

# VACUUM COLLECTING UNITS

6501399 VACUUM STATION 10 HQE 60 R1  
6500393 VACUUM STATION 10 HQE 105 R1  
6500390 VACUUM STATION 10 HQE 140 R2

6500386 VACUUM STATION 10 HQE 60 R2  
6501539 VACUUM STATION 10 HQE 105 R2

## Vacuum suction for grey water and condensates, and blackwater for R2 models only

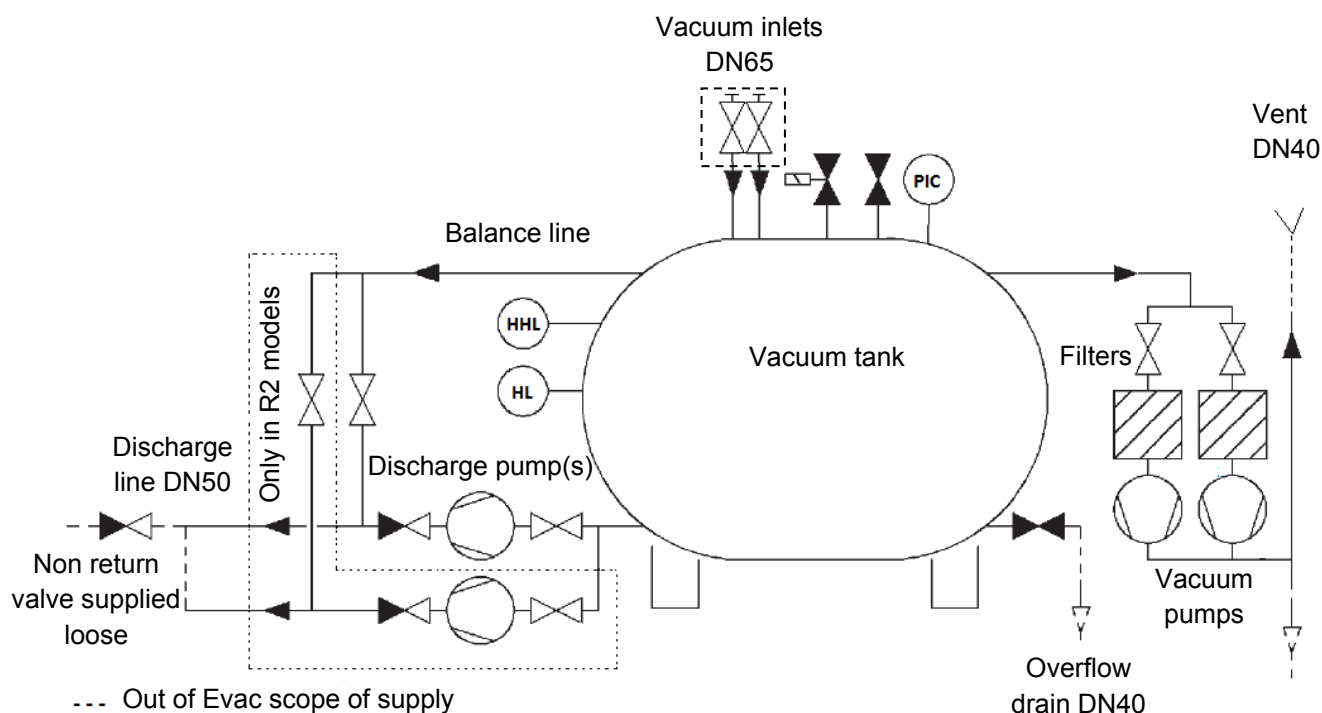
The vacuum system N°10 HQE is composed of:

- One 1100 liters epoxy coated or stainless steel collecting tank.
- Two rotary claw vacuum pumps of Evac design, with stainless steel filter, available with various flow rates
- One (R1) or two (R2) discharge pumps
- One control panel for power and regulation (BMS available in option)
- Connections for PVC (PN16) network pipes
- Two wastewater inlets connections
- An epoxy coated mount frame with anti choc

## Advantages

- Competitive price
- Compact and powered
- No water consumption
- Low electricity consumption

