



Zenit-BelOMO
Joint Stock Company

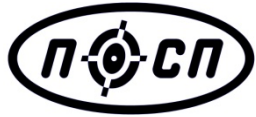


ILLUMINATED OPTICAL SIGHTS

Operation Manual

Conformity mark for POSP 4x24 and its versions

Registered trademarks ®



NOTICE: Due to continuous design improvement, there may be slight differences between this manual and the sight received.

Sight is a complex optical-mechanical device that requires careful handling.

DO NOT DISASSEMBLE THE SIGHT!

IMPORTANT: Always remove batteries from the battery compartment before long-term storage.

POSP ® 4x24, POSP ® 6x24, POSP ® 2-6x24 sights and their versions (hereinafter referred to as "sight") with extended exit pupil are effective for hunting and sporting weapons in various conditions.

The sight is dust/sand proof and resistant to high and low temperatures: 50°C to –40°C.

The sight is sealed and filled with nitrogen that protects optics from dimming at low temperatures.

In course of mechanical stress resistance test, all sights are exposed to stress of 455g.

The sight allows rough estimation of distance to the object.

The design of the sight allows sight shooting under insufficient light conditions.
Please read this manual before using the sight.

1 1 SPECIFICATIONS

	POSP	4x24	6x24	2-6x24
Min. visible magnification, ratio		3.8	5.7	1.8 – 5.5
Min. angular field of view, degrees		5.6	3.8	7.5 - 4
Lens clear aperture, mm		24	24	24
Max. resolution limit, s		12	8	17-7
Expected exit pupil distance, mm		78±7.8	68±7	(76±8) – (73±7)
Min. exit pupil diameter, mm		5.7	3.8	9.6 – 3.8
Illumination power supply voltage, V		3	3	3
Power source (battery).....		MTs 130 (AG13) - 2 pcs. (for W version: a single CR2032 (3V))		
Click value (100 m), cm		5	5	5
Max. overall dimensions, with caps, mm:				
- POSP 4x24		280x73x165		
- W version.....		280x73x85		
Max. overall dimensions, with caps, mm:				
- POSP 6x24		280x73x165		
Max. overall dimensions, with caps, mm:				

- POSP 2-6x24	290x73x165			
- W version	290x73x85			
Dovetail mounting bracket size, mm	14	14	14	
Max. weight, kg				
- POSP 4x24.....	0.72	0.72	0.85	
- W version.....	0.65	-	0.67	

Precious metal content, g:

all versions except C: silver: 0.1039;
- C version: silver: 0.63;
gold: 0.002.

