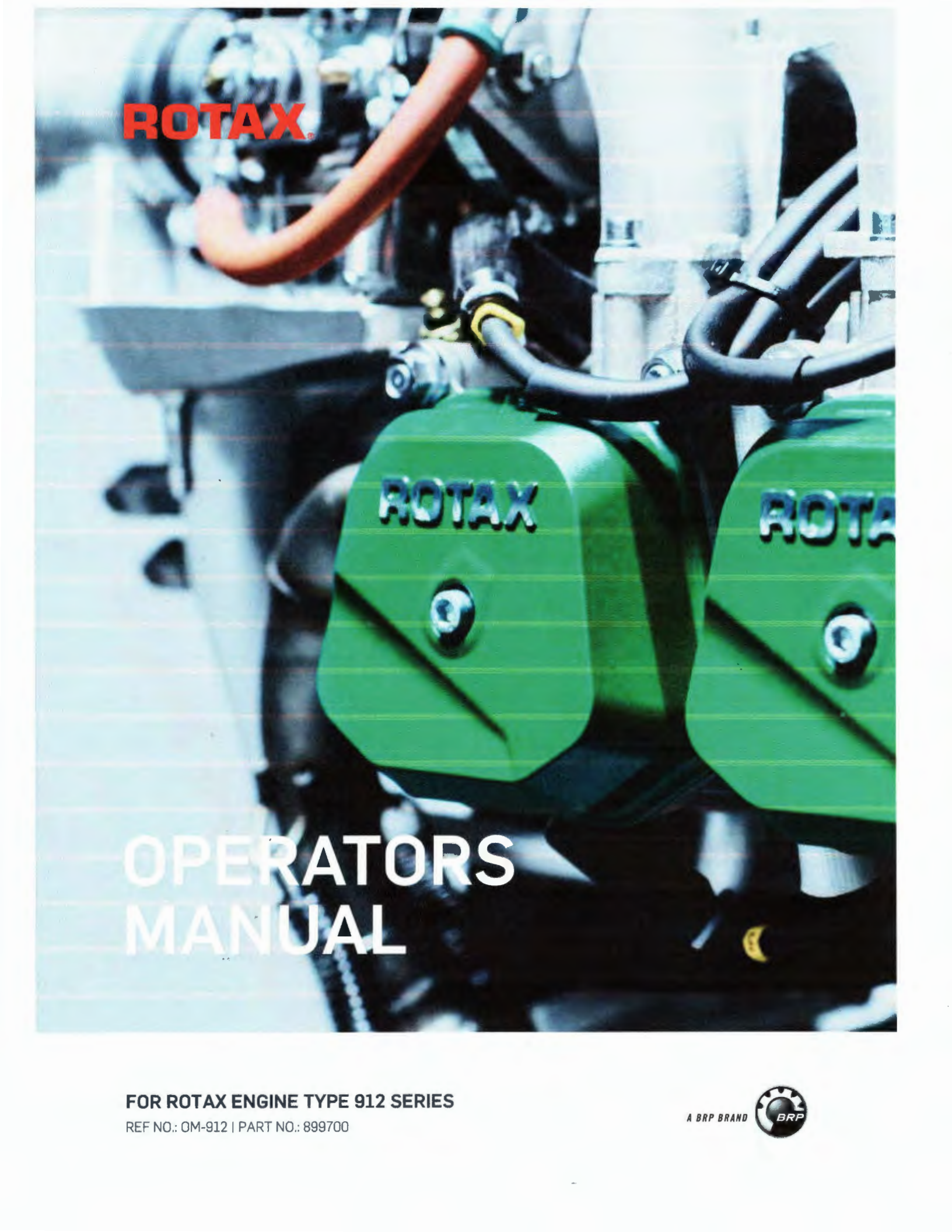




ROTAX.

OPERATORS MANUAL

FOR ROTAX ENGINE TYPE 912 SERIES

REF NO.: OM-912 | PART NO.: 899700



Fuel pressure

⚠ WARNING

Non-compliance can result in serious injuries or death!
Fuel pressure in excess of stated limit can lead to an override of the float valve with subsequent engine stop.

The aircraft engine manufacturer strongly recommends the installation of an additional pump, unless this has not been covered by legal obligations so far.

Fuel pressure	
Max.	0.4 bar (5.8 psi) (0.5 bar (7.26 psi)) ²
Min.	0.15 bar (2.2 psi)

Propeller governor

Power consumption of the hydraulic propeller governor:

Max.	600 W
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Vacuum pump

Power consumption of the vacuum pump:

Max.	300 W
------	-------

External alternator

Power consumption of the external alternator:

Max.	1200 W
------	--------

Bank angle

Deviation from bank angle:

Max.	40°
------	-----

NOTE

Up to this value the dry sump lubrication system warrants lubrication in every flight situation.

2. applicable only for fuel pump from S/N 11.0036

2.2) Operating limits (912 S/ULS)

Performance

Performance data relate to ISA (International Standard Atmosphere) conditions without Governor, external alternator etc.