## Flow diagram



# VACUUM COLLECTING UNITS

6501399 VACUUM STATION 10 HQE 60 R1  
6500393 VACUUM STATION 10 HQE 105 R1  
6500390 VACUUM STATION 10 HQE 140 R2

6500386 VACUUM STATION 10 HQE 60 R2  
6501539 VACUUM STATION 10 HQE 105 R2

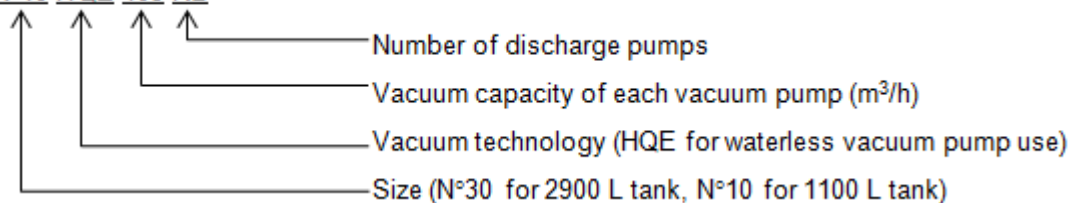
## Functioning

- The vacuum pumps are connected to the collecting tank and then to the pipe network. These pumps maintain a constant level of vacuum in the system.
- The vacuum electronic measurement system regulates the starting and stopping of the vacuum pumps.
- The collecting tank collects waste water through the pipe network (branch and main).
- Two DN65 inlets are located on the upper left part of the tank.
- When the vacuum pumps are running, vacuum is created in all the system.
- When needed the vacuum pumps are stopped, and the discharge pump is activated to discharge the tank to the sewage system through the DN50 PVC pipe.
- The control panel of the PLC manages the entire system. All Vacuum Collection Unit are equipped with free contact for default report and optional connection to BMS.

## Vacuum collection unit range

How to read the plant type:

