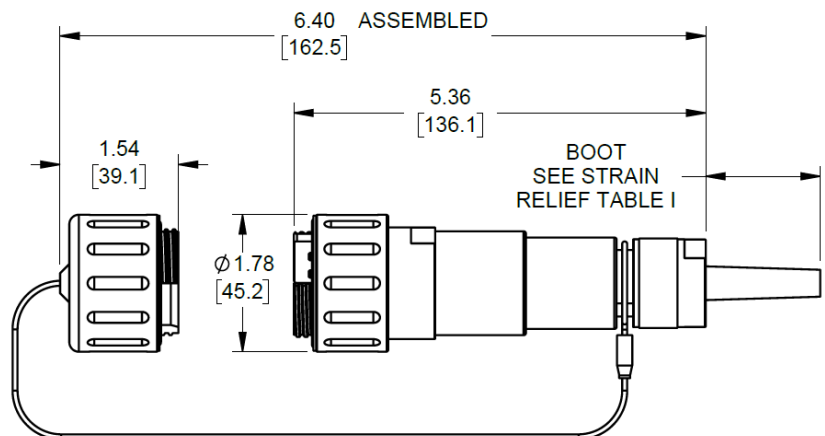
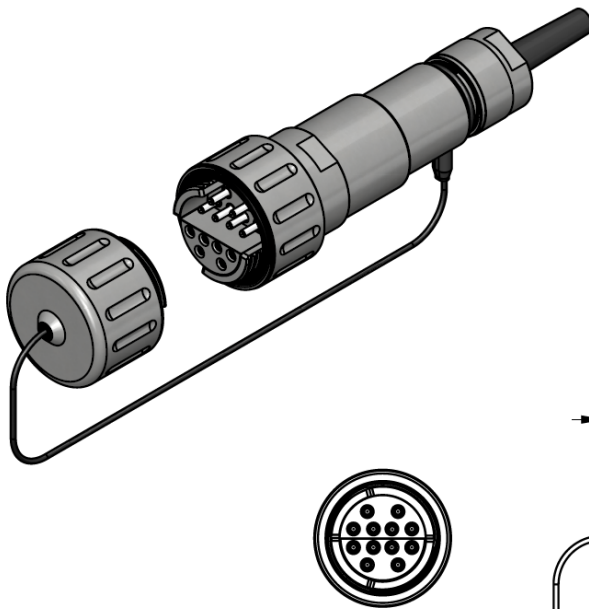
ELink; 4Ch Plug; Hermaphroditic; Backshell; Dust Cover:

ELINK-PHHX-04CH-SXX



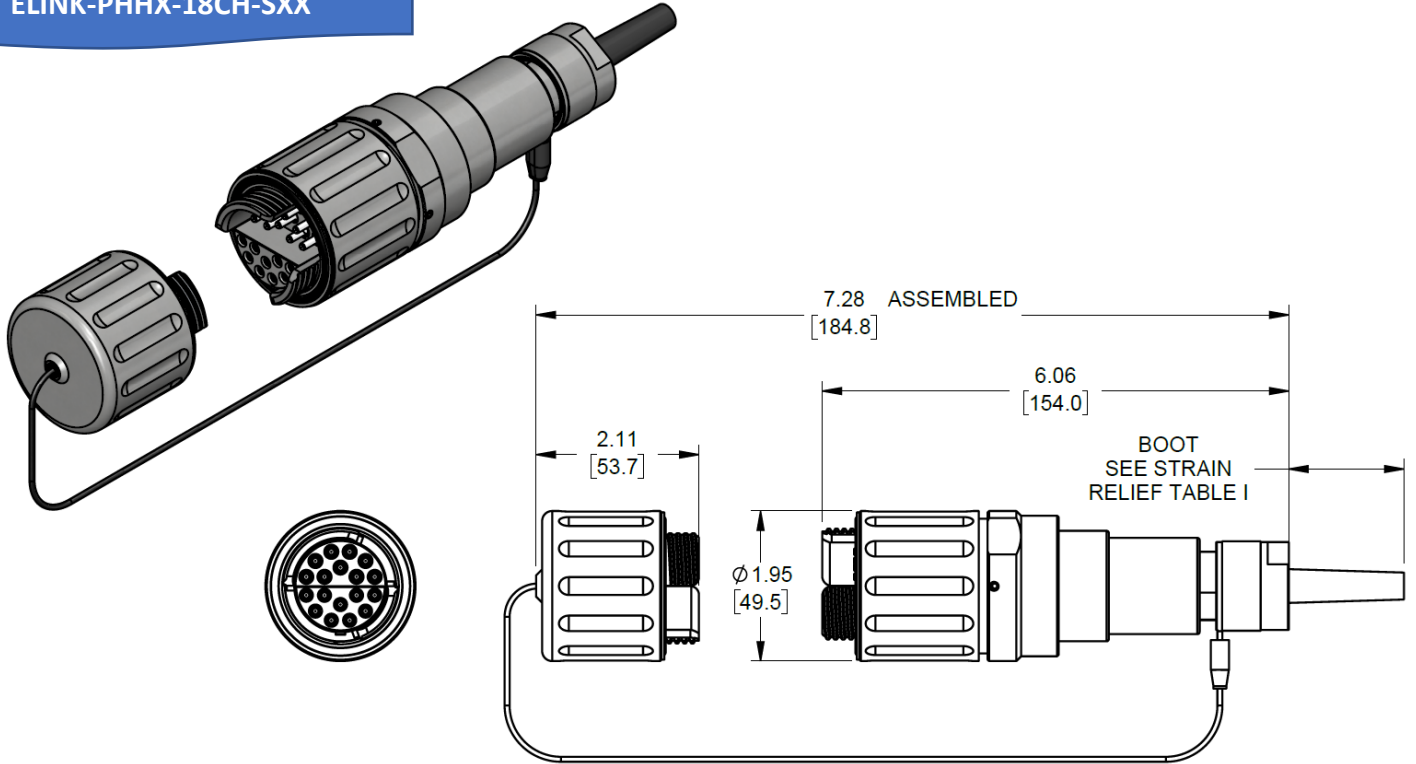
ELink; 12Ch Plug; Hermaphroditic; Backshell; Dust Cover:

ELINK-PHHX-12CH-SXX



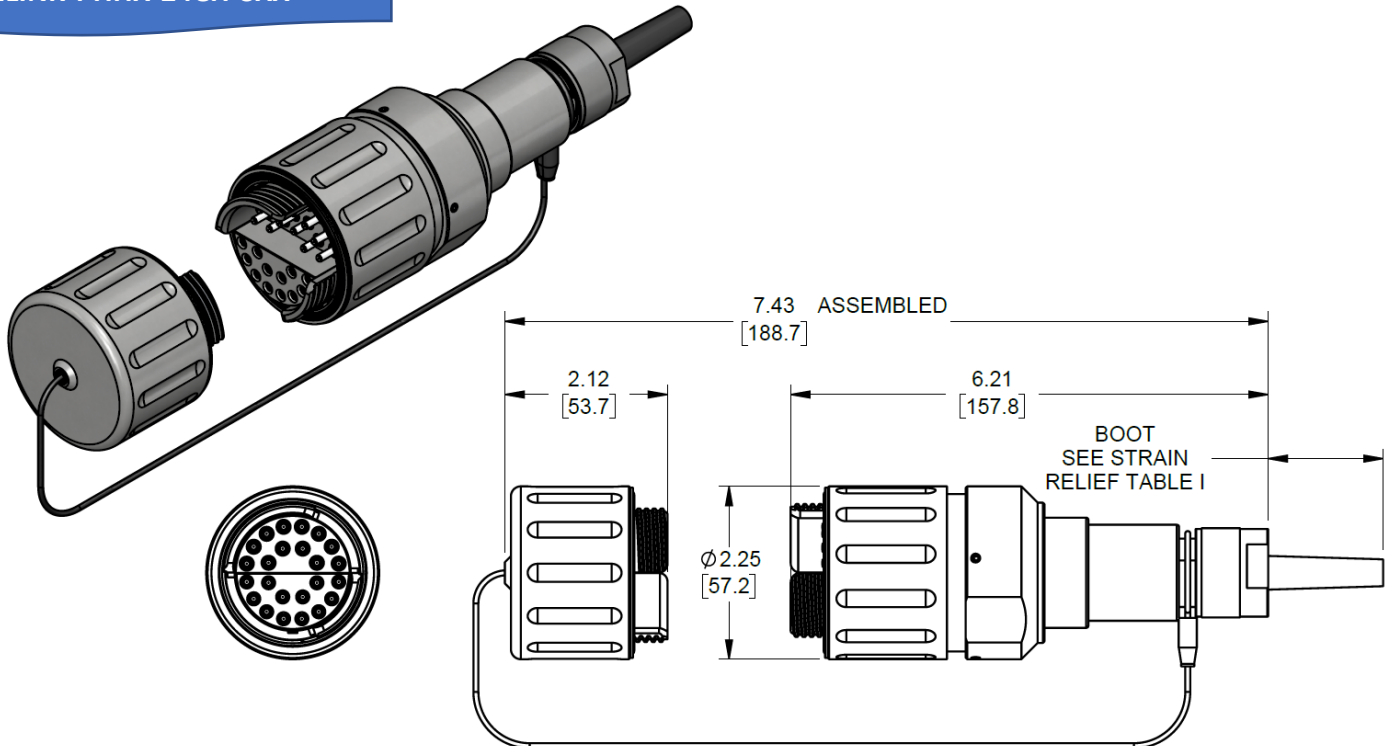
ELink; 18Ch Plug; Hermaphroditic; Backshell; Dust Cover:

ELINK-PHHX-18CH-SXX



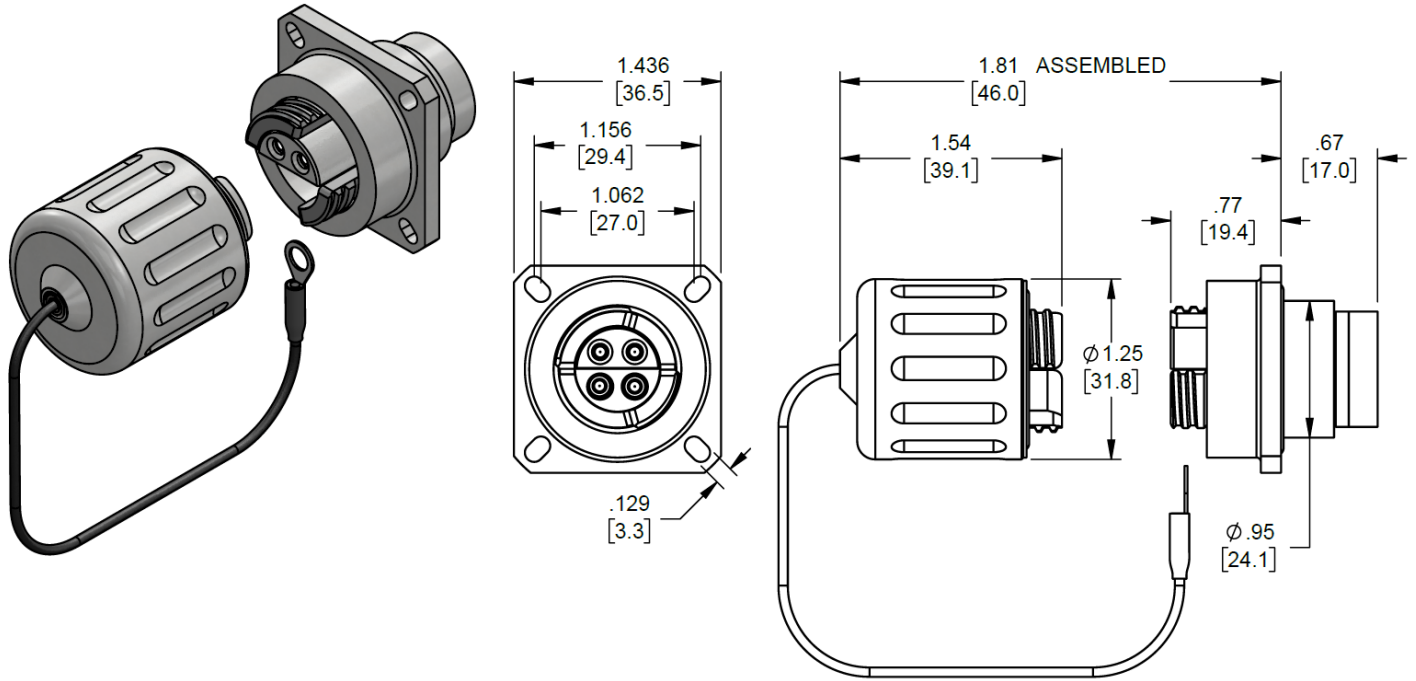
ELink; 24Ch Plug; Hermaphroditic; Backshell; Dust Cover:

ELINK-PHHX-24CH-SXX



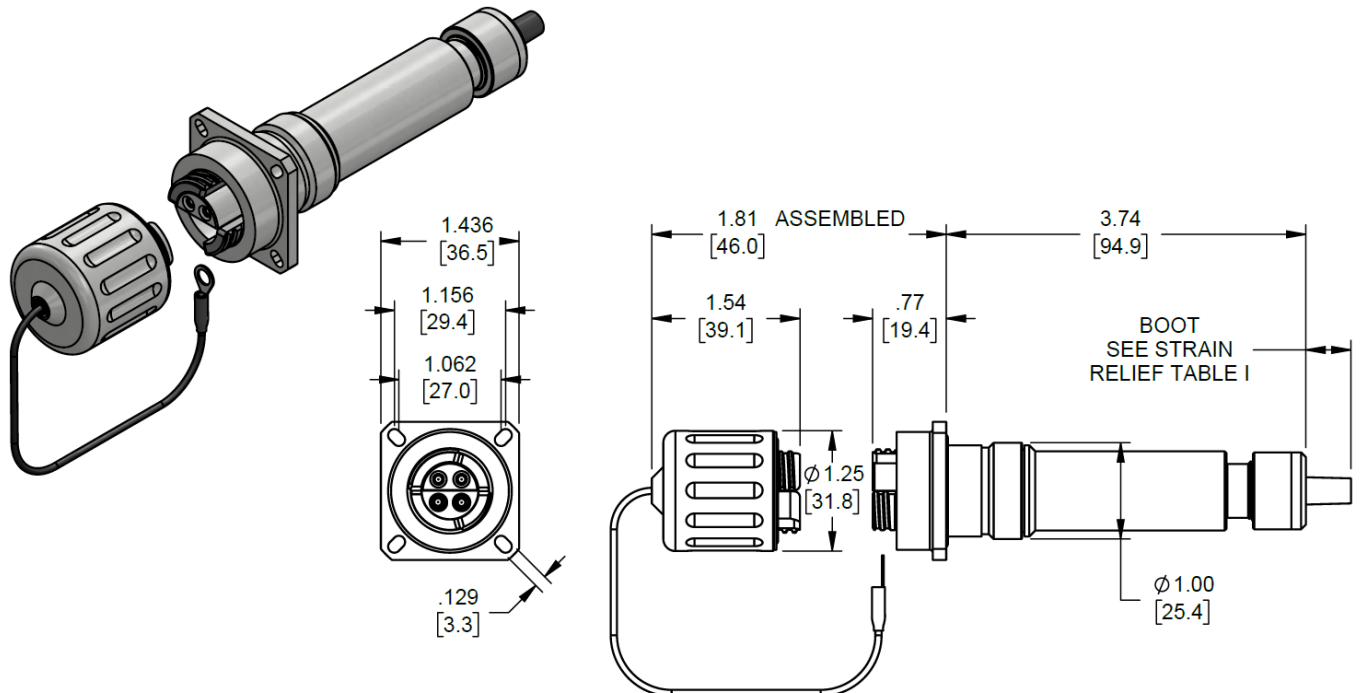
ELink; 4Ch Receptacle; Hermaphroditic; Dust Cover:

ELINK-RHHX-04CH-S0X



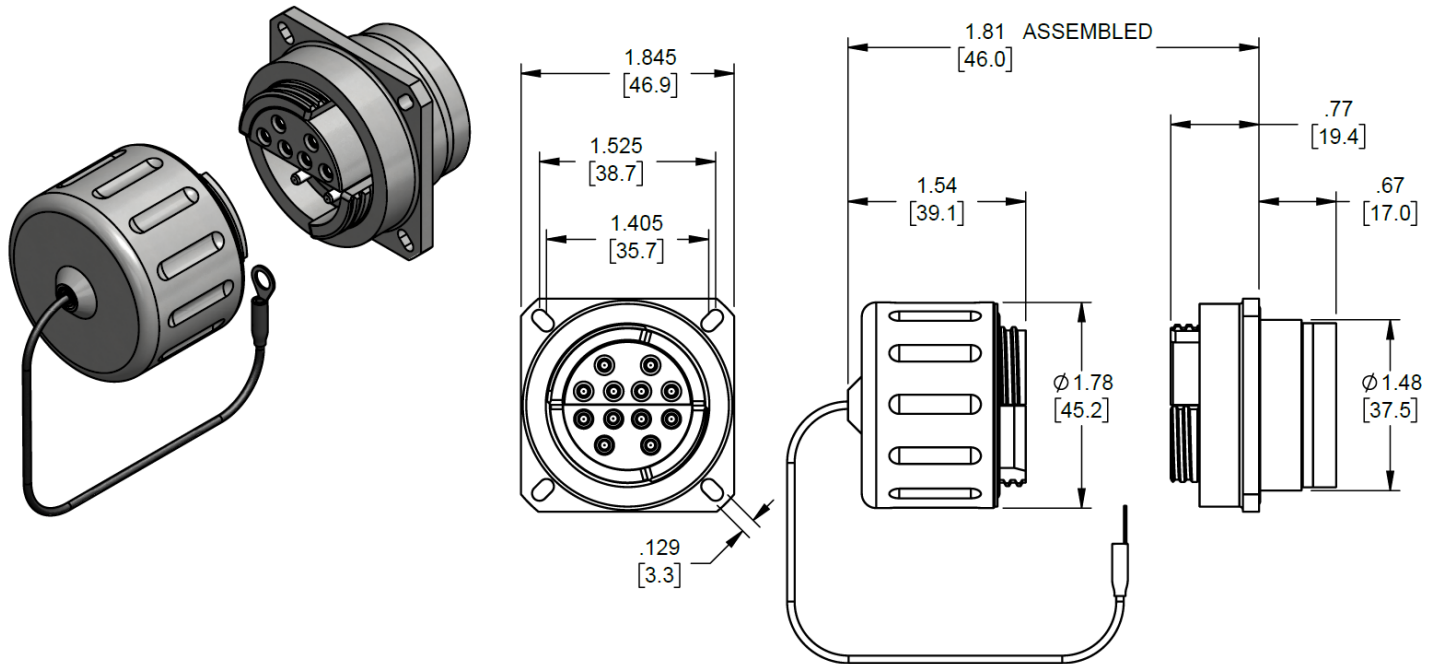
ELink; 4Ch Receptacle; Hermaphroditic; Backshell; Dust Cover:

ELINK-RHHX-04CH-SXX



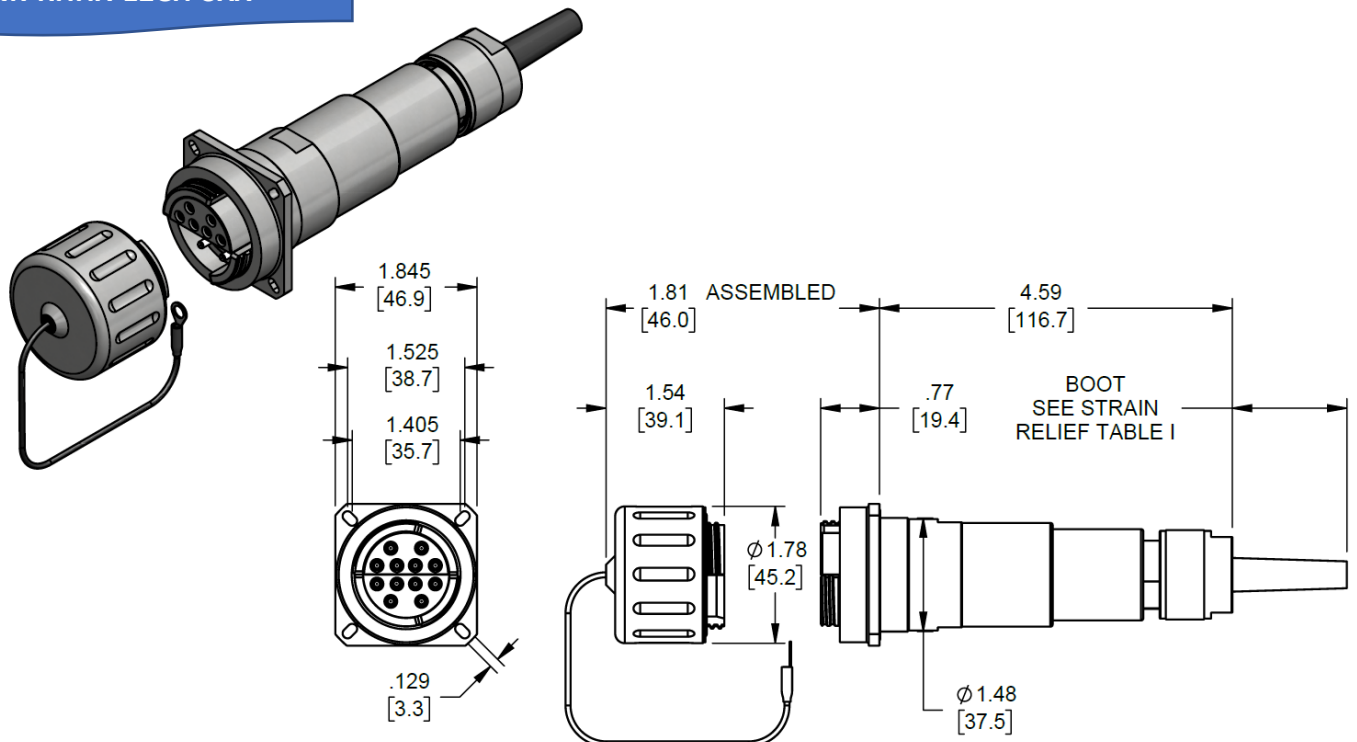
ELink; 12Ch Receptacle; Hermaphroditic; Dust Cover:

ELINK-RHHX-12CH-S0X



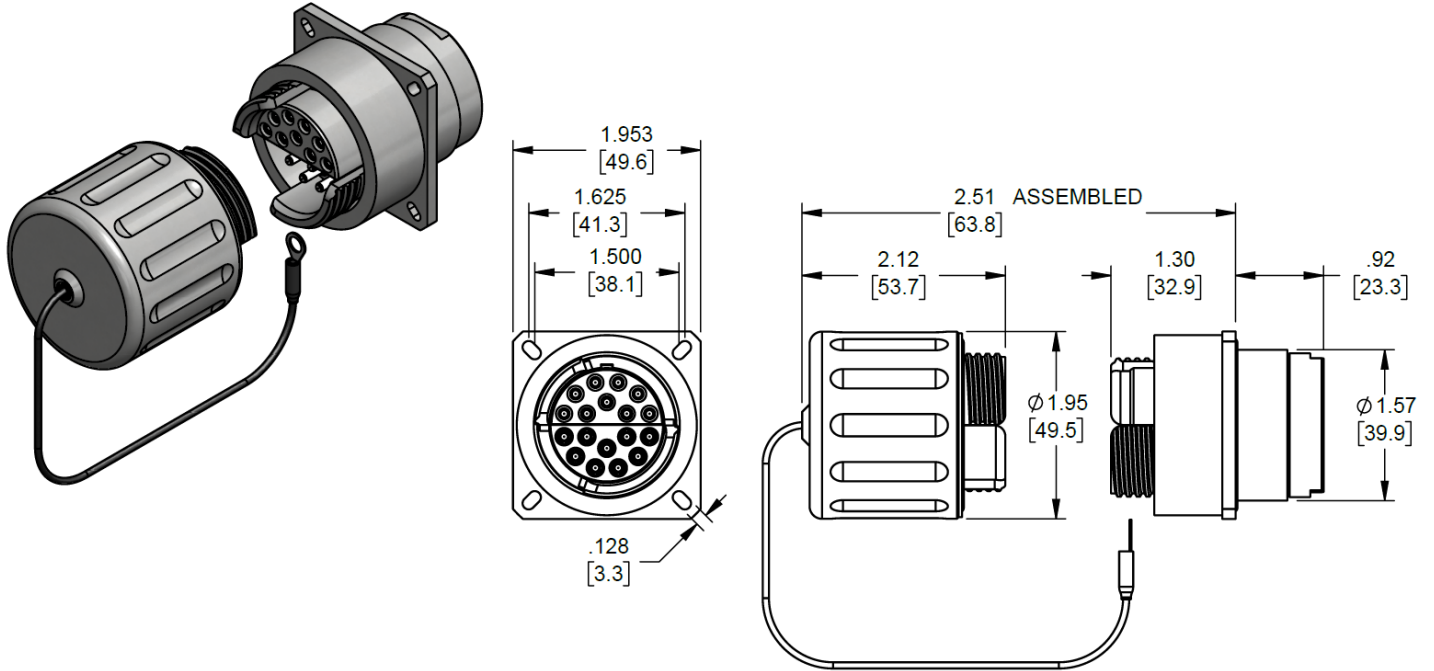
ELink; 12Ch Receptacle; Hermaphroditic; Backshell; Dust Cover:

ELINK-RHHX-12CH-SXX



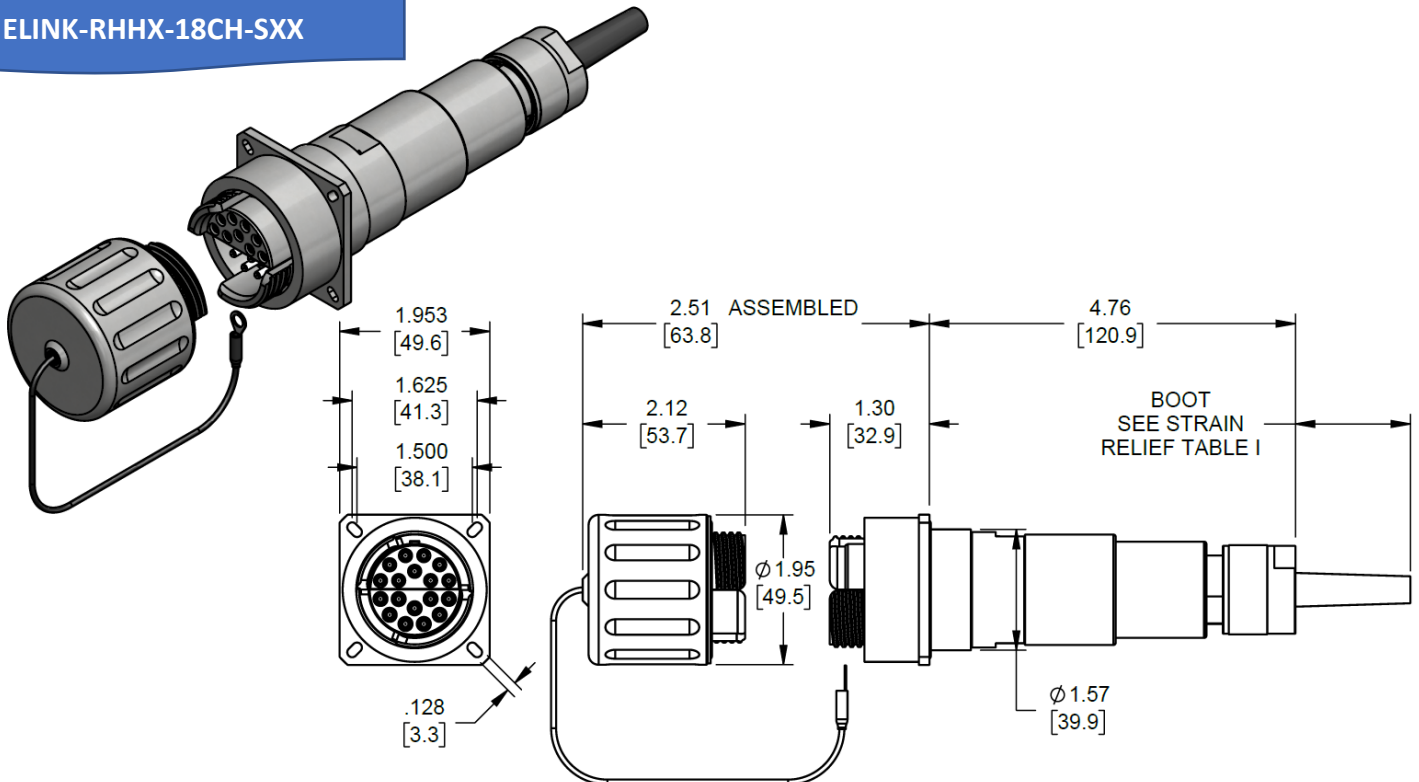
ELink; 18Ch Receptacle; Hermaphroditic; Dust Cover:

ELINK-RHHX-18CH-SOX



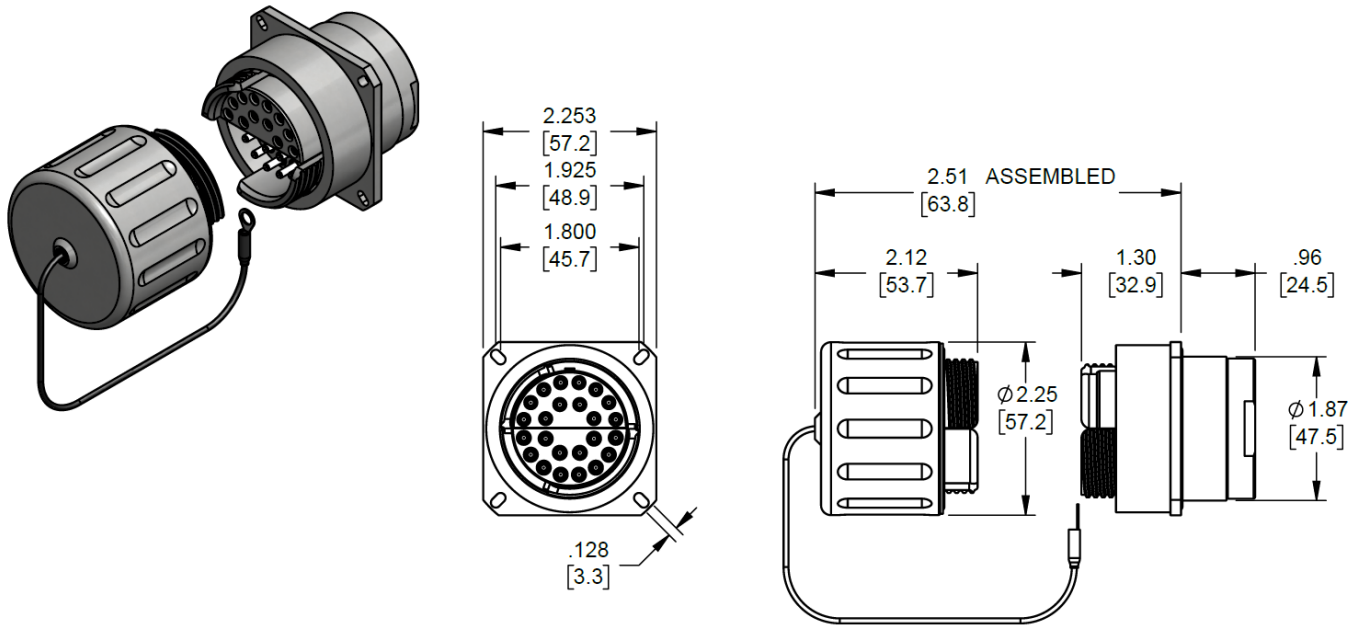
ELink; 18Ch Receptacle; Hermaphroditic; Backshell; Dust Cover:

ELINK-RHHX-18CH-SXX



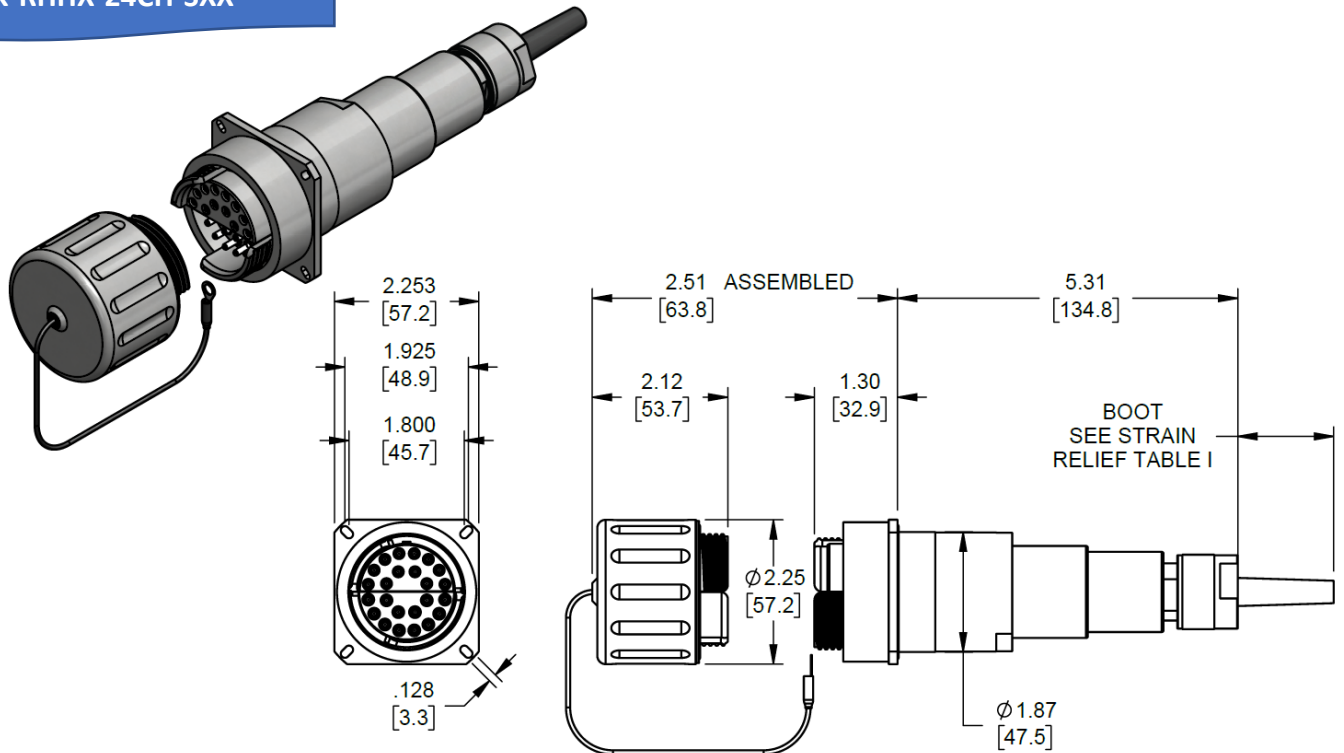
ELink; 24Ch Receptacle; Hermaphroditic; Dust Cover:

