EUROFORVARD®

ABOUT US

EUROFORVARD – Ukrainian manufacturer of multifaceted poles and metal structures. Since 2004, we have been successfully selling our products and implementing projects of our customers.

For production we use modern professional equipment and use only those certified raw materials. The reliability and quality of our products are confirmed by certificates and meet state and European standards.

We have gathered in our team the best industry specialists from all over Ukraine.

We strive and do our best to make our products useful for everyone. That is why we are constantly improving and expanding the range of our products.

Our main areas of production are:

- street and park lighting poles;
- contact line poles of the city electric transport;
- poles for autonomous lighting.

Also, based on the individual requirements of the customer, we develop and design products of any complexity:

- floodlight towers;
- mobile towers;
- flagsticks;
- lightning receivers;
- metal poles of overhead power lines.

Production capacity allows us to produce up to two thousand metal poles per month.

To increase the service life and increase the wear resistance, all products are subjected to anti-corrosion treatment by the method of hot-dip galvanizing.

Most of all, we want to be sure of the reliability and safety of the installed products, which is why we always share our experience and provide expert advice to our partners and customers.

During years of our activity, we have proven that we are experienced manufacturer and a reliable partner. Many of our customers really appreciate our products. Join them!


ORGANIZATION FOR TECHNICAL CONFORMITY

CERTIFICATE

OF CONSTANCY OF PERFORMANCE

LLC «EUROFORVARD UKRAINE»


ISO 9001

MANAGEMENT SYSTEMS CERTIFICATION BODY

CERTIFICATE

FOR QUALITY MANAGEMENT SYSTEM

IAF

TOVARYSTVO Z OBMEZHENOYU VIDPOVIDALNISTYU «NAUKOVO-VYROBNYCHE PIDPRYYEMSTVO «YEVROFORVARD UKRAYINA»

ДСТУ EN ISO 9001:2018

(EN ISO 9001:2015, IDT; ISO 9001:2015, IDT)

Andriy ANDRIUSHKO

Head of Certification Body

QUALITY MANAGEMENT SYSTEMS


МІНЕКОНОМІКИ

СЕРТИФІКАТ ВІДПОВІДНОСТІ

CERTIFICATE of CONFORMITY


МІНЕКОНОМІКИ

СЕРТИФІКАТ ВІДПОВІДНОСТІ

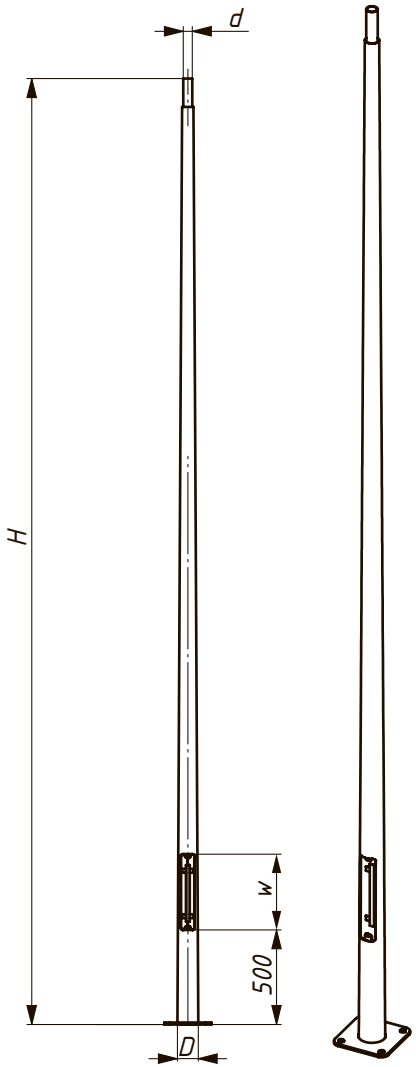
CERTIFICATE of CONFORMITY

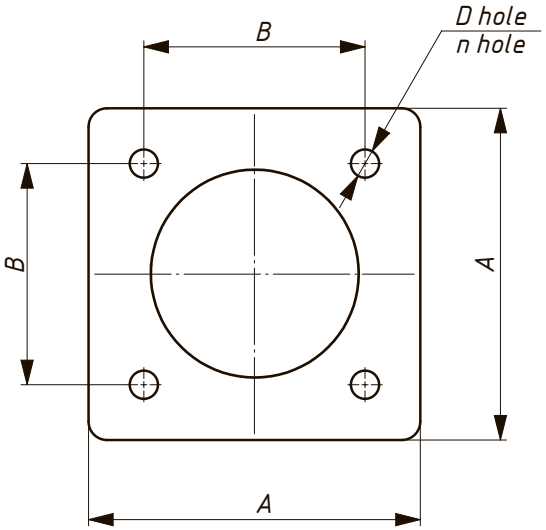
CONTENT

ROUND CONICAL

PARK LIGHTING POLES

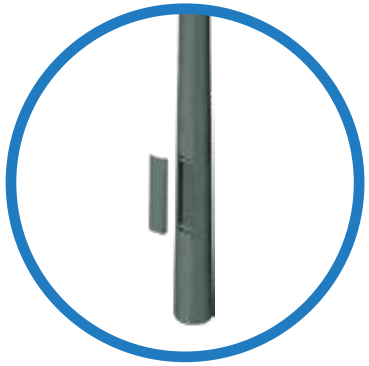
The round conical lighting poles from 3 to 8 meters high are designed for installation in parks and squares. This type of poles is mounted on a previously prepared foundation base of the anchor type and provides exclusively for the underground supply of the power cable.



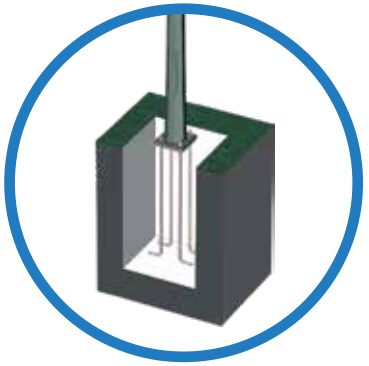


Name of pole	Weight	Wall thickness	Pole dimensions			Flange dimensions				Service hatch dimensions		Type of foundation
	m	t	H	d	D	A	B	D hole	n hole	w	v	
	kg	mm	m	mm	mm	mm	mm	mm	PCs	mm	mm	Embedded
RCP-3/3	22	3	3	60	90	250	190	23	4	400	60	ABF MFCP 4xM20x800
RCP-4/3	29	3	4	60	100	250	190	23	4	400	70	ABF MFCP 4xM20x800
RCP-5/3	37	3	5	60	110	250	190	23	4	400	70	ABF MFCP 4xM20x800
RCP-6/3	46	3	6	60	120	250	190	23	4	400	70	ABF MFCP 4xM20x1000
RCP-7/3	55	3	7	60	130	250	190	23	4	400	70	ABF MFCP 4xM20x1000
RCP-8/3	66	3	8	60	140	250	190	23	4	400	90	ABF MFCP 4xM20x1000

BRACKET MOUNTING POINT



SERVICE HATCH

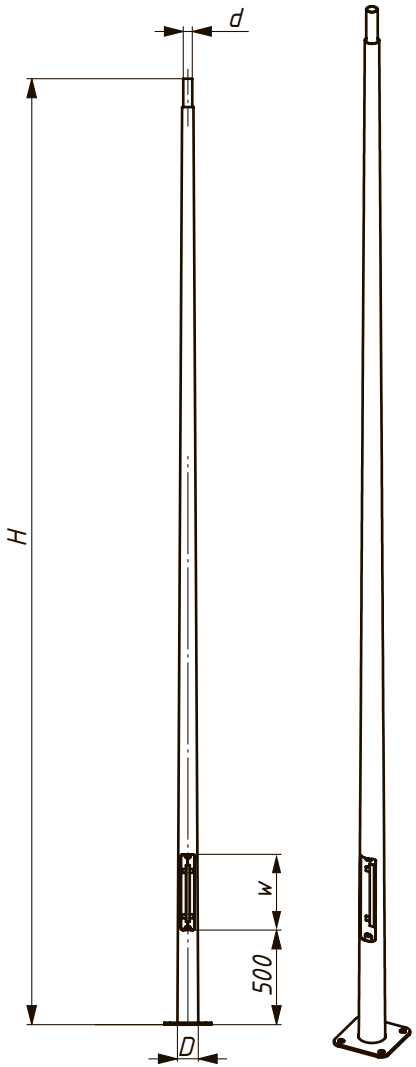


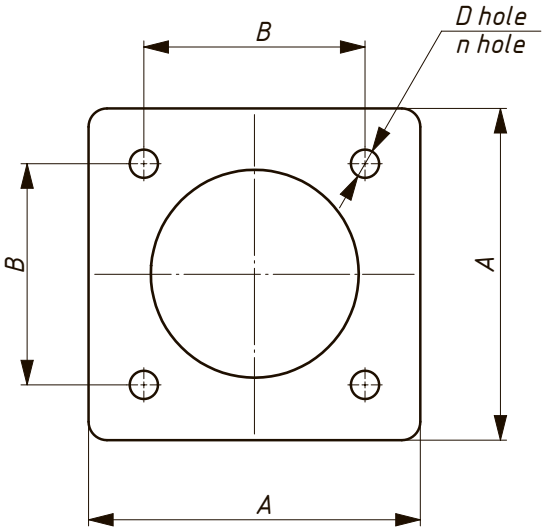
FLANGE CONNECTION

ROUND CONICAL

STREET LIGHTING POLES

The round conical lighting poles from 7 to 12 meters high are designed for installation along streets in populated areas, as well as on roads and highways. This type of poles is mounted on a previously prepared foundation base of the anchor type and provides exclusively for the underground supply of the power cable.

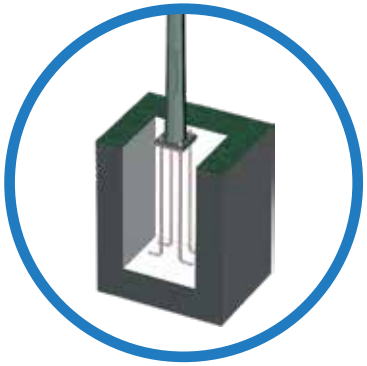




Name of pole	Weight	Wall thickness	Pole dimensions			Flange dimensions				Service hatch dimensions		Type of foundation
	m	t	H	d	D	A	B	D hole	n hole	w	v	
	kg	mm	m	mm	mm	mm	mm	mm	PCs	mm	mm	Embedded
RCP-7/4	72	4	7	60	130	250	190	23	4	400	70	ABF MFCP 4xM20x1000
RCP-8/4	84	4	8	60	140	250	190	23	4	400	90	ABF MFCP 4xM20x1000
RCP-9/4	104	4	9	60	150	300	220	27	4	400	90	ABF MFCP 4xM24x1200
RCP-10/4	119	4	10	60	160	300	220	27	4	400	90	ABF MFCP 4xM24x1200
RCP-11/4	136	4	11	60	170	300	220	27	4	400	90	ABF MFCP 4xM24x1500/1
RCP-12/4	151	4	12	60	180	300	220	27	4	400	90	ABF MFCP 4xM24x1500/1

BRACKET MOUNTING POINT

SERVICE HATCH

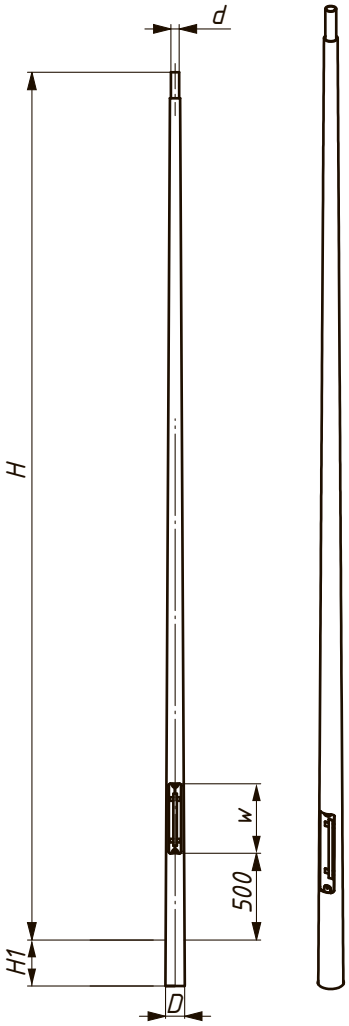


FLANGE CONNECTION

ROUND CONICAL POLES WITHOUT FLANGES

FOR PARK AND STREET LIGHTING

Round conical flangeless lighting poles with a height of 3 to 10 meters are intended for installation in parks and squares, along streets in populated areas, as well as on roads and highways. This type of poles is mounted directly in the soil or in a ready-made concrete foundation and provides exclusively for underground supply of the power cable.



Name of pole	Weight	Wall thickness	Pole dimensions			Service hatch dimensions		Depth in the ground
	m	t	H	d	D	w	v	H1
	kg	mm	m	mm	mm	mm	mm	mm
RCP-3500	22	3	3	60	95	400	70	500
RCP-4500	28	3	4	60	105	400	70	500
RCP-5500	37	3	5	60	115	400	70	500
RCP-6500	46	3	6	60	125	400	70	500
RCP-7100	51	3	6,5	60	131	400	90	600
RCP-8600	67	3	8	60	146	400	90	600
RCP-9100	73	3	8,5	60	151	400	90	600
RCP-10600	92	3	10	60	166	400	90	600

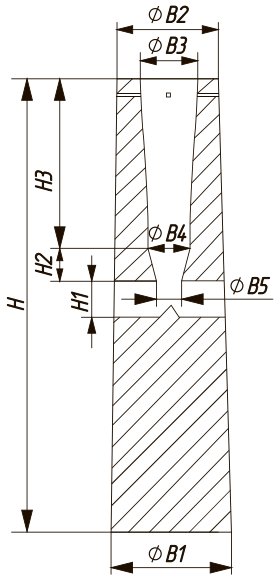
A concrete foundation is a ready-made block of concrete and an anchor bolt foundation, which sinks into a prepared hole in the ground and is intended for quick installation of flangeless lighting poles.

CONCRETE FOUNDATIONS

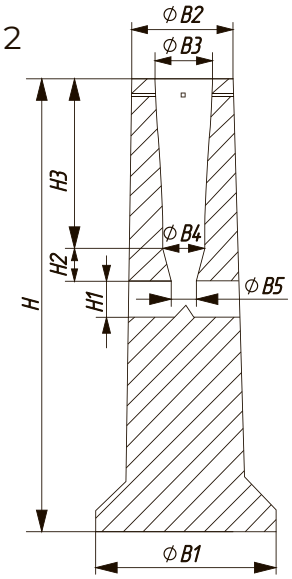
FOR FLANGELESS POLES

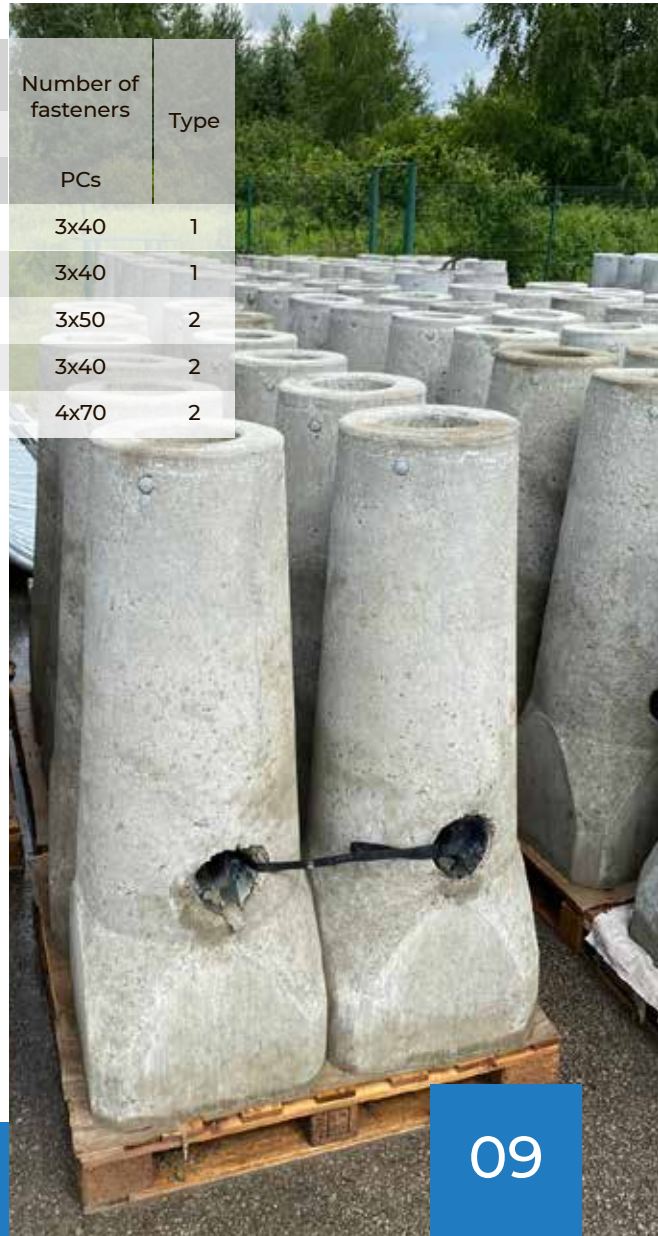
Name of concrete foundation	Pole diameter	Pole height	Weight	Dimensions									Number of fasteners	Type
			m	H	H1	H2	H3	B1	B2	B3	B4	B5		
	mm	m	kg	mm	mm	mm	mm	mm	mm	mm	mm	mm	PCs	
CF-1	100-136	1-5	94	700	120	105	370	320	290	150	138	92	3x40	1
CF-2	100-136	1-6	130	950	120	105	370	320	290	150	138	92	3x40	1
CF-3	128-168	6-10	370	1200	200	103	560	600	350	190	180	110	3x50	2
CF-4	100-160	5-8	300	1300	200	100	460	500	314	173	163	110	3x40	2
CF-5	159-224	8-12	570	1500	240	110	660	650	424	244	225	120	4x70	2

Type 1



Type 2



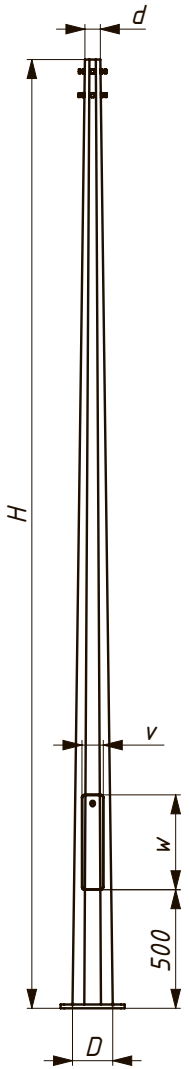


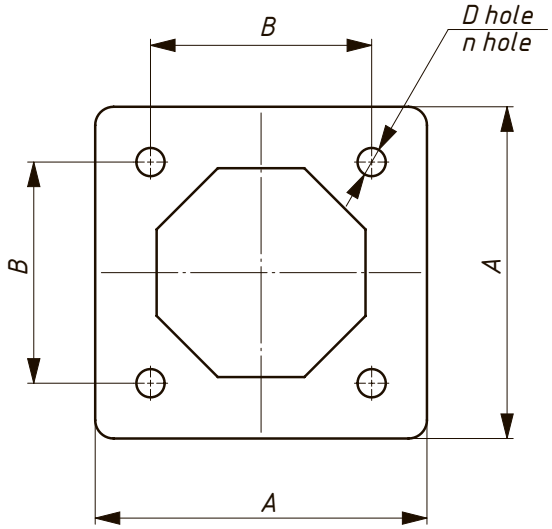
* The manufacturer reserves the right to make changes to designs and technical data (solutions) without prior notice and approval.

MULTIFACETED CONICAL

PARK LIGHTING POLES

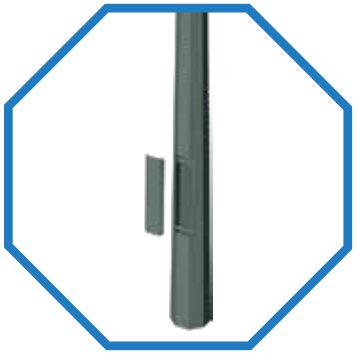
The multifaceted conical lighting poles from 3 to 8 meters high are designed for installation in parks and squares. This type of poles is mounted on a previously prepared foundation base of the anchor type and provides exclusively for the underground supply of the power cable.



