



MWfly SPIRIT SKY LINE ENGINE COMPARISON CHART



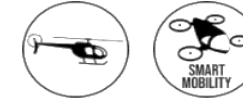
Model
Application(s)

SPIRIT 100 DIRECT R/L

SPIRIT 122 GEARED R/L

SPIRIT 135 DIRECT R/L

SPIRIT 140 GEARED R/L



Performance

Max Power [Hp (kW)]
Max Torque [Nm (Ft-lb)]
Max Continuous Power [Hp (kW)]

100.3 (74.8) @ 3400 rpm
205.6 (151.6) @ 3400 rpm
100.3 (74.8) @ 3400 rpm

122.2 (91.1) @ 4050 rpm
217.5 (160.4) @ 4000 rpm
110 (82) @ 4000 rpm

135.3 (100.9) @ 4550 rpm
218 (160.8) @ 4150 rpm
120 (89.5) @ 4300 rpm

140.4 (104.7) @ 4050 rpm
249 (183.6) @ 3700 rpm
125 (93.2) @ 4000 rpm

Max Engine Speed [rpm]
Power/Weight [Hp/Kg (Hp/lbs)]
TBO [h]

3400
1.35 (0.62)
2200

4200
1.55 (0.70)
2000

4700
1.83 (0.83)
1500

4200
1.77 (0.81)
2000

Engine Data

Engine Type
Displacement [cm3 (in3)]
Weight [Kg (lbs)]
Dimension L x W x H [mm (in)]

dry (without accessories)

2201 (134)
74 (163)
593 x 762 x 419 (23.35 x 30 x 16.5)

2201 (134)
79 (174)
672 x 762 x 419 (26.46 x 30 x 16.5)

2201 (134)
74 (163)
593 x 762 x 419 (23.35 x 30 x 16.5)

2545 (155)
79 (174)
672 x 762 x 419 (26.46 x 30 x 16.5)

Stroke X Bore [mm (in)]
Compression Rate
Thermodynamic Cycle
Fuel

81 x 93 (3.18 x 3.66)
10.3÷1

81 x 93 (3.18 x 3.66)
10.3 ÷ 1

81 x 93 (3.18 x 3.66)
10.3 ÷ 1

81 x 100 (3.18 x 3.93)
10.1 ÷ 1

Fuel Cons. [L/h (USgal/h)]
Cooling System
Lubrication

18.1 (4.8) @ 75 Hp

18.5 (4.9) @ 75 Hp

34.2 (9.03) @ 120Hp

19.3 (5.1) @ 75Hp

Timing System
Timing Driving System

4 stroke fuel (Otto cycle)

Mo.GAS min. AKI 90, R.O.N. 95, M.O.N. 85, LL100

Liquid with mechanical pump

Semi-dry sump, pressure oil feed assisted with internal pump

2 valves per cylinder with S.O.H.C. (Single Over Head Camshaft)

Gear + chain with automatic chain tensioner

Transmission

Type
Transmission Ratio
Max Propeller Speed [rpm]
Propeller Rotation
Damper

Direct drive
1 ÷ 1
3400

Gearbox with helical gear
1 ÷ 1.732
2400

Direct drive
1 ÷ 1
4700

Gearbox with helical gear
1 ÷ 1.732
2400

Right (R) or Left (L)

Optional

Active Damping Control (A.D.C.)

Elasto-dissipative with Active Damping Control (A.D.C.)
Integrated constant speed hydraulic governor

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Integrated constant speed hydraulic governor



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Model

Electric Data

Generator

Starter

F.R.I.S. (Full Redundancy Injection System)

Full redundancy ECU's

Full installed engine wiring loom

Internal generator

Voltage regulator

Start relay

Installed inductive coil

Installed cooling circuit expansion tank

Installed cooling circuit thermostat

Engine mount dampers (8)

Fuse & relay (electrical hub)

Capacitor

Standard coolant radiator kit

Front coolant radiators for STOL (2)

Oil radiator kit

Fuel pumps & filters module (2+2)

Standard exhaust system

EMS & sensor kit

CAN aerospace interface

Bed mounting adaptors (4)

Engine-cockpit wiring loom

Hydraulic VPP (constant speed)

Aux generator

SPIRIT 100 DIRECT R/L

Permanent magnet, oil cooled,
225W (12.5V-18A)

SPIRIT 122 GEARED R/L

Permanent magnet, oil cooled,
260W (12.5V-21A)
Electric 0.65kW with anti-kickback clutch

SPIRIT 135 DIRECT R/L

Permanent magnet, oil cooled,
300W (12.5V-24A)

SPIRIT 140 GEARED R/L

Permanent magnet, oil cooled,
260W (12.5V-21A)

ECU with dual injection and ignition; altitude and temperature compensation; Limp Home strategy

ACCESSORIES INCLUDED WITH ENGINE (STANDARD)



ADDITIONAL ACCESSORIES (SOLD SEPARATELY)

