

Series e-HSC

Double Suction Centrifugal Pumps

PERFORMANCE CURVES - 60 HZ

Service and support from the most trusted name in the industry – Bell & Gossett.

The Bell & Gossett name has always stood for uncompromising quality and dependability. That's evident in the way every one of our centrifugal pumps is built and backed by our outstanding customer service and support team.

Your local Bell & Gossett representative is available any time and is an experienced professional with a wealth of technical expertise. In addition to expert system and product application assistance and a wide product inventory warehoused locally, we offer ESP-Systemwize software selection program.



ESP-Systemwize is a Bell & Gossett web-based software that helps you design HVAC systems accurately, effectively and very quickly. You get fast, precise equipment selection, pump performance curves and equipment schedules, submittals, specifications and more.

ESP-Systemwize includes:

- Centrifugal Pumps
- Air/Dirt Separators
- Drives and Controls
- Expansion Tanks
- Heat Exchangers
- PIC Valves
- Replacement Parts
- Suction Diffuser and Triple Duty Valve
- Wastewater/Stormwater

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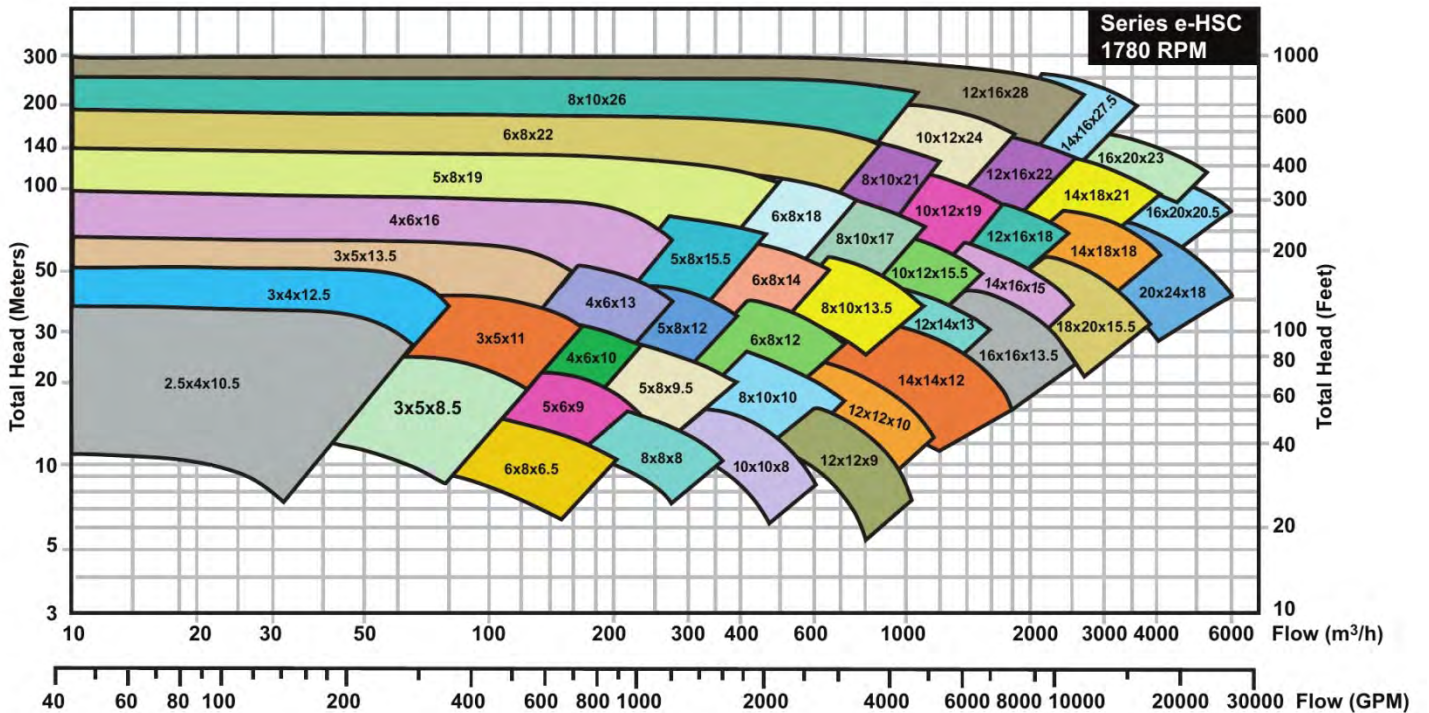
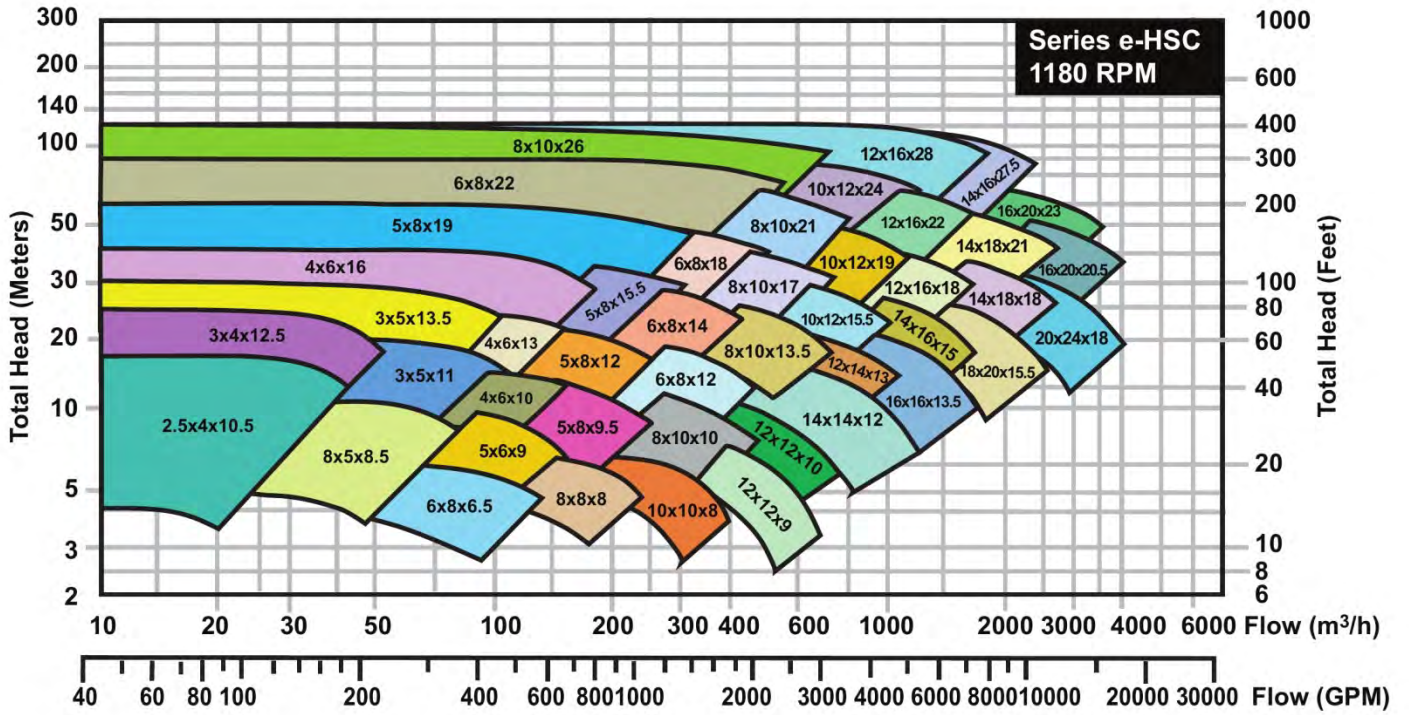
¹Hydraulic performance curves not shown may be available through online selection tools if not displayed in this booklet. Use online selection tools to view the most up-to-date performance data.

MODEL LIST

No.	e-HSC Pump Model ¹		2-Pole	4-Pole	6-Pole
1	2.5x4x10.5	2.5x4x10	•	•	•
2	3x4x12.5	3x4x12	•	•	•
3	3x5x8.5	3x5x8	•	•	•
4	3x5x11	3x5x10.5	•	•	•
5	3x5x13.5	3x5x13		•	•
6	4x6x10	4x6x9.5	•	•	•
7	4x6x13	4x6x12	•	•	•
8	4x6x16	4x6x15.5		•	•
9	5x6x9	5x6x8.5		•	•
10	5x8x9.5	5x8x9	•	•	•
11	5x8x12	5x8x11	•	•	•
12	5x8x15.5	5x8x14.5		•	•
13	5x8x19	5x8x18		•	•
14	6x8x6.5	6x8x6		•	•
15	6x8x12	6x8x11		•	•
16	6x8x14	6x8x13.5		•	•
17	6x8x18	6x8x17		•	•
18	6x8x22	6x8x21		•	•
19	6x10x11	6x10x10.5	•		
20	8x8x8	8x8x7.5		•	•
21	8x10x10	8x10x9.5		•	•
22	8x10x13.5	8x10x13		•	•
23	8x10x17	8x10x16		•	•
24	8x10x21	8x10x20		•	•
25	8x10x26	8x10x25		•	•
26	10x10x8	10x10x7.5		•	•
27	10x12x15.5	10x12x14.5		•	•
28	10x12x19	10x12x18		•	•
29	10x12x24	10x12x23		•	•
30	12x12x9	12x12x8.5		•	•
31	12x12x10	12x12x9.5		•	•
32	12x14x13	12x14x12.5		•	•
33	12x16x18	12x16x17		•	•
34	12x16x22	12x16x21		•	•
35	12x16x28	12x16x27		•	•
36	14x14x12	14x14x11		•	•
37	14x16x15	14x16x14.5		•	•
38	14x16x27.5	14x16x26		•	•
39	14x18x18	14x18x17		•	•
40	14x18x21	14x18x20		•	•
41	16x16x13.5	16x16x13		•	•
42	16x20x20.5	16x20x19.5		•	•
43	16x20x23	16x20x22		•	•
44	18x20x15.5	18x20x14.5		•	•
45	20x24x18	20x24x17		•	•

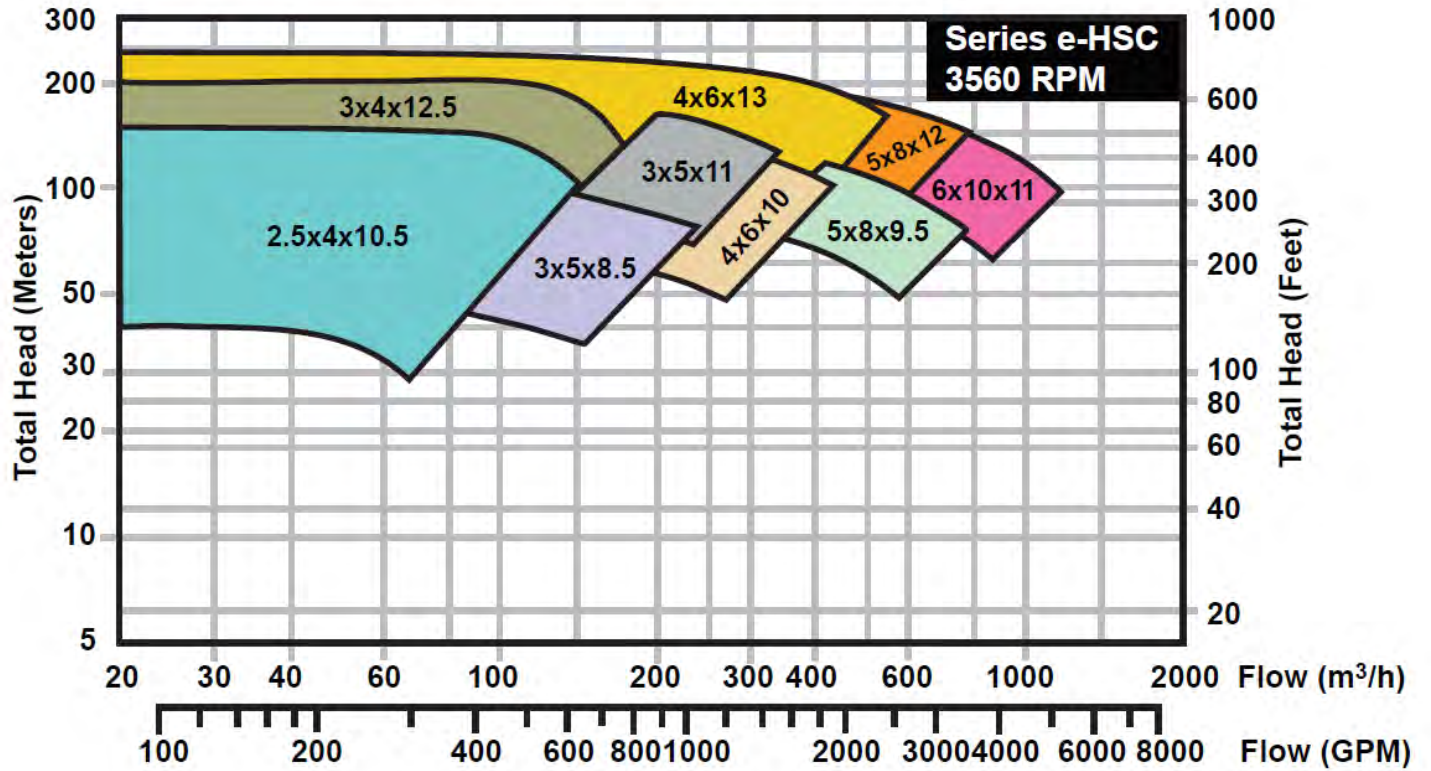
¹Pump model nomenclature: (Discharge diameter) x (Suction diameter) x (Impeller diameter) in inches

e-HSC PUMP 60 CYCLE PERFORMANCE RANGE



Note: Every pump size listed contains two distinct impeller designs – i.e. the 5X8X12 model also contains a 5X8X11 configuration. See individual model curves for details. Click on a pump model to be taken to the individual curve.

e-HSC PUMP 60 CYCLE PERFORMANCE RANGE



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GENERAL INTRODUCTION

The new **e-HSC** pump series is the result of close collaboration between our customers and us; the new range has been redesigned and improved to meet the Commercial Building Services (CBS) requirements in terms of performance and energy savings. It features 90 pump models with standard and optional material combinations in order to meet a wide variety of customer needs (see page XX for more material offering details).

Pump Design

The **e-HSC** pump is a centrifugal double suction electro-pump with a single stage, horizontally split case and radial flanged design. The **e-HSC** pump has cast iron casing (ductile iron on high pressure models) and stainless steel impeller standard.

e-HSC pumps are equipped with interchangeable mechanical seals, NEMA Premium efficiency motors, and baseplates for added support. Easily adjustable ANSI/OSHA compliant coupling guards are also included standard.

e-HSC pumps are designed for ease of serviceability. The horizontal split-case design allows the entire rotating assembly to be removed simultaneously after removing the upper casing. Additionally, mechanical seal and bearing service can be performed without removing the upper casing of the pump. Both of these features permit pump maintenance without removing attached piping.

Applications

- Chillers
- Cooling towers
- Distributive pumping
- District cooling and heating
- Primary & secondary HVAC pumping
- Process application in HVAC markets



Additional Benefits

- **Performance:** ESIA 2010 compliant and equipped with NEMA Premium efficiency motors, the e-HSC product line provides best-in-class hydraulic coverage at high efficiencies.
- **Reliability:** High production quality, robust construction and operation, and easy access to mechanical elements ensure continuous operation with minimal downtime for maintenance.
- **Total Cost Ownership:** Best-in-class hydraulic and electric efficiency with easy and quick maintenance reduce energy expenditure as well as operation and maintenance costs.
- **Pre-post Sales Support:** We are continuously working close to our customers to help them select the right pump for their specific application. Improved user-friendly selection software equipped with many tools and filters is available on the web and on apps for mobile phones. Experienced engineers are fully dedicated to big projects for all customer needs.

Hydraulic Specifications

- Maximum flow: **26,628 GPM** [6048 m³/hr]
- Maximum head: **869 ft.** [265 m]
- Hydraulic performance compliant with ANSI/HI 14.6 and ISO 9906:2012 (Grade 2B)

Fluid Temperature Range

- Standard configuration: **-4 to 250°F** [-20 to 121°C]

Maximum Operating Pressure (Seals & Casings)

- Mechanical seal pressure options up to **450 psi** [31 bar]
- Cast iron casing working pressures: **175 psi** [12 bar]
- Version with cast ductile iron casing: **400 & 450 psi** [28 & 31 bar]

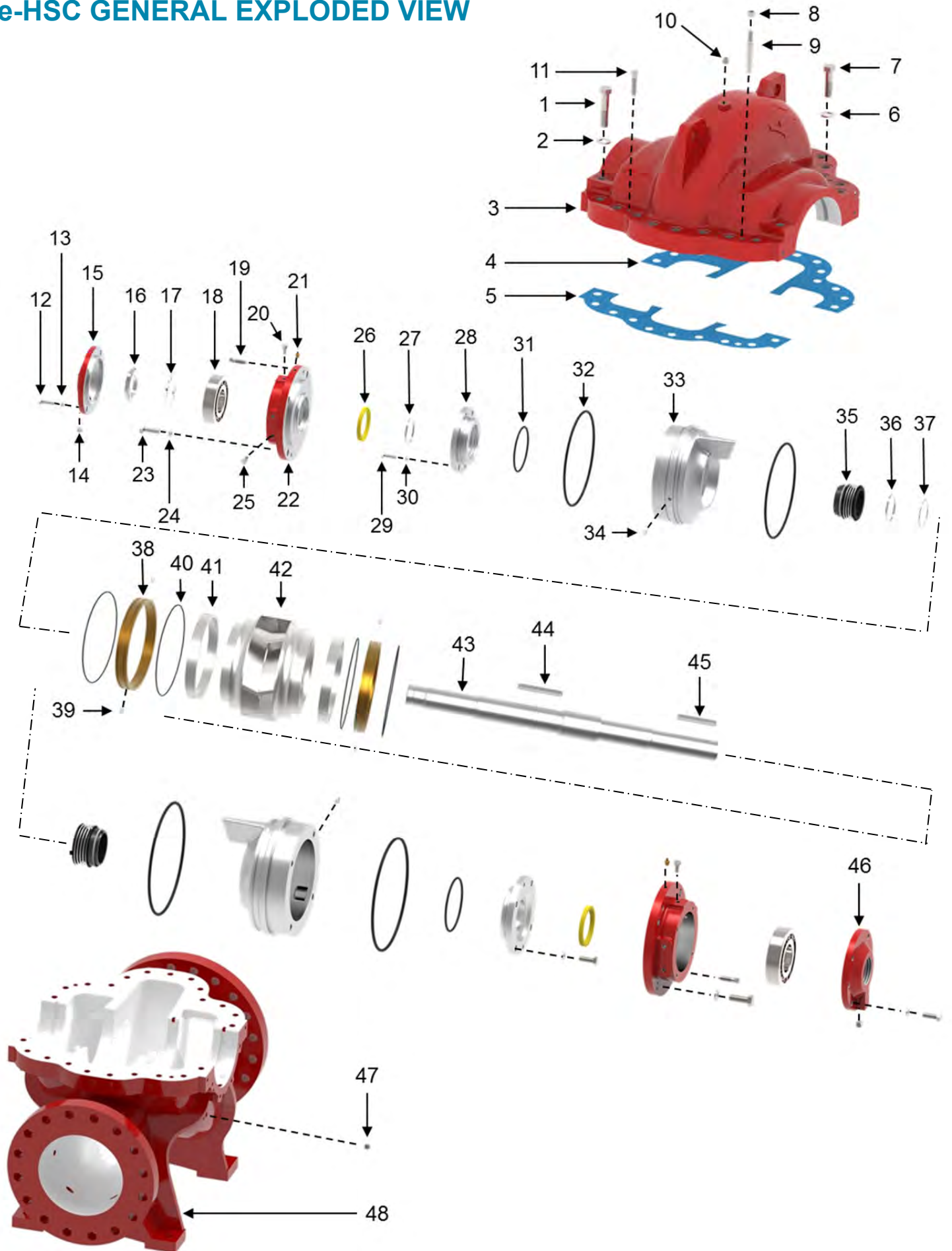
Flange Drilling Specifications

- ASME/ANSI B16.1, 125/250#
- DIN 16/25/40, EN 1092-1 (Optional)

Motor Specifications

- **NEMA Premium** efficiency per EISA 2010
- 2, 4, 6-pole ranges
- Maximum 3-phase ambient temperature: **104°F** [40°C]
- Inverter-Duty Ready
- Open Drip Proof (ODP) or Totally Enclosed Fan Cooled (TEFC) enclosures
- Performances according to **NEMA MG-1**
- PTC/RTD Transducers (Optional)
- **Class F** insulation
- Standard voltages:
 - 3 x 460/575 V (North America)

e-HSC GENERAL EXPLODED VIEW



LEGEND					
NO.	Description	Qty.	NO.	Description	Qty.
1	Large Casing Bolt	4	25	Sensor Screw	10
2	Large Casing Washer	4	26	Lip Seal	2
3	Upper Casing	1	27	Shoulder Ring	2
4	Suction Gasket	1	28	Seal Gland	2
5	Discharge Gasket	1	29	Bolt (Seal Gland)	8
6	Casing Washer	*	30	Washer (Seal Gland)	8
7	Casing Bolt	*	31	O-Ring (Seal Gland)	2
8	Tapered Pin Nut	2	32	O-Ring (Stuffing Box)	4
9	Tapered Pin	2	33	Stuffing Box (Seal Body)	2
10	Vent Plug	1	34	Pin (Seal Body)	2
11	Jacking Screw	4	35	Mechanical Seal	2
12	Bolt (Bearing Gland)	8	36	Shoulder Ring (MS)	1
13	Washer (Bearing Gland)	8	37	Circlip (Snap Ring)	1
14	Plug (Bearing Gland)	2	38	Casing Wear Ring (Optional)	2
15	Bearing Gland B (Outboard Gland) ¹	2	39	Pin (CWR only)	4
16	Locknut (Bearing)	1	40	O-Ring (CWR only)	4
17	Lockwasher (Bearing)	1	41	Impeller Wear Ring (Optional) ²	2
18	Deep Groove Ball Bearing	2	42	Impeller	1
19	Jacking Screw (Bearing Housing)	4	43	Shaft	1
20	Screw (BH Top)	2	44	Impeller Key	1
21	Grease Cup	2	45	Coupling Key	1
22	Bearing Housing	2	46	Bearing Gland A (Inboard Gland) ¹	1
23	Bolt (Bearing Housing)	8	47	Drain Plug	10
24	Washer (Bearing Housing)	8	48	Lower Casing	1

*Quantity varies with pump size

¹Bearing gland gasket not depicted. Gasket is placed between bearing gland and bearing housing.

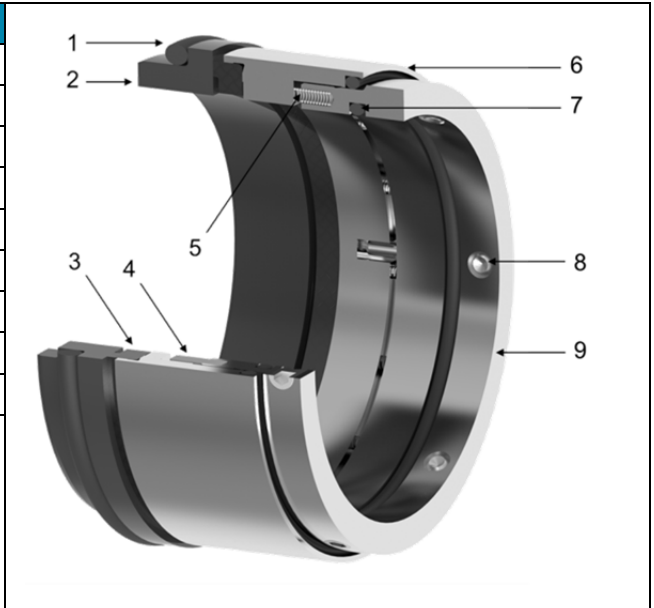
²Set screws not depicted. Each impeller wear ring is fastened to the impeller with (3) screws placed 120° apart. Screw fastening axis runs parallel to the shaft axis of rotation.

