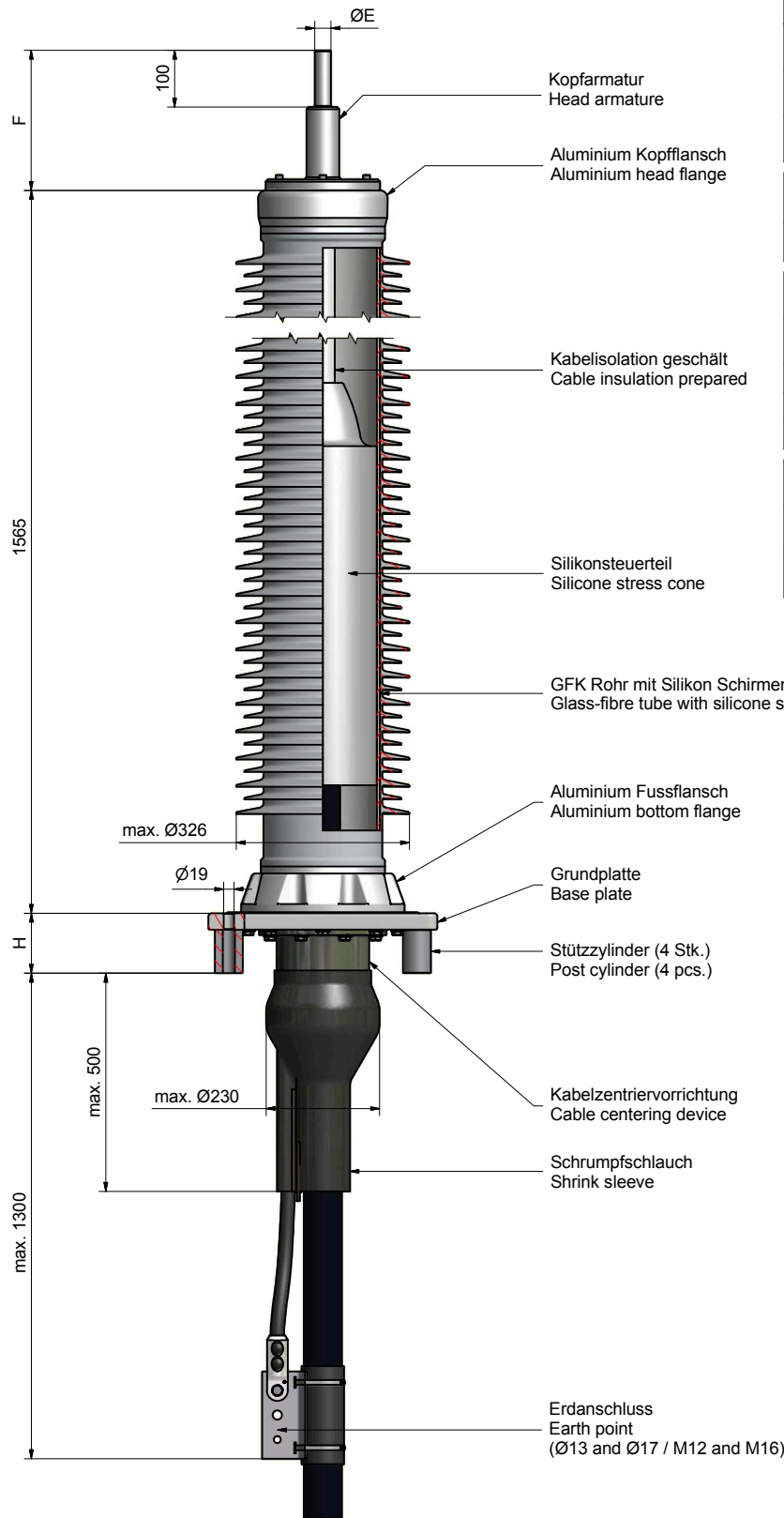


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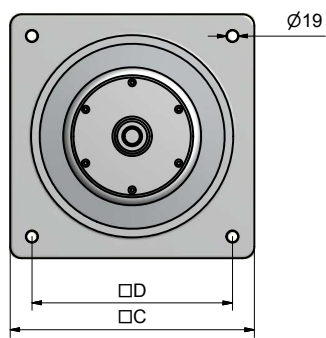


Höchste Spannung für Betriebsmittel (Um) Highest voltage for equipment (Um)	145 kV	
Kriechweg (min.) Creepage distance (min.)	4570 mm	
Verschmutzungsstufe Pollution class	IEC 60815 IEC 60815-3	31.5 mm/kV (IV) 54.6 mm/kV (e)
Farbe des Isolators Colour of insulator	grau grey	
Totalgewicht ohne Kabel (ca.) Total weight without cable (approx.)	80 kg	

