

**YAMUNA DENSON'S Heat Shrink Cable Joints & Terminations**  
 4 Core up to 1.1 kV for Low Tension **PVC/XLPE/PILC Cable (1.1kV)**  
**XSE/XSO/PSE/PSO/XSSO/PSSO**



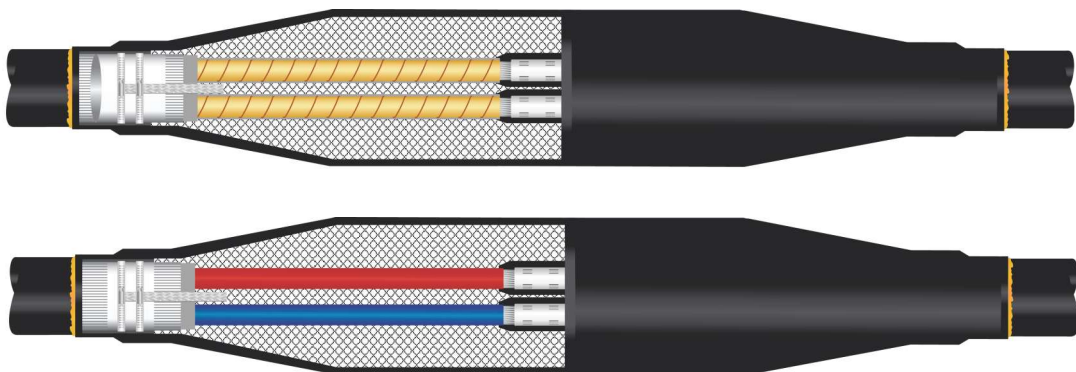
1.1 kV PILC Termination



1.1 kV PVC / XLPE Termination

**Features :**

- All key inputs are produced in-house
- Corrosion resistant and unlimited shelf life
- In compliance with EN-50393 / IS-13573-1
- Electrolytic grade connectors



*Remember*



CESI



KEMA



## Specifications:

Test Item of Low Tension Heat Shrinkable St. Th. Joint & Termination as per EN-50393 / IS-13573-1

Test	1.1 kV
A.C. Dry Withstand Voltage	4 kV AC
Impulse Voltage Withstand	8 & 20 kV ± Ve 10 Shots

### Order Reference for Heat Shrink Terminations Indoor and Outdoor 1.1 kV (for PVC/XLPE/PILC Cable)

1.1 kV, PVC/XLPE Indoor Terminations	Cable Cross Section (mm <sup>2</sup> )	Type No.	1.1 kV, PVC/XLPE Outdoor Terminations	Cable Cross Section (mm <sup>2</sup> )	Type No.
	4 x 16 - 35	XSE - 01		4 x 16 - 35	XSO - 01
4 x 50 - 95	XSE - 02	4 x 50 - 95	XSO - 02		
4 x 120 - 185	XSE - 03	4 x 120 - 185	XSO - 03		
4 x 225 - 300	XSE - 04	4 x 225 - 300	XSO - 04		
4 x 400 - 500	XSE - 05	4 x 400 - 500	XSO - 05		

1.1kV, PILC Indoor Terminations	Cable Cross Section (mm <sup>2</sup> )	Type No.	1.1kV, PILC Outdoor Terminations	Cable Cross Section (mm <sup>2</sup> )	Type No.
	4 x 16 - 35	PSE - 01		4 x 16 - 35	PSO - 01
4 x 50 - 95	PSE - 02	4 x 50 - 95	PSO - 02		
4 x 120 - 185	PSE - 03	4 x 120 - 185	PSO - 03		
4 x 225 - 300	PSE - 04	4 x 225 - 300	PSO - 04		
4 x 400 - 500	PSE - 05	4 x 400 - 500	PSO - 05		

In conformance with C 81, VDE 0278 / TAIL I, BS 6346 / 5467, IS 7098 (Part I), IS 1554, IS 694 Type Test Reports Available On Request

