
Vistronic® Direct-Actuated (Back) Fan Drives
for Medium- and Heavy-Duty Truck Applications and Off-Highway Equipment

Proven viscous performance... electronic control... revolutionary hydraulics. The Vistronic® back-actuated fan drives from BorgWarner Thermal Systems provide the motive power for optimal thermal management and cooling performance. You benefit from lower fan noise, greater fuel economy, and lower exhaust emissions. A patented hydraulic design and a high-speed fluid reservoir deliver the lowest idle speeds and fastest response times of any viscous fan drive, improving fuel economy and reducing fan noise. The Vistronic drive is operated directly by the engine control module, which means you have the precise temperature control necessary to meet low tail-pipe emission requirements. These features make the Vistronic an ideal choice for your most important medium- to heavy-duty truck applications or off-highway equipment.

*Vistronic fan drives provide
intelligent airflow management
for optimal cooling performance.*



Direct actuation
from back of drive



BorgWarner Thermal Systems is a single point of contact for cooling system components for passenger car, SUV, light truck, medium-duty truck, heavy-duty truck, and off-highway applications. We work with original-equipment manufacturers around the world to provide a full range of direct-actuated Vistronic® fan drives, viscous fan drives, Kysor™ on/off fan clutches, Cool Logic™ heavy-duty multi-speed drives, polymer fans, and shutters.

cool
FAN DRIVES

Vistronic® Direct-Actuated (Back) Fan Drives

for Medium- and Heavy-Duty Truck Applications and Off-Highway Equipment

Features and Benefits

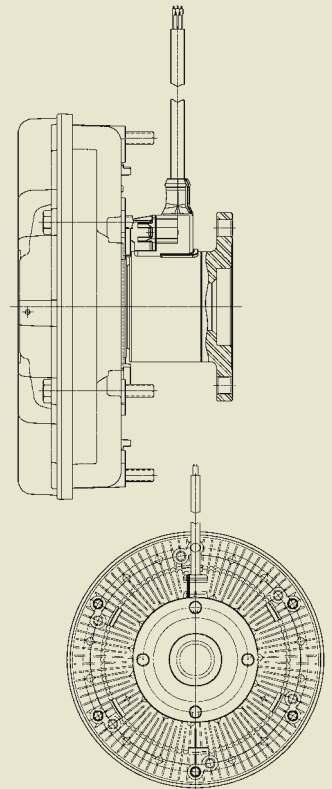
- Efficiency – A patented proportional valve allows precise fan speed control directly by the engine control module (ECM).
- Ease of Assembly – control cable mounts to the back of the drive and can attach directly to the engine wiring harness.
- Reduced Emissions – drive can quickly modulate fan speed to maintain narrow temperature tolerances. A high-speed reservoir and patented fluid distribution enable a faster response than other viscous fan drives.
- Fuel Savings – achieved through a very low idle fan speed.
- Reduced Noise – fan operates only when needed and only turns at the minimum speed to keep temperatures under control.
- Flexible Control – although not necessary for basic control, a fan speed feedback sensor is easily added to enable a greater degree of thermal precision.
- More Engine Power – less parasitic horsepower frees more engine power for other tasks.
- Improved Climate Control – fast response time enables better system pressure control without excessive fan cycling during idle conditions.
- Never Stranded – if control power is interrupted, the drive turns on.
- Extended Belt-Life – no harsh speed transitions as experienced with on/off or fixed-speed clutches.
- Dependability – maintenance-free design. Long life, low cost.

Model	Typical Weight	Diameter	Fan Pad to Drive Front	Minimum Total Length*	Typical Fan Size	Torque Capacity
712B	10.4 lb 4.7 kg	8 in 205 mm	2.44 in 62 mm	4.72 in 120 mm	27.7 in 704 mm	885 in-lb 100 Nm
812B	13.7 lb 6.2 kg	9.6 in 245 mm	2.68 in 68 mm	4.96 in 126 mm	29.7 in 754 mm	1,328 in-lb 150 Nm
812BXL	14.3 lb 6.5 kg	10.2 in 260 mm	2.68 in 68 mm	4.96 in 126 mm	30.7 in 780 mm	1,770 in-lb 200 Nm
812BXXL	15.4 lb 7.0 kg	11.8 in 300 mm	3.1 in 78 mm	5.4 in 136 mm	32 in 813 mm	2,036 in-lb 230 Nm

* length dependent on flange geometry

Note: Standard drives use open-loop control.

For precise thermal control, a fan speed sensor is easily added for closed-loop operation.



Worldwide Technology Centers

1507 South Kalamazoo Avenue
Marshall, MI 49068 USA

Planckstrasse 4 + 6
D-88677 Markdorf Germany

www.bwthermal.com



BorgWarner
Thermal Systems