

**NSCF 40-250/185/P25VCS4****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                  | °C          | 4         |
| 3 | Nominal flow              | m³/h             | 0  | Max / Min Operating Temperature mech. Seal | °C          | 120 / -25 |
| 4 | Nominal head              | m                | 0  | pH-value at t A                            |             | 7         |
| 5 | Static head               | m                | 0  | Density at t A                             | kg/m³       | 1000      |
| 6 | Inlet pressure            | kPa              | 0  | Kin. viscosity at t A                      | mm²/s       | 1.569     |
| 7 | Environmental temperature | °C               | 20 | Vapor pressure at t A                      | kPa         | 100       |
| 8 | Available system NPSH     | m                | 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.     | mm 257    |
| 12 | Operating speed       | 2900 rpm                                        | Stages 1 |             | designed | mm 243    |
| 13 | Suction nozzle        | DN 65 /                                         | PN 16 /  |             | Min.     | mm 199    |
| 14 | Discharge nozzle      | DN 40 /                                         | PN 16 /  | Flow        | Nominal  | m³/h      |
| 15 | Max. casing pressure  | kPa                                             |          |             | Max-     | m³/h 60.7 |
| 16 | Max. working pressure | kPa                                             | 848.1    |             | Min-     | m³/h 22.1 |
| 17 | Impeller type         | Radial impeller                                 |          | Head        | Nominal  | m         |
| 18 | Head H(Q=0)           | m                                               | 86       |             | at Qmax  | m 67.2    |
| 19 | Max. shaft power      | kW                                              | 17.8     |             | at Qmin  | m 85.4    |
| 20 | Pump weight           | kg                                              | 60       | Shaft power | kW       |           |
| 21 | Total weight          | kg                                              | 212.1    | Efficiency  | %        |           |
|    |                       |                                                 |          | NPSH 3%     | m        |           |

**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 - Ø28mm                                | BQ7EGG-WA                                  |
| 25 | Impeller                     | Fabricated Stainless Steel | Mechanical seal diameter                     | 28 mm                                      |
| 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 24 mm                           | Motor 42 mm |
| 45 | Rated power     | 18.5 kW                                    | Rated current 32.7 A      | Frame size          | 95                                   |             |
| 46 | Nominal speed   | 2940 rpm                                   | Rated voltage 400 V       | Spacer length       | mm 3                                 |             |
| 47 | Frame size      | 160                                        | Service factor 1          | Weight              | kg 2.2                               |             |
| 48 | Weight          | kg 107.0                                   | Degree of protection IP55 | Coupling protection | COUPLGUARD 175x152PNTD 0.33 kg       |             |

**Base plate**

|    |        |                      |      |                |  |  |
|----|--------|----------------------|------|----------------|--|--|
| 49 | Name   | BASE 6A 1250X540 BLU |      | <b>Remarks</b> |  |  |
| 50 | Weight | kg                   | 42.6 |                |  |  |
|    |        |                      |      |                |  |  |

