



FEDOME48C-V2

Description

CERTECH 48-Core Dome Fibre Optic Splice Enclosure, Heat-Shrink Seal, IP68 Rated

Colour

Black

Technical Overview

The CERTECH FEDOME48C-V2 is a compact, IP68-rated dome fibre optic splice enclosure engineered for the splicing, protection and management of outside-plant optical fibre networks.

Constructed from durable polycarbonate with a UL94-HB flammability classification, the enclosure accommodates up to 48 fusion splices across four 12-fibre splice trays and incorporates dedicated fibre storage for splice management and straight-through fibre routing. The re-enterable enclosure provides clear access to the splice assembly, while the integrated fibre-management system maintains fibre bend radii greater than 30mm.

A heat-shrink cable sealing system provides secure cable entry, with three round cable-entry ports and one oval cable-entry port supporting a range of cable configurations. An integrated M8 air valve enables field pressure testing of the completed enclosure to verify sealing integrity following installation or re-entry.

The FEDOME48C-V2 supports aerial, pole, wall, underground, duct and handhole installations and is suitable for operating environments from -40°C to +65°C.

How to Specify

Specify **CERTECH FEDOME48C-V2 48-Core Dome Fibre Optic Splice Enclosure, IP68 rated**, with polycarbonate housing and UL94-HB flammability classification. The enclosure shall provide capacity for up to 48 fusion-spliced fibres across four 12-fibre splice trays and incorporate dedicated fibre storage and management.

The enclosure shall incorporate a heat-shrink cable sealing system with three round cable-entry ports and one oval cable-entry port, suitable for cable diameters up to 20mm subject to cable-entry configuration.

The enclosure shall incorporate an integrated M8 air valve to enable field pressure testing and verification of enclosure seal integrity and shall be suitable for aerial, pole, wall, underground, duct and handhole installation.

The enclosure shall be suitable for operating temperatures from -40°C to +65°C.

Key Features

IP68-Rated Enclosure

Provides environmental protection for outside-plant fibre splicing applications

48-Fibre Capacity

Accommodates up to 48 fusion splices across four 12-fibre splice trays

Polycarbonate Housing

Durable enclosure construction with UL94-HB flammability classification

Heat-Shrink Cable Sealing

Provides secure sealing around incoming and outgoing fibre cables

Four Cable-Entry Ports

Three round cable entries and one oval cable entry support flexible cable routing and branching configurations

Integrated Pressure-Test Valve

M8 air valve enables field pressure testing to verify enclosure seal integrity

360° Internal Access

Provides unrestricted access to the splice trays and fibre-management assembly during installation and maintenance

Integrated Fibre Management

Dedicated splice trays and fibre holding tray provide controlled fibre routing, storage and bend-radius management

Multiple Mounting Configurations

Suitable for aerial, pole, wall, underground, duct and handhole deployment

Wide Temperature Range

Suitable for operating environments from -40°C to +65°C

Applications

The CERTECH FEDOME48C-V2 is designed for outside-plant fibre networks requiring a compact, sealed and re-enterable fibre splice enclosure.

Ideal for use across a wide range of applications, including:

Telecommunications Networks

Fibre backbone, distribution and access-network splicing

Fibre-to-the-Premises (FTTP)

