



GEA HILGE TP

Single-stage End-suction Centrifugal Pumps
Catalog

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ALWAYS IN MOTION WITH FLOW COMPONENTS



“Regardless of the application – for our customers product quality and profitability are what matters. This is what GEA Flow Components is known for. Our engineers are specialists in everything that flows.”

GEA Flow Components

The Flow Components Portfolio comprises hygienic pumps, valve technology and cleaning technology. Our products comply with the highest hygiene standards, such as EHEDG and 3-A. Our customers’ success depends on the quality and profitability of their products. That is why they rely on advanced technology and on our decades of experience in ensuring smooth processing of liquid products. Our sophisticated process components and service offers for everything that flows are available worldwide from the international GEA sales network.



Around one quarter of the milk processed is handled by GEA equipment



Roughly every second liter of beer is brewed using GEA equipment and solutions



Every fourth liter of human blood is handled by GEA equipment



Approx. one in three instant coffee lines has been built by GEA

Hygienic Pumps

GEA Hilge Hygienic Pumps – The heart of every process

GEA Hilge offers a versatile range of centrifugal and positive displacement pumps for a wide variety of sensitive applications in the beverage, food and pharmaceutical industries.

Our pumps with their sophisticated design ensure particularly gentle conveyance of the respective medium, offer lasting reliability and are characterized by economic efficiency. After all, hygienic pumps are used in processes that directly affect the product and production. They are the heart of every process.

State-of-the-art pump technology, made to our customers' preferences

At the GEA Hygienic Pumps Competence Center we develop innovative pumps and processes together with our customers. Our decades of up-close experience with operations and systems at our customers' production sites ensure optimum selection and configuration of the right pumps for every application.

Maximum efficiency

Two product lines, GEA VARIPUMP and GEA SMARTPUMP, enable our customers to choose from a highly versatile pump range with a multitude of smart adaption options to achieve simpler operation, higher-quality production, and reduced consumption of valuable resources. Special construction features of our many types of pumps provide for exceptionally gentle product handling, delivering top-quality products to consumers.

Maximum reliability

Our customers rely on the safe, continuous operation of their production processes without unplanned breaks or disturbances. That is why GEA pumps are optimized for uncompromising reliability in all applications. Thanks to their robust design and long service life, they are known as "workhorses" for their ease of maintenance and outstanding service, proven over decades, and for the great number of pumps currently in operation. Of course, GEA pumps also comply with all relevant hygiene standards and norms with continuous documentation and up-to-date certifications safely ensuring judicial security.

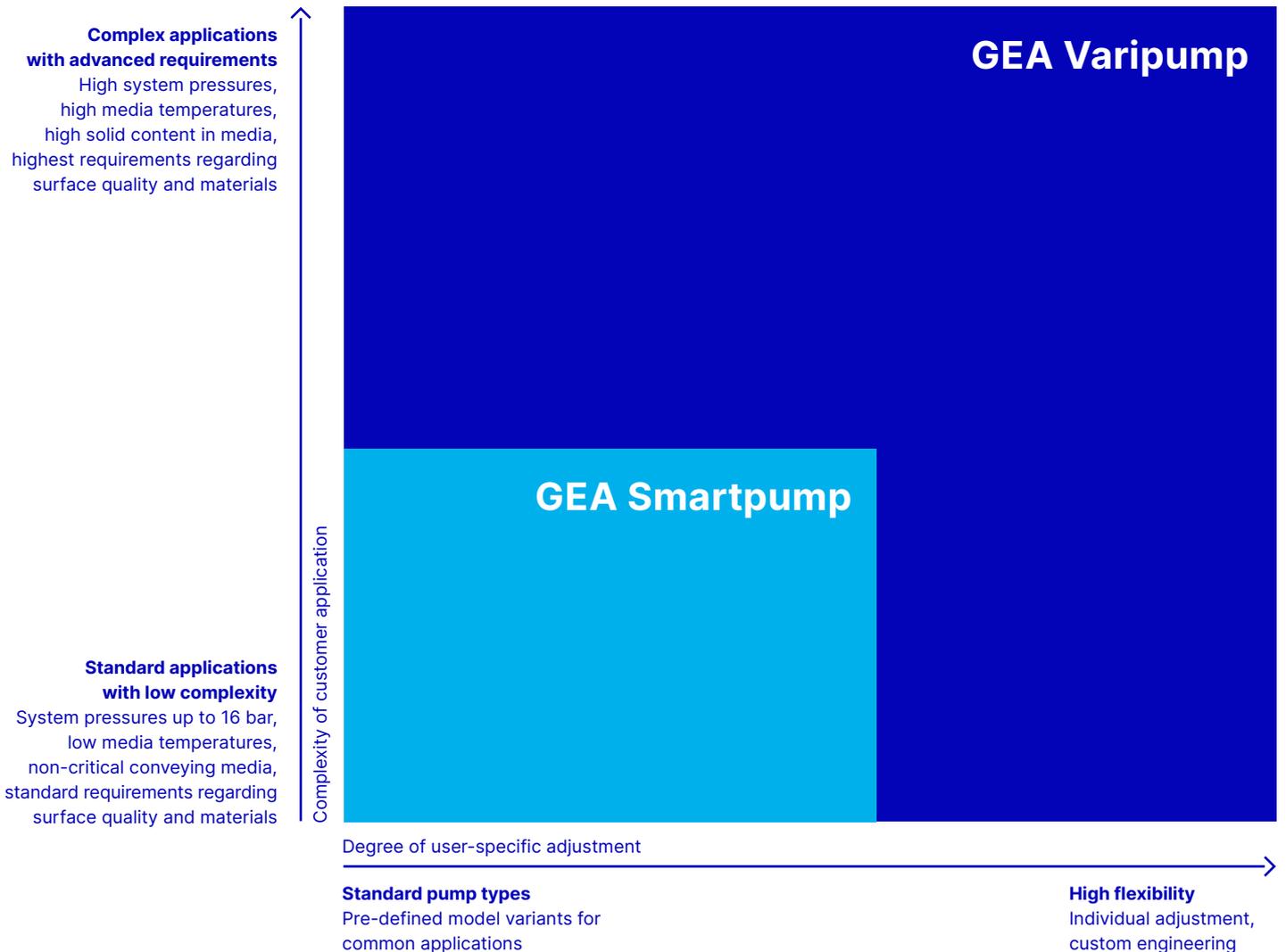


Hygienic Pumps Introduction

Two modern pump lines for maximum efficiency

Two product lines, GEA Varipump and GEA Smartpump, form a highly versatile pump range with a multitude of adaption options to ensure simpler operation, higher-quality production, and reduced consumption of valuable resources.

Selecting and configuring the right pump requires a high level of experience. The selection matrix provides initial guidance.



GEA Varipump

The pump series in the GEA Varipump line have been conceived for extreme application demands. The pumps are individually optimized by GEA for each task.

GEA Varipump models are made entirely without die-cast components, offering high-quality surfaces and materials that meet stringent demands even in the sensitive pharmaceutical industry, further ensured by complementing services, e.g. Witnessed Factory Acceptance Test (FAT).

With a great variety of set-up and customizing options the pumps can be adapted individually to any production process, for lower operational costs and maximum system efficiency.

- Developed for advanced application conditions
- Project-specific customization
- Surface roughness up to $R_a \leq 0.4 \mu\text{m}$ (not applicable for GEA Hilge MAXA)
- Selection of materials in contact with product according to specific requirements (e.g. no cast parts, $F_e \leq 1\%$ optional)

GEA Smartpump

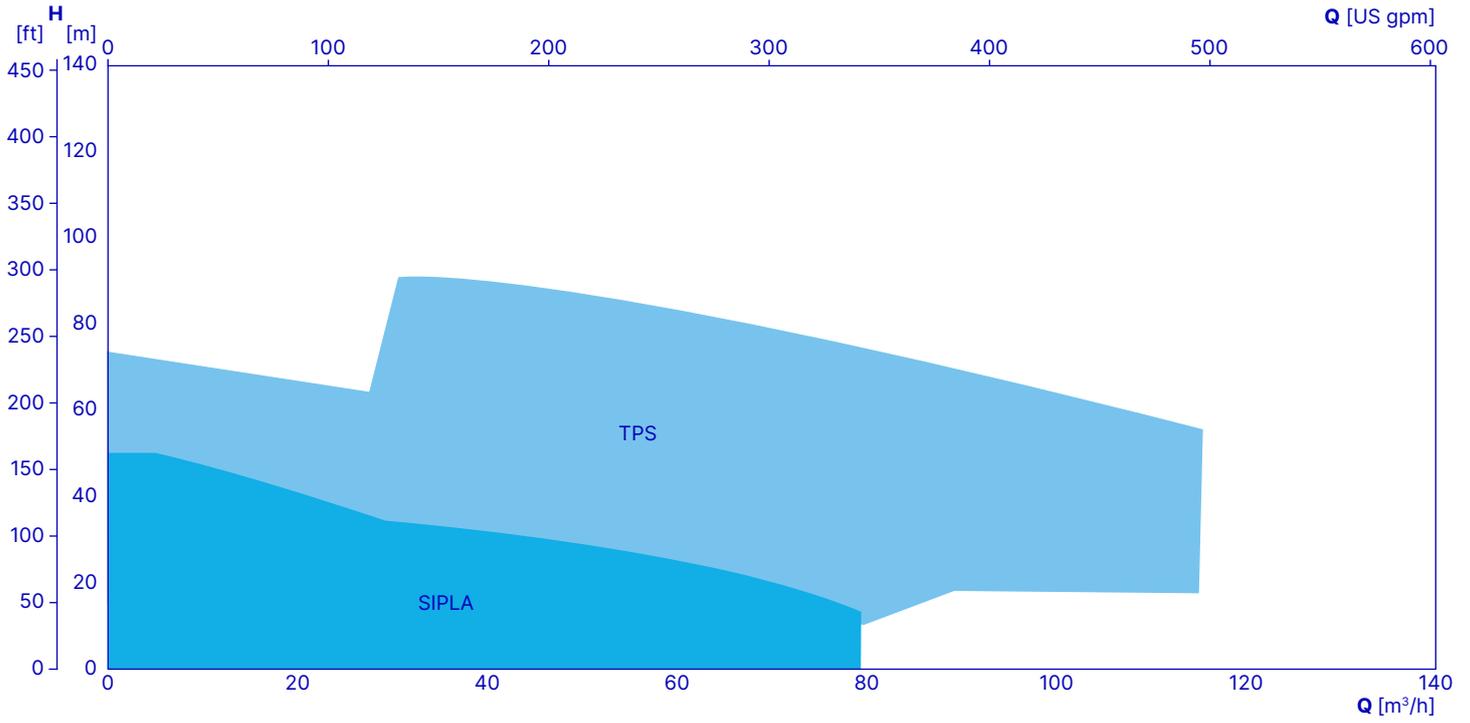
The GEA Smartpump line comprises highly standardized and attractively priced pump series for common, often-used applications at standard conditions. The pumps are easy to select and ready for fast delivery. Within pre-defined parameters, the standard models can be configured to individual tasks.

The modular construction using high-value materials, the proven "Hygienic Design" and easy-to-apply standardized spare parts all recommend GEA Smartpump pumps for use in cost-critical production systems – at no compromise in terms of quality.

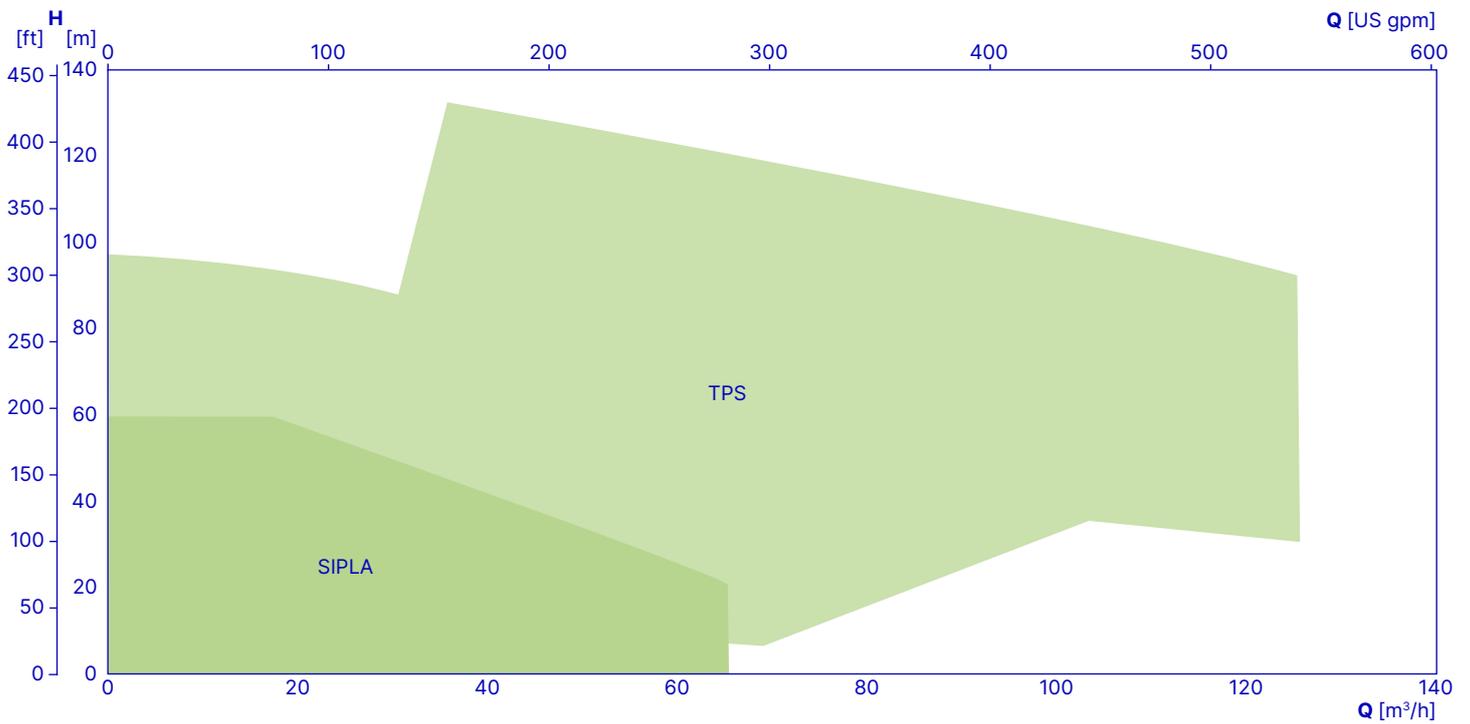
- Application for common and clearly defined "standard" process tasks
- Simple selection and configuration
- Fast delivery
- Standardized spare parts
- Surface roughness up to $R_a \leq 0.8 \mu\text{m}$ (not applicable for GEA Hilge DURietta)

Hygienic Pumps Introduction Performance Curves

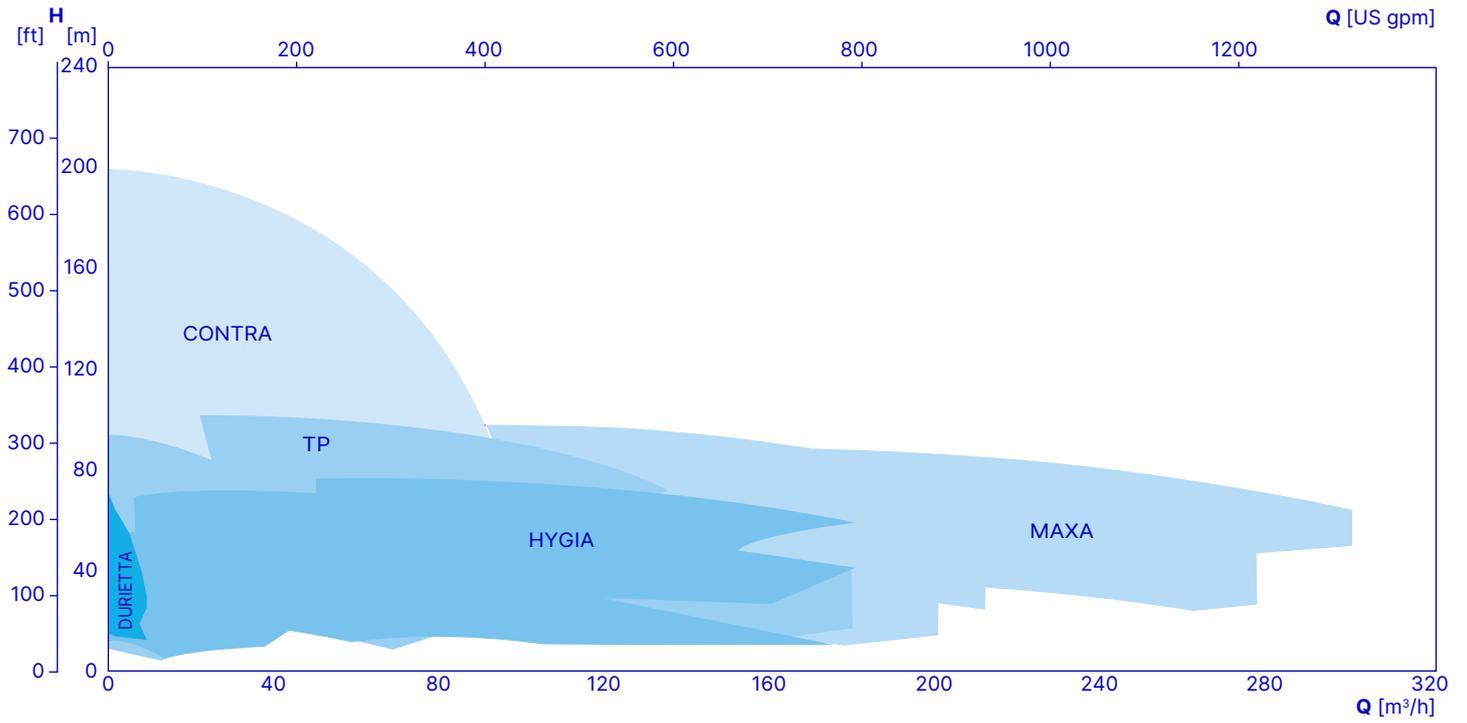
Self-priming Pumps, 50 Hz



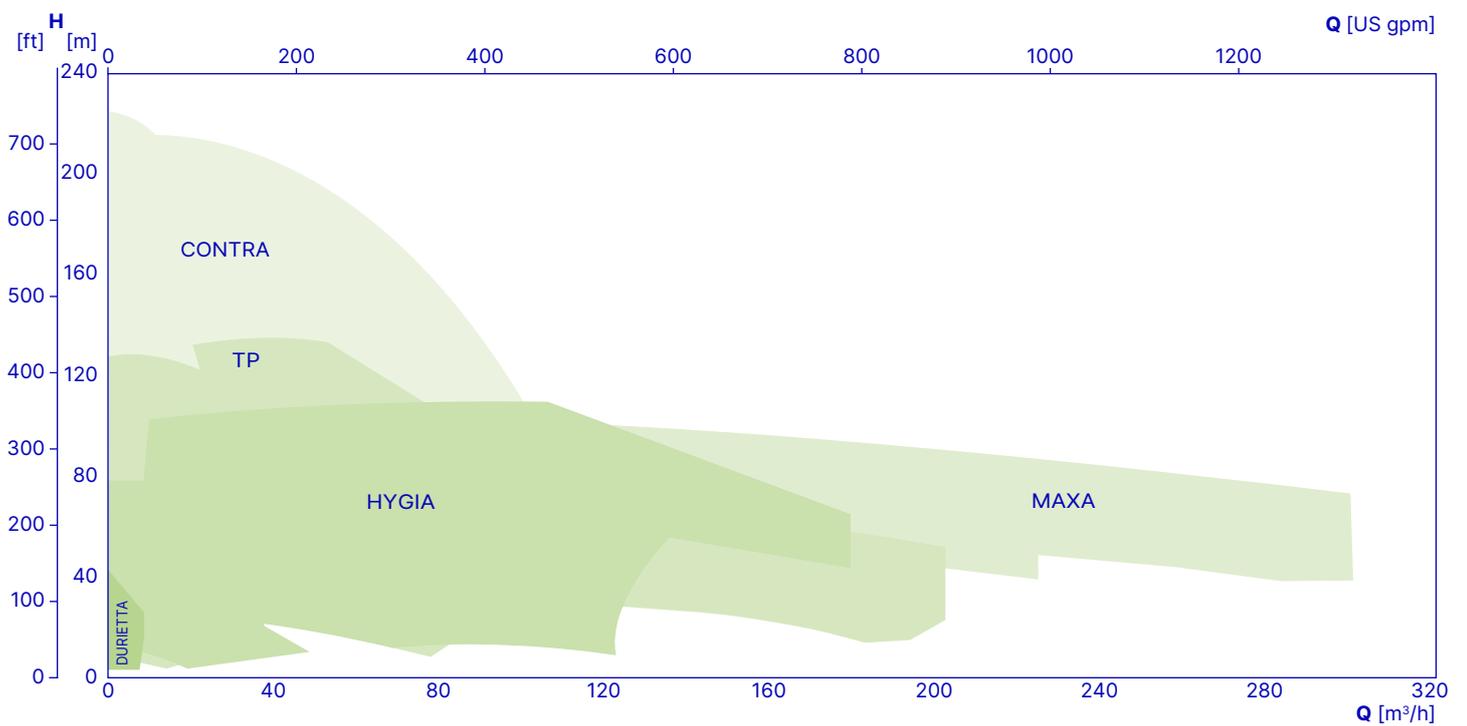
Self-priming Pumps, 60 Hz



Centrifugal Pumps, 2-pole, 50 Hz

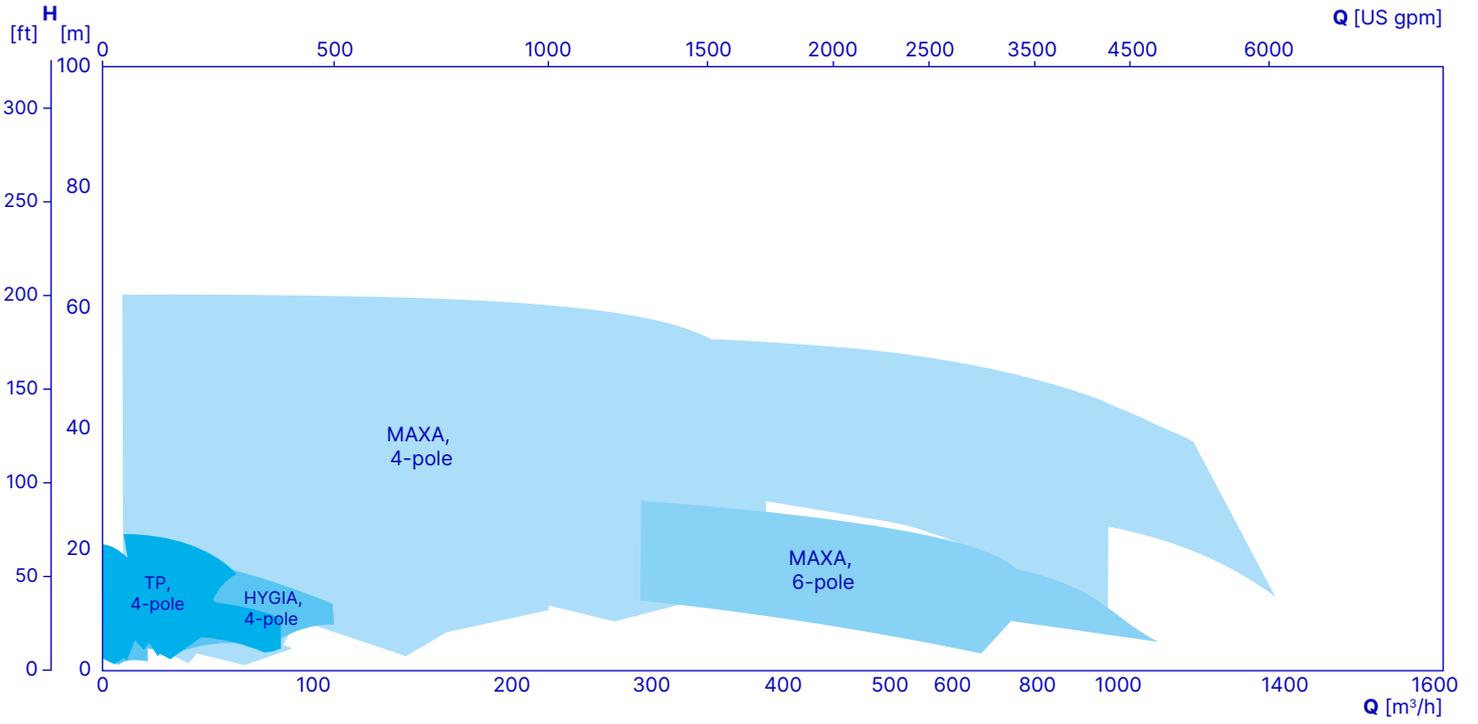


Centrifugal Pumps, 2-pole, 60 Hz

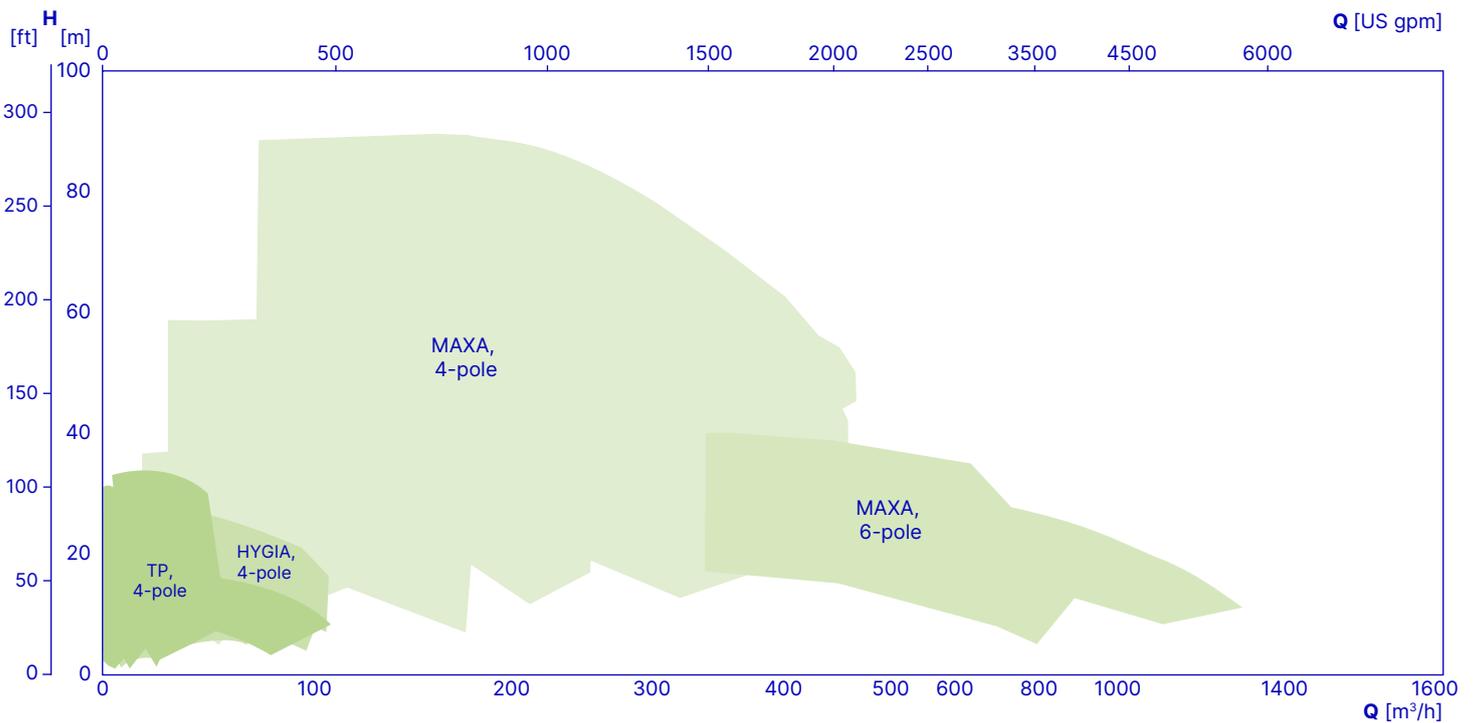


Hygienic Pumps Introduction Performance Curves

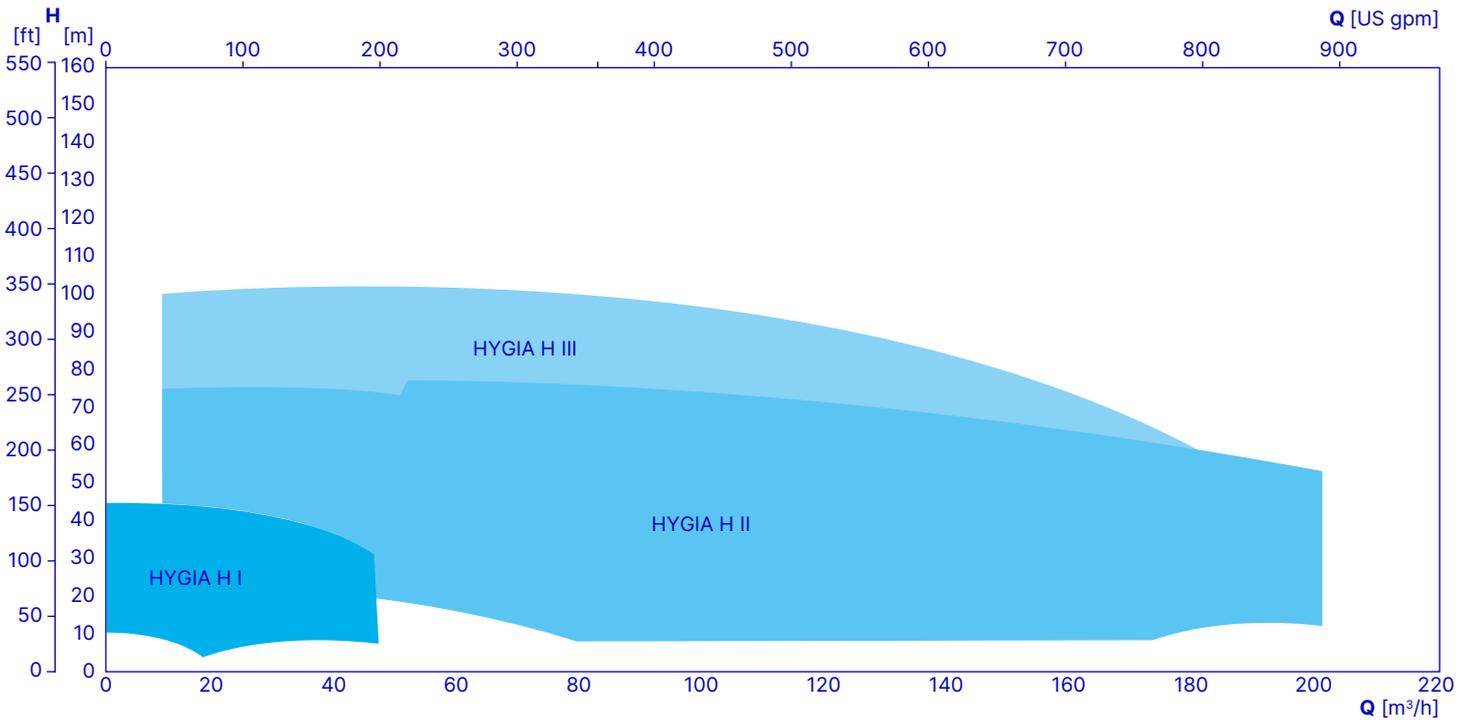
Centrifugal Pumps, 4-/6-pole, 50 Hz



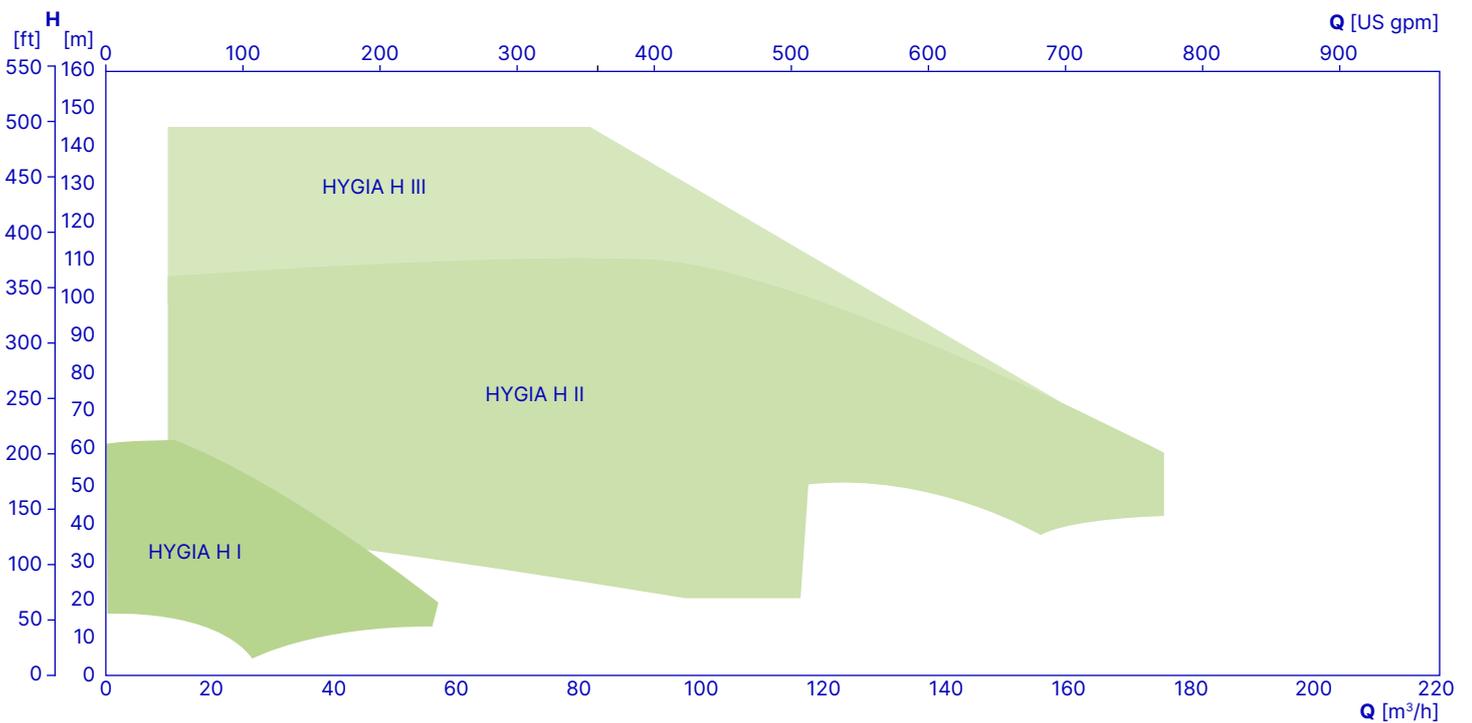
Centrifugal Pumps, 4-/6-pole, 60 Hz



High-pressure Pumps, 50 Hz

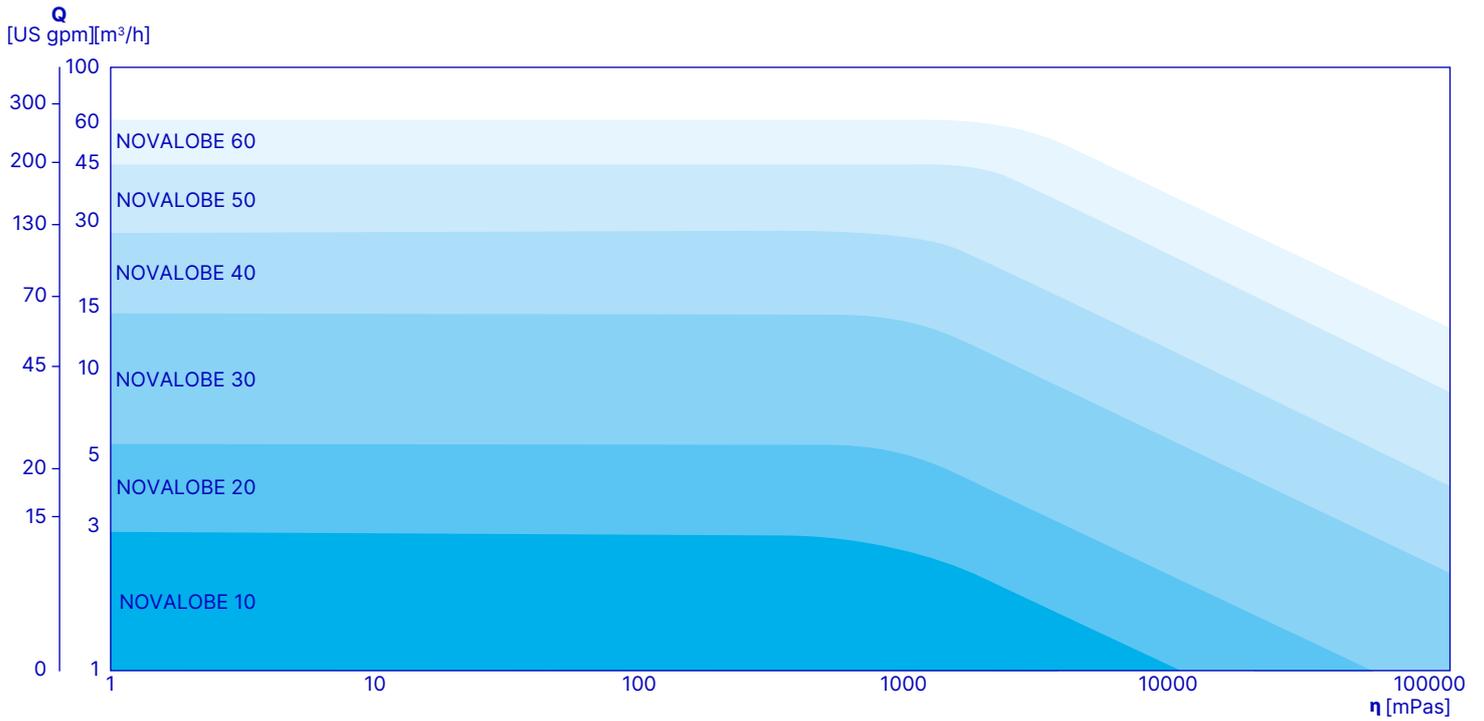


High-pressure Pumps, 60 Hz

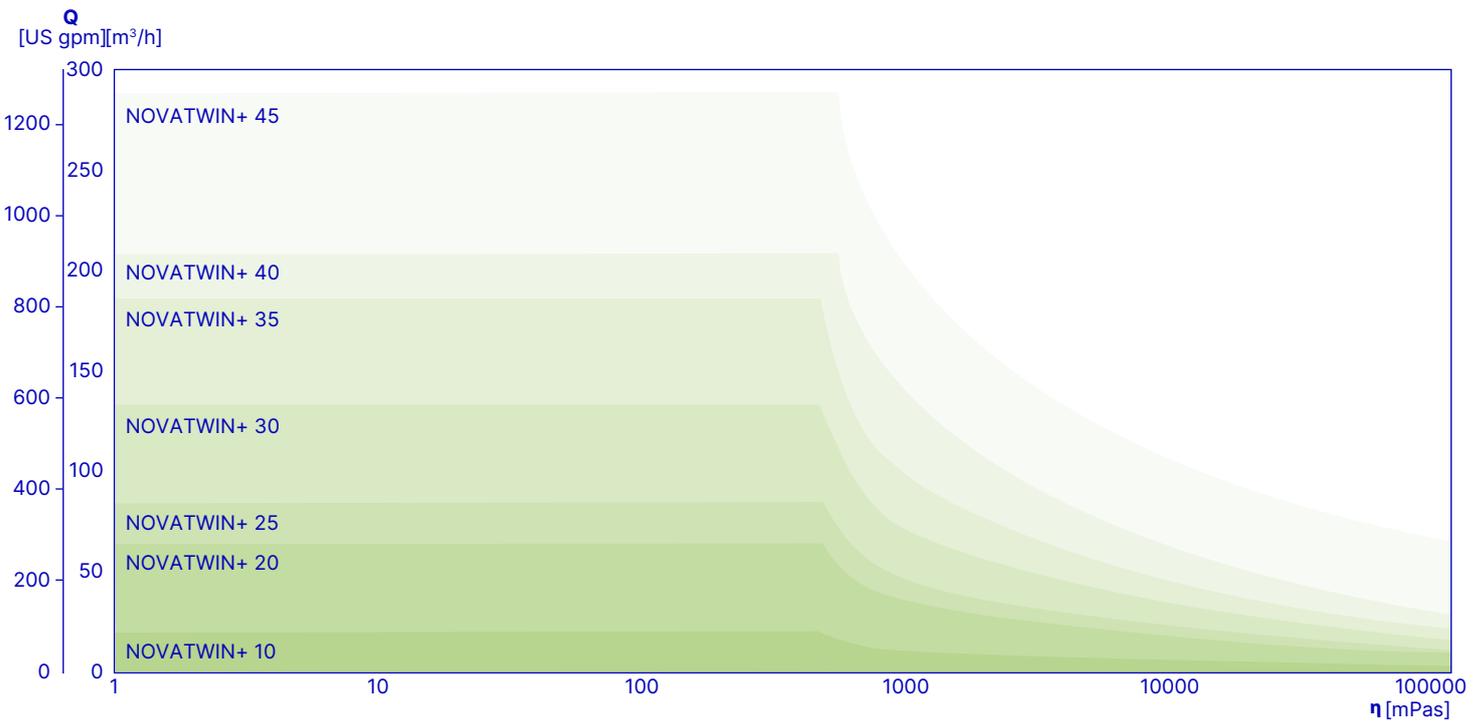


Hygienic Pumps Introduction Performance Curves

Rotary Lobe Pumps



Twin Screw Pumps



Hygienic Pumps Overview

GEA Hilge HYGIA / HYGIA H

The "Swiss Knife" among the hygienic pumps. Premium quality, reliability and highest flexibility of customization ensure successful application in the food, beverage, and pharma industries. Also available as high-pressure execution.

Technical data	50 Hz	60 Hz
Max. flow rate	200 m ³ /h	175 m ³ /h
Max. head	100 m	145 m
System pressure	16 / 25 / 64 bar	



GEA Hilge HYGIA

GEA Hilge MAXA

A single-stage centrifugal pump designed for heavy-duty operation in industrial processes. Especially used in fermentation broth, filtration facilities and transportation of condensate, hot and cold water.

Technical data	50 Hz	60 Hz
Max. flow rate	1,450 m ³ /h	1,320 m ³ /h
Max. head	100 m	100 m
System pressure	10 bar	



GEA Hilge MAXA

GEA VARIPUMP

Wide model range with numerous variants.
Customization to specific customer requirements

GEA SMARTPUMP

Clearly defined list of models,
limited to standard requirements, no other variants

Single-stage end-suction centrifugal pumps

GEA Hilge TP



GEA Hilge TP

The GEA Hilge TP is the smart solution for standard applications. The single-stage centrifugal pump suits a wide range of applications and offers uncompromising hygiene and quality.

Technical data	50 Hz	60 Hz
Max. flow rate	215 m ³ /h	245 m ³ /h
Max. head	90 m	130 m
System pressure*	16 bar	16 bar

* GEA Hilge TP 1020 10 bar

GEA Hilge SIPLA

A single-stage self-priming side channel pump, especially suited for SIP/CIP return systems and applications with high gas content. Right- and left-hand rotation can be freely adjusted for additional application options.

Technical data	50 Hz	60 Hz
Max. flow rate	78 m³/h	64 m³/h
Max. head	47 m	60 m
System pressure	10 bar	10 bar



GEA Hilge SIPLA

Single-stage self-priming centrifugal pumps

GEA Hilge TPS



GEA Hilge TPS

This self-priming centrifugal pump is the solution of choice especially for emptying tanks as well as for conveying products containing gas, e.g. CIP return systems.

Technical data	50 Hz	60 Hz
Max. flow rate	115 m³/h	125 m³/h
Max. head	95 m	138 m
System pressure	16 bar	16 bar

GEA Hilge CONTRA

Single- and multi-stage centrifugal pumps are available in this series. The hygienic design in every detail provides perfect solutions to numerous tasks in sterile and hygienic processes.

Technical data	50 Hz	60 Hz
Max. flow rate	100 m³/h	100 m³/h
Max. head	200 m	230 m
System pressure	25 bar	25 bar



GEA Hilge CONTRA

Multi-stage centrifugal pumps

GEA Hilge DURIETTA



GEA Hilge DURIETTA

This end-suction single- or multi-stage centrifugal pump in a very compact design has been created for applications with low flow rates at high flow heads.

Technical data	50 Hz	60 Hz
Max. flow rate	8 m³/h	8 m³/h
Max. head	72 m	41 m
System pressure	8 bar	8 bar

GEA Hilge NOVALOBE

This rotary lobe pump has been specifically designed for highly viscous media – and for applications where gentle pumping is required. The pump is fully drainable with vertical ports.

Technical data	50/60 Hz
Max. displacement	2.1 l/rev
Max. differential pressure	16 bar
System pressure	10/16 bar



GEA Hilge NOVALOBE

Rotary lobe pumps

GEA Hilge NOVATWIN+

The flexible 3-A certified twin screw pump range allows production and CIP operation with one pump. It fulfills the highest hygienic requirements and ensures reliable production.

Technical data	50/60 Hz
Max. flow rate	310 m³/h
Max. differential pressure	25 bar
System pressure	up to 30 bar



GEA Hilge NOVATWIN+

Twin-screw pumps

Positive displacement pumps

Hygienic Pumps Certificates

The certificates listed here are valid for corresponding GEA pump models. Pumps conforming to the requirements of the European Hygienic Engineering and Design Group (EHEDG) as well as 3-A Sanitary Standards, Inc. (3-A SSI) are available for numerous fields of application.

EHEDG certificates apply only to the specific pump type as listed. However, they may be transferred to specific other pump types, owing to identical housing designs and flow path geometries.

Moreover, independent, standardized tests have confirmed the efficient, problem-free cleaning ability of numerous pumps – for optimum safety and economic gain.

Pump	GEA Hilige HYGIA / HYGIA H	GEA Hilige TP /TPS	GEA Hilige CONTRA	GEA Hilige MAXA	GEA Hilige DURIETTA	GEA Hilige SIPLA	GEA Hilige NOVALOBE	GEA Hilige NOVATWIN+
Document								
3-A Sanitary Standard	•	•					•	•
EHEDG certificate	•*	•*	•*				•	•*
FDA declaration of conformity	•	•	•	•	•	•	•	•
Declaration of compliance with the order 2.1 acc. to EN 10204	•	•	•	•	•	•	•	•
Test report 2.2 acc. to EN 10204	•	•	•	•	•	•	•	•
Inspection certificate 3.1 acc. to EN 10204	•	•	•	•	•	•	•	•
EAC-Certificate	•*	•	•	•	•	•	•	•
Surface roughness test report	•	•	•	•			•	•
Delta ferrite test report	•		•				•	•
Acoustic measurement test report	•	•	•	•	•	•	•	•
USP Class VI – declaration of conformity	•	•	•			•	•	•
Certificate in acc. with the regulation (EG) No. 1935/2004	•	•	•	•	•	•	•	•
Certificate DIN EN ISO 9001:2015	•	•	•	•	•	•	•	•

Many more certificates on request
Subject to change without notice.

* registered for certification/recertification



GEA Hilge TP
on Stainless Steel Adjustable Feet

Overview

Features and benefits

- Process safety, reliability, and optimal cleanability, due to sterile, cast-free stainless variant with blowhole-free, deep-drawn components (Hygienic Design).
- Gentle product handling of liquids thanks to optimum impeller geometry.
- Precise sizing for optimum efficiency and matching of duty point thanks to different impeller geometries. Additional flexibility through operation on a frequency converter.
- Fast delivery time thanks to a standardized product portfolio.
- Modular system for easy adaptation to changing requirements (e.g. self-priming, other mechanical seals).
- Favorable spare parts inventory thanks to the same sealing concept as TPS pumps and only 2 seal diameters for 11 pump sizes.
- Simple and economical motor replacement by IEC or NEMA standard motor with balanced clamping shaft.

GEA Hilge Centrifugal Pump TP

The GEA Hilge Centrifugal Pump TP is designed for pumping demanding media up to a viscosity of 1,000 mPas. Low flow velocities and gentle discharge of media through the spiral housing ensure extremely gentle product handling and high efficiency.

11 pump sizes with a capacity range of up to 205 m³/h and pump heads of up to 130 m are available, finely tuned to the task at hand.

The spiral housing for the TP series is made of cold-rolled steel. This material has an excellent surface quality, which is essential for optimum cleaning in CIP/SIP processes. Wall thicknesses up to 8 mm provide high strength for critical piping configurations and high inlet pressures.

	50 Hz	60 Hz
Flow rate	up to 215 m ³ /h	up to 245 m ³ /h
Head	up to 90 m	130 m
System pressure	up to 16 bar	up to 16 bar
Operating temperature	max. 100 °C	max. 100 °C
Sterilization temperature	max. 140 °C (SIP)	max. 140 °C (SIP)
Max. pump efficiency	46 %	46 %

Design

GEA Hilge TP pumps are single-stage, end-suction, centrifugal pumps, designed to meet the hygienic requirements of sterile process technology.

The pump casing is made of heavy-duty, rolled and deep drawn CrNiMo steel 1.4404/1.4435, the equivalent of AISI 316L. The pumps have a mechanical seal and a fan-cooled asynchronous motor to enclosure class IP55.

The pumps are available in eleven sizes with a variety of flexible versions. The pumps are CIP- and SIP-capable in compliance with the DIN EN 12462 performance criteria. The design fulfills the following requirements:

- 3-A Sanitary Standard
- EHEDG (registered for recertification)
- EAC
- GMP regulations



Certification

Applications

The GEA Hilge TP pump range is suitable for the following application areas and products, due to the hygienic design and material selection:

- Breweries
Beer, wort, yeast, water, CIP solutions
- Dairies
Milk, cream, yoghurt, whey, brine, CIP solutions
- Food
Oils, sauces, stock, brine, flavours, ice-cream mix, CIP solutions
- Fields of applications
Conveying, circulation, pressure boosting, filling lines, filling, emptying, filtration, evaporation, cleaning

Pump connections

GEA Hilge offers the following standard connections for the GEA Hilge TP pump range:

- Flange acc. to DIN 11864-2/11853-1

Additional connections such as sterile connections in accordance with DIN 11853, SMS, RJT, IDF, DIN or ISO clamp connections are available on request.

Selected connections also available with drain port. You can find additional information in the connection selection guide from page 29 to 31.

ATEX

For use in potentially explosive areas, Adapta pumps are available. These pumps, which possess an EC declaration of conformity in accordance with the ATEX guideline 2014/34/EU, correspond to device categories 2 or 3, and can be used in zone 1 or 2.



