

Poles with angle bracket, conical, round, for angle-bracket lighting

Angle bracket, angle 15°, fibreglass-reinforced plastic with option of 5°, spigot 94 mm, with diameter of luminaire connection (spigot) 42 and 60 mm, length as specified by customer. Terms of technical delivery as per EN 40, with CE European Conformity Mark

Surface characteristics of steel poles:
Hot-dip galvanized as per DIN EN ISO1461, with additional paint finish as specified by customer

Surface characteristics of aluminium poles:
With ground finish, with additional paint or anodized finish

Surface characteristics of concrete poles:
Smooth, concrete-gray, coloured as specified by customer

Surface characteristics of fibreglass-reinforced plastic (GRP):
Smooth, completely colour-impregnated, and electrically insulated

Standard equipment:
Door, equipment mounting plate with two slide nuts and plain grounding link, cable hole in underground section

Poles with circular curved bracket, conical, round, for bracket lighting

With circular curved bracket, angle 15°, fibreglass-reinforced plastic with option of 5°, spigot 60 mm, with diameter of luminaire connection (spigot) 42 mm, length 400 mm. Terms of technical delivery as per EN 40, with CE European Conformity Mark

Surface characteristics of steel poles:
Hot-dip galvanized as per DIN EN ISO1461, with additional paint finish as specified by customer

Surface characteristics of aluminium poles:
With ground finish, with additional paint or anodized finish

Surface characteristics of concrete poles:
Smooth, concrete-gray, coloured as specified by customer

Standard equipment:
Door, equipment mounting plate with two slide nuts and plain grounding link, cable hole in underground section

Straight poles, conical, round, for post-top lighting

Terms of technical delivery as per EN 40, with CE European Conformity Mark

Surface characteristics of steel poles:
Hot-dip galvanized as per DIN EN ISO1461, with additional paint finish as specified by customer

Surface characteristics of aluminium poles:
With ground finish, with additional paint or anodized finish

Surface characteristics of concrete poles:
Smooth, concrete-gray, coloured as specified by customer

Surface characteristics of fibreglass-reinforced plastic (GRP):
Smooth, completely colour-impregnated, and electrically insulated

Standard equipment:
Door, equipment mounting plate with two slide nuts and plain grounding link, cable hole in underground section. For steel poles: top end of pole calibrated to 100 mm for standard version

Poles with angle bracket, cylindrical, stepped, for bracket lighting

Angle bracket, angle 15°, spigot 76 mm, with diameter of luminaire connection (spigot) 42 and 60 mm, length as specified by customer. Terms of technical delivery as per EN 40, with CE European Conformity Mark

Surface characteristics of steel poles:
Hot-dip galvanized as per DIN EN ISO1461, with additional paint finish as specified by customer

Surface characteristics of aluminium poles:
With ground finish, with additional paint or anodized finish

Surface characteristics of concrete poles:
Smooth, concrete-gray, coloured as specified by customer

Standard equipment:
Door, equipment mounting plate with two slide nuts and plain grounding link, cable hole in underground section

Poles with circular curved bracket, cylindrical, stepped, for bracket lighting

Bracket with circular curve, angle 15°, spigot 60 mm, with diameter of luminaire connection (spigot) 42 mm, length 400 mm. Terms of technical delivery as per EN 40, with CE European Conformity Mark

Surface characteristics of steel poles:
Hot-dip galvanized as per DIN EN ISO1461, with additional paint finish as specified by customer

Surface characteristics of aluminium poles:
With ground finish, with additional paint or anodized finish

Surface characteristics of concrete poles:
Smooth, concrete-gray, coloured as specified by customer

Standard equipment:
Door, equipment mounting plate with two slide nuts and plain grounding link, cable hole in underground section

Straight poles, cylindrical, stepped, for post-top lighting

Terms of technical delivery as per EN 40, with CE European Conformity Mark

Surface characteristics of steel poles:
Hot-dip galvanized as per DIN EN ISO1461, with additional paint finish as specified by customer

Surface characteristics of aluminium poles:
With ground finish, with additional paint or anodized finish

Surface characteristics of concrete poles:
Smooth, concrete-gray, coloured as specified by customer

Standard equipment:
Door, equipment mounting plate with two slide nuts and plain grounding link, cable hole in underground section



HOW DO YOU FIND THE MAST YOU NEED?

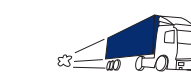
To give you a better overview, we have organized our catalogue in accordance with the height of the poles. Good tip: the page number of this catalogue is the same as the height of each of the poles in metres.



On the fold-out pages of the cover, you will find information on the poles in the basic models, as well as extensively used technical accessories.

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Explanation of the symbols

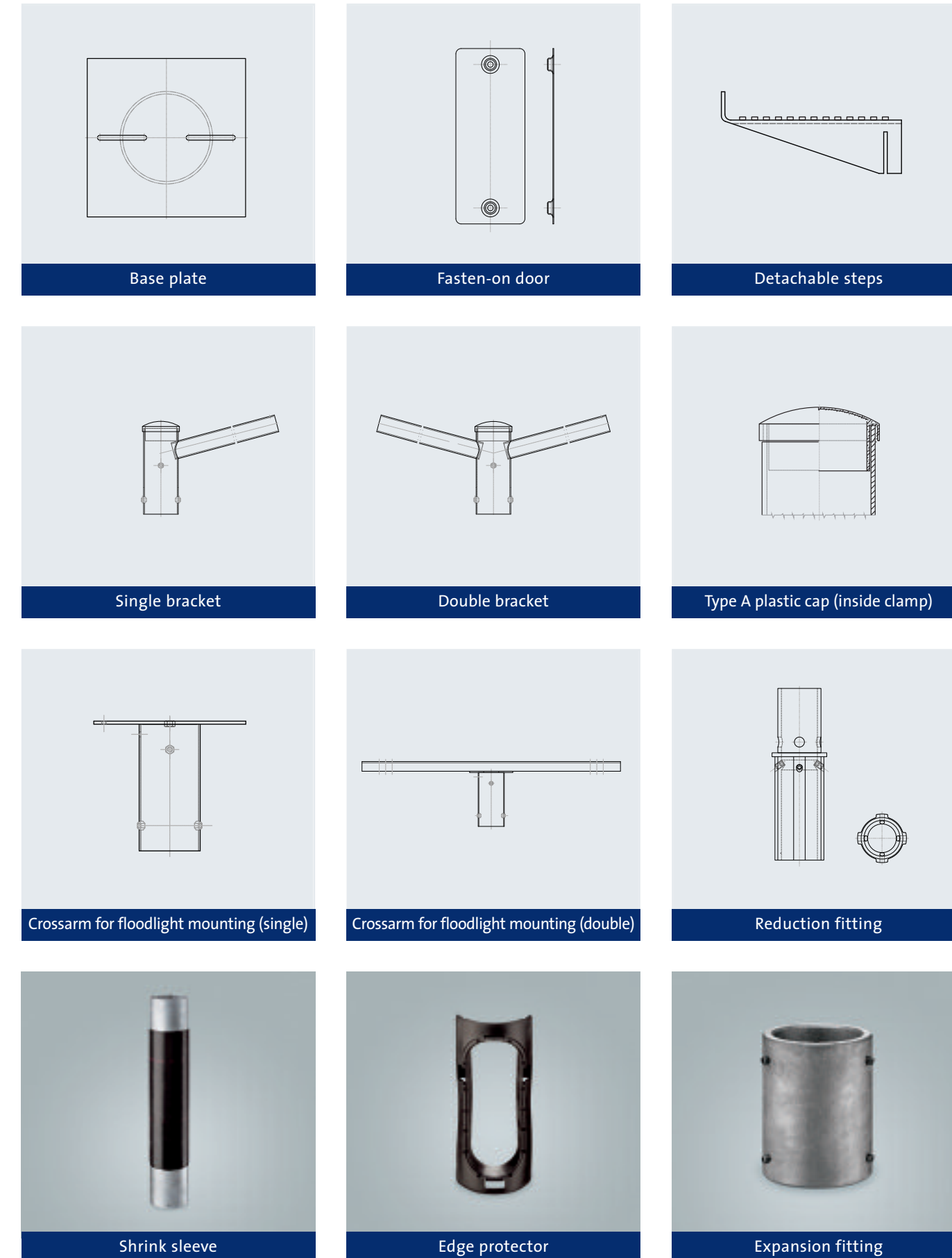


Masts with this symbol are available on short notice from our warehouses.

Light is Life

LIGHTING | OUTDOOR LIGHTING

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Put your city or community in the right light. Classical outdoor lighting has two main purposes: specifically designed aesthetic enhancement, and satisfaction of the basic needs of residents and guests. After dark, good outdoor lighting not only creates special atmosphere, but also provides orientation and safety.

With this catalogue we would like to give you an overview of our lighting pole program for outdoor illumination. Lighting poles from Europoles are functional, cost-effective, and decorative. Place lighting accents in your surroundings – with a lighting pole made of steel, spun concrete, aluminium, or fibreglass-reinforced plastic. The choice is yours.

