

## NSCF50-250/220/L26UCS4

### 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           | Standard, Grease lubrication [Std]              |  |        |       |             |            |          |         |           |           |       |
| 10 | Execution             | [F] = 2 poles motor unit with standard cuopling |  |        |       |             | Impeller Ø | Max.     | inch    | 9 1/8     |           |       |
| 11 | Design                | Horizontal                                      |  |        |       |             |            | designed | inch    | 7 15/16   |           |       |
| 12 | Operating speed       | 3500 rpm                                        |  | Stages |       | 1           |            | Min.     | inch    | 7 15/16   |           |       |
| 13 | Suction nozzle        | DN 65                                           |  | /      | PN 16 |             | /          | EN1092-2 |         | Nominal   | US g.p.m. |       |
| 14 | Discharge nozzle      | DN 50                                           |  | /      | PN 16 |             | /          | EN1092-2 |         | Max-      | US g.p.m. | 396.3 |
| 15 | Max. casing pressure  | psi                                             |  |        |       |             |            |          | Min-    | US g.p.m. | 92.5      |       |
| 16 | Max. working pressure | psi                                             |  | 106.4  |       |             |            |          | Nominal | ft        |           |       |
| 17 | Impeller type         | Radial impeller                                 |  |        |       |             | Head       | at Qmax  | ft      | 179.8     |           |       |
| 18 | Head H(Q=0)           | ft                                              |  | 250    |       | at Qmin     |            | ft       | 249.1   |           |           |       |
| 19 | Max. shaft power      | hp                                              |  | 28.4   |       | Shaft power |            | hp       |         |           |           |       |
| 20 | Pump weight           | kg                                              |  | 134.5  |       | Efficiency  |            | %        |         |           |           |       |
| 21 | Total weight          | lb                                              |  | 516.8  |       | NPSH 3%     |            | ft       |         |           |           |       |

#### Materials

|    |                              |                            |  |                                              |
|----|------------------------------|----------------------------|--|----------------------------------------------|
| 22 |                              | Pump                       |  | Shaft Seal                                   |
| 23 | Volute Casing                | Cast Iron                  |  | Single mechanical seal, without shaft sleeve |
| 24 | Casing Cover                 | Cast Iron                  |  | eMG12 - Ø28mm                                |
| 25 | Impeller                     | Fabricated Stainless Steel |  | BQ7EGG-WA                                    |
| 26 | Shaft                        | Stainless steel            |  | Mechanical seal diameter                     |
| 27 | Wear ring                    | Stainless steel            |  | 1 1/8 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            | 3MAS 180 M B3 22 kW                        | Shaft diameter       | Pump 15/16 inch Motor 1 7/8 inch     |
| 45 | Rated power     | 29.502 hp                                  | Rated current        | 39.6 A                               |
| 46 | Nominal speed   | 3546 rpm                                   | Rated voltage        | 380 V                                |
| 47 | Frame size      | 180 M                                      | Service factor       | 1                                    |
| 48 | Weight          | lb 280.6                                   | Degree of protection | IP55                                 |
|    |                 |                                            | Frame size           | 110                                  |
|    |                 |                                            | Spacer length        | inch 1/8                             |
|    |                 |                                            | Weight               | lb 7.3                               |
|    |                 |                                            | Coupling protection  | COUPLGUARD 175x152PNTD 0.72751 lb    |

#### Base plate

|    |        |                      |
|----|--------|----------------------|
| 49 | Name   | BASE 6C 1250X540 BLU |
| 50 | Weight | lb 93.7              |
|    |        |                      |
|    |        |                      |

|         |                        |            |           |             |           |
|---------|------------------------|------------|-----------|-------------|-----------|
| Project | Xylect-20182283        | Created by |           | Last update | 1/11/2025 |
| Block   | NSCF50-250/370/L26UCS4 | Created on | 1/11/2025 |             |           |

