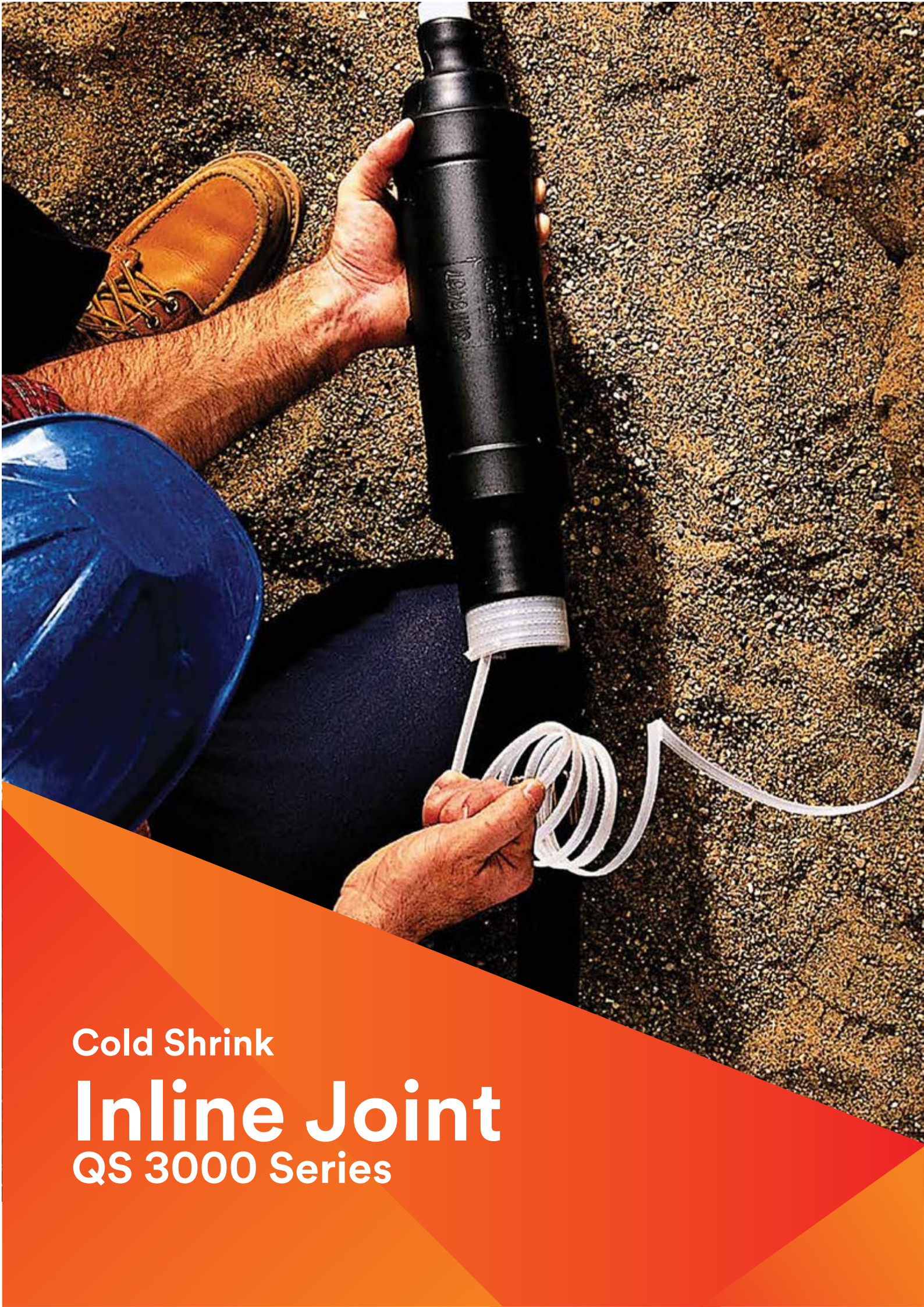


Cold Shrink

Inline Joint

QS 3000 Series

PRODUCT DESCRIPTION

3M QS 3000 cold shrink splices are provided in the expanded state, mounted on removable inner supporting plastic cores. The cold shrink type splices are very easy for installation, only need to withdraw the supporting cores. QS 3000 splices are integral preforming type, the splice bodies are made of high quality liquid silicon rubber. Every splice does factory electrical test to insure reliable quality, the splices according to the Chinese standard GB/T 12706.4, IEC 60502-4 and are applicable for 26/35(40.5) kV & 20/35(40.5) kV extruded insulation power cables.

