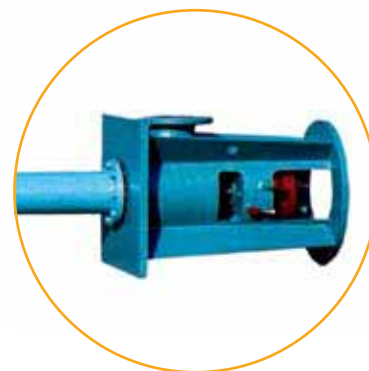
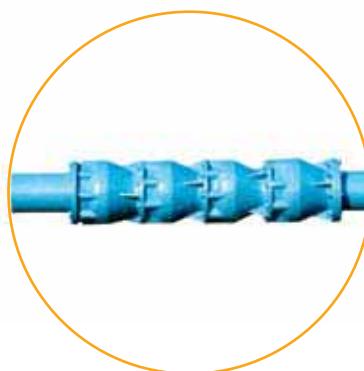
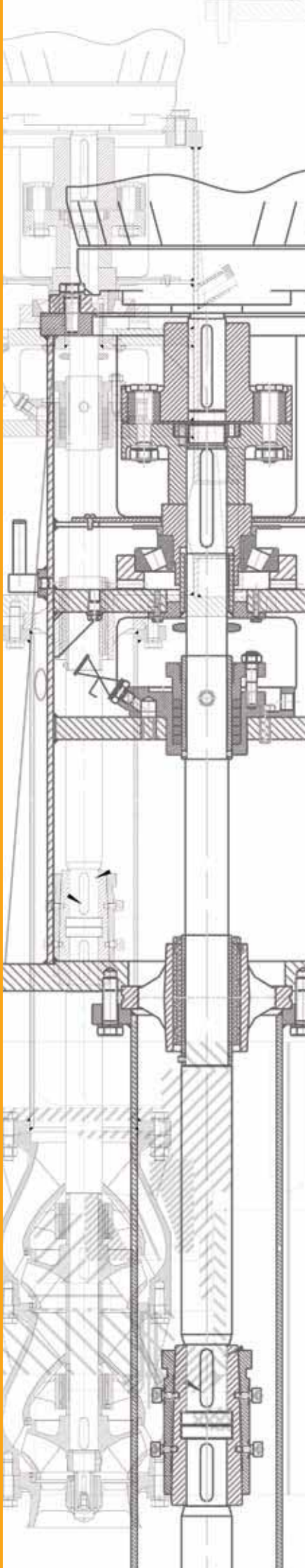




**DP,VPH,HMF – VERTICAL TURBINE, DEEP WELL PUMPS**





MZT Pumpi a.d is one of the leading manufacturers of industrial pumps in the region of South-East Europe. With its extensive experience of more than 60 years, justified with existence of broad product range, it continuously strives to satisfy the utmost needs of the customer.

The key elements to survive in this globalized market are flexibility towards market changes and ability to innovate-both in product designs as well as business processes. By following the worldwide development in the pump industry, our staff constantly faces with the growing challenge to keep abreast of the numerous innovations in pump designs and this is justified by having a separate R&D department.

The basic objective of MZT Pumpi is expanding the business partnerships and building the brand name of our products worldwide. All of our employees live up to our motto: "Pump your way to success".

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## GENERAL DATA

### Technical data:

Capacity:	up to 680l/s
Head:	up to 210
Temperature:	up to 60°C

### Pump type key

Example:	DP 14-3
	DP – Design code
	14 – Design range
	3 – Stages

### Design:

This vertical and semi-axial pump converse the capacity range up to 600 [l/s] against head of up to 200 [m]. "DP" and "VPH" type are produced as single and multistage pumps while "HMF" type is manufactured only as single stage pump.

Those pumps are intended for pumping clear or slightly muddy water at temperatures not exceeding 60°C. Pump (hydraulic part) consists of one or several impellers with axial suction usually manufactured using bronze or cast iron. Each of the impellers is statically and dynamically balanced and they are mounted on steel shaft and screwed on the bottom side using bolt, so they create an whole.

The pipe line is used for water transportation and at same time for balancing the transmission. The required depth of installation is attained by certain number of standard intermediate pipes and welded flanges as well as steel shaft coupled by fast couplings. The steel shafts are under rubber bearings protected by easily replaceable bronze sleeves.

To pump the water to the pressure pipeline, one of the pipes or the motor foundation is manufactured with an elbow which ends with a flange used for connection with the pressure pipe. The elbow is mounted below or above the pump station floor.

### Applications:

For liquid transfer and circulation of clean or slightly polluted water

Typical applications in:

- Metallurgical and other industries
- Water supply of populated places
- Industrial plants
- Irrigation and dewatering
- Municipal water supply
- Sanitary wash down services
- Thermo energetic plants
- Mining, civil engineering

### Standard material executions:

- Pump case and impeller are in bronze or cast iron.
- Pump shaft and shaft sleeves in high quality stainless steel.
- Other material combinations are available on special demand or due to the properties of the liquid.

### Bearing assembly with shaft:

The vertical transmission of the pump bears upon rubber bearings while the weight and axial hydraulic thrust bear upon the upper semi-axial roller bearing. It's also used for centering of shaft at the same time. The rubber bearing are lubricated by water of the working medium, while the roller bearing is oil lubricated..

### Shaft sealing:

The shaft sealing could be arranged by graphite soft packing.

In soft packing arrangements the shaft is protected by replaceable, bronze sleeve or some other suitable material.

### Range of program:

A wide variety of models makes it possible to select a pump to suit any existing irrigation or dewatering plant.

Proper choice is important in order to minimize the energy consumption and to assure long trouble-free operation of the pump.

### Performance

The performance curves are given in the diagrams bellow, indicating: Q-H, Q-P, Q-efficiency, Q-NPSH. DP pumps can operate continuously in whole the operating region within the motor power limitation. All the pumps can run at different speeds, depending on the size of the pump and the customer requirements.



**GENERAL DATA – DESIGN**

**Shaft sealing**

The shaft sealing could be arranged by graphite soft packing.

**Bearings**

Weight and axial hydraulic thrust bear upon the upper semi-axial roller bearing. It's also used for centering of shaft at the same time.

**Discharge pipe**

Properly sized for optimum water velocities to insure peak hydraulic performance

**Pump shaft**

Heavy duty for strength and corrosion resistance. The shaft is protected by a replaceable shaft sleeve in stainless steel.

**Pump case**

The pump case is of rigid design with a generous wall thickness, giving good protection against erosion and corrosion.

**Radial sleeve type bearing**

Provided at each stage to assure stable operation away from critical speeds

**Impeller**

Designed for maximum efficiency with wide range hydraulic coverage. Precision balanced for smooth operation

**Wear rings**

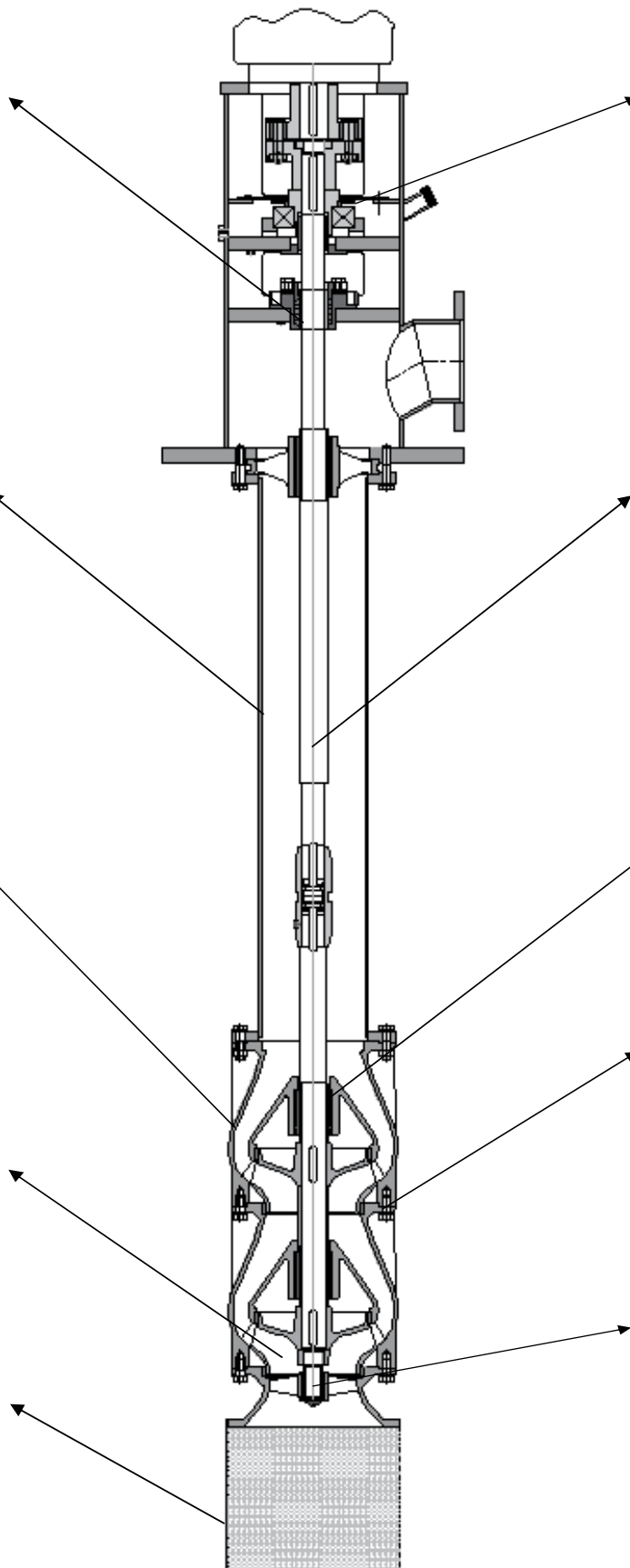
Front and back renewable wear rings are furnished in order to achieve the best pump performance and ease the maintenance

**Suction strainer**

Prevents solids from entering suction bearing

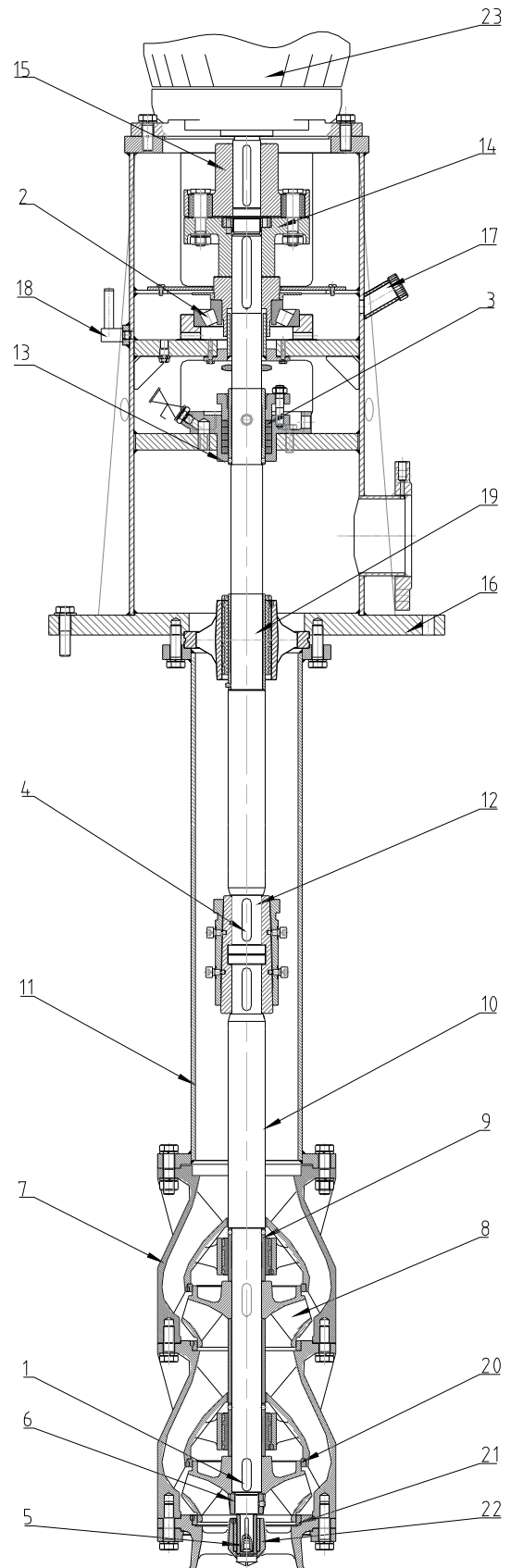
**Suction bell bearing**

Provided for shaft stability



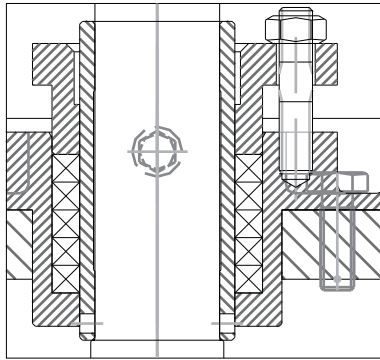
**TEHNICAL DATA - Sectional drawing**

Pos.	Description
1.	Key
2.	Bearing
3.	Soft Packing
4.	Key
5.	Sleeve
6.	Impeller nut
7.	Diffuser
8.	Impeller
9.	Sleeve
10.	Shaft
11.	Pipe
12.	Coupling for shaft
13.	Gland packing
14.	Coupling for pump
15.	Coupling for motor
16.	Motor base plate
17.	Oil filling connection
18.	Oil indicator
19.	Guide bearing
20.	Upper ring
21.	Bottom ring
22.	Bottom guide bearing
23.	Motor



**TEHNICAL DATA**

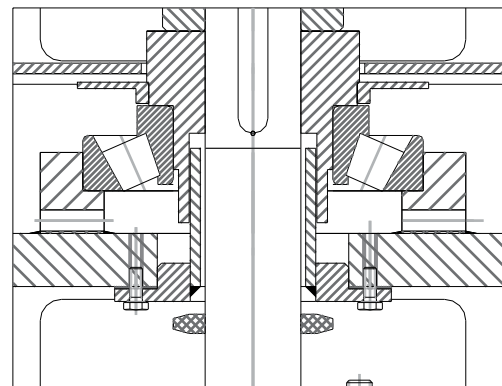
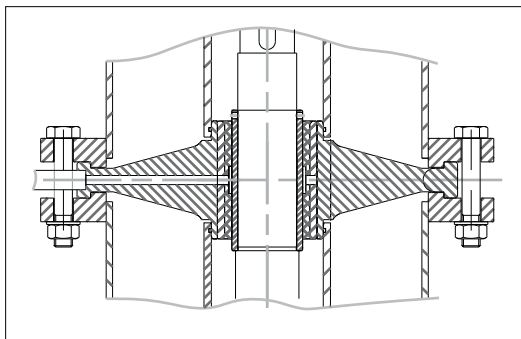
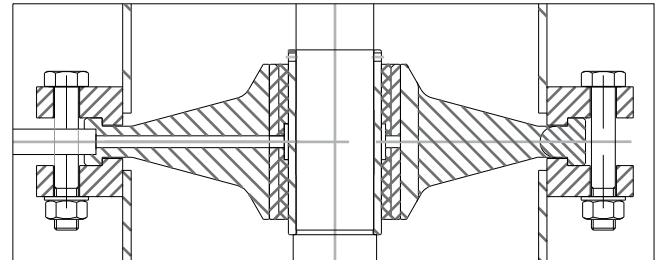
**Stuffing box**



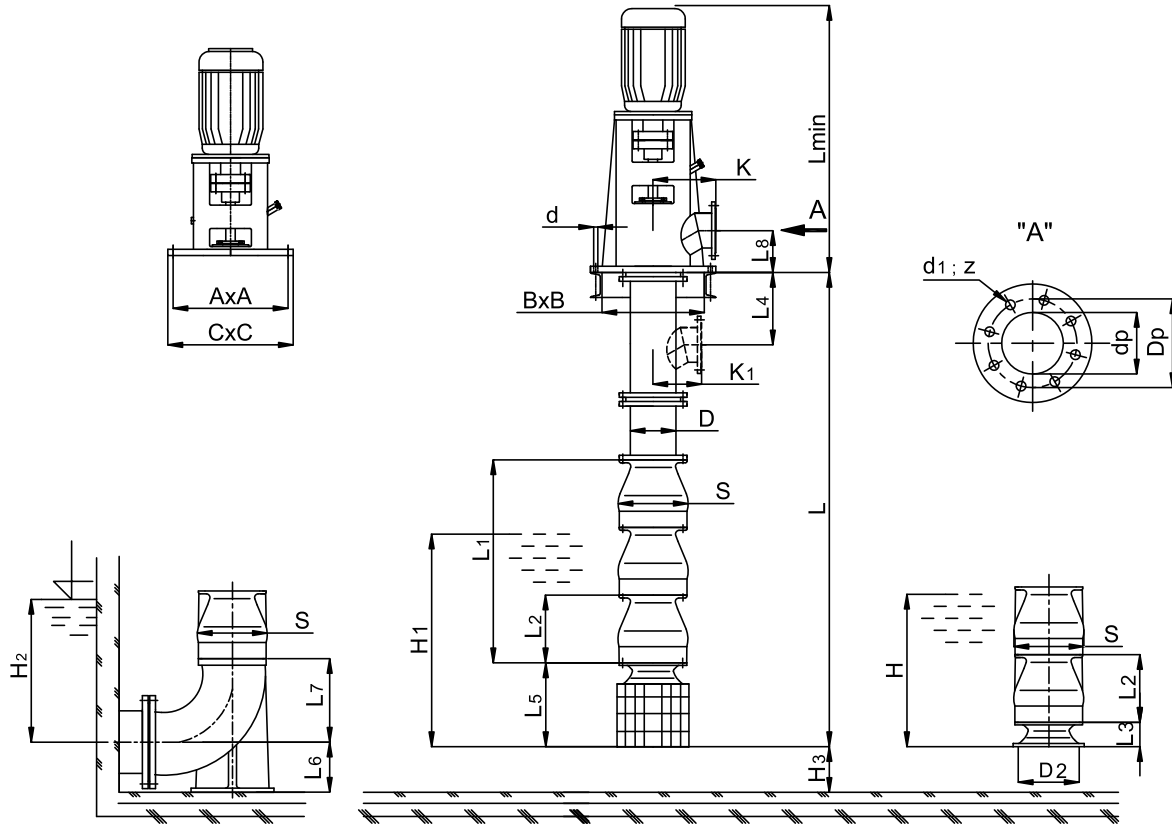
- In soft packing arrangements the shaft is protected by replaceable, bronze sleeve or some other suitable material.

**Bearing Assembly Bracket**

- The vertical transmission of the pump bears upon intermediate rubber bearings while the weight and axial hydraulic thrust bear upon the upper semi-axial roller bearing. For heavy polluted industrial water enclosing tube for shaft bearing protection is used.



Vertical Deep Well Pumps: DP10, DP14, DP18



BASE PLATE MAIN DIMENSIONS		(mm)
P (kw)	4 ÷ 90	
	132 ÷ 160	
A	550	
B	500	
C	600	
	800	
d	23	
	23	



**Vertical Deep Well Pumps: DP10, DP14, DP18**

PUMP TYPE			DP 10	DP 10 A	DP 14	DP 18
					DP 14/ 6	DP 18 / 6
L <sub>1</sub>	number of stages	1	265	265	324	483
		2	530	530	648	966
		3	795	795	972	1449
		4	1060	1060	1296	1932
		5	1925	1925	2090	2795
		6	2190	2190	2414	3278
		7	2455	2455	2738	
		8	2720	2720	3062	
		9	3585	3585	3856	
		10	3850	3850	4240	
		11	4115	4115		
		12	4380	4380		
		13	5245	5245		
		14	5510	5510		
		15	5775	5775		
		16	6040	6040		
		17	6905	6905		
		18	7170	7170		
		19	7435	7435		
		20	7700	7700		

L <sub>2</sub>	265	265	324	483
L <sub>3</sub>	130	130	116	178
L <sub>4</sub>	in accordance with customer requirements			
L <sub>5</sub>	416	416	416	478
L <sub>6</sub>	210	210	240	240
L <sub>7</sub>	450	450	500	500
L <sub>8</sub>	200	200	200	470
$L = L_1 + (1,0 \div 2,0) \cdot 10^3 \div 25 \cdot 10^3$				
L min	3000	3000	3000	3500
D	168	168	216	318
S	270	270	340	485
K	300	300	330	470
K <sub>1</sub>	300	300	300	400
H	500	500	600	800
H <sub>1</sub>	800	800	900	1100
H <sub>2</sub>	800	800	1000	1200
H <sub>3</sub>	250	250	350	400
D <sub>2</sub>	265	265	285	400

**Vertical Deep Well Pumps: DP10, DP14, DP18**

Hydraulic characteristics								
Pump type	Pump					D (mm)	electric motor	
	Q (l/s)						N (kW)	n(rpm)
	14	18	22	26				
H (mVs)								
DP10-1	9	8	7	5.5		198	4	1450
DP10-2	18	16	14	11			7.5	
DP10-3	27	24	21	16.5			11	
DP10-4	36	32	28	22			15	
DP10-5	45	40	35	27.5			18.5	
DP10-6	54	48	42	33			22	
DP10-7	63	56	49	38.5			30	
DP10-8	72	64	56	44			30	
DP10-9	81	72	63	49.5			37	
DP10-10	90	80	70	55			37	
DP10-11	99	88	77	60.5			37	
DP10-12	108	96	84	66			45	
DP10-13	117	104	91	71.5			45	
DP10-14	126	112	98	77			55	
DP10-15	135	120	105	82.5			55	
DP10-16	144	128	112	88			55	
DP10-17	153	136	119	93.5			75	
DP10-18	162	144	126	99			75	
DP10-19	171	152	133	104.5			75	
DP10-20	180	160	140	110			75	

Pump type	Q (l/s)					D(mm)	electric motor	
	22	26	30	34	36		N (kW)	n (rpm)
	H (mVs)							
DP10A -1	10	9	8	7	6.5	199	7.5	1450
DP10A -2	20	18	16	14	13		15	
DP10A -3	30	27	24	21	19.5		18.5	
DP10A -4	40	36	32	28	26		30	
DP10A -5	50	45	40	35	32.5		30	
DP10A -6	60	54	48	42	39		37	
DP10A -7	70	63	56	49	45.5		45	
DP10A -8	80	72	64	56	52		55	
DP10A -9	90	81	72	63	58.5		55	
DP10A -10	100	90	80	70	65		75	
DP10A -11	110	99	88	77	71.5		75	
DP10A -12	120	108	96	84	78		75	
DP10A -13	130	117	104	91	84.5		90	
DP10A -14	140	126	112	98	91		90	
DP10A -15	150	135	120	105	97.5		90	
DP10A -16	160	144	128	112	104		110	
DP10A -17	170	153	136	119	110.5		110	
DP10A -18	180	162	144	126	117		110	
DP10A -19	190	171	152	133	123.5		132	
DP10A -20	200	180	160	140	130		132	

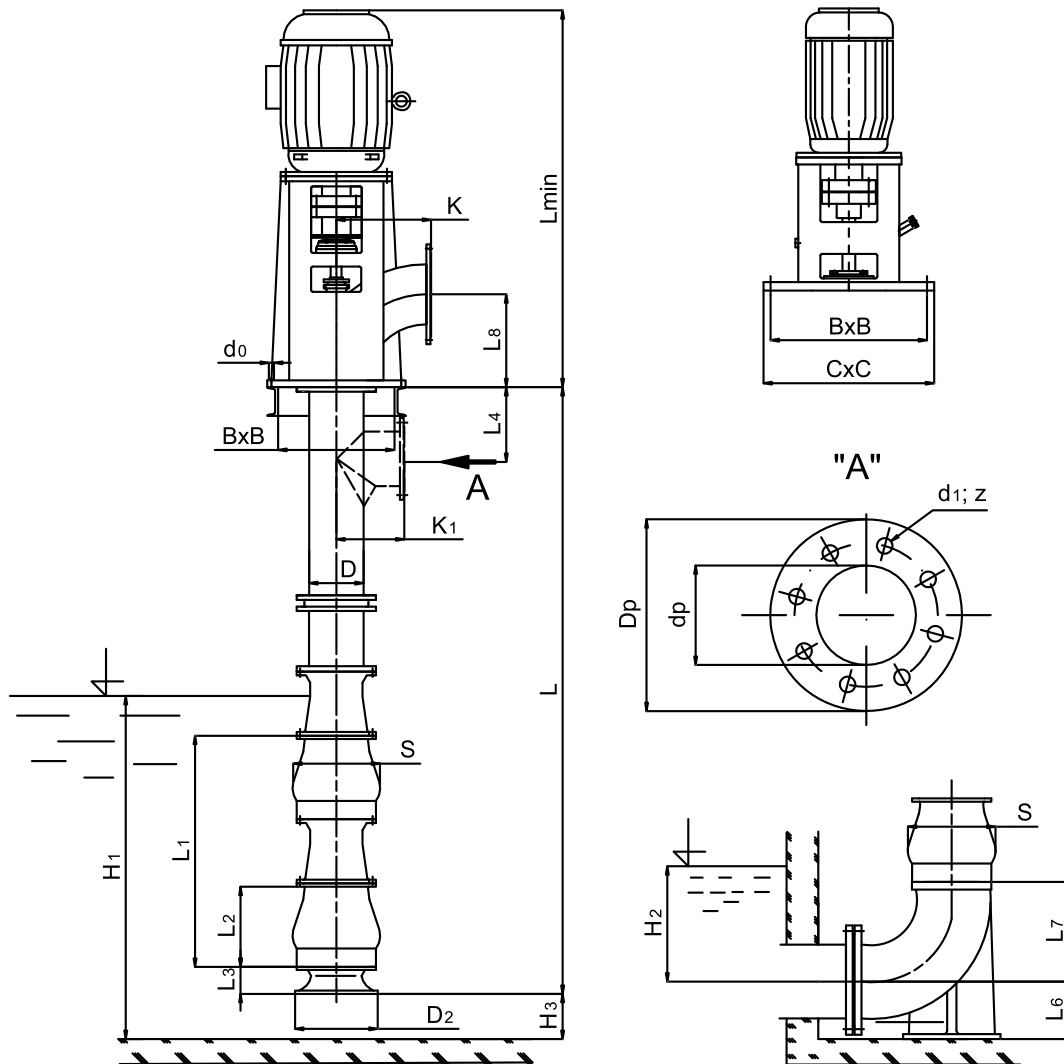
**Vertical Deep Well Pumps: DP10, DP14, DP18**

Pump type	Q (l/s)					D(mm)	electric motor	
	35	50	65	80	85		N (kW)	n (rpm)
<b>DP14 -1</b>	18	16	15	12	10	252	15	1450
<b>DP14 -2</b>	36	32	30	24	20		30	
<b>DP14 -3</b>	54	48	45	36	30		45	
<b>DP14 -4</b>	72	64	60	48	40		55	
<b>DP14 -5</b>	90	80	75	60	50		75	
<b>DP14 -6</b>	108	96	90	72	60		90	
<b>DP14 -7</b>	126	112	105	84	70		110	
<b>DP14 -8</b>	144	128	120	96	80		132	
<b>DP14 -9</b>	162	144	135	108	90		132	
<b>DP14 -10</b>	180	160	150	120	100		160	
	<b>23</b>	<b>32</b>	<b>43</b>	<b>52</b>	<b>56</b>	252		960
<b>DP14/6 -2</b>	15	14	13	10	8		11	
<b>DP14/6 -4</b>	30	28	26	20	16		22	
	<b>70</b>	<b>90</b>	<b>110</b>	<b>130</b>	<b>160</b>	364		1450
<b>DP18 -1</b>	35	32	30	26	20		55	
<b>DP18 -2</b>	70	64	60	52	40		110	
<b>DP18 -3</b>	105	96	90	78	60		160	
<b>DP18 -4</b>	140	128	120	104	80		220	
<b>DP18 -5</b>	175	160	150	130	100		315	
<b>DP18 -6</b>	210	192	180	156	120		315	
	<b>63</b>	<b>81</b>	<b>99</b>	<b>117</b>	<b>144</b>	328		1450
<b>DP18c -1</b>	28	26	24	21	16		45	
<b>DP18c -2</b>	56	52	48	42	32		90	
<b>DP18c -3</b>	84	78	72	63	48		110	
<b>DP18c -4</b>	112	104	96	84	64		160	
<b>DP18c -5</b>	140	130	120	105	80			
<b>DP18c -6</b>	168	156	144	126	96		250	
	<b>46</b>	<b>59</b>	<b>72</b>	<b>85</b>	<b>105</b>	364		960
<b>DP18/6 -1</b>	15	14	13	11	8.5		11	
<b>DP18/6 -2</b>	30	28	26	22	17		22	

**Conection flanges standard:**

PUMP TYPE			DP 10	DP 10A	DP 14	DP 18
					DP 14/ 6	DP 18 / 6
DIN 25 32	10 at	number of stages	1 - 11	1 - 10	1 - 6	1 - 3
		<b>dp</b>	150	150	200	300
		<b>Dp</b>	240	240	295	400
		<b>d<sub>1</sub></b>	23	23	23	23
		<b>z</b>	8	8	8	12
DIN 25 33	16 at	number of stages	12 - 17	11 - 16	7 - 10	4 - 5
		<b>dp</b>	150	150	200	300
		<b>Dp</b>	240	240	295	410
		<b>d<sub>1</sub></b>	23	23	23	27
		<b>z</b>	8	8	12	12
DIN 25 44	25 at	number of stages	18 - 20	17 - 20		
		<b>dp</b>	150	150		
		<b>Dp</b>	250	250		
		<b>d<sub>1</sub></b>	27	27		
		<b>z</b>	8	8		

Vertical Semi-axial Pump: 2VPH, 4VPH



BASE PLATE MAIN DIMENSIONS		(mm)
N (kw)	4 - 90	200 - 280
	132 - 160	315 - 800
A	550 750	1100 1300
B	500 700	1050 1250
C	600 800	1200 1400
d	23 23	30 30

**Vertical Semi-axial Pump: 2VPH, 4VPH**

PUMP TYPE			2VPH	4VPHA
			2VPH / 6	4VPHA / 6
DIN 25 32	10 at	number of stages	1 - 3	1 - 2
		<b>dp</b>	300	350
		<b>Dp</b>	400	460
		<b>d<sub>1</sub></b>	23	23
		<b>z</b>	12	16
DIN 25 33	16 at	number of stages	4	3
		<b>dp</b>	300	350
		<b>Dp</b>	410	470
		<b>d<sub>1</sub></b>	27	27
		<b>z</b>	12	16
DIN 25 44	25 at	number of stages	5 - 6	4
		<b>dp</b>	300	350
		<b>Dp</b>	430	490
		<b>d<sub>1</sub></b>	30	33
		<b>z</b>	16	16

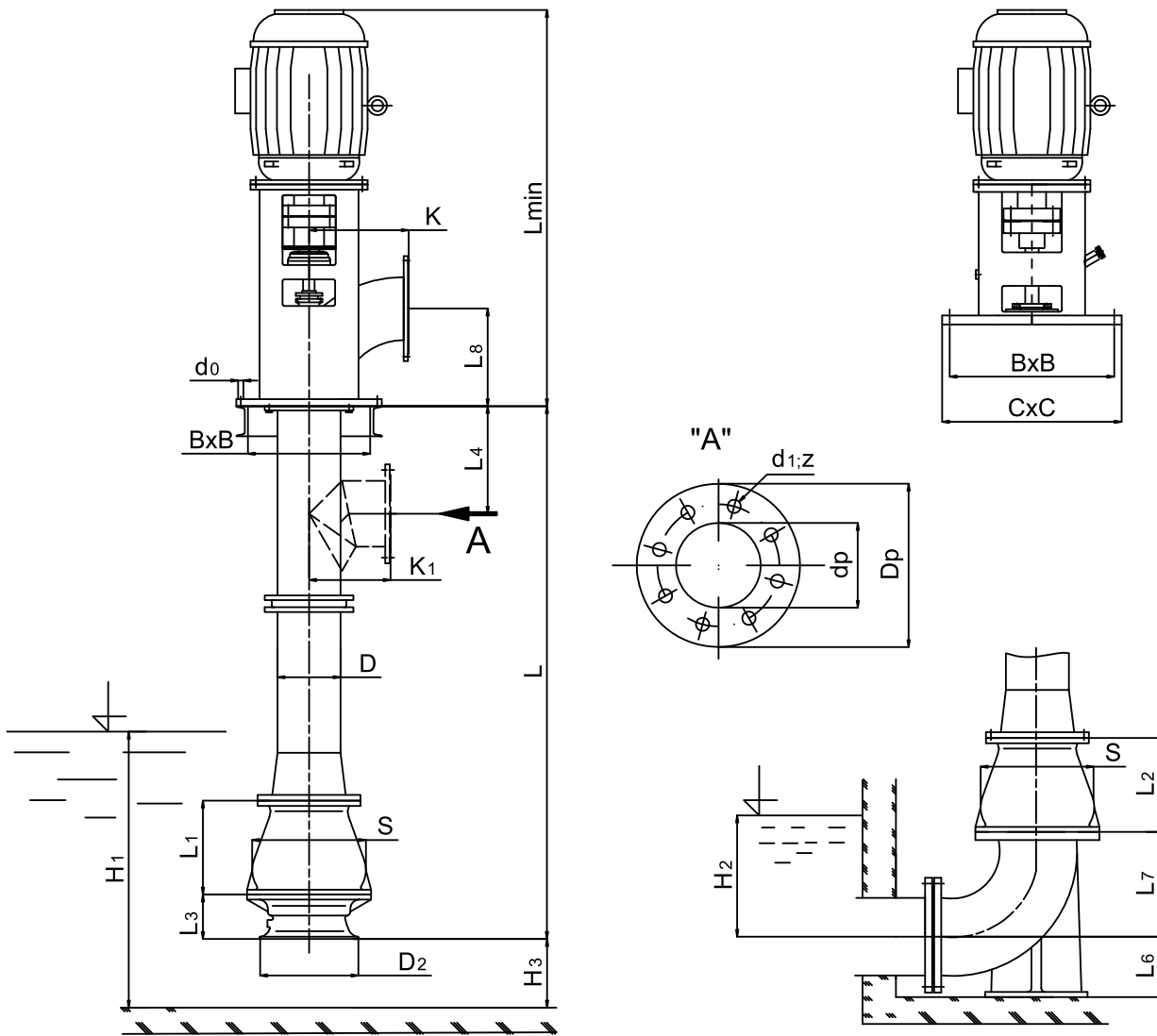
PUMP TYPE			2VPH	4VPHA
			2VPH / 6	4VPHA / 6
L <sub>1</sub>	number of stages	1	495	565
		2	1370	1570
		3	2245	2575
		4	3120	3580
		5	3995	
		6	4870	

L <sub>2</sub>	495	565
L <sub>3</sub>	160	180
L <sub>4</sub>	in accordance with customer requirements	
L <sub>6</sub>	270	270
L <sub>7</sub>	530	530
L <sub>8</sub>	470	550
$L = L_1 + (1,0 \div 2,0) \cdot 10^3 \div 25 \cdot 10^3$		
<b>L min</b>	3500	4000
<b>D</b>	318	355
<b>S</b>	520	600
<b>K</b>	470	700
<b>K<sub>1</sub></b>	400	400
<b>H</b>	800	1000
<b>H<sub>1</sub></b>	1100	
<b>H<sub>2</sub></b>	1200	1300
<b>H<sub>3</sub></b>	400	450
<b>D<sub>2</sub></b>	480	550

**Vertical Semi-axial Pump: 2VPH, 4VPH**

Pump type	Q (l/s)					D(mm)	electric motor	
	125	150	175	225	275		N(kW)	n(rpm)
	H (mVs)							
<b>2VPH -1</b>	36	35	32	27	20	368	90	1450
<b>2VPH -2</b>	72	70	64	54	40		180	
<b>2VPH -3</b>	108	105	96	81	60		315	
<b>2VPH -4</b>	144	140	128	108	80		360	
<b>2VPH -5</b>	180	175	160	135	100		450	
<b>2VPH -6</b>	216	210	192	162	120		500	
	<b>110</b>	<b>130</b>	<b>150</b>	<b>195</b>	<b>240</b>	320		1450
<b>2VPHC -1</b>	27	26.5	24	21	15		75	
<b>2VPHC -2</b>	54	53	48	42	30		110	
<b>2VPHC -3</b>	81	79.5	72	63	45		180	
<b>2VPHC -4</b>	108	106	96	84	60		250	
<b>2VPHC -5</b>	135	132	120	105	75		315	
<b>2VPHC -6</b>	165	160	145	126	90	360		
	<b>82</b>	<b>100</b>	<b>115</b>	<b>150</b>	<b>180</b>	368		950
<b>2VPH/6 -1</b>	15.5	15	14	11.5	8.5		30	
<b>2VPH/6 -3</b>	46.5	45	42	34.5	25.5			
	<b>240</b>	<b>280</b>	<b>320</b>	<b>360</b>	<b>400</b>	430		1450
<b>4VPH -1</b>	50	48	45	41	36		200	
<b>4VPH -2</b>	100	96	90	82	72		400	
<b>4VPH -3</b>	150	144	135	123	108		630	
<b>4VPH -4</b>	200	192	180	164	144	800		
	<b>210</b>	<b>245</b>	<b>280</b>	<b>310</b>	<b>350</b>	375		1450
<b>4VPHC -1</b>	38	36	34	31	27		160	
<b>4VPHC -2</b>	76	72	68	62	54		280	
<b>4VPHC -3</b>	114	108	102	93	81		400	
<b>4VPHC -4</b>	152	144	136	124	108	550		
	<b>160</b>	<b>180</b>	<b>210</b>	<b>235</b>	<b>260</b>	430		960
<b>4VPH/6 -1</b>	21.5	20.5	19	17.5	15.5		75	
<b>4VPH/6 -2</b>	43	41	38	35	31		132	

Vertical Semi-axial Pump: HMF41.5, HMF45, HMF47, HMF47.5



BASE PLATE MAIN DIMENSIONS

(mm)

N (kw)	4 - 90	200 - 280
	132 - 160	315 - 800
A	550 750	1100 1300
B	500 700	1050 1250
C	600 800	1200 1400
d	23 23	30 30

**Vertical Semi-axial Pump: HMF41.5, HMF45, HMF47, HMF47.5**

PUMP TYPE			HMF 41,5	HMF 47,5
			HMF 41,5 / 6	HMF 47,5 / 6
			HMF 45	HMF 50
DIN 25 32	10 at	number of stages	1	1
		<b>dp</b>	500	500
		<b>Dp</b>	620	620
		<b>d<sub>1</sub></b>	27	27
		<b>z</b>	20	20

PUMP TYPE			HMF 41,5	HMF 47,5
			HMF 41,5 / 6	HMF 47,5 / 6
			HMF 45	HMF 50
<b>L<sub>1</sub></b>	number of stages	1	530	600
		2		1800

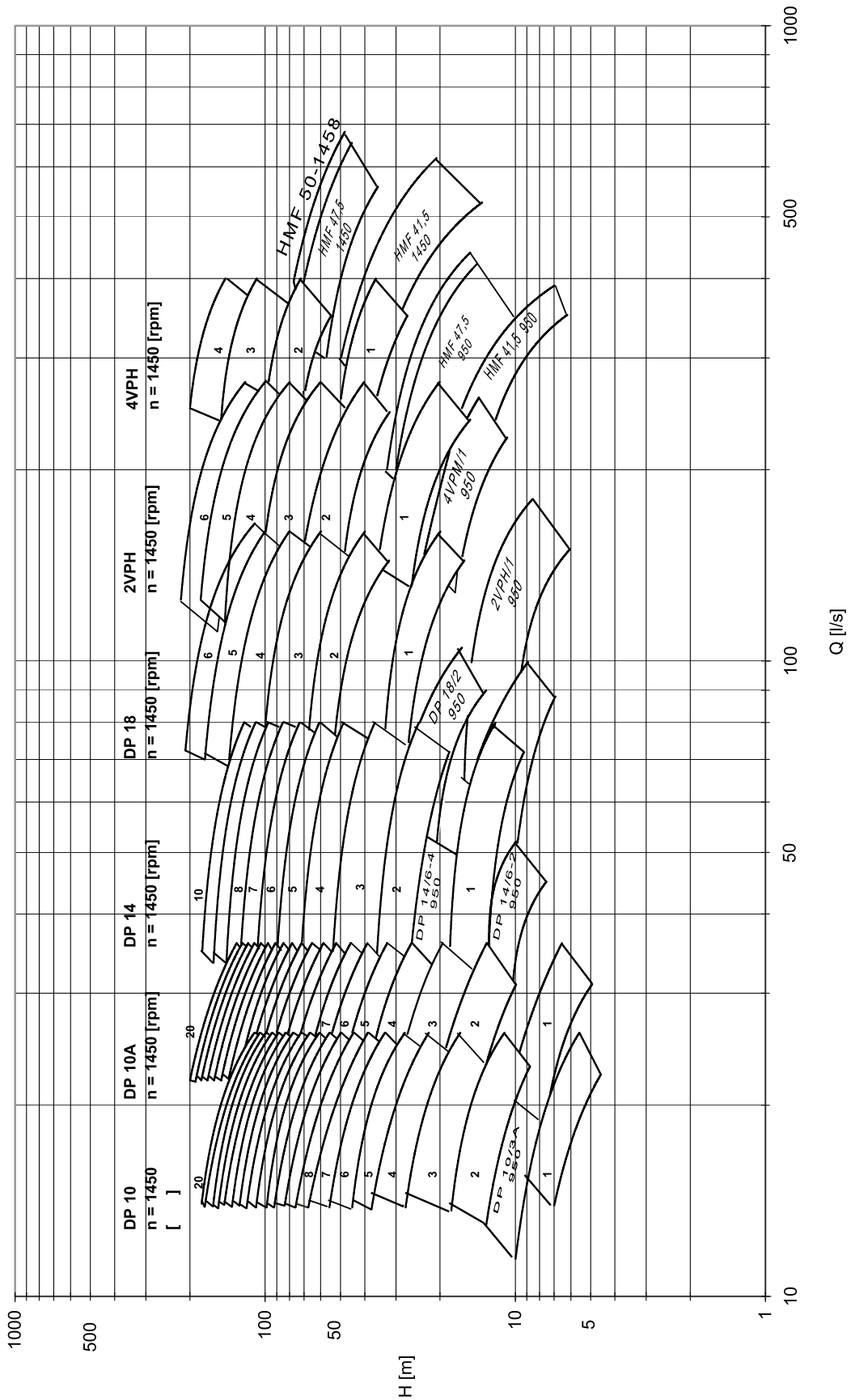
<b>L<sub>2</sub></b>	530	600
<b>L<sub>3</sub></b>	250	350
<b>L<sub>4</sub></b>	in accordance with the customers requirements	
<b>L<sub>5</sub></b>		
<b>L<sub>6</sub></b>	365	365
<b>L<sub>7</sub></b>	800	800
<b>L<sub>8</sub></b>	550	550
<b>L=</b>	$L_1 + (1,0 \div 2,0) * 10^3 \div 25 * 10^3$	
<b>L min</b>	4000	4000
<b>D</b>	355	355
<b>S</b>	700	755
<b>K</b>	700	700
<b>K<sub>1</sub></b>	600	600
<b>H</b>	1000	1100
<b>H<sub>1</sub></b>		
<b>H<sub>2</sub></b>	1300	1400
<b>H<sub>3</sub></b>	450	500
<b>D<sub>2</sub></b>	550	650



**Vertical Semi-axial Pump: HMF41.5, HMF45, HMF47, HMF47.5**

Pump type	Q (l/s)					D(mm)	electric motor	
	125	150	175	225	275		N(kW)	n(rpm)
	H (mVs)							
	<b>300</b>	<b>400</b>	<b>500</b>	<b>600</b>	<b>700</b>			1450
<b>HMF41.5</b>	40	32	25	16		468	200	
<b>HMF45</b>	48	40	31	21		510	250	
<b>HMF45c</b>	40	30	20	10		457	160	
<b>HMF47.5</b>	70	65	60	50		497	400	
<b>HMF50</b>	77	72	66	57	38	530	450	
<b>HMF47.5 -2</b>	140	130	120	100		497		
	<b>195</b>	<b>260</b>	<b>330</b>	<b>390</b>	<b>460</b>			950
<b>HMF41.5/6</b>	17	14	11	7	-	468	55	
<b>HMF47.5/6</b>	30	28	26	21	13	497	110	
	<b>270</b>	<b>360</b>	<b>450</b>	<b>540</b>	<b>585</b>			1450
<b>HMF41.5C</b>	32	26	20	13	6.5	425	100	
	<b>260</b>	<b>350</b>	<b>435</b>	<b>520</b>	<b>610</b>			1450
<b>HMF47.5C</b>	53	49	45	38	23	435	315	

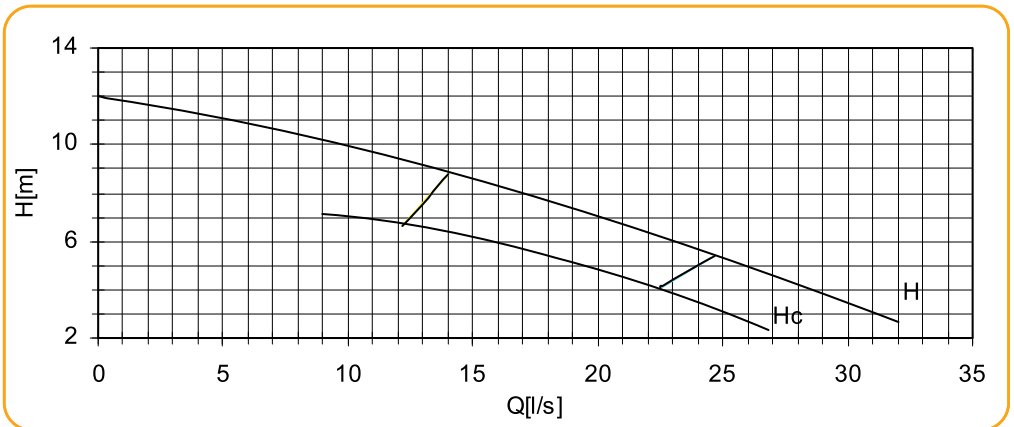
Range of performance curves



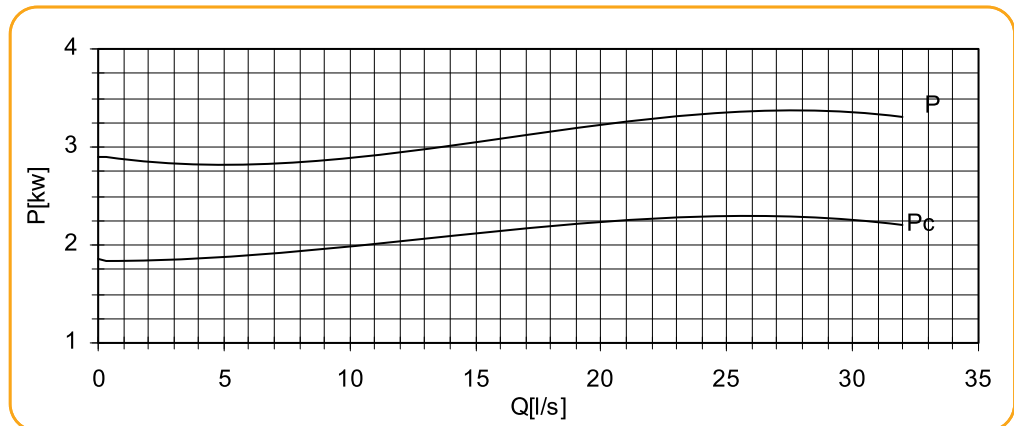
Performance curves are valid for clear water  $t=20\text{ }^{\circ}\text{C}$ ,  $\rho=1000\text{ kg/m}^3$ . NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

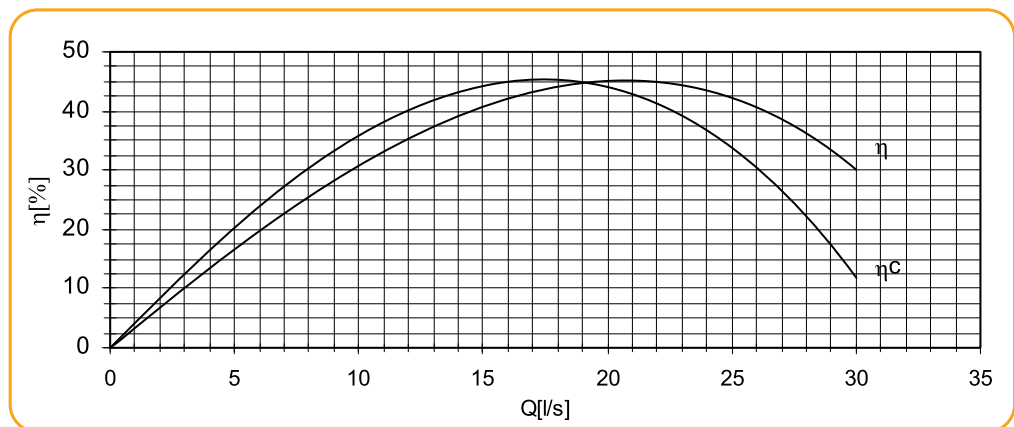
Total  
Differential  
Head



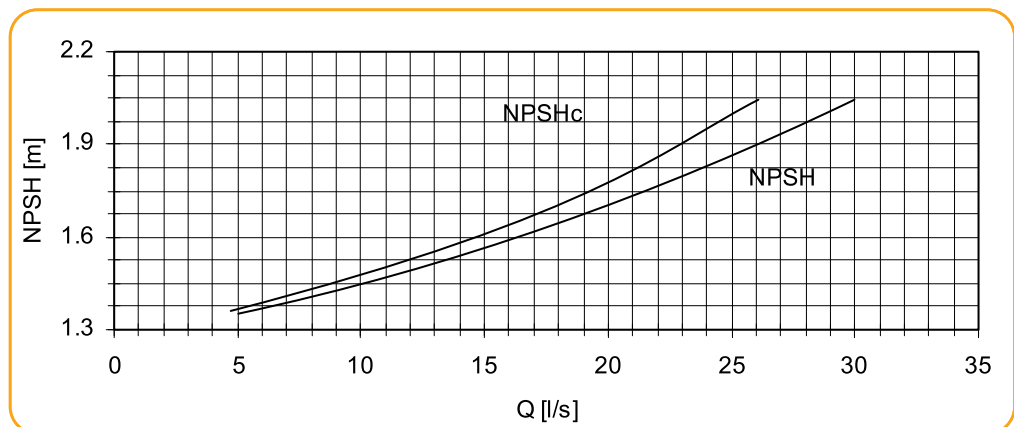
Power Input



Efficiency



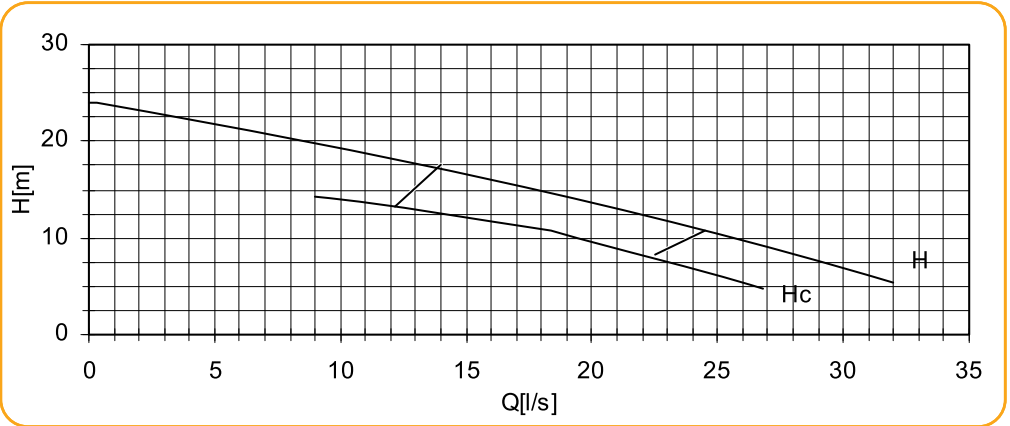
Net Positive  
Suction Head



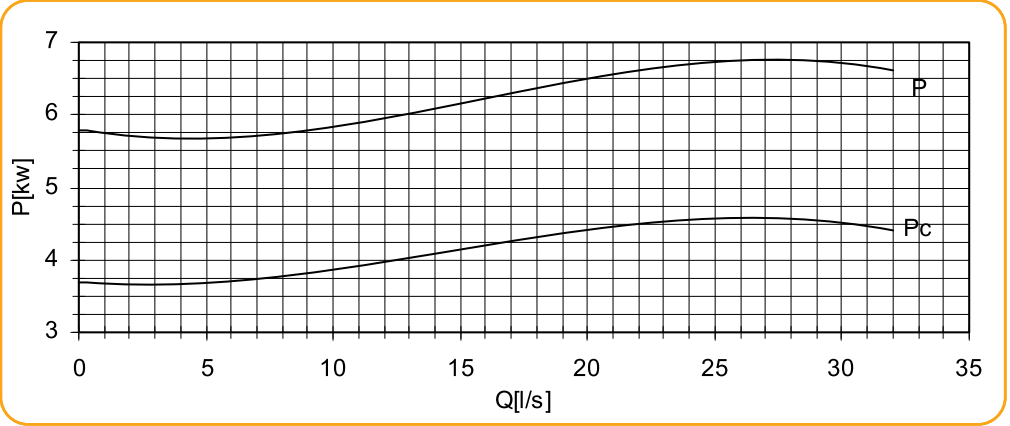
Pump performance curves

DP 10-2  
n = 1450 (rpm)

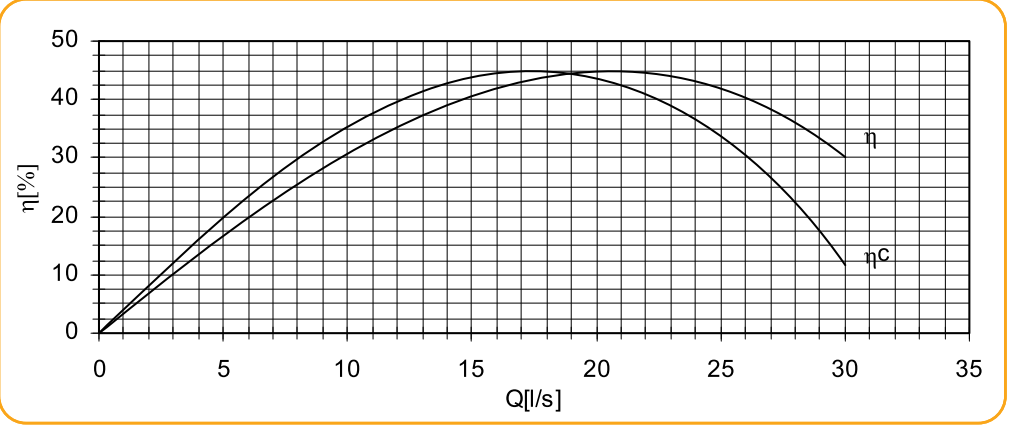
Total  
Differential  
Head



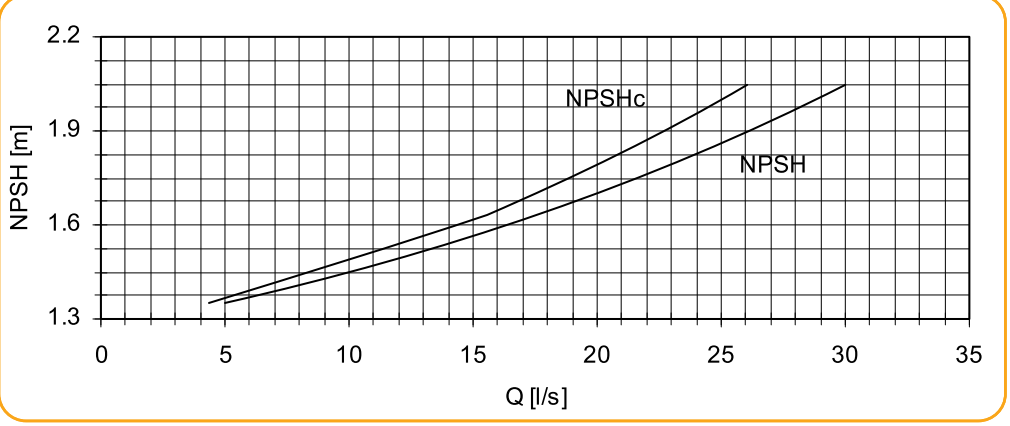
Power Input



Efficiency



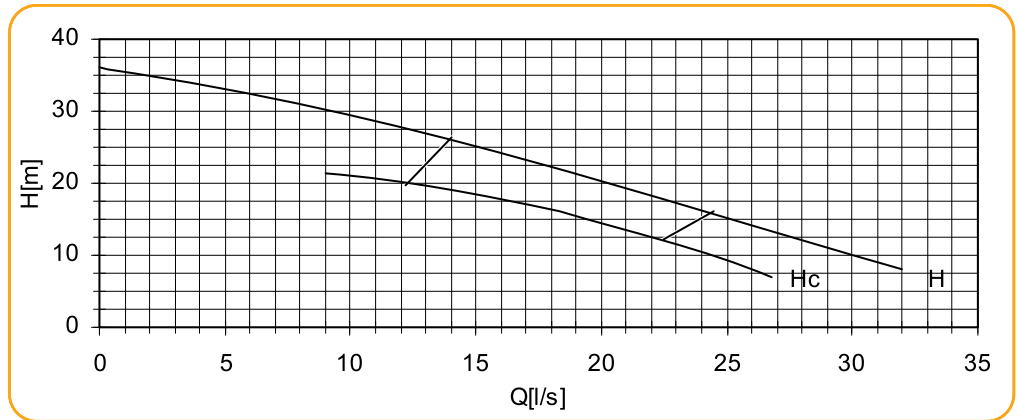
Net Positive  
Suction Head



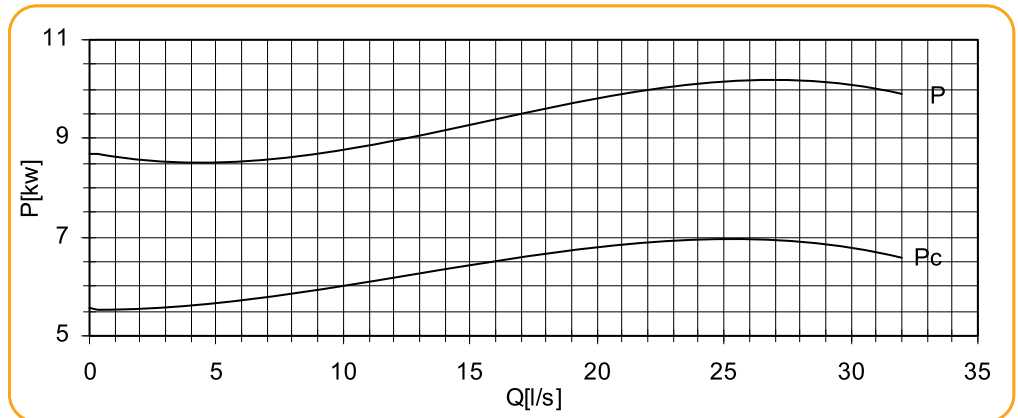
Performance curves are valid for clear water  $t=20\text{ }^{\circ}\text{C}$ ,  $\rho=1000\text{ kg/m}^3$ . NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

