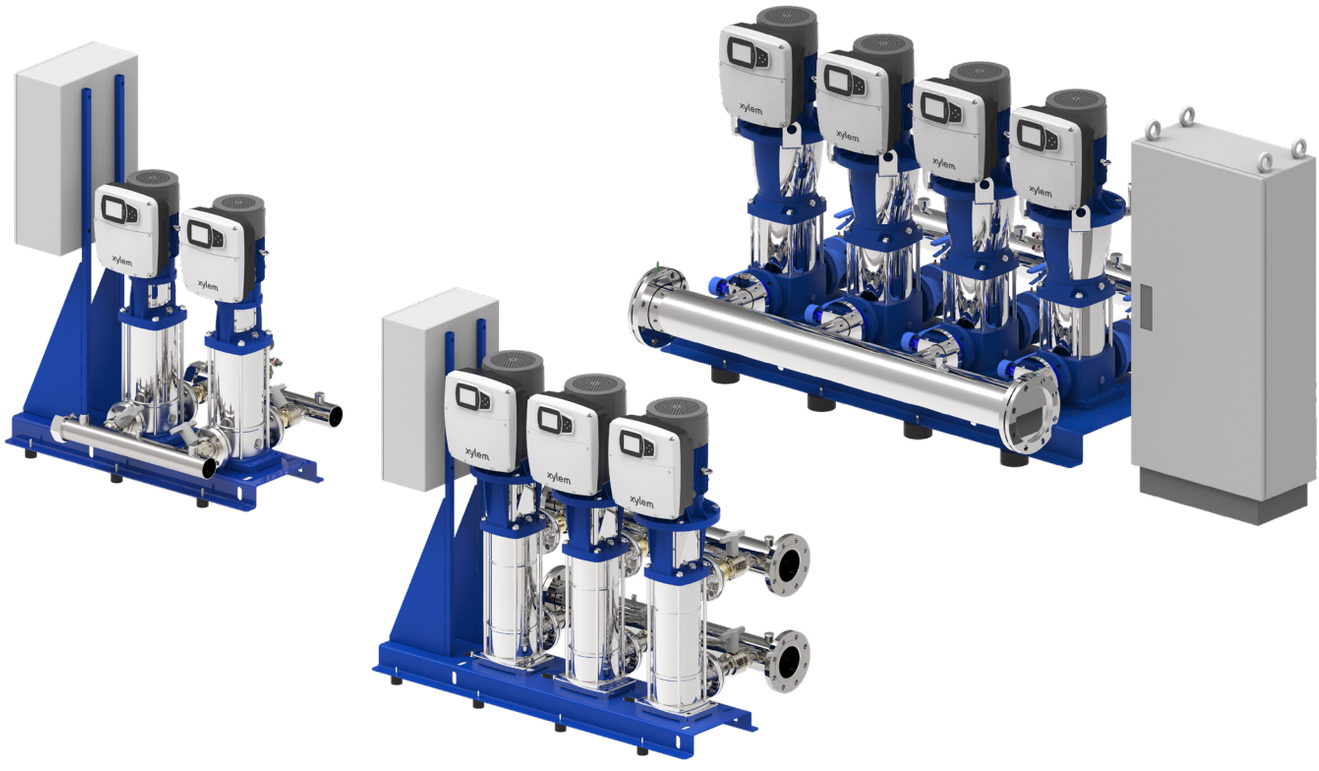
LOWARA xylem

Technical brochure
Cod. 191020601 Rev. H Ed.02/2026

50/60 Hz



GHV hydrovar X+ Series

GHV10-GHV20-GHV30-GHV40 Series

Variable speed booster sets with
e-SVX vertical multistage electric pump series
and with hydrovar X+

xylem

Directive 2009/125/EC of the European Union

The **Directive 2005/32/EC** on energy-using products (**EuP**) and the subsequent **Directive 2009/125/EC** on energy-related products (**ErP**) established the ecodesign requirements for products to reduce their energy consumption and consequently their environmental impact.

These requirements apply to products placed and used in the European Economic Area (European Union plus Iceland, Liechtenstein and Norway) as a stand-alone unit or as integrated parts in other products.

The following tables show the Regulations that define the requirements applicable to Lowara products.

- Some types of **pump** used for pumping clean water:

Regulations	From	Target
(EU) N. 547/2012 and subsequent updates	1 January 2015	**MEI** ≥ 0,4

- **Circulators** with a rated hydraulic output power of between 1 and 2500 W, designed for use in heating systems or in secondary circuits of cooling distribution systems:

Regulations	From	Target
(EC) N. 641/2009 and subsequent updates	1 August 2015	**EEI** < 0,23

- **Three-phase motors** with frequency 50 or 60 or 50/60 Hz and voltages between 50 and 1000 V (S1 and D.O.L.):

Regulations	From	Target
(EU) 2019/1781 and subsequent updates	1 July 2023	**IE2**: motors with a rated output ≥ 0,12 and < 0,75 kW **IE3**: motors with a rated output ≥ 0,75 and < 75 kW **IE4**: motors with a rated output ≥ 75 and < 201 kW **IE3**: motors with a rated output ≥ 201 and < 1000 kW

- **Single-phase motors** with frequency 50 or 60 or 50/60 Hz and voltages between 50 and 1000 V (S1 and D.O.L.):

Regulations	From	Target
(EU) 2019/1781and subsequent updates	1 July 2023	**IE2**: motors with a rated output ≥ 0,12

- **Variable speed drives** (VSD) with three-phase input and rated output power from 0,12 kW up to 1000 kW, rated for operating with motor included in the same regulations:

Regulations	From	Target
(EU) 2019/1781and subsequent updates	1 July 2021	**IE2**

Lowara, e-SV, HYDROVAR, Solver are trademarks of Xylem Inc. or one of its subsidiaries.
All other trademarks of registered trademarks are property of their respective owners.

CONTENTS

GENERAL INTRODUCTION – PRODUCT DESCRIPTION 4

DESCRIPTION OF OPERATION 5

INSTALLATION 8

CHOICE AND SELECTION 9

GHV.../SVX SERIES 15

IDENTIFICATION CODE 16

ELECTRIC PUMP RANGE AND CHARACTERISTICS 19

TABLE OF HYDRAULIC PERFORMANCE 28

BOOSTER SETS AVAILABLE VERSIONS 36

ELECTRICAL DATA TABLE 38

GHV10 SERIES 41

GHV20 SERIES 44

GHV30 SERIES 53

GHV40 SERIES 64

PERFORMANCE CURVES 75

Hc PRESSURE DROP CURVES 145

ACCESSORIES 163

OPTIMYZE™ 172

TECHNICAL APPENDIX 175

GHV BOOSTER SETS SERIES
GENERAL INTRODUCTION – PRODUCT DESCRIPTION

Lowara GHV series booster sets are designed to transfer and increase the pressure of water, in the following applications:

- Hospitals
- Schools
- Public buildings
- Industries
- Hotels
- Condominiums
- Sports facilities
- Mains water systems

GHV series booster sets are variable speed pumping stations with one to four e-SVX series multistage vertical pumps. Each pump is equipped with an hydrovar X+ frequency converter. This means that all the pumps are capable of variable speed operation. Special sets with up to 8 pumps are also available on request.

These types of systems improve the comfort of the end user, reducing noise emissions. Thanks to the gradual switching off of the pumps, “water hammer” is also reduced.

GHV10: The e-SVX pump is connected to a suction manifold complete with shut-off valve and minimum pressure switch. In delivery there are: manifold, non-return valve, shut-off valve.

GHV20, GHV30, GHV40: The pumps are assembled on a single base. Shut-off valves and check valves are present for each pump. Suction and delivery manifolds connect the entire system.

GHV series booster sets with e-SVX are certified for use with drinking water.

The control panel is secured to the same base by means of a bracket.
GHV series booster sets have been defined with a wide range of pumps to satisfy the different needs of every system. However, Lowara can also offer the GHV series with customization to satisfy particular working requirements.

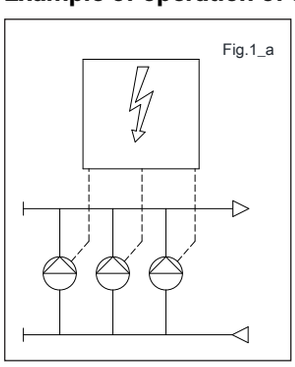
Systems for regulating the speed of the electric motors, as in GHV series booster sets, are used in the following cases:

- In case of systems with many users, where the daily consumption varies frequently and in different periods.
- When it is necessary to obtain constant pressure.
- In case of systems with supervision it is possible to monitor and check the performances of the pump stations.

GHV BOOSTER SETS SERIES
DESCRIPTION OF OPERATION

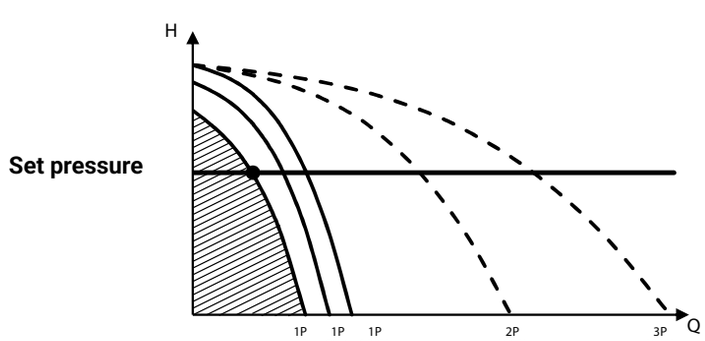
In Lowara GHV series booster sets, all the pumps are controlled by a hydrovar X+ frequency converter, and operate at variable speeds.
Special sets with up to eight pumps are also available on request. Start-up is automatic, depending on system requirements. Each pump has a pressure transmitter that provides a pressure reading, which is recorded and sent to the frequency converter.
The pump speed is modulated based on system requirements.
Pump start alternation is automatic, following a preset time (parameter available in the frequency converter). Pump starts and stops are determined based on the pressures entered as set values in the menu of the frequency converter.

Example of operation of a GHV set with three pumps.

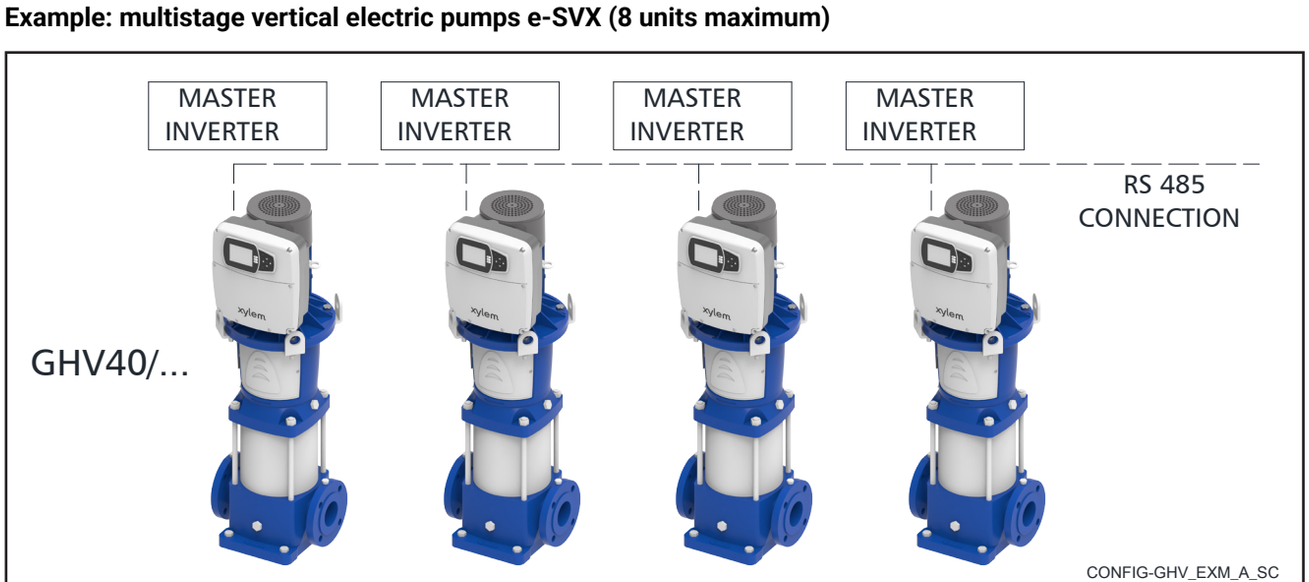


Each pump is controlled by a frequency converter, directly connected to the pump electric motor. The starting priority is changed in accordance with the time set in the relevant hydrovar X+ parameter field. The speed adjustment will apply to all the pumps installed. When the water request decreases, the pumps stop in succession.
The pumps connected to the frequency converter keep the pressure constant by modulating the number of motor revs.
The acceleration and deceleration of the pump, both at start-up and switch off, is of the soft type.
This helps to reduce water hammer and ensures a quiet operation of the booster set.

Lowara GHV series booster sets guarantee constant pressure of the system as in the following example:

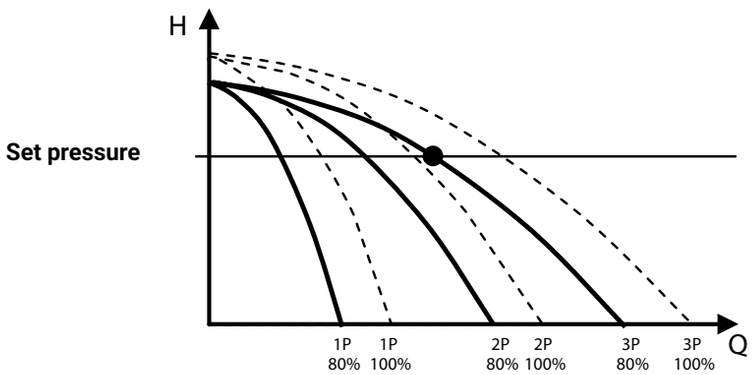


Example: multistage vertical electric pumps e-SVX (8 units maximum)



GHV BOOSTER SETS SERIES
DESCRIPTION OF OPERATION

When the pressure decreases, an electric pump starts, adjusting the motor speed so that the set pressure value can be guaranteed. When the demand for water increases, the other pumps also start in sequence, at variable speed, to keep the pressure at a constant level.



When the demand for water decreases, the pumps switch off in succession. The number of revolutions of the first pump switched on decreases to a set minimum before switching off.

Regulating the constant pressure value

GHV series booster sets guarantee constant pressure of the system even during frequent variations in water consumption. The system pressure value is measured by the pressure transducers connected to the delivery manifold.
The value found is compared with the set value. The comparison between the measured pressure and the set pressure is performed through the hydrovar X+ internal “controller”, which manages the motor speed acceleration and deceleration ramps (frequency), changing the performance of the pump during the time.
In case of fault of one of the frequency converters, the others will remain active and will continue to guarantee the control of the other pumps and the constant pressure.

Type of control

GHV series booster sets use one or more sensors as a standard device to control pressure.
For each booster set, there are as many sensors as the number of pumps installed. In case of fault of one of the transducer, the converter connected to the pump stops working. It is also possible to change the unit of measure into bar, psi, m3/h, °C, °F, l/sec, l/min, %. In this case, different transducers may be used, depending on the selected measure, such as flow or temperature transducers.

Setpoint

It is possible to set up to two setpoints of different values. In this way, the same booster set can be used for systems that require different pressure values at the utility. For example, different setpoints can be used for an irrigation system on a hillside, or one setpoint value can be used for domestic water supply during the day and a second setpoint for irrigation at night.
The setpoints can be changed through an external consensus.

GHV BOOSTER SETS SERIES
DESCRIPTION OF OPERATION

Cyclical exchange of pumps

In the GHV series with more than one pump, the pump's start is alternated according to a time set for each pump through a clock in the frequency converter menu.

Additional protection against dry running

Protection against dry running activates when the water reserve falls below the minimum level guaranteed for suction. The level can be checked using a float switch, a minimum pressure switch, an external contact, or level probes. For the latter, the probes must be connected to the adjustable sensitivity electronic module. The control panel is already preset for the installation of this module.

Minimum delivery pressure protection

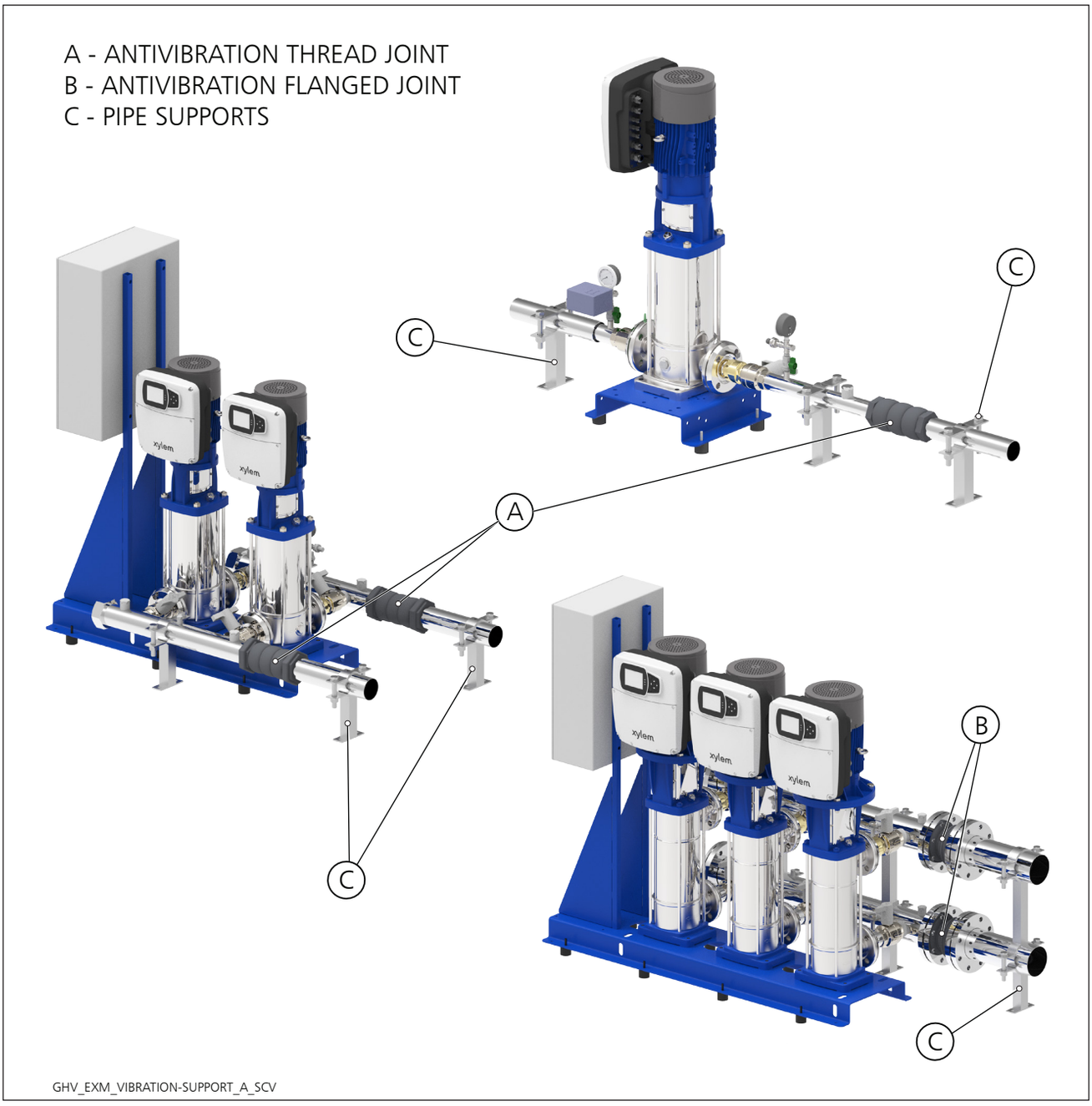
The minimum delivery pressure function can be managed by entering the pressure value in the menu of the hydrovar X+ control card, which will receive the signal through the pressure transducer at the delivery.

Filling mode function

The PIPE FILLING FUNCTION controls the filling of the system when it is not pressurized, in order to avoid water hammer. If function is enabled and activated, the unit runs at the MINIMUM SPEED for the PIPE FILLING STEADY TIME and the pressure is monitored. If the pressure is stable for the steady time, the speed is increased by the PIPE FILLING SPEED STEP and then the pressure is monitored. At the end of PIPE FILLING FUNCTION, the unit control goes back to the standard regulation.

GHV BOOSTER SETS SERIES
INSTALLATION

The booster sets must be installed in areas protected against frost and with adequate ventilation to cool the motors. It is a good practice to connect the suction and delivery pipes with vibration-damping joints to limit vibrations and resonance in the whole system.



The booster sets must be connected to pressurized tanks with an adequate capacity for the system to operate correctly.
These tanks can avoid any problems due to water hammer that is created due to the sudden stopping of the pumps running at a fixed speed. For this type of system, it is possible to use expansion vessel that when installed in the delivery piping perform a pressure dampening function, as they are not intended to store water like autoclave systems. Due to their design, variable-speed booster sets can satisfy the user demand by moderating the pump speed.

Considering also that variable-pressure sets are very sensitive to swings of pressure in the system, the use of expansion vessel allows the pressure to stabilize when requests are low or inexistent, and avoids the pumps remaining in operation at minimum speed without stopping.

GHV BOOSTER SETS SERIES
CHOICE AND SELECTION

When selecting the booster set the consumption figure of the system must be considered, which is generally supplied by the person who designed the system.
For systems where consumption varies continuously and suddenly over time it is advisable to install GHV series booster sets with variable regulation of the pump speed.

The calculation of the size of the booster set (its performance and the number of pumps) is based on the take-off point and therefore on the consumption value which takes the following factors into account:

- The value of the peak in consumption
- Efficiency
- NPSH
- Standby pumps
- Jockey pumps
- Expansion vessel

By adjusting their operation over time, variable-speed booster sets give the end user energy savings which can be calculated directly on the control board with a metering module fitted in the electric control panel.
This allows checking of the system yield, especially in complex systems with many users and many ranges of consumption.
It is possible to install a standby pump if it is necessary to have some kind of additional safety in the pump station. This is typical in systems of a certain importance, such as hospitals or factories, or in the field of crop irrigation.
If small users have to be served in the same system, it is preferable to install what is commonly called a jockey pump, where instead of running the main pump, which usually has higher power, the service is guaranteed with a smaller pump and therefore lower energy consumption.

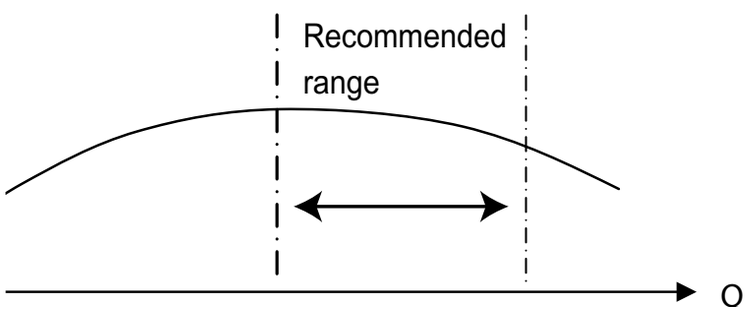
GHV series booster sets are equipped with an expansion vessel, with capacity 25lt PN10 or 12lt PN16. For the sizes, see the specific chapter in this catalogue.
The expansion vessel avoids the risk of water hammer, which is harmful for both the system and the pumps.

Generally for systems with highly variable or sudden variations in consumption, it is recommended to install a booster set with variable pump speed, such as the GHV series, to guarantee constant pressure.

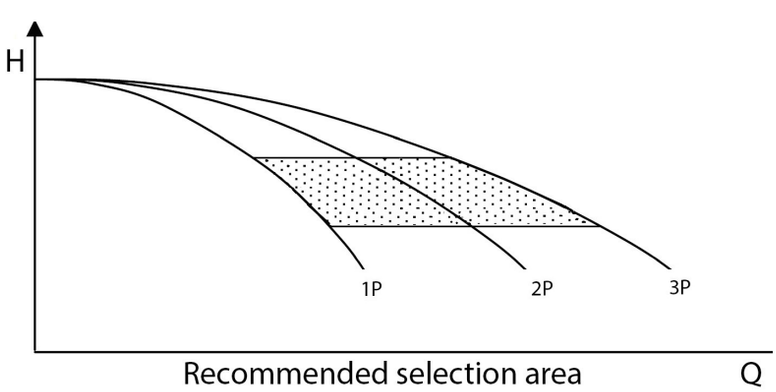
GHV BOOSTER SETS SERIES
SELECTING THE PUMPS

What type of pump to choose?
Generally, the selection of pump is based on the maximum duty point of the system, which is usually the highest possible. The maximum request value is normally for short periods, so the pump must also be able to satisfy variable requests throughout its time in service.

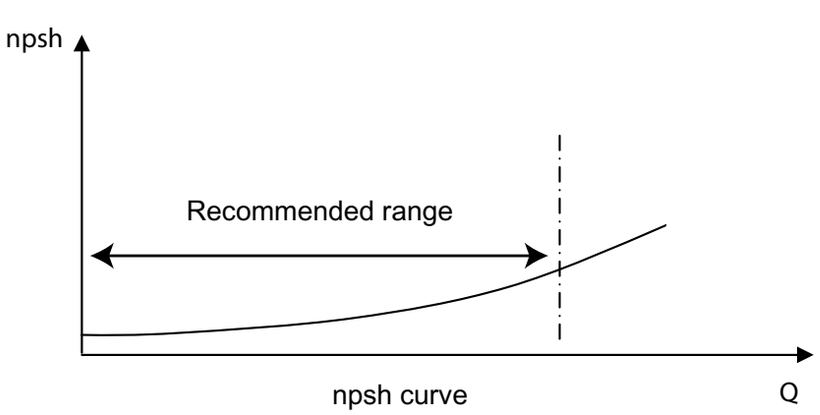
Generally the choice of the pump, based on the performance curve, should fall around the maximum efficiency point. The pump must ensure operation within its rated performance.
Since the unit is sized according to the maximum possible consumption, the maximum duty point of the pumps must be in the area on the right of the performance curve so that, if there is a fall in consumption, the efficiency remains high.



If we make a choice on the characteristic curve of the pump, we can see that the area where it is best to select the pump is represented by the following graph:



Another factor to be considered when choosing the pumps is its NPSH value. Never choose a pump where the maximum duty point is too far to the right of the NPSH curve.
This risks not having good pump suction, which may be aggravated by the type of installation (where negative suction is possible).
In these cases there is the risk of cavitation.
The NPSH of the pump must always be checked at the maximum flow rate requested.



GHV BOOSTER SETS SERIES
HOW TO READ CURVES OF e-SV with hydrovar X+

To exploit to the maximum potential of GHV BOOSTER SETS it's important to properly read working curves shown in the relevant charts.

① **Pump model**

Maximum speed curve (100%) for

② **1 pump** ③ **2 pumps**

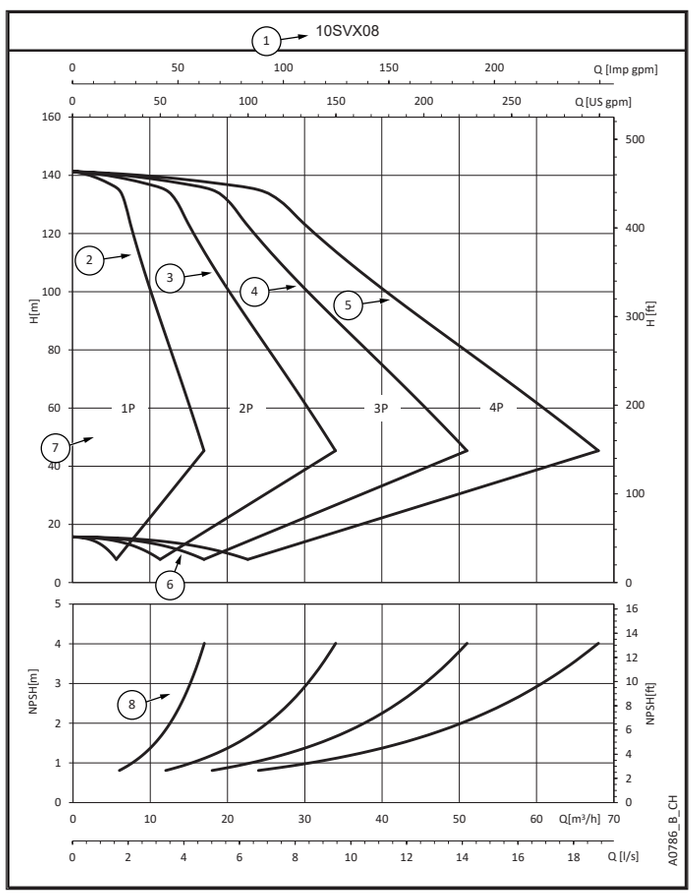
④ **3 pumps** ⑤ **4 pumps**

running: equal to 3600 rpm or pump running at nominal power.

⑥ **Minimum speed curve (0%):** it refers to the minimum rpm level the motor can work at, it's calculated depending on the model of pump maximizing the working area and allowing the highest system flexibility. Pumps run same speed.

⑦ **The part load percentage** calculated depending on maximum speed (max, 100%) and minimum speed (min, equal to 0%, which coincides with the minimum load step under which the drive remains powered but cannot work). Pumps run same speed.

⑧ **NPSH:** is the net positive suction head of pump+motor+drive system working at maximum speed.

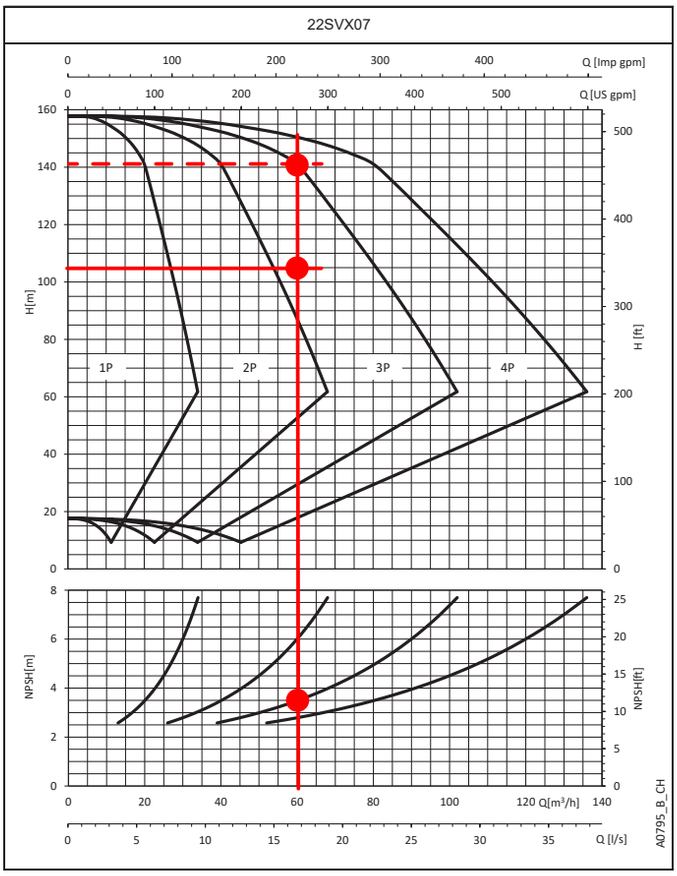


Load control: the booster set GHV series controls and limits power consumption at high flow/low head, in this way the motor stays protected from overload and ensure a longer life of pump +motor+drive system.



GHV BOOSTER SETS SERIES
SELECTING THE PUMPS

The choice of pump is therefore based on the characteristic curve of the pump depending on the flow rate and the pressure required for the system. Starting from the required flow rate, a vertical line is drawn until it meets the horizontal line of the required pressure. The point of intersection of the lines gives both the type and the number of pumps necessary for the system



The example alongside refers to a required flow rate of 60 m³/h and a pressure of 105 m water column.

As shown in the operating curves on page 113, the selection requires three 22SVX07 pumps.

Moreover the take-off point falls in the npsh area farthest to the left and therefore in an area with a low cavitation risk.

The values obtained are those for the performance of the pumps. A correct check of the net pressure value must be made due to the intrinsic load loss of the booster set and the conditions of installation. For this reason it is recommended to see the specific chapter in this catalogue.
The example considers all pumps in operation. For the selection of booster it is recommended that one pump is in stand by.

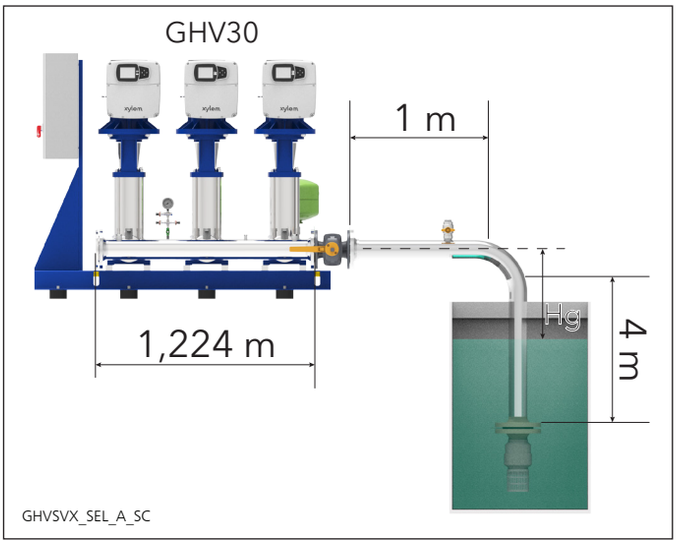
The inlet pressure of the booster or pump plus the pressure supply by pump must always be lower than the maximum operating pressure (PN) of the booster.

NPSH

The minimum operating values that can be reached by the pump suction are limited by the appearance of cavitation. Cavitation consists in the formation of steam pockets in the liquid when the local pressure reaches a critical value. A critical value is when the local pressure is equal or just below the pressure of the liquid steam.
Steam cavitation flows with the current. When it reaches a higher pressure area, condensation of the contained steam occurs. The pockets collide, causing pressure waves that are transmitted to the walls, which are therefore subjected to stress cycles that can cause deformation and then breaks due to fatigue.
This phenomena, characterized by a metallic noise due to the hammering of the walls, is called incipient cavitation. Cavitation damage can be made worse by electrochemical corrosion, and by local temperature increases due to the plastic deformation of the walls. The materials with the highest resistance to heat and corrosion are alloyed steels, and particularly austenitic steels. The conditions that cause cavitation can be predicted by calculating the total suction height, indicated in the technical literature with the acronym NPSH (Net Positive Suction Head).
The NPSH represents the total energy (in m) of the flow measured at the suction in incipient cavitation conditions, net of the steam pressure (in m) of the fluid at the input of the pump.

GHV BOOSTER SETS SERIES
SUCTION CONDITIONS

Once the type and the number of pumps of the set have been identified, the suction conditions must also be assessment. Below is an example of the assessment of the suction lift installation conditions, in relation to the previously described case:



in suction lift installation, it is necessary to calculate the maximum Hg height - which must not be exceeded due to safety reasons -, to avoid cavitation, and therefore the unpriming of the pump itself.
The relation that must assessed, and which connects this value, is the following:

NPSH available ≥ NPSH required, when the equality condition represents the limit condition.

NPSH available = Patm + Hg – ∑t – ∑a

Where:
Patm is the atmospheric pressure, equal to 10,33 m
Hg is the geodetic level difference
∑t are the pressure drops for suction components such as foot check valve, suction piping, curve, gate valve.
∑a are the pressure drops for suction set branch.

The NPSH requested is a parameter obtained from the performance curve; in our case, at the flow of each pump equal to 20 m³/h, it corresponds to 3.5 m (page 113). Before calculating the NPSH available, it is necessary to calculate the pressure drops at the suction, using the tables on pages 179-180 and taking into account the material, such as the type of stainless steel for the piping and cast iron for the valves.
The total sum of the pressure drops ∑t for suction components is made in the following way, considering that the diameter of the suction piping is DN100, equal to the diameter of the suction manifold of the set (page 56).

Calculation of suction drops ∑c for cast iron components
Equivalent piping length for DN100 foot check valve = 4,7 m
Equivalent piping length for DN100 gate valve = 0,4 m
Total equivalent length = 4,7 + 0,4 = 5,1 m
Pressure drops in the suction piping (cast iron) ∑c = 5,1 x 7,79 /100 = 0,39 m

Calculation of suction drops ∑s for stainless steel components
Equivalent piping length for DN100 90° curve = 2,1 m
Total equivalent length = 2,1 m
Horizontal suction pipe length = 1 m
Vertical suction pipe length = 4 m
Pressure drops in the suction piping (stainless steel) ∑s = (2,1 + 4 + 1) x 7,79 x 0,54 / 100 = 0,29 m

Pressure drops for suction components ∑t = ∑c + ∑s = 0,39 + 0,29 = 0,68 m
The total sum of the pressure drops ∑t for suction components is made in the following way, considering that the diameter of the suction piping is DN100, equal to the diameter of the suction manifold of the set (page 56).
Hc pressure drops for suction set branch must be assessed on the B curve (page 154, scheme B0402_A_CH); at the flow value of each pump equal to 20 m³/h, a value of Hc = 0,0035 m is obtained.
Calculation of suction drops ∑s for stainless steel components
Equivalent piping length for DN100 manifold T fitting = 4,3 m
Suction manifold length = 1,224 m
Pressure drops in the suction manifold (steel) ∑t = (4.3 + 1,224) x 7,79 x 0,54 / 100 = 0,23 m
Pressure drops ∑a = Hc + ∑s = 0,0035 + 0,23 = 0,24 m

Remembering that NPSH available = Patm + Hg - ∑t – ∑a and that NPSH available ≥ NPSH requested we have that Patm + Hg - ∑t - ∑a must be ≥ NPSH requested.
Substituting the values we get that 10,33 + Hg - 0,68 – 0,24 ≥ 3,5 m (NPSH requested),
Hg = 3,5 + 0,68 + 0,24 – 10,33 = - 5,91 m, it represents the limit condition for which
NPSH available = NPSH requested

Therefore, in order to guarantee the conditions for the correct operation of the system as far as cavitation risks, it will be necessary to position the pump above the water level, so that the Hg height is below the limit value of 5,91 m.

GHV BOOSTER SETS SERIES
NET PRESSURE CALCULATION

When selecting GHV booster sets, the performance levels of the pump must be taken into account.
Performance levels are obtained from the characteristic curves of the pumps, and do not take into account any pressure drops due to system piping and valves. The following example helps the customer to obtain the correct delivery manifold pressure value: by knowing the system operating point Q = 60 m3/h and H = 105 mca (P requested), and the installation height Hg (estimated to 5 m), in order to make the calculations easier we use the pressure drop curves for each single pump on page 154 of this catalogue. Assuming that a booster set GHV30/22SVX07 with non-return valves on the delivery has been selected, we proceed as follows:

P net available ≥ P requested, when the equality condition represents the limit condition.
P net available = H – (Hg + ∑t + ∑a + ∑m)
Where:
H head value of booster set
Hg is the geodetic level difference (estimated to 5 m)
∑t are the pressure drops for suction components such as foot check valve, suction piping, curve and gate valve.
∑a are the pressure drops for suction set branch
∑m are the pressure drops for delivery set branch

The total sum of the pressure drops ∑t for suction components is made in the following way, considering that the diameter of the suction piping is DN100, equal to the diameter of the suction manifold of the set (page 56).

Calculation of suction drops ∑c for cast iron components
Equivalent piping length for DN100 foot check valve = 4,7 m
Equivalent piping length for DN100 gate valve = 0,4 m
Total equivalent length = 4,7 + 0,4 = 5,1 m
Pressure drops in the suction piping (cast iron)
∑c = 5,1 x 7,79 /100 = 0,39 m

Calculation of suction drops ∑s for stainless steel components
Equivalent piping length for DN100 90° curve = 2,1 m
Total equivalent length = 2,1 m
Horizontal suction pipe length = 1 m
Vertical suction pipe length = 4 m
Pressure drops in the suction piping (stainless steel) ∑s = (2,1 + 4 + 1) x 7,79 x 0,54 / 100 = 0,29 m

Pressure drops for suction components ∑t = ∑c + ∑s = 0,39 + 0,29 = 0,68 m
The total sum of the pressure drops ∑t for suction components is made in the following way, considering that the diameter of the suction piping is DN100, equal to the diameter of the suction manifold of the set (page 56).
Hc pressure drops for suction set branch must be assessed on the B curve (page 154, scheme B0402_A_CH); at the flow value of each pump equal to 20 m^3/h, a value of Hc = 0,0035 m is obtained.

Calculation of suction drops ∑s for stainless steel components
Equivalent piping length for DN100 manifold T fitting = 4,3 m
Suction manifold length = 1,224 m
Pressure drops in the suction manifold (steel) ∑t = (4,3 + 1,224) x 7,79 x 0,54 / 100 = 0,23 m
Pressure drops ∑a = Hc + ∑s = 0,0035 + 0,23 = 0,24
The total sum of the pressure drops ∑m for delivery branch is made in the following way, considering that the diameter of the delivery manifold is DN100, equal to the diameter of the delivery manifold of the set (page 56).
Hc pressure drops for delivery set branch must be assessed on the A curve (page 154, scheme B0402_A_CH); at the flow value of each pump equal to 20 m^3/h, a value of Hc = 2,9 m is obtained.

Calculation of delivery drops ∑s for stainless steel components
Equivalent piping length for DN100 manifold TEE fitting = 4,3 m
Delivery manifold length = 1,224 m
Pressure drops in the delivery manifold (steel) ∑s = (4,3 + 1,224) x 7,79 x 0,54 / 100 = 0,23 m

Pressure drops in delivery manifold ∑m = Hc + ∑s = 2,9 + 0,23 = 3,13 m
If we analyze the performance of the set at the flow value of 60 m^3/h, the head value H is 142 m.
The net pressure at the delivery manifold will be P net available= H – (Hg + ∑t + ∑a + ∑m)
Substituting the values we get that P net available = 142 – (5 + 0,68 + 0,24 + 3,13) = 133 m
When comparing this value with the design value (not taking into account the dynamic energy)
we see that 133 m > 105 m [P net available > P Required], with three pumps run.

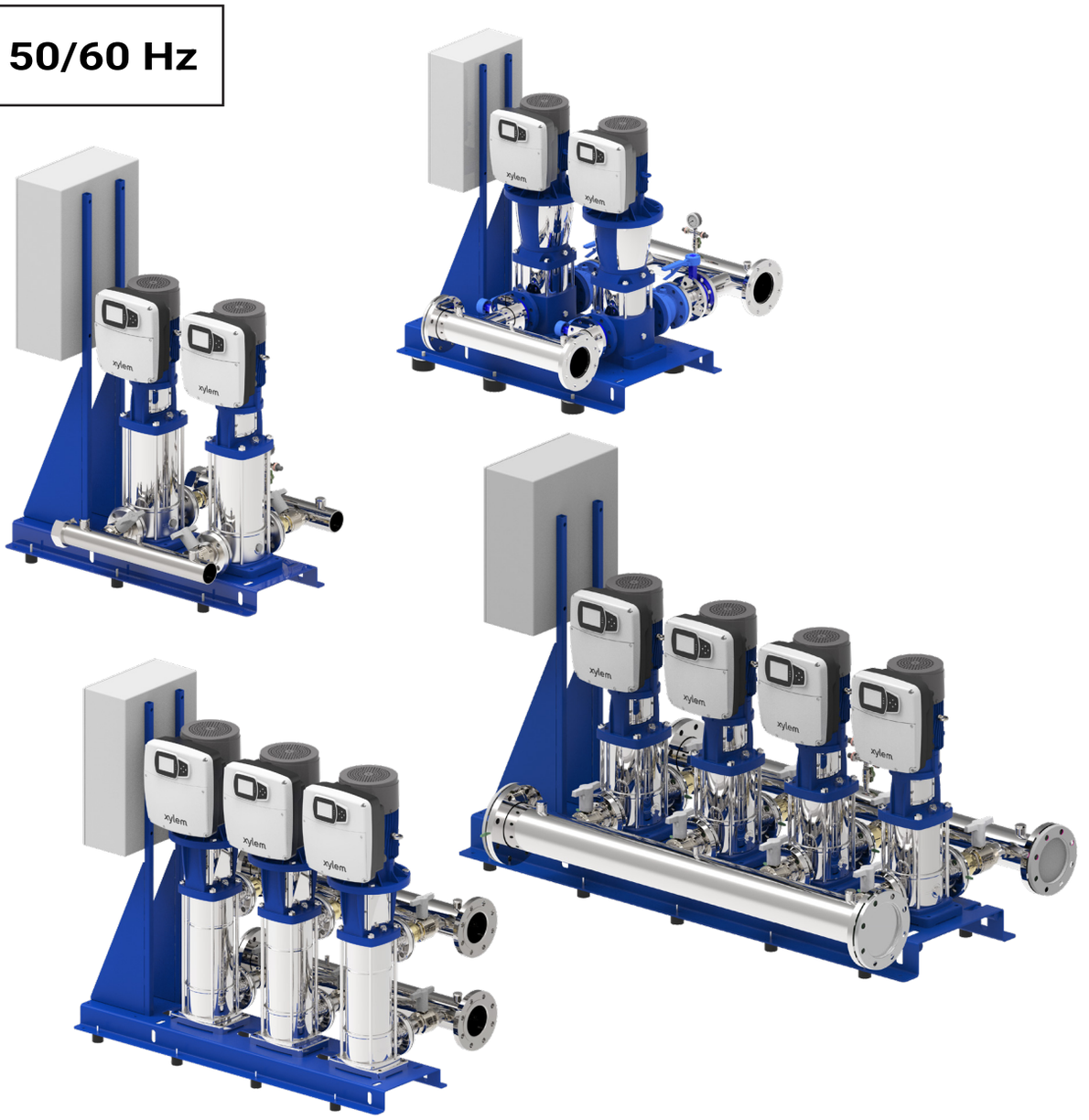
The set is therefore capable of meeting system requirements with three pumps run.

GHV.../SVX Series

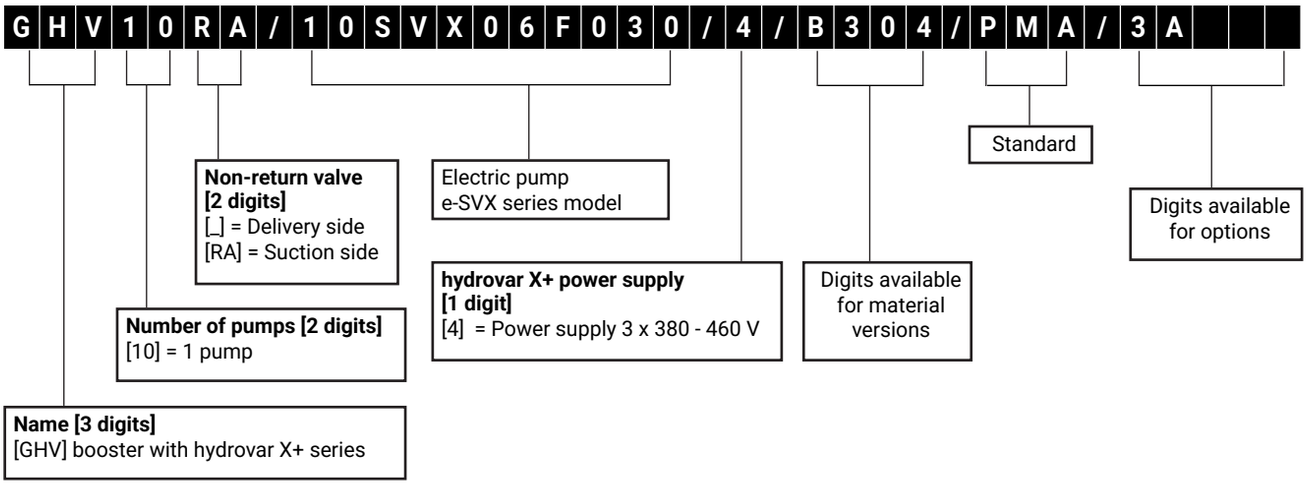
Variable speed booster sets
with e-SVX vertical multistage electric pump series
equipped with hydrovar X+

Flow rate up to 640 m^3/h, pressure up to 25 bar.

50/60 Hz



GHV SINGLE PUMP BOOSTER SET SERIES
IDENTIFICATION CODE



AVAILABLE MATERIAL VERSIONS

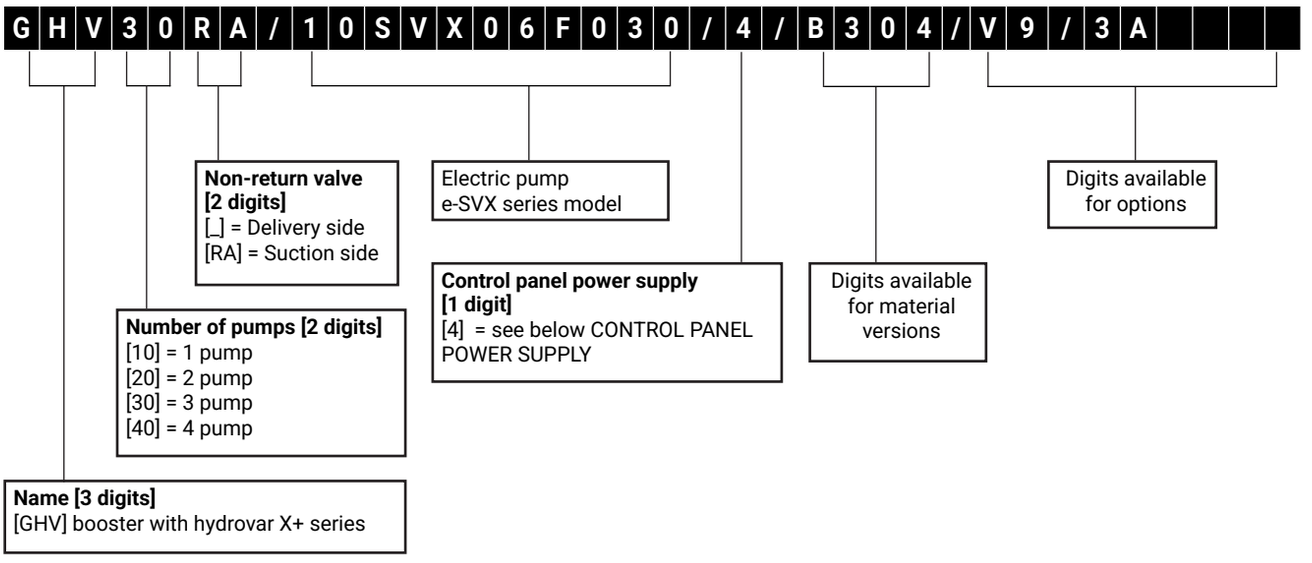
B304, C304, B316, C316, for more details see tables at pages 26-27.

OPTIONS

3A Set with 1A certified pumps (Factory test report issued from end of line, QH curve included)
BAP High pressure switch on the delivery manifold
G3 Booster set with hydrovar X for IT neutral systems

Some options are not available together.
Please contact the your usual Sales and Technical Assistance Service for further information.

GHV MULTIPUMP BOOSTER SET SERIES
IDENTIFICATION CODE



AVAILABLE MATERIAL VERSIONS

B304, C304, B316, C316, for more details see tables at pages 26-27.

OPTIONS

3A	Set with 1A certified pumps (Factory test report issued from end of line, QH curve included)
BAP	High pressure switch on the delivery manifold
DR2	Set with 2 optical sensors for lack/presence of water (fixed to each pump). (GHV20../DR2)
DR3	Set with 3 optical sensors for lack/presence of water (fixed to each pump). (GHV30../DR3)
DR4	Set with 4 optical sensors for lack/presence of water (fixed to each pump). (GHV40../DR4)
G3	Set with hydrovar X for IT neutral systems
PMA	Minimum pressure switch and vacuum pressure gauge for protection against dry running, installed on the suction manifold
RV	Control panel with phase missing, phase asymmetry and minimum and maximum voltage value control
SCA	Without suction manifold (but with suction valves)
SQ	Set without control panel and without panel frame; for inverter sets, transmitters and inverter are present
V9	Delivery side turned upwards by 90° using elbow. It's possible to install expansion vessels directly on the manifold
WM	Wall mounted control panel; cables L=5m
XA	Control panel ready for a cloud connect device CCD401 (not included)

CONTROL PANEL POWER SUPPLY

/4 Control panel 3x400 V, hydrovar X+ 3 x 380-460 V

Some options are not available together.
Please contact the your usual Sales and Technical Assistance Service for further information.

GENERAL CHARACTERISTICS
3, 5, 10, 15, 22SV SERIES

- Multistage centrifugal vertical electric pumps. All metal parts in contact with pumped liquid are made of stainless steel.
- **F** version: round flanges, in-line delivery and suction ports, AISI 304 stainless steel.
- **R** version: round flanges, delivery port above the suction port and adjustable in four positions, AISI 304 stainless steel.
- **Z** version: R version pump with additional empty stages. For example 15SVX02Z3: pump with two impellers and three additional empty stages.
- Further choice possibilities among the following versions:
  - **N**: round flanges, in-line delivery and suction ports, AISI 316 stainless steel.
  - **T**: oval flanges, in-line delivery and suction ports, AISI 304 stainless steel.
- Reduced axial thrusts.
- Standard mechanical seal according to EN 12756 (formerly DIN 24960) and ISO 3069 for series 1, 3, 5SV and 10, 15, 22SV (≤ of 4 kW).
- **Balanced mechanical** seal according to EN 12756 (formerly DIN 24960) and ISO 3069, easy to replace **without removing the pump motor**, for series 10, 15 and 22SV (≥ of 5,5 kW).
- Seal housing designed to avoid air accumulation inside the critical area adjoining the mechanical seal.
- Second loading plug available for series 10, 15, 22SV.
- Easy maintenance. No special tools required for assembly or disassembly.

F, T, R and N pumps are certified for use with drinking water (WRAS, ACS and D.M.174).

33, 46, 66, 92, 125SV SERIES

- Version **G**: Multistage vertical centrifugal electric pump with impellers, diffusers and outer jacket fully made of stainless steel; superior cast iron pump body and head.Round flanges, in-line delivery and suction ports.
- Further choice possibilities among the following versions:
  - N, P: fully made of AISI 316 stainless steel.
- In pumps with higher heads, the axial load compensation system allows a reduction of axial thrusts.
- **Balanced mechanical seal** according to EN 12756 (formerly DIN 24960) and ISO 3069, **easy to replace without removing the pump motor**.
- Seal housing designed to avoid air accumulation inside the critical area adjoining the mechanical seal.
- Pump body supplied with the necessary attachments for a pressure gauge on the flanges, both on the suction and the delivery side.
- Mechanical strength and easy maintenance. No special tools required for assembly or disassembly.

G and N pumps are certified for use with drinking water (WRAS, ACS and D.M.174).

For complete information see dedicated e-SV technical catalogue.

e-SVX SERIES
e-SV with hydrovar X+

Background and context

Xylem is a leading global water technology company committed to solving critical water and infrastructure challenges with innovation.
By providing smart and cutting-edge technology, we are reducing energy consumption to minimum possible levels and increasing sustainability.
There is one thing that Xylem shares with the greatest engineering innovators, that's the continuous investment into new products that reflects into outstanding solutions.
You can find all these features in **hydrovar X+**, the answer to innovation, sustainability and easiness all-in-one.

hydrovar X+ also brings the best energy efficiency performances with its frequency converter coupled with the ultimate synchronous motor, manufactured by Xylem integrating decades of expertise and know-how in pumping solutions.

It's the right combination of motors, variable speed drive and pump ensuring great performance, maximum savings and a rapid return on investment.

Sustainability

hydrovar X+ brings green technology solution by providing best-in-class performance achievement.
Rare earths? No thanks! Xylem accepted the challenge to fight price, availability and environmental concerns with a smarter technology that provides the best-in-class performance with a green heart.

Ease of use and commissioning

The built-in application software makes it the easiest drive to commission, program and operate, enabling virtually any configuration of pumps. Backward compatibility assures the **hydrovar X+** will work seamlessly with existing systems.

Pump solution

Integrated pump functions provide protection for the pump solution and improve the quality of energy from the grid.
All of this means terrific energy savings from a compact, easy-to-use solution suited for nearly any application.

Application sectors

- Industrial installations
- Air conditioning
- Water supply systems in residential buildings
- Water treatment plants

hydrovar X+

- IES2 efficiency level (IEC 61800-9-2:2017)
- Three-phase power supply:
  from 3 kW to 22 kW: 380-480 V +/- 10%, 50/60 Hz
- Power up to 22 kW
- Protection class IP 55
- Overload and locked rotor protection with automatic reset incorporated
- Can be linked up to 8 e-SV hydrovar X+ pumps (e-SVX)



Pump

- Flow rate: up to 160 m3/h
- Head: up to 260 m
- Temperature of pumped liquid: up to +120°C
- Maximum operating pressure 25 bar (PN 25)
- The hydraulic performances meet the tolerances specified
  in ISO 9906:2012.

Motor

- IE5 efficiency level (IEC TS 60034-30-2:2016)
- Synchronous electric motor with permanent magnet assisted reluctance technology, closed structure, aircooled (TEFC)
- Insulation class 155 (F)
- Environment temperature: -20° C to +50° C with no performance derating

Regulations (EU) 2019/1781 e 2021/341 Annex I – point 4

(Product information)

The requirements shall not apply to these variable speed drives, as they are integrated to permanent magnet motors, that aren't covered by the same regulations.

e-SVX SERIES
e-SV with hydrovar X+

hydrovar X+ offers a LED display and graphical colored, like in the below picture:



GHV hydrovar X+ Drive position

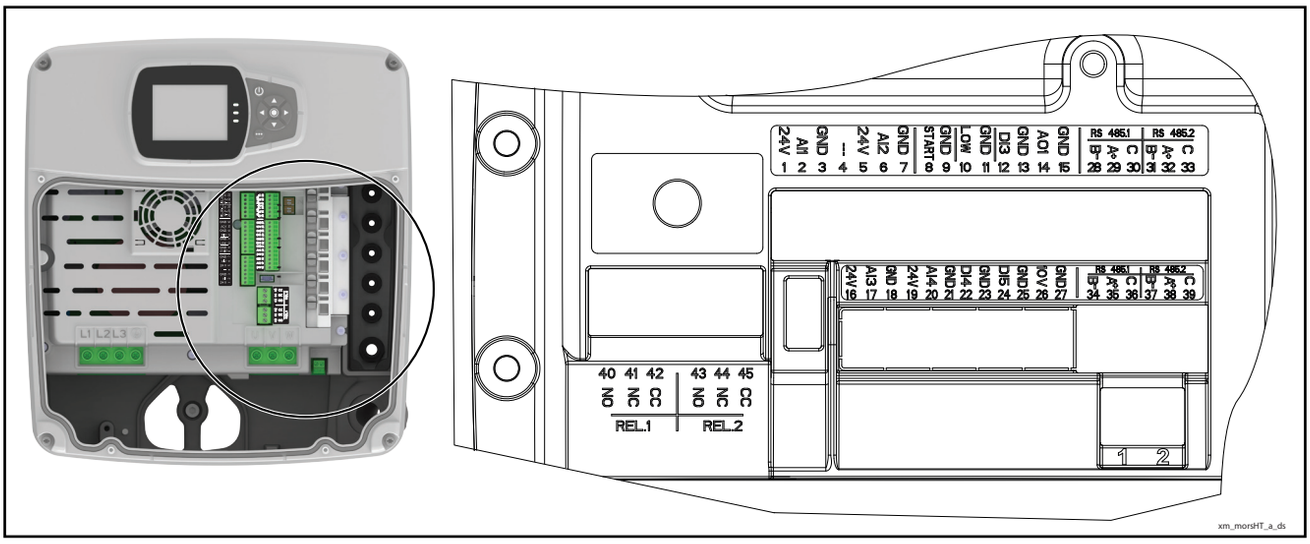


STANDARD POSITION
GHV../SVX..F
GHV../SVX..G

STANDARD POSITION
GHV../SVX..R
GHV../SVX..Z..R

Other drive positions are available on request.

TERMINAL BLOCK
hydrovar X+



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

xm_morsHT-en_a_sc

MAIN COMPONENTS
GHV10 BOOSTER SETS SERIES

Main on-off valves	Installed at the suction and delivery of pump; ball type up to 2” included. For higher diameters, butterfly valves flanged lug or wafer. Other types may be used depending on the booster set version.
Non return valve	Installed on the delivery of pump; threaded spring type up to 2” included. Axial guided type for larger sizes, from DN65 to DN125. Other types may be used depending on the booster set version.
Suction manifolds	With threaded or flanged ends, depending on set type (see drawings).
Minimum pressure switch and pressure gauge	Installed on the suction side, as standard.
Delivery manifold	With threaded or flanged ends, depending on set type (see drawings). It has Rp3/4” threaded fittings for connection of expansion vessels and hydraulic connector.
Pressure gauge and transmitters for control	Installed on the delivery side of the set.
Various fittings	For the connections.
Support base	For the pump set.
Anti-vibration feet	Sized depending on the set. For some sets, the assembling is the responsibility of the customer.

Versions available

GHV.../B304, GHV.../C304, GHV.../B316, GHV.../C316	For more details see tables at pages 26-27.

Accessories on request:

• **Expansion vessel,** available in these models:

Expansion vessel with membrane	- 300 l 25 bar hydro tube kit - 400 l 25 bar hydro tube kit - 600 l 25 bar hydro tube kit

• **Kit expansion vessel,** available in these models with:

Device to prevent water stagnation	- hydrotube kit 25 l 10 bar - hydrotube kit 12 l 16 bar
Shut-off valve	- hydrotube kit 24 l 16 bar - hydrotube kit 24 l 25 bar

• **Devices for protection against dry running**, available in these versions with:

Float switch
Level probes (electrodes) kit

• **QEXM10 control panel**

GHV series booster sets are certified for use with drinking water.

MAIN COMPONENTS
GHV20, GHV30, GHV40 BOOSTER SETS SERIES

Main on-off valves	Installed at the suction and delivery of each pump, ball type up to 2" included. For higher diameters, butterfly valves flanged lug type in suction and wafer flanged type in delivery. Other types may be used depending on the booster set version.
Non return valve	Installed on the delivery of each pump, threaded spring type up to 2" included. Axial guided type for larger sizes from DN65 to DN125. Other types may be used depending on the booster set version.
Suction manifolds	With threaded or flanged ends, depending on set type (see drawings). Threaded fitting for water loading priming of booster.
Delivery manifold	With threaded or flanged ends, depending on set type (see drawings). It has Rp3/4" threaded fittings for connection of expansion vessels and hydraulic connector.
Pressure gauge and transmitters for control	Installed on the delivery manifold of the set.
Control panel	
Various fittings	For the connections.
Support base	For the pump set and control panel bracket.
Anti-vibration feet	Sized depending on the set. For some sets, the assembling is the responsibility of the customer

Versions available

GHV.../B304, GHV.../C304, GHV.../B316, GHV.../C316	For more details see tables at pages 26-27.

Accessories on request:

• **Expansion vessel,** available in these models:

Expansion vessel with membrane	- 300 l 25 bar hydro tube kit - 400 l 25 bar hydro tube kit - 600 l 25 bar hydro tube kit

• **Kit expansion vessel,** available in these models with:

Device to prevent water stagnation	- hydrotube kit 25 l 10 bar - hydrotube kit 12 l 16 bar
Shut-off valve	- hydrotube kit 24 l 16 bar - hydrotube kit 24 l 25 bar

• **Devices for protection against dry running**, available in these versions with:

Float switch
Level probes (electrodes) kit
Minimum pressure switch

SPECIAL EQUIPMENT ON REQUEST (Contact the Sales and Technical Assistance Service)

- Sets with 5 to 8 electric pumps
- Sets with jockey pump

GHV series booster sets are certified for use with drinking water.

GHV BOOSTER SETS SERIES
CONTROL PANEL



Standard control panel for protecting up to three electric pumps with hydrovar X+ frequency converter:

- power supply **voltage three-phase 3x400 V** +/-10%, 50/60Hz (GHV.../4)

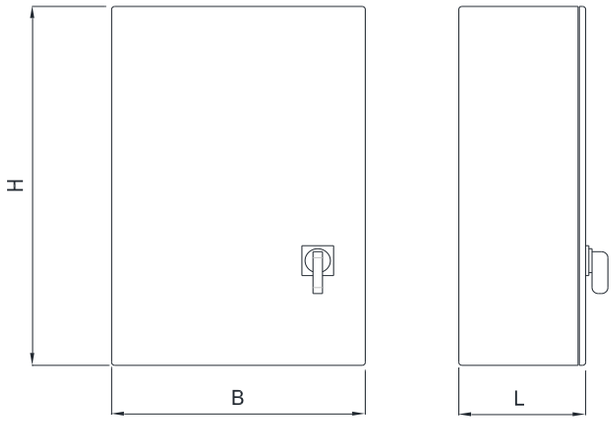
Cabinet of panel is made by metal and protected to **IP55**

Main characteristics:
- Automatic switch with thermal magnetic protection for each hydrovar X+ frequency converter.
- Standard with “clean” potential-free contacts for signaling: pump running, frequency converter faulty. Configured for enable from external contact.
- Protection against dry running: protection against dry running activates when the water reserve falls below the minimum level guaranteed for suction.

The level can be checked using a float switch, a minimum pressure switch, an external contact or level probes.
For the latter, the probes must be connected to the adjustable sensitivity electronic module, optional.

The control panel is ready for the installation of the electronic module to connect the lack of water control.

Single-pump unit has no electrical panel. The control panel is available as an accessory.



TIPO	POTENZA N POMPE X (kW)	ALIMENTAZIONE	IP	DIMENSIONI (mm) B	H	L
QEXM10	1 x (3 ÷ 22)	3x400	55	250	300	150
QEXM20	2 x (3 ÷ 22)	3x400	55	300	400	150
QEXM30	3 x (3 ÷ 11)	3x400	55	400	400	200
QEXM30	3 x (15 ÷ 22)	3x400	55	400	500	200
QEXM40 *	4 x (3 ÷ 11)	3x400	55	400	500	200
QEXM40 *	4 x (15 ÷ 22)	3x400	55	400	600	200
QEXM40 *	4 x (11 ÷ 22)	3x400	55	600	1300	250

* Maggiori dettagli vedi tabelle dimensionali del gruppo

qexm_b_td

GHV BOOSTER SETS SERIES
WORKING LIMITS

The input pressure of the pump, added to the pressure with the port shut off, must not exceed the maximum permitted operating pressure (PN) of the set.

Permitted liquids	Water without gases and corrosive and/or aggressive substances.
Fluid temperature	5°C to + 60 °C, standard version
	5°C to + 80 °C, B304, C304, B316, C316 version
Ambient temperature	0°C to + 40 °C
Maximum operating pressure*	Max 16 bar
Minimum input pressure	In line with the NPSH curve and the losses, with a margin of at least 0,5 m
Maximum input pressure	The input pressure added to the pump pressure without flow must be lower than the maximum operating pressure of the set.
Installation	Internal environment protected from atmospheric agents. Away from heat sources. Max altitude 1000 a.s.l. Max humidity 50%, without condensation.

* Higher PN available on request depending on pump type

ghv_nex_2p_emea-en_b_ti

GHV BOOSTER SETS SERIES
MATERIAL TABLE FOR SETS PUMPS, 10-15-22SV

DENOMINATION	G... (STANDARD)	G.../B304	G.../C304	G.../B316	G.../C316
Pump flange	F/R	F/R	F/R	F/R	N
Manifolds	AISI 304	AISI 304	AISI 304	AISI 316	AISI 316
Slinding, blind, weld flange	AISI 304	AISI 304	AISI 304	AISI 316	AISI 316
Pump counterflange	AISI 304	AISI 304	AISI 304	AISI 316	AISI 316
On-off valves, threaded	Nickel-plated brass	AISI 316	AISI 316	AISI 316	AISI 316
Non-return valves - Body - Shutter	- Brass - Brass	- AISI 304 - AISI 304	- AISI 304 - AISI 304	- AISI 316 - AISI 316	- AISI 316 - AISI 316
Pressure switches	Galvanized steel / AISI 304	AISI 304	AISI 304	AISI 304	AISI 304
Pressure transmitters	AISI 304	AISI 304	AISI 304	AISI 304	AISI 304
Pressure gauge -Water connection -Cover -Fluid	- Brass -ABS - /	-AISI 316 -AISI 304 -Glycole	-AISI 316 -AISI 304 -Glycole	-AISI 316 -AISI 304 -Glycole	-AISI 316 -AISI 304 -Glycole
Vacuum pressure gauge -Water connection -Cover -Fluid	-Brass -ABS - Glycole	-AISI 316 -AISI 304 -Glycole	-AISI 316 -AISI 304 -Glycole	-AISI 316 -AISI 304 -Glycole	-AISI 316 -AISI 304 -Glycole
Caps, plugs	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316
Fittings	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316
Bracket	Painted steel	Painted steel	AISI 304	Painted steel	AISI 316
Base	Painted steel	Painted steel	AISI 304	Painted steel	AISI 316
Miscellaneus	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316

g_wad_exm_3-22sv-en_e_tm

GHV BOOSTER SETS SERIES
MATERIAL TABLE FOR SETS WITH PUMPS, 33-46-66-92-125SV

DENOMINAZIONE	G... (STANDARD)	G.../B304	G.../C304	G.../B316	G.../C316
Pump flange	G	G	N	G	N
Manifolds	AISI 304	AISI 304	AISI 304	AISI 316	AISI 316
Slinding, blind, weld flange	AISI 304	AISI 304	AISI 304	AISI 316	AISI 316
On-off valves, threaded	Ottone nichelato	AISI 316	AISI 316	AISI 316	AISI 316
On-off valves, flanged -Body -Disc	-Cast iron -Epoxy	-Cast iron -AISI 316	-AISI 316 -AISI 316	-Cast iron -AISI 316	-AISI 316 -AISI 316
Non-return valves, flanged - Body - Shutter	-Cast iron -AISI 304	-AISI 316 -AISI 316	-AISI 316 -AISI 316	-AISI 316 -AISI 316	-AISI 316 -AISI 316
Pressure switches	Galvanized steel / AISI 304	AISI 304	AISI 304	AISI 304	AISI 304
Pressure transmitters	AISI 304	AISI 304	AISI 304	AISI 304	AISI 304
Pressure gauge -Water connection -Cover -Fluid	- Brass -ABS - /	-AISI 316 -AISI 304 -Glycole	-AISI 316 -AISI 304 -Glycole	-AISI 316 -AISI 304 -Glycole	-AISI 316 -AISI 304 -Glycole
Vacuum pressure gauge -Water connection -Cover -Fluid	-Brass -ABS - Glycole	-AISI 316 -AISI 304 -Glycole	-AISI 316 -AISI 304 -Glycole	-AISI 316 -AISI 304 -Glycole	-AISI 316 -AISI 304 -Glycole
Caps, plugs	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316
Fittings	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316
Bracket	Painted steel	Painted steel	AISI 304	Painted steel	AISI 316
Base	Painted steel	Painted steel	AISI 304	Painted steel	AISI 316
Miscellaneus	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316

g_wad_exm_33-125sv-en_e_tm

GHV10/...5-22SVX BOOSTER SETS SERIES THREE-PHASE
TABLE OF HYDRAULIC PERFORMANCE

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	26,7	53,3	80,0	106,7	133,3	160,0	166,7
	P_N	TYPE	m^3/h 0	1,6	3,2	4,8	6,4	8,0	9,6	10,0
	kW		H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
5SVX15..L	1 x 3	EXM100B14..030B	157,6	157,9	153,2	144,3	121,5	93,3	65,3	58,2

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	43,3	86,7	130,0	173,3	216,7	260,0	283,3
	P_N	TYPE	m^3/h 0	2,6	5,2	7,8	10,4	13,0	15,6	17,0
	kW		H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
10SVX06..L	1 x 3	EXM100B14..030B	97,3	96,2	93,7	89,5	75,8	60,0	44,0	34,9
10SVX06	1 x 3	EXM100B14..030B	105,9	104,9	102,5	93,2	75,8	60,0	44,0	34,9
10SVX08	1 x 4	EXM112B14..040B	141,3	139,7	136,7	120,3	97,9	77,5	57,0	45,3
10SVX11..L	1 x 5,5	EXM132B5..055B	158,4	156,1	151,8	143,9	130,2	106,1	77,8	57,4

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	70,0	140,0	210,0	280,0	350,0	420,0	483,3
	P_N	TYPE	m^3/h 0	4,2	8,4	12,6	16,8	21,0	25,2	29,0
	kW		H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
15SVX02	1 x 3	EXM100B14..030B	42,7	42,0	41,2	39,9	37,6	34,0	28,7	21,6
15SVX03	1 x 4	EXM112B14..040B	64,0	63,0	61,8	59,8	56,4	48,2	37,2	26,5
15SVX05..L	1 x 5,5	EXM132B5..055B	98,0	96,4	94,3	91,0	83,5	67,1	50,2	33,7
15SVX05	1 x 5,5	EXM132B5..055B	106,7	105,1	102,9	99,3	83,5	67,1	50,2	33,7
15SVX07	1 x 7,5	EXM132B5..075C	149,4	147,0	144,2	138,6	114,1	91,3	67,8	44,7

POMPA TIPO	MOTOR		Q = DELIVERY							
			l/min 0	83,3	166,7	250,0	333,3	416,7	500,0	566,7
	P_N	TYPE	m^3/h 0	5,0	10,0	15,0	20,0	25,0	30,0	34,0
	kW		H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
22SVX02	1 x 3	EXM100B14..030B	45,2	44,6	43,6	42,2	38,5	31,0	22,9	15,2
22SVX03	1 x 4	EXM112B14..040B	67,8	67,0	65,4	63,2	51,8	40,9	28,8	17,2
22SVX04	1 x 5,5	EXM132B5..055B	90,1	90,1	88,7	85,6	71,6	57,2	41,3	26,6
22SVX05..L	1 x 7,5	EXM132B5..075C	97,6	97,4	95,8	92,1	85,5	74,8	58,4	40,1
22SVX05	1 x 7,5	EXM132B5..075C	112,7	112,7	110,8	107,7	97,0	78,5	58,5	40,2

Table refers to hydraulic performances with one pump running max rpm, friction lost not included

g10_5-22svx-exmT-2p50-en_a_th

For technical deatils see technical catalogue of single SVX electric pump.

GHV10/..33-125SVX BOOSTER SETS SERIES THREE-PHASE
TABLE OF HYDRAULIC PERFORMANCE

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	116,7	233,3	350,0	466,7	583,3	700,0	800,0
	P_N kW	TYPE	m3/h 0	7,0	14,0	21,0	28,0	35,0	42,0	48,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
33SVX01	1 x 3	EXM100B14..030B	35,0	34,7	34,3	32,8	28,3	23,9	19,4	15,0
33SVX02	1 x 5,5	EXM132B5..055B	70,1	69,5	68,7	61,2	52,4	44,0	35,0	26,3
33SVX02	1 x 7,5	EXM132B5..075C	70,1	69,5	68,6	67,1	65,0	59,2	49,6	40,8
33SVX03..L	1 x 11	EXM160B5..110C	99,4	98,4	97,2	95,0	91,5	85,7	72,7	59,5
33SVX03	1 x 11	EXM160B5..110C	105,1	104,2	102,9	100,7	97,5	86,9	72,7	59,5
33SVX04	1 x 15	EXM160B5..150D	140,1	138,9	137,2	134,4	129,8	118,4	99,3	81,6
33SVX05..L	1 x 18,5	EXM160B5..185D	156,2	154,8	152,7	149,1	143,1	133,5	119,0	100,3

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	173,3	346,7	520,0	693,3	866,7	1040,0	1200,0
	P_N kW	TYPE	m3/h 0	10,4	20,8	31,2	41,6	52,0	62,4	72,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
46SVX01	1 x 5,5	EXM132B5..055B	40,7	39,4	37,7	35,6	32,9	29,1	21,6	13,6
46SVX02	1 x 7,5	EXM132B5..075C	79,0	76,5	70,1	61,9	52,0	40,4	27,5	15,3
46SVX02	1 x 11	EXM160B5..110C	79,1	76,8	74,8	72,2	68,6	61,5	47,6	33,9
46SVX03	1 x 15	EXM160B5..150D	118,8	115,1	112,1	108,6	101,5	83,5	63,0	43,0
46SVX04	1 x 18,5	EXM160B5..185D	157,5	152,9	148,9	143,5	123,9	99,7	73,1	48,0

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	223,3	446,7	670,0	893,3	1116,7	1340,0	1550,0
	P_N kW	TYPE	m3/h 0	13,4	26,8	40,2	53,6	67,0	80,4	93,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
66SVX01	1 x 5,5	EXM132B5..055B	44,4	43,7	36,9	31,1	26,6	22,7	18,4	12,1
66SVX02	1 x 11	EXM160B5..110C	86,5	85,4	72,7	61,9	53,3	45,8	37,8	27,8
66SVX02	1 x 15	EXM160B5..150D	86,5	85,6	83,4	79,8	69,5	60,8	52,5	43,5
66SVX03..L	1 x 18,5	EXM160B5..185D	98,7	97,5	94,8	90,6	84,6	76,7	66,1	51,8
66SVX03	1 x 18,5	EXM160B5..185D	128,9	127,6	120,5	103,0	89,0	77,0	65,0	51,1
66SVX04..L	1 x 22	EXM180B5..220D	157,3	155,8	146,4	125,1	108,2	93,4	77,8	58,9

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	323,3	646,7	970,0	1293,3	1616,7	1940,0	2250,0
	P_N kW	TYPE	m3/h 0	19,4	38,8	58,2	77,6	97,0	116,4	135,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
92SVX01	1 x 7,5	EXM132B5..075C	42,7	39,7	35,6	31,0	26,2	21,1	15,1	7,2
92SVX02	1 x 15	EXM160B5..150D	85,4	79,4	71,6	62,8	53,7	44,2	33,2	19,4
92SVX03..L	1 x 22	EXM180B5..220D	98,3	96,8	89,5	80,5	71,8	62,3	47,9	26,8
92SVX03	1 x 22	EXM180B5..220D	120,6	112,9	101,9	89,6	76,8	63,4	47,9	28,2

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	383,3	766,7	1150,0	1533,3	1916,7	2300,0	2666,7
	P_N kW	TYPE	m3/h 0	23,0	46,0	69,0	92,0	115,0	138,0	160,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
125SVX01	1 x 7,5	EXM132B5..075C	31,6	29,1	26,2	23,1	19,7	15,9	11,5	6,7
125SVX02	1 x 15	EXM160B5..150D	62,9	59,0	54,3	48,9	43,1	36,8	30,1	23,2
125SVX02	1 x 22	EXM180B5..220D	78,8	73,9	69,7	65,7	59,3	52,4	45,2	37,8

Table refers to hydraulic performances with one pump running max rpm, friction lost not included

g10_33-125svx-exmT-2p50-en_c_th

For technical deatils see technical catalogue of single SVX electric pump.

GHV20/..3-22SVX BOOSTER SETS SERIES THREE-PHASE
TABLE OF HYDRAULIC PERFORMANCE

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	26,7	53,3	80,0	106,7	133,3	160,0	173,3
	P_N	TYPE	m^3/h 0	1,6	3,2	4,8	6,4	8,0	9,6	10,4
	kW		H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
3SVX21	2 x 3	EXM100B14..030B	234,5	236,5	235,3	227,8	204,9	164,7	123,8	102,7

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	53,3	106,7	160,0	213,3	266,7	320,0	333,3
	P_N	TYPE	m^3/h 0	3,2	6,4	9,6	12,8	16,0	19,2	20,0
	kW		H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
5SVX15..L	2 x 3	EXM100B14..030B	157,6	157,9	153,2	144,3	121,5	93,3	65,3	58,2
5SVX15	2 x 3	EXM100B14..030B	166,7	167,0	162,7	151,7	121,5	93,3	65,3	58,2
5SVX19	2 x 4	EXM112B14..040B	211,2	211,7	205,8	194,4	161,8	125,4	89,3	80,2
5SVX23..L	2 x 5,5	EXM132B5..055B	248,5	248,9	242,3	227,9	205,7	174,2	129,6	118,2

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	86,7	173,3	260,0	346,7	433,3	520,0	566,7
	P_N	TYPE	m^3/h 0	5,2	10,4	15,6	20,8	26,0	31,2	34,0
	kW		H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
10SVX06..L	2 x 3	EXM100B14..030B	97,3	96,2	93,7	89,5	75,8	60,0	44,0	34,9
10SVX06	2 x 3	EXM100B14..030B	105,9	104,9	102,5	93,2	75,8	60,0	44,0	34,9
10SVX08	2 x 4	EXM112B14..040B	141,3	139,7	136,7	120,3	97,9	77,5	57,0	45,3
10SVX11..L	2 x 5,5	EXM132B5..055B	158,4	156,1	151,8	143,9	130,2	106,1	77,8	57,4
10SVX11	2 x 5,5	EXM132B5..055B	194,4	192,0	188,1	165,0	134,4	106,4	77,8	61,6
10SVX15	2 x 7,5	EXM132B5..075C	249,7	248,3	242,2	226,7	184,4	145,3	105,4	82,8

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	140,0	280,0	420,0	560,0	700,0	840,0	966,7
	P_N	TYPE	m^3/h 0	8,4	16,8	25,2	33,6	42,0	50,4	58,0
	kW		H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
15SVX02Z3	2 x 3	EXM100B14..030B	42,6	41,8	40,8	39,2	36,5	32,5	26,5	18,7
15SVX02	2 x 3	EXM100B14..030B	42,7	42,0	41,2	39,9	37,6	34,0	28,7	21,6
15SVX03Z2	2 x 4	EXM112B14..040B	64,0	62,9	61,6	59,3	55,7	48,2	37,2	26,5
15SVX03	2 x 4	EXM112B14..040B	64,0	63,0	61,8	59,8	56,4	48,2	37,2	26,5
15SVX05..L	2 x 5,5	EXM132B5..055B	98,0	96,4	94,3	91,0	83,5	67,1	50,2	33,7
15SVX05	2 x 5,5	EXM132B5..055B	106,7	105,1	102,9	99,3	83,5	67,1	50,2	33,7
15SVX07	2 x 7,5	EXM132B5..075C	149,4	147,0	144,2	138,6	114,1	91,3	67,8	44,7
15SVX09	2 x 11	EXM160B5..110C	195,1	190,3	186,1	180,8	165,1	137,4	108,8	80,4
15SVX12..L	2 x 15	EXM160B5..150D	245,8	239,6	234,3	226,9	214,7	187,4	149,1	111,2

POMPA TIPO	MOTOR		Q = DELIVERY							
			l/min 0	166,7	333,3	500,0	666,7	833,3	1000,0	1133,3
	P_N	TYPE	m^3/h 0	10,0	20,0	30,0	40,0	50,0	60,0	68,0
	kW		H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
22SVX02Z3	2 x 3	EXM100B14..030B	45,2	44,5	43,2	41,4	37,2	29,0	20,0	11,6
22SVX02	2 x 3	EXM100B14..030B	45,2	44,6	43,6	42,2	38,5	31,0	22,9	15,2
22SVX03Z2	2 x 4	EXM112B14..040B	67,8	66,9	65,2	62,7	51,0	39,6	26,9	14,8
22SVX03	2 x 4	EXM112B14..040B	67,8	67,0	65,4	63,2	51,8	40,9	28,8	17,2
22SVX04Z1	2 x 5,5	EXM132B5..055B	90,1	90,0	88,6	85,3	71,2	56,5	40,3	25,4
22SVX04	2 x 5,5	EXM132B5..055B	90,1	90,1	88,7	85,6	71,6	57,2	41,3	26,6
22SVX05..L	2 x 7,5	EXM132B5..075C	97,6	97,4	95,8	92,1	85,5	74,8	58,4	40,1
22SVX05	2 x 7,5	EXM132B5..075C	112,7	112,7	110,8	107,7	97,0	78,5	58,5	40,2
22SVX07	2 x 11	EXM160B5..110C	157,8	157,6	155,3	150,5	141,1	115,5	87,4	61,8
22SVX10	2 x 15	EXM160B5..185D	225,5	225,3	221,5	215,3	194,1	157,1	117,1	80,4
22SVX12..L	2 x 18,5	EXM160B5..185D	248,4	247,4	244,4	236,7	221,6	194,7	146,0	102,9

Table refers to hydraulic performances with two pumps running max rpm, friction lost not included

g20_3-22svx-exmT-2p50-en_a_th

For technical deatils see technical catalogue of single SVX electric pump.