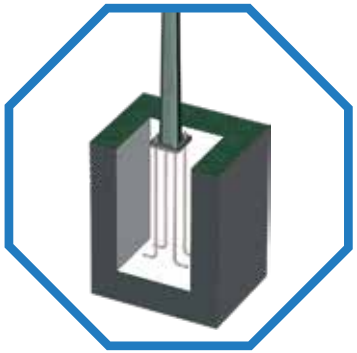


Name of pole	Weight	Wall thickness	Pole dimensions			Flange dimensions				Service hatch dimensions		Type of foundation
	m	t	H	d	D	A	B	D hole	n hole	w	v	
	kg	mm	m	mm	mm	mm	mm	mm	PCs	mm	mm	Embedded
MFCPP-3	29	3	3	60	156	250	190	23	4	500	90	ABF MFCP 4xM20x800
MFCPP-4	36	3	4	60	156	250	190	23	4	500	90	ABF MFCP 4xM20x800
MFCPP-5	45	3	5	60	156	250	190	23	4	500	90	ABF MFCP 4xM20x800
MFCPP-6	58	3	6	60	156	300	220	27	4	500	90	ABF MFCP 4xM24x1000
MFCPP-7	67	3	7	60	156	300	220	27	4	500	90	ABF MFCP 4xM24x1000
MFCPP-8	78	3	8	60	156	300	220	27	4	500	90	ABF MFCP 4xM24x1000

BRACKET MOUNTING POINT



SERVICE HATCH

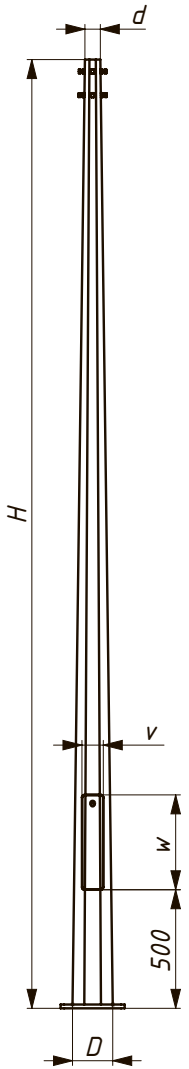


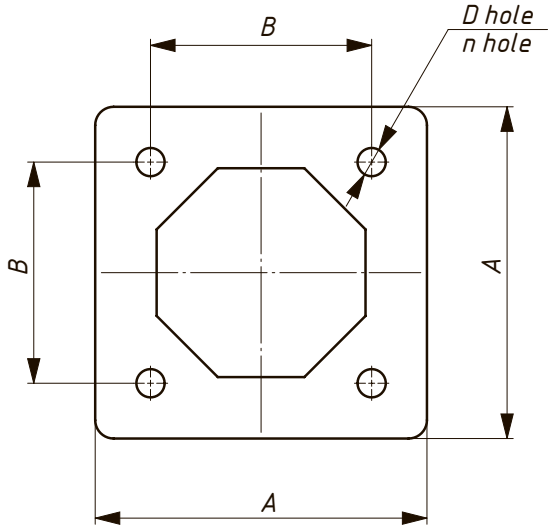
FLANGE CONNECTION

MULTIFACETED CONICAL

STREET LIGHTING POLES

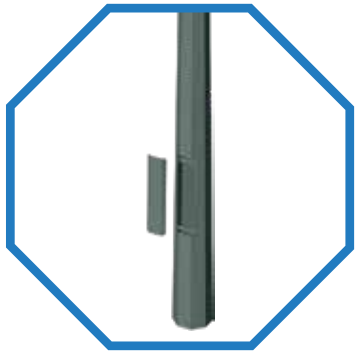
The multifaceted conical lighting poles from 6 to 12 meters high are designed for installation along streets in populated areas, as well as on roads and highways. This type of poles is mounted on a previously prepared foundation base of the anchor type and provides for the underground or air (SSIW) supply of the power cable.





Name of pole	Weight	Wall thickness	Pole dimensions			Flange dimensions				Service hatch dimensions		Type of foundation
	m	t	H	d	D	A	B	D hole	n hole	w	v	
	kg	mm	m	mm	mm	mm	mm	mm	PCs	mm	mm	Embedded
MFCSP-7/3	75	3	7	60	191	300	220	27	4	500	105	ABF MFCP 4xM24x1000
MFCSP-8/3	86	3	8	60	191	300	220	27	4	500	105	ABF MFCP 4xM24x1000
MFCSP-9/3	96	3	9	60	191	300	220	27	4	500	105	ABF MFCP 4xM24x1000
MFCSP-10/3	108	3	10	60	191	300	220	27	4	500	105	ABF MFCP 4xM24x1200
MFCSP-6/4	75	4	6	60	156	300	220	27	4	500	90	ABF MFCP 4xM24x1000
MFCSP-7/4	97	4	7	60	191	300	220	27	4	500	105	ABF MFCP 4xM24x1000
MFCSP-8/4	110	4	8	60	191	300	220	27	4	500	105	ABF MFCP 4xM24x1000
MFCSP-9/4	123	4	9	60	191	300	220	27	4	500	105	ABF MFCP 4xM24x1200
MFCSP-10/4	137	4	10	60	191	300	220	27	4	500	105	ABF MFCP 4xM24x1200
MFCSP-11/4	149	4	11	60	191	300	220	27	4	500	105	ABF MFCP 4xM24x1500/1
MFCSP-12/4	162	4	12	60	191	300	220	27	4	500	105	ABF MFCP 4xM24x1500/1

BRACKET MOUNTING POINT



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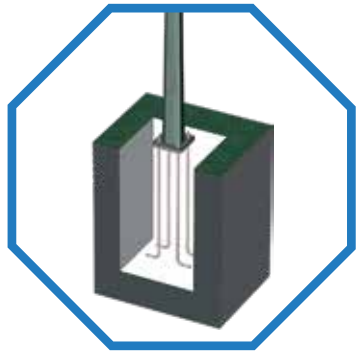
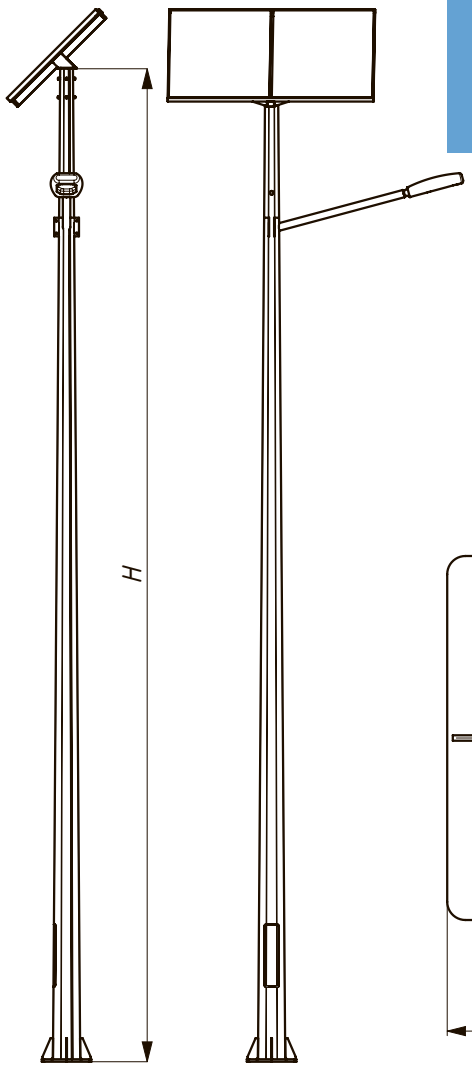


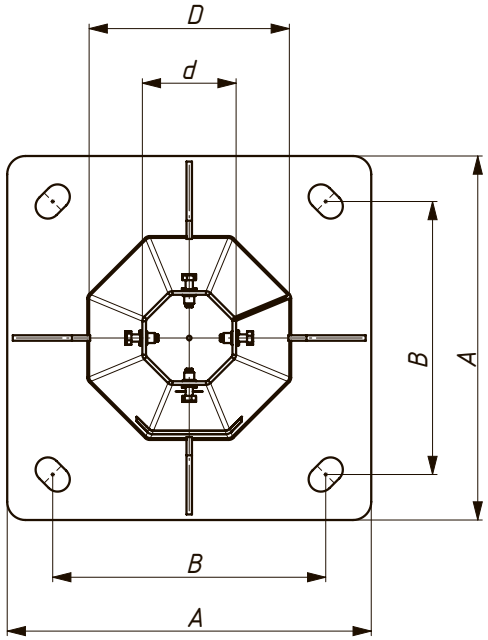
FLANGE CONNECTION

MULTIFACETED POLES

FOR SOLAR PANELS

The poles are specially designed for autonomous lighting complexes, which are used to illuminate highways, squares, parks, streets, playgrounds, pedestrian crossings and many other street objects. They are installed in places where it is difficult or impossible to supply electrical energy, there is no electrical network, or for the purpose of increasing energy efficiency.





DESIGN FEATURES

The faceted conical barrel of the pole is made of sheet steel by bending with one or two longitudinal welds and consists of one or more sections. This type of poles is designed taking into account the load on them and is reinforced with scarves in the lower part.

ADVANTAGES

- It is possible to place additional special equipment: traffic lights, anti-vandal protection, signs, etc.;
- An autonomous lighting complex does not require a power cable;
- Works in automatic mode (does not require maintenance);
- Poles are easy to install and operate;
- There is no need a large land acquisition under the construction;
- Aesthetic appearance.

COATING

Corrosion protection by hot galvanizing complies with DSTU B V.2.6-193:2013 and is controlled in accordance with the international standard ISO 1461:2009 (which provides corrosion protection of the product and the absence of operating costs for at least 25 years). This type of coating is not decorative and is purely functional.

Name of pole	Weight	Wall thickness	Pole dimensions			Flange dimensions			
	m	t	H	d	D	A	B	D hole	n hole
	kg	mm	m	mm	mm	mm	mm	mm	PCs
MFPSP-6-220	110	4	6	103	220	400	300	27	4
MFPSP-6-252	119	4	6	103	252	400	300	30	4
MFPSP-6-300	131	4	6	103	300	400	300	30	4
MFPSP-7-220	127	4	7	103	220	400	300	27	4
MFPSP-7-252	137	4	7	103	252	400	300	30	4
MFPSP-7-300	150	4	7	103	300	400	300	30	4
MFPSP-8-220	142	4	8	103	220	400	300	27	4
MFPSP-8-252	154	4	8	103	252	400	300	30	4
MFPSP-8-300	171	4	8	103	300	400	300	30	4
MFPSP-9-220	158	4	9	103	220	400	300	27	4
MFPSP-9-252	172	4	9	103	252	400	300	30	4
MFPSP-9-300	191	4	9	103	300	400	300	30	4
MFPSP-10-220	174	4	10	103	220	400	300	30	4
MFPSP-10-252	189	4	10	103	252	400	300	30	4
MFPSP-10-300	206	4	10	103	300	400	300	30	4

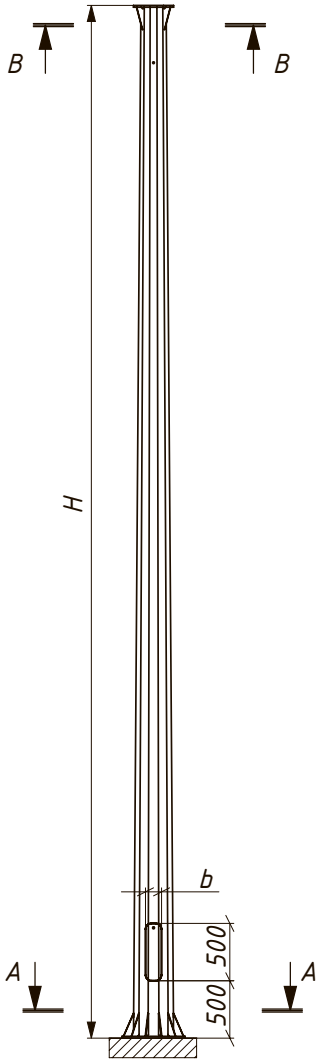
Anchor bolt foundations for poles:

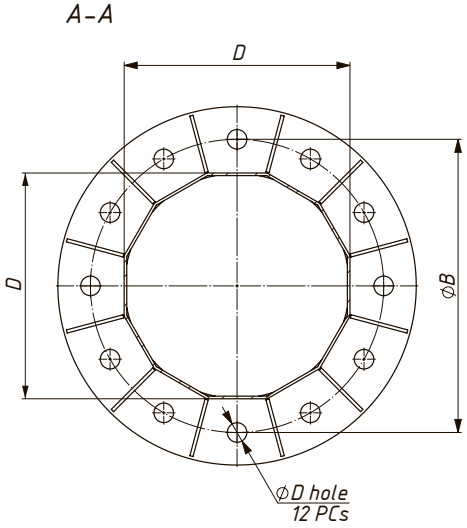
Name of anchor bolt foundation	Weight	Dimensions					
	m	A	B	C	H	Db	nb
	kg	mm	mm	mm	mm	mm	PCs
ABF MFPSP 4xM24x1500	25	380	300	325	1500	24	4
ABF MFPSP 4xM27x1500	32	380	300	325	1500	27	4

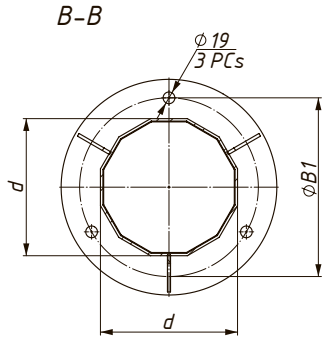
MULTIFACETED CONICAL

REINFORCED POLES (FLANGE)

Multifaceted conical reinforced poles are designed for installation along the streets, on highways and roads with traffic of any intensity. They can provide for the installation of street lights using lighting brackets, suspension of self-supporting insulated wire and the installation of extensions, advertising and information structures, highway markings, traffic lights and video surveillance systems. They can also be used as end or anchor-angle poles for conducting self-supporting insulated wires.





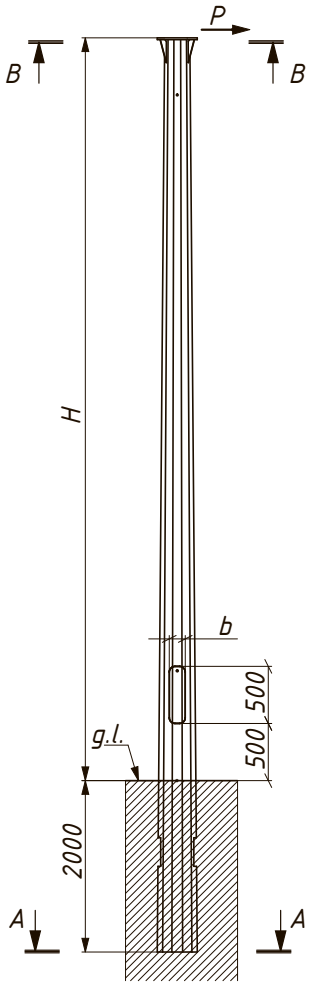


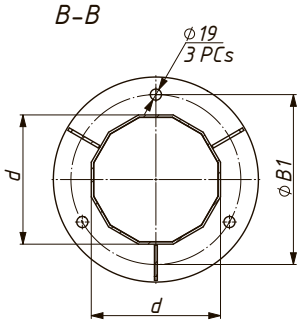
Name of pole	Weight	Estimated load	Pole dimensions			Flange dimensions				Service hatch dimensions	Type of foundation
	m	P	H	d	D	B	B1	D hole	n hole	b	
	kg	t	m	mm	mm	mm	mm	mm	PCs	mm	Embedded
MFCRP 8/0,25	179	0,25	8	120	220	310	190	33	6	120	ABF MFCRP 6xM30x1050
MFCRP 8/0,4	209	0,4	8	120	270	370	190	27	12	120	ABF MFCRP 12xM24x850
MFCRP 8/0,7	251	0,7	8	120	360	460	190	30	12	120	ABF MFCRP 12xM27x1000
MFCRP 8/1,0	294	1,0	8	120	430	530	190	33	12	140	ABF MFCRP 12xM30x1050
MFCRP 8/1,3	327	1,3	8	120	480	590	190	39	12	140	ABF MFCRP 12xM36x1300
MFCRP 9/0,25	197	0,25	9	120	220	310	190	33	6	120	ABF MFCRP 6xM30x1050
MFCRP 9/0,4	229	0,4	9	120	270	370	190	27	12	120	ABF MFCRP 12xM24x850
MFCRP 9/0,7	276	0,7	9	120	360	460	190	30	12	120	ABF MFCRP 12xM27x1000
MFCRP 9/1,0	322	1,0	9	120	430	530	190	33	12	140	ABF MFCRP 12xM30x1050
MFCRP 9/1,3	360	1,3	9	120	480	590	190	39	12	140	ABF MFCRP 12xM36x1300
MFCRP 10/0,25	216	0,25	10	120	220	310	190	33	6	120	ABF MFCRP 6xM30x1050
MFCRP 10/0,4	250	0,4	10	120	270	370	190	27	12	120	ABF MFCRP 12xM24x850
MFCRP 10/0,7	302	0,7	10	120	360	460	190	30	12	120	ABF MFCRP 12xM27x1000
MFCRP 10/1,0	352	1,0	10	120	430	530	190	33	12	140	ABF MFCRP 12xM30x1050
MFCRP 10/1,3	448	1,3	10	220	480	590	290	39	12	160	ABF MFCRP 12xM36x1300
MFCRP 11/0,25	234	0,25	11	120	220	310	190	33	6	120	ABF MFCRP 6xM30x1050
MFCRP 11/0,4	271	0,4	11	120	270	370	190	27	12	120	ABF MFCRP 12xM24x850
MFCRP 11/0,7	327	0,7	11	120	360	460	190	30	12	120	ABF MFCRP 12xM27x1000
MFCRP 11/1,0	443	1,0	11	220	430	530	290	33	12	140	ABF MFCRP 12xM30x1050
MFCRP 11/1,3	485	1,3	11	220	480	590	290	39	12	160	ABF MFCRP 12xM36x1300
MFCRP 12/0,25	251	0,25	12	120	220	310	190	33	6	120	ABF MFCRP 6xM30x1050
MFCRP 12/0,4	291	0,4	12	120	270	370	190	27	12	120	ABF MFCRP 12xM24x850
MFCRP 12/0,7	419	0,7	12	220	360	460	290	30	12	120	ABF MFCRP 12xM27x1000
MFCRP 12/1,0	477	1,0	12	220	430	530	290	33	12	140	ABF MFCRP 12xM30x1050
MFCRP 12/1,3	522	1,3	12	220	480	590	290	39	12	160	ABF MFCRP 12xM36x1300

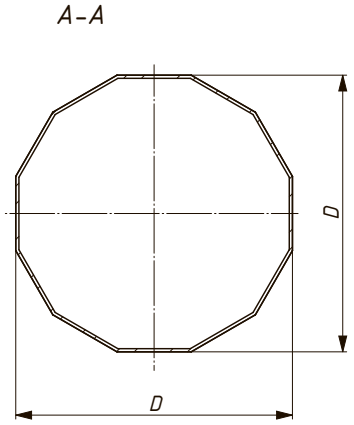
MULTIFACETED CONICAL

REINFORCED POLES WITH INSTALLATION IN THE GROUND

This type of poles is intended for the installation of lamps that illuminate roads and highways, air suspension of cables of the electric network of external lighting (SSIW), billboards for various purposes - advertising, information, etc. They are an alternative to reinforced flange poles, and are mounted directly into the ground.





