

Gabbioneta Pumps™
Horizontal Double Suction Pumps
AXD Range

General information

The AXD range heavy duty process pumps are horizontal, between bearings with axial split casing and double suction 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.
- Double suction, closed impeller, solid hub assure axial balance under different operating conditions.
- Rotor operates far from its critical speeds
- Centreline casing mounting for high temperature stability
- Deep stuffing boxes integrally cast with pump casing, in accordance to API 682 standard, suitable to accept any type of mechanical or packing seal.
- Axial split bearing housing for easy inspection and maintenance procedure.
- Labyrinths and deflectors at both bearing housing covers to maximise protection against dirt.
- Suction and discharge nozzles, integrally cast with the casing, are arranged in in-line position.
- Three bearings arrangements available:
 - Ball Radial / Ball Thrust
 - Sleeve Radial / Ball Thrust
 - Sleeve Radial / Tilting Pads Thrust (Kingsbury Type)

Options

The following pump designs can be provided:

- For extremely low NPSH duties, a number of AXD pumps can be equipped with inducers
- Casing foot mounted
- Replaceable stuffing box cooling or heating jackets
- Double shaft extension
- Cylindrical fit at coupling shaft end
- Special bearing isolators at both bearing housing ends
- "CARB" or hydrodynamic line bearing for high temperature application
- Oil mist lubrication system (pure or purge)
- Forced feed lubrication system
- Temperature and/or vibration detection and monitoring equipment
- Baseplate available with three point gimbal mounting (FPSO services)

Main pumps applications refer to heavy duties on

- Oil & Gas
- Fluid transportation
- Refineries
- Petrochemical plants
- Firefighting

Operating data

Capacity

up to 6000 m³/h (26400 USgpm)

Head

up to 380 m (1200 feet)

Temperature

from — 30°C (-20°F) to 200°C (400°F)

