

## Manual reflector holder for sighting frame stake out

- one holder for stake out and control of the nails
- changeable marking pin
- adjustable reflector holder
- compact and light construction
- 2 circular levels in the handle
- tiltable reflector may be pushed through
- handle of Mahogany wood



### Type J

Special holder for Zeiss mini prisms P1 (Jena) with a case diameter of 45 mm and a rear screw-on stub M10. Standard prism constant  $K = -30 \text{ mm}/-35 \text{ mm}$ .

*Please mention when ordering.*

- no adjustment of the reflector holder necessary

*as long as stocks last*

**Typ J** (without prism)

**Order-No. 520**

79,- €



### Typ EZ

Special holder for reflectors from Zeiss.

- no adjustment of the reflector holder necessary
- Prism constant  $K = -35 \text{ mm}$ .

**Typ EZ** (without prism)

**Order-No. 550**

79,- €



### Typ T

Special holder for reflectors or reflector holders with 5/8" female thread and 50 mm tilting axis height, for example TOPCON mini prism.

Especially suitable for our reflector holder series HIP-U and RT 50:

- HIP-U with integrated mini prism/reflecting target
- ONRT 50 with mini prism MP 24 or OMNI/CST-Mini prism or reflecting target
- L-holder (5/8"-thread) with prism or reflecting target
- EZRT 50 with Zeiss reflector ETR 1

- Individual adaptation to your EDM system by using prisms and prism constants according your needs.
- cardanic installation of the prism: after set up of the reflector holder, the prism can be aligned on every stand point without turning the handle.

**Typ T** (without prism and reflector holder)

**Order-No. 530**

79,- €

## Prism Nail holder HIT for sighting frame stake out (DGBM)

The prism nail holder HIT is a new development and completes our program of accessories for sighting frame stake out. It was developed especially for those colleagues who cannot use our pendulum holder, as the floorboards or slats of their sighting frames do not have enough or don't even have any space to the ground.

### Structure and functioning:

The holder consists of a connection for a nail, a prism of the series HIP or TOP and of an impact bolt (picture 1).

The nail connection has a quick clamp for simple and quick insertion of the nail (picture 2). The vertical axis of the prism HIP (TOP) is identical with the nail axis. The impact bolt is screwed on the upper end of the prism holder. By hitting on the bolt with a hammer, the nail can be driven into the board as much as necessary to make the nail holder stand on its own (picture 3). The plumbing is done with the circular level integrated in the holder HIP (TOP). To protect the material, the nail will be driven directly with the hammer to the desired depth after removing the nail holder.

### Advantages:

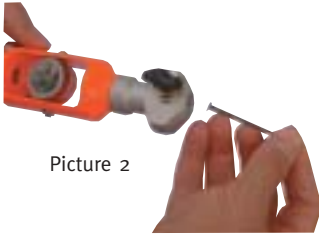
- The nail serves as stake-out point. After correct measuring the holder will be removed – the nail remains unchanged at the surveyed position. A possible identity error can be eliminated, an additional control is not necessary. After an approximation or an auxiliary measurement, the nail can be taken out of the board with the prism nail holder at any time and can be placed anywhere else.
- After hitting the nail, the prism including the holder can be turned around the nail axis and aligned to the total station/EDM.
- The prism remains on the stake out board without any further manual support. In this way, staking out can be done on your own without a colleague's support.
- As the nail and the holder provide a firm base when measuring, the nail also remains in a plumbed position after removing the holder (picture 4).
- The nail holder HIT can also be placed on already existing nails. To do this, the nail has to have an exposed length of at least 25 mm.
- All nails with a regular head and a length of 50 mm and a  $\varnothing$  of 2,5 to 3,5 mm can be used.
- The prism nail holder HIT is set up modularly: Nail connection, prism and impact bolt can be separated. Therefore the prism can also be used for other applications (e.g. with the prism pole).

The nail holder HIP is available with a 5/8" - thread or with Leica 12 mm vertical bolt and with the following **prism constants K** (Leica in brackets): - see catalogue page 4 -

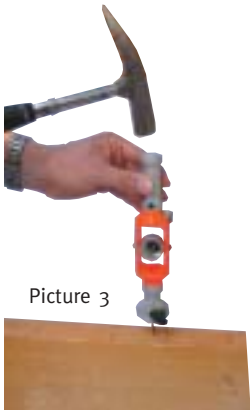
Picture 1



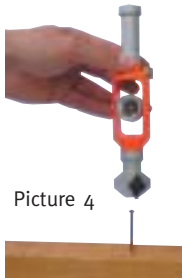
Picture 2



Picture 3



Picture 4



Reflector/prism	prism constant K (Leica in brackets)	comments
Reflecting target (26 x 40 mm)	o (+34,4) mm	only available in design HIP
glass prism	o (+34,4) mm	available only in design TOP
glass prism	-11 (+23,1) mm = LEICA 360°-PRISM	} available in design HIP and TOP
glass prism	-16 (+18,4) mm	
glass prism	-30 (+4,4) mm	
glass prism	-34 (o) mm	
glass prism	-35 (-0,6) mm	

