

|              |             |           |
|--------------|-------------|-----------|
| Customer     | Date        | 1/11/2019 |
| Contact      | Project     |           |
| Phone number | Project no. |           |
| Email        |             |           |

## 10SV05T022T

### 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 14  |
| Number of stages      | 5         | Min-             | m <sup>3</sup> /h     |
| Max. casing pressure  | kPa       | Nominal          | m                     |
| Max. working pressure | kPa 588.2 | Head at Qmax     | m 28.9                |
| Head H(Q=0)           | m 60      | at Qmin          | m 60                  |
| Weight                | kg 37     | Shaft power      | kW ( )                |
| Max. Impeller R       | mm 96     | Max. shaft power | kW 1.8                |
| designed              | mm 96     | Efficiency       | %                     |
| Min.                  | mm 96     | 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  | 2900 rpm | Insulation class | 155 (F)  |
| Specific design  | IE3 Three phase surface motor (e-SV) | Frame size           | 90    | Colour |          |                  | RAL 5010 |
| Type             | PLM90B14/322 E3 (380-415/660-690V)   |                      |       |        |          |                  |          |
| Rated power      | 2.2 kW                               | Degree of protection | IP55  |        |          |                  |          |
| Electric current | 4.57 A                               |                      |       |        |          |                  |          |

### Remarks:

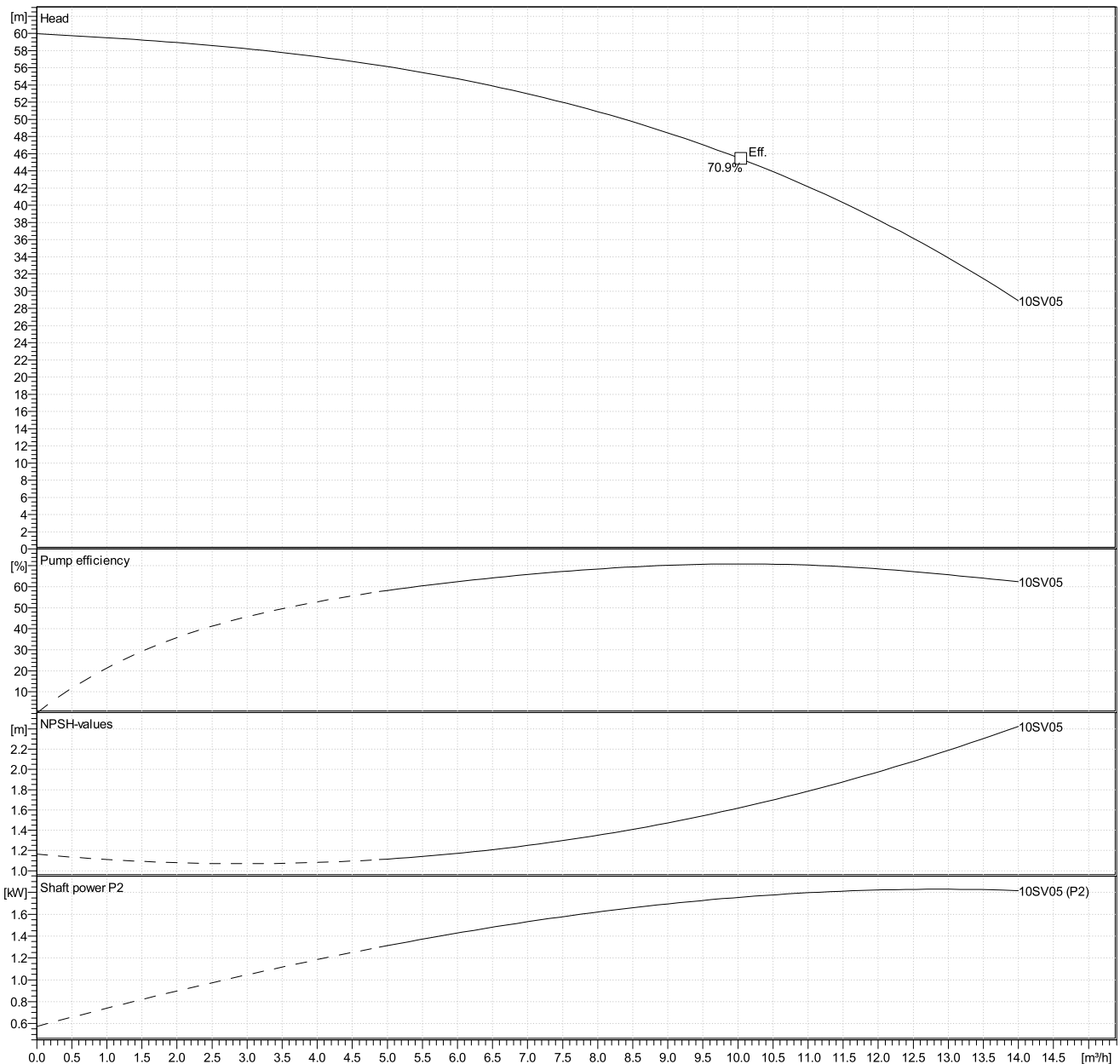
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## 10SV05T022T

### Hydraulic data

| Operating Data Specification |                     | Hydraulic data (duty point) |  | Impeller design |          |
|------------------------------|---------------------|-----------------------------|--|-----------------|----------|
| Flow                         | 0 m <sup>3</sup> /h | Flow                        |  | Impeller R      | 96 mm    |
| Head                         | 0 m                 | Head                        |  | Frequency       | 50 Hz    |
| Static head                  | 0 m                 | MEI >=0,7                   |  | Speed           | 2900 rpm |

Power datas 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

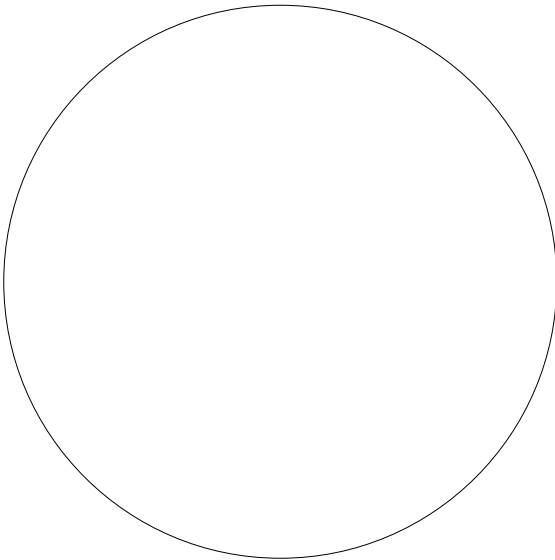




**10SV05T022T**

|                       |          |  |     |
|-----------------------|----------|--|-----|
| 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        |          |  |     |

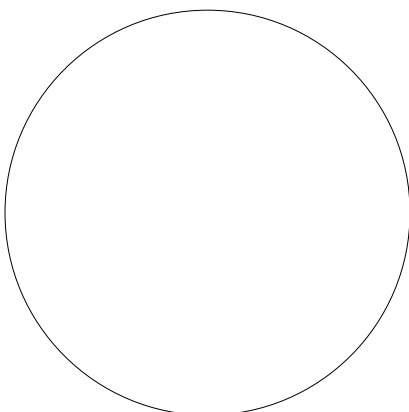
**Total costs**



**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)