

**Gabbioneta Pumps™**  
Vertical Single Stage Pumps  
**IL-DSIL Range**

## General information

The IL and DSIL range pumps are heavy duty process vertical in-line overhung pumps with single (IL) or double suction (DSIL) 1't impeller designed for full compliance with latest edition of API 610 Standard.

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
- In-line arrangement for suction and discharge nozzles integrally cast with the casing
- Double volutes (for sizes with discharge nozzle >2") minimise radial loads for extended pump life
- Closed type impeller with front and rear wear rings as well as balancing holes, to minimise the axial thrust
- Large eye single suction (IL) or double suction (DSIL) 1" stage impeller to meet low NPSH requirements
- Back pull-out design allows all pump maintenance activities without motor removal
- Stiff shaft design. Rotor operates below 1" critical speed
- Rotor axial thrust supported by a duplex oil lubricated ball angular contact type bearing as a standard
- Deep stuffing boxes, designed in accordance to API 682 Standard, suitable to accept any type of mechanical or packing seal it pump
- Labyrinths and deflectors at both bearing housing ends to maximise protection against dirt

## Options

The following pump designs can be provided:

- Heavy duty bearing housing for high suction pressure applications
- Anti reverse rotation device
- Air fan cooling system provided on bearing bracket and/or mechanical seal when required by hot temperature applications
- Special bearing isolator at both bearing housing ends
- Oil mist lubrication system (pure or purge)
- Temperature and/or vibration detection and monitoring equipments

## Main pumps applications refer to heavy duties on

- Oil & Gas
- Fluid transportation
- Refineries
- Petrochemical plants
- Water supply
- Sewage

## Operating data

### IL Capacity

up to 750 m<sup>3</sup>/h (3300 USgpm)

### IL Head

up to 350 m (1100 feet)

### DSIL Capacity

up to 6000 m<sup>3</sup>/h (26500 USgpm)

### DSIL Head

up to 150 m (500 feet)

### Temperature

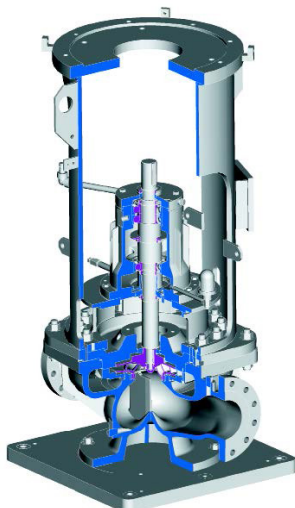
from -150°C (-240°F) to 400°C (750°F)

### Design working pressure

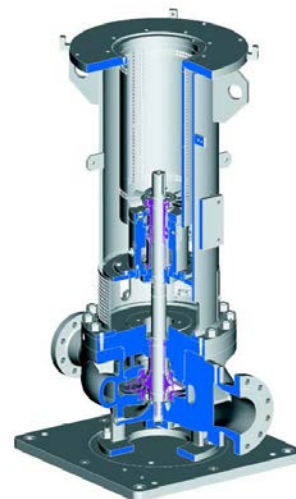
up to 100 barg (2100 psig)