Prism Nail Holder HIT: impact bolt + nail connection with quick clamp + circular level Integral	Holder without Tilting axis bolt Order-No.	Holder with 2 tilting axis bolts Order-No.
Prism HIP 2 x 5/8", reflecting target	4615.0 254,- €	4615.0 Z 267,- €
Prism HIP 2 x 5/8", prism center regular	4610.xx 371,- €	4610.xx Z 384,- €
Prism HIP 2 x 5/8", prism center red marked	4611.xx 376,- €	4611.xx Z 389,- €
Prism HIP Leica-5/8", reflecting target	4635.0 279,- €	4635.0 Z 292,- €
Prism HIP Leica-5/8", prism center regular	4630.xx 396,- €	4630.xx Z 409,- €
Prism HIP Leica-5/8", prism center red marked	4631.xx 401,- €	4631.xx Z 414,- €
Prism TOP 2 x 5/8", without prism MP 24	4515.xx 248,- €	4515.xx Z 261,- €
Prism TOP 2 x 5/8", with prism MP 24 S	4511.xx 358,- €	4511.xx Z 371,- €
Prism TOP Leica 5/8", without prism MP 24	4525.xx 274,- €	4525.xx Z 287,- €
Prism TOP Leica 5/8", with prism MP 24 S	4521.xx 384,- €	4521.xx Z 387,- €

xx: Please mention the required prism constant (red) from above table without +/- signs.

## Pendulum Holder for sighting frame stake out

### Pendulum holder (patented)

suitable for regular prisms and reflectors; depending on the manner of construction, it takes a plumbed position on its own after placing it on the sighting frame (directly on the board or the nail). Discrepancies and errors by manual holding can be avoided. Sighting frame stake out can be done without support of an assistant. In "One-man-operation" ideal in connection with the 6x60° prism (picture 5)

### Pendulum holder – complete – consists of:

- **Pendulum head** (reflector connection + set up and marking pin + integrated nail set-up case). The nail set-up case is connected with the set up pin and can be installed in a way, that after staking out of a point, the pendulum holder can be safely hung on the nail driven into the board (picture 2).

To manually hold the reflector, the pendulum head can be detached in a few seconds (picture 3+4)

- **Pendulum bow** with handle, with a fixed length (40 cm) or telescopic extension (20-40 cm).
- **Pendulum weight**, assures a plumbed position of the pendulum holder: 1500 g for large and heavy standard prisms; 1150 g for lighter mini prisms.



Picture 1

Bow length (cm)	Weight (g)	For reflectors or reflector holders with:			
		5/8" thread		Leica vertical bolt Ø 12 mm	
		Description	Order-No.	Description	Order-No.
40	1150	PHN 5/11	<b>420</b> 134,- €	PHN L/11	<b>430</b> 134,- €
40	1500	PHN 5/15	<b>421</b> 139,- €	PHN L/15	<b>431</b> 139,- €
Telescope 20-40	1150	PHT 5/11	<b>426</b> 142,- €	PHT L/11	<b>436</b> 142,- €
Telescope 20-40	1500	PHT 5/15	<b>427</b> 147,- €	PHT L/15	<b>437</b> 147,- €



Picture 2



Picture 3



Picture 4



Picture 5

(circular level as special equipment see page 23).

## Accessories Pendulum Holder

### Circular level (installed)



attachable at the removed pendulum head.  
For manual holding of a reflector, that does not yet have an integrated level.  
May be attached on the pendulum bow if not needed.

Circular level (installed)

Order-No. 140

19,- €

### Pendulum head, single

with integrated nail set up case



Pendulum head, 5/8"- thread

Order-No. 121

39,- €

Pendulum head, Leica vertical bolt

Order-No. 181

39,- €

### Stake out pins and circular level

The combination of an installed circular level with a pendulum head is ideal for the exact surveying of points without a prism pole.

Suitable for all prisms with 5/8"- thread or Leica vertical bolt connections without integrated circular level in the prism holder.

The Installed circular level is rotatable in all directions, regardless of the type of screw thread the reflector has. This assures an optimal view of the level, also in difficult surveying situations.

The stake out pin is equipped with an integrated fixed nail set up case.  
Therefore optimal control of the nails driven on the sighting frame.



Stake Out pin with circular level, 5/8" (without prism)

Order-No. 122

58,- €



Stake Out pin with circular level, 5/8" (without prism)

Order-No. 182

58,- €