### Order Reference for Heat Shrink Joints 1.1 kV (for PVC/XLPE/PILC Cable)

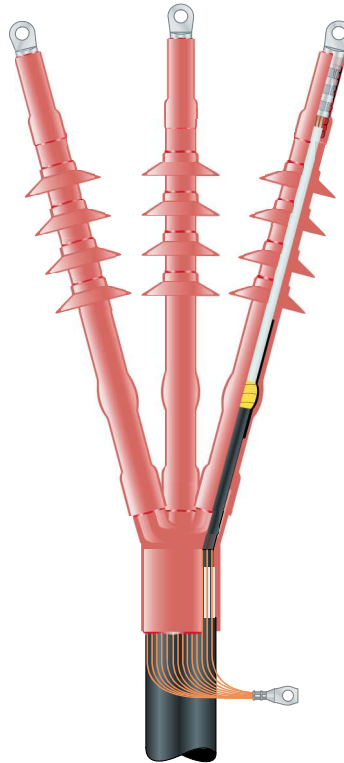
1.1 kV, PVC/XLPE Straight Through Joints	Cable Cross Section (mm <sup>2</sup> )	Type No.	1.1 kV, PILC Straight Through Joints	Cable Cross Section (mm <sup>2</sup> )	Type No.
	4 x 1.5 - 6	XSSO - 1		4 x 1.5 - 6	PSSO - 1
4 x 10 - 16	XSSO - 2	4 x 10 - 16	PSSO - 2		
4 x 25 - 50	XSSO - 3	4 x 25 - 50	PSSO - 3		
4 x 70 - 150	XSSO - 4	4 x 70 - 150	PSSO - 4		
4 x 185 - 240	XSSO - 5	4 x 185 - 240	PSSO - 5		
4 X 300 - 400	XSSO - 6	4 X 300 - 400	PSSO - 6		

In conformance with C 81, VDE 0278 / TAIL I, BS 6346 / 5467, IS 7098 (Part I), IS 1554, IS 694 Type Test Reports Available On Request

## YAMUNA DENSON Heat Shrink Cable Joints & Terminations

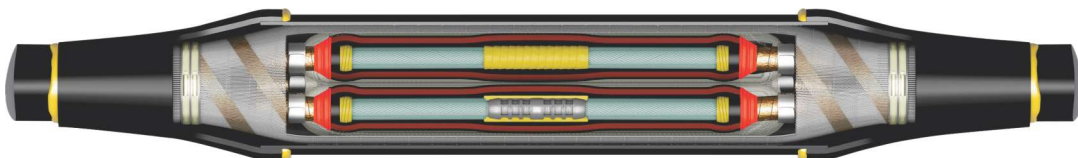
3 Core up to 36kV for XLPE/EPR Insulated Cable (11-22-33kV)

### XSE/XSO/XSS



#### Features :

- All key inputs are produced in-house
- Continuous operation temperature-55°C to 120°C
- Corrosion resistant and unlimited shelf life
- In compliance with IEC-60502-4 / IS-13573
- Electrolytic grade connectors



*Remember*



CESI



KEMA



## Specifications:

Test Item of Heat Shrinkable Straight Through Joint & Termination as per IEC-60502-4 / IS:13573

Testing Items U o/U	6.35/11 kV	12.7/22 kV	19/33 kV
A.C. Withstand Test	29kV, 5min, no flashover	58kV, 5min, no flashover	86kV, 5min, no flashover
Partial Discharge Test	11kV<10pc (Max.)	22kV<10pc (Max.)	33kV<10pc (Max.)
Thermal Cycles (63 cycles)	under 95-100° C 16kV	under 95-100° C 32kV	under 95-100° C 48kV
Impulse Voltage Test	75kV no flashover	125kV no flashover	170kV no flashover
A.C. Withstand test	16kV, 15 min, no flashover	32kV, 15 min, no flashover	48kV, 15 min, no flashover
Humidity Test (Indoor)	No flashover, tracking erosion or mechanical damage occurred at 300hrs, 8kV	No flashover, tracking erosion or mechanical damage occurred at 300hrs, 16kV	No flashover, tracking erosion or mechanical damage occurred at 300hrs, 24kV
Salt Fog Test (Outdoor)	No flashover, tracking erosion or mechanical damage occurred at 1000hrs, 8kV no flashover, tracking	No flashover, tracking erosion or mechanical damage occurred at 1000hrs, 16kV no flashover, tracking	No flashover, tracking erosion or mechanical damage occurred at 1000hrs, 24kV no flashover, tracking

