

# **Operating Poles**

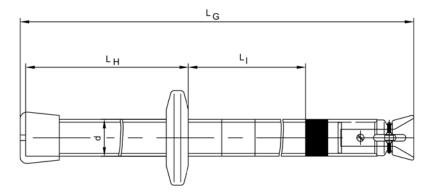
PFISTERER offers various types of operating poles for different applications. Operating poles are hand-held devices for operating and testing live components.

# **Insulating Poles**

These insulating poles are suitable for use on installations with nominal voltages up to 110 kV.

## Technical description:

- Receiving head with roller locking device
- Suitable for indoor and outdoor installations, but not when there is precipitation
- Red ring
- Hand guard
- Insulating poles made of fibre-glass reinforced polyester tube, colour yellow



No.	Nominal voltage	Total length	Length of insulating element	Length of handle	Diameter of insulating element
	U <sub>n</sub> (kV)	L <sub>G</sub> (mm)	L <sub>ı</sub> (mm)	L <sub>H</sub> (mm)	d (mm)
363 810 810	30	1038	525	450	33
363 810 811	30	1538	525	605	33
363 810 812	30	2038	525	705	33
363 810 816	110	2038	1300	685	33
363 815 818	110	3038	1300	800	43

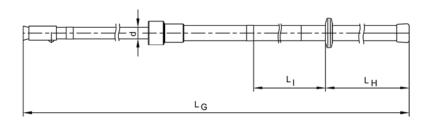


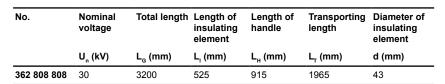
# **Insulating Poles, Telescopic Type**

These insulating poles are suitable for use on installations with nominal voltages up to  $110\ \text{kV}.$ 

## Technical description:

- Continuous telescoping adjustment
- Receiving head with roller locking device
- Suitable for indoor and outdoor installations, but not when there is precipitation
- Red ring
- Hand guard
- Insulating poles made of fibre-glass reinforced polyester tube, colour yellow







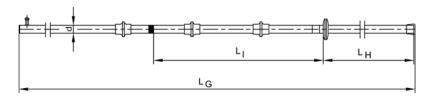
# **Switching Poles**

These switching poles are suitable for use on installations with nominal voltages up to  $110\ \text{kV}.$ 

# Technical description:

- Suitable for indoor and outdoor installations
- Plastic actuating bolt and hand guard
- End cap made of non-slip rubber
- Switching pole made of glass-fibre reinforced polyester tube, colour yellow

These switching poles are designed to Standard DIN VDE 0681 Part 1 and 2.



No.	Nominal voltage	Suitable for use under precipitation	Total length	Length of insulating element	Length of handle	Diameter of insulating element
	U <sub>n</sub> (kV)		L <sub>g</sub> (mm)	L <sub>i</sub> (mm)	L <sub>H</sub> (mm)	d (mm)
364 035 004	30	-	1008	525	400	33
364 827 006	30	•	1008	525	400	33
364 035 005	30	-	1508	525	530	33
364 827 001	30	•	1508	525	470	33
364 035 035	30	-	2008	525	635	33
364 827 002	30	-	2008	525	470	33
364 035 036	30	-	2508	525	750	33
364 035 037	30	-	3008	525	750	33
364 827 003	60	-	2508	900	850	33
364 035 042	110	-	2008	1300	635	33
364 035 043	110	-	2508	1300	750	33
364 827 004	110		3008	1300	950	33
364 035 008	110	-	3508	1300	750	33
364 827 007	110		4008	1300	1400	33
364 827 008	110		5008	1300	1400	33

# **Insulating Working Poles**

These insulating working poles are designed for use as operating poles on various jobs carried out on or near live components.

Insulating working poles are available in various lengths. More details available on request.



# **Pruning saw poles**

**Pruning saw poles** used to saw off individual branches that have grown into the danger area around electrical installations. For this purpose, special sawing devices are attached to insulating poles made of fibre-glass reinforced polyester tube.

No.	Version
360 488 000	0008



### **Lopping Poles**

**Lopping poles** used to cutting off individual branches that have grown into the danger area around electrical installations. For this purpose, special cutting devices are attached to insulating poles made of fibre-glass reinforced polyester tube.

