



Light is Life

Exterior Lighting

LIGHTING

EURO || POLES



WELCOME TO EUROPOLES!

Show your city or community in its true light. Classic exterior lighting serves an aesthetic purpose on the one hand and meets the basic needs of residents and visitors on the other. After nightfall, light not only provides ambience, but it also allows for better orientation and security.

CONTENTS

Europoles – Poles are our passion	04
We are always there for you	06
Wind zone map	06
Terrain categories	06
Footing recommendations	07
Straight poles, conically round	08
Straight poles, cylindrically stepped	10
Poles with circular curved brackets, conically round	12
Poles with circular curved brackets, cylindrically stepped	13
Steel sleeve – by far the best	14
Floodlight poles	16
Lowerable lighting systems	18
Pole accessories	20
Design solutions – room for (nearly) any idea.....	22
Technical solutions – functional to the last detail	24
Laser welding – modern, aesthetic, environmentally sound.....	26
Hot-dip zinc plating – corrosion protection	28
Surface finish – creative, widely varied and in colour	30
GRP Poles – Technically Sophisticated and Efficient	32
Cement poles – inspiring technology and innovative capacity	34
Service – your wishes are our possibilities	36
Logistics – on location quickly and reliably	37
Pole dictionary	38



Danube Bridge, Regensburg

PASSION



Scan this QR code with your smartphone and experience Europoles in moving pictures as well.

Europoles Plant in Korin

EUROPOLES – POLES ARE OUR PASSION

Europoles is a leading european pole manufacturer with over 1,100 employees. Our many sales offices and production facilities mean that we are nearly always in the vicinity of our customers in Europe, and we have a presence in the Middle East and Africa as well.

Over our company's 100 years of history, we have developed an extensive array of specialist knowledge when it comes to pole solutions. We possess engineering know-how for load-bearing systems ranging from the design phase to turnkey delivery.

It is our passion to take on new challenges. Our business units have extensive knowledge of the standards and special requirements in many different regions and countries of the world. We are a long-term partner that designs and implements individual solutions for our customers.

Our leading position with respect to the pole construction materials of steel, pre-stressed spun concrete and glass-fibre reinforced plastic (GRP) gives us an independent selection of the best possible material for each particular application. This may also include hybrid solutions. We are constantly developing these materials further and combining them with new, state-of-the-art production techniques. Whether it involves new concrete qualities, steels, laser welding or surface finishing methods – we advance innovation along with customer value.

Lighting

The Lighting business unit offers a broad spectrum of pole types. From standard poles to customer-specific solutions, everything comes to you from the same source. Whether the products are design-oriented or functional – from consultation through to structural analysis – we go by what the customer desires. We provide you with support for the details involved in pole footings and in connecting the lamps, floodlights or cameras to the load-bearing system. Besides steel as a raw material, we also offer concrete and GRP and can therefore meet your needs adequately.

Energy

In the Energy business unit, we offer a broad product portfolio for all voltage levels. Whether for concrete, steel or hybrid solutions (steel with GRP, concrete with steel) – what is of the essence to us is providing every customer as well as every location/route with a design that matches the specific circumstances. From routing considerations to footing/base solutions, traverses, assemblies and even on-site project management. We accompany our customers as a consultant until they have achieved their goals.

Electricity for telecommunications installations, for illuminating entire streets, on rough terrain or in remote off-grid areas: Europoles has developed a system that is completely independent of the power grid, producing its own power in an environmentally-friendly way. The system generates electricity using wind and solar power as well as fuel cells. This gives you flexibility in using resources and lets you make plans with confidence. The flexibility of these modern technologies ensures that you will always have electricity flowing. Remote system monitoring offers you additional security and comfort.

Communications

The Communications business unit designs and produces pole and roof stations for mobile communications customers. We offer complete solutions from a single source, from initial operation of the station to its subsequent service needs, be they inspections, swaps or software updates. This reduces the interfaces and expense for the customer when coordinating the various trades and services necessary for the smooth construction and efficient operation of mobile communications stations. We possess the required know-how, from

planning the stations to the final hand-over and systems technology – making everything available from a single source and thus ideal for the customer.

Surfaces & Design

Europoles is the expert in special surface finishes. Give your poles an innovative finish. Whether it is a silky gloss, coarse or fine-textured finish required, we are flexible in turning your wishes into reality. Special anti-graffiti or anti-poster surface finishes ensure that nothing sticks on your pole – except for its beautiful appearance.

Mobility

The Mobility business unit – rail, road, airport, seaport – provides its customers with high-tech solutions. Be it railway poles for high-speed routes or the most reliable lowering systems for airports – extremely high demands such as these have to be met reliably. Here as well, for the sake of the best solution for our customer, we resort to pre-stressed concrete, steel or, for railway crossing barriers, ultra-light GRP material.

Buildings & Security

In architecture, poles become columns. Design columns or storey

supports – they all have one thing in common: extremely high load-bearing capacity combined with a slender form. We make it possible to achieve greater visibility and new design potential. World-renowned buildings have already put this to use, applying new design concepts.

Europoles is a long-term system partner in all of its business units – from the design phase to implementation. We put our decades of experience to good use for the benefit of our customers.

	LIGHT & LIFE
	ENERGY
	COMMUNICATIONS
	SURFACES & DESIGN
	MOBILITY
	BUILDINGS & SECURITY

WE ARE ALWAYS THERE FOR YOU ...

...in every project phase, with know-how and energy. This is how we safeguard your project and free up time for your key tasks. No other company in the world satisfies as many different pole design demands as Euro poles. This is a wealth of experience that you should take advantage of... so that your project runs its course with no worries involved.

Every project and every customer has a unique set of requirements. It is our passion at Euro poles to face this challenge so that you will be more than satisfied. What is more, we will share this know-how with you in order for you to better understand what is involved.

In order to give you a rough orientation, this double page has illustrations depicting the wind zones, the

terrain categories, and the footing recommendations. Please note, however, that this is merely an orientation and that no definitive conclusions can be drawn from them.

You can get an idea here, and then during project handling we will take charge of adjusting everything to suit your wishes or prescribed conditions.

Wind zone map and terrain categories for the region of the Federal Republic of Germany as per DIN 1055-4:2005-03

TERRAIN CATEGORY I

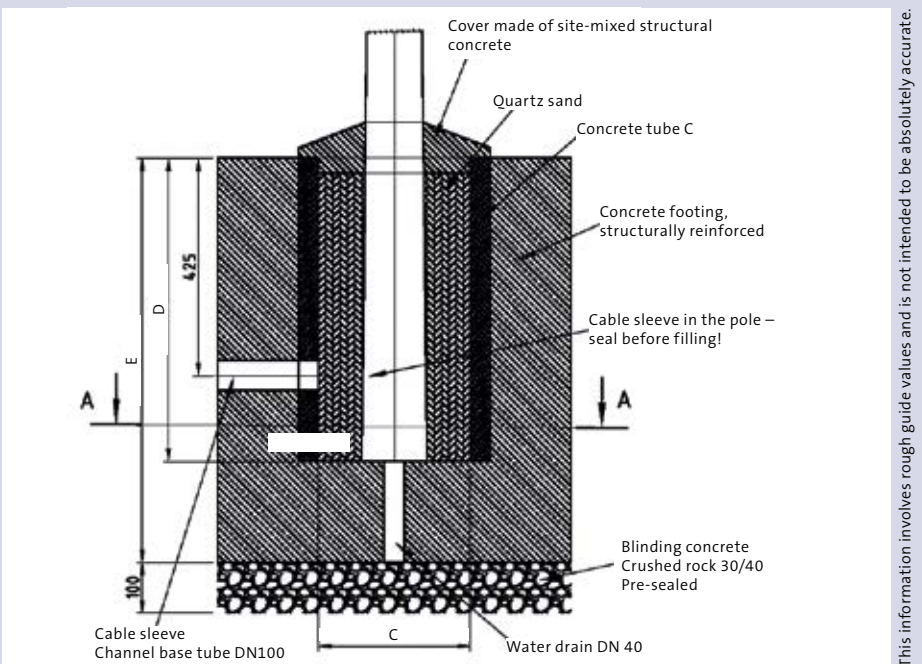
Open sea; smooth, flat land without any obstacles

TERRAIN CATEGORY II

Terrain with hedges, individual farmsteads, houses or trees, e.g. agricultural area.

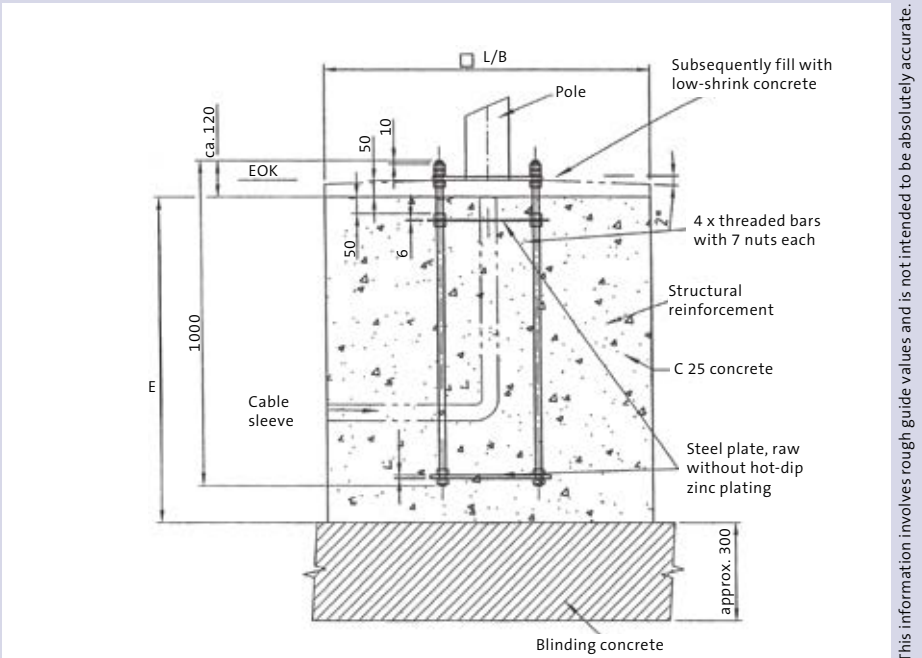


Tubular footing recommendation (The dimensions vary depending on the pole)



This information involves rough guide values and is not intended to be absolutely accurate.

