

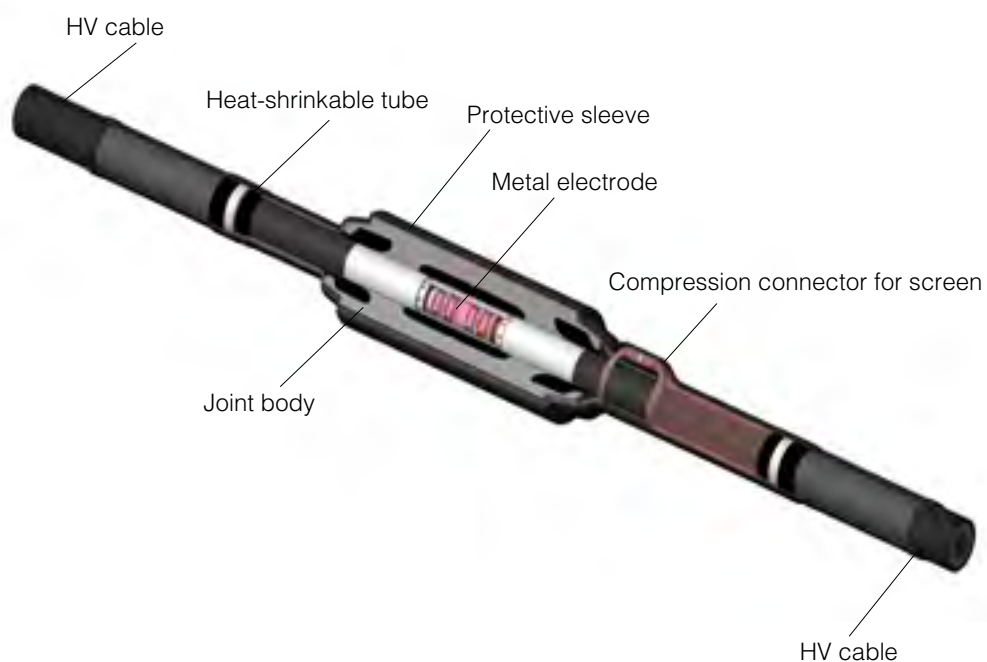
Straight joints MCB 72,5, MCB 126, MCB 145, MCB 170, MCB 252

Arkasil straight joints 72-252 kV are prefabricated silicone joints, designed to connect high-voltage cables 60/110/132/150/220 kV with XLPE insulation (conductor cross-section 95-2500 mm²) with direct connection of wire screens. Factory produced and tested silicone joint-body is the main element of the joint. Joint body is made of high quality silicone rubber (LSR) and contains conductive deflectors and middle electrode for electrical stress control. Straight joints can be produced with different outer covering.