An overview of the four materials for your selection:

Steel	Concrete	Fibreglass-reinforced plastic (FRP)	Aluminium
<ul style="list-style-type: none"> Fast logistic availability as a result of standardization Great versatility Reusable through recycling Optimal cost-benefit ratio Long life cycle 	<ul style="list-style-type: none"> Long life cycle, even under extreme environmental conditions (e.g., salty sea air) Individual design possibilities, in form, colour, and surface finish Surface resistance to impacts and scratching Little maintenance required Resistant to vandalism, owing to sturdy construction 	<ul style="list-style-type: none"> Low intrinsic weight Choice of all RAL colours Smooth surface, resistance to scratching Electrically non-conductive 	<ul style="list-style-type: none"> Low intrinsic weight Uniformly smooth surface Reusable through recycling

Hand in hand with your experts for lighting poles

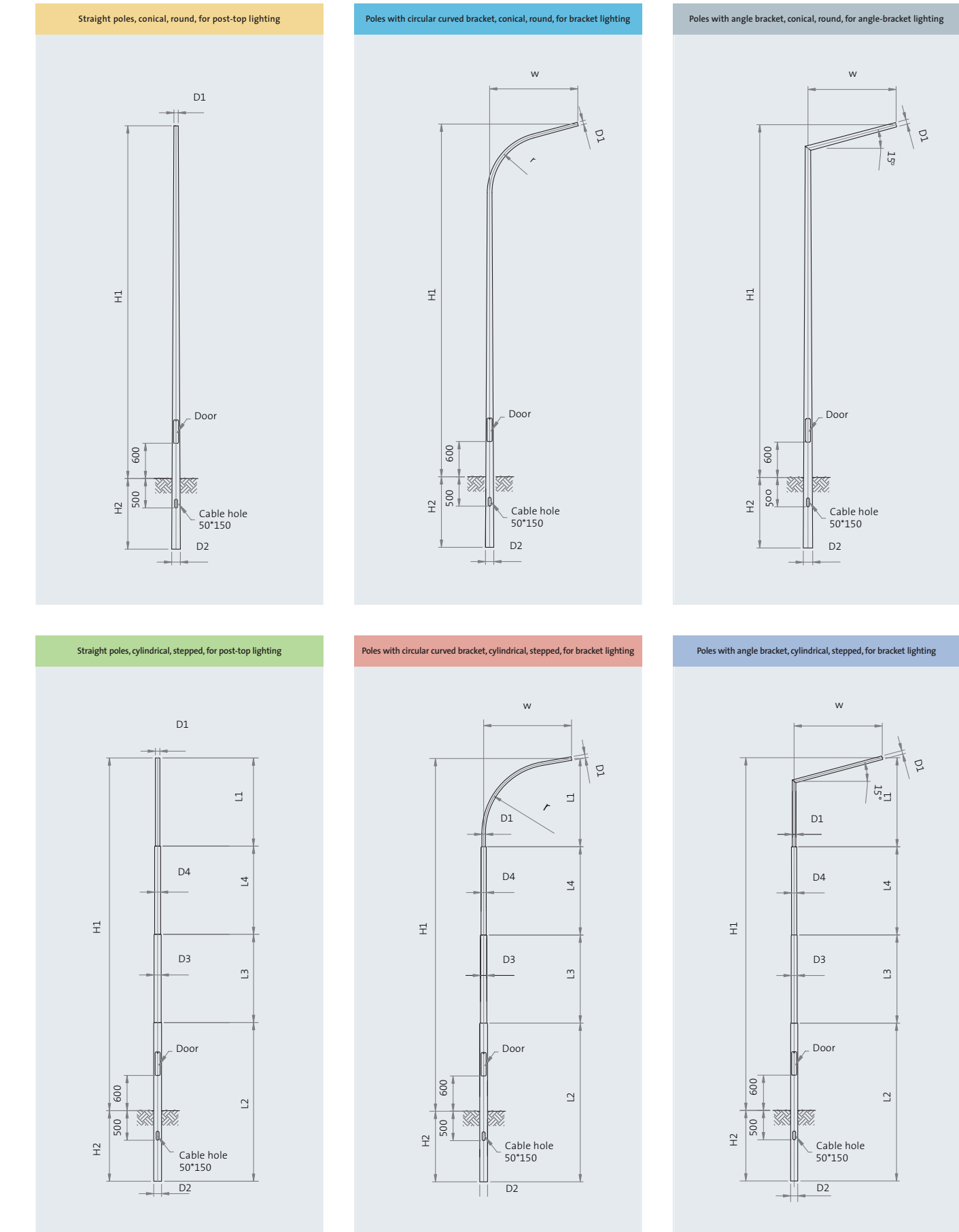
Throughout Europe, the name Europoles stands for pole and tower construction at highest quality levels. Production plants in Germany – certified in accordance with DIN EN ISO 9001:2000 – as well as project and sales offices in all of Europe, plan and implement carrier systems for the following competency fields:

- LIGHTING
- POWER
- COMMUNICATIONS
- TRAFFIC
- ADVERTISING
- ARCHITECTURE

Europoles links innovation – with tradition and know-how – to the experience of committed experts. The result is an added value of quality and performance. Whether steel, concrete, or fibreglass-reinforced plastic: We get excited about poles and towers.

Pole dictionary

Terms	Explanations
Fitting	The connection element between the luminaire and the top end of a mast, or the outside end of a straight bracket or of a curved bracket. The fitting can form a unit with the pole or the pole section, or it can be connected to them as an additional part.
Flange plate	A plate firmly attached to the lighting pole (but not to the underground length), with an opening for the cable entry, which enables a connection to the concrete foundation or to other supporting structures.
Foot	The bottom end of a lighting pole, with diameter given in mm.
Foot plate	See ground plate.
Foundation cage	Several anchor bolts connected together.
Fuse box	An enclosure that contains fusegear, between the earthing cable and the luminaire cable.
Ground plate	See base plate.
Light-source height	The distance between the connection point of the luminaire and the planned ground level, for poles with a flange plate.
Luminaire connection dimension	The diameter of that part of the luminaire that is connected with the luminaire to the pole.
Plain earthing link	Located near the door inside the pole, for providing the earthing connection.
Pole attachment	See bracket and crossarm.
Pole cap	Parts made of plastic, steel, or aluminium, to seal off exposed mast openings.
Pole insertion joint	Connection of the upper and lower parts of the pole by inserting one part into the other.
Pole with circular curved bracket	A pole with one or more curved brackets, which form one unit with the mast, or which can be removed.
Reduction piece or fitting	This component serves to reduce the dimension of the end of the pole, so that it will fit into the luminaire (see Fitting).
Shrink sleeve	This is a sleeve that is shrunk by heat to fit around the part of the pole just above and below the surface of the earth.
Steel sleeve	A pipe element welded onto the pole, just above and below the surface of the earth, with length = 400 mm (or according to requirements).
Straight pole	A straight pole onto which the luminaire is directly mounted at the top.
Straightness deviation	Deviation from the absolute straightness of a pole, with the measuring point located at the outer diameter of the pole.
Structural engineering calculations	Structural-engineering proof of stability according to DIN EN 40.
Surface finish	Decorative paint finish, powder, or wet finish coating.
Top end of the pole	The upper end of a pole, with the diameter given in mm.
Top expansion piece	See expansion piece or fitting.
Torsion	The rotation of a pole around its own axis.
Underground depth	See underground length.
Underground length	Length of the pole underneath the surface of the earth.
Weld-on nuts	Nuts welded to the pole or to the pole section.
Wind zones	National stipulations governing the wind velocities to be assumed in a region for structural-engineering calculations.
Zinc plating	Long-term corrosion protection, which results from formation of an alloy with the protected steel surface, with technical delivery specifications as per DIN EN ISO 1461.



3-metre poles

TYPE	H' [mm]	H" [mm]	D'/L' [mm]	D"/L" [mm]	D'/L' [mm]	D"/L" [mm]	S [mm]	Conicity [mm/m]	w [mm]	r [mm]	Weight [kg]
Steel	Straight poles, conical, round										
KLM30/60/3.0	3000	600	60	110			3.0	14			23
KLM30/76/3.0	3000	600	76	126			3.0	14			27
KLM35/60/3.0	3500	600	60	117			3.0	14			27
KLM35/76/3.0	3500	600	76	133			3.0	14			32
Steel	Straight poles, cylindrical, stepped										
ZLM30/60	3000	600	60/2000	114/1600							22
ZLM30/76	3000	600	76/2000	114/1600							24
ZLM35/60	3500	600	60/2500	114/1600							24
ZLM35/76	3500	600	76/2500	114/1600							26
Aluminium	Straight poles, conical, round										
A-KLM30/60/100/2.5	3000	600	60	100			2.5				8
A-KLM30/76/100/2.5	3000	600	76	100			2.5				8
A-KLM30/60/114/2.5	3000	800	60	114			2.5				11
A-KLM30/76/114/2.5	3000	800	76	114			2.5				11
A-KLM35/60/100/2.5	3500	600	60	100			2.5				9
A-KLM35/76/100/2.5	3500	600	76	100			2.5				9
A-KLM35/60/114/2.5	3500	800	60	114			2.5				13
A-KLM35/76/114/2.5	3500	800	76	114			2.5				13
Aluminium	Straight poles, cylindrical, stepped										
A-ZLM30/60/100/2.5	3000	600	60/1700	100/1900			2.5				8
A-ZLM30/76/100/2.5	3000	600	76/1700	100/1900			2.5				8
A-ZLM35/60/100/2.5	3500	600	60/2200	100/1900			2.5				9
A-ZLM35/76/100/2.5	3500	600	76/2200	100/1900			2.5				9
A-ZLM35/60/114/2.5	3500	800	60/2200	114/2100			2.5				13
A-ZLM35/76/114/2.5	3500	800	76/2200	114/2100			2.5				13
Plastic	Straight poles, conical, round										
36004091-1700003	3000	600	60	125				18			9
36004096-1700014	3000	600	76	141				18			11
36004096-1700014	3000	600	76	112				10			11
36004092-1700005	3500	700	60	136				18			12
36004098-1700016	3500	700	76	152				18			14
36001098-1700016	3500	700	76	118				10			14
Concrete	Straight poles, conical, round										
RK 3.5	3500	1000	100	199				22			150

Please get in touch with us if you need information on the site-related or luminaire-dependent load-carrying capacity of any of the pole types.

