

Scope Specs Table

For e.g.: 6-20x | 5-25x | 4-20x

Bottom Magni. = 6x or lower

Top Magni. = 20x or higher

with 10y-Side Parallax

Exposed Turrets

Holdoff Reticle

Under \$500

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Requirements for this Table (a few exceptions are included)

Bottom magnification = 6x or lower

Top magnification = 20x or higher

Minimum Parallax = 10 yards or less

Side Parallax Adjustment

Turrets = Exposed

Reticle = Holdoff reticle (evenly spaced hash lines or dots for aiming with holdoff/ holdover)

Price = between \$200 and \$500, and a few a bit higher, esp. at full retail price

Abbreviations in the Table

Green is a good thing... – e.g.: a very good warranty, a shorter size or lighter weight than average for this magnification range, a larger than average elevation adjustment range, a very wide field of view (FoV), or some additional feature (bubble level, zero stop, turret turn counter, numbers on the hash lines of the reticle), etc.

Red is less of a good thing... – e.g.: a not so great warranty, a longer size or heavier weight than average, a smaller than average elevation adjustment range, a very narrow field of view (FoV), or some other negative or limiting feature, like: a small exit pupil (reducing the eye box), a min. parallax longer than 10y, a reticle without illumination, capped turrets, an FFP reticle without thick outside posts, or a price higher than the max. price that was set for this scope table), etc.

Orange is a caution flag, a marginal feature or characteristic... – e.g.: warranty limitations, a marginal FoV, a smaller objective diameter for (supposedly) less light than average for the magnification range, an uneven number of mils or moas per turret turn (not multiples of 5mil or 10moa), a 34mm tube (somewhat limiting scope mount choices), a price so low as to shed doubt on the quality of the scope, etc.

SFP vs. **FFP** = table starts with **SFP** (*second focal plane*) scopes, then *first focal plane* (**FFP**)

Thick O/S Posts [for **FFP**] = thick black outside posts, i.e., 3 or 4 of the crosshairs are thick toward the outside (the posts are not hollow rectangles, but filled in with black), which allows seeing the crosshairs easily even when at low magnification

10x [or 16x, or another number] [for **SFP**] = the magnification at which the holdoff hash lines or dots have been calibrated, i.e., where 1 moa indicated on the reticle actually is 1.047" in reality at 100 yards

Price \$ Low = lowest prices in US dollars I found in 2019 (some 2020) [additional price separated by a *comma* , – and separated by a *semicolon* ; from the manufacturer's price]

Price Mfctr.'s = manufacturer's price [last price in that field, after the semicolon ;]

No. = the manufacturer's product or parts number; helpful to identify the scope at a seller's page as some scopes are very similar and the seller's description is either misleading or insufficient to identify the scope with certainty; also for shopping for the lowest price it helps to enter the number in the search

Discont. = product has been discontinued (but still could be purchased used)

Warranty Info: **Life** = life time warranty | **5y** = 5 years warranty | **OOwn** = warranty only for the original owner | **Unlmt** = unlimited warranty | **Anyb.** = warranty applies to any owner, anybody (e.g., even if you bought it used) | **NoRec.** = no receipt (proof of purchase) required | **Rec.** [or: **R.**] = receipt (proof of purchase) required | **30d** = must register the scope within 30 days of purchase

FoV = Field of View (in ft at 100y): A large FoV at the bottom end of the magnification range is important for *hurried close range shooting*, as the large FoV helps rapid target acquisition. Note that a wide FoV is not critical for *unhurried target shooting*. The color coding is based on my very personal, unabashedly subjective estimation that *for my kind of hurried close range shooting* I'd like to have a FoV of at least 3ft at 10y (which translates to 30ft @100y in the scope specs, color coded black). The color coding is applied irrespective of the scope's magnification, so naturally 6-24x scopes for example don't usually get a green rating, but orange or red. Note however that there are significant differences in FoV between scopes with the same magnification range.

42ft or more | **41-36ft** | 35-30ft | **29-23ft** | **22-17ft** | **16ft or less**

IR = illuminated reticle [Y = yes | **NO**]

Reticle, Ret.: **D** = "dots" = enough dots or hash lines on the crosshairs for holdoffs

N = "numbers" = the dots or hash lines are numbered for quicker holdoffs

Grid = the reticle is a grid style ("Christmas tree style"), for simultaneous elevation *and* windage holdoffs

BDC = bullet drop compensating reticle, meaning that the spacing between the hash lines is uneven and therefore not usable for holdoffs unless shooting the ammo the reticle was calibrated for

Capped Turrets! **BUT Clickable** = means that though the turrets are capped, when uncapped they are finger adjustable, the numbers are visible from behind the rifle, and the zero can be reset

