GROUNDSCREWS.SHOP

GROUNDSCREWS.SHOP

Professional solutions • Reliable service

Hot dip galvanized • Multi-Purpose constructions

Advanced experience • Located in Latvia

WWW.GROUNDSCREWS.LV

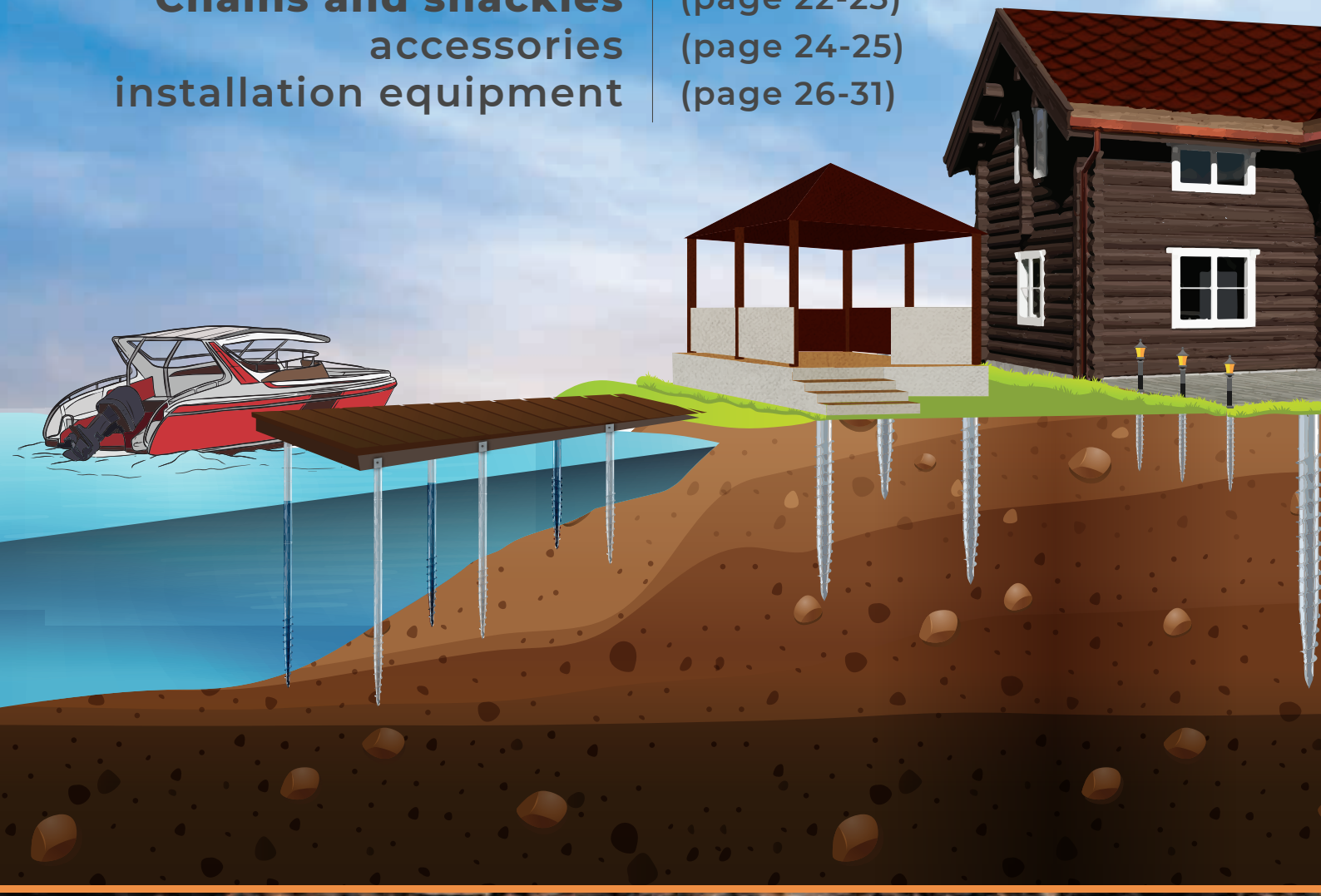
CONTENT

Ø 76mm / Ø 89mm

U profile	(page 4-5)
G profile	(page 6-7)
M profile	(page 8-9)
V profile	(page 10-11)

Ø 114mm

HD-U profile	(page 12-13)
HD-G profile	(page 14-15)
HD-M profile	(page 16-17)
Earth anchor	(page 20-21)
Chains and shackles	(page 22-23)
accessories	(page 24-25)
installation equipment	(page 26-31)



e-catalogue

GROUNDSCREWS.SHOP

STOP CONCRETING
SAVE THE ENVIRONMENT

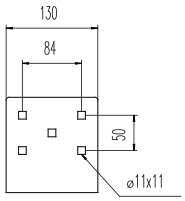
GROUND SCREW for easy beam assembly

The U Series of ground screws are specially designed for all common dimensions of wood beams. They are optimally suited for quick and easy fastening of standing posts as well as for constructing carports, wooden terraces, piers and bridges etc.

U profile

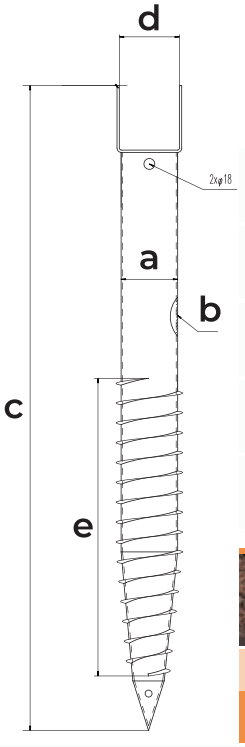
U68x685[550]-71
U68x865[730]-91
U76x1135[1000]-101
U114x1300[1165]-121
U114x1435[1300]-121

