

# NSCSX 32-200/110/204CS4

## Technical data

Company name  
Contact  
Phone number  
e-mail address

| Operating data |                           |                   |    |                           |                          |
|----------------|---------------------------|-------------------|----|---------------------------|--------------------------|
| 1              | Pumpe type                | Horizontal        |    | Fluid                     | Water, pure              |
| 2              | No. of pumps              |                   | 1  | Operating temperature t A | °C 4                     |
| 3              | Nominal flow              | m <sup>3</sup> /h | 0  | pH-value at t A           | 7                        |
| 4              | Nominal head              | m                 | 0  | Density at t A            | kg/m <sup>3</sup> 1000   |
| 5              | Static head               | m                 | 0  | Vapor pressure at t A     | kPa 100                  |
| 6              | Inlet pressure            | kPa               | 0  | Kin. viscosity at t A     | mm <sup>2</sup> /s 1.569 |
| 7              | Environmental temperature | °C                | 20 | Altitude                  | 0                        |
| 8              | Available system NPSH     | m                 | 0  |                           |                          |

| Pump data |                       |                   |
|-----------|-----------------------|-------------------|
| 9         | Product version       | [X] - Hydrovar X+ |
| 10        | Operating speed       |                   |
| 11        | Stages                | 1                 |
| 12        | Max. working pressure | kPa 890.5         |
| 13        | Head H(Q=0)           | m 91              |
| 14        | Power input P1(max)   | kW 12.3           |
| 15        | Total weight          | kg 71.0           |
| 16        | Power input           | kW                |
| 17        | Overall efficiency    | %                 |
| 18        | Shaft power           | kW                |
| 19        | Pump efficiency       | %                 |
| 20        | NPSH 3%               | m                 |
| 21        |                       |                   |

| Materials |                              |                            |  |   |
|-----------|------------------------------|----------------------------|--|---|
|           | Pump                         |                            | Shaft Seal                                   |   |
| 22        |                              |                            | Single mechanical seal, without shaft sleeve |   |
| 23        | Volute Casing                | Cast Iron                  |  |   |
| 24        | Casing Cover                 | Cast Iron                  | eMG12 - Ø22mm                                | BQ7EGG-WA                                 |
| 25        | Impeller                     | Fabricated Stainless Steel |  |   |
| 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 |                 |                       |                          |                               |
|------------|-----------------|-----------------------|--------------------------|-------------------------------|
| 42         | Manufacturer    | Xylem                 | Rated voltage            | 380-480V                      |
| 43         | Specific design | IE5 Three phase motor | Rated current            | 20,3-16,5 A                   |
| 44         | Type            | EXM160B5/4.110CH2     | Motor efficiency @400V % | 4/4: 89.7 3/4: 89.5 2/4: 88.2 |
| 45         | Rated power     | 11 kW                 | Power factor @400V       | 0.93                          |
| 46         | Nominal speed   | 3600 rpm              | Weight                   | kg 51.6                       |
| 47         | Frame size      | 160                   |                          |                               |
| 48         | Size            | C                     |                          |                               |