i.e. N°10 HQE 105 R2

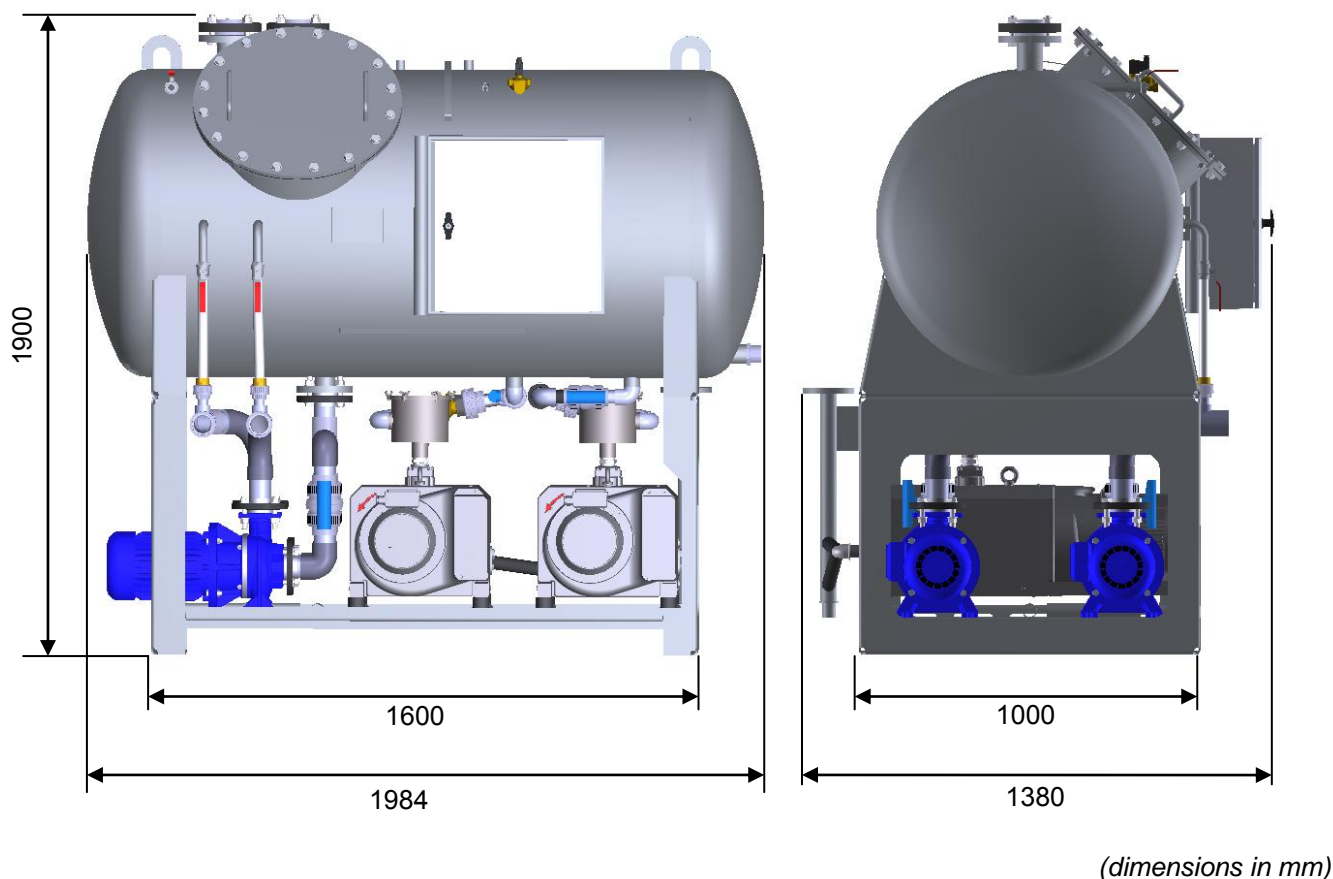


| P/N     | Models        | Vacuum pump capacity m³/h | Number of discharge pumps | Power KW |
|---------|---------------|---------------------------|---------------------------|----------|
| 6501399 | 10 HQE 60 R1  | 60                        | 1                         | 5.6      |
| 6500386 | 10 HQE 60 R2  | 60                        | 2                         | 8.6      |
| 6500393 | 10 HQE 105 R1 | 105                       | 1                         | 8.6      |
| 6501539 | 10 HQE 105 R2 | 105                       | 2                         | 11.6     |
| 6500390 | 10 HQE 140 R2 | 140                       | 2                         | 13       |

# VACUUM COLLECTING UNITS

6501399 VACUUM STATION 10 HQE 60 R1  
6500393 VACUUM STATION 10 HQE 105 R1  
6500390 VACUUM STATION 10 HQE 140 R2

6500386 VACUUM STATION 10 HQE 60 R2  
6501539 VACUUM STATION 10 HQE 105 R2



## Technical data

| Type          | Power KW | Dry weight Kg | Total vacuum capacity m <sup>3</sup> /h |
|---------------|----------|---------------|---|
| 10 HQE 60 R1  | 5.6      | 1050          | 120                                     |
| 10 HQE 60 R2  | 8.6      | 1100          | 120                                     |
| 10 HQE 105 R1 | 8.6      | 1050          | 210                                     |
| 10 HQE 105 R2 | 11.6     | 1100          | 210                                     |
| 10 HQE 140 R2 | 13       | 1130          | 280                                     |

## Materials

Vacuum pump; pump casing: cast iron, PTEF coated inside  
Frame and tank: epoxy coated or stainless steel

