

# EURO ENGINEERING

LIGHTNING PROTECTION / GROUNDING SYSTEMS

## CATALOGUE

LIGHTNING PROTECTION ACCESSORIES



# EURO ENGINEERING

LIGHTNING PROTECTION / GROUNDING SYSTEMS



**Dear Customer,**

***Our company Euro Engineering – Hristomir Nikolaev, founded in 2000, has main scope of activity manufacturing, design, development, and supply of products for external lightning protection systems.***

***We provide wide range of hot galvanized steel, copper, and stainless steel products for lightning protection.***

***Our Main goal is to present to our customers high quality products for fast and easy montage. Our products are environmentally friendly and safe for implementation.***

Certificates and Declarations

Our products are a subject of regular testing in EU certified laboratories for testing of electrical equipment.

Our products are developed and manufactured in compliance with all EU requirements for Lightning Protection.

BDS EN 62305 “Lightning Protection” part 1-4;

BDS EN 62561- 1, August 2012: Lightning Protection System Components (LPSC) -- Part 1: Requirements for connection components. (IEC 62561-1:2012, with changes);

BDS EN 62561-2, August 2012: Lightning Protection System Components (LPSC) -- Part 2: Requirements for conductors and earth electrodes. (IEC 62561-2:2012, with changes)

Second revision of NFC 17-102, from 2009, approved by CENELEC.

Euro Engineering – Hristomir Nikolaev is a certified company according all requirements of standard ISO 9001:2008.



## 1. E.S.E Euro Star – Bulgaria



EE1-401



EE1-402



EE1-403



EE1-404

Code	Model	ESE	Material	Dimensions	Dimensions	Price
		/ΔT (μs)		(cm)	(kg)	
EE1-401	ES 1.2	10 μs	Inox	25/11	1,790	295.00
EE1-402	ES 1.3	25 μs	Inox	25/11	1,810	328.00
EE1-403	ES 1.4	45 μs	Inox	25/11	1,830	415.00
EE1-404	ES 1.6	60 μs	Inox	25/11	1,840	460.00

Protection radius (m) Euro Star (in accordance with the revised 2011 requirements of French NFC 17-102)

Ниво на защита h(m)	ES 1.2				ES 1.3				ES 1.4				ES 1.6			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
2	8	11	13	15	17	19	23	26	25	28	32	36	32	34	40	44
3	12	16	19	24	25	29	34	39	38	41	48	53	48	52	59	65
4	17	26	26	34	34	39	46	52	51	57	65	72	64	69	78	87
5	21	29	32	43	42	49	57	65	62	71	81	89	79	86	97	106
6	21	30	34	45	42	49	58	66	62	71	81	90	79	87	97	107
8	22	33	36	47	43	50	59	67	62	72	82	91	79	87	98	108
10	23	36	37	48	44	51	61	69	63	72	83	92	79	88	99	109
20	24	40	41	55	45	52	63	75	65	74	86	97	80	89	102	113
60	30	48	53	64	45	52	65	79	66	75	90	105	80	90	105	120

## Anchors for E.S.E.

### 1. ANCHORS

Vertical bracket (anchor)

Cat.№	Material	Dimensions (mm)	Height (mm)	Weight (kg)	Price USD/pcs
EE2-001	Inox	250x250	500	≈ 5,8	129.00



Horizontal bracket (anchor)

Kat.№	Material	Размер (mm)	Height (mm)	Weight (kg)	Price USD/per set
EE2-002	Inox	500x50	500	≈ 3,1	205.00

Pipe clamp for heavy loads - Weight – 1.6 kg; Material – Hot Dip Galvanized



### 2. Masts for E.S.E

Cat. №	Material	High (h= m)	Elements	(m)	(m)	(m)	Weight (kg)	Price USD/pcs
				2"	1 ½"	1 ¼"		
EE2-017	Inox	2	1	-	1	1	≈ 7	94.00
EE2-018	Inox	3	2	-	1	2	≈ 10	180.00
EE2-019	Inox	4	2	-	1	3	≈ 12,9	151.00
EE2-020	Inox	5	2	-	2	3	≈ 17	186.00
EE2-021	Inox	6	3	-	3	3	≈ 21	220.00

