

# NSCF80-160/185/P26PCC4

## 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 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 |          |                      |                       |
| 11        | Design                | Horizontal                                      |          | Impeller Ø           | Max. inch 6 15/16     |
| 12        | Operating speed       | 3500 rpm  | Stages 1 |                      | designed inch 5 11/16 |
| 13        | Suction nozzle        | DN 100 / PN 16 / EN1092-2                       |          |                      | Min. inch 5 11/16     |
| 14        | Discharge nozzle      | DN 80 / PN 16 / EN1092-2                        |          | Flow                 | Nominal US g.p.m.     |
| 15        | Max. casing pressure  | psi   |          |                      | Max- US g.p.m. 1166.8 |
| 16        | Max. working pressure | psi   | 55.9     | Min- US g.p.m. 233.8 |                       |
| 17        | Impeller type         | Radial impeller                                 |          | Head                 | Nominal ft            |
| 18        | Head H(Q=0)           | ft  | 130      |                      | at Qmax ft 51.7       |
| 19        | Max. shaft power      | hp  | 24.2     |                      | at Qmin ft 128        |
| 20        | Pump weight           | kg  | 145.5    | Shaft power          | hp                    |
| 21        | Total weight          | lb  | 480.9    | Efficiency           | %                     |
|           |                       |   |          | 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                                | BQ7EGG-WA                                  |
| 25        | Impeller                     | Cast Iron       |  | Mechanical seal diameter                     | 1 1/8 inch                                 |
| 26        | Shaft                        | Stainless steel |  | 1. Rotating ring                             | Carbon graphite resin impregnated          |
| 27        | Wear ring                    | Stainless steel |  | 2. Stationary ring                           | SiC, silicon carbide, sintered press. less |
| 28        | Impeller lock nut and washer | Stainless steel |  | 3. Secondary seal                            | Ethylene propylene rubber (EPDM)           |
| 29        | Impeller key                 | Stainless steel |  | 4. Springs                                   | CrNiMo - Steel                             |
| 30        | Fill and drain plugs         | Stainless steel |  | 5. Others                                    | EPDM - WRAS                                |
| 31        |                              |                 |  | Gaskets of the pump                          | Ethylene propylene rubber (EPDM)           |
| 32        |                              |                 |  |  |  |
| 33        |                              |                 |  |  |  |
| 34        |                              |                 |  |  |  |
| 35        |                              |                 |  |  |  |
| 36        |                              |                 |  |  |  |
| 37        |                              |                 |  |  |  |
| 38        |                              |                 |  |  |  |
| 39        |                              |                 |  |  |  |
| 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 160 B3 18,5 kW                         |                      | Shaft diameter                                     | Pump 15/16 inch                      | Motor 1 5/8 inch       |            |
| 45         | Rated power     | 24.809 hp                                  | Rated current        | 33.7 A   | Frame size                           | 95                     |            |
| 46         | Nominal speed   | 3540 rpm                                   | Rated voltage        | 380 V  | Spacer length                        | inch                   | 1/8        |
| 47         | Frame size      | 160  | Service factor       | 1  | Weight                               | lb                     | 4.9        |
| 48         | Weight          | lb 235.9                                   | Degree of protection | IP55   | Coupling protection                  | COUPLGUARD 175x152PNTD | 0.72751 lb |

| Base plate |        |                      | Remarks |  |
|------------|--------|----------------------|---------|--|
| 49         | Name   | BASE 6A 1250X540 BLU |         |  |
| 50         | Weight | lb                   | 93.9    |  |