GROUNDSCREWS.SHOP
U profile

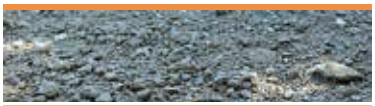


Product Description

The Ground screw is made of high quality S235 steel and finished by hot dipped galvanizing. This type of ground screw pile with U flange can be fixed with horizontal and vertical timber applications, such as fence, timber house, timber piles, benches, barriers, playground equipment etc.



	a Outer Ø mm	b Thickness mm	c Length mm	d Head width mm	e Thread height mm	Weight kg
U68x685-550-71	68	1,8	685	71	280	2,6
U68x865-730-91	68	1,8	865	91	280	3,2
U76x1135-1000-101	76	2,5	1135	101	600	7,1
U114x1300-1165-121	114	3	1300	121	600	12,3
U114x1435-1300-121	114	3	1435	121	600	15,9



	semi-solid loam			semi-solid gravel			semi-solid sand		
	Max load kN	Max tension load kN	Shift load kN	Max load kN	Max tension load kN	Shift load kN	Max load kN	Max tension load kN	Shift load kN
U68x685-550-71	4,6	3,4	2,9	8,2	5,3	0,8	9,2	5,3	0,5
U68x865-730-91	5,2	4,6	4,7	11,9	8	1,5	13,3	7,5	1,5
U76x1135-1000-101	11,9	9,2	6,8	18,4	12,9	2,6	20,7	12,4	2,2
U114x1300-1165-121	17,2	14,8	11,8	24,2	18,1	4,8	28,2	17	3,1
U114x1435-1300-121	22,8	18,1	12,5	32,8	24,9	5,8	37,2	23,3	4,5

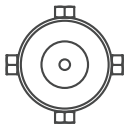
1 kN = 101,97 kg. All values are approximate and can be used as estimates for initial calculations. Actual load tests are mandatory! The manufacturer is not liable for damage caused due to errors in the calculation of loads.

WHERE TO USE:

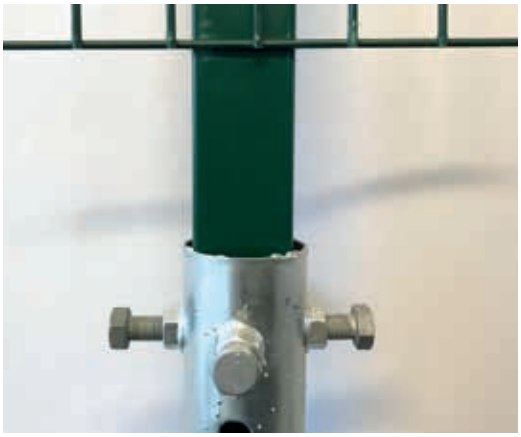
Foundation for umbrellas, sunshades, clothes lines, mailboxes, marquees, volleyball and tennis nets, flagpoles, road and traffic signs and fencing systems.

G profile

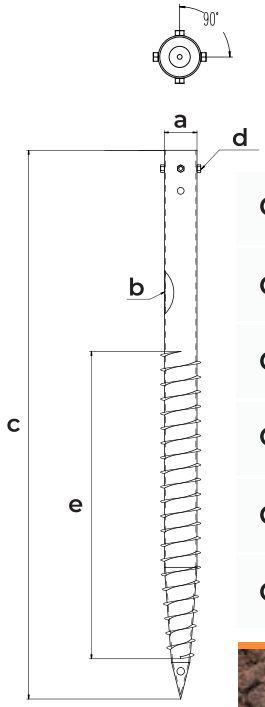
G76x800
G76x865
G76x1500
G76x2100
G89x1500
G114x1300



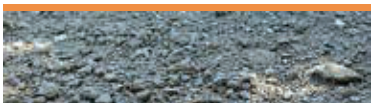
GROUNDSCREWS.SHOP
G profile



Ground screw piles are very commonly used in solar power system. It's a stable foundation base because of high grade S235 steel and galvanized treatment. Galvanized ground screw pile can provide 30-50 years lifetime and can be installed where needed.



	a Outer Ø mm	b Thickness mm	c Length mm	d Threaded holes	e Thread height mm	Weight kg
G76x800x2,5-3xM16	76	2,5	800	3xM16	480	4,3
G76x865x2-4xM16	76	2	865	4xM16	400	3,6
G76x1500x3-4xM16	76	3	1500	4xM16	840	9,2
G76x2100x3,5-4xM16	76	3,5	2100	4xM16	880	14,7
G89x1500x3-4xM12	89	3	1500	4xM12	840	10,7
G114x1300x3-4xM16	114	3	1300	4xM16	600	11,6



	semi-solid loam			semi-solid gravel			semi-solid sand		
	Max load kN	Max tension load kN	Shift load kN	Max load kN	Max tension load kN	Shift load kN	Max load kN	Max tension load kN	Shift load kN
G76x800x2,5-3xM16	10,6	8,5	5,3	14,10	10,70	1,8	15,9	10	1,5
G76x865x2-4xM16	10,7	8,7	5,3	14,4	10,9	1,9	16,1	10,5	1,5
G76x1500x3-4xM16	19,3	15,2	10,8	27,1	19,8	4,9	31,3	19,1	4,7
G76x2100x3,5-4xM16	28,2	22,8	11,9	36,1	28,3	5,9	40,2	25,7	5,6
G89x1500x3-4xM12	23,8	17,9	8,3	37,6	25,7	4,5	42	24,2	3,8
G114x1300x3-4xM16	24,3	19,2	13,9	33,2	24,6	5,8	38	22,3	4,5

1 kN = 101,97 kg. All values are approximate and can be used as estimates for initial calculations. Actual load tests are mandatory! The manufacturer is not liable for damage caused due to errors in the calculation of loads.

GROUND SCREW for direct mounting on the thread

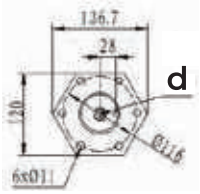
The M series of ground screw have a central M thread that allows the supported object to be installed directly onto the ground screw foundation. They are suitable for pre-assembled garages, containers, buildings, wooden or steel houses , arbours, street lights, etc.