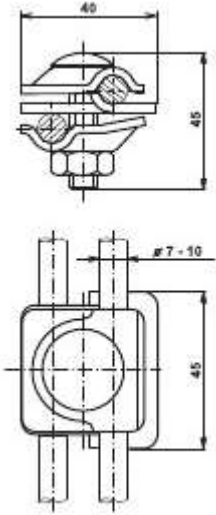


**Component parts of earthing systems**  
**Earth rods (with coupling)**

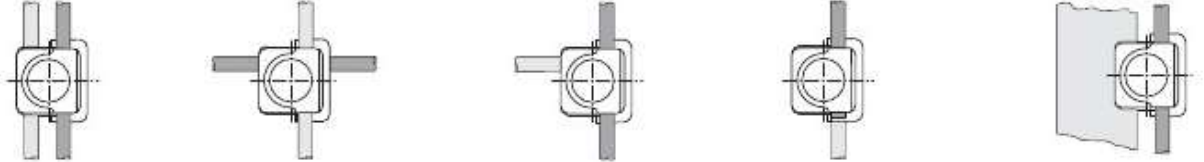
Cat.№	Marking	Material	Dimension (mm)	Length (mm)	Weight (kg)	Price USD/pcs
EE5-002	EEZT20HDG	Hot Dip Galvanized	∅ 20	1500	3,7	14.00
EE5-005	EEZT20V2A	Inox	∅ 20	1500	4	28.00
EE5-006	EEZT20Cu	Copper	∅ 20	1500	5	



## UNIVERSAL CLAMP WITH INTERMEDIATE PLATE

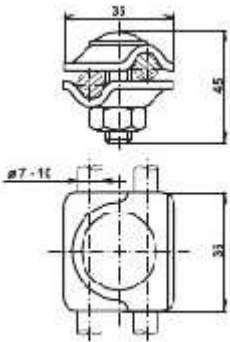


Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN 101	0.131	100	0.75
Copper	EN201	0.141	1	
Inox	EN301	0.112	1	



**Application:** Parallel connection; cross connection; T-connection; Coaxial connection; Flat material connection.

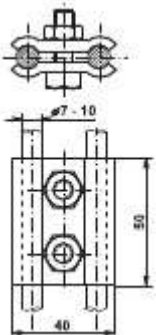
## UNIVERSAL CLAMP WITHOUT INTERMEDIATE PLATE



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN102	0.099	100	0.55
Copper	EN202	0.105	1	
Inox	EN302	0.085	1	

**Application:** Parallel connection; cross connection; T-connection; Coaxial connection ( $\phi$  7-10 mm).

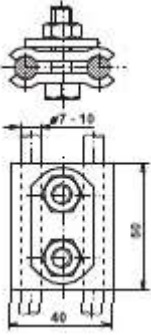
## PARALLEL CLAMP



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN103	0.107	150	0.55
Copper	EN203	0.120	1	
Inox	EN303	0.086	1	

**Application:** Connection of round conductors ( $\phi$  7-10 mm) and connection with flat material.

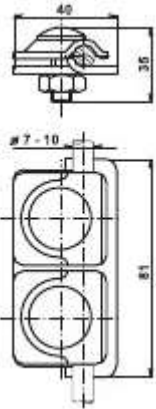
## PARALLEL CLAMP WITH SPLICE



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN104	0.138	100	0.65
Copper	EN304	0.155	1	

**Application:** Connection of round conductors ( $\varnothing$  7-10 mm) and connection with flat material.

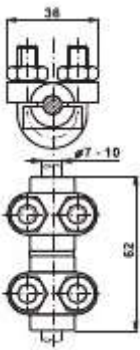
## TEST CLAMP



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN105	0.193	100	1.25
Copper	EN205	0.206	1	
Inox	EN305	0.162	1	

