

Pump Performance Datasheet

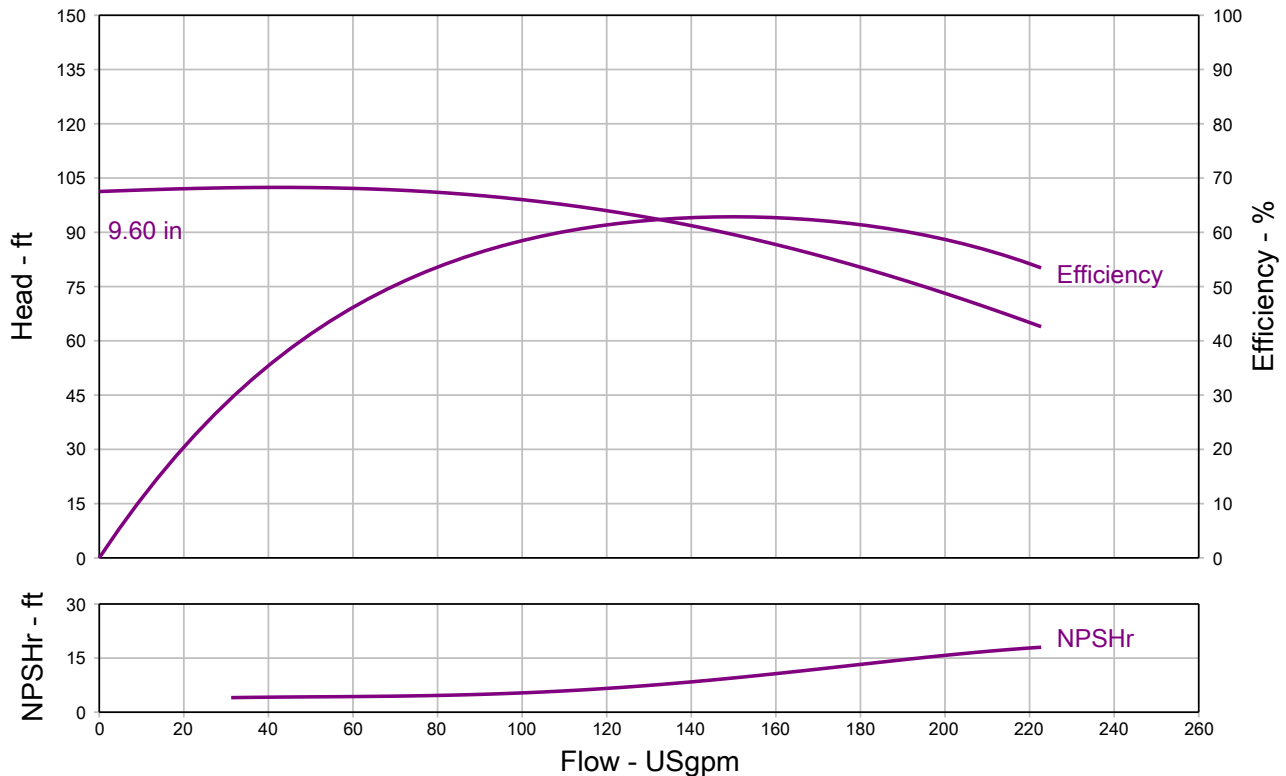
| | | |
|----------------------|-------------------------|--------------------|
| Customer : | Quote Number / ID : | 1471203 |
| Customer ref. / PO : | Model : | 20959 VL |
| Tag Number : 001 | Stages : | 1 |
| Service : | Based on curve number : | VL_20959_4P Rev 0 |
| Quantity : 1 | Basic model number : | - |
| | Date last saved : | 11/06/2023 2:48 PM |

| Operating Conditions | | Liquid | |
|---|---------------------|---------------------------------|--------------------|
| Flow, rated | : 150.0 USgpm | Liquid type | : Cold Water |
| Differential head / pressure, rated (requested) | : 89.38 ft | Additional liquid description | : |
| Differential head / pressure, rated (actual) | : 89.38 ft | Solids diameter, max | : 0.00 in |
| Suction pressure, rated / max | : 0.00 / 0.00 psi.g | Solids concentration, by volume | : 0.00 % |
| NPSH available, rated | : Ample | Temperature, max | : 68.00 deg F |
| Site Supply Frequency | : 60 Hz | Fluid density, rated / max | : 1.000 / 1.000 SG |

