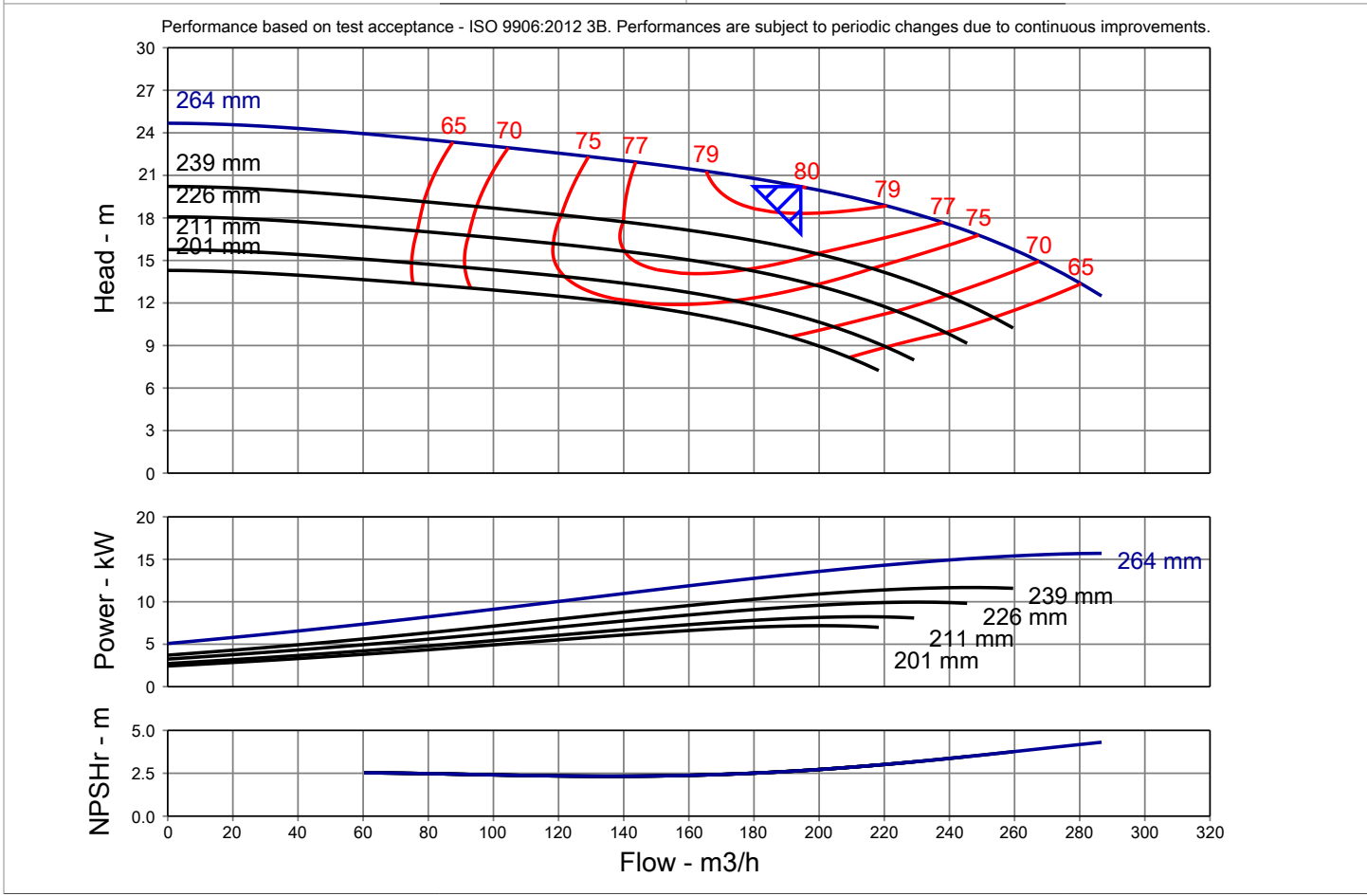


## Pump Performance Datasheet

|                       |                                              |
|-----------------------|----------------------------------------------|
| Customer :            | Quote number :                               |
| Customer reference :  | Size : LVI 125-250                           |
| Item number : Default | Stages : 1                                   |
| Service :             | Based on curve number : LVI 125-125-250-4-60 |
| Quantity : 1          | Date last saved : 16 Nov 2023 8:16 PM        |

