

Gabbioneta Pumps®
Vertical Single Stage Pumps
VI Range

General information

The VI range heavy duty process pumps are vertical single stage type pumps with a side discharge designed for full compliance with the latest edition of API 610 Standard. These pumps are specifically used in sump applications.

A wide range of sizes and material combinations complete the variety of the offered products.

Main design features:

- Geometry of pump components optimised through hydraulic, structural, thermal and dynamic F.E.M. analysis to guarantee high product reliability
- Closed type impeller with front and rear wear rings as well as balancing holes, to minimise the axial thrust
- Large eye single suction impeller to meet low NPSH requirements
- Deep stuffing boxes, designed in accordance to API 682 Standard, suitable to accept any type of mechanical or packing seal
- Pump shaft fully machined to respect the most restrictive run-out API limits.
- Labyrinths and deflectors at both bearing housing covers to maximise protection against dirt
- Rotor axial thrust supported by a duplex oil lubricated ball angular contact type bearing as a standard
- Discharge column, line shaft and support column may consist of multiple sections, depending upon the pump setting.
- Discharge column mounted with a sliding fit through the sole plate to account for thermal expansions
- Renewable intermediate bushings, lubricated by process fluid or external source, are provided in correspondence of all column sections

Options

The following pump designs can be provided:

- Full jacketed body
- Semi-open impeller with wear plates fitted on suction casing
- Additional rigid coupling to facilitate mechanical seal maintenance activities
- Rectangular or circular soleplates
- Suction strainer
- Anti reverse rotation device
- Air fan or water cooling system provided on bearing bracket and/or mechanical seal if required
- Special bearing isolators at both bearing housing ends
- Oil mist lubrication (pure or purge)
- Temperature and/or vibration detection and monitoring equipment

Main pumps applications refer to heavy duties on

- Oil & Gas
- Sump service
- Molten sulphur
- Hydrocarbon processing
- Petrochemical processing
- Water treatment
- Waste processing
- General purpose

Operating data

Capacity

up to 5000 m³/h (22000 USgpm)

Head

up to 300 m (1000 feet)

Temperature

from -30°C (-20°F) to 450°C (850°F)

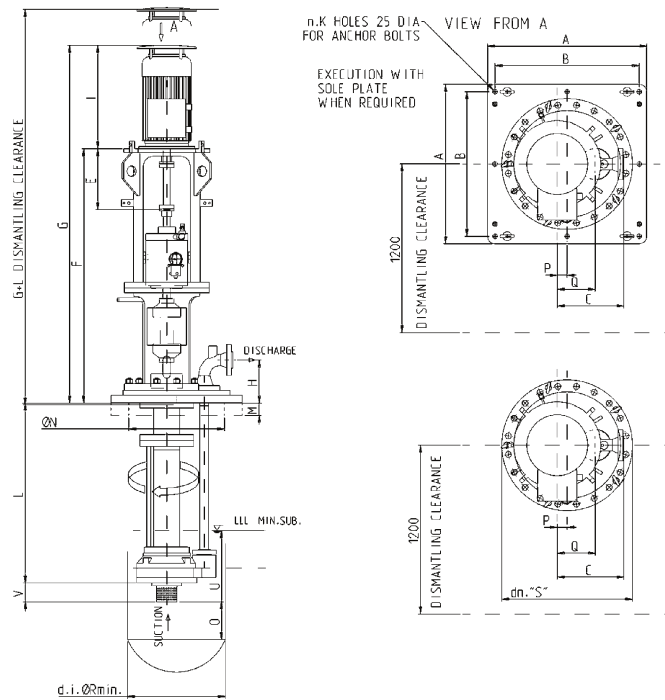
Design working pressure

up to 40 barg (600 psig)

