

## Data sheet

### Hydraulic data

|                                    |        |
|------------------------------------|--------|
| Minimum efficiency index (MEI)     | 0.4    |
| Maximum operating pressure $P_N$   | 10 bar |
| Min. fluid temperature $T_{min}$   | -20 °C |
| Max. fluid temperature $T_{max}$   | 120 °C |
| Min. ambient temperature $T_{min}$ | 0 °C   |
| Max. ambient temperature $T_{max}$ | 40 °C  |

### Motor data

|                                  |                   |
|----------------------------------|-------------------|
| Mains connection                 | 3~380 V, 50/60 Hz |
| Motor efficiency class           | IE4               |
| Rated power $P_2$                | 0.75 kW           |
| Rated current $I_N$              | 1.9 A             |
| Rated speed $n$                  | 2900 1/min        |
| Max. speed $n_{max}$             | 2910 1/min        |
| Interference emission            | EN 61800-3        |
| Interference immunity            | EN 61800-3        |
| Insulation class                 | F                 |
| Protection class motor           | IP55              |
| Integrated full motor protection | -                 |
| Threaded cable connection        | 1 x M16x1.5       |

### Materials

|              |                 |
|--------------|-----------------|
| Pump housing | Cast iron       |
| Impeller     | PPE/PS-GF30     |
| Shaft        | Stainless steel |
| Shaft seal   | AQ1EGG          |
| Lantern      | Cast iron       |

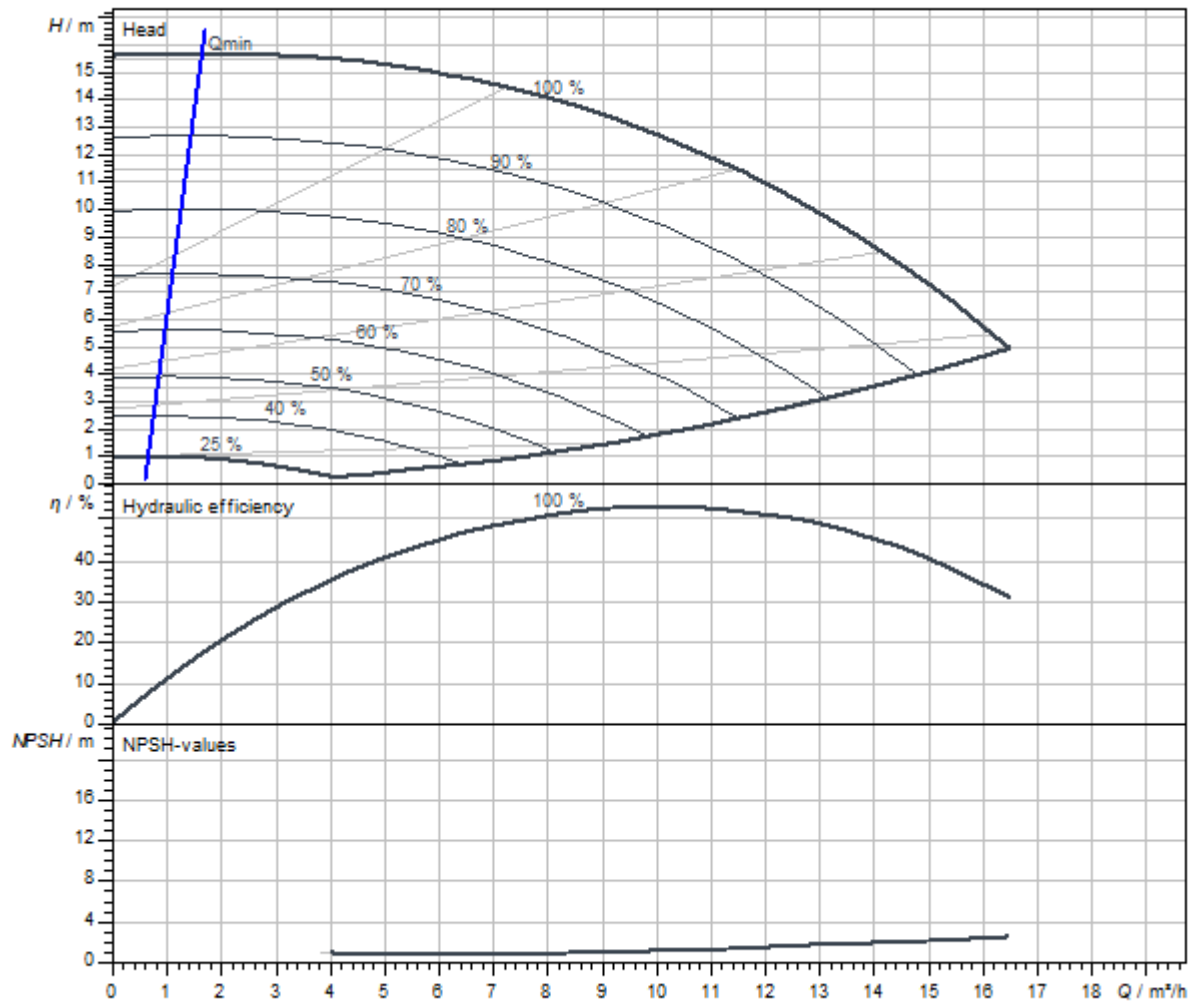
### Approved liquids (other liquids upon request)