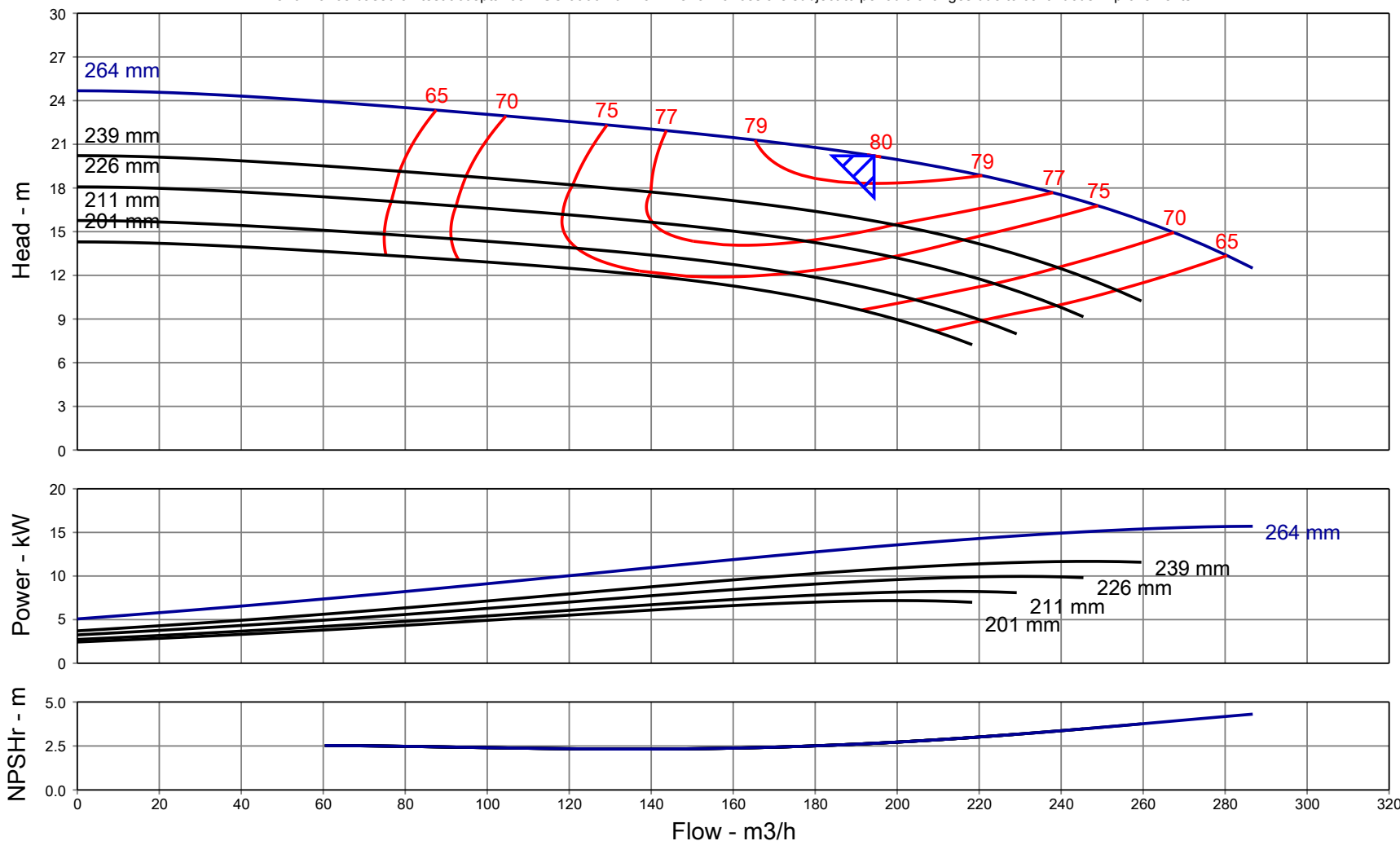
| Operating Conditions                              | Liquid                                   |
|---------------------------------------------------|------------------------------------------|
| Flow, rated : 194.4 m3/h                          | Liquid type : Water                      |
| Head, rated (requested) : 20.21 m                 | Additional liquid description :          |
| Head, rated (actual) : 20.21 m                    | Solids diameter, max : 0.0 mm            |
| Suction pressure, rated / max : 0.00 / 0.00 bar.g | Solids concentration, by volume : 0.00 % |
| NPSH available : Ample                            | Temperature : 20.00 deg C                |
| Site Supply Frequency : 50 Hz                     | Fluid density : 0.999 / 0.999 kg/dm3     |
|                                                   | Viscosity : 1.00 cSt                     |
|                                                   | Vapor pressure, rated : 0.00 bar.a       |

