

Are Pistol Caliber Carbines Shooting "Rifle Like" Velocities?

I've read a plethora of arguments on internet forums regarding [USPSA](#)'s adoption of Pistol Caliber Carbines (PCC) in their matches. Just to be clear we are not talking about Multi-Gun matches here. We are talking about the standard "pistol" matches. The quotes around "pistol" are there because the "P" in USPSA doesn't stand for "pistol" it stands for "practical" and I know that more than a few people got kind of hung up on that. Whichever way you fell in those debates the fact is that PCC is here, though some clubs are not allowing it as of yet. I, for one, was in favor of the change. I mean what's not to love about a gun that holds 30+ rounds, has little felt recoil, and is capable of hitting targets pretty easily out to 100 yards or more?

Well some people have found things they don't like in that scenario with velocity of the bullets being one of them. I read a comment from a long time competitor, and NROI certified official, that he was concerned about the "rifle like velocities" of these PCC guns. I am not trying to single him out because he isn't the only one and I guess that for some people it seems logical to assume that there is a large increase in velocity. I've read numerous posts in which someone believes that shooting a 9mm out of a carbine will see dramatic increases in velocity. I wanted to dispel that notion so I headed to the range with some guns, ammo, and a chronograph.

While I was packing for the range it occurred to me that I needed something with a bit more oomph than my 9mm steel loads so I also packed an open gun that I happen to have around. It is in .38 Super Comp and I thought it would make a nice contrast to the 9mm steel loads I had made. The gun was built on a Strayer-Voigt Inc. frame and, while it may be an old gun, it still runs USPSA major power factor loads as well as it did when it was new.

I also brought along a [Springfield Armory XD\(M\) 5.25"](#) in 9mm, which is my go to gun for steel matches. I knew going into this that the ammo I am shooting out of this gun MIGHT, just maybe, be making USPSA minor. Even though it's a steel load I do like to make sure those knockdown targets go down. The gun itself is fairly stock with the exception of a [Powder River trigger kit](#) and a Pistol Gear magwell.

The final piece of the puzzle is the Pistol Caliber Carbine. I built this one myself using a [Palmetto State Armory](#) lower that takes Colt style 9mm magazines. These magazines are basically a modified Uzi mag that holds 32 rounds of 9mm. It also has the PSA Hybrid Bolt Carrier and a Wilson 1:10 barrel. [Hogue](#) furniture and a [POF-USA drop in trigger](#), both generously donated to matches I attended, round out the rifle build.

The ammunition for the 9mm pistol and carbine used a 124gr fmj from [Armcor](#), Federal small pistol primers and [once fired](#) brass. The 38 Super open gun used a 115gr fmj from Montana Gold, Winchester small rifle primers, and new Starline 38 Super Comp brass.

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Once I found a spot at the range I set up my [CED chronograph](#) and did a little shooting. First up was the XD(M) 5.25" in 9mm. Three shots averaged 1027 fps. Not exactly cooking but plenty fast enough for steel matches that don't have a power factor.



Since we are talking power factor I ran the numbers on that and came up with a 127 power factor. Not too far over the minimum power floor for USPSA minor but it will definitely make it.

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Next up we take a look at that 9mm Pistol Caliber Carbine and see how much, if any, increase in velocity we see.



Three shots with the PCC came in at 987 fps. Wait, what's that, 987 fps? But that is slower than the XD(M) 5.25"? How can that be? Well in all seriousness there are several factors at play here. The bore on the PCC could be tighter, looser, rifled differently, etc... so there are variables. Chamber dimensions could also come into play.

I'm sure they are both SAAMI spec chambers but, who knows, they could be on

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different ends of the specs. Barrel length could certainly play a role in this as well. A hotter load may have shifted the results the other way. Either way, in the end, the carbine was throwing that load downrange 40 fps slower than the pistol. Which leaves me with some work to do at the reloading bench. 122 power factor is NOT going to cut it. I will definitely have to check the manual and see how much more powder I can stuff in there to get the speed up.



The final act of this PCC story is the open gun. I knew going into this that the SVI would be fast and loud but I had never shot this particular gun. It belongs to a friend who has often offered me the use of it but, until now, I had always declined. I've owned, and shot, open guns many times but the concussive force they emit, along with the extremely loud report, is always a bit of a surprise

when I fire that first shot after so long away from one.

The three shot average came in at 1511 fps for a power factor of 173.7. Plenty of room to



comfortably make USPSA's 165 major power factor. Also around 500 fps faster than either the PCC or the XD(M). Does the open gun have "rifle like" velocity? No, not really. 1500 fps is nothing to sneeze at but it is more like .357 magnum velocity instead of say 30-30 velocity. To get there we would need to speed things up to well over 2000 fps and I don't think anyone is interested in that except, of course, 3-gun competitors who are ACTUALLY shooting a rifle and not an overgrown pistol.

So, I think it is safe to say that "rifle like" velocity is definitely off the list of complaints you can make about PCC. I've heard other complaints but I don't want to get into them in this article. I will say that ALL competitors need to keep the rules of safe gun handling in mind at ALL times. Just because your rifle is slung it does not become a "dead stick" as some would put it. Respect everyone around you and lets all try to have a good time at the range.