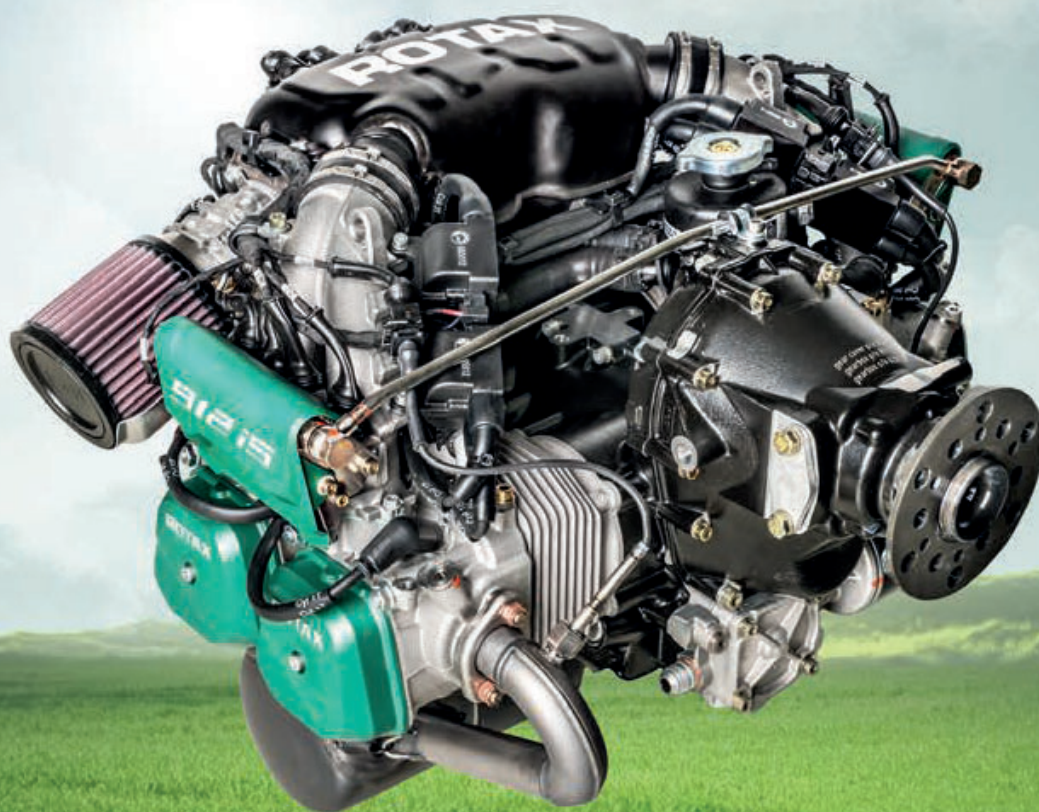


OPERATORS MANUAL

FOR ROTAX® ENGINE TYPE 912 i SERIES



5) Performance and Fuel consumption

Topics in this chapter

5.1 Performance data	2
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5.1) Performance data

The performance tables and performance graphs on the next few pages are intended to show you what kind of performance to expect from your engine in terms of power output. The indicated power can be achieved by following the procedures laid out in the Operators Manual and ensuring that the engine is well-maintained.

Performance data Engine 912 iSc/iS Sport

Performance data for standard conditions (ISA)

Providing engine speed over 5500 rpm is restricted to 5 minutes.

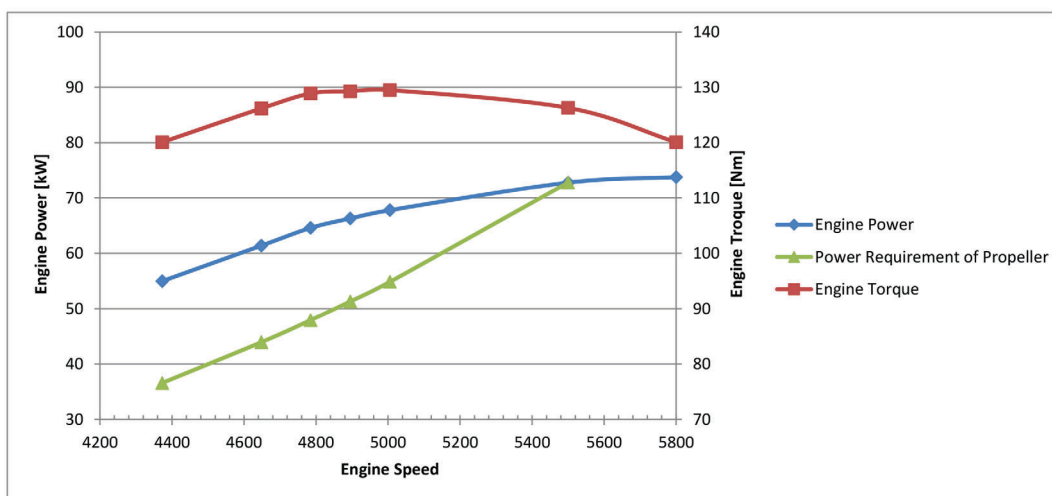


Figure 1: Performance data

Performance data Engine 912 iSc/iS

Performance data for standard conditions (ISA)

