

CREATING POWER SOLUTIONS.







2G40 · 2G40H

On the 2G40, power take off possibilities are available on the crankshaft [conical drive shaft] and directly on the flywheel. The 2G40H version also provides a power take off with gear wheels for operating hydraulic pumps. The matching hydraulic pumps can, of course, also be obtained from Hatz.



Flexibility through additional equipment

Oil bath or dry air filter, additional oil sump, instrument box, fuel tanks, 12 V/24 V electrics and a number of connection housings. The list of standard available options is virtually endless.

Hatz G-series: The two-cylinder power package

As our customers can confirm, Hatz diesel engines are the most robust and durable in this market segment. Where they are installed makes no difference. Whether at very low temperatures or in a tropical climate, the Hatz 2G40 carries out its job reliably. With regular maintenance many thousands of hours are commonplace, using Hatz original spare parts, of course.

Lightweight and compact

Like all Hatz diesel engines, the extremely compactly built two-cylinder engine is distinguished by its high reliability and, not least, flexible in application thanks to its dimensions. The light metal construction of the housing and die-cast aluminum cylinder heads keep the weight low, between 88 kg and 105 kg depending on the version.

Environmental aspects

The Hatz 2G40 is exclusively produced and marketed to the specification of the strict US exhaust standard of the EPA [Environmental Protection Agency]. Measures for reducing inner engine friction losses result in high efficiency, and thus also in an extremely low specific fuel consumption.

Low operating costs

The air cooled 2G40 is the absolute front runner in terms of total operating costs. This is due not only to the low fuel and engine oil consumption, but also to the remarkably low maintenance costs. For example, the engine does without any belts at all. In the basic version with oil bath filter, just the fuel and engine oil filter as well as the engine oil are all that need to be changed regularly.

Robust and durable design



Hatz engines are designed for an exceptionally long service life. The best possible materials and components coupled with uncompromising quality assurance contribute to the fact that Hatz engines have

been setting standards in the industry for many years when it comes to robustness and service life. And should, contrary to expectations, a spare part actually be needed, more than 500 service partners in 115 countries are available quickly and dependably with advice and assistance as well as original spare parts.

Sales area (exhaust certificate)		2640
USA (EPA/CARB constant speed)	(r.p.m.)	2000-3000
USA (EPA 2-speed)	(r.p.m.)	2300-3000
USA (EPA variable speed)	(r.p.m.)	2300-3000
India CPCB I (Genset)	(r.p.m.)	3000
All others (non-EPA)	(r.p.m.)	1500-3600

IFN rating ICFN rating F/IFN/ICFN rating

Technical data, Performance Table

Tec	hnical data	2640						
Ð	Туре	Air cooled 2-cylinder 4-stroke diesel engine with direct injection						
	Bore x stroke (mm / inches)	92 x 75 / 3.62 x 2.95						
	Displacement (I / cu.in.)	0.997 / 60.84						
	Mean piston speed at 3000 r.p.m. (m/s / ft/min)	7.5 / 1476						
Engi	Compression ratio		20.5 : 1					
	Lub. oil consumption, related to full load		app	rox. 1 % of fuel consu	Imption			
	Oil filling max - min (I / US qts)	2.5 - 1.7 / 2.6 - 1.8						
	Speed control · Lowest idle speed	approx. 1000 r.p.m.						
	 Static speed droop 	approx. 5% at 3000 r.p.m.						
	Amount of combustion air at 3000 r.p.m. approx. 1] (m³/min / cu.ft./min)			1.42 / 50.3				
mation	Amount of cooling air at 3000 r.p.m. approx. ¹⁾ (m³/min / cu.ft./min)	10.5 / 370						
n info	Mass moment of inertia J (kgm² / lb.ft²)			0.16 / 3.78				
atior	Starter	12 V - 2.0 kW — 24 V - 3.0 kW						
Install	Alternator charging current at 3000 r.p.m. 1500 r.p.m.		14 V - 23 A, 28 14 V - 10 A, 2	8V-12A — 14V 28V-5A — 14V	- 55 A, 28 V - 27 A - 55 A, 28 V - 27 A			
	Battery capacity (min / max Ah)	12 V - 45Ah / 88 Ah — 24 V - 45 Ah / 55 Ah						
Weight		Engine with rope start	Engine with electric start 12 V, flywheel alternator 23 A	Engine with electric start 24 V, flywheel alternator 12 A	Engine with electric start 12 V, belt-driven alternator 55 A	Engine with electric start 24 V, belt-driven alternator 27 A		
	Weight of engine versions [kg / lbs.]	88.8 / 195.8	96.8 / 213.4	99.1/ 218.58	103.4 / 228.0	105.2 / 232.0		

^{1]} For other speeds there is a linear reduction in the air requirement.

Performance Table		2640		
	(r.p.m.)	kW	hp	
Vehicle power acc. to	3600	17.0	23.1	
DIN ISO 1585. (kW / hp)	3000	16.2	22.0	
	2600	14.6	19.9	
Blocked	3600	16.3	22.2	
ISO brake horsepower (IFN)	3000	15.5	21.1	
loading acc. to ISO 3046-1. (kW / hp)	2600	13.9	18.9	
Blocked ISO brake horsepower (IFN)	3600	15.6	21.2	
for intermittent loading	3000	14.7	20.0	
acc. to ISU 3046-1. [kw / np]	2600	13.4	18.2	
EPA 2-Speed	2300	12.0	16.3	
	2000	10.5	14.3	
	1800	9.3	12.6	
	1500	7.4	10.1	
ISO standard power output (ICXN)	3000	13.7	18.6	
[10% overload permissible]. [kW / hp]	2600	12.6	17.1	
EPA variable; EPA constant	2300	11.2	15.2	
Blocked ISO standard power output (no overload permissible) acc. to ISO 3046-1. (kW / hp) For constant speed and constant load (ICFN).	2000	9.8	13.3	



Power output, torque und fuel consumption

 Power ratings

 Power ratings refer to standard reference conditions of

 ISO 3046-1 (IFN):

 + 25 °C (77 °F), 100 kPa, relative humidity 30 %. The specified power

* 25 °C (77 °F), 100 kPa, relative number 30 %. The specified power is reached during the running-in period, and can be 5 % less on deliv-ery. Power reduction acc. to ISO 3046-1. Standard values: More than 100 m above sea level approx. 1 % per 100 m. Above 25 °C (77 °F) approx. 4 % per 10 °C (50 °F). The power taken from the alternator also has to be added to the power collustion.

power calculation.

Maintenance and operating points



Power take off



Power take off		2G40
e	А	100%
ferat que	В	100%
tor	С	30.6 Nm
-	F1	3400 N
sible loac	F2	F2 = <u>261 000</u> [N]* L1 (mm]
armis in the second secon	F3	3400 N
ă.	F4	F4 =
		L2 (mm) *) with upward belt pull values reduced to 55 %.

2G40









Spread at box dimensions ± 3 mm due to tolerance. Drawings with detail and connection dimensions as PDF resp. DXF can be found at www.HATZ-DIESEL.com.

*) Max. tilt position

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