HÄNY-ECOLINE







High-performance pumps for urban drainage and sewage transport



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info@haeny.com www.haeny.com Häny AG all roads lead to us when it comes to pumps

NEW IN OUR RANGE

HÄNY ECOLINE



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HÄNY-ECOLINE

PRODUCT RANGE

High-pressure drainage

Pressure drainage systems in urban water management permit the connection of individual properties and parts of villages to a distant channel system. Our pumps can overcome extremely long pipe distances with delivery pressures **up to 16 bar**. By using these products together with small pipe cross-sections, the total cost of the drainage system can be significantly reduced. With the Econex®, you can build up a feed pressure of 12 bar at a volumetric flow rate of 0.6 l/s with only 1.8 kW motor power.

- Unique cutting system made of hardened special steel
- ATEX "Ex d c IIB" as standard
- Motor with a high efficiency class, although not required by the standards
- Two mechanical seals connected in series in oil bath
- SIC/SIC mechanical seal on the medium side
- Heavy-duty double row bearing as a fixed bearing on the hydraulic side
- Three Klixon connected in series for temperature monitoring
- · Leakage detection in specially designed chamber
- · Motor hydraulic connection with service-friendly v-band
- Special heat dissipation system for high running times without water on the motor



Product line ECOCUT®

- Grinder pumps with 1 and 2-stage centrifugal hydraulics
- Maximum pressure: 8 bar (16 bar as a series installation)
- · Hydraulic unit that is easily adjustable from outside
- Flange connection for coupling to any third-party system



Product line ECONEX®

- Progressive cavity hydraulic grinder pump
- Maximum pressure: 12 bar (installed with only 1,8 kW)
- Transmission with hermetically encapsulated cardan joint





Low-pressure drainage

The sturdy Vortex series Ecovox® is suitable to transport both sewage containing faeces and without faeces. Either as a sewage lifting unit in buildings or in various process stages in the sewage plant.

- Non-clogging drainage and sewage hydraulic pumps
- Proven Vortex impellers with high hydraulic efficiency
- Flange connection for coupling to any third-party system
- ATEX "Ex d c IIB" as standard
- Motor with a high efficiency class, although not required by the standards
- Two mechanical seals connected in series in oil bath
- SIC/SIC mechanical seal on the medium side
- Heavy-duty double row bearing as a fixed bearing on the hydraulic side
- Three Klixon connected in series for temperature monitoring
- Leakage detection in specially designed chamber
- Motor hydraulic connection with service-friendly v-band
- Special heat dissipation system for high running times without water on the motor



Product line ECOVOX® WW (WasteWater)

- The classic sewage pump DN80 with Vortex impeller moves any problematic media charged with solids
- Fibre-repellent system to protect the mechanical seal



Product line ECOVOX® DR (Drainage)

 The classic drainage pump DN50 with Vortex impeller moves any media slightly charged with solids

Our production site is also certified to:

• ISO 9001 / ISO/TS 16949 / ATEX 94/9/EG VII

In addition to the usual checks, the pumps are subjected to a full:

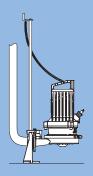
- motor test: no-load current and insulation measurement and
- hydraulics test: operating point measurement with water.

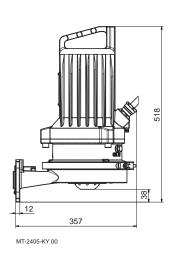
ECOCUT®

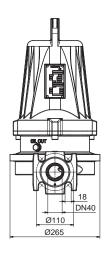


ECOCUT®-2405 (1-stage)

High-quality design in gray cast iron, with a grinding unit of hardened special steel for sewage and faeces. Its field of use is in sewage disposal for individual properties and parts of villages. The blockage-free, integrated grinding unit ensures that the pumping medium can be transported through a De40 line. Straight lengths of line (De50) of up to **700 m** can be overcome. These pumps come in the standard design "Ex d c IIB".