Ø Kabelisolation geschält Ø Cable insulation prepared	51 - 91 mm	
Entspricht Leiterquerschnitt (ca.) Corresponding conductor cross-section (approx.)	150 - 2000 mm²	

Kopfarmatur Head armature		
Leiterquerschnitt Conductor cross section	ØE [mm]	F [mm]
≤ 500 mm²	30	200 - 400
> 500 mm² - < 1200 mm²	40	
≥ 1200 mm²	50	

Grundplatte Base plate	Kabelisolation Cable insulation [mm]	C / D [mm]	H [mm]
Standard	51.0 - 91.0	420 / 345	112
auf Anfrage on request		320 / 270 500 / 400	



Name / name		Datum / date		Zeichnung nicht masstäblich / drawing not to scale			
Erstellt von created by		Umasankar		2020-12-21		Änderungen vorbehalten / subject to change	
Geprüft von approved by		wenk		2021-02-08		Beschreibung / title DOC145-C45 Trockener Freiluft Silikon Endverschluss DOC145-C45 Dry Outdoor Composite Termination	
Ersetzt für / replacement for		Für Kunden		Dokumententitel / type of document		Dateiname / filename	
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## Technical data of DOC145-C45

### HV dry outdoor composite termination

Manufacturer		PFISTERER
Catalog name	HV-Cable termination DOC	
Voltage range	up to 145 kV	
Type designation	dry outdoor composite termination	
Variant	according to cable data	
Applied standard	IEC 60840	

Electrical levels (IEC 60840)	
Rated voltage (U)	132 – 138 kV
Highest voltage (U <sub>m</sub> )	145 kV
(U <sub>0</sub> ) for determination of test voltage	76 kV
Max. design voltage to ground	84 kV

Electrical type test levels (IEC 60840)	
AC withstand voltage 15 min	190 kV
Lightning impulse voltage test (BIL)	650 kV
Heating cycles (AC voltage, 2 U <sub>0</sub> )	152 kV
Partial discharge test < 5 pc at 1.5 U <sub>0</sub>	114 kV

Electrical routine test levels (IEC 60840)	
AC withstand voltage 30 min	190 kV
Partial discharge test < 5 pc at 1.5 U <sub>0</sub>	114 kV
Each stress cone routine tested	yes
Pre-assembled with termination housing	yes

Current of conductor	
Max. current rating	same as cable
Max. thermal short circuit current (1 s)	63 kA
	max. same as cable

Cantilever load on vertical installation	
Mechanical connector	4 kN

Operation conditions	
Ambient temperature	- 30 / + 55 °C
Max inclination	30°

Stress control	
Field control method	geometrical
Type	pre-moulded
Material	silicone rubber
Production method	injection moulding
Production environment	clean room
Stress cone pre-assembled in termination housing	yes

Termination housing	
Filling compound	none
Overall length excl. head armature	1565 mm
Tube diameter with sheds (max.)	326 mm
Housing material	fibreglass
Sheds material	silicone rubber
Pollution class IEC 60815	31.5 mm/kV
Pollution class IEC 60815-3	54.6 mm/kV
Creepage distance (min.)	4570 mm
Flash over distance (min.)	1415 mm

Head armature	
Connector standard	bolted (SICON)
Material	aluminium blank
Conductor size	150 – 2000 mm <sup>2</sup>
compression armature	On request

Cable type	
Type	XLPE
Screen type	wire, lead sheath corrugated Al & Cu
Diameter over prepared insulation	51 – 91 mm
Range of overall cable diameter	50 – 150 mm

Base plate	
Material	aluminium
Fixing holes distance	see dimension D on drawing

Post cylinder	
Included in scope of supply	4 pcs
Material	steel (hot-galvanized)

Earthing	
Type of cable screen to be used	all types
Earth point	50 – 630 mm <sup>2</sup>
Earthing cable	supplied by customer

Installation	
Installation work	only by certified fitters
Installation temperature	min. 0 / max. + 55 °C
Site conditions	clean environment
Installation instruction for each kit	yes

Packing	
Treated wooden box (seaworthy/airworthy)	ISPM15
Gross weight 3 pcs (approx.)	600 kg
Pack volume 3 pcs (approx.)	3.9 m <sup>3</sup>

Storage	
Conditions	clean and dry
Long-term storage temperature	min. 0 / max. + 25 °C
Shelf life items	2 years
Non-shelf life items	10 years
Expected service life after installation	40 years