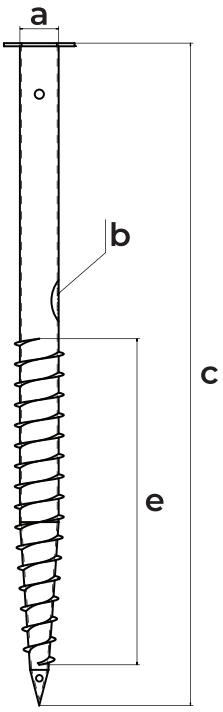
M profile

M76x800
M76x1300
M76x2100
M76x3000
M114x1300

GROUNDSCREWS.SHOP

M profile





Product Description

Ground screws with hexagon flange are very popular in solar PV system. It replaces traditional concrete base, can be connected with solar brackets to keep stable and allows even expansive constructions to be built.

	a Outer Ø mm	b Thickness mm	c Length mm	d Threaded holes	e Thread height mm	Weight kg
M76x800x2-M16	76	2	800	M16	400	3,8
M76x1300x3-M16	76	3	1300	M16	640	8,3
M76x2100x3,5-M16	76	3,5	2100	M16	880	15,4
M76x3000x3,75-M16	76	3,75	3000	M16	1120	23,4
M114x1300x3-M24	114	3	1300	M24	800	13,2

	semi-solid loam			semi-solid gravel			semi-solid sand		
	Max load kN	Max tension load kN	Shift load kN	Max load kN	Max tension load kN	Shift load kN	Max load kN	Max tension load kN	Shift load kN
M76x800x2-M16	10,6	8,5	5,3	14,1	10,7	1,8	15,9	10	1,5
M76x1300x3-M16	14,5	10,6	7,4	23,3	16,2	3,2	27,4	16,2	3,8
M76x2100x3,5-M16	29,2	23,6	13	35,8	27,4	6,2	41,5	26,3	6,3
M76x3000x3,75-M16	37,2	25,1	14	49,5	32,7	7	55,4	32,2	7
M114x1300x3-M24	23,7	18,8	13,5	33,5	24	5,8	37,2	23,2	4,4

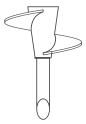
1 kN = 101,97 kg. All values are approximate and can be used as estimates for initial calculations. Actual load tests are mandatory! The manufacturer is not liable for damage caused due to errors in the calculation of loads.

V profile

Helix Ground Screw piles can be used as screw anchors, helical piles and helical anchors. These are a steel screw-in piling and ground anchoring system used for building deep foundations. These Ground Screw Pile can be used in different kind of soils and foundation types including clay, sand, gravel, soil beneath water and other foundation.

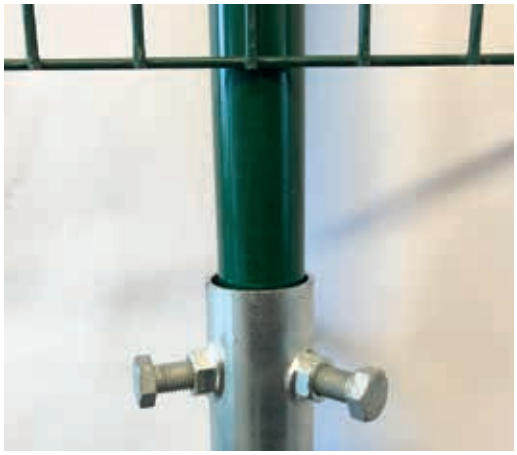
V profile

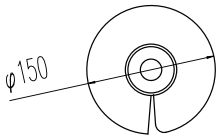
V60x900
V76x1600



GROUNDSCREWS.SHOP

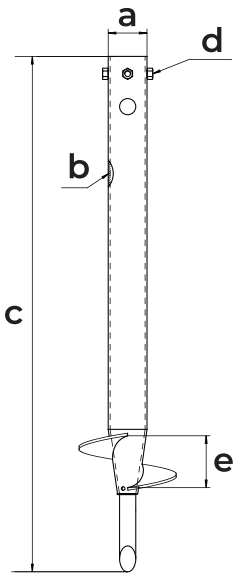
V profile



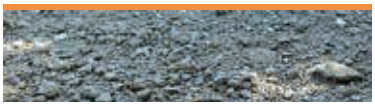


Product Description

V Ground screw is similar to common ground screw but the helix quantity is less than others. The helix sizes can be 150x6mm or 150x8mm. The material is S235 steel and surface is hot dip galvanized.



	a Outer Ø mm	b Thickness mm	c Length mm	d Threaded holes	e Thread height mm	Weight kg
60x900	60	3	900	3xM16	50	4,6
76x1600	76	3	1600	3xM16	100	9,5



	semi-solid loam			semi-solid gravel			semi-solid sand		
	Max load kN	Max tension load kN	Shift load kN	Max load kN	Max tension load kN	Shift load kN	Max load kN	Max tension load kN	Shift load kN
V60x900	4,6	4,3	2,9	8,2	5,3	0,8	9,2	5,3	0,5
V76x1600	18,2	14	9,5	26,8	19	3,2	30,2	17,9	3

1 kN = 101,97 kg. All values are approximate and can be used as estimates for initial calculations. Actual load tests are mandatory! The manufacturer is not liable for damage caused due to errors in the calculation of loads.