### Order Reference for Heat Shrink Termination Indoor & Outdoor 3 Core (for XLPE/EPR Insulated Cable)

11 kV, 3 core Indoor Terminations	Cable Cross Section (mm <sup>2</sup> )	Type No.	11 kV, 3 core Outdoor Terminations	Cable Cross Section (mm <sup>2</sup> )	Type No.
	3 x 16 - 50	XSE - 11		3 x 16 - 50	XSO - 11
3 x 70 - 95	XSE - 12	3 x 70 - 95	XSO - 12		
3 x 120 - 185	XSE - 13	3 x 120 - 185	XSO - 13		
3 x 240 - 300	XSE - 14	3 x 240 - 300	XSO - 14		
3 x 400 - 500	XSE - 15	3 x 400 - 500	XSO - 15		

22 kV, 3 core Indoor Terminations	Cable Cross Section (mm <sup>2</sup> )	Type No.	22 kV, 3 core Outdoor Terminations	Cable Cross Section (mm <sup>2</sup> )	Type No.
	3 x 16 - 50	XSE - 21		3 x 16 - 50	XSO - 21
3 x 70 - 120	XSE - 22	3 x 70 - 120	XSO - 22		
3 x 150 - 225	XSE - 23	3 x 150 - 225	XSO - 23		
3 x 240 - 400	XSE - 24	3 x 240 - 400	XSO - 24		
3 x 500	XSE - 25	3 x 500	XSO - 25		

33 kV, 3 core Indoor Terminations	Cable Cross Section (mm <sup>2</sup> )	Type No.	33 kV, 3 core Outdoor Terminations	Cable Cross Section (mm <sup>2</sup> )	Type No.
	3 x 25 - 50	XSE - 31		3 x 25 - 50	XSO - 31
3 x 70 - 95	XSE - 32	3 x 70 - 95	XSO - 32		
3 x 120 - 185	XSE - 33	3 x 120 - 185	XSO - 33		
3 x 240 - 400	XSE - 34	3 x 240 - 400	XSO - 34		

### Order Reference for Heat Shrink Joints 3 Core (for XLPE/EPR Insulated Cable)

11 kV, 3 core Straight Through Joints	Cable Cross Section (mm <sup>2</sup> )	Type No.	22 kV, 3 core Straight Through Joints	Cable Cross Section (mm <sup>2</sup> )	Type No.
	3 x 16 - 50	XSS - 11		3 x 25 - 50	XSS - 21
3 x 70 - 95	XSS - 12	3 x 70 - 95	XSS - 22		
3 x 120 - 185	XSS - 13	3 x 120 - 150	XSS - 23		
3 x 240 - 300	XSS - 14	3 x 185 - 240	XSS - 24		
3 x 400	XSS - 15	3 x 300 - 400	XSS - 25		

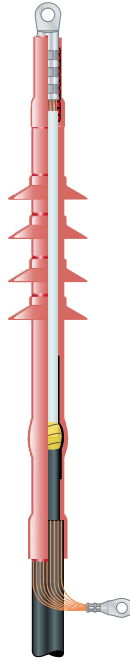
  

33 kV, 3 core Straight Through Joints	Cable Cross Section (mm <sup>2</sup> )	Type No.
	3 x 35 - 70	XSS - 31
3 x 95 - 150	XSS - 32	
3 x 185 - 300	XSS - 33	
3 x 400	XSS - 34	