| Performance                                                    | Material                     |
|----------------------------------------------------------------|------------------------------|
| Speed criteria : Synchronous                                   | Material selected : Standard |
| Speed : 1460 rpm                                               |                              |
| Impeller dia. : 264 mm                                         |                              |
| Impeller diameter, maximum : 264 mm                            |                              |
| Impeller diameter, minimum : 201 mm                            |                              |
| Efficiency : 80.00 %                                           |                              |
| NPSH required / margin required : 2.65 / 0.00 m                |                              |
| nq (imp. eye flow) / S (imp. eye flow) : 36 / 163 Metric units |                              |
| MCSF : -                                                       |                              |
| Head max. : 24.68 m                                            |                              |
| Head rise to shutoff : 22.12 %                                 |                              |
| Flow, best eff. point : 194.4 m3/h                             |                              |
| 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                                  |                              |



### Pump Performance Curve

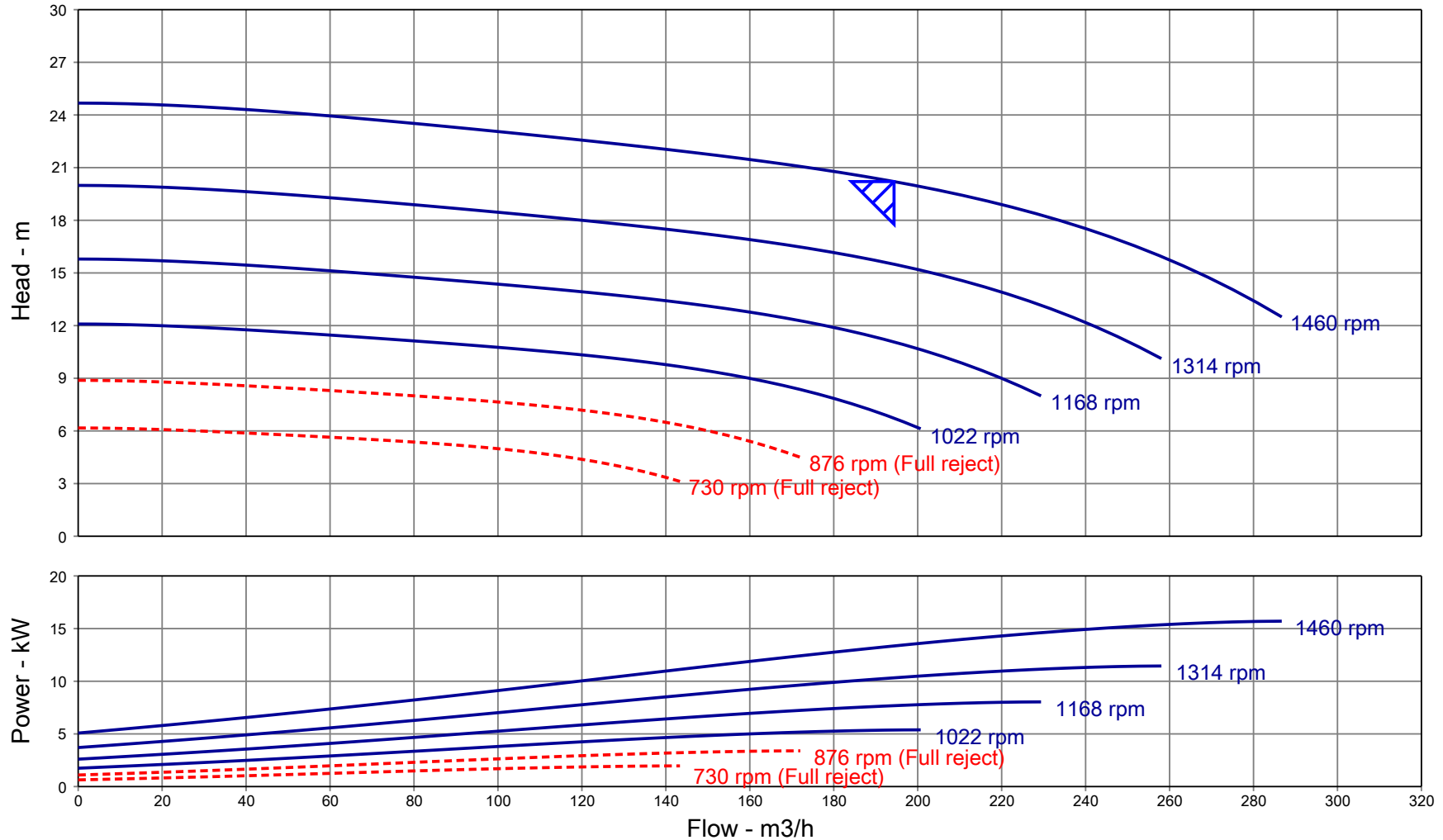
Performance based on test acceptance - ISO 9906:2012 3B. Performances are subject to periodic changes due to continuous improvements.