Rotational speed

up to 3800 rpm

VI Overall Dimensions

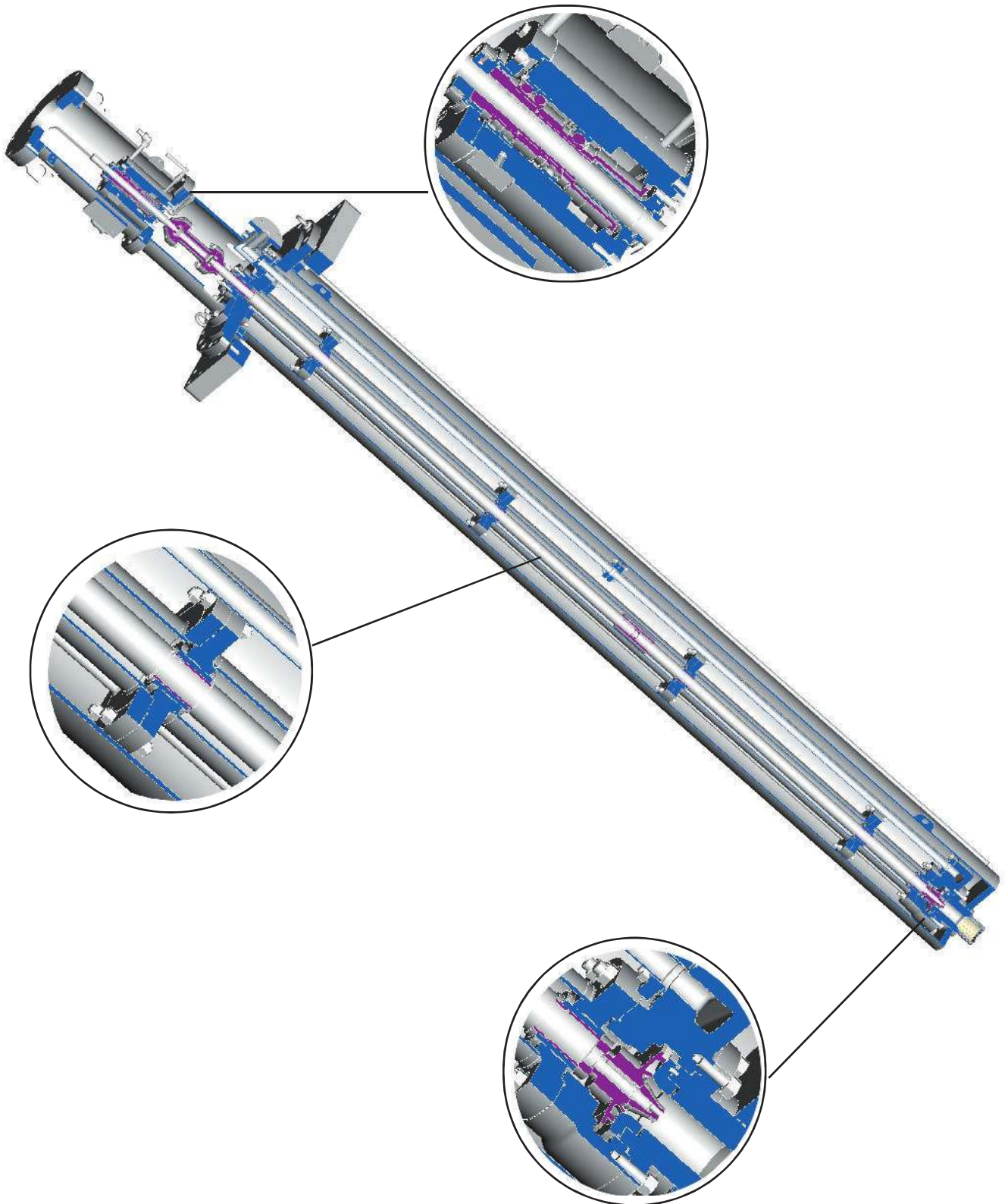


General notes

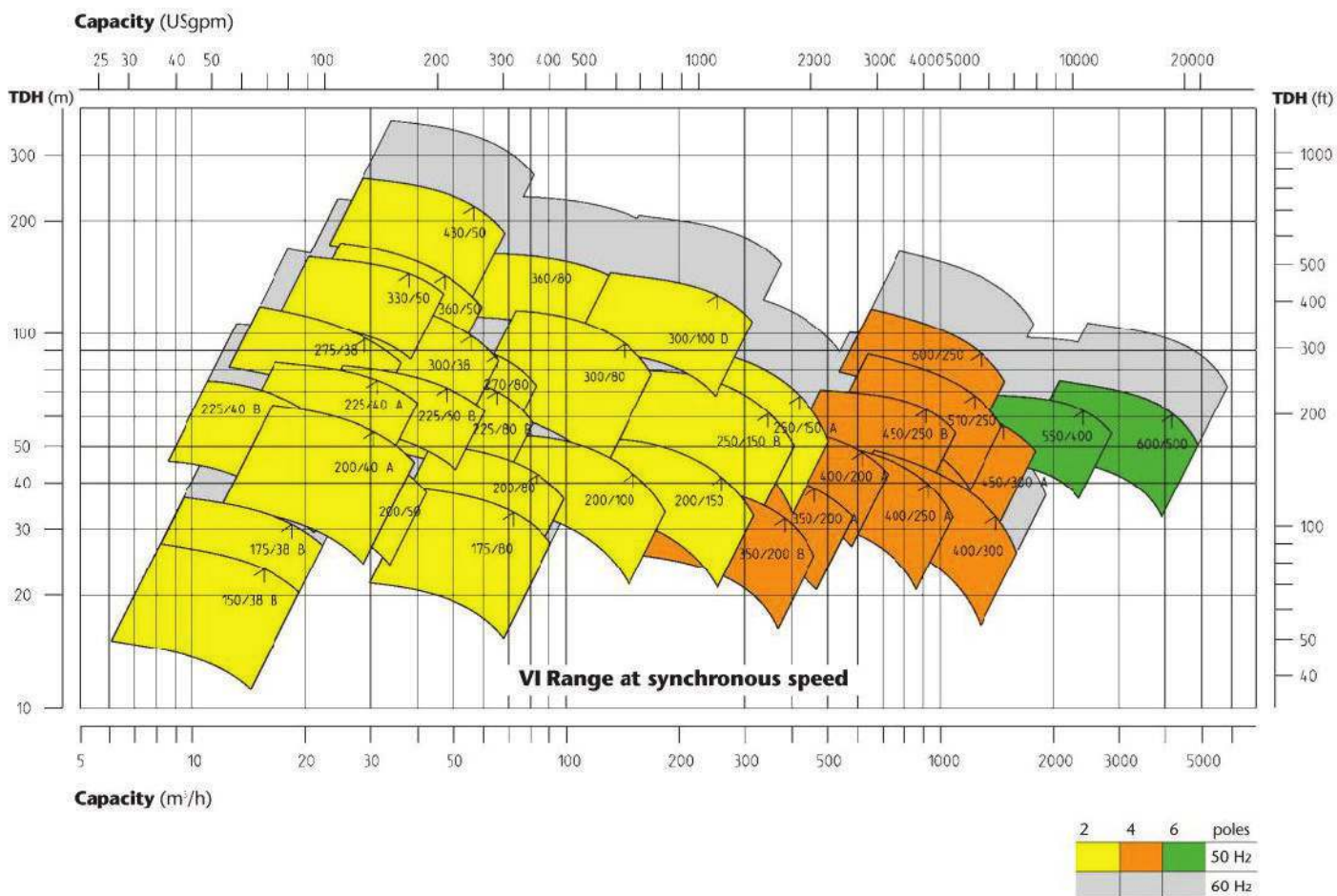
1. All dimensions are in mm. Do not use for construction unless certified.
2. Dimensions G and I vary with driver selection.
3. Dimension L depending on purchaser requirement.