| Performance | | Material | |
|----------------------------|------------|-------------------|--------------------|
| Speed, rated | : 1760 rpm | Material selected | : Cast iron - 125# |
| Impeller diameter, rated | : 9.60 in | | |
| Impeller diameter, maximum | : 9.60 in | | |
| Impeller diameter, minimum | : 7.00 in | | |

| Performance | | Pressure Data | |
|--|-----------------------------|------------------------------------|---------------|
| Efficiency | : 62.86 % | Maximum working pressure | : 44.32 psi.g |
| NPSH required / margin required | : 9.48 / 0.00 ft | Maximum allowable working pressure | : 175.0 psi.g |
| nq (imp. eye flow) / S (imp. eye flow) | : 14 / 77 Metric units | Maximum allowable suction pressure | : 175.0 psi.g |
| MCSF | : 43.43 USgpm | Hydrostatic test pressure | : 263.0 psi.g |
| Head, maximum, rated diameter | : 102.4 ft | | |
| Head rise to shutoff | : 13.30 % | | |
| Flow, best eff. point | : 150.0 USgpm | | |
| Flow ratio, rated / BEP | : 100.00 % | | |
| Diameter ratio (rated / max) | : 100.00 % | | |
| Head ratio (rated dia / max dia) | : 100.00 % | | |
| Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010] | : 1.00 / 1.00 / 1.00 / 1.00 | | |
| Selection status | : Acceptable | | |

| Energy Indexes | | Driver & Power Data (@Max density) | |
|----------------|--------|------------------------------------|-------------------------------|
| PEI (CL) | : 0.90 | Motor sizing specification | : Max power (non-overloading) |
| ER (CL) | : 10 | Margin over specification | : 0.00 % |
| | | Service factor | : 1.00 |
| | | Power, hydraulic | : 3.38 hp |
| | | Rated power (based on duty point) | : 5.38 hp |
| | | Max power (non-overloading) | : 6.72 hp |
| | | Nameplate motor rating | : 7.50 hp / 5.59 kW |



Grundfos Series VL - In-Line Centrifugal Pump, Close Coupled

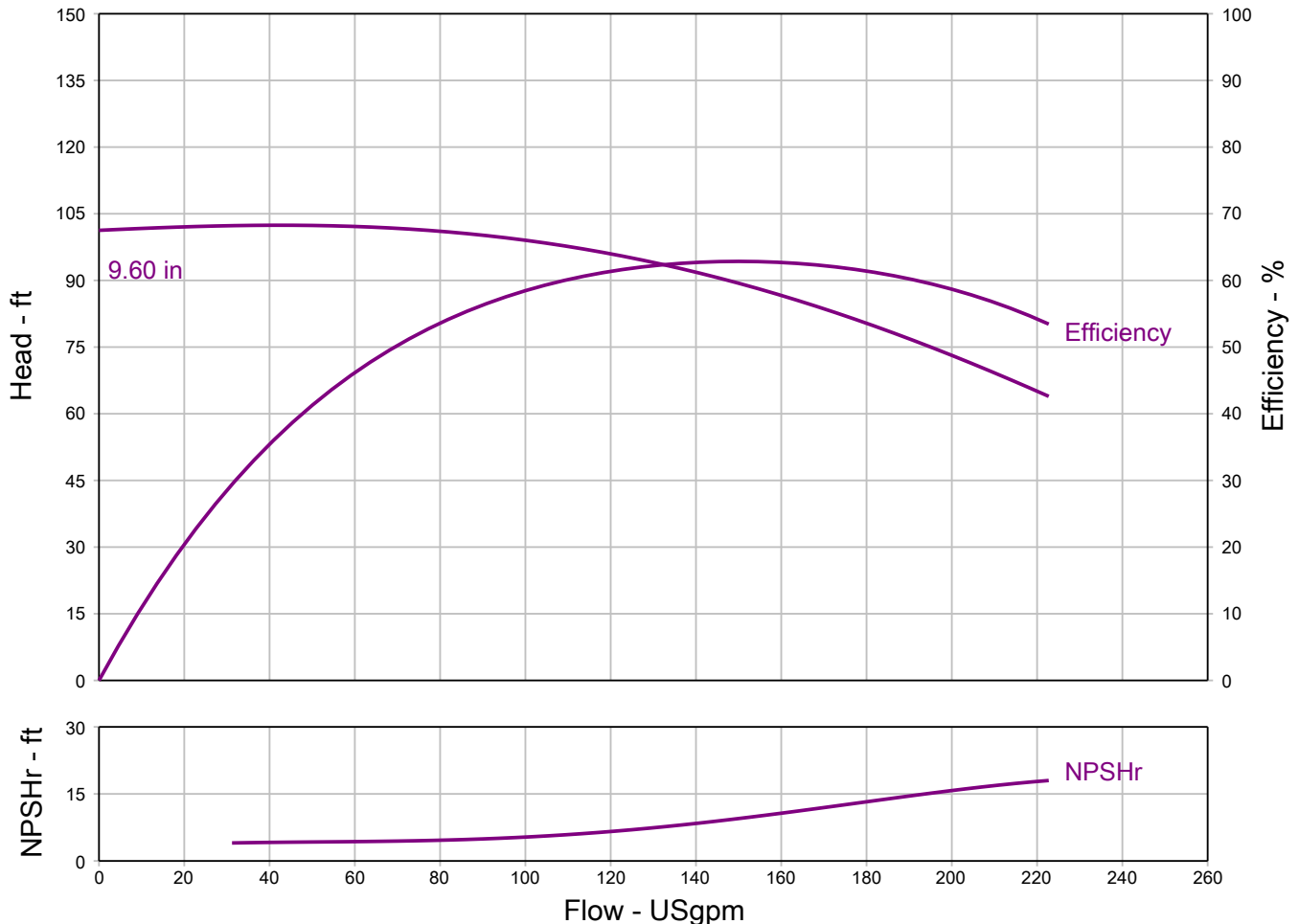
| | | |
|----------------------------------|---------------------|-------------------|
| QUOTE NUMBER / ID 1471203 | UNIT TAG 001 | QUANTITY 1 |
| REPRESENTATIVE | SERVICE | |
| ENGINEER | SUBMITTED BY | DATE |
| CONTRACTOR | APPROVED BY | DATE |
| | ORDER # | DATE |



