

SMN

Single-channel closed impeller

All product images are indicative only



General characteristics

Single-channel closed impeller	
motor power	22,0 kW
poles	4
discharge	DN150 ÷ DN250 horizontal
free passage	max 130 mm
max flow rate	170 l/s
max head	33.0 m

Electromechanical assembly

Electromechanical assembly in GJL-250 cast iron, for submerged operation. Seal set comprising 2 (two) opposing silicon carbide mechanical seals in inspectable oil sump. Ecological dry motor.

Applications

Designed for heavy-duty applications, they are generally used in civil and industrial wastewater treatment plants, for lifting in sewer systems and for pumping industrial sludges. Transporting rainwater containing solids and recycling raw or activated sludges and biological liquids. This series is prefitted for installation of the ZENIT cooling system for dry or semi-submerged installation.

Construction materials

Case	Cast iron EN-GJL 250
Impeller	Cast iron EN-GJL-250
Nuts and bolts	Stainless steel - Class A2-70
Standard gasket	Rubber - NBR
Shaft	Stainless steel - AISI 420
Cooling jacket	Carbon steel or AISI 304 stainless steel
Paint type	Ecological bicomponent epoxy (medium thickness 150 µm)
Set of standard mechanical seals	Two silicon carbide mechanical seals (2SiC)

Operating limits

Maximum operating temperature	40 °C
PH of treated fluid	6 ÷ 14
Viscosity of treated fluid	1 mm ² /s
Maximum immersion depth	20 m
Density of treated fluid	1 Kg/dm ³
Maximum acoustic pressure	70 dB
max starts per hour	20

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Cooling system

Dry installation available using the cooling jacket (see details to page 17)



Cable Gland

Cable gland system to guarantee perfect water-tightness. The universal thread ring-nut can be removed to fix a rigid or flexible duct to the cable gland to protect the power supply cable.



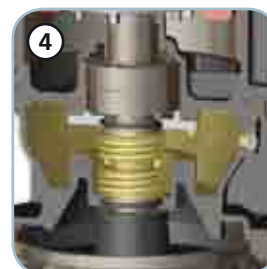
Sensor

Sensor for detecting water in the mechanical seal oil chamber. Connected to an electrical panel, the sensor provides immediate warning of wear on the first mechanical seal, preventing possible damage to the motor.



Mechanical seals

Two silicon carbide (SiC) mechanical seals in oil sump.



Oil sump

Large oil sump to guarantee longer mechanical seal lifetime.



Drive shaft

Impeller connected to the drive shaft by means of tapered coupling.



