



VESUVIATE

FEATURES (VOLARE)

Case & Bracelets – Stainless steel 316L with case/surface hardening heat treatment. SS 316L has very low carbon content with a maximum of only 0.035% and has corrosion and magnetic resistance; hence, it is widely used in the food and medical industries, as well as diving equipment and marine applications. Despite its relatively good hardness @ 222HV (HV = Vickers Hardness) compared to the 904L @ 149HV, we have decided to use case hardening heat treatment to harden the surface of the 316L to the hardness value of 1,100HV +/- 10% to improve the wear resistance further. The thermos-chemical process* diffuses nitrogen into the surface of the 316L, bombarding the surface with energetic nitrogen ions, which allow nitrogen ions to diffuse and form a case-hardened surface (Note: This is NOT a “coating” process per se that merely applying a thin layer of covering e.g. powder, epoxy, electroplating or chrome, which supposes to be a “shell” or “skin” over the metal which will eventually peel, crack or flake off due to lack of adhesion between the covering the substrate). Through the heat treatment process, the 316L will not only become more scratch-resistant, but its performance, working lifespan, strain limit, and fatigue strength will also be enhanced, other advantages of this process are the low-temperature range to avoid shape distortion and maintaining 316L corrosion resistance properties. Any alloy, carbon steels, cast irons, stainless steels, Inconel and titanium can be nitride treated by tweaking the temperature and processing time.

*Note. This heat-treating process has existed since the 1920s; however, it only started gaining popularity in the last three decades. Due to its increasing popularity, further developments were made to create a more efficient process that can be accurately controlled with lower costs. Vesuviate Watches is neither the inventor nor the proprietary owner of this industrial heat-treatment process (Disclaimer – The use of such a process does not infringe the Patents or other intellectual property rights of any Third Party).

Case dimensions – 41mm width with a lug-to-lug length of 46.7mm. The overall thickness is 13.7mm measured at the apex of the sapphire (dome height 0.48mm).

Crown – 7mm diameter, screw down SS 316L.

Bracelets dimensions – 20mm with deployant clasp – 18mm with micro-adjustment and ratchet extension. All components SS 316L, case/surface-hardened.

Bezel – 24 hour rotating unidirectional 120 clicks bezel that can be used to track another time zone, Sapphire Insert is used for its hardness (2,000HV) making it unlikely to scratch.

Watch Crystal – 3.0mm thick Domed Sapphire Crystal with five (5) layers of inner anti-reflective coatings. Sapphire is chosen in favor of mineral crystal for its resistance to scratches and shattering. Similar to Ceramic, the hardness of Sapphire is 2,000HV.

Lume – Super-LumiNova – BGW9 (Day – White, Night – Blue-Green), Grade A pigment is chosen for the excellent afterglow performance. This material is 100% Swiss made, non-radioactive, REACH compatible, high temperature, environmental resistance, and complies with ISO 3157:1991 requirements. Note. With the exception of the white dial which is full-lume.

Water Resistance – Rating – 20 ATM / 200m / 6600ft. This watch is designed to withstand underwater depths of at least 200 meters which meets the ISO 6425 requirement. Hence, it is safe for recreation sports such swimming, free/skin diving.

Case Back – Exhibition flat tinted (red) Sapphire Crystal.

Movement/Caliber – The heart of the watch – Seiko SII NH34A caliber, is based upon the same architecture design of the NH35A which is considered to be the workhorse of the industry. Since 2011, it's been widely considered to be a proven movement that is easy to service and economical to be replaced; at 5.32mm thick it is equipped with quick date correction via hacking – i.e. time setting with the second hand halt mechanism, self-winding – bidirectional, 24 jewels with a typical power reserve of 41 hours, frequency of 21,600 beats per hour, 3 Hz (Six vibrations a second, requires less frequent maintenance due to lower friction), accuracy of -20 ~ +40 second (per day).

Features – Hours, minutes, central running seconds. 24-Hour (GMT) hand and date display in window.

Warranty – Our watch is warranted for two (2) years from the date of purchase against any and all manufacturer's defects. Any damage resulting from improper handling, extreme use, accident or negligence is not covered under this warranty.

SPECIFICATION SUMMARY:

Dimensions:	Width 41mm x Length 46.7mm x Thickness 13.7mm (At the apex of sapphire)
Case & Bands:	Stainless Steel 316L case hardened to 1,100HV +/- 10% heat treatment
Crown:	Screw Down, 7.0mm
Bezel:	Sapphire insert, 2,000HV with 24-hour rotating unidirectional 120 clicks bezel
Crystal:	3.0mm thick Domed Sapphire 2,000HV inner anti-reflective coatings (5 layers)
Case back:	Tinted (red) flat Sapphire Crystal 2,000HV exhibition case back
Movement:	Seiko SII NH34A (aka 4R34)
Power reserve:	41 hours (Typical)
Accuracy:	-20 ~ +40 sec (per Day)
Frequency:	21,600 vph (vibrations per Hour)
Jewels:	24 pcs
Rotor Winding:	Bidirectional
Anti-shock:	Diashock Protection System
Bracelet / Strap:	20mm, Stainless Steel 316L case hardened to 1,100HV +/- 10% heat treatment
Clasp / Buckle:	18mm, SS316L case hardened to 1,100HV +/- 10% with ratchet extension
Water resistance:	20 ATM / 200m / 660ft
Indicators:	Hours, minutes, seconds, GMT, date. Swiss Super-LuminNova BGW9, Grade A
Weight:	177 gm (complete with all the links)
Designed:	Singapore