

Pressure Booster System

Hyamat SVP

Type Series Booklet



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Type Series Booklet Hyamat SVP

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Building Services: Water Supply

Pressure Booster Systems

Hyamat SVP



Main applications

- Pressure boosting

Fluids handled

- Clean fluids not chemically or mechanically aggressive to the pump materials
- Drinking water
- Service water
- Cooling water

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m ³ /h]	≤ 660 with max. 6 pumps ¹⁾
	Q [l/s]	≤ 183 with max. 6 pumps ¹⁾
Head	H [m]	≤ 160
Fluid temperature	T [°C]	≥ 0
		≤ +70
		≤ +25 to DIN 1988 (DVGW) ²⁾
Operating pressure	p _d [bar]	≤ 16
Inlet pressure	p _{inl} [bar]	≤ 10

1) With stand-by pump as peak load pump
2) Applies to the handling of drinking water (Germany only)

Design details

Design

- Fully automatic pressure booster package system
- Baseplate-mounted
- Two to six vertical high-pressure centrifugal pumps with variable speed control
- Hydraulic components made of stainless steel / brass
- 1 check valve and 1 shut-off valve per pump set to DIN / DVGW
- Discharge-side, direct-flow membrane-type accumulator, approved for drinking water
- Pressure gauge
- Pressure transmitter on the discharge side
- Design and function as per EN 806-2, DIN 1988-500

Pressure booster system with Movitec 2B, 4B, 6B, 10B and 15B:

- Anti-vibration pads per pump

Pressure booster system with Movitec 25B, 40B, 60B and 90B:

- Level-adjustable feet and rubber pads (supplied but not fitted)

Installation

- Stationary dry installation

Drive

- High-efficiency, magnet-less KSB SuPremE motor
- Efficiency class IE4/IE5 to IEC TS 60034-30-2:2016

Automation

- Control unit (IP54 enclosure)
- Control panel (display, keys, LEDs, service interface)
- Frequency inverter
- Transformer for control voltage
- Motor protection switch per pump
- Lockable master switch (repair switch)
- Pressure transmitter on the discharge side
- Circuit diagram to VDE and parts list for electric parts
- Terminal strip/terminals with identification for all connections
- Connection for analog or digital dry running protection equipment
- Remote ON/OFF input
- Field bus connection (optional)

Designation

Example: Hyamat SVP 4 / 0408 / 1,2 - 3,5

Designation key

Code	Description
Hyamat	Type series
SVP	All pump sets are variable speed versions.
4	Number of pump sets
04	Pump size
08	Number of stages
1,2	Minimum inlet pressure [bar]
3,5	Maximum usable inlet pressure [bar]

Configuration and function



Fig. 1: Illustration of pressure booster system

1	Control unit	4	High-pressure centrifugal pump
2	Control cabinet	5	Manifold
3	Motor with variable speed system	6	Baseplate

Design

The fully automatic pressure booster system is equipped with two to six vertical variable speed high-pressure centrifugal pumps (4) for pumping the fluid handled to the consumer installations in the set pressure range.

Function

A microprocessor control unit (1) controls and monitors two to six high-pressure pumps (4). Each pump set is operated on a motor-mounted variable speed system (frequency inverter) and controlled by the control unit so as to ensure a constant discharge pressure of the pressure booster system. As the demand increases or decreases, peak load pumps are started and stopped automatically.

As soon as the demand increases again after one pump set has been stopped, another pump set which has not been in operation before is started up. When the last pump set has been stopped and the demand increases again, the next pump set in line is started up. The stand-by pump is also included in the alternating cycle.

The actual pressure is measured by means of an analog pressure gauge (pressure transmitter) which is monitored by integrated broken wire detection (4-20 mA). In the standard setting, the pressure booster system starts up and stops automatically. The pump sets are started and stopped as a function of demand. Variable speed control reduces the frequency of starts of the pump sets in parallel operation. If a pump set fails while in operation, the next pump set is started up immediately. If the demand drops towards 0, the pressure booster system slowly runs down to the stop point. A fault message can be transmitted via volt-free contacts, e.g. to a control station. The operating status is displayed via LEDs.

Materials

Overview of available materials

Component	Material
Pump casing	Stainless steel
Shroud	Stainless steel
Hydraulic system	Stainless steel
Mechanical seal	To EN 12756
Primary ring	Silicon carbide
Mating ring	Hard carbon
Elastomer	EPDM
Baseplate	Steel, with powder or paint coating
Manifold	Stainless steel
Valves	Copper-base alloy / brass or nodular cast iron / EPDM, DVGW-approved, approved for drinking water
Accumulator	Connection made of stainless steel, flow through valve to DIN 4807-5
Membrane	Approved for drinking water

Product benefits

- Optimised energy efficiency by high-efficiency, magnet-less KSB SuPremE motor of efficiency class IE4/IE5 (to IEC TS 60034-30-2:2016) and energy-saving function
- Ready-to-connect, supplied pre-set and tested for functionality
- User-friendly, straightforward menu navigation
- Reliable operation by corrosion-resistant internal parts
- Suitable for drinking water installations as it has been manufactured under stringent hygienic conditions
- Hydraulic components made of stainless steel / brass

Product information

Product information as per Regulation No. 1907/2006 (REACH)

For information as per chemicals Regulation (EC) No. 1907/2006 (REACH), see <http://www.ksb.com/reach>.

Selection information

Lightning protection

- Electrical installations must be protected against overvoltage (compulsory since 14 December 2018) (see DIN VDE 0100-443 (IEC60364-4-44:2007/A1:2015, modified) and DIN VDE 0100-534 (IEC 60364-5-53:2001/A2:2015, modified). Whenever modifications are made to existing installations, retrofitting a surge protective device (SPD) in accordance with VDE is mandatory.
- A maximum cable length of 10 metres should not be exceeded between the surge protective device (usually type 1, internal lightning protection) installed at the service entrance and the equipment to be protected. For longer cables, additional surge protective devices (type 2) must be provided in the sub-distribution board upstream of the equipment to be protected or directly in the equipment itself.
- The associated lightning protection concept must be provided by the operator or by a suitable provider commissioned by the operator. Surge protective devices can be offered for the control units on request.

Selecting the pressure booster system

For selecting the pressure booster system see KSB EasySelect and/or the Planning Information for Pressure Booster Systems (reference number 2300.025).

Example

Specify the operating points:

- Flow rate required: 10 m³/h
- Head: 55 m (start-up pressure p_E: 5.5 bar)
- Decide on whether to use a stand-by pump to DIN 1988.

Calculate the flow rate per pump set:

To distribute the load evenly between the pump sets used, divide the required flow rate by the number of pump sets used. The stand-by pump, if any, is not taken into account.

Calculation:

- ✓ Requirements planning results in four pump sets.
- 1. 10 m³/h : 4 duty pumps = 2.5 m³/h per pump set
⇒ 4 duty pumps + 1 stand-by pump = 5 (Hyamat ... 5)

Determine the pump size and number of stages:

1. In the characteristic curve of Hyamat ... 5 link the calculated flow rate per pump set with the required head.
⇒ Link 2.5 m³/h to 55 m (head) = 2/10B
⇒ Pump set size = Movitec 2, number of stages 10
⇒ Hyamat ... 5 / 210B

Flow rate calculation based on the number of pumps

Number of pumps	With stand-by pump	Calculation of flow rate [Q]
1	No	Required flow rate = flow rate in characteristic curve
1	Yes	Required flow rate = flow rate in characteristic curve
2	No	Required flow rate : 2 = flow rate in characteristic curve
2	Yes	Required flow rate : 2 = flow rate in characteristic curve
3	No	Required flow rate : 3 = flow rate in characteristic curve
3	Yes	Required flow rate : 3 = flow rate in characteristic curve
4	No	Required flow rate : 4 = flow rate in characteristic curve
4	Yes	Required flow rate : 4 = flow rate in characteristic curve

Number of pumps	With stand-by pump	Calculation of flow rate [Q]
5	No	Required flow rate : 5 = flow rate in characteristic curve
5	Yes	Required flow rate : 5 = flow rate in characteristic curve
6	No	Required flow rate : 6 = flow rate in characteristic curve

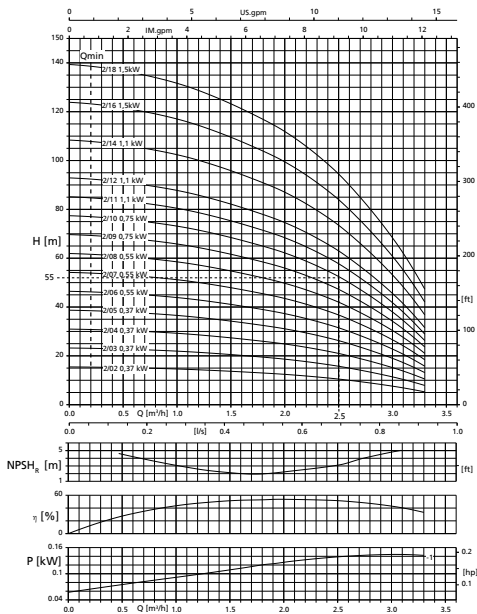


Fig. 2: Characteristic curve for determining the pressure booster system (example)

Determining the power input

The value P [kW] determined in the characteristic curve refers to the power per stage.