MECHANICAL SEALS

MR1 Balanced Metal Pusher Seal

LEGEND	Description	Material
1	O-Ring	EPDM, FKM
2	Fixed Assembly	Silicon Carbide
3	Rotating Assembly	Carbon, Silicon Carbide
4	Pin	AISI 316
5	Coil Spring	AISI 316
6	Seal Bracket	18-8 Stainless steel
7	O-Ring	EPDM, FKM
8	Set Screw	AISI 316
9	Drive Ring	AISI 316

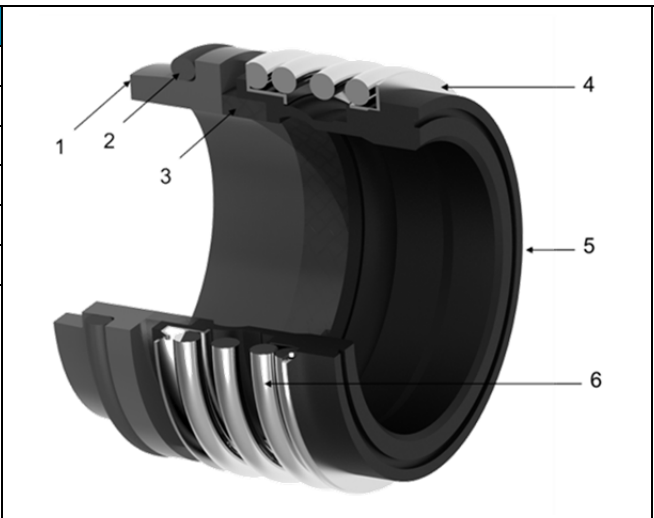
Up to 110 mm and 450 psi [31 bar] (DIN 24960 & EN12756)
 Standard offering for working pressures above 175 psi [12 bar]
 Temperature range: -4 to 250°F [-20 to 121°C]



MR2 Unbalanced Rubber Bellow Seal

LEGEND	Description	Material
1	Fixed Assembly	Silicon carbide
2	O-Ring	EPDM
3	Rotating Assembly	Carbon
4	Spring Retainer	18-8 SS
5	Elastomer Bellow	EPDM
6	Spring	18-8 SS

Up to 110 mm and 232 psi [16 bar] (DIN 24960 & EN12756)
 Standard offering for working pressures up to 175 psi [12 bar]
 Temperature range: -4 to 250°F [-20 to 121°C]



Note: Mechanical seals do not have a suction pressure limitation due to the internally flushed design of e-HSC pumps. Seals are rated to withstand max working pressures of e-HSC pumps.

MATERIAL CONFIGURATIONS

PART MATERIAL CONFIGURATIONS

COMPONENT	STANDARD OPTION		OTHER AVAILABLE OPTIONS		
Casing	Cast Iron	Ductile Iron ¹	-		
Shaft	Stainless steel 420		Stainless steel Duplex 2205		
Impeller	Stainless steel 304 (CF8)		SS 316 (CF8M)		
Casing wear rings ³	C90300 Bronze		SS 420 ²	SS Duplex ²	Nitronic 60 ²
Impeller wear rings ³	Stainless steel 304 (CF8)		SS 316 (CF8M)		
Mechanical seal type	MR2		MR1 ¹		
Mechanical seal material ⁴	Carbon/SiC/EPDM	SiC/SiC/EPDM	Carbon/SiC/FKM	SiC/SiC/FKM	

¹Standard for working pressures above 175 psi (12 bar)

²Optional material with long lead time

³Casing and impeller wear rings are optional components with standard material configurations. Impeller wear ring material must always match impeller material. Casing and impeller wear ring materials must not match.

⁴MR2 seal only available in standard material configuration. See *Mechanical Seals* for more information.

COUPLING, MOTOR, AND OTHER ACCESSORIES

COUPLING TYPE	STANDARD OPTION		OTHER AVAILABLE OPTIONS		
Non-Spacer	-		Duraflex®	Falk Steelflex®	Falk Gear Type®
Spacer	Duraflex®	Falk Steelflex® ¹	Falk Steelflex®	Falk Gear Type	
¹ Standard only if Duraflex® coupling size is not available					

ITEM	STANDARD OPTION	OTHER AVAILABLE OPTIONS		
Motor Type ¹	NEMA premium efficiency per EISA 2010	Premium efficiency		
Power Range ²	0-1000 HP	1000+ HP		
Enclosure	Open drip proof (ODP)	Totally enclosed fan cooled (TEFC)		
Other Motor Features	1.15 Service Factor ²	PTC, PT100	Aegis® bearing protection rings or shielded bearings	Explosion proof motor

¹Motors are NEMA Premium Efficient up to 400 HP and 449T frame size. Above 400 HP and 449T frame size, motor frames are vendor specified.

²Service factor is reduced to 1 for TEFC enclosed motors above 450 HP.

OTHER ACCESSORIES
Drip pan (lead times dependent on supplier)
Temperature Sensor (lead times dependent on supplier)
Vibration Sensor (lead times dependent on supplier)
Pressure Sensor (lead times dependent on supplier)
Universal disassembly tool (short lead time)

e-HSC PUMP ACCESSORIES

Temperature Monitoring (PN: P6011896)

Description

- Prosense ETS Series Digital Temperature Sensor

Attributes

- -58°F to 302°F [-50°C to 150°C]
- ¼ inch male NPT process connection
- 30 mm [1.18 in.] insertion length
- Output 1: Switch PNP, N.O./N.C. selectable or 4 to 20 mA
- Output 2: Switch PNP, N.O./N.C. selectable or 4 to 20 mA, 4-digit display

Vibration Monitoring (PN: P6015979)

Description

- PCB Piezotronics Industrial Velocity Transmitter

Attributes

- Output: 4 to 20 mA
- 1/4-28 UNF process connection
- 0 to 1 in/sec pk
- 3 to 1k Hz
- Top exit
- 2-pin connection

Pressure Monitoring (PNs: S13203, S13204)

Description (S13203)

- American Sensor Technologies Pressure Sensor/Transmitter

Attributes

- AST range 0 to 100 psi [0 to 6.9 bar]
- Output: 4 to 20 mA
- ¼ inch male NPT process connection
- 10 ft. [3 m] wiring
- 316L wetted material

Description (S13204)

- American Sensor Technologies Pressure Sensor/Transmitter

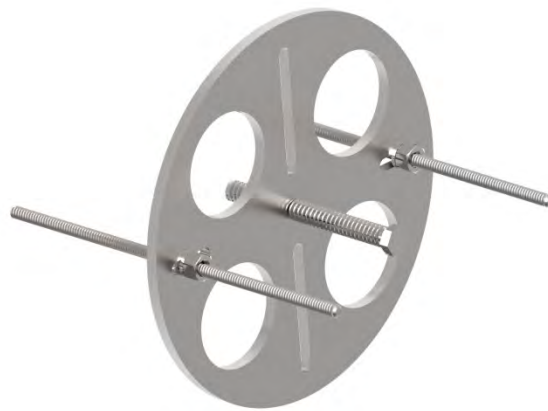
Attributes

- AST range 0 to 300 psi [0 to 20.7 bar]
- Output: 4 to 20 mA
- ¼ inch male NPT process connection
- 10 ft. [3 m] wiring
- 316L welded material

Universal Disassembly Tool (PN: P6014747)

Description

- Optional tool which assists with bearing housing, seal gland, and mechanical seal extraction. Refer to the e-HSC pump instruction manual (IOM PN: P6016605) for more information on how to use the universal disassembly tool.



Universal Disassembly Tool (PN: P6014747)

Variable Frequency Drives (VFDs) Overview

Description

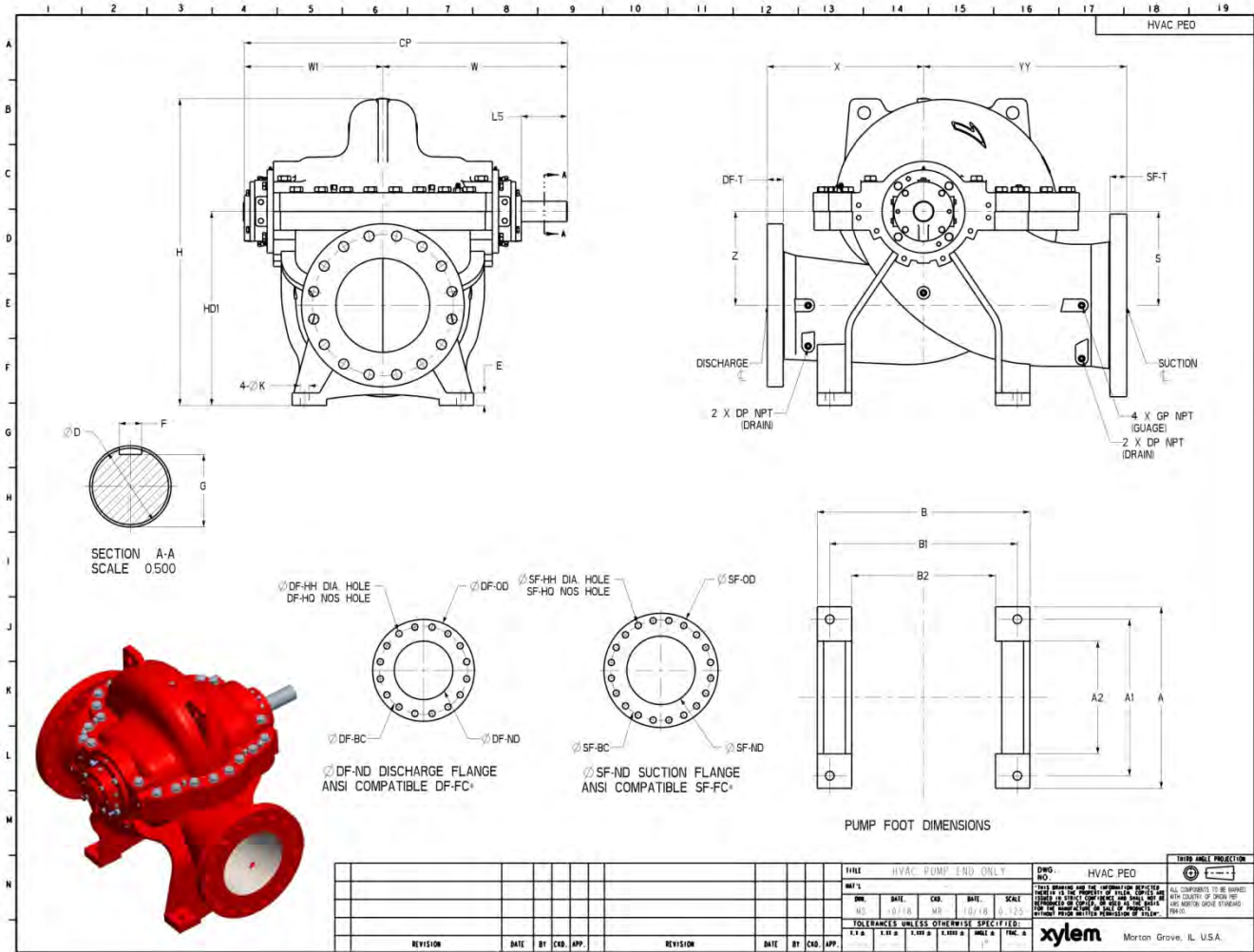
- Technologic® IPC Variable Speed Controller

Attributes

- 460/575V
- 1.5 to 125 hp and 150 to 600 hp range options
- Temperature rating: 14°F to 113°F [-10°C to 45°C]
- Built-in BACnet, Modbus RTU, N2 Metasys FLN
- 2 analog inputs, 1 analog output
- 4 digital inputs, 2 digital outputs
- Mains disconnect with optional fuses
- Optional bypass for cross-the-line operation (UL TYPE 1 and UL TYPE 12 only)
- UL TYPE 1, 2, 3R and 4X enclosure options
- Fan-cooled via temperature controller
- 100 kA SCCR rating

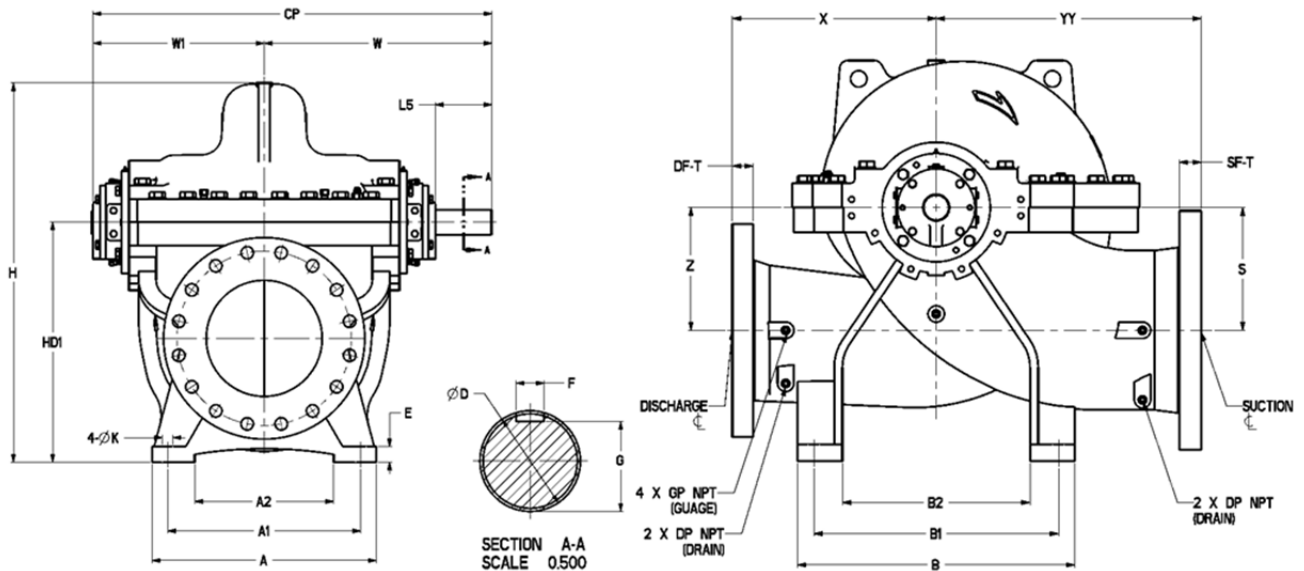
For more detailed drive information and selection, visit www.esp-systemwize.com.

e-HSC PUMP DIMENSIONAL DATA (PUMP END ONLY)

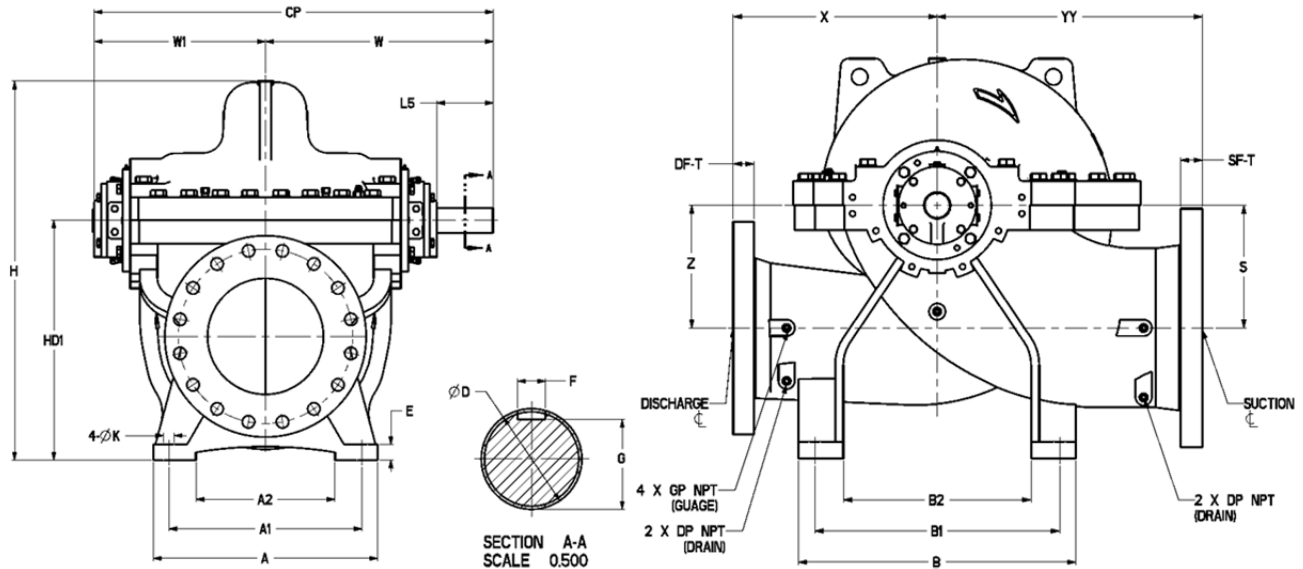


REVISION										TITLE		DWG. NO.		HVAC PEO		FIRST ANGLE PROJECTION		
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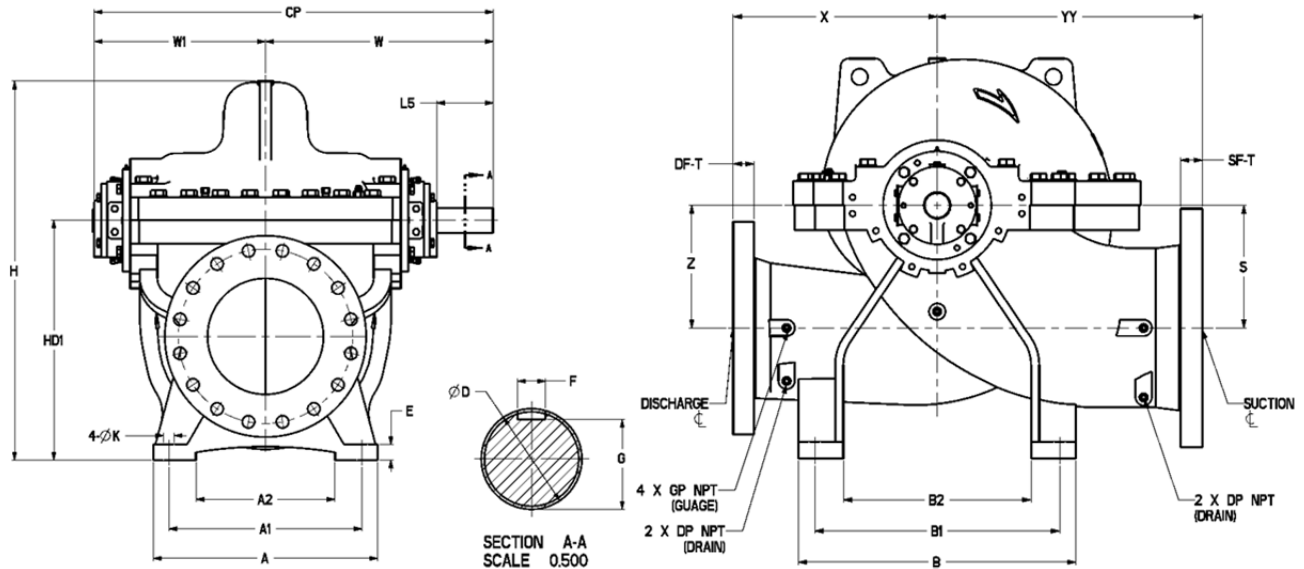
Pump Size	2.5X4X10.5		Pump Size	3X4X12.5		Pump Size	3X5X8.5	
	2.5X4X10			3X4X12			3X5X8	
Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)
YY	11.81	300	YY	14.17	360	YY	11.81	300
X	11.81	300	X	12.99	330	X	11.81	300
H	18.31	465	H	19.29	490	H	19.49	495
HD1	11.02	280	HD1	11.02	280	HD1	12.6	320
Z	5.12	130	Z	5.12	130	Z	6.3	160
S	5.12	130	S	5.12	130	S	6.3	160
B	11.81	300	B	13.78	350	B	13.78	350
B1	9.84	250	B1	11.81	300	B1	11.81	300
B2	6.3	160	B2	8.27	210	B2	8.27	210
W1	10.12	257	W1	11.5	292	W1	11.5	292
W2	13.39	340	W2	14.76	375	W2	14.76	375
CP	23.5	597	CP	26.26	667	CP	26.26	667
L5	3.15	80	L5	3.15	80	L5	3.15	80
D	1.38	35	D	1.38	35	D	1.38	35
A	11.81	300	A	13.78	350	A	13.78	350
A1	9.84	250	A1	11.81	300	A1	11.81	300
A2	6.3	160	A2	8.27	210	A2	8.27	210
E	1.18	30	E	1.18	30	E	1.18	30
K	0.73	18.5	K	0.73	18.5	K	0.73	18.5
G	1.18	30	G	1.18	30	G	1.18	30
F	0.39	10	F	0.39	10	F	0.39	10
DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT
GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT
Weight	(lb.)	(kg)	Weight	(lb.)	(kg)	Weight	(lb.)	(kg)
	478	217		662	300		507	230



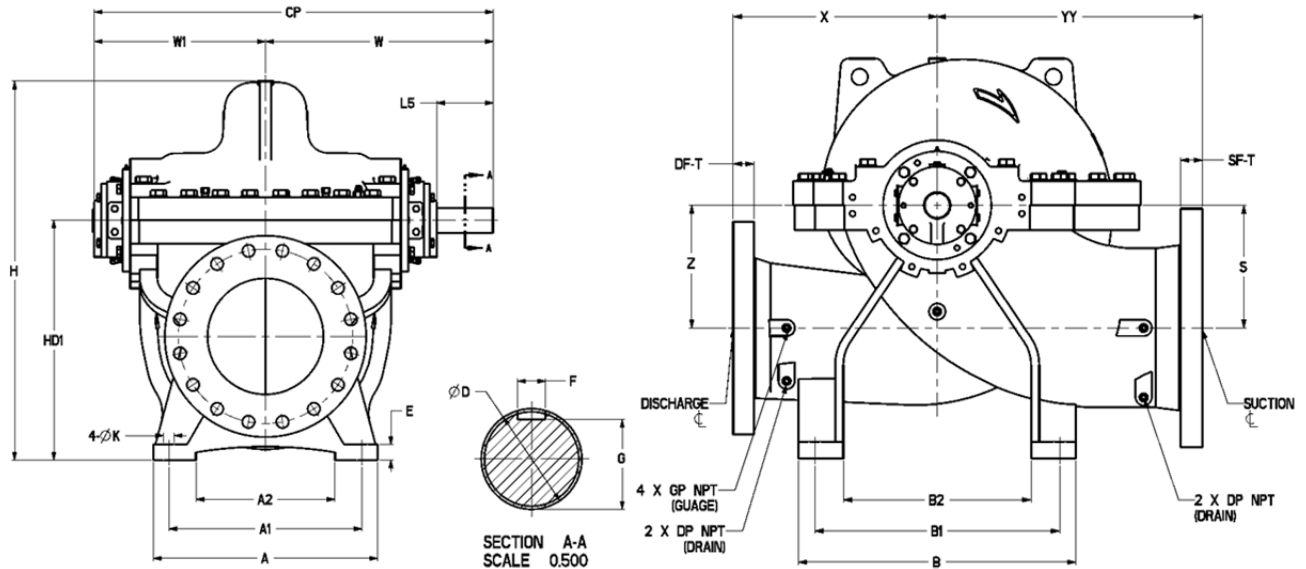
Pump Size	3X5X11		Pump Size	3X5X13.5		Pump Size	4X6X10	
	3X5X10.5			3X5X13			4X6X9.5	
Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)
YY	13.78	350	YY	14.96	380	YY	13.78	350
X	11.81	300	X	13.78	350	X	12.99	330
H	20.47	520	H	21.26	540	H	21.85	555
HD1	12.6	320	HD1	12.6	320	HD1	13.78	350
Z	6.3	160	Z	6.3	160	Z	6.69	170
S	6.3	160	S	6.3	160	S	6.69	170
B	13.78	350	B	13.78	350	B	13.78	350
B1	11.81	300	B1	11.81	300	B1	11.81	300
B2	8.27	210	B2	8.27	210	B2	8.27	210
W1	11.5	292	W1	11.5	292	W1	11.5	292
W2	14.76	375	W2	14.76	375	W2	14.76	375
CP	26.26	667	CP	26.26	667	CP	26.26	667
L5	3.15	80	L5	3.15	80	L5	3.15	80
D	1.38	35	D	1.38	35	D	1.38	35
A	13.78	350	A	13.78	350	A	13.78	350
A1	11.81	300	A1	11.81	300	A1	11.81	300
A2	8.27	210	A2	8.27	210	A2	8.27	210
E	1.18	30	E	1.18	30	E	1.18	30
K	0.73	18.5	K	0.73	18.5	K	0.73	18.5
G	1.18	30	G	1.18	30	G	1.18	30
F	0.39	10	F	0.39	10	F	0.39	10
DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT
GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT
Weight	(lb.)	(kg)	Weight	(lb.)	(kg)	Weight	(lb.)	(kg)
	662	300		650	295		617	280