Main parts

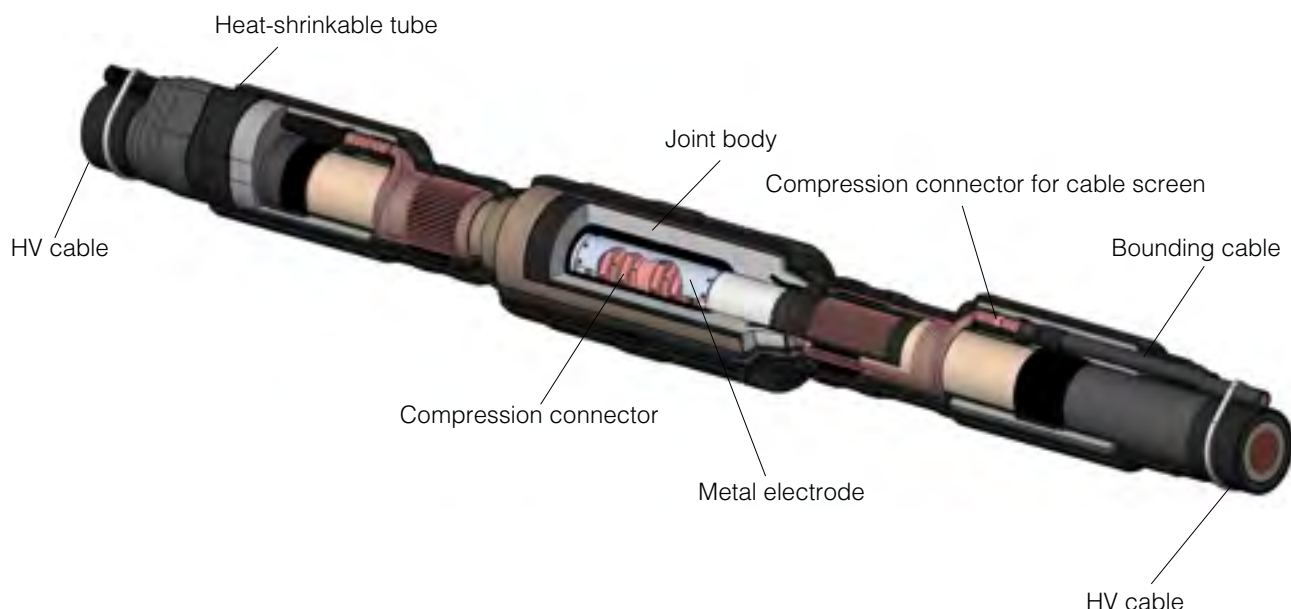
- screw connector or compression connector;
- pre-molded silicone insulator - joint body;
- sealing materials;
- tapes (semiconductive, sealing);
- heat-shrinkable protective tubes and sleeves;
- coffin box;
- copper case.

MCB 72,5 / 126 / 145 / 170 / 252



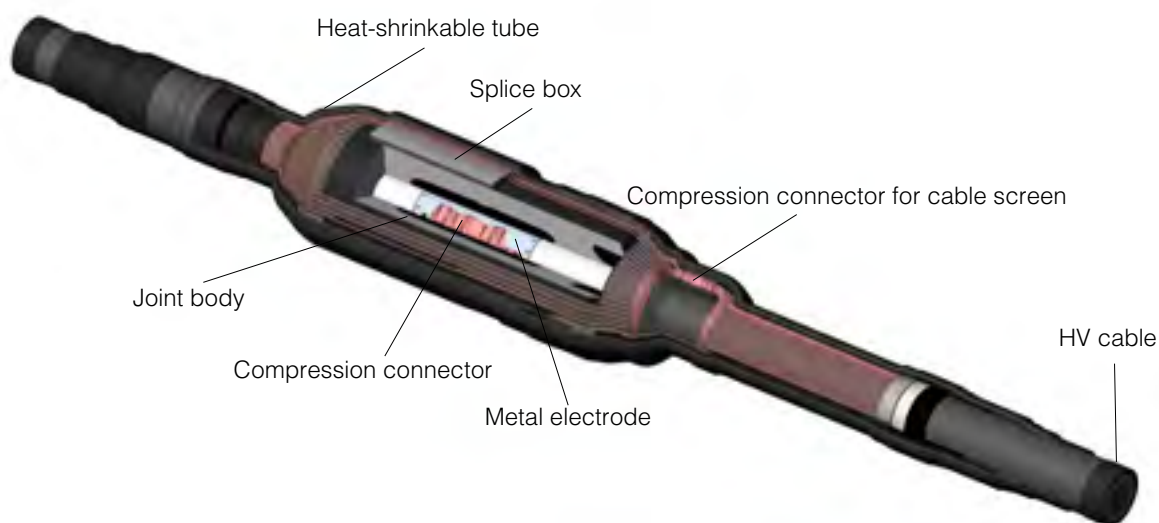
Cross-bonding joints MCB 72,5 X / 126 X / 145 X / 170 X / 252 X

Arkasil cross-bonding joints 72-252 kV are prefabricated silicone joints, designed to connect high-voltage cables 60/110/132/150/220 kV with XLPE insulation (conductor cross-section 95-2500 mm²) with integrated screen interruption. Joint body has dielectric gap. Cable screen interruption is organized by 2 single-wire bonding cables or by one coaxial cable.