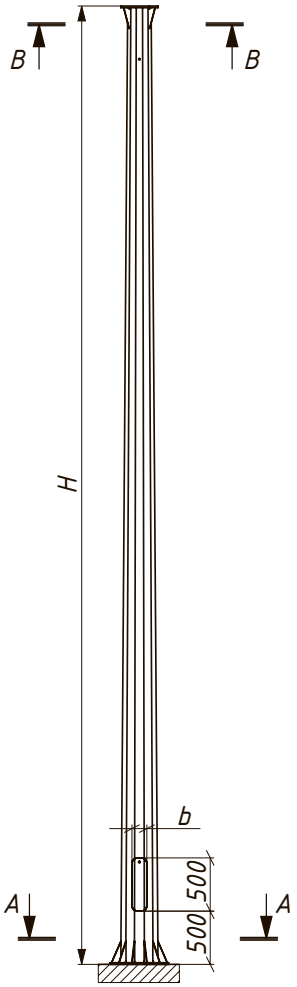


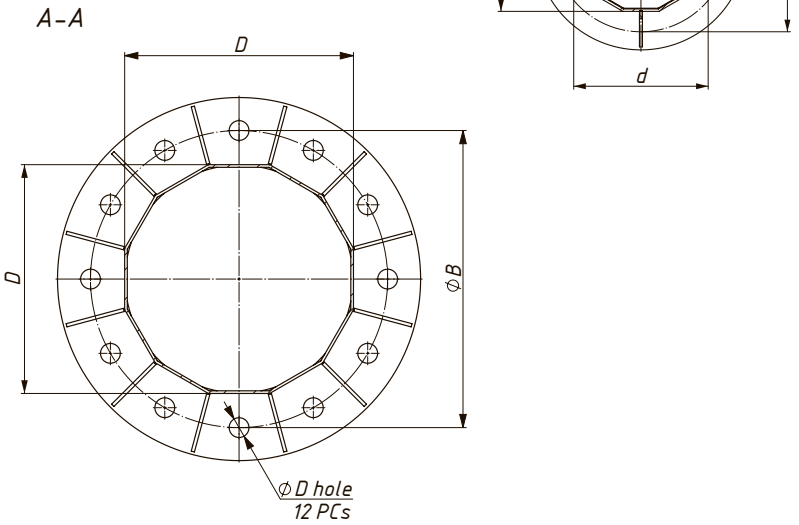
Name of pole	Weight	Estimated load	Pole dimensions				Flange dimensions	Service hatch dimensions
	m	P	H	Total product length	d	D	B1	b
	kg	t	m	m	mm	mm	mm	mm
MFCRPG 8/0,25	204	0,25	8	10	120	245	190	120
MFCRPG 8/0,4	238	0,4	8	10	120	310	190	120
MFCRPG 8/0,7	296	0,7	8	10	120	420	190	120
MFCRPG 8/1,0	344	1,0	8	10	120	510	190	140
MFCRPG 8/1,3	375	1,3	8	10	120	570	190	140
MFCRPG 9/0,25	223	0,25	9	11	120	245	190	120
MFCRPG 9/0,4	261	0,4	9	11	120	310	190	120
MFCRPG 9/0,7	324	0,7	9	11	120	420	190	120
MFCRPG 9/1,0	376	1,0	9	11	120	510	190	140
MFCRPG 9/1,3	412	1,3	9	11	120	570	190	140
MFCRPG 10/0,25	243	0,25	10	12	120	245	190	120
MFCRPG 10/0,4	284	0,4	10	12	120	310	190	120
MFCRPG 10/0,7	353	0,7	10	12	120	420	190	120
MFCRPG 10/1,0	411	1,0	10	12	120	510	190	140
MFCRPG 10/1,3	490	1,3	10	12	220	535	290	160

MULTIFACETED CONICAL POLES

OF CONTACT LINE FOR URBAN TRANSPORT (FLANGE)

This type of poles is used for fastening contact lines of urban electric vehicles (for example, tram and trolleybus lines). They can also provide for the installation of street lights using lighting brackets, suspension of self-supporting insulated wire and the installation of extensions, advertising and information structures, highway markings, traffic lights and video surveillance systems.



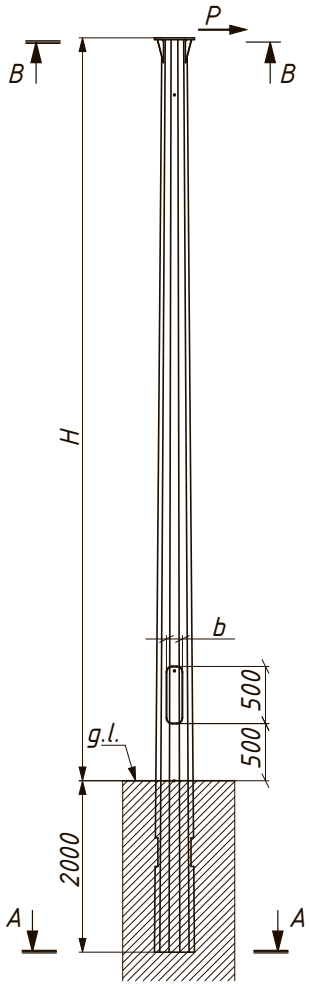


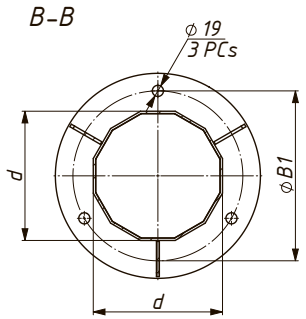
Name of pole	Weight	Estimated load	Pole dimensions			Flange dimensions				Service hatch dimensions	Type of foundation
	m	P	H	d	D	B	B1	D hole	n hole	b	
	kg	t	m	mm	mm	mm	mm	mm	PCs	mm	Embedded
MFPCL 9/0,7	458	0,7	9	220	350	450	290	30	12	140	ABF MFPCL 12xM27x1000
MFPCL 9/1,0	467	1,0	9	220	350	450	290	30	12	140	ABF MFPCL 12xM27x1000
MFPCL 9/1,3	509	1,3	9	220	400	500	290	33	12	140	ABF MFPCL 12xM30x1050
MFPCL 9/1,5	553	1,5	9	280	400	500	350	33	12	140	ABF MFPCL 12xM30x1050
MFPCL 9/2,0	612	2,0	9	280	450	560	350	39	12	140	ABF MFPCL 12xM36x1300/1
MFPCL 9/2,5	652	2,5	9	280	500	610	350	39	12	160	ABF MFPCL 12xM36x1300/2
MFPCL 10/0,7	512	0,7	10	220	350	450	290	30	12	140	ABF MFPCL 12xM27x1000
MFPCL 10/1,0	557	1,0	10	220	400	500	290	33	12	140	ABF MFPCL 12xM30x1050
MFPCL 10/1,3	622	1,3	10	220	450	560	290	39	12	140	ABF MFPCL 12xM36x1300/1
MFPCL 10/1,5	669	1,5	10	280	450	560	350	39	12	140	ABF MFPCL 12xM36x1300/1
MFPCL 10/2,0	714	2,0	10	280	500	610	350	39	12	160	ABF MFPCL 12xM36x1300/2
MFPCL 10/2,5	757	2,5	10	280	550	660	350	39	12	160	ABF MFPCL 12xM36x1300/3
MFPCL 11/0,7	595	0,7	11	220	400	500	290	33	12	140	ABF MFPCL 12xM30x1050
MFPCL 11/1,0	661	1,0	11	220	450	560	290	39	12	140	ABF MFPCL 12xM36x1300/1
MFPCL 11/1,3	708	1,3	11	220	500	610	290	39	12	160	ABF MFPCL 12xM36x1300/2
MFPCL 11/1,5	763	1,5	11	280	500	610	350	39	12	160	ABF MFPCL 12xM36x1300/2
MFPCL 11/2,0	811	2,0	11	280	550	660	350	39	12	160	ABF MFPCL 12xM36x1300/3
MFPCL 11/2,5	886	2,5	11	280	620	730	350	39	12	180	ABF MFPCL 12xM36x1300/4
MFPCL 12/0,7	655	0,7	12	220	400	500	290	33	12	140	ABF MFPCL 12xM30x1050
MFPCL 12/1,0	725	1,0	12	220	450	560	290	39	12	140	ABF MFPCL 12xM36x1300/1
MFPCL 12/1,3	765	1,3	12	220	500	610	290	39	12	160	ABF MFPCL 12xM36x1300/2
MFPCL 12/1,5	823	1,5	12	280	500	610	350	39	12	160	ABF MFPCL 12xM36x1300/2
MFPCL 12/2,0	936	2,0	12	280	620	730	350	39	12	180	ABF MFPCL 12xM36x1300/4
MFPCL 12/2,5	956	2,5	12	280	620	730	350	39	12	180	ABF MFPCL 12xM36x1300/4

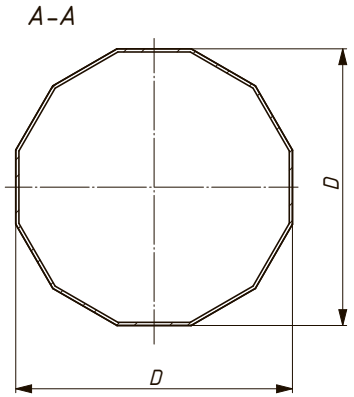
MULTIFACETED CONICAL POLES

OF CONTACT LINE FOR URBAN TRANSPORT WITH INSTALLATION IN THE GROUND

This type of poles is designed for fastening the contact line of trams and trolleybuses, and also at the same time, for the installation of lighting devices, suspension of self-supporting insulated wires, billboards for various purposes, traffic signs, traffic lights, etc. They are an alternative to poles with a flange connection from the foundation, and are mounted directly into the ground.





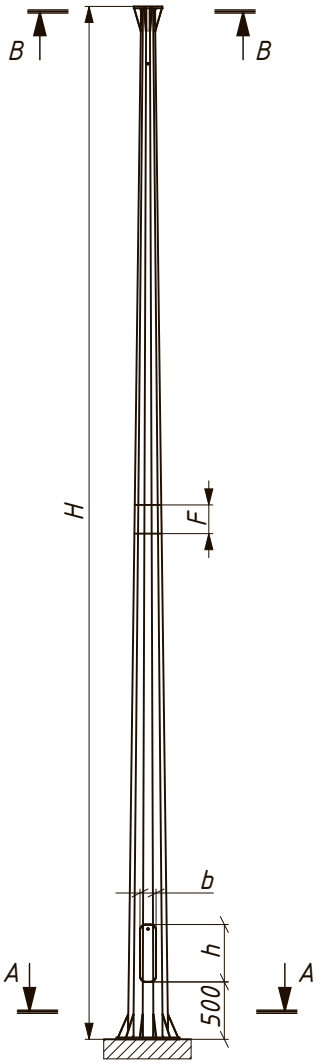


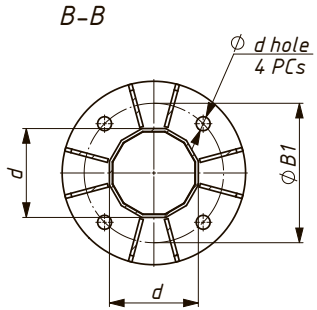
Name of pole	Weight	Estimated load	Pole dimensions				Flange dimensions	Service hatch dimensions
	m	P	H	Total product length	d	D	B1	b
	kg	t	m	m	mm	mm	mm	mm
MFPCLG 9/0,7	516	0,7	9	11	220	380	290	140
MFPCLG 9/1,0	522	1,0	9	11	220	380	290	140
MFPCLG 9/1,3	572	1,3	9	11	220	440	290	140
MFPCLG 9/1,5	625	1,5	9	11	280	440	350	140
MFPCLG 9/2,0	675	2,0	9	11	280	500	350	140
MFPCLG 9/2,5	726	2,5	9	11	280	560	350	160
MFPCLG 10/0,7	587	0,7	10	12	220	380	290	140
MFPCLG 10/1,0	645	1,0	10	12	220	440	290	140
MFPCLG 10/1,3	701	1,3	10	12	220	500	290	140
MFPCLG 10/1,5	760	1,5	10	12	280	500	350	140
MFPCLG 10/2,0	818	2,0	10	12	280	560	350	160
MFPCLG 10/2,5	855	2,5	10	12	280	600	350	160

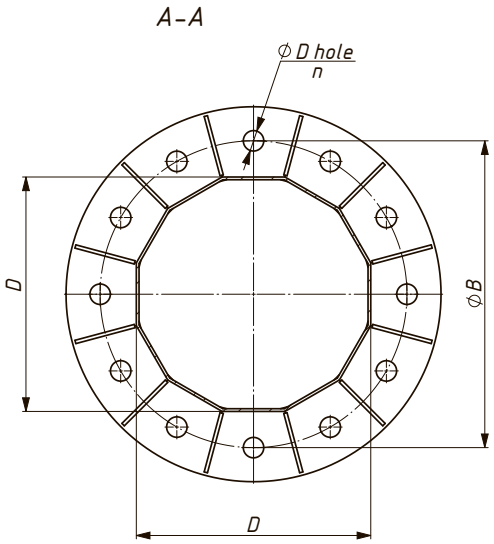
MULTIFACETED CONICAL

FLOODLIGHT TOWERS

Multifaceted floodlight towers are used to illuminate highways and interchanges, parking lots, seaports, airports, warehouses, industrial enterprises and other open areas.







Name of tower	Weight	Tower dimensions				Lower flange dimensions			Upper flange dimensions		Service hatch dimensions	
	m	H	F	d	D	B	D hole	n hole	B1	d hole	h	b
	kg	m	mm	mm	mm	mm	mm	PCs	mm	mm	mm	mm
MFCT-12	291	12	-	120	300	400	33	6	190	19	500	140
MFCT-14	379	14	500	120	340	440	30	12	190	19	500	140
MFCT-16	467	16	500	120	380	480	30	12	190	19	500	160
MFCT-18	558	18	500	120	420	520	33	12	190	19	500	160
MFCT-20	669	20	500	120	470	570	33	12	190	19	500	160

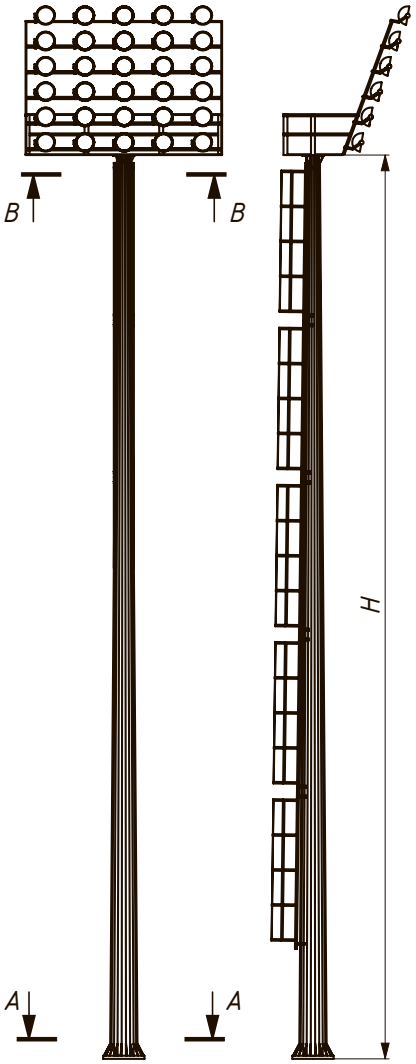
Anchor bolt foundations for multifaceted floodlight towers:

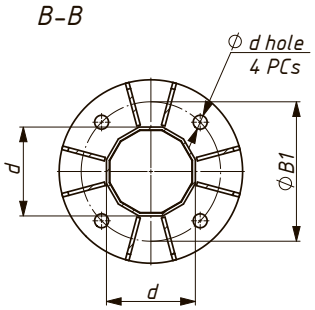
Name of tower	Name of anchor bolt foundation	Weight	Dimensions			
		m	B	H	Db	nb
		kg	mm	mm	mm	PCs
MFCT-12	ABF MFCT 6xM30x1050	69	400	1050	30	6
MFCT-14	ABF MFCT 12xM27x1000/1	99	440	1000	27	12
MFCT-16	ABF MFCT 12xM27x1000/2	100	480	1000	27	12
MFCT-18	ABF MFCT 12xM30x1050/1	126	520	1050	30	12
MFCT-20	ABF MFCT 12xM30x1050/2	131	570	1050	30	12

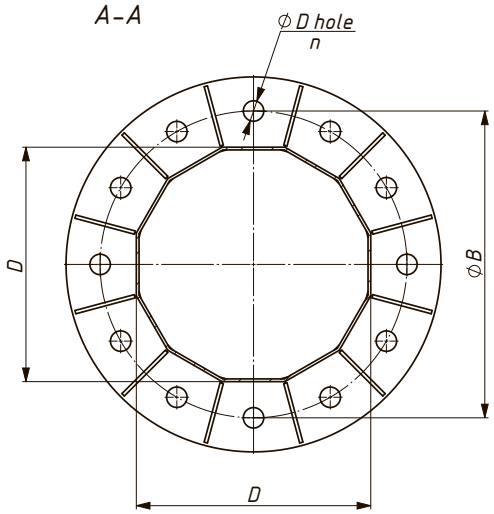
STADIUM

FLOODLIGHT TOWERS

Floodlight towers with stationary platforms are designed to illuminate large spaces and sports facilities: stadiums, infrastructure, ski slopes, parking lots, airports, railway stations, seaports, storage and other open areas.







DESIGN FEATURES

The faceted conical barrel of the tower is made of sheet steel by bending with one or two longitudinal welds and can reach a height of 80 meters. The tower consists of one or more sections, with an upper flange, onto which a stationary platform with traverses or cassette is installed for up to 60 lighting devices. To access the crown on the trunk of the tower are located staircases on which a fence can be installed. The mast (tower) can be equipped with platforms for rest and accommodation of additional equipment.

The calculation of floodlight mast of any type is based on the characteristics of the installed equipment (windward area, weight, number of lighting devices), the wind area and the climatic performance.

ADVANTAGES

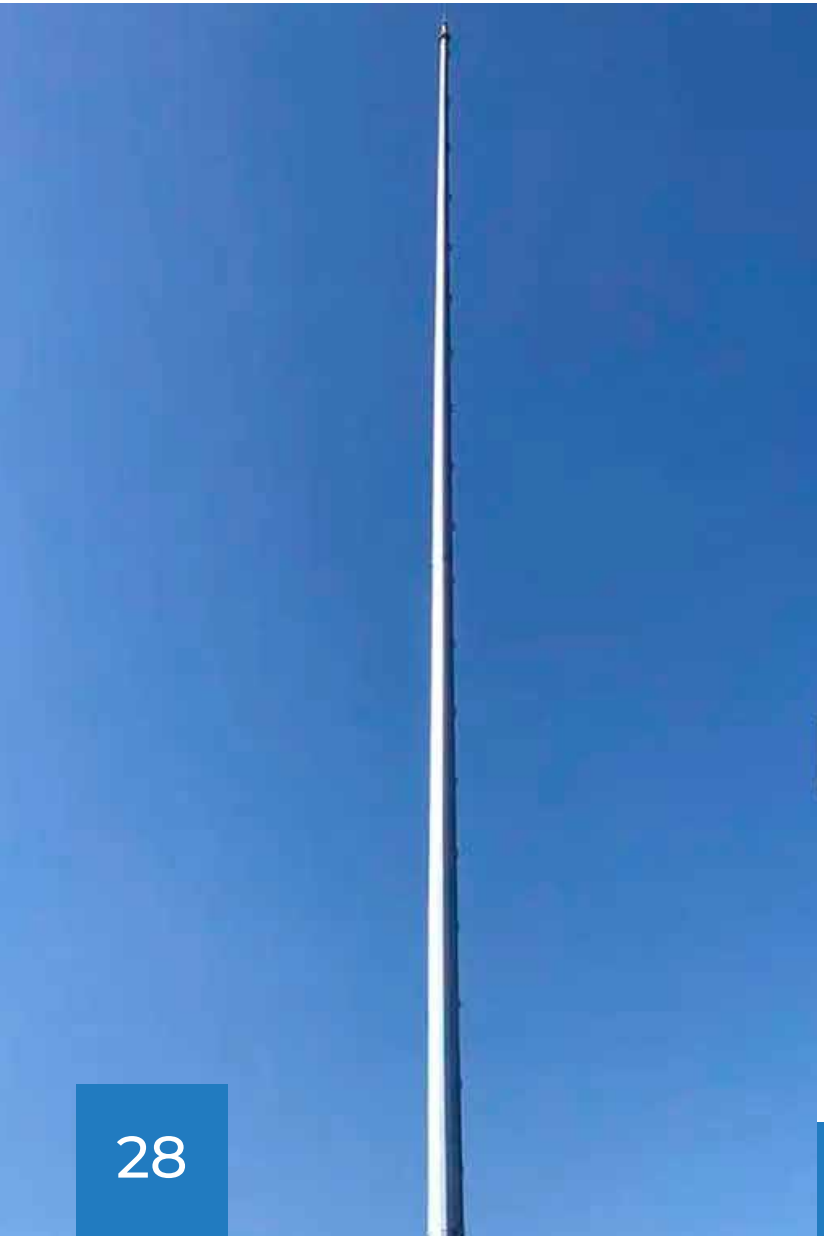
- It is possible to place any number of lighting fixtures and other equipment;
- Large selection of platforms (cassettes);
- Easy access and adjustment of lighting devices;
- The tower is easy to install and operate;
- Maintenance of lighting equipment does not require special equipment;
- Aesthetic appearance.