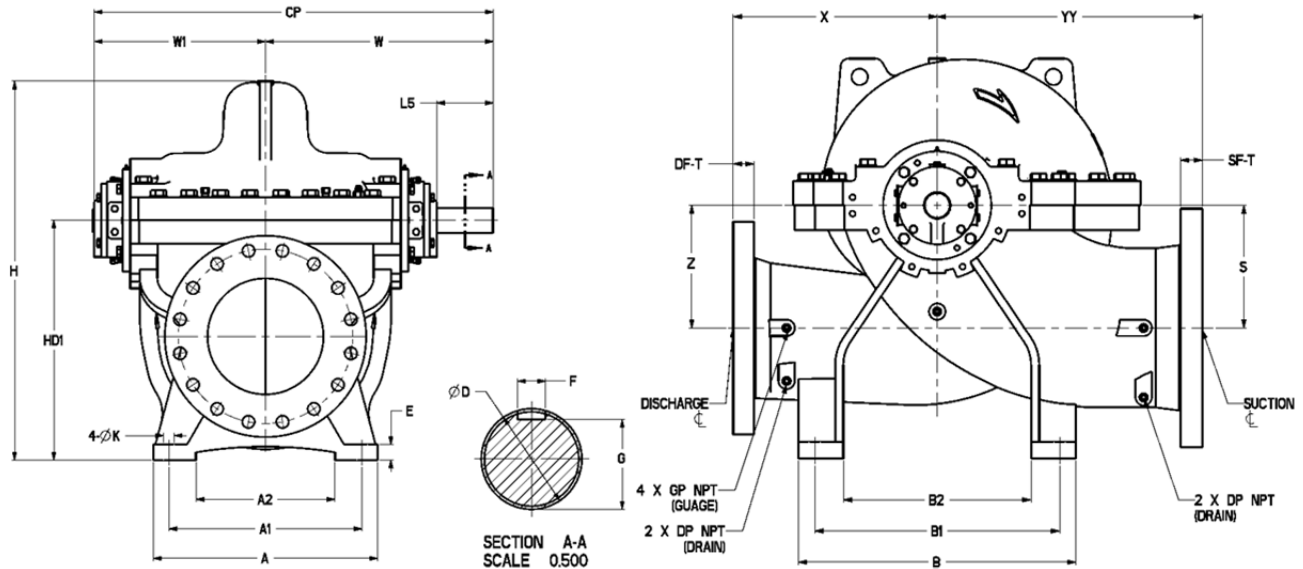
Pump Size	4X6X13		Pump Size	4X6X16		Pump Size	5X6X9	
	4X6X12			4X6X15.5			5X6X8.5	
Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)
YY	15.75	400	YY	16.93	430	YY	14.17	360
X	13.78	350	X	15.75	400	X	11.81	300
H	22.44	570	H	23.82	605	H	21.46	545
HD1	13.78	350	HD1	13.78	350	HD1	13.78	350
Z	6.69	170	Z	6.69	170	Z	6.69	170
S	6.69	170	S	6.69	170	S	6.69	170
B	13.78	350	B	18.5	470	B	13.78	350
B1	11.81	300	B1	15.75	400	B1	11.81	300
B2	8.27	210	B2	11.42	290	B2	8.27	210
W1	11.34	288	W1	11.5	292	W1	11.5	292
W2	15.94	405	W2	14.76	375	W2	14.76	375
CP	27.28	693	CP	26.26	667	CP	26.26	667
L5	4.33	110	L5	3.15	80	L5	3.15	80
D	1.77	45	D	1.38	35	D	1.38	35
A	13.78	350	A	16.54	420	A	13.78	350
A1	11.81	300	A1	13.78	350	A1	11.81	300
A2	8.27	210	A2	9.45	240	A2	8.27	210
E	1.18	30	E	1.38	35	E	1.18	30
K	0.73	18.5	K	0.94	24	K	0.73	18.5
G	1.56	39.5	G	1.18	30	G	1.18	30
F	0.55	14	F	0.39	10	F	0.39	10
DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT
GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT
Weight	(lb.)	(kg)	Weight	(lb.)	(kg)	Weight	(lb.)	(kg)
	662	300		783	355		662	300



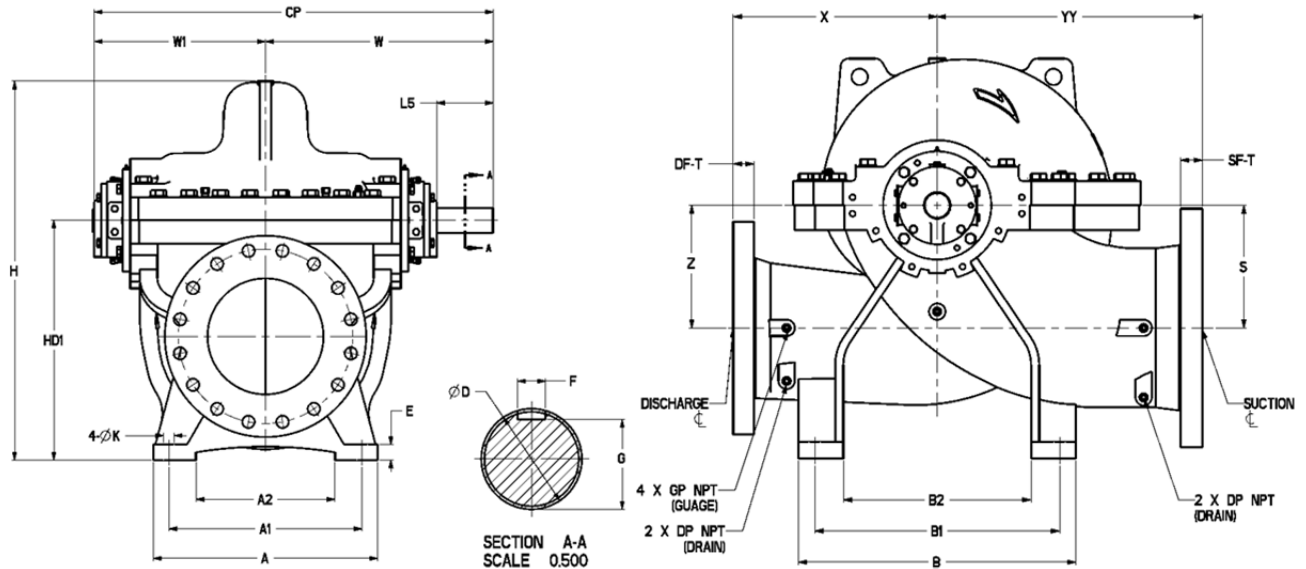
Pump Size	5X8X9.5		Pump Size	5X8X12		Pump Size	5X8X15.5	
	5X8X9			5X8X11			5X8X14.5	
Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)
YY	15.75	400	YY	15.75	400	YY	17.72	450
X	13.78	350	X	13.78	350	X	15.75	400
H	24.8	630	H	25	635	H	26.77	680
HD1	16.54	420	HD1	16.54	420	HD1	16.54	420
Z	7.87	200	Z	7.87	200	Z	7.87	200
S	7.87	200	S	7.87	200	S	7.87	200
B	18.5	470	B	18.5	470	B	18.5	470
B1	15.75	400	B1	15.75	400	B1	15.75	400
B2	11.42	290	B2	11.42	290	B2	11.42	290
W1	13.11	333	W1	13.11	333	W1	13.11	333
W2	17.72	450	W2	17.72	450	W2	17.72	450
CP	30.83	783	CP	30.83	783	CP	30.83	783
L5	4.33	110	L5	4.33	110	L5	4.33	110
D	1.77	45	D	1.77	45	D	1.77	45
A	16.54	420	A	16.54	420	A	16.54	420
A1	13.78	350	A1	13.78	350	A1	13.78	350
A2	9.45	240	A2	9.45	240	A2	9.45	240
E	1.38	35	E	1.38	35	E	1.38	35
K	0.94	24	K	0.94	24	K	0.94	24
G	1.56	39.5	G	1.56	39.5	G	1.56	39.5
F	0.55	14	F	0.55	14	F	0.55	14
DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT
GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT
Weight	(lb.)	(kg)	Weight	(lb.)	(kg)	Weight	(lb.)	(kg)
	750	340		858	390		860	390



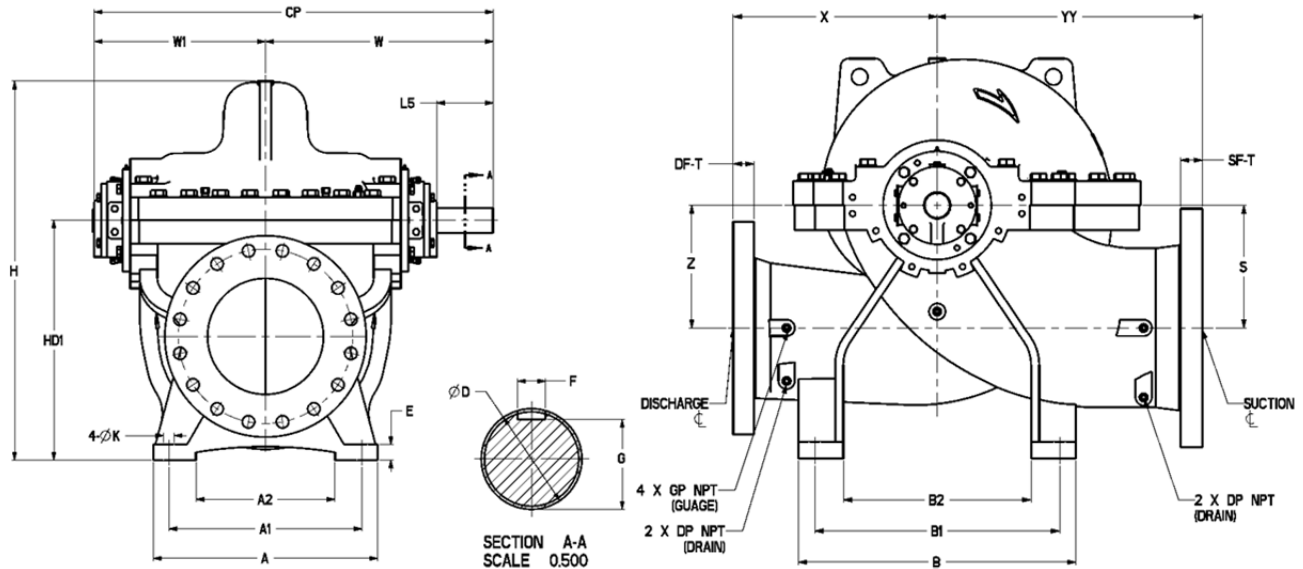
Pump Size	5X8X19		Pump Size	6X8X6.5		Pump Size	6X8X12	
	5X8X18			6X8X6			6X8X11	
Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)
YY	19.69	500	YY	15.75	400	YY	17.72	450
X	17.72	450	X	15.75	400	X	15.75	400
H	28.35	720	H	22.64	575	H	27.17	690
HD1	16.54	420	HD1	14.96	380	HD1	17.72	450
Z	7.87	200	Z	6.3	160	Z	9.06	230
S	7.87	200	S	6.3	160	S	9.06	230
B	20.47	520	B	18.5	470	B	18.5	470
B1	17.72	450	B1	15.75	400	B1	15.75	400
B2	13.39	340	B2	11.42	290	B2	11.42	290
W1	13.11	333	W1	11.5	292	W1	14.49	368
W2	17.72	450	W2	14.76	375	W2	19.09	485
CP	30.83	783	CP	26.26	667	CP	33.58	853
L5	4.33	110	L5	3.15	80	L5	4.33	110
D	1.77	45	D	1.38	35	D	1.77	45
A	20.47	520	A	16.54	420	A	16.54	420
A1	17.72	450	A1	13.78	350	A1	13.78	350
A2	13.39	340	A2	9.45	240	A2	9.45	240
E	1.38	35	E	1.38	35	E	1.38	35
K	0.94	24	K	0.94	24	K	0.94	24
G	1.56	39.5	G	1.18	30	G	1.56	39.5
F	0.55	14	F	0.39	10	F	0.55	14
DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT
GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT
Weight	(lb.)	(kg)	Weight	(lb.)	(kg)	Weight	(lb.)	(kg)
	948	430		617	280		636	380



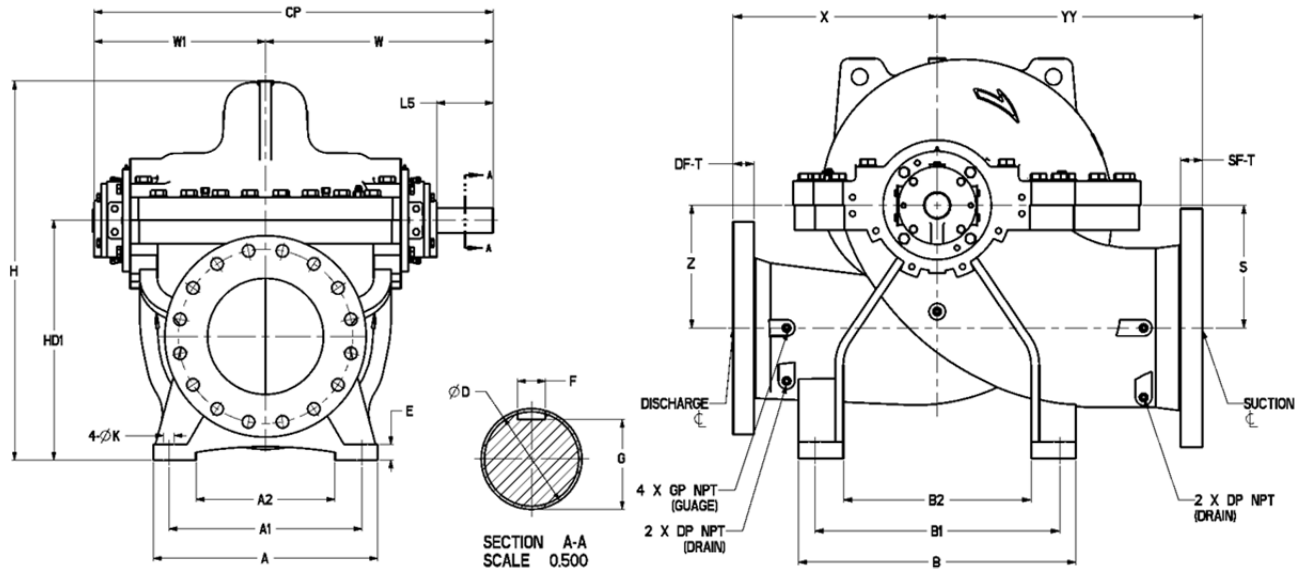
Pump Size	6X8X14		Pump Size	6X8X18		Pump Size	6X8X22	
	6X8X13.5			6X8X17			6X8X21	
Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)
YY	17.72	450	YY	19.69	500	YY	23.62	600
X	15.75	400	X	17.72	450	X	19.69	500
H	28.15	715	H	29.53	750	H	34.65	880
HD1	17.72	450	HD1	17.72	450	HD1	20.47	520
Z	9.06	230	Z	9.06	230	Z	11.81	300
S	9.06	230	S	9.06	230	S	11.81	300
B	18.5	470	B	18.5	470	B	26.77	680
B1	15.75	400	B1	15.75	400	B1	23.62	600
B2	11.42	290	B2	11.42	290	B2	18.11	460
W1	14.49	368	W1	14.84	377	W1	16.46	418
W2	19.09	485	W2	19.49	495	W2	22.24	565
CP	33.58	853	CP	34.33	872	CP	38.7	983
L5	4.33	110	L5	4.33	110	L5	5.51	140
D	1.77	45	D	2.17	55	D	2.56	65
A	16.54	420	A	16.54	420	A	22.83	580
A1	13.78	350	A1	13.78	350	A1	19.69	500
A2	9.45	240	A2	9.45	240	A2	14.17	360
E	1.38	35	E	1.38	35	E	1.57	40
K	0.94	24	K	0.94	24	K	1.1	28
G	1.56	39.5	G	1.93	49	G	2.28	58
F	0.55	14	F	0.63	16	F	0.71	18
DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT
GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT
Weight	(lb.)	(kg)	Weight	(lb.)	(kg)	Weight	(lb.)	(kg)
	904	410		1061	480		1808	820



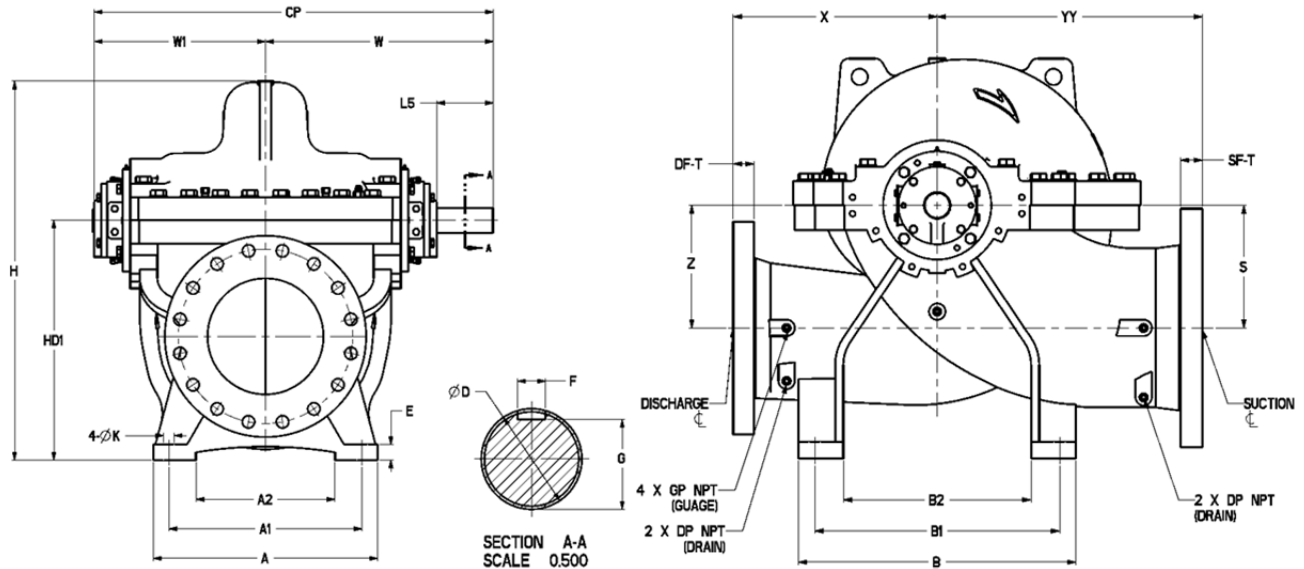
Pump Size	6X10X11		Pump Size	8X8X8		Pump Size	8X10X10	
	6X10X10.5			8X8X7.5			8X10X9.5	
Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)
YY	17.72	450	YY	17.72	450	YY	19.69	500
X	15.75	400	X	15.75	400	X	15.75	400
H	28.15	715	H	25.39	645	H	29.53	750
HD1	18.9	480	HD1	16.54	420	HD1	18.9	480
Z	9.06	230	Z	7.87	200	Z	9.06	230
S	9.06	230	S	7.87	200	S	9.06	230
B	20.47	520	B	18.5	470	B	20.47	520
B1	17.72	450	B1	15.75	400	B1	17.72	450
B2	13.39	340	B2	11.42	290	B2	13.39	340
W1	14.84	377	W1	12.68	322	W1	14.49	368
W2	19.49	495	W2	15.94	405	W2	19.09	485
CP	34.33	872	CP	28.62	727	CP	33.58	853
L5	4.33	110	L5	3.15	80	L5	4.33	110
D	2.17	55	D	1.38	35	D	1.77	45
A	20.47	520	A	16.54	420	A	20.47	520
A1	17.72	450	A1	13.78	350	A1	17.72	450
A2	13.39	340	A2	9.45	240	A2	13.39	340
E	1.38	35	E	1.38	35	E	1.38	35
K	0.94	24	K	0.94	24	K	0.94	24
G	1.93	49	G	1.18	30	G	1.16	29.5
F	0.63	16	F	0.39	10	F	0.55	14
DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT
GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT
Weight	(lb.)	(kg)	Weight	(lb.)	(kg)	Weight	(lb.)	(kg)
	902	410		849	385		1235	560



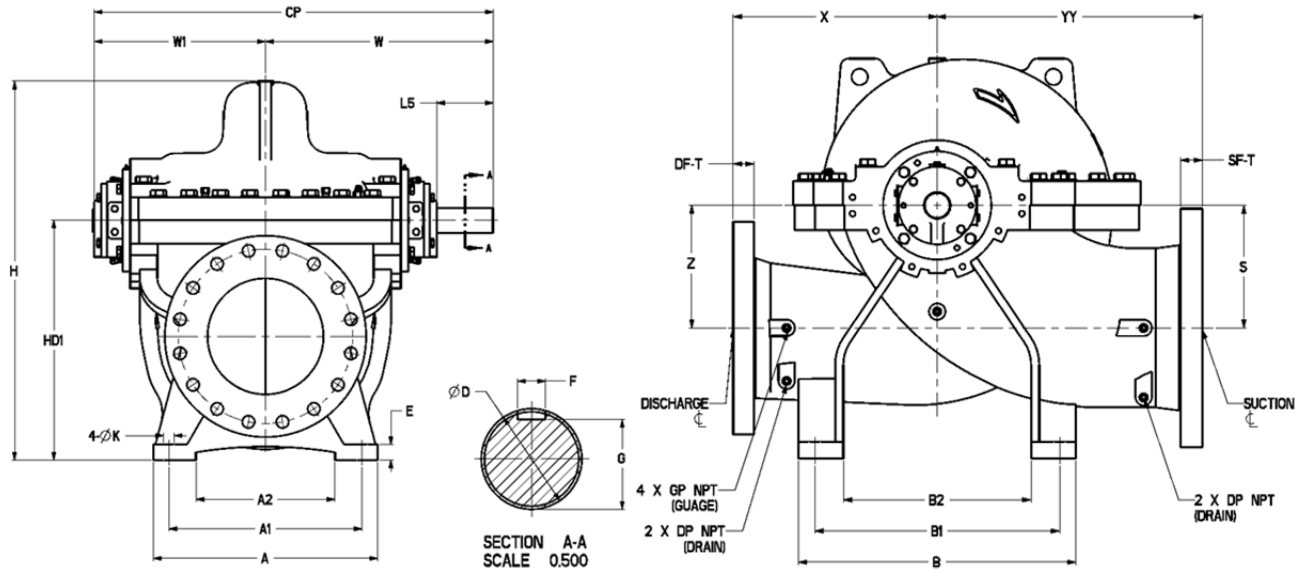
Pump Size	8X10X13.5		Pump Size	8X10X17		Pump Size	8X10X21	
	8X10X13			8X10X16			8X10X20	
Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)
YY	19.69	500	YY	21.65	550	YY	21.65	550
X	15.75	400	X	19.69	500	X	19.69	500
H	31.5	800	H	32.87	835	H	35.83	910
HD1	20.47	520	HD1	20.47	520	HD1	21.65	550
Z	10.63	270	Z	10.63	270	Z	11.81	300
S	10.63	270	S	10.63	270	S	11.81	300
B	20.47	520	B	20.47	520	B	26.77	680
B1	17.72	450	B1	17.72	450	B1	23.62	600
B2	13.39	340	B2	13.39	340	B2	18.11	460
W1	14.84	377	W1	17.01	432	W1	16.46	418
W2	19.49	495	W2	21.65	550	W2	22.24	565
CP	34.33	872	CP	38.66	982	CP	38.7	983
L5	4.33	110	L5	4.33	110	L5	5.51	140
D	2.17	55	D	2.17	55	D	2.56	65
A	20.47	520	A	20.47	520	A	22.83	580
A1	17.72	450	A1	17.72	450	A1	19.69	500
A2	13.39	340	A2	13.39	340	A2	14.17	360
E	1.38	35	E	1.38	35	E	1.57	40
K	0.94	24	K	0.94	24	K	1.1	28
G	1.93	49	G	1.93	49	G	2.28	58
F	0.63	16	F	0.63	16	F	0.71	18
DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT
GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT
Weight	(lb.)	(kg)	Weight	(lb.)	(kg)	Weight	(lb.)	(kg)
	1081	490		1433	650		1918	870