4-metre poles

TYPE	H' [mm]	H" [mm]	D'/L' [mm]	D"/L" [mm]	D'/L' [mm]	D"/L" [mm]	S [mm]	Conicity [mm/m]	w [mm]	r [mm]	Weight [kg]
Steel	Straight poles, conical, round										
KLM 40/60/3.0	4000	800	60	127			3.0	14			33
KLM 40/76/3.0	4000	800	76	124			3.0	10			35
KLM 45/60/3.0	4500	800	60	134			3.0	14			38
KLM 45/76/3.0	4500	800	76	129			3.0	10			40
Steel	Straight poles, cylindrical, stepped										
ZLM 40/60	4000	800	60/2700	114/2100							29
ZLM 40/76	4000	800	76/2700	114/2100							32
ZLM 45/60	4500	800	60/3200	114/2100							31
ZLM 45/76	4500	800	76/3200	114/2100							34
Aluminium	Straight poles, conical, round										
A-KLM40/60/114/2.5	4000	800	60	114			2.5				14
A-KLM40/76/114/2.5	4000	800	76	114			2.5				14
A-KLM40/60/120/3.0	4000	800	60	120			3.0				17
A-KLM40/76/120/3.0	4000	800	76	120			3.0				17
A-KLM45/60/114/2.5	4500	800	60	114			2.5				15
A-KLM45/76/114/2.5	4500	800	76	114			2.5				15
A-KLM45/60/120/3.0	4500	800	60	120			3.0				18
A-KLM45/76/120/3.0	4500	800	76	120			3.0				18
Aluminium	Straight poles, cylindrical, stepped										
A-ZLM40/60/114/2.5	4000	800	60/2700	114/2100			2.5				14
A-ZLM40/76/114/2.5	4000	800	76/2700	114/2100			2.5				14
A-ZLM40/60/120/3.0	4000	800	60/2700	120/2100			3.0				17
A-ZLM40/76/120/3.0	4000	800	76/2700	120/2100			3.0				17
A-ZLM45/60/114/2.5	4500	800	60/3200	114/2100			2.5				15
A-ZLM45/76/114/2.5	4500	800	76/3200	114/2100			2.5				15
A-ZLM45/60/120/3.0	4500	800	60/3200	120/2100			3.0				18
A-ZLM45/76/120/3.0	4500	800	76/3200	120/2100			3.0				18
Plastic	Straight poles, conical, round										
36004093-1700008	4000	800	60	148				18			17
36004100-1700019	4000	800	76	124				10			17
36004100-1700019	4000	800	76	162				18			17
36004094-1700011	4500	800	60	155				18			19
36004103-1700023	4500	800	76	172				18			20
36004103-1700023	4500	800	76	129				10			20
Concrete	Straight poles, conical, round										
RK 4	4000	1000	100	210				22			170
RK 4.5	4500	1000	100	221				22			200

Please get in touch with us if you need information on the site-related or luminaire-dependent load-carrying capacity of any of the pole types.

5-metre poles

TYPE	H' [mm]	H" [mm]	D'/L' [mm]	D"/L" [mm]	D'/L' [mm]	D"/L" [mm]	S [mm]	Conicity [mm/m]	w [mm]	r [mm]	Weight [kg]
Steel	Straight poles, conical, round										
KLM 50/60/3.0	5000	800	60	130			3.0	12			40
KLM 50/76/3.0	5000	800	76	134			3.0	10			45
KLM 55/60/3.0	5500	900	60	137			3.0	12			46
KLM 55/76/3.0	5500	900	76	140			3.0	10			51
Steel	Straight poles, cylindrical, stepped										
ZLM 50/60	5000	800	60/3200	114/2600							35
ZLM 50/76	5000	800	76/3200	114/2600							39
Steel	Poles with angle bracket, cylindrical, stepped										
ZAM 50 w 500	5000	1000	76/1700	114/2200	89/2100				500		44
ZAM 50 w 750	5000	1000	76/1700	114/2200	89/2100				750		45
ZAM 50 w 1000	5000	1000	76/1700	114/2200	89/2100				1000		46
Aluminium	Straight poles, conical, round										
A-KLM50/60/114/2.5	5000	800	60	114			2.5				16
A-KLM50/76/114/2.5	5000	800	76	114			2.5				16
A-KLM50/60/120/3.0	5000	800	60	120			3.0				20
A-KLM50/76/120/3.0	5000	800	76	120			3.0				20
A-KLM55/60/120/3.0	5500	800	60	120			3.0				22
A-KLM55/76/120/3.0	5500	800	76	120			3.0				22
Aluminium	Straight poles, cylindrical, stepped										
A-ZLM50/60/114/2.5	5000	800	60/3700	114/2100			2.5				16
A-ZLM50/76/114/2.5	5000	800	76/3700	114/2100			2.5				16
A-ZLM50/60/120/3.0	5000	800	60/3700	120/2100			3.0				20
A-ZLM50/76/120/3.0	5000	800	76/3700	120/2100			3.0				20
Plastic	Straight poles, conical, round										
36004106-1700026	5000	800	76	180				18			24
36004106-1700026	5000	800	76	134				10			24
36004108-1700029	5500	800	76	189				18			27
36004108-1700029	5500	800	76	139				10			27
Plastic	Poles, conical, round, for mounting brackets made of fibreglass-reinforced plastic										
36004126-1700051	5000	1000	94	202				18			28
36004127-1700052	5500	1000	94	211				18			33
Concrete	Straight poles, conical, round										
RK 5	5000	1000	100	232				22			230
RK 5.5	5500	1000	100	243				22			260

Please get in touch with us if you need information on the site-related or luminaire-dependent load-carrying capacity of any of the pole types.

6-metre poles

TYPE	H' [mm]	H" [mm]	D'/L' [mm]	D"/L" [mm]	D'/L' [mm]	D"/L" [mm]	S [mm]	Conicity [mm/m]	w [mm]	r [mm]	Weight [kg]
Steel	Straight poles, conical, round										
KLM 60/60/3.0	6000	1000	60	130			3.0	10			49
KLM 60/76/3.0	6000	1000	76	146			3.0	10			57
KLM 63/76/3.0	6300	1000	76	149			3.0	10			60
KLM 65/60/3.0	6500	1000	60	135			3.0	10			53
KLM 65/60/3.5	6500	1000	60	135			3.5	10			62
KLM 65/76/3.0	6500	1000	76	151			3.0	10			62
Steel	Poles with circular curved bracket, conical, round										
KPM 60 w 1300	6000	1000	60	153			3.0	12	1300	1200	60
KPM 60 w 1500	6000	1000	60	154			3.0	12	1500	1500	61
Steel	Poles with angle bracket, conical, round										
KAM 60 w 1000	6000	1000	76	170			3.0	14	1000		76
KAM 60 w 1300	6000	1000	76	169			3.0	14	1300		79
Steel	Straight poles, cylindrical, stepped										
ZLM 60/60	6000	1000	60/2700	114/2300	89/2000						43
ZLM 60/76	6000	1000	76/2700	114/2300	89/2000						46
ZLM 65/60	6500	1000	60/3000	114/2300	89/2200						45
ZLM 65/76	6500	1000	76/3000	114/2300	89/2200						48
Steel	Poles with circular curved bracket, cylindrical, stepped										
ZPM 60 w 1500	6000	1000	60/1700	114/2500	89/2800				1500	1200	55
Steel	Poles with angle bracket, cylindrical, stepped										
ZAM 60 w 750	6000	1000	76/1700	114/2500	89/2800				750		52
ZAM 60 w 1000	6000	1000	76/1700	114/2500	89/2800				1000		53
ZAM 60 w 1250	6000	1000	76/1700	114/2500	89/2800				1250		54
Aluminium	Straight poles, conical, round										
A-KLM60/60/120/3.0	6000	1000	60	120			3.0				24
A-KLM60/76/120/3.0	6000	1000	76	120			3.0				24
A-KLM65/76/120/3.0	6500	1000	76	120			3.0				25
Aluminium	Poles with circular curved bracket, conical, round										
A-KPM 60 w 1500	6000	1000	85	165			3.0		1500	1500	40
Aluminium	Straight poles, cylindrical, stepped										
A-ZLM60/60/120/3.0	6000	1000	60/4700	120/2300			3.0				24
A-ZLM60/76/120/3.0	6000	1000	76/4700	120/2300			3.0				24
Plastic	Straight poles, conical, round										
36004110-1700032	6000	800	76	198				18			31
36004110-1700032	6000	800	76	144				10			31
36004113-1700036	6500	1000	76	211				18			39
36004113-1700036	6500	1000	76	151				10			39
Plastic	Poles, conical, round, for mounting brackets made of fibreglass-reinforced plastic										
36004129-1700054	6000	1000	94	220				18			39
36004130-1700055	6500	1200	94	232				18			45
Concrete	Straight poles, conical, round										
RK 6	6000	1500	115	198							290
RK 6.3	6300	1200	115	198							290
RK 6.5	6500	1500	115	203							310
Concrete	Poles with angle bracket, conical, round										
RS 6+	6000	1000	115	220				15			290
RS 6.35+	6350	1150	115	198				11			290

Please get in touch with us if you need information on the site-related or luminaire-dependent load-carrying capacity of any of the pole types.

