

GREEN HORNET

TM

**BUTT SPLICE
CONFIGURATION
CLOSURE SERIES**

BROUGHT TO YOU BY CHANNELL

FIBERX

Dedicated to protecting fiber optics through design, innovation, and service.

With Green Hornet The Options Are Endless

Green Hornet returns in the form of a fiber optic, butt splice configuration closure series that offers a simple, easy, and customizable solution for multiple applications in FTTX networks. The legacy of the Green Hornet continues through the use of Channell's patented grommet sealing technology. Green Hornet stays true to its name by offering unbeatable protection.

Unbeatable protection

- Environmentally sealed: air/water tight
- Meets test standards of GR771, IP68, and IEC 61300
- Structural Integrity: impact/solvent/UV resistant

Made for mankind with craft-friendly design

- Quick installation
- Easily re-enterable/reusable

Green Hornet is the most universal, versatile fiber optic closure in the industry, providing the power to customize and solve any of your application needs. Green Hornet can battle the underground, hang on a pole, or fly aerial, and is also able to accommodate a wide range of cable diameters, drop densities, and splice capacities.

Blown or Conventional Fiber?

Flat or Oval Tray?

Lubricated or Compression Grommet?

Passive Optical Filters?

No problem!

Whatever the application, Green Hornet is the solution.

GREEN HORNET: MOST UNIVERSAL CLOSURE IN THE INDUSTRY



✓ Aerial



✓ Subsurface



✓ Pole/Wall

G6 conventional fiber shown with flat trays, mux, and armored distribution cables

Need caption

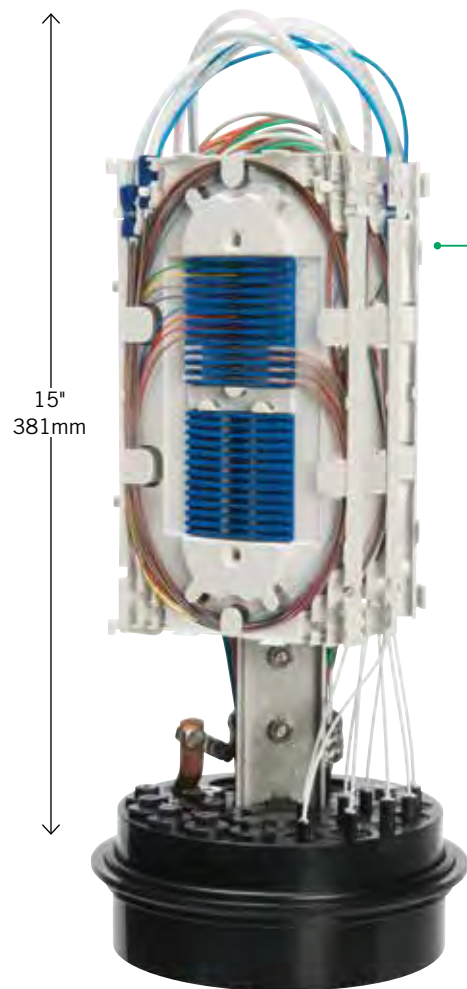


Which Green Hornet is Best for Your Application...G6, G9, or G5?



All Green Hornet models offer a wide range of customizable options and configurations, allowing for flexibility in your FTTX network plan. From conventional and blown fiber, to flat and oval trays, to compression and lubricated grommets, Green Hornet is the most versatile closure in the world.

