

VS Variable-Speed Fan Drives

VS Air



These lightweight fan drives are equipped with a larger, precision, flat bimetal sensor plate that automatically adjusts fan speed based on the air temperature in the engine's heat exchangers. Operating at variable speeds, they provide cooling only as needed, giving you less noise, greater fuel efficiency and better engine performance.

- **Smooth fan transitions to optimum speed**
- **A larger sensor plate for improved performance with greater temperature sensitivity and durability – preventing debris buildup to reduce clogging and overheating**
- **Quick response to even the smallest temperature fluctuation**
- **Field-adjustable prototypes for simple fan control calibration**
- **Double-row bearings to increase durability**



VS Variable-Speed, Air-Sensing Fan Drive Models and Specifications

Model Numbers	VS121	VS162	VS212	VS222
Fan Bolt Circle	147 mm [5.79 in.]	152 mm [6.0 in.]	152 / 200 mm [6.0 / 7.87 in.]	152 / 200 mm [6.0 / 7.87 in.]
Bolt Type	3 x M6	6 x M8	6 x M8	6 x M8
Fan Center Diameter	135 mm [5.31 in.]	127 mm [5.0 in.]	127 / 201 mm [5.0 / 7.9 in.]	127 / 201 mm [5.0 / 7.9 in.]
Torque Range	4–17 N-m [35.5–150.5 in.-lbs.]	20–60 N-m [177.0–531.0 in.-lbs.]	40–120 N-m [354.0–1062.0 in.-lbs.]	50–150 N-m [442.5–1327.6 in.-lbs.]
Weight	1 kg [2.20 lbs.]	3.5–4.3 kg [7.72–9.48 lbs.]	4.9–5.7 kg [10.80–12.57 lbs.]	4.9–5.7 kg [10.80–12.57 lbs.]
Maximum Diameter	160 mm [6.30 in.]	190 mm [7.48 in.]	236 mm [9.29 in.]	236 mm [9.29 in.]
Minimum Length	39 mm [1.54 in.]	90 mm [3.54 in.]	90 mm [3.54 in.]	90 mm [3.54 in.]
Typical Fan Size	300–500 mm [15–20 in.]	500–700 mm [20–27.5 in.]	700–750 mm [27.5–29.5 in.]	700–780 mm [27.5–31 in.]

Committed to Your Ideal Airflow Solution

Horton® is the premium provider of engine cooling solutions worldwide. Our culture of innovation delivers high-performance products that last and services that help you meet your commitments. Trust Horton to help your products last longer, run quieter and consume less fuel.

VS Variable-Speed Fan Drives

VS Direct



VS Variable-Speed, Directly-Controlled Fan Drives are managed by the engine's electronic control unit (ECU) to provide precision fan control, increased cooling performance, improved fuel economy and less noise. Designed for a wide range of applications, they are offered in several sizes and three control configurations, including on/off, open loop and PWM (pulse-width-modulation) with integrated speed monitoring control.

- **Rapid response time (fan speed engages in 10 seconds and disengages in 10 to 30 seconds depending on engine speed)**
- **Compact size with greater torque for lightweight, powerful performance**
- **Double-row bearings for durability and longer product life**
- **Rear electrical connection harness to shield electrical connection from the fan blades**



VS Variable-Speed, Directly-Controlled Fan Drive Models and Specifications

Model Numbers	VS167	VS217	VS227
Power Supply	12 / 24 Volts	12 / 24 Volts	12 / 24 Volts
Fan Bolt Circle	152 mm [6.0 in.]	152 / 200 mm [6.0 / 7.87 in.]	152 / 200 mm [6.0 / 7.87 in.]
Bolt Type	6 x M8	6 x M8	6 x M8
Fan Center Diameter	127 mm [5.0 in.]	127 / 201 mm [5.0 / 7.9 in.]	127 / 201 mm [5.0 / 7.9 in.]
Torque Range	20–60 N-m [177.0–531.0 in.-lbs.]	40–120 N-m [354.0–1062.0 in.-lbs.]	50–150 N-m [442.5–1327.6 in.-lbs.]
Weight	3.5–4.3 kg [7.72–9.48 lbs.]	4.9–5.7 kg [10.80–12.57 lbs.]	4.9–5.7 kg [10.80–12.57 lbs.]
Maximum Diameter	190 mm [7.48 in.]	236 mm [9.29 in.]	236 mm [9.29 in.]
Minimum Length	198 mm [7.80 in.]	105 mm [4.13 in.]	105 mm [4.13 in.]
Typical Fan Size	500–700 mm [20–27.5 in.]	700–750 mm [27.5–29.5 in.]	700–780 mm [27.5–31 in.]

Horton is IATF 16949, ISO 14001 and ISO 9001 certified.



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