

The Sky is the Limit.<sup>SM</sup>

**ROTAX**  
AIRCRAFT ENGINES

Aircraft Engine  
**503 UL - D.C.D.I.**

www.rotax-aircraft-engines.com

**DESCRIPTION**

2-cyl. 2-stroke fan cooled engine with piston ported inlet, with electronic dual ignition, exhaust system, carburetor, rewind starter.



Picture 503 UL - D.C.D.I. with options

| VERSION   | PERFORMANCE |      |       | TORQUE |         |       | MAX R.P.M. |
|-----------|-------------|------|-------|--------|---------|-------|------------|
|           | kW          | hp   | 1/min | Nm     | ft. lb. | 1/min |            |
| 503 UL-1V | 34.0        | 45.6 | 6500  | 51     | 37.6    | 5900  | 6800       |
| 503 UL-2V | 37.0        | 49.6 | 6500  | 56     | 41.3    | 6000  | 6800       |

| BORE  |          | STROKE |          | DISPLACEMENT          |               | COMPRESSION RATIO |         |
|-------|----------|--------|----------|-----------------------|---------------|-------------------|---------|
| 72 mm | 2.84 in. | 61 mm  | 2.40 in. | 496.7 cm <sup>3</sup> | 30.31 cu. in. | th: 10.8          | ef: 6.2 |

| FUEL                                | Super 2-stroke oil              | MIXING RATIO |
|-------------------------------------|---------------------------------|--------------|
| min. MON 83 RON 91*<br>min. AKI 87* | API - TC - Classification       | 1 : 50 **    |
| * leaded or unleaded                | ** variable with fresh oil pump |              |

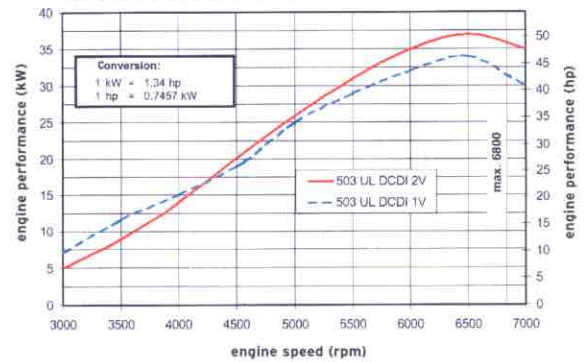
| IGNITION UNIT     | IGNITION TIMING | SPARK PLUG              |
|-------------------|-----------------|-------------------------|
| DUCATI double CDI | 16° v. OT       | ROTAX® part no. 897 055 |

| GENERATOR PERFORMANCE | R.P.M.     | VOLTAGE |
|-----------------------|------------|---------|
| 155 W DC              | 6000 1/min | 13.5 V  |

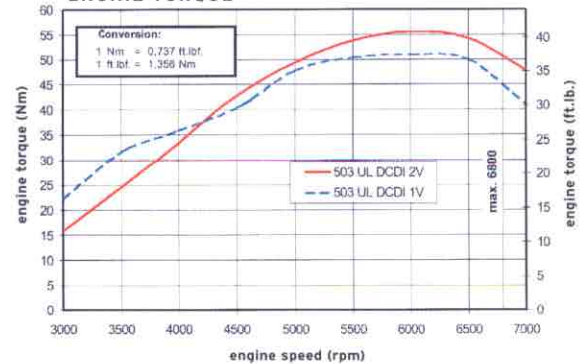
|                    |                                     | WEIGHT | kg   | lb   |
|--------------------|-------------------------------------|--------|------|------|
| Standard           | engine*                             |        | 31.4 | 69.2 |
|                    | 2 carburetors                       |        | 1.8  | 4.0  |
|                    | exhaust system                      |        | 5.1  | 11.2 |
| Options            | 2 air cleaners                      |        | 0.3  | 0.7  |
|                    | dual air cleaner                    |        | 0.5  | 1.1  |
|                    | electric starter                    |        | 3.5  | 7.7  |
|                    | gearbox "B" / i = 2.0/2.24/2.58     |        | 4.5  | 9.9  |
|                    | gearbox "C" / i = 2.62/3.0/3.47/4.0 |        | 8.0  | 17.6 |
|                    | gearbox "E" / i = 2.62/3.0/3.47/4.0 |        | 11.2 | 24.7 |
|                    | external alternator 220 W DC        |        | 1.1  | 2.4  |
|                    | oil tank 2.4 l                      |        | 1.6  | 3.5  |
|                    | fresh oil pump                      |        | 0.3  | 0.7  |
|                    | HAC-kit                             |        | 0.2  | 0.4  |
| intake silencer 1V |                                     | 0.8    | 1.8  |      |
| intake silencer 2V |                                     | 1.1    | 2.4  |      |
| after muffler      |                                     | 1.6    | 3.5  |      |

\* engine also available in free-air version

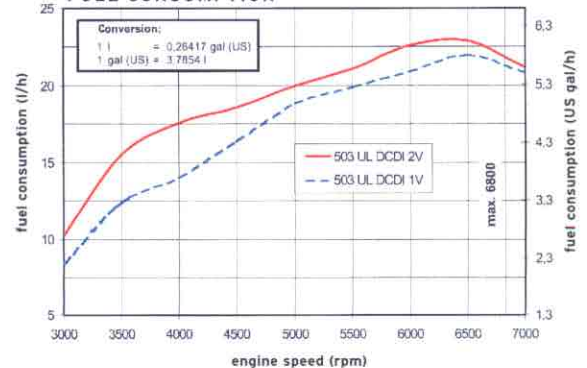
**ENGINE PERFORMANCE**



**ENGINE TORQUE**



**FUEL CONSUMPTION**



|   |                                      |
|---|--------------------------------------|
| <p><b>⚠ WARNING</b></p> <p>This aircraft engine does not comply with federal safety regulations for standard aircraft. This engine is for use in experimental and ultralight uncertified aircraft only and only in circumstances in which an engine failure will not compromise safety. Before operating the engine read operator's manual. Information is available from your local authorized ROTAX®-distributor.</p> | <p>ROTAX® authorized distributor</p> |
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