- Normal stage (St = 1)
- Stage with a smaller impeller (St = -1)

Calculation

1st example:

Movitec .../11 (11 stages)

$$P = \text{power/stage} \times 11$$

2nd example:

Movitec .../11-1 (11 stages, 1 stage with a smaller impeller)

$$P = \text{power/stage} \times (10 + -1)$$

3rd example:

Movitec .../11-2 (11 stages, 2 stages with a smaller impeller)

$$P = \text{power/stage} \times (9 + -2)$$

Technical data
Electrical performance data

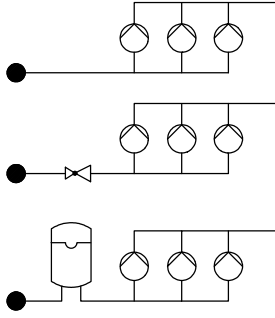
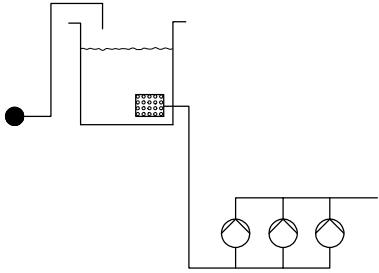
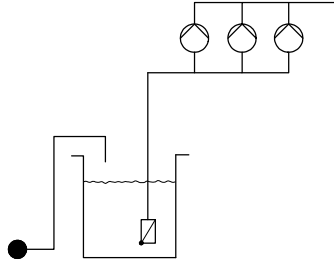
Electrical performance data

Hyamat SVP with pumps Movitec	Per motor		Total rated power required [kVA]				
	P _N	I _N 3-400 V	Number of pumps (motors)				
			[kW]	[A]	2	3	4
0202B	0,55	1,6	2,3	3,5	4,7	5,8	7
0203B	0,55	1,6	2,3	3,5	4,7	5,8	7
0204B	0,55	1,6	2,3	3,5	4,7	5,8	7
0205B	0,55	1,6	2,3	3,5	4,7	5,8	7
0206B	0,55	1,6	2,3	3,5	4,7	5,8	7
0207B	0,55	1,6	2,3	3,5	4,7	5,8	7
0208B	0,55	1,6	2,3	3,5	4,7	5,8	7
0209B	0,75	2,1	3,1	4,6	6,1	7,6	9,2
0210B	0,75	2,1	3,1	4,6	6,1	7,6	9,2
0211B	1,1	3	4,4	6,5	8,7	10,9	13,1
0212B	1,1	3	4,4	6,5	8,7	10,9	13,1
0214B	1,1	3	4,4	6,5	8,7	10,9	13,1
0216B	1,5	4,1	6	8,9	11,9	14,9	17,9
0218B	1,5	4,1	6	8,9	11,9	14,9	17,9
0402B	0,55	1,6	2,3	3,5	4,7	5,8	7
0403B	0,55	1,6	2,3	3,5	4,7	5,8	7
0404B	0,55	1,6	2,3	3,5	4,7	5,8	7
0405B	0,75	2,1	3,1	4,6	6,1	7,6	9,2
0406B	1,1	3	4,4	6,5	8,7	10,9	13,1
0407B	1,1	3	4,4	6,5	8,7	10,9	13,1
0408B	1,5	4,1	6	8,9	11,9	14,9	17,9
0409B	1,5	4,1	6	8,9	11,9	14,9	17,9
0410B	1,5	4,1	6	8,9	11,9	14,9	17,9
0411B	2,2	5,6	8,1	12,2	16,3	20,4	24,4
0412B	2,2	5,6	8,1	12,2	16,3	20,4	24,4
0414B	2,2	5,6	8,1	12,2	16,3	20,4	24,4
0416B	3	7,6	11,1	16,6	22,1	27,6	33,2
0602B	0,55	1,6	2,3	3,5	4,7	5,8	7
0603B	0,75	2,1	3,1	4,6	6,1	7,6	9,2
0604B	1,1	3	4,4	6,5	8,7	10,9	13,1
0605B	1,1	3	4,4	6,5	8,7	10,9	13,1
0606B	1,5	4,1	6	8,9	11,9	14,9	17,9
0607B	1,5	4,1	6	8,9	11,9	14,9	17,9
0608B	2,2	5,6	8,1	12,2	16,3	20,4	24,4
0609B	2,2	5,6	8,1	12,2	16,3	20,4	24,4
0610B	2,2	5,6	8,1	12,2	16,3	20,4	24,4
0611B	3	7,6	11,1	16,6	22,1	27,6	33,2
0612B	3	7,6	11,1	16,6	22,1	27,6	33,2
0614B	3	7,6	11,1	16,6	22,1	27,6	33,2
1002B	0,75	2,1	3,1	4,6	6,1	7,6	9,2
1003B	1,1	3	4,4	6,5	8,7	10,9	13,1
1004B	1,5	4,1	6	8,9	11,9	14,9	17,9
1005B	2,2	5,6	8,1	12,2	16,3	20,4	24,4
1006B	2,2	5,6	8,1	12,2	16,3	20,4	24,4
1007B	3	7,6	11,1	16,6	22,1	27,6	33,2
1008B	3	7,6	11,1	16,6	22,1	27,6	33,2
1009B	4	9,4	13,7	20,5	27,4	34,2	41
1010B	4	9,4	13,7	20,5	27,4	34,2	41
1011B	4	9,4	13,7	20,5	27,4	34,2	41
1013B	5,5	12,5	18,2	27,3	36,4	45,5	54,6
1502B	2,2	5,6	8,1	12,2	16,3	20,4	24,4

Hyamat SVP with pumps Movitec	Per motor		Total rated power required [kVA]				
	P _N	I _N 3~400 V	Number of pumps (motors)				
			[kW]	[A]	2	3	4
	1503B	3	7,6	11,1	16,6	22,1	27,6
1504B	4	9,4	13,7	20,5	27,4	34,2	41
1505B	5,5	12,5	18,2	27,3	36,4	45,5	54,6
1506B	5,5	12,5	18,2	27,3	36,4	45,5	54,6
1507B	7,5	16,7	24,3	36,4	48,6	60,7	72,9
1508B	7,5	16,7	24,3	36,4	48,6	60,7	72,9
2502B	4	9,4	13,7	20,5	27,4	34,2	41
2503B	5,5	12,5	18,2	27,3	36,4	45,5	54,6
2504B	7,5	16,7	24,3	36,4	48,6	60,7	72,9
2505B	11	23,7	34,5	51,7	69	86,2	103,4
2506B	11	23,7	34,5	51,7	69	86,2	103,4
2507B	15	32	46,6	69,8	93,1	116,4	139,7
4002-2B	5,5	12,5	18,2	27,3	36,4	45,5	54,6
4002B	7,5	16,7	24,3	36,4	48,6	60,7	72,9
4003-2B	11	23,7	34,5	51,7	69	86,2	103,4
4003B	11	23,7	34,5	51,7	69	86,2	103,4
4004-2B	15	32	46,6	69,8	93,1	116,4	139,7
4004B	15	32	46,6	69,8	93,1	116,4	139,7
4005-2B	18,5	38,8	56,5	84,7	112,9	141,1	169,4
4005B	18,5	38,8	56,5	84,7	112,9	141,1	169,4
4006-2B	18,5	38,8	56,5	84,7	112,9	141,1	169,4
4006B	22	50,7	73,8	110,6	147,5	184,4	221,3
6001B	5,5	12,5	18,2	27,3	36,4	45,5	54,6
6002-2B	7,5	16,7	24,3	36,4	48,6	60,7	72,9
6002B	11	23,7	34,5	51,7	69	86,2	103,4
6003-2B	15	32	46,6	69,8	93,1	116,4	139,7
6003B	18,5	38,8	56,5	84,7	112,9	141,1	169,4
6004-2B	18,5	38,8	56,5	84,7	112,9	141,1	169,4
6004B	22	50,7	73,8	110,6	147,5	184,4	221,3
6005-2B	22	50,7	73,8	110,6	147,5	184,4	221,3
9002-2-2B	11	23,7	34,5	51,7	69	86,2	103,4
9002-2-1B	15	32	46,6	69,8	93,1	116,4	139,7
9002-2B	15	32	46,6	69,8	93,1	116,4	139,7
9003-2B	18,5	38,8	56,5	84,7	112,9	141,1	169,4
9003-1B	22	50,7	73,8	110,6	147,5	184,4	221,3
9003B	22	50,7	73,8	110,6	147,5	184,4	221,3

Type of connection

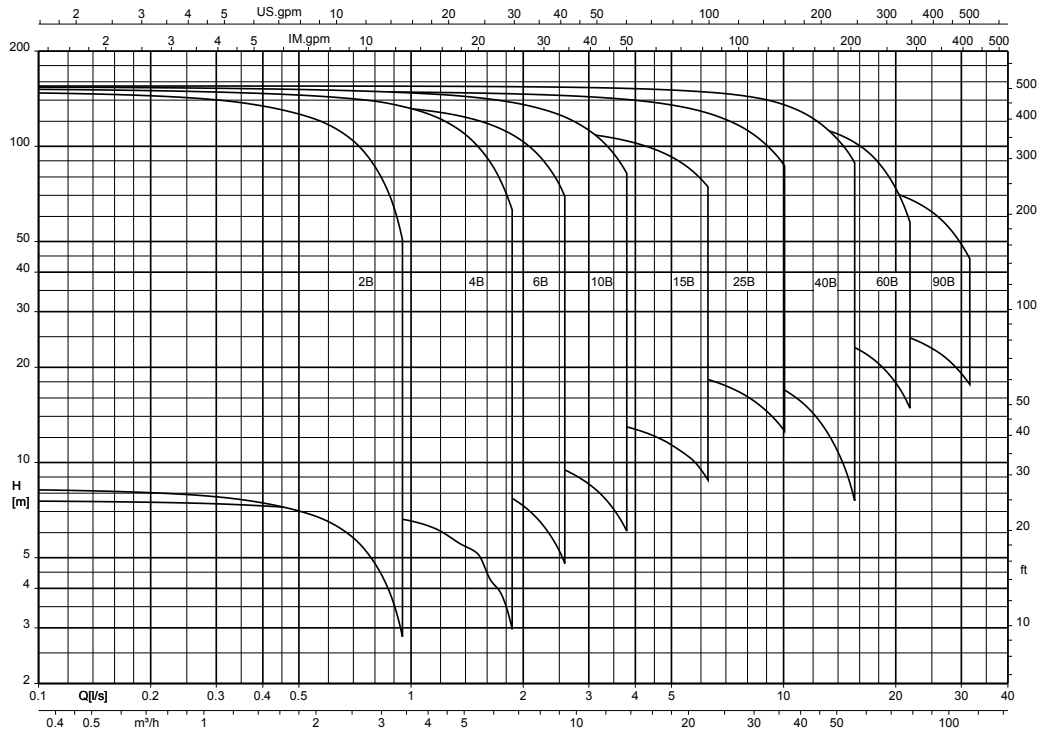
Types of connection (schematic)

