

Pressure Booster System

Hyamat K

Type Series Booklet



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Type Series Booklet Hyamat K

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Building Services: Water Supply

Pressure Booster Systems

Hyamat K



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 [m³/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

Design details

Design

- Fully automatic pressure booster package system
- Baseplate-mounted
- Two to six vertical high-pressure centrifugal pumps
- 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 DIN EN 806-2

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

- Electric motor 50 Hz
- 2 poles
- Efficiency class IE3 to IEC 60034-30
- Special KSB model
- For three-phase mains

Automation

- 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)
- Pressure transmitter on the discharge side
- Circuit diagram to VDE and parts list for electric parts
- Terminal strip/terminals with identification for all connections
- Terminal connection for analog dry running protection
- Remote ON/OFF input
- Field bus connection (optional)

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

Designation

Example: Hyamat K 6 / 1505B / 0,3

Designation key

Code	Description
Hyamat	Pressure booster system
K	Cascade control
6	Number of pumps
15	Pump size
05	Number of stages
B	Design status
0,3	Inlet pressure [bar]

Configuration and function



Fig. 1: Illustration of pressure booster system

1	Control unit	4	Manifold
2	Control cabinet	5	Baseplate
3	High-pressure centrifugal pump		

Design

The fully automatic pressure booster system is equipped with two to six vertical high-pressure centrifugal pumps (3) 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 (3). The first pump set starts up when the pressure drops below the set start-up pressure. 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. The pump sets are started and stopped as a function of demand. 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

- 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
- Suitable for drinking water with 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 duty 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 K 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
2. To obtain an operating point near Q_{opt} select the next number of stages up.
 ⇒ Hyamat K 5 / 211B

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
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

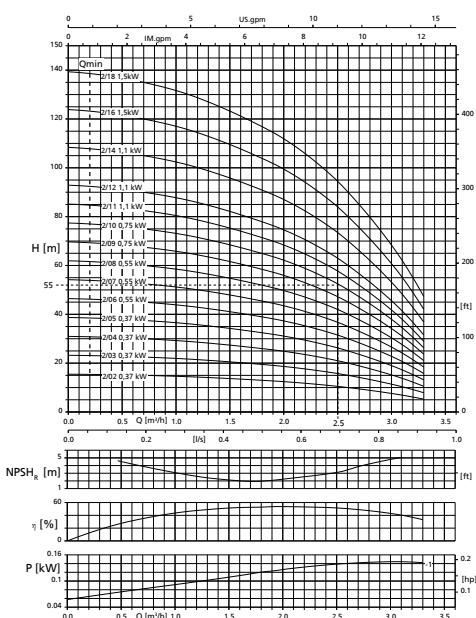


Fig. 2: Characteristic curve for determining the pressure booster system (example)

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 K with pumps Movitec	Nominal power per motor	Nominal current per motor at 400 V	Total rated power required [kVA]				
			Number of pumps (motors)				
	[kW]	[A]	2	3	4	5	6
0202B	0,37	0,94	1,3	2	2,6	3,3	3,9
0203B	0,37	0,94	1,3	2	2,6	3,3	3,9
0204B	0,37	0,94	1,3	2	2,6	3,3	3,9
0205B	0,37	0,94	1,3	2	2,6	3,3	3,9
0206B	0,55	1,33	1,8	2,8	3,7	4,6	5,5
0207B	0,55	1,33	1,8	2,8	3,7	4,6	5,5
0208B	0,55	1,33	1,8	2,8	3,7	4,6	5,5
0209B	0,75	1,68	2,3	3,5	4,7	5,8	7
0210B	0,75	1,68	2,3	3,5	4,7	5,8	7
0211B	1,1	2,4	3,3	5	6,7	8,3	10
0212B	1,1	2,4	3,3	5	6,7	8,3	10
0214B	1,1	2,4	3,3	5	6,7	8,3	10
0216B	1,5	2,92	4	6,1	8,1	10,1	12,1
0218B	1,5	2,92	4	6,1	8,1	10,1	12,1
0402B	0,37	0,94	1,3	2	2,6	3,3	3,9
0403B	0,55	1,33	1,8	2,8	3,7	4,6	5,5
0404B	0,55	1,33	1,8	2,8	3,7	4,6	5,5
0405B	0,75	1,68	2,3	3,5	4,7	5,8	7
0406B	1,1	2,4	3,3	5	6,7	8,3	10
0407B	1,1	2,4	3,3	5	6,7	8,3	10
0408B	1,5	2,92	4	6,1	8,1	10,1	12,1
0409B	1,5	2,92	4	6,1	8,1	10,1	12,1
0410B	1,5	2,92	4	6,1	8,1	10,1	12,1
0411B	2,2	4,15	5,8	8,6	11,5	14,4	17,3
0412B	2,2	4,15	5,8	8,6	11,5	14,4	17,3
0414B	2,2	4,15	5,8	8,6	11,5	14,4	17,3
0416B	3	5,59	7,7	11,6	15,5	19,4	23,2
0602B	0,37	0,94	1,3	2	2,6	3,3	3,9
0603B	0,75	1,68	2,3	3,5	4,7	5,8	7
0604B	1,1	2,4	3,3	5	6,7	8,3	10
0605B	1,1	2,4	3,3	5	6,7	8,3	10
0606B	1,5	2,92	4	6,1	8,1	10,1	12,1
0607B	1,5	2,92	4	6,1	8,1	10,1	12,1
0608B	2,2	4,15	5,8	8,6	11,5	14,4	17,3
0609B	2,2	4,15	5,8	8,6	11,5	14,4	17,3
0610B	2,2	4,15	5,8	8,6	11,5	14,4	17,3
0611B	3	5,59	7,7	11,6	15,5	19,4	23,2
0612B	3	5,59	7,7	11,6	15,5	19,4	23,2
0614B	3	5,59	7,7	11,6	15,5	19,4	23,2
1002B	0,75	1,68	2,3	3,5	4,7	5,8	7
1003B	1,1	2,4	3,3	5	6,7	8,3	10
1004B	1,5	2,92	4	6,1	8,1	10,1	12,1
1005B	2,2	4,15	5,8	8,6	11,5	14,4	17,3
1006B	2,2	4,15	5,8	8,6	11,5	14,4	17,3
1007B	3	5,59	7,7	11,6	15,5	19,4	23,2
1008B	3	5,59	7,7	11,6	15,5	19,4	23,2
1009B	4	7,45	10,3	15,5	20,6	25,8	31
1010B	4	7,45	10,3	15,5	20,6	25,8	31
1011B	4	7,45	10,3	15,5	20,6	25,8	31
1013B	5,5	10	13,9	20,8	27,7	34,6	41,6
1502B	2,2	4,15	5,8	8,6	11,5	14,4	17,3
1503B	3	5,59	7,7	11,6	15,5	19,4	23,2