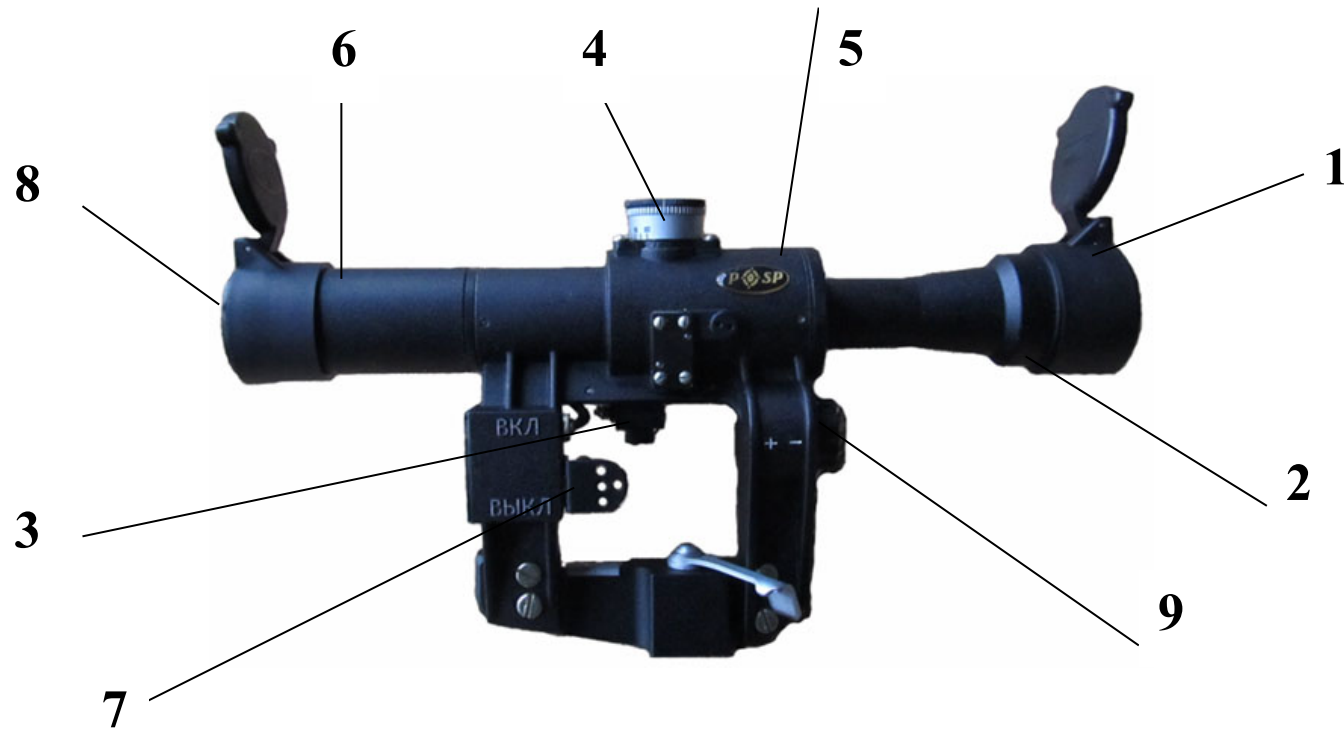
2 SCOPE OF DELIVERY

Optical sight	1 pc.
Eyeguard	1 pc.

Case	1 pc.
Operation manual	1 pc.
Optical filter *	1 pc.
Eyepiece cap (attached).....	1 pc.
Shade *	1 pc.
Wrench.....	1 pc.
Cleaning cloth	1 pc.