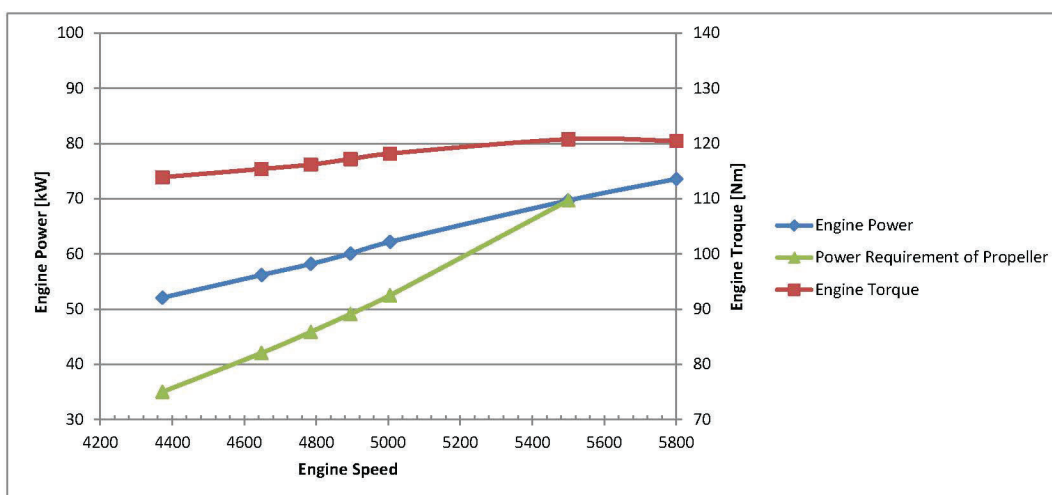
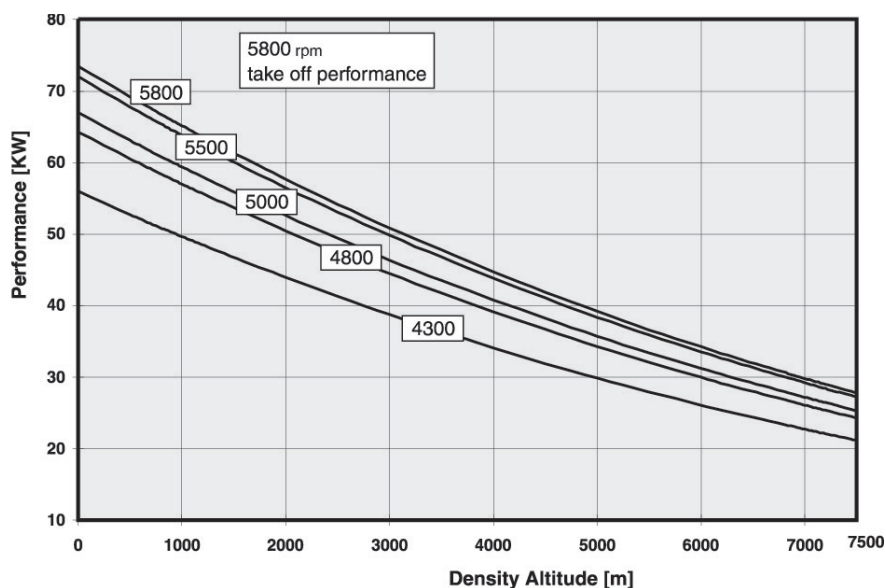


Figure 2: Performance data

Performance graph for non-standard conditions Engine 912 iSc/iS and 912 iS/iSc Sport

The following graph shows the performance drop with increasing flight altitude. The curves show the performance at 5800, 5500, 5000, 4800 and 4300 rpm, at full throttle.

At deviation of temperature conditions from standard atmosphere conditions the engine performance to be expected can be calculated from the performance indicated, multiplied by standard temperature, divided by actual temperature in °K.



$$P_{akt.} = P_{stand.} \cdot \frac{T_{standard}}{T_{aktuell}}$$

$$T [K] = t [^{\circ}C] + 273$$

Figure 3: Performance graph



Further essential information regarding engine behavior see Service Letter SL-912 i-003, latest edition.