## Capacity

Tank volume: 1,100 L

## Electrical data

Voltage: 380V/50Hz, 3 phases +earth

## Connections

Inlet: DN65  
Outlet (discharge): DN50

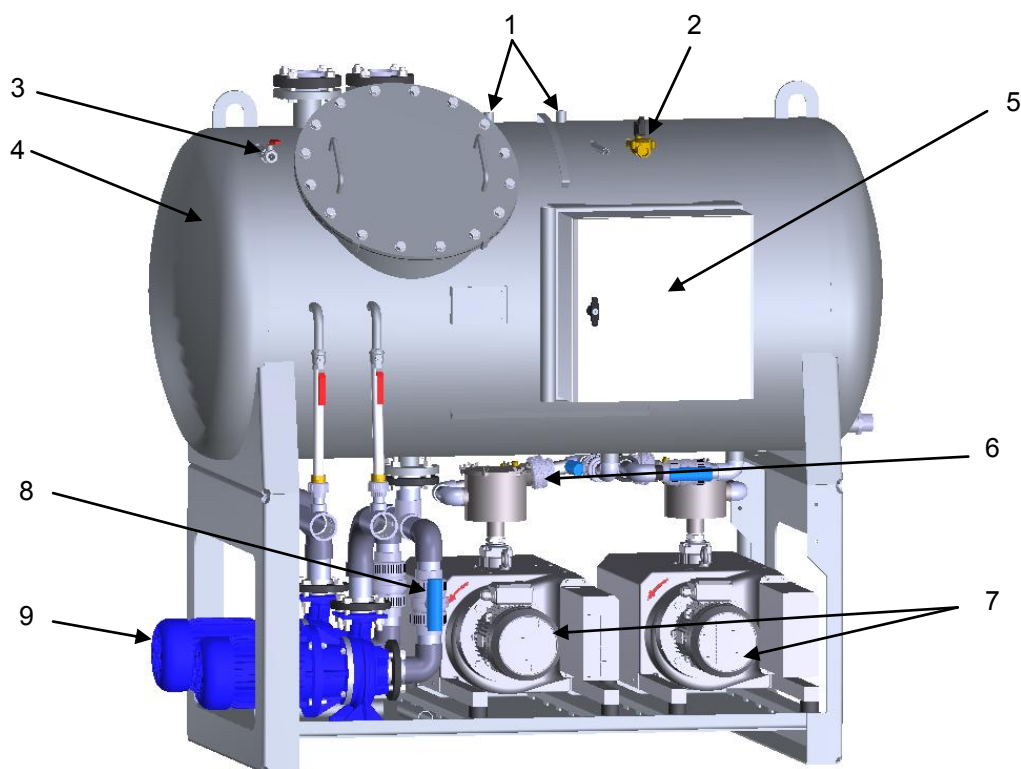
## Shipping data

Volume: 1.2 m<sup>3</sup> appr.