Technical data

Medium: Faecal sewage

without rainwater

Nominal perfor-

mance, P2: 1.5/2.2/2.7/3 kW

Speed, n: 2900 min⁻¹ Tension, U: 3 x 230/400 V

Frequency, F: 50 Hz
Protection class: IP 68
Insulation class: F

Performance cable: 1 x (7 x 1.5 mm²)

10 m (NSSHÖU)

Mode of operation: S1 / S3

Discharge

connection: DN 40

Equivalent

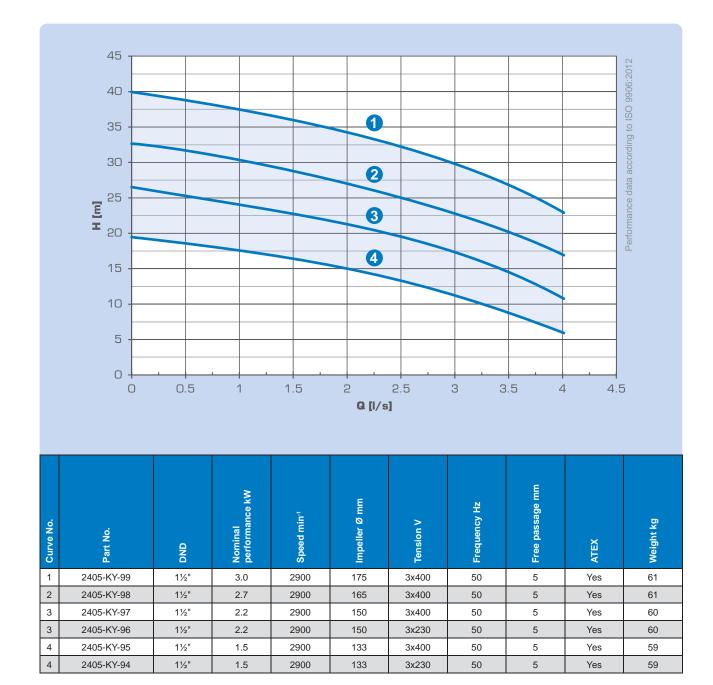
free passage: 5 mm

Weight: approx. 60 kg







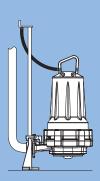


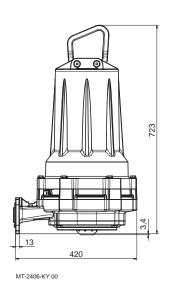
ECOCUT®

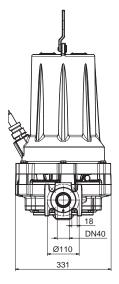


ECOCUT®-2406 (2-stage)

High-quality design in gray cast iron, with a grinding unit of hardened special steel for sewage and faeces. Its field of use is in sewage disposal for individual properties and parts of villages. The blockage-free, integrated grinding unit ensures that the pumping medium can be transported through a De40 line. Straight lengths of line (De50) of up to **1400 m** can be overcome. These pumps come in the standard design "Ex d c IIB".







Technical data

Medium: Faecal sewage

without rainwater

Nominal perfor-

mance, P2: 5.5 / 7.5 kWSpeed, n: 2900 min^{-1} Tension, U: $3 \times 400 \text{ V}$ Frequency, F: 50 HzProtection class: IP 68

Insulation class: F

Performance cable: 1x (10 x 2.5 mm²)

10 m (NSSHÖU)

