

SIGMA G BUILD ENGINE

SW 20 - 18

*Power range: 25.2 kW; 33.8 bhp
Fixed speed: 1800 r/min*

NATURALLY ASPIRATED HEAVY DUTY G BUILD DIESEL ENGINE

SPECIAL ATTRIBUTES

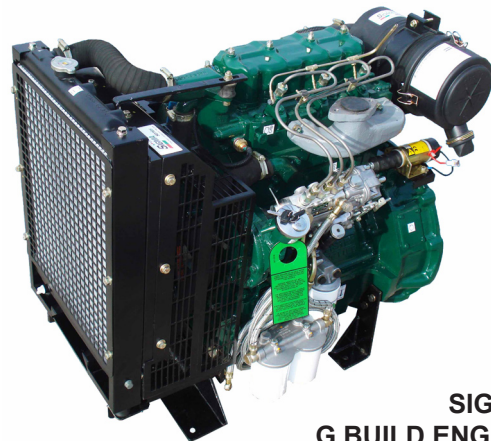
- suitable for generating sets
- 250-hour service intervals
- continuous operation in ambient temperatures up to 50°C (122°F)
- unaided cold start down to -2°C (28.4°F)

BASIC ENGINE CHARACTERISTICS

- three cylinders
- diesel fuelled
- direct injection
- liquid cooled
- naturally aspirated

DESIGN FEATURES AND EQUIPMENT

- standard oil and fuel filters
- 12V electric start
- anti clockwise rotation, looking on flywheel
- SAE 10" flywheel
- SAE3 flywheel housing
- radiator with fan guard
- cast-iron crankcase
- self-vent fuel system
- inline fuel injection pump
- flywheel with ring gear
- air cleaner
- low oil pressure switch
- spin-on lubricating oil filter
- primary/secondary fuel filter
- inlet and exhaust manifolds
- operators' handbook
- instrumentation package



**SIGMA
G BUILD ENGINE**

POWER OUTPUTS TO ISO 3046

		SW 20 - 18
r/min		1800
Continuous Power	kW	25.2
	bhp	33.8
Overload Power	kW	27.7
	bhp	37.2

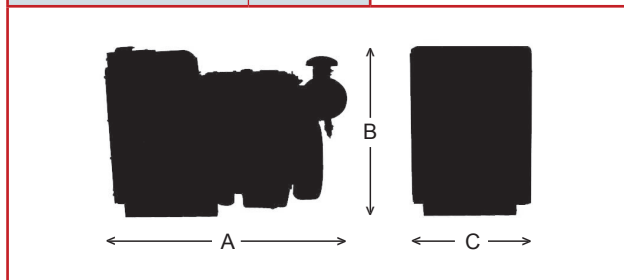
FUEL CONSUMPTION

		SW 20 - 18
r/min		1800
litre/hr @ 100% power (continuous power)		7.0

Notes: 1. Power ratings are measured at the flywheel end.
2. Power ratings and fuel consumption figures apply to a fully run-in, non-derated engine without a radiator and fan fitted, and without power-absorbing accessories or transmission equipment.

APPROXIMATE DIMENSIONS AND WEIGHT

Length (A)	mm	947
	in	37.28
Height (B)	mm	785
	in	30.90
Width (C)	mm	730
	in	28.74
Dry Weight	kg	340
	lb	750



RATING DEFINITIONS, TO ISO 3046

ISO Standard Conditions

Barometric pressure	100 kPa
Relative humidity	30%
Ambient temperature at air inlet manifold	25°C

Fixed speed power: continuous power (ICN)

The power in kW which the engine is capable of delivering continuously at the stated crankshaft speed, under ISO standard conditions, measured at the flywheel without power-absorbing accessories, provided that the engine is overhauled and maintained in good operating condition and that fuel to BS EN 590 Class A1 or A2, and lubricating oils to the correct performance specification and viscosity classification as recommended by Lister Petter Limited, are used.

Fixed speed power: overload power (ICXN)

The maximum power in kW which the engine is capable of delivering intermittently at the stated crankshaft speed for a period not exceeding one hour in any period of twelve hours' continuous running, immediately after working at the continuous power, under

TECHNICAL DATA

Model	SW 20 - 18	
Number of cylinders	3	
Firing order (number 1 cylinder is at gear end)	1 2 3	
Type of fuel injection	Direct	
Aspiration	Natural	
Direction of rotation, looking on flywheel	Anti Clockwise	
Cylinder bore	mm	91.44
	in	3.60
Stroke	mm	127
	in	5
Total cylinder capacity	litre	2.50
	in ³	152.4
Compression ratio	18.5:1	
Rated maximum full-load speed (r/min)	1800	
Mean piston speed	m/sec	7.6
	f/sec	25
Oil consumption	Maximum 0.3% of fuel consumption	

ISO standard conditions and with the provisions specified for continuous power above.

De-rating

For non-standard site conditions, reference should be made to relevant BS, ISO and DIN standards.

A comprehensive range of options allows you to select a specification that matches your requirements. Please ask your Lister Petter distributor (see panel below right).

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