## YAMUNA DENSON Heat Shrink Cable Joints & Terminations

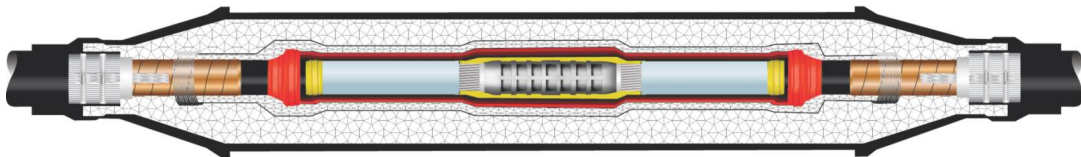
1 Core up to 36kV for XLPE/EPR Insulated Cable (11-22-33kV)

### XSES/XSOS/XSSS



#### Features :

- All key inputs are produced in-house
- Continuous operation temperature-55°C to 120°C
- Corrosion resistant and unlimited shelf life
- In compliance with IEC-60502-4 / IS-13573
- Electrolytic grade connectors



*Remember*



CESI



KEMA



## Specifications:

Test Item of Heat Shrinkable Straight Through Joint & Termination as per IEC-60502-4 / IS:13573

Testing Items U o/U	6.35/11 kV	12.7/22 kV	19/33 kV
A.C. Withstand Test	29kV, 5min, no flashover	58kV, 5min, no flashover	86kV, 5min, no flashover
Partial Discharge Test	11kV<10pc (Max.)	22kV<10pc (Max.)	33kV<10pc (Max.)
Thermal Cycles (63 cycles)	under 95-100° C 16kV	under 95-100° C 32kV	under 95-100° C 48kV
Impulse Voltage Test	75kV no flashover	125kV no flashover	170kV no flashover
A.C. Withstand Test	16kV, 15 min, no flashover	32kV, 15 min, no flashover	48kV, 15 min, no flashover
Humidity Test (Indoor)	No flashover, tracking erosion or mechanical damage occurred at 300hrs, 8kV	No flashover, tracking erosion or mechanical damage occurred at 300hrs, 16kV	No flashover, tracking erosion or mechanical damage occurred at 300hrs, 24kV
Salt Fog Test (Outdoor)	No flashover, tracking erosion or mechanical damage occurred at 1000hrs, 8kV no flashover, tracking	No flashover, tracking erosion or mechanical damage occurred at 1000hrs, 16kV no flashover, tracking	No flashover, tracking erosion or mechanical damage occurred at 1000hrs, 24kV no flashover, tracking

### Order Reference for Heat Shrink Termination Indoor & Outdoor 1 Core (for XLPE/EPR Insulated Cable)

11 kV 1 Core Indoor Terminations	Cable Cross Section (mm <sup>2</sup> )	Type No.	11 kV, 1 core Outdoor Terminations	Cable Cross Section (mm <sup>2</sup> )	Type No.
	1 x 16 - 50	XSES - 11		1 x 25 - 50	XSOS - 11
1 x 70 - 120	XSES - 12	1 x 70 - 120	XSOS - 12		
1 x 150 - 300	XSES - 13	1 x 150 - 300	XSOS - 13		
1 x 400 - 630	XSES - 14	1 x 400 - 630	XSOS - 14		
1 x 800 - 1000	XSES - 15	1 x 800 - 1000	XSOS - 15		

22 kV, 1 core Indoor Terminations	Cable Cross Section (mm <sup>2</sup> )	Type No.	22 kV, 1 core Outdoor Terminations	Cable Cross Section (mm <sup>2</sup> )	Type No.
	1 x 16 - 50	XSES - 21		1 x 16 - 50	XSOS - 21
1 x 70 - 150	XSES - 22	1 x 70 - 150	XSOS - 22		
1 x 185 - 300	XSES - 23	1 x 185 - 300	XSOS - 23		
1 x 400 - 630	XSES - 24	1 x 400 - 630	XSOS - 24		
1 x 800 - 1000	XSES - 25	1 x 800 - 1000	XSOS - 25		