Footing recommendation with anchor bolt cage (The dimensions vary depending on the pole)



This information involves rough guide values and is not intended to be absolutely accurate.

We will gladly provide you with footing recommendations for flood-light poles as well. Simply get in touch with us.

KNOW-HOW

STRAIGHT POLES, CONICALLY ROUND



The conically round lighting pole consists of a shaped steel sheet that has been longitudinally welded, has a minimum steel quality of S235JR and has been hot-dip zinc plated as per DIN EN ISO 1461. The pole has been specifically and statically designed and adapted for the lamp and number of lamps per pole. The poles are made with a door cut-out that has a steel door installed and a triangular lock made of V2A, edge length 12 mm.

Straight pole, conically round – programme in stock

H¹ 3000 mm								
Article Number	TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	Conicity [mm/m]	Area exposed to the wind* [m²]	Max. lamp weight* [kg]
36002177	KLM30/60/ST	3000	600	60	110	14	0,2	13
36011736	KLM30/76/ST	3000	600	76	126	14	0,64	13

H¹ 3500 mm								
Article Number	TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	Conicity [mm/m]	Area exposed to the wind* [m²]	Max. lamp weight* [kg]
36002178	KLM35/60/ST	3500	600	60	117	14	0,33	13
36011737	KLM35/76/ST	3500	600	76	133	14	0,68	13

H¹ 4000 mm								
Article Number	TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	Conicity [mm/m]	Area exposed to the wind* [m²]	Max. lamp weight* [kg]
36011735	KLM 40/60/ST	4000	800	60	127	14	0,44	13
36011275	KLM 40/76/ST	4000	800	76	129	11	0,42	13

H¹ 4500 mm								
Article Number	TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	Conicity [mm/m]	Area exposed to the wind* [m²]	Max. lamp weight* [kg]
36011774	KLM 45/60/ST	4500	800	60	134	14	0,44	13
36011276	KLM 45/76/ST	4500	800	76	134	11	0,41	13

H¹ 5000 mm								
Article Number	TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	Conicity [mm/m]	Area exposed to the wind* [m²]	Max. lamp weight* [kg]
36002524	KLM 50/60/ST	5000	800	60	130	12	0,31	13
36011277	KLM 50/76/ST	5000	800	76	140	11	0,41	13

It is possible to mount a cable junction box using a plain earthing link and sliding nuts inside the pole. There are two openings opposite each other in the buried base for feeding the cable.

As a manufacturer, Euro poles has all of the necessary production certifications: Verification of suitability DIN 18800 / EN 40-5; verification of origin as per DIN 1990; EN ISO 5817; certificate DIN EN ISO 9001; welder test DIN EN 287-1/Part 1 steels DIN EN 1418; environmental management system certification as per DIN ISO 14001 : 2009.

Straight pole, conically round – programme in stock (cont.)

H¹ 6000 mm								
Article Number	TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	Conicity [mm/m]	Area exposed to the wind* [m²]	Max. lamp weight* [kg]
36011734	KLM 60/60/ST	6000	1000	60	137	11	0,18	13
36011278	KLM 60/76/ST	6000	1000	76	153	11	0,36	13

H¹ 7000 mm								
Article Number	TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	Conicity [mm/m]	Area exposed to the wind* [m²]	Max. lamp weight* [kg]
36011462	KLM 70/76/ST	7000	1200	76	166	11	0,33	13

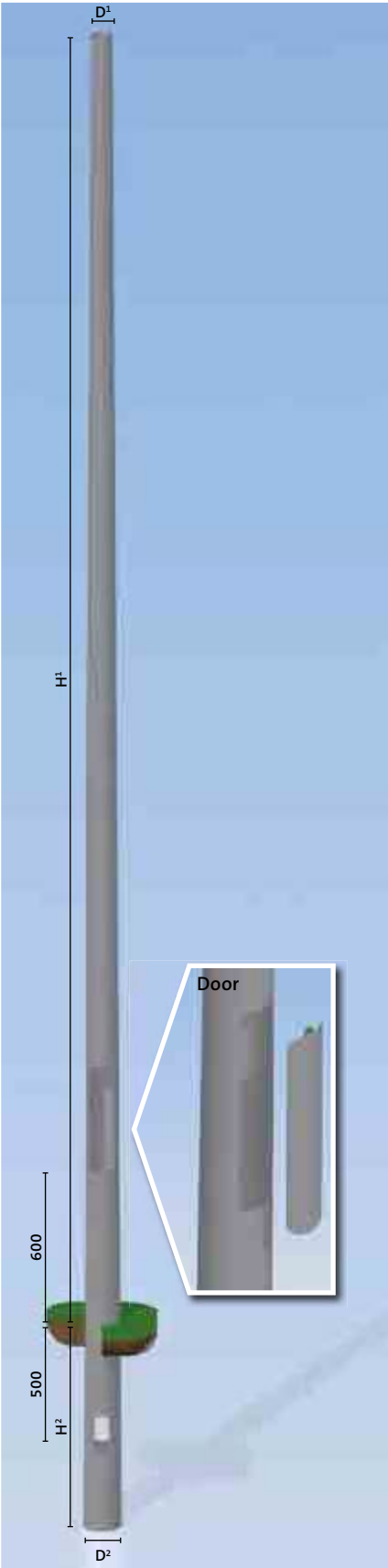
H¹ 7500 mm								
Article Number	TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	Conicity [mm/m]	Area exposed to the wind* [m²]	Max. lamp weight* [kg]
36011505	KLM 75/76/ST	7500	1200	76	172	11	0,3	13

H¹ 8000 mm								
Article Number	TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	Conicity [mm/m]	Area exposed to the wind* [m²]	Max. lamp weight* [kg]
36011463	KLM 80/76/3/ST	8000	1200	76	177	11	0,25	20
36010111	KLM 80/76/3,5/ST	8000	1200	76	168	10	0,4	20
36011506	KLM 80/76/4/ST	8000	1200	76	177	11	0,53	20
36010113	KLM 80/89/3,5/ST	8000	1200	89	181	10	0,54	40

H¹ 9000 mm								
Article Number	TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	Conicity [mm/m]	Area exposed to the wind* [m²]	Max. lamp weight* [kg]
36011464	KLM 90/76/3/ST	9000	1500	76	192	11	0,23	20
36010114	KLM 90/76/3,5 ST	9000	1500	76	181	10	0,35	20

H¹ 10000 mm								
Article Number	TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	Conicity [mm/m]	Area exposed to the wind* [m²]	Max. lamp weight* [kg]
36011465	KLM 100/76/3/ST	10000	1500	76	203	11	0,18	20
36011507	KLM 100/76/4/ST	10000	1500	76	203	11	0,45	20
36011508	KLM 100/89/4/ST	10000	1500	89	216	11	0,6	40

H¹ 12000 mm								
Article Number	TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	Conicity [mm/m]	Area exposed to the wind* [m²]	Max. lamp weight* [kg]
36011509	KLM 120/76/4/ST	12000	1500	76	225	11	0,42	20
36002202	KLM 120/89/4/ST	12000	1500	89	224	10	0,54	40
36002204	KLM 120/108/4/ST	12000	1500	108	243	10	0,73	40



All poles with a standard door 85 x 400 mm in size with a 12 mm triangular lock. Subject to technical modifications.

Abbreviation key: H¹ beam spot height; H² underground length; D¹ pole top diameter; D² foot diameter; **Conicity** uniform tapering of the pole diameter

***Maximum load / area exposed to the wind:** Calculation through wind zone 2. This is only meant as an orientation value and cannot be applied as if it were definitive.

You can find pole accessories on pages 20 and 21.

STRAIGHT POLES, CYLINDRICALLY STEPPED



The cylindrically stepped steel light pole is dished and welded all around. The steel has a minimum quality as per S235 JR and is hot-dip zinc plated on the interior and exterior as per DIN EN ISO 1461.

The cylindrically stepped pole has also been individually and statically designed and adapted for the lamp and number of lamps per pole. Moreover, there is a standard steel door with a triangular lock on the pole. It is possible to mount a cable junction box using a plain earthing

link and sliding nuts. There are two openings opposite each other in the buried base for feeding the cable.

As the manufacturer, Europoles has all of the necessary production verifications: Verification of suitability DIN 18800 / EN 40-5; verification of origin as per DIN 1990; EN ISO 5817; certificate DIN EN ISO 9001; welder test DIN EN 287-1/Part 1 steels DIN EN 1418; environmental management system certification as per DIN ISO 14001 : 2009.

