

## Pump Performance Datasheet

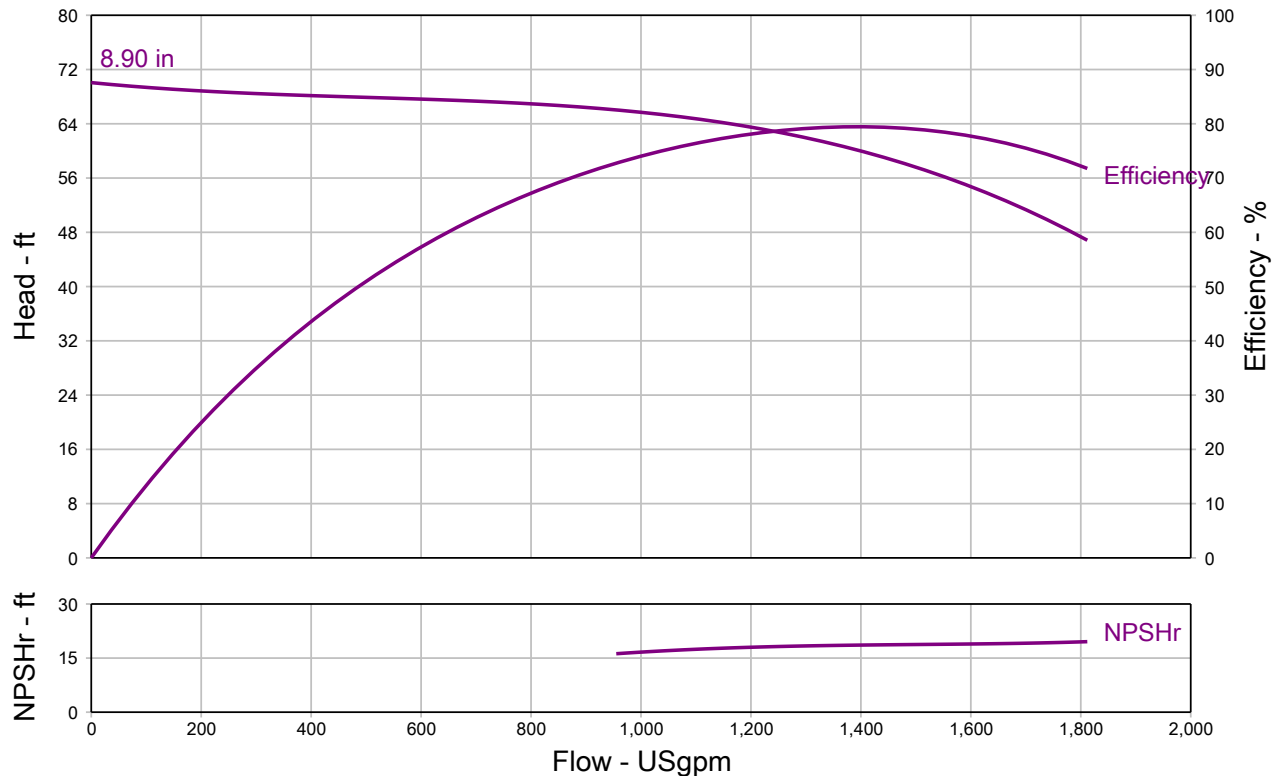
|                      |                         |                       |
|----------------------|-------------------------|-----------------------|
| Customer :           | Quote Number / ID :     | 1471203               |
| Customer ref. / PO : | Model :                 | 80123 VL              |
| Tag Number : 001     | Stages :                | 1                     |
| Service :            | Based on curve number : | VL_80123_4P Rev Aug21 |
| Quantity : 1         | Basic model number :    | -                     |
|                      | Date last saved :       | 11/07/2023 5:29 PM    |

| Operating Conditions                            |                     | Liquid                          |                    |
|---|---------------------|---------------------------------|--------------------|
| Flow, rated                                     | : 1,392.9 USgpm     | Liquid type                     | : Cold Water       |
| Differential head / pressure, rated (requested) | : 60.08 ft          | Additional liquid description   | :                  |
| Differential head / pressure, rated (actual)    | : 60.30 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               | : 1780 rpm | Material selected | : Cast iron - 125# |
| Impeller diameter, rated   | : 8.90 in  |                   |                    |
| Impeller diameter, maximum | : 12.10 in |                   |                    |
| Impeller diameter, minimum | : 7.80 in  |                   |                    |
| Efficiency                 | : 79.46 %  |                   |                    |