|   |                                      |
|---|--------------------------------------|
| Heating water (as per VDI 2035)   | yes                                  |
| Heat carrier oil  | Special version at additional charge |
| Cooling and cold water circulation systems  | yes                                  |
| Water-glycol mixtures (at 20 - 40 vol. % glycol and fluid temperature $\leq 40$ °C) | yes                                  |

### Installation dimensions

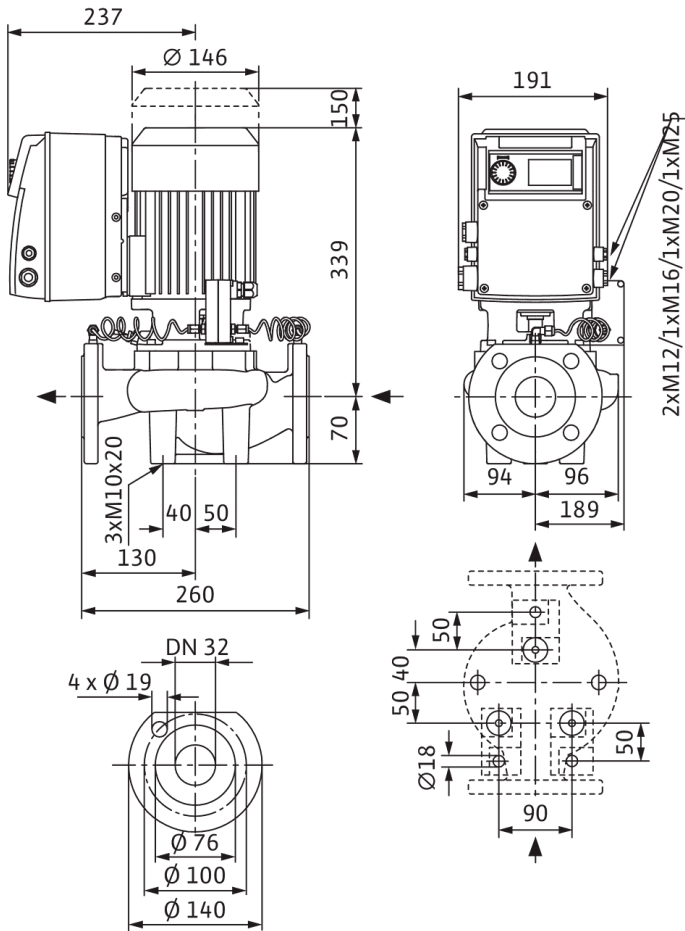
|  |        |
|--|--------|
| Port-to-port length $L_0$                    | 260 mm |
| Pipe connection on the suction side $DN_s$   | DN 32  |
| Pipe connection on the discharge side $DN_d$ | DN 32  |

Pump curves



Dimensions and dimensions drawings

VeroLine-IP-E 32/105-0,75/2



**Note:**

Housing with feet for installation on a base and drilled holes M10, brackets on request.

## Ordering information

### Product data

|                            |                             |
|----------------------------|-----------------------------|
| Brand                      | Wilo                        |
| Product description        | VeroLine-IP-E 32/105-0,75/2 |
| Article number             | 2158811                     |
| EAN number                 | 4048482603360               |
| Colour                     | Green                       |
| Minimum order quantity     | 1                           |
| Date of sales availability | 2015-09-01                  |

### Dimension, weight

|                                |          |
|--------------------------------|----------|
| Length with packaging          | 595 mm   |
| Length <i>L</i>                | 408.5 mm |
| Height with packaging          | 465 mm   |
| Height <i>H</i>                | 367 mm   |
| Width with packaging           | 395 mm   |
| Width <i>W</i>                 | 283 mm   |
| Gross weight, approx. <i>m</i> | 33 kg    |
| Net weight, approx. <i>m</i>   | 28 kg    |

### Packaging

|                    |                     |
|--------------------|---------------------|
| Number per layer   | 1                   |
| Packaging property | Transport packaging |
| Packaging type     | Cardboard box       |
| Pieces per pallet  | 1                   |

## Tender text

Glanded centrifugal pump with in-line design for pipe installation with built-in frequency converter for electronic control for constant or variable differential pressure (dp-c/dp-v). Three-phase AC motor with frequency converter.