G6

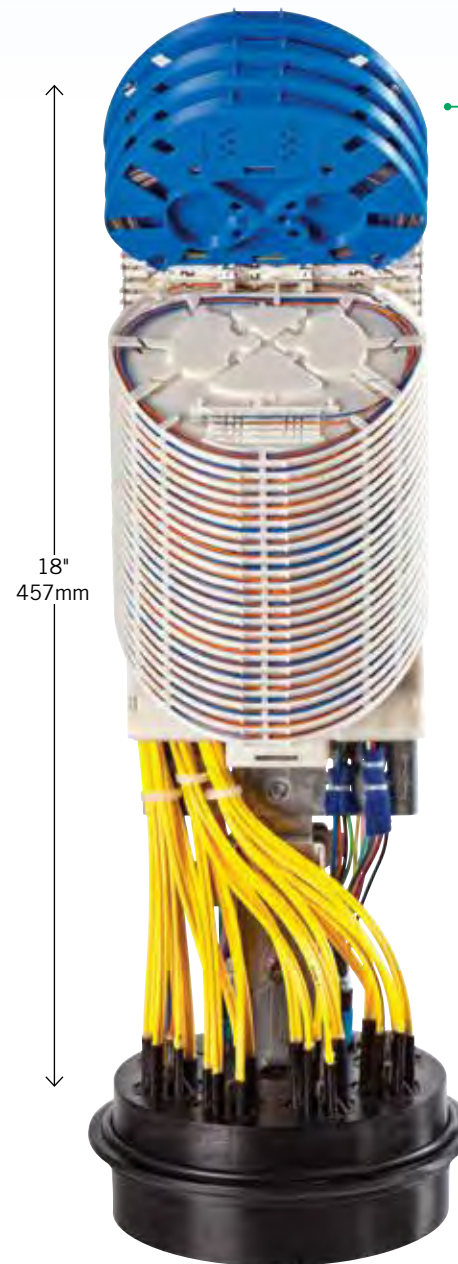


15"
381mm

6"
152mm

6" x 15"
152mm x 381mm

- Conventional Fiber
- Lubricated grommet
- Tray Design/Max Capacity: 4 flat splice trays
- Max Splice Capacity: 96 single-stacked splice, 192 double-stacked splices
- Max Drop Density: 16 distribution ports, 1 main oval port, 1 branch port, 1 spare port for bonding and grounding



18"
457mm

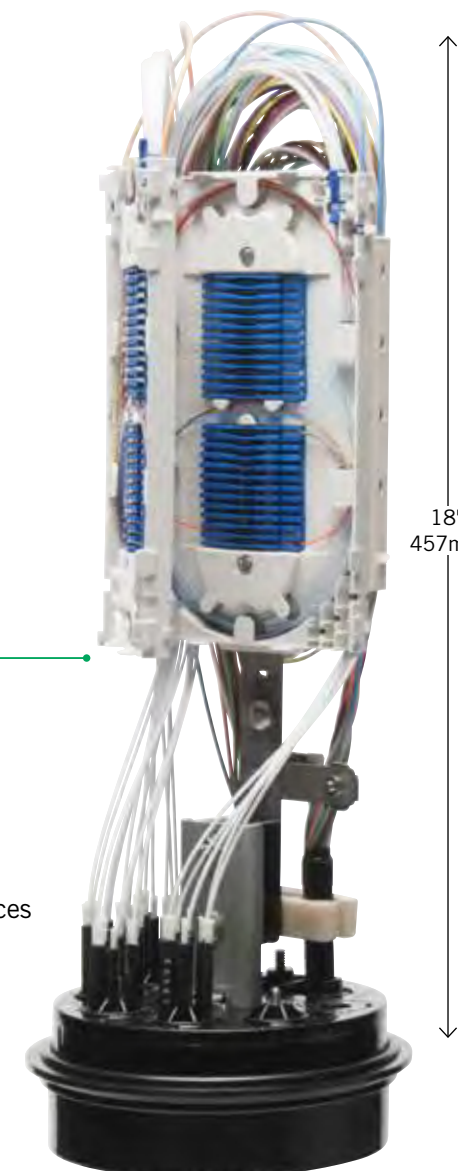
6"
152mm

6" x 18"
152mm x 457mm

- Conventional Fiber
- Compression grommet
- Tray Design/Max Capacity: Oval Tray Design- 32 single circuit trays, or 24 single circuit trays and 4 single element trays, or a combination of the two
- Max Splice Capacity: 96 single-stacked splice, 192 double-stacked splices
- Max Drop Density: 6 interchangeable ports and 1 main oval port for a max of 36 distribution ports, 6 single branch ports, or combination of the two

6" x 18"
152mm x 457mm

- Conventional Fiber
- Compression grommet
- Tray Design/Max Capacity: 4 flat splice trays
- Max Splice Capacity: 96 single-stacked splice, 192 double-stacked splices
- Max Drop Density: 6 interchangeable ports and 1 main oval port to offer a maximum of 36 distribution ports, 6 single branch ports, or a combination of the two