HEAVY DUTY

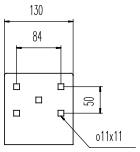
Withstands heavy load, designed for larger and heavier constructions

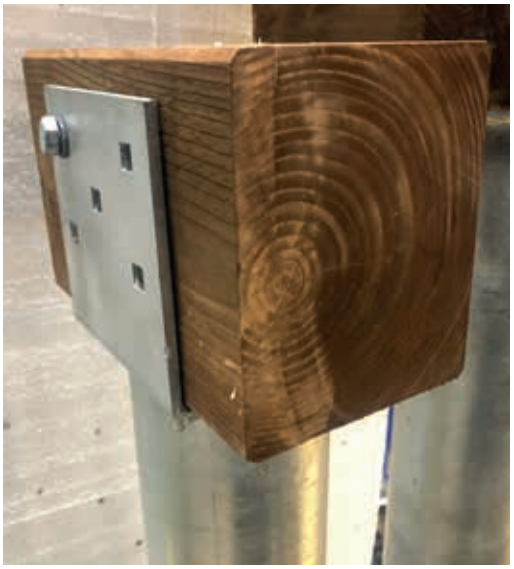
Piles are environmentally-friendly. The base of the screw piles will not damage the landscape, minimizes damage to the roots of trees and shrubs, does not damage the top layer of the soil. They are made of non-hazardous and endlessly recyclable steel.

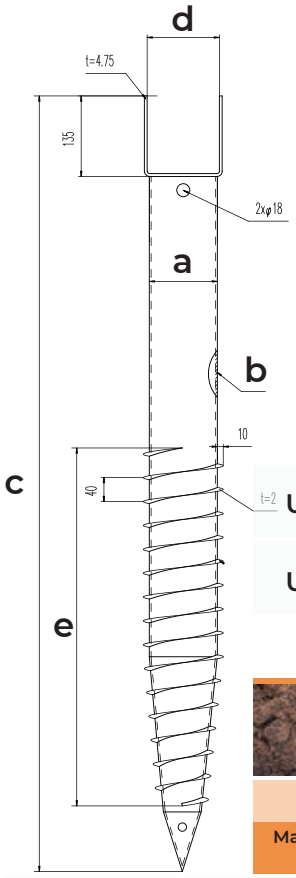
HD-U profile ø 114 mm

GROUNDSCREWS.SHOP
Heavy duty profiles

specially produced for industrial use







Product Description

The Ground screw is made of high quality S235 steel and finished by hot dipped galvanizing. This type of ground screw pile with U flange can be fixed with horizontal and vertical timber applications, such as fence, timber house, timber piles, benches, barriers, playground equipment etc.

	a	b	c	d	e	
	Outer Ø mm	Thickness mm	Length mm	Head width mm	Thread height mm	Weight kg
U114x1300-1165-121	114	3	1300	121	600	12,3
U114x1435-1300-121	114	3	1435	121	600	15,9

	semi-solid loam			semi-solid gravel			semi-solid sand		
	Max load kN	Max tension load kN	Shift load kN	Max load kN	Max tension load kN	Shift load kN	Max load kN	Max tension load kN	Shift load kN
U114x1300-1165x3-121	17,2	14,8	11,8	24,2	18,1	4,8	28,2	17	3,1
U114x1435-1300x3-121	22,8	18,1	12,5	32,8	24,9	5,8	37,2	23,3	4,5

1 kN = 101,97 kg. All values are approximate and can be used as estimates for initial calculations. Actual load tests are mandatory! The manufacturer is not liable for damage caused due to errors in the calculation of loads.

HEAVY DUTY

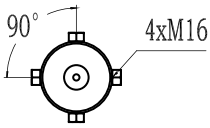
Withstands heavy load, designed for larger and heavier constructions

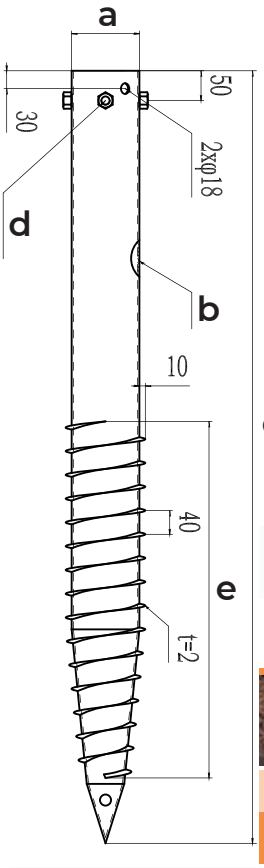
Piles are environmentally-friendly. The base of the screw piles will not damage the landscape, minimizes damage to the roots of trees and shrubs, does not damage the top layer of the soil. They are made of non-hazardous and endlessly recyclable steel.

HD-G profile ⌀ 114 mm

GROUNDSCREWS.SHOP
Heavy duty profiles

specially produced for industrial use





Product Description

Ground screw piles are very commonly used in solar power system. It's a stable foundation base because of high grade S235 steel and galvanized treatment. Galvanized ground screw pile can provide 30-50 years lifetime and can be installed where needed.

	a	b	c	d	e	
	Outer Ø mm	Thickness mm	Length mm	Threaded holes	Thread height mm	Weight kg
G114x1300x3-4xM16	114	3	1300	4xM16	600	11,6

	semi-solid loam			semi-solid gravel			semi-solid sand		
	Max load kN	Max tension load kN	Shift load kN	Max load kN	Max tension load kN	Shift load kN	Max load kN	Max tension load kN	Shift load kN
G114x1300x3-4xM16	24,3	19,2	13,9	33,2	24,6	5,8	38	22,3	4,5

1 kN = 101,97 kg. All values are approximate and can be used as estimates for initial calculations. Actual load tests are mandatory! The manufacturer is not liable for damage caused due to errors in the calculation of loads.

HEAVY DUTY

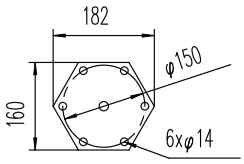
Withstands heavy load, designed for larger and heavier constructions

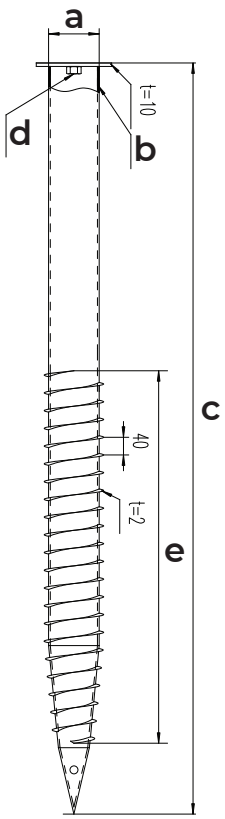
Piles are environmentally-friendly. The base of the screw piles will not damage the landscape, minimizes damage to the roots of trees and shrubs, does not damage the top layer of the soil. They are made of non-hazardous and endlessly recyclable steel.