			Magni. → FoV		→ Eye Box			Exposed Turrets				Holdoff Reticle				Dimensions			
in 2019, 2020	Price \$ Low; Mfctr.'s	War- ranty	Magni- fication	FoV = Field of View @ 100y (ft)	Obj. ∅ Dia (mm)	Exit Pupil (mm)	IR Y, N	Max. Elev. Adj. (MOA)	1 Click =	1 T. Turn =	Turrets in:	Reticle in:	Thick O/S Posts? FEP — SFP Calibration at ?	Enough Dots, No's	Line thick- ness	1" or 30mm	Weight (oz) (g)	Length (inch) (cm)	Misc. + Reviewers' "Comments"
			SFP Scopes												at max.				
UTG: Accushot <small>No. SCP3-UG6245AOIEW</small>	209; 310	Life	6-24x	15-5	56	8- 2.2	Y	??	1/8 moa	15 moa	MOA ≠	≠MIL	SFP 10x	D*		30	32.2 910g	17.5" 44c	*It should state "glass etched reticle"!
Discovery: HD/30mm SFP 5-25x50 <small>No. 170103</small>	207; 300	3y	5-25x	24-5	50	10- 2.0 <small>calibrated</small>	Y	68	0.1 mil	6 mil	MIL =	=MIL	SFP 10x	D, N	.05 ^{mi} .18 ^{mo}	30	27.8 785g	13.2" 34c	Locking Turrets
Nikko: Diamond Long Range <small>No. NDSI62450LRHMD</small> •Ret. HMD	250; ?	Life, 0.Own	6-24x	21-5	50		Y	40	1/4 moa		MOA ≠	≠MIL	SFP x?	D		30	27.8 788g	15.4" 39c	
Vector: Atlas <small>No. SCOL-04</small>	399; ?	5y, Rec.	5-30x	25-4	56	11- 1.9	Y	80	1/8 moa	15 moa	MOA ≠	≠MIL	SFP x?	D, N	?	35	35.3 1000g	14.8" 38c	
MTC: Viper Pro Tactical	520; ?	Life ³⁰⁰ R, 0.Own	5-30x	24-4	50		Y	42	1/4 moa	10 moa	MOA ≠	≠MIL	SFP x?	D	?	30	25.8 732g	16.4" 42c	not customizable
MTC: Viper Pro	570; ?	Life ³⁰⁰ R, 0.Own	5-30x	24-4	50		Y	42	1/4 moa	30 moa	MOA ≠ Custom	≠MIL	SFP x?	D	?	30	30.7 869g	16.4" 42c	Customizbl. Turrets Magnifier Cap
Bushnell: Engage <small>No. REN62450DG</small>	450; 540	Life, NoRec.	6-24x	18-4	50	?	N O	50	1/8 moa	8 moa	MIL ≠	≠MOA	SFP x?	D	.05 ^{mi} .18 ^{mo}	30	23.7 672g	14.2" 36c	
Hawke: Sidewinder 30 SF <small>No. 17220 [not 17221]</small>	439; 600	Life, R, 0.Own	6-24x	15-4	56	9- 2.0	Y	62	1/4 moa	15 moa	MOA ≠	≠MIL	SFP x?	D	?	30	29.8 844g	15.9" 40c	
Hawke: Airmax 30 SF <small>No. 13320</small>	408; 480	Life, R, 0.Own	6-24x	17-4	50	8- 2.0	Y	65	1/4 moa	15 moa	MOA ≠	≠MIL	SFP w/ odd spacing	D	?	30	26.7 757g	15.6" 40c	"small Eyebow"
Aztec: Emerald SFP	440; —	Life	55-25x	19-4	50	?	N O	c. 40?	1/4 moa	15 moa	MOA =	=MOA	SFP 18x✓	D, N	?	30	25.4 720	14.4 37c	
Hawke: Airmax 30 SF Compact <small>No. 13220</small>	?; 400	Life, R, 0.Own	6-24x	22-5	50		Y	53	0.1 mil	?	MIL =	=MIL	SFP 10x	D	?	30	23.6 670g	13.0" 33c	Capped Turrets! BUT Clickable Turn Counter
Optisan: EVX Gen. 2: 5-20X50i <small>No. 37526</small>	430; 440	Life	5-20x	23-6	50	10- 2.5	Y	50	0.1 mil	4.5 mil	MIL =	=MIL	SFP x?	D, (N)	.05 ^{mi} .18 ^{mo}	30	27.0 765g	14.4" 37c	
Sightron: S-TAC: [SFP] •Ret. MOA <small>No. S-TAC4-20X50MOA</small>	470; 540	Life	4-20x	24-4	50	?	N O	80 <small>(40 wind age)</small>	1/4 moa	15 moa	MOA =	=MOA	SFP x?	D	.03 ^{mi} .1 ^{mo}	30	23.8 675g	14.8" 38c	Capped Turrets! BUT Clickable Turn Counter
Vector: Paragon Gen. 2 <small>No. SCOL-26</small>	360; ?	Life, NoRec.	5-25x	23-5	56	8- 2.2	Y	60	0.1 mil	8 mil	MIL =	=MIL	SFP x?	D, N ^{Elev} , Grid		30	23.6 670g	14.4" 37c	Parallax 15y Locking Turrets
Element: Helix SFP •MIL Ret. PR-1C SFP •MOA Ret. EHR-1C SFP	400; —	Life, NoRec.	6-24x	19-4	50	9- 2.0	N O	65	0.1 mil 1/4 moa	6 mil 15 moa	MIL = MOA =	=MIL =MOA	SFP 24x	D, N	?	30	26.0 737g	13.3" 36c	Tool-less Zero Reset; Zero Stop; Turn Counter
Vector: Continental 30mm Tactical <small>No. SCOL-33T</small>	?; 499	Life, NoRec.	4-24x	31-5	50	9- 2.1	Y	67	0.1 mil	8 mil	MIL =	=MIL	SFP 20x	D, N Grid		30	23.6 670g	14.6" 37c	Parallax 15y Locking Turrets
Hawke: Frontier SF •Ret. MIL PRO <small>No. T8130</small>	?; 629	Life, R, 0.Own	4-20x	37-8	44	20- 3.3?	Y	65	0.1 mil	8 mil (?)	MIL =	=MIL	SFP 10x ≈ 20x	D, N ^{Elev} , Grid	?	1"	20.6 584g	13.2" 34c	Parallax 15y
Hawke: Frontier SF •Ret. MIL PRO <small>No. T8140</small>	?; 699	Life, R, 0.Own	5-25x	23-5	50	20- 3.3?	Y	37	0.1 mil	8 mil (?)	MIL =	=MIL	SFP 20x	D, N ^{Elev} , Grid	?	1"	22.2 628g	14.4 36c	10y Parallax✓

