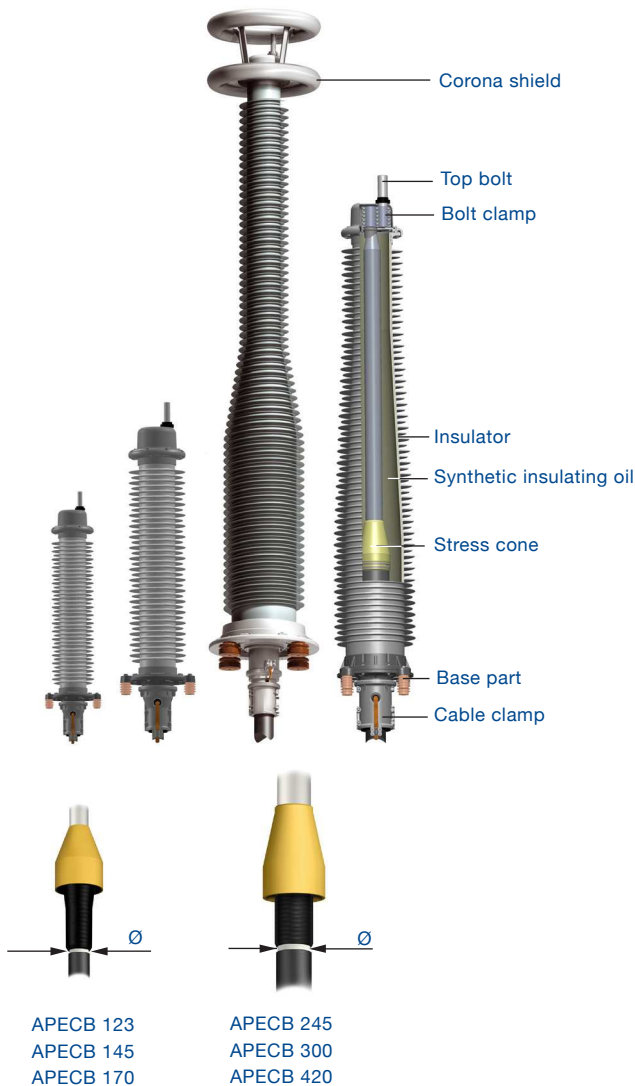


Outdoor cable termination



Use

For installations in which the termination is to be used as a fixed connection point.

Standard

Meets the requirements of:

- IEC 60840, < 170 kV
- IEC 62067, 245–420 kV
- IEEE 48

Design

The cable termination consists of an insulator installed on a box body made of aluminium castings. The base part is to be installed on a bracket.

The electrical stress control component is a premolded rubber stress cone. The insulator has sheds of short-long type and is filled with synthetic insulating oil.

The composite insulator design includes grey silicone rubber sheds and a fiberglass reinforced epoxy resin hollow core. It is light-weight and less sensitive for outer damages.

The porcelain insulators are available in brown on request.

A bolt clamp in the top fitting is used to connect the conductor to the top bolt. Top bolt and bolt clamp are included in the kit.

For the maximum permitted diameter over the cable oversheath and the diameter over prepared insulation, see the table below.

123-170 kV has three post insulators included. In case four are needed, extra can be ordered. For 245-420 kV four post insulators are included. The 420 kV have also a corona shield included.

Installation

Installation can be simplified by assembling the termination horizontally on the ground before lifting it into place.

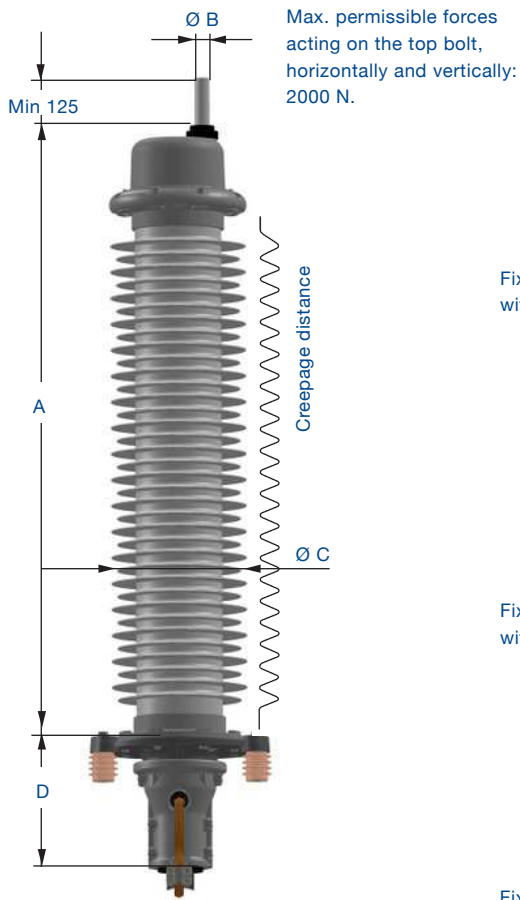
The following cable data should be stated when ordering