ATEX-Symbol

For explanation see chapter certificates on page 18. The pumps fulfil the following surface requirements in terms of the wet end parts:

- Standard: $R_a \leq 3.2 \mu\text{m}$
- Optional: $R_a \leq 0.8 \mu\text{m}$

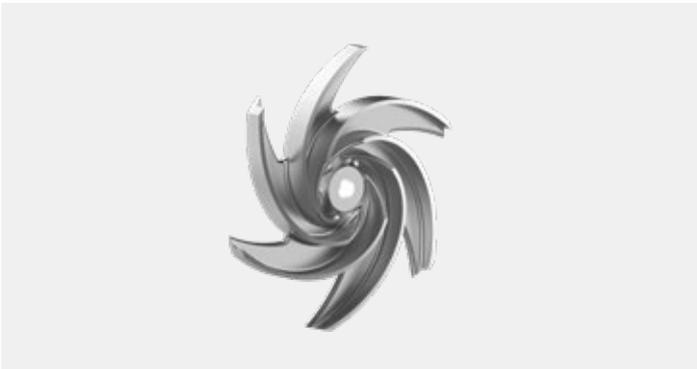
Overview

Open impeller design

- All parts stainless steel, wetted components made of 1.4404 or 1.4409 (AISI 316L)
- Surface roughnesses of $R_a \leq 0.8 \mu\text{m}$ can be achieved by mechanical treatment of the surface

Semi-open impeller

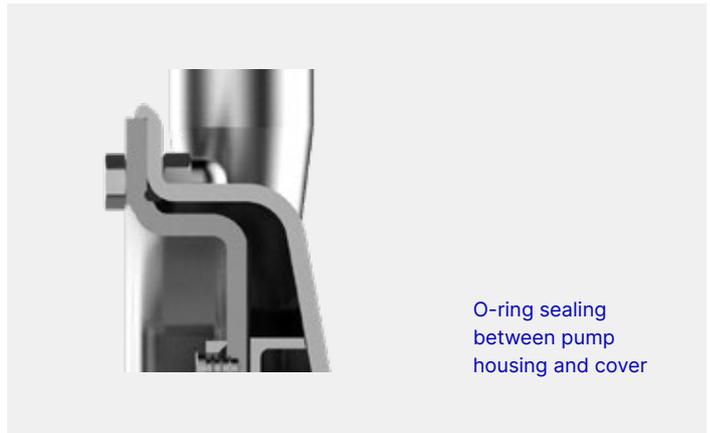
The electro-polished, stainless steel, semi-open impeller is available in two versions, according to the application. The impeller is suitable for low-viscosity liquids and liquids containing low content of particles.



Impeller version	Surface finish
Cast	$R_a \leq 3.2 \mu\text{m}$
Milled	$R_a \leq 0.8 \mu\text{m}$

Sealing according to the VARIVENT® principle

The special groove ensures that the seal is kept reliably in place at all times. The shape of the groove is based on FEM analyses. The metallic stop allows a defined compression of the seal, ensuring gap-free sealing against the product chamber without dead corners. System pressure up to 16 bar.



Mechanical seal

GEA Hilge offers the following seal designs:

- Single mechanical seal
- Single mechanical seal, flushed (Quench)
- Double mechanical seal

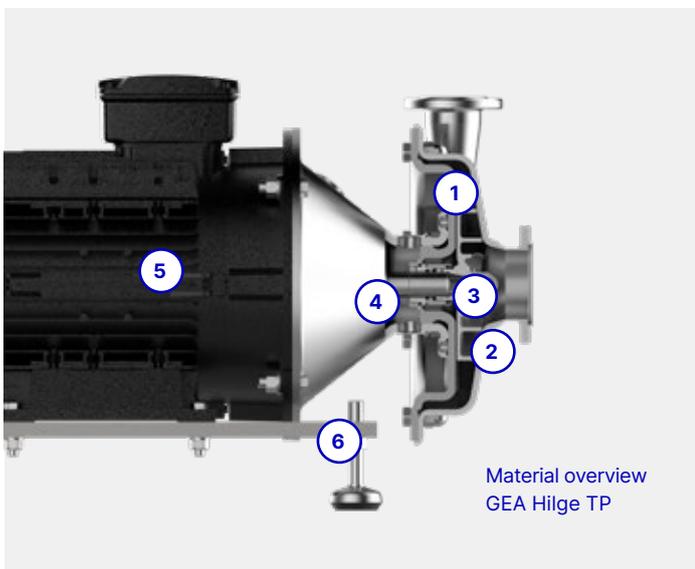
The pumps of the GEA Hilge TP range are equipped with single internal mechanical seals optimally arranged in the pump.

This ensures efficient lubrication and cooling of the mechanical seal. CIP and SIP-capability is fulfilled according to hygienic design criteria.

The standard material for the mechanical seals is carbon/SiC with EPDM elastomers. Other executions and materials are available on request.

For further information on mechanical seals, see page 32.

Materials



Item	Component	Material	No.
1	Impeller	CrNiMo steel	316L (1.4404/ 1.4409)
2	Pump casing	CrNiMo steel	316L (1.4404)
3	Seal	Single mechanical seal carbon/stainless steel, SiC/SiC and carbon/SiC	
4	Pump shaft	CrNiMo steel	316L (1.4404)/ 304 (1.4301)
5	Motor	Rolled steel, cast iron	
6	Foot	Stainless steel	

Coating

Components not made of stainless steel are provided with one of the following coatings, depending on the design:

Version	Paint/coating	Coating thickness
Primer	2K epoxy resin	30–60 µm
	KTL coating	15–20 µm
Top coating	2K epoxy resin	50–70 µm
	2K polyurethane color	60 µm
	KTL coating	15–20 µm

Surface design

Selected components are electro-polished in order to improve the surface and protect it against corrosion.

Surface	Electro-polished components
$R_a \leq 3.2 \mu\text{m}$	Casing
$R_a \leq 0.8 \mu\text{m}$	All components that come into contact with the pumped fluid

Lantern (motor stool) and cast impeller not electro-polished.

Elastomers

We use EPDM and FKM as elastomers in GEA Hilge TP pumps.

All elastomers are certified as follows:

- FDA 21 CFR Part. 177.2600
- USP Class VI (chapter 88)
- Animal derived ingredient free (ADI-, TSE-, BSE free)
- 3-A Sanitary Standard 18-03
- Bisphenol A free
- Phthalate free

Overview

Standard version	Description
GEA Hilge TP	Horizontal installation, plug-in shaft, standard motor
GEA Hilge TP Super	Horizontal installation, plug-in shaft, standard motor, with stainless steel shroud



Designs

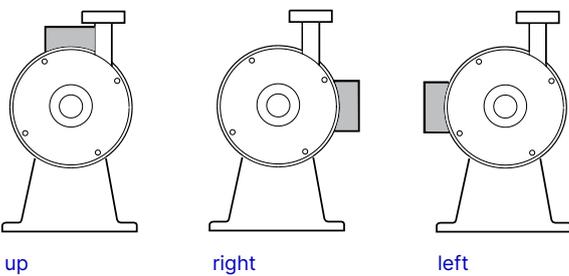
The following overview lists common designs, installations and versions:

- On stainless steel adjustable feet

Additional versions on request.

Terminal box position

This terminal box positions are possible for all pumps without shroud.



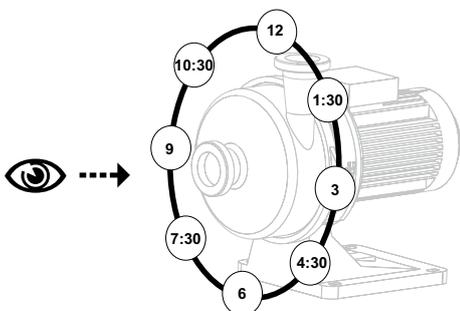
Noise emissions

Measured values according to DIN EN ISO 3746 for pump units, measurement uncertainty 3 dB(A).

Type	Lpfa [dB (A)]
TP 1020	63
TP 1540	67
TP 2030	74
TP 2050	74
TP 2575	77
TP 3050	74
TP 5060	74
TP 7060	77
TP 8050	78
TP 8080	77
TP 16040	83

The noise emissions of a pump are significantly affected by the given application. The values given here therefore serve only as a guide. Please contact GEA for more detailed information.

Positioning of discharge port and terminal box



Positioning of discharge port and terminal box for horizontal pumps

Overview

Program Overview

						
		GEA Hilge TP 1020	GEA Hilge TP 1540	GEA Hilge TP 2030	GEA Hilge TP 2050	GEA Hilge TP 2575
2-pole, 50 Hz	Max. flow rate [m ³ /h]	20	40	34	37	46
	Max. pump head [m]	24	42	36	60	85
	Motor rating [kW]	1.1 – 5.5	3.0 – 15.0	1.5 – 11.0	3.0 – 15.0	5.5 – 30.0
4-pole, 50 Hz	Max. flow rate [m ³ /h]	10	21	20	19	23
	Max. pump head [m]	6	11	9	17	21
	Motor rating [kW]	0.75 – 3.0	0.75 – 3.0	0.75 – 5.5	2.2 – 4.0	3.0 – 7.5
2-pole, 60 Hz	Max. flow rate [m ³ /h]	24	47	48	44	56
	Max. pump head [m]	34	62	52	90	130
	Motor rating [kW]	1.1 – 5.5	3.0 – 15.0	1.5 – 11.0	3.0 – 15.0	5.5 – 30.0
4-pole, 60 Hz	Max. flow rate [m ³ /h]	12	25	23	23	24
	Max. pump head [m]	8	15	13	22	31
	Motor rating [kW]	0.75 – 2.2	0.75 – 2.2	0.75 – 5.5	2.2 – 4.0	3.0 – 7.5
Impeller diameter [mm]		80 – 130	130 – 180	100 – 160	160 – 210	200 – 250
Max. viscosity [mPa*s]		1.000	1.000	1.000	1.000	1.000



**GEA Hilge
TP 3050**

**GEA Hilge
TP 5060**

**GEA Hilge
TP 7060**

**GEA Hilge
TP 8050**

**GEA Hilge
TP 8080**

**GEA Hilge
TP 16040**

79	86	115	117	134	215
60	75	74	57	90	49
3.0 – 22.0	5.5 – 30.0	7.5 – 30.0	4.0 – 30.0	11.0 – 45.0	11.0 – 45.0
35	42	58	59	67	107
16	19	19	14	23	12
0.75 – 7.5	2.2 – 7.5	2.2 – 7.5	2.2 – 7.5	4.0 – 7.5	3.0 – 7.5
90	94	114	144	137	245
90	110	105	83	130	70
3.0 – 22.0	5.5 – 30.0	7.5 – 30.0	4.0 – 30.0	11.0 – 45.0	11.0 – 45.0
46	49	69	78	74	123
24	27	27	21	34	17
0.75 – 7.5	2.2 – 7.5	2.2 – 7.5	2.2 – 7.5	4.0 – 7.5	3.0 – 7.5
140 – 210	155 – 225	155 – 225	135 – 205	170 – 250	160 – 200
1.000	1.000	1.000	1.000	1.000	1.000

Product Range

Motors

P2 [kW]	Frame size	2-pole	4-pole
0.75	80		•
1.1	90S	•	•
1.5	90L	•	•
2.2	90L	•	•
3.0	100L	•	•
4.0	112M	•	•
5.5	132S	•	•
7.5	132S	•	•
11.0	160M	•	
15.0	160M	•	
18.5	160L	•	
22.0	160L	•	
30.0	200L	•	
37.0	200L	•	
45.0	200M	•	

Motor protection

Three-phase motors should be connected to a motor-protective circuit breaker.

All three-phase mains-operated standard motors can be connected to an external frequency converter. When a frequency converter is connected, the motor isolation is often overloaded, making the motor louder than during normal operation. In addition, large motors will be exposed to bearing currents caused by the frequency converter.

The following should be taken into account when operating a frequency converter:

- In the event of special noise protection requirements, motor noise can be reduced by using a dU/dt filter between the motor and the frequency converter. For noise-sensitive environments, we recommend using a sinus filter.
- The length of the cable between motor and frequency converter affects the motor load. For this reason, check whether the cable length corresponds to the specifications issued by the supplier of the frequency converter.
- For supply voltages between 500 and 690 V, fit either a dU/dt filter to reduce voltage peaks, or use a motor with reinforced insulation.
- For supply voltages of 690 V, use a motor with reinforced insulation, and fit a dU/dt filter.

Design

The motors are totally enclosed, fan-cooled standard motors with main dimensions according to IEC and DIN standards. Electrical tolerances according to IEC 60034.

Pump range	Design- IEC 60034-7 Horizontal installation
GEA Hilge TP	IM 2101 (IM B34) IM 2001 (IM B35)

- Relative air humidity: Max. 95 %
- Enclosure class: IP55
- Insulation class: F according to IEC 85
- Ambient temperature: Max. 40 °C (standard motor)

Power [kW]	Motor approval		IE Class		PTC
	CEL China Energy	INMETRO Brazil	50 Hz	60 Hz	
0.75	•	•	3	3	
1.1		•	3	3	
1.5	•	•	3	3	
2.2	•	•	3	3	
3.0	•	•	3	3	•
4.0	•	•	3	3	•
5.5	•	•	3	3	•
7.5	•	•	3	3	•
11.0	•	•	3	3	•
15.0	•	•	3	3	•
18.5	•	•	3	3	•
22.0	•	•	3	3	•
30.0	•	•	3	3	
37.0	•	•	3	3	
45.0	•	•	3	3	

Connection Guide

Selecting according to the application

The table below is intended as a general guide. Selection of connection often depends on on-site conditions.

Connection	Application																
	Beverages					Food				Industrial applications						Cleaning	
Type	Beer	Wine	Juice	Alcohol	Soft drinks	Confectionery	Dairy products	Frying oil	Syrup	Glue and paint	Purification products	Chemical products	Industrial wastewater and efflux	Surface treatment products	Biofuel	CIP	SIP
Clamps																	
ASME/ DIN 32676 tri-clamp	•	•	•	•	•	•	•		•							•	•
Flanges																	
Flange VARIVENT® FN	•	•	•	•	•	•	•		•							•	•
Aseptic flange DIN 11864-2/11853-2	•	•	•	•	•	•	•	•	•							•	•
Flange DIN EN 1092-1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Threads																	
Threaded connection SMS	•	•	•	•	•	•	•	•	•							•	
Threaded connection DIN 11851	•	•	•	•	•	•	•	•	•							•	
Threaded connection IDF	•	•	•	•	•	•	•	•	•							•	
Threaded connection RJT	•	•	•	•	•	•	•	•	•							•	
Aseptic threaded connection DIN 11864-1/ 11853-1	•	•	•	•	•	•	•	•	•							•	•

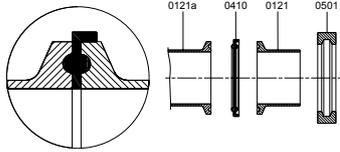
• Commonly used connections

Connection Guide

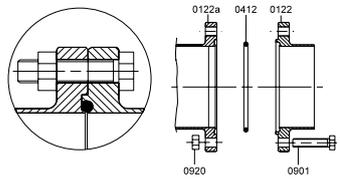
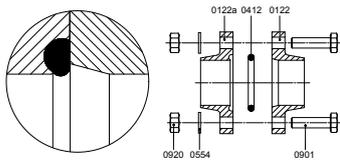
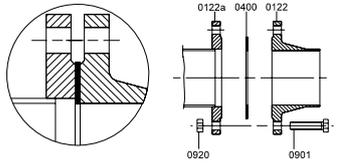
Design

The following tables show the design of the different connection types.

Clamps

Applications	Standard	Design	Description of the components
<ul style="list-style-type: none"> Beverage Industry Food Industry Cosmetic Industry Cleaning System (CIP/SIP) 	DIN 32676 Class C (Tri-Clamp® / ASME BPE)		0121a: Clamp connection at pump casing 0121: Clamp connection 0410: Profile gasket 0501: Clamp ring

Flanges

Applications	Standard	Design	Description of the components
Aseptic Flange			
<ul style="list-style-type: none"> Food Industry Beverage Industry Cosmetic Industry Cleaning System (CIP/SIP) 	DIN 11864-2/ 11853-2 Form A		0122: Flanged connection at pump casing 0122a: Flanged connection 0412: O-ring 0901: Hexagon head screw 0920: Hexagon nut
Flange			
<ul style="list-style-type: none"> Food Industry Beverage Industry Cleaning System (CIP/SIP) 	VARIVENT®		0122: Flanged connection at pump casing 0122a: Flanged connection 0412: O-ring 0554: Washer 0901: Hexagon head screw 0920: Hexagon nut
<ul style="list-style-type: none"> Industrial Applications 	DIN EN 1092-1 (fixed)		0122a: Flanged connection at pump casing 0122a: Flanged connection 0400: Gasket 0901: Hexagon head screw 0920: Hexagon nut

Threads

Applications	Standard	Design	Description of the components
Thread			
<ul style="list-style-type: none"> Beverage Industry Food Industry 	SMS (ISO 2037 DS 722)		0120a: Threaded connection at pump casing 0120: Threaded connection 0411: Joint ring 0925: Grooved union nut
<ul style="list-style-type: none"> Beverage Industry Cleaning System (CIP) Food Industry 	DIN 11851		0120a: Threaded connection at pump casing 0120: Threaded connection 0411: Joint ring 0925: Grooved union nut
<ul style="list-style-type: none"> Beverage Industry Cleaning System (CIP) Food Industry 	IDF (BS 4825-4)		0120a: Threaded connection at pump casing 0120: Threaded connection 0411: Joint ring 0412: O-ring 0925: Grooved union nut
<ul style="list-style-type: none"> Beverage Industry Cleaning System (CIP) Food Industry 	RJT (BS 4825-5)		0120a: Threaded connection at pump casing 0120: Threaded connection 0412: O-ring 0925: Grooved union nut
Aseptic Thread			
<ul style="list-style-type: none"> Beverage Industry Cleaning System (CIP) Food Industry 	DIN 11864-1/ 11853-1		0120a: Threaded connection at pump casing 0120: Threaded connection 0412: O-ring 0925: Grooved union nut

Seals

In order to ensure correct operation (depending on the application and the medium), single or double mechanical flushed seal systems can be supplied. The mechanical seal is optimally placed inside the pump. This ensures efficient lubrication and cooling of the mechanical seal, while also ensuring CIP (Cleaning In Place) and SIP (Sterilization In Place) capability. The standard material for the mechanical seals are carbon/stainless steel or SiC/SiC with EPDM or FKM (Viton) elastomers.

Mechanical seals

The operating range of the seal depends on the liquid, the type of seal, the operating pressure and the liquid temperature.

The seal types described below are standard seal types; other seals are available on request.

Version	Material pairs stationary seal face/O-rings	Max. pressure	Max. temperature
Encapsulated spring	silicon carbide /silicon carbide /EPDM silicon carbide /silicon carbide /FKM carbon/stainless steel/EPDM carbon/stainless steel/FKM carbon/SiC/EPDM carbon/SiC/FKM	16 bar	-5 to 200 °C

Mechanical seal arrangements

Arrangement	Design	Components
Double-acting mechanical seal		11: Slide ring holder 120.1: Face seal ring, primary 120.5: Stationary seal ring 120.6: Face seal, secondary
Single-acting mechanical seal		100.1: Face seal ring 100.2: Stationary seal ring 110.6: Spring
Single-acting mechanical seal, flushed (Quench)		11: Slide ring holder 100.1: Face seal ring 100.2: Stationary seal ring 110.1: Shaft protection sleeve 110.2: Shaft seal 110.6: Spring

ATO-Program



ATO
Fast delivery

Motor*

Type	Voltage / Frequency	Power
2 Pole IE3, IP55, Iso-F	3×220/380 V – 415/720 V (50 Hz)	0.75–37 kW**
	3×400/690 V (50 Hz)	7.5 and 15 kW
	3×265/460 V – 460/800 V (60 Hz)	0.75–37 kW

* Pumps are fitted with motor of a brand of our choice

** Except 7.5 and 15 kW

Available ATO Executions / Configurations

Sizes

TP 1020 TP 1540 TP 2030 TP 2050 TP 2575 TP 3050 TP 5060 TP 7060 TP 8050 TP 8080

Impeller

Semi-open

Material liquid contact parts

316L (1.4404)

Elastomer

EPDM, FKM

Connection options

Threads DIN 11851

Flange DIN 11864-2 row A, form A

Threads SMS (International)

Connection sizes

TP Size	DIN	ASME	TP Size	DIN	ASME
TP 1020	DN 50/40	2"-1 ½"	TP 3050	DN 65/50-80/65	2 ½"-2" / 3"-2 ½"
TP 1540	DN 65/40	2 ½"-1 ½"	TP 5060	DN 80/65	3"-2 ½"
TP 2030	DN 50/40-65/50	2"-1 ½" / 2 ½"-2"	TP 7060	DN 80/80	3"-3"
TP 2050	DN 65/50	2 ½"-2"	TP 8050	DN 100/65-100/80	4"-2 ½" / 4"-3"
TP 2575	DN 65/50	2 ½"-2"	TP 8080	DN 100/80	4"-3"

Surface roughness liquid contact parts

Hygiene standard $R_a \leq 3.2 \mu\text{m}$

Mechanical seal execution

Single mechanical seal

Single mechanical seal, flushed (quench)

Double mechanical seal, flushed (face-to-face)

Mechanical seal materials*

Carbon/SiC/EPDM

SiC/SiC/EPDM

Carbon/SiC/FKM

SiC/SiC/FKM

Design

Pump with plug-in shaft

Execution SUPER: Motor with stainless steel shroud

Mounting

Stainless steel adjustable feet

Motor Color

RAL 9005

Lantern

Cast iron

Documentation

Operating Manual in English

Declaration of CE conformity

Pump test report

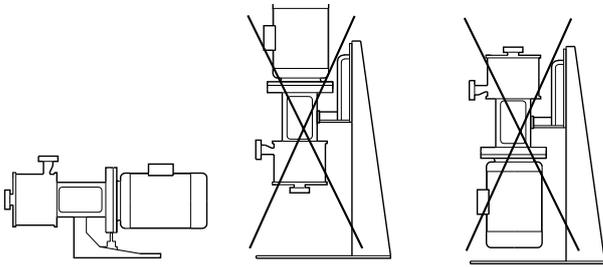
* The elastomer of static seals are equal to the elastomer of the chosen mechanical seal

Installation

Mechanical installation

GEA Hilge TP

Never install the pump vertically!



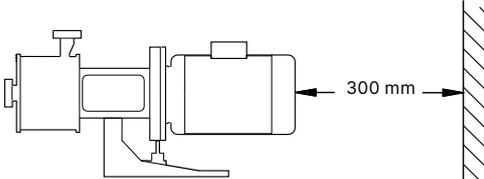
Installation

Space requirements

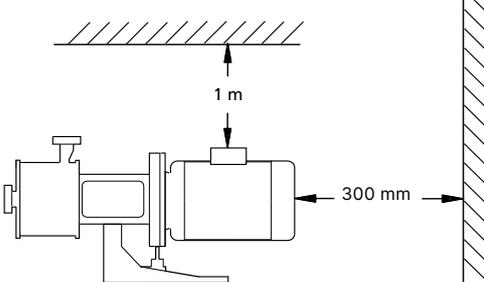
Horizontal installation

- Pumps fitted with motors up to and including 4 kW require an 300 mm clearance behind the motor.
- Pumps fitted with motors of 5.5 kW and up require at least a 1 meter clearance above the motor and 300 mm behind it to allow the use of lifting equipment.

0.55–4 kW



>5.5 kW



Horizontal installation

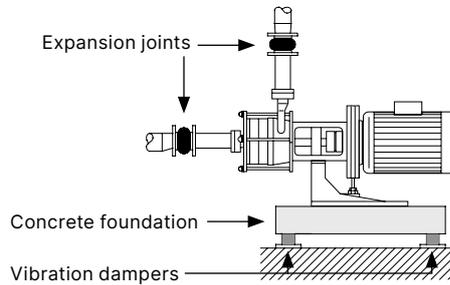
Elimination of noise and vibrations

In order to achieve optimum operation and minimum noise and vibration, consider vibration dampening of the pump. Generally, always consider this for pumps with motors above 11 kW. Smaller motors, however, may also cause undesirable noise and vibration.

Noise and vibration are generated by the rotation in the motor and pump and by the flow in the pipework and fittings. The effect on the environment is subjective and depends on correct installation and the state of the remaining system.

Foundation

Vibration dampening is best achieved by installing the pumps on a plane and rigid concrete foundation.



Example of a pump foundation

As a guideline, the weight of the concrete foundation should be 1.5 times the pump weight.

Vibration dampers

To prevent vibrations from being transmitted to the building, we recommend that you isolate the pump foundation from buildings by means of vibration dampers.

The selection of the correct vibration dampers requires the following data:

- Forces that will be transmitted through the vibration dampers
- Motor speed, taking speed control into account as needed
- Required dampening in % (suggested value is 70 %).

The right damper varies from installation to installation, and the wrong damper may increase the vibration level. Vibration dampers should therefore be sized by the supplier.

Expansion joints

If the pump is installed on a pedestal with vibration dampers, expansion joints must always be fitted on the pipeline connections. This is important to prevent the pump from "hanging" in the connections.

Install expansion joints in order to

- absorb expansion/contractions in the pipework caused by variable liquid temperatures
- reduce mechanical strains that occur in connection with pressure surges in the plant
- isolate mechanical structure-borne noise in the pipework (only rubber bellows expansion joints).

Note: Do not install expansion joints to compensate for inaccuracies in the pipework such as center displacement of flanges.

Fit expansion joints at a distance of at least 1 to 1.5 times the nominal flange diameter away from the pump on the suction as well as on the discharge side. This will prevent the development of turbulence in the expansion joints, resulting in better suction conditions and a minimum pressure loss on the discharge side.

We always recommend expansion joints with limiting rods for flanges larger than DN 100/4".

The pipes should be anchored so that they do not stress the expansion joints and the pump. Follow the supplier's instructions and pass them on to advisers or pipe installers.

Media Guide

The values for density and viscosity given here are ratios and can deviate in practice.

Application beer

Subgroup	Temperature [°C]	Density [kg/m ³]	Viscosity [mPas]	Mechanical seal* material product side / atmospheric side		
				Single	Quench	Tandem
Altbier						
Beer						
Beer mix						
Berliner Weisse						
Bock beer						
Craft beer						
Export beer						
Full beer (Vollbier)						
Green beer						
Herb beer	< 100	1,000	1	aeE (up to 10 bar), aiH (from 10 bar)	-	-
Lager						
Light beer						
Martzen (Märzen)						
Non-alcoholic beer						
Pils						
Pilsener						
Ringed (Kräusen)						
Wheat beer						
Cold wort	< 40	< 1,050	< 5	aeE (up to 10 bar), aiH (from 10 bar)	-	-
Original wort						
Hop extract (dissolved)						
Lees	< 100	< 1,050	< 5	-	kiE/WDR	kiE/aeE
Mash (beer)						
Lauter wort	40–90	< 1,050	< 5	-	kiE/WDR	kiE/aeE
Hot wort	40–115	< 1,050	< 5	-	kiE/WDR	kiE/aeE
Crop yeast						
Pitching yeast	< 20	< 1,050	< 100	aeE	-	-
Yeast						
Enzymes (watery dissolution)	< 60	< 1,050	< 5	aeE	-	-
Lactic acid, con. < 50% (C ₃ H ₆ O ₃)	< 100	< 1,100	< 5	kiV (up to 16 bar), kil (up to 25 bar)	-	-
Lactic acid, con. > 50% (C ₃ H ₆ O ₃)	< 100	< 1,210	< 5	kiV (up to 16 bar), kil (up to 25 bar)	-	-

Application water

Subgroup	Temperature [°C]	Density [kg/m ³]	Viscosity [mPas]	Mechanical seal* material product side / atmospheric side		
				Single	Quench	Tandem
Iced water	-4 to +3	< 1,000	1	kiE (up to 10 bar), kiH (from 10 bar)	-	-
Cold water						
Demineralized water (Not for sterile applications)						
Drinking water						
Flushing water						
Hot water	< 110	< 1,000	1	aeE (up to 10 bar), aiH (from 10 bar)	-	-
Mineral water						
Process water						
Service water						
Water						

Application wine/sparkling wine

Subgroup	Temperature [°C]	Density [kg/m ³]	Viscosity [mPas]	Mechanical seal* material product side / atmospheric side		
				Single	Quench	Tandem
Champagne						
Cherry wine						
Cider						
Cidre						
Dry sparkling wine						
Fruit wine						
Prosecco	< 35	< 1,000	1	aeE (up to 10 bar), aiH (from 10 bar)	–	–
Red wine						
Rosé						
Sparkling wine						
Strawberry wine						
White wine						
Wine						
Young wine						
Dessert wine						
Dessert wine, late-harvest wine	< 35	< 1,050	15	aeE (up to 10 bar), aiH (from 10 bar)	–	–
Drape must (w/o. particles)						
Ice wine						
Wine lees	< 35	< 1,050	100	aeE (up to 10 bar), aiH (from 10 bar)	–	–
Wine yeast						
Mash (wine)	< 35	< 1,050	5	aeE (up to 10 bar), aiH (from 10 bar)	–	–

Application coffee/tea/cocoa

Subgroup	Temperature [°C]	Density [kg/m ³]	Viscosity [mPas]	Mechanical seal* material product side / atmospheric side			Encapsulated seal for vacuum application
				Single	Quench	Tandem	
Coffee	< 125	1,000	1	aeE	–	–	
Coffee extract	< 80–100	< 1,200	< 250	–	–	kiV/aeV	x
Tea	< 125	1,000	1	aeE	–	–	
Fruit tea / flavored tea	< 125	1,000	1	aeE	–	–	
Cocoa drink	< 40	1,020	< 10	aeE	–	–	

* aeE: carbon/stainless steel/EPDM, aeV: carbon/stainless steel/Viton, aiH: carbon/SiC/EPDM (USP-Class VI), kiE: SiC/SiC/EPDM, kiH: SiC/SiC/EPDM (USP-Class VI), kiI: SiC/SiC/Viton (USP Class VI), kiV: SiC/SiC/Viton, WDR: lip seal. The elastomer of the static seals equals the elastomer of the mechanical seals.

Media Guide

Application milk

Subgroup	Temperature [°C]	Density [kg/m³]	Viscosity [mPas]	Mechanical seal* material product side / atmospheric side		
				Single	Quench	Tandem
Buttermilk	< 55	< 1,050	< 10	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	> 55 – < 100	< 1,050	< 5	–	aeE/WDR (up to 10 bar), aiH/WDR (from 10 bar)	aeE/aeE (up to 10 bar), aiH/aeE (from 10 bar)
UHT milk	< 55	< 1,050	< 10	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	> 55 – < 100	< 1,050	< 5	–	aeE/WDR (up to 10 bar), aiH/WDR (from 10 bar)	aeE/aeE (up to 10 bar), aiH/aeE (from 10 bar)
Yoghurt milk	< 55	< 1,050	< 10	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	> 55 – < 100	< 1,050	< 5	–	aeE/WDR (up to 10 bar), aiH/WDR (from 10 bar)	aeE/aeE (up to 10 bar), aiH/aeE (from 10 bar)
Kefir	< 55	< 1,050	< 10	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	> 55 – < 100	< 1,050	< 5	–	aeE/WDR (up to 10 bar), aiH/WDR (from 10 bar)	aeE/aeE (up to 10 bar), aiH/aeE (from 10 bar)
Cheese milk	< 55	< 1,050	< 10	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	> 55 – < 100	< 1,050	< 5	–	aeE/WDR (up to 10 bar), aiH/WDR (from 10 bar)	aeE/aeE (up to 10 bar), aiH/aeE (from 10 bar)
Skimmed milk	< 55	< 1,050	< 10	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	> 55 – < 100	< 1,050	< 5	–	aeE/WDR (up to 10 bar), aiH/WDR (from 10 bar)	aeE/aeE (up to 10 bar), aiH/aeE (from 10 bar)
Skimmed milk concentrate	< 55	< 1,050	< 10	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	> 55 – < 100	< 1,050	< 5	–	aeE/WDR (up to 10 bar), aiH/WDR (from 10 bar)	aeE/aeE (up to 10 bar), aiH/aeE (from 10 bar)
Milk	< 55	< 1,050	< 10	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	> 55 – < 100	< 1,050	< 5	–	aeE/WDR (up to 10 bar), aiH/WDR (from 10 bar)	aeE/aeE (up to 10 bar), aiH/aeE (from 10 bar)
Milk concentrate	< 55	< 1,050	< 10	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	> 55 – < 100	< 1,050	< 5	–	aeE/WDR (up to 10 bar), aiH/WDR (from 10 bar)	aeE/aeE (up to 10 bar), aiH/aeE (from 10 bar)
Lactic culture	< 55	< 1,050	< 10	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	> 55 – < 100	< 1,050	< 5	–	aeE/WDR (up to 10 bar), aiH/WDR (from 10 bar)	aeE/aeE (up to 10 bar), aiH/aeE (from 10 bar)
Milk mix	< 55	< 1,050	< 10	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	> 55 – < 100	< 1,050	< 5	–	aeE/WDR (up to 10 bar), aiH/WDR (from 10 bar)	aeE/aeE (up to 10 bar), aiH/aeE (from 10 bar)
Whey	< 55	< 1,050	< 10	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	> 55 – < 100	< 1,050	< 5	–	aeE/WDR (up to 10 bar), aiH/WDR (from 10 bar)	aeE/aeE (up to 10 bar), aiH/aeE (from 10 bar)
Raw milk	< 55	< 1,050	< 10	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	> 55 – < 100	< 1,050	< 5	–	aeE/WDR (up to 10 bar), aiH/WDR (from 10 bar)	aeE/aeE (up to 10 bar), aiH/aeE (from 10 bar)
Pre-stirred yoghurt	< 55	< 1,050	< 10	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	> 55 – < 100	< 1,050	< 5	–	aeE/WDR (up to 10 bar), aiH/WDR (from 10 bar)	aeE/aeE (up to 10 bar), aiH/aeE (from 10 bar)

				Mechanical seal* material product side / atmospheric side		
Subgroup	Temperature [°C]	Density [kg/m³]	Viscosity [mPas]	Single	Quench	Tandem
Sour milk	< 55	< 1,050	< 10	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	> 55 – < 100	< 1,050	< 5	–	aeE/WDR (up to 10 bar), aiH/WDR (from 10 bar)	aeE/aeE (up to 10 bar), aiH/aeE (from 10 bar)
Sour cream with thickening agents	< 55	< 1,050	< 10	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	> 55 – < 100	< 1,050	< 5	–	aeE/WDR (up to 10 bar), aiH/WDR (from 10 bar)	aeE/aeE (up to 10 bar), aiH/aeE (from 10 bar)
Full cream milk	< 55	< 1,050	< 10	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	> 55 – < 100	< 1,050	< 5	–	aeE/WDR (up to 10 bar), aiH/WDR (from 10 bar)	aeE/aeE (up to 10 bar), aiH/aeE (from 10 bar)
Coffee cream	< 55	< 1,100	< 40	aeV (up to 10 bar), ail (from 10 bar)	–	–
	> 55 – < 100	< 1,100	< 20	–	aeV/WDR (up to 10 bar), ail/WDR (from 10 bar)	aeV/aeV (up to 10 bar), ail/aeV (from 10 bar)
Whipping cream	< 55	< 1,100	< 40	aeV (up to 10 bar), ail (from 10 bar)	–	–
	> 55 – < 100	< 1,100	< 20	–	aeV/WDR (up to 10 bar), ail/WDR (from 10 bar)	aeV/aeV (up to 10 bar), ail/aeV (from 10 bar)
Sour cream	< 55	< 1,100	< 40	aeV (up to 10 bar), ail (from 10 bar)	–	–
	> 55 – < 100	< 1,100	< 20	–	aeV/WDR (up to 10 bar), ail/WDR (from 10 bar)	aeV/aeV (up to 10 bar), ail/aeV (from 10 bar)
Cream	< 55	< 1,100	< 40	aeV (up to 10 bar), ail (from 10 bar)	–	–
	> 55 – < 100	< 1,100	< 20	–	aeV/WDR (up to 10 bar), ail/WDR (from 10 bar)	aeV/aeV (up to 10 bar), ail/aeV (from 10 bar)
Condensed milk	< 55	< 1,100	< 40	aeV (up to 10 bar), ail (from 10 bar)	–	–
	> 55 – < 100	< 1,100	< 20	–	aeV/WDR (up to 10 bar), ail/WDR (from 10 bar)	aeV/aeV (up to 10 bar), ail/aeV (from 10 bar)

Application vinegar / sauces / marinade

				Mechanical seal* material product side / atmospheric side		
Subgroup	Temperature [°C]	Density [kg/m³]	Viscosity [mPas]	Single	Quench	Tandem
Soy sauce	5–95	1,250	25	kiE	–	–
	95.1–125	1,250	25	–	kiE/WDR	kiE/aeE
Cider vinegar						
Herb-flavored vinegar						
Vinegar	60	1,020	1	aeE	–	–
Wine vinegar						
Vinegar essence	60	1,050	1	aeV	–	–

* aeE: carbon/stainless steel/EPDM, aeV: carbon/stainless steel/Viton, aiH: carbon/SIC/EPDM (USP-Class VI), ail: carbon/SIC/Viton (USP-Class VI), kiE: SIC/SIC/EPDM, WDR: lip seal. The elastomer of the static seals equals the elastomer of the mechanical seals.

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Application non-alcoholic drink

Subgroup	Temperature [°C]	Density [kg/m³]	Viscosity [mPas]	Mechanical seal*			Encapsulated seal
				Single	Quench	Tandem	
Apple juice	< 70	1,040	< 50	aeE	–	–	
	< 70	1,040	< 50	aeE	–	–	x
	< 70	1,040	< 50	kiE	–	–	x
	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	
	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	x
Apricot-mango juice	< 70	1,040	< 50	aeE	–	–	
	< 70	1,040	< 50	aeE	–	–	x
	< 70	1,040	< 50	kiE	–	–	x
	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	
	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	x
Cherry juice	< 70	1,040	< 50	aeE	–	–	
	< 70	1,040	< 50	aeE	–	–	x
	< 70	1,040	< 50	kiE	–	–	x
	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	
	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	x
Cola	< 100	1,040	< 5	aeE	–	–	
	< 100	1,040	< 5	aeE	–	–	
Concentrated lemon juice, without pulp and granules	< 70	1,040	25	kiV	–	–	
Cranberry juice	< 70	1,040	< 50	aeE	–	–	
	< 70	1,040	< 50	aeE	–	–	x
	< 70	1,040	< 50	kiE	–	–	x
	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	
	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	x
Fruit juice, with granules	< 70	1,040	< 50	kiE	–	–	x
Fruit juice, with pulp		1,040	< 50	aeE	–	–	x
Fruit juice, with pulp and with granules	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	x
Fruit juice, without pulp	< 70	1,040	< 50	aeE	–	–	
	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	
Grape juice	< 70	1,040	< 50	aeE	–	–	x
	< 70	1,040	< 50	aeE	–	–	
	< 70	1,040	< 50	kiE	–	–	x
	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	
	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	x
Iced tea	< 100	1,040	< 5	aeE	–	–	
Lemon juice, with pulp and granules	< 70	1,040	25	kiV	–	–	x
Lemon juice, without pulp and granules	< 70	1,040	25	aeV	–	–	
Lemonade	< 100	1,040	< 5	aeE	–	–	
	< 100	1,040	< 5	aeE	–	–	
Mineral water	< 100	1,040	< 5	aeE	–	–	
	< 100	1,040	< 5	aeE	–	–	
Multivitamin juice	< 70	1,040	< 50	aeE	–	–	
	< 70	1,040	< 50	aeE	–	–	x
	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	
	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	x
	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	
Orange juice	< 70	1,040	< 50	aeE	–	–	
	< 70	1,040	< 50	aeE	–	–	x
	< 70	1,040	< 50	kiE	–	–	x
	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	
	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	x

Subgroup	Temperature [°C]	Density [kg/m ³]	Viscosity [mPas]	Mechanical seal* material product side / atmospheric side			
				Single	Quench	Tandem	Encapsulated seal
Peach- / passion fruit juice	< 70	1,040	< 50	aeE	–	–	
	< 70	1,040	< 50	aeE	–	–	x
	< 70	1,040	< 50	kiE	–	–	x
	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	
	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	x
Raspberry- / Strawberry juice	< 70	1,040	< 50	aeE	–	–	
	< 70	1,040	< 50	aeE	–	–	x
	< 70	1,040	< 50	kiE	–	–	x
	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	
	> 70 – < 95	1,040	< 10	–	kiE/WDR	kiE/aeE	x
Vegetable juice, with pulp and granules	< 70	1,050	< 50	kiV	–	–	x
	> 70 – < 95	1,050	< 10	–	–	kiV/aeV	x
Vegetable juice, without pulp and granules	< 70	1,050	< 50	aeV	–	–	
	> 70 – < 95	1,050	< 10	–	–	kiV/aeV	

Application concentrated fruit juice

Subgroup	Temperature [°C]	Density [kg/m ³]	Viscosity [mPas]	Concentration [Brix]	Mechanical seal* material product side / atmospheric side		
					Single	Quench	Tandem
Concentrated fruit juice	5–90	1,150	related to temperature	to 25°	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	5–40	1,200		26–49°	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	40.1–90	1,200		26–49°	–	aeE/WDR	aeE/aeE
	15–40	1,230		50°	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	40.1–90	1,230		50°	–	aeE/WDR	aeE/aeE
	15–40	1,260		55°	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	40.1–90	1,260		55°	–	aeE/WDR	aeE/aeE
	15–40	1,290		60°	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	40.1–90	1,290		60°	–	aeE/WDR	aeE/aeE
	15–40	1,320		65°	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	40.1–90	1,320		65°	–	aeE/WDR	aeE/aeE
	20–40	1,350		70°	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	40.1–90	1,350		70°	–	aeE/WDR	aeE/aeE

* aeE: carbon/stainless steel/EPDM, aeV: carbon/stainless steel/Viton, aiH: carbon/SiC/EPDM (USP-Class VI), kiE: SiC/SiC/EPDM, kiH: SiC/SiC/EPDM (USP-Class VI), kiV: SiC/SiC/Viton, WDR: lip seal. The elastomer of the static seals equals the elastomer of the mechanical seals.

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Application oil

Subgroup	Temperature [°C]	Density [kg/m ³]	Viscosity [mPas]	Mechanical seal* material product side / atmospheric side		
				Single	Quench	Tandem
Cocoa butter						
Coconut oil / copra oil						
Corn oil						
Cotton seed oil	10-30	940	< 80	aeV	-	-
Linseed oil						
Olive oil						
Palm oil						
Peanut oil						
Pumpkin seed oil						
Rape oil / rapeseed oil						
Safflower oil						
Sesame oil	30.1-125	920	< 40	aeV	-	-
Soy oil / soy bean oil						
Sunflower oil						
Walnut oil						
Wheat germ oil						
Chip fat	< 170	900	10		-	-
Butter oil (liquid)	> 45-120	860	45	aeV	-	-
Lard (liquid)	> 45-120	860	45	aeV	-	-
Liquid butter	> 35-120	860	45	aeV	-	-
Fish oil	10-125	950	< 100	aeV	-	-
Whale oil	10-125	950	< 100	aeV	-	-
Cod liver (cod-liver oil)	10-125	950	< 100	aeV	-	-
Mineral oil						
Motor oil	10-100			aeV	-	-
Petroleum						
Derv	10-100	850	< 15	aeV	-	-
Diesel oil						
Oil-in-water emulsion	0-100	1,000	< 50	aeV	-	-

Application spirits

Subgroup	Temperature [°C]	Density [kg/m ³]	Viscosity [mPas]	Concentration [%]	Mechanical seal* material product side / atmospheric side		
					Single	Quench	Tandem
Spirits	40	< 1,000	< 5		aeE (up to 10 bar), aiH (from 10 bar)	-	-
	< 50	< 1,150	< 150		aeE (up to 10 bar), aiH (from 10 bar)	aeE/WDR	kiE/aeE
	< 100	< 1,150	< 100		-	aeE/WDR	kiE/aeE
	< 78	< 1,000	1	< 10	aeE (up to 10 bar), aiH (from 10 bar)	-	-
	< 78	900	1	< 50	-	-	-
	< 78	800	1	< 98	aeE (up to 10 bar), aiH (from 10 bar)	-	-

Application cleaning in place CIP

Subgroup	Temperature [°C]	Density [kg/m³]	Viscosity [mPas]	Concentration [%]	Mechanical seal* material product side / atmospheric side		
					Single	Quench	Tandem
CIP liquid (concentration approx. 5%)	< 100	1,050	< 5	< 5	aeE (up to 10 bar), aiH (from 10 bar)	–	–

Application sugar syrup

Subgroup	Temperature [°C]	Density [kg/m³]	Viscosity [mPas]	Concentration [Brix]	Mechanical seal* material product side / atmospheric side		
					Single	Quench	Tandem
Sugar syrup without crystals	5–90	1,150	related to temperature	to 25°	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	5–40	1,200		26–49°	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	40.1–90	1,200		26–49°	–	aeE/WDR	aeE/aeE
	15–40	1,230		50°	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	40.1–90	1,230		50°	–	aeE/WDR	aeE/aeE
	15–40	1,260		55°	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	40.1–90	1,260		55°	–	aeE/WDR	aeE/aeE
	15–40	1,290		60°	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	40.1–90	1,290		60°	–	aeE/WDR	aeE/aeE
	15–40	1,320		65°	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	40.1–90	1,320		65°	–	aeE/WDR	aeE/aeE
	20–40	1,350		70°	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	40.1–90	1,350		70°	–	aeE/WDR	aeE/aeE
	20–40	1,360		72,7°	aeE (up to 10 bar), aiH (from 10 bar)	–	–
	40.1–90	1,360		72,7°	–	aeE/WDR	aeE/aeE
	5–90	1,150		to 25°	kiE (up to 10 bar), kiH (10 – 16 bar)	–	–
	5–40	1,200		26–49°	kiE (up to 10 bar), kiH (10 – 16 bar)	–	–
	40.1–90	1,200		26–49°	–	kiE/WDR	kiE/aeE
	15–40	1,230		50°	kiE (up to 10 bar), kiH (10 – 16 bar)	–	–
	40.1–90	1,230		50°	–	kiE/WDR	kiE/aeE
	15–40	1,260		55°	kiE (up to 10 bar), kiH (10 – 16 bar)	–	–
	40.1–90	1,260		55°	–	kiE/WDR	kiE/aeE
	15–40	1,290		60°	kiE (up to 10 bar), kiH (10 – 16 bar)	–	–
	40.1–90	1,290		60°	–	kiE/WDR	kiE/aeE
	15–40	1,320		65°	kiE (up to 10 bar), kiH (10 – 16 bar)	–	–
	40.1–90	1,320		65°	–	kiE/WDR	kiE/aeE
	20–40	1,350		70°	kiE (up to 10 bar), kiH (10 – 16 bar)	–	–
	40.1–90	1,350		70°	–	kiE/WDR	kiE/aeE

* aeE: carbon/stainless steel/EPDM, aeV: carbon/stainless steel/Viton, aiH: carbon/SiC/EPDM (USP-Class VI), kiE: SiC/SiC/EPDM, kiH: SiC/SiC/EPDM (USP-Class VI), WDR: lip seal. The elastomer of the static seals equals the elastomer of the mechanical seals.

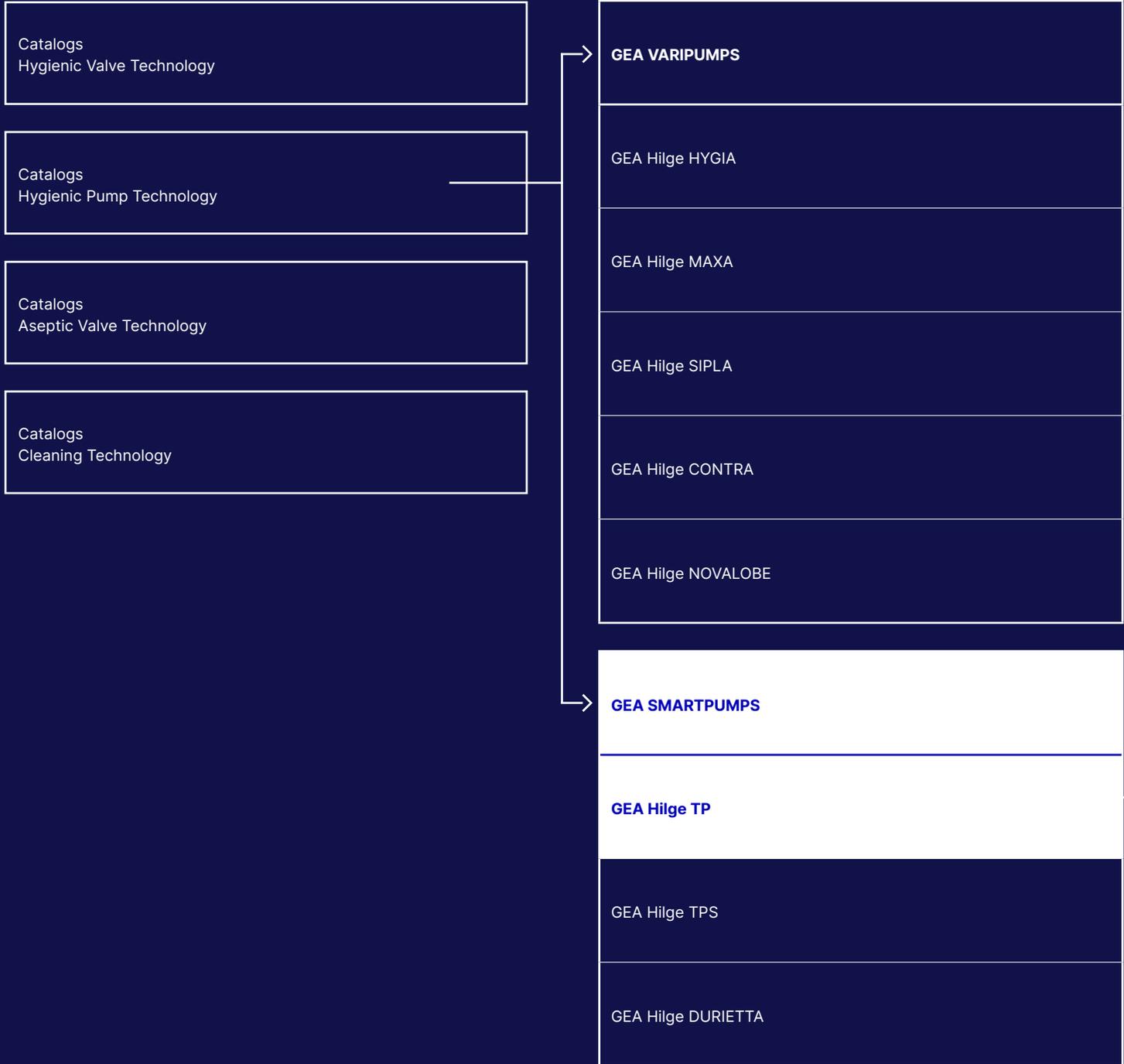
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Application chemicals

Subgroup	Temperature [°C]	Density [kg/m ³]	Viscosity [mPas]	Concentration [%]	Mechanical seal*		
					material	product side / atmospheric side	
					Single	Quench	Tandem
Caustic soda (NaOH)	< 60	= Concentration		< 15	kiE	-	-
	< 60	= Concentration		> 15 - < 50	-	kiE/WDR	kiE/aeE
	> 60 - < 101	= Concentration		< 12	kiE	-	-
	> 60 - < 101	= Concentration		< 12 - < 50	-	kiE/WDR	kiE/aeE
Phosphoric acid (H ₃ PO ₄)	< 40	1% = 1,004 5% = 1,026	< 5	< 15	kiV	-	-
	> 40 - < 85	10% = 1,053 20% = 1,114 35% = 1,216	< 5	< 15	-	kiV/WDR	kiV/aeV
	< 85	45% = 1,293	< 5	> 15 - < 45	-	-	kiV/aeV
Nitric acid (HNO ₃)	0-20	1% = 1,004	5	0-10	kiV	-	-
	20.1-40	10% = 1,055	5	0-10	-	kiV/WDR	kiV/aeV
	0-40	20% = 1,115	5	10.1-20	-	kiV/WDR	kiV/aeV
	40.1-85	30% = 1,180	5	0-20	-	-	kiV/aeV
	0-85	40% = 1,245	5	20.1-40	-	-	kiV/aeV
High test peroxide (H ₂ O ₂) Hydrogen peroxide	< 90	< 1,050	2	2-3	aeV	-	-
	< 90	< 1,150	2	< 40	kiV	-	-
	< 90	< 1,300	2	< 60	kiV	-	-
	< 60	< 1,450	2	< 100	-	-	kiV/aeV
Brine solution Common salt solution Sodium chloride (NaCl)	< 30	< 1,050	< 5	< 5	aeE	-	-
	30.1-40	< 1,050	< 5	< 5	kiE	-	-
	< 40	< 1,080	< 5	5.1-10	kiE	-	-
	< 40	< 1,200	< 25	10.1-25	-	kiE/WDR	kiE/aeE
Curing brine (butchery)	< 40	1,200	< 300	< 20	kiE	-	-
Salting brine (cheese dairy)	< 40	1,300	< 60	20-30	-	kiE/WDR	kiE/aeE
Ammonia/ammoniac (NH ₃)	< 40	800	< 5		-	aeE/WDR	aeE/aeE
Caustic potash (KOH)	< 60	< 1,100	< 5	< 10	kiE	-	-
Potassium hydroxide	< 60	< 1,200	< 5	< 20	kiE	-	-
Glycerol Propanetriol	80	< 1,100	< 5	0-40	aeV	-	-
	80	< 1,160	< 20	40.1-60	aeV	-	-
	80	< 1,200	< 50	60.1-75	aeV	-	-
	80	< 1,220	< 100	75.1-85	aeV	-	-
Propylene-glycol (C ₃ H ₈ O ₂)	0-80	1,010	< 5	1-20	kiV	-	-
	-5-80	1,020	< 20	20.1-50	kiV	-	-
	-10-80	1,040	< 150	50.1-75	kiV	-	-
	-10-0	1,060	< 255	75.1-100	kiV	-	-
	0.1-80	1,050	< 150	75.1-100	kiV	-	-
Ethanediol Ethylene-glycol (C ₂ H ₆ O ₂)	0-80	1,030	< 5	1-20	kiE	-	-
	-5-80	1,060	< 20	20.1-50	kiE	-	-
	-10-80	1,090	< 40	50.1-75	kiE	-	-
	-10-0	1,120	< 100	75.1-100	kiE	-	-
	0.1-80	1,110	< 65	75.1-100	kiE	-	-
Citric acid (C ₆ H ₈ O ₇) Natural citric acid	5-80	1% = 1,005 10% = 1,020	< 15	< 10	kiV	-	-
	5-80	10.1% = 1,020 20% = 1,050 30% = 1,100 50% = 1,260	< 15	10.1-50	kiV	-	-
Acetic acid (C ₂ H ₄ O ₂)	5-80	1,010	1	< 10	aeE	-	-
	5-100	1,050	1	10.1-100	-	-	aeK/aeE

* aeE: carbon/stainless steel/EPDM, aeK: carbon/stainless steel/FFKM, aeV: carbon/stainless steel/Viton, kiE: SIC/SIC/EPDM, kiV: SIC/SIC/Viton.
The elastomer of the static seals equals the elastomer of the mechanical seals.