### Rotational speed

up to 4000 rpm

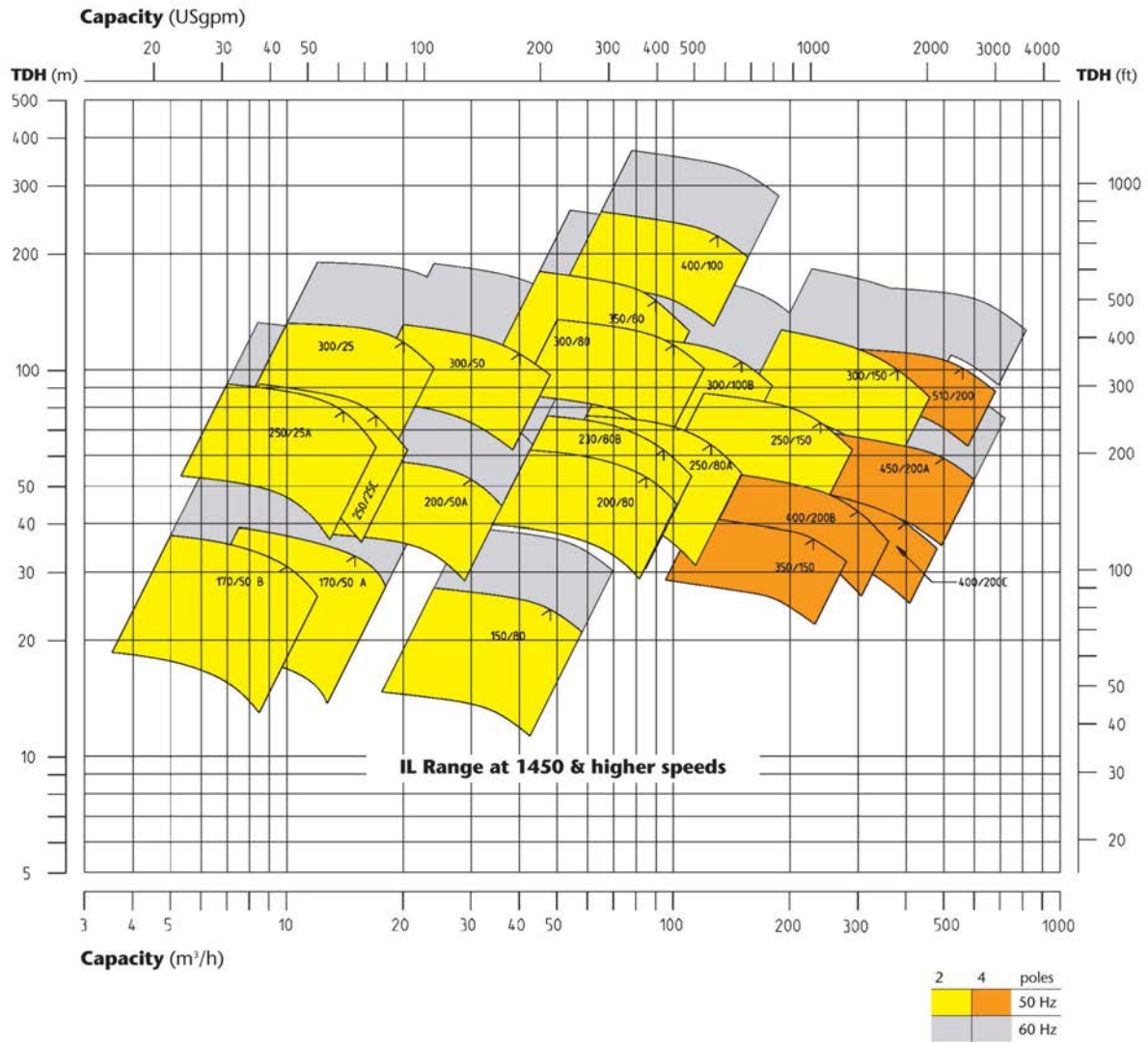


IL pump



DSIL pump

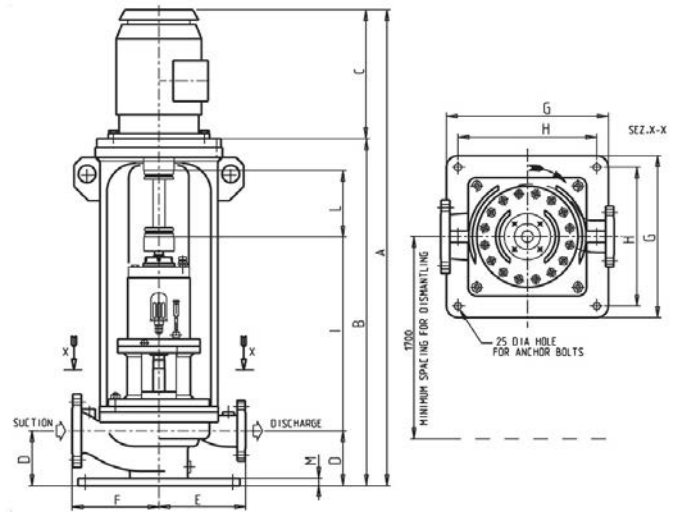
# Coverage Chart



## Overall dimensions

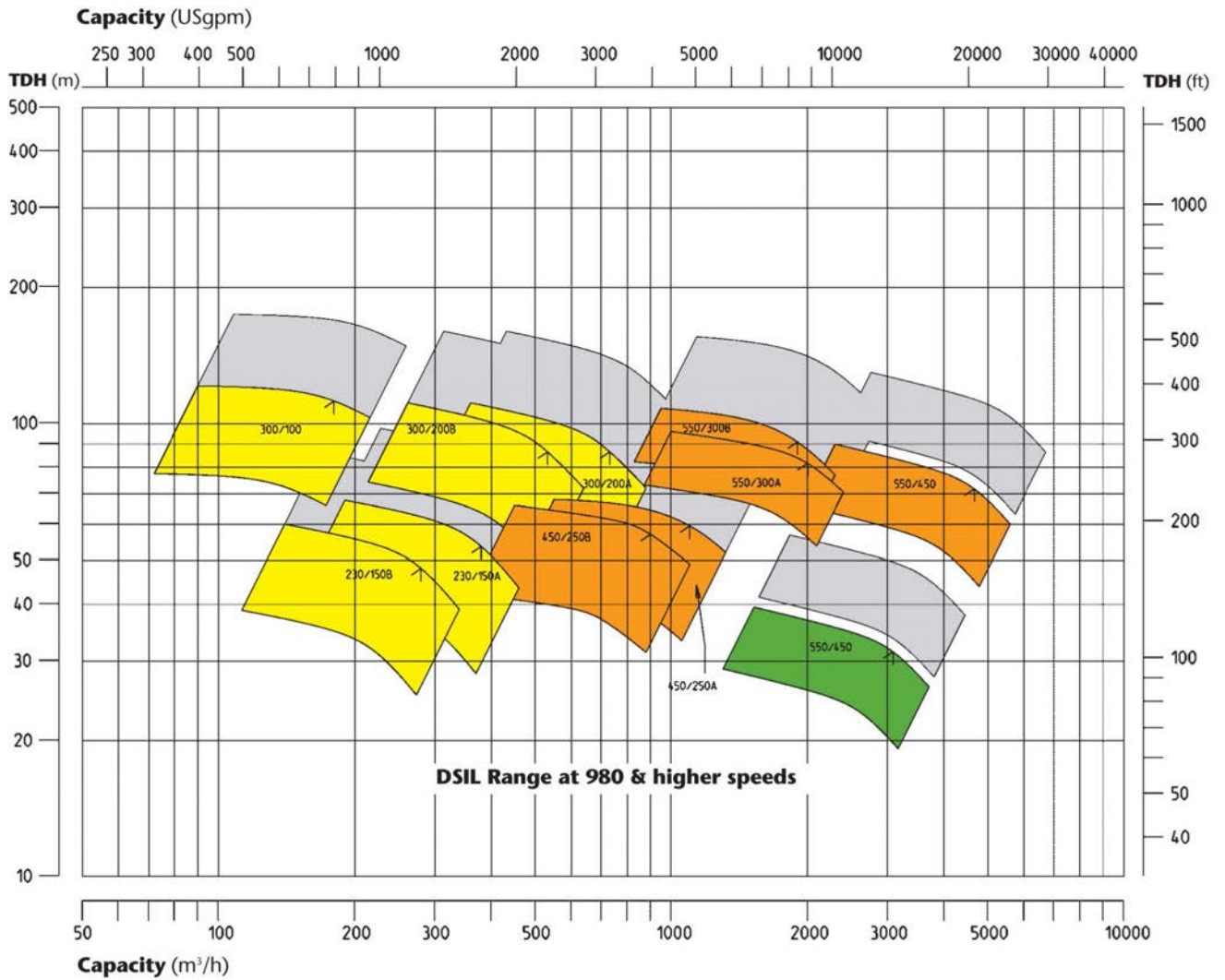
### General notes

1. All dimensions are in mm. Do not use for construction unless certified.
2. Dimensions A-C-L vary with driver selection.
3. N.1 drain and N.1 vent for all pumps type.
4. CCW rotation for coupling side.
5. Dimension for pump with inducer.