33 kV, 1 core Indoor Terminations	Cable Cross Section (mm <sup>2</sup> )	Type No.	33 kV, 1 core Outdoor Terminations	Cable Cross Section (mm <sup>2</sup> )	Type No.
	1 x 25 - 50	XSES - 31		1 x 25 - 50	XSOS - 31
1 x 70 - 185	XSES - 32	1 x 70 - 185	XSOS - 32		
1 x 240 - 400	XSES - 33	1 x 240 - 400	XSOS - 33		
1 x 500 - 800	XSES - 34	1 x 500 - 800	XSOS - 34		
1 x 1000	XSES - 35	1 x 1000	XSOS - 35		

### Order Reference for Heat Shrink Joints 1 Core (for XLPE/EPR Insulated Cable)

11 kV, 1 core Straight Through Joints	Cable Cross Section (mm <sup>2</sup> )	Type No.	22kV, 1 core Straight Through Joints	Cable Cross Section (mm <sup>2</sup> )	Type No.
	1 x 16 - 50	XSSS - 11		1 x 25 - 50	XSSS - 21
1 x 70 - 120	XSSS - 12	1 x 70 - 150	XSSS - 22		
1 x 150 - 225	XSSS - 13	1 x 185 - 240	XSSS - 23		
1 x 240 - 300	XSSS - 14	1 x 300 - 500	XSSS - 24		
1 x 400 - 500	XSSS - 15	1 x 630 - 800	XSSS - 25		
1 x 630 - 1000	XSSS - 16	1 x 1000	XSSS - 26		

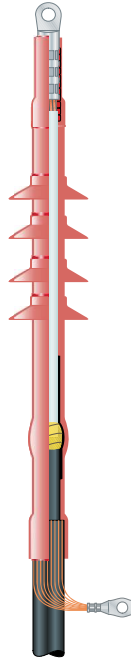
  

33 kV, 1 core Straight Through Joints	Cable Cross Section (mm <sup>2</sup> )	Type No.
	1 x 35 - 70	XSSS - 31
1 x 95 - 150	XSSS - 32	
1 x 185 - 400	XSSS - 33	
1 x 500 - 630	XSSS - 34	
1 x 800 - 1000	XSSS - 35	

## YAMUNA DENSON Heat Shrink Cable Joints & Terminations

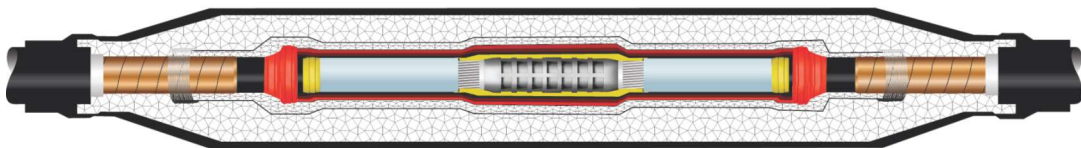
1 Core up to 36kV for Aerial Bunched Cable (11-22-33kV)

### XSES-AB/XSOS-AB/XSSS-AB



#### Features :

- All key inputs are produced in-house
- Continuous operation temperature-55°C to 120°C
- Corrosion resistant and unlimited shelf life
- In compliance with IEC-60502-4 / IS-13573
- Electrolytic grade connectors



*Remember*



CESI



KEMA



## Specifications:

Test Item of Heat Shrinkable Straight Through Joint & Termination as per IEC-60502-4 / IS:13573