			Magni.	→ FoV	→ Eye Box	Exposed Turrets					Holdoff Reticle				Dimensions					
in 2019, 2020	Price \$ Low; Brand: Series	Warranty Mfr.'s	Magnification	FoV =Field of View @ 100y (ft)	Obj. Dia (mm)	Exit Pupil (mm)	IR Y, N	Max. Elev. Adj. (MOA)	1 Click =	1 T. Turn =	Turrets in:	Reticle in:	FFP Thick O/S Posts? — SFP Calibration at ?	Enough Dots, No's	Line thick- ness	1" or 30mm	Weight (oz) (g)	Length (inch) (cm)	Misc. + Reviewers' "Comments"	
			FFP Scopes																	
	FFP Scopes – without Thick Outside Posts in the Reticle																			
Monstrum: •G1 Ret. No. FFP62450-R •G2 Ret. No. G2-BFFPS62450-R	•230 •200	1y	6-24x	???	50	?	Y	? 80	1/4 moa	15 moa	MOA =	=MOA	FFP No Thick Posts	D	?	30	30.0 29.0	16.6" 15.5"		
Sun Optics: FFP Variable No. CS41-62450	400; 557	1y	6-24x	17-4	50	8- 2.0	N 0	??	0.1 mil	6 mil	MIL =	=MIL	FFP No Thick Posts	D	.10 ^{mi} .34 ^{mo}	30	26.0 737g	14.5" 37c		
Vector: Veyron 6-24x44 No. SCFF-23	198; 289	5y	6-24x	17-4	44	7- 1.8	N 0	50	0.1 mil	6 mil	MIL =	=MIL	FFP ³ No Thick Posts	D	.025 ^{mi} .08 ^{mo}	30	20.5 580g	11.7" 30c	Locking Turrets	
Vector: Marksman 6- 24x50 (not the 6-25x50, SCFF-11) No. SCFF-26	?; 230	5y, Rec.	6-24x	17-5	50	8- 2.1	N 0	60	0.1 mil	6 mil	MIL =	=MIL	FFP ¹⁶ No Thick Posts	D, N, Grid but not so great	?	30	24.7 700g	14.2" 36c	Locking turrets	
MTC: King Cobra F1	446.629; —	Life ^{30d} , R. 0.Own	6-24x	16-4	50	?	Y	38 (??)	0.1 mil	5 mil	MIL =	=MIL	FFP ¹⁸ No Thick Posts	D		30	26.3 746g	14.4" 37c	Locking Turrets Magnify. Lens Cap	
Hawke: Airmax 30 FFP SF No. 13352	?; 589	Life, R. 0.Own	6-24x	21-5	50	8- 2.1	Y	57	0.1 mil		MIL =	=MIL	FFP w/ odd spacing No Thick Posts	D	?	30	27.0 765g	14.9" 38c	Capped Turrets! BUT Clickable	
Discovery: HD: 4-20x50 SFIR No. 170105	200; 300	3y	4-20x	24-5	50	?	Y	60	0.1 mil	6 mil	MIL =	=MIL	FFP ²⁴ No Thick Posts	D, N, mini Grid	.05 ^{mi} .17 ^{mo}	30	28.1 795g	13.2" 34c	Locking Turrets	
Vector: Taurus No. SCFF-14	?; 449	Life, NoRec.	5-30x	20-3	56	11- 1.8	Y	40	0.1 mil	6 mil	MIL =	=MIL	FFP ² No Thick Posts	D, N	?	30	28.7 813g	15.6" 40c	Parallax 17y (20y stated)	
Konus (Italy): Pro F30 No. 7297	590; ?	Life	6-24x	16-4	52	8- 2.2	Y	60	0.1 mil	5 mil	MIL =	=MIL	FFP ¹² No Thick Posts	D	.04 ^{mi} OR? .05 .14 ^{mo}	30	28.6 810g	16.4" 42c	Cant Bubble Large Parallax T.	
Hawke: Vantage 30 WA FFP No. 14304	?; 589	Life, R. 0.Own	6-24x	21-5	50	8- 2.1	Y	60	0.1 mil		MIL =	=MIL	FFP No Thick Posts	D	?	30	26.6 755g	14.9" 38c		
Hawke: Sidewinder 30 SF FFP No. 17420	500, 460 ^{rib.} , 600	Life, R. 0.Own	6-24x	17-4	56	9- 2.0	Y	60	0.1 mil	5 mil	MIL =	=MIL	FFP ¹⁰ No Thick Posts	D	?	30	31.1 880g	15.9" 40c		
Discovery: HD: 5-25x50 SFIR DLTW FFP No. 170110	?; 315	3y	5-25x	24-5	50		Y	60	0.1 mil	6 mil	MIL =	=MIL	FFP ⁴ No Thick Posts	D, N	.05 ^{mi} .17 ^{mo}	30	27.8 788g	13.5" 34c	Locking Turrets	
Discovery: HD/34mm: 5-30x56 SFIR No. 170114	?; 392	3y	5-30x	23-3	56	11- 1.9	Y	70 (or 5 0?)	0.1 mil	6 mil	MIL =	=MIL	FFP ³ No Thick Posts	D, N, Grid	?	34	31.8 903g	15.6" 40c	Parallax is 10y. Locking Turrets	
Vector: Taurus No. SCFF-17	?; 430	Life, NoRec.	4-24x	27-4	50	12- 2.1	Y	50	0.1 mil	6 mil	MIL =	=MIL	FFP ²³ No Thick Posts	D, N	.04 ^{mi} .14 ^{mo}	30	27.1 770g	15.0" 38c	Parallax is 10y. Locking turrets	
Discovery: HD/34mm: 4-24x50 SFIR No. 170109	330; 375	3y	4-24x	27-5	50	12- 2.1 calculated	Y	85	0.1 mil	6 mil	MIL =	=MIL	FFP ¹ No Thick Posts	D, N, Grid	.05 ^{mi} .17 ^{mo}	34	23.7 776g	14.7" 37c	Parallax is 10y. Locking Turrets	
FFP Scopes – with Thick Outside Posts in the Reticle																				
Vector: Tourex No. SCFF-19	?; 280	5y, Rec.	6-24x	18-5	50	8- 2.1	Y	50	1/4 moa	15 moa	MOA =	=MOA	FFP ¹⁷ Thick O/S Posts	D, N, but 4, 12, 20, 28, 36	?	30	26.3 745g	14.3" 37c	Zero stop turrets	
Monstrum: •G3 Ret. No. G3F62450 •GH Ret. No. FFP62450-H	•250 •200	1y	6-24x	18-5	50	?	Y	80	1/4 moa	15 moa	MOA =	=MOA	FFP Thick O/S Posts	D	?	30	30.0 850g	15.8" 16.6"	Parallax is 10y	
Aztec: Emerald FFP	540; —	Life	5.5- 25x	19-4	50	?	Y	c. 40?	1/4 moa	15 moa	MOA =	=MOA	FFP ¹⁹ Thick O/S Posts	D, N, small Grid	?	30	25.4 720g	14.4" 37c	"Low DoF"	
ACME Machine •TR-MIL Ret. No. 08-625 •TR-MOA Ret. No. 08-624	?; 300		6-24x	17-4	50	8- 2.1	Y	60	0.1mil 1/4mo	??mil 12moa	MIL = MOA =	=MIL =MOA	FFP ²⁰ Thick O/S Posts	D		30	28.5 808g		Parallax is 10y. T. Turn Counter	