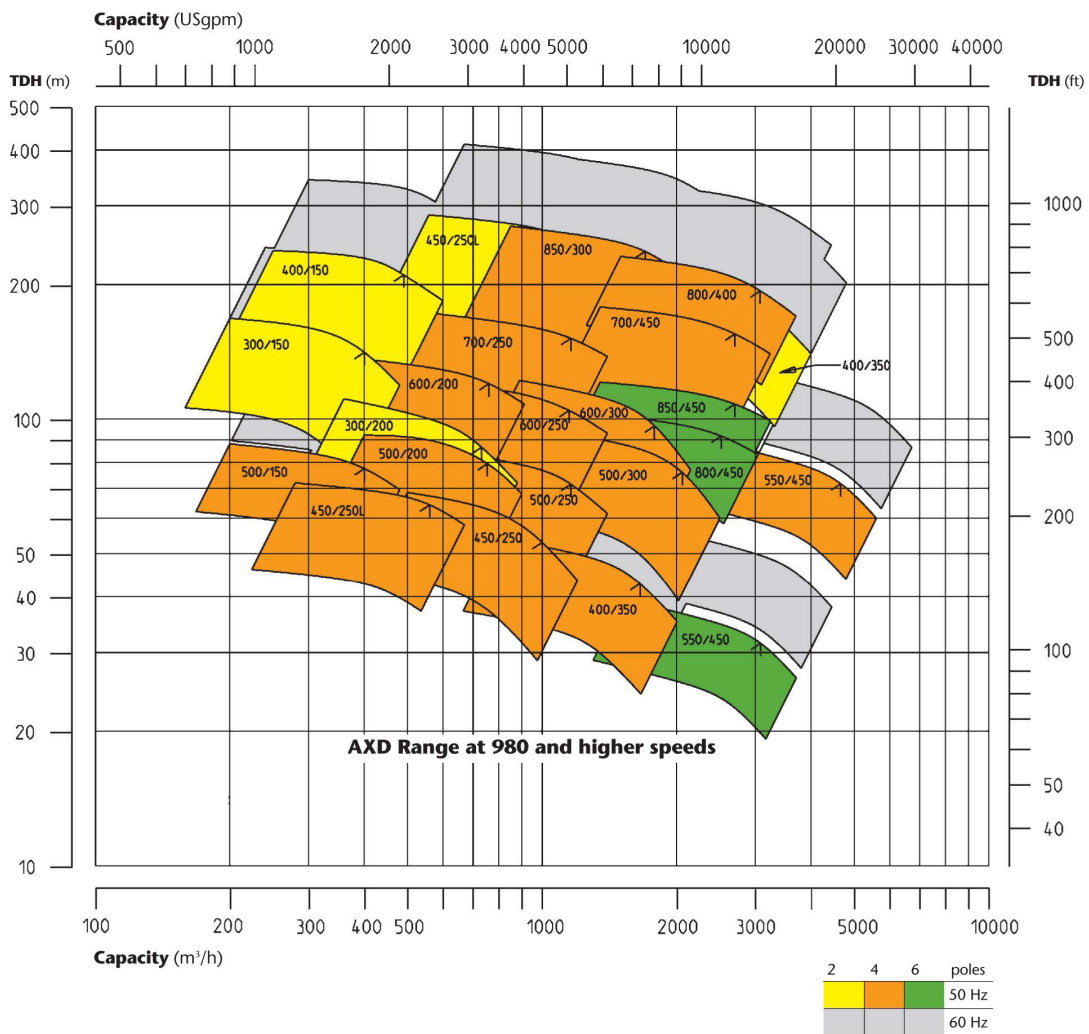
Design working pressure

up to 60 barg (900 psig)