VL 20959
1760 rpm

Part Number N/A

| Conditions of Service | | Pump Data | | Motor Data | |
|-----------------------|-------------|-------------------|---------|------------|-----------|
| Flow | 150.0 USgpm | Impeller Diameter | 9.60 in | Motor HP | 7.5 HP |
| Head | 89.38 ft | Max. Imp. Dia. | 9.60 in | BHP | 5.38 HP |
| Liquid | Cold Water | Min. Imp. Dia. | 7.00 in | Enclosure | TEFC |
| Temperature | 68.00 deg F | Efficiency | 62.86 % | Voltage | 230/460 V |
| NPSHr | 9.48 ft | Suction | 2 in. | Phase | 3 Phase |
| Viscosity | 1.00 cP | Discharge | 2 in. | Cycle | 60 |
| Specific Gravity | 1.000 SG | PEI (CL) | 0.9 | Frame Size | 213JM |
| | | ER (CL) | 10 | | |

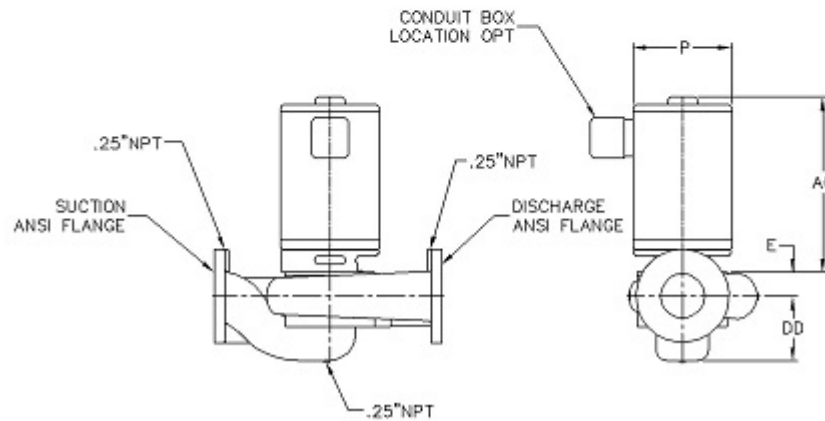


Grundfos Series VL - In-Line Centrifugal Pump, Close Coupled

Do not install pump larger than 215JM in vertical piping.

Pressure and drain tap locations are approximate.

Suction and discharge flanges, are cast per 250# ANSI thickness and diameter. All flanges are flat face. Some holes may be threaded because of nut clearances.



NOT FOR CONSTRUCTION, unless certified and referenced on order

| Units | Frame | S x D | AG (Max) | DC | DD | DE | E | P (Max) | X | YY | Weight |
|--------|-------|-------|----------|------|------|------|------|---------|------|------|--------|
| inches | 213JM | 2 X 2 | 22.00 | 6.00 | 4.88 | 6.25 | 1.50 | 12.00 | 9.00 | 9.00 | TBD |