



**Model**  
**Application(s)**



## MWfly SPIRIT RED LINE ENGINE COMPARISON CHART



### SPIRIT 115 DIRECT R/L



### SPIRIT 135 GEARED R/L



### SPIRIT 160 DIRECT R/L



### SPIRIT 160 GEARED R/L



## Performance

Max Power [Hp (kW)]

Max Torque [Nm (Ft-lb)]

Max Continuous Power [Hp (kW)]

Max Engine Speed [rpm]

Power/Weight [Hp/Kg (Hp/lbs)]

TBO [h]

## Engine Data

Engine Type

Displacement [cm<sup>3</sup> (in<sup>3</sup>)]

Weight [Kg (lbs)]

Dimension L x W x H [mm (in)]

Stroke X Bore [mm (in)]

Compression Rate

Thermodynamic Cycle

Fuel

Fuel Cons. [L/h (USgal/h)]

Cooling System

Lubrication

Timing System

Timing Driving System

## Transmission

Type

Transmission Ratio

Max Propeller Speed [rpm]

Propeller Rotation

Damper

Optional

dry (without accessories)

115 (85.7) @ 3350 rpm  
242.9 (179.1) @ 3350 rpm  
115 (85.7) @ 3350 rpm

3400  
1.55 (0.71)  
2200

2545 (155)  
74 (163)  
593 x 762 x 419 (23.35 x 30 x 16.5)  
81 x 93 (3.18 x 3.66)  
10.1 ÷ 1

18.6 (4.9) @ 75 Hp

Direct drive

1 ÷ 1  
3400

Active Damping Control (A.D.C.)

135.3 (100.9) @ 4550 rpm  
218 (160.8) @ 4150 rpm  
115 (85.7) @ 4200 rpm

4700  
1.71 (0.78)  
1800

2201 (134)  
79 (174)  
672 x 762 x 419 (26.46 x 30 x 16.5)  
81 x 93 (3.18 x 3.66)  
10.3 ÷ 1

18.5 (4.9) @ 75 Hp

Gearbox with helical gear  
(separate lubrication)

1 ÷ 1.958  
2400

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

4 cylinder boxer

4 stroke fuel (Otto cycle)

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

41.4 (10.94) @ 142 Hp

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

Right (R) or Left (L)

160 (119.3) @ 4650 rpm  
255 (188.1) @ 3900 rpm  
142 (105.9) @ 4300 rpm

4700  
2.16 (0.98)  
1200

2545 (155)  
74 (163)  
593 x 762 x 419 (23.35 x 30 x 16.5)  
81 x 100 (3.18 x 3.93)  
10.1 ÷ 1

41.4 (10.94) @ 142 Hp

Direct drive

1 ÷ 1  
4700

Active Damping Control (A.D.C.)

160 (119.3) @ 4650 rpm  
255 (188.1) @ 3900 rpm  
137 (102.1) @ 4200 rpm

4700  
2.02 (0.92)  
1800

2545 (155)  
79 (174)  
672 x 762 x 419 (26.46 x 30 x 16.5)  
81 x 100 (3.18 x 3.93)  
10.1 ÷ 1

19.3 (5.1) @ 75 Hp

Gearbox with helical gear  
(separate lubrication)

1 ÷ 1.958  
2400

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



## MWfly SPIRIT RED LINE ENGINE COMPARISON CHART



### 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 115 DIRECT R/L

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

### SPIRIT 135 GEARED R/L

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

### SPIRIT 160 DIRECT R/L

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

### SPIRIT 160 GEARED R/L

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

Electric 0.65kW with anti-kickback clutch

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

### ACCESSORIES INCLUDED WITH ENGINE (STANDARD)



### ADDITIONAL ACCESSORIES (SOLD SEPARATELY)