COATING

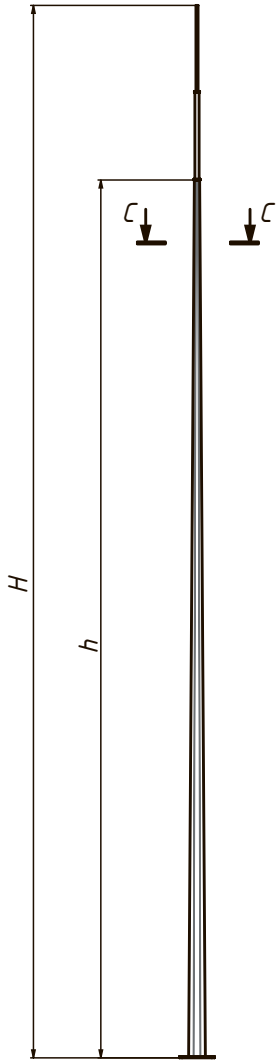
Corrosion protection by hot galvanizing complies with DSTU B V.2.6-193:2013 and is controlled in accordance with the international standard ISO 1461:2009 (which provides corrosion protection of the product and the absence of operating costs for at least 25 years). This type of coating is not decorative and is purely functional.

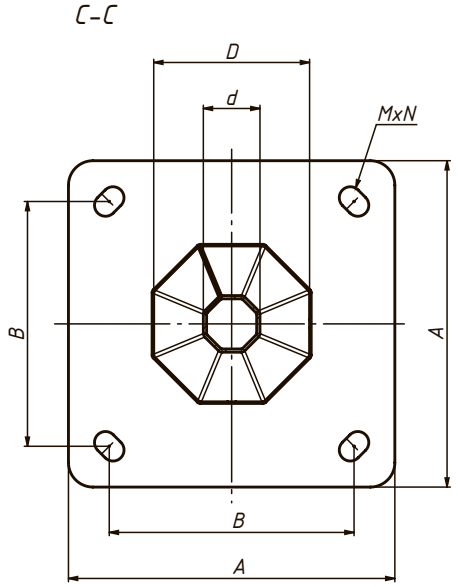
MULTIFACETED CONICAL POLES

FOR LIGHTNING RECEIVERS



The main purpose of lightning rods is to protect buildings and constructions from direct lightning strikes, which can lead to fire and destruction. Lightning rods remove overvoltage in the network, which leads to failure of various types of equipment. Protection is mandatory for facilities such as: gas station; open warehouses for storing gaseous and liquid fuel, chemicals; other industrial facilities; hotels; recreation centers; health camps.





DESIGN FEATURES

The main parts of lightning protection are lightning rod, electric current arrester, a grounding device and a supporting base. The most common lightning conductors are made on the basis of lighting poles. The faceted conical barrel of the lightning rod is made of sheet steel by the bending method with one or two longitudinal welds and consists of one or more sections. The number of sections is determined by the height of the structure, ease of installation and transportation. The lightning rod in this case is a metal rod up to 10 m long, which is installed on top of the pole.

Name of lightning receiver	Weight	Lightning receiver dimensions				Lower flange dimensions			Upper flange dimensions	
	m	H	h	d	D	B	D hole	n hole	B1	d hole
	kg	m	m	mm	mm	mm	mm	PCs	mm	mm
PLR-10	96	10	7	65	130	230	30	4	145	19
PLR-15	195	15	12	65	170	270	33	4	145	19
PLR-20	528	20	15	160	320	420	27	12	250	23
PLR-25	731	25	20	160	400	500	27	12	250	23
PLR-30	1165	30	25	160	530	640	39	16	250	23
PLR-35	1585	35	30	160	690	800	39	16	250	23
PLR-40	1910	40	32	160	700	810	39	16	250	27

ADVANTAGES

- It is possible to place additional special equipment;
- It is possible to combine the function of lighting objects;
- Poles for lightning receivers are easy to install and operate;
- There is no need a large land acquisition under the construction;
- Aesthetic appearance.

COATING

Corrosion protection by hot galvanizing complies with DSTU B V.2.6-193:2013 and is controlled in accordance with the international standard ISO 1461:2009 (which provides corrosion protection of the product and the absence of operating costs for at least 25 years). This type of coating is not decorative and is purely functional.

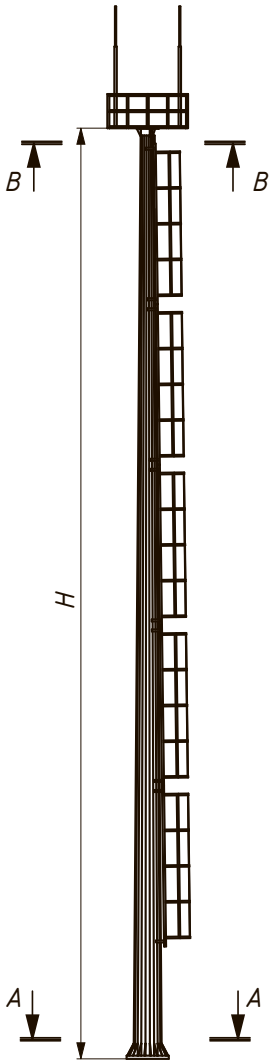
Anchor bolt foundations for poles for lightning receivers:

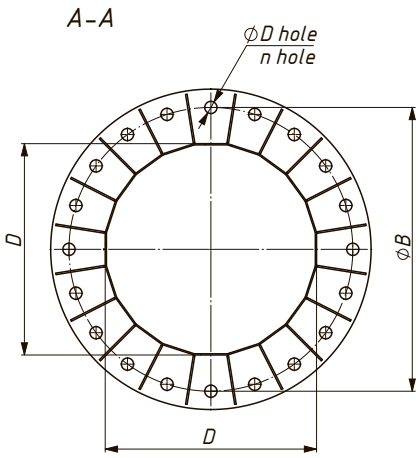
Name of lightning receiver	Name of anchor bolt foundation	Weight	Dimensions			
		m	B	H	Db	nb
		kg	mm	mm	mm	PCs
PLR-10	ABF PLR 4xM27x1000	37	230	1000	27	4
PLR-15	ABF PLR 4xM30x1050	45	270	1050	30	4
PLR-20	ABF PLR 12xM24x850/1	72	420	850	24	12
PLR-25	ABF PLR 12xM24x850/2	75	500	850	24	12
PLR-30	ABF PLR 16xM36x1300/1	278	640	1300	36	16
PLR-35	ABF PLR 16xM36x1300/2	285	800	1300	36	16
PLR-40	ABF PLR 16xM36x1300/3	285	810	1300	36	16

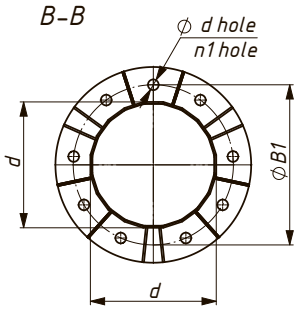
MULTIFACETED

MOBILE TOWERS

Communication poles are the main element in the organization coverage for mobile operators. They are intended for the installation of transceiver panel and radio-relay antennas of base stations of cellular communication, repeaters for various purposes, to ensure stable coverage. The towers allow mobile operators to place base stations among residential buildings or, most often, outside the city. This is possible thanks to the minimum requirements for land allocation for the installation of multifaceted towers. Masts (towers) can be made for any wind area.







Name of tower	Weight	Barrel dimensions			Lower flange dimensions			Upper flange dimensions		
	m	H	D	d	B	D hole	n hole	B1	d hole	n1 hole
	kg	m	mm	mm	mm	mm	PCs	mm	mm	PCs
MFMT-25	3088	23	782	336	930	39	20	380	23	12
MFMT-31	4870	28	1020	340	1140	39	32	420	23	12
MFMT-40	6802	39	1100	398	1230	45	20	480	23	12

DESIGN FEATURES

The faceted conical barrel of the communication towers is made of sheet steel by bending with one or two longitudinal welds. A tower consists of one or more sections, with an upper flange, on which a platform for servicing equipment can be installed, where racks for installing antennas can be located. The number of sections is determined by the height of the tower, ease of installation and transportation. When designing the structure, it is also possible to provide various attachments: stairs with a guard, brackets for securing cables, etc.

ADVANTAGES

- It is possible to place any number of special equipment;
- Easy access and adjustment of devices;
- The towers are easy to install and operate;
- There is no need a large land acquisition under the mast;
- Aesthetic appearance.

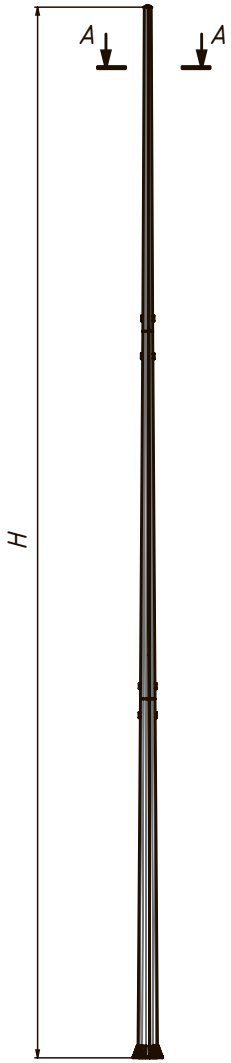
COATING

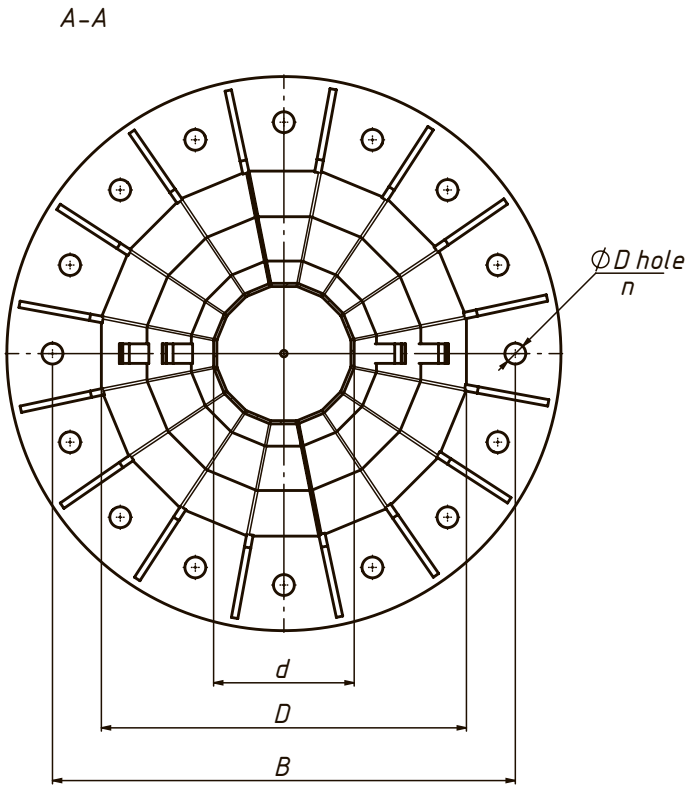
Corrosion protection by hot galvanizing complies with DSTU B V.2.6-193:2013 and is controlled in accordance with the international standard ISO 1461:2009 (which provides corrosion protection of the product and the absence of operating costs for at least 25 years). This type of coating is not decorative and is purely functional.

MULTIFACETED

FLAGSTICKS

High steel structures, which are used for placing state and corporate flags, pennants, advertising banners, and other items of an advertising and informational nature in open areas. They have a good appearance, high strength and are equipped with mechanisms for convenient raising and lowering of flags without the use of lifting equipment and additional devices.





Name of flagstick	Flagstick dimensions
	H
	m
MFF-30	32
MFF-40	42
MFF-50	52
MFF-60	62
MFF-70	72

DESIGN FEATURES

The main element of the flagstick is a faceted conical trunk made of sheet metal. The trunk of the flagpole consists of several sections, the number of which is determined by the total height of the product. Sections are connected to each other using a telescopic connection. The geometric dimensions of the trunk of the flagstick depend on wind loads, the size of the flag and the material from which the flag is made. For each object, the flagstick pole is selected individually according to the technical assignment, therefore, in each case, it is possible to foresee the presence of specific structures and equipment to solve the tasks.

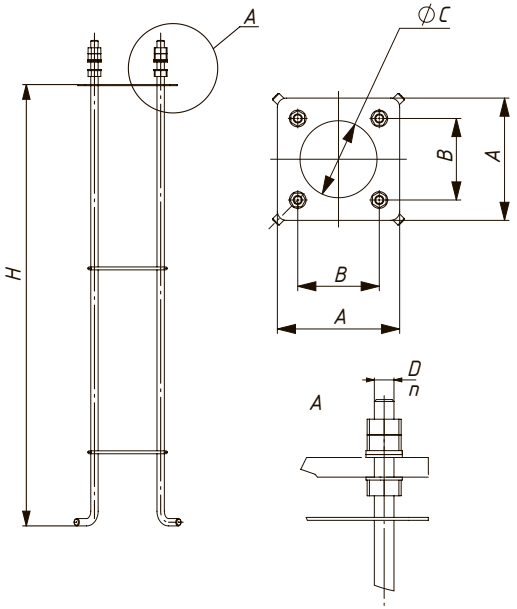
ADVANTAGES

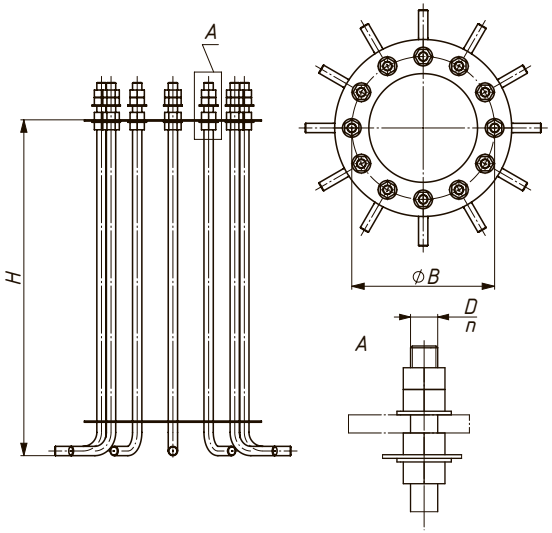
- It is possible to place additional special equipment;
- It is possible to combine the function of lighting objects;
- Flagsticks are easy to install and operate;
- There is no need a large land acquisition under the construction;
- Aesthetic appearance.

COATING

Corrosion protection by hot galvanizing complies with DSTU B V.2.6-193:2013 and is controlled in accordance with the international standard ISO 1461:2009 (which provides corrosion protection of the product and the absence of operating costs for at least 25 years). This type of coating is not decorative and is purely functional.

FOUNDATIONS





For multifaceted conical reinforced poles (flange):

Name of anchor bolt foundation	Weight	Dimensions			
	m	B	H	Db	nb
	kg	mm	mm	mm	PCs
ABF MFCRP 6xM30x1050	63	310	1050	30	6
ABF MFCRP 12xM24x850	68	370	850	24	12
ABF MFCRP 12xM27x1000	96	460	1000	27	12
ABF MFCRP 12xM30x1050	123	530	1050	30	12
ABF MFCRP 12xM36x1300	206	590	1300	36	12

For multifaceted conical floodlight towers:

Name of anchor bolt foundation	Weight	Dimensions			
	m	B	H	Db	nb
	kg	mm	mm	mm	PCs
ABF MFCT 6xM30x1050	69	400	1050	30	6
ABF MFCT 12xM27x1000/1	99	440	1000	27	12
ABF MFCT 12xM27x1000/2	100	480	1000	27	12
ABF MFCT 12xM30x1050/1	126	520	1050	30	12
ABF MFCT 12xM30x1050/2	131	570	1050	30	12

For multifaceted conical poles of contact line for urban transport (flange):

Name of anchor bolt foundation	Weight	Dimensions			
	m	B	H	Db	nb
	kg	mm	mm	mm	PCs
ABF MFPCL 12xM27x1000	96	450	1000	27	12
ABF MFPCL 12xM30x1050	123	500	1050	30	12
ABF MFPCL 12xM36x1300/1	205	560	1300	36	12
ABF MFPCL 12xM36x1300/2	206	610	1300	36	12
ABF MFPCL 12xM36x1300/3	208	660	1300	36	12
ABF MFPCL 12xM36x1300/4	210	730	1300	36	12

For conical poles for park and street lighting (flange):

Name of anchor bolt foundation	Weight	Dimensions					
	m	A	B	C	H	Db	nb
	kg	mm	mm	mm	mm	mm	PCs
ABF MFCP 4xM20x800	10	250	190	170	800	20	4
ABF MFCP 4xM20x850	10	250	190	170	850	20	4
ABF MFCP 4xM20x1000	12	250	190	170	1000	20	4
ABF MFCP 4xM24x1000	18	300	220	210	1000	24	4
ABF MFCP 4xM24x1200	21	300	220	210	1200	24	4
ABF MFCP 4xM24x1500/1	25	300	220	210	1500	24	4
ABF MFCP 4xM24x1500/2	25	380	300	325	1500	24	4
ABF MFCP 4xM27x1500	36	380	300	325	1500	27	4
ABF MFCP 4xM30x1500	40	380	300	325	1500	30	4

For multifaceted poles for solar panels:

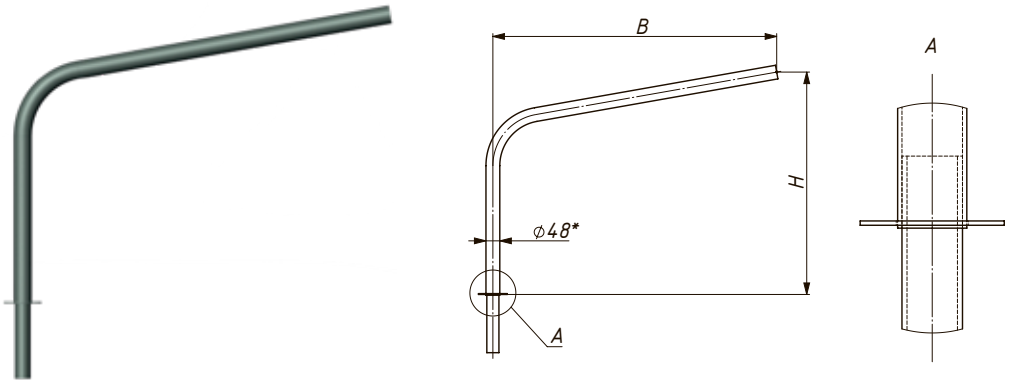
Name of anchor bolt foundation	Weight	Dimensions					
	m	A	B	C	H	Db	nb
	kg	mm	mm	mm	mm	mm	PCs
ABF MFPSP 4xM24x1500	25	380	300	325	1500	24	4
ABF MFPSP 4xM27x1500	32	380	300	325	1500	27	4

For poles for lightning receivers:

Name of anchor bolt foundation	Weight	Dimensions			
	m	B	H	Db	nb
	kg	mm	mm	mm	PCs
ABF PLR 4xM27x1000	37	230	1000	27	4
ABF PLR 4xM30x1050	45	270	1050	30	4
ABF PLR 12xM24x850/1	72	420	850	24	12
ABF PLR 12xM24x850/2	75	500	850	24	12
ABF PLR 16xM36x1300/1	278	640	1300	36	16
ABF PLR 16xM36x1300/2	285	800	1300	36	16
ABF PLR 16xM36x1300/3	285	810	1300	36	16

RADIAL SINGLE ROW

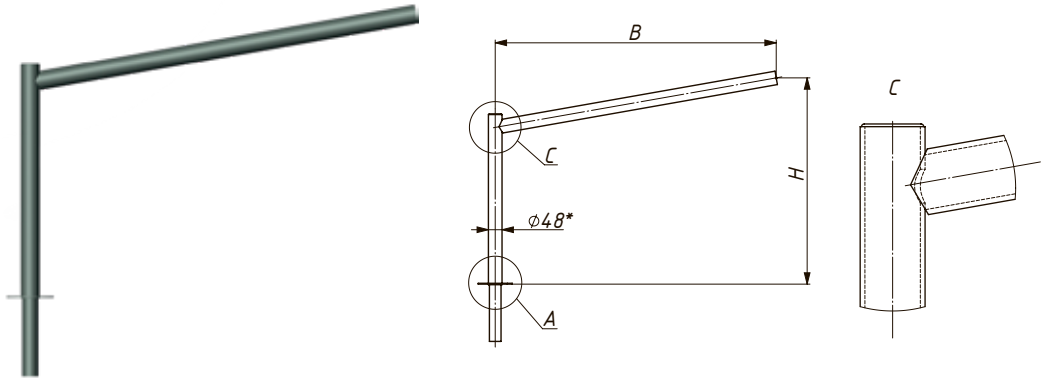
ONE-ARM BRACKETS



Name of bracket	Weight	Bracket dimensions		
	m	H	B	d
	kg	mm	mm	mm
RB 1/0.5/1.0	6	500	1000	48
RB 1/0.5/1.5	7	500	1500	48
RB 1/0.6/1.5	7	600	1500	48
RB 1/1.0/1.0	9	1000	1000	48
RB 1/1.0/1.5	10	1000	1500	48
RB 1/1.5/1.5	12	1500	1500	48
RB 1/1.5/2.0	16	1500	2000	48