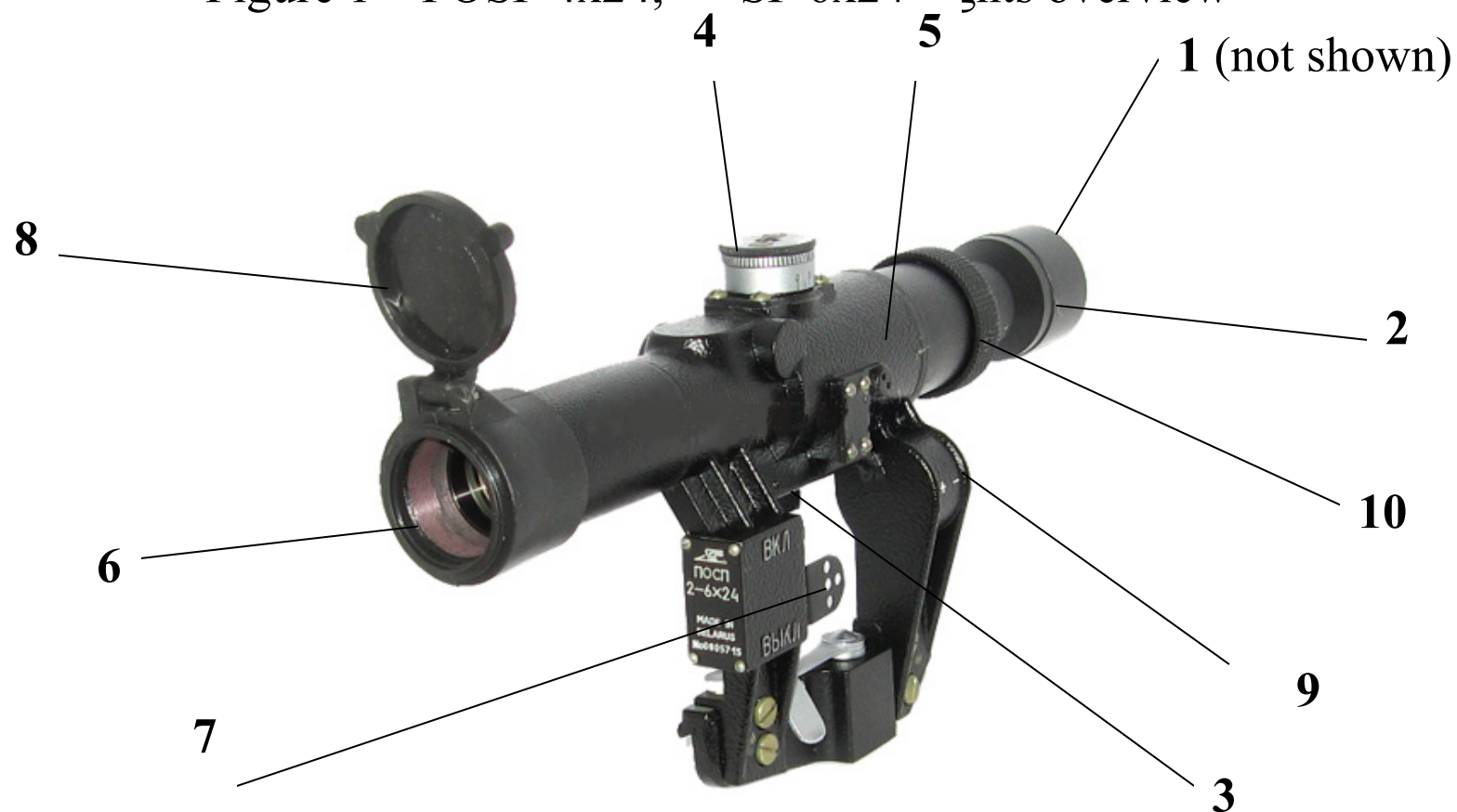
* optional

3 SIGHT OVERVIEW



1 – Eyepiece cap; 2 – eyepiece; 3 – emitter; 4 – handwheels; 5 – body with mounting bracket; 6 – lens; 7 – illumination switch; 8 – lens cap; 9 – battery compartment cover.

Figure 1 – POSP 4x24, POSP 6x24 sights overview



1 – Eyepiece cap; 2 – eyepiece; 3 – emitter; 4 – handwheels; 5 – body with mounting bracket; 6 – lens; 7 – illumination switch; 8 – lens cap; 9 – battery compartment cover; 10 – zoom ring.

Figure 2 – POSP 2-6x24 sight overview

4 SETTING-UP PROCEDURE

4.1 Batteries installation and replacement

Reticle illumination circuit is powered by two AG13 (MTs 130) button cell batteries (2x1.5V).

Version W uses only a single CR2032 coin battery. To switching on and adjust the reticle illumination turn the switch 1 (fig.3). To switch off the illumination, set the switch to OFF position.

To install or replace batteries:

- open the twist cover of the battery compartment 9 (fig.1, fig.2);
- install batteries into the battery compartment correctly;
- close the twist cover of the battery compartment.

To install or replace the CR2032 battery into W or L version of the sight:

- open the twist cover of the battery compartment 2 (fig. 3);
- install the battery into the battery compartment correctly;
- close the twist cover of the battery compartment.



1 – switch; 2 – battery compartment cover

Figure 3 – Battery compartment

If the illumination becomes too dim, the power source needs to be replaced.