HD-M ø 114 mm profile

GROUNDSCREWS.SHOP
Heavy duty profiles

specially produced for industrial use





Product Description

Ground screws with hexagon flange are very popular in solar PV system. It replaces traditional concrete base, can be connected with solar brackets to keep stable and allows even expansive constructions to be built.

	a	b	c	d	e	
	Outer Ø mm	Thickness mm	Length mm	Threaded holes	Thread height mm	Weight kg
M114x1300x3-M24	114	3	1300	M24	800	13,2

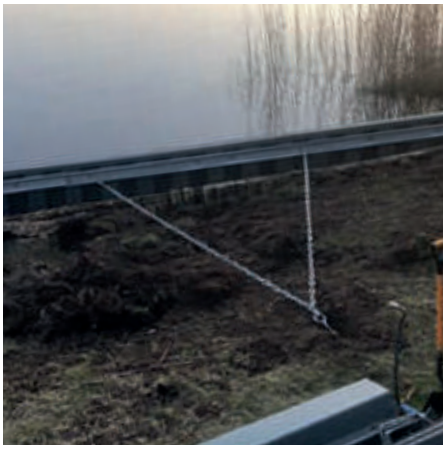
	semi-solid loam			semi-solid gravel			semi-solid sand		
	Max load kN	Max tension load kN	Shift load kN	Max load kN	Max tension load kN	Shift load kN	Max load kN	Max tension load kN	Shift load kN
M114x1300x3-M24	23,7	18,8	13,5	33,5	24	5,8	37,2	23,2	4,4

1 kN = 101,97 kg. All values are approximate and can be used as estimates for initial calculations. Actual load tests are mandatory! The manufacturer is not liable for damage caused due to errors in the calculation of loads.

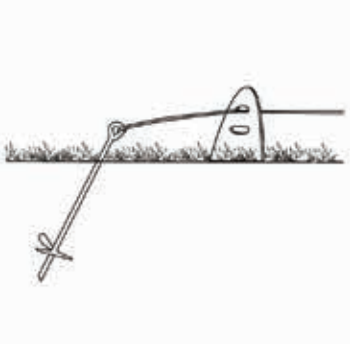
KARL DEUTSCH
116

GROUND SCREW APPLICATION

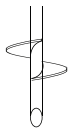
GROUNDSCREWS.SHOP



The ground earth anchor 16x1000 is used for fixing chains, ropes and wires. For example, boat ropes, mast lines or anchor chains. The product can also be cast in concrete.

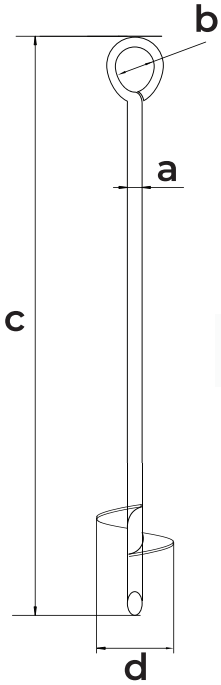


Earth anchor



GROUNDSCREWS.SHOP

Earth anchor



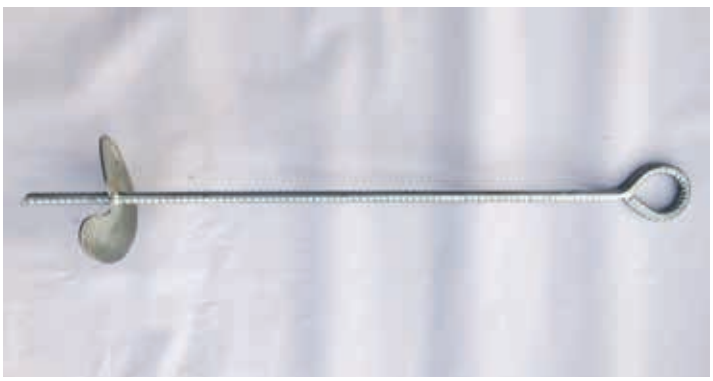
Product Description

Earth anchor is one of the various ground screw types whose surface is galvanized. In general, there is one rod with a loop on top and with one or two helix on bottom. The installation of earth anchor is very easily and one person is sufficient to screw it into ground by metal bar.

	a	b	c	d	
	Ø mm	Ø mm	Length mm	Helix mm	Weight kg
earth anchor	16	55	1000	180	2,3

Application

1. Retaining walls, as part of erosion control systems.
2. Structural support of temporary buildings and structures, such as circus tents and outdoor stages.
3. Mooning marine structures, such as floating docks and pipelines.
4. Anchoring utility poles and similar structures.
5. Drainage systems, for loadlocking and restraining capability to happen simultaneously.



ø10mm

ø13mm

ø16mm

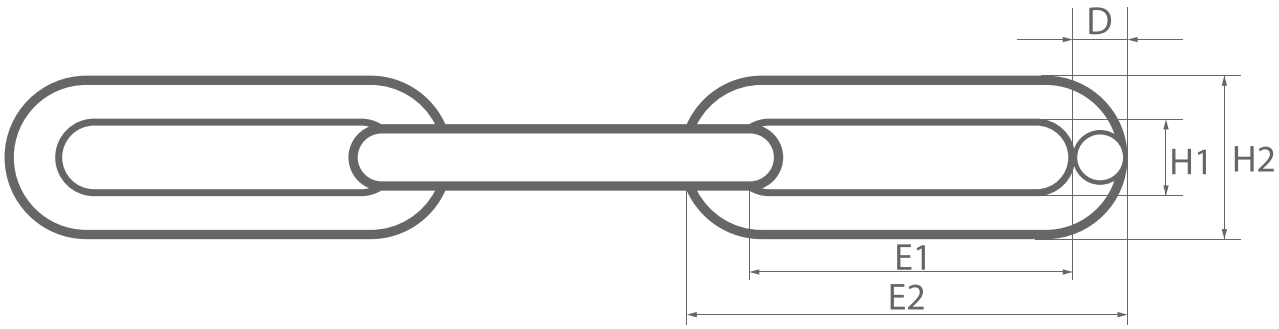
ø20mm

Chains and shackles

GROUNDSCREWS.SHOP
Chains and shackles

Durable hot dip galvanized (HDG) long link chains. DIN 763.

