



- 1 cylinder
- 224 cm³
- 3.5 kW/4.8 HP
- 3600 rpm
- Nm. 10.4@2400

Homologation

- ECE R 24

Construction

- 4 -stroke air cooled diesel engine.
- Conical power take-off on crankshaft.
- Anticlockwise rotation.
- Direct injection.
- Forced lubrication with oil pump.
- Centrifugal mass governor.
- Built-in full flow oil filter.
- Oil breathing blow-by with safety device.
- Automatic mechanical fuel supplement.
- Self bleeding fuel system.
- Torque regulator.
- Automatic compression release.
- Die-cast aluminium crankcase with integral cast iron cylinder liner.
- Aluminium alloy cylinder head.
- Built-in rigid feet.

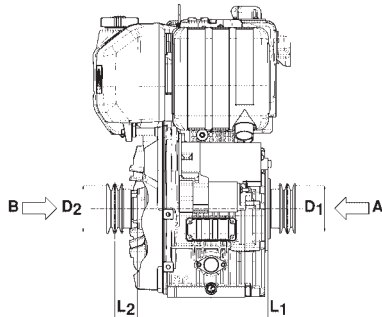


Applications

- Two-wheel tractor
- Agricultural mower
- Agricultural pump
- High pressure cleaner
- Generating set
- Vibrating plate
- Hydraulic power pack

Specifications

Cylinders	N.	1
Displacement	cm ³	224
Bore	mm	69
Stroke	mm	60
Compression ratio		21:1
Rating kW/HP	N (80/1269/CEE) ISO 1585	3.5/4.8
	NB ISO 3046 IFN	3.3/4.5
	NA ISO 3046 ICXN	3.1/4.2
Max. torque	Nm.	10.4@2400
Min. idling speed		950÷1000
Fuel tank capacity	l	3
Oil consumption	kg/h.	0.0021
Oil sump capacity	l	0.9
Min. allowable oil pressure	bar	1÷1.5
Max. allowable inclination for short periods of operation (peak values)		25° (35°)
Vol. of air required for correct combustion @ 3600 r.p.m.	l/min.	350
Vol. of air required for correct cooling @ 3600 r.p.m.	l/min.	3800
Dry weight	kg	28
Recommended battery	V/Ah	12/36
Minimum pulley diameters for belt drive		



$$D_2 \text{ (mm)} \geq 740 [90 + L_2 \text{ (mm)}] \frac{N \text{ (kW)}}{n \text{ (RPM)}}$$

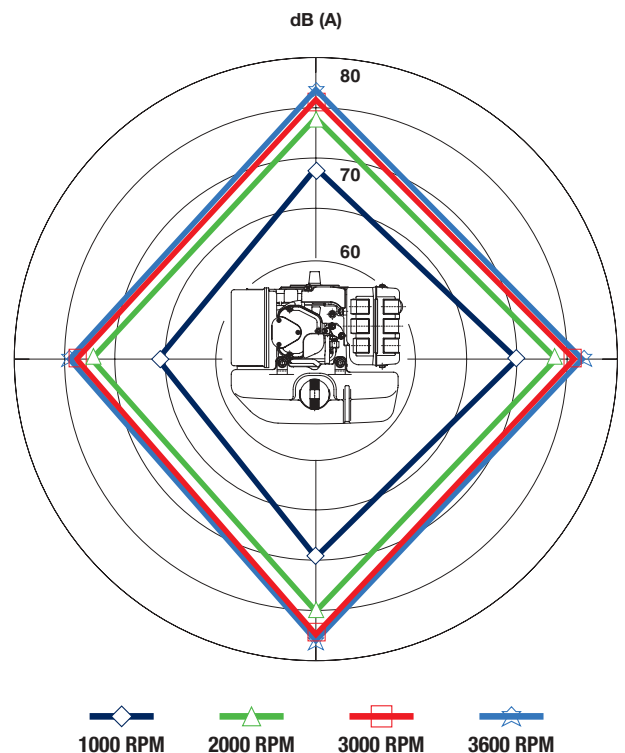
$$D_1 \text{ (mm)} \geq 820 [55 + L_1 \text{ (mm)}] \frac{N \text{ (kW)}}{n \text{ (RPM)}}$$

