

**NSCS200-250/370/L46UDC4****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 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           | 42                       |  |           |      |   |            |          |             |          |                   |           |        |
| 10 | Execution             | Standard Design (Type B) |  |           |      |   | Impeller Ø | Max.     | inch        | 10 11/16 |                   |           |        |
| 11 | Design                | Horizontal               |  |           |      |   |            | designed | inch        | 9 7/16   |                   |           |        |
| 12 | Operating speed       | 1775 rpm                 |  | Stages    |      | 1 |            | Min.     | inch        | 8 11/16  |                   |           |        |
| 13 | Suction nozzle        | DN250                    |  | /         | PN16 |   | /          | EN1092-2 |             | Flow     | Nominal US g.p.m. |           |        |
| 14 | Discharge nozzle      | DN200                    |  | /         | PN16 |   | /          | EN1092-2 |             |          | Max-              | US g.p.m. | 3768.9 |
| 15 | Max. casing pressure  | psi                      |  |           |      |   |            |          | Min-        |          | US g.p.m.         | 587.3     |        |
| 16 | Max. working pressure | psi                      |  | 36.5      |      |   |            |          | Nominal     |          | ft                |           |        |
| 17 | Impeller type         | Radial impeller          |  |           |      |   | Head       | at Qmax  |             | ft       | 32.4              |           |        |
| 18 | Head H(Q=0)           | ft                       |  | 84        |      |   |            |          | at Qmin     |          | ft                | 81.7      |        |
| 19 | Max. shaft power      | hp                       |  | 48.3      |      |   |            |          | Shaft power |          | hp                |           |        |
| 20 | Pump weight           | kg                       |  |           |      |   |            |          | Efficiency  |          | %                 |           |        |
| 21 | Total weight          | lb                       |  | On demand |      |   |            |          | NPSH 3%     |          | ft                |           |        |

**Materials**

|    |                              |                                                       |                                              |                                           |
|----|------------------------------|-------------------------------------------------------|----------------------------------------------|-------------------------------------------|
| 22 | <b>Pump</b>                  |                                                       | <b>Shaft Seal</b>                            |                                           |
| 23 | Volute Casing                | Ductile Iron, EN-GJS-400-15, ASTM A536 40-60-18       | Single mechanical seal, without shaft sleeve |                                           |
| 24 | Impeller                     | Cast Iron, EN 1561 - GJL-200, ASTM Class 30           | eMG12 - Ø48mm                                | BQ7EGG-WA                                 |
| 25 | Casing Cover                 | Ductile Iron, EN-GJS-400-15, ASTM A536 40-60-18       | Mechanical seal diameter                     |                                           |
| 26 | Shaft                        | Stainless steel, 1.4057, AISI 431                     | 1. Rotating ring                             | Carbon graphite resin impregnated         |
| 27 | Wear ring                    | Stainless steel, 1.4301, AISI 304                     | 2. Stationary ring                           | SiC, silicon carbide, sintered press.less |
| 28 | Impeller lock nut and washer | A4 (1.4401)                                           | 3. Secondary seal                            | Ethylene propylene rubber (EPDM)          |
| 29 | Impeller key                 | Stainless steel, 1.4571, AISI 316Ti                   | 4. Springs                                   | CrNiMo - Steel                            |
| 30 | Fill and drain plugs         | Galvanized carbon steel, EN 10277-3, AISI 1213 / 1215 | 5. Others                                    | EPDM - WRAS                               |
| 31 | Bearing bracket              | Cast Iron, EN 1561 - GJL-250, ASTM Class 35           | Gaskets of the pump                          |                                           |
| 32 |                              |                                                       |                                              |                                           |
| 33 |                              |                                                       |                                              |                                           |
| 34 |                              |                                                       |                                              |                                           |
| 35 |                              |                                                       |                                              |                                           |
| 36 |                              |                                                       |                                              |                                           |
| 37 |                              |                                                       |                                              |                                           |
| 38 |                              |                                                       |                                              |                                           |
| 39 |                              |                                                       |                                              |                                           |
| 40 |                              |                                                       |                                              |                                           |
| 41 |                              |                                                       |                                              |                                           |

