

PRECISION MAKES THE DIFFERENCE

Scopes of the Police Marksman Line

SCHMIDT O BENDER

Schmidt & Bender Scopes of the PM Line

Scopes of the Schmidt & Bender PM line have been developed in close cooperation with special forces and police experts. Due to their proverbial reliability they are in the top ranks all over the world. They are successfully being used in many countries of the world for many years. In environments from desert sand to tropical humidity to arctic cold the models of the PM and PMII lines prove their operability under most extreme conditions.

Mounted on an precision or sharpshooter rifle for short to middle distances or on a .50 BMG for aquiring tactical targets at extremely far distances, Schmidt & Bender's PM line offers a suitable scope for every purpose.

To ensure long term functionality and reliability under all environmental conditions almost all mechanical parts are machined of metallic materials. The scope's main tubes are made of one single piece of high grade aluminum. They have a very strong, scratch resistent hard-anodized surface.

For increased safety of the shooter all PM scopes provide an eye relief distance of 90 millimeters (equals 3.5 inches). This is of high advantage especially in stress situations and for quick target acquisition.

The ocular housings are equipped with a rubber ring that protects the eye and increases the non-skid property of the ocular. The outside diameter of this ring allows adapting accessories such as protectice covers and polarization filters. A change of the magnification setting is accomplished by rotating a handy ring next to the ocular, which can comfortably be used with gloves as well.

The scopes feature high elevation and windage ranges for bullet drop compensation.

To provide high elevation and windage ranges the models of the PMII line feature a main tube diameter of 34 millimeters. The PM line scopes 1.1-4 x 20 Short-Dot, 1-8 x 24 Short-Dot and 1.5-6 x 20 have a main tube diameter of 30 millimeters.

Each of the scope's operating elements works precisely and serves only one single function. This prevents faulty operation and unintended adjustments.

With the parallax adjustment mechanism developed by Schmidt & Bender the shooter can quickly and safely focus the scope to distances from 10 meters to infinity. Since the parallax adjustment mechanism is located on a third turret opposite to the windage adjustment the shooter can easily stay on the target while focussing. The ability for exact adjustment helps preventing changes in point of impact as well as tiring of the shooter's eyes which could be caused by parallax or unfocussed images.

The design of the illumination control for illuminated reticles shows once more the Schmidt & Bender engineer's direct relation to practice and the effort to give the user real handling advantages. In total the illumination intensity can be adjusted to the environmental light conditions in 11 intensity steps. This allows the shooter to find his aiming point even in low light conditions and against dark backgrounds. Set between two intensity settings the power supply is cut, so that once the desired intensity setting is chosen the illumination can be switched off and then switched on in the previously chosen intensity setting again when it is needed.

On special demand the scopes can be equipped with a laser protection filter (1064nm). This laser protection filter is classified according to protection level LS4 (laser operation modes D,R according to DIN EN 207) and is located inside the objective system in order to protect it against any outside damages.

The commercially approved battery cell (CR 2032) has a lifetime of significantly more than 100 hours. Should the shooter forget to switch the illumination off the integrated chip will do this after 6 hours automatically.

All Schmidt & Bender scopes are leakage tested with 300 mbar inner pressure and purged with nitrogen afterwards.

The objective end of the main tube features an inside thread for adaption of accessories such as filters or sunshades.

Schmidt & Bender offers elevation and windage turret configurations which provide sufficient elevation and windage ranges with different click values. A choice of different practically proven glass reticles is available as well.