**Performance data
912 iSc/iS Sport**

Engine speed over 5500 rpm is restricted to 5 minutes. Run the engine in accordance with the following table.

Power setting	Engine speed (rpm)	Performance (kW)/ (HP)	Torque	
			(Nm)	(ft. lb)
Take-off power	5800	73.5/100	121.4	89.54
max. continuous power	5500	72.02/ 97.9	126.4	93.23
75%	5000	54.0/73.4	103.1	76.04
65%	4800	46.7/63.5	93.3	68.81
50%	4300	35.9/48.8	78.5	57.90

**Performance data
912 iSc/iS**

Power setting	Engine speed (rpm)	Performance (kW)/ (HP)	Torque	
			(Nm)	(ft. lb)
Take-off power	5800	73.5/100	121.0	89.24
max. continuous power	5500	69.0/92	119.8	88.36
75%	5000	51.8/69	98.7	72.79
65%	4800	44.9/60	89.5	66.01
50%	4300	34.5/46	75.3	55.53

Fuel consumption

Fuel consumption

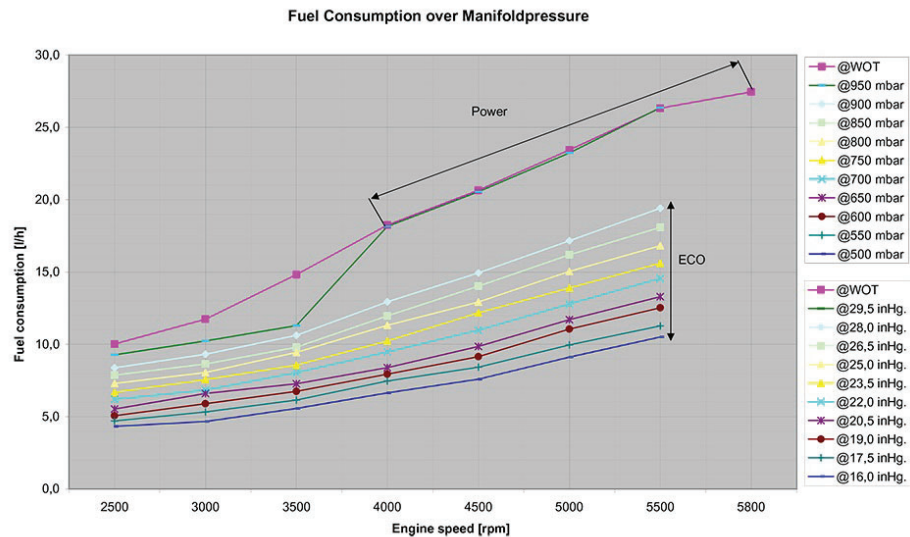


Figure 4: Fuel consumption

The indicated fuel consumption was determined at 974 hPa and is only valid for an error-free operation of the engine. Error may lead to a higher fuel consumption.

Power vs. ECO Modus

The 912 iSc/iS engine has two different modes, the POWER and ECO mode which differ significantly in fuel consumption.

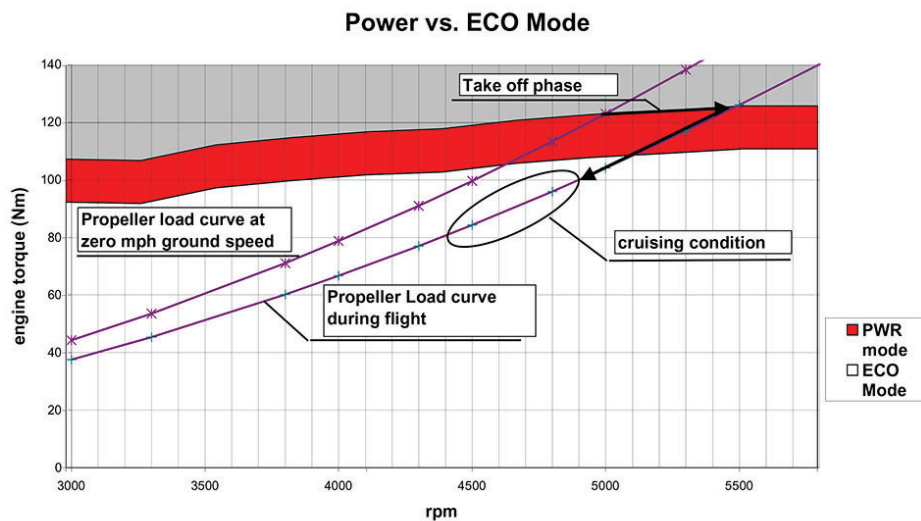


Figure 5: Power

NOTE

The switchover between ECO and RICH mode is about 97 % of throttle position. Appropriate display instruments indicate this threshold.