Straight pole, cylindrically stepped – programme in stock

H³ 3000 mm											
Article Number	TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	D³ [mm]	L¹ [mm]	L² [mm]	L³ [mm]	Area Exposed to the Wind* [m²]	Max. lamp weight* [kg]
36003100	ZLM30/60/ST	3000	600	60	114	/	2000	/	1600	0,3	13
36010110	ZLM30/76/ST	3000	600	76	114	/	2000	/	1600	0,6	13

H³ 3500 mm											
Article Number	TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	D³ [mm]	L¹ [mm]	L² [mm]	L³ [mm]	Area Exposed to the Wind* [m²]	Max. lamp weight* [kg]
36004680	ZLM35/60/ST	3500	600	60	114	/	2500	/	1600	0,3	13
36003275	ZLM35/76/ST	3500	600	76	114	/	2500	/	1600	0,5	13

H³ 4000 mm											
Article Number	TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	D³ [mm]	L¹ [mm]	L² [mm]	L³ [mm]	Area Exposed to the Wind* [m²]	Max. lamp weight* [kg]
36003276	ZLM 40/60/ST	4000	800	60	114	/	2700	/	2100	0,25	13
36003277	ZLM 40/76/ST	4000	800	76	114	/	2700	/	2100	0,45	13

H¹ 4500 mm											
Article Number	TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	D³ [mm]	L¹ [mm]	L² [mm]	L³ [mm]	Area Exposed to the Wind* [m²]	Max. lamp weight* [kg]
36003272	ZLM 45/60/ST	4500	800	60	114	/	3200	/	2100	0,15	13
36003278	ZLM 45/76/ST	4500	800	76	114	/	3200	/	2100	0,35	13

H³ 5000 mm											
Article Number	TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	D³ [mm]	L¹ [mm]	L² [mm]	L³ [mm]	Area Exposed to the Wind* [m²]	Max. lamp weight* [kg]
36004681	ZLM 50/60/ST	5000	800	60	114	/	3200		2600	0,12	13
36003271	ZLM 50/76/ST	5000	800	76	114	/	3200		2600	0,3	13

H¹ 6000 mm											
Article Number	TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	D³ [mm]	L¹ [mm]	L² [mm]	L³ [mm]	Area Exposed to the Wind* [m²]	Max. lamp weight* [kg]
36003273	ZLM 60/60/ST	6000	1000	60	114	89	2700	2000	2300	0,2	13
36003274	ZLM 60/76/ST	6000	1000	76	114	89	2700	2000	2300	0,2	13

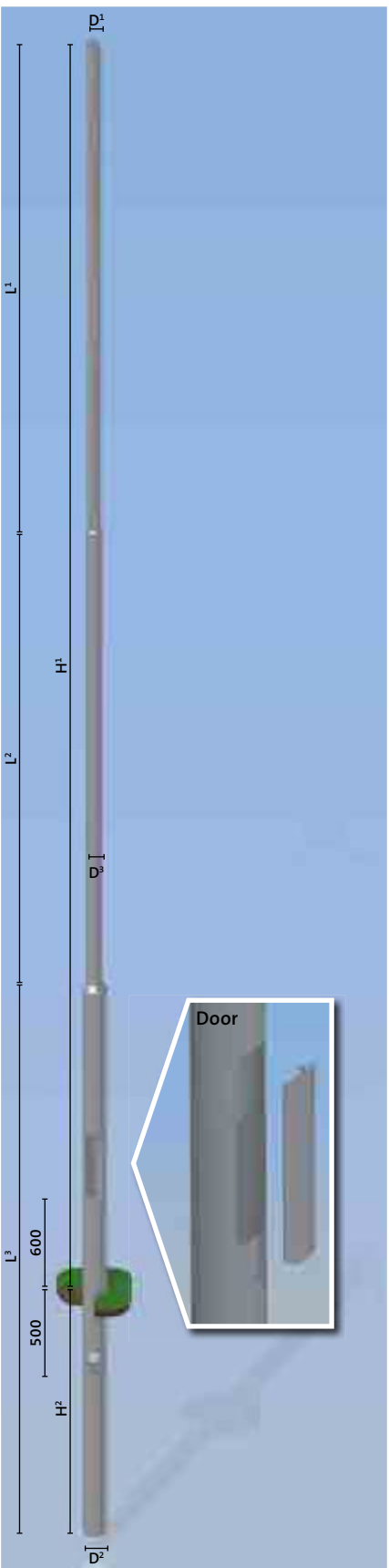
H³ 7000 mm											
Article Number	TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	D³ [mm]	L¹ [mm]	L² [mm]	L³ [mm]	Area Exposed to the Wind* [m²]	Max. lamp weight* [kg]
36007711	ZLM 70/76/ST	7000	1200	76	114	89	3000	2500	2700	0,1	13

H³ 8000 mm											
Article Number	TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	D³ [mm]	L¹ [mm]	L² [mm]	L³ [mm]	Area Exposed to the Wind* [m²]	Max. lamp weight* [kg]
36007713	ZLM 80/76/ST	8000	1200	76	133	102	3000	2800	3400	0,2	20

All poles with a standard door 85 x 400 mm in size with a 12 mm triangular lock. Subject to technical modifications.

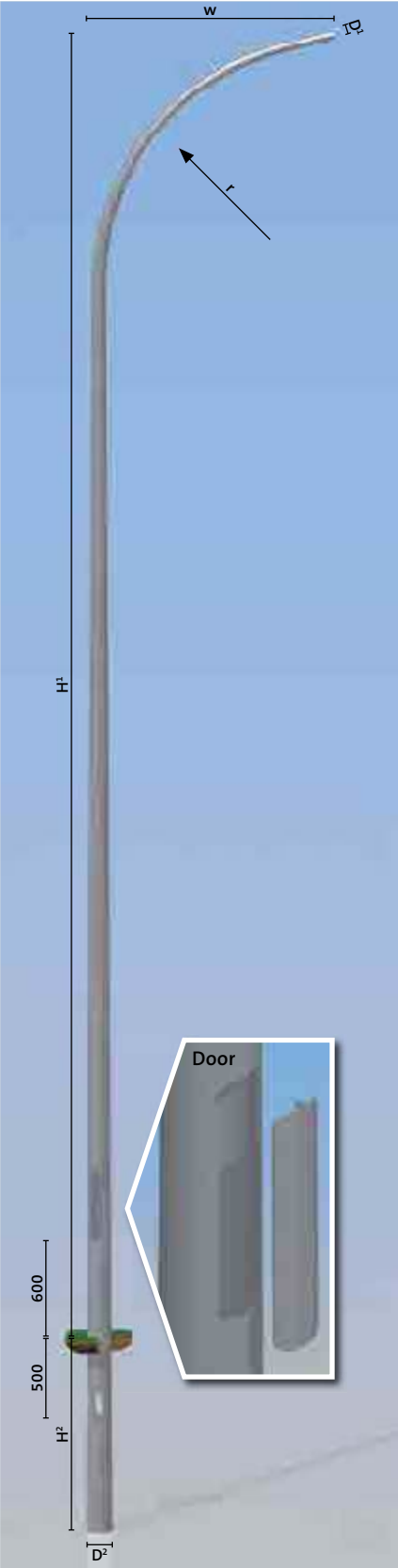
Abbreviation key: H¹ beam spot height; H² underground length; D¹ diameter of segment 1; D² diameter of segment 2; D³ diameter of segment 3; L¹ length of segment 1; L² length of segment 2; L³ length of segment 3

***Maximum load / area exposed to the wind:** Calculation through wind zone 1. This is only meant as an orientation value and cannot be applied as if it were definitive.



You can find pole accessories on pages 20 and 21.

POLES WITH CIRCULAR CURVED BRACKETS – CONICALLY ROUND & CYLINDRICALLY STEPPED



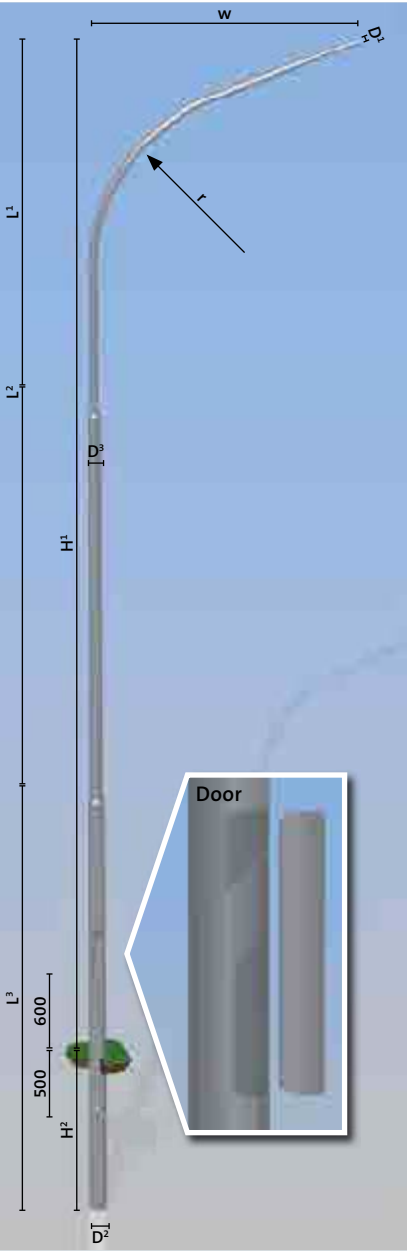
The conical steel pipe pole with circular curved brackets or the cylindrically stepped pole with a single circular curved bracket is welded with a minimum steel quality of S235 JR and hot-dip zinc plated on the interior and exterior as per DIN EN ISO 1461. The steel door on the pole has a triangular lock.