Pump Selection Matrix





Connection Dimensions

Pump type		GEA Hilge TP 1020					GEA Hilge TP 1540					
Standard		DIN		OD			DIN			OD		
Nominal width		50/40	40/40	2"/1 1/2"	1 1/2"/1 1/2"		65/40	65/50	80/50	2 1/2"/2"	2 1/2"/1 1/2"	3"/2"
Connection type												
DIN 32676 / CO clamp	a ₁	35	57	62	68		70	70	62	91	92	68
	h ₂	148	148	155	155		169	184	189	179	159	179
VARIVENT® / TN flange	a ₁	39	65	59	66		67	67	67	87	87	64
	h ₂	151	151	151	151		165	187	185	176	155	184
DIN 11851 / GO thread	a ₁	48	68	70	68		82	82	87	102	98	82
	h ₂	159	159	159	159		175	197	197	185	174	201
SMS / SMG thread	a ₁	–	–	51	57		–	–	–	88	88	66
	h ₂	–	–	143	143		–	–	–	170	161	181
IDF / IG thread	a ₁	–	–	55	57		–	–	–	81	87	64
	h ₂	–	–	148	145		–	–	–	176	162	186
RJT / RJG thread	a ₁	–	–	57	59		–	–	–	79	94	68
	h ₂	–	–	152	152		–	–	–	177	167	188
11853-1 / GSK thread	a ₁	44	66	64	66		78	77	76	98	101	84
	h ₂	157	157	157	157		171	193	193	181	172	192
11853-2 / NFK flange	a ₁	37	59	57	59		66	66	66	88	90	68
	h ₂	150	150	152	152		164	186	186	174	167	185
1092-1 / FD Welding flange	a ₁	58	78	–	–		87	87	72	–	–	–
	h ₂	168	168	–	–		182	207	208	–	–	–

Pump type		GEA Hilge TP 2030						GEA Hilge TP 2050					
Standard		DIN			OD			DIN			OD		
Nominal width		50/40	50/50	65/50	2"/1 1/2"	2"/2"	2 1/2"/2"	65/50	80/50	50/50	2 1/2"/2"	3"/2"	2"/2"
Connection type													
DIN 32676 / CO clamp	a ₁	66	61	62	89	89	65	80	60	98	75	99	
	h ₂	157	179	185	153	174	174	183	183	183	183	183	
VARIVENT® / TN flange	a ₁	65	65	65	95	86	61	77	57	112	94	95	
	h ₂	160	182	182	150	170	170	186	186	186	179	179	
DIN 11851 / GO thread	a ₁	75	75	76	95	95	76	92	77	122	109	119	
	h ₂	166	192	182	158	180	185	196	196	196	189	189	
SMS / SMG thread	a ₁	–	–	–	70	80	60	–	–	–	93	70	
	h ₂	–	–	–	145	165	165	–	–	–	174	174	
IDF / IG thread	a ₁	–	–	–	82	82	58	–	–	–	91	68	
	h ₂	–	–	–	147	167	166	–	–	–	176	176	
RJT / RJG thread	a ₁	–	–	–	76	87	62	–	–	–	95	70	
	h ₂	–	–	–	151	172	171	–	–	–	180	180	
11853-1 / GSK thread	a ₁	71	71	60	84	91	62	88	83	119	105	114	
	h ₂	146	188	188	151	176	168	192	192	192	185	185	
11853-2 / NFK flange	a ₁	66	64	58	84	84	62	78	65	111	95	107	
	h ₂	161	181	181	149	169	169	185	185	185	178	178	
1092-1 / FD Welding flange	a ₁	85	85	79	–	–	–	97	102	133	–	–	
	h ₂	177	202	104	–	–	–	206	206	206	–	–	

Dimensions for ISO connections are available on request.

Pump type		GEA Hilge TP 3050						GEA Hilge TP 5060					
		DIN			OD			DIN			OD		
		65/50	80/65	80/80	2 1/2"/2"	3"/2 1/2"	3"/3"	80/65	80/80	65/65	3"/2 1/2"	3"/3"	2 1/2"/2 1/2"
DIN 32676 / CO clamp	a ₁	78	98	98	97	74	74	79	79	89	86	86	109
	h ₂	177	219	239	175	200	213	258	290	258	235	258	235
VARIVENT® / TN flange	a ₁	75	95	95	93	70	70	76	76	86	83	83	106
	h ₂	180	228	228	172	196	210	255	277	255	233	256	233
DIN 11851 / GO thread	a ₁	90	120	115	108	95	95	91	96	101	98	98	112
	h ₂	190	220	216	182	206	225	275	297	270	248	271	248
SMS / SMG thread	a ₁	-	-	-	92	69	69	-	-	-	82	82	105
	h ₂	-	-	-	167	195	204	-	-	-	232	255	232
IDF / IG thread	a ₁	-	-	-	90	67	67	-	-	-	79	79	102
	h ₂	-	-	-	188	212	226	-	-	-	229	252	229
RJT / RJG thread	a ₁	-	-	-	94	71	71	-	-	-	84	84	106
	h ₂	-	-	-	193	217	231	-	-	-	234	257	233
11853-1 / GSK thread	a ₁	86	112	112	94	87	87	93	93	97	100	100	103
	h ₂	186	227	253	198	227	246	266	294	266	250	273	250
11853-2 / NFK flange	a ₁	74	94	94	94	71	71	85	85	65	83	83	106
	h ₂	179	226	235	190	216	230	254	276	254	233	256	233
1092-1 / FD Welding flange	a ₁	95	120	120	-	-	-	101	101	96	-	-	-
	h ₂	190	236	261	-	-	-	275	297	275	-	-	-

Pump type		GEA Hilge TP 7060						GEA Hilge TP 2575			
		DIN			OD			DIN		OD	
		80/65	80/80	65/65	3"/2 1/2"	3"/3"	2 1/2"/2 1/2"	65/50	80/50	2 1/2"/2"	3"/2"
DIN 32676 / CO clamp	a ₁	84	84	94	91	91	114	77	77	97	74
	h ₂	258	280	258	231	253	231	212	212	210	210
VARIVENT® / TN flange	a ₁	81	81	91	88	88	101	74	62	93	70
	h ₂	255	277	255	227	250	227	215	215	196	196
DIN 11851 / GO thread	a ₁	101	101	106	102	102	125	89	85	108	85
	h ₂	270	307	270	242	265	242	225	225	216	221
SMS / SMG thread	a ₁	-	-	-	86	86	109	-	-	92	69
	h ₂	-	-	-	246	249	246	-	-	201	201
IDF / IG thread	a ₁	-	-	-	84	84	107	-	-	89	67
	h ₂	-	-	-	224	247	224	-	-	203	203
RJT / RJG thread	a ₁	-	-	-	89	89	112	-	-	94	71
	h ₂	-	-	-	228	251	228	-	-	207	207
11853-1 / GSK thread	a ₁	98	98	102	104	104	127	85	79	104	87
	h ₂	266	288	266	238	267	238	221	221	212	212
11853-2 / NFK flange	a ₁	80	80	90	88	88	111	72	60	94	71
	h ₂	254	276	253	228	251	228	214	214	205	205
1092-1 / FD Welding flange	a ₁	106	106	111	-	-	-	94	87	-	-
	h ₂	275	302	275	-	-	-	235	235	-	-

Dimensions for ISO connections are available on request.

Connection Dimensions

Pump type		GEA Hilge TP 8050						GEA Hilge TP 8080					
Standard		DIN			OD			DIN			OD		
Nominal width		100/65	80/65	80/80	4" / 2 1/2"	3" / 2 1/2"	3" / 3"	100/65	80/65	80/80	4" / 2 1/2"	3" / 2 1/2"	3" / 3"
Connection type													
DIN 32676 / CO clamp	a ₁	101	135	135	121	140	140	99	133	133	120	138	138
	h ₂	288	288	310	250	250	273	278	278	290	252	252	275
VARIVENT® / TN flange	a ₁	98	132	132	118	136	131	96	130	130	116	135	135
	h ₂	285	285	307	246	246	269	275	275	287	248	249	271
DIN 11851 / GO thread	a ₁	113	147	152	147	150	151	125	150	150	145	150	150
	h ₂	310	300	327	261	256	284	290	290	317	263	263	286
SMS / SMG thread	a ₁	-	-	-	127	135	135	-	-	-	126	134	134
	h ₂	-	-	-	245	245	268	-	-	-	247	247	270
IDF / IG thread	a ₁	-	-	-	129	133	130	-	-	-	123	131	130
	h ₂	-	-	-	243	243	265	-	-	-	255	245	268
RJT / RJG thread	a ₁	-	-	-	119	137	137	-	-	-	117	136	136
	h ₂	-	-	-	248	248	271	-	-	-	249	249	272
11853-1 / GSK thread	a ₁	109	149	153	143	153	148	121	147	147	141	152	152
	h ₂	310	296	324	257	257	286	286	286	314	259	259	288
11853-2 / NFK flange	a ₁	98	130	132	120	137	137	97	129	129	119	135	135
	h ₂	284	284	306	247	247	270	278	274	296	249	249	272
1092-1 / FD Welding flange	a ₁	125	157	157	-	-	-	123	155	155	-	-	-
	h ₂	305	305	332	-	-	-	295	295	322	-	-	-

Pump type		GEA Hilge TP 16040			
Standard		DIN		OD	
Nominal width		150 / 100	125 / 100	100 / 100	4" / 4"
Connection type					
DIN 32676 / CO clamp	a ₁	114	154	181	179
	h ₂	308	308	308	298
VARIVENT® / TN flange	a ₁	111	151	178	176
	h ₂	305	305	305	294
DIN 11851 / GO thread	a ₁	136	172	207	205
	h ₂	334	334	334	323
SMS / SMG thread	a ₁	-	-	-	186
	h ₂	-	-	-	304
IDF / IG thread	a ₁	-	-	-	173
	h ₂	-	-	-	291
RJT / RJG thread	a ₁	-	-	-	177
	h ₂	-	-	-	296
11853-1 / GSK thread	a ₁	-	-	203	201
	h ₂	-	-	330	319
11853-2 / NFK flange	a ₁	104	144	178	179
	h ₂	306	306	306	297
1092-1 / FD Welding flange	a ₁	138	178	205	-
	h ₂	352	352	332	-

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2-POLE, 50 HZ

GEA Hilge TP

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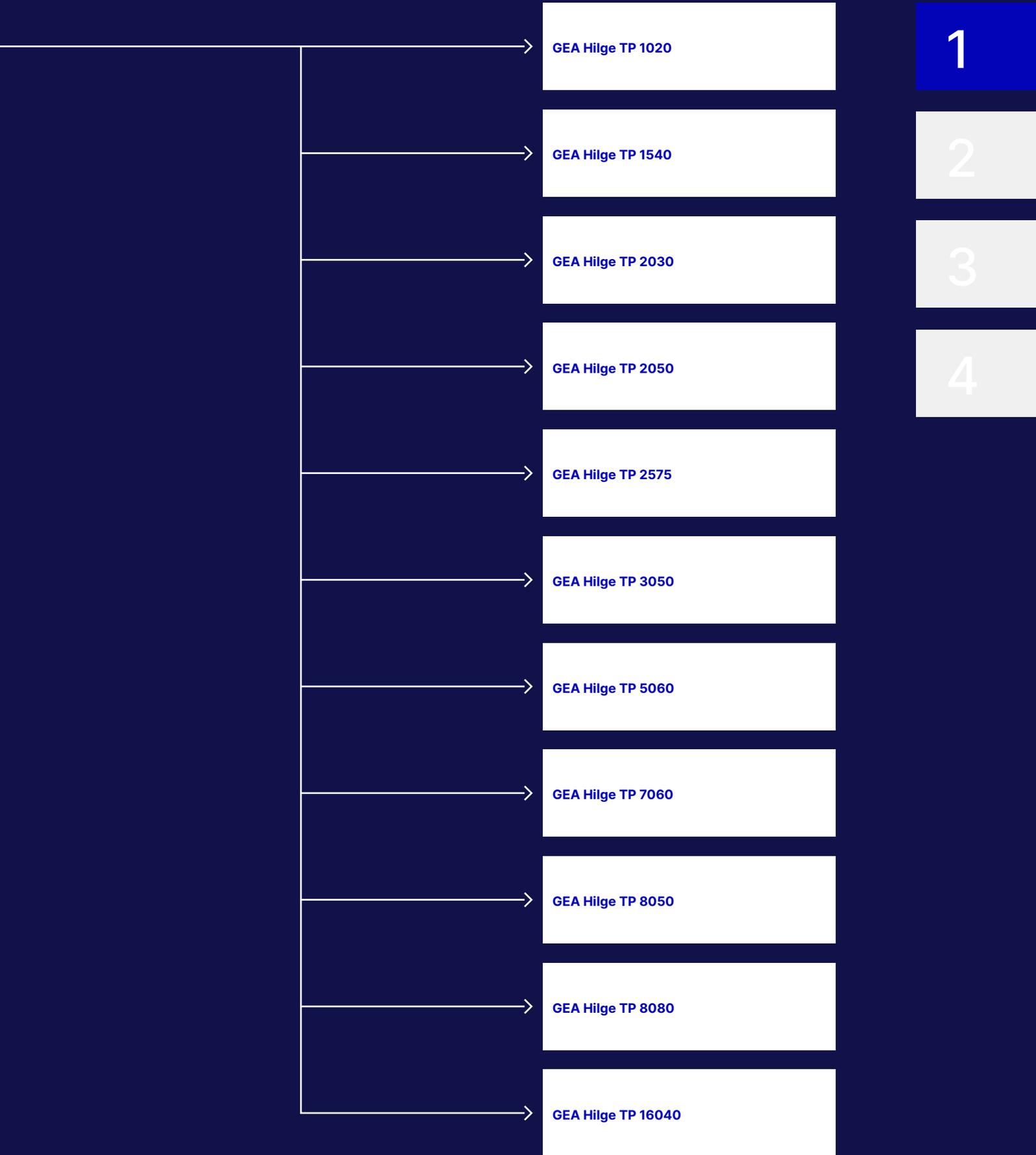
4

Pump Selection Matrix

GEA Hilge TP

2-pole

50 Hz



GEA Hilge TP 1020

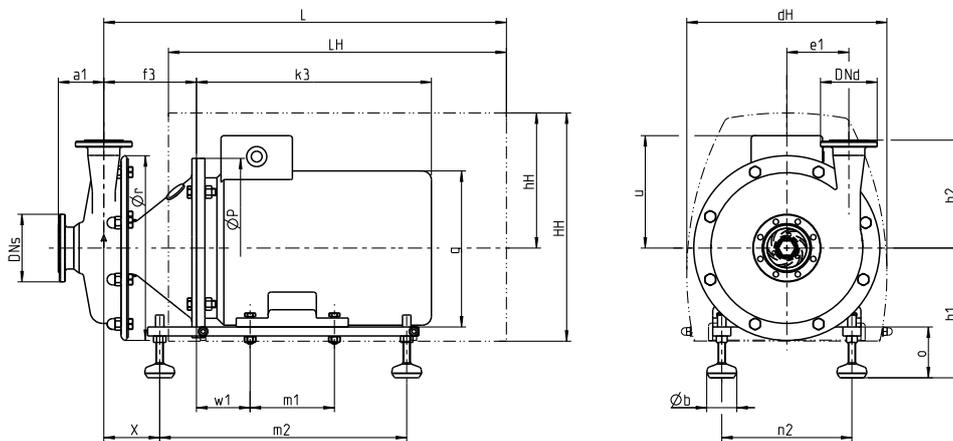


Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 50, pressure side DN 40
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 220/380 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 20 m ³ /h
Pump head	Max. 24 m
Housing pressure	Max. 10 bar
Certificates	



* registered for recertification



Ør = 225 mm
e1 = 76 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
80	1.1	535	178	431	291	228	126	50	200	144	285	50	100	285	84	125	82	162	35
90S	1.5	541	180	431	291	228	147	50	200	144	310	56	100	285	90	140	82	172	40
90L	2.2	541	180	431	291	228	147	50	200	144	310	56	125	285	90	140	82	175	42
100L	3.0	581	207	471	341	278	149	50	250	154	360	63	140	335	120	160	85	197	59
112M	4.0	581	207	471	341	278	175	50	250	154	333	70	140	335	127	190	85	197	70
112M	5.5	581	207	471	341	278	175	50	250	154	333	70	140	335	127	190	85	197	70

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

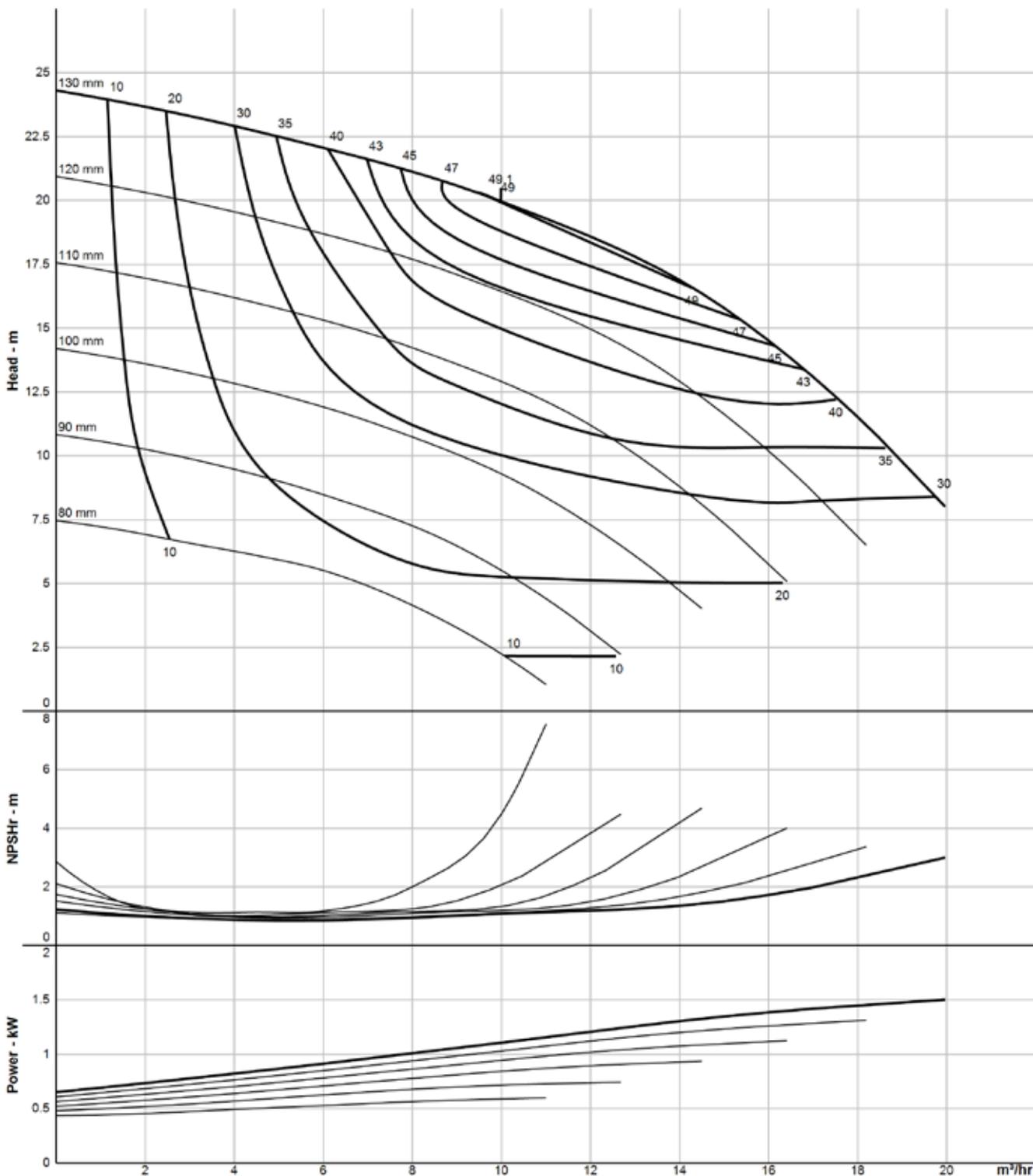
GEA Hilge TP 1020 Performance Curve

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The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

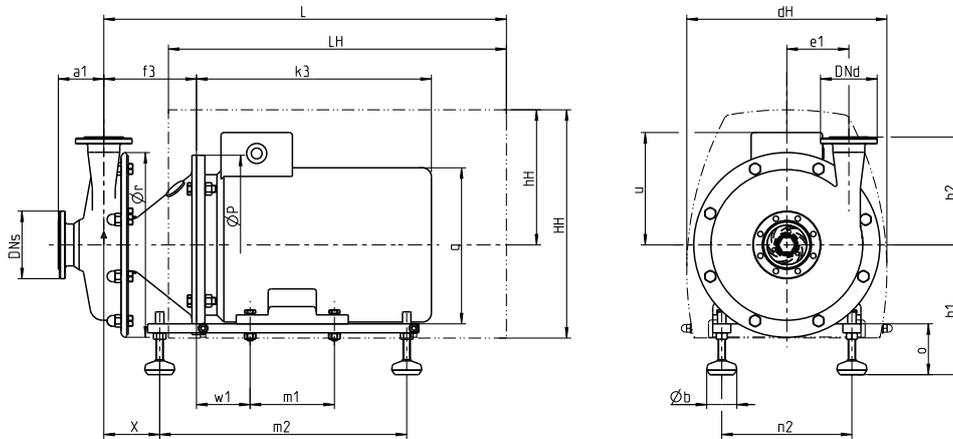
GEA Hilge TP 1540



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 65, pressure side DN 40
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 220/380 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 40 m ³ /h
Pump head	Max. 42 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 274 mm
e1 = 90 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
100L	3.0	558	207	471	341	278	149	50	250	131	360	63	140	335	98	160	85	197	62
112M	4.0	558	207	471	341	278	175	50	250	131	333	70	140	335	105	190	85	197	73
112M	5.5	558	207	471	341	278	175	50	250	131	333	70	140	335	105	190	85	197	78
112M	7.5	558	207	471	341	278	175	50	250	131	375	70	140	335	105	190	85	197	84
132M	9.0	666	227	561	381	332	195	50	300	151	410	89	178	410	91	216	85	217	114
132M	11.0	666	227	561	381	332	195	50	300	151	410	89	178	410	91	216	85	217	115
132M	15.0	666	227	561	381	332	195	50	300	151	435	89	178	410	91	216	85	217	129
160M	11.0	877	326	736	512	412	222	75	350	183	524	108	210	640	105	254	110	270	152

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

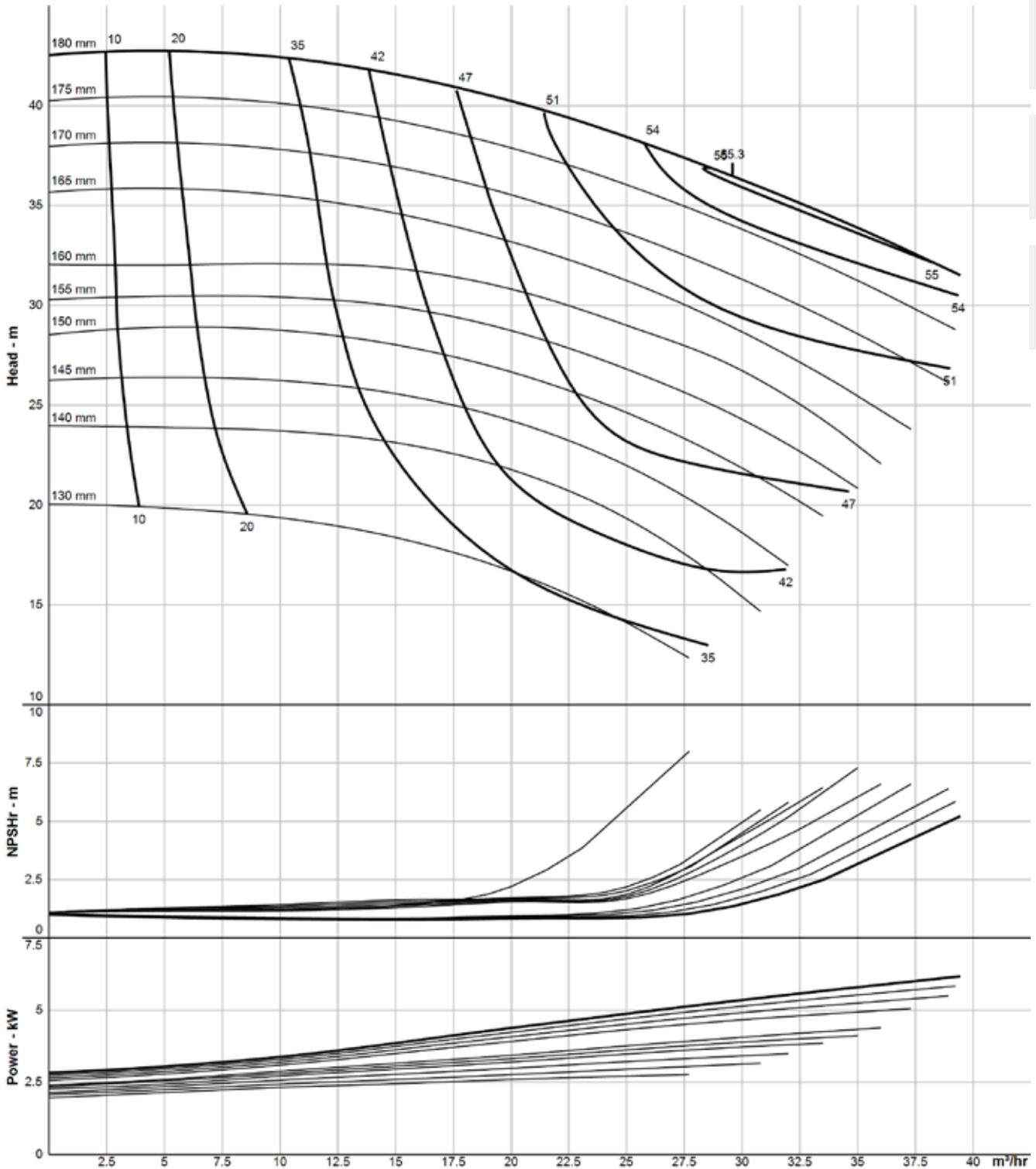
GEA Hilge TP 1540 Performance Curve

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The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

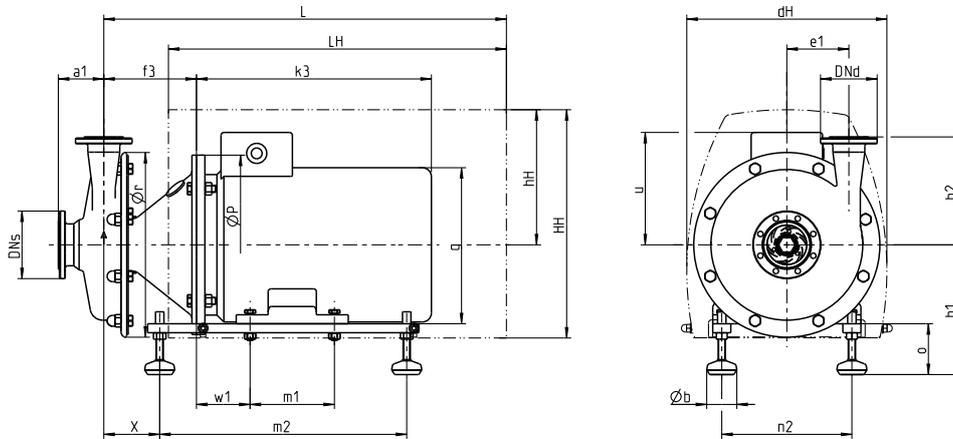
GEA Hilge TP 2030



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 50; 65, pressure side DN 40; 50
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 220/380 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 34 m ³ /h
Pump head	Max. 36 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 259 mm
e1 = 85 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
90S	1.5	518	180	431	291	228	147	50	200	121	310	56	125	285	68	140	82	172	42
90L	2.2	518	180	431	291	228	147	50	200	121	310	56	125	285	68	140	82	172	44
100L	3.0	558	207	471	314	278	149	50	250	131	360	63	140	335	98	160	85	197	61
112M	4.0	558	207	471	341	378	175	50	250	131	333	70	140	335	105	190	85	197	72
112M	5.5	558	207	471	341	378	175	50	250	131	333	70	140	335	105	190	85	197	77
112M	7.5	558	207	471	341	378	175	50	250	131	375	70	140	335	105	190	85	197	83
132S	5.5	666	227	561	381	332	195	50	300	151	410	89	140	410	91	216	85	217	105
132M	9.0	666	227	561	381	332	195	50	300	151	410	89	178	410	91	216	85	217	113
132M	11.0	666	227	561	381	332	195	50	300	151	410	89	178	410	91	216	85	217	114
160M	11.0	877	326	736	512	412	222	75	350	183	524	108	210	640	105	254	110	270	148

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

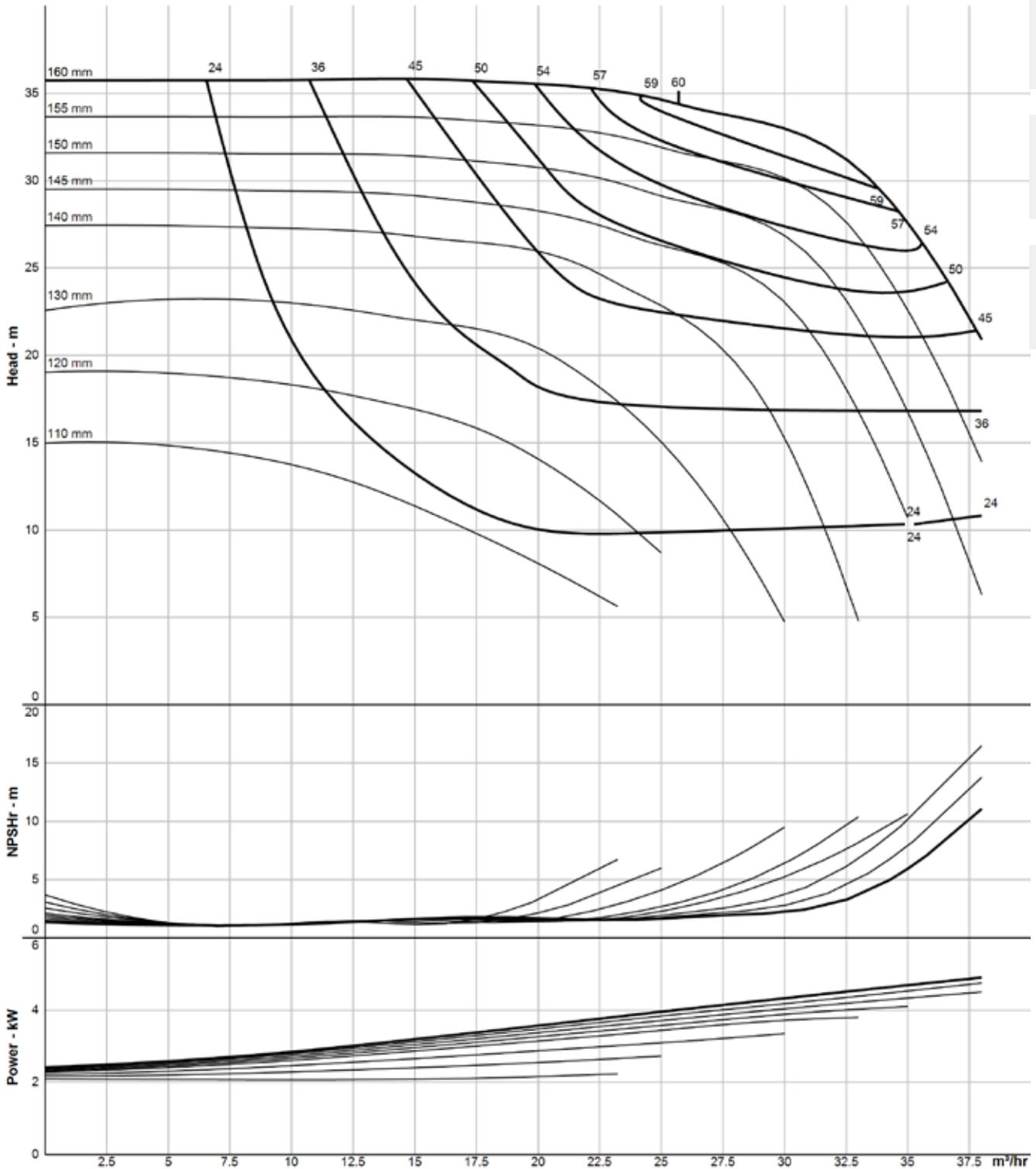
GEA Hilge TP 2030 Performance Curve

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The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

GEA Hilge TP 2050

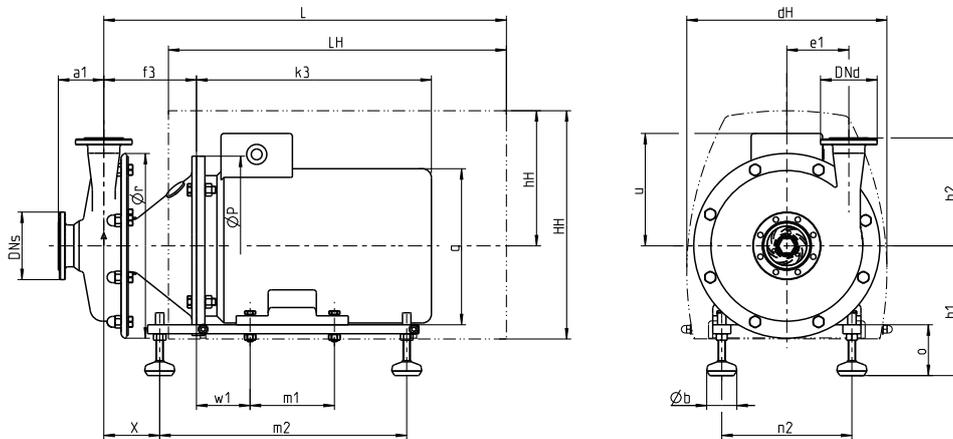


Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 50; 65, pressure side DN 50
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 220/380 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 37 m ³ /h
Pump head	Max. 60 m
Housing pressure	Max. 16 bar
Certificates	



* registered for recertification



Ør = 309 mm
e1 = 107 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
100L	3.0	563	207	471	341	278	149	50	250	136	360	63	140	335	102	160	85	197	63
112M	4.0	563	207	471	341	278	175	50	250	136	333	70	140	335	109	190	85	197	74
112M	5.5	563	207	471	341	278	175	50	250	136	333	70	140	335	109	190	85	197	79
112M	7.5	563	207	471	341	278	175	50	250	136	375	70	140	335	109	190	85	197	85
132M	9.0	671	227	561	381	332	195	50	300	156	410	89	178	410	95	216	85	217	115
132M	11.0	671	227	561	381	332	195	50	300	156	410	89	178	410	95	216	85	217	116
132M	15.0	671	227	561	381	332	195	50	300	156	435	89	178	410	95	216	85	217	130

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

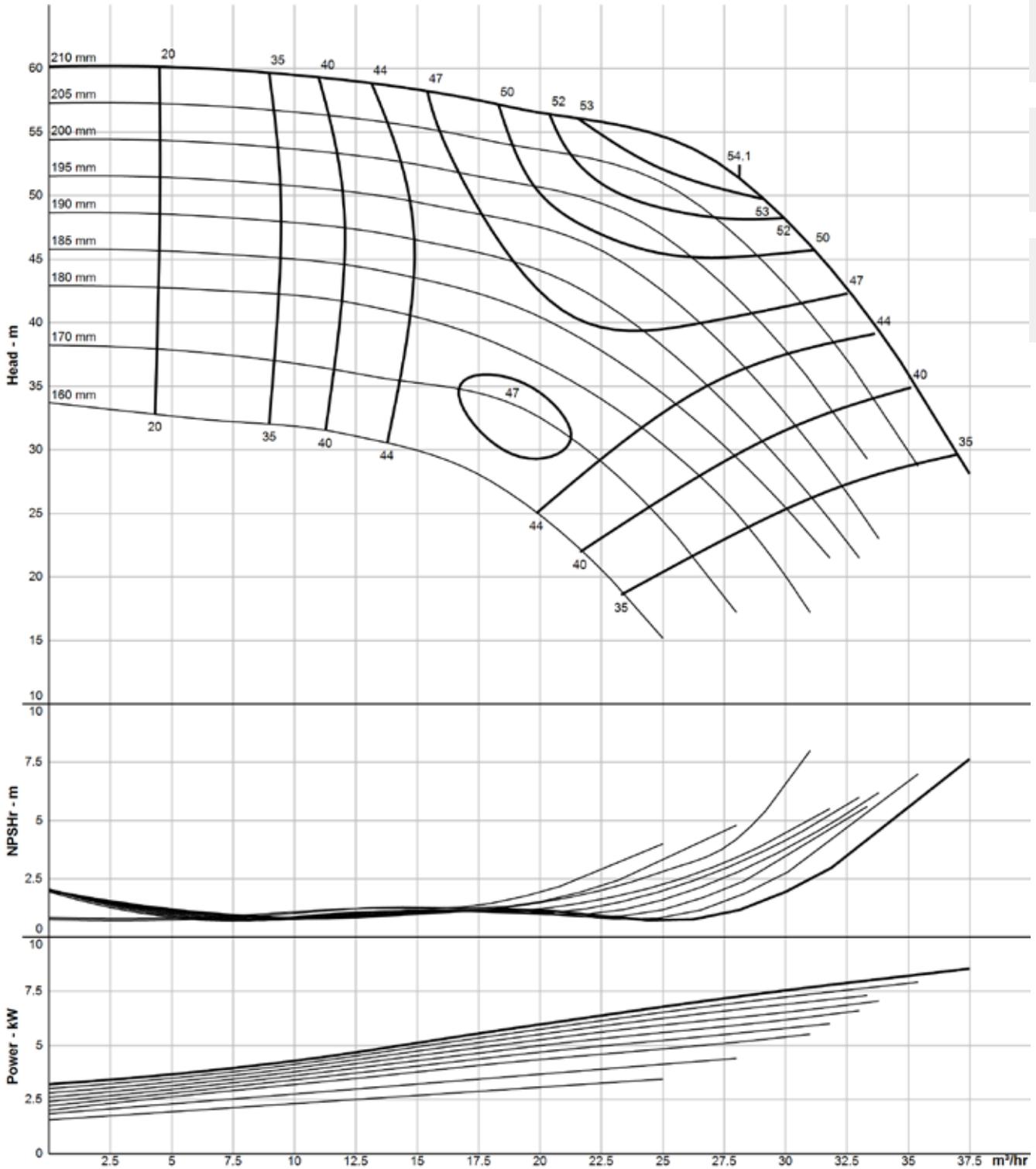
GEA Hilge TP 2050 Performance Curve

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The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

GEA Hilge TP 2575

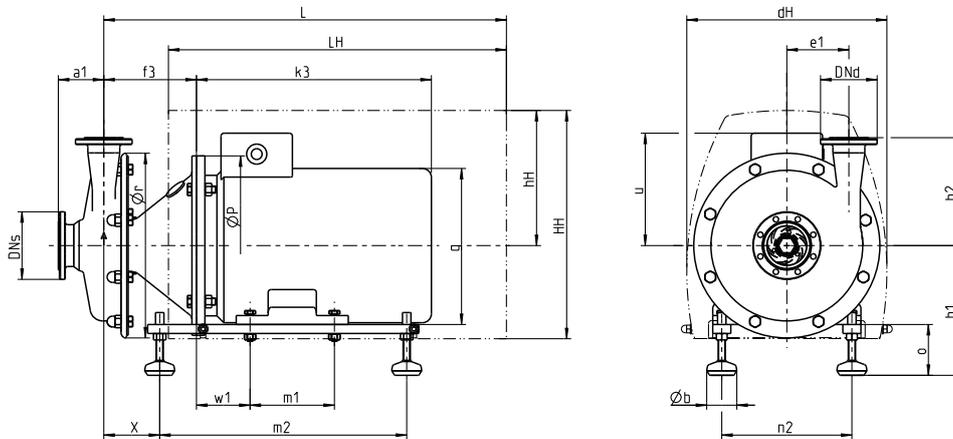


Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 65; 80, pressure side DN 50; 65
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 380/660 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 46 m ³ /h
Pump head	Max. 85 m
Housing pressure	Max. 16 bar
Certificates	



* registered for recertification



Ør = 344 mm
e1 = 124.5 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
112M	5.5	563	207	471	341	278	195	50	250	136	333	70	140	335	111	190	85	197	83
112M	7.5	563	207	471	341	278	195	50	250	136	375	70	140	335	111	190	85	197	89
132M	9.0	671	227	561	381	332	195	50	300	156	410	89	178	410	97	216	85	217	119
132M	11.0	671	227	561	381	332	195	50	300	156	410	89	178	410	97	216	85	217	120
132M	15.0	671	227	561	381	332	195	50	300	156	435	89	178	410	97	216	85	217	134
160L	18.5	885	326	736	511	412	222	75	350	191	524	108	254	640	111	254	110	270	183
160L	22.0	885	326	736	511	412	222	75	350	191	554	108	254	640	111	254	110	270	192
200L	30.0	979	354	821	581	472	292	100	400	195	648	133	305	810	120	318	115	315	300

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

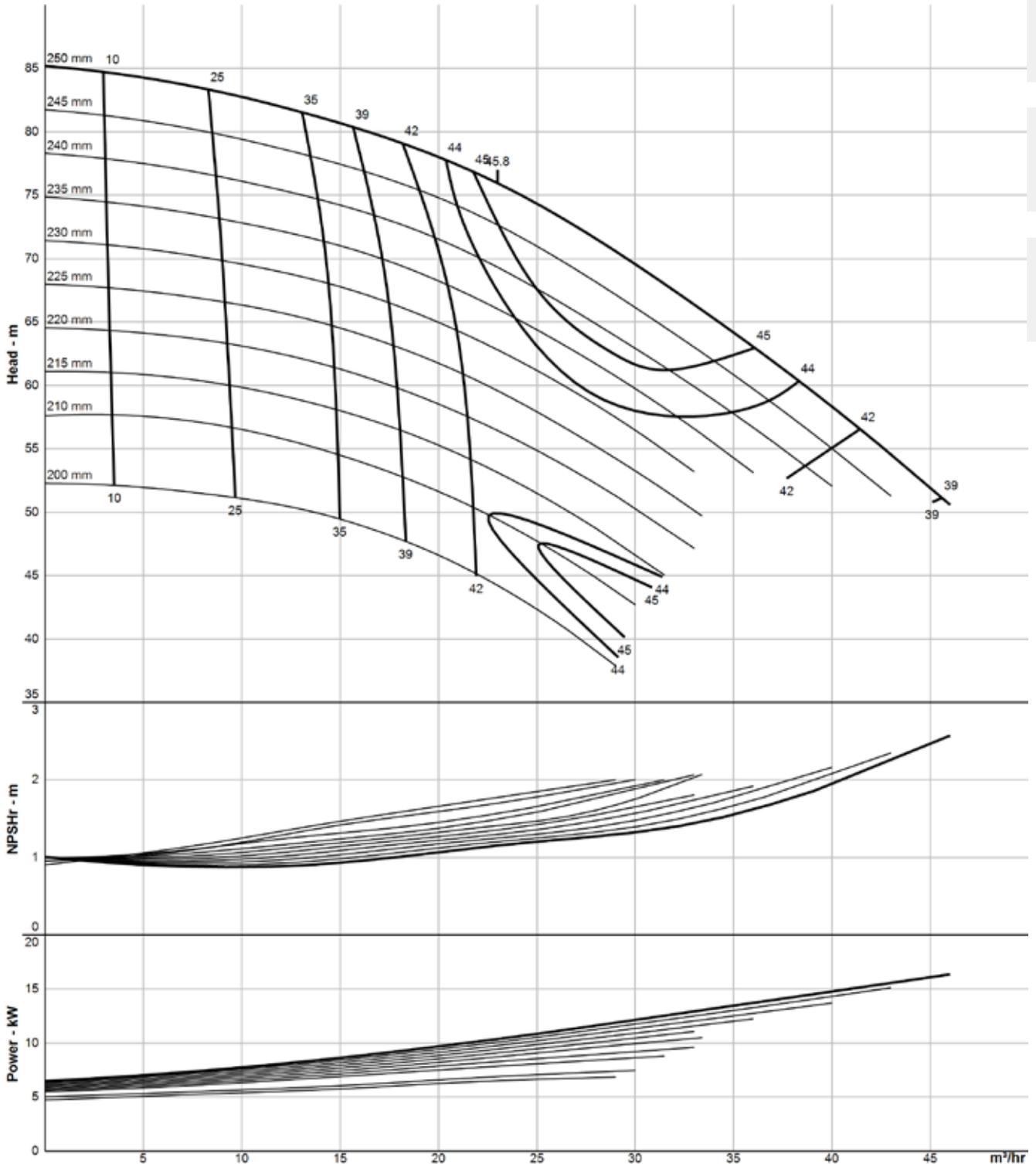
GEA Hilge TP 2575 Performance Curve

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The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

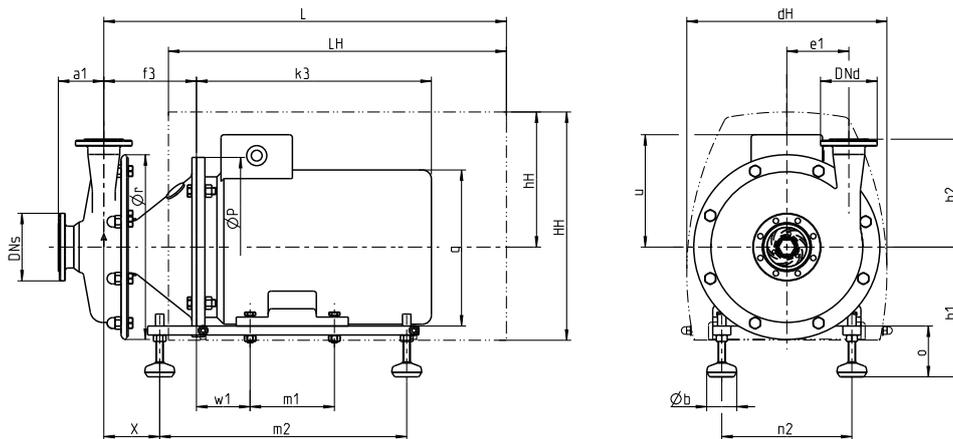
GEA Hilge TP 3050



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 65; 80, pressure side DN 50; 65
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 220/380 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 79 m ³ /h
Pump head	Max. 60 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 309 mm
e1 = 103 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
100L	3.0	561	207	471	341	278	149	50	250	134	360	63	140	335	100	160	85	197	66
112M	4.0	561	207	471	341	278	175	50	250	134	333	70	140	335	107	190	85	197	77
112M	5.5	561	207	471	341	278	175	50	250	134	333	70	140	335	107	190	85	197	82
112M	7.5	561	207	471	341	278	175	50	250	134	375	70	140	335	107	190	85	197	88
132S	5.5	669	227	561	381	332	195	50	300	154	410	89	140	410	93	216	85	217	127
132S	7.5	669	227	561	381	332	195	50	300	154	410	89	140	410	93	216	85	217	139
132M	9.0	669	227	561	381	332	195	50	300	154	410	89	178	410	93	216	85	217	118
132M	11.0	669	227	561	381	332	195	50	300	154	410	89	178	410	93	216	85	217	119
132M	15.0	669	227	561	381	332	195	50	300	154	435	89	178	410	93	216	85	217	133
160M	11.0	883	326	736	511	412	222	75	350	189	524	108	210	640	107	254	110	270	173
160L	18.5	883	326	736	511	412	222	75	350	189	525	108	254	640	107	254	110	270	182
160L	22.0	883	326	736	511	412	222	75	350	189	554	108	254	640	107	254	110	270	191