Splice protection and fibre management within distribution and access networks

Carrier and ISP Networks

Outside-plant fibre distribution, branching and network expansion

Transport and Utilities

Protected fibre splicing for road, rail, utility and infrastructure networks

Industrial Infrastructure

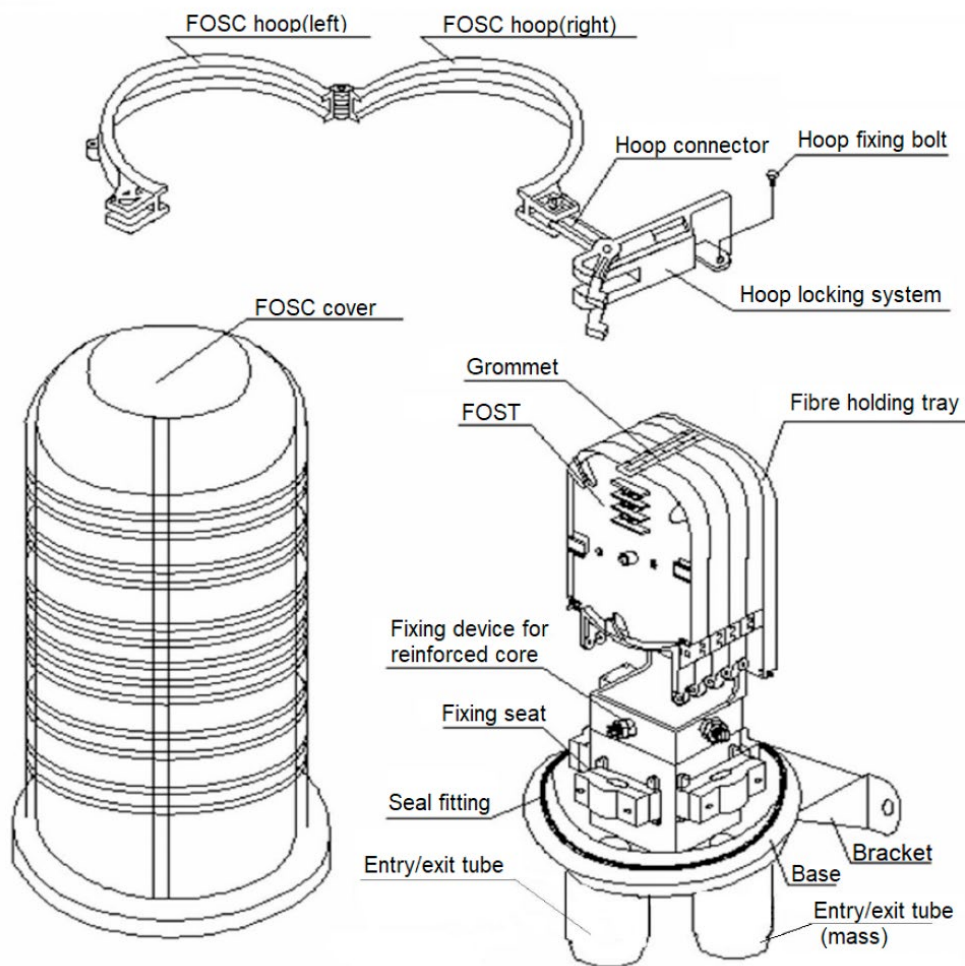
Sealed fibre splice protection for industrial and harsh operating environments

Campus and Enterprise Networks

External fibre backbone connections between buildings and facilities

Smart Infrastructure

Fibre connectivity supporting surveillance, communications, IoT and distributed network infrastructure



Mechanical Performance

Axial Pull Resistance

≥ 800N

Crush Resistance

2,000N / 10cm

Impact Resistance

16N·m, 3 impacts

Bending Resistance

150N at ±45°, 10 cycles

Torsional Resistance

50N·m at ±90°, 10 cycles

Environmental Performance

Ingress Protection

IP68

Operating Temperature

-40°C to +65°C

Field Pressure Test

60-80kPa

Housing Flammability Classification

UL94-HB - Polycarbonate housing material

Construction

Housing Material

Polycarbonate

Housing Colour

Black

Maximum Fibre Capacity

48 fibres

Splice Tray Configuration

4 x 12-fibre trays

Fibre Holding Tray

Integrated

Cable-Entry Ports

4 - 1 oval and 3 round

Cable Diameter

Up to 20mm, subject to entry configuration

Cable Sealing

Heat-shrink sealing system

Dome-to-Base Enclosure

Seal fitting and locking hoop

Pressure-Test Valve

Integrated M8 air valve

Earthing Provision

Connection provision for metallic cable components

External Dimensions

Ø 178mm x 299mm (H)

