www.cablejoints.co.uk Thorne and Derrick UK

## LOW VOLTAGE

## **Application**

# **Characteristics**



## **Approvals**

**Features & Benefits** 

# **FIRE PERFORMANCE CABLE JOINTS**

- For use with FP400 fire resistant cables
- To maintain circuit integrity under fire conditions
- 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
- > All products are low smoke zero halogen and comply with IEC 331 and BS6387 Category CWZ
- 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)
- Farth 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



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	Α	Passes	
750°C for 3 hours	В	Passes	
950°C for 3 hours	С	Passes	

## Resistance to fire with water spray

The joint is exposed to flames at  $650^{\circ}$ 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	

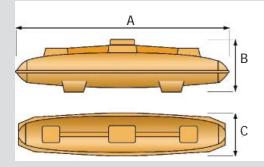
### Resistance to fire with mechanical shock

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**

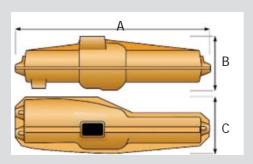
	Shell Dimensions				
	Joint Ref.	А	В	С	
	FRZHMPJ2	300mm	85mm	70mm	
	FRZHMPJ3	405mm	100mm	80mm	
	FRZHMPJ4	430mm	110mm	90mm	
	FRZHMPJ5	560mm	160mm	130mm	
	FRZHMPJ6	740mm	180mm	145mm	
	FRZHMPJ7	870mm	190mm	145mm	
	FRZHMPJ8	1015mm	205mm	180mm	



	Low Voltage FP400 Straight Joints					
Nominal are of Conductor	Two Core Ref.	Three Core Ref.	Four Core Ref.	Connector Ref.		
4mm²	4mm² FRZHMPJ2 FRZHMPJ2		FRZHMPJ2	BE-YS		
6mm²	FRZHMPJ2	FRZHMPJ2	FRZHMPJ2	BTCS		
10mm <sup>2</sup>	FRZHMPJ2	FRZHMPJ2	FRZHMPJ2	BT10CS		
16mm <sup>2</sup>	FRZHMPJ2	FRZHMPJ3	FRZHMPJ3	BT16CS		
25mm²	FRZHMPJ2	FRZHMPJ3	FRZHMPJ4	BT25CS		
35mm²	FRZHMPJ3	FRZHMPJ4	FRZHMPJ4	BT35CS		
50mm <sup>2</sup>	FRZHMPJ3	FRZHMPJ5	FRZHMPJ5	BT50CS		
70mm <sup>2</sup>	FRZHMPJ4	FRZHMPJ5	FRZHMPJ5	BT70CS		
95mm²	FRZHMPJ4	FRZHMPJ5	FRZHMPJ5	BT95CS		
120mm²	FRZHMPJ5	FRZHMPJ6	FRZHMPJ6	BT120CS		
150mm <sup>2</sup>	FRZHMPJ5	FRZHMPJ6	FRZHMPJ6	BT150CS		
185mm²	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**

Shell Dimensions			
Joint Ref.	А	В	С
FRZHMPJ2	300mm	85mm	70mm
FRZHMPJ3	405mm	100mm	80mm



L	Low Voltage FP400 Branch joints					
area	Nominal Two area of R		Three Core Ref.	Four Core Ref.		
2.5mr	2.5mm <sup>2</sup> FRZHMB1		FRZHMB1	FRZHMB1		
4mm	n² FRZ	ZHMB1	FRZHMB1	FRZHMB1		
6mm	n² FRZ	ZHMB1	FRZHMB1	FRZHMB1		
10mn	n² FRZ	ZHMB1	FRZHMB1	FRZHMB1		
16mn	n² FRZ	ZHMB1	FRZHMB1	FRZHMB2		
25mn	25mm <sup>2</sup> FRZH		FRZHMB1	FRZHMB2		
35mn	n² FRZ	ZHMB1	FRZHMB2	FRZHMB2		
50mn	n² FRZ	ZHMB2	FRZHMB2	FRZHMB2		
70mn	n² FRZ	ZHMB2	FRZHMB2	-		
95mn	95mm <sup>2</sup> FRZHMB2 120mm <sup>2</sup> FRZHMB2		FRZHMB2	-		
120mi			-	-		

Compression Connector

Notes: Connectors are sold separately



CABLE JOINTS, CABLE TERMINATIONS, CABLE GLANDS, CABLE CLEATS FEEDER PILLARS, FUSE LINKS, ARC FLASH, CABLE ROLLERS, CUT-OUTS