			Magni. → FoV		→ Eye Box			Exposed Turrets			Holdoff Reticle				Dimensions				
in 2019, 2020	Price \$ Low; Brand: Series	Warranty Mfctr.'s	Magnification	FoV = Field of View @ 100y (ft)	Obj. Dia ∅ (mm)	Exit Pupil (mm)	IR Y, N	Max. Elev. Adj. (MOA)	1 Click =	1 T. Turn =	Turrets in:	Reticle in:	Thick O/S Posts? FFP — SFP Calibration at ?	Enough Dots, No's	Line thickness	1" or 30mm	Weight (oz) (g)	Length (inch) (cm)	Misc. + Reviewers' "Comments"
Discovery: VT-3: 6-24x50 SFAI FFP <small>No. 170602</small>	?; 290	3y	6-24x	19-5	50	? 0	N 50	1/8 moa	7.5 moa	MOA =	=MOA	FFP Thick O/S Posts	D, N, Person Ranging	?	30	26.7 758g	14.7" 37c	Angle Indicator Locking Turrets	
Discovery: VT-T: 6-24x50 SFVF FFP <small>No. 170503</small>	207; 350	3y	6-24x	19-5	50	? 0	N 60	0.1 mil	6 mil	MIL =	=MIL	FFP Thick O/S Posts	D, N	?	30	26.1 740g	14.7" 37c	w/Phone Adaptor Locking Turrets	
Discovery: HI: 6-24x50 SFIR FFP <small>No. ???</small>	?; 259	Life✓	6-24x	???-?	50	? Y	??	0.1 mil	6 mil	MIL =	=MIL	FFP Med. Thick Posts	D, N, Grid	?	30	23.8? 675g? Really?	14.1" 36c	Mech. Range Finder, Angle Indicator 4 screws to re-zero	
Sightron: S-TAC: [FFP] •Ret. MIL <small>No. S-TAC4-20X50FFP23IRMH</small>	660; 800	Life	4-20x	22-4	50	? Y	80 (40 wind age)	0.1 mil	5 mil	MIL =	=MIL	FFP Thick O/S Posts	D, N	.035 ^{mi} .12 ^{mo}	30	25.6 725g	15.0" 38c	T Turn Counter Zero Stop	
Hi-Lux (US): PentaLux TAC-VF 4-20x50 FFP G2	?; 575	Life, Rec.	4-20x	28-6	50	12-2.5	Y 80	0.1 mil	12 mil	MIL =	=MIL	FFP ³² Thick O/S Posts	D, N	?	30	27.9 791g	14.7" 37c		
Swampfox (US): Warhawk •Sharpsh. Grid Ret. MIL •Sharpsh. Grid Ret. MOA <small>No. TWK42050-3L No. TWK42050-3M</small>	??; 659	Life (50000 rounds)	4-20x	32-7	50	13-2.4	Y 90	0.1mi 1/4mo	10 mi 25mo	MIL = MOA =	=MIL =MOA	FFP ³⁴ Med. Thick Posts	D, N, Grid	?	34	32.8 930g	15.0 38c	Locking Turrets	
Nikko: Diamond FFP 30 •PRR Ret. •Skeleton HMD Reticle <small>No. NSFFP62450PPRR No. NSFFP62450HMD</small>	300; ?	Life, 0.Own	6-24x	19-5	50	? Y	50	0.1 mil	6 mil	MIL =	=MIL	FFP ²⁷ O/S Posts: •Thick •Not Thick	D, N D, —	.05 ^{mi} .17 ^{mo}	30	24.0 680g	14.2" 36c	Locking Turrets	
Nikko: Diamond FFP 34 •PRR Ret. •Skeleton HMD Ret. <small>No. NSFFP3441644PPRR No. NSFFP3462450PPRR</small>	430; ?	Life, 0.Own	6-24x	21-5	50	? Y	80	0.1 mil	6 mil	MIL =	=MIL	FFP ²⁸ O/S Posts: •Thick •Not Thick	D, N D, —	.05 ^{mi} .17 ^{mo}	34	26.5 750g	14.2" 36c	Locking Turrets	
Optisan: EVX, Gen. 2: 6-24x50 F1 •w/ IR No. 37583 •w/o IR No. 37534	?; 560	Life	6-24x	19-6	50	8-2.1	Ei ther 50	0.1 mil	4.8 mil or 5 mil	MIL =	=MIL	FFP ²¹ Med. Thick Posts	D, (N)	?	30	26.5 751g	14.8" 38c	Locking Turrets	
Vector: Counterpunch: No. SCFF-03A	?; 249	5y, Rec.	6-25x	19-6	56	9-2.4	Y 70	1/4 moa	6 mil	MOA =	=MOA	FFP	too small	?	30	32.3 917g	15.6" 40c		
Vector: Counterpunch: No. SCFF-03C	?; 249	5y, Rec.	6-25x	19-5	56	9-2.4	Y 70	0.1 mil	6 mil	MIL =	=MIL	FFP ¹⁵ Thick O/S Posts	D	?	30	32.4 917g	15.5" 40c		
Riton (US): X3 Conquer <small>No. 019962527661</small>	442; 650	Life, NoRec	6-24x	17-4	50	8-2.1	Y 70	0.1 mil	6 mil	MIL =	=MIL	FFP Thick O/S Posts	D, N, Grid	.045 ^{mi} .15 ^{mo}	30	27.1 768g	14.1" 36c	Zero Stop	
Riton (US): Mod. 5 [not X51]: Gen. 2: IR FFP <small>No. 019962523960</small>	420; 570	Life, NoRec	6-24x	17-4	50	8-2.1	Y 70	1/4 moa	15 moa	MOA =	=MOA	FFP Thick O/S Posts	D	?	30	30.0 850g	14.0" 35c	Locking turrets	
Swampfox (US): Patriot •Sharpsh. Grid Ret. MIL •Sharpsh. Grid Ret. MOA <small>No. PAT62450-L No. PAT62450-M</small>	300; 429	Life (50000 rounds)	6-24x	18-4	50	8-2.1	N 65	0.1mi 1/4mo	6 mi 15mo	MIL = MOA =	=MIL =MOA	FFP Thick O/S Posts	D, N, Grid	?	30	24.0 680g	14.5 37c		
Blackhound (US): Genesis 6-24x50 FFP	?; 400	Life, Anyb.	6-24x	16-4	50	? Y	70	0.1mi or 1/4mo	5 mil or 15mo	MIL = or MOA =	=MIL or =MOA	FFP ⁹ Thick O/S Posts	D, N	?	30	27.5 780g	14.1" 36c	Zero Stop T. Turn Counter	
Athlon: Argos BTR Gen 1 Discontinued •MIL Ret. •MOA Ret. <small>No. 214061 No. 214060</small>	297; 445	Life, NoRec.	6-24x	17-4	50	8-2.1	Y 60 (a user reported 70)	0.1mi or 1/4mo	5 mil or 12mo	MIL = or MOA =	=MIL or =MOA	FFP ¹³ Thick O/S Posts	D, N, Grid	.02 ^{mi} .07 ^{mo} .04 ^{mi} .14 ^{mo}	30	29.6 835g	14.1" 36c	T. Turn Counter "Tracks, Wide DoF, small Eye Box"	
Athlon: Argos BTR Gen 2 •MIL Ret. •MOA Ret. <small>No. 214063 No. 214062</small>	380; 450	Life, NoRec.	6-24x	17-4	50	8-2.1	Y 60 (a user reported 70)	0.1mi or 1/4mo	6 mil or 15mo	MIL = or MOA =	=MIL or =MOA	FFP ³¹ Thick O/S Posts	D, N, Grid	.02 ^{mi} .07 ^{mo} .04 ^{mi} .14 ^{mo}	30	30.3 859g	14.1" 36c	True Zero Stop T. Turn Counter	
Vortex: Diamondback Tactical •MIL Ret. •MOA Ret. <small>No. DBK-10029 No. DBK-10028</small>	400, 300; 500	Life	6-24x	18-4	50	8-2.1 calculated	N 65	0.1mi or 1/4mo	6 mil or 15mo	MIL = or MOA =	=MIL or =MOA	FFP ⁸ Thick O/S Posts	D, N, Grid	.03 ^{mi} .12 ^{mo}	30	24.6 697g	14.3" 36c	"Tracks" "small Eyebow"	