## NSCF50-250/220/L26UCS4

### Performance curve

Company name  
Contact  
Phone number  
e-mail address

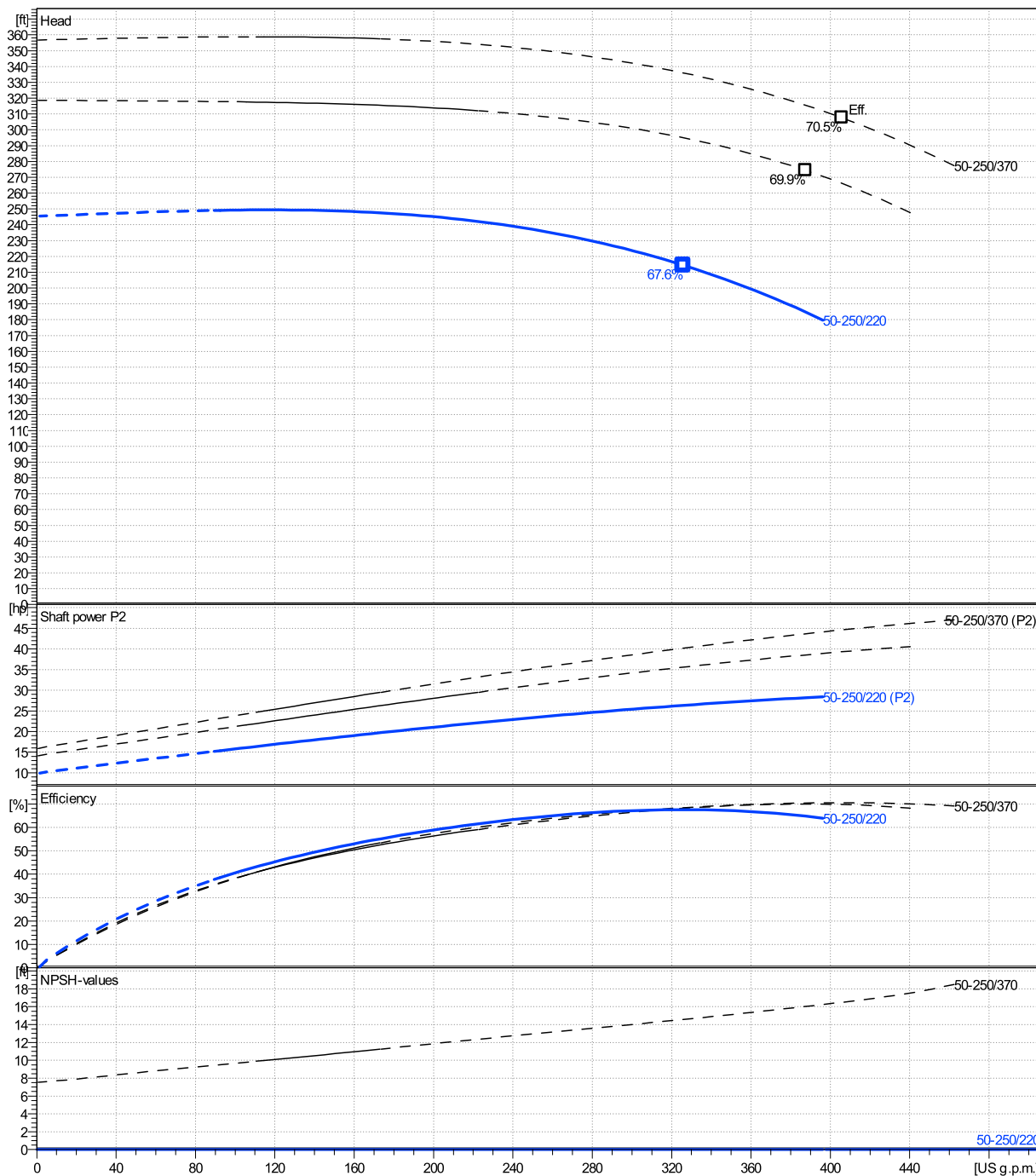
|        | Ø<br>mm | Pump capacity<br>Operating range |                   |                   | Pump head    |                 | Shaft power P2 |            |                 | Frequency              |    |      |
|--------|---------|----------------------------------|-------------------|-------------------|--------------|-----------------|----------------|------------|-----------------|------------------------|----|------|
|        |         | Min.<br>US g.p.m.                | Max.<br>US g.p.m. | Max.<br>US g.p.m. | H(Q=0)<br>ft | η<br>Max.<br>ft | P2(Q=0)<br>hp  | Max.<br>hp | η<br>Max.<br>hp | Operating speed<br>rpm | Hz |      |
| actual | 7 15/16 | 92.5                             | 396               | 326               | 245          | 214             |                | 28.4       | 26.3            |                        | 60 | 3500 |
| Min.   | 0       | /                                | /                 | 326               | 245          | 214             |                | /          | 26.3            |                        |    | 0    |
| Max.   | 9 1/8   | /                                | /                 | 406               | 357          | 308             |                | /          | 44.6            |                        |    | 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