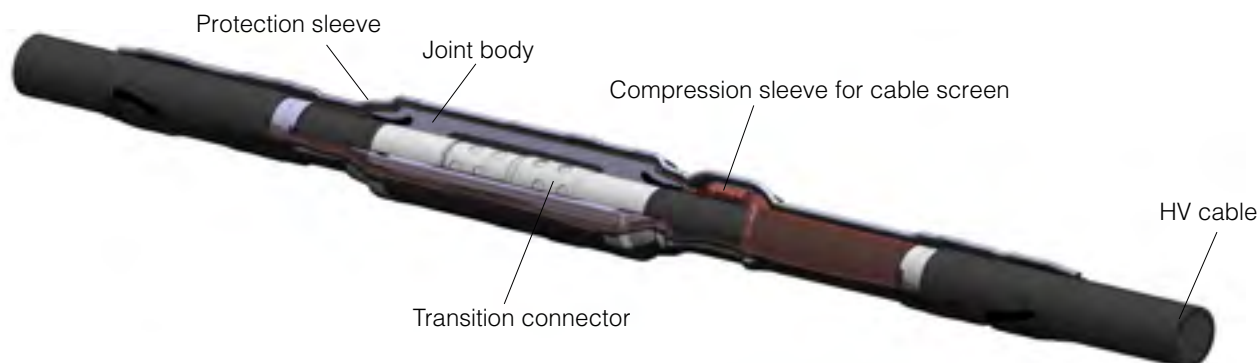
Joints with splice-box for optical fiber connection MCB 72,5 O / 126 O / 145 O / 170 O / 252 O

Arkasil joints 72-252 kV with connector (splice-box) of optical fiber integrated in screen are prefabricated silicone joints, designed to connect high-voltage cables 60/110/132/150/220 kV with XLPE insulation (conductor cross-section 95-2500 mm²). Splice-box includes all necessary components for splicing and mechanical protection.



Transition joints MCB 72,5 T / 126 T / 145 T / 170 T / 252 T

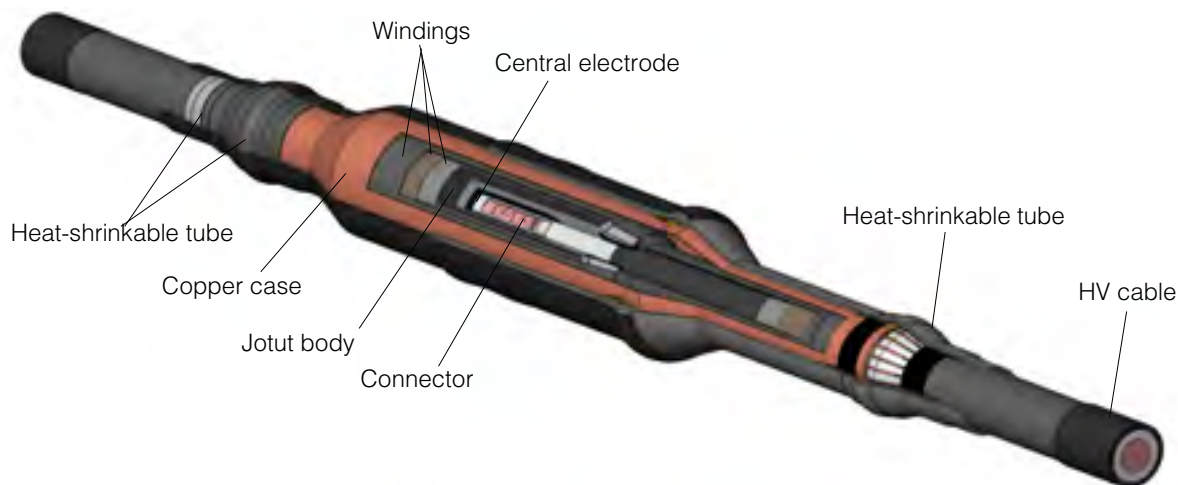
Arkasil transition joints 72-252 kV are prefabricated silicone joints, designed to connect high-voltage cables 60/110/132/150/220 kV with XLPE insulation (conductor cross-section 95-2500 mm²) with different constructions, different cross-sections of the core and screen, insulation thicknesses, conductor material etc. Transition joint dimensions depend on cables constructions.