4.2 Installation on a weapon

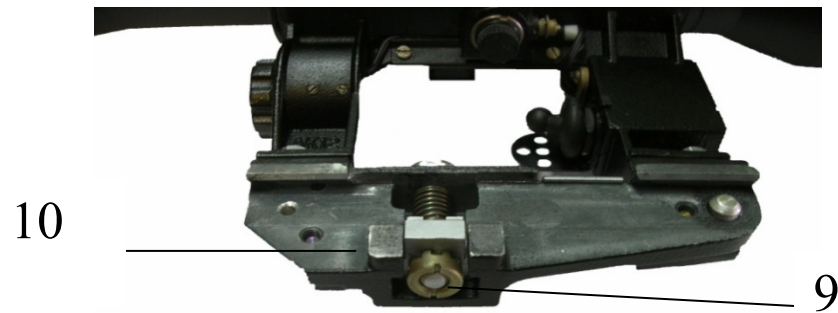
Before installing on a weapon, make sure that the dovetail carriage guide of the weapon corresponds to the mounting bracket of the sight.

Turn the lock 8 (fig.4b) towards the buttstock and insert the sight into the carriage guide of the weapon as far as it can go from the side of the buttstock. Fix the sight by the lock 8.

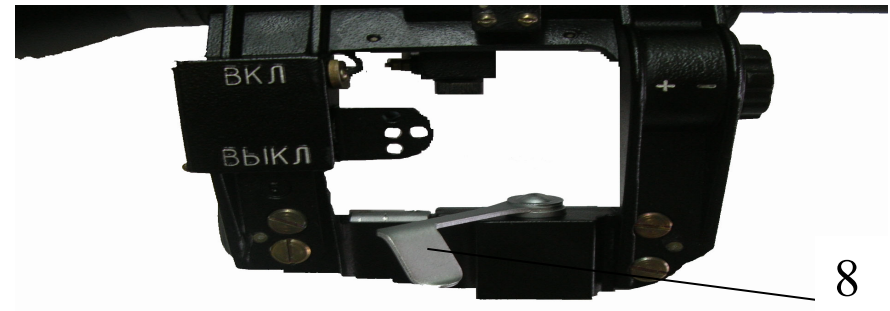
The mounting bracket allows adjustment of the clamping force with the adjusting nut 9 (Fig. 4a). To adjust the force:

- press the latch 10 (Fig. 4a) until the nut is released;
- turn the nut 9 on the lock 8 axis with a screwdriver to achieve required clamping force;

- make sure that the lock fits the nearest cavity of the nut and reset the latch.



a)

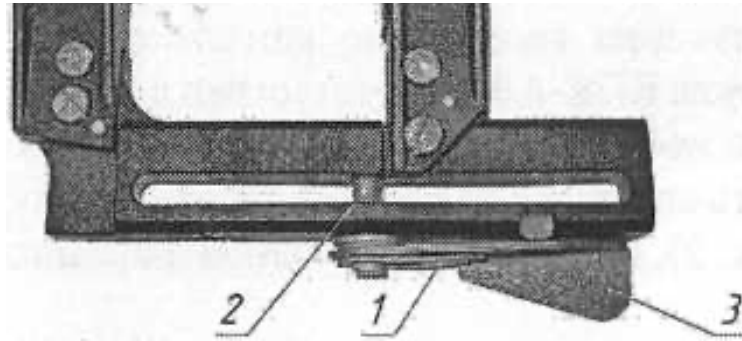


б)

8 - lock; 9 - adjusting nut; 10 - latch

Figure 4 – Mounting bracket

Sights of version B have a guide, as shown in figure 5.



1 – lock; 2 – locking screw; 3 – handle

Figure 5 – Mounting bracket

To install on a weapon, turn the handle 3 (figure 5) towards the buttstock, insert the sight into the carriage guide as far as it can go and fix it tightly by turning the handle 3.

Adjustment of the clamping force:

- turn and slide the lock 1 (figure 5) with the wrench provided, until the wide part of the lock hole is aligned with the axis of the clamping screw 2 and remove it
- turn the clamping screw 2 with the handle 3 to achieve the required clamping force;

- remove the handle 3 from the toothed head of the clamping screw 2 and reset to the initial position;
- place the lock 1 on the clamping screw 2 in its original position and lock it in the hole of the handle 3.

Versions W of sights are designed for installation on weapons with Weaver top mounting carriage guide. To install the sight on a weapon, turn the nuts 1 (Fig. 6) counter-clockwise, insert the sight into the carriage guide as far as it can go from the side of the buttstock. Fix the sight with the nuts 1 using the hexagonal wrench provided.