Internal Cover Dimensions

Ø 132mm x 226mm (H)

Product Weight

1.55-1.74kg

Fibre Management

Maximum Fibre Capacity

48 fibres

Splice Tray Capacity

12 fibres per tray

Number of Splice Trays

4

Fibre Storage Length

> 1.6m per splice tray

Minimum Fibre Bend Radius

> 30mm

Minimum Fibre Loop Diameter During Tray Installation

80mm

Straight-Through Fibre Storage

Integrated fibre holding tray

Electrical Performance

Dielectric Withstand Voltage

DC 15kV for 1 minute

Insulation Resistance

$\geq 2 \times 10^4 \text{M}\Omega$

Earthing

Provision for bonding metallic cable components

Mounting

Aerial / Pole

Metal hoop and transom mounting

Wall

Bracket mounting

Underground

Direct enclosure installation; pole-mounting hoop not required

Duct / Handhole

Suitable for protected underground fibre infrastructure

Cable-Entry Configuration

Round Cable Entries

Three individual round cable-entry ports, each accommodating a single fibre cable up to 20mm diameter

Oval Cable Entry

One oval cable-entry port supporting:

- One cable up to 20mm diameter;
- Two cables up to 15mm diameter each; or
- Multiple smaller-diameter cables when installed using the appropriate branching and heat-shrink sealing arrangement

Straight-Through Configuration

The oval cable entry supports straight-through cable configurations where selected fibres are routed through the enclosure without splicing

Installation and Termination

Fibre cables are prepared, secured and sealed using the supplied heat-shrink cable sealing components. Fusion splices are protected using heat-shrink splice-protection sleeves and managed within the four 12-fibre splice trays.

Following completion of cable sealing and enclosure assembly, the enclosure shall be pressure tested through the integrated M8 air valve at 60-80kPa using a suitable manual or battery-operated pressure pump fitted with a pressure gauge.

On completion of the field pressure test, the internal pressure shall be released and the enclosure returned to normal atmospheric pressure before final installation.

Installation shall maintain the specified fibre bend radius and fibre-management requirements.

Logistics

Packaged Weight	1.76kg
Packaged Dimensions	310mm x 200mm x 150mm
Carton Quantity	10
Carton Dimensions	800mm x 440mm x 340mm
Barcode	329522600

Tools and Equipment

Fibre Preparation and Splicing

- Fibre cable preparation tools
- Fibre stripper and cutter
- Fusion splicer
- Fibre test equipment

Enclosure Installation

- General hand tools
- Suitable heat source for heat-shrink cable sealing
- Cleaning materials

Pressure Testing

- Manual or battery-operated pressure pump
- Pressure gauge
- Suitable connection for the integrated M8 air valve

Included Accessories

Accessory	Quantity
Heat-Shrink Splice-Protection Sleeves	48
Nylon Fibre Ties	4
Single-Cable Heat-Shrink Sealing Sleeves	2
Oval / Branch Cable Heat-Shrink Sealing Sleeve	1
Branching Clip	1
Earthing Wire	1
Desiccant	1
Fibre Identification Label	1
Reinforced-Core Fixing Wrench	1
Pole / Wall Mounting Hardware	1 set

Compliance & Certification

AS/CA S008:2020 (Australian Standard)

Requirements for customer cabling products (the manufacturing rules)

AS/CA S009:2020 (Australian Standard)

Installation requirements for customer cabling (the wiring rules)

AS/NZS 14763.3

Information Technology - Implementation and operation of customer premises cabling, Part 3: Testing of optical fibre cabling

IEC 61753

Fibre Component Performance Standard

Sustainability

Packaging

This product is currently transitioning to more sustainable packaging designed in line with the Australian Packaging Covenant's (APCO) Sustainable Packaging Guidelines (SPGs)

Materials

This product is currently in transition to remove single-use plastic packaging

Warranty

2-Year Limited Product Warranty

Limited Product Warranty against manufacturing defects in materials and workmanship