| Performance                            |                             | Pressure Data                      |               |
|--|-----------------------------|------------------------------------|---------------|
| NPSH required / margin required        | : 18.59 / 0.00 ft           | Maximum working pressure           | : 30.32 psi.g |
| nq (imp. eye flow) / S (imp. eye flow) | : 38 / 158 Metric units     | Maximum allowable working pressure | : 175.0 psi.g |
| MCSF                                   | : 419.7 USgpm               | Maximum allowable suction pressure | : 175.0 psi.g |
| Head, maximum, rated diameter          | : 70.07 ft                  | Hydrostatic test pressure          | : 263.0 psi.g |
| Head rise to shutoff                   | : 16.51 %                   |                                    |               |
| Flow, best eff. point                  | : 1,393.3 USgpm             |                                    |               |
| Flow ratio, rated / BEP                | : 99.97 %                   |                                    |               |
| Diameter ratio (rated / max)           | : 73.55 %                   |                                    |               |
| Head ratio (rated dia / max dia)       | : 40.38 %                   |                                    |               |
| 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)       | : 1.00 | Motor sizing specification         | : Max power (non-overloading) |
| ER (CL)        | : 0    | Margin over specification          | : 0.00 %                      |
|                |        | Service factor                     | : 1.00                        |
|                |        | Power, hydraulic                   | : 21.15 hp                    |
|                |        | Rated power (based on duty point)  | : 26.61 hp                    |
|                |        | Max power (non-overloading)        | : 29.85 hp                    |
|                |        | Nameplate motor rating             | : 30.00 hp / 22.37 kW         |



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

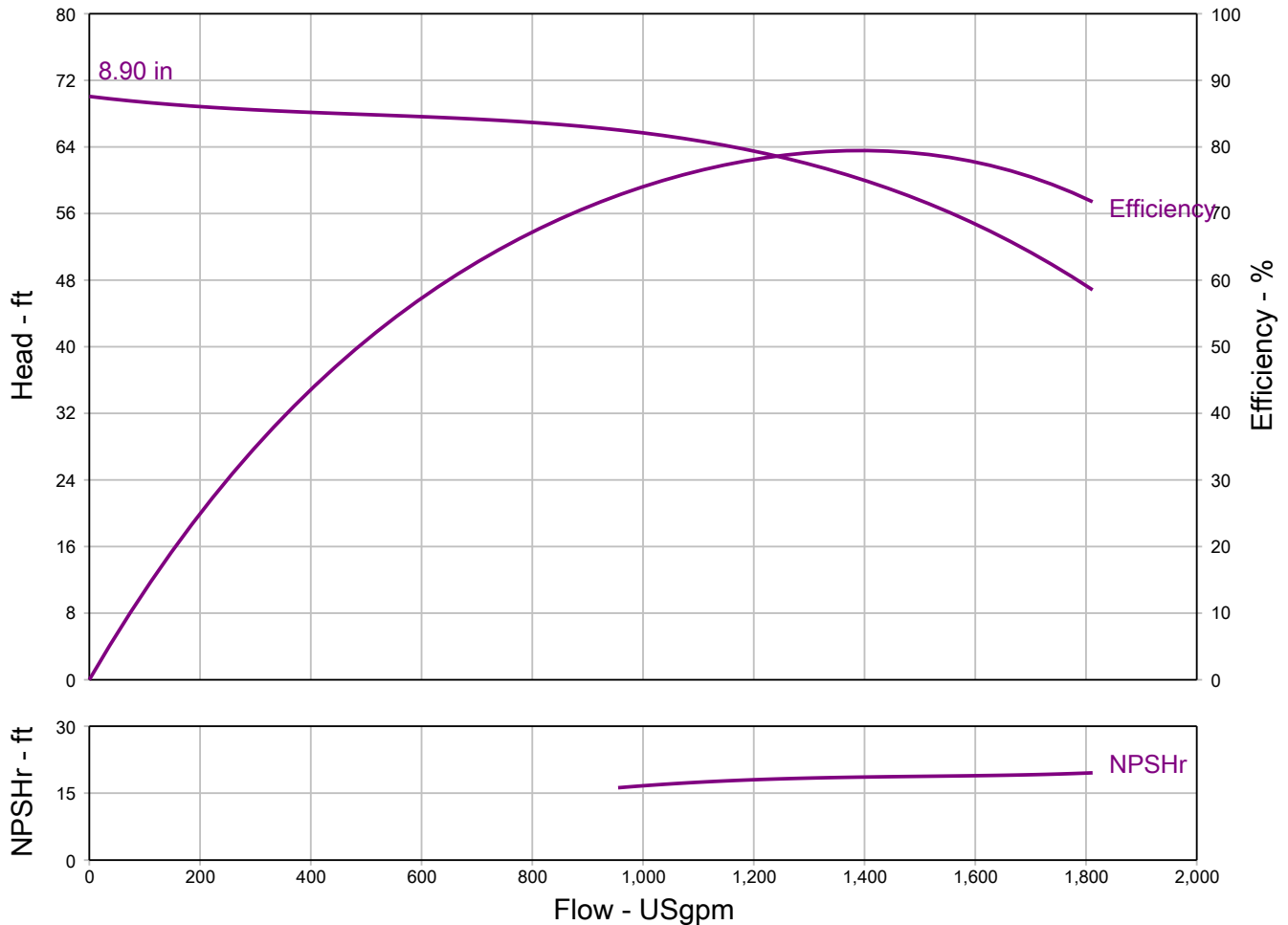
|                           |              |            |
|---------------------------|--------------|------------|
| QUOTE NUMBER / ID 1471203 | UNIT TAG 001 | QUANTITY 1 |
| REPRESENTATIVE            | SERVICE      |            |
| ENGINEER                  | SUBMITTED BY | DATE       |
| CONTRACTOR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