Galvanised Steel Long Link Chain is used within an variety of industries, excellent for playground equipment, farming use and mooring steel chains.

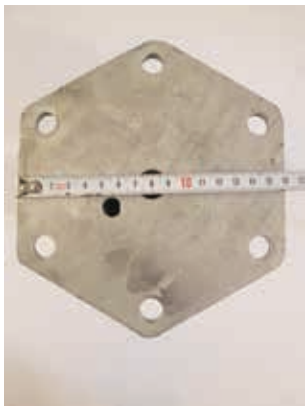


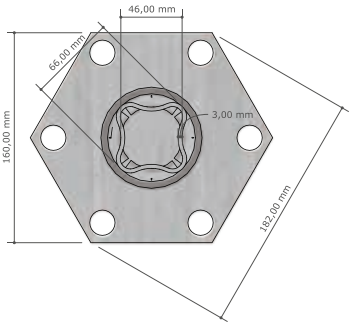
D mm	E1 mm	E2 mm	H1 mm	H2 mm	Weight kg/m	Working load kg	Test load kN	Tensile strength kN	Chain price EUR/m
10	65	85	20	40	1,75	630	13	40	3,50
13	82	108	26	52	2,95	1000	21	63	6,00
16	100	132	32	64	4,45	1600	33	100	8,00
20	120	160	35	75	7,00	2500	50	160	14,00

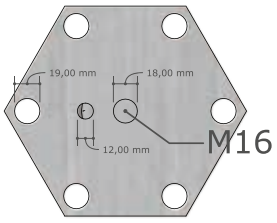
Shackles are used when attachment devices or ropes have to be connected to structures, machines or components.

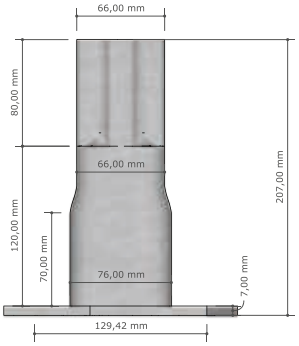
ø13mm ø16mm ø20mm ø25mm

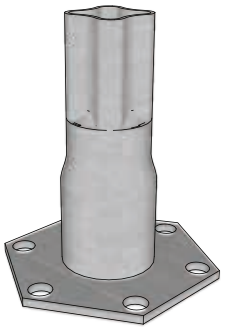
D mm	Shackle price EUR / pcs
13	1,20
16	2,00
20	3,00
25	7,00

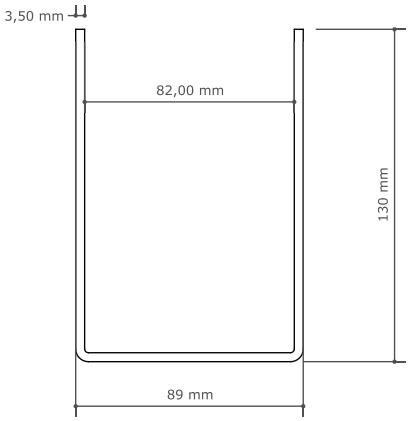


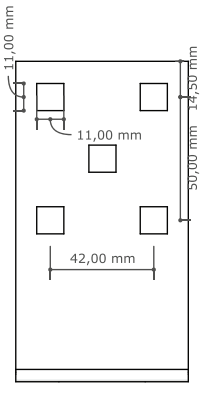

46,00 mm
66,00 mm
3,00 mm
160,00 mm
182,00 mm

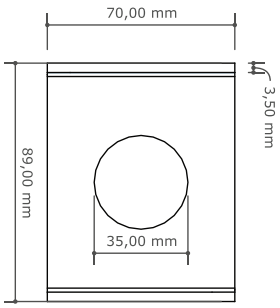

19,00 mm
18,00 mm
12,00 mm
M16

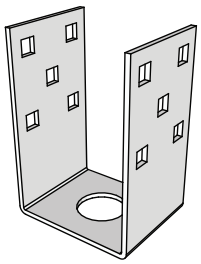

66,00 mm
80,00 mm
66,00 mm
120,00 mm
207,00 mm
70,00 mm
76,00 mm
7,00 mm
129,42 mm




