

PREMIUM LINE

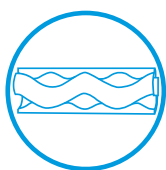
S50 300-06



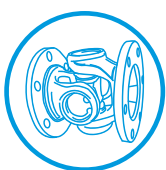
6 BAR
Max. pressure

71 m³/h
Max. flow rate

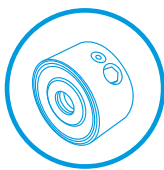
88 mm
Solids pass



Hydraulic, large
solids pass, and
wear resistance



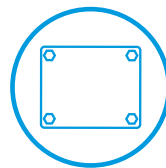
Cardan
transmission



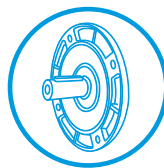
Lubricated
mechanical seal



Double ball
bearings support



EDS system,
easy and quick
disassembly



IEC Standardized
drive

Helical pumps featuring high suction capacity up to -0.8 bar. Furthermore, they distinguish themselves by their capability to reverse direction of rotation depending on the needs of the process.

They have an entire modular design, four inspection ports, and a quick disassembly system, which includes an absolute standardized drive.

The Premium series stands out for its rugged mechanical construction, making it ideally suitable for complex applications containing abrasive fluids, a high percentage of viscous or dry media such as urban sludge, slurry, digestate, organic liquid wastes, paper pulp, polymers, fats, oils and grease, and organic crumbled wastes among others.

Technical specifications

Structural design and finishes

Process: Horizontal suction
Design: Double ball bearings sturdy support
Transmission system: Needle bearings car-dan transmission lubricated in grease
Sealing system: Mechanical seal lubricated in oil. Maximum temperature 150°C. Maxi-mum pressure 23 bar
Suction/discharge connections: EN 1092 DN150 PN16 - ANSI 6" 150 LBS

Rotating direction: Reversible
Inspection ports: On both sides (150x100 mm)
Design, maximum pressure: 6 bar (1 stage)
Rotor geometry: "S" type, featuring high wear resistance
Design, maximum temperature: 80°C
Painting procedure: C3-M according to DIN EN ISO 12944-2 , saturated polyester powder coating. Layer thickness from 100 to 120µm.

Drive system

Reducer

Reducer type: Helical gear drive
Connection to pump: Key
Reducer operation: B5 flange, IEC standardized design

Motor

Motor type: Electric TEFC, IEC standardized motor
Voltage: 220-400 V / 400-690 V, 50-60 Hz, 3 PH
Efficiency: IE3 Premium
Insulation: F Class type
Protection: IP-55
Thermal protection: PTC 150°C thermistor

Construction materials

Housing: GG-25 cast iron
Stator: NBR
Cardan: Cast iron with parts in contact with the fluid, stainless steel. AISI 304 / 316 / Du-plex

Transmission protection: Rubber sleeve protection with inner textile ply reinforce-ment in NBR / EPDM
Shaft drive: Stainless steel AISI 304 / 316 / Duplex
Base support: 3 feet in cast iron

	STD	BG	V2A	FULL+
Rotor	1.0571 HCP AISI 1024 HCP	1.2436H AISI D6-H	1.4301 HCP AISI 304 HCP	1.4571 HCP AISI 316 HCP
Mechanical seal	SiC/SiC/FPM Oil lubricated	SiC/SiC/FPM Oil lubricated	SiC/SiC/FPM Oil lubricated	SiC/SiC/FPM Oil lubricated
Housing	GG-25	GG-25	GG-25	1.4571 HCP AISI 316 HCP