# VACUUM COLLECTING UNITS

6501399 VACUUM STATION 10 HQE 60 R1  
6500393 VACUUM STATION 10 HQE 105 R1  
6500390 VACUUM STATION 10 HQE 140 R2

6500386 VACUUM STATION 10 HQE 60 R2  
6501539 VACUUM STATION 10 HQE 105 R2

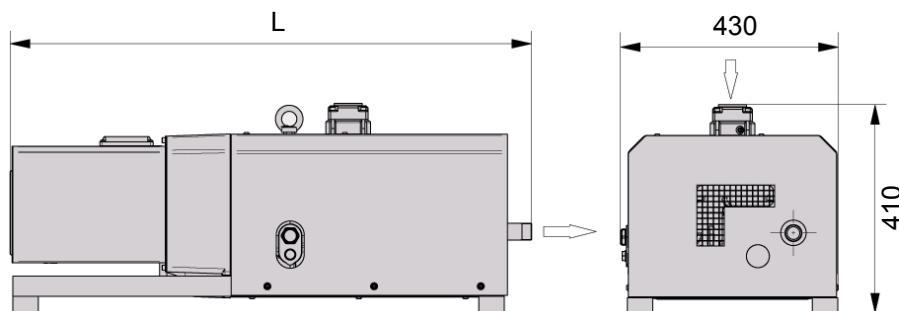


## Main components

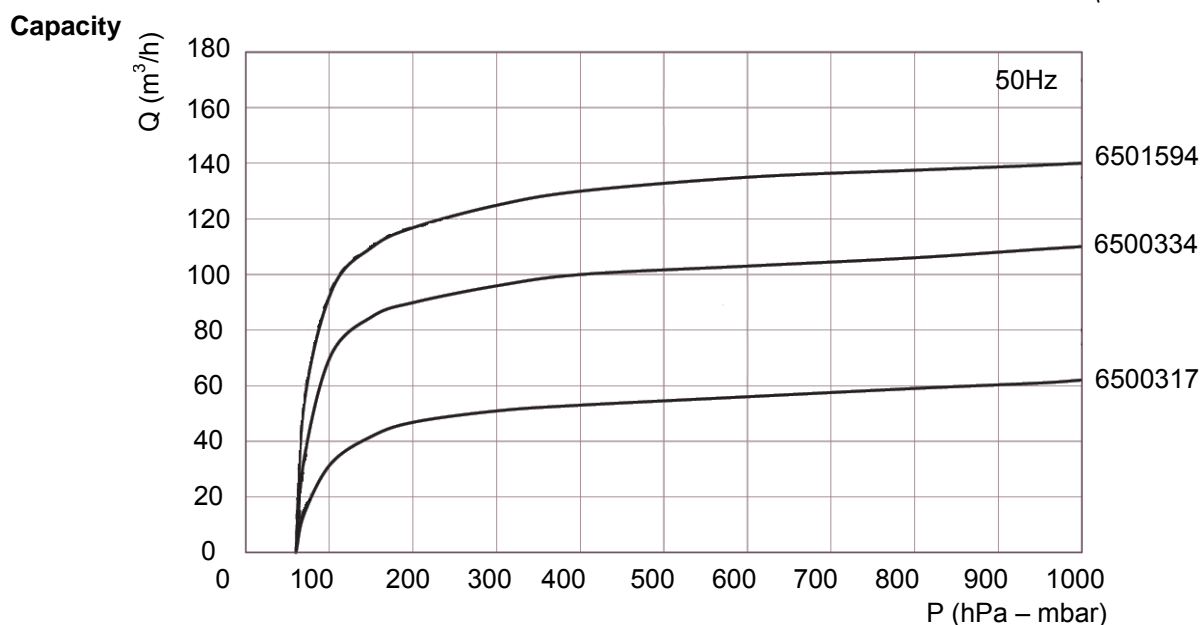
| Item | Name   | P/N     | N°10 HQE |      |       |        |        |
|------|--|---------|----------|------|-------|--------|--------|
|      |  |         | 60R1     | 60R2 | 105R1 | 105 R2 | 140 R2 |
| 1    | Level switches                                       | 6500178 | 2        | 2    | 2     | 2      | 2      |
| 2    | Solenoid air valve                                   | 6500339 | 1        | 1    | 1     | 1      | 1      |
| 3    | Manual shut-off valve for vacuum break               | 6500297 | 1        | 1    | 1     | 1      | 1      |
| 4    | Epoxy coated collection tank with frame              | 6500401 |          | 1    |       | 1      | 1      |
|      |  | 6500400 | 1        |      | 1     |        |        |
| 5    | Control panel with vacuum display                    | 6506003 | 1        | 1    | 1     | 1      | 1      |
| 6    | Non return valve 1" 1/4                              | 6501737 | 2        | 2    | 2     | 2      | 2      |
|      |  | 6500317 | 2        | 2    |       |        |        |
| 7    | Rotary claw vacuum pumps                             | 6500334 |          |      | 2     | 2      |        |
|      |  | 6501594 |          |      |       |        | 2      |
| 8    | Manual ball valve                                    | 6500056 | 1        | 2    | 1     | 2      | 2      |
| 9    | Discharge pumps                                      | 6546910 | 1        | 2    | 1     | 2      | 2      |
|      |  | 6544423 | 2        | 2    | 2     | 2      | 2      |
|      | SS Filter 1" 1/4 complete                            | 6544424 | 2        | 2    | 2     | 2      | 2      |
|      | Cartridge filter                                     | 6544424 | 2        | 2    | 2     | 2      | 2      |
|      | Reinforced plastic non return valve (supplied loose) | 6546452 | 1        | 2    | 1     | 2      | 2      |
|      | Cast iron non return valve (supplied loose)          | 6500069 | 1        | 1    | 1     | 1      | 1      |

**6500317 VACUUM PUMP ME 60 50Hz**  
**6501594 VACUUM PUMP ME 140 50Hz**

**6500334 VACUUM PUMP ME 105 50Hz**



(dimensions in mm)



The displacement curves are valid for air at 20 °C. Tolerance:  $\pm 10\%$

| P/N     | L<br>mm | Nominal flow rate<br>m³/h | Weight<br>Kg | Nominal power<br>rating KW | Motor speed<br>rpm | Sound level<br>dB(A) |
|---------|---------|---------------------------|--------------|----------------------------|--------------------|----------------------|
| 6500317 | 970     | 62                        | 180          | 1.3                        | 1500               | 66                   |
| 6500334 | 1010    | 105                       | 180          | 2.8                        | 3000               | 75                   |
| 6501594 | 1030    | 140                       | 185          | 3.5                        | 3000               | 75                   |