Direct	Indirect	
	Unpressurised inlet tank at the same or at a higher level	Unpressurised inlet tank at a lower level (suction-lift operation) ³⁾
 <p style="text-align: right;">1952.106</p>	 <p style="text-align: right;">1952.107</p>	 <p style="text-align: right;">1952.108</p>
Inlet pressure monitoring (see Supplementary equipment or Accessories)		
At $p_{in} > 0.5$ bar (min. 1 bar, DIN 1988) - Pressure switch - Pressure sensor At $p_{in} < 0.5$ bar - Pressure sensor - Flow monitoring	- Float switch - Set of electrodes and relay - Dry running protection for PE inlet tank - Pressure sensor - Flow monitoring ⁴⁾	- Float switch - Set of electrodes and relay - Dry running protection for PE inlet tank - Flow monitoring ⁴⁾

3) Non-priming pumps, suitable for suction-lift operation (for selection, please consult KSB)
 4) Automatic reset is not possible for this type of dry running protection

Selection chart

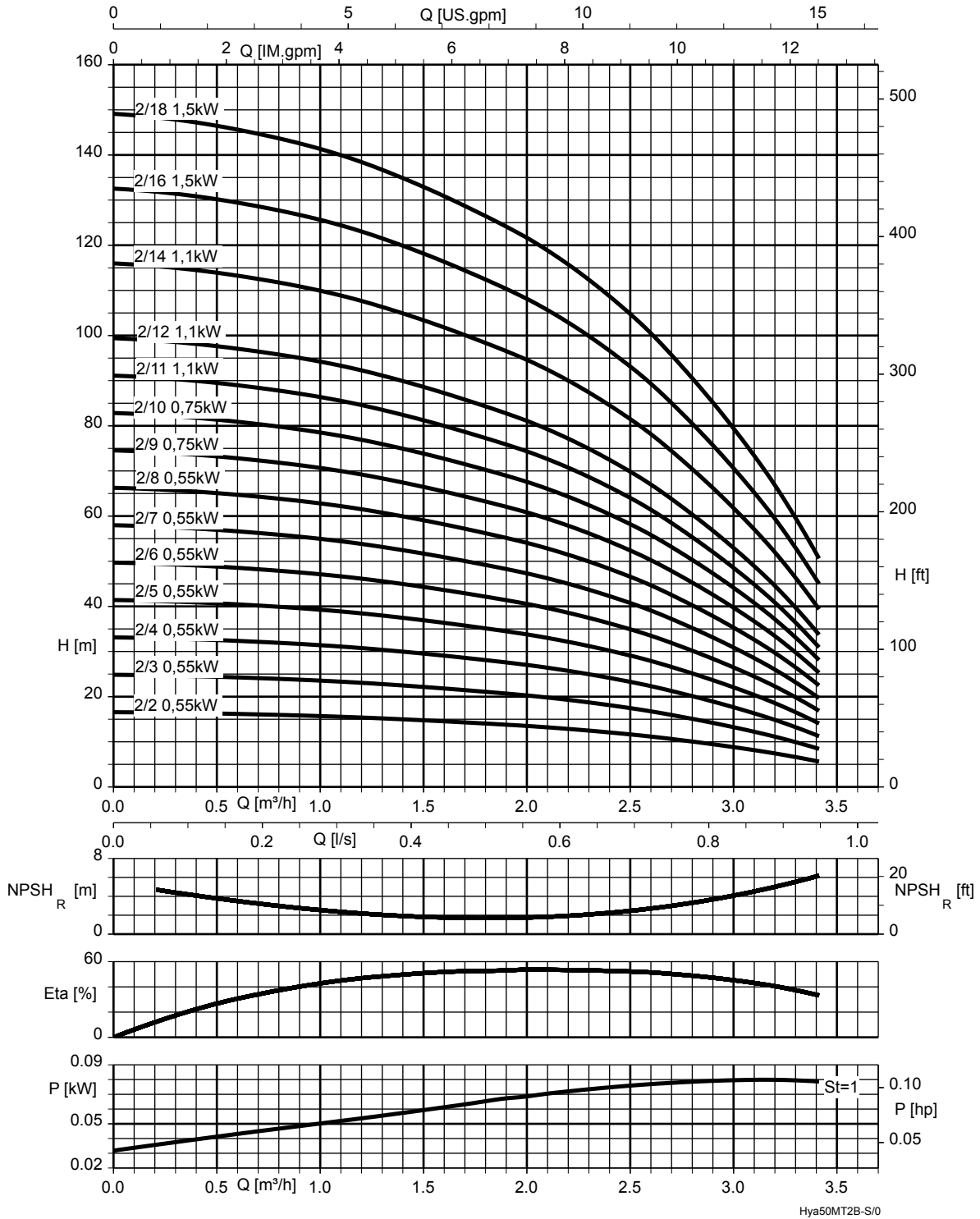
Hyamat SVP; n = 3000 rpm



The flow rate in the characteristic curves is based on one duty pump:
The flow rate of a stand-by pump, if any, is not taken into account when calculating the flow rate required.
Flow rates for multiple pump systems

Characteristic curves

Hyamat SVP with Movitec 2B; n = 3000 rpm



i Systems with 4 and 8 stages
The actual curve will deviate from the documented curve due to the reduced speed. An accurate selection can only be made with KSB's selection program KSB EasySelect.

St = 1 | P per stage

Hyamat SVP with Movitec 4B; n = 3000 rpm

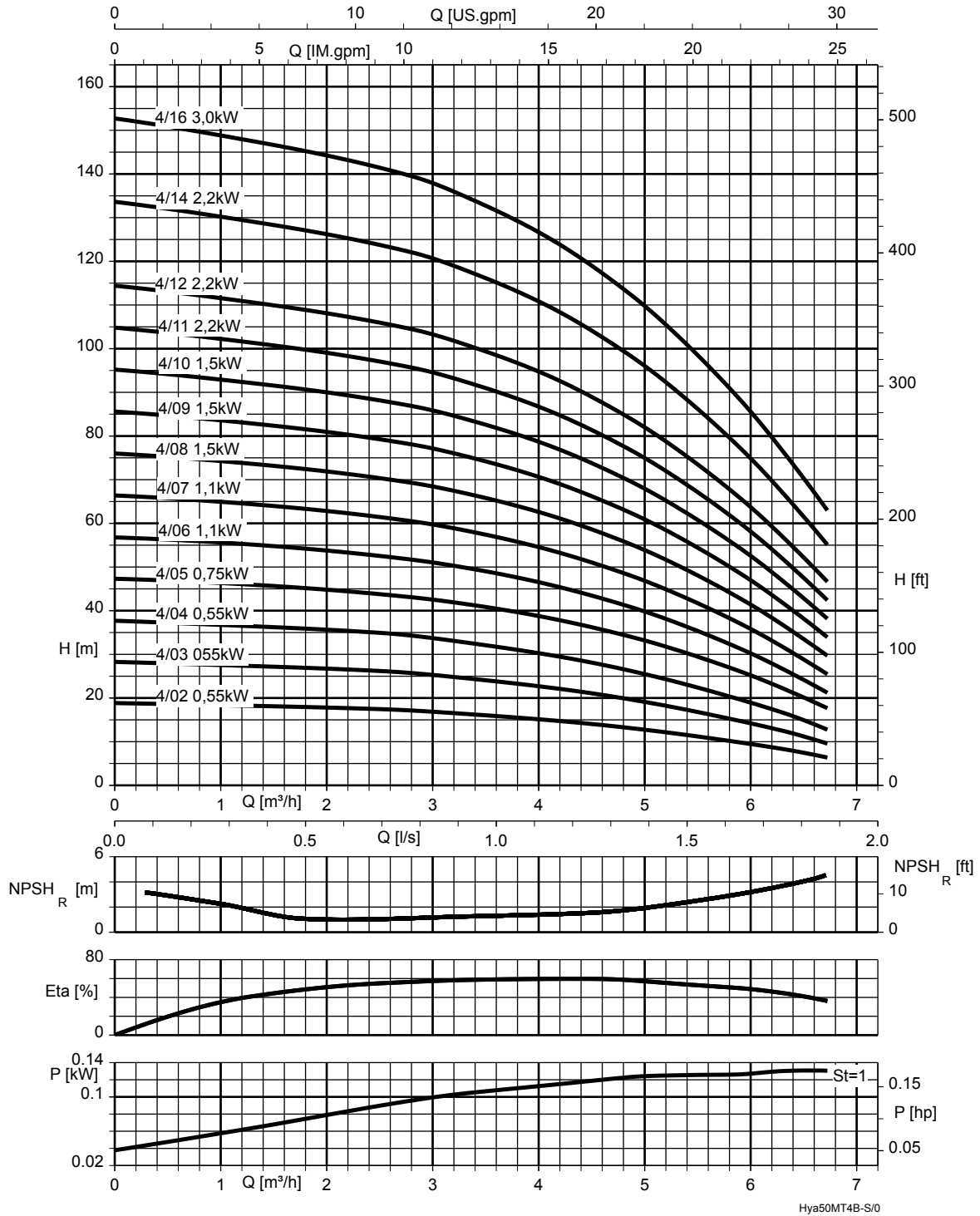


Fig. 3: Systems with 4, 5 and 10 stages
The actual curve will deviate from the documented curve due to the reduced speed. An accurate selection can only be made with KSB's selection program KSB EasySelect.