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

# NSCSX 32-200/110/204CS4

## Performance curve

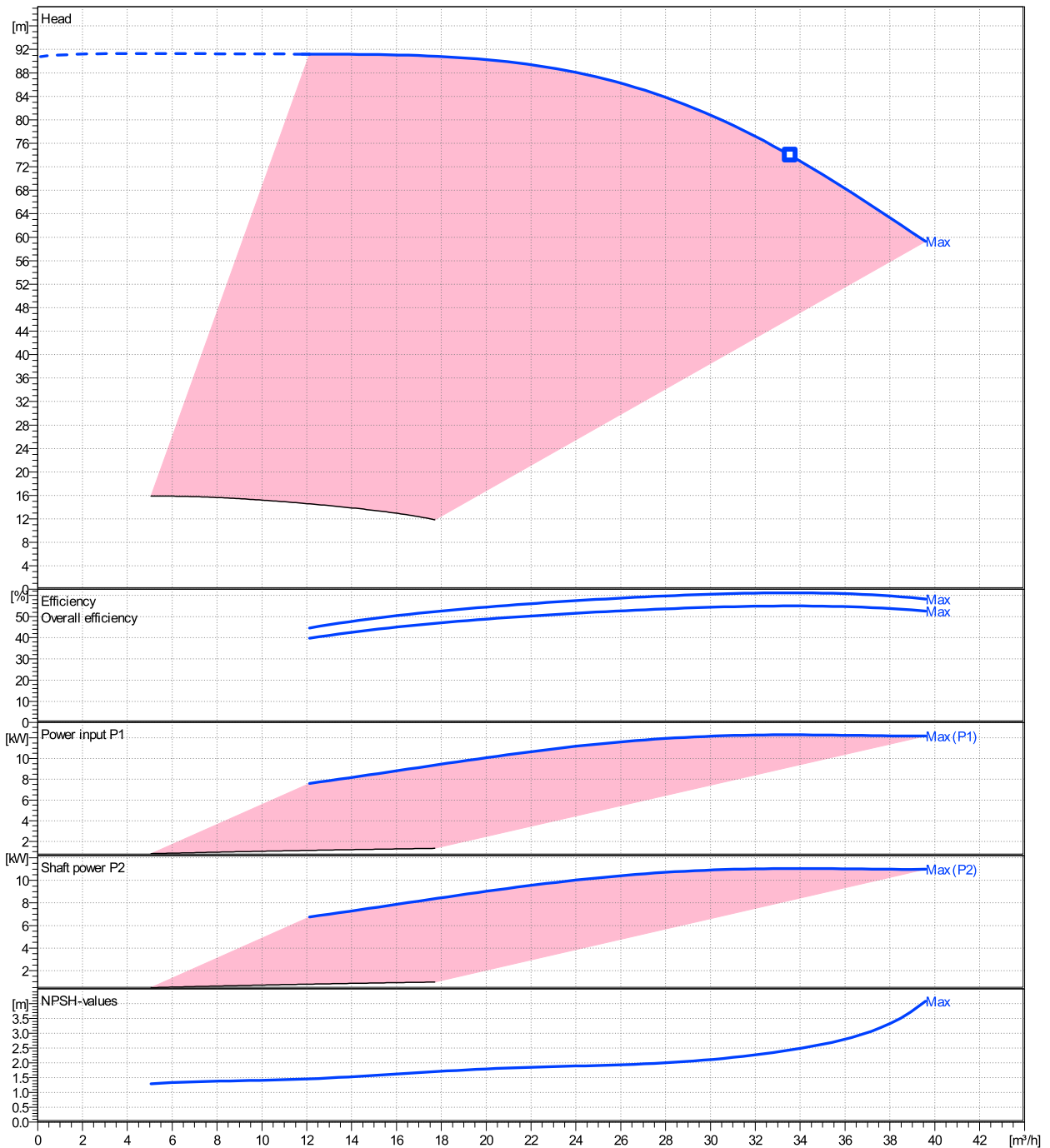
Company name  
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| Ø    | Pump capacity   |           |           | Pump head |      | Frequency       | Hz   | 50/60 |
|------|-----------------|-----------|-----------|-----------|------|-----------------|------|-------|
|      | Operating range | η         | η         | H(Q=0)    | η    |                 |      |       |
|      | Min. m³/h       | Max. m³/h | Max. m³/h | m         | m    | Operating speed | rpm  |       |
| Max. | 12.1            | 39.6      | 33.6      | 90.8      | 73.9 | Nominal flow    | m³/h | 0     |
|      |                 |           |           |           |      | Nominal head    | m    | 0     |
|      |                 |           |           |           |      | Inlet pressure  | kPa  | 0     |
|      |                 |           |           |           |      | Static head     | m    | 0     |