**Motor data**

Electrical and dimensional data refer to IE3 motor

|    |                 |                                           |                      |        |
|----|-----------------|-------------------------------------------|----------------------|--------|
| 42 | Manufacturer    | Lowara                                    |                      |        |
| 43 | Specific design | IE3 3ph Flange Motor - Premium Efficiency |                      |        |
| 44 | Type            | 3MAS 225 S B35 37 kW                      |                      |        |
| 45 | Rated power     | 49.618 hp                                 | Rated current        | 69.2 A |
| 46 | Nominal speed   | 1764 rpm                                  | Rated voltage        | 380 V  |
| 47 | Frame size      | 225 S                                     | Service factor       | 1      |
| 48 | Weight          | lb 576.5                                  | Degree of protection | IP55   |

**Remarks**

|    |  |
|----|--|
| 49 |  |
| 50 |  |
| 50 |  |
| 52 |  |

|         |                         |            |           |             |           |
|---------|-------------------------|------------|-----------|-------------|-----------|
| Project | Xylect-20178897         | Created by |           | Last update | 1/10/2025 |
| Block   | NSCS200-250/550/L46UDC4 | Created on | 1/10/2025 |             |           |

## NSCS200-250/370/L46UDC4

### Performance curve

Company name  
Contact  
Phone number  
e-mail address

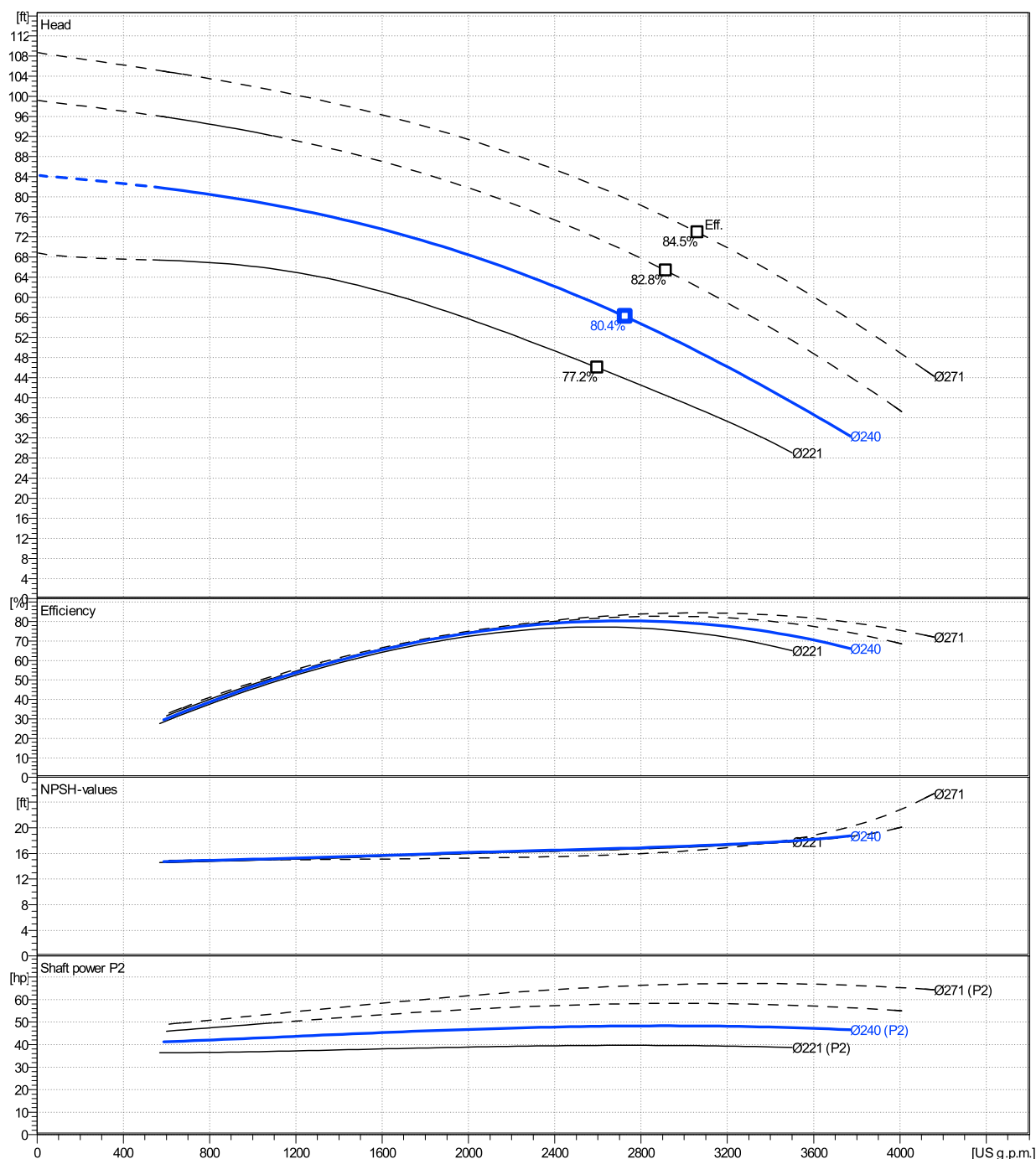
|        | Ø<br>mm  | Pump capacity<br>Operating range<br>Min. Max. Max.<br>US g.p.m. US g.p.m. US g.p.m. |      |      | Pump head<br>H(Q=0) η<br>ft ft |      | Shaft power P2<br>P2(Q=0) Max. η<br>hp hp hp |      |      | Frequency<br>Hz 60     |             |
|--------|----------|-------------------------------------------------------------------------------------|------|------|--------------------------------|------|----------------------------------------------|------|------|------------------------|-------------|
|        |          | Min.                                                                                | Max. | Max. | H(Q=0)                         | η    | P2(Q=0)                                      | Max. | η    | Operating speed<br>rpm | 1775        |
| actual | 9 7/16   | 587                                                                                 | 3770 | 2730 | 84.2                           | 56.1 |                                              | 48.3 | 48.2 | Nominal flow           | US g.p.m. 0 |
| Min.   | 0        | /                                                                                   | /    | 2600 | 68.8                           | 46   |                                              | /    | 39.6 | Nominal head           | ft 0        |
| Max.   | 10 11/16 | /                                                                                   | /    | 3060 | 109                            | 72.9 |                                              | /    | 66.9 | Inlet pressure         | psi 0       |
|        |          |                                                                                     |      |      |                                |      |                                              |      |      | Static head            | ft 0        |