St = 1 P per stage

Hyamat SVP with Movitec 6B; n = 3000 rpm

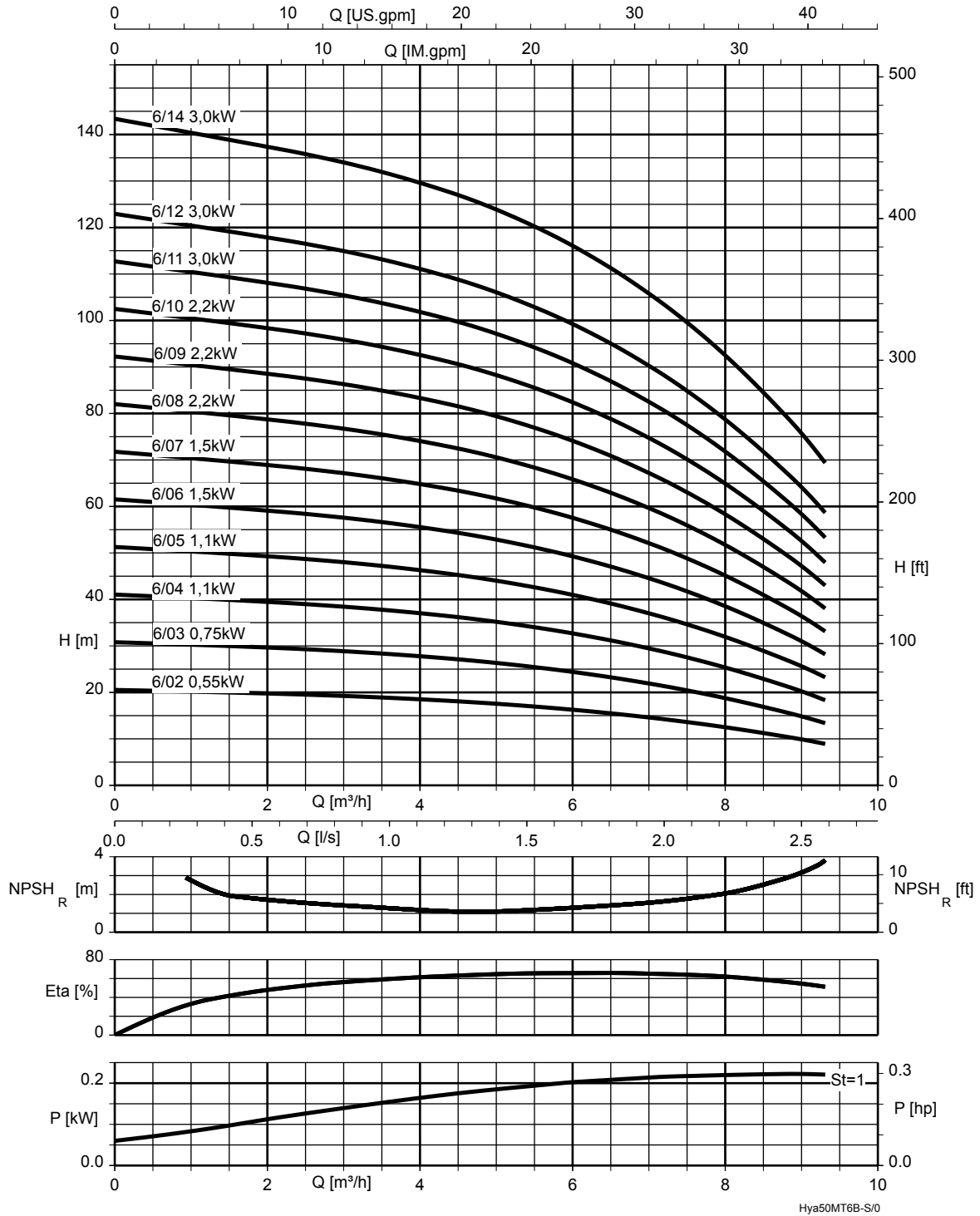


Fig. 4: Systems with 2 and 14 stages
The actual curve will deviate from the documented curve due to the reduced speed. An accurate selection can only be made with KSB's selection program KSB EasySelect.

St = 1 P per stage

Hyamat SVP with Movitec 10B; n = 3000 rpm

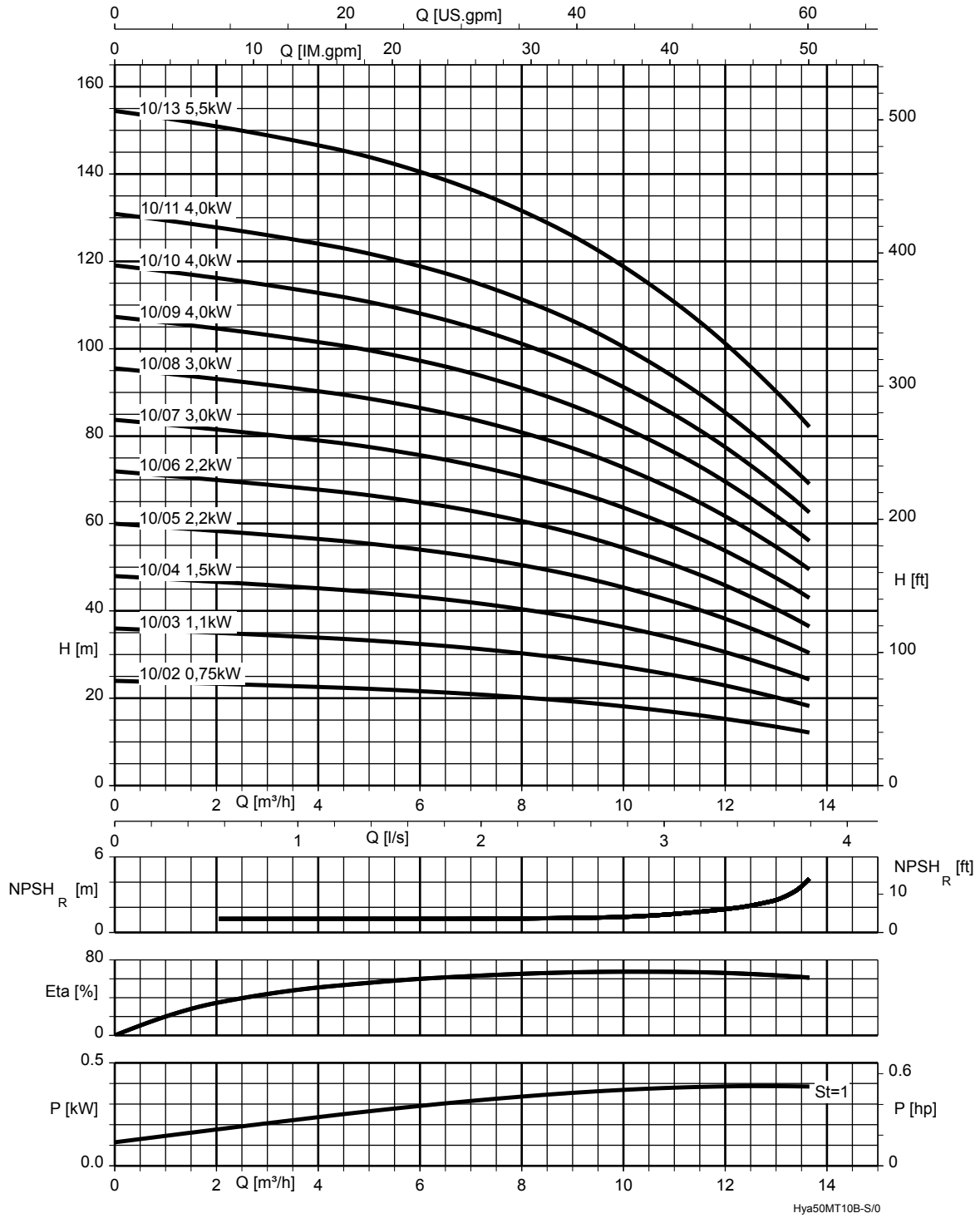
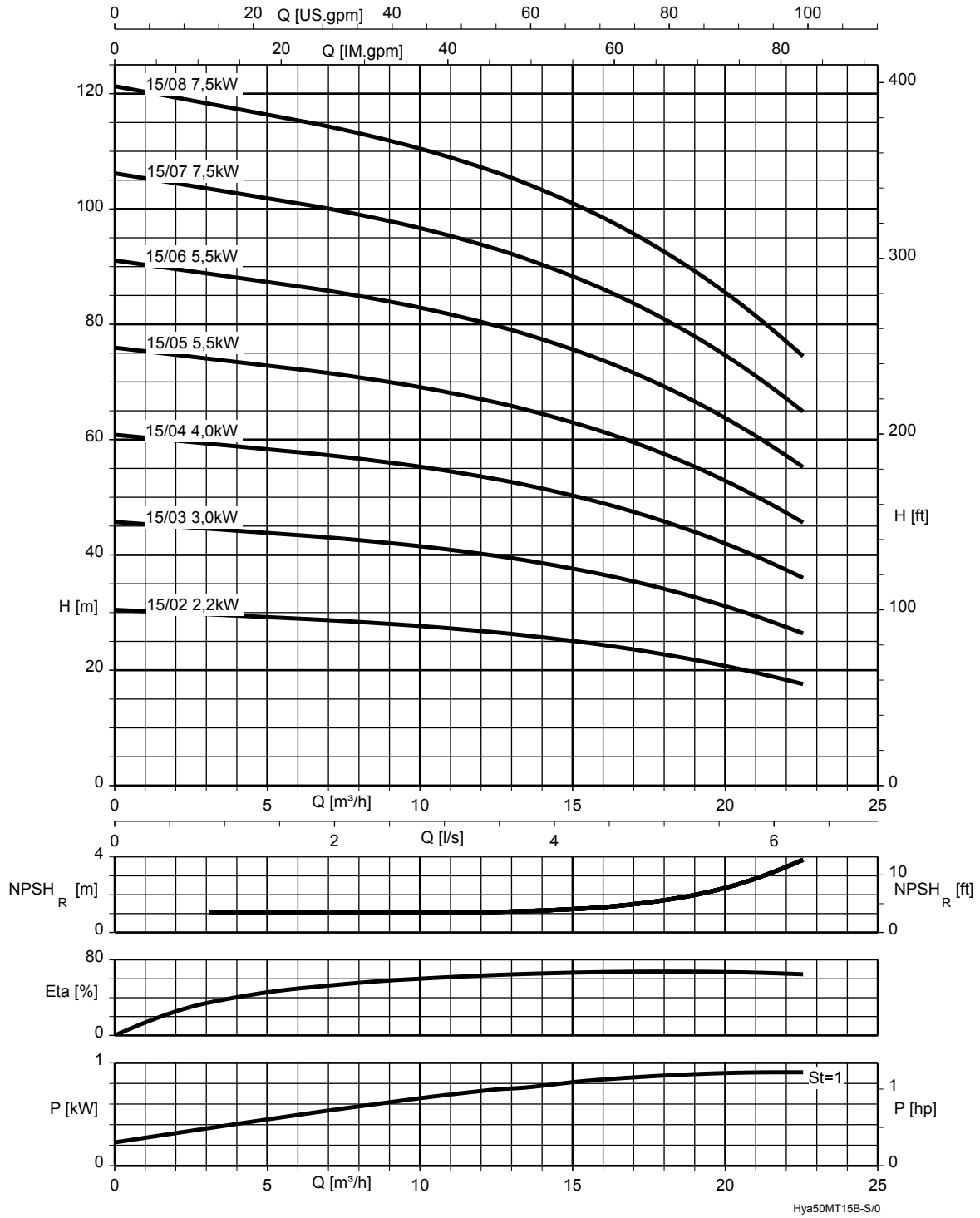