7-metre poles

TYPE	H' [mm]	H" [mm]	D'/L' [mm]	D"/L" [mm]	D'/L' [mm]	D"/L" [mm]	S [mm]	Conicity [mm/m]	w [mm]	r [mm]	Weight [kg]
Steel	Straight poles, conical, round										
KLM 70/60/3.5	7000	1200	60	142			3.5	10			70
KLM 70/76/3.0	7000	1200	76	158			3.0	10			71
KLM 75/60/3.5	7500	1200	60	147			3.5	10			76
KLM 75/76/3.0	7500	1200	76	163			3.0	10			76
Steel	Poles with circular curved bracket, conical, round										
KPM 70 w 1500	7000	1200	60	169			3.0	12	1500	1200	76
KPM 75 w 1500	7500	1000	60	172			3.0	12	1500	1500	79
KPM 75 w 1500	7500	1200	60	175			3.0	12	1500	1200	83
KPM 75 w 2000	7500	1200	60	159			3.5	10	2000	1200	94
KPM 75 w 2240	7500	1200	60	161			4.0	10	2240	1500	109
KPM 75 w 2240	7500	1200	60	160			4.0	10	2240	1800	108
KPM 75 w 2240	7500	1200	60	159			3.5	10	2240	2150	94
KPM 75 w 2240	7500	1200	60	159			4.0	10	2240	2150	107
Steel	Poles with angle bracket, conical, round										
KAM 70 w 1200	7000	1200	76	186			3.0	14	1200		96
KAM 70 w 1500	7000	1200	76	185			3.0	14	1500		99
KAM 75 w 1200	7500	1200	76	193			3.0	14	1200		103
KAM 75 w 1500	7500	1200	76	192			3.0	14	1500		107
KAM 75 w 1800	7500	1200	76	191			3.0	14	1800		111
Steel	Straight poles, cylindrical, stepped										
ZLM 70/60	7000	1200	60/3000	114/2700	89/2500						51
ZLM 70/76	7000	1200	76/3000	114/2700	89/2500						54
ZLM 75/60	7500	1200	60/3000	114/3000	89/2700						55
Steel	Poles with circular curved bracket, cylindrical, stepped										
ZPM 75 w 1500	7500	1200	60/2500	114/3200	89/3000				1500	1200	67
Steel	Poles with angle bracket, cylindrical, stepped										
ZAM 70 w 1000	7000	1200	76/2000	121/3200	89/3000				1000		67
ZAM 70 w 1250	7000	1200	76/2000	121/3200	89/3000				1250		68
ZAM 70 w 1500	7000	1200	76/2000	121/3200	89/3000				1500		69
ZAM 75 w 1000	7500	1200	76/2000	133/3400	89/3300				1000		79
ZAM 75 w 1250	7500	1200	76/2000	133/3400	89/3300				1250		80
Aluminium	Straight poles, conical, round										
A-KLM70/76/120/3.0	7000	1000	76	120			3.0				27
A-KLM70/76/135/3.0	7000	1000	76	135			3.0				31
A-KLM70/76/145/3.0	7000	1000	76	145			3.0				34
Aluminium	Poles with circular curved bracket, conical, round										
A-KPM 70 w 1500	7000	1200	85	165			3.0		1500	1500	45
A-KPM 75 w 1500	7500	1200	85	165			3.0		1500	1500	48
Aluminium	Straight poles, cylindrical, stepped										
A-ZLM70/76/120/3.0	7000	1000	76/5700	120/2300			3.0				27
Plastic	Straight poles, conical, round										
36004114-1700037	7000	1000	76	220				18			47
36004114-1700037	7000	1000	76	156				10			47
36004116-1700040	7500	1200	76	232				18			52
36004116-1700040	7500	1200	76	163				10			52
Plastic	Poles, conical, round, for mounting brackets made of fibreglass-reinforced plastic										
36004132-1700057	7000	1200	94	242				18			52
36004133-1700058	7500	1400	94	254				18			57
Concrete	Straight poles, conical, round										
RK 7	7000	1500	115	209							340
RK 7.5	7500	1500	115	214							370
MSLL 7800	6300	1500	140	257				15			510
Concrete	Poles with angle bracket, conical, round										
RS 7+	7000	1000	115	235				15			360
RS 7.5+	7500	1000	115	209				11			340

Please get in touch with us if you need information on the site-related or luminaire-dependent load-carrying capacity of any of the pole types.

8-metre poles

TYPE	H' [mm]	H" [mm]	D'/L' [mm]	D"/L" [mm]	D'/L' [mm]	D"/L" [mm]	S [mm]	Conicity [mm/m]	w [mm]	r [mm]	Weight [kg]
Steel	Straight poles, conical, round										
KLM 80/76/3.0	8000	1200	76	168			3.0	10			83
KLM 80/76/3.5	8000	1200	76	168			3.5	10			96
KLM 80/76/4.0	8000	1200	76	168			4.0	10			109
KLM 80/89/3.5	8000	1200	89	181			3.5	10			106
KLM 80/89/4.0	8000	1200	89	181			4.0	10			121
KLM 85/76/3.0	8500	1300	76	174			3.0	10			90
KLM 85/76/3.5	8500	1300	76	174			3.5	10			105
KLM 85/76/4.0	8500	1300	76	174			4.0	10			119
Steel	Poles with circular curved bracket, conical, round										
KPM 80 w 1500	8000	1200	60	161			4.0	10	1500	1200	96
KPM 80 w 2000	8000	1200	60	164			3.5	10	2000	1200	101
KPM 80 w 2240	8000	1200	60	166			4.0	10	2240	1500	117
KPM 80 w 2240	8000	1200	60	165			4.0	10	2240	1800	116
KPM 80 w 2240	8000	1200	60	164			4.0	10	2240	2150	115
KPM 85 w 1500	8500	1300	60	167			3.5	10	1500	1200	105
KPM 85 w 2000	8500	1300	60	170			3.5	10	2000	1200	110
KPM 85 w 2240	8500	1300	60	172			4.0	10	2240	1500	127
KPM 85 w 2240	8500	1300	60	171			4.0	10	2240	1800	126
KPM 85 w 2240	8500	1300	60	170			4.0	10	2240	2150	125
Steel	Poles with angle bracket, conical, round										
KAM 80 w 1500	8000	1200	76	199			3.0	14	1500		115
KAM 80 w 1800	8000	1200	76	198			3.0	14	1800		119
KAM 80 w 2000	8000	1200	76	197			3.0	14	2000		121
Steel	Straight poles, cylindrical, stepped										
ZLM 80/76	8000	1200	76/3000	133/3400	102/2800						75
ZLM 85/76	8500	1300	76/3200	133/3500	108/3100						82
Steel	Poles with circular curved bracket, cylindrical, stepped										
ZPM 80 w 2000	8000	1200	60/2500	140/3200	89/3500				2000	1500	82
ZPM 85 w 1500	8500	1300	60/2100	140/2800	108/2200	82/2700			1500	1200	84
ZPM 85 w 2000	8500	1300	60/2100	152/2800	108/2200	82/2700			2000	1500	92
Aluminium	Straight poles, conical, round										
A-KLM80/76/145/3.0	8000	1200	76	145			3.0				38
A-KLM80/76/165/3.0	8000	1200	76	165			3.0				44
Aluminium	Poles with circular curved bracket, conical, round										
A-KPM 80 w 1500	8000	1200	85	165			3.0		1500	1500	52
Plastic	Straight poles, conical, round										
36004117-1700041	8000	1200	76	242				18			60
36004117-1700041	8000	1200	76	168				10			60
36004119-1700043	8500	1200	76	251				18			69
36004119-1700043	8500	1200	76	173				10			69
Plastic	Poles, conical, round, for mounting brackets made of fibreglass-reinforced plastic										
36004134-1700059	8000	1500	94	265				18			67
36004135-1700060	8500	1500	94	274				18			74
Concrete	Straight poles, conical, round										
RK 8	8000	1500	115	220				11			410
RK 8L	8000	1700	115	222				11			420
MSLL 9700	8200	1500	140	286				15			690
Concrete	Poles with angle bracket, conical, round										
RS 8+	8000	1000	115	214				11			370
RS 8.5+	8500	1000	115	220				11			410

Please get in touch with us if you need information on the site-related or luminaire-dependent load-carrying capacity of any of the pole types.