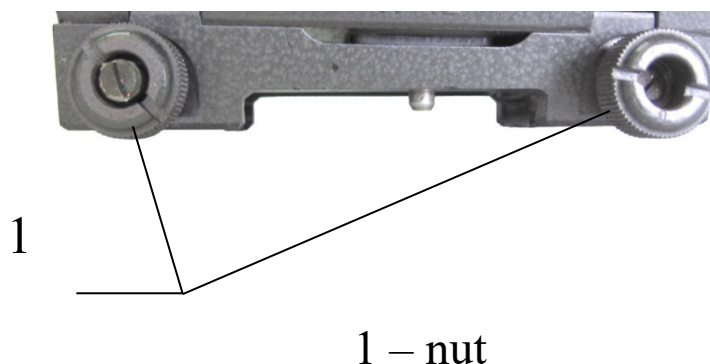


Figure 6 – Mounting bracket

4.3 Aiming line adjustment

Adjustment of aiming line is performed after the adjustment of fire.

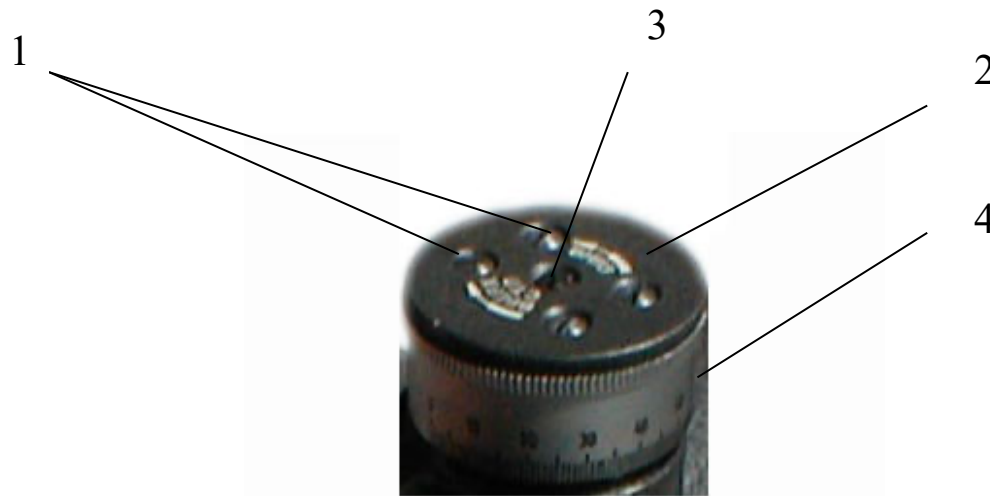
Elevation handwheel and windage handwheel have graduated bands for aiming line adjustment.

Red marks on handwheel bands are aligned with red marks on nuts, which corresponds to the datum line.

To adjust the aiming line:

- perform adjustment of fire for a certain distance to the target; move the reticle with the handwheels 4 (Figure 7);
- loosen the screws 1 on the nuts 2 of the handwheels 4;
- holding the nut 2 of the handwheel 4 still, turn the handwheel to "0" position with a screwdriver (screw 3 with the index on the body);
- tighten the screws 1 and check the accuracy of the adjustment.

Note: To return the reticle to the original position corresponding to the datum line set with collimator by the manufacturer, loose the screws 1 and turn the screw 3 with a screwdriver to align the red marks on the nut with red strokes on the handwheel bands. Tighten the screws 1.



1- screws; 2 - nut; 3 - screw; 4 - drum

Figure 7 - Adjusting handwheel

4.4 Sight alignment mechanism

On the right side of the sight body there is a windage handwheel with rear-sight windage scale on its cylindrical part. On the nut of the handwheel, deflection directions

of the aiming line relative to the zero point of sight are indicated when lateral corrections are made (scales of handwheels are set to zero values when the sight is zero adjusted). Displacement of the scale by one division (scale division is 3.6') is equivalent to displacement of the aiming line by 10 cm at a distance of 100m. Handwheels lock allows setting intermediate positions between the divisions (values by 1.8') that is equivalent to 5 cm at a distance of 100 m.