18"
457mm

6"
152mm

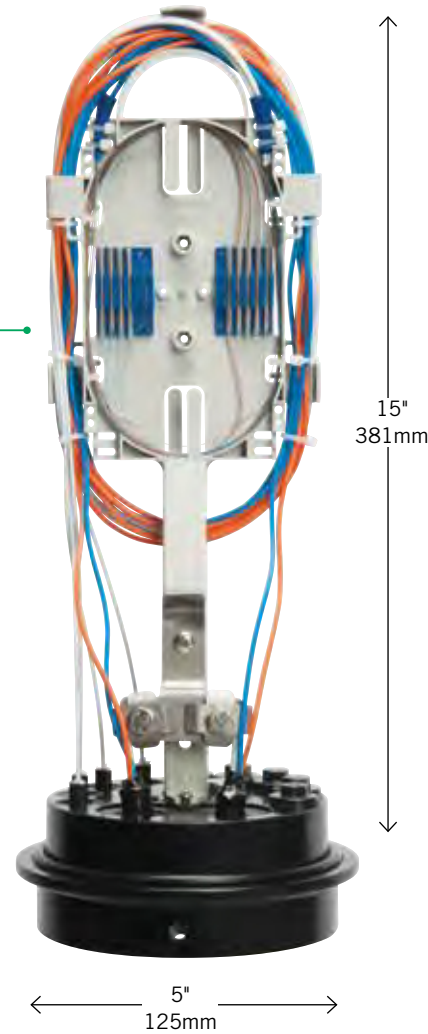
change to black to look like GH



G5

5" x 15"
125mm x 381mm

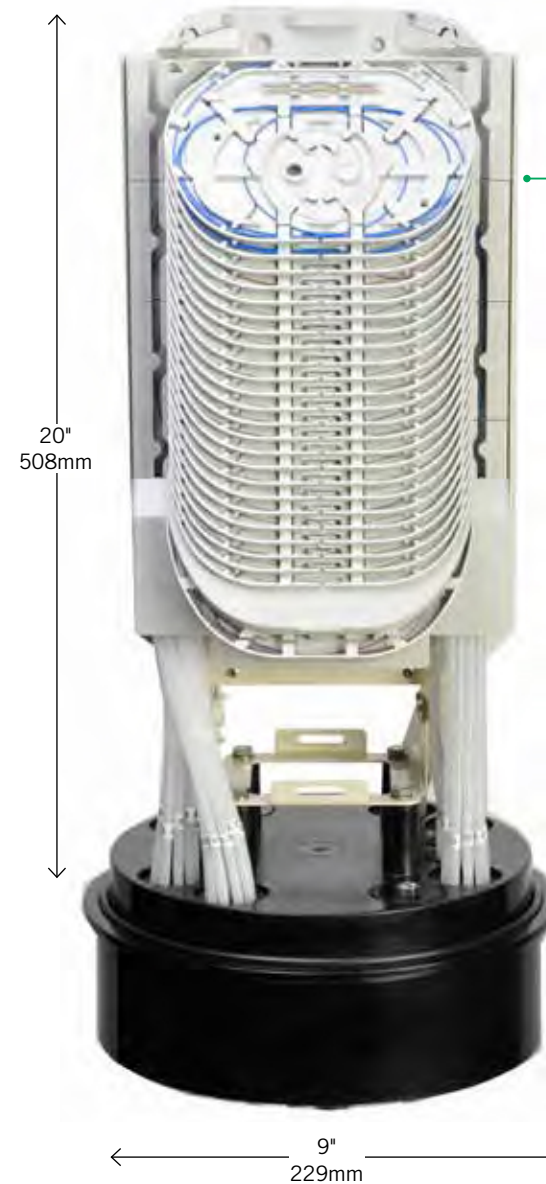
- Conventional Fiber
- Lubricated grommet
- Tray Design/Max Capacity:
4 flat compact splice trays
- Max Splice Capacity:
48 single-stacked splices
- Max Drop Density:
8 distribution ports, 1 main oval port,
and 1 ground port



