

# NSCF40-200/22/P46PCS4

## Technical data

Company name  
Contact  
Phone number  
e-mail address

| Operating data |                           |                  |    |  |             |           |
|----------------|---------------------------|------------------|----|--|-------------|-----------|
| 1              | Pumpe type                | Single head pump |    | Fluid                                      | Water, pure |           |
| 2              | No. of pumps              | 1                |    | Operating temperature at t A               | °F          | 39.2      |
| 3              | Nominal flow              | US g.p.m.        | 0  | Max / Min Operating Temperature mech. Seal | °F          | 120 / -25 |
| 4              | Nominal head              | ft               | 0  | pH-value at t A                            |             | 7         |
| 5              | Static head               | ft               | 0  | Density at t A                             | lb/ft³      | 62.4      |
| 6              | Inlet pressure            | psi              | 0  | Kin. viscosity at t A                      | ft²/s       | 1.689E-5  |
| 7              | Environmental temperature | °F               | 68 | Vapor pressure at t A                      | psi         | 14.5      |
| 8              | Available system NPSH     | ft               | 0  | Altitude                                   |             | 0         |

| Pump data |                       |   |         |             |          |                   |           |         |
|-----------|-----------------------|---|---------|-------------|----------|-------------------|-----------|---------|
| 9         | Lubrication           | Standard, Grease lubrication [Std]              |         |             |          |                   |           |         |
| 10        | Execution             | [F] = 4 poles motor unit with standard cuopling |         |             |          |                   |           |         |
| 11        | Design                | Horizontal                                      |         | Impeller Ø  | Max.     | inch              | 7 13/16   |         |
| 12        | Operating speed       | 1750 rpm  | Stages  |             | 1        | designed          | inch      | 7 7/16  |
| 13        | Suction nozzle        | DN 65 /   | PN 16 / |             | EN1092-2 | Min.              | inch      | 6 15/16 |
| 14        | Discharge nozzle      | DN 40 /   | PN 16 / | EN1092-2    | Flow     | Nominal US g.p.m. |           |         |
| 15        | Max. casing pressure  | psi   |         |             |          | Max-              | US g.p.m. | 162.9   |
| 16        | Max. working pressure | psi   | 25.4    |             | Min-     | US g.p.m.         | 40.5      |         |
| 17        | Impeller type         | Radial impeller                                 |         | Head        | Nominal  |                   | ft        |         |
| 18        | Head H(Q=0)           | ft  | 59      |             | at Qmax  | ft                | 30.7      |         |
| 19        | Max. shaft power      | hp  | 2.7     |             | at Qmin  | ft                | 59.3      |         |
| 20        | Pump weight           | kg  | 88.2    | Shaft power | hp       |                   |           |         |
| 21        | Total weight          | lb  | 229.9   | Efficiency  | %        |                   |           |         |
|           |                       |   |         | NPSH 3%     | ft       |                   |           |         |

| Materials |                              |                            |  |
|-----------|------------------------------|----------------------------|--|
| 22        |                              | <b>Pump</b>                | <b>Shaft Seal</b>                            |
| 23        | Volute Casing                | Cast Iron                  | Single mechanical seal, without shaft sleeve |
| 24        | Casing Cover                 | Cast Iron                  | eMG12 - Ø22mm                                |
| 25        | Impeller                     | Fabricated Stainless Steel | BQ7EGG-WA                                    |
| 26        | Shaft                        | Stainless steel            | Mechanical seal diameter                     |
| 27        | Wear ring                    | Stainless steel            | 7/8 inch                                     |
| 28        | Impeller lock nut and washer | Stainless steel            | 1. Rotating ring                             |
| 29        | Impeller key                 | Stainless steel            | Carbon graphite resin impregnated            |
| 30        | Fill and drain plugs         | Stainless steel            | 2. Stationary ring                           |
| 31        |                              |                            | SiC, silicon carbide, sintered press.less    |
| 32        |                              |                            | 3. Secondary seal                            |
| 33        |                              |                            | Ethylene propylene rubber (EPDM)             |
| 34        |                              |                            | 4. Springs                                   |
| 35        |                              |                            | CrNiMo - Steel                               |
| 36        |                              |                            | 5. Others                                    |
| 37        |                              |                            | EPDM - WRAS                                  |
| 38        |                              |                            | Gaskets of the pump                          |
| 39        |                              |                            | Ethylene propylene rubber (EPDM)             |
| 40        |                              |                            |  |
| 41        |                              |                            |  |

