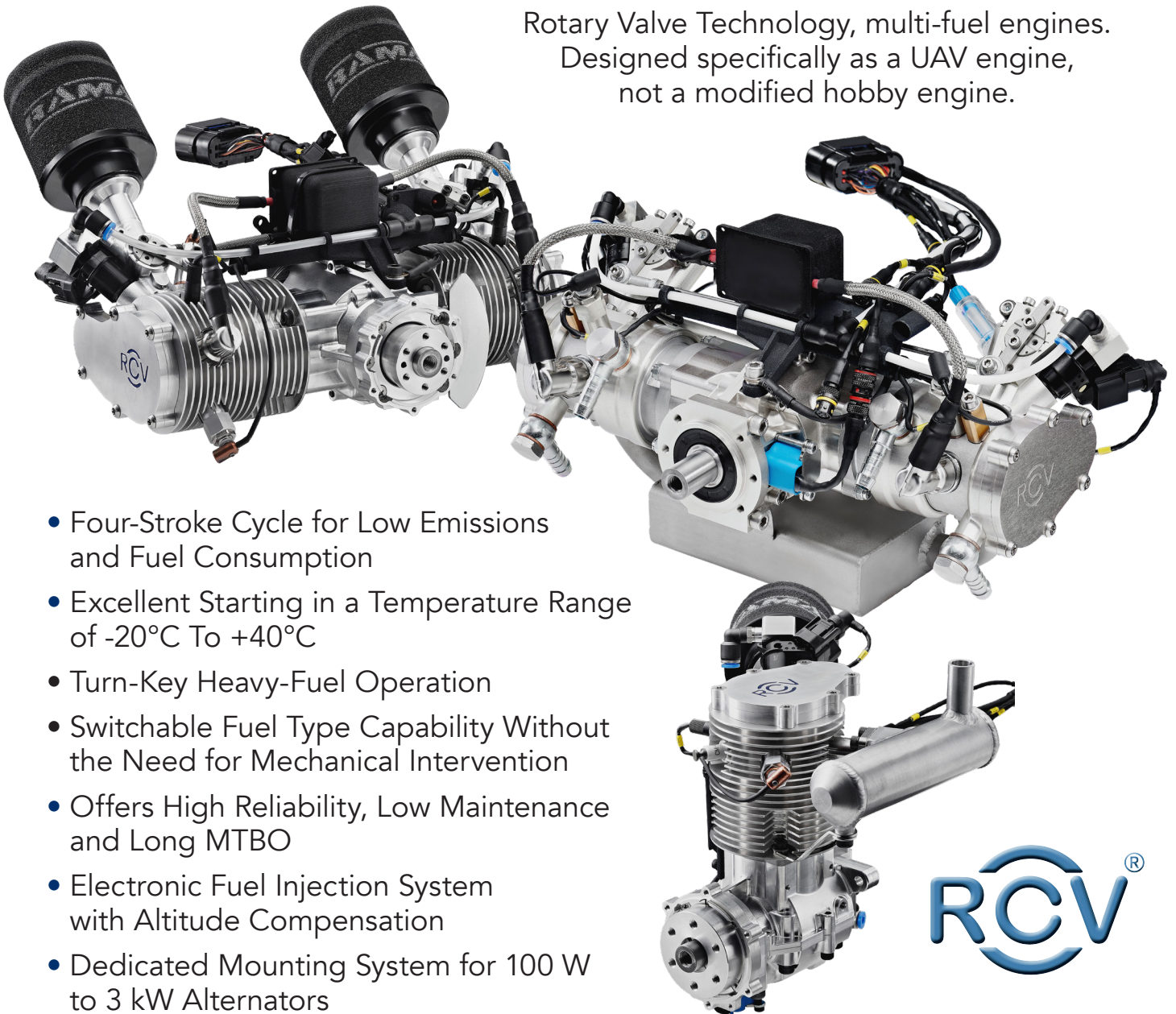


RCV ROTARY VALVE MULTI-FUEL UAV ENGINES

Rotary Valve Technology, multi-fuel engines.
Designed specifically as a UAV engine,
not a modified hobby engine.



- Four-Stroke Cycle for Low Emissions and Fuel Consumption
- Excellent Starting in a Temperature Range of -20°C To +40°C
- Turn-Key Heavy-Fuel Operation
- Switchable Fuel Type Capability Without the Need for Mechanical Intervention
- Offers High Reliability, Low Maintenance and Long MTBO
- Electronic Fuel Injection System with Altitude Compensation
- Dedicated Mounting System for 100 W to 3 kW Alternators



Where Precision and Reliability Soar!

