

6mm-284 WINCHESTER

Test Specifications:

Firearm Used: Savage 12VSS

Barrel Length: 26"

Twist: 1 x 8"

Components:

Case: Winchester (reformed)

Trim-to Length: 2.160"

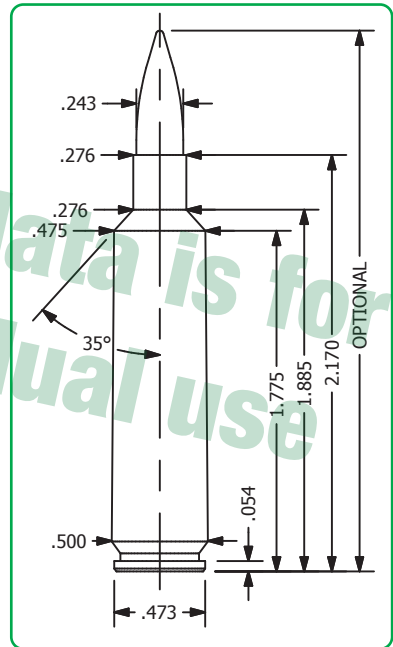
Primer: Remington 9 1/2

Remarks:



The 6mm-284 is yet another of the progeny of the 284 Winchester case. While the 284 Winchester itself hasn't fared too well, it generated a flurry of wildcatting activity. Ironically, it has been the parent case of a number of wildcats that have surpassed the popularity of the original cartridge. The original idea behind the 284 was to provide a case with 30-06 capacity housed in a 308 length action. The concept had some appeal, but ultimately the 284 was all but replaced by other 7mm cartridges. At any rate, the parent case has been necked up and down to fit a variety of applications.

From a capacity standpoint, the 6mm-284 meets its goal. The real question should be, was this a good idea? Certain tradeoffs must be made with any cartridge design. Everything comes down to a series of compromises. While velocity can be gained by adding more powder capacity, the amount of powder (within a given bore size) becomes increasingly greater with forever smaller returns in speed. This simple consideration, i.e., what the shooter wants versus what he's willing to give up is at the root of any cartridge selection. Those who favor the 6mm-284 are looking for speed to the exclusion of all other factors. Delivering an average of 100 fps more velocity than the 6mm Remington, it does so at a cost of a good bit more powder. In short, the 6mm-284 has reached the point of diminishing returns. The same can be said for its ballistic twins: the 6mm-06 and the 240 Weatherby Magnums.

For those willing to pay the costs associated with it, the 6mm-284 will deliver flat trajectories and a substantial punch on the receiving end. In a properly built rifle, it is also capable of excellent accuracy. The round has seen some use in competition, and had set a world 1,000 yard benchrest accuracy record with the Sierra 107 grain MatchKing. It has sufficient energy to make it an effective round for deer and antelope at extended ranges, though bullets must be chosen with care. Proper cleaning technique combined with a sensible approach to shooting (and not overheating) will go a long way toward getting the most life out of a barrel.



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	Bullet	Caliber	Weight	Type	C.O.A.L.
	#1502	.243"	55gr.	BlitzKing	2.775"
	#1500	.243"	60gr.	HP	2.735"




Powder ∨	Velocity >	3100	3200	3300	3400	3500	3600	3700
Target		37.0	38.4	39.8	41.2	42.6	44.0	
IMR 4064		37.0	38.4	39.8	41.2	42.6	44.0	
Viht N150		36.8	38.4	40.0	41.6	43.2		
IMR 4350		42.2	43.8	45.5	47.1	48.7	50.4	52.0
H4350		41.9	43.6	45.3	47.0	48.7	50.4	
RE 19		45.4	47.0	48.6	50.2	51.8	53.4	55.0
IMR 4831		45.2	46.8	48.4	50.0	51.6	53.2	54.8
A 3100		47.6	49.0	50.4	51.8	53.2	54.6	56.0
H4831 SC		45.3	47.0	48.7	50.4	52.1	53.8	55.5
MagPro		48.5	50.3	52.1	53.9	55.7	57.5	59.3
RE 22		45.6	47.2	48.8	50.4	52.0	53.6	55.2
WXR		46.2	47.8	49.4	51.0	52.6	54.2	55.8
Energy Ft. lbs		1173	1250	1330	1412	1496	1582	1672

Special Load	Powder	Grains	Velocity fps	Energy Ft. lbs
Accuracy Load	Viht N150	41.6	3400	1412
Hunting Load	H4831 SC	53.8	3600	1582






During a May hunt in Texas' Hill Country, the author made an 11th-hour shot at 308 yards to put this young axis buck down quickly, using a Sharps Rifle Company .25-45 Sharps and 87 grain bullets.