G9

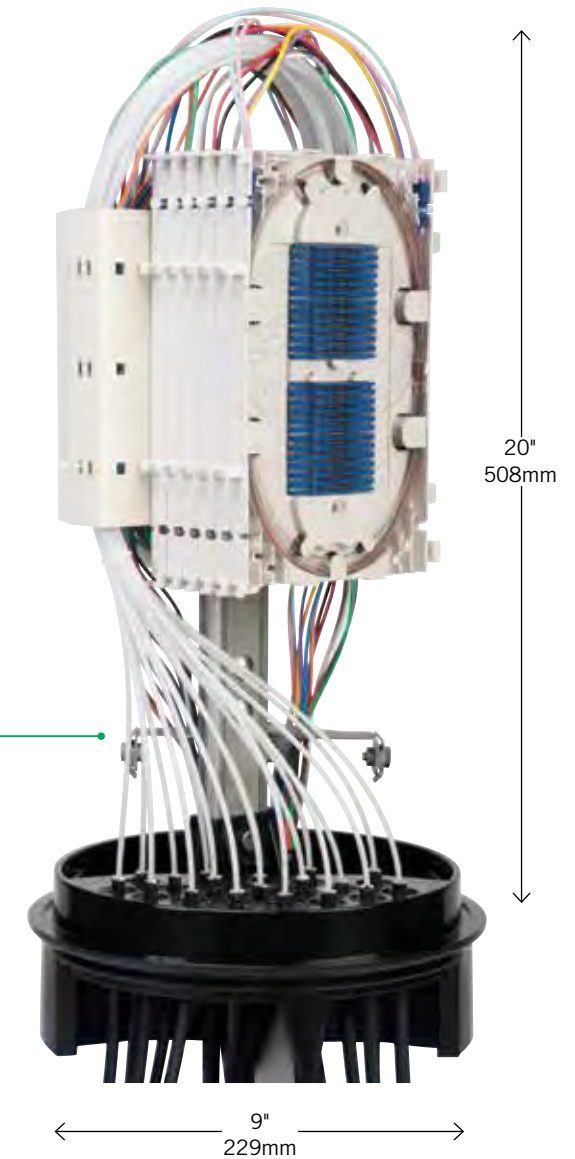
9" x 20"
229mm x 508mm

- Blown Fiber
- Lubricated grommet
- Tray Design/Max Capacity:
Oval-Single circuit and single element trays
- Max Splice Capacity:
56 single circuit trays: 4 splices per tray, 224 fiber splices
28 single element trays: 12 splices per tray, 336 fiber splices
- Max Drop Density:
72 individual drops



9" x 20"
229mm x 508mm

- Conventional Fiber
- Lubricated grommet
- Tray Design/Max Capacity:
6 flat splice trays
- Max Splice Capacity:
144 single-stacked splices
288 double-stacked splices
- Max Drop Density:
16 distribution ports, 1 main
oval port, 2 branch ports,
and 1 ground port



Green Hornet G9 FTTH Closure

Channell offers several mounting bracket options to accommodate any Green Hornet application, from aerial, to, pole, to subsurface.



Aerial Bracket



Primary Bracket



Extended Bracket



Channell's new Compression Grommet brings high drop density to a whole new level. Introducing the newest member of the Green Hornet series: The G6 with Compression Grommet Sealing Technology.

Compression Grommet Sealing

- Bolt driven sealing system: Bolt drives compression which creates an environmental seal
- Completely environmentally sealed: air/water tight weatherproof, and flood proof (in accordance with GR-771-CORE testing requirements)
- Quick and efficient installation
- Intuitive and easy to use
- No special tools are required

Interchangeable Grommet Sealing System

The base offers 1 main cable oval port seal and 6 interchangeable ports that accommodate single cable compression grommets and multiple cable compression grommets giving you the ability to design your own configuration.

The unit offers a max of 36 distribution ports (6 multiple cable compression grommets), 6 single branch ports (single cable compression grommet), or a combination of the two.



Compression grommet sealing technology shown on a G6 base

Compression Grommet Installation



- ✓ **Step 1**
Install the empty grommet into the port then push the cable through.



- ✓ **Step 2**
Tighten the bolt.

