

Carl Zeiss Sports Optics

Overview all available reticles



We make it visible.

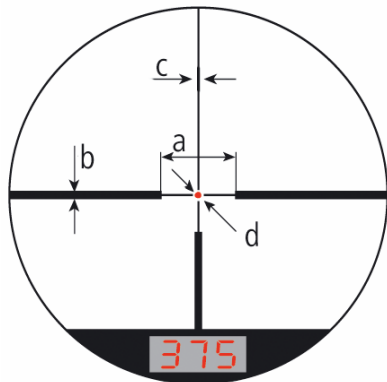
| Riflescope | | Reticle plane | Illuminated | Standard |
|-------------------|---------------|---------------|------------------------|------------|
| Victory Diarange | 2,5 - 10 x 50 | 2 | 43 - 60 - 66 - 70 - 77 | - |
| | 3 - 12 x 56 | 2 | 43 - 60 - 66 - 70 - 77 | - |
| Victory Varipoint | 1,1 - 4 x 24 | 1 + 2 | 0 - 60 | - |
| | 1,5 - 6 x 42 | 1 + 2 | 0 - 60 | - |
| | 2,5 - 10 x 42 | 1 + 2 | 0 - 60 | - |
| | 2,5 - 10 x 50 | 1 + 2 | 0 - 60 | - |
| | 3 - 12 x 56 | 1 + 2 | 0 - 60 | - |
| Victory Diavari | 1,5 - 6 x 42 | 1 | - | 4 - 8 |
| | 2,5 - 10 x 42 | 1 | - | 4 - 8 - 42 |
| | 2,5 - 10 x 50 | 1 | 40 - 44 - 60 - 66 | 4 - 8 - 42 |
| | | 2 | 60 - Rapid Z5 | - |
| | 3 - 12 x 56 | 1 | 40 - 43 - 44 - 60 - 66 | 4 - 8 - 43 |
| | | 2 | 60 - Rapid Z5 | - |
| | 6 - 24 x 56 | 2 | 40 - 43 - 60 | 4 - 43 |
| 6 - 24 x 72 T* FL | 2 | 40 - 43 - 60 | - | |
| Classic Diasport | 2,5 - 10 x 42 | 1 | - | 67 |
| Classic Diavari | 1,1 - 4 x 24 | 2 | - | 4 - 8 |
| | 1,5 - 6 x 42 | 1 | - | 4 - 8 |
| | 2,5 - 10 x 50 | 1 | 40 - 44 - 60 - 66 | 4 - 8 - 42 |
| | 3 - 12 x 56 | 1 | 40 - 44 - 60 - 66 | 4 - 8 |
| Classic Diatal | 6 x 42 | - | - | 4 - 8 |
| | 7 x 50 | - | 40 - 44 - 60 - 66 | - |
| | 8 x 56 | - | - | 4 - 8 |

Subtensions at page

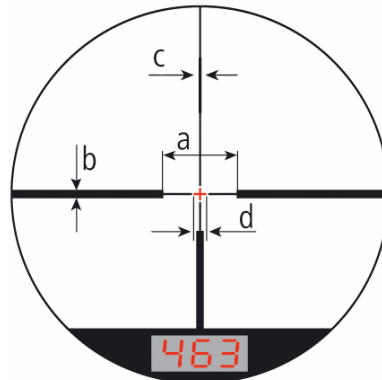
| | |
|---|----|
| Diarange | |
| 60 - 66 - 70 - 77 | 2 |
| 43 | 3 |
| Varipoint | |
| 0 - 60 | 4 |
| Diavari and Diatal (illuminated) | |
| 40 - 44 - 60 - 66 (1.IP) | 5 |
| 40 - 60 (2. IP) | 6 |
| 43 | 7 |
| Rapid Z5 | 8 |
| Diavari and Diatal (not illuminated) | |
| 4 - 8 - 42 | 9 |
| 43 | 10 |
| Diasport | |
| 67 | 11 |
| Former Reticles | |
| 63 (Diavari 6-24x) | 12 |
| 54 - 56 (Varipoint) | 13 |

March 2008

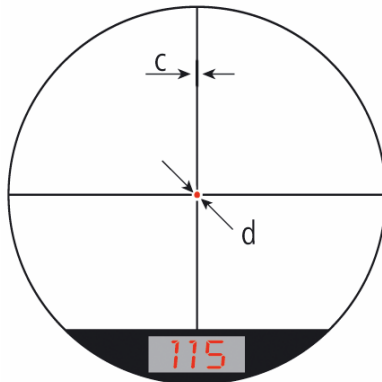
Illuminated reticles no. 60 - 66 - 70 - 77 (Diarange)