#### Power datas referred to:

hydr. Performance acceptance acc. To EN ISO 9906 Class Grade 2B

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

MEI: >=0,70 - according to Ecodesign Directive 2009/125/EC and Regulation (EU) No.547/2012



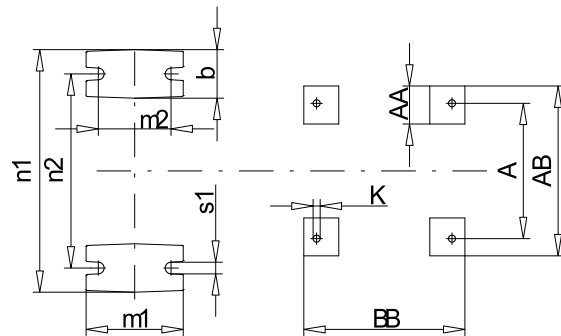
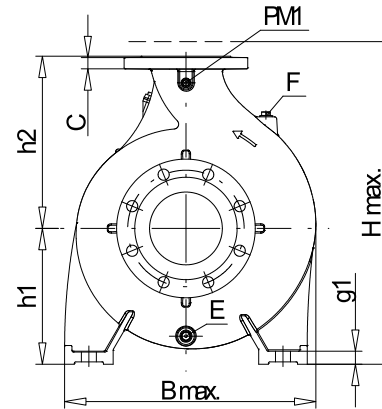
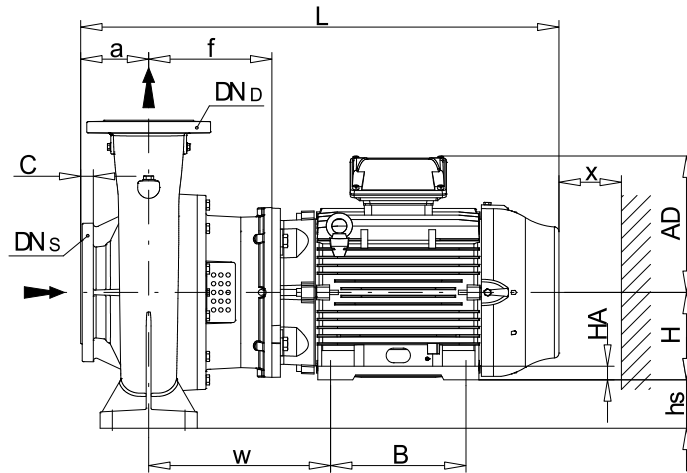
## NSCS200-250/370/L46UDC4

