



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)

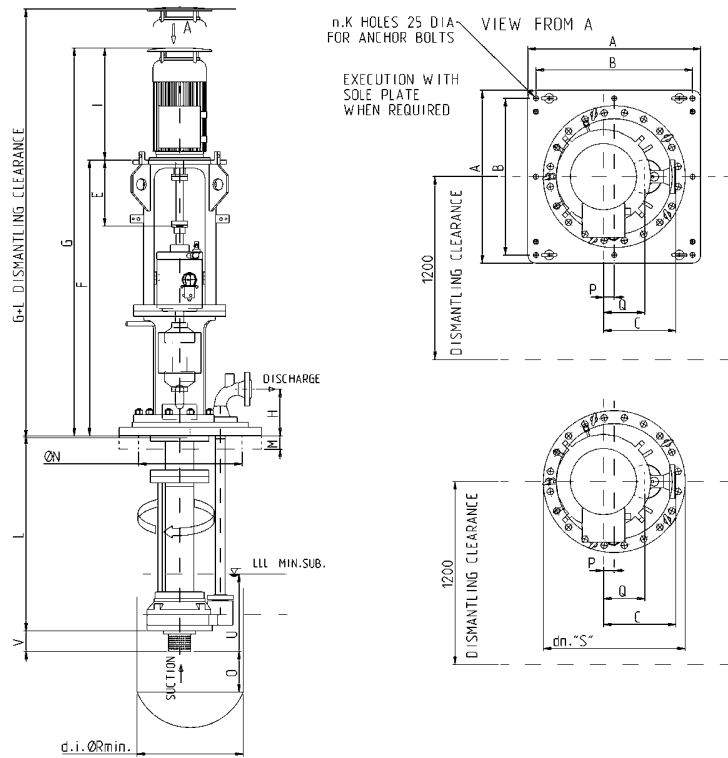
Design working pressure

up to 40 barg (600 psig)

