

BOOSTER 15

Twin-cylinder piston pump

Booster 15 diesel engine Stage 5 - 22.3 kW
1106120

Booster 15 R diesel engine Stage 5 - 22.3 kW
EU road-towable approved
1106121



Compact and reliable, it is equipped with:

- Yanmar engine Stage 5
- Hydraulic pump with variable flow
- IMER electronic control board
- "Cool-Fast" cooling system
- Soundproofed engine compartment



Description

Booster 15 is an extremely small and light stationary concrete pump, capable of pumping concrete with a maximum grain size of 25 mm, or projecting micro concrete with a grain size of up to 12 mm. The machine is equipped with a variable displacement hydraulic pump that allows to vary the number of S-valve switches per minute, increasing or reducing the useful flow rate of the material according to the application.

Ideal for small and medium-sized construction sites, especially if located in places where the operating spaces are small and / or difficult to reach with other pumping systems.

It is suitable for pumping:

- Concrete with a maximum grain size of 25 mm (1")
- Fiber-reinforced concrete
- Self-compacting concrete
- Refractory concrete (only for wet application)
- Grouting or fill core grout
- Self-levelling cement / anhydride based flow screeds

It is suitable for spraying:

- Shotcrete
- Shotcrete with setting accelerating additives
- Structural mortar, also fiber-reinforced

Booster 15 can be optimized to meet specific pumping or spraying needs, thanks to the availability of a wide range of optional accessories.

Operation

Booster 15 is a two-cylinder piston pump with exchange S-tube valve. The pumping cylinders are 120 mm in diameter and have a stroke of 700 mm. The S-valve has an elongated conical shape (from Ø 120 to Ø 100) and is equipped with a special self-compensation system for the wear of the sealing plates.

Booster 15 is based on a completely hydraulic free flow operation, capable of developing 220 bar of pressure. The particular and exclusive cooling system "Cool Fast" of the hydraulic oil provides the use of a special auxiliary hydraulic pump and a generously sized air / oil radiator. The "Cool Fast" system is able to guarantee continuous operation even with high ambient temperatures.

The material must be unloaded into the hopper directly from the batching plant / truck mixer / dumper / large mixers. Passing through the vibrating grid, it is filtered by any excessively large stones. In the case of pumping with small diameter hoses (Ø 50 mm), the machine can be equipped with a thin mesh grid.

Booster 15 works with the following cycle:

- The agitator in the bottom of the hopper accompanies the material in front of the dispensing cylinders.
- The two pistons inside the dispensing cylinders suck the material from the hopper until it reaches its limit switch backwards.
- The exchange sensors detect the arrival of the piston and control, through the exchange cylinders, the position of the S-valve.
- The piston that had finished its backward stroke (in suction) now pushes and pressurizes the material into the pipe through the S valve, while the other piston is engaged in the suction phase.

The cycle is renewed from 4 to 34 times per minute, depending on how the operator sets the material flow rate in the control panel.

**EU road-towable approved
(approved up to 140 Km / h).**

With braking system, 195 R14 wheels, wheel lock wedges, mudguards, light bar and anti-cyclist bars. Standard on Booster 15 R.



Adjustable handling bar
Standard on Booster 15



5-function cable
remote control (standard):

- March
- Stop
- Inversion
- Flow rate increase
- Flow rate decrease



ANTI-SHOCK control panel:

- Material flow regulation
- Hydraulic pressure control gauges
- Emergency operating system in case of failure of the exchange sensors
- Hour counter



Maximum performance thanks to:

- Quick exchange of S-valve tube
- Cylinder with Hardox® steel wear plates
- Self-compensation system of wear
- Agitator shaft to avoid segregation of the material during work

Standard Equipment

- Liquid cooled diesel engine - Yanmar 3TNV82A-BDYE Stage 5
- Hopper with agitator shaft
- Hopper grid with 12V electric vibrator
- Free flow hydraulic system
- Pumping group with S-valve tube
- Victaulic 4" delivery manifold (Ø 100 mm)
- ANTI-SHOCK control panel
- Hour meter
- Cable remote control 5 functions
- Tool kit for replacing pumping pistons
- Manual greasing pump
- Axle with wheels 195R14
- Adjustable handling bar (Booster 15 version)
- EU road-towable approved (Booster 15 R version)

Technical data

Diesel engine Stage 5		3TNV82A-BDYE2
Installed power	kW	22.3
Pumping system		Two-cylinder piston
Grain size	mm	25
Material flow*	m ³ /h	2-15
Pumping pressure*	bar	70
Pipe connection manifold	mm	Victaulic 25 (4")
Hopper capacity	l	240
Loading height	mm	1080
Horizontal pumping distance	m	200
Pumping height	m	80
Pumping cylinder size	mm	120
Pumping cylinder stroke	mm	700
Number of S-valve exchanges	min	4 - 34
Machine dimensions w / l / h	mm	1494/4100/1540
Machine weight	kg	1550
Packed machine dimensions w / l / h	mm	1550/1550/3500
Packed machine weight	kg	1610
Sound pressure level	dB (A)	<103

(*) The data on distance, height and hourly output are non-binding indicative values, which vary according to the consistency of the materials and the chosen configuration. Maximum pumping pressure and maximum flow are inversely proportional, never obtainable simultaneously.