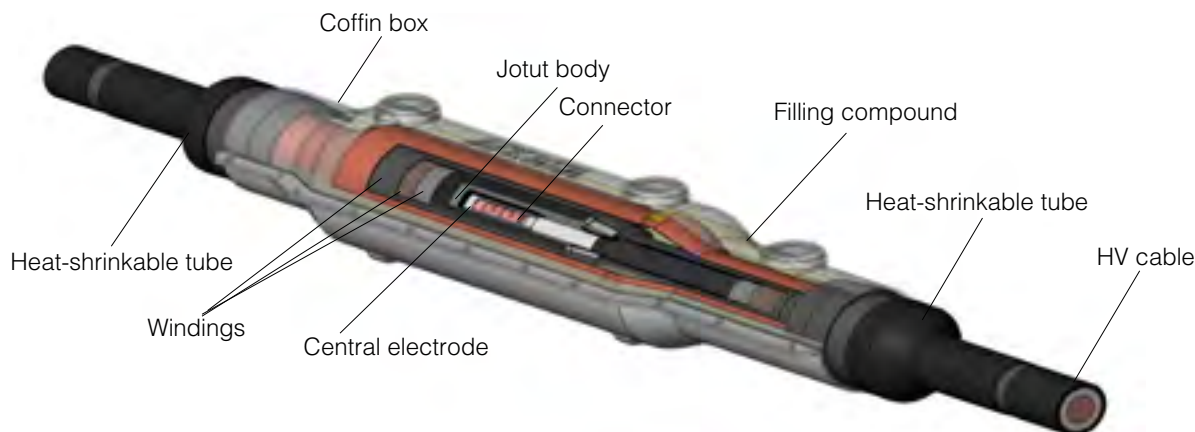
Joints with copper cases (index C) and coffin-boxes (index P) MCB 72,5 C,P(CP) / 126 C,P(CP) / 145 C,P(CP) / 170 C,P(CP) / 252 C,P(CP)

Arkasil joints with copper cases (index C) and coffin-boxes (index P) are premolded silicone joints which are used for XLPE cables connection. Cases serve for mechanical protection and additional protection against water penetration.

