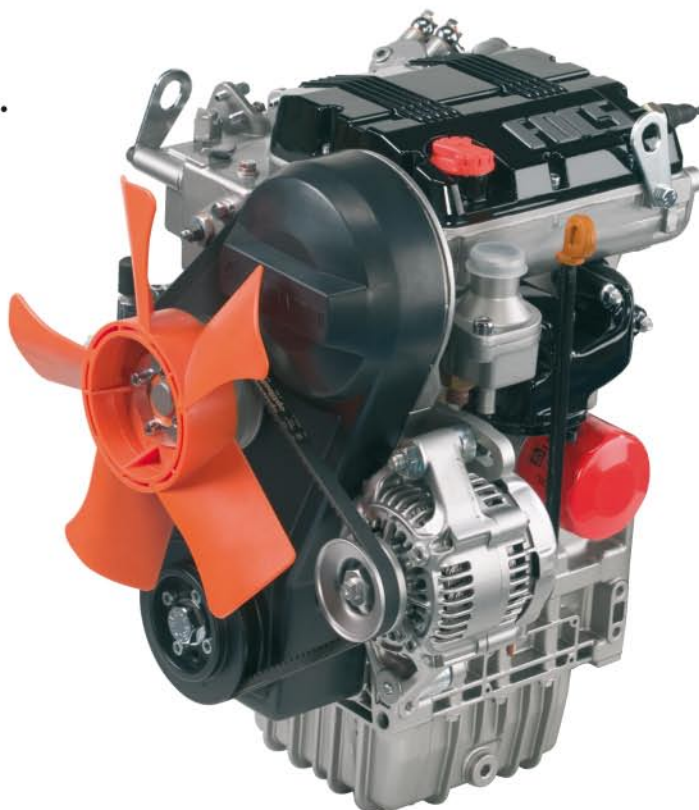


- 2 cylinders in line
- 505 cm<sup>3</sup>
- 4,0 kW/5,4 HP @ 3000 (3600) r.p.m.
- Nm 20,0@1600 r.p.m.



## Construction

- 4-stroke diesel engine with 2 cylinders in line
- Liquid-cooled with axial fan
- Indirect injection with pump injector unit on head
- Die-cast aluminium engine block
- Aluminium cylinder head
- 2 valves per cylinder
- Overhead camshaft on head driven by cogged belt
- 3<sup>rd</sup> PTO on the camshaft end
- Counterclockwise rotation (1° PTO)
- Lubrication by oil pump driven by crankshaft
- Full flow external oil filter
- Breather return oil steam
- Centrifugal Governor
- Torque adaptor
- Cooling pump in engine block
- Automatic extra fuel starting device
- Heating cab system predisposition

## Main applications

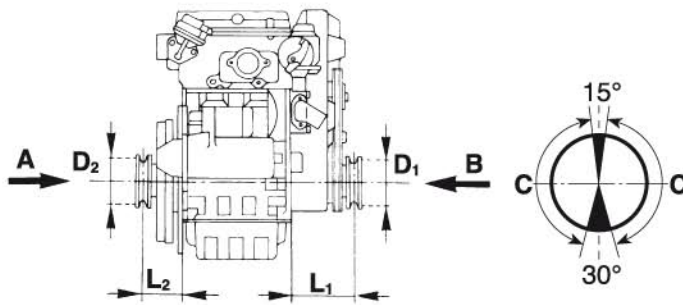
- Automotive (possible homologation EURO 2, EURO 3)
- Mini-Transporters
- Sweepers