No.	Version	
360 488 000	0009	



### **Ice-removing Poles**

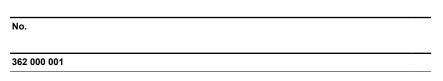
**Ice-removing poles** used to remove ice from electrical installations. For this purpose, a special hook is attached to insulating poles made of fibre-glass reinforced polyester tube.

No.	Version	
360 488 000	0010	



# **Cable Pulling Hook**

This **cable pulling hook** is used for moving live superflexible cables, especially in mining applications.





# **All-insulated Rescue Hook**

For rescuing persons from the danger area around live system components after an accident. These rescue hooks have a dielectric strength of 80 kV / mm. Type H is for indoor use only, Type N can be used either in indoor or outdoor installations.

No.	Туре	Range of application	Length
			(mm)
360 491 001	N	< 1000 V	1000
360 491 002	Н	< 30000 V	1650

# Fuse-tongs, 20° angled

This fuse-tong is suitable for replacing high-voltage fuses in switchgear.

# Technical description:

- Rapid adjustment using the double-threaded spindle
- Tilted clamping jaws
- Mechanical overload coupling protects the head from fracture
- Not to be used when there is precipitation

The fuse tong is designed to Standard DIN VDE 0681 Parts 1 and 3.

No.	Nominal voltage	Total length	Length of insulating element	Length of handle	Diameter of insulating element
	$U_n$ (kV)	L <sub>G</sub> (mm)	L <sub>i</sub> (mm)	L <sub>H</sub> (mm)	d (mm)
363 280 002	30	1251	525	460	33



### **Earthing Poles**

Earthing poles are used for connecting earthing and short-circuiting devices. To do this, the line clamps are brought up to the connection point on the dead conductor.

#### **Technical description:**

- Line clamps held by spindle and cross-pin
- A receiving head with roller locking device allows the earthing pole to be easily attached/detached from the line clamp
- Earthing poles made of glass-fibre reinforced polyester tube, coloured yellow
- Black mark indicates the required insulation gap
- End cap made of non-slip rubber

# **Earthing Poles**

Single-piece earthing poles.

No.	Pole length	Diameter of insulating element
	(mm)	d (mm)
364 153 153	1038	33
364 153 154	1538	33
364 153 155	2038	33
364 156 156	2538	43
364 156 157	3038	43
364 156 158	3538	43

# **Telescopic Earthing Poles**

Telescopic earthing poles.

No.	Pole length extended	Transporting length	Diameter of insulating element
	L (mm)	L <sub>r</sub> (mm)	d (mm)
364 169 169	1565	890	43
364 169 170	2030	1155	43
364 169 171	2464	1390	43
364 169 172	2905	1540	43
364 169 173	3405	1790	43
364 169 174	3905	2040	43
364 169 175	4415	2540	43
364 169 597	5917	4040	43

# **Earthing Poles with Line Clamp P1**

Single-piece earthing poles with fixed line clamp P1.

The one-piece design allows earth fittings to be attached/detached easily, even in places that are difficult to access. The yellow earthing poles also clearly mark the work location.

No.	Pole length	Diameter of insulating element
	(mm)	d (mm)
364 115 001	1500	33



### **Earthing Poles with Line Clamp P7**

Single-piece earthing poles with fixed line clamp P7.

The one-piece design allows earth fittings to be attached/detached easily, even in places that are difficult to access. The yellow earthing poles also clearly mark the work location.

No.	Pole length	Diameter of insulating element
	(mm)	d (mm)
364 212 001	2500	43



# **Telescopic Earthing Poles with Line Clamp P9**

Earthing poles, telescopic type, with fixed parallel line clamp P9.

This design allows earth fittings to be attached/detached easily, even in places that are difficult to access. The yellow earthing poles also clearly mark the work location.

No.	Pole length extended	Transporting length	Diameter of insulating element
	L (mm)	L <sub>T</sub> (mm)	d (mm)
364 084 084	2185	1470	43
364 084 086	3050	1845	43
364 084 087	3540	2095	43
364 084 001	4040	2345	43
364 084 089	4560	2845	43
364 084 002	6065	4190	43





# **Telescopic Earthing Poles with Line Clamp P8**

Earthing poles, telescopic type, with fixed HV line clamp P8.

This design allows earth fittings to be attached/detached easily, even in places that are difficult to access. The yellow earthing poles also clearly mark the work location.