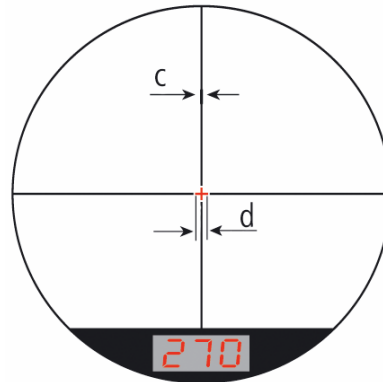
Reticle 60



Reticle 66



Reticle 70



Reticle 77

| Victory | Diarange | | | |
|---------|----------------|-----|---|----|
| | 2. Image plane | | | |
| | a | b | c | d |
| 60 | 140 | 7,5 | 1 | 3 |
| 66 | 140 | 7,5 | 1 | 10 |
| 70 | - | - | 1 | 3 |
| 77 | - | - | 1 | 10 |

Subtensions in cm at 100 m with M = 6 x.

Subtensions with different magnifications can be calculated as

$$S(M) = S \times 6 / M$$

Double magnification = half the subtensions !

Example
Thickness bars with M = 10 x:
 $S(10) = 7,5 \text{ cm} \times 6 / 10 = 4,5 \text{ cm}$

Illuminated reticle no. 43 (Diarange)

Diarange 2,5 – 10 x 50 T*
Diarange 3 – 12 x 56 T*

2. Image plane

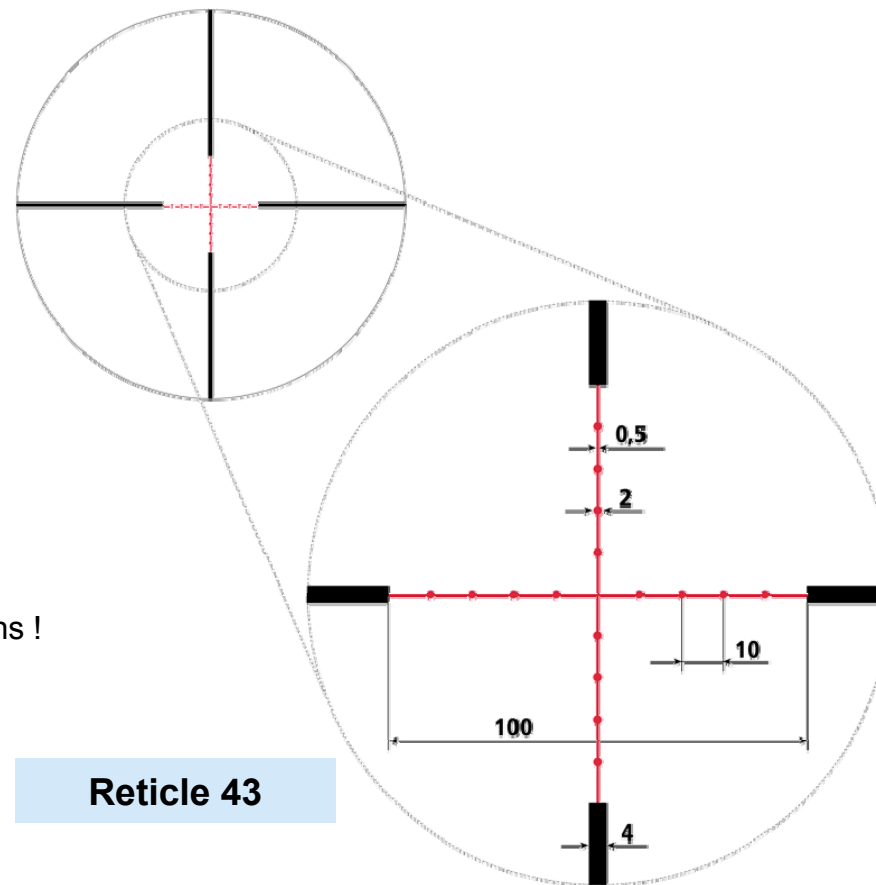
Subtensions S in cm at 100 m
with M = 10 x.