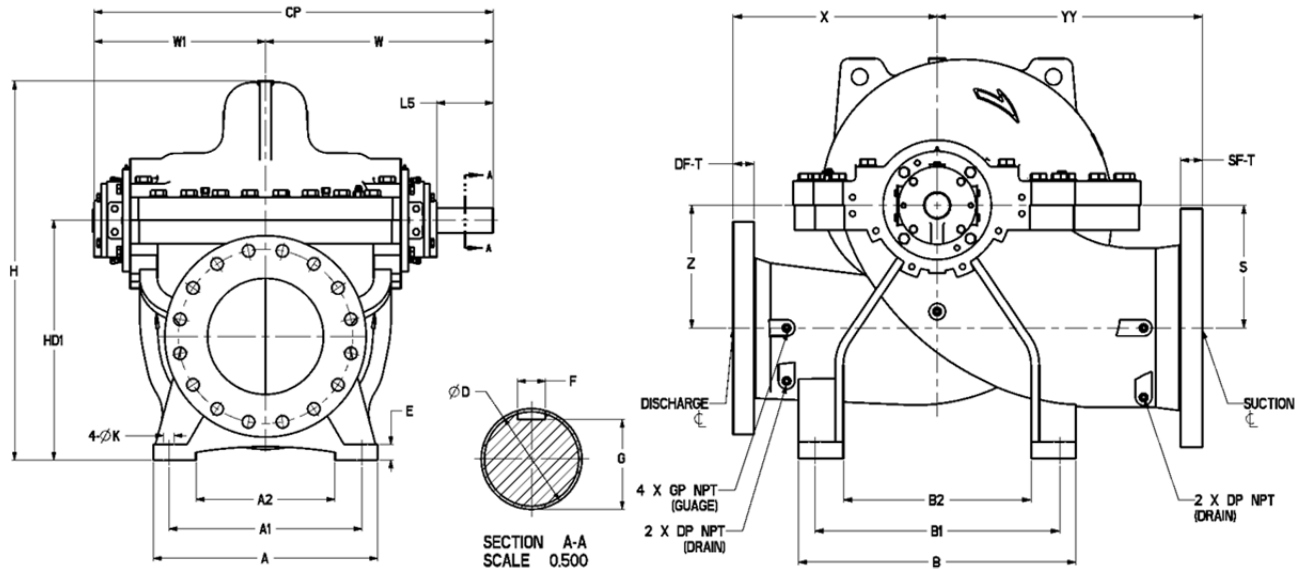
Pump Size	8X10X26		Pump Size	10X10X8		Pump Size	10X12X15.5	
	8X10X25			10X10X7.5			10X12X14.5	
Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)
YY	25.59	650	YY	19.69	500	YY	21.65	550
X	23.62	600	X	17.72	450	X	19.69	500
H	41.34	1050	H	28.94	735	H	35.04	890
HD1	24.41	620	HD1	18.9	480	HD1	22.83	580
Z	13.78	350	Z	8.66	220	Z	11.81	300
S	13.78	350	S	8.66	220	S	11.81	300
B	26.77	680	B	20.47	520	B	26.77	680
B1	23.62	600	B1	17.72	450	B1	23.62	600
B2	18.11	460	B2	13.39	340	B2	18.11	460
W1	16.61	422	W1	13.66	347	W1	17.44	443
W2	22.24	565	W2	16.93	430	W2	23.23	590
CP	38.86	987	CP	30.59	777	CP	40.67	1033
L5	5.51	140	L5	3.15	80	L5	5.51	140
D	2.95	75	D	1.38	35	D	2.56	65
A	22.83	580	A	20.47	520	A	22.83	580
A1	19.69	500	A1	17.72	450	A1	19.69	500
A2	14.17	360	A2	13.39	340	A2	14.17	360
E	1.57	40	E	1.38	35	E	1.57	40
K	1.1	28	K	0.94	24	K	1.1	28
G	2.66	67.5	G	1.18	30	G	2.28	58
F	0.79	20	F	0.39	10	F	0.71	18
DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT
GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT
Weight	(lb.)	(kg)	Weight	(lb.)	(kg)	Weight	(lb.)	(kg)
	2535	1150		838	380		1654	750



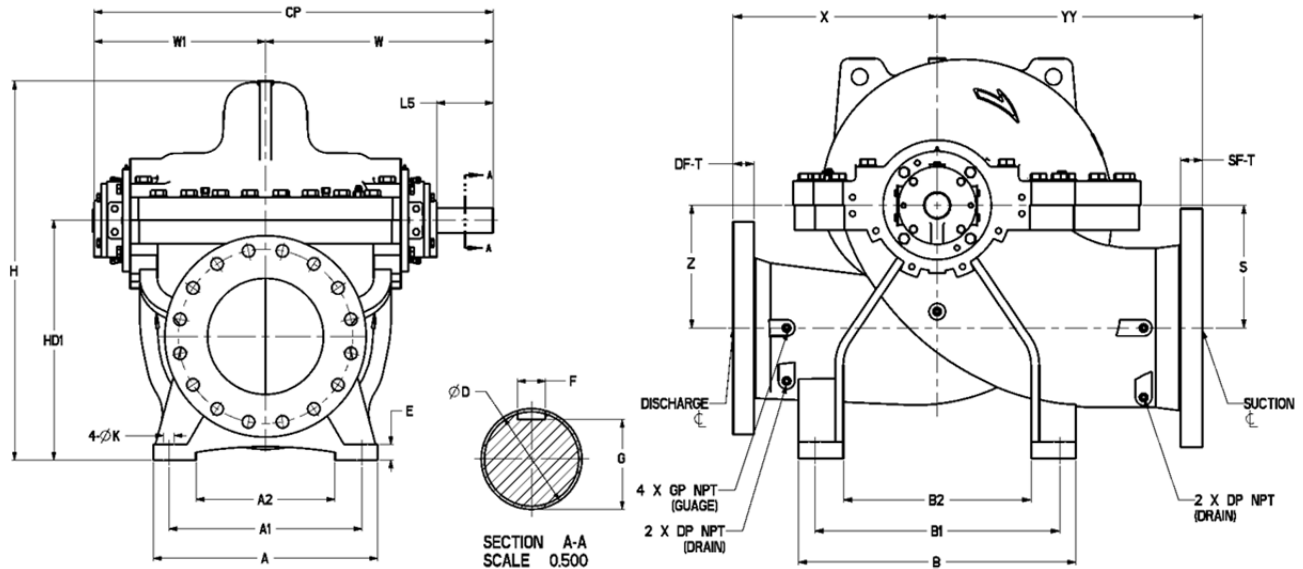
Pump Size	10X12X19		Pump Size	10X12X24		Pump Size	12X12X9	
	10X12X18			10X12X23			12X12X8.5	
Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)
YY	23.62	600	YY	25.59	650	YY	21.65	550
X	21.65	550	X	21.65	550	X	17.72	450
H	37.6	955	H	40.94	1040	H	33.46	850
HD1	22.83	580	HD1	24.8	630	HD1	21.65	550
Z	11.81	300	Z	13.78	350	Z	10.63	270
S	11.81	300	S	13.78	350	S	10.63	270
B	26.77	680	B	26.77	680	B	20.47	520
B1	23.62	600	B1	23.62	600	B1	17.72	450
B2	18.11	460	B2	18.11	460	B2	13.39	340
W1	19.02	483	W1	18.94	481	W1	16.85	428
W2	24.8	630	W2	25.98	660	W2	21.46	545
CP	43.82	1113	CP	44.92	1141	CP	38.31	973
L5	5.51	140	L5	6.69	170	L5	4.33	110
D	2.56	65	D	3.35	85	D	1.77	45
A	22.83	580	A	22.83	580	A	20.47	520
A1	19.69	500	A1	19.69	500	A1	17.72	450
A2	14.17	360	A2	14.17	360	A2	13.39	340
E	1.57	40	E	1.57	40	E	1.38	35
K	1.1	28	K	1.1	28	K	0.94	24
G	2.28	58	G	2.99	76	G	1.56	39.5
F	0.71	18	F	0.87	22	F	0.55	14
DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT
GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT
Weight	(lb.)	(kg)	Weight	(lb.)	(kg)	Weight	(lb.)	(kg)
	1941	880		2536	1150		1720	780



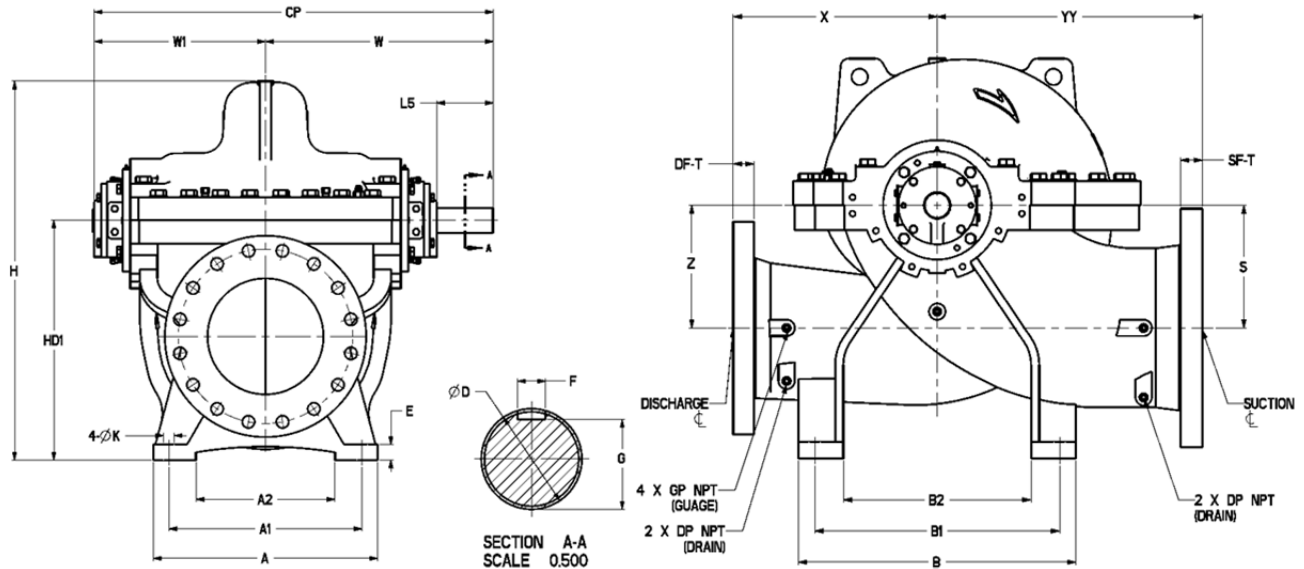
Pump Size	12X12X10		Pump Size	12X14X13		Pump Size	12X16X18	
	12X12X9.5			12X14X12.5			12X16X17	
Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)
YY	23.62	600	YY	25.59	650	YY	25.59	650
X	19.69	500	X	19.69	500	X	23.62	600
H	33.86	860	H	40.35	1025	H	41.73	1060
HD1	21.65	550	HD1	24.41	620	HD1	27.56	700
Z	10.63	270	Z	11.81	300	Z	13.78	350
S	10.63	270	S	11.81	300	S	13.78	350
B	20.47	520	B	26.77	680	B	30.71	780
B1	17.72	450	B1	23.62	600	B1	27.56	700
B2	13.39	340	B2	18.11	460	B2	20.47	520
W1	15.28	388	W1	17.44	443	W1	18.39	467
W2	19.88	505	W2	23.23	590	W2	24.02	610
CP	35.16	893	CP	40.67	1033	CP	42.4	1077
L5	4.33	110	L5	5.51	140	L5	5.51	140
D	1.77	45	D	2.56	65	D	2.95	75
A	20.47	520	A	22.83	580	A	24.8	630
A1	17.72	450	A1	19.69	500	A1	21.65	550
A2	13.39	340	A2	14.17	360	A2	15.35	390
E	1.38	35	E	1.57	40	E	1.57	40
K	0.94	24	K	1.1	28	K	1.1	28
G	1.56	39.5	G	2.28	58	G	2.66	67.5
F	0.55	14	F	0.71	18	F	0.79	20
DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT
GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT
Weight	(lb.)	(kg)	Weight	(lb.)	(kg)	Weight	(lb.)	(kg)
	1672	760		2095	950		2156	980



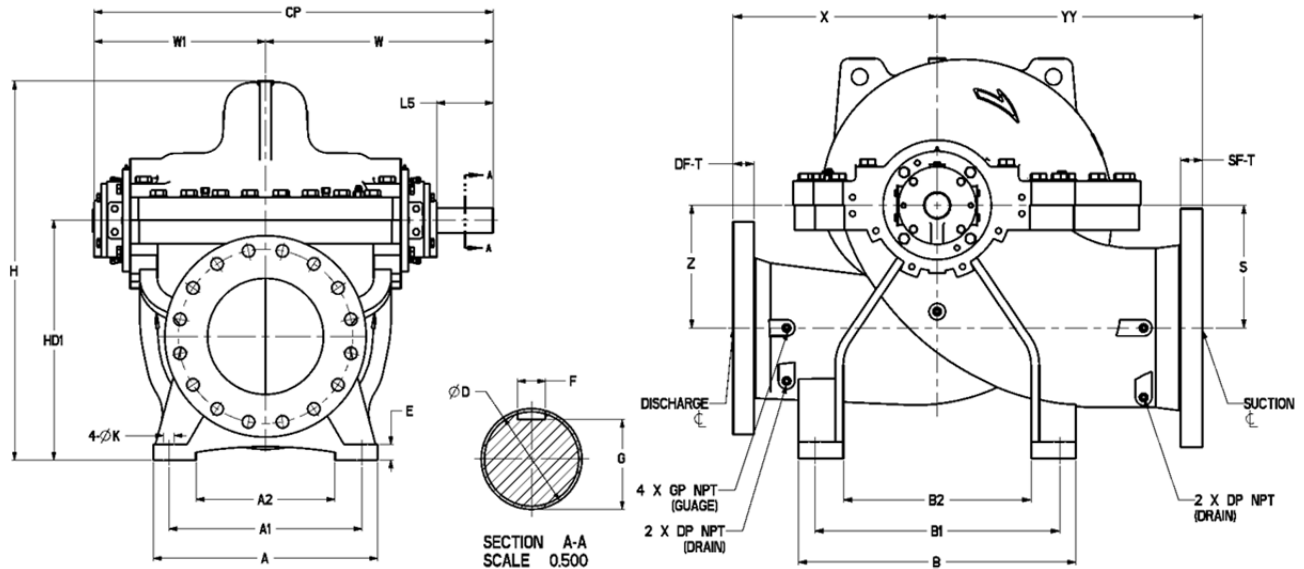
Pump Size	12X16X22		Pump Size	12X16X28		Pump Size	14X14X12	
	12X16X21			12X16X27			14X14X11	
Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)
YY	25.59	650	YY	31.5	800	YY	25.59	650
X	23.62	600	X	25.59	650	X	19.69	500
H	43.5	1105	H	48.62	1235	H	38.19	970
HD1	27.56	700	HD1	29.53	750	HD1	24.41	620
Z	13.78	350	Z	15.75	400	Z	11.81	300
S	13.78	350	S	15.75	400	S	11.81	300
B	30.71	780	B	35.83	910	B	26.77	680
B1	27.56	700	B1	31.5	800	B1	23.62	600
B2	20.47	520	B2	23.23	590	B2	18.11	460
W1	21.69	551	W1	20.55	522	W1	16.85	428
W2	28.74	730	W2	27.56	700	W2	21.46	545
CP	50.43	1281	CP	48.11	1222	CP	38.31	973
L5	6.69	170	L5	6.69	170	L5	4.33	110
D	3.35	85	D	3.74	95	D	1.77	45
A	24.8	630	A	29.92	760	A	22.83	580
A1	21.65	550	A1	25.59	650	A1	19.69	500
A2	15.35	390	A2	18.9	480	A2	14.17	360
E	1.57	40	E	1.77	45	E	1.57	40
K	1.1	28	K	1.38	35	K	1.1	28
G	2.99	76	G	3.39	86	G	1.56	39.5
F	0.87	22	F	0.98	25	F	0.55	14
DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT
GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT
Weight	(lb.)	(kg)	Weight	(lb.)	(kg)	Weight	(lb.)	(kg)
	2977	1350		2977	1350		2095	950



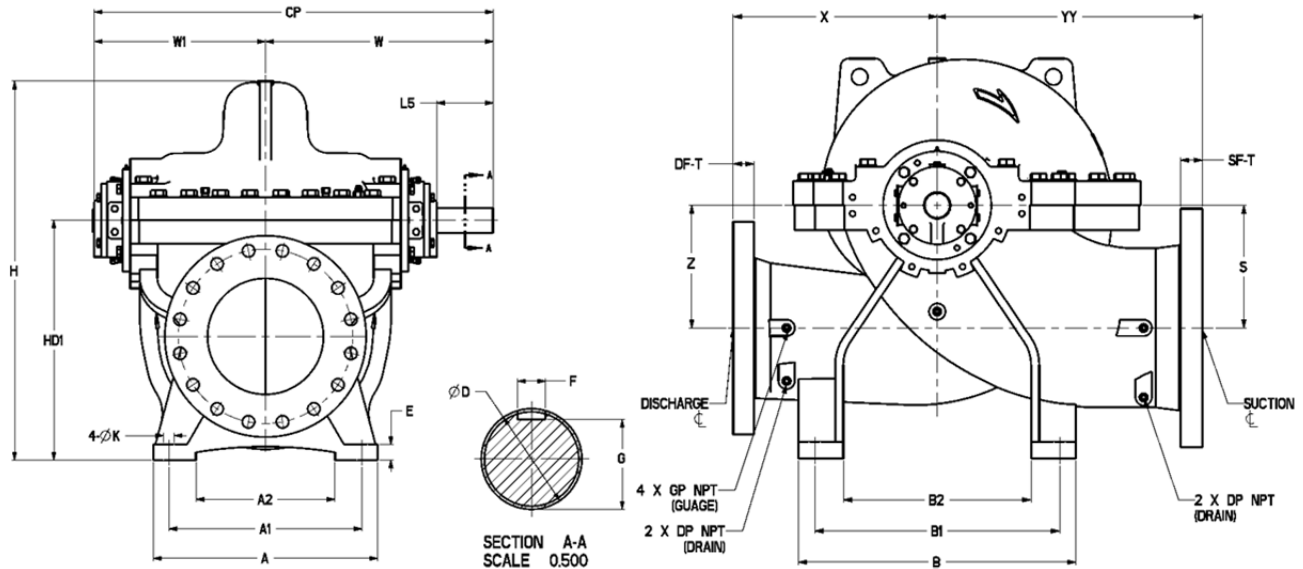
Pump Size	14X16X15		Pump Size	14X16X27.5		Pump Size	14X18X18	
	14X16X14.5			14X16X26			14X18X17	
Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)
YY	27.56	700	YY	35.43	900	YY	31.5	800
X	21.65	550	X	29.53	750	X	25.59	650
H	43.5	1105	H	53.74	1365	H	43.5	1105
HD1	27.56	700	HD1	33.07	840	HD1	30.71	780
Z	13.78	350	Z	18.9	480	Z	15.75	400
S	13.78	350	S	18.9	480	S	15.75	400
B	30.71	780	B	43.31	1100	B	35.83	910
B1	27.56	700	B1	39.37	1000	B1	31.5	800
B2	20.47	520	B2	29.53	750	B2	23.23	590
W1	18.39	467	W1	22.32	567	W1	21.69	551
W2	24.02	610	W2	30.91	785	W2	28.74	730
CP	42.4	1077	CP	53.23	1352	CP	50.43	1281
L5	5.51	140	L5	8.27	210	L5	6.69	170
D	2.95	75	D	4.13	105	D	3.35	85
A	24.8	630	A	33.86	860	A	29.92	760
A1	21.65	550	A1	29.53	750	A1	25.59	650
A2	15.35	390	A2	21.26	540	A2	18.9	480
E	1.57	40	E	1.77	45	E	1.77	45
K	1.1	28	K	1.38	35	K	1.38	35
G	2.66	67.5	G	3.74	95	G	2.99	76
F	0.79	20	F	1.1	28	F	0.87	22
DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT
GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT
Weight	(lb.)	(kg)	Weight	(lb.)	(kg)	Weight	(lb.)	(kg)
	2715	1230		4849	2200		3572	1620



Pump Size	14X18X21		Pump Size	16X16X13.5		Pump Size	16X20X20.5	
	14X18X20			16X16X13			16X20X19.5	
Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)
YY	27.56	700	YY	29.53	750	YY	31.5	800
X	25.59	650	X	23.62	600	X	27.56	700
H	47.44	1205	H	43.31	1100	H	55.71	1415
HD1	30.71	780	HD1	27.56	700	HD1	35.43	900
Z	15.75	400	Z	13.78	350	Z	18.9	480
S	15.75	400	S	13.78	350	S	18.9	480
B	35.83	910	B	30.71	780	B	35.83	910
B1	31.5	800	B1	27.56	700	B1	31.5	800
B2	23.23	590	B2	20.47	520	B2	23.23	590
W1	21.69	551	W1	19.37	492	W1	24.29	617
W2	28.74	730	W2	24.02	610	W2	31.3	795
CP	50.43	1281	CP	43.39	1102	CP	55.59	1412
L5	6.69	170	L5	4.33	110	L5	6.69	170
D	3.35	85	D	2.17	55	D	3.74	95
A	29.92	760	A	24.8	630	A	29.92	760
A1	25.59	650	A1	21.65	550	A1	25.59	650
A2	18.9	480	A2	15.35	390	A2	18.9	480
E	1.77	45	E	1.57	40	E	1.77	45
K	1.38	35	K	1.1	28	K	1.38	35
G	2.99	76	G	1.93	49	G	3.39	86
F	0.87	22	F	0.63	16	F	0.98	25
DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT
GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT
Weight	(lb.)	(kg)	Weight	(lb.)	(kg)	Weight	(lb.)	(kg)
	3418	1550		2712	1230		4518	2050



Pump Size	16X20X23		Pump Size	18X20X15.5		Pump Size	20X24X18	
	16X20X22			18X20X14.5			20X24X17	
Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)	Dimension	Value (in.)	Value (mm)
YY	31.5	800	YY	33.46	850	YY	39.37	1000
X	27.56	700	X	25.59	650	X	29.53	750
H	52.76	1340	H	50.2	1275	H	58.07	1475
HD1	34.25	870	HD1	32.28	820	HD1	37.4	950
Z	17.72	450	Z	15.75	400	Z	18.9	480
S	17.72	450	S	15.75	400	S	18.9	480
B	35.83	910	B	35.83	910	B	43.7	1110
B1	31.5	800	B1	31.5	800	B1	39.37	1000
B2	23.23	590	B2	23.23	590	B2	29.53	750
W1	24.09	612	W1	21.38	543	W1	24.45	621
W2	32.68	830	W2	27.17	690	W2	31.5	800
CP	56.77	1442	CP	48.54	1233	CP	55.94	1421
L5	8.27	210	L5	5.51	140	L5	6.69	170
D	4.13	105	D	2.56	65	D	3.35	85
A	29.92	760	A	29.92	760	A	33.86	860
A1	25.59	650	A1	25.59	650	A1	29.53	750
A2	18.9	480	A2	18.9	480	A2	21.26	540
E	1.77	45	E	1.77	45	E	1.77	45
K	1.38	35	K	1.38	35	K	1.38	35
G	3.74	95	G	2.28	58	G	2.99	76
F	1.1	28	F	0.71	18	F	0.87	22
DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT	DP	1/2 NPT	1/2 BSPT
GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT	GP	1/2 NPT	1/2 BSPT
Weight	(lb.)	(kg)	Weight	(lb.)	(kg)	Weight	(lb.)	(kg)
	4849	2200		3815	1730		5513	2500