Take-off performance	73.5 kW at 5800 rpm
Max. continuous performance	69 kW at 5500 rpm

Speed

Speed	
Take-off speed	5800 rpm (max. 5 min.)
Max. continuous speed	5500 rpm
Idle speed	min. 1400 rpm

Acceleration

Limit of engine operation at zero gravity and in **negative „g“** condition.
Max. 5 seconds at max. -0.5 g

Oil pressure

Oil pressure	
Max.	7 bar (102 psi)
Min.	0.8 bar (12 psi) (below 3500 rpm)
Normal	2.0 to 5.0 bar (29-73 psi) (above 3500 rpm)

ATTENTION

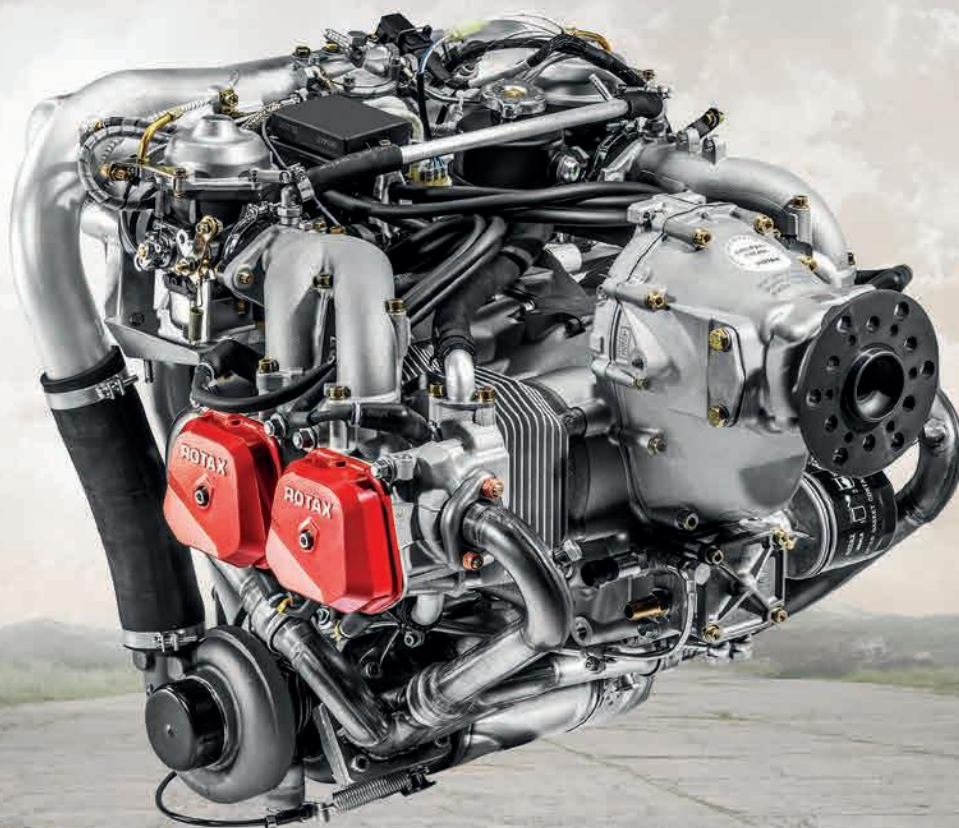
Oil pressure max. for a short period admissible at cold start.

Oil temperature

Oil temperature	
Max.	130 °C (266 °F)
Min.	50 °C (120 °F)
normal operating temperature: approx. 90 to 110 °C (190-230 °F)	

OPERATORS MANUAL

FOR ROTAX® ENGINE TYPE 914 SERIES



Engine speed

Take-off speed	5800 rpm (max. 5 min.)
Max. continuous speed	5500 rpm
Idle speed	min. 1400 rpm

Manifold pressure

ATTENTION	
Due to the control behavior an overshooting of the manifold pressure is possible. But within 2 seconds this pressure has to stabilize within the allowance.	

Take-off performance	max. 1350 hPa (39.9 in.HG)
Max. continuous performance	max. 1200 hPa (35.4 in.HG)

Acceleration

Limit of engine operation at zero gravity and in **negative “g”** condition.

Max.	-0.5 g (max. 5 second)
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Critical flying altitude

Available boost pressure

ATTENTION	
Up to the stated critical flight altitude the respective manifold pressure is available.	

Take-off performance	up to max. 2450 m (8000 ft) above sea level
Continuous performance	up to max. 4875 m (16000 ft) above sea level

Airbox temperature

Airbox temperature	
Intervention temperature	72 °C (160 °F) * 88 °C (190 °F) * 914 F starting with S/N 4420200 (TCU part no. 966741) * 914 UL starting with S/N 4417598 (TCU part no. 966741)

External alternator

Power consumption of the external alternator	
Max.	1200 W

Static roll angle

The dry sump lubrication system warrants lubrication in every flight situation below maximum static roll angle.

Parameter	Min.	Max.
Static roll angle β		40°

Parameter	Min.	Max.
Operating Altitude	–	23000 ft

The engine performance is approximately proportional to the air flow value.