Subtensions with different
magnifications can be calculated as

$$S(M) = S \times 10 / M$$

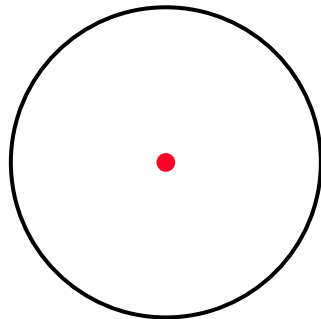
Double magnification = half the subtensions !

Example
Thickness bars with M = 5 x:
 $S(5) = 4 \text{ cm} \times 10 / 5 = 8 \text{ cm}$



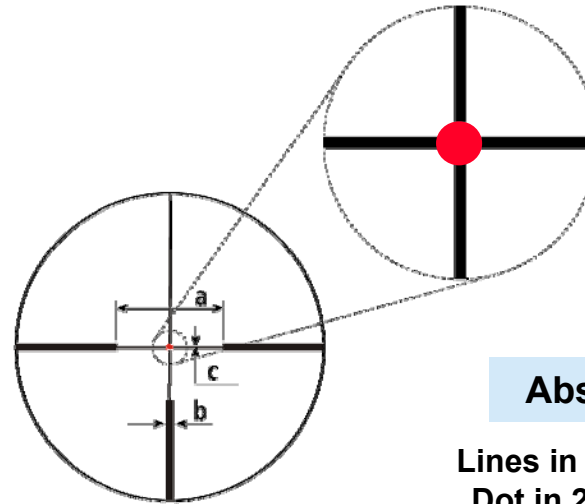
Reticle 43

Illuminated reticles no. 0 and 60 (Victory Varipoint)



Reticle 0

Dot in 2. image plane



Absehen 60

Lines in 1. image plane
Dot in 2. image plane

The red dot has the same size for all models and for both reticles 0 and 60:

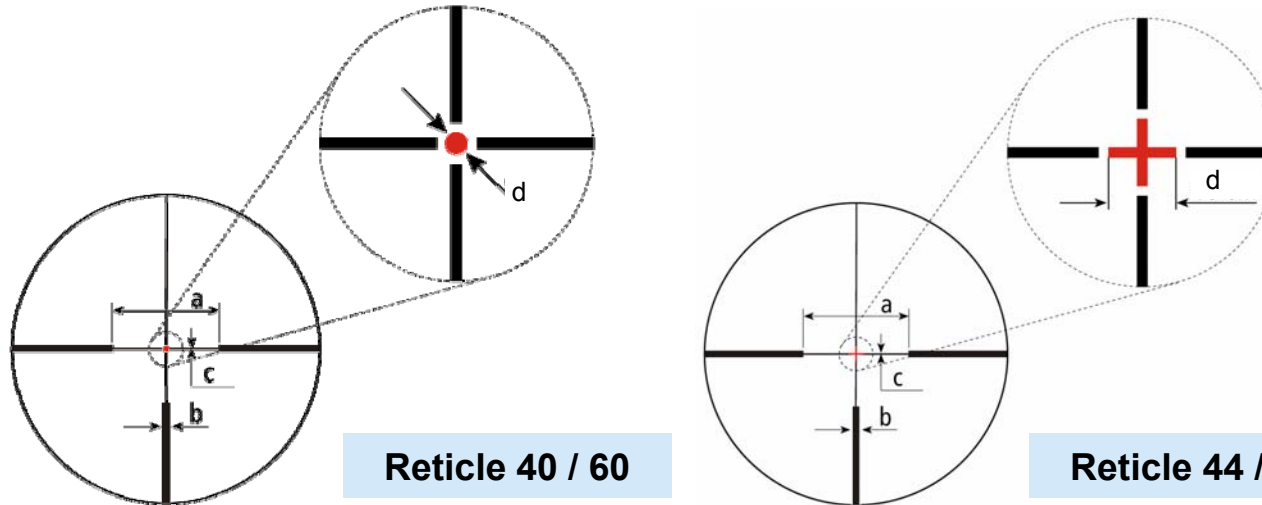
**Diameter red dot c
= 22 cm / magnification**

Example: With $M = 10 \times$ the diameter is 2,2 cm at 100 m.