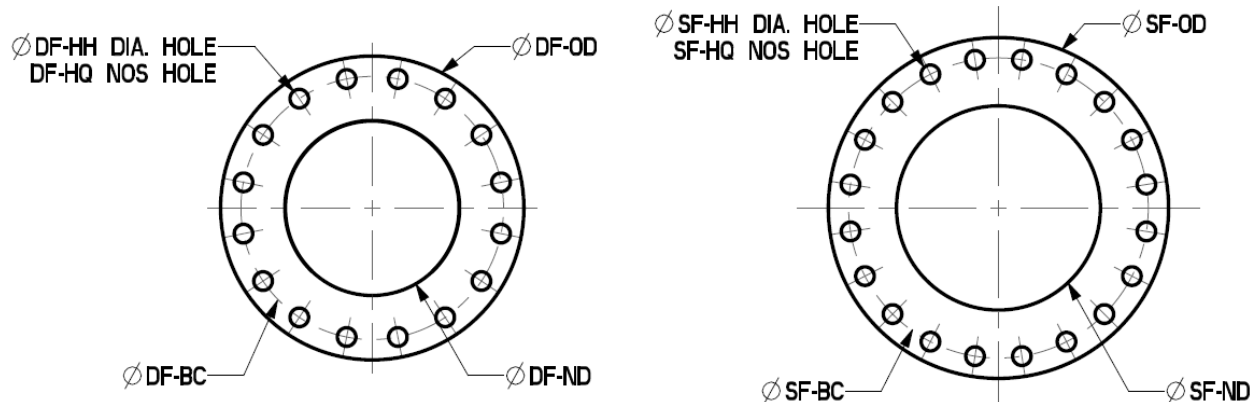


Suction Flange Dimensions (125# ANSI)

SF-ND	SF-BC	SF-OD	SF-HQ	SF-HH
inch [mm]	inch [mm]	inch [mm]	No. Holes	inch [mm]
4 [100]	7.5 [191]	9 [229]	8	0.750 [19]
5 [125]	8.5 [216]	10 [254]	8	0.875 [22]
6 [150]	9.5 [241]	11 [279]	8	0.875 [22]
8 [200]	11.75 [298]	13.5 [343]	8	0.875 [22]
10 [250]	14.25 [362]	16 [406]	12	1.000 [25]
12 [300]	17 [432]	19 [483]	12	1.000 [25]
14 [350]	18.75 [476]	21 [533]	12	1.125 [29]
16 [400]	21.25 [540]	23.5 [597]	16	1.000 [25]
18 [450]	22.75 [578]	25 [635]	16	1.250 [32]
20 [500]	25 [635]	27.5 [699]	20	1.250 [32]
24 [600]	29.5 [749]	32 [813]	20	1.375 [35]

Discharge Flange Dimensions (125# ANSI)

DF-ND	DF-BC	DF-OD	DF-HQ	DF-HH
inch [mm]	inch [mm]	inch [mm]	No. Holes	inch [mm]
2.5 [65]	5.5 [140]	7 [178]	4	0.75 [19]
3 [80]	6 [152]	7.5 [191]	4	0.75 [19]
4 [100]	7.5 [191]	9 [229]	8	0.75 [19]
5 [125]	8.5 [216]	10 [254]	8	0.875 [22]
6 [150]	9.5 [241]	11 [279]	8	0.875 [22]
8 [200]	11.75 [298]	13.5 [343]	8	0.875 [22]
10 [250]	14.25 [362]	16 [406]	12	1 [25]
12 [300]	17 [432]	19 [483]	12	1 [25]
14 [350]	18.75 [476]	21 [533]	12	1.125 [29]
16 [400]	21.25 [540]	23.5 [597]	16	1.25 [32]
18 [450]	22.75 [578]	25 [635]	16	1.25 [32]
20 [500]	25 [635]	27.5 [699]	20	1.25 [32]

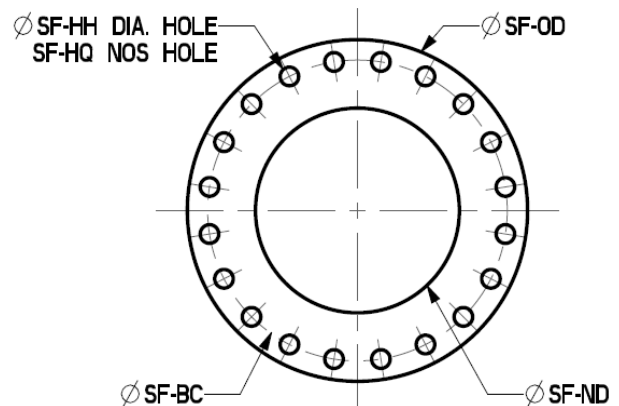
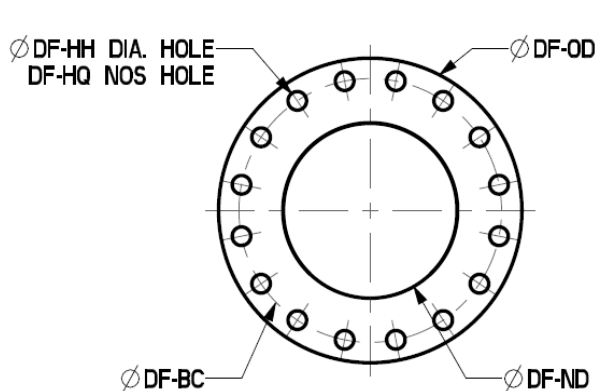


Suction Flange Dimensions (250# ANSI)

SF-ND	SF-BC	SF-OD	SF-HQ	SF-HH
inch [mm]	inch [mm]	inch [mm]	No. Holes	inch [mm]
4 [100]	7.875 [200]	10 [250]	8	0.875 [22]
5 [125]	9.25 [235]	11 [279]	8	0.875 [22]
6 [150]	10.625 [270]	12.5 [318]	12	0.875 [22]
8 [200]	13 [330]	15 [381]	12	1 [25]
10 [250]	15.25 [387]	17.5 [445]	16	1.125 [29]
12 [300]	17.75 [451]	20.5 [521]	16	1.25 [32]
14 [350]	20.25 [514]	23 [584]	20	1.25 [32]
16 [400]	22.5 [572]	25.5 [648]	20	1.375 [35]
18 [450]	24.75 [629]	28 [711]	24	1.375 [35]
20 [500]	27 [686]	30.5 [775]	24	1.375 [35]
24 [600]	32 [813]	36 [914]	24	1.625 [41]

Discharge Flange Dimensions (250# ANSI)

DF-ND	DF-BC	DF-OD	DF-HQ	DF-HH
inch [mm]	inch [mm]	inch [mm]	No. Holes	inch [mm]
2.5 [65]	5.875 [150]	5.25 [134]	8	0.875 [22]
3 [80]	6.625 [168]	8.25 [210]	8	0.875 [22]
4 [100]	7.875 [200]	10 [254]	8	0.875 [22]
5 [125]	9.25 [235]	11 [279]	8	0.875 [22]
6 [150]	10.625 [270]	12.5 [318]	12	0.875 [22]
8 [200]	13 [330]	15 [381]	12	1 [25]
10 [250]	15.25 [387]	17.5 [445]	16	1.125 [29]
12 [300]	17.75 [451]	20.5 [521]	16	1.25 [32]
14 [350]	20.25 [514]	23 [584]	20	1.25 [32]
16 [400]	22.5 [572]	25.5 [648]	20	1.375 [35]
18 [450]	24.75 [629]	28 [711]	24	1.375 [35]
20 [500]	27 [686]	30.5 [775]	24	1.375 [35]



Suction Flange Dimensions (DIN/PN16)

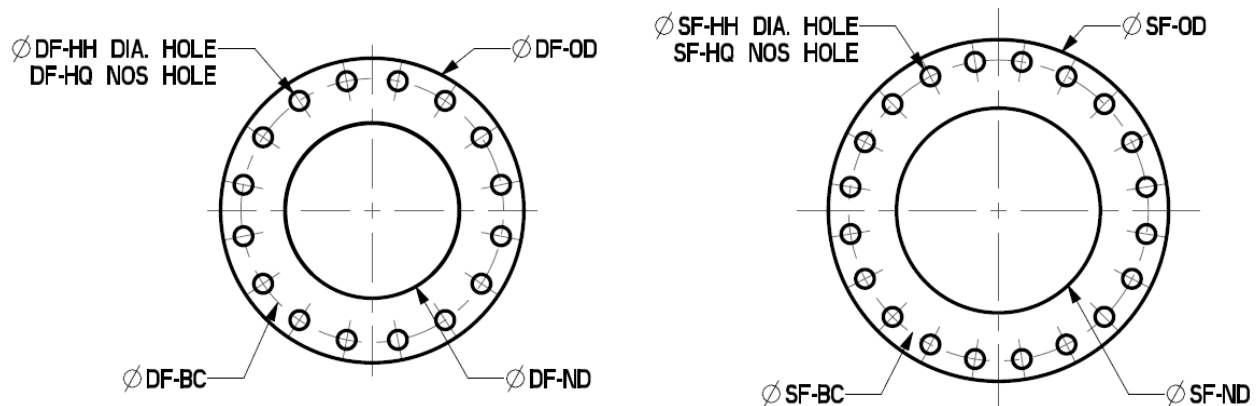
SF-ND ¹	SF-BC	SF-OD	SF-HQ	SF-HH
inch [mm]	mm	mm	No. Holes	mm
4 [100]	180	220	8	18
5 [125]	210	250	8	18
6 [150]	240	285	8	22
8 [200]	295	340	12	22
10 [250]	355	405	12	26
12 [300]	410	460	12	26
14 [350]	470	520	16	26
16 [400]	525	580	16	30
18 [450]	585	640	20	30
20 [500]	650	715	20	33
24 [600]	770	840	20	36

¹Standard specified in mm. Dimensions based on EN 1092-1 drilling standard.

Discharge Flange Dimensions (DIN/PN16)

SF-ND ¹	SF-BC	SF-OD	SF-HQ	SF-HH
inch [mm]	mm	mm	No. Holes	mm
2.5 [65]	145	185	4	18
3 [80]	160	200	8	18
4 [100]	180	220	8	18
5 [125]	210	250	8	18
6 [150]	240	285	8	22
8 [200]	295	340	12	22
10 [250]	355	405	12	26
12 [300]	410	460	12	26
14 [350]	470	520	16	26
16 [400]	525	580	16	30
18 [450]	585	640	20	30
20 [500]	650	715	20	33

¹Standard specified in mm. Dimensions based on EN 1092-1 drilling standard.



Suction Flange Dimensions (DIN/PN25)

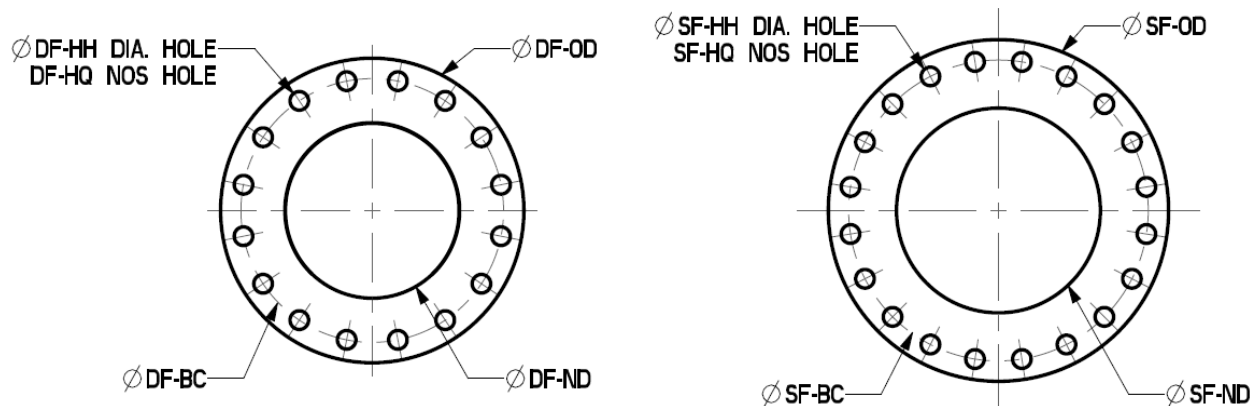
SF-ND ¹	SF-BC	SF-OD	SF-HQ	SF-HH
inch [mm]	mm	mm	No. Holes	mm
4 [100]	Use DIN/PN40 Dimensions			
5 [125]				
6 [150]				
8 [200]	310	360	12	26
10 [250]	370	425	12	30
12 [300]	430	485	16	30
14 [350]	490	555	16	33
16 [400]	550	620	16	36
18 [450]	600	670	20	36
20 [500]	660	730	20	36
24 [600]	770	845	20	39

¹Standard specified in mm. Dimensions based on EN 1092-1 drilling standard.

Discharge Flange Dimensions (DIN/PN25)

SF-ND ¹	SF-BC	SF-OD	SF-HQ	SF-HH
inch [mm]	mm	mm	No. Holes	mm
2.5 [65]	Use DIN/PN40 Dimensions			
3 [80]				
4 [100]				
5 [125]	Use DIN/PN40 Dimensions			
6 [150]				
8 [200]				
10 [250]	370	425	12	30
12 [300]	430	485	16	30
14 [350]	490	555	16	33
16 [400]	550	620	16	36
18 [450]	600	670	20	36
20 [500]	660	730	20	36

¹Standard specified in mm. Dimensions based on EN 1092-1 drilling standard.



Suction Flange Dimensions (DIN/PN40)

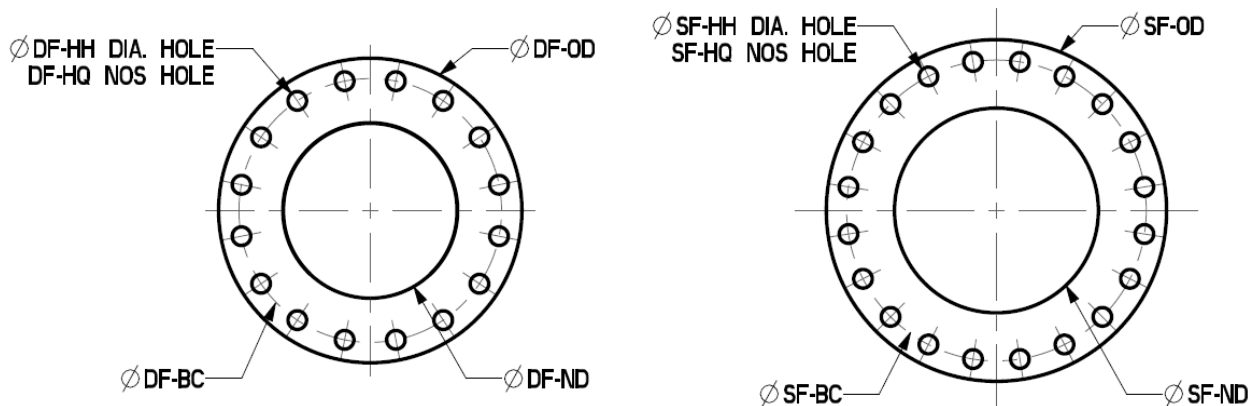
SF-ND ¹	SF-BC	SF-OD	SF-HQ	SF-HH
inch [mm]	mm	mm	No. Holes	mm
4 [100]	190	235	8	22
5 [125]	220	270	8	26
6 [150]	250	300	8	26
8 [200]	320	375	12	30
10 [250]	385	450	12	33
12 [300]	450	515	16	33
14 [350]	510	580	16	36
16 [400]	585	660	16	39
18 [450]	610	685	20	39
20 [500]	670	755	20	42
24 [600]	795	890	20	48

¹Standard specified in mm. Dimensions based on EN 1092-1 drilling standard.

Discharge Flange Dimensions (DIN/PN40)

SF-ND ¹	SF-BC	SF-OD	SF-HQ	SF-HH
inch [mm]	mm	mm	No. Holes	mm
2.5 [65]	145	185	8	18
3 [80]	160	200	8	18
4 [100]	190	235	8	22
5 [125]	220	270	8	26
6 [150]	250	300	8	26
8 [200]	320	375	12	30
10 [250]	385	450	12	33
12 [300]	450	515	16	33
14 [350]	510	580	16	36
16 [400]	585	660	16	39
18 [450]	610	685	20	39
20 [500]	670	755	20	42

¹Standard specified in mm. Dimensions based on EN 1092-1 drilling standard.



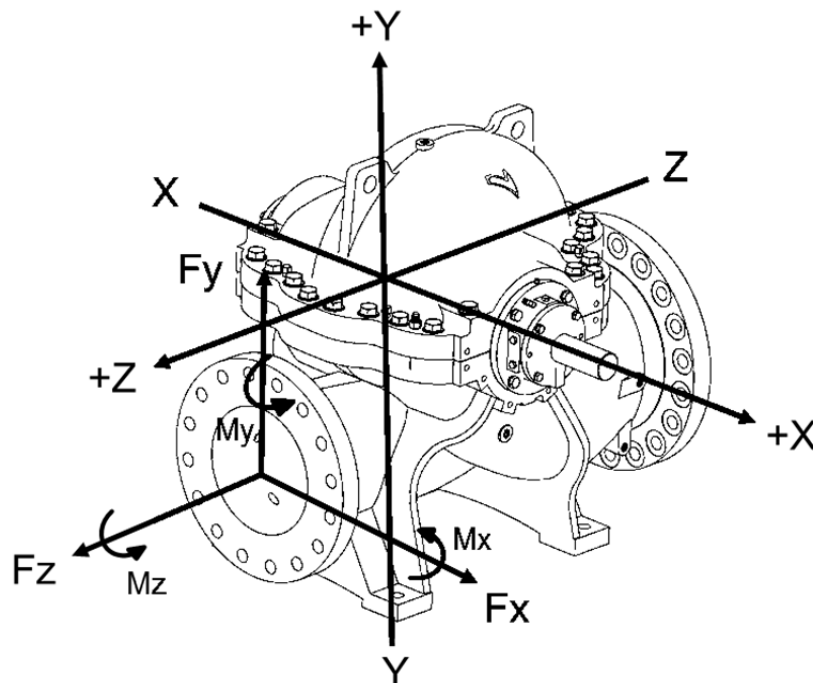
Shared Dimensions (Flange Thickness)

Pump Size		Suction Flange (SF-T)	Discharge Flange (DF-T)
		in. [mm]	in. [mm]
2.5x4x10.5	2.5x4x10	1.25 [31.8]	0.75 [19.0]
3x4x12.5	3x4x12	1.25 [31.8]	1.13 [28.6]
3x5x8.5	3x5x8	1.37 [34.9]	1.13 [28.6]
3x5x11	3x5x10.5	1.37 [34.9]	1.13 [28.6]
3x5x13.5	3x5x13	1.37 [34.9]	1.13 [28.6]
4x6x10	4x6x9.5	1.44 [36.5]	1.25 [31.8]
4x6x13	4x6x12	1.44 [36.5]	1.25 [31.8]
4x6x16	4x6x15.5	1.44 [36.5]	1.25 [31.8]
5x6x9	5x6x8.5	1.44 [36.5]	1.37 [34.9]
5x8x9.5	5x8x9	1.63 [41.3]	1.37 [34.9]
5x8x12	5x8x11	1.63 [41.3]	1.37 [34.9]
5x8x15.5	5x8x14.5	1.63 [41.3]	1.37 [34.9]
5x8x19	5x8x18	1.63 [41.3]	1.37 [34.9]
6x8x6.5	6x8x6	1.63 [41.3]	1.44 [36.5]
6x8x12	6x8x11	1.63 [41.3]	1.44 [36.5]
6x8x14	6x8x13.5	1.63 [41.3]	1.44 [36.5]
6x8x18	6x8x17	1.63 [41.3]	1.44 [36.5]
6x8x22	6x8x21	1.63 [41.3]	1.44 [36.5]
6x10x11	6x10x10.5	1.89 [48.0]	1.44 [36.5]
8x8x8	8x8x7.5	1.63 [41.3]	1.63 [41.3]
8x10x10	8x10x9.5	1.89 [48.0]	1.63 [41.3]
8x10x13.5	8x10x13	1.89 [48.0]	1.63 [41.3]
8x10x17	8x10x16	1.89 [48.0]	1.63 [41.3]
8x10x21	8x10x20	1.89 [48.0]	1.63 [41.3]
8x10x26	8x10x25	1.89 [48.0]	1.63 [41.3]
10x10x8	10x10x7.5	1.89 [48.0]	1.89 [48.0]
10x12x15.5	10x12x14.5	2.01 [51.0]	1.89 [48.0]
10x12x19	10x12x18	2.01 [51.0]	1.89 [48.0]
10x12x24	10x12x23	2.01 [51.0]	1.89 [48.0]
12x12x9	12x12x8.5	2.01 [51.0]	2.01 [51.0]
12x12x10	12x12x9.5	2.01 [51.0]	2.01 [51.0]
12x14x13	12x14x12.5	2.13 [54.0]	2.01 [51.0]
12x16x18	12x16x17	2.24 [57.0]	2.01 [51.0]
12x16x22	12x16x21	2.24 [57.0]	2.01 [51.0]
12x16x28	12x16x27	2.24 [57.0]	2.01 [51.0]
14x14x12	14x14x11	2.13 [54.0]	2.13 [54.0]
14x16x15	14x16x14.5	2.24 [57.0]	2.13 [54.0]
14x16x27.5	14x16x26	2.24 [57.0]	2.13 [54.0]
14x18x18	14x18x17	2.36 [60.0]	2.13 [54.0]
14x18x21	14x18x20	2.36 [60.0]	2.13 [54.0]
16x16x13.5	16x16x13	2.24 [57.0]	2.24 [57.0]
16x20x20.5	16x20x19.5	2.50 [63.5]	2.24 [57.0]
16x20x23	16x20x22	2.50 [63.5]	2.24 [57.0]
18x20x15.5	18x20x14.5	2.50 [63.5]	2.36 [60.0]
20x24x18	20x24x17	2.75 [69.9]	2.50 [63.5]