## Technical drawings \*

Cylinders	N.	2
Displacement	cm <sup>3</sup>	505
Bore	mm	72
Stroke	mm	62
Compression ratio		22,8 : 1
Combustion sequence	degrees	360°
Rating at 3750 t/m	N (80/1269/CEE) ISO 1585 kW/HP	9,3/12,6
Rating at 3600 t/m	N (80/1269/CEE) ISO 1585 kW/HP	4,0/5,4
Rating at 3000 t/m	N (80/1269/CEE) ISO 1585 kW/HP	4,0/5,4
Max torque (9,3 kW rating)	Nm	26,0@2200
Max torque (4,0 kW rating)	Nm	20,0@1600
Low idle speed	rpm	1100
Water pump delivery at 3600 rpm	l/min	40
Oil consumption	kg/h	0,007
Oil sump capacity	l	1,4
Max. allowable inclination for:		
- short periods of operation (max. time 30 minutes)		25°
- peak values (max. time 1 minute)		35°
Air combustion volume @ 3600 rpm	m <sup>3</sup> /h	910
Dry weight	kg	53
Recommended battery	V/Ah	12/44



## Minimum pulley diameters for belt drive



---

V belt  $D_2 \text{ (mm)} \geq 85 [L_2 \text{ (mm)} + 191] \frac{N \text{ (HP)}}{n \text{ (RPM)}}$

---

Cogged belt  $D_1 \text{ (mm)} \geq 65 [L_1 \text{ (mm)} + 191] \frac{N \text{ (HP)}}{n \text{ (RPM)}}$

---

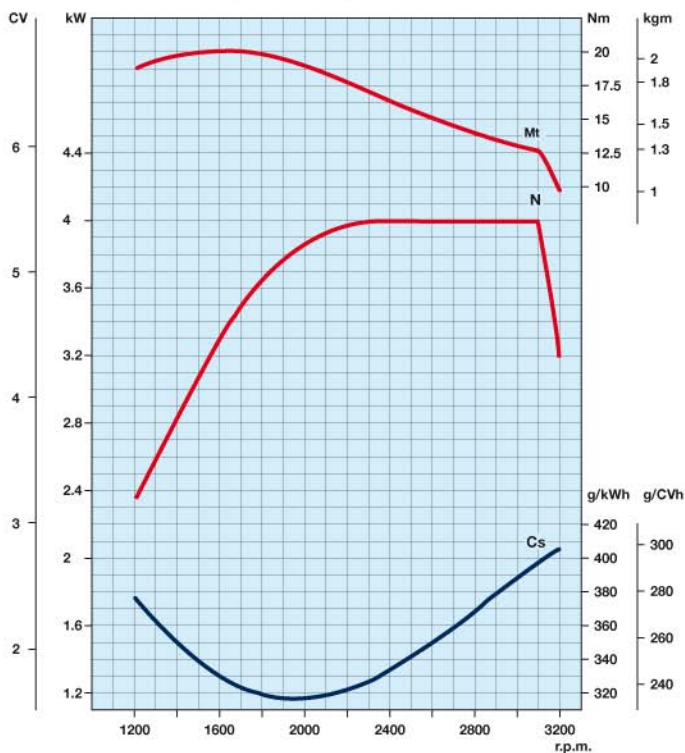
Max. intermittent axial load in both direction A-B = 300 kg