On top of the body there is elevation handwheel with aiming elevation angle scale on its cylindrical part. On the nut of the handwheel, deflection directions of the aiming line are indicated for aiming angle alignment. Turning the handwheel, starting from zero division of the scale, moves the reticle down from the center of the field of view and allows to set the aiming line depending on the range. Correspondence of marks on the cylindrical part of the handwheel to aiming angles is shown in Table 1.

Table 1

Scale mark	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Min. aiming angle	3.6	7.2	10.8	14.4	18	21.6	25.2	28.8	32.4	36	39.6	43.2	46.8	50.4	54	57.6	61.2	64.8	68.4	72
Aiming line displacement at a distance of 100m, cm	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200

4.4 Using the sight

Look into the sight. The exit pupil of the optical system should match the pupil of the eye. The whole field of vision should be visible without crescent-shaped shadows on the periphery.

For version D of sight, the eyepiece can be adjusted from minus 3 to plus 3 dpt (depending on individual difference of eyes).

The sight allows sight shooting in conditions of insufficient illumination of the reticle. Turn on the reticle illumination with the switch 7 (Fig. 1, Fig. 2)

The design of version C sights allows changing the illumination of the reticle by the illumination switch 7.

The optical filter (if provided by the contract) allows to improve the visibility and increase the contrast of an object in conditions of insufficient visibility (haze, fog, etc.).

The eyeguard provided is used to prevent exposure of the eye to the ambient light and to maintain the position of the eye in relation to the eyepiece. When necessary, put on the eyeguard after removing the cap of the eyepiece 1 (Fig. 1, Fig. 2).

The lens has a protruding 13mm shade for protection against direct rays. In special cases, to increase the size of the shade, an additional 50mm shade can be installed, (if provided by the contract), after removing the lens cap 8 (Fig. 1, Fig. 2).

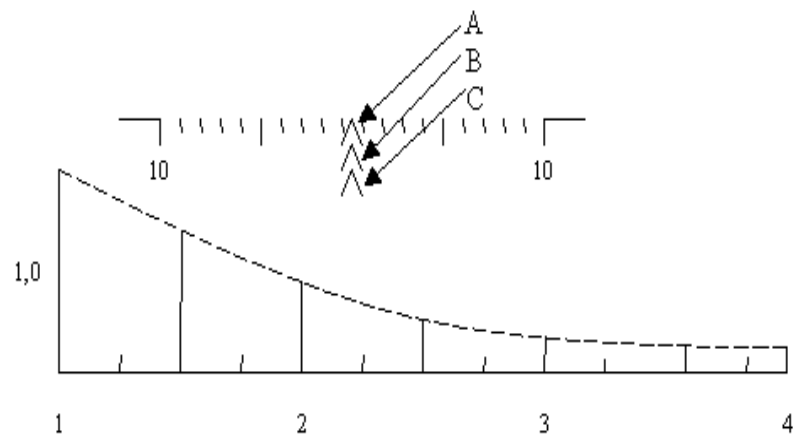
The lens 6 and the eyepiece 2 (Fig. 1, Fig. 2) are protected from contamination and mechanical damage with caps 8 and 1.

One of reticles shown in Fig.8 and Fig.9 is installed in the sight.