Hyamat K with pumps Movitec	Nominal power per motor	Nominal current per motor at 400 V	Total rated power required [kVA]				
			Number of pumps (motors)				
	[kW]	[A]	2	3	4	5	6
1504B	4	7,45	10,3	15,5	20,6	25,8	31
1505B	5,5	10	13,9	20,8	27,7	34,6	41,6
1506B	5,5	10	13,9	20,8	27,7	34,6	41,6
1507B	7,5	13,4	18,6	27,9	37,1	46,4	55,7
1508B	7,5	13,4	18,6	27,9	37,1	46,4	55,7
2502B	4	7,45	10,3	15,5	20,6	25,8	31
2503B	5,5	10	13,9	20,8	27,7	34,6	41,6
2504B	7,5	13,4	18,6	27,9	37,1	46,4	55,7
2505B	11	19,3	26,7	40,1	53,5	66,9	80,2
2506B	11	19,3	26,7	40,1	53,5	66,9	80,2
2507B	15	26,2	36,3	54,5	72,6	90,8	108,9
4002-2B	5,5	10	13,9	20,8	27,7	34,6	41,6
4002B	7,5	13,4	18,6	27,9	37,1	46,4	55,7
4003-2B	11	19,3	26,7	40,1	53,5	66,9	80,2
4003B	11	19,3	26,7	40,1	53,5	66,9	80,2
4004-2B	15	26,2	36,3	54,5	72,6	90,8	108,9
4004B	15	26,2	36,3	54,5	72,6	90,8	108,9
4005-2B	18,5	31,8	44,1	66,1	88,1	110,2	132,2
4005B	18,5	31,8	44,1	66,1	88,1	110,2	132,2
4006-2B	18,5	31,8	44,1	66,1	88,1	110,2	132,2
4006B	22	37,6	52,1	78,2	104,2	130,3	156,3
6001B	5,5	10	13,9	20,8	27,7	34,6	41,6
6002-2B	7,5	13,4	18,6	27,9	37,1	46,4	55,7
6002B	11	19,3	26,7	40,1	53,5	66,9	80,2
6003-2B	15	26,2	36,3	54,5	72,6	90,8	108,9
6003B	18,5	31,8	44,1	66,1	88,1	110,2	132,2
6004-2B	18,5	31,8	44,1	66,1	88,1	110,2	132,2
6004B	22	37,6	52,1	78,2	104,2	130,3	156,3
6005-2B	22	37,6	52,1	78,2	104,2	130,3	156,3
9002-2B	11	19,3	26,7	40,1	53,5	66,9	80,2
9002-1B	15	26,2	36,3	54,5	72,6	90,8	108,9
9002B	15	26,2	36,3	54,5	72,6	90,8	108,9
9003-2B	18,5	31,8	44,1	66,1	88,1	110,2	132,2
9003-1B	22	37,6	52,1	78,2	104,2	130,3	156,3
9003B	22	37,6	52,1	78,2	104,2	130,3	156,3

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

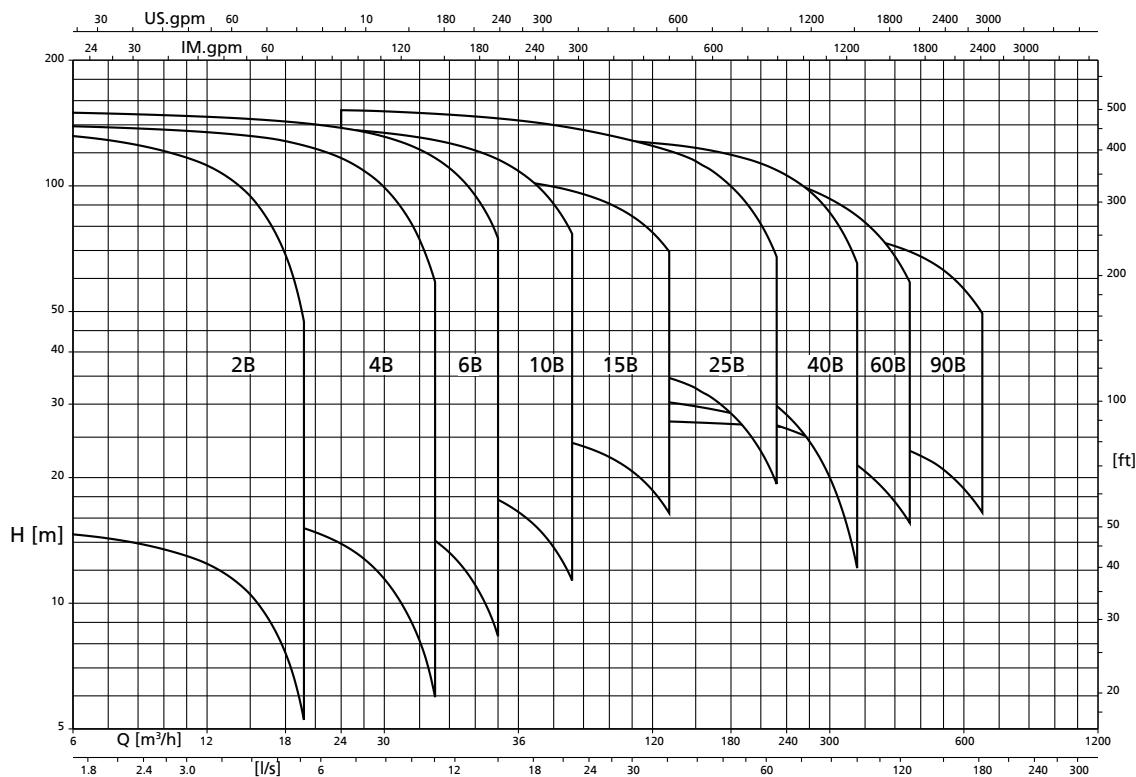
Type of connection

Types of connection (schematic)

Direct	Indirect	Indirect
	Unpressurised inlet tank at the same or at a higher level than the system	Unpressurised inlet tank at a lower level than the system (suction lift operation) ³⁾
1952+106 1952+107 1952+108		
Inlet pressure monitoring (see Supplementary equipment or Accessories)		
At $p_{in} > 0.5$ bar (min. 1 bar, DIN 1988) <ul style="list-style-type: none"> - Pressure switch - Pressure sensor At $p_{in} < 0.5$ bar <ul style="list-style-type: none"> - Pressure sensor - Flow monitoring 	<ul style="list-style-type: none"> - Float switch - Set of electrodes and relay - Dry running protection for PE inlet tank - Pressure sensor - Flow monitoring⁴⁾ 	<ul style="list-style-type: none"> - Float switch - Set of electrodes and relay - Dry running protection for PE inlet tank - Flow monitoring⁴⁾

