

# LOW VOLTAGE

# FIRE PERFORMANCE CABLE JOINTS

## Application

- > For use with FP400 fire resistant cables
- > To maintain circuit integrity under fire conditions

## Characteristics

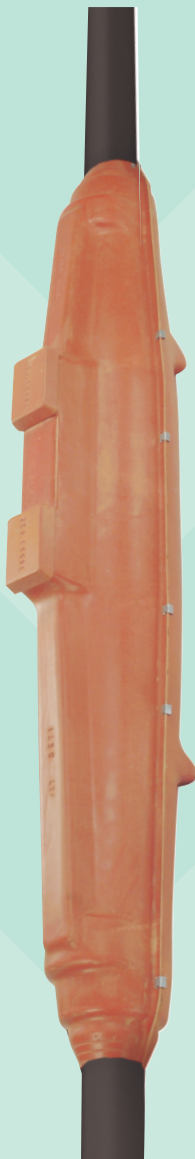
- > Prysmian Components has been the market leader in this field for many years, and has provided cable accessories for many major projects including:
  - Channel Tunnel
  - Singapore Metro
  - London Underground's Jubilee Line
  - Hong Kong International Airport
- > The joint shell material is a fire retardant, rigid thermo setting glass reinforced phenolic which is secured by steel clips

## Approvals

- > All products are low smoke zero halogen and comply with IEC 331 and BS6387 Category CWZ

## Features & Benefits

- > Mechanical Protection
- > Joints comply with BS EN 50393 & ENA ER C81
- > Joints comply with the Fire resistance requirements of BS6387 Categories C, W & Z.
- > Non-halogenated material (including resin)
- > Earth bonds included
- > Maintain circuit integrity during fire
- > Equal to FP400 cable characteristics
- > Quick and easy to install
- > No special tools necessary
- > No external heat required
- > Non-hazardous



## FP400 Joint Tests

Prysmian's fire resistant joints are tested to BS6387 categories C, W & Z

### Resistance to fire

The joint is tested by exposure to gas burner flames while passing a current at its rated voltage

Performance	Symbol	FR Joint
650°C for 3 hours	A	Passes
750°C for 3 hours	B	Passes
950°C for 3 hours	C	Passes

### Resistance to fire with water spray

The joint is exposed to flames at 650°C for 15 minutes whilst passing a current of 250MA at a rated voltage and then the spray is turned on to give exposure to both fire and water for a further 15 minutes.

Performance	Symbol	FR Joint
650°C	W	Passes

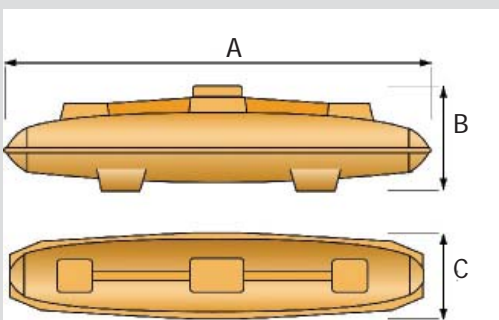
### Resistance to fire with mechanical shock

The joint is mounted on a back panel and exposed to flames whilst the backing panel is struck with a solid steel bar every 30 seconds for 15 minutes.

Performance	Symbol	FR Joint
950°C	Z	Passes

## Straight Joints

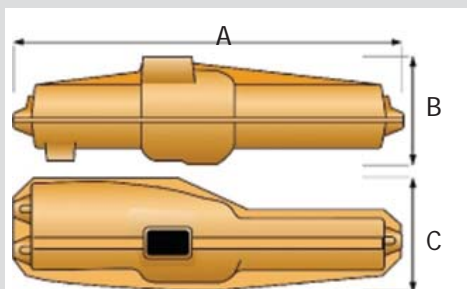
Joint Ref.	Shell Dimensions		
	A	B	C
FRZHMPJ2	300mm	85mm	70mm
FRZHMPJ3	405mm	100mm	80mm
FRZHMPJ4	430mm	110mm	90mm
FRZHMPJ5	560mm	160mm	130mm
FRZHMPJ6	740mm	180mm	145mm
FRZHMPJ7	870mm	190mm	145mm
FRZHMPJ8	1015mm	205mm	180mm



Nominal area of Conductor	Low Voltage FP400 Straight Joints			
	Two Core Ref.	Three Core Ref.	Four Core Ref.	Connector Ref.
4mm <sup>2</sup>	FRZHMPJ2	FRZHMPJ2	FRZHMPJ2	BE-YS
6mm <sup>2</sup>	FRZHMPJ2	FRZHMPJ2	FRZHMPJ2	BTCS
10mm <sup>2</sup>	FRZHMPJ2	FRZHMPJ2	FRZHMPJ2	BT10CS
16mm <sup>2</sup>	FRZHMPJ2	FRZHMPJ3	FRZHMPJ3	BT16CS
25mm <sup>2</sup>	FRZHMPJ2	FRZHMPJ3	FRZHMPJ4	BT25CS
35mm <sup>2</sup>	FRZHMPJ3	FRZHMPJ4	FRZHMPJ4	BT35CS
50mm <sup>2</sup>	FRZHMPJ3	FRZHMPJ5	FRZHMPJ5	BT50CS
70mm <sup>2</sup>	FRZHMPJ4	FRZHMPJ5	FRZHMPJ5	BT70CS
95mm <sup>2</sup>	FRZHMPJ4	FRZHMPJ5	FRZHMPJ5	BT95CS
120mm <sup>2</sup>	FRZHMPJ5	FRZHMPJ6	FRZHMPJ6	BT120CS
150mm <sup>2</sup>	FRZHMPJ5	FRZHMPJ6	FRZHMPJ6	BT150CS
185mm <sup>2</sup>	FRZHMPJ5	FRZHMPJ6	FRZHMPJ6	BT185CS
240mm <sup>2</sup>	FRZHMPJ6	FRZHMPJ7	FRZHMPJ7	BT240CS
300mm <sup>2</sup>	FRZHMPJ6	FRZHMPJ7	FRZHMPJ7	BT300CS
400mm <sup>2</sup>	-	-	FRZHMPJ8	BT400CS

## Branch Joints

Joint Ref.	Shell Dimensions		
	A	B	C
FRZHMPJ2	300mm	85mm	70mm
FRZHMPJ3	405mm	100mm	80mm



Nominal area of conductor	Low Voltage FP400 Branch joints		
	Two Core Ref.	Three Core Ref.	Four Core Ref.
2.5mm <sup>2</sup>	FRZHMB1	FRZHMB1	FRZHMB1
4mm <sup>2</sup>	FRZHMB1	FRZHMB1	FRZHMB1
6mm <sup>2</sup>	FRZHMB1	FRZHMB1	FRZHMB1
10mm <sup>2</sup>	FRZHMB1	FRZHMB1	FRZHMB1
16mm <sup>2</sup>	FRZHMB1	FRZHMB1	FRZHMB2
25mm <sup>2</sup>	FRZHMB1	FRZHMB1	FRZHMB2
35mm <sup>2</sup>	FRZHMB1	FRZHMB2	FRZHMB2
50mm <sup>2</sup>	FRZHMB2	FRZHMB2	FRZHMB2
70mm <sup>2</sup>	FRZHMB2	FRZHMB2	-
95mm <sup>2</sup>	FRZHMB2	FRZHMB2	-
120mm <sup>2</sup>	FRZHMB2	-	-



Compression Connector

**Notes: Connectors are sold separately**