It is possible to mount a fuse box using a plain earthing link and sliding nuts. There are two openings opposite each other in the buried base for feeding the cable.

As the manufacturer, Europoles has all of the necessary production verifications: Verification of suitability DIN 18800 / EN 40-5; verification of origin as per DIN 1990; EN ISO 5817; certificate DIN EN ISO 9001; welder test DIN EN 287-1/Part 1 steels DIN EN 1418; environmental management system certification as per DIN ISO 14001 : 2009.



Traffic Light Flower Project – Munich Public Services, company headquarters – Emmy-Noether Strasse



Poles with circular curved brackets, conically round – programme in stock

H ¹ 6000 mm										
Article Number	TYPE	H ¹ [mm]	H ² [mm]	D ¹ [mm]	D ² [mm]	Conicity [mm/m]	w [mm]	r [mm]	Area exposed to the wind* [m ²]	Max. lamp weight* [kg]
36002535	KPM 60 W 15/3	6000	1000	60	138	10	1500	1500	0,13	13

Additional welded-on fitting 42 x 400 mm in size

H ¹ 7500 mm										
Article Number	TYPE	H ¹ [mm]	H ² [mm]	D ¹ [mm]	D ² [mm]	Conicity [mm/m]	w [mm]	r [mm]	Area exposed to the wind* [m ²]	Max. lamp weight* [kg]
36002536	KPM 75 W 15/3.5	7500	1200	60	155	10	1500	1200	0,2	13

Additional welded-on fitting 42 x 400 mm in size

H ¹ 8000 mm										
Article Number	TYPE	H ¹ [mm]	H ² [mm]	D ¹ [mm]	D ² [mm]	Conicity [mm/m]	w [mm]	r [mm]	Area exposed to the wind* [m ²]	Max. lamp weight* [kg]
36006240	KPM 80 W 15/4.0	8000	1200	60	161	10	1500	1500	0,3	20

Poles with circular curved brackets, cylindrically stepped – programme in stock

H ¹ 6000 mm													
Article Number	TYPE	H ¹ [mm]	H ² [mm]	D ¹ [mm]	D ² [mm]	D ³ [mm]	L ¹ [mm]	L ² [mm]	L ³ [mm]	w [mm]	r [mm]	Area exposed to the wind* [m ²]	Max. lamp weight* [kg]
36003291	ZPM 60 W 15	6000	1000	60	114	89	1700	2800	2500	1500	1200	0,1	13

H ¹ 7500 mm													
Article Number	TYPE	H ¹ [mm]	H ² [mm]	D ¹ [mm]	D ² [mm]	D ³ [mm]	L ¹ [mm]	L ² [mm]	L ³ [mm]	w [mm]	r [mm]	Area exposed to the wind* [m ²]	Max. lamp weight* [kg]
36003292	ZPM 75 W 15	7500	1200	60	121	89	2500	3000	3200	1500	1200	0,1	13

All poles with a standard door 85 x 400 mm in size with a 12 mm triangular lock. Subject to technical modifications.
Abbreviation key: H¹ beam spot height; H² underground length; D¹ pole top diameter; D² foot diameter; D³ pole attachment diameter; L¹ length of segment 1; L² length of segment 2; L³ length of segment 3; w projection; r radius
***Maximum load / area exposed to the wind:** Calculation through wind zone 1. This is only meant as an orientation value and can not be applied as if it were definitive.

You can find pole accessories on pages 20 and 21.



STEEL SLEEVE – BY FAR THE BEST

The steel sleeve, with a length of 400 mm at the ground entry point, offers additional corrosion protection against environmental and mechanical influences (e.g. mowing and sweeping machines, snow removal services, salt water and dog urine). Thanks to the special technical feature, whereby Europoles installs the sleeve with a gap, both the sleeve as well as the pole are double-plated with zinc in this area and ideally protected against corrosion.

Poles, conically round with steel sleeve – programme in stock

H¹ 4000 bis 10 000 mm						
TYPE	H¹ [mm]	H² [mm]	D¹ [mm]	D² [mm]	Area exposed to the wind* [m²]	Max. lamp weight* [kg]
KLM 40/76/3 RSM	4000	800	76	129	0,42	13
KLM 45/76/3 RSM	4500	800	76	134	0,41	13
KLM 50/76/3 RSM	5000	800	76	140	0,41	13
KLM 60/76/3 RSM	6000	1000	76	153	0,36	13
KLM 80/76/3 RSM	8000	1200	76	177	0,25	20
KLM 80/76/4 RSM	8000	1200	76	177	0,53	20
KLM 90/76/3,5 RSM	9000	1500	76	181	0,35	20
KLM 100/76/3 RSM	10000	1500	76	203	0,18	20
KLM 100/76/4 RSM	10000	1500	76	203	0,45	20

All poles with a standard door 85 x 400 mm in size with a 12 mm triangular lock. Subject to technical modifications.
Abbreviation key: H¹ beam spot height; H² underground length; D¹ pole top diameter; D² foot diameter
***Maximum load / area exposed to the wind:** Calculation through wind zone 2. This is only meant as an orientation value and cannot be applied as if it were definitive.





© Philips Austria

Flachau ski slope at night

FLOODLIGHT POLES – WE TURN NIGHT INTO DAY FOR YOU

Perfect conditions for the athletes, ideal visual conditions for all the spectators and brilliant light for television broadcasts – these are the primary challenges for illuminating sports facilities. Optimally placing and aligning the spotlights results in lighting that is virtually non-glare and uniform.

Europoles offers complete solutions for stadiums and sports facilities of all categories and sizes – from the football fields of local sports clubs to arenas for top sporting events on an international scale.

It is particularly in the area of winter sports that the site often requires the operator to open up and develop hard-to-access terrain. If necessary, the

poles are provided with a special attachment for helicopter installation to allow the poles to be positioned accurately.

Up to 20 metres in length, floodlight poles made of steel (conically round) from our standard pole programme can be used with traverses including one to six or more floodlights.



Salzburg Sports Facility



Leoben Hinterberg



Helicopter installation of a floodlight pole on the ski slope in St. Englmar

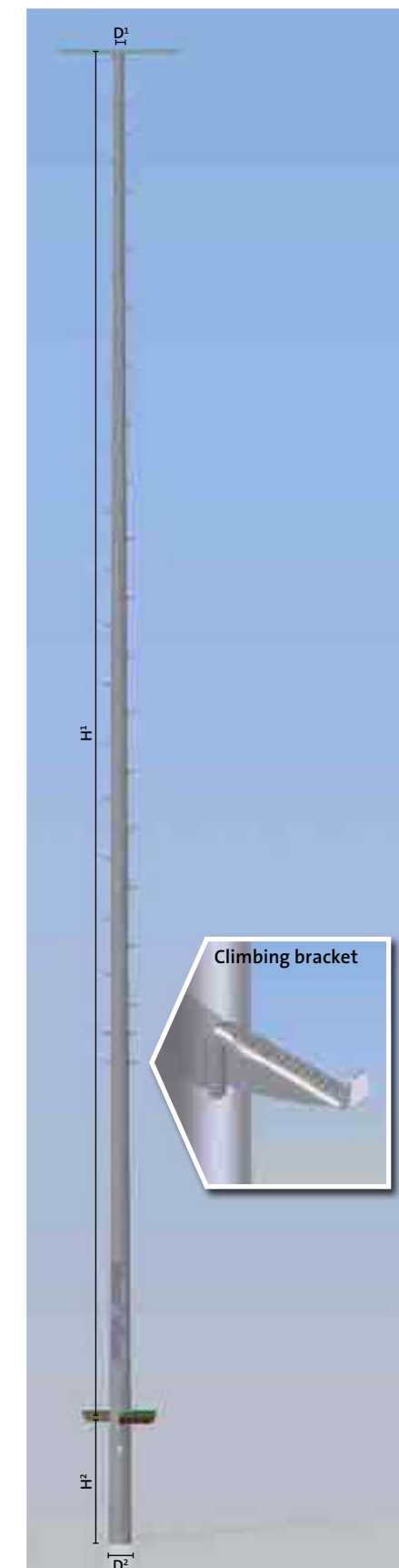
Floodlight poles – programme in stock

H ¹ 16 bis 20 m								
Article Number	TYPE	H ¹ [m]	H ² [m]	D ¹ [mm]	D ² [mm]	Doors	Area exposed to the wind* [m ²]	Max. lamp weight* [kg]
36003491	KFLM 16/1 without climbing fixtures	16	1,5	108	270	1	0,45	40
36002870	KFLM 16/1 with climbing fixtures	16	1,5	108	270	1	0,45	40
36003492	KFLM 16/2 without climbing fixtures	16	1,5	108	270	2	0,5	40
36002871	KFLM 16/2 with climbing fixtures	16	1,5	108	270	2	0,5	40
36011015	KFLM 16/4 with climbing fixtures	16	1,5	121	282	2	0,8	80
36011016	KFLM 18/4 with climbing fixtures	18	1,5	121	302	2	0,64	80
36011017	KFLM 18/6 with climbing fixtures	18	1,5	160	341	3	1	120
36011018	KFLM 20/6 with climbing fixtures	20	1,8	150	354	3	1	120

All poles with a standard door 155 x 500 or 700 mm in size with a 12 mm triangular lock. Subject to technical modifications.