MCB 72,5 C / 126 C / 145 C / 170 C / 252 C

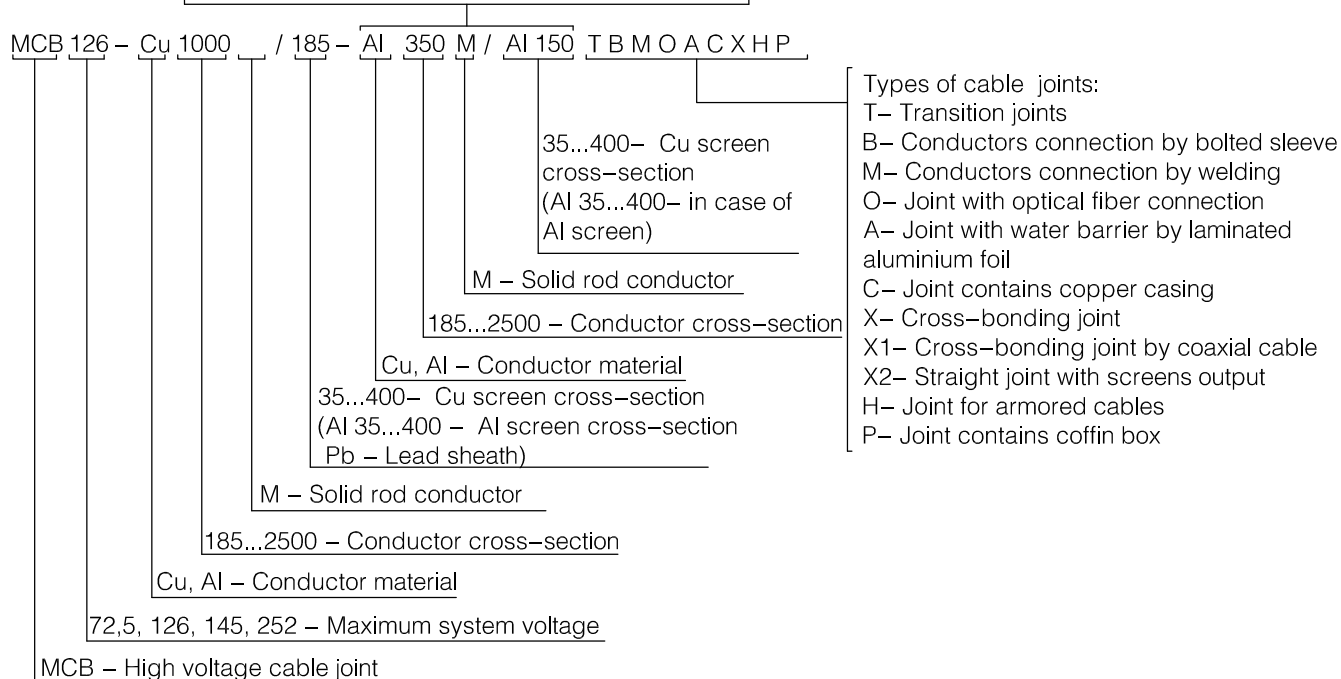


MCB 72,5 P / 126 P / 145 P / 170 P / 252 P



Marking of high-voltage cable joints

In case of connection two equal construction cable, cable specify only once.



Area of application

Type		MCB 72,5	MCB 126	MCB 145	MCB 170	MCB 252
Phase voltage	kV	36	64	76	87	127
Line voltage	kV	66	110	132	150	220
Maximum system voltage	kV	72,5	126	145	170	252
Cable conductor cross-section range	mm ²	95-1600	185 ÷ 2000	185 ÷ 2000	185 ÷ 2500	400 ÷ 2500
Maximum cable diameter	mm	120	150	150	150	150
Maximum cable insulation diameter	mm	75	93	93	110	110
Rated minimal insulation thickness	mm	8,5	10,5	14	14	20

Installation options		MCB 72,5	MCB 126	MCB 145	MCB 170	MCB 252
Underground		+	+	+	+	+
Outdoor		+	+	+	+	+
Indoor		+	+	+	+	+

Technical data

Electrical parameters	MCB 72,5	MCB 126	MCB 145	MCB 170	MCB 252
AC voltage withstand test	90 kV for 30 min	160 kV for 30 min	190 kV for 30 min	218 kV for 30 min	318 kV for 30 min
Partial discharges	<5 pC at 54 kV	<5 pC at 96 kV	<5 pC at 114 kV	<5 pC at 131 kV	<5 pC at 190 kV
Impulse voltage (10+/10- impulses)	325 kV	550 kV	650 kV	750 kV	1050 kV

Current load rating	MCB 72,5	MCB 126	MCB 145	MCB 170	MCB 252
Rated operational current	limited by cable specification	limited by cable specification	limited by cable specification	limited by cable specification	limited by cable specification
Short circuit current	limited by cable specification	limited by cable specification	limited by cable specification	limited by cable specification	limited by cable specification

Stress cone routine tests	MCB 72,5	MCB 126	MCB 145	MCB 170	MCB 252
AC voltage withstand test	90 kV for 30 min	160 kV for 30 min	190 kV for 30 min	218 kV for 30 min	318 kV for 30 min
Partial discharges	<5pC at 54 kV	<5pC at 96 kV	<5pC at 114 kV	<5 pC at 131 kV	<5pC at 190 kV