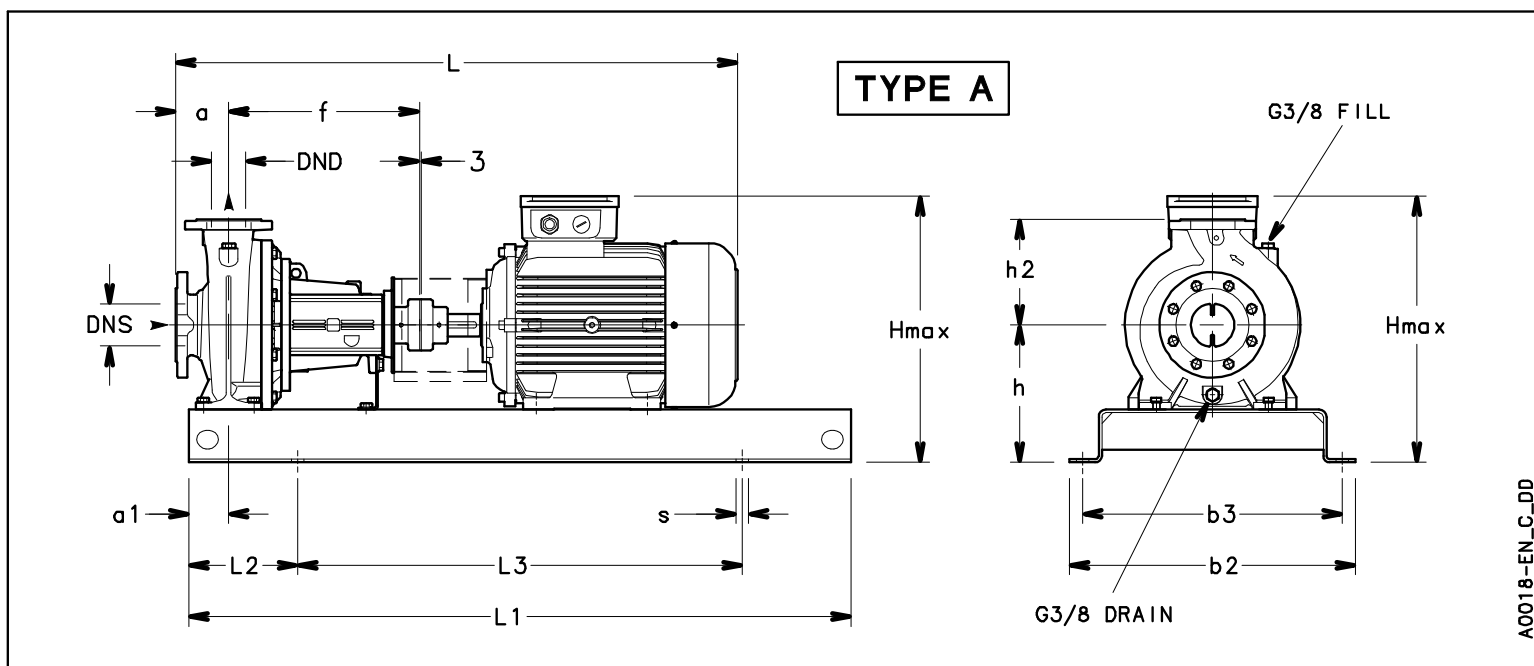
## NSCF50-250/220/L26UCS4

## Dimensions

Company name  
Contact  
Phone number  
e-mail address

Frame mounted  
[F] = 2 poles motor unit with standard coupling  
3MAS 180 M B3 22 kW

Electrical and dimensional data refer to IE3 motor



| Dimensions |                                  | [ inch ] |
|------------|----------------------------------|----------|
| a          | 3 <sup>15</sup> / <sub>16</sub>  |          |
| a1         | 2 <sup>15</sup> / <sub>16</sub>  |          |
| AD         | 10 <sup>3</sup> / <sub>8</sub>   |          |
| b2         | 21 <sup>1</sup> / <sub>4</sub>   |          |
| b3         | 19 <sup>5</sup> / <sub>16</sub>  |          |
| DND        | 1 <sup>15</sup> / <sub>16</sub>  |          |
| DNS        | 2 <sup>9</sup> / <sub>16</sub>   |          |
| f          | 14 <sup>3</sup> / <sub>16</sub>  |          |
| Guard      | 6 <sup>7</sup> / <sub>16</sub>   |          |
| h          | 11 <sup>1</sup> / <sub>32</sub>  |          |
| h2         | 8 <sup>7</sup> / <sub>8</sub>    |          |
| Hmax       | 21 <sup>7</sup> / <sub>16</sub>  |          |
| L          | 45 <sup>13</sup> / <sub>16</sub> |          |
| L1         | 49 <sup>3</sup> / <sub>16</sub>  |          |
| L2         | 8 <sup>1</sup> / <sub>16</sub>   |          |
| L3         | 33 <sup>1</sup> / <sub>16</sub>  |          |
| s          | 4xØ24                            |          |
| Type       | A                                |          |
| Volumen    | 1 <sup>1</sup> / <sub>64</sub>   |          |
| x          | 1 <sup>1</sup> / <sub>8</sub>    |          |

