

|              |             |          |
|--------------|-------------|----------|
| Customer     | Date        | 1/9/2019 |
| Contact      | Project     |          |
| Phone number | Project no. |          |
| Email        |             |          |

## 5SV23F040T

### Operating data

|                           |                     |                           |                          |
|---------------------------|---------------------|---------------------------|--------------------------|
| Pump type                 | Single head pump    | Fluid                     | Water                    |
| No. of pumps / Reserve    | 1 / 0               | Operating temperature t A | °C 4                     |
| Nominal flow              | m <sup>3</sup> /h 0 | pH-value at t A           | 7                        |
| Nominal head              | m 0                 | Density at t A            | kg/m <sup>3</sup> 1000   |
| Static head               | m 0                 | Kin. viscosity at t A     | mm <sup>2</sup> /s 1.569 |
| Inlet pressure            | kPa 0               | Vapor pressure at t A     | kPa 100                  |
| Environmental temperature | °C 20               | Solids                    | 0                        |
| Available system NPSH     | m 0                 | Altitude                  | m 0                      |

### Pump data

|                       |            |                  |                       |
|-----------------------|------------|------------------|-----------------------|
| Make                  | Lowara     | Nominal          | m <sup>3</sup> /h ( ) |
| Speed                 | rpm 2900   | Flow Max-        | m <sup>3</sup> /h 8.5 |
| Number of stages      | 23         | Min-             | m <sup>3</sup> /h     |
| Max. casing pressure  | kPa        | Nominal          | m                     |
| Max. working pressure | kPa 1710.8 | Head at Qmax     | m 77.2                |
| Head H(Q=0)           | m 170      | at Qmin          | m 174.4               |
| Weight                | kg 47      | Shaft power      | kW ( )                |
| Max. Impeller R       | mm 76      | Max. shaft power | kW 3.3                |
| designed              | mm 76      | Efficiency       | %                     |
| Min.                  | mm 76      | NPSH 3%          | m                     |

### Pump Materials

|                          |                            |
|--------------------------|----------------------------|
| Pump body                | Stainless steel / AISI 304 |
| IMPELLER                 | Stainless steel / AISI 304 |
| DIFFUSER                 | Stainless steel / AISI 304 |
| Outer sleeve             | Stainless steel / AISI 304 |
| SHAFT                    | Stainless steel / AISI 304 |
| ADAPTER                  | Cast iron                  |
| Base                     | Aluminium                  |
| COUPLING                 | Aluminium                  |
| SEAL HOUSING             | Stainless steel / AISI 304 |
| Coupling protection      | Stainless steel / AISI 304 |
| Shaft sleeve and bushing | Tungsten carbide           |
| Fill / drain plugs       | Stainless steel / AISI 304 |
| Tie rods                 | Galvanized steel           |
| WEAR RING                | Technopolymer PPS          |

### Shaft Seal

|                               |                          |
|-------------------------------|--------------------------|
| e-SV Mechanical seal          | Roten                    |
| e-SV - Uniten (-30 / +120 °C) |                          |
| 1 - Rotating part             | Silicon Carbide          |
| 2 - Stationary part           | Resin impregnated carbon |
| 3 - Elastomers                | EPDM                     |
| 4 - Springs                   | AISI 316                 |
| 5 - Other components          | AISI 316                 |

### Motor data

|                  |  |                      |       |        |          |                  |          |
|------------------|--|----------------------|-------|--------|----------|------------------|----------|
| Manufacturer     | Lowara                                 | Electric voltage     | 380 V | Speed  | 2910 rpm | Insulation class | 155 (F)  |
| Specific design  | IE3 Three phase surface motor (e-SV)   | Frame size           | 112R  | Colour |          |                  | RAL 5010 |
| Type             | PLM112RB14S6/340 E3 (380-415/660-690V) |                      |       |        |          |                  |          |
| Rated power      | 4 kW                                   | Degree of protection | IP55  |        |          |                  |          |
| Electric current | 7.8 A                                  |                      |       |        |          |                  |          |