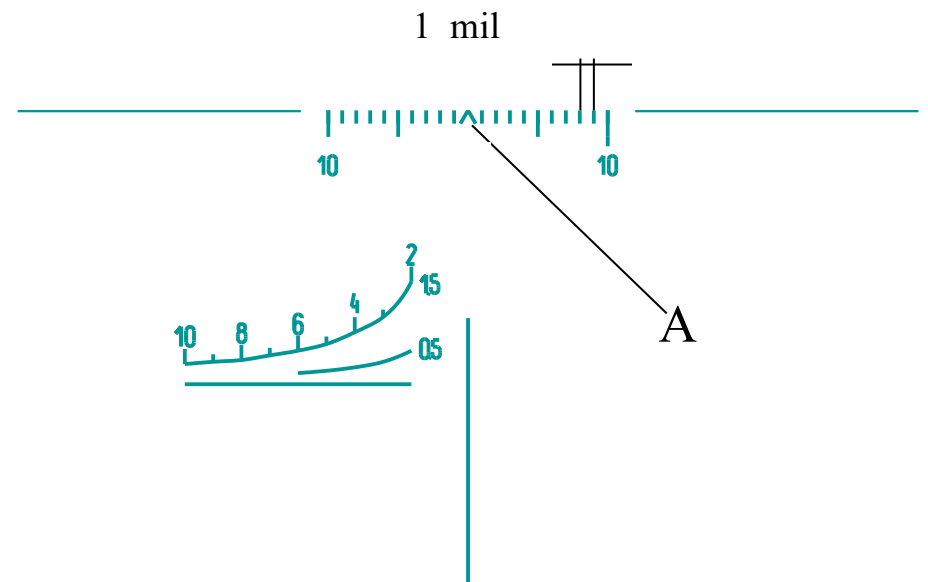
For estimation of the distance to the target object with a height of 1m (Figure 8a) or 1.8m (Figure 9), align the image of the object between the horizontal line and the curve accurately without gaps and protrusion of the object over the line. The nearest figure to the object, multiplied by 100 is the distance, e.g:

1 corresponds to 100m;

2 corresponds to 200m, etc.



a)



b)