The air flow information is available on the Display CAN Bus.

Acceleration

Limit of engine operation at zero gravity and in **negative “g”** condition.

Parameter	Min.	Max.
Acceleration	–	-0.5 g (max. 5 seconds)

Static roll angle

The dry sump lubrication system warrants lubrication in every flight situation

Parameter	Min.	Max.
Static roll angle β	–	40°

Manifold temperature

Parameter	Min.	Max.
Manifold temperature	–	80 °C (176 °F)

Manifold pressure

Parameter	Min.	Max.
Manifold pressure	60 hPa (1.77 in. HG)	1730 hPa (51 in. HG)

NOTE

Target pressure at a temperature from 25 °C (77 °F) to 35 °C (95 °F):

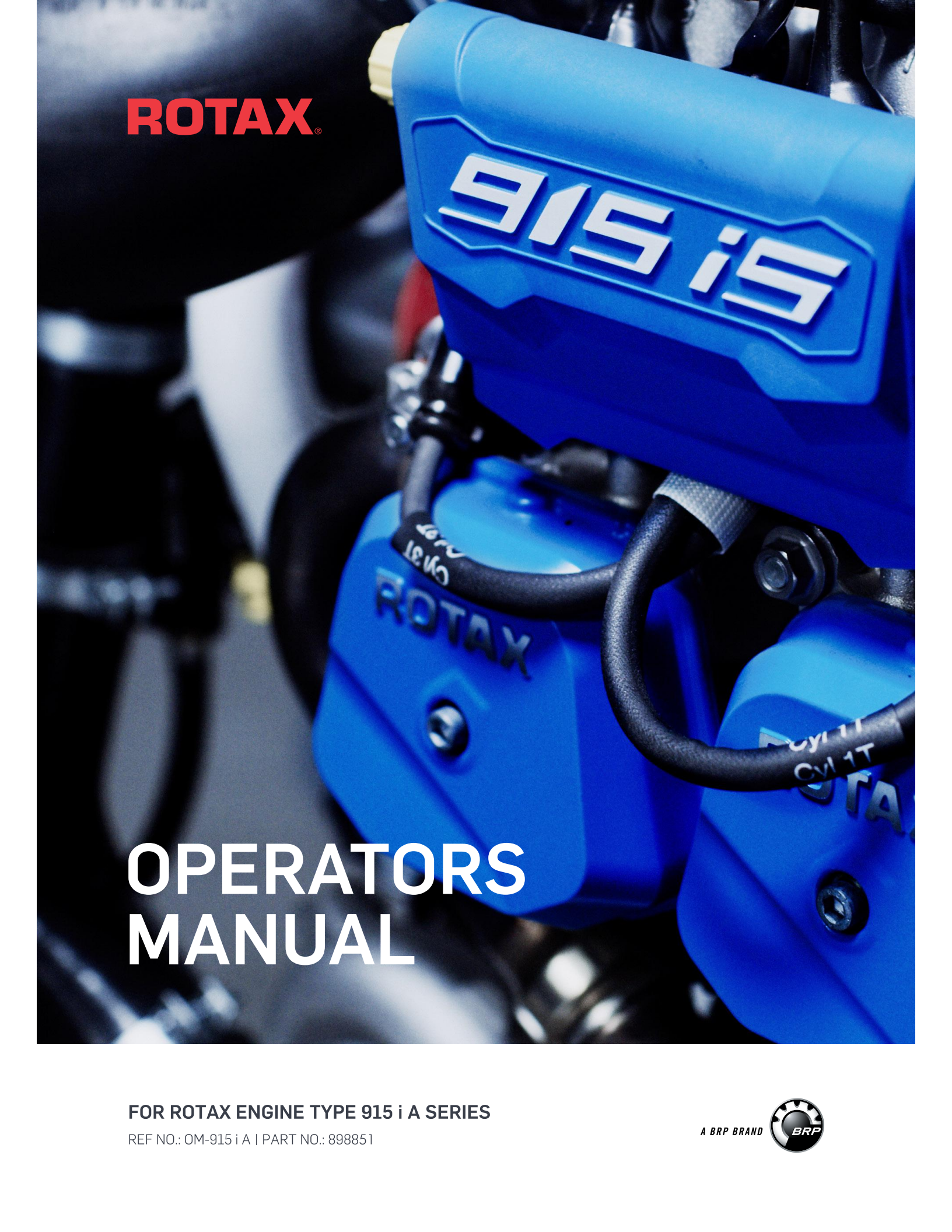
5800 rpm 1520 mbar

5500 rpm 1450 mbar

1730 mbar is the “not to exceed” value which is needed by the boost pressure control in special situations (e.g. 75 °C (167 °F)).

Boost pressure

Parameter	Min.	Max.
Boost pressure	ambient pressure	1730 hPa (51 in. HG)



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FOR ROTAX ENGINE TYPE 915 i A SERIES

REF NO.: OM-915 i A | PART NO.: 898851