Subtensions in cm at 100 m.

| Victory Varipoint | 1,1 - 4 x 24 | | | 1,5 - 6 x 42 2,5 - 10 x 42 2,5 - 10 x 50 3 - 12 x 56 | | |
|-------------------|--------------|-------|---|---|-----|---|
| | a | b | c | a | b | c |
| 60 | 210 | 11,25 | 3 | 140 | 7,5 | 2 |

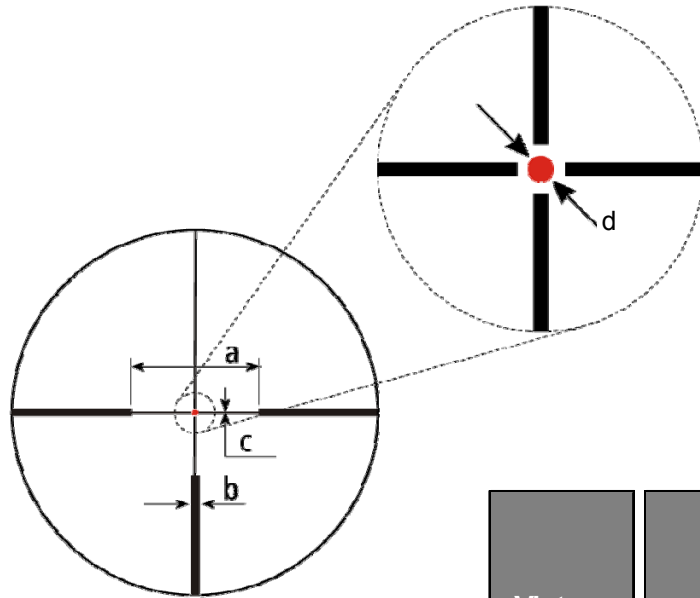
Illuminated reticles no. 40 - 44 - 60 - 66 (1. Image plane)



| | Victory Diavari 2,5 - 10 x 50 3 - 12 x 56 | | | | Classic Diavari 6 - 24 x 56 6 - 24 x 72 | | | | Classic Dialal 7 x 50 | | | |
|-----------|---|-----|-----|----|---|-----|-----|----|--------------------------|-----|-----|----|
| | a | b | c | d | a | b | c | d | a | b | c | d |
| 40 | 70 | 15 | 1,5 | 3 | 70 | 15 | 1,5 | 3 | 70 | 15 | 1,5 | 3 |
| 44 | 70 | 15 | 1,5 | 10 | 70 | 15 | 1,5 | 10 | 70 | 15 | 1,5 | 10 |
| 60 | 140 | 7,5 | 1,5 | 3 | 140 | 7,5 | 1,5 | 3 | 140 | 7,5 | 1,5 | 3 |
| 66 | 140 | 7,5 | 1,5 | 10 | 140 | 7,5 | 1,5 | 10 | 140 | 7,5 | 1,5 | 10 |

Subtensions in cm at 100 m.

illuminated reticles no. 40 - 60 (2. Image plane / Victory Diavari)



Reticles 40 - 60

Subtensions at different magnifications (M) can be calculated as

$$S (M) = S \times 6 / M$$

Double magnification = half the subtensions !

Subtensions S in cm at 100 m with M = 6 x.

| Victory Diavari | 6 - 24 x 56 6 - 24 x 72 FL 2. Image plane | | | | 2,5 - 10 x 50 3 - 12 x 56 6 - 24 x 56 6 - 24 x 72 FL 2. Image plane | | | |
|-----------------|---|----|---|---|---|-----|---|---|
| | a | b | c | d | a | b | c | d |
| 40 | 140 | 30 | 3 | 6 | | | | |
| 60 | | | | | 140 | 7,5 | 1 | 3 |

illuminated reticle no. 43 (Victory Diavari)



We make it visible.

Victory Diavari
 6 - 24 x 56 T*
 6 - 24 x 72 T* FL
 2. Image plane

Subtensions S in cm at 100 m
 with M = 12 x.

