



SHEET METAL BENT PYRAMIDAL POLES

Clamped lighting pole (OSV type)

Flanged lighting pole (OSP type)

Basic Information

The improvement of utility properties through using sheet metal bent pyramidal poles brings along many use options, a low mass, minimal maintenance, a long service life, 100% recycling, and contribution to the traffic safety with higher deformation absorption in a motor vehicle crash.

The use of sheet metal bent poles is primarily distinct in public lighting systems and also in the illumination of sports grounds or the use as flagpoles. Poles taller than 6 m are sectioned, which is primarily beneficial in transporting and handling the poles. Thanks to its sectional combination design, it is possible to adjust the pole length to the customer's requirements.

With respect to the traffic safety, the sheet metal bent pyramidal poles are designed so that they can be easily deformed if crashed into by a vehicle to save both the vehicle and the driver. As compared to similar cylindrical poles, the pyramidal poles' mass is 30% less while the strength and load-bearing capacity of both types are comparable, and, consequently, the cost for transportation and installation is significantly reduced.

Technical Description

The OSV lighting poles are designed for clamping and fixing into a prescribed case foundation. The flanged poles are fixed with screws onto a pre-prepared foundation. Both types are manufactured through bending steel sheet metal 2, 3 and 4 mm thick of the S 235 JRC+N material class. The hot zinc dipping with the minimum coat thickness of 80µm is the standard finish. In clamped poles, the clamped section is furnished with the Renolak ALN asphalt protection coat up to the grounding connector height on both the outside and inside of the pole. In flanged poles, the flange and the pole are furnished with the Renolak ALN coat up to the grounding connector height on both the outside and inside of the pole.

At the height of 1,000 m above the clamping position, the poles are furnished with lockable doors behind which there are fixing elements for electric equipment. The M 10 nut for grounding is fixed on the outside ca. 100 mm above the clamping position or the flange. Openings for cable throughput are made on the OSV clamped section.

One-arm or two-arm (angled 90° and 180°) extenders designed for these poles may be mounted on the sheet metal bent pyramidal poles. The circumscribed circle diameter at the pole top end is 60 mm. The pole utility height (H) may, due to technology reasons, primarily in the OSP and multi-section poles, differ by up to ±25 mm from the length stated in tables. The poles, including respective extenders, meet structural calculations for fixing a light fixture with the maximum mass of 15 kg and the maximum aerodynamic resistance of 0.15 sq. m.

The manufacturer guarantees the service life of 20 years for the hot zinc dipped poles and the pole extenders. The pole equipment, the extender and the complete light fixture may be included in the delivery.

Basic Technical Data

Sheet Metal Bent Pyramidal Pole – Clamped Lighting Pole (OSV)

TYPE	H (mm)	E (mm)	Ø D (mm)	S (mm)	T (kN)	Mass (kg)*	No. of Sections (-)	Length X (mm)	Length Y (mm)	Length Z (mm)
OSV 040-30	4,000	800	156	3	1,00	37	1	4,800		
OSV 040-30	5,000	800	150	3	0,70	42	1	5,800		
OSV 060-20	6,000	800	300	2	0,52	59	1	6,800		
OSV 060-30	6,000	800	150	3	0,52	51	1	6,800		
OSV 080-43	8,000	1,000	176	4.3	0.80	97	2	6,700	2,700	
OSV 100-43	10,000	1,200	206	4.3	0.98	134	2	6,700	4,900	
OSV 120-43	12,000	1,200	230	4.3	0.90	168	2	6,800	6,700	
OSV 140-444	14,000	1,500	314	4.44	1.00	390	3	4,600	6,700	5,000
OSV 160-444	16,000	1,500	336	4.44	1.00	420	3	6,700	6,700	5,000

H Pole utility height

E Clamping depth

Ø D Pole foot diameter (circumscribed)

S Section wall thickness (bottom)

T Top tension

Mass*

No. of Sections

Length X

Length Y

Length Z

Total mass without finish

Number of sections for reaching the pole utility height

First section length (bottom)

Second section length

Third section length

Sheet Metal Bent Pyramidal Pole – Flanged Lighting Pole (OSP)