GHV20/..33-125SVX BOOSTER SETS SERIES THREE-PHASE
TABLE OF HYDRAULIC PERFORMANCE

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	233,3	466,7	700,0	933,3	1166,7	1400,0	1600,0
	P_N kW	TYPE	m3/h 0	14,0	28,0	42,0	56,0	70,0	84,0	96,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
33SVX01	2 x 3	EXM100B14..030B	35,0	34,7	34,3	32,8	28,3	23,9	19,4	15,0
33SVX02	2 x 5,5	EXM132B5..055B	70,1	69,5	68,7	61,2	52,4	44,0	35,0	26,3
33SVX02	2 x 7,5	EXM132B5..075C	70,1	69,5	68,6	67,1	65,0	59,2	49,6	40,8
33SVX03..L	2 x 11	EXM160B5..110C	99,4	98,4	97,2	95,0	91,5	85,7	72,7	59,5
33SVX03	2 x 11	EXM160B5..110C	105,1	104,2	102,9	100,7	97,5	86,9	72,7	59,5
33SVX04	2 x 15	EXM160B5..150D	140,1	138,9	137,2	134,4	129,8	118,4	99,3	81,6
33SVX05..L	2 x 18,5	EXM160B5..185D	156,2	154,8	152,7	149,1	143,1	133,5	119,0	100,3
33SVX05	2 x 18,5	EXM160B5..185D	175,2	173,7	171,5	167,9	162,4	146,1	122,4	100,3
33SVX06	2 x 22	EXM180B5..220D	210,3	208,4	205,8	201,5	194,8	173,9	145,4	118,9

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	346,7	693,3	1040,0	1386,7	1733,3	2080,0	2400,0
	P_N kW	TYPE	m3/h 0	20,8	41,6	62,4	83,2	104,0	124,8	144,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
46SVX01	2 x 5,5	EXM132B5..055B	40,7	39,4	37,7	35,6	32,9	29,1	21,6	13,6
46SVX02	2 x 7,5	EXM132B5..075C	79,0	76,5	70,1	61,9	52,0	40,4	27,5	15,3
46SVX02	2 x 11	EXM160B5..110C	79,1	76,8	74,8	72,2	68,6	61,5	47,6	33,9
46SVX03	2 x 15	EXM160B5..150D	118,8	115,1	112,1	108,6	101,5	83,5	63,0	43,0
46SVX04	2 x 18,5	EXM160B5..185D	157,5	152,9	148,9	143,5	123,9	99,7	73,1	48,0
46SVX05	2 x 22	EXM180B5..220D	196,9	191,0	186,2	173,5	147,9	117,9	85,1	54,2

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	446,7	893,3	1340,0	1786,7	2233,3	2680,0	3100,0
	P_N kW	TYPE	m3/h 0	26,8	53,6	80,4	107,2	134,0	160,8	186,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
66SVX01	2 x 5,5	EXM132B5..055B	44,4	43,7	36,9	31,1	26,6	22,7	18,4	12,1
66SVX02	2 x 11	EXM160B5..110C	86,5	85,4	72,7	61,9	53,3	45,8	37,8	27,8
66SVX02	2 x 15	EXM160B5..150D	86,5	85,6	83,4	79,8	69,5	60,8	52,5	43,5
66SVX03..L	2 x 18,5	EXM160B5..185D	98,7	97,5	94,8	90,6	84,6	76,7	66,1	51,8
66SVX03	2 x 18,5	EXM160B5..185D	128,9	127,6	120,5	103,0	89,0	77,0	65,0	51,1
66SVX04..L	2 x 22	EXM180B5..220D	157,3	155,8	146,4	125,1	108,2	93,4	77,8	58,9
66SVX04	2 x 22	EXM180B5..220D	171,3	171,5	146,3	125,2	108,1	93,4	77,8	58,9

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	646,7	1293,3	1940,0	2586,7	3233,3	3880,0	4500,0
	P_N kW	TYPE	m3/h 0	38,8	77,6	116,4	155,2	194,0	232,8	270,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
92SVX01	2 x 7,5	EXM132B5..075C	42,7	39,7	35,6	31,0	26,2	21,1	15,1	7,2
92SVX02	2 x 15	EXM160B5..150D	85,4	79,4	71,6	62,8	53,7	44,2	33,2	19,4
92SVX03..L	2 x 22	EXM180B5..220D	98,3	96,8	89,5	80,5	71,8	62,3	47,9	26,8
92SVX03	2 x 22	EXM180B5..220D	120,6	112,9	101,9	89,6	76,8	63,4	47,9	28,2

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	766,7	1533,3	2300,0	3066,7	3833,3	4600,0	5333,3
	P_N kW	TYPE	m3/h 0	46,0	92,0	138,0	184,0	230,0	276,0	320,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
125SVX01	2 x 7,5	EXM132B5..075C	31,6	29,1	26,2	23,1	19,7	15,9	11,5	6,7
125SVX02	2 x 15	EXM160B5..150D	62,9	59,0	54,3	48,9	43,1	36,8	30,1	23,2
125SVX02	2 x 22	EXM180B5..220D	78,8	73,9	69,7	65,7	59,3	52,4	45,2	37,8

Table refers to hydraulic performances with two pumps running max rpm, friction lost not included

g20_33-125svx-exmT-2p50-en_c_th

For technical deatils see technical catalogue of single SVX electric pump.

GHV30/..3-22SVX BOOSTER SETS SERIES THREE-PHASE
TABLE OF HYDRAULIC PERFORMANCE

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	40,0	80,0	120,0	160,0	200,0	240,0	260,0
	P_N kW	TYPE	m^3/h 0	2,4	4,8	7,2	9,6	12,0	14,4	15,6
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
3SVX21	3 x 3	EXM100B14..030B	234,5	236,5	235,3	227,8	204,9	164,7	123,8	102,7

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	80,0	160,0	240,0	320,0	400,0	480,0	500,0
	P_N kW	TYPE	m^3/h 0	4,8	9,6	14,4	19,2	24,0	28,8	30,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
5SVX15..L	3 x 3	EXM100B14..030B	157,6	157,9	153,2	144,3	121,5	93,3	65,3	58,2
5SVX15	3 x 3	EXM100B14..030B	166,7	167,0	162,7	151,7	121,5	93,3	65,3	58,2
5SVX19	3 x 4	EXM112B14..040B	211,2	211,7	205,8	194,4	161,8	125,4	89,3	80,2
5SVX23..L	3 x 5,5	EXM132B5..055B	248,5	248,9	242,3	227,9	205,7	174,2	129,6	118,2

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	130,0	260,0	390,0	520,0	650,0	780,0	850,0
	P_N kW	TYPE	m^3/h 0	7,8	15,6	23,4	31,2	39,0	46,8	51,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
10SVX06..L	3 x 3	EXM100B14..030B	97,3	96,2	93,7	89,5	75,8	60,0	44,0	34,9
10SVX06	3 x 3	EXM100B14..030B	105,9	104,9	102,5	93,2	75,8	60,0	44,0	34,9
10SVX08	3 x 4	EXM112B14..040B	141,3	139,7	136,7	120,3	97,9	77,5	57,0	45,3
10SVX11..L	3 x 5,5	EXM132B5..055B	158,4	156,1	151,8	143,9	130,2	106,1	77,8	57,4
10SVX11	3 x 5,5	EXM132B5..055B	194,4	192,0	188,1	165,0	134,4	106,4	77,8	61,6
10SVX15	3 x 7,5	EXM132B5..075C	249,7	248,3	242,2	226,7	184,4	145,3	105,4	82,8

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	210,0	420,0	630,0	840,0	1050,0	1260,0	1450,0
	P_N kW	TYPE	m^3/h 0	12,6	25,2	37,8	50,4	63,0	75,6	87,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
15SVX02Z3	3 x 3	EXM100B14..030B	42,6	41,8	40,8	39,2	36,5	32,5	26,5	18,7
15SVX02	3 x 3	EXM100B14..030B	42,7	42,0	41,2	39,9	37,6	34,0	28,7	21,6
15SVX03Z2	3 x 4	EXM112B14..040B	64,0	62,9	61,6	59,3	55,7	48,2	37,2	26,5
15SVX03	3 x 4	EXM112B14..040B	64,0	63,0	61,8	59,8	56,4	48,2	37,2	26,5
15SVX05..L	3 x 5,5	EXM132B5..055B	98,0	96,4	94,3	91,0	83,5	67,1	50,2	33,7
15SVX05	3 x 5,5	EXM132B5..055B	106,7	105,1	102,9	99,3	83,5	67,1	50,2	33,7
15SVX07	3 x 7,5	EXM132B5..075C	149,4	147,0	144,2	138,6	114,1	91,3	67,8	44,7
15SVX09	3 x 11	EXM160B5..110C	195,1	190,3	186,1	180,8	165,1	137,4	108,8	80,4
15SVX12..L	3 x 15	EXM160B5..150D	245,8	239,6	234,3	226,9	214,7	187,4	149,1	111,2

POMPA TIPO	MOTOR		Q = DELIVERY							
			l/min 0	250,0	500,0	750,0	1000,0	1250,0	1500,0	1700,0
	P_N kW	TYPE	m^3/h 0	15,0	30,0	45,0	60,0	75,0	90,0	102,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
22SVX02Z3	3 x 3	EXM100B14..030B	45,2	44,5	43,2	41,4	37,2	29,0	20,0	11,6
22SVX02	3 x 3	EXM100B14..030B	45,2	44,6	43,6	42,2	38,5	31,0	22,9	15,2
22SVX03Z2	3 x 4	EXM112B14..040B	67,8	66,9	65,2	62,7	51,0	39,6	26,9	14,8
22SVX03	3 x 4	EXM112B14..040B	67,8	67,0	65,4	63,2	51,8	40,9	28,8	17,2
22SVX04Z1	3 x 5,5	EXM132B5..055B	90,1	90,0	88,6	85,3	71,2	56,5	40,3	25,4
22SVX04	3 x 5,5	EXM132B5..055B	90,1	90,1	88,7	85,6	71,6	57,2	41,3	26,6
22SVX05..L	3 x 7,5	EXM132B5..075C	97,6	97,4	95,8	92,1	85,5	74,8	58,4	40,1
22SVX05	3 x 7,5	EXM132B5..075C	112,7	112,7	110,8	107,7	97,0	78,5	58,5	40,2
22SVX07	3 x 11	EXM160B5..110C	157,8	157,6	155,3	150,5	141,1	115,5	87,4	61,8
22SVX10	3 x 15	EXM160B5..185D	225,5	225,3	221,5	215,3	194,1	157,1	117,1	80,4
22SVX12..L	3 x 18,5	EXM160B5..185D	248,4	247,4	244,4	236,7	221,6	194,7	146,0	102,9

Table refers to hydraulic performances with three pumps running max rpm, friction lost not included

g30_3-22svx-exmT-2p50-en_a_th

For technical deatils see technical catalogue of single SVX electric pump.

GHV30/..33-125SVX BOOSTER SETS SERIES THREE-PHASE
TABLE OF HYDRAULIC PERFORMANCE

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	350,0	700,0	1050,0	1400,0	1750,0	2100,0	2400,0
	P_N kW	TYPE	m3/h 0	21,0	42,0	63,0	84,0	105,0	126,0	144,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
33SVX01	3 x 3	EXM100B14..030B	35,0	34,7	34,3	32,8	28,3	23,9	19,4	15,0
33SVX02	3 x 5,5	EXM132B5..055B	70,1	69,5	68,7	61,2	52,4	44,0	35,0	26,3
33SVX02	3 x 7,5	EXM132B5..075C	70,1	69,5	68,6	67,1	65,0	59,2	49,6	40,8
33SVX03..L	3 x 11	EXM160B5..110C	99,4	98,4	97,2	95,0	91,5	85,7	72,7	59,5
33SVX03	3 x 11	EXM160B5..110C	105,1	104,2	102,9	100,7	97,5	86,9	72,7	59,5
33SVX04	3 x 15	EXM160B5..150D	140,1	138,9	137,2	134,4	129,8	118,4	99,3	81,6
33SVX05..L	3 x 18,5	EXM160B5..185D	156,2	154,8	152,7	149,1	143,1	133,5	119,0	100,3
33SVX05	3 x 18,5	EXM160B5..185D	175,2	173,7	171,5	167,9	162,4	146,1	122,4	100,3
33SVX06	3 x 22	EXM180B5..220D	210,3	208,4	205,8	201,5	194,8	173,9	145,4	118,9

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	520,0	1040,0	1560,0	2080,0	2600,0	3120,0	3600,0
	P_N kW	TYPE	m3/h 0	31,2	62,4	93,6	124,8	156,0	187,2	216,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
46SVX01	3 x 5,5	EXM132B5..055B	40,7	39,4	37,7	35,6	32,9	29,1	21,6	13,6
46SVX02	3 x 7,5	EXM132B5..075C	79,0	76,5	70,1	61,9	52,0	40,4	27,5	15,3
46SVX02	3 x 11	EXM160B5..110C	79,1	76,8	74,8	72,2	68,6	61,5	47,6	33,9
46SVX03	3 x 15	EXM160B5..150D	118,8	115,1	112,1	108,6	101,5	83,5	63,0	43,0
46SVX04	3 x 18,5	EXM160B5..185D	157,5	152,9	148,9	143,5	123,9	99,7	73,1	48,0
46SVX05	3 x 22	EXM180B5..220D	196,9	191,0	186,2	173,5	147,9	117,9	85,1	54,2

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	670,0	1340,0	2010,0	2680,0	3350,0	4020,0	4650,0
	P_N kW	TYPE	m3/h 0	40,2	80,4	120,6	160,8	201,0	241,2	279,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
66SVX01	3 x 5,5	EXM132B5..055B	44,4	43,7	36,9	31,1	26,6	22,7	18,4	12,1
66SVX02	3 x 11	EXM160B5..110C	86,5	85,4	72,7	61,9	53,3	45,8	37,8	27,8
66SVX02	3 x 15	EXM160B5..150D	86,5	85,6	83,4	79,8	69,5	60,8	52,5	43,5
66SVX03..L	3 x 18,5	EXM160B5..185D	98,7	97,5	94,8	90,6	84,6	76,7	66,1	51,8
66SVX03	3 x 18,5	EXM160B5..185D	128,9	127,6	120,5	103,0	89,0	77,0	65,0	51,1
66SVX04..L	3 x 22	EXM180B5..220D	157,3	155,8	146,4	125,1	108,2	93,4	77,8	58,9
66SVX04	3 x 22	EXM180B5..220D	171,3	171,5	146,3	125,2	108,1	93,4	77,8	58,9

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	970,0	1940,0	2910,0	3880,0	4850,0	5820,0	6750,0
	P_N kW	TYPE	m3/h 0	58,2	116,4	174,6	232,8	291,0	349,2	405,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
92SVX01	3 x 7,5	EXM132B5..075C	42,7	39,7	35,6	31,0	26,2	21,1	15,1	7,2
92SVX02	3 x 15	EXM160B5..150D	85,4	79,4	71,6	62,8	53,7	44,2	33,2	19,4
92SVX03..L	3 x 22	EXM180B5..220D	98,3	96,8	89,5	80,5	71,8	62,3	47,9	26,8
92SVX03	3 x 22	EXM180B5..220D	120,6	112,9	101,9	89,6	76,8	63,4	47,9	28,2

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	1150,0	2300,0	3450,0	4600,0	5750,0	6900,0	8000,0
	P_N kW	TYPE	m3/h 0	69,0	138,0	207,0	276,0	345,0	414,0	480,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
125SVX01	3 x 7,5	EXM132B5..075C	31,6	29,1	26,2	23,1	19,7	15,9	11,5	6,7
125SVX02	3 x 15	EXM160B5..150D	62,9	59,0	54,3	48,9	43,1	36,8	30,1	23,2
125SVX02	3 x 22	EXM180B5..220D	78,8	73,9	69,7	65,7	59,3	52,4	45,2	37,8

Table refers to hydraulic performances with three pumps running max rpm, friction lost not included

g30_33-125svx-exmT-2p50-en_c_th

For technical deatils see technical catalogue of single SVX electric pump.

GHV40/..5-22SVX BOOSTER SETS SERIES THREE-PHASE
TABLE OF HYDRAULIC PERFORMANCE

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	106,7	213,3	320,0	426,7	533,3	640,0	666,7
	P_N kW	TYPE	m^3/h 0	6,4	12,8	19,2	25,6	32,0	38,4	40,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
5SVX15..L	4 x 3	EXM100B14..030B	157,6	157,9	153,2	144,3	121,5	93,3	65,3	58,2
5SVX15	4 x 3	EXM100B14..030B	166,7	167,0	162,7	151,7	121,5	93,3	65,3	58,2
5SVX19	4 x 4	EXM112B14..040B	211,2	211,7	205,8	194,4	161,8	125,4	89,3	80,2
5SVX23..L	4 x 5,5	EXM132B5..055B	248,5	248,9	242,3	227,9	205,7	174,2	129,6	118,2

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	173,3	346,7	520,0	693,3	866,7	1040,0	1133,3
	P_N kW	TYPE	m^3/h 0	10,4	20,8	31,2	41,6	52,0	62,4	68,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
10SVX06..L	4 x 3	EXM100B14..030B	97,3	96,2	93,7	89,5	75,8	60,0	44,0	34,9
10SVX06	4 x 3	EXM100B14..030B	105,9	104,9	102,5	93,2	75,8	60,0	44,0	34,9
10SVX08	4 x 4	EXM112B14..040B	141,3	139,7	136,7	120,3	97,9	77,5	57,0	45,3
10SVX11..L	4 x 5,5	EXM132B5..055B	158,4	156,1	151,8	143,9	130,2	106,1	77,8	57,4
10SVX11	4 x 5,5	EXM132B5..055B	194,4	192,0	188,1	165,0	134,4	106,4	77,8	61,6
10SVX15	4 x 7,5	EXM132B5..075C	249,7	248,3	242,2	226,7	184,4	145,3	105,4	82,8

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	280,0	560,0	840,0	1120,0	1400,0	1680,0	1933,3
	P_N kW	TYPE	m^3/h 0	16,8	33,6	50,4	67,2	84,0	100,8	116,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
15SVX02Z4	4 x 3	EXM100B14..030B	42,6	41,6	40,2	37,6	33,1	26,1	17,8	17,8
15SVX02	4 x 3	EXM100B14..030B	42,7	42,0	41,2	39,9	37,6	34,0	28,7	21,6
15SVX03Z3	4 x 4	EXM112B14..040B	64,0	62,8	61,4	59,1	55,4	47,7	36,4	25,6
15SVX03	4 x 4	EXM112B14..040B	64,0	63,0	61,8	59,8	56,4	48,2	37,2	26,5
15SVX05Z1..L	4 x 5,5	EXM132B5..055B	98,0	96,3	94,2	90,8	83,1	66,4	49,6	32,6
15SVX05..L	4 x 5,5	EXM132B5..055B	98,0	96,4	94,3	91,0	83,5	67,1	50,2	33,7
15SVX05Z1	4 x 5,5	EXM132B5..055B	106,7	105,0	102,7	99,1	83,2	66,5	49,4	32,7
15SVX05	4 x 5,5	EXM132B5..055B	106,7	105,1	102,9	99,3	83,5	67,1	50,2	33,7
15SVX07	4 x 7,5	EXM132B5..075C	149,4	147,0	144,2	138,6	114,1	91,3	67,8	44,7
15SVX09	4 x 11	EXM160B5..110C	195,1	190,3	186,1	180,8	165,1	137,4	108,8	80,4
15SVX12..L	4 x 15	EXM160B5..150D	245,8	239,6	234,3	226,9	214,7	187,4	149,1	111,2

POMPA TIPO	MOTOR		Q = DELIVERY							
			l/min 0	333,3	666,7	1000,0	1333,3	1666,7	2000,0	2266,7
	P_N kW	TYPE	m^3/h 0	20,0	40,0	60,0	80,0	100,0	120,0	136,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
22SVX02Z4	4 x 3	EXM100B14..030B	45,2	44,5	43,1	41,2	36,8	28,3	19,1	10,4
22SVX02	4 x 3	EXM100B14..030B	45,2	44,6	43,6	42,2	38,5	31,0	22,9	15,2
22SVX03Z3	4 x 4	EXM112B14..040B	67,8	66,9	65,1	62,4	50,5	38,9	25,9	13,6
22SVX03	4 x 4	EXM112B14..040B	67,8	67,0	65,4	63,2	51,8	40,9	28,8	17,2
22SVX04Z2	4 x 5,5	EXM132B5..055B	90,1	90,0	88,5	85,0	70,7	55,8	39,4	24,2
22SVX04	4 x 5,5	EXM132B5..055B	90,1	90,1	88,7	85,6	71,6	57,2	41,3	26,6
22SVX05Z1..L	4 x 7,5	EXM132B5..075C	97,6	97,3	95,6	91,8	85,1	74,1	57,4	38,9
22SVX05..L	4 x 7,5	EXM132B5..075C	97,6	97,4	95,8	92,1	85,5	74,8	58,4	40,1
22SVX05Z1	4 x 7,5	EXM132B5..075C	112,7	112,5	110,8	107,2	96,6	77,9	57,6	39,0
22SVX05	4 x 7,5	EXM132B5..075C	112,7	112,7	110,8	107,7	97,0	78,5	58,5	40,2
22SVX07	4 x 11	EXM160B5..110C	157,8	157,6	155,3	150,5	141,1	115,5	87,4	61,8
22SVX10	4 x 15	EXM160B5..185D	225,5	225,3	221,5	215,3	194,1	157,1	117,1	80,4
22SVX12..L	4 x 18,5	EXM160B5..185D	248,4	247,4	244,4	236,7	221,6	194,7	146,0	102,9

Table refers to hydraulic performances with four pump running max rpm, friction lost not included

g40_5-22svx-exmT-2p50-en_a_th

For technical deatils see technical catalogue of single SVX electric pump.

GHV40/..33-125SVX BOOSTER SETS SERIES THREE-PHASE
TABLE OF HYDRAULIC PERFORMANCE

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	466,7	933,3	1400,0	1866,7	2333,3	2800,0	3200,0
	P_N kW	TYPE	m3/h 0	28,0	56,0	84,0	112,0	140,0	168,0	192,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
33SVX01	4 x 3	EXM100B14..030B	35,0	34,7	34,3	32,8	28,3	23,9	19,4	15,0
33SVX02	4 x 5,5	EXM132B5..055B	70,1	69,5	68,7	61,2	52,4	44,0	35,0	26,3
33SVX02	4 x 7,5	EXM132B5..075C	70,1	69,5	68,6	67,1	65,0	59,2	49,6	40,8
33SVX03..L	4 x 11	EXM160B5..110C	99,4	98,4	97,2	95,0	91,5	85,7	72,7	59,5
33SVX03	4 x 11	EXM160B5..110C	105,1	104,2	102,9	100,7	97,5	86,9	72,7	59,5
33SVX04	4 x 15	EXM160B5..150D	140,1	138,9	137,2	134,4	129,8	118,4	99,3	81,6
33SVX05..L	4 x 18,5	EXM160B5..185D	156,2	154,8	152,7	149,1	143,1	133,5	119,0	100,3
33SVX05	4 x 18,5	EXM160B5..185D	175,2	173,7	171,5	167,9	162,4	146,1	122,4	100,3
33SVX06	4 x 22	EXM180B5..220D	210,3	208,4	205,8	201,5	194,8	173,9	145,4	118,9

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	693,3	1386,7	2080,0	2773,3	3466,7	4160,0	4800,0
	P_N kW	TYPE	m3/h 0	41,6	83,2	124,8	166,4	208,0	249,6	288,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
46SVX01	4 x 5,5	EXM132B5..055B	40,7	39,4	37,7	35,6	32,9	29,1	21,6	13,6
46SVX02	4 x 7,5	EXM132B5..075C	79,0	76,5	70,1	61,9	52,0	40,4	27,5	15,3
46SVX02	4 x 11	EXM160B5..110C	79,1	76,8	74,8	72,2	68,6	61,5	47,6	33,9
46SVX03	4 x 15	EXM160B5..150D	118,8	115,1	112,1	108,6	101,5	83,5	63,0	43,0
46SVX04	4 x 18,5	EXM160B5..185D	157,5	152,9	148,9	143,5	123,9	99,7	73,1	48,0
46SVX05	4 x 22	EXM180B5..220D	196,9	191,0	186,2	173,5	147,9	117,9	85,1	54,2

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	893,3	1786,7	2680,0	3573,3	4466,7	5360,0	6200,0
	P_N kW	TYPE	m3/h 0	53,6	107,2	160,8	214,4	268,0	321,6	372,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
66SVX01	4 x 5,5	EXM132B5..055B	44,4	43,7	36,9	31,1	26,6	22,7	18,4	12,1
66SVX02	4 x 11	EXM160B5..110C	86,5	85,4	72,7	61,9	53,3	45,8	37,8	27,8
66SVX02	4 x 15	EXM160B5..150D	86,5	85,6	83,4	79,8	69,5	60,8	52,5	43,5
66SVX03..L	4 x 18,5	EXM160B5..185D	98,7	97,5	94,8	90,6	84,6	76,7	66,1	51,8
66SVX03	4 x 18,5	EXM160B5..185D	128,9	127,6	120,5	103,0	89,0	77,0	65,0	51,1
66SVX04..L	4 x 22	EXM180B5..220D	157,3	155,8	146,4	125,1	108,2	93,4	77,8	58,9
66SVX04	4 x 22	EXM180B5..220D	171,3	171,5	146,3	125,2	108,1	93,4	77,8	58,9

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	1293,3	2586,7	3880,0	5173,3	6466,7	7760,0	9000,0
	P_N kW	TYPE	m3/h 0	77,6	155,2	232,8	310,4	388,0	465,6	540,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
92SVX01	4 x 7,5	EXM132B5..075C	42,7	39,7	35,6	31,0	26,2	21,1	15,1	7,2
92SVX02	4 x 15	EXM160B5..150D	85,4	79,4	71,6	62,8	53,7	44,2	33,2	19,4
92SVX03..L	4 x 22	EXM180B5..220D	98,3	96,8	89,5	80,5	71,8	62,3	47,9	26,8
92SVX03	4 x 22	EXM180B5..220D	120,6	112,9	101,9	89,6	76,8	63,4	47,9	28,2

PUMP TYPE	MOTOR		Q = DELIVERY							
			l/min 0	1533,3	3066,7	4600,0	6133,3	7666,7	9200,0	10666,7
	P_N kW	TYPE	m3/h 0	92,0	184,0	276,0	368,0	460,0	552,0	640,0
			H = TOTAL HEAD IN METRES OF COLUMN OF WATER							
125SVX01	4 x 7,5	EXM132B5..075C	31,6	29,1	26,2	23,1	19,7	15,9	11,5	6,7
125SVX02	4 x 15	EXM160B5..150D	62,9	59,0	54,3	48,9	43,1	36,8	30,1	23,2
125SVX02	4 x 22	EXM180B5..220D	78,8	73,9	69,7	65,7	59,3	52,4	45,2	37,8

Table refers to hydraulic performances with three pumps running max rpm, friction lost not included

g40_33-125svx-exmT-2p50-en_c_th

For technical deatils see technical catalogue of single SVX electric pump.

GHV BOOSTER SETS SERIES
3-22SVX, BOOSTER AVAILABLE VERSIONS

PUMP		BOOSTER SET							
		GHV10		GHV20		GHV30		GHV40	
		PUMP VERSION							
TYPE	kW	F	R	F	R	F	R	F	R
3SVX21	3	-	-	●	●	●	●	-	-
5SVX15..L	3	●	-	●	●	●	●	●	●
5SVX15	3	-	-	●	●	●	●	●	●
5SVX19	4	-	-	●	●	●	●	●	●
5SVX23..L	5,5	-	-	●	●	●	●	●	●
10SVX06..L	3	●	-	●	●	●	●	●	●
10SVX06	3	●	-	●	●	●	●	●	●
10SVX08	4	●	-	●	●	●	●	●	●
10SVX11..L	5,5	●	-	●	●	●	●	●	●
10SVX11	5,5	-	-	●	●	●	●	●	●
10SVX15	7,5	-	-	●	●	●	●	●	●
15SVX02Z4	3	-	-	-	-	-	-	-	●
15SVX02Z3	3	-	-	-	●	-	●	-	-
15SVX02	3	●	-	●	-	●	-	●	-
15SVX03Z3	4	-	-	-	-	-	-	-	●
15SVX03Z2	4	-	-	-	●	-	●	-	-
15SVX03	4	●	-	●	-	●	-	●	-
15SVX05Z1..L	5,5	-	-	-	-	-	-	-	●
15SVX05Z1	5,5	-	-	-	-	-	-	-	●
15SVX05..L	5,5	●	-	●	●	●	●	●	-
15SVX05	5,5	●	-	●	●	●	●	●	-
15SVX07	7,5	●	-	●	●	●	●	●	●
15SVX09	11	-	-	●	●	●	●	●	●
15SVX12..L	15	-	-	●	●	●	●	●	●
22SVX02Z4	3	-	-	-	-	-	-	-	●
22SVX02Z3	3	-	-	-	●	-	●	-	-
22SVX02	3	●	-	●	-	●	-	●	-
22SVX03Z3	4	-	-	-	-	-	-	-	●
22SVX03Z2	4	-	-	-	●	-	●	-	-
22SVX03	4	●	-	●	-	●	-	●	-
22SVX04Z2	5,5	-	-	-	-	-	-	-	●
22SVX04Z1	5,5	-	-	-	●	-	●	-	-
22SVX04	5,5	●	-	●	-	●	-	●	-
22SVX05Z1..L	7,5	-	-	-	-	-	-	-	●
22SVX05Z1	7,5	-	-	-	-	-	-	-	●
22SVX05..L	7,5	●	-	●	●	●	●	●	-
22SVX05	7,5	●	-	●	●	●	●	●	-
22SVX07	11	●	-	●	●	●	●	●	●
22SVX10	15	-	-	●	●	●	●	●	●
22SVX12..L	18,5	-	-	●	●	●	●	●	●

GHV-3_22SVX-2p50-en_a_tm

GHV BOOSTER SETS SERIES
33-125SVX, BOOSTER AVAILABLE VERSIONS

PUMP(*)		BOOSTER SET							
		GHV10		GHV20		GHV30		GHV40	
TIPO	kW	STANDARD	../V9	STANDARD	../V9	STANDARD	../V9	STANDARD	../V9
33SVX01	3	●	-	●	●	●	●	●	●
33SVX02	5,5	●	-	●	●	●	●	●	●
33SVX02	7,5	●	-	●	●	●	●	●	●
33SVX03..L	11	●	-	●	●	●	●	●	●
33SVX03	11	●	-	●	●	●	●	●	●
33SVX04	15	●	-	●	●	●	●	●	●
33SVX05..L	18,5	●	-	●	●	●	●	●	●
33SVX05	18,5	-	-	●	●	●	●	●	●
33SVX06	22	-	-	●	●	●	●	●	●
46SVX01	5,5	●	-	●	●	●	●	●	●
46SVX02	7,5	●	-	●	●	●	●	●	●
46SVX02	11	●	-	●	●	●	●	●	●
46SVX03	15	●	-	●	●	●	●	●	●
46SVX04	18,5	●	-	●	●	●	●	●	●
46SVX05	22	-	-	●	●	●	●	●	●
66SVX01	5,5	●	-	●	●	●	●	●	●
66SVX02	7,5	●	-	●	●	●	●	●	●
66SVX02	11	●	-	●	●	●	●	●	●
66SVX03..L	18,5	●	-	●	●	●	●	●	●
66SVX03	18,5	●	-	●	●	●	●	●	●
66SVX04..L	22	●	-	●	●	●	●	●	●
66SVX04	22	-	-	●	●	●	●	●	●
92SVX01	7,5	●	-	●	●	●	●	●	●
92SVX02	15	●	-	●	●	●	●	●	●
92SVX03..L	22	●	-	●	●	●	●	●	●
92SVX03	22	●	-	●	●	●	●	●	●
125SVX01	7,5	●	-	●	●	●	●	●	●
125SVX02	15	●	-	●	●	●	●	●	●
125SVX02	22	●	-	●	●	●	●	●	●

* G, Standard pump version

GHV-33_125SVX-2p50-en_cn_c_tm

GHV BOOSTER SETS SERIES - THREE-PHASE ELECTRICAL DATA TABLE

In the range 3000-3600 rpm the nominal motor power is guaranteed. Above 3600 rpm it isn't possible to work and the motor is automatically limited; below 3000 rpm it works at partial load.

P_N	MOTOR TYPE	IEC SIZE*	Construction Design	SPEED	INPUT CURRENT	DATA RELATED TO THE VOLTAGE OF 400V						
				(RPM)**	I (A)	In	cosφ	Tn	η %			IES
kW				min^{-1}	380-480 V	A		Nm	4/4	3/4	2/4	
3	EXM100B14SV/4.030B	100	B14	3000	6,74-5,18	5,79	0,86	9,55	87,5	87,3	86,2	2
				3600		5,71		7,96	87,8	87,6	85,8	
				4000		5,72		7,16	87,7	87,4	85,5	
4	EXM112B14SV/4.040B	112		3000	7,73-6,42	7,34	0,90	12,7	87,5	88,0	87,5	2
				3600		7,23		10,6	88,5	88,6	87,3	
				4000		7,30		9,55	88,0	88,2	86,6	
5,5	EXM132B5SV/4.055B	132	B5	3000	10,1-8,22	9,51	0,92	17,5	90,0	89,7	88,9	2
				3600		9,63		14,6	89,4	89,5	88,7	
				4000		9,58		13,1	89,5	89,0	87,6	
7,5	EXM132B5SV/4.075C	132		3000	13,7-11,8	13,40	0,85	23,9	90,6	89,7	87,9	2
				3600		14,00		19,9	90,8	90,1	88,4	
				4000		13,50		17,9	89,5	88,6	88,4	
11	EXM160B5SV/4.110C	160		3000	19,8-16,5	18,90	0,93	35	91,0	90,9	90,0	2
				3600		19,10		29,2	89,7	89,7	88,2	
				4000		19,30		26,3	89,7	89,7	88,7	
15	EXM160B5SV/4.150D	160		3000	27,5-26,6	26,40	0,81	47,8	91,5	91,4	90,5	2
				3600		29,10		39,8	91,7	91,4	90,5	
				4000		29,10		35,8	91,2	91,1	89,7	
18,5	EXM160B5SV/4.185D	160		3000	33,4-28,0	32,20	0,90	58,9	91,7	91,7	91,2	2
				3600		32,10		49,1	91,9	91,7	90,9	
				4000		32,10		44,2	91,9	91,7	90,8	
22	EXM180B5SV/4.220D	180		3000	38,8-32,0	37,30	0,93	70	92,4	92,0	91,2	2
				3600		36,80		58,4	92,6	92,1	91,0	
				4000		36,90		52,7	92,5	91,9	90,5	

** The indicated rotational speed are representing the upper and lower limits of the rated power operational speed range.

SV-XM_mott-en_a_te

Note. **IES** refers to the efficiency class for frequency converter + motor systems (known as power transmission systems-PDS) with power between 0.12 kW and 1000 kW and between 100 V and 1000 V, according to the standard **EN 50598-2:2014**.

GHV BOOSTER SET SERIES
SPECIAL SETS

GHV30/33SVX/SPECIAL





GHV60/46SVX/SPECIAL

GHV BOOSTER SET SERIES
ELECTRIC PUMP RANGE AND CHARACTERISTICS

The standard range of GHV series variable-speed booster sets includes models with 1 to 4 e-SVX pumps with hydrovar X+ in different configurations, to adapt to the specific needs of each application.
For other models refer to your usual sales representative.



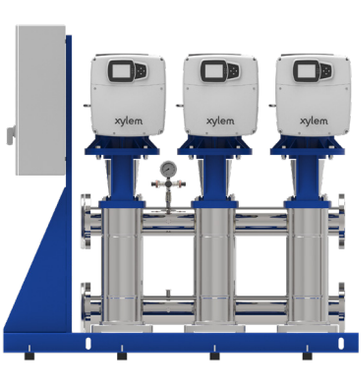
GHV10 SERIES
Variable speed sets with hydrovar X+ frequency converter and one multistage vertical pump with power up to 22 kW.

Head up to 160 m.
Flow rate up to 160 m^3/h.



GHV20 SERIES
Variable speed sets with hydrovar X+ frequency converter and two multistage vertical pumps with power up to 22 kW.

Head up to 250 m.
Flow rate up to 320 m^3/h.



GHV30 SERIES
Variable speed sets with hydrovar X+
frequency converter and three multistage vertical pumps with power up to 22 kW.

Head up to 250 m.
Flow rate up to 480 m^3/h.



GHV40 SERIES
Variable speed sets with hydrovar X+ frequency converter and four multistage vertical pumps with power up to 22 kW.

Head up to 250 m.
Flow rate up to 640 m^3/h.

Booster sets

MARKET SECTORS
RESIDENTIAL-CIVIL, INDUSTRIAL

APPLICATIONS
- Water network supply in housing complexes, offices, hotels, shopping centers, industrial plants.
- Supply of water networks for agricultural applications (e.g. irrigation).

GHV10 SERIES

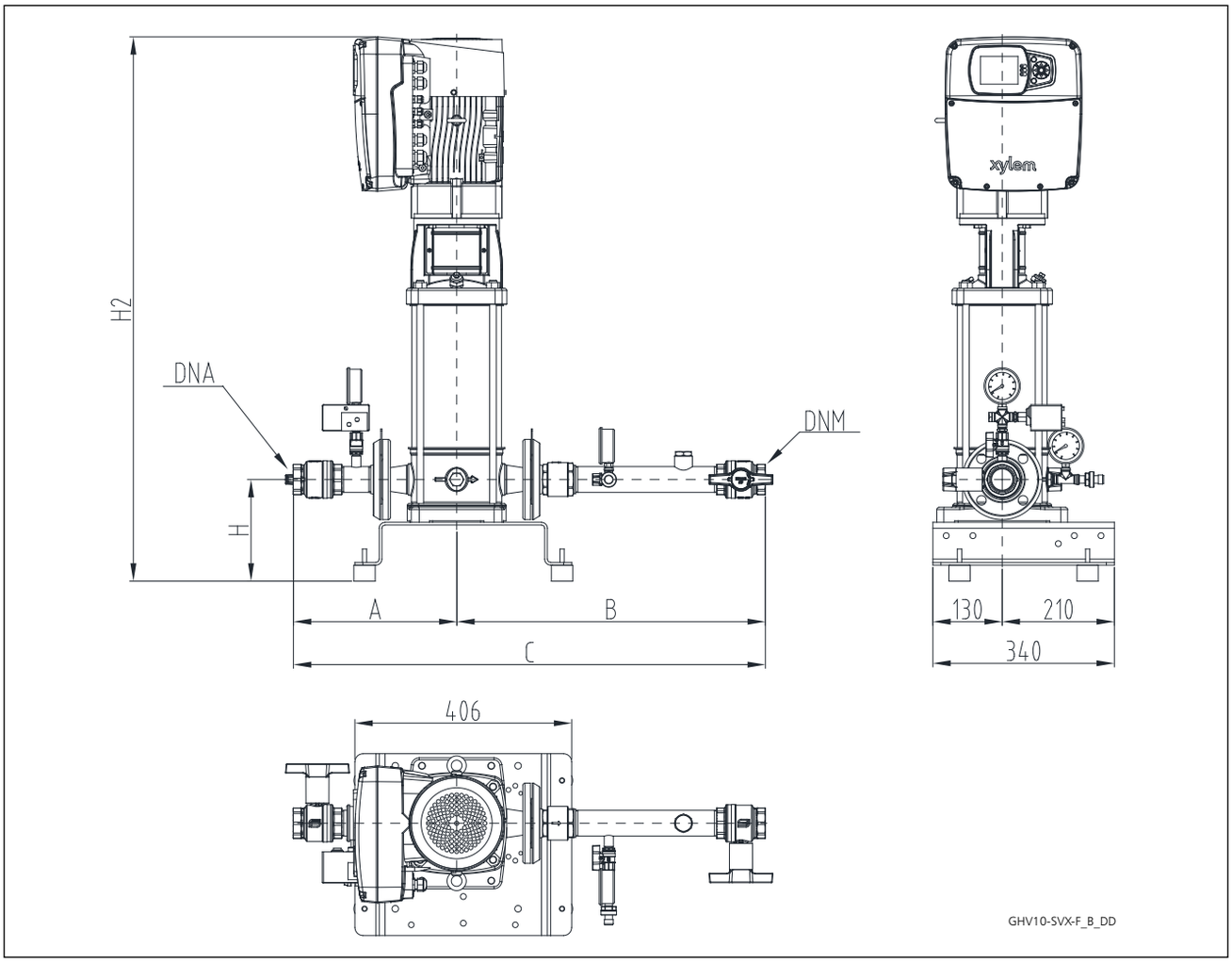


SPECIFICATIONS

- **Flow rate** up to 160 m^3/h.
- **Head** up to 160 m.
- **Frequency** 50/60 Hz
- **e-SVX** vertical axis electric pump
- **hydrovar X+** frequency converter coupled with synchronous motor
- **Protection class IP55** for: - e-SVX electric pump
- Maximum operating **pressure**: 16 bar.
- Maximum liquid **temperature**: max +60°C.
- Maximum electric pump **power**: 1 x 22 kW.
- **Progressive** motor start.

GHV series booster sets with e-SV are certified for use with drinking water

SET OF 1 PUMP SV..F SERIES
THREE-PHASE POWER SUPPLY GHV10.../4

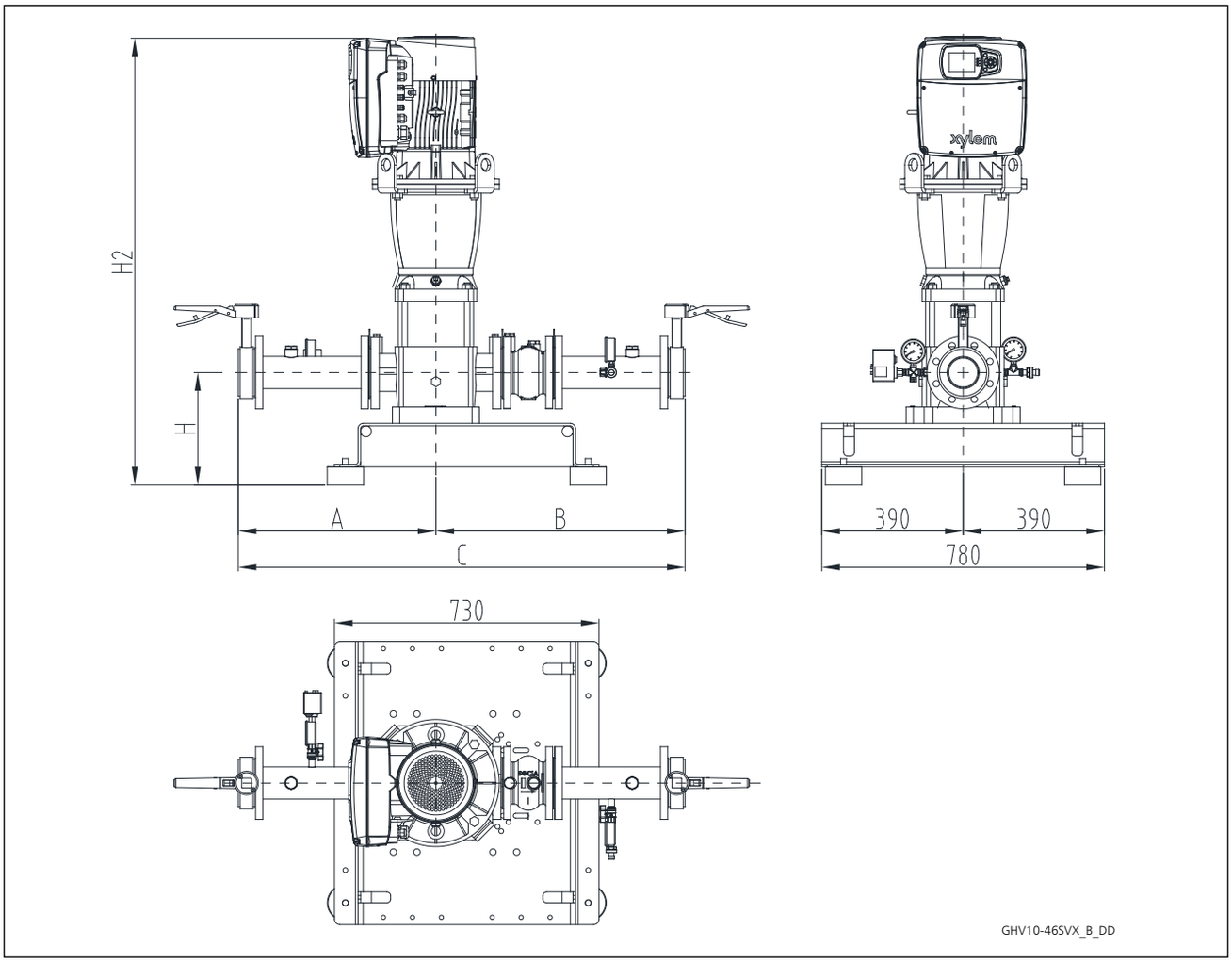


GHV 10	DNA	DNM	A	B	C	H	H2
5SVX15F030L	Rp1"1/4	Rp1"1/4	272	577	849	185	1072
10SVX06F030L	Rp1"1/2	Rp1"1/2	306	578	885	190	954
10SVX06F030	Rp1"1/2	Rp1"1/2	306	578	885	190	954
10SVX08F040	Rp1"1/2	Rp1"1/2	306	578	885	190	1018
10SVX11F055L	Rp1"1/2	Rp1"1/2	306	578	885	190	1195
15SVX02F030	Rp 2"	Rp 2"	346	651	996	200	868
15SVX03F040	Rp 2"	Rp 2"	346	651	996	200	916
15SVX05F055L	Rp 2"	Rp 2"	346	651	996	200	1089
15SVX05F055	Rp 2"	Rp 2"	346	651	996	200	1089
15SVX07F075	Rp 2"	Rp 2"	346	651	996	200	1227
22SVX02F030	Rp 2"	Rp 2"	346	651	996	200	868
22SVX03F040	Rp 2"	Rp 2"	346	651	996	200	916
22SVX04F055	Rp 2"	Rp 2"	346	651	996	200	1041
22SVX05F075L	Rp 2"	Rp 2"	346	651	996	200	1131
22SVX05F075	Rp 2"	Rp 2"	346	651	996	200	1131
22SVX07F110	Rp 2"	Rp 2"	346	651	996	200	1270

Dimensions in mm. Tolerance ± 10 mm.

ghv10_svx-f-emea_d_td

SET OF 1 PUMP SV..G SERIES
THREE-PHASE POWER SUPPLY GHV10.../4



GHV 10	DNA	DNM	A	B	C	H	H2
33SVX01G030	DN65 / PN16	DN65 / PN16	558	680	1238	275	998
33SVX02G055	DN65 / PN16	DN65 / PN16	558	680	1238	275	1103
33SVX02G075	DN65 / PN16	DN65 / PN16	558	680	1238	275	1145
33SVX03G110L	DN65 / PN16	DN65 / PN16	558	680	1238	275	1268
33SVX03G110	DN65 / PN16	DN65 / PN16	558	680	1238	275	1268
33SVX04G150	DN65 / PN16	DN65 / PN16	558	680	1238	275	1419
33SVX05G185L	DN65 / PN16	DN65 / PN16	558	680	1238	275	1494
46SVX01G055	DN80 / PN16	DN80 / PN16	546	705	1251	310	1068
46SVX02G075	DN80 / PN16	DN80 / PN16	546	705	1251	310	1220
46SVX02G110	DN80 / PN16	DN80 / PN16	546	705	1251	310	1233
46SVX03G150	DN80 / PN16	DN80 / PN16	546	705	1251	310	1384
46SVX04G185	DN80 / PN16	DN80 / PN16	546	705	1251	310	1459
66SVX01G055	DN100 / PN16	DN100 / PN16	597	734	1330	310	1093
66SVX02G110	DN100 / PN16	DN100 / PN16	597	734	1330	310	1273
66SVX02G150	DN100 / PN16	DN100 / PN16	597	734	1330	310	1349
66SVX03G185L	DN100 / PN16	DN100 / PN16	597	734	1330	310	1439
66SVX03G185	DN100 / PN16	DN100 / PN16	597	734	1330	310	1439
66SVX04G220L	DN100 / PN16	DN100 / PN16	597	734	1330	310	1529
92SVX01G075	DN100 / PN16	DN100 / PN16	597	734	1330	310	1135
92SVX02G150	DN100 / PN16	DN100 / PN16	597	734	1330	310	1349
92SVX03G220L	DN100 / PN16	DN100 / PN16	597	734	1330	310	1439
92SVX03G220	DN100 / PN16	DN100 / PN16	597	734	1330	310	1439
125SVX01G075	DN125 / PN16	DN125 / PN16	570	780	1358	330	1254
125SVX02G150	DN125 / PN16	DN125 / PN16	570	780	1358	330	1528
125SVX02G220	DN125 / PN16	DN125 / PN16	570	780	1358	330	1528

Dimensions in mm. Tolerance ± 10 mm.

Booster sets

MARKET SECTORS
RESIDENTIAL-CIVIL, INDUSTRIAL

APPLICATIONS
- Water network supply in housing complexes, offices, hotels, shopping centers, industrial plants.
- Supply of water networks for agricultural applications (e.g. irrigation).

GHV20 SERIES

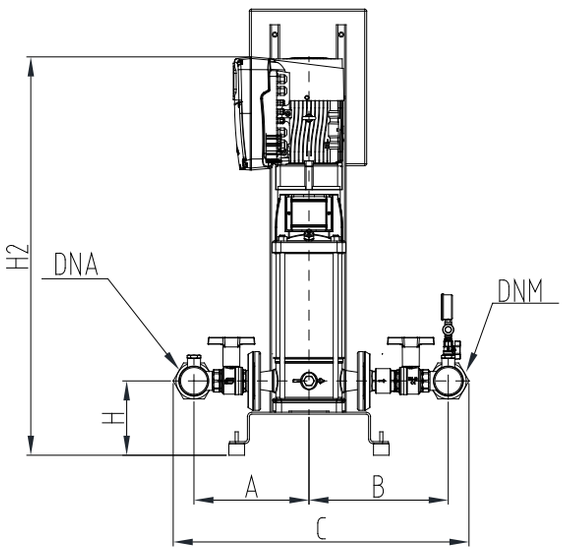


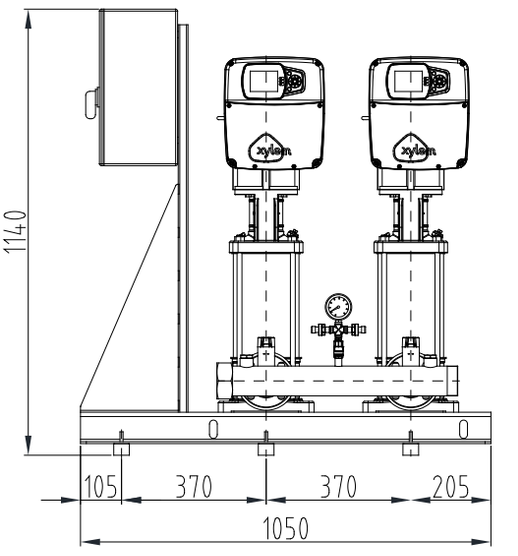
SPECIFICATIONS

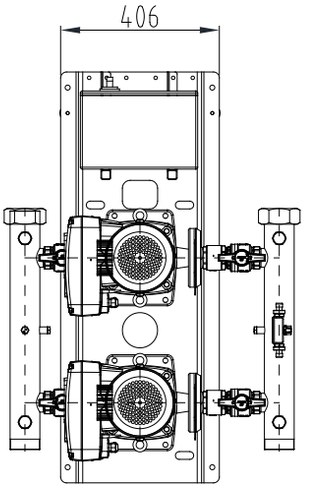
- **Flow rate** up to 320 m^3/h.
- **Head** up to 250 m.
- **Frequency** 50/60 Hz
- **e-SVX** vertical axis electric pump
- **hydrovar X+** frequency converter coupled with synchronous motor
- **Protection class IP55** for:
  - electrical control panel
  - e-SVX electric pump
- Maximum operating **pressure**: 25 bar.
- Maximum liquid **temperature**: max +60°C.
- Maximum electric pump **power**: 2 x 22 kW.
- **Progressive** motor start.

GHV series booster sets with e-SV are certified for use with drinking water

SET OF 2 PUMPS SV..F SERIES
THREE-PHASE POWER SUPPLY (GHV20.../4)







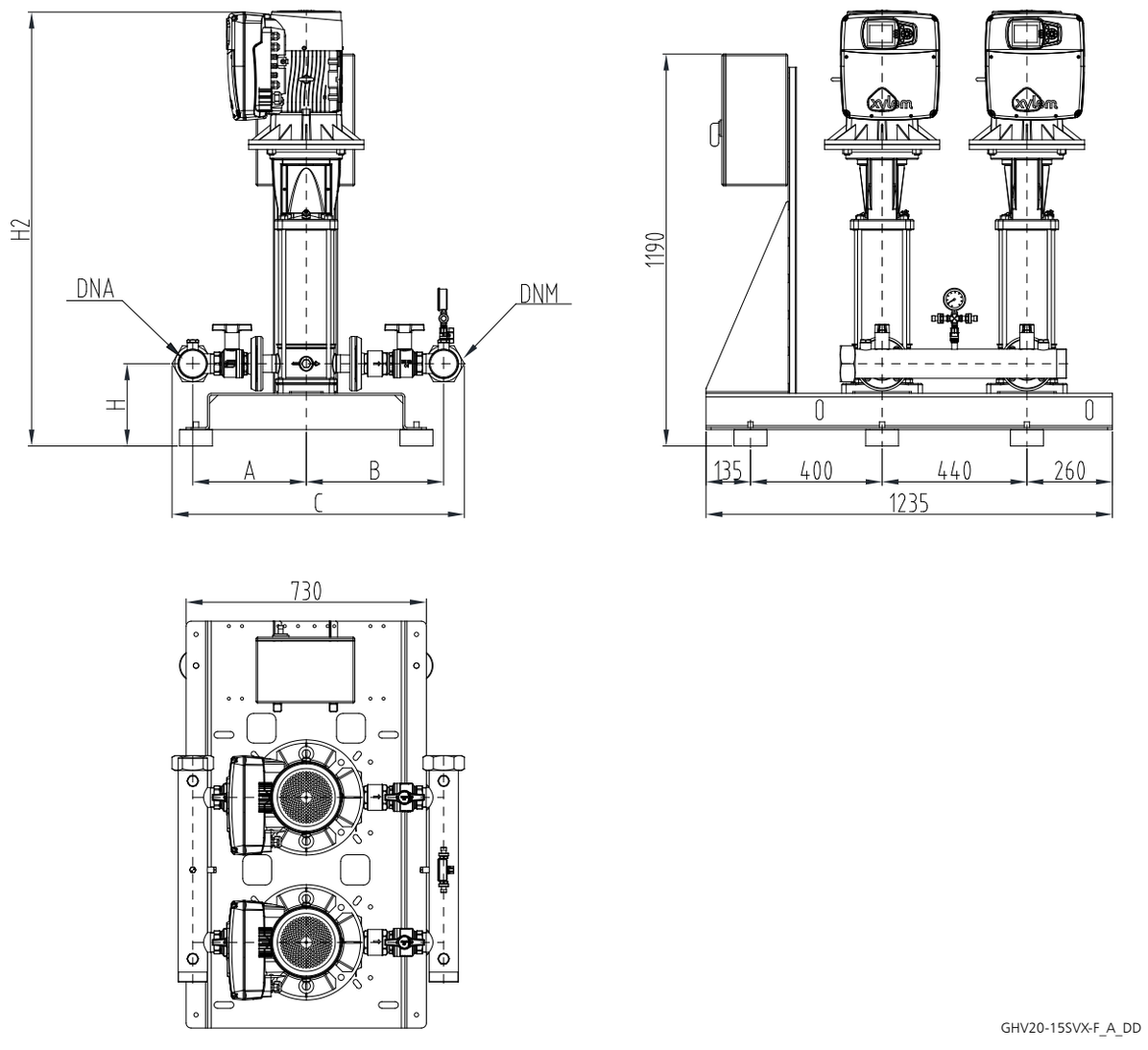
GHV20-SVX-F_A_DD

GHV 20	DNA	DNM	A	B	C	H	H2
3SVX21F030	R 2"	R 2"	257	312	649	185	1117
5SVX15F030L	R 2"	R 2"	262	327	671	185	1072
5SVX15F030	R 2"	R 2"	262	327	671	185	1072
5SVX19F040	R 2"	R 2"	262	327	671	185	1172
5SVX23F055L	R 2"	R 2"	262	327	671	185	1307
10SVX06F030L	R2"1/2	R2"1/2	294	356	757	190	954
10SVX06F030	R2"1/2	R2"1/2	294	356	757	190	954
10SVX08F040	R2"1/2	R2"1/2	294	356	757	190	1018
10SVX11F055L	R2"1/2	R2"1/2	294	356	757	190	1196
10SVX11F055	R2"1/2	R2"1/2	294	356	757	190	1196
10SVX15F075	R2"1/2	R2"1/2	294	356	757	190	1360
15SVX02F030	R 3"	R 3"	345	418	888	200	868
15SVX03F040	R 3"	R 3"	345	418	888	200	916
15SVX05F055L	R 3"	R 3"	345	418	888	200	1012
15SVX05F055	R 3"	R 3"	345	418	888	200	1012
15SVX07F075	R 3"	R 3"	345	418	888	200	1227
22SVX02F030	R 3"	R 3"	345	418	888	200	868
22SVX03F040	R 3"	R 3"	345	418	888	200	916
22SVX04F055	R 3"	R 3"	345	418	888	200	1041
22SVX05F075L	R 3"	R 3"	345	418	888	200	1131
22SVX05F075	R 3"	R 3"	345	418	888	200	1131

Dimensions in mm. Tolerance ± 10 mm.

ghv20_svx-f_emea_b_td

SET OF 2 PUMPS SV..F SERIES
THREE-PHASE POWER SUPPLY (GHV20.../4)

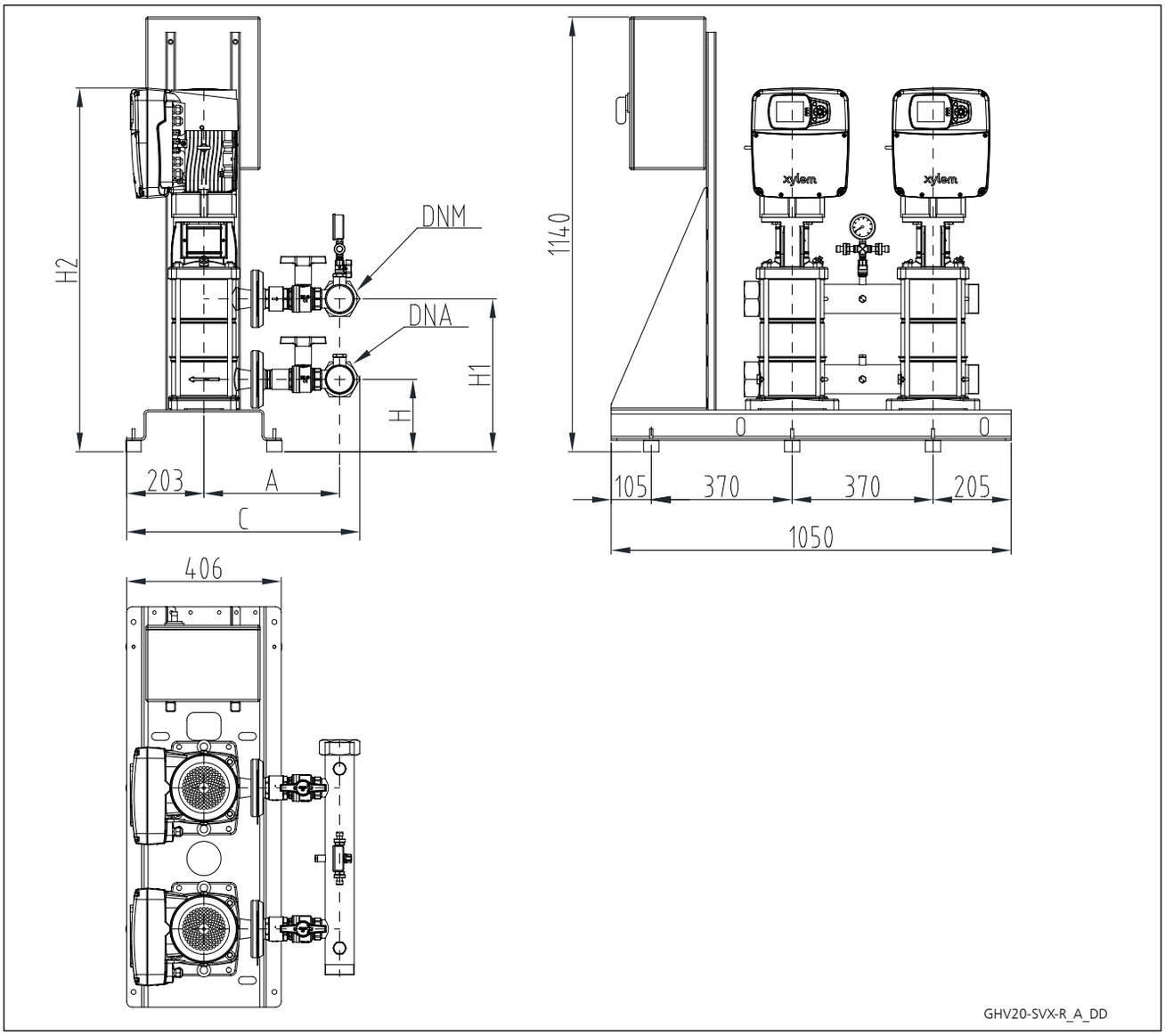


GHV 20	DNA	DNM	A	B	C	H	H2
15SVX09F110	R 3"	R 3"	345	418	888	250	1447
15SVX12F150L	R 3"	R 3"	345	418	888	250	1666
22SVX07F110	R 3"	R 3"	345	418	888	200	1320
22SVX10F150	R 3"	R 3"	345	418	888	200	1570
22SVX12F185L	R 3"	R 3"	345	418	888	200	1666

Dimensions in mm. Tolerance ± 10 mm.

ghv20_15svx-f-emea_b_td

SET OF 2 PUMPS SV..R SERIES
THREE-PHASE POWER SUPPLY (GHV20.../4)

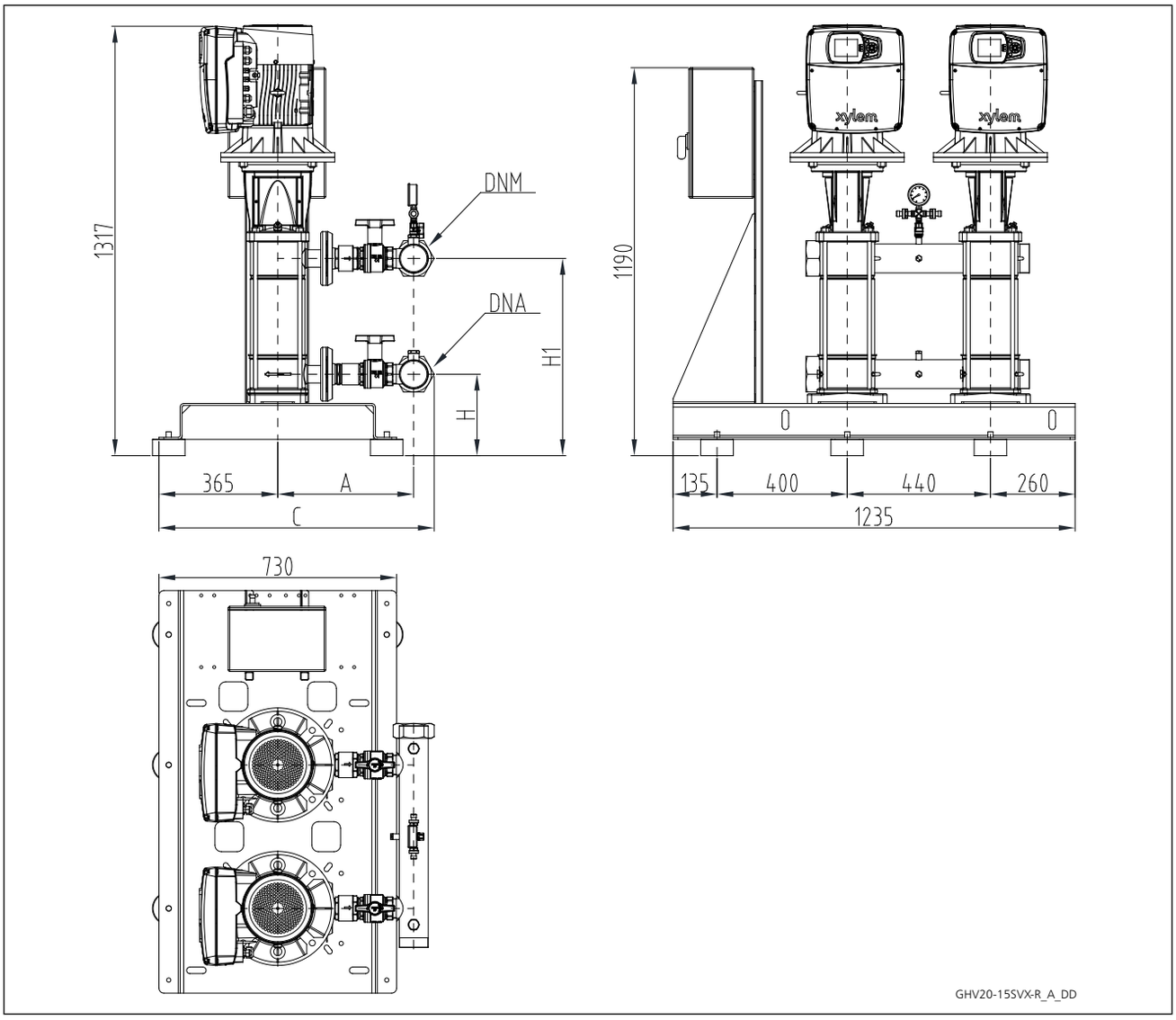


GHV 20	DNA	DNM	A	C	H	H1	H2
3SVX21R030	R 2"	R 2"	312	557	185	597	1117
5SVX15R030L	R 2"	R 2"	327	573	185	552	1072
5SVX15R030	R 2"	R 2"	327	573	185	552	1072
5SVX19R040	R 2"	R 2"	327	573	185	652	1172
5SVX23R055L	R 2"	R 2"	327	573	185	752	1307
10SVX06R030L	R2"1/2	R2"1/2	356	614	190	401	954
10SVX06R030	R2"1/2	R2"1/2	356	614	190	401	954
10SVX08R040	R2"1/2	R2"1/2	356	614	190	465	1018
10SVX11R055L	R2"1/2	R2"1/2	356	614	190	561	1196
10SVX11R055	R2"1/2	R2"1/2	356	614	190	561	1196
10SVX15R075	R2"1/2	R2"1/2	356	614	190	689	1360
15SVX02Z3R030	R 3"	R 3"	418	621	200	459	1089
15SVX03Z2R040	R 3"	R 3"	418	621	200	459	1089
15SVX05R055L	R 3"	R 3"	418	621	200	459	1012
15SVX05R055	R 3"	R 3"	418	621	200	459	1012
15SVX07R075	R 3"	R 3"	418	621	200	555	1227
22SVX02Z3R030	R 3"	R 3"	418	621	200	459	1131
22SVX03Z2R040	R 3"	R 3"	418	621	200	459	1131
22SVX04Z1R055	R 3"	R 3"	418	621	200	459	1131
22SVX05R075L	R 3"	R 3"	418	621	200	459	1131
22SVX05R075	R 3"	R 3"	418	621	200	459	1131

Dimensions in mm. Tolerance ± 10 mm.

ghv20_svx-r-emea_b_td

SET OF 2 PUMPS SV..R SERIES
THREE-PHASE POWER SUPPLY (GHV20.../4)

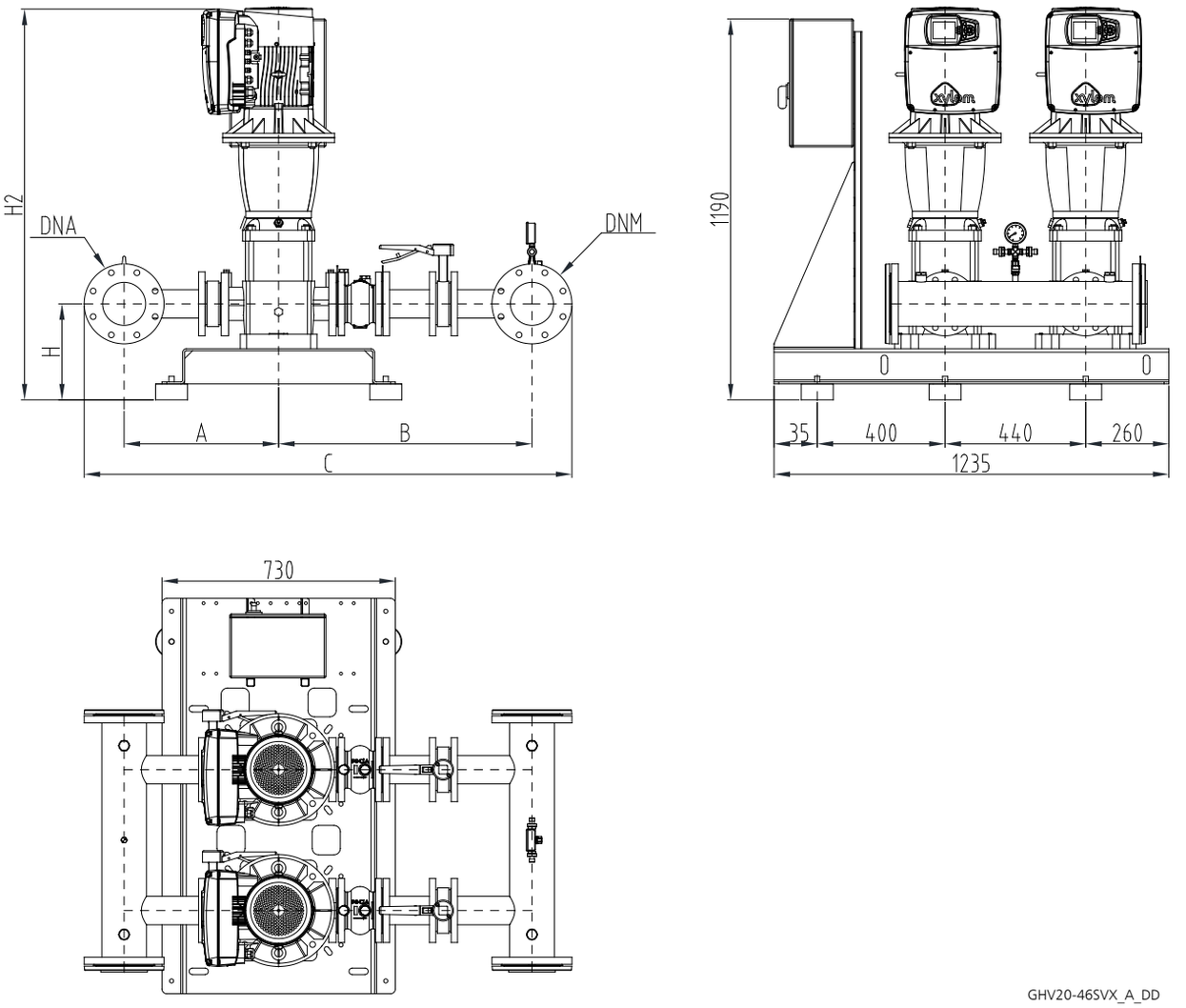


GHV 20	DNA	DNM	A	C	H	H1	H2
15SVX09R110	R 3"	R 3"	418	846	250	731	1447
15SVX12R150L	R 3"	R 3"	418	846	250	875	1666
22SVX07R110	R 3"	R 3"	418	846	200	605	1320
22SVX10R150	R 3"	R 3"	418	846	200	779	1570
22SVX12R185L	R 3"	R 3"	418	846	200	875	1666

Dimensions in mm. Tolerance ± 10 mm.

ghv20_15svx-r-emea_b_td

SET OF 2 PUMPS SV..G SERIES
THREE-PHASE POWER SUPPLY (GHV20.../4)

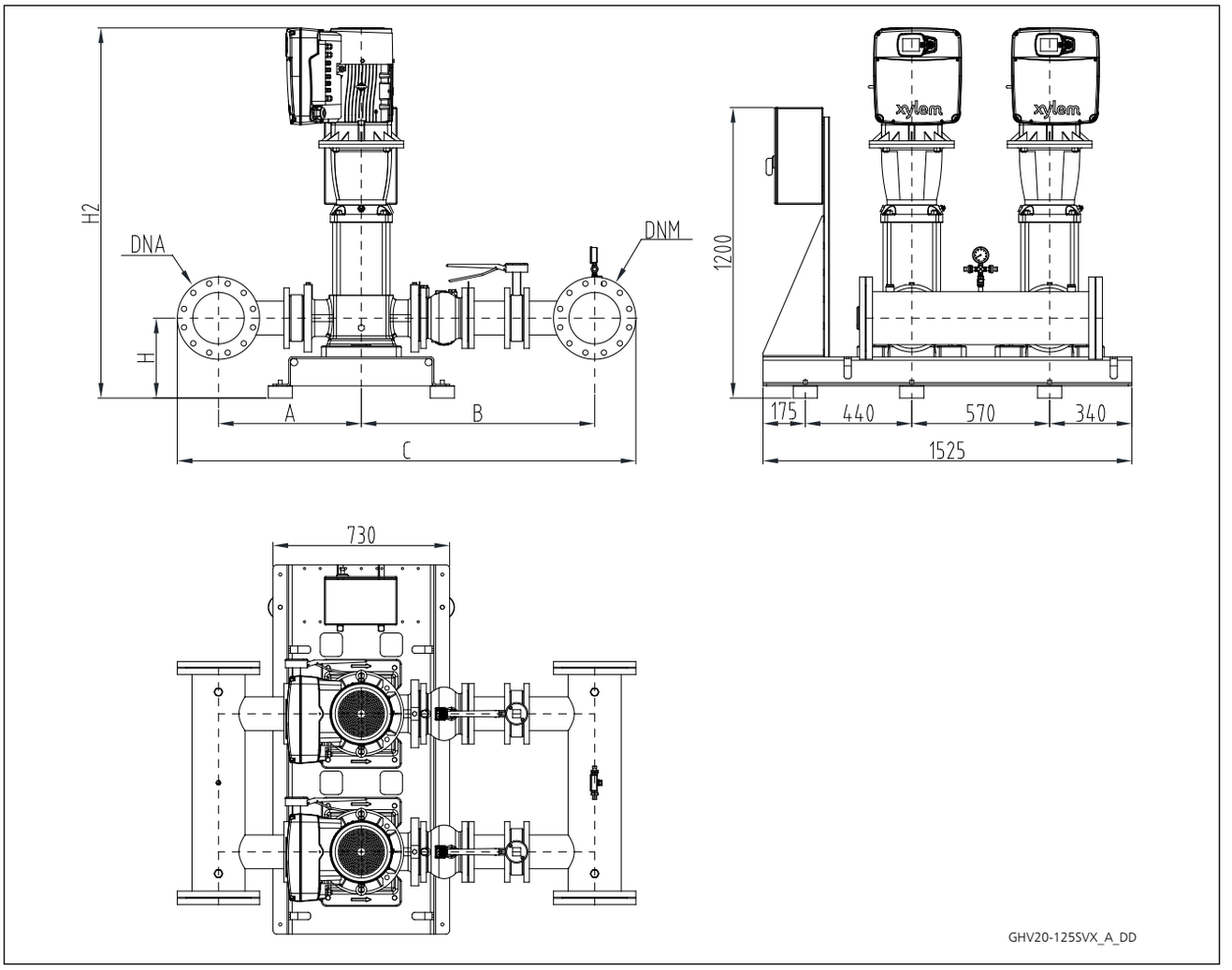


GHV 20	DNA	DNM	A	B	C	H	H2
33SVX01G030	DN100 / PN16	DN100 / PN16	448	732	1400	265	988
33SVX02G055	DN100 / PN16	DN100 / PN16	448	732	1400	265	1093
33SVX02G075	DN100 / PN16	DN100 / PN16	448	732	1400	265	1135
33SVX03G110L	DN100 / PN16	DN100 / PN16	448	732	1400	265	1258
33SVX03G110	DN100 / PN16	DN100 / PN16	448	732	1400	265	1258
33SVX04G150	DN100 / PN16	DN100 / PN16	448	732	1400	265	1409
33SVX05G185L	DN100 / PN16	DN100 / PN16	448	732	1400	265	1484
33SVX05G185	DN100 / PN16	DN100 / PN25	448	732	1400	265	1484
33SVX06G220	DN100 / PN16	DN100 / PN25	448	732	1400	265	1559
46SVX01G055	DN125 / PN16	DN125 / PN16	483	792	1526	300	1058
46SVX02G075	DN125 / PN16	DN125 / PN16	483	792	1526	300	1210
46SVX02G110	DN125 / PN16	DN125 / PN16	483	792	1526	300	1223
46SVX03G150	DN125 / PN16	DN125 / PN16	483	792	1526	300	1374
46SVX04G185	DN125 / PN16	DN125 / PN16	483	792	1526	300	1449
46SVX05G220	DN125 / PN16	DN125 / PN25	483	792	1526	300	1524
66SVX01G055	DN150 / PN16	DN125 / PN16	504	833	1605	300	1083
66SVX02G110	DN150 / PN16	DN125 / PN16	504	833	1605	300	1263
66SVX02G150	DN150 / PN16	DN125 / PN16	504	833	1605	300	1339
66SVX03G185L	DN150 / PN16	DN125 / PN16	504	833	1605	300	1429
66SVX03G185	DN150 / PN16	DN125 / PN16	504	833	1605	300	1429
66SVX04G220L	DN150 / PN16	DN125 / PN16	504	833	1605	300	1519
66SVX04G220	DN150 / PN16	DN125 / PN25	504	833	1605	300	1519
92SVX01G075	DN200 / PN16	DN150 / PN16	529	848	1689	300	1125
92SVX02G150	DN200 / PN16	DN150 / PN16	529	848	1689	300	1339
92SVX03G220L	DN200 / PN16	DN150 / PN16	529	848	1689	300	1429
92SVX03G220	DN200 / PN16	DN150 / PN16	529	848	1689	300	1429

Dimensions in mm. Tolerance ± 10 mm.

ghv20 46svx-emea c td

SET OF 2 PUMPS SV..G SERIES
THREE-PHASE POWER SUPPLY (GHV20.../4)

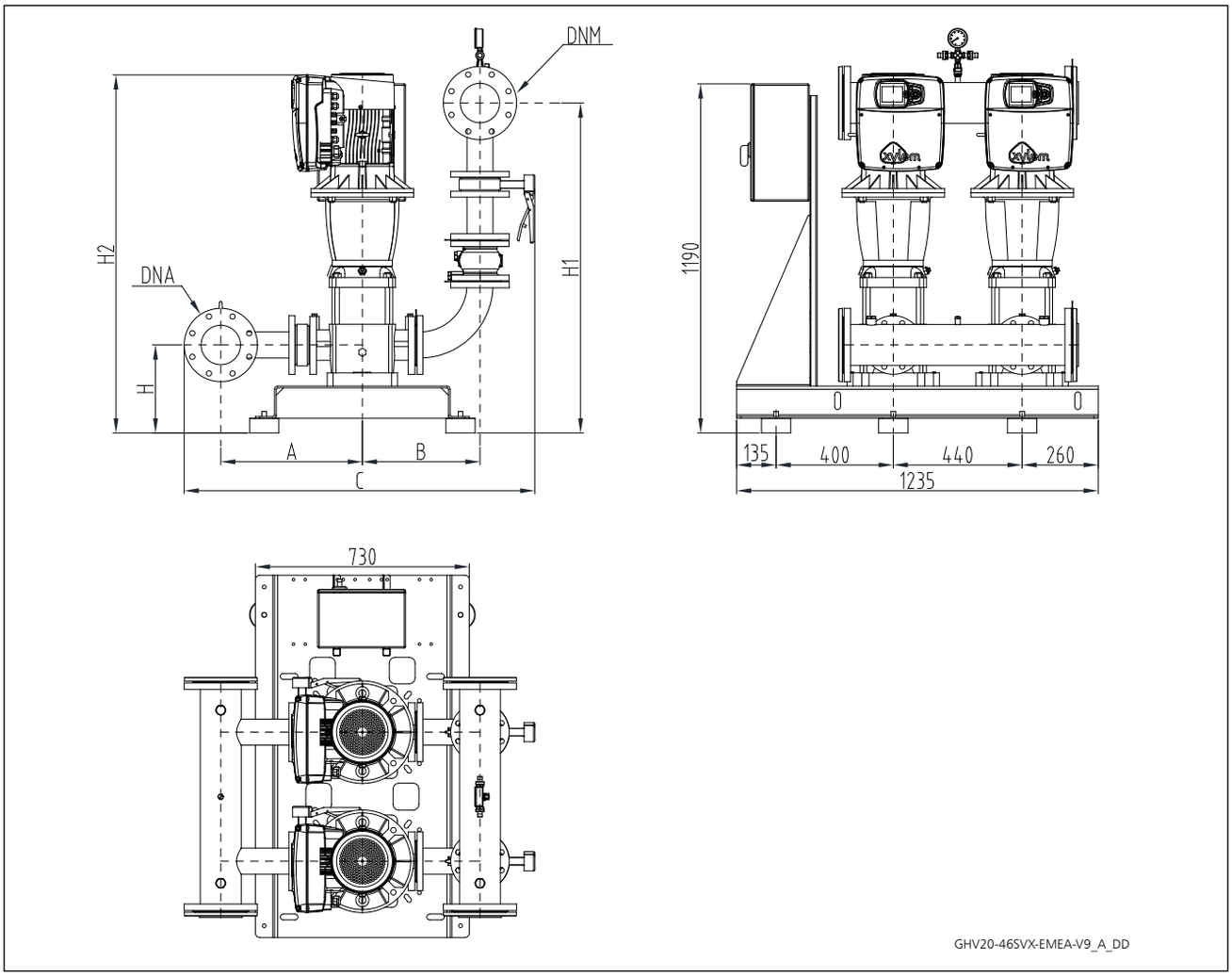


GHV 20	DNA	DNM	A	B	C	H	H2
125SVX01G075	DN200 / PN16	DN200 / PN16	591	965	1895	330	1254
125SVX02G150	DN200 / PN16	DN200 / PN16	591	965	1895	330	1528
125SVX02G220	DN200 / PN16	DN200 / PN16	591	965	1895	330	1528

Dimensions in mm. Tolerance ± 10 mm.

ghv20_125svx-emea_b_td

SET OF 2 PUMPS SV..G SERIES - V9 OPTION
THREE-PHASE POWER SUPPLY (GHV20.../4)

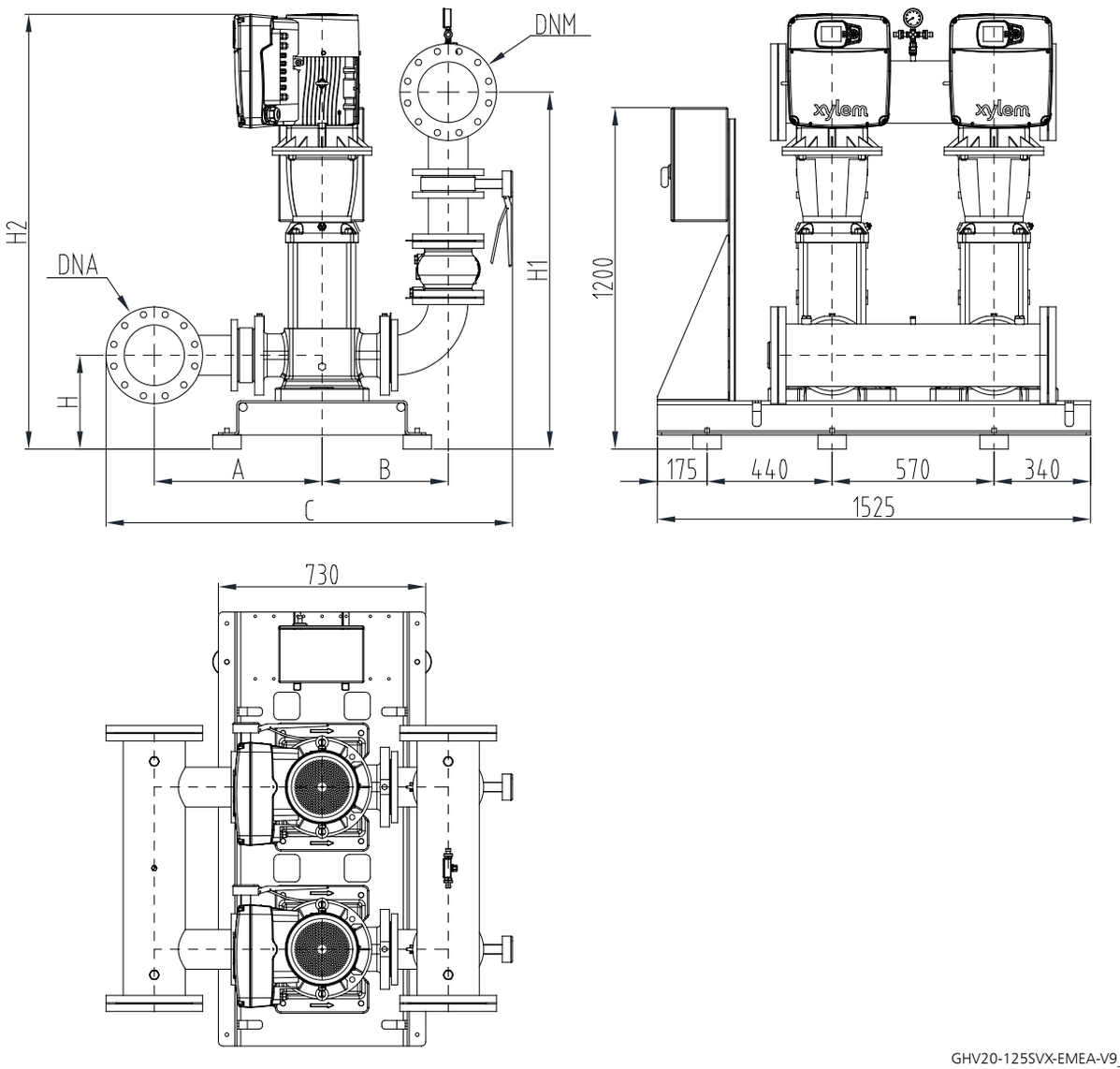


GHV 20	DNA	DNM	A	B	C	H	H1	H2
33SVX01G030	DN100 / PN16	DN100 / PN16	448	349	1088	265	1022	988
33SVX02G055	DN100 / PN16	DN100 / PN16	448	349	1088	265	1022	1093
33SVX02G075	DN100 / PN16	DN100 / PN16	448	349	1088	265	1022	1135
33SVX03G110L	DN100 / PN16	DN100 / PN16	448	349	1088	265	1022	1258
33SVX03G110	DN100 / PN16	DN100 / PN16	448	349	1088	265	1022	1258
33SVX04G150	DN100 / PN16	DN100 / PN16	448	349	1088	265	1022	1409
33SVX05G185L	DN100 / PN16	DN100 / PN16	448	349	1088	265	1022	1484
33SVX05G185	DN100 / PN16	DN100 / PN25	448	349	1088	265	1022	1484
33SVX06G220	DN100 / PN16	DN100 / PN25	448	349	1088	265	1022	1559
46SVX01G055	DN125 / PN16	DN125 / PN16	483	402	1197	300	1125	1058
46SVX02G075	DN125 / PN16	DN125 / PN16	483	402	1197	300	1125	1210
46SVX02G110	DN125 / PN16	DN125 / PN16	483	402	1197	300	1125	1223
46SVX03G150	DN125 / PN16	DN125 / PN16	483	402	1197	300	1125	1374
46SVX04G185	DN125 / PN16	DN125 / PN16	483	402	1197	300	1125	1449
46SVX05G220	DN125 / PN16	DN125 / PN25	483	402	1197	300	1125	1524
66SVX01G055	DN150 / PN16	DN125 / PN16	504	349	1206	300	1113	1083
66SVX02G110	DN150 / PN16	DN125 / PN16	504	349	1206	300	1113	1263
66SVX02G150	DN150 / PN16	DN125 / PN16	504	349	1206	300	1113	1339
66SVX03G185L	DN150 / PN16	DN125 / PN16	504	349	1206	300	1113	1429
66SVX03G185	DN150 / PN16	DN125 / PN16	504	349	1206	300	1113	1429
66SVX04G220L	DN150 / PN16	DN125 / PN16	504	349	1206	300	1113	1519
66SVX04G220	DN150 / PN16	DN125 / PN25	504	349	1206	300	1113	1519
92SVX01G075	DN200 / PN16	DN150 / PN16	529	349	1259	300	1127	1125
92SVX02G150	DN200 / PN16	DN150 / PN16	529	349	1259	300	1127	1339
92SVX03G220L	DN200 / PN16	DN150 / PN16	529	349	1259	300	1127	1429
92SVX03G220	DN200 / PN16	DN150 / PN16	529	349	1259	300	1127	1429

Dimensions in mm. Tolerance ± 10 mm.

ghv20_46svx-emea-v9_c_td

SET OF 2 PUMPS SV..G SERIES - V9 OPTION
THREE-PHASE POWER SUPPLY (GHV20.../4)



GHV20-125SVX-EMEA-V9_A_DD

GHV 20	DNA	DNM	A	B	C	H	H1	H2
125SVX01G075	DN200 / PN16	DN200 / PN16	591	444	1431	330	1255	1254
125SVX02G150	DN200 / PN16	DN200 / PN16	591	444	1431	330	1255	1528
125SVX02G220	DN200 / PN16	DN200 / PN16	591	444	1431	330	1255	1528

Dimensions in mm. Tolerance ± 10 mm.