1-8x24 PMII Short-Dot

The 1-8x24 PM Short-Dot model represents the consistent further development of the tried and true 1.1-4x20 PM Short-Dot scope. The range of applications has been expanded enormously due to the extreme magnification range. The fine illuminated reticle in the first focal plane permits a precise operation up to a distance of 800 meter. Due to the red dot in the second focal plane the scope can also be used as a red dot scope at rather short distances - the red dot will not be enlarged with the image. The new "CC mode" development permits a parallax-free use of the scope as a red dot scope at the shortest distances with a magnification of 1.0. Deactivated the red dot will vanish completely, leaving behind a plain illuminated reticle. The illumination has been designed in a way that either the red dot or the illuminated reticle will be activated. In addition to that the user has various night and day modes available, so the scope may also be used with night vision equipment. The main tube has a diameter of 30 mm, enabling the user to switch from a 1.1-4x20 PM Short-Dot to a 1-8x24 PM Short-Dot without any problems. A locking system secures the adjusting caps of the elevation and windage turrets against accidental shifting.

1-8
35.3 - 4.9
9.6-3.0
90
3.9-13.9
90 %
+2 / -3
CC-MODE - 100m fix
550
Mil-Dot CC und P3

Klickrastung	Höhe	Seite	Stellrichtung	Single Turn	Double Turn
1 cm	-1 cm - + 101 cm	± 51 cm	cw and ccw	Х	



1.1-4x20 PM Short-Dot

The 1.1– 4×20 PM Short-Dot is a combination of red dot sight and scope. It has been developed for the use at short to middle distances. At low magnification the scope can be used like a red dot sight. The red aiming point is projected into the center of the field of view. Switched off the red dot disappears completely and a regular reticle with fine crosshairs remains. The illumination control features 5 intensity settings for the use in bright daylight. The red dot remains visible even on snow or sand in bright sunlight. 3 intensity settings are made for the use in low light conditions, 3 additional settings are for the use of the scope together with night vision goggles. The turrets for elevation, windage and illumination control lock automatically to prevent unintended displacement of the turret settings.

Magnification	1.1-4
Field of view (m / 100 m)	32-10
Exit pupil (mm)	14-5
Eye relief distance (mm)	90
Twilight factor	3.1-8.9
Transmission	75 %
Diopter adjustment (dptr.)	+2/-3
Parallax adjustment	100m fix
Weight (g)	570
Reticle	CQB

Click value	Elevation	Windage	Direction	Single Turn	Double Turn
1/2 MOA	-1 - 25 MOA	± 13 MOA	CCW	X	

1.5-6 x 20 PM Flash-Dot

The $1.5-6 \times 20$ PM Flash-Dot is like the $1.1-4 \times 20$ Short-Dot a combination of a red dot sight and a scope. The 1.5×10^{-2} magnification allows the shooter to keep both eyes open for target acquisiton.

Magnification	1.5-6
Field of view (m / 100 m)	21.7 - 6.7
Exit pupil (mm)	13.3-3.3
Eye relief distance (mm)	90
Twilight factor	4.2-11
Transmission	75 %
Diopter adjustment (dptr.)	+2 / -3
Parallax adjustment	100 m fix
Weight (g)	610
Reticle	Р3

Click value	Elevation	Windage	Direction	Single Turn	Double Turn
1 cm	- 5 − 65 cm	± 35 mrad	CW	Х	
1/4 MOA	0 - 12 MOA	± 5 MOA	CW	Х	



3-20x50 PMII

Due to an ever increasing range of applications we developed the 3-20x50 PMII scope, providing the user with the highest possible rate of flexibility. The 3-20 times magnification range makes this scope ready for the use with a multitude of weapons and calibers. On top of that, a total adjustment range of 260 cm permits the user to employ the scope on great distances. Elevation and windage turrets have been equipped with locking functions and a dual turn system featuring a tactile second level. This system prevents the user from performing involuntary adjustments on the elevation and windage turrets. The tactile dual turn function as well as the ten tactile stops (MTC) are designed to reduce and prevent any improper operations under stress and pressure. On request the reticle can be built into the first or second image plane. Moreover, the scope features a parallax compensation function ranging from 25 m to infinity. Reticle illumination ranges from night vision goggles via dusk to broad daylight.