# NSCF80-160/185/P26PCC4

## Performance curve

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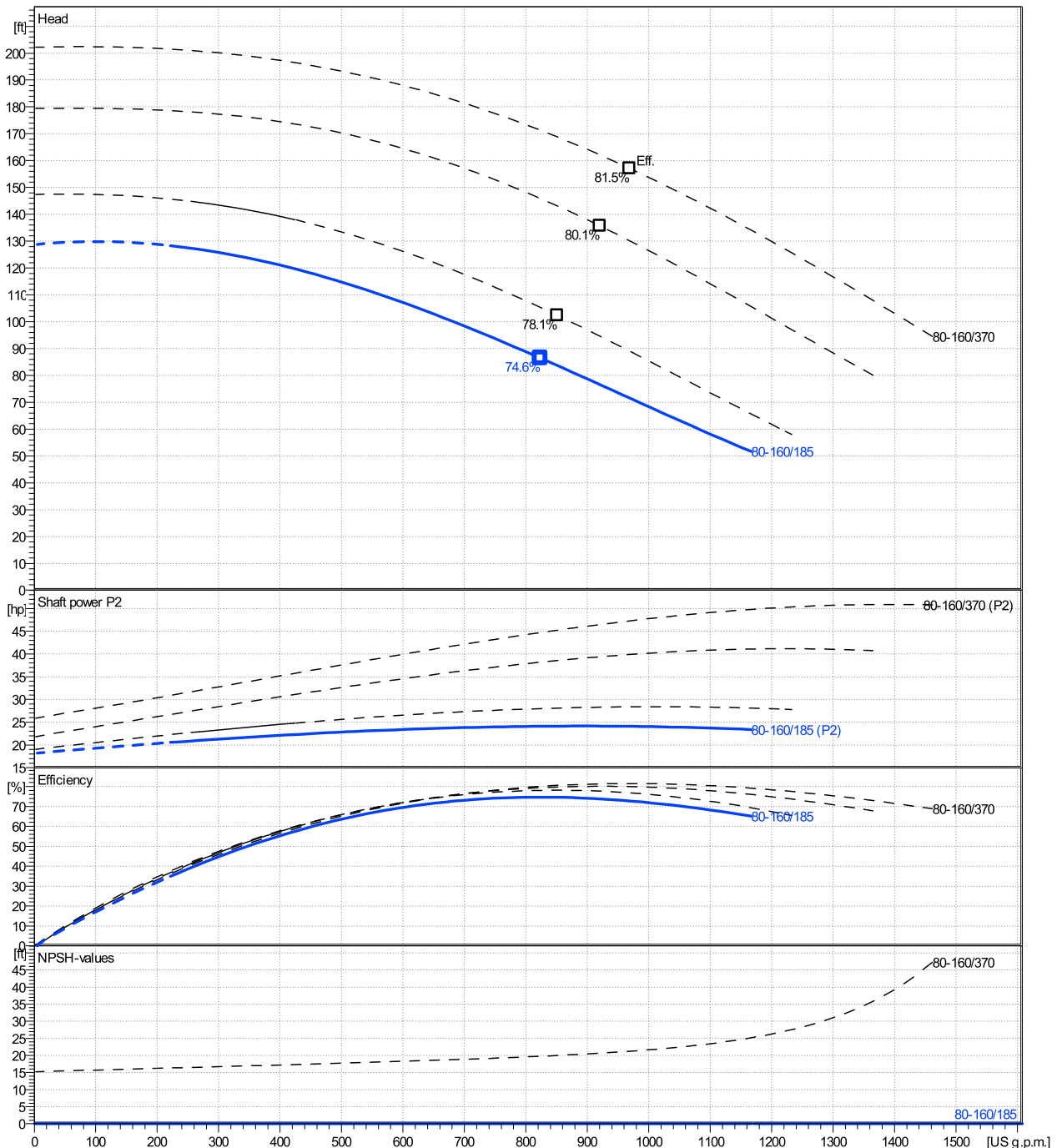
|        | Ø<br>mm | Pump capacity                        |                   |                        | Pump head    |                 | Shaft power P2 |            |                 | Frequency              |                           | Hz | 60 |
|--------|---------|--------------------------------------|-------------------|------------------------|--------------|-----------------|----------------|------------|-----------------|------------------------|---------------------------|----|----|
|        |         | Operating range<br>Min.<br>US g.p.m. | Max.<br>US g.p.m. | η<br>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 | Nominal flow<br>US g.p.m. |    |    |
| actual | 5 11/16 | 234                                  | 1170              | 824                    | 129          | 86.4            | 24.2           | 24.1       | 3500            | 0                      | 0                         | 0  |    |
| Min.   | 0       | /                                    | /                 | 824                    | 129          | 86.4            | /              | 24.1       | 0               | 0                      | 0                         | 0  |    |
| Max.   | 6 15/16 | /                                    | /                 | 969                    | 202          | 157             | /              | 47.3       | 0               | 0                      | 0                         | 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**