- Voltage
- Diameter over prepared insulation
- Conductor cross section and diameter
- Screen, sheath design and cross section
- Overall cable diameter
- Optical fibres integrated in screen
- Diameter and material of the top bolt, copper or aluminium

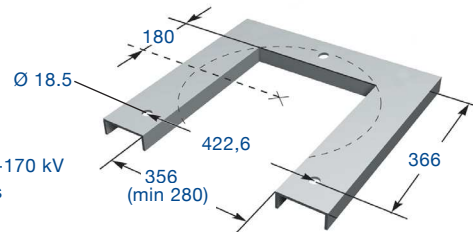
Voltage U_m	Insulation diameter		Outer sheath \emptyset
	min \emptyset	max	
kV	mm		mm
≤ 170	45.5	107	170
245	73	120	170
300	73	120	170
420	80	124	170

Technical specification

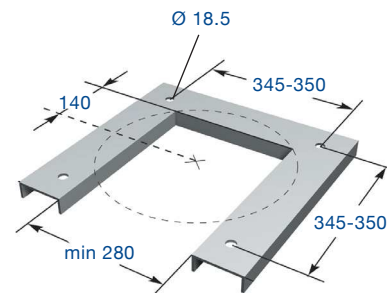
Dimensions in mm



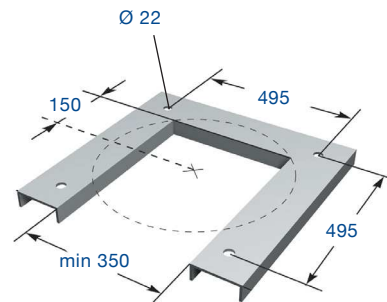
Fixing to bracket for 123-170 kV with three post insulators



Fixing to bracket for 123–300 kV with four post insulators



Fixing to bracket for 420 kV
Non-insulated: four 18 mm holes for M16 bolts.
Insulated: four 22 mm holes for M20 bolts.



Voltage kV	Insulator	Designation*	Dimensions				Creepage distance min mm	Net weight kg/item
			A mm	Ø B	Ø C	D		
123	Composite	APECB 1231 P	1330	40/50/54/60	370	230	3150	90
145	Composite	APECB 1452 P	1630	40/50/54/60	370	230	4350	100
170	Composite	APECB 1703 P	1830	40/50/54/60	370	230	5250	110
170	Composite	APECB 1705 P	2555	40/50/54/60	370	230	8000	130
245	Composite	APECB 2456 P	3050	40/50/54/60	496	230	9360	295
300	Composite	APECB 3006 P	3050	40/50/54/60	496	230	9360	295
420	Composite	APECB 4201 P	4600	40/50/54/60	600	395	14900	600

* When the cable diameter is larger than 120 mm, add: Ø 170 at the end of the designation.

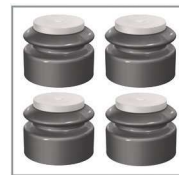
Applications and accessories



Inclination up to 30°.



GAP-APECB
Rod gap.



PIU 420 B/G
Post insulator kit for fixing APECB 420 kV when insulated installation. Included in the kit.

Accessories, to be ordered separately



OKT
Optical fiber kit for cables with integrated optical fibers in the earth screen.



SV140, SV190, SV 215
Tools for installation of stress cones as follows:
– SV 140 for SKG
– SV 190 for SKGB
– SV 215 for SKGE

Designation	Description
GAP-APECB	Rod gap for protection against overvoltage 123-170 kV
PIU-APEC	Post-insulator kit for fixing APECB 420 kV for insulated installation
OKT	Optical fiber kit for integrated optical fibers in the screen of the cable 123–420 kV
SV 140	Installation tool for stress cone, SKG for cable termination APECB 123–170
SV 190	Installation tool for stress cone, SKGB for cable termination APECB 245–300
SV 215	Installation tool for stress cone, SKGE for cable termination APECB 420

Designation	Description	See page
JSA*	Earthing kit for cable with metallic sheath, e.g. lead. Not needed if cable has only Cu-wire screen.	2/30
SCK*	Screen connection for Al-foil (APL)radial waterproof cable. Not needed if cable has only Cu-wire screen.	2/30

* NB: if earthing kit is required, this increases the cable outer diameter Ø by 20 mm.