### Design:

- > Single-stage low-pressure centrifugal pump with one-piece shaft
- > Spiral housing, in-line design
- > PN 16 flange – drilled according to EN 1092-2
- > Pressure measuring connections (R 1/8) for mounted differential pressure sensor (version ...-R1 without differential pressure sensor)
- > Pump housing and motor flange with cataphoretic coating as standard
- > Mechanical seal for water feed up to  $T=120\text{ °C}$ . A glycol admixture of 20 to 40% by vol. is permitted up to  $T_{\text{max}} = +40\text{ °C}$ . Other mechanical seals or other fluids/temperatures on request.

### Accessories:

- > Mounting brackets for fixing to the foundation
- > IR-Monitor
- > IR-Stick
- > IF module PLR
- > IF module LON
- > IF module Modbus
- > IF module BACnet
- > IF module CAN
- > Control systems VR-HVAC/CCe-HVAC/SCe-HVAC
- > Differential pressure sensor (DDG) sets 0-10 V for pumps in version ...-R1

### Standard equipment:

- > One-button manual operation level for:
  - > Pump On/Off
  - > Setpoint and speed adjustment
  - > Selecting the control mode:  $\Delta p\text{-c}$  (constant differential pressure),  $\Delta p\text{-v}$  (variable differential pressure), PID controller, n-constant (constant speed)
  - > Selection of operating mode in dual pump operation (main/standby operation, parallel operation)
  - > Configuration of operating parameters
  - > Fault acknowledgement
- > Pump display for displaying:
  - > Control mode
  - > Setpoint (e.g. differential pressure or speed)
  - > Error and warning messages
  - > Actual values (e.g. power consumption, actual value of the sensor)
  - > Operating data (e.g. operating hours, energy consumption)
  - > Status data (e.g. status of SSM and SBM relay)
  - > Device data (e.g. pump name)

### Additional functions:

- > Interfaces: Control input "Overriding Off", "External pump cycling" (effective only in dual pump operation), analogue input 0–10 V, 2–10 V, 0–20 mA, 4–20 mA for control mode (DDC) or for remote setpoint adjustment, analogue input 0–10 V, 2–10 V, 0–20 mA, 4–20 mA for actual value signal of the pressure sensor, Infrared interface for wireless communication with the operating and service unit Wilo-IR-Stick/IR-Monitor, plug-in position for Wilo IF-Module Modbus, BACnet, CAN, PLR, LON for connecting to the building automation, configurable, potential-free fault and operating/ready message, interface for dual pump communication
- > Adjustable time interval for pump cycling (in dual pump mode)
- > Integrated full motor protection
- > Different operating modes for heating mode (HV) or air-conditioning mode (AC)
- > Access disable
- > Different operation levels: Standard / Service

### Operating data

|                         |        |
|-------------------------|--------|
| Fluid temperature $T$   | -20 °C |
| Ambient temperature $T$ | 0 °C   |

### Operating data

|                                  |        |
|----------------------------------|--------|
| Maximum operating pressure $P_N$ | 10 bar |
| Minimum efficiency index (MEI)   | 0.4    |

### Motor data

|                        |                   |
|------------------------|-------------------|
| Motor efficiency class | IE4               |
| Interference emission  | EN 61800-3        |
| Interference immunity  | EN 61800-3        |
| Mains connection       | 3~380 V, 50/60 Hz |
| Rated power $P_2$      | 750 W             |
| Max. speed $n_{\max}$  | 2910 1/min        |
| Rated current $I_N$    | 1.9 A             |
| Insulation class       | F                 |
| Protection class motor | IP55              |
| Motor protection       |                   |

### Materials

|              |                 |
|--------------|-----------------|
| Pump housing | Cast iron       |
| Impeller     | PPE/PS-GF30     |
| Shaft        | Stainless steel |
| Shaft seal   | AQ1EGG          |
| Lantern      | Cast iron       |

### Installation dimensions

|  |        |
|--|--------|
| Pipe connection on the suction side $DN_s$   | DN 32  |
| Pipe connection on the discharge side $DN_d$ | DN 32  |
| Port-to-port length $L_0$                    | 260 mm |

### Ordering information

|                         |                             |
|-------------------------|-----------------------------|
| Brand                   | Wilo                        |
| Product description     | VeroLine-IP-E 32/105-0,75/2 |
| Net weight, approx. $m$ | 28 kg                       |
| Article number          | 2158811                     |