Fig. 5: Systems with 2, 3, 4, 8 and 11 stages
The actual curve will deviate from the documented curve due to the reduced speed. An accurate selection can only be made with KSB's selection program KSB EasySelect.

St = 1	P per stage
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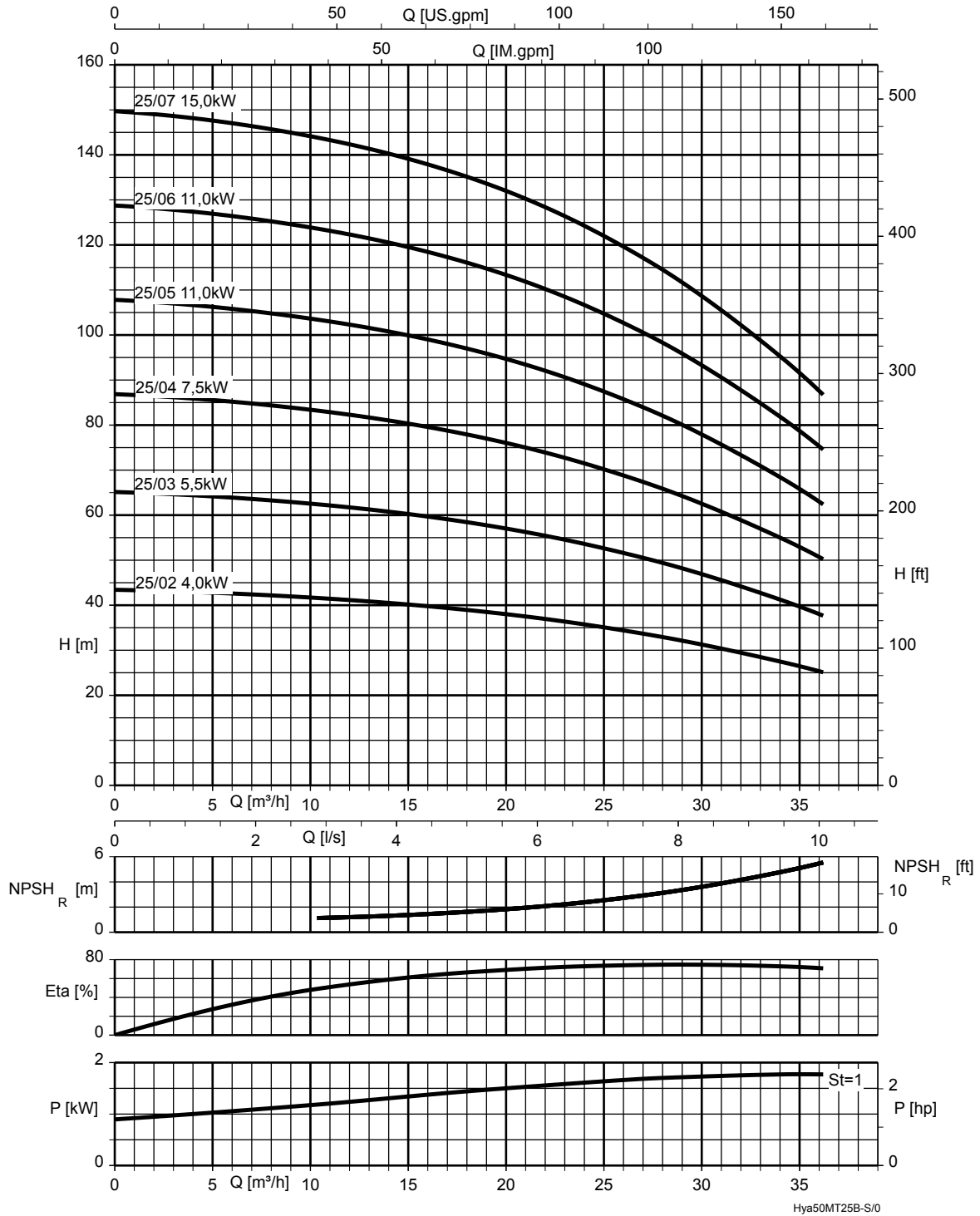
1953.53/07-EN