Abbreviation key: H¹ beam spot height; H² underground length; D¹ pole top diameter; D² foot diameter

*Maximum load / area exposed to the wind: Calculation through wind zone 2. This information is only meant as an orientation value and cannot be applied as if it were definitive.



Climbing bracket

You can find pole accessories on pages 20 and 21.

INNOVATION

LIGHTING SYSTEMS WITH SWISS PRECISION

Lighting equipment from Europoles proves to be compelling the world over thanks to the efficient lowering system designed in. The floodlight brackets are lowered to the ground for maintenance and service. This not only reduces costs, but also makes for rapid and safe handling even during on-going operations.

Europoles lighting systems combine Swiss precision engineering with Made in Germany pole technology. They are the perfect solution for any location where artificial light is needed for large areas.

Europoles is the global technology leader in the development, production and assembly of low-maintenance lighting equipment as well as in its inspection. Our lowering system is based on two decades of innovation and experience in the construction of cable railways.

Lowering systems are primarily used where there is little room, thus making it very difficult to maintain lighting and camera poles.

Repair or cleaning of floodlight lamps therefore does not cause any restriction on moving traffic. Repairs and maintenance can be carried out trouble-free and relatively quickly on the ground without using a cherry picker. Setting up a cherry picker or a truck-mounted crane would take longer and cost more. What is more, the climbing fixtures on the pole can be done away with.

Europoles has just the right load-bearing system for every application: Loads ranging from 80 kilograms to 3.5 tonnes are possible. The lowering system can be retrofitted on existing poles.

Light Lowering Device (LLD)

The LLD is a lighting lowering system for indoor areas. No matter how high your hangar or hall is – you will not need any special equipment such as risers or lifting

platforms for performing work on the lamps.

Systems for

- Apron lighting at airports
- Airport solutions for safe landings
- Stadiums
- Freight zones
- Harbours
- Streets
- Interior space solutions

Your Benefits:

- Not necessary to tip the poles
- No extensive apron closures
- No downtimes
 - » operations continue without any restrictions
- One-sided projection possible without a counterweight
 - » can be lowered even in windy conditions
- Floodlight bracket can be freely designed
- Can be operated by one person
- Power supply via a plug contact
 - » not necessary to lead cables
- Easy to connect additional equipment (e. g. cameras, airport obstacle lighting, loudspeakers, etc.)
- Can be used in high-ceilinged halls and buildings such as aircraft hangars, trade fair halls, sports facilities, stadiums and factories.



NivaLift

- Lifting power of up to 3,500 kg
- Up to 50 m in height
- 1 wire – guide rail
- Brake with double safety
- Up to 80 plug contacts
- Lighting, CCTV (video monitoring), antennas, etc.
- Stainless steel – aluminium
- Can be operated by one person



Camera pole with NivaLift 160

NivaClimber



NivaClimber on the motorway

- Up to 20 m in height
- Guided by a gear rod – locking mechanism
- Up to 16 plug contacts
- Lighting, CCTV (video monitoring), antennas, etc.
- Stainless steel – aluminium
- Can be operated by one person



NivaLift Indoor

- Maintenance without a scaffold
- Lighting, CCTV (video monitoring), antennas, etc.
- Can be operated by one person



Ceiling lamp maintenance even during on-going operation

NivaCom

- Ethernet Cat5e (gigabit Ethernet) coax plug, e. g. for HF signals



NivaCom supply plug



Replacing lamps at the King Apron Airport, KAIA Jeddah, Saudi Arabia



Scan this QR code with your smartphone and watch a video on Europoles lowering systems.

POLE ACCESSORIES

Supplied unassembled

Traverses



Single traverse



Double traverse



Double traverse –
can be laterally clamped



Triple 120° star traverse



Quadruple 90° cross traverse

Bracket



Single bracket



Double 90° bracket



Double 180° bracket



Triple 120° bracket

Fitting



Expansion fitting



Reduction fitting

Caps



Type A plastic cap (inside clamping)



Type B plastic cap (outside clamping)

Other



Outer door installed



Climbing bracket



Triangular socket

Pre- and self-assembly possible



Shrink sleeve



Edge protector



Base plate

POLE ACCESSORIES

Pole attachments for pole-top lamps

Material Number	Type	Lamp connection size in mm	Angle of inclination in °	Projection in mm
36012382	Single bracket for pole top 76 – N127206B	42x100	15	200
36010425	Single bracket for pole top 76 – N127109B	60x100	15	200
36010426	Single bracket for pole top 76 – N127113B	60x100	15	500
36010427	Single bracket for pole top 76 – N127202B	60x100	15	1000
36010428	Single bracket for pole top 76 – N127203B	60x100	15	1500
36010437	Double bracket for pole top 60 – N127218B	42x100	15	200
36010438	Double bracket for pole top 60 – N127219B	60x100	15	200
36012383	Double bracket for pole top 76 – N127211B	42x100	15	200
36010431	Double bracket for pole top 76 – N127214B	60x100	15	200
36010432	Double bracket for pole top 76 – N127115B	60x100	15	500
36010433	Double bracket for pole top 76 – N127212B	60x100	15	1000
36010434	Double bracket for pole top 76 – N127215B	60x100	15	1500
36010439	Double bracket for pole top 76 – N127221B	60x100	15	250
36010435	Double bracket for pole top 9 – N127216B	60x100	15	200
36010440	Triple bracket for pole top 76 – N127222B	60x100	15	350
36010441	Triple bracket for pole top 89 – N127223B	60x100	15	350

Traverses for vertical floodlights

Material Number	Type
36010470	Traverse for 1 floodlight 1/76 NEW N000658H
36010471	Traverse for 2 floodlights 2/76 NEW N000661F
36010472	Traverse for 1 floodlight 1/89 NEW N000659H
36010473	Traverse for 2 floodlights 2/89 NEW N000663F
36010474	Traverse for 1 floodlight 1/108 NEW N000660J
36010475	Traverse for 2 floodlights 2/108 NEW N000667G
36010194	Star traverse for 3 floodlights Ø108 N116787C
36010193	Cross traverse for 4 floodlights Ø108 N119593C

Adapters

Material Number	Type
36007840	Reduction 89/76x130 Alu. dr. N114831B
36003287	Plug reduction 76/60 draw. N010883E
36007481	Intermating extension 60/76 N102265B

Other accessories

Material Number	Type
10024576	Edge protection for the cable hole
10024599	Shrink sleeve, loose COR 100
10024634	Shrink sleeve, loose COR 115
10024566	Shrink sleeve, loose COR 125
10024568	Shrink sleeve, loose COR 160
10024608	Shrink sleeve, loose COR 170
10024600	Shrink sleeve, loose COR 200
10024610	Pole cap made of plastic for 60 mm pole top
10024529	Pole cap made of plastic for 76 mm pole top
10024543	Pole cap made of plastic for 89 mm pole top
26023040	Door key with movable hinge pin for triangular door lock with 10 mm edge length
26011048	Door key with movable hinge pin for triangular door lock with 12 mm edge length
26018932	Base plate attached with screws, 200 x 200 x 3 mm + 2x clip bolt + nut
26018933	Base plate attached with screws, 250 x 250 x 3 mm + 2x clip bolt + nut
26018934	Base plate attached with screws, 300 x 300 x 3 mm + 2x clip bolt + nut
26018931	Base plate attached with screws, 400 x 400 x 3 mm + 2x clip bolt + nut
	Replacement doors made of steel for all poles: Width 85 mm or 100 mm – length 300 mm or 400 mm

POLE ACCESSORIES



Bridge near Dunaújváros, Hungary

Pole height 13 m; beam spot height 11.5 m; projection: 300 mm; pole inclination: 16.5°

DESIGN SOLUTIONS – ROOM FOR (NEARLY) ANY IDEA



Wooden design, French Alps

Beam spot height 5 m

Pole top diameter 76 mm

Print technique with a wooden look



Blade of grass pole, Marktoberdorf

Height above ground 8 m

Beam spot height 7 m

Projection 1.2 m



Flower petal pole, Ruhla

Flora lamp

Design mirror projector, Konin

Large-area light distribution, non-glare, indirect lighting



Nostalgia pole

Beam spot height 3.1 m

Pole top diameter 60 mm

Corrosion protection, hot-dip zinc plated



Snowdrop pole, Konin, Poland

Beam spot height 8 m / 5 m

Projection approx. 2.3 m



Light cylinder, Marktoberdorf

Diameter 323 mm

Pole height 5.8 m



Europe Bridge, Riga, Latvia

Conical pole shaft with a cylindrical, double-curved, removable bracket; beam spot height 8 m; projection 1.8 m



State Theatre, Innsbruck, Austria

Floodlight pole height 15 m

With flag-hoisting device and magnetic flag positioning

DESIGN

TECHNICAL SOLUTIONS – FUNCTIONAL TO THE LAST DETAIL



Camera pole

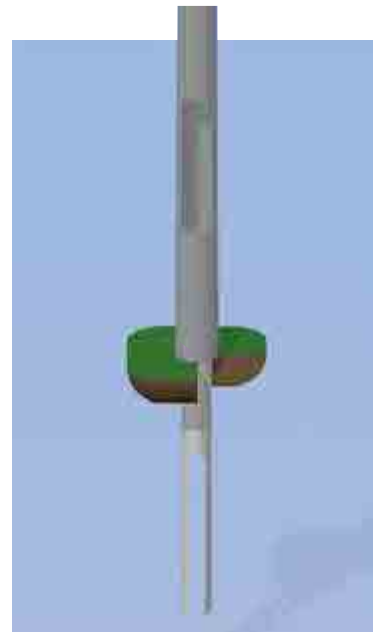
Height above ground 8 m;
pole top diameter 89 mm;
ascendable;
camera poles calculated
as per DIN 4131 to be low-
vibration and static



Tiltable pole systems

*Tilting pole at the Ernst August
lock in Hamburg*

Poles with low beam spot heights
can be equipped with a tilting
mechanism. The poles can thus be
tilted by means of a grip. The flood-
light and pole can be maintained
quickly and easily on the ground.
Tilting poles are used for hard-to-
access locations such as locks and
track fields.