Mode of operation: S1 / S3

Discharge

connection: DN 40

Equivalent

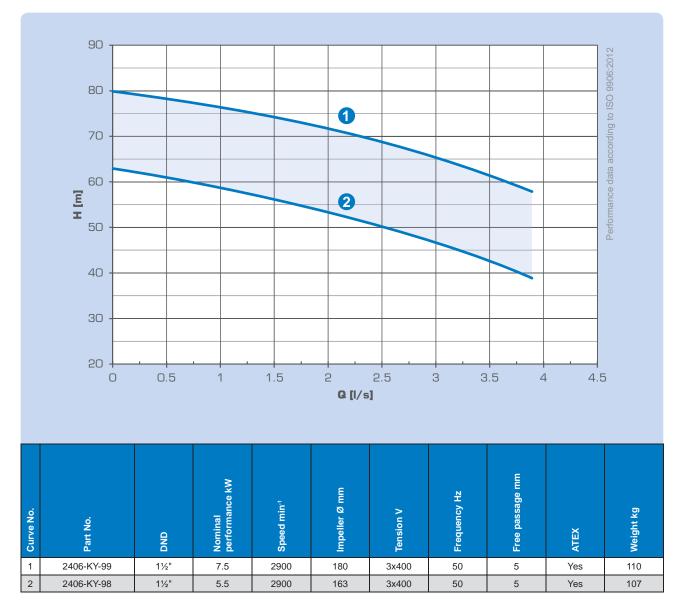
free passage: 5 mm

Weight: approx. 108 kg







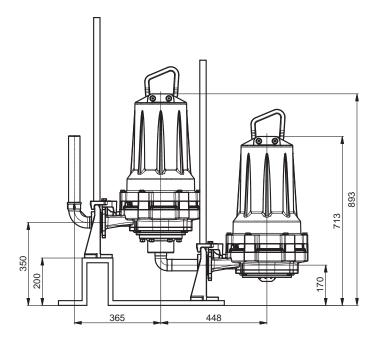


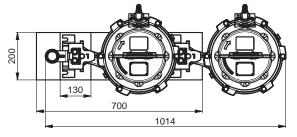
ECOCUT®



ECOCUT®-2406/2405 (in series)

With a combination of the 2406 and 2405 units in series the 80 meter limit can be increased to a **maximum of 150 meter** head and all required operating duties can be achieved. Thanks to this combination pipelines of up to **3000 meters** long (De50) can be pumped. This makes even those places that are normally out of reach, possible to connect to the public sewer system. This also achieves **large cost savings** for this type of pump station. These pumps come in the standard design "Ex d c IIB".

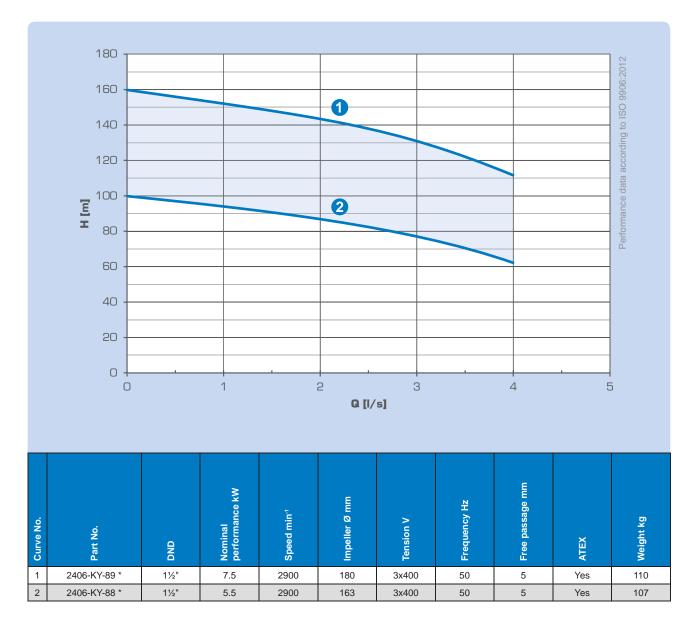












^{*)} in combination with any 2405 or 2406 pump

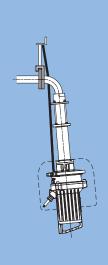
High-efficiency pumps

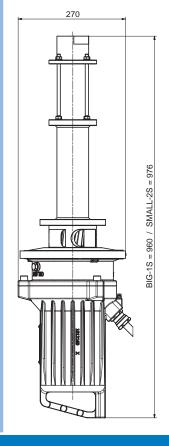
ECONEX®

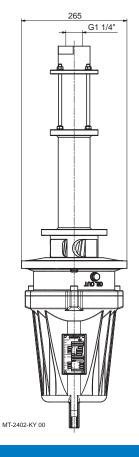


ECONEX®-2402

The 2402 is a unique positive-displacement, submersible motor-driven pump with grinding unit of hardened special steel for sewage and faeces. Its field of use is in sewage disposal for individual properties and parts of villages. The blockage-free, integrated grinding unit ensures that the pumping medium can be transported through a De32 line. Straight lengths of line (De40) of **up to 4500 m** can be overcome. These pumps come in the standard design "Ex d c IIB". They can be installed either horizontally or vertically.







