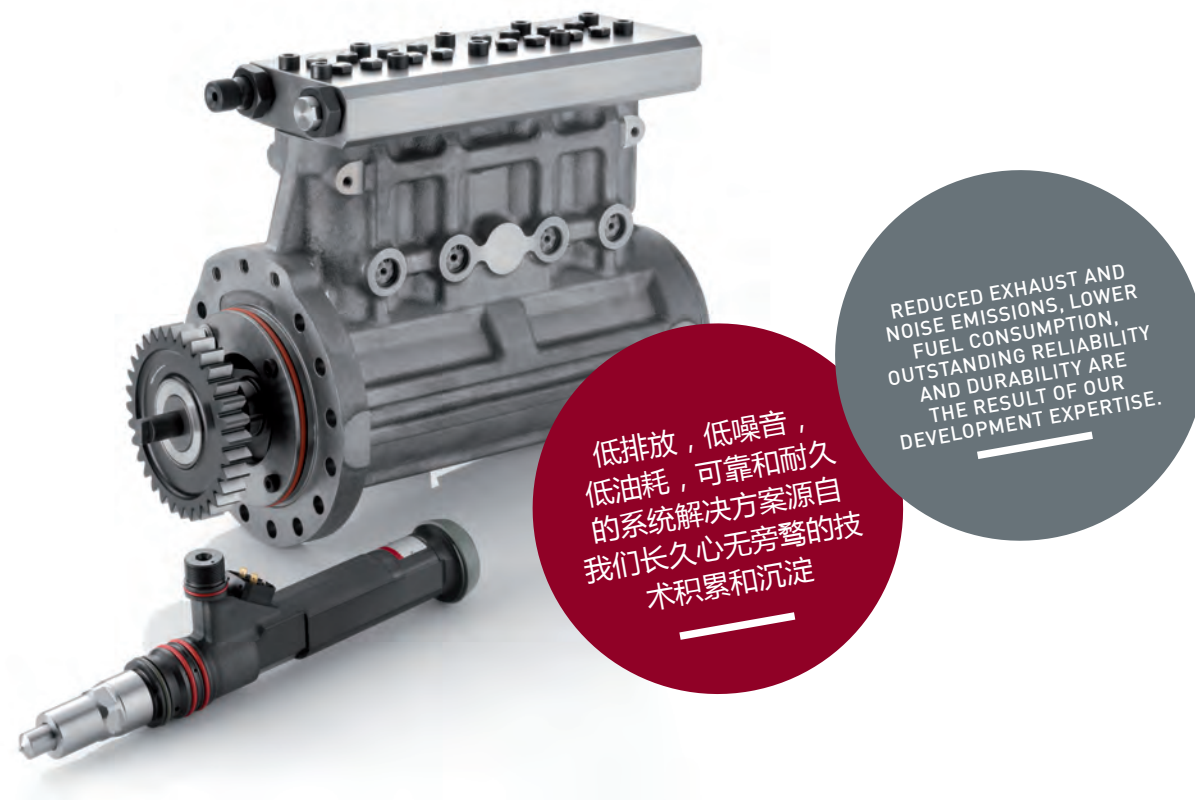


低油耗，低排放，专业的发动机管理解决方案

LOW CONSUMPTION – LOW EMISSION – OPTIMIZED ENGINE MANAGEMENT:

共轨燃油系统 COMMON-RAIL SYSTEMS



我们的专业—全球领先发动机制造商的信任

越来越多的高端发动机选用共轨燃油系统，因为燃油可以按照我们期望的压力以微秒为时间单位喷射到燃烧室中，完全独立于发动机工作循环。共轨燃油系统的模块化设计理念，让我们可以为不同发动机提供解决方案。单缸功率可以覆盖100kW到3920kW，且适用于重油和柴油。

LEADING ENGINE MANUFACTURERS WORLDWIDE PLACE THEIR TRUST IN OUR EXPERTISE

High-quality engines increasingly rely on common-rail fuel injection. The main benefit of this injection type is that fuel can be injected into the combustion chamber at any desired pressure and that the injection can be timed to the microsecond, independently of the engine's operating cycle. Due to our modular design, we are able to offer our common-rail systems for the most varied engine types. We provide common-rail systems for engine sizes from 100 to 3,920 kW/cylinder. The systems are suitable for heavy fuel oil and diesel.