Rotational speed

up to 3800 rpm

VD Overall Dimensions

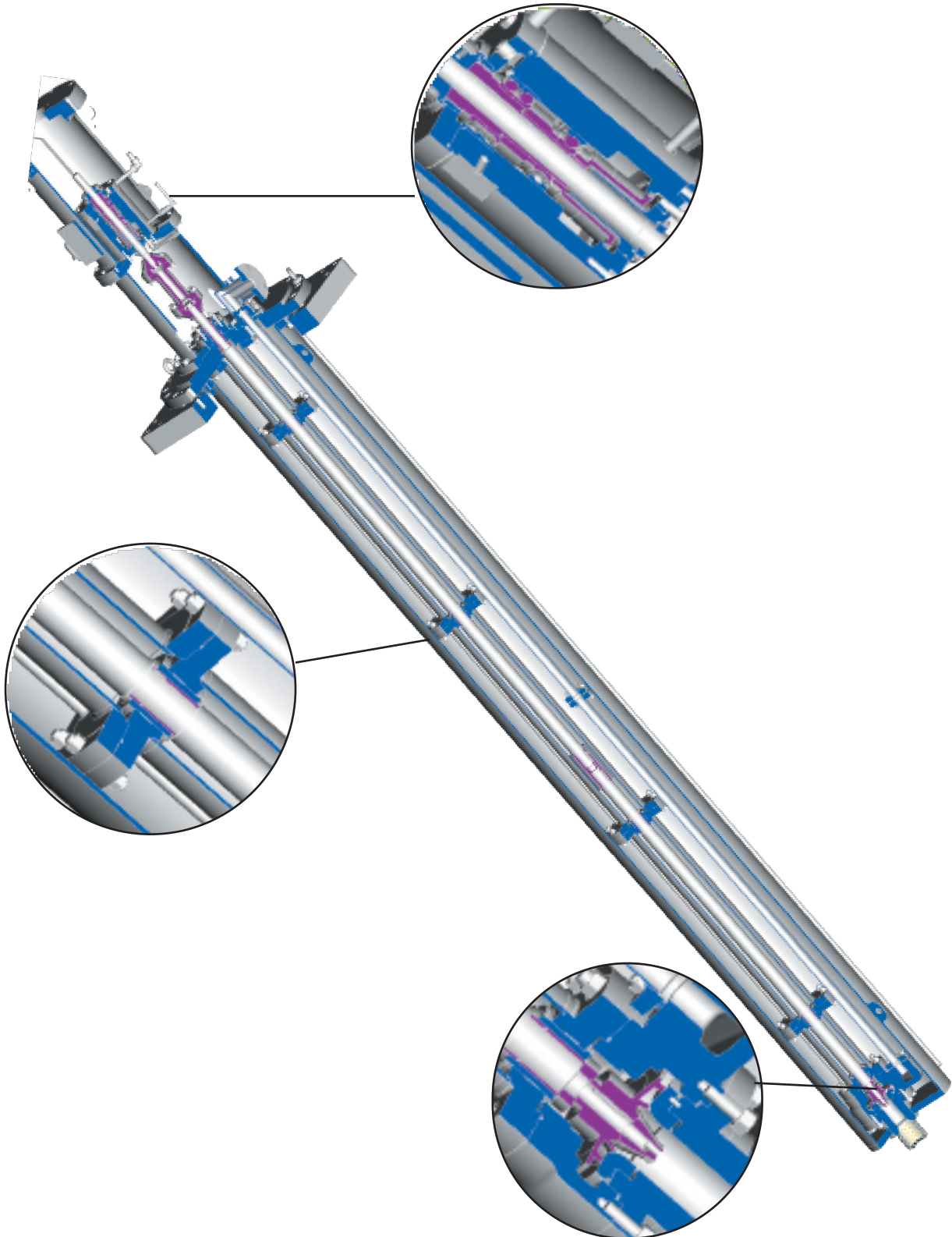


General notes

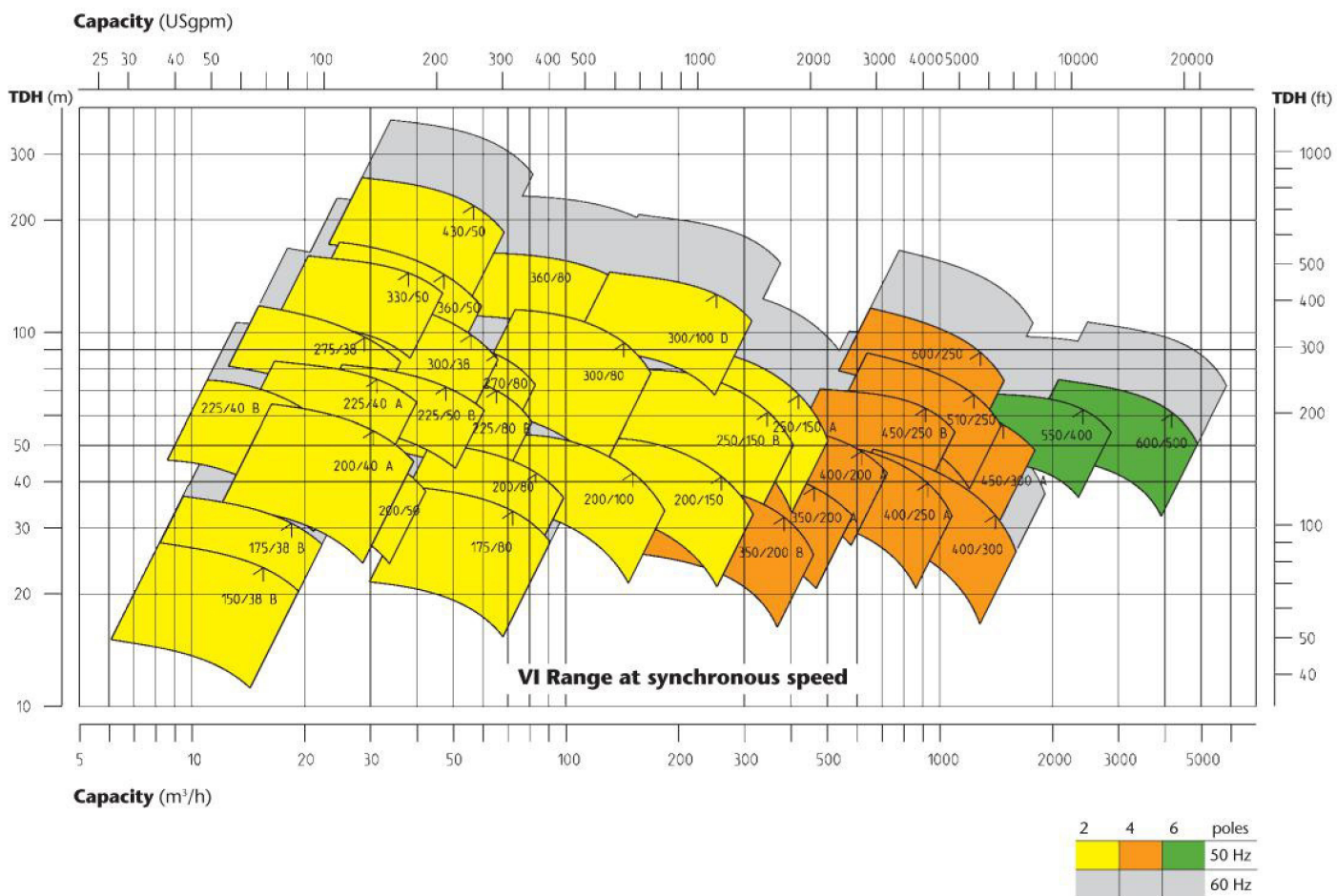
1. All dimensions are in mm. Do not use for construction unless certified.
2. Dimensions G and I vary with driver selection.
3. Dimension L depending on purchaser requirement.