Grommet Sealing Technologies Offer Power and Choice

Lubricated Grommet

Channell's patented lubricated grommet sealing technology offers an instant, reliable, and guaranteed environmental seal with superior cable retention:

- Offers both cable retention and a guaranteed seal in a single unit
- Completely environmentally sealed: air/water tight, weatherproof, and flood proof (In accordance with Telecordia GR-771-CORE testing requirements)
- Quick, efficient, and tool-less installation: on average, takes less than 1 minute to install
- Superior pull out strength
- Accommodates multiple cable configurations
- Long-term structural integrity



Lubricated grommet sealing technology shown on a G6 base

Lubricated Grommet Installation



- ✓ **Step 1**
Measure the cable diameter



- ✓ **Step 2**
Snip the grommet



- ✓ **Step 3**
Lubricate the grommet with Channell lube



- ✓ **Step 4**
Install the grommet into the desired port



GR 771 = The Americas
 IEC 61300 = International: Australia, New Zealand, Asia, Europe, Africa, Middle East

TEST PERFORMANCE MEASURES

Criteria	Reference Specification	Requirements
Sealing	IEC 61300-2-23; GR 771 5.4.6	No water intrusion
Tightness	IEC 61300-2-38	No continuous air escape
Appearance/Visual	IEC61300-3-1	No performance effecting damage
Optical Measurements	IEC 61300-3-3, 5, and 44 ; GR-771 A.2	Attenuation change

MECHANICAL PERFORMANCE SEQUENCE

Item	Test	Reference Specification	Requirements
1	Cable Clamping	GR-771 5.3.1	Appearance, Tightness, Optical Measurements
2	Sheath Retention	IEC 61300-2-4, GR-771 5.3.2	Appearance, Tightness, Optical Measurements
3	Cable Flexure	IEC 61300-2-37, GR 771 5.3.3	Appearance, Tightness, Optical Measurements
4	Cable Torsion	IEC 61300-2-5 ; GR 771 5.3.4	Appearance, Tightness, Optical Measurements
5	Vertical Drop	GR-771 5.3.5	Appearance, Tightness
6	Crush Resistance	IEC 61300-2-10, GR-771 5.3.6	Appearance, Tightness
7	Axial Compression	IEC-61300-2-11	Appearance, Tightness
8	Impact - Drop Tube	IEC 61300-2-12, GR-771 5.3.7	Appearance, Tightness
9	Water Resistance	IEC 61300-2-23 ; GR 771 5.4.6	Appearance, Tightness, Sealing
10	Central Strength Member	IEC 61300-2-11, GR-771 5.3.10	No protrusion
11	Vibration	GR-771 5.3.9 ; IEC-60068-2-6	Appearance, Tightness

ENVIRONMENTAL PERFORMANCE

Item	Test	Reference Specification	Requirements
1	Thermal Aging	GR771 5.4.1	Sealing
2	Assembly and Reconfiguration	IEC 61300-2-33, GR-771 5.4.2	Appearance, Tightness
3	Temperature/Humidity Cycling	GR-771 5.4.3	Appearance, Tightness
4	Temperature Cycling	IEC-61300-2-22	Appearance, Tightness, Sealing
5	Freeze/Thaw	GR-771 5.4.4	Appearance, Tightness
6	Water Resistance	IEC-61300-2-23, GR-771 5.4.6	Sealing
7	Corrosion Resistance	IEC-61300-2-26, GR-771 5.5.3	Appearance, Sealing
8	Chemical Resistance	IEC 61300-2-34, GR-771 5.5.4	80% Property retention
9	UV Resistance	GR771 5.5.5	80% Property retention

FiberX "Special Weapons"



The Seal of Steel

Channell's grommet sealing technologies offers an instant, reliable, and guaranteed environmental seal with superior cable retention:

- Completely environmentally sealed: air/water tight, weatherproof, and flood proof (in accordance with Telecordia GR-771-CORE and IEC 61300 testing requirements)
- Quick, efficient, and tool-less installation: on average, takes less than 1 minute to install
- Superior pull out strength
- Accommodates multiple cable configurations
- Long-term structural integrity