TYPE	H (mm)	E (mm)	Ø D (mm)	S (mm)	A (mm)	B (mm)	Ø C (mm)	Ø F (mm)	T (kN)	Mass*	No. of Sections	Length X (mm)	Length Y (mm)	Length Z (mm)
OSV 040-30	4,000	10	140	3	350	270	20	100	1.00	38	1	4,000		
OSV 050-30	5,000	15	137	3	350	270	20	100	0.70	42	1	5,000		
OSP 060-20	6,000	15	265	2	400	320	24	100	0.52	59	1	6,000		
OSP 060-30	6,000	15	138	3	400	320	24	100	0.52	51	1	6,000		
OSP 080-43	8,000	15	250	4.3	400	320	24	100	0.80	97	2	5,700	2,700	
OSVV 100-43	10,000	15	190	4.3	400	320	24	100	0.98	134	2	5,500	5,000	
OSV 120-43	12,000	20	214	4.3	450	350	28	100	0.90	168	2	5,500	6,800	
OSV 140-444	14,000	25	287	4.44	450	360	28	170	1.00	373	3	3,075	6,700	5,000
OSP160-444	16,000	25	310	4.44	500	400	28	200	1.00	450	3	5,000	6,500	5,400

H Pole utility height

E Flange thickness

Ø D Pole foot diameter (circumscribed)

S Section wall thickness (bottom)

A Flange side length

B Screw hole pitch

Ø C Screw openings diameter

Ø F

T Cable throughput opening

Mass* Top tension

No. of

Sections

Length X

Length Y

Length Z

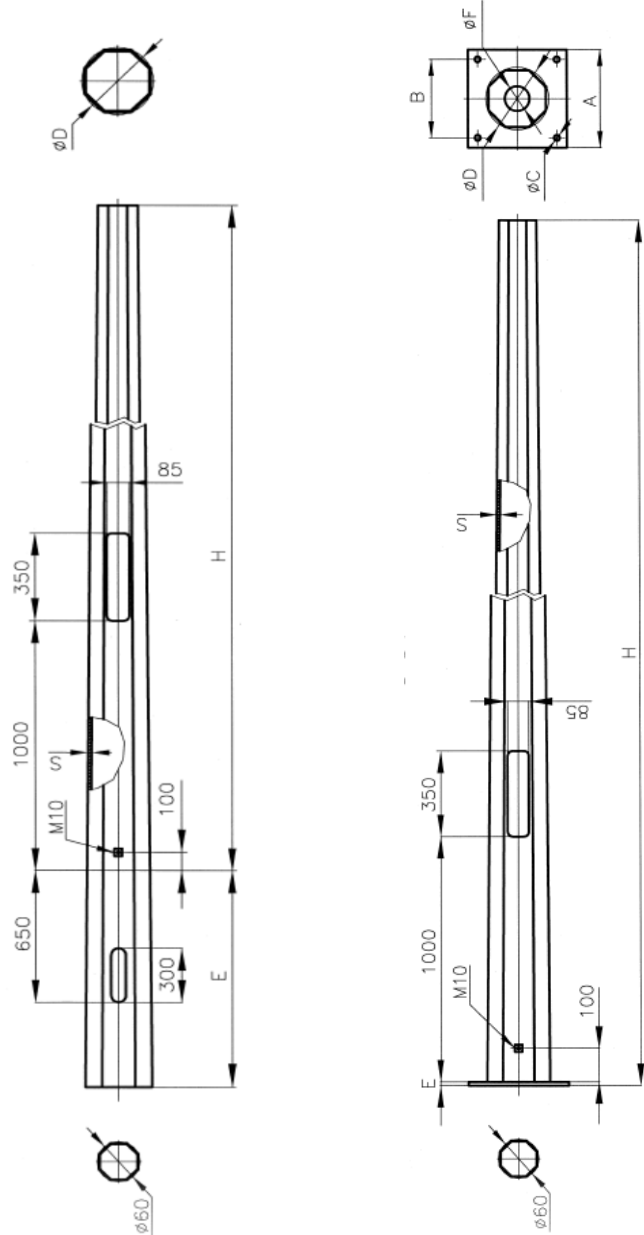
Number of sections for reaching the utility length

First section length (bottom)

Second section length

Third section length

**Sheet Metal Bent
Pyramidal Pole**



**Fig. 1 – Sheet Metal Bent Pyramidal Pole
OSV Clamped Lighting Pole**

**Fig. 2 – Sheet Metal Bent Pyramidal Pole
OSP Flange Lighting Pole**

Contact

ELTODO EG, a.s.
 Novodvorská 1010/14
 142 01 Praha 4
 Phone: +420 261 346 828
 Fax: +420 261 346 803
 e-mail: eltodo@eltodo.cz
<http://www.eltodo.cz>