**Application:** Connection of above ground round conductor with grounding.

## TEST CLAMP

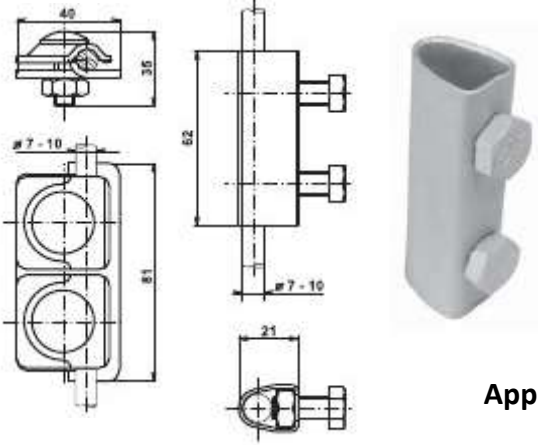


Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN106	0.180	100	2.35

**Application:** Parallel connection of round conductor with grounding



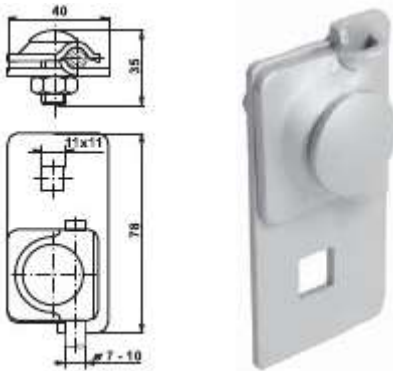
### TEST CLAMP



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN107	0.120	100	1.27
Copper	EN207	0.140	1	
Inox	EN307	0.118	1	

**Application:** Parallel connection of round conductor with grounding.

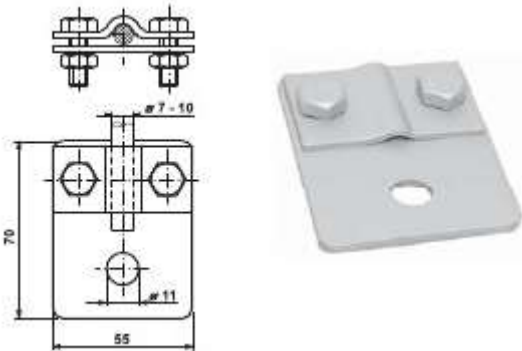
### ATTACHING CLAMP



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN108	0.125	100	0.67
Copper	EN208	0.134	1	
Inox	EN308	0.108	1	

**Application:** Connection of round conductor to metal parts of building.

### ATTACHING CLAMP

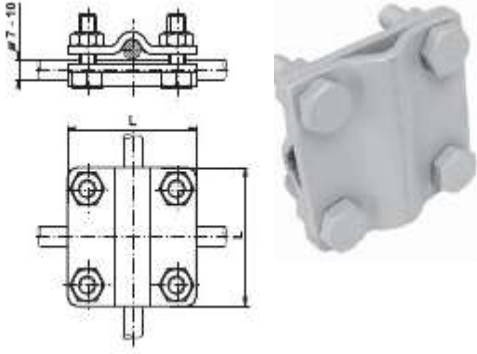


Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN109	0.146	50	0.67
Copper	EN309	0.160	1	

**Application:** Attaching round conductor to metal parts of building.



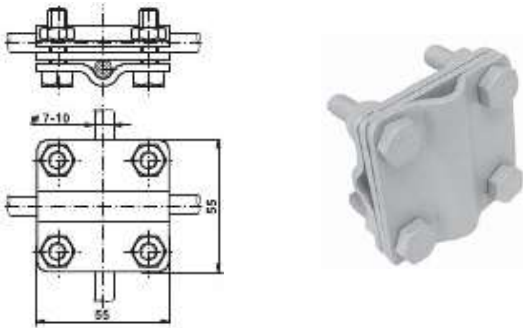
## CROSS CLAMP



Material	Code		Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN110	55	0.216	50	1.03
Copper	EN210	55	0.236	1	
Inox	EN310	55	0.186	1	
Hot Dip Galvanized		65	0.344	50	

