

- 2 cylinders
- 686 cm³
- 12.5 kW/17.0 HP
- 3600 rpm
- Nm. 40.5@2000

Homologation

- EPA TIER 2 ■

Construction

- 4-stroke diesel engine with cylinders in line
- Liquid-cooled with axial fan.
- Indirect injection with injector-pump on head.
- Single-shaft distribution in head.
- Distribution control with timing belt.
- Double pto on the crankshaft.
- Pto on the distribution.
- Counterclockwise rotation.
- Forced lubrication with vane pump on the crankshaft.
- Total passage external oil filter.
- Water pump in the engine block.
- Automatic extra fuel starting device.
- Centrifugal governor.
- Torque regulator.
- Cast iron engine block with re-borable integral liners.
- Aluminium cylinder head.



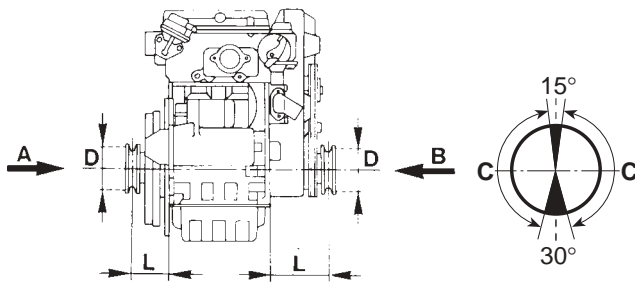
Applications

- Excavator
- Dumper
- Roller
- Access platform
- Generating set
- Sweeper
- High pressure cleaner
- Lawn mower

Specifications

Cylinders	N.	2
Displacement	cm ³	686
Bore	mm	75
Stroke	mm	77,6
Compression ratio		22.8:1
Rating kW/HP	N (80/1269/CEE) ISO 1585	12.5/17.0
	NB ISO 3046 IFN	11.7/16.0
	NA ISO 3046 ICXN	10.7/14.5
Max. torque	Nm.	40.5@2000
Max. torque 3 P.T.O.	Nm.	37.0@1800
Min. idling speed		900
Water pump delivery at 3600 r.p.m.	l/min.	40 (-)
Oil consumption	kg/h.	0.009
Oil sump capacity	l	1.6
Min. allowable oil pressure	bar	1.5
Max. allowable inclination for short periods of operation (peak values)		25° (35°)
Vol. of air required for correct cooling @ 3600 r.p.m.	l/min.	1240
Vol. of air required for correct combustion @ 3600 r.p.m.	m ³ /min.	43
Dry weight	kg	66
Recommended battery	V/Ah	12/44

Minimum pulley diameters for belt drive



$$\text{V belt} \quad D \text{ (mm)} \geq 143 [L \text{ (mm)} + 101] \frac{N \text{ (kW)}}{n \text{ (RPM)}}$$

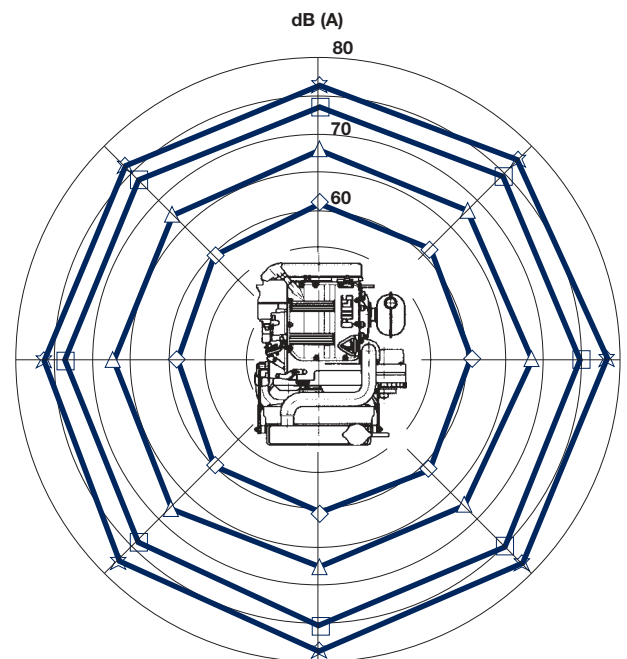
$$\text{Cogged belt} \quad D \text{ (mm)} \geq 99 [L \text{ (mm)} + 101] \frac{N \text{ (kW)}}{n \text{ (RPM)}}$$

Max. allowable axial load in both directions A-B = 300 kg
C - zone in which the radial load acts on the pulley



Sound pressure level dB (A)