Climatic characteristics	MCB 72,5	MCB 126	MCB 145	MCB 170	MCB 252
Temperature	-45 +50°C	-45 +50°C	-45 +50°C	-45 +50°C	-45 +50°C

Cable sheath test voltage	MCB 72,5 X	MCB 126	MCB 145	MCB 170	MCB 252
AC voltage	10 kV within 1 min	10 kV within 1 min	10 kV within 1 min	10 kV within 1 min	10 kV within 1 min
DC voltage	20 kV within 1 min	20 kV within 1 min	20 kV within 1 min	20 kV within 1 min	20 kV within 1 min

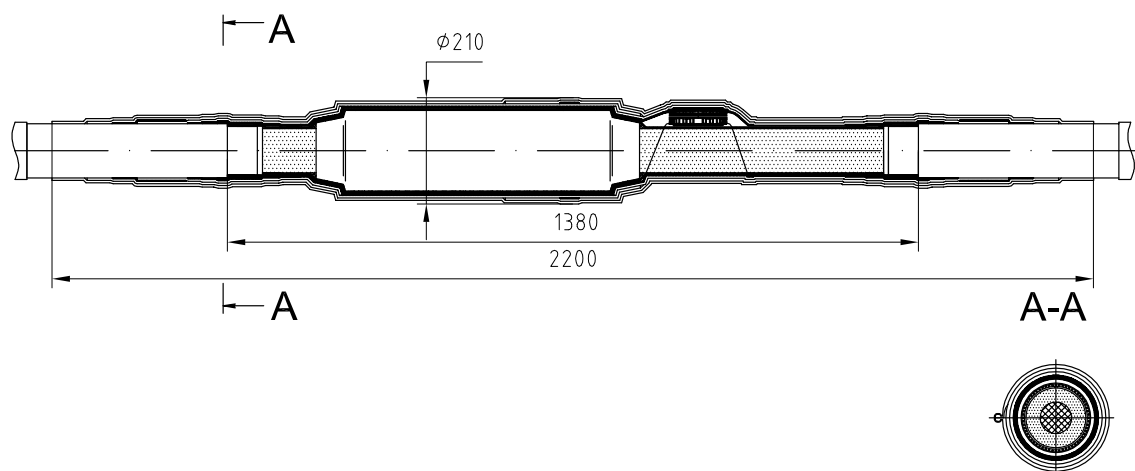
Test voltages of the cross-bonding joints	MCB 72,5 X	MCB 126 X	MCB 145 X	MCB 170 X	MCB 252 X
Impulse voltage (10+/10- impulses)	30 kV	37,5 kV	37,5 kV	47,5 kV	47,5 kV
DC voltage	25 kV within 1 min	25 kV within 1 min	25 kV within 1 min	25 kV within 1 min	25 kV within 1 min

Test voltages between transposition wires	MCB 72,5 X	MCB 126 X	MCB 145 X	MCB 170 X	MCB 252 X
DC voltage	25 kV within 1 min	25 kV within 1 min	25 kV within 1 min	25 kV within 1 min	25 kV within 1 min
Impulse voltage (10+/10- impulses)	60 kV	75 kV	75 kV	95 kV	95 kV