Technical data

Medium: Faecal sewage

without rainwater

Nominal perfor-

mance, P2: 1.5 / 1.8 / 2.5 kW Speed, n: 950 / 1450 min⁻¹ Tension, U: 3 x 230 / 400 V

Frequency, F: 50 Hz
Protection class: IP 68
Insulation class: F

Performance cable: 1x (7 x 1.5 mm²)

10 m (NSSHÖU)

Mode of operation: S1 / S3

Discharge

connection: 11/4"

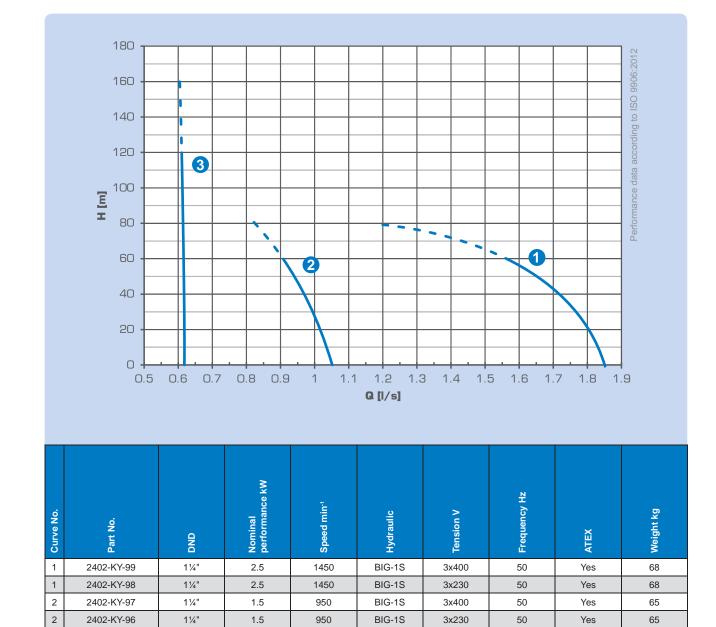
Equivalent

free passage: 5 / 8 mm
Weight: approx. 67 kg









2402-KY-95

2402-KY-94

11/4"

11/4"

1.8

1.8

1450

1450

SMALL-2S

SMALL-2S

3x400

3x230

50

50

Yes

Yes

65

65

3

3

High-efficiency pumps

SEWAGE PRESSURE DRAINAGE SYSTEMS

ECOCUT® ECONEX®

A typical application for sewage pressure drainage systems is the connection to properties outside the municipal sewage network. The typical requirement would be to transport a small quantity (0.55 - 4 l/s) over a longer distance of up to 4500 meters.

Conventional sewage pumps operate with an increasing pressure and flow in an area with a low pump efficiency and therefore a high energy consumption. As in this case long piping distances have to be covered, the friction loss over this distance increases the head the pump has to overcome and therefore also total energy costs. Häny Ecocut® and Econex® pumps have been designed specially for this type of application, and bring a failure free operation with lowest possible operating costs.

A conventional sewage pumping station is usually equipped with a delivery pipeline of 80 mm diameter. With a Häny Ecocut® and Econex® pumping station the incoming solids are cut with the grinding mechanism that reduces the size of the solids, so that the main pipeline inside diameter can be reduced to 40 / 32 mm. This in turn reduces the purchase price of the installation and the laying of the main pipeline. The machinery used needs only to cut a narrow trench or in some cases the piping can even be fed straight into the ground, with a vibratory plough. In this way even difficult terrain can be overcome.

The line routing must be taken into account with very long line lengths. In order to prevent hydraulic shocks and air pockets and to allow a run off in the line, bleed/ vent valves are used and/or the delivery volume is regulated with a frequency converter.



