# Apogee Super Easy View Eyepieces 3.6mm, 5.5mm and 9.5mm

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#### \$119.95 each

Non-premium eyepieces are quite popular both for the user on a budget as well as for some eyepiece purists who dislike the high-priced extra-widle field eyepiece performance on-axis. Apogee has started selling the SUPER EASY VIEW series of eyepiece in three focal lengths to serve the needs of both eyepiece camps.

### **Product Description**

The SUPER EASY VIEW series consists three 1.25" barrel eyepieces of 9.9mm, 5.5mm, and 3.6mm focal lengths. Physically, all three are virtually identical in look, being housed in a black "wasp-wasted" cylinder about 3.25 inches (82.6mm) long and 1.5 inches (38.1mm) in maximum diameter. The eye lens of each is surrounded by a rubber end section which can not only protect the eyepiece to some extent if dropped on the end, but can make for a less "cold" feeling in the winter if the face of the user happens to touch the eyepiece. The

middle of the eyepiece housing narrows somewhat in a "wasp-waist" fasion to allow the user a somewhat better grip on the eyepiece. The name and focal length of each is stamped in this middle section, and all three eyepieces are threaded for standard filters.

One item to note is that the field lens opening apparently is \*not\* where the field stop is, as when I placed a pin over the edge of the field lens, it was not visible when looking through the eyepiece. In any case, the fact that the three eyepieces had nearly identical field lens openings means the field stop is internal. The field stop is visible in all three eyepieces but its size was not measureable, so an equivalent field stop diameter was calculated based on the true field of view each eyepiece gave in my 100mm f/6 refractor.

I measured the apparent field of view (AFOV) and approximate Eye Reliefs (E.R.), as well lens diameters and calculated the Field Stops to come up with specifications for these three units:

Eyepiece Lens Diam.	AFOV	E.R.	Field Stop (calc.)	Eye Lens Diam.	Field
9.5mm	49.9 deg.	14mm	8.0mm	16mm	12.4mm
5.5mm	46.7 deg.	9.5mm	4.5mm	8.5mm	12.4mm
3.6mm	42.7 deg.	8mm	2.6mm	6mm	12.4mm

As can be seen above, the apparent fields of view and eye reliefs are fairly typical of eyepieces of these focal lengths. Each eyepiece had a very slight rattle when they were shaken (the 9.5mm was almost "loose" in this regard), but it was not excessive. Each eyepiece was fairly light (about 120 grams), so they should not cause significant balance problems in most telescopes. All three eyepieces dropped into the 1.25" eyepiece holders of my telescopes with little trouble, but they were not loose in the focusers either.

### Performance

I tested the eyepieces in my 100mm f/6 refractor and my NexStar 9.25GPS Schmidt-Cassegrain. Each performed fairly well overall, although there were some differences. I liked the 9.5mm the best of the three, as it gave a very nice and clear view of Jupiter in my Schmidt-Cassegrain similar to that provided by my 10mm Orion Ultrascopic. I did like its 14mm eye relief, as it seemed a bit longer than with my 10mm Ultrascopic. It showed just a little lateral color very close to the field edges but otherwise, the views were pretty good. In 100mm f/6, the 9.5mm showed a little pin-cushion distortion but it was not terribly serious (I have seen a lot worse). However, I felt that my 10mm Ultrascopic may have provided just a hair better performance overall than the 9.5mm Super Easy-View. The 5.5mm was not bad either, with no hints of secondary color or other major eyepiece aberrations, although it too had just a little pin-cushion distortion near the field edges.

The 3.6mm provided a very satisfactory view, but it showed a slight light falloff along one edge of the field of view, possibly indicating a little decentering of either one of the optical elements or perhaps the field stop. Its field of view was also the narrowest of the three, which did make a difference when finding things at high power. Like its other two brothers, the 3.6mm also showed a little pincushion distortion, but also provided a very nice diffraction pattern when the 100mm f/6 refractor was centered on my artificial star.

Overall, all three eyepieces showed nothing which would rule-out their being useful items in an eyepiece case. However, they provided little if any significant gain in performance over the slightly less expensive Orion Ultrascopics.

## Summary

The Apogee SUPER EASY-VIEW series of eyepieces are reasonably-good basic eyepieces with performance similar to that of the slightly less expensive Orion Ultrascopics.

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