**Application:** Cross connection of round conductors.

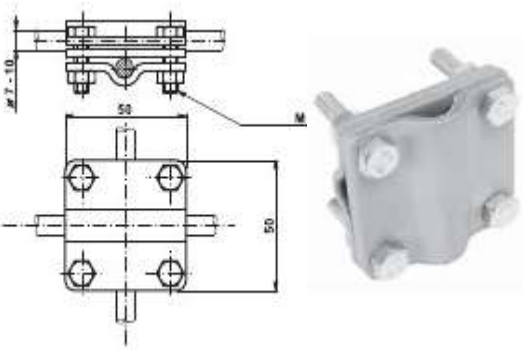
## CROSS CLAMP WITH INTERMEDIATE CLAMP



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN111	0.284	50	1.27

**Application:** Cross connection of round conductors.

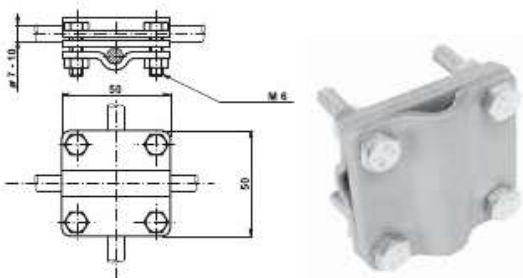
## CROSS CLAMP M6



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN112	0.152	50	0.82
Copper	EN212	0.120	1	
Inox	EN312	0.120	1	

**Application:** Cross connection of round conductors.

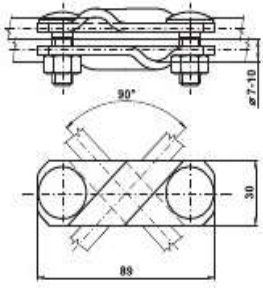
## CROSS CLAMP WITH INTERMEDIATE PLATE M6



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN113	0.211	50	1.09

**Application:** Cross connection of round conductors.

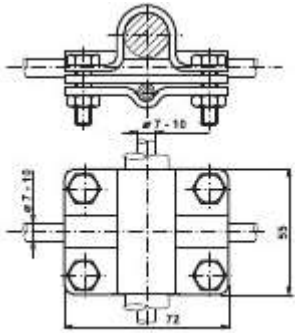
### CROSS DIAGONAL CLAMP



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN114	0.235	50	1.36
Copper	EN214	0.188	1	
Inox	EN314	0.188	1	

**Application:** Cross connection of round conductors.

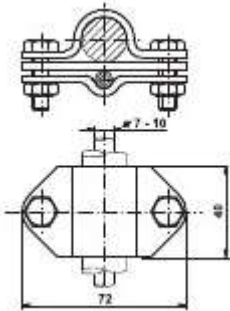
### CLAMP FOR RECEIVING ROD



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN115	0.387	50	1.38
Copper	EN315	0.421	1	

**Application:** Connecting the round conductor to receiving rod.

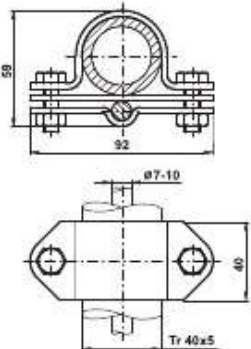
### CLAMP FOR RECEIVING ROD



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN116	0.228	50	1.22
Copper	EN216	0.244	1	
Inox	EN316	0.168	1	

**Application:** Connecting the round conductor with receiving rod.

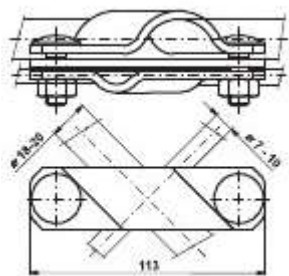
### CLAMP FOR RECEIVING ROD



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN117	0.304	50	1.29
Inox	EN217	0.207	1	

**Application:** Connecting round conductor to receiving rod (ø40mm).

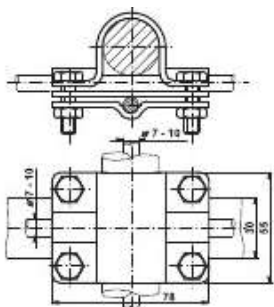
### CLAMP FOR ROD DIAGONAL



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN118	0.382	50	1.56

**Application:** Connecting the grounding tape and round conductor to insertion rods.

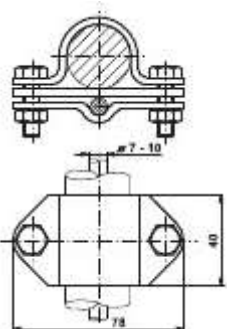
### CLAMP FOR GROUDING ROD



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN119	0.417	50	1.59
Copper	EN319	0.459	1	

**Application:** Connecting the grounding tape and round conductor to grounding rod.

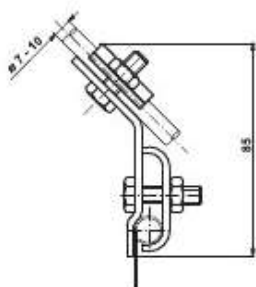
### CLAMP FOR GROUDING ROD



Materia	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN120	0.255	50	1.28
Copper	EN320	0.285	1	