**Power datas referred to:**

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

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

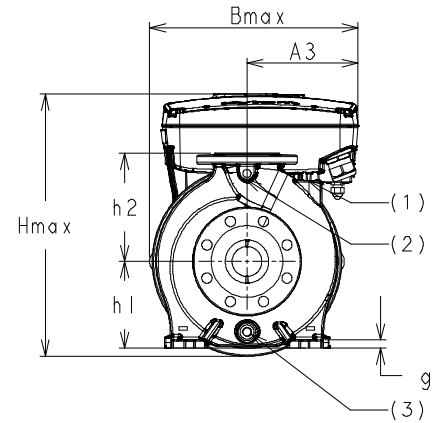
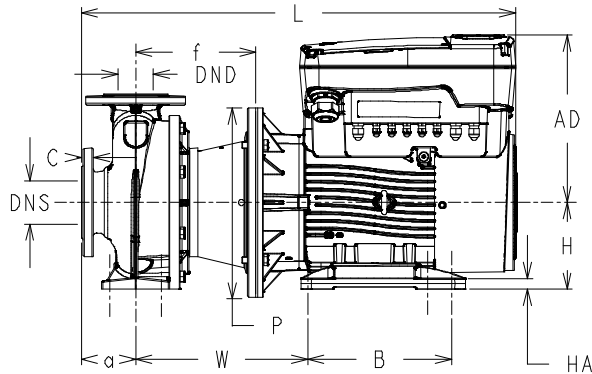


# NSCSX 32-200/110/204CS4

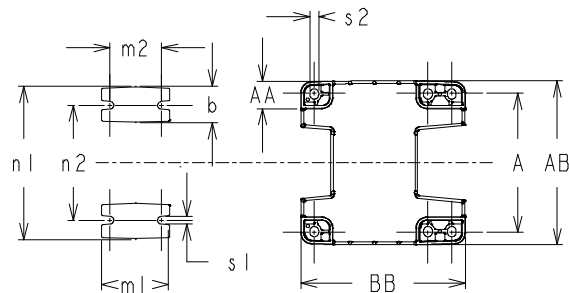
## Dimensions

Company name  
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[X] - Hydrovar X+  
EXM160B5/4.110CH2



- (1) FILL
- (2) PRESSURE GAUGE CONNECTOR
- (3) DRAIN



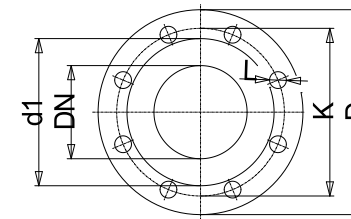
| Dimensions |      |      | [ mm ] |
|------------|------|------|--------|
| (1)        | G1/8 | HA   | 20     |
| (2)        | G1/4 | Hmax | 416    |
| (3)        | G3/8 | L    | 708    |
| A          | 254  | m1   | 100    |
| a          | 80   | m2   | 70     |
| A3         | 175  | n1   | 240    |
| AA         | 57   | n2   | 190    |
| AB         | 304  | P    | 350    |
| AD         | 241  | s1   | 14     |
| B          | 210  | s2   | 15     |
| b          | 50   | Type | B      |
| BB         | 254  | W    | 299    |
| Bmax       | 350  | x    | 300    |
| DND        | 32   |      |        |
| DNS        | 50   |      |        |
| f          | 222  |      |        |
| g1         | 14   |      |        |
| H          | 160  |      |        |
| h1         | 160  |      |        |
| h2         | 180  |      |        |

### Weight

**Total weight** 71 kg

### Connections

| EN1092-2 |       | EN1092-2 |       |
|----------|-------|----------|-------|
| DN 50    | PN 16 | DN 32    | PN 16 |
| C        | 20    | C        | 18    |
| D        | 165   | D        | 140   |
| df       | 99    | df       | 76    |
| DN       | 50    | DN       | 32    |
| K        | 125   | K        | 100   |



Value C, D may vary from Standard

### Dimensions and weight without obligation

|         |                         |            |           |             |           |
|---------|-------------------------|------------|-----------|-------------|-----------|
| Project | Xylect-20353685         | Created by |           | Last update | 7/22/2024 |
| Block   | NSCSX 32-200/110/204CS4 | Created on | 7/22/2024 |             |           |