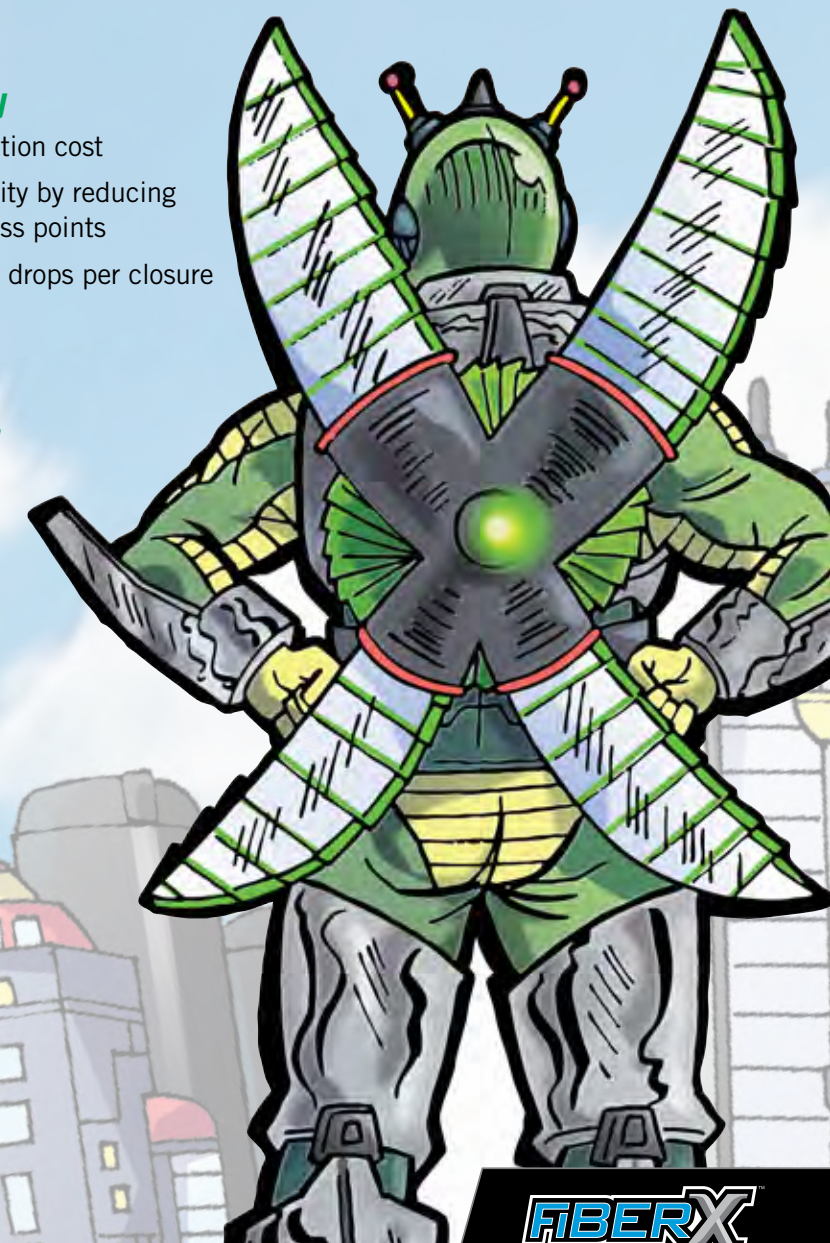
High Drop Density

- Yields the lowest installation cost
- Increases system reliability by reducing the number of fiber access points
- Accommodates up to 72 drops per closure



Installation at the Speed of Light

Tool-less installations that are quick and simple make FiberX products the fastest to install in the industry.