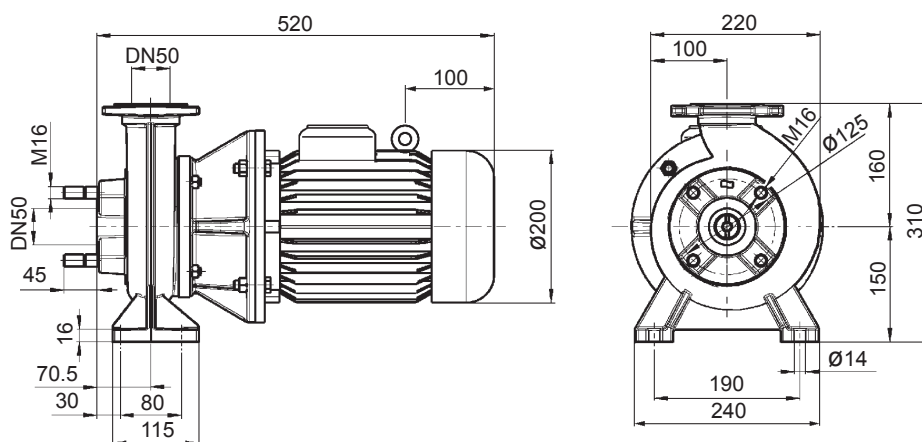
**Type** Rotary claw vacuum pump

**Materials** Casing and Impellers: Cast iron, PTFE coated inside

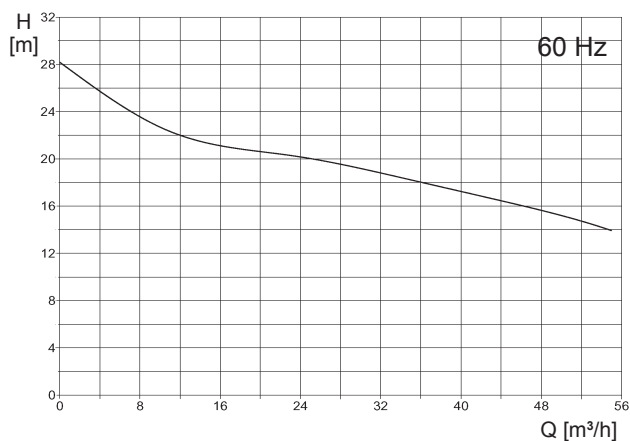
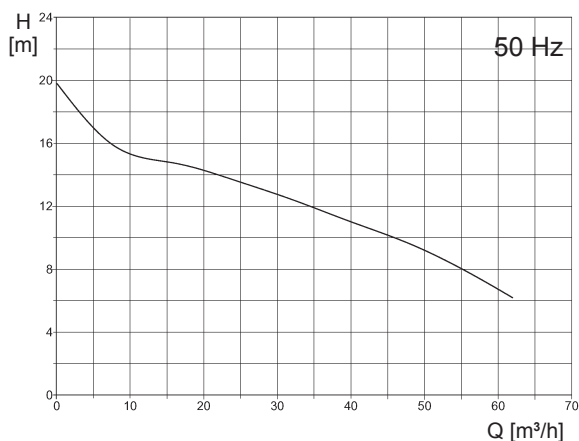
**Connections** Inlet: 1 ¼", outlet: 1"

**Electrical data** Voltage: 400/440 V, 50Hz

**6546910 PUMP S30, 3x380-420 V 50 Hz, 3x440-480 V 60 Hz, 3x660-690 V 50 Hz**



**Capacity**



**Electrical data**

| Voltage: 3x380-420 V 50 Hz |         |             | Voltage: 3x440-480 V 60 Hz |         |             | Voltage: 3x660-690 V 50 Hz |         |             |
|----------------------------|---------|-------------|----------------------------|---------|-------------|----------------------------|---------|-------------|
| Nominal                    |         | Motor speed | Nominal                    |         | Motor speed | Nominal                    |         | Motor speed |
| Power                      | Current |             | Power                      | Current |             | Power                      | Current |             |
| 3.0 kW                     | 6.5 A   | 3000 rpm    | 3.6 kW                     | 6.3 A   | 3600 rpm    | 3.0 kW                     | 3.75 A  | 3000 rpm    |

Protection class: IP55  
Insulation class: F  
Efficiency: IE1

**Materials**

Pump casing and interstage casing: Cast iron EN-GJL-250 (GG25)  
Impeller: Cast iron EN-GJL-250 (GG25)  
Shaft: Stainless steel SIS 2350 (AISI316Ti)  
Impeller nut: Copper alloy UNS 38500  
Metal seals: Carbon stainless steel