| Motor data |                 |  |                      | Electrical and dimensional data refer to IE3 motor |                                      | Coupling               |           |
|------------|-----------------|--|----------------------|--|--------------------------------------|------------------------|-----------|
| 42         | Manufacturer    | Lowara                                     |                      | Manufacturer                                       | Flender                              |                        |           |
| 43         | Specific design | IE3 3ph Surface Motor - Premium Efficiency |                      | Series   | Standard Coupling - N-EUPEX - Type B |                        |           |
| 44         | Type            | PLM 100 B3 2,2 kW                          |                      | Shaft diameter                                     | Pump 15/16 inch                      | Motor 1 1/8 inch       |           |
| 45         | Rated power     | 2.9502 hp                                  | Rated current        | 8.19 A   | Frame size                           | 68                     |           |
| 46         | Nominal speed   | 1740 rpm                                   | Rated voltage        | 220 V  | Spacer length                        | inch                   | 1/8       |
| 47         | Frame size      | 100  | Service factor       | 1  | Weight                               | lb 1.2                 |           |
| 48         | Weight          | lb 87.7                                    | Degree of protection | IP55   | Coupling protection                  | COUPLGUARD 160x112PNTD | 0.5291 lb |

| Base plate |        |                     | Remarks |  |
|------------|--------|---------------------|---------|--|
| 49         | Name   | BASE 3A 900X390 BLU |         |  |
| 50         | Weight | lb                  | 52.2    |  |

|         |                        |            |           |             |           |
|---------|------------------------|------------|-----------|-------------|-----------|
| Project | Xylect-20182283        | Created by |           | Last update | 1/11/2025 |
| Block   | NSCF40-200/185/P26PCS4 | Created on | 1/11/2025 |             |           |

# NSCF40-200/22/P46PCS4

## Performance curve

Company name  
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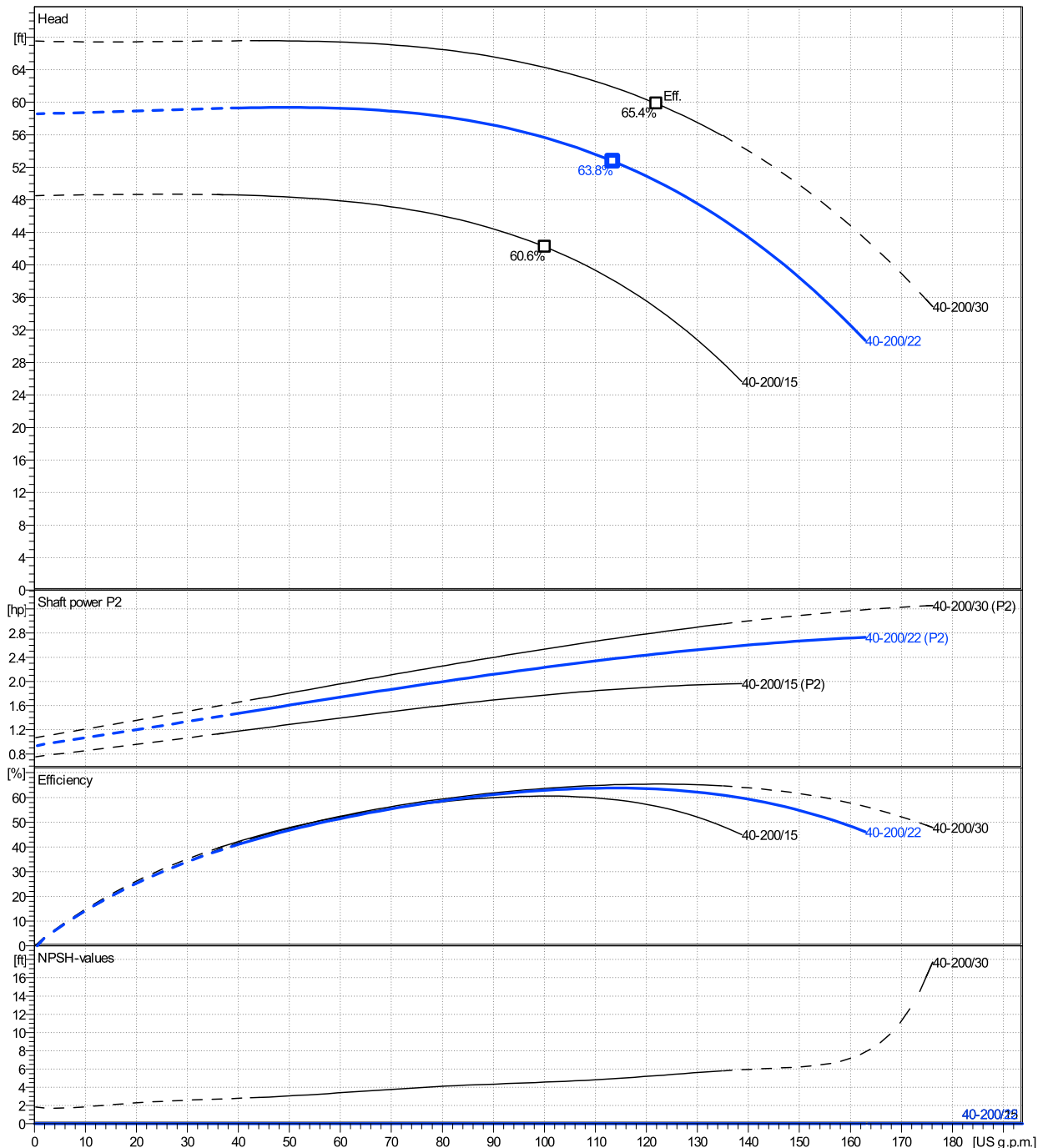
|        | Ø<br>mm | Pump capacity<br>Operating range<br>η |                   |                   | Pump head<br>H(Q=0)<br>η |      | Shaft power P2<br>P2(Q=0)<br>η |      |                | Frequency       | Hz  |  |
|--------|---------|---------------------------------------|-------------------|-------------------|--------------------------|------|--------------------------------|------|----------------|-----------------|-----|--|
|        |         | Min.<br>US g.p.m.                     | Max.<br>US g.p.m. | Max.<br>US g.p.m. | ft                       | ft   | hp                             | hp   | hp             | Operating speed | rpm |  |
| actual | 7 7/16  | 40.5                                  | 163               | 113               | 58.6                     | 52.7 | 2.73                           | 2.37 | 60             | 1750            |     |  |
| Min.   | 0       | /                                     | /                 | 100               | 48.5                     | 42.2 | /                              | 1.78 | Nominal flow   | US g.p.m.       | 0   |  |
| Max.   | 7 13/16 | /                                     | /                 | 122               | 67.5                     | 59.8 | /                              | 2.81 | Nominal head   | ft              | 0   |  |
|        |         |                                       |                   |                   |                          |      |                                |      | Inlet pressure | psi             | 0   |  |
|        |         |                                       |                   |                   |                          |      |                                |      | Static head    | ft              | 0   |  |