Hyamat SVP with Movitec 15B; n = 3000 rpm



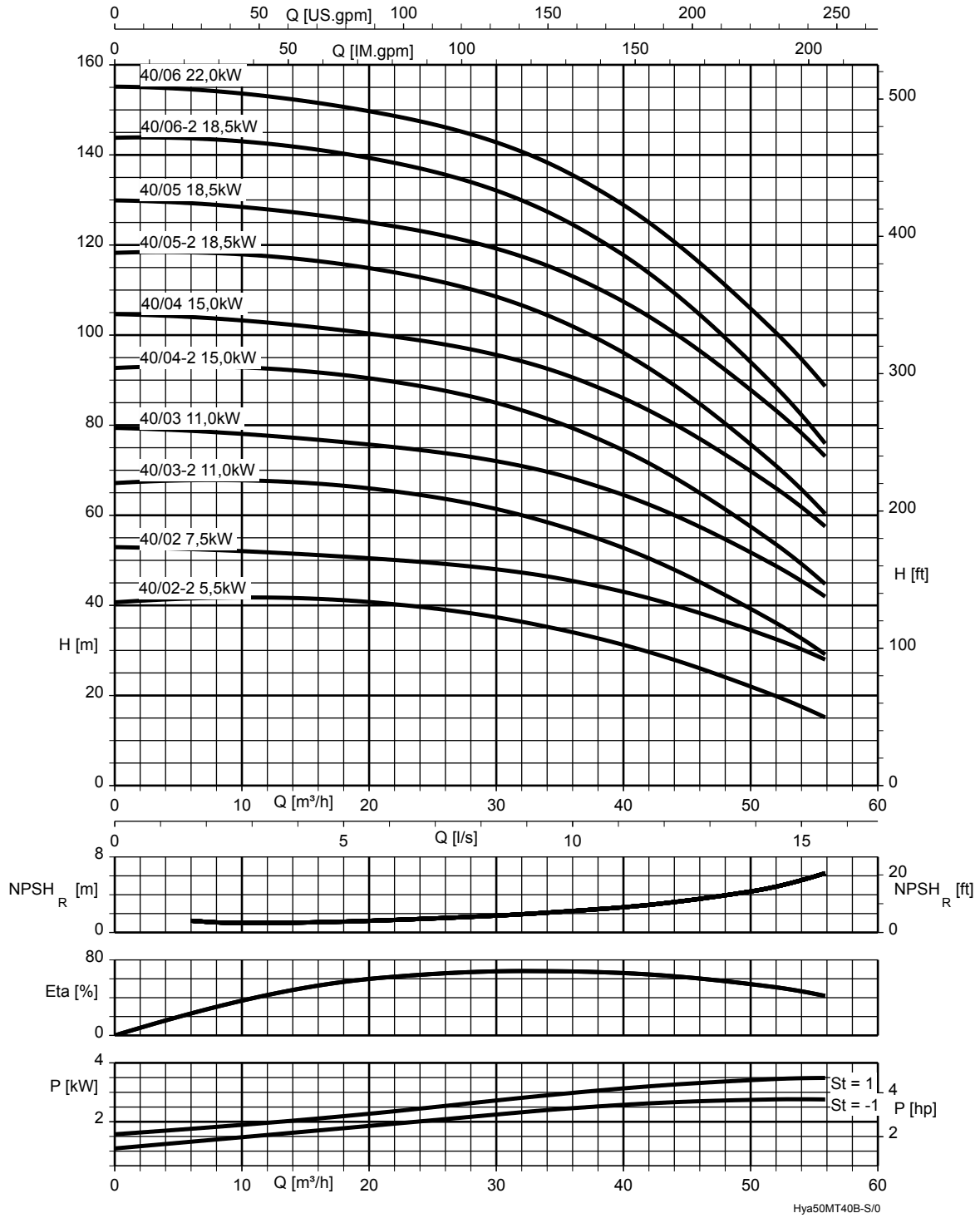
St = 1 | P per stage

Hyamat SVP with Movitec 25B; n = 3000 rpm



St = 1 | P per stage

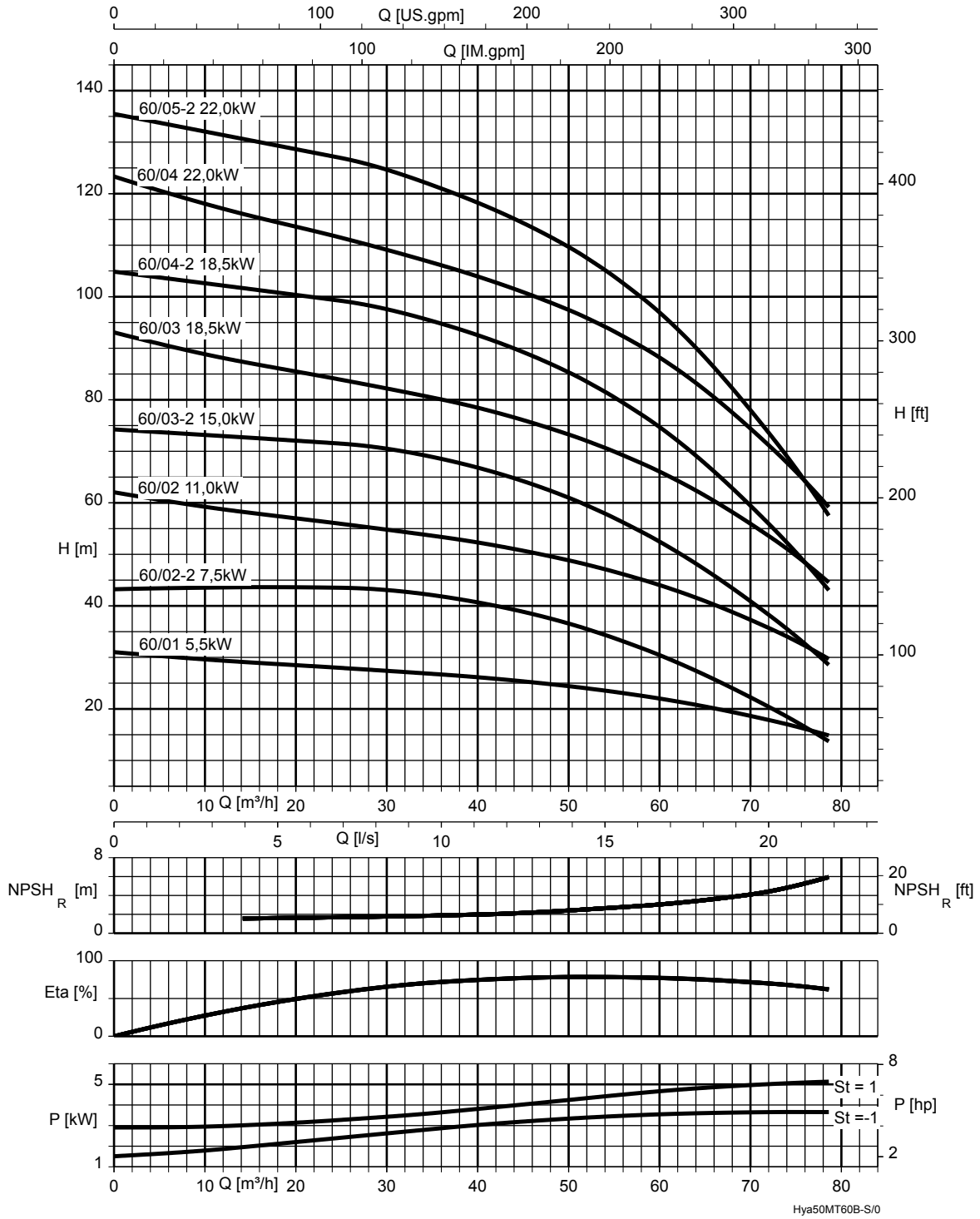
Hyamat SVP with Movitec 40B; n = 3000 rpm



St = 1 P per stage	St = -1 P per stage with a smaller impeller
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1953.53/07-EN

Hyamat SVP with Movitec 60B; n = 3000 rpm



St = 1	P per stage	St = -1	P per stage with a smaller impeller
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Hyamat SVP with Movitec 90B; n = 3000 rpm

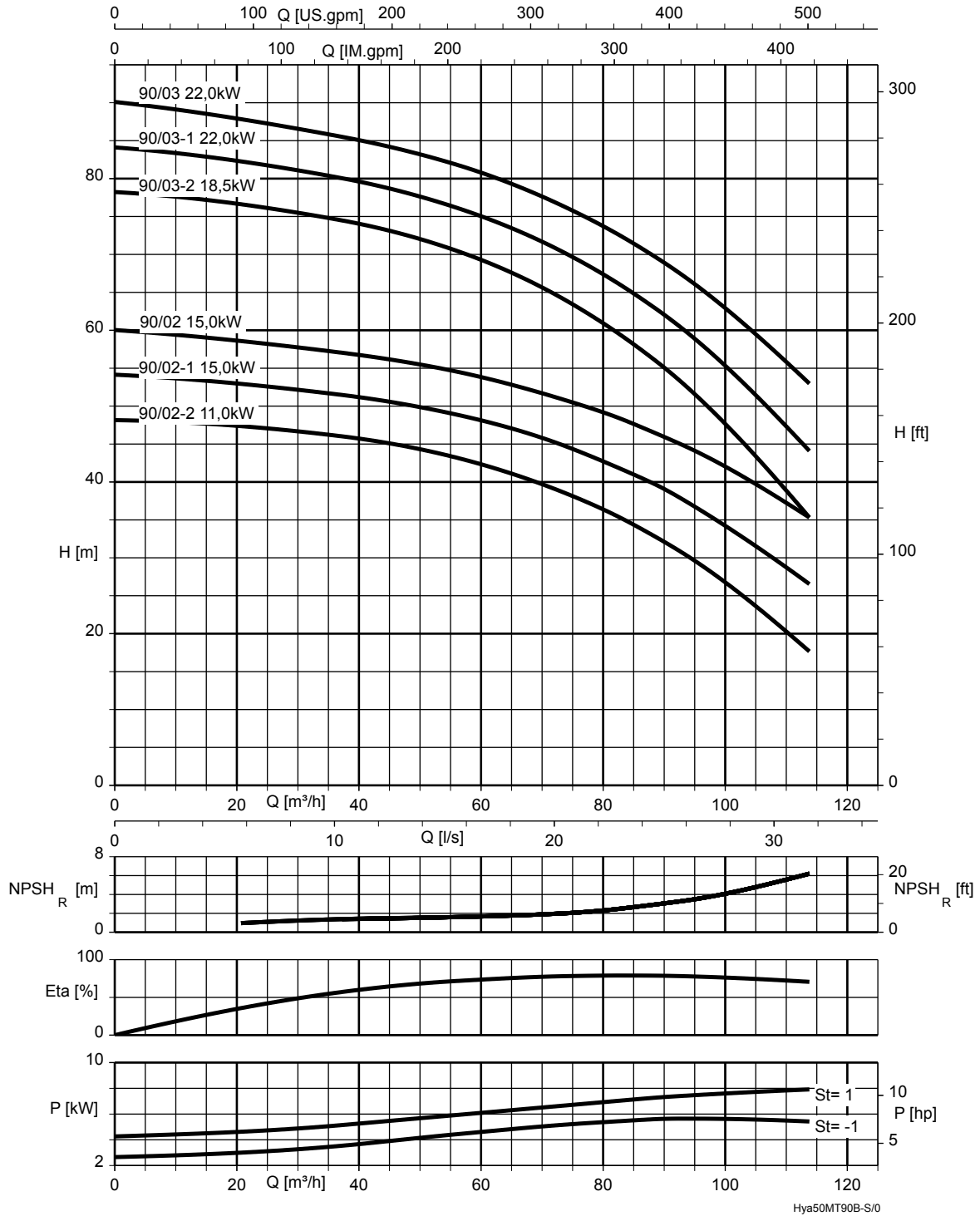


Fig. 6: Systems with 2, 3-2 and 3 stages
The actual curve will deviate from the documented curve due to the reduced speed. An accurate selection can only be made with KSB's selection program KSB EasySelect.

St = 1	P per stage	St = -1	P per stage with a smaller impeller
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1953.53/07-EN

Dimensions and weights

Version with Movitec 2B / 4B / 6B / 10B / 15B

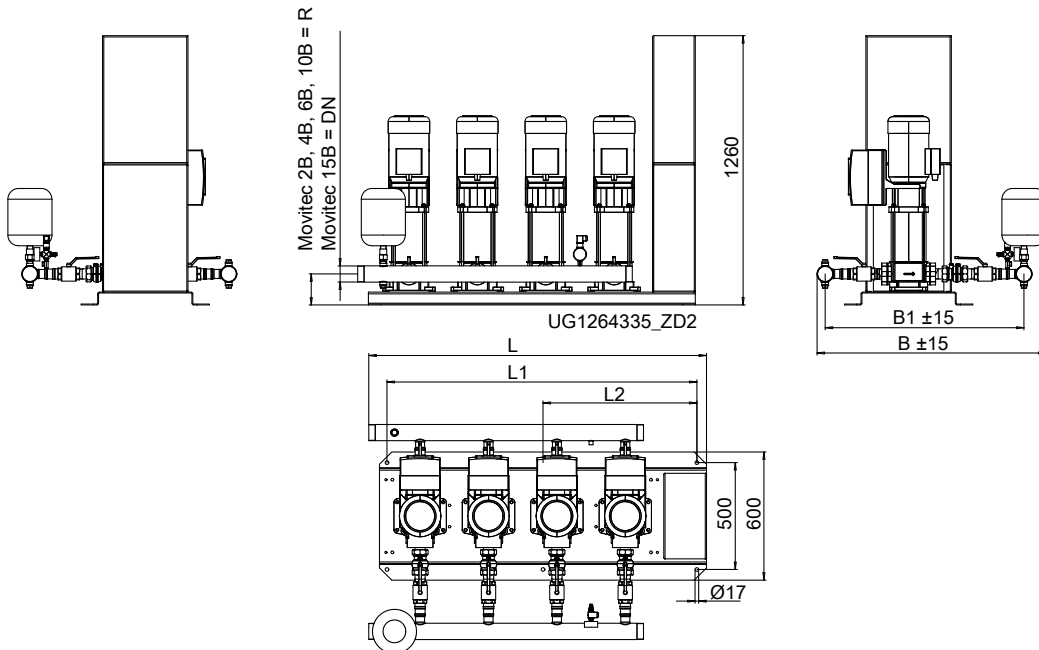


Fig. 7: Dimensions of version with Movitec 2B / 4B / 6B / 10B / 15B
Control cabinet dimensions (⇒ Page 22)
Flanges drilled to EN 1092-1 PN 16
Baseplate RAL 5002, control unit RAL 7035