**Application:** Connecting the round conductor and grounding tape to grounding rod.

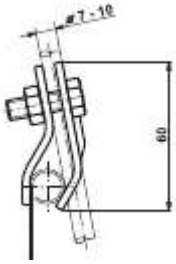
### GUTTER CLAMP



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN121	0.280	50	1.27
Copper	EN321	0.308	1	

**Application:** Connects the round conductor to the gutter.

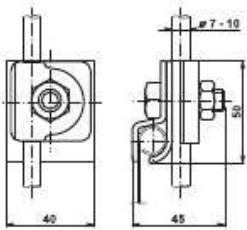
## GUTTER CLAMP



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN122	0.150	100	0.89
Copper	EN322	0.168	1	

**Application:** Connects the round conductor to the gutter.

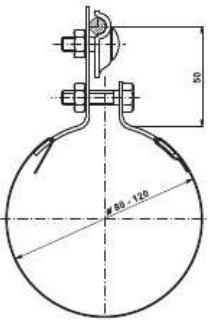
## GUTTER CLAMP



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN123	0.147	100	0.75
Copper	EN223	0.160	1	
Inox	EN323	0.128	1	

**Application:** Connects the round conductor to the gutter.

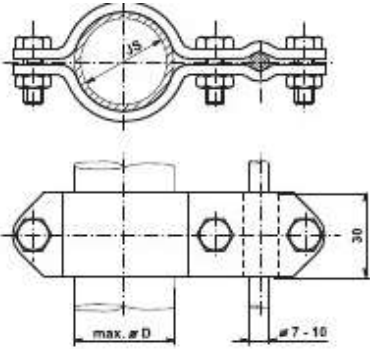
## DOWNPIPE CLAMP



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN125	160	100	1.29
Copper	EN225	168	1	
Inox	EN325	129	1	

**Application:** Connects the eaves trough to the round conductor. Use of flexible stainless-steel tape enables universal use of this kind of clamp for several diameters of downpipe or other pipes.

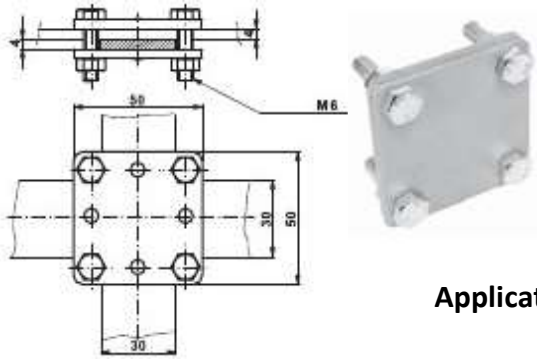
## PIPELINE CLAMP



Material	Code	D (mm)	Js (")	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN124-1	18 - 22	1/2	0,208	50	1.23
	EN124-2	23 - 27	3/4	0.255	50	1.38
	EN124-3	28 - 34	1	0.275	50	1.40
	EN124-4	35 - 43	1 1/4	0.295	50	1.55
	EN124-5	44 - 49	1 1/2	0.315	50	1.65
	EN124-6	50 - 61	2	0.345	50	1.68
	EN124-7	67 - 77	2 1/2	0.373	50	1.88
	EN124-8	81 - 90	3	0.405	50	1.92
	EN124-9	106 - 115	4	0.497	50	2.25
Copper	EN224-1	18 - 22	1/2	0.237	1	
	EN224-2	23 - 27	3/4	0.289	1	
	EN224-3	28 - 34	1	0.313	1	
	EN224-4	35 - 43	1 1/4	0.336	1	
Inox	EN324-1	18 - 22	1/2	0.167	1	
	EN324-2	23 - 27	3/4	0.203	1	
	EN324-3	28 - 34	1	0.218	1	
	EN324-4	35 - 43	1 1/4	0.233	1	
	EN324-5	44 - 49	1 1/2	0.248	1	
	EN324-6	50 - 61	2	0.271	1	
	EN324-7	67 - 77	2 1/2	0.292	1	
	EN324-8	81 - 90	3	0.315	1	
	EN324-9	106 - 115	4	0.384	1	