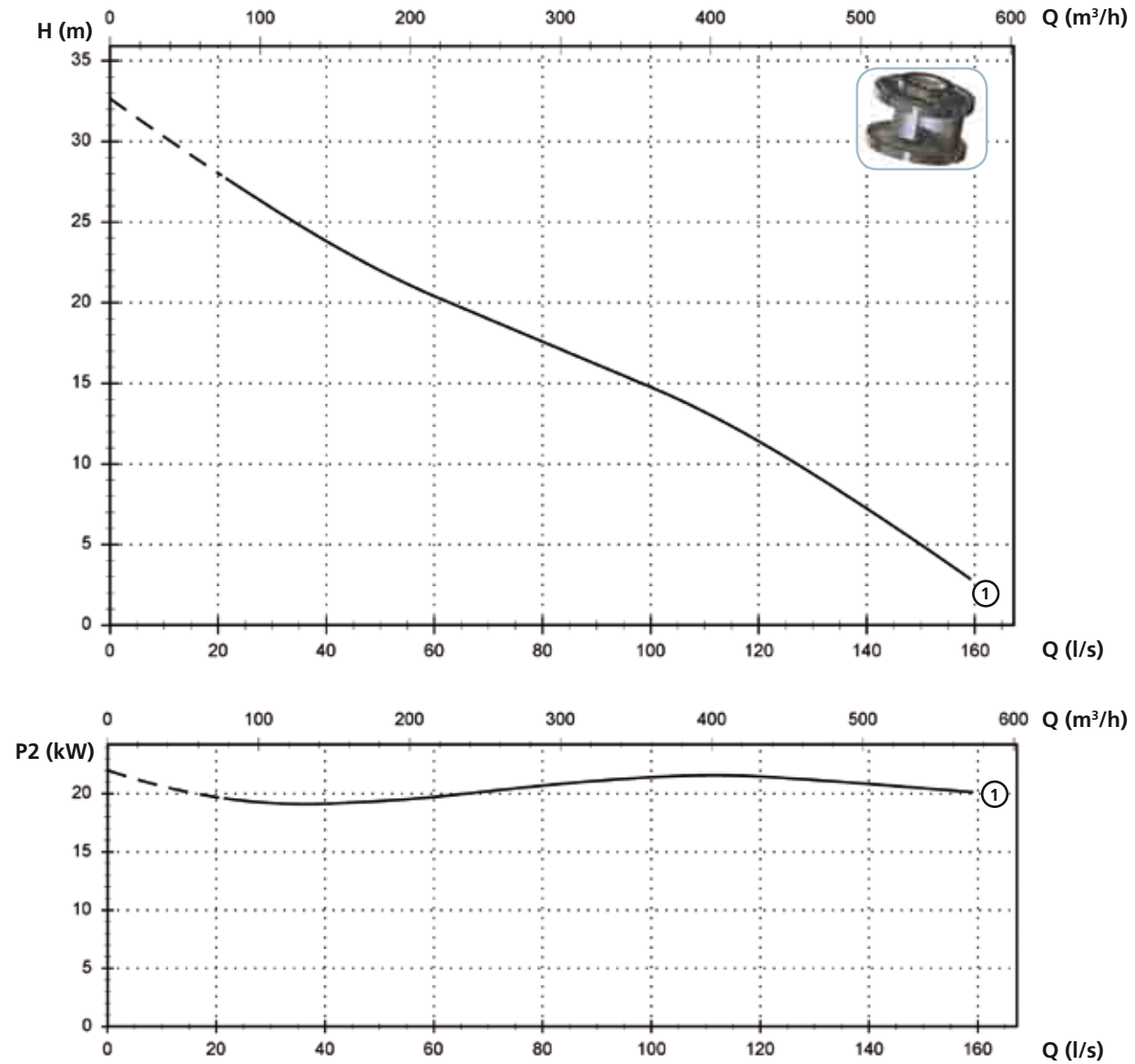
Free passage

Wide free passage allowing the expulsion of solids and preventing fouling of the impeller.

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Models with horizontal DN150 PN10-16 flanged discharge - 4 poles