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

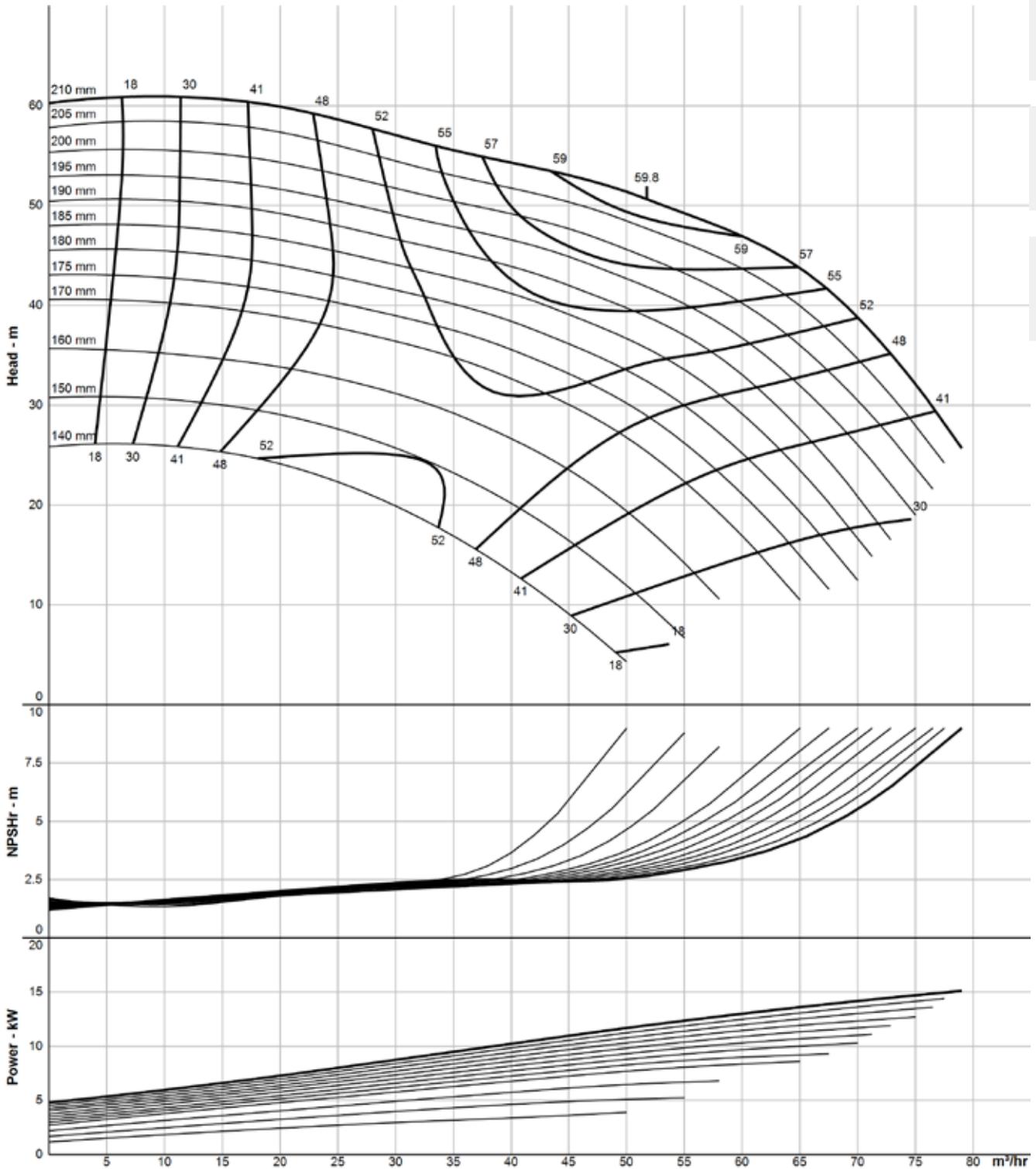
GEA Hilge TP 3050 Performance Curve

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The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

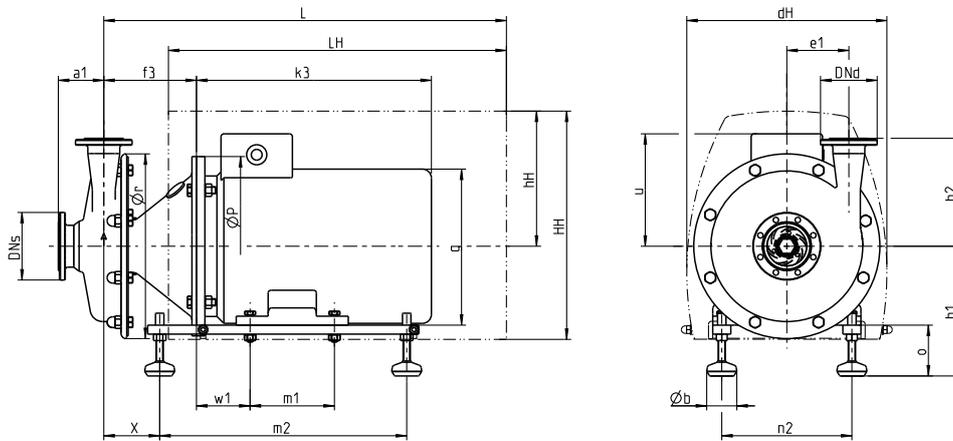
GEA Hilge TP 5060



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 80, pressure side DN 65; 80
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 380/660 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 86 m ³ /h
Pump head	Max. 75 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 334 mm
e1 = 114.5 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
112M	5.5	564	207	471	341	332	175	50	250	137	333	70	140	335	110	190	85	197	84
112M	7.5	564	207	471	341	332	175	50	250	137	375	70	140	335	110	190	85	197	90
132M	9.0	672	227	561	381	332	195	50	300	157	410	89	178	410	96	216	85	217	120
132M	11.0	672	227	561	381	332	195	50	300	157	410	89	178	410	96	216	85	217	121
132M	15.0	672	227	561	381	332	195	50	300	157	435	89	178	410	96	216	85	217	135
160M	11.0	886	326	736	511	412	222	75	350	192	524	108	210	640	110	254	110	270	160
160L	18.5	886	326	736	511	412	222	75	350	192	524	108	254	640	110	254	110	270	184
160L	22.0	886	326	736	511	412	222	75	350	192	554	108	254	640	110	254	110	270	193
200L	30.0	979	354	821	581	472	292	100	400	195	648	133	305	810	119	318	115	315	301

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

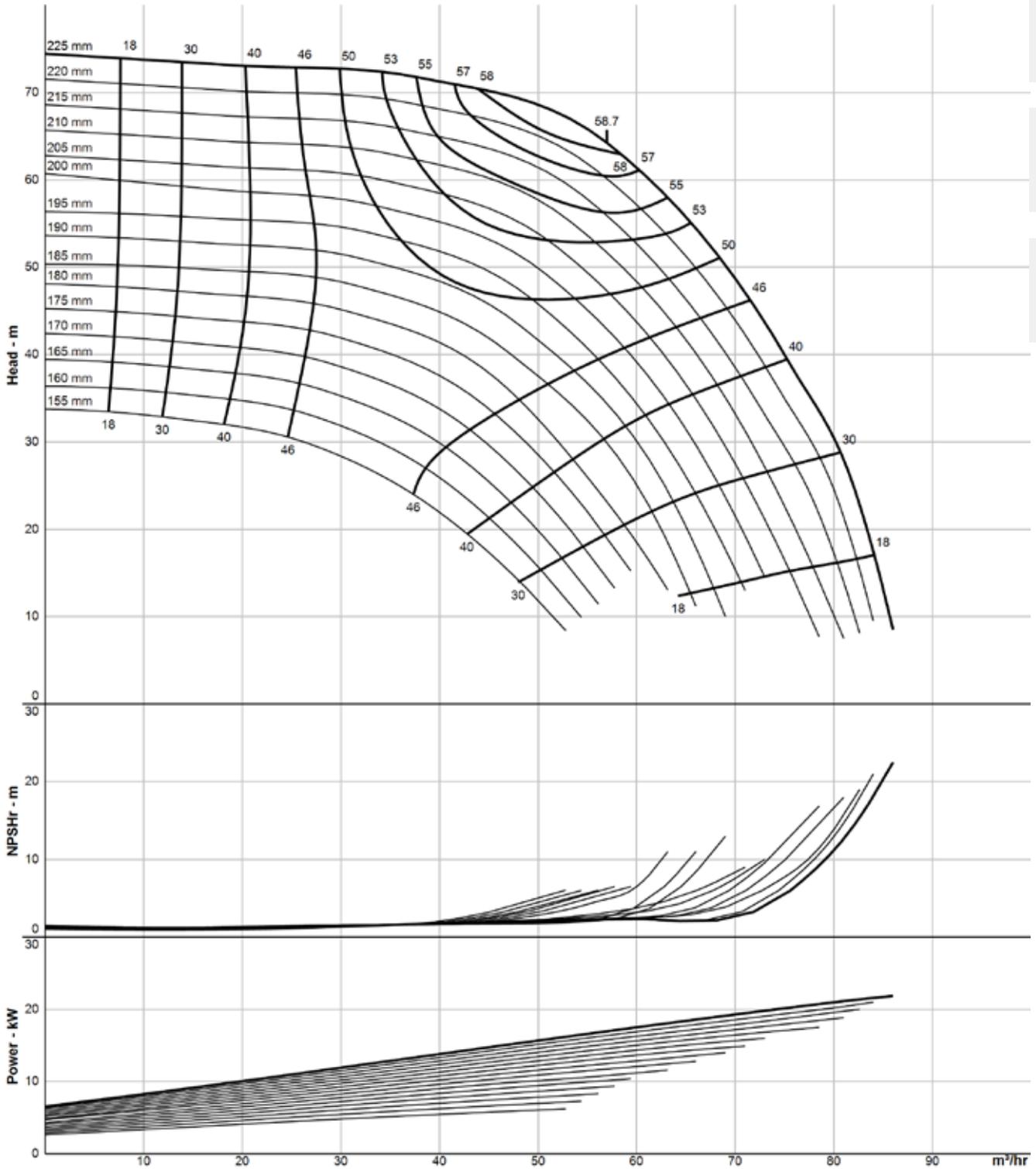
GEA Hilge TP 5060 Performance Curve

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The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

GEA Hilge TP 7060

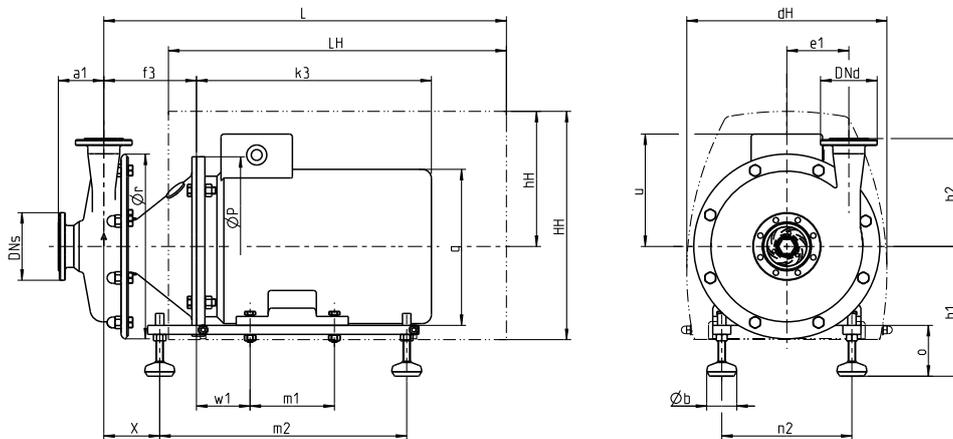


Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 80, pressure side DN 65; 80
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 380/660 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 115 m ³ /h
Pump head	Max. 74 m
Housing pressure	Max. 16 bar
Certificates	



* registered for recertification



Ør = 334 mm
e1 = 110 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
112M	7.5	559	207	471	341	278	195	50	250	132	375	70	140	335	105	190	85	197	91
132M	9.0	667	227	561	381	332	195	50	300	152	410	89	178	410	92	216	85	217	120
132M	11.0	667	227	561	381	332	195	50	300	152	410	89	178	410	92	216	85	217	122
132M	15.0	667	227	561	381	332	195	50	300	152	435	89	178	410	92	216	85	217	136
160L	18.5	881	326	736	511	412	222	75	350	187	524	108	254	640	106	254	110	270	185
160L	22.0	881	326	736	511	412	222	75	350	187	554	108	254	640	106	254	110	270	194
200L	30.0	975	354	821	581	472	292	100	400	191	648	133	305	810	114	318	115	345	302

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

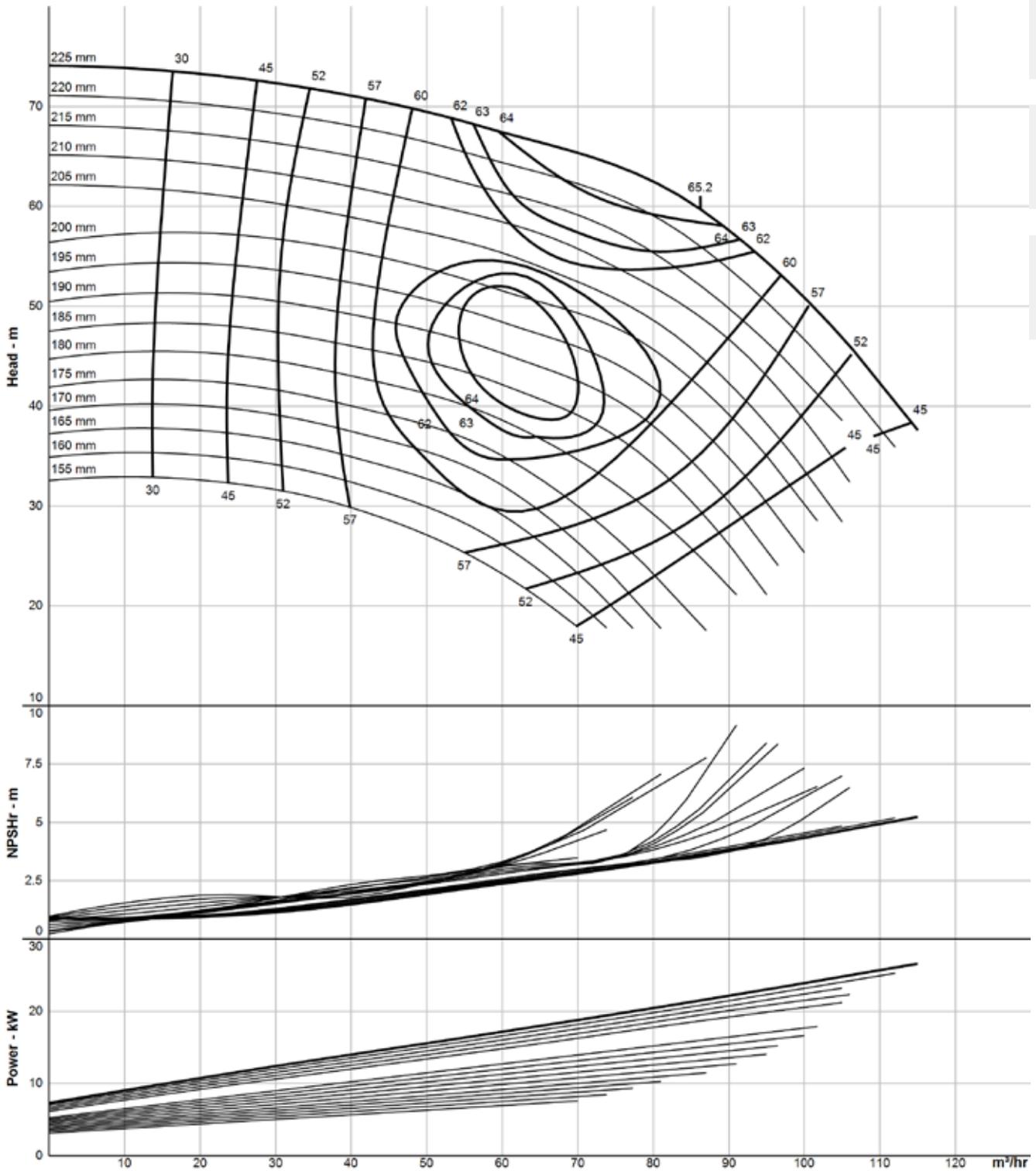
GEA Hilge TP 7060 Performance Curve

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The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

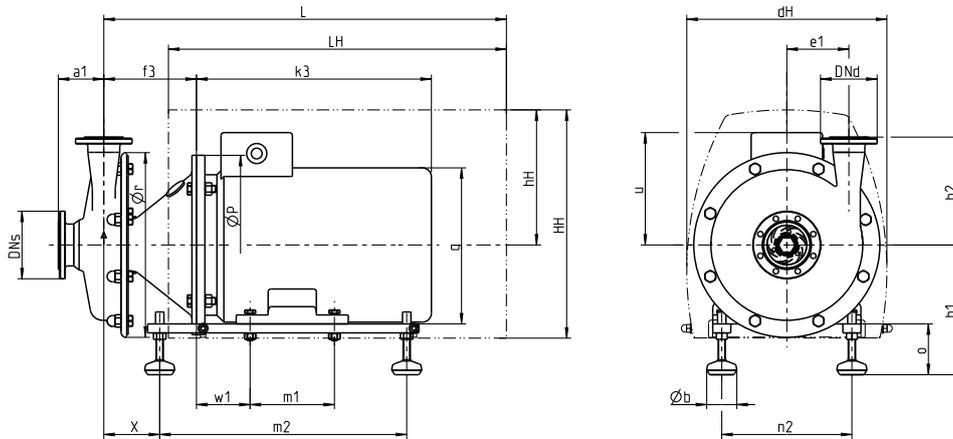
GEA Hilge TP 8050



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 100, pressure side DN 65; 80
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 380/660 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 117 m ³ /h
Pump head	Max. 57 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 432 mm
e1 = 114 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
112M	4.0	557	207	471	341	278	195	50	250	130	333	70	140	335	103	190	85	197	83
112M	5.5	557	207	471	341	278	195	50	250	130	333	70	140	335	103	190	85	197	88
112M	7.5	557	207	471	341	278	195	50	250	130	375	70	140	335	103	190	85	197	94
132M	9.0	665	227	561	381	332	195	50	300	150	410	89	178	410	89	216	85	217	124
132M	11.0	665	227	561	381	332	195	50	300	150	410	89	178	410	89	216	85	217	125
132M	15.0	665	227	561	381	332	195	50	300	150	435	89	178	410	89	216	85	217	139
160M	11.0	879	326	736	511	412	222	75	350	185	524	108	210	640	103	254	110	270	173
160M	15.0	883	326	736	511	412	222	75	350	189	524	108	210	640	103	254	110	270	179
160L	18.5	879	326	736	511	412	222	75	350	185	524	108	254	640	103	254	110	270	184
160L	22.0	879	326	736	511	412	222	75	350	185	554	108	254	640	103	254	110	270	192
200L	30.0	973	354	821	581	472	292	100	400	189	648	133	305	810	112	318	115	315	301

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

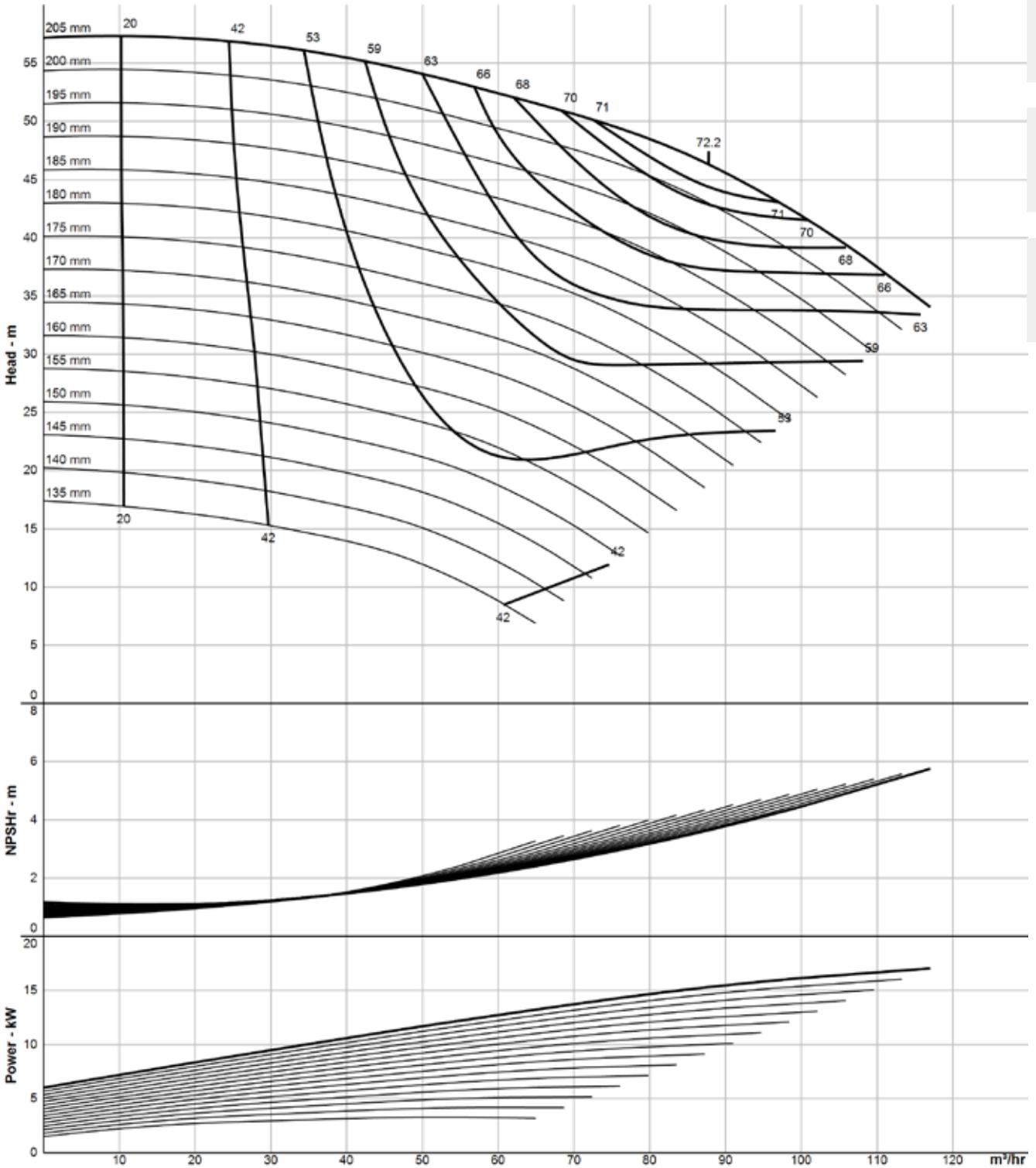
GEA Hilge TP 8050 Performance Curve

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The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

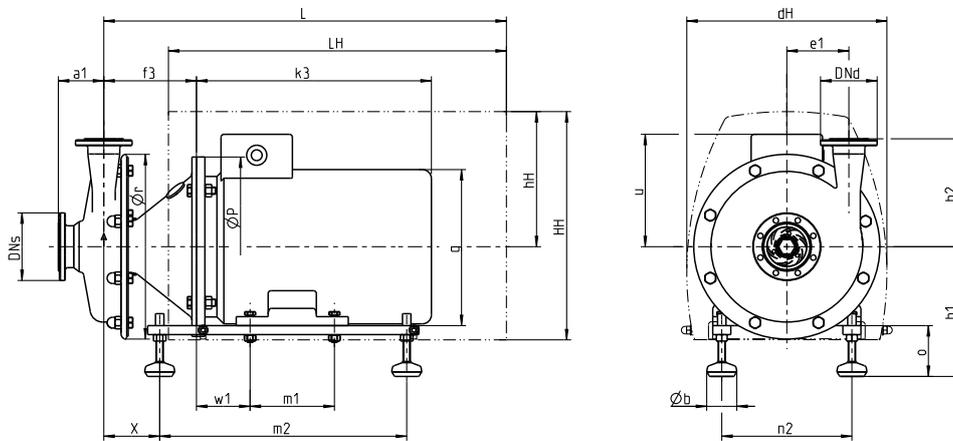
GEA Hilge TP 8080



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 100, pressure side DN 65; 80
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 380/660 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 134 m ³ /h
Pump head	Max. 90 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 359 mm
e1 = 124 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
132M	11.0	673	227	561	381	332	195	50	300	158	410	89	178	410	97	217	85	217	124
132M	15.0	673	227	561	381	332	195	50	300	158	435	89	178	410	97	217	85	217	138
160M	11.0	887	325	736	510	412	222	75	350	193	524	108	210	640	111	254	110	270	172
160M	15.0	887	325	736	510	412	222	75	350	193	554	108	210	640	111	254	110	270	178
160L	18.5	887	326	736	511	412	222	75	350	193	524	108	254	640	111	254	110	270	187
160L	22.0	887	326	736	511	412	222	75	350	193	554	108	254	640	111	254	110	270	196
200L	30.0	980	354	821	581	472	292	100	400	196	648	133	305	810	119	318	115	315	304
200L	37.0	980	354	821	581	472	292	100	400	196	648	133	305	810	119	318	115	315	316
200M	45.0	980	354	821	581	472	292	100	400	196	678	133	305	810	119	318	115	315	349

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

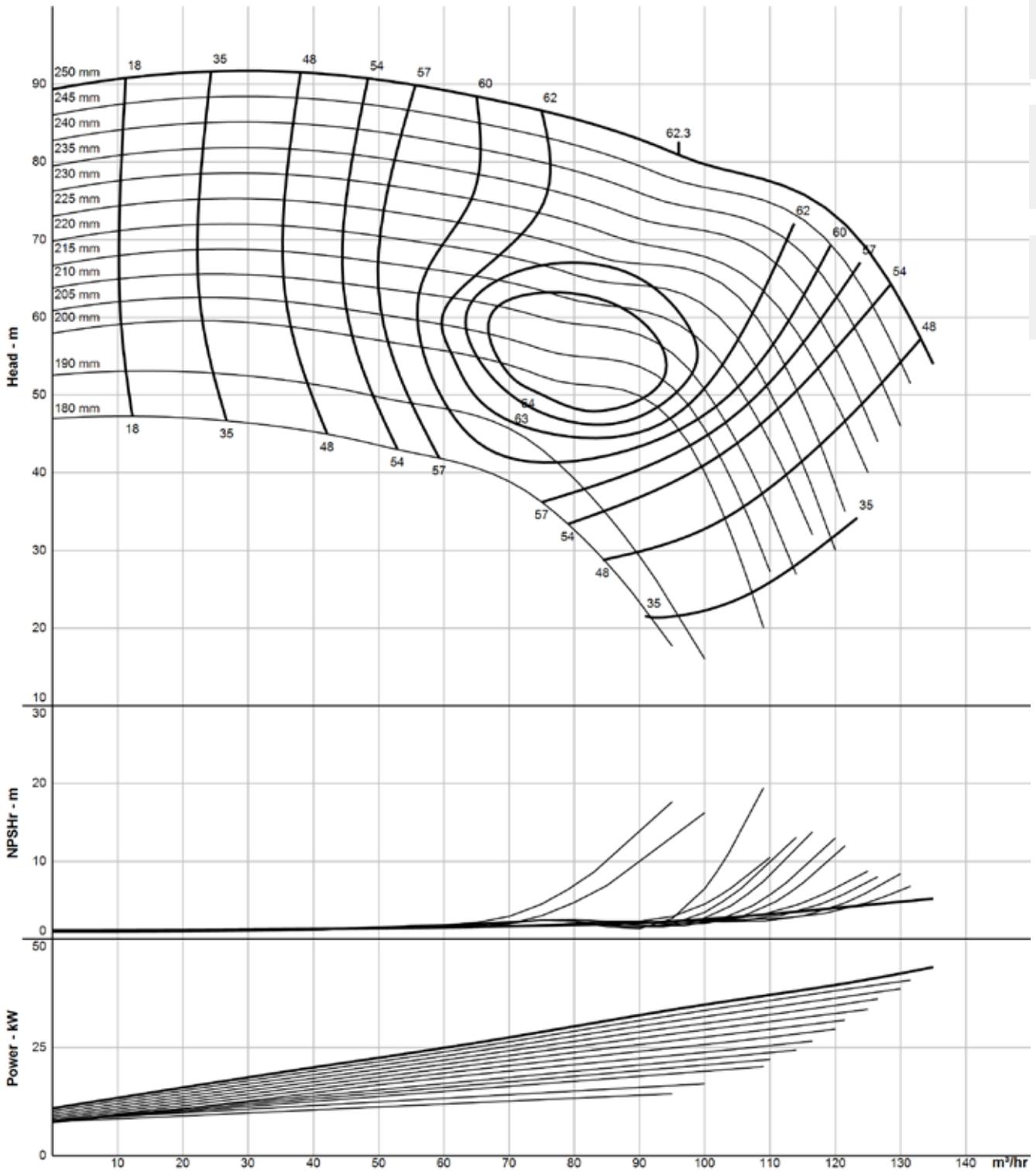
GEA Hilge TP 8080 Performance Curve

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The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

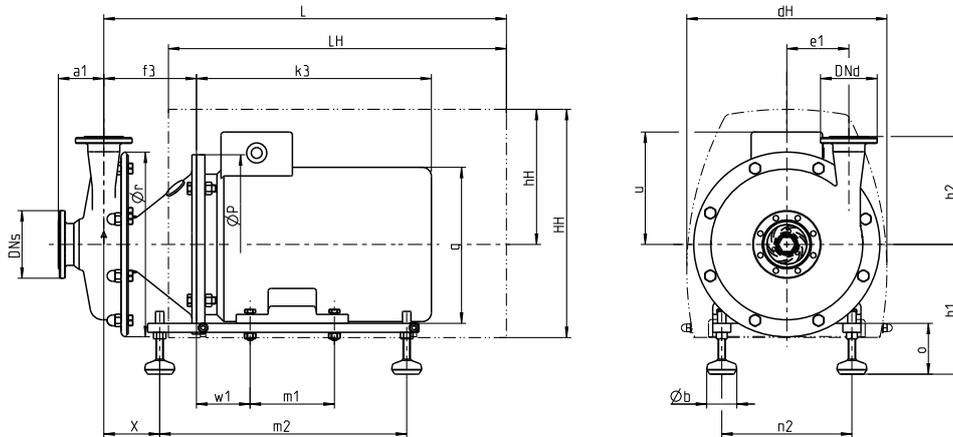
GEA Hilge TP 16040



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 100; 150, pressure side DN 100
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 380/660 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 215 m ³ /h
Pump head	Max. 49 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 359 mm
e1 = 108 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
132M	11.0	665	227	561	381	332	195	50	300	150	410	89	178	410	90	216	85	217	128
132M	15.0	665	227	561	381	332	195	50	300	150	435	89	178	410	90	216	85	217	142
160M	11.0	879	626	736	511	412	222	75	350	185	524	108	210	640	106	254	110	270	176
160M	15.0	879	626	736	511	412	222	75	350	185	554	108	210	640	106	254	110	270	182
160L	18.5	879	326	736	511	412	222	75	350	185	524	108	210	640	106	254	110	270	191
160L	22.0	879	326	736	511	412	222	75	350	185	554	108	210	640	106	254	110	270	200
200L	30.0	973	354	821	581	472	292	100	400	189	648	133	305	810	112	318	115	315	308
200L	37.0	973	354	821	581	472	292	100	400	189	648	133	305	810	112	318	115	315	320
200M	45.0	973	354	821	581	472	292	100	400	189	678	133	305	810	112	318	115	315	353
225M	45.0	1.040	384	821	618	520	372	100	450	189	708	149	311	810	128	365	115	340	405

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

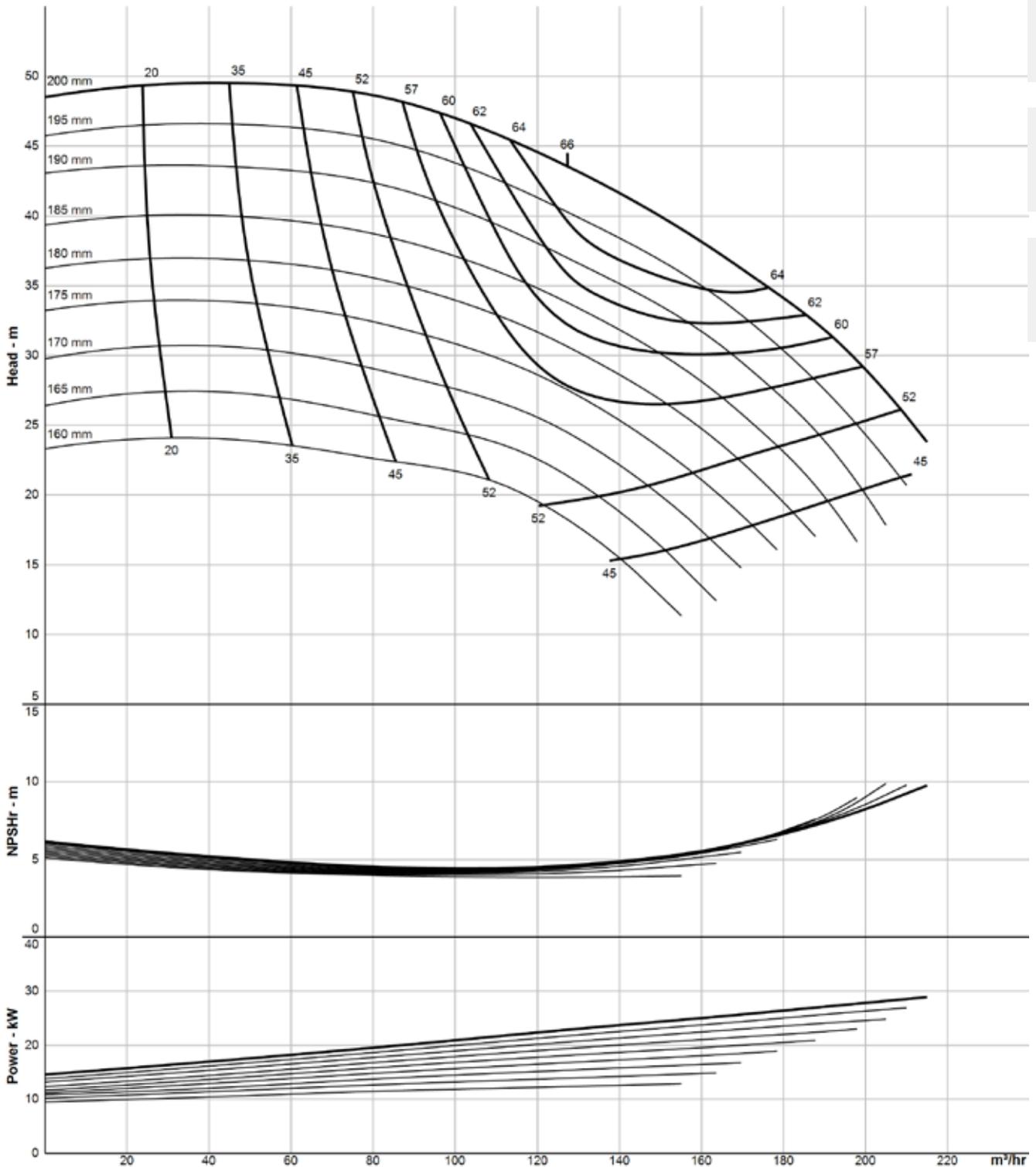
GEA Hilge TP 16040 Performance Curve

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The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

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4-POLE, 50 HZ

GEA Hilge TP

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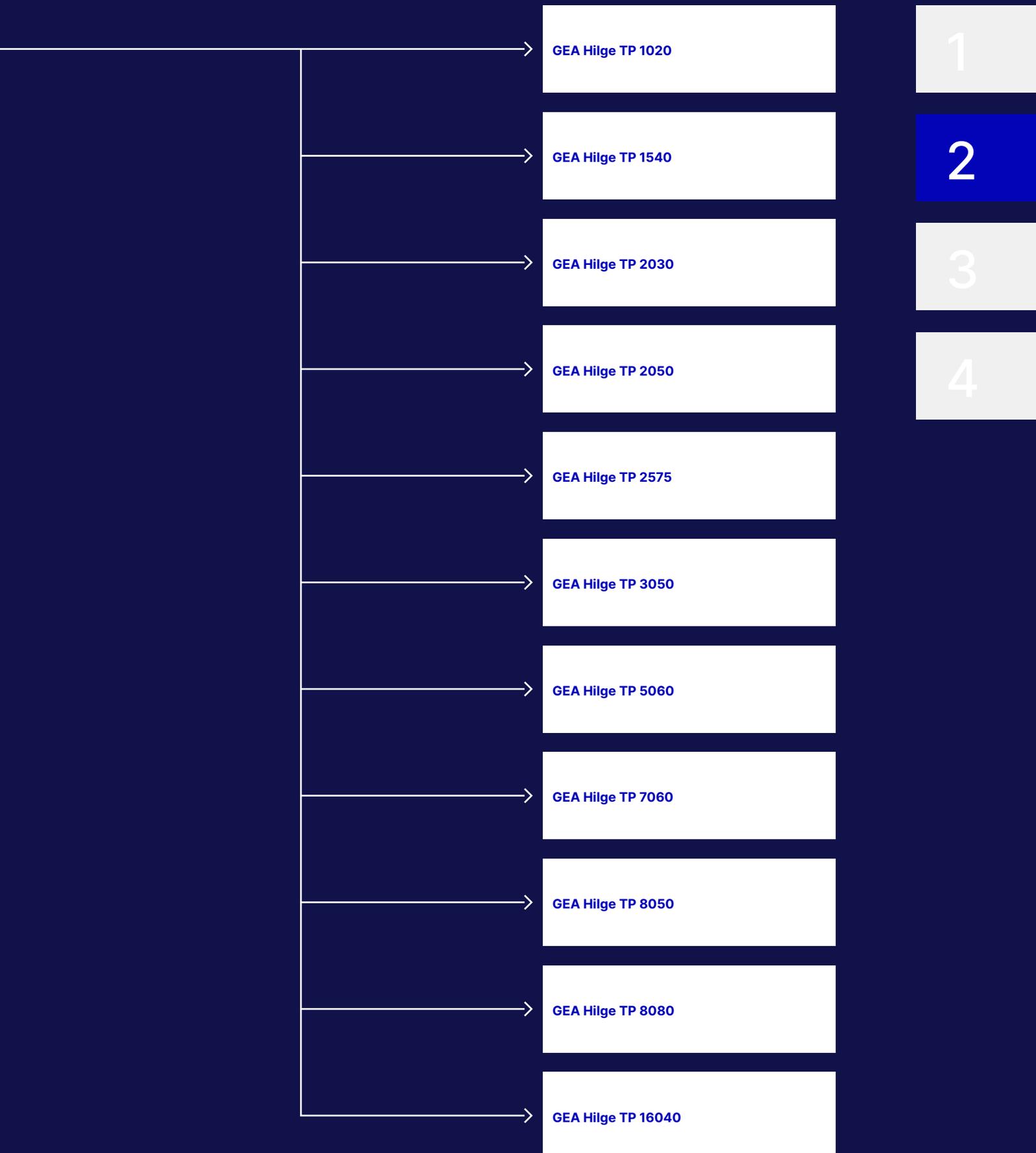
4

Pump Selection Matrix

GEA Hilge TP

4-pole

50 Hz



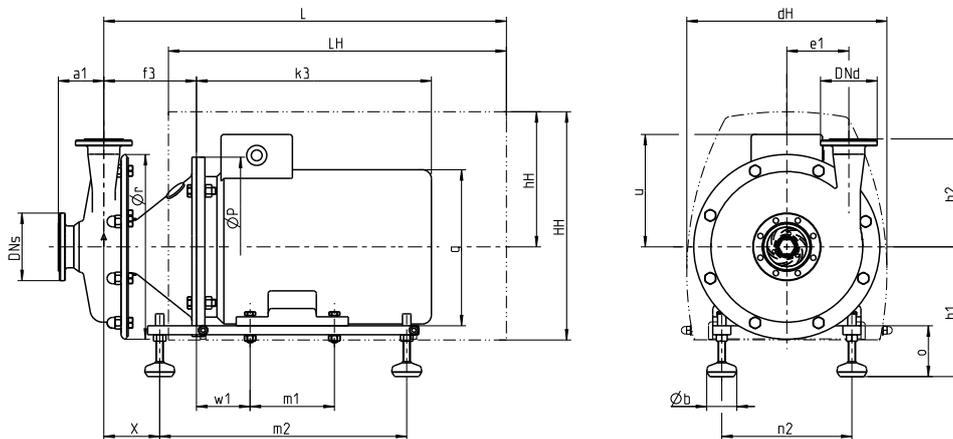
GEA Hilge TP 1020



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 50, pressure side DN 40
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 220/380 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 10 m ³ /h
Pump head	Max. 6 m
Housing pressure	Max. 10 bar
Certificates	

* registered for recertification



Ør = 225 mm
e1 = 76 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
80	0.75	535	178	431	291	228	126	50	200	144	236	50	100	285	84	125	82	174	34
90S	1.1	241	180	431	291	228	147	50	200	144	279	56	100	285	90	140	82	172	39
90L	1.5	241	180	431	291	228	147	50	200	144	279	56	125	285	90	140	82	172	41
100L	2.2	581	207	471	341	278	149	50	250	154	316	63	140	335	120	160	85	197	61
100L	3.0	581	207	471	341	278	149	50	250	154	360	63	140	335	120	160	85	197	64

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

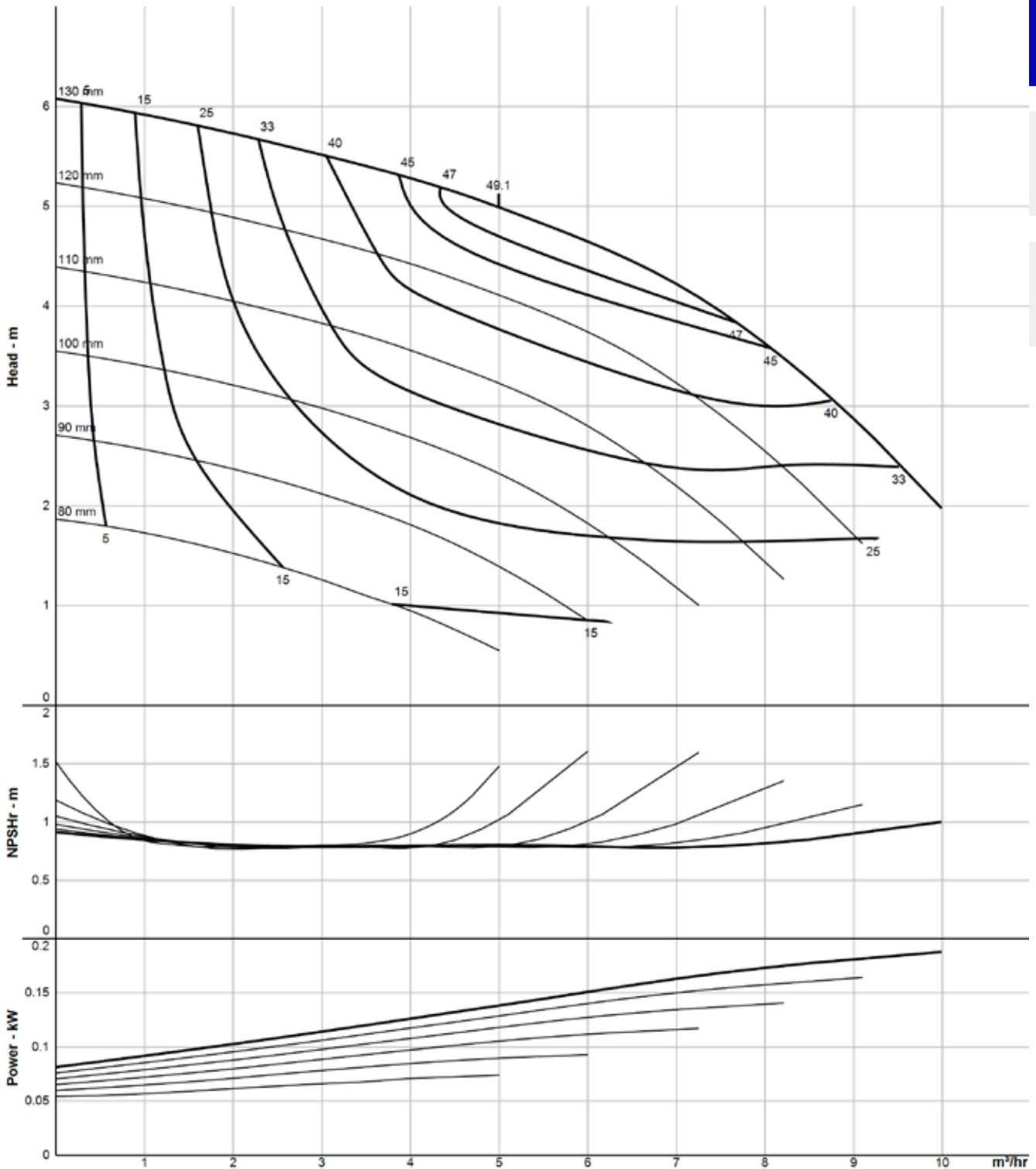
GEA Hilge TP 1020 Performance Curve

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The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

GEA Hilge TP 1540

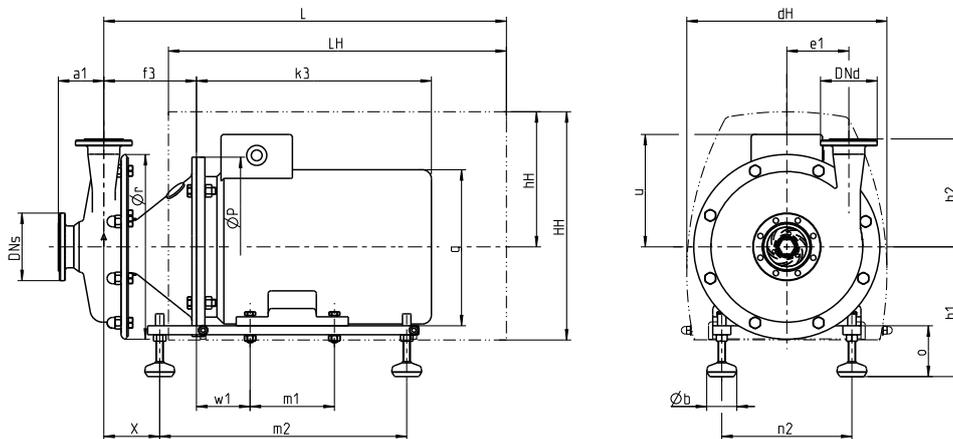


Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 65, pressure side DN 40
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 220/380 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 21 m ³ /h
Pump head	Max. 11 m
Housing pressure	Max. 16 bar
Certificates	



* registered for recertification



Ør = 274 mm
e1 = 90 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
80	0.75	558	178	431	291	228	126	50	200	121	236	50	140	285	61	125	82	197	37
90S	1.10	558	180	431	291	228	147	50	200	121	279	56	100	285	67	140	82	172	42
90L	1.50	558	180	431	291	228	147	50	200	121	279	56	125	285	67	140	82	172	44
100L	2.20	666	207	471	341	278	149	50	125	131	316	63	140	335	98	160	85	197	64
100L	3.00	666	207	471	341	278	149	50	125	131	360	63	140	335	98	160	85	197	67

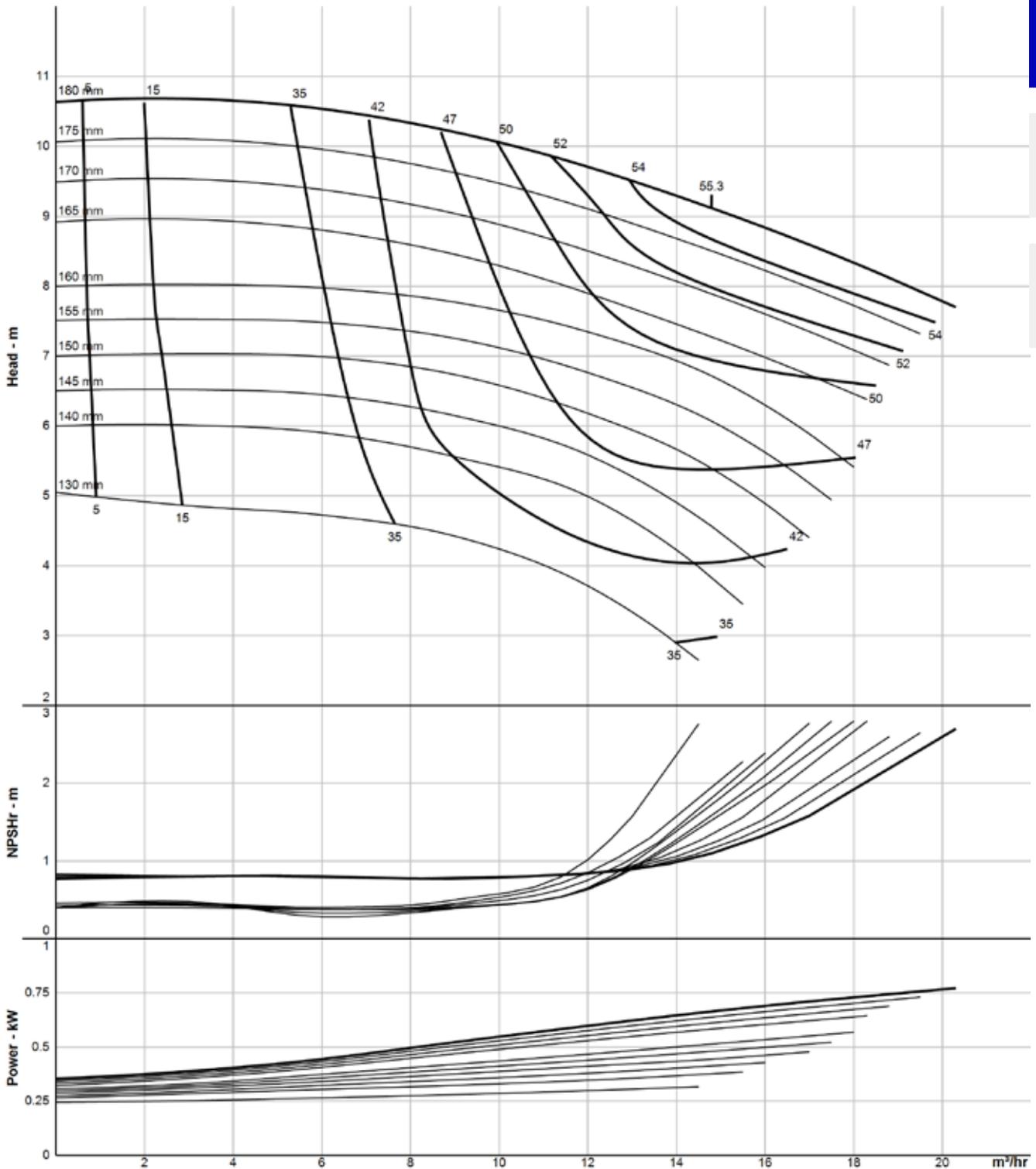
Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 1540 Performance Curve



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The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

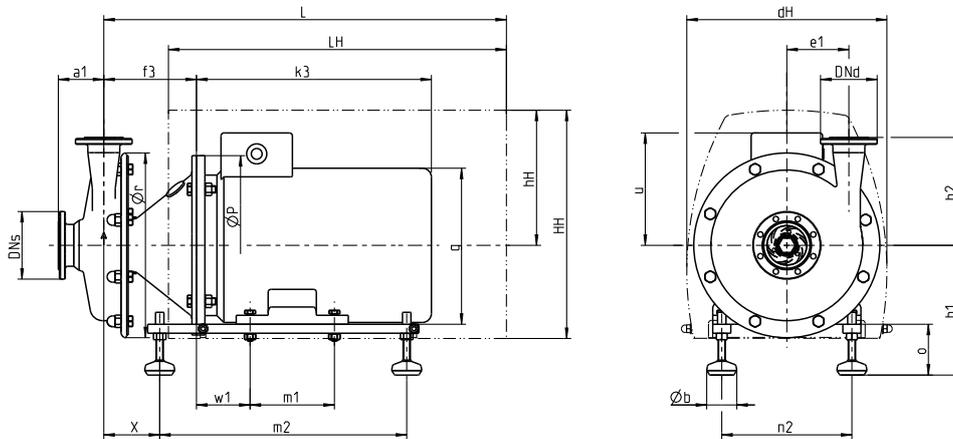
GEA Hilge TP 2030



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 50; 65, pressure side DN 40; 50
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 220/380 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 20 m ³ /h
Pump head	Max. 9 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 259 mm
e1 = 85 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
80	0.75	512	178	431	291	228	126	50	200	121	236	50	100	285	62	125	82	174	36
90S	1.10	518	180	431	291	228	147	50	200	121	279	56	100	285	68	140	82	172	41
90L	1.50	518	180	431	291	228	147	50	200	121	279	56	100	285	68	140	82	172	43
100L	2.20	558	207	417	341	278	149	50	250	131	316	63	140	335	98	160	85	197	63
100L	3.00	558	207	417	341	278	149	50	250	131	360	63	140	335	98	160	85	197	66
112M	4.00	558	207	471	341	278	175	50	250	131	333	70	140	335	105	190	85	197	75
132S	5.50	666	227	561	381	332	195	50	300	151	410	89	140	410	91	216	85	217	92