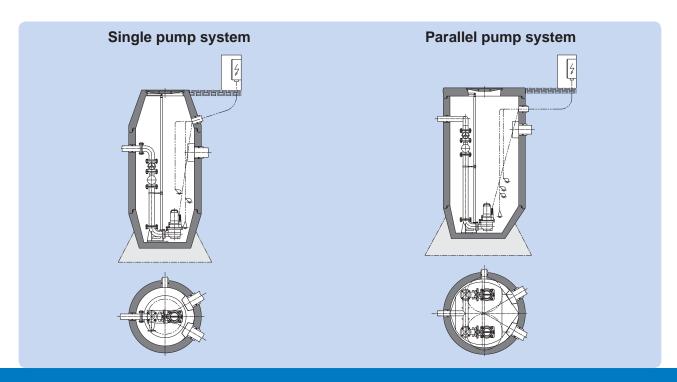




Häny Ecocut® and Econex® pumping stations are today available in Single or Parallel operation. Why a Parallel pumping installation?

- 1. To reach a larger total flow capacity.
- 2. With the failure of one pump it is still possible to transport a large part of the Sewage with the second pump.
- 3. With the increase of the flow input the second pump can be started, which will insure that in critical situations the flow output can be increased.
- 4. An automatic pump change with the pump control, insures that all pumps are always ready for operation.

Great care must be taken to ensure that the system is serviced regularly so as to guarantee troublefree operation over a longer period of time.



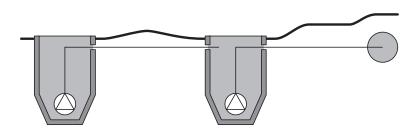
High-efficiency pumps

YOUR ADVANTAGES WITH HÄNY

ECOCUT® ECONEX®

The following calculation shows that the Häny Ecocut® or Econex® station saves you up to 20 - 45 % in costs, in comparison to a similar quality conventional sewage pump station.

Sewage system with conventional sewage pumps



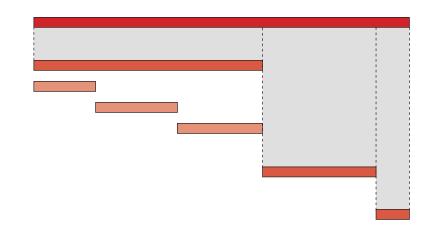
Total costs

Material costs

- Pumps
- Sump
- Piping system

Installation costs

Revision costs

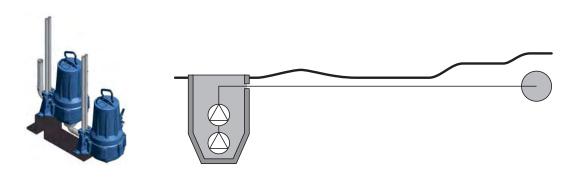


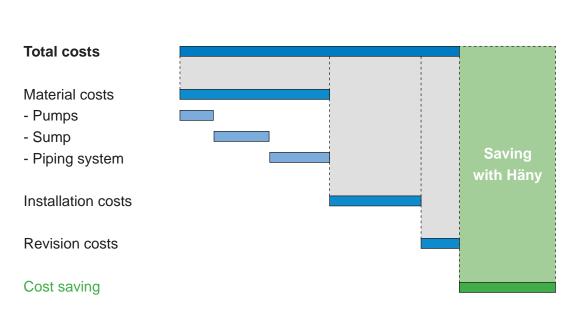






Sewage system with Häny Ecocut® or Econex® pumps





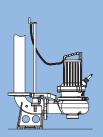
Our dealers in your area would be pleased to calculate for you the benefit you derive from our Ecocut® and Econex® pumps.