Performances

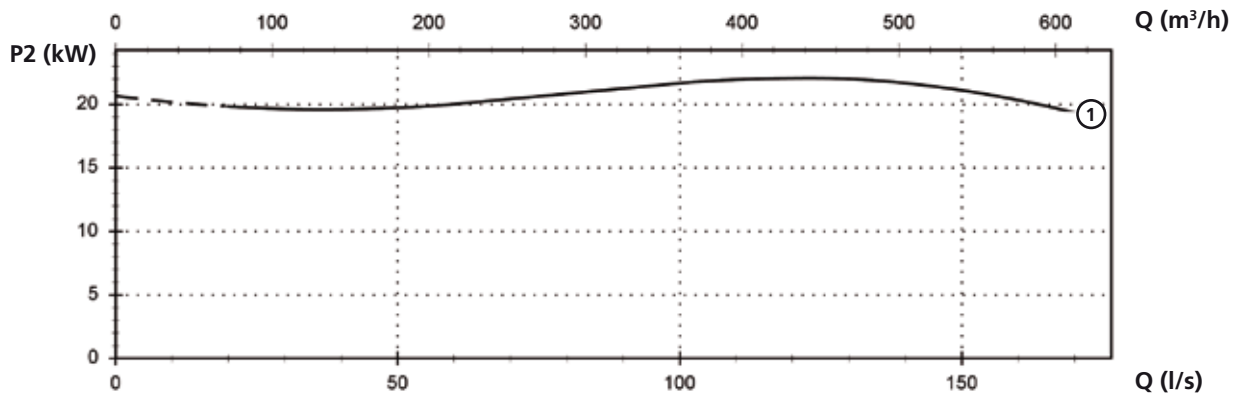
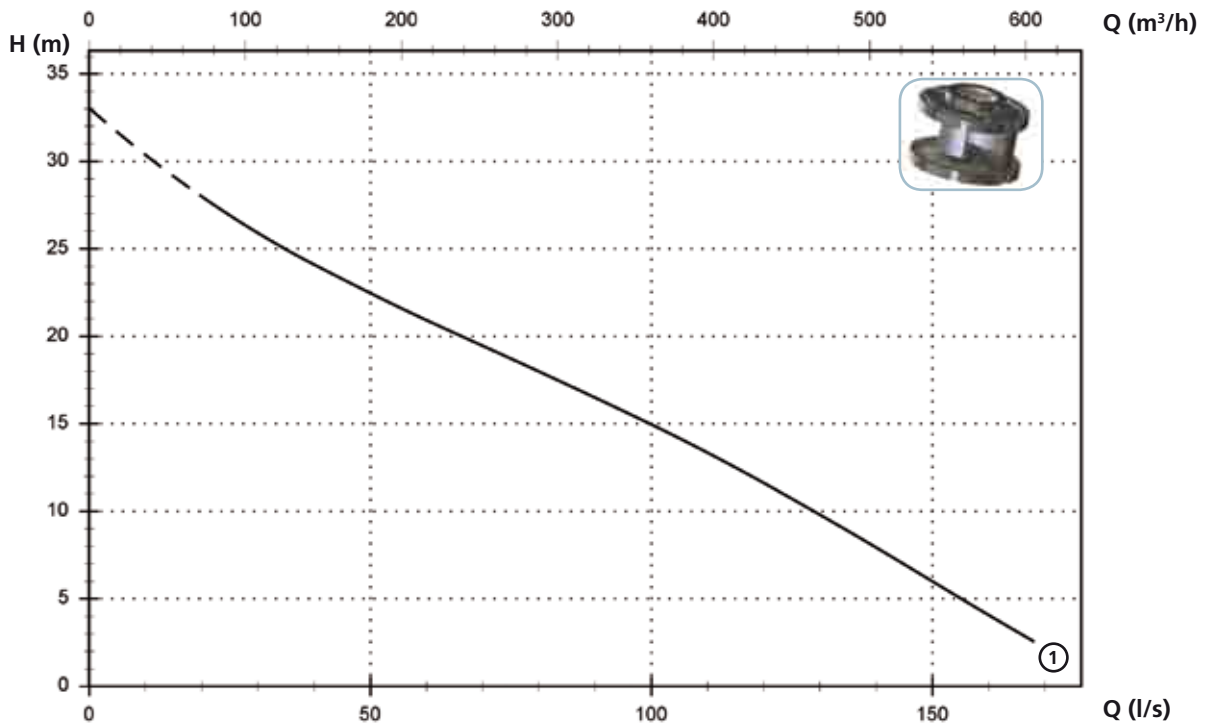


Technical data

	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Start	Ø	Free passage
① SMN 3000/4/150 A1LT/50	400	3	25.3	22	43.5	1450	Y Δ	DN150 PN10-16	100x130 mm