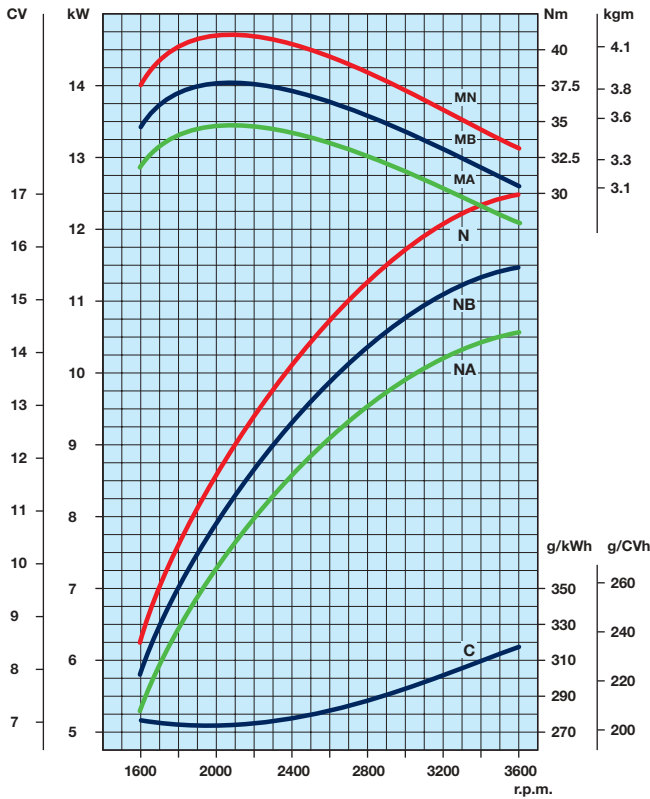
Sound level polar diagram open field - 7 meters microphone - no load running engine.