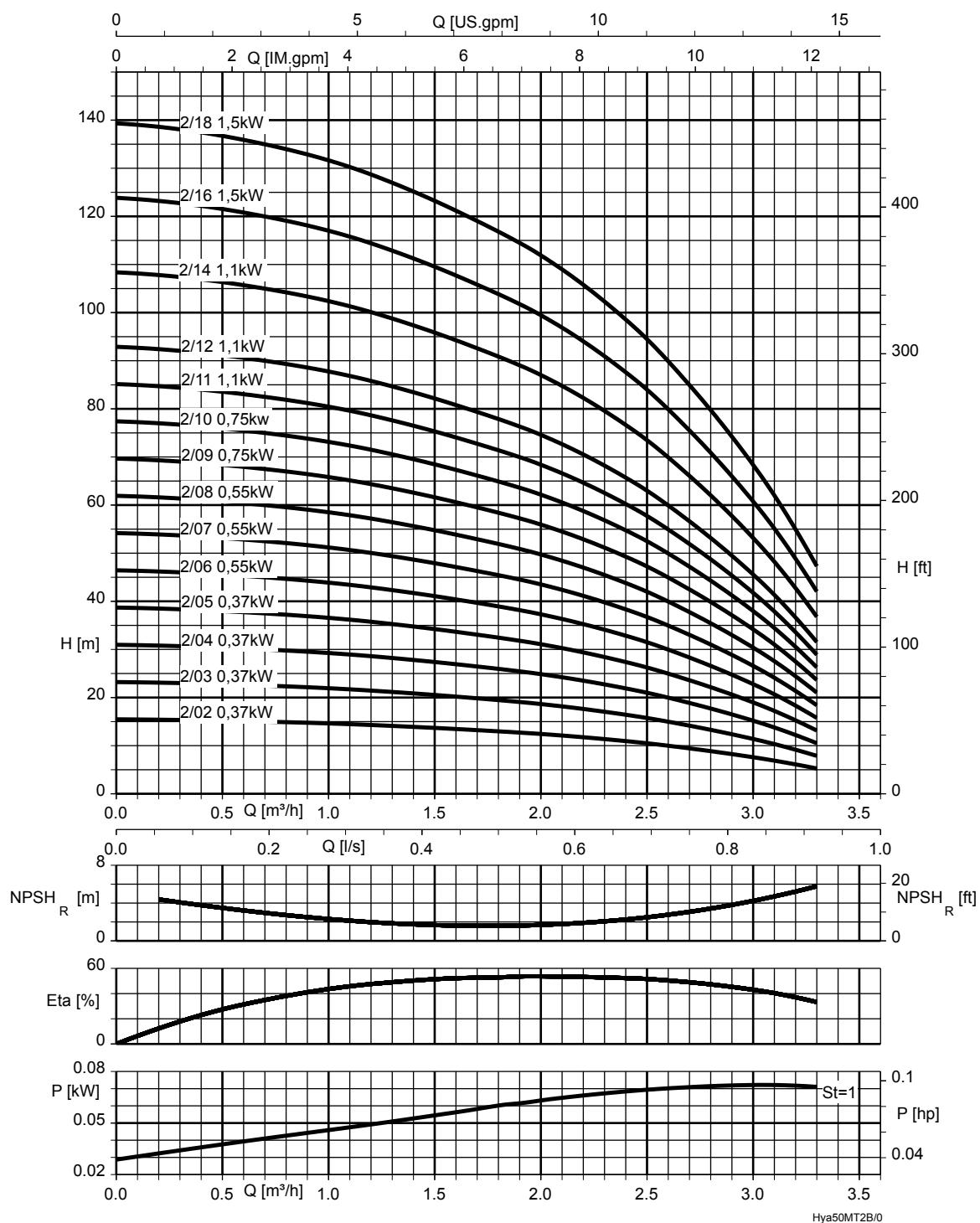
Selection chart

Hyamat K; $n = 2900$ rpm



Characteristic curves

Hyamat K with Movitec 2B; n = 2900 rpm



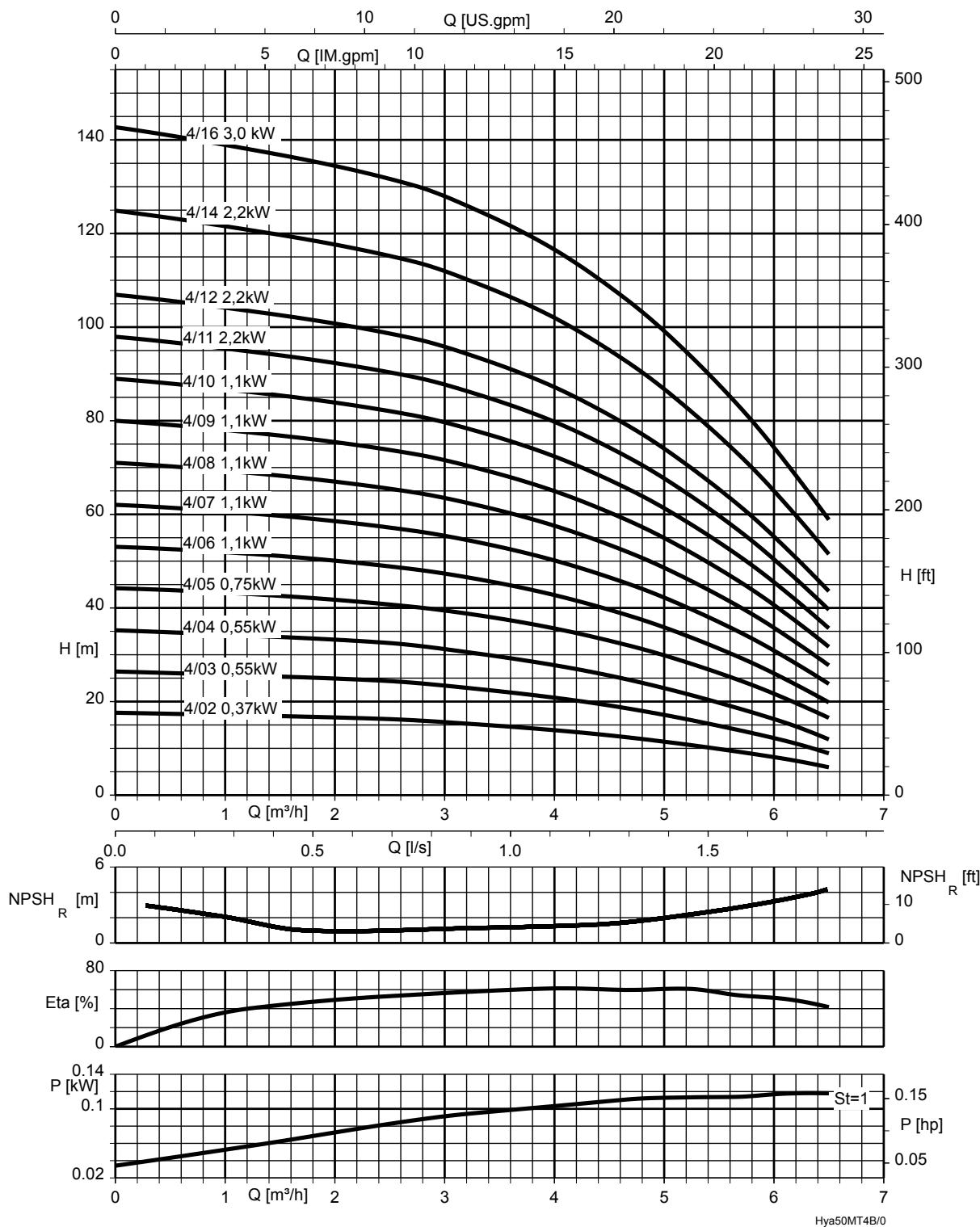
The flow rate in the characteristic curve is based on one duty pump:

The flow rate of a stand-by pump, if any, is not taken into account when calculating the flow rate required.

St = 1 | P per stage

Flow rates for multiple pump systems (⇒ Page 6)

Hyamat K with Movitec 4B; n = 2900 rpm

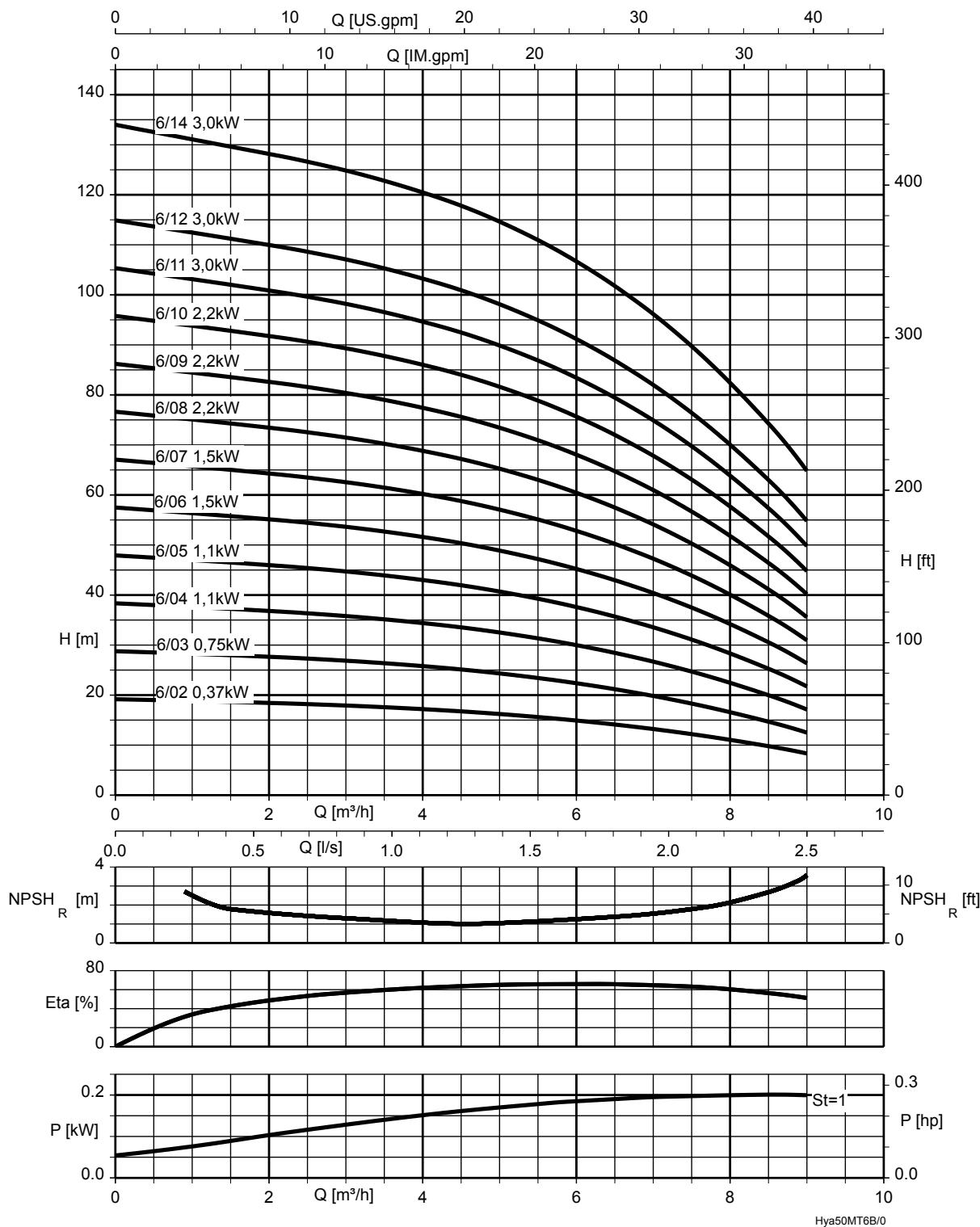


The flow rate in the characteristic curve is based on one duty pump:
 The flow rate of a stand-by pump, if any, is not taken into account when calculating the flow rate required.