## NSCF 40-250/185/P25VCS4

### Performance curve

Company name  
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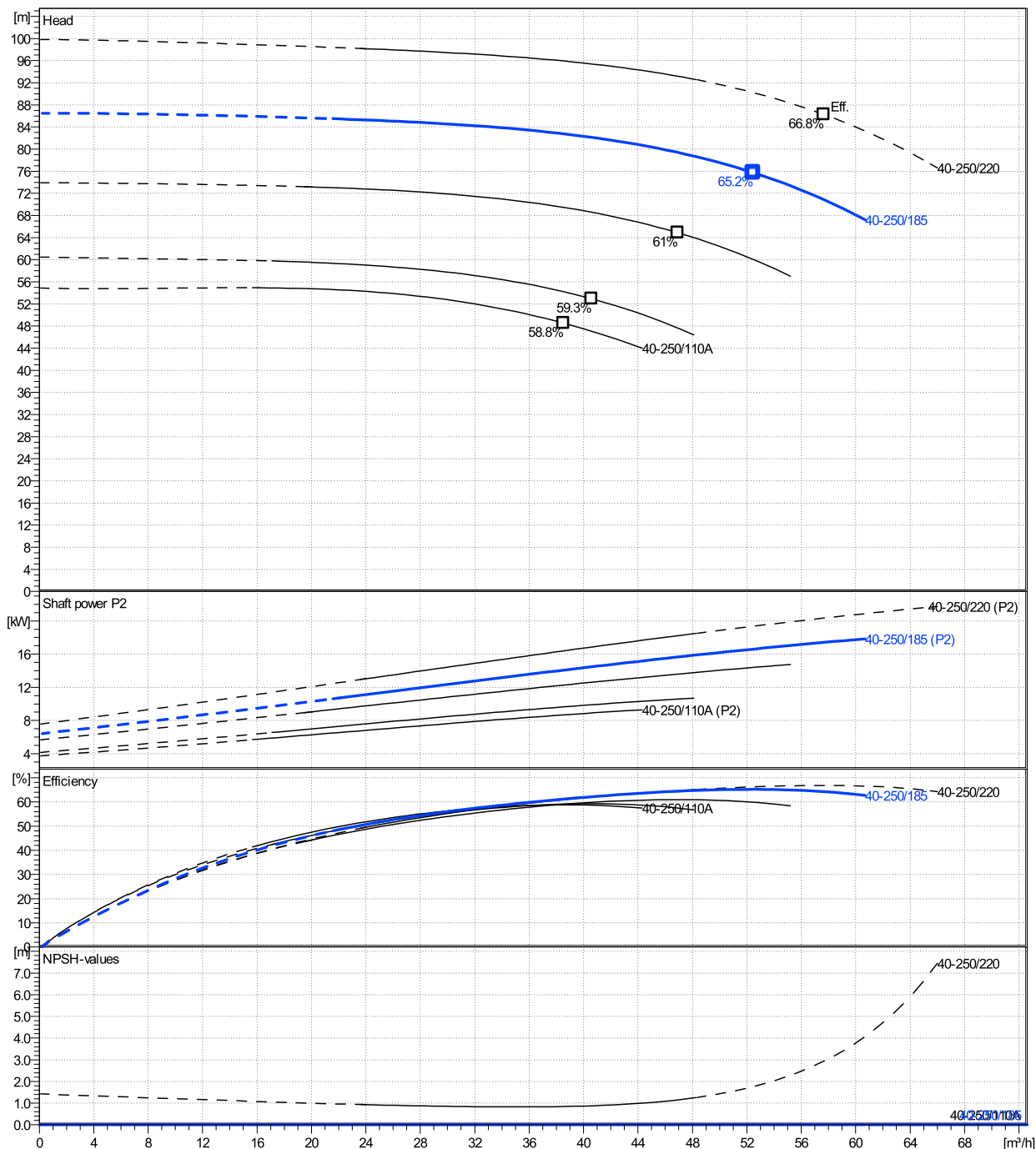
|        | Ø<br>mm | Pump capacity                   |              |                   | Pump head   |                | Shaft power P2 |            |                 | Frequency              |      | Hz   |
|--------|---------|---------------------------------|--------------|-------------------|-------------|----------------|----------------|------------|-----------------|------------------------|------|------|
|        |         | Operating range<br>Min.<br>m³/h | Max.<br>m³/h | η<br>Max.<br>m³/h | H(Q=0)<br>m | η<br>Max.<br>m | P2(Q=0)<br>kW  | Max.<br>kW | η<br>Max.<br>kW | Operating speed<br>rpm |      |      |
| actual | 243     | 22.1                            | 60.7         | 52.5              | 86.5        | 75.8           |                | 17.8       | 16.6            |                        |      | 50   |
| Min.   | 0       | /                               | /            | 38.5              | 54.9        | 48.5           |                | /          | 8.67            |                        |      | 2900 |
| Max.   | 257     | /                               | /            | 57.7              | 99.8        | 86.3           |                | /          | 20.3            |                        |      | 0    |
|        |         |                                 |              |                   |             |                |                |            |                 | Nominal flow           | m³/h | 0    |
|        |         |                                 |              |                   |             |                |                |            |                 | Nominal head           | m    | 0    |
|        |         |                                 |              |                   |             |                |                |            |                 | Inlet pressure         | kPa  | 0    |
|        |         |                                 |              |                   |             |                |                |            |                 | Static head            | m    | 0    |