9-metre poles

TYPE	H' [mm]	H" [mm]	D'/L' [mm]	D"/L" [mm]	D'/L' [mm]	D"/L" [mm]	S [mm]	Conicity [mm/m]	w [mm]	r [mm]	Weight [kg]
Steel	Straight poles, conical, round										
KLM 90/76/3.0	9000	1500	76	181			3.0	10			99
KLM 90/76/3.5	9000	1500	76	181			3.5	10			115
KLM 90/76/4.0	9000	1500	76	181			4.0	10			131
KLM 95/76/3.0	9500	1500	76	186			3.0	10			106
KLM 95/76/3.5	9500	1500	76	186			3.5	10			123
KLM 95/76/4.0	9500	1500	76	186			4.0	10			140
Steel	Poles with circular curved bracket, conical, round										
KPM 90 w 1500	9000	1500	60	174			3.5		1500	1200	115
KPM 90 w 2000	9000	1500	60	177			3.5		2000	1200	120
KPM 90 w 2240	9000	1500	60	179			4.0		2240	1500	139
KPM 90 w 2240	9000	1500	60	178			4.0		2240	1800	138
KPM 90 w 2240	9000	1500	60	177			4.0		2240	2150	137
Steel	Poles with angle bracket, conical, round										
KAM 90 w 1500	9000	1500	76	217			3.0	14	1500		137
KAM 90 w 1800	9000	1500	76	216			3.0	14	1800		141
KAM 90 w 2000	9000	1500	76	215			3.0	14	2000		144
Steel	Straight poles, cylindrical, stepped										
ZLM 90/76	9000	1500	76/3000	133/3000	121/2000	102/2500					90
ZLM 95/76	9500	1500	76/3000	152/3000	121/2200	108/2800					105
Steel	Poles with circular curved bracket, cylindrical, stepped										
ZPM 90 w 1500	9000	1500	60/2100	152/3000	114/2500	89/2900			1500	1200	100
ZPM 90 w 2000	9000	1500	60/2100	152/3000	114/2500	89/2900			2000	1500	102
Aluminium	Straight poles, conical, round										
A-KLM90/76/165/3.0	9000	1500	76	165			3.0				49
Plastic	Straight poles, conical, round										
36004121-1700045	9000	1500	76	265				18			85
36004121-1700045	9000	1500	76	181				10			85
36004122-1700047	9500	1500	76	274				18			90
36004122-1700047	9500	1500	76	186				10			90
Plastic	Poles, conical, round, for mounting brackets made of fibreglass-reinforced plastic										
36004136-1700061	9000	1500	94	283				18			90
1700178	9500	1500	94	292				18			94
Concrete	Straight poles, conical, round										
RK 9	9000	2000	115	236				11			510
RK 9.5	9500	2000	115	242				11			570
Concrete	Poles with angle bracket, conical, round										
RS 9+	9000	1000	115	225				11			520
RS 9.5+	9500	1000	115	231				11			554

Please get in touch with us if you need information on the site-related or luminaire-dependent load-carrying capacity of any of the pole types.

10-metre poles

TYPE	H' [mm]	H" [mm]	D'/L' [mm]	D"/L" [mm]	D'/L' [mm]	D"/L" [mm]	S [mm]	Conicity [mm/m]	w [mm]	r [mm]	Weight [kg]
Steel	Straight poles, conical, round										
KLM 100/76/3.0	10000	1500	76	191			3.0	10			113
KLM 100/76/3.5	10000	1500	76	191			3.5	10			131
KLM 100/76/4.0	10000	1500	76	191			4.0	10			149
KLM 100/89/4.0	10000	1500	89	204			4.0	10			164
Steel	Poles with angle bracket, conical, round										
KAM 100 w 1500	10000	1500	76	231			3.0	14	1500		156
KAM 100 w 1800	10000	1500	76	230			3.0	14	1800		160
KAM 100 w 2000	10000	1500	76	229			3.0	14	2000		163
Steel	Straight poles, cylindrical, stepped										
ZLM 100/76	10000	1500	76/3000	152/3300	121/2300	108/2900					111
Aluminium	Straight poles, conical, round										
A-KLM100/76/165/3.0	10000	1500	76	165			3.0				54
Plastic	Straight poles, conical, round										
36004123-1700048	10000	1500	76	283				18			95
36004123-1700048	10000	1500	76	191				10			95
Plastic	Poles, conical, round, for mounting brackets made of fibreglass-reinforced plastic										
36004137-1700062	10000	1500	94	301				18			102
Concrete	Straight poles, conical, round										
RK 10	10000	2000	115	247				11			610
Concrete	Poles with angle bracket, conical, round										
RS 10+	10000	1000	126	247				11			540
RS 10.5+	10500	1000	115	288				15			640

Please get in touch with us if you need information on the site-related or luminaire-dependent load-carrying capacity of any of the pole types.

Poles 11 metres and more

TYPE	H' [mm]	H" [mm]	D'/L' [mm]	D"/L" [mm]	D'/L' [mm]	D"/L" [mm]	S [mm]	Conicity [mm/m]	w [mm]	r [mm]	Weight [kg]
Steel	Straight poles, conical, round										
KLM 120/76/4.0	12000	1500	76	211			4.0	10			189
KLM 120/89/4.0	12000	1500	89	224			4.0	10			206
KLM 120/108/4.0	12000	1500	108	243			4.0	10			232
KLM 140/89/4.0	14000	1500	89	234			4.0	10			257
KLM 140/108/4.0	14000	1500	108	253			4.0	10			285
KLM 160/108/4.0	16000	1500	108	273			4.0	10			337
Plastic	Straight poles, conical, round										
36004123-1700048	11000	1500	76	301				18			100
36004123-1700048	12000	1500	76	319				18			105
36004123-1700048	11000	1500	76	201				10			100
36004123-1700048	12000	1500	76	220				10			105
Plastic	Poles, conical, round, for mounting brackets made of fibreglass-reinforced plastic										
36004137-1700062	11000	1500	94	319				18			107
36004137-1700062	12000	1500	94	337				18			115
Concrete	Straight poles, conical, round										
RK 11	11000	2000	115	258				11			700
RK 12	12000	2000	115	269				11			790
RK 14	14000	2000	156	444				18			1,770
RK 16	16000	2000	130	400				15			1,500
Concrete	Poles with angle bracket, conical, round										
RS 11+	11000	1000	115	295				15			720

Please get in touch with us if you need information on the site-related or luminaire-dependent load-carrying capacity of any of the pole types.

Floodlight poles, from 12 to 20 metres

We would be glad to offer you different lamp heights, and different luminaires, upon request.

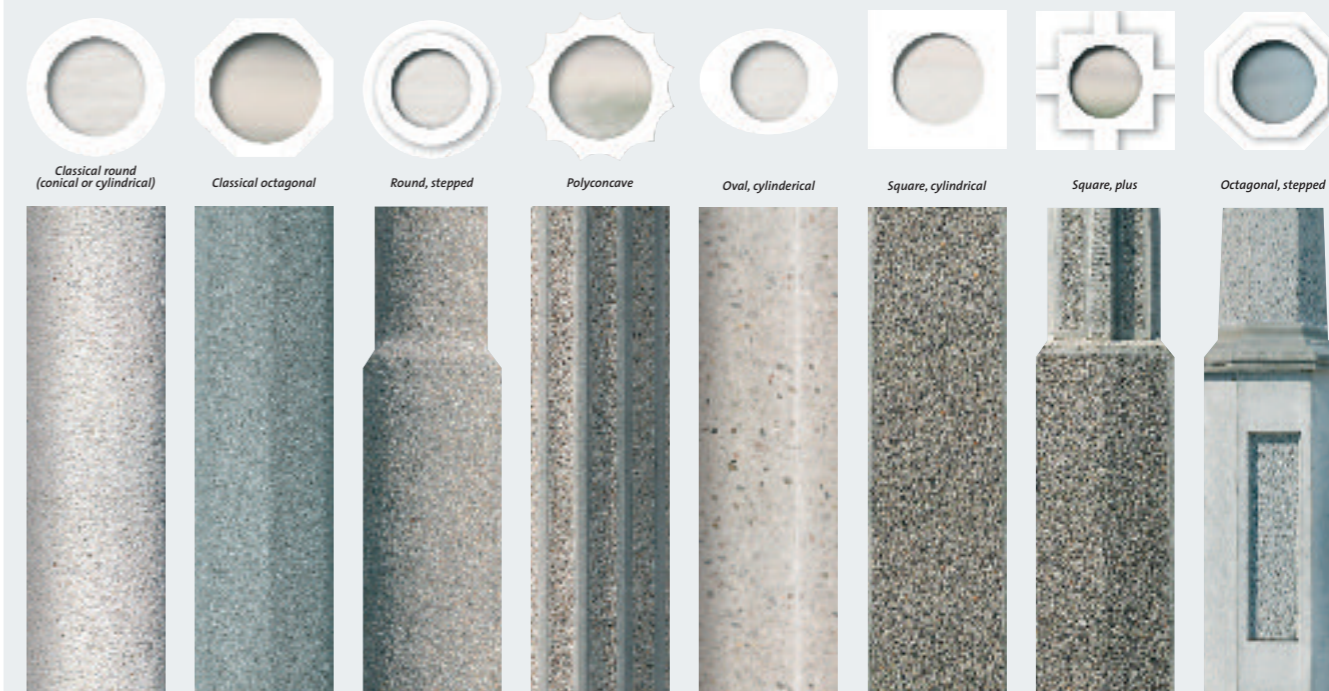
TYPE <i>*with and without detachable steps</i>	H' [mm]	H'' [mm]	D'/L' [mm]	D''/L'' [mm]	D'''/L''' [mm]	D''/L'' [mm]	S [mm]	Conicity [mm/m]	w [mm]	r [mm]	Weight [kg]
Steel											
Floodlight poles, conical, round											
KFLM12/1 1 flood	11600	1500	108	239				10			230
KFLM12/2 2 floods	11600	1500	108	252				10			253
KFLM14/1* 1 flood	13600	1500	108	250				10			280
KFLM14/2* 2 floods	13600	1500	108	249				10			316
KFLM15/1 1 flood	14600	1500	108	260				10			306
KFLM15/2 2 floods	14600	1500	108	259				10			343
KFLM16/1* 1 flood	15600	1500	108	270				10			333
KFLM16/2* 2 floods	15600	1500	108	269				10			370
KFLM16/3 3 floods	15600	1500	121	282				10			434
KFLM16/4 4 floods	15600	1500	133	293				10			557
KFLM18/1 1 flood	17600	1500	108	290				10			391
KFLM18/2 2 floods	17600	1500	108	289				10			427
KFLM18/3 3 floods	17600	1500	121	302				10			501
KFLM18/4 4 floods	17600	1500	133	313				10			649
KFLM20/1 1 flood	19600	1800	108	313				10			461
KFLM20/2 2 floods	19600	1800	108	325				10			559
KFLM20/3 3 floods	19600	1800	133	335				10			677
KFLM20/4 4 floods	19600	1800	140	343				10			734
New versions from 2008											
Floodlight poles, conical, round											
KFLM 16/1* 1 flood	15600	1500	141	338				10			378
KFLM 16/2* 2 floods	15600	1500	141	338				10			378
KFLM 16/3* 3 floods	15600	1500	141	338				10			378
KFLM 16/4* 4 floods	15600	1500	141	338				10			378
KFLM 18/1* 1 flood	17600	1500	116	338				10			437
KFLM 18/2* 2 floods	17600	1500	116	338				10			437
KFLM 18/3* 3 floods	17600	1500	116	338				10			437
KFLM 18/4* 4 floods	17600	1500	116	338				10			437