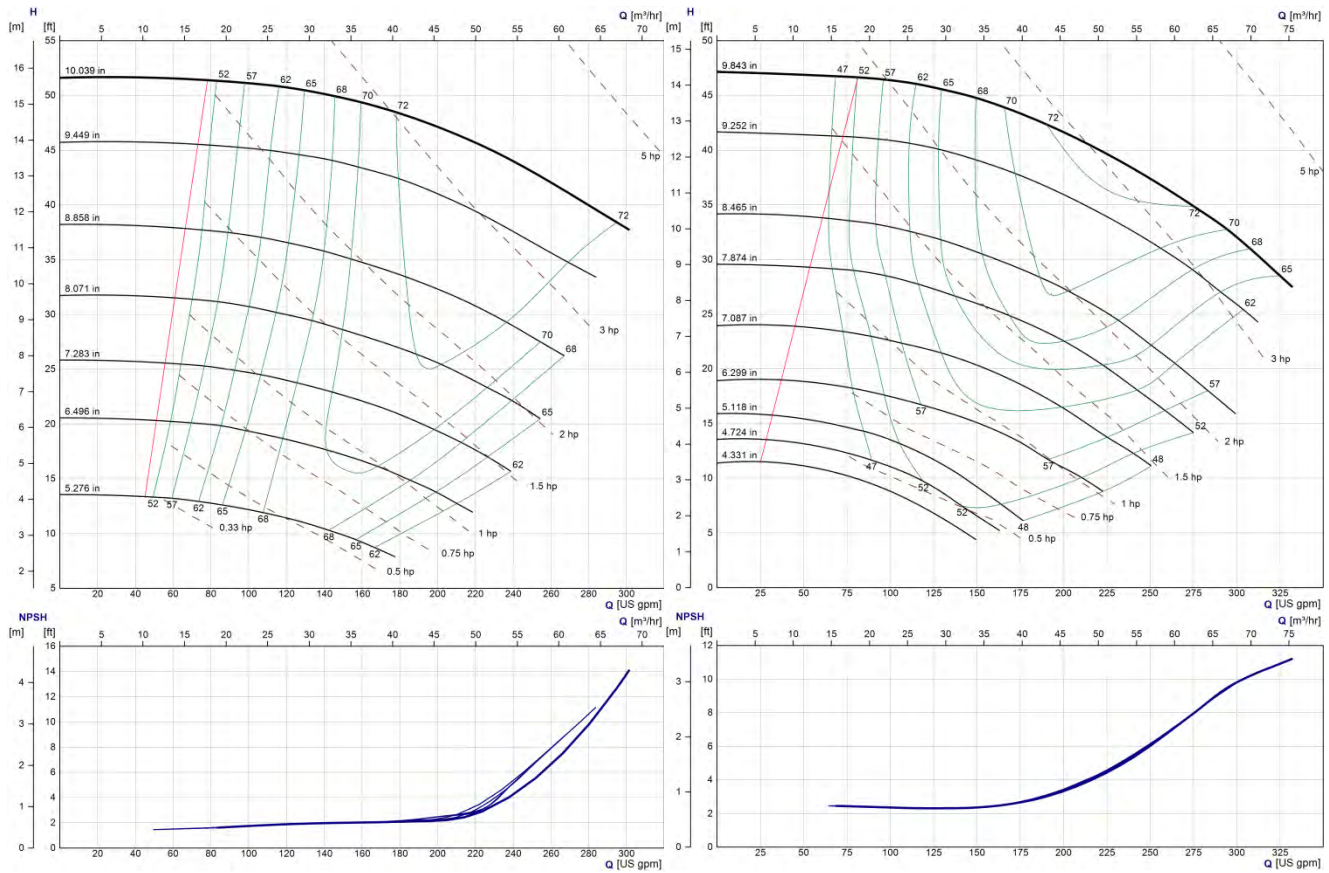
FORCES AND MOMENTS AT PUMP FLANGES

Flange Loading Ratings

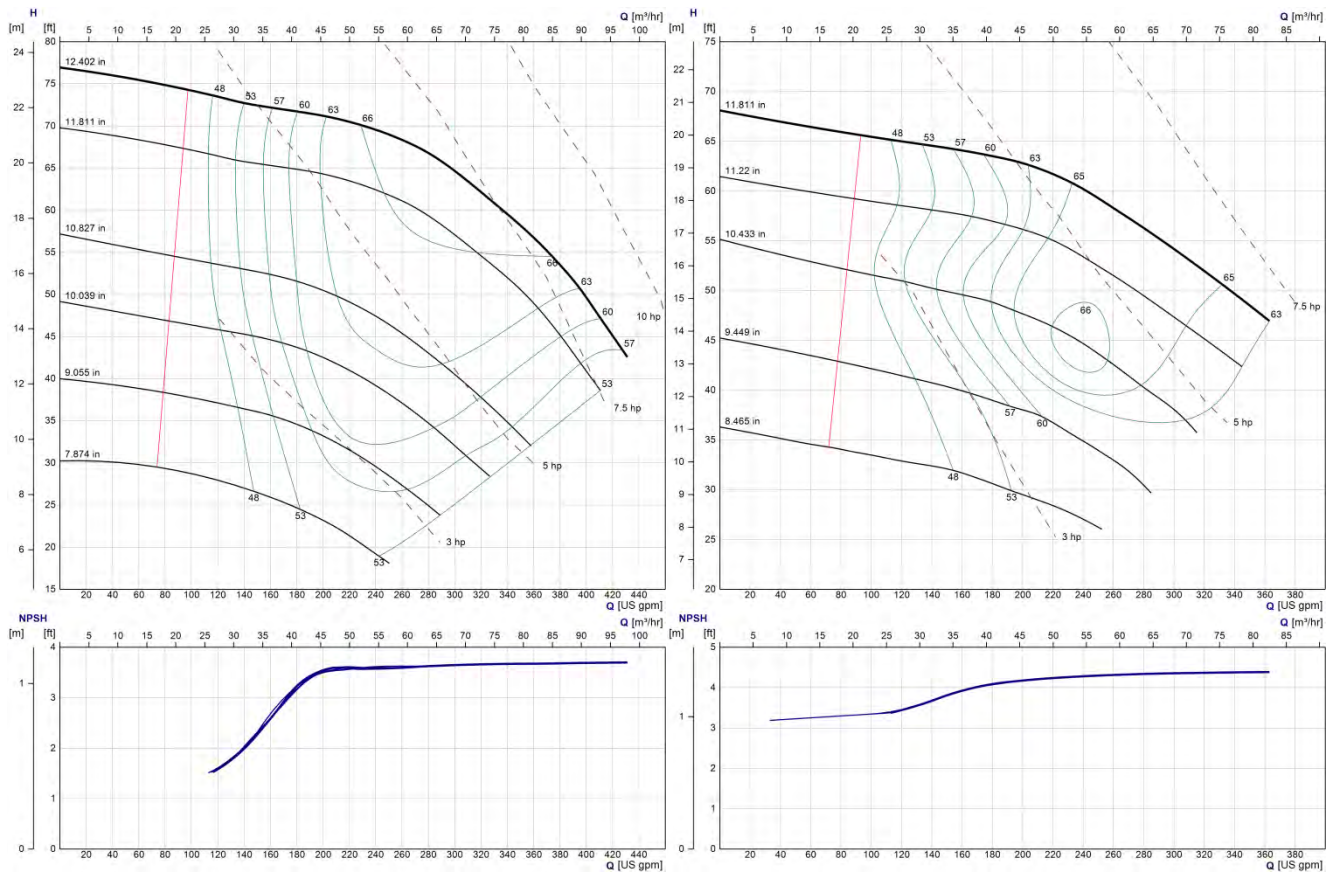
Diameter		Fx Max		Fy Max		Fz Max		Mx Max		My Max		Mz Max	
in.	mm	lb.	N	lb.	N	lb.	N	lb-ft	N-m	lb-ft	N-m	lb-ft	N-m
2.5	65	166	740	189	840	153	680	332	450	243	330	266	360
3	76	202	900	225	1000	184	820	354	480	254	345	288	390
4	102	270	1200	301	1340	243	1080	387	525	277	375	321	435
5	127	319	1420	355	1580	288	1280	465	630	332	450	420	570
6	152	405	1800	450	2000	364	1620	553	750	387	525	454	615
8	203	540	2400	602	2680	486	2160	719	975	509	690	586	795
10	254	670	2980	751	3340	607	2700	985	1335	697	945	808	1095
12	305	805	3580	899	4000	724	3220	1339	1815	951	1290	1095	1485
14	356	940	4180	1048	4660	845	3760	1715	2325	1217	1650	1405	1905
16	406	1075	4780	1196	5320	967	4300	2146	2910	1538	2085	1759	2385
18	457	1209	5380	1344	5980	1088	4840	2644	3585	1881	2550	2168	2940
20	508	1344	5980	1493	6640	1209	5380	3197	4335	2268	3075	2611	3540
24	610	1614	7180	1789	7960	1448	6440	4470	6060	3186	4320	3673	4980
28	711	1884	8380	2086	9280	1691	7520	5952	8070	4248	5760	4912	6660



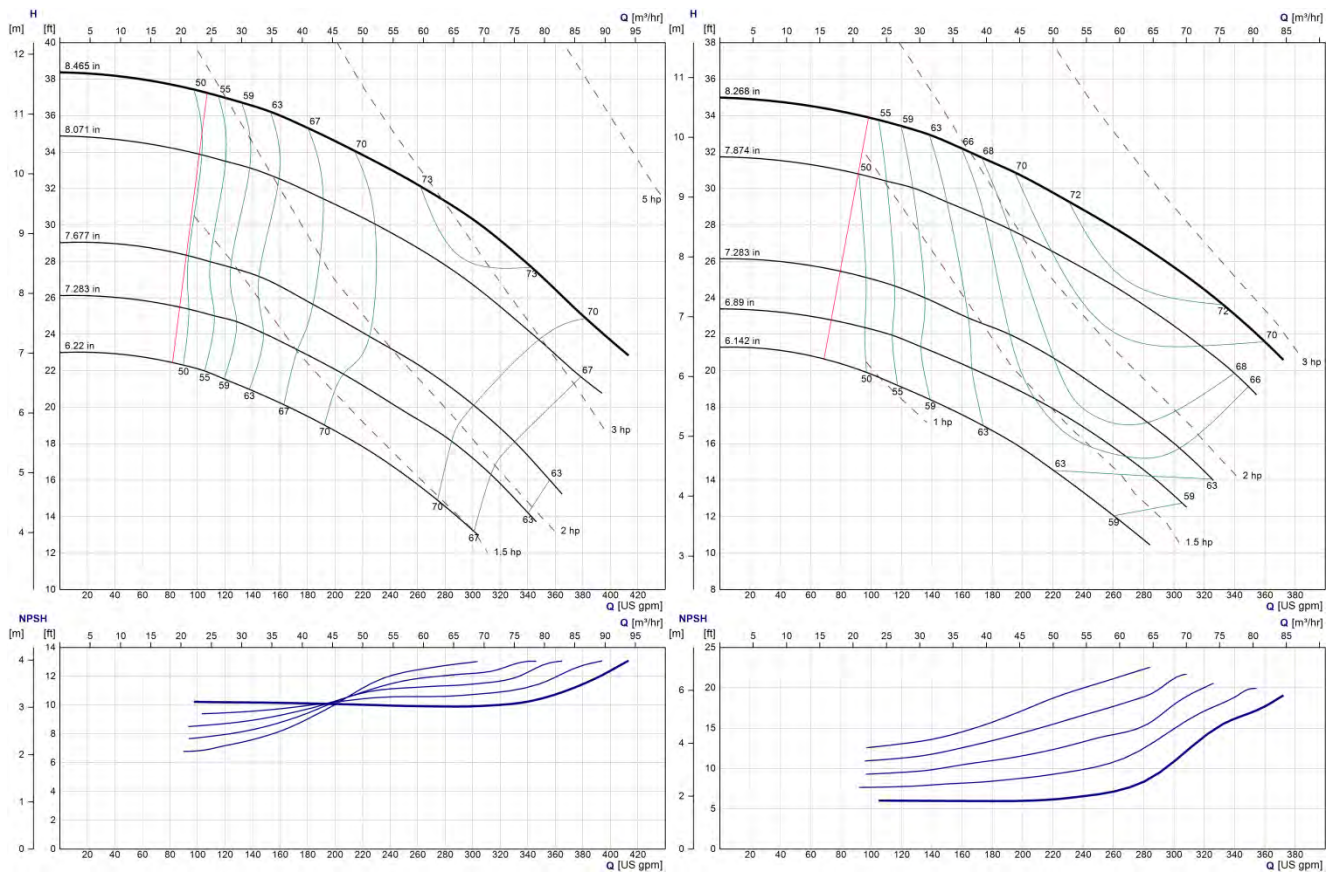
6-Pole Performance (e-HSC 2.5x4x10.5 & 2.5x4x10)



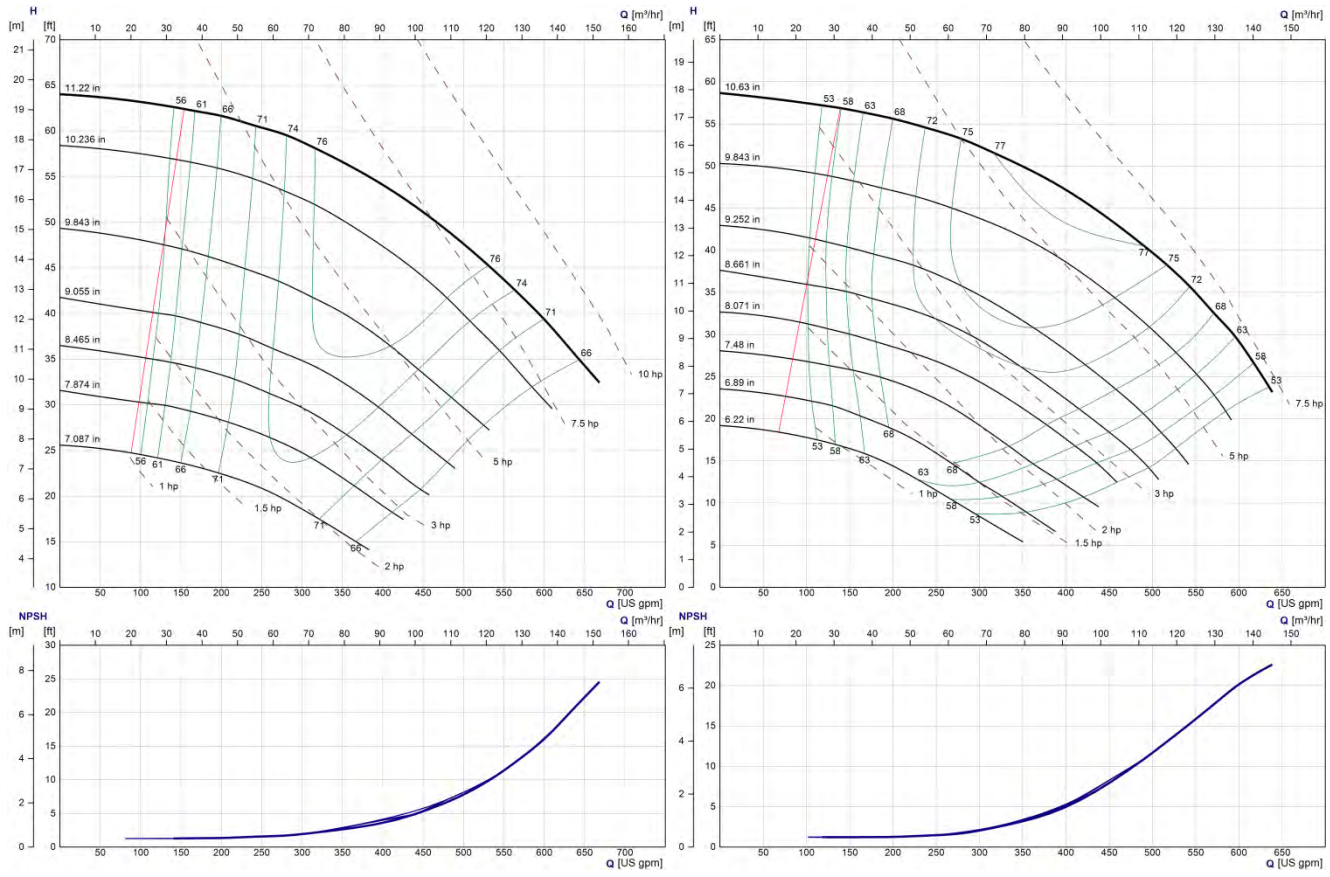
6-Pole Performance (e-HSC 3x4x12.5 & 3x4x12)



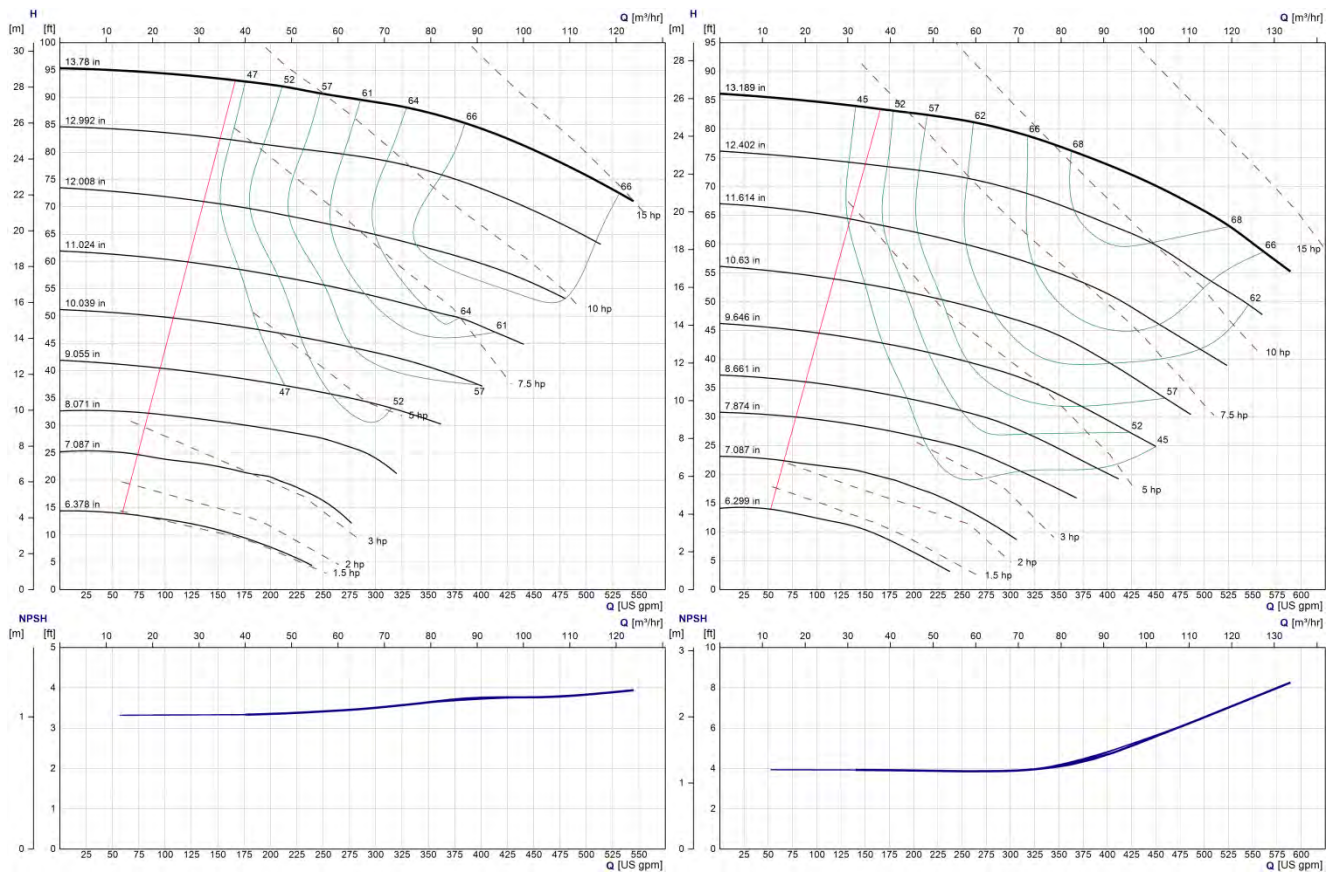
6-Pole Performance (e-HSC 3x5x8.5 & 3x5x8)



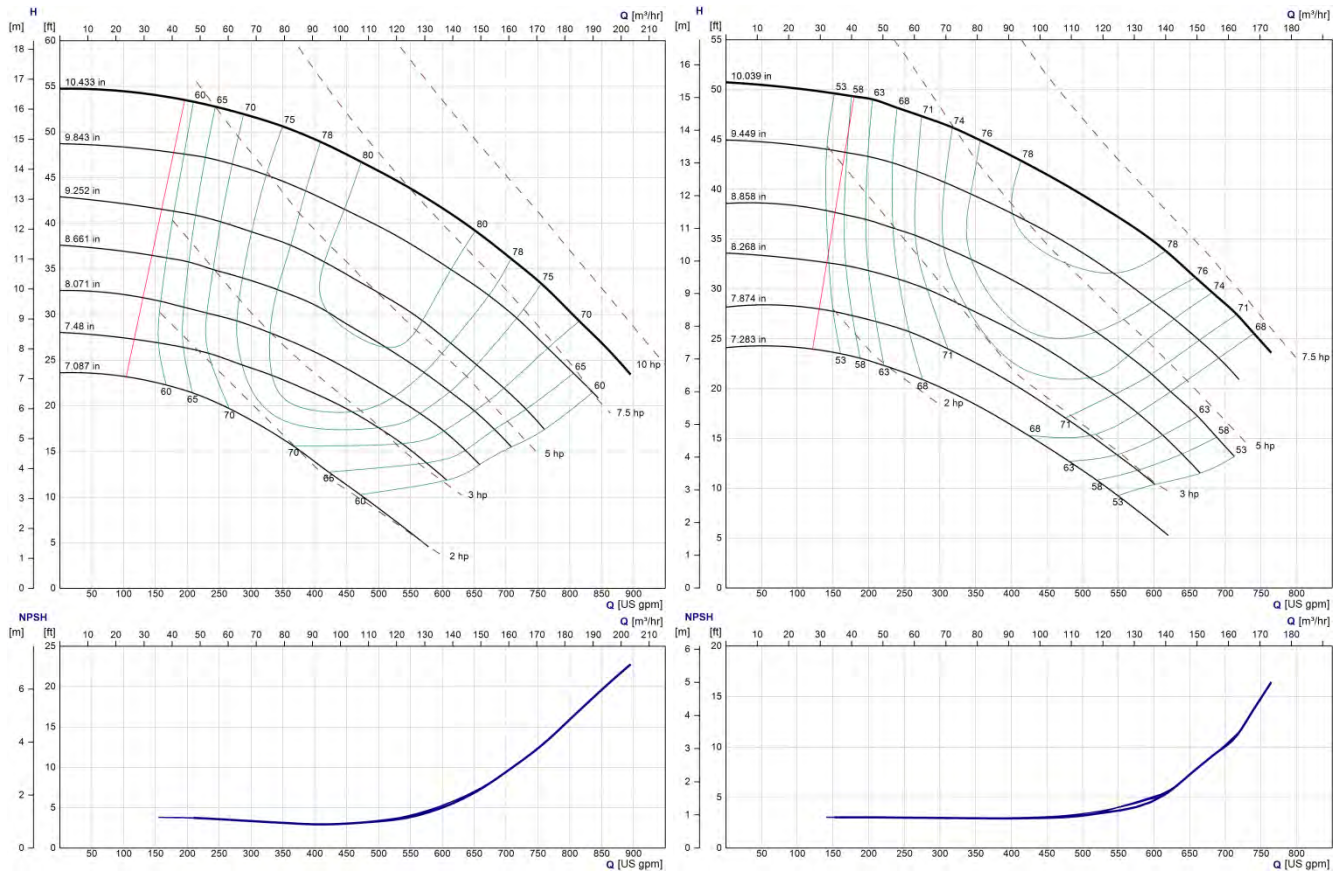
6-Pole Performance (e-HSC 3x5x11 & 3x5x10.5)