**Application:** Connects pipelines and eavestroughs with round conductor.

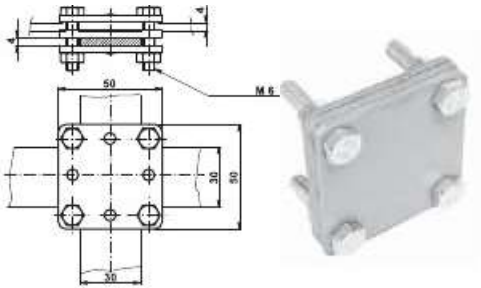
### GROUNDING TAPE-TAPE CLAMP M6



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN126	0.146	100	0.72

**Application:** Used for cross and parallel connection of grounding tape conductor.

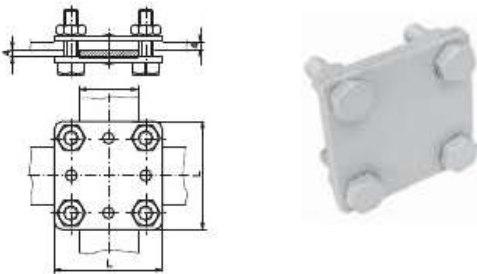
### GROUNDING TAPE-TAPE CLAMP WITH INTERMEDIATE PLATE M6



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN127	0.202	50	1.05

**Application:** Used for cross and parallel connection of grounding tape conductor.

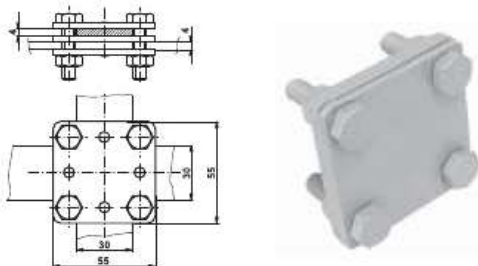
### GROUNDING TAPE-TAPE CLAMP



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN128	0.208	50	1.03
Copper	EN228	0.228	1	
Inox	EN328	0.196	1	

**Application:** For cross and parallel connection of grounding tape conductor (30x4; 40x4)

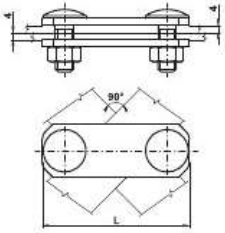
### GROUNDING TAPE-TAPE CLAMP WITH INTERMEDIATE PLATE



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN129	0.275	50	1.22

**Application:** For cross and parallel connection of grounding tape conductor(30x3)

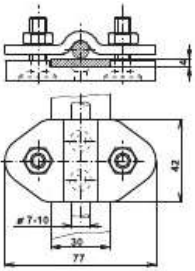
## GROUNDING TAPE- DIAGONAL CLAMP



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN130	0.247	50	1.18
Inox	EN330	0.193	1	

**Application:** For cross and parallel connection of grounding tape conductor(30x3).

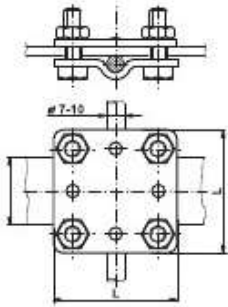
## GROUNDING TAPE – WIRE CLAMP



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN131	0.249	50	1.45

**Application:** For parallel connection of grounding tape and round conductor.

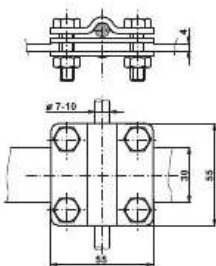
## GROUNDING TAPE – WIRE CLAMP



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN132	0.214	50	1.12
Copper	EN232	0.232	1	
Inox	EN332	0.201	1	

**Application:** For cross and parallel connection of grounding tape conductor (30x4; 40x4) and round conductor.

## GROUNDING TAPE – WIRE CLAMP WITH INTERMEDIATE PLATE

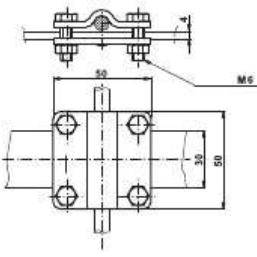


Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN133	0.281	50	1.28
Inox	EN333	0.243	1	