Models with horizontal DN200 PN10 flanged discharge - 4 poles

Performances



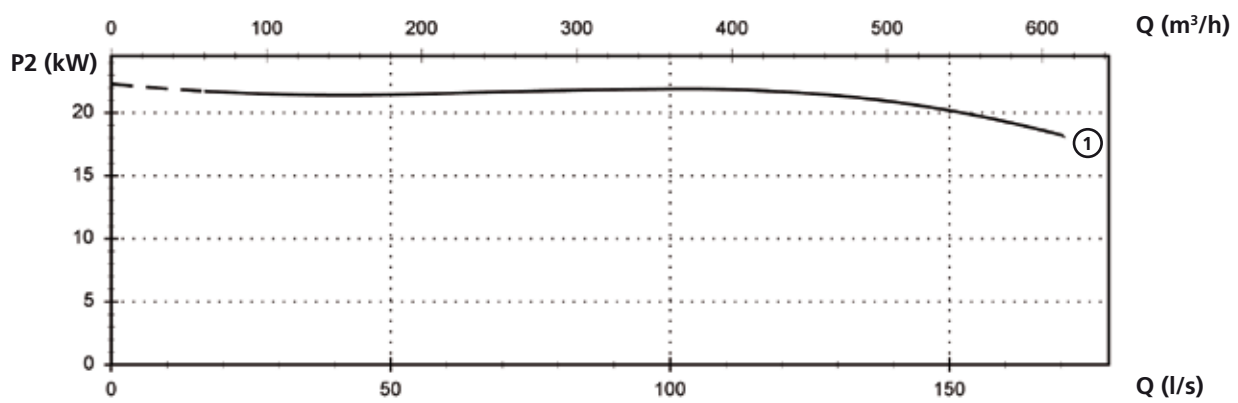
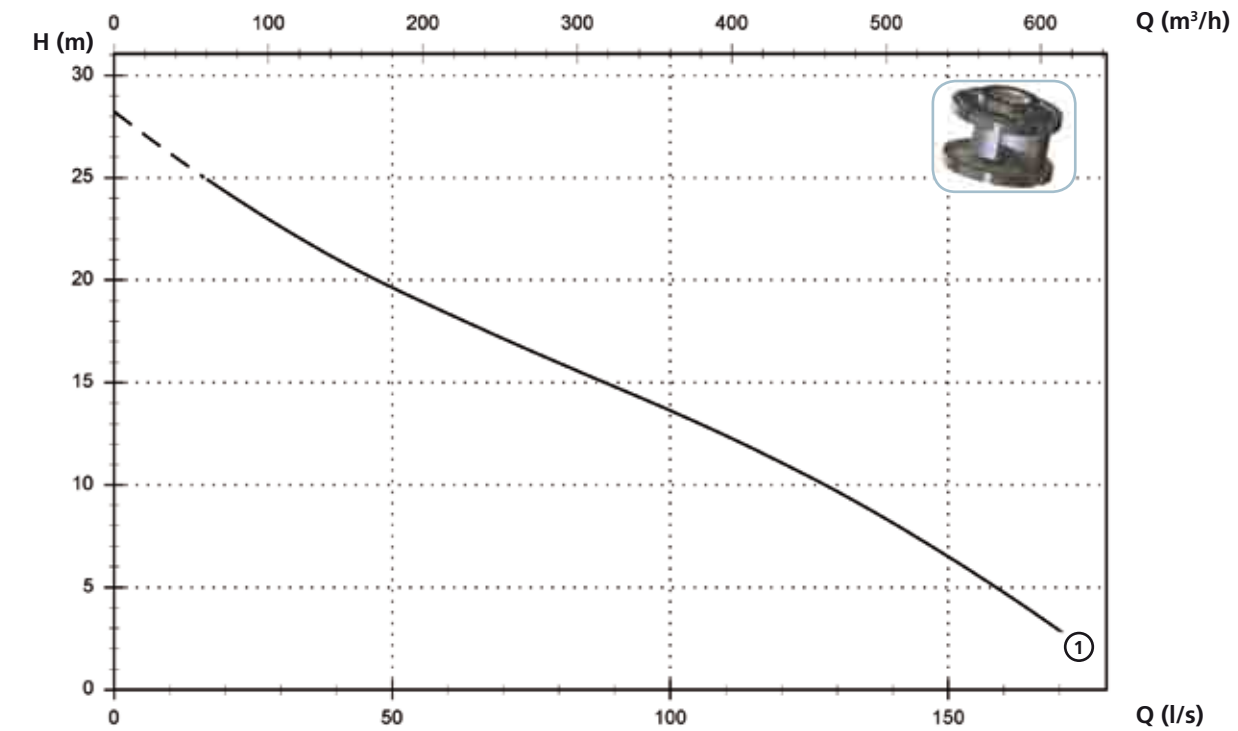
Technical data