Pivot tooth pole

Height above ground 5 m;
pole top diameter 60 mm.
In times of tight budgets and
stretched funds, customers are
increasingly interested in using
existing footings. If an examination
by a structural engineer reveals
that this is possible, we are able to
produce a suitable pole. Tell us the
diameter at the ground entry point
and the desired beam spot height,
and we will gladly present you with
an offer.

ENGINEERING



**Cylindrical signal pole with a circular bracket,
Nuremberg**

Height above ground 6.2 m; pole top diameter
108 mm; projection 4 m; removable bracket



LSA pole type Leipzig

Pole height 8.5-12 m; projection 3-12 m, removable bracket



Traffic light pole in Augustburg

Projection from 3 to 7.5 mm – extendable up to 10 m; design with a swivelling bracket for special transports



Scan this QR code with your smartphone and experience laser welding in moving pictures.



High precision and circularity



LASER WELDING – MODERN, AESTHETIC, ENVIRONMENTALLY SOUND

Europoles employs laser welding technology which is unique in the area of steel lighting poles. The laserpole from Europoles features state-of-the-art welding technology. The laser welding procedure is a vastly improved technique compared to the procedures previously used.

Functionality, cost effectiveness and a long life cycle – these properties have been true of Europoles lighting poles since the very beginning. As the European market and technology leader, Europoles is once again taking advantage of new production methods for innovative pole solutions by using today's state-of-the-art welding techniques.

Since 2010, Europoles has also been using laser welding to produce conical steel lighting poles. This technology makes it possible to produce optimum full penetration welding of the wall, thereby minimizing the risk of corrosion. Thanks to the procedure's precision and low heat influence, you receive an extremely sturdy, high-quality processed pole.



Uncoiling, straightening, cutting



Bending with the high-performance press



Laser welding



Close-up of the laser welding procedure

LASER

The lack of a welding seam means the design blends perfectly into its environment. Moreover, production is more environmentally friendly due to considerably lower CO₂ emissions. This makes the laser pole a durable investment that saves resources.

With this laser pole, Europoles adds yet another product to its range, enabling you to find the perfect pole made from the right material for any application type and purpose. Thanks to our international experience in more than 20 countries, we have the flexibility to respond to a wide variety of technical requirements and customer wishes. This is not only limited to pole height, shape and material. There is freedom with respect to surface design as well.

What this means for you ...

- The *laserpole* is of high-grade manufacture and thus has a considerably longer service life.
- The material is treated gently during production and thus lasts longer.

Benefits of the *laserpole* at a glance

Low heat influence around the welding seam

- The mechanical properties of the material are only influenced right at the welding seam and only to a very limited extent even there.

Laser welding is precise

- No band edge skew
- Very high welding quality

Welding without additional materials

- No raised zinc plating along the welding seam
- Minimal risk of the zinc flaking off
- Minimal risk of corrosion

Non-destructive welding seam inspection

- Inspection using a special camera

No ridge formation

- No wall thickness constriction
- Uniform load-bearing capacity all around

High precision and circularity

Environmentally friendly

- Greatly reduced CO₂ emission
- Resource-saving procedure

Perfect design

- No excessive welding seam peaking
- Reduced risk of zinc run-off projections
- Blends in to the environment perfectly
- Extremely flexible, enabling design freedom

HOT-DIP ZINC PLATING – CORROSION PROTECTION

Corrosion protection EN 40-5:2002 permits hot-dip zinc plating. The surface condition requirements and plating thickness here are definitively based on DIN EN ISO 1461.

Definition

Hot-dip zinc plating involves the production of overlays of zinc and iron/zinc alloys by dipping the prepared steel in melted zinc.

Appearance

Hot-dip zinc plating is long-term corrosion protection that does not strive to achieve a uniform and decorative appearance. When inspected, all essential surfaces on the zinc-plated material must be free from thickened areas, bubbles, rough spots, zinc points or non-plated patches. Flux and zinc ash residue are not permissible either.

Since the roughness of the steel surface affects the thickness and constitution of the zinc plating, however, surface irregularities of the base material will normally still be visible after hot-dip zinc plating.

Reactive elements in the base material, e.g. silicon and phosphor, can also affect the thickness and appearance of zinc overlays. Different proportions of these elements

result in uniform and/or dark-grey overlays that can be either thinner or thicker than normal.

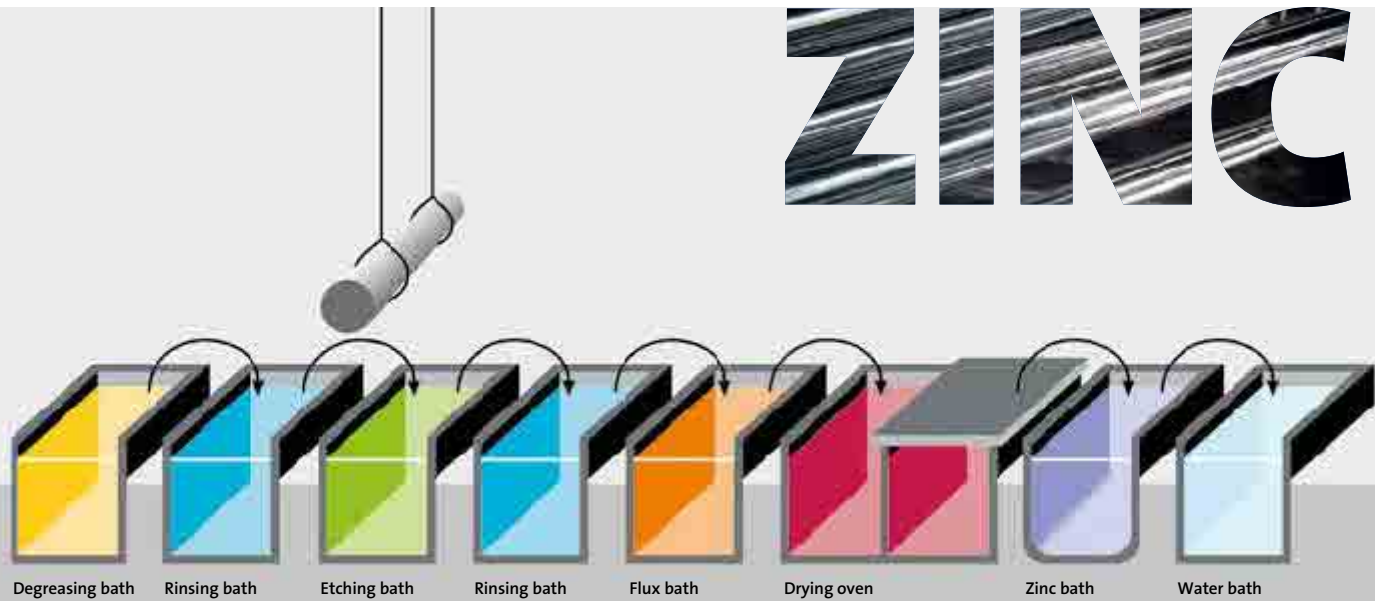
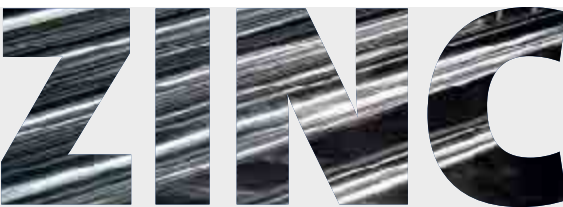
Thickened zinc areas are not permissible if they interfere with the proper use of the steel part; however, they do not affect corrosion resistance.

The occurrence of dark or light-grey patches (e.g. a net-shaped pattern of grey areas) or a slight surface unevenness is no reason to reject the part. This is also true for white rust that can form due to storage in moist conditions after the hot-dip zinc plating process, provided that the zinc overlay still has the required minimum thickness.

In each instance, any requirements concerning appearance that go beyond the provisions of EN ISO 1461 are to be arranged separately before the order is placed.

Plating thickness

The local plating thickness may only be tested on the defined reference surfaces as per 6.2.3 (DIN EN ISO 1461).



Zinc plating



Europoles poles in the zinc-plating bath (very top) and afterwards (above)

The measurements may not be conducted in the area of cutting edges or less than 10 mm from work piece edges, flame-cut surfaces and corners. However, the standard does not prescribe any maximum values that must be maintained.