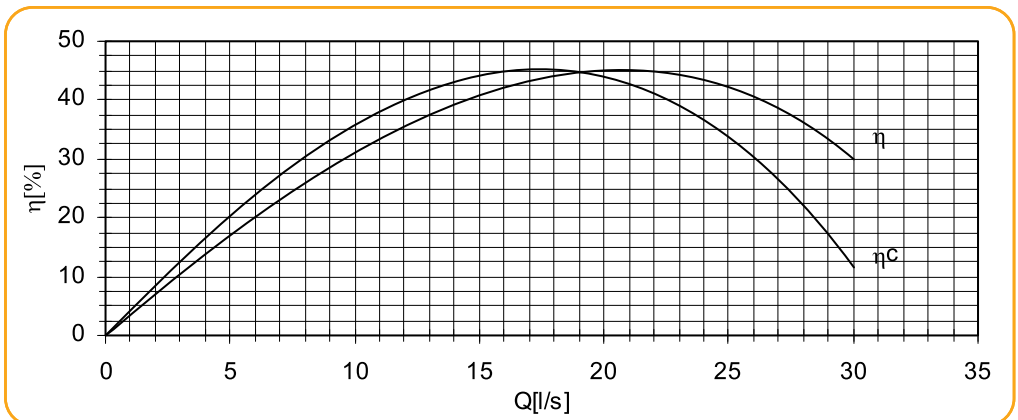
Total Differential Head



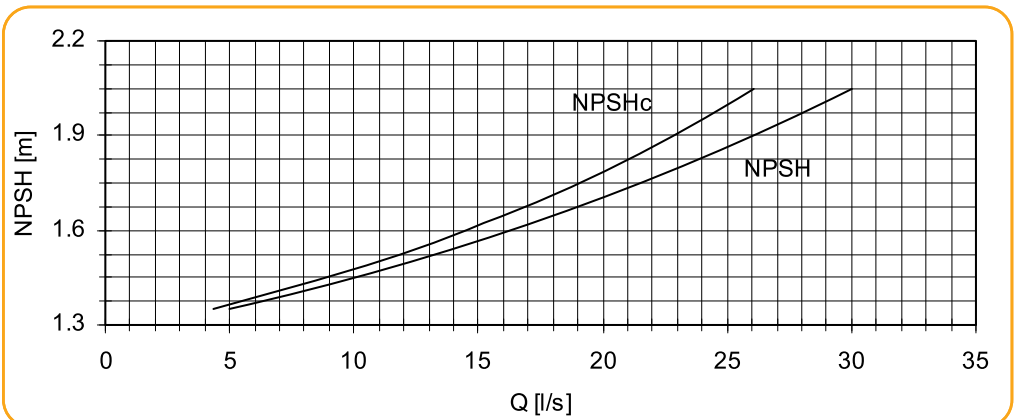
Power Input



Efficiency



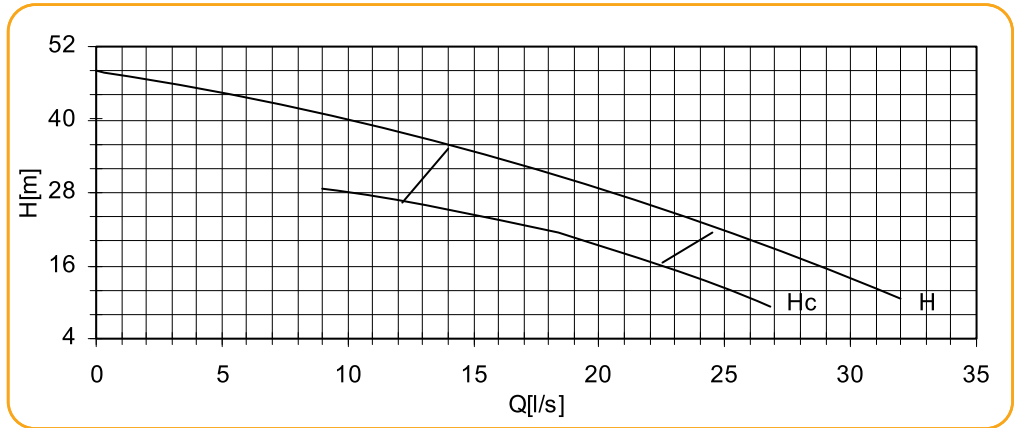
Net Positive Suction Head



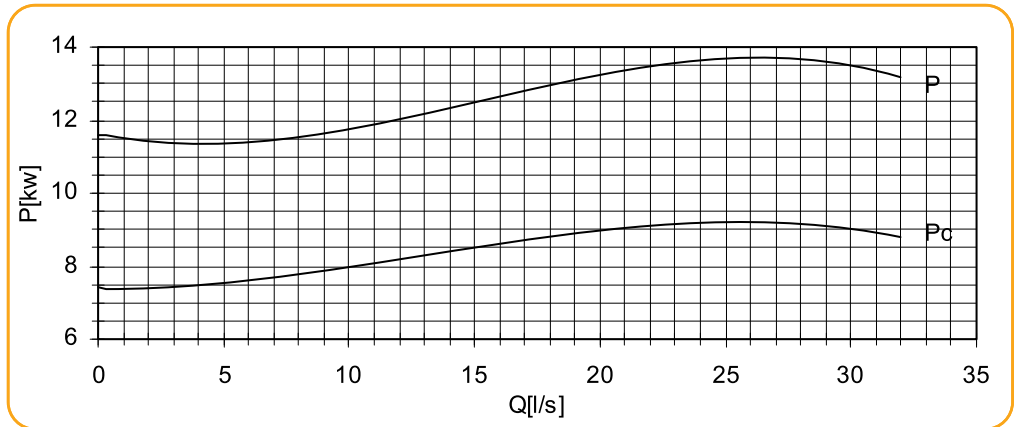
Pump performance curves

DP 10-4  
n =1450 (rpm)

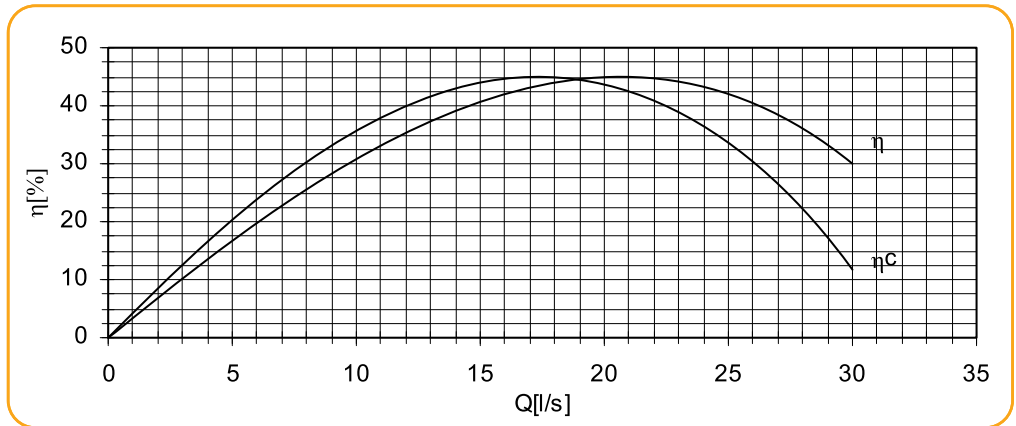
Total  
Differential  
Head



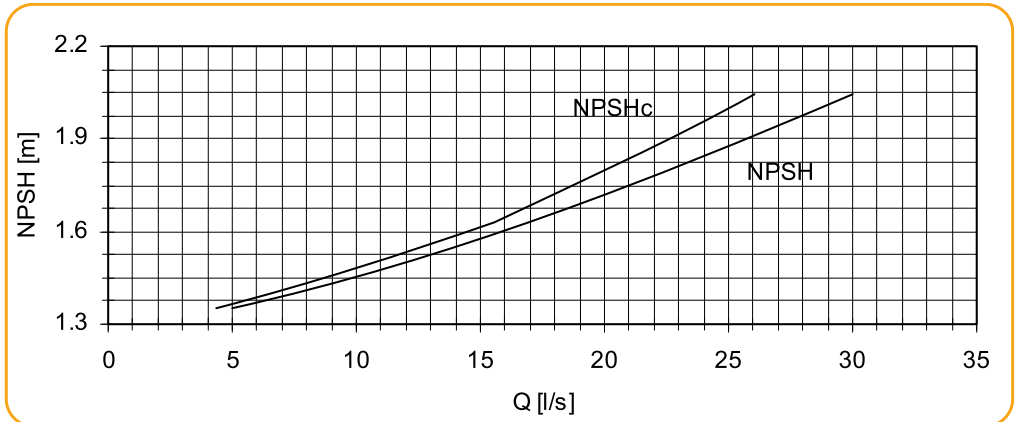
Power Input



Efficiency

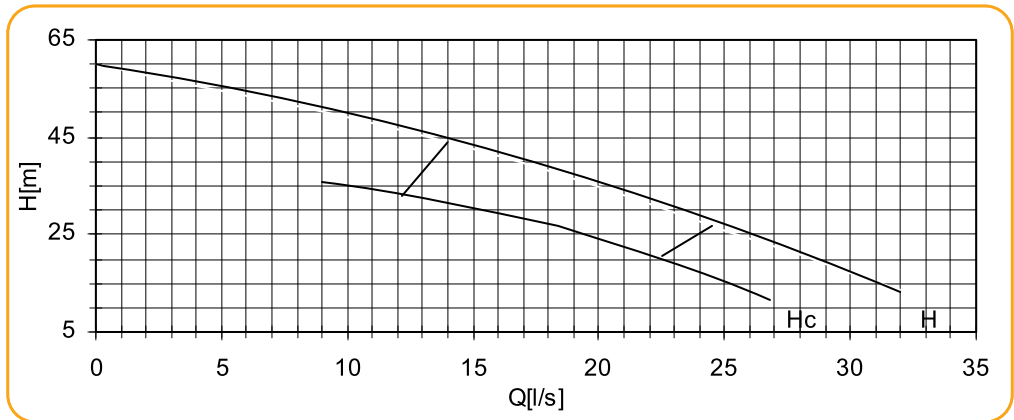


Net Positive  
Suction Head

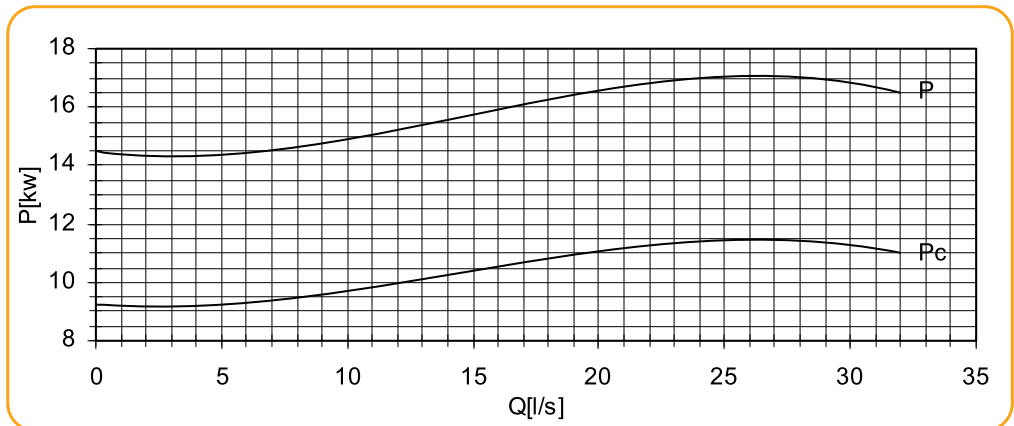


Pump performance curves

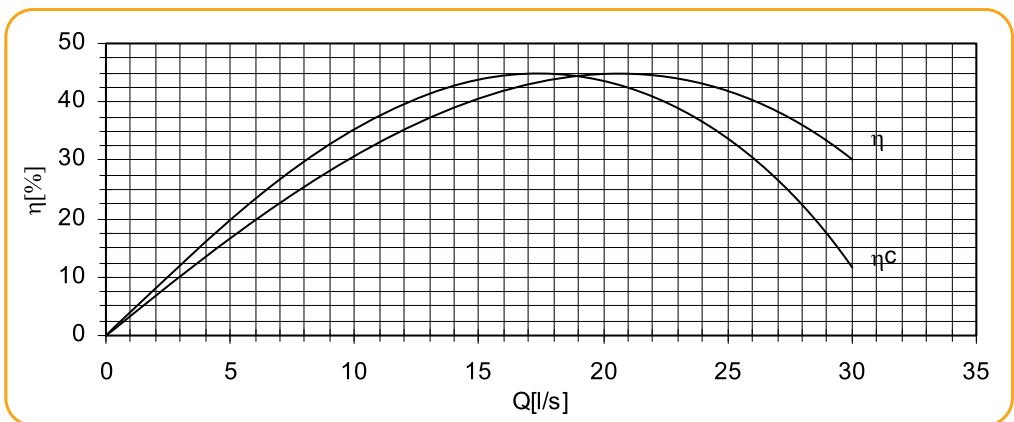
Total Differential Head



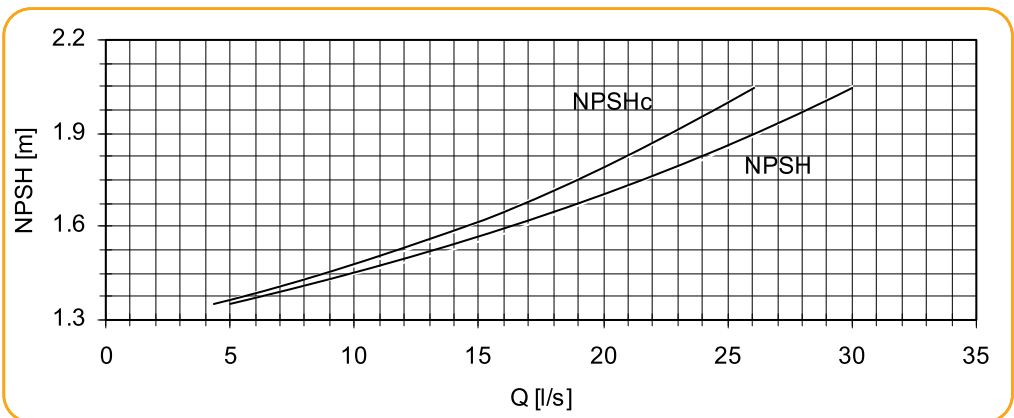
Power Input



Efficiency



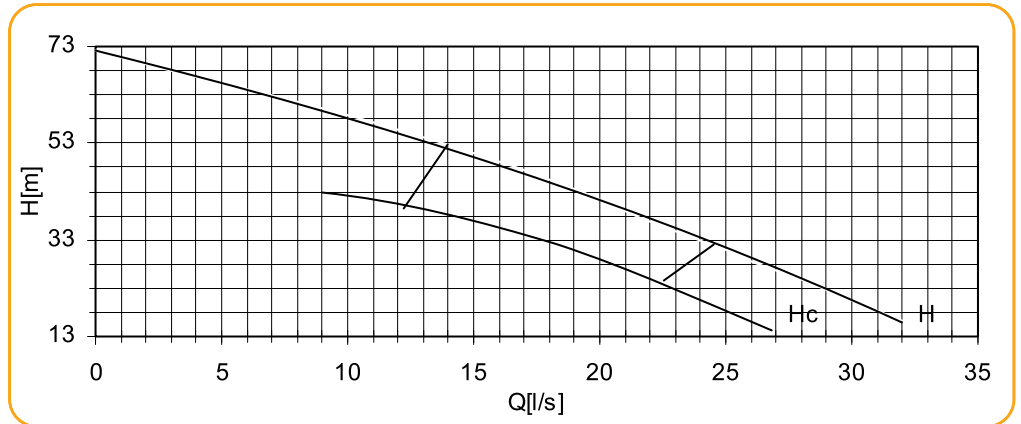
Net Positive Suction Head



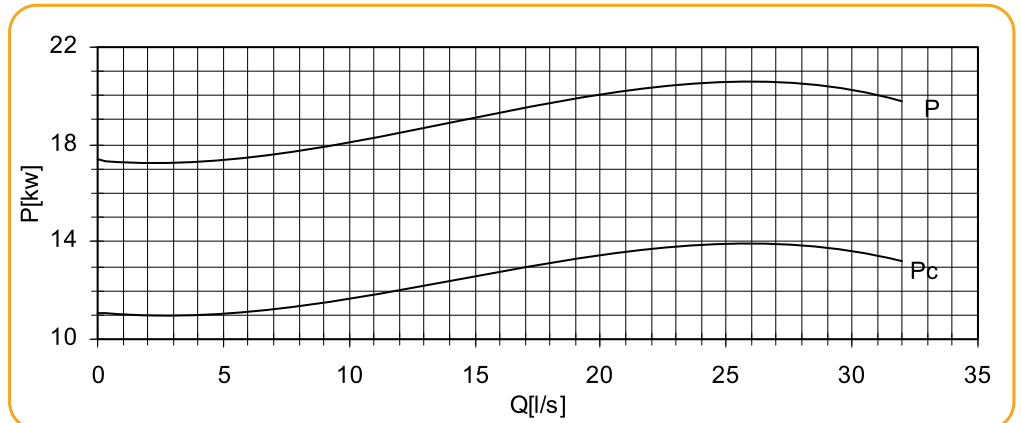
Pump performance curves

DP 10-6  
n =1450 (rpm)

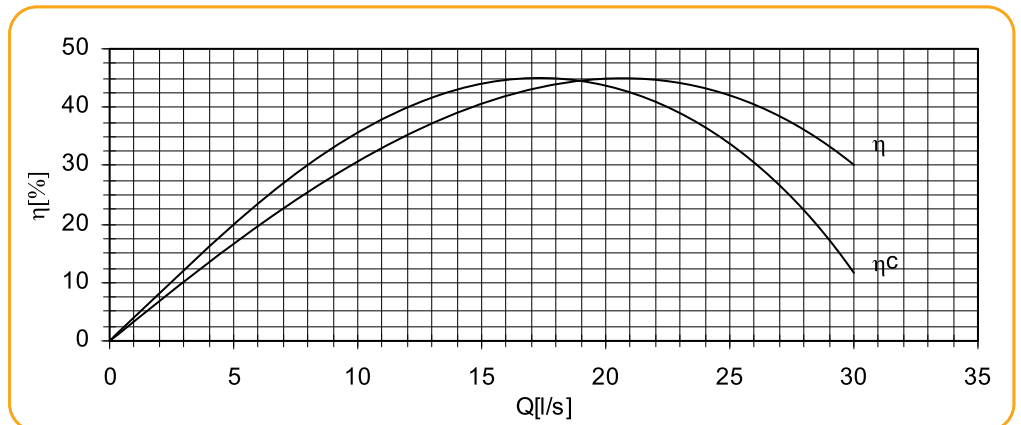
Total  
Differential  
Head



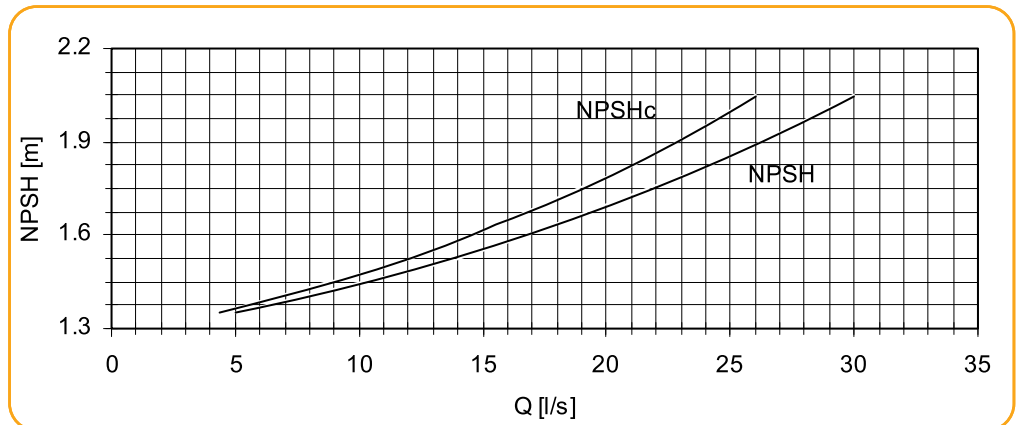
Power Input



Efficiency



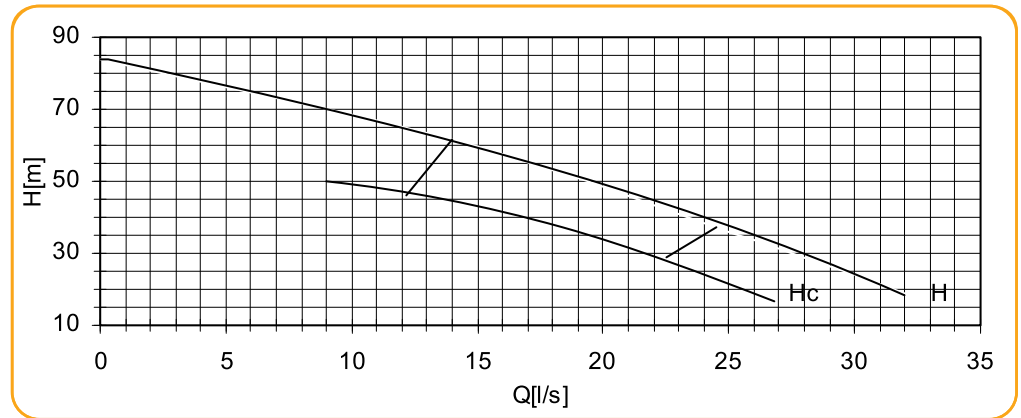
Net Positive  
Suction Head



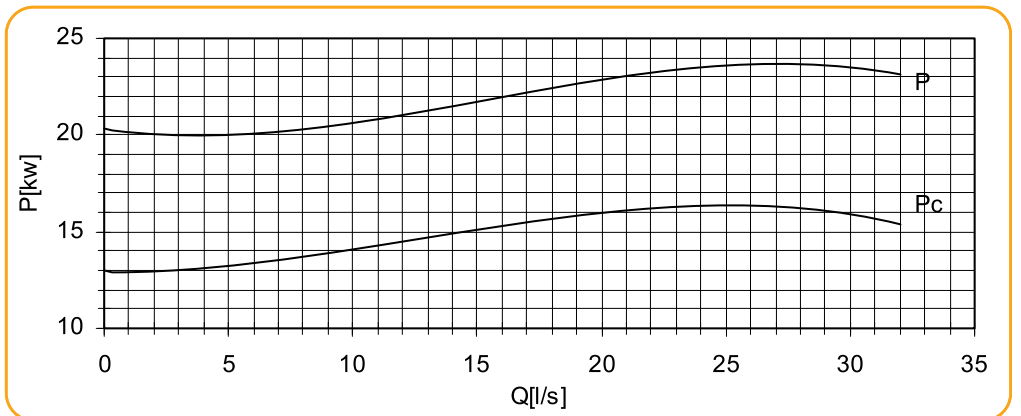


Pump performance curves

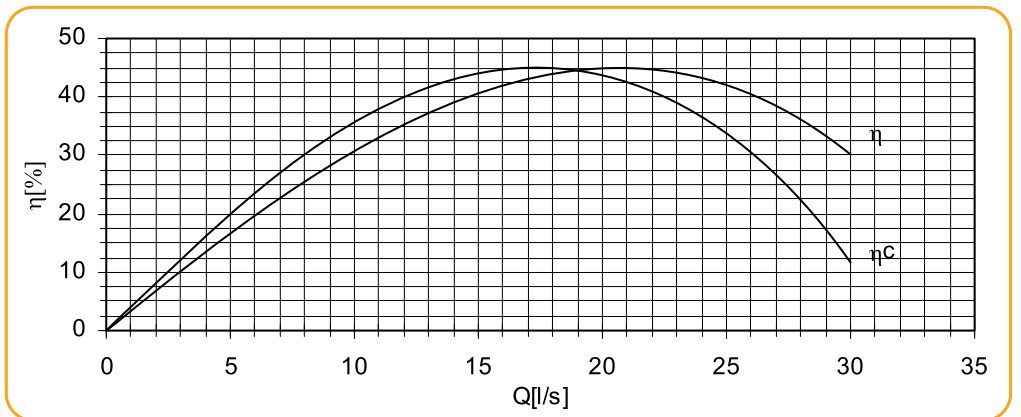
Total Differential Head



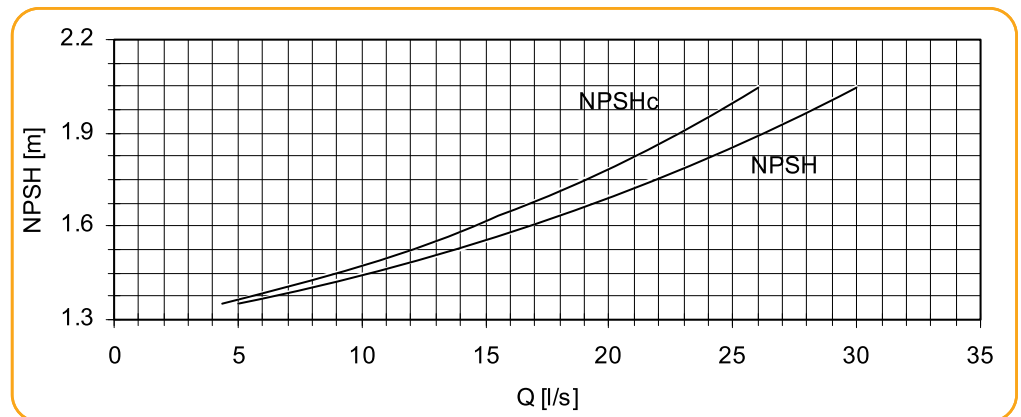
Power Input



Efficiency



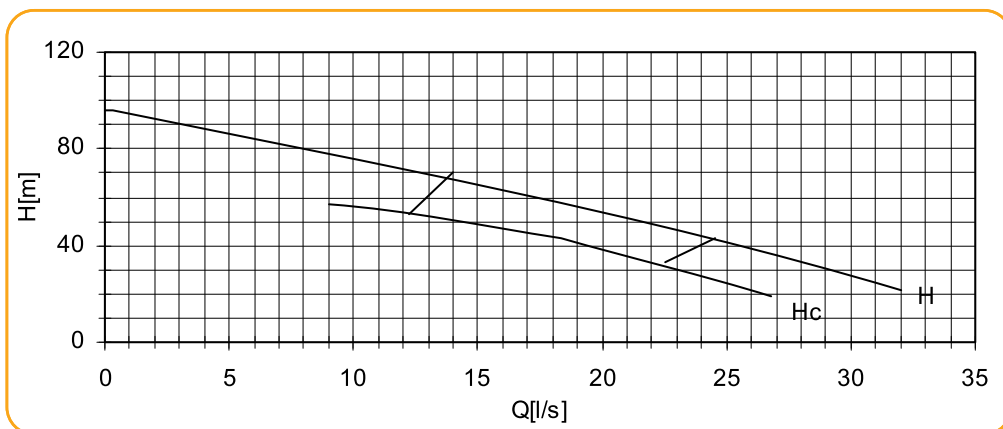
Net Positive Suction Head



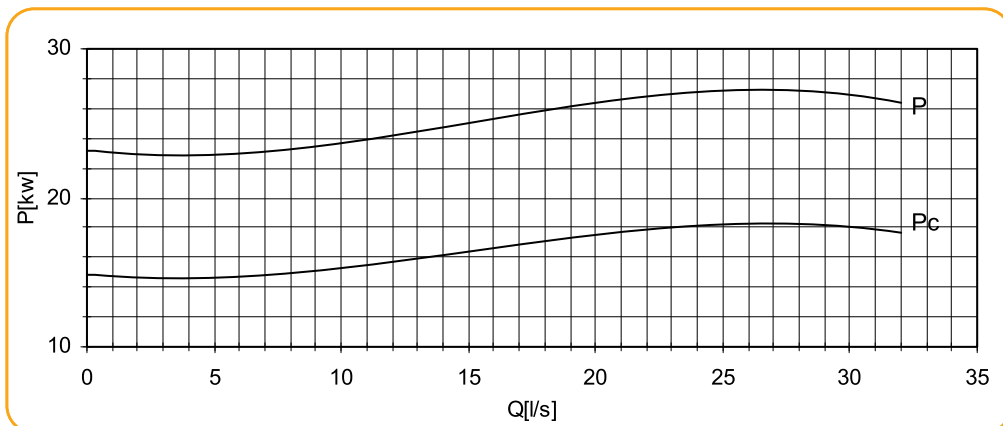
Pump performance curves

DP 10-8  
n =1450 (rpm)

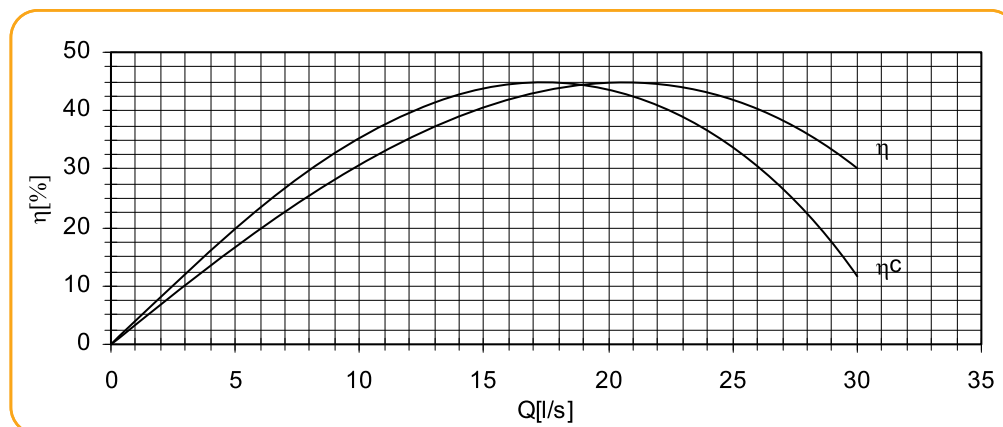
Total  
Differential  
Head



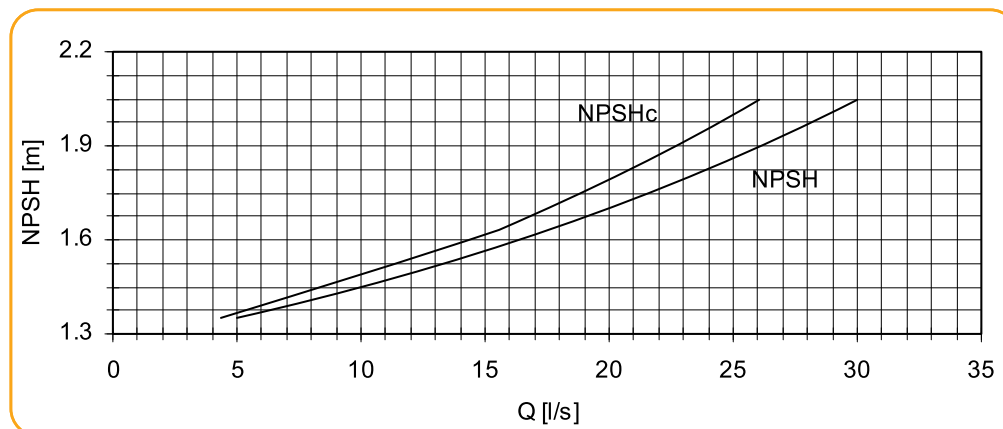
Power Input



Efficiency



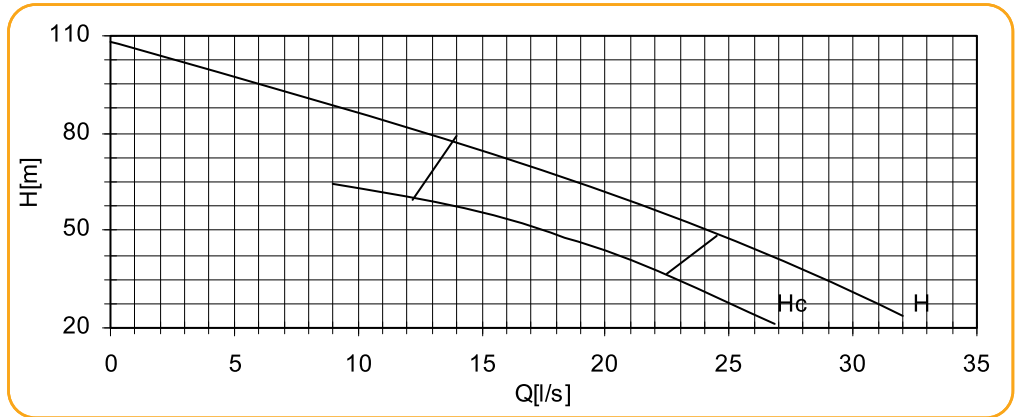
Net Positive  
Suction Head



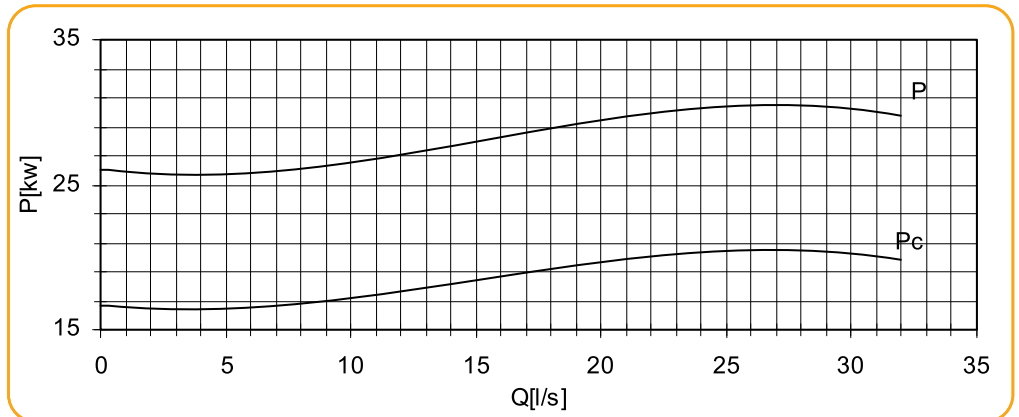
Performance curves are valid for clear water t=20 °C, ρ=1000 kg/m³. NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

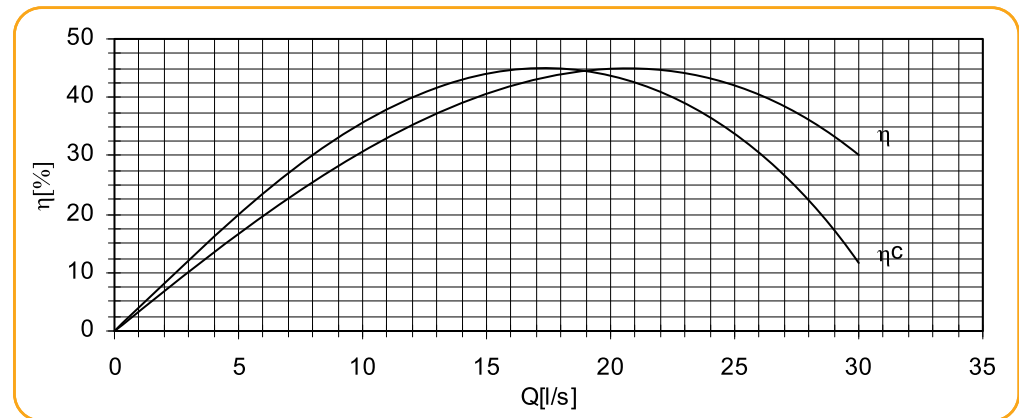
Total  
Differential  
Head



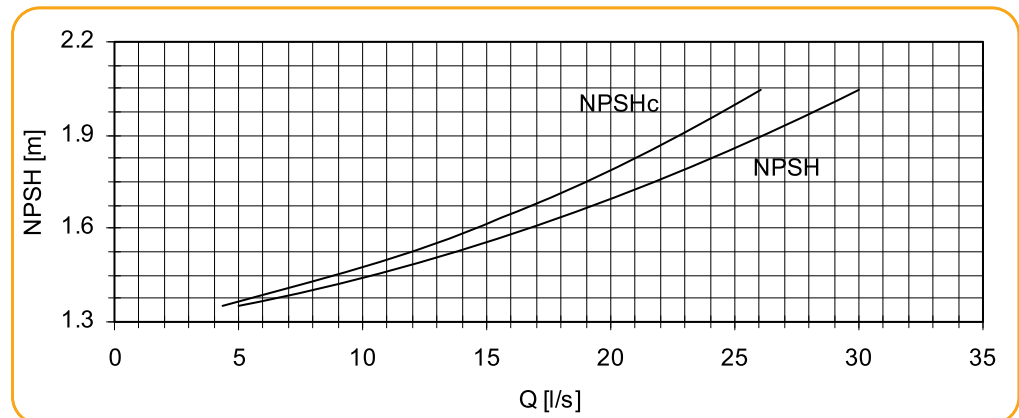
Power Input



Efficiency



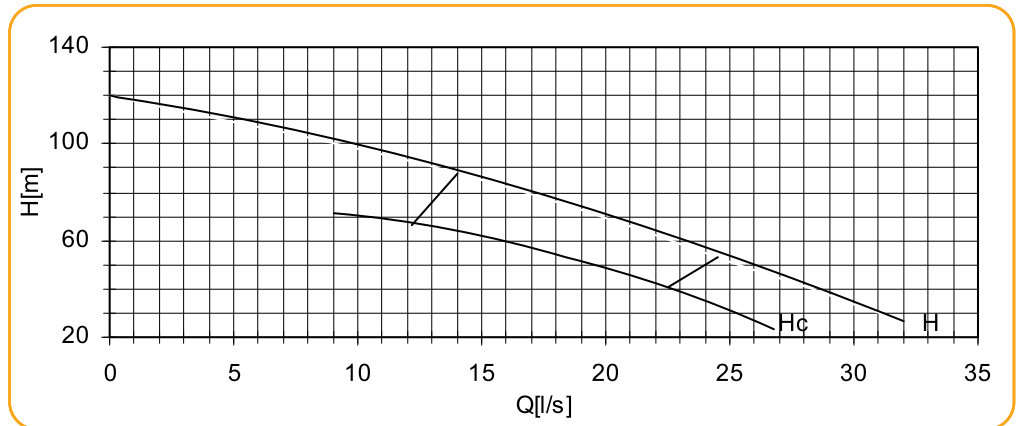
Net Positive  
Suction Head



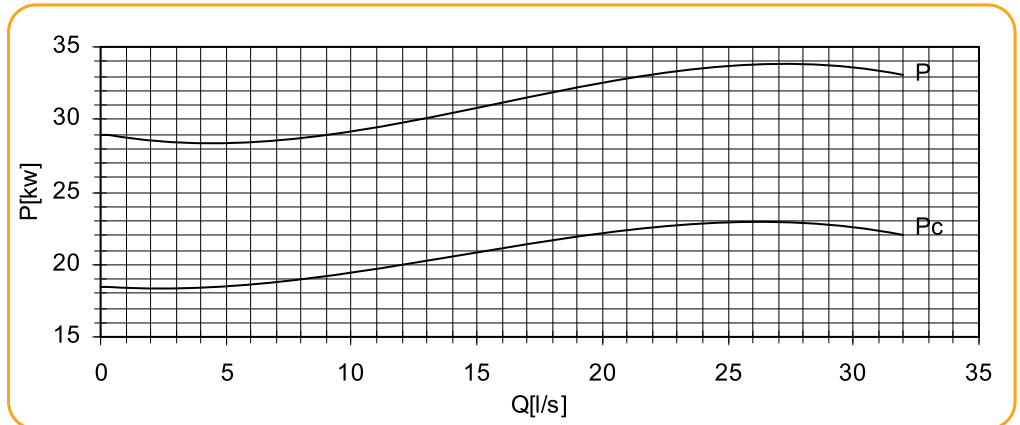
Pump performance curves

DP 10-10  
n = 1450 (rpm)

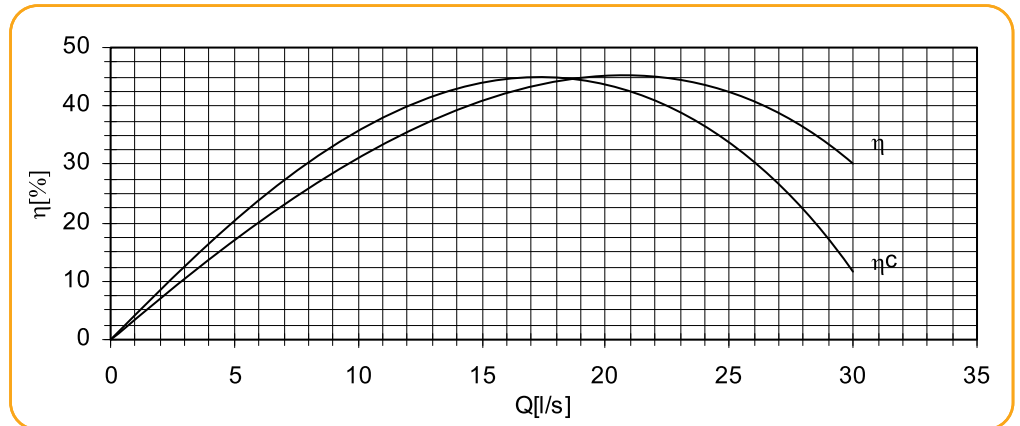
Total  
Differential  
Head



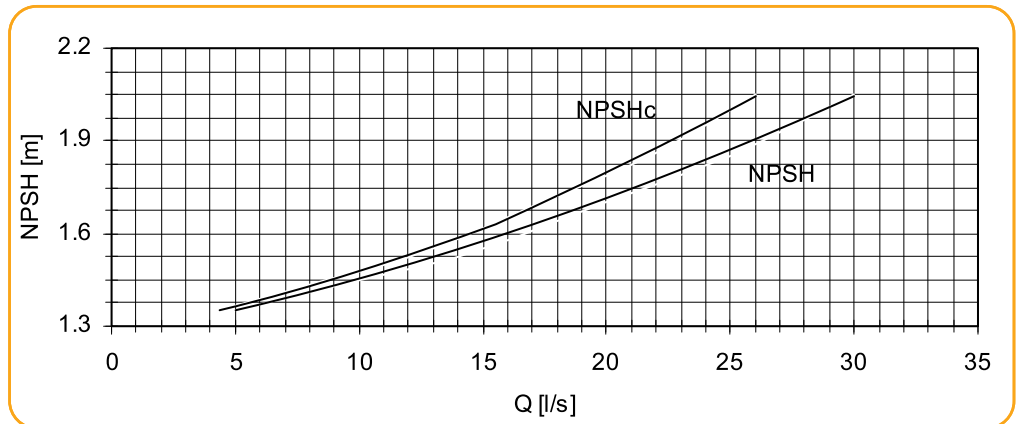
Power Input



Efficiency

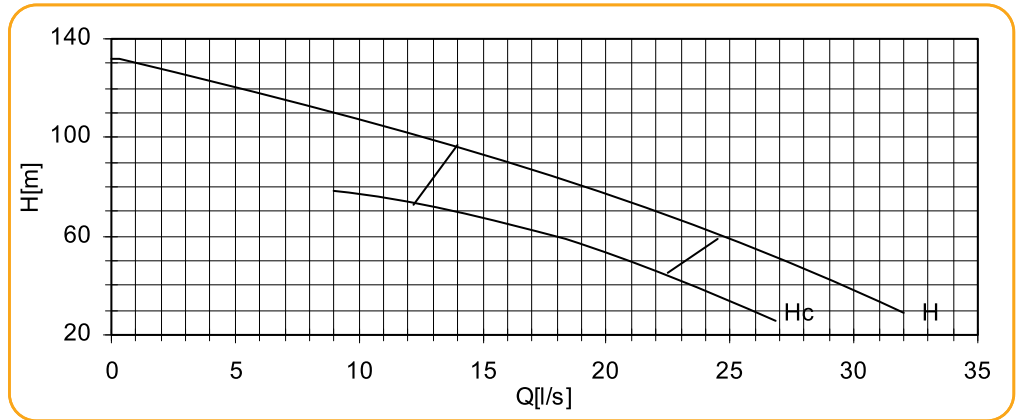


Net Positive  
Suction Head

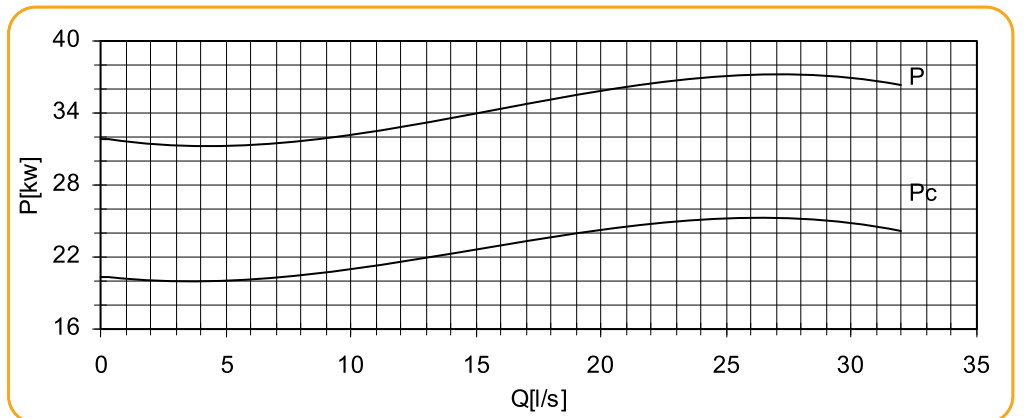


Pump performance curves

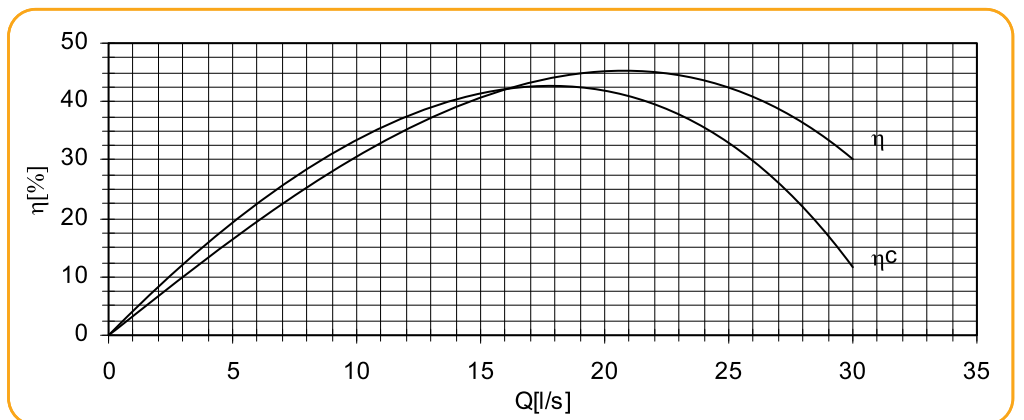
Total  
Differential  
Head



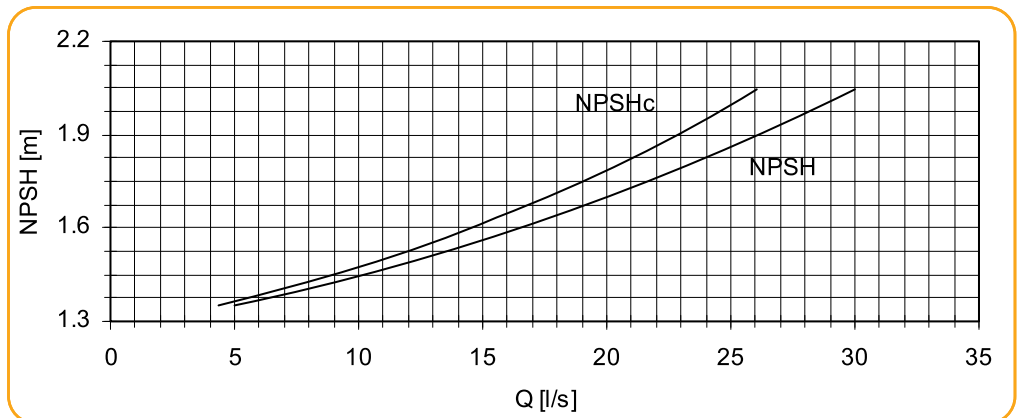
Power Input



Efficiency



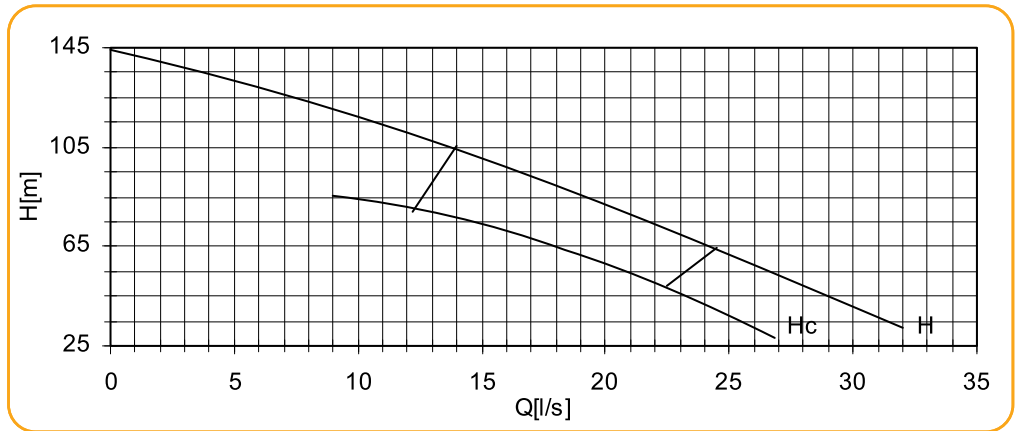
Net Positive  
Suction Head



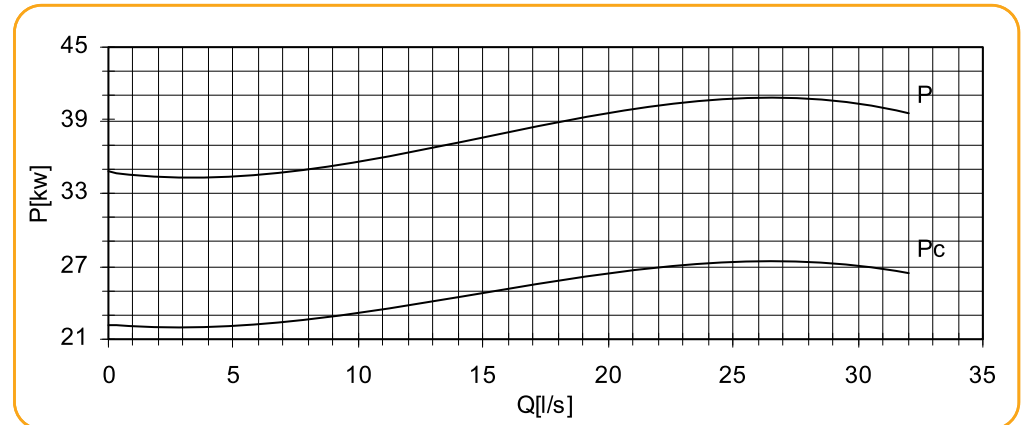
Pump performance curves

DP 10-12  
n = 1450 (rpm)

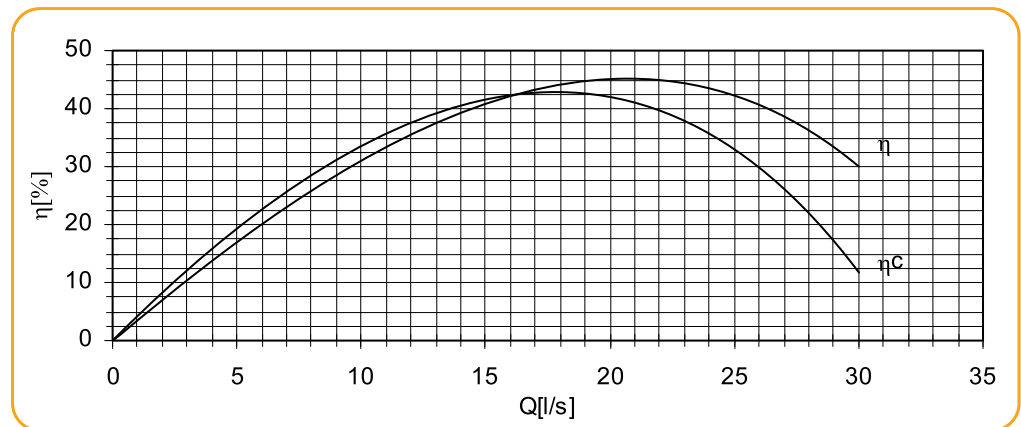
Total  
Differential  
Head



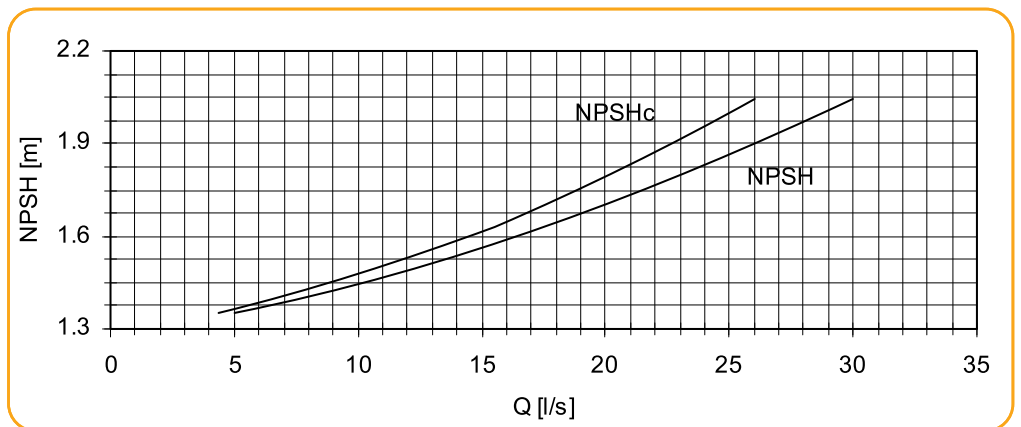
Power Input



Efficiency

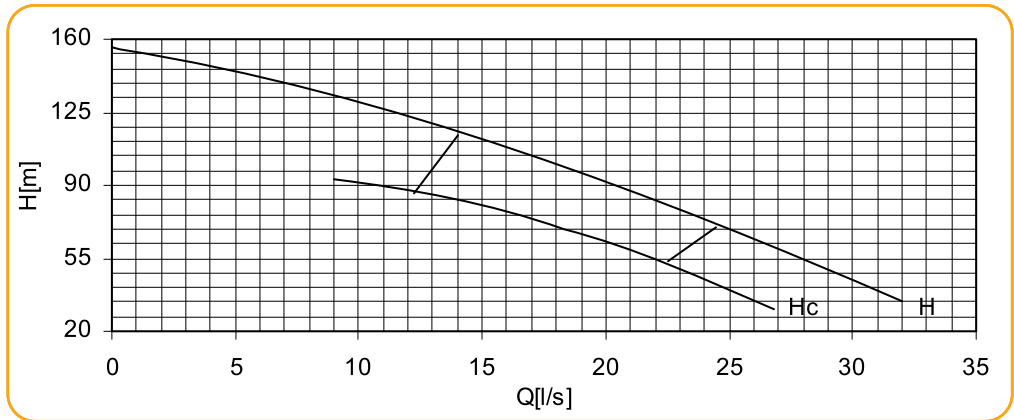


Net Positive  
Suction Head

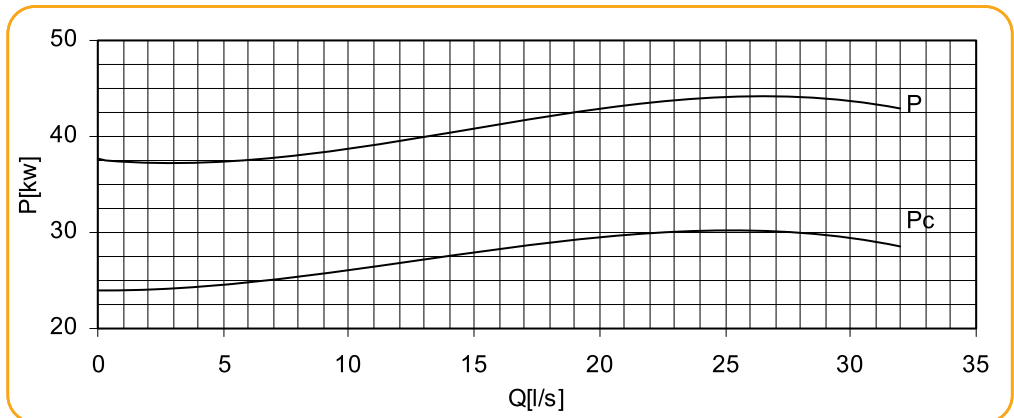


Pump performance curves

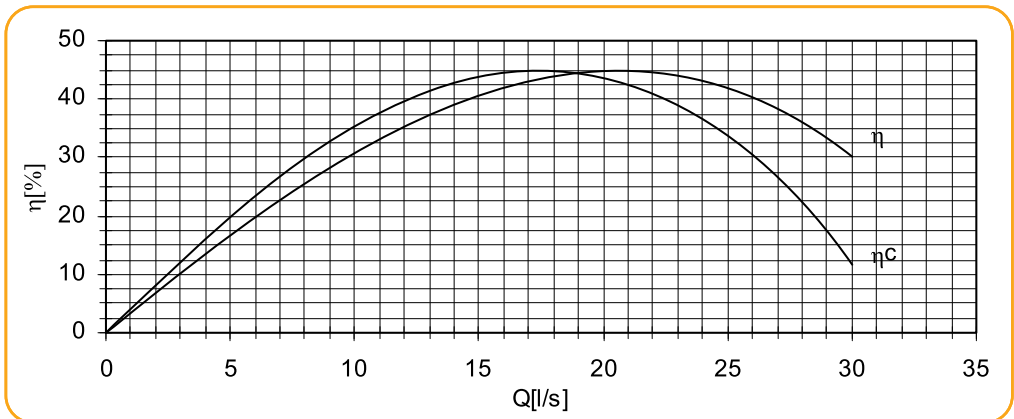
Total Differential Head



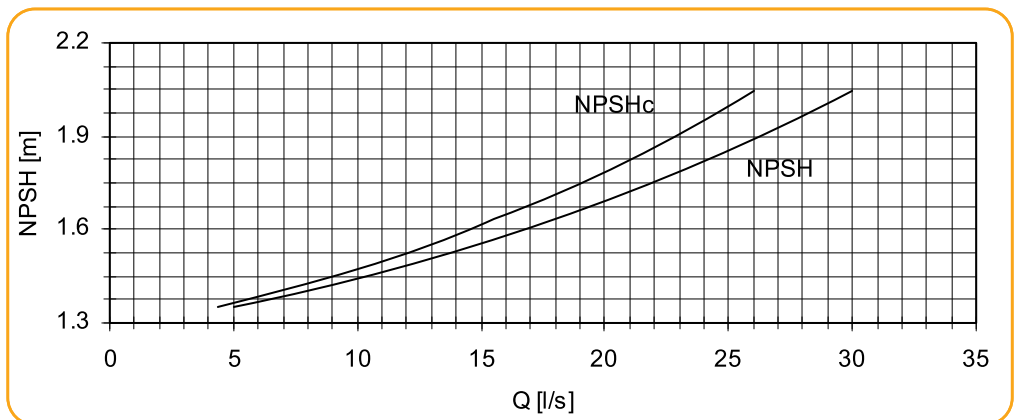
Power Input



Efficiency

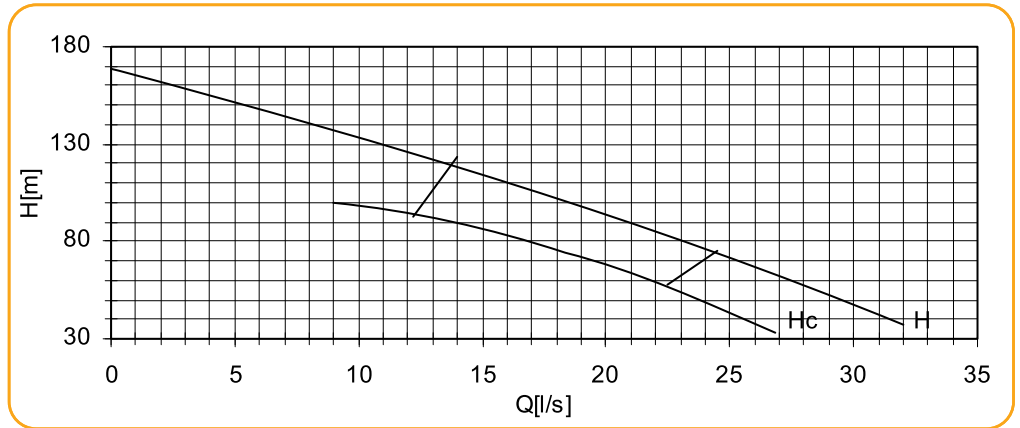


Net Positive Suction Head

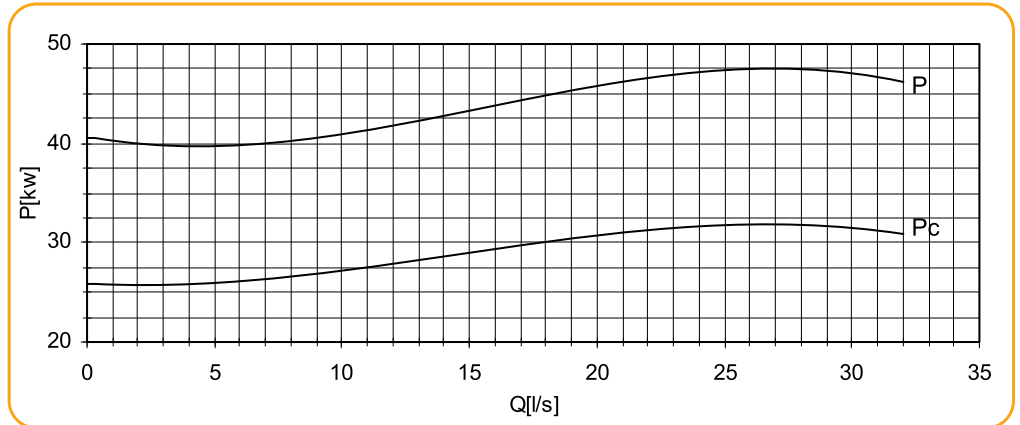


Pump performance curves

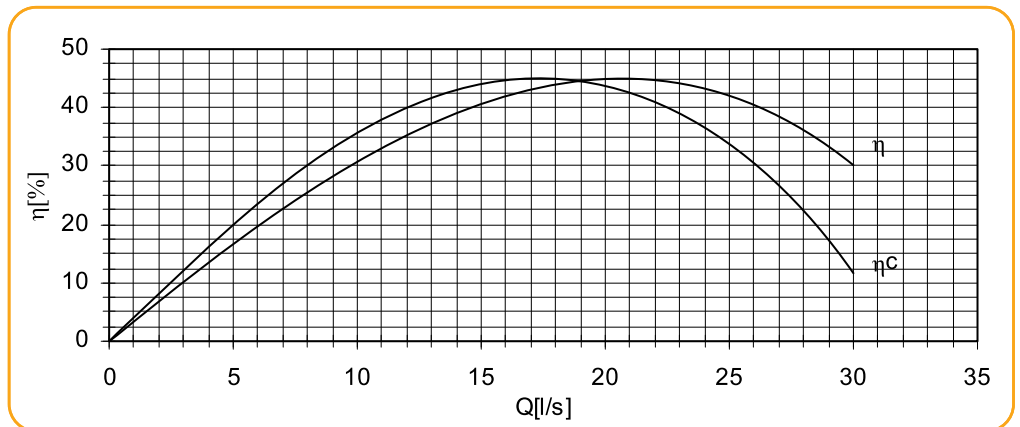
Total Differential Head



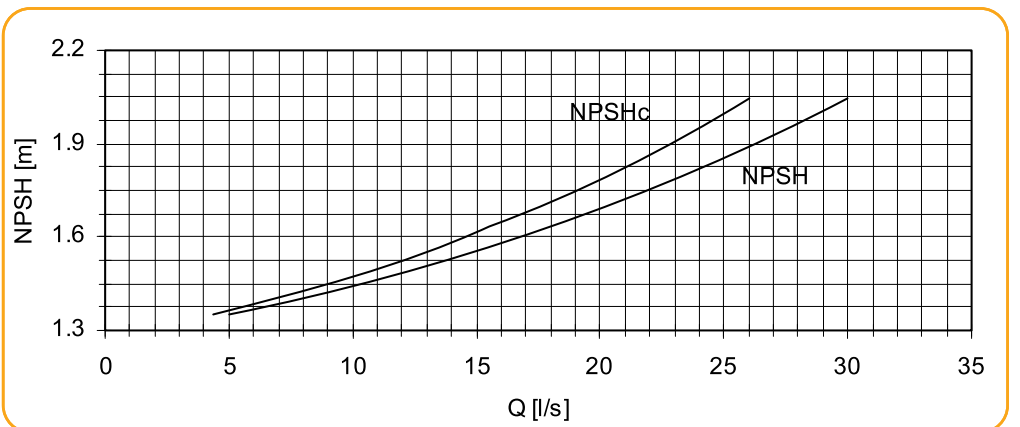
Power Input



Efficiency



Net Positive Suction Head

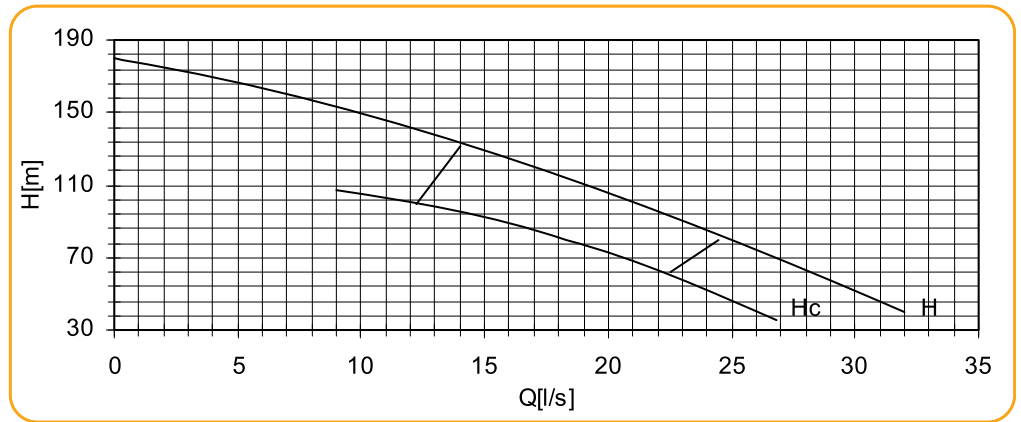


Performance curves are valid for clear water  $t=20\text{ }^{\circ}\text{C}$ ,  $\rho=1000\text{ kg/m}^3$ . NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