### Remarks:

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## 5SV23F040T

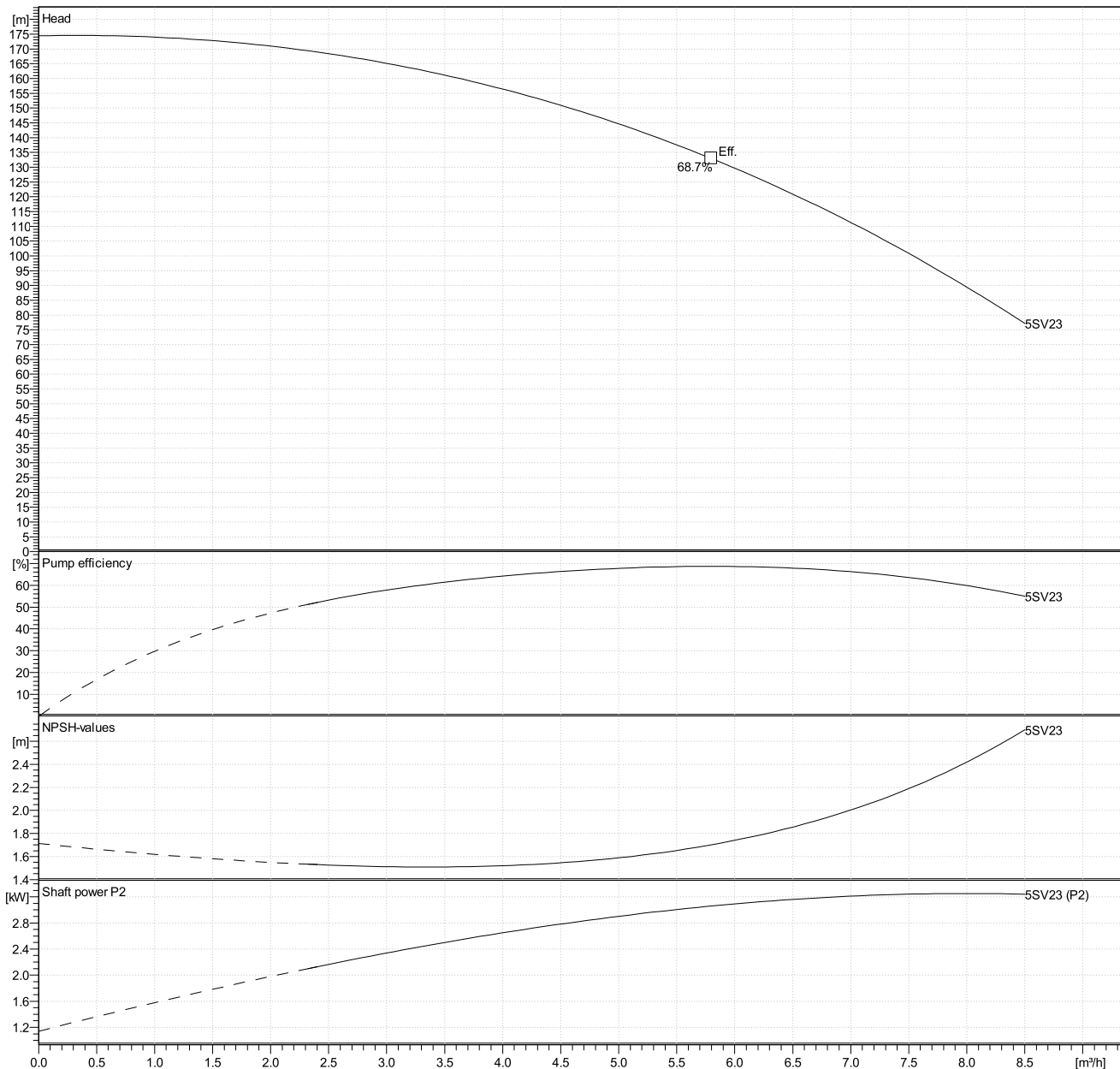
### Hydraulic data

| Operating Data Specification |                     | Hydraulic data (duty point) |  | Impeller design |          |
|------------------------------|---------------------|-----------------------------|--|-----------------|----------|
| Flow                         | 0 m <sup>3</sup> /h | Flow                        |  | Impeller R      | 76 mm    |
| Head                         | 0 m                 | Head                        |  | Frequency       | 50 Hz    |
| Static head                  | 0 m                 | MEI >=0,7                   |  | Speed           | 2900 rpm |

#### Power data referred to:

Water [100%] ; 4°C; 1000kg/m<sup>3</sup>; 1.57mm<sup>2</sup>/s

Performance according to ISO 9906:2012 – Grade 3B

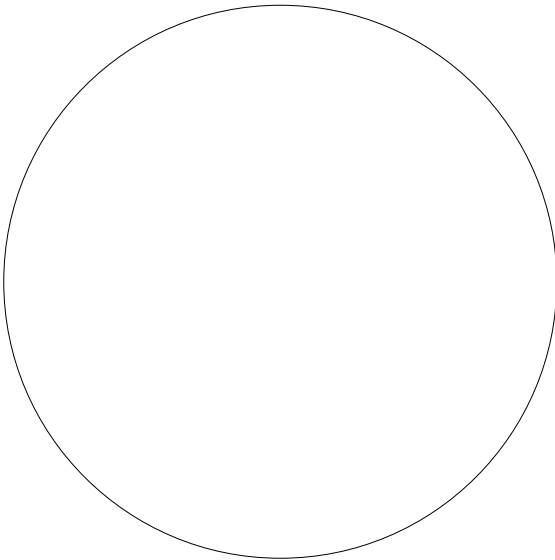




**5SV23F040T**

|                       |          |  |     |
|-----------------------|----------|--|-----|