Dimensions [mm]

Size	Connection	B	B1	H1	L	L1	L2
2/02.. B	R 2	870	737	115	825	670	-
2/04.. B	R 2	870	737	115	825	670	-
2/06.. B	R 2	935	802	115	825	670	-
2/10.. B	R 2	1024	890	145	985	900	-
2/15.. B	DN 80	1097	894	145	980	900	-
3/02.. B	R 2	870	737	115	1055	900	-
3/04.. B	R 2	870	737	115	1055	900	-
3/06.. B	R 2	935	802	115	1055	900	-
3/10.. B	R 2 1/2	1073	932	145	1260	1130	560
3/15.. B	DN 80	1097	894	145	1210	1130	560
4/02.. B	R 2	870	737	115	1285	1130	560
4/04.. B	R 2	870	737	115	1285	1130	560
4/06.. B	R 2	935	802	115	1285	1130	560
4/10.. B	R 2 1/2	1073	932	145	1580	1450	720
4/15.. B	DN 100	1272	1052	145	1544	1450	720
5/02.. B	R 2 1/2	920	778	115	1605	1450	720
5/04.. B	R 2 1/2	920	778	115	1605	1450	720
5/06.. B	R 2 1/2	987	846	115	1605	1450	720
5/10.. B	R 2 1/2	1073	932	145	1900	1770	880
5/15.. B	DN 100	1221	1001	145	1850	1770	880
6/02.. B	R 2 1/2	920	778	115	1925	1770	880
6/04.. B	R 2 1/2	920	778	115	1925	1770	880
6/06.. B	R 2 1/2	987	846	115	1925	1770	880
6/10.. B	R 3	1090	943	145	2220	2090	1040
6/15.. B	DN 150	1352	1067	145	2170	2090	1040

Version with Movitec 25B / 40B / 60B / 90B

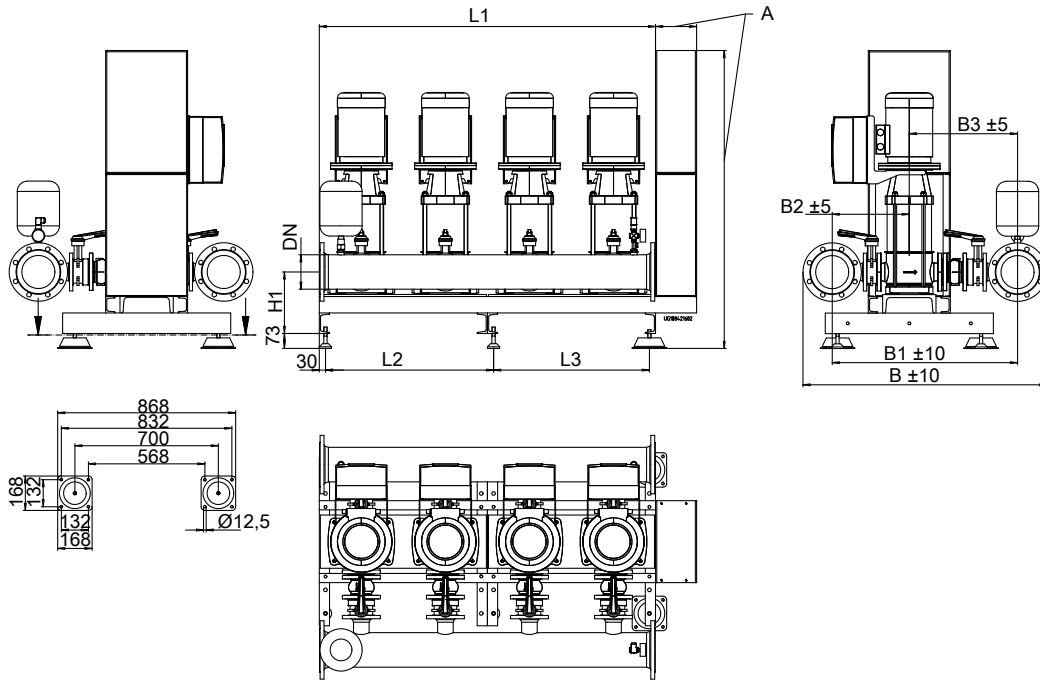


Fig. 8: Dimensions of version with Movitec 25B / 40B / 60B / 90B
A = control cabinet dimensions (⇒ Page 22)
Flanges drilled to EN 1092-1 PN 16
Baseplate RAL 5002, control unit RAL 7035

Dimensions [mm]

Size	Connection	B	B1	B2	B3	H1	L1	L2	L3
2/25.. B	DN 100	1074	854	351	503	302	820	-	760
2/40.. B	DN 100	1139	919	374	545	337	820	-	760
2/60.. B	DN 150	1320	1035	431	604	337	820	-	760
2/90.. B	DN 150	1335	1050	439	611	337	820	-	760
3/25.. B	DN 100	1074	854	351	503	302	1230	-	1170
3/40.. B	DN 150	1248	963	396	567	337	1230	-	1170
3/60.. B	DN 150	1320	1035	431	604	337	1230	-	1170
3/90.. B	DN 200	1436	1096	462	634	337	1230	-	1170
4/25.. B	DN 150	1189	904	376	528	302	1640	820	760
4/40.. B	DN 150	1248	963	396	567	337	1640	820	760
4/60.. B	DN 200	1421	1081	454	627	337	1640	820	760
4/90.. B	DN 200	1436	1096	462	634	337	1640	820	760
5/25.. B	DN 150	1189	904	376	528	302	2050	1230	760
5/40.. B	DN 200	1349	1009	419	590	337	2050	1230	760
5/60.. B	DN 200	1421	1081	454	627	337	2050	1230	760
5/90.. B	DN 250	1561	1156	492	664	337	2050	1230	760
6/25.. B	DN 150	1189	904	376	528	302	2460	1230	1170
6/40.. B	DN 200	1349	1009	419	590	337	2460	1230	1170
6/60.. B	DN 200	1421	1081	454	627	337	2460	1230	1170
6/90.. B	DN 250	1561	1156	492	664	337	2460	1230	1170

Control cabinet dimensions

i The dimensions apply to systems in standard design. Larger control cabinets may be required for installing other optional equipment.

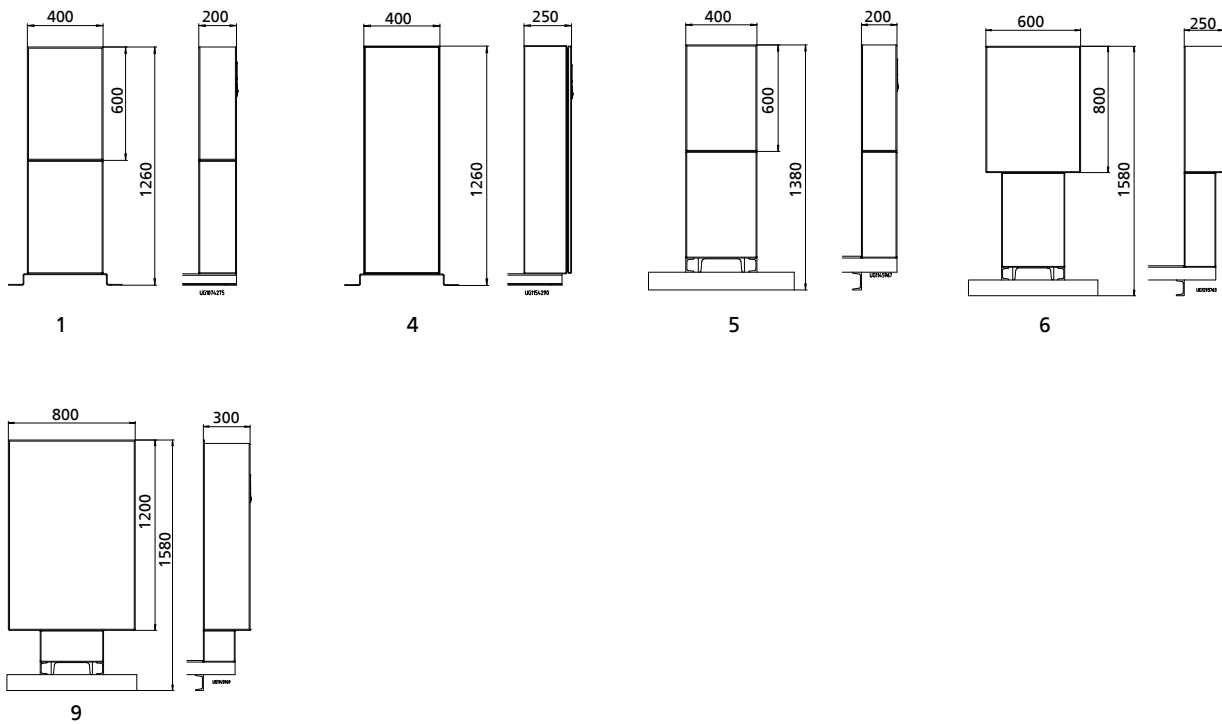


Fig. 9: Control cabinet dimensions [mm]