QS3000 have two types: straight splices QS 3000-K and insulated splices QS3000-AX applied in 1-C cable cross-link grounding system.

KIT CONTENTS

- Silicon rubber splice body
- Grounding braid wire
- Cable preparation kit
- Constant force spring
- Copper shielding sleeve
- 2228# insulating & waterproof tape (only c/w Armorcast tape)
- 23# insulating tape
- 13# semi-conducting tape
- Armorcast tape or Heat shrink / Cold shrink EPDM Tube or Resin Rejacketing

FEATURES

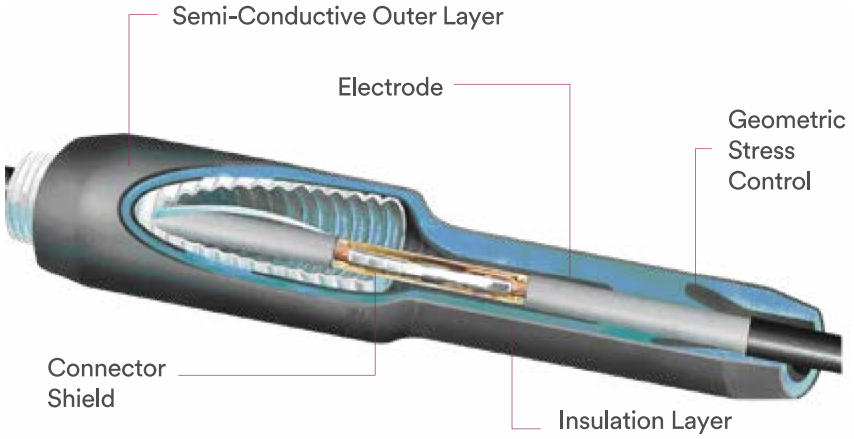
- Special copper shielding sleeve design, which could uniformize the electrical stress at the metallic connecting tube location.
- Enhanced insulation thickness, which is 16mm, and the AC voltage withstand margin up to 160kV.
- Optimized stress cone design ensures reliable electrical stress control performance.
- Cold shrink technology ensures quick, easy and tool-free installation.
- One-piece versatile design, have straight splice and insulating splice two types, allowing quick installation and accommodating a wide range of cable sizes.
- Seals tight, retains its resiliency and pressure even after years of aging and exposure.
- Wide temperature range.
- High contact pressure ensures absolute watertightness.
- Apply constant force spring to install grounding wires, ensures reliable contact performance.
- Flexible Rejacketing type: Special Armorcast tape ensures reliable mechanical protection, or Conventional Heat shrink / Cold Shrink Rejacketing, or water seal tight Resin Rejacketing.
- 100% production tested.

APPLICATIONS

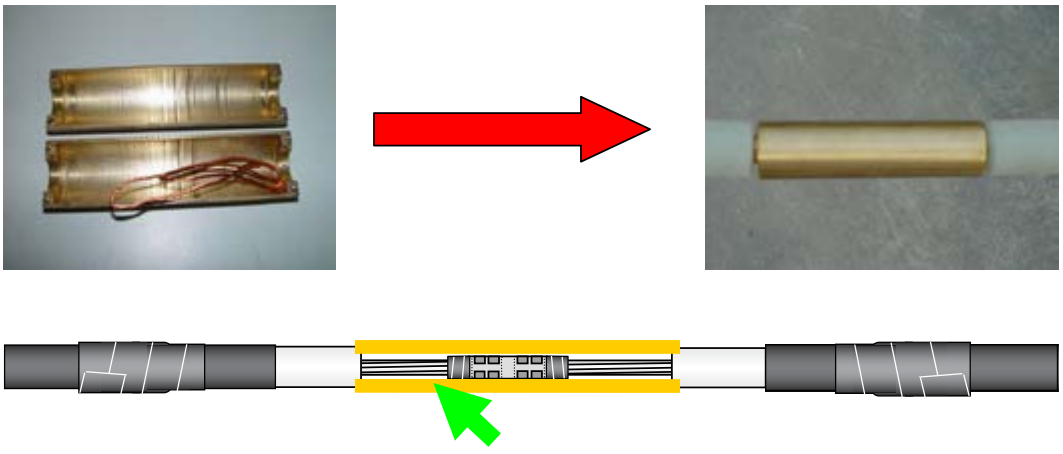
Applicable for 26/35(40.5) kV & 20/35(40.5) kV extruded insulation cable, such as: Polyethylene (high andlow density), cross-linked polyethylene (XLPE) and ethylene propylene rubber (EPR).