**Power datas referred to:**

hydr. Performance acceptance acc. To EN ISO 9906 Class Grade 3B

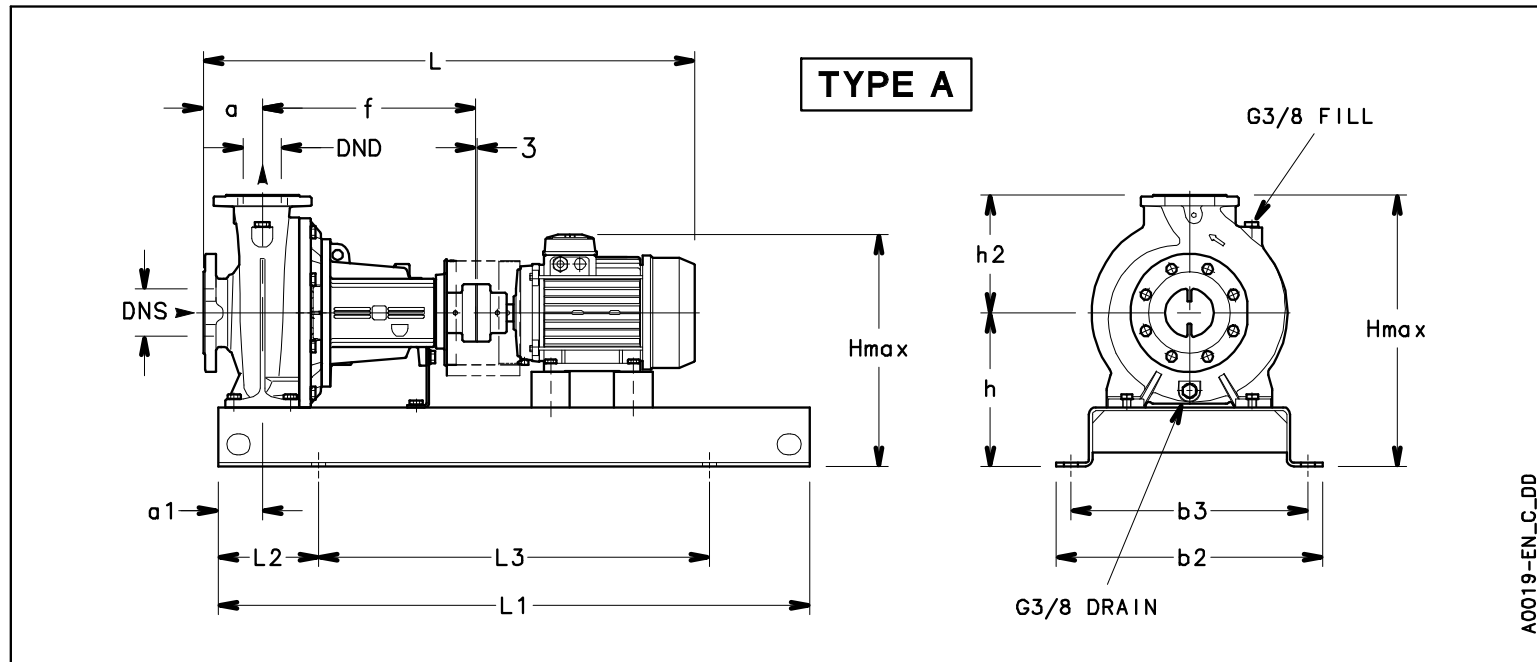
Water, pure [100%] ; 39.2°F; 62.4lb/ft³; 1.69E-5ft²/s