ANGULAR SINGLE ROW

ONE-ARM BRACKETS

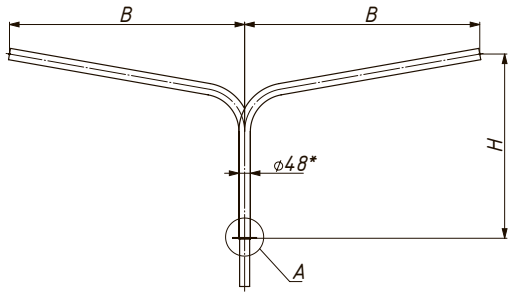


Name of bracket	Weight	Bracket dimensions		
	m	H	B	d
	kg	mm	mm	mm
AB 1/0.2/0.3	3	200	300	48
AB 1/0.3/0.5	4	300	500	48
AB 1/0.5/0.5	5	500	500	48
AB 1/0.5/1.0	6	500	1000	48
AB 1/0.5/1.5	8	500	1500	48
AB 1/0.6/1.5	8	600	1500	48
AB 1/1.0/1.0	9	1000	1000	48
AB 1/1.0/1.5	10	1000	1500	48
AB 1/1.5/1.5	12	1500	1500	48
AB 1/1.5/2.0	16	1500	2000	48

RADIAL SINGLE ROW

TWO-ARM BRACKETS

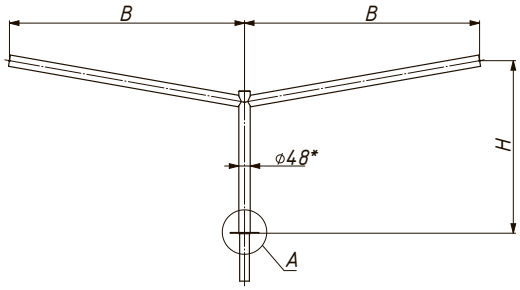
Name of bracket	Weight	Bracket dimensions		
	m	H	B	d
	kg	mm	mm	mm
RB 2/0.5/1.0	10	500	1000	48
RB 2/0.5/1.5	13	500	1500	48
RB 2/0.6/1.5	13	600	1500	48
RB 2/1.0/1.0	16	1000	1000	48
RB 2/1.0/1.5	18	1000	1500	48
RB 2/1.5/1.5	21	1500	1500	48
RB 2/1.5/2.0	31	1500	2000	48



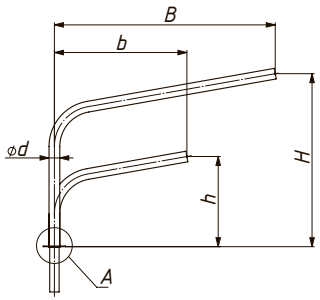
ANGULAR SINGLE ROW

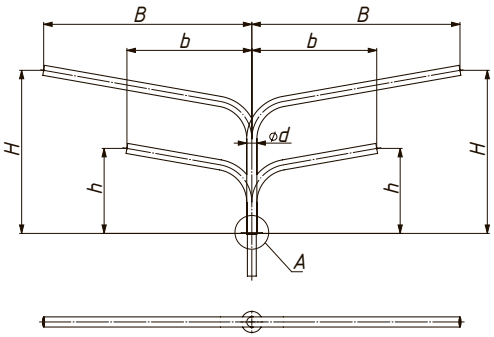
TWO-ARM BRACKETS

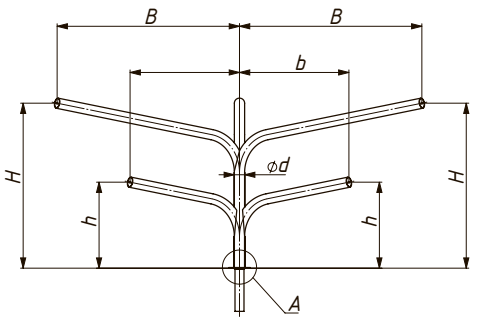
Name of bracket	Weight	Bracket dimensions		
	m	H	B	d
	kg	mm	mm	mm
AB 2/0.2/0.3	5	200	300	48
AB 2/0.3/0.5	6	300	500	48
AB 2/0.5/0.5	7	500	500	48
AB 2/0.5/1.0	10	500	1000	48
AB 2/0.6/1.5	14	600	1500	48
AB 2/1.0/1.0	16	1000	1000	48
AB 2/1.0/1.5	18	1000	1500	48
AB 2/1.5/1.5	21	1500	1500	48
AB 2/1.5/2.0	31	1500	2000	48

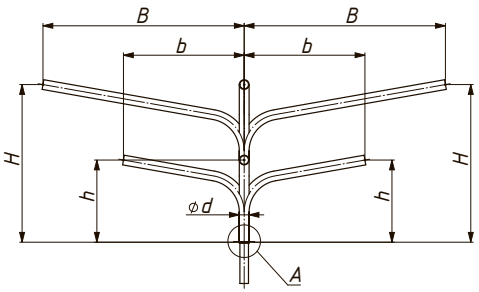


RADIAL DOUBLE ROW BRACKETS

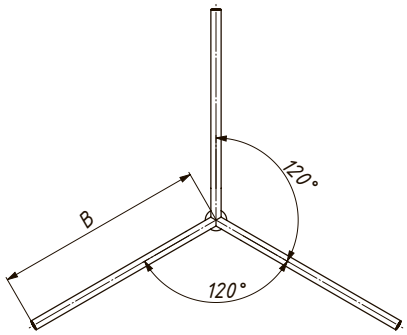


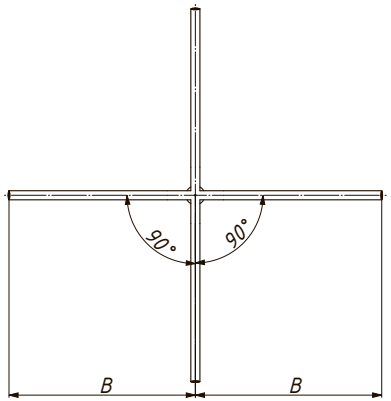




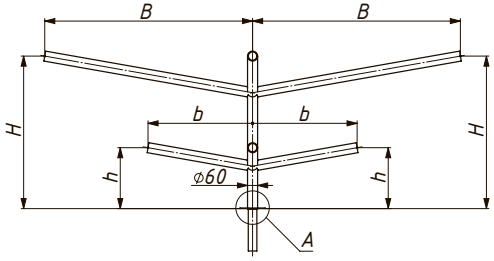


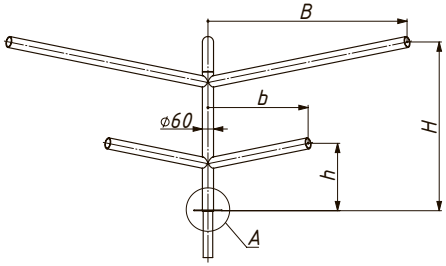
Name of bracket	Weight	Bracket dimensions						Number of pairs of arms
	m	H	B	h	b	d	r	
	kg	mm	mm	mm	mm	mm	mm	
RB 1/1.0-1.5/0.5-1.0	20	1000	1500	500	1000	60	200	1
RB 1/1.0-2.0/0.6-1.5	24	1000	2000	600	1500	60	200	1
RB 2/1.0-1.5/0.5-1.0	35	1000	1500	500	1000	60	200	2
RB 2/1.0-2.0/0.6-1.5	44	1000	2000	600	1500	60	200	2
RB 3/1.0-1.5/0.5-1.0	51	1000	1500	500	1000	60	200	3
RB 3/1.0-2.0/0.6-1.5	65	1000	2000	600	1500	60	200	3
RB 4/1.0-1.5/0.5-1.0	75	1000	1500	500	1000	60	200	4
RB 4/1.0-2.0/0.6-1.5	87	1000	2000	600	1500	60	200	4

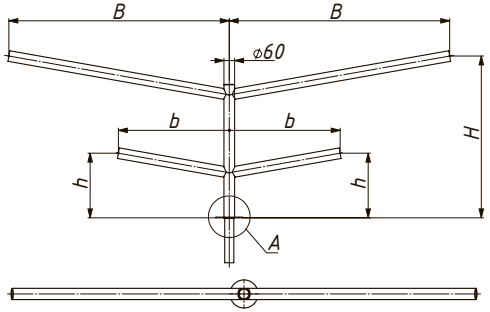


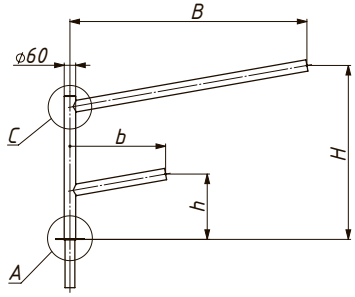


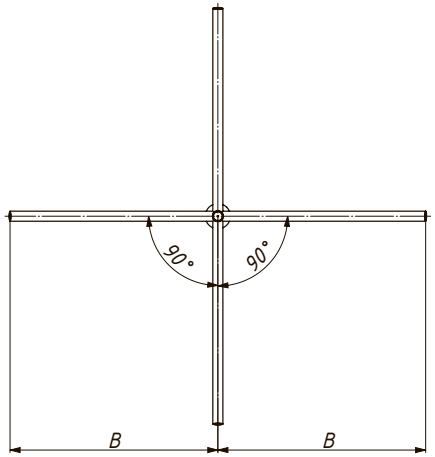
ANGULAR DOUBLE ROW BRACKETS

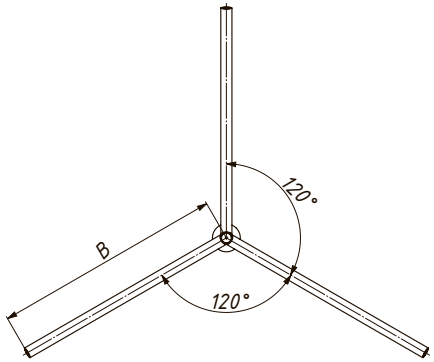






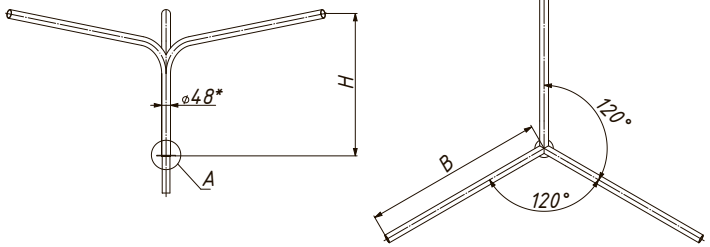






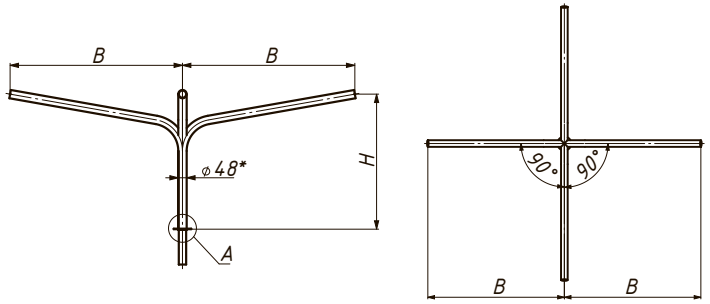
Name of bracket	Weight	Bracket dimensions						Number of pairs of arms
	m	H	B	h	b	d	r	
	kg	mm	mm	mm	mm	mm	mm	
AB 1/1.0-1.5/0.5-1.0	21	1000	1500	500	1000	60	200	1
AB 1/1.0-2.0/0.5-1.5	26	1000	2000	500	1500	60	200	1
AB 2/1.0-1.5/0.5-1.0	36	1000	1500	500	1000	60	200	2
AB 2/1.0-2.0/0.5-1.5	46	1000	2000	500	1500	60	200	2
AB 3/1.0-1.5/0.5-1.0	50	1000	1500	500	1000	60	200	3
AB 3/1.0-2.0/0.5-1.5	67	1000	2000	500	1500	60	200	3
AB 4/1.0-1.5/0.5-1.0	65	1000	1500	500	1000	60	200	4
AB 4/1.0-2.0/0.5-1.5	87	1000	2000	500	1500	60	200	4

RADIAL SINGLE ROW THREE-ARM BRACKETS



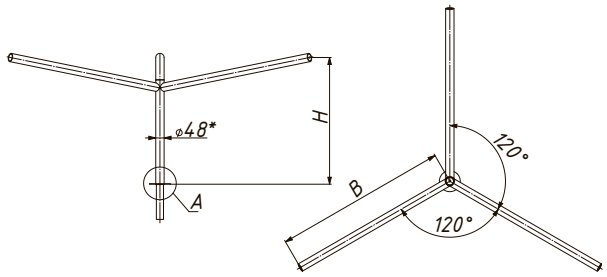
Name of bracket	Weight	Bracket dimensions		
	m	H	B	d
	kg	mm	mm	mm
RB 3/0.5/1.0	14	500	1000	48
RB 3/0.6/1.5	19	600	1500	48

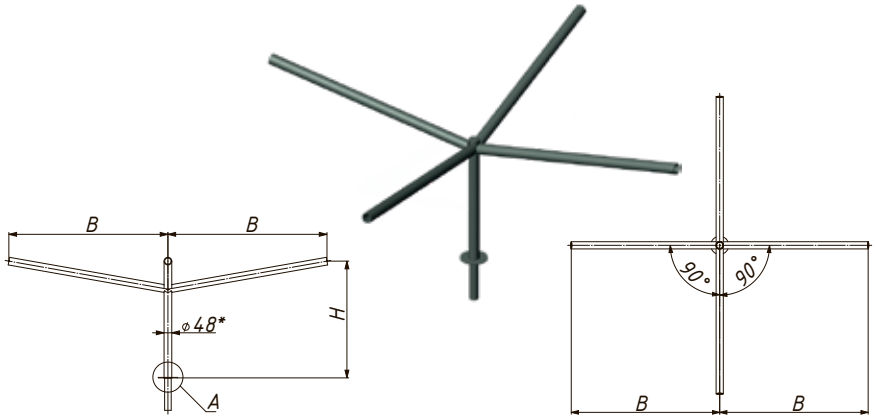
RADIAL SINGLE ROW FOUR-ARM BRACKETS



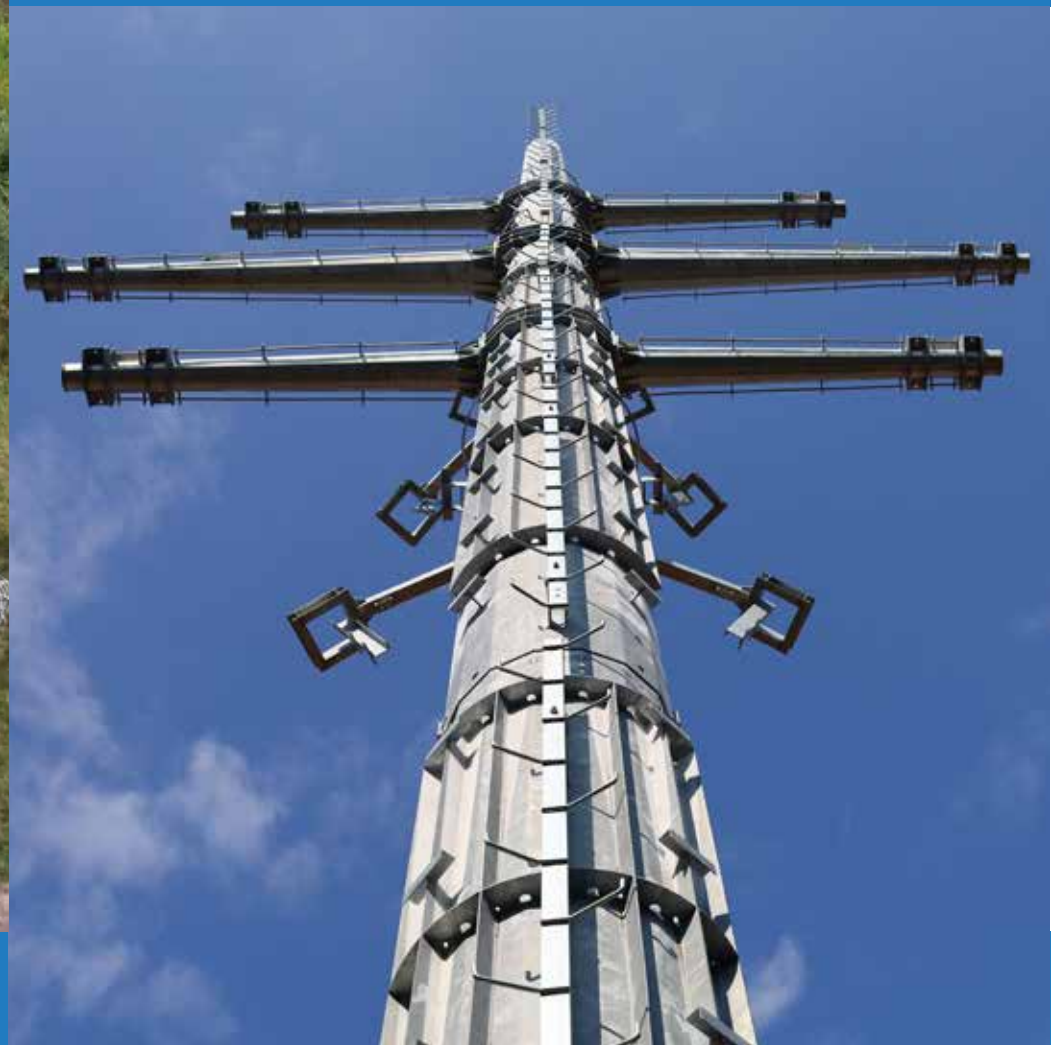
Name of bracket	Weight	Bracket dimensions		
	m	H	B	d
	kg	mm	mm	mm
RB 4/0.5/1.0	18	500	1000	48
RB 4/0.6/1.5	25	600	1500	48