Please get in touch with us if you need information on the site-related or luminaire-dependent load-carrying capacity of any of the pole types.

Concrete lighting poles: colours, forms, and surface finishes

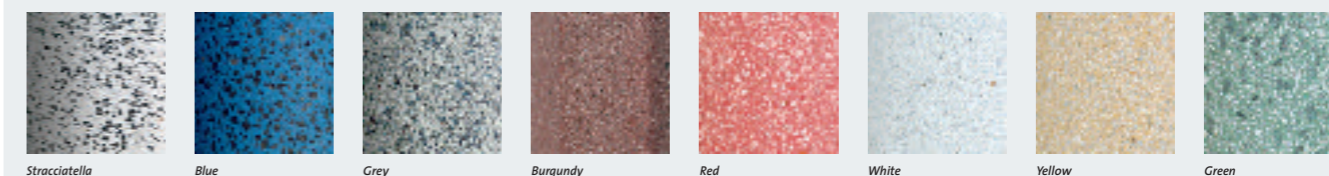
With a great number of forms, colours, and surface finishes, it's very easy for you to combine specifications to create the decorative poles you want. In the Internet under www.europoles.com our pole configurator will also provide you with great help. Give it a try!

Forms



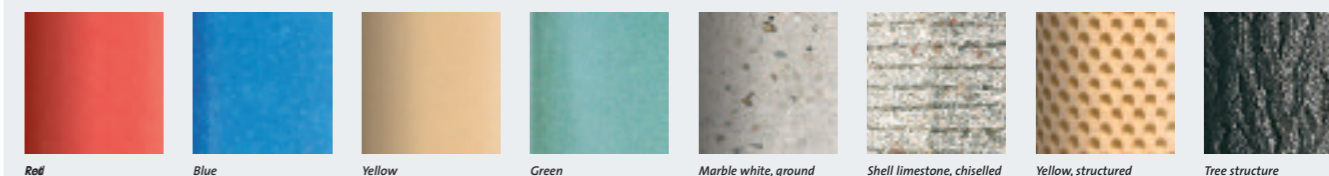
Colours and surface textures

SANDBLASTED

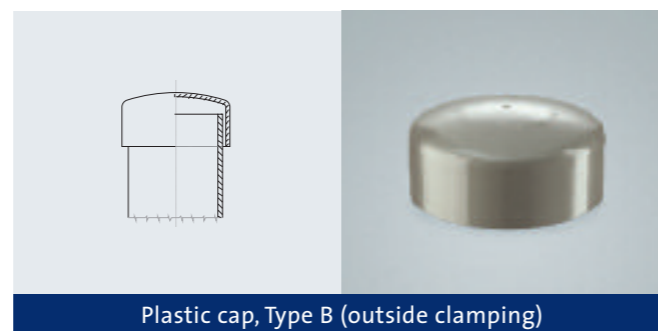
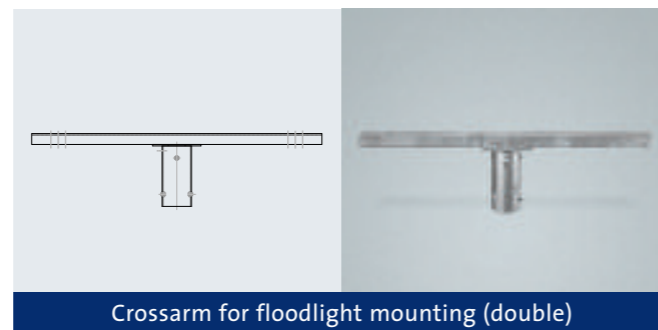
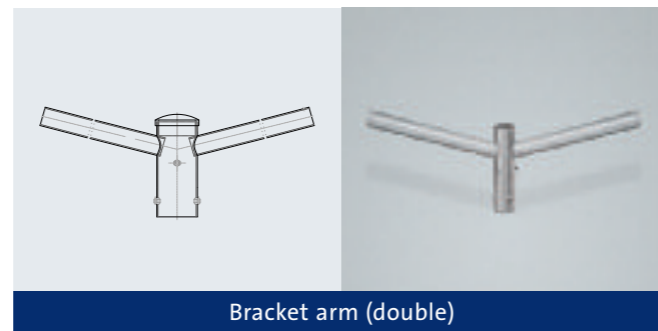
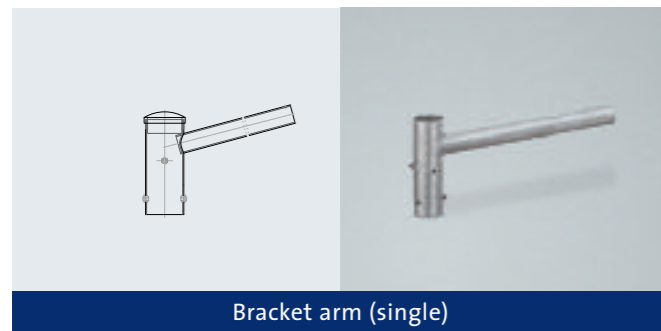
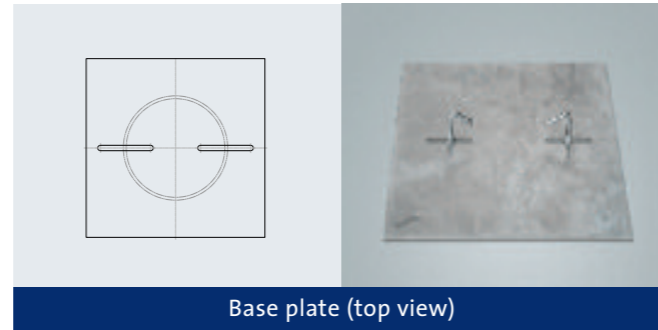
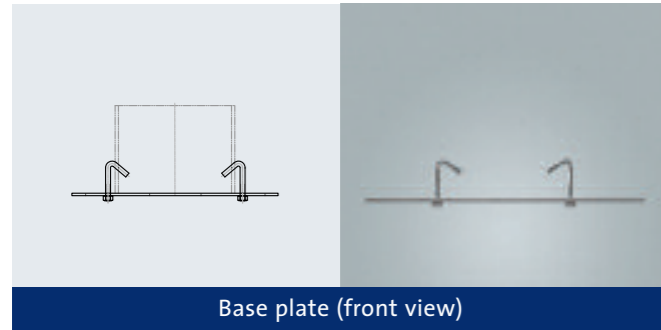