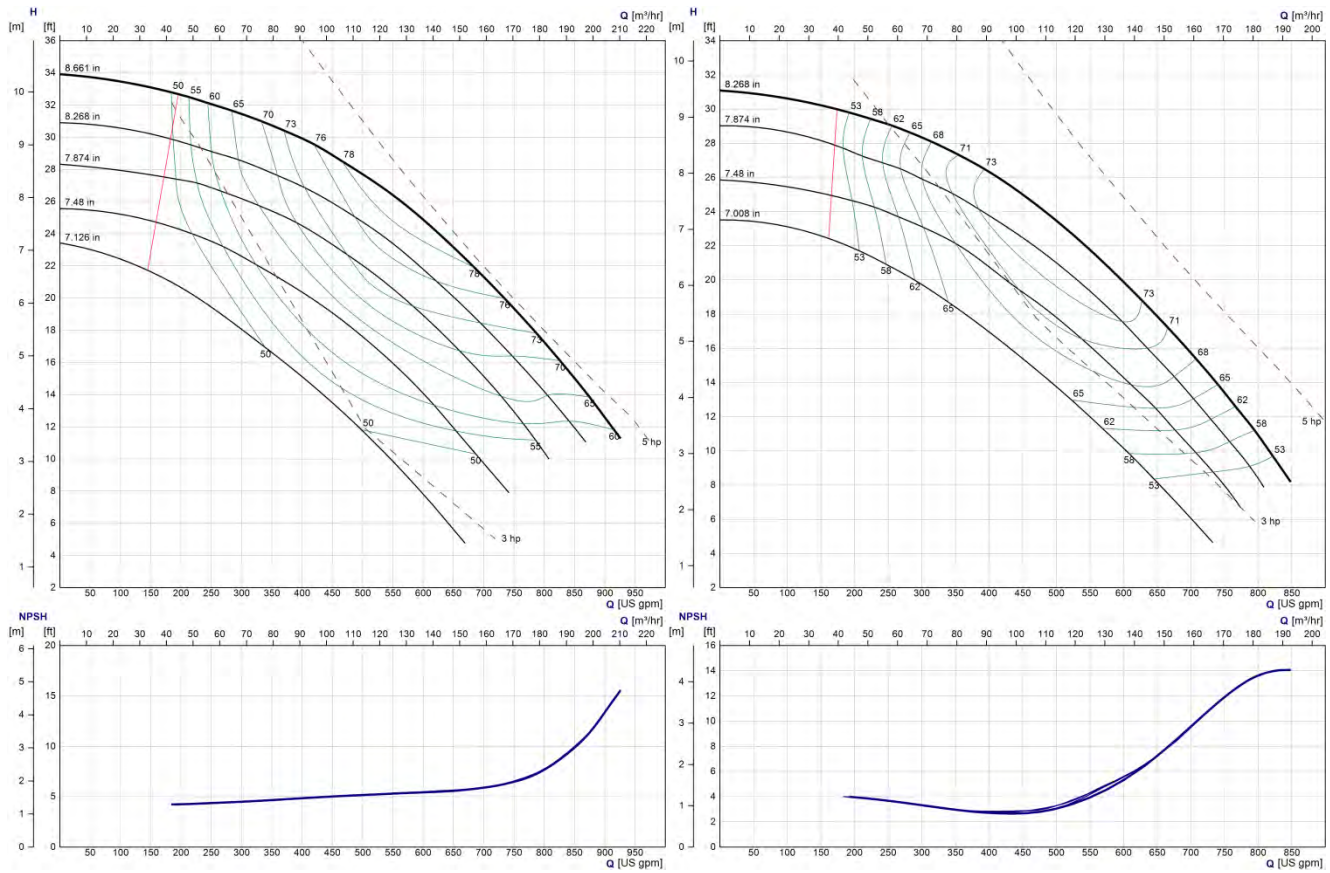
6-Pole Performance (e-HSC 3x5x13.5 & 3x5x13)



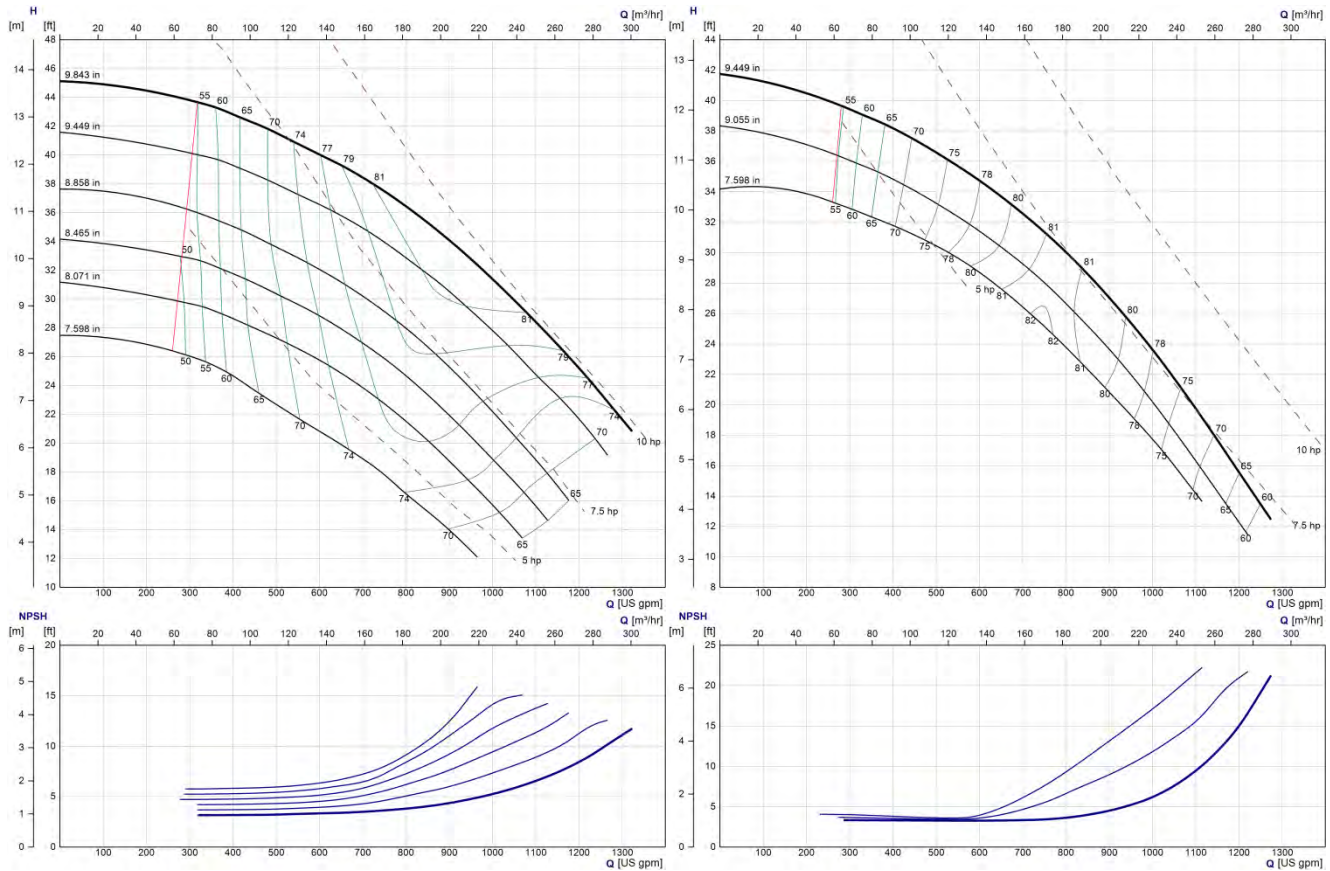
6-Pole Performance (e-HSC 4x6x10 & 4x6x9.5)



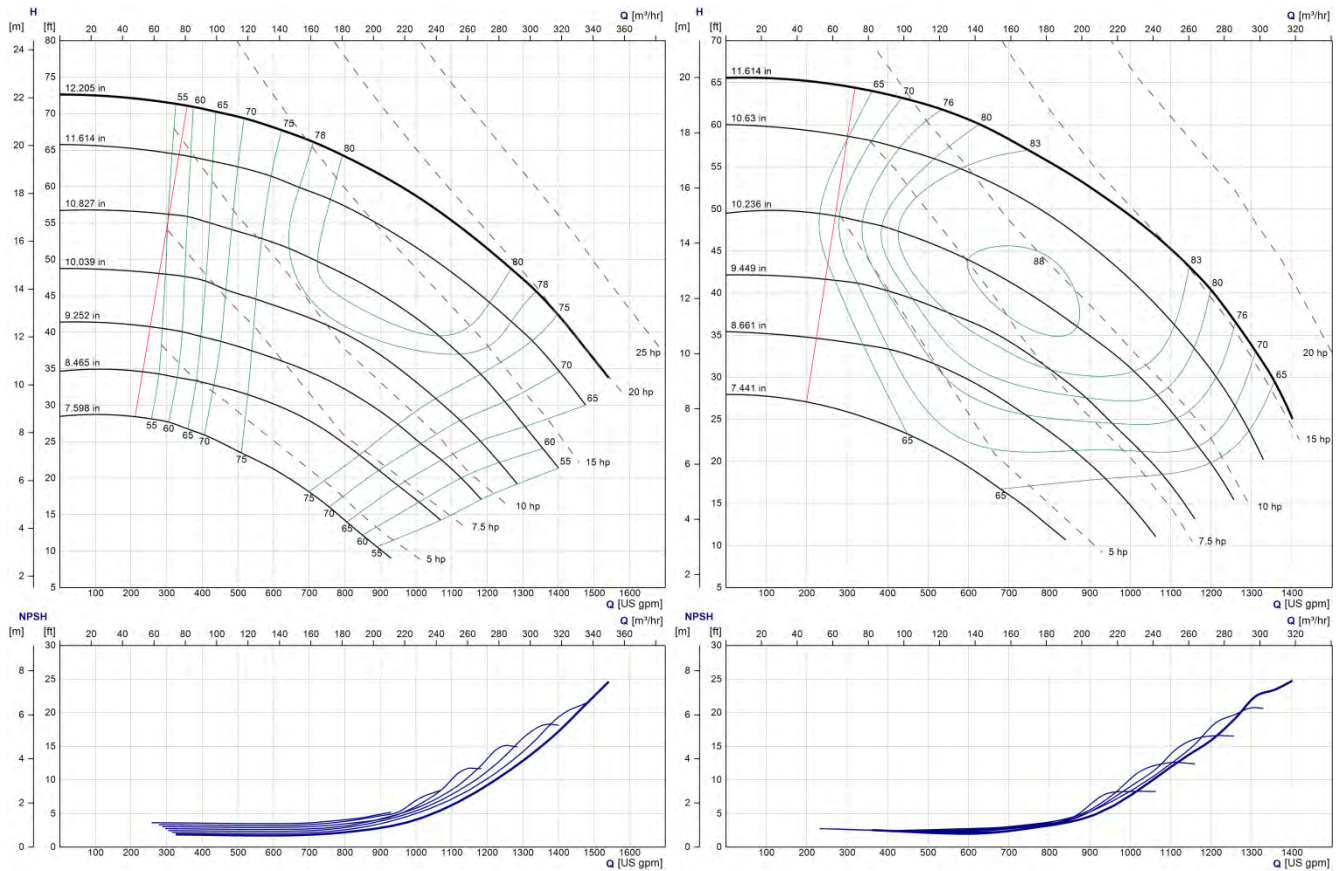
6-Pole Performance (e-HSC 5x6x9 & 5x6x8.5)



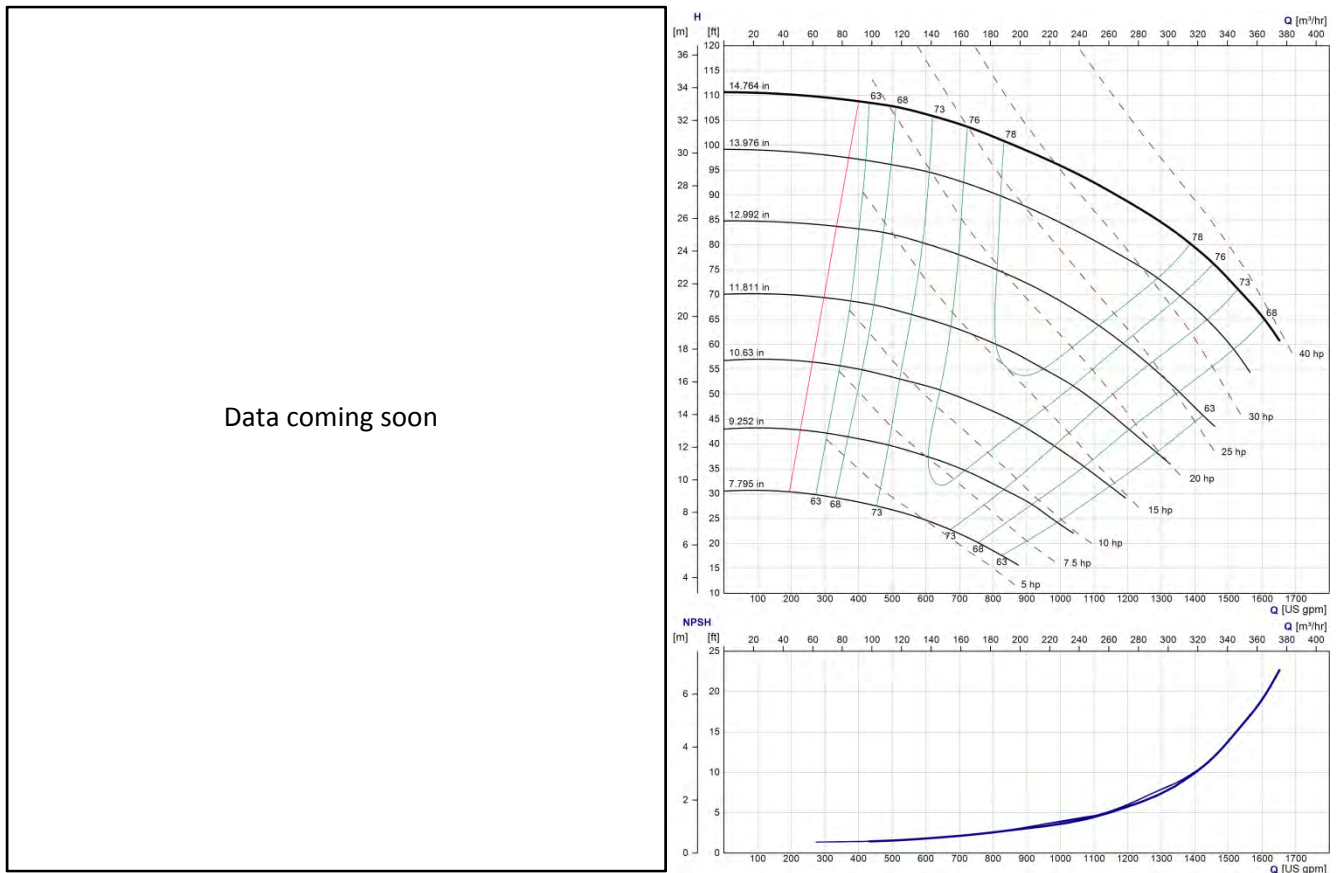
6-Pole Performance (e-HSC 5x8x9.5 & 5x8x9)



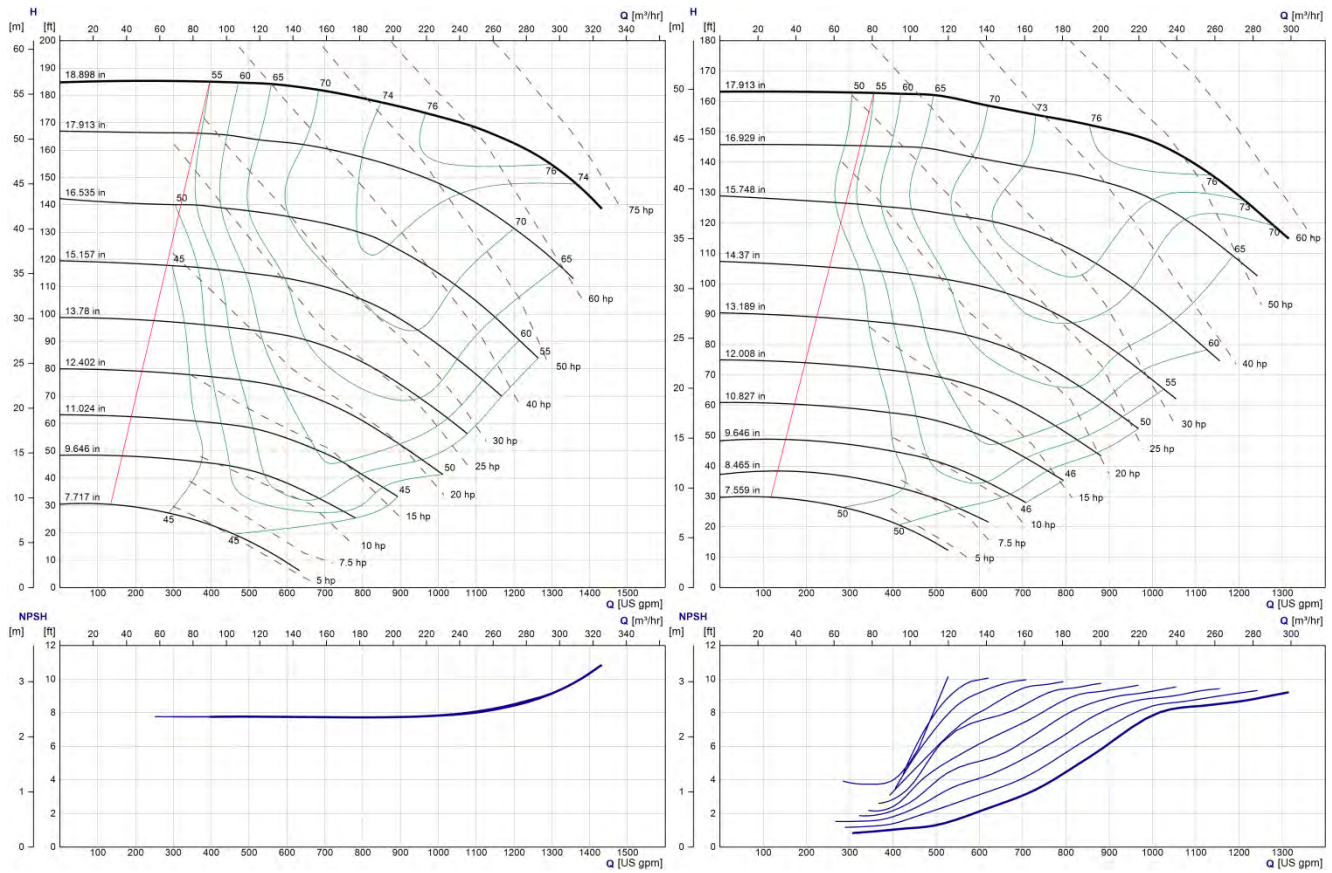
6-Pole Performance (e-HSC 5x8x12 & 5x8x11)



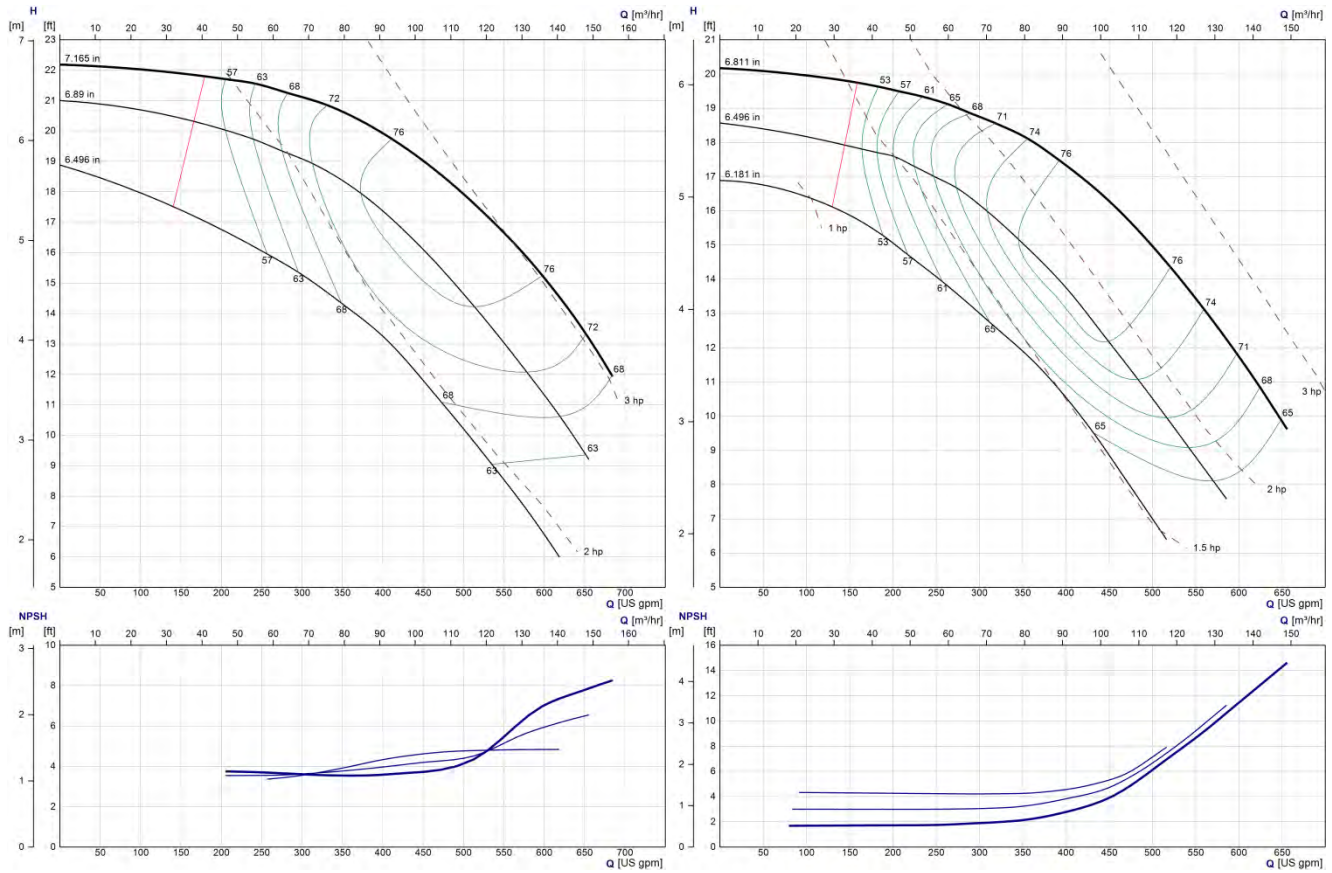
6-Pole Performance (e-HSC 5x8x15.5 & 5x8x14.5)



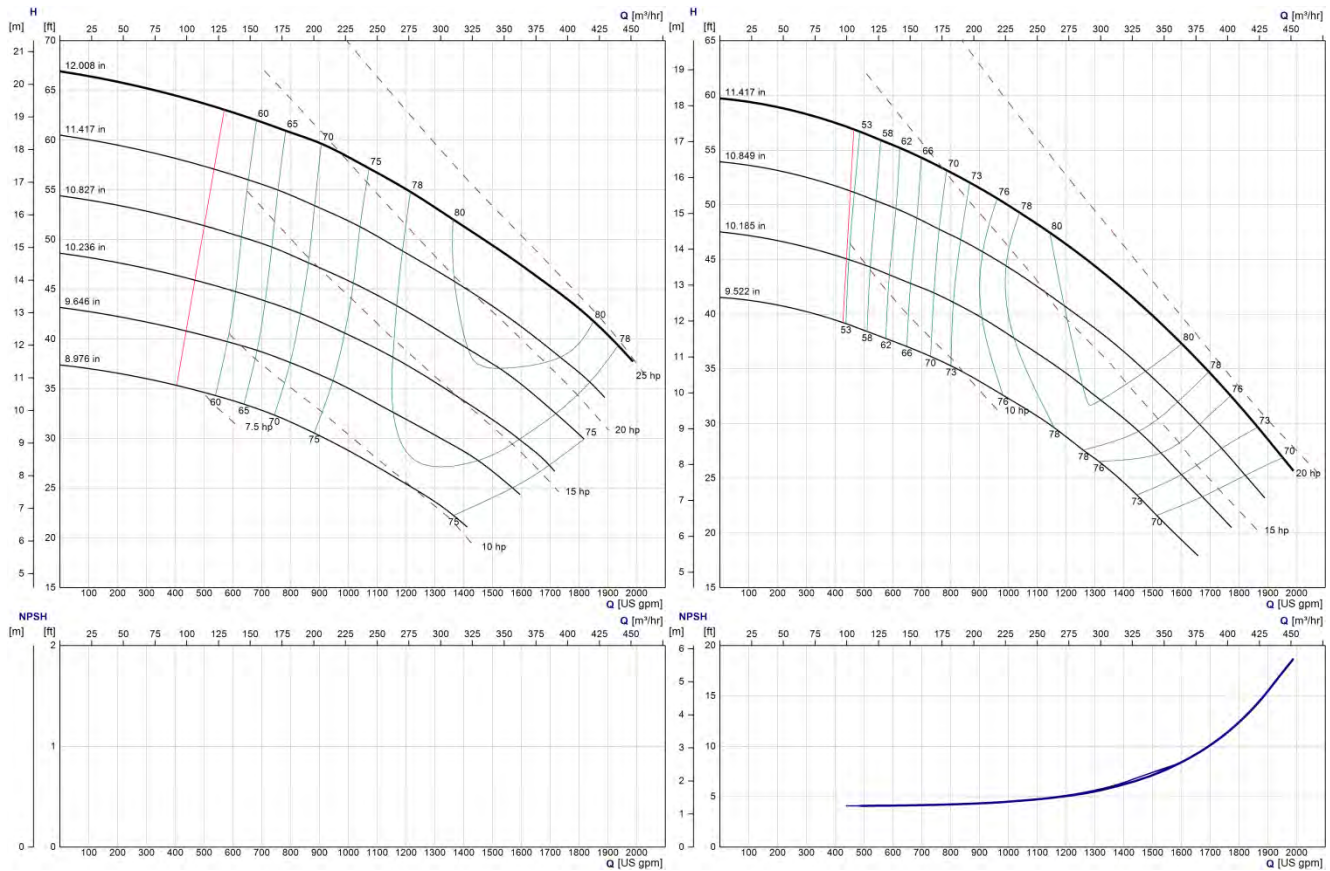
6-Pole Performance (e-HSC 5x8x19 & 5x8x18)