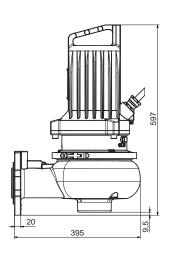
ECOVOX®

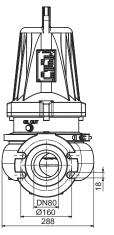


ECOVOX®-2404 WW

High-quality design in gray cast iron. Suitable for transporting effluent, faecal sewage and sewage with various solid shares. Has a blockage-free, sturdy Vortex impeller hydraulics with a large free passage. The pumps are used either as sewage lifting units in buildings or in various process stages in sewage plants. Each pump is tested individually on the hydraulic test bench in the manufacturer's works.







MT-2404-KY 00

Technical data

Medium: Effluent and

faecal sewage

Nominal perfor-

mance, P2: 1.1 / 1.5 / 1.9 /

2.2 / 2.7 / 3 kW

Speed, n: 950 / 1450 min⁻¹

Tension, U: 3 x 230 / 400 V

Frequency, F: 50 Hz Protection class: IP 68

Insulation class: F

Performance cable: 1x (7 x 1.5 mm²)

10 m (NSSHÖU)

Mode of operation: S1 / S3

Discharge

connection: DN 80

Equivalent

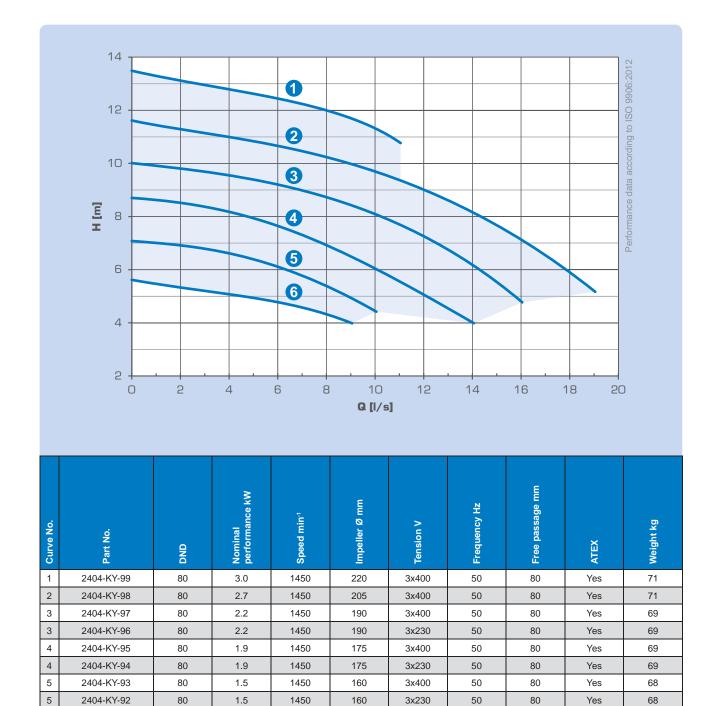
free passage: 80 mm

Weight: approx. 68 kg









2404-KY-91

2404-KY-90

1.1

1.1

3x400

3x230

Yes

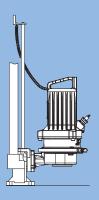
Yes

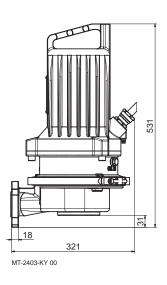
ECOVOX®

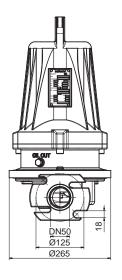


ECOVOX®-2403 DR

High-quality design in gray cast iron. Thanks to the sturdy Vortex impeller hydraulics, the pump is suitable for transporting all kinds of effluent and, within limits, for faecal sewage. The pumps are used in residential construction, trade and in industry. The pump comes with a deep well or on feet on request. Each pump is tested individually on the hydraulic test bench in the manufacturer's works.