ANGULAR SINGLE ROW BRACKETS





METAL STRUCTURES OF ELECTRICAL TRANSMISSION LINES AND SUBSTATIONS



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MULTIFACETED POLES

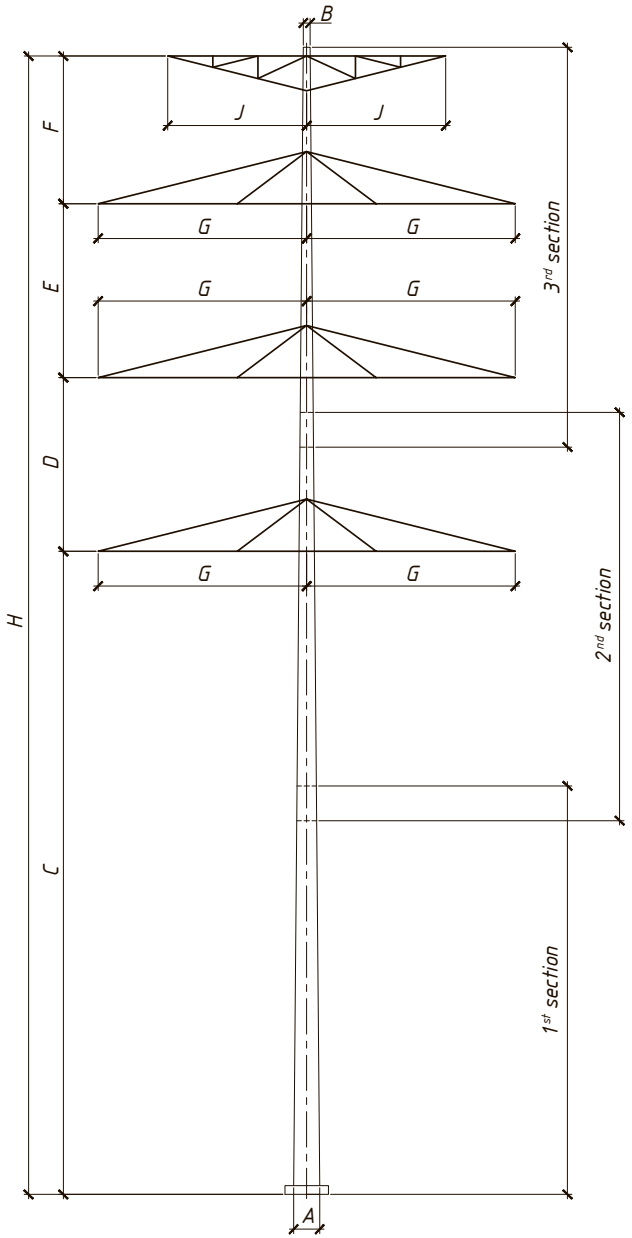
OF ELECTRICAL TRANSMISSION LINES

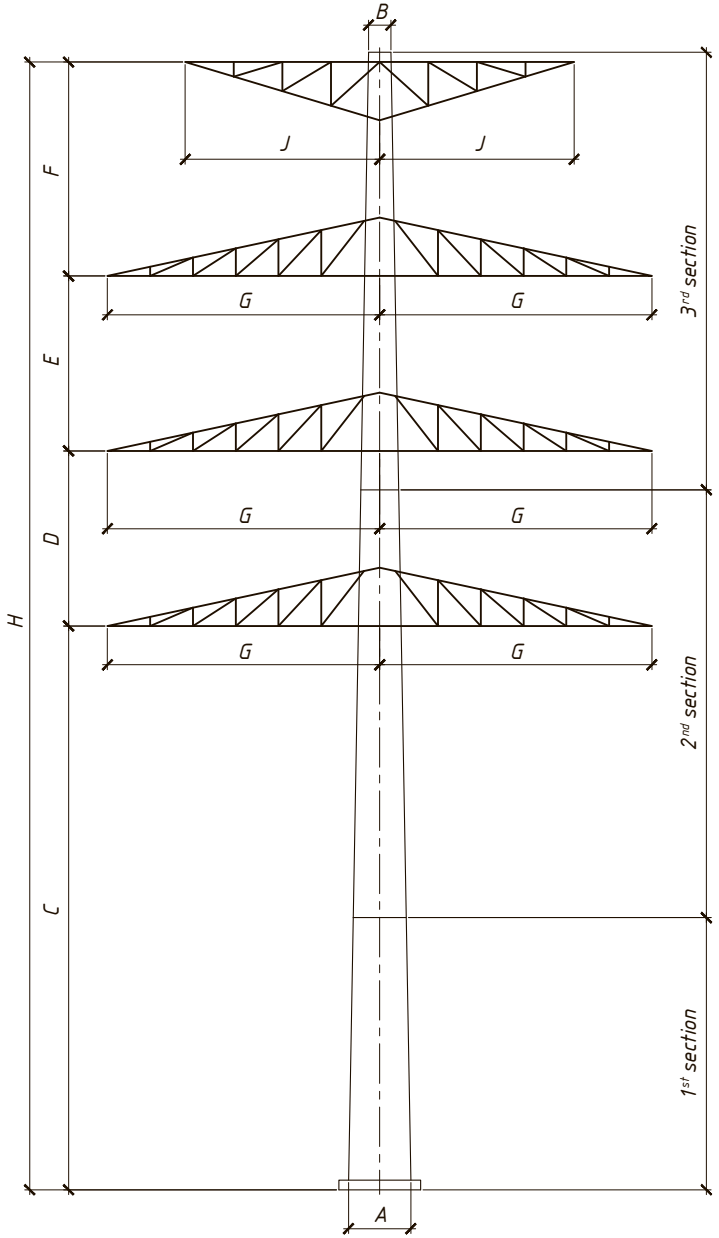
Power transmission poles, consisting of multifaceted bent racks, have a very important feature – universality, i.e. the ability to adapt when developing their various modifications. Another benefit of such poles is their installation speed: they have two- and sometimes four-fold advantage over traditional poles.

In terms of reliability, the advantages of these poles are durability, maintainability, vandal resistance. The adaptability of this type of poles gives unique opportunities of installation and assembly in difficult environmental conditions, which provides solution of complex problems.

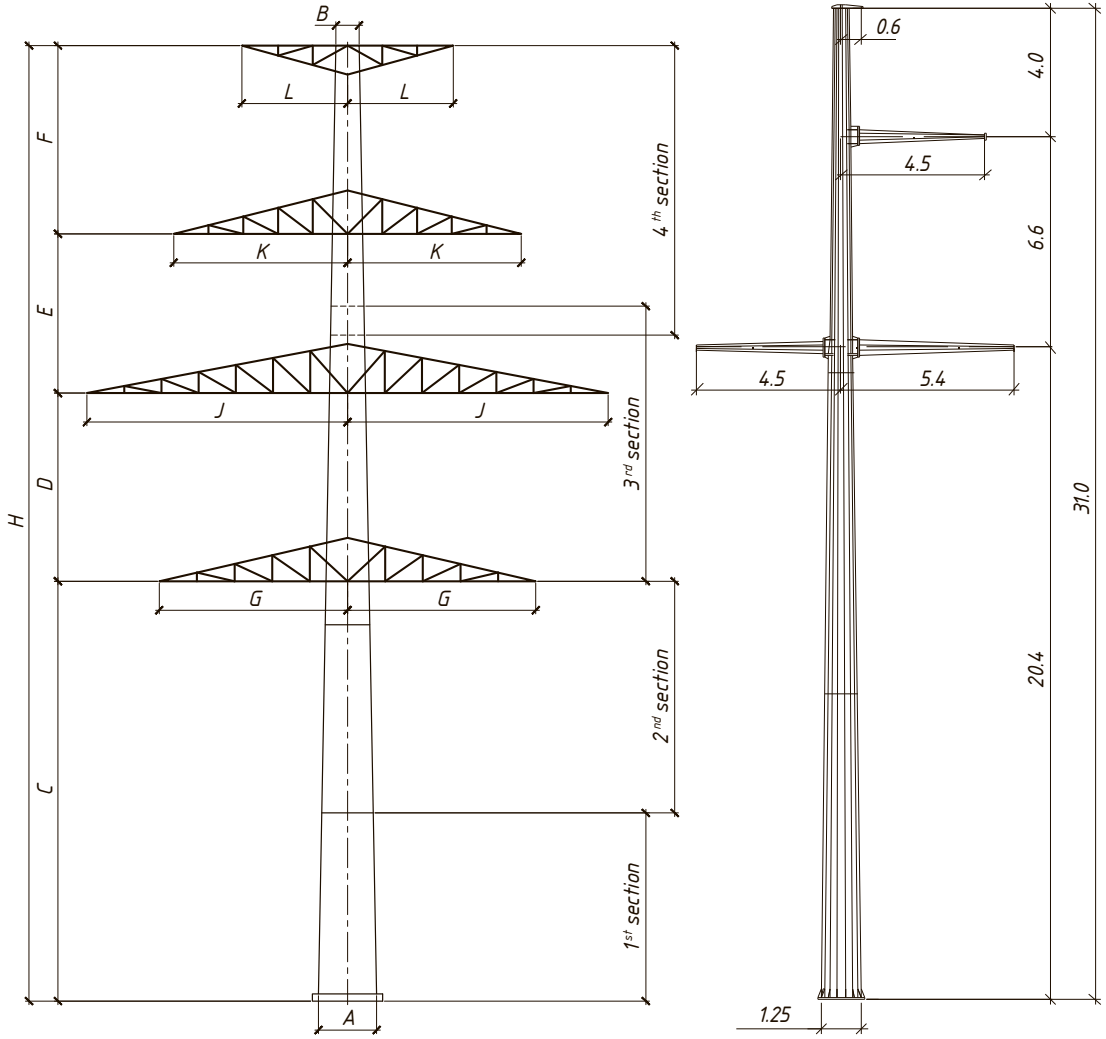
Standard size – from 4 to 42 meters

Multifaceted towers for OHPL of 110 kV:

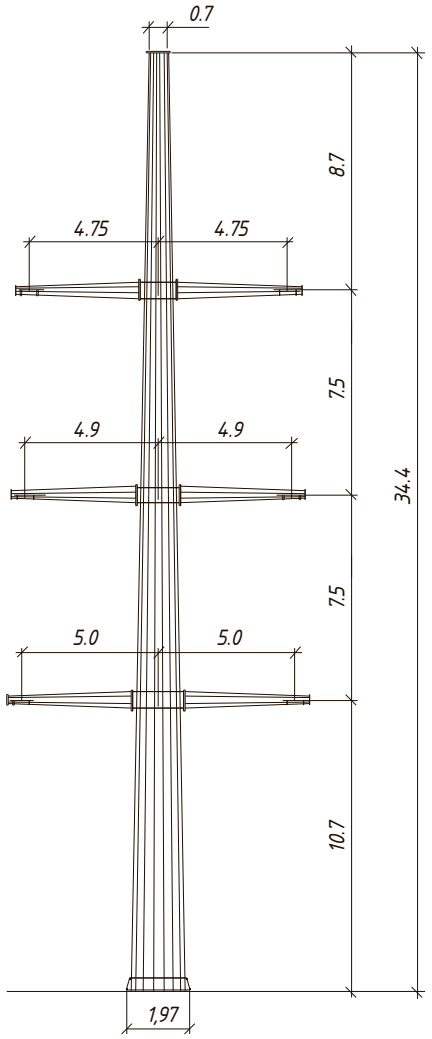




Multifaceted towers for OHPL of 220 kV:

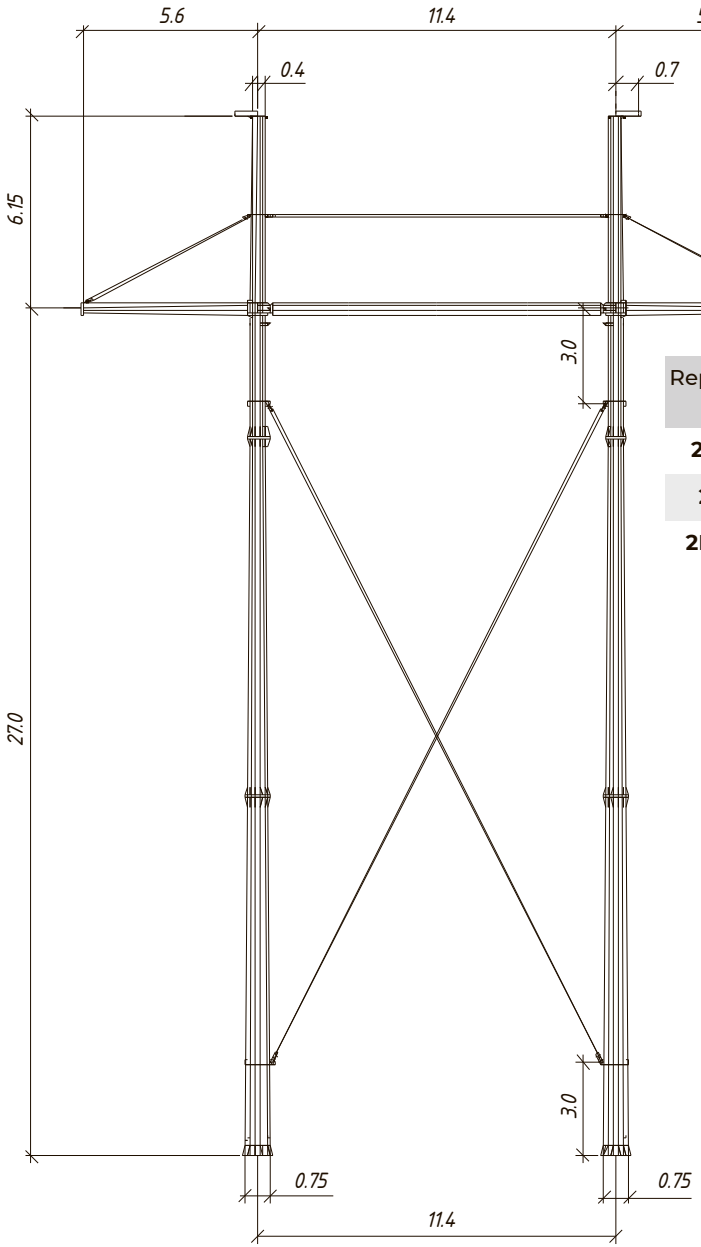


Multifaceted towers for OHPL of 330 kV:



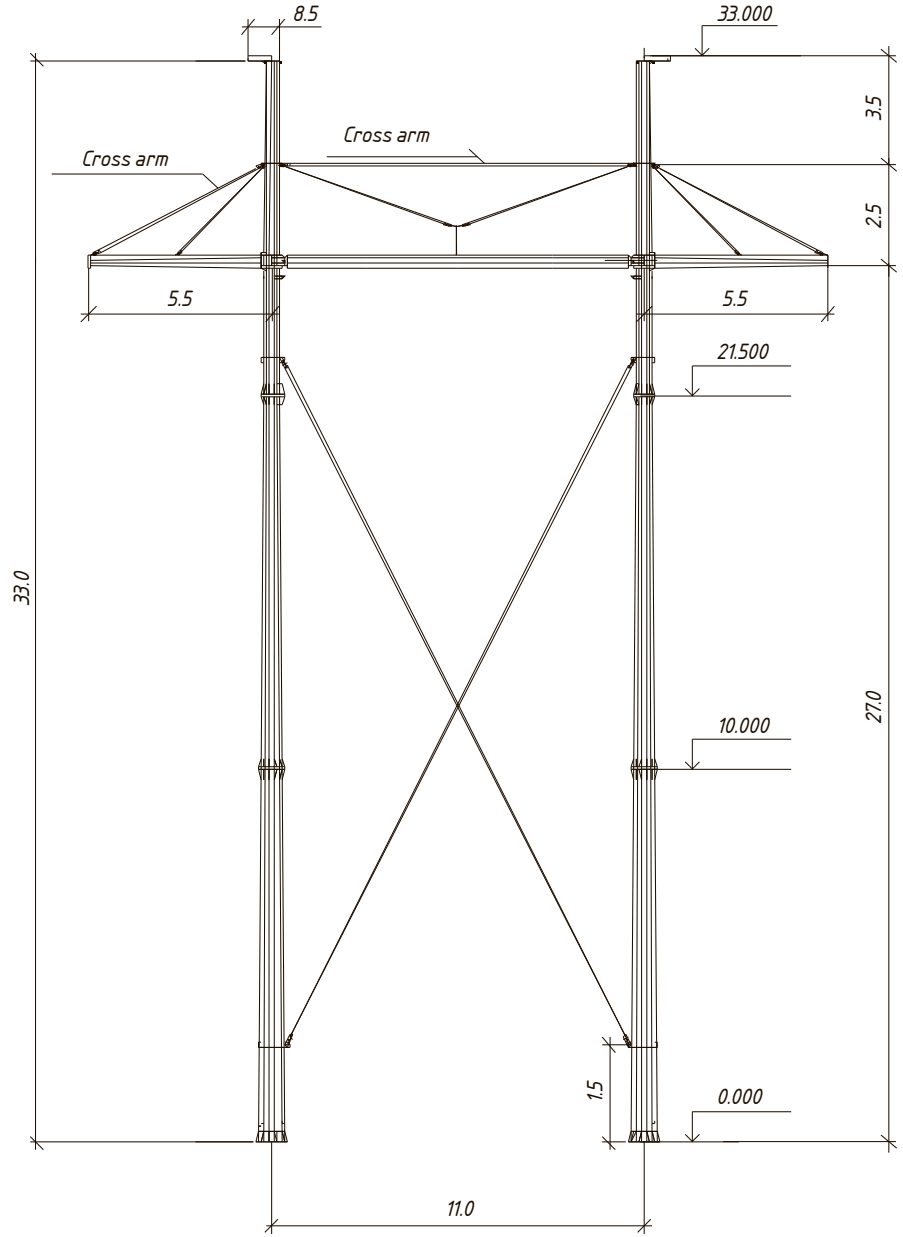
Representative item
MP330-1
MP330-2
MU330-1
MU330-3
MU330-5
MU330-2
MU330-4
MU330-6

Multifaceted towers for OHPL of 330 kV:

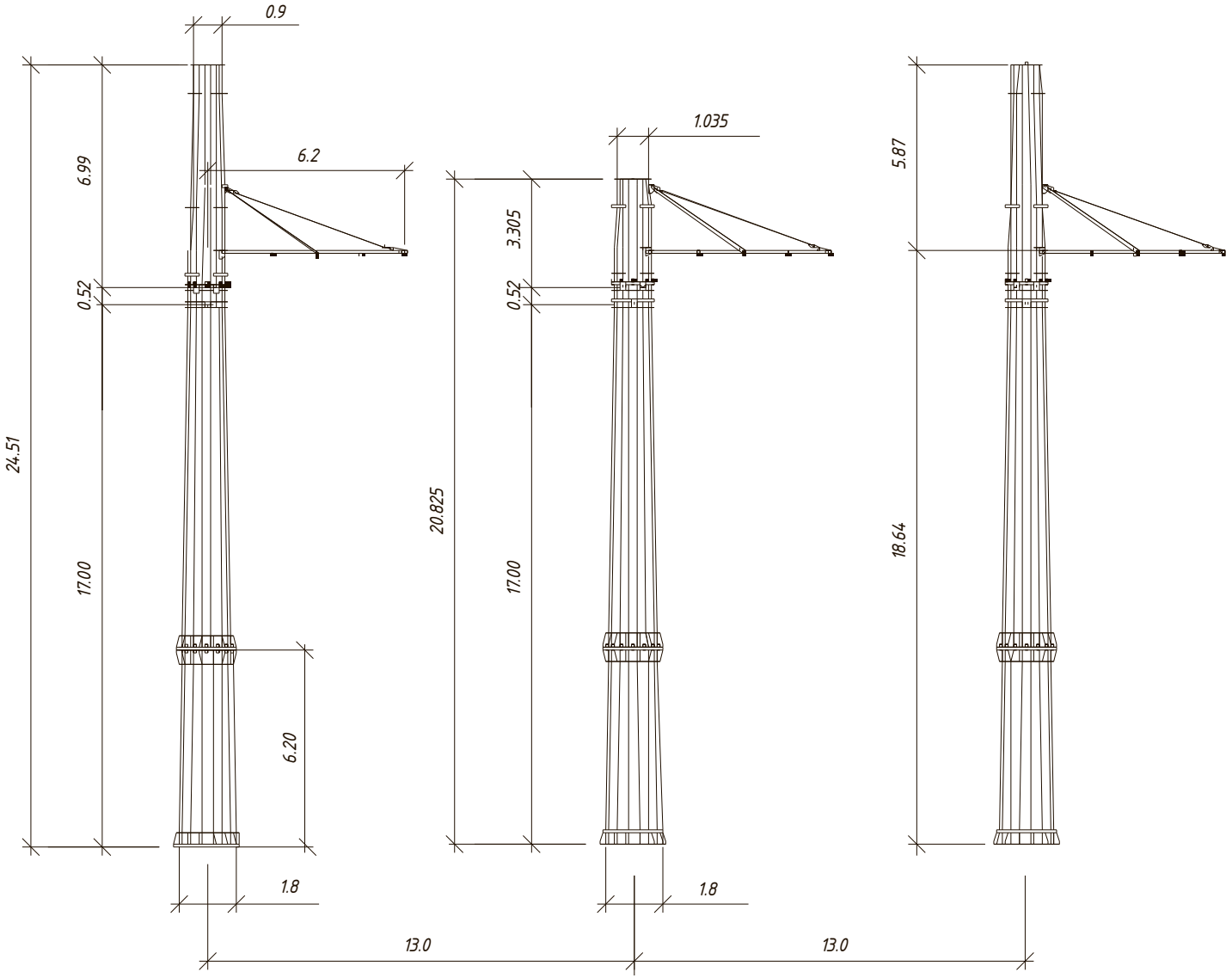


Representative item
2MP330-1V
2MU330-1
2MU330-1+5

Multifaceted towers for OHPL of 500 kV:



Multifaceted towers for OHPL of 500 kV:

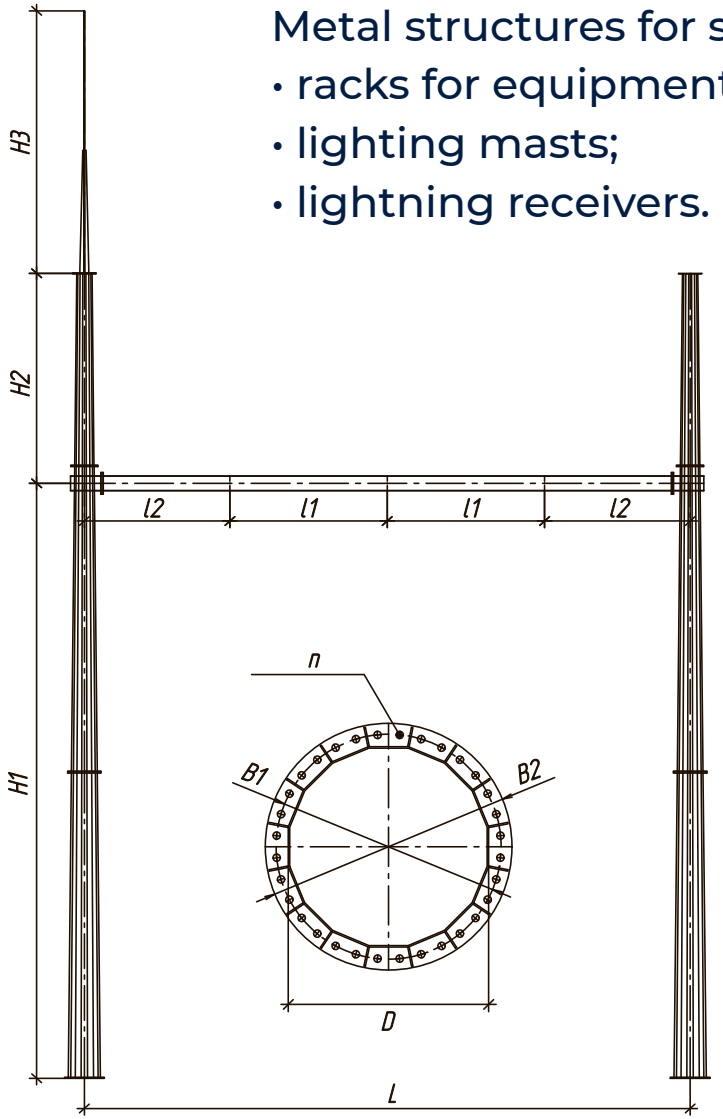


Representative item
2MP500-1V
2MP330-3V
3MU500-1
3MU500-1+5

STEEL MULTIFACETED PORTALS OF ODD

Metal structures for substations:

- racks for equipment;
- lighting masts;
- lightning receivers.