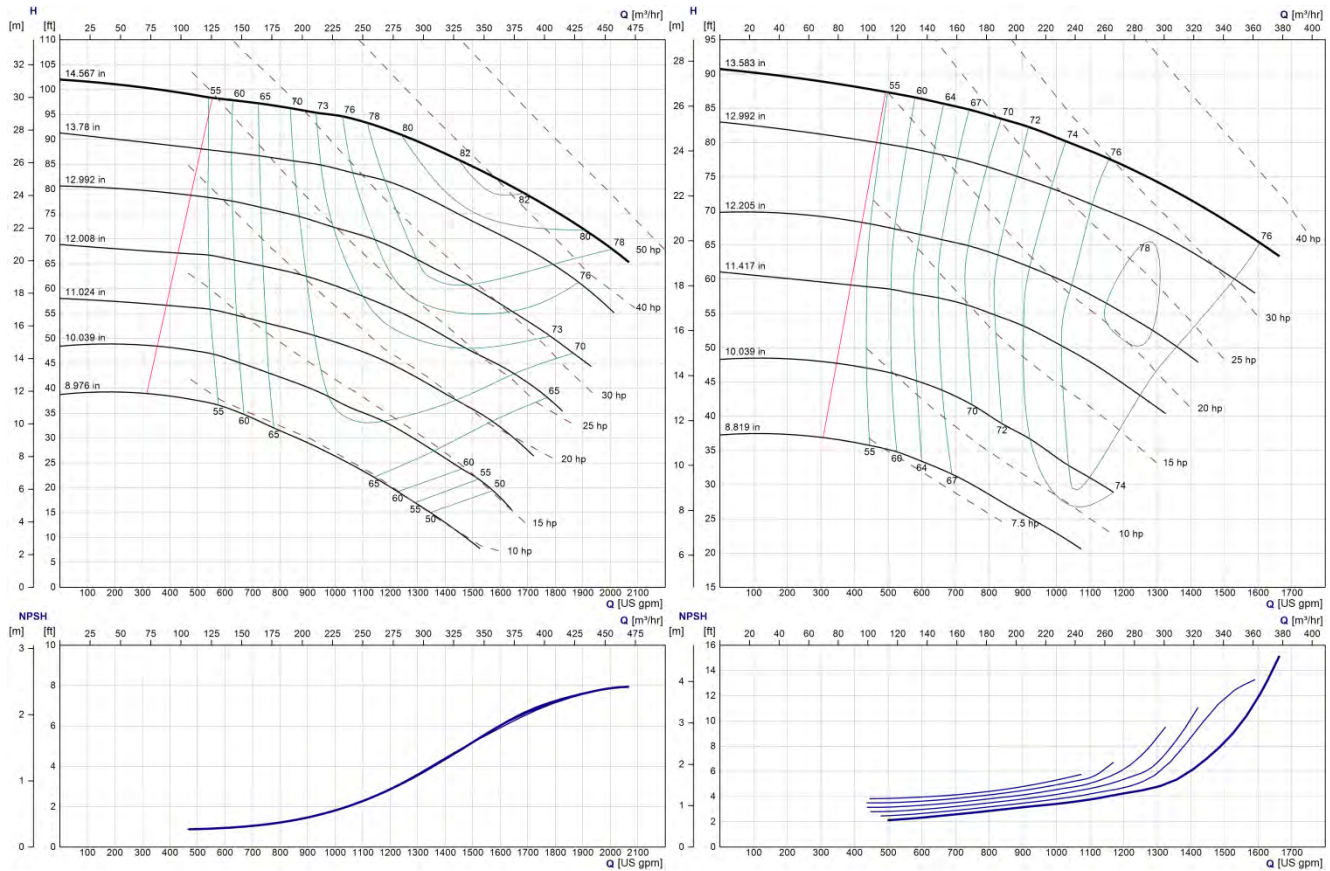
6-Pole Performance (e-HSC 6x8x6.5 & 6x8x6)



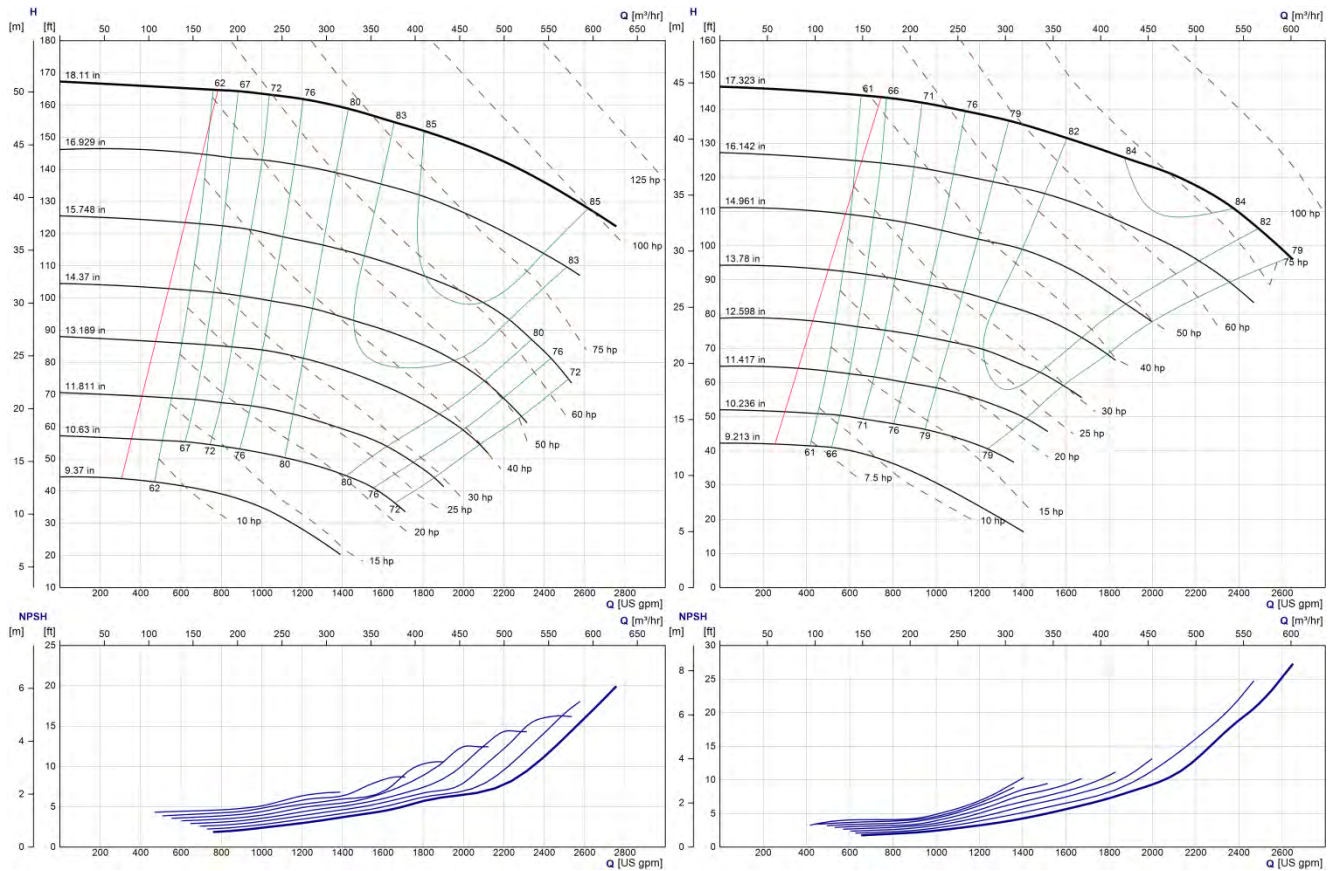
6-Pole Performance (e-HSC 6x8x12 & 6x8x11)



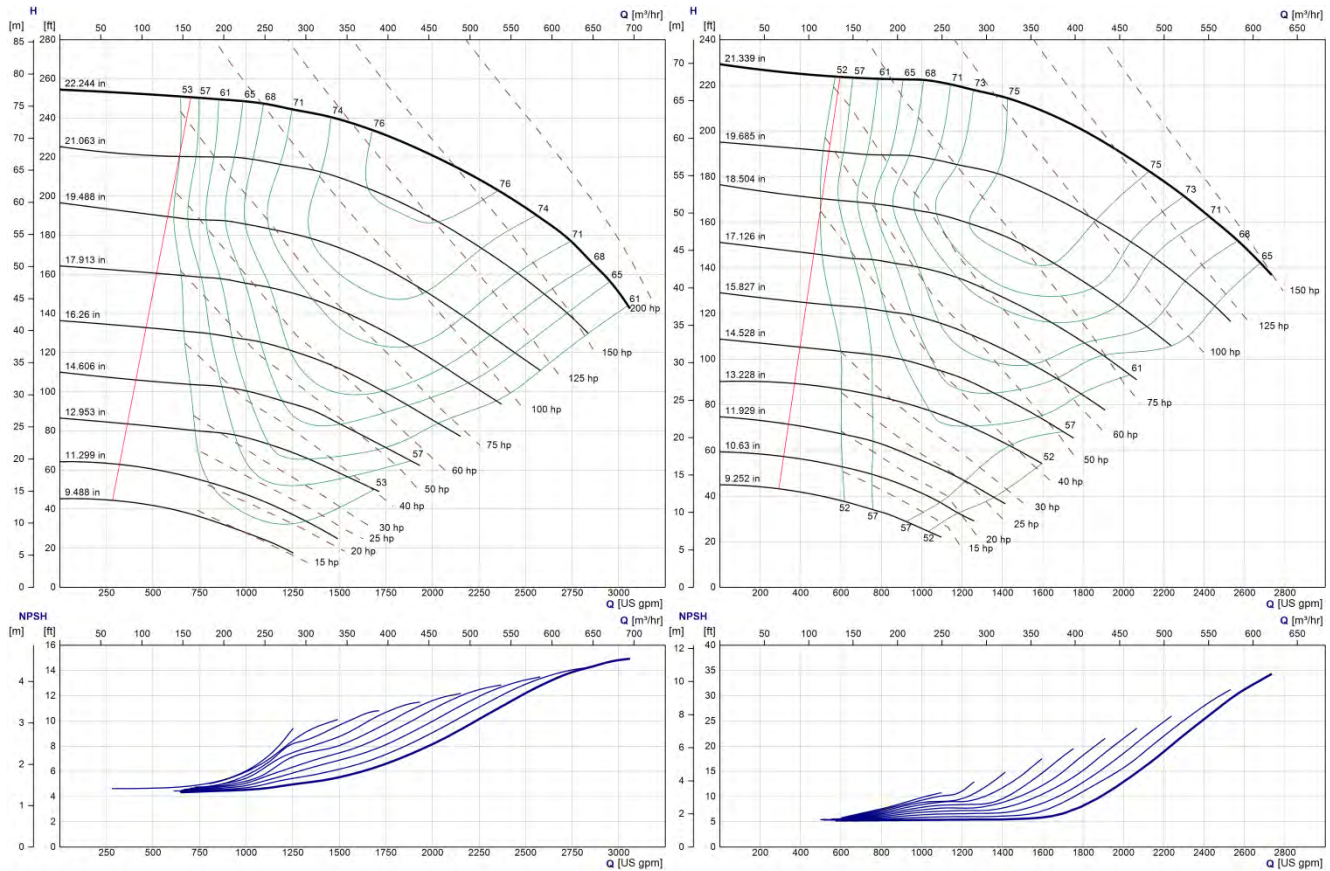
6-Pole Performance (e-HSC 6x8x14 & 6x8x13.5)



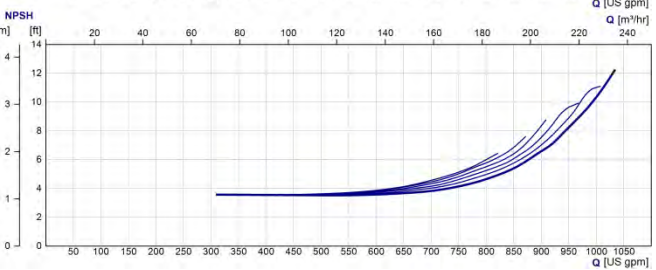
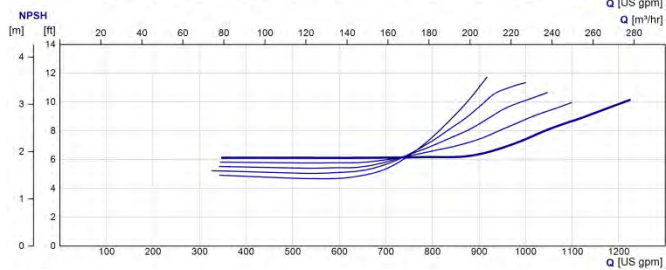
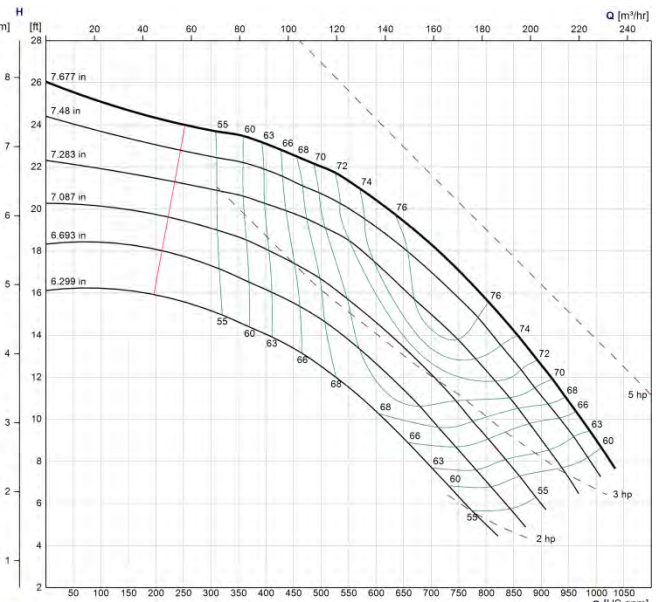
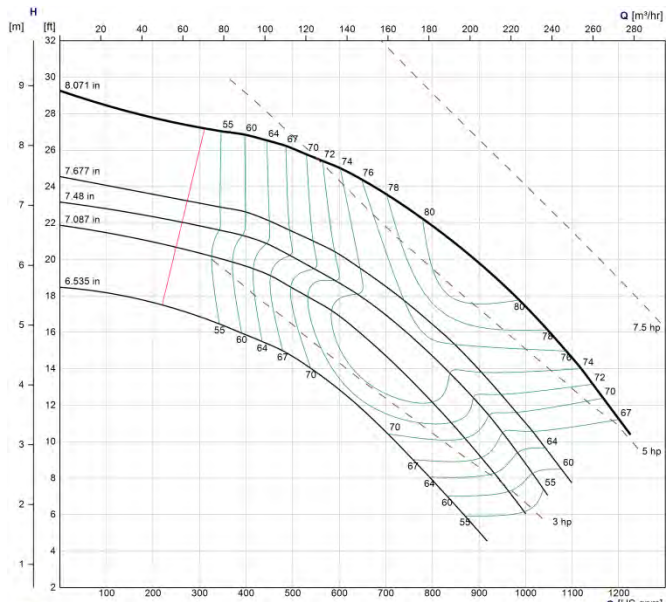
6-Pole Performance (e-HSC 6x8x18 & 6x8x17)



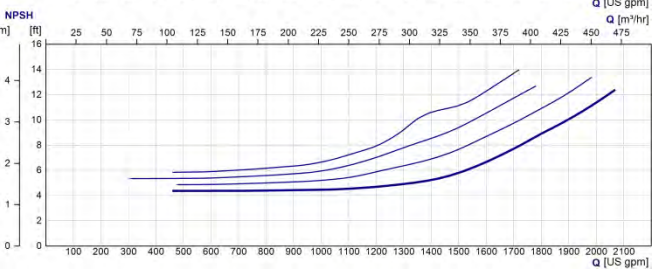
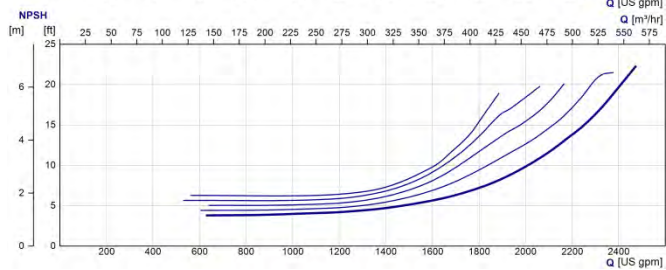
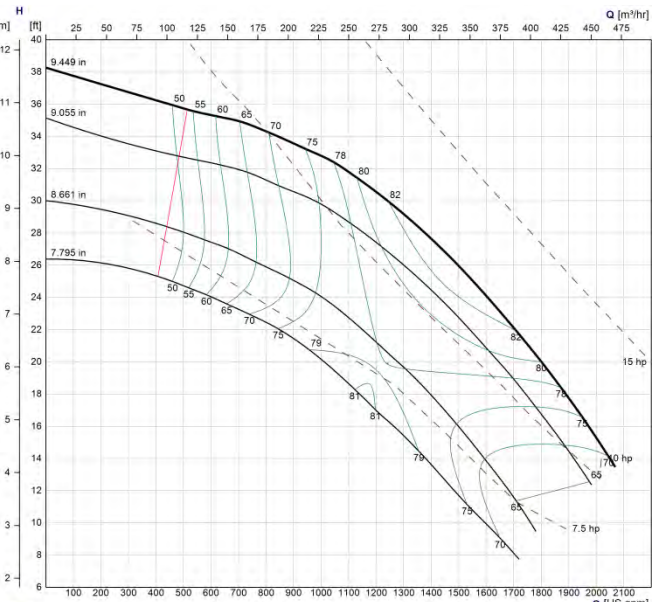
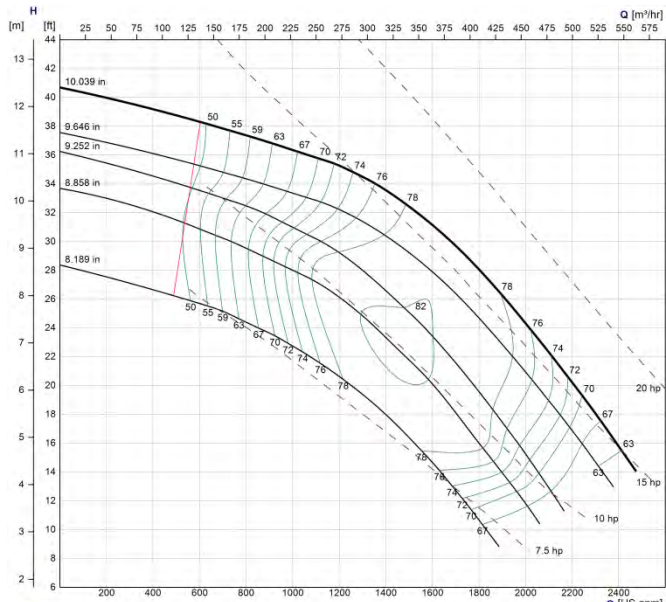
6-Pole Performance (e-HSC 6x8x22 & 6x8x21)



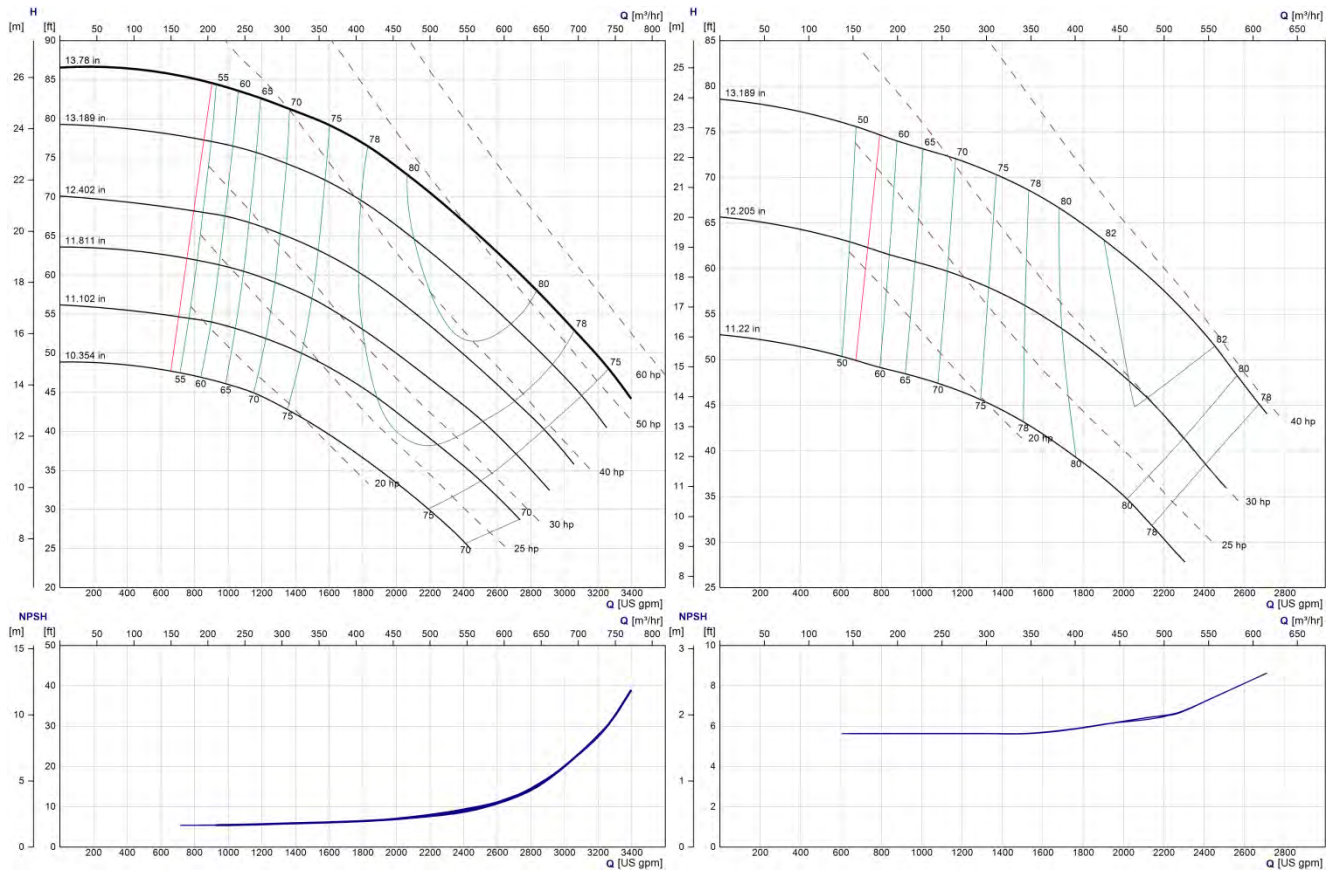
6-Pole Performance (e-HSC 8x8x8 & 8x8x7.5)