in 2019, 2020	Price \$ Low; Mfctr.'s	Warranty	Magni- fication	FoV = Field of View @ 100y (ft)	Obj. Dia (mm)	Eye Box Exit Pupil Y, N	IR Max. Elev. Adj. (MOA)	1 Click =	1 T. Turn =	Turrets in:	Reticle in:	Holdoff Reticle Thick O/S Posts? FFP — SFP Calibration at ?	Enough Dots, No's	Line thick- ness	1" or 30mm	Weight (oz) (g)	Length (inch) (cm)	Misc. + Reviewers' "Comments"
Discovery: ED: 6-24x50 SFIR <small>No. 171104</small>	335; 383	Life <small>(for ED)</small>	6-24x	21-5	50	? Y	70	0.1 mil	5 mil	MIL =	=MIL	FFP ⁷ Thick O/S Posts	D, N, Grid	?	30	25.8 730g	14.1" 36c	Locking Turrets 4 screws to re-zero
Element: Helix FFP • MIL Ret. APR-2D MRAD • MOA Ret. APR-2D MOA	480; —	Life, NoRec.	6-24x	18-5	50	9- 2.2	N 65 0	0.1 mi ¼mo	6 mil 15mo	MIL = MOA =	=MIL =MOA	FFP ³⁰ Thick O/S Posts	D, N, Grid	?	30	26.0 737g	14.3" 36c	Tool-less Zero Reset; Zero Stop; Turn Counter
Bushnell: Match Pro • w/ IR <small>No. MP6245BF8</small> • w/o IR <small>No. MP6245BF2</small>	?, ?; 500, 450	Life NoRec.	6-24x	18-4	50	? Ei ther	65	0.1 mil	10 mil	MIL =	=MIL	FFP Thick O/S Posts	D, N, Grid	.05 ^{mi} .17 ^{mo}	30	29.8 845g	14.0" 36c	Locking Turrets
Athlon: Helos BTR • MIL Ret. <small>No. 214107</small> • MOA Ret. <small>No. 214106</small>	459, 570; 712	Life, NoRec.	6-24x	17-5	50	8- 2.1	Y 60	0.1mi or ¼mo	6 mil or 15mo	MIL = or MOA =	=MIL or =MOA	FFP ⁶ Thick O/S Posts	D, N, Grid	.02 ^{mi} .07 ^{mo} .04 ^{mi} .14 ^{mo}	30	29.7 842g	14.0" 36c	T. Turn Counter Locking Turrets
Athlon: Midas TAC • MILAPRS2 Ret. <small>No. 213075</small> • MILAPRS3 Ret. <small>No. 213077</small> • MOA APLR4 Ret. <small>No. 213076</small>	•630 756 •670 837 •670 837	Life, NoRec.	6-24x	18-5	50	11- 1.8	Y 85 <small>(50 Win dage)</small>	0.1mi or ¼mo	10 mil or 25 moa	MIL = or MOA =	=MIL or =MOA	FFP ⁵ Thick O/S Posts	D, N, Grid D, N, Grid	.03 ^{mi} .10 ^{mo} .036 ^{mi} .12 ^{mo}	30	26.3 746g	14.6" 37c	T. Turn Counter Zero Stop Windage Capped
Swampfox (US): Warhawk • Sharpsh. Grid Ret. MIL <small>No. TWK52556-3L</small> • Sharpsh. Grid Ret. MOA <small>No. TWK52556-3M</small>	569; 689	Life <small>(50000 rounds)</small>	5-25x	24.5- 1.7	56	11- 2.2	Y 90	0.1mi ¼mo	10 mi 25mo	MIL = MOA =	=MIL =MOA	FFP ³⁴ Med. Thick Posts	D, N, Grid	?	34	36.8 1043g	15.4 39c	Parallax 15y Locking Turrets
Swampfox (US): Ken- tucky Long • Sharpsh. Grid Ret. MIL <small>No. KTK53056-4L</small> • Sharpsh. Grid Ret. MOA <small>No. KTK53056-4M</small>	467; 599	Life <small>(50000 rounds)</small>	5-30x	20-4	56	9- 1.7	Y 80	0.1mi ¼mo	6 mi 15mo	MIL = or MOA =	=MIL or =MOA	FFP ²² Med. Thick Posts	D, N, Grid	?	30	31.8 902g	15.5" 39c	Parallax 15y Locking Turrets
Hi-Lux (US): Phenom 5-30x56 FFP	507; 599	Life, Rec.	5-30x	23-4	56	10- 1.2	Y 90	0.1 mil	12 mil	MIL =	=MIL	FFP Thick O/S Posts	D, N, Grid	.05 ^{mi} .17 ^{mo}	34	32.0 907g	14.7" 37c	Locking Turrets 12mil/tun
Swampfox (US): Ken- tucky Long • Sharpsh. Grid Ret. MIL <small>No. KTK42450-4L</small> • Sharpsh. Grid Ret. MOA <small>No. KTK42450-4M</small>	459; 569	Life <small>(50000 rounds)</small>	4-24x	31-5	50	11- 2.0	Y 90	0.1mi ¼mo	6 mi 15mo	MIL = or MOA =	=MIL or =MOA	FFP ³³ Med. Thick Posts	D, N, Grid	?	30	28.2 800g	15.1 38c	Locking Turrets
Falcon (UK): S30 Gen. 1 (–2020) <small>No. S3001</small>	377, 423; –	10y, 0.0wn	5-30x	24-5	56	11- 1.9 <small>capped</small>	N 57 0	0.1 mil	10 mil	MIL =	=MIL	FFP Thick O/S Posts	D, N	.04 ^{mi} .14 ^{mo}	30	32.5 920g	15.8" 40c	T Turn Counter
Falcon (UK): S30 Gen. 2 (2020–)	?; —	10y, 0.0wn	5-30x	24-5	56	11- 1.9 <small>capped</small>	N 90 0	0.1 mil	12 mil	MIL =	=MIL	FFP Thick O/S Posts	D, N, Grid	?	34	36.0 1020g	14.6" 37c	No T Turn Counter, but 12mil/turn
Vortex: Strike Eagle • MIL Ret. <small>No. SE-52504</small> • MOA Ret. <small>No. SE-52503</small> <small>Some fails: https://www.youtube.com/watch?v=u06lYj4xpQs</small>	700; 800	Life	5-25x	24-5	56	? Y no off	110 78 Win dage	0.1mi ¼mo	10 mi 25mo	MIL = or MOA =	=MIL or =MOA	FFP Thick O/S Posts	D, N, Grid	.03 ^{mi} .11 ^{mo}	34	31.8 902g	15.5" 39c	Parallax 15y Zero Stop → then <small>only 47moa elev. adj.</small> Locking Turrets
Element: Titan • MIL Ret. APR-1C • MIL Ret. APR-1D • MOA Ret. EHR-1C • MOA Ret. EHR-2D	800; —	Life, NoRec.	5-25x	24-5	56	11- 2.1	Y 90 50 Win dage	0.1mi 0.1mi ¼mo ¼mo	10 mi 10 mi 25mo 25mo	MIL = MIL = MOA = MOA =	=MIL =MIL =MOA =MOA	FFP ²⁹ Thick O/S Posts	D, N, noGrid Grid noGrid Grid	?	34	39.0 1105g	15.2" 39c	Parallax 15y Zero Stop → then <small>only 47moa elev. adj.</small> Turn Counter; Locking Turrets
Vector: Continental 34mm <small>No. SCFF-29</small>	750; 800	Life, NoRec.	4-24x	31-5	56	8- 2.3	Y 113	0.1 mil	10 mil	MIL =	=MIL	FFP ²⁵ Thick O/S Posts	D, N, Grid	?	34	27.5 780g	14.3" 36c	Zero Stop → then <small>only 68moa elev. adj.</small> Locking Turrets
Vector: Continental 34mm <small>No. SCFF-30</small>	750; 800	Life, NoRec.	5-30x	25-4	56	8- 1.8	Y 86	0.1 mil	10 mil	MIL =	=MIL	FFP ²⁶ Thick O/S Posts	D, N, Grid	.04 ^{mi} .14 ^{mo}	34	28.6 810g	15.4" 39c	Zero Stop → then <small>only 68moa max.</small> Locking Turrets