PUMP TYPE	NOZZLE SIZE	B	D	E	F	G	H	I	M
IL 150/80	3"/3"	1175	165	330	330	600	500	670	30
IL 170/50	2"/2"	1175	165	330	330	600	500	670	30
IL 200/50	3"/2"	1190	180	340	340	600	500	670	30
IL 200/80	4"/3"	1190	180	340	340	600	500	670	30
IL 230/80	4"/3"	1205	190	330	330	600	500	675	30
IL 250/25	2"/2"	1190	180	340	340	600	500	670	30
IL 250/80	4"/1"	1205	190	330	330	600	500	675	30
IL 250/150	6"/6"	1335	325	400	400	750	650	885	30
IL 300/25	2"/2"	1190	180	360	360	750	650	885	30
IL 300/50	2"/2"	1205	180	360	360	750	650	670	30
IL 300/50A	3"/2"	1205	180	360	380	750	650	670	30
IL 300/80	4"/3"	1210	180	380	380	750	650	670	30
IL 300/100	6"/4"	1265	225	360	380	750	650	680	30
IL 300/150	8"/6"	1590	255	400	450	750	650	885	30
IL 350/80	4"/3"	1530	275	420	420	750	650	835	30
IL350/150	8"/6"	1260	250	400	500	900	800	885	40
IL 400/100	6"/4"	1595	335	500	620	900	800	840	40
IL 400/200	10"/8"	1615	335	500	620	900	800	840	40
IL 400/200	10"/8"	1395	385	550	620	900	800	885	40
IL 450/200	10"/8"	1740	385	600	700	900	800	885	40
IL 480/50	3"/2"	1595	275	460	460	900	800	885	40
IL 510/200	10"/8"	1740	385	600	750	900	800	885	40

# Coverage Chart

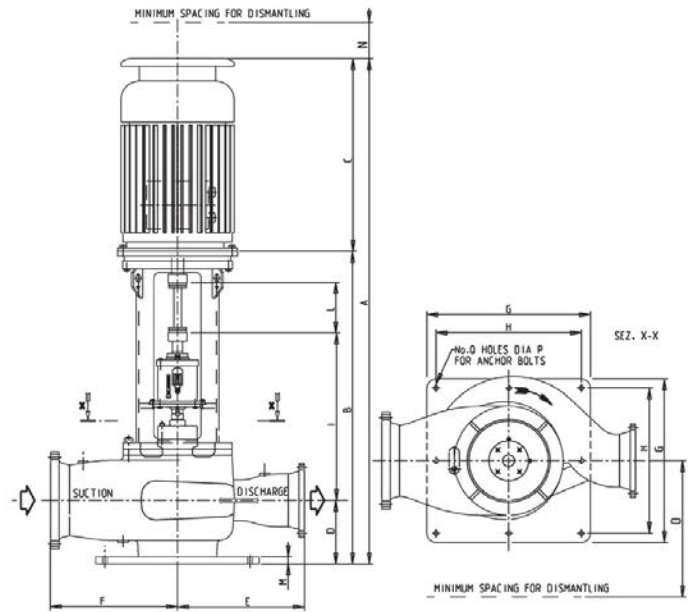


2	4	6	poles
Yellow	Orange	Green	50 Hz
Grey	Grey	Grey	60 Hz

## Overall dimensions

### General notes

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2. Dimensions A-C-L vary with driver selection.
3. N.1 drain and N.1 vent for all pumps type.



PUMP TYPE	NOZZLE SIZE	B	D	E	F	G	H	I	M	N	O	P	Q
DSIL 230/150	8"/6"	2002	240	380	400	600	500	1202	30	400	1750	30	4
DSIL 300/100	6"/4"	1640	300	520	520	800	700	835	40	450	1750	30	4
DSIL 300/200	12"/8"	1670	325	625	625	900	800	895	40	450	1750	30	4
DSIL 450/250	14"/10"	1720	350	700	700	900	800	920	40	500	1750	30	4
DSIL 550/300	16"/12"	2182	420	800	800	1600	1500	1202	70	600	1750	36	8
DSIL 550/450	24"/18"	2474	665	1000	1000	1600	1500	1202	70	1000	1750	36	8

## 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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