GRANULATED

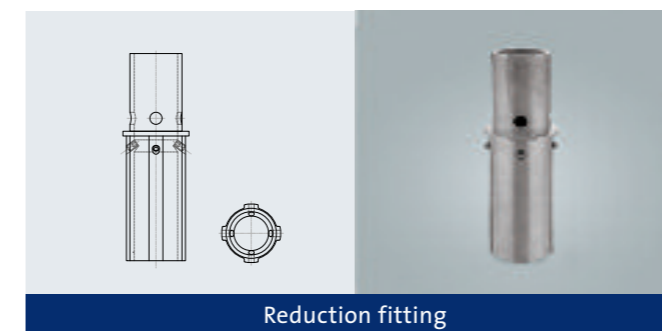
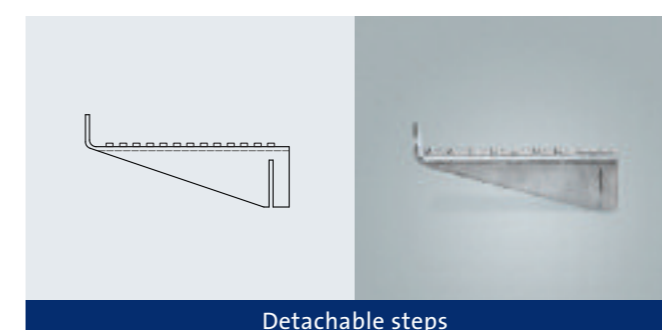
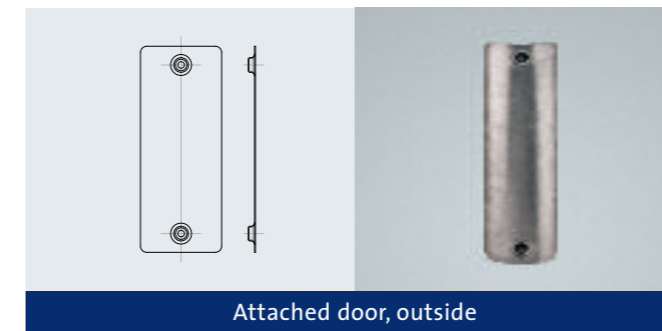
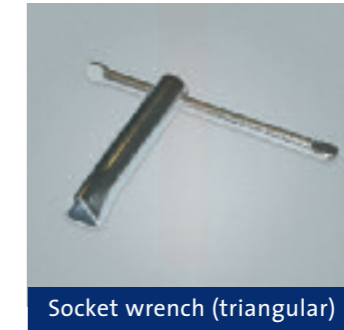
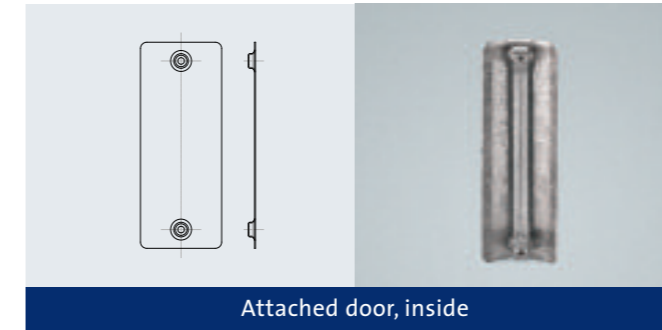
SMOOTH



Pole accessories



Pole accessories



Standard door sizes

Steel

Lighting poles
85 x 400 mm

Floodlight poles
155 x 500 mm

Aluminium

Foot diameter
= 100 mm
75 x 300 mm

Foot diameter
> 100 mm
85 x 400 mm

Fibreglass-reinforced plastic poles

Lighting poles
85 x 300 mm

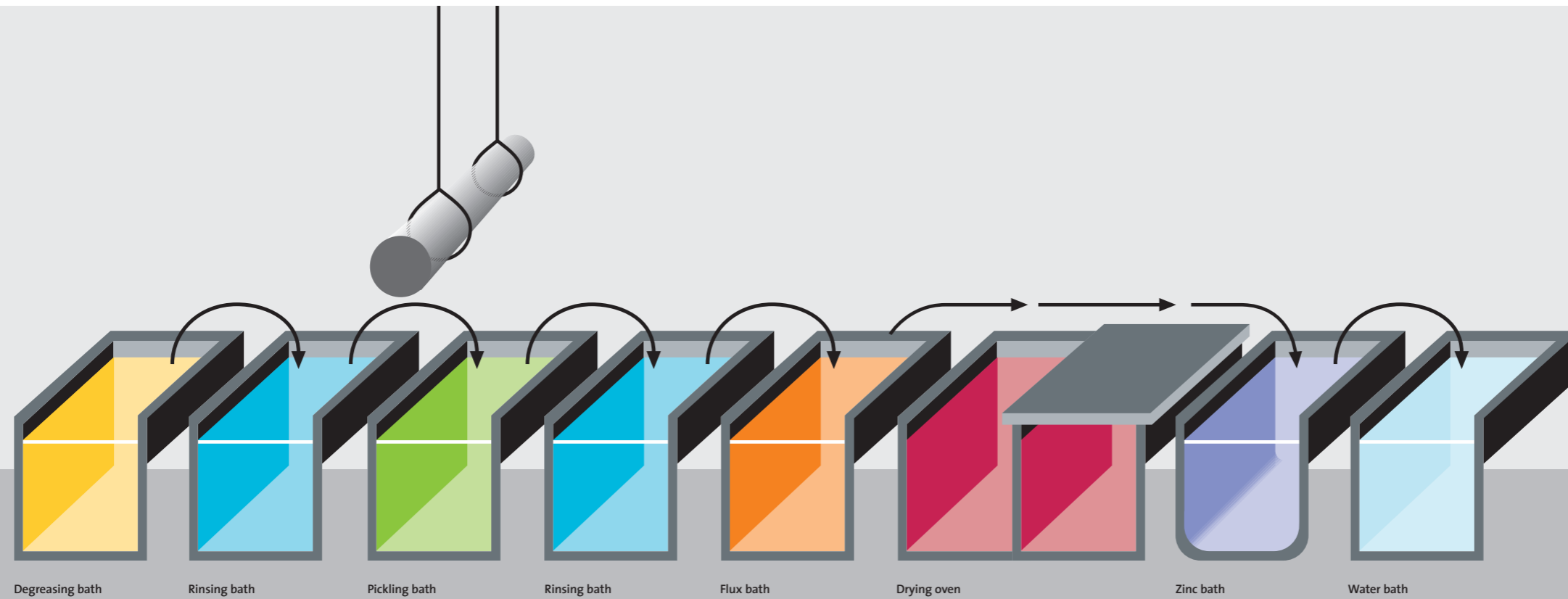
Concrete

Light-source height
= 3.50 - 4.50 m
85 x 300 mm

Light-source height
= 5.00 - 7.00 m
100 x 300 mm

Light-source height
> 7.00 m
100 x 400 mm

Other sizes
upon request.



Hot-dip galvanizing

The standard EN 40-5:2002 allows hot-dip galvanizing as corrosion protection. The pertinent requirements are oriented to DIN EN ISO 1461 with respect to surface properties and thickness of the zinc layer.

Definition of hot-dip galvanizing

Hot-dip galvanizing is defined as the application of plating surface finish consisting of zinc or of iron-zinc alloys, by immersing suitably prepared steel in molten zinc.

Appearance

Hot-dip galvanizing provides long-term corrosion protection, but not uniform or decorative appearance. All important surfaces on the zinc-plated surfaces must,

upon inspection by the naked eye, be free from lumps, bubbles, rough zones, zinc points, or unplated areas. Residues consisting of zinc or flux are also not allowed. Since the roughness of the steel surface has an influence on the thickness and the structure of the zinc plating, irregularities in the original surface to be plated generally remain visible after galvanizing.

Reactive elements in the base material – for example, silicon and phosphorous – have an affect on the thickness and appearance of zinc plating. Irregular and/or dark-gray plating, which can be brittle and thicker than usual, can also result, depending on the various shares of these elements in the material to be plated.

Excessively thick zinc plating is not permissible if it interferes with the intended and specified use of the plated steel parts. Excessively thick plating, however, does not impair the corrosion resistance.

The occurrence of dark and/or light-gray zones (for example, a network-shaped pattern of gray areas), or slight irregularities in the surface, do not justify rejection of the plated objects. White rust can form during storage of the parts under moist conditions after galvanizing. The appearance of white rust is also no reason for rejection, insofar as the required minimum thickness of the zinc plating is still observed. Any customer specifications for appearance that go beyond the conditions as set forth in EN ISO 1461, must in all cases be especially agreed before award of contract.

Thickness of the zinc plating

The local thickness of the zinc plating may be tested only at the pre-determined reference surfaces in accordance with Section 6.2.3 of DIN EN ISO 1461. These measurements may not be performed in the area of cut edges, or in zones less than 10 mm from component edges, or at flame-cut surfaces and edges. The standard, however, does not stipulate maximum values that must be observed.

Plated parts and their thickness	Local plating thickness (minimum value)		Average plating thickness (minimum value)	
	g/m ²	µm	g/m ²	µm
Steel ≥ 6 mm	505	70	610	85
Steel ≥ 3 mm ... <6 mm	395	55	505	70
Steel ≥ 1.5 mm ... <3 mm	325	45	395	55

Reworking

The total areas of the zones that have no plating, and which must be reworked, may not exceed 0.5% of the total surface area of an individual plated part. An individual area without plating may not exceed 10 cm² in area. Otherwise, the component parts must be zinc-plated once again, unless some other agreement has been made between the customer and the galvanizing company.

Reworking must take place by thermal spraying with zinc, or by a suitable zinc-dust finish, within the limits practicable for such systems.