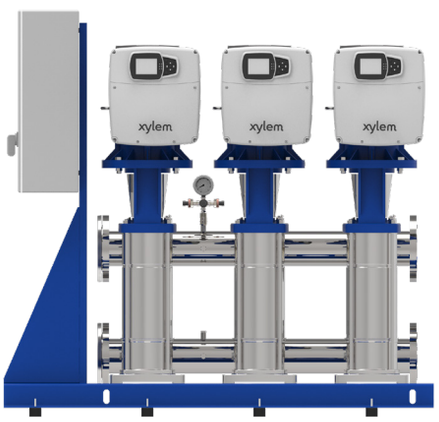
ghv20_125svx-emea-v9_b_td

Booster sets

MARKET SECTORS
RESIDENTIAL-CIVIL, INDUSTRIAL

APPLICATIONS
- Water network supply in housing complexes, offices, hotels, shopping centers, industrial plants.
- Supply of water networks for agricultural applications (e.g. irrigation)

GHV30 SERIES

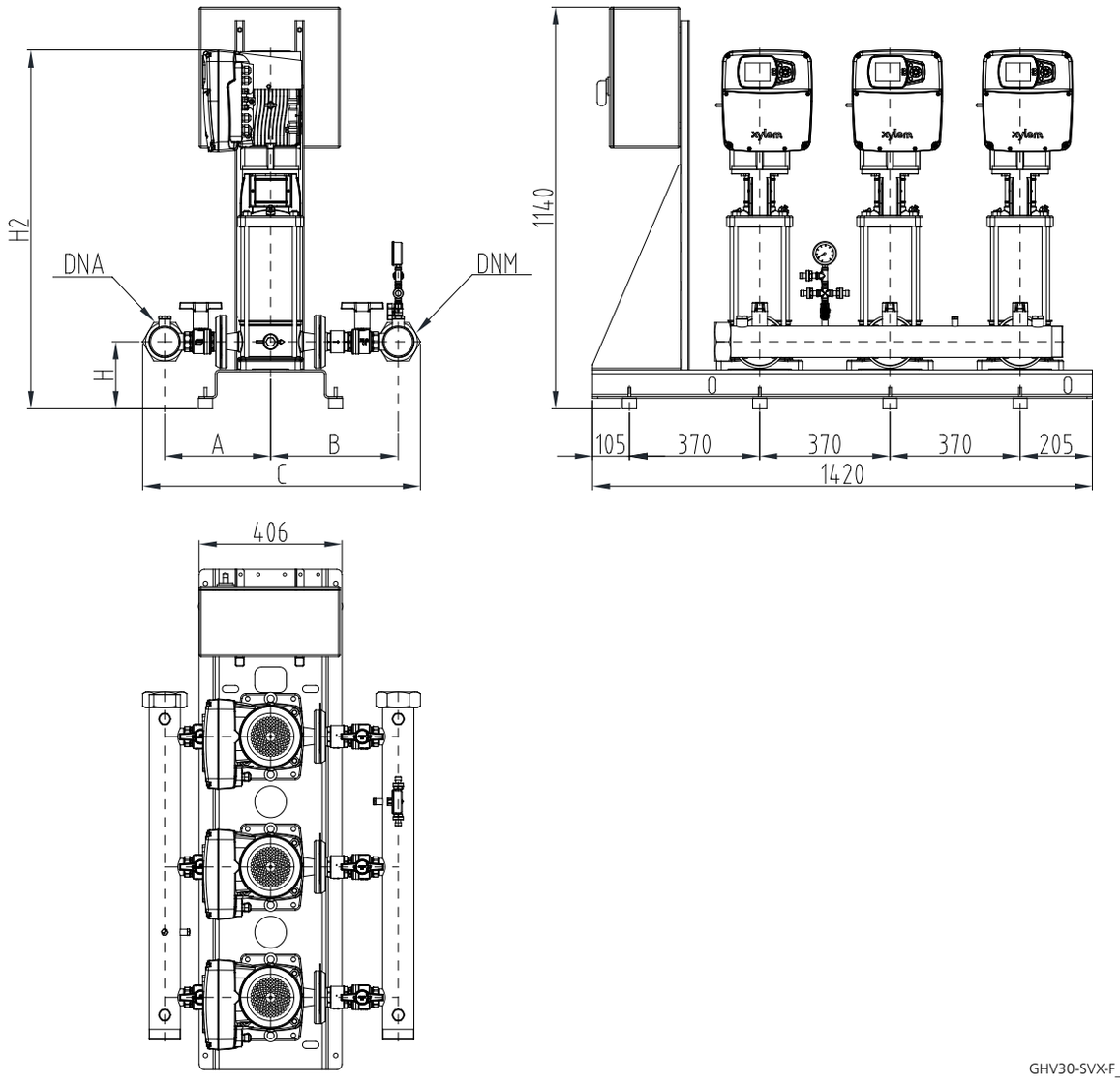


SPECIFICATIONS

- **Flow rate**
  up to 480 m^3/h.
- **Head**
  up to 250 m.
- **Frequency** 50/60 Hz
- **e-SVX** vertical axis electric pump
- **hydrovar X+** frequency converter coupled with synchronous motor
- **Protection class IP55** for:
  - electrical control panel
  - e-SVX electric pump
- Maximum operating **pressure**:
  25 bar.
- Maximum liquid **temperature**:
  max +60°C.
- Maximum electric pump **power**:
  3 x 22 kW.
- **Progressive** motor start.

GHV series booster sets with e-SV are certified for use with drinking water

SET OF 3 PUMPS SV..F SERIES
THREE-PHASE POWER SUPPLY (GHV30.../4)

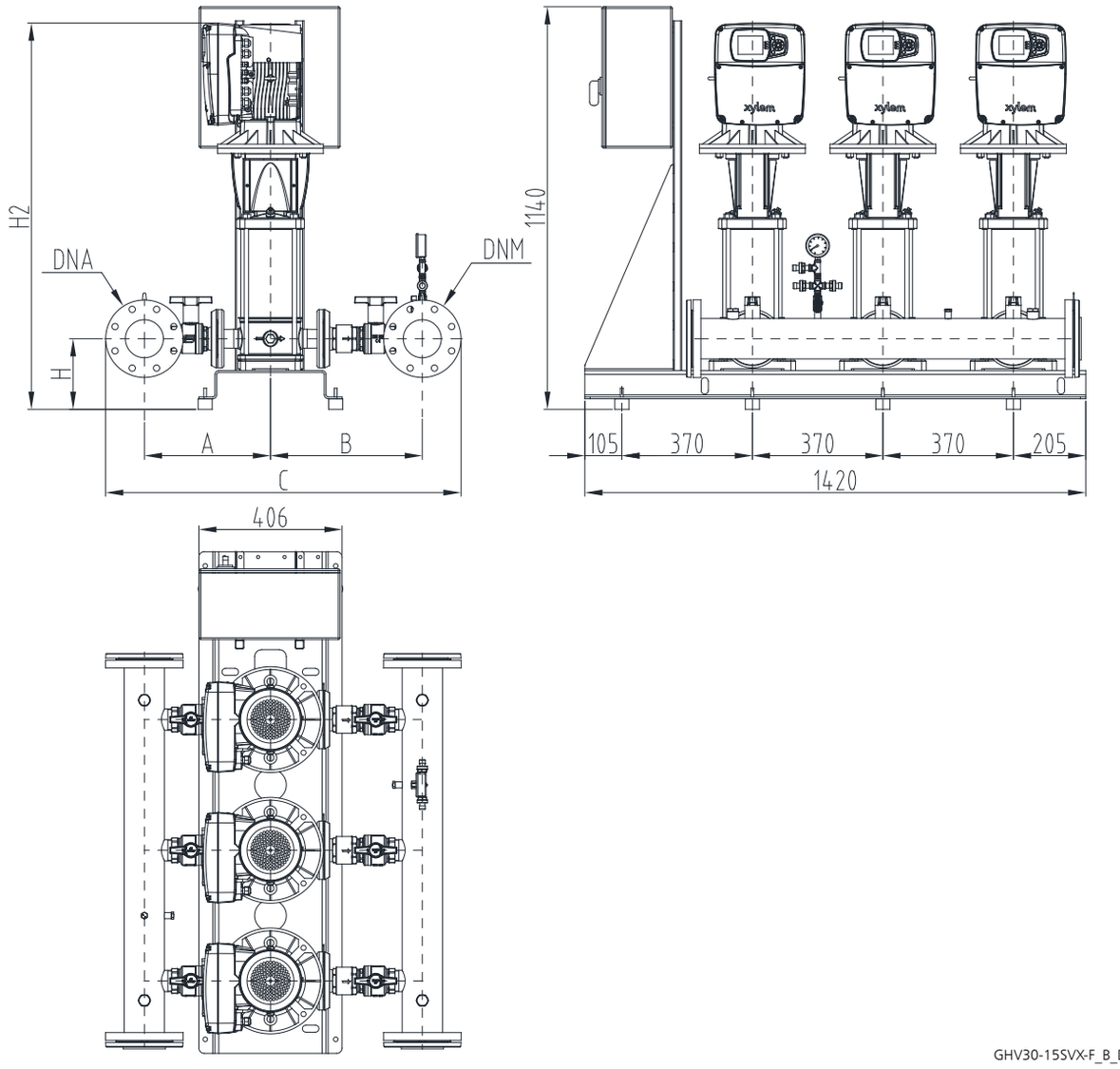


GHV 30	DNA	DNM	A	B	C	H	H2
3SVX21F030	R 2"	R 2"	257	312	649	185	1117
5SVX15F030L	R 2"	R 2"	262	327	671	185	1072
5SVX15F030	R 2"	R 2"	262	327	671	185	1072
5SVX19F040	R 2"	R 2"	262	327	671	185	1172
5SVX23F055L	R 2"	R 2"	262	327	671	185	1307
10SVX06F030L	R 3"	R 3"	301	363	789	190	954
10SVX06F030	R 3"	R 3"	301	363	789	190	954
10SVX08F040	R 3"	R 3"	301	363	789	190	1018
10SVX11F055L	R 3"	R 3"	301	363	789	190	1196
10SVX11F055	R 3"	R 3"	301	363	789	190	1196
10SVX15F075	R 3"	R 3"	301	363	789	190	1360

Dimensions in mm. Tolerance ± 10 mm.

ghv30_svx-f-emea_b_td

SET OF 3 PUMPS SV..F SERIES
THREE-PHASE POWER SUPPLY (GHV30.../4)

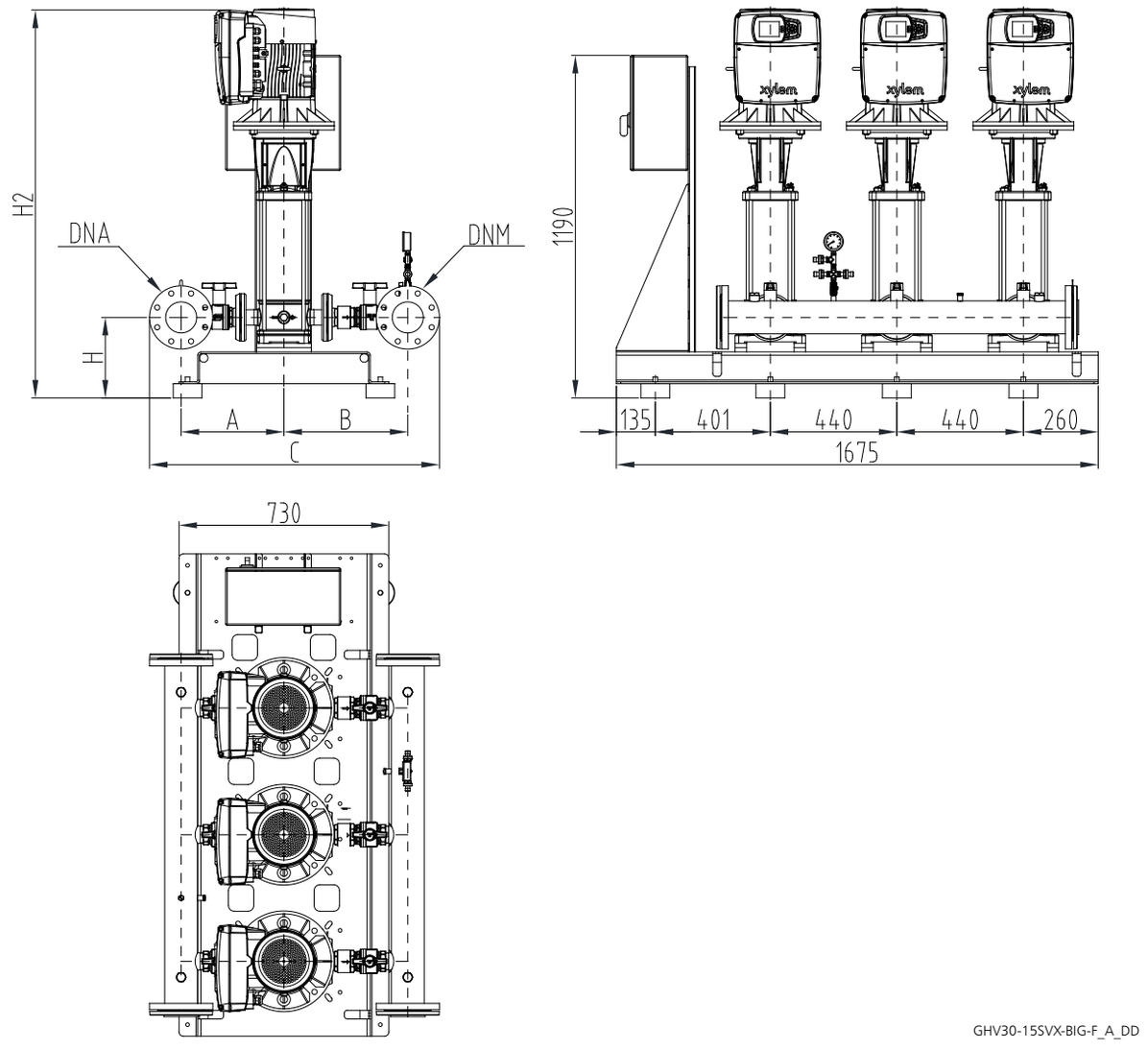


GHV 30	DNA	DNM	A	B	C	H	H2
15SVX02F030	DN100 / PN16	DN100 / PN16	357	430	1008	200	868
15SVX03F040	DN100 / PN16	DN100 / PN16	357	430	1008	200	916
15SVX05F055L	DN100 / PN16	DN100 / PN16	357	430	1008	200	1012
15SVX05F055	DN100 / PN16	DN100 / PN16	357	430	1008	200	1012
15SVX07F075	DN100 / PN16	DN100 / PN16	357	430	1008	200	1227
22SVX02F030	DN100 / PN16	DN100 / PN16	357	430	1008	200	868
22SVX03F040	DN100 / PN16	DN100 / PN16	357	430	1008	200	916
22SVX04F055	DN100 / PN16	DN100 / PN16	357	430	1008	200	1041
22SVX05F075L	DN100 / PN16	DN100 / PN16	357	430	1008	200	1131
22SVX05F075	DN100 / PN16	DN100 / PN16	357	430	1008	200	1131

Dimensions in mm. Tolerance ± 10 mm.

ghv30_15svx-f-emea_b_td

SET OF 3 PUMPS SV..F SERIES
THREE-PHASE POWER SUPPLY (GHV30.../4)



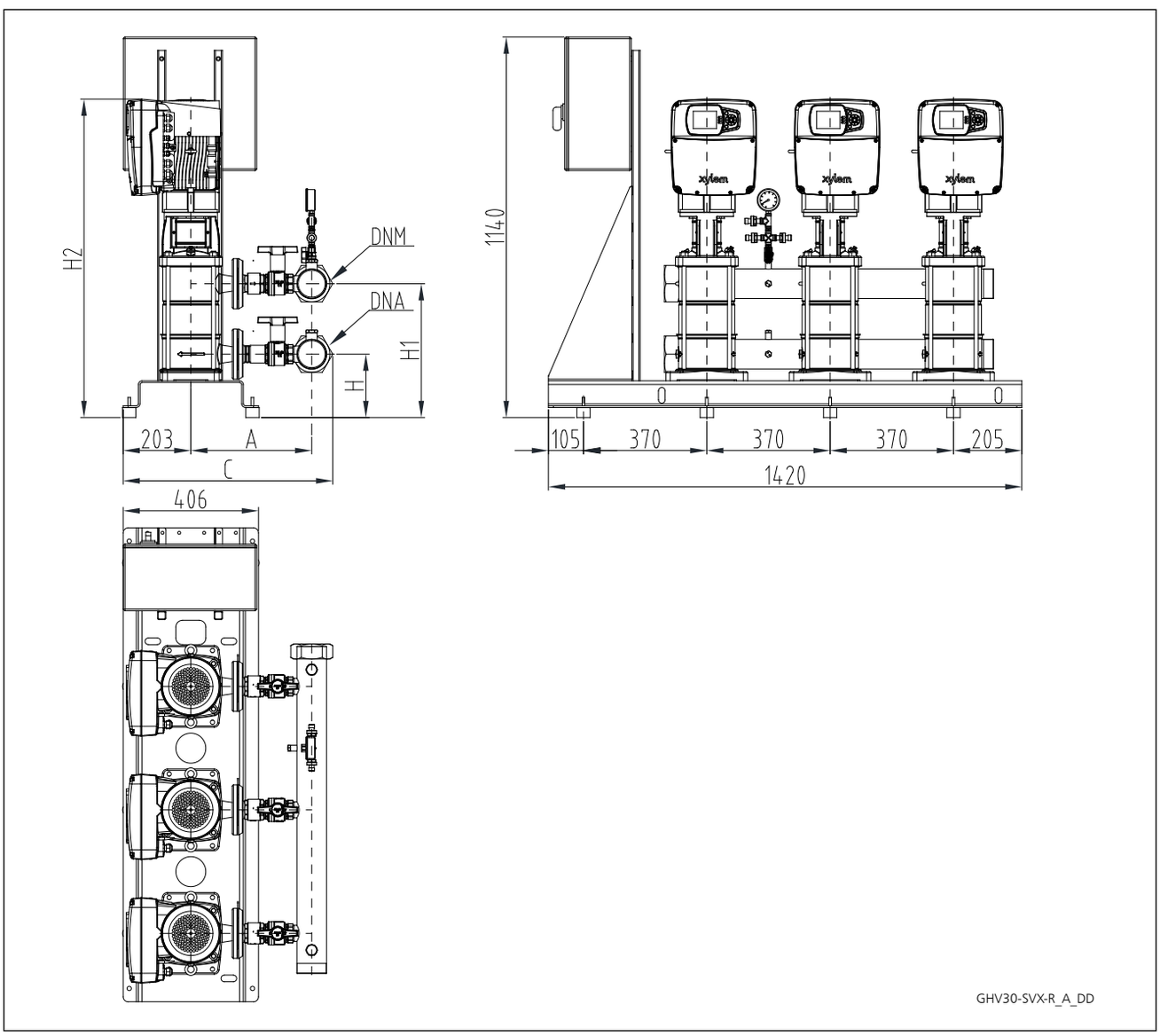
GHV30-15SVX-BIG-F_A_DD

GHV 30	DNA	DNM	A	B	C	H	H2
15SVX09F110	DN100 / PN16	DN100 / PN25	357	430	1008	280	1447
15SVX12F150L	DN100 / PN16	DN100 / PN25	357	430	1008	280	1666
22SVX07F110	DN100 / PN16	DN100 / PN16	357	430	1008	200	1320
22SVX10F150	DN100 / PN16	DN100 / PN25	357	430	1008	200	1570
22SVX12F185L	DN100 / PN16	DN100 / PN25	357	430	1008	200	1666

Dimensions in mm. Tolerance ± 10 mm.

ghv30_15svx-big-f-emea_b_td

SET OF 3 PUMPS SV..R SERIES
THREE-PHASE POWER SUPPLY (GHV30.../4)

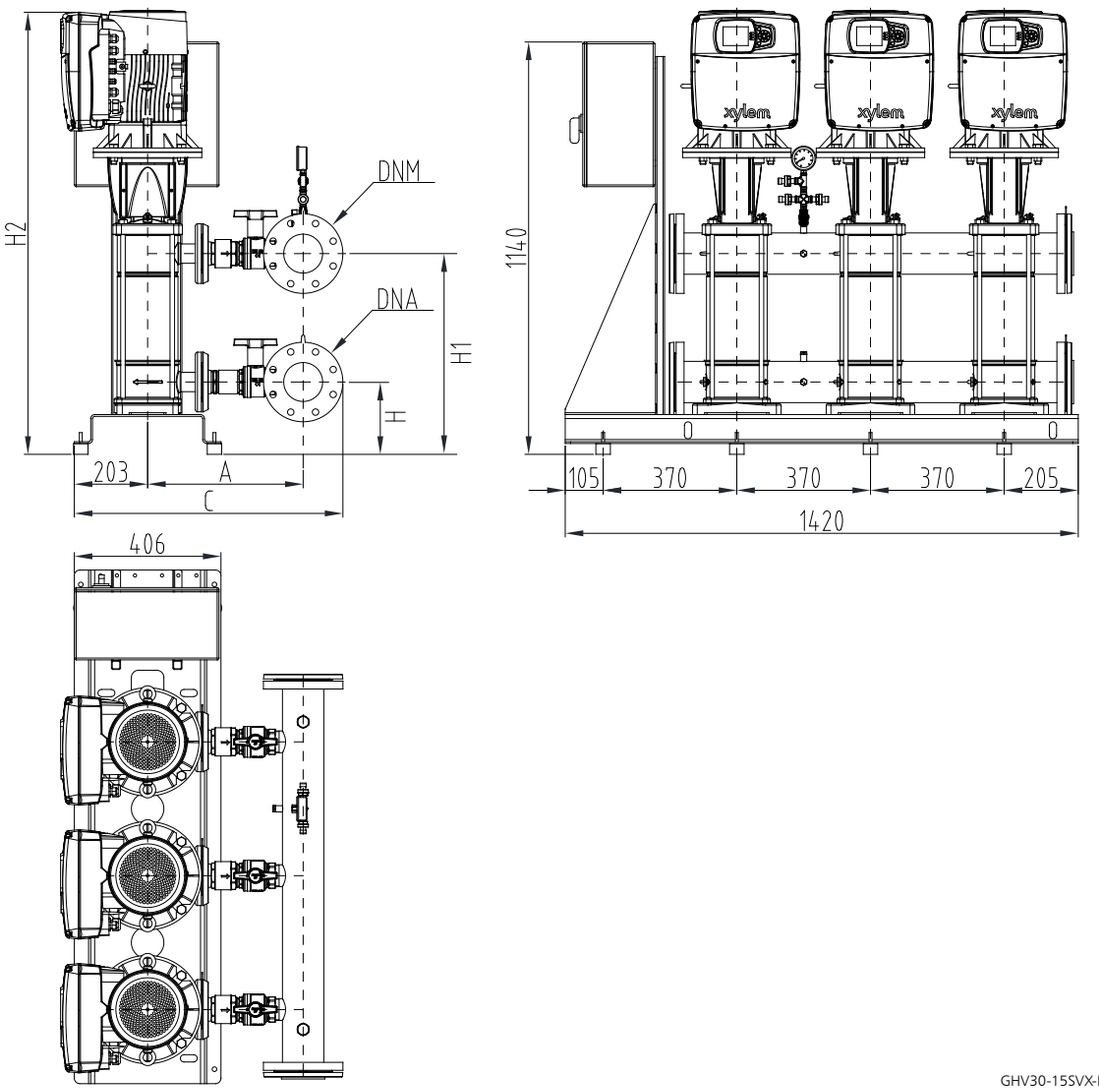


GHV 30	DNA	DNM	A	C	H	H1	H2
3SVX21R030	R 2"	R 2"	312	557	185	597	1117
5SVX15R030L	R 2"	R 2"	327	573	185	552	1072
5SVX15R030	R 2"	R 2"	327	573	185	552	1072
5SVX19R040	R 2"	R 2"	327	573	185	652	1172
5SVX23R055L	R 2"	R 2"	327	573	185	752	1307
10SVX06R030L	R 3"	R 3"	363	629	190	401	954
10SVX06R030	R 3"	R 3"	363	629	190	401	954
10SVX08R040	R 3"	R 3"	363	629	190	465	1018
10SVX11R055L	R 3"	R 3"	363	629	190	591	1196
10SVX11R055	R 3"	R 3"	363	629	190	591	1196
10SVX15R075	R 3"	R 3"	363	629	190	719	1360

Dimensions in mm. Tolerance ± 10 mm.

ghv30_svx-r-emea_b_td

SET OF 3 PUMPS SV..R SERIES
THREE-PHASE POWER SUPPLY (GHV30.../4)

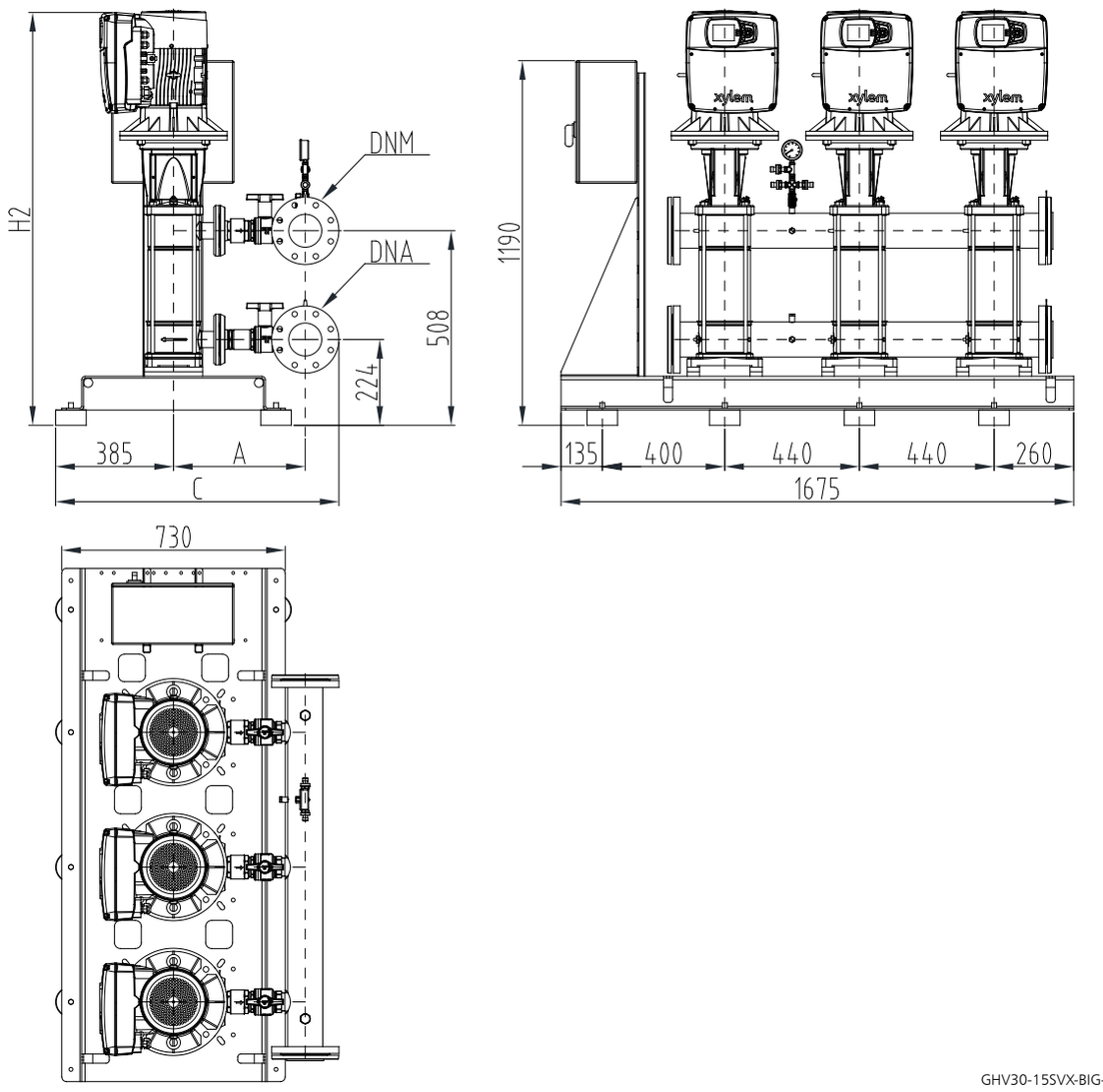


GHV 30	DNA	DNM	A	C	H	H1	H2
15SVX02Z3R030	DN100 / PN16	DN100 / PN16	430	743	200	459	1012
15SVX03Z2R040	DN100 / PN16	DN100 / PN16	430	743	200	459	1012
15SVX05R055L	DN100 / PN16	DN100 / PN16	430	743	200	459	1012
15SVX05R055	DN100 / PN16	DN100 / PN16	430	743	200	459	1012
15SVX07R075	DN100 / PN16	DN100 / PN16	430	743	200	555	1227
22SVX02Z3R030	DN100 / PN16	DN100 / PN16	430	743	200	459	1131
22SVX03Z2R040	DN100 / PN16	DN100 / PN16	430	743	200	459	1131
22SVX04Z1R055	DN100 / PN16	DN100 / PN16	430	743	200	459	1131
22SVX05R075L	DN100 / PN16	DN100 / PN16	430	743	200	459	1131
22SVX05R075	DN100 / PN16	DN100 / PN16	430	743	200	459	1131

Dimensions in mm. Tolerance ± 10 mm.

ghv30_15svx-r-emea_b_td

SET OF 3 PUMPS SV..R SERIES
THREE-PHASE POWER SUPPLY (GHV30.../4)



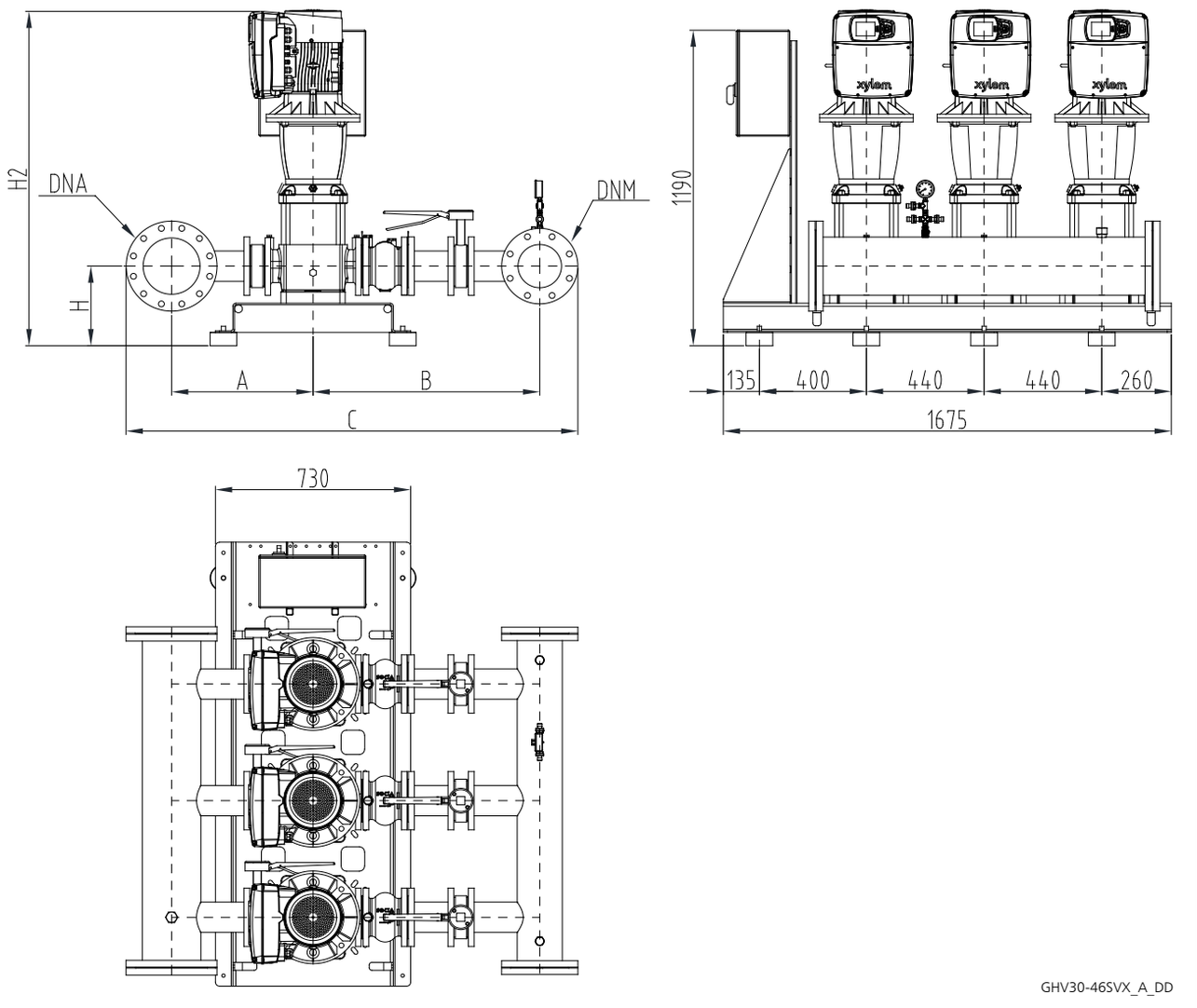
GHV30-15SVX-BIG-R_A_DD

GHV 30	DNA	DNM	A	C	H	H1	H2
15SVX09R110	DN100 / PN16	DN100 / PN25	430	905	280	731	1447
15SVX12R150L	DN100 / PN16	DN100 / PN25	430	905	280	875	1666
22SVX07R110	DN100 / PN16	DN100 / PN16	430	905	200	635	1320
22SVX10R150	DN100 / PN16	DN100 / PN25	430	905	200	779	1570
22SVX12R185L	DN100 / PN16	DN100 / PN25	430	905	200	875	1666

Dimensions in mm. Tolerance ± 10 mm.

ghv30_15svx-big-r-emea_b_td

SET OF 3 PUMPS SV..G SERIES
THREE-PHASE POWER SUPPLY (GHV30.../4)

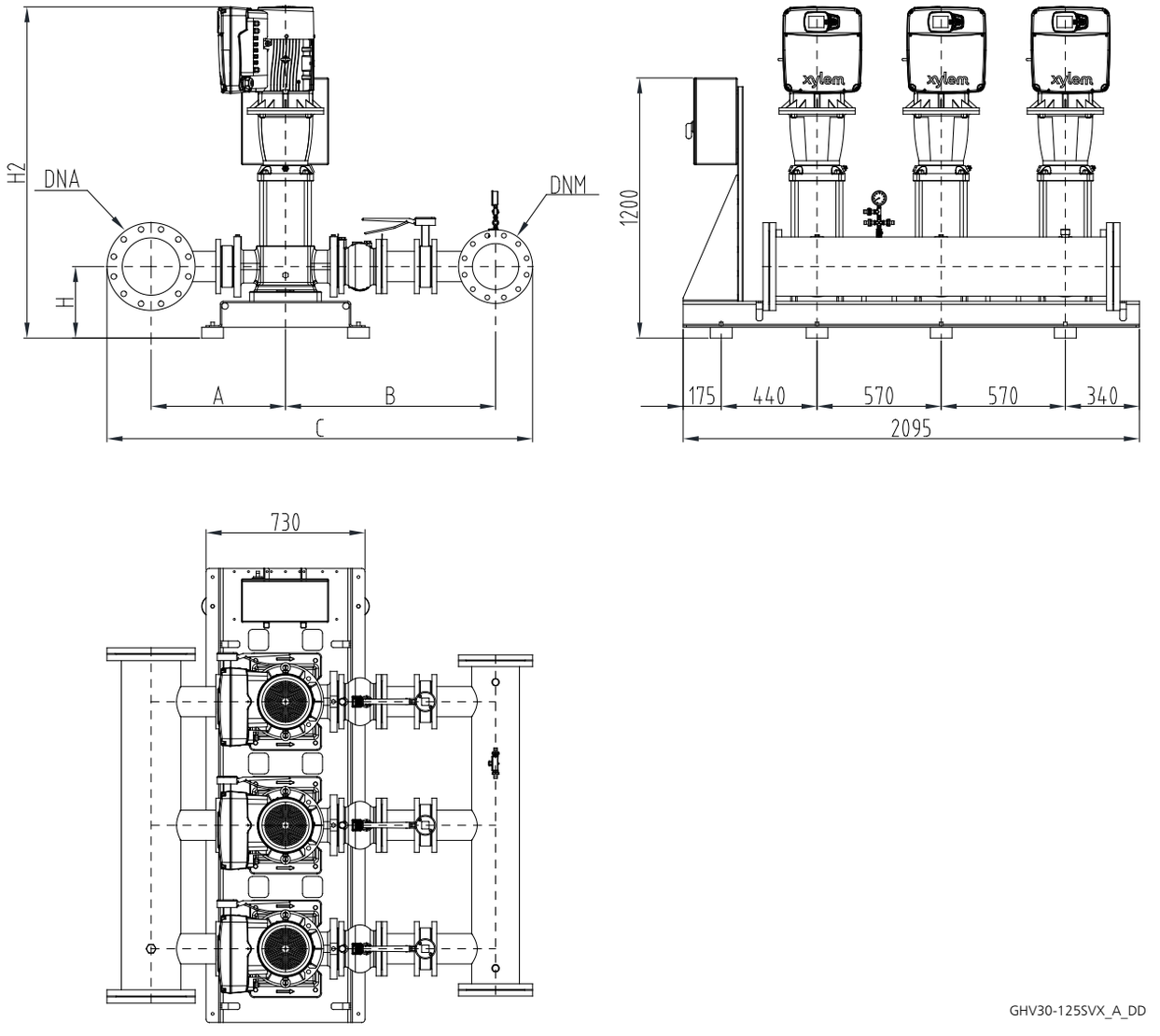


GHV 30	DNA	DNM	A	B	C	H	H2
33SVX01G030	DN125 / PN16	DN125 / PN16	461	745	1456	265	988
33SVX02G055	DN125 / PN16	DN125 / PN16	461	745	1456	265	1093
33SVX02G075	DN125 / PN16	DN125 / PN16	461	745	1456	265	1135
33SVX03G110L	DN125 / PN16	DN125 / PN16	461	745	1456	265	1258
33SVX03G110	DN125 / PN16	DN125 / PN16	461	745	1456	265	1258
33SVX04G150	DN125 / PN16	DN125 / PN16	461	745	1456	265	1409
33SVX05G185L	DN125 / PN16	DN125 / PN16	461	745	1456	265	1484
33SVX05G185	DN125 / PN16	DN125 / PN25	461	745	1456	265	1484
33SVX06G220	DN125 / PN16	DN125 / PN25	461	745	1456	265	1559
46SVX01G055	DN150 / PN16	DN150 / PN16	498	807	1589	300	1058
46SVX02G075	DN150 / PN16	DN150 / PN16	498	807	1589	300	1210
46SVX02G110	DN150 / PN16	DN150 / PN16	498	807	1589	300	1223
46SVX03G150	DN150 / PN16	DN150 / PN16	498	807	1589	300	1374
46SVX04G185	DN150 / PN16	DN150 / PN16	498	807	1589	300	1449
46SVX05G220	DN150 / PN16	DN150 / PN25	498	807	1589	300	1524
66SVX01G055	DN200 / PN16	DN150 / PN16	529	848	1689	300	1083
66SVX02G110	DN200 / PN16	DN150 / PN16	529	848	1689	300	1263
66SVX02G150	DN200 / PN16	DN150 / PN16	529	848	1689	300	1339
66SVX03G185L	DN200 / PN16	DN150 / PN16	529	848	1689	300	1429
66SVX03G185	DN200 / PN16	DN150 / PN16	529	848	1689	300	1429
66SVX04G220L	DN200 / PN16	DN150 / PN16	529	848	1689	300	1519
66SVX04G220	DN200 / PN16	DN150 / PN25	529	848	1689	300	1519
92SVX01G075	DN200 / PN16	DN200 / PN16	529	873	1742	300	1125
92SVX02G150	DN200 / PN16	DN200 / PN16	529	873	1742	300	1339
92SVX03G220L	DN200 / PN16	DN200 / PN16	529	873	1742	300	1429
92SVX03G220	DN200 / PN16	DN200 / PN16	529	873	1742	300	1429

Dimensions in mm. Tolerance ± 10 mm.

ghv30_46svx-emea_c_td

SET OF 3 PUMPS SV..G SERIES
THREE-PHASE POWER SUPPLY (GHV30.../4)

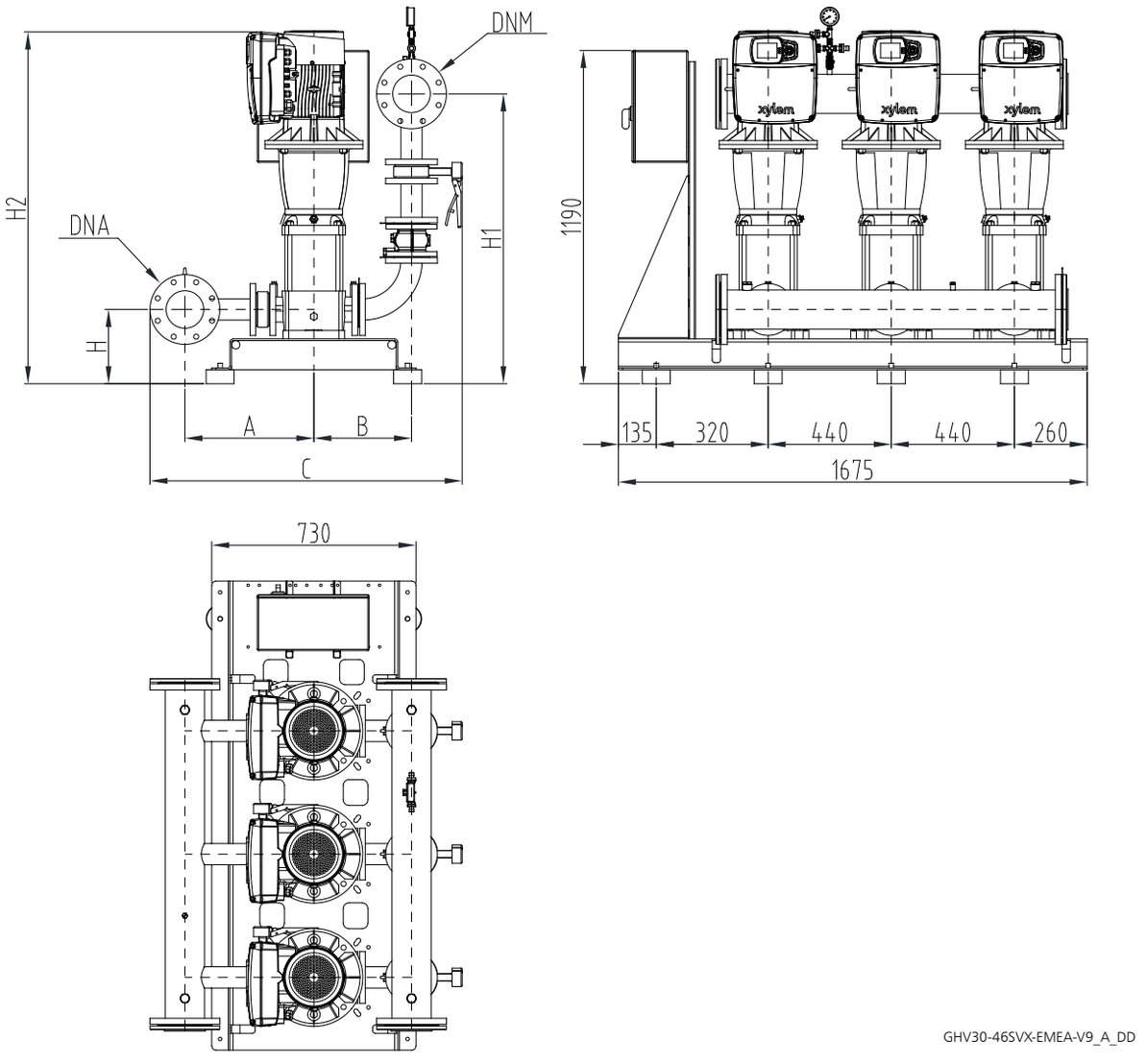


GHV 30	DNA	DNM	A	B	C	H	H2
125SVX01G075	DN250 / PN16	DN200 / PN16	618	965	1955	330	1254
125SVX02G150	DN250 / PN16	DN200 / PN16	618	965	1955	330	1528
125SVX02G220	DN250 / PN16	DN200 / PN16	618	965	1955	330	1528

Dimensions in mm. Tolerance ± 10 mm.

ghv30_125svx-emea_b_td

SET OF 3 PUMPS SV..G SERIES - V9 OPTION
THREE-PHASE POWER SUPPLY (GHV30.../4)



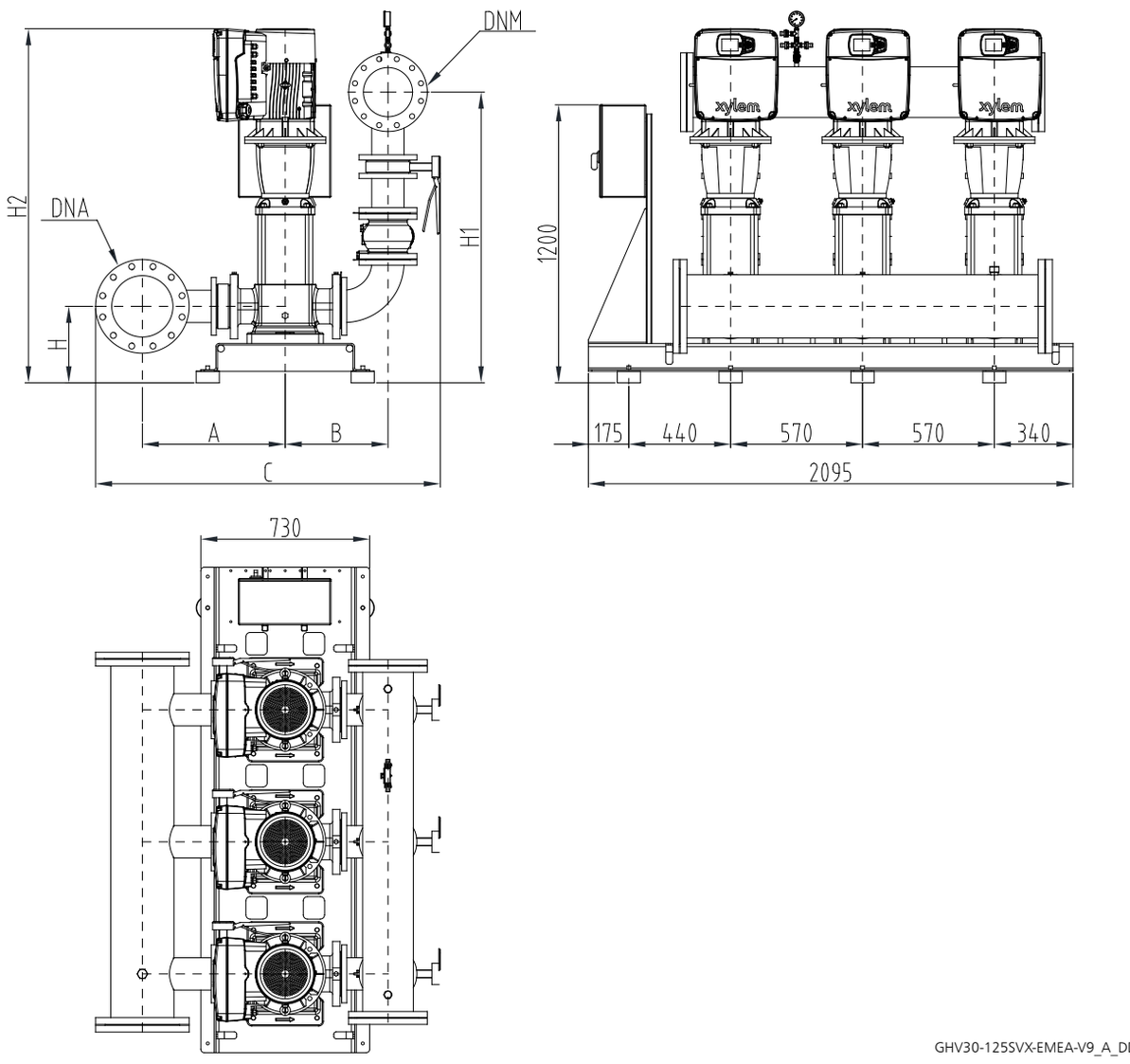
GHV30-46SVX-EMEA-V9_A_DD

GHV 30	DNA	DNM	A	B	C	H	H1	H2
33SVX01G030	DN125 / PN16	DN125 / PN16	461	349	1116	265	1035	988
33SVX02G055	DN125 / PN16	DN125 / PN16	461	349	1116	265	1035	1093
33SVX02G075	DN125 / PN16	DN125 / PN16	461	349	1116	265	1035	1135
33SVX03G110L	DN125 / PN16	DN125 / PN16	461	349	1116	265	1035	1258
33SVX03G110	DN125 / PN16	DN125 / PN16	461	349	1116	265	1035	1258
33SVX04G150	DN125 / PN16	DN125 / PN16	461	349	1116	265	1035	1409
33SVX05G185L	DN125 / PN16	DN125 / PN16	461	349	1116	265	1035	1484
33SVX05G185	DN125 / PN16	DN125 / PN25	461	349	1116	265	1035	1484
33SVX06G220	DN125 / PN16	DN125 / PN25	461	349	1116	265	1035	1559
46SVX01G055	DN150 / PN16	DN150 / PN16	498	402	1229	300	1139	1058
46SVX02G075	DN150 / PN16	DN150 / PN16	498	402	1229	300	1139	1210
46SVX02G110	DN150 / PN16	DN150 / PN16	498	402	1229	300	1139	1223
46SVX03G150	DN150 / PN16	DN150 / PN16	498	402	1229	300	1139	1374
46SVX04G185	DN150 / PN16	DN150 / PN16	498	402	1229	300	1139	1449
46SVX05G220	DN150 / PN16	DN150 / PN25	498	402	1229	300	1139	1524
66SVX01G055	DN200 / PN16	DN150 / PN16	529	349	1259	300	1127	1083
66SVX02G110	DN200 / PN16	DN150 / PN16	529	349	1259	300	1127	1263
66SVX02G150	DN200 / PN16	DN150 / PN16	529	349	1259	300	1127	1339
66SVX03G185L	DN200 / PN16	DN150 / PN16	529	349	1259	300	1127	1429
66SVX03G185	DN200 / PN16	DN150 / PN16	529	349	1259	300	1127	1429
66SVX04G220L	DN200 / PN16	DN150 / PN16	529	349	1259	300	1127	1519
66SVX04G220	DN200 / PN16	DN150 / PN25	529	349	1259	300	1127	1519
92SVX01G075	DN200 / PN16	DN200 / PN16	529	349	1259	300	1153	1125
92SVX02G150	DN200 / PN16	DN200 / PN16	529	349	1259	300	1153	1339
92SVX03G220L	DN200 / PN16	DN200 / PN16	529	349	1259	300	1153	1429
92SVX03G220	DN200 / PN16	DN200 / PN16	529	349	1259	300	1153	1429

Dimensions in mm. Tolerance ± 10 mm.

ghv30_46svx-v9-emea_c_td

SET OF 3 PUMPS SV..G SERIES - V9 OPTION
THREE-PHASE POWER SUPPLY (GHV30.../4)



GHV 30	DNA	DNM	A	B	C	H	H1	H2
125SVX01G075	DN250 / PN16	DN200 / PN16	618	444	1490	330	1255	1254
125SVX02G150	DN250 / PN16	DN200 / PN16	618	444	1490	330	1255	1528
125SVX02G220	DN250 / PN16	DN200 / PN16	618	444	1490	330	1255	1528

Dimensions in mm. Tolerance ± 10 mm.

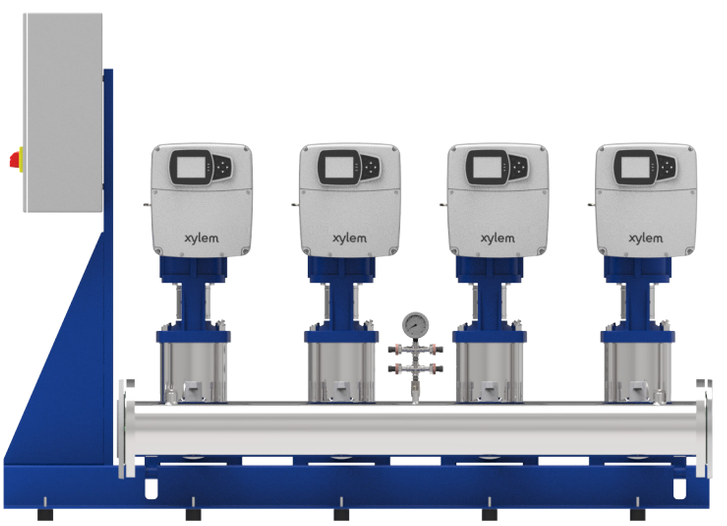
ghv30_125svx-v9-emea_b_td

Booster sets

MARKET SECTORS
RESIDENTIAL-CIVIL, INDUSTRIAL

APPLICATIONS
- Water network supply in housing complexes, offices, hotels, shopping centers, industrial plants.
- Supply of water networks for agricultural applications (e.g. irrigation)

GHV40 SERIES

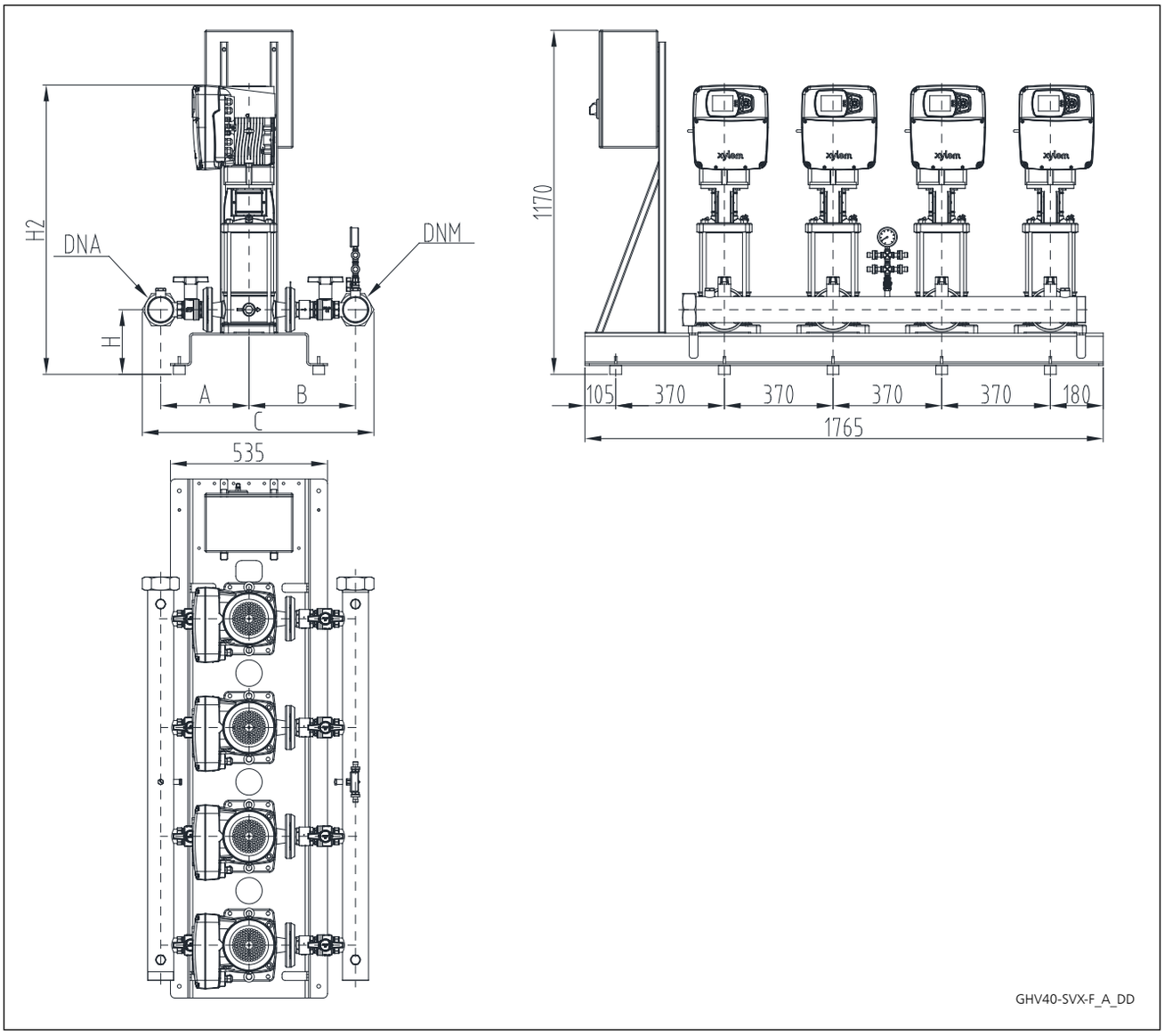


SPECIFICATIONS

- **Flow rate**
  up to 640 m^3/h.
- **Head**
  up to 250 m.
- **Frequency** 50/60 Hz
- **e-SVX** vertical axis electric pump
- **hydrovar X+** frequency converter coupled with synchronous motor
- **Protection class IP55** for:
  - electrical control panel
  - e-SVX electric pump
- Maximum operating **pressure**:
  25 bar.
- Maximum liquid **temperature**:
  max +60°C.
- Maximum electric pump **power**:
  4 x 22 kW.
- **Progressive** motor start.

GHV series booster sets with e-SV are certified for use with drinking water

SET OF 4 PUMPS SV..F SERIES
THREE-PHASE POWER SUPPLY (GHV40.../4)

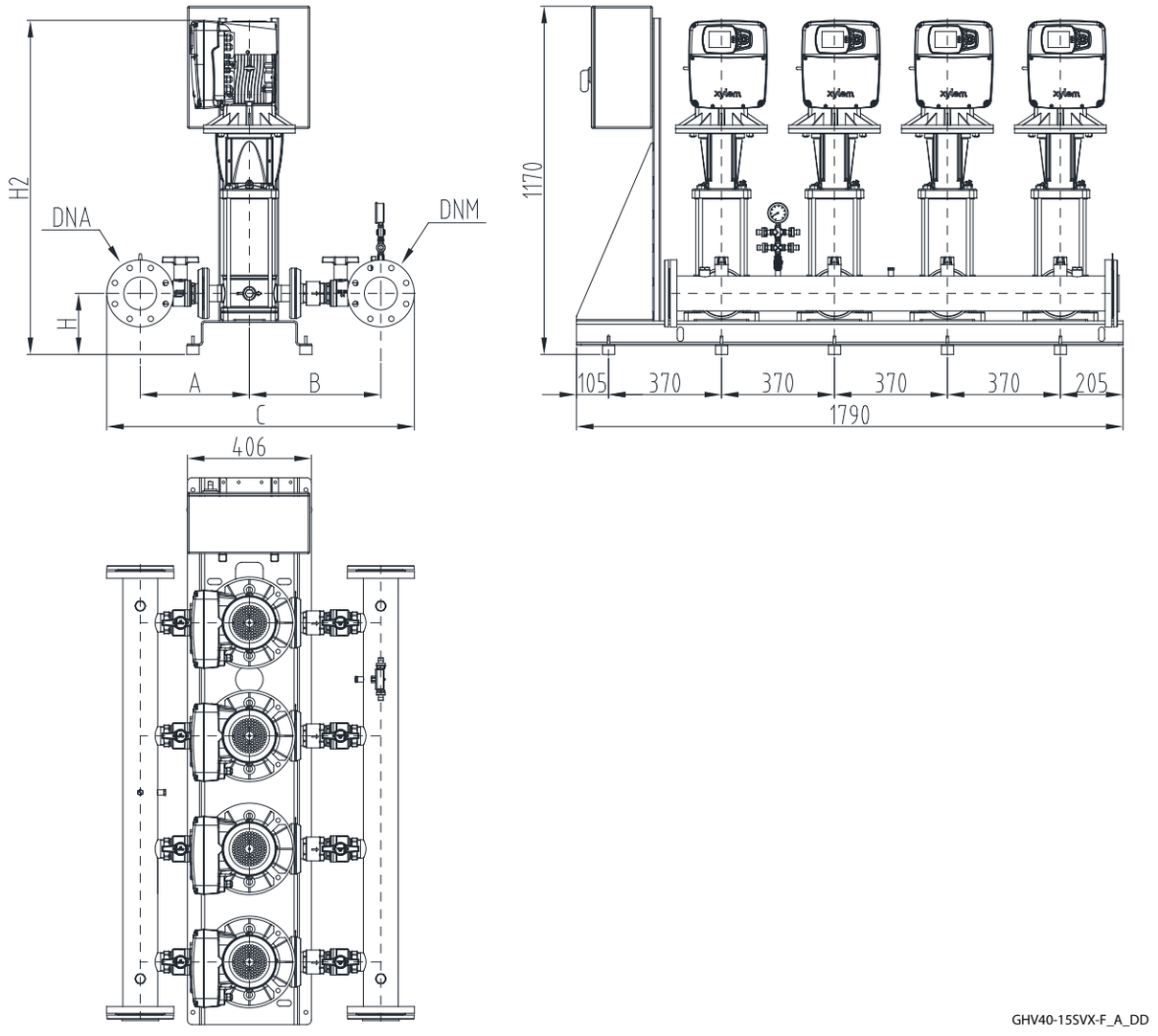


GHV 40	DNA	DNM	A	B	C	H	H2
5SVX15F030L	R2"1/2	R2"1/2	270	338	715	215	1102
5SVX15F030	R2"1/2	R2"1/2	270	338	715	215	1102
5SVX19F040	R2"1/2	R2"1/2	270	338	715	215	1202
5SVX23F055L	R2"1/2	R2"1/2	270	338	715	215	1337
10SVX06F030L	R 3"	R 3"	301	363	789	220	984
10SVX06F030	R 3"	R 3"	301	363	789	220	984
10SVX08F040	R 3"	R 3"	301	363	789	220	1048
10SVX11F055L	R 3"	R 3"	301	363	789	220	1225
10SVX11F055	R 3"	R 3"	301	363	789	220	1225
10SVX15F075	R 3"	R 3"	301	363	789	220	1390

Dimensions in mm. Tolerance ± 10 mm.

ghv40_svx-f-emea_b_td

SET OF 4 PUMPS SV..F SERIES
THREE-PHASE POWER SUPPLY (GHV40.../4)

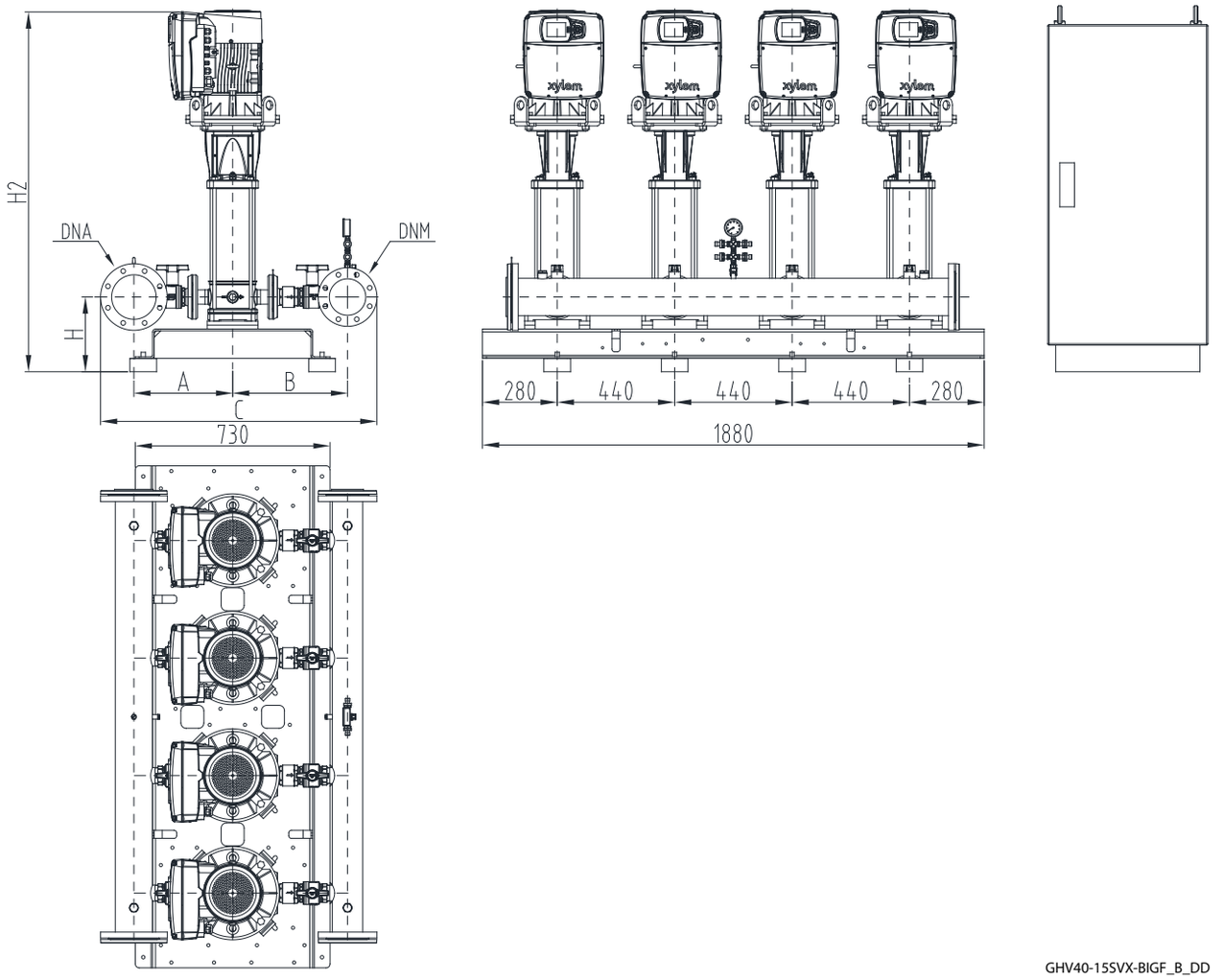


GHV 40	DNA	DNM	A	B	C	H	H2
15SVX02F030	DN125 / PN16	DN100 / PN16	370	430	1036	230	898
15SVX03F040	DN125 / PN16	DN100 / PN16	370	430	1036	230	946
15SVX05F055L	DN125 / PN16	DN100 / PN16	370	430	1036	230	1090
15SVX05F055	DN125 / PN16	DN100 / PN16	370	430	1036	230	1090
15SVX07F075	DN125 / PN16	DN100 / PN16	370	430	1036	230	1257
22SVX02F030	DN125 / PN16	DN100 / PN16	370	430	1036	230	898
22SVX03F040	DN125 / PN16	DN100 / PN16	370	430	1036	230	946
22SVX04F055	DN125 / PN16	DN100 / PN16	370	430	1036	230	1071
22SVX05F075L	DN125 / PN16	DN100 / PN16	370	430	1036	230	1161
22SVX05F075	DN125 / PN16	DN100 / PN16	370	430	1036	230	1161

Dimensions in mm. Tolerance ± 10 mm.

ghv40_15svx-f-emea_b_td

SET OF 4 PUMPS SV..F SERIES
THREE-PHASE POWER SUPPLY (GHV40.../4)

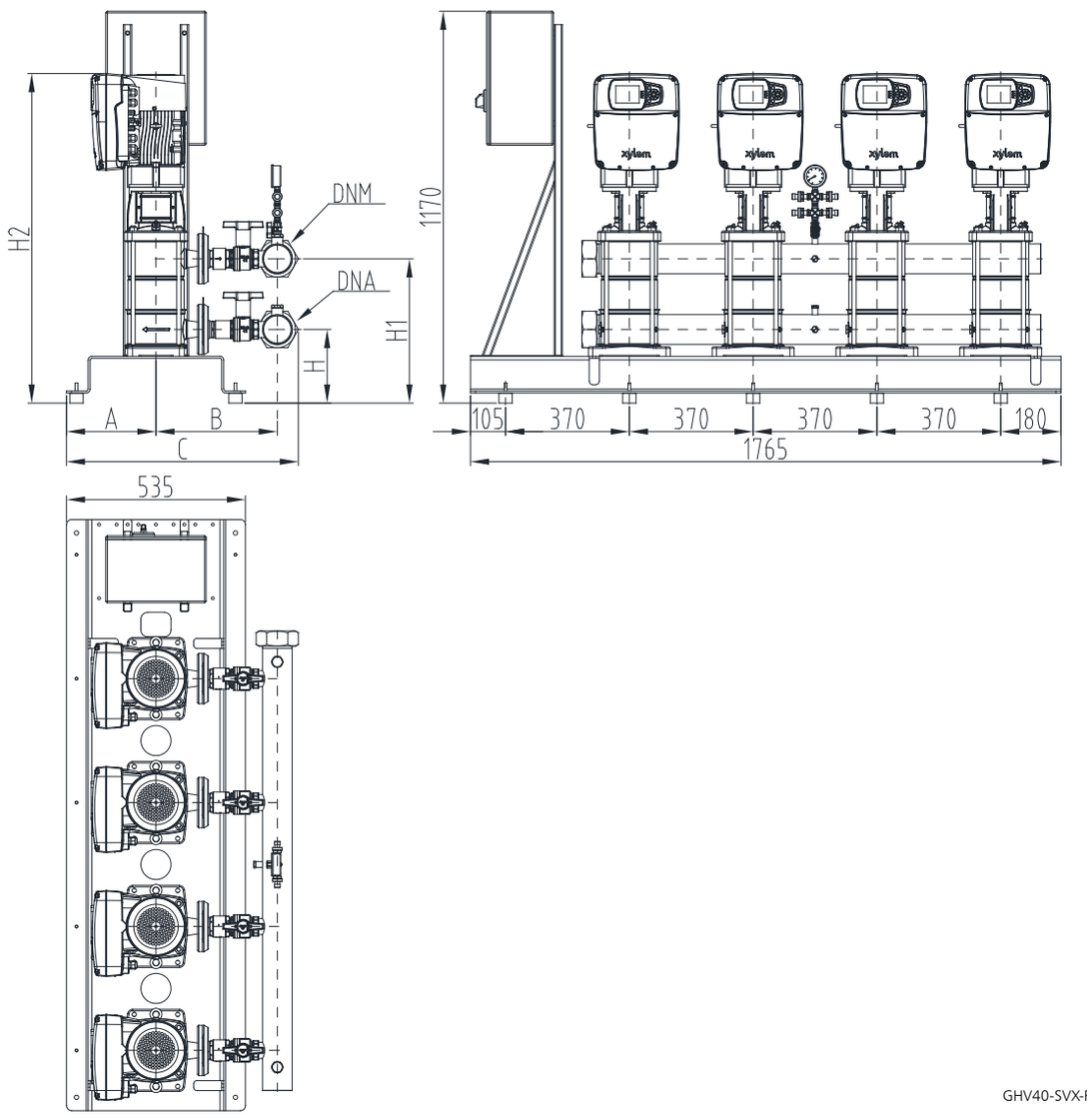


GHV 40	DNA	DNM	A	B	C	H	H2
15SVX09F110	DN125 / PN16	DN100 / PN25	370	430	1036	280	1447
15SVX12F150L	DN125 / PN16	DN100 / PN25	370	430	1036	280	1666
22SVX07F110	DN125 / PN16	DN100 / PN16	370	430	1036	230	1350
22SVX10F150	DN125 / PN16	DN100 / PN25	370	430	1036	230	1570
22SVX12F185L	DN125 / PN16	DN100 / PN25	370	430	1036	230	1666

Dimensions in mm. Tolerance ± 10 mm.

ghv40_15svx-big-f-emea_b_td

SET OF 4 PUMPS SV..R SERIES
THREE-PHASE POWER SUPPLY (GHV40.../4)



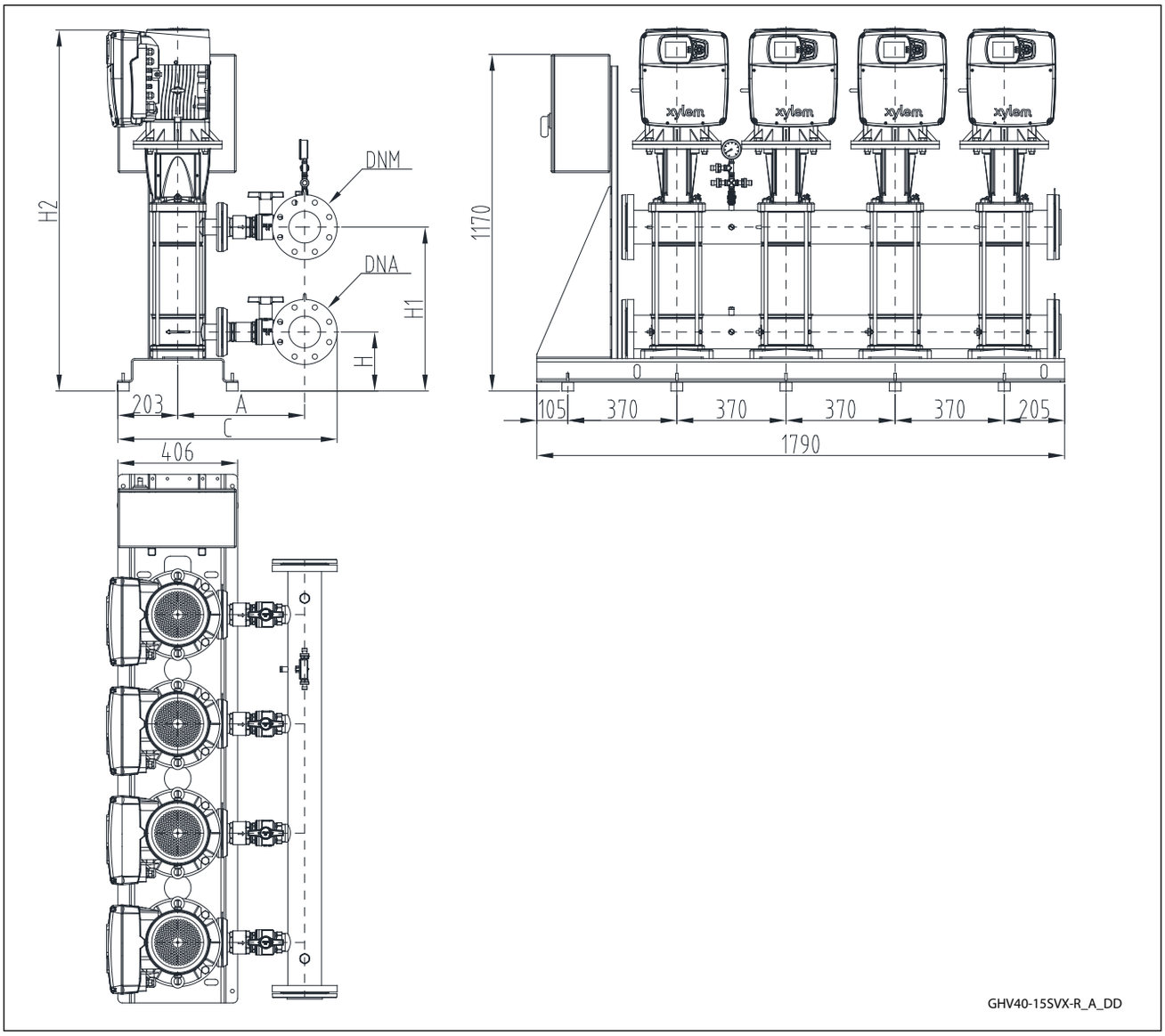
GHV40-SVX-R_A_DD

GHV 40	DNA	DNM	A	C	H	H1	H2
5SVX15R030L	R2"1/2	R2"1/2	338	659	215	582	1102
5SVX15R030	R2"1/2	R2"1/2	338	659	215	582	1102
5SVX19R040	R2"1/2	R2"1/2	338	659	215	682	1202
5SVX23R055L	R2"1/2	R2"1/2	338	659	215	782	1337
10SVX06R030L	R 3"	R 3"	363	683	220	431	984
10SVX06R030	R 3"	R 3"	363	683	220	431	984
10SVX08R040	R 3"	R 3"	363	683	220	495	1048
10SVX11R055L	R 3"	R 3"	363	683	220	591	1225
10SVX11R055	R 3"	R 3"	363	683	220	591	1225
10SVX15R075	R 3"	R 3"	363	683	220	719	1390

Dimensions in mm. Tolerance ± 10 mm.

ghv40_svx-r-emea_b_td

SET OF 4 PUMPS SV..R SERIES
THREE-PHASE POWER SUPPLY (GHV40.../4)

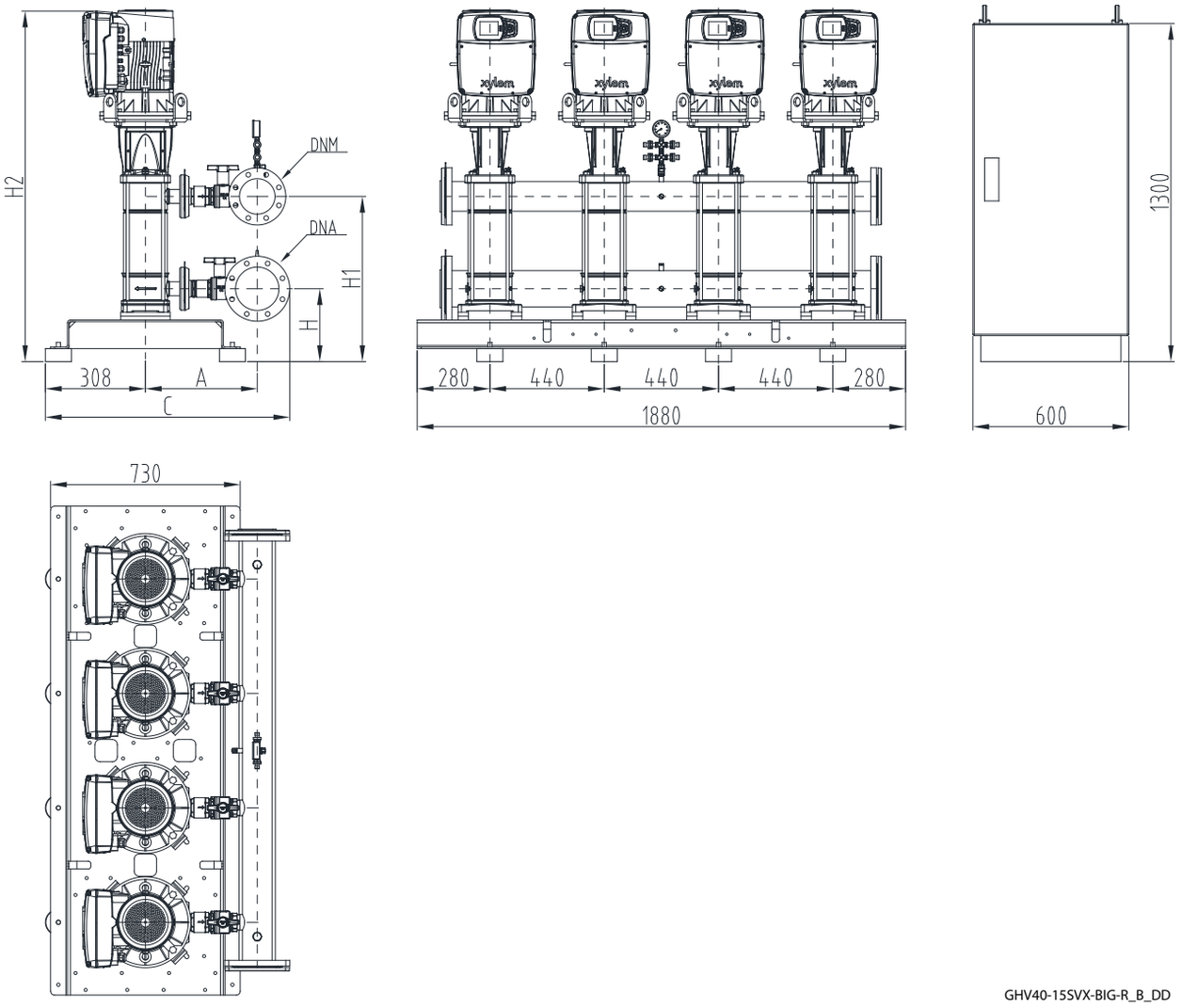


GHV 40	DNA	DNM	A	C	H	H1	H2
15SVX02Z4R030	DN125 / PN16	DN100 / PN16	430	813	230	537	1138
15SVX03Z3R040	DN125 / PN16	DN100 / PN16	430	813	230	537	1138
15SVX05Z1R055L	DN125 / PN16	DN100 / PN16	430	813	230	537	1138
15SVX05Z1R055	DN125 / PN16	DN100 / PN16	430	813	230	537	1138
15SVX07R075	DN125 / PN16	DN100 / PN16	430	813	230	585	1257
22SVX02Z4R030	DN125 / PN16	DN100 / PN16	430	813	230	537	1208
22SVX03Z3R040	DN125 / PN16	DN100 / PN16	430	813	230	537	1208
22SVX04Z2R055	DN125 / PN16	DN100 / PN16	430	813	230	537	1208
22SVX05Z1R075L	DN125 / PN16	DN100 / PN16	430	813	230	537	1208
22SVX05Z1R075	DN125 / PN16	DN100 / PN16	430	813	230	537	1208