No.	Pole length extended	Transporting length	Diameter of insulating element	
	L (mm)	L <sub>T</sub> (mm)	d (mm)	
364 112 114	3050	1700	43	
364 112 115	3540	1950	43	
364 112 116	3950	2200	43	
364 112 003	4460	2700	43	
364 112 004	6650	3685	43	

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# **Two-piece Earthing Poles with Phase Fixed Point**

This **two-piece earthing pole with downward aluminium phase fixed point** makes it easier to attach earthing and short-circuiting devices at high working positions on outdoor switchgear.

This two-piece earthing pole is attached to the phase fixed point, tube or wire, and then tightened. The earthing pole remains attached throughout the whole earthing process. A single-pole earthing and short-circuiting device with separate earthing pole can then be attached to the downward phase fixed point on the two-piece earthing pole.

#### **Technical description:**

- The earthing and short-circuiting device can be used for short-circuit currents up to 29.5 kA / 1 s (wire cross-section 150 mm²)
- Working heights up to 9 m possible
- Easy handling thanks to shorter ground wire
- Shorter, weight-saving ground wire
- The earthed working location is very clearly marked by the attached earthing pole
- Aluminium downward fixed phase point
- Suitable earthing poles:
   364 112 115 (with line clamp P8)
   364 169 173 (without line clamp)
- Diameter of insulating part: 43 mm

Earthing device to connect phase fixed point to ground potential need to be ordered separately.

No.	Version	Total length	Carrying length	Line clamp	
		L <sub>G</sub> (mm)	(mm)		
364 116 000	0001	4500	3107	P7	1
364 116 000	0002	5000	3107	P7	1
364 116 000	0003	5500	3107	P7	1
364 116 000	0004	6000	3107	P7	1
364 116 000	0005	6500	3494	P7	1
364 116 000	0006	7000	3494	P7	1
364 116 000	0007	7500	4494	P7	1
364 116 000	8000	8000	4494	P7	1
364 116 000	0010	4500	3107	P8	2
364 116 000	0011	5000	3107	P8	2
364 116 000	0012	5500	3107	P8	2
364 116 000	0013	6000	3107	P8	2
364 116 000	0014	6500	3501	P8	2
364 116 000	0015	7000	4001	P8	2
364 116 000	0016	7500	4501	P8	2
364 116 000	0017	8000	5001	P8	2







## **Earthing Poles for Railway Systems**

Earthing poles for railway systems are used for connecting railway grounding devices. To do this, the earthing terminals are brought up to the contact wire. These earthing poles are marked with red stripes on a white background. This allows optimum identification of the work location.

#### **Technical description:**

- Contact wire earthing terminals held by spindle and cross-pin
- A receiving head with roller locking device allows the earthing pole to be easily attached/detached from the contact wire earthing terminal
- Robust construction for use in railway applications



### **Telescopic Earthing Poles, two-piece**

Earthing poles for railway systems, in two-piece design. These earthing poles are used mainly for transformers and railway power lines. They are continuously adjustable.

No.	Length range	Pole length extended	Transporting length	Insulating length	Weight	DB no.	DB drawing number
	(m)	L (mm)	L <sub>T</sub> (mm)	L <sub>i</sub> (mm)	(kg)		
362 744 001	1,8 - 3,0	3500	1800	500	3.8	00157507	3 Ebgw 01.17
362 744 744	2,6 - 5,0	5000	2600	500	3.8	00157497	3 Ebgw 01.12



### Telescopic Earthing Poles, three-piece

Earthing poles for railway systems, in three-piece design. The top area of the earthing pole is continuously adjustable.

The connection between the earthing pole and the contact wire earthing terminal can be fixed using a slider. The earthing pole can thus be used to mark the work location.

No.	Length range	Pole length Transporting extended length		Insulating length	Weight
	(m)	L (mm)	L <sub>T</sub> (mm)	L <sub>i</sub> (mm)	(kg)
362 745 745	2,0 - 5,0	5080	2000	500	5.2
362 745 002	3,2 - 7,0	7000	3200	500	5.2

#### Earthing Poles, five-piece

Earthing pole for railway systems in five-piece design. Because of the short carrying length, this type is suitable for transport in all common passenger vehicle types. The connection between the earthing pole and the contact wire earthing terminal can be fixed using a slider. The earthing pole can thus be used to mark the work location.

No.	Length range	Pole length	Transporting length	Insulating length	DB no.	DB drawing number
	(m)	L (mm)	L <sub>T</sub> (mm)	L <sub>i</sub> (mm)		
364 784 001	4,9	4892	1100	500	00157498	3 Ebgw 01.22





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