|                    |                       |                       |                        |                                  |                             |
|--------------------|-----------------------|-----------------------|------------------------|----------------------------------|-----------------------------|
| Customer           | :                     | Size                  | : LVI 125-250          | Flow, rated                      | : 194.4 m3/h                |
| Customer reference | :                     | Stages                | : 1                    | Head, rated                      | : 20.21 m                   |
| Item number        | : Default             | Speed                 | : 1460 rpm             | Fluid density                    | : 0.999 / 0.999 kg/dm3      |
| Service            | :                     | Based on curve number | : LVI 125-125-250-4-60 | Viscosity                        | : 1.00 cSt                  |
| Quantity           | : 1                   | Efficiency            | : 80.00 %              | Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010] | : 1.00 / 1.00 / 1.00 / 1.00 |
| Quote number       | :                     | Power, rated          | : 13.35 kW             |                                  |                             |
| Date last saved    | : 16 Nov 2023 8:16 PM | NPSH required         | : 2.65 m               |                                  |                             |

### Multi-Speed Performance Curve

Performance based on test acceptance - ISO 9906:2012 3B. Performances are subject to periodic changes due to continuous improvements.



|                                       |                               |                                    |
|---------------------------------------|-------------------------------|------------------------------------|
| Customer :                            | Stages :                      | Nominal speed :                    |
| Customer reference :                  | Based on curve number :       | Flow, rated :                      |
| Item number : Default                 | Efficiency : 80.00 %          | Head, rated :                      |
| Service :                             | Power, rated : 13.35 kW       | Speed :                            |
| Quantity : 1                          | NPSH required : 2.65 m        | Impeller dia. :                    |
| Quote number :                        | Site Supply Frequency : 50 Hz | Fluid density :                    |
| Date last saved : 16 Nov 2023 8:16 PM |                               | Viscosity :                        |
| Size : LVI 125-250                    |                               | Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010] : |

### Life Cycle Cost Datasheet

|                       |                                       |                    |
|-----------------------|---------------------------------------|--------------------|
| Customer :            | Quantity : 1                          | Size : LVI 125-250 |
| Customer reference :  | Quote number :                        | Stages : 1         |
| Item number : Default | Date last saved : 16 Nov 2023 8:16 PM | Speed : 1460       |
| Service :             |                                       |                    |