| 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

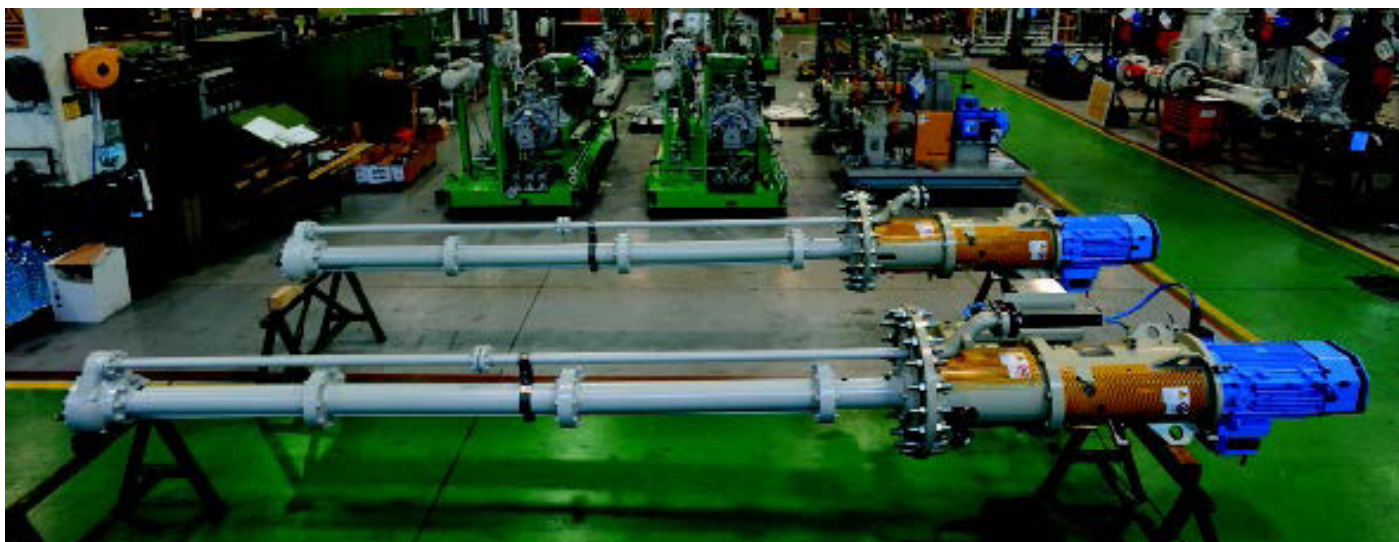


Pump identification

Pump type

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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www.trilliumflow.com Certified: ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2007