Dimensions in mm. Tolerance ± 10 mm.

ghv40_15svx-r-emea_b_td

SET OF 4 PUMPS SV..R SERIES
THREE-PHASE POWER SUPPLY (GHV40.../4)

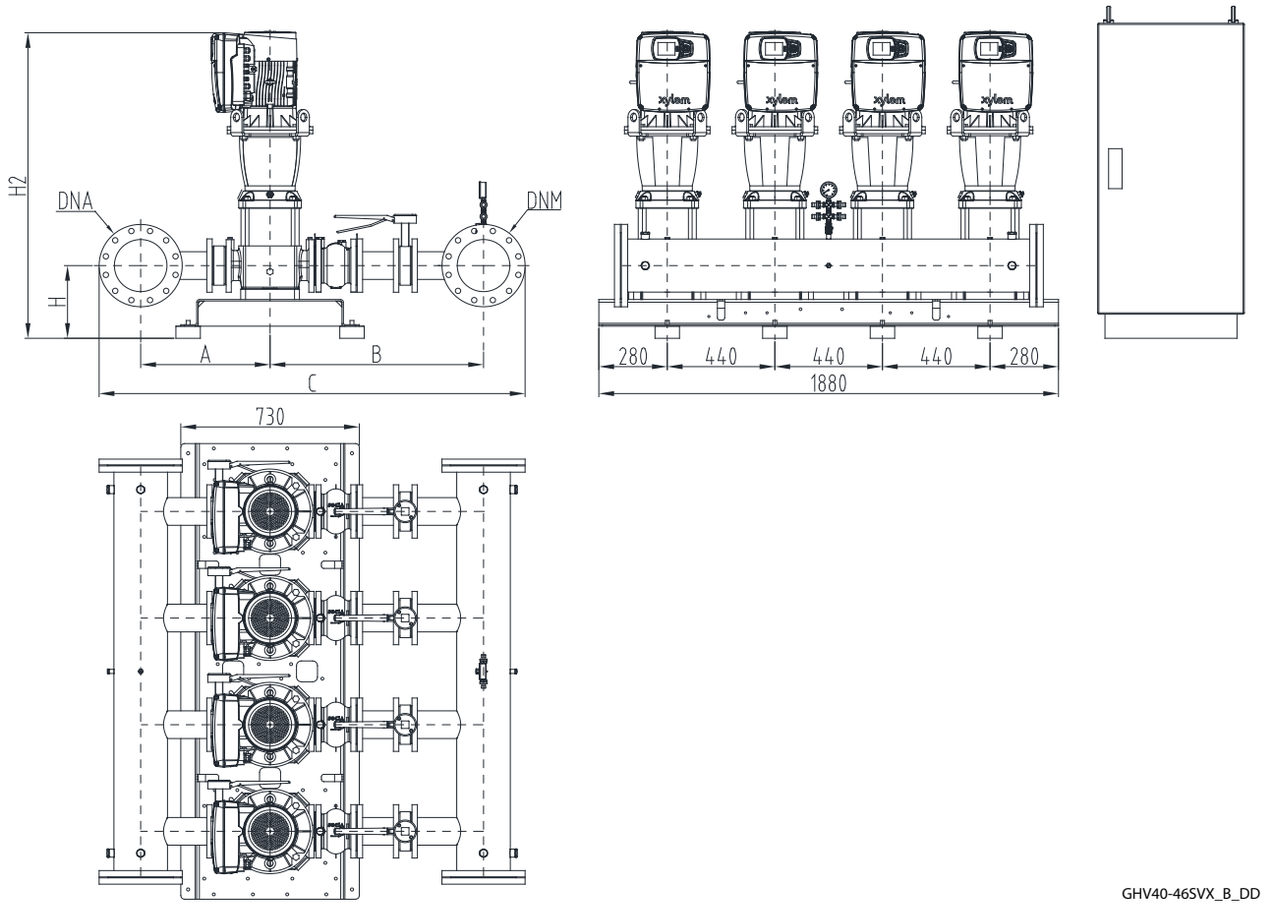


GHV 40	DNA	DNM	A	C	H	H1	H2
15SVX09R110	DN125 / PN16	DN100 / PN25	430	813	280	731	1447
15SVX12R150L	DN125 / PN16	DN100 / PN25	430	813	280	875	1666
22SVX07R110	DN125 / PN16	DN100 / PN16	430	813	230	635	1350
22SVX10R150	DN125 / PN16	DN100 / PN25	430	813	230	779	1570
22SVX12R185L	DN125 / PN16	DN100 / PN25	430	813	230	875	1666

Dimensions in mm. Tolerance ± 10 mm.

ghv40_15svx-big-r-emea_b_td

SET OF 4 PUMPS SV..G SERIES
THREE-PHASE POWER SUPPLY (GHV40.../4)

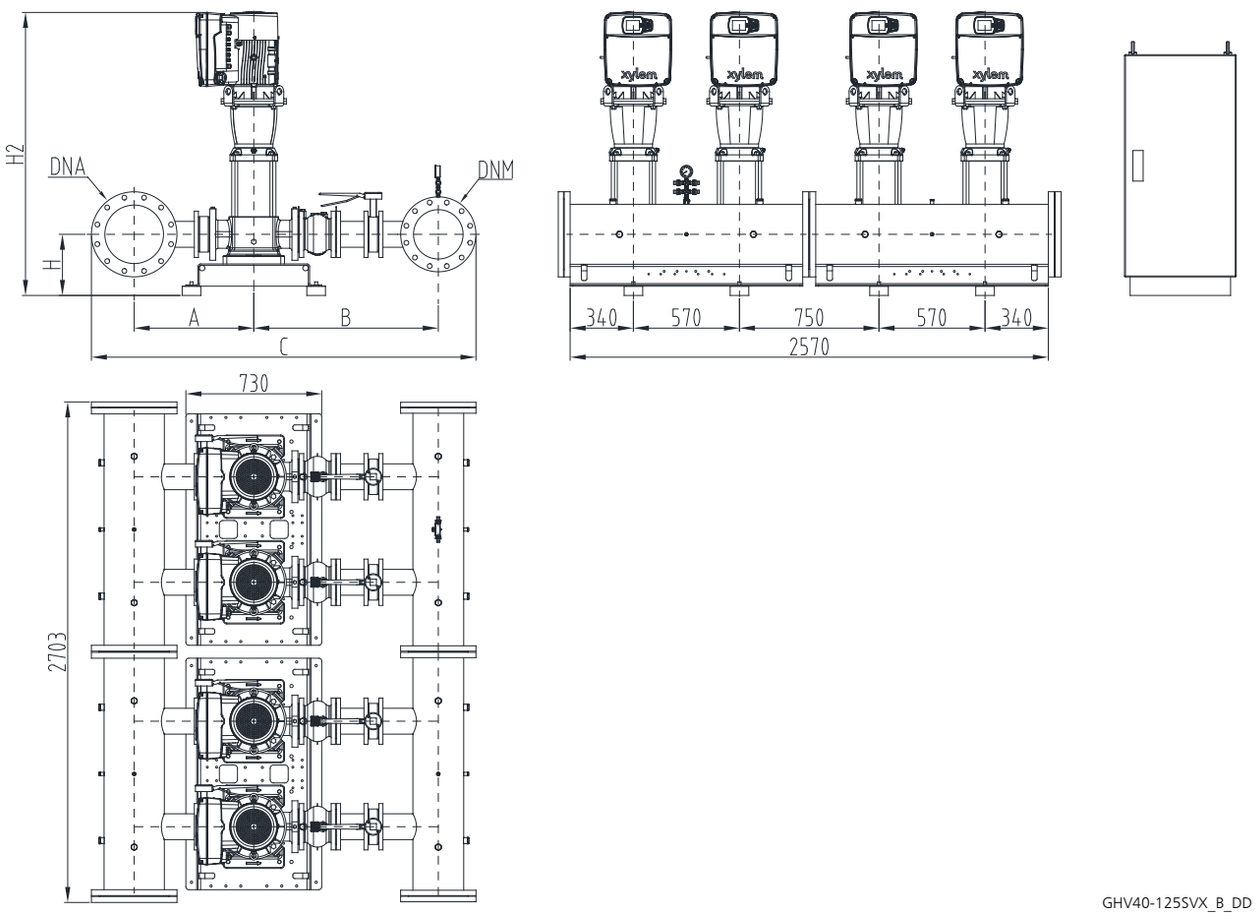


GHV 40	DNA	DNM	A	B	C	H	H2
33SVX01G030	DN150 / PN16	DN125 / PN16	475	745	1488	265	988
33SVX02G055	DN150 / PN16	DN125 / PN16	475	745	1488	265	1093
33SVX02G075	DN150 / PN16	DN125 / PN16	475	745	1488	265	1135
33SVX03G110L	DN150 / PN16	DN125 / PN16	475	745	1488	265	1258
33SVX03G110	DN150 / PN16	DN125 / PN16	475	745	1488	265	1258
33SVX04G150	DN150 / PN16	DN125 / PN16	475	745	1488	265	1409
33SVX05G185L	DN150 / PN16	DN125 / PN16	475	745	1488	265	1484
33SVX05G185	DN150 / PN16	DN125 / PN25	475	745	1488	265	1484
33SVX06G220	DN150 / PN16	DN125 / PN25	475	745	1488	265	1559
46SVX01G055	DN200 / PN16	DN150 / PN16	523	807	1642	300	1058
46SVX02G075	DN200 / PN16	DN150 / PN16	523	807	1642	300	1210
46SVX02G110	DN200 / PN16	DN150 / PN16	523	807	1642	300	1223
46SVX03G150	DN200 / PN16	DN150 / PN16	523	807	1642	300	1374
46SVX04G185	DN200 / PN16	DN150 / PN16	523	807	1642	300	1449
46SVX05G220	DN200 / PN16	DN150 / PN25	523	807	1642	300	1524
66SVX01G055	DN200 / PN16	DN200 / PN16	529	873	1742	300	1083
66SVX02G110	DN200 / PN16	DN200 / PN16	529	873	1742	300	1263
66SVX02G150	DN200 / PN16	DN200 / PN16	529	873	1742	300	1339
66SVX03G185L	DN200 / PN16	DN200 / PN16	529	873	1742	300	1429
66SVX03G185	DN200 / PN16	DN200 / PN16	529	873	1742	300	1429
66SVX04G220L	DN200 / PN16	DN200 / PN16	529	873	1742	300	1519
66SVX04G220	DN200 / PN16	DN200 / PN25	529	873	1742	300	1519
92SVX01G075	DN250 / PN16	DN250 / PN16	556	900	1861	300	1125
92SVX02G150	DN250 / PN16	DN250 / PN16	556	900	1861	300	1339
92SVX03G220L	DN250 / PN16	DN250 / PN16	556	900	1861	300	1429
92SVX03G220	DN250 / PN16	DN250 / PN16	556	900	1861	300	1429

Dimensions in mm. Tolerance ± 10 mm.

ghv40_46svx-emea_b_td

SET OF 4 PUMPS SV..G SERIES
THREE-PHASE POWER SUPPLY (GHV40.../4)

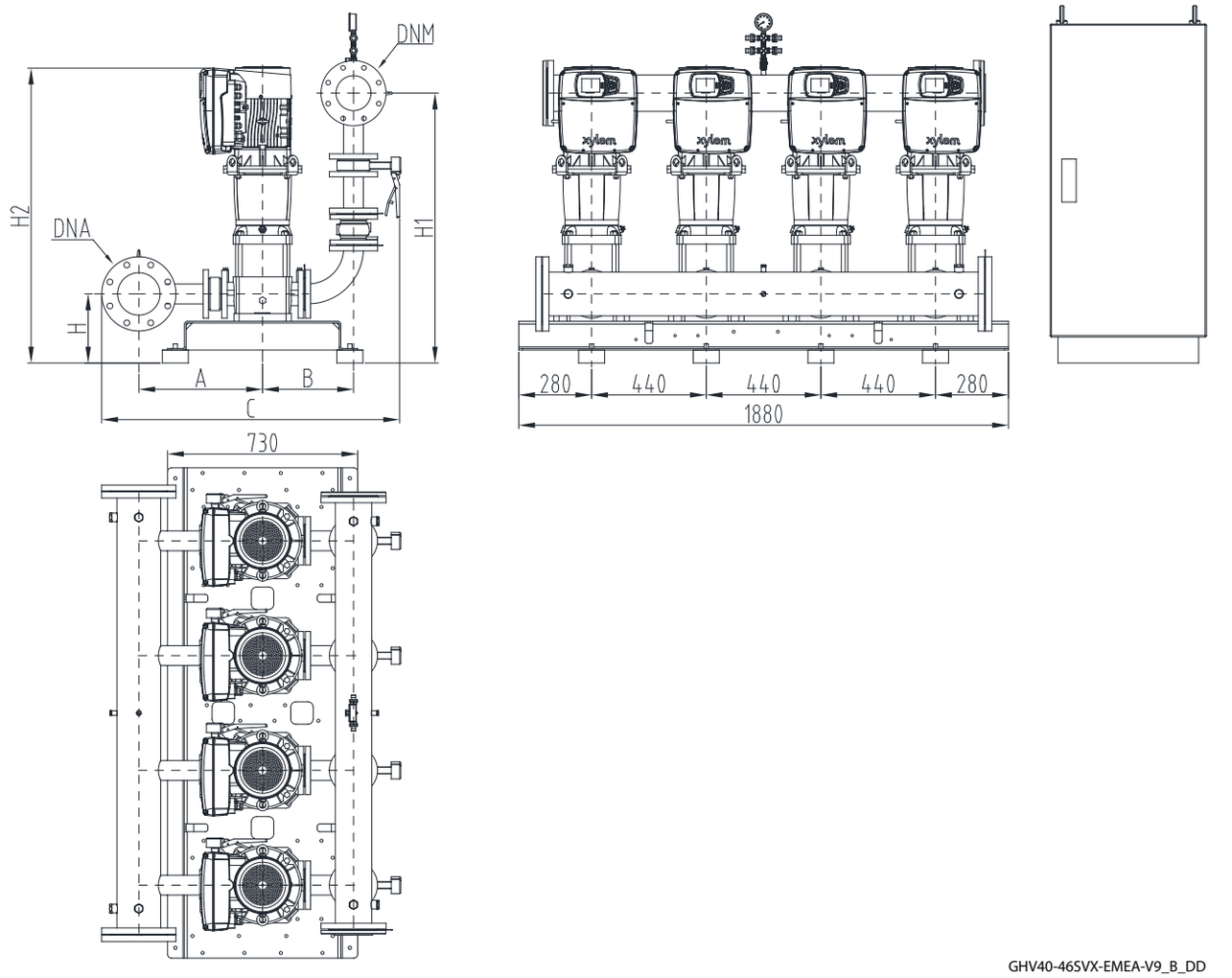


GHV 40	DNA	DNM	A	B	C	H	H2
125SVX01G075	DN300 / PN16	DN250 / PN16	643	992	2067	330	1254
125SVX02G150	DN300 / PN16	DN250 / PN16	643	992	2067	330	1528
125SVX02G220	DN300 / PN16	DN250 / PN16	643	992	2067	330	1528

Dimensions in mm. Tolerance ± 10 mm.

ghv40_125svx-emea_b_td

SET OF 4 PUMPS SV..G SERIES - V9 OPTION
THREE-PHASE POWER SUPPLY (GHV40.../4)



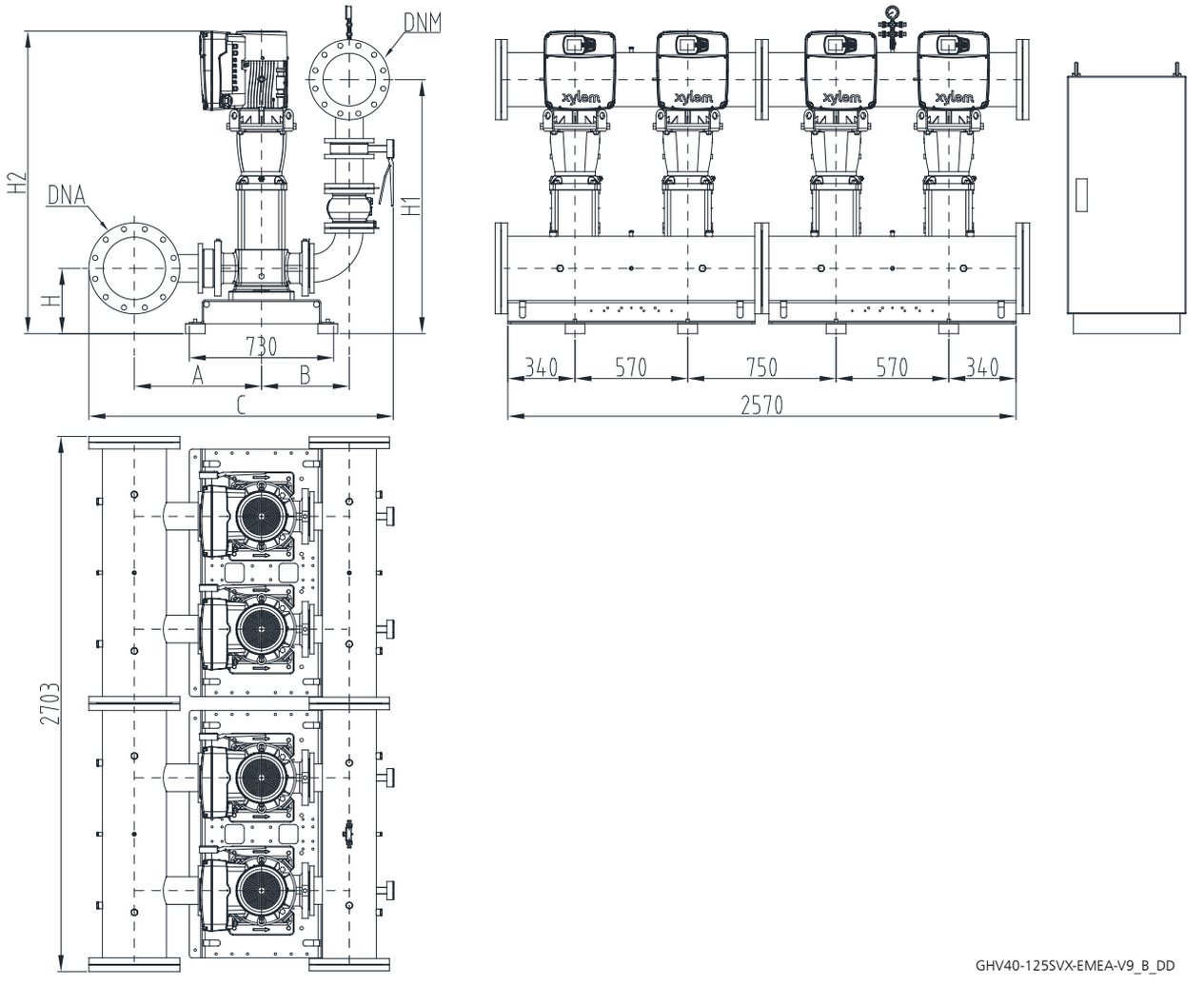
GHV40-46SVX-EMEA-V9_B_DD

GHV 40	DNA	DNM	A	B	C	H	H1	H2
33SVX01G030	DN150 / PN16	DN125 / PN16	475	349	1090	265	1035	988
33SVX02G055	DN150 / PN16	DN125 / PN16	475	349	1090	265	1035	1093
33SVX02G075	DN150 / PN16	DN125 / PN16	475	349	1090	265	1035	1135
33SVX03G110L	DN150 / PN16	DN125 / PN16	475	349	1090	265	1035	1258
33SVX03G110	DN150 / PN16	DN125 / PN16	475	349	1090	265	1035	1258
33SVX04G150	DN150 / PN16	DN125 / PN16	475	349	1090	265	1035	1409
33SVX05G185L	DN150 / PN16	DN125 / PN16	475	349	1090	265	1035	1484
33SVX05G185	DN150 / PN16	DN125 / PN25	475	349	1090	265	1035	1484
33SVX06G220	DN150 / PN16	DN125 / PN25	475	349	1090	265	1035	1559
46SVX01G055	DN200 / PN16	DN150 / PN16	523	402	1237	300	1139	1058
46SVX02G075	DN200 / PN16	DN150 / PN16	523	402	1237	300	1139	1210
46SVX02G110	DN200 / PN16	DN150 / PN16	523	402	1237	300	1139	1223
46SVX03G150	DN200 / PN16	DN150 / PN16	523	402	1237	300	1139	1374
46SVX04G185	DN200 / PN16	DN150 / PN16	523	402	1237	300	1139	1449
46SVX05G220	DN200 / PN16	DN150 / PN25	523	402	1237	300	1139	1524
66SVX01G055	DN200 / PN16	DN200 / PN16	529	349	1218	300	1153	1083
66SVX02G110	DN200 / PN16	DN200 / PN16	529	349	1218	300	1153	1263
66SVX02G150	DN200 / PN16	DN200 / PN16	529	349	1218	300	1153	1339
66SVX03G185L	DN200 / PN16	DN200 / PN16	529	349	1218	300	1153	1429
66SVX03G185	DN200 / PN16	DN200 / PN16	529	349	1218	300	1153	1429
66SVX04G220L	DN200 / PN16	DN200 / PN16	529	349	1218	300	1153	1519
66SVX04G220	DN200 / PN16	DN200 / PN25	529	349	1218	300	1153	1519
92SVX01G075	DN250 / PN16	DN250 / PN16	556	349	1310	300	1180	1125
92SVX02G150	DN250 / PN16	DN250 / PN16	556	349	1310	300	1180	1339
92SVX03G220L	DN250 / PN16	DN250 / PN16	556	349	1310	300	1180	1429
92SVX03G220	DN250 / PN16	DN250 / PN16	556	349	1310	300	1180	1429

Dimensions in mm. Tolerance ± 10 mm.

ghv40_46svx-v9-emea_c_td

SET OF 4 PUMPS SV..G SERIES - V9 OPTION
THREE-PHASE POWER SUPPLY (GHV40.../4)



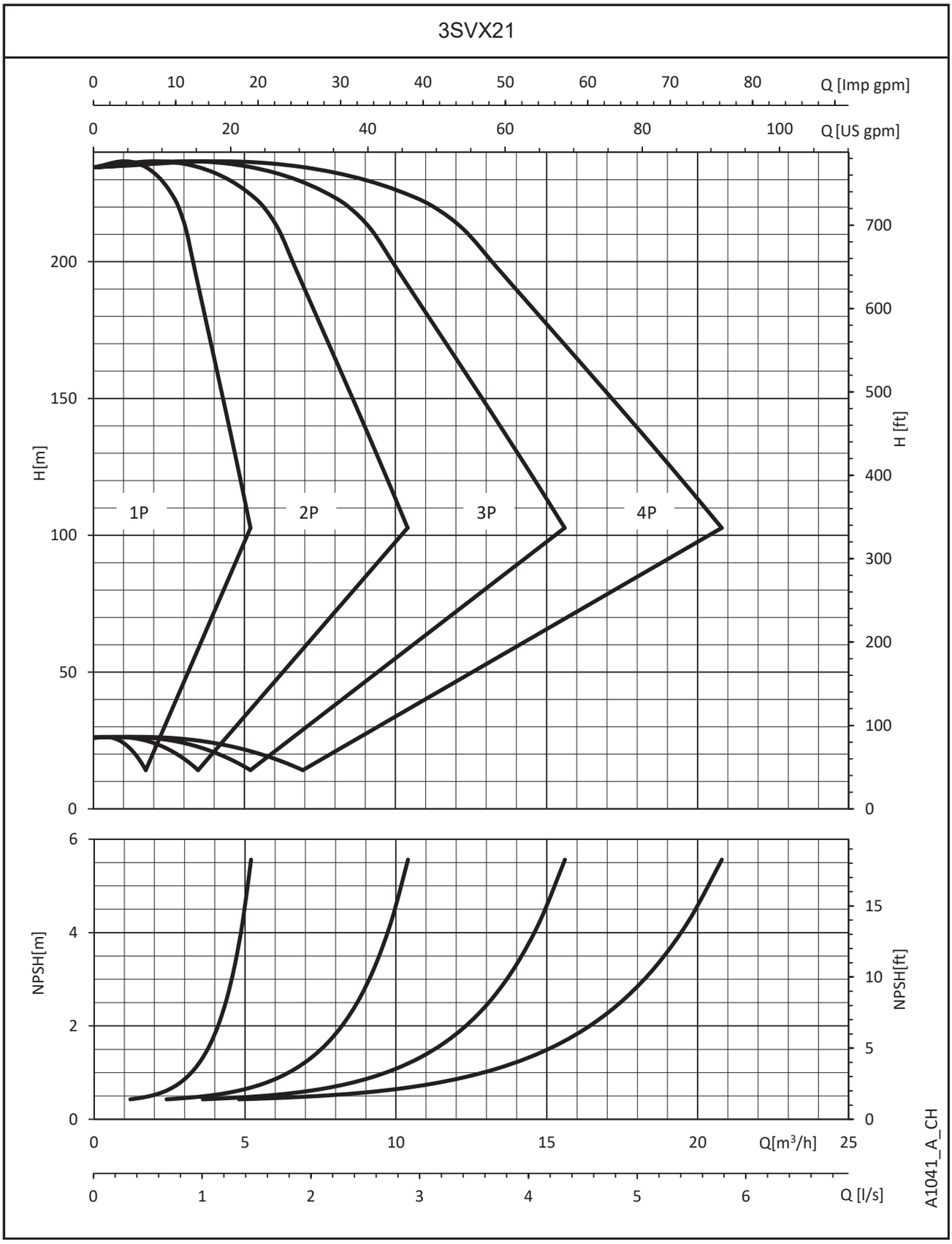
GHV 40	DNA	DNM	A	B	C	H	H1	H2
125SVX01G075	DN300 / PN16	DN250 / PN16	643	444	1519	330	1284	1254
125SVX02G150	DN300 / PN16	DN250 / PN16	643	444	1519	330	1284	1528
125SVX02G220	DN300 / PN16	DN250 / PN16	643	444	1519	330	1284	1528

Dimensions in mm. Tolerance ± 10 mm.

ghv40_125svx-v9-emea_b_td

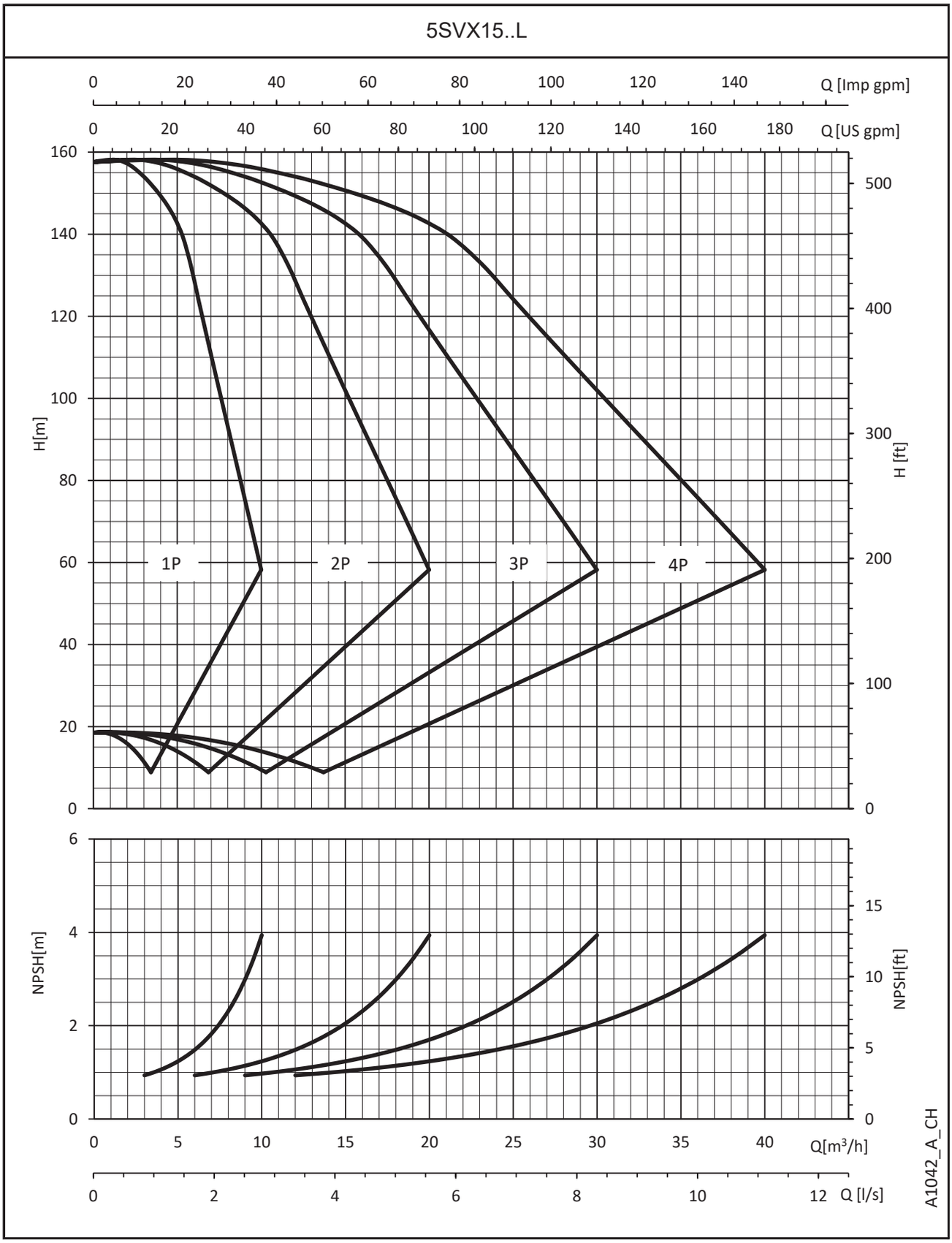
PERFORMANCE CURVES

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



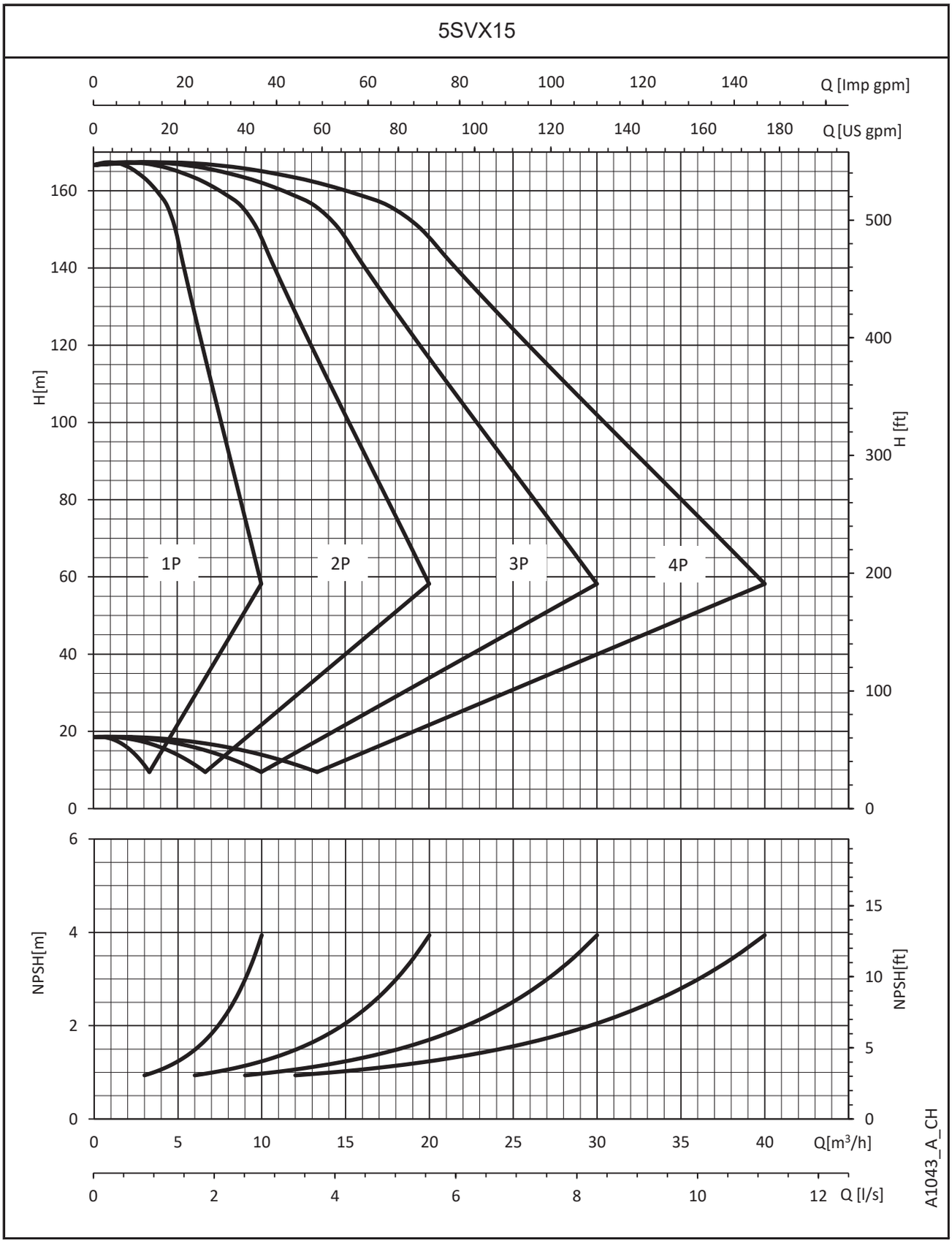
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



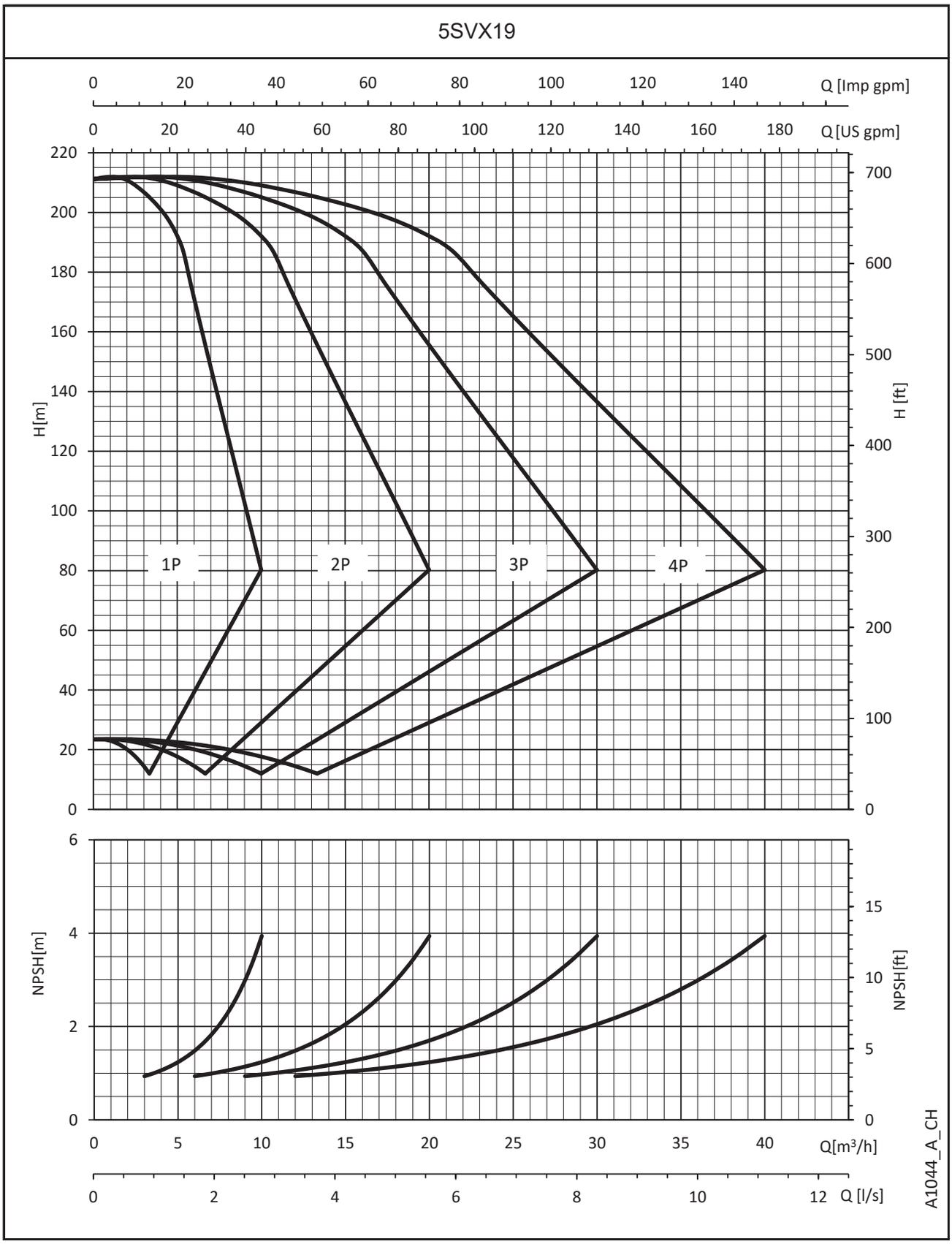
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



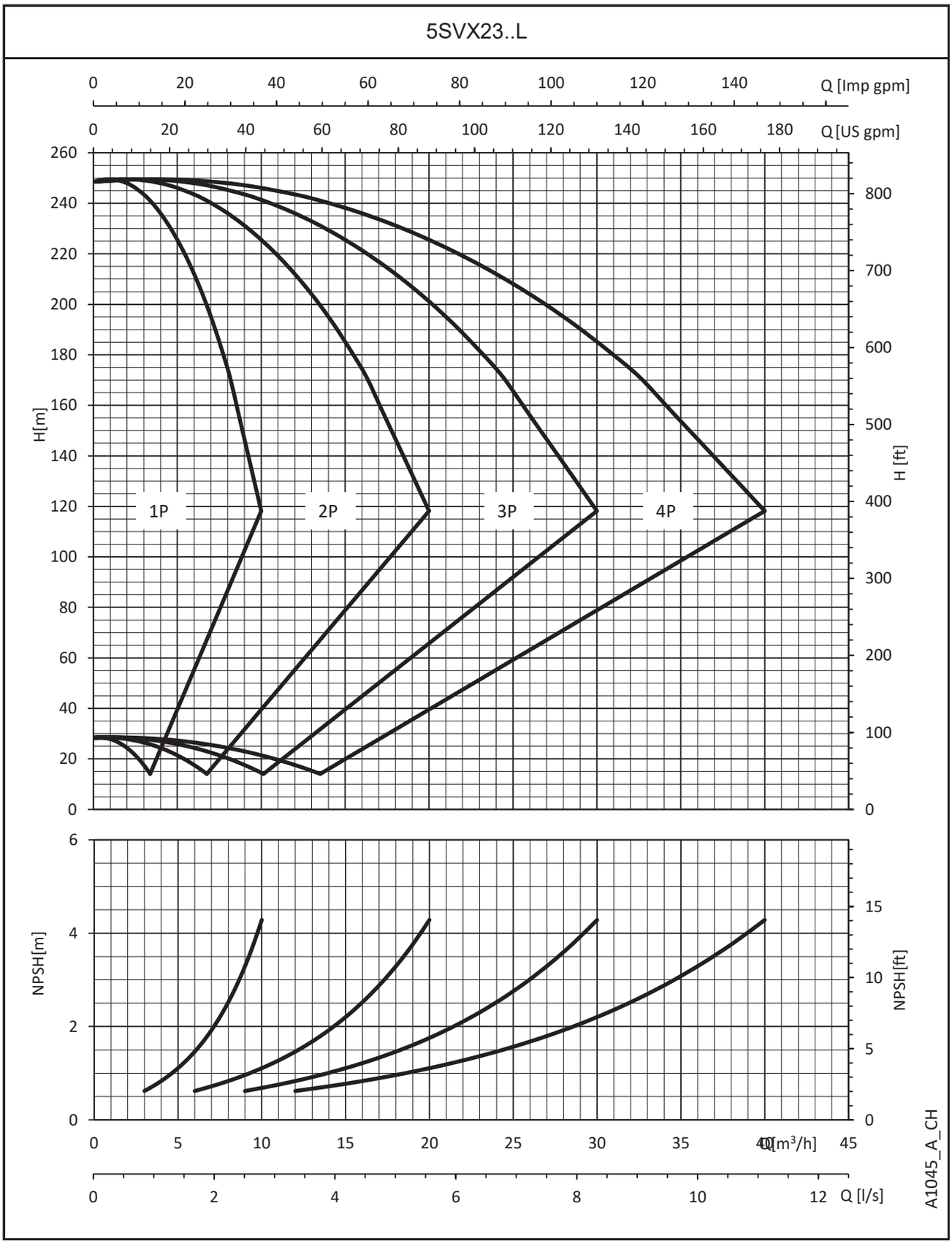
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



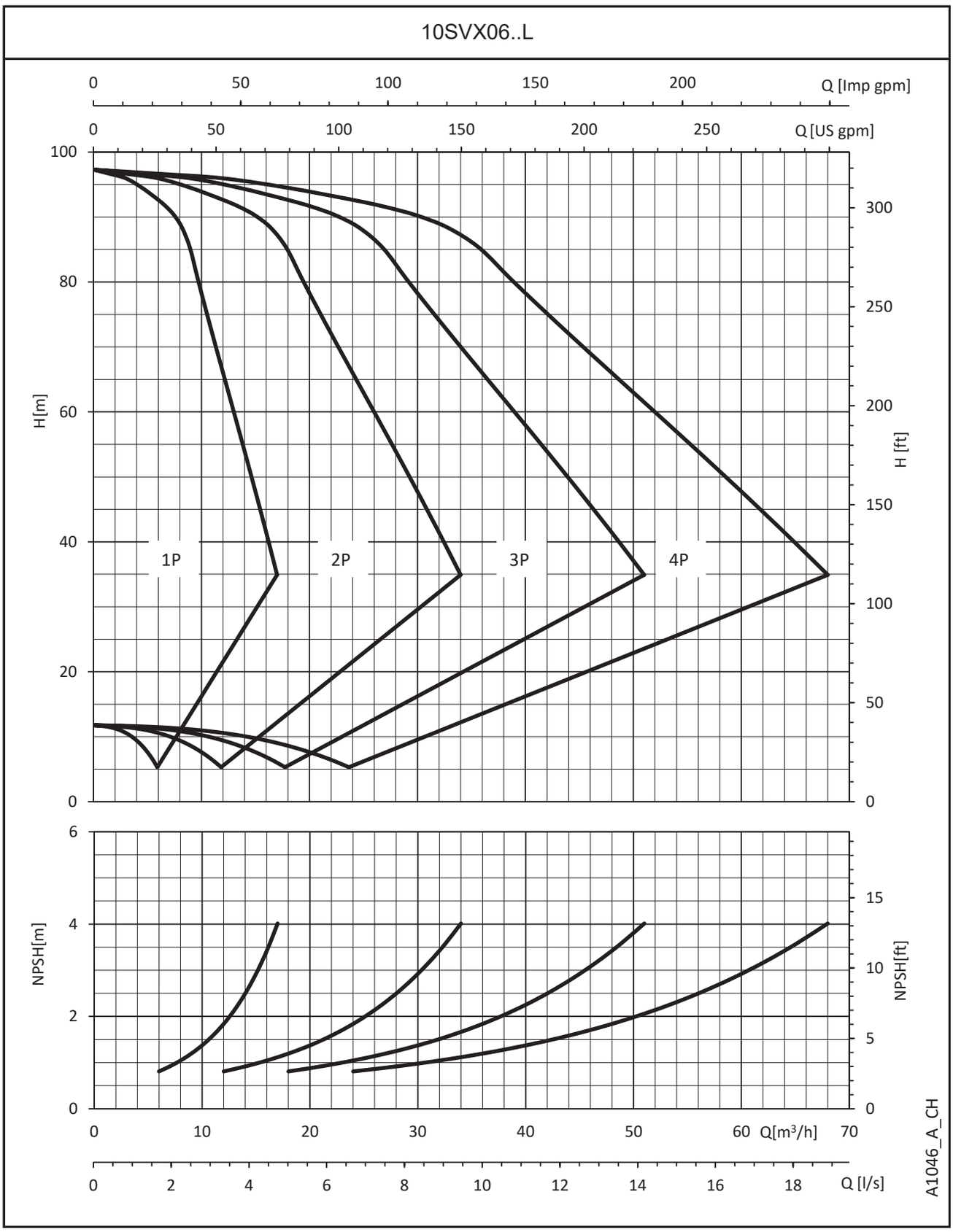
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



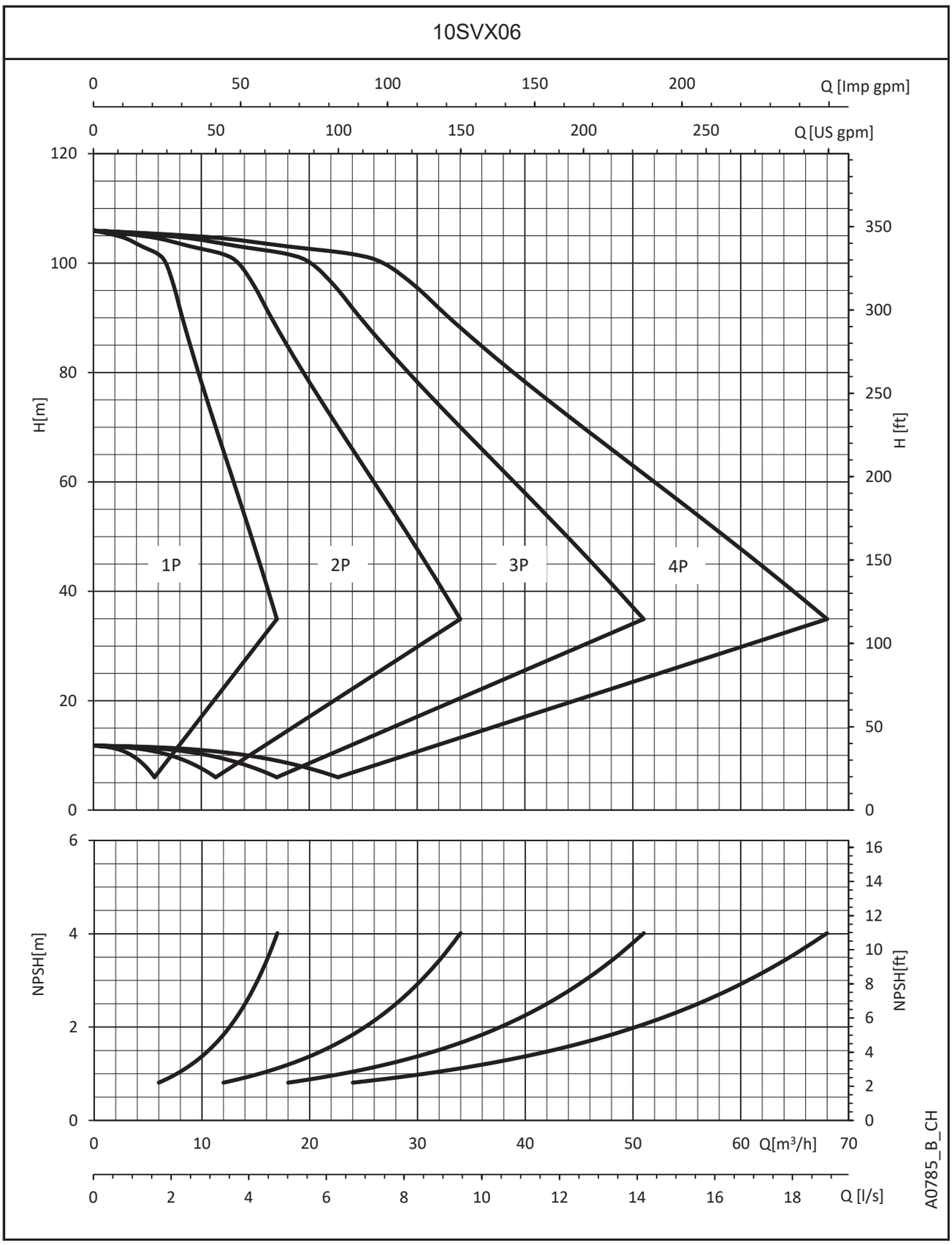
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



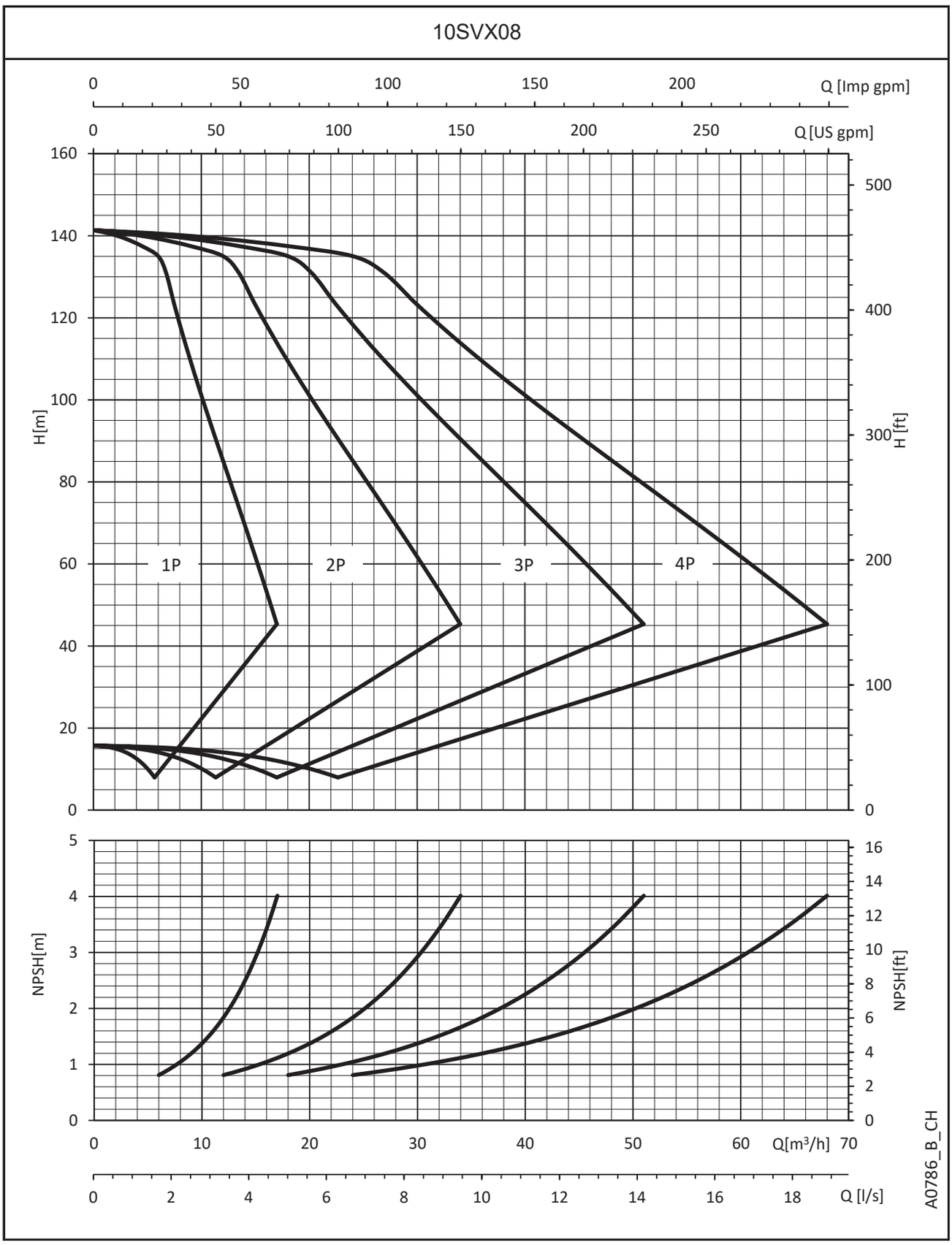
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



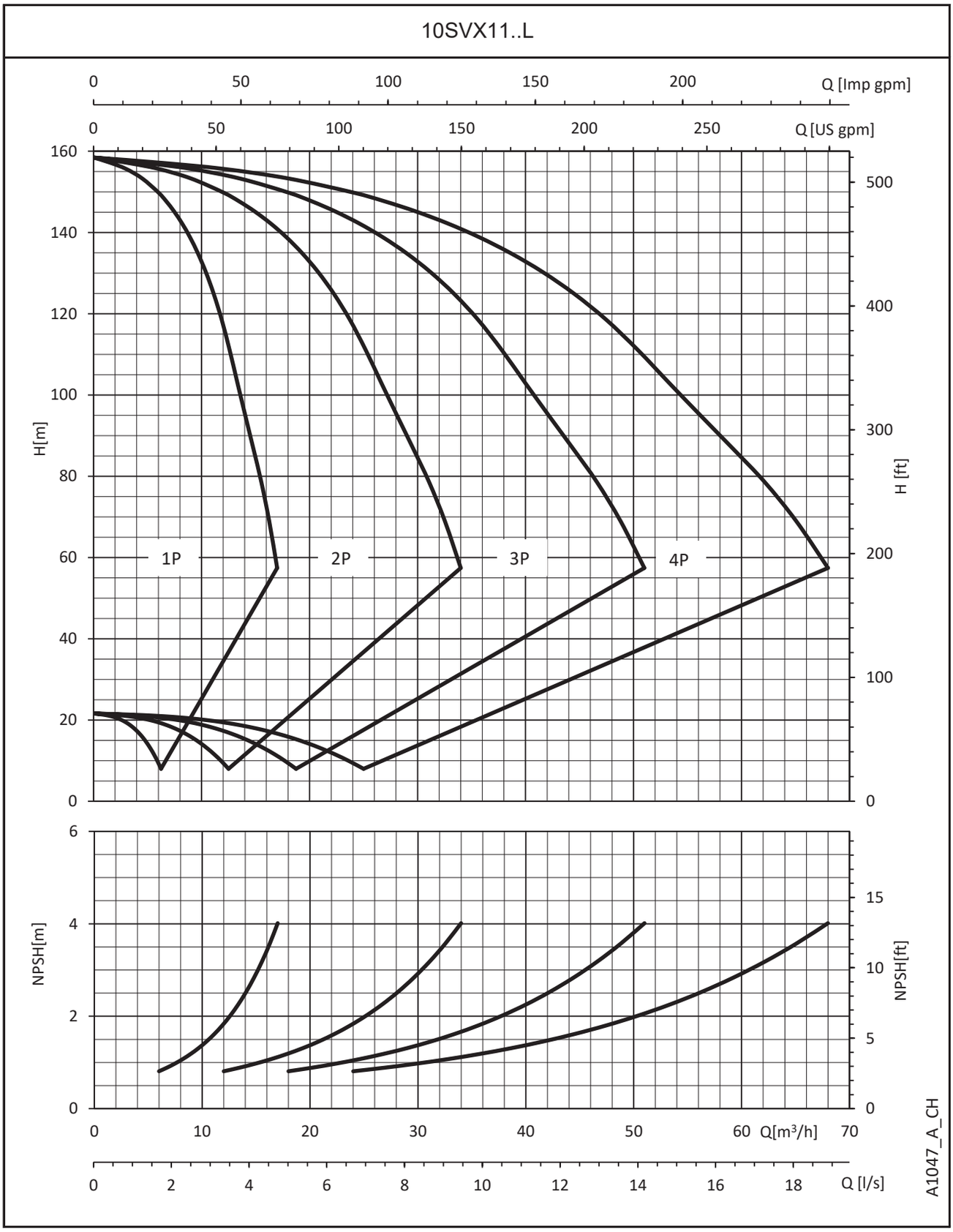
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



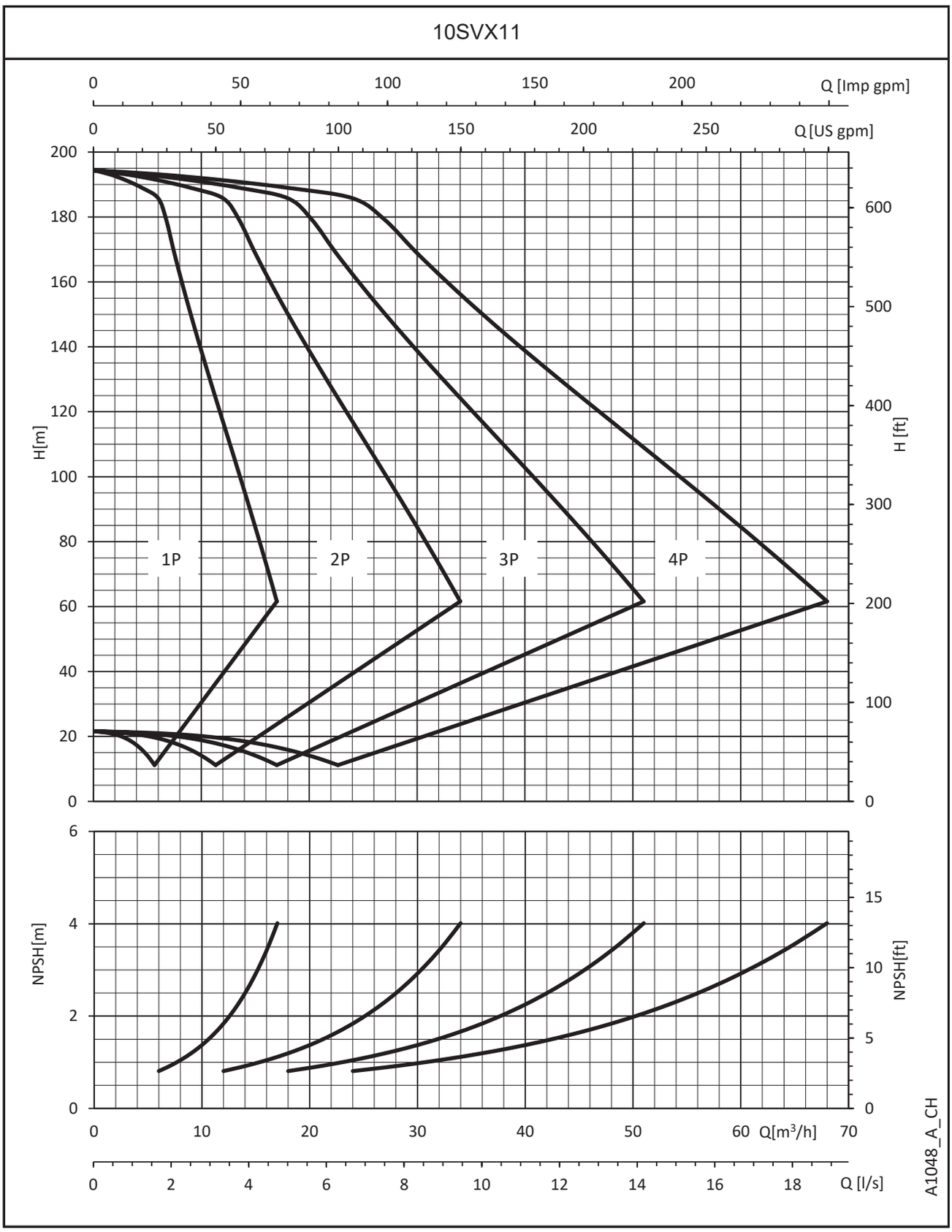
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



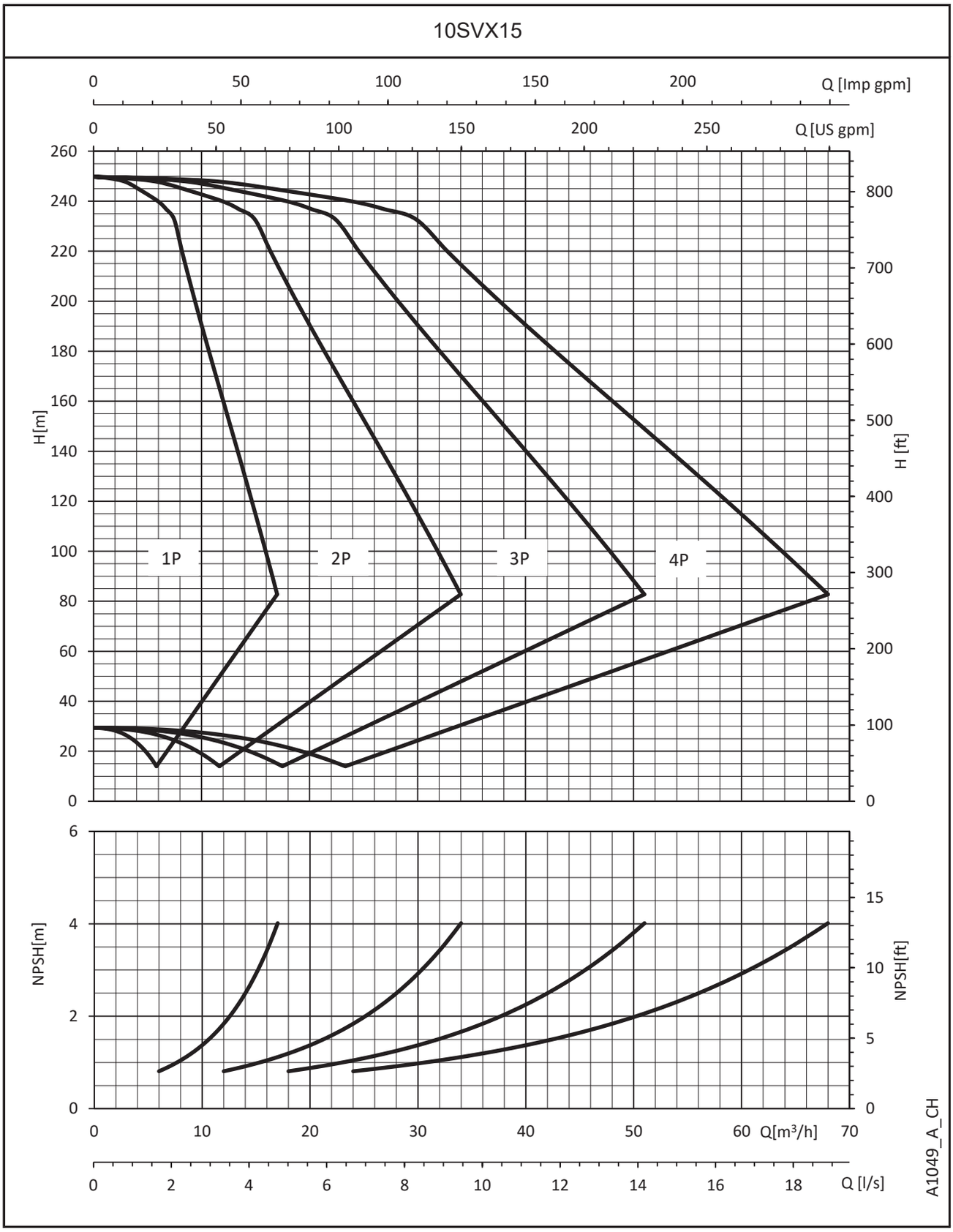
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



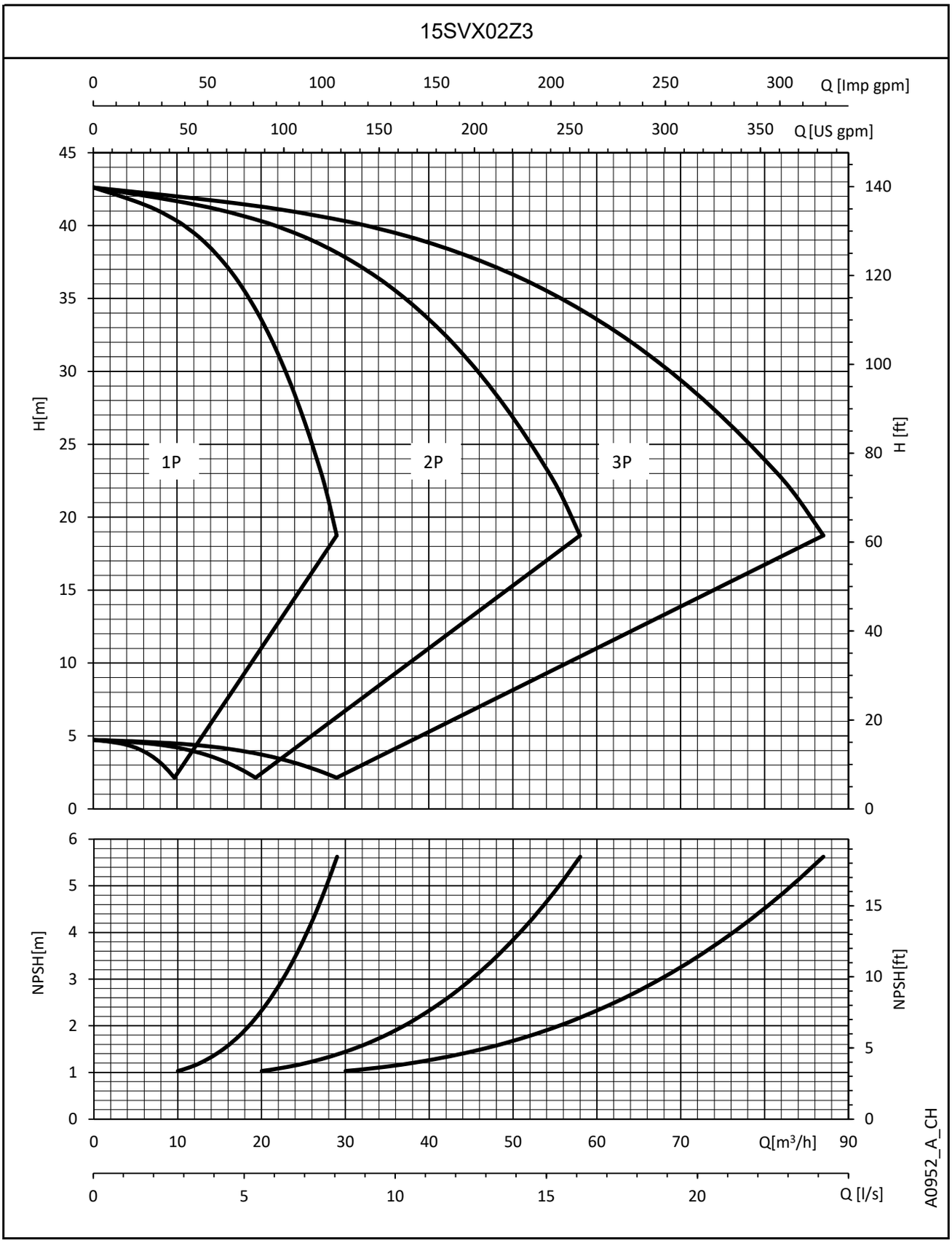
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



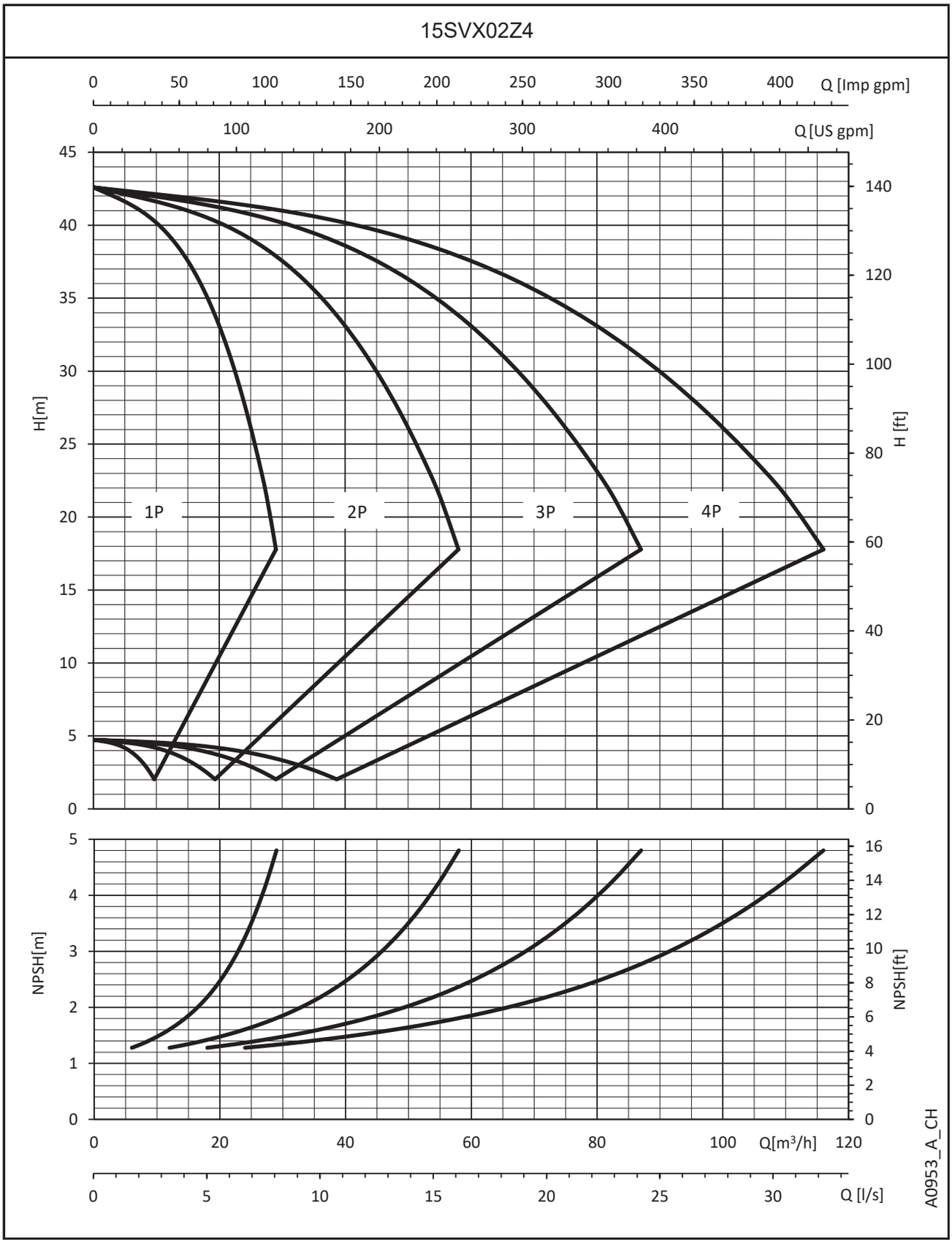
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



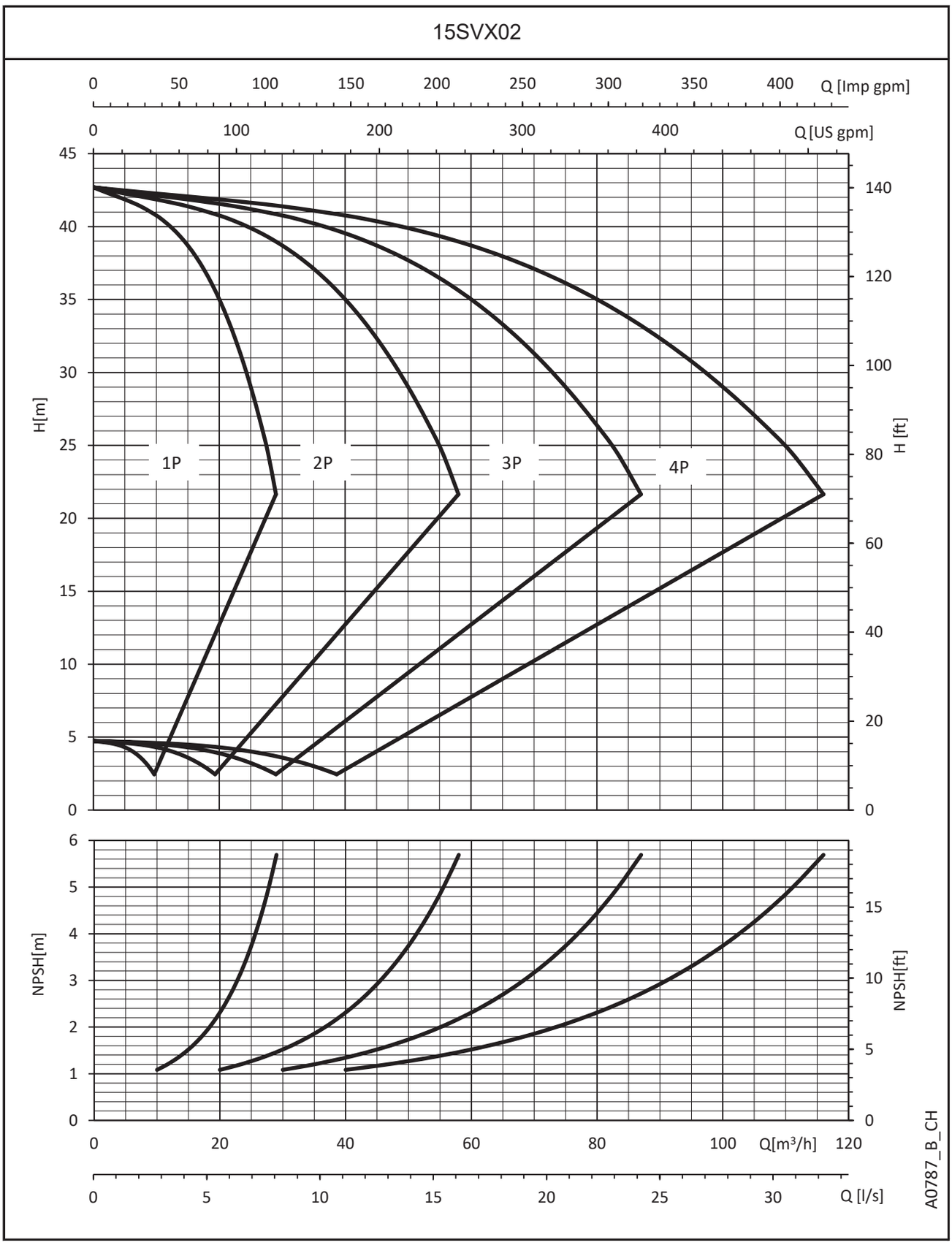
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



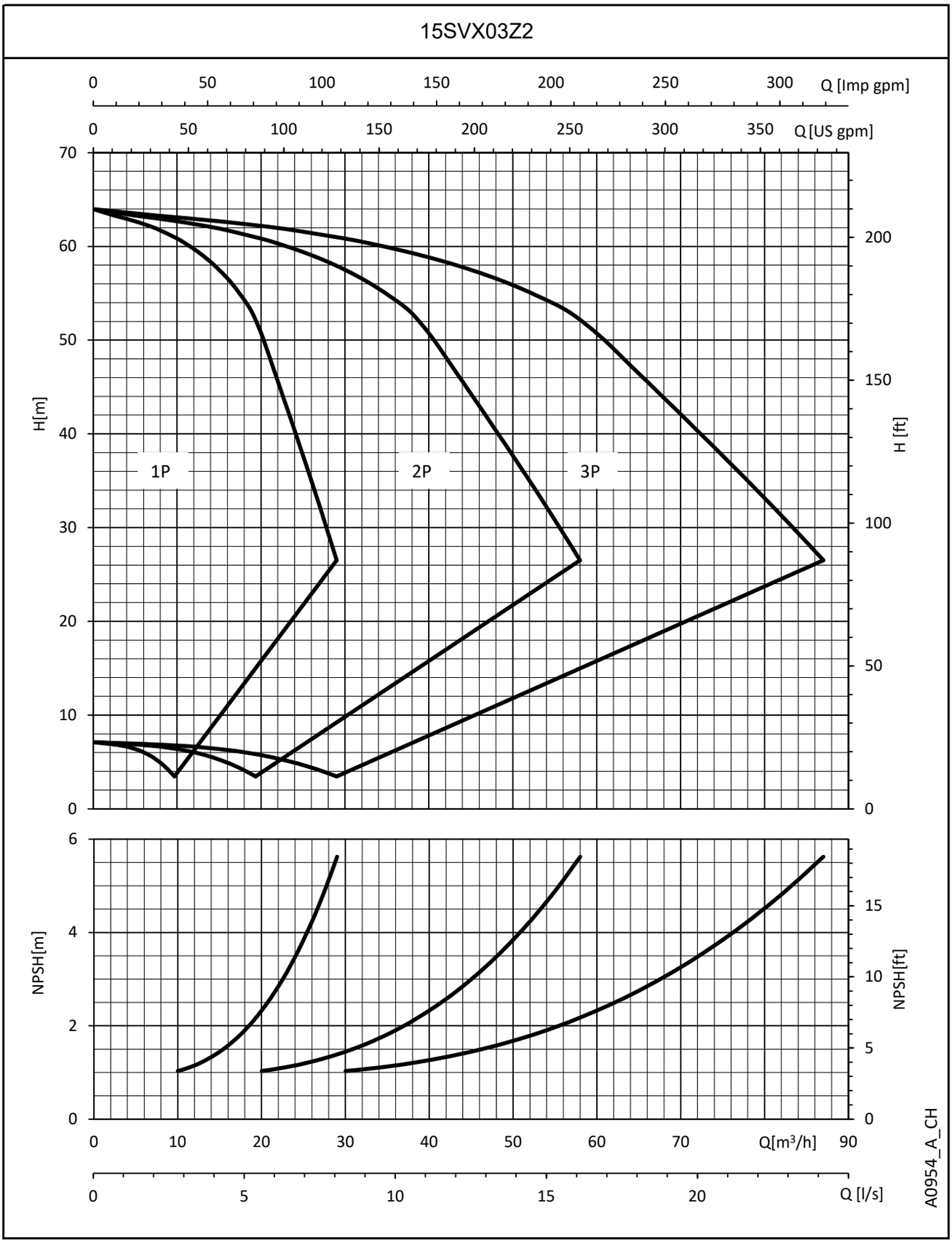
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



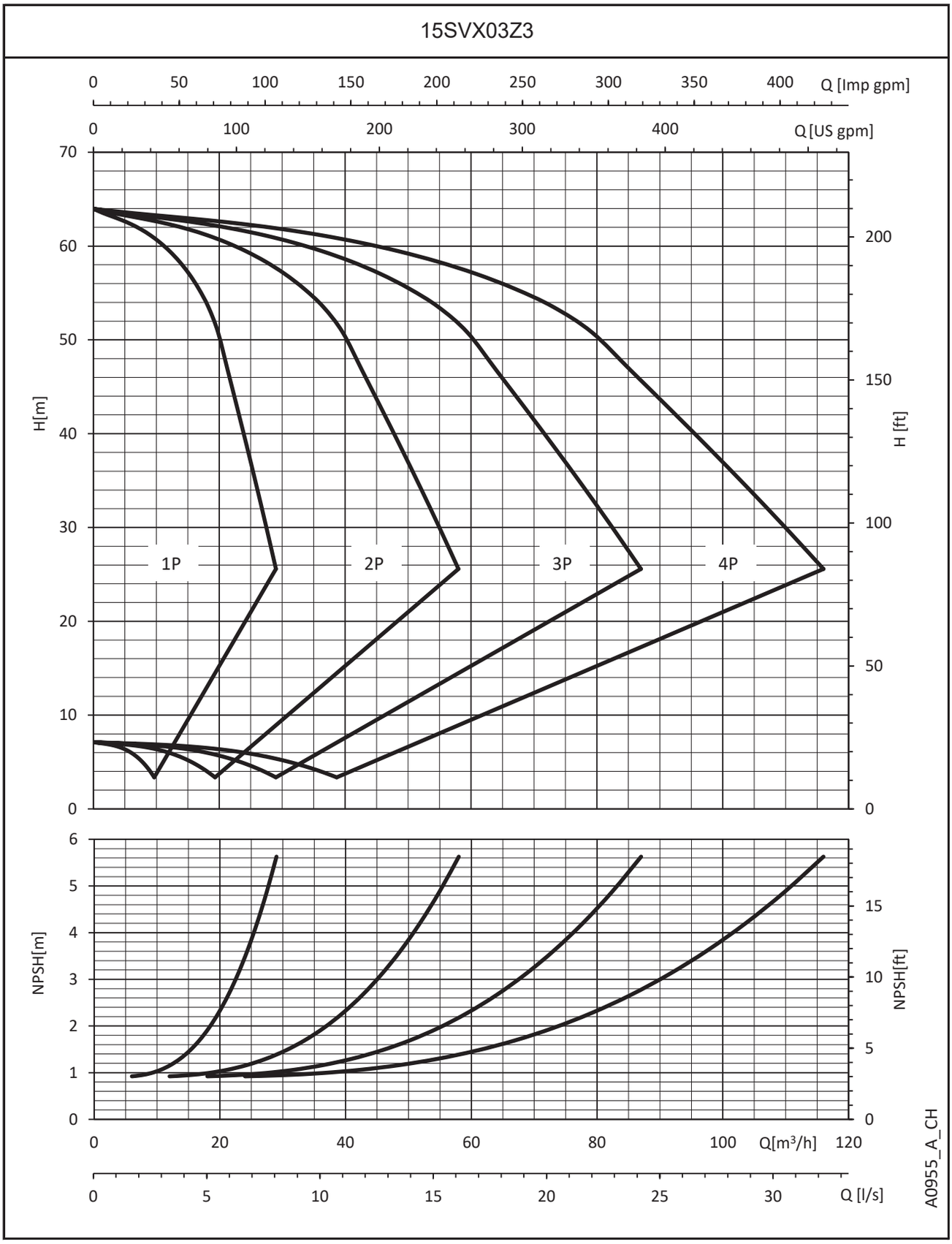
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