Reworking

The sum of the areas without an overlay that have to be reworked may not exceed 0.5% of an indivi-

dual part's overall surface area. An individual patch without an overlay may not be larger than 10 cm2 in size. Otherwise, the component must be zinc plated again, provided that no other agreement has been made between the client and the hot-dip zinc plating company. Reworking must be done using thermal spraying with zinc or by a suitable zinc dust coating within the practical limits of such systems.

White rust – a defect?

The formation of white rust may erroneously give the impression of zinc overlay damage. However, the presence of white rust is no measure of the quality of corrosion protection, nor does it constitute a defect according to DIN EN ISO 1461.

As a rule, the products of corrosion should be removed using a soft brush and/or standard cleaning agents. Other preventive measures are preservation options directly after the zinc-plating process, phosphating, chromating or applying corrosion protection oils.

Parts and their thickness	Local plating thickness (minimum value)		Average plating thickness (minimum value)	
	g/m²	µm	g/m²	µm
Steel ≥ 6 mm	505	70	610	85
Steel ≥ 3 mm bis < 6 mm	395	55	505	70
Steel ≥ 1,5 mm bis < 3 mm	325	45	395	55

SURFACE FINISH – CREATIVE, WIDELY VARIED AND IN COLOUR

Europoles is the expert in special surface finishes. Give your poles an innovative finish. Whether it is a silky gloss, coarse or fine-textured finish required, we are flexible in turning your wishes into reality. Special anti-graffiti or anti-poster surface finishes ensure that nothing sticks on your pole – except for its beautiful appearance.

Basic Processing Guidelines		MXclassic™	MXsolid™	MXextreme™
Grinding off zinc run-off projections on zinc-plated poles/tubes		✓	✓	✓
Mechanical smoothing/dressing with zinc-plated poles/tubes		✓	✓	✓
Sweeping in the dry-blasting process	Up to 7,00 m			
	As of 7,01 m	✓	✓	✓
Chrome III passivation up to 7.00 m		✓	✓	✓
Outgassing / tempering at approx. 260° / 15 min. OT		✓	✓	✓
Finish coat 1 approx. coat thickness in µm (microns)		80	80	80
Finish coat 2 approx. coat thickness in µm (microns)			80	80
Finish coat 3 approx. coat thickness in µm (microns)				80
Approx. total thickness of the coats in µm (microns)		80	160	240
Complies with DIN		12944 / 55633	12944 / 55633	goes beyond DIN
Recommended for corrosiveness category		C1 – C3	C4 – C5	desert areas
Prime examples		Lüneburger Heide	Wilhelmshaven / Sylt	Dubai
Duration of protection	Up to 7,00 m	15 years	15 years	15 years
	As of 7,01 m	15 years	C4= 15 years C5= 5 years	5 years

MX Classic™

- Single-layered powder coating variety
- Stone-hard protection for 15 years, long-lasting
- Best visual and haptic properties
- Fulfils all properties for use in areas within corrosiveness categories C1–C3 as per DIN 12944 and DIN 55633



MX Solid™

- Double-layered powder coating variety
- Stone-hard protection for 15 years, long-lasting
- Best visual and haptic properties
- Fulfils all properties for use in areas within corrosiveness categories C4–C5 as per DIN 12944 and DIN 55633

MX Extreme™

- Triple-layered powder coating variety
- Exceptional protective properties against extreme UV strain
- Extremely hard protective coating against external influences such as sandstorms for more than 15 years

MX Protect Anti-Poster™

- Protects nearly all surfaces, such as steel, zinc, aluminium, GRP on lighting poles, signalling equipment, flagpoles, control boxes, bus stops, etc.
- Transparent finish system based on previous coating systems MX Classic™, MX Solid™, MX Extreme™
- Posters and stickers do not adhere to this surface

MX Protect Anti-Graffiti™

- Protects underlying materials such as metals, GRP, enamels from graffiti, markers and inks
- Extremely resistant to weather, high UV radiation and chemicals
- Transparent finish system based on previous coating systems MX Classic™, MX Solid™, MX Extreme™
- Produces a permanent barrier layer by means of a homogeneous surface
- The surface protected in this way can be repeatedly cleaned with a special cleaning agent without being refinished.
- Graffiti and visible contamination can be easily removed from this surface.

MX Glamour™

- Designer coating system utilising an innovative powder coating process
- More than 500 stone, natural, wood and design motifs
- Corrosion and weather resistant, highly UV resistant
- Fulfils all properties for use in areas as per corrosiveness categories C1–C5

MX Delight™

- Polyester-resin-based coating system with a fluorescent effect
- Green afterglow
- Fulfils all properties for use in areas within corrosiveness categories C1–C5 as per DIN 12944 and DIN 55633, depending on previous coating systems MX Classic and MX Solid



Scan this QR code with your smartphone and experience the benefits of the surface finish in moving pictures.

Top 20 RAL colours*					
Shade of colour		Type	Shade of colour		Type
DB 701		smooth	RAL 7016		smooth, glossy
DB 702		smooth	RAL 7024		smooth, glossy
DB 702 S		fine structure, matt	RAL 7030		smooth, glossy
DB 703		smooth	RAL 7043		smooth, glossy
DB 703		fine structure, matt	RAL 9005		smooth, glossy
Gris 2900 Sablé		fine structure	RAL 9005		smooth matt
Gris 900 Sablé		fine structure	RAL 9005		fine structure, matt
Noir 200 Sablé		fine structure	RAL 9006		smooth, glossy
RAL 6005		smooth, glossy	RAL 9007		smooth, glossy
RAL 6009		smooth, glossy	RAL 9010		smooth, glossy
RAL 6020		smooth, glossy	RAL 9016		smooth, glossy

* Please note that these are not true colours, due to the colour variation that can occur during printing

COLOUR

Requirements met:

- Manufactured as per DIN EN ISO 9001:2008 in compliance with EN 40-7
- 35 years of manufacturing experience



EFFICIENT AND TECHNICALLY SOPHISTICATED

You are on safe ground with lighting poles made of glass-fibre reinforced plastic. Our posts offer the ultimate in passive safety, thereby satisfying the stipulations of internationally known frangibility requirements.

Production

The glass-fibre mats are cut to the proper length and wound tightly around a metal mandrel. Afterwards, the high-tensile glass-fibre armoring is inlaid in the chrome-plated steel mould.

This is directly followed by the skidding process, in which strong centrifugal forces soak the reinforcement

material (glass-fibre mats) with the matrix material – coloured polyester resin is added – and compact them. The result is a smooth surface and very high rigidity.

After the hardening process, the poles are removed from the skidding mould and precisely cut to length. Depending on customer specifications, the GRP poles have accessories mounted and are painted.



Decorative FRP lighting pole with bracket in Salzburg, Clemens-Krauss-Strasse



Ascendant FRP pole with pole-top lamp at the Schönerweide train station in Berlin



FRP poles in various colours with pole-top lamps in France



Along the A7 Mühlkreis motorway near Linz in Austria, the FRP poles were primarily used due to their passive safety. Easy assembly, which is also possible on bridge railings thanks to their low net weight, is another advantage.

Their Benefits at a Glance

- Corrosion resistant to contaminants such as CO₂ and road salt
- Suitable for use in salty air
- Can be used in sewage treatment plants due to their chemical properties
- The poles break when collided with
- Maintenance-free
- Good vibration absorption helps prolong the service life of the lamp and braces
- Poles available in all RAL colours; UV-resistant colours
- Two footing varieties: With an underground buried base or a base plate
- Production using environmentally-friendly materials and relatively low energy expenditure
- Low transport and assembly costs thanks to their low net weight
- High degree of dynamic and mechanical rigidity – resistant to extreme wind strain
- Non-conductive – fully insulated due to their material properties (lightning protection)
- Mechanical damage to the pole surface can be repaired
- Resistant to acids and alkalis, osmosis-resistant
- Electrically non-conductive, radio and radar permeable



Scan this QR code with your smartphone and experience the production of GRP poles in moving pictures.



Even aggressive environmental influences such as frost or polluted air will not damage the poles. Along with their scratch- and shock-proof surface, the robust properties of the poles ensure a very long service life with little maintenance work, thus resulting in considerable long-term cost savings as well.

Despite their enormous load-bearing capacity, poles made of spun concrete have very small diameters and present a slender form to the observer. All rotationally symmetrical cross-sections (round, oval, rectangular, polygonal) can be produced to suit individual tastes. The surface treatment can be chosen from a large selection of colours and textures. The hollow space inside the poles makes for excellent protection for supply and disposal lines. Special solutions and adaptations to local conditions are developed on-site by our teams, which are made up of competent structural engineers and designers.



INSPIRING TECHNOLOGY AND INNOVATIVE CAPACITY

Scratch and shock proof, resistant to extreme environmental influences and vandalism: Lighting poles made of spun concrete captivate thanks to their minimal life-cycle costs – and are also convincing due to their very good eco-balance and environmental friendliness.