Combinations of systems and control cabinet dimensions

Size	P [kW] (per pump)						
	4,00	5,50	7,50	11,00	15,00	18,50	22,00
2/02.. B	1	1	1	-	-	-	-
2/04.. B	1	1	1	-	-	-	-
2/06.. B	1	1	1	-	-	-	-
2/10.. B	1	1	1	-	-	-	-
2/15.. B	1	1	1	-	-	-	-
2/25.. B	5	5	5	9	9	9	9
2/40.. B	5	5	5	9	9	9	9
2/60.. B	5	5	5	9	9	9	9
2/90.. B	5	5	5	9	9	9	9
3/02.. B	1	1	1	-	-	-	-
3/04.. B	1	1	1	-	-	-	-
3/06.. B	1	1	1	-	-	-	-
3/10.. B	1	1	1	-	-	-	-
3/15.. B	1	1	1	-	-	-	-
3/25.. B	5	5	5	9	9	9	9
3/40.. B	5	5	5	9	9	9	9
3/60.. B	5	5	5	9	9	9	9
3/90.. B	5	5	5	9	9	9	9
4/02.. B	1	1	1	-	-	-	-
4/04.. B	1	1	1	-	-	-	-
4/06.. B	1	1	1	-	-	-	-
4/10.. B	1	1	1	-	-	-	-
4/15.. B	1	1	1	-	-	-	-
4/25.. B	5	5	5	9	9	9	9
4/40.. B	5	5	5	9	9	9	9
4/60.. B	5	5	5	9	9	9	9
4/90.. B	5	5	5	9	9	9	9
5/02.. B	1	4	4	-	-	-	-
5/04.. B	1	4	4	-	-	-	-
5/06.. B	1	4	4	-	-	-	-
5/10.. B	1	4	4	-	-	-	-
5/15.. B	1	4	4	-	-	-	-

Size	P [kW] (per pump)						
	4,00	5,50	7,50	11,00	15,00	18,50	22,00
5/25.. B	5	6	6	9	9	9	9
5/40.. B	5	6	6	9	9	9	9
5/60.. B	5	6	6	9	9	9	9
5/90.. B	5	6	6	9	9	9	9
6/02.. B	1	4	4	-	-	-	-
6/04.. B	1	4	4	-	-	-	-
6/06.. B	1	4	4	-	-	-	-
6/10.. B	1	4	4	-	-	-	-
6/15.. B	1	4	4	-	-	-	-
6/25.. B	5	6	6	9	9	9	9
6/40.. B	5	6	6	9	9	9	9
6/60.. B	5	6	6	9	9	9	9
6/90.. B	5	6	6	9	9	9	9

Weights

Weights [kg]

Size	1	2-2	2-1	2	3-2	3-1	3	4-2	4	5-2	5	6-2	6	7	8	9	10	11	12	13	14	16	18
2/B 02../..	-	-	-	136	-	-	136	-	137	-	138	-	142	143	144	149	149	155	156	-	158	167	168
3/B 02../..	-	-	-	172	-	-	173	-	174	-	176	-	182	183	184	191	193	202	203	-	205	218	221
4/B 02../..	-	-	-	211	-	-	213	-	214	-	216	-	225	226	228	237	239	251	252	-	256	273	277
5/B 02../..	-	-	-	256	-	-	258	-	260	-	262	-	274	276	278	289	291	306	308	-	312	334	338
6/B 02../..	-	-	-	297	-	-	299	-	302	-	304	-	317	320	322	336	338	356	359	-	363	390	395
2/B 04../..	-	-	-	136	-	-	140	-	141	-	145	-	151	152	160	161	162	168	170	-	171	200	-
3/B 04../..	-	-	-	172	-	-	178	-	181	-	187	-	196	197	208	210	212	220	223	-	226	268	-
4/B 04../..	-	-	-	212	-	-	220	-	223	-	231	-	243	244	259	262	264	276	279	-	283	340	-
5/B 04../..	-	-	-	257	-	-	268	-	271	-	281	-	296	298	316	320	322	338	342	-	346	417	-
6/B 04../..	-	-	-	297	-	-	310	-	314	-	326	-	344	347	369	374	376	394	399	-	404	489	-
2/B 06../..	-	-	-	138	-	-	146	-	152	-	153	-	161	162	169	170	171	191	192	-	193	-	-
3/B 06../..	-	-	-	174	-	-	186	-	195	-	197	-	209	210	221	222	224	254	255	-	256	-	-
4/B 06../..	-	-	-	214	-	-	230	-	242	-	244	-	260	262	276	278	280	320	321	-	323	-	-
5/B 06../..	-	-	-	258	-	-	278	-	293	-	296	-	316	318	336	338	341	390	392	-	395	-	-
6/B 06../..	-	-	-	297	-	-	322	-	339	-	342	-	367	370	391	394	397	456	459	-	462	-	-
2/B 10../..	-	-	-	171	-	-	177	-	187	-	194	-	196	214	216	229	231	233	-	315	-	-	-
3/B 10../..	-	-	-	224	-	-	234	-	250	-	260	-	263	289	292	312	314	317	-	441	-	-	-
4/B 10../..	-	-	-	281	-	-	294	-	315	-	329	-	333	368	372	397	401	405	-	570	-	-	-
5/B 10../..	-	-	-	342	-	-	358	-	384	-	402	-	406	450	455	487	492	497	-	708	-	-	-
6/B 10../..	-	-	-	398	-	-	417	-	448	-	469	-	475	528	533	572	578	584	-	836	-	-	-
2/B 15../..	-	-	-	211	-	-	230	-	242	-	320	-	322	332	337	-	-	-	-	-	-	-	-
3/B 15../..	-	-	-	282	-	-	309	-	327	-	444	-	447	462	469	-	-	-	-	-	-	-	-
4/B 15../..	-	-	-	369	-	-	406	-	430	-	586	-	590	609	619	-	-	-	-	-	-	-	-
5/B 15../..	-	-	-	580	-	-	626	-	656	-	856	-	860	885	898	-	-	-	-	-	-	-	-
6/B 15../..	-	-	-	705	-	-	761	-	797	-	1036	-	1041	1071	1086	-	-	-	-	-	-	-	-
2/B 25../..	-	-	-	396	-	-	455	-	469	-	699	-	705	729	-	-	-	-	-	-	-	-	-
3/B 25../..	-	-	-	546	-	-	634	-	654	-	980	-	988	1024	-	-	-	-	-	-	-	-	-
4/B 25../..	-	-	-	760	-	-	877	-	905	-	1325	-	1337	1385	-	-	-	-	-	-	-	-	-
5/B 25../..	-	-	-	948	-	-	1100	-	1134	-	1644	-	1660	1720	-	-	-	-	-	-	-	-	-
6/B 25../..	-	-	-	1104	-	-	1235	-	1277	-	1932	-	1950	2022	-	-	-	-	-	-	-	-	-
2/B 40../..	-	411	-	419	627	-	628	632	660	682	712	717	789	-	-	-	-	-	-	-	-	-	-
3/B 40../..	-	616	-	629	922	-	922	629	971	1004	1048	1056	1163	-	-	-	-	-	-	-	-	-	-
4/B 40../..	-	793	-	810	1187	-	1187	1196	1252	1296	1356	1366	1509	-	-	-	-	-	-	-	-	-	-
5/B 40../..	-	1094	-	1114	1571	-	1572	1583	1653	1708	1782	1794	1974	-	-	-	-	-	-	-	-	-	-
6/B 40../..	-	1274	-	1298	1839	-	1840	1854	1938	2003	2093	2107	2323	-	-	-	-	-	-	-	-	-	-
2/B 60../..	481	496	-	701	736	-	760	796	875	882	-	-	-	-	-	-	-	-	-	-	-	-	-
3/B 60../..	638	660	-	948	1000	-	1036	1091	1209	1220	-	-	-	-	-	-	-	-	-	-	-	-	-
4/B 60../..	926	956	-	1326	1396	-	1443	1517	1674	1688	-	-	-	-	-	-	-	-	-	-	-	-	-
5/B 60../..	1175	1212	-	1660	1747	-	1806	1898	2096	2112	-	-	-	-	-	-	-	-	-	-	-	-	-
6/B 60../..	1369	1413	-	1944	2048	-	2120	2230	2467	2487	-	-	-	-	-	-	-	-	-	-	-	-	-
2/B 90../..	-	822	834	834	905	977	977	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3/B 90../..	-	1178	1196	1196	1302	1388	1388	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/B 90../..	-	1568	1592	1592	1734	1878	1878	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/B 90../..	-	2098	2128	2128	2306	2486	2486	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6/B 90../..	-	2463	2499	2499	2712	2928	2928	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Scope of supply

Depending on the model, the following items are included in the scope of supply:

Pressure booster system

- Two to six vertical high-pressure centrifugal pumps
- Discharge-side, direct-flow membrane-type accumulator, approved for drinking water
- 1 check valve and 1 shut-off valve per pump set to DIN / DVGW
- Pressure transmitter on the discharge side
- Pressure gauge
- Powder-coated / epoxy resin-coated steel baseplate

For Movitec 2B, 4B, 6B, 10B and 15B:

- With oval flange/round flange
- Pumps mounted on the baseplate with anti-vibration mounts


For Movitec 25B, 40B, 60B and 90B:

- With round flange
- Pressure booster system with level-adjustable feet and rubber pads (supplied but not fitted)

Control unit

- IP54 enclosure
- Control panel (display, keys, LEDs, service interface)
- Transformer for control voltage
- Motor protection switch per pump
- Lockable master switch (repair switch)
- Terminal strip/terminals with identification for all connections
- Circuit diagram and list of electric components
- Connection for analog or digital dry running protection equipment
- Remote ON/OFF input

Accessories

 See the separate type series booklet Accessories for Pressure Booster Systems 1954.5.



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