Subtensions at different
 magnifications (M) can be
 calculated as

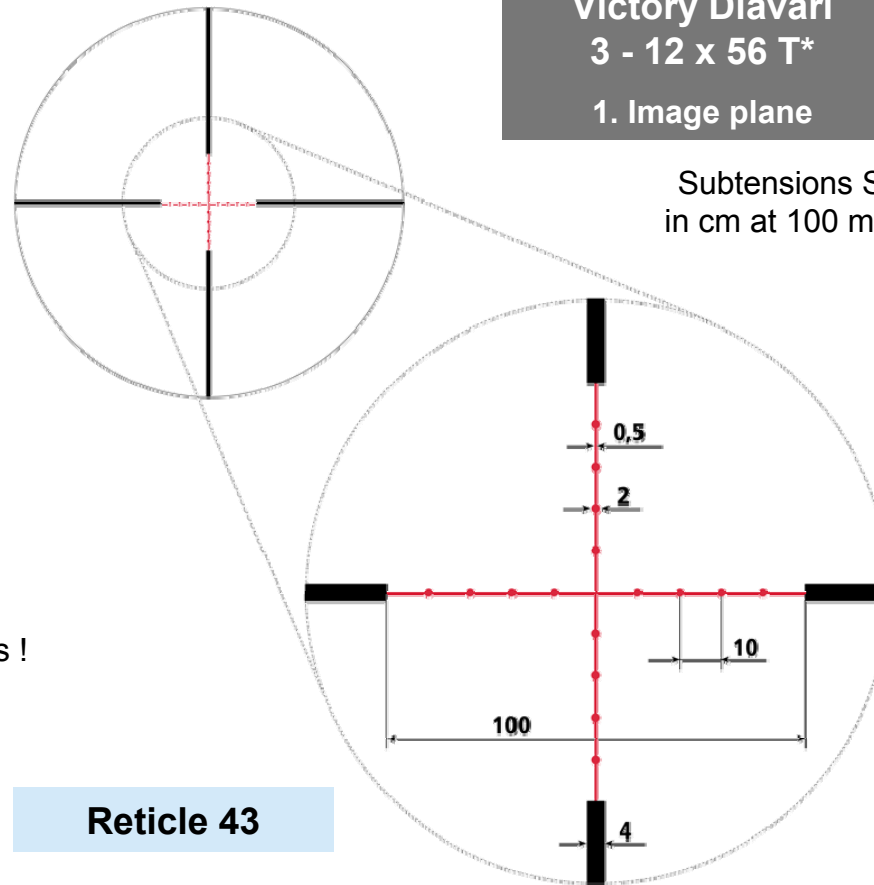
$$S (M) = S \times 12 / M$$

Double magnification = half the subtensions !

Example
 Thickness bars with M = 6 x:
 $S (6) = 4 \text{ cm} \times 12 / 6 = 8 \text{ cm}$

Victory Diavari
 3 - 12 x 56 T*
 1. Image plane

Subtensions S
 in cm at 100 m.

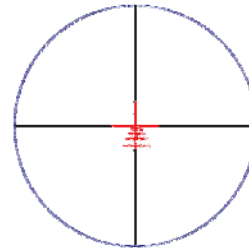




illuminated reticle Rapid Z5 (Victory Diavari)

Victory Diavari
 2.5 - 10 x 50 T*
 3 - 12 x 56 T*
 2. Image plane

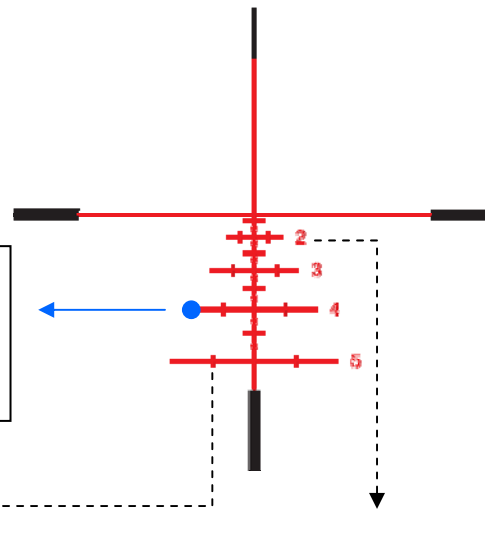
Rapid Z5
 (76)



Subtensions in cm at 100 m at max magnification M_{max} :

- Thin line = 0.5 cm
- Bars = 2 cm
- Between bars = 70 cm
- Gap „center to line 2“ = 4,5 cm
- until 3 = 11 cm / 4 = 19 cm / 5 = 29 cm

Example:
Aiming point for 400 m.
 Cross wind from right
 5 m / sec = 18 km / h.