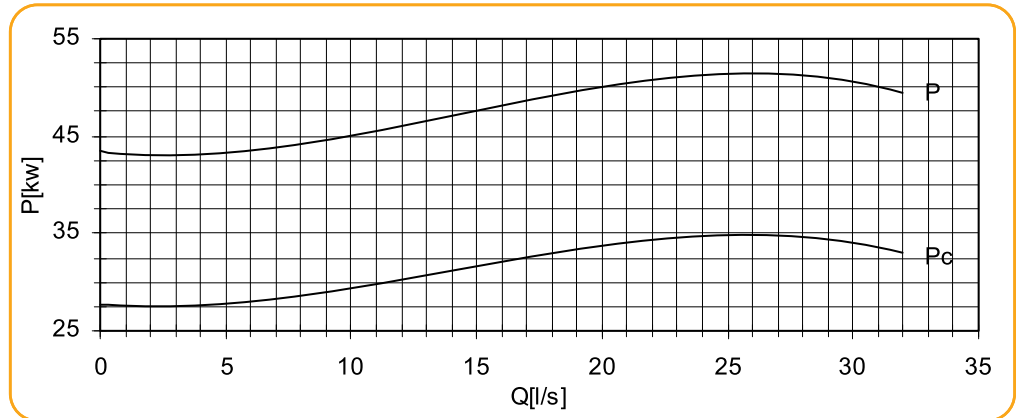


Pump performance curves

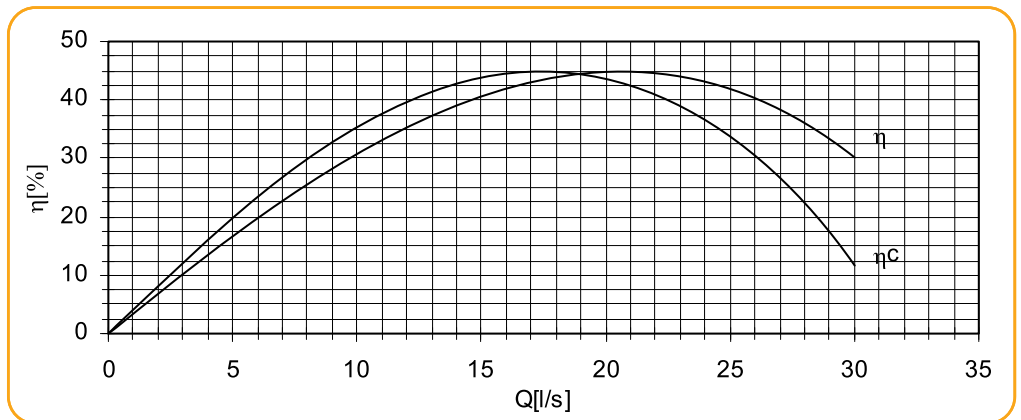
Total Differential Head



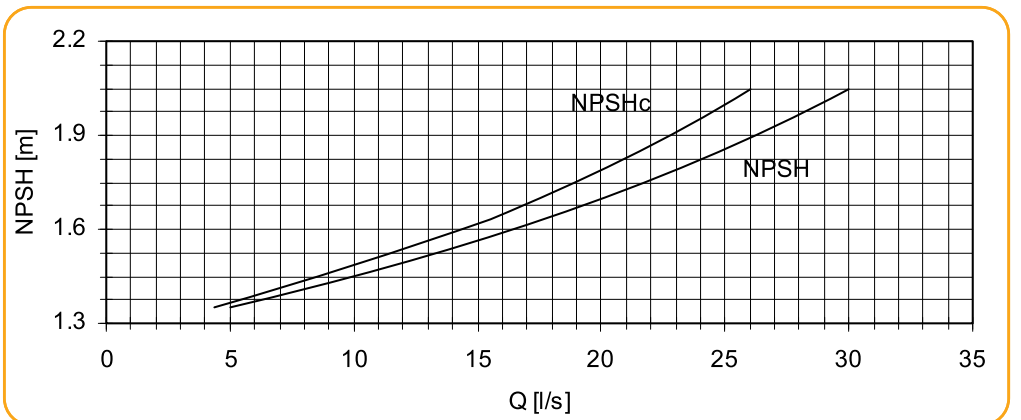
Power Input



Efficiency

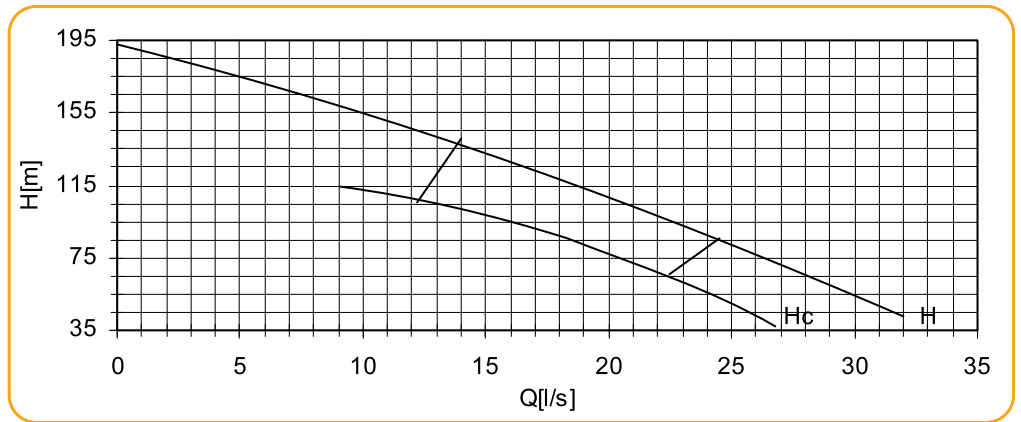


Net Positive Suction Head

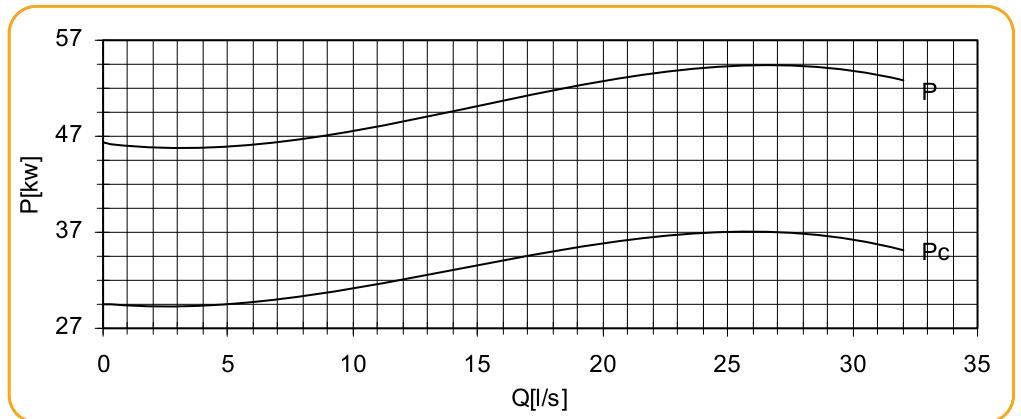


Pump performance curves

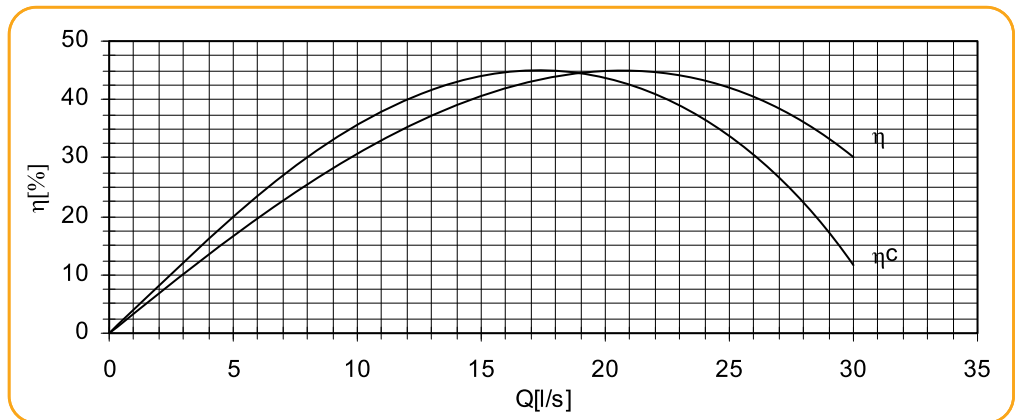
Total  
Differential  
Head



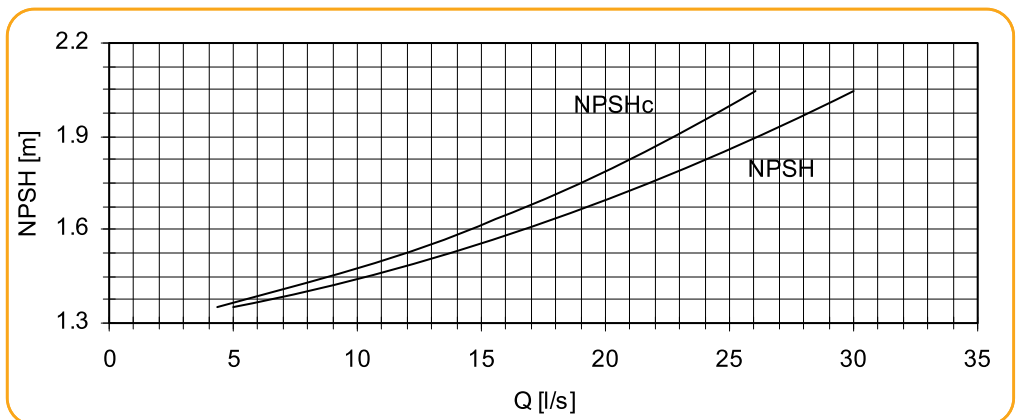
Power Input



Efficiency

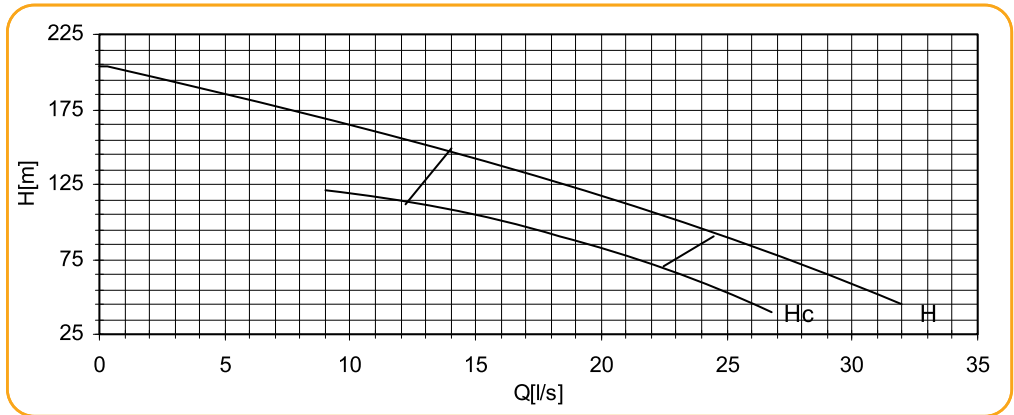


Net Positive  
Suction Head

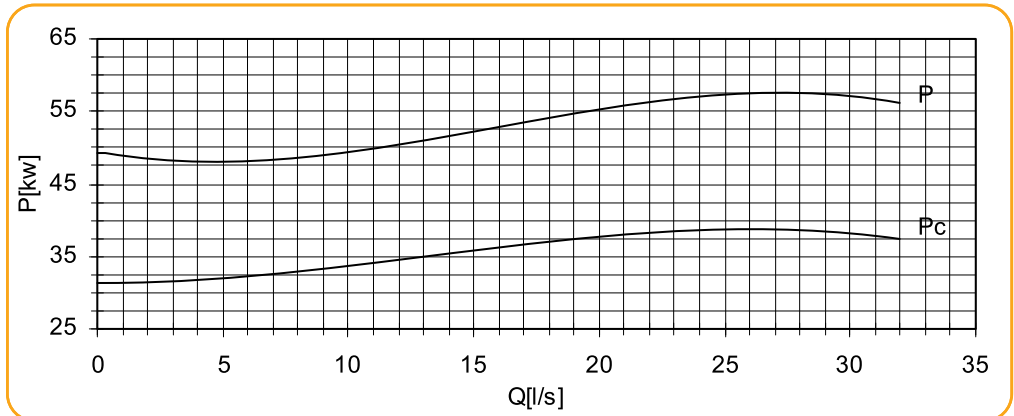


Pump performance curves

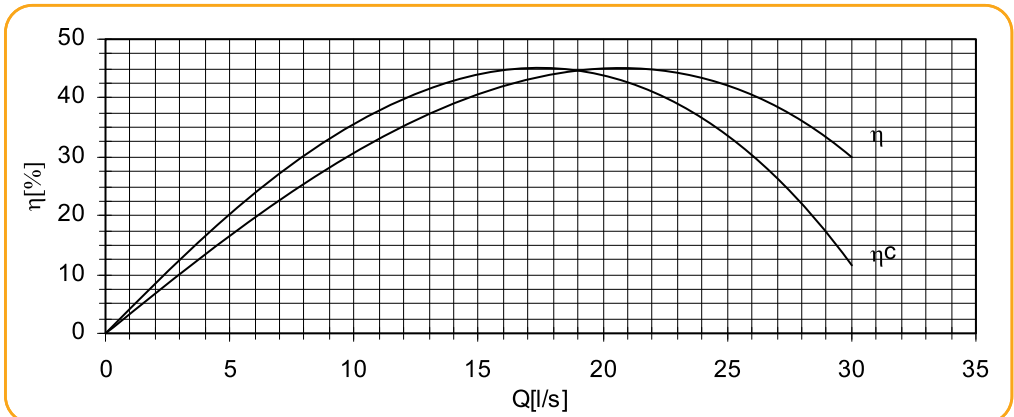
Total  
Differential  
Head



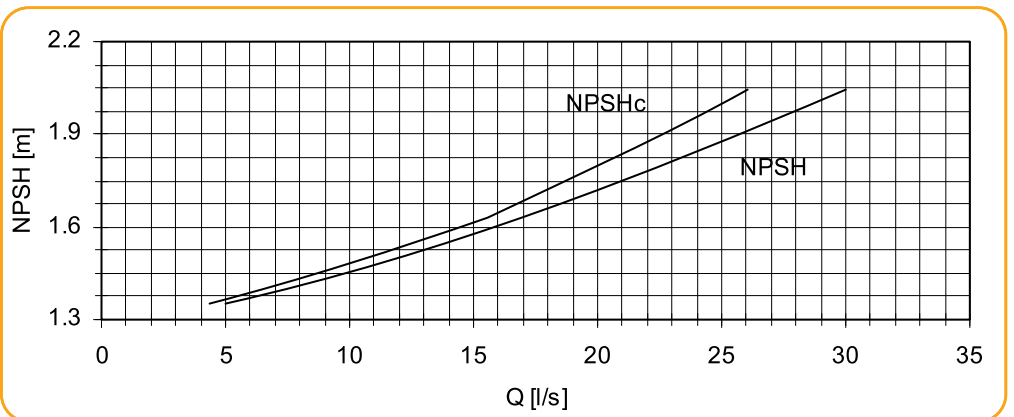
Power Input



Efficiency

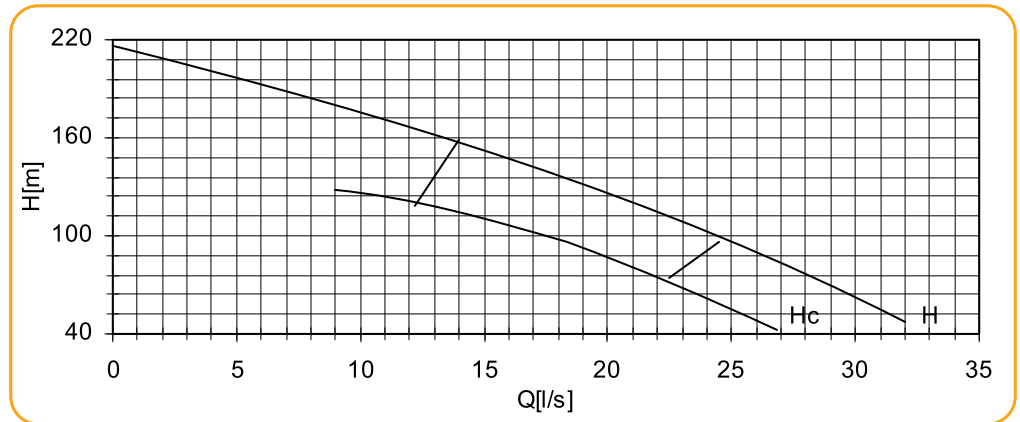


Net Positive  
Suction Head

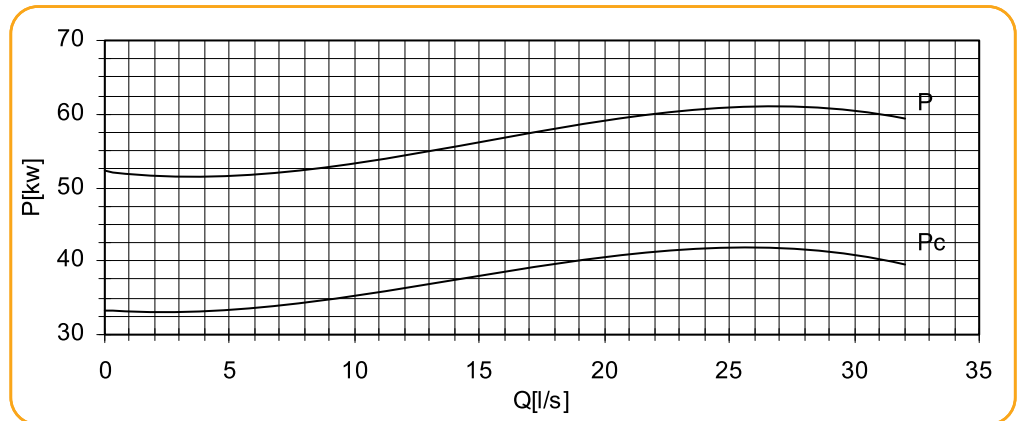


Pump performance curves

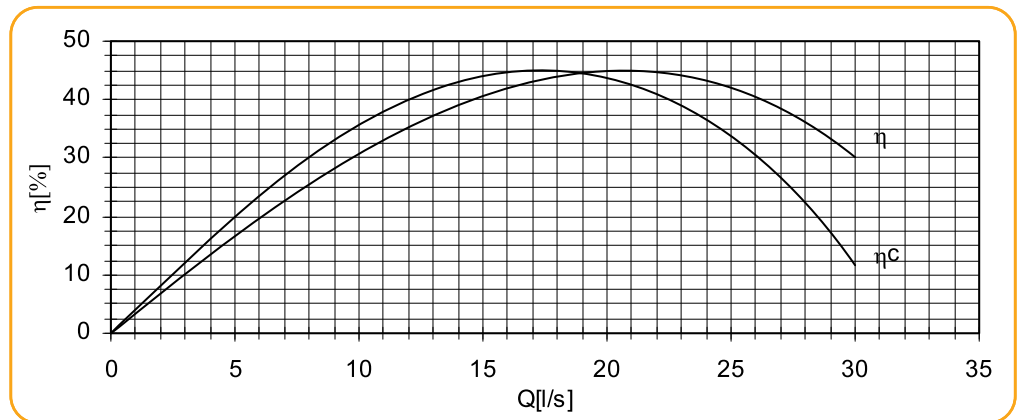
Total  
Differential  
Head



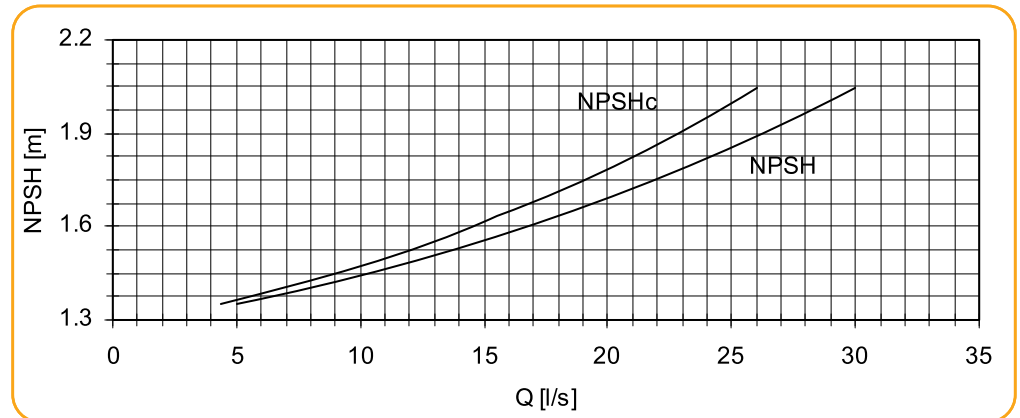
Power Input



Efficiency

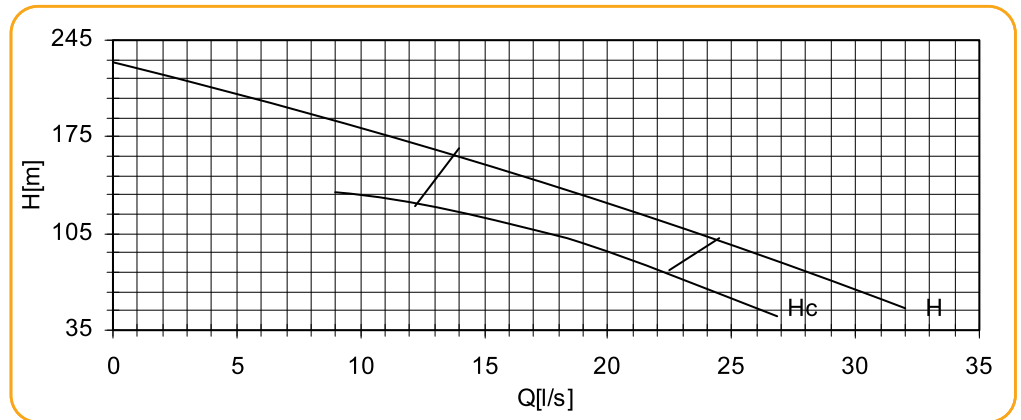


Net Positive  
Suction Head

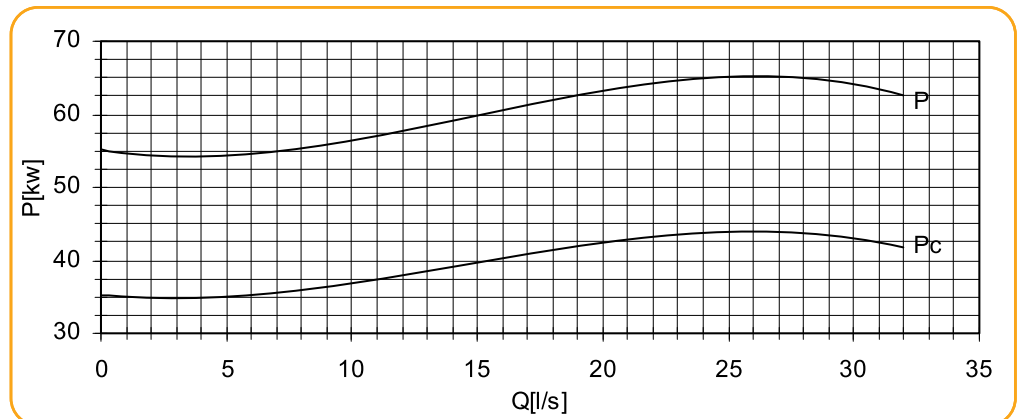


Pump performance curves

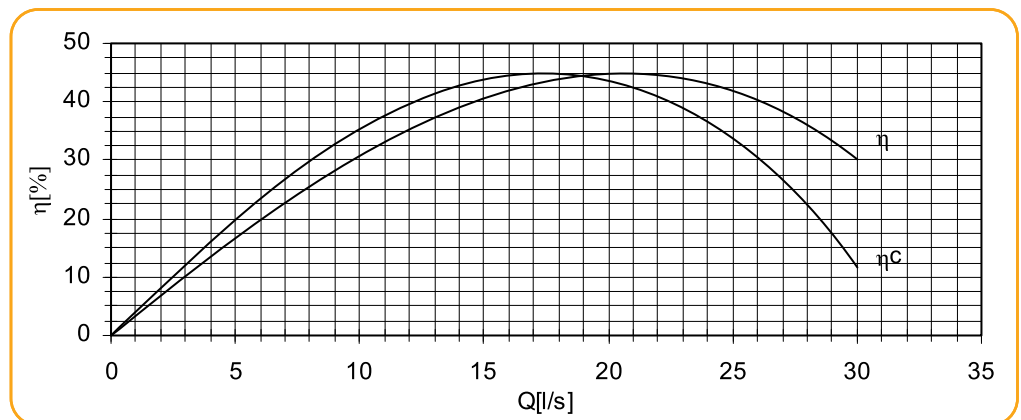
Total Differential Head



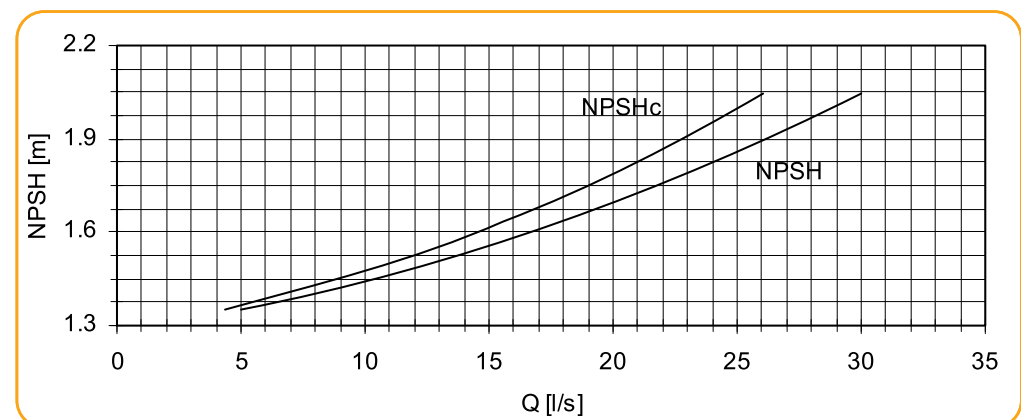
Power Input



Efficiency

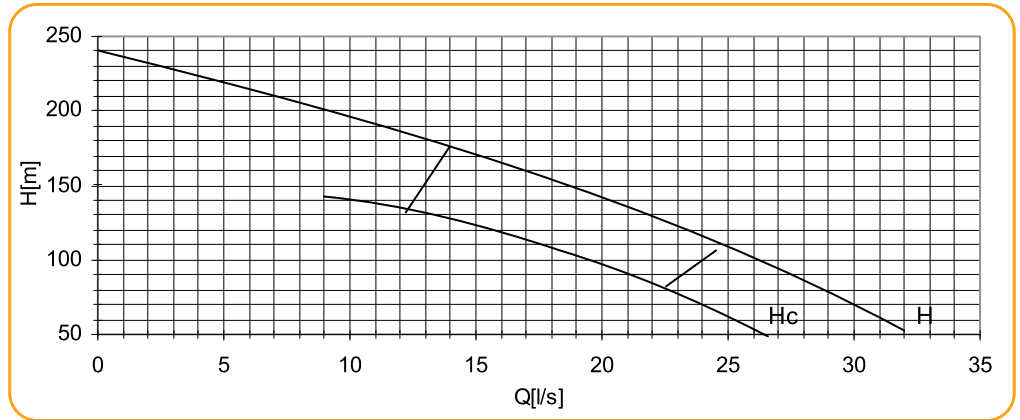


Net Positive Suction Head

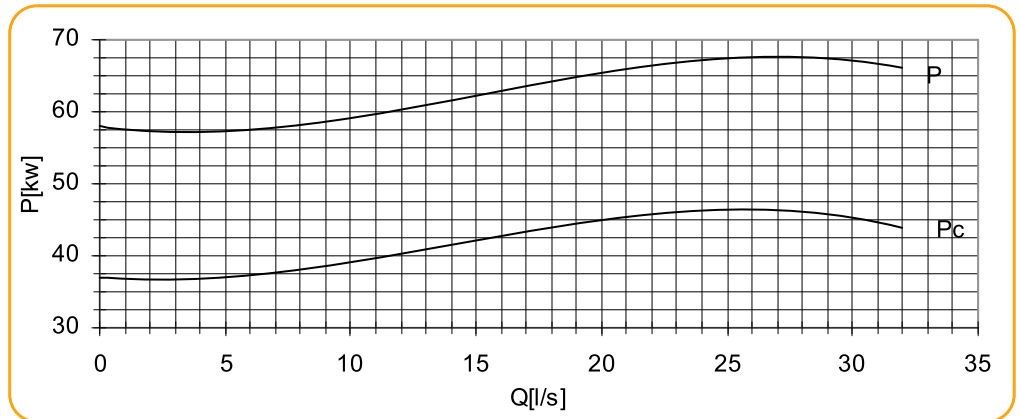


Pump performance curves

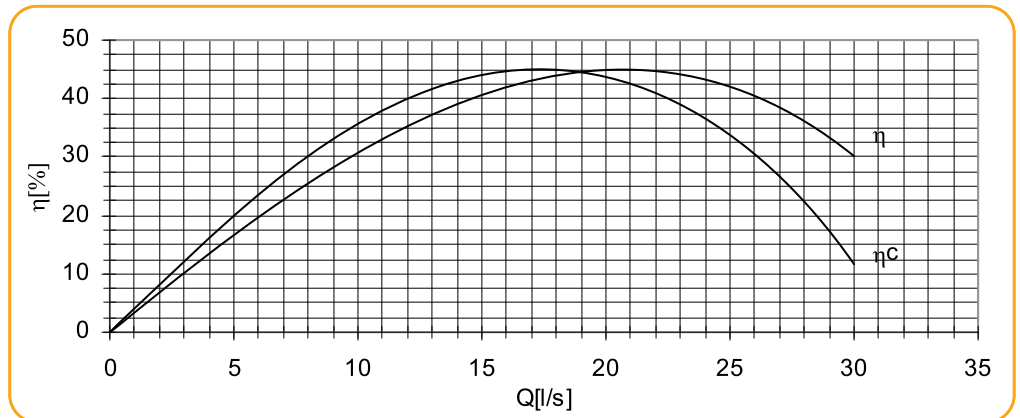
Total Differential Head



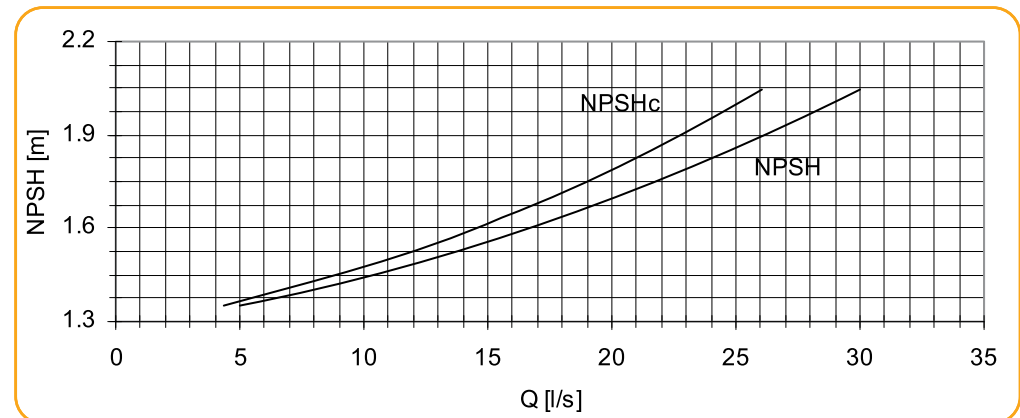
Power Input



Efficiency

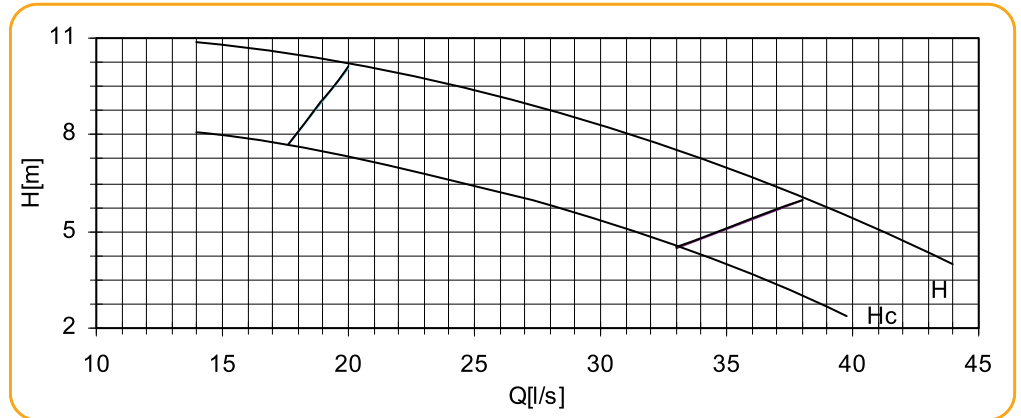


Net Positive Suction Head

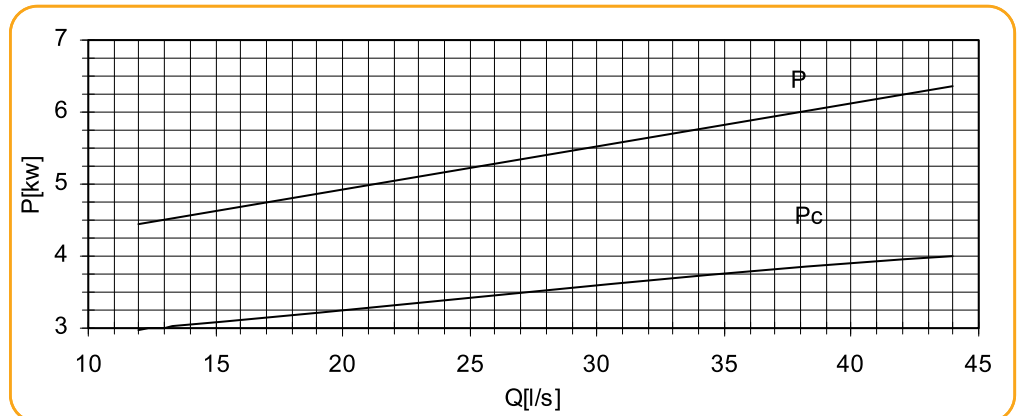


Pump performance curves

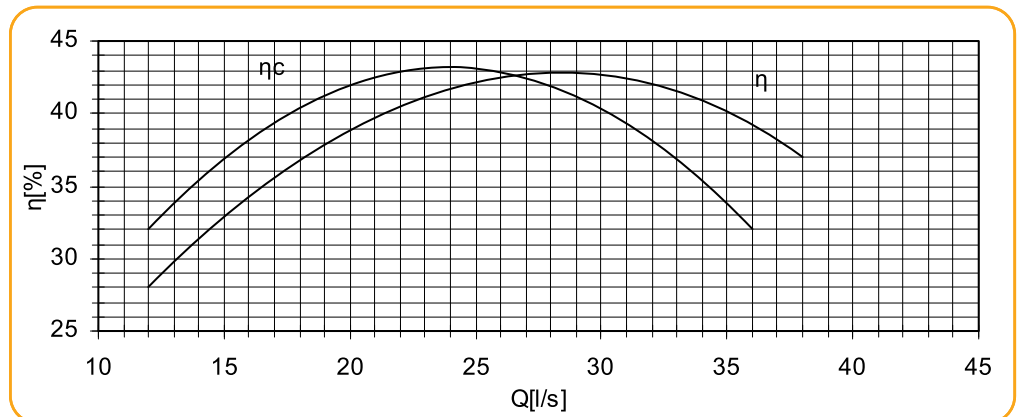
Total  
Differential  
Head



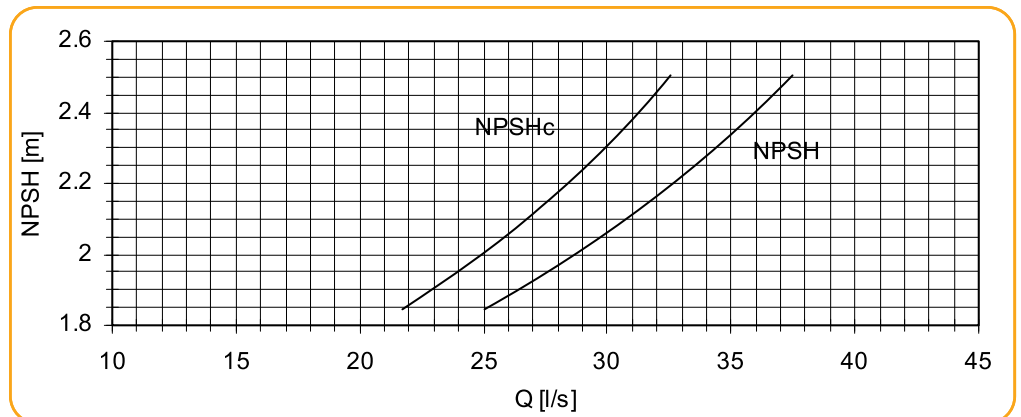
Power Input



Efficiency

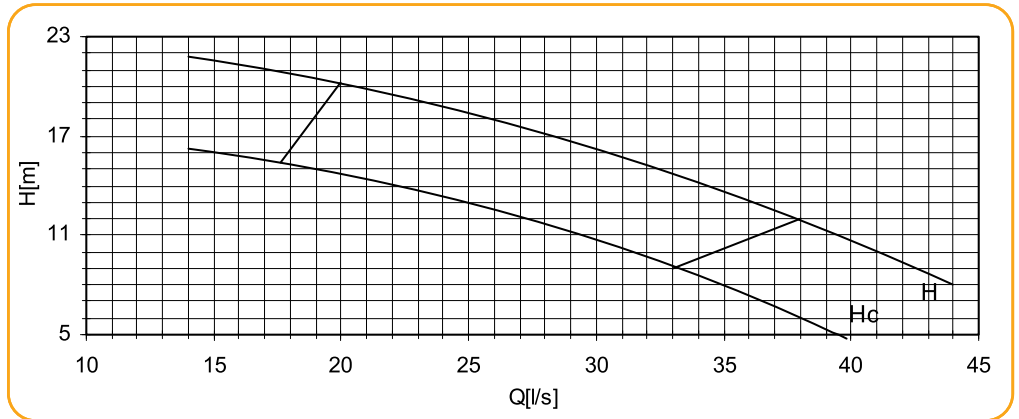


Net Positive  
Suction Head

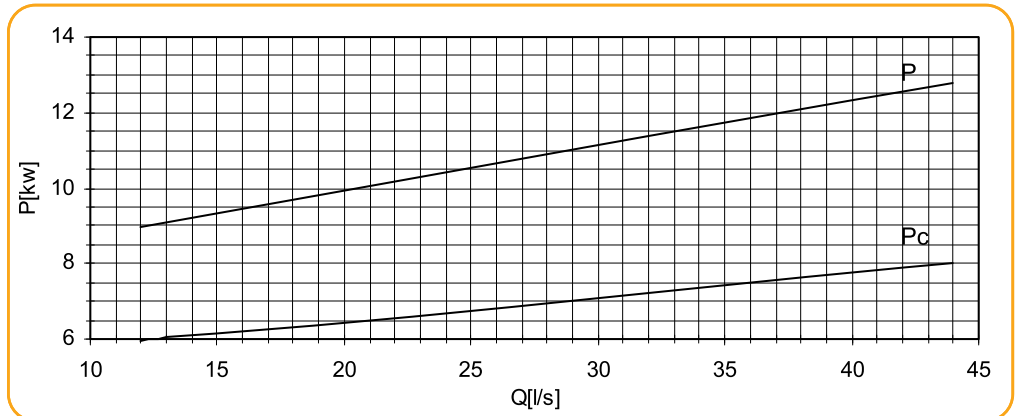


Pump performance curves

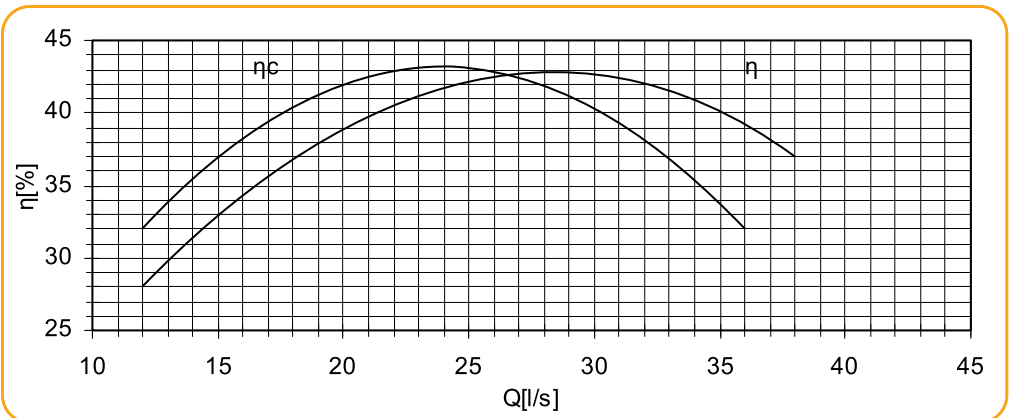
Total  
Differential  
Head



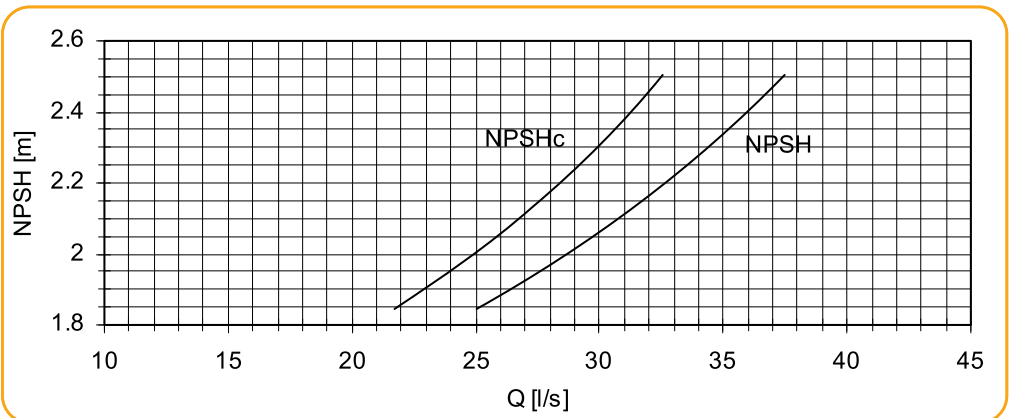
Power Input



Efficiency



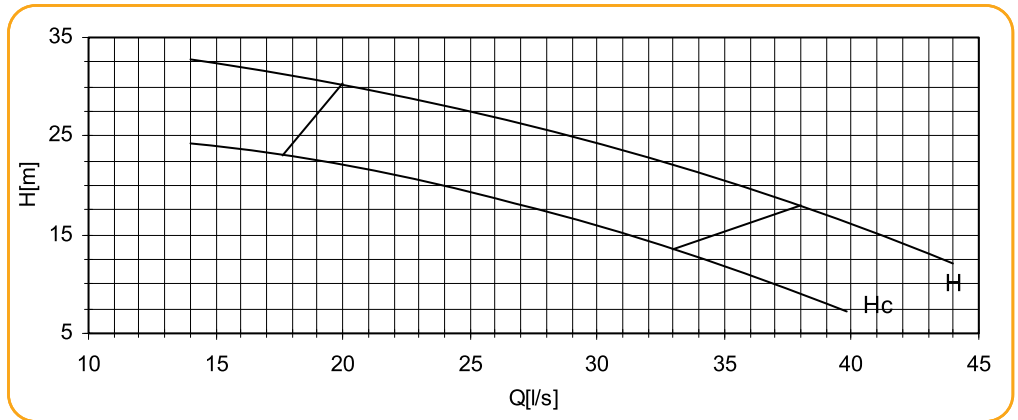
Net Positive  
Suction Head



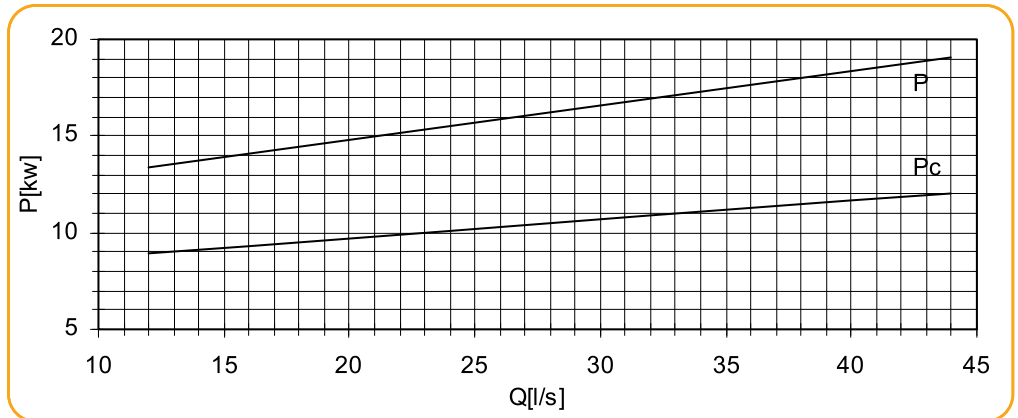


Pump performance curves

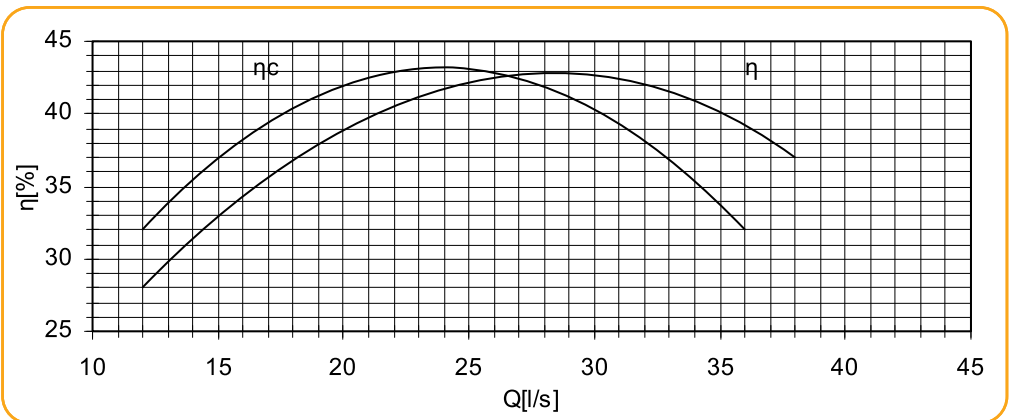
Total Differential Head



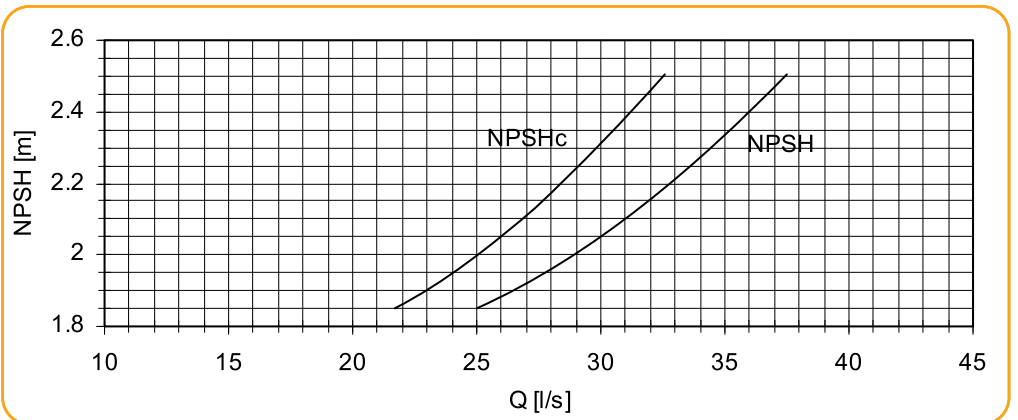
Power Input



Efficiency



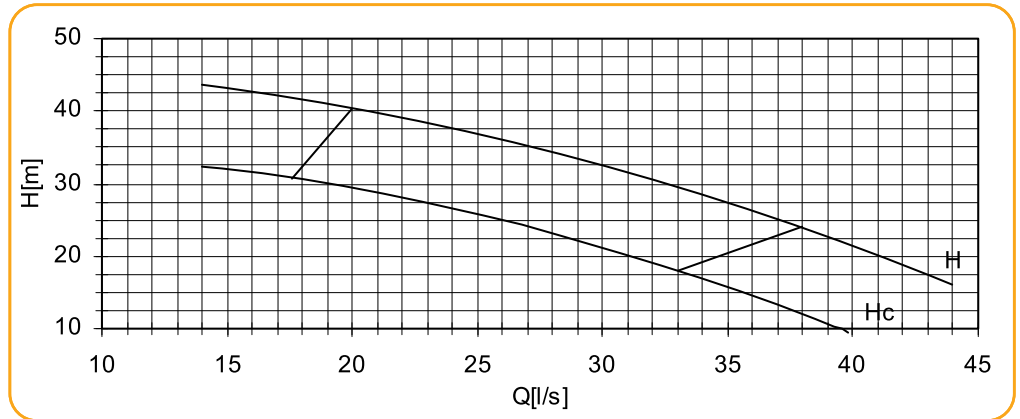
Net Positive Suction Head



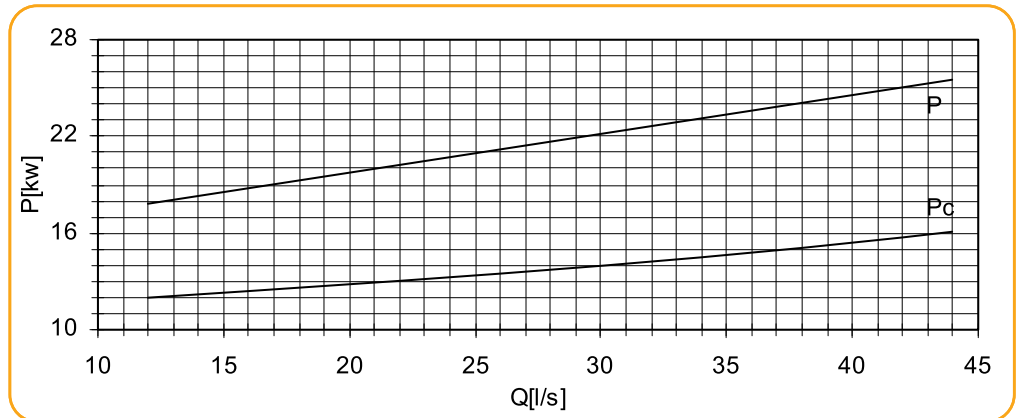
Pump performance curves

DP 10A-4  
n = 1450 (rpm)

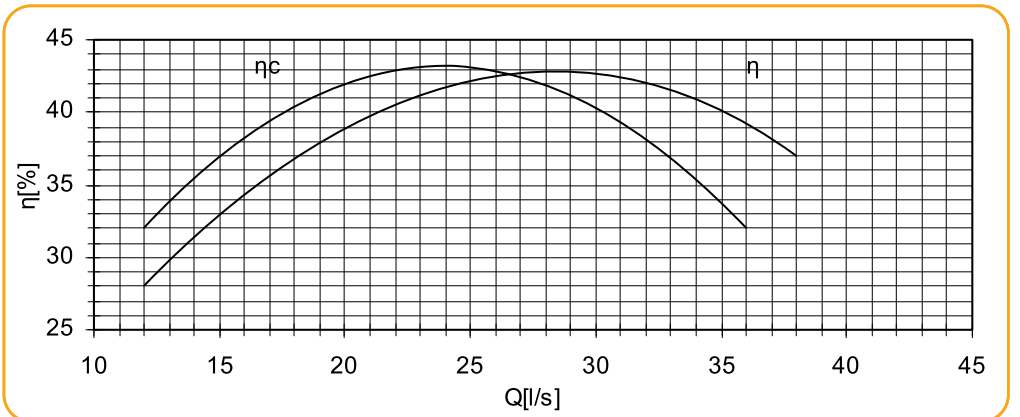
Total  
Differential  
Head



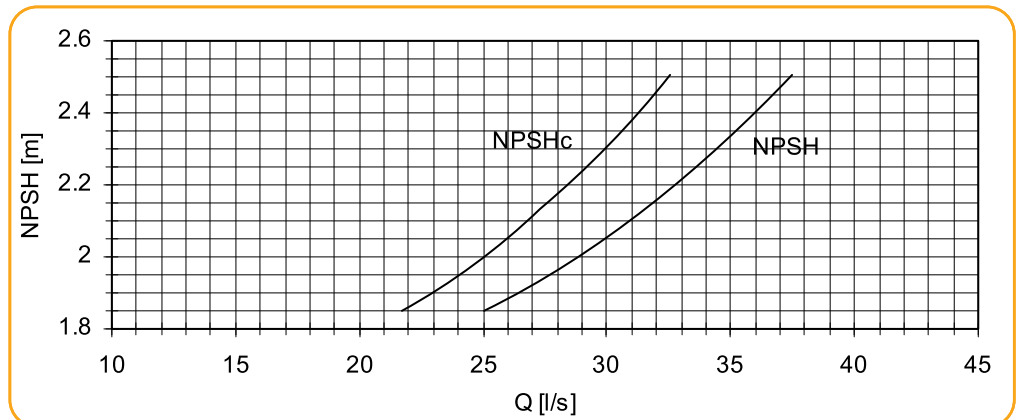
Power Input



Efficiency

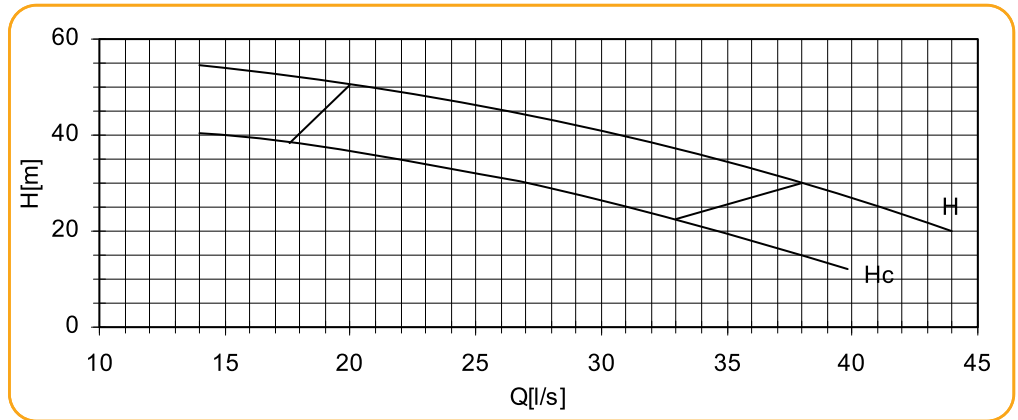


Net Positive  
Suction Head

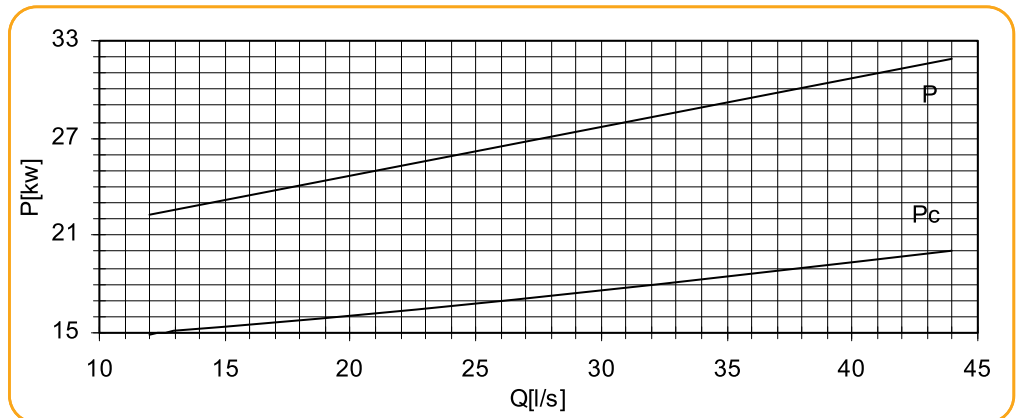


Pump performance curves

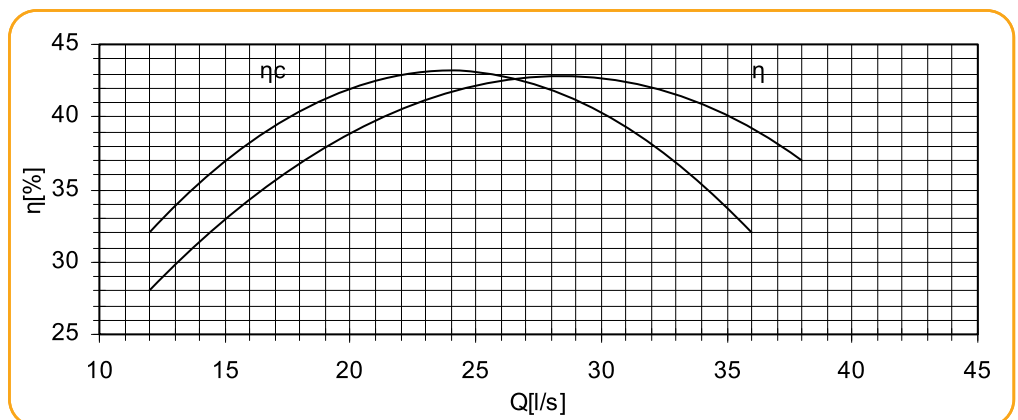
Total Differential Head



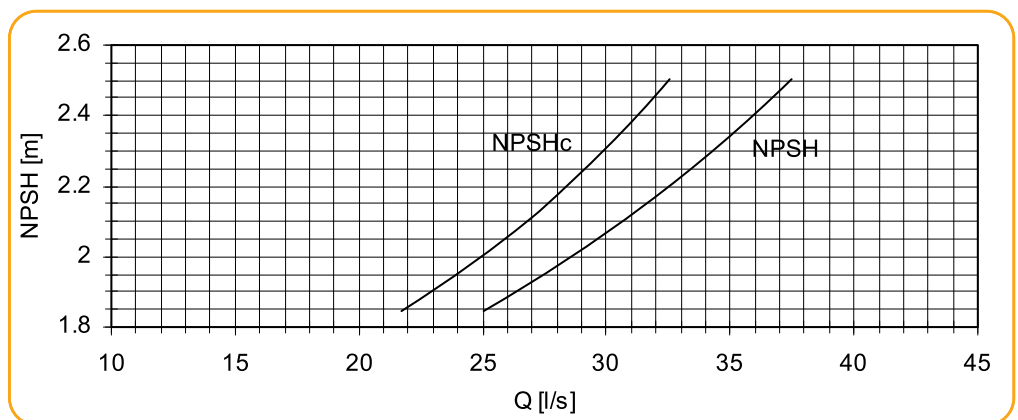
Power Input



Efficiency



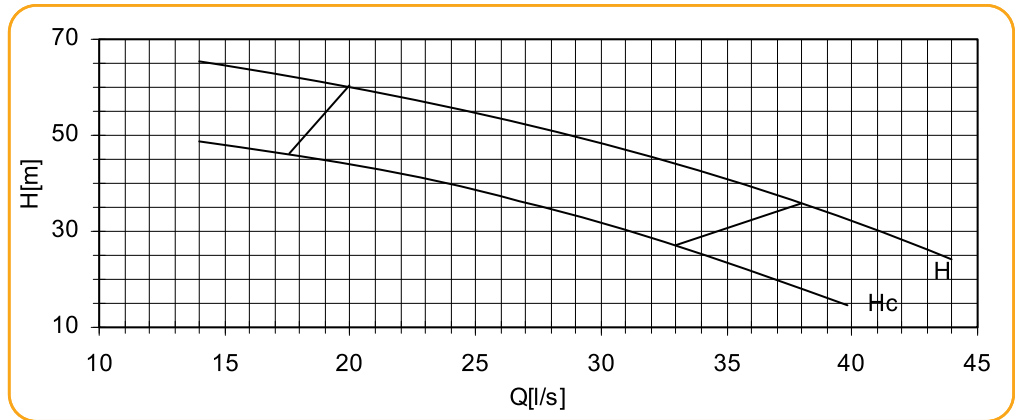
Net Positive Suction Head



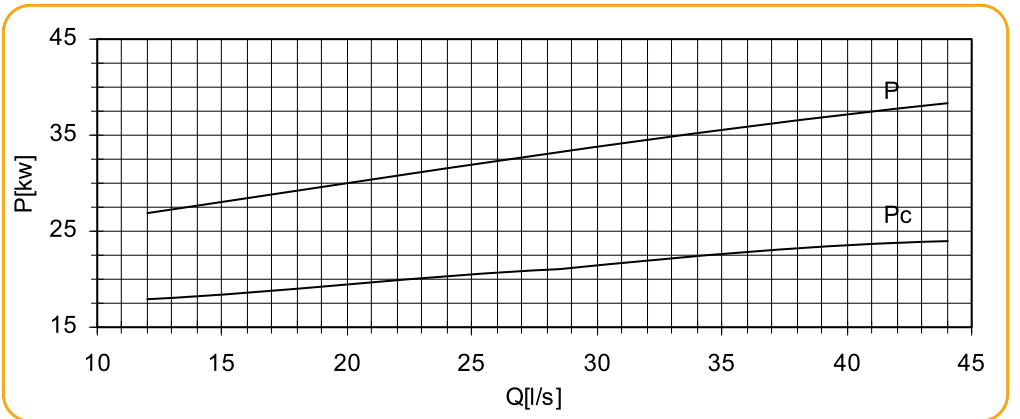
Pump performance curves

DP 10A-6  
n = 1450 (rpm)

