

Conax Technologies has adapted our proven soft sealant capability to include the ability to compress a soft sealant material around the outside diameter of a fiber optic cable. The fiber optic cable is encased within a rugged stainless steel sheath that protects the cable from damage during the sealing process. This sheath is then placed through a sealing gland. This process allows the fiber optic cable to be sealed without the use of epoxies and with minimal out-gassing.

The fiber optic feedthrough sub-assembly can be used with various Conax Technologies sealing glands, including multiple hole fittings and can be adapted for special applications.

Features

- Wide range of connector terminations: ST, SMA, FC, FC/APC, FC/PC and SC/APC
- Standard fiber core sizes: 8.3, 62.5, 100, 200, 400, 600, 700 micron & larger

- Adaptable to customer-supplied fiber
- Can seal outside jacket diameters from 400 to 1040 microns
- Protection Tubing: Standard furcation tube (black in color) is constructed of a polypropylene inner tube with a dried Kevlar® Aramid yarn strength member and a 3.0 mm outer polyethylene jacket.
- Models FSA2 and FSA4 are available with a low-outgassing furcation tube. Please specify FSA2B or FSA4B for this feature.

Specifications

- Helium Leak Rate: 1×10^{-6} scc/sec typical
- Transmission Loss: Less than 0.3db typical (not including connectors)
- Pressure Rating: 1000 psig (70 bar) standard, up to 3000 (207 bar) psig optional
- Temperature Rating: -4° F to +185° F (-20° C to +85° C)
Higher temperature models are available in some configurations. Please consult factory.

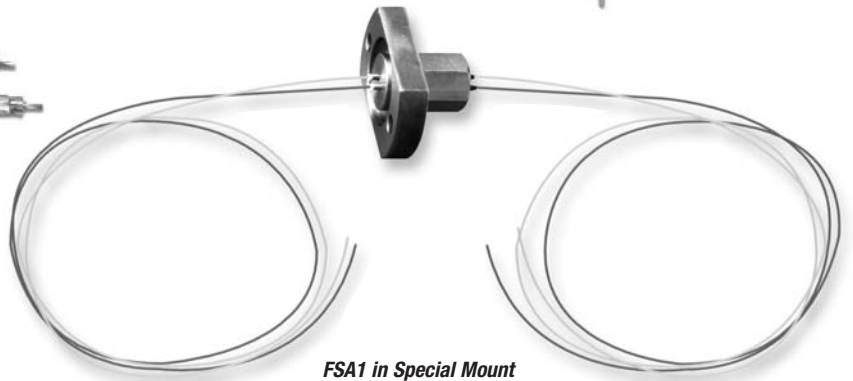
Catalog Numbering System

Model Type	Fiber Core Size	Tube Seal Length	Mounting Gland (Optional)	Conduit Length (mm)	Process Length (mm)	Connector Termination Conduit Side	Connector Termination Process Side
FSA1	0 – 8.3 μm	1 – 55 mm (2.0")	XX – No Gland			XX – No Connector	XX – No Connector
FSA2	1 – 62.5 μm	not available for Model FSA3	See the appropriate catalog section to determine proper gland call out. Will accept PG, MK, MHM, MHC or PGS style gland			905 – SMA 905	905 – SMA 905
FCA2B – low outgassing	2 – 100 μm	2 – 76 mm (3.0")				906 – SMA 906	906 – SMA 906
FSA3	3 – 200 μm	3 – 102 mm (4.0")				ST – ST	ST – ST
FSA4	4 – 400 μm	4 – 114 mm (4.5")				FST – ST with female adapter	FST – ST with female adapter
FSA4	6 – 600 μm	5 – 127 mm (5.0")				FC – FC	FC – FC
FCA4B – low outgassing	7 – 700 μm	6 – 152 mm (6.0")				FC/PC – FC with PC Polish	FC/PC – FC with PC Polish
	9 – Customer supplied fiber					FC/APC – FC with APC, 8° Angle Polish	FC/APC – FC with APC, 8° Angle Polish
						SC/APC – SC with APC, 8° Angle Polish	SC/APC – SC with APC, 8° Angle Polish