To select the correct magnification:

1. Sight in distance 100 m.
2. Δ_{300} = Bullet drop of the used ammunition at 300 m.
3. Calculate the magnification M as:

$$M = M_{max} \times 33 \text{ cm} / \Delta_{300}$$

(M_{max} = max. magn. = 10 or 12)

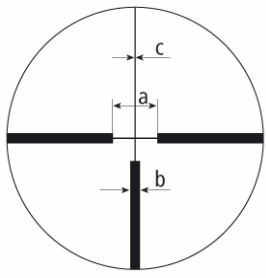
Markings for cross wind compensation.
 Wind speed 2.5 m / sec and 5 m / sec.

Lines for 200 m until 500 m with markings in between.
 Precondition: Sighted-in at 100 m and the correct magnification, due to the ammunition.

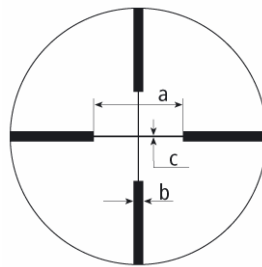
Reticles no. 4 - 8 – 42 (Diavari, Diatal)



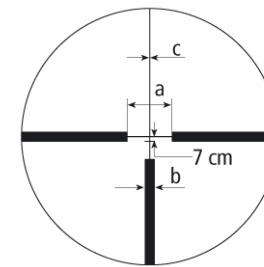
We make it visible.



Reticle 4



Reticle 8



Reticle 42

| Classic Diatal | 6 x 42 | | | 8 x 56 | | |
|----------------|--------|----|-----|--------|----|-----|
| | a | b | c | a | b | c |
| 4 | 70 | 20 | 2 | 70 | 15 | 1,5 |
| 8 | 140 | 15 | 1,5 | 140 | 15 | 1,5 |

Subtensions in cm at 100 m.

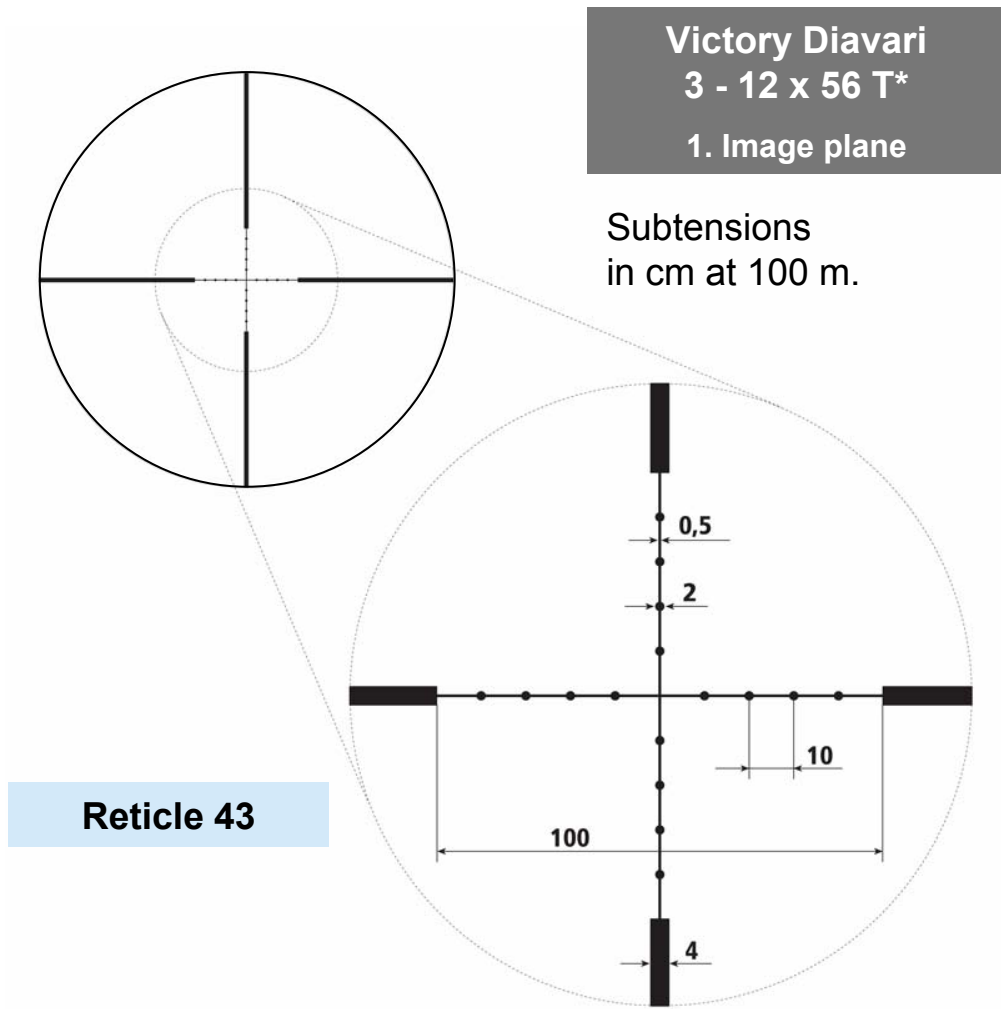
| Classic Diavari | 1,1 - 4 x 24 | | | 1,5 - 6 x 42 | | | 2,5 - 10 x 50 | | | 3 - 12 x 56 | | |
|-----------------|--------------|-------|-------|--------------|----|-----|---------------|----|-----|-------------|----|-----|
| | a | b | c | a | b | c | a | b | c | a | b | c |
| 4 | 140-38,5 | 40-11 | 4-1,1 | 70 | 15 | 1,5 | 70 | 15 | 1,5 | 70 | 15 | 1,5 |
| 8 | 280-77 | 40-11 | 4-1,1 | 140 | 15 | 1,5 | 140 | 15 | 1,5 | 140 | 15 | 1,5 |
| 42 | | | | | | | 70 | 20 | 1 | | | |

