

## Pump Performance Datasheet

|                    |           |                       |                       |
|--------------------|-----------|-----------------------|-----------------------|
| Customer           | :         | Quote number          | :                     |
| Customer reference | :         | Size and model        | : 10x12x21 PWH        |
| Item number        | : Default | Stages                | : 1                   |
| Service            | :         | Based on curve number | : 10x12x21PWH-1       |
| Quantity           | : 1       | Date last saved       | : 04 Aug 2018 6:34 PM |

| Operating Conditions                            |                             | Liquid                             |                             |
|---|-----------------------------|------------------------------------|-----------------------------|
| Flow, rated                                     | : 0.10 m3/s                 | Liquid type                        | : Chemical                  |
| Differential head / pressure, rated (requested) | : 30.00 m                   | Additional liquid description      | :                           |
| Differential head / pressure, rated (actual)    | : 30.21 m                   | Solids diameter, max               | : 0.00 in                   |
| Suction pressure, rated / max                   | : 10.82 / 10.82 bar.a       | Solids concentration, by volume    | : 0.00 %                    |
| NPSH available, rated                           | : 110.2 m                   | Temperature, max                   | : 5.00 deg C                |
| Frequency                                       | : 60 Hz                     | Fluid density, rated / max         | : 1,000.0 / 1,000.0 kg/m3   |
| Performance                                     |                             | Viscosity, rated                   | : 1.52 cP                   |
| Speed, rated                                    | : 890 rpm                   | Vapor pressure, rated              | : 0.00 psi.a                |
| Impeller diameter, rated                        | : 19.50 in                  | Material                           |                             |
| Impeller diameter, maximum                      | : 21.00 in                  | Material selected                  | : S-6 (Carbon Steel/Chrome) |
| Impeller diameter, minimum                      | : 17.00 in                  | Pressure Data                      |                             |
| Efficiency                                      | : 79.93 %                   | Maximum working pressure           | : 13.89 bar.a               |
| NPSH required / margin required                 | : 1.67 / 0.00 m             | Maximum allowable working pressure | : 52.03 bar.a               |
| nq (imp. eye flow) / S (imp. eye flow)          | : 25 / 178 Metric units     | Maximum allowable suction pressure | : 32.04 bar.a               |
| MCSF  | : 0.04 m3/s                 | Hydrostatic test pressure          | : 77.55 bar.a               |
| Head, maximum, rated diameter                   | : 31.34 m                   | Driver & Power Data (@Max density) |                             |
| Head rise to shutoff                            | : 1.28 %                    | Driver sizing specification        | : API 610 / ISO 13709       |
| Flow, best eff. point                           | : 0.13 m3/s                 | Margin over specification          | : 0.00 %                    |
| Flow ratio, rated / BEP                         | : 74.98 %                   | Service factor                     | : 1.15                      |
| Diameter ratio (rated / max)                    | : 92.86 %                   | Power, hydraulic                   | : 39.45 hp                  |
| Head ratio (rated dia / max dia)                | : 81.65 %                   | Power, rated                       | : 49.36 hp                  |
| Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]                | : 1.00 / 1.00 / 1.00 / 1.00 | Power, maximum, rated diameter     | : 65.15 hp                  |
| Selection status                                | : Acceptable                | Minimum recommended motor rating   | : 60.00 hp / 44.74 kW       |

