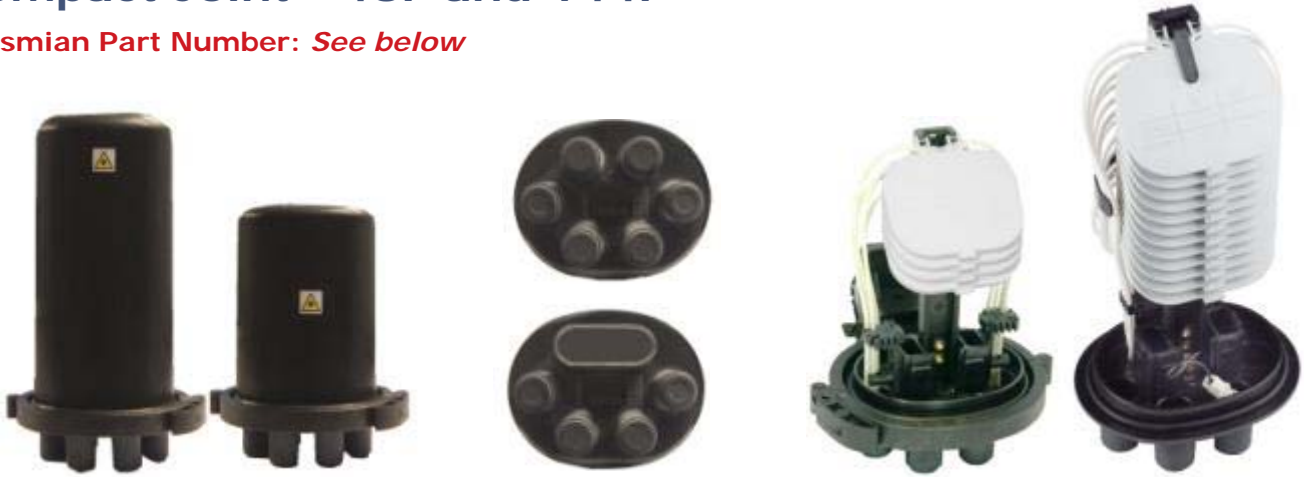# Compact Joint - 48F and 144F

Prysmian Part Number: *See below*

The Compact Joints primary application is for jointing optical fibre cables together at cable element level. The joint is ideal for use as a Cable Chamber Joint, Track Joint or Spur Joint due to its capacity and compact size. It is available in two sizes, of 48 fibre and 144 fibre maximum splicing capacity. The splice trays are factory fitted and each tray can accommodate up to 12 spliced fibres. A multi-functional bracket is supplied with the joint (aerial joint) which enables wall or pole mounting of the joint vertically or horizontally.

The joint can be supplied with a base with six circular ports or a base with an oval port and four circular ports.

Features and Benefits

• 48 and 144 fibre versions are available. **Note:** The 48 fibre joint cannot be upgraded to 144 fibres at a later date.

• Each joint is supplied with pre-fitted splice trays each capable of containing up to 12 spliced fibres.

• The joint can be supplied with splice trays able to accommodate either heat shrink splice protectors or mechanical (crimp) splice protectors. See Part numbers on page 3 for details.

• All fibres are positively managed to maintain a 30mm minimum bend radius within the joint.

• The closure base is available with either 6 circular entry ports, or an oval port with 4 circular ports. Cables up to 22mm in diameter can be installed into each port.

• All cables are sealed using adhesive lined heatshrink sleeves. The base entry ports are pre-shot blasted and configured with easy knock out ends, eliminating the need for cutting and abrading.

• Splice trays hinge upwards individually, allowing full access to spliced fibres without disturbance to live fibres in adjacent trays.

•The joints are supplied with all of the components required to prepare, install and store the fibres of two cables. In cases where the oval port base is selected, the Oval Port Entry Kit is supplied instead of Circular Port Entry Kits.

• Additional cables can be installed into the circular ports of the joint for branch/spur configurations using OAsys Cable Entry Kits.   Additional cables can be installed into the oval port of the joint using an OAsys Oval Port Entry Kit.

• The joint is suitable for direct buried applications using Prysmian's recommendations. Please contact Prysmian for a copy of the drawing.

Kit Contents

The Compact Joint is supplied with splice trays and all accessories required for the complete installation of two cables.
The aerial version is also supplied with a pole / wall mounting bracket.

Additional Items

• Cable Entry Kit

• Splice Protectors

• Support Tool

• Wall Mounting Bracket

• Pole Mounting Bracket (supplied in aerial joints).

Technical Data

• Number of cable ports:	6 circular or 1 oval 4 circular
• Maximum cable diameter (mm):	22
• Maximum number of splice trays:	4 (48 fibre)
	12 (144 fibre)
• Maximum fibre capacity of Joint:	48 or 144
• Required space envelope (mm):	**48 F** = (l) 300 x (w) 231 x (d) 164

(Length = 410mm when heat shrink sleeve and SCOP are installed)

144 F = (l) 390 x (w) 231 x (d) 164

(Length = 500mm when heat shrink sleeve and SCOP are installed)