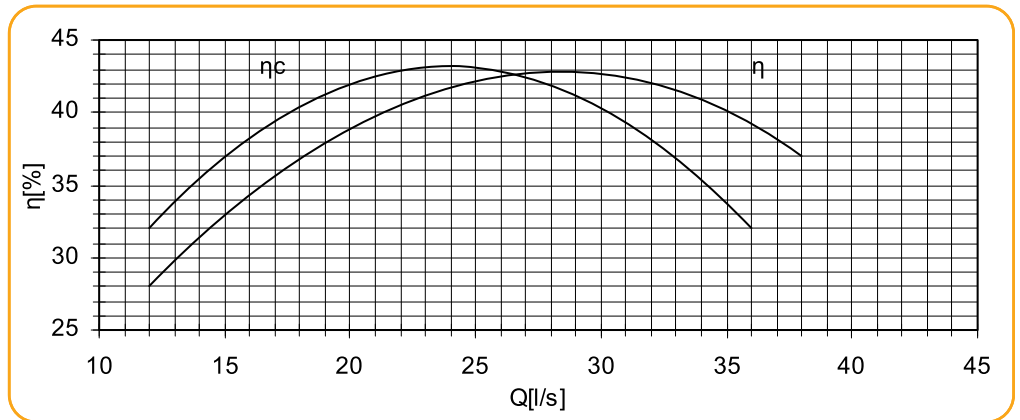
Total  
Differential  
Head



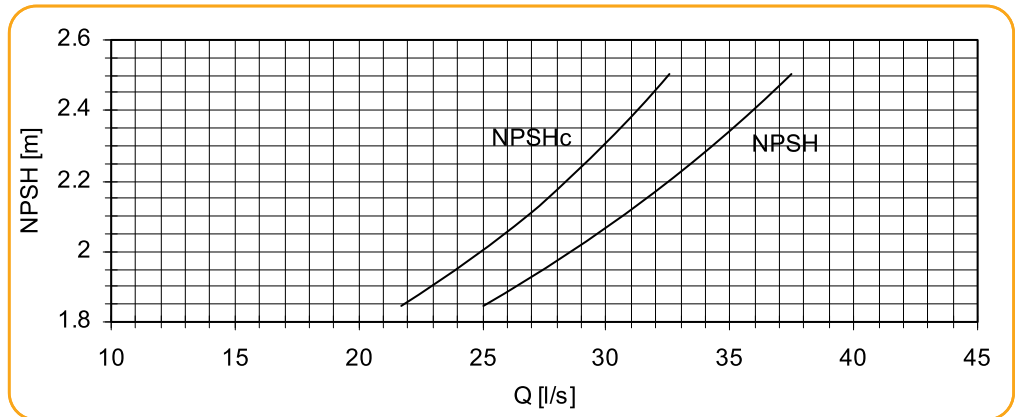
Power Input



Efficiency



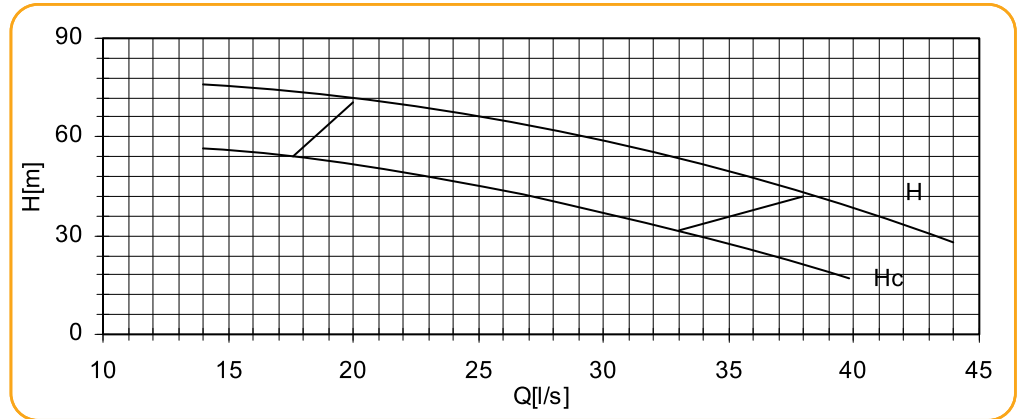
Net Positive  
Suction Head



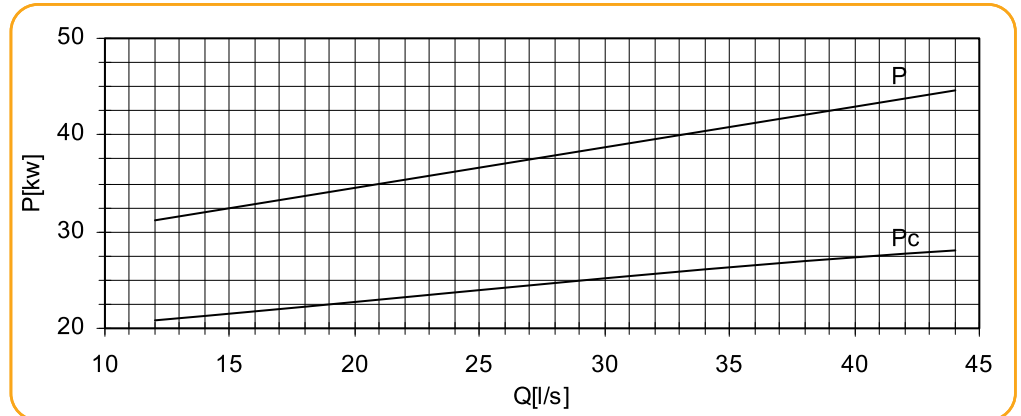
Performance curves are valid for clear water  $t=20\text{ }^{\circ}\text{C}$ ,  $\rho=1000\text{ kg/m}^3$ . NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

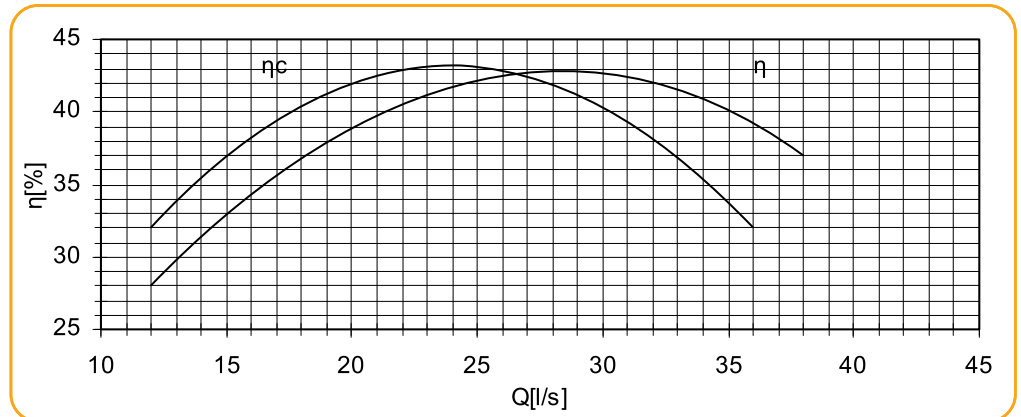
Total Differential Head



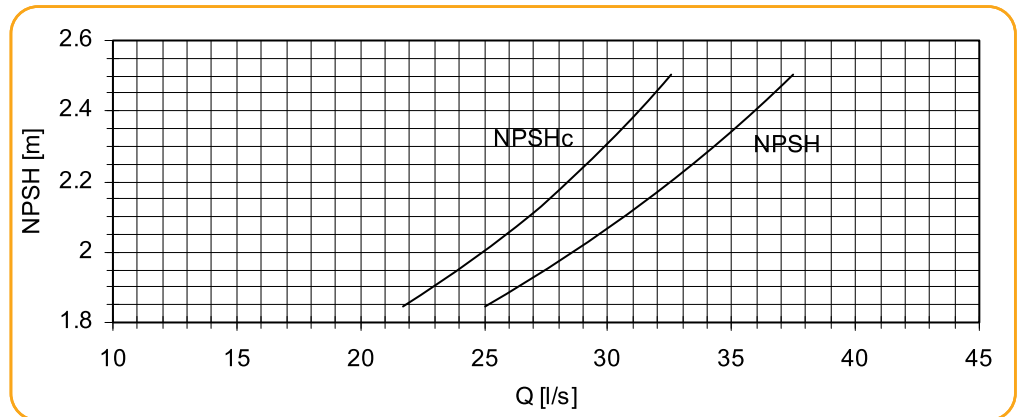
Power Input



Efficiency



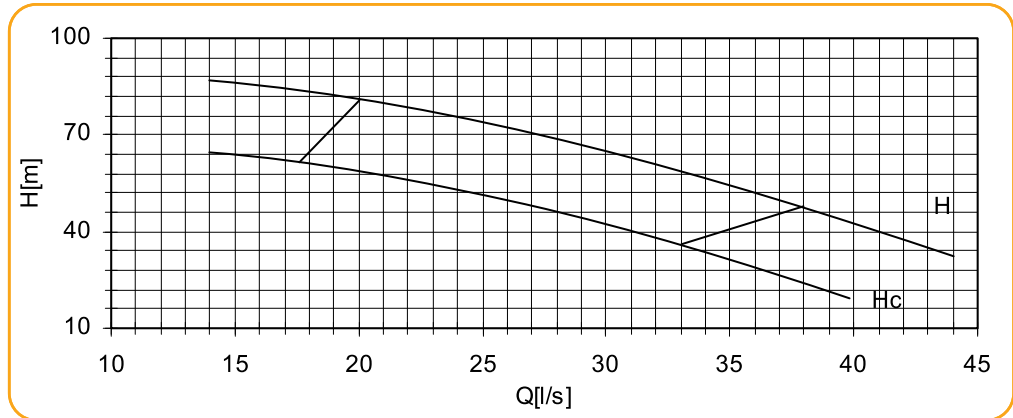
Net Positive Suction Head



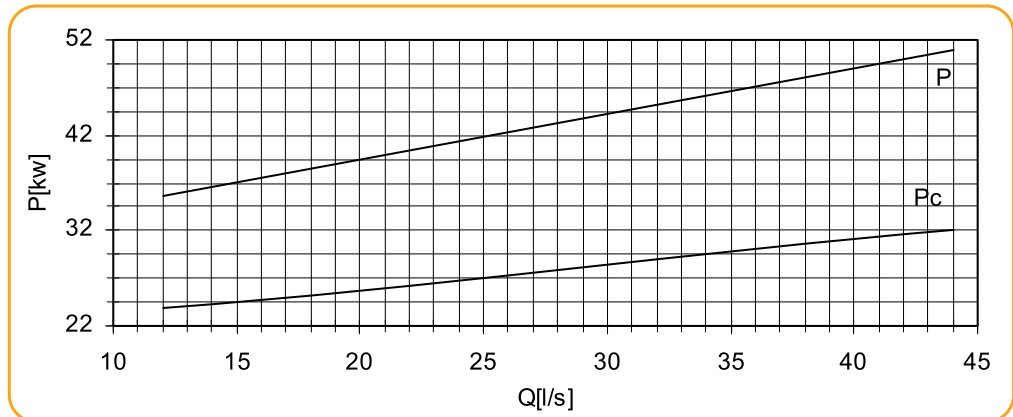
Pump performance curves

DP 10A-8  
n =1450 (rpm)

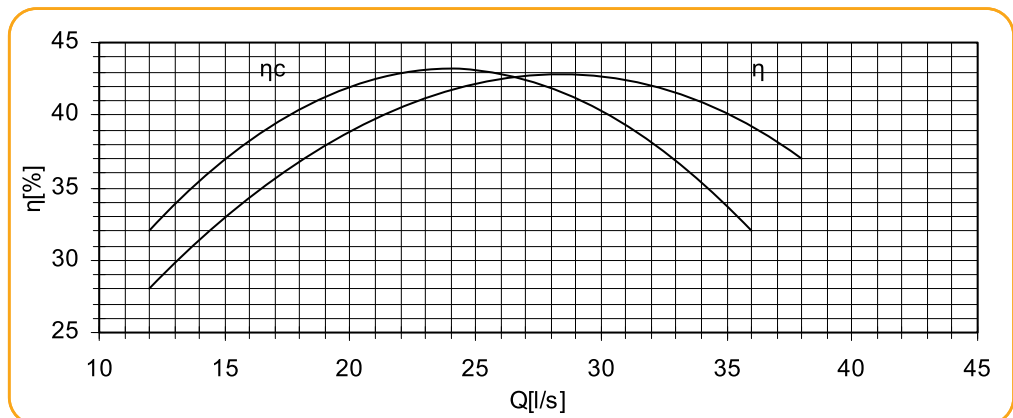
Total  
Differential  
Head



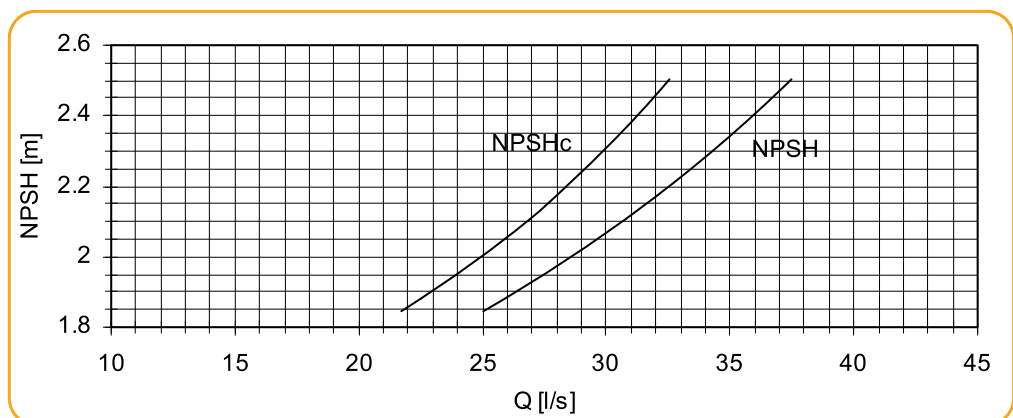
Power Input



Efficiency



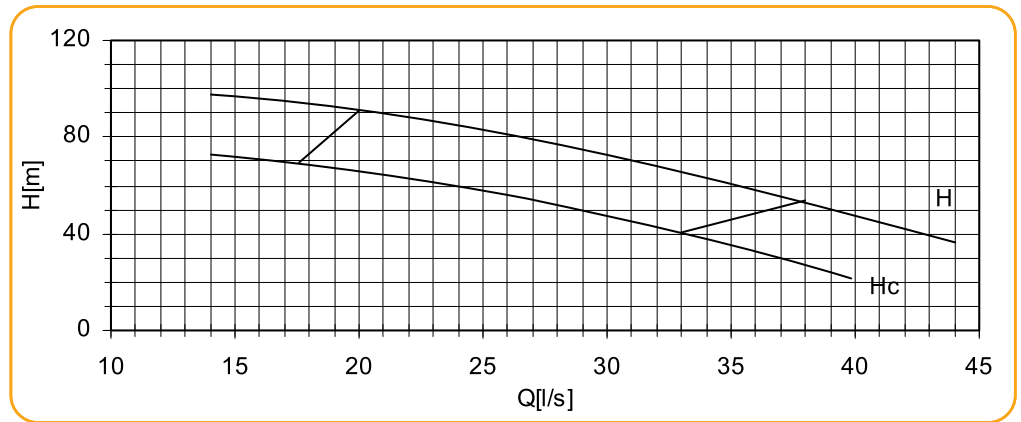
Net Positive  
Suction Head



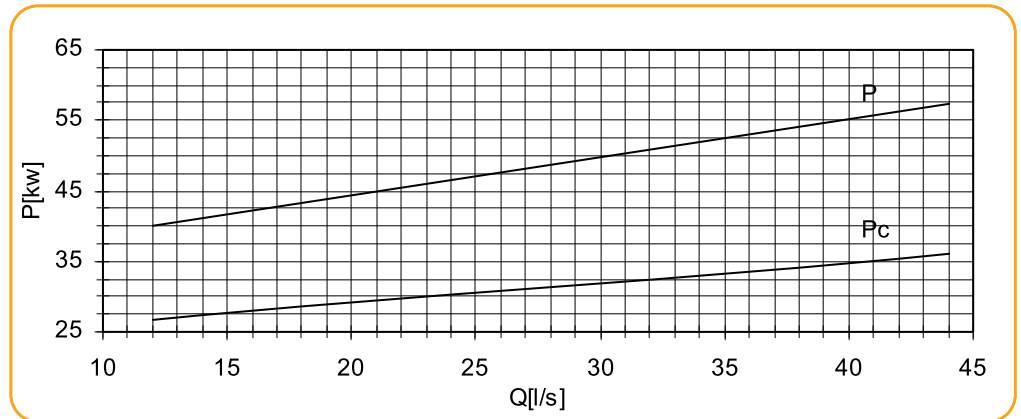
Performance curves are valid for clear water t=20 °C, ρ=1000 kg/m<sup>3</sup>.. NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

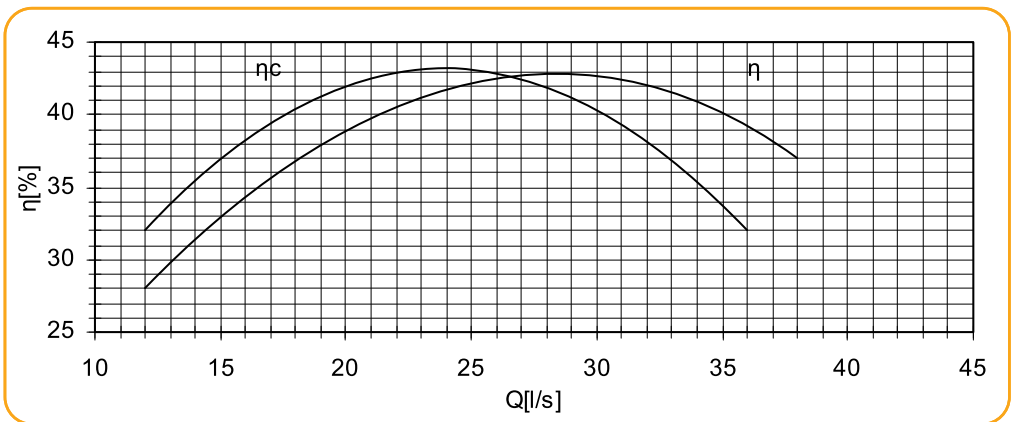
Total Differential Head



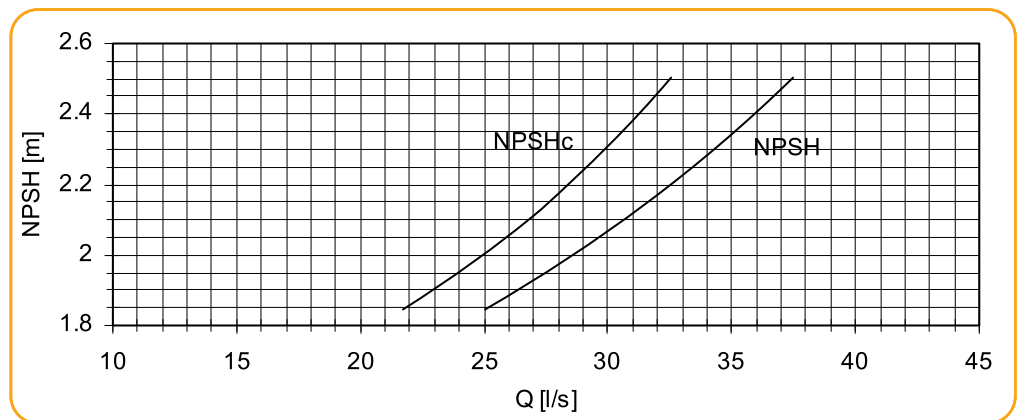
Power Input



Efficiency



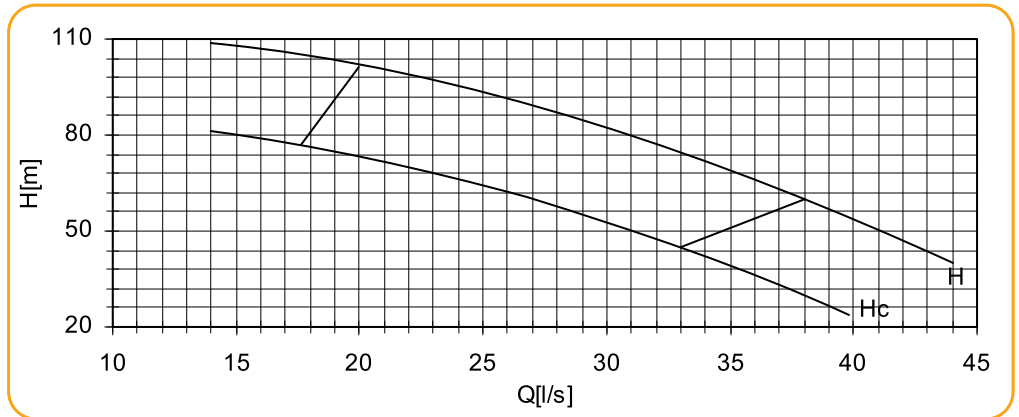
Net Positive Suction Head



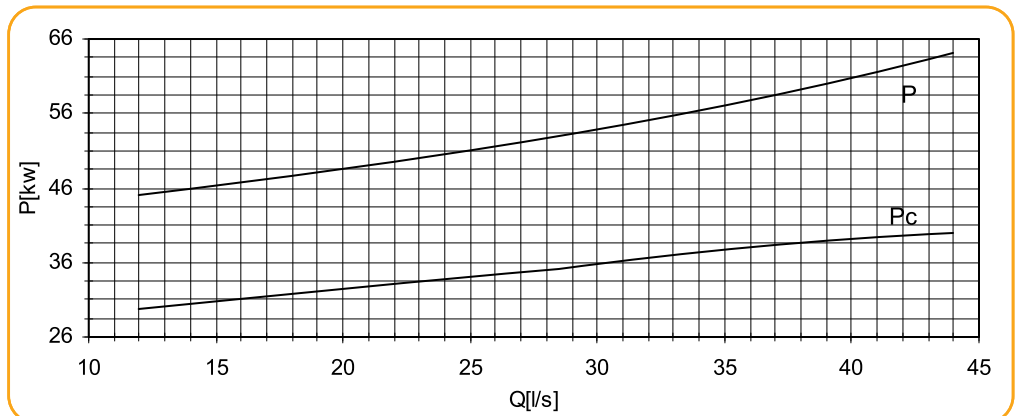
Pump performance curves

DP 10A-10  
n =1450 (rpm)

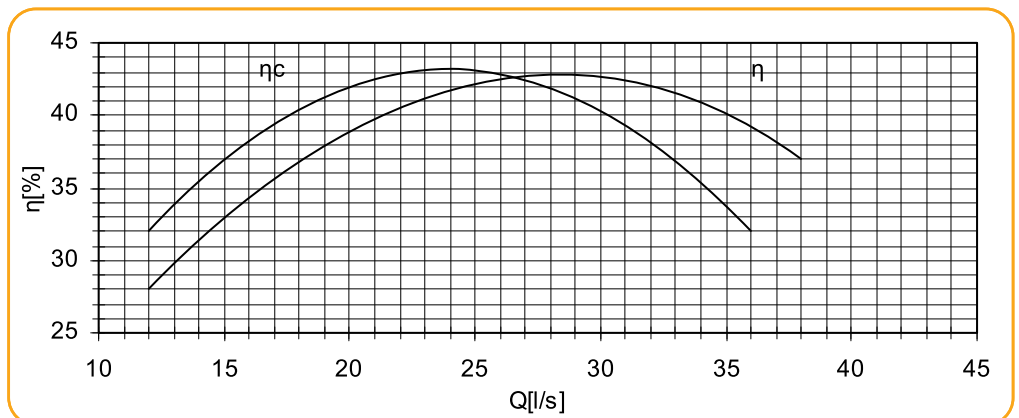
Total  
Differential  
Head



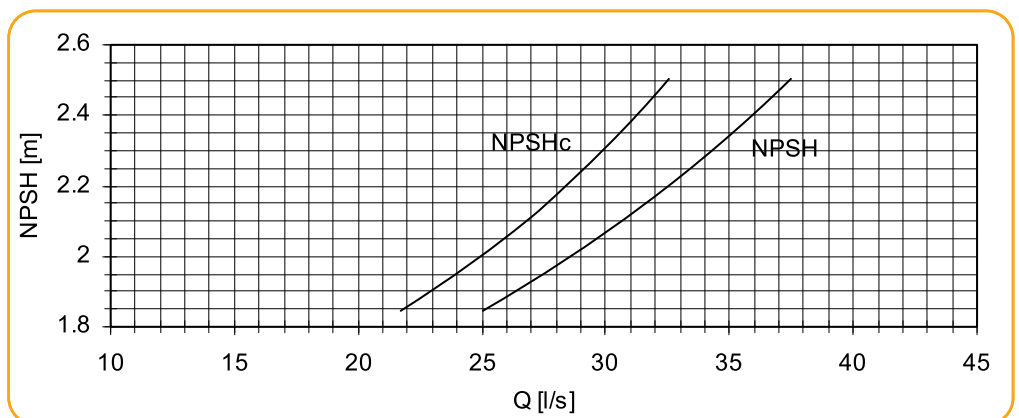
Power Input



Efficiency



Net Positive  
Suction Head

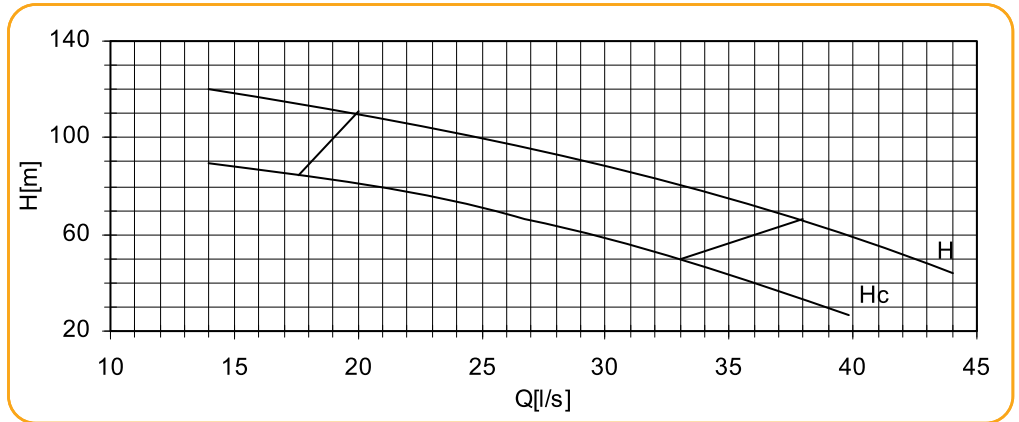


Performance curves are valid for clear water  $t=20\text{ }^{\circ}\text{C}$ ,  $\rho=1000\text{ kg/m}^3$ . NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

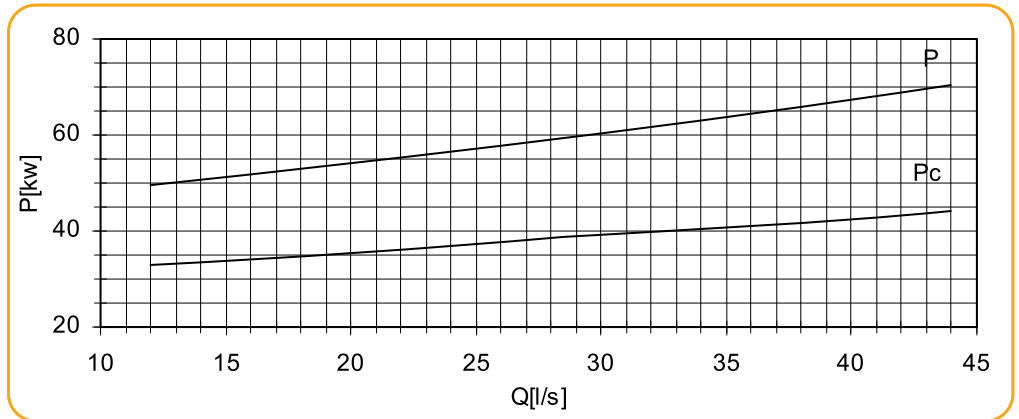


Pump performance curves

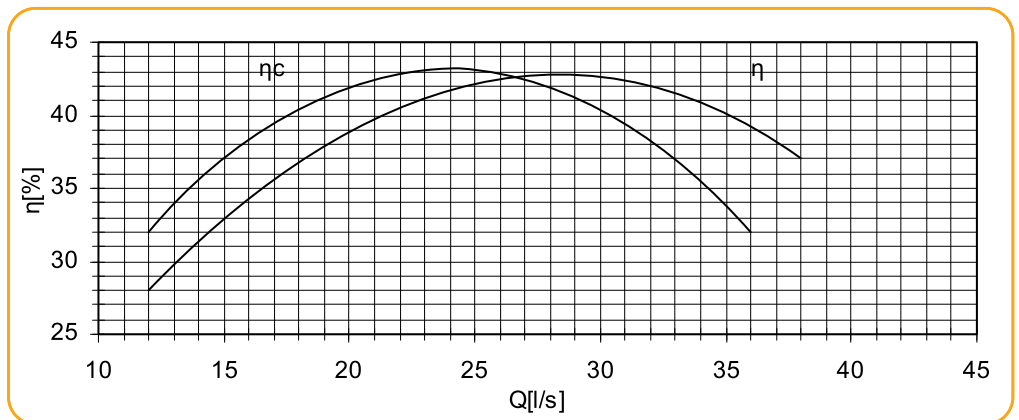
Total  
Differential  
Head



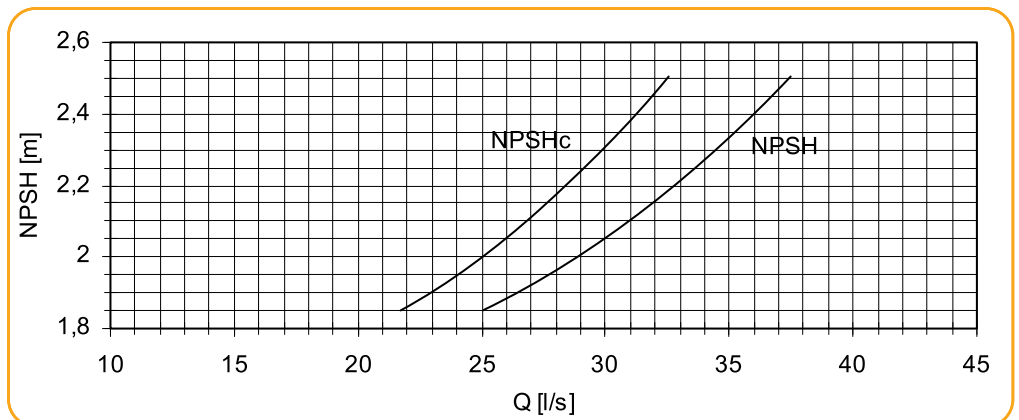
Power Input



Efficiency



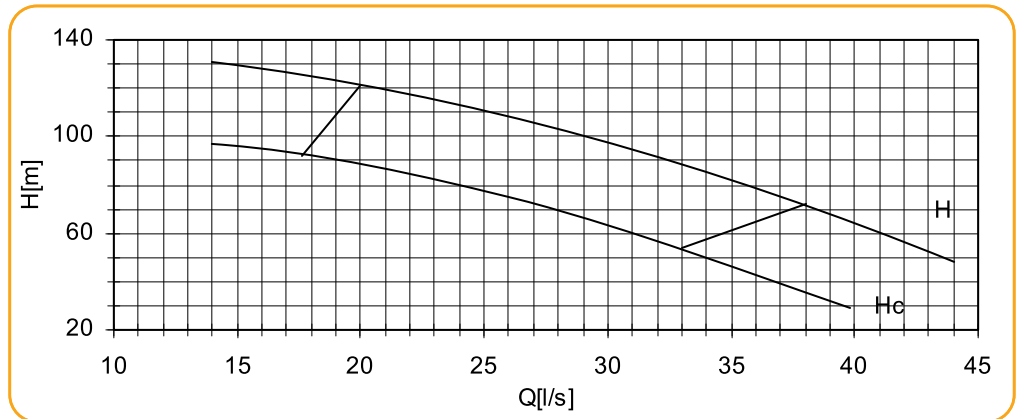
Net Positive  
Suction Head



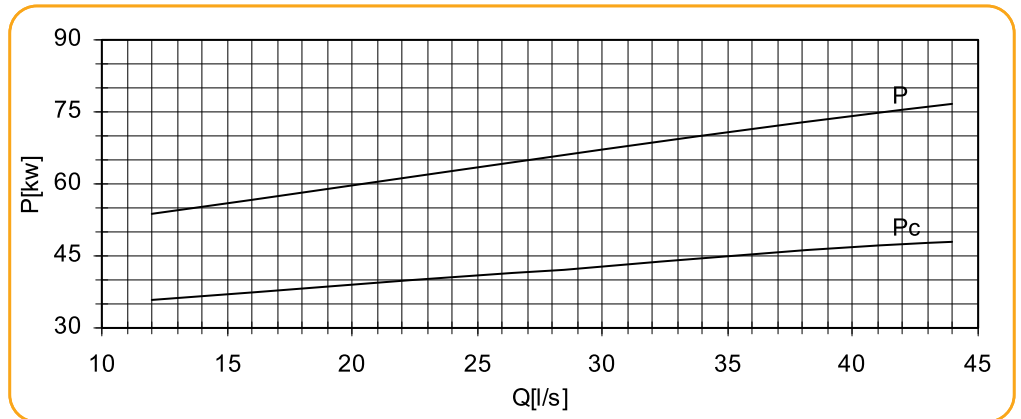
Pump performance curves

DP 10A-12  
n = 1450 (rpm)

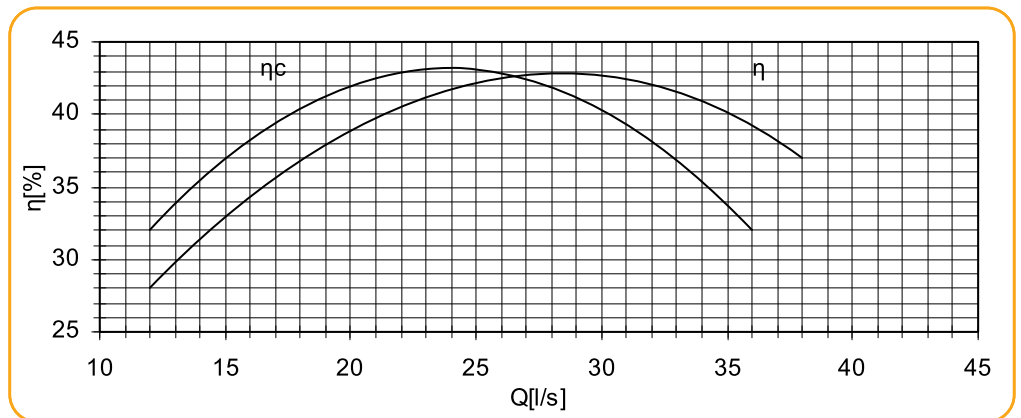
Total  
Differential  
Head



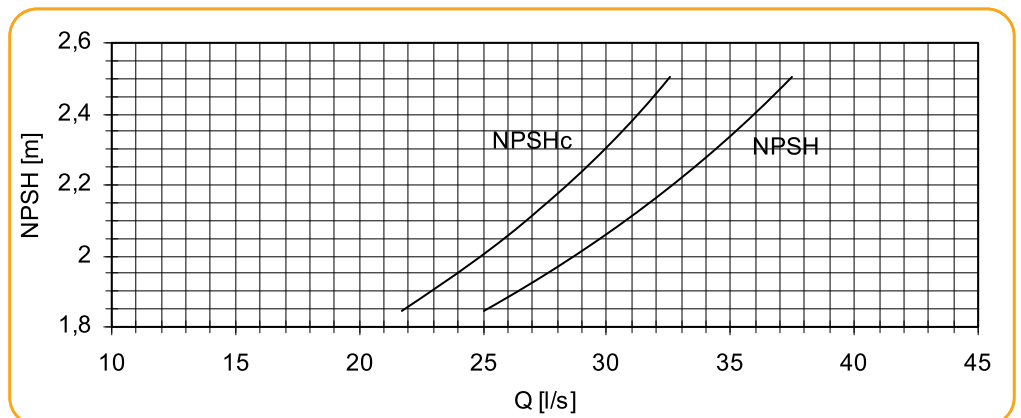
Power Input



Efficiency



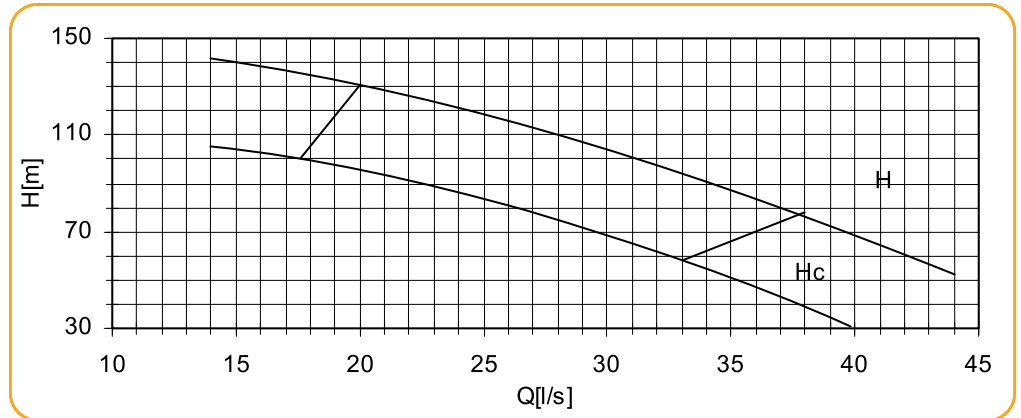
Net Positive  
Suction Head



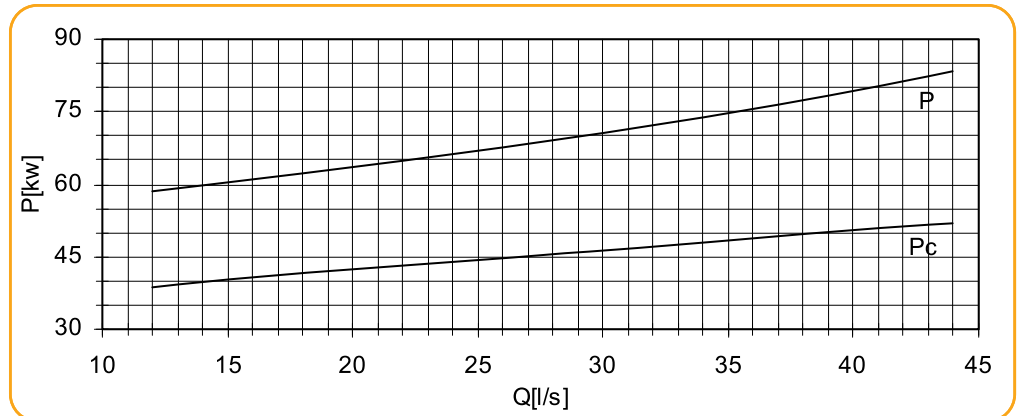
Performance curves are valid for clear water  $t=20\text{ }^{\circ}\text{C}$ ,  $\rho=1000\text{ kg/m}^3$ . NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

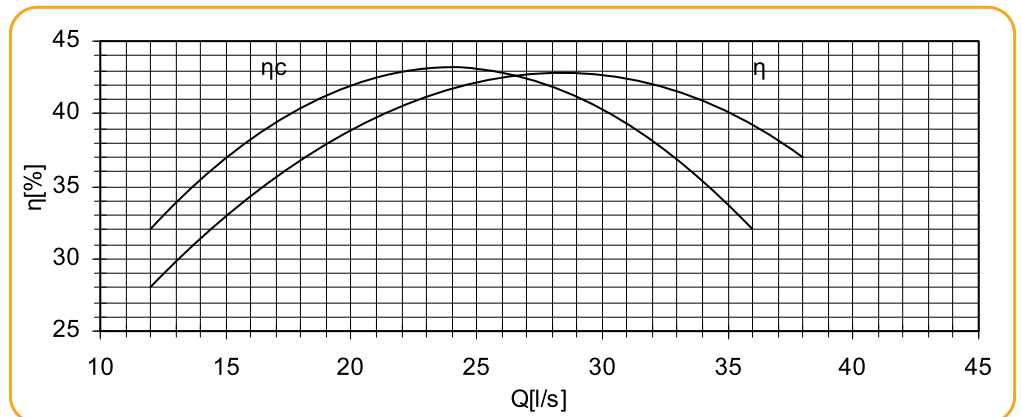
Total  
Differential  
Head



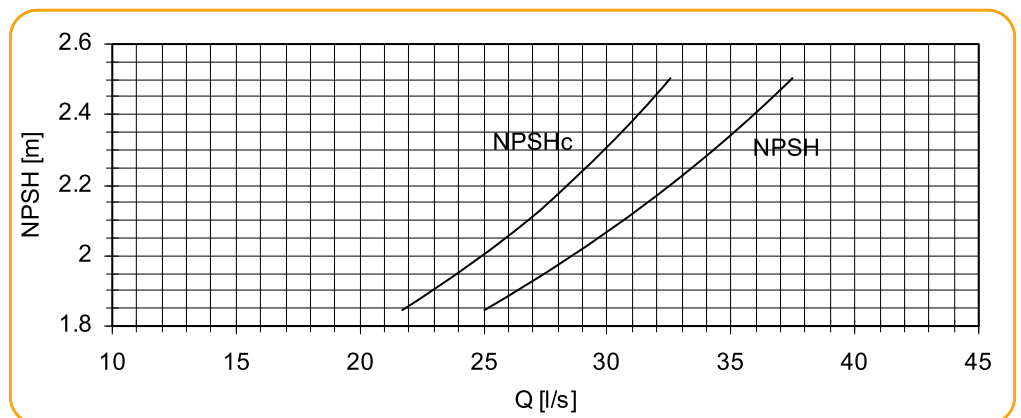
Power Input



Efficiency



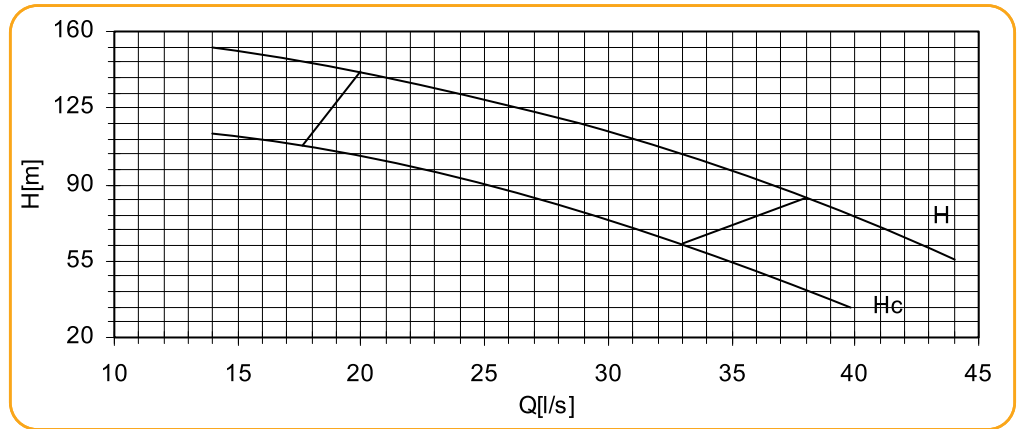
Net Positive  
Suction Head



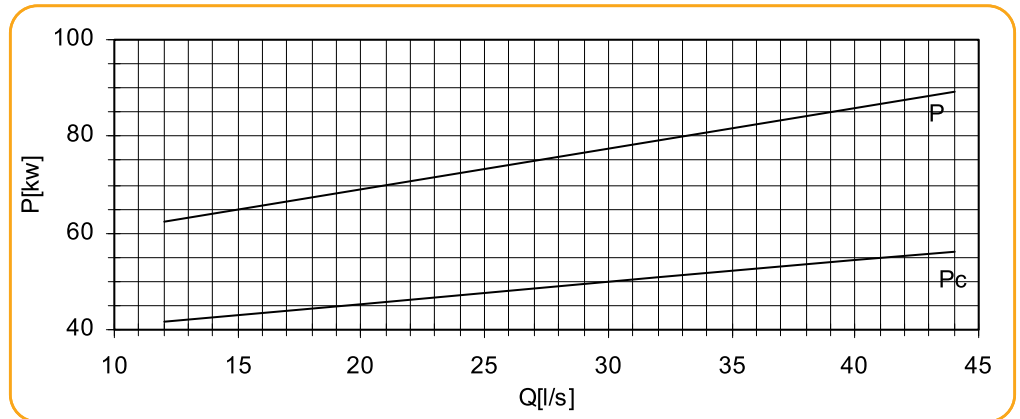
Pump performance curves

DP 10A-14  
n = 1450 (rpm)

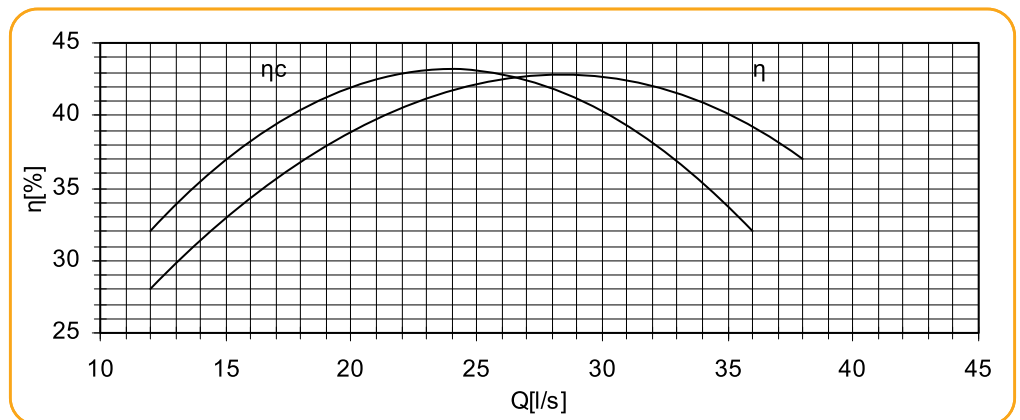
Total  
Differential  
Head



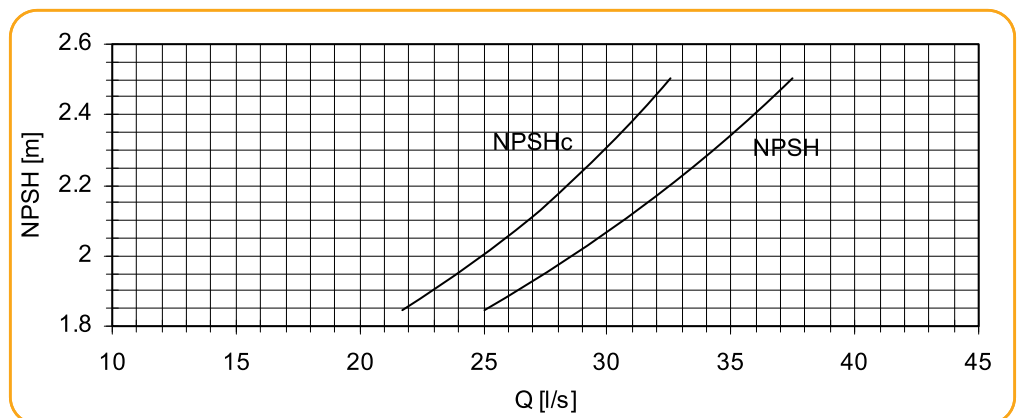
Power Input



Efficiency



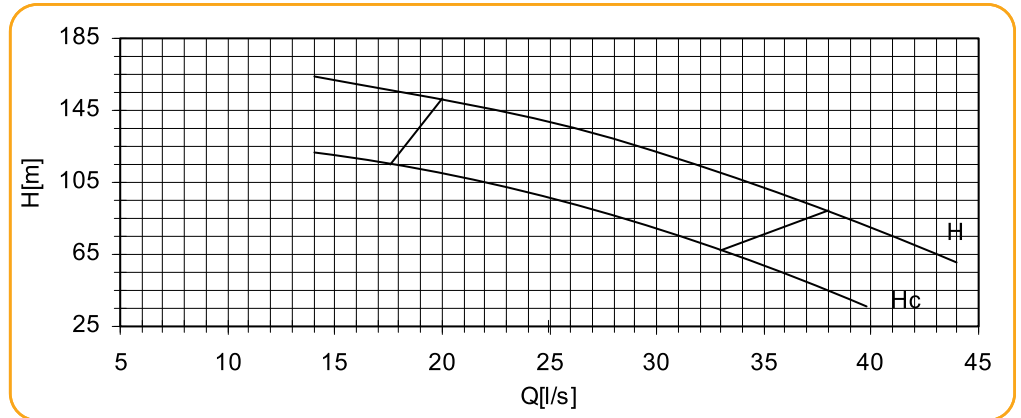
Net Positive  
Suction Head



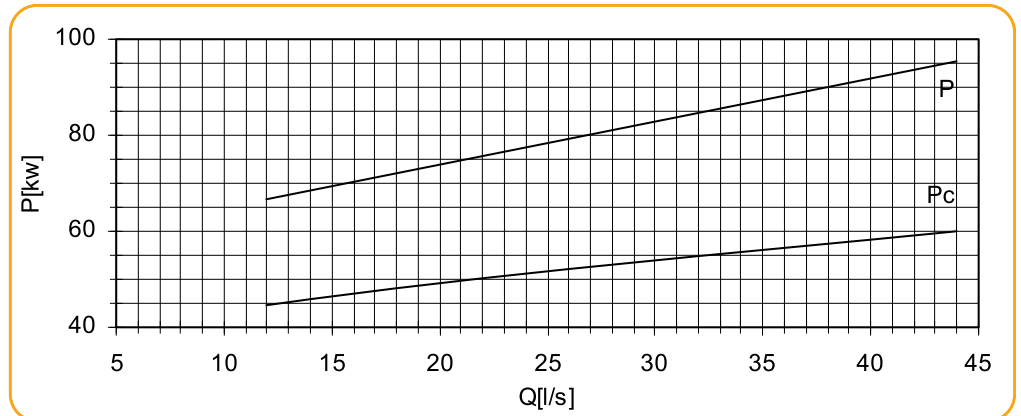
Performance curves are valid for clear water  $t=20\text{ }^{\circ}\text{C}$ ,  $\rho=1000\text{ kg/m}^3$ . NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

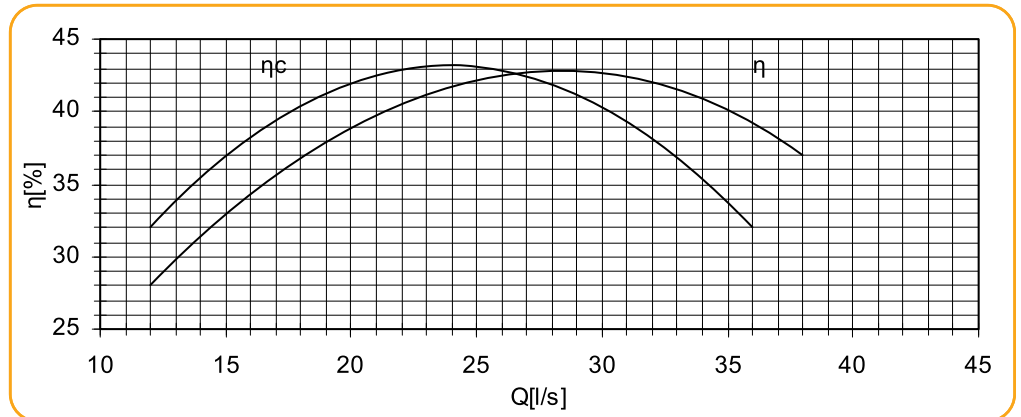
Total Differential Head



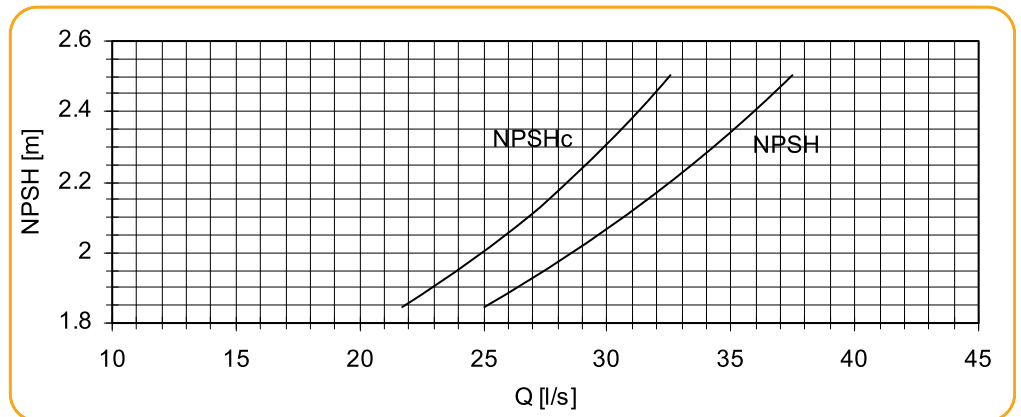
Power Input



Efficiency



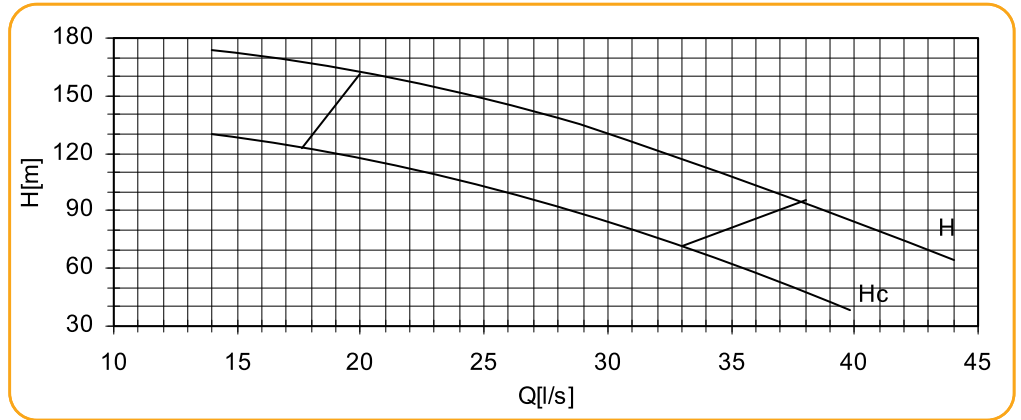
Net Positive Suction Head



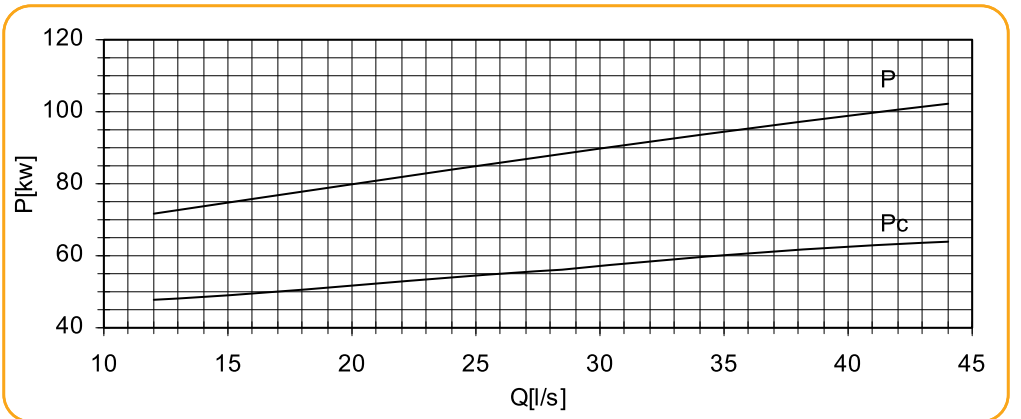
Pump performance curves

DP 10A-16  
n =1450 (rpm)