**Other**

Impeller: Ø120

**Shipping data**

Net weight: 56 kg

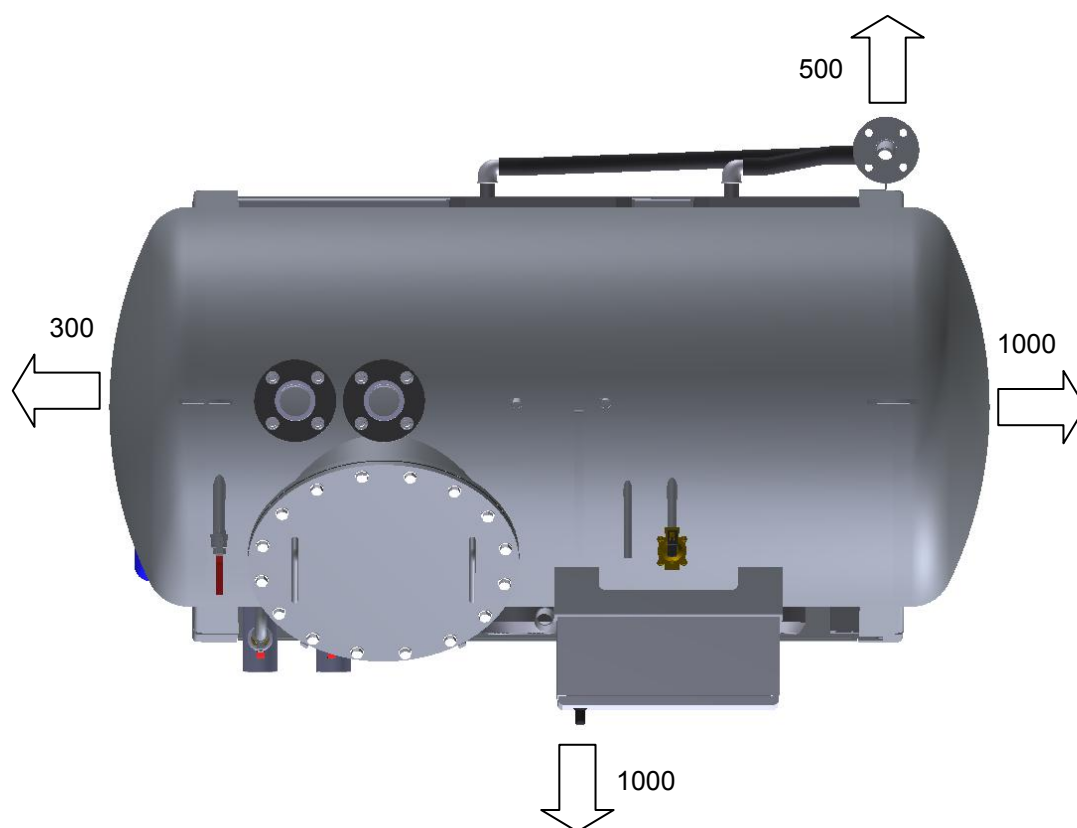
# VACUUM COLLECTING UNITS

6501399 VACUUM STATION 10 HQE 60 R1  
6500393 VACUUM STATION 10 HQE 105 R1  
6500390 VACUUM STATION 10 HQE 140 R2

6500386 VACUUM STATION 10 HQE 60 R2  
6501539 VACUUM STATION 10 HQE 105 R2

The installation of an Evac vacuum system requires:

- Area for equipment, providing space to the sides for maintenance and services, minimum plant room area approx : 3 x 4 m with 2.5 m height
- Water supply and bib tap for maintenance purposes
- Lighting and 240 V for maintenance purposes
- A floor drain for the vent line condensates (or a single appliance unit)
- Supply of electricity, 415V/50Hz, 3 phases +earth
- Pipe arrival sewer vacuum
- Final sewage discharge location adapted to the discharge pump capacity
- Ventilation pipe for the vacuum pump exhaust is connected to atmosphere, outside of the building, ending in a swan neck. Pipe sizing according to site.



*(maintenance distances requirement in mm)*