LATTICE TYPE UNIFIED STEEL POLES

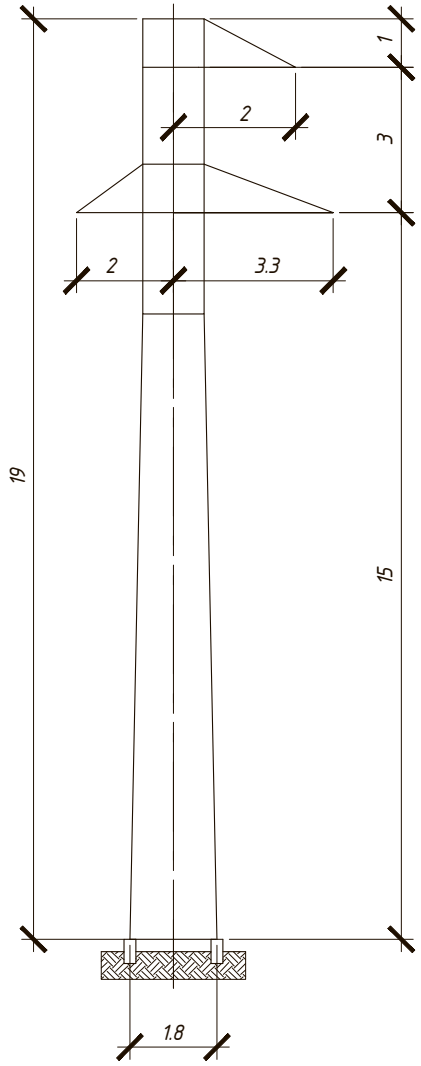
OF OVERHEAD LINES WITH VOLTAGE OF 35-750 kV

- the structures of these poles are prefabricated on bolts, practically without welded assemblies;

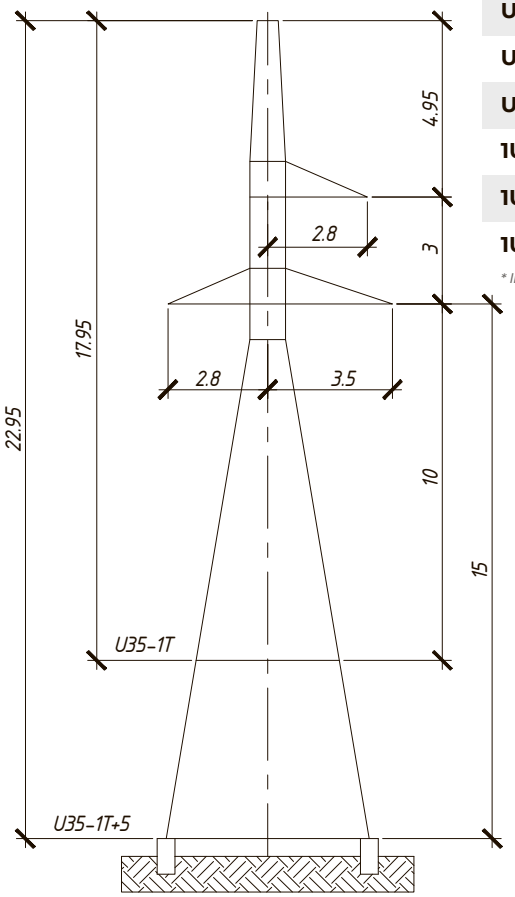
- design features and technological processes used in their manufacture ensure high quality and reliability;

- reduction of standard sizes of parts and elements of poles reduces costs and facilitates transportation, storage and installation on construction sites.

Anchor-angle poles of power lines with voltage of 35 kV:



Pole type	Pole weight without zinc	Pole weight with zinc
	kg	kg
P35-1	1499	1561
P35-1T	1603	1669
P35-2	1861	1938
P35-2T	1965	2046
1P35-2	2007	2090
1P35-2T	2114	2201

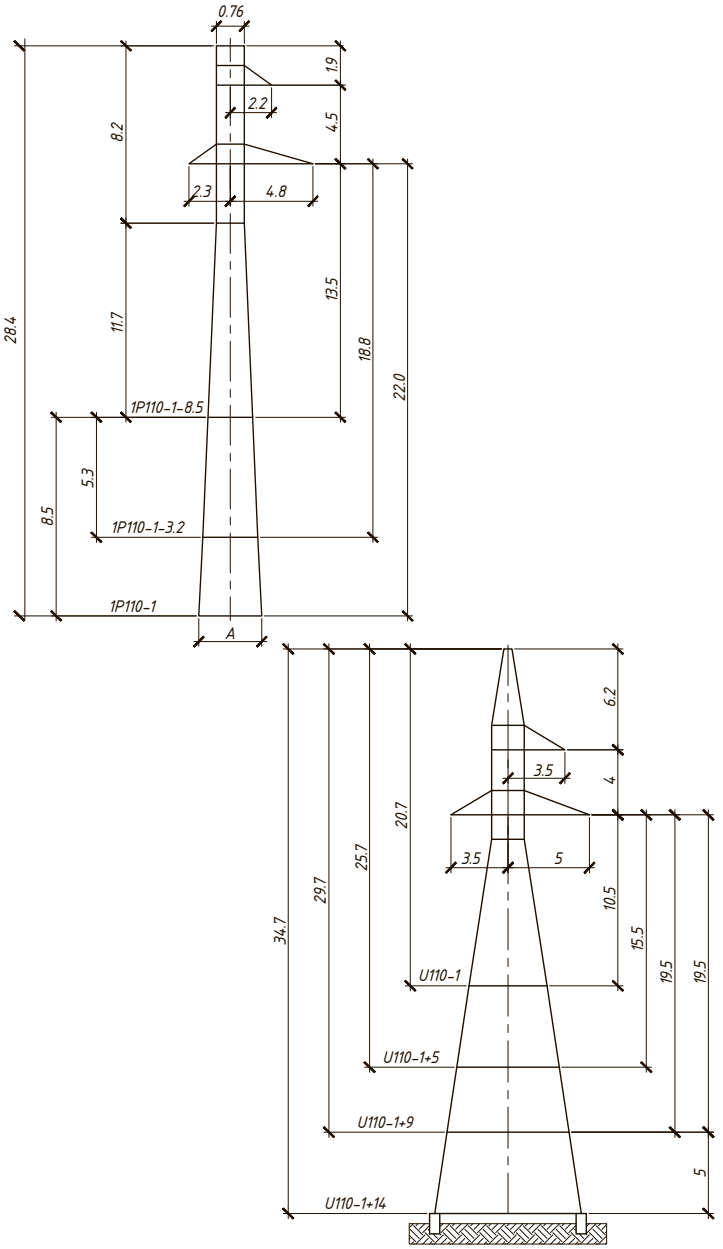


Pole type	Pole weight without zinc	Pole weight with zinc
	kg	kg
U35-1	2964	3087
U35-2	4831	5030
U35-1T	3140	3270
U35-2T	5004	5210
U35-3	1635	1703
U35-4	2799	2915
1U35-2	3492	3636
1U35-2T	3650	3800
1U35-2T *	3724	3877

** lightning conductor*

Anchor-angle and branch poles of power lines with voltage of 110 kV:

Pole type	Pole weight without zinc	Pole weight with zinc
	kg	kg
P110-1	1895	1937
P110-2	2691	2802
P110-3	2458	2560
P110-4	3240	3374
P110-5	2585	2692
P110-5PG	2722	2835
P110-6	3794	3951
P110-6PG	3894	4055
PS110-6	3334	3427
PS110-9	2847	2965
PS110-9PG	2979	3102
PS110-10	4715	4910
PS110-10PG	4814	5013
1P110-1	2211	2302
1P110-2	3318	3455
1P110-3	2033	2117
2P110-1	2557	2302
2P110-3	2302	2397

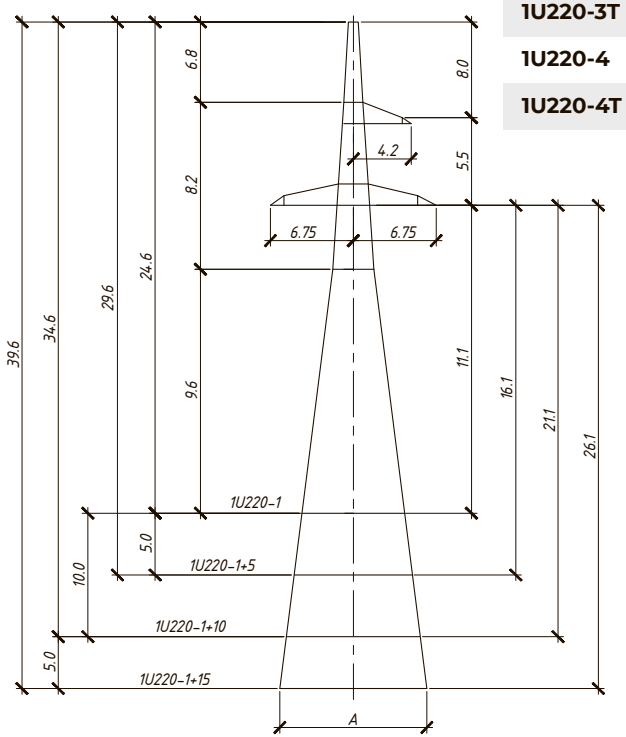


Pole type	Pole weight without zinc	Pole weight with zinc
	kg	kg
U110-1	5040	5248
U110-2	7704	8022
U110-2V	7863	8187
U110-2P	7849	8173
U110-3 *	3377	3517
U110-4 *	5394	5617
US110-3	5299	5518
US110-5	6741	7019
US110-6	10447	10878
US110-7	7440	7747
US110-8	12081	12579
1U110-1 *	3021	3145
1U110-2 *	4238	4413
1U110-3 *	3854	4013
1U110-4 *	5844	6085
1U110-4P	5670	5904
1U110-48	5685	5919

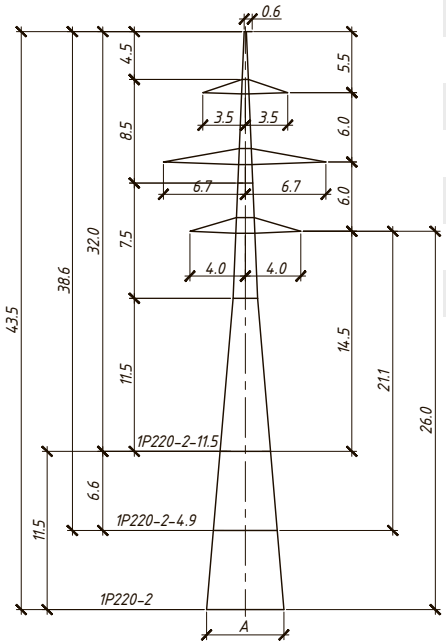
** lightning conductor*

Anchor-angle and branch poles of power lines with voltage of 220 kV:

Pole type	Pole weight without zinc	Pole weight with zinc
	kg	kg
U220-1	8609	8964
U220-2	14398	14992
U220-2T	14932	15548
U220-3	7247	7546
1U220-1	6895	7179
1U220-1T	7526	7836
1U220-2	10590	11026
1U220-2T	11187	11648
1U220-3	8534	8886
1U220-3T	9186	9564
1U220-4	13226	13771
1U220-4T	13848	14419

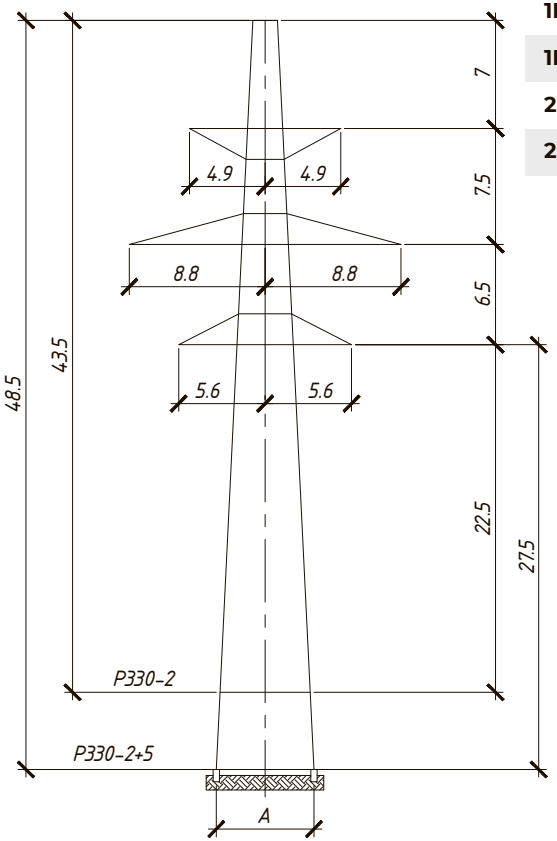


Pole type	Pole weight without zinc	Pole weight with zinc
	kg	kg
P220-2	6208	6464
P220-2T	6327	6588
P220-3	4698	4892
P220-3T	4876	5077
1P220-2	5423	5647
1P220-2T	5570	5799
2P220-1	4396	4577
2P220-1T	4595	4784
2P220-2	6728	7005
2P220-2T	6876	5905
2P220-3	3909	4070
2P220-3T	4107	4276
PS220-2	5503	5730
PS220-2T	5624	5856
PS220-5	5575	5805
PS220-5T	5741	5978
PS220-6	8461	8810
PS220-6T	8546	8898

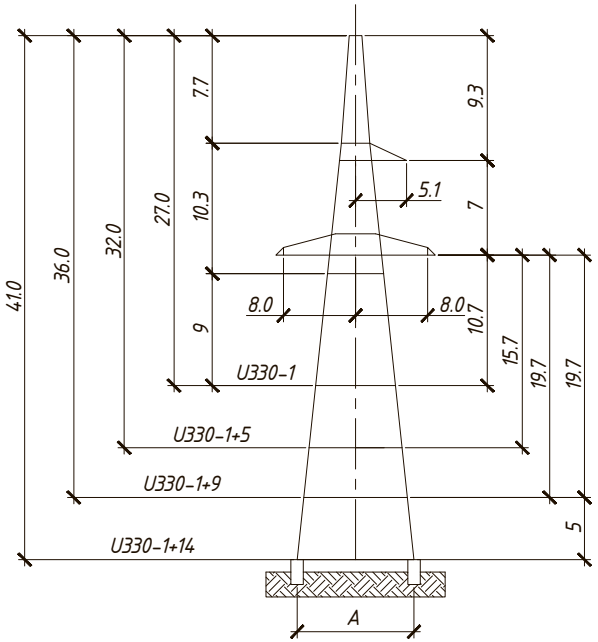


Anchor-angle poles of power lines with voltage of 330 kV:

Pole type	Pole weight without zinc	Pole weight with zinc
	kg	kg
P330-3	6152	6406
P330-3T	6560	6831
PS330-2	9067	9441
PS330-2T	9297	9680
PS330-3	5416	5640
PS330-3T	5825	6065
1P330-1	5208	5423
1P330-1T	4107	4276
2P330-1	6522	6750
2P330-1T	6796	7076

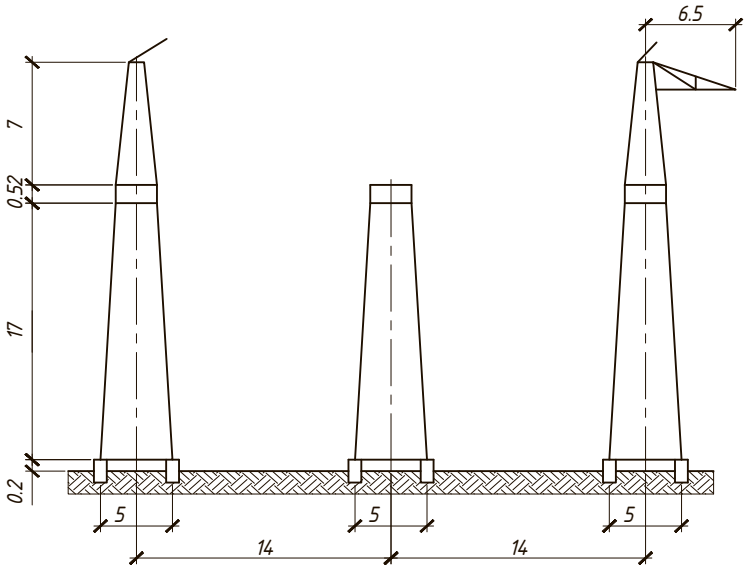


Pole type	Pole weight without zinc	Pole weight with zinc
	kg	kg
U330-1	13145	13687
U330-2	22972	23919
U330-2T	23873	24857
U330-3	10502	10935
1U330-1	13843	14413
1U330-1T	14496	15093



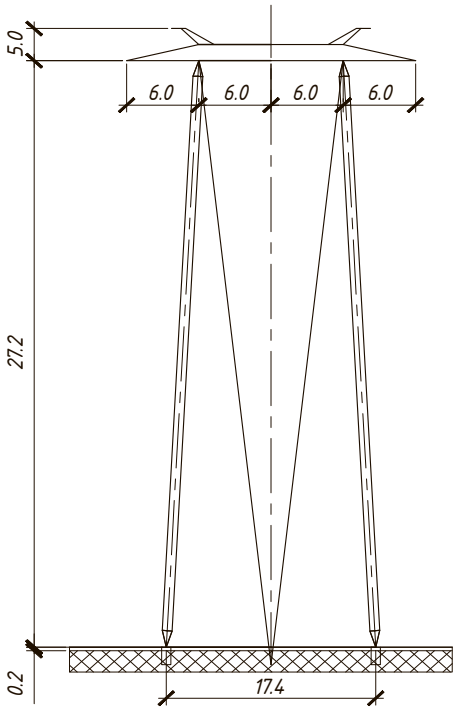
Anchor-angle and branch poles of power lines with voltage of 500 kV:

Pole type	Pole weight without zinc	Pole weight with zinc
	kg	kg
U-1	14405,3	14998,8
U-1T	15982,7	16641,2
U-2	15451,4	16088,0
U-2T	17028,8	17730,3
U-2A	12941,6	13474,8
UBM-17	12844,8	13374,0
UBM-22	15184,2	15809,8
R-1	10810,9	11256,3
R-2	11473,0	11945,7