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

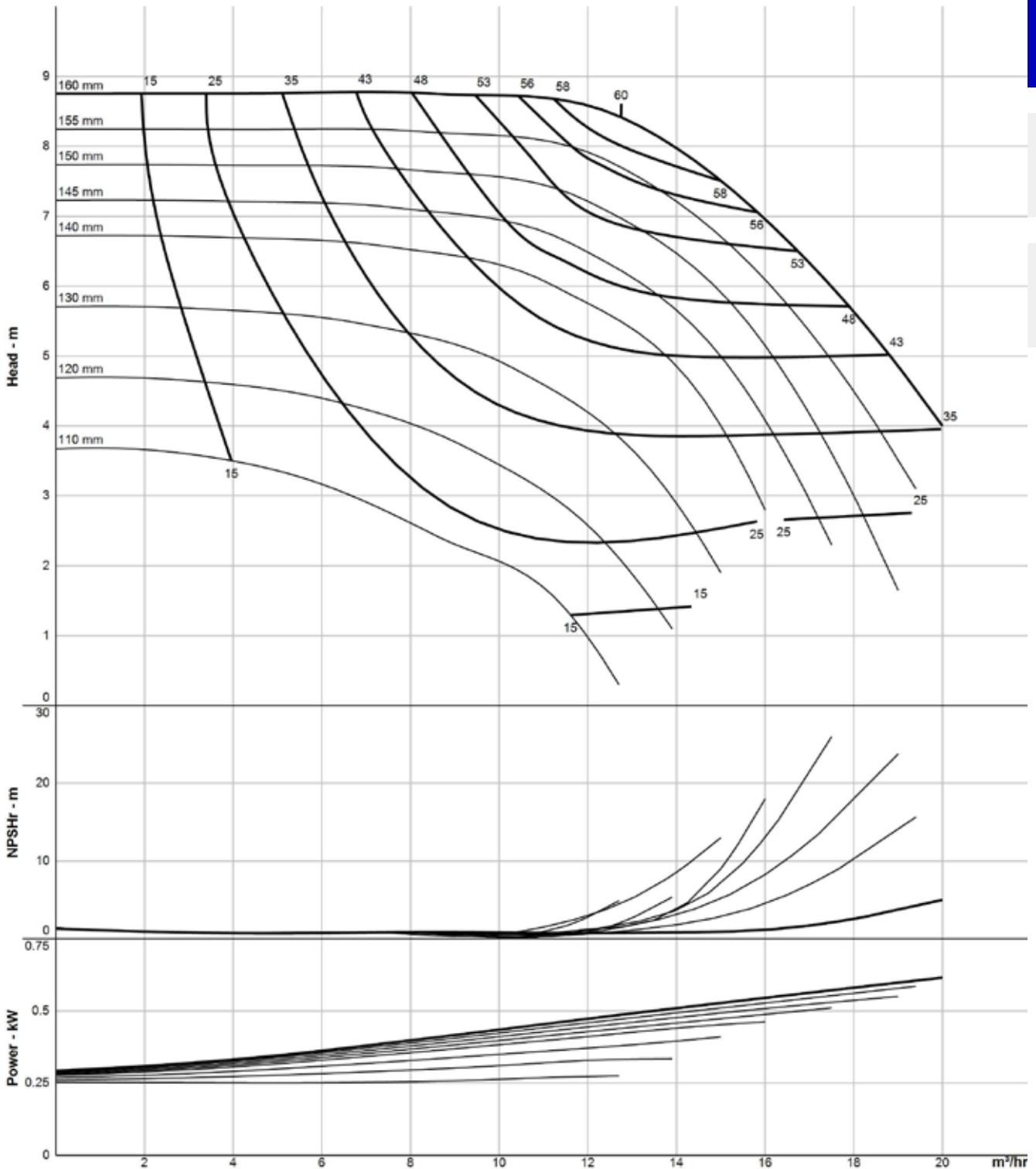
GEA Hilge TP 2030 Performance Curve

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The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

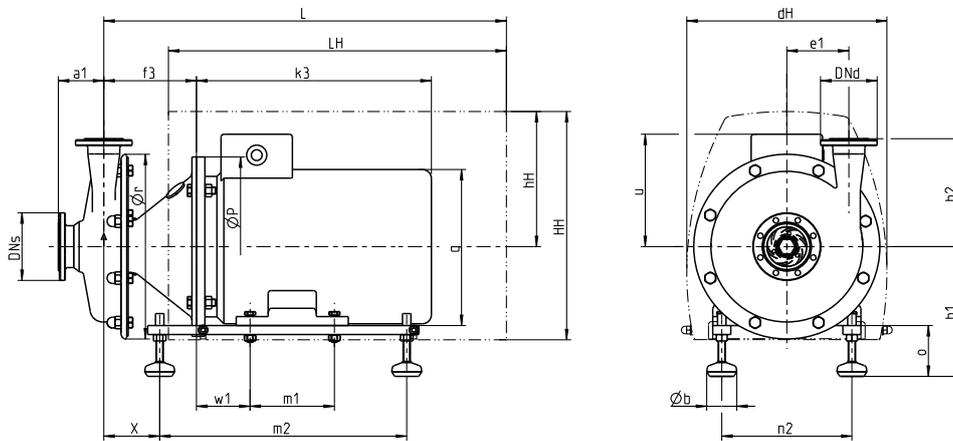
GEA Hilge TP 2050



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 50; 65, pressure side DN 50
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 220/380 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 19 m ³ /h
Pump head	Max. 17 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 309 mm
e1 = 107 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
80	0.75	517	178	431	291	228	126	50	200	126	236	50	100	285	66	125	82	174	38
90S	1.10	523	180	431	291	228	147	50	200	126	279	56	100	285	72	140	82	172	43
90L	1.50	523	180	431	291	228	147	50	200	126	279	56	125	285	72	140	82	172	45
100L	2.20	563	207	471	341	278	149	50	250	136	316	63	140	335	102	160	85	197	64
100L	3.00	563	207	471	341	278	149	50	250	136	360	63	140	335	102	160	85	197	68
112M	4.00	563	207	471	341	278	175	50	250	136	333	70	140	335	109	190	85	197	77

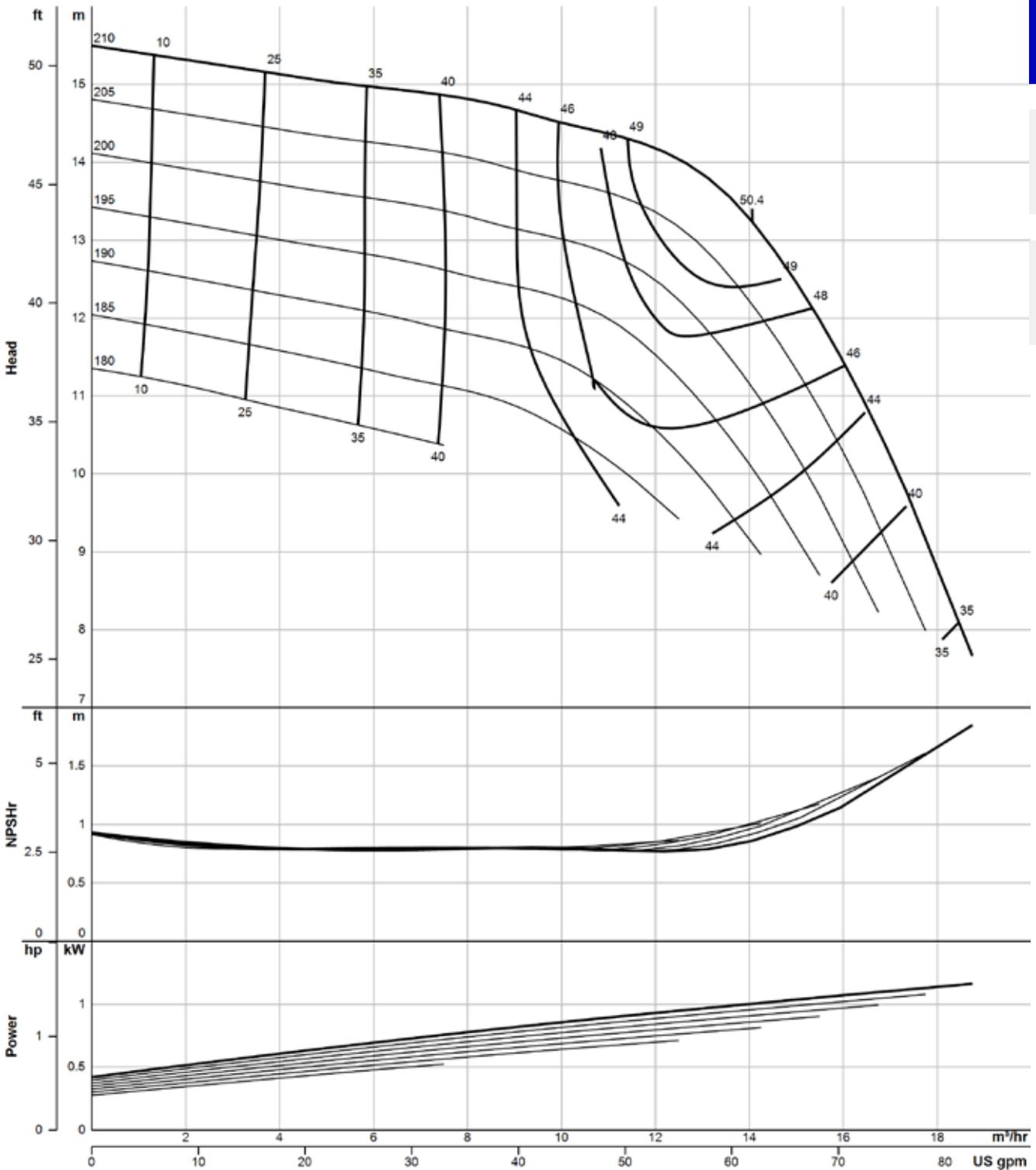
Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 2050 Performance Curve



1

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4

The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

GEA Hilge TP 2575

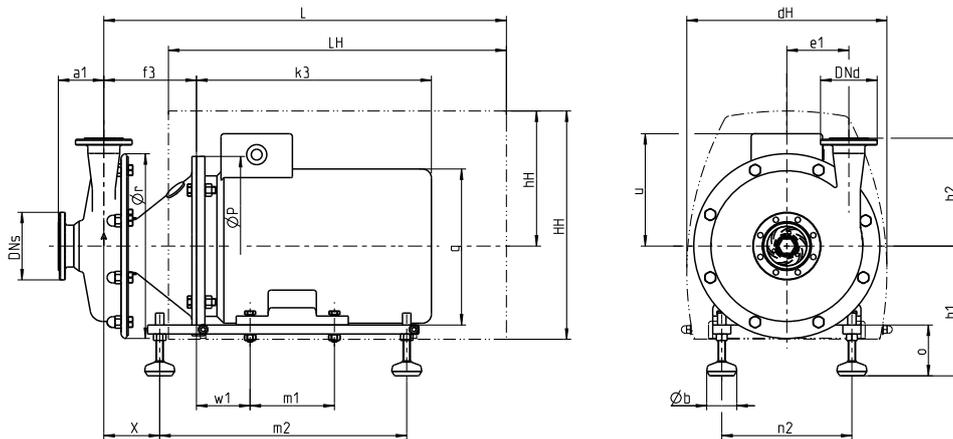


Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 65, pressure side DN 50
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 380/660 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 23 m ³ /h
Pump head	Max. 21 m
Housing pressure	Max. 16 bar
Certificates	



* registered for recertification



Ør = 344 mm
e1 = 124.5 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
100L	3.0	563	207	471	341	278	149	50	250	136	360	63	140	335	104	160	85	197	72
112M	4.0	563	207	471	341	278	149	50	250	136	333	70	140	335	111	190	85	197	81
132M	5.5	671	227	561	381	332	195	50	300	156	410	89	140	410	97	216	85	217	98
132M	7.5	671	227	561	381	332	195	50	300	156	410	89	178	410	97	216	85	217	116

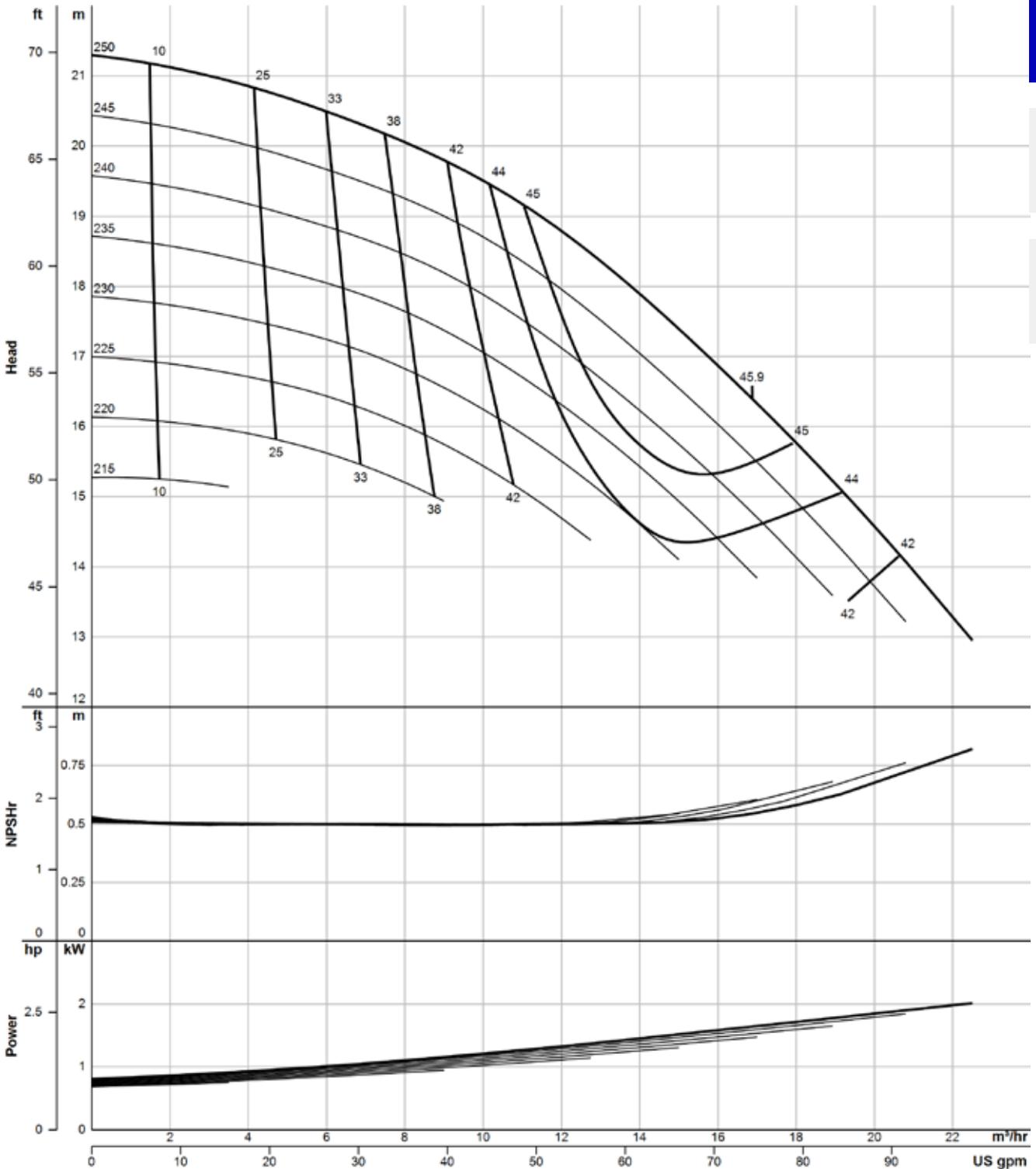
Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 2575 Performance Curve



- 1
- 2
- 3
- 4

The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

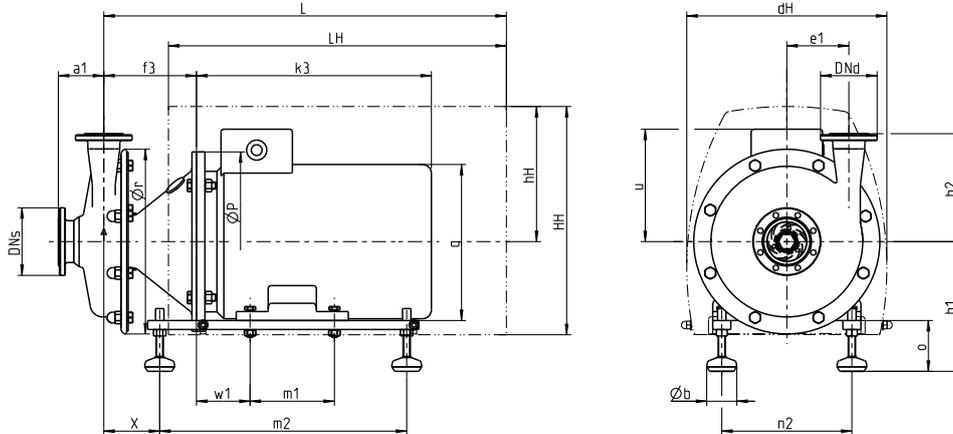
GEA Hilge TP 3050



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 65; 80, pressure side DN 50; 65
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 220/380 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 35 m ³ /h
Pump head	Max. 16 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 309 mm
e1 = 103 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
80	0.75	515	178	431	291	228	126	50	200	124	236	50	100	285	64	125	82	174	41
90S	1.10	521	180	431	291	228	147	50	200	124	279	56	100	285	70	140	82	172	46
90L	1.50	521	180	431	291	228	147	50	200	124	279	56	125	285	70	140	82	172	48
100L	2.20	561	207	471	341	278	149	50	250	134	316	63	140	335	100	160	85	197	68
100L	3.00	561	207	471	341	278	149	50	250	134	360	63	140	335	100	160	85	197	71
112M	4.00	561	207	471	341	278	175	50	250	134	333	70	140	335	107	190	85	197	80
132S	5.50	669	227	561	381	332	195	50	300	154	410	89	140	410	93	216	85	217	97
132S	7.50	669	227	561	381	332	195	50	300	154	410	89	178	410	93	216	85	217	115

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

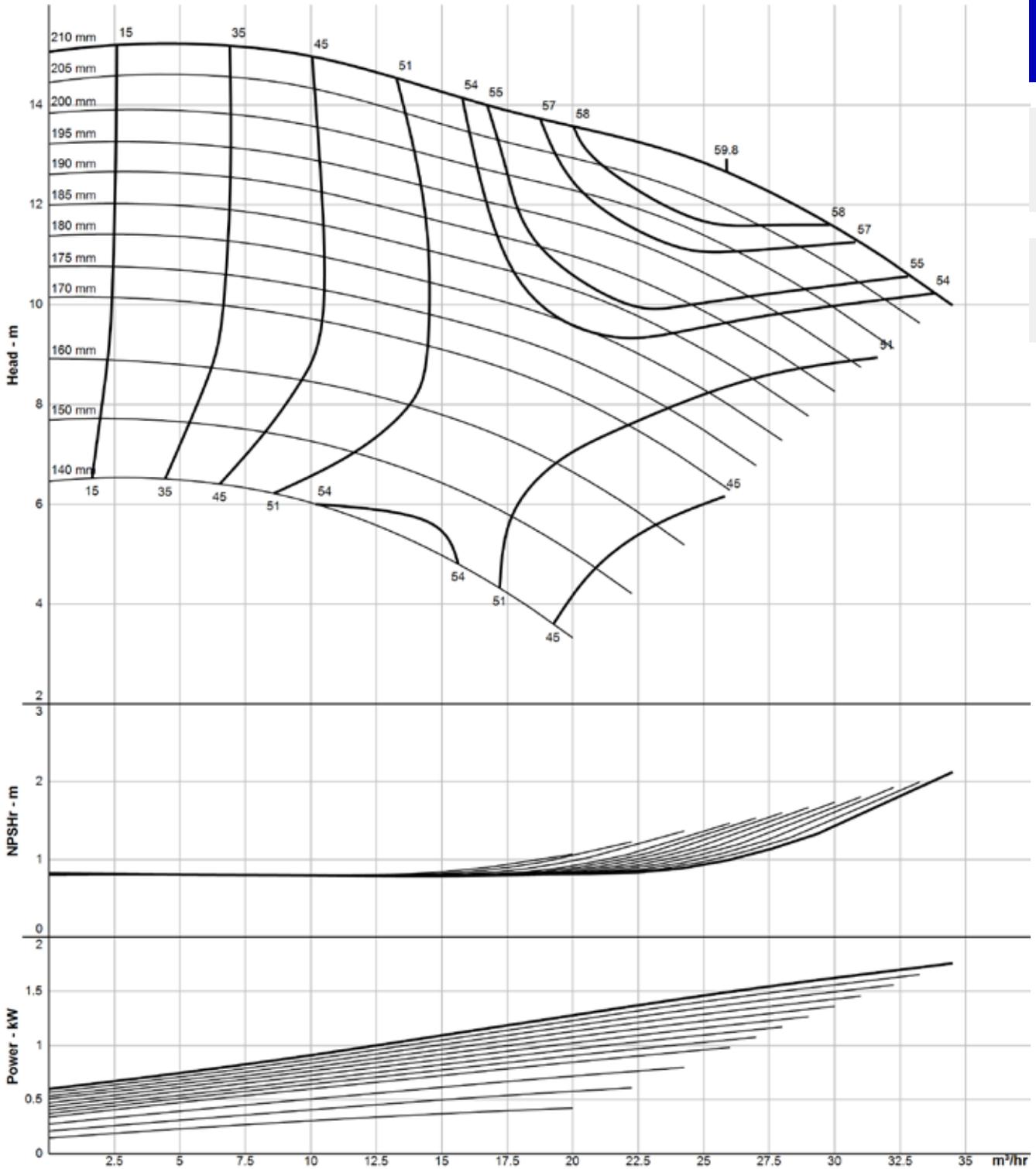
GEA Hilge TP 3050 Performance Curve

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The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

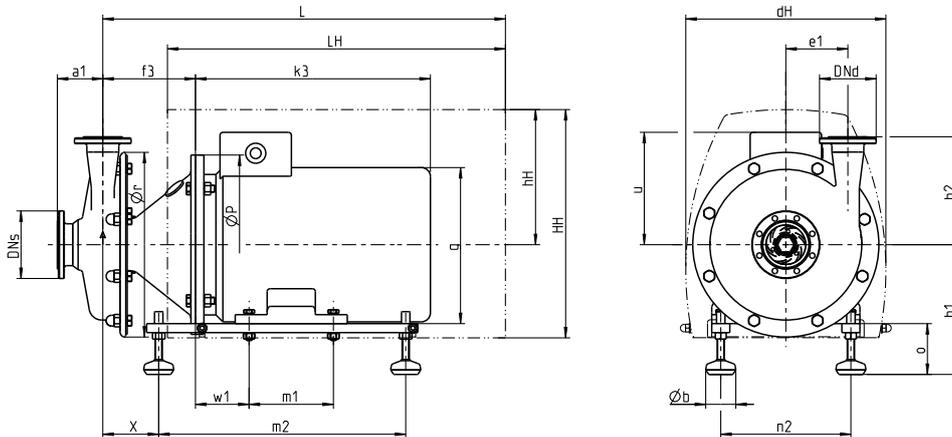
GEA Hilge TP 5060



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 80, pressure side DN 65; 80
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 220/380 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 42 m ³ /h
Pump head	Max. 19 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 334 mm
e1 = 114.5 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
100L	2.2	564	207	471	341	278	149	50	250	137	316	63	140	335	103	160	85	197	70
100L	3.0	564	207	471	341	278	149	50	250	137	360	63	140	335	103	160	85	197	73
112M	4.0	564	207	471	341	278	175	50	250	137	333	70	140	335	110	190	85	197	82
132S	5.5	672	227	561	381	332	195	50	300	157	410	89	140	410	96	216	85	217	99
132M	7.5	672	227	561	381	332	195	50	300	157	410	89	178	410	96	216	85	217	117

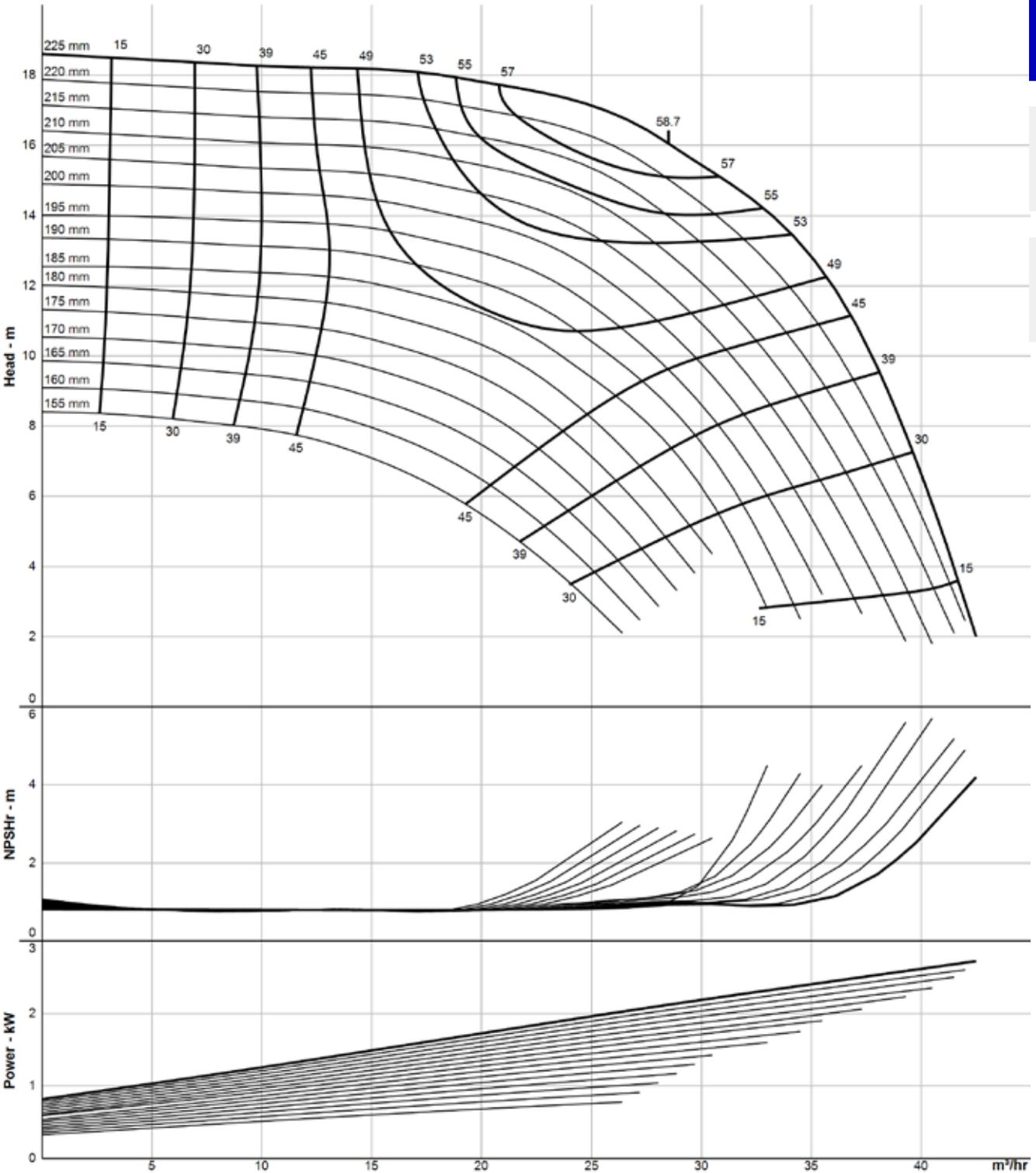
Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 5060 Performance Curve



1

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3

4

The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

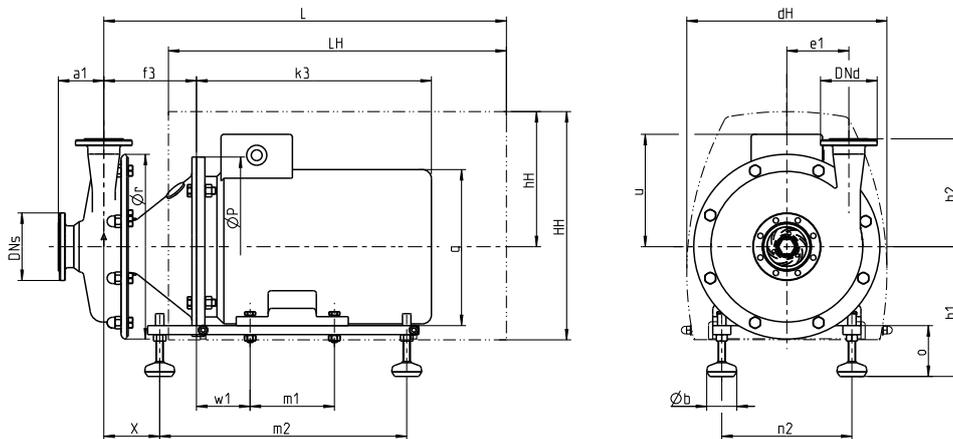
GEA Hilge TP 7060



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 80, pressure side DN 65; 80
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 220/380 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 58 m ³ /h
Pump head	Max. 19 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 334 mm
e1 = 110 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
100L	2.2	559	207	471	341	278	149	50	250	132	316	63	140	335	98	160	85	197	71
100L	3.0	559	207	471	341	278	149	50	250	132	360	63	140	335	98	160	85	197	74
112M	4.0	559	207	471	341	278	175	50	250	132	333	70	140	335	105	190	85	197	83
132S	5.5	667	227	561	381	332	195	50	300	152	410	89	140	410	92	216	85	217	100
132M	7.5	667	227	561	381	332	195	50	300	152	410	89	178	410	92	216	85	217	118

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

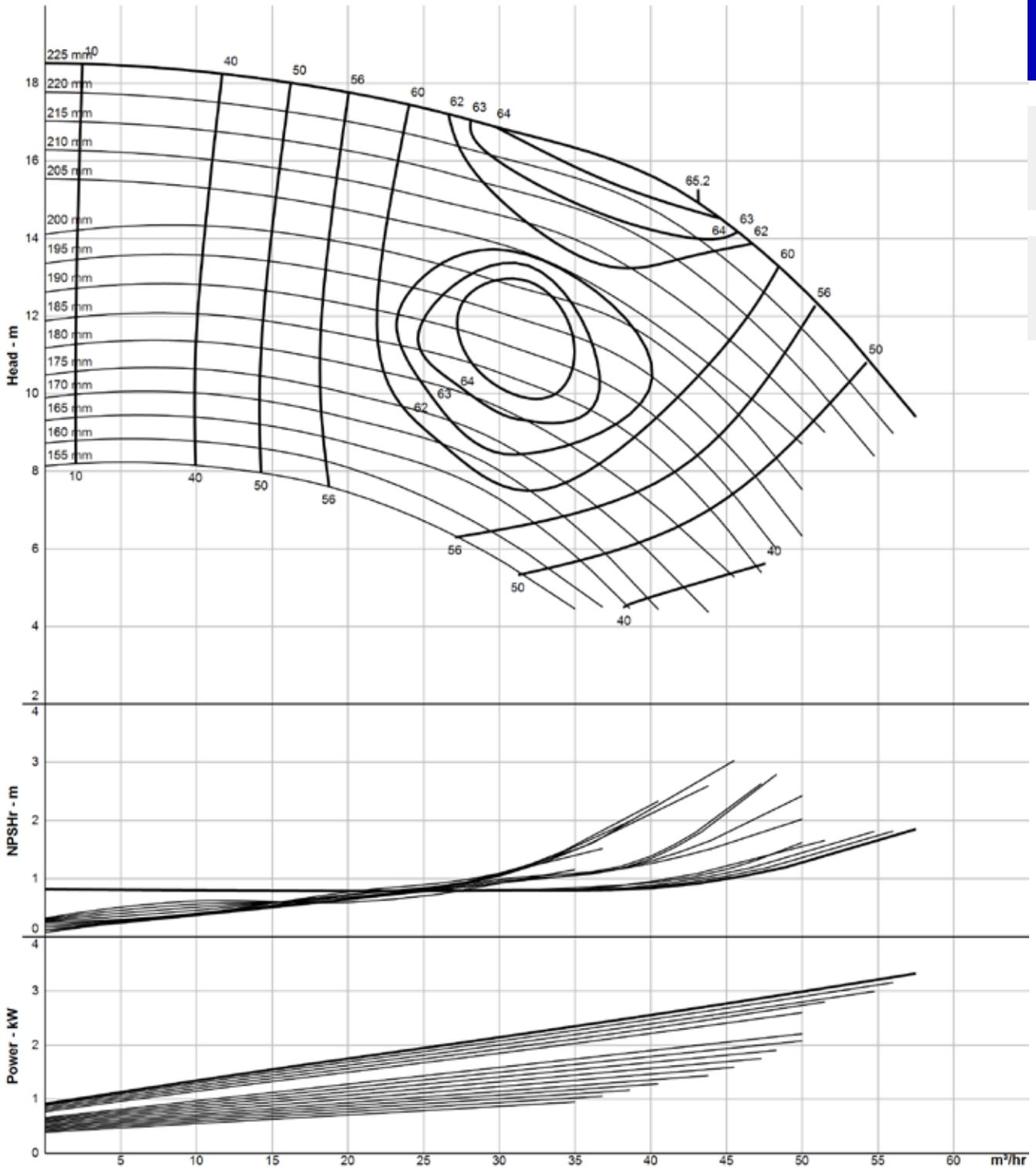
* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 7060 Performance Curve

- 1
- 2
- 3
- 4



The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

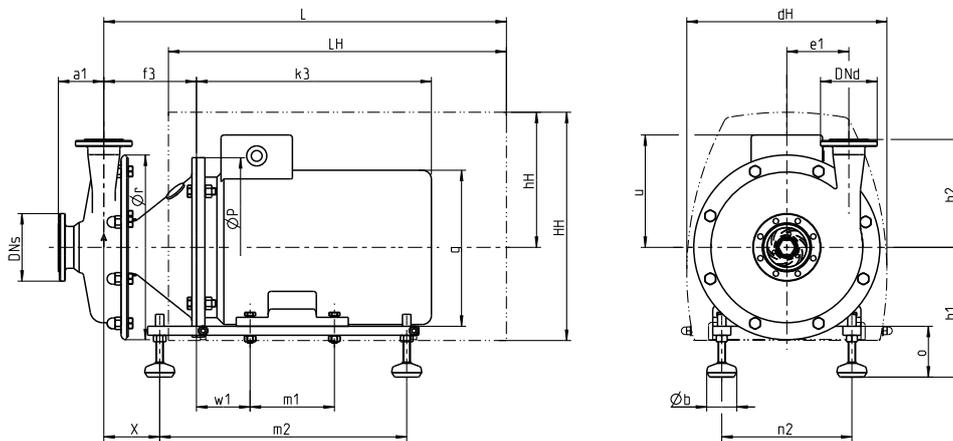
GEA Hilge TP 8050



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 100, pressure side DN 65; 80
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 220/380 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 59 m ³ /h
Pump head	Max. 14 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 432 mm
e1 = 114 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
100L	2.2	557	207	471	341	278	149	50	250	130	316	63	140	335	96	160	85	197	80
100L	3.0	557	207	471	341	278	149	50	250	130	360	63	140	335	96	160	85	197	83
112M	4.0	557	207	471	341	278	175	50	250	130	333	70	140	335	103	190	85	197	86
132S	5.5	665	227	561	381	332	195	50	300	152	410	89	140	410	89	216	85	217	103
132M	7.5	665	227	561	381	332	195	50	300	152	410	89	178	410	89	216	85	217	121

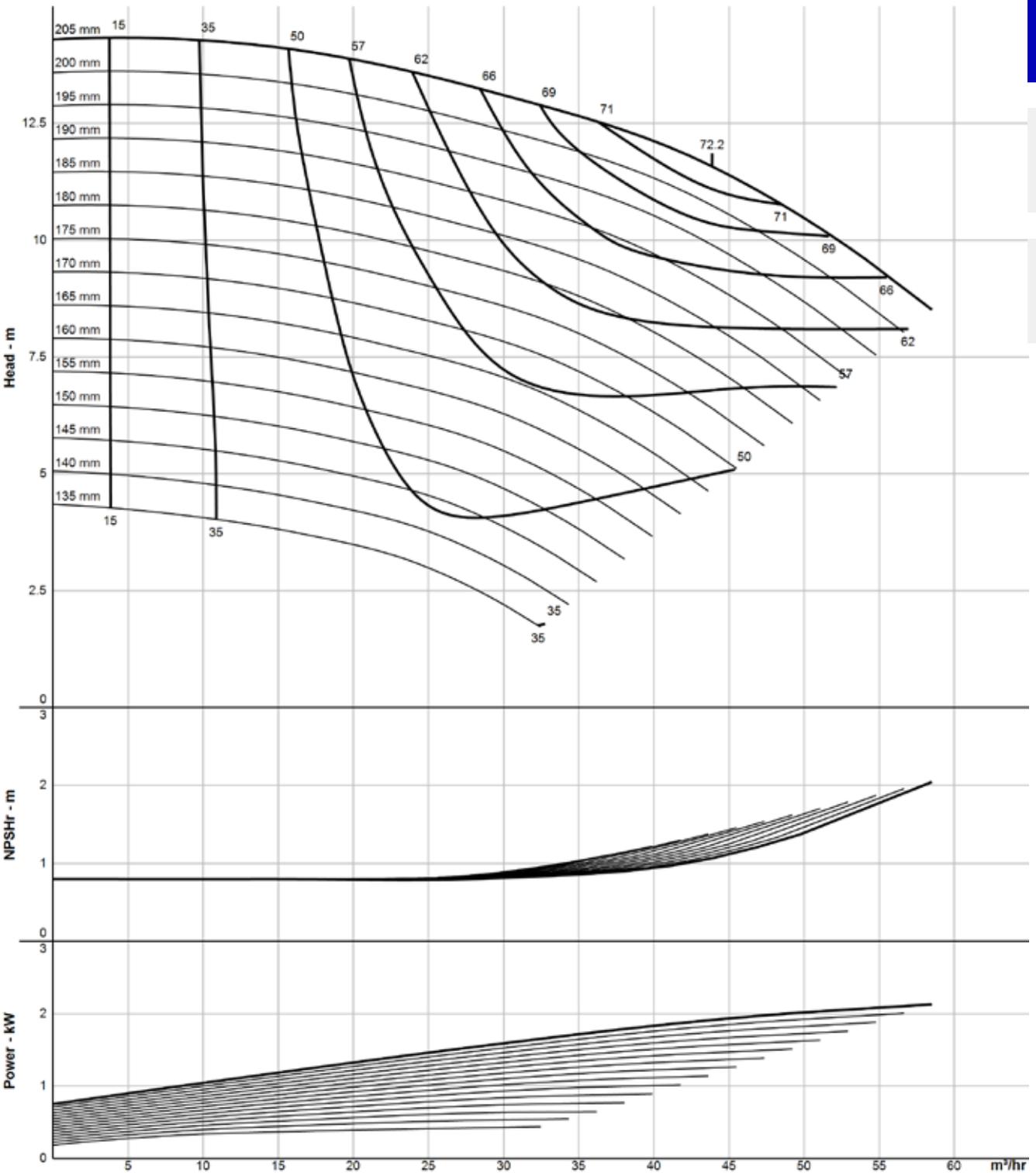
Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 8050 Performance Curve



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The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

GEA Hilge TP 8080

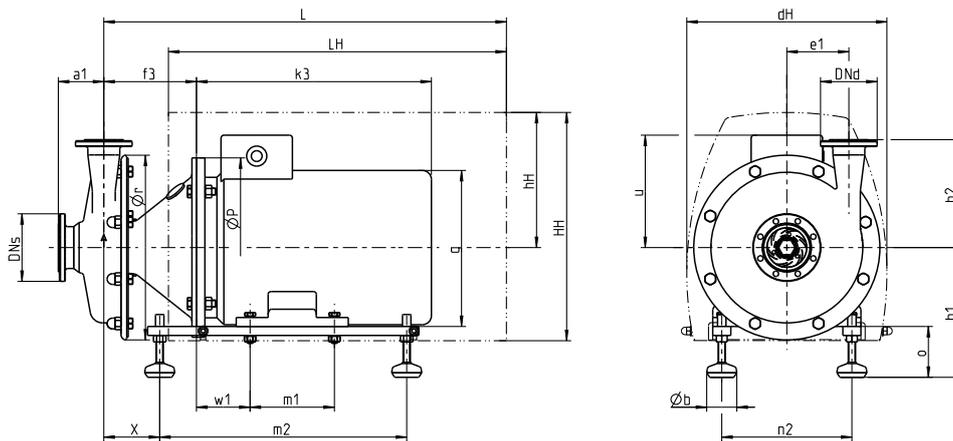


Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 100, pressure side DN 65; 80
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 380/660 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 67 m ³ /h
Pump head	Max. 23 m
Housing pressure	Max. 16 bar
Certificates	



* registered for recertification



Ør = 359 mm
e1 = 124 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
112M	4.0	565	207	471	341	278	175	50	250	138	333	70	140	335	111	190	85	197	85
132S	5.5	673	227	561	381	332	195	50	300	158	410	89	140	410	97	216	85	217	102
132M	7.5	673	227	561	381	332	195	50	300	158	410	89	178	410	97	216	85	217	120

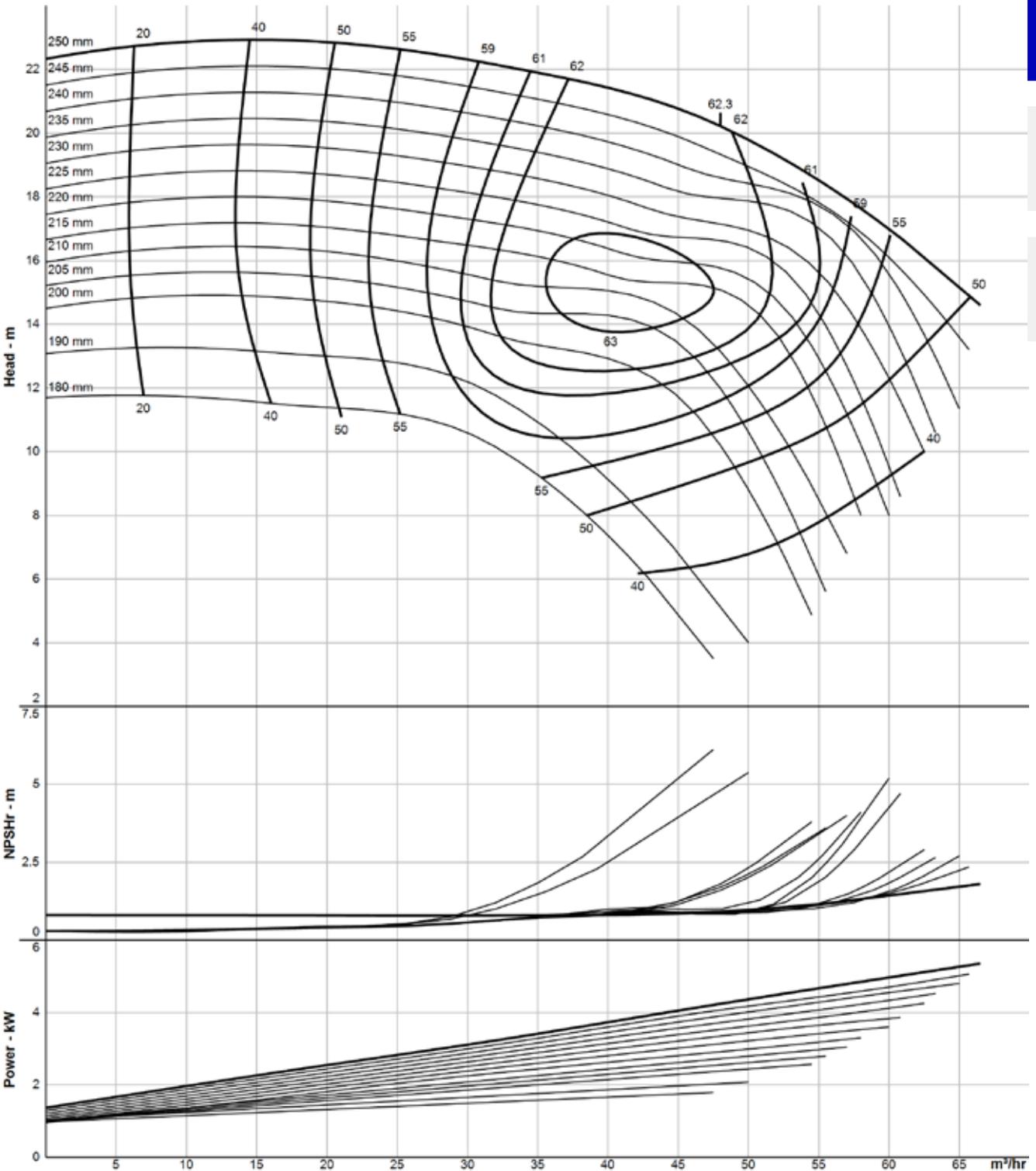
Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 8080 Performance Curve



1

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3

4

The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

GEA Hilge TP 16040

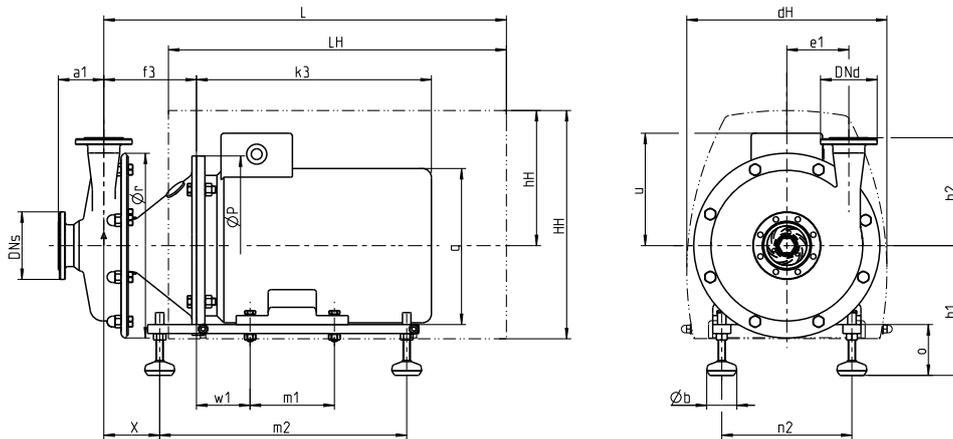


Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 100; 150, pressure side DN 100
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 380/660 V – 415/720 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 107 m ³ /h
Pump head	Max. 12 m
Housing pressure	Max. 16 bar
Certificates	



* registered for recertification



Ør = 356 mm
e1 = 108 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
100L	3.0	557	207	471	341	278	149	50	250	130	360	63	140	335	97	160	85	197	86
112M	4.0	557	207	471	341	278	175	50	250	130	333	70	140	335	104	190	85	197	89
132S	5.5	665	227	561	381	332	195	50	300	150	410	89	140	410	90	216	85	217	106
132M	7.5	665	227	561	381	332	195	50	300	150	410	89	178	410	90	216	85	217	124

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

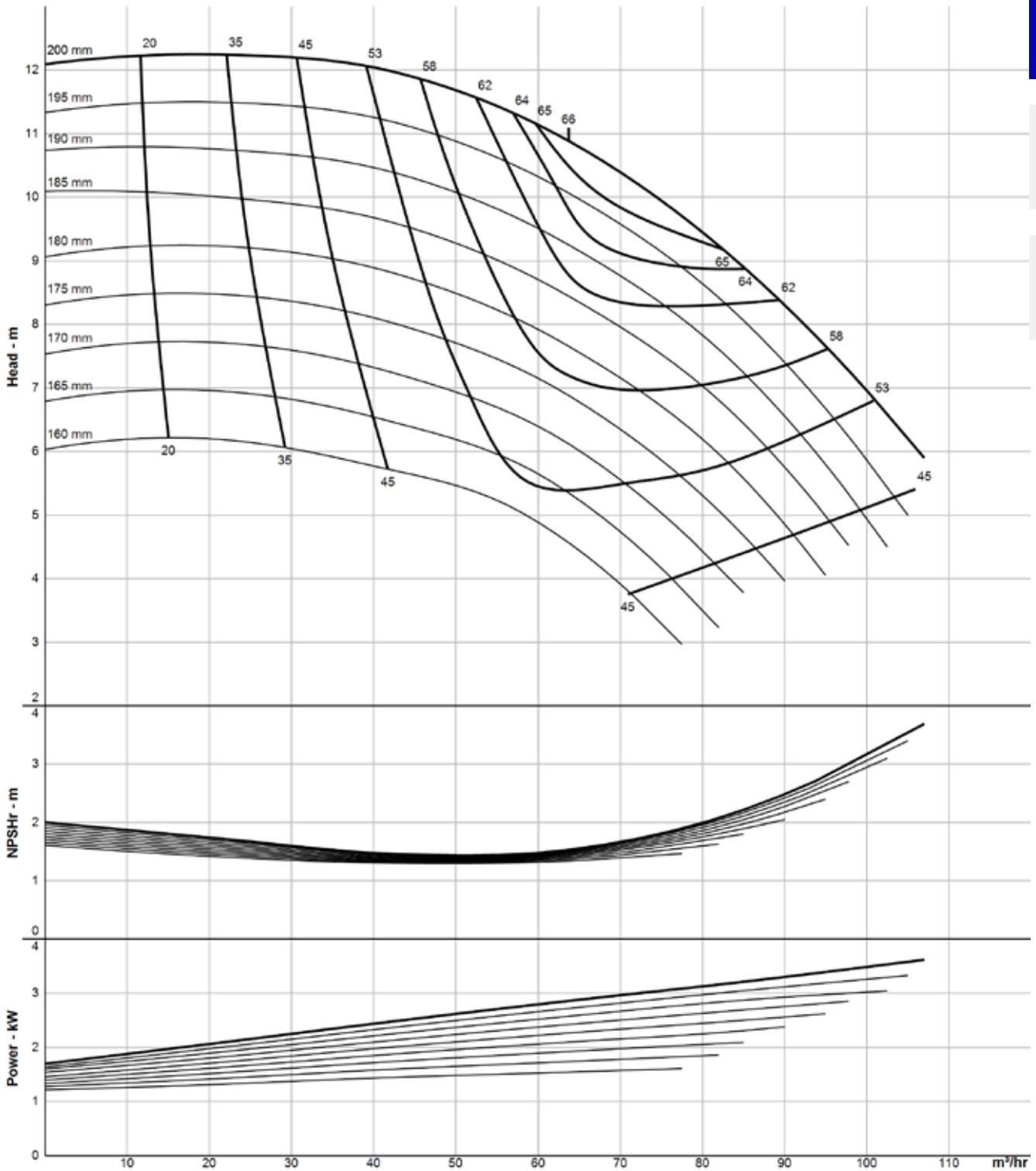
* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 16040 Performance Curve