| Victory Diavari | 1,5 - 6 x 42 | | | 2,5 - 10 x 42 | | | 2,5 - 10 x 50 | | | 3 - 12 x 56 | | |
|-----------------|--------------|----|-----|---------------|----|-----|---------------|----|-----|-------------|----|-----|
| | a | b | c | a | b | c | a | b | c | a | b | c |
| 4 | 70 | 15 | 1,5 | 70 | 15 | 1,5 | 70 | 15 | 1,5 | 70 | 15 | 1,5 |
| 8 | 140 | 15 | 1,5 | 140 | 15 | 1,5 | 140 | 15 | 1,5 | 140 | 15 | 1,5 |
| 42 | | | | 70 | 20 | 1 | 70 | 20 | 1 | | | |

Reticle no. 43 (Victory Diavari)



We make it visible.



Victory Diavari
3 - 12 x 56 T*
1. Image plane

Subtensions
in cm at 100 m.

Victory Diavari
6 - 24 x 56 T*
2. Image plane

Subtensions S in cm at
100 m with M = 12 x.

Subtensions at different
magnifications (M) can be
calculated as

$$S (M) = S \times 12 / M$$

Double magnification = half the subtensions !

Example:
Bar thickness at M = 6 x:
 $S (6) = 4 \text{ cm} \times 12 / 6 = 8 \text{ cm}$

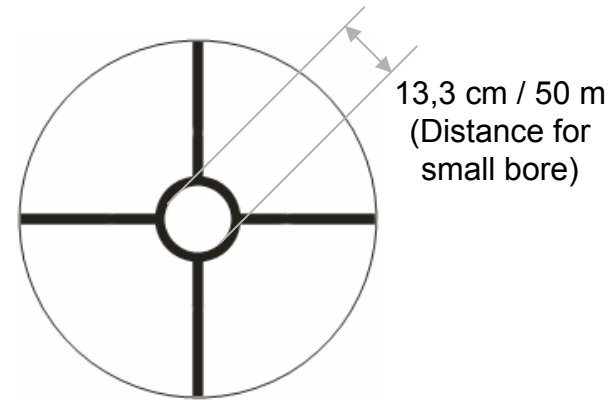
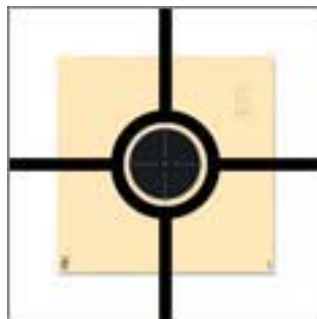
Reticle 43

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Reticle no. 67 (Diasport)



We make it visible.