Magnification	3-20
Field of view (m / 100 m)	13-2.1
Exit pupil (mm)	11.4-2.5
Eye relief distance (mm)	90
Twilight factor	10.1-31.6
Transmission	90 %
Diopter adjustment (dptr.)	+2 / -3
Parallax adjustment	25m-∞
Weight (g)	920
Reticle	P4L, P4feine, H2CMR,
	Klein, Police, H37 , H58

Click value	Elevation	Windage	Direction	Single Turn	Double Turn
1 cm	0 – 260 cm	± 60	cw and ccw		Х
1/4 MOA	0-64 MOA	± 14 MOA	cw and ccw		Х



3-12x50 PMII

A very versatile scope that allows shooting at distances up to 1500 m, depending on the configuration. The scope $3-12\times50$ PM II is the basic configuration of this model. The reticle is located in the first focal plane and thus allows range estimation in any magnification setting.

Magnification	3-12
Field of view (m / 100 m)	11.1-3.4
Exit pupil (mm)	14.3 - 4.3
Eye relief distance (mm)	90
Twilight factor	8.5 - 24.5
Transmission	≥90 %
Diopter adjustment (dptr.)	+2 / -3
Parallax adjustment	300 m fix
Weight (g)	720
Reticle	P1, P3

Click value	Elevation	Windage	Direction	Single Turn	Double Turn
1 cm	0 – 130 cm	± 60 cm	cw	χ	
1 cm	0 – 230 cm	± 60 cm	cw		Х
1/4 MOA	0 - 32 MOA	± 14 MOA	cw	Х	
1/4 MOA	0-56 MOA	± 14 MOA	cw		Х
0.1 mrad	0 – 22 mrad	± 6 mrad	ccw		Х
0.1 mrad	-1 - 12 mrad	± 6 mrad	CW	Х	



3-12x50 PMII/P

This scope is a 3–12 x 50 PM II with parallax adjustment. The scope can be focussed on distances from 50 meters to infinity. The reticle is located in the first focal plane and thus allows range estimation in any magnification setting.

Magnification	3-12
Field of view (m / 100 m)	11.1-3.4
Exit pupil (mm)	14.3 - 4.3
Eye relief distance (mm)	90
Twilight factor	8.5-24.5
Transmission	90 %
Diopter adjustment (dptr.)	+2 / -3
Parallax adjustment	50 m - ∞
Weight (g)	830
Reticle	P1. P3

Click value	Elevation	Windage	Direction	Single Turn	Double Turn
1 cm	0 – 130 cm	± 60 cm	CW	Х	
1 cm	0 – 230 cm	± 60 cm	cw		Х
1/4 MOA	0-32 MOA	± 14 MOA	CW	Х	
1/4 MOA	0-56 MOA	± 14 MOA	CW		Х
0.1 mrad	0 – 22 mrad	± 6 mrad	ccw		Х
0.1 mrad	-1 - 12 mrad	± 6 mrad	CW	Х	

3-12 x 50 PM II / LP

The 3–12x50 PMII/LP is a scope with parallax adjustment and illuminated reticle. Practical functions are brought together in the LP configuration, yet the turrets for parallax adjustment and reticle illumination are separated from each other. This gives the shooter the confidence which is essential for a successful application. The reticle is located in the first focal plane and thus allows range estimation in any magnification setting.

Magnification	3 – 12
Field of view (m / 100 m)	11.1-3.4
Exit pupil (mm)	14.3 - 4.3
Eye relief distance (mm)	90
Twilight factor	8.5-24.5
Transmission	90 %
Diopter adjustment (dptr.)	+2 / -3
Parallax adjustment	50m-∞
Weight (g)	860
Reticle	P3L, P4L, P4L fein