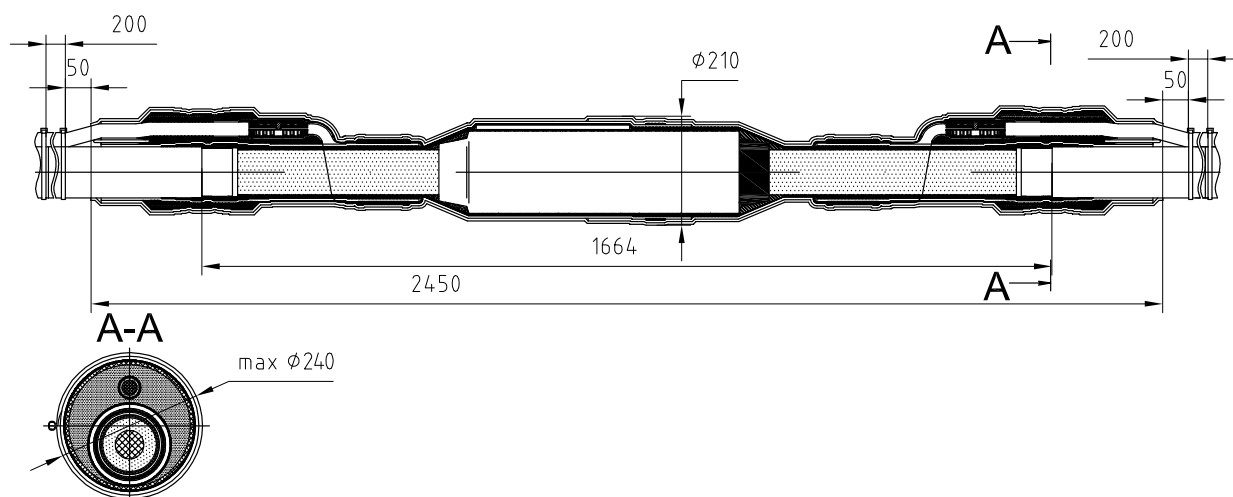
Mechanical characteristics	MCB 72,5	MCB 72,5 X	MCB 126	MCB 126 X	MCB 145	MCB 145 X	MCB 170	MCB 170 X	MCB 252	MCB 252 X
Approximate weight, kg	34	50	38	59	38	59	38	59	75	95