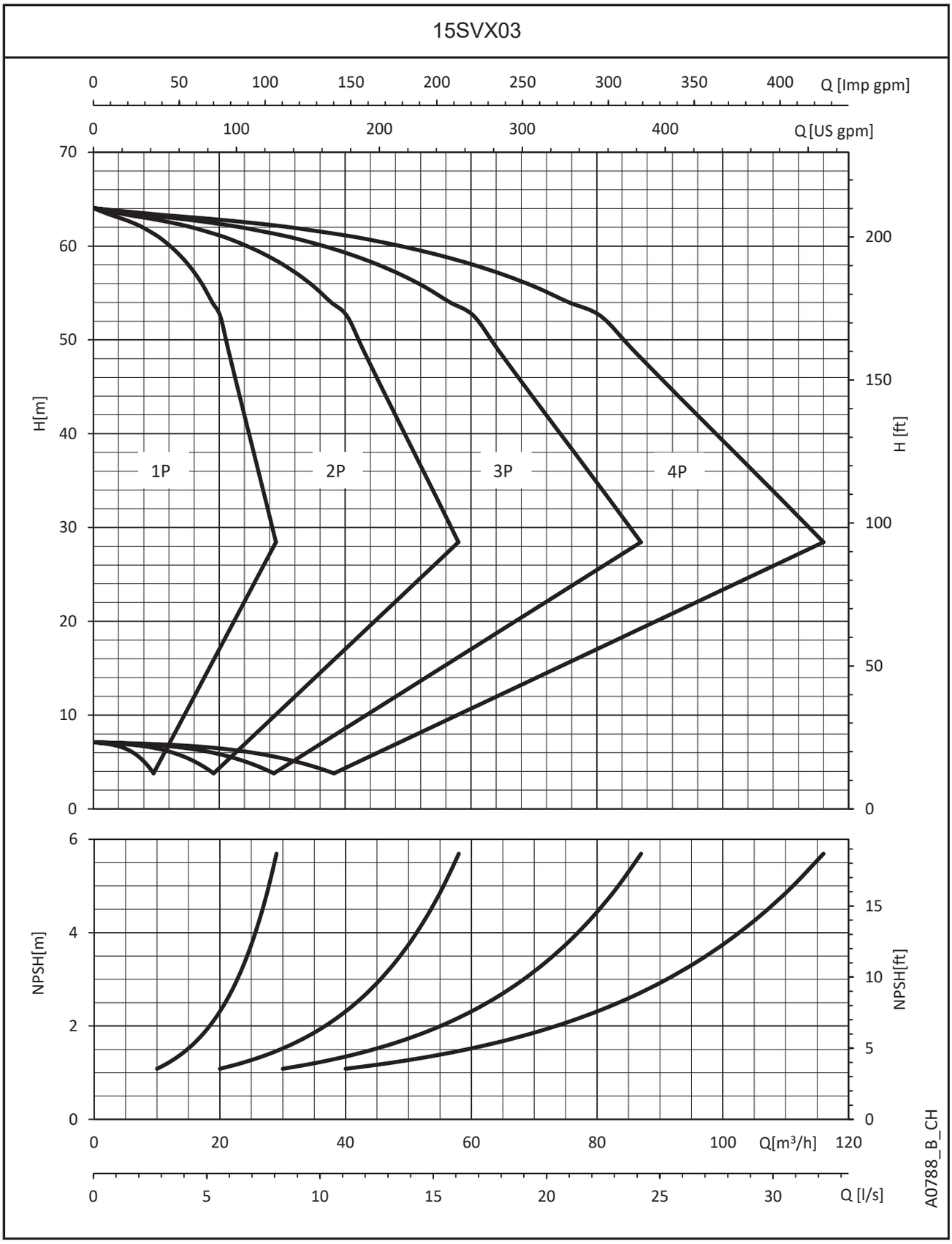
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



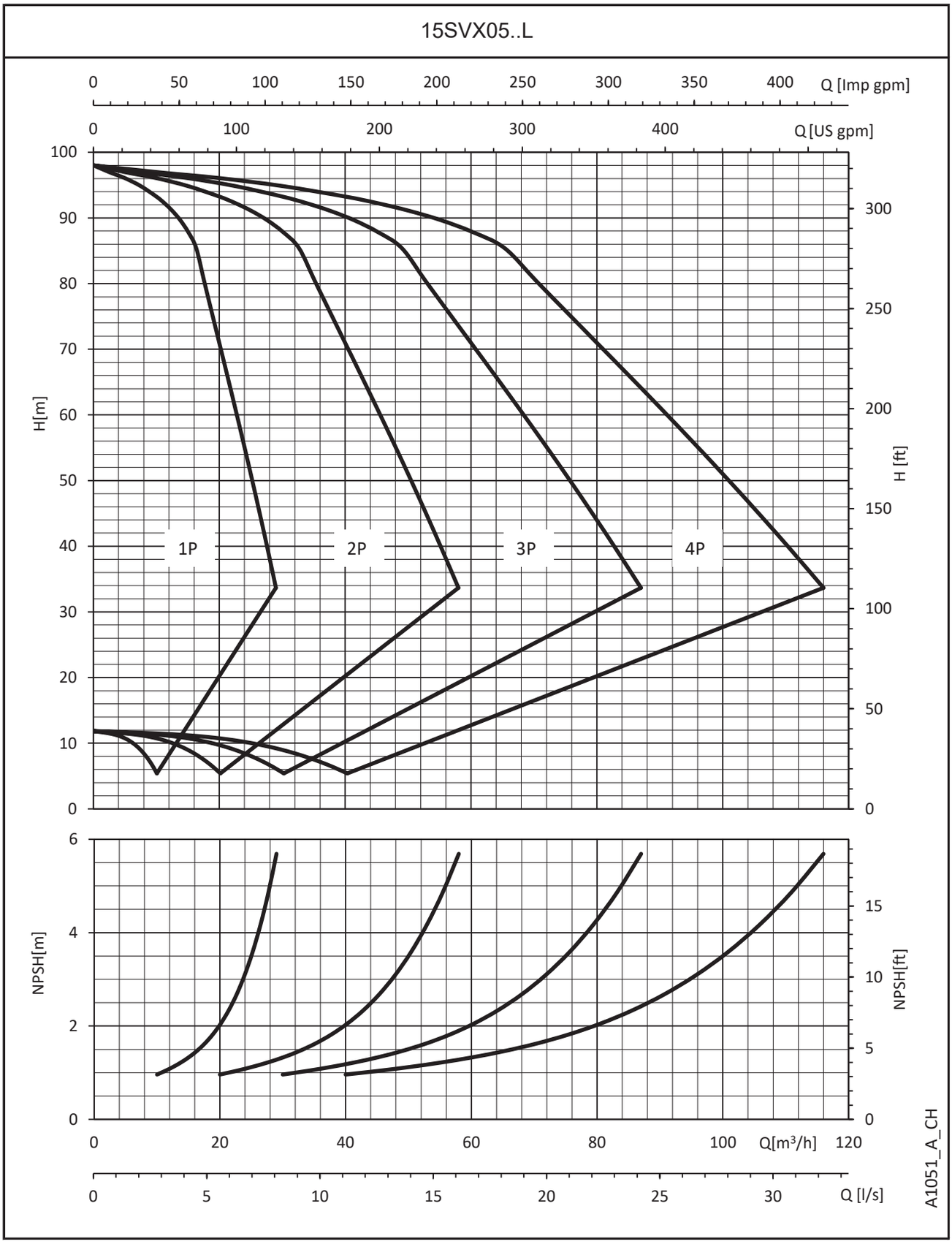
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



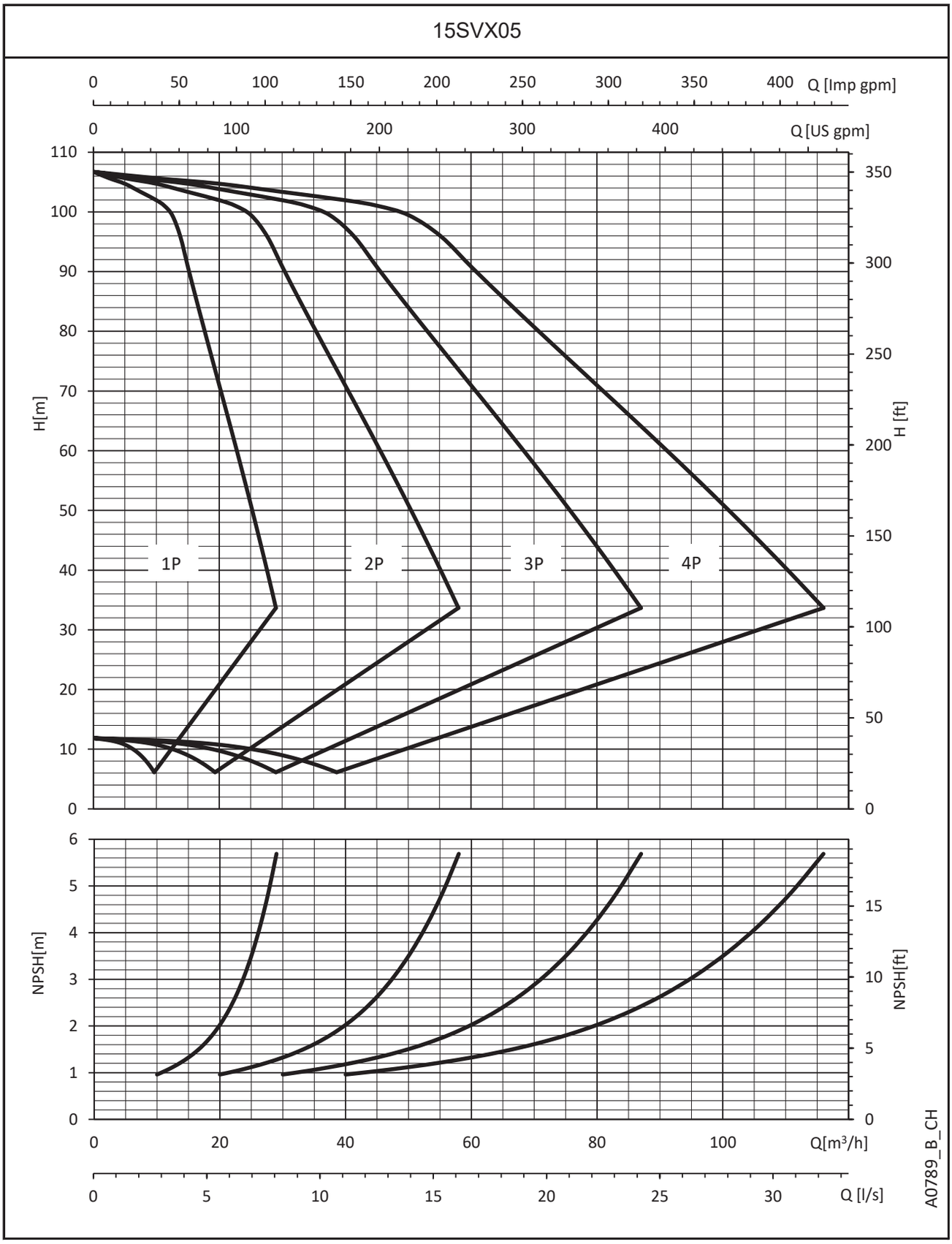
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



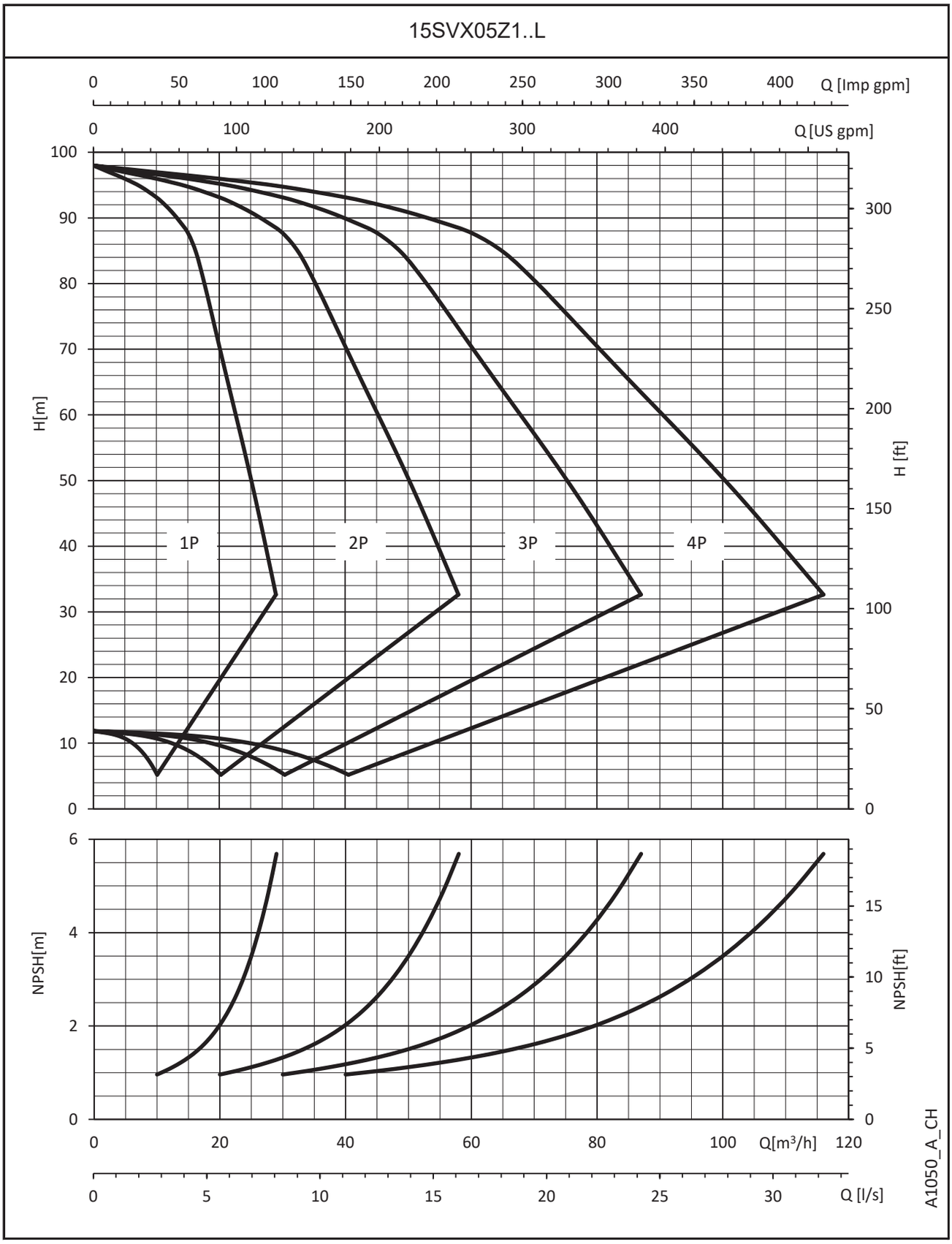
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



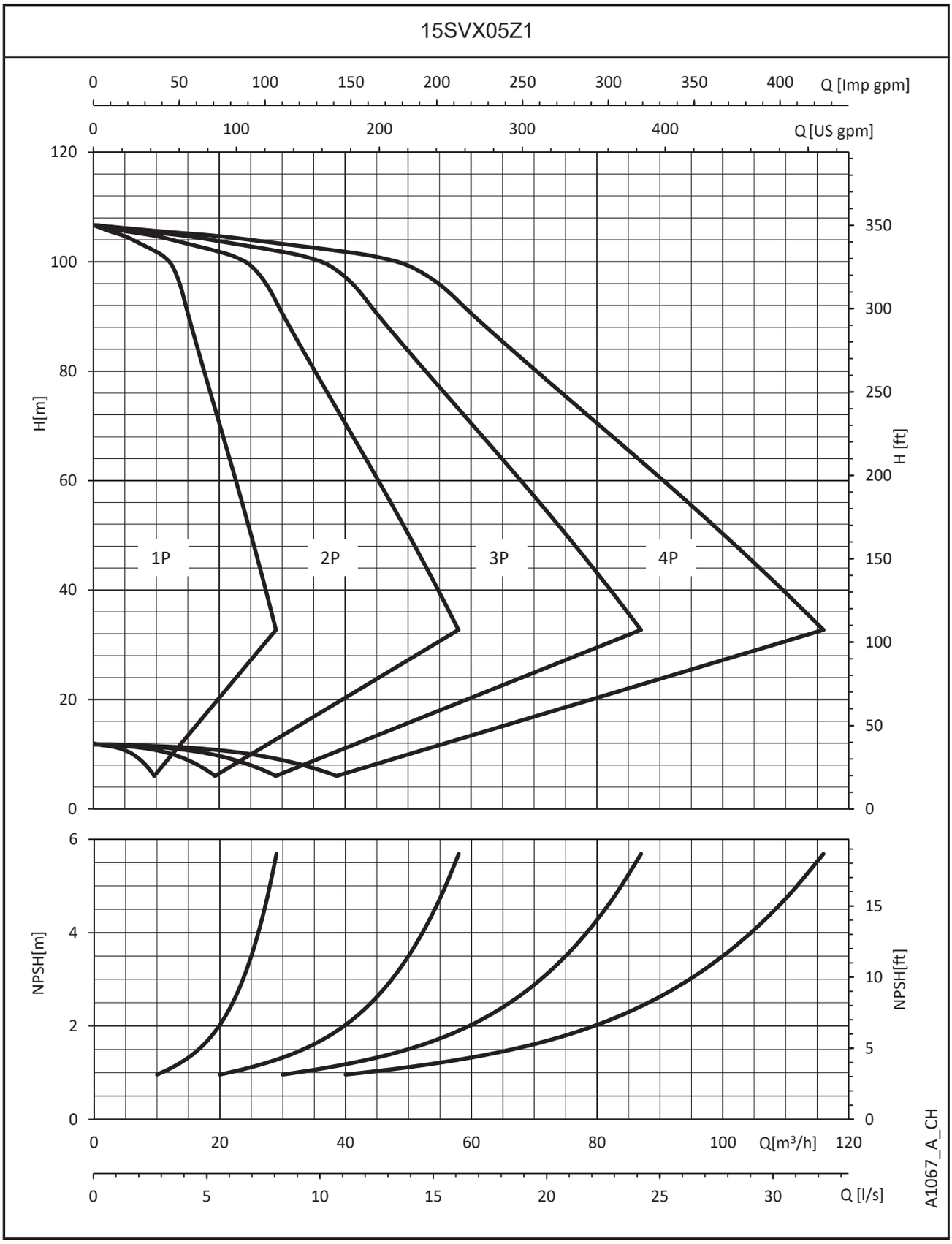
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



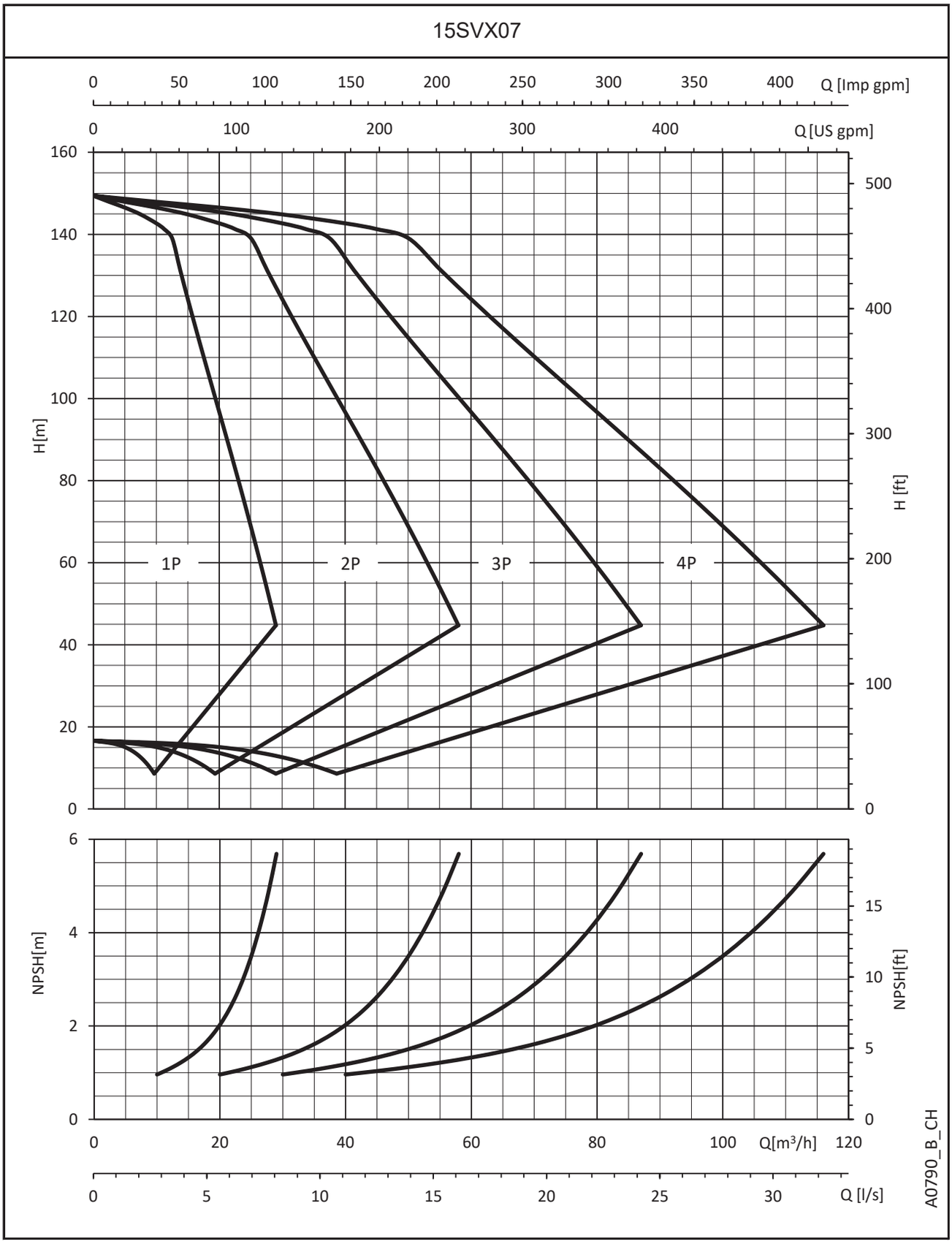
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



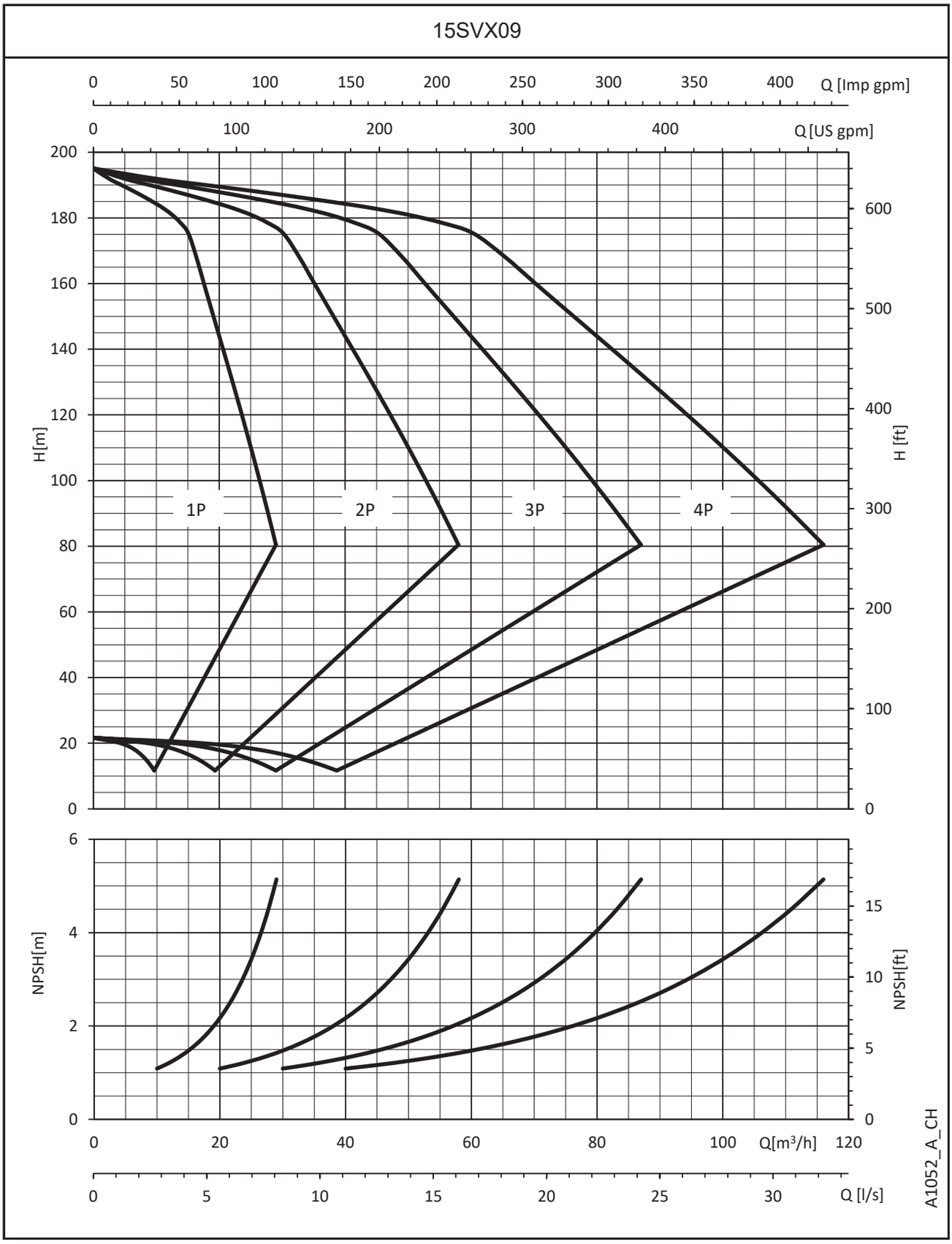
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



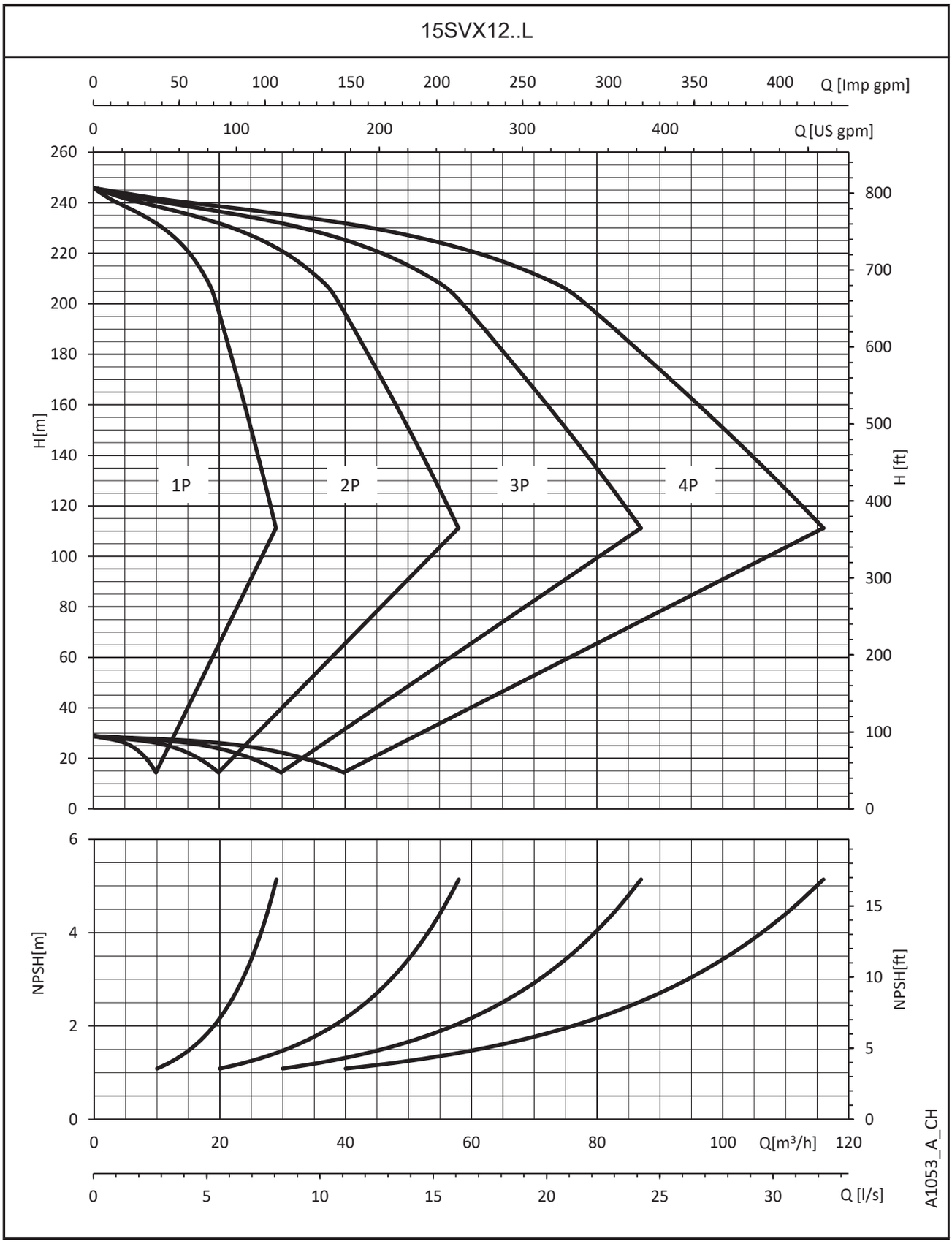
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



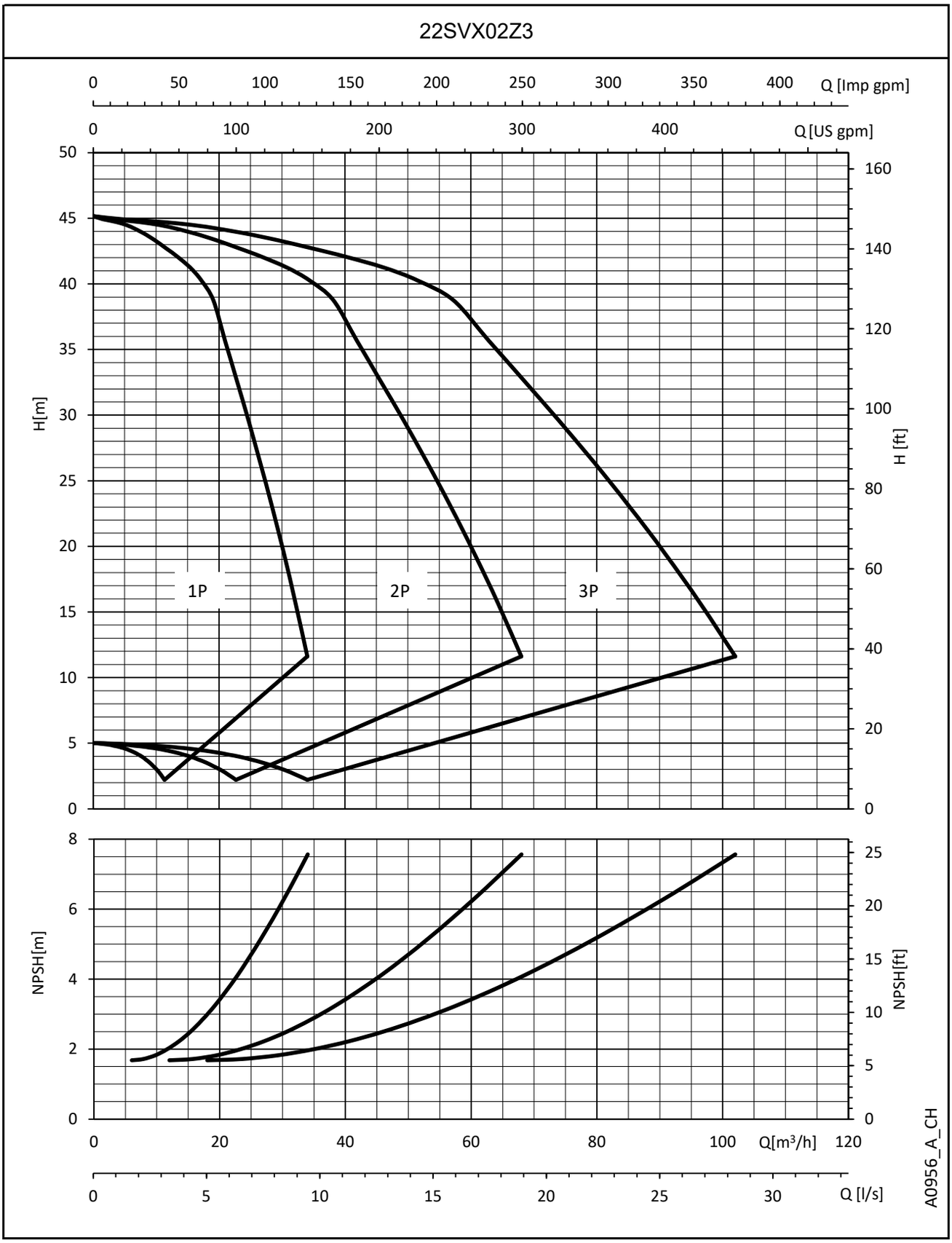
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



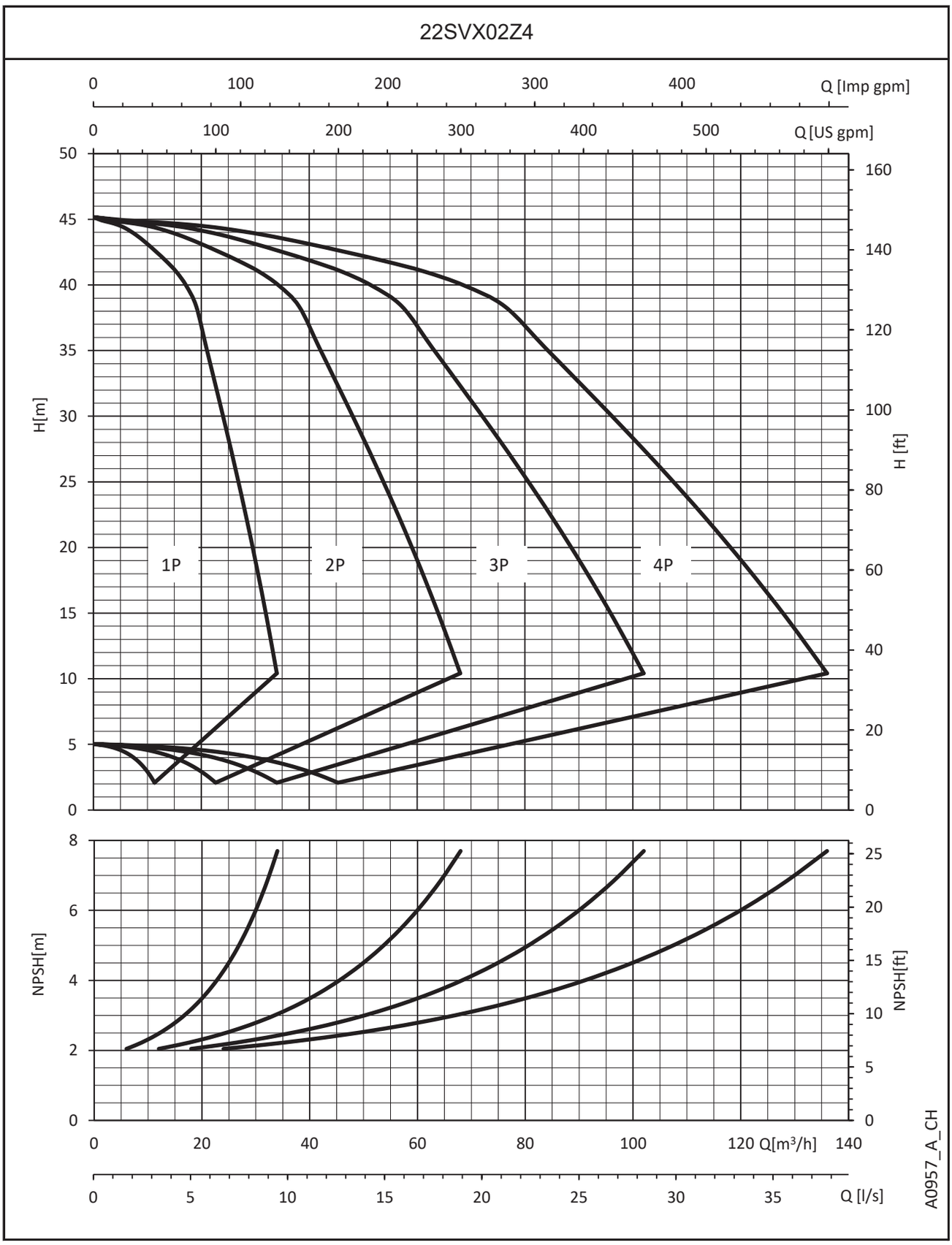
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



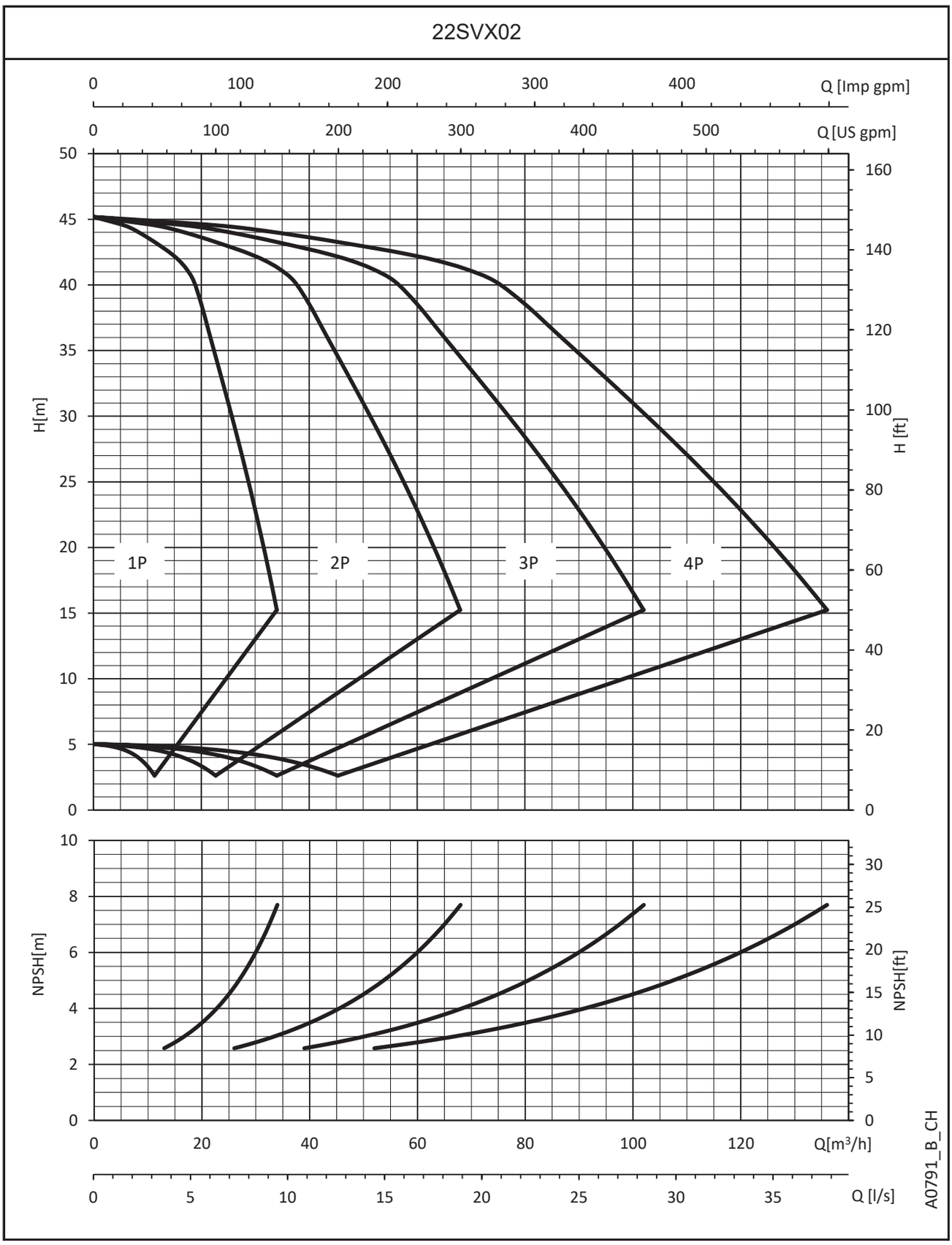
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



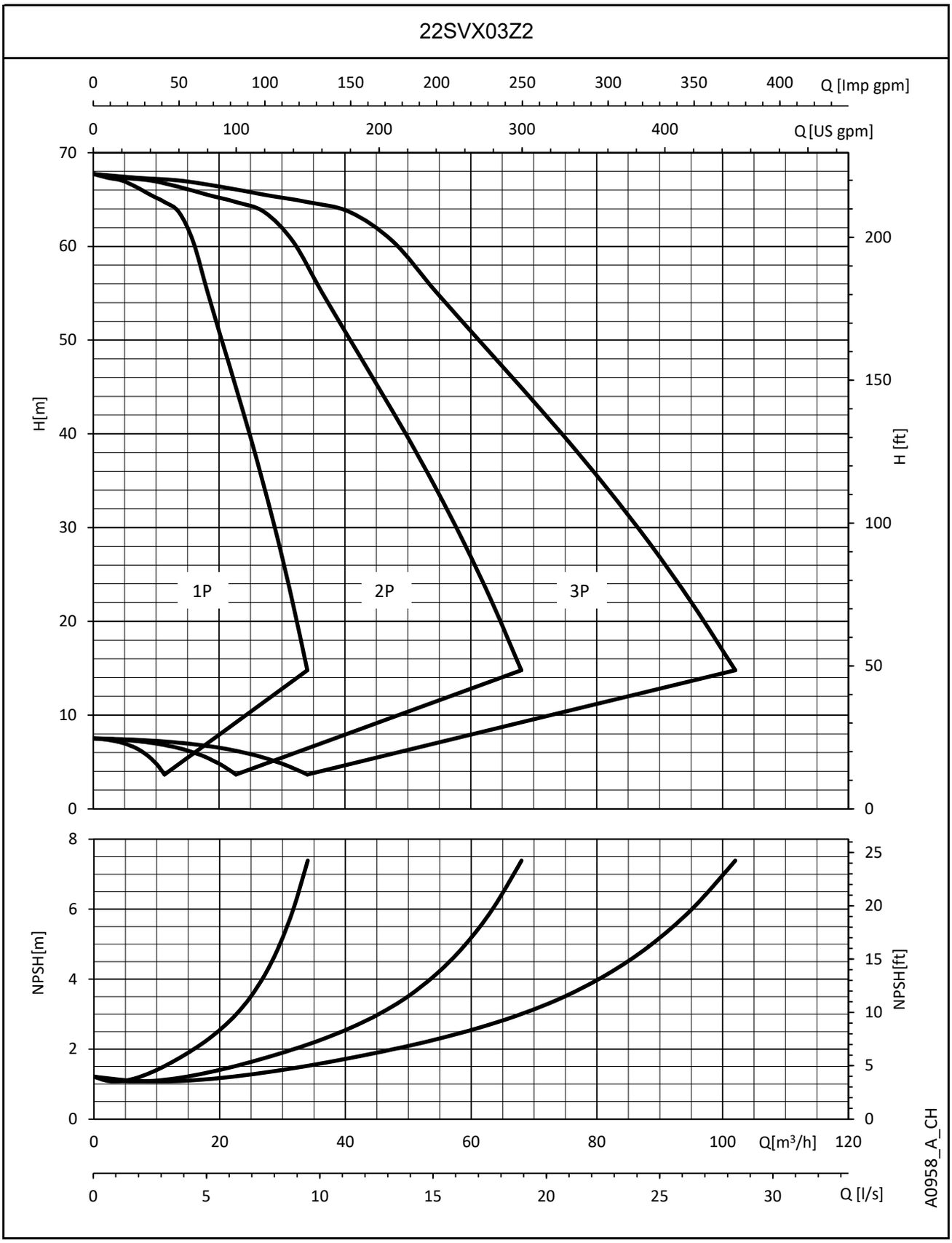
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



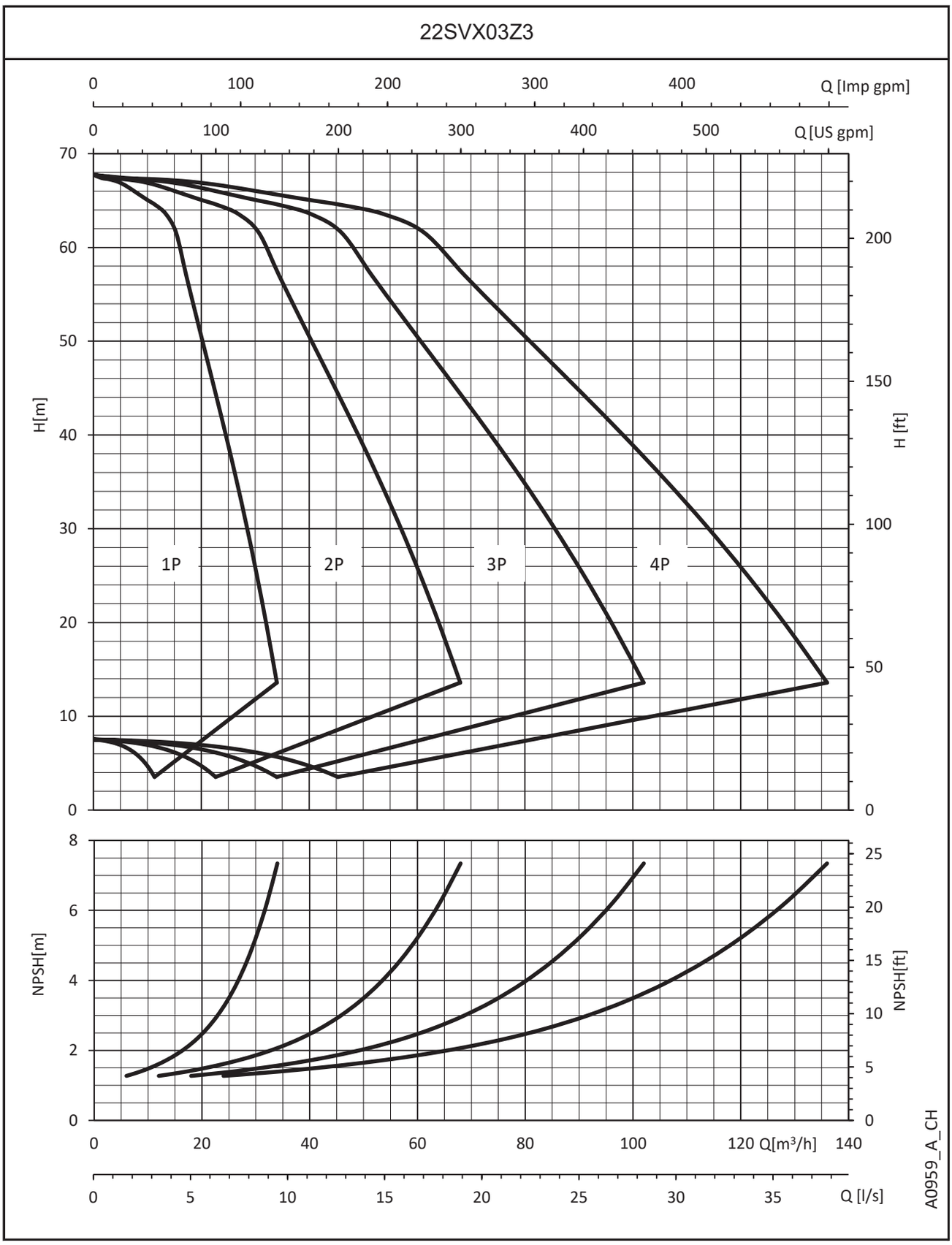
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



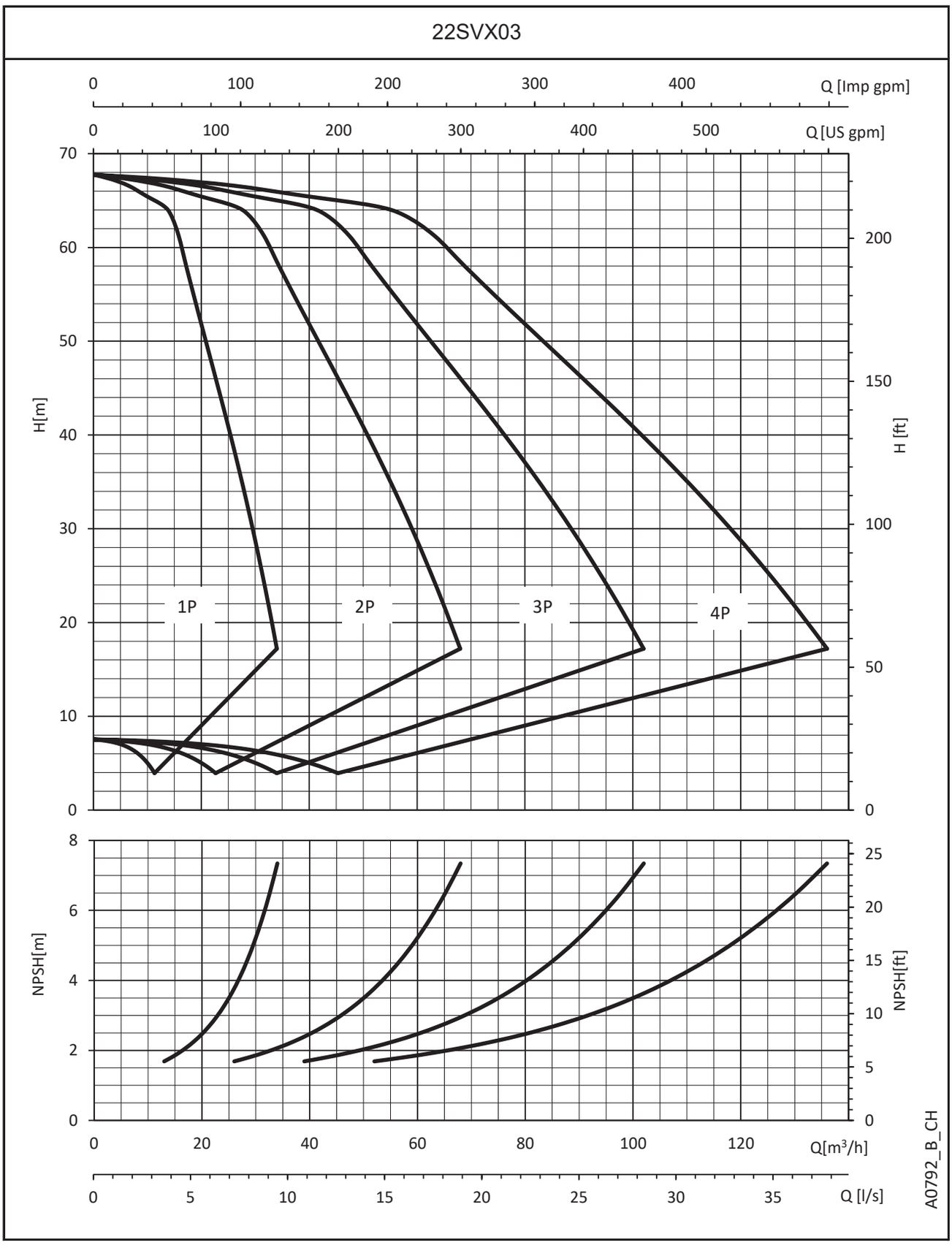
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



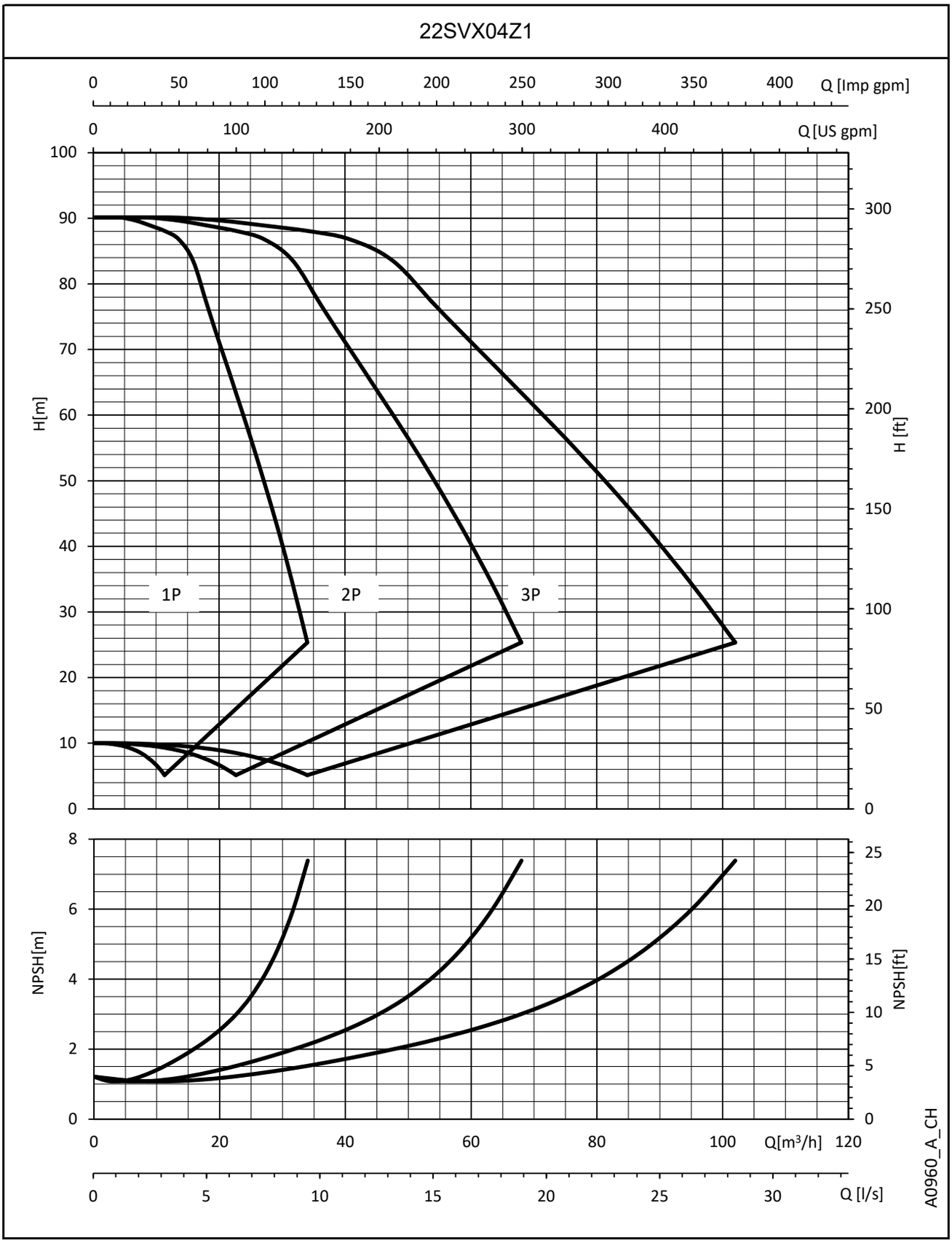
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



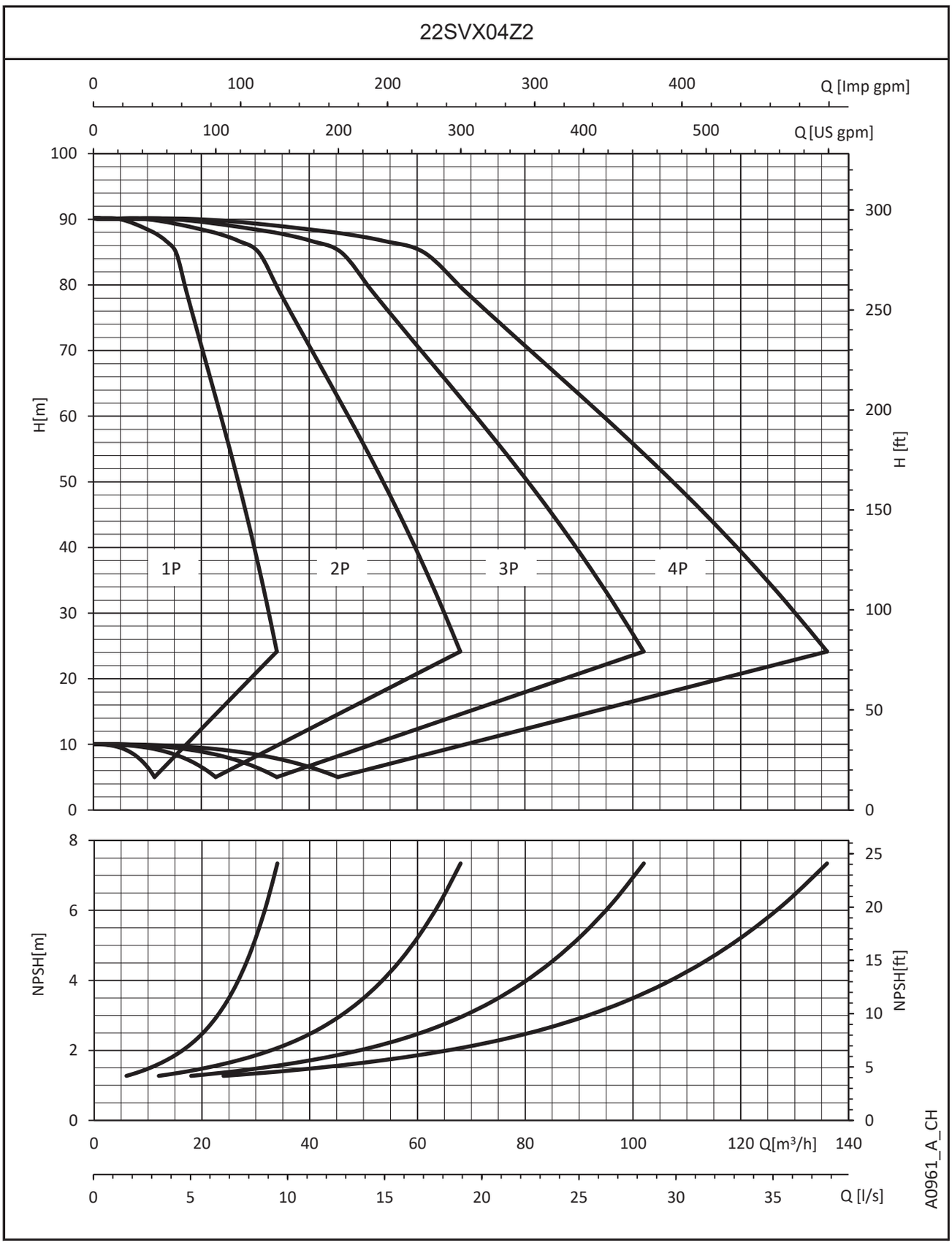
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



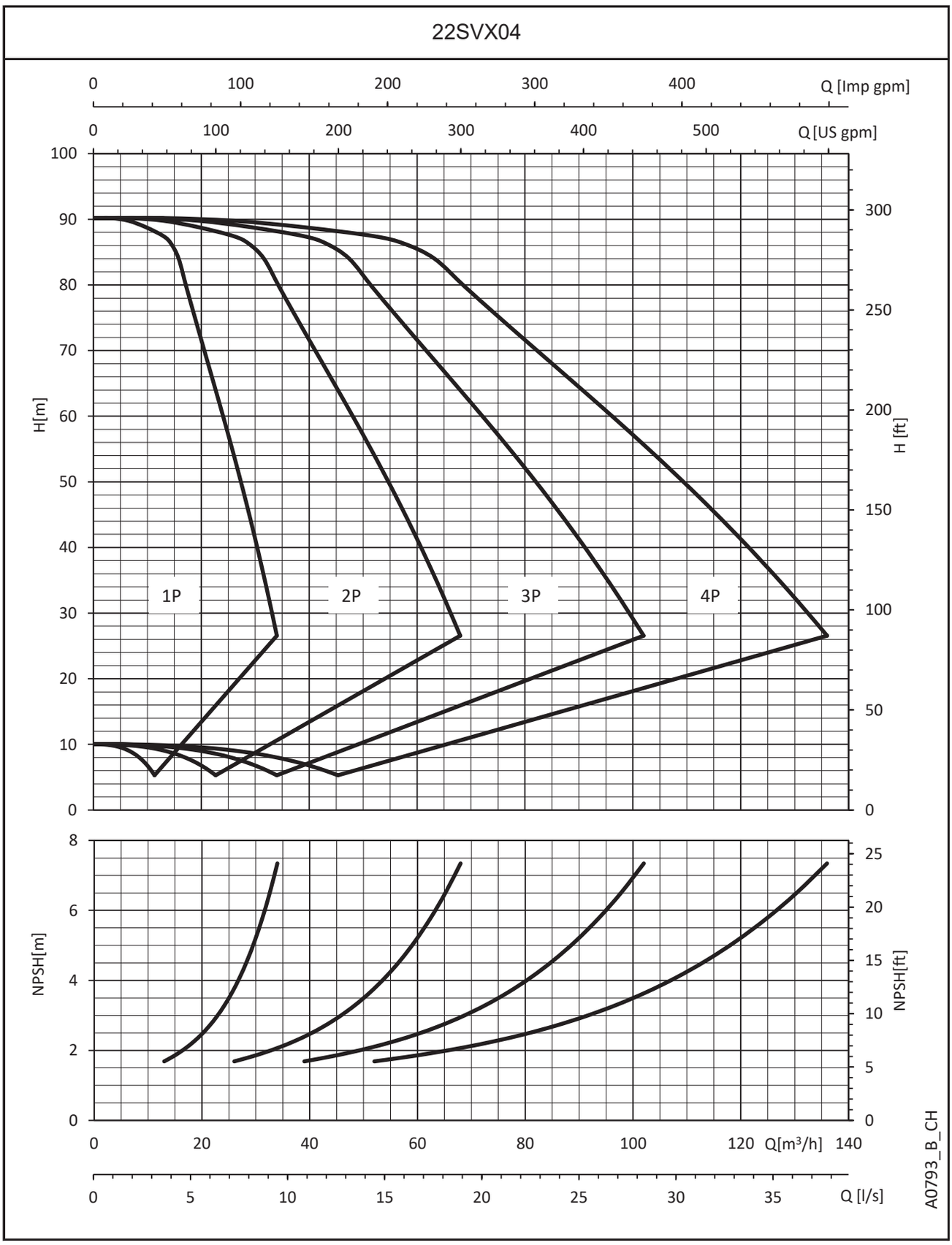
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



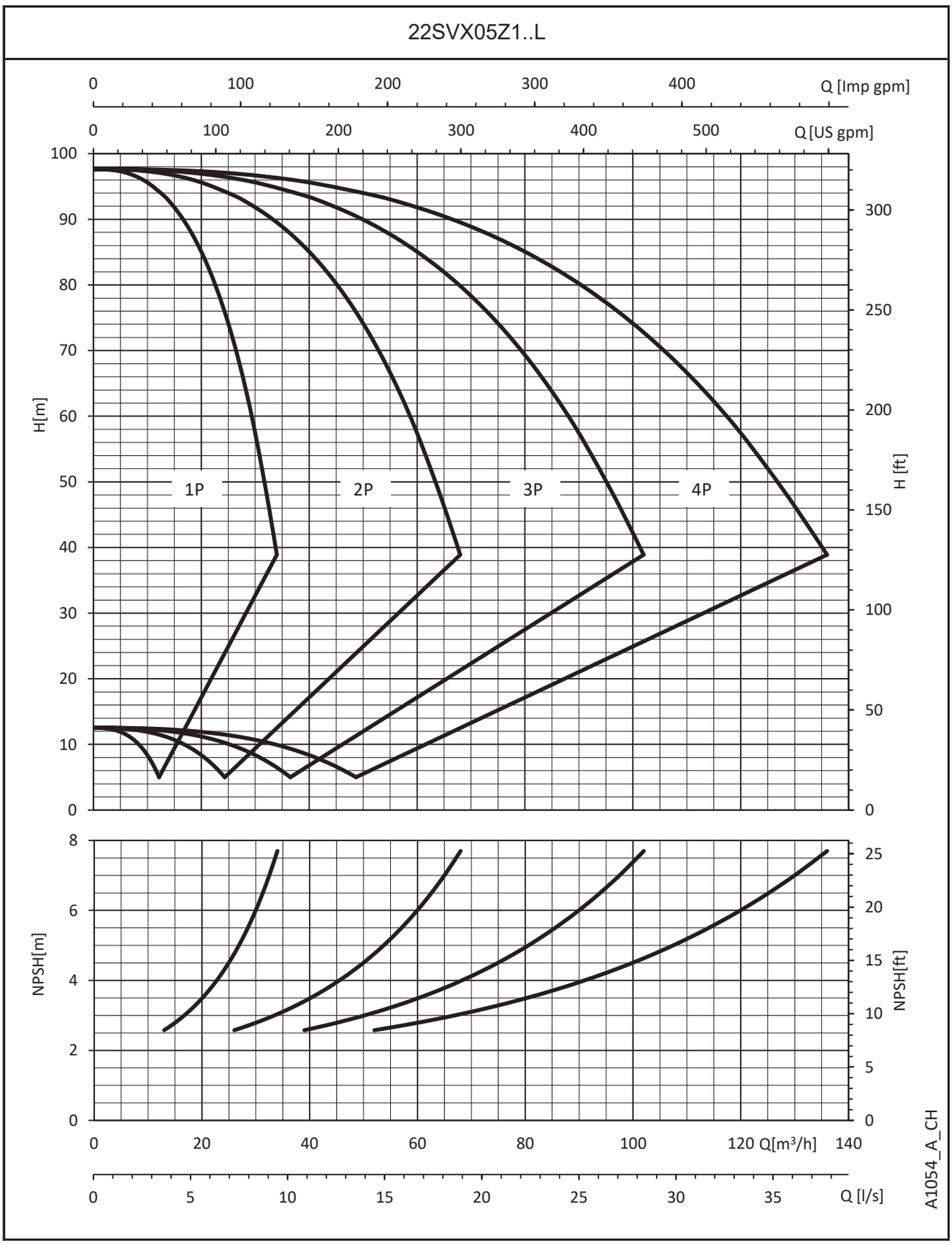
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



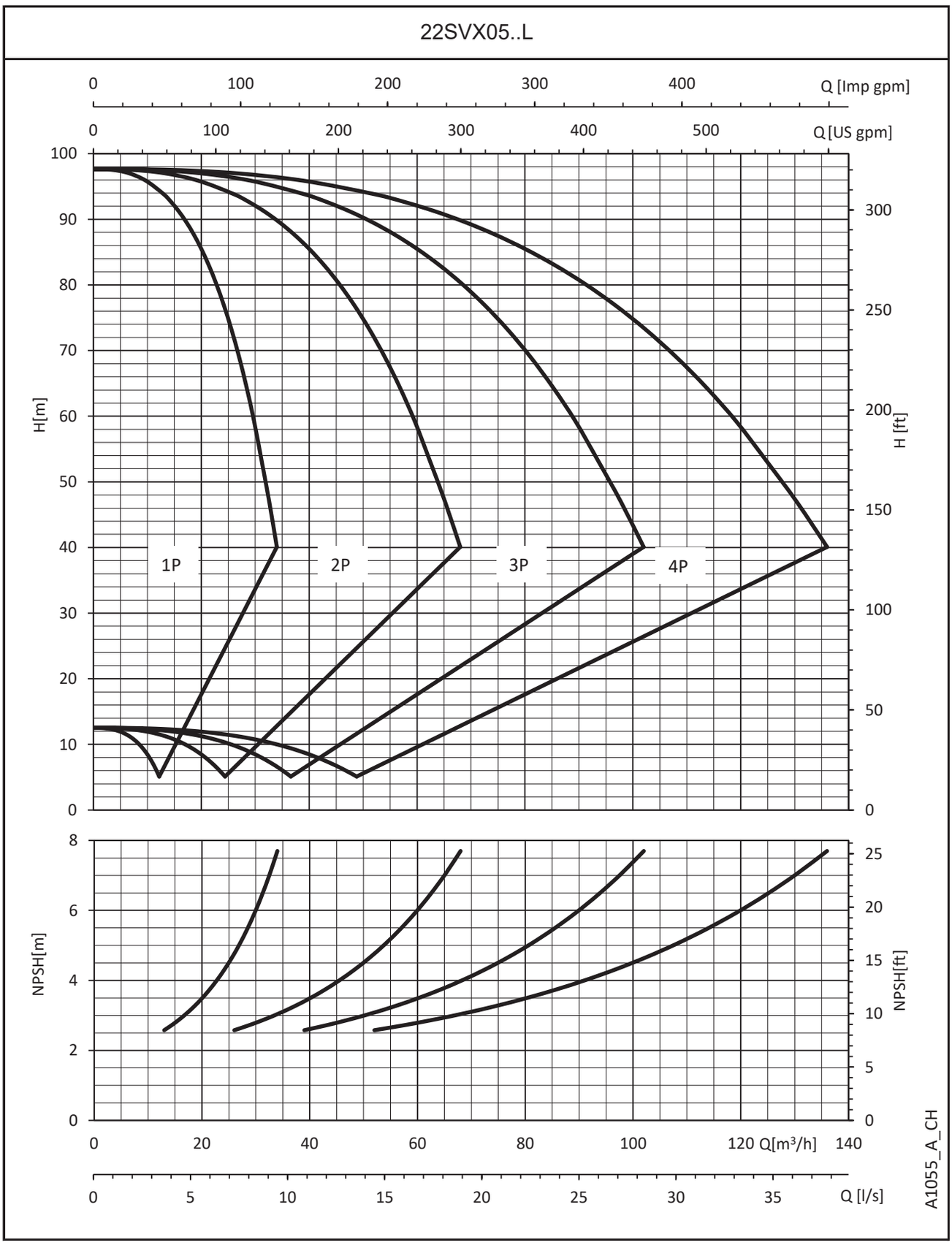
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



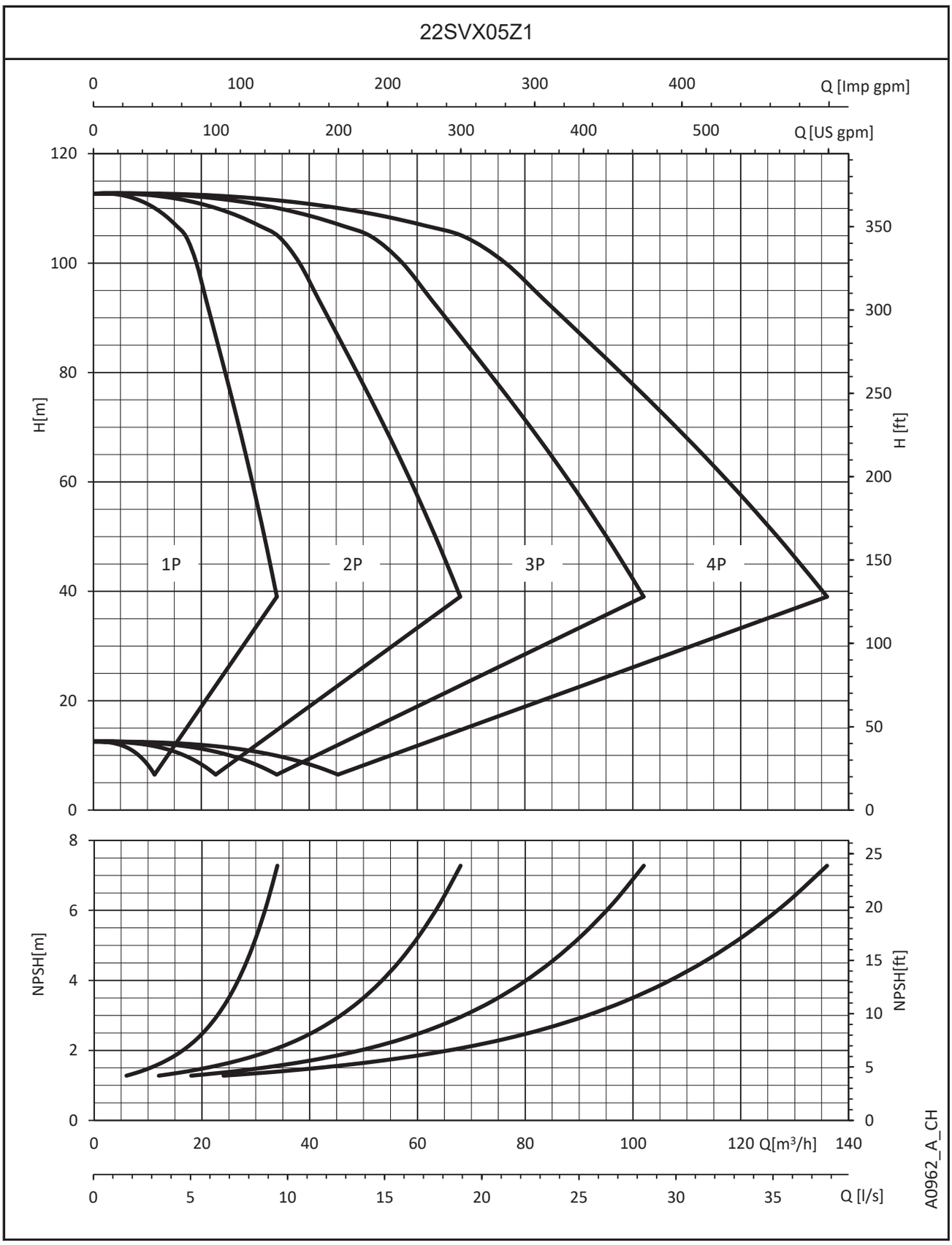
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



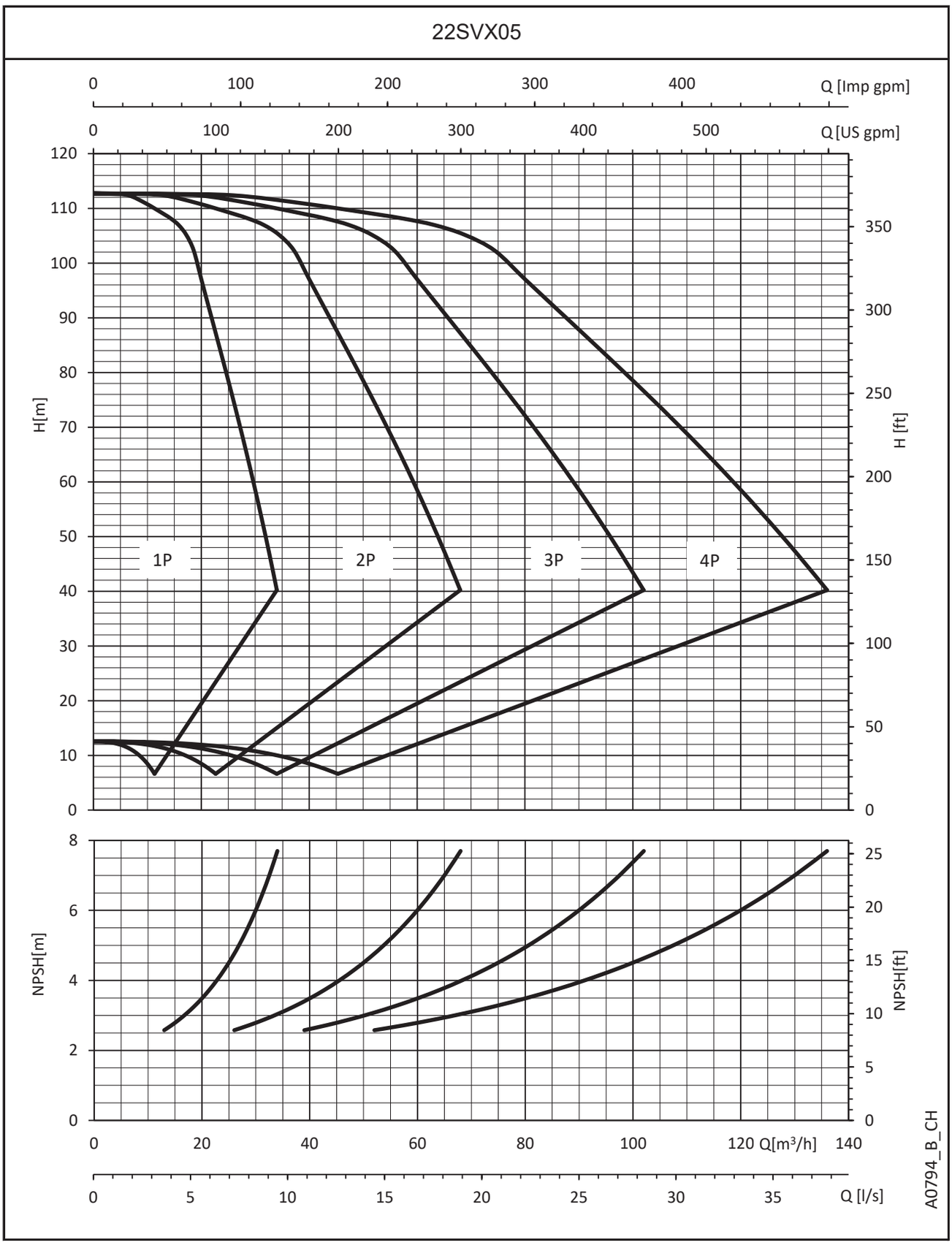
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



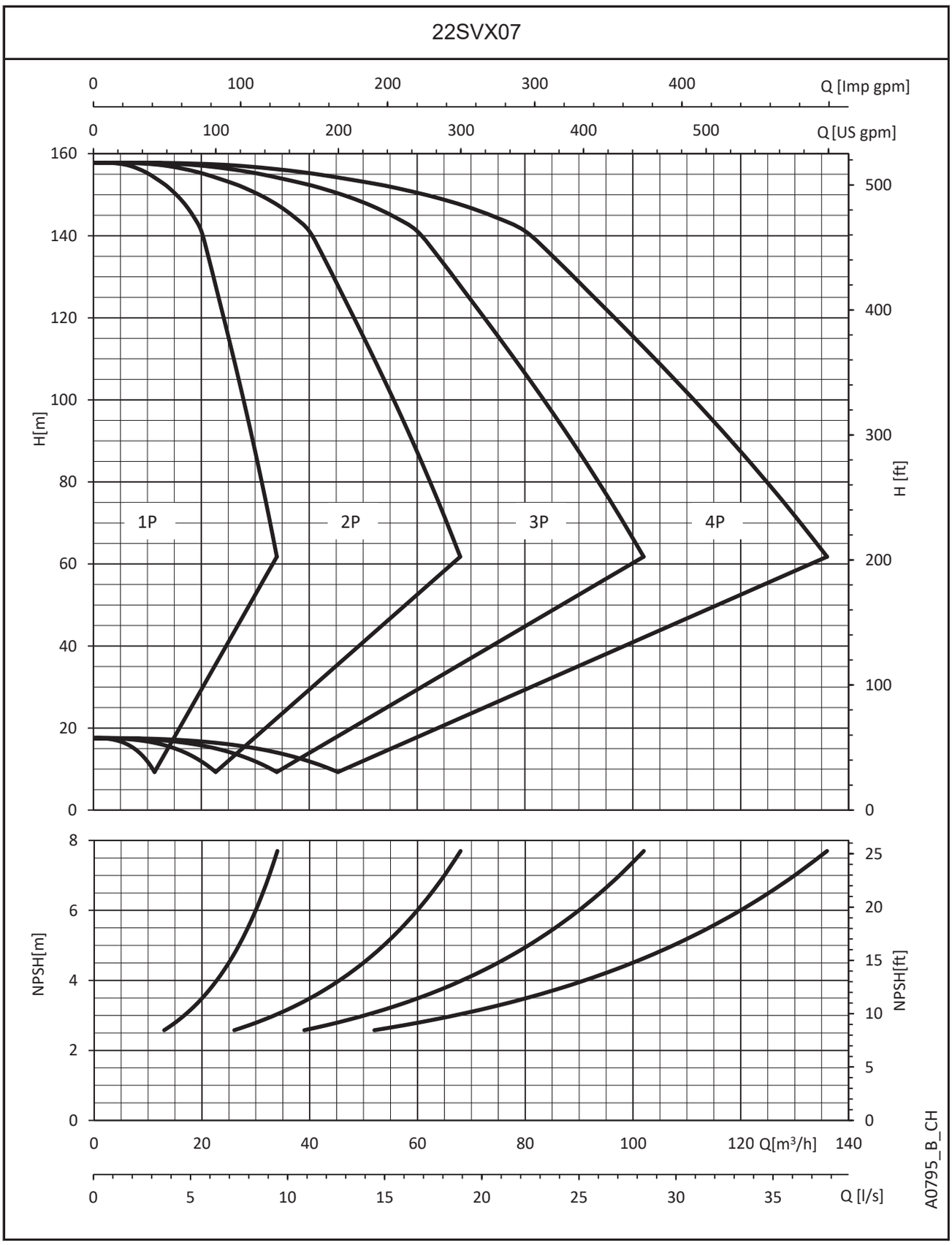
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



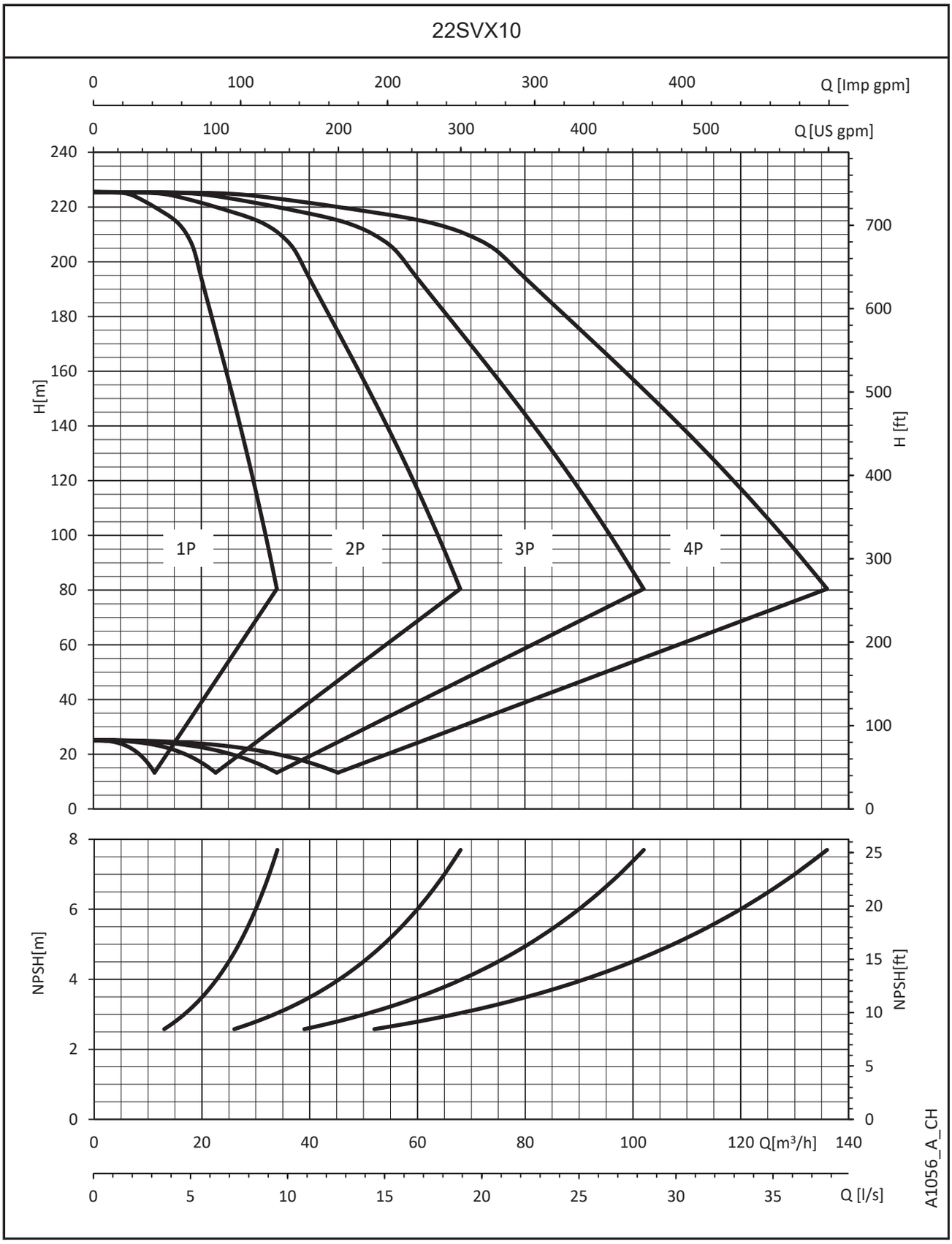
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