Click value	Elevation	Windage	Direction	Single Turn	Double Turn
1 cm	0 – 130 cm	± 60 cm	cw	Х	
1 cm	0 – 230 cm	± 60 cm	CW		Х
1/4 MOA	0 – 32 MOA	± 14 MOA	cw	Х	
1/4 MOA	0 - 56 MOA	± 14 MOA	CW		Х
0.1 mrad	0 – 22 mrad	± 6 mrad	ccw		Х
0.1 mrad	-1 - 12 mrad	± 6 mrad	CW	Х	



4-16 x 42 PM II / LP

To meet their special requirements this scope with magnification from 4x to 16x and an objective diameter of $42\,\mathrm{mm}$ has been developed according to the demands of US forces on the basis of the successfully used 4–16x50 PMII/LP. The lower objective diameter allows lower mounting of the scope to the rifle and thus makes an alternative for a lot of existing firearm systems that afford a $42\,\mathrm{mm}$ objective diameter. The reticle is located in the first focal plane and thus allows range estimation in any magnification setting.

Magnification	4-16
Field of view (m / 100 m)	7.5 - 2.35
Exit pupil (mm)	10.5-2.6
Eye relief distance (mm)	90
Twilight factor	11.3 - 25.9
Transmission	90 %
Diopter adjustment (dptr.)	+2 / -3
Parallax adjustment	50 m - ∞
Weight (g)	875
Reticle	P31 P41 fine

Click value	Elevation	Windage	Direction	Single Turn	Double Turn
0.1 mrad	0 – 13 mrad	± 6 mrad	ccw	Х	
1 cm	0 – 130 cm	± 60 cm	CW	Х	
1/4 MOA	0-56 MOA	± 14 MOA	CW		Х



4-16x50 PMII/LP

The 4–16 x 50 PMII/LP features a reticle illumination in addition to the parallax adjustment. Practical functions are brought together in the LP configuration, yet the turrets for parallax adjustment and reticle illumination are separated from each other. This gives the shooter the confidence which is essential for a successful application. The reticle is located in the first focal plane and thus allows range estimation in any magnification setting.

Magnification	4-16
Field of view (m / 100 m)	7.5 - 2.35
Exit pupil (mm)	12.5-3.1
Eye relief distance (mm)	90
Twilight factor	11.3-28.3
Transmission	90 %
Diopter adjustment (dptr.)	+2 / -3
Parallax adjustment	50 m - ∞
Weight (g)	933
Reticle	P3L, P4L fine

Click value	Elevation	Windage	Direction	Single Turn	Double Turn	
0.1 mrad	0 – 13 mrad	± 6 mrad	ccw	Х		
1 cm	0 – 130 cm	± 60 cm	CW	Х		
1/4 MOA	0 - 56 MOA	± 14 MOA	cw		Х	



5-25 x 56 PM II / LP

The 5–25x56 PMII/LP is the scope with high magnification and extremely substantial elevation range. It features a parallax adjustment, reticle illumination and a Double Turn elevation turret. Thanks to the high magnification and the substantial elevation range this scope can successfully be used by sharpshooters for distances up to 2000 meters. The parallax can be adjusted from 10 meters to infinity. The 5x zoom range offers a higher flexibility and thus makes the scope universally useful. The scope can be equipped with reticles in first or second focal plane.

Magnification	5-25
Field of view (m/100 m)	5.3 - 1.5
Exit pupil (mm)	10.95-2.28
Eye relief distance (mm)	90
Twilight factor	14.1-37.4
Transmission	90 %
Diopter adjustment (dptr.)	+2 / - 3
Parallax adjustment	10 m - ∞
Weight (g)	1080
Reticle	1. Focal plane:
	P3L, P4, P4L fine
	2. Focal plane:
	P4L. P3L

Click value	Elevation	Windage	Direction	Single Turn	Double Turn
0.1 mrad	0 – 26 mrad	± 6 mrad	ccw		Х
0.1 mrad	0 – 26 mrad	± 6 mrad	CW		Х
1/4 MOA	0 - 65 MOA	± 16 MOA	CW		х



5-25 x 56 PSR

The 5-25x56 PMII/LP/MTC/LT ist he newest version of 5-25x56 PMII, with military standard ceramic coating and locking turret functions, to better meets today's enhanced user requirements. The user has two complete turns available for the elevation adjustment with a tactile revolution indicator. Elevation and windage turrets each are equipped with "MTC". The windage turret has an "MTC" at the engraved -0- position, the so-called "zero click". A special feature on this model is the locking function on both elevation and windage turrets.