Processing guidelines for the plating of steel poles

Processing guidelines	Powder coating Guideline 1	Powder coating Guideline 2	Powder coating Guideline 3	Powder coating Guideline 4	Wet coating Guideline 5
Maximum length	7.0	14.0	7.0	14.0	25.0
Maximum height	1.5	2.5	1.5	2.5	3.5
Maximum width/depth	0.6	2.5	0.6	2.5	3.5
Pre-order picking	Yes	Yes	Yes	Yes	Yes
Optical inspection, to the extent possible, before plating	Yes	Yes	Yes	Yes	Yes
Mechanical grinding to remove slight zinc runoff projections for zinc-plated lighting poles (as per reference sample)	Yes	Yes	Yes	Yes	Yes
Smoothing off of zinc surfaces by using satin-finishing and polishing machines	Yes	Yes	Yes	Yes	Yes
Mechanical removal of white rust from zinc-plated material	Yes	Yes	Yes	Yes	Yes
Sweeping of zinc-plated or aluminium surfaces, at approx. 2 x surface enlargement power	No	Yes	No	Yes	Yes
Chemical degreasing by automatic spray nozzle rings, with oscillation, pH = approx. 4.5 - 5.0	Yes	No	Yes	No	No
Chemical degreasing by cleaning agents containing solvents	No	No	No	No	No
Iron phosphating by automatic spray nozzle rings, with oscillation	Yes	No	Yes	No	No
Surface rinsing with tap water (city supply), automatic spray nozzle rings, with oscillation	Yes	No	Yes	No	No
Final rinsing with completely demineralized water, by automatic spray nozzle rings, with oscillation	Yes	No	Yes	No	No
Outgassing / tempering for zinc / aluminium castings / magnesium / up to approx. 240°C / 10 min. OT	Yes	Yes	Yes	Yes	Not applicable
Manual or automatic application	Yes	Yes	Yes	Yes	Yes
Thickness of finishing layers in microns (µm), depending on colour shade and paint quality	1 x polyester 60-120µm	1 x polyester 60-120µm	1 x epoxy-polyester 60-120µm 1 x polyester 60-120µm	1 x epoxy-polyester 60-120µm 1 x polyester 60-120µm	1 x 2K EP: approx. 80µm 1 x 2K PUR: approx. 40µm
Curing / hardening of the painted surface, approx. 200°C / 10 min OT	Yes	Yes	Yes	Yes	forced drying at 80°C, if necessary
Visual inspection of the painted surface, without recording of inspection results	Yes	Yes	Yes	Yes	Yes
Testing of the finish-layer thickness by means of layer-thickness measuring instruments, without recording of results (if requested)	Yes	Yes	Yes	Yes	Yes
Testing of paint adhesion by means of cross-cut adhesion test for paints, without recording of results (if requested)	Yes	Yes	Yes	Yes	Yes



Logistics

Europoles is the partner for you when it comes to fast and reliable supply of poles

As a service-oriented leader on the market, we supply your masts in the models you wish, direct to your warehouse or your construction site – anywhere in Europe.

With 3 logistics centres in Germany we assure you short delivery paths and fast execution of orders. At our central logistics centre in Neumarkt, Germany, we have more than 150 different pole types and pole accessory parts on stock – which guarantees you prompt delivery times. Mast models designed for specific countries are

also quickly available to you. The issue of small-quantity logistics is also one that we gladly address: we reliably process and deliver orders beginning at 1 item.

Our own forwarding company, as well as subcontracted transport agents, guarantee you reliable delivery performance. Our delivery vehicles are generally fitted with cranes to ensure smooth unloading of your poles by the driver.

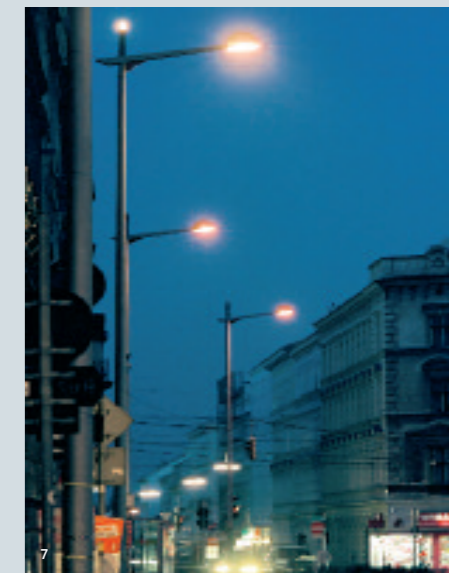
Our prime objective is to deliver your poles at the agreed delivery date

And when things get really urgent? Europoles offers special delivery for

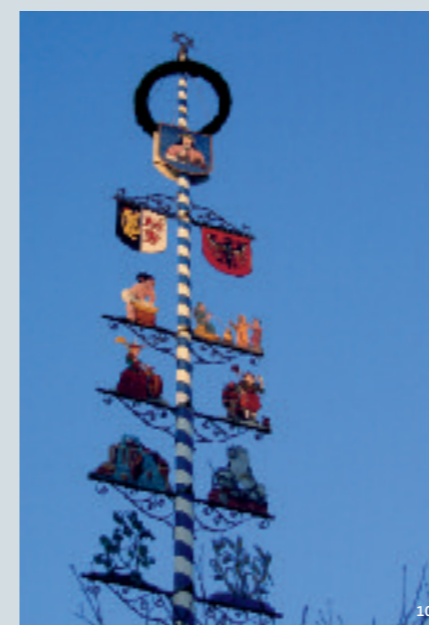
the most common straight poles, within 1 ... 2 working days, throughout Germany, with delivery directly to your construction site.



Special poles



The spa Nordseebad Kampen on the island of Sylt, Germany: spun-concrete pole with stepped pole foot and conically tapered form, with granulated finish (1).
 Secondary-reflector luminaires for indirect lighting, on conically round poles, in Deggendorf, Germany (2).
 Conically round pole made of glass fibreglass-reinforced plastic (FRP) with decorative bracket arm in Salzburg (3).
 White painted lighting pole out of concrete in Saint-Martin-Boulogne / France (4).
 Conically round steel lighting poles on access streets to the BMW plant in Leipzig, Germany (5).
 Poles with circular curved bracket, cylindrical, stepped, in Nuremberg, Germany (6).
 Lighting poles on the Vienna Ring, Austria (7).
 Lighting poles made of FRP on the Maiburger Dock in Salzburg (8).
 At the Jungfernstieg luxury shopping district in Hamburg: conically round, two-section steel poles (9).
 The "Class and Guild Tree" for a brewery in Neumarkt, Germany (10).
 Conical steel lighting poles in the Kehrwiederspitze residential and business district, in Hamburg (11).
 Conically round lighting poles at the Nibelungen Bridge in Regensburg, Germany (12).



Pole dictionary

Terms	Explanations
Anchor bolts	These bolts are cast individually into the pole foundation, and serve to support and secure the pole flange plate.
Anchor plate	See flange plate.
Angle of inclination	The angle between the axis of the luminaire connection element and the horizontal.
Angle-bracket pole	Pole with one or more angular brackets that form one unit with the pole, or that can be removed.
Angular deviation	Deviation of the angle between the centre line of the pole bracket and the centre line of the door opening, from the specified position.
Area of the pole exposed to the wind	Area of the luminaire or of the pole that is used for the structural-engineering calculations for the required pole.
Base plate	A plate tightly mounted to or loosely bolted with the underground pole length, to prevent the pole from sinking into the earth.
Bitumen coating	Protective bitumen coating on the pole, at or below the ground level.
Bracket	The pole attachment, with angular or curved extension.
Cable entry opening	An opening in the underground part of the pole that enables entry of the power cable.
Cable hole	See cable entry opening.
Cable terminal box	See fuse box.
Calibration	Shaping work performed to a section of the pole (for example, the top end of the pole), to enable it to mount the luminaire.
Cantilever overhang	The horizontal interval between the attachment point of the luminaire and the vertical line through the centre point of the pole cross-section at ground level.
CE designation	Confirmation of conformity as per DIN EN 40-5 (outside certification), required for delivery throughout the European Union.
Conicity	The measure of the uniform taper of the mast diameter, for conically round pole models.
Corrosion protection	See Zinc plating, Surface finish, Bitumen coating, Shrink sleeve, Steel sleeve.
Crossarm	A steel part for mounting the luminaire by curved clamps to the pole top or to threaded connections.
Curved bracket	The curved element of the pole, attached to the pole, with a prescribed radius.
Cylindrical, stepped	A stepped-shaped tapering of the pole diameter.
Deflection	The lateral and horizontal excursion of the point of attachment of the luminaire.
Detachable steps	Metal steps that be inserted into the pole for climbing; can be later removed.
Door	The cover to the door opening, inserted or attached.
Door bracing	Reinforcing steel parts welded vertically in the door area, to compensate for the structural-engineering weakening of the pole arising from the door opening.
Door key	A socket wrench to open the door, standard triangular, 12 mm.
Door lock	A bolt in the door to lock the door by using a wrench with the insertion shape of a triangle, square, half-moon, or the like.
Door opening	The opening in the pole that allows access to the power cables and to the electrical components inside.
Earthing bolt	Located near the door inside the pole, for connecting the earthing system.
Edge protector	Fitted to the cable entry opening to protect the cable from damage from sharp edges.
Equipment mounting plate	Located on the inside of the pole, in the door area, it serves together with the slide nuts to secure the electrical units inside.
Expansion piece or fitting	Serves to adapt the luminaire to the size of the pole top (see fitting).