			Magni. → FoV		→ Eye Box		Exposed Turrets				Holdoff Reticle				Dimensions					
in 2019, 2020	Price \$; Low; Mfctr.'s	Warranty	Magnification	FoV = Field of View @ 100y (ft)	Obj. Dia (mm)	Exit Pupil (mm)	IR Y, N	Max. Elev. Adjmt (MOA)	1 Click =	1 T. Turn =	Turrets in:	Reticle in:	Thick FFP O/S Posts? - SFP Calibration at ?	Enough Dots, No's	Line thickness	1" or 30mm	Weight (oz) (g)	Length (inch) (cm)	Misc. + Reviewers' "Comments"	
Falcon (UK): S18i FFP → For comparison only 2019	343, 380; -	10y, 0.0wn	3-18x	39-7 @ 10m = 1.4m	50	16- 2.8	Y	90 Min travels 105	0.1 mil	10 mil	MIL =	=MIL	FFP ¹¹ Thick O/S Posts	D, N	.04 ^{mi} .14 ^{mo}	30	31.0 880g	14.6" 37c	T. Turn Counter	
in 2019	Price \$; Low ; Mfctr.'s	Warranty	Magnification	FoV = Field of View @ 100y (ft)	Obj. Dia (mm)	Exit Pupil (mm)	IR Y, N	Max. Elev. Adjmt (MOA)	1 Click =	1 T. Turn =	Turrets in:	Reticle in:	Thick FFP O/S Posts? - SFP Calibration at ?	Enough Dots, No's	Line Thickness	1" or 30mm	Weight (oz) (g)	Length (inch) (cm)	Misc. + Reviewers' "Comments"	
			Magni. → FoV	→ Eye Box		Exposed Turrets				Holdoff Reticle										