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| REF. | ITEM                   | DESCRIPTION   | DEFAULT           |
|------|------------------------|---|-------------------|
| 1    |                        | Power supply +24 VDC, max. 60mA (total, terminals 1 + 5)                    |                   |
| 2    | Analog Input 1         | Configurable Analog Input 1   | Pressure Sensor 1 |
| 3    |                        | Electronic GND  |                   |
| 4    | Not used               | Internal use - Do not connect   |                   |
| 5    |                        | Power supply +24 VDC, max. 60mA (total, terminals 1 + 5)                    |                   |
| 6    | Analog Input 2         | Configurable Analog Input 2   | Not used          |
| 7    |                        | Electronic GND  |                   |
| 8    | External Start/Stop    | Start/Stop digital input, +24 VDC internal pull-up, 6mA contact current     | -                 |
| 9    |                        | Electronic GND  |                   |
| 10   | External Lack of Water | Low water digital input, +24 VDC internal pull-up, 6mA contact current      | -                 |
| 11   |                        | Electronic GND  |                   |
| 12   | Digital Input 3        | Configurable Digital Input 3, +24 VDC internal pull-up, 6mA contact current | Solo Run          |
| 13   |                        | Electronic GND  |                   |
| 14   | Analog Output          | Configurable Analog Output  | Motor Speed       |
| 15   |                        | Electronic GND  |                   |
| 16   |                        | Power supply +24 VDC, max. 60mA (total, terminals 16 and 19)                |                   |
| 17   | Analog Input 3         | Configurable Analog Input 3   | Not used          |
| 18   |                        | Electronic GND  |                   |
| 19   |                        | Power supply +24 VDC, max. 60mA (total, terminals 16 and 19)                |                   |
| 20   | Analog Input 4         | Configurable Analog Input 4   | Not used          |
| 21   |                        | Electronic GND  |                   |
| 22   | Digital Input 4        | Configurable Digital Input 4, +24 VDC internal pull-up, 6mA contact current | Not used          |
| 23   |                        | Electronic GND  |                   |
| 24   | Digital Input 5        | Configurable Digital Input 5, +24 VDC internal pull-up, 6mA contact current | Not used          |
| 25   |                        | Electronic GND  |                   |
| 26   | 10 VDC supply          | Power supply +10 VDC, max. 3mA  | -                 |
| 27   |                        | Electronic GND  |                   |
| 28   |                        | RS485 port 1 : RS485-1B N (-)   |                   |
| 29   | Communication bus 1    | RS485 port 1 : RS485-1A P (+)   | Multipump         |
| 30   |                        | RS485 port 1 : RS485-COM  |                   |
| 31   |                        | RS485 port 2 : RS485-2B N (-)   |                   |
| 32   | Communication bus 2    | RS485 port 2 : RS485-2A P (+)   | Modbus            |
| 33   |                        | RS485 port 2 : RS485-COM  |                   |
| 34   |                        | RS485 port 1 : RS485-1B N (-)   |                   |
| 35   | Communication bus 1    | RS485 port 1 : RS485-1A P (+)   | Multipump         |
| 36   |                        | RS485 port 1 : RS485-COM  |                   |
| 37   |                        | RS485 port 2 : RS485-2B N (-)   |                   |
| 38   | Communication bus 2    | RS485 port 2 : RS485-2A P (+)   | Modbus            |
| 39   |                        | RS485 port 2 : RS485-COM  |                   |
| 40   |                        | Configurable relay 1: Normally Open   |                   |
| 41   | Relay 1                | Configurable relay 1: Normally Closed                                       | Running           |
| 42   |                        | Configurable relay 1: Common Contact  |                   |
| 43   |                        | Configurable relay 2: Normally Open   |                   |
| 44   | Relay 2                | Configurable relay 2: Normally Closed                                       | Error             |
| 45   |                        | Configurable relay 2: Common Contact  |                   |