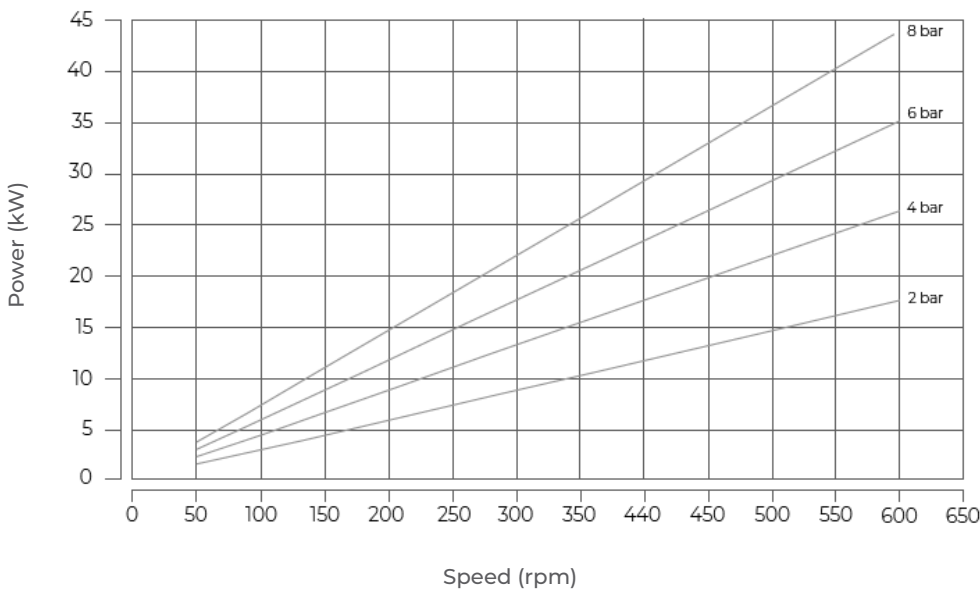
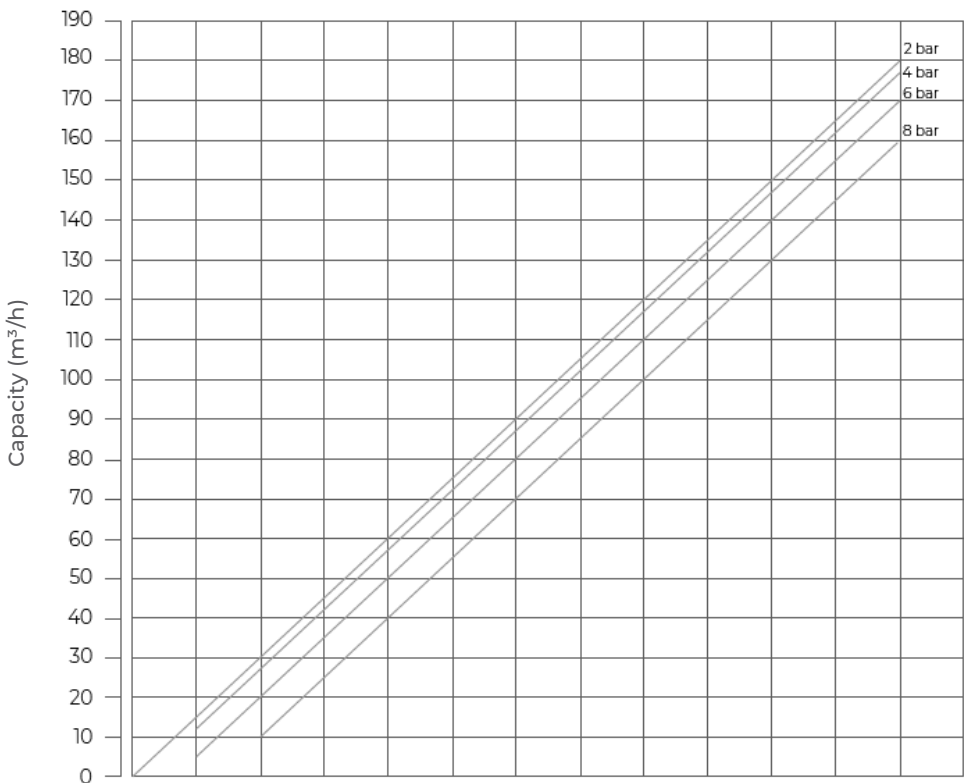
Other combinations available on demand

S50 300-06

Nominal flow (m³/h 50 Hz)	RPM (50 Hz)	Motor (kW)	Flow rate range (m³/h 20-65 Hz)	Solids pass (mm)
21	69	5.5	8 a 23	88
33	110	7.5	13 a 43	88
50	165	11	20 a 65	88
71	236	15	28 a 92	88

Usual models. Consult availability for other flow rates different than shown.