Conventional Fiber

Flat Splice Tray Design

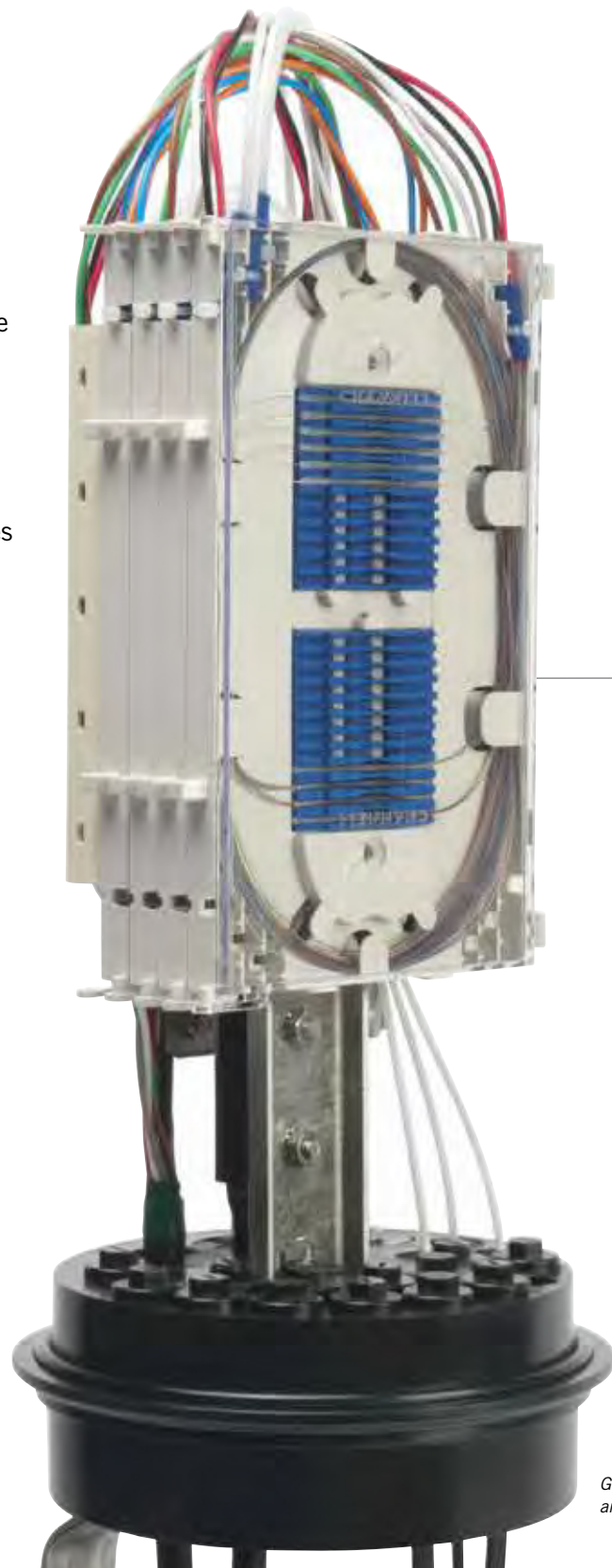
- Hinged, stackable, and removable, which enables technicians to splice inside the closure, or remove trays and splice outside of the closure
- Accommodate single-fusion, mass-fusion, or mechanical splicing
- Each splice tray accommodates up to 24 single-stacked splices or 48 double-stacked splices.

Grommet Options

- Can accommodate both compression and lubricated grommets.