St = 1 P per stage

Flow rates for multiple pump systems (⇒ Page 6)

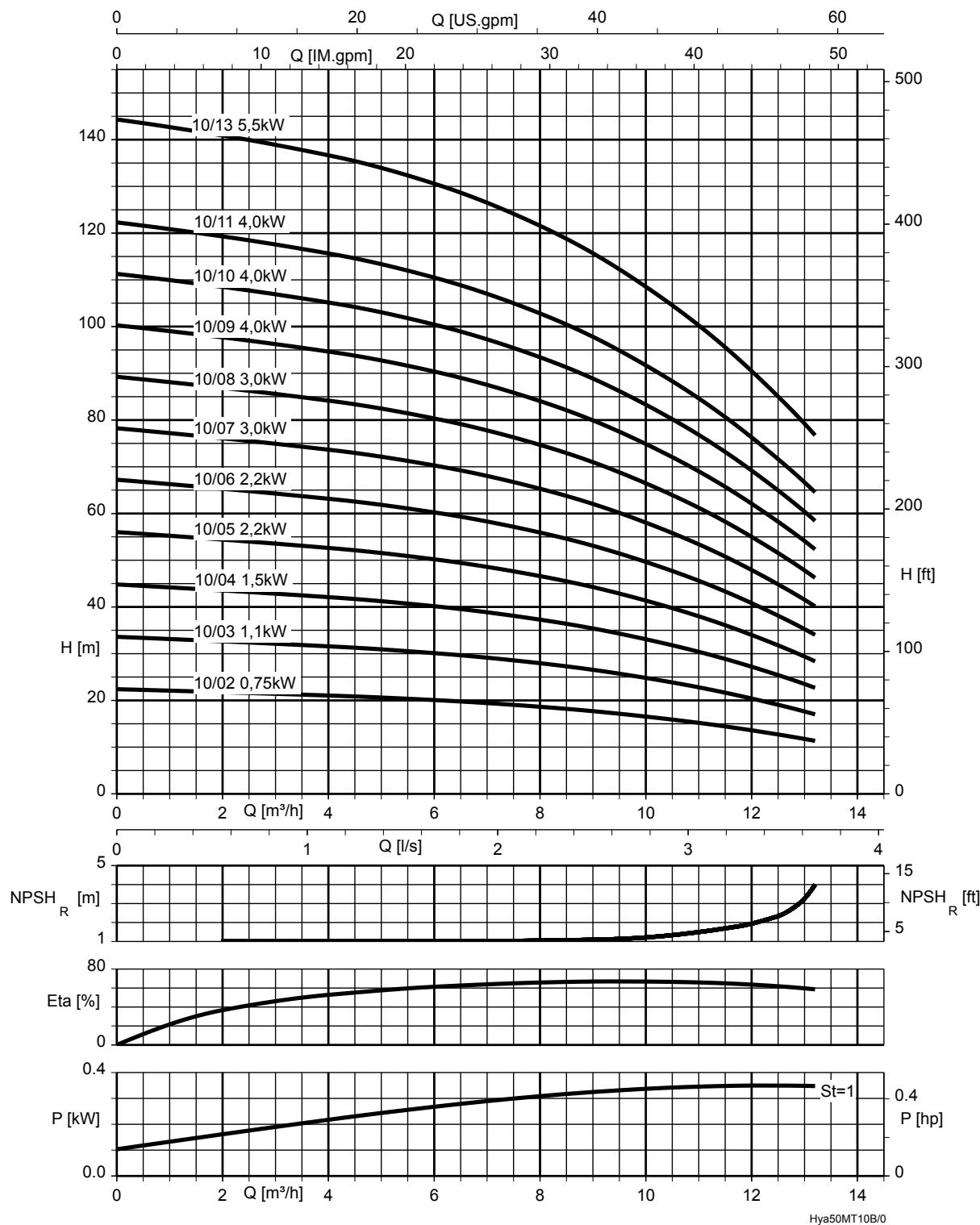
Hyamat K with Movitec 6B; n = 2900 rpm



The flow rate in the characteristic curve 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.

St = 1 | P per stage

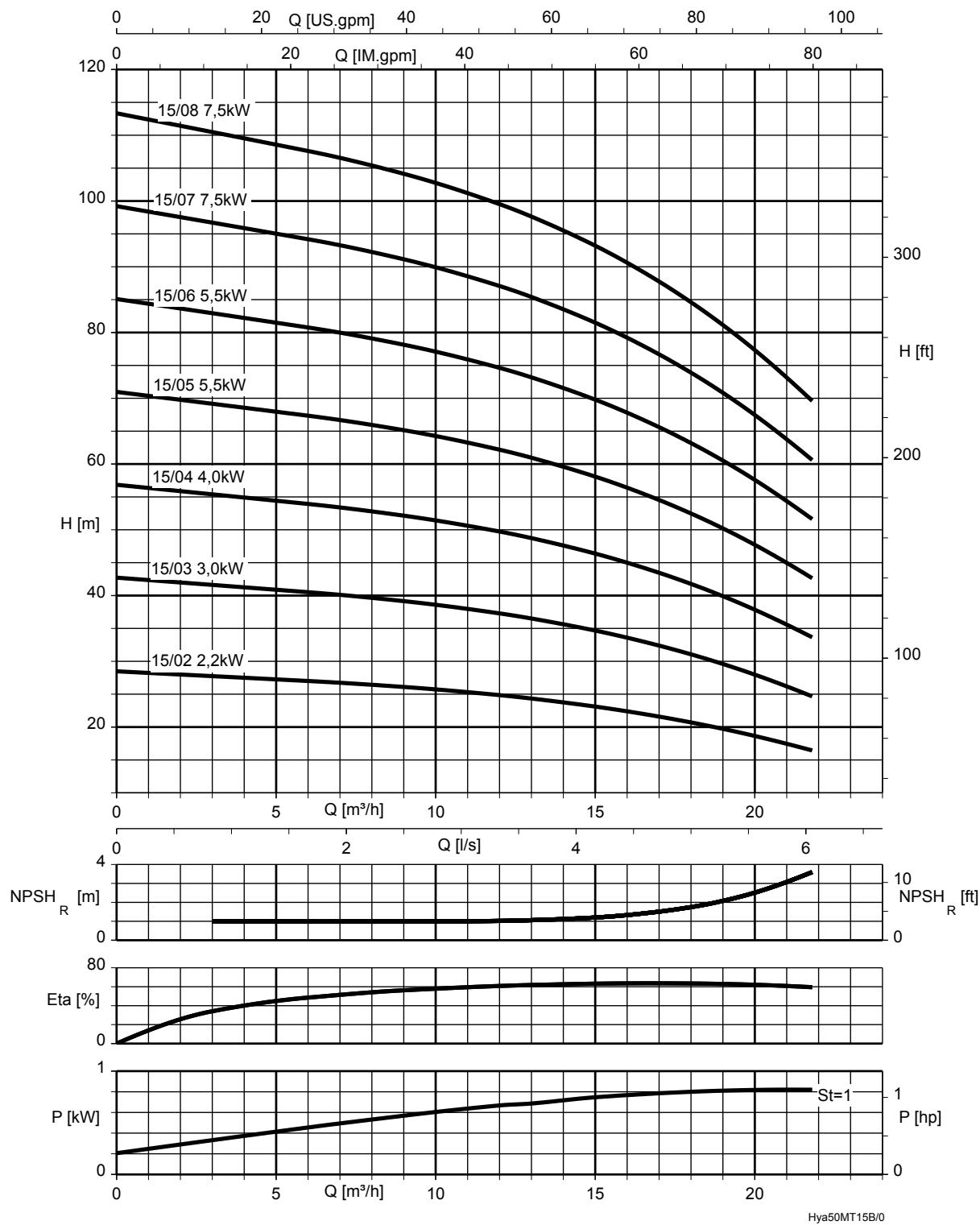
Flow rates for multiple pump systems (\Rightarrow Page 6)

Hyamat K with Movitec 10B; n = 2900 rpm


The flow rate in the characteristic curve 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.