C - zone in which the radial loads can be applied

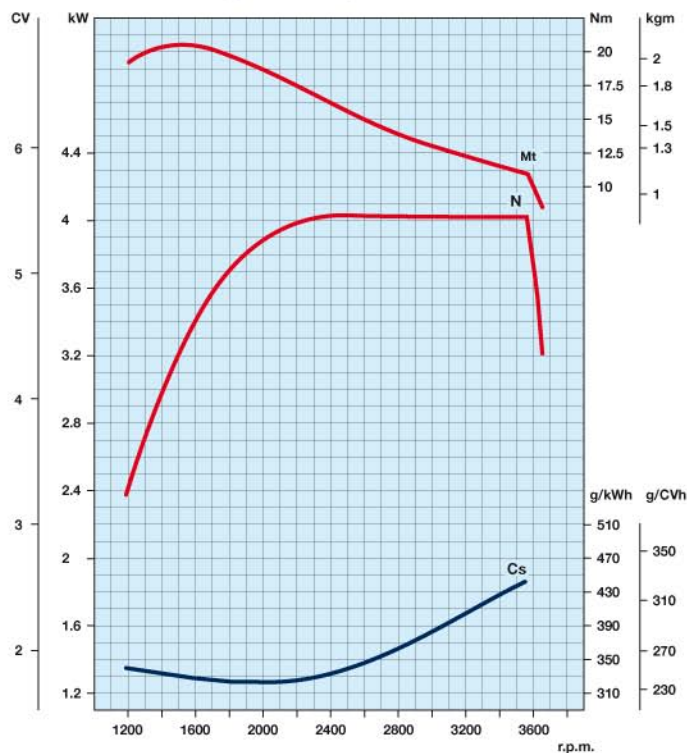
# SERIE FOCS

## Curves

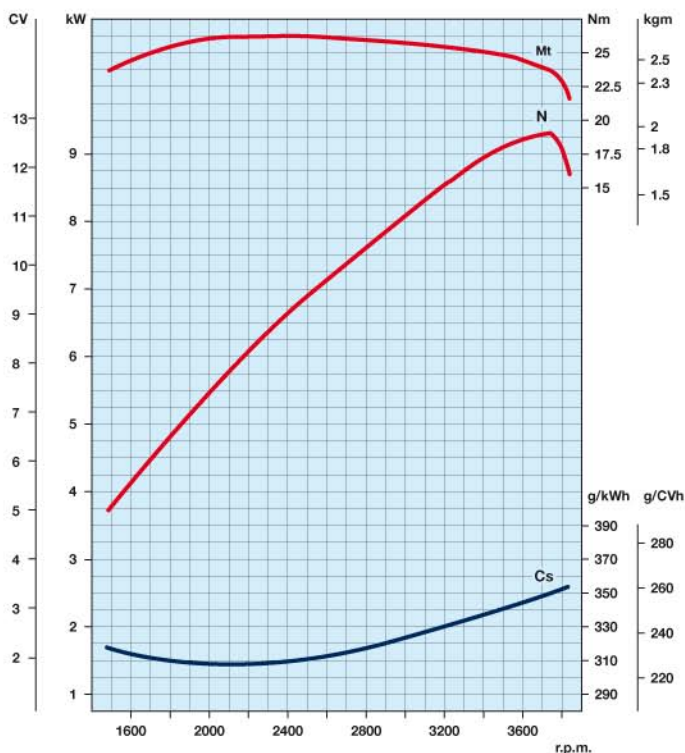
LDW 502 @ 3000 r.p.m.



LDW 502 @ 3600 r.p.m.



LDW 502 @ 3750 r.p.m.