3,50 mm
82,00 mm
130 mm
89 mm


11,00 mm
14,50 mm
11,00 mm
30,00 mm
42,00 mm


70,00 mm
3,50 mm
89,00 mm
35,00 mm



Accessories

GROUNDSCREWS.SHOP
Accessories

specially produced to modify

G profile to M profile
&
M profile to U profile

10 €

M adapter

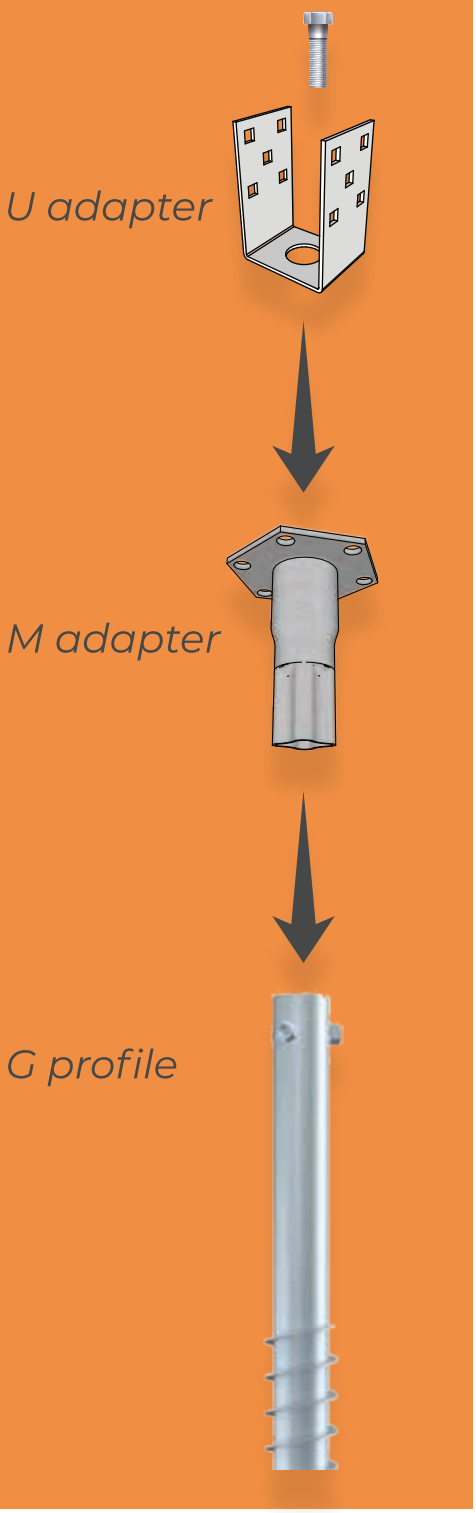
Product developed to modify construction from G profile to M profile, without dismantling ground screw

5 €

U adapter

Product developed to modify construction from M profile to U profile, without dismantling ground screw

how it works



EASY USE REDUCTOR

for RENT and SALE

Install a GROUND SCREW within 5 minutes using ground screw easy assembling reductor!

EASY TRANSPORTABLE

Assembling time	1 minute
Weight	7.5 kg
Box size	38 x 22 x 10 cm
Compatible	Electric screwdriver
Gear ratio	1:60
Torque out put	> 4800 N.M
Material	40 Cr
Socket	32mm 33 mm

RENT 30 EUR/day

FOR SALE 150 EUR

U profile + assembled reductor + electric screwdriver

GROUNDSCREWS.SHOP
Equipment

PROFESSIONAL INSTALLATION EQUIPMENT

TECHNICAL DATA **GSD-20** GROUND SCREW DRIVER	
MODEL	**GSD-20**
VOLTAGE	**230V**
MAX. TORQUE	**2600N.M**
MAX. POWER CONSUMPTION	**1600W**
MAX. AC CURRENT	**7A**
NO-Load SPEED	**122MIN**

Selling price: ***3615 EUR***
Rent price: ***100 EUR/day***

TECHNICAL DATA **GSD-30** GROUND SCREW DRIVER	
MODEL	**GSD-30**
VOLTAGE	**230V**
MAX. TORQUE	**3600N.M**
MAX. POWER CONSUMPTION	**2000W**
MAX. AC CURRENT	**9A**
NO-Load SPEED	**122MIN**

Selling price: ***4923 EUR***
Rent price: ***120 EUR/day***

TECHNICAL DATA **GSD-50** GROUND SCREW DRIVER	
MODEL	**GSD-50**
VOLTAGE	**230V**
MAX. TORQUE	**4800N.M**
MAX. POWER CONSUMPTION	**4000W**
MAX. AC CURRENT	**18A**
NO-Load SPEED	**122MIN**

Selling price: ***7630 EUR***
Rent price: ***150 EUR/day***

HYDRAULIC INSTALLATION EQUIPMENT

HYDRAULIC DRIVE HEAD SPECIFICATIONS

RATED TORQUE (not less than)	**4300 / 8700 / 11000 NM**
INLET PRESSURE (nominal)	**16 MPa**
INLET PRESSURE (maximum)	**20 MPa**
WEIGHT (without holding bracket)	**21 / 37,5 / 46 kg**
Oil temperature	**+15°C to +70°C**
Interval of ambient temperatures	**-40°C to +40°C**
SPEED	**3-15 RPM**

When choosing a hydraulic driver, the diameter of the pile and the density of the soil must be taken into account.
* Hydraulic drive available separately.