Long-lasting durability – strong eco-balance

The Neumarkt concrete pole factory operates with state-of-the-art spun concrete technology. Spun concrete is a material that has it where it counts: Long-lasting and with an excellent eco-balance, it offers a high degree of planning reliability and the possibility of investing in an environmentally-friendly, high-class product. Poles made of spun concrete are 100% recyclable. It is due to our workforce of highly qualified and motivated employees

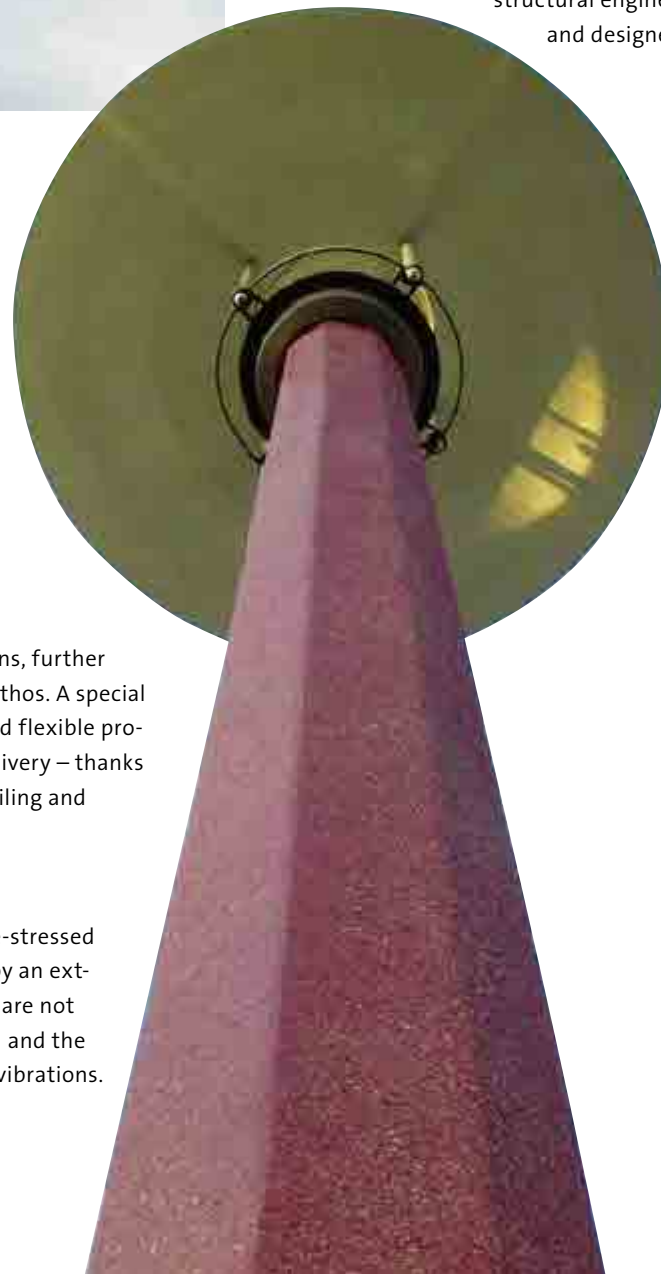
that there are constant innovations, further developments and a top quality ethos. A special service we provide is our quick and flexible production as well as just-in-time delivery – thanks to intelligent raw material stockpiling and storage planning.

Robust and sturdy

Poles from Europoles made of pre-stressed spun concrete are characterised by an extremely robust construction. They are not only highly resistant to vandalism and the effects of fire, but also to strong vibrations.

Our products possess the following certifications:

- DIN EN ISO 9001:2008 (QM)
- DIN EN ISO 14001:2009 (environment)
- CE EN 40-4
- W 67 59 80 114



CONCRETE

SERVICE – YOUR WISHES ARE OUR POSSIBILITIES

What is special about your collaboration with Eurocoles is the comprehensive service for your order. We at Eurocoles are always working hard to ensure that customer requirements are met and solutions are being found – both with respect to design as well as meeting the customer's budget.

Due to the continual improvement process, even standard products are constantly benefiting from innovations. Results from research and development are invariably being integrated into our products to ensure that they are always in line with the current state of the technology.

Local conditions generally require the statics to be completely recalculated, which Eurocoles does for your safety. This allows designs to be adapted to customer wishes at all times. On request, the customer will receive a certified or verifiable statics report.

We are market leaders and specialists for individual and special solutions, and we work closely together with our national and international clients. Our sales team and our technical agents will accompany you throughout the process and will gladly be at your side to assist and advise you even after the project has come to a close.

Eurocoles sales staff are constantly receiving further education through training and qualifications. In this way, we can continue to provide our customers with the competent technical consultation that they value so highly – even on location if necessary.



LOGISTICS – ON LOCATION QUICKLY AND RELIABLY

Providing the right quantity, at the right quality and at the right location – that is our philosophy.

Eurocoles is your partner when reliable and rapid deliveries are at stake. As a service-oriented market leader, we deliver your poles upon request directly to your warehouse or construction site in the desired design – all through Europe!

We assure you of short distances and quick execution. In our central warehouses in Neumarkt and Konin (Poland), we have over 200 different kinds of poles and pole accessories in stock. We thus guarantee you quick delivery times.

Even country-specific pole types are easily available.

Whether we deal with corporate groups or small businesses – our customers are always our top priority, which is why we process even small order quantities reliably.

Our own forwarding agency as well as third-party forwarding agencies reviewed by us guarantee you reliable delivery performance. Our lorries are generally equipped with a crane; the poles are therefore

easily unloaded by our driver. Eurocoles organises the logistics for special deliveries of popular straight pole types directly to your construction site – anywhere in Germany within 1 to 2 working days.



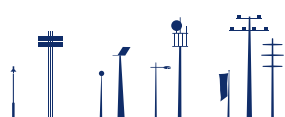
POLE DICTIONARY

Term	Explanation
Anchor bolt	Cast individually into the foundation; serves to mount and anchor the flange plate
Anchor bolt cage	Multiple anchor bolts connected together
Angle of inclination	The angle between the axis of the lamp connection and the horizontal
Area exposed to the wind	Area of the lamp and/or pole that is taken for the static calculation of the required pole
Base plate	Loose enclosed plate
Beam spot height	Distance between the attachment point of the lamp and the intended surface of the earth for poles with a buried base or the bottom edge of the flange plate for poles with a flange plate
Bitumen coating	Protective coating at the ground entry point or on the buried base
Cable hole	Opening in the buried base that permits the power supply cable to be inserted
Cable junction box	See fuse box
Calibration	Forming a pole section, such as the pole top for attaching the lamp
Cantilever pole	Pole with one or more angled brackets that either form a unit with the pole or are removable
CE marking	Confirmation of conformity as per DIN EN 40-5, third-party certification, requirement for delivery in the EU
Circular curved bracket	Pole attachment curved in a defined radius
Climbing bracket	Climbing aid that is hung in place
Climbing rung	Climbing aid that is welded on
Conicity	Uniform tapering of the pole diameter; conically round pole shape
Cylindrically stepped	Stepped tapering of the pole diameter DeflectionHorizontal, lateral deflection of the lamp's attachment point
Dishing	Reshaping the pipe to a smaller diameter
Door	Cover to the pole opening
Door lock	Assembly for locking the door
Door opening	Opening in the pole that provides access to the power supply cables and the electrical components
Door reinforcement	Vertical reinforcements in the area of the door, welded onto the inside, for increasing the pole's statics
Earthing bracket	Located inside the pole near the door, serving to hold the earthing cable
Earthing screw	Located inside the pole near the door, serving to affix the earthing cable
Edge protection	Attached at the cable entry opening and protecting the cable from any damage
Flange plate	A plate that is firmly attached to the lighting pole (without a buried base) with an opening for the cable to pass through and which allows for a connection with a concrete footing or other building construction
Fitting	Connection between the top end of a mast or the outer end of a bracket or a circular curved bracket and the lamp. It can be firmly welded to the pole or pole section or be attached as an accessory.
Foot	The bottom end of a lighting pole, with diameter given in mm
Fuse box	Electrical junction box between earthing and lamp cables
Lamp connection size	Diameter of the lamp part with which the lamp is connected to the pole

POLE DICTIONARY

Term	Explanation
Plain earthing link	Located inside the pole near the door; along with the sliding nuts, serves to attach electrical units
Pole attachment	See bracket or traverse
Pole cap	Cover made of plastic or steel for sealing exposed pole openings
Pole insertion joint	Connects the lower and upper pole sections by inserting one into the other
Pole top	The top end of a lighting pole, with diameter given in mm
Pole-top expansion	Serves to enlarge the dimension of the pole top to adapt it to the lamp (see fitting)
Pole with circular curved brackets	Pole with one or more circular curved brackets that either form a unit with the pole or are removable
Reduction piece / fitting	Serves to reduce the dimension of the pole end to adapt it to the lamp (see fitting)
Shrink sleeve	A plastic part shrunken with heat that is at the ground entry point
Statics	Computational proof of the structural safety as per DIN EN 40
Steel sleeve	Tube welded on to the pole at the ground entry point, length 400 mm or as required
Straight pole	Straight pole onto which the lamp is directly mounted at the top
Surface finish	Decorative coat of paint, powder coating or wet coating
Traverse	Steel piece for holding the lamps/floodlights, which are attached or bolted on with brackets
Underground depth	See underground length
Underground length	Length of the mast below the surface of the earth
Welding nut	Nut welded to the pole or the pole section
Wind zones	National definitions of the regional wind velocities that are to be assumed
Zinc plating	Long-term corrosion protection, forming an alloy with the steel surface, with technical delivery specifications as per DIN EN ISO 1461





Europoles GmbH & Co. KG

Ingolstädter Straße 51
92318 Neumarkt

Phone +49 9181 896-0
Fax +49 9181 896-1155

info@europoles.com

www.europoles.com