Testing Items U o/U	6.35/11 kV	12.7/22 kV	19/33 kV
A.C. Withstand Test	29kV, 5min, no flashover	58kV, 5min, no flashover	86kV, 5min, no flashover
Partial Discharge Test	11kV<10pc (Max.)	22kV<10pc (Max.)	33kV<10pc (Max.)
Thermal Cycles (63 cycles)	under 95-100° C 16kV	under 95-100° C 32kV	under 95-100° C 48kV
Impulse Voltage Test	75kV no flashover	125kV no flashover	170kV no flashover
A.C. Withstand Test	16kV, 15 min, no flashover	32kV, 15 min, no flashover	48kV, 15 min, no flashover
Humidity Test (Indoor)	No flashover, tracking erosion or mechanical damage occurred at 300hrs, 8kV	No flashover, tracking erosion or mechanical damage occurred at 300hrs, 16kV	No flashover, tracking erosion or mechanical damage occurred at 300hrs, 24kV
Salt Fog Test (Outdoor)	No flashover, tracking erosion or mechanical damage occurred at 1000hrs, 8kV no flashover, tracking	No flashover, tracking erosion or mechanical damage occurred at 1000hrs, 16kV no flashover, tracking	No flashover, tracking erosion or mechanical damage occurred at 1000hrs, 24kV no flashover, tracking

### Order Reference for Heat Shrink Termination Indoor & Outdoor 1 Core (for Aerial Bunched Cable)

Termination Type	Cable Cross Section (mm <sup>2</sup> )		Type No.	
	Cable Cross Section (mm <sup>2</sup> )	Type No.	Cable Cross Section (mm <sup>2</sup> )	Type No.
11 kV, 1 core Indoor Terminations	1 x 16 - 50	XSES/AB - 11	1 x 25 - 50	XSOS/AB - 11
	1 x 70 - 120	XSES/AB - 12	1 x 70 - 120	XSOS/AB - 12
	1 x 150 - 300	XSES/AB - 13	1 x 150 - 300	XSOS/AB - 13
	1 x 400 - 630	XSES/AB - 14	1 x 400 - 630	XSOS/AB - 14
	1 x 800 - 1000	XSES/AB - 15	1 x 800 - 1000	XSOS/AB - 15
22 kV, 1 core Indoor Terminations	1 x 16 - 50	XSES/AB - 21	1 x 16 - 50	XSOS/AB - 21
	1 x 70 - 120	XSES/AB - 22	1 x 70 - 120	XSOS/AB - 22
	1 x 185 - 300	XSES/AB - 23	1 x 185 - 300	XSOS/AB - 23
	1 x 400 - 630	XSES/AB - 24	1 x 400 - 630	XSOS/AB - 24
	1 x 800 - 1000	XSES/AB - 25	1 x 800 - 1000	XSOS/AB - 25
33 kV, 1 core Indoor Terminations	1 x 25 - 50	XSES/AB - 31	1 x 25 - 50	XSOS/AB - 31
	1 x 70 - 120	XSES/AB - 32	1 x 70 - 120	XSOS/AB - 32
	1 x 240 - 400	XSES/AB - 33	1 x 240 - 400	XSOS/AB - 33
	1 x 500 - 800	XSES/AB - 34	1 x 500 - 800	XSOS/AB - 34
	1 x 1000	XSES/AB - 35	1 x 1000	XSOS/AB - 35