• Operating temperature:	-40ºC to + 70ºC (5 to 95% RH)
• Material:-	
• Cap:	Polypropylene
• Base:	Phenolic resin
• Splice trays:	FR High Impact Polystyrene
• Testing:-	
• Closure sealing:	IP68 - BT specification LN450B
• Optical:	Tested 1310nm,1550nm and 1625nm
• Dry heat:	BS EN 60068-2-2 Test Bb
• Damp heat:	IEC 60068-2-3: 1969
• Change of temperature:	IEC 60068-2-14: 1984
• Vibration:	IEC 60068-2-6: 1995
• Shock:	IEC 60068-2-27: 1987

Logistics

48 Fibre

• Packing Dimensions (mm):	(l) 480 x (w) 250 x (d) 210
• Packed Weight (Kg):	2.4
• Net Weight (Kg):	1.9
• Installation Instructions Included	

144 Fibre

• Packing Dimensions (mm):	(l) 480 x (w) 250 x (d) 210
• Packed Weight (Kg):	2.8
• Net Weight (Kg):	2.3
• Installation Instructions Included	

Part Numbers

Compact Joint

Heat Shrink Splice Protectors

Part No.	Description
XJTSC00069	48f with 6 circular ports
XJTSC00183	48f with 1 oval , 4 circular ports
XJTSC00301	48f with 6 circular ports inc. pressure test valve
XJTSC00302	48f with 1 oval , 4 circular ports inc. pressure test valve
XJTSC00196	144f with 6 circular ports
XJTSC00182	144f with 1 oval , 4 circular ports
XJTSC00303	144f with 6 circular ports inc. pressure test valve
XJTSC00304	144f with 1 oval , 4 circular ports inc. pressure test valve

Mechanical (Crimp) Splice Protectors

Part No.	Description
XJTSC00366	48f with 6 circular ports
XJTSC00367	48f with 1 oval , 4 circular ports
XJTSC00368	48f with 6 circular ports inc. pressure test valve
XJTSC00369	48f with 1 oval , 4 circular ports inc. pressure test valve
XJTSC00370	144f with 6 circular ports
XJTSC00371	144f with 1 oval , 4 circular ports
XJTSC00372	144f with 6 circular ports inc. pressure test valve
XJTSC00373	144f with 1 oval , 4 circular ports inc. pressure test valve

Aerial Compact Joint (includes pole / wall mounting bracket)

Heat Shrink Splice Protectors

Part No.	Description
XJTSC00186	48f with 6 circular ports
XJTSC00188	48f with 1 oval , 4 circular ports
XJTSC00305	48f with 6 circular ports inc. pressure test valve
XJTSC00306	48f with 1 oval , 4 circular ports inc. pressure test valve
XJTSC00185	144f with 6 circular ports
XJTSC00187	144f with 1 oval , 4 circular ports
XJTSC00307	144f with 6 circular ports inc. pressure test valve
XJTSC00308	144f with 1 oval , 4 circular ports inc. pressure test valve

Mechanical (Crimp) Splice Protectors

Part No.	Description
XJTSC00374	48f with 6 circular ports
XJTSC00375	48f with 1 oval , 4 circular ports
XJTSC00376	48f with 6 circular ports inc. pressure test valve
XJTSC00377	48f with 1 oval , 4 circular ports inc. pressure test valve
XJTSC00378	144f with 6 circular ports
XJTSC00379	144f with 1 oval , 4 circular ports
XJTSC00380	144f with 6 circular ports inc. pressure test valve
XJTSC00381	144f with 1 oval , 4 circular ports inc. pressure test valve

Additional Items

Cable Entry Kit

The Cable Entry Kit is used to install an additional cable into a Compact Joint. The kit contains all of the components required to prepare and install the cable, and route the cable fibres to the splice trays

Prysmian Part No. – XKTSC00010

Oval Port Entry Kit

The Oval Port Entry Kit is used to install a loop of cable into the oval port of a Compact Joint. The kit contains all of the components required to prepare and install the cable, and route the cable fibres to the splice trays

Prysmian Part No. – XKTSC00046

Heat Shrink Splice Protectors

Splice protectors are used to protect the fibre splice. They are 2.2mm in diameter and 45mm in length.

Prysmian Part No. - XPESC00053 (pack of 50)
- XKTSC00050 (pack of 12)

Mechanical (Crimp) Splice Protectors

Mechanical Splice Protectors are used to protect the fibre splice.
They are 45mm in length.

Prysmian Part No. – XKTSC00078 (pack of 50)
                    - XKTSC00079 (pack of 12)

Compact Joint Mounting Brackets

Support Tool

The Compact Joint support tool allows the user to support an Compact Joint within a portable workbench. The bracket is designed to fit most commercially available workbenches. It is dimensioned to enable a splicing machine to be placed on the workbench for close access to the splicing trays.

Prysmian Part No. – XJTSC00075

Wall Mounting Bracket

The Compact Joint Wall Bracket allows an Compact Joint to be mounted vertically against a wall face or bulk head. The bracket is secured using either bolts or screws (not provided). All jointing operations can be carried out whilst the joint is mounted in the bracket.

Prysmian Part No. – XJTSC00076

Pole Mounting Bracket

The Compact Joint Pole Mounting Bracket allows an Compact Joint to be mounted vertically or horizontally on a pole, or against a wall face or bulk head. The bracket is secured using either screws or a steel band (not provided). This bracket is already supplied with the aerial joints.

Prysmian Part No. – XJTSC00136

Please contact your local sales office listed on **www.prysmiangroup.com**