Figure 8 - Reticles

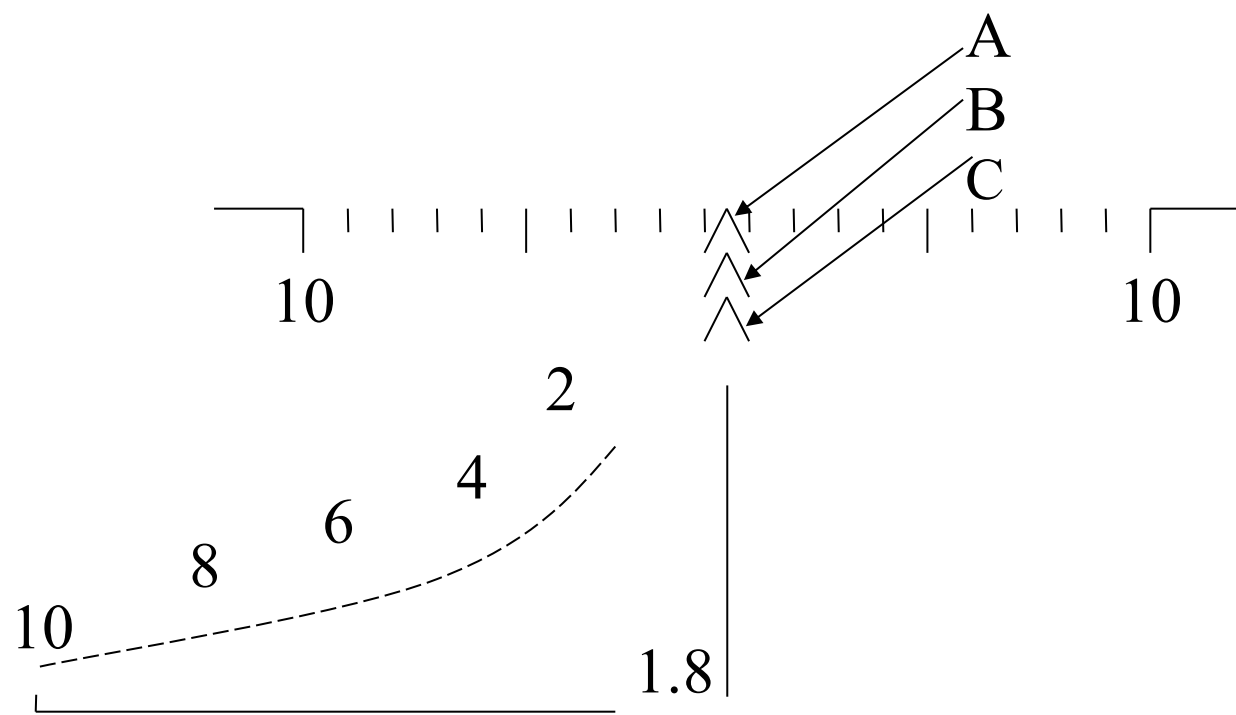


Figure 9 – Reticle

If the length (height) of the object is known and contours are clearly visible, it is possible to roughly estimate the distance to the object with the interrupted funnel (Fig. 8b). To estimate the distance to the object with height of 1.5m or 0.5m, align the object between the horizontal line and the curve accurately without gaps and protrusion of the object over the line. The nearest figure to the object, multiplied by 100 is the distance (in meters): e.g. 2 corresponds to 200m; 4 corresponds to 400 m, etc.

Vertical marks on the horizontal line of the reticle (Fig. 8, Fig. 9) are used for aiming without lateral correction. The distance between the marks is 3.6'.

Additional aiming signs A are used for shooting distant targets without using the elevation drum. The choice of the aiming sign depends on the range to the target, weapon ballistics and is determined by trial.

5 HANDLING AND STORAGE

5.1 The sight should be stored in case, in a dry, heated and ventilated area. Always remove batteries from the battery compartment before long-term storage.

5.2 Keep the sight clean. Protect from mechanical stresses, moisture and rapid temperature changes.

5.3 Protect the lens from fouling. Wipe the lenses with clean soft cloth. Grease spots or stains are removed by cotton wool soaked with alcohol.

6 ACCEPTANCE CERTIFICATE

6.1 Illuminated optical sight POSP 4x24 _____ No _____ conforms to the specifications TU RB 14536193.028-99 and accepted for use; POSP 6x24 _____ No _____, POSP 2-6x24 _____ No _____ conforms to the specifications TU 3.7524949.002-93 and accepted for use.

Date of manufacture _____

Quality inspector _____
(signature or stamp)

Packer _____
(signature or stamp)

Sold by _____
(shop stamp)

7 WARRANTY STATEMENT

7.1 The sight conforms to the approved type design. The manufacturer guarantees the conformity of the sight to the specification provided that the user observes the operating rules stated in the operation manual.

7.2 Warranty period: 12 months from the date of sale through retail network.

During the warranty period the user has the right of free repairing of the sight in case of failure due to production defect.

Repair is performed by the manufacturer.

The sight should be sent to the manufacturer by parcel, together with operation manual, a brief description of the defect and conditions under which the defect was found out.

7.3 Exchange of defective sights is performed in accordance with the valid exchange rules.

7.4 No claims about the operating quality of the sight will be accepted and no warranty repair will be performed if the failure arises due to wrong handling or mishandling of the sight, as well as in case of absence of the operation manual and warranty certificates.

Address for quality claims:
Zenit-BelOMO JSC
ul. Chapayeva 26, Vileika, Minsk Region, 222416
Tel:
Assembling department: (01771) 3-29-10,
Chief quality inspector: (01771) 3-29-57

Note: Batteries are supplied by an additional agreement with wholesaler (dealer) responsible for individual packaging of each product.

Counterfoil No. 1

for warranty repair of illuminated optical sight

Received « » 20 year. Chief mechanic

(surname, signature)

Detach here



Zenit-BelOMO JSC
WARRANTY CERTIFICATE

Illuminated optical sight

POSP 4x24 _____

POSP 6x24 _____

POSP 2-6x24 _____

Serial number _____

Sold by shop No. _____
(name and address of the shop)

« » _____ 20

Shop stamp _____
(signature)

Owner's name and address _____

_____ Signature _____

The following faults were repaired: _____

Workshop mechanic _____
date signature

Owner _____

Chief of workshop _____

Address for purchase orders:
Zenit-BelOMO JSC
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