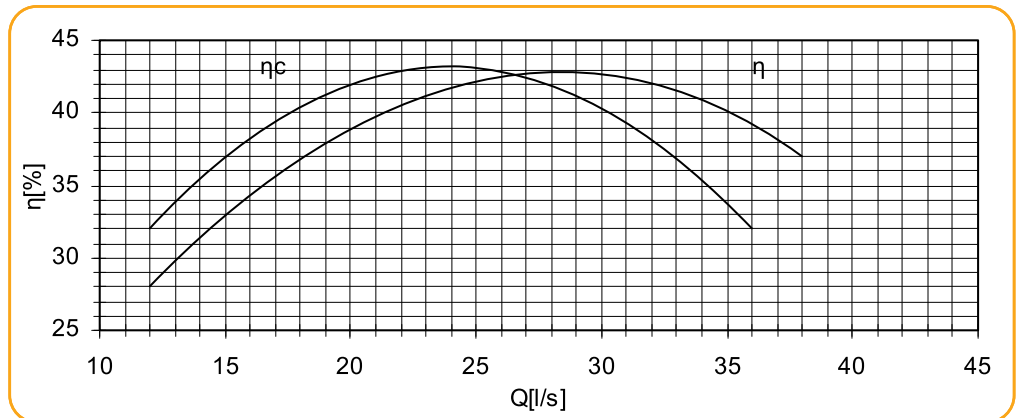
Total  
Differential  
Head



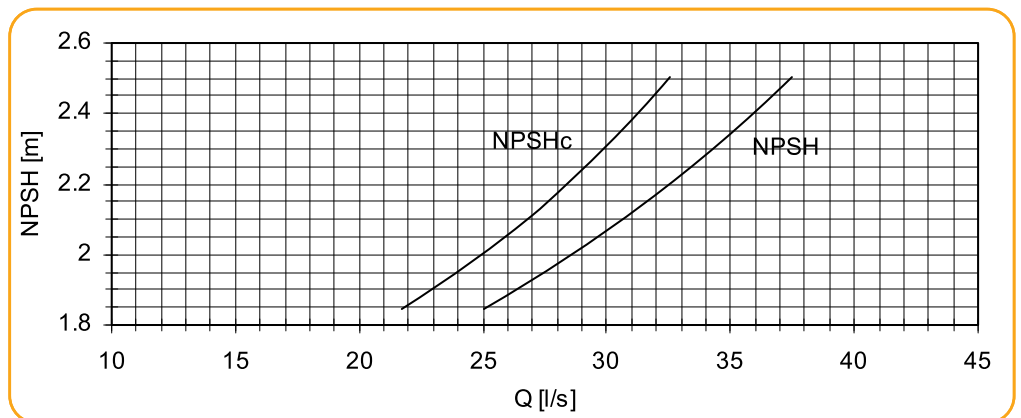
Power Input



Efficiency



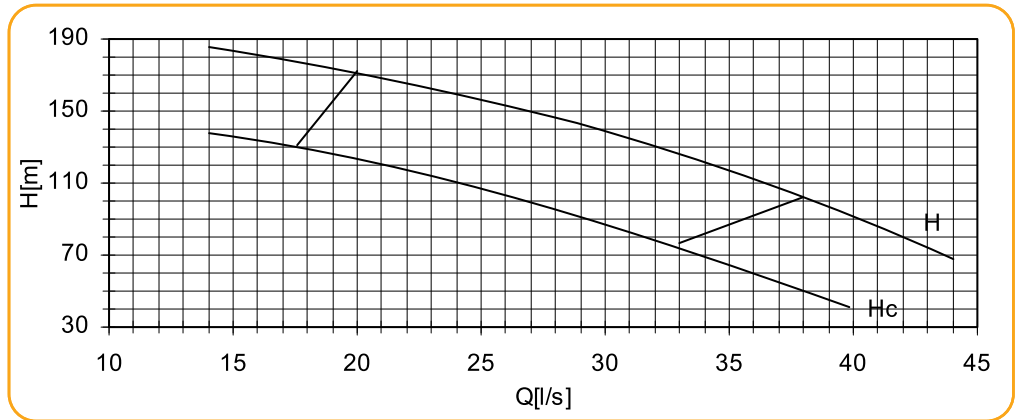
Net Positive  
Suction Head



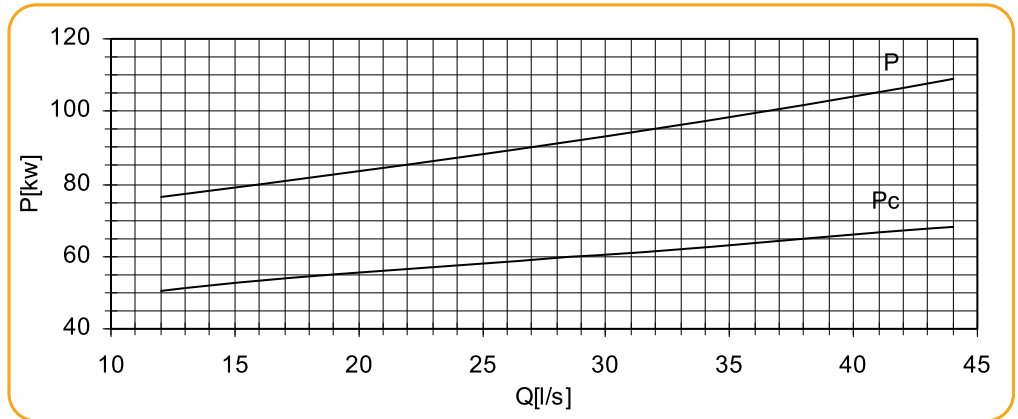
Performance curves are valid for clear water  $t=20\text{ }^{\circ}\text{C}$ ,  $\rho=1000\text{ kg/m}^3$ . NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

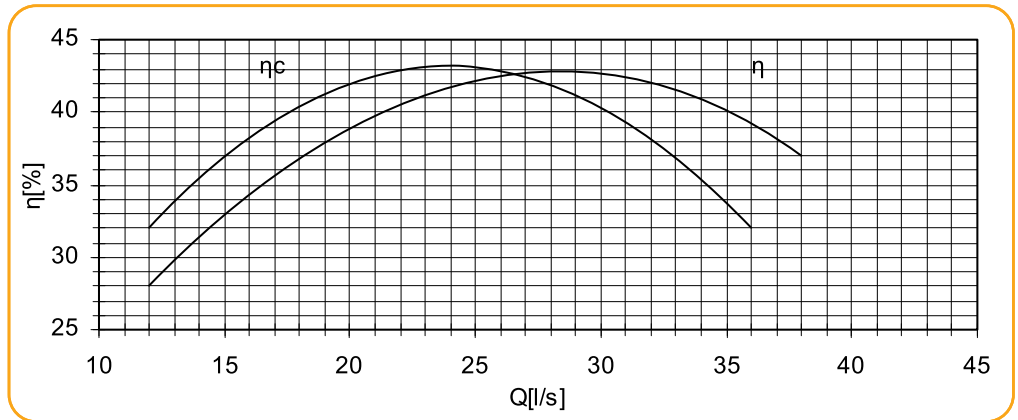
Total Differential Head



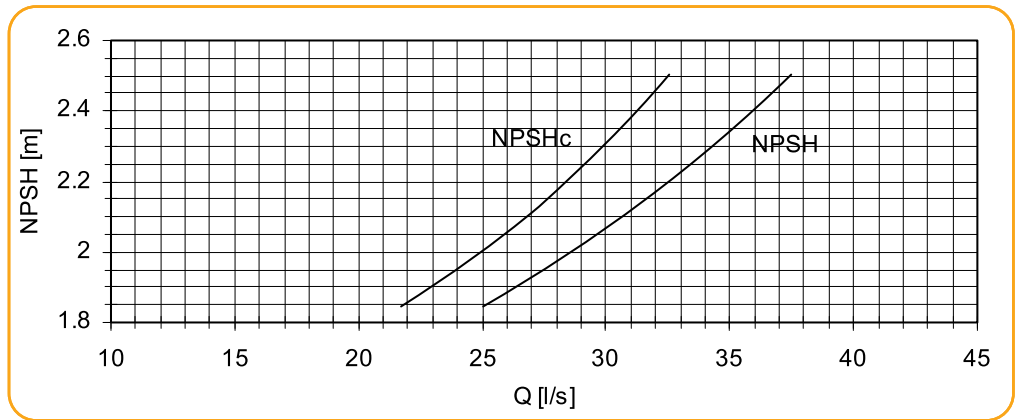
Power Input



Efficiency



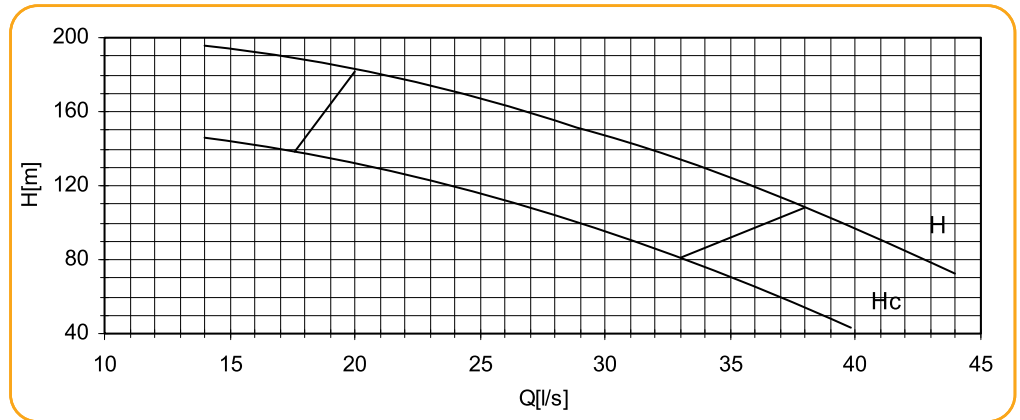
Net Positive Suction Head



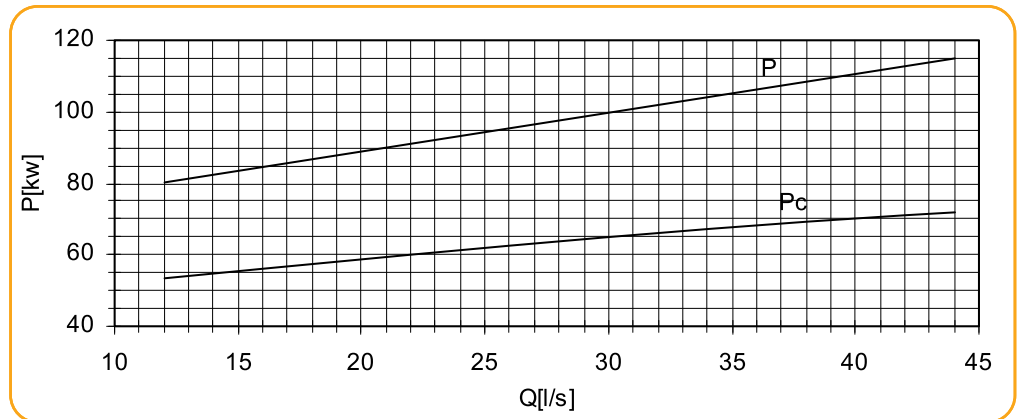
Pump performance curves

DP 10A-18  
n = 1450 (rpm)

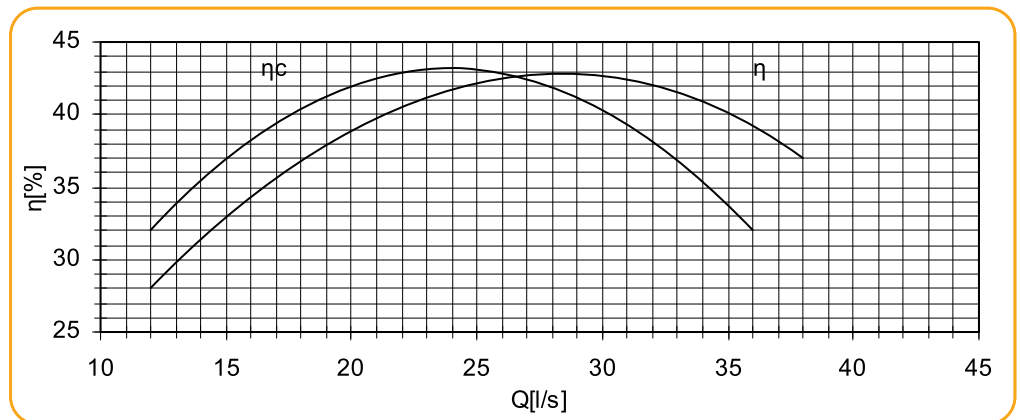
Total  
Differential  
Head



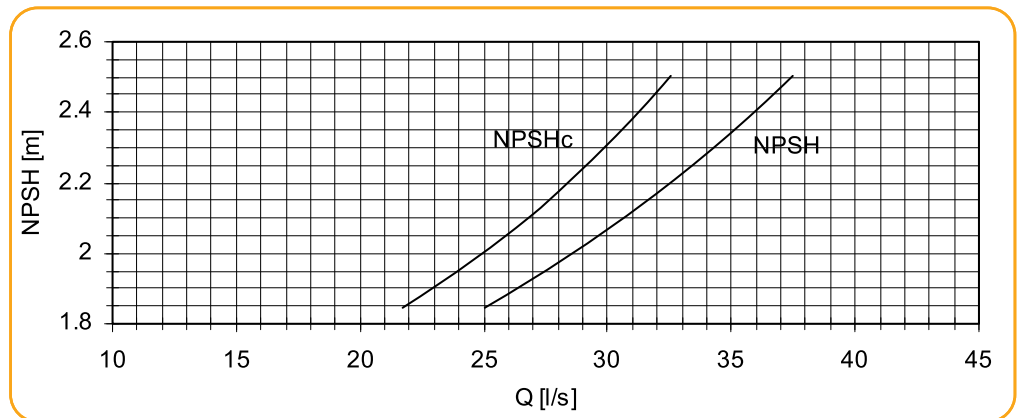
Power Input



Efficiency



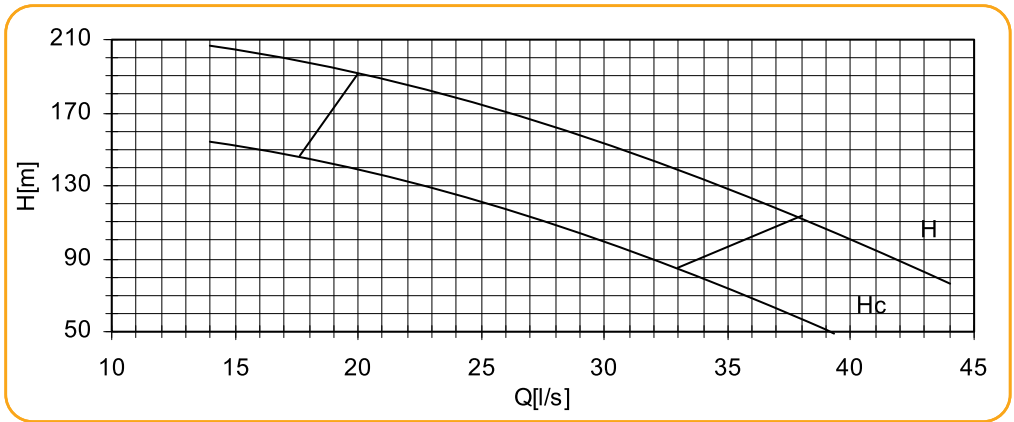
Net Positive  
Suction Head



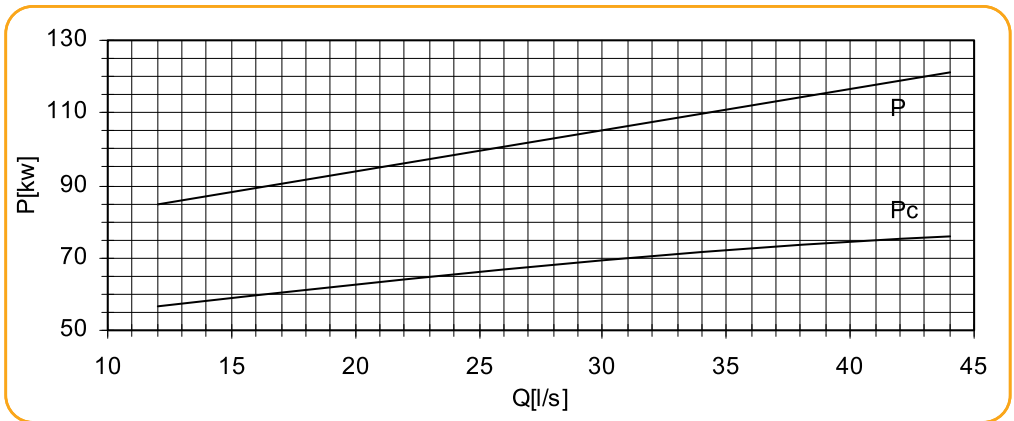


Pump performance curves

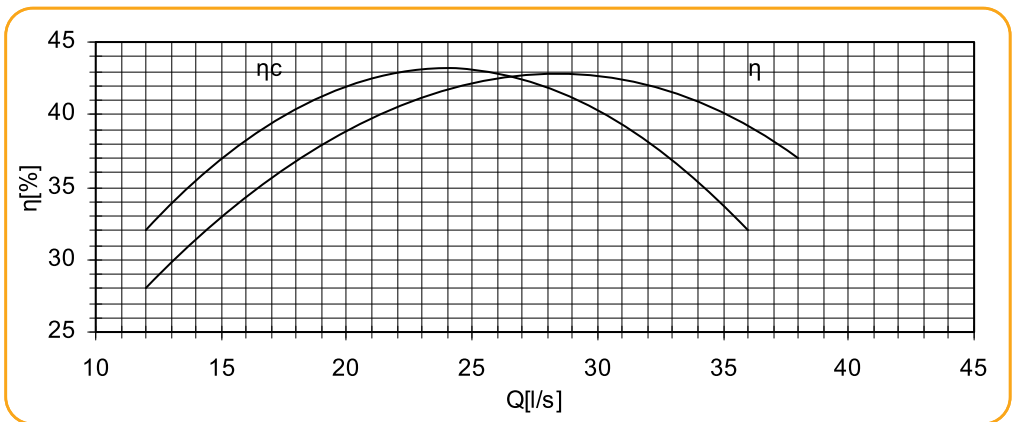
Total  
Differential  
Head



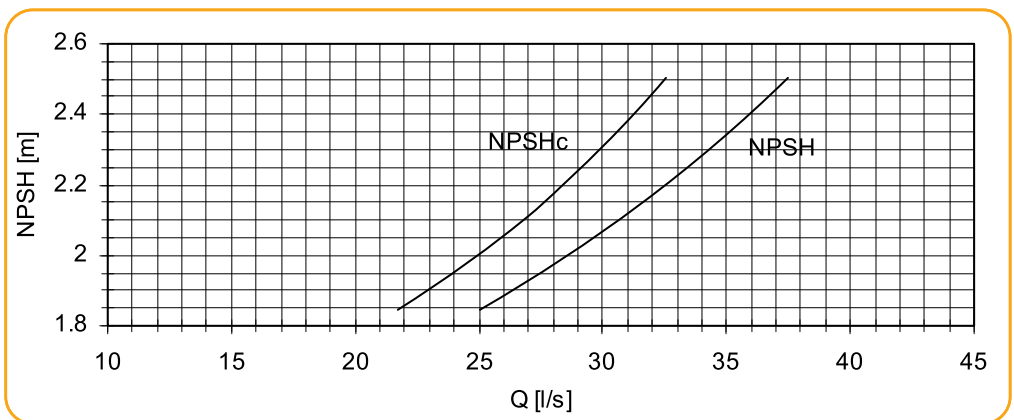
Power Input



Efficiency



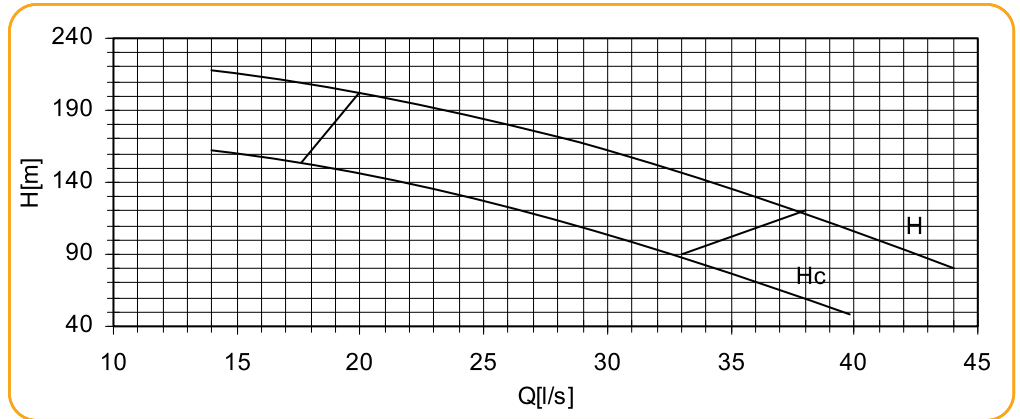
Net Positive  
Suction Head



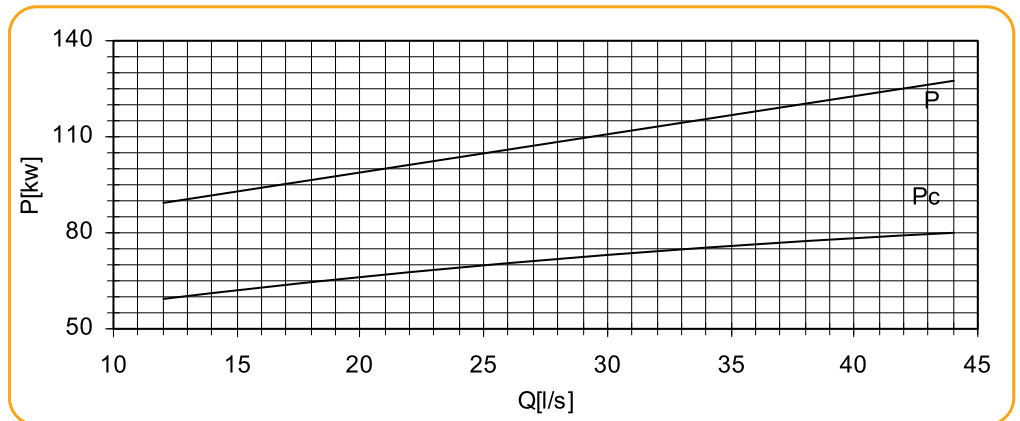
Pump performance curves

DP 10A-20  
n = 1450 (rpm)

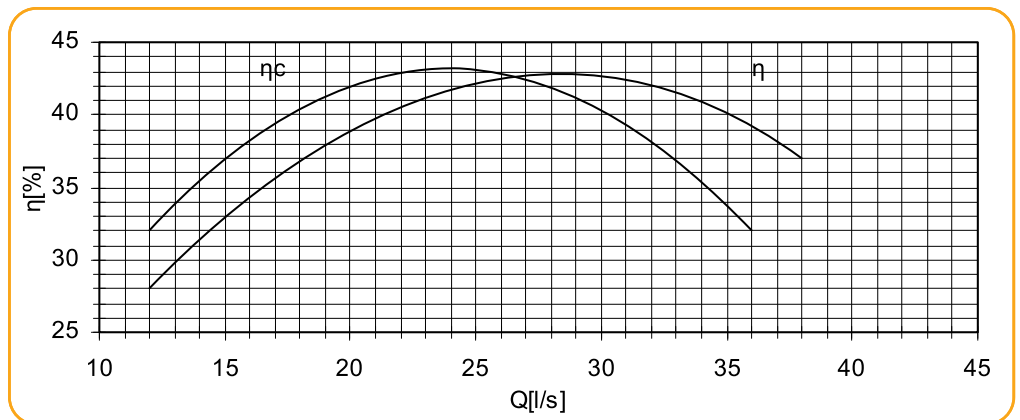
Total  
Differential  
Head



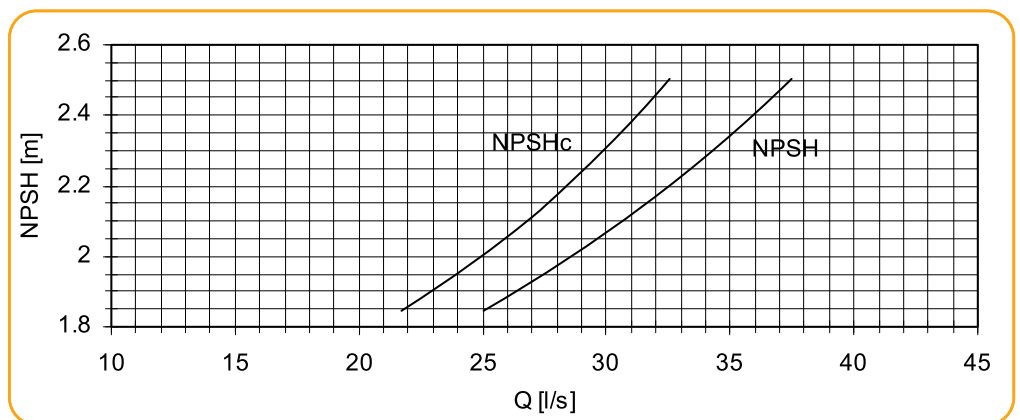
Power Input



Efficiency



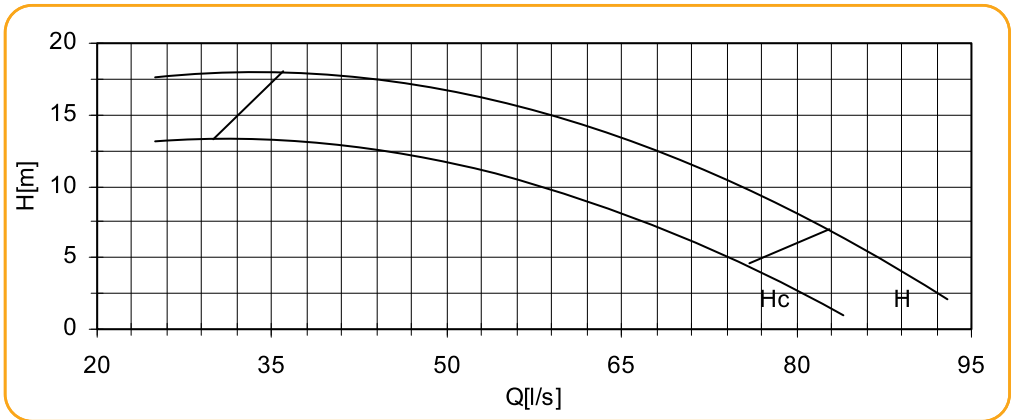
Net Positive  
Suction Head



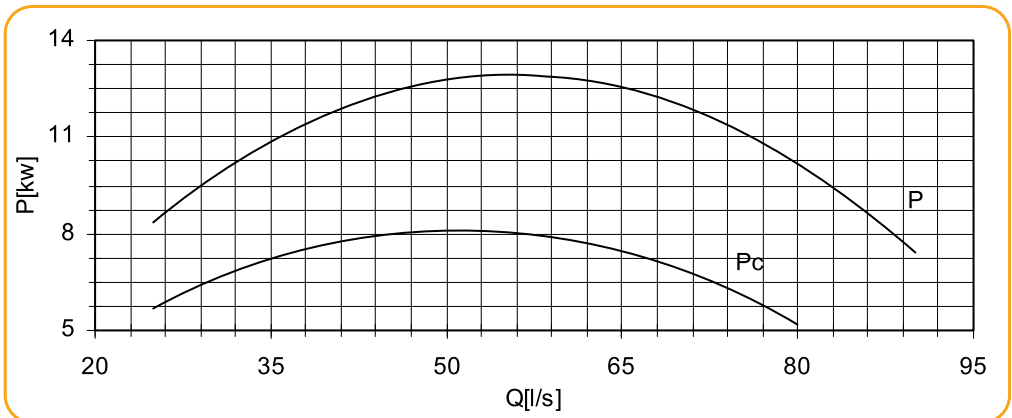
Performance curves are valid for clear water  $t=20\text{ }^{\circ}\text{C}$ ,  $\rho=1000\text{ kg/m}^3$ . NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

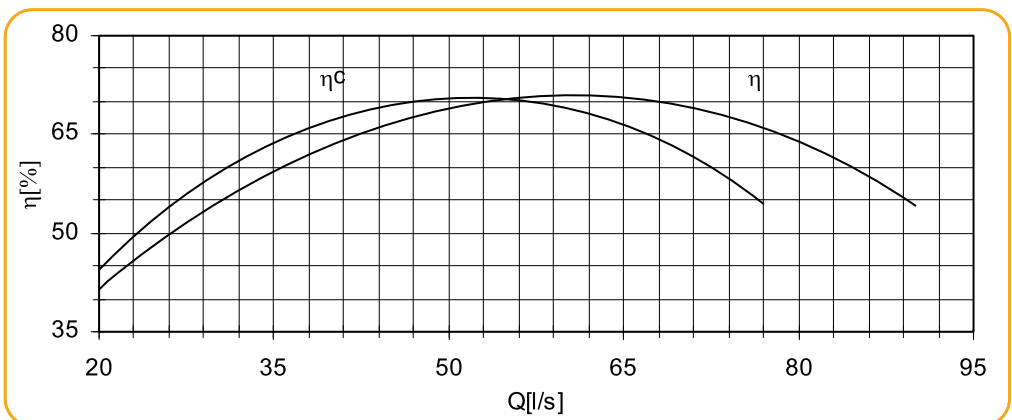
Total  
Differential  
Head



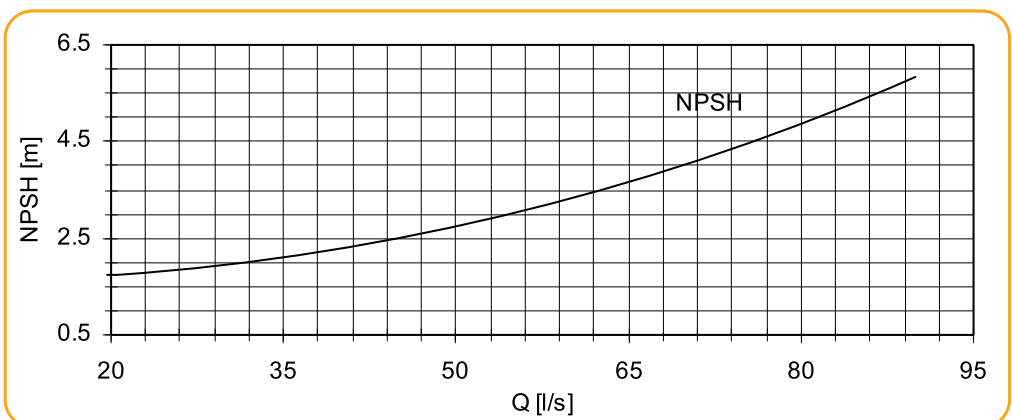
Power Input



Efficiency

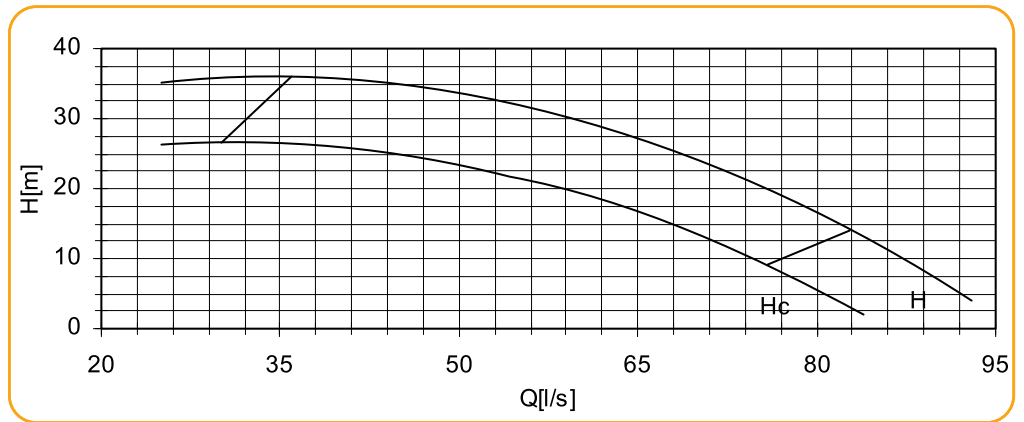


Net Positive  
Suction Head

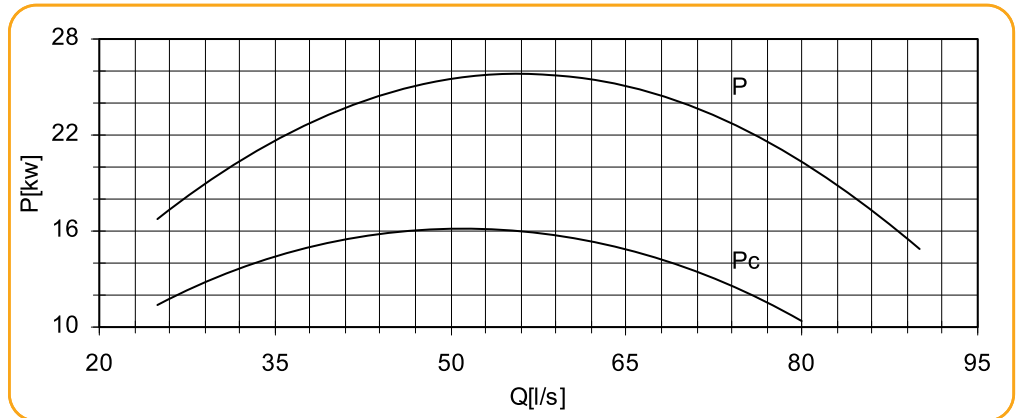


Pump performance curves

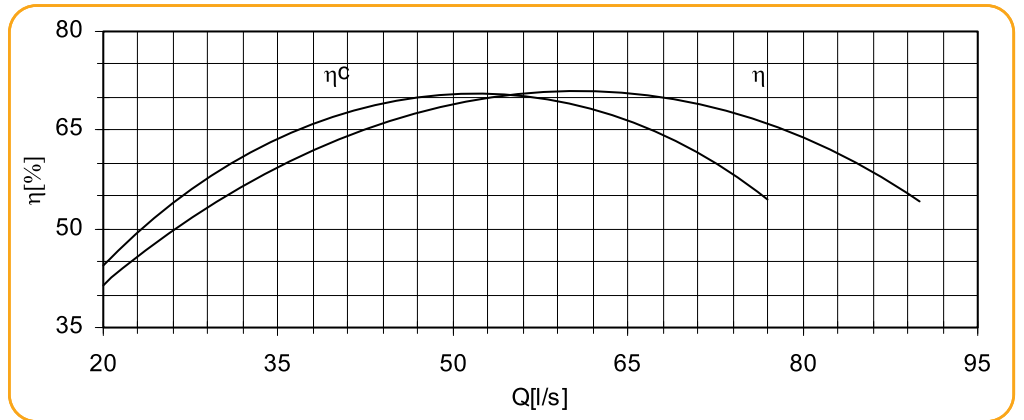
Total  
Differential  
Head



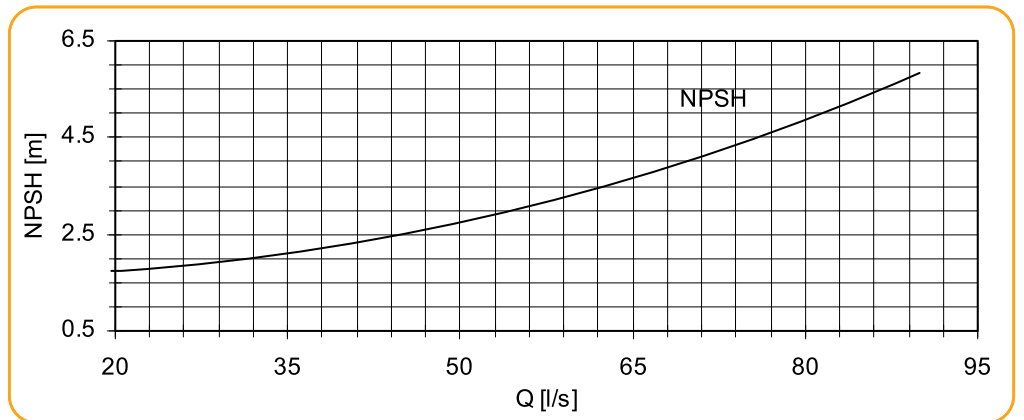
Power Input



Efficiency



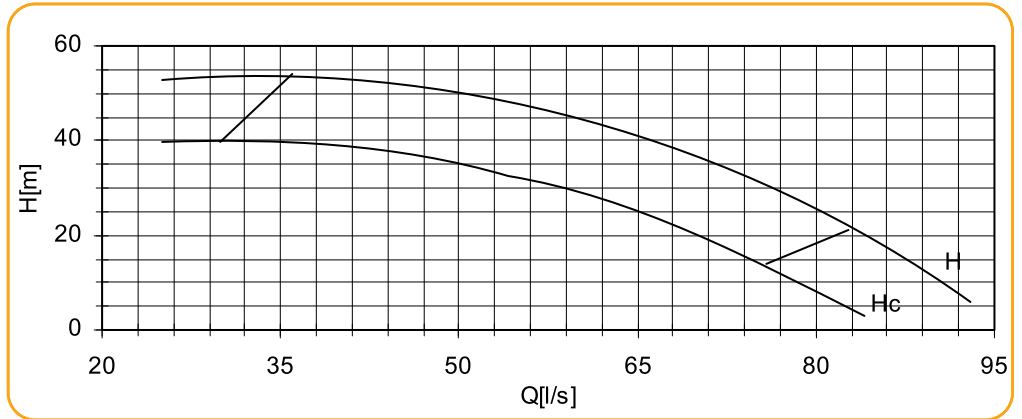
Net Positive  
Suction Head



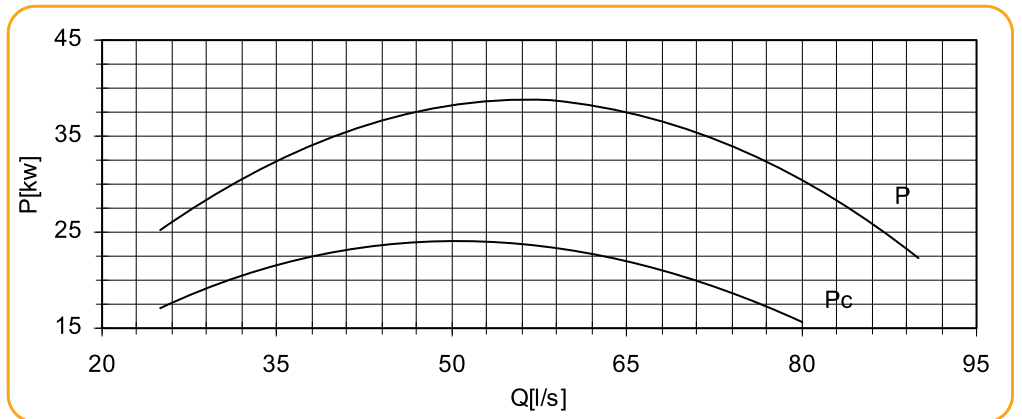
Performance curves are valid for clear water t=20 °C, ρ=1000 kg/m<sup>3</sup>. NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

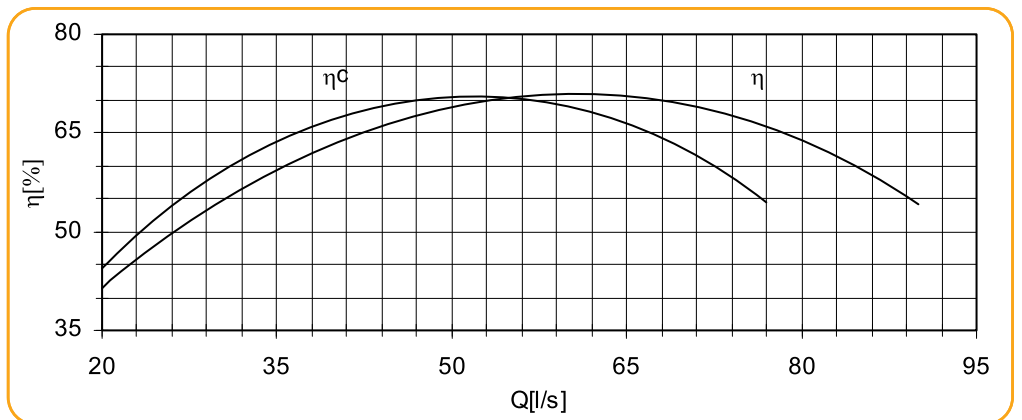
Total  
Differential  
Head



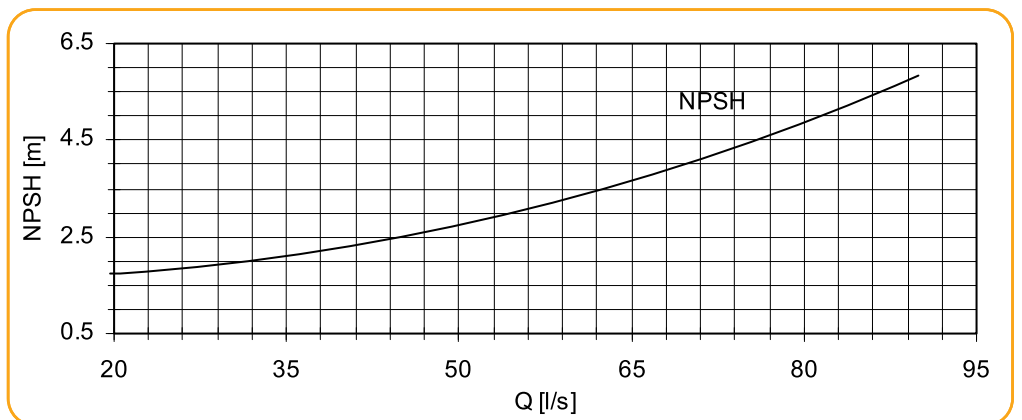
Power Input



Efficiency



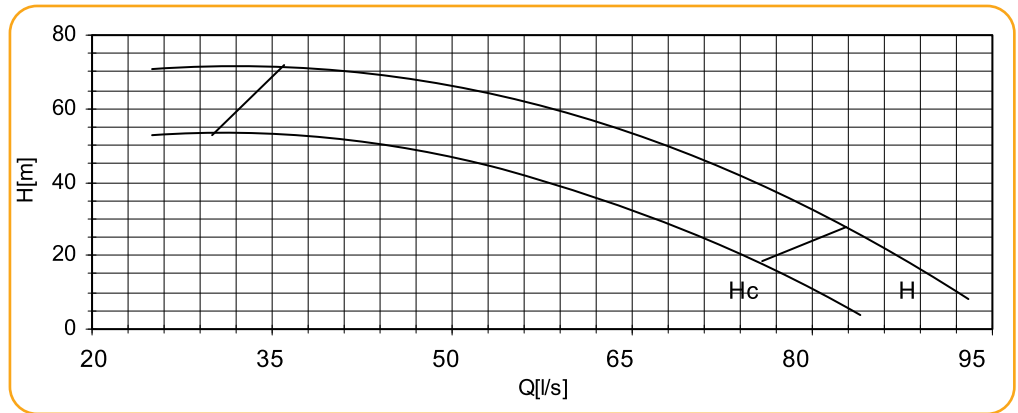
Net Positive  
Suction Head



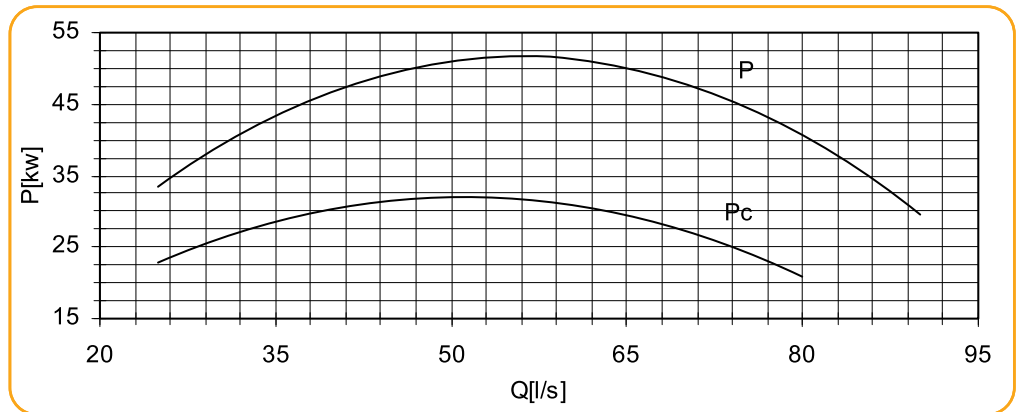
Pump performance curves

DP 14-4  
n = 1450 (rpm)

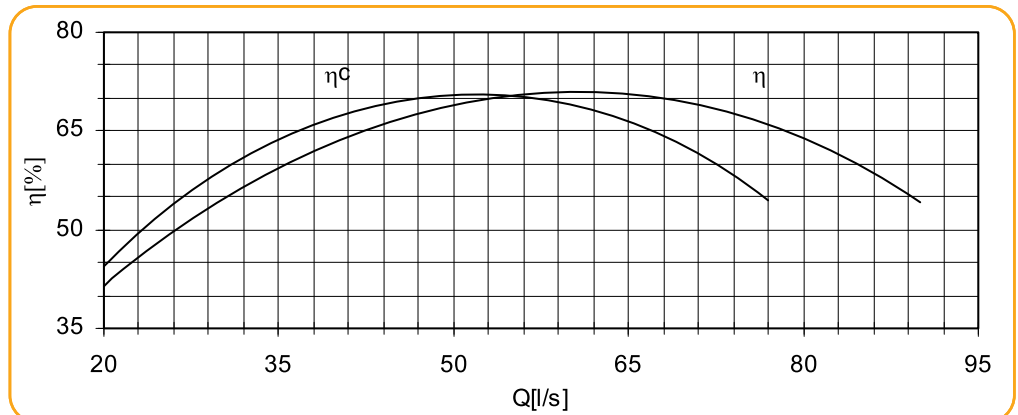
Total  
Differential  
Head



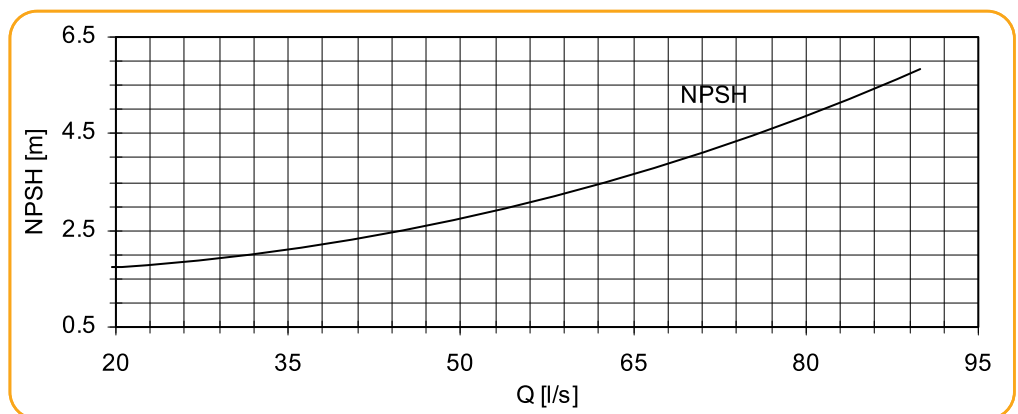
Power Input



Efficiency



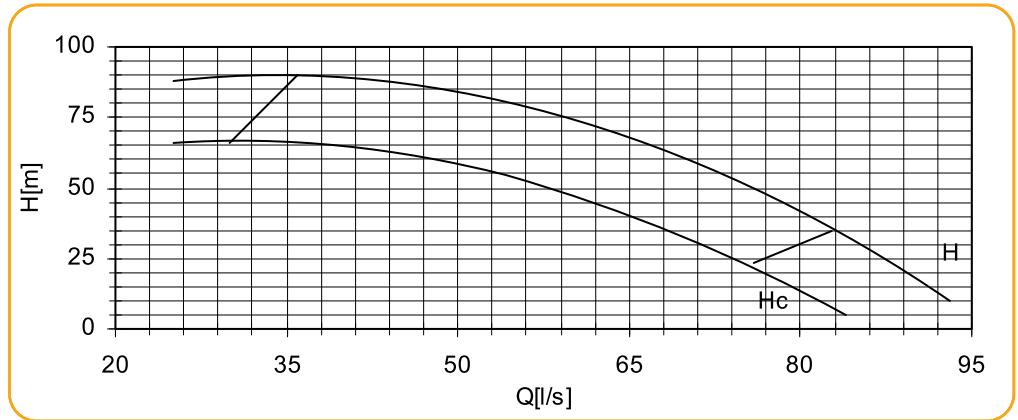
Net Positive  
Suction Head



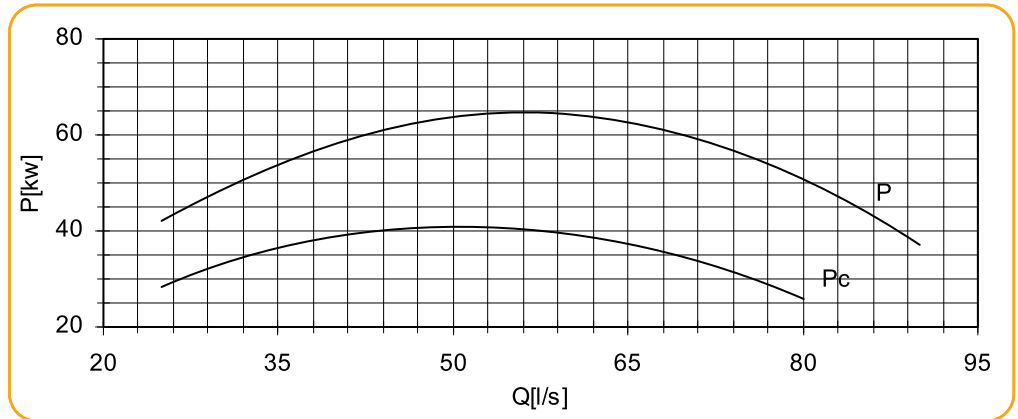
Performance curves are valid for clear water t=20 °C, ρ=1000 kg/m<sup>3</sup>.. NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

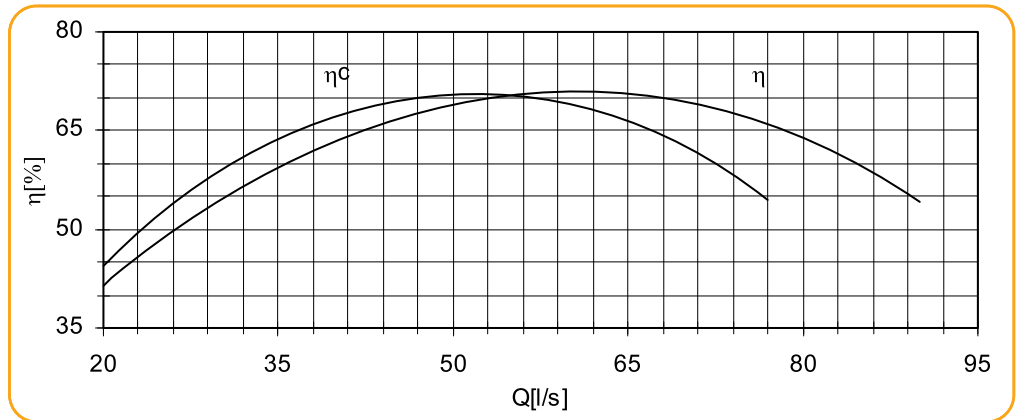
Total  
Differential  
Head



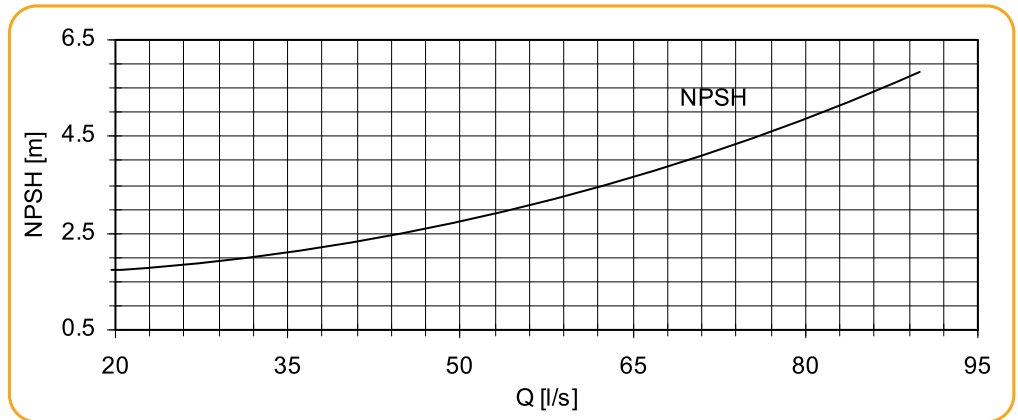
Power Input



Efficiency



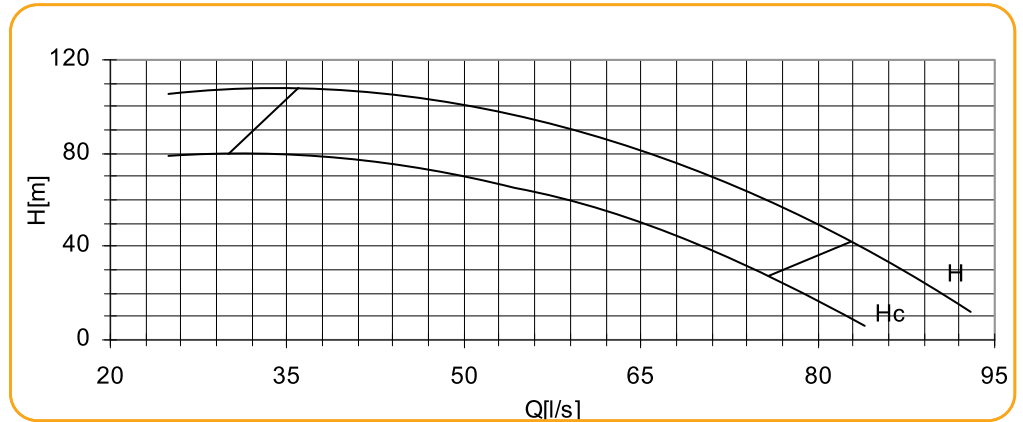
Net Positive  
Suction Head



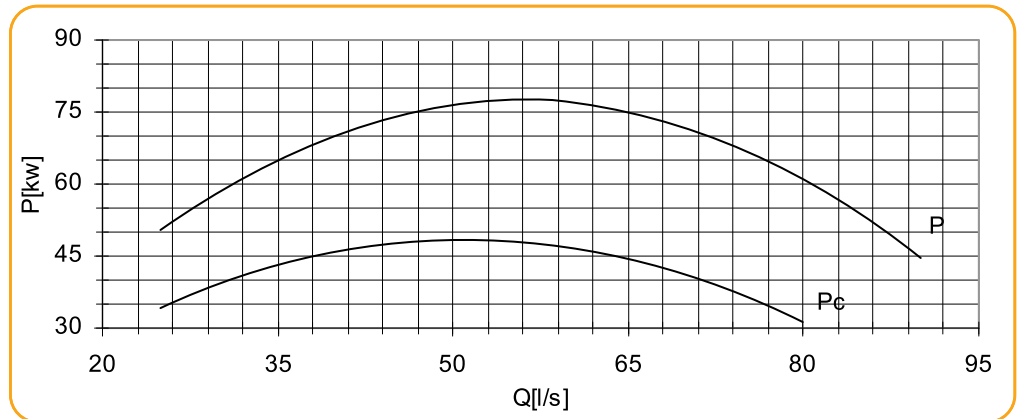
Pump performance curves

DP 14-6  
n =1450 (rpm)

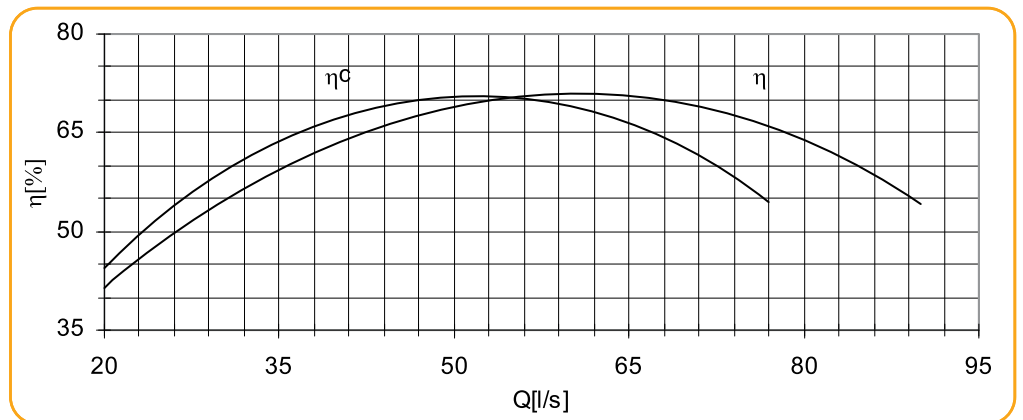
Total  
Differential  
Head



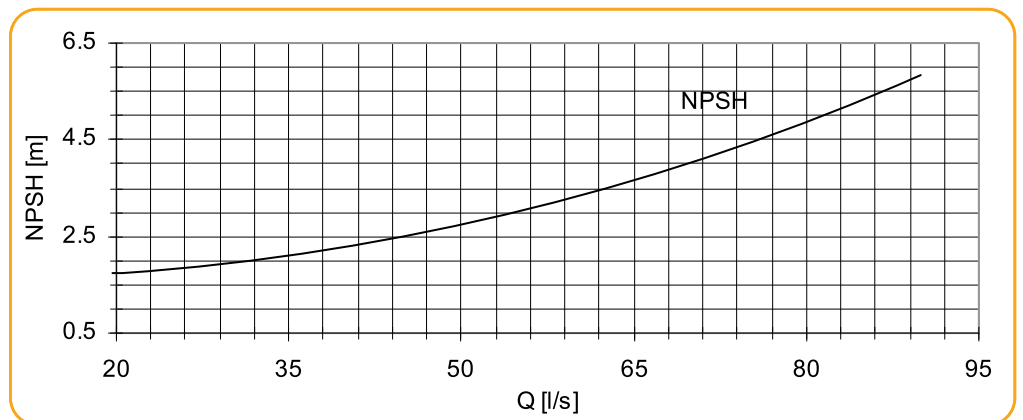
Power Input



Efficiency



Net Positive  
Suction Head

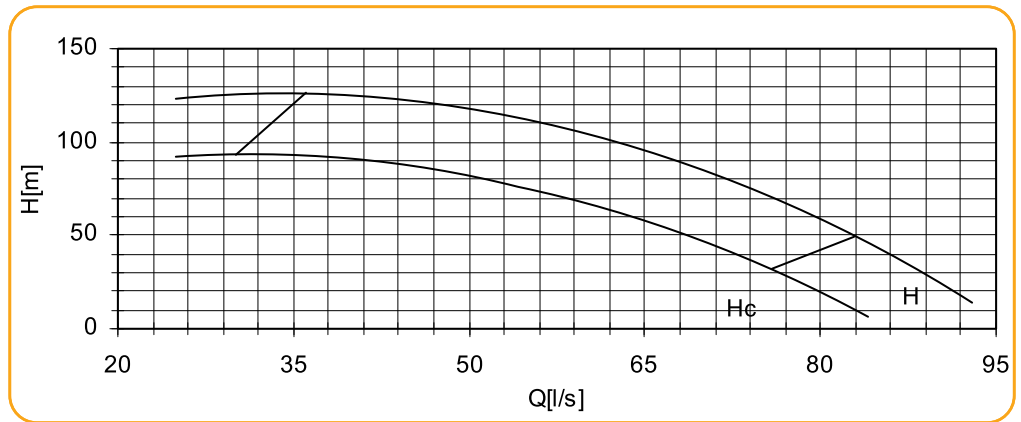


Performance curves are valid for clear water  $t=20\text{ }^{\circ}\text{C}$ ,  $\rho=1000\text{ kg/m}^3$ . NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