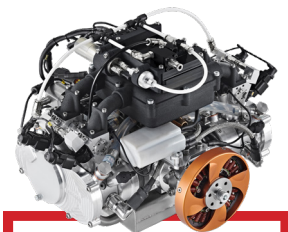
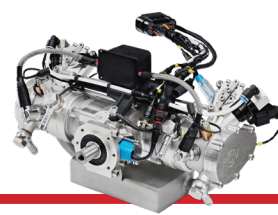
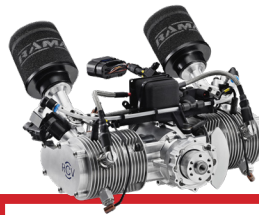
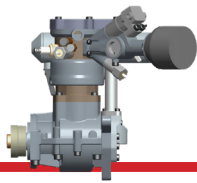
From single components to entire propulsion systems – Our main focus is in propulsion solutions, modular components and support solutions for any UAV or unmanned system.

RCV Rotary Valve Internal Combustion 4-Stroke Engines from 2.2 to 8.61kW for Small Unmanned Vehicles.

Single, twin or 4-cylinder, off-the-shelf or customized specifically for your unmanned system — configure the RCV engine for your application.

RCV Engines are designed for low emissions, low fuel consumption, and turn-key heavy-fuel operation. With their single-, twin-, and four-cylinder designs, these engines are easy to calibrate and provide consistent performance with RCV Engine's unique combustion system. With no injectors in the combustion chamber to carbon up, no valve clearances to adjust, and shielded spark plugs, RCV engines have the high reliability and low maintenance that many midsize drone applications require. As the key features demonstrate, the RCV engine fits a variety of applications, including fixed-wing, rotary-wing, hybrid, marine and portable power.

- Four-stroke cycle for low emissions and fuel consumptions
- Excellent starting in a temperature range of -20°C to +40°C
- Compact combustion system that offers:
 - Turn-key heavy-fuel operation
 - Stable response to changes in AFR or ignition timing
 - Insensitivity to changes in fuel quality or altitude
 - Resistance to detonation and carbon build up
- Large valve breathing area gives high power with a wide power band
- Offers high reliability, low maintenance and long MTBO with:
 - No injectors in the combustion chamber to carbon up
 - No valve clearances to adjust
 - Shielded spark plug for minimum plug fouling and long life
- Electronic fuel injection system with altitude compensation
- Dedicated mounting system for 100 W to 3 kW alternators
- Available in air cooled and liquid cooled versions
- Switchable multi-fuel technology that provides the ability to run on any fuel at any time without compromising efficiency or reliability
- CANbus controlled fuel map switching allows multi-fuel capability with no mechanical changes required



DF35

DF35LC

DF70

DF70LC

DF140LC

SPECIFICATIONS

Standard Build	DF35	DF35LC	DF70	DF70LC	DF140LC
Cooling	Air Cooled	Liquid Cooled	Air Cooled	Liquid Cooled	Liquid Cooled
Type	35cc Single-Cylinder		70cc Twin-Cylinder		140cc Four-Cylinder
Power (JP8)	2.2kW (3.0hp) @ 8500 rpm		4.2kW (5.7hp) @ 8500 rpm		8.61kW (11.5hp) @ 8800 rpm
Weight Complete*	2.0 Kg (4.4 lb)		(3.0 Kg (6.6 lb))		4.8 Kg (10.6 lb)
Combustion System	Revolving Valve, 4-Stroke				
Fuel / Lubrication	Gasoline, Heavy-Fuels (Kerosene Based Including: JP5, JP8, Jet A-1) / Oil/Fuel Ratio (25:1)				
Fueling	Low Pressure Manifold Injection with Altitude Compensation				
Heavy-Fuel Starting	Cold Start Assisted with Installed Cartridge Headers				
Fuel Consumption (JP8)	330 g/kW.hr (0.54 lb/hp.hr)				
TBO	250 hrs (VTOL), 500 hrs (Fixed-Wing)				
OPTIONS					
Rotation	Clockwise or Anti-clockwise (viewing the prop drive)				
Starting	Starter Generator				
Cooling	Mechanical Fan / Cowling / Electrical Fan	Custom Radiator Design	Mechanical Fan / Cowling / Electrical Fan	Custom Radiator Design	Custom Radiator Design

* Weight includes engine assembly ready to run with fuel system, ECU, wiring and exhaust. Weight does not include prop, generator or cowling.



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