Example: **FSA2-4-2-PG2AT-2000/1500-906/ST**



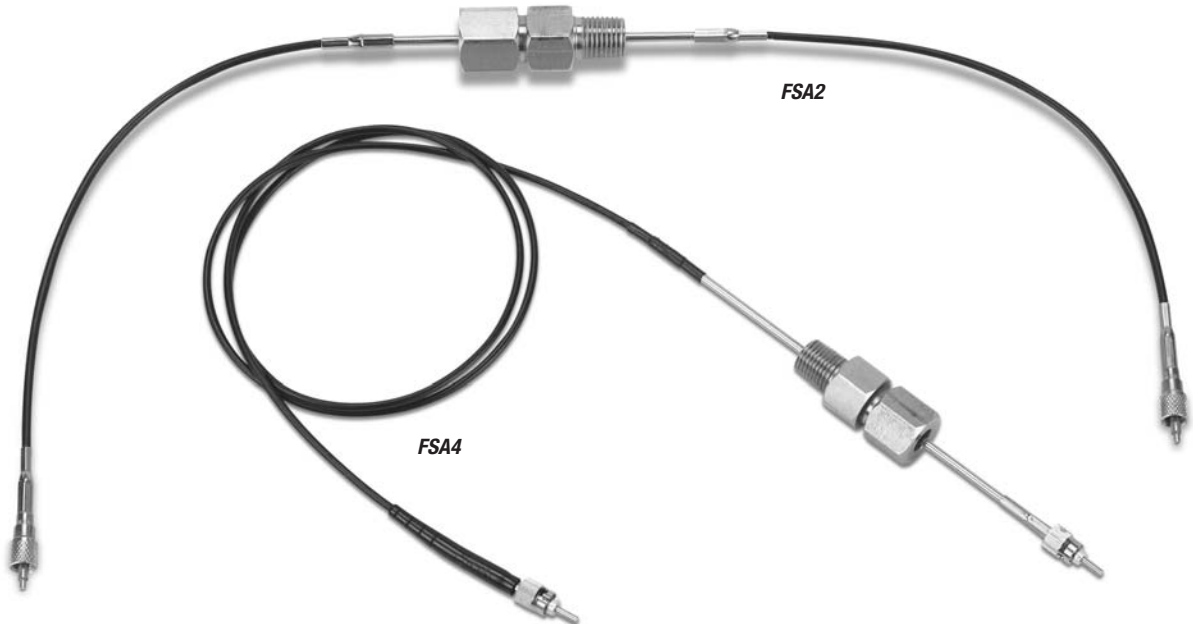
FSA2 in Multi-Hole Gland Arrangement



FSA1 in Special Mount



FSA2



FSA2

FSA4

Conax Technologies offers high performance cable assemblies for use in applications such as laser delivery systems, telecommunications, fiber-to-fiber connections, test & measurement systems and research. These cable assemblies feature high quality, reliable factory terminations and are available in a variety of lengths, fiber types and connection styles. Each cable assembly can be optically tested for connection losses.

Features

- Available with or without connector terminations
- Standard fiber core sizes available: 8.3, 62.5, 100, 200, 400 micron and larger
- Will provide cable for customer-supplied fiber
- Protection Tubing: FCA1 and FCA2 use a standard furcation tube (black in color) constructed of a polypropylene inner tube with a dried Kevlar® Aramid yarn strength member and a 3.0 mm outer polyethylene jacket. These models are also available with a low

outgassing furcation tube (blue in color) constructed of a PVDF inner jacket with a dried Kevlar® Aramid yarn strength member and a 3.0 mm PVDF outer jacket. FCA3 uses the standard furcation tube with a stainless steel overbraid. Please specify FCA1B or FCA2B for this feature.

Specifications

- Transmission Loss: Less than 0.3db typical (not including connectors).
- Temperature Rating: -4° F to +185° F (-20° C to +85° C) Higher temperature models are available in some configurations. Please consult factory.

Benefits

- Rugged construction
- Fiber optic cable is protected inside the sheath
- Uses low outgassing materials

Catalog Numbering System

Model Type	Fiber Core Size	Overall Length (mm)	Connector Termination Conduit Side	Connector Termination Process Side
FCA1	0 – 8.3 μm		XX – No Connector	XX – No Connector
FCA1B – low outgassing	1 – 62.5 μm		905 – SMA 905	905 – SMA 905
FCA2	2 – 100 μm		906 – SMA 906	906 – SMA 906
FCA2B – low outgassing	3 – 200 μm		ST – ST	ST – ST
FCA3	4 – 400 μm		FST – ST with female adapter	FST – ST with female adapter
	6 – 600 μm		FC – FC	FC – FC
	7 – 700 μm		FC/PC – FC with PC Polish	FC/PC – FC with PC Polish
	9 – Customer supplied fiber		FC/APC – FC with APC, 8° Angle Polish	FC/APC – FC with APC, 8° Angle Polish
			SC/APC – SC with APC, 8° Angle Polish	SC/APC – SC with APC, 8° Angle Polish

Model Type
Low Outgassing Tube
Fiber Core Size
Length
Connector Termination, Conduit Side
Connector Termination, Process Side

Example: FCA2B-4-1000-ST/ST



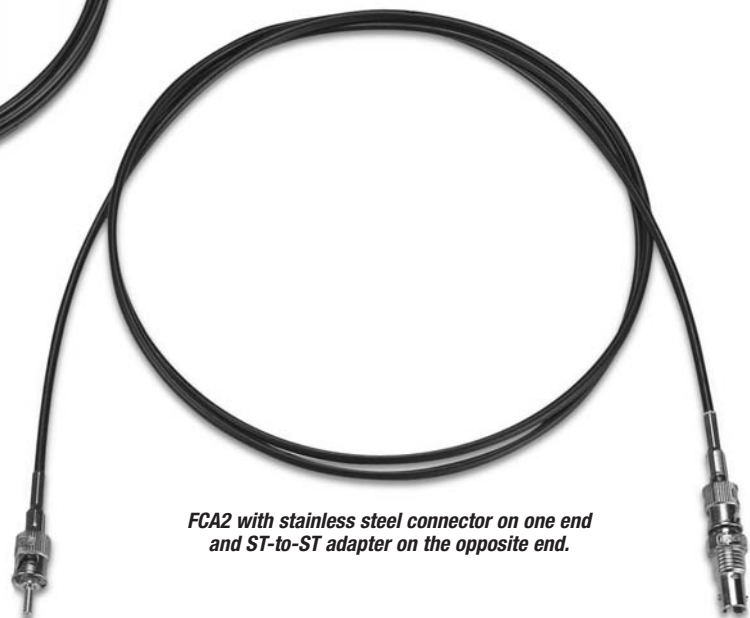
FCA1



FCA3



FCA2



FCA2 with stainless steel connector on one end and ST-to-ST adapter on the opposite end.

SPECIAL
ASSEMBLIES