Stanadyne

ALTERNATIVE FUEL INJECTOR

Hydrogen, CNG, DME

BENEFITS

Compressed natural gas, hydrogen, dimethyl ether (DME), other gaseous applications

Scalable flow capability

Flexible packaging for port fuel injection applications

Reliable and durable design

Designed for low cost

Improved materials for hydrogen compatibility

Modular design

Wide Application Range

Flexible Design

Efficient Performance

Stanadyne's multipurpose low-pressure port fuel injector is capable of high-flow rates and has flexible packaging for a variety of port fuel injection applications. The higher flow capacity and scalable flow capability provide superior fuel-air mixing features of the new injector permit equivalent energy density fuel delivery when compared to traditional hydrocarbon fuels. Its modular design is based on improved materials for robust hydrogen, compressed natural gas, and DME compatibility.

ENABLING CLEAN PROPULSION THROUGH ENGINE INNOVATION

+1.860.525.0821 | marketing@stanadyne.com | www.stanadyne.com

UNIQUE FEATURES

ACHIEVING EQUIVALENT LIQUID FUEL ENERGY FLOW RATE

- Increased flow porting for hydrogen gas
- Up to 15 bar injection pressure
- Increased flow porting for hydrogen gas
- Increased injector hole size to accommodate sonic gas injection
- Non-restrictive gas flow design

MITIGATING EXCESSIVE IMPACT STRESS

- Hardened tool steels for seats
- Special coatings for wear pair control
- Solenoid controlled

MANAGING SLIDING WEAR

- Low friction materials for sliding wear robustness
- Special coatings, including “diamond like” ion-bond coatings
- Use of ceramic materials for sliding components for severe applications

MANAGING HYDROGEN EMBRITTLEMENT

- Hydrogen barrier coatings: Oxide coatings
- Hydrogen diffusion barriers: Metal plating
- Designed in retained austenite layering for severe applications

SEAL MATERIAL COMPATIBILITY

- Hydrogen compatible seal materials
- Example: Buna-N/Nitrile, Viton, Silicone for static sealing and PTFE for dynamic sealing

Patent Pending features for efficient gaseous fuel control