Magnification	5-25
Field of view (m / 100 m)	5.3 - 1.5
Exit pupil (mm)	10.95 - 2.28
Eye relief distance (mm)	90
Twilight factor	14.1-37.4
Transmission	90 %
Diopter adjustment (dptr.)	+2/-3
Parallax adjustment	10m - ∞
Weight (g)	1150
Reticle	1. Focal plane:
	P3L , P4L, P4Lfeine,
	Police , Klein, H2CMR,
	H37, H58, MSR
	2. Focal plane:
	P3L , P4L, P4Lfeine

Click value	Elevation	Windage	Direction	Single Turn	Double Turn	Multi Turn
1 cm	0-260 cm	± 60 cm	cw and ccw		Х	
1/4 MOA	0-64 MOA	± 14 MOA	cw and ccw		Х	



12-50x56 PMII/P

The 12-50x56 PM II/P is the ideal rifle scope for long distance shooting. Successfully utilized in other Schmidt & Bender scopes, the parallax adjustment allows targets to be clearly seen as close as 10 meters. Ballistic drop compensation can be accomplished with the Double Turn or the new Multi Turn configuration. Schmidt & Bender P3L, P4 Fine and Sport reticles are available in the first or second focal plane.

Magnification	12 - 50
Field of view (m/100 m)	4.2 - 1.1
Exit pupil (mm)	4.55 - 1.18
Eye relief distance (mm)	70
Twilight factor	25.9-52.9
Transmission	90 %
Diopter adjustment (dptr.)	+2 / -3
Parallax adjustment	10m - ∞
Weight (g)	1110
Weight (g) Reticle	1110 1. Focal plane:
3 (3)	
3 (3)	1. Focal plane:
3 (3)	1. Focal plane: P3, P4 fine

Click value	Elevation	Windage	Direction	Single Turn	Double Turn	Multi Turn
1/4 MOA	0-65 MOA	± 16 MOA	CCW	Х	Х	
1/4 MOA	0-65 MOA	± 16 MOA	CW	Х	Х	
1/8 MOA	0-75 MOA	± 14 MOA	ccw		Х	Х
1/8 MOA	0-75 MOA	± 14 MOA	CW		Х	Х
1/4 cm	0-175 cm	± 16 cm	CW	Х		Х

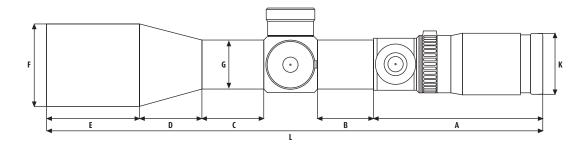
11)

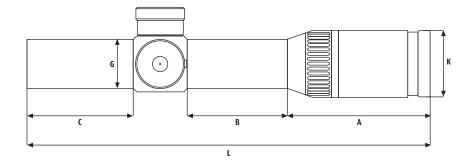
Option "Double Turn"