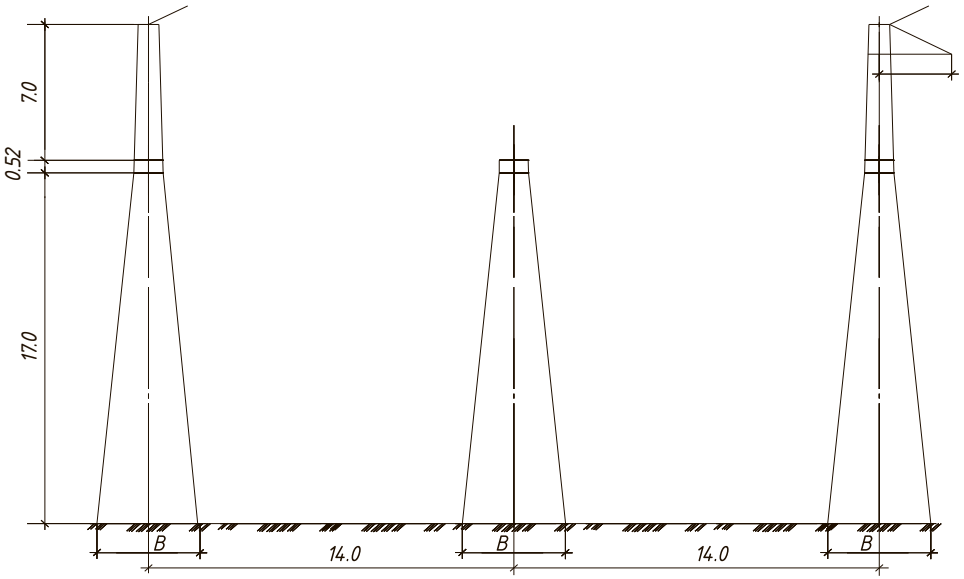


Pole type	Pole weight without zinc	Pole weight with zinc
	kg	kg
PB-1	6543,1	6812,7
PB-1.1	6460,2	6726,4
PB-2	6711,4	6987,9
PB-2.1	6648,7	6922,6
PB-3	7323,3	7625,0
PB-3.1	7249,6	7548,3
PB-4	7765,6	8085,6
PB-4.1	7690,4	8007,2
PB-5	8175,4	8512,2
PB-5.1	8100,2	8433,9
PUB-2	9442,5	9831,5
PUB-5	9308,0	9691,5

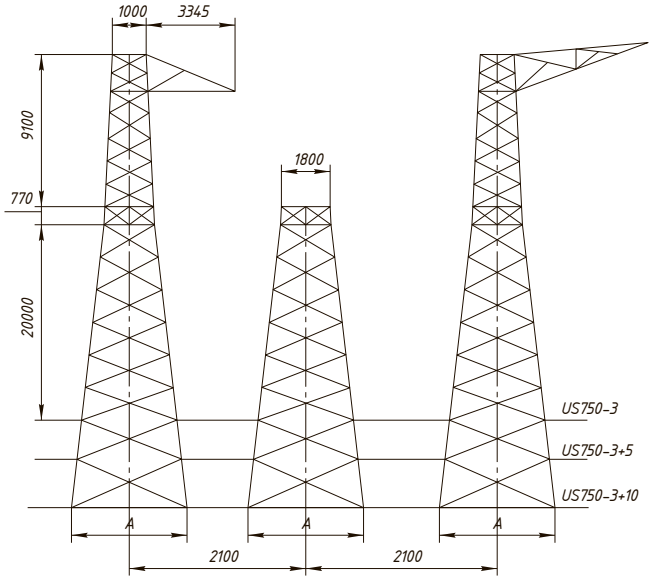
Power line pole of 500 kV



Anchor-angle poles of power lines with voltage of 750 kV:



Representative item
U 1
U 2
U 2K



Representative item
US 750-3

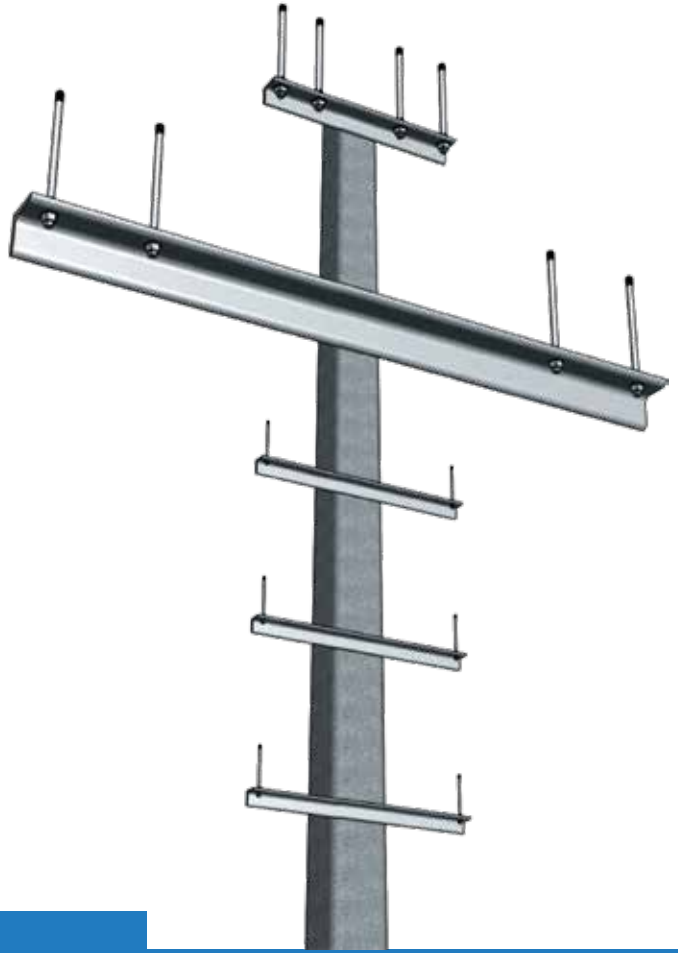
They are used for suspension of AC and DC contact lines of electrified railways of 1520mm gauges on multi-track sections and stations.

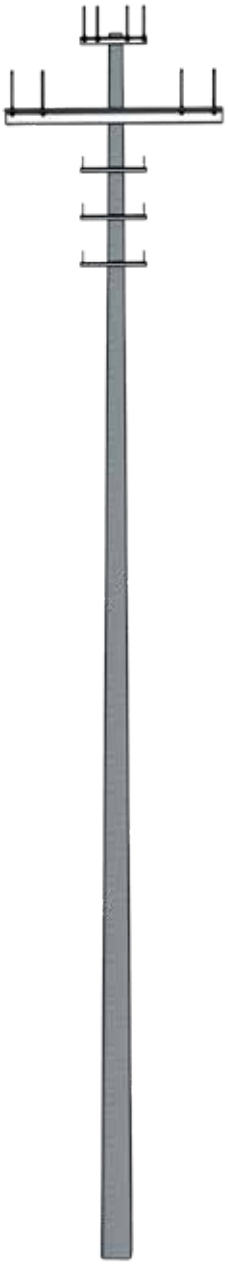
The universality of this type of structure allows electrifying railway tracks, reducing the cost of construction and installation work.

MULTIFACETED RACKS AND RIGID

CROSS-BEAMS FOR RAILWAYS

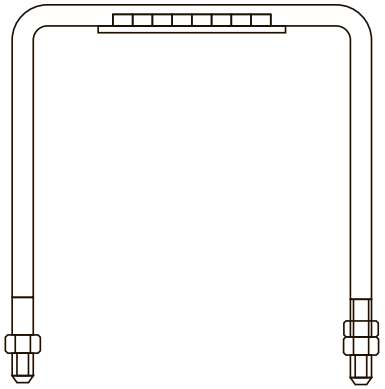
WITH VOLTAGE OF 0.38 and 6-10 kV



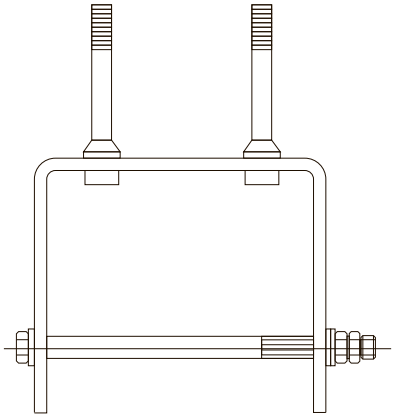


Designed for installation on reinforced concrete vibrated racks. Despite their light weight, they are widely used and include cross arms, clamps, brackets, heads, cable stands, extensions, etc.

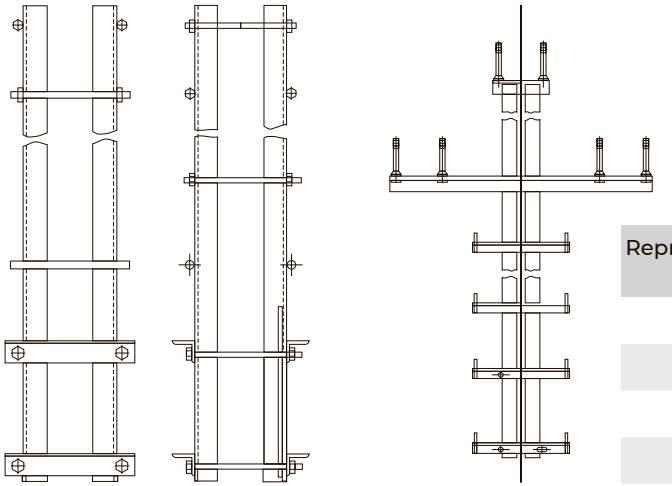
The company has its own developments in this type of product, which are successfully used in practice.



Representative item	Representative item
Clamp	Clamp
X 1	**X 10**
X 35	**X 12**
X 42	**X 13**

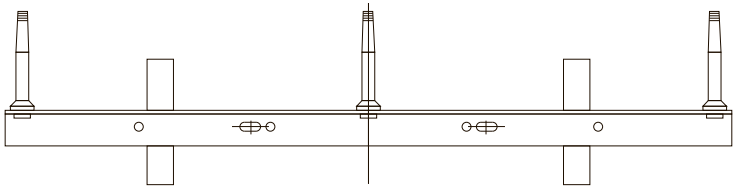


Representative item
Head
OG 1
OG 3
OG 6



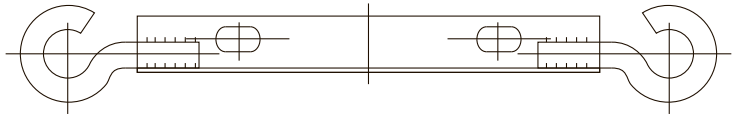
Representative item
Stand
TS 1
TS 2
TS 3

Metal structures with voltage of 6-10 kV:

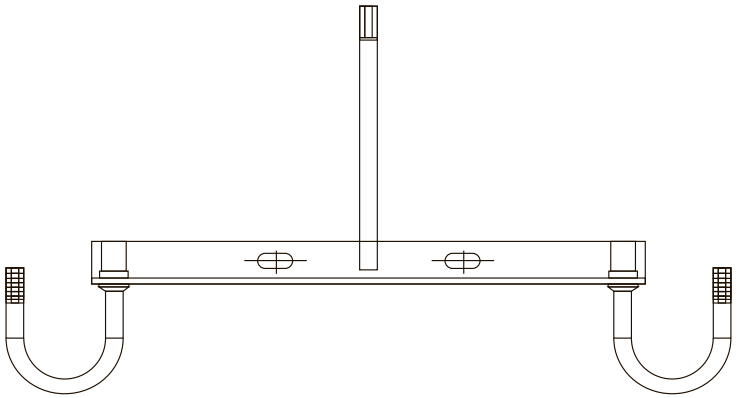


Representative item
Cross arm
TM-1
TM-2
TM-3

Metal structures with voltage of 0.38 kV:



Representative item
Cross arm
TN-18
TN-19
TN-27



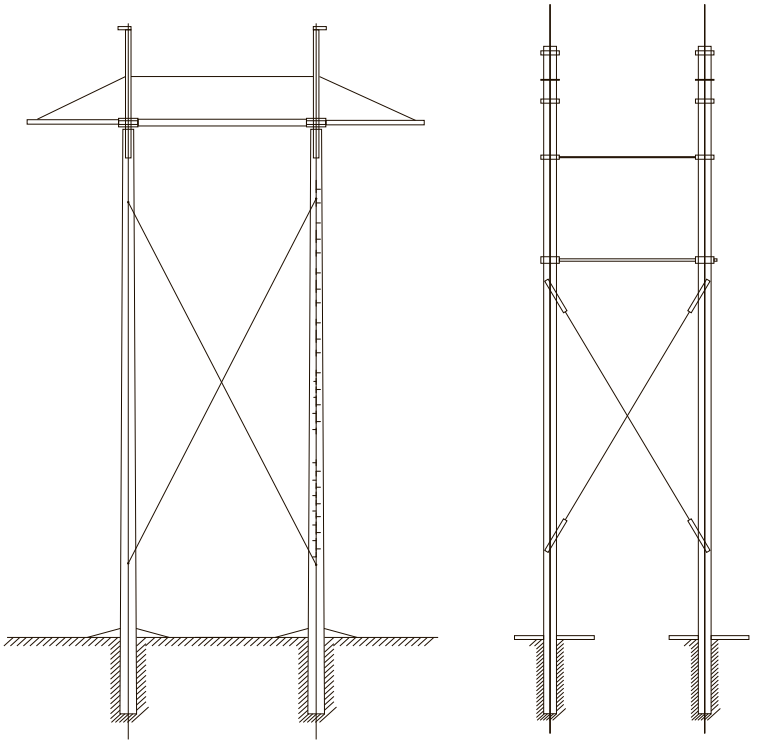
Representative item
Cross arm
TN-1
TN-2
TN-3
TN-4

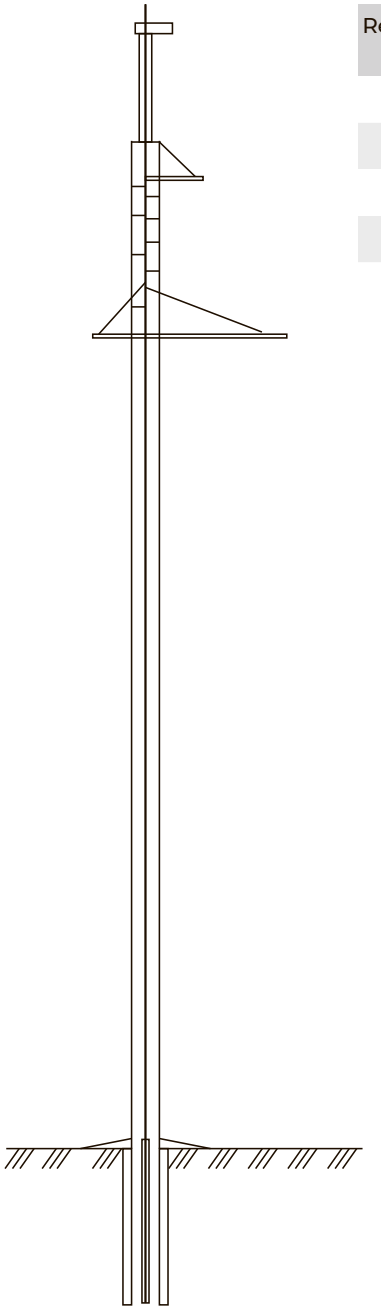
WITH VOLTAGE OF 35-500 kV

Designed for use on centrifuged conical and vibrated reinforced concrete racks and poles: tangent-suspension, anchor-angle, dead-end, one circuit and two circuits.

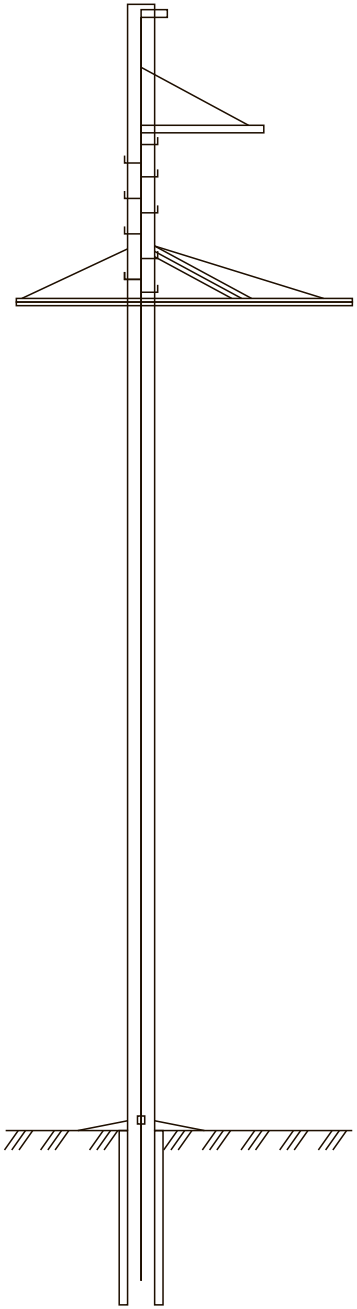
At the moment, developments are underway to adapt this type of metal structures for use on multifaceted and conical racks.

Representative item
Pole
PB-330-7N
PB-330-3

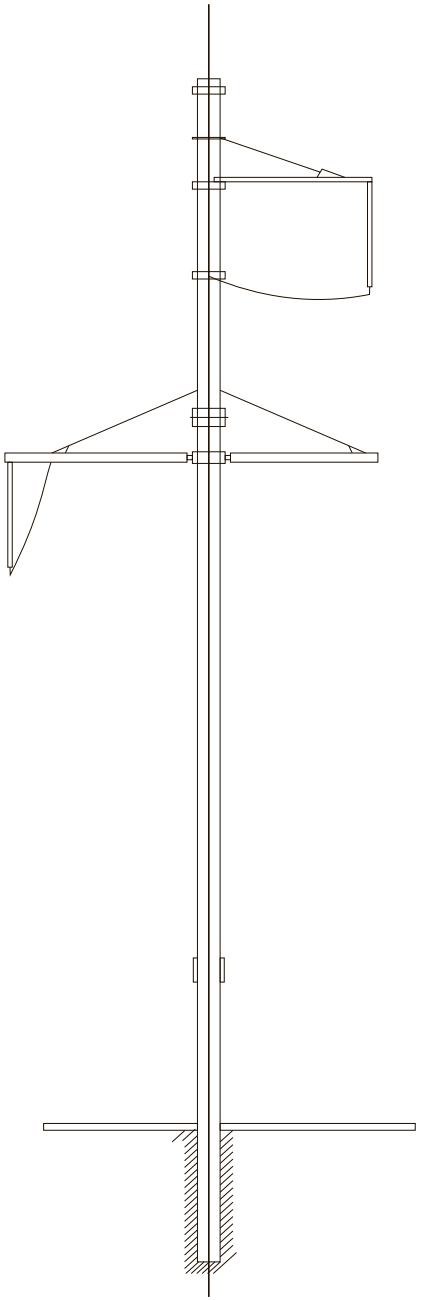




Representative item
Pole
PB-35-1.1
PB-35-2.1
UB-35-1
UB-35-2



Representative item
Pole
PB-110-1
PB-110-2
UB-110-1
UB-110-2



Representative item
Pole
PB-220-1
UB-220-1

HOT DIP GALVANIZING

Hot dip galvanizing is a process in which, by immersing metal products in a bath with hot zinc melt, a zinc coating is formed on the surface of the product, which performs the function of corrosion protection.

Before hot-dip galvanizing, the following technological operations take place sequentially: preliminary chemical preparation of metal products in degreasing baths for further digestion in hydrochloric acid solutions, washing in water, treatment in a fluxing bath, preliminary heating and drying of galvanized products. The thickness of such a coating in accordance with the requirements of DSTU B V.2.6-193:2013 varies, depending on needs, from 70 to 120 mm. The advantages of this coating are obvious, because it allows to protect the product from rust, improves its performance. Among them, the most obvious advantages are: aesthetic appearance and greater resistance to wear, which increases its endurance limit in relation to chemical and mechanical influences. This effect is achieved due to the interaction of steel with molten zinc, as a result of which, on the surface of the steel product, an zinc-iron compound (phase) is formed. This changes the chemical composition and structure of the surface layer of zinc.

As experience shows, the service life of products with such a coating can be up to 50 years without visible corrosion, making hot dip galvanizing indispensable for products in aggressive and difficult climatic conditions. This is relevant for the fields of energy, industrial and civil engineering, transport, and urban economy.

Ideas, improved by experience!

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