### Load Profiles and Energy Costs

| Expected pump life: 20 years            | Load Profile #1 | Load Profile #2 | Load Profile #3 | Load Profile #4 | Load Profile #5 | Total        |
|-----------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------------|
| Flow: ( m3/h )                          | 7.69            | -               | -               | -               | -               | -            |
| Operation: ( hours per year )           | 8,760           | -               | -               | -               | -               | 8,760        |
| Energy cost, present value (\$ per kWh) | 0.1             | -               | -               | -               | -               | -            |
| Speed (rpm)                             | 1460            | -               | -               | -               | -               | -            |
| Head (m)                                | 24.66           | -               | -               | -               | -               | -            |
| Efficiency (%)                          | 9.64            | -               | -               | -               | -               | -            |
| Power, rated (kW)                       | 5.35            | -               | -               | -               | -               | -            |
| Motor efficiency (%)                    | 100.00          | -               | -               | -               | -               | -            |
| Drive/gear efficiency (%)               | 100.00          | -               | -               | -               | -               | -            |
| System curve                            | -               | -               | -               | -               | -               | -            |
| Energy, total (kWh)                     | 937,381.7       | -               | -               | -               | -               | 937,381.7    |
| Energy cost, per year                   | \$ 4,686.91     | -               | -               | -               | -               | \$ 4,686.91  |
| Energy cost, total present value        | \$ 70,296.03    | -               | -               | -               | -               | \$ 70,296.03 |

### Life Cycle Cost Calculation

| Additional Annual Costs         | Additional One-time Costs, Year 0          | Interest and Inflation Rates             |
|---------------------------------|--------------------------------------------|------------------------------------------|
| Routine maintenance cost : 0.00 | Initial investment cost : 0.00             | Interest rate, % : 6.00                  |
| Repair cost : 0.00              | Installation and commissioning cost : 0.00 | Inflation rate, % : 3.00                 |
| Operating cost : 0.00           | Other one-time costs, year 0 : 0.00        | <b>Total Net Present Value Costs</b>     |
| Downtime cost : 0.00            | <b>Additional One-time Costs, Year 20</b>  | Total energy cost : \$ 70,296.03         |
| Environmental cost : 0.00       | Decommissioning cost : 0.00                | Total additional annual cost : \$ 0.00   |
| Other annual costs : 0.00       | Other one-time costs, year 20 : 0.00       | Total additional one-time cost : \$ 0.00 |
| Total, present value : \$ 0.00  | Total, present value : \$ 0.00             | Total life cycle cost : \$ 70,296.03     |

## Pump Performance - Additional Data

|                       |                                       |
|-----------------------|---------------------------------------|
| Customer :            | Quote number :                        |
| Customer reference :  | Size : LVI 125-250                    |
| Item number : Default | Stages : 1                            |
| Service :             | Speed : 1460 rpm                      |
| Quantity : 1          | Intellicode :                         |
|                       | Date last saved : 16 Nov 2023 8:16 PM |

| Performance Data                                           | Stage, Speed and Solids Limits        |
|------------------------------------------------------------|---------------------------------------|
| Head, maximum diameter, rated flow : 20.21 m               | Stages, maximum : 1                   |
| Head, minimum diameter, rated flow : 9.39 m                | Stages, minimum : 1                   |
| Head max. : 24.68 m                                        | Pump speed limit, maximum : 3600 rpm  |
| Efficiency adjustment factor, total : 1.00                 | Pump speed limit, minimum : 950 rpm   |
| Power adjustment, total : 0.00 kW                          | Curve speed limit, maximum : 3600 rpm |
| Head adjustment factor, total : 1.00                       | Curve speed limit, minimum : 950 rpm  |
| Flow adjustment factor, total : 1.00                       | Variable speed limit, maximum : -     |
| Flow adjustment factor, efficiency only (shift BEP) : 1.00 | Variable speed limit, minimum : -     |
| Flow adjustment factor, end-of-curve only, total : 1.00    | Solids size limit : 0.0 mm            |
| MCSF adjustment factor : 1.00                              |                                       |
| NPSHR adjustment factor, total : 1.00                      |                                       |
| NPSHR slope correction factor : 1.00                       |                                       |
| User applied performance adjustment comments :             |                                       |
| NPSH margin dictated by pump supplier : 0.00 m             |                                       |
| NPSH margin dictated by user : 0.00 m                      |                                       |
| NPSH margin used (added to 'required' values) : 0.00 m     |                                       |