Applicable for overhead cables, buried cables, bridge cable and tunnel cables.

Detailed installation of the QS 3000



Copper shielding sleeve type	Suited metallic connecting tube maximum length (mm)	Suited metallic connecting tube maximum outer diameter (mm)
CS 50 ~ 95 mm²	110	21
CS 120 ~ 185 mm²	125	27
CS 240 ~ 400 mm²	150	38
CS 500 ~ 630 mm²	160	45

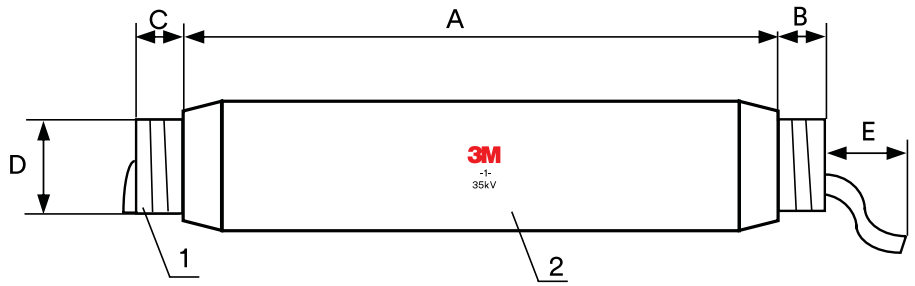


Copper shielding sleeve

TYPICAL DIMENSIONS

Figure 1 Straight splice body on the score

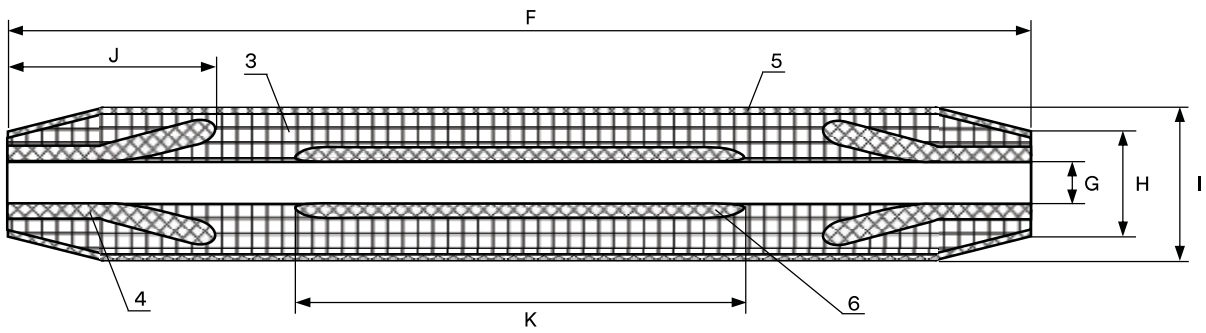
Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
QS 3000-K1/QS 3000-I	455	30 ~ 50	30 ~ 50	61	≥100
QS 3000-K2/QS 3000-II	510	30 ~ 50	30 ~ 50	72	≥100