## Dimensions

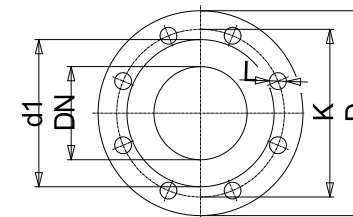
Company name  
Contact  
Phone number  
e-mail address

Blockpump  
Standard Design (Type B)  
3MAS 225 S B35 37 kW

Electrical and dimensional data refer to IE3 motor



PM1...Pressure gauge connector  
E...Drain  
F...Filling



Value C, D may vary from Standard

| Dimensions [ inch ] |                                  |      |                                  |
|---------------------|----------------------------------|------|----------------------------------|
| a                   | 7 <sup>1</sup> / <sub>16</sub>   | m1   | 7 <sup>7</sup> / <sub>8</sub>    |
| A                   | 14 <sup>1</sup> / <sub>32</sub>  | m2   | 5 <sup>7</sup> / <sub>8</sub>    |
| AA                  | 3 <sup>3</sup> / <sub>16</sub>   | n1   | 21 <sup>5</sup> / <sub>8</sub>   |
| AB                  | 18 <sup>1</sup> / <sub>2</sub>   | n2   | 17 <sup>11</sup> / <sub>16</sub> |
| AD                  | 12 <sup>11</sup> / <sub>16</sub> | P    | 17 <sup>11</sup> / <sub>16</sub> |
| b                   | 3 <sup>15</sup> / <sub>16</sub>  | PM1  | 1/2"                             |
| B                   | 11 <sup>1</sup> / <sub>4</sub>   | s1   | 7/8                              |
| BB                  | 13 <sup>1</sup> / <sub>4</sub>   | Trim | Type B                           |
| Bmax                | 25 <sup>13</sup> / <sub>16</sub> | w    | 17 <sup>1</sup> / <sub>16</sub>  |
| CTO                 |                                  | x    | 7 <sup>1</sup> / <sub>8</sub>    |
| DNd                 | 7 <sup>7</sup> / <sub>8</sub>    |      |                                  |
| DNs                 | 9 <sup>13</sup> / <sub>16</sub>  |      |                                  |
| E                   | 1/2"                             |      |                                  |
| F                   | -                                |      |                                  |
| f                   | 11 <sup>3</sup> / <sub>16</sub>  |      |                                  |
| g1                  | 1 <sup>1</sup> / <sub>32</sub>   |      |                                  |
| H                   | 8 <sup>7</sup> / <sub>8</sub>    |      |                                  |
| h1                  | 14                               |      |                                  |
| h2                  | 18 <sup>11</sup> / <sub>16</sub> |      |                                  |
| h3                  |                                  |      |                                  |
| HA                  | 1 <sup>3</sup> / <sub>16</sub>   |      |                                  |
| Hmax                | 32 <sup>11</sup> / <sub>16</sub> |      |                                  |
| hs                  | 5 <sup>1</sup> / <sub>8</sub>    |      |                                  |
| K                   | 3/4                              |      |                                  |

### Weight

|              |              |
|--------------|--------------|
| Total weight | On demand kg |
|--------------|--------------|

### Connections

| Suction nozzle |                                  | Discharge nozzle |                                 |
|----------------|----------------------------------|------------------|---------------------------------|
| DN250          |                                  | DN200            |                                 |
| PN16           |                                  | PN16             |                                 |
| EN1092-2       |                                  | EN1092-2         |                                 |
| C              | 1 <sup>1</sup> / <sub>4</sub>    | C                | 1 <sup>3</sup> / <sub>16</sub>  |
| D              | 15 <sup>15</sup> / <sub>16</sub> | D                | 13 <sup>9</sup> / <sub>16</sub> |
| d1             | 12 <sup>9</sup> / <sub>16</sub>  | d1               | 10 <sup>1</sup> / <sub>2</sub>  |
| K              | 14                               | K                | 11 <sup>5</sup> / <sub>8</sub>  |
| L              | 1 <sup>1</sup> / <sub>8</sub>    | L                | 7/8                             |
| Z              | 1/2                              | Z                | 1/2                             |

### Dimensions and weight without obligation

|         |                         |            |           |             |           |
|---------|-------------------------|------------|-----------|-------------|-----------|
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| Block   | NSCS200-250/550/L46UDC4 | Created on | 1/10/2025 |             |           |