| Mechanical Limits                                         | Typical Driver Data                 |
|-----------------------------------------------------------|-------------------------------------|
| Torque, rated power, rated speed : 9.15 kW/1000 rpm       | Driver speed, full load : 1460 rpm  |
| Torque, maximum power, rated speed : 10.76 kW/1000 rpm    | Driver speed, rated load : 1460 rpm |
| Torque, driver power, full load speed : 12.77 kW/1000 rpm | Driver efficiency, 100% load : N/A  |
| Torque, driver power, rated speed : 12.77 kW/1000 rpm     | Driver efficiency, 75% load : N/A   |
| Torque, pump shaft limit : -                              | Driver efficiency, 50% load : N/A   |
| Radial load, worst case : -                               |                                     |
| Radial load limit : -                                     |                                     |
| Impeller peripheral speed, rated : -                      |                                     |
| Impeller peripheral speed limit : -                       |                                     |

| Various Performance Data        | Flow (m3/h) | Head (m) | Efficiency (%) | NPSHr (m) | Power (kW) |
|---------------------------------|-------------|----------|----------------|-----------|------------|
| Shutoff, rated diameter         | 0.00        | 24.68    | -              | -         | 5.08       |
| Shutoff, maximum diameter       | 0.00        | 24.68    | -              | -         | 5.08       |
| MCSF                            | -           | -        | -              | -         | -          |
| Rated flow, minimum diameter    | 194.4       | 9.39     | 69.28          | -         | 7.16       |
| Rated flow, maximum diameter    | 194.4       | 20.21    | 80.00          | -         | 13.35      |
| BEP flow, rated diameter        | 194.4       | 20.21    | 80.00          | 2.65      | 13.35      |
| 120% rated flow, rated diameter | 233.2       | 18.03    | 77.68          | 3.24      | 14.73      |
| End of curve, rated diameter    | 286.7       | 12.49    | 62.05          | 4.31      | 15.70      |
| End of curve, minimum diameter  | 218.3       | 7.24     | 61.48          | 2.98      | 6.99       |
| End of curve, maximum diameter  | 286.7       | 12.49    | 62.05          | 4.31      | 15.70      |
| Maximum value, rated diameter   | -           | 24.68    | 80.00          | -         | 15.70      |
| Maximum value, maximum diameter | -           | -        | 80.00          | -         | 15.70      |

| System differential pressure                            | @ Density, rated | @ Density, max |
|---------------------------------------------------------|------------------|----------------|
| Differential pressure, rated flow, rated diameter (bar) | 1.98             | 1.98           |
| Differential pressure, shutoff, rated diameter (bar)    | 2.42             | 2.42           |
| Differential pressure, shutoff, maximum diameter (bar)  | 2.42             | 2.42           |

| Discharge pressure                                     | @ Suction pressure, rated | @ Suction pressure, max | @ Suction pressure, rated | @ Suction pressure, max |
|--------------------------------------------------------|---------------------------|-------------------------|---------------------------|-------------------------|
| Discharge pressure, rated flow, rated diameter (bar.g) | 1.98                      | 1.98                    | 1.98                      | 1.98                    |
| Discharge pressure, shutoff, rated diameter (bar.g)    | 2.42                      | 2.42                    | 2.42                      | 2.42                    |
| Discharge pressure, shutoff, maximum diameter (bar.g)  | 2.42                      | 2.42                    | 2.42                      | 2.42                    |

| Ratios                                               |                                                                    |
|------------------------------------------------------|--------------------------------------------------------------------|
| Maximum flow / rated flow, rated diameter : 147.52 % | Head rated diameter / head minimum diameter, rated flow : 215.22 % |



### Pump Performance - Additional Data

#### Construction

|                                       |            |  |
|---------------------------------------|------------|--|
| Vertical In-Line Pump Classifications | : Standard |  |
|---------------------------------------|------------|--|