Technical data

Medium: Effluent, within

limits with faeces

Nominal perfor-

mance, P2: 0.6/1.5/2.2/3 kW Speed, n: 1450 / 2900 min⁻¹ Tension, U: 3 x 230 / 400 V

1 x 230 V

Frequency, F: 50 Hz Protection class: IP 68

Insulation class: F

Performance cable: 1x (7 x 1.5 mm²)

10 m (NSSHÖU)

Mode of operation: S1 / S3

Discharge

connection: DN 50

Equivalent

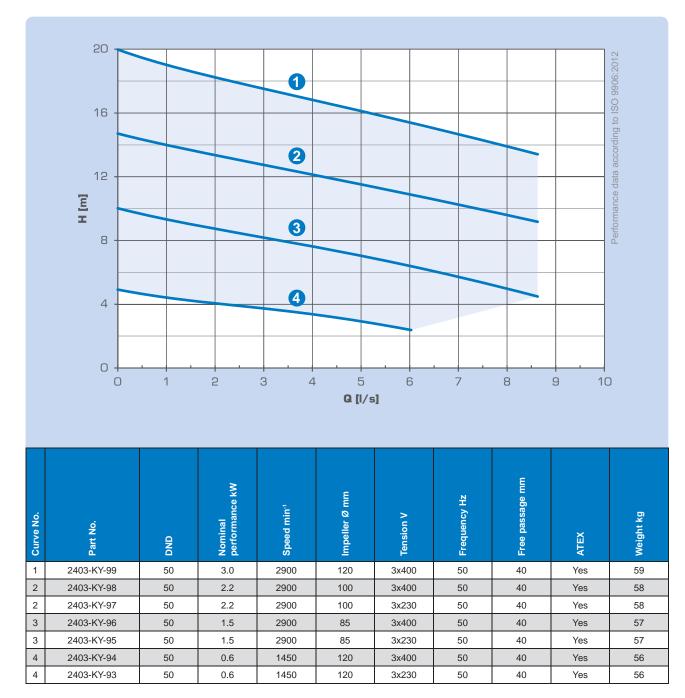
free passage: 40 mm

Weight: approx. 58 kg

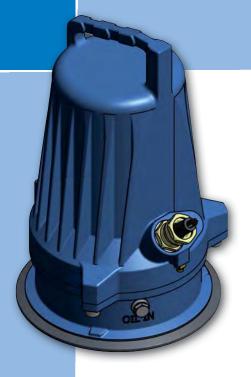








ATEX-MOTORS



BG 90/100

The special motor concept is based on an identical flange/ shaft connection for each type of pump that allows their costefficient production despite the numerous quality features.

- ATEX "Ex d c IIB" as standard
- Motor with a high efficiency class, although not required by the standards
- Two mechanical seals connected in series in oil bath
- SIC/SIC mechanical seal on the medium side
- Heavy-duty double row bearing as a fixed bearing on the hydraulic side
- Three Klixon connected in series for temperature monitoring
- Motor hydraulic connection with service-friendly v-band
- Special heat dissipation system for high running times without water on the motor
- Each motor is tested individually on the electrical test bench in the manufacturer's works

Technical data

BG90/100

Nominal perfor-

mance, P2: 0.6 - 3 kW Speed, n: 950 / 1450 /

2900 min⁻¹

BG132

Nominal perfor-

mance, P2: 5.5 - 7.5 kW Speed, n: 2900 min⁻¹

Tension, U: 230 / 400 V

Frequency, F: 50 Hz
Protection class: IP 68
Insulation class: F
Performance cable: 10 m
Mode of operation: S1 / S3

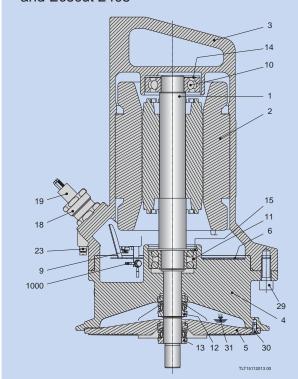






Model: BG100 and BG90

for Econex 2402, Ecovox 2403/04 and Ecocut 2405



No.	Description	No.	Description	
1	Rotor		Axial face seal Q1Q1	
2	! Stator		Ball bearing compensating washer	
3	Motor housing		Locking ring	
4	Adapter		Screwed cable gland	
5	Intermediate cover		Motor cable	
6	Gasket		Explosion-proof terminal	
9	Explosion-proof terminal		Cheese head screw	
10	Deep groove ball bearing		Countersunk screw	
11	Angular ball bearing, double-row		Oil ¹⁾	
12	Axial face seal BQ1		Conductivity probe	