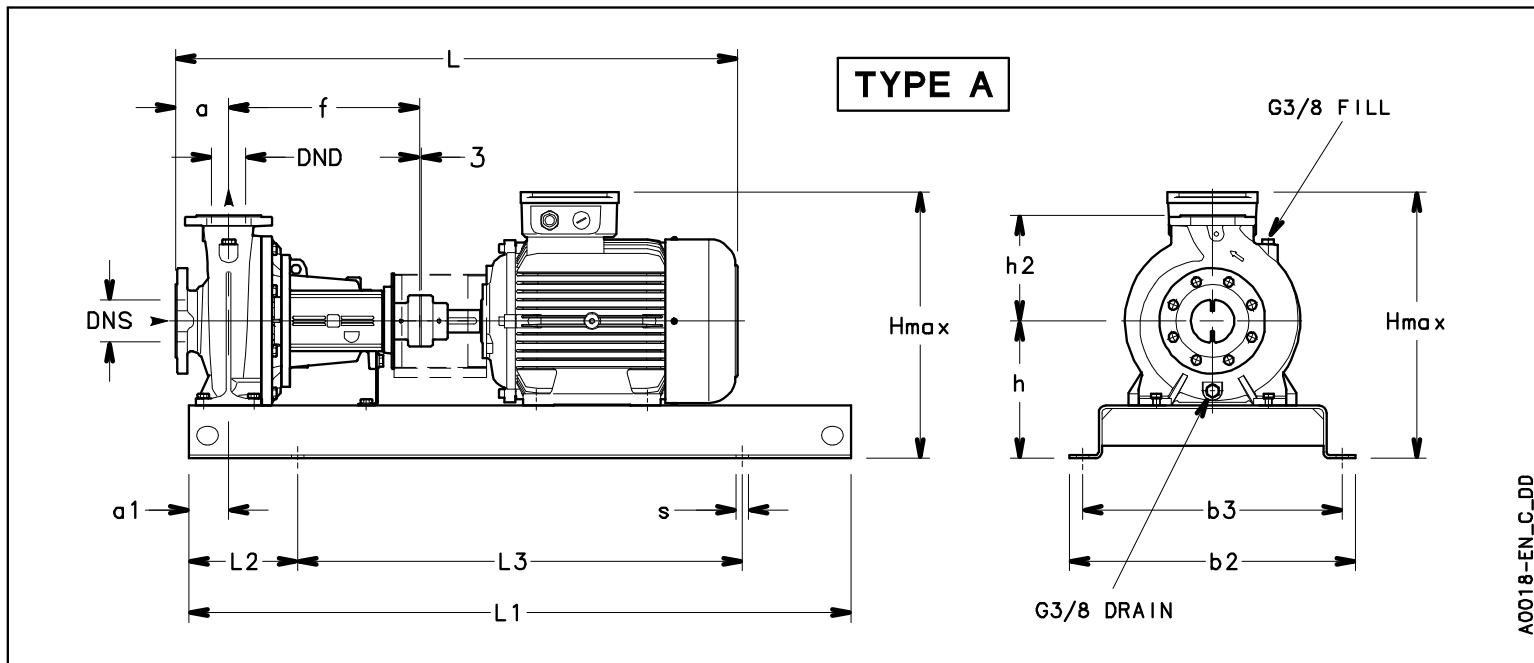
# NSCF80-160/185/P26PCC4

## Dimensions

Company name  
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Frame mounted  
[F] = 2 poles motor unit with standard coupling  
PLM 160 B3 18,5 kW

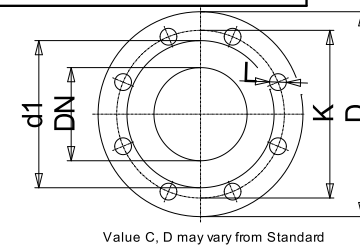
Electrical and dimensional data refer to IE3 motor



| Dimensions |                                 | [ inch ] |
|------------|---------------------------------|----------|
| a          | 4 <sup>15</sup> / <sub>16</sub> |          |
| a1         | 2 <sup>15</sup> / <sub>16</sub> |          |
| AD         | 9 <sup>7</sup> / <sub>16</sub>  |          |
| b2         | 21 <sup>1</sup> / <sub>4</sub>  |          |
| b3         | 19 <sup>9</sup> / <sub>16</sub> |          |
| DND        | 3 <sup>3</sup> / <sub>8</sub>   |          |
| DNS        | 3 <sup>15</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       | 20 <sup>1</sup> / <sub>2</sub>  |          |
| L          | 43                              |          |
| 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 | 218.13 kg |

| Connections    |                                 |                  |                                |
|----------------|---------------------------------|------------------|--------------------------------|
| Suction nozzle |                                 | Discharge nozzle |                                |
| DN 100         |                                 | DN 80            |                                |
| PN 16          |                                 | PN 16            |                                |
| EN1092-2       |                                 | EN1092-2         |                                |
| C              | 1 <sup>5</sup> / <sub>16</sub>  | C                | 7 <sup>7</sup> / <sub>8</sub>  |
| D              | 9 <sup>1</sup> / <sub>16</sub>  | D                | 7 <sup>7</sup> / <sub>8</sub>  |
| df             | 6 <sup>3</sup> / <sub>16</sub>  | df               | 5 <sup>3</sup> / <sub>16</sub> |
| DN             | 3 <sup>15</sup> / <sub>16</sub> | DN               | 3 <sup>1</sup> / <sub>8</sub>  |
| K              | 7 <sup>1</sup> / <sub>16</sub>  | K                | 6 <sup>5</sup> / <sub>16</sub> |
| L              | 8 x 19                          | L                | 8 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   | NSCF80-160/370/L26UCC4 | Created on | 1/11/2025 |             |           |