Flow curve



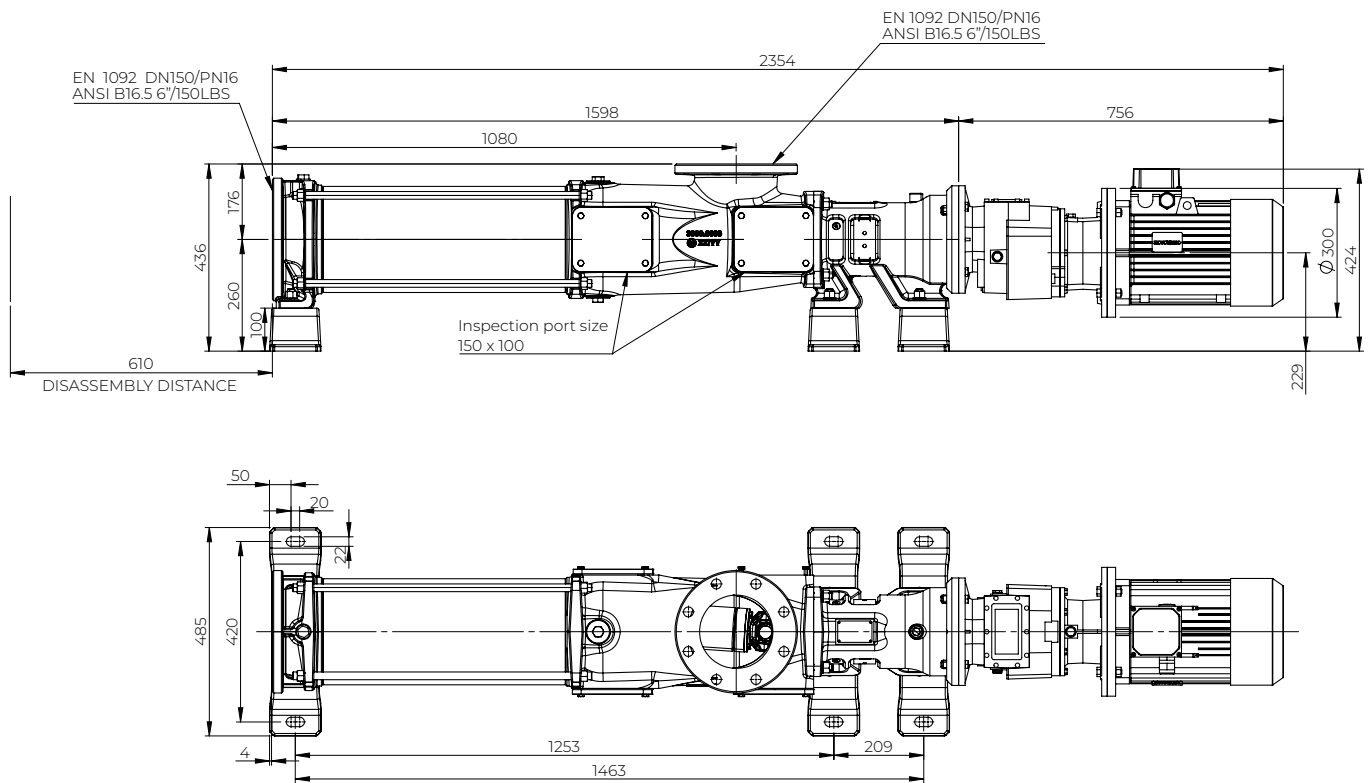
Values/figures measured with water at 20 °C

For information purposes only. Should you require exact flow rate figures, performance tests need to be carried out in our test bench.

The information on the product is subject to changes; please contact factory for further details. All images are for illustrative purposes only.

The actual product shown in this brochure may vary.

Dimensional technical drawing



Optional equipment

Frequency variators

Constant torque / Heavy load / overload at start-up: 150%, EMC filter included.
 Inputs: 6 digital / 2 analogical
 Outputs: 2 digital / 2 analogical
 Bus RS485
 Options:
 >IP-20 for an electric board
 >IP-66 for outdoors installation
 >IP-67 Integrated motor casing

"Plug & Play" Electric Panel

Metal cabinet, working ,malfunctioning, and protection leds.
 >Direct start-up option with thermal-magnetic circuit breaker, start / stop selector, pump protection in case of pump running dry
 >Frequency converter option available, potentiometer, manual selector / stop / auto, digital and analogical input in automatic mode

Protection system in case of dry-running

PT100+ probe, temperature control display. Available with a digital output. 230 V, IP-65

Electronic pressure switch:

Pressure controller with a front-flush ceramic diaphragm. Range -1...25bar. Available with 2 configurable outputs. 24V, IP-67

Forced ventilation motor

Monophasic / Triphasic. To function at working frequencies lower than 20Hz

Premium Line features

Inspection ports and EDS easy and quick disassembly system:

Four inspection ports are to be found on the sides of the unit so that maintenance and cleaning are carried out easily in case of clogging or simply to check the internal state of the components.

These ports enable access to the transmission pins, thus facilitating and economizing maintenance tasks.

Moreover, the pump has a blocker to prevent rotation of the shaft, this way avoiding potential issues while disassembling the unit.

Oil-lubricated cartridge sealing system

In the Premium series product range, the sealing system is based on an oil lubricated cartridge mechanical sealing. The faces of the seal are bathed with a lubricated clean fluid and feature no outward springs, in contrast to traditional seals which are lubricated by means of the fluid being pumped.

Rotor and Stator Geometry featuring high efficiency and wear resistance:

The rotor and stator geometry of this pump series guarantees large solids pass together with slow speed rotation, which enhances efficiency and durability of our units compared to other hydraulic pumps on the market.

Standardized drive

Unlike monobloc pumps, our pump-reducer connection is carried out by means of an IEC standardized flange and key, allowing a larger flexibility and cost reduction should you require a reducer replacement.

Rugged construction with ball bearings support

While in operation axial and radial loads are generated and transmitted to the gearbox bearings in the reducer, causing strain and consequently internal gear failure. In order to avoid this, all our Premium pump series are fitted with a sturdy double ball bearings support block design, which absorbs whichever stress is generated, thus protecting the reducer from such overload.

Cardan transmission with needle bearings support

As a power transmission system, our units include a cardan design provided with needle roller bearings lubricated in grease. This system offers considerable mechanical resistance and regular maintenance is not necessary. Its large diameter design makes it almost impossible for hairs and fibers to get tangled up in it, which could bring on clogging inside its casing. This transmission is protected and isolated from the medium being pumped by means of an internally fitted rubber sleeve with textile ply reinforcement.