 St = 1 P per stage

Flow rates for multiple pump systems (⇒ Page 6)

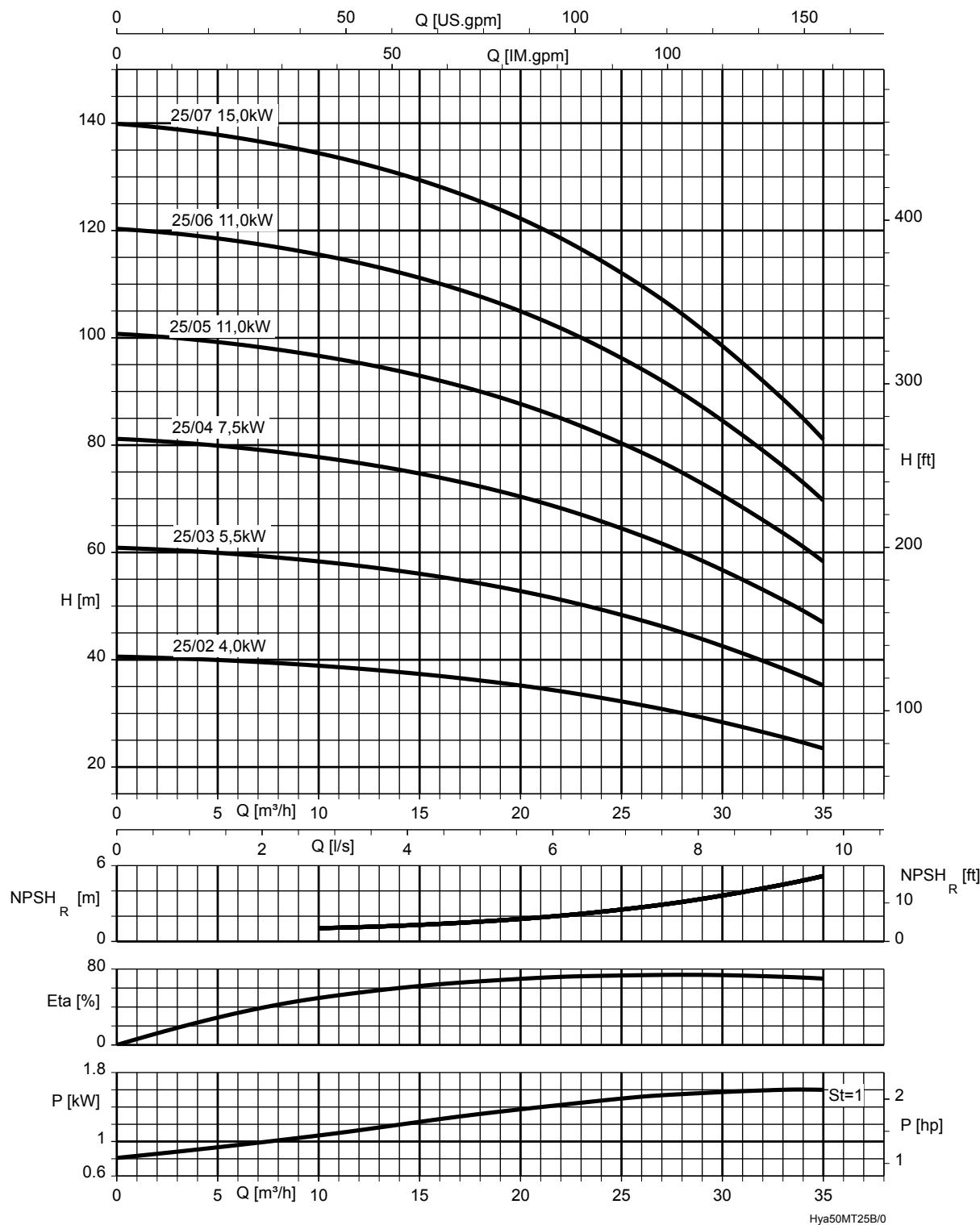
Hyamat K with Movitec 15B; n = 2900 rpm


The flow rate in the characteristic curve 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.

St = 1 P per stage

Flow rates for multiple pump systems (\Rightarrow Page 6)

Hyamat K with Movitec 25B; n = 2900 rpm

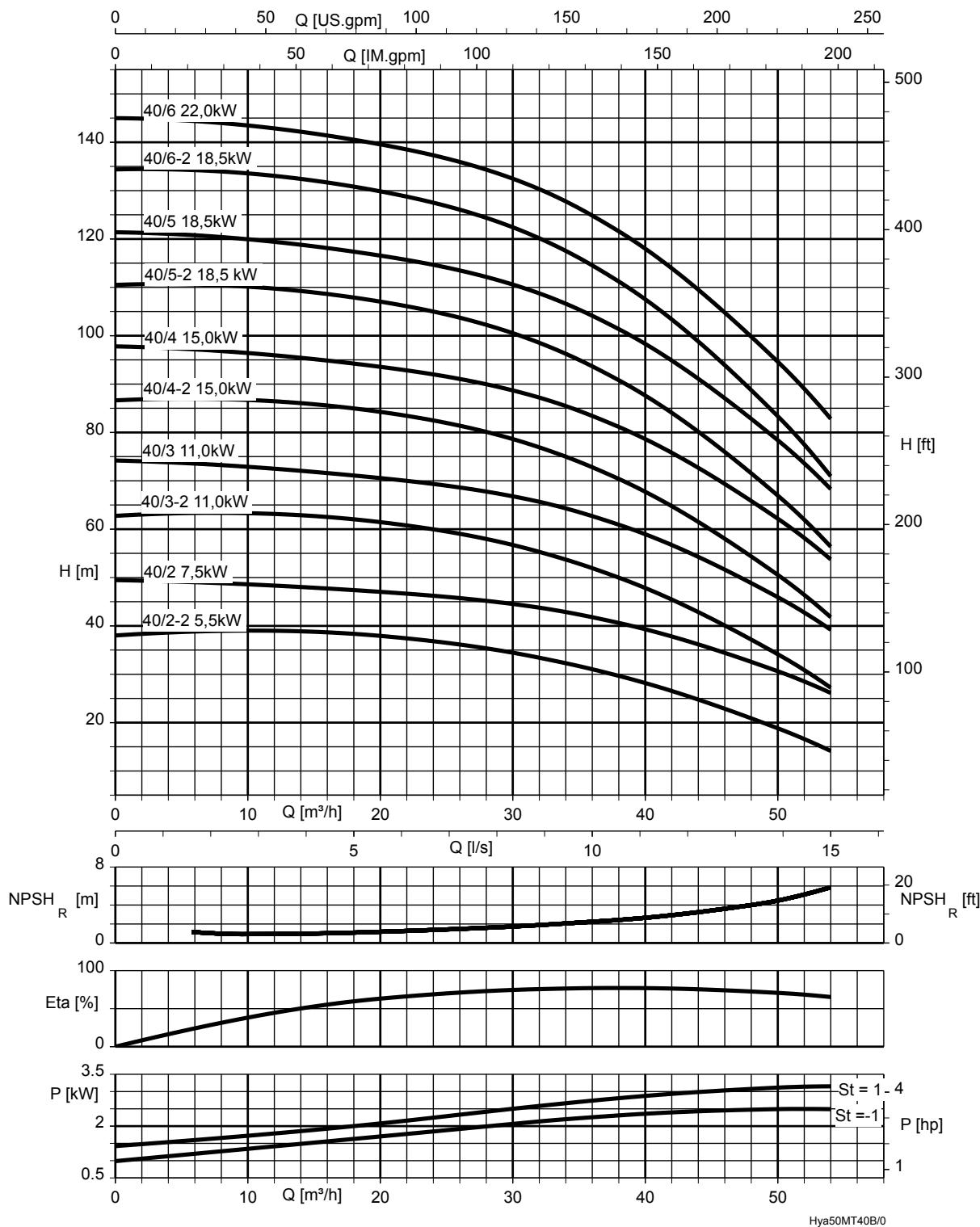


The flow rate in the characteristic curve is based on one duty pump:
 The flow rate of a stand-by pump, if any, is not taken into account when calculating the flow rate required.