ELINK-RHHX-24CH-S0X



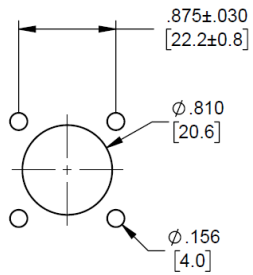
ELink; 24Ch Receptacle; Hermaphroditic; Backshell; Dust Cover:

ELINK-RHHX-24CH-SXX

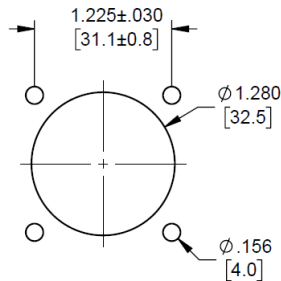


ELink Receptacle Panel Cutouts

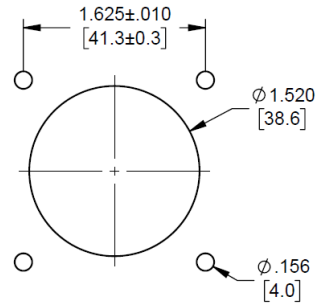
Pin / Socket Without Backshell



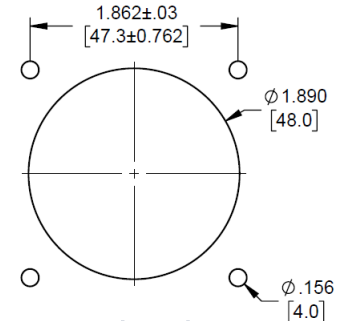
4 Channel



12 Channel

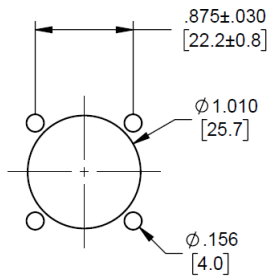


18 Channel

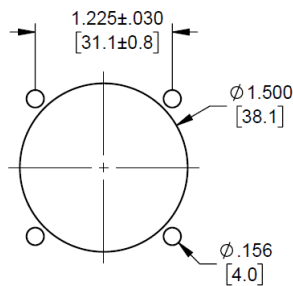


24 Channel

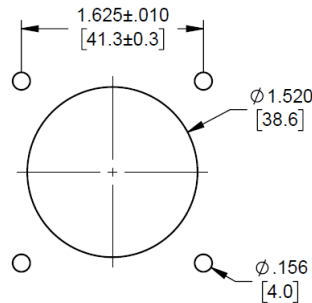
Pin / Socket With Backshell



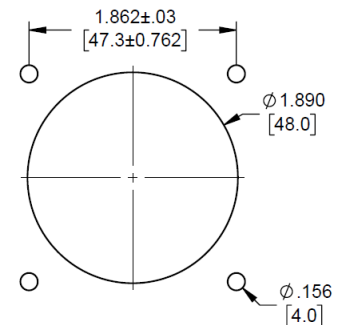
4 Channel



12 Channel

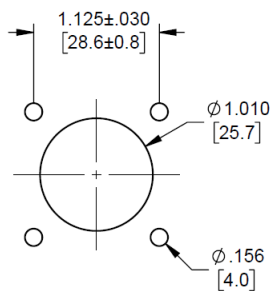


18 Channel

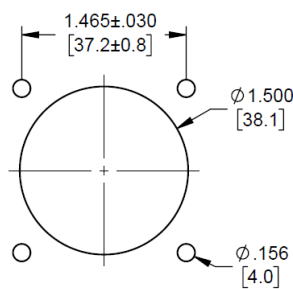


24 Channel

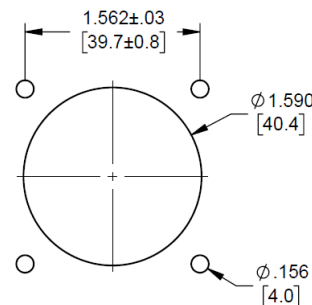
Hermaphroditic With and Without Backshell



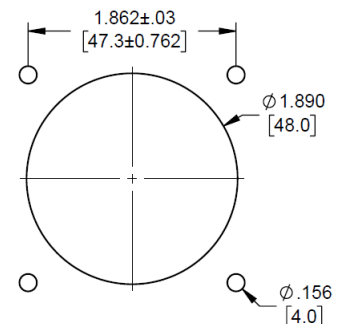
4 Channel



12 Channel



18 Channel



24 Channel

Table I – ELink Strain Relief Options (Plugs / Receptacles with Backshell):

Cable OD in (mm)	4 Channel		12 / 18 / 24 Channel	
	Strain Relief Identifier	Strain Relief Length in (mm)	Strain Relief Identifier	Strain Relief Length in (mm)
0.200 - 0.236 (5.1 - 6.0)	S60	0.47 (11.9)	-	-
0.240 - 0.276 (6.1 - 7.0)	S70	0.47 (11.9)	-	-
0.142 - 0.177 (3.6 - 4.5)	-	-	S045	1.43 (36.3)
0.181 - 0.217 (4.6 - 5.5)	-	-	S055	1.43 (36.3)
0.220 - 0.256 (5.6 - 6.5)	-	-	S065	1.43 (36.3)
0.260 - 0.295 (6.6 - 7.5)	-	-	S075	0.95 (24.1)
0.299 - 0.335 (7.6 - 8.5)	-	-	S085	0.36 (9.1)
0.339 - 0.374 (8.6 - 9.5)	-	-	S095	0.36 (9.1)

Table II – ELink Strain Relief Options (Receptacles without Backshell)

Cable OD	Strain Relief Identifier
900µm	S00
2mm	S02
3mm	S03

ELink Termini:

PART NUMBER	DESCRIPTION
ELINK-TRM	Terminus Assembly; ELink; 2.5mm Ferrule OD; 126µm Singlemode/Multimode
ELINK-SAS	Alignment Sleeve; ELink; 2.5mm ID; Split; Thick Wall (0.63mm)
ELINK-CMP-2MM	Crimp Sleeve, 2.0mm, Stainless Steel
ELINK-CMP-3MM	Crimp Sleeve, 3.0mm, Stainless Steel

ELink Replacement Dust Covers (Aluminum):

PART NUMBER	DESCRIPTION
ELINK-DCPSN-04CH	Dust Cover; ELink; Plug; Male; Aluminum; Hard Anodize; Black; 4CH
ELINK-DCPSN-12CH	Dust Cover; ELink; Plug; Male; Aluminum; Hard Anodize; Black; 12CH
ELINK-DCPSN-18CH	Dust Cover; ELink; Plug; Male; Aluminum; Hard Anodize; Black; 18CH
ELINK-DCPSN-24CH	Dust Cover; ELink; Plug; Male; Aluminum; Hard Anodize; Black; 24CH
ELINK-DCRPN-04CH	Dust Cover; ELink; Receptacle; Female; Aluminum; Hard Anodize; Black; 4CH
ELINK-DCRPN-12CH	Dust Cover; ELink; Receptacle; Female; Aluminum; Hard Anodize; Black; 12CH
ELINK-DCRPN-18CH	Dust Cover; ELink; Receptacle; Female; Aluminum; Hard Anodize; Black; 18CH
ELINK-DCRPN-24CH	Dust Cover; ELink; Receptacle; Female; Aluminum; Hard Anodize; Black; 24CH
ELINK-DCPHN-04CH	Dust Cover; ELink; Plug; Hermaphroditic; Aluminum; Hard Anodize; Black; 4CH
ELINK-DCPHN-12CH	Dust Cover; ELink; Plug; Hermaphroditic; Aluminum; Hard Anodize; Black; 12CH
ELINK-DCPHN-18CH	Dust Cover; ELink; Plug; Hermaphroditic; Aluminum; Hard Anodize; Black; 18CH
ELINK-DCPHN-24CH	Dust Cover; ELink; Plug; Hermaphroditic; Aluminum; Hard Anodize; Black; 24CH
ELINK-DCRHN-04CH	Dust Cover; ELink; Receptacle; Hermaphroditic; Aluminum; Hard Anodize; Black; 4CH
ELINK-DCRHN-12CH	Dust Cover; ELink; Receptacle; Hermaphroditic; Aluminum; Hard Anodize; Black; 12CH
ELINK-DCRHN-18CH	Dust Cover; ELink; Receptacle; Hermaphroditic; Aluminum; Hard Anodize; Black; 18CH
ELINK-DCRHN-24CH	Dust Cover; ELink; Receptacle; Hermaphroditic; Aluminum; Hard Anodize; Black; 24CH

ELink Replacement Dust Covers (Stainless Steel):

PART NUMBER	DESCRIPTION
ELINK-DCPSS-04CH	Dust Cover; ELink; Plug; Male; Stainless Steel; Passivated; 4CH
ELINK-DCPSS-12CH	Dust Cover; ELink; Plug; Male; Stainless Steel; Passivated; 12CH
ELINK-DCPSS-18CH	Dust Cover; ELink; Plug; Male; Stainless Steel; Passivated; 18CH
ELINK-DCPSS-24CH	Dust Cover; ELink; Plug; Male; Stainless Steel; Passivated; 24CH
ELINK-DCRPS-04CH	Dust Cover; ELink; Receptacle; Female; Stainless Steel; Passivated; 4CH
ELINK-DCRPS-12CH	Dust Cover; ELink; Receptacle; Female; Stainless Steel; Passivated; 12CH
ELINK-DCRPS-18CH	Dust Cover; ELink; Receptacle; Female; Stainless Steel; Passivated; 18CH
ELINK-DCRPS-24CH	Dust Cover; ELink; Receptacle; Female; Stainless Steel; Passivated; 24CH
ELINK-DCPHS-04CH	Dust Cover; ELink; Plug; Hermaphroditic; Stainless Steel; Passivated; 4CH
ELINK-DCPHS-12CH	Dust Cover; ELink; Plug; Hermaphroditic; Stainless Steel; Passivated; 12CH
ELINK-DCPHS-18CH	Dust Cover; ELink; Plug; Hermaphroditic; Stainless Steel; Passivated; 18CH
ELINK-DCPHS-24CH	Dust Cover; ELink; Plug; Hermaphroditic; Stainless Steel; Passivated; 24CH
ELINK-DCRHS-04CH	Dust Cover; ELink; Receptacle; Hermaphroditic; Stainless Steel; Passivated; 4CH
ELINK-DCRHS-12CH	Dust Cover; ELink; Receptacle; Hermaphroditic; Stainless Steel; Passivated; 12CH
ELINK-DCRHS-18CH	Dust Cover; ELink; Receptacle; Hermaphroditic; Stainless Steel; Passivated; 18CH
ELINK-DCRHS-24CH	Dust Cover; ELink; Receptacle; Hermaphroditic; Stainless Steel; Passivated; 24CH

ELink Tools:

PART NUMBER	DESCRIPTION
TK-053	ELink Tool Kit (Includes all items below)
PT-451	Fiber Optic Termini Spring Compression Tool (ELink, QFoca, QDrive)
PT-615	Square Drive Strap Wrench, 3/8" Square Drive (NOTE: For 4 Channel ELink Only)
PT-540	Hydraulic Hand Crimping Tool
PT-542	Die Set, 0.444 Hex for Hydraulic Hand Crimper
PT-005	Fiber Optic Termini Crimp Tool, 2mm & 3mm (Hex Sizes .100 / .125 / .147)

Notes & Sketches:

A large grid area for notes and sketches, consisting of 20 columns and 30 rows of small squares.

QFC

ENGINEERED FIBER OPTIC SOLUTIONS

Military Aerospace Shipboard Industrial Mining Transportation Oil & Gas Broadcast Manufacturing Marine Energy Medical