The scopes of the PM II line are valued by sports shooters, security forces and special units of police and military all over the world. Inspired by conversations with the users of this scope category and their practical experiences a steady improvement with orientation to the intended scope use has been accomplished over the last years. The youngest innovation is a further extension of the usable elevation range. The 34mm diameter of the main tube allows a comfortable range of 260 cm at 100 m. Until now the usable elevation range has been 130 cm at 100 m. The reason is a mechanical part inside the elevation turret that allowed only 130 clicks maximum with 1 cm per click. Having all the clicks only on one revolution gives the shooter the advantage that he always can see to which adjustment value the elevation turret is set. Other scope manufacturers sometimes use multiple revolutions of the turret which might confuse the user. A new adjustment mechanism, called the "Double Turn" uses two

revolutions of the turret, making the maximum elevation travel available for the user. To avoid any confusion the Schmidt & Bender engineers designed an additional mechanism featuring little windows on top of the elevation turret: Black colour in these windows indicate that the elevation adjustment is in the first revolution. When the second revolution is reached the colour in the windows changes to yellow. This distinct bright/dark contrast is easily visible even in low light conditions and leads the user's eye to the upper, yellow filled scale on the turret cap that marks the second revolution. The Double Turn turret is a standard feature of the 5–25 x 56 PMI/LP scope. It is available for the other PMII scopes as an option. Mounted on a .50 caliber rifle the 5–25 x 56 PMI/LP with the Double Turn turret allows a bullet drop compensation for up to 2000 m with a fine click value of 0.1 mrad (equals 1 cm at 100 m).