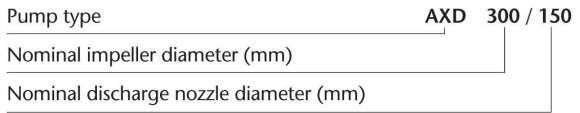
Rotational speed

up to 3800 rpm

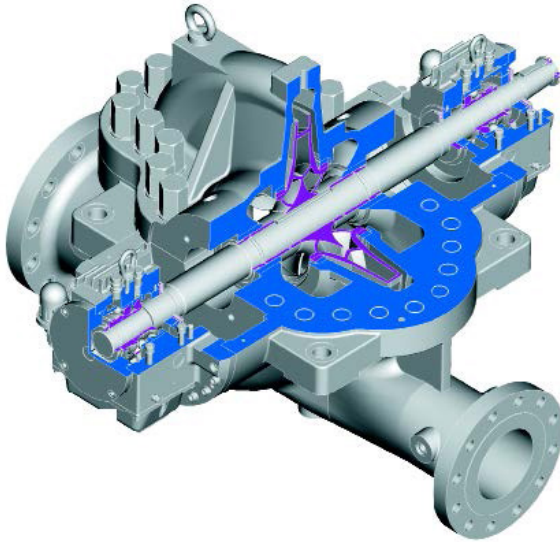
Coverage Chart



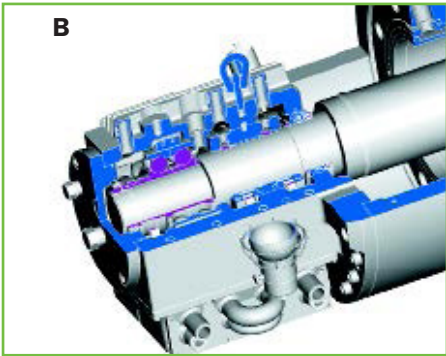
Pump identification



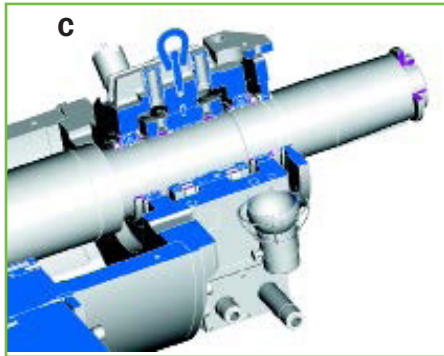
A



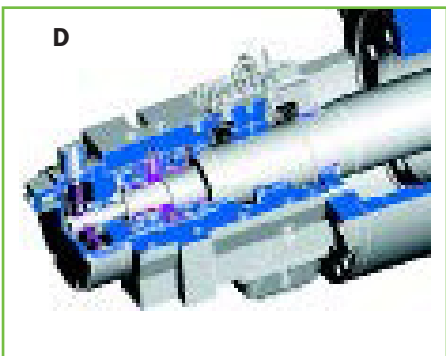
B



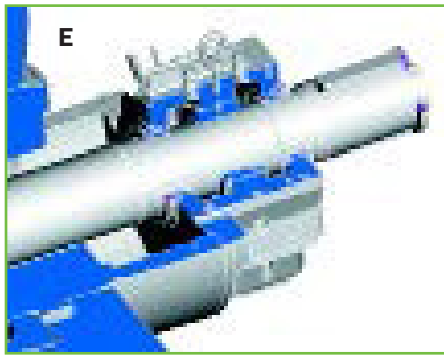
C



D

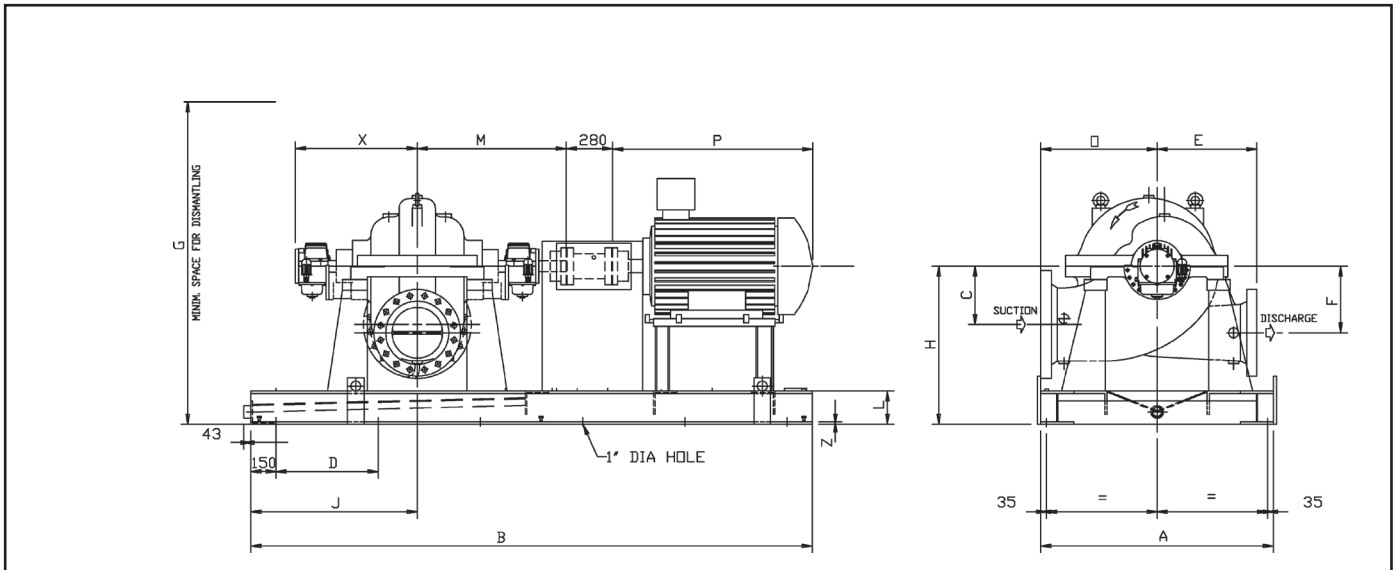


E



- A. Ball-Ball
- B. Sleeve-Ball NDE
- C. Sleeve-Ball DE
- D. Sleeve-Kingsbury NDE
- E. Sleeve-Kingsbury DE

Overall dimensions



General notes

1. All dimensions are in mm. Do not use for construction unless certified.
2. Dimensions B and P vary with driver selection.
3. Dimension X relative to Sleeve-Kingsbury configuration does not include the coaxial lube oil pump,

| Pump type | Nozzle Size | | A | D | C | E | F | G | H | X | | | M | O | J | L | Z |
|-----------|-------------|-------|------|-----|-----|-----|-----|------|------|-----|------|------|------|-----|------|-----|------|
| | Suct | Disch | | | | | | | | S/B | S/K | | | | | | |
| 300/150 | 8" | 6" | 1060 | 715 | 230 | 370 | 230 | 1400 | 800 | 556 | 680 | 700 | 690 | 430 | 1000 | 200 | 15 |
| 300/200 | 10" | 8" | 1060 | 715 | 270 | 360 | 230 | 1500 | 800 | 685 | 809 | 829 | 846 | 460 | 1000 | 200 | 15 |
| 400/150 | 10" | 6" | 1240 | 715 | 255 | 500 | 255 | 1700 | 800 | 647 | 771 | 791 | 766 | 500 | 1000 | 200 | 15 |
| 400/350 | 18" | 14" | 1390 | 715 | 370 | 600 | 400 | 1900 | 1100 | 730 | 854 | 874 | 895 | 700 | 1000 | 200 | 17,5 |
| 450/250 | 12" | 10" | 1240 | 715 | 330 | 480 | 300 | 1750 | 800 | 640 | 764 | 784 | 740 | 620 | 1000 | 200 | 15 |
| 450/250 L | 12" | 10" | 1240 | 715 | 300 | 480 | 300 | 1750 | 900 | 664 | 788 | 808 | 829 | 620 | 1000 | 200 | 15 |
| 500/150 | 8" | 6" | 1240 | 715 | 280 | 550 | 280 | 1950 | 800 | 580 | 704 | 724 | 680 | 600 | 1000 | 240 | 17 |
| 500/200 | 10" | 8" | 1390 | 715 | 350 | 500 | 350 | 1950 | 900 | 685 | 809 | 829 | 846 | 600 | 1000 | 240 | 17 |
| 500/250 | 14" | 10" | 1390 | 715 | 320 | 550 | 370 | 1900 | 900 | 664 | 788 | 808 | 829 | 650 | 1000 | 200 | 15 |
| 500/300 | 16" | 12" | 1390 | 715 | 350 | 600 | 400 | 1950 | 1000 | 732 | 856 | 876 | 895 | 700 | 1000 | 200 | 15 |
| 550/450 | 24" | 18" | 1900 | 715 | 500 | 800 | 550 | 2500 | 1300 | 867 | 991 | 1011 | 1030 | 950 | 1200 | 260 | 17,5 |
| 600/200 | 10" | 8" | 1390 | 715 | 350 | 550 | 350 | 2100 | 1000 | 685 | 809 | 829 | 846 | 630 | 1000 | 240 | 17 |
| 600/250 | 14" | 10" | 1390 | 715 | 320 | 550 | 400 | 2100 | 1000 | 664 | 788 | 808 | 829 | 700 | 1000 | 240 | 17 |
| 600/300 | 14" | 12" | 1545 | 715 | 400 | 600 | 350 | 2100 | 1000 | 720 | 844 | 864 | 893 | 750 | 1000 | 240 | 17 |
| 700/250 A | 14" | 10" | 1600 | 715 | 300 | 650 | 455 | 2200 | 1000 | 663 | 879 | 803 | 846 | 780 | 1000 | 240 | 17 |
| 700/250 B | 12" | 10" | 1545 | 715 | 340 | 575 | 340 | 2200 | 800 | 685 | 809 | 829 | 846 | 720 | 1000 | 200 | 15 |
| 700/450 | 24" | 18" | 1900 | 715 | 420 | 850 | 520 | 2300 | 1200 | 888 | 1014 | 1034 | 1075 | 950 | 1300 | 260 | 17,5 |
| 850/300 | 16" | 12" | 1900 | 715 | 420 | 850 | 520 | 2300 | 1200 | 798 | 922 | 942 | 965 | 950 | 1300 | 260 | 17,5 |
| 800/400 | 20" | 16" | 1900 | 715 | 420 | 850 | 520 | 2300 | 1200 | 858 | 984 | 1004 | 1045 | 950 | 1300 | 260 | 17,5 |
| 850/400 | 20" | 16" | 1900 | 715 | 420 | 850 | 520 | 2300 | 1200 | 858 | 984 | 1004 | 1045 | 950 | 1300 | 260 | 17,5 |
| 800/450 | 24" | 18" | 1900 | 715 | 420 | 850 | 520 | 2300 | 1200 | 888 | 1014 | 1034 | 1045 | 950 | 1300 | 260 | 17,5 |
| 850/450 | 24" | 18" | 1900 | 715 | 420 | 850 | 520 | 2300 | 1200 | 888 | 1014 | 1034 | 1045 | 950 | 1300 | 260 | 17,5 |

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