Footnotes: Links for Views/ Videos of FFP Reticles at Different Magnifications

Note on more detailed reticle diagrams:

- Athlon: Each scope on their homepage includes detailed diagrams: <https://athlonoptics.com>
- Discovery: many scopes reticles are listed here: <https://discoveryoptics.co.uk/reticles/>

¹ Discovery: HD/34mm: 4-24x50 FFP: Reticle at all magnifications: @ 4:56min:

<https://www.youtube.com/watch?v=DerSb0Y-d34>

² Vector: Taurus: 5-30x56 FFP: Reticle at all magnifications: @ 10:04min:

<https://www.youtube.com/watch?v=xV6m6OUR33c>

Reticle at all magnifications, in front of a favorable background:

<https://www.youtube.com/watch?v=pQ82hBoSwdw>

³ Discovery: HD/34mm: 5-30x56 FFP: *Illuminated* Reticle at all magnifications, but no *non*-illuminated view: @

1:23min: <https://www.youtube.com/watch?v=31y22fzGb1M>

⁴ Discovery: HD: 5-25x50 FFP: *Illuminated* Reticle at all magnifications, but no *non*-illuminated view: @ 4:29

<https://www.youtube.com/watch?v=SJZNGszt0E4>

non-illuminated view: @ 2:35min: <https://www.youtube.com/watch?v=zR9mUevdVX0>

⁵ Athlon: Midas TAC: Reticle at min. and max. magnification:

• MIL: APRS2 Reticle: <https://athlonoptics.com/product/midas-tac-6-24x50-aprs2-ffp-mil-scope/>

• MIL Grid: APRS3 Reticle: <https://athlonoptics.com/product/midas-tac-6-24x50-aprs3-ffp-mil-scope/>

• MOA: APLR4 Reticle: <https://athlonoptics.com/product/midas-tac-6-24x50-aplr4-ffp-moa-scope/>

⁶ Athlon: Helos BTR: Reticle at min. and max. magnification:

• APMR MIL Grid: <https://athlonoptics.com/product/rifle-scopes-helos-btr/>

• APLR2 MOA: <https://athlonoptics.com/product/rifle-scopes-helos-btr-3/>

⁷ Discovery: ED: 6-24x50 FFP: Reticle at all magnifications: @ 6:44min:

<https://www.youtube.com/watch?v=1Ph66qud50M>

⁸ Vortex: Diamondback: 6-24x50 FFP: Reticle at all magnifications: @ 6:55min:

<https://www.youtube.com/watch?v=weHwC3amwfE>

⁹ Blackhound: Genesis: 6-24x50 FFP: Reticle at min. and max. magnification:

• Alpha MIL reticle: Owner's Manual: <https://www.blackhoundoptics.com/product/genesis-6-24x50-ffp-mil/>

• Ascent MOA reticle: <https://www.blackhoundoptics.com/product/genesis-6-24x50-ffp-moa/>

¹⁰ Hawke: Sidewinder: 30 SF FFP: 6-24x56 [No. 17420]: Reticle at min. and max. magnification:

<https://us.hawkeoptics.com/sidewinder-30-sf-ffp-riflescopes.html>

¹¹ Falcon: S18i 3-18x50 FFP: Reticle at all magnifications: @ 2:06min:

<https://www.youtube.com/watch?v=RGmnOFp2fUU>

¹² Falcon: F30 6-24x50 FFP: Reticle at 6x magnification (24x at the mfctr's webpage): @ 5:33min:

<https://www.youtube.com/watch?v=swZJkEM76hw>

¹³ Athlon: Argos BTR Gen. 1: 6-24x50 FFP: Reticle at min. and max. magnifications:

• APMR MIL reticle: <https://athlonoptics.com/product/rifle-scope-argos-6-24x50/>

• APLR2 MOA reticle: <https://athlonoptics.com/product/rifle-scopes-argos-6-24x50-atmr-ffp-ir-moa/>

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¹⁵ Vector: Counterpunch: 6-25x56 FFP: Reticle at all magnifications:

<https://www.youtube.com/watch?v=E9qIPzpxvTQ>

¹⁶ Vector: Marksman: 6-24x50 FFP: Reticle at all magnifications: @ 6:33min:

<https://www.youtube.com/watch?v=BnLJLvXVSol>

and @ 4.47min: <https://www.youtube.com/watch?v=nepYkyfjpng>

¹⁷ Vector: Tourex: 6-24x50 FFP: Reticle at various magnifications: @ 2:04min:

https://www.youtube.com/watch?v=zD-HN8uU_fo

¹⁸ MTC: King Cobra F1: 6-24x50 FFP: Reticle at all magnifications: @ 1:03min:

<https://www.youtube.com/watch?v=4RjMgVRqTM4>

¹⁹ Aztec: Emerald: 5.5-25x50 FFP: Reticle at all magnifications: @ 4:21min:

<https://www.youtube.com/watch?v=8GwntsJAuU>

²⁰ ACME Machine: 6-24x50 FFP: Reticle at 6x, 14x, and 24x magnifications: @ 1:55min:

<https://www.youtube.com/watch?v=LCI2SM7G2t0>

Reticle at 6x and 24x, MOA:

<https://www.acmemachine.com/optics-sights/6-24x50mm-first-focal-plane-tactical-rifle-scope-tr-mil-reticle/?variant=48625453254>

²¹ Optisan: EVX: 6-24x50 FFP F1: Reticle at 6x, 15x, and 24x magnifications: @ 12:33min:

<https://www.youtube.com/watch?v=RuXmjOLxwNw>

²² Swampfox: Kentucky Long: 5-30x56 FFP: MOA Reticle: Reticle at all magnification: @ 3:16min:

<https://www.youtube.com/watch?v=riYsEFSXYyw>

²³ Vector: Taurus: 4-24x50 FFP: Reticle at min. and max. magnification: @ 0:37min (play at slowest playback speed, the min. magnification will be shown only for a *split second* – but shows how thin the outside post really are, they are not really “medium”:

<https://www.youtube.com/watch?v=rZRVuR5-398>

²⁴ Discovery: HD: 4-20x50 SFIR FFP: Reticle at all magnifications: @ 2:42min:

https://www.youtube.com/watch?v=C1qBt7yg_ek

²⁵ Vector: Continental 34mm: 4-24x56 FFP: Reticle at all magnifications: @ 1:27min:

<https://www.youtube.com/watch?v=ceLSb2gkmbk>

<https://www.vectoroptics.com/data/uploads/2020/06/22/1592831142.jpg>

²⁶ Vector: Continental 34mm: 5-30x56 FFP: Reticle at min. and max. magnification:

<https://www.vectoroptics.com/data/uploads/2020/06/22/1592831200.jpg>

²⁷ Nikko: Diamond FFP 30: 6-24x50: *Skeleton HMD Reticle* (No. NSFFP62450HMD) (the PRR Reticle is different and does have thick outside posts!): Reticle at different magnifications: 6x: @ 13:44min | 16x: @ 14:14min | 24x: 14:31min:

https://www.youtube.com/watch?v=VOy2IWN7N_c

²⁸ Nikko: Diamond FFP: Nikko's *Skeleton HMD* reticle is used in several scopes and it does not have thick outside posts; the double lines used are just as thin as the rest of the reticle. Here is an example of the *Skeleton HMD* reticle, in the Diamond FFP 30mm 6-24x50: Reticle at different magnifications: 6x: @ 13:44min | 16x: @ 14:14min | 24x: 14:31min:

https://www.youtube.com/watch?v=VOy2IWN7N_c

²⁹ Element: Titan: 5-25x56:

MIL Ret. APR-1C: Likely from 5x–25x – recommended to play it with slow motion: @ 3:46min

<https://www.youtube.com/watch?v=eSGzTPkRxZY>

MIL Ret. APR-1C + APR-1D: @ 5:02min:

<https://www.youtube.com/watch?v=2CmHU4lhfqQ>

MIL Ret. APR-1D: @ 6:50min:

<https://www.youtube.com/watch?v=0-C6DhTkDgw>

MOA Ret. EHR-1C + EHR-1D: @ 6:31min:

<https://www.youtube.com/watch?v=2CmHU4lhfqQ>

Manual of all four reticles, at 5x and 25x:

<https://element-optics.com/wp-content/uploads/2020/10/5x7-TITAN-MANUAL-Amended.pdf>

Difference between Titan and Nexus (more expensive – because of lighter and smaller, with higher quality)

<https://www.youtube.com/watch?v=W4qdh7-v2mM>

³⁰ Element: Helix: 6-24x50 FFP:

APR-2D MRAD: 6x and 24x: @ 1:01min and 1:16:

<https://www.youtube.com/watch?v=DggOXpR2ymY>

APR-2D MOA: Reticle at all magnifications: @ 0:14min

<https://www.youtube.com/watch?v=YeWbkurVV0o>

- ³¹ Athlon: Argos BTR Gen. 2: 6-24x50 FFP: Reticle at min. and max. magnifications:
- APMR MIL reticle: <https://athlonoptics.com/product/argos-btr-gen2-6-24x50-apmr-ffp-ir-mil-copy/>
 - APLR2 MOA reticle: <https://athlonoptics.com/product/argos-btr-gen2-6-24x50-atmr-ffp-ir-moa-copy/>
- ³² Hi-Lux: PentaLux: TAC-VF 4-20x50 FFP G2: 20x: @ 0:20min:
https://www.youtube.com/watch?v=NAbX_POUKgc
@ 5:12min:
<https://www.youtube.com/watch?v=dvzUNANmNXs>
- ³³ Swampfox: Kentucky Long: 4-24x50 FFP:
Cf. the other models of this series that have the same six-fold magnification range, resulting in the same ratio of reticle increase/decrease:
Kentucky Long: 5-30x56 FFP: MOA Reticle: Reticle at all magnification: @ 3:16min:
<https://www.youtube.com/watch?v=riYsEFSXYyw>
And also: Swampfox: Kentucky Long: 2-12x44 FFP: MOA: Reticle at 2x and at 12x(?):
<https://images-na.ssl-images-amazon.com/images/I/71%2B5YMUAXfL.AC.SL1500.jpg>
<https://images-na.ssl-images-amazon.com/images/I/71aX%2BZ5aDFL.AC.SL1500.jpg>
- ³⁴ Swampfox: Warhawk: 5-25x56 FFP: MOA Reticle: at 5x: @ 1:04min (very briefly, use slo-mo, or pause it):
<https://www.youtube.com/watch?v=fFh5jleVgxE>
Cf. also the same reticle in the Kentucky Long models (several videos available; however the Warhawk has only a five-fold magnification range, as opposed to the Kentucky Long's six-fold, which means the reticle will increase/decrease 17% less).