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	Bullet	Caliber	Weight	Type	C.O.A.L.			
	#1505	.243"	70gr.	HPBT MatchKing	2.765"			
	#1507	.243"	70gr.	BlitzKing	2.800"			
	#1510	.243"	75gr.	HP	2.745"			
Powder ▾	Velocity >	3000	3100	3200	3300	3400	3500	3600
Varget		35.3	36.9	38.5	40.1	41.7		
IMR 4064		35.8	37.4	39.0	40.6	42.2		
Viht N150		35.0	37.0	39.0	41.0	43.0		
IMR 4350		40.8	42.5	44.2	45.9	47.6	49.3	
H4350		39.4	41.3	43.2	45.1	47.0	48.9	
RE 19		43.1	44.8	46.5	48.2	49.9	51.6	
IMR 4831		42.5	44.2	45.9	47.6	49.3	51.0	52.7
A 3100		45.7	47.3	48.9	50.5	52.1	53.7	
H4831 SC		42.7	44.6	46.5	48.4	50.3	52.2	
MagPro		46.4	48.3	50.2	52.1	54.0	55.9	57.8
Viht N165		41.7	43.9	46.1	48.3	50.5	52.7	
RE 22		44.0	45.6	47.2	48.8	50.4	52.0	53.6
WXR		41.7	43.7	45.7	47.7	49.7	51.7	53.7
Magnum		49.7	51.5	53.3	55.1	56.9	58.7	
Energy Ft. lbs		1399	1493	1591	1692	1796	1904	2014
Special Load	Powder	Grains	Velocity fps	Energy Ft. lbs				
Accuracy Load	IMR 4831	51.0	3500	1904				
Hunting Load	Viht N165	52.7	3500	1904				


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	Bullet	Caliber	Weight	Type	C.O.A.L.			
	#1515	.243"	80gr.	SBT Blitz	2.785"			
	#1520	.243"	85gr.	SPT	2.785"			
	#1530	.243"	85gr.	HBPT	2.750"			
Powder	Velocity	2900	3000	3100	3200	3300	3350	3400
Varget		33.9	35.6	37.3	39.0			
IMR 4064		34.6	36.3	38.0				
Viht N150		34.2	36.2	38.2				
IMR 4350		35.7	38.0	40.3	42.6	44.9		
H4350		34.8	37.3	39.8	42.3	44.8		
RE 19		39.2	41.5	43.8	46.1	48.4		
IMR 4831		39.4	41.4	43.4	45.4	47.4	48.4	
A 3100		43.8	45.6	47.4	49.2	51.0		
H4831 SC		41.5	43.4	45.3	47.2	49.1	50.1	51.0
MagPro		45.7	47.9	50.1	52.3	54.5	55.6	56.7
Viht N165			42.6	45.1	47.5	50.0		
RE 22		42.0	43.9	45.8	47.7	49.6	50.6	51.5
WXR		41.2	43.2	45.2	47.2	49.2	50.2	51.2
Magnum		47.5	49.5	51.5	53.5	55.5	56.5	57.5
Energy Ft. lbs		1494	1598	1707	1819	1934	1993	2053
Special Load	Powder	Grains	Velocity	fps	Energy	Ft. lbs		
Accuracy Load	RE 22	49.6	3300		1934			
Hunting Load	H4831 SC	51.0	3400		2053			

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		Bullet	Caliber	Weight	Type					C.O.A.L.
		#1540	.243"	100gr.	SPT					2.785"
		#1560	.243"	100gr.	SBT					2.785"
Powder	Velocity	2700	2800	2900	3000	3100	3150	3200		
Target		31.8	33.8	35.8	37.8					
IMR 4064		33.0	34.8	36.6	38.4					
Viht N150		32.5	34.6	36.7	38.8					
IMR 4350		34.5	36.5	38.5	40.5	42.5	43.5			
H4350		33.7	35.9	38.1	40.3	42.5				
RE 19		35.9	37.9	39.9	41.9	43.9	44.9			
IMR 4831		34.9	37.1	39.3	41.5	43.7	44.8			
A 3100		38.5	40.6	42.7	44.8	46.9	48.0			
H4831 SC		36.8	38.9	41.0	43.1	45.2	46.3	47.3		
MagPro		39.7	42.2	44.7	47.2	49.7	51.0			
Viht N165		35.5	38.1	40.7	43.3	45.9	47.2			
RE 22		36.3	38.6	40.9	43.2	45.5	46.7	47.8		
WXR		36.5	39.0	41.5	44.0	46.5	47.8	49.0		
Magnum		43.0	45.1	47.2	49.3	51.4	52.5	53.5		
Energy Ft. lbs		1618	1741	1867	1998	2133	2203	2273		
Special Load	Powder	Grains	Velocity fps	Energy Ft. lbs						
Accuracy Load	H4350	40.3	3000	1998						
Hunting Load	WXR	47.8	3150	2203						

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Bullet		Caliber	Weight	Type	C.O.A.L.			
	#1570	.243"	107gr.	HPBT MatchKing	2.925"*			
*requires a 1x8" or faster twist								
Powder	Velocity	2800	2900	3000	3100	3200	3250	
Varget		36.2	38.0	39.8				
IMR 4064		36.4	38.2	40.0				
Viht N150		37.0	39.0	41.0				
IMR 4350		41.7	43.4	45.1	46.8	48.5	49.3	
H4350		40.8	42.6	44.4	46.2	48.0		
RE 19		41.3	43.3	45.3	47.3	49.3	50.3	
IMR 4831		42.6	44.2	45.8	47.4	49.0		
A 3100		44.5	46.2	47.9	49.6			
H4831 SC		43.2	44.9	46.6	48.3	50.0		
MagPro		46.8	48.6	50.4	52.2	54.0		
Viht N165		43.5	45.4	47.3	49.2			
RE 22		40.7	43.0	45.3	47.6	49.9	51.1	
WXR		43.2	45.0	46.8	48.6	50.4		
Magnum		48.4	50.2	52.0	53.8	55.6		
Energy Ft. lbs		1862	1998	2138	2283	2432	2509	
Special Load	Powder	Grains	Velocity fps	Energy Ft. lbs				
Accuracy Load	IMR 4064	40.0	3000	2138				
<i>Sierra does not recommend MatchKing bullets for hunting applications.</i>								