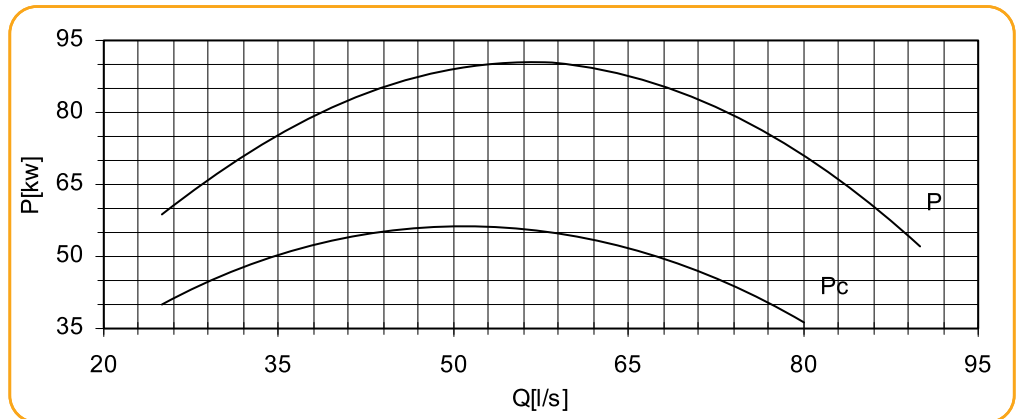


Pump performance curves

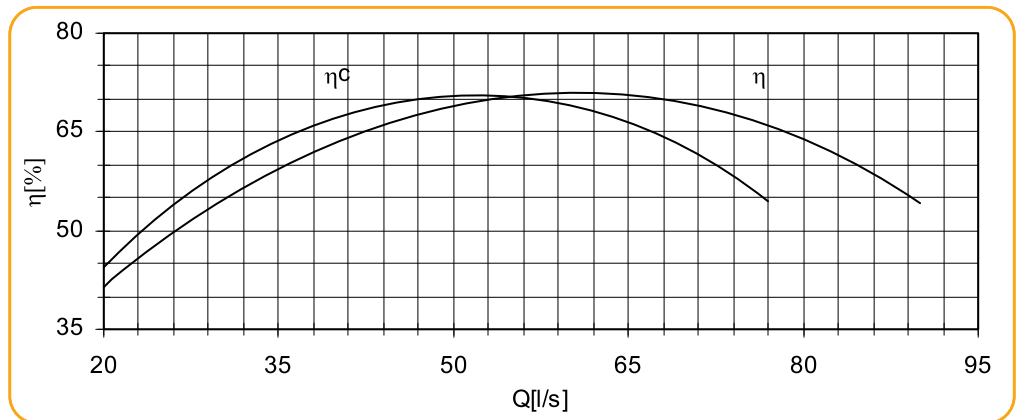
Total Differential Head



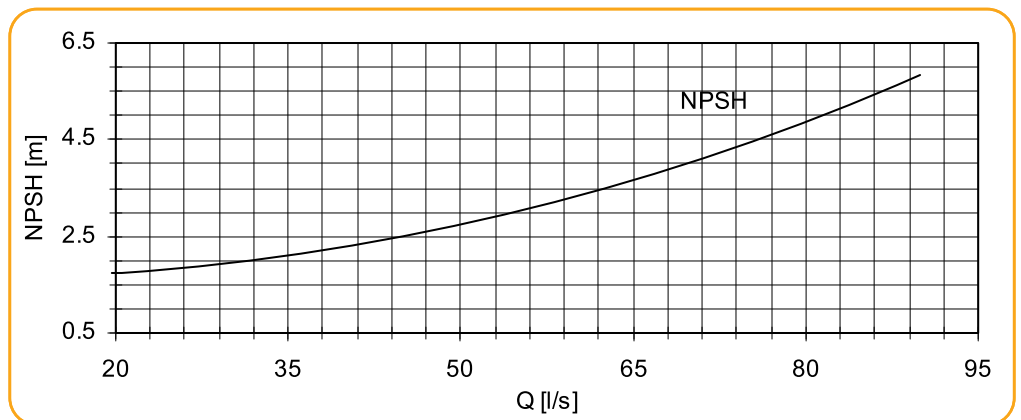
Power Input



Efficiency



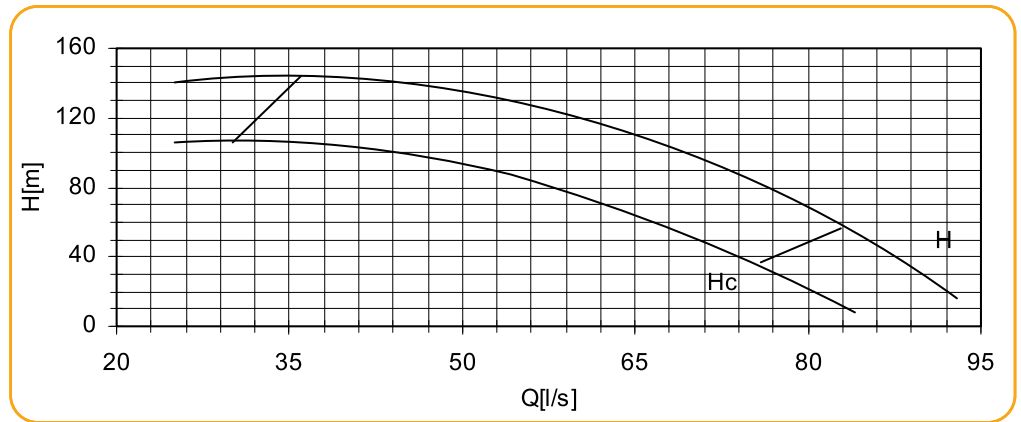
Net Positive Suction Head



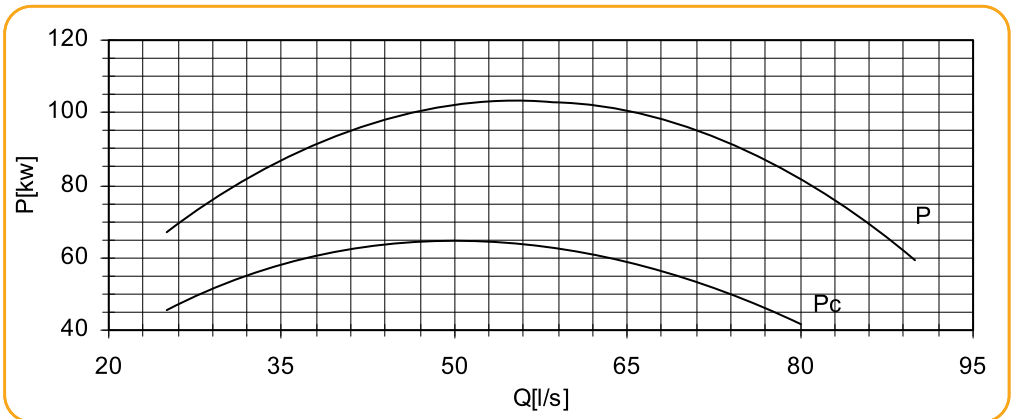
Pump performance curves

DP 14-8  
n = 1450 (rpm)

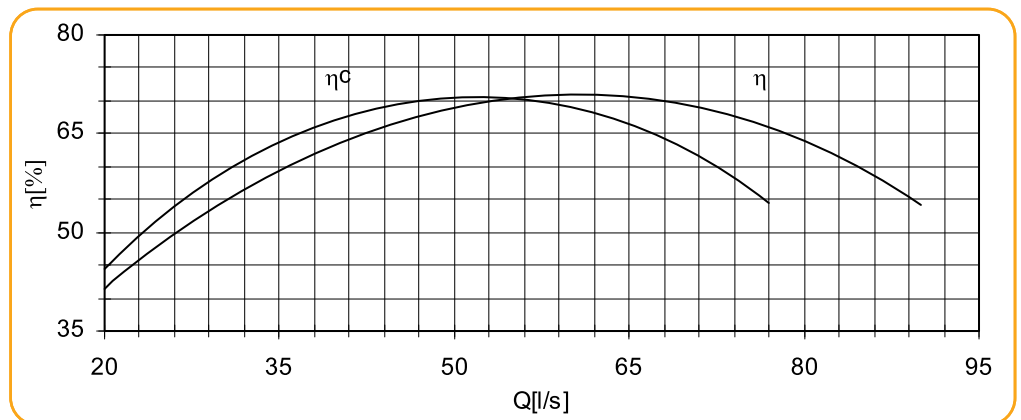
Total  
Differential  
Head



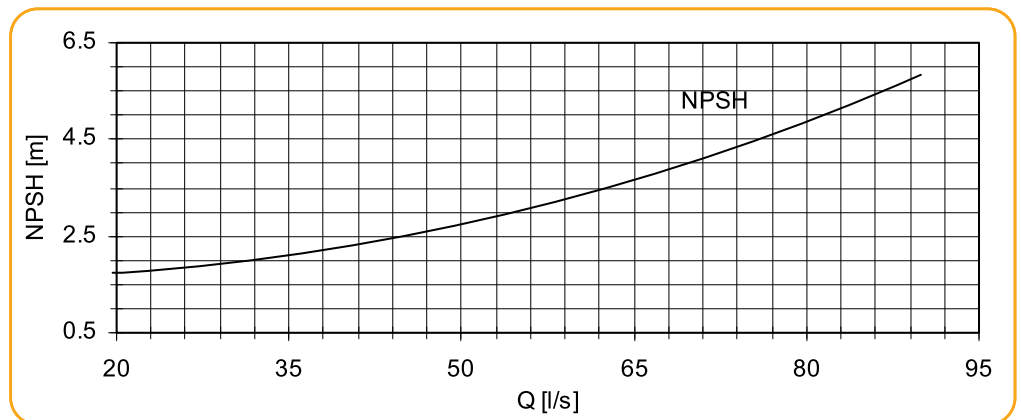
Power Input



Efficiency



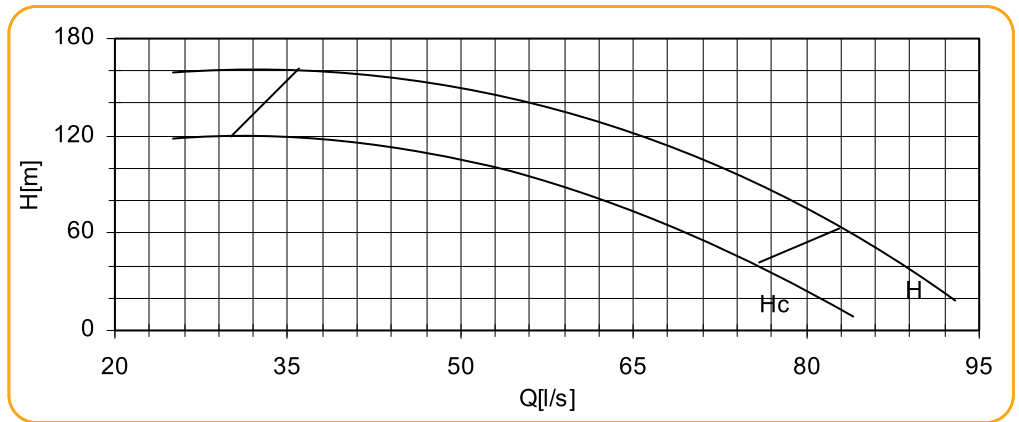
Net Positive  
Suction Head



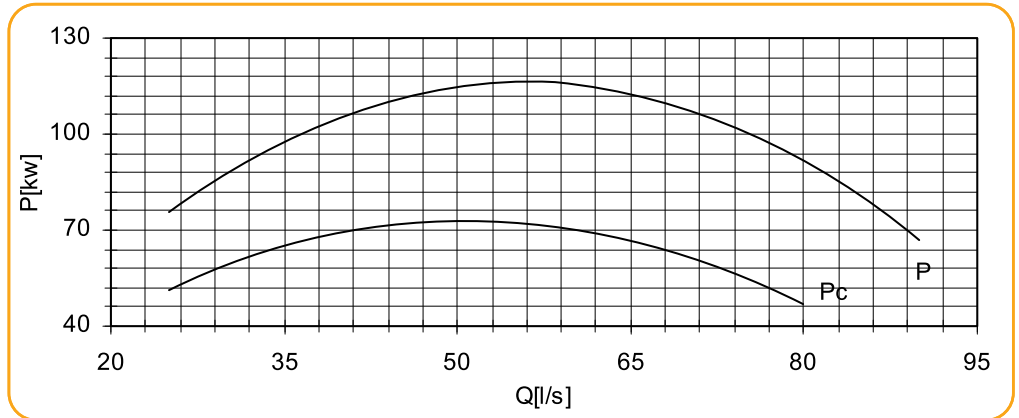
Performance curves are valid for clear water  $t=20\text{ }^{\circ}\text{C}$ ,  $\rho=1000\text{ kg/m}^3$ . NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

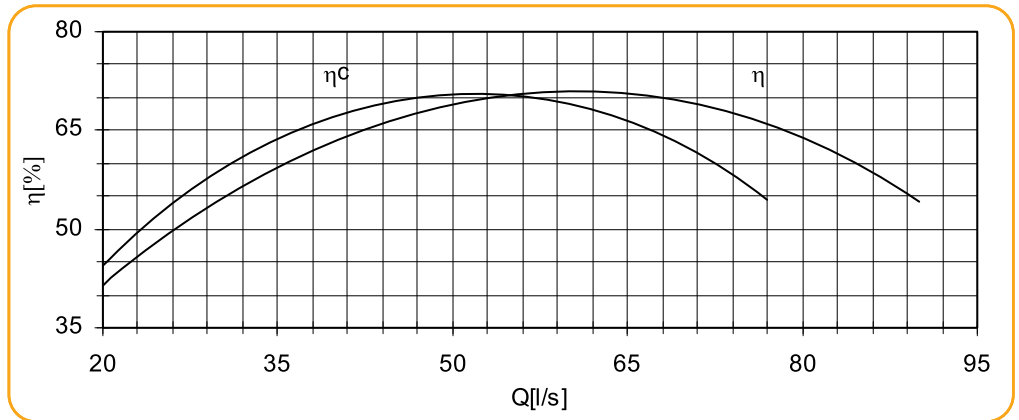
Total Differential Head



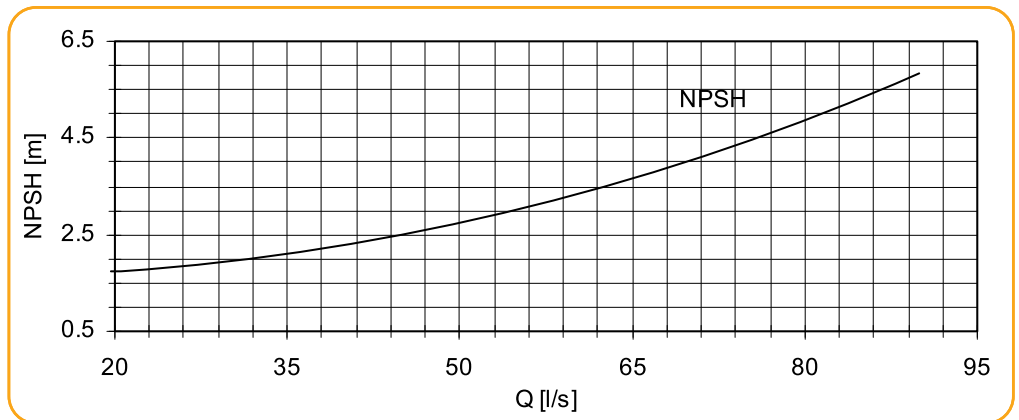
Power Input



Efficiency

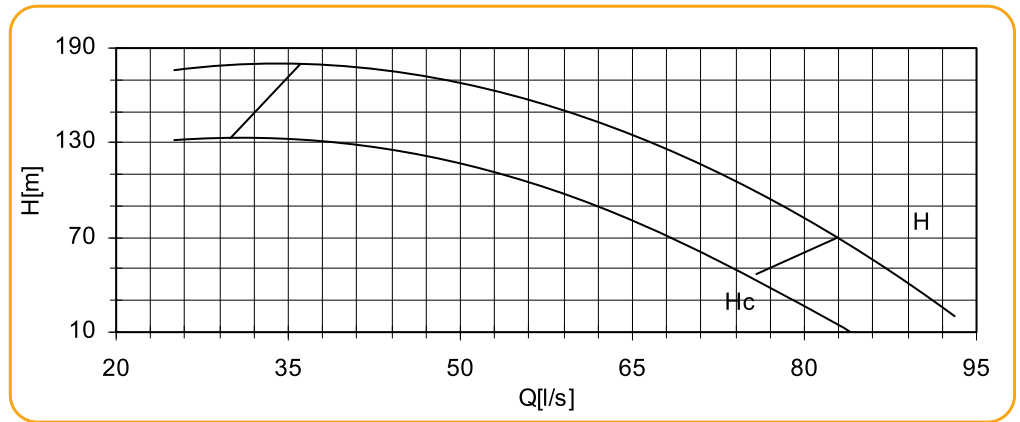


Net Positive Suction Head

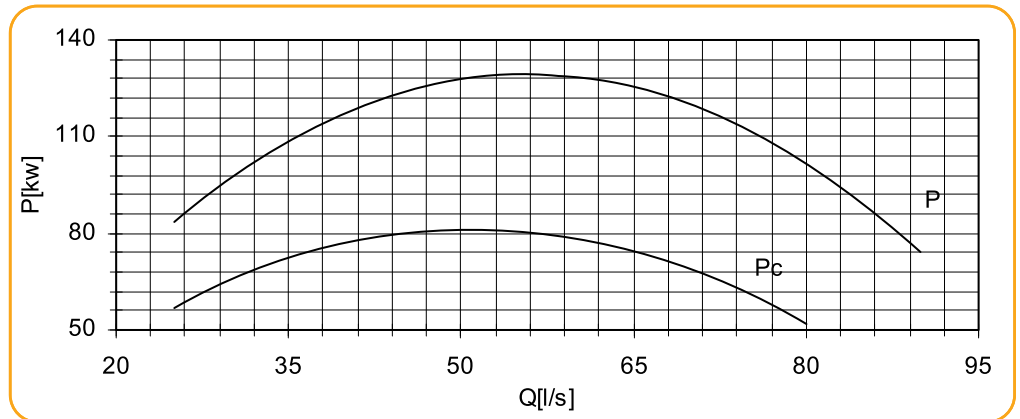


Pump performance curves

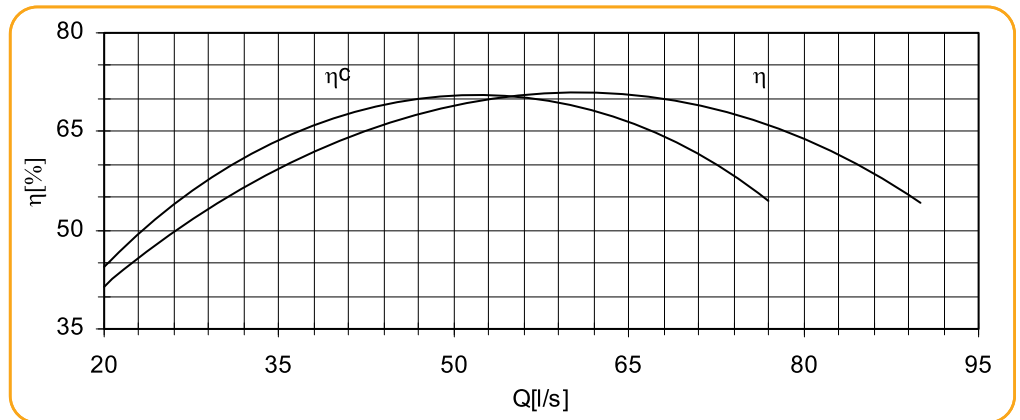
Total  
Differential  
Head



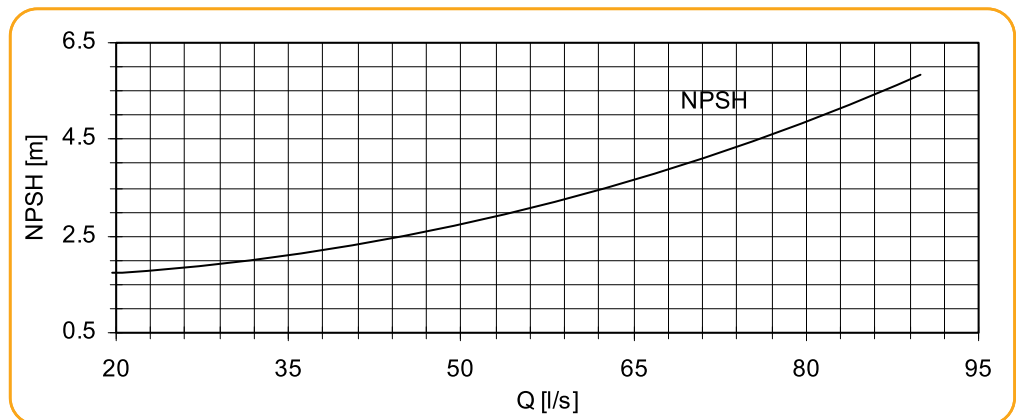
Power Input



Efficiency



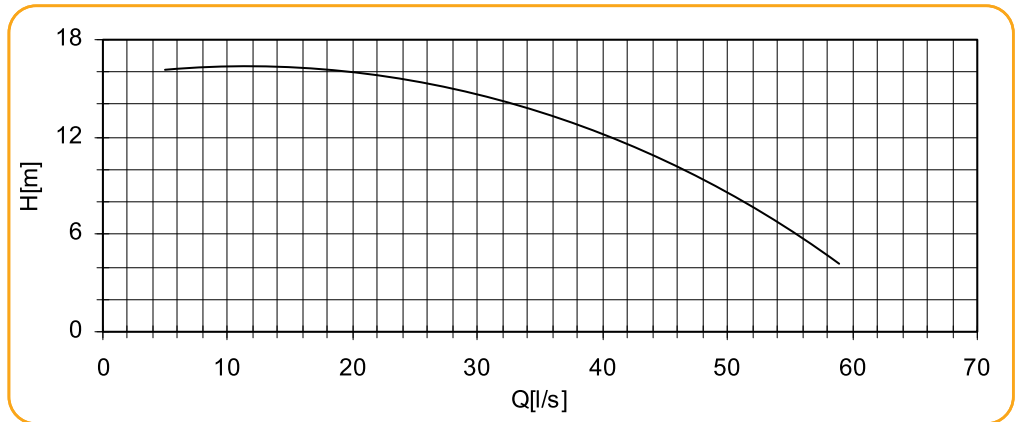
Net Positive  
Suction Head



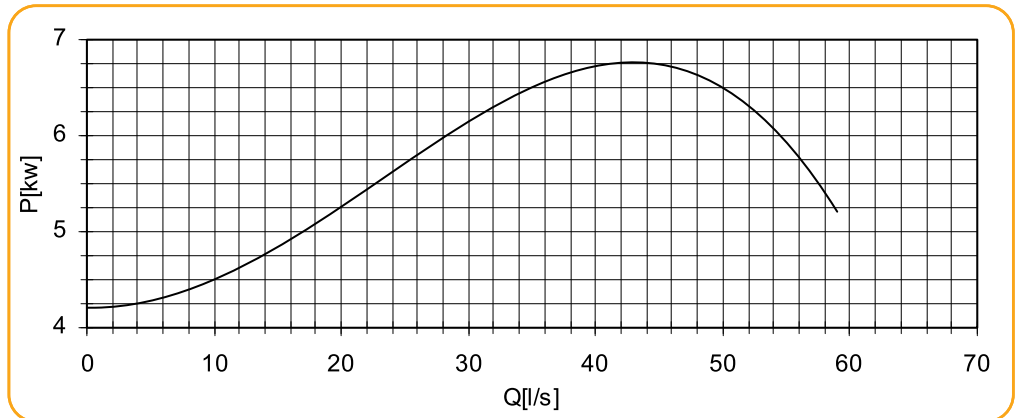
Performance curves are valid for clear water  $t=20\text{ }^{\circ}\text{C}$ ,  $\rho=1000\text{ kg/m}^3$ . NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

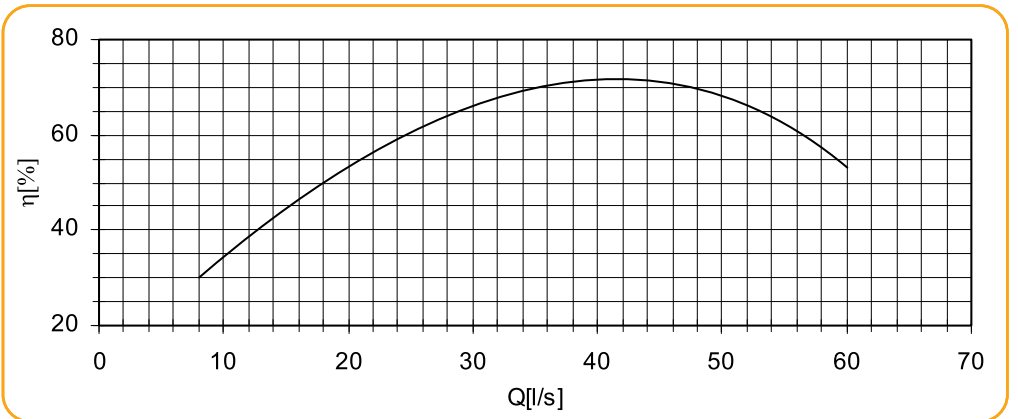
Total  
Differential  
Head



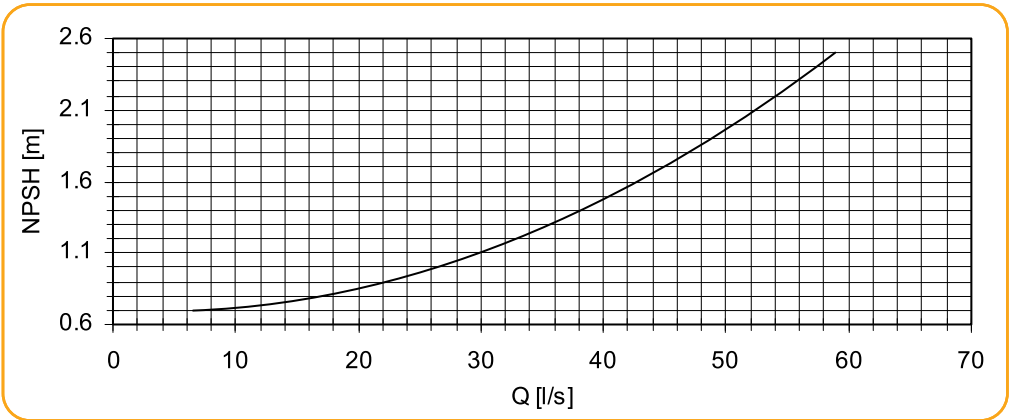
Power Input



Efficiency



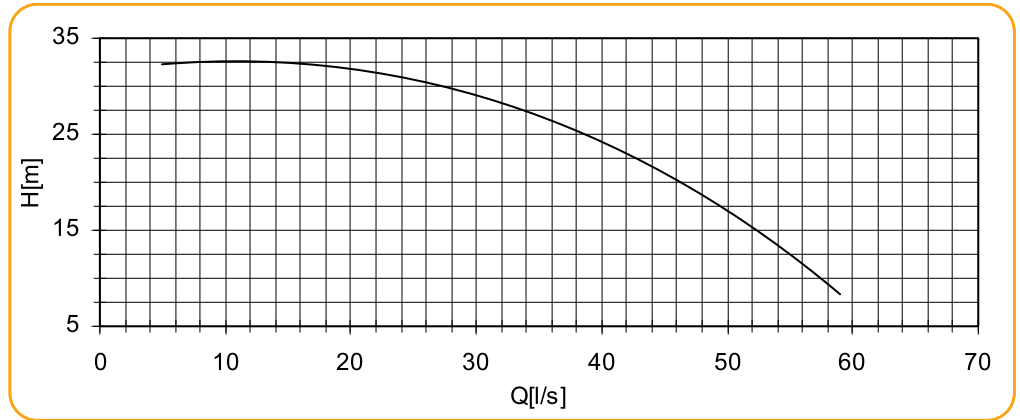
Net Positive  
Suction Head



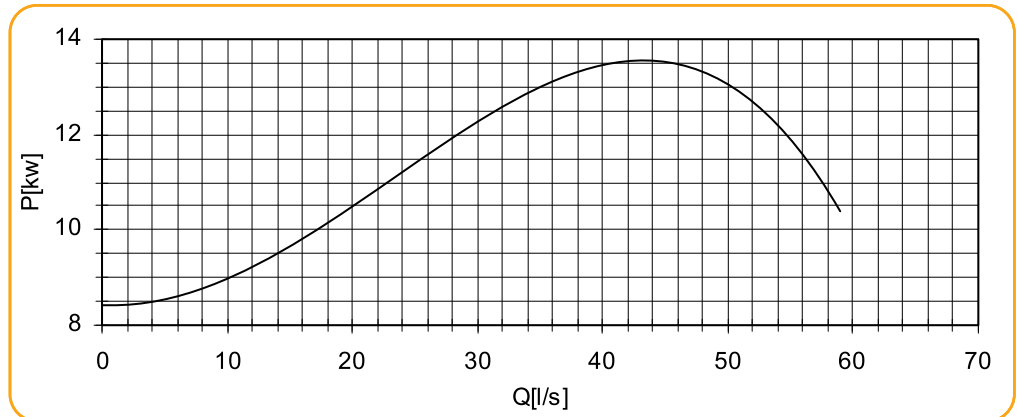
Pump performance curves

DP 14-4  
n =950 (rpm)

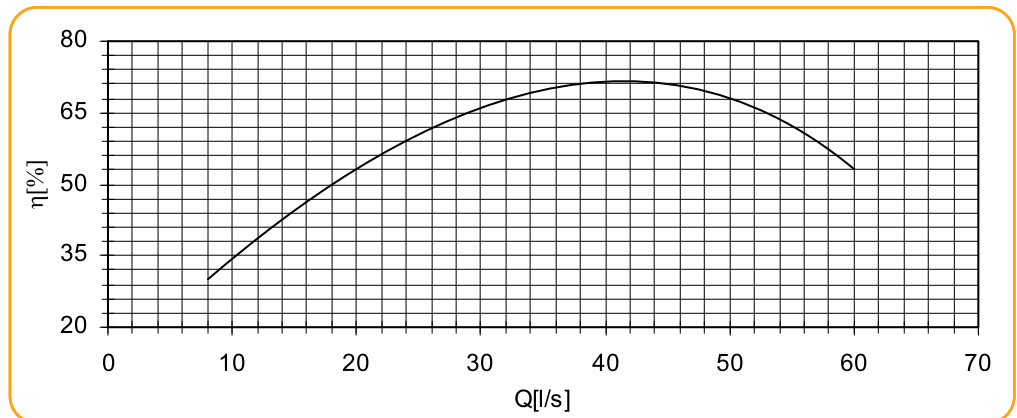
Total  
Differential  
Head



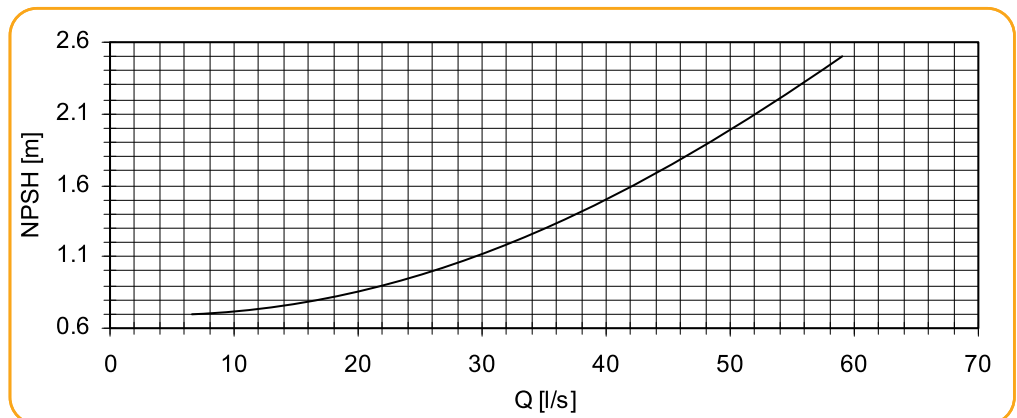
Power Input



Efficiency



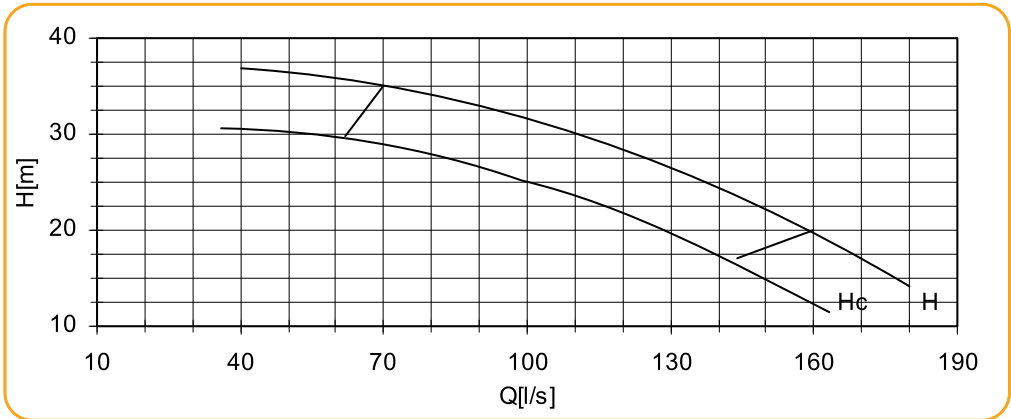
Net Positive  
Suction Head



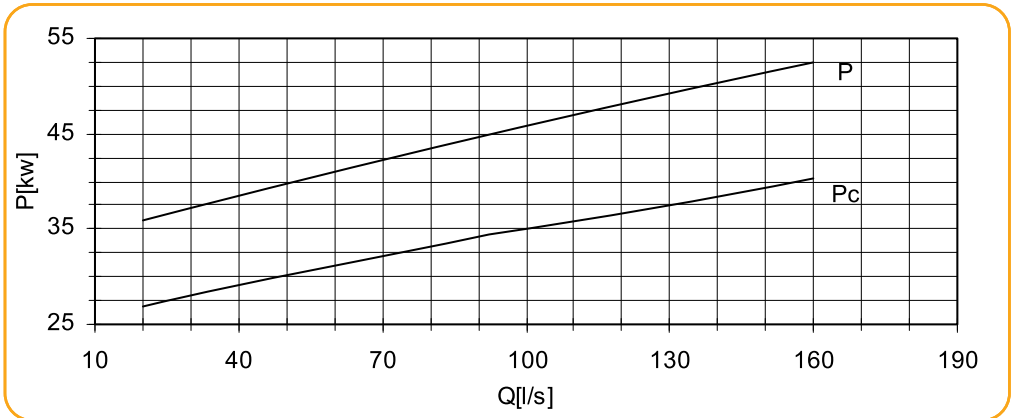
Performance curves are valid for clear water t=20 °C, ρ=1000 kg/m³. NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

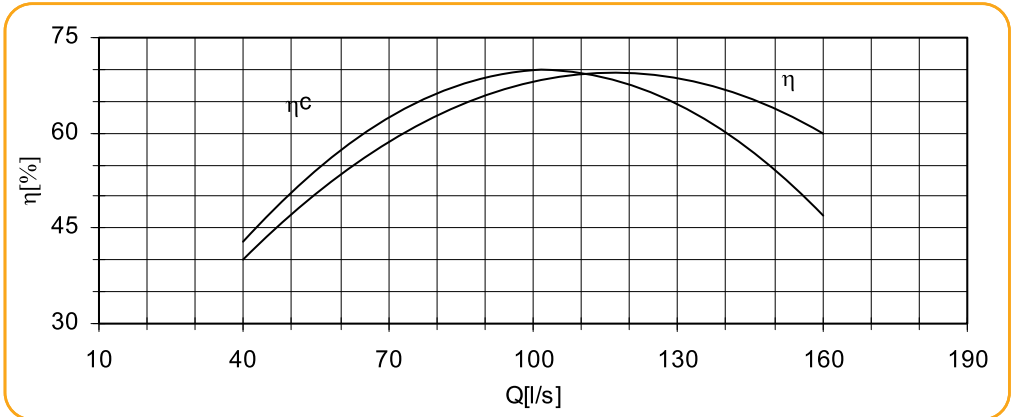
Total Differential Head



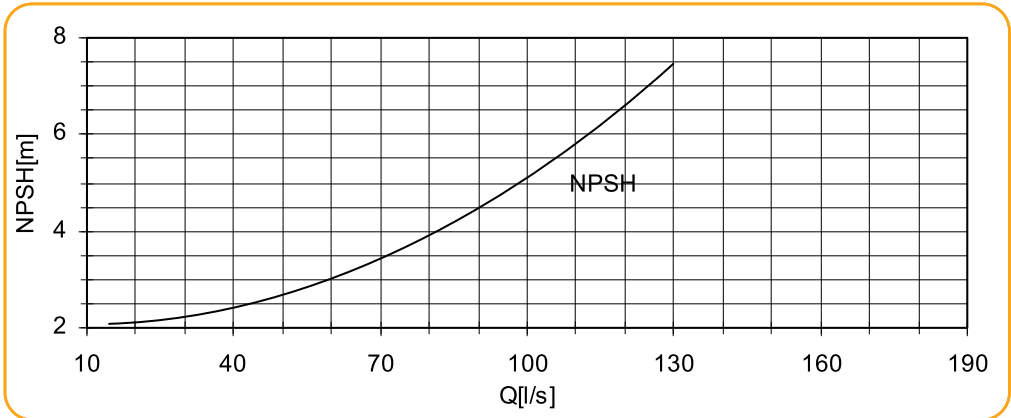
Power Input



Efficiency



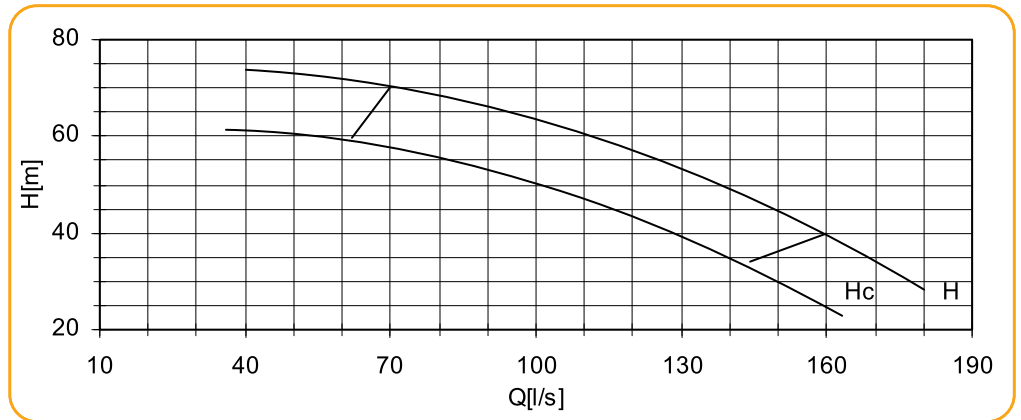
Net Positive Suction Head



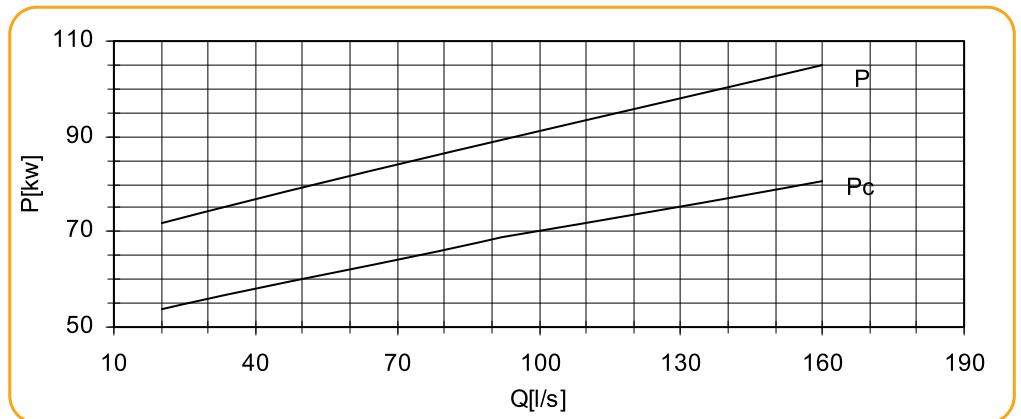
Pump performance curves

DP 18-8  
n = 1450 (rpm)

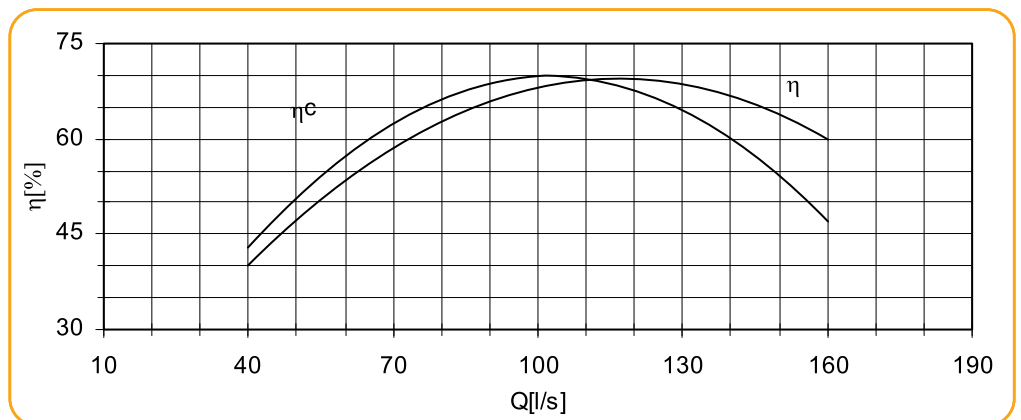
Total  
Differential  
Head



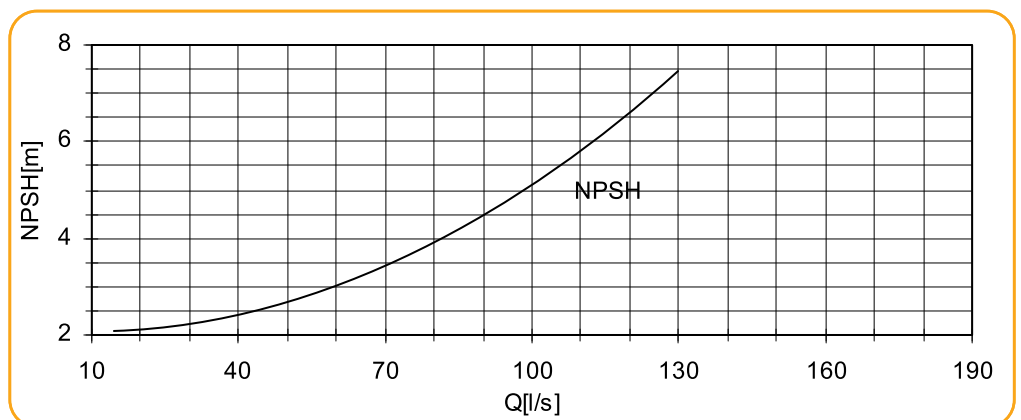
Power Input



Efficiency



Net Positive  
Suction Head

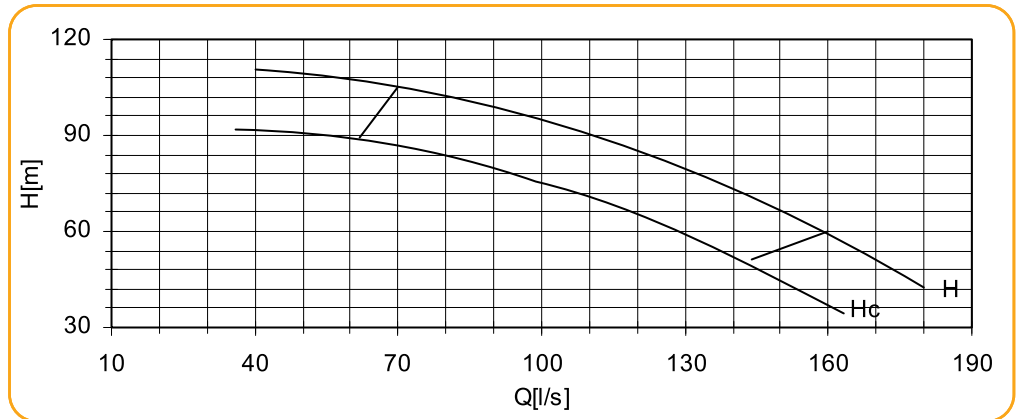


Performance curves are valid for clear water  $t=20\text{ }^{\circ}\text{C}$ ,  $\rho=1000\text{ kg/m}^3$ . NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

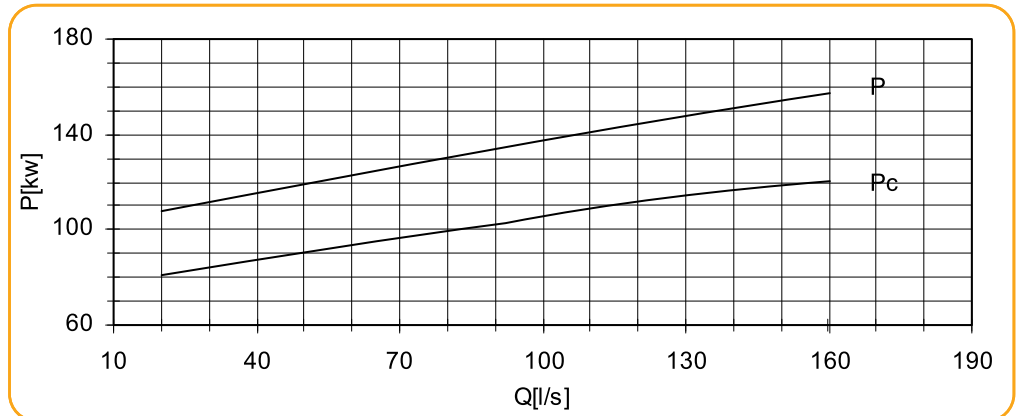


Pump performance curves

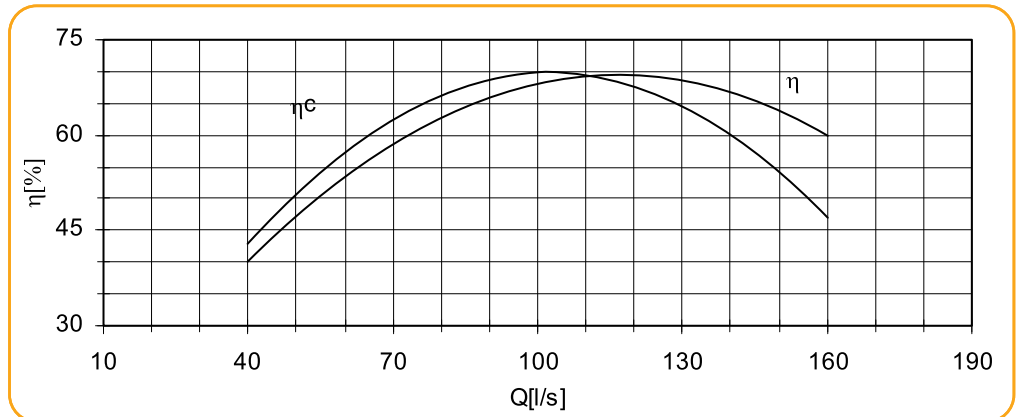
Total  
Differential  
Head



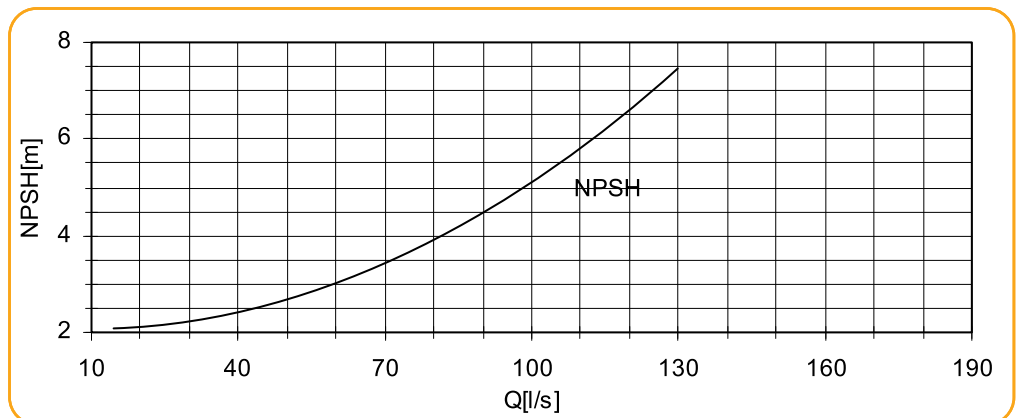
Power Input



Efficiency



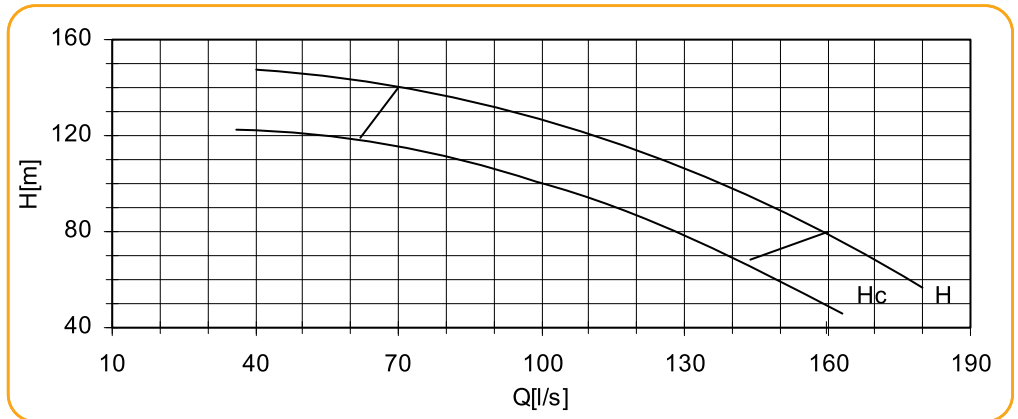
Net Positive  
Suction Head



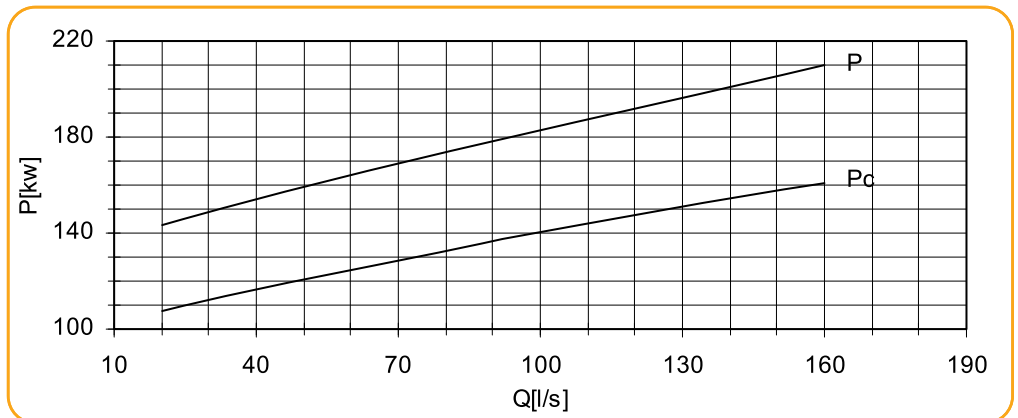
Pump performance curves

DP 18-4  
n = 1450 (rpm)

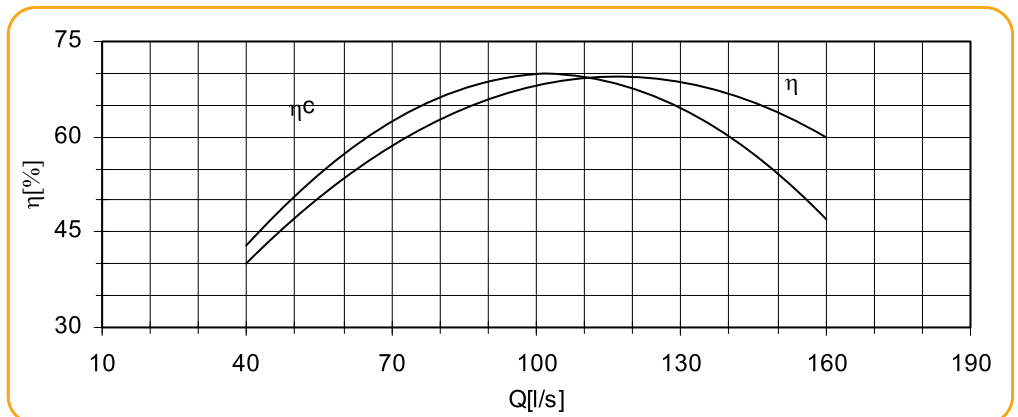
Total  
Differential  
Head



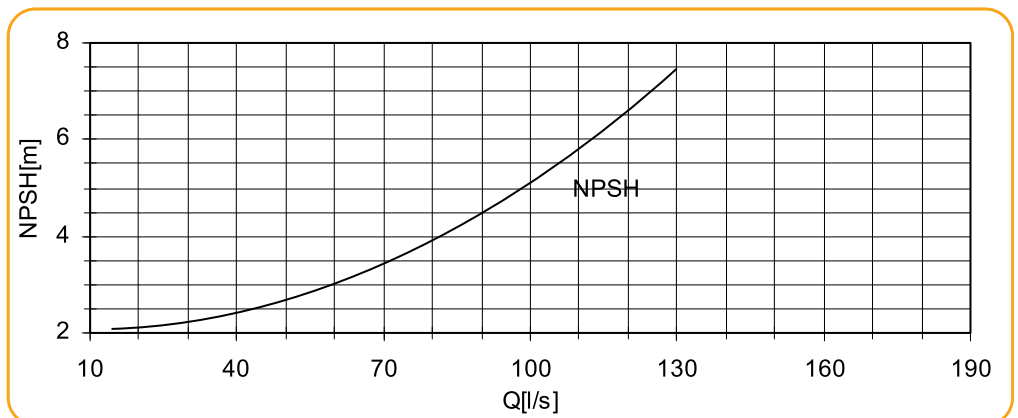
Power Input



Efficiency



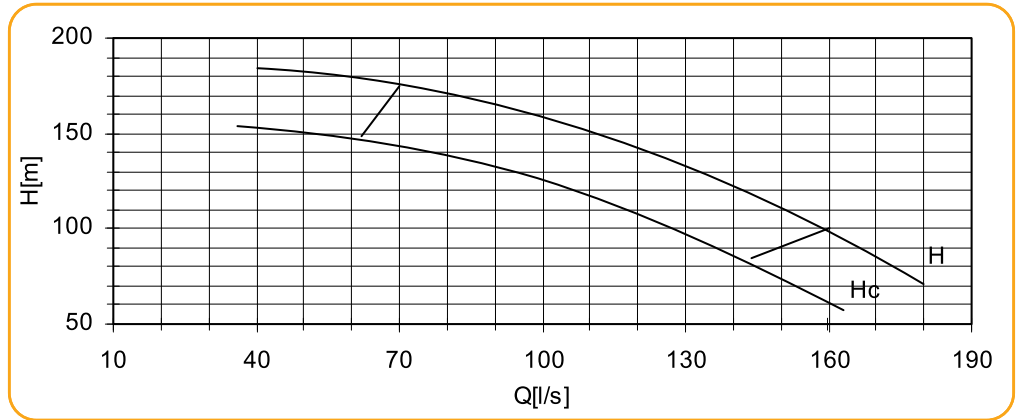
Net Positive  
Suction Head



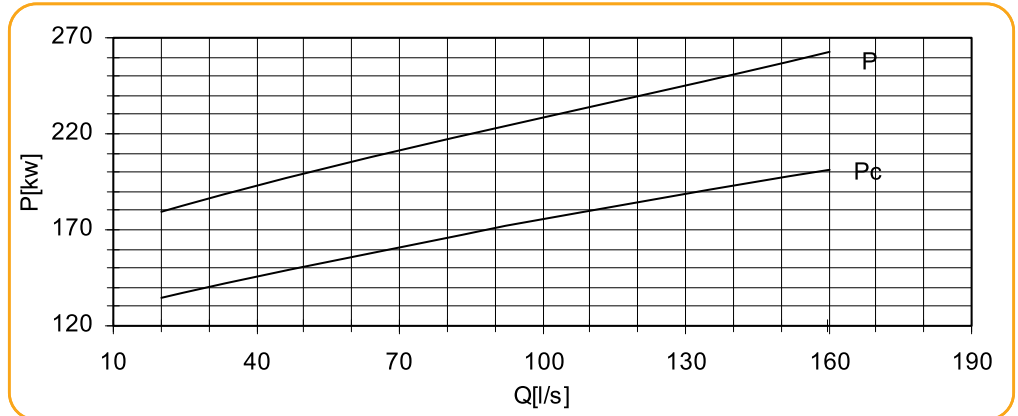
Performance curves are valid for clear water t=20 °C, ρ=1000 kg/m<sup>3</sup>.. NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

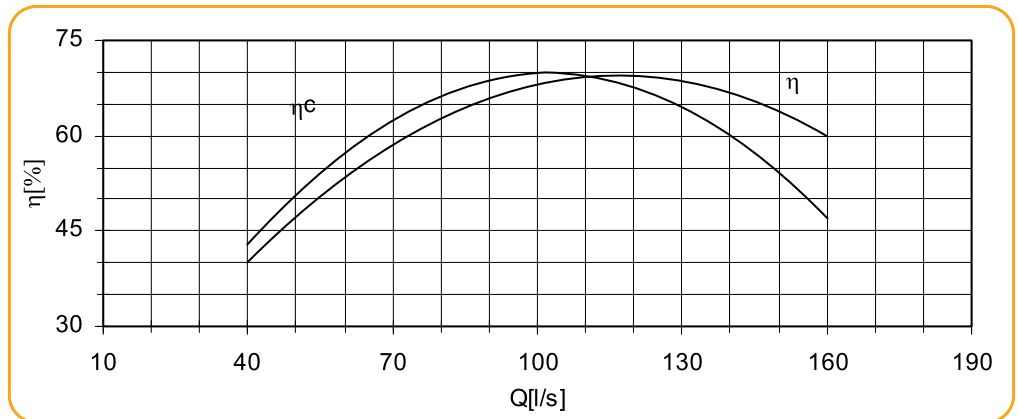
Total  
Differential  
Head



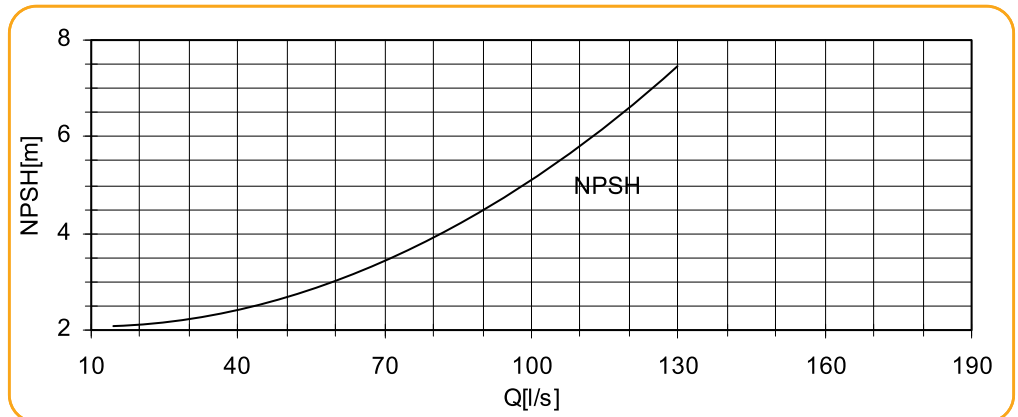
Power Input



Efficiency



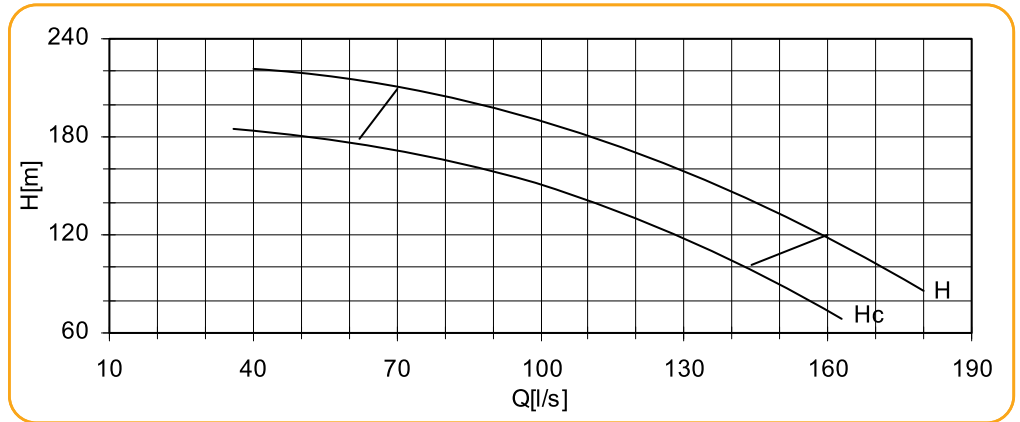
Net Positive  
Suction Head



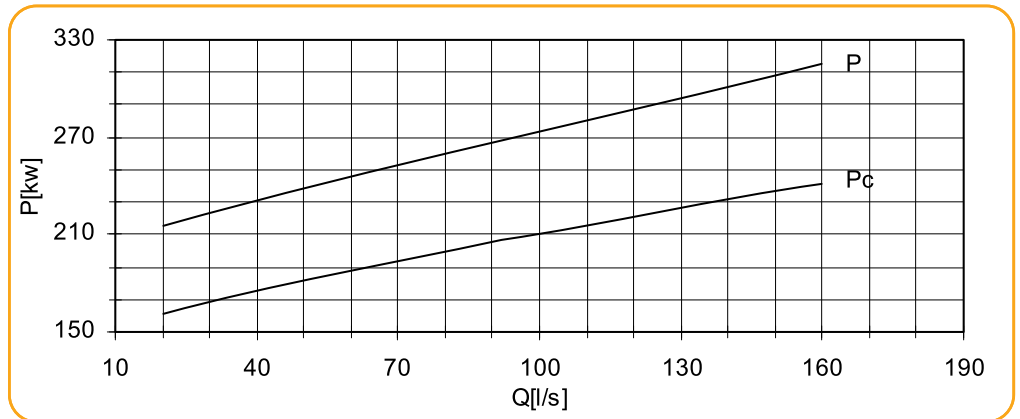
Pump performance curves

DP 18-6  
n = 1450 (rpm)