St = 1 P per stage

Flow rates for multiple pump systems (⇒ Page 6)

Hyamat K with Movitec 40B; n = 2900 rpm



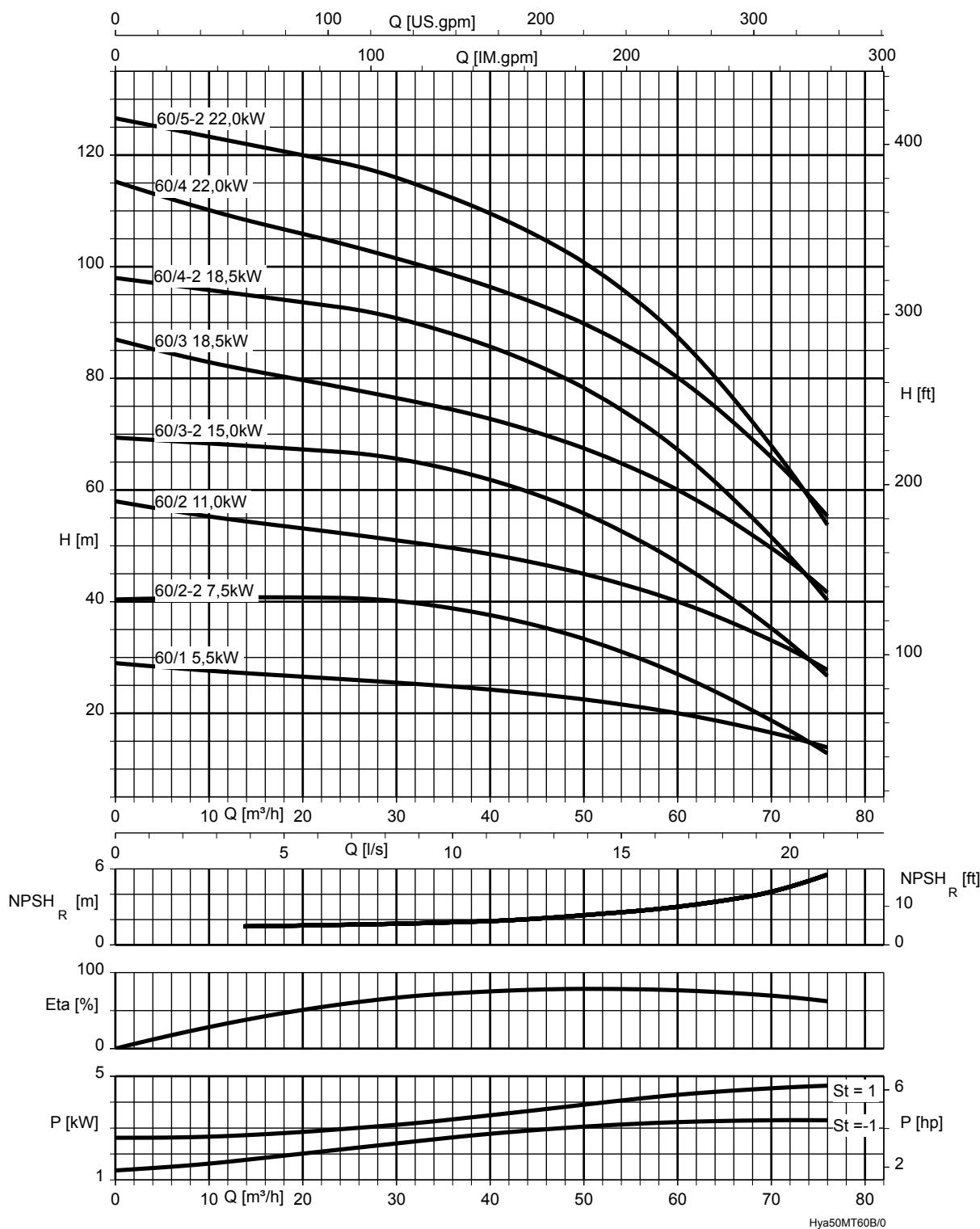
The flow rate in the characteristic curve is based on one duty pump:
 The flow rate of a stand-by pump, if any, is not taken into account when calculating the flow rate required.

St = 1 | P per stage

St = -1 | P per stage with a smaller impeller

Flow rates for multiple pump systems (⇒ Page 6)

Hyamat K with Movitec 60B; n = 2900 rpm



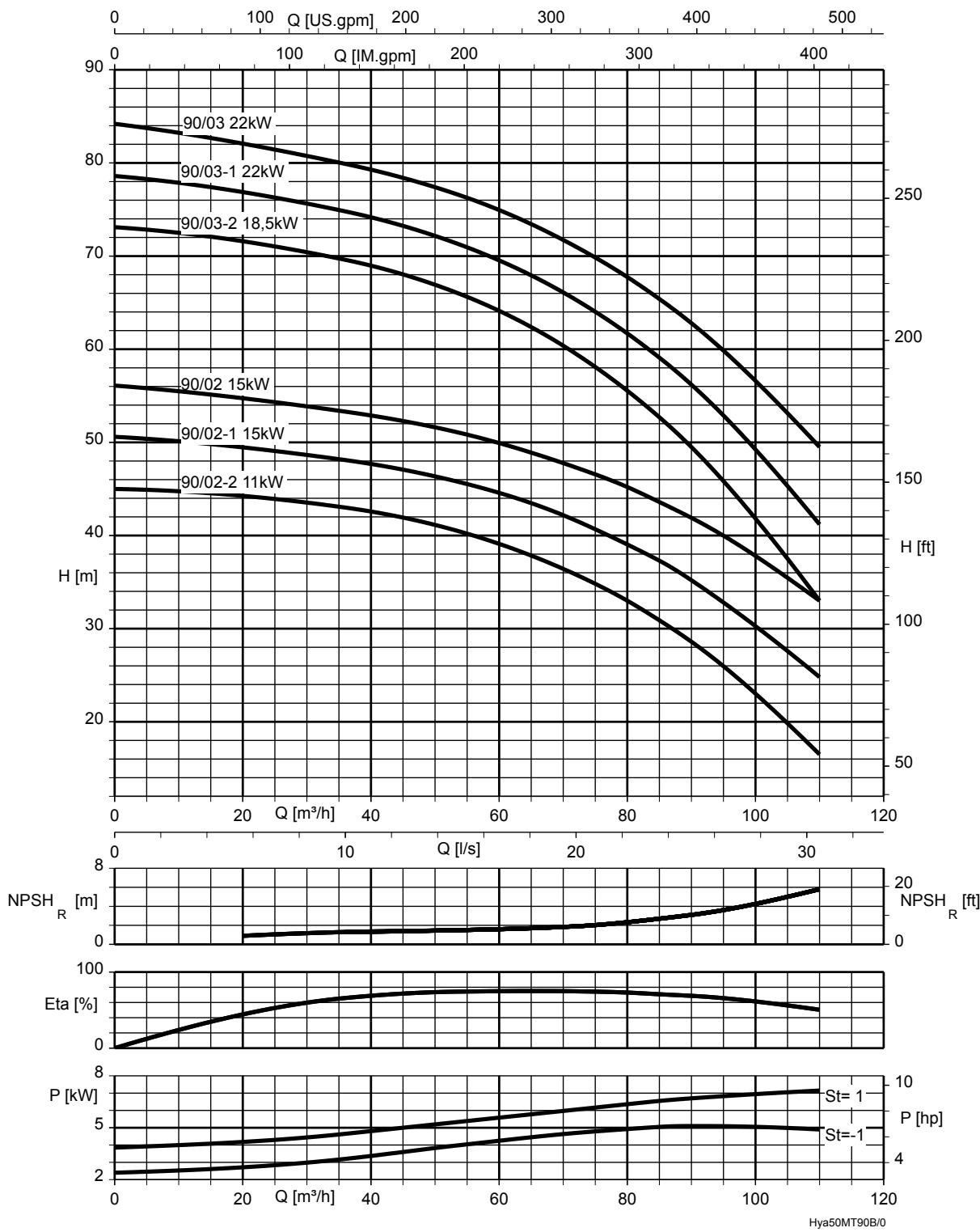
The flow rate in the characteristic curve is based on one duty pump:
 The flow rate of a stand-by pump, if any, is not taken into account when calculating the flow rate required.