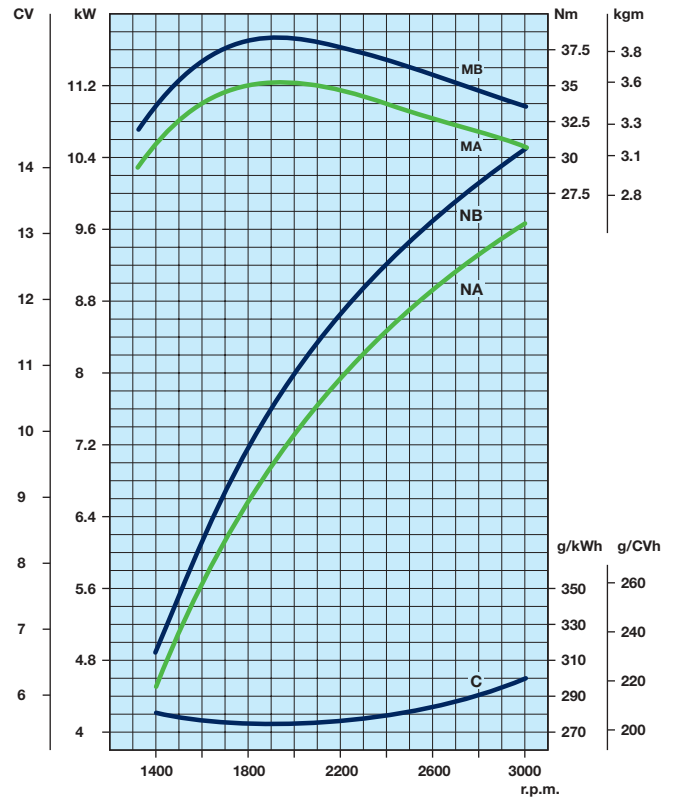
1000 RPM 2000 RPM 3000 RPM 3600 RPM

Curves

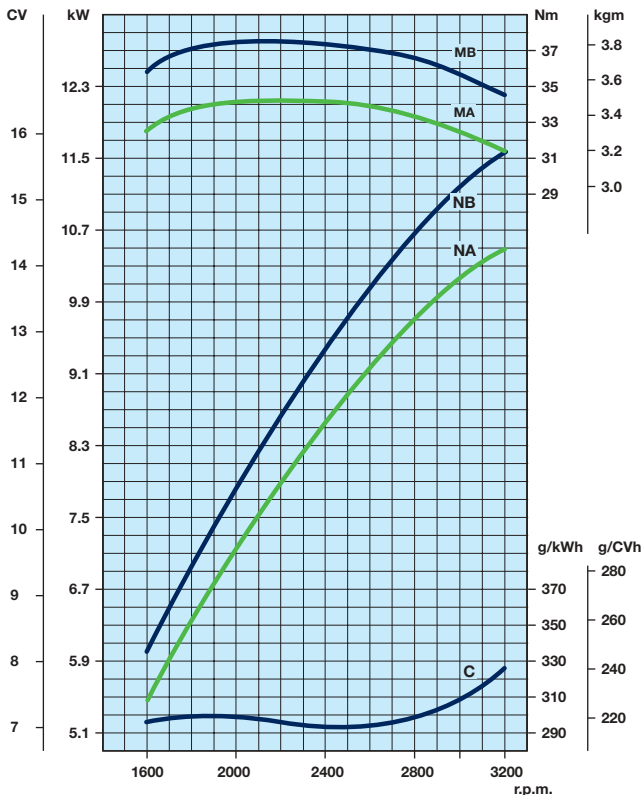
LDW 702 @ 3600 r.p.m. ■



LDW 702 / B1 @ 3000 r.p.m. ■



LDW 702 @ 3200 r.p.m.



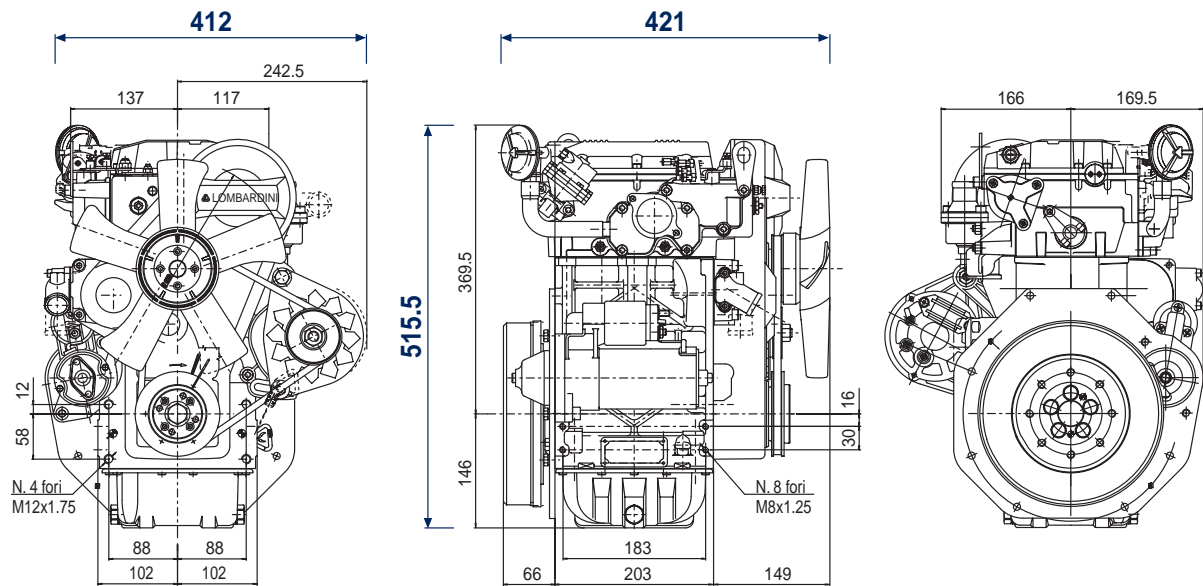
N	Power curve - 80/1269/CEE - ISO 1585 -
NB	Power curve - ISO 3046/1 - IFN -
NA	Power curve - ISO 3046/1 - ICXN -
MN	Torque curve - (N curve)
MB	(B curve - MA (A curve))
C	Specific fuel consumption - (NB curve)

Output power for fixed speed application (including generating sets)

Engine power kW

r.p.m.	Intermittent (NB)	Continuous (NA)
3600	11.5	10.4
3000	11	10
1800	6.5	5.9
1500	5.5	5

Technical drawings *



* More specific dimensions are available on www.lombardini.it (see table at the bottom of the page)

Standard equipment

- External oil filter
- Intake manifold
- Exhaust manifold
- Intake fan
- Accelerator control
- Electric starter and 12V alternator
- Thermostatic valve
- Fuel feed diaphragm pump
- Water pump
- Flanging plate
- Flywheel with ring gear
- Use, maintenance and spare parts booklet

Accessories

- Different guards according to use
- Clutch flywheels
- Flanges
- Transmission adaptors
- Keyswitch panel
- Electric stop
- Electronic plant for plugs
- Alternators 12V or 24V
- Radiators
- Blowing fan
- Engine feet
- Fuel tanks
- Mufflers
- Dry air-cleaners mounted and separated
- Cyclonic precleaners
- Fuel filter on engine
- High capacity oil sumps
- Cab heating system



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

Files for this product available on www.lombardini.it

Data sheet	LDW702DS.PDF
Owner manual	LDW702OM.PDF
Service manual	LDW702SM.PDF
Technical drawing	LDW702TD.DWG
Power curve	LDW702PC.PDF

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mod. 50981/5