### Weight

|              |           |
|--------------|-----------|
| Total weight | 234.43 kg |
|--------------|-----------|

### Connections

| Suction nozzle |                                 | Discharge nozzle |                                 |
|----------------|---------------------------------|------------------|---------------------------------|
| DN 65          |                                 | DN 50            |                                 |
| PN 16          |                                 | PN 16            |                                 |
| EN1092-2       |                                 | EN1092-2         |                                 |
| C              | 1 <sup>3</sup> / <sub>16</sub>  | C                | 1 <sup>3</sup> / <sub>16</sub>  |
| D              | 7 <sup>5</sup> / <sub>16</sub>  | D                | 6 <sup>1</sup> / <sub>2</sub>   |
| df             | 4 <sup>5</sup> / <sub>8</sub>   | df               | 3 <sup>7</sup> / <sub>8</sub>   |
| DN             | 2 <sup>9</sup> / <sub>16</sub>  | DN               | 1 <sup>15</sup> / <sub>16</sub> |
| K              | 5 <sup>11</sup> / <sub>16</sub> | K                | 4 <sup>15</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

|         |                        |            |           |             |           |
|---------|------------------------|------------|-----------|-------------|-----------|
| Project | Xylect-20182283        | Created by |           | Last update | 1/11/2025 |
| Block   | NSCF50-250/370/L26UCS4 | Created on | 1/11/2025 |             |           |