系统部件

高压共轨泵

- 直列2缸或直列4缸
- 最大供油量30L/min
- 最高系统压力2,500bar

管路系统

- 为满足高压储油的经典管路系统
- 迷你式油轨系统
- 跳线式管路系统

高压共轨喷油器

- 电磁阀通断电决定喷油器工作过程
- 具备多次喷射（预喷，主喷和后喷）
- 加电时间长短影响喷射时间
- 集成蓄压腔（可选）
- 为实现最优排放和油耗结果，选择并优化油嘴及喷孔的技术参数

优点

- 减少排放及降低噪音
- 降低油耗
- 通过可靠设计延长使用周期
- 一站式系统方案
- 高精度及可靠的产品



THE COMPONENTS:

PUMPS

- 2 or 4 cylinder inline pumps
- Up to 30 l/min fuel output
- Pressures up to 2,500 bar

RAILS

- Classic rails for fuel storage under high pressure
- Mini rails as component carriers or distributor lines
- Jumperline distribution system

INJECTORS

- Solenoid operated
- Multiple injection capabilities (pre, main and post injection)
- Time-controlled injection
- Integrated accumulator, optional
- Optimized spray hole configuration for best results regarding emissions and fuel consumption

YOUR BENEFITS:

- Reduced exhaust and noise emissions
- Lower fuel consumption
- Robust design to reach highest service life expectations
- One supplier for all components
- High precision and reliable products

LECM-大发动机控制模块

LECM作为集成化的，能安装于发动机机体的控制模块，其可用于控制发动机运行的所有方面。涵盖调速/调负荷，空燃比控制，喷射控制，燃烧诊断，发动机起停控制，发动机各功能检测、保护报警，以及机载数据记录和通讯

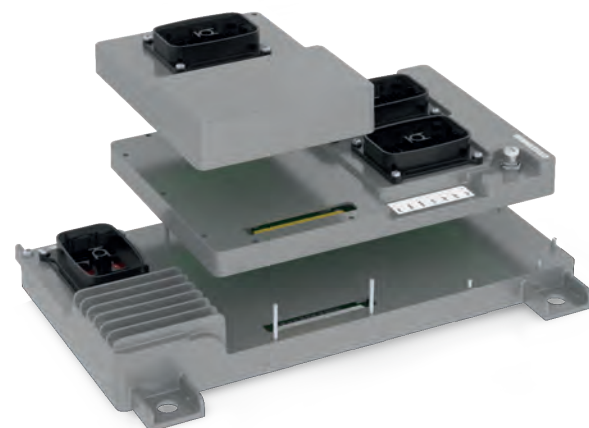
→ 具备船检认证，可开发应用程序提供交钥匙方案，且可提供开放的开发平台。



LECM – LARGE ENGINE CONTROL MODULE

The LECM provides a single, engine-mounted module that can be used to control all aspects of the engine's operation. These include speed and load control, air/fuel ratio control, injector control, combustion diagnostics, the engine's start and stop routines, all the monitoring and engine-protection-related alarms associated with each function, as well as on-board data logging and communications.

→ Marine-certified; available with application software for turnkey solutions and as an open platform.



Images: Adobestock, Fotolia, iStock / All trademarks referenced herein, including WOODWARD and the Woodward logo, are registered trademarks of Woodward, Inc. or its subsidiaries

ALWAYS INNOVATING FOR A BETTER FUTURE

Woodward, Inc.

Corporate Headquarters

1081 Woodward Way, Fort Collins Colorado 80524, USA

Tel: +1 (970) 663 3900, Fax: +1 (970) 962 7050

L'Orange Fuel Injection Trading (Suzhou) Co., Ltd.

No. 116 Qingqiu Street, Suzhou Industrial Park, Suzhou 215024, Jiangsu

Tel: +86-512-6285-0935, Fax: +86-512-6285-0931

www.woodward.com