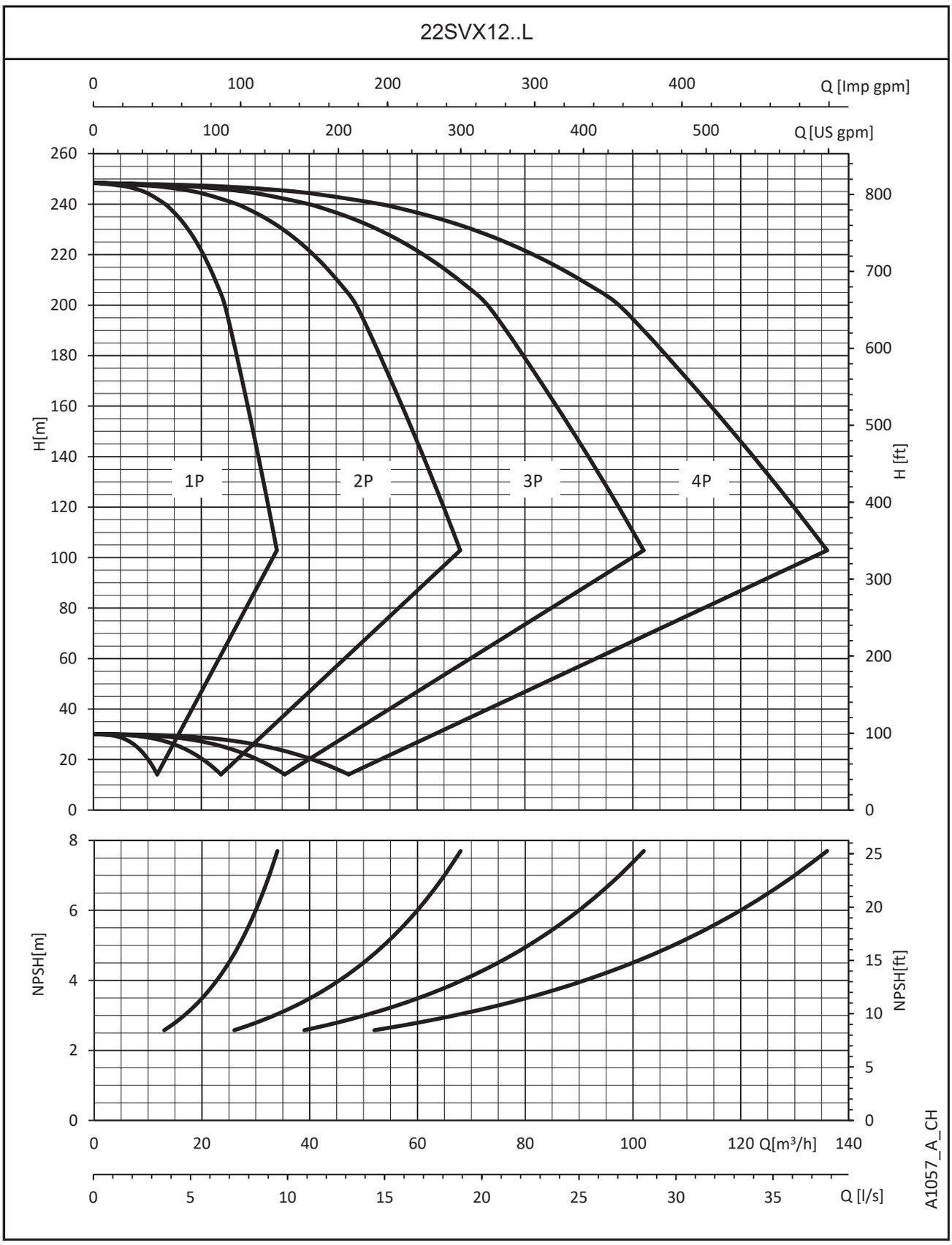
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



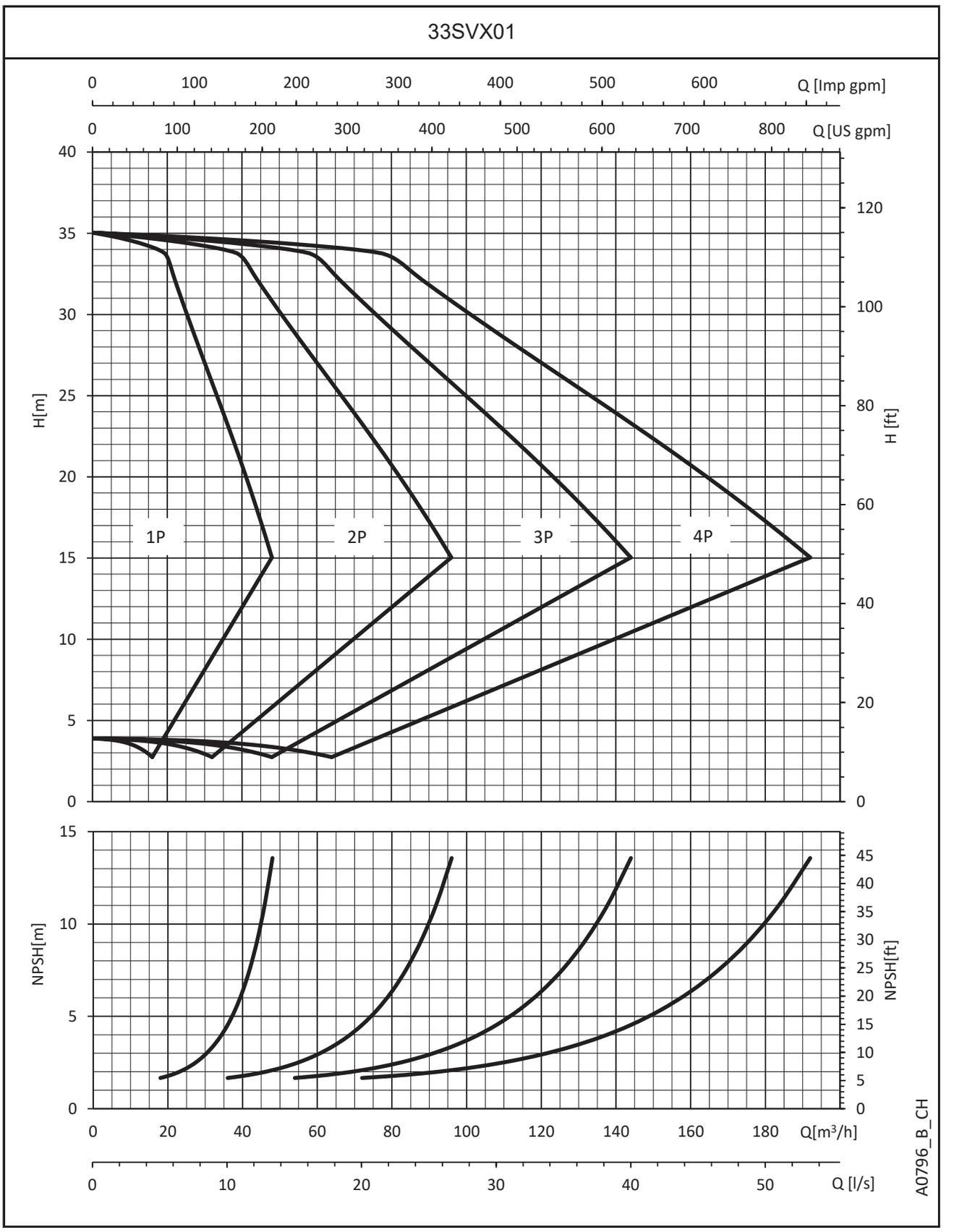
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



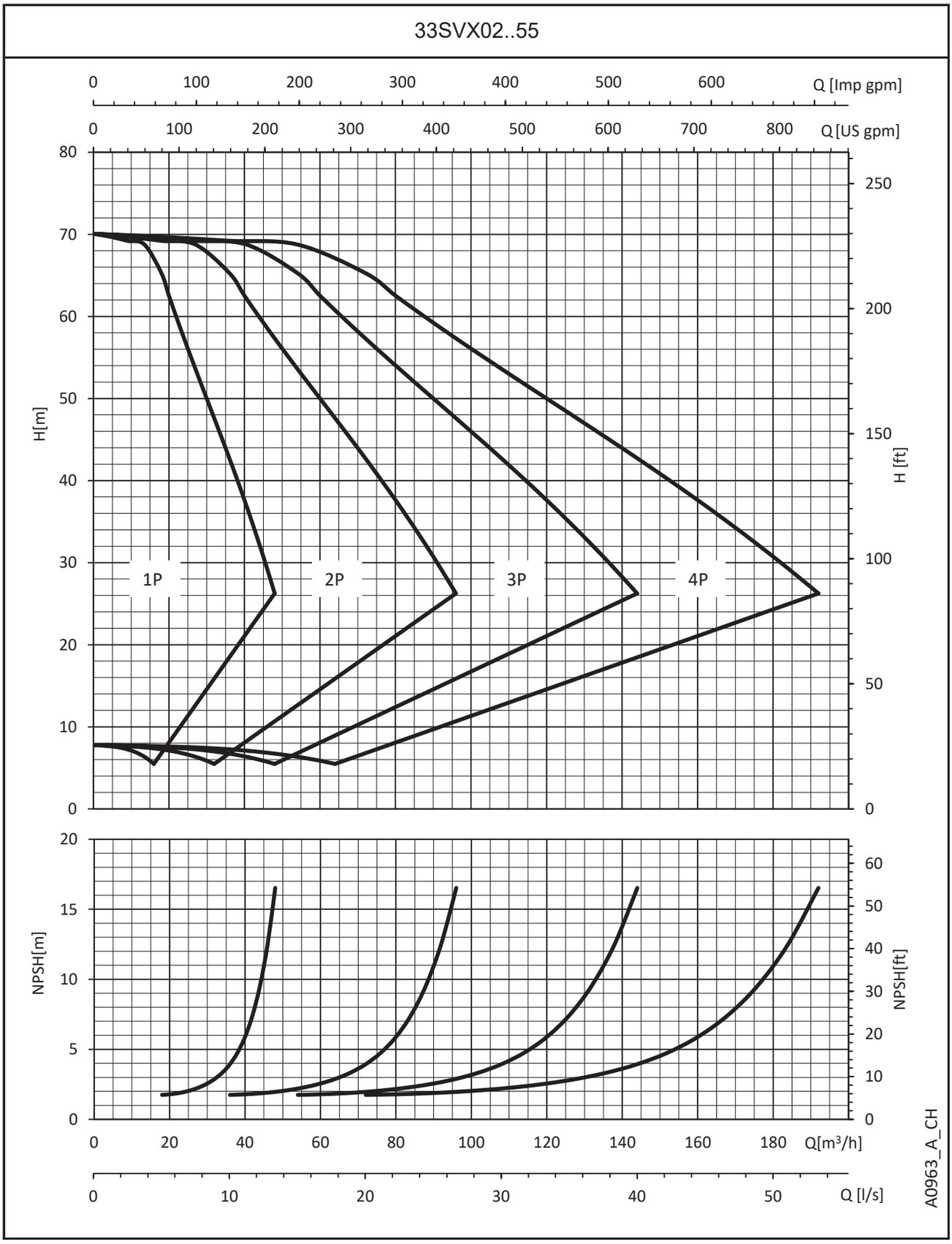
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



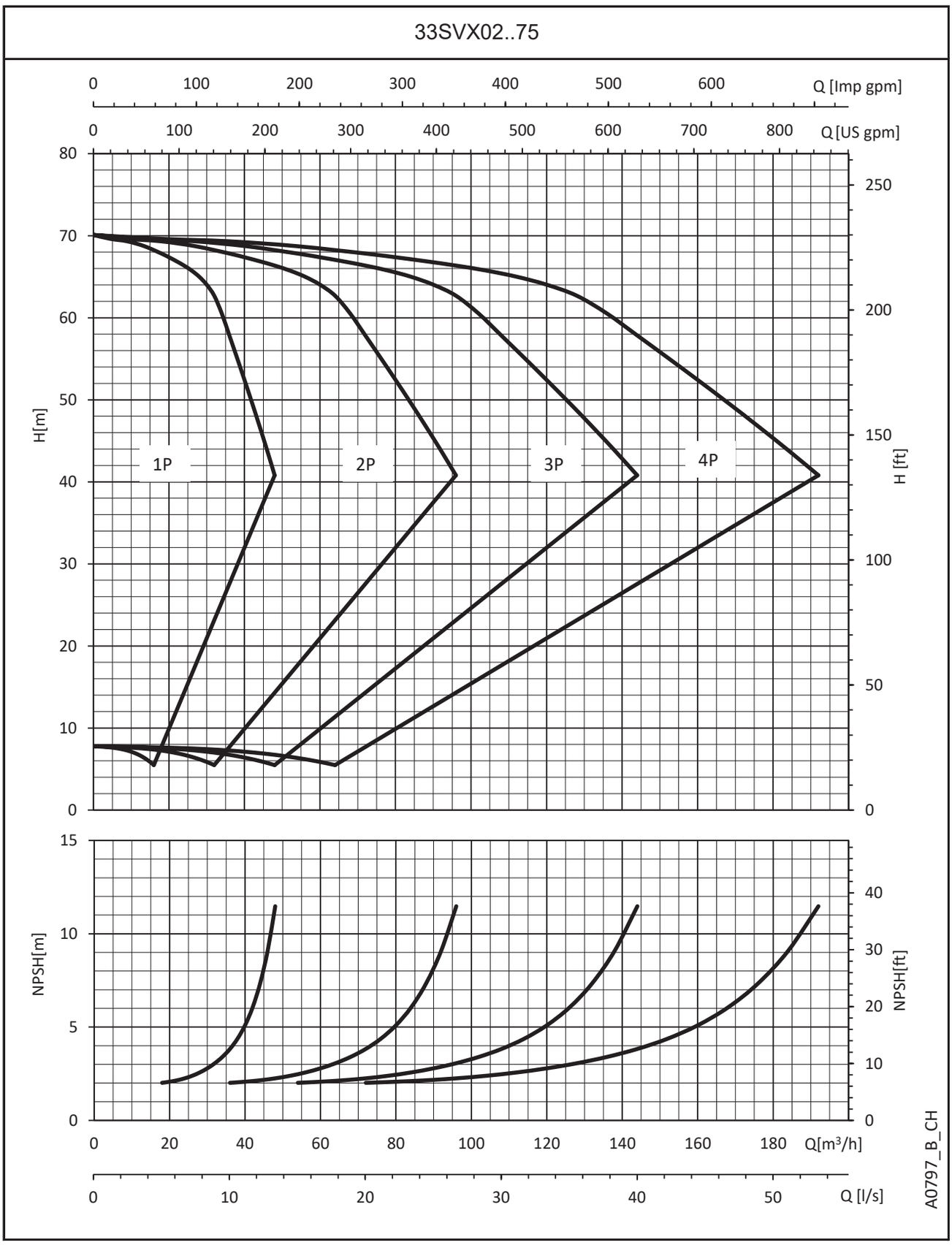
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



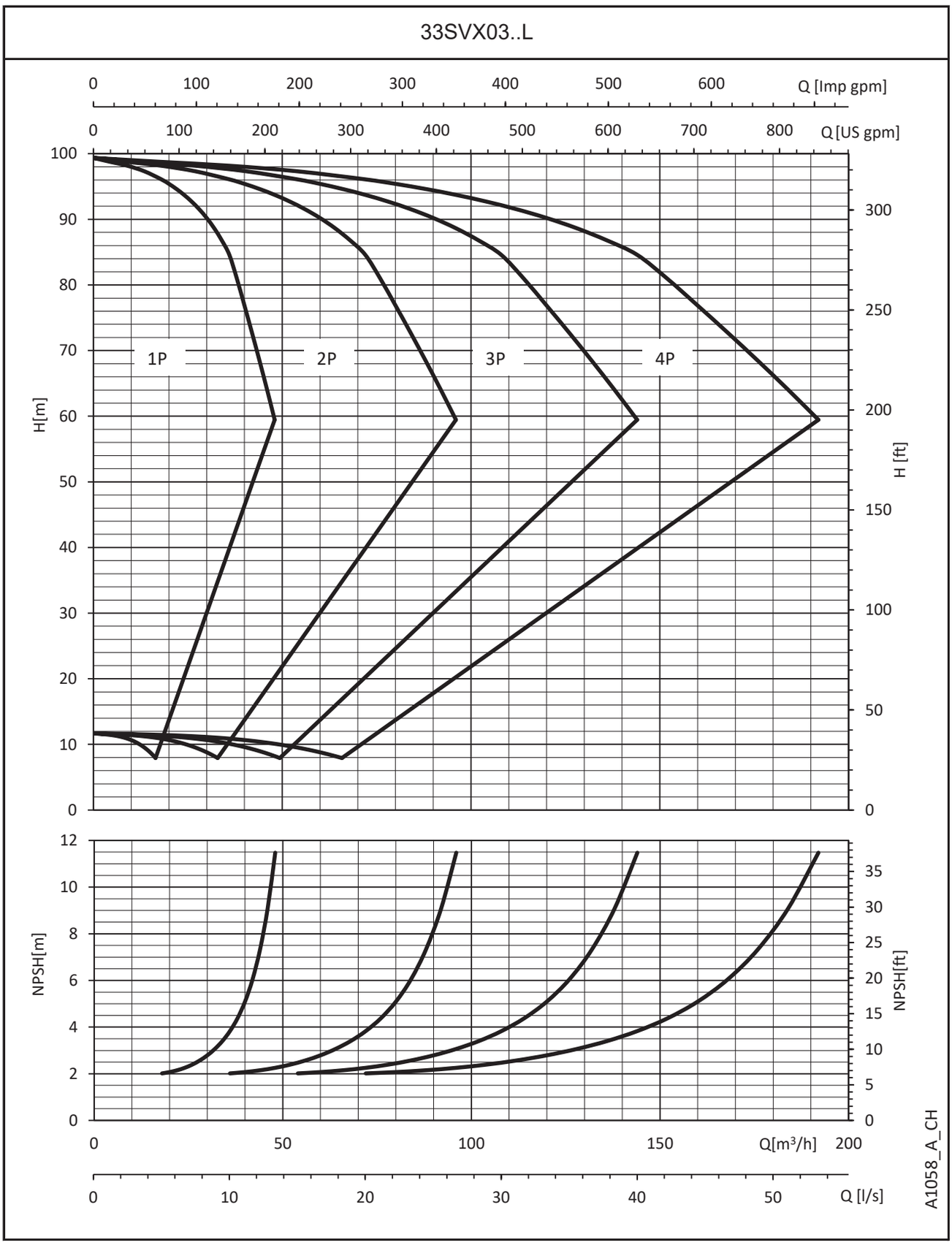
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



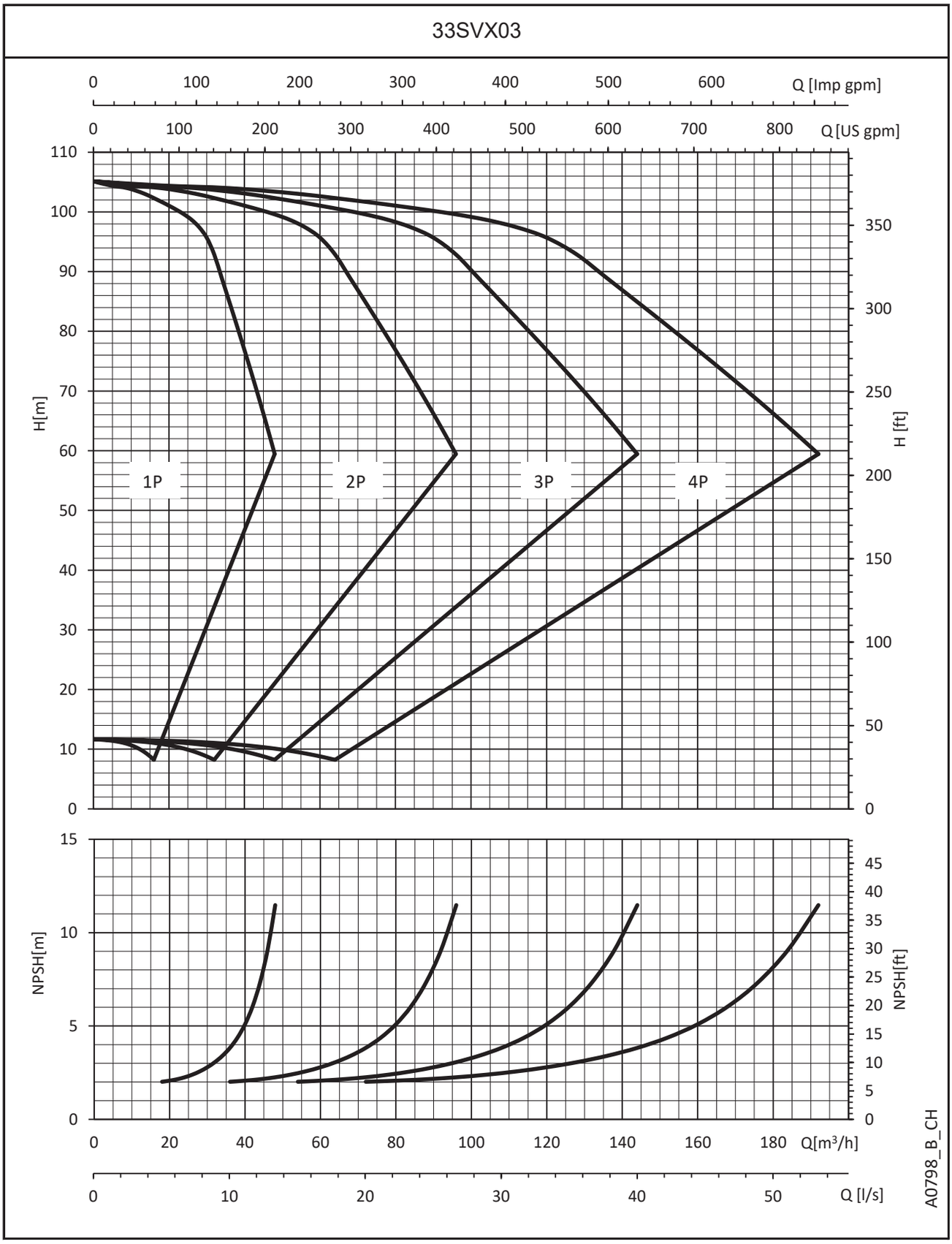
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



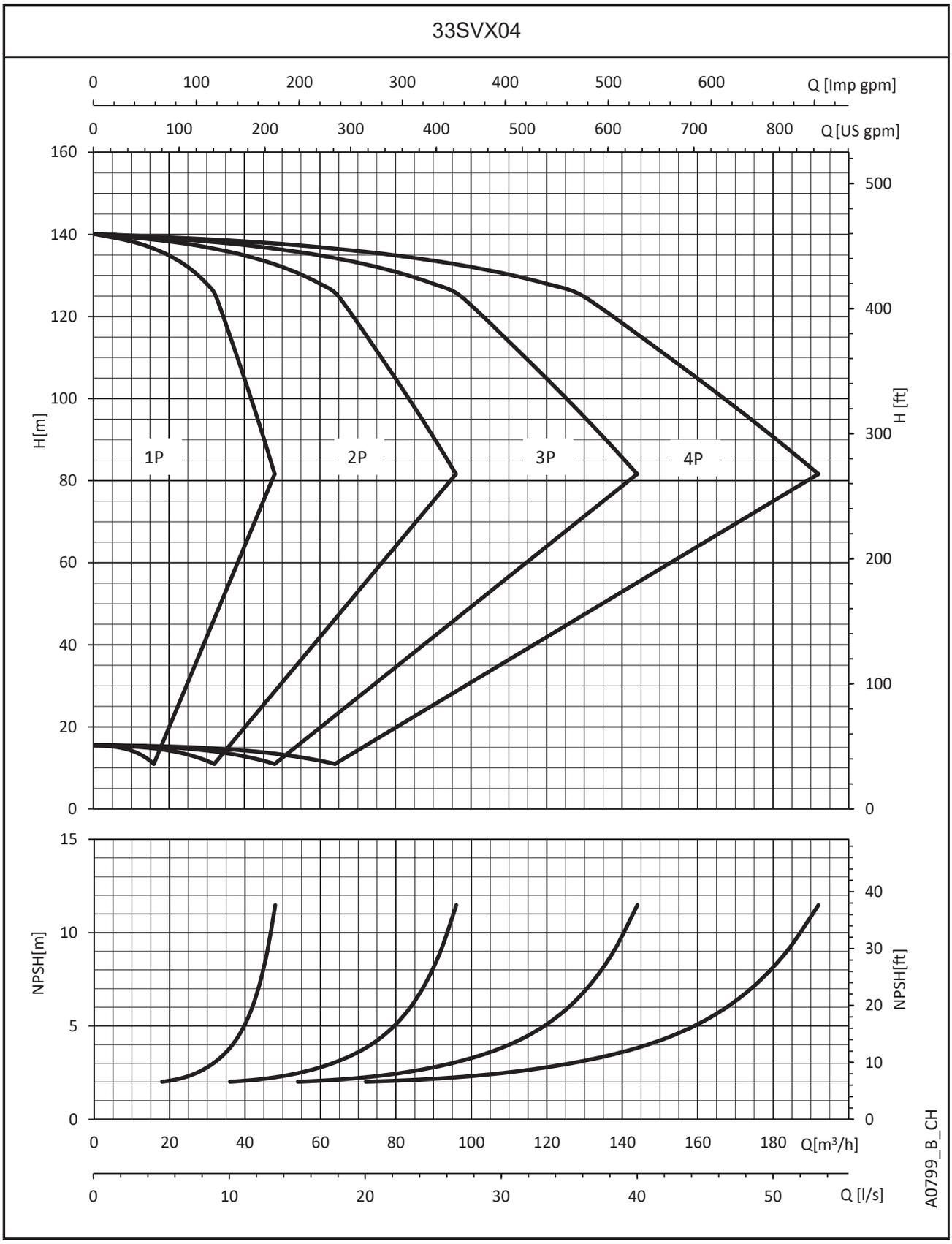
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



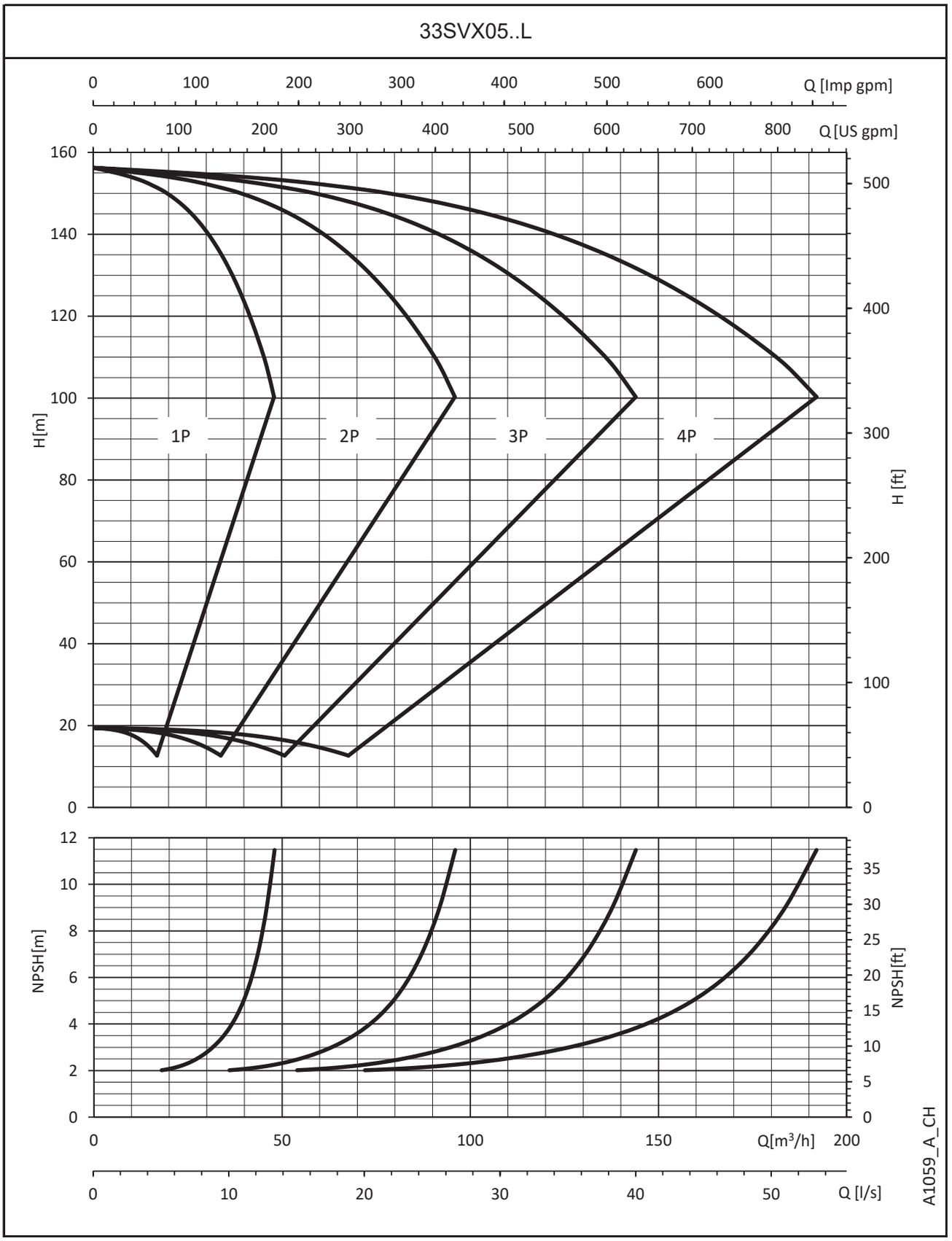
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



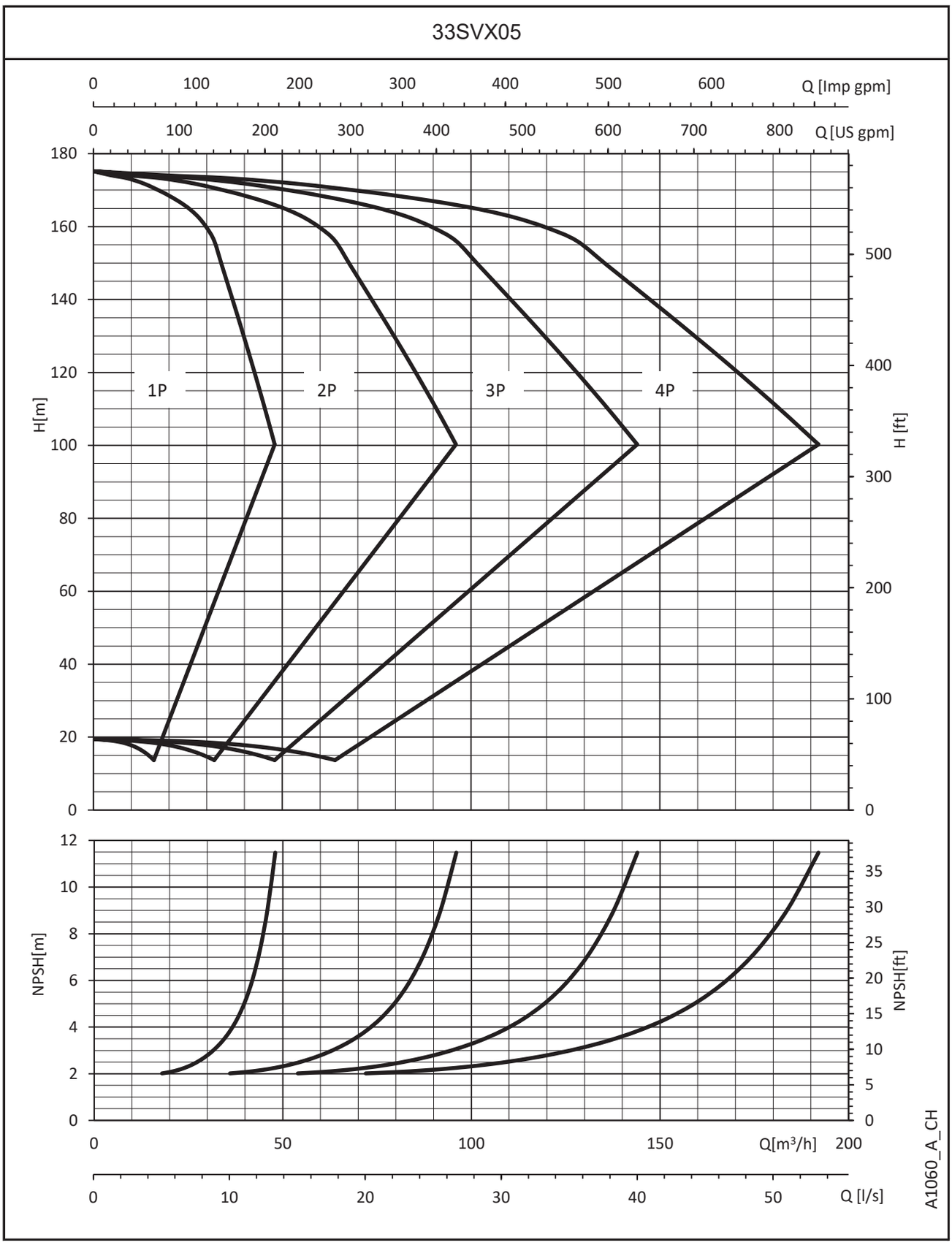
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



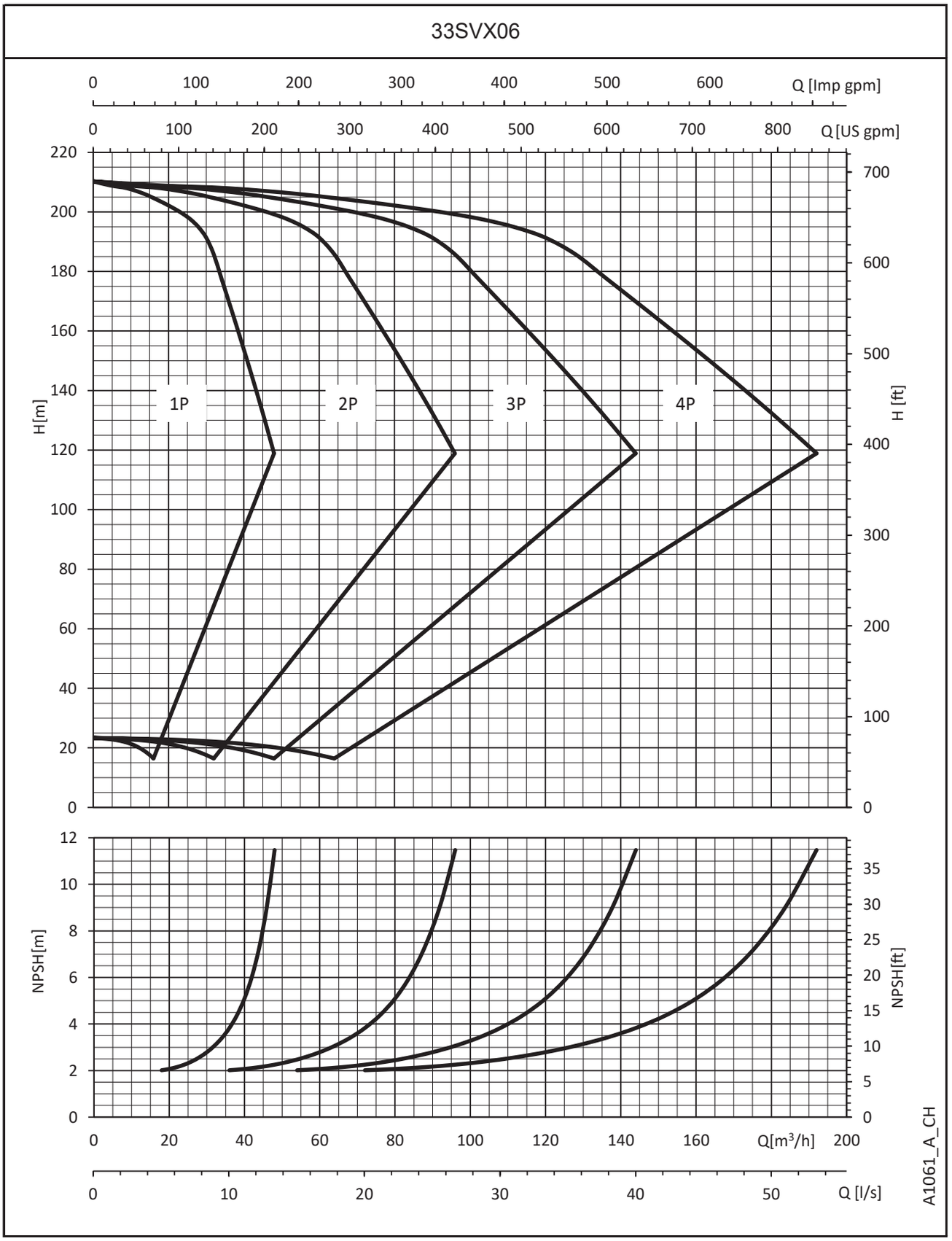
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



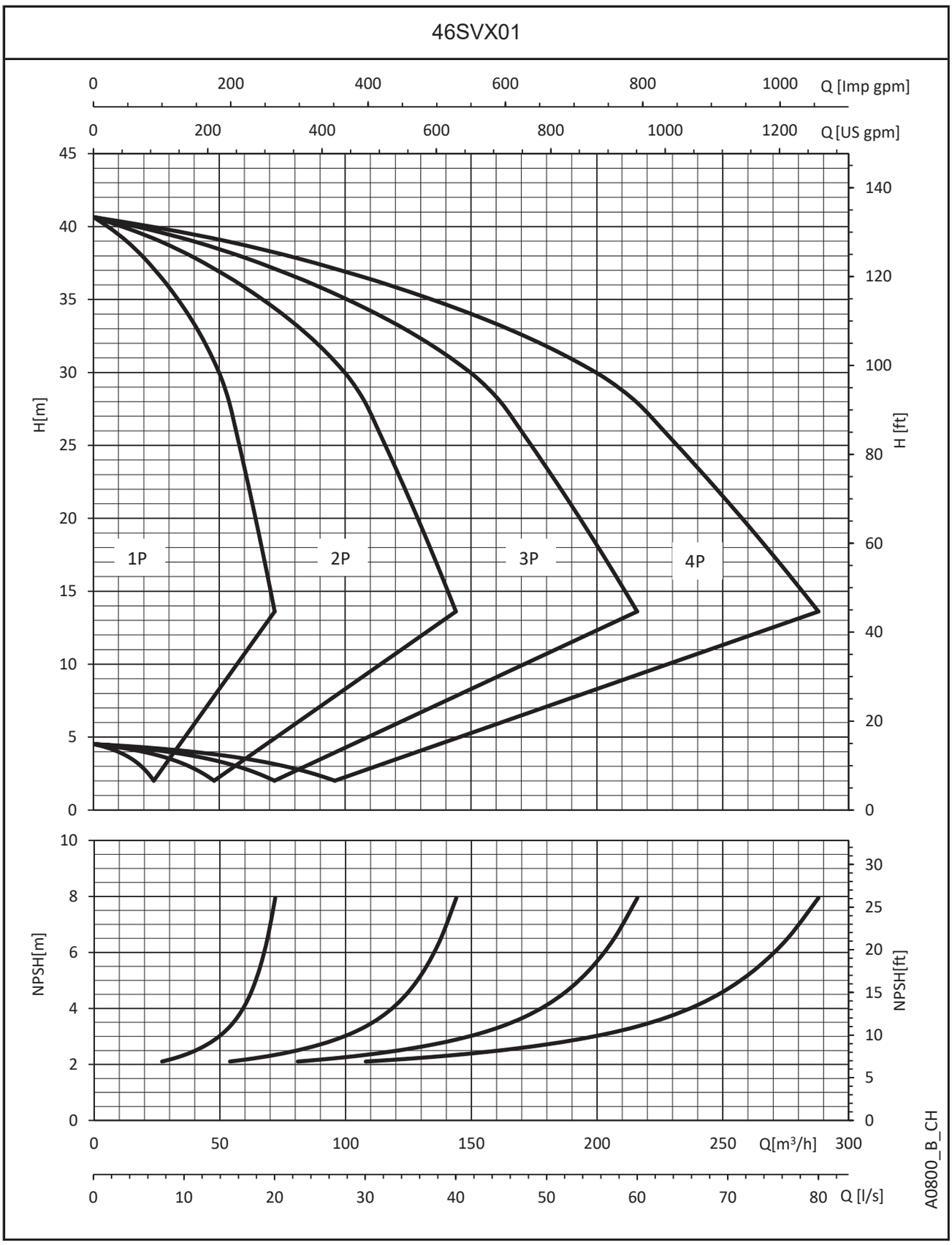
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



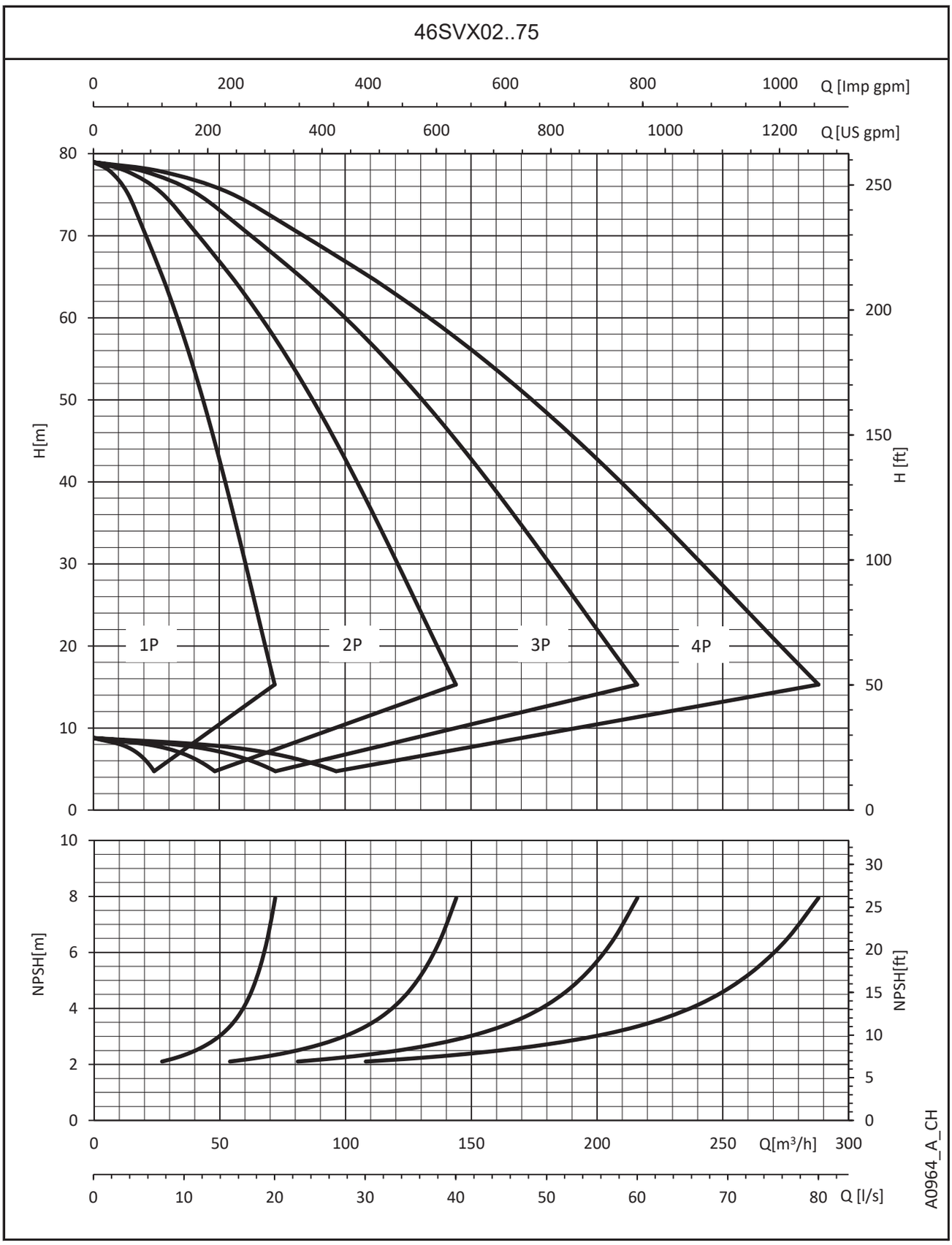
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



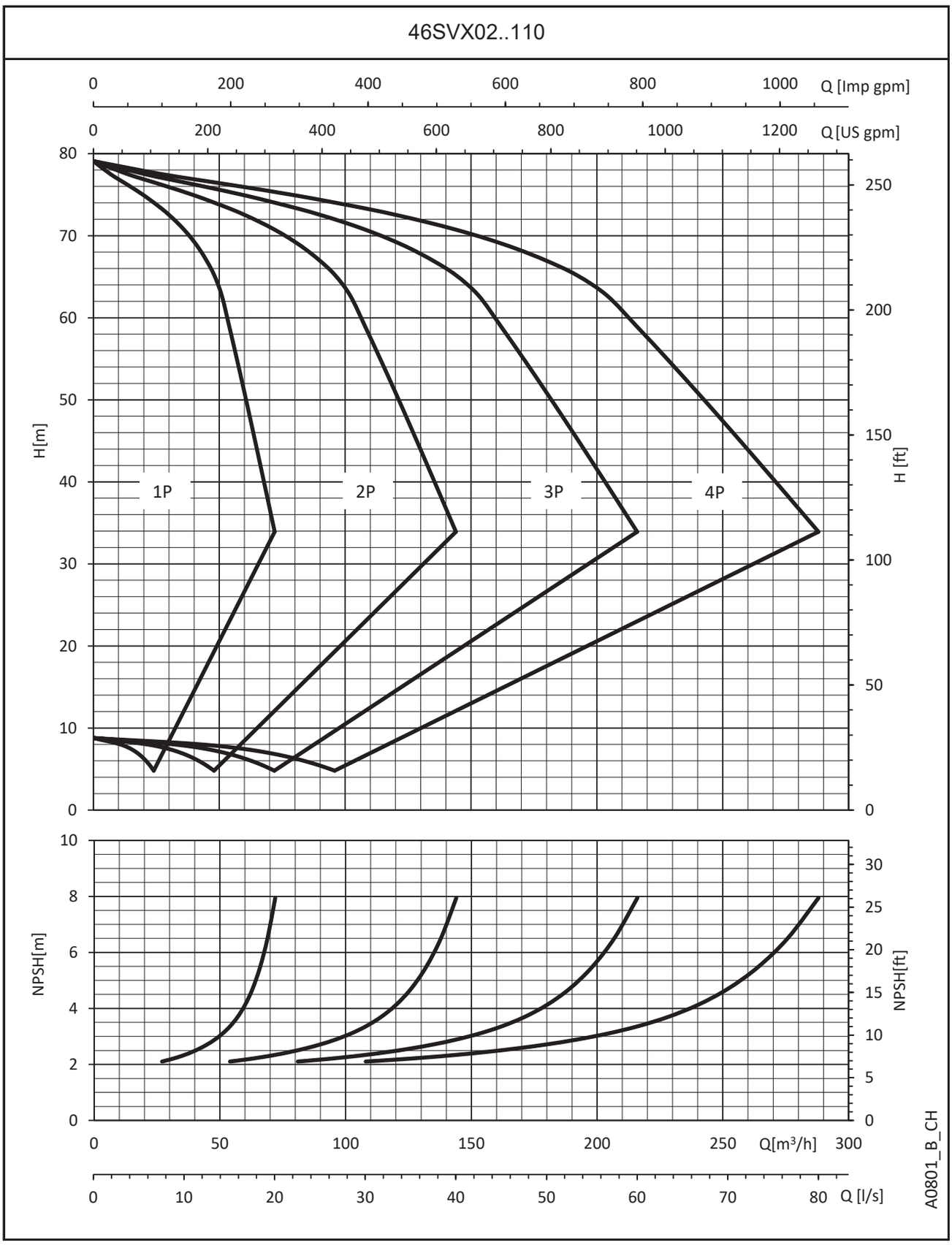
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



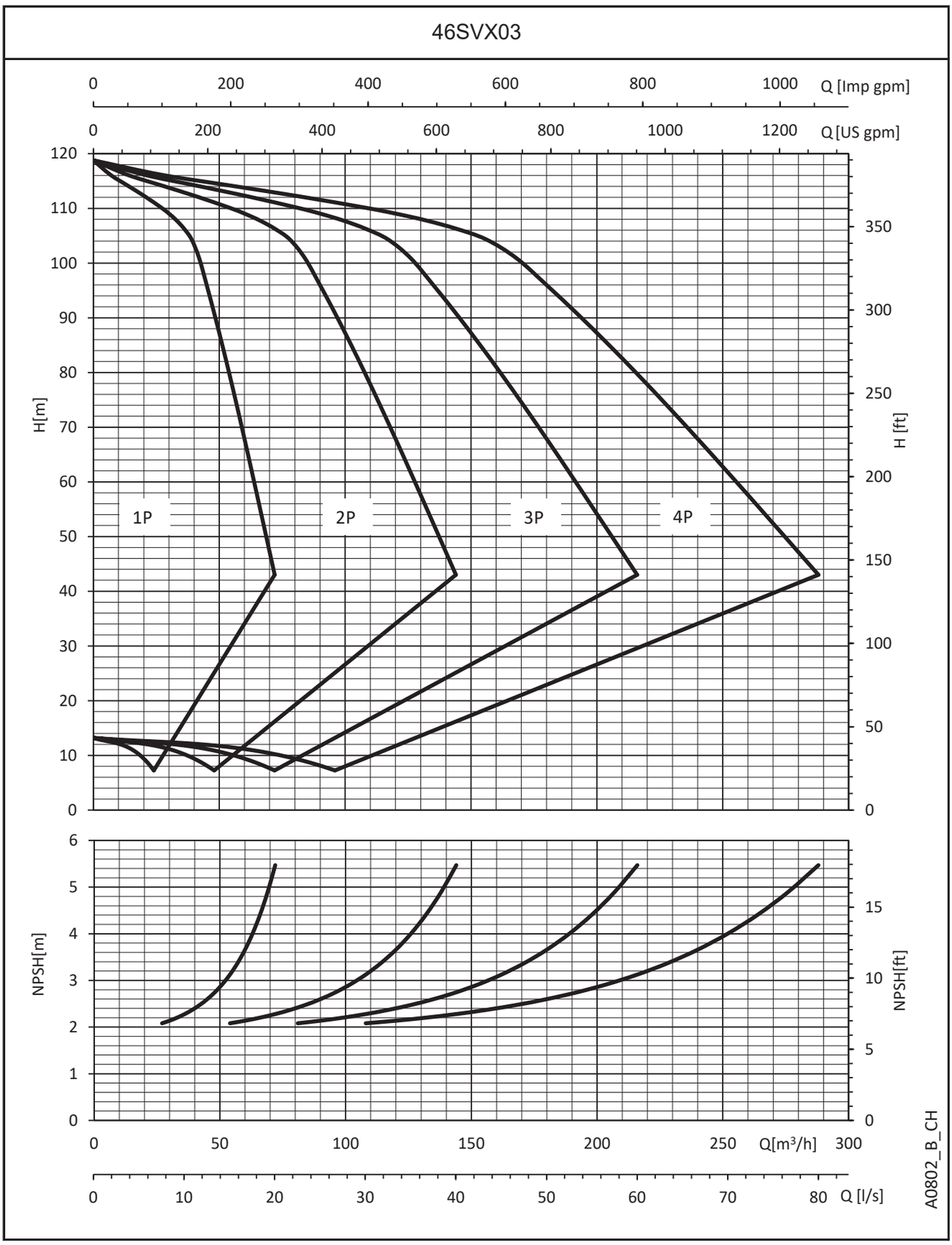
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



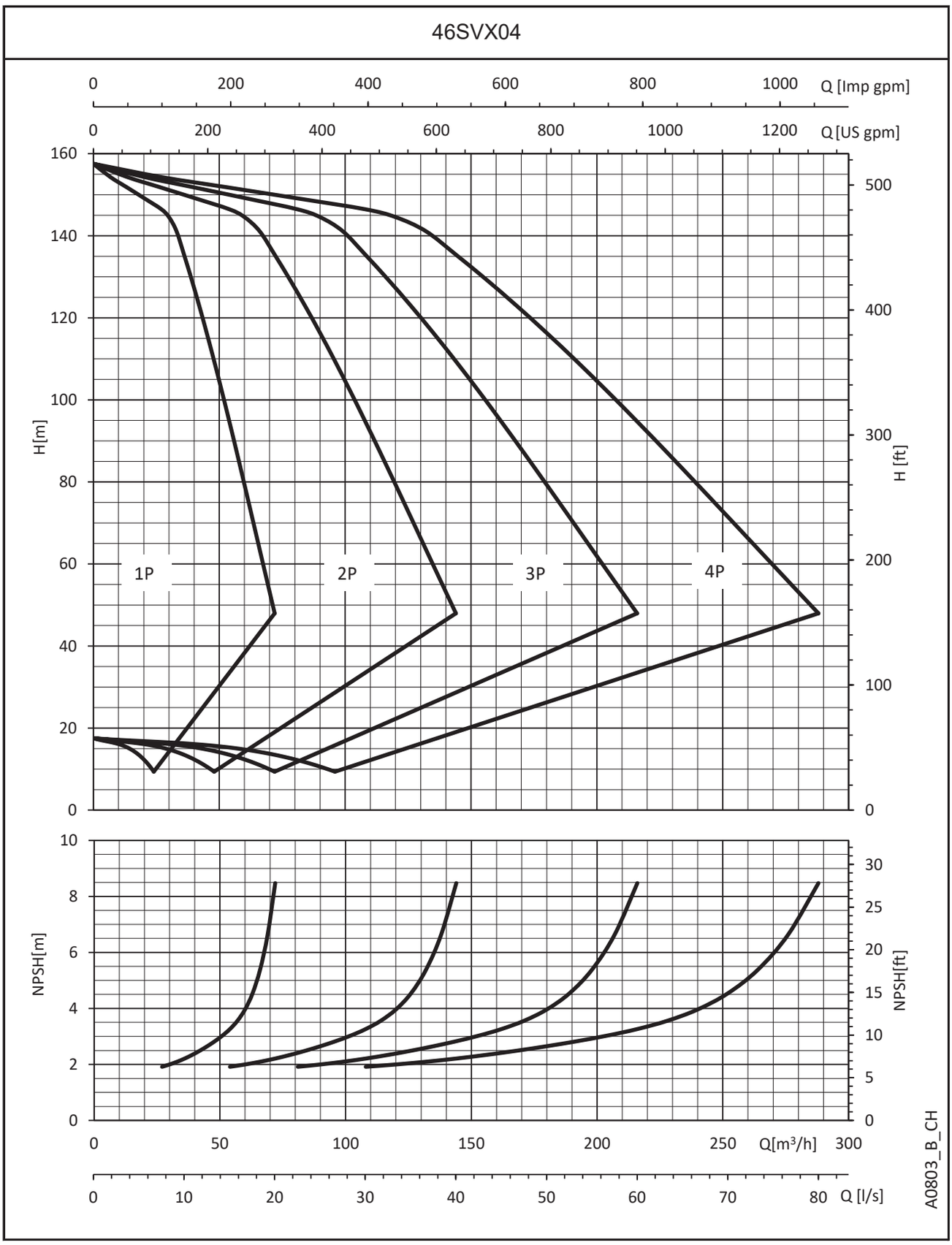
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



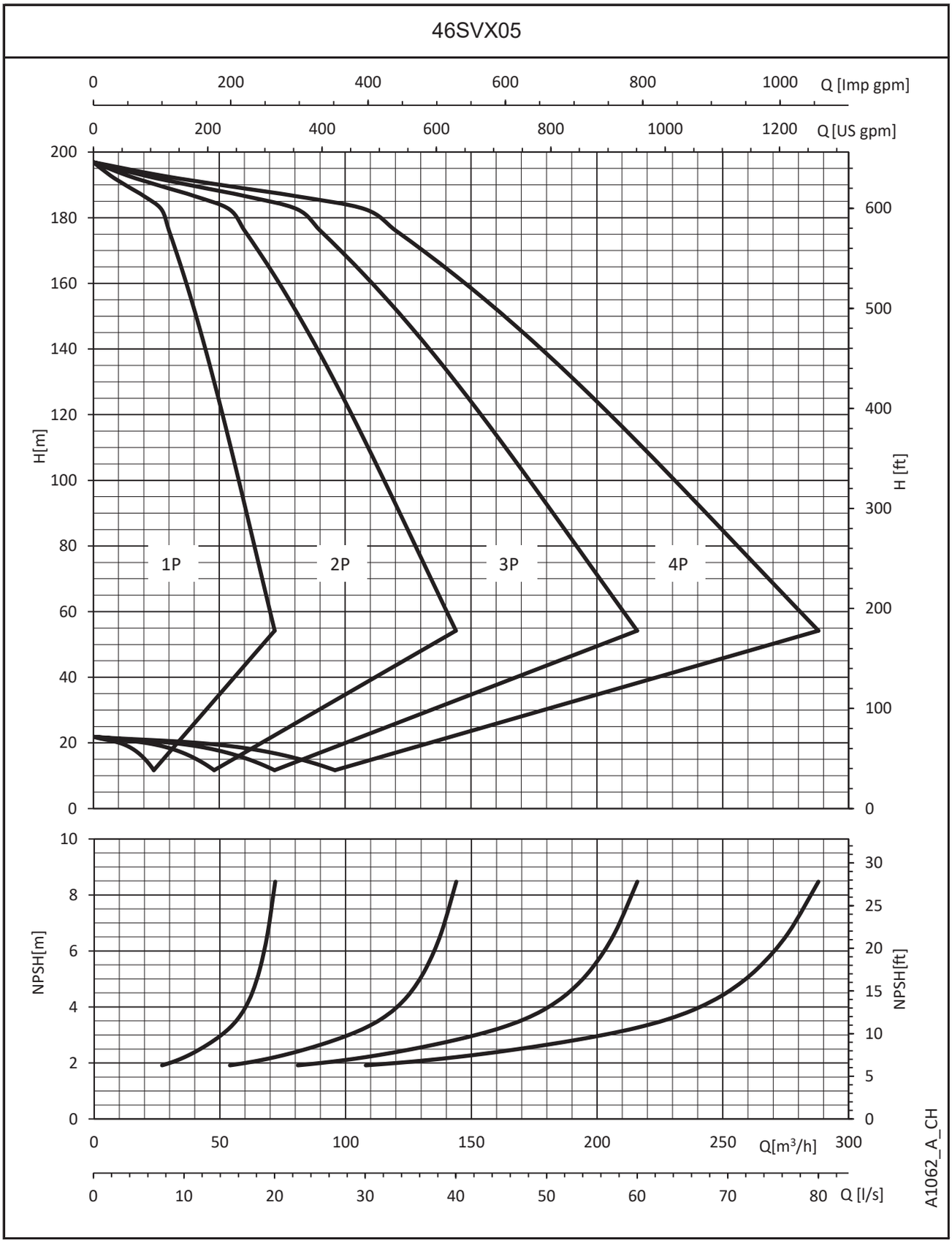
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



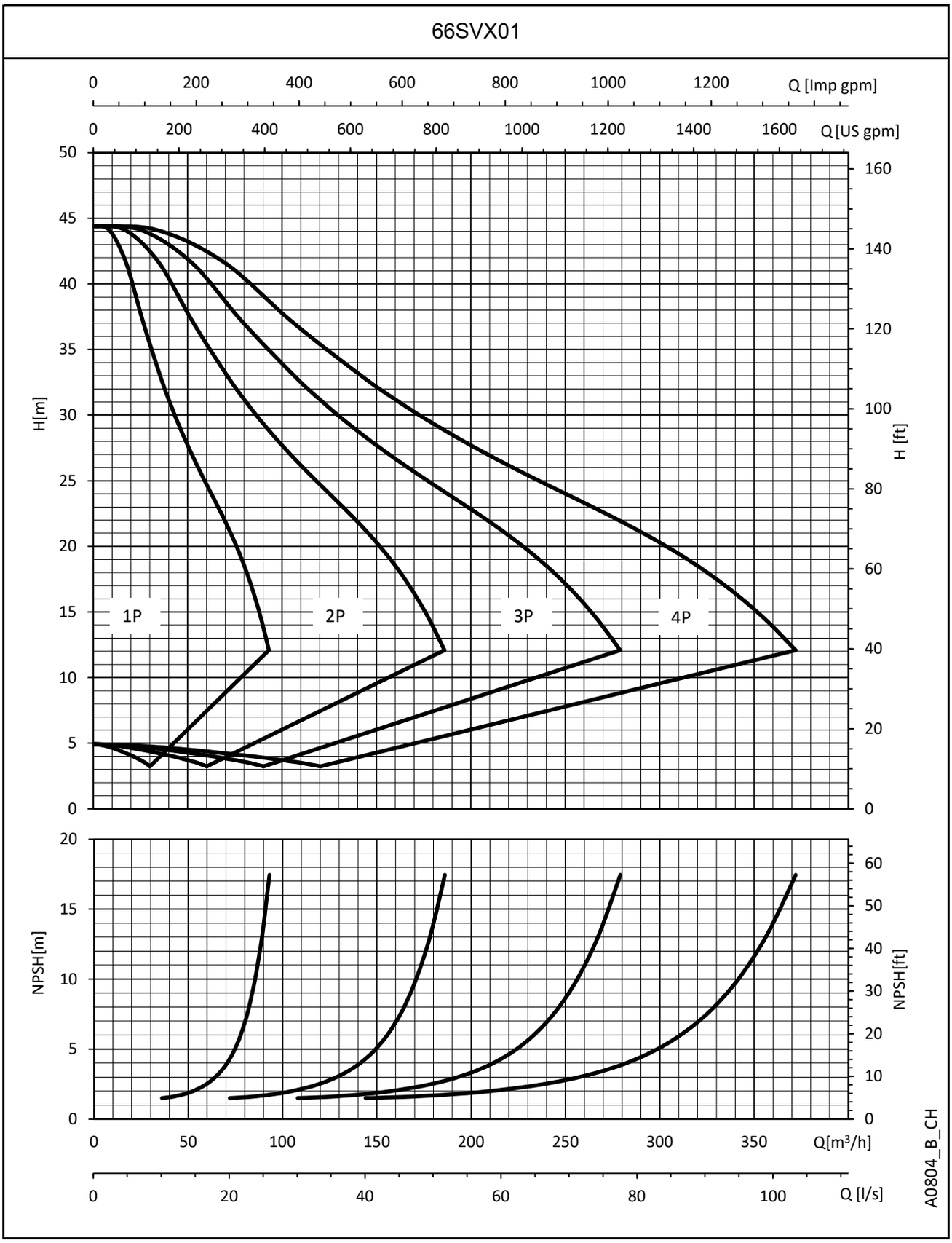
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



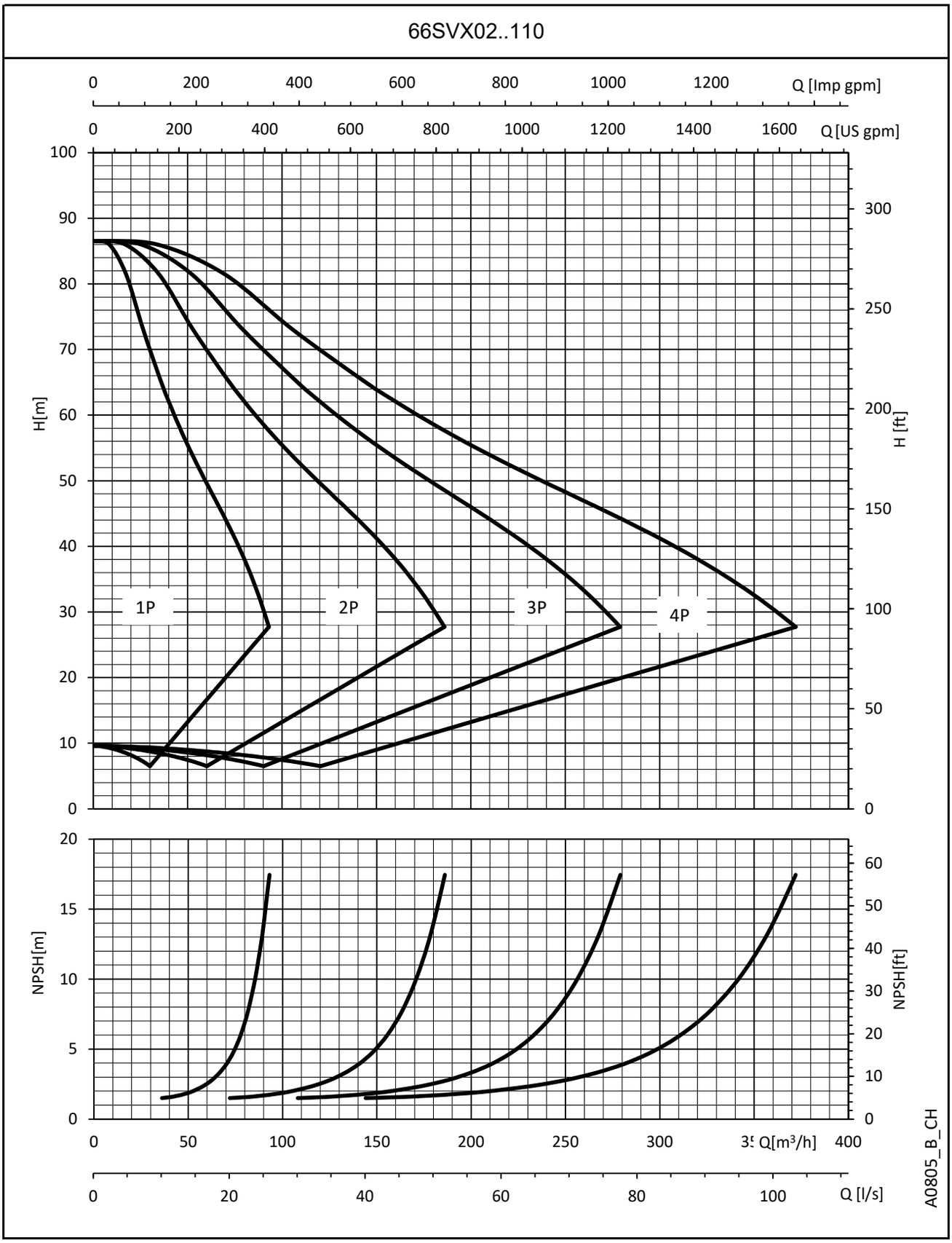
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



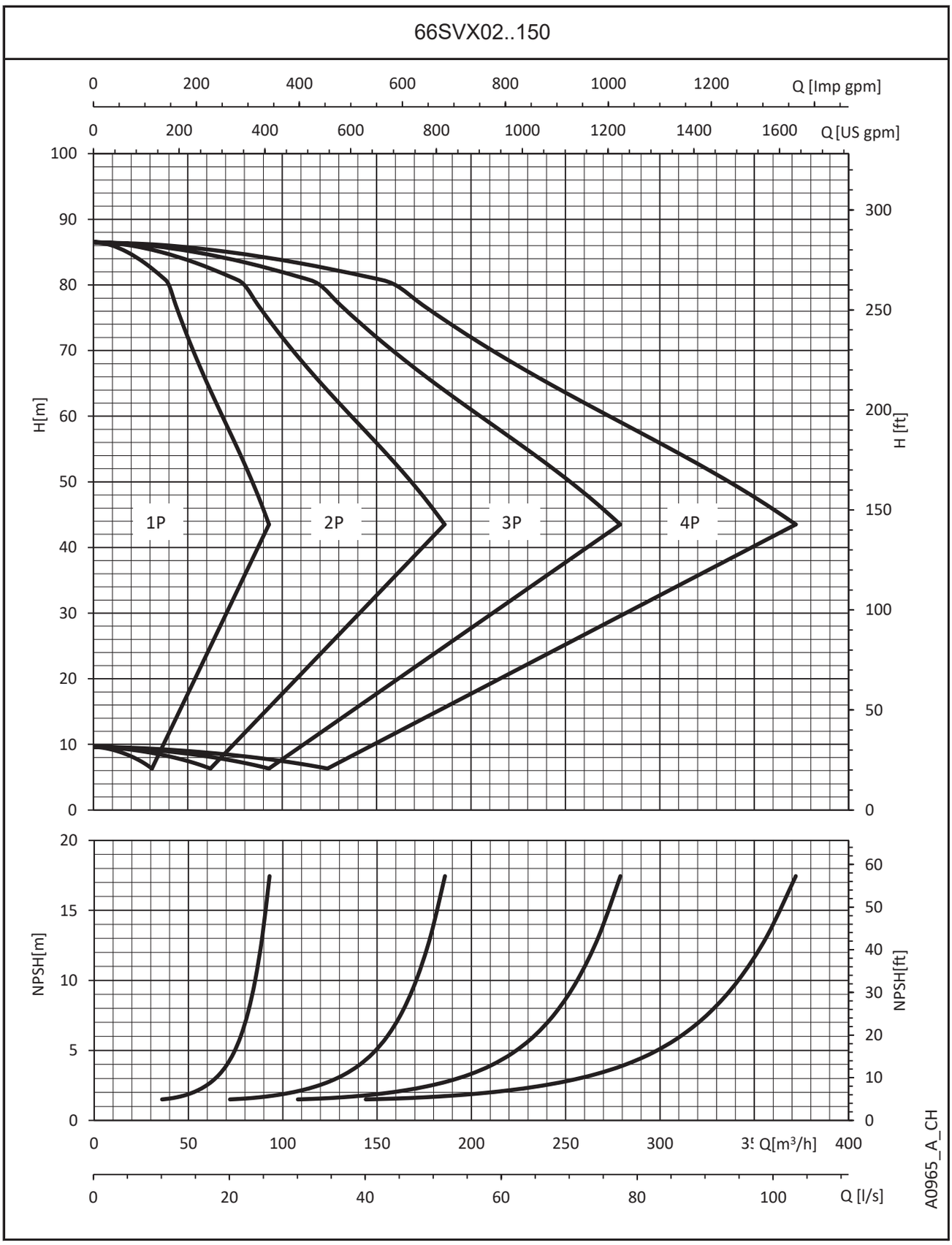
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



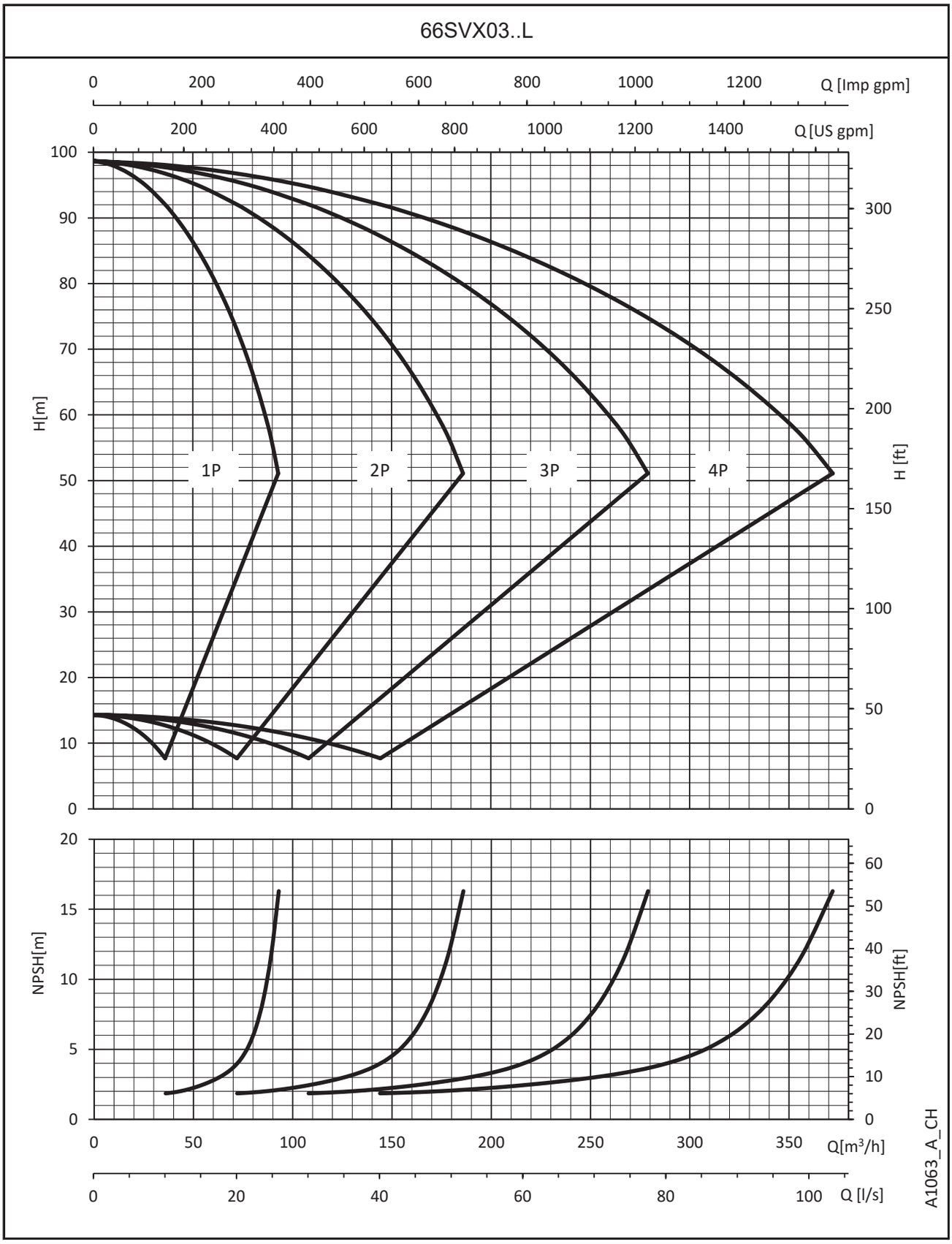
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



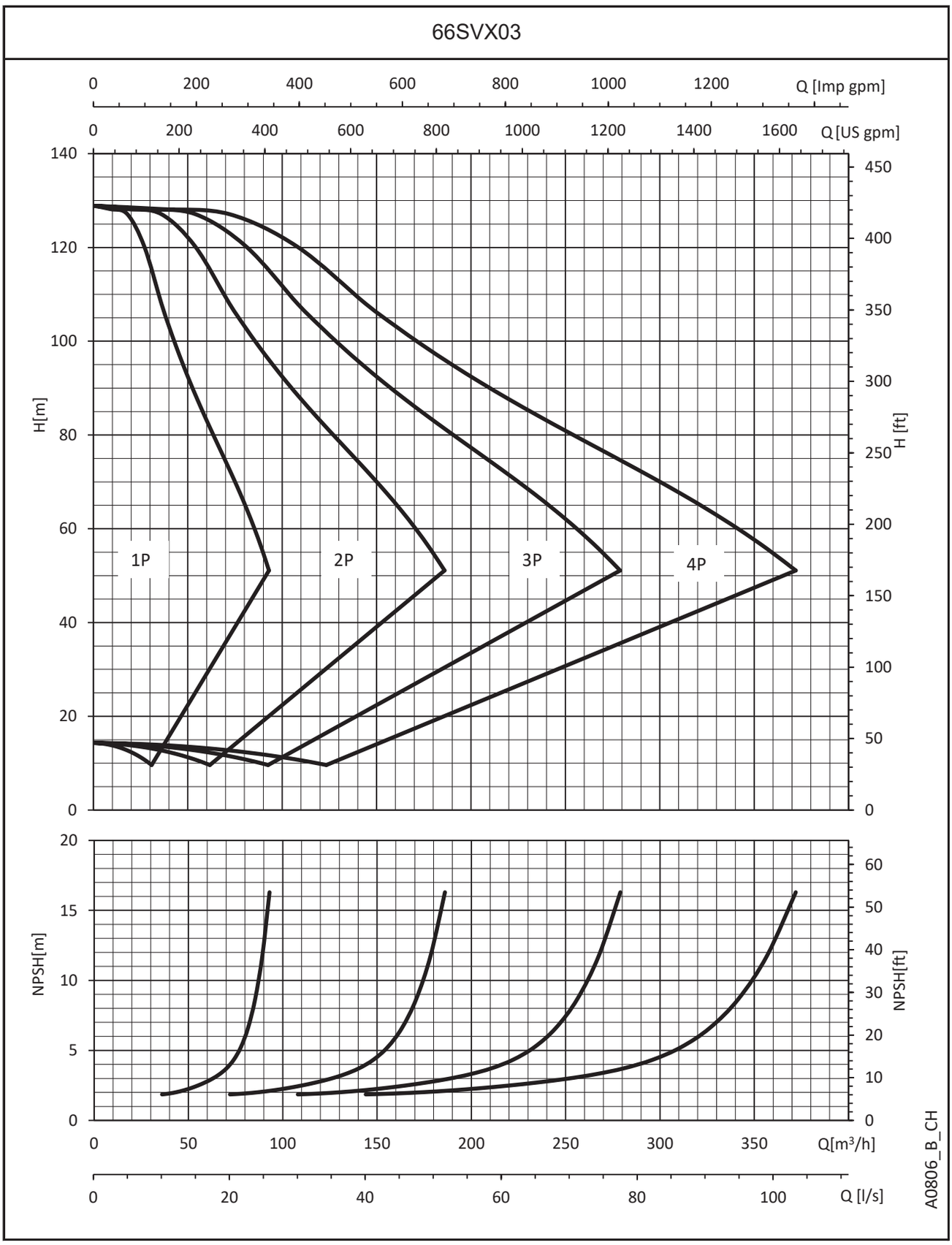
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



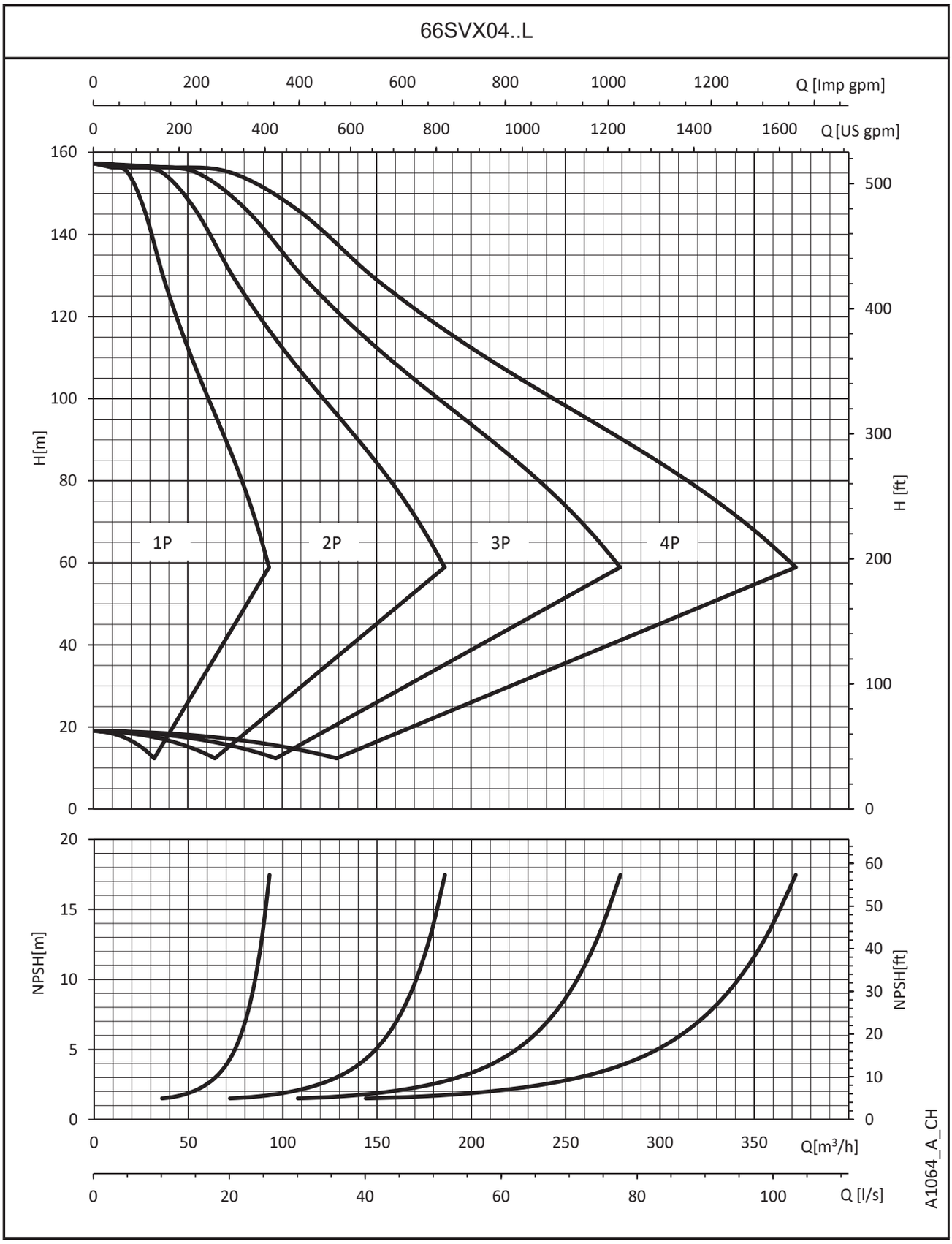
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



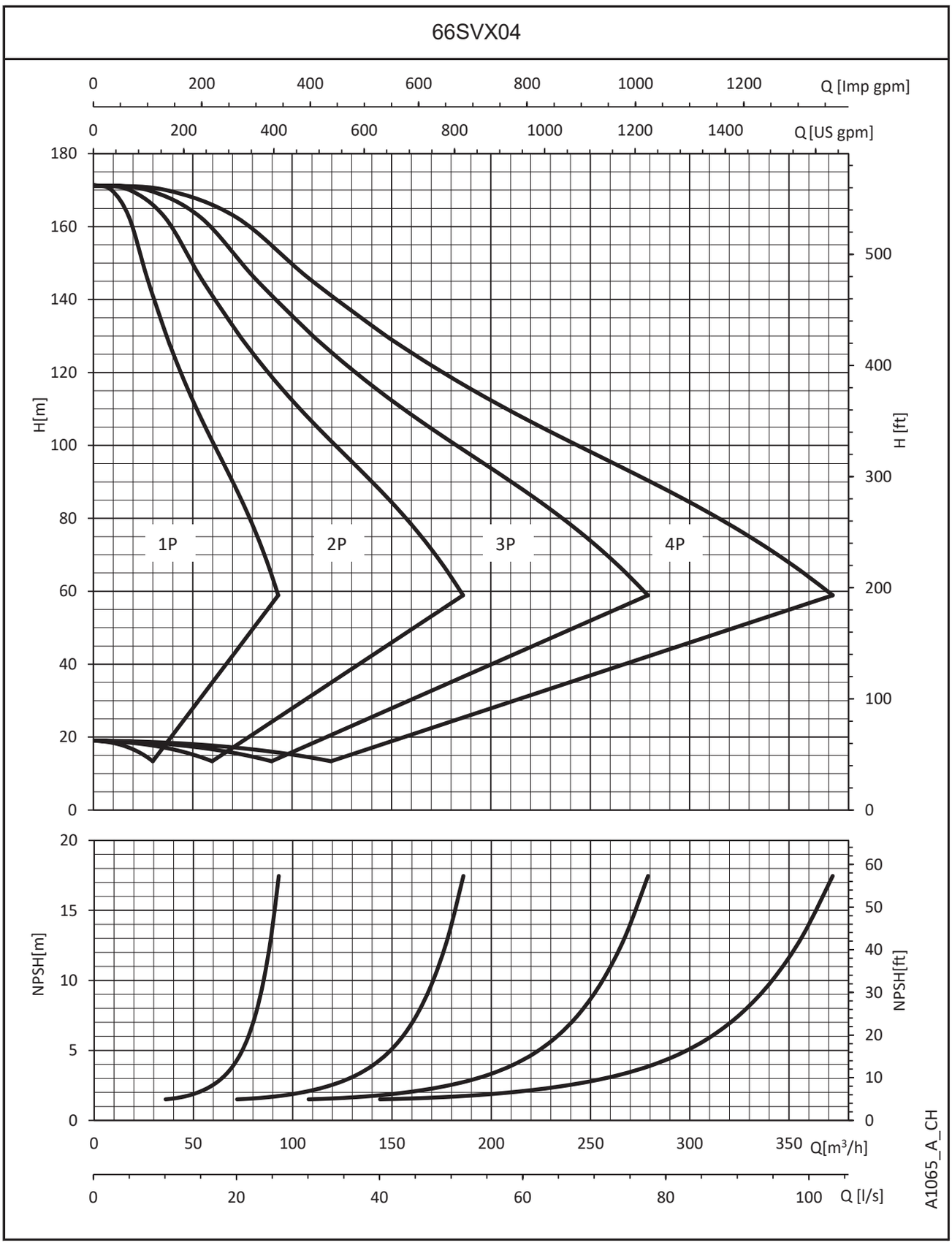
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