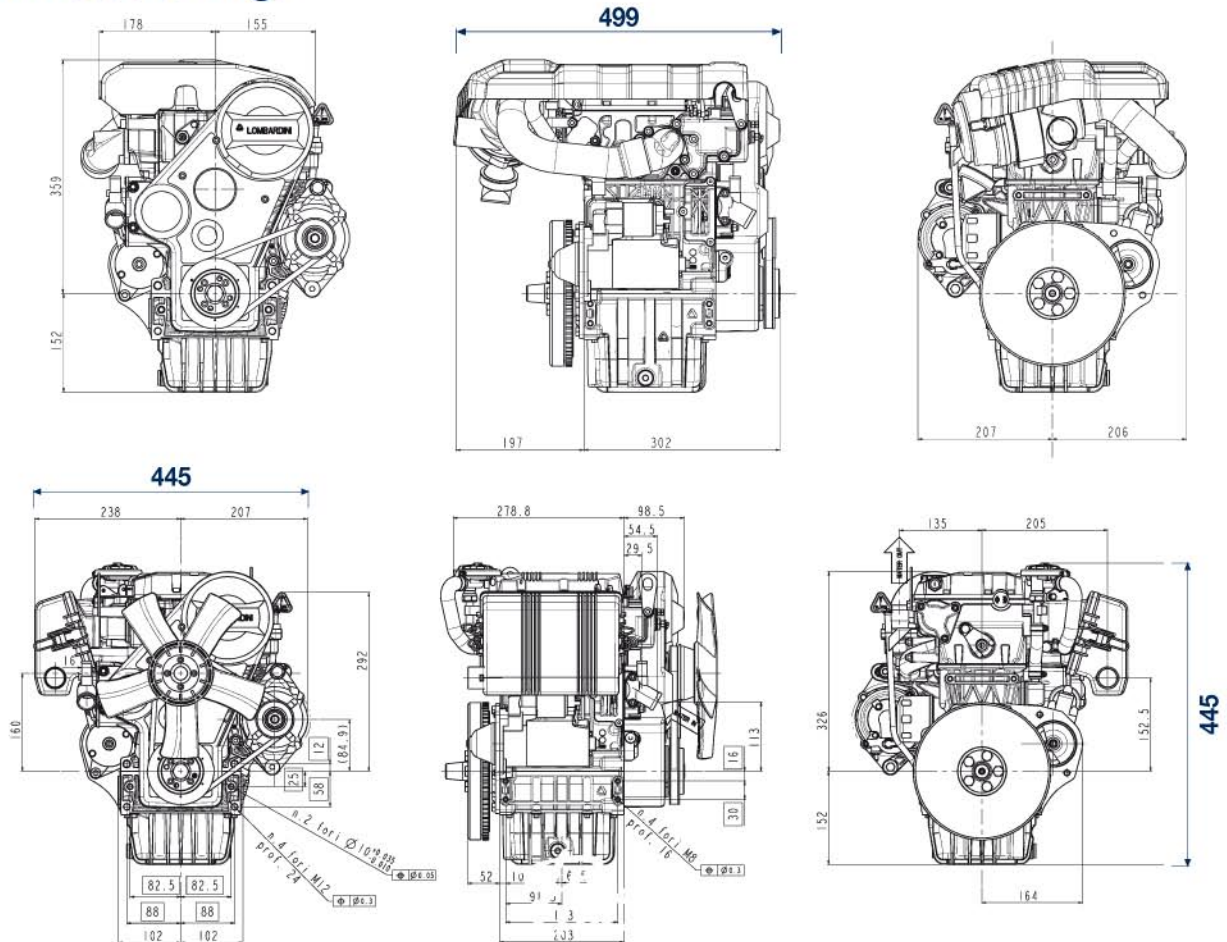


- N** Power curve - 80/1269/CEE - ISO 1585 -
- Mt** Torque curve - (N curve)
- Cs** Specific fuel consumption - (NB curve)

Power ratings refer to engines equiped with air filter, standard muffler, after being run in and in ambient conditions of 20°C and 1 bar. Power levels drop by 1% every 100m altitude and by 2% every 5°C above 20°C.



## Technical drawings \*



\* More specific dimensions are available on [www.lombardini.it](http://www.lombardini.it) (see table at the bottom of the page)

### Standard equipment

- External oil filter
- Exhaust manifold
- Intake manifold
- Intake fan
- Accelerator control
- Electric starter and 12 V alternator
- Thermostatic valve
- Electrical fuel feeding pump
- Starter plate
- Flywheel with ring gear
- Use and maintenance – spare parts booklet

### Special accessories

- Clutch flywheels
- Flanges
- Transmission adaptors
- Hydraulic pump adaptors
- Vacuum system adaptors
- Electrical stop
- Electronic central unit for glow plugs
- Alternators
- Radiators
- Blowing fans
- Engine feet
- Air filters



ISO 9001 Cert. n. 0446 - 1405  
QS. 9000 Cert. n. 2231/0



Via Cav. del Lavoro Adelmo Lombardini, 2  
42100 Reggio Emilia - Italia  
Tel. ++39 0522.3891 - Fax ++39 0522.389503  
[www.lombardini.it](http://www.lombardini.it)

Files for this product available on [www.lombardini.it](http://www.lombardini.it)

Data sheet	LGW502DS.PDF
Owner manual	LGW502OM.PDF
Service manual	LGW502SM.PDF
Technical drawing	LGW502TD.DWG
Power curve	LGW502PC.PDF

LOMBARDINI RESERVES THE RIGHT TO MAKE MODIFICATIONS WITHOUT PRIOR NOTICE

cod. 3558298 - 07-2008