Drawings

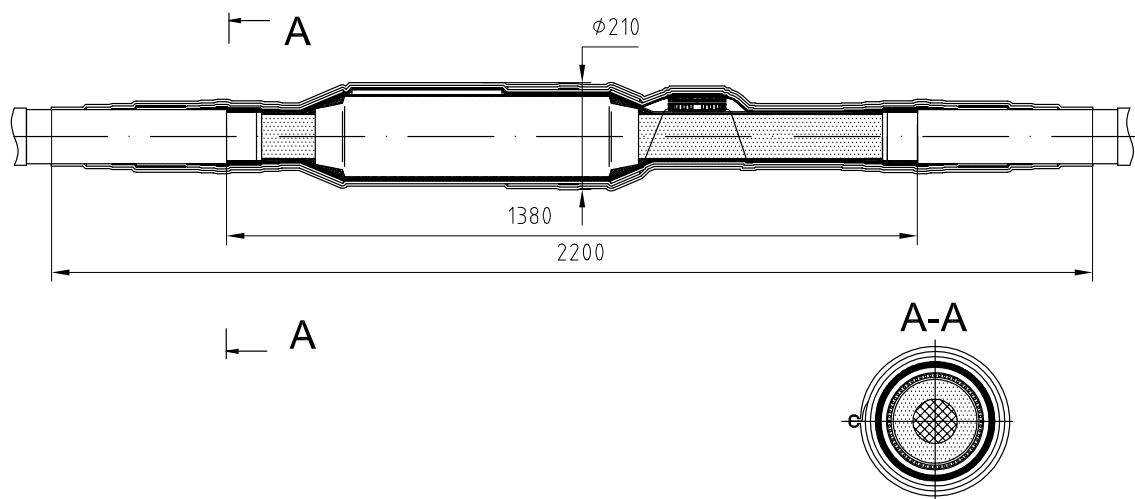
MCB 126 / 145 / 170



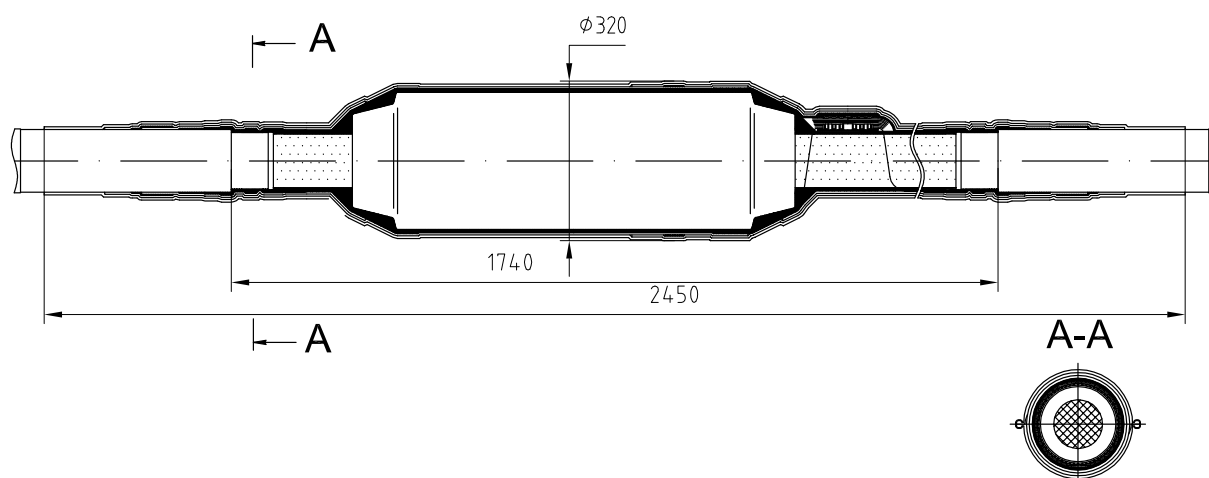
MCB 126 X / 145 X / 170 X



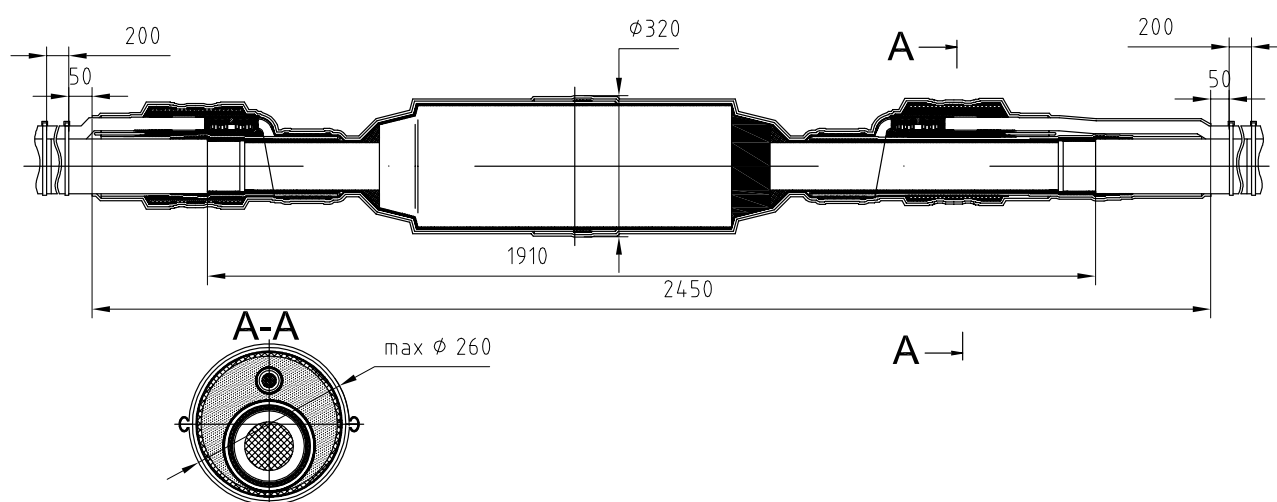
MCB 126 O / 145 O / 170 O



MCB 252



MCB 252 X



MCB 252 O

