



# SIGMA Series

## SW 25 - 22 Engine

Power ranges: 23 - 36.4 kW; 30.8 - 48.8 bhp  
Variable speed: 1200 - 2200 r/min

*Naturally aspirated heavy-duty variable speed diesel engine*

### Special Attributes

- designed for 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

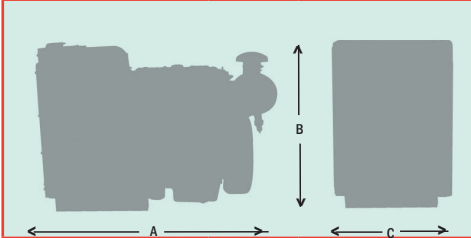
- standard oil and fuel filters
- 12 V electric start
- anticlockwise rotation, looking on flywheel
- SAE 10" flywheel
- SAE3 flywheel housing
- radiator with fan guard
- cast-iron crankcase
- self-vent fuel system
- inline fuel injection pump
- flywheel with ring gear
- air cleaner
- low oil-pressure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



Technical Data		
Engine family	SW 25	
Number of cylinders	3	
Firing order (number 1 cylinder is at gear end)	1 3 2	
Fuel injection	Direct injection	
Aspiration	Natural	
Direction of rotation, looking on flywheel	Anticlockwise	
Nominal cylinder bore	mm	105
	in	4.13
Stroke	mm	110
	in	4.33
Total cylinder capacity	litre	2.86
	in <sup>3</sup>	174.3
Compression ratio	19:1	
Rated maximum full-load speed	r/min	2200
Idling speed (minimum)	r/min	700
Oil consumption	Maximum 0.3% of fuel consumption	

**SIGMA Series: Variable Speed Engine Technical Data Sheet**

Dimensions and Weight		
Length (A)	mm	1065
	in	41.9
Height (B)	mm	978
	in	38.5
Width (C)	mm	730
	in	28.74
Dry Weight	kg	441
	lb	971



Power Outputs to ISO3046						
		r/min	1200	1500	1800	2200
Variable speed	Fuel Stop Power	kW	23	29	33	36.4
		bhp	30.8	38.9	44.2	48.8

Torque to ISO3046						
		r/min	1200	1500	1800	2200
Variable speed	Fuel Stop Torque	Nm	183	185	175	157
		lbf ft	135	136	129	116

Fuel Consumption					
Fuel Stop power	r/min	1200	1500	1800	2200
	litre/hr	5.2	6.6	8.4	9.7

**1. Variable speed: fuel-stop power, continuous power (IFN)**

The maximum power in kW which an engine is capable of delivering continuously at stated crankshaft speed, with the fuel limited so that the fuel stop power cannot be exceeded. The output ratings apply only to fully run - in engines without radiator, fan or other power absorbing accessories.

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

**Distributor's Address**

Lister Petter have made efforts to ensure that the information in this data sheet is accurate but reserve the right to amend specifications and information without notice and without obligation or liability.



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