### Order Reference for Heat Shrink Joints 1 Core (for Aerial Bunched Cable)

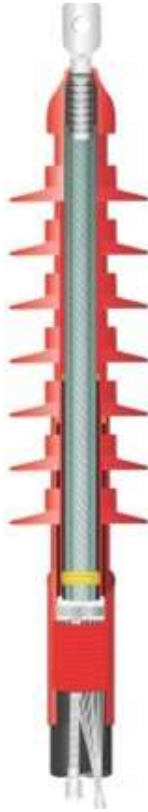
Termination Type	Cable Cross Section (mm <sup>2</sup> )		Type No.	
	Cable Cross Section (mm <sup>2</sup> )	Type No.	Cable Cross Section (mm <sup>2</sup> )	Type No.
11 kV, 1 core Straight Through Joints	1 x 16 - 50	XSSS/AB - 11	1 x 25 - 50	XSSS/AB - 21
	1 x 70 - 120	XSSS/AB - 12	1 x 70 - 150	XSSS/AB - 22
	1 x 150 - 225	XSSS/AB - 13	1 x 185 - 240	XSSS/AB - 23
	1 x 240 - 300	XSSS/AB - 14	1 x 300 - 500	XSSS/AB - 24
	1 x 400 - 500	XSSS/AB - 15	1 x 630 - 800	XSSS/AB - 25
	1 x 600 - 1000	XSSS/AB - 16	1 x 1000	XSSS/AB - 26
33 kV, 1 core Straight Through Joints	1 x 35 - 70	XSSS/AB - 31		
	1 x 95 - 150	XSSS/AB - 32		
	1 x 185 - 400	XSSS/AB - 33		
	1 x 500 - 630	XSSS/AB - 34		
	1 x 800 - 1000	XSSS/AB - 35		



## YAMUNA DENSON Heat Shrink Cable Joints & Terminations

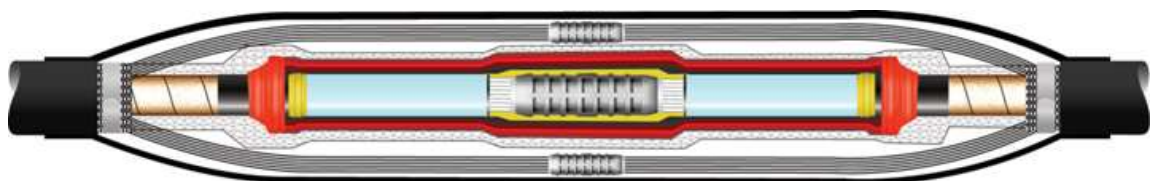
1 Core, 66/72.5 kV for XLPE Insulated Cable

### XSOS/XSSS



#### Features :

- All key inputs are produced in-house
- Continuous operation temperature -55°C to 120°C
- Corrosion resistant and unlimited shelf life
- In compliance with IEC-60840 / IS-13573
- Electrolytic grade Heavy duty connectors



*Remember*



CESI



KEMA



## Specifications:

Test Item of Heat Shrinkable Straight Through Joint & Termination as per IEC-60840 / IS:13573

Testing Items U o/U	38/66 kV
A.C. Withstand Test	95kV / 15 Min
DC Voltage Test	25 kV / 1 Min
Partial Discharge Test	Less than 5 pC
Impulse Voltage Test	325kV / 10 Shots

### Order Reference for Heat Shrink Termination Indoor & Outdoor 1 Core (for XLPE Insulated Cable)

66 kV 1 Core Indoor Terminations	Cable Cross Section (mm <sup>2</sup> )	Type No.	66 kV, 1 core Outdoor Terminations	Cable Cross Section (mm <sup>2</sup> )	Type No.
	1 x 16 - 50	XSES - 71		1 x 16 - 50	XSOS - 71
1 x 70 - 120	XSES - 72	1 x 70 - 120	XSOS - 72		
1 x 150 - 300	XSES - 73	1 x 150 - 300	XSOS - 73		
1 x 400 - 630	XSES - 74	1 x 400 - 630	XSOS - 74		
1 x 800 - 1000	XSES - 75	1 x 800 - 1000	XSOS - 75		
1 x 1200	XSES - 76	1 x 1200	XSOS - 76		

### Order Reference for Heat Shrink Joints 1 Core (for XLPE Insulated Cable)

66 kV, 1 core Straight Through Joints	Cable Cross Section (mm <sup>2</sup> )	Type No.
	1 x 16 - 50	XSSS - 71
1 x 70 - 120	XSSS - 72	
1 x 150 - 300	XSSS - 73	
1 x 400 - 630	XSSS - 74	
1 x 800 - 1000	XSSS - 75	
1 x 1200	XSSS - 76	