1/ Core 2/ Splice body

Figure 2 Straight splice body cross-section

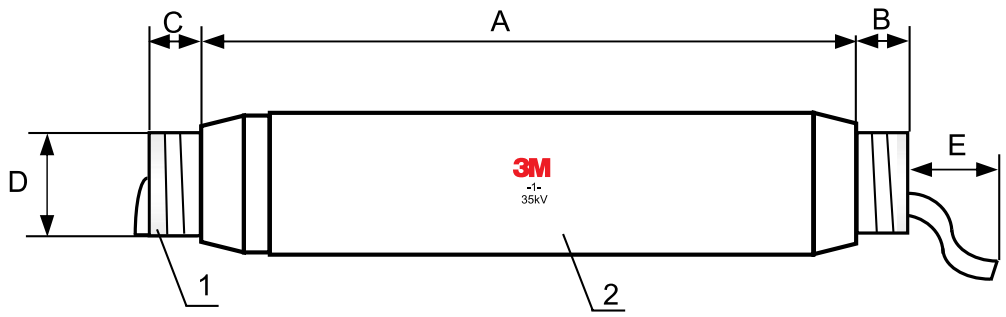
Type	F (mm)	G (mm)	H (mm)	I (mm)	J (mm)	K (mm)
QS 3000-K1/QS 3000-I	509	21	53	75	102	218
QS 3000-K2/QS 3000-II	579	28	60	82	102	288



3/ Insulation layer 4/ Stress cone 5/ Outer semi-conductive layer 6/ Inner electrode

Figure 3 Insulated splice body on the core

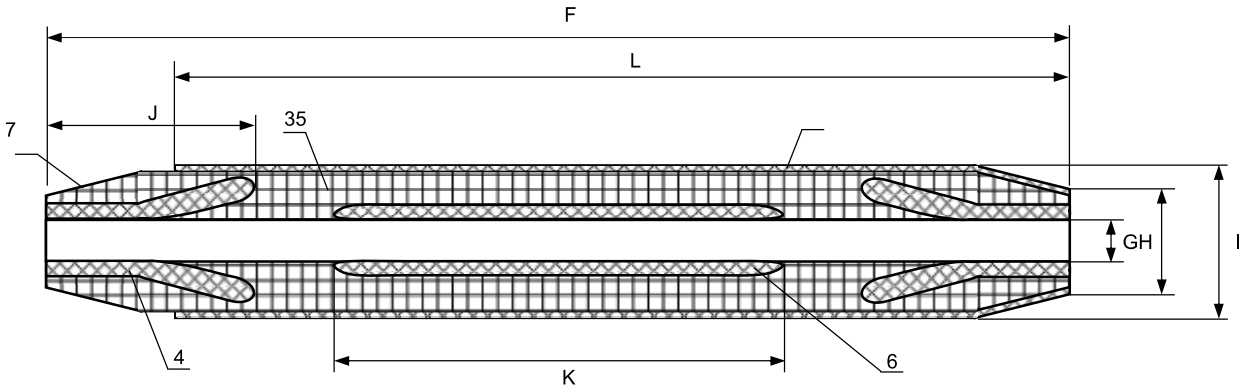
Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
QS3000-AX	510	30 ~ 50	30 ~ 50	72	≥100



1/ Core 2/ Splice body

Figure 4 Insulated splice body cross-section

Type	F (mm)	G (mm)	H (mm)	I (mm)	J (mm)	K (mm)	L (mm)
QS 3000-AX	579	28	60	82	102	288	504



3/ Insulation layer 4/ Stress cone 5/ Outer semi-conductive layer 6/ Inner electrode
7/ Shield Insulated Separation

SELECTION GUIDE

QS 3000 Straight Splices

Type (3-C/1-C)	Cable dimensions		
	Outer Cable Insulation diameter (mm)	20/35(40.5) kV	26/35(40.5) kV
QS 3000-K1/QS 3000-I	27.3 - 42.0	50 - 240	50 - 185
QS 3000-K2/QS 3000-II	36.4 - 57.2	300 - 800	240 - 630

QS 3000 Insulated Splices

Type (1-C)	Cable dimensions		
	Outer Cable Insulation diameter (mm)	20/35(40.5) kV	26/35(40.5) kV
QS 3000-AX	36.4 - 57.2	300 - 800	240 - 630

NOTE: The external dameter of the insulation layer is determinant, the cross-section of the conductor is only for reference.