Max. allowable axial load in both directions A-B = 150 kg



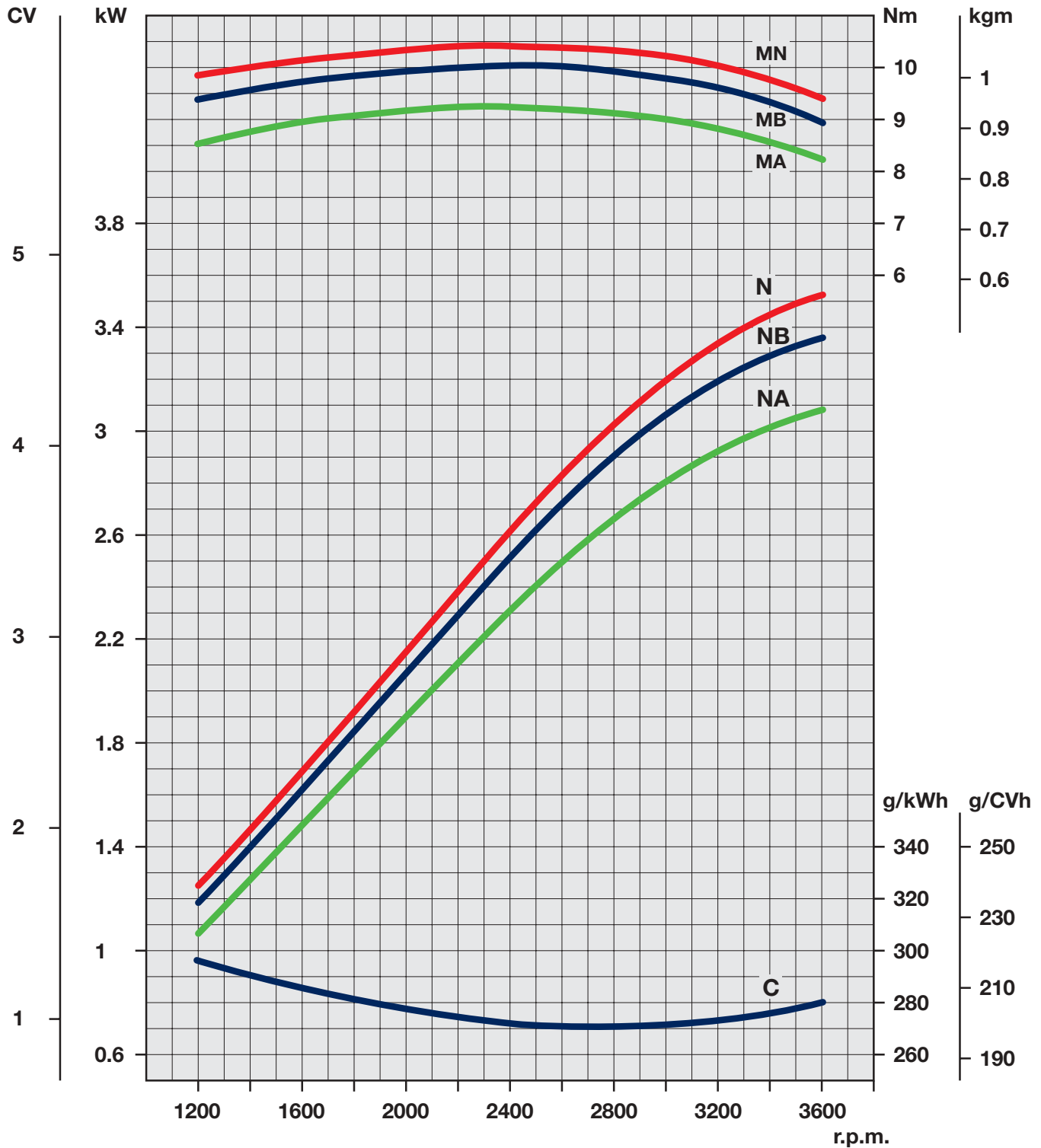
Sound pressure level dB (A)