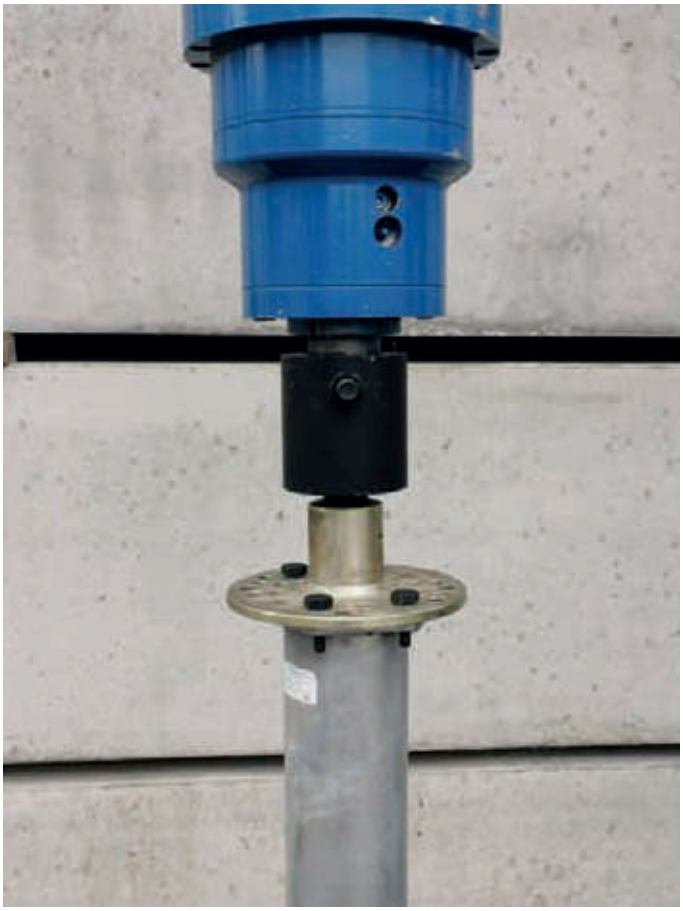
HYDRAULIC POWER PACK SPECIFICATIONS

FLOW	**36 liters / MIN**
MAX pressure	**15 MPa**
WORKING FLUID TEMPERATURE (MAX)	**+70°C**
OIL TANK CAPACITY	**40 liters**
FUEL TANK CAPACITY	**6,7 liters**
HYDRAULIC SYSTEM VOLUME	**MAX. 40L**
FILTRATION SYSTEM	**inorganic microfiber**
ENGINE	**4-stroke, 13 HP (HONDA)**
OPERATING CONDITIONS	**-15°C to +30°C**
AVERAGE FUEL CONSUMPTION	**374 g/kWh**
WEIGHT (without working fluid)	**85 kg**
WEIGHT (with working fluid)	**125 kg**

You can connect any hydraulic tool to this hydraulic power unit - hydraulic hammer, hydraulic shears, hydraulic pump and more.

Weight with a winch	100 kg
Carrying capacity (MAX)	130 kg
MAX screw pile length	4000 mm
Dimentions in transport conditions	3500x550x530

INSTALLATION EQUIPMENT



PROFESSIONAL HYDRAULIC INSTALLATION EQUIPMENT

GROUNDSCREWS.SHOP
Equipment

for RENT and SALE

GSHD-60 GSHD-80 GSHD-150 GSHD-200 GSHD-300

Model	UNIT	GSHD-60	GSHD-80	GSHD-150	GSHD-200	GSHD-300
Application	T	2-6	6-15	15-20	20-25	25-40
MAX Torque	kNm	4,1	9,9	20,1	30,4	59,4
Pressure	Bar	80-240	80-240	80-260	80-260	160-350
Flow	Lpm	25-92	40-150	80-170	80-170	100-250
Rotate speed	Rpm	30-68	20-48	15-48	12-26	10-22
Output shaft	mm	65x65	75x75	75x75	75x75	110x110
Weight	kg	110	115	200	298	721

GROUND SCREW BENEFITS

Installation time - 5 minutes

Hot dip galvanized treatment

30-50 years lifetime

Safe and stable foundation (reliable performance)

High quality technology

High grade quality S235 steel

Quick, easy and time-saving installation

No digging or concrete

Removable at anytime or place

No rust, No corrosion, No peeling

Environment-friendly

KARSTI CINKOTI SKRŪVPĀĻI HDG GROUND SCREWS	CENA bez PVN PRICE excl. VAT EUR	PVN 21% VAT 21% EUR	CENA ar PVN PRICE incl. VAT EUR
G76x800x2.5mm with 3xM16	13,20	2,77	**15,97**
G76x865x2mm with 4xM16	13,20	2,77	**15,97**
G76x1500x3mm with 4xM16	25,30	5,31	**30,61**
G76x2100x3.5mm with 3xM16	34,10	7,16	**41,26**
G76x2100x3.5mm with 4xM16	34,10	7,16	**41,26**
G89x1500x3mm with 4xM12	27,50	5,78	**33,28**
G114x1300x3mm with 4xM16	35,20	7,39	**42,59**
M76x800x3mm M12	17,60	3,70	**21,30**
M76x800x2mm M16	17,60	3,70	**21,30**
M76x1300x3mm M12	24,20	5,08	**29,28**
M76x1300x3mm M16	24,20	5,08	**29,28**
M76x2100x3.5mm M16	40,70	8,55	**49,25**
M76x3000x3.75mm M16	53,90	11,32	**65,22**
M114x1300x3mm M20	35,20	7,39	**42,59**
U68x685x1.8mm head-71mm (length to the U-top 550mm)	11,00	2,31	**13,31**
U68x865x1.8mm head-91mm (length to the U-top 730mm)	16,50	3,47	**19,97**
U76x1135x2.5mm head-101mm (length to the U-top 1000mm)	20,90	4,39	**25,29**
U114x1300x3mm head-121mm (length to the U-top 1165mm)	35,20	7,39	**42,59**
U114x1435x3mm head-121mm (length to the U-top 1300mm)	38,50	8,09	**46,59**
V60x900x3mm (helix ground screw)	14,30	3,00	**17,30**
V76x1600x3mm (helix ground screw)	26,40	5,54	**31,94**
Earth anchor 16x1000x180x3mm	6,60	1,39	**7,99**
U-type top adapter	5,00	1,05	**6,05**
M-hexagon top adapter	10,00	2,10	**12,10**

INSTRUMENTI EQUIPMENT	PĀRDOŠANA FOR SALE CENA bez PVN PRICE excl. VAT EUR	ĪREI / FOR RENT Deposit EUR	Rent price **per MONTH** EUR	Rent price **per DAY** EUR
Ground Screw reductor GSR 1:60	150	150	100	**30**
Electric driver GSD-20 2600N.M	3615	3000	1000	**100**
Electric driver GSD-30 3600N.M	4923	4000	1200	**120**
Electric driver GSD-50 4800N.M	7630	7000	2000	**150**

GROUNDSCREWS.SHOP

WWW.GROUNDSCREWS.SHOP
WWW.GROUNDSCREWS.LV

Price subject to change without any notice. Please contact us for the most up-to-date information. Due to a policy of continuous product development, SIA GRAND GROUND reserves the right to change specifications without prior notice.

LOCATED in LATVIA
"BRUNAVINAS", Dreilini,
Stopinu novads, LV-2130

+371 29 24 39 34
+371 29 37 48 49

info@groundscrews.shop
info@groundscrews.lv