MEI: N.A - according to Ecodesign Directive 2009/125/EC and Regulation (EU) No.547/2012



Frame mounted  
[F] = 4 poles motor unit with standard coupling  
PLM 100 B3 2,2 kW

Electrical and dimensional data refer to IE3 motor

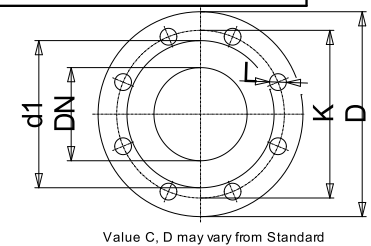


**Dimensions** [ inch ]

|         |                                  |  |  |
|---------|----------------------------------|--|--|
| a       | 3 <sup>15</sup> / <sub>16</sub>  |  |  |
| a1      | 2 <sup>3</sup> / <sub>8</sub>    |  |  |
| AD      | 6 <sup>7</sup> / <sub>16</sub>   |  |  |
| b2      | 15 <sup>3</sup> / <sub>8</sub>   |  |  |
| b3      | 13 <sup>3</sup> / <sub>4</sub>   |  |  |
| DND     | 1 <sup>9</sup> / <sub>16</sub>   |  |  |
| DNS     | 2 <sup>9</sup> / <sub>16</sub>   |  |  |
| f       | 14 <sup>3</sup> / <sub>16</sub>  |  |  |
| Guard   | 4 <sup>7</sup> / <sub>16</sub>   |  |  |
| h       | 10 <sup>1</sup> / <sub>4</sub>   |  |  |
| h2      | 7 <sup>1</sup> / <sub>16</sub>   |  |  |
| Hmax    | 17 <sup>9</sup> / <sub>16</sub>  |  |  |
| L       | 34 <sup>15</sup> / <sub>16</sub> |  |  |
| L1      | 35 <sup>7</sup> / <sub>16</sub>  |  |  |
| L2      | 5 <sup>7</sup> / <sub>8</sub>    |  |  |
| L3      | 23 <sup>9</sup> / <sub>8</sub>   |  |  |
| s       | 4xØ19                            |  |  |
| Type    | A                                |  |  |
| Volumen | 1 <sup>1</sup> / <sub>128</sub>  |  |  |
| x       | 1 <sup>1</sup> / <sub>8</sub>    |  |  |

| Weight       |           |
|--------------|-----------|
| Total weight | 104.28 kg |

| Connections    |                                 |                  |                                |
|----------------|---------------------------------|------------------|--------------------------------|
| Suction nozzle |                                 | Discharge nozzle |                                |
| DN 65          |                                 | DN 40            |                                |
| PN 16          |                                 | PN 16            |                                |
| EN1092-2       |                                 | EN1092-2         |                                |
| C              | 1 <sup>3</sup> / <sub>16</sub>  | C                | 1 <sup>1</sup> / <sub>16</sub> |
| D              | 7 <sup>5</sup> / <sub>16</sub>  | D                | 5 <sup>7</sup> / <sub>8</sub>  |
| df             | 4 <sup>5</sup> / <sub>8</sub>   | df               | 3 <sup>5</sup> / <sub>16</sub> |
| DN             | 2 <sup>9</sup> / <sub>16</sub>  | DN               | 1 <sup>9</sup> / <sub>16</sub> |
| K              | 5 <sup>11</sup> / <sub>16</sub> | K                | 4 <sup>5</sup> / <sub>16</sub> |
| L              | 4 x 19                          | L                | 4 x 19                         |



Note:  
Weight and Dimensions of selected Hydrovar are NOT considered.  
Please refer to additional datasheet.

**Dimensions and weight without obligation**

|         |                        |            |           |             |           |
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