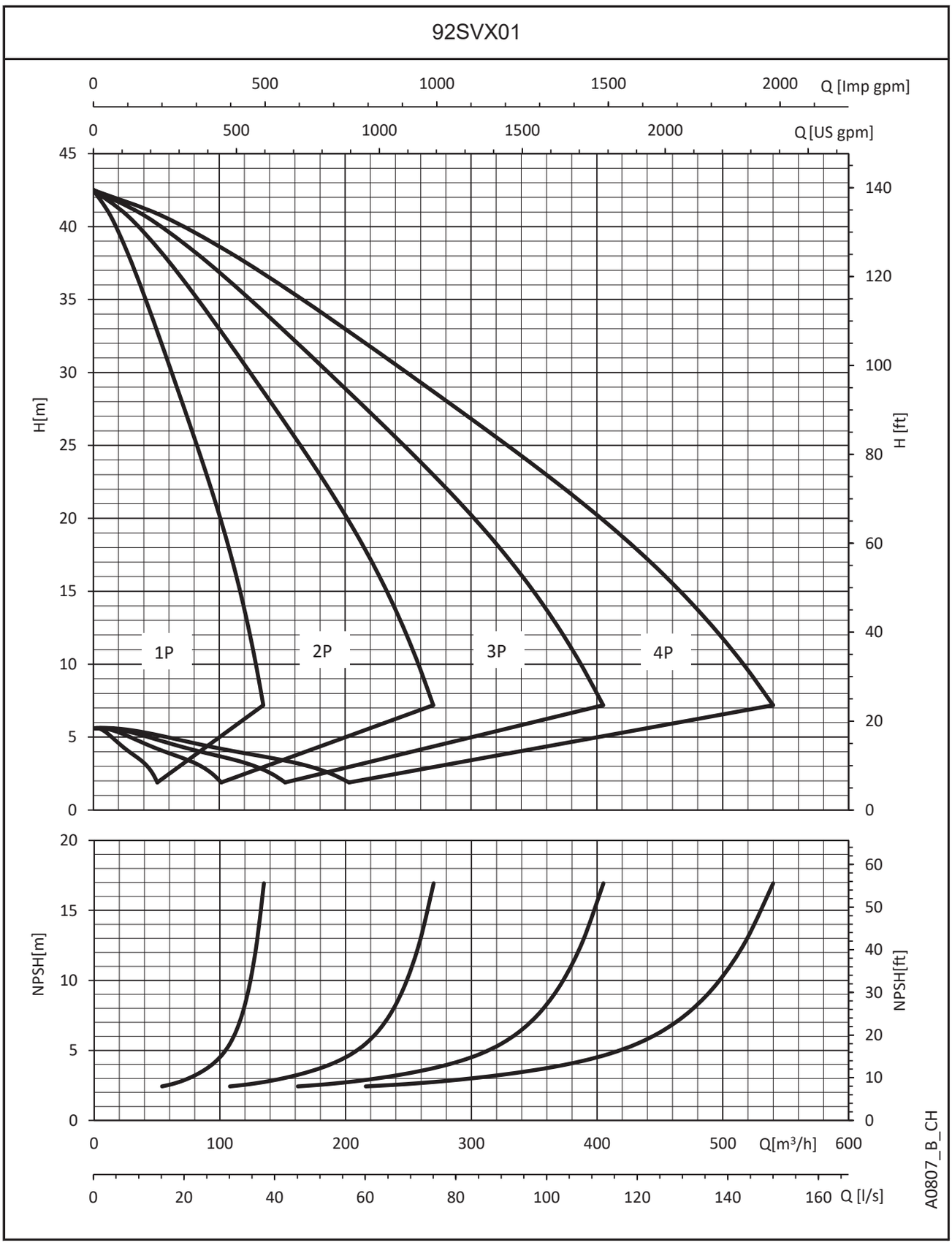
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



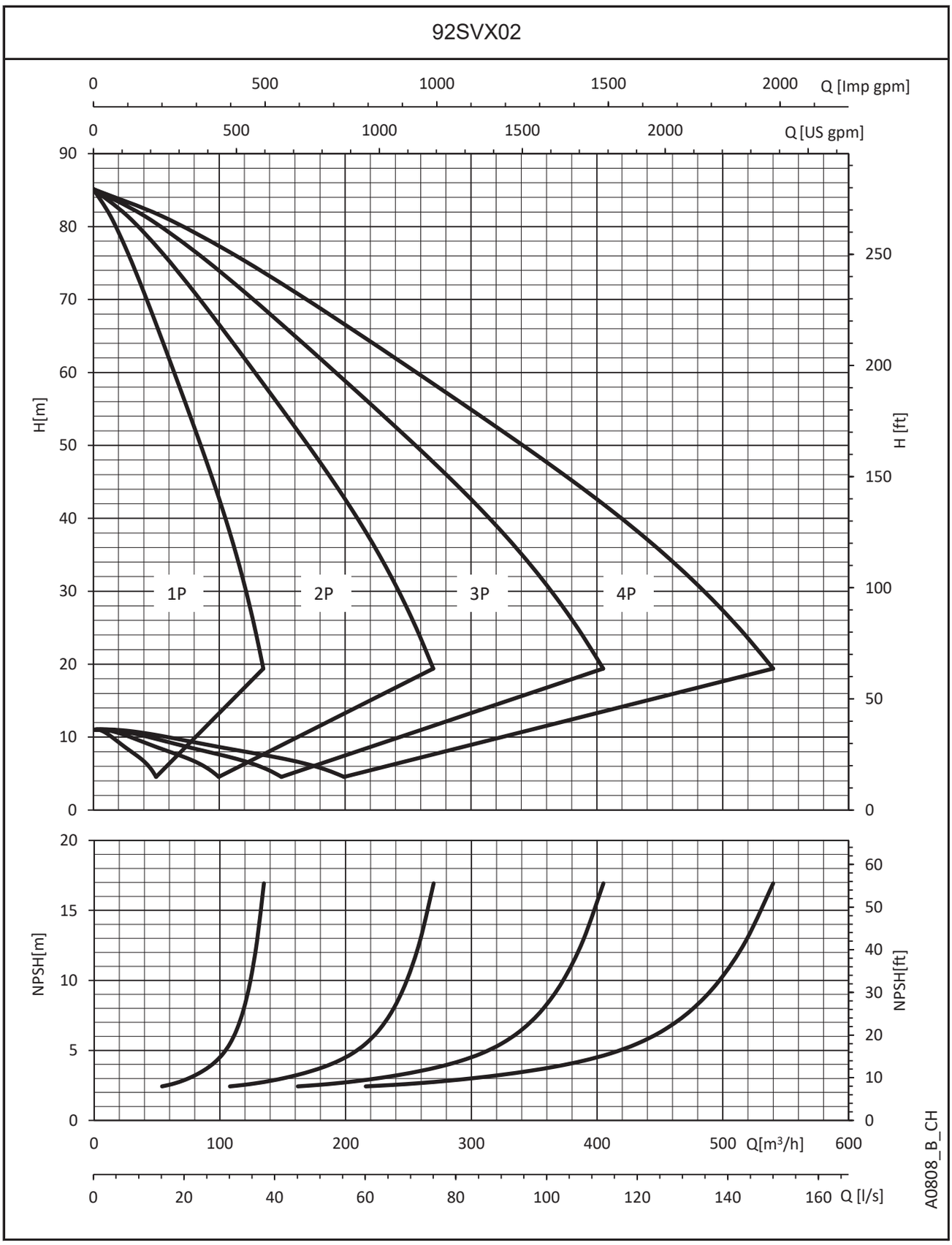
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



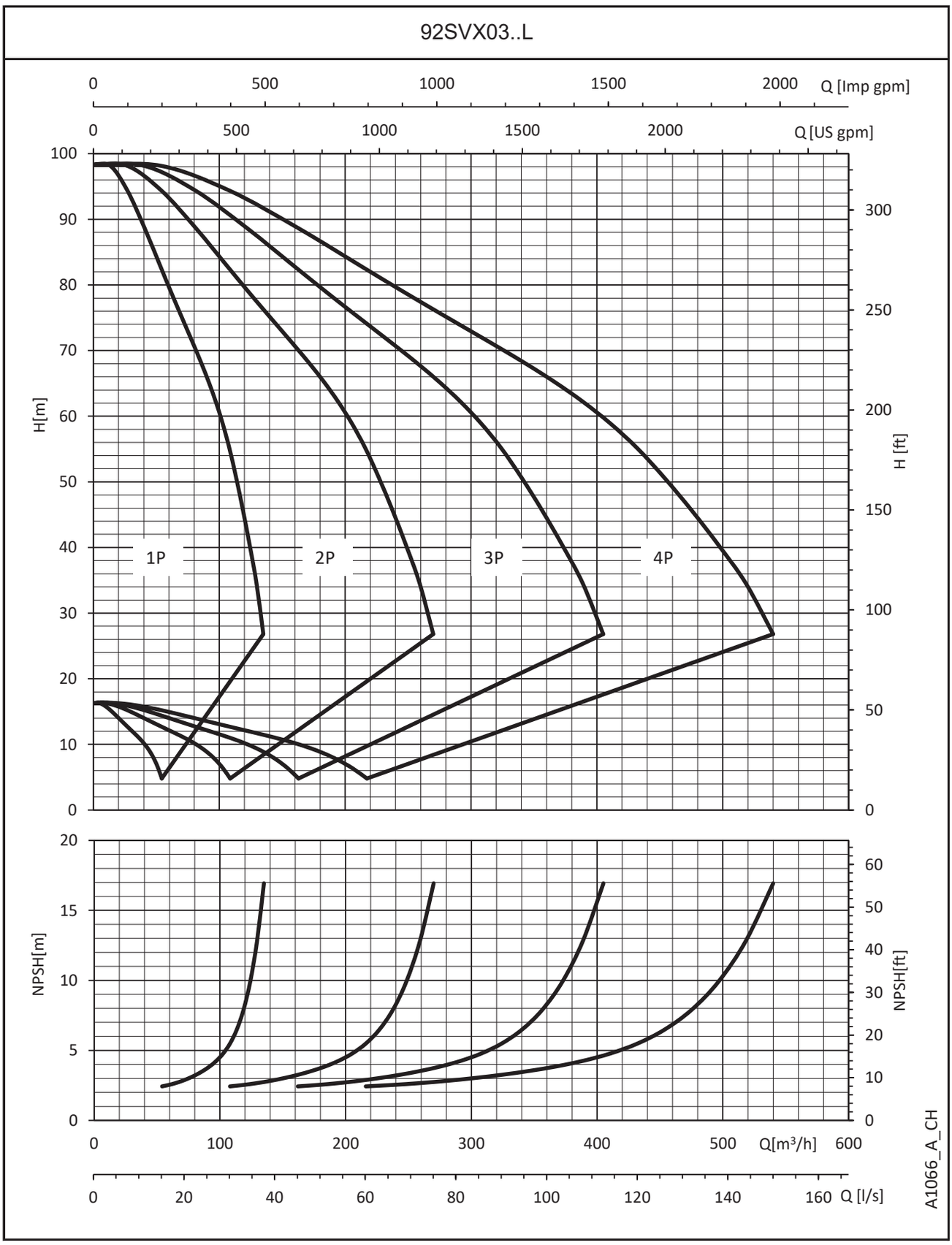
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



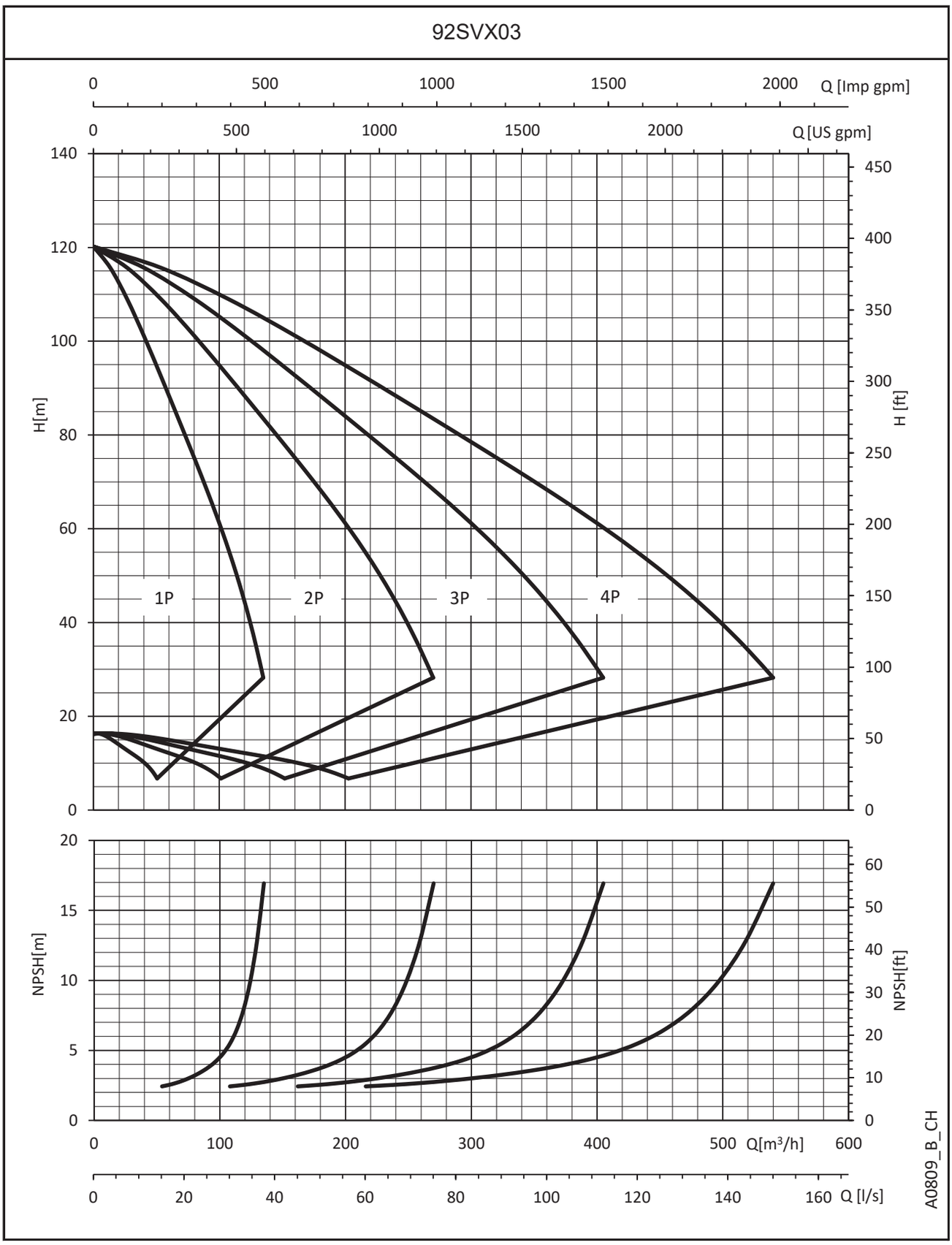
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



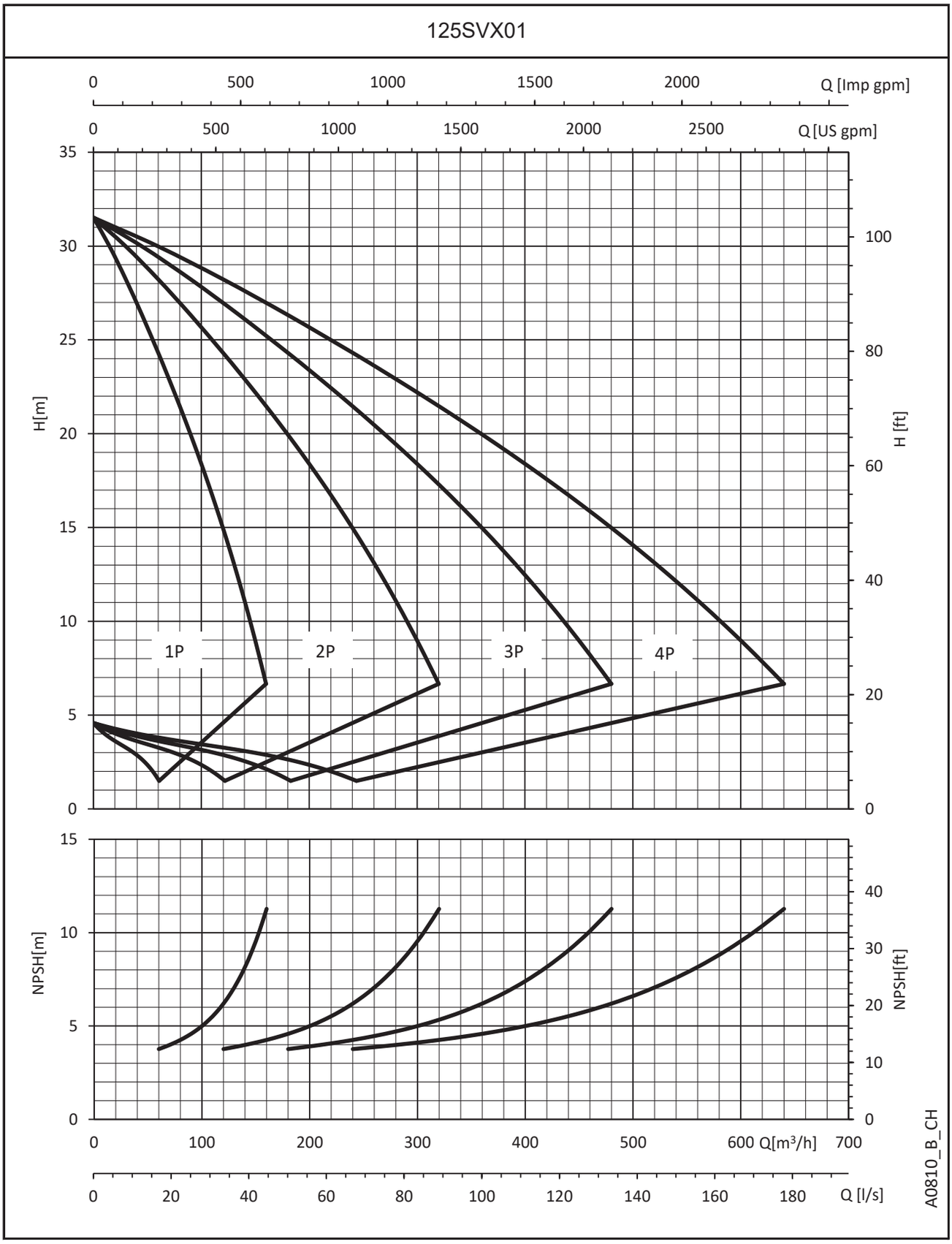
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



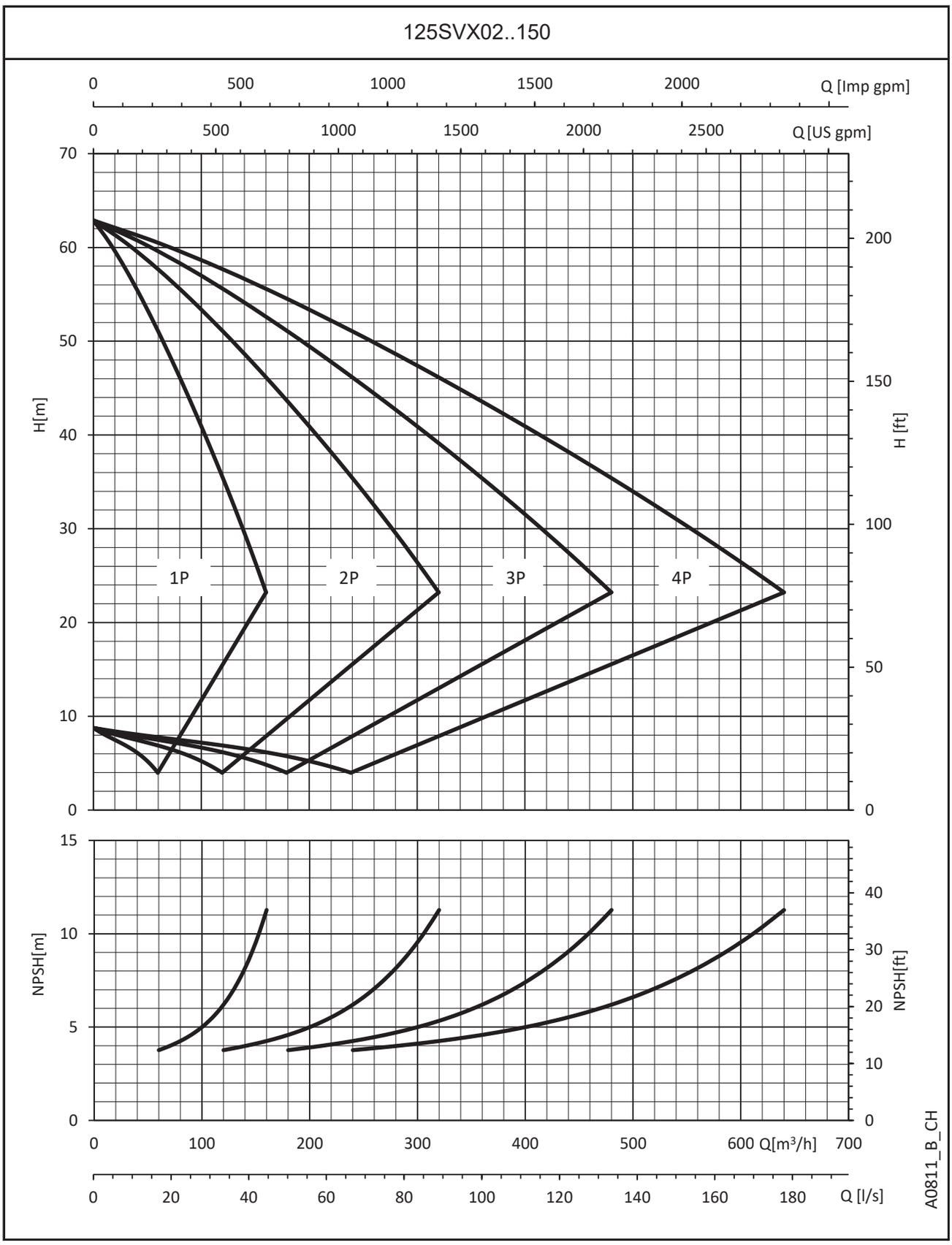
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



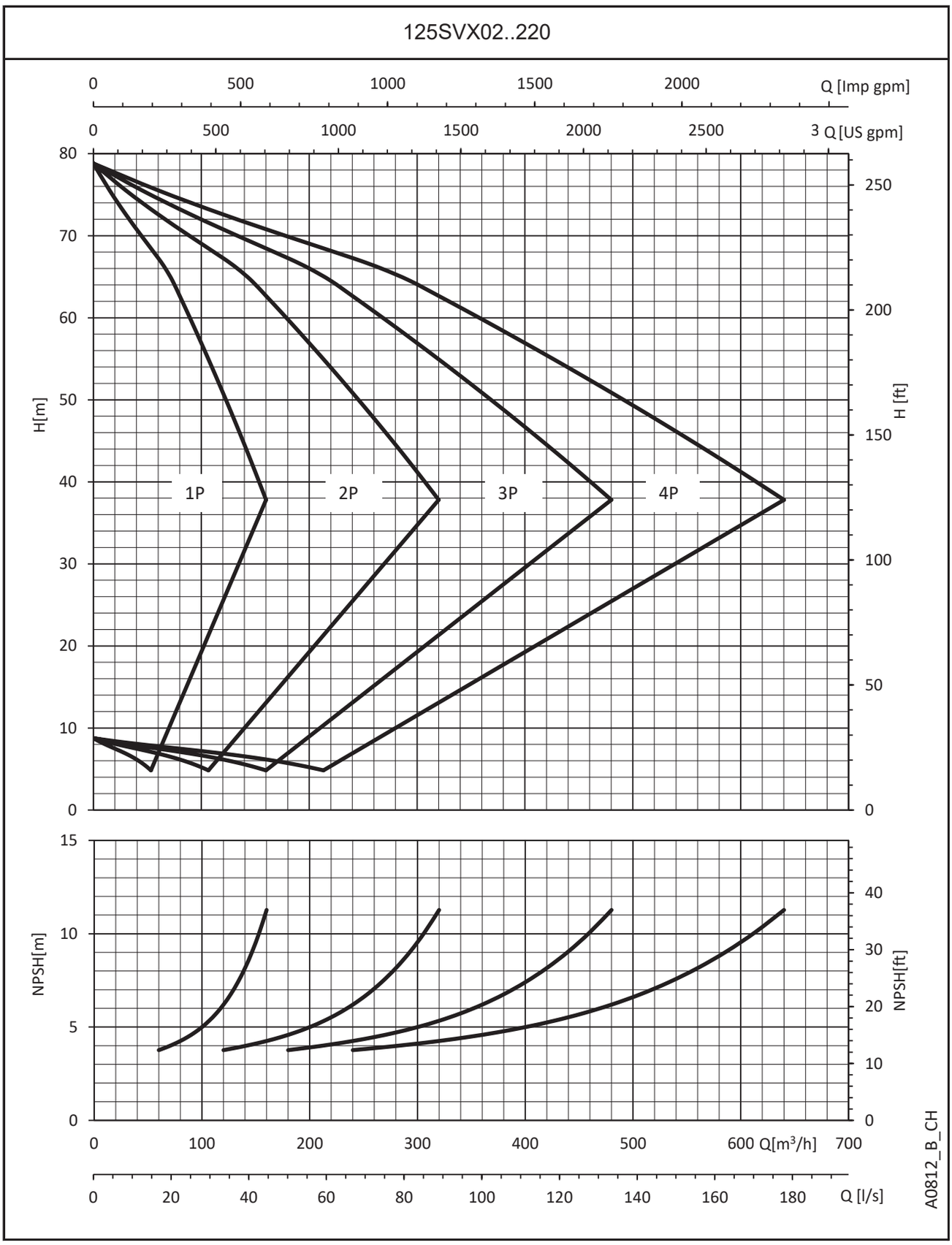
The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

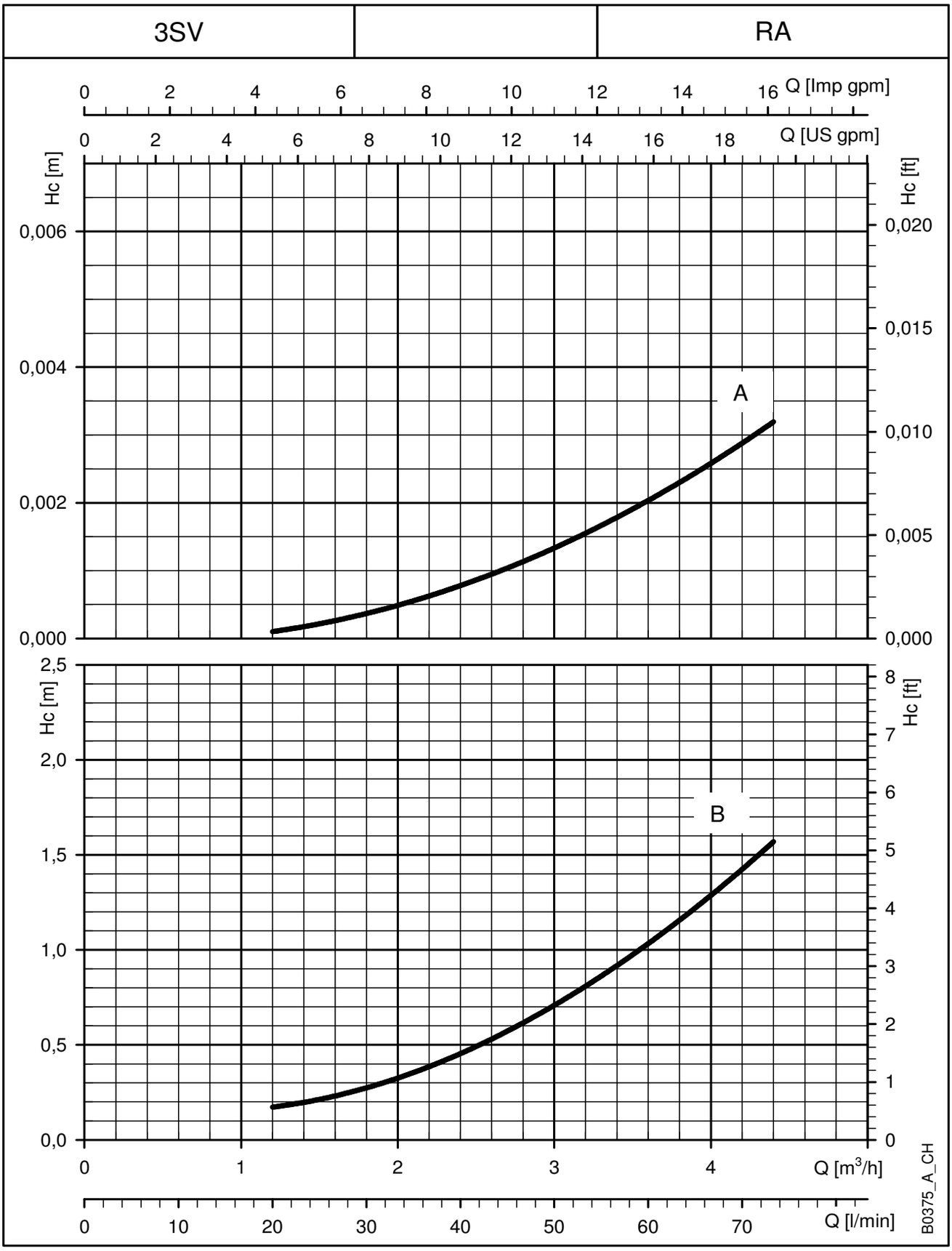
GHV.../SVX BOOSTER SETS SERIES
OPERATING CHARACTERISTICS



The performance curves do not take into account flow resistance in the valves and piping. The curves show the performance with one, two, three and four pumps running.
These performances are valid for liquids with density ρ = 1.0 Kg/dm³ and kinematic viscosity ν = 1 mm²/sec.
The declared NPSH values are laboratory values; for practical use we recommend increasing these values by 0,5 m.

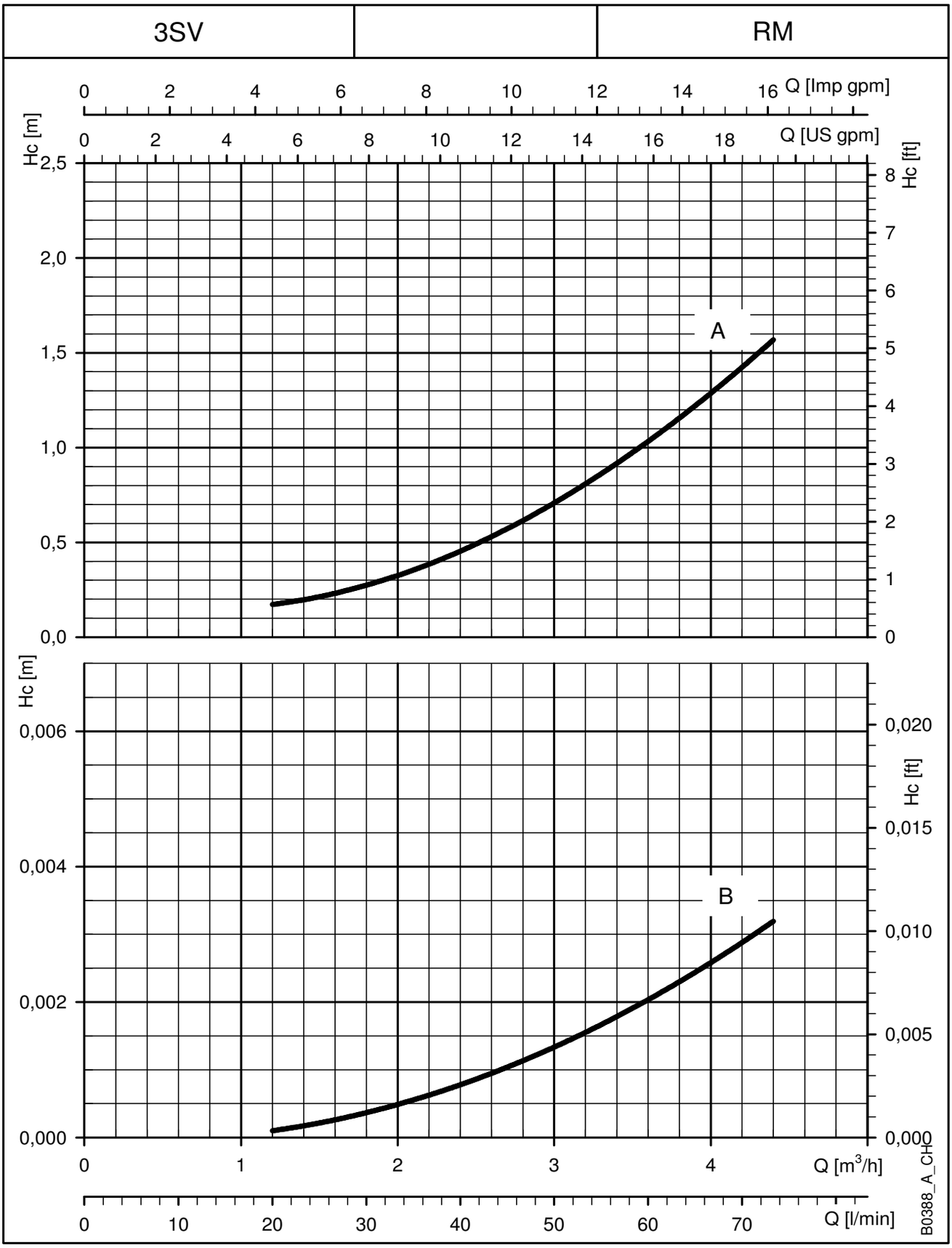
GHV../SVX BOOSTER SETS SERIES
Hc PRESSURE DROP CURVES

3SV		RA



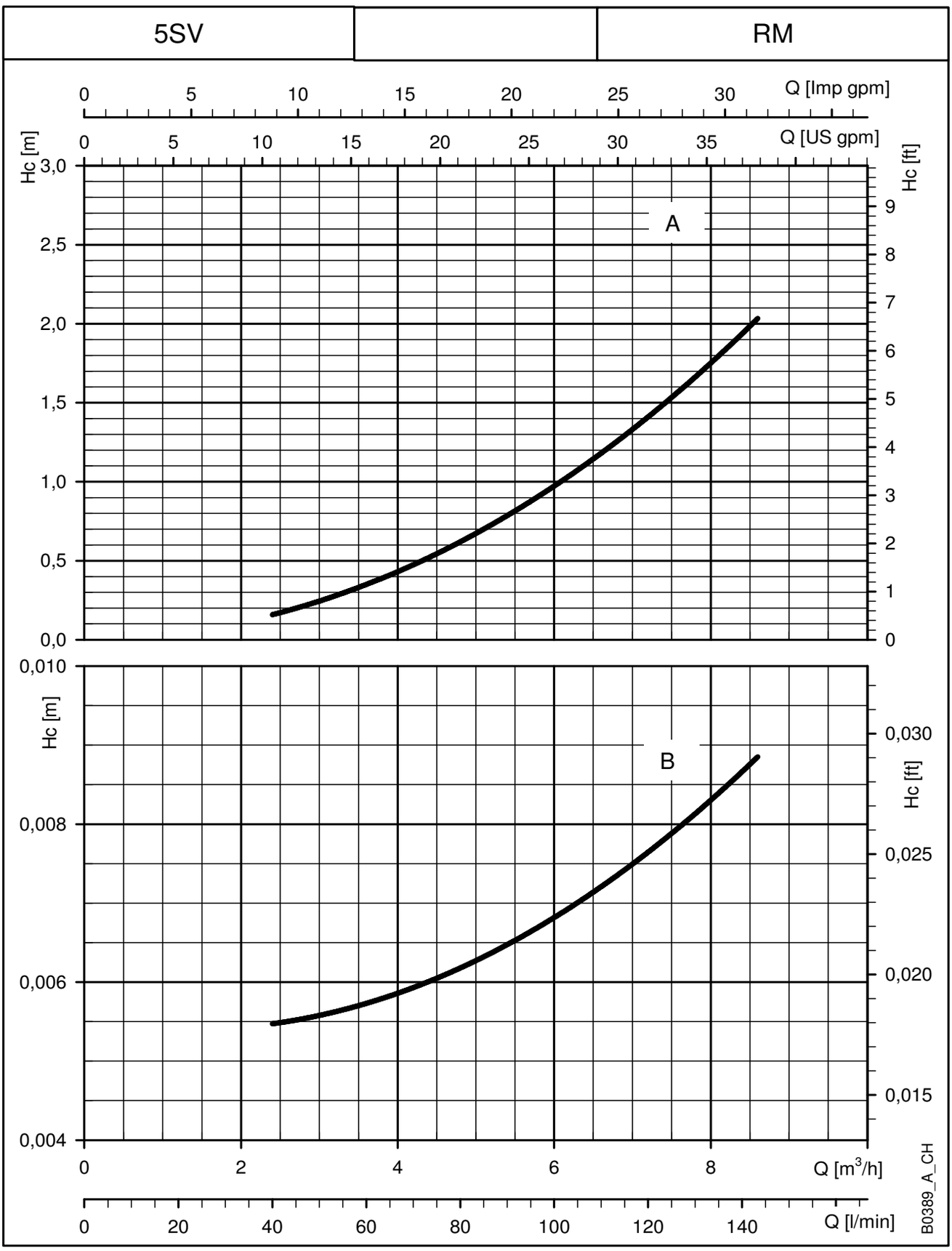
The declared curves are valid for liquids with density ρ = 1 kg/dm³ and kinematic viscosity ν = 1 mm²/sec. Hc (A): Pressure drop curve on delivery side of the pump. Hc (B): Pressure drop curve on suction side of the pump. RA: check valve on suction side. RM: check valve on delivery side. The pressure drops do not consider the distributed pressure drops on the manifold.

GHV../SVX BOOSTER SETS SERIES
Hc PRESSURE DROP CURVES



The declared curves are valid for liquids with density ρ = 1 kg/dm^3 and kinematic viscosity ν = 1 mm^2/sec. Hc (A): Pressure drop curve on delivery side of the pump. Hc (B): Pressure drop curve on suction side of the pump. RA: check valve on suction side. RM: check valve on delivery side. The pressure drops do not consider the distributed pressure drops on the manifold.

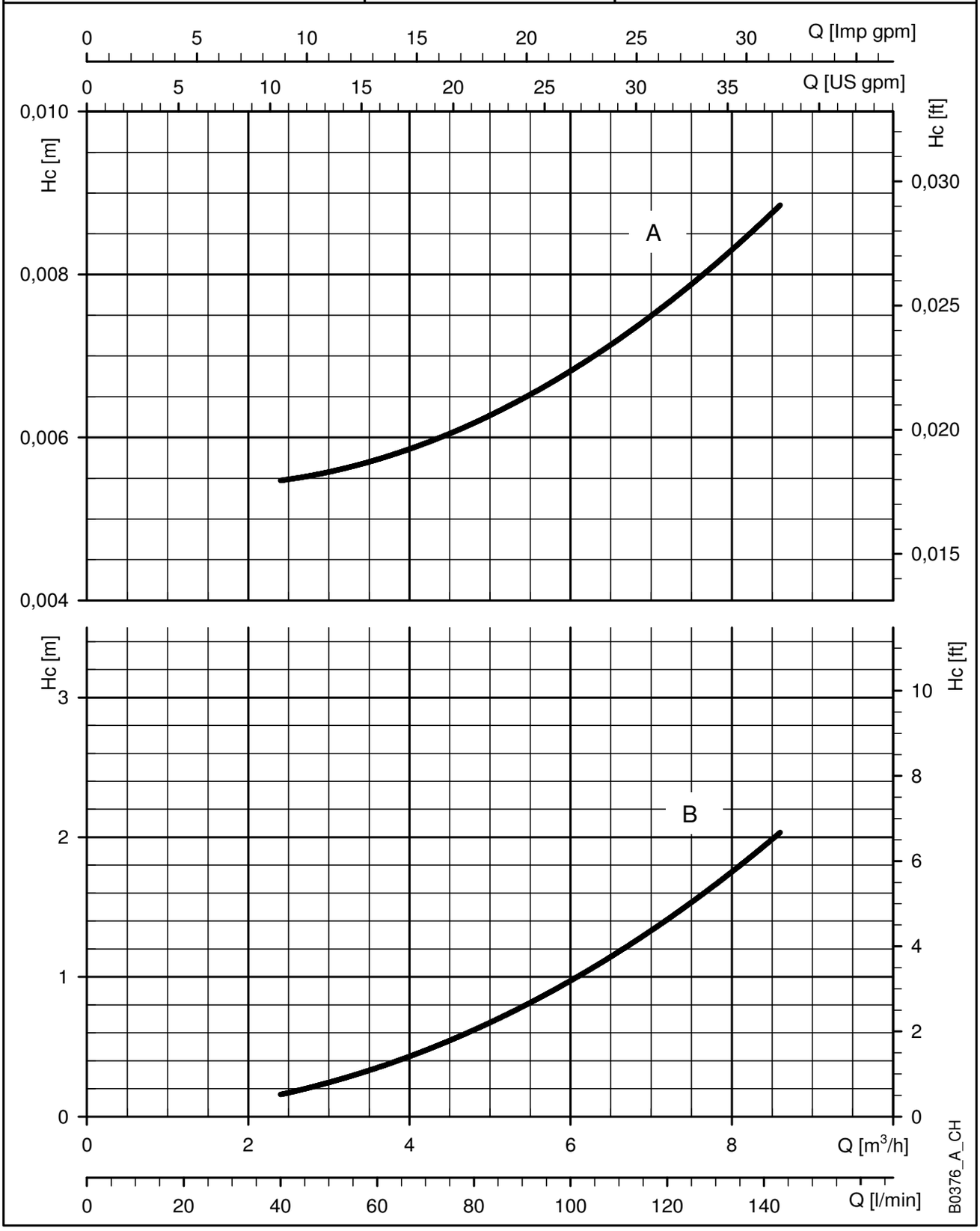
GHV../SVX BOOSTER SETS SERIES
Hc PRESSURE DROP CURVES



The declared curves are valid for liquids with density ρ = 1 kg/dm^3 and kinematic viscosity ν = 1 mm^2/sec. Hc (A): Pressure drop curve on delivery side of the pump. Hc (B): Pressure drop curve on suction side of the pump. RA: check valve on suction side. RM: check valve on delivery side. The pressure drops do not consider the distributed pressure drops on the manifold.

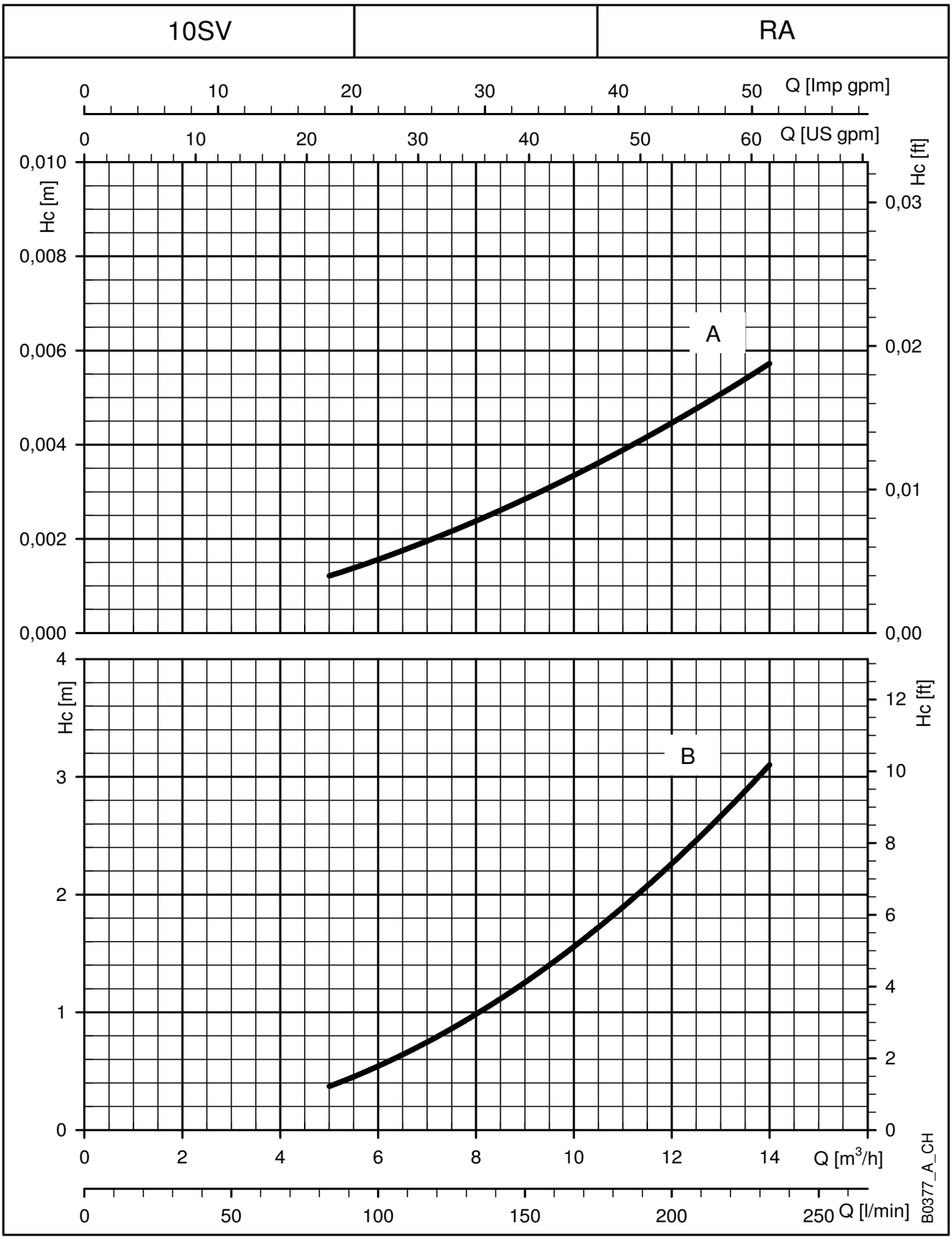
GHV../SVX BOOSTER SETS SERIES
Hc PRESSURE DROP CURVES

5SV		RA



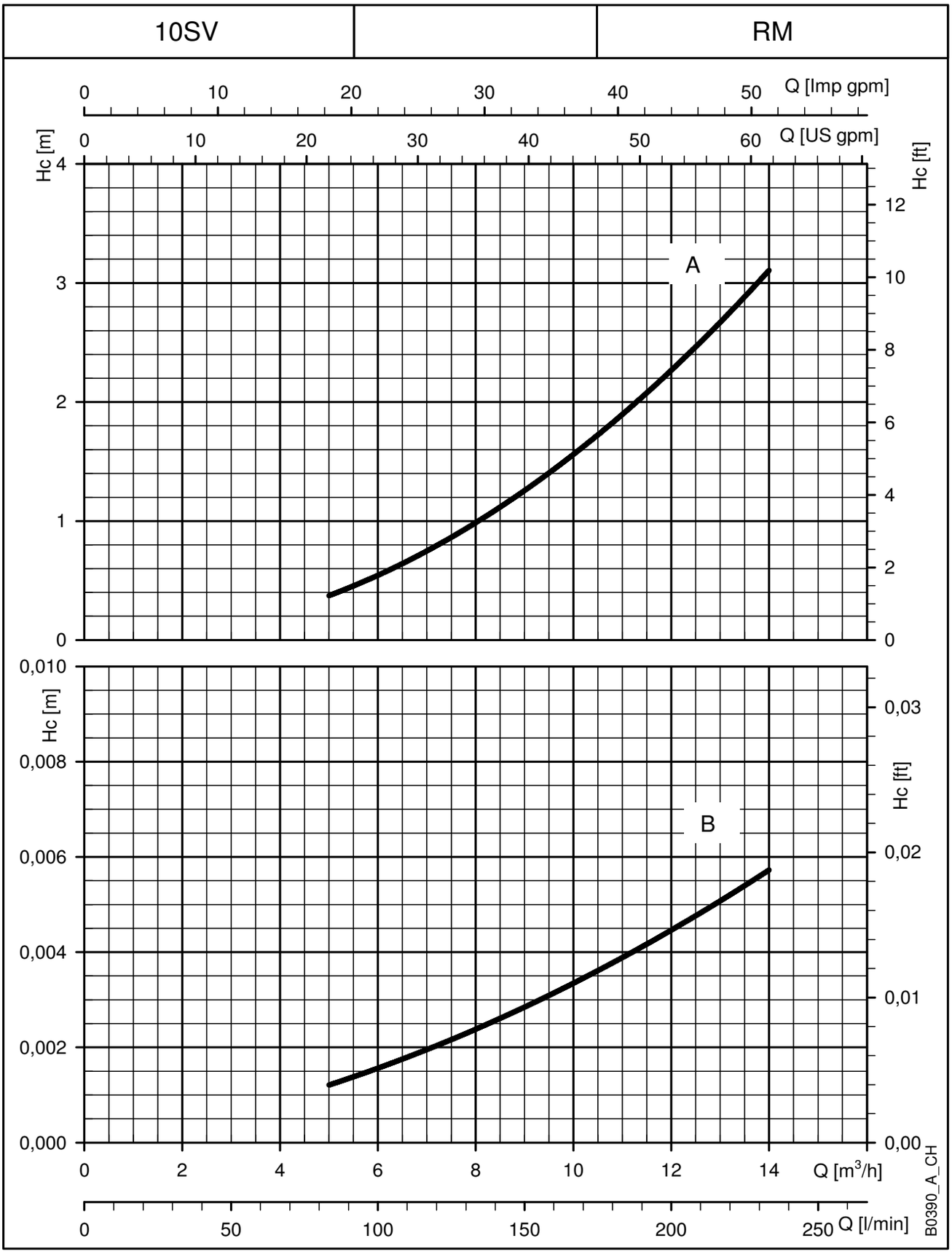
The declared curves are valid for liquids with density ρ = 1 kg/dm^3 and kinematic viscosity ν = 1 mm^2/sec. Hc (A): Pressure drop curve on delivery side of the pump. Hc (B): Pressure drop curve on suction side of the pump. RA: check valve on suction side. RM: check valve on delivery side. The pressure drops do not consider the distributed pressure drops on the manifold.

GHV../SVX BOOSTER SETS SERIES
Hc PRESSURE DROP CURVES



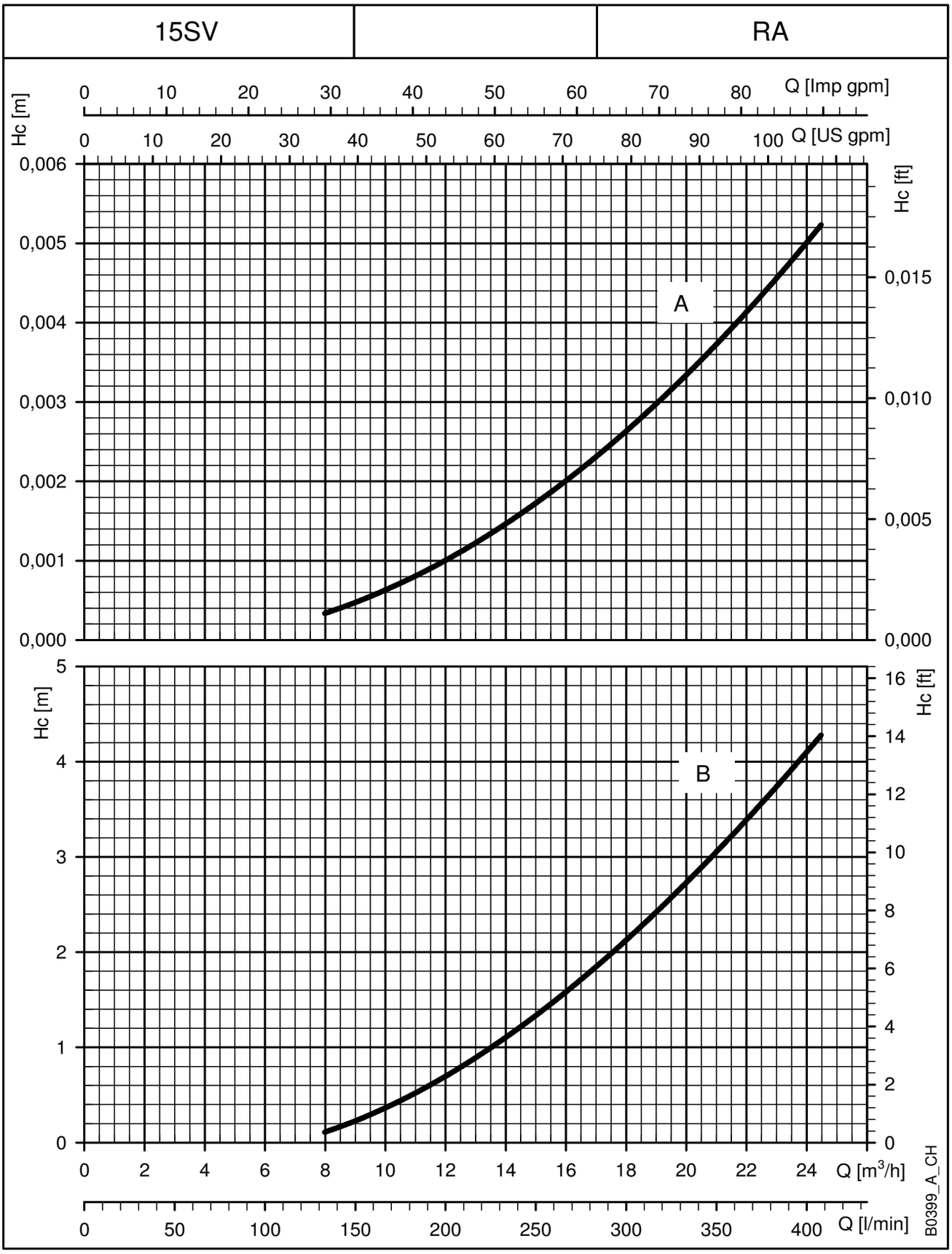
The declared curves are valid for liquids with density ρ = 1 kg/dm^3 and kinematic viscosity ν = 1 mm^2/sec. Hc (A): Pressure drop curve on delivery side of the pump. Hc (B): Pressure drop curve on suction side of the pump. RA: check valve on suction side. RM: check valve on delivery side. The pressure drops do not consider the distributed pressure drops on the manifold.

GHV../SVX BOOSTER SETS SERIES
Hc PRESSURE DROP CURVES



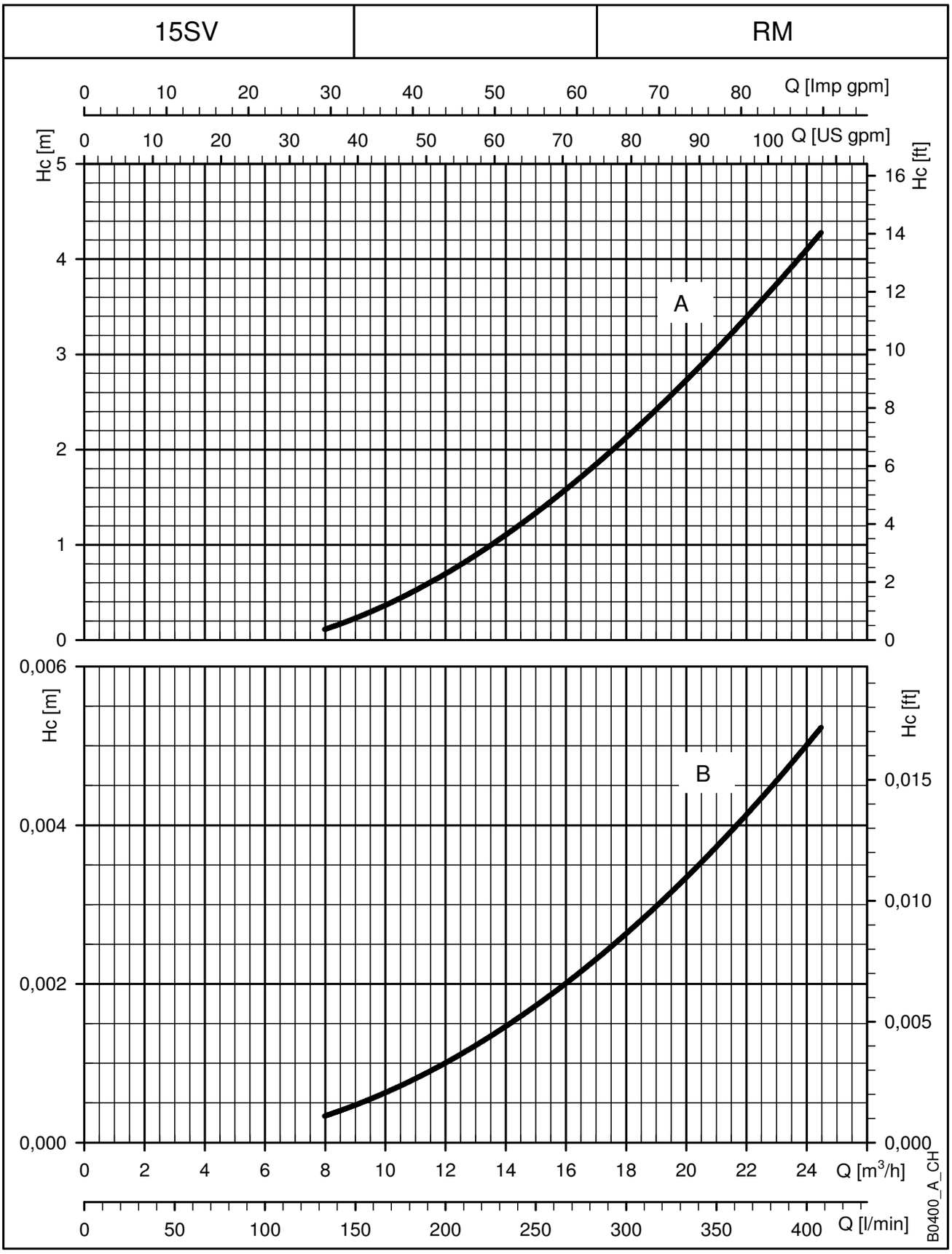
The declared curves are valid for liquids with density ρ = 1 kg/dm³ and kinematic viscosity ν = 1 mm²/sec. Hc (A): Pressure drop curve on delivery side of the pump. Hc (B): Pressure drop curve on suction side of the pump. RA: check valve on suction side. RM: check valve on delivery side. The pressure drops do not consider the distributed pressure drops on the manifold.

GHV../SVX BOOSTER SETS SERIES
Hc PRESSURE DROP CURVES



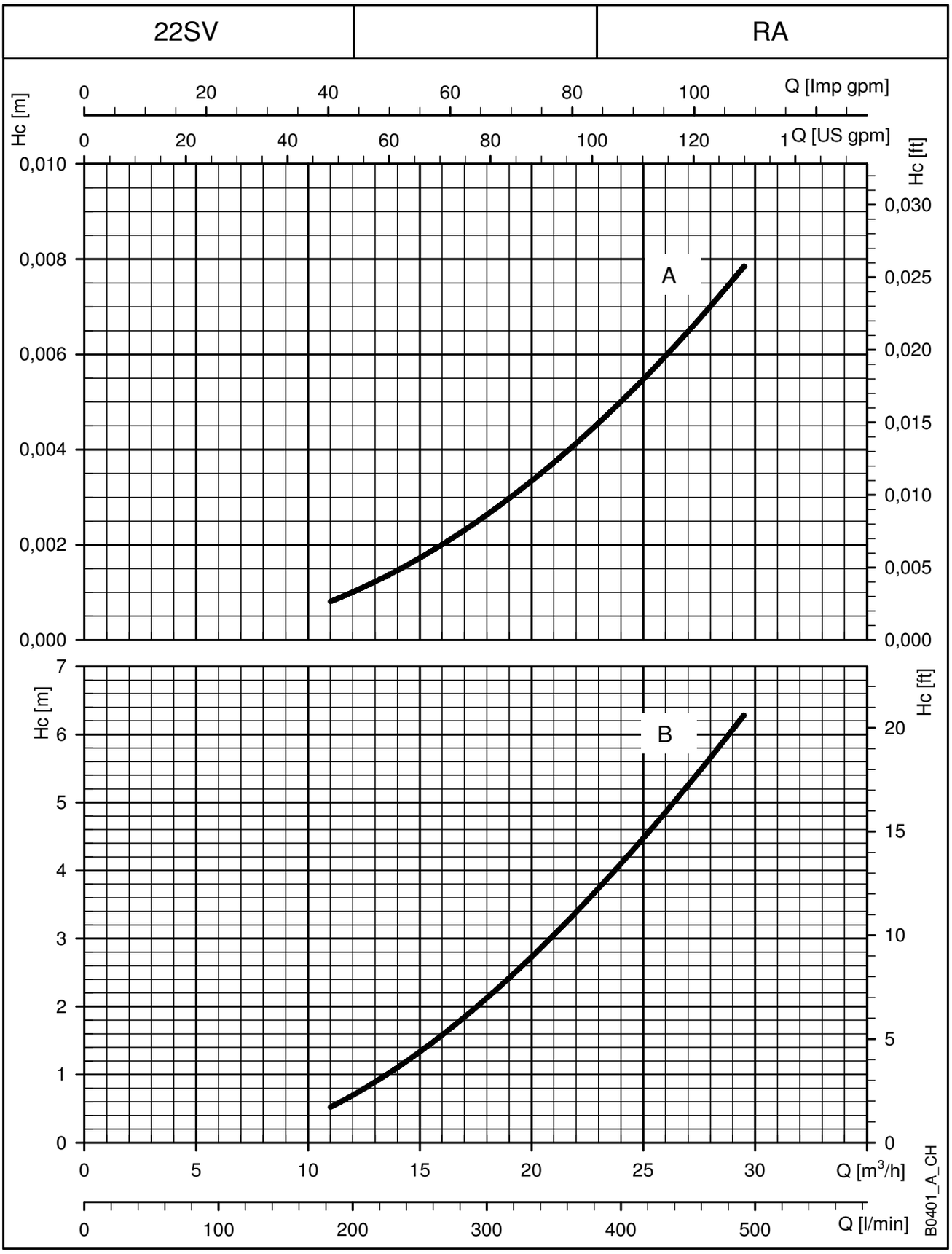
The declared curves are valid for liquids with density ρ = 1 kg/dm³ and kinematic viscosity ν = 1 mm²/sec. Hc (A): Pressure drop curve on delivery side of the pump. Hc (B): Pressure drop curve on suction side of the pump. RA: check valve on suction side. RM: check valve on delivery side. The pressure drops do not consider the distributed pressure drops on the manifold.

GHV../SVX BOOSTER SETS SERIES
Hc PRESSURE DROP CURVES



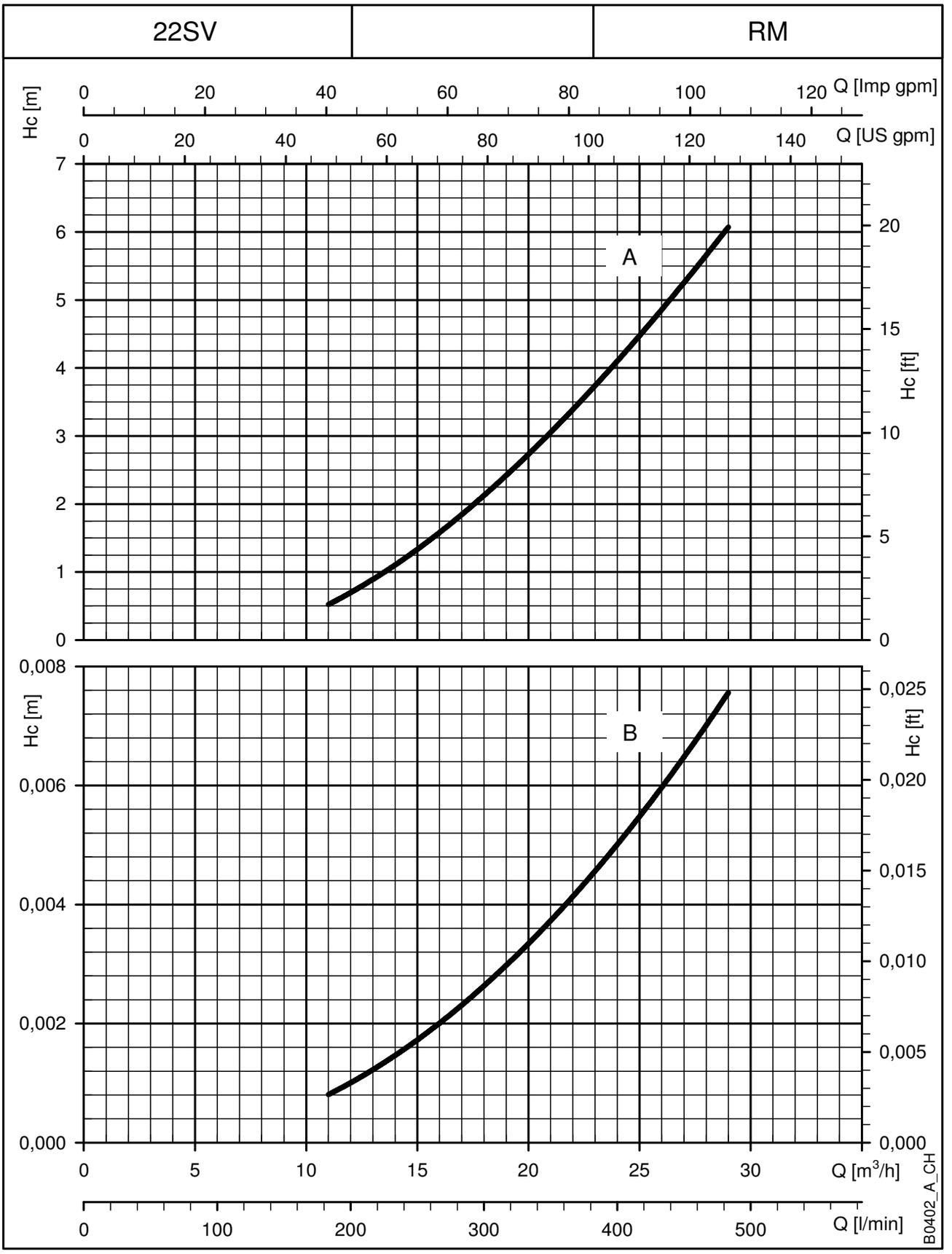
The declared curves are valid for liquids with density ρ = 1 kg/dm³ and kinematic viscosity ν = 1 mm²/sec. Hc (A): Pressure drop curve on delivery side of the pump. Hc (B): Pressure drop curve on suction side of the pump. RA: check valve on suction side. RM: check valve on delivery side. The pressure drops do not consider the distributed pressure drops on the manifold.

GHV../SVX BOOSTER SETS SERIES
Hc PRESSURE DROP CURVES



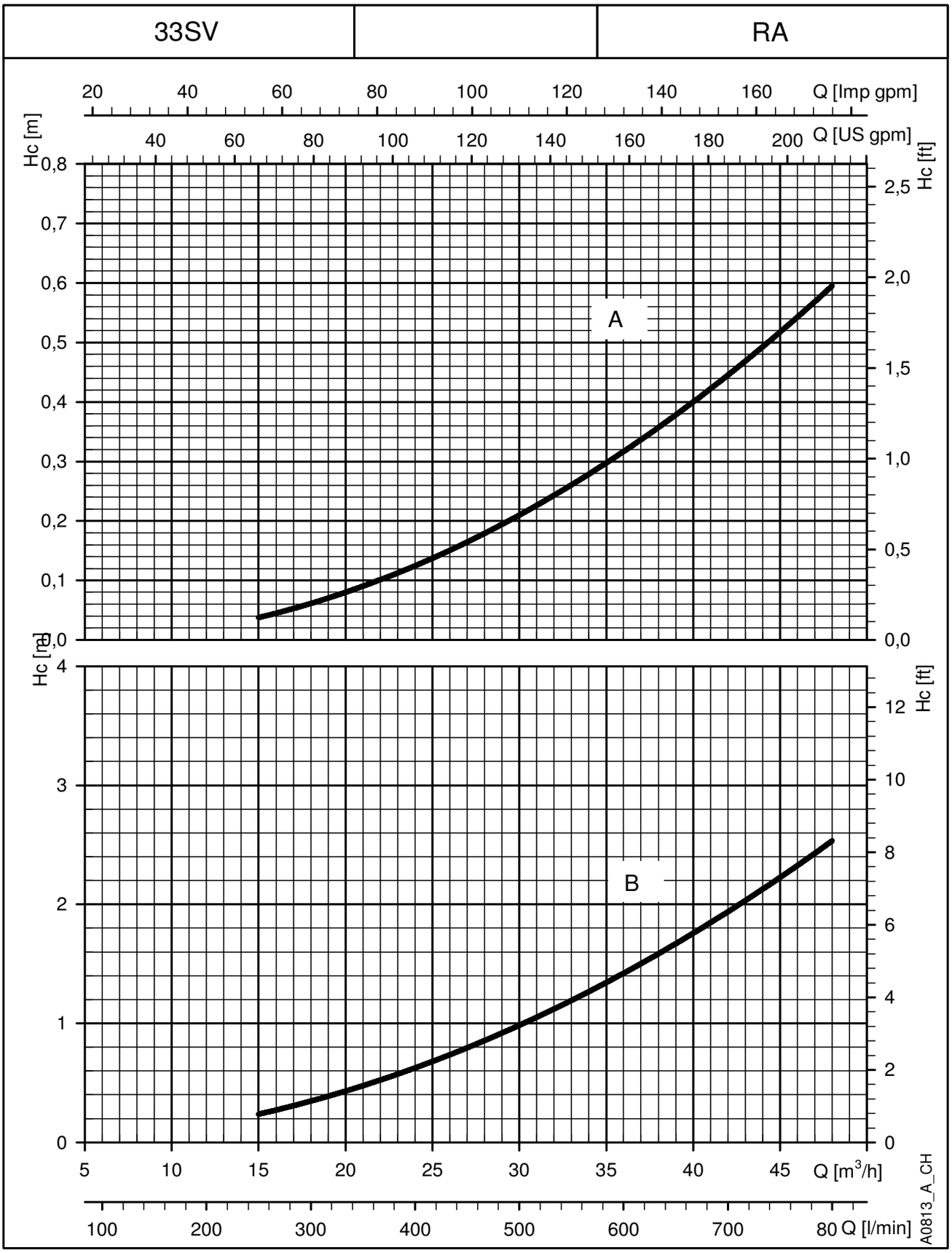
The declared curves are valid for liquids with density ρ = 1 kg/dm^3 and kinematic viscosity ν = 1 mm^2/sec. Hc (A): Pressure drop curve on delivery side of the pump. Hc (B): Pressure drop curve on suction side of the pump. RA: check valve on suction side. RM: check valve on delivery side. The pressure drops do not consider the distributed pressure drops on the manifold.

GHV../SVX BOOSTER SETS SERIES
Hc PRESSURE DROP CURVES



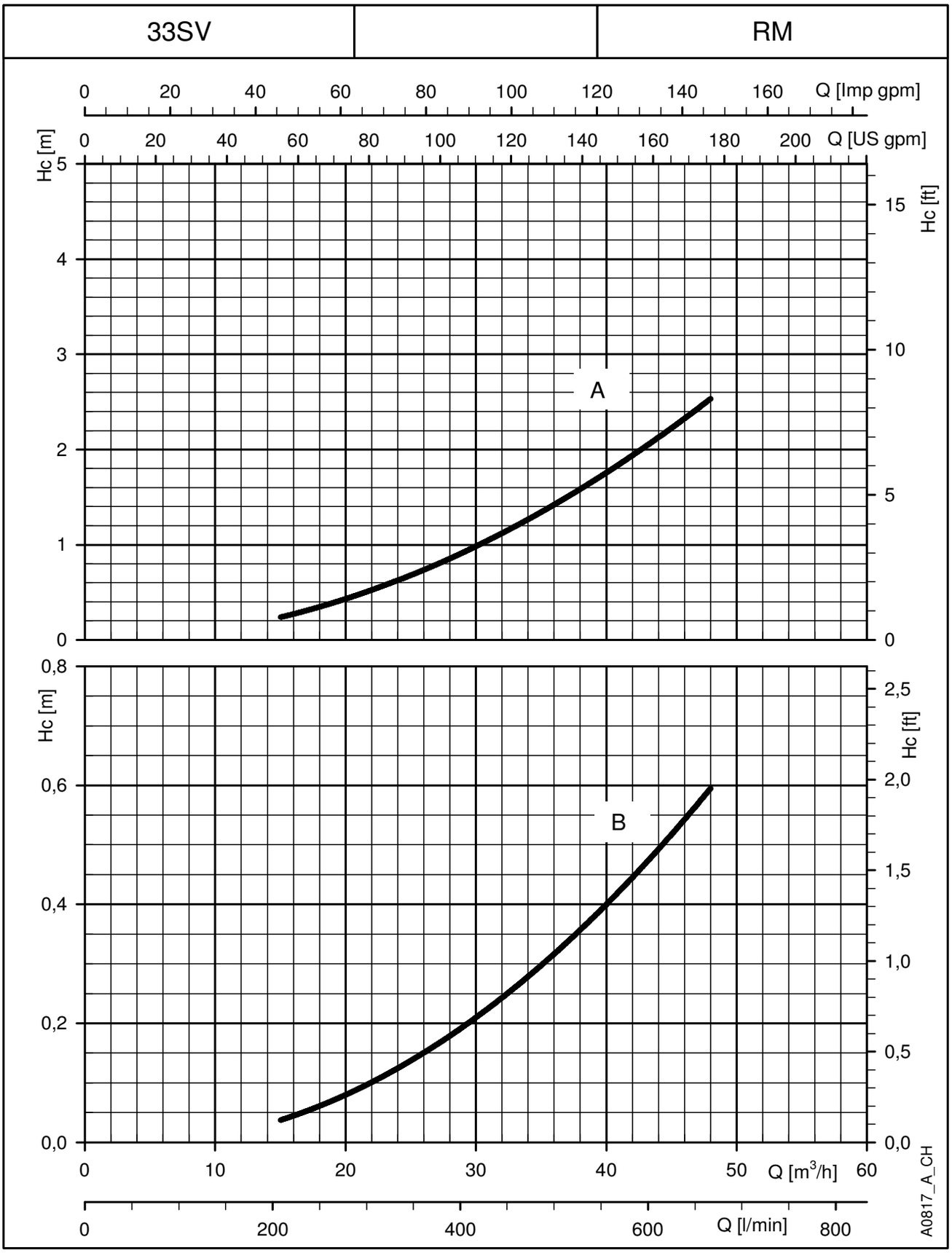
The declared curves are valid for liquids with density ρ = 1 kg/dm^3 and kinematic viscosity ν = 1 mm^2/sec. Hc (A): Pressure drop curve on delivery side of the pump. Hc (B): Pressure drop curve on suction side of the pump. RA: check valve on suction side. RM: check valve on delivery side. The pressure drops do not consider the distributed pressure drops on the manifold.

GHV../SVX BOOSTER SETS SERIES
Hc PRESSURE DROP CURVES



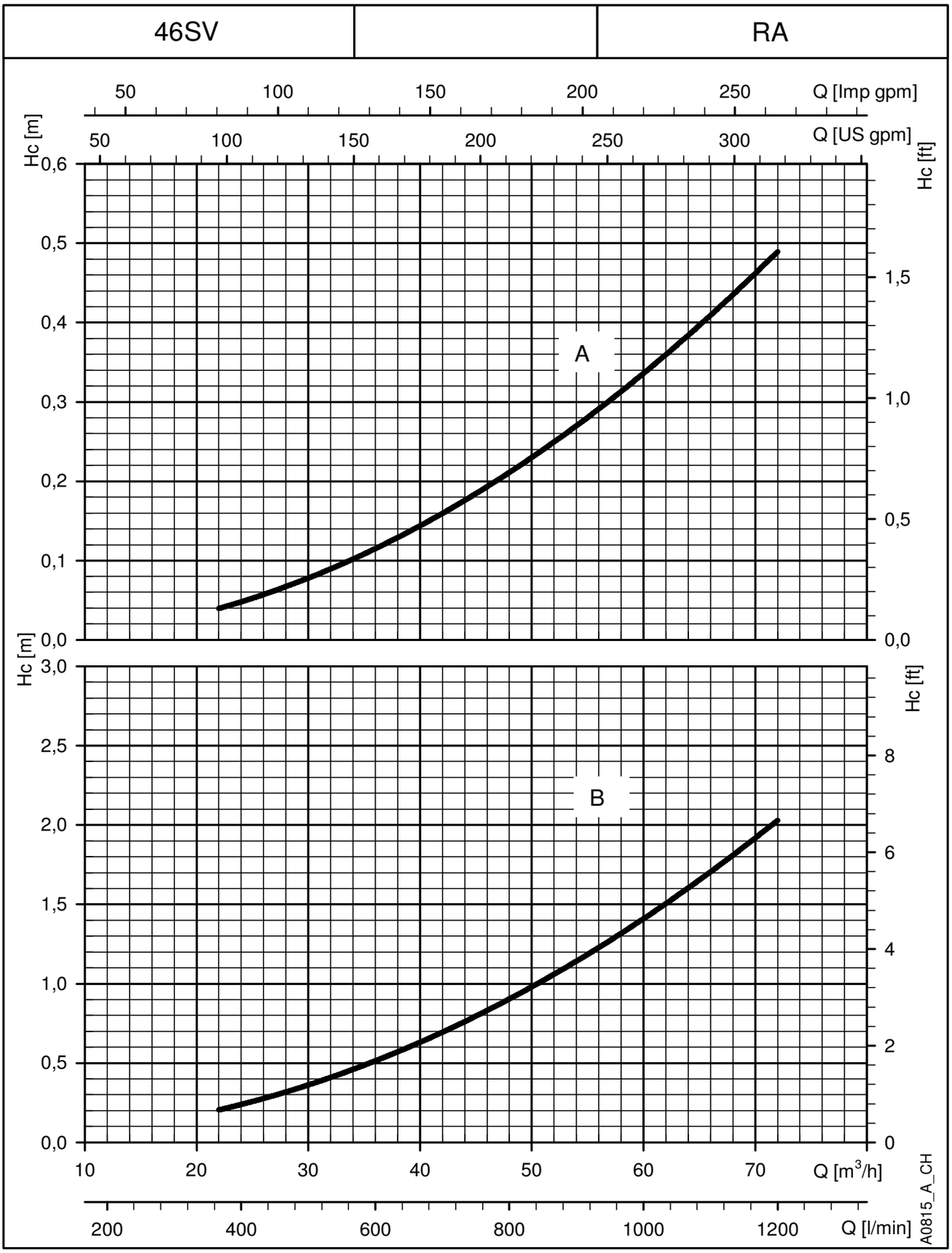
The declared curves are valid for liquids with density ρ = 1 kg/dm^3 and kinematic viscosity ν = 1 mm^2/sec. Hc (A): Pressure drop curve on delivery side of the pump. Hc (B): Pressure drop curve on suction side of the pump. RA: check valve on suction side. RM: check valve on delivery side. The pressure drops do not consider the distributed pressure drops on the manifold.

GHV../SVX BOOSTER SETS SERIES
Hc PRESSURE DROP CURVES



The declared curves are valid for liquids with density ρ = 1 kg/dm^3 and kinematic viscosity ν = 1 mm^2/sec. Hc (A): Pressure drop curve on delivery side of the pump. Hc (B): Pressure drop curve on suction side of the pump. RA: check valve on suction side. RM: check valve on delivery side. The pressure drops do not consider the distributed pressure drops on the manifold.

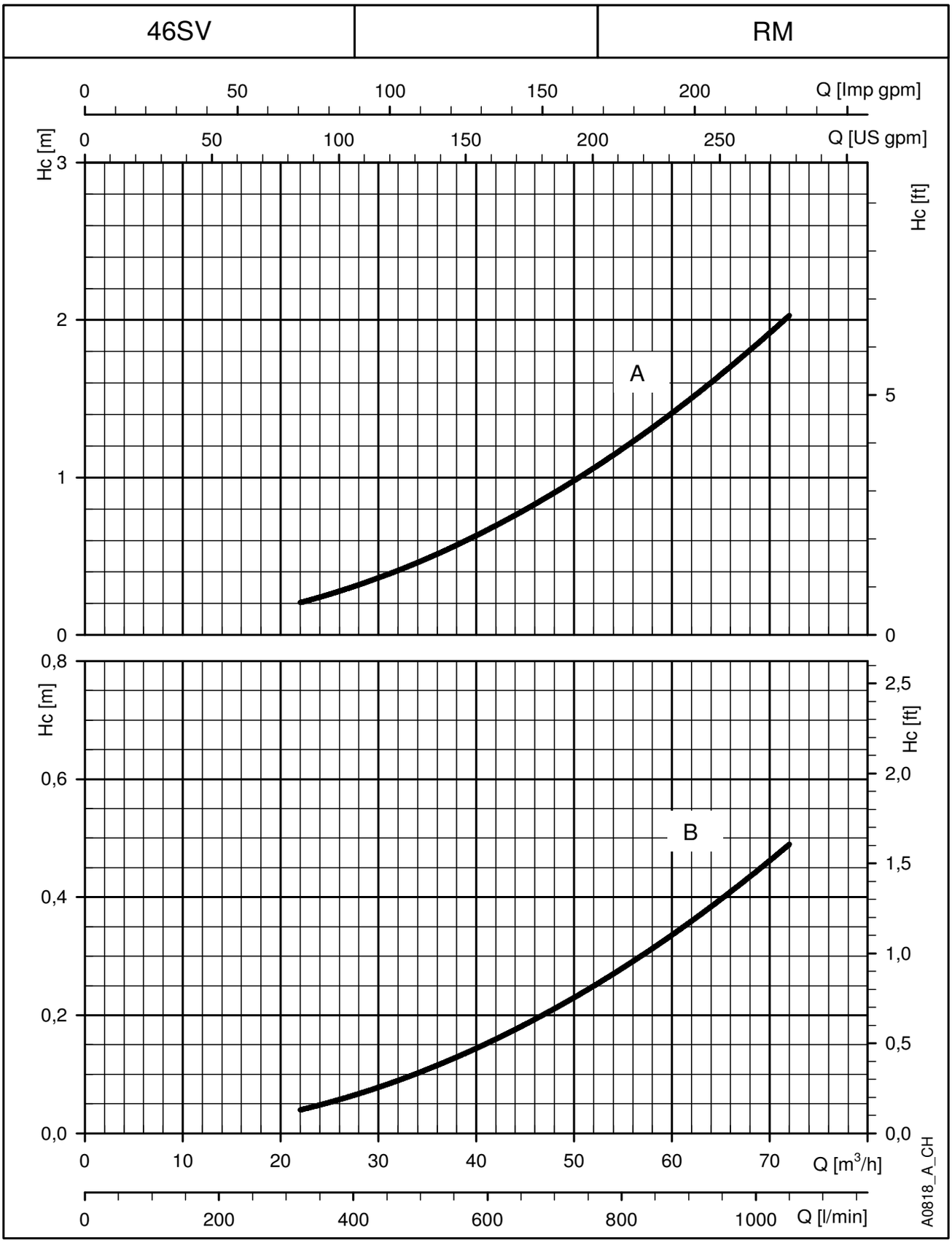
GHV../SVX BOOSTER SETS SERIES
Hc PRESSURE DROP CURVES



The declared curves are valid for liquids with density ρ = 1 kg/dm^3 and kinematic viscosity ν = 1 mm^2/sec. Hc (A): Pressure drop curve on delivery side of the pump. Hc (B): Pressure drop curve on suction side of the pump. RA: check valve on suction side. RM: check valve on delivery side. The pressure drops do not consider the distributed pressure drops on the manifold.