| Total lifetime        | 15       | Inflation rate (rate of price increases) | 2 % |
| Annual operating time | 5600     | Interest rate (for investment)           | 3 % |
| Energy cost per kWh   | 0.00 GBP |  |     |
| Power input P1        |          |  |     |

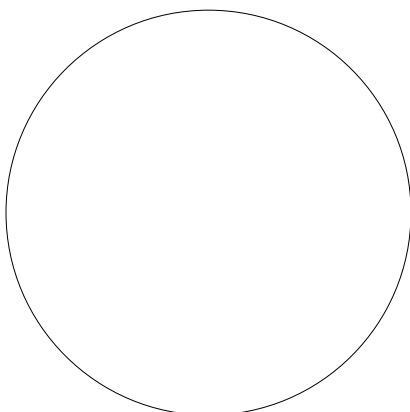
**Total costs**



**GBP**

- 0%** **0.00 GBP** Energy
- 0%** **0.00 GBP** Investment costs
- 0%** **0.00 GBP** Installation & commissioning
- 0%** **0.00 GBP** Operating cost
- 0%** **0.00 GBP** Maintenance & repair
- 0%** **0.00 GBP** Downtime
- 0%** **0.00 GBP** Environmental
- 0%** **0.00 GBP** Decommissioning

**First year costs**



**GBP**

- 0%** **0.00 GBP** Energy (1st year)
- 0%** **0.00 GBP** Investment costs (1st year)
- 0%** **0.00 GBP** Installation & commissioning (1st year)
- 0%** **0.00 GBP** Operating cost (1st year)
- 0%** **0.00 GBP** Maintenance & repair (1st year)
- 0%** **0.00 GBP** Downtime (1st year)
- 0%** **0.00 GBP** Environmental (1st year)
- 0%** **0.00 GBP** Decommissioning (1st year)