St = 1 | P per stage

St = -1 | P per stage with a smaller impeller

Flow rates for multiple pump systems (⇒ Page 6)

Hyamat K with Movitec 90B; n = 2900 rpm



The flow rate in the characteristic curve 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.

St = 1 | P per stage

St = -1 | P per stage with a smaller impeller

Flow rates for multiple pump systems (⇒ Page 6)

Dimensions and weights

Hyamat K with Movitec 2B / 4B / 6B / 10B / 15B

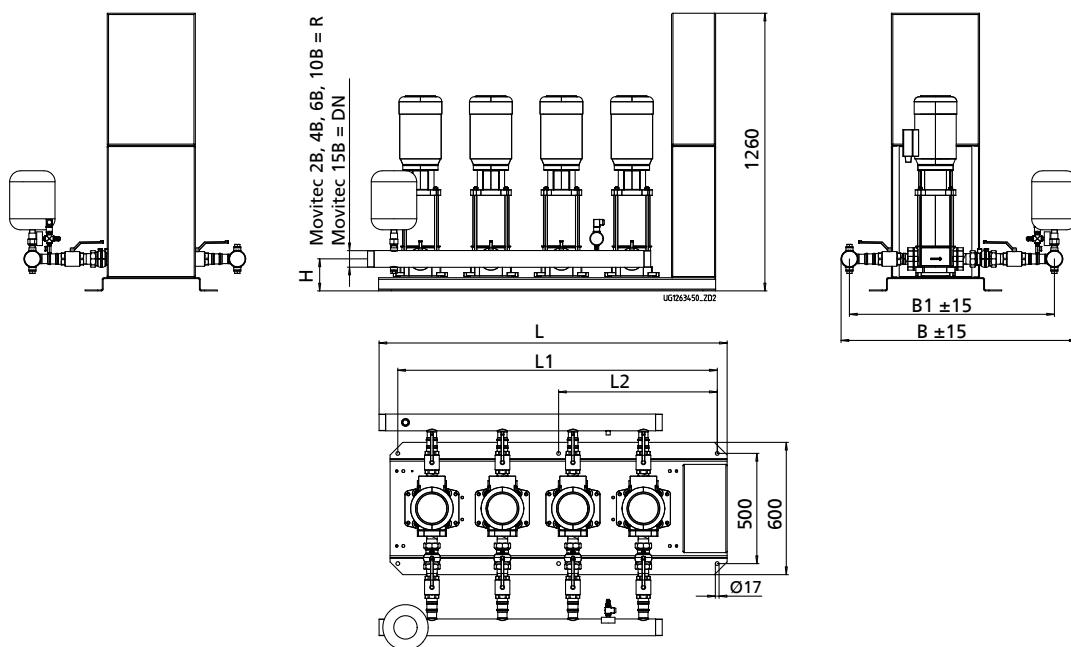


Fig. 3: Dimensions of Hyamat K with Movitec 2B / 4B / 6B / 10B / 15B

Control cabinet dimensions (⇒ Page 23)

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

Hyamat K with Movitec 25B / 40B / 60B / 90B

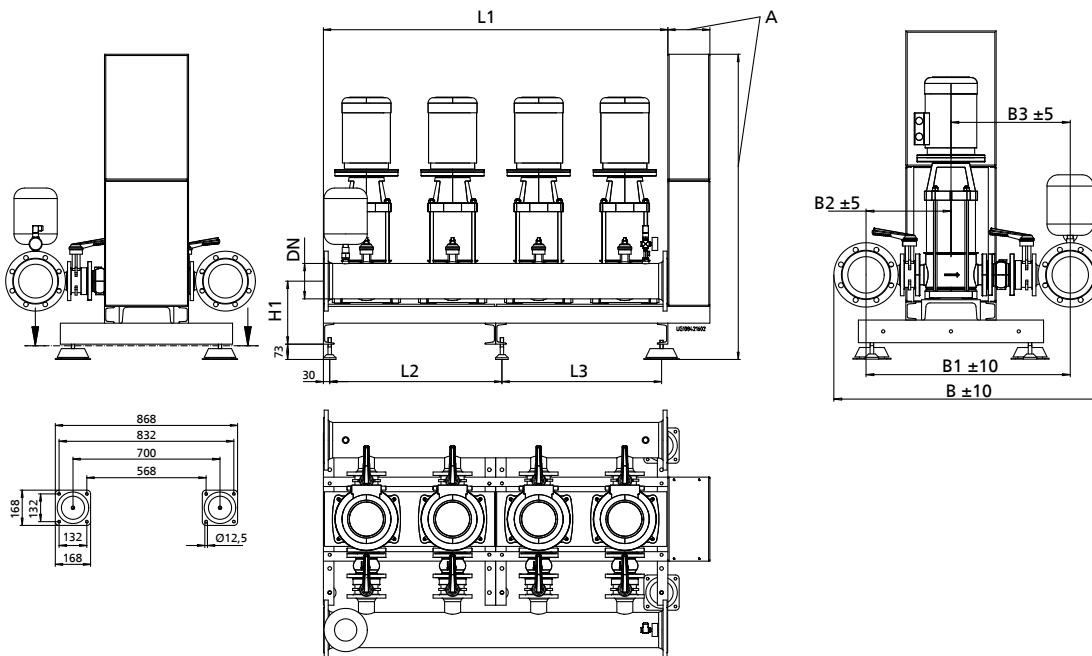


Fig. 4: Dimensions of Hyamat K with Movitec 25B / 40B / 60B / 90B

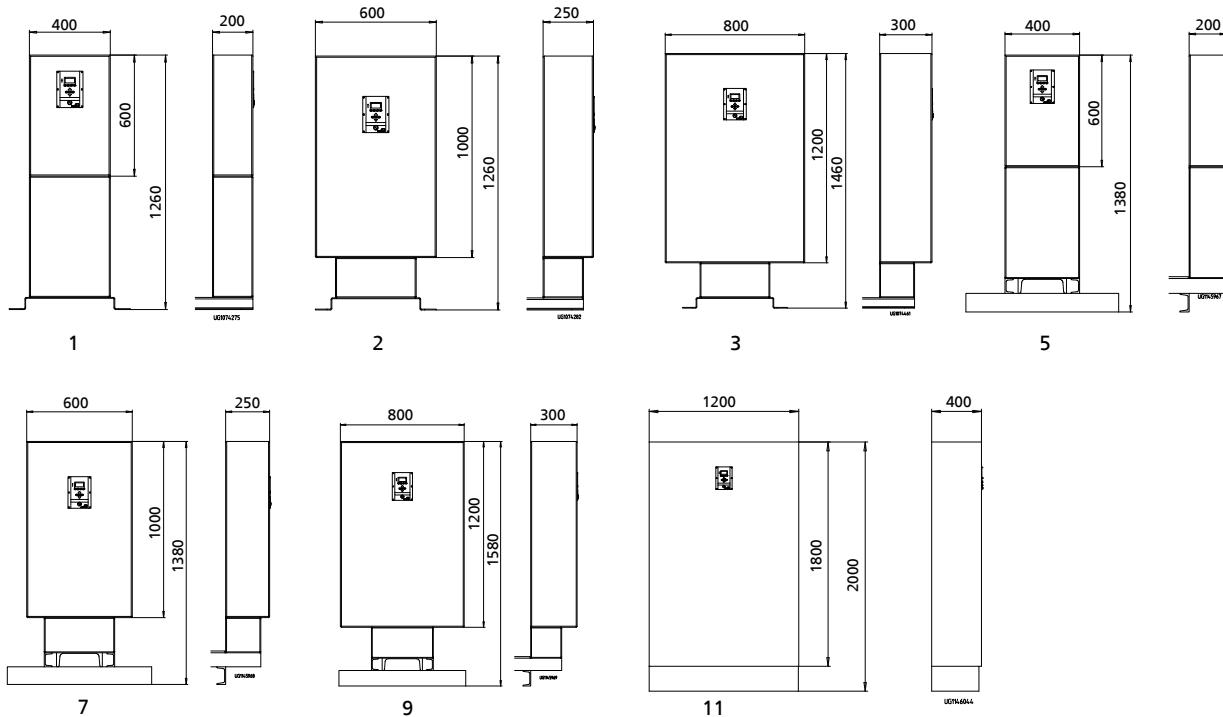
A = control cabinet dimensions (⇒ Page 23)

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

Fig. 5: Control cabinet dimensions [mm]

The dimensions refer to pressure booster systems in standard design. Larger control cabinets may be required for installing optional equipment.

