

December 15, 2016 Calsonic Kansei Corporation

Production Commences of New EGR Cooler for Petrol engine vehicles

Calsonic Kansei Corporation (President & CEO: Hiroshi Moriya; Headquarters: Kita-ku, Saitama City) announced it has commenced production of an EGR cooler installed with the new VG-fin[®].

EGR coolers (EGR: Exhaust Gas Recirculation) are heat exchangers that cool down exhaust gas being returned into the combustion chamber. The emission of nitrogen oxides (NOx) is reduced by lowering the combustion temperature within the engine, and at the same time fuel efficiency is improved by reducing pumping loss from resistance during engine air intake.

In 2013, Calsonic Kansei and Tokyo Radiator Mfg. Co., Ltd jointly developed the world's first VG-fin® (VG: Vortex Generator), which can be used to generate an optimum vortex to reduce the resistance of gas flow within production EGR coolers. In this new cooler, the fin's shape has been improved to allow an even stronger vortex to be generated. With this improved VG-fin®, it has achieved top performance globally, with 75% reduction in gas flow resistance and 20% reduction in weight when compared with previous models.

Calsonic Kansei expects to see even higher demand in the future for its EGR cooler, which improves fuel efficiency in automobile engines, and purifies exhaust gas.



New EGR cooler
Lower gas flow resistance ... 75% reduction
Lighter weight ... 20% reduction



New VG-fin®

- ✓ Generates stronger vortex
- ✓ Reduces flow resistance; contributes to better EGR rate
- Even smaller size and lighter weight due to improved heat exchange performance and lower resistance