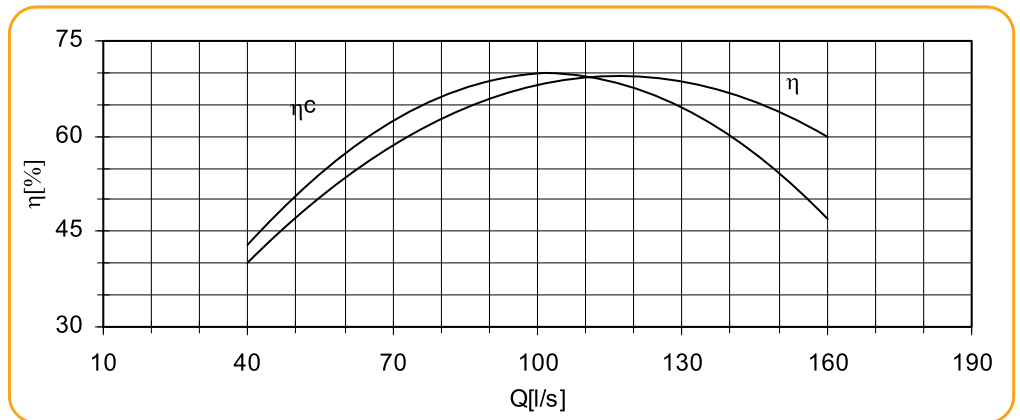
Total  
Differential  
Head



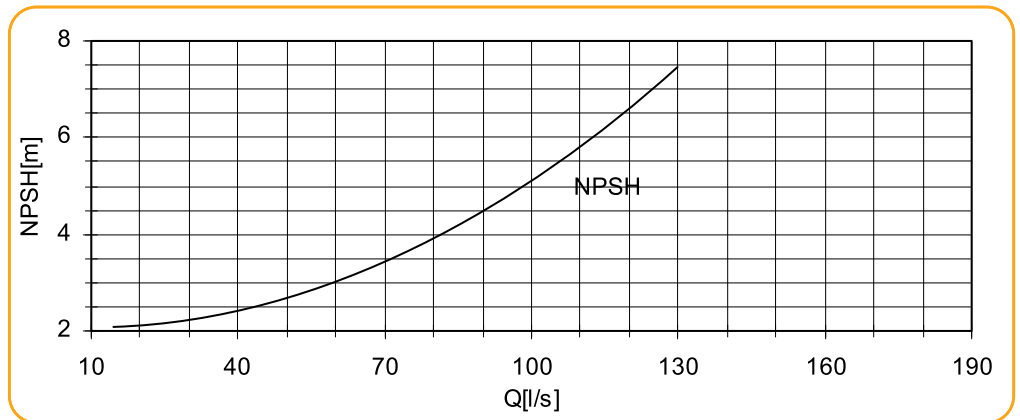
Power Input



Efficiency



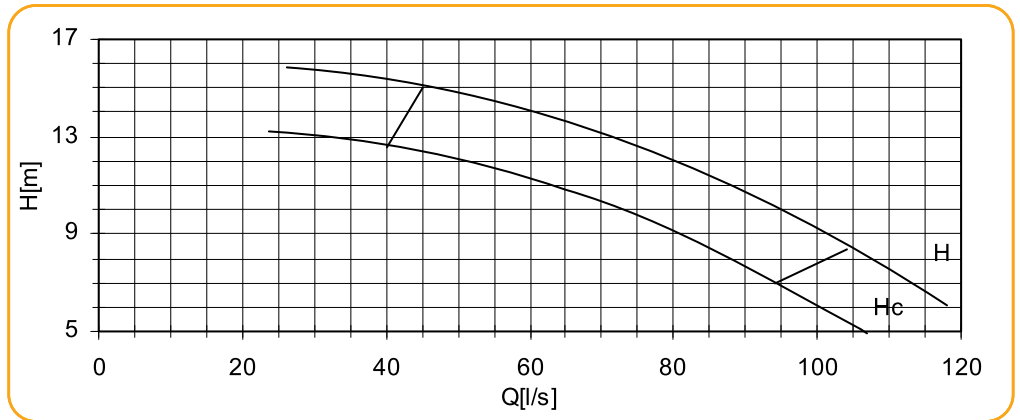
Net Positive  
Suction Head



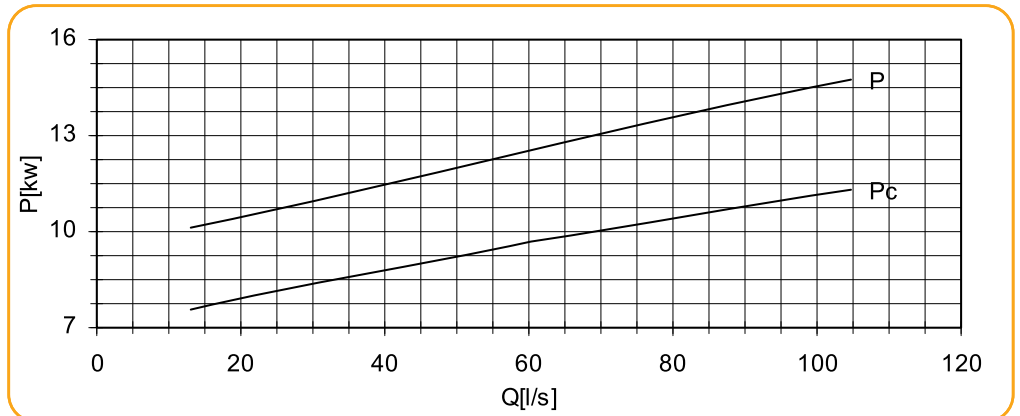
Performance curves are valid for clear water  $t=20\text{ }^{\circ}\text{C}$ ,  $\rho=1000\text{ kg/m}^3$ . NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

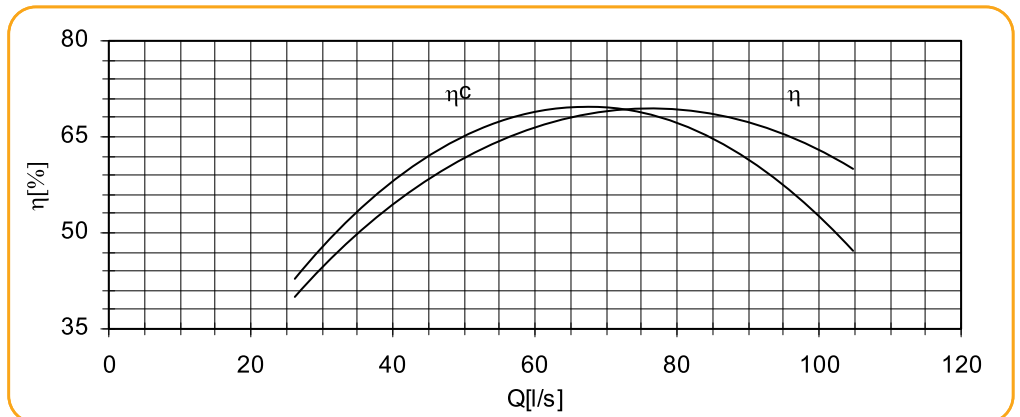
Total  
Differential  
Head



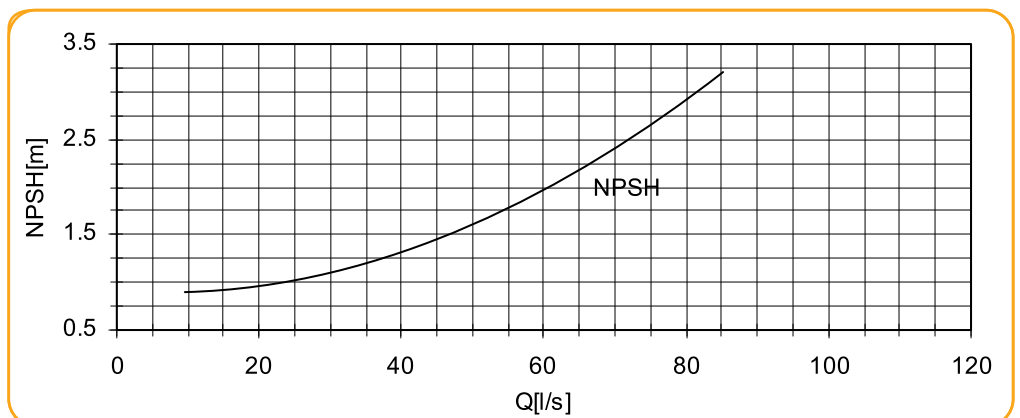
Power Input



Efficiency

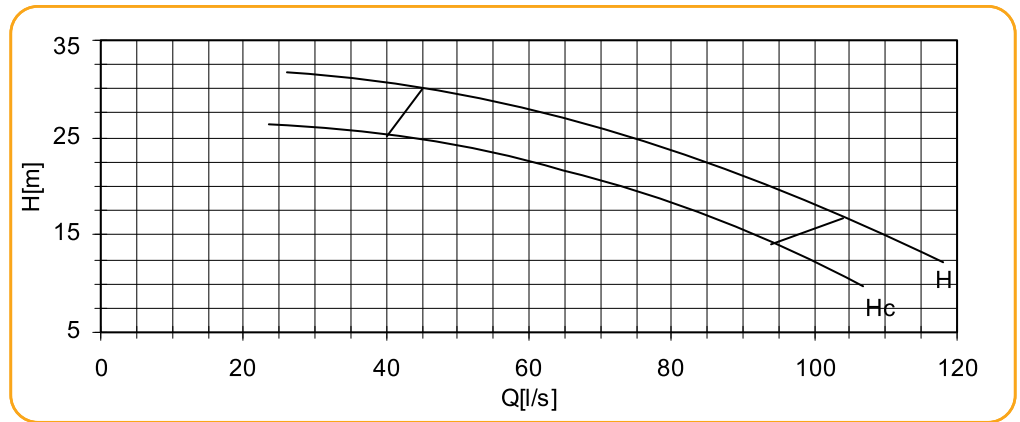


Net Positive  
Suction Head

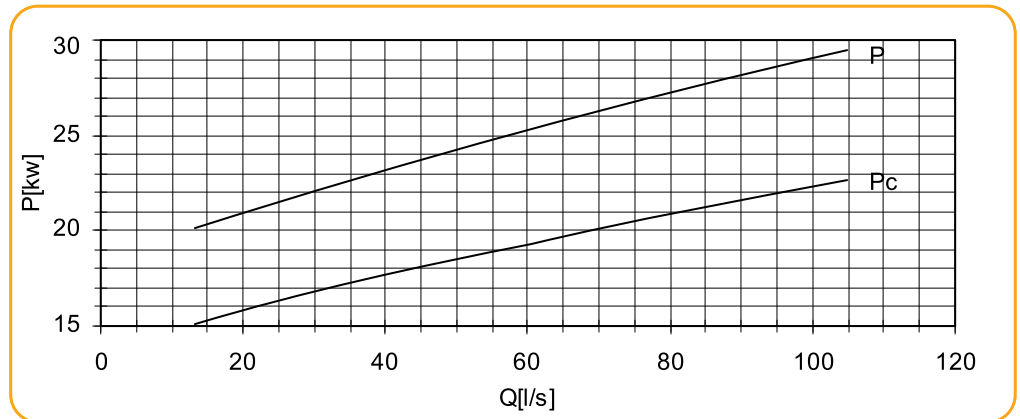


Pump performance curves

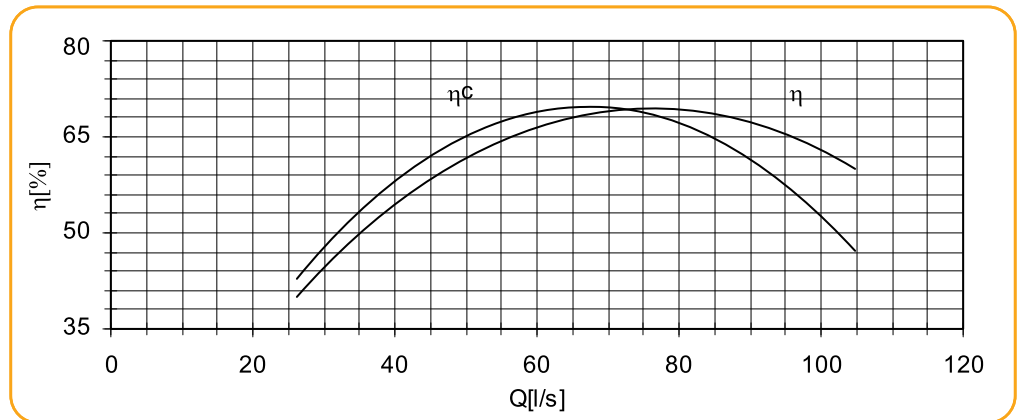
Total  
Differential  
Head



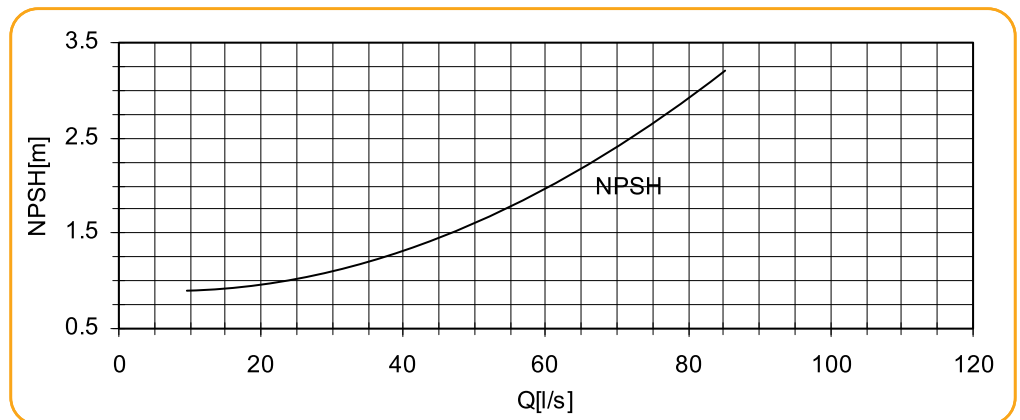
Power Input



Efficiency



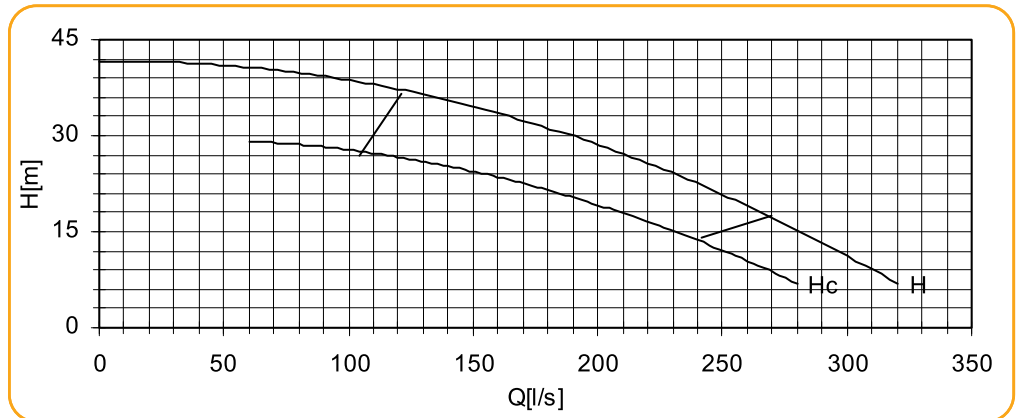
Net Positive  
Suction Head



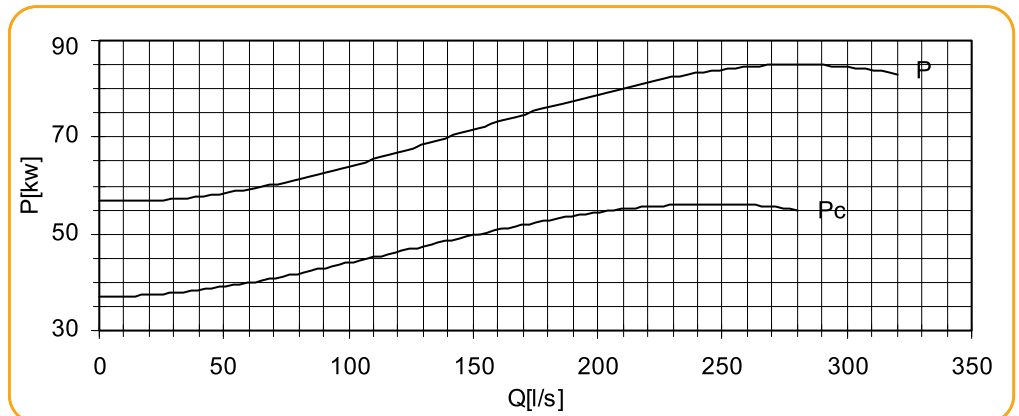
Performance curves are valid for clear water  $t=20\text{ }^{\circ}\text{C}$ ,  $\rho=1000\text{ kg/m}^3$ . NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

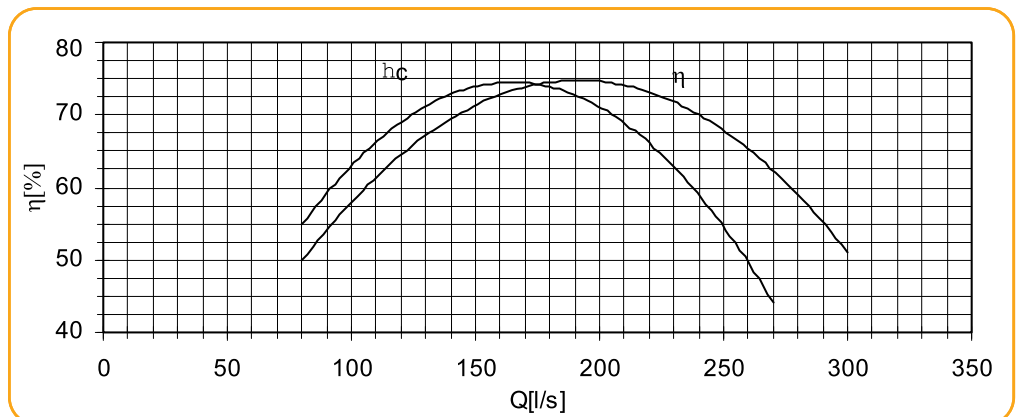
Total  
Differential  
Head



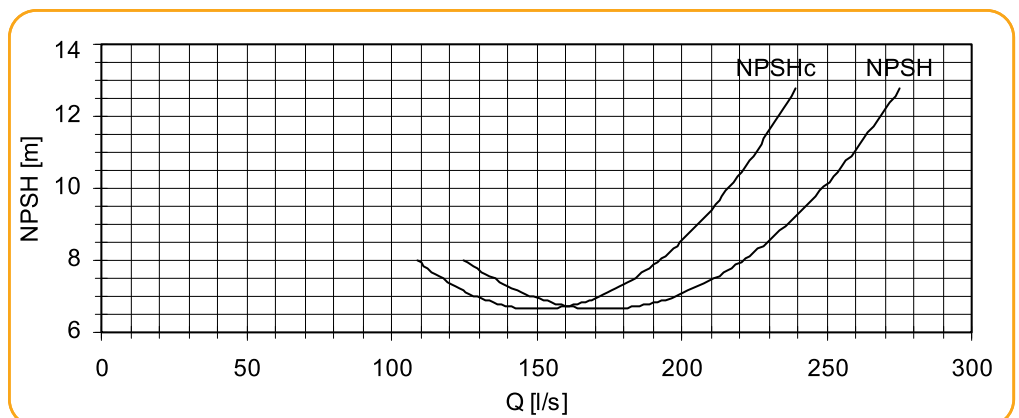
Power Input



Efficiency

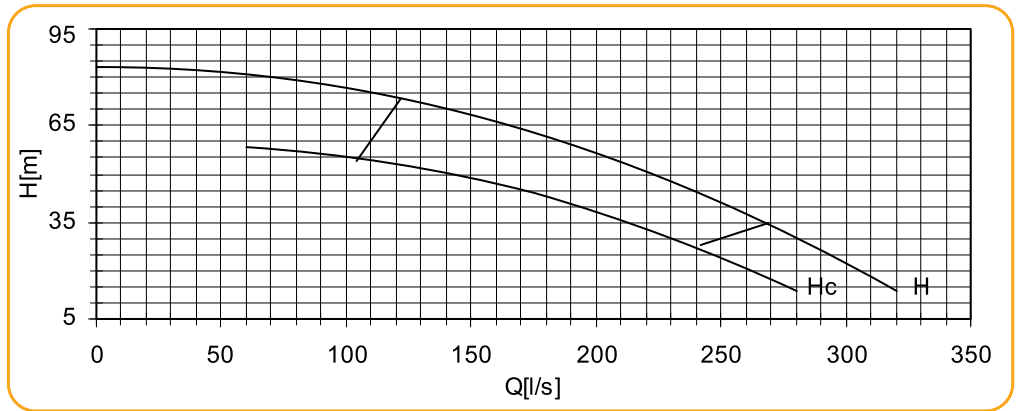


Net Positive  
Suction Head

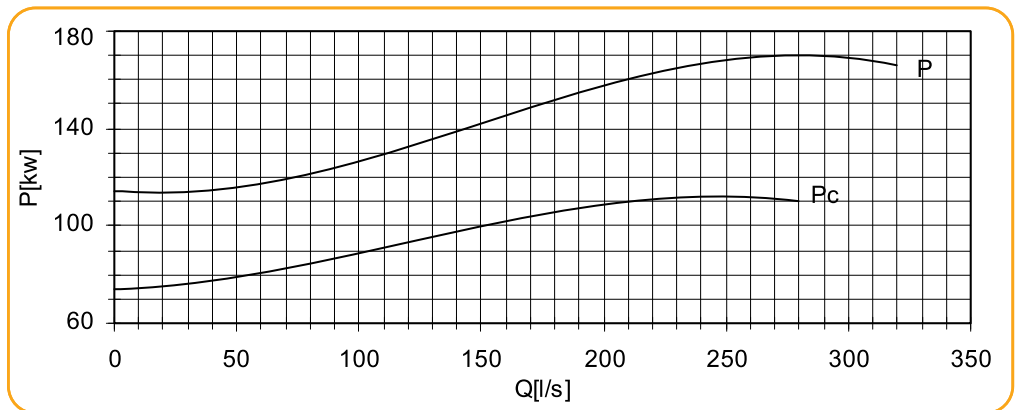


Pump performance curves

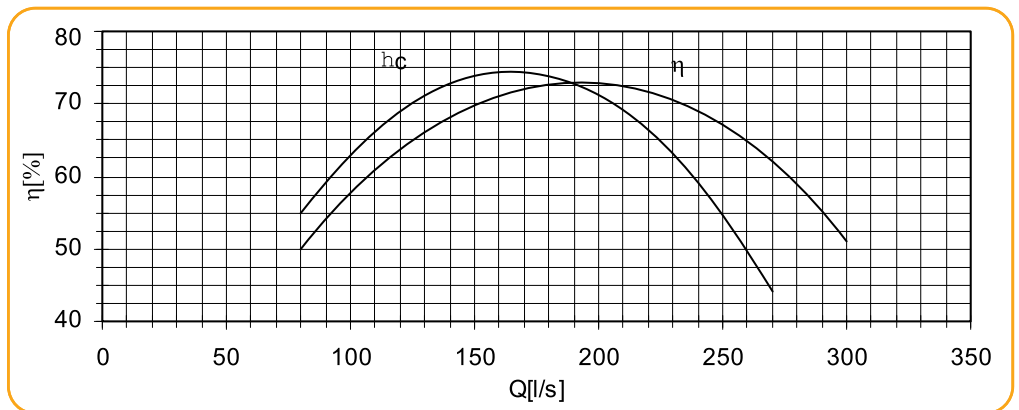
Total  
Differential  
Head



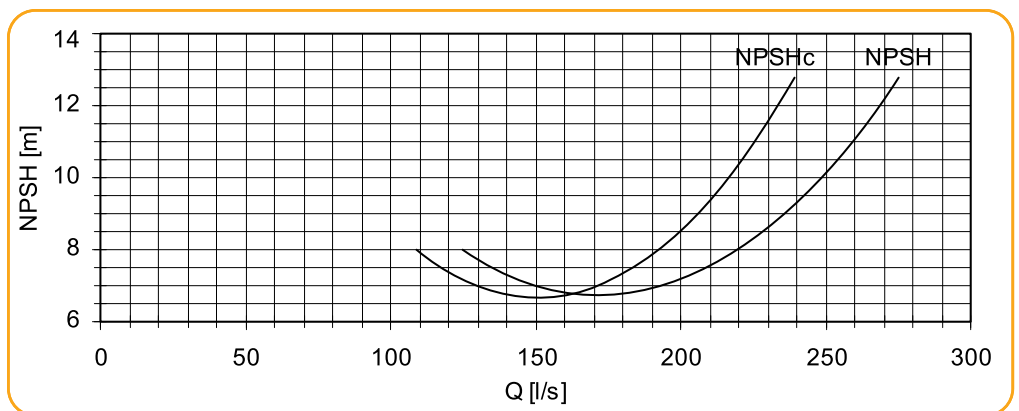
Power Input



Efficiency



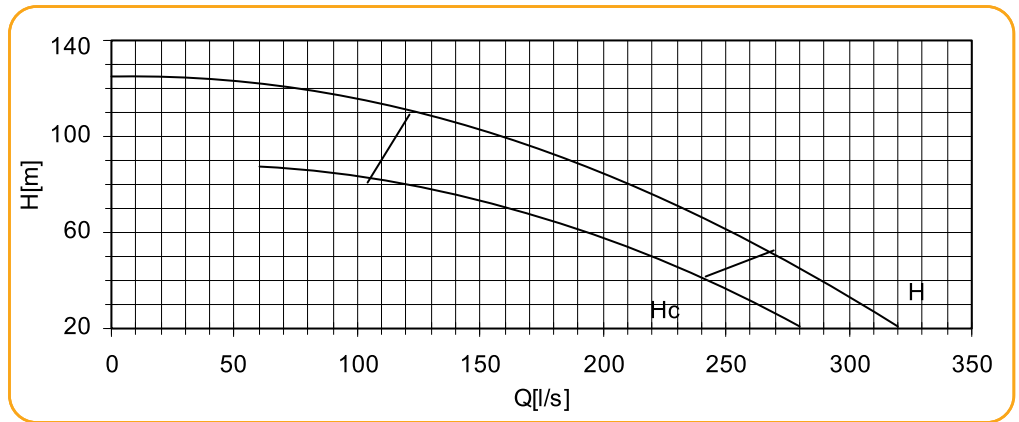
Net Positive  
Suction Head



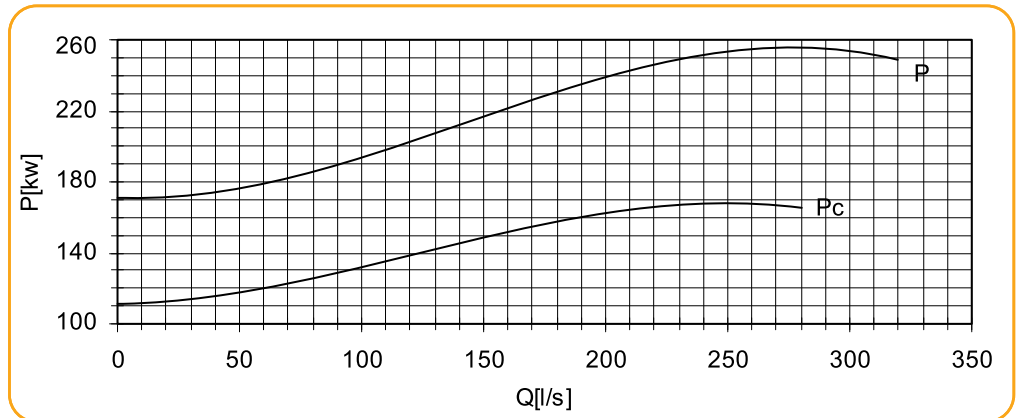


Pump performance curves

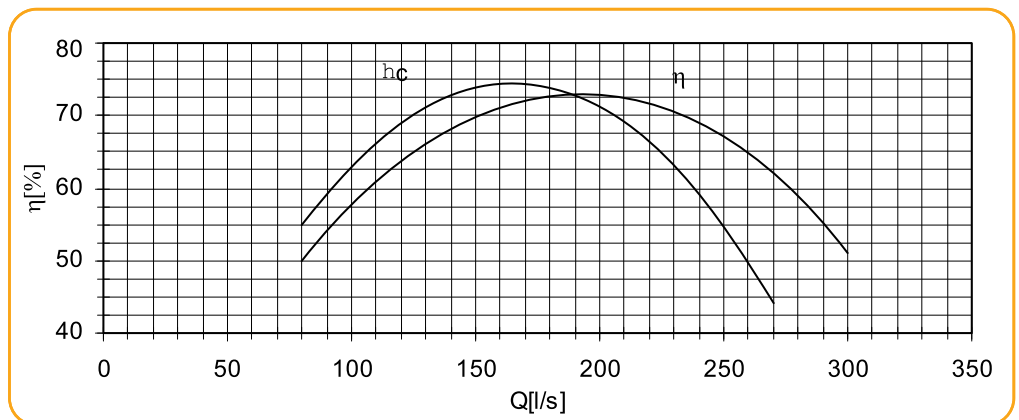
Total  
Differential  
Head



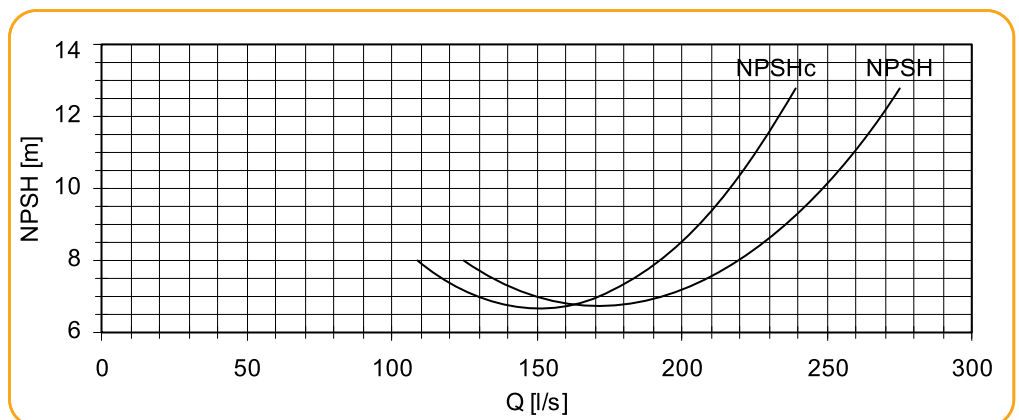
Power Input



Efficiency



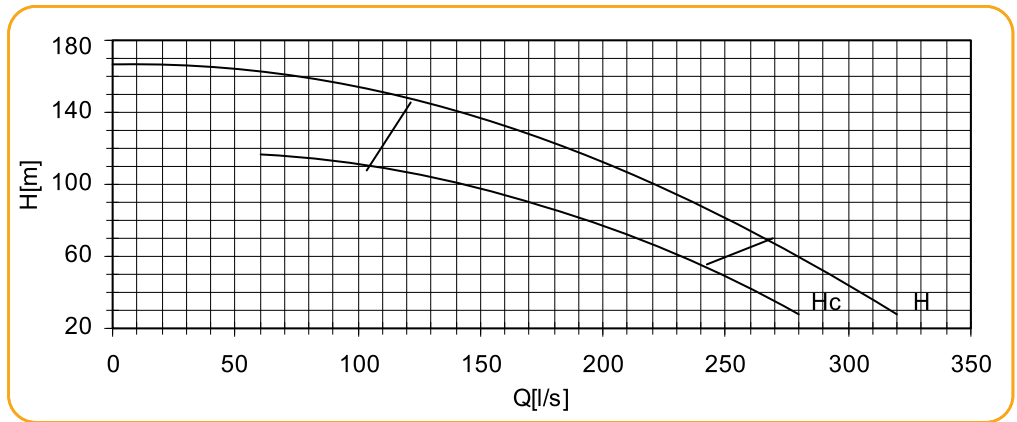
Net Positive  
Suction Head



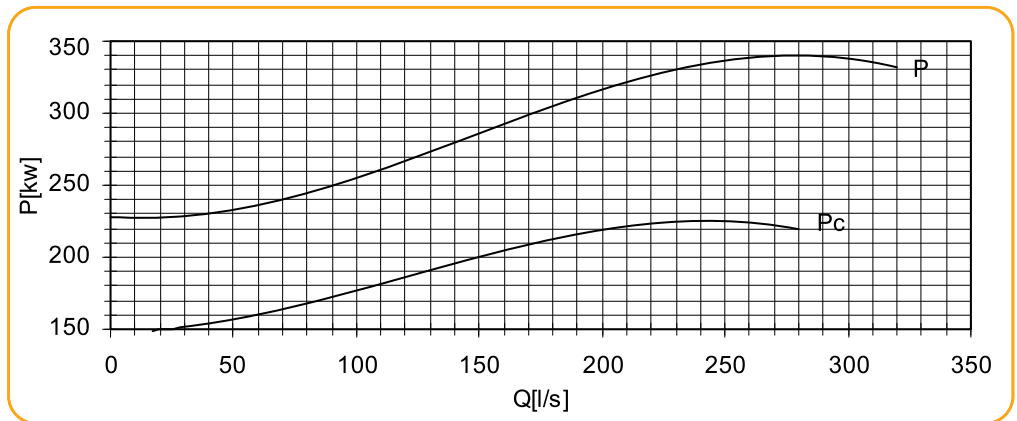
Pump performance curves

2VPH-4  
n =1450 (rpm)

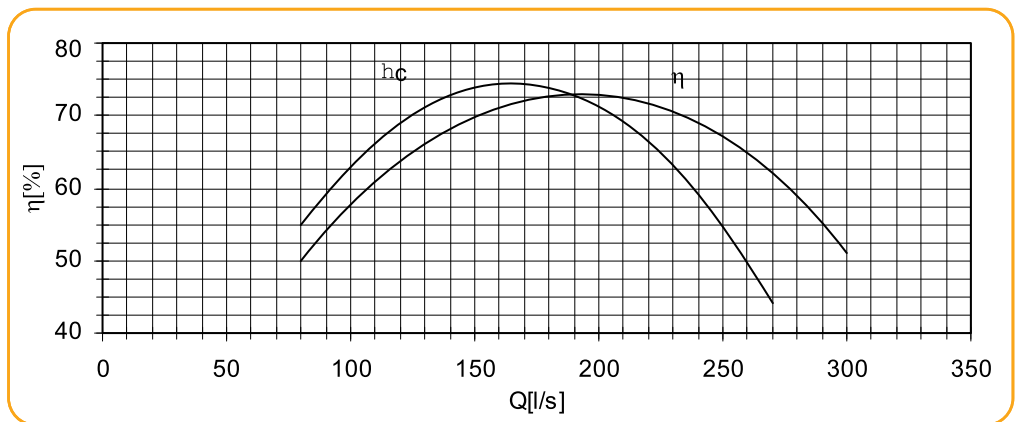
Total  
Differential  
Head



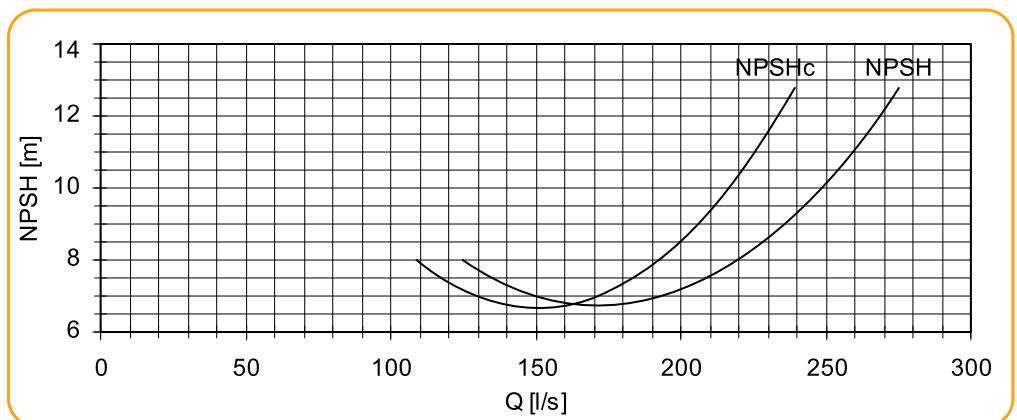
Power Input



Efficiency



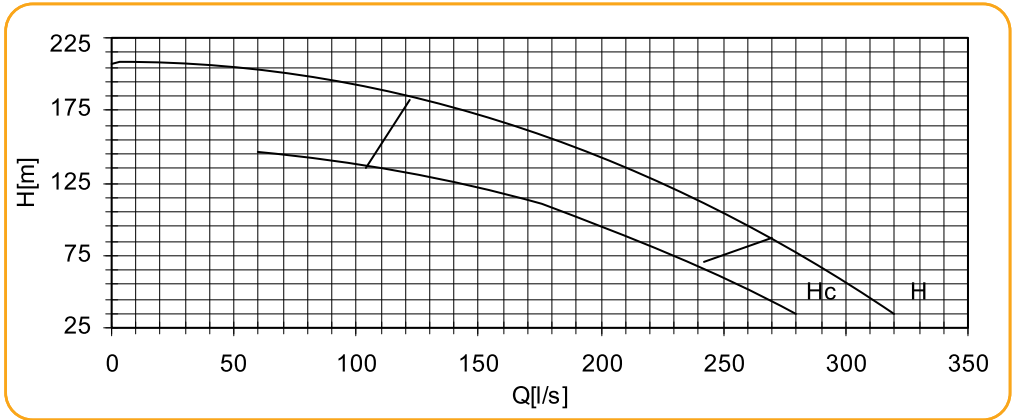
Net Positive  
Suction Head



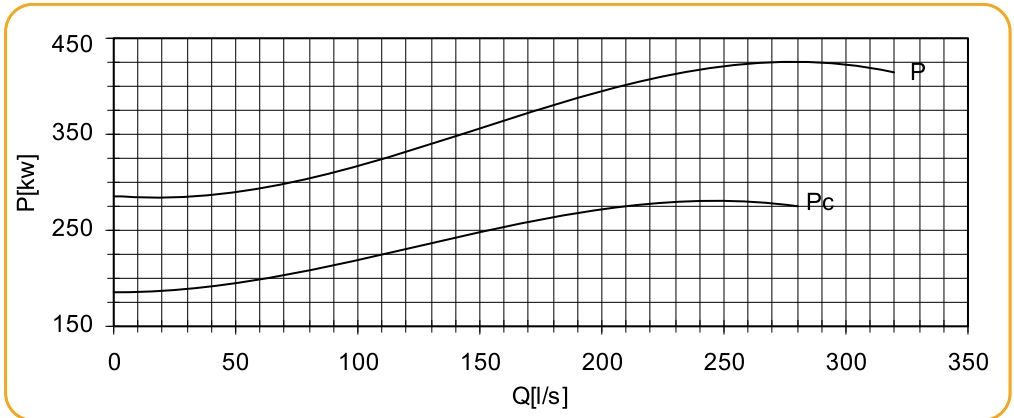
Performance curves are valid for clear water  $t=20\text{ }^{\circ}\text{C}$ ,  $\rho=1000\text{ kg/m}^3$ . NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

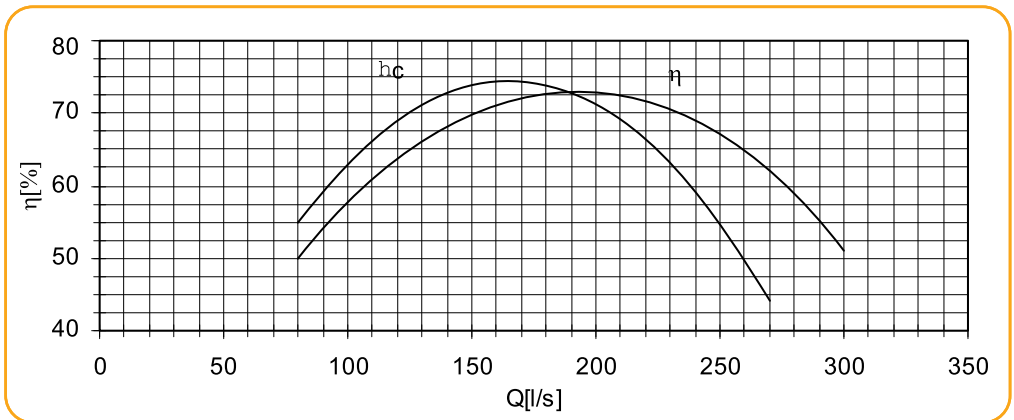
Total  
Differential  
Head



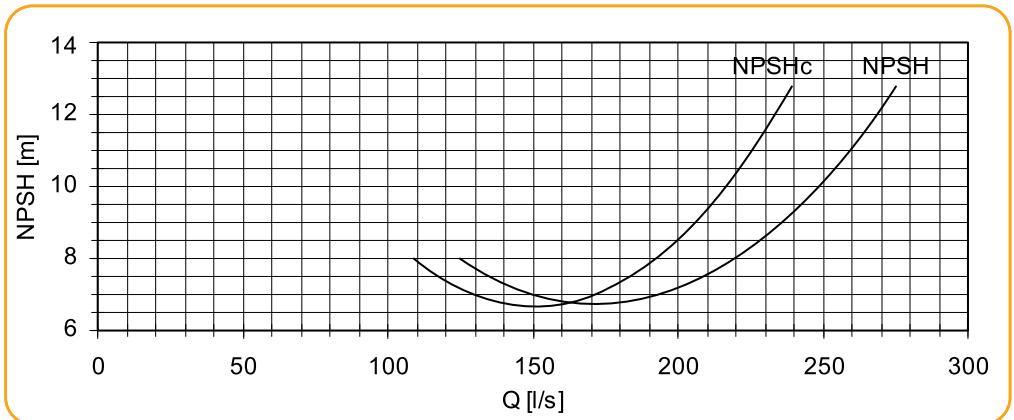
Power Input



Efficiency



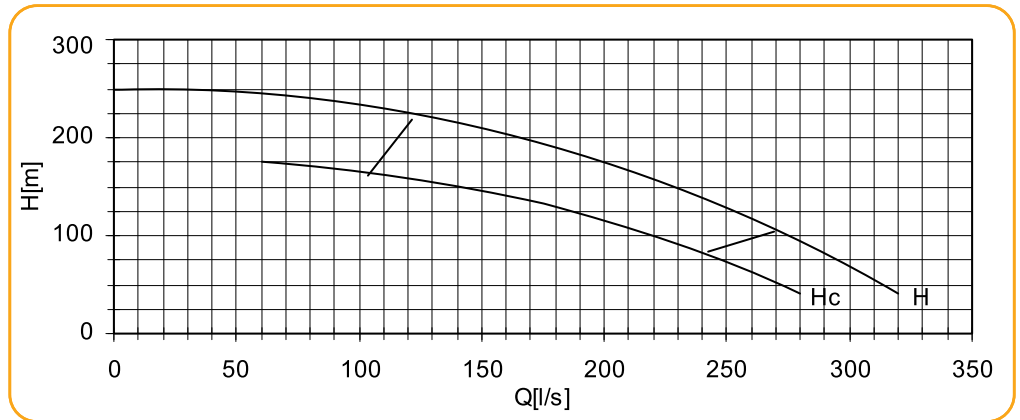
Net Positive  
Suction Head



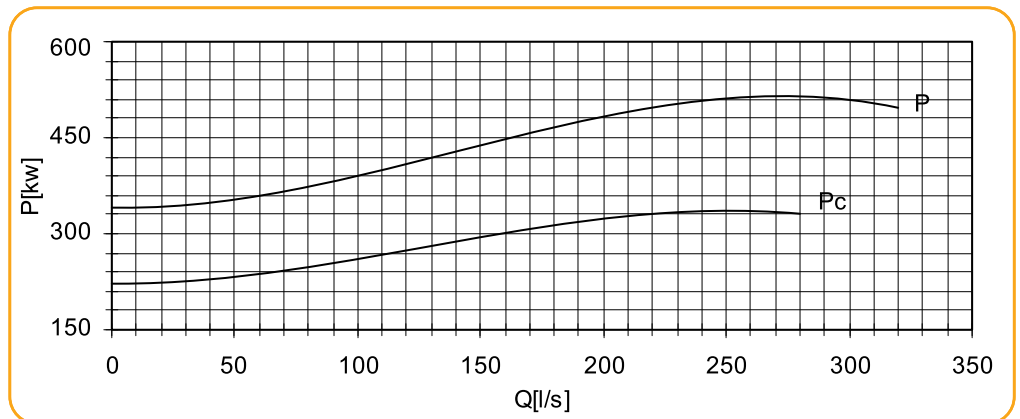
Pump performance curves

2VPH-6  
n =1450 (rpm)

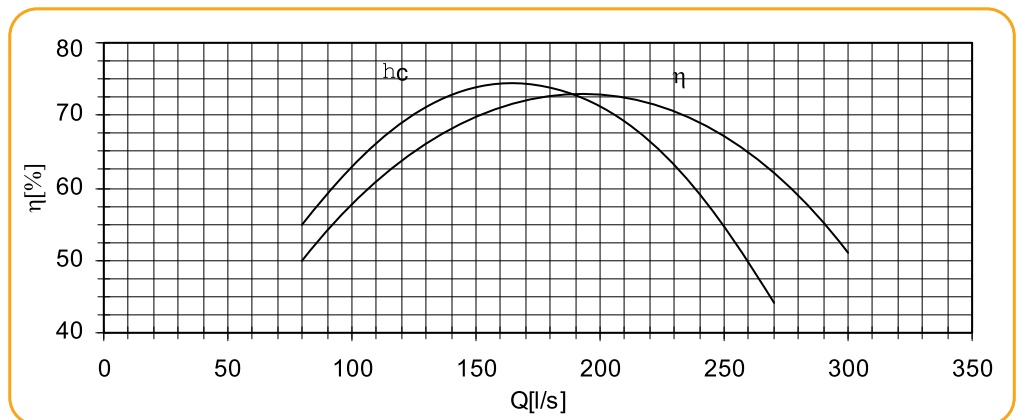
Total  
Differential  
Head



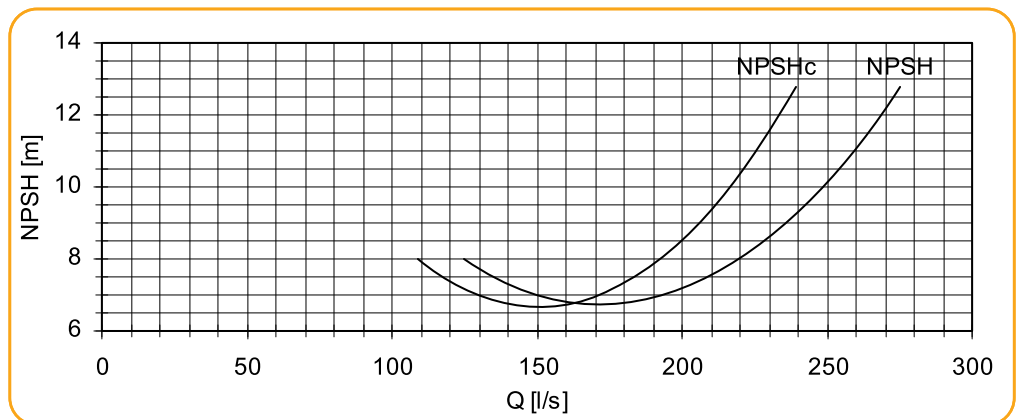
Power Input



Efficiency



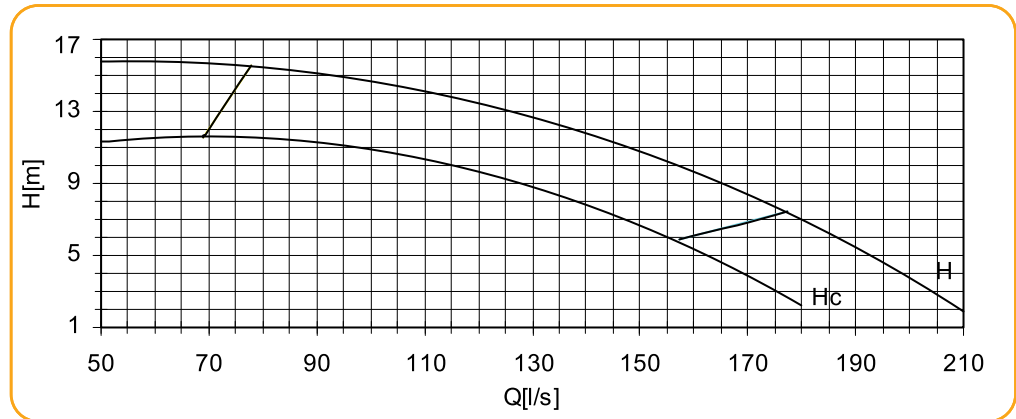
Net Positive  
Suction Head



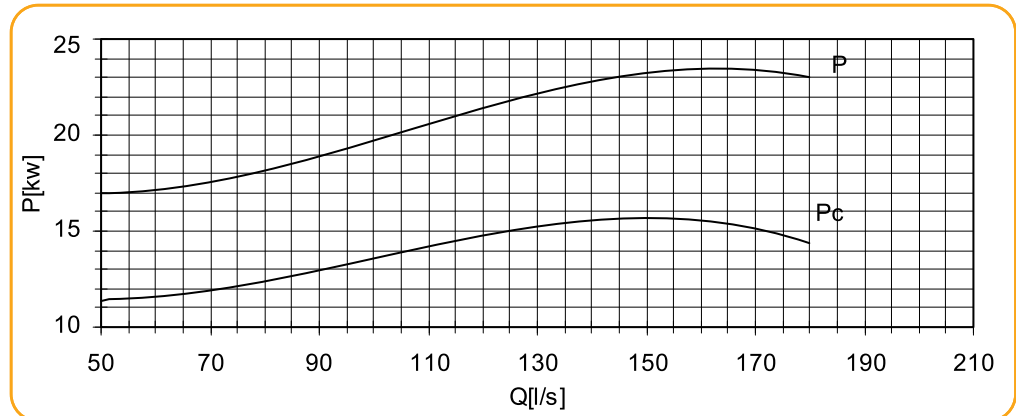
Performance curves are valid for clear water  $t=20\text{ }^{\circ}\text{C}$ ,  $\rho=1000\text{ kg/m}^3$ . NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

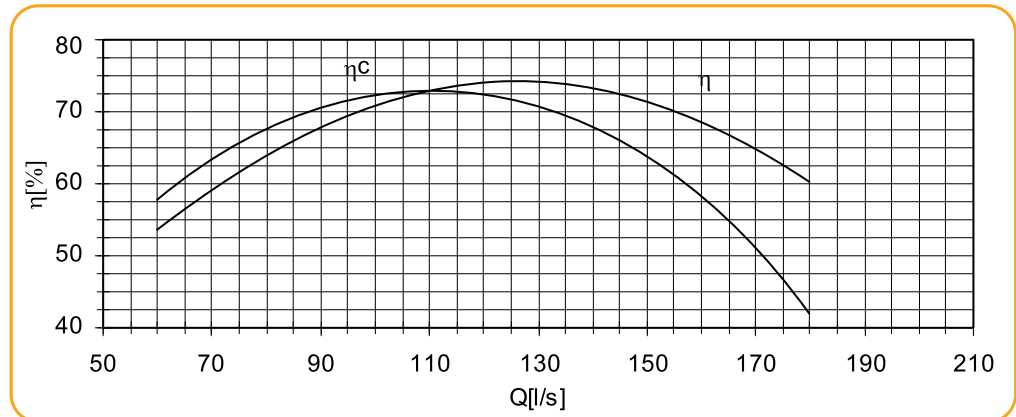
Total  
Differential  
Head



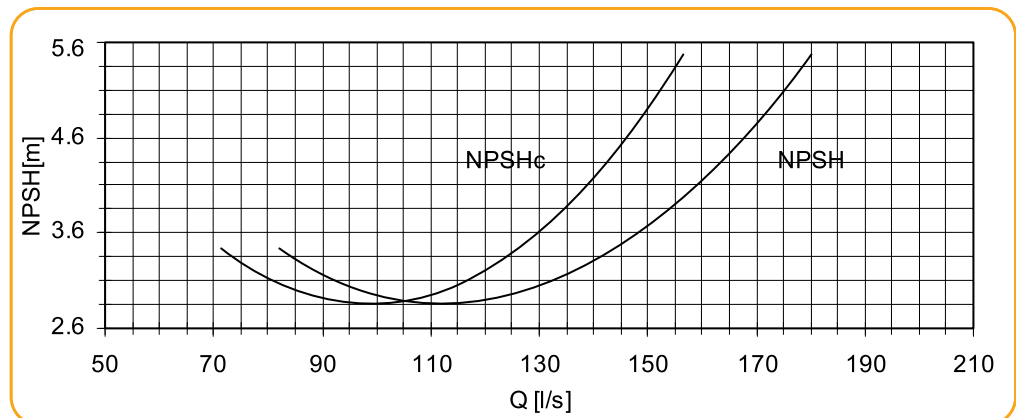
Power Input



Efficiency

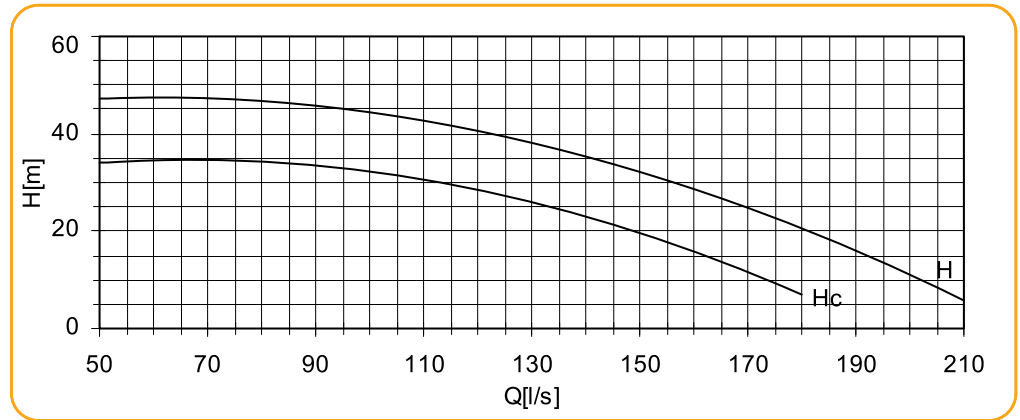


Net Positive  
Suction Head

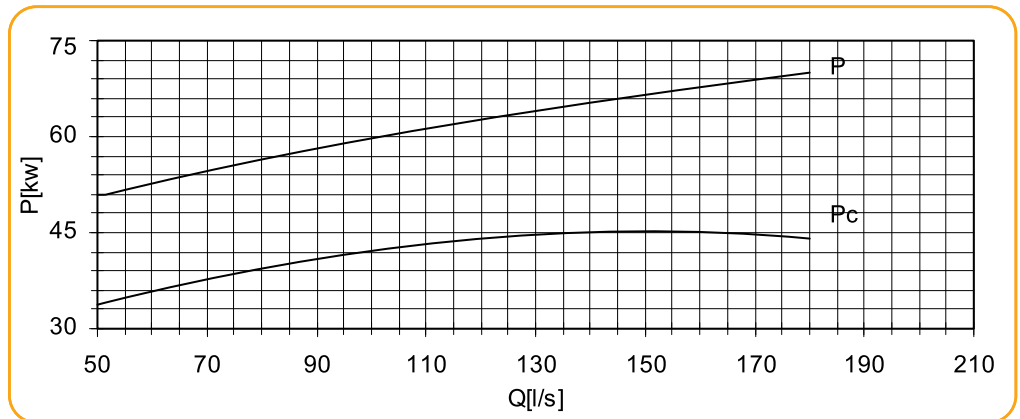


Pump performance curves

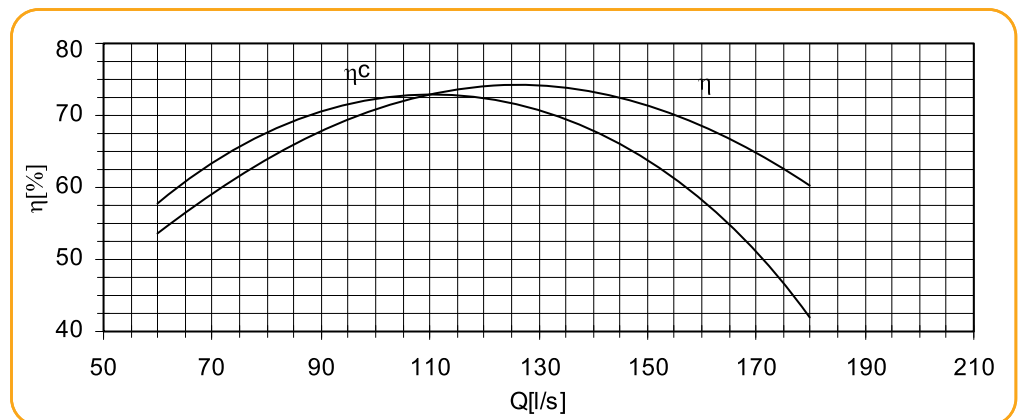
Total  
Differential  
Head



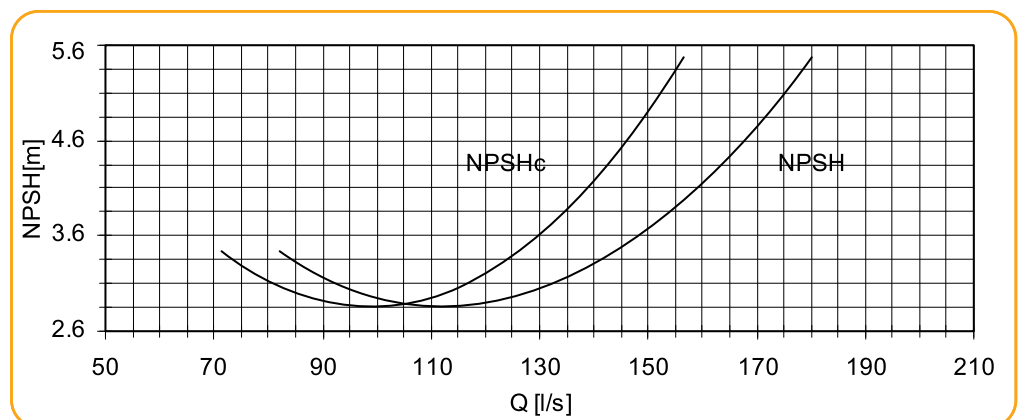
Power Input



Efficiency



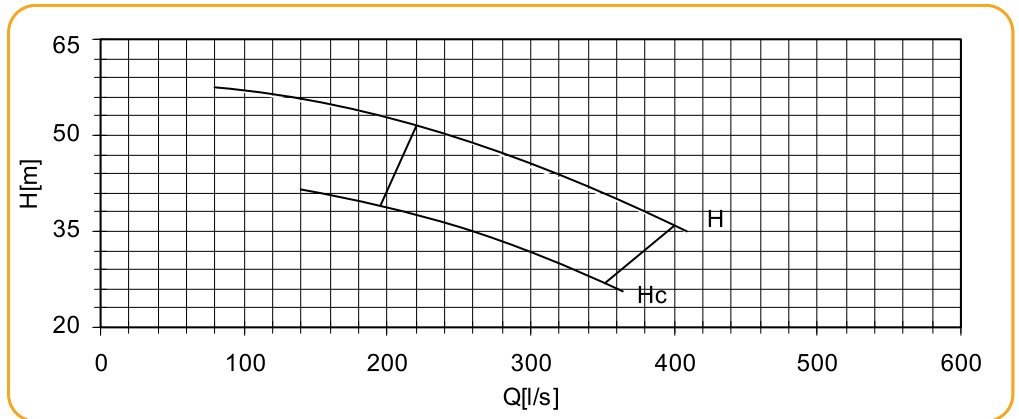
Net Positive  
Suction Head



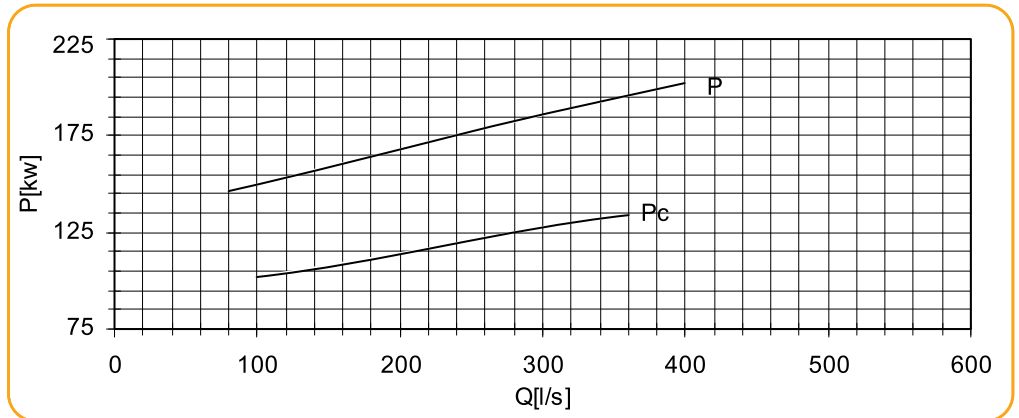
Performance curves are valid for clear water  $t=20\text{ }^{\circ}\text{C}$ ,  $\rho=1000\text{ kg/m}^3$ . NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