Compression grommets



G6 conventional fiber with flat trays and lubricated grommets



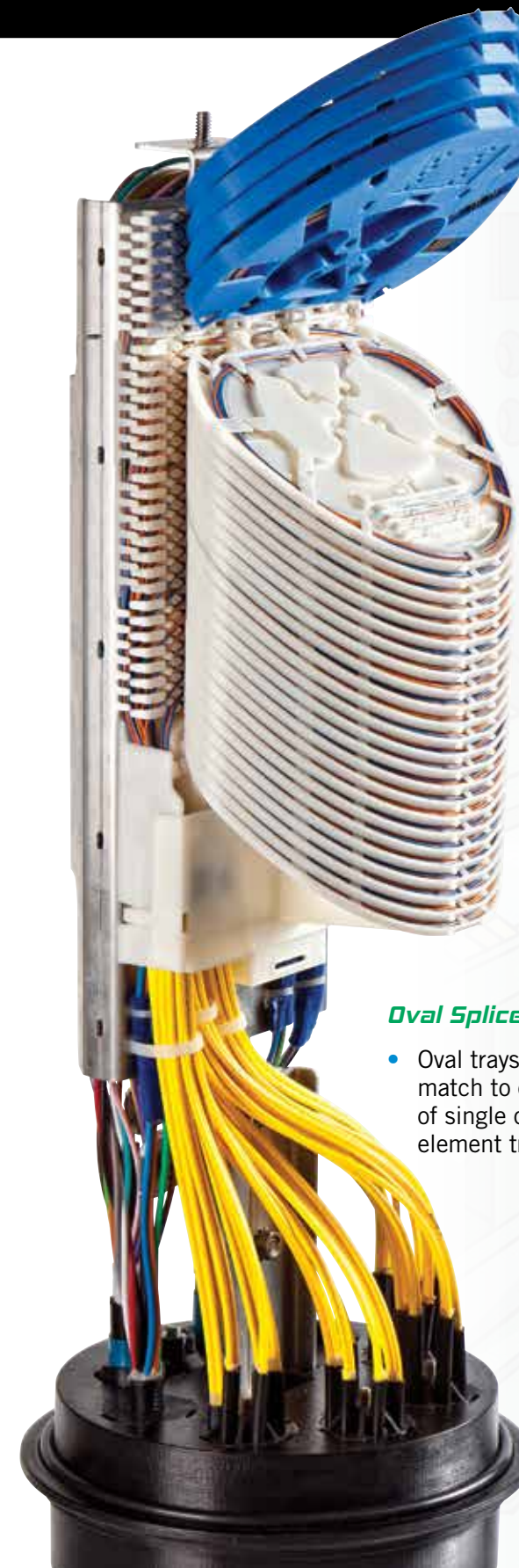
Slack storage tray

Slack Storage Tray

- Allows any expressed or uncut tubes/fibers to be looped, stored, and routed within the back of the enclosure
- Permits more slack and better organization

Splice Holders

- Accommodate, secure, and protect single-stacked or double-stacked splices
- Each splice tray features 2 splice holders
- Each holder has a max capacity of 12 single-stacked spliced or 24 double-stacked splices



G6 conventional fiber with single circuit and single element oval trays and compression grommets

Oval Splice Tray Design

- Oval trays allow you to mix and match to create a combination of single circuit and single element trays.

PASSIVE OPTICAL COMPONENTS

Our trays can house a wide range of passive optical components—including CWDM multiplexers, splitters, and patch panels—allowing for an even greater range of flexibility in your network.



CWDM Multiplexers



Splitters



Patch Panels

Blown Fiber

Tray Design

- The oval tray design used in blown fiber applications allows you to mix and match the tray modules to create a customized combination of single circuit and single element trays. Therefore, the max splice capacity may vary depending on what combination is used.



Single circuit tray



Single element tray

- Can accommodate passive optical components such as splitters

- Can accommodate passive optical components



Single element tray with splitter on G9



G9 blown fiber with single circuit and single element trays and lubricated grommet sealing

Connect & Protect with the FiberXconnect

The Xconnect is a special weapon used by the FiberX team to connect the central network to the blown fiber tubes; and most importantly, protect this connection.

- Capable of connecting and protecting 10 blown fiber tubes
- Environmentally sealed: Air tight/Water tight
- Impervious to hostile environments
- Quick installation



Xconnect with blown fiber tubes



- ✓ Environmentally sealed with Channel's lubricated grommet sealing technology.



Blown fiber Green Hornet unit includes tubes and endcaps





FiberX™ is a superhero fiber optic product team in the Channell Universe that is dedicated to the protection of fiber optics. FiberX is committed to making the world of fiber optics a better place through design, innovation, and service.

FiberX products feature an optimal fiber splice management system that is simple, organized, and craft-friendly. With a wide range of features and accessories, FiberX offers a customized solution to meet the needs of any FTTX application.

The strength of FiberX has evolved from Channell's 90 years of experience and leadership in thermoplastic enclosures for the telecommunication and broadband industries. FiberX embodies the same patented, reliable, and proven features that have contributed to Channell's reputation and great success.

FOR MORE INFORMATION ABOUT FIBERX PRODUCTS, CALL 800-423-1863.



BUTT SPLICE CONFIGURATION CLOSURE SERIES



FREE-BREATHING CLOSURE SERIES



INLINE SPLICE CONFIGURATION CLOSURE SERIES



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