- 1
- 2
- 3
- 4



The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

3

2-POLE, 60 HZ

GEA Hilge TP

1

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3

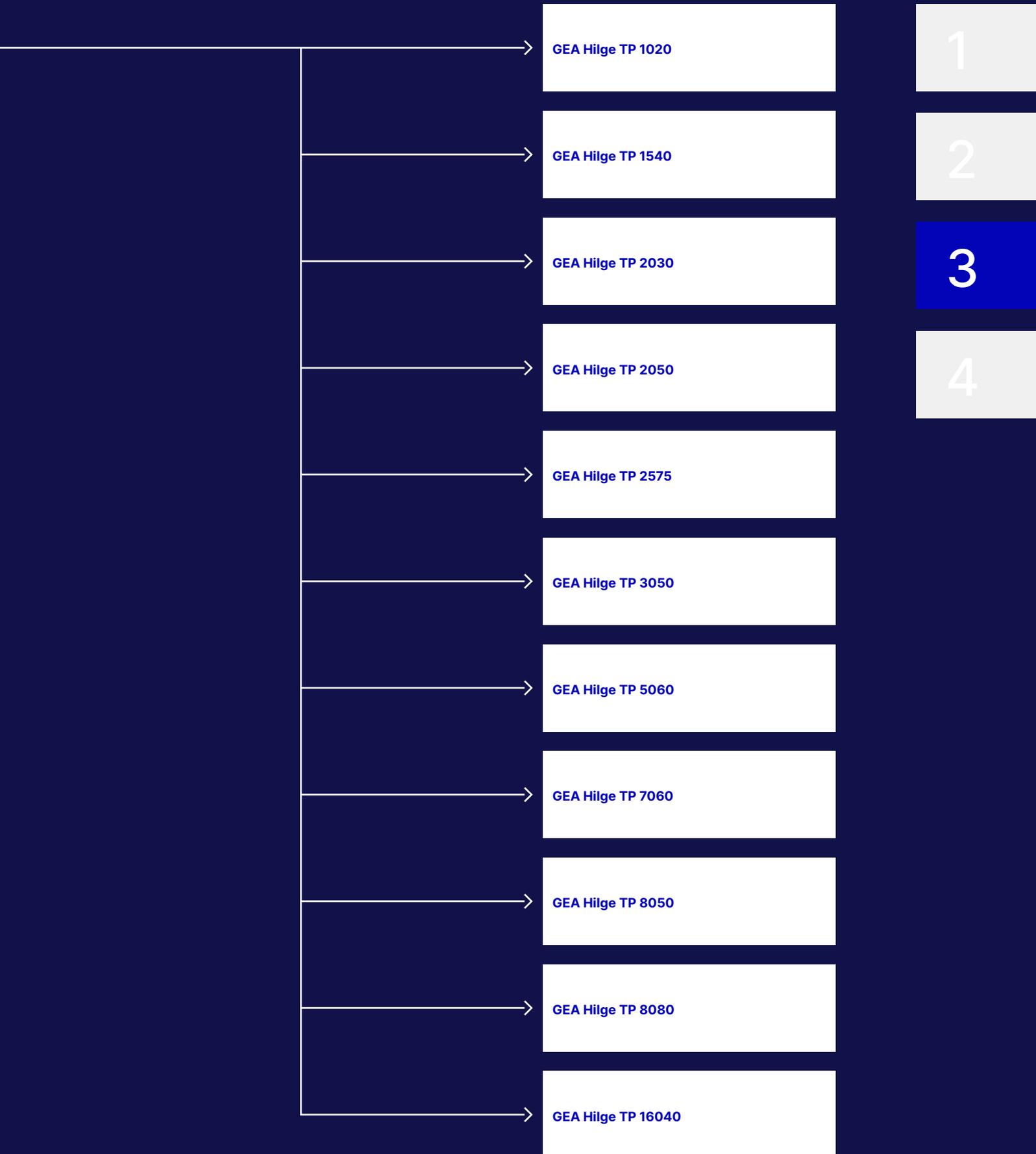
4

Pump Selection Matrix

GEA Hilge TP

2-pole

60 Hz



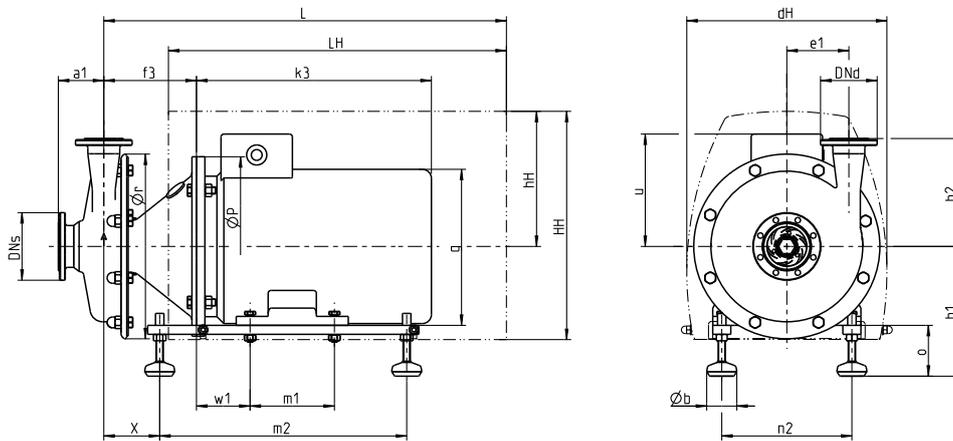
GEA Hilge TP 1020



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 50, pressure side DN 40
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 265/460 V – 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 24 m ³ /h
Pump head	Max. 34 m
Housing pressure	Max. 10 bar
Certificates	

* registered for recertification



Ør = 225 mm
e1 = 76 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
80	1.1	535	178	431	291	228	126	50	200	144	285	50	100	285	84	125	82	162	35
90S	1.5	541	180	431	291	228	147	50	200	144	310	56	100	285	90	140	82	172	40
90L	2.2	541	180	431	291	228	147	50	200	144	310	56	125	285	90	140	82	175	42
100L	3.0	581	207	471	341	278	149	50	250	154	360	63	140	335	120	160	85	197	59
112M	4.0	581	207	471	341	278	175	50	250	154	333	70	140	335	127	190	85	197	70
112M	5.5	581	207	471	341	278	175	50	250	154	333	70	140	335	127	190	85	197	70

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

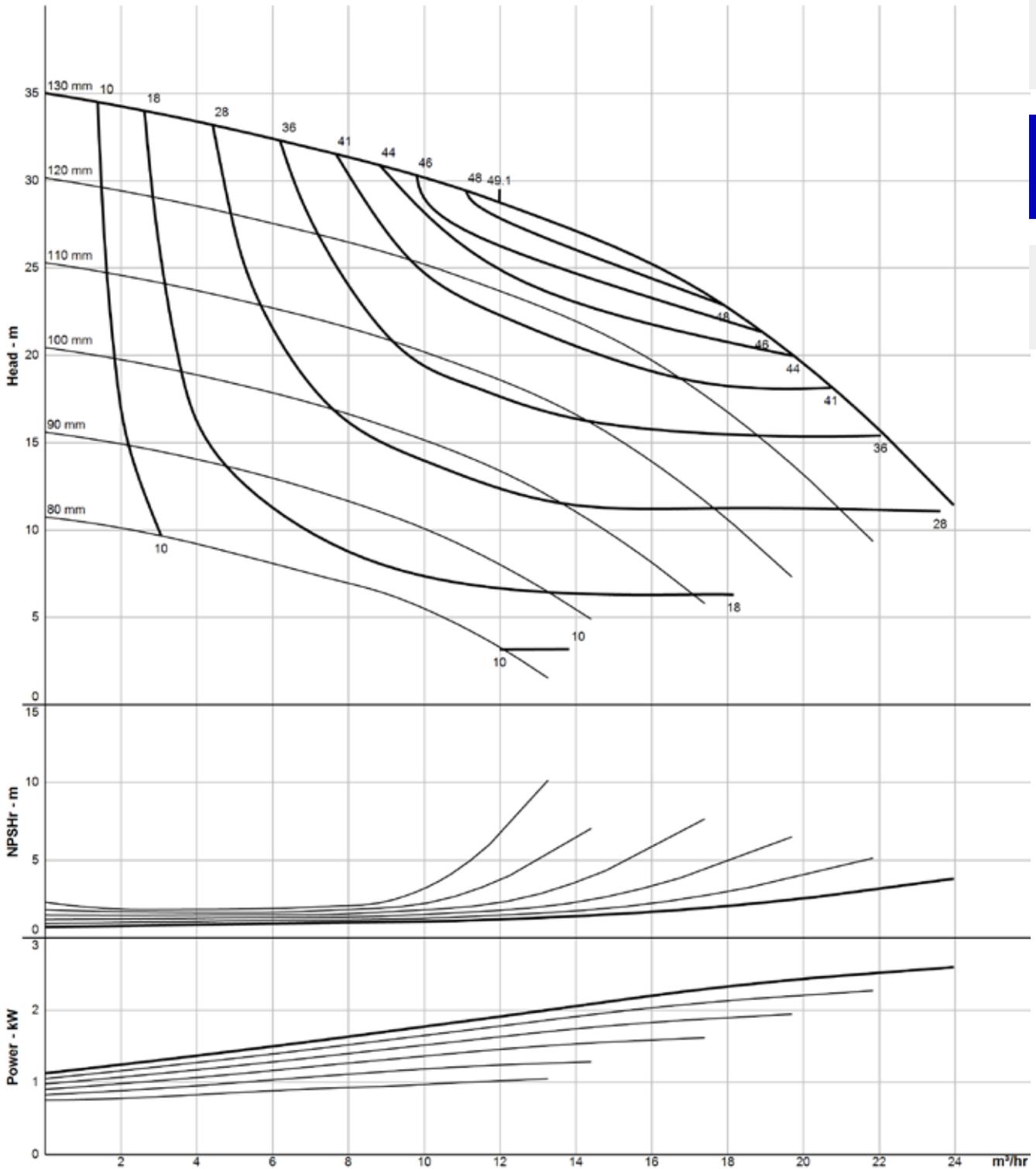
GEA Hilge TP 1020 Performance Curve

1

2

3

4



The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

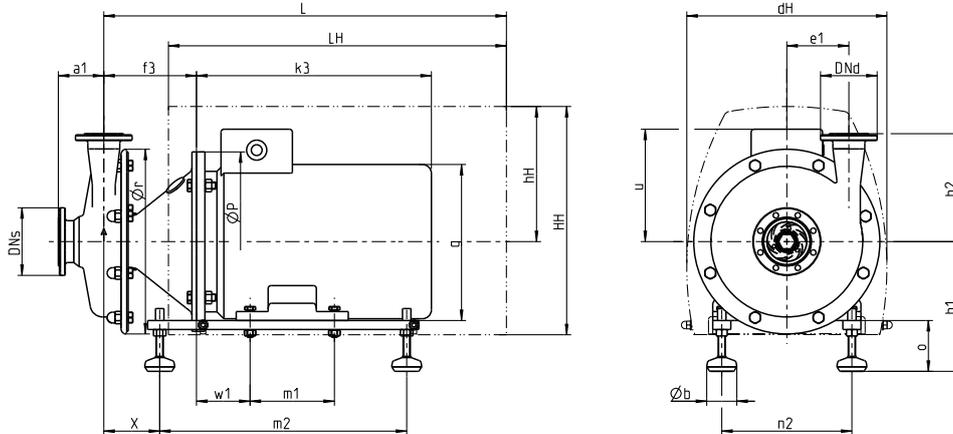
GEA Hilge TP 1540



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 65, pressure side DN 40
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 47 m ³ /h
Pump head	Max. 62 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 274 mm
e1 = 90 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
100L	3.0	558	207	471	341	278	149	50	250	131	360	63	140	335	98	160	85	197	62
112M	4.0	558	207	471	341	278	175	50	250	131	333	70	140	335	105	190	85	197	73
112M	5.5	558	207	471	341	278	175	50	250	131	333	70	140	335	105	190	85	197	78
112M	7.5	558	207	471	341	278	175	50	250	131	375	70	140	335	105	190	85	197	84
132M	9.0	666	227	561	381	332	195	50	300	151	410	89	178	410	91	216	85	217	114
132M	11.0	666	227	561	381	332	195	50	300	151	410	89	178	410	91	216	85	217	115
132M	15.0	666	227	561	381	332	195	50	300	151	435	89	178	410	91	216	85	217	129
160M	11.0	877	326	736	512	412	222	75	350	183	524	108	210	640	105	254	110	270	152

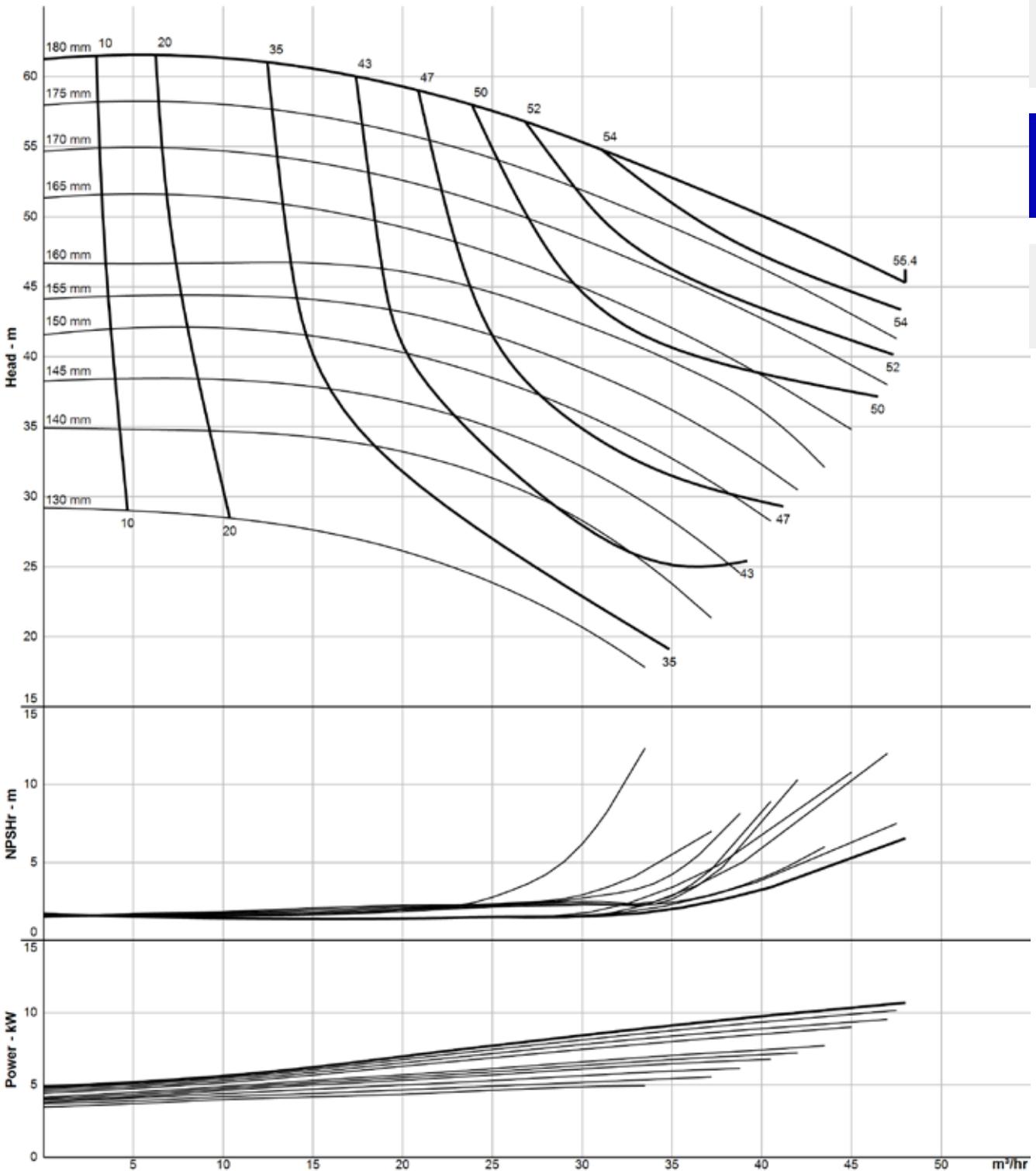
Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 1540 Performance Curve



- 1
- 2
- 3
- 4

The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

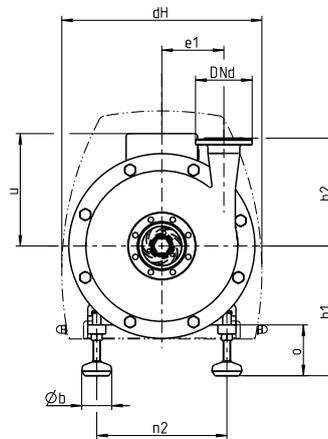
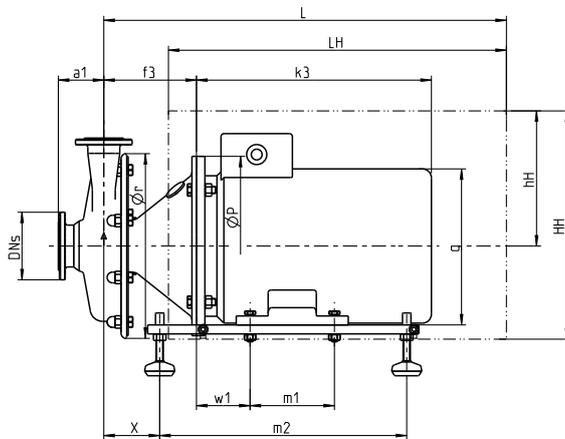
GEA Hilge TP 2030



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 50; 65, pressure side DN 40; 50
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 265/460 V – 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 48 m ³ /h
Pump head	Max. 52 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 259 mm
e1 = 85 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
90S	1.5	518	180	431	291	228	147	50	200	121	310	56	125	285	68	140	82	172	42
90L	2.2	518	180	431	291	228	147	50	200	121	310	56	125	285	68	140	82	172	44
100L	3.0	558	207	471	314	278	149	50	250	131	360	63	140	335	98	160	85	197	61
112M	4.0	558	207	471	341	378	175	50	250	131	333	70	140	335	105	190	85	197	72
112M	5.5	558	207	471	341	378	175	50	250	131	333	70	140	335	105	190	85	197	77
112M	7.5	558	207	471	341	378	175	50	250	131	375	70	140	335	105	190	85	197	83
132S	5.5	666	227	561	381	332	195	50	300	151	410	89	140	410	91	216	85	217	105
132M	9.0	666	227	561	381	332	195	50	300	151	410	89	178	410	91	216	85	217	113
132M	11.0	666	227	561	381	332	195	50	300	151	410	89	178	410	91	216	85	217	114
160M	11.0	877	326	736	512	412	222	75	350	183	524	108	210	640	105	254	110	270	148

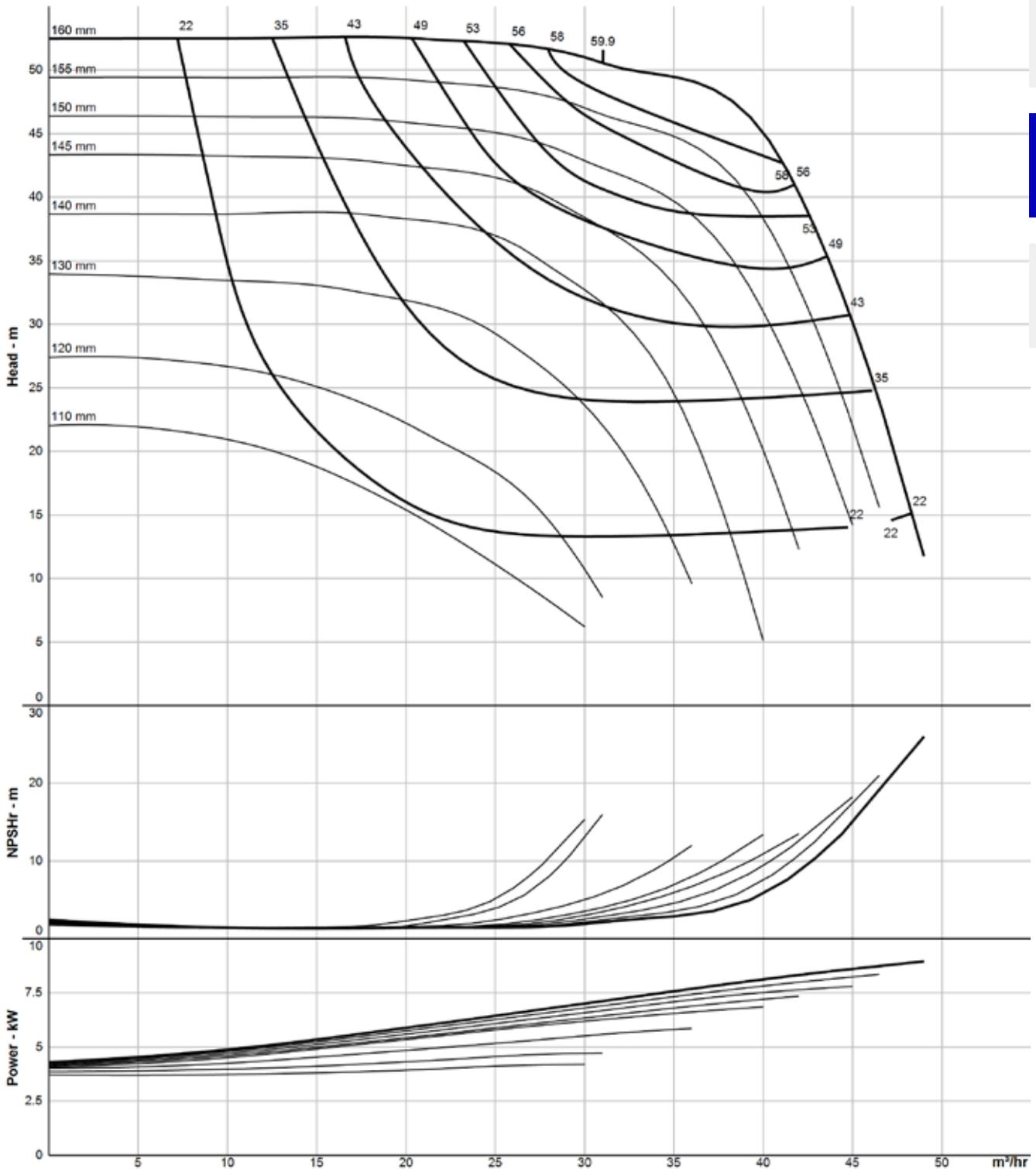
Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 2030 Performance Curve



- 1
- 2
- 3
- 4

The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

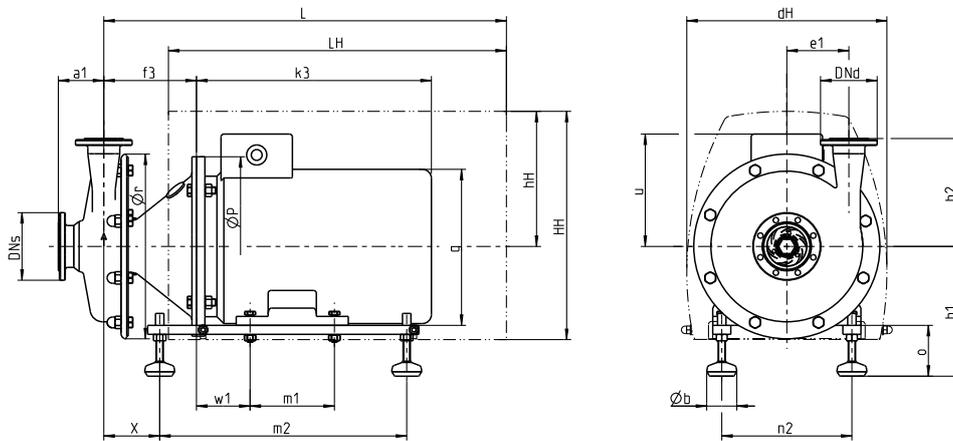
GEA Hilge TP 2050



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 50; 65, pressure side DN 50
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 44 m ³ /h
Pump head	Max. 85 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 309 mm
e1 = 107 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
100L	3.0	563	207	471	341	278	149	50	250	136	360	63	140	335	102	160	85	197	63
112M	4.0	563	207	471	341	278	175	50	250	136	333	70	140	335	109	190	85	197	74
112M	5.5	563	207	471	341	278	175	50	250	136	333	70	140	335	109	190	85	197	79
112M	7.5	563	207	471	341	278	175	50	250	136	375	70	140	335	109	190	85	197	85
132M	9.0	671	227	561	381	332	195	50	300	156	410	89	178	410	95	216	85	217	115
132M	11.0	671	227	561	381	332	195	50	300	156	410	89	178	410	95	216	85	217	116
132M	15.0	671	227	561	381	332	195	50	300	156	435	89	178	410	95	216	85	217	130

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

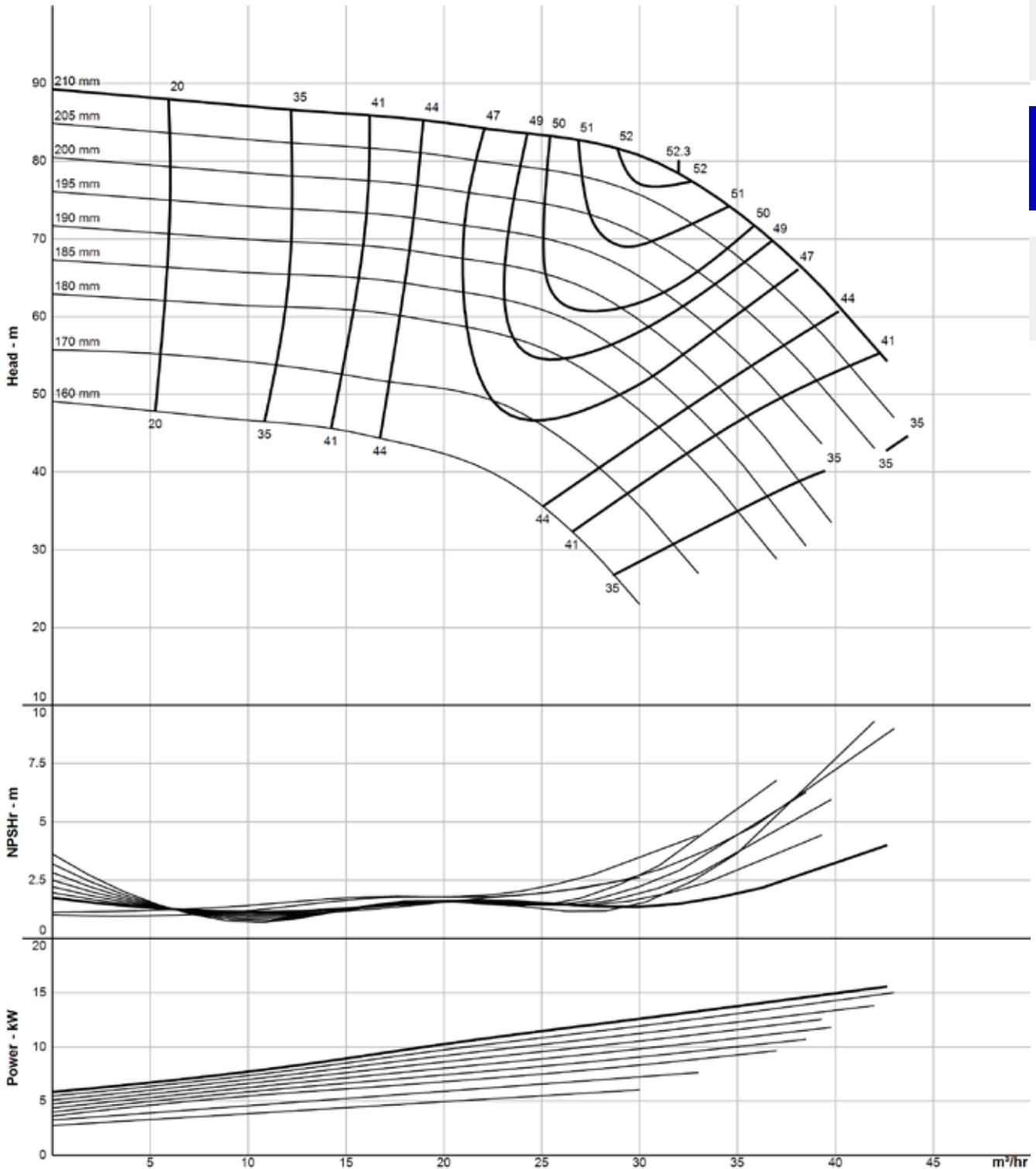
* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 2050 Performance Curve

- 1
- 2
- 3
- 4



The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

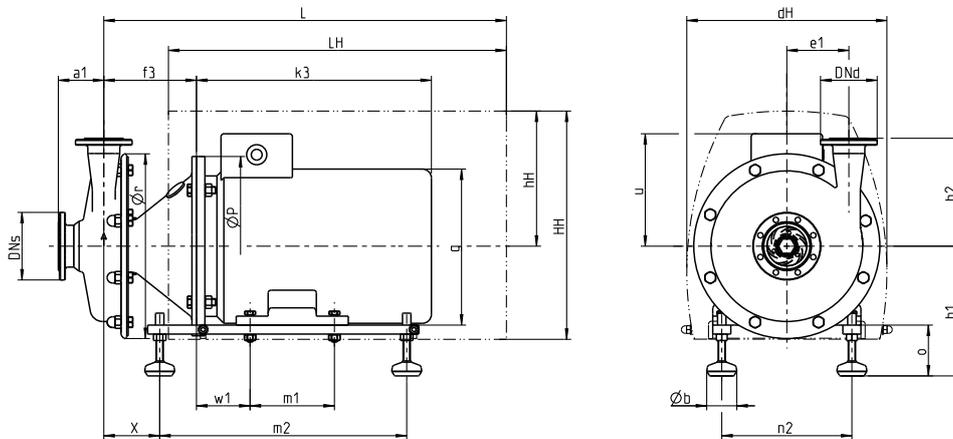
GEA Hilge TP 2575



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 65, pressure side DN 50
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 56 m ³ /h
Pump head	Max. 130 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 344 mm
e1 = 124.5 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
112M	5.5	563	207	471	341	278	195	50	250	136	333	70	140	335	111	190	85	197	83
112M	7.5	563	207	471	341	278	195	50	250	136	375	70	140	335	111	190	85	197	89
132M	9.0	671	227	561	381	332	195	50	300	156	410	89	178	410	97	216	85	217	119
132M	11.0	671	227	561	381	332	195	50	300	156	410	89	178	410	97	216	85	217	120
132M	15.0	671	227	561	381	332	195	50	300	156	435	89	178	410	97	216	85	217	134
160L	18.5	885	326	736	511	412	222	75	350	191	524	108	254	640	111	254	110	270	183
160L	22.0	885	326	736	511	412	222	75	350	191	554	108	254	640	111	254	110	270	192
200L	30.0	979	354	821	581	472	292	100	400	195	648	133	305	810	120	318	115	315	300

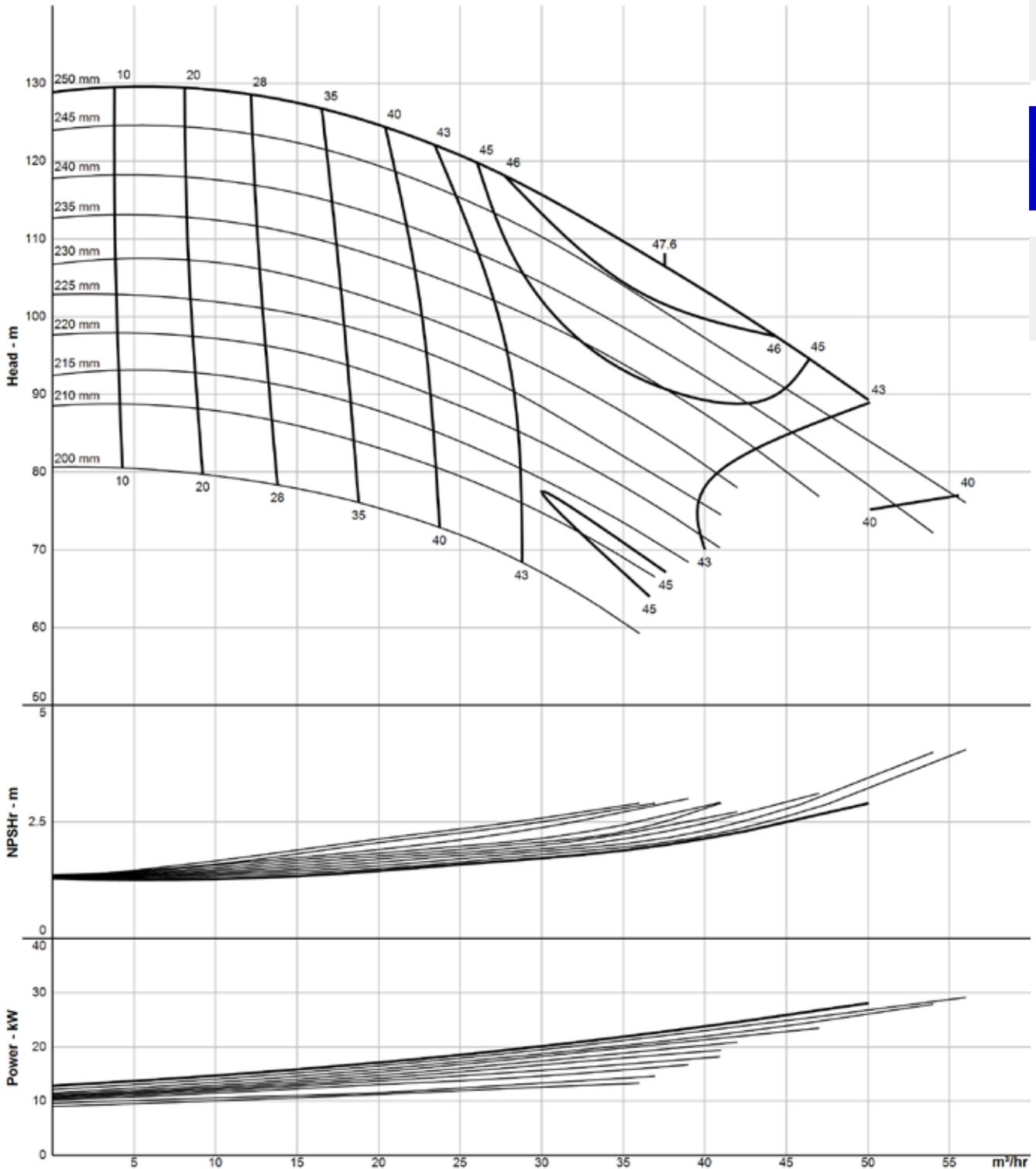
Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 2575 Performance Curve



The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

GEA Hilge TP 3050

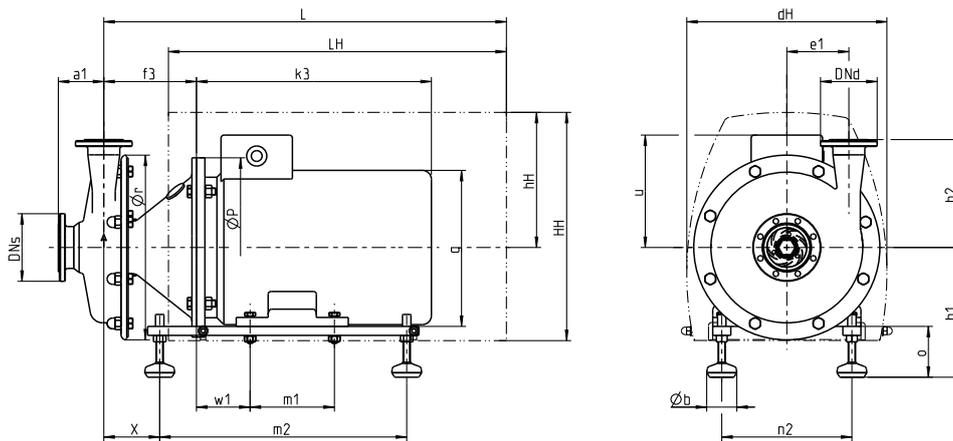


Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 65; 80, pressure side DN 50; 65
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 90 m ³ /h
Pump head	Max. 95 m
Housing pressure	Max. 16 bar
Certificates	



* registered for recertification



Ør = 309 mm
e1 = 103 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
100L	3.0	561	207	471	341	278	149	50	250	134	360	63	140	335	100	160	85	197	66
112M	4.0	561	207	471	341	278	175	50	250	134	333	70	140	335	107	190	85	197	77
112M	5.5	561	207	471	341	278	175	50	250	134	333	70	140	335	107	190	85	197	82
112M	7.5	561	207	471	341	278	175	50	250	134	375	70	140	335	107	190	85	197	88
132S	7.5	669	227	561	381	332	195	50	300	154	410	89	140	410	93	216	85	217	139
132S	5.5/7.5	669	227	561	381	332	195	50	300	154	410	89	140	410	93	216	85	217	127/139
132M	9.0	669	227	561	381	332	195	50	300	154	410	89	178	410	93	216	85	217	118
132M	11.0	669	227	561	381	332	195	50	300	154	410	89	178	410	93	216	85	217	119
132M	15.0	669	227	561	381	332	195	50	300	154	435	89	178	410	93	216	85	217	133
160M	11.0	883	326	736	511	412	222	75	350	189	524	108	210	640	107	254	110	270	173
160L	18.5	883	326	736	511	412	222	75	350	189	525	108	254	640	107	254	110	270	182
160L	22.0	883	326	736	511	412	222	75	350	189	554	108	254	640	107	254	110	270	191

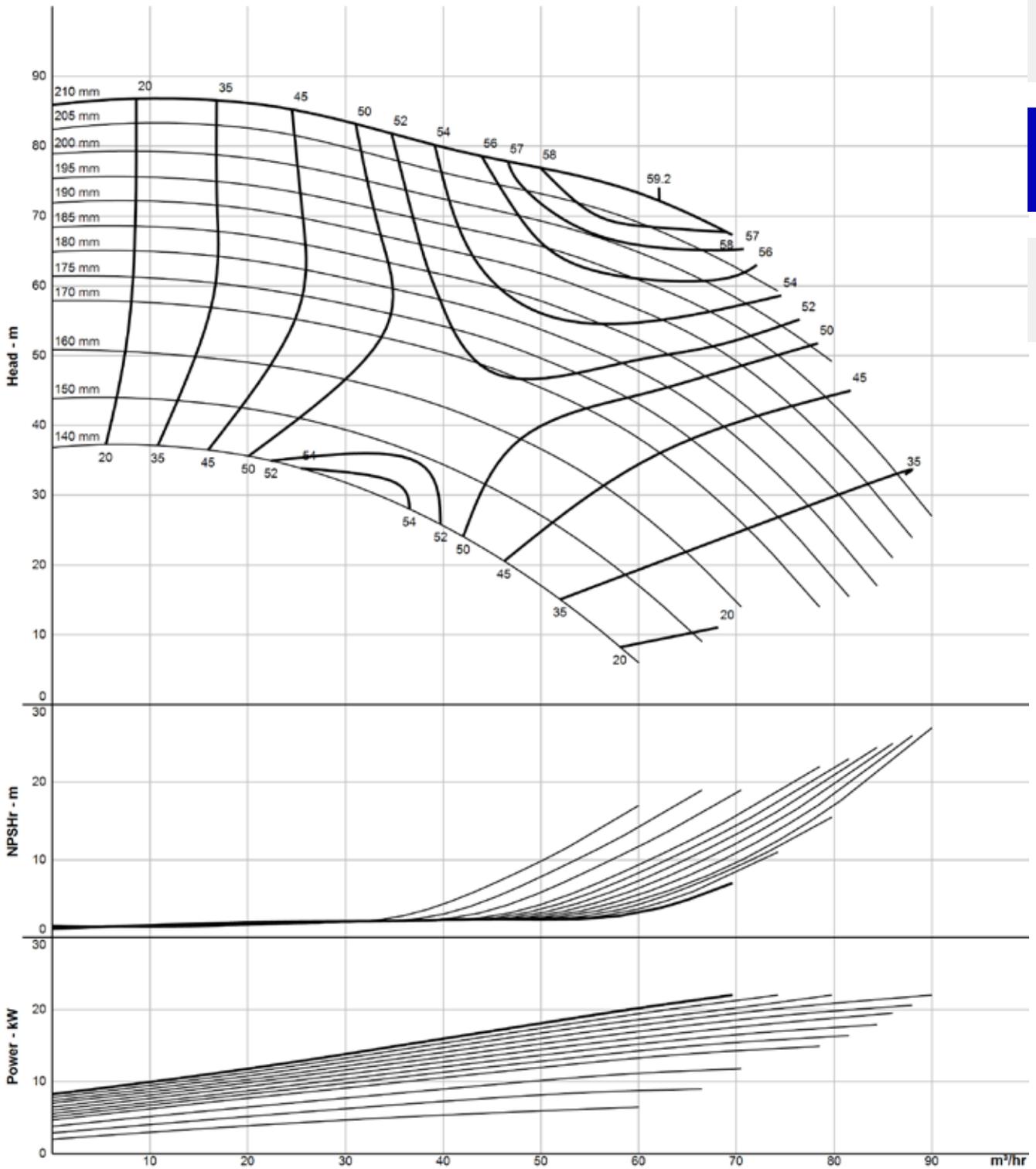
Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 3050 Performance Curve



1

2

3

4

The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

GEA Hilge TP 5060

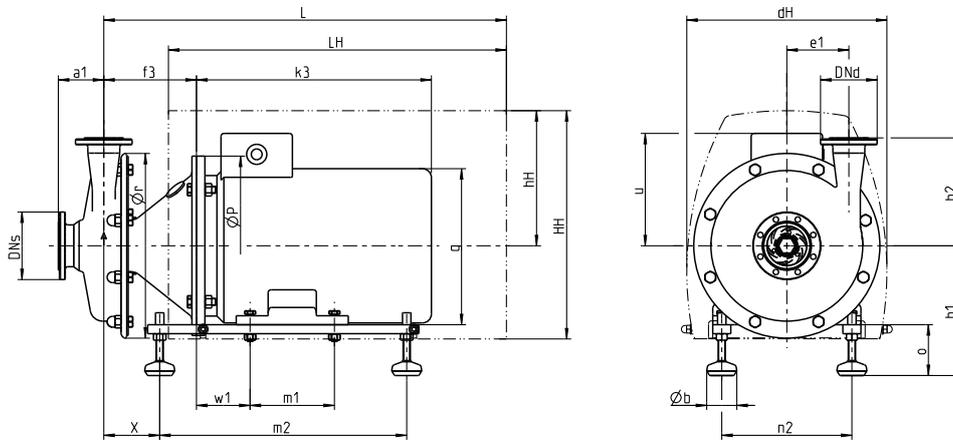


Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 80, pressure side DN 65; 80
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 94 m ³ /h
Pump head	Max. 110 m
Housing pressure	Max. 16 bar
Certificates	



* registered for recertification



Ør = 334 mm
e1 = 114.5 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
112M	5.5	564	207	471	341	332	175	50	250	137	333	70	140	335	110	190	85	197	84
112M	7.5	564	207	471	341	332	175	50	250	137	375	70	140	335	110	190	85	197	90
132M	9.0	672	227	561	381	332	195	50	300	157	410	89	178	410	96	216	85	217	120
132M	11.0	672	227	561	381	332	195	50	300	157	410	89	178	410	96	216	85	217	121
132M	15.0	672	227	561	381	332	195	50	300	157	435	89	178	410	96	216	85	217	135
160M	11.0	886	326	736	511	412	222	75	350	192	524	108	210	640	110	254	110	270	160
160L	18.5	886	326	736	511	412	222	75	350	192	524	108	254	640	110	254	110	270	184
160L	22.0	886	326	736	511	412	222	75	350	192	554	108	254	640	110	254	110	270	193
200L	30.0	979	354	821	581	472	292	100	400	195	648	133	305	810	119	318	119	315	301

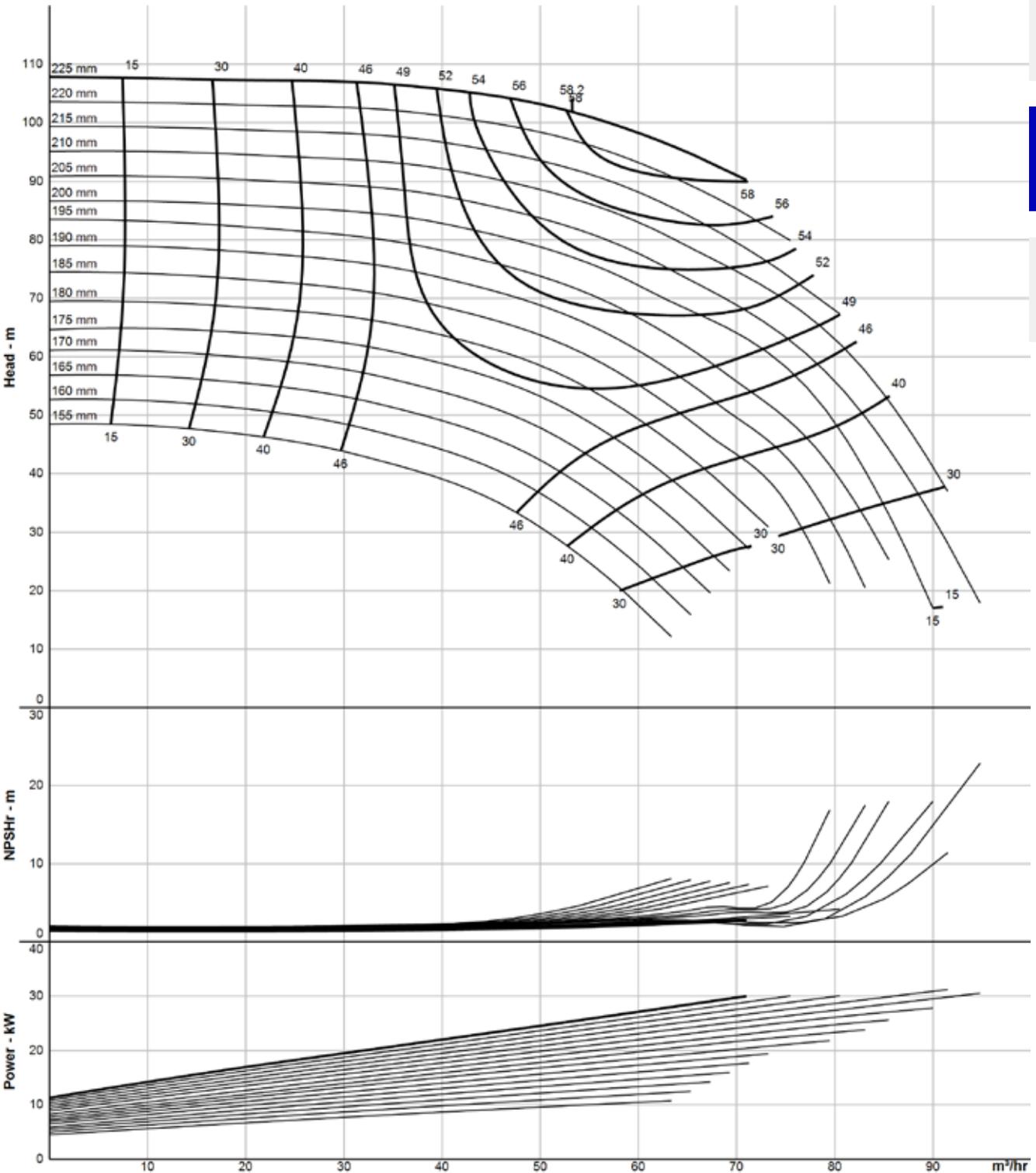
Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 5060 Performance Curve



1

2

3

4

The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

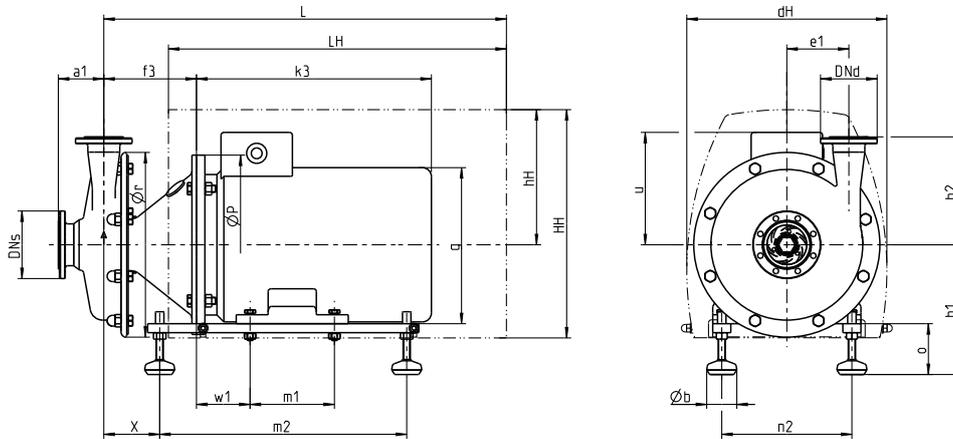
GEA Hilge TP 7060



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 80, pressure side DN 65; 80
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 114 m ³ /h
Pump head	Max. 105 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 334 mm
e1 = 110 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
112M	7.5	559	207	471	341	278	195	50	250	132	375	70	140	335	105	190	85	197	91
132M	9.0	667	227	561	381	332	195	50	300	152	410	89	178	410	92	216	85	217	120
132M	11.0	667	227	561	381	332	195	50	300	152	410	89	178	410	92	216	85	217	122
132M	15.0	667	227	561	381	332	195	50	300	152	435	89	178	410	92	216	85	217	136
160L	18.5	881	326	736	511	412	222	75	350	187	524	108	254	640	106	254	110	270	185
160L	22.0	881	326	736	511	412	222	75	350	187	554	108	254	640	106	254	110	270	194
200L	30.0	975	354	821	581	472	292	100	400	191	648	133	305	810	114	318	115	345	302

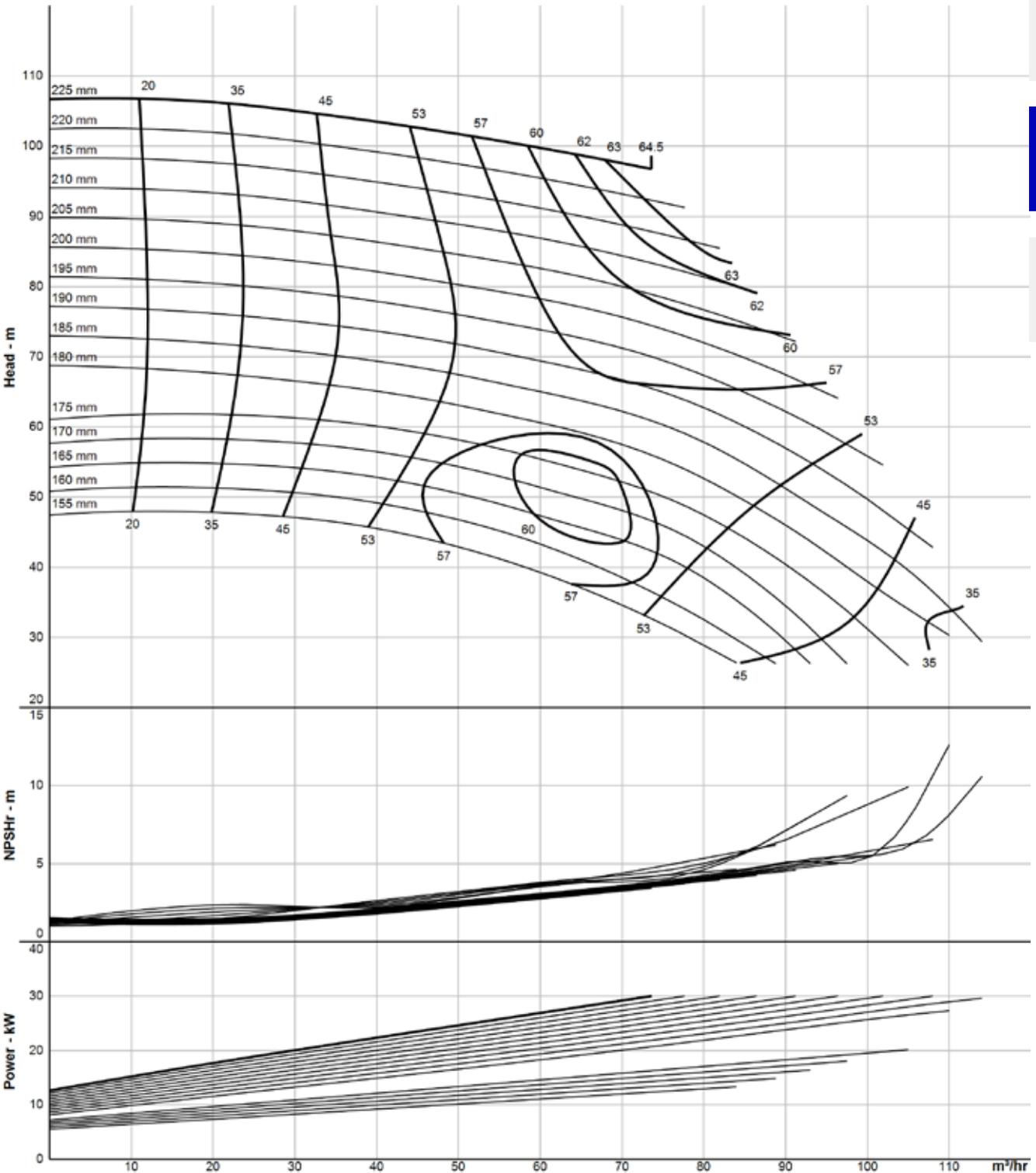
Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 7060 Performance Curve