Reticle 67

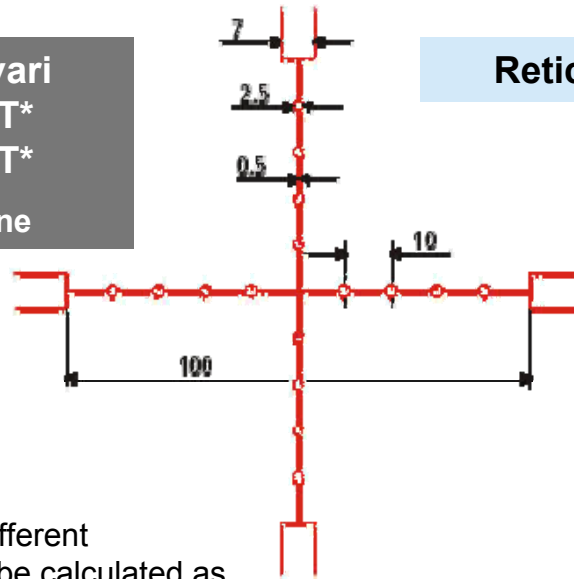
Classic Diasport

2,5 - 10 x 42 T*

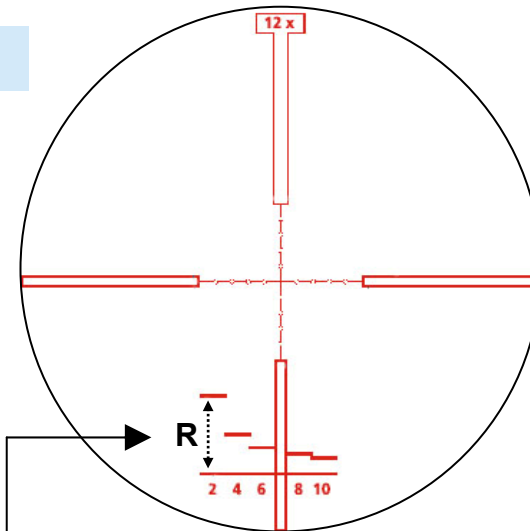
1. Image plane

illuminated reticle no. 63 (former Victory Diavari 6 - 24 x)

Victory Diavari
 6 - 24 x 56 T*
 6 - 24 x 72 T*
 2. Image plane



Reticle 63



Subtensions S
 in cm at 100 m
 with = 12 x.

Subtensions with different
 magnifications can be calculated as

$$S (M) = S \times 12 / M$$

Double magnification = half the subtensions !

Example
 Distance „point to point“ with M = 6 x:
 $S (6) = 10 \text{ cm} \times 12 / 6 = 20 \text{ cm}$

Range estimations

Precondition

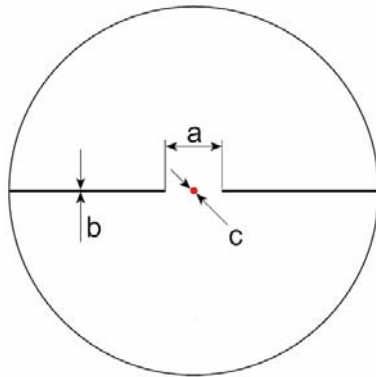
- a) Reference R with 1 meter height.
- b) Magnifications at = 12 x.

Example
 If this object is between bottom line and line
 above „2“, the distance is 200 m.

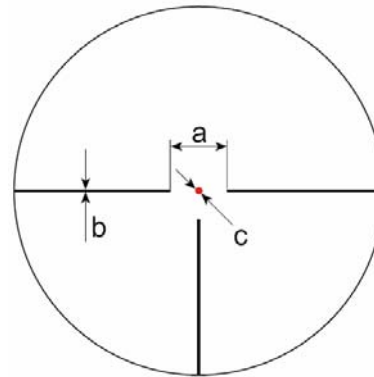
Illuminated reticles no. 54 - 56 (former Varipoint)



We make it visible.



Reticle 54



Reticle 56

Lines in 1. image plane
Red dot in 2. image plane

| Victory Varipoint | 1,5 - 6 x 42 | | | 2,5 - 10 x 42 2,5 - 10 x 50 | | | 3 - 12 x 56 | | |
|----------------------|--------------|----|----------|--------------------------------|----|---------|-------------|----|---------|
| | a | b | c | a | b | c | a | b | c |
| 54 | 140 | 15 | 14,7-3,7 | 140 | 15 | 8,8-2,2 | 140 | 15 | 7,3-1,8 |
| 56 | 140 | 15 | 14,7-3,7 | 140 | 15 | 8,8-2,2 | 140 | 15 | 7,3-1,8 |

**Diameter red dot c
= 22 cm / magnification**

Example: With M = 10 x the diameter is 2,2 cm at 100 m.

Subtensions in cm
at 100 m