Pump type	Nozzle Size Disch.	A	B	C	E	F	H	R	M	N	O	p	Q	S ANSI 150 RF	K	u	V
		150/38	2"	700	620	350	325	1357	230	20"	60	510	100	52	200	20"	4
175/38	2"	700	620	350	325	1357	230	20"	60	510	100	52	200	20"	4	485	100
175/80	3"	850	770	405	325	1357	260	24"	60	510	200	70	210	20"	4	595	150
200/40	2"	700	620	350	325	1357	230	20"	60	510	100	52	200	20"	4	480	100
200/50	2"	850	770	340	325	1357	230	24"	60	510	100	52	190	20"	4	480	100
200/80	3"	850	770	405	325	1357	260	24"	60	510	200	70	210	20"	4	480	100
200/100	4"	850	770	540	325	1357	327	30"	60	660	250	105	300	26"	4	880	200
200/150	6"	1000	920	680	325	1357	395	34"	70	760	250	125	350	34"	8	850	200
225/40	2"	700	620	350	325	1357	230	20"	60	510	100	52	200	20"	4	480	100
225/50	2"	850	770	340	325	1357	230	24"	60	510	100	52	190	20"	4	480	100
225/80	3"	850	770	405	325	1357	260	24"	60	560	200	70	210	22"	4	580	100
250/150	6"	1000	920	680	325	1357	395	34"	70	760	250	125	350	34"	8	890	200
270/80	3"	850	770	445	325	1357	260	26"	60	590	200	83	250	24"	4	580	100
275/38	2"	850	770	376	325	1357	230	24"	60	560	100	44	226	22"	4	470	100
300/38	2"	850	770	376	325	1357	230	24"	60	560	100	44	226	22"	4	520	100
300/80	3"	850	770	445	325	1357	260	26"	60	590	200	70	250	24"	4	580	100
300/100 D	4"	1000	920	420	325	1357	280	34"	60	750	250	42	220	30"	4	825	200
330/50	2"	850	770	376	325	1357	230	26"	60	590	100	44	226	24"	4	470	85
350/200	8"	1200	1120	750	345	1515	367	46"	70	1000	350	140	450	42"	8	1100	200
360/50	2"	850	770	390	325	1357	230	26"	60	590	100	33	240	24"	4	470	100
360/80	3"	850	770	445	325	1357	230	26"	60	590	100	70	250	24"	4	470	100
430/50	2"	850	770	433	325	1357	230	28"	60	635	100	40	283	26"	4	470	100
400/200	8"	1300	1220	920	345	1515	600	46"	70	1100	350	170	450	42"	8	1100	200
400/250	10"	1800	1720	1187	345	1515	415	-	70	1600	350	-	825	-	8	1400	200
450/300	12"	2000	1920	1250	345	1515	485	-	70	1800	350	-	877	-	8	1400	200
480/80	3"	1000	920	506	325	1357	260	34"	60	750	200	50	320	30"	4	575	75
510/250	10"	2000	1920	1250	345	1515	435	-	70	1800	350	-	877	-	8	1400	200
550/400	16"	2350	2270	1584	345	1515	700	-	70	2050	400	-	1050	-	8	1050	400
600/250	10"	1800	1720	870	345	1515	407	52"	70	1500	350	120	520	48"	8	1300	200
600/500	20"	2700	2620	-	345	1515	200	-	70	2500	400	-	1205	-	8	1900	300

VI Pump



Coverage Chart



Pump identification

Pump type VI 200 / 100

Nominal impeller diameter (mm) |

Nominal discharge nozzle diameter (mm) |



A century of experience

Since the foundation of the company in 1897, Gabbioneta Pumps® has been engaged in design and manufacture of high quality centrifugal pumps.

The products and the markets served progressively changed from water to chemical industry and finally, in the last thirty years, to API 610 heavy duty pumps for refinery and petrochemical industries.

Product development is based on a thorough interchange of marketing and operating experience within the company and in close cooperation with project and plant engineers.

Manufacturing is carried out in a factory equipped with several modern CNC machines and machine tools. Special note has to be given to the machining centers where pump casings can be machined completely with only two settings.

In-house facilities are designed to meet the performance and NPSH testing requirements of all pumps manufactured in the company in full compliance with API 610 Standards.

A quality assurance system certified in accordance with ISO 9001 ensures Gabbioneta Pumps® are of the highest quality.





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