GHV../SVX BOOSTER SETS SERIES
Hc PRESSURE DROP CURVES

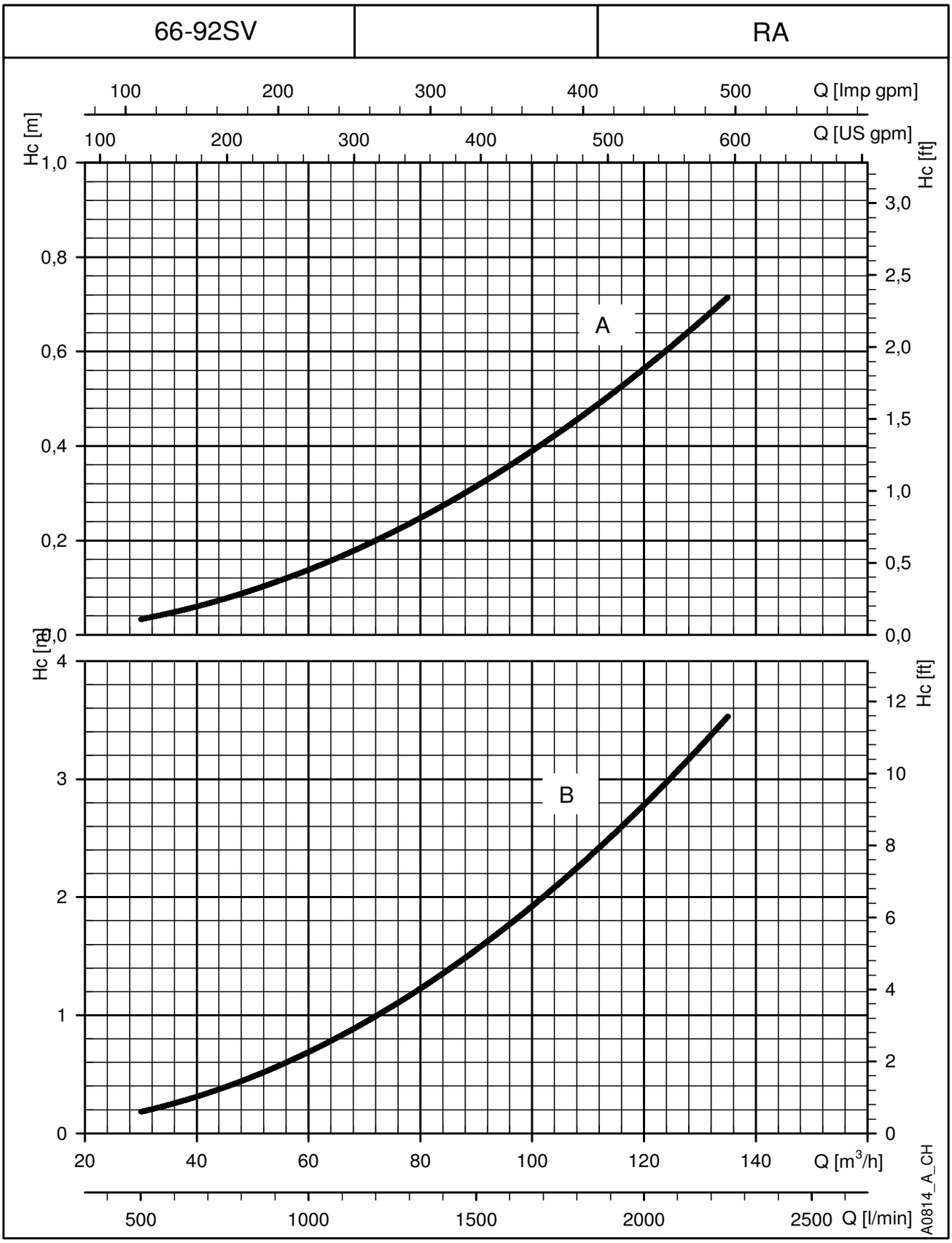
46SV		RM



The declared curves are valid for liquids with density ρ = 1 kg/dm^3 and kinematic viscosity ν = 1 mm^2/sec. Hc (A): Pressure drop curve on delivery side of the pump. Hc (B): Pressure drop curve on suction side of the pump. RA: check valve on suction side. RM: check valve on delivery side. The pressure drops do not consider the distributed pressure drops on the manifold.

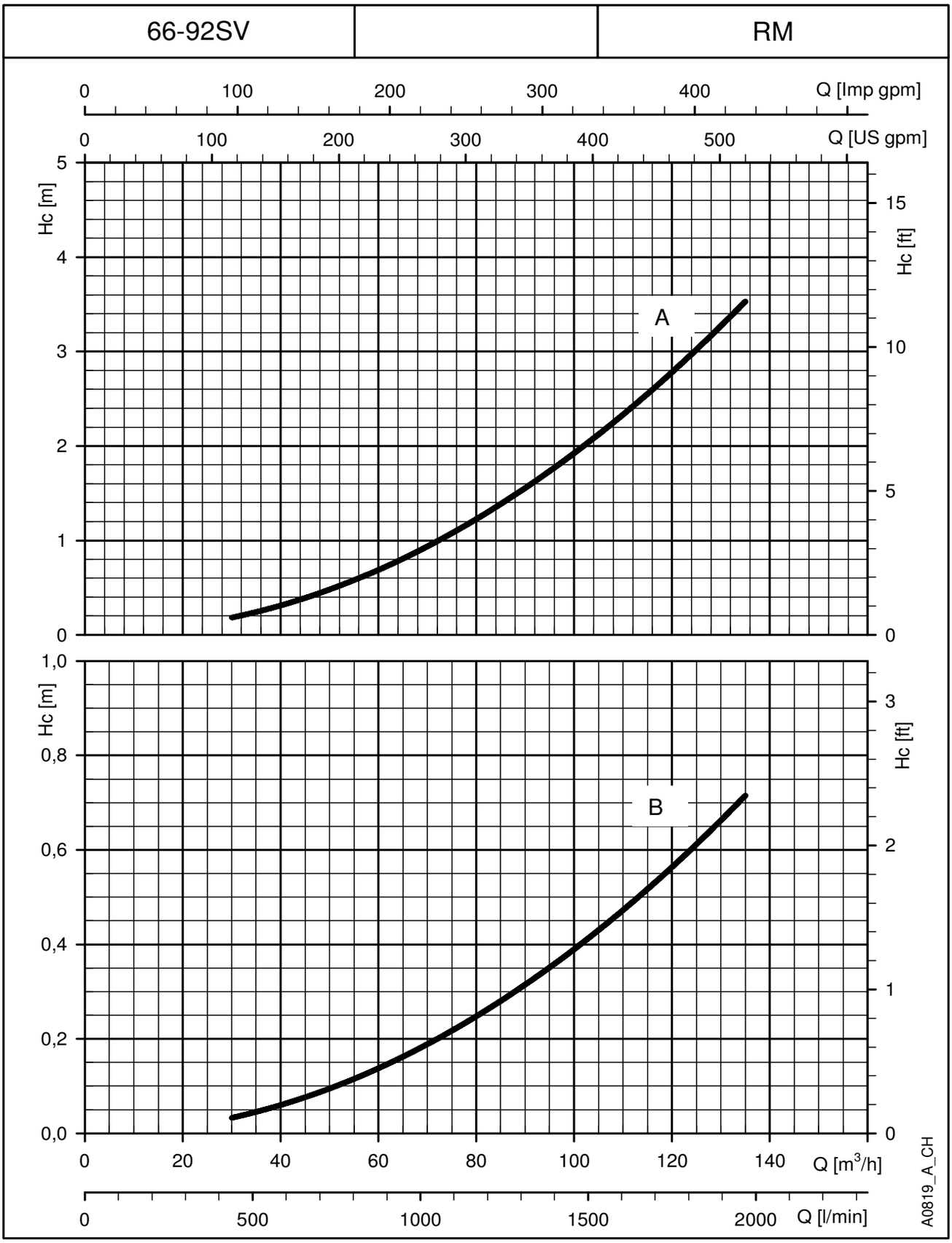
GHV../SVX BOOSTER SETS SERIES
Hc PRESSURE DROP CURVES

66-92SV		RA



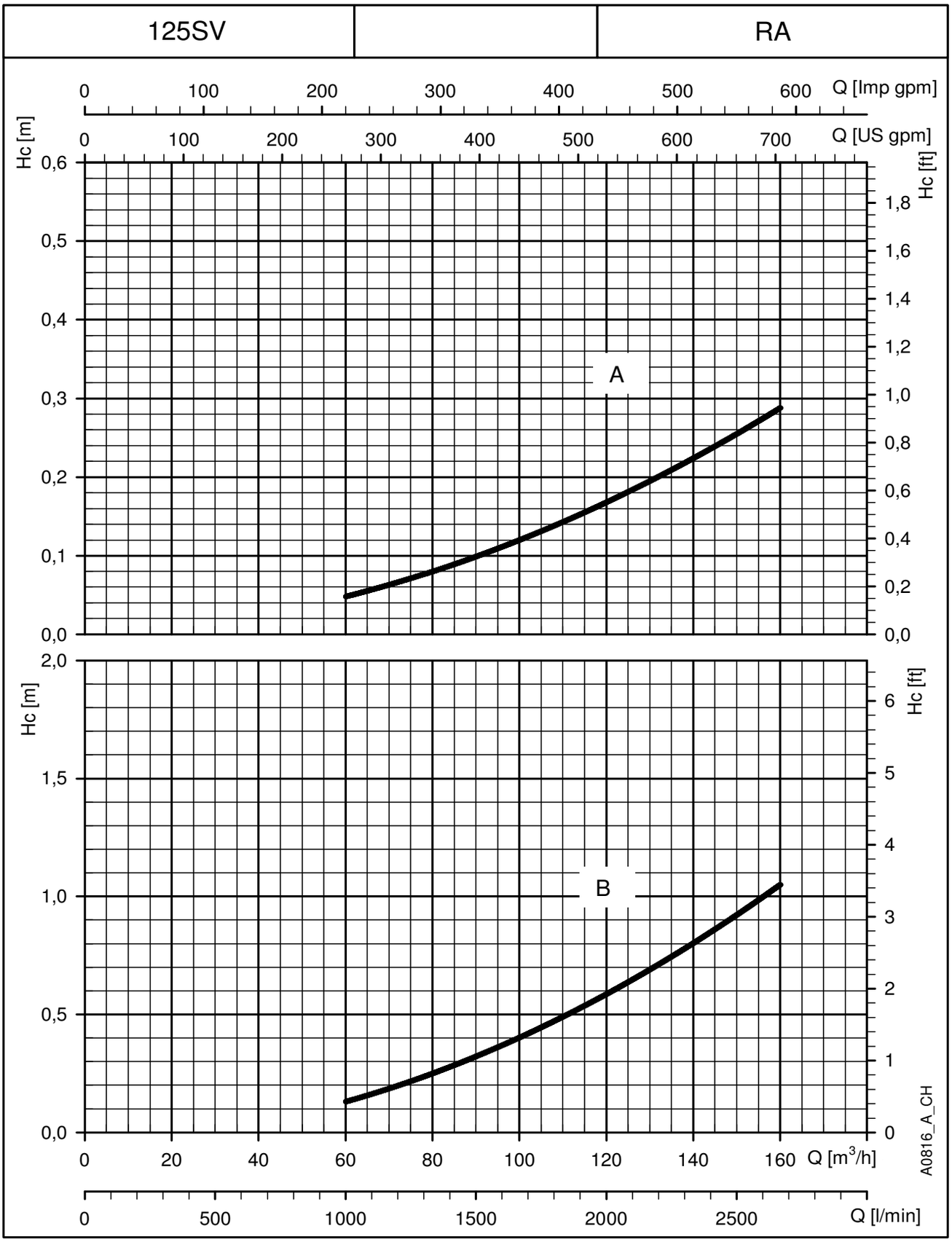
The declared curves are valid for liquids with density ρ = 1 kg/dm^3 and kinematic viscosity ν = 1 mm^2/sec. Hc (A): Pressure drop curve on delivery side of the pump. Hc (B): Pressure drop curve on suction side of the pump. RA: check valve on suction side. RM: check valve on delivery side. The pressure drops do not consider the distributed pressure drops on the manifold.

GHV../SVX BOOSTER SETS SERIES
Hc PRESSURE DROP CURVES



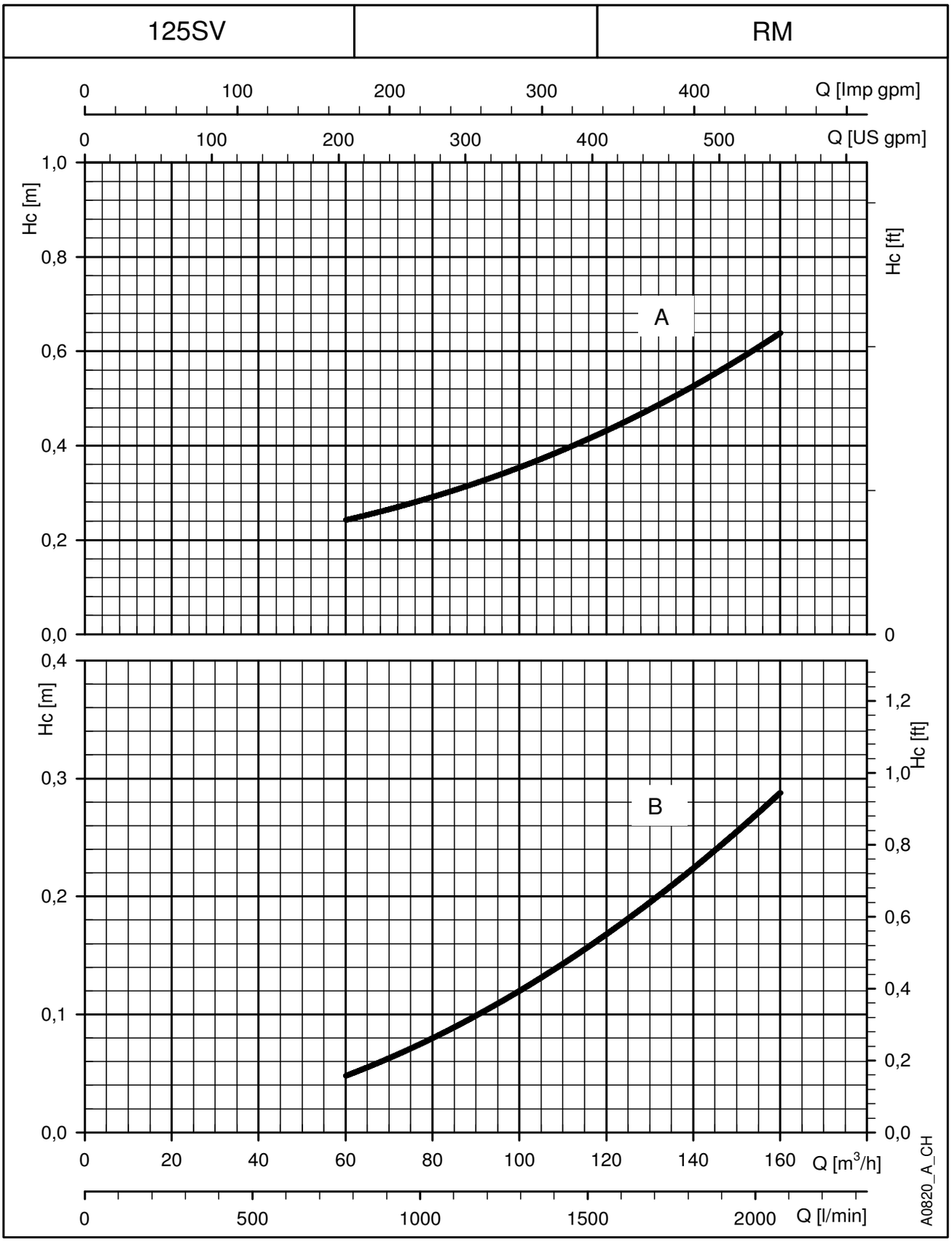
The declared curves are valid for liquids with density ρ = 1 kg/dm^3 and kinematic viscosity ν = 1 mm^2/sec. Hc (A): Pressure drop curve on delivery side of the pump. Hc (B): Pressure drop curve on suction side of the pump. RA: check valve on suction side. RM: check valve on delivery side. The pressure drops do not consider the distributed pressure drops on the manifold.

GHV../SVX BOOSTER SETS SERIES
Hc PRESSURE DROP CURVES



The declared curves are valid for liquids with density ρ = 1 kg/dm^3 and kinematic viscosity ν = 1 mm^2/sec. Hc (A): Pressure drop curve on delivery side of the pump. Hc (B): Pressure drop curve on suction side of the pump. RA: check valve on suction side. RM: check valve on delivery side. The pressure drops do not consider the distributed pressure drops on the manifold.

GHV../SVX BOOSTER SETS SERIES
Hc PRESSURE DROP CURVES



The declared curves are valid for liquids with density ρ = 1 kg/dm^3 and kinematic viscosity ν = 1 mm^2/sec. Hc (A): Pressure drop curve on delivery side of the pump. Hc (B): Pressure drop curve on suction side of the pump. RA: check valve on suction side. RM: check valve on delivery side. The pressure drops do not consider the distributed pressure drops on the manifold.

ACCESSORIES

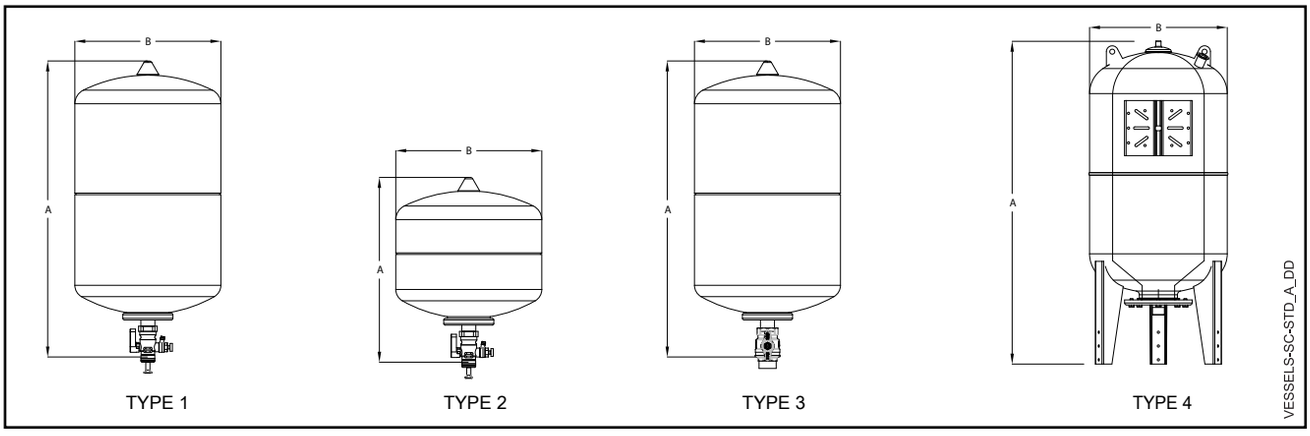
EXPANSION VESSEL TANK KITS

Any large size tanks can be connected to the unused end of the delivery manifold.
For proper sizing of the tank, please refer to the technical appendix.
Kits including the following accessories **are available on request:**

- Expansion vessel
- Instructions sheet
- Packaging
- Special isolation device for tank that avoids water stagnation and allows servicing. Only for type 1 and type 2.

Volume	Type	PN	DIMENSIONS (mm)			Material		
Liters		bar	A	ø B	Connection	Bladder	Vessel	Connection
25	1	10	280	567	3/4" MF	BUTYL	Painted steel	Brass
12	2	16	280	354	3/4" MF	BUTYL	Painted steel	Brass
24	3	16	540	270	3/4" MF	BUTYL	Painted steel	AISI 316
24	3	25	550	280	3/4" MF	BUTYL	Painted steel	Brass
300	4	25	1318	750	DN 50	BUTYL	Painted steel	Painted steel
400	4	25	1423	750	DN 50	BUTYL	Painted steel	Painted steel
600	4	25	1868	750	DN 50	BUTYL	Painted steel	Painted steel

vessels-sc-std-en_a_td



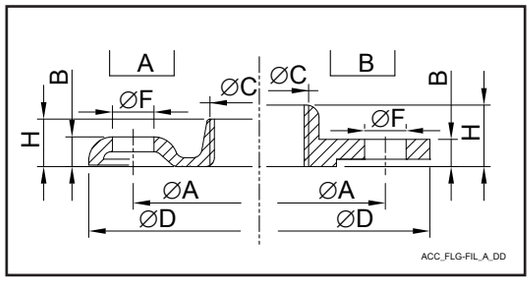
FLANGE KIT

Manifolds up to 3” are supplied with threaded attachments and caps for sealing the unused ends.
For these manifolds, stainless steel AISI 304 or 316 flanges for connection to the system are available on request.

THREADED COUNTERFLANGES

KIT		DIMENSIONS (mm)						HOLES		
TYPE	DN	MODEL	ø C	ø A	B	ø D	H	ø F	N°	PN
2"	50	A	Rp 2	125	16	165	24	18	4	25
2" ½	65	A	Rp 2 ½	145	16	185	23	18	4	16
3"	80	A	Rp 3	160	17	200	27	18	8	16
2" ½	65	B	Rp 2 ½	145	22	185	38	18	8	25
3"	80	B	Rp 3	160	24	200	40	18	8	25

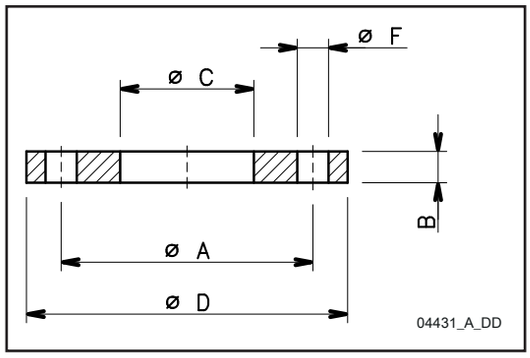
Gcom-ctf-tonde-f_b_td



WELD-ON COUNTERFLANGES

KIT		DIMENSIONS (mm)				HOLES		
TYPE	DN	ø C	ø A	B	ø D	ø F	N°	PN
2"	50	61,5	125	20	165	18	4	16
2"1/2	65	77,5	145	20	185	18	4	16
3"	80	90,5	160	20	200	18	8	16
4"	100	116	180	22	220	18	8	16
5"	125	141,5	210	22	250	18	8	16
6"	150	170,5	240	24	285	22	8	16
8"	200	221,5	295	26	340	22	12	16
10"	250	276,5	355	29	405	26	12	16
12"	300	327,5	410	32	460	26	12	16
2"	50	61,5	125	20	165	18	4	16
2"1/2	65	77,5	145	22	185	18	8	25
3"	80	90,5	160	24	200	18	8	25
4"	100	116	190	26	235	22	8	25
5"	125	141,5	220	28	270	26	8	25
6"	150	170,5	250	30	300	26	8	25
8"	200	221,5	310	32	360	26	12	25
10"	250	276,5	370	35	425	30	12	25
12"	300	327,5	430	38	485	30	16	25

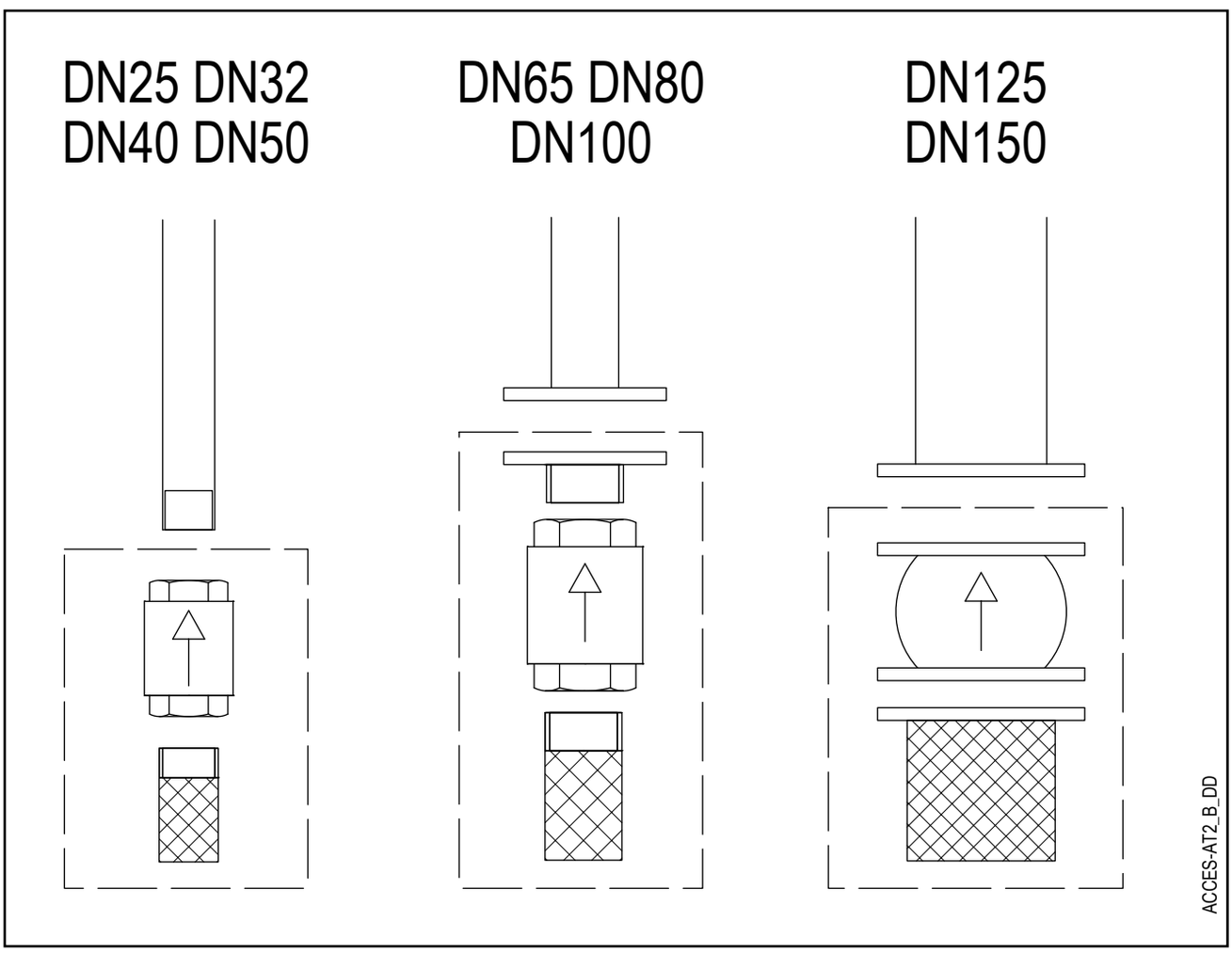
Gcom-ctf-tonde-s-en_e_td



SUCTION SIDE KIT

The GHV..SA booster sets are supplied without components on the suction side of the pumps and can be completed with piping, strainers and foot valves.

The following table summarizes the pump type and the components of the kit, such as strainer and foot valve. The pipe connection from foot valve and pump must be provided by the customers.



PUMP NAME	FOOT VALVE & STRAINER SIZE	FOOT VALVE & STRAINER MATERIAL
1SV	DN32	Aisi 304
3SV	DN32	Aisi 304
5SV	DN40	Aisi 304
10SV	DN50	Aisi 304
15SV	DN65	Aisi 304
22SV	DN65	Aisi 304
33SV	DN80	Aisi 304
46SV	DN100	Aisi 304
66SV	DN125	Aisi 304
92SV	DN125	Aisi 304
125SV	DN150	Aisi 304

acces-strainer_at2_mat-en_a_tm

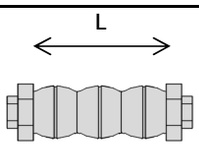
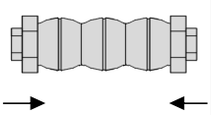
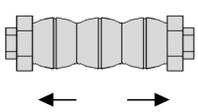
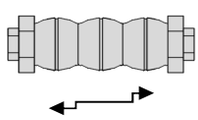
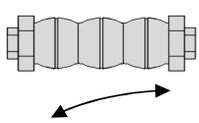
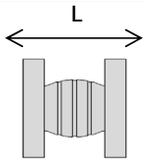
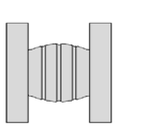
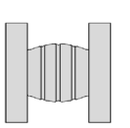
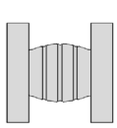
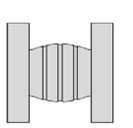
ANTI-VIBRATION JOINT KIT

Anti-vibration joints, or compensation joints, can be used to absorb deformations, expansions, pipe noise and reduce water hammering. They can also withstand a high level of vacuum, which enables the absorption of negative expansions due to depression.

Due to its elasticity, the material can deform or expand as necessary, making installation easier, simpler and quicker, even when the piping is not aligned.

The drinking water certificates are valid for the standard booster configuration. Please check with your Sales representative the drinking water certifications applicable for boosters equipped with fitted joints.
For more information, please contact the sales network.

RUBBER EXPANSION JOINT

EPDM RUBBER (*) DN	Pmax bar (**)	L  (mm)	A  (mm)	B  (mm)	C  (mm)	D  (°)
1"	10	203	22	6	22	25
1"1/4	10	203	22	6	22	25
1"1/2	10	203	22	6	22	20
2"	10	203	22	6	22	15
2"1/2	10	203	22	6	22	12
3	10	203	22	6	22	10
EPDM RUBBER (*) DN	Pmax bar (**)	L  (mm)	A  (mm)	B  (mm)	C  (mm)	D  (°)
32	16	152	13	9	13	15
40	16	152	13	9	13	15
50	16	152	13	9	13	15
65	16	152	13	9	13	15
80	16	152	13	9	13	15
100	16	152	19	13	13	15
125	16	152	19	13	13	15
150	16	152	19	13	13	15
200	16	152	19	13	19	15
250	16	203	25	16	19	15
300	10	203	25	16	19	15
350	10	203	25	16	19	15
400	9	203	25	16	19	15
450	9	203	25	16	19	15
500	9	203	25	16	19	15

* Metallic part in SS316

GD-316_JOINT-en_A_TD

** Maximum pressure permitted up to 80°C water

LEGEND

A = compression
B = extension
C = transverse
D = angular movement

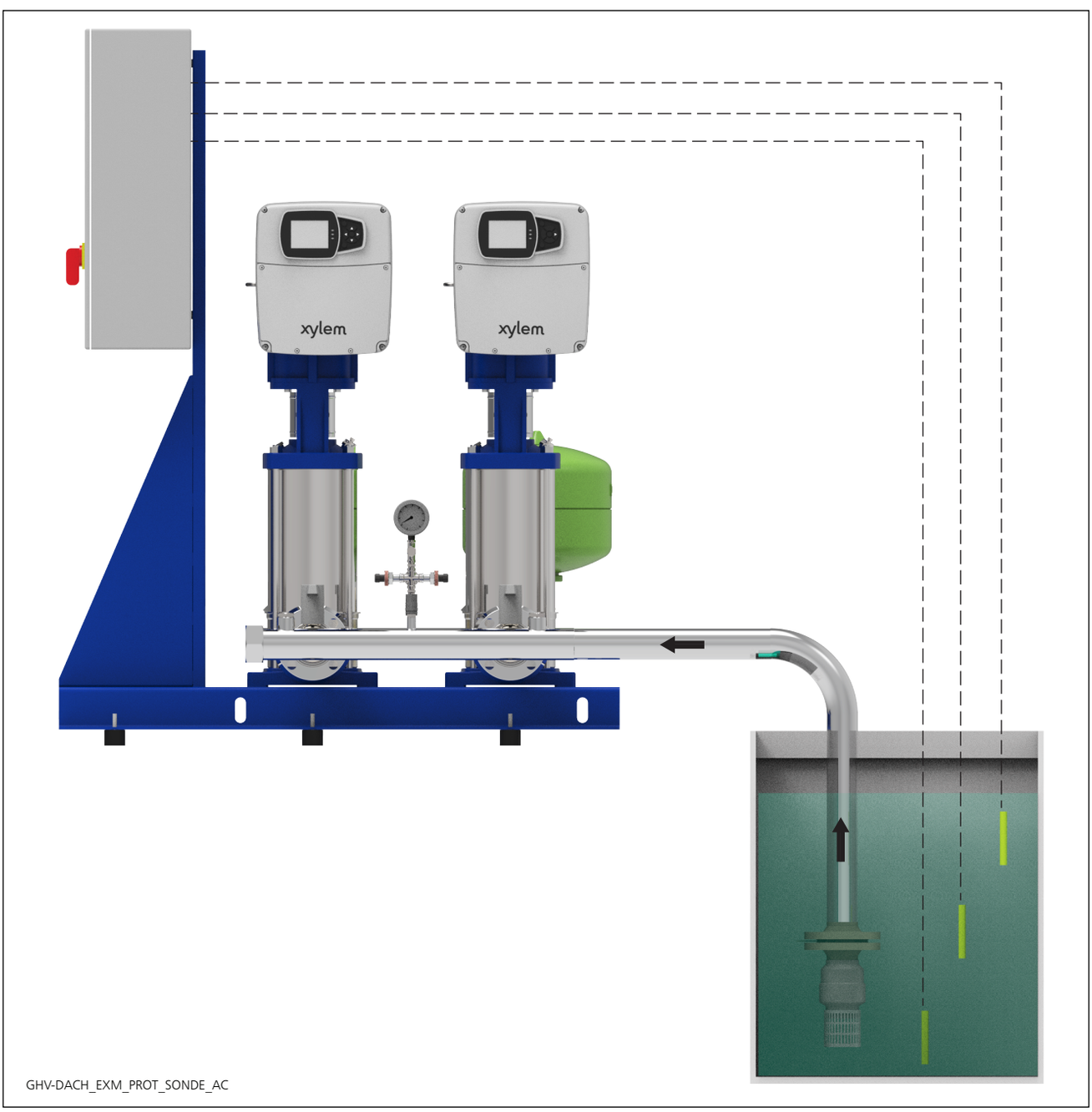
NOTE. **A** - **B** - **C** - **D** can not be cumulative

PROTECTION SYSTEMS AGAINST DRY RUNNING

To avoid damaging the pumps, protection systems must be used to prevent it from dry running.

ELECTRODE PROBE PROTECTION

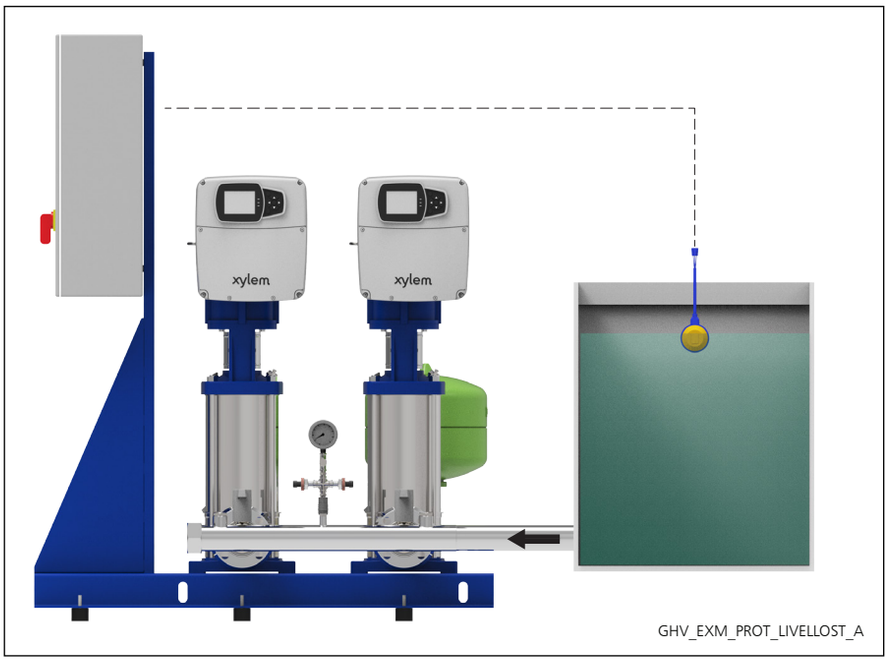
The system with electrode probes is used for supplies from open tanks or wells.
Three probes are directly connected to the electric module with adjustable sensitivity that can be installed in the control panel. If there is no water, the control circuit opens the electrical contact and the electric pumps stop.



GHV-DACH_EXM_PROT_SONDE_AC

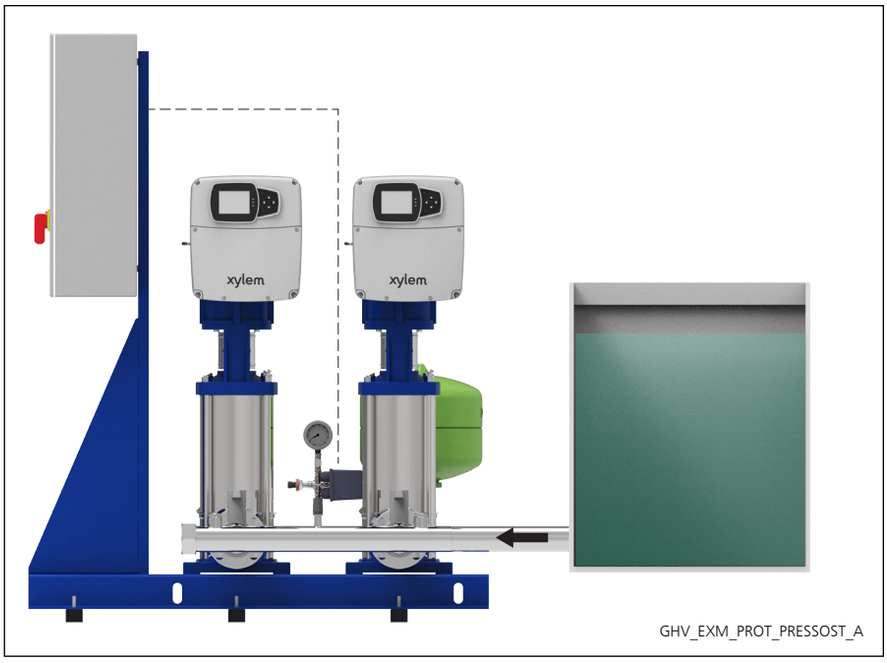
PROTECTION SYSTEMS AGAINST DRY RUNNING

To avoid damaging the pumps, protection systems must be used to prevent it from dry running.



FLOAT SWITCH PROTECTION

The float switch system is used for supplies from open tanks. The float switch immersed in the tank must be connected to the control panel. If there is no water, the float switch opens the electrical contact and the pumps stop.



MINIMUM PRESSURE SWITCH PROTECTION

The system with minimum pressure switch is used for water supplies from pressurized networks or tanks. The pressure switch is connected to the control panel. In case of water shortage, it opens the electric contact, causing the stop of the pumps.

PROTECTION SENSOR AGAINST DRY RUNNING



Sensor for detecting the presence of water based on the optoelectronic principle, therefore non-invasive and with no moving parts. The sensor features an electronic contact (on/off) which stops the pump if there is no water in the seal area.
The sensor opens the electric contact if there is no water after they factory-set delay (10 seconds) elapses. The sensor is supplied as a kit complete with 2 meters of cable, an EPDM O-ring gasket and a stainless steel adapter.

General operating features

- The sensor can be fitted directly on the filling cap of the e-SV series of pumps.
- Operation is independent of the hardness and conductivity of the water. The sensor cannot detect frozen liquids.

Available in two power versions depending on foreseen use:

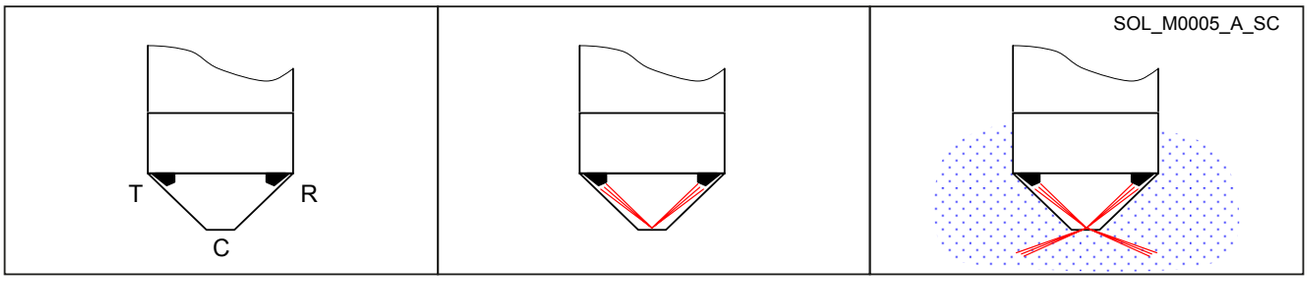
- 21÷27 Vac, universal solid state output for external relay at 24 Vac (21÷27 Vac, Max 50 mA).
- 15÷25 Vdc, NPN output at 25 V (10 mA) for HYDROVAR inverter.

Operating principle

Operation is based on the change in the refractive index on the surfaces. The optic sensor comprises a glass cap (C) containing a transmitter (T) and an infrared receiver (R).

If there is no liquid, all the infrared light emitted by the transmitter is internally reflected by the surface of the glass cap of the receiver.
The electronic contact will be open.

If liquid is present, the refractive index of the surface changes. Most of the infrared light emitted by the transmitter is dispersed in the liquid. The receiver receives less light and the electronic contact is closed.



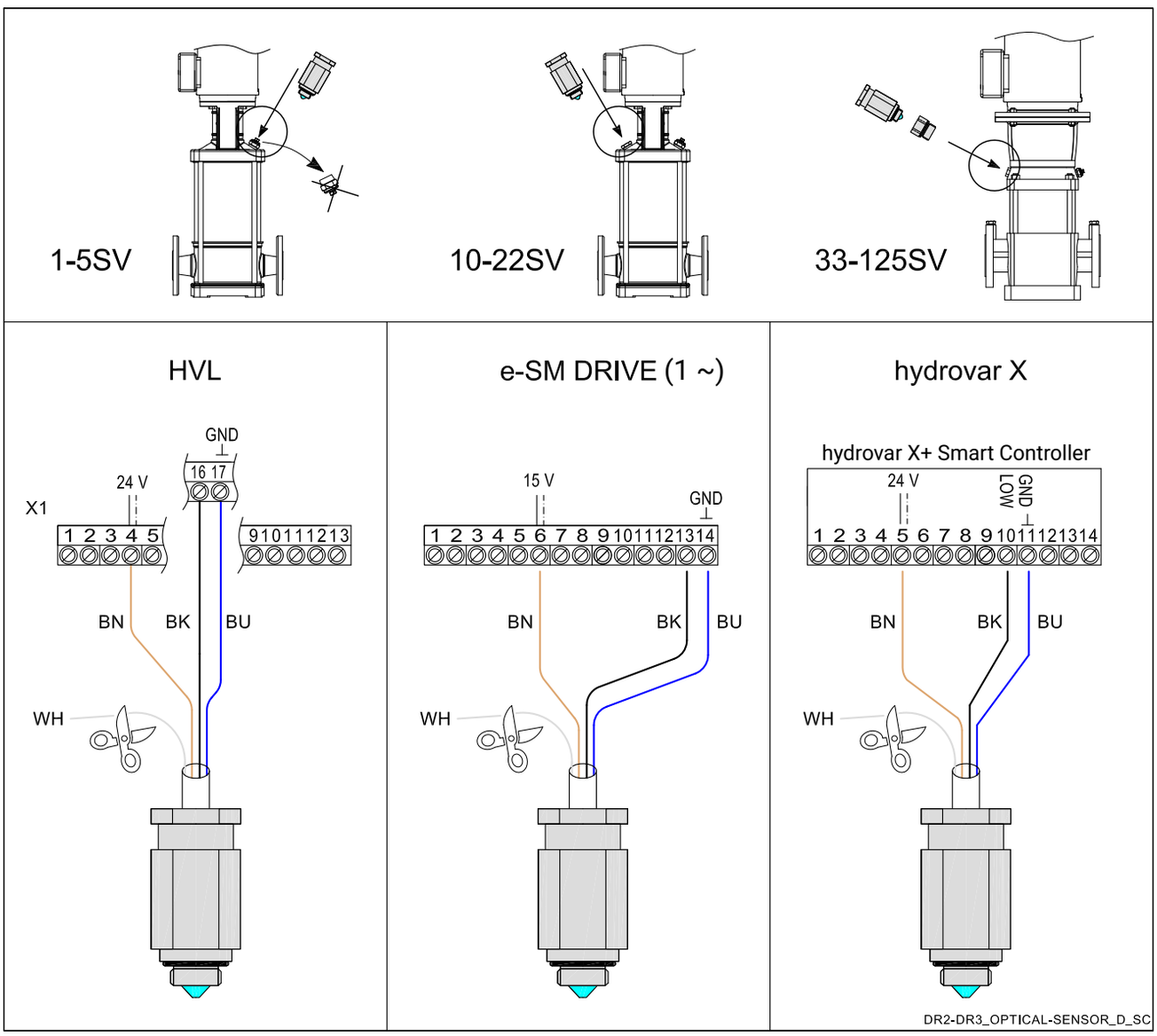
SPECIFICATIONS

- Materials:
  - Body in AISI 316L stainless steel
  - Glass optic cap
  - EPDM gasket
- Liquids: clean water, demi water. Operation is not affected by the hardness and conductivity of the liquid. To check the suitably of other liquids, contact the Lowara technical assistance service providing the characteristics of the liquid.
- Temperature of liquid: -20°C÷+120°C (cannot be used to detect frozen liquids).
- Ambient temperature: -5°C ÷+50°C
- Maximum pressure (PN): 25 bar
- Connector: 3/8 “ (3/8” x 1/2” adapter plug included in the Kit)
- Dimensions: 27x 60 mm
- IP55 protection
- Electrical characteristics:
  - Input voltage SENSOR KIT DRP-GP: 21÷27 Vac
    SENSOR KIT DRP-HV: 15÷25 Vdc
  - Output SENSOR KIT DRP-GP: universal solid state 21÷27 Vac (50 mA) for 24 Vac external relay
    SENSOR KIT DRP-HV: NPN 25 V (10 mA) for HYDROVAR inverter
  - Alarm delay: 10 seconds (factory setting)
  - FROR cable 4 x 0,34 mm^2 (PVC-CEI 20-22) 2 meters long.

PROTECTION SENSOR AGAINST DRY RUNNING
WIRING DIAGRAM

The sensor can be directly mounted on the filling plug of the e-SV pumps.
For the 33, 46, 66, 92, 125SV series, the 3/8” x 1/2” adapter ring included in the Kit must also be mounted.

KIT SENSOR DRP-HV (code 109394600)
GHV10../DR1, GHV20../DR2, GHV30../DR3



OPTIMYZE™
CONDITION MONITORING TO OPTIMIZE YOUR BOTTOM LINE

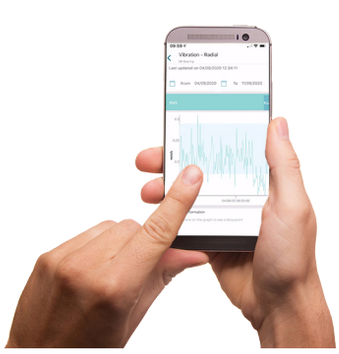
The optimyze™ modular condition monitoring solution provides health guidance and predictive maintenance advice for rotating and fixed assets such as pumps, motors, heat exchangers and steam traps. It periodically monitors system vibration and temperature and allows everyday users to access simple-to-use monitoring tools from iOS or Android mobile devices.



Using predictive analysis, optimyze identifies potential problems with your equipment before they occur, to help you manage system reliability and maintenance. Information is monitored, collected, stored and analyzed in the optimyze sensor. This allows you to understand the current health and historical trends of your assets, create maintenance reminders and generate detailed reports. As a result, you can perform preventative maintenance before issues become critical to uptime.

BENEFITS:

- Predictive maintenance to monitor the health of mechanical and electrical assets
- Asset management including asset location, size and manufacturing date
- System transparency to optimize reliability
- Optimized reporting that helps to simplify documentation, manage system maintenance and inform purchasing
- The ability to automatically share data with multiple local users
- Conveniently monitor system conditions on our simple-to-use mobile application



INDUSTRIES:

- Commercial Building Services
- Manufacturing
- Agriculture
- Water Utilities

APPLICATIONS:

- Monitoring the vibration of pumps and motors
- Monitoring the temperature of pump bearings
- Monitoring the temperature of motors to prevent overheating and winding damage
- Monitoring the performance of heat exchangers
- And more

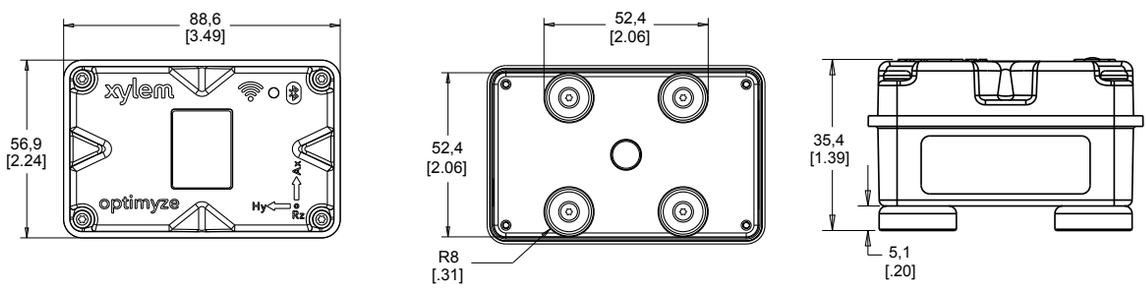
OPTIMYZE™
CONDITION MONITORING AND OPTIMIZATION SPECIFICATIONS

Surface Temperature Measurement	
Measurement range	-20°C to +135°C (-4°F to +275°F)
Measurement method	Non-contact infrared laser
Minor gradient accuracy (0°C to 25°C gradient)	+/- 1°C
Moderate gradient accuracy (25°C to 50°C gradient)	+/- 2°C
Large gradient accuracy (50°C to 100°C gradient)	+/- 4°C
Vibration Measurement	
Frequency range	5Hz to 1,100Hz
Measurement method	Independent 3-axis
Primary output (per axis)	Single value RMS
Other outputs	Kurtosis and FFT
Vibration limit (max acceleration)	16g
Threshold standard (Global)	ISO 10816-7
Threshold standard (North America)	ANSI/HI 9.6.4
Power	
Batteries (replaceable)	(2) 3.6V AA, 2400mAh, Lithium
Battery life (using default sampling rate at 25°C)	3 to 5 years
Default sampling rate	1 sample per 30 minutes
Available sampling rates (one sample per unit of time)	10 seconds to 12 hours
Wireless Communication	
Network type	Bluetooth® Low Energy 5.01
Connection range (without interference)	30 meters (100 feet)
Environmental	
Ambient operating range	-20°C to +50°C (-4°F to +122°F)
Storage temperature (5 to 95% humidity non-condensing)	-25°C to +65°C (-13°F to +149°F)
Protection rating	IP56, NEMA 4
Physical Properties	
Weight	145g (0.32 lbs.)
Status	LED
Mounting method (standard)	Magnetic (16mm potted magnets)
Mounting method (optional)	Drill and tap with plate
Certifications	
Certifications	CE, FCC, UL
Intended use (environments)	Non-hazardous, non-corrosive
Part Numbers	
optimyze (standard sensor)	P2007000
optimyze battery replacement kit	P2007030
optimyze optional flat plate mounting kit	P2007031

[1]Backwards compatible up to Bluetooth® Low Energy 4.2

opt-en_a_sc

DIMENSIONS: mm [in]



TECHNICAL APPENDIX

VAPOUR PRESSURE
VAPOUR PRESSURE ps AND ρ DENSITY OF WATER TABLE

t °C	T K	ps bar	ρ kg/dm³
0	273,15	0,00611	0,9998
1	274,15	0,00657	0,9999
2	275,15	0,00706	0,9999
3	276,15	0,00758	0,9999
4	277,15	0,00813	1,0000
5	278,15	0,00872	1,0000
6	279,15	0,00935	1,0000
7	280,15	0,01001	0,9999
8	281,15	0,01072	0,9999
9	282,15	0,01147	0,9998
10	283,15	0,01227	0,9997
11	284,15	0,01312	0,9997
12	285,15	0,01401	0,9996
13	286,15	0,01497	0,9994
14	287,15	0,01597	0,9993
15	288,15	0,01704	0,9992
16	289,15	0,01817	0,9990
17	290,15	0,01936	0,9988
18	291,15	0,02062	0,9987
19	292,15	0,02196	0,9985
20	293,15	0,02337	0,9983
21	294,15	0,24850	0,9981
22	295,15	0,02642	0,9978
23	296,15	0,02808	0,9976
24	297,15	0,02982	0,9974
25	298,15	0,03166	0,9971
26	299,15	0,03360	0,9968
27	300,15	0,03564	0,9966
28	301,15	0,03778	0,9963
29	302,15	0,04004	0,9960
30	303,15	0,04241	0,9957
31	304,15	0,04491	0,9954
32	305,15	0,04753	0,9951
33	306,15	0,05029	0,9947
34	307,15	0,05318	0,9944
35	308,15	0,05622	0,9940
36	309,15	0,05940	0,9937
37	310,15	0,06274	0,9933
38	311,15	0,06624	0,9930
39	312,15	0,06991	0,9927
40	313,15	0,07375	0,9923
41	314,15	0,07777	0,9919
42	315,15	0,08198	0,9915
43	316,15	0,09639	0,9911
44	317,15	0,09100	0,9907
45	318,15	0,09582	0,9902
46	319,15	0,10086	0,9898
47	320,15	0,10612	0,9894
48	321,15	0,11162	0,9889
49	322,15	0,11736	0,9884
50	323,15	0,12335	0,9880
51	324,15	0,12961	0,9876
52	325,15	0,13613	0,9871
53	326,15	0,14293	0,9862
54	327,15	0,15002	0,9862
55	328,15	0,15741	0,9857
56	329,15	0,16511	0,9852
57	330,15	0,17313	0,9846
58	331,15	0,18147	0,9842
59	332,15	0,19016	0,9837
60	333,15	0,1992	0,9832
61	334,15	0,2086	0,9826
62	335,15	0,2184	0,9821
63	336,15	0,2286	0,9816
64	337,15	0,2391	0,9811
65	338,15	0,2501	0,9805
66	339,15	0,2615	0,9799
67	340,15	0,2733	0,9793
68	341,15	0,2856	0,9788
69	342,15	0,2984	0,9782
70	343,15	0,3116	0,9777
71	344,15	0,3253	0,9770
72	345,15	0,3396	0,9765
73	346,15	0,3543	0,9760
74	347,15	0,3696	0,9753
75	348,15	0,3855	0,9748
76	349,15	0,4019	0,9741
77	350,15	0,4189	0,9735
78	351,15	0,4365	0,9729
79	352,15	0,4547	0,9723
80	353,15	0,4736	0,9716
81	354,15	0,4931	0,9710
82	355,15	0,5133	0,9704
83	356,15	0,5342	0,9697
84	357,15	0,5557	0,9691
85	358,15	0,5780	0,9684
86	359,15	0,6011	0,9678
87	360,15	0,6249	0,9671
88	361,15	0,6495	0,9665
89	362,15	0,6749	0,9658
90	363,15	0,7011	0,9652
91	364,15	0,7281	0,9644
92	365,15	0,7561	0,9638
93	366,15	0,7849	0,9630
94	367,15	0,8146	0,9624
95	368,15	0,8453	0,9616
96	369,15	0,8769	0,9610
97	370,15	0,9094	0,9602
98	371,15	0,9430	0,9596
99	372,15	0,9776	0,9586
100	373,15	1,0133	0,9581
102	375,15	1,0878	0,9567
104	377,15	1,1668	0,9552
106	379,15	1,2504	0,9537
108	381,15	1,3390	0,9522
110	383,15	1,4327	0,9507
112	385,15	1,5316	0,9491
114	387,15	1,6362	0,9476
116	389,15	1,7465	0,9460
118	391,15	1,8628	0,9445
120	393,15	1,9854	0,9429
122	395,15	2,1145	0,9412
124	397,15	2,2504	0,9396
126	399,15	2,3933	0,9379
128	401,15	2,5435	0,9362
130	403,15	2,7013	0,9346
132	405,15	2,867	0,9328
134	407,15	3,041	0,9311
136	409,15	3,223	0,9294
138	411,15	3,414	0,9276
140	413,15	3,614	0,9258
145	418,15	4,155	0,9214
155	428,15	5,433	0,9121
160	433,15	6,181	0,9073
165	438,15	7,008	0,9024
170	433,15	7,920	0,8973
175	448,15	8,924	0,8921
180	453,15	10,027	0,8869
185	458,15	11,233	0,8815
190	463,15	12,551	0,8760
195	468,15	13,987	0,8704
200	473,15	15,550	0,8647
205	478,15	17,243	0,8588
210	483,15	19,077	0,8528
215	488,15	21,060	0,8467
220	493,15	23,198	0,8403
225	498,15	25,501	0,8339
230	503,15	27,976	0,8273
235	508,15	30,632	0,8205
240	513,15	33,478	0,8136
245	518,15	36,523	0,8065
250	523,15	39,776	0,7992
255	528,15	43,246	0,7916
260	533,15	46,943	0,7839
265	538,15	50,877	0,7759
270	543,15	55,058	0,7678
275	548,15	59,496	0,7593
280	553,15	64,202	0,7505
285	558,15	69,186	0,7415
290	563,15	74,461	0,7321
295	568,15	80,037	0,7223
300	573,15	85,927	0,7122
305	578,15	92,144	0,7017
310	583,15	98,70	0,6906
315	588,15	105,61	0,6791
320	593,15	112,89	0,6669
325	598,15	120,56	0,6541
330	603,15	128,63	0,6404
340	613,15	146,05	0,6102
350	623,15	165,35	0,5743
360	633,15	186,75	0,5275
370	643,15	210,54	0,4518
374,15	647,30	221,20	0,3154

G-at_npsh_b_sc

TANK
CHOOSING AND SIZING THE SURGE TANK

The purpose of the surge tank is to limit the number of hourly starts of the pumps, placing part of its stock of water, which is maintained under pressure by the air above it, at the disposal of the system.
The surge tank can be of the air cushion or expansion vessel type.
In the air cushion version there is no clear separation between air and water.
Since part of the air tends to mix with water, it is necessary to restore it by means of air supply units or a compressor.
In the expansion vessel version, neither air supply units nor compressor are needed, as contact between air and water is prevented by a flexible expansion vessel inside the tank.
The following method, which is used to determine the volume of a surge tank, is valid both for horizontal and vertical surge tanks.
When calculating the volume of the surge tank, it is generally sufficient to consider the first pump only.

EXPANSION VESSEL

If you decide to use an expansion vessel, the volume will be lower than that of the air-cushion tank. It can be calculated with the following formula:

$$V_m = \frac{Qp}{4 \times Z} \times \frac{1}{1 - \frac{(Pmin - 2)}{Pmax}}$$

where:
Vm = Total volume of the air-cushion surge tank in m^3
Qp = Average pump flow rate in m^3/h
Pmax = Maximum pressure setting (wcm)
Pmin = Minimum pressure setting (wcm)
Z = Maximum number of starts per hour allowed by the motor
Example:
22SV10F110T electric pump
Pmax = 23 wcm
Pmin = 15 wcm
Qp = 20 m^3/h
Z =25

$$V_m = \frac{Qp}{4 \times Z} \times \frac{1}{1 - \frac{(Pmin - 2)}{Pmax}} = 0{,}46\ m^3$$

A 500-litre surge tank is therefore required.

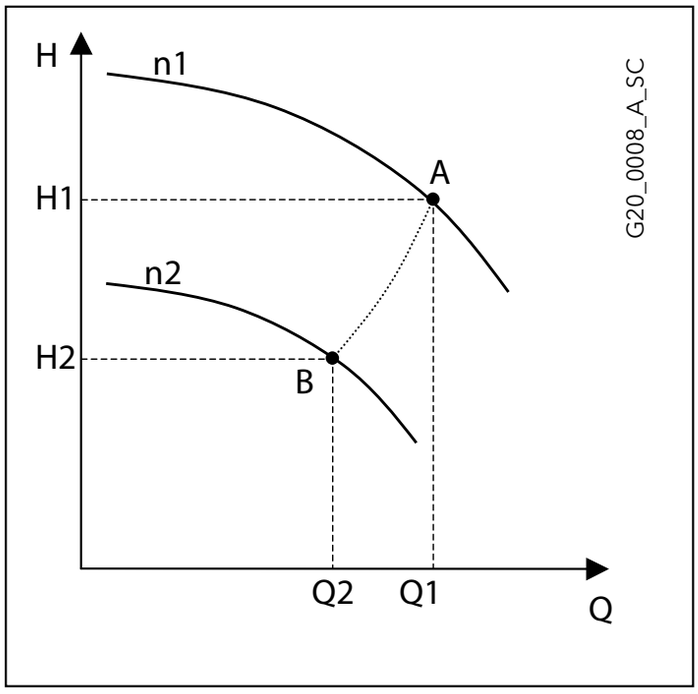
TANK
PERFORMANCE WITH VARYING SPEED: EQUIVALENCE RELATIONS

Fitting the electric pump with a frequency converter makes it possible to vary the pump rotation speed, normally according to the system pressure parameter. **Variations in electric pump speed** result in **modified performances** according to the equivalence relations.

Flow rate $\frac{Q1}{Q2} = \left[\frac{n1}{n2}\right]$

Head $\frac{H1}{H2} = \left[\frac{n1}{n2}\right]^2$

Power $\frac{P1}{P2} = \left[\frac{n1}{n2}\right]^3$



n1 = initial speed; n2= speed required.
Q1 = initial flow rate; Q2= flow rate required.
H1 = initial head; H2= head required.
P1 = initial power; P2= power required

Frequency ratios can be used instead of speed in practical applications, keeping 30 Hz as the bottom limit.

Example : 2-pole 50 Hz electric pump n1 =2900 rpm (point A)
Flow rate (A) = 100 l/min; Head (A) = 50 m
By reducing the frequency to 30 Hz the speed is reduced to approx. n2 = 1740 rpm (point B)
Flow rate (B) = 60 l/min; Head (B) = 18 m
The power of the new work point B is cut to about 22% of the initial power.

SIZING THE EXPANSION VESSEL IN SYSTEMS WITH SPEED VARIATION

Variable speed booster sets need **smaller expansion vessel** compared to traditional systems. Generally speaking, the vessel with a liter capacity of just 10% of the nominal capacity of a single pump, expressed in liters per minute, is needed.
The **gradual starting** of the pumps controlled by the frequency converters reduces the need to limit the number of hourly starts; the main purpose of the vessel is to compensate for small system losses, stabilize the pressure and make up for pressure variations caused by sudden demand.

Make the following calculation:
Set made up of three electric pumps, each with a maximum flow rate of 400 l/min, for a total capacity of 1200 l/min.
The **volume** required for the vessel is 40 liters. This size can be obtained by using two 24-litre vessels mounted directly onto the set's manifold.
The calculation establishes the minimum value needed for proper operation.

TABLE OF FLOW RESISTANCE IN 100 m OF STRAIGHT CAST IRON PIPELINE (HAZEN-WILLIAMS FORMULA C=100)

FLOW RATE			NOMINAL DIAMETER in mm and inches																
m^3/h	l/min		15 1/2"	20 3/4"	25 1"	32 1 1/4"	40 1 1/2"	50 2	65 2 1/2"	80 3"	100 4"	125 5"	150 6"	175 7"	200 8"	250 10"	300 12"	350 14"	400 16"
0,6	10	v	0,94	0,53	0,34	0,21	0,13												
		hr	16	3,94	1,33	0,40	0,13												
0,9	15	v	1,42	0,80	0,51	0,31	0,20												
		hr	33,9	8,35	2,82	0,85	0,29												
1,2	20	v	1,89	1,06	0,68	0,41	0,27	0,17											
		hr	57,7	14,21	4,79	1,44	0,49	0,16											
1,5	25	v	2,36	1,33	0,85	0,52	0,33	0,21											
		hr	87,2	21,5	7,24	2,18	0,73	0,25											
1,8	30	v	2,83	1,59	1,02	0,62	0,40	0,25											
		hr	122	30,1	10,1	3,05	1,03	0,35											
2,1	35	v	3,30	1,86	1,19	0,73	0,46	0,30											
		hr	162	40,0	13,5	4,06	1,37	0,46											
2,4	40	v		2,12	1,36	0,83	0,53	0,34	0,20										
		hr		51,2	17,3	5,19	1,75	0,59	0,16										
3	50	v		2,65	1,70	1,04	0,66	0,42	0,25										
		hr		77,4	26,1	7,85	2,65	0,89	0,25										
3,6	60	v		3,18	2,04	1,24	0,80	0,51	0,30										
		hr		108	36,6	11,0	3,71	1,25	0,35										
4,2	70	v		3,72	2,38	1,45	0,93	0,59	0,35										
		hr		144	48,7	14,6	4,93	1,66	0,46										
4,8	80	v		4,25	2,72	1,66	1,06	0,68	0,40										
		hr		185	62,3	18,7	6,32	2,13	0,59										
5,4	90	v			3,06	1,87	1,19	0,76	0,45	0,30									
		hr			77,5	23,3	7,85	2,65	0,74	0,27									
6	100	v			3,40	2,07	1,33	0,85	0,50	0,33									
		hr			94,1	28,3	9,54	3,22	0,90	0,33									
7,5	125	v			4,25	2,59	1,66	1,06	0,63	0,41									
		hr			142	42,8	14,4	4,86	1,36	0,49									
9	150	v				3,11	1,99	1,27	0,75	0,50	0,32								
		hr				59,9	20,2	6,82	1,90	0,69	0,23								
10,5	175	v				3,63	2,32	1,49	0,88	0,58	0,37								
		hr				79,7	26,9	9,07	2,53	0,92	0,31								
12	200	v				4,15	2,65	1,70	1,01	0,66	0,42								
		hr				102	34,4	11,6	3,23	1,18	0,40								
15	250	v				5,18	3,32	2,12	1,26	0,83	0,53	0,34							
		hr				154	52,0	17,5	4,89	1,78	0,60	0,20							
18	300	v					3,98	2,55	1,51	1,00	0,64	0,41							
		hr					72,8	24,6	6,85	2,49	0,84	0,28							
24	400	v					5,31	3,40	2,01	1,33	0,85	0,54	0,38						
		hr					124	41,8	11,66	4,24	1,43	0,48	0,20						
30	500	v					6,63	4,25	2,51	1,66	1,06	0,68	0,47						
		hr					187	63,2	17,6	6,41	2,16	0,73	0,30						
36	600	v						5,10	3,02	1,99	1,27	0,82	0,57	0,42					
		hr						88,6	24,7	8,98	3,03	1,02	0,42	0,20					
42	700	v						5,94	3,52	2,32	1,49	0,95	0,66	0,49					
		hr						118	32,8	11,9	4,03	1,36	0,56	0,26					
48	800	v						6,79	4,02	2,65	1,70	1,09	0,75	0,55					
		hr						151	42,0	15,3	5,16	1,74	0,72	0,34					
54	900	v						7,64	4,52	2,99	1,91	1,22	0,85	0,62					
		hr						188	52,3	19,0	6,41	2,16	0,89	0,42					
60	1000	v							5,03	3,32	2,12	1,36	0,94	0,69	0,53				
		hr							63,5	23,1	7,79	2,63	1,08	0,51	0,27				
75	1250	v							6,28	4,15	2,65	1,70	1,18	0,87	0,66				
		hr							96,0	34,9	11,8	3,97	1,63	0,77	0,40				
90	1500	v							7,54	4,98	3,18	2,04	1,42	1,04	0,80				
		hr							134	48,9	16,5	5,57	2,29	1,08	0,56				
105	1750	v							8,79	5,81	3,72	2,38	1,65	1,21	0,93				
		hr							179	65,1	21,9	7,40	3,05	1,44	0,75				
120	2000	v								6,63	4,25	2,72	1,89	1,39	1,06	0,68			
		hr								83,3	28,1	9,48	3,90	1,84	0,96	0,32			
150	2500	v								8,29	5,31	3,40	2,36	1,73	1,33	0,85			
		hr								126	42,5	14,3	5,89	2,78	1,45	0,49			
180	3000	v									6,37	4,08	2,83	2,08	1,59	1,02	0,71		
		hr									59,5	20,1	8,26	3,90	2,03	0,69	0,28		
210	3500	v									7,43	4,76	3,30	2,43	1,86	1,19	0,83		
		hr									79,1	26,7	11,0	5,18	2,71	0,91	0,38		
240	4000	v									8,49	5,44	3,77	2,77	2,12	1,36	0,94		
		hr									101	34,2	14,1	6,64	3,46	1,17	0,48		
300	5000	v										6,79	4,72	3,47	2,65	1,70	1,18		
		hr										51,6	21,2	10,0	5,23	1,77	0,73		
360	6000	v										8,15	5,66	4,16	3,18	2,04	1,42		
		hr										72,3	29,8	14,1	7,33	2,47	1,02		
420	7000	v											6,61	4,85	3,72	2,38	1,65	1,21	
		hr											39,6	18,7	9,75	3,29	1,35	0,64	
480	8000	v											7,55	5,55	4,25	2,72	1,89	1,39	
		hr											50,7	23,9	12,49	4,21	1,73	0,82	
540	9000	v											8,49	6,24	4,78	3,06	2,12	1,56	1,19
		hr											63,0	29,8	15,5	5,24	2,16	1,02	0,53
600	10000	v												6,93	5,31	3,40	2,36	1,73	1,33
		hr												36,2	18,9	6,36	2,62	1,24	0,65

The hr values must be multiplied by:

0,71 for galvanized or painted steel pipes

0,54 for stainless steel or copper pipes

0,47 for PVC or PE pipes

hr = flow resistance for 100 m of straight pipeline (m)

V = water speed (m/s)

G-at-pct-en_b_th

FLOW RESISTANCE
TABLE OF FLOW RESISTANCE IN BENDS, VALVES AND GATES

The flow resistance is calculated using the equivalent pipeline length method according to the table below:

ACCESSORY TYPE	DN											
	25	32	40	50	65	80	100	125	150	200	250	300
	Equivalent pipeline length (m)											
45° bend	0,2	0,2	0,4	0,4	0,6	0,6	0,9	1,1	1,5	1,9	2,4	2,8
90° bend	0,4	0,6	0,9	1,1	1,3	1,5	2,1	2,6	3,0	3,9	4,7	5,8
90° smooth bend	0,4	0,4	0,4	0,6	0,9	1,1	1,3	1,7	1,9	2,8	3,4	3,9
Union tee or cross	1,1	1,3	1,7	2,1	2,6	3,2	4,3	5,3	6,4	7,5	10,7	12,8
Gate valve	-	-	-	0,2	0,2	0,2	0,4	0,4	0,6	0,9	1,1	1,3
Foot check valve	1,1	1,5	1,9	2,4	3,0	3,4	4,7	5,9	7,4	9,6	11,8	13,9
Non return valve	1,1	1,5	1,9	2,4	3,0	3,4	4,7	5,9	7,4	9,6	11,8	13,9

G-a-pcv-en_b_th

The table is valid for the Hazen Williams coefficient C=100 (cast iron pipework)
for galvanized steel or painted steel multiply the values by 0,71;
for stainless steel and copper multiply the values by 0,54;
for Pvc and PE multiply the values by 0,47.

When the **equivalent pipeline length** has been determined, the flow resistance is obtained from the table in the previous page.
The values given are guideline values which are bound to vary slightly according to the model, especially for gate valves and non-return valves, for which it is a good idea to check the values supplied by manufacturers.

VOLUMETRIC CAPACITY

Litres per minute l/min	Cubic metres per hour m^3/h	Cubic feet per hour ft^3/h	Cubic feet per minute ft^3/min	Imperial gallon per minute Imp. gal/min	U.S. gallon per minute US gal/min
1,0000	0,0600	2,1189	0,0353	0,2200	0,2642
16,6667	**1,0000**	35,3147	0,5886	3,6662	4,4029
0,4719	0,0283	**1,0000**	0,0167	0,1038	0,1247
28,3168	1,6990	60,0000	**1,0000**	6,2288	7,4805
4,5461	0,2728	9,6326	0,1605	**1,0000**	1,2009
3,7854	0,2271	8,0208	0,1337	0,8327	**1,0000**

PRESSURE AND HEAD

Newton per square metre N/m^2	kilo Pascal kPa	bar bar	Pound force per square inch psi	Metre of water m H_2O	Millimetre of mercury mm Hg
1,0000	0,0010	1×10^{-5}	$1,45 \times 10^{-4}$	$1,02 \times 10^{-4}$	0,0075
1 000,0000	**1,0000**	0,0100	0,1450	0,1020	7,5006
1×10^5	100,0000	**1,0000**	14,5038	10,1972	750,0638
6 894,7570	6,8948	0,0689	**1,0000**	0,7031	51,7151
9 806,6500	9,8067	0,0981	1,4223	**1,0000**	73,5561
133,3220	0,1333	0,0013	0,0193	0,0136	**1,0000**

LENGTH

Millimetre mm	Centimetre cm	Metre m	Inch in	Foot ft	Yard yd
1,0000	0,1000	0,0010	0,0394	0,0033	0,0011
10,0000	**1,0000**	0,0100	0,3937	0,0328	0,0109
1 000,0000	100,0000	**1,0000**	39,3701	3,2808	1,0936
25,4000	2,5400	0,0254	**1,0000**	0,0833	0,0278
304,8000	30,4800	0,3048	12,0000	**1,0000**	0,3333
914,4000	91,4400	0,9144	36,0000	3,0000	**1,0000**

VOLUME

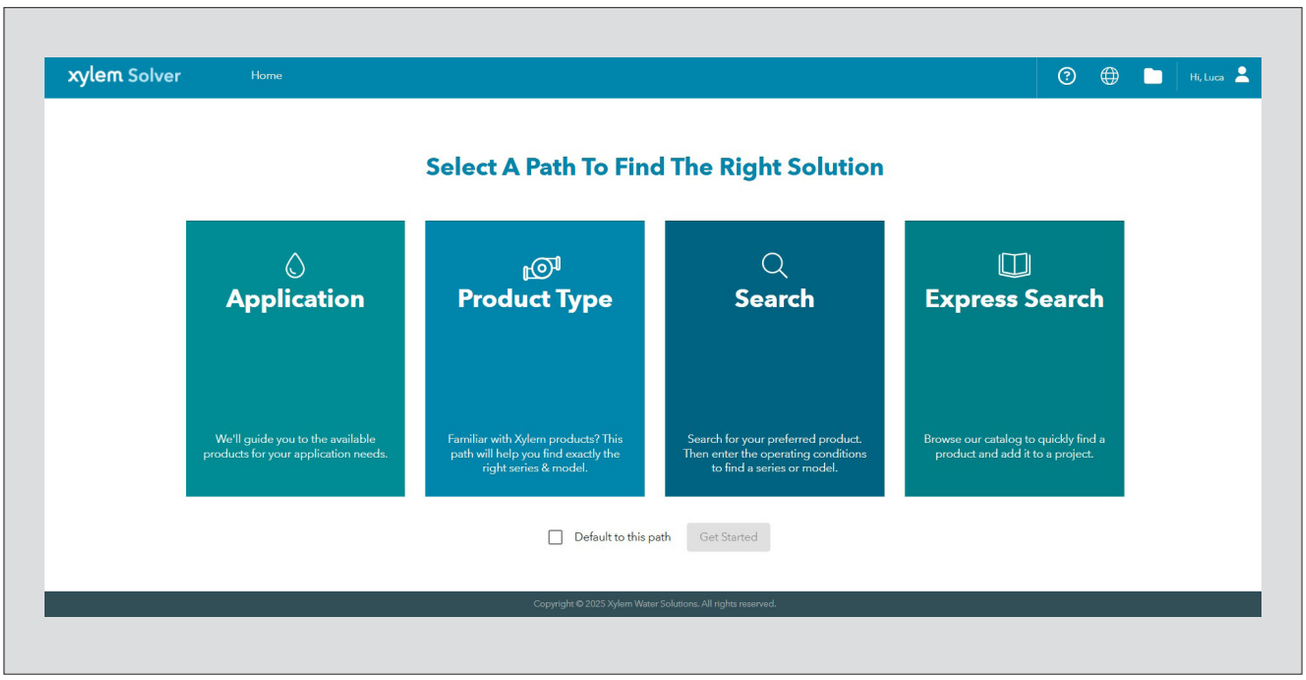
Cubic metre m^3	Litre L	Millilitre ml	Imperial gallon imp. gal.	U.S. gallon US gal.	Cubic foot ft^3
1,0000	1 000,0000	1×10^6	219,9694	264,1720	35,3147
0,0010	**1,0000**	1 000,0000	0,2200	0,2642	0,0353
1×10^{-6}	0,0010	**1,0000**	$2,2 \times 10^{-4}$	$2,642 \times 10^{-4}$	$3,53 \times 10^{-5}$
0,0045	4,5461	4 546,0870	**1,0000**	1,2009	0,1605
0,0038	3,7854	3 785,4120	0,8327	**1,0000**	0,1337
0,0283	28,3168	28 316,8466	6,2288	7,4805	**1,0000**

TEMPERATURE

Water	Kelvin K	Celsius °C	Fahrenheit °F	$°F = °C \times \frac{9}{5} + 32$ $°C = (°F - 32) \times \frac{5}{9}$
icing	273,1500	0,0000	32,0000	
boiling	373,1500	100,0000	212,0000	

G-at_pp-en_b_sc

FURTHER PRODUCT SELECTION AND DOCUMENTATION
Xylem Solver



Xylem Solver is pump solution selection software with an extensive online database of product information across the entire Xylem range of pumps and related products, with multiple search options and helpful project management facilities. The system holds up-to-date product information on thousands of products and accessories.

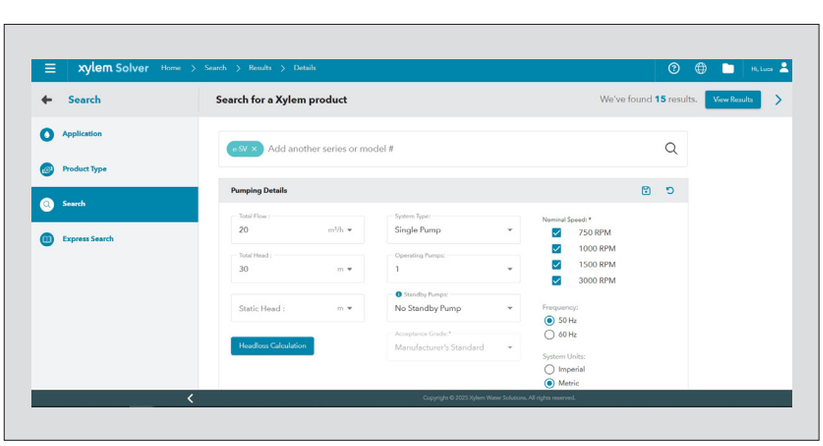
The possibility to search by applications and the detailed information output given makes it easy to make the optimal selection without having detailed knowledge about the Xylem products.

The search can be made by:

- Application
- Product type
- Duty point

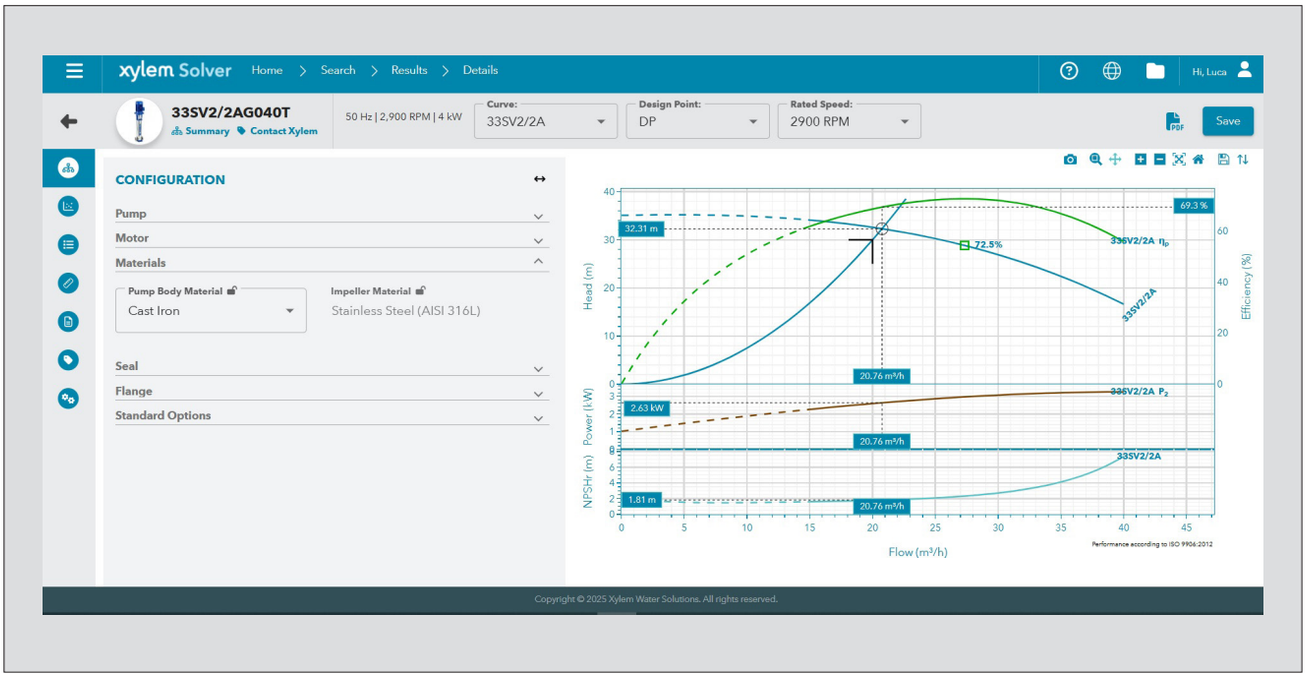
Xylem Solver gives a detailed output:

- List with search results in which you can compare up to four products
- Performance curves (flow, head, power, efficiency, NPSH)
- Motor data
- Dimensional drawings
- Options
- Data sheet printouts
- Document downloads incl dxf, stp and BIM files



Once a product series has been selected, input design criteria to select pumps that meet the design requirements.

FURTHER PRODUCT SELECTION AND DOCUMENTATION
Xylem Solver



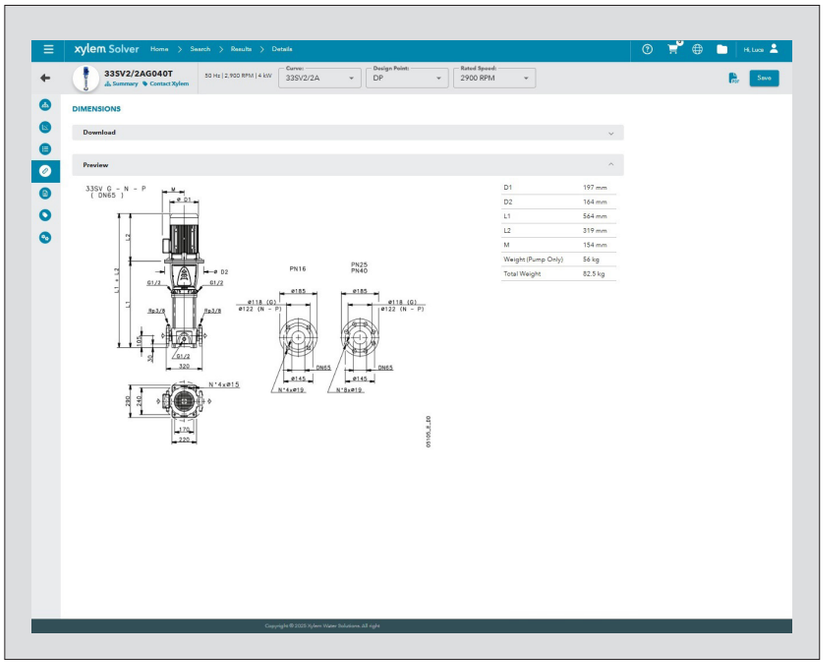
The detailed output makes it easy to select the optimal pump from the given alternatives.

The best way to work with Xylem Solver is to create a personal account. This makes it possible to:

- Set own standard units
- Create and save projects

Every registered user has a proper space, where all projects are saved.

For more information about Xylem Solver please contact our sales network or visit https://solver.xylem.com.



The dimensions tab shows technical drawings, dimensions, and CAD files when available.

Xylem |'zīləm|

1) the tissue in plants that brings water and nutrients upward from the roots.

2) a leading global water solutions company.

Xylem is the connective tissue and system in plants which cleanses and transports water from the root to where it is needed most to sustain life.

And this is the essence of Xylem as a company. We are committed to driving sustainable impact by ensuring our connected technologies and solutions support our customers and the communities they serve, to tackle the water challenges that matter most to them.

For more information on how Xylem can help you, visit xylem.com.

Xylem Service Italia Srl
Via Dottor Vittorio Lombardi 14
36075 - Montecchio Maggiore (VI)
Italy

Tel. (+39) 0444 707111
Fax (+39) 0444 491043
www.xylem.com/it-it

Xylem Water Solutions Italia Srl si riserva il diritto di apportare modifiche senza l'obbligo di preavviso

© 2026 Xylem Inc. or its affiliates. All rights reserved. Lowara is a trademark of Xylem or one of its subsidiaries.