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



SERIE RY

Curves RY50

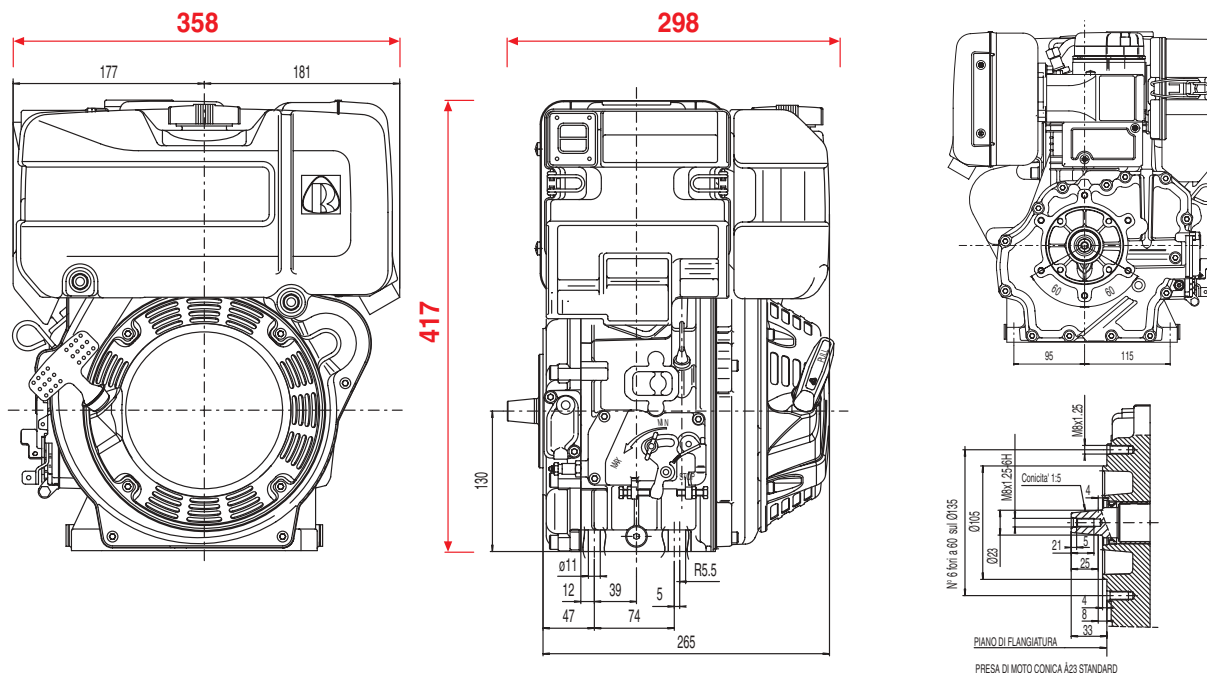


N Power curve - 80/1269/CEE - ISO 1585 -
NB Power curve - ISO 3046/1 - IFN -
NA Power curve - ISO 3046/1 - ICXN -

MN Torque curve - (N curve)
MB (B curve - **MA** (A curve)
C Specific fuel consumption - (NB curve)



Technical drawings *



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

Standard equipment

Recoil starting and automatic compression release
 Fuel tank
 Fuel filter
 Dry-air cleaner
 Exhaust muffler protection
 Accelerator and stop manual control
 Flange with \varnothing 23 mm conical shaft
 Standard paint: red paint on sheet metal parts
 User maintenance - spare parts booklet

Accessories on request

Power take-off flywheel side (engines with electrical starting)
 Power take-off with flanging and special shaft
 Parallel crankshaft
 Internal dynamic balancer
 Oil-bath air-cleaner
 Electric start
 Control board
 Emergency stop through electrovalve
 Accelerator and stop remote control
 Single lever panel
 Panel protection
 Fuel lift pump
 Oil dipstick on cylinder head
 Oil pressure switch
 Oil temperature switch
 Glow plug on intake manifold
 Recoil with denoising cover
 Grass protection for engine cooling

Files for this product available on www.ruggerini.it

Data sheet	RY50DS.PDF
Owner manual	RY50OM.PDF
Service manual	RY50SM.PDF
Technical drawing	RY50TD.DWG
Power curve	RY50PC.PDF



Via Cav. del Lavoro Adelmo Lombardini, 2
 42100 Reggio Emilia - Italia
 Tel. ++39 0522.3891 - Fax ++39 0522.389503
www.ruggerini.it

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