**Application:** For parallel and cross connection of grounding tape and round conductor.



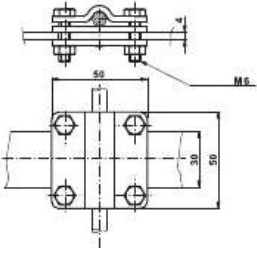
## GROUNDING TAPE-WIRE CLAMP M6



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN134	0.149	50	0.98

**Application:** For parallel and cross connection of grounding tape and round conductor.

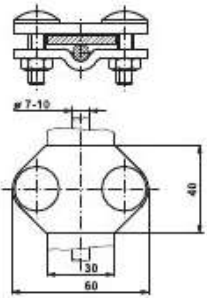
## GROUNDING TAPE-WIRE CLAMP WITH INTERMEDIATE PLATE M6



Material	Code	Weight (kg)	Package (pcs)	Price
Hot Dip Galvanized	EN135	0.209	50	1.18

**Application:** For parallel and cross connection of grounding tape and round conductor.

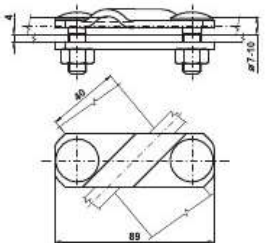
## GROUNDING TAPE - WIRE CLAMP



Material	Code	Weight (kg)	Package (pcs)	Price
Hot Dip Galvanized	EN136	0.163	100	1.09
Copper	EN336	0.172	1	

**Application:** For parallel of grounding tape and round conductor.

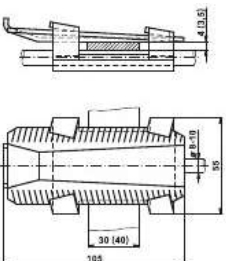
## GROUNDING TAPE - WIRE DIAGONAL CLAMP



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN137	0.234	50	1.15
Inox	EN237	0.186	1	

**Application:** For cross and parallel connection of grounding tape and round conductor.

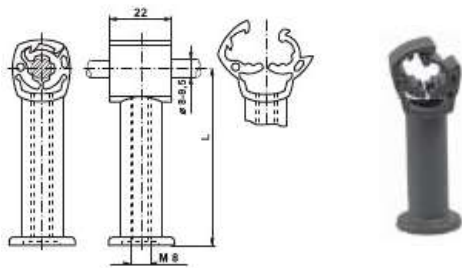
## GROUNDING TAPE-TAPE-WIRE CLAMP (WEDGE)



Material	Code	Weight (kg)	Package (pcs)	Price USD/pcs
Hot Dip Galvanized	EN138	0.208	50	1.35

**Application:** For parallel and cross connection of grounding tape or grounding tape and round conductor in concrete.

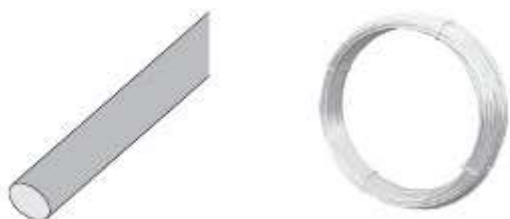
## CONDUCTOR SUPPORT FOR MASONRY



Hight	Code	Weight (kg)	Package (pcs)	Price USD/pcs
L=20mm	EN139-2	0.008	50	0.51
L=30mm	EN139-3	0.009	50	0.65
L= 55mm	EN139-5	0.010	50	0.69

**Application:** Fastening the lightning conductor to masonry structure using a screws and dowels.

## ROUND CONDUCTOR



Material	Code	Dimensions (mm)	Package (kg)	Price
Hot Dip Galvanized	EN140	8	50	-
	EN141	10	50	-
Copper	EN240	8	25	-
	EN241	10	25	-
Inox	EN340	8		-
AlMgSi	EN440	8	20	-
	EN441	10	20	-
	And pvc	8/11	20	-

**Application:** For Lightning Protection Systems.

## TAPE CONDUCTOR



Material	Code	Dimensions (mm)	Package (kg/m)	Price
Hot Dip Galvanized	EN142-1	20x3	50kg	-
	EN142-2	30x3.5	50kg	-
	EN142-3	40x4	50kg	-
Inox	EN242	30x3.5	4m	-

**Application:** For Lightning Protection Systems and Grounding Systems.

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