The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

GEA Hilge TP 8050

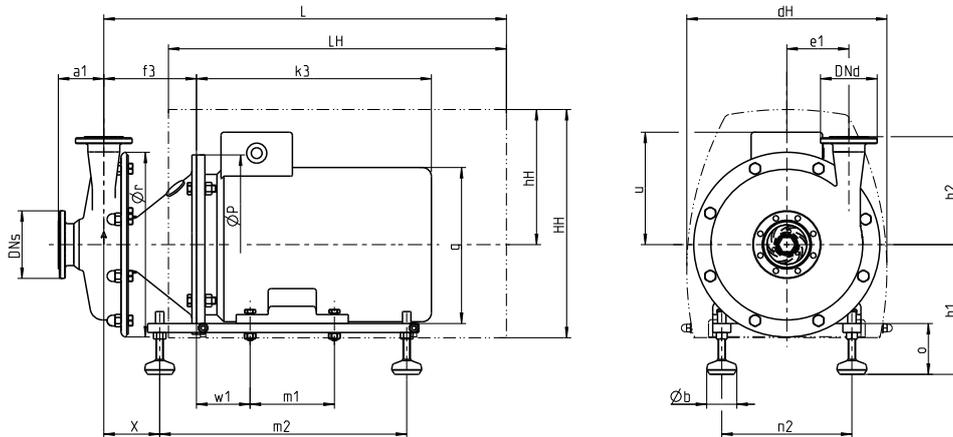


Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 100, pressure side DN 65; 80
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 144 m ³ /h
Pump head	Max. 83 m
Housing pressure	Max. 16 bar
Certificates	



* registered for recertification



Ør = 432 mm
e1 = 114 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
112M	4.0	557	207	471	341	278	195	50	250	130	333	70	140	335	103	190	85	197	83
112M	5.5	557	207	471	341	278	195	50	250	130	333	70	140	335	103	190	85	197	88
112M	7.5	557	207	471	341	278	195	50	250	130	375	70	140	335	103	190	85	197	94
132M	9.0	665	227	561	381	332	195	50	300	150	410	89	178	410	89	216	85	217	124
132M	11.0	665	227	561	381	332	195	50	300	150	410	89	178	410	89	216	85	217	125
132M	15.0	665	227	561	381	332	195	50	300	150	435	89	178	410	89	216	85	217	139
160M	11.0	879	326	736	511	412	222	75	350	185	524	108	210	640	103	254	110	270	173
160M	15.0	883	326	736	511	412	222	75	350	189	524	108	210	640	103	254	110	270	179
160L	18.5	879	326	736	511	412	222	75	350	185	524	108	254	640	103	254	110	270	184
160L	22.0	879	326	736	511	412	222	75	350	185	554	108	254	640	103	254	110	270	192
200L	30.0	973	354	821	581	472	292	100	400	189	648	133	305	810	112	318	115	315	301

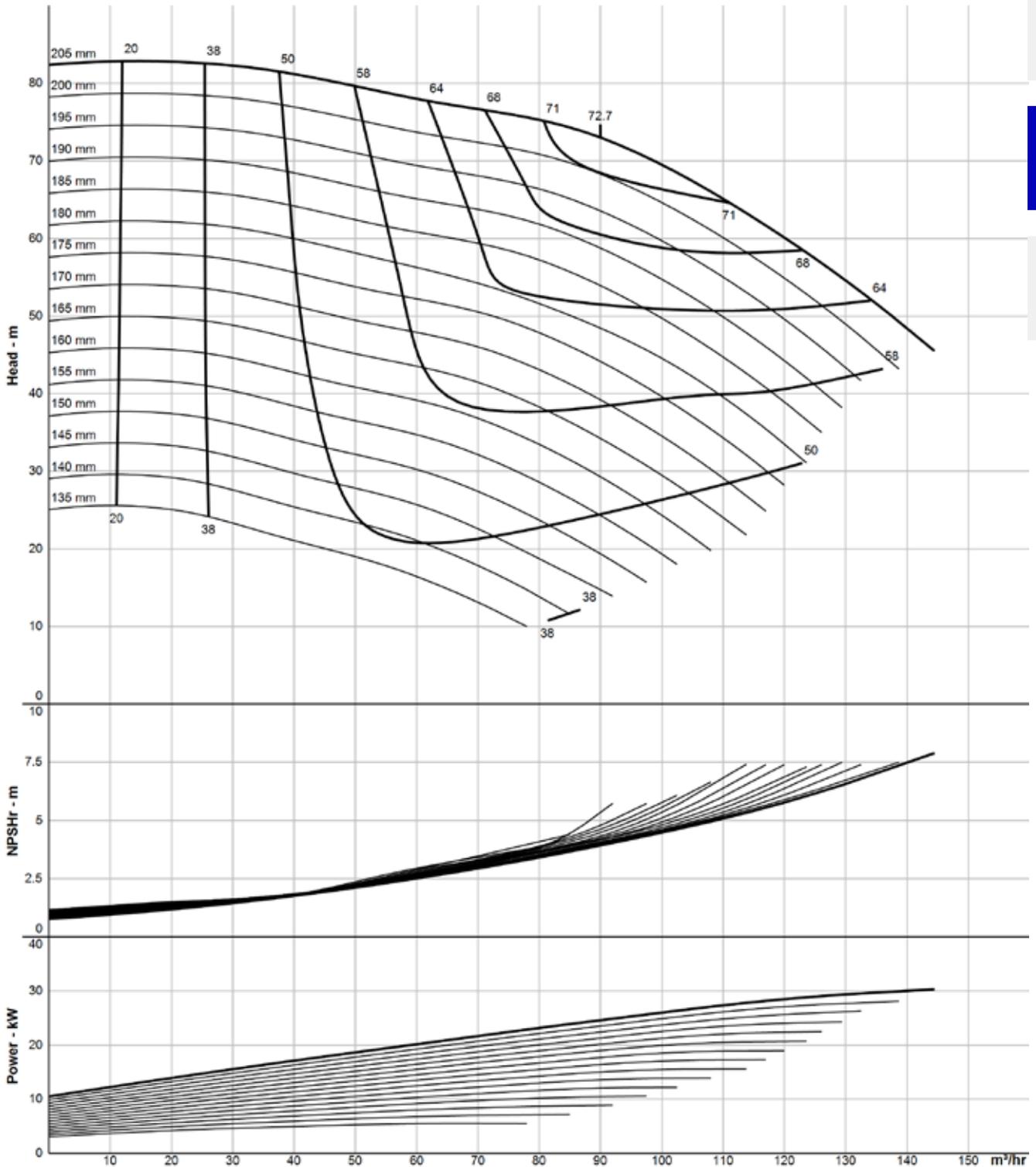
Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 8050 Performance Curve



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The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

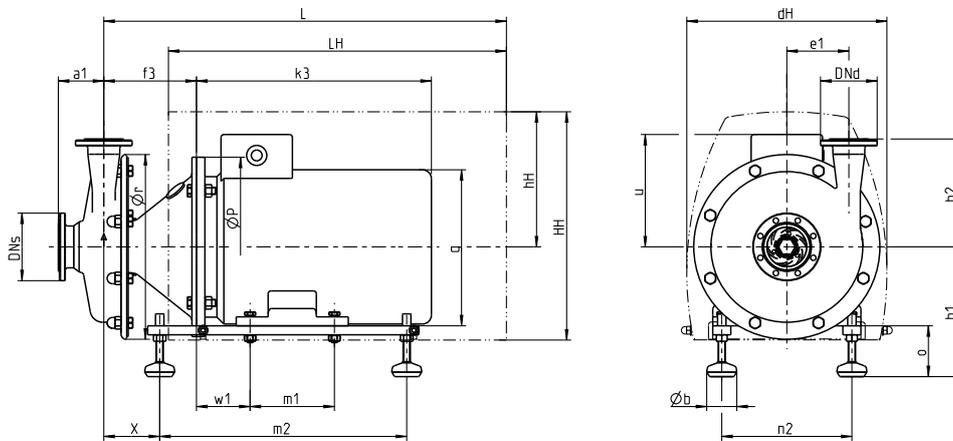
GEA Hilge TP 8080



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 100, pressure side DN 65; 80
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 137 m ³ /h
Pump head	Max. 130 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 359 mm
e1 = 124 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
132M	11.0	673	227	561	381	332	195	50	300	158	410	89	178	410	97	217	85	217	124
132M	15.0	673	227	561	381	332	195	50	300	158	435	89	178	410	97	217	85	217	138
160M	11.0	887	325	736	510	412	222	75	350	193	524	108	210	640	111	254	110	270	172
160M	15.0	887	325	736	510	412	222	75	350	193	554	108	210	640	111	254	110	270	178
160L	18.5	887	326	736	511	412	222	75	350	193	524	108	254	640	111	254	110	270	187
160L	22.0	887	326	736	511	412	222	75	350	193	554	108	254	640	111	254	110	270	196
200L	30.0	980	354	821	581	472	292	100	400	196	648	133	305	810	119	318	115	315	304
200L	37.0	980	354	821	581	472	292	100	400	196	648	133	305	810	119	318	115	315	316
200M	45.0	980	354	821	581	472	292	100	400	196	678	133	305	810	119	318	115	315	349

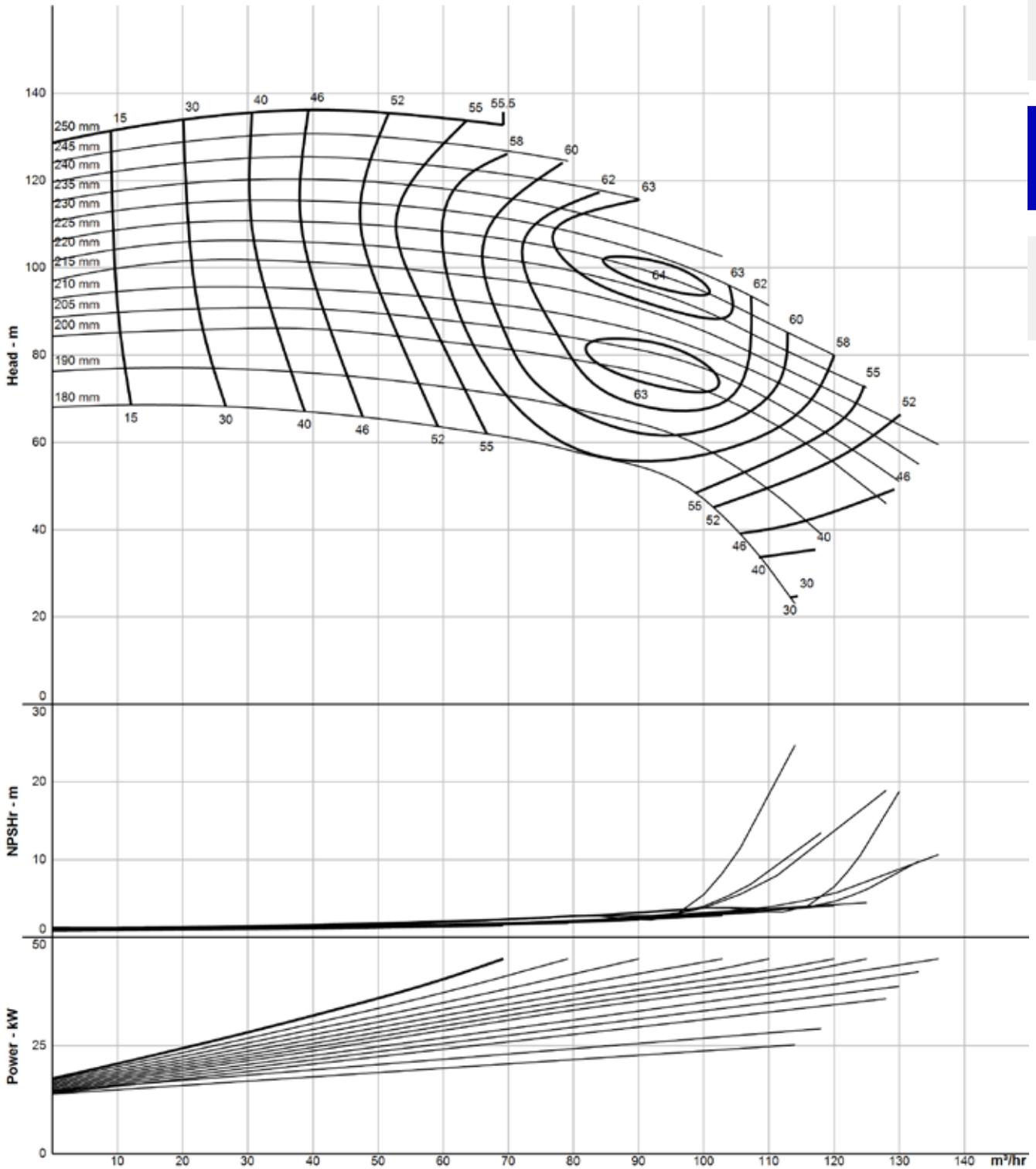
Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 8080 Performance Curve



The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

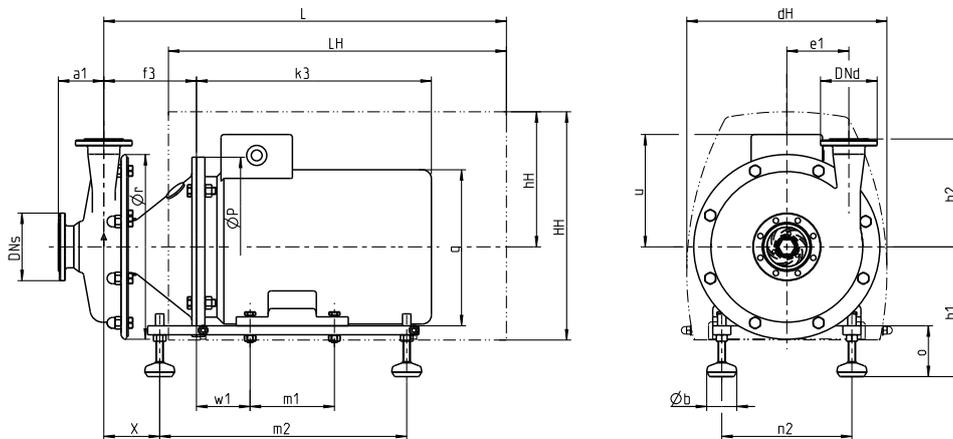
GEA Hilge TP 16040



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 100; 150, pressure side DN 100
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 245 m ³ /h
Pump head	Max. 70 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 359 mm
e1 = 108 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
132M	11.0	665	227	561	381	332	195	50	300	150	410	89	178	410	90	216	85	217	128
132M	15.0	665	227	561	381	332	195	50	300	150	435	89	178	410	90	216	85	217	142
160M	11.0	879	626	736	511	412	222	75	350	185	524	108	210	640	106	254	110	270	176
160M	15.0	879	626	736	511	412	222	75	350	185	554	108	210	640	106	254	110	270	182
160L	18.5	879	326	736	511	412	222	75	350	185	524	108	210	640	106	254	110	270	191
160L	22.0	879	326	736	511	412	222	75	350	185	554	108	210	640	106	254	110	270	200
200L	30.0	973	354	821	581	472	292	100	400	189	648	133	305	810	112	318	115	315	308
200L	37.0	973	354	821	581	472	292	100	400	189	648	133	305	810	112	318	115	315	320
200M	45.0	973	354	821	581	472	292	100	400	189	678	133	305	810	112	318	115	315	353
225M	45.0	1.040	384	821	618	520	372	100	450	189	708	149	311	810	128	365	115	340	405

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

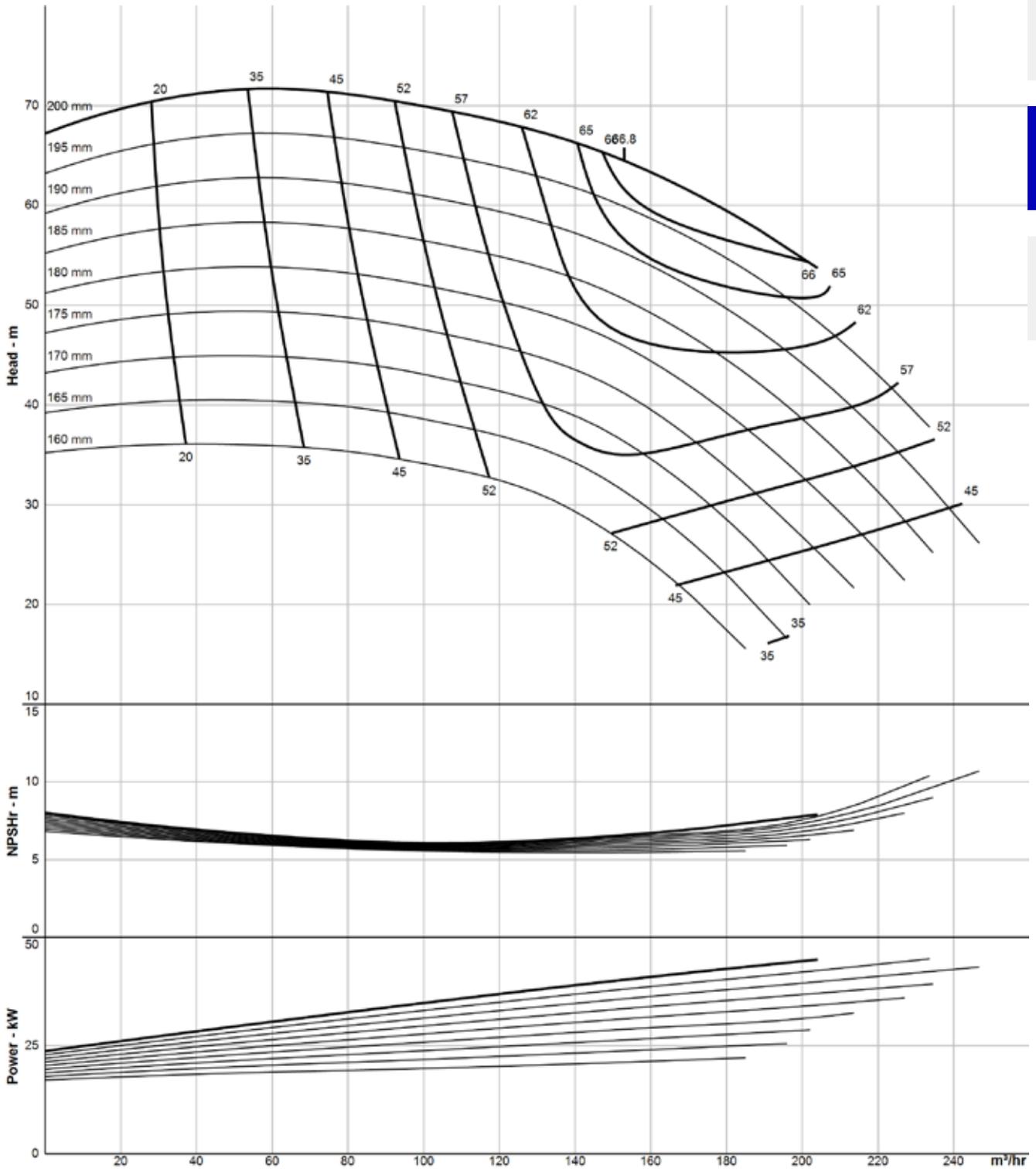
GEA Hilge TP 16040 Performance Curve

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The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

4

4-POLE, 60 HZ

GEA Hilge TP

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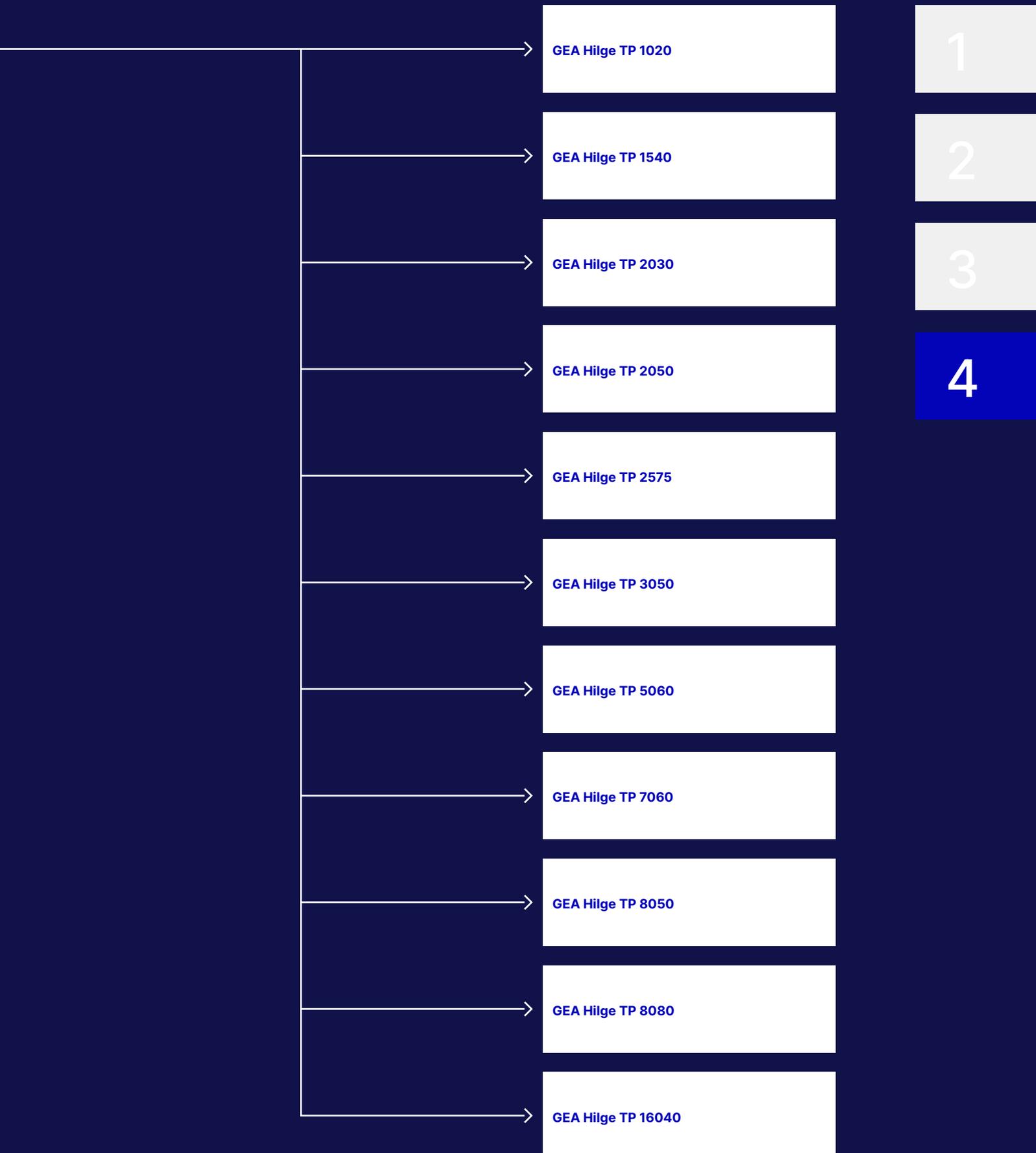
4

Pump Selection Matrix

GEA Hilge TP

4-pole

60 Hz



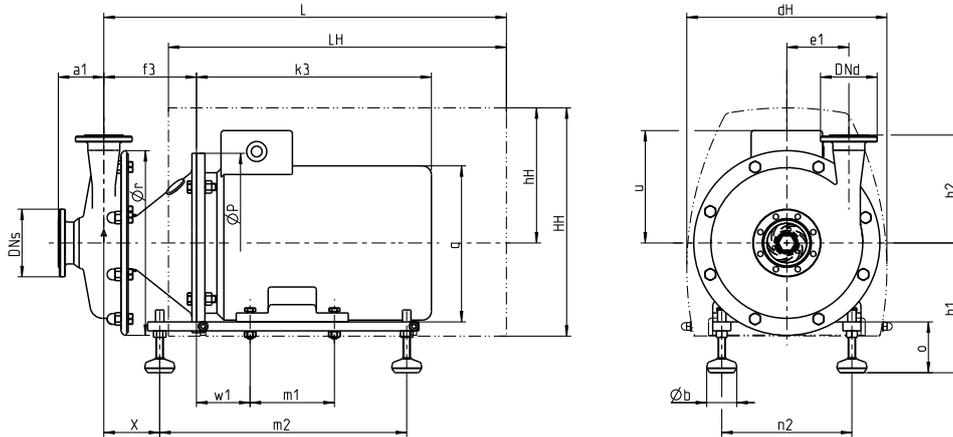
GEA Hilge TP 1020



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 50, pressure side DN 40
Mechanical seal	Single mechanical seal (carbon /SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 265/460 V – 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 12 m ³ /h
Pump head	Max. 8 m
Housing pressure	Max. 10 bar
Certificates	

* registered for recertification



Ør = 225 mm
e1 = 76 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
80	0.75	535	178	431	291	228	126	50	200	144	236	50	100	285	84	125	82	174	34
90S	1.1	241	180	431	291	228	147	50	200	144	279	56	100	285	90	140	82	172	39
90L	1.5	241	180	431	291	228	147	50	200	144	279	56	125	285	90	140	82	172	41
100L	2.2	581	207	471	341	278	149	50	250	154	316	63	140	335	120	160	85	197	61
100L	3.0	581	207	471	341	278	149	50	250	154	360	63	140	335	120	160	85	197	64

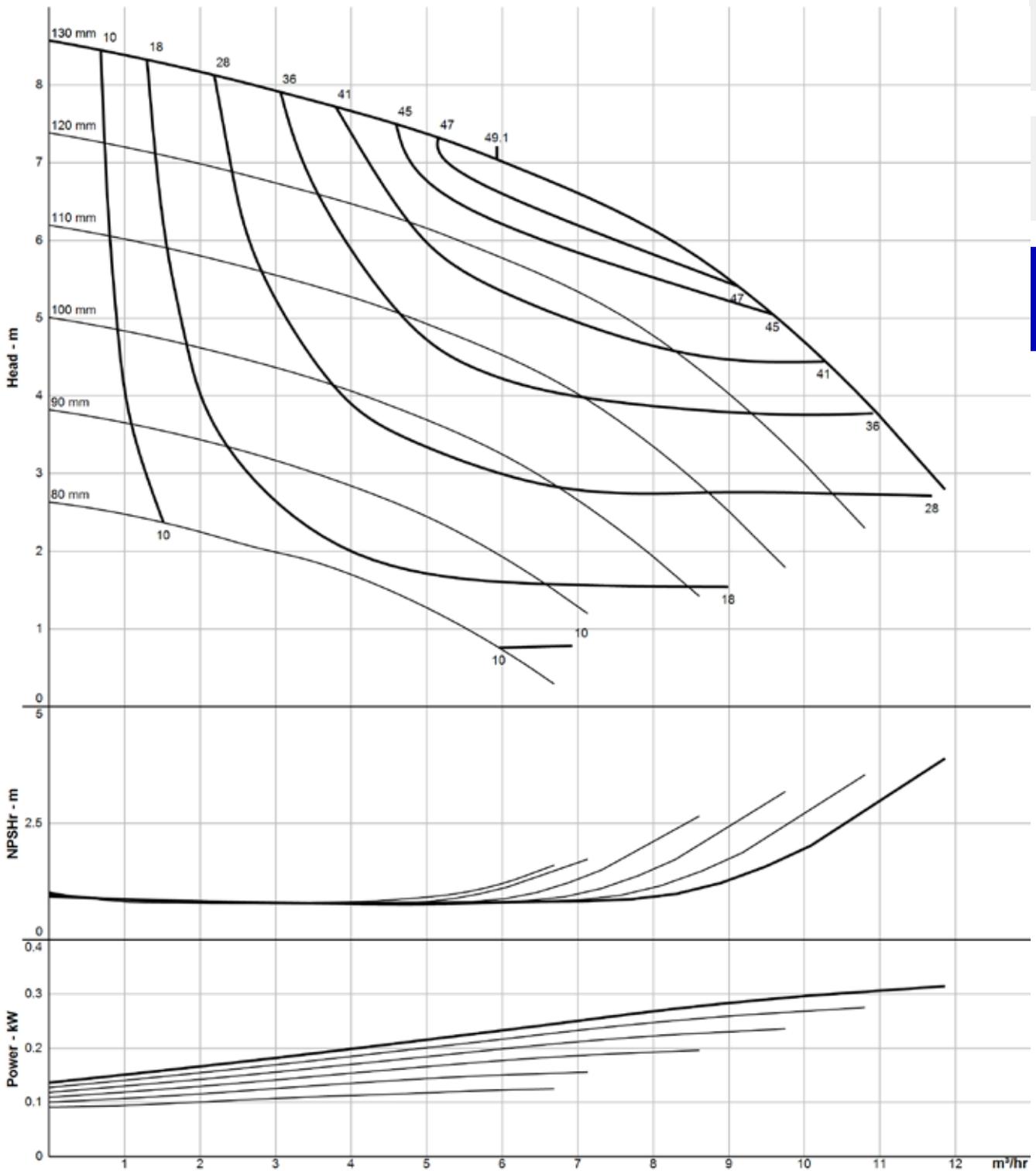
Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 1020 Performance Curve



- 1
- 2
- 3
- 4

The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

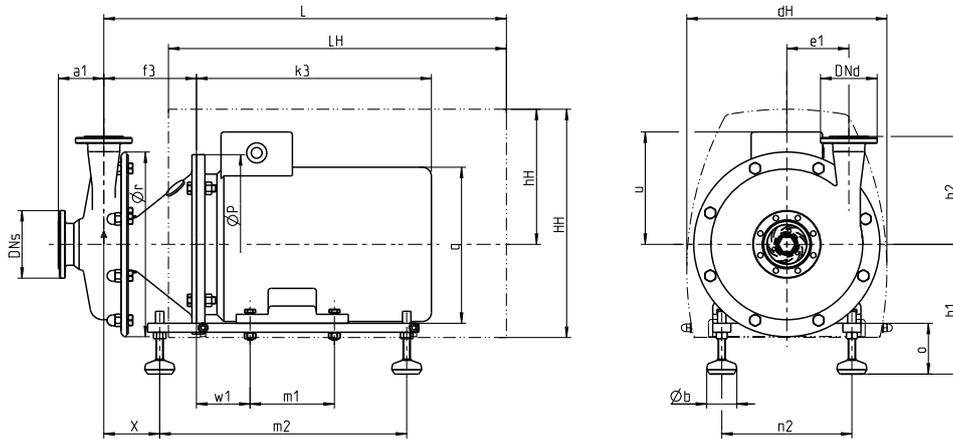
GEA Hilge TP 1540



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 65, pressure side DN 40
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 265/460 V – 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 25 m ³ /h
Pump head	Max. 15.5 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 274 mm
e1 = 90 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
80	0.75	558	178	431	291	228	126	50	200	121	236	50	140	285	61	125	82	197	37
90S	1.10	558	180	431	291	228	147	50	200	121	279	56	100	285	67	140	82	172	42
90L	1.50	558	180	431	291	228	147	50	200	121	279	56	125	285	67	140	82	172	44
100L	2.20	666	207	471	341	278	149	50	125	131	316	63	140	335	98	160	85	197	64
100L	3.00	666	207	471	341	278	149	50	125	131	360	63	140	335	98	160	85	197	67

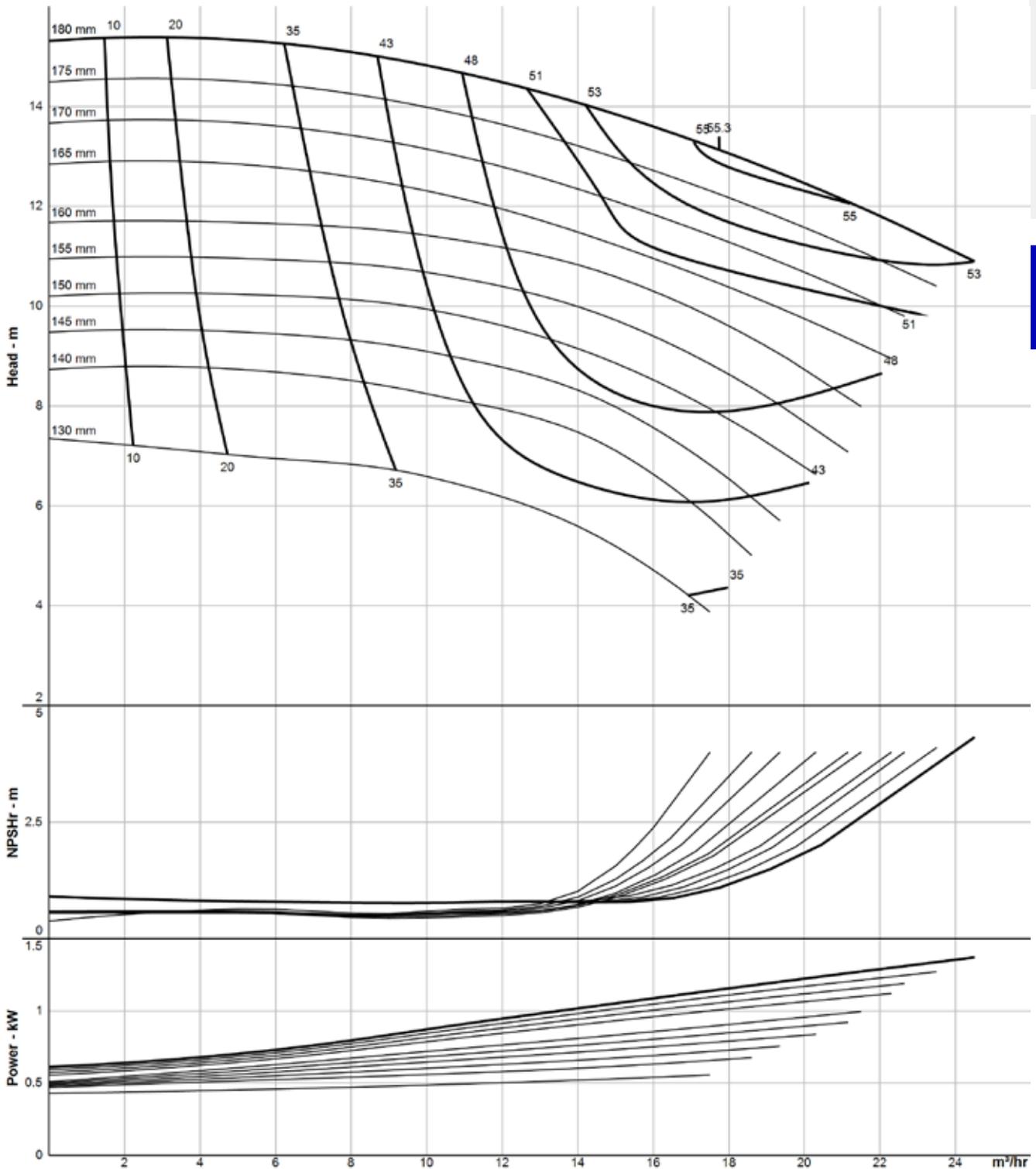
Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 1540 Performance Curve



- 1
- 2
- 3
- 4

The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

GEA Hilge TP 2030

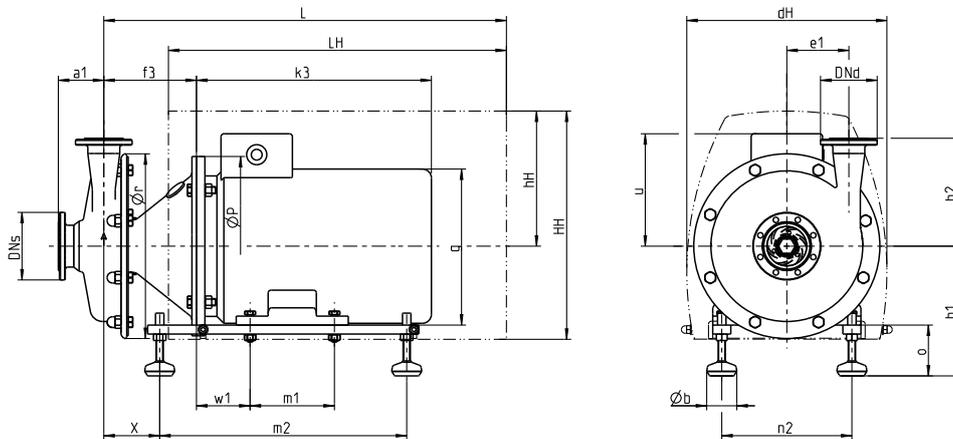


Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 50; 65, pressure side DN 40; 50
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 265/460 V – 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 23 m ³ /h
Pump head	Max. 13 m
Housing pressure	Max. 16 bar
Certificates	



* registered for recertification



Ør = 259 mm
e1 = 85 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
80	0.75	512	178	431	291	228	126	50	200	121	236	50	100	285	62	125	82	174	36
90S	1.10	518	180	431	291	228	147	50	200	121	279	56	100	285	68	140	82	172	41
90L	1.50	518	180	431	291	228	147	50	200	121	279	56	100	285	68	140	82	172	43
100L	2.20	558	207	417	341	278	149	50	250	131	316	63	140	335	98	160	85	197	63
100L	3.00	558	207	417	341	278	149	50	250	131	360	63	140	335	98	160	85	197	66
112M	4.00	558	207	471	341	278	175	50	250	131	333	70	140	335	105	190	85	197	75
132S	5.50	666	227	561	381	332	195	50	300	151	410	89	140	410	91	216	85	217	92

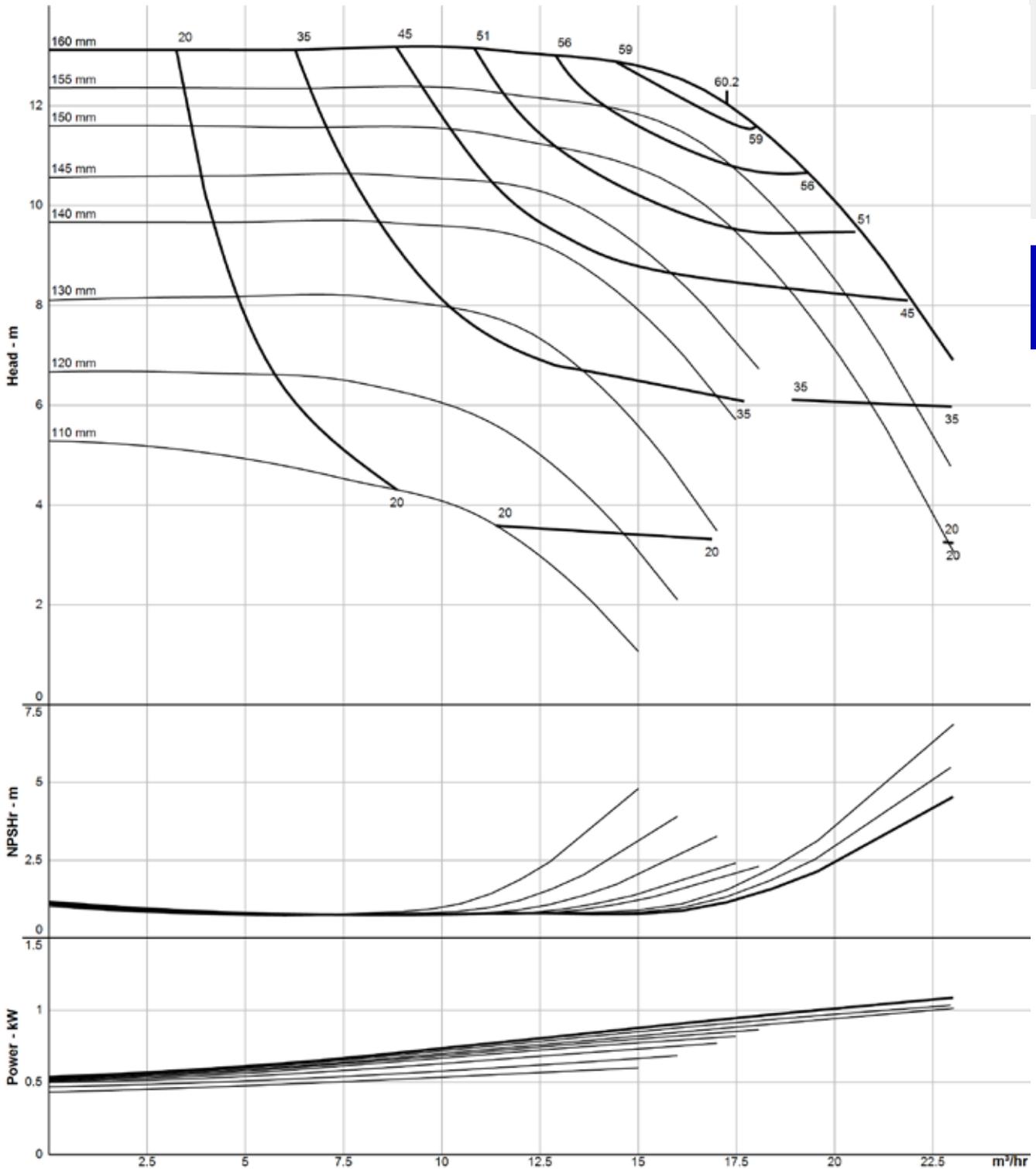
Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 2030 Performance Curve



- 1
- 2
- 3
- 4

The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

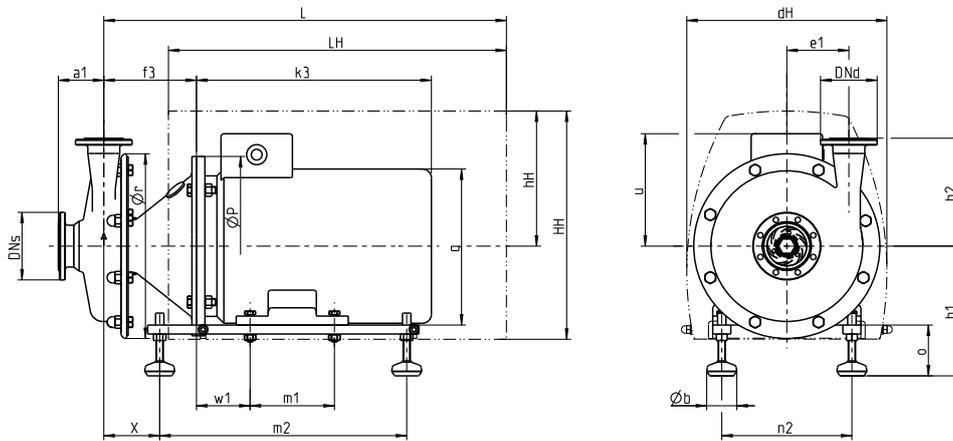
GEA Hilge TP 2050



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 50; 65, pressure side DN 50
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 265/460 V – 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 23 m ³ /h
Pump head	Max. 22 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 309 mm
e1 = 107 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
80	0.75	517	178	431	291	228	126	50	200	126	236	50	100	285	66	125	82	174	38
90S	1.10	523	180	431	291	228	147	50	200	126	279	56	100	285	72	140	82	172	43
90L	1.50	523	180	431	291	228	147	50	200	126	279	56	125	285	72	140	82	172	45
100L	2.20	563	207	471	341	278	149	50	250	136	316	63	140	335	102	160	85	197	64
100L	3.00	563	207	471	341	278	149	50	250	136	360	63	140	335	102	160	85	197	68
112M	4.00	563	207	471	341	278	175	50	250	136	333	70	140	335	109	190	85	197	77

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

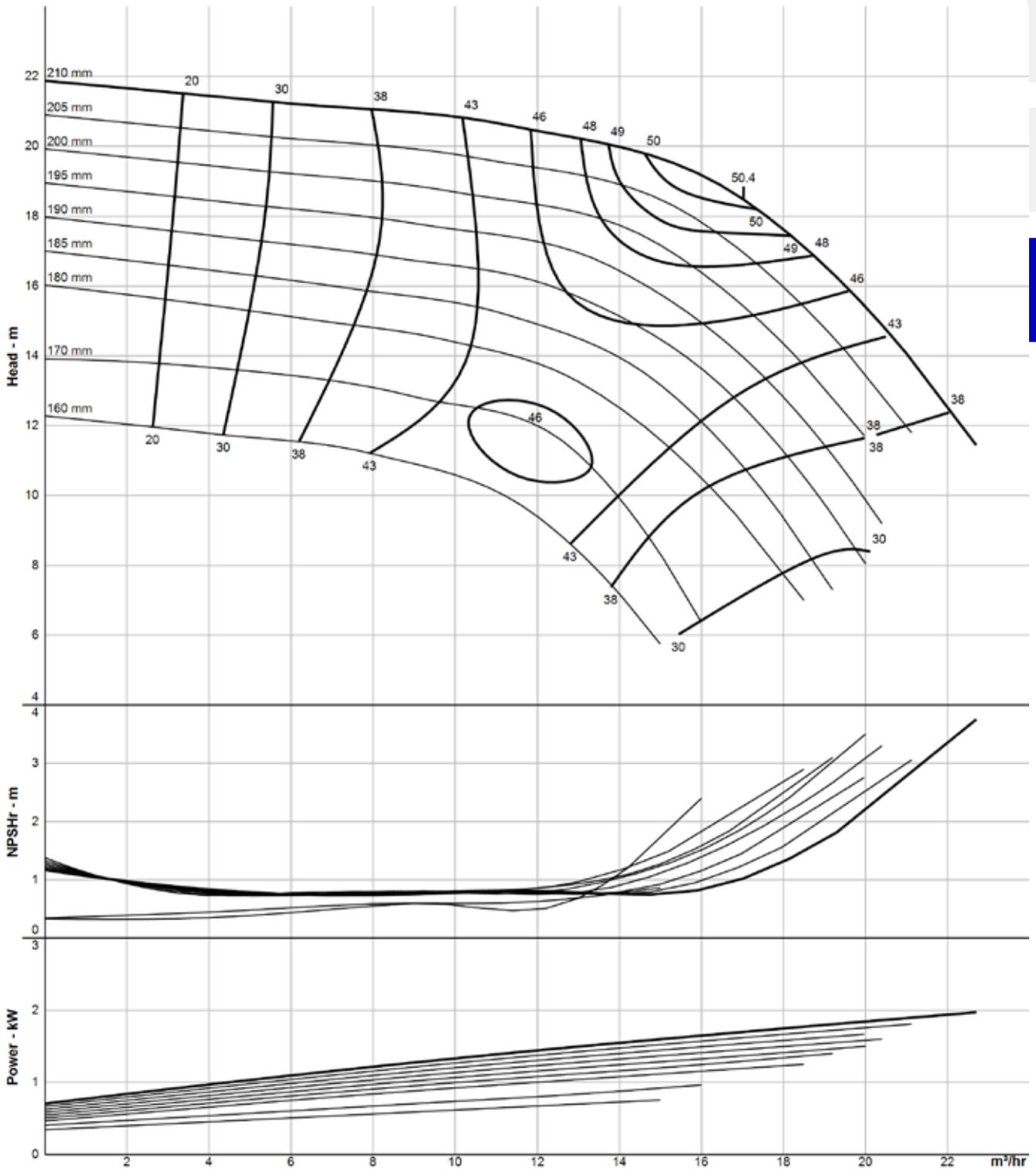
* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 2050 Performance Curve

- 1
- 2
- 3
- 4



The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

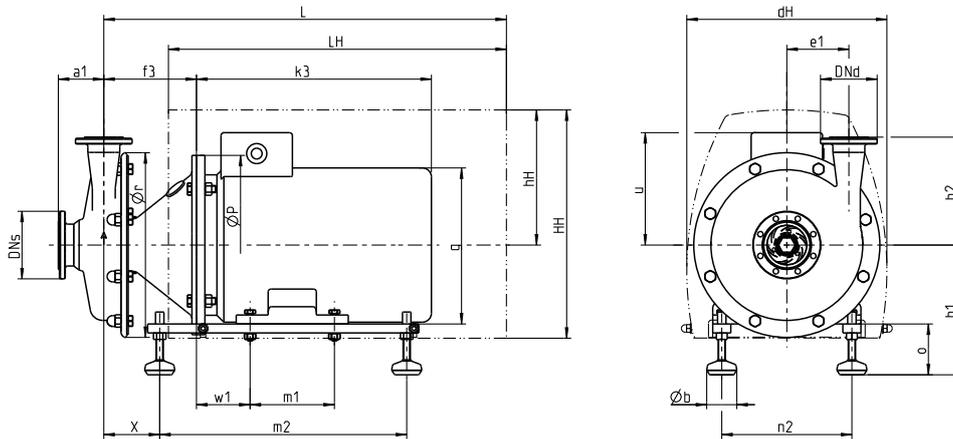
GEA Hilge TP 2575



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 65, pressure side DN 50
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	Standard motor: IEC-Motor, 3 phase 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 24 m ³ /h
Pump head	Max. 31 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 344 mm
e1 = 124.5 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
100L	3.0	563	207	471	341	278	149	50	250	136	360	63	140	335	104	160	85	197	72
112M	4.0	563	207	471	341	278	149	50	250	136	333	70	140	335	111	190	85	197	81
132M	5.5	671	227	561	381	332	195	50	300	156	410	89	140	410	97	216	85	217	98
132M	7.5	671	227	561	381	332	195	50	300	156	410	89	178	410	97	216	85	217	116

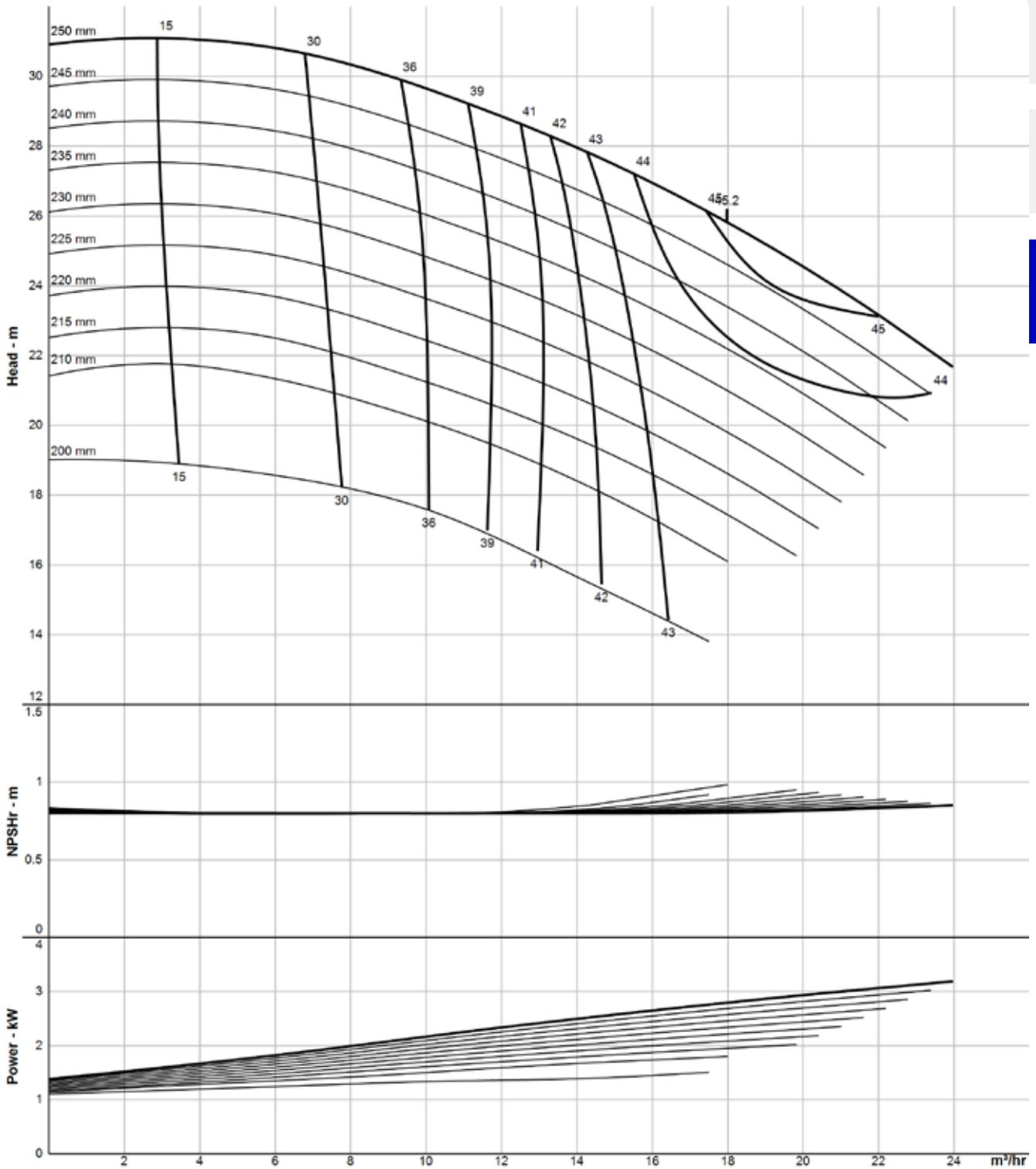
Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 2575 Performance Curve