Models and Specifications

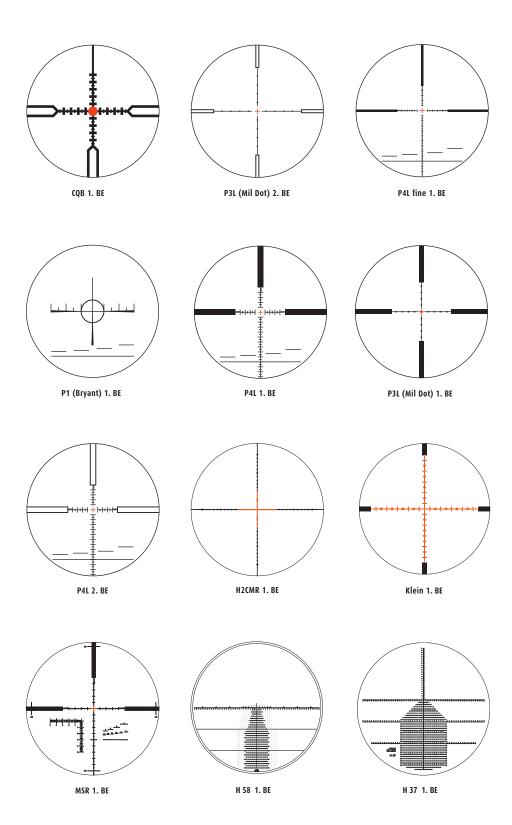




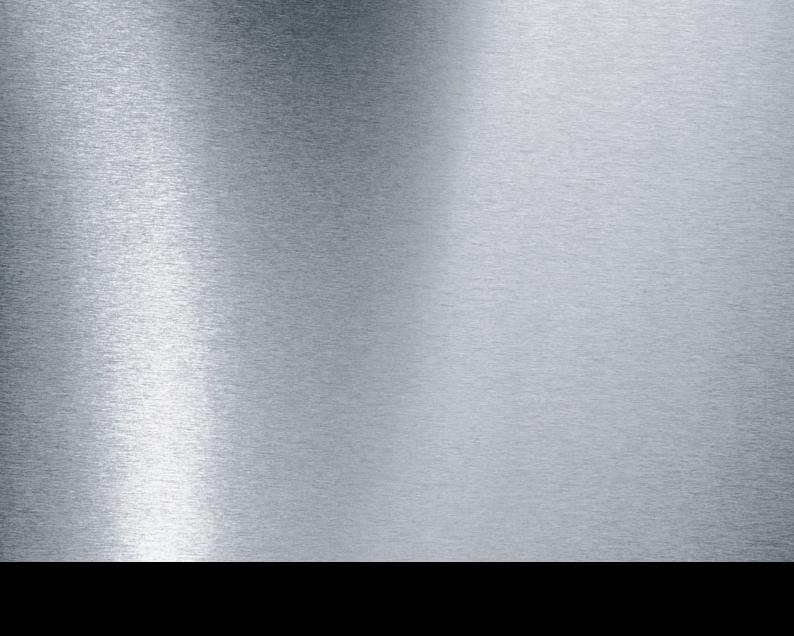
Model	1-8 x 24 PM II	1.1 – 4 x 20 PM Short-Dot	1.5-6×20 PM Flash-Dot	3-20 x 50 PM II / P	3 - 12 x 50 PM II	3-12x50 PMII/P
Magnification	1-8	1.1-4	1.5-6	3-20	3-12	3-12
Field of view (m / 100 m)	35.3-4.9	32-10	21.7-6.7	13-2.1	11.1-3.4	11.1-3.4
Exit pupil (mm)	9.6-3.0	14-5	13. 3-3.3	11.4-2.5	14.3 - 4.3	14.3 - 4.3
Eye relief distance (mm)	90	90	90	90	90	90
Twilight factor	3.9-13.9	3.1-8.9	4,2-11	10.1 - 31.6	8.5 - 24.5	8.5 - 24.5
Transmission	90 %	75 %	75 %	90 %	90 %	90 %
Diopter adjustment (dptr.)	+2 / -3	+2 / -3	+2 / -3	+2 / -3	+2/-3	+2 / -3
Parallax adjustment	CC-MODE-100 m fix	100 m fix	100 m fix	25 m - ∞	300 m fix	50 m -
Weight (g)	550	570	610	920	720	830
Dimensions						
A (m)	99	95	96	125	90	90
B (m)	66	70	70	53	67	65
C (m)	95	74	122	40	42	43
D (m)				75	46	44
E (m)				45	66	65
F (m)				57	57	57
G (m)	30	30	30	34	34	34
K (m)	46	43	43	50	43	43
L (m)	290	269	317	385	343	343

Model	3-12 x 50 PM II / LP	4-16 x 42 PM II / LP	4-16x50 PM II / LP	5-25 x 56 PM II / LP	5 - 25 x 56 PSR	12-50×56 PMII/P
Magnification	3-12	4-16	4-16	5-25	5-25	12-50
Field of view (m / 100 m)	11.1-3.4	7.5-2.35	7.5 - 2.35	5.3-1.5	5.3 - 1.5	4.2 - 1.1
Exit pupil (mm)	14.3 - 4.3	10.5 - 2.6	12.5-3.1	10.95-2.28	10.95-2.28	4.55 - 1.18
Eye relief distance (mm)	90	90	90	90	90	70
Twilight factor	8.5-24.5	11.3 - 25.9	11.3 - 28.3	14.1-37. 4	14.1 - 37.4	25.9 - 52.9
Transmission	90 %	90 %	90 %	90 %	90 %	90 %
Diopter adjustment (dptr.)	+2 / -3	+2 / -3	+2 / -3	+2 / -3	+2/-3	+2/-3
Parallax adjustment	50 m - ∞	50 m - ∞	50 m - ∞	10 m - ∞	10 m-∞	50 m-∞
Weight (g)	860	875	933	1080	1150	1110
Dimensions						
A (m)	115	115	115	124	118	95
B (m)	38.5	38.5	38.5	45	44.6	71.5
C (m)	49	64	44	38.5	38.5	38.5
D (m)	44	63	82	92	92	92.5
E (m)	58	77	76	73	73	72
F (m)	57	50	57	62	62	62
G (m)	34	34	34	34	34	34
K (m)	43	43	43	43	43	43
L (m)	343	394	393	417	410	417

Available Reticles



13



SCHMIDT O BENDER

Schmidt & Bender GmbH & Co. KG

Am Grossacker 42 · D-35444 Biebertal

Telephone + 49 (0) 64 09-81 15-0 · Facsimile + 49 (0) 64 09-81 15-11

www.schmidt-bender.de