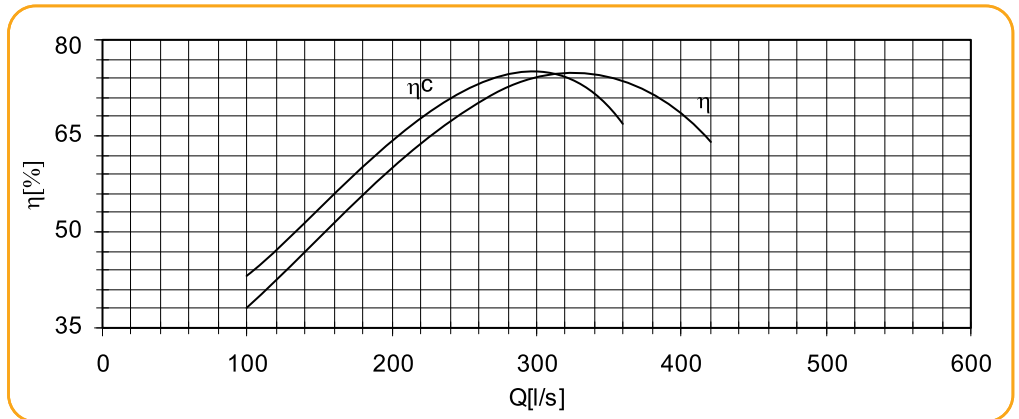
Total Differential Head



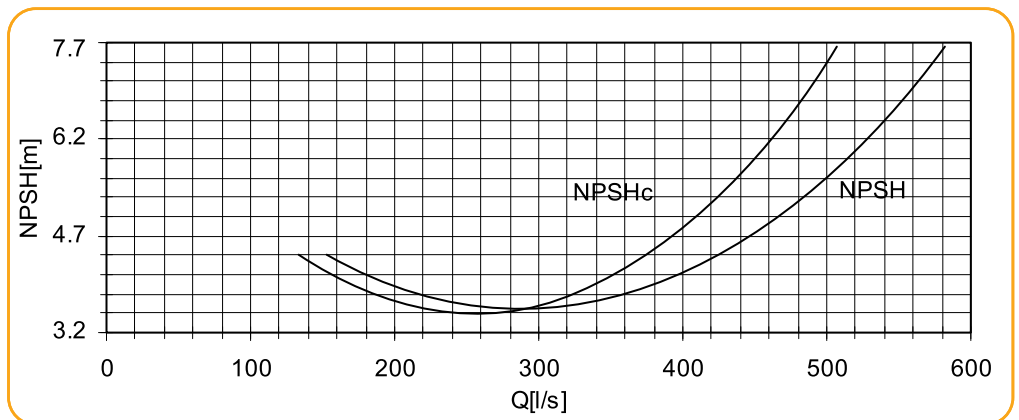
Power Input



Efficiency



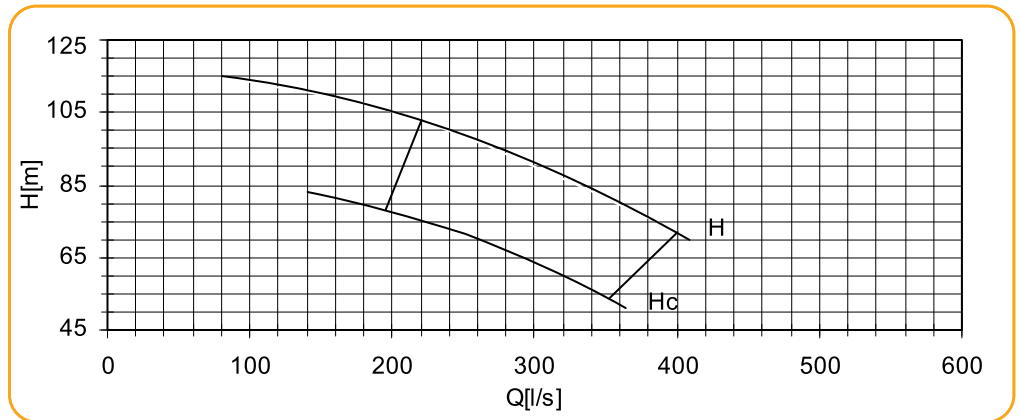
Net Positive Suction Head



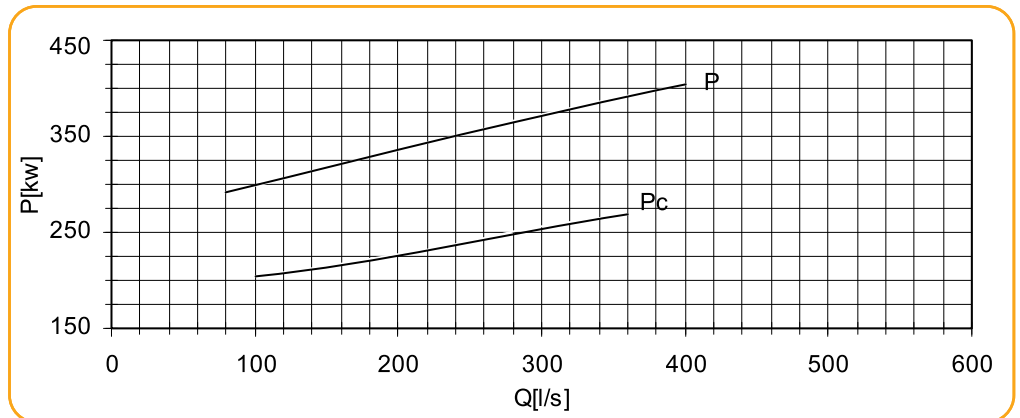
Pump performance curves

4VPH-2  
n = 1450 (rpm)

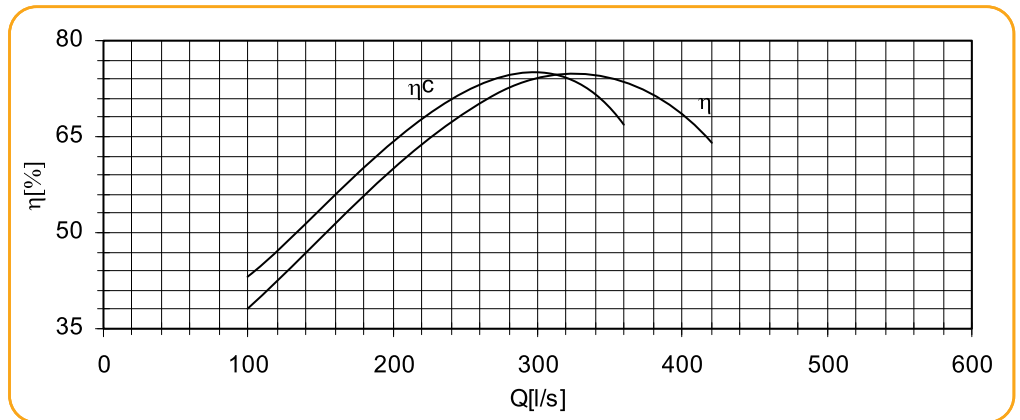
Total  
Differential  
Head



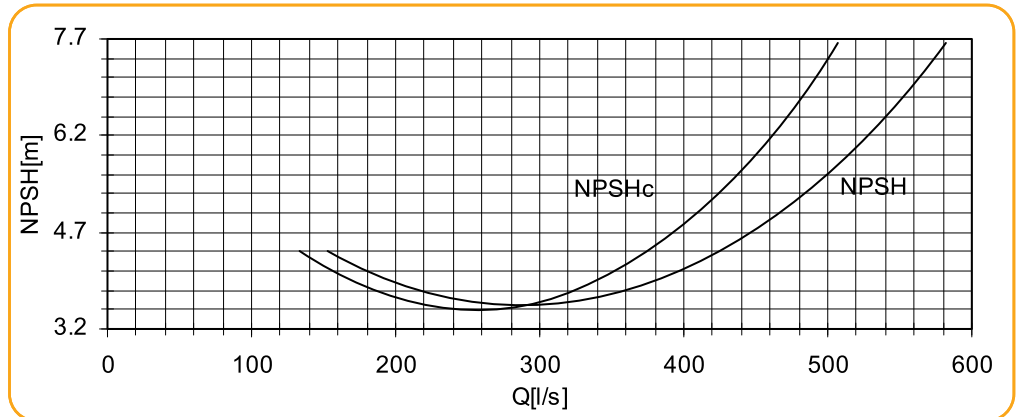
Power Input



Efficiency



Net Positive  
Suction Head

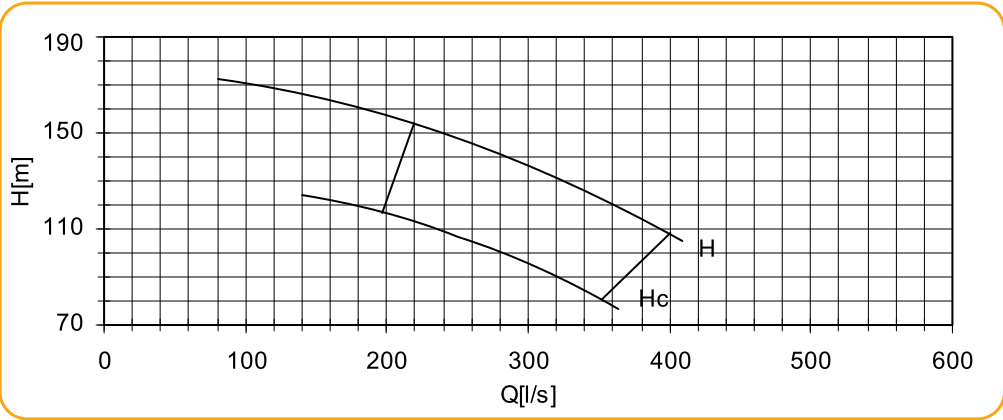


Performance curves are valid for clear water t=20 °C, ρ=1000 kg/m<sup>3</sup>.. NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

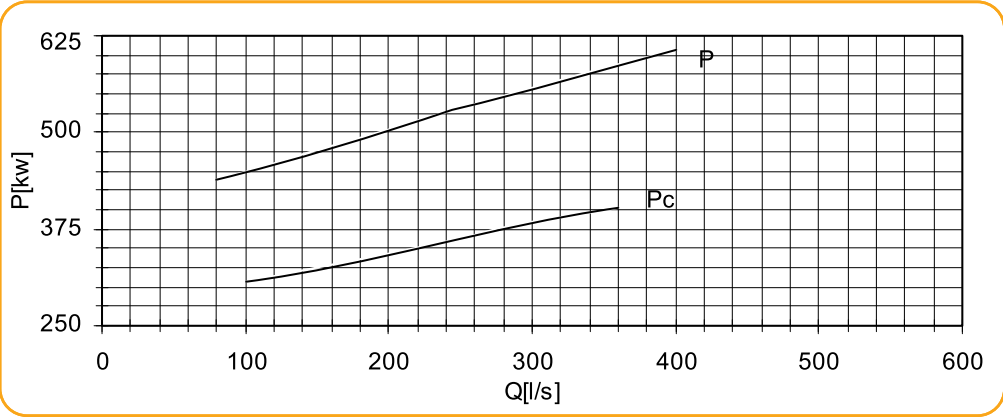


Pump performance curves

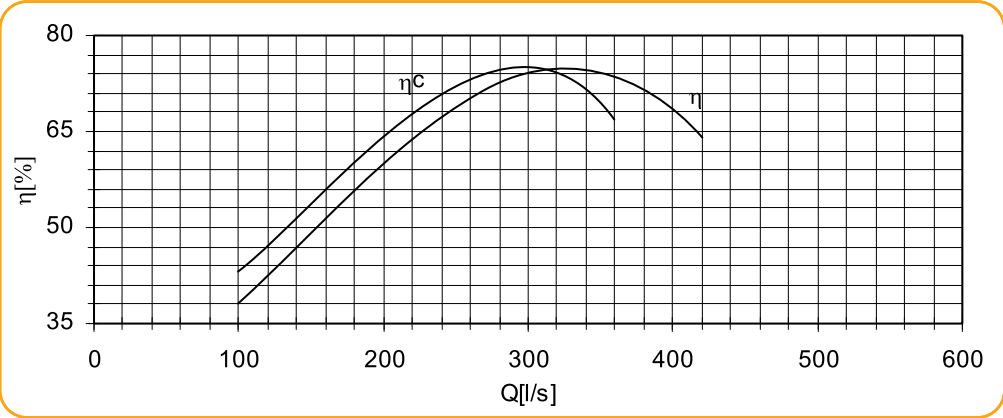
Total  
Differential  
Head



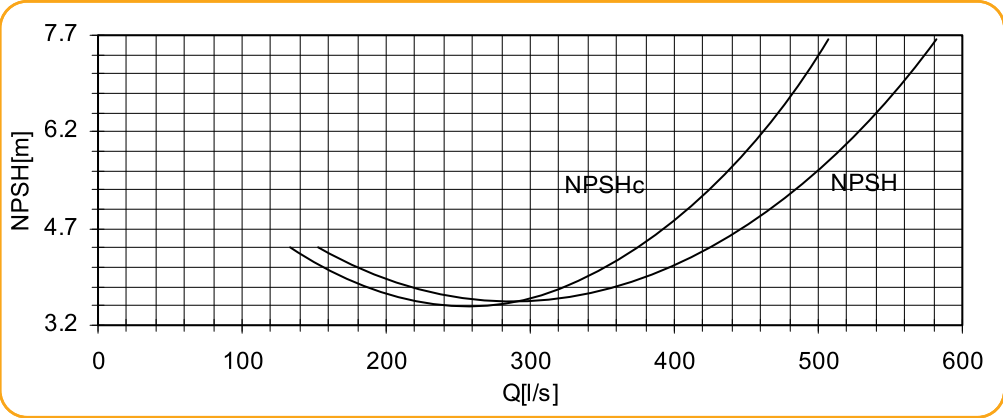
Power Input



Efficiency



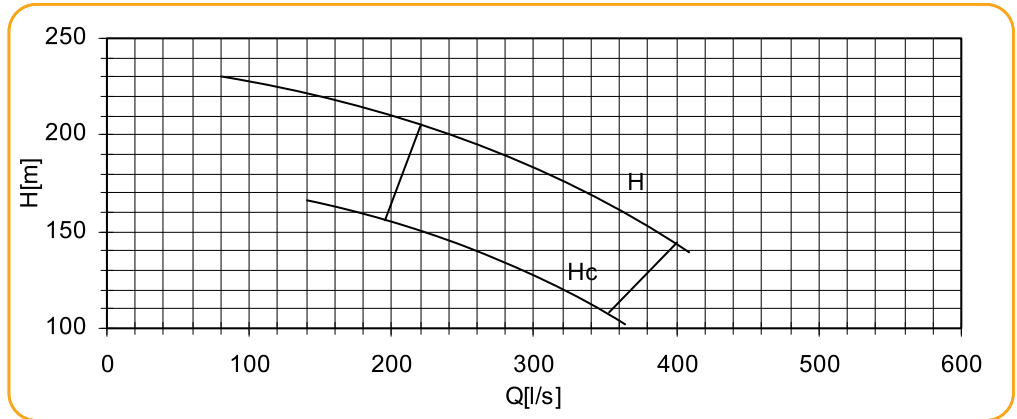
Net Positive  
Suction Head



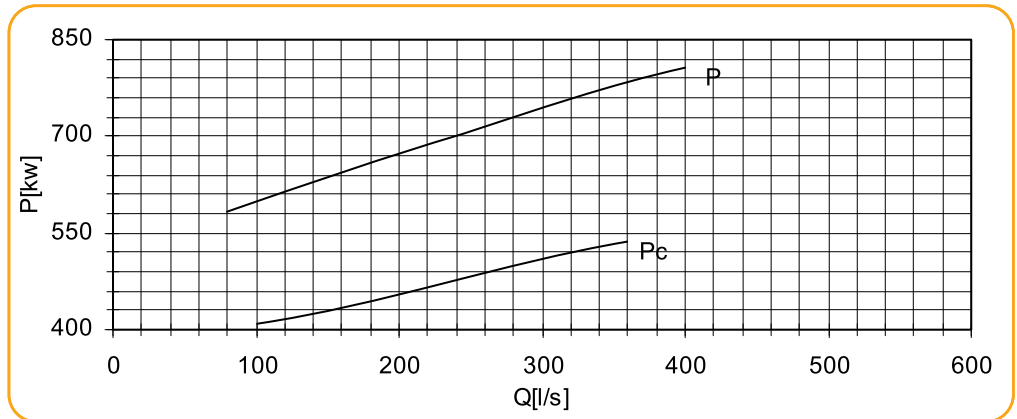
Pump performance curves

4VPH-4  
n = 1450 (rpm)

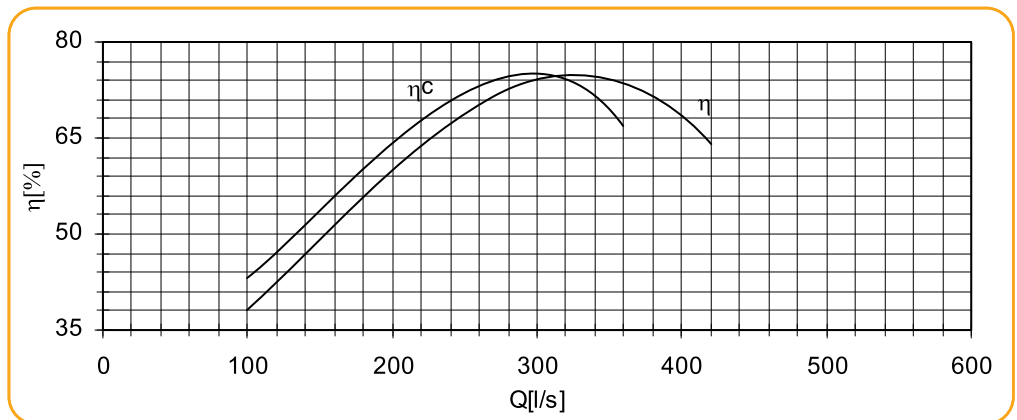
Total  
Differential  
Head



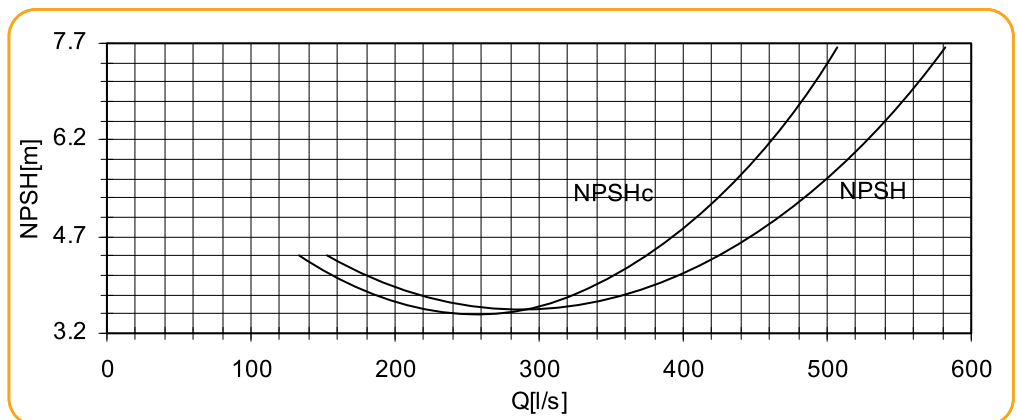
Power Input



Efficiency



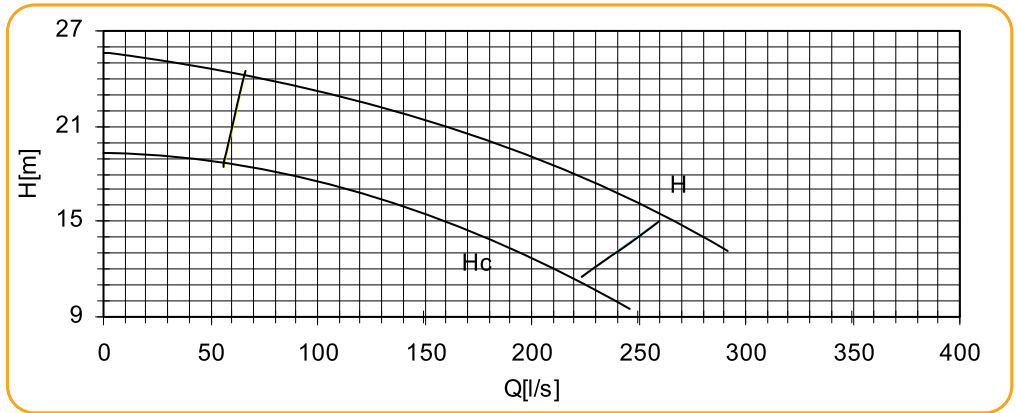
Net Positive  
Suction Head



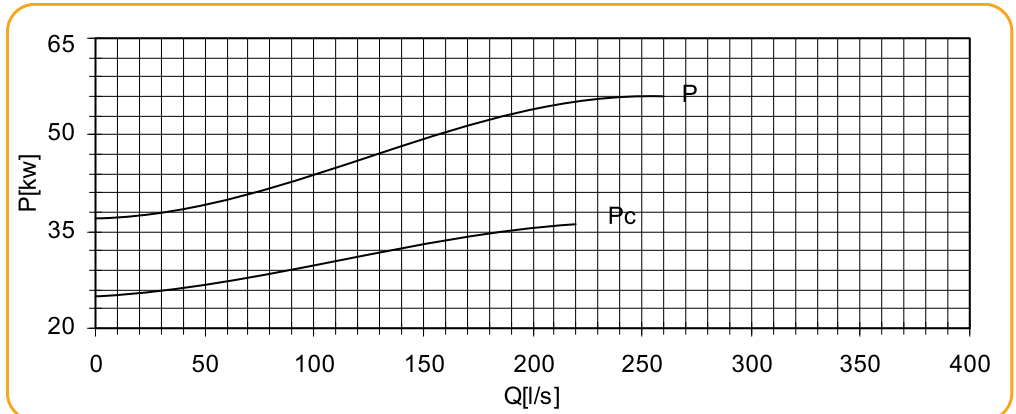
Performance curves are valid for clear water  $t=20\text{ }^{\circ}\text{C}$ ,  $\rho=1000\text{ kg/m}^3$ . NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

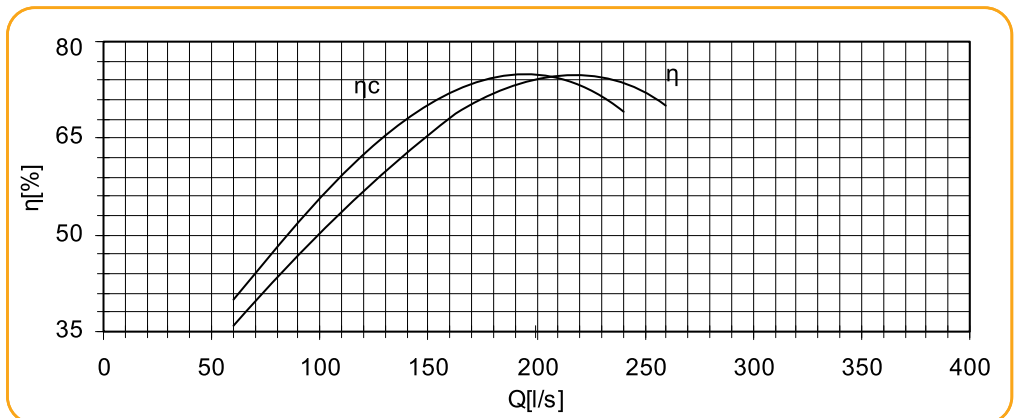
Total  
Differential  
Head



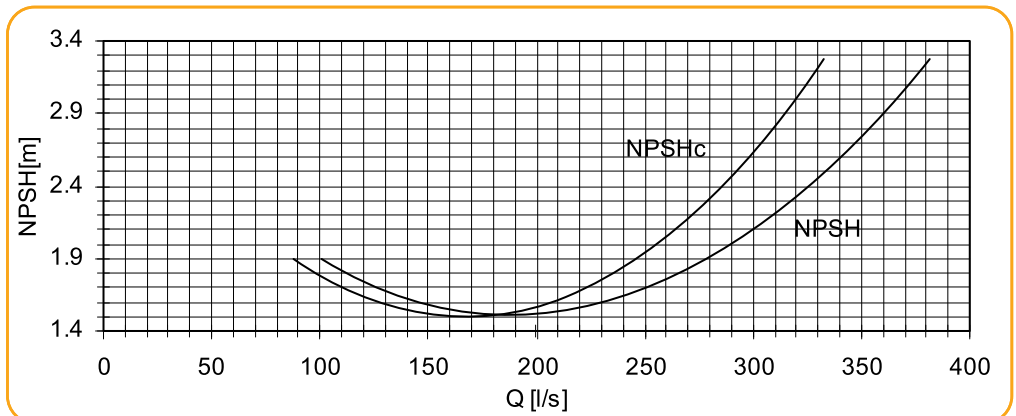
Power Input



Efficiency

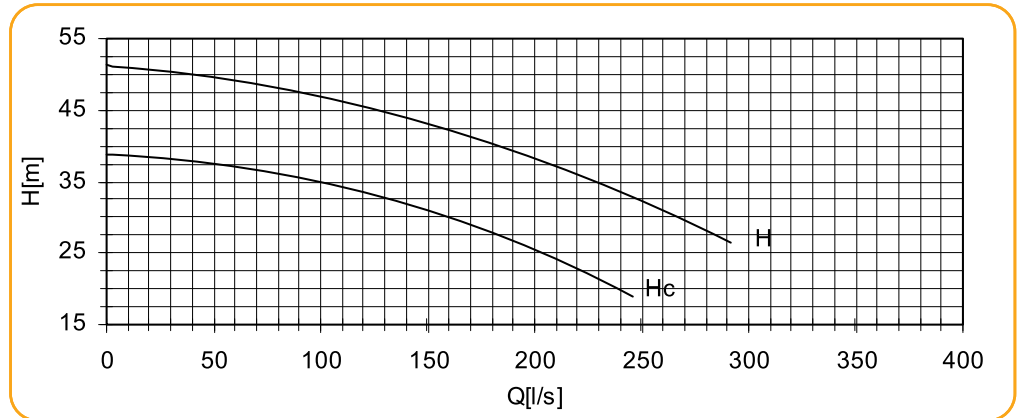


Net Positive  
Suction Head

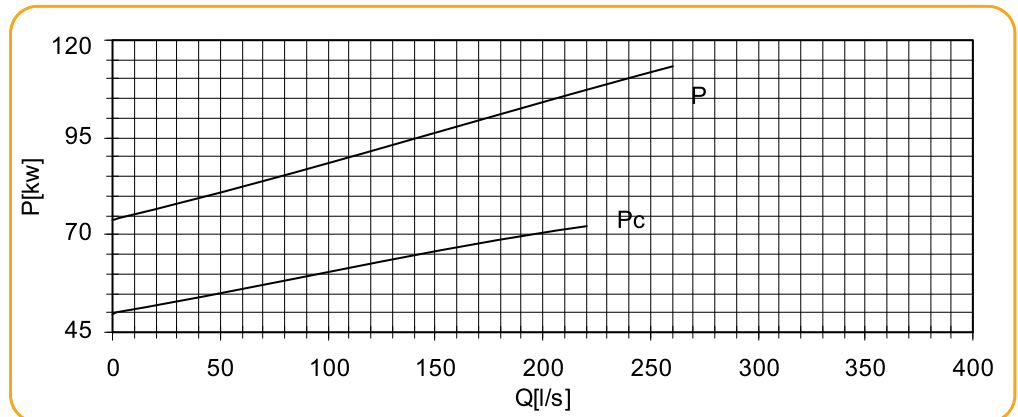


Pump performance curves

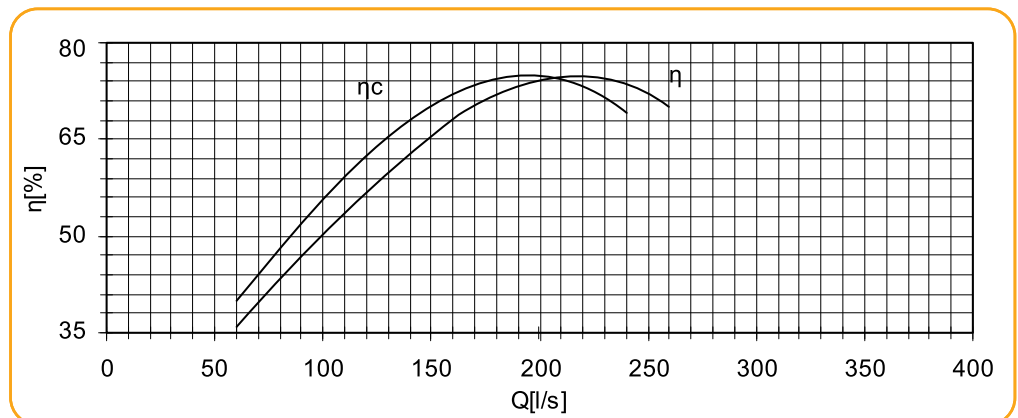
Total  
Differential  
Head



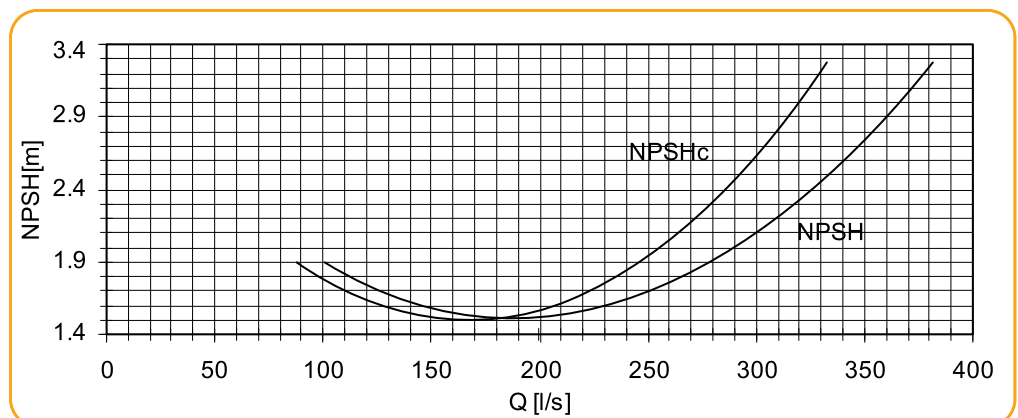
Power Input



Efficiency



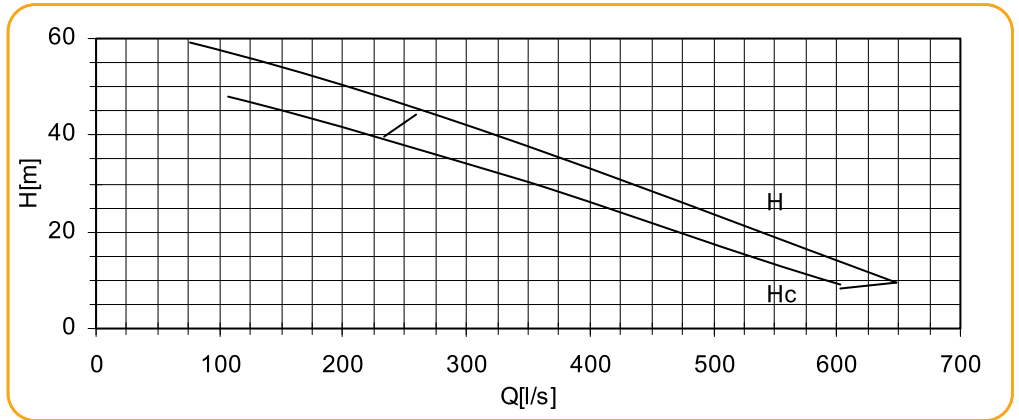
Net Positive  
Suction Head



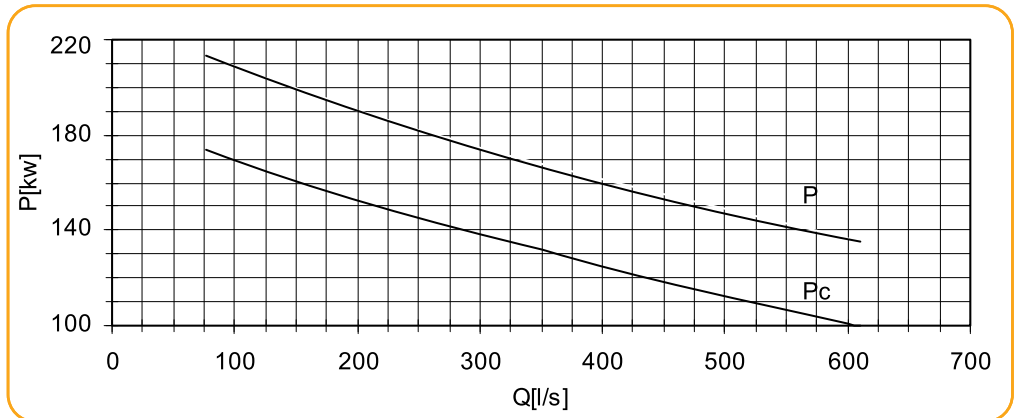
Performance curves are valid for clear water t=20 °C, ρ=1000 kg/m³. NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

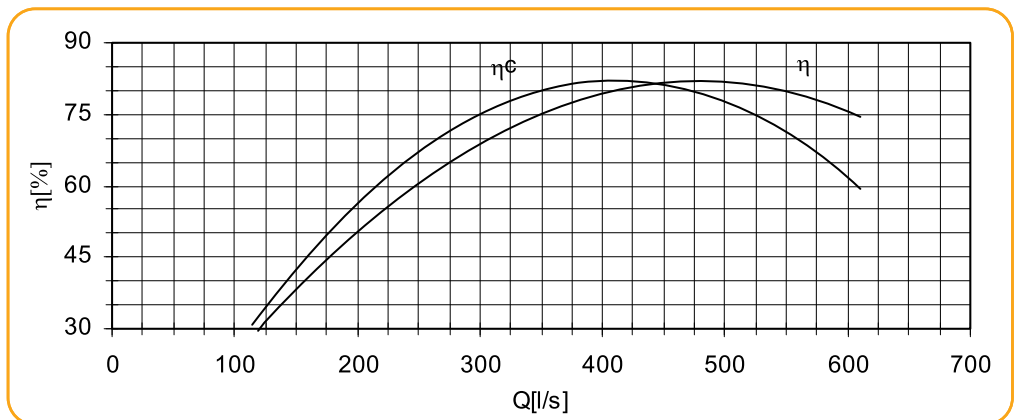
Total  
Differential  
Head



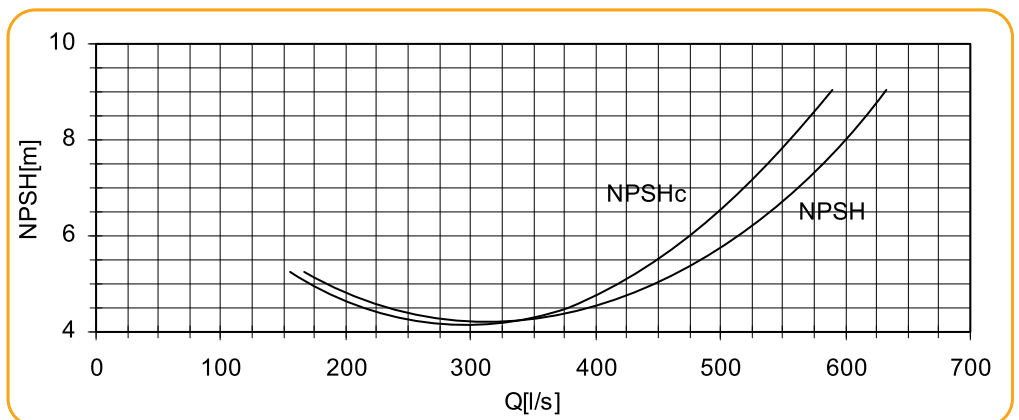
Power Input



Efficiency

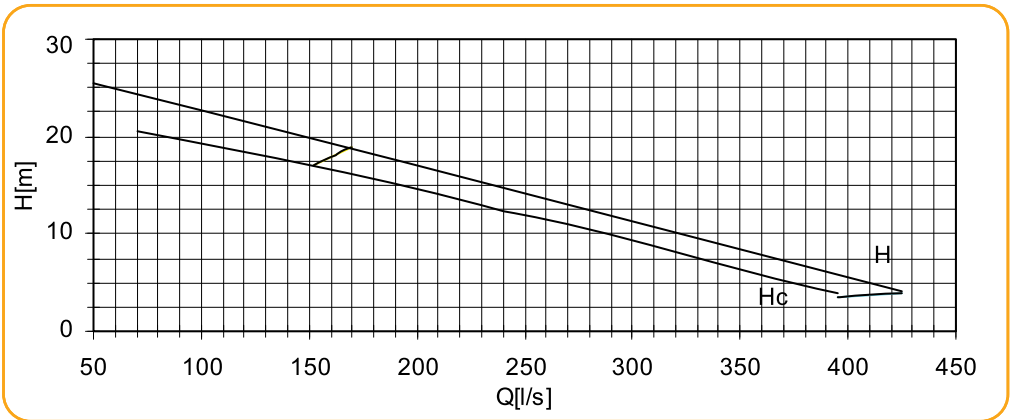


Net Positive  
Suction Head

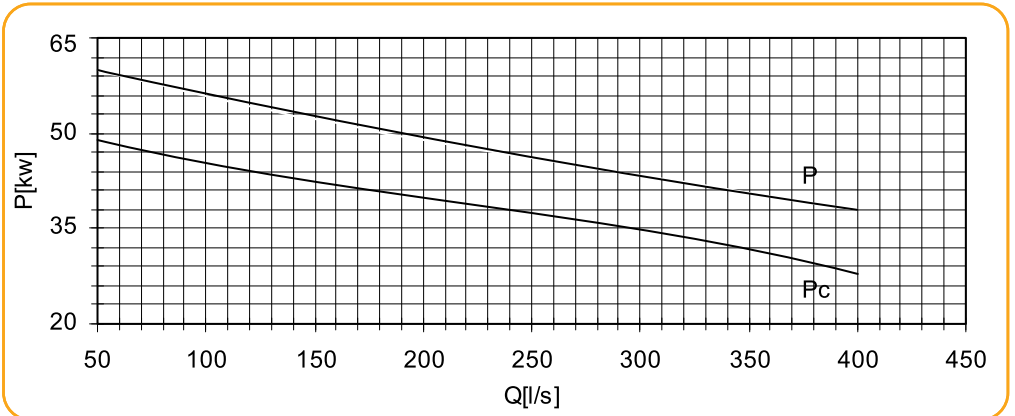


Pump performance curves

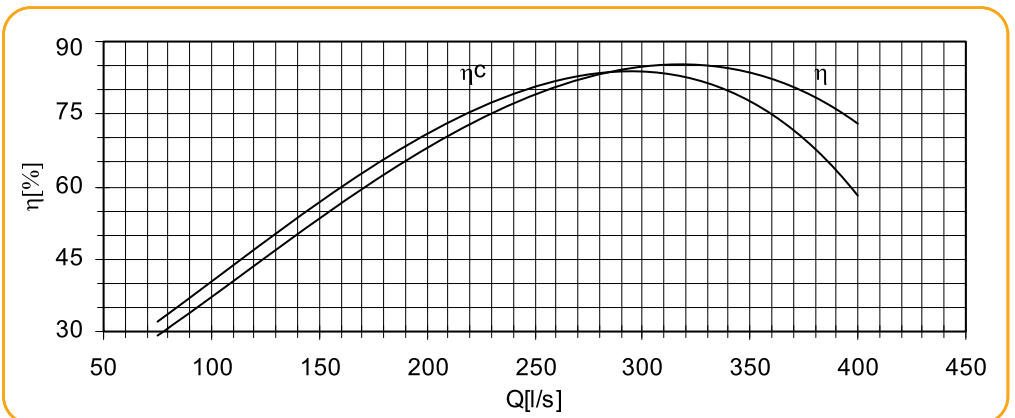
Total  
Differential  
Head



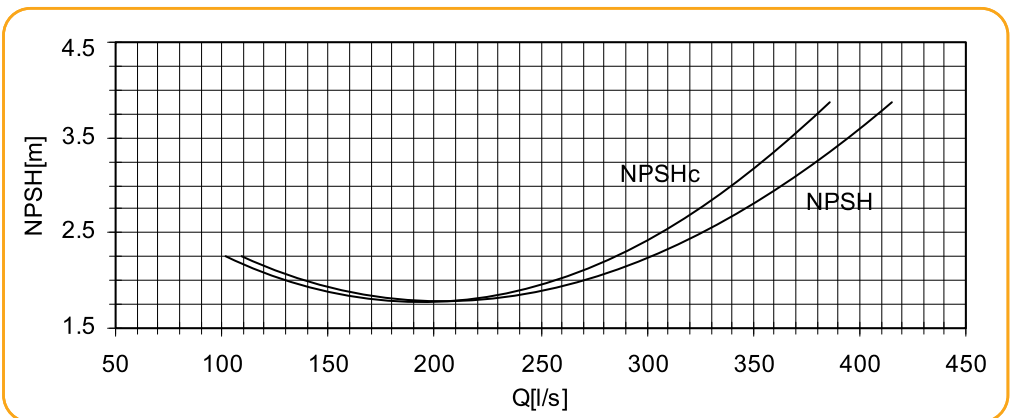
Power Input



Efficiency



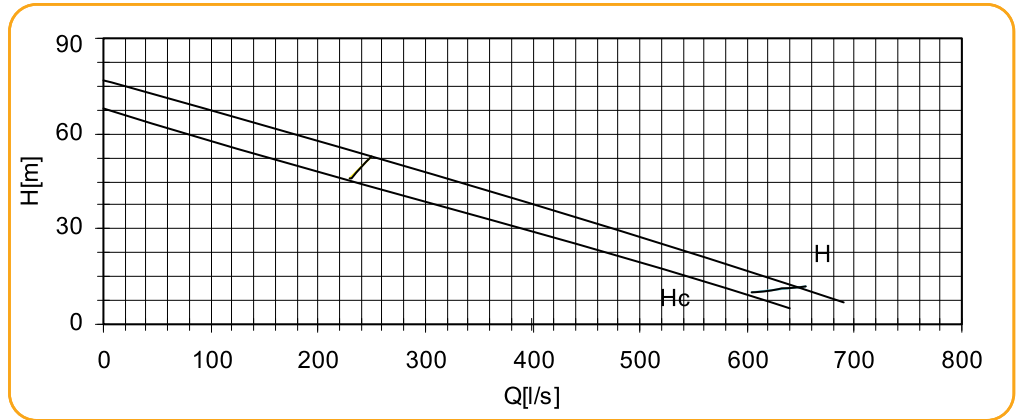
Net Positive  
Suction Head



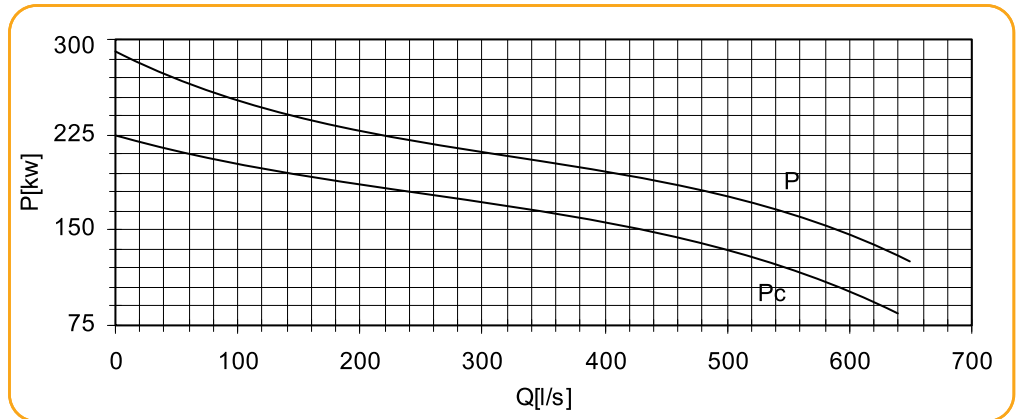
Performance curves are valid for clear water t=20 °C, ρ=1000 kg/m<sup>3</sup>.. NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

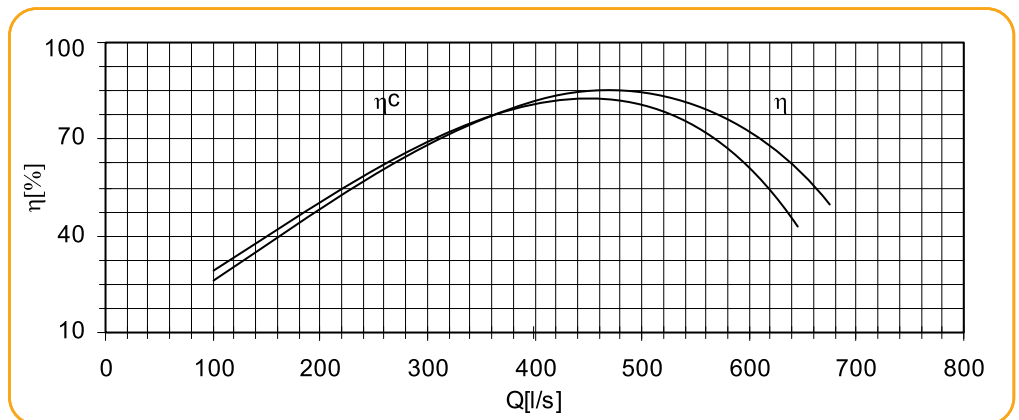
Total Differential Head



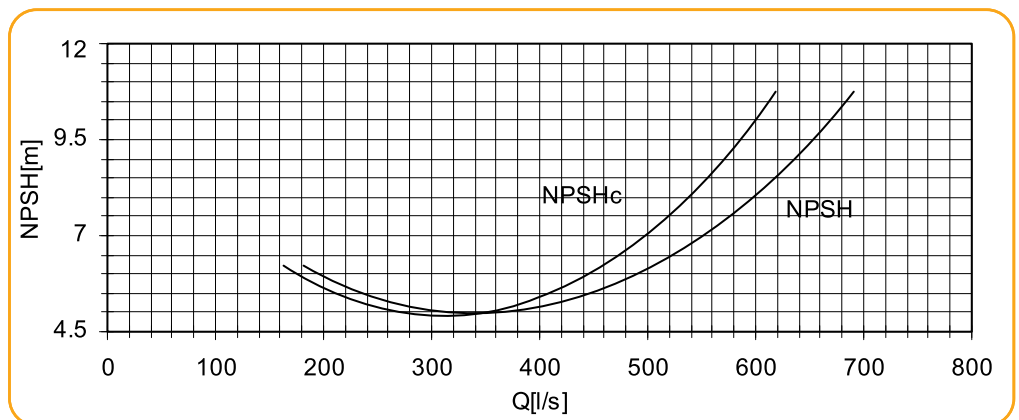
Power Input



Efficiency

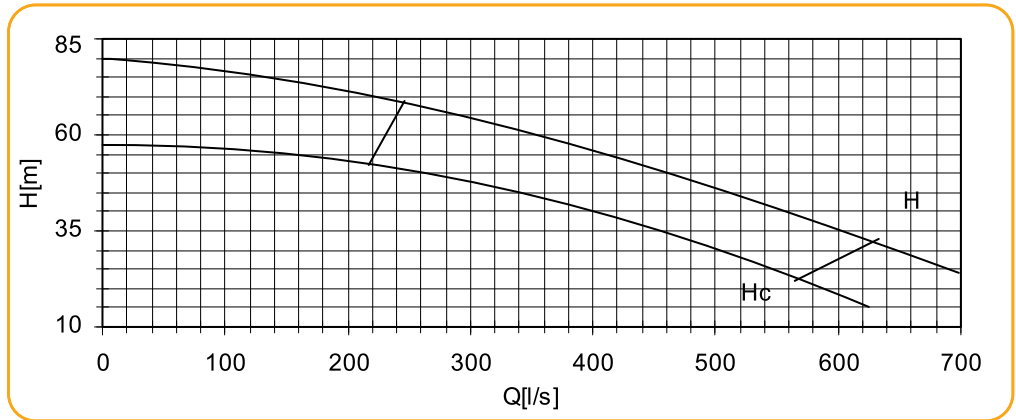


Net Positive Suction Head

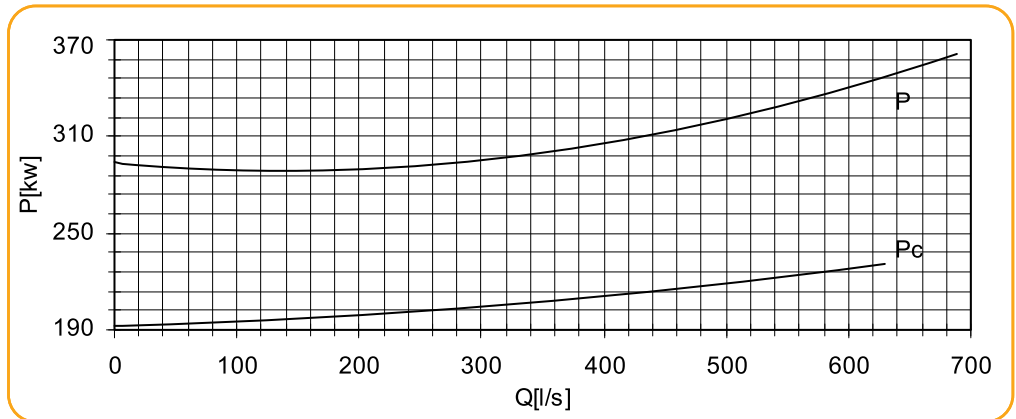


Pump performance curves

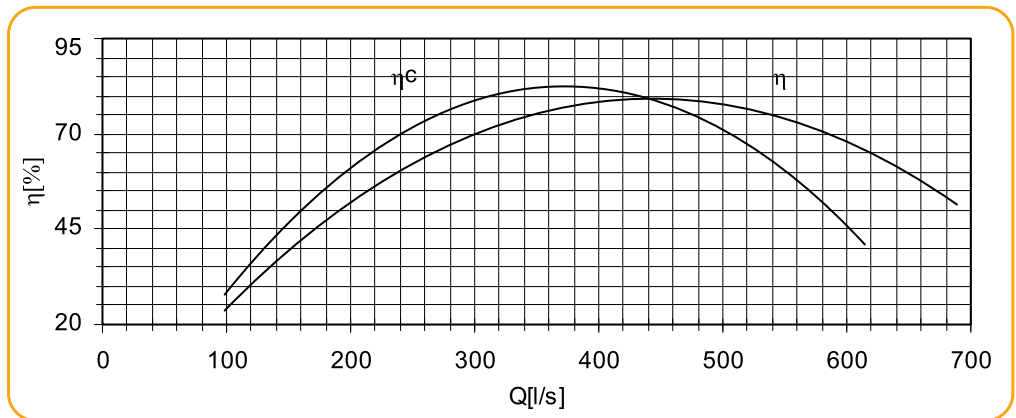
Total  
Differential  
Head



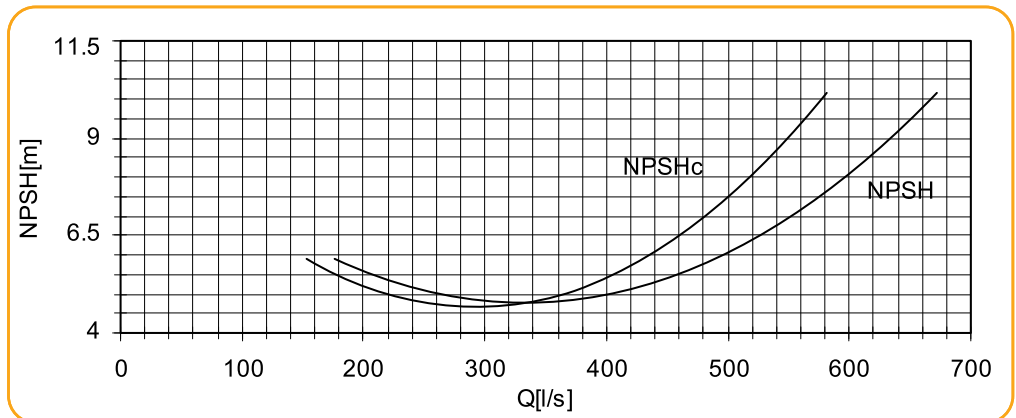
Power Input



Efficiency



Net Positive  
Suction Head

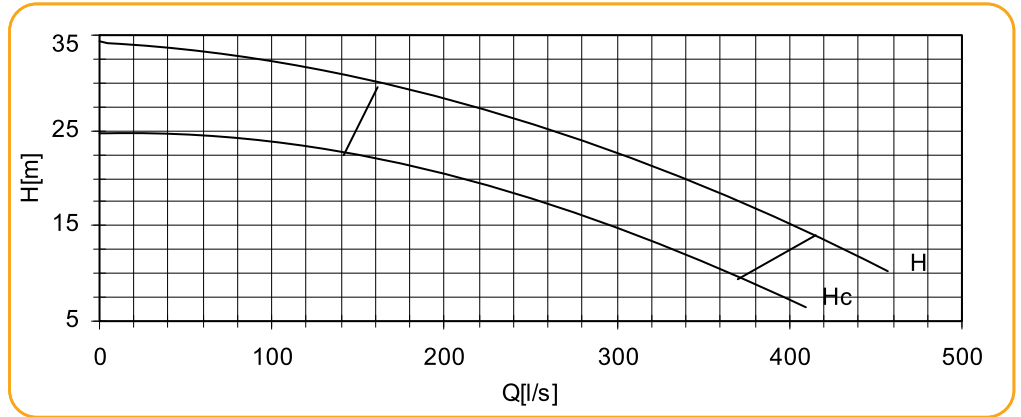


Performance curves are valid for clear water t=20 °C, ρ=1000 kg/m<sup>3</sup>.. NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

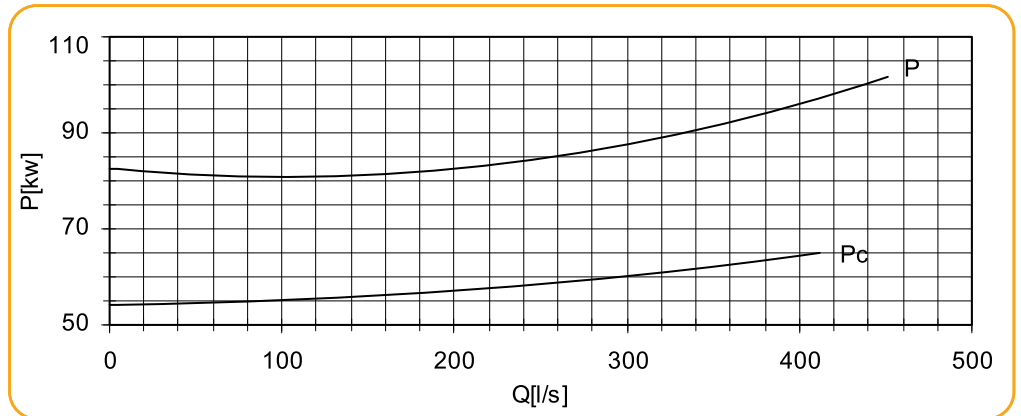


Pump performance curves

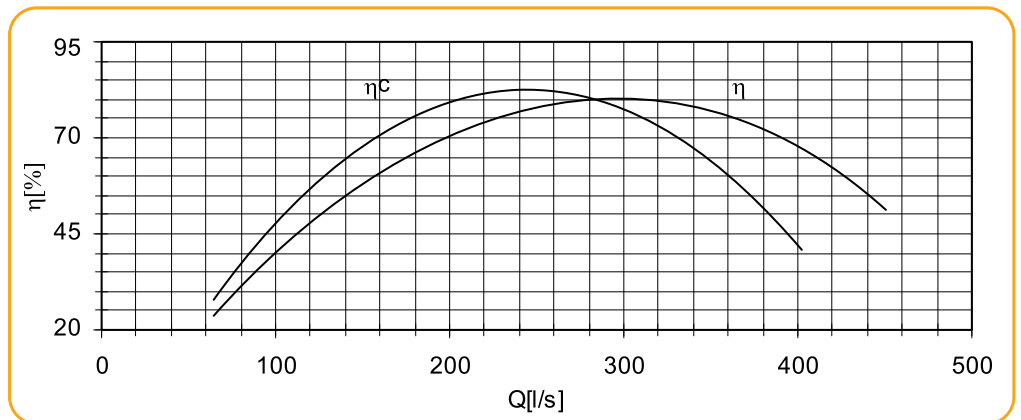
Total  
Differential  
Head



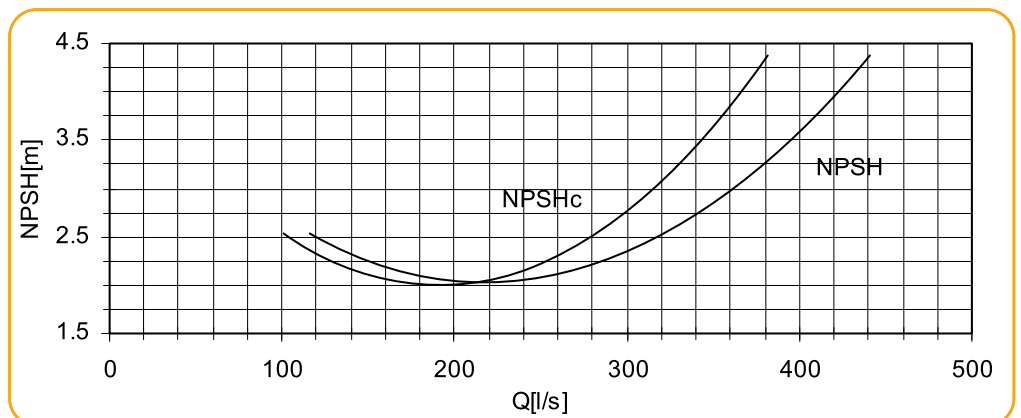
Power Input



Efficiency

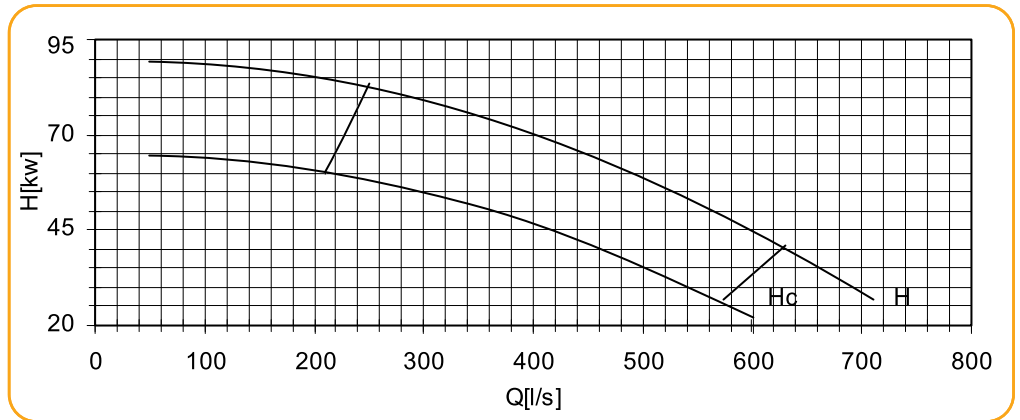


Net Positive  
Suction Head

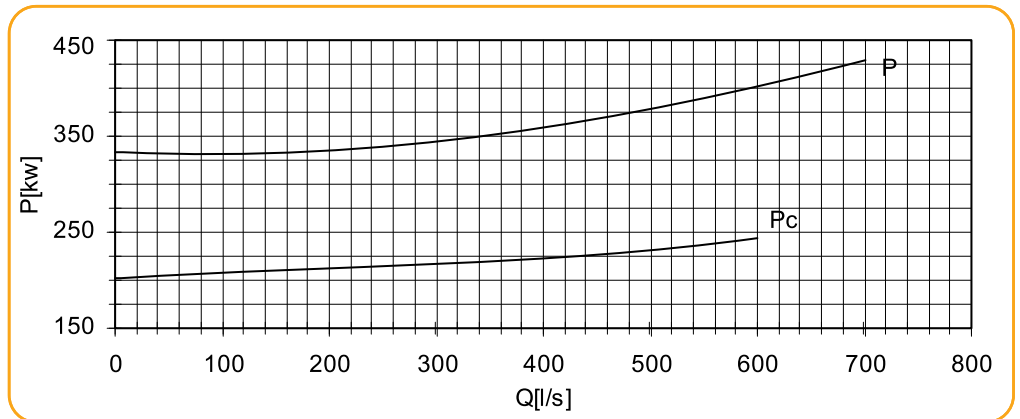


Pump performance curves

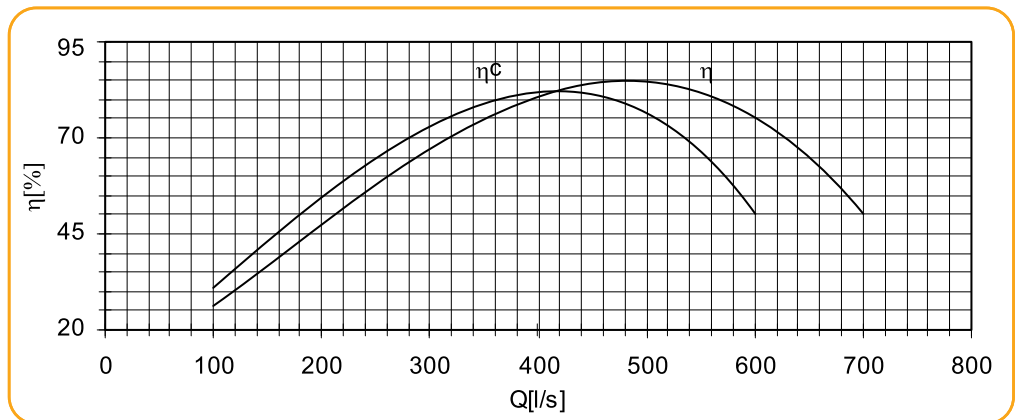
Total  
Differential  
Head



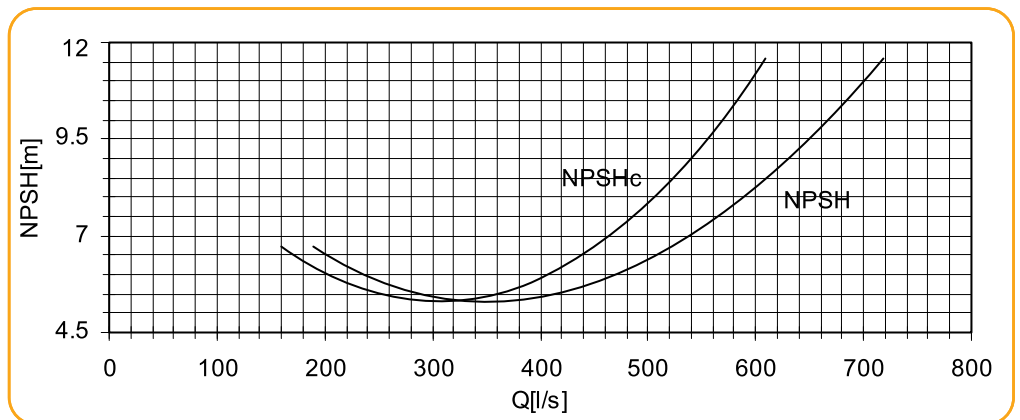
Power Input



Efficiency



Net Positive  
Suction Head



Performance curves are valid for clear water  $t=20\text{ }^{\circ}\text{C}$ ,  $\rho=1000\text{ kg/m}^3$ . NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906





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