The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

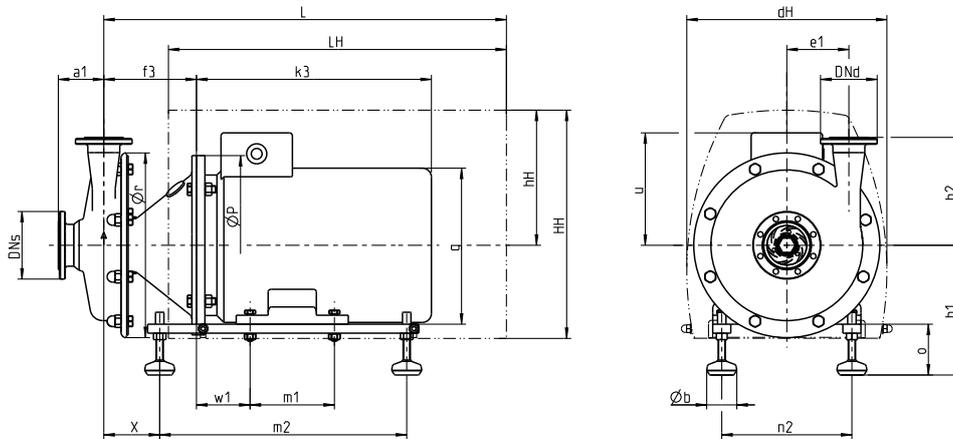
GEA Hilge TP 3050



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 65; 80, pressure side DN 50; 65
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 265/460 V – 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 46 m ³ /h
Pump head	Max. 24 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 309 mm
e1 = 103 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
80	0.75	515	178	431	291	228	126	50	200	124	236	50	100	285	64	125	82	174	41
90S	1.10	521	180	431	291	228	147	50	200	124	279	56	100	285	70	140	82	172	46
90L	1.50	521	180	431	291	228	147	50	200	124	279	56	125	285	70	140	82	172	48
100L	2.20	561	207	471	341	278	149	50	250	134	316	63	140	335	100	160	85	197	68
100L	3.00	561	207	471	341	278	149	50	250	134	360	63	140	335	100	160	85	197	71
112M	4.00	561	207	471	341	278	175	50	250	134	333	70	140	335	107	190	85	197	80
132S	5.50	669	227	561	381	332	195	50	300	154	410	89	140	410	93	216	85	217	97
132S	7.50	669	227	561	381	332	195	50	300	154	410	89	178	410	93	216	85	217	115

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

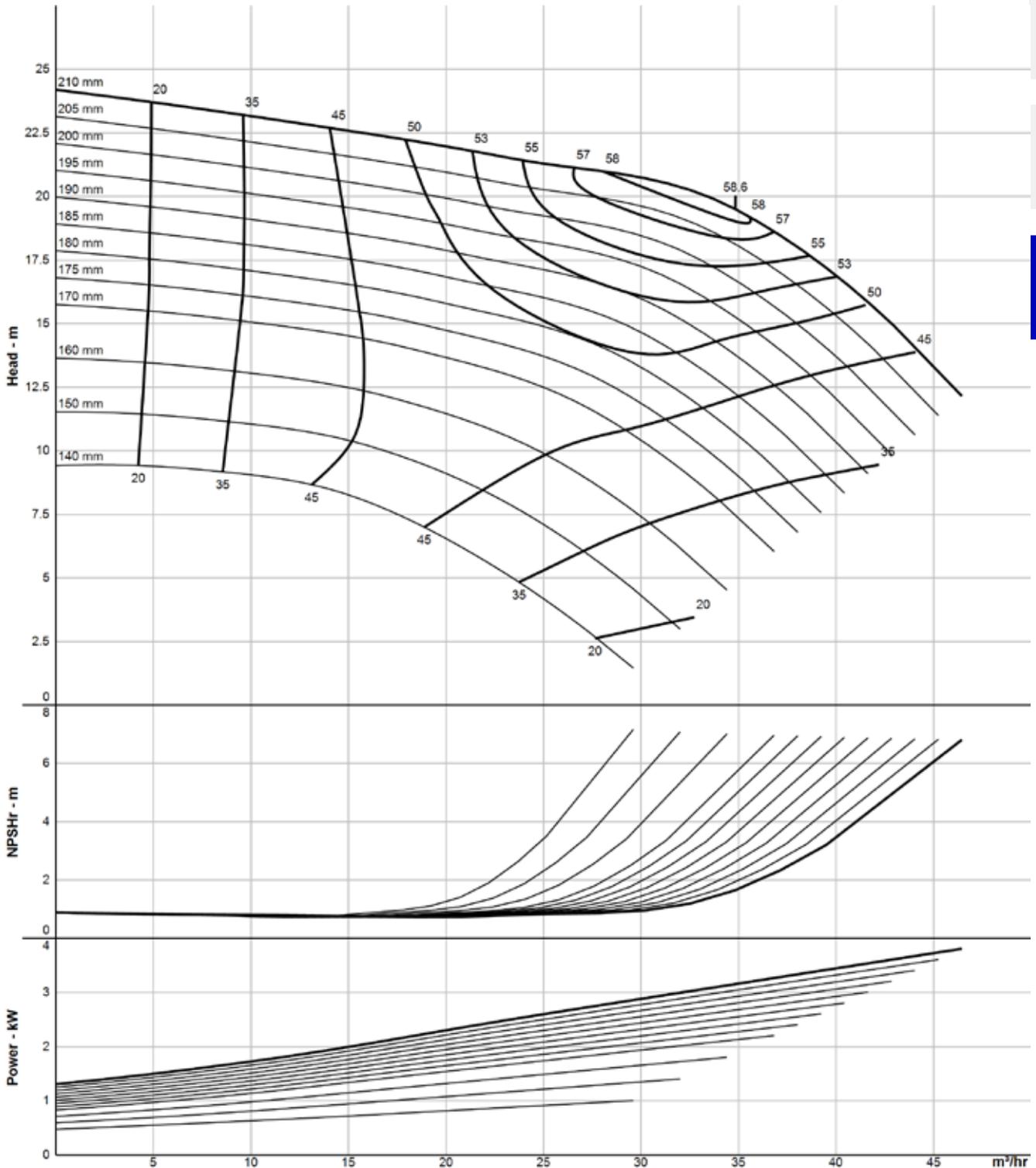
GEA Hilge TP 3050 Performance Curve

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The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

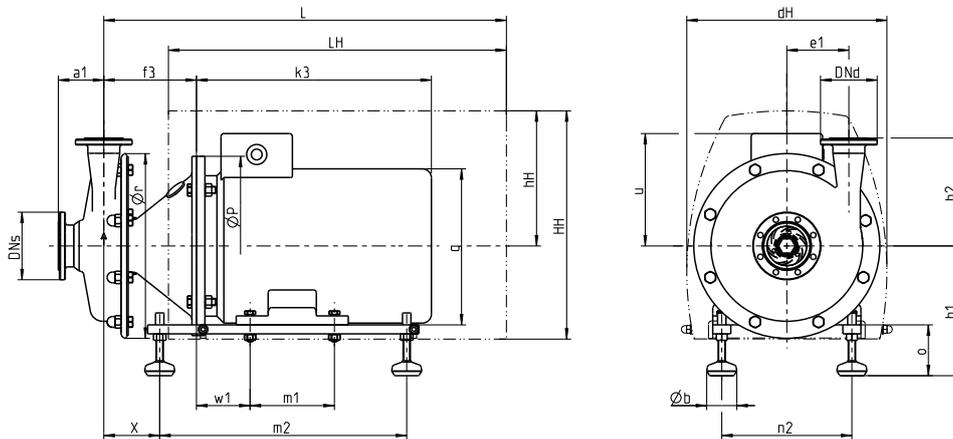
GEA Hilge TP 5060



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 80, pressure side DN 65; 80
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 265/460 V – 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 49 m ³ /h
Pump head	Max. 24 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 334 mm
e1 = 114.5 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
100L	2.2	564	207	471	341	278	149	50	250	137	316	63	140	335	103	160	85	197	70
100L	3.0	564	207	471	341	278	149	50	250	137	360	63	140	335	103	160	85	197	73
112M	4.0	564	207	471	341	278	175	50	250	137	333	70	140	335	110	190	85	197	82
132S	5.5	672	227	561	381	332	195	50	300	157	410	89	140	410	96	216	85	217	99
132M	7.5	672	227	561	381	332	195	50	300	157	410	89	178	410	96	216	85	217	117

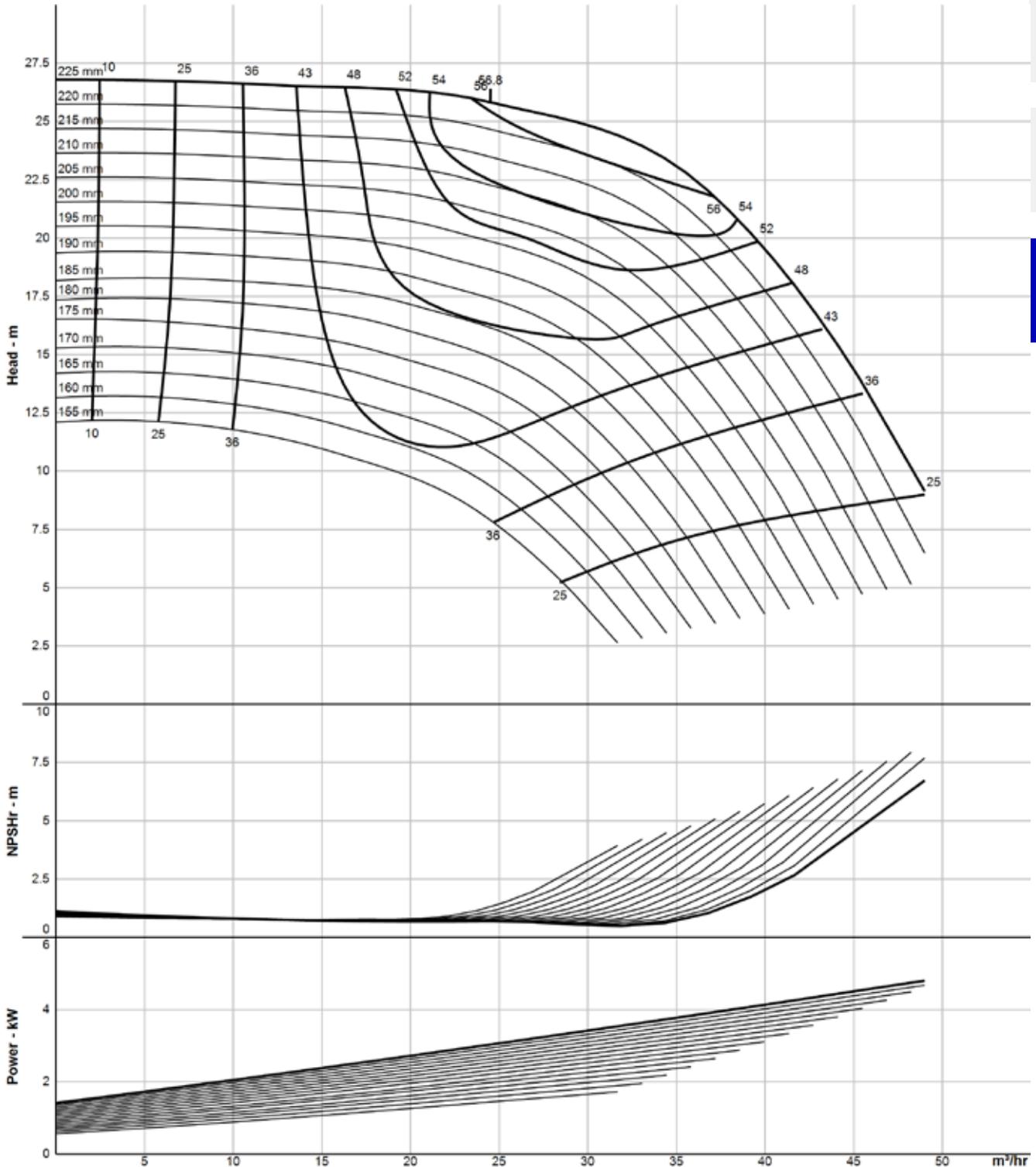
Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 5060 Performance Curve



1

2

3

4

The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

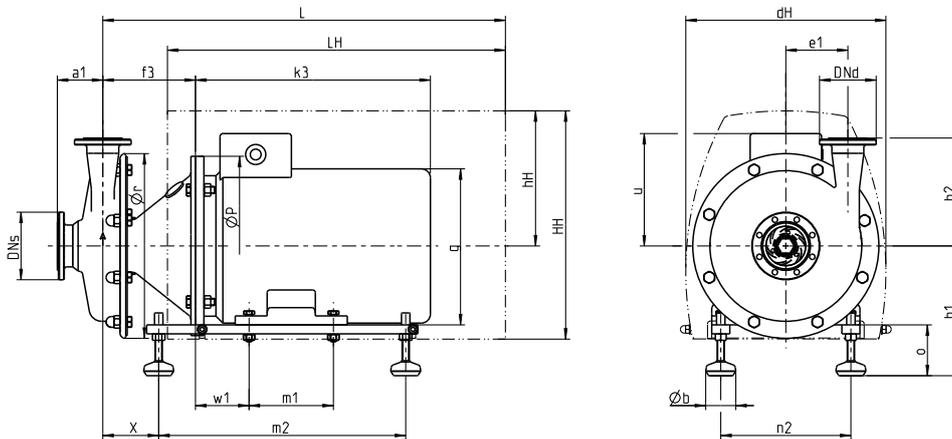
GEA Hilge TP 7060



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 80, pressure side DN 65; 80
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 265/460 V – 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 69 m ³ /h
Pump head	Max. 27 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 334 mm
e1 = 110 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
100L	2.2	559	207	471	341	278	149	50	250	132	316	63	140	335	98	160	85	197	71
100L	3.0	559	207	471	341	278	149	50	250	132	360	63	140	335	98	160	85	197	74
112M	4.0	559	207	471	341	278	175	50	250	132	333	70	140	335	105	190	85	197	83
132S	5.5	667	227	561	381	332	195	50	300	152	410	89	140	410	92	216	85	217	100
132M	7.5	667	227	561	381	332	195	50	300	152	410	89	178	410	92	216	85	217	118

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

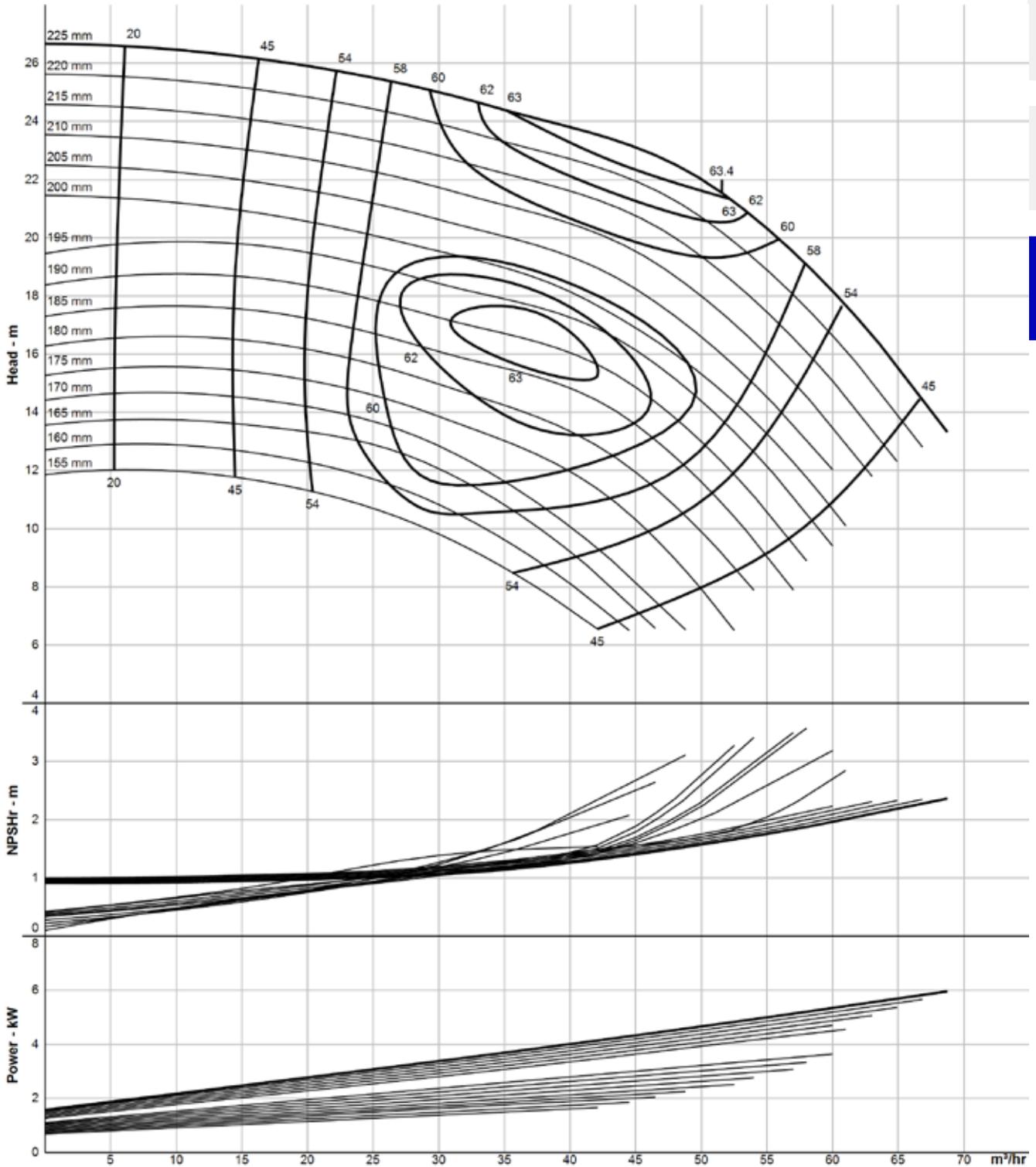
* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 7060 Performance Curve

- 1
- 2
- 3
- 4



The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

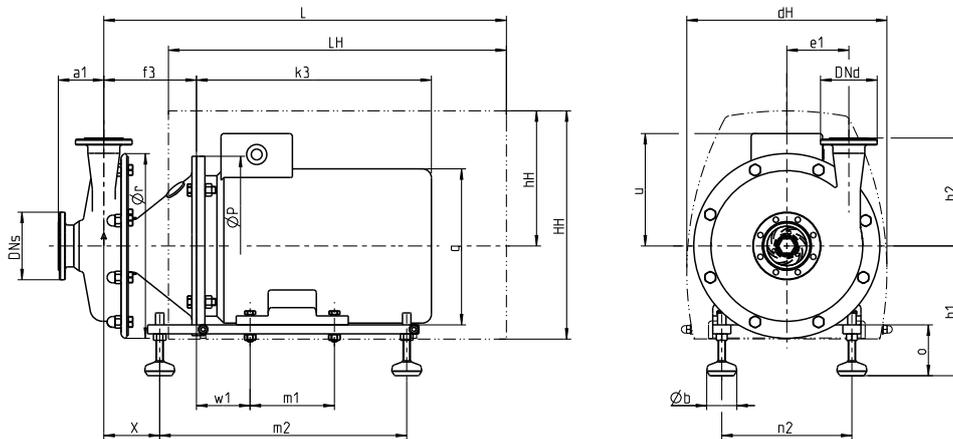
GEA Hilge TP 8050



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 100, pressure side DN 65; 80
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 265/460 V – 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 78 m ³ /h
Pump head	Max. 21 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 432 mm
e1 = 114 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
100L	2.2	557	207	471	341	278	149	50	250	130	316	63	140	335	96	160	85	197	80
100L	3.0	557	207	471	341	278	149	50	250	130	360	63	140	335	96	160	85	197	83
112M	4.0	557	207	471	341	278	175	50	250	130	333	70	140	335	103	190	85	197	86
132S	5.5	665	227	561	381	332	195	50	300	152	410	89	140	410	89	216	85	217	103
132M	7.5	665	227	561	381	332	195	50	300	152	410	89	178	410	89	216	85	217	121

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

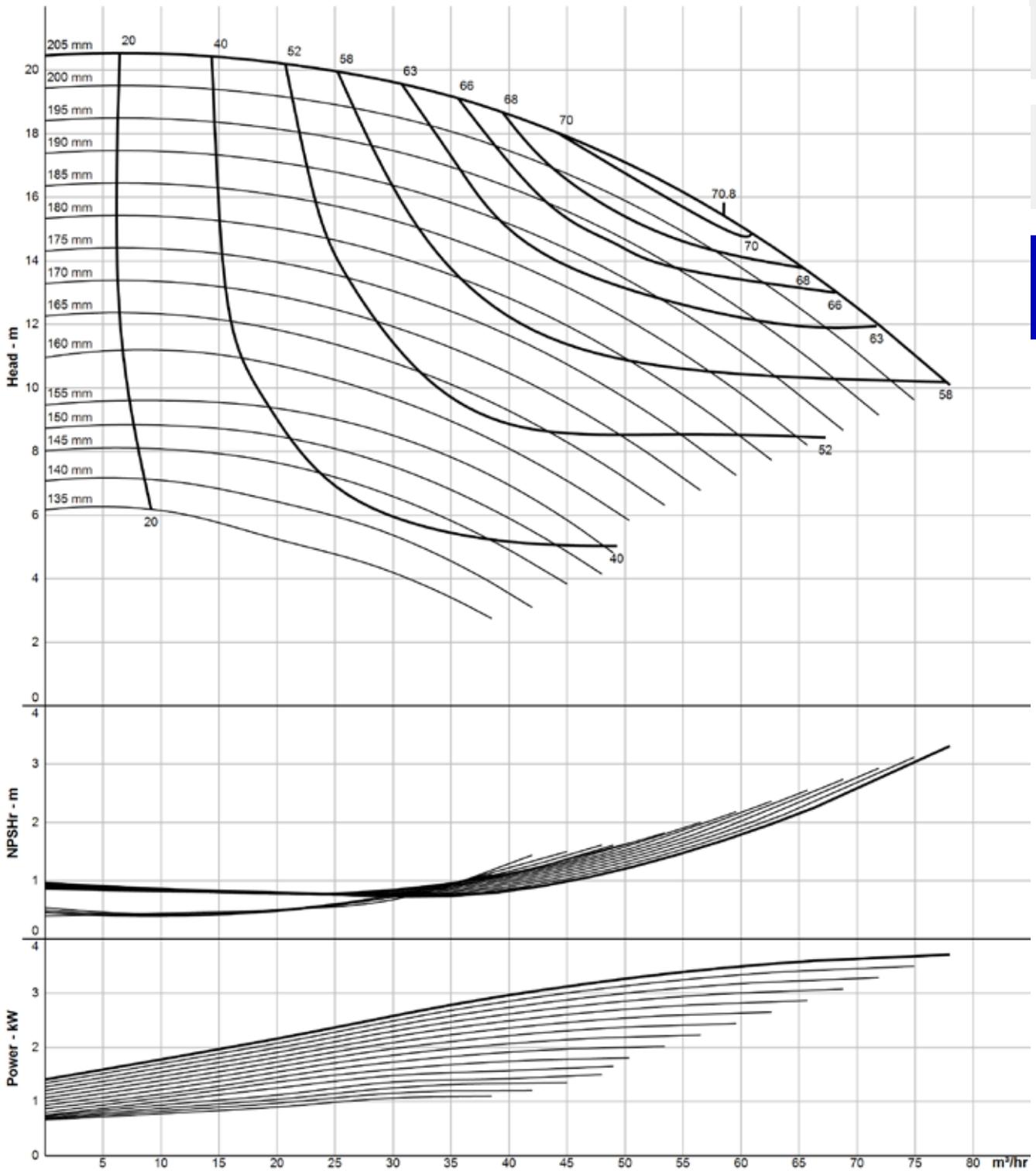
* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 8050 Performance Curve

- 1
- 2
- 3
- 4



The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

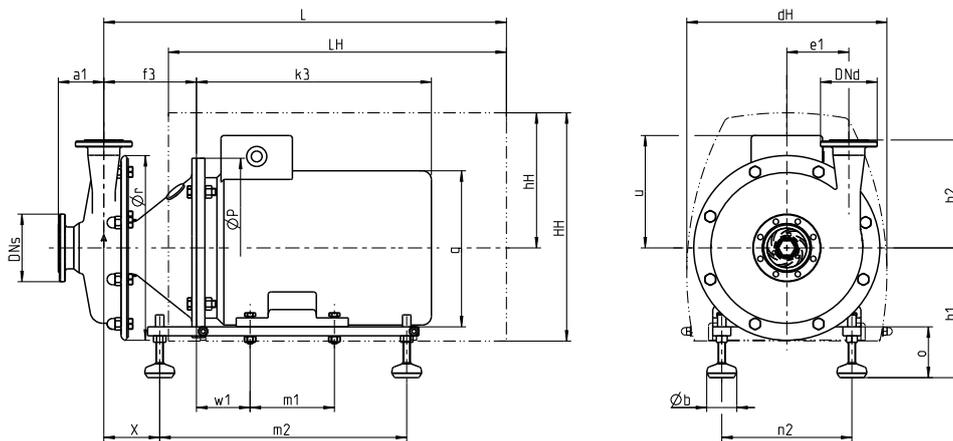
GEA Hilge TP 8080



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 100, pressure side DN 65; 80
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 74 m ³ /h
Pump head	Max. 34 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 359 mm
e1 = 124 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
112M	4.0	565	207	471	341	278	175	50	250	138	333	70	140	335	111	190	85	197	85
132S	5.5	673	227	561	381	332	195	50	300	158	410	89	140	410	97	216	85	217	102
132M	7.5	673	227	561	381	332	195	50	300	158	410	89	178	410	97	216	85	217	120

Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

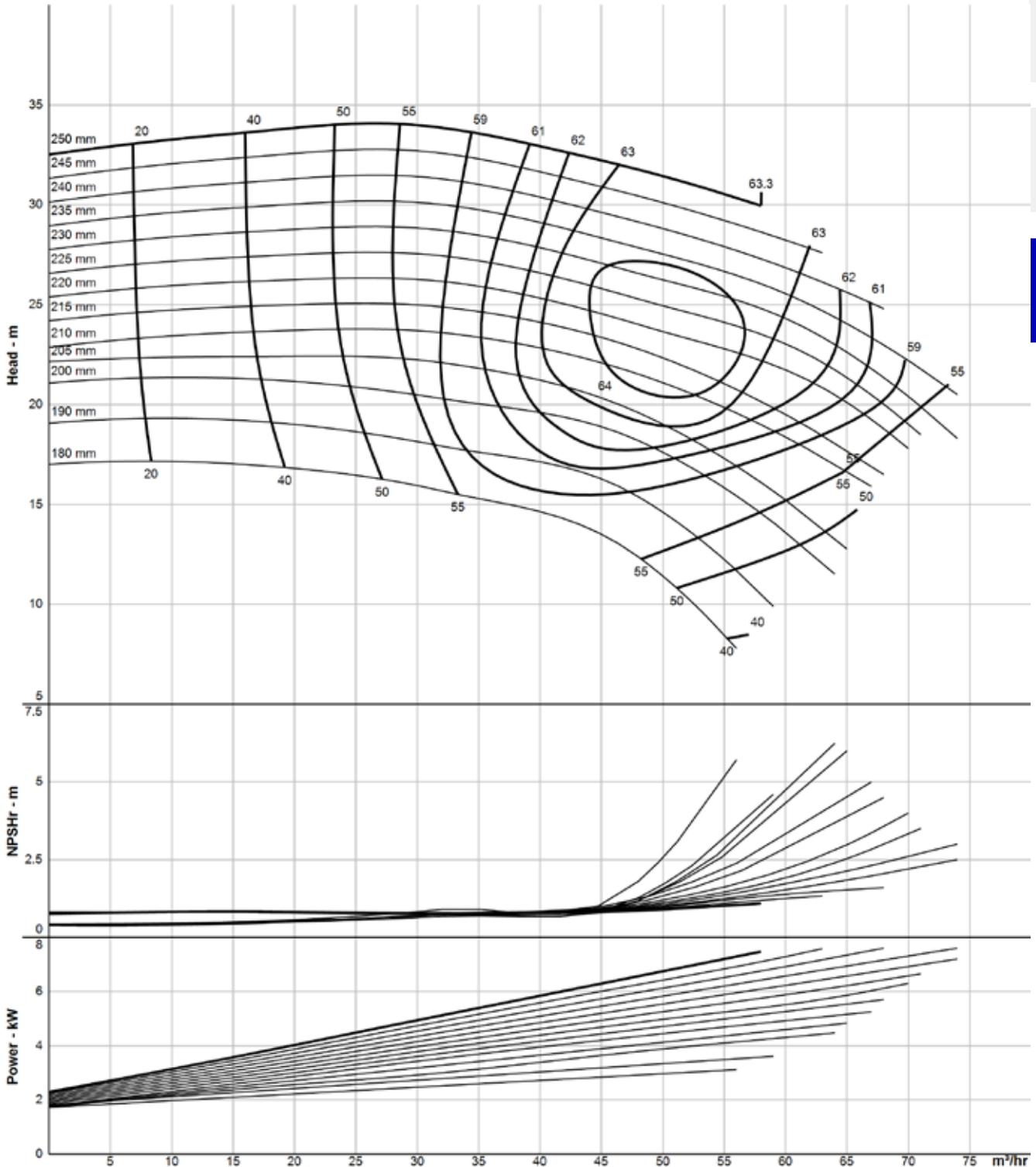
GEA Hilge TP 8080 Performance Curve

1

2

3

4



The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

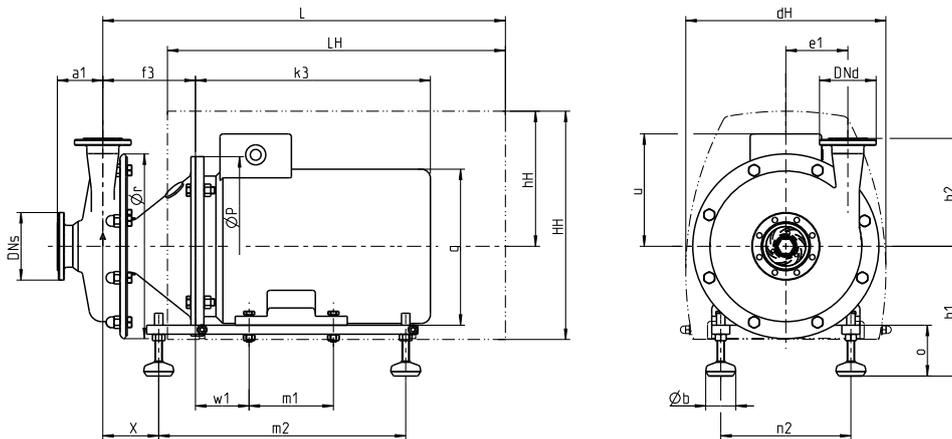
GEA Hilge TP 16040



Technical data of the standard version

Materials	Pump housing deep-drawn: Stainless steel 316L (1.4404) Impeller: Investment cast 316L (1.4409)
Connections	Grooved flanges DIN 11853-2
Nominal width of connections	Suction side DN 100; 150, pressure side DN 100
Mechanical seal	Single mechanical seal (carbon/SiC/EPDM)
Static seals	EPDM
Motor (Standard Motor)	IEC-Motor, 3 phase 460/800 V, IM B35, IP 55, ISO-Class F, incl. thermistor, IE3
Documentation	Operating instructions, declaration of conformity
Flow rate	Max. 123 m ³ /h
Pump head	Max. 17 m
Housing pressure	Max. 16 bar
Certificates	

* registered for recertification



Ør = 356 mm
e1 = 108 mm

Dimensions

Frame Size	Power [kW]	L [mm]	hH [mm]	LH [mm]	HH [mm]	dH [mm]	u [mm]	Øb [mm]	ØP [mm]	f3 [mm]	k3 [mm]	w1 [mm]	m1 [mm]	m2 [mm]	x [mm]	n2 [mm]	o [mm]	h1 [mm]	Weight [kg]
100L	3.0	557	207	471	341	278	149	50	250	130	360	63	140	335	97	160	85	197	86
112M	4.0	557	207	471	341	278	175	50	250	130	333	70	140	335	104	190	85	197	89
132S	5.5	665	227	561	381	332	195	50	300	150	410	89	140	410	90	216	85	217	106
132M	7.5	665	227	561	381	332	195	50	300	150	410	89	178	410	90	216	85	217	124

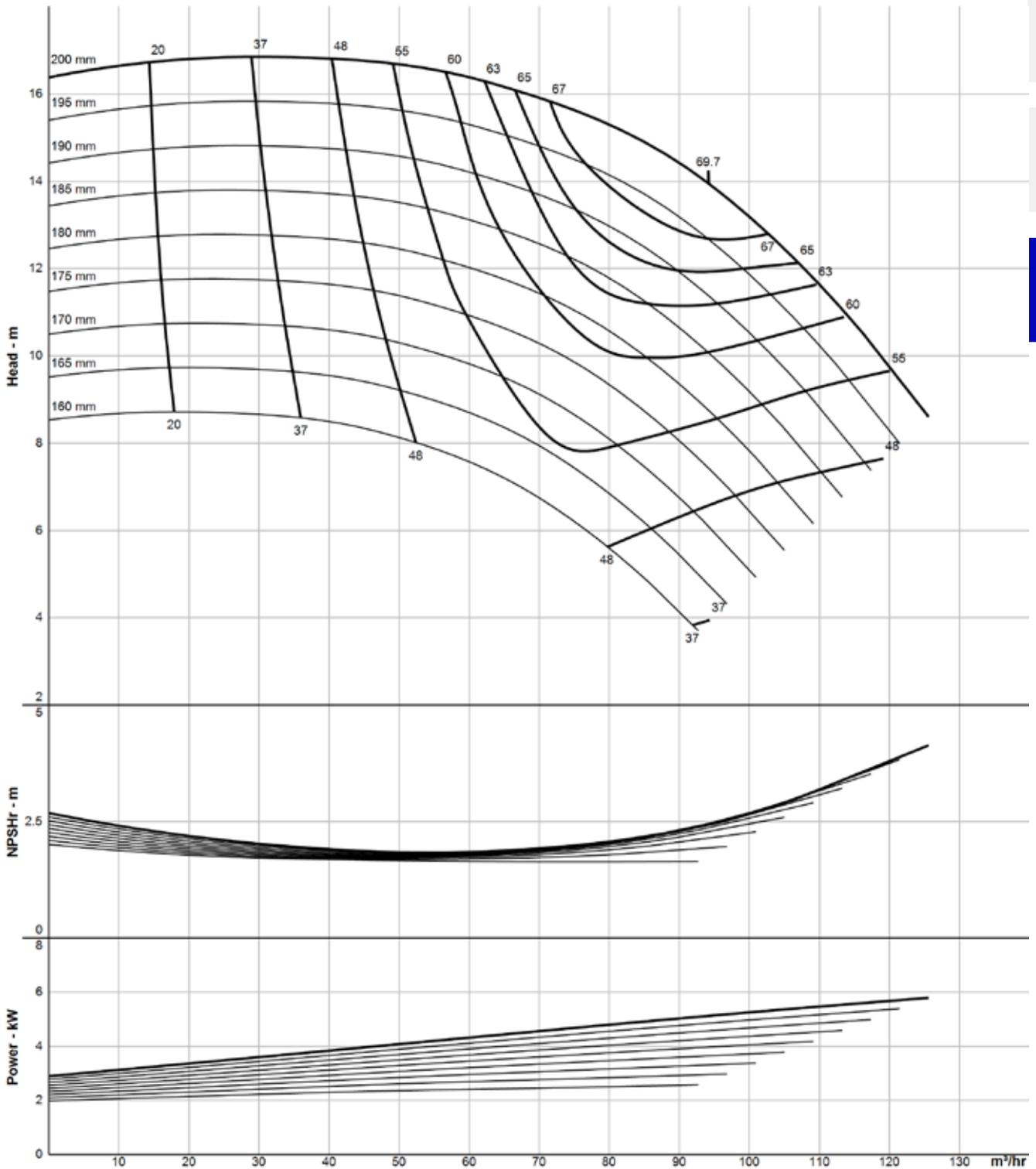
Motor dimensions depend on the motor manufacturer and execution. The shown motor dimensions indicate the size for the standard motor

* Option: drain valve (dimensions and other drainage variants on request)

Weight: net-weight without packaging

a1, h2 see connection dimensions

GEA Hilge TP 16040 Performance Curve



- 1
- 2
- 3
- 4

The flow charts are based on water, temperature 20 °C
Graphic extracted from pump configuration tool

Inquiry Sheet · Centrifugal Pumps 1/2

GEA Hygienic Pumps

Contact Data

Company: _____ E-mail: _____
 Contact Person: _____ Country: _____
 Phone: _____ Country of Installation: _____

Preferred Range

VARIPUMP SMARTPUMP No preference

Liquid Data

*Liquid: _____ Solids: No Yes:
 *Liquid temperature [°C/°F]: _____ Kind of solids: _____
 *Density [kg/dm³]: _____ Size of solids [mm]: _____
 *Viscosity [mPas]: _____ Abrasive: No Yes
 Concentration [%]: _____

Operating Conditions

*Duty point 1 *Flow [m³/h/gpm]: _____ *Head [m lc]: _____
 Duty point 2 Flow [m³/h/gpm]: _____ Head [m lc]: _____
 End-suction pump: Self-priming pump:
 Inlet pressure (NPSHa) [m]: _____ Suction head [m]: _____
 Vacuum at inlet: No Yes: Gas content: No < 5% > 5%
 Vacuum, abs. [mbar]: _____
 System pressure [bar]: _____

Cleaning / Sterilization

CIP: No Yes: SIP: No Yes:
 CIP Temperature [°C/°F]: _____ SIP Temperature [°C/°F]: _____
 CIP Flow [m³/h/gpm]: _____ SIP Duration [min]: _____
 CIP Head [m Fls]: _____

Pump execution

*Connection Type

Tri Clamp (DIN 32676) ANSI Flange DIN 11851
 DIN 11853-2/11864-2 Other: _____

Connection Size

DN_i/DN_o: _____
 Other: _____

Drainable:

No Yes

Execution and Design

Pump in Bloc version with motor Combi foot Motor foot
 Pump in long coupled version with base plate and standard motor On Trolley Horizontal
 With stainless steel motor shroud Cast iron foot Vertical
 3-A stainless steel adjustable feet Stainless steel foot Vertical w. stainless steel stand

Inquiry Sheet · Centrifugal Pumps 2/2

GEA Hygienic Pumps

Surface Roughness

- Not specified
- $R_a \leq 3.2 \mu\text{m}$
- $R_a \leq 0.8 \mu\text{m}$
- $R_a \leq 0.4 \mu\text{m}$

Ferrite Content

- Not specified
- Fe < 1%

Shaft Seal

- Single mechanical seal
- Flushed mechanical seal

Material Shaft Seal

- Carbon/Stainless Steel
- SiC/SiC
- Carbon/SiC
- Other: _____

Elastomer

- EPDM
- FKM (Viton)
- Other: _____

Motor Data

*Power supply:

- 3~ 400 V / 50 Hz 3~ 460 V / 60 Hz
- 3~ 200 V / 50 Hz 3~ 200 V / 60 Hz
- Other: _____ 3~ 380 V / 60 Hz

Motor speed [1/min]: _____

PTC-Thermistors: No Yes2 wire-Thermistors: No YesVariable speed drive No Yes:

- External frequency converter (not on motor)
- Integrated frequency converter (on motor)

Explosion protection No YesATEX No Yes:

Ex-Zone: _____

Temperature class: _____

Ambient temperature [°C/°F]: _____

EXP Motor No Yes:

Temperature class: _____

Ambient temperature [°C/°F]: _____

Class: _____

Division: _____

Group: _____

Certificates/Documentation

- 3-A Sanitary Standard certification
- Inspection certificate 3.1 acc. to DIN EN 10204
- Test report 2.2 acc. to DIN EN 10204
- EHEDG certification
- Further certificates and documentation: _____
- FDA declaration of conformity
- Surface roughness test report
- Delta ferrite test report

Further Information

* Fields marked with an asterisk are mandatory for a pump selection
Selected options subject to confirmation by our offered portfolio

09/2022

Description of Certificates and Test Reports

2.1		Works certificate according to DIN EN 10204: Declaration of the compliance with the order. This certificate is issued by the manufacturer.
2.2		Test report according to DIN EN 10204: Declaration of the compliance with the order under specification of the results of non-specific tests. This certificate is issued by the manufacturer.
3.1		Inspection certificate 3.1 according to DIN EN 10204: Declaration of the compliance with the order under specification of the results of specific tests. This certificate is issued by an authority which is independent of manufacturing and is validated by the manufacturers authorized inspection representative.
3-A		3-A Sanitary Standards, Inc. (3-A SSI) is an independent, non-profit corporation dedicated to advancing hygienic equipment design for the food, beverage, and pharmaceutical industries.
AS-i		Actuator Sensor interface. BUS system for the lowest field level.
ASME-BPE		Standard of the ASME's – bioprocessing equipment association
ATEX		Atmosphères Explosibles. ATEX comprises the directives of the European Union in the area of explosion protection. For one thing, this is the ATEX equipment directive 2014/34/EU, for another, the ATEX workplace directive 1999/92/EC.
cCSAus		Test of a product by CSA according to applicable safety standards in Canada and the USA.
CE		Conformité Européenne. By affixing the CE mark, the manufacturer confirms that the product complies with the European directives 765/2008 applicable to the specific product.
CSA		Canadian Standards Association. A non-governmental Canadian organization which issues standards as well as checking and certifying the safety of products. It is now globally active.
cULus		Test of a product by UL according to applicable safety standards in Canada and the USA.
DIN EN ISO 9001:2015		This norm is the basis for a multitude of varied organizations in different industries worldwide for quality assurance and quality management. It is the most widespread standards of ISO (International Organisation for Standardization).
EAC		Euroasion conformity. The symbol is used similar to the European CE mark. The manufacturer or supplier confirms that the machine has passed all necessary compliance procedures in one of the Member States of the customs union.
EG 1935/2004*		Materials in contact with the product used in valves from GEA Tuchenhausen GmbH are in accordance with EC regulation 1935/2004. This defines a general framework for materials and objects intended to come into contact with foodstuffs.
EHEDG		European Hygienic Engineering & Design Group. European supervisory authority for foodstuffs and pharmaceuticals. This authority issues approvals and certificates for products and materials that are used in the foodstuffs and pharmaceuticals industries.
FDA		Food and Drug Administration. US supervisory authority for foodstuffs and pharmaceuticals. This authority issues approvals and certificates for products and materials that are used in the foodstuffs and pharmaceuticals industries.
UL		Underwriters Laboratories. An organization founded in the USA for checking and certifying products and their safety.
USP Class VI		The United States Pharmacopeial Convention (USP) is a scientific nonprofit organization that sets standards to help protecting public health. Class VI administer tests and impacts of material and their substances on animal and human tissues.

Abbreviations and Terms

Abbreviation	Explanation
°C	Degrees Celsius, unit of measurement for temperature
°F	Degrees Fahrenheit, unit of measurement for temperature
3D	Three-dimensional
A	Ampere, unit of measurement of current intensity or Output, term used in automation
AC	Alternating Current
ADI free	All elastomer compounds are free of animal-derived ingredients
AISI	American Iron and Steel Institute, association of the American steel industry
ANSI	American National Standards Institute, American body for standardizing industrial processes
approx.	approximately
AS-i	Actuator Sensor interface, standard for fieldbus communication
ASME	American Society of Mechanical Engineers, professional association of mechanical engineers in the USA
ASME-BPE	Standard of the ASME's – bioprocessing equipment association
ATEX	Atmosphères Explosibles, synonymous with the directives of the European Union for potentially explosive areas
bar	Unit of measurement for pressure. All pressure values [barg/psig] refer to positive pressure [bar _g /psi _g], unless specifically stated otherwise.
bar _g	Unit of measurement for pressure relative to atmospheric pressure
CAN	Controller Area Network; asynchronous serial bus system
CE	Conformité Européenne, administrative symbol for the free movement of industrial products
CIP	Cleaning In Place, designates a process for cleaning technical process systems.
CRN	The Canadian Registration Number is issued by a Canadian Jurisdiction and covers pressurized components. The authorization is needed to operate these components in Canada.
CSA	Canadian Standards Association, a non-governmental Canadian Standardization organization
Cv	The Cv value corresponds to the water flow rate through a valve (in US gal/min) at a pressure differential of 1 PSI and a water temperature of 5 °C to 30 °C. kv = 14,28 Cv (USA).
Cvs	The Cv values of a valve at nominal stroke (100 % opening) is designated the Cvs value.
dB	Decibel, one tenth of a bel, named after Alexander Graham Bell and used for identifying levels and dimensions
DC	Direct Current
DIN	Deutsches Institut für Normung e. V. Standardization organization in the Federal Republic of Germany, DIN = synonym for standards issued by the organization
DIP	Dual Inline Package, design of a switch
DN	Diameter Nominal, DIN nominal width
Device Net	Network system used in the automation industry to interconnect control devices for data exchange
E	Input, term used in automation
EAC	Certification of technical conformity from the customs union of Russia/Balarus/Kazakhstan
Pressure Equipment Directive 2014/68/EU	Directive of the European Parliament and the Council Directive for layout and conformity evaluation for pressure equipment and assemblies with a maximum pressure (PS) of more than 0.5 bars.
EG No. 1935/2004	Regulation of the European Parliament which lays down common rules for materials which come, or may come, into contact with food, either directly or indirectly.
EHEDG	European Hygienic Engineering and Design Group. Consortium of equipment manufacturers, food industries, research institutes as well as public health authorities
EN	European standard, rules of the European Committee for Standardization
EPDM	Ethylene propylene diene rubber, acronym acc. to DIN/ISO 1629
Ex	Synonym for ATEX
FDA	Food and Drug Administration, official foodstuffs monitoring in the United States
FEM calculation	Finite Element Method; calculation process for simulating solids
FKM	Fluorinated rubber, acronym acc. to DIN/ISO 1629
GOST	Gosudarstvennyy Standart, Certification of conformity for components according to standards and regulations of the Russian Federation
H	Henry, unit of measurement for inductance
HNBR	Hydrated acrylonitrile butadiene rubber, acronym acc. to DIN/ISO 1629
Hz	Hertz, unit of frequency named after Heinrich Hertz

Abbreviations and Terms

Abbreviation	Explanation
I	Formula symbol for electrical current
IEC	International Electrotechnical Commission, international standardization organization for electrical and electronic engineering
IP	Ingress Protection / International Protection, index of protection class acc. to IEC 60529
IPS	Iron Pipe Size, American pipe dimension
ISA	International Society of Automation, international US organization of the automation industry
ISO	International Organization for Standardization, international organization that produced international standards, ISO = synonym for standards from the organization
kg	Kilogram, unit of measurement for weight
Kv	The Kv value corresponds to the water flow rate through a valve (in m ³ /h) at a pressure differential of 0.98 bar and a water temperature of 5 °C to 30 °C.
Kvs	The Kv values of a valve at nominal stroke (100 % opening) is designated the Kvs value
L	Conductive
LED	Light-Emitting Diode
mm	Millimeter, unit of measurement for length
M	Metric, system of units based on the meter or Mega, one million times a unit
m ³ /h	Cubic meters per hour, unit of measurement for volumetric flow
max.	Maximum
NAMUR	Standardization working association for measuring and control technology in the chemical industry, synonym for the interface type of the organization, especially for potentially explosive atmospheres
NC	Normally Closed; valve or solenoid valve control which is closed in idle status
NO	Normally Open; valve or solenoid valve control which is open in idle status
NOT-element	Logic element, NOT gate
NPN	Signal transmission against reference potential, current-consuming
NPT	National Pipe Thread, US thread standard for self-sealing pipe fittings
OD	Outside Diameter, pipe dimension
ODVA	Open DeviceNet Vendor Association, global association for network standards
PA 12/L	Polyamide
Pg	Armoured thread
PMO	Pasteurized Milk Ordinance
PN	Nominal pressure for pipeline systems according to EN 1333, rated pressure in bar at room temperature (20 °C)
PNP	Signal transmission against reference potential, current-supplying
PPO	Polyphenylene oxide, thermoplastic material
PS	Maximum permitted operating pressure at which the components can operate safely at maximum allowable temperature (TS)
psi	Unit of measurement for pressure, pound-force per square inch, 1 psi = 6894.75 Pa. All pressure values [bar/psi] refer to positive pressure [bar _g /psi _g], unless specifically stated otherwise.
psi _g	Unit of measurement for pressure relative to atmospheric pressure
PV	Solenoid valve
R _a in µm	Average roughness value, describes the roughness of a technical surface
International Protection-Code IP67, IP66, IP69K	Classifies and rates the degree of protection provided against intrusion dust, accidental contact, and water
SES	GEA Tuchenhagen control head for Ex areas, control top system of GEA Tuchenhagen
SET-UP	Self-learning installation, the SET-UP procedure carries out all necessary settings for generating messages during commissioning and maintenance.
SIP	Sterilization in Place, refers to a process for cleaning technical process systems
SMS	Svensk Mjöl Standard, Scandinavian pipe dimension
SW	Indicates the size of a tool spanner, "Schlüsselweite"
TA-Luft VDI 2440	If a product is certified according to TA Luft it meets the requirements for proof of high grade performance according to TA Luft of 1.0× 10 ⁻⁴ mbar x l / (s x m) at service conditions under the VDI guideline 2440. The product will hence be tested for tightness.
TS	Maximum permitted operating temperature

Abbreviation	Explanation
UL	Underwriters Laboratories, a certification organization established in the USA
USP Class VI	The United States Pharmacopeial Convention (USP) is a scientific nonprofit organization that sets standards to help protecting public health. Class VI administer tests and impacts of material and their substances on animal and human tissues.
UV	Ultraviolet, ultraviolet radiation is a wavelength of light
V	Volt, unit of measurement for voltage
VMQ	High-polymer vinyl methyl polysiloxane, silicone rubber, MVQ = synonym
W	Watt, unit of measurement for power
Y	Control air connection for the working cylinder, designation from pneumatic systems
μ	Micro, one millionth of a unit
Ω	Ohm, the unit of electrical resistance named after Georg Simon Ohm

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