Combination of control cabinets and pressure booster systems

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

Size	Power/pump						
	4,00	5,50	7,50	11,00	15,00	18,50	22,00
	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]
5/04.. B	1	2	2	-	-	-	-
5/06.. B	1	2	2	-	-	-	-
5/10.. B	1	2	2	-	-	-	-
5/15.. B	1	2	2	-	-	-	-
5/25.. B	5	7	7	9	9	9	11
5/40.. B	5	7	7	9	9	9	11
5/60.. B	5	7	7	9	9	9	11
5/90.. B	5	7	7	9	9	9	11
6/02.. B	1	3	3	-	-	-	-
6/04.. B	1	3	3	-	-	-	-
6/06.. B	1	3	3	-	-	-	-
6/10.. B	1	3	3	-	-	-	-
6/15.. B	1	3	3	-	-	-	-
6/25.. B	5	9	9	9	9	9	11
6/40.. B	5	9	9	9	9	9	11
6/60.. B	5	9	9	9	9	9	11
6/90.. B	5	9	9	9	9	9	11

Weights

Weights of the system in [kg], weights of the control cabinet () in [kg]

Hyamat K	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.../..	-	-	-	110	-	-	110	-	111	-	112	-	116	117	118	123	123	129	130	-	132	141	142
3/B 02.../..	-	-	-	133	-	-	134	-	135	-	136	-	143	144	146	152	154	163	164	-	166	179	182
4/B 02.../..	-	-	-	159	-	-	161	-	162	-	164	-	173	174	176	185	187	199	200	-	204	221	225
5/B 02.../..	-	-	-	192	-	-	194	-	196	-	198	-	208	210	212	224	226	241	243	-	247	269	274
6/B 02.../..	-	-	-	219	-	-	221	-	224	-	226	-	239	242	244	258	260	278	281	-	285	312	317
2/B 04.../..	-	-	-	110	-	-	114	-	115	-	119	-	125	126	134	135	136	142	144	-	145	174	-
3/B 04.../..	-	-	-	133	-	-	140	-	142	-	148	-	157	158	169	171	172	182	184	-	187	229	-
4/B 04.../..	-	-	-	160	-	-	168	-	171	-	179	-	191	192	207	210	212	224	227	-	231	288	-
5/B 04.../..	-	-	-	192	-	-	202	-	206	-	216	-	231	233	252	256	258	272	276	-	281	352	-
6/B 04.../..	-	-	-	219	-	-	232	-	236	-	248	-	266	269	291	296	298	316	321	-	326	411	-
2/B 06.../..	-	-	-	112	-	-	120	-	126	-	127	-	135	136	143	144	145	165	166	-	167	-	-
3/B 06.../..	-	-	-	135	-	-	148	-	156	-	158	-	170	172	182	184	185	215	216	-	217	-	-
4/B 06.../..	-	-	-	162	-	-	178	-	190	-	192	-	208	210	224	226	228	268	269	-	271	-	-
5/B 06.../..	-	-	-	193	-	-	214	-	228	-	230	-	251	254	271	274	276	326	328	-	330	-	-
6/B 06.../..	-	-	-	219	-	-	244	-	261	-	264	-	289	292	313	316	319	378	381	-	384	-	-
2/B 10.../..	-	-	-	145	-	-	151	-	161	-	168	-	170	188	190	203	205	207	-	309	-	-	
3/B 10.../..	-	-	-	185	-	-	195	-	211	-	221	-	224	250	253	273	275	278	-	422	-	-	
4/B 10.../..	-	-	-	229	-	-	242	-	263	-	277	-	281	316	320	345	349	353	-	538	-	-	
5/B 10.../..	-	-	-	277	-	-	293	-	319	-	337	-	341	385	390	422	427	432	-	678	-	-	
6/B 10.../..	-	-	-	320	-	-	339	-	370	-	391	-	397	450	455	494	500	506	-	793	-	-	
2/B 15.../..	-	-	-	185	-	-	204	-	216	-	314	-	316	326	331	-	-	-	-	-	-	-	
3/B 15.../..	-	-	-	243	-	-	270	-	288	-	425	-	428	443	450	-	-	-	-	-	-	-	
4/B 15.../..	-	-	-	317	-	-	354	-	378	-	554	-	558	577	587	-	-	-	-	-	-	-	
5/B 15.../..	-	-	-	514	-	-	561	-	591	-	826	-	830	855	868	-	-	-	-	-	-	-	
6/B 15.../..	-	-	-	627	-	-	683	-	719	-	993	-	998	1028	1043	-	-	-	-	-	-	-	
2/B 25.../..	-	-	-	370	-	-	449	-	463	-	647	-	653	677	-	-	-	-	-	-	-	-	
3/B 25.../..	-	-	-	507	-	-	614	-	636	-	902	-	910	946	-	-	-	-	-	-	-	-	
4/B 25.../..	-	-	-	708	-	-	845	-	873	-	1221	-	1233	1281	-	-	-	-	-	-	-	-	
5/B 25.../..	-	-	-	883	-	-	1070	-	1104	-	1514	-	1530	1590	-	-	-	-	-	-	-	-	
6/B 25.../..	-	-	-	1026	-	-	1192	-	1234	-	1776	-	1794	1886	-	-	-	-	-	-	-	-	
2/B 40.../..	-	405	-	413	575	-	576	580	608	616	646	651	723	-	-	-	-	-	-	-	-	-	
3/B 40.../..	-	597	-	610	844	-	844	851	893	904	950	957	1064	-	-	-	-	-	-	-	-	-	
4/B 40.../..	-	761	-	778	1083	-	1083	1092	1148	1164	1224	1234	1377	-	-	-	-	-	-	-	-	-	
5/B 40.../..	-	1064	-	1084	1441	-	1442	1453	1523	1542	1618	1630	1717	-	-	-	-	-	-	-	-	-	
6/B 40.../..	-	1231	-	1255	1683	-	1684	1698	1782	1805	1895	1909	2030	-	-	-	-	-	-	-	-	-	
2/B 60.../..	475	490	-	649	684	-	694	730	809	816	-	-	-	-	-	-	-	-	-	-	-	-	
3/B 60.../..	619	641	-	870	922	-	937	992	1110	1120	-	-	-	-	-	-	-	-	-	-	-	-	
4/B 60.../..	894	924	-	1222	1292	-	1311	1385	1542	1448	-	-	-	-	-	-	-	-	-	-	-	-	
5/B 60.../..	1145	1182	-	1530	1617	-	1642	1734	1838	1856	(205)	(205)	-	-	-	-	-	-	-	-	-	-	
6/B 60.../..	1326	1370	-	1788	1892	-	1922	2032	2174	1980	(208)	-	-	-	-	-	-	-	-	-	-	-	
2/B 90.../..	-	770	782	782	839	911	911	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3/B 90.../..	-	1100	1118	1118	1203	1289	1289	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4/B 90.../..	-	1464	1488	1488	1602	1746	1746	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5/B 90.../..	-	1968	1998	1998	2141	2229	2229	(205)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6/B 90.../..	-	2307	2343	2343	2514	2635	2635	(208)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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
- Terminal connection for analog dry running protection
- Remote ON/OFF input

Accessories

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



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