#### Power datas referred to:

Water, pure [100%] ; 4°C; 1000kg/m³; 1.57mm²/s

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

MEI: >=0,4



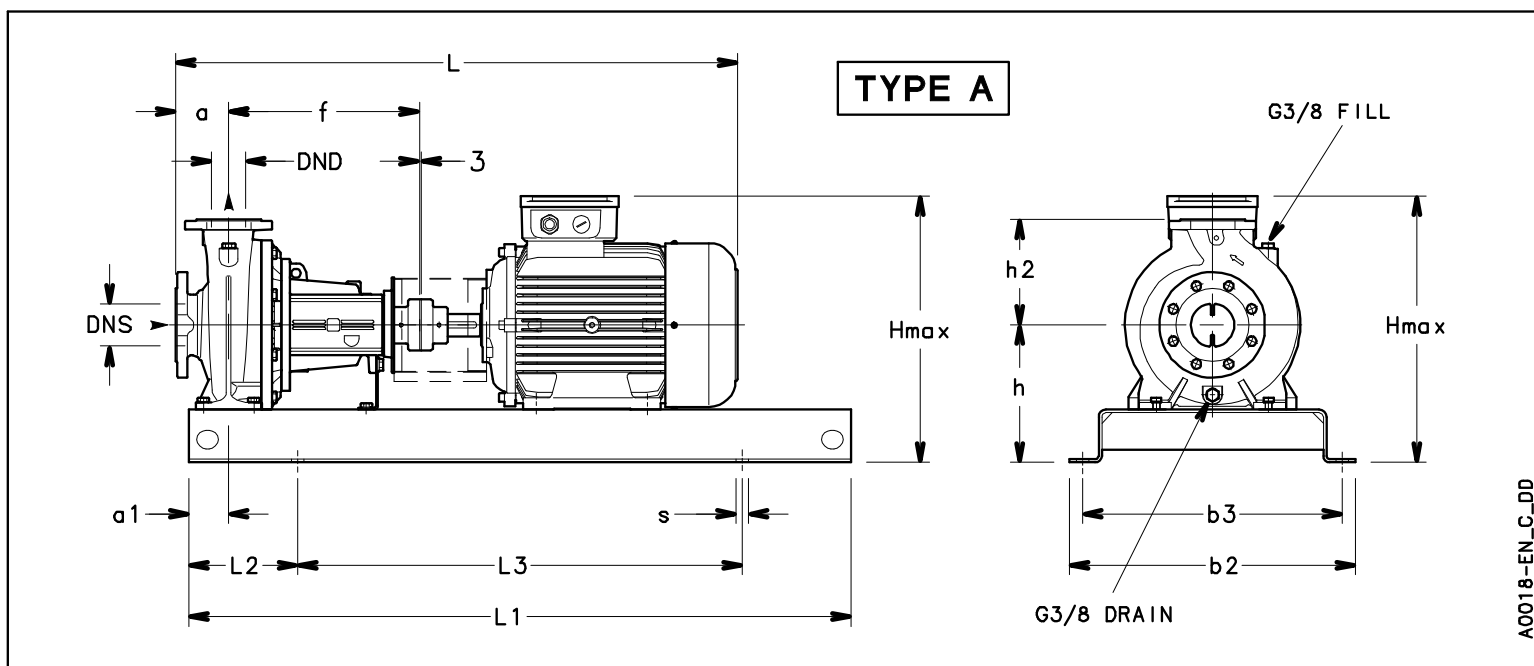
## NSCF 40-250/185/P25VCS4

## Dimensions

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

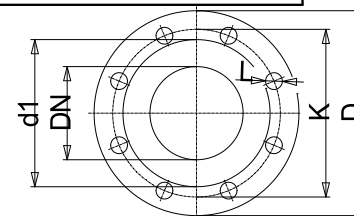
Electrical and dimensional data refer to IE3 motor



| Dimensions |         | [ mm ] |  |
|------------|---------|--------|--|
| a          | 100     |        |  |
| a1         | 75      |        |  |
| AD         | 240     |        |  |
| b2         | 540     |        |  |
| b3         | 490     |        |  |
| DND        | 40      |        |  |
| DNS        | 65      |        |  |
| f          | 360     |        |  |
| Guard      | 163     |        |  |
| h          | 280     |        |  |
| h2         | 225     |        |  |
| Hmax       | 520     |        |  |
| L          | 1067    |        |  |
| L1         | 1250    |        |  |
| L2         | 205     |        |  |
| L3         | 840     |        |  |
| s          | 4xØ24   |        |  |
| Type       | A       |        |  |
| Volumen    | 0.29961 |        |  |
| x          | 3       |        |  |

| Weight       |           |
|--------------|-----------|
| Total weight | 212.13 kg |

| Connections    |        |                  |        |
|----------------|--------|------------------|--------|
| Suction nozzle |        | Discharge nozzle |        |
| DN 65          |        | DN 40            |        |
| PN 16          |        | PN 16            |        |
| EN1092-2       |        | EN1092-2         |        |
| C              | 20     | C                | 18     |
| D              | 185    | D                | 150    |
| df             | 118    | df               | 84     |
| DN             | 65     | DN               | 40     |
| K              | 145    | K                | 110    |
| L              | 4 x 19 | L                | 4 x 19 |



Value C, D may vary from Standard

### Dimensions and weight without obligation

|         |                         |            |            |             |            |
|---------|-------------------------|------------|------------|-------------|------------|
| Project | Xylect-20101351         | Created by |            | Last update | 12/15/2024 |
| Block   | NSCF 40-250/220/L25VCS4 | Created on | 12/15/2024 |             |            |