Oil quantity: approx. 1.6 liter Oil type: ISO 32 - SAE 10W, ARNICA 32 - Agip, DTE 24 - Mobil, NUTO H32 - Esso, TELLUS S 37 - Shell, PANOLIN TRAFO C1 or analog

Model: BG132 for Ecocut 2406
33 36
25
60 99
53
55
51 35
16

No.	Description	No.	Description
16	Axial face seal Q1Q1		Deep groove ball bearing
25	25 Screwed cable gland		Angular ball bearing, double-row
28	Stator	51	Axial face seal BQ1
29	Rotor	53	Cheese head screw
31	Oil ¹⁾	55	Cheese head screw
33	Ball bearing compensating washer		Motor cable
35	Seeger circlip ring		Conductivity probe

1) Oil quantity: approx. 2.55 liter
Oil type: ISO 32 - SAE 10W, ARNICA 32 - Agip, DTE 24 - Mobil,
NUTO H32 - Esso, TELLUS S 37 - Shell, PANOLIN

TRAFO C1 or analog

SERVICES

HÄNY AG



Häny AG offers other products and services for export:

Borehole pump for water supplies

Häny AG has extended its range of borehole pumps. These pumps have been used by Swiss water industries for decades and even after 50 years of operation we are still able to service and inspect these high-quality machines as if they were as good as new.

Our HBP heavy-duty borehole pumps are unique when it comes to efficiency and the requirements on their service life (Made in Switzerland).

Flow rate: 15 - 120 l/s Delivery head: 10 - 195 m

Complete overhauls

Häny AG specialises in the complete overhaul of Sulzer pumps manufactured before 1999 in Winterthur (CH), particularly the HPL, HPH, BPK and BPS series.

After a complete overhaul, the pump is technically and hydraulically "as new". The efficiency is at least equivalent to that at its initial acquisition.

Thanks to the earlier takeover of the "Sulzer Pumpen Schweiz (PUCH)" business unit we were able to preserve and further develop the valuable know-how and the production documents.





Energy production with the Blue-Water-Power line of products (Made in Switzerland)

Energy production from drinking water is very important for water supplies that are of ecological and economic interest. Häny AG has been successfully involved in this field for several years. The systems can usually be installed in existing supply structures with no problems. Häny can offer the following product lines in this sector:

Back-pressure Pelton turbines

A proprietary development that can be operated in closed systems and thus has the big advantage that they can be installed in existing structures with no modifications. Power range 1 - 2000 kW.

- with European drinking water certification
- in a vertical design, 1 to 3 jets

Pelton turbines

Our assortment covers the power range from 1 kW to 2000 kW.

- with European drinking water certification
- in a vertical and horizontal design, 1 to 3 jets







Blue-Water-Power

Competent, progressive, innovative

ABOUT US

HÄNY AG

Our aim is not to meet your expectations, but to surpass them – and to enthuse you.

Innovative and safe pump solutions, turbine and injection systems

For decades, Häny AG has been a household name for pump and system technology for water supply and sanitation in the municipal and industrial segments. Our know-how also leads to convincing and clear results in building services engineering as well as swimming pool technology. Offering innovative turbine solutions, Häny AG enables more efficient use of renewable water power in times of energy shortages. Last but not least, we are among the leading manufacturers of injection systems.

Top quality over 5 generations

Ever since its foundation by Eduard Häny-Pfister in 1875, Häny AG has been a family business. Today the company is managed by the fifth generation of the family and employs roughly 150 staff. Over time, the company has transformed itself from a pump manufacturer into a systems provider. For the most part procuring our pumps from the global market, we are now capable of suggesting to our customers the best possible solution in specific situations. Where unusually sophisticated pumps or special solutions are called for, we continue to manufacture these in Jona, Switzerland.

Your competent services and solution

By thinking and acting outside the box and thanks to our unique consultancy, manufacturing and servicing competence, we are able to offer the optimal solution for any product range. All from one source – reliable, custom-tailored, and safe.