**VL 80123**  
**1780 rpm**

Part Number N/A

| Conditions of Service |               | Pump Data         |          | Motor Data |           |
|-----------------------|---------------|-------------------|----------|------------|-----------|
| Flow                  | 1,392.9 USgpm | Impeller Diameter | 8.89 in  | Motor HP   | 30 HP     |
| Head                  | 60.08 ft      | Max. Imp. Dia.    | 12.10 in | BHP        | 26.61 HP  |
| Liquid                | Cold Water    | Min. Imp. Dia.    | 7.80 in  | Enclosure  | TEFC      |
| Temperature           | 68.00 deg F   | Efficiency        | 79.46 %  | Voltage    | 230/460 V |
| NPSHr                 | 18.59 ft      | Suction           | 8 in.    | Phase      | 3 Phase   |
| Viscosity             | 1.00 cP       | Discharge         | 8 in.    | Cycle      | 60        |
| Specific Gravity      | 1.000 SG      | PEI (CL)          | 1        | Frame Size | 286JM     |
|                       |               | ER (CL)           | 0        |            |           |

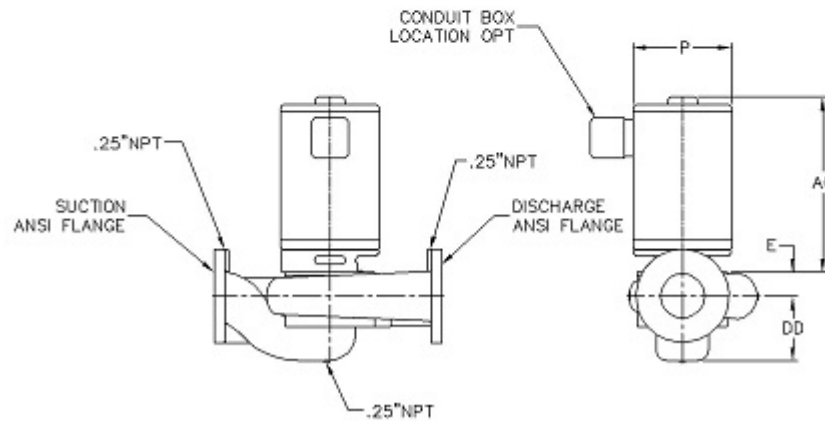


**Grundfos Series VL - In-Line Centrifugal Pump, Close Coupled**

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 | 286JM | 8 X 8 | 26.00    | 8.75 | 12.00 | 12.75 | 2.88 | 15.00   | 19.00 | 19.00 | TBD    |