	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Start	Ø	Free passage
① SMN 3000/4/200 A1LT/50	400	3	25.3	22	43.5	1450	Y Δ	DN200 PN10	100x130 mm

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Models with horizontal DN250 PN10 flanged discharge - 4 poles

Performances



Technical data

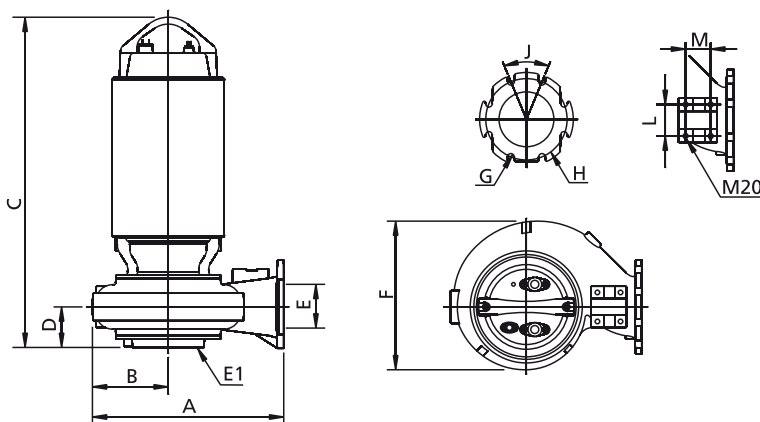
	V	Phases	P1 (kW)	P2 (kW)	A	Rpm	Start	Ø	Free passage
① SMN 3000/4/250 A1LT/50	400	3	25.3	22	43.5	1450	Y Δ	DN250 PN10	100x130 mm

Versions available

(Key to versions on page 16)

	Electrical variants										Cooling				Mechanical seals					
	N A E	T	T C	T C D	T C D T	T C D G T	T C G	T C S T	T C S G T	T S	T R	T R G	N	CC CCE	FT	C G F T	2SIC	SICM	SICAL	2SICAL
SMN 3000/4/150 A1LT/50										●		●	●				●			
SMN 3000/4/200 A1LT/50										●		●	●				●			
SMN 3000/4/250 A1LT/50										●		●	●				●			

Overall dimensions and weights



	A	B	C	D	E	E1 (*)	F	G	H	J	L	M	kg
SMN 3000/4/150 A1LT/50	650	255	1200	140	150	200	505	24	240	45°	109	79	392
SMN 3000/4/200 A1LT/50	695	275	1200	145	200	200	540	24	295	45°	109	79	393
SMN 3000/4/250 A1LT/50	785	310	1200	145	250	200	610	24	350	30°	109	79	402

Dimensions in mm

All weights and dimensions are indicative only

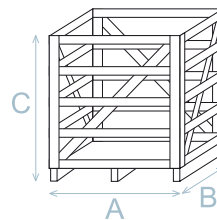
(*) DN of the suction flange - PN6

Packaging dimension

	A	B	C
SMN 3000/4/150 A1LT/50	1100	900	1350
SMN 3000/4/200 A1LT/50	1100	900	1350
SMN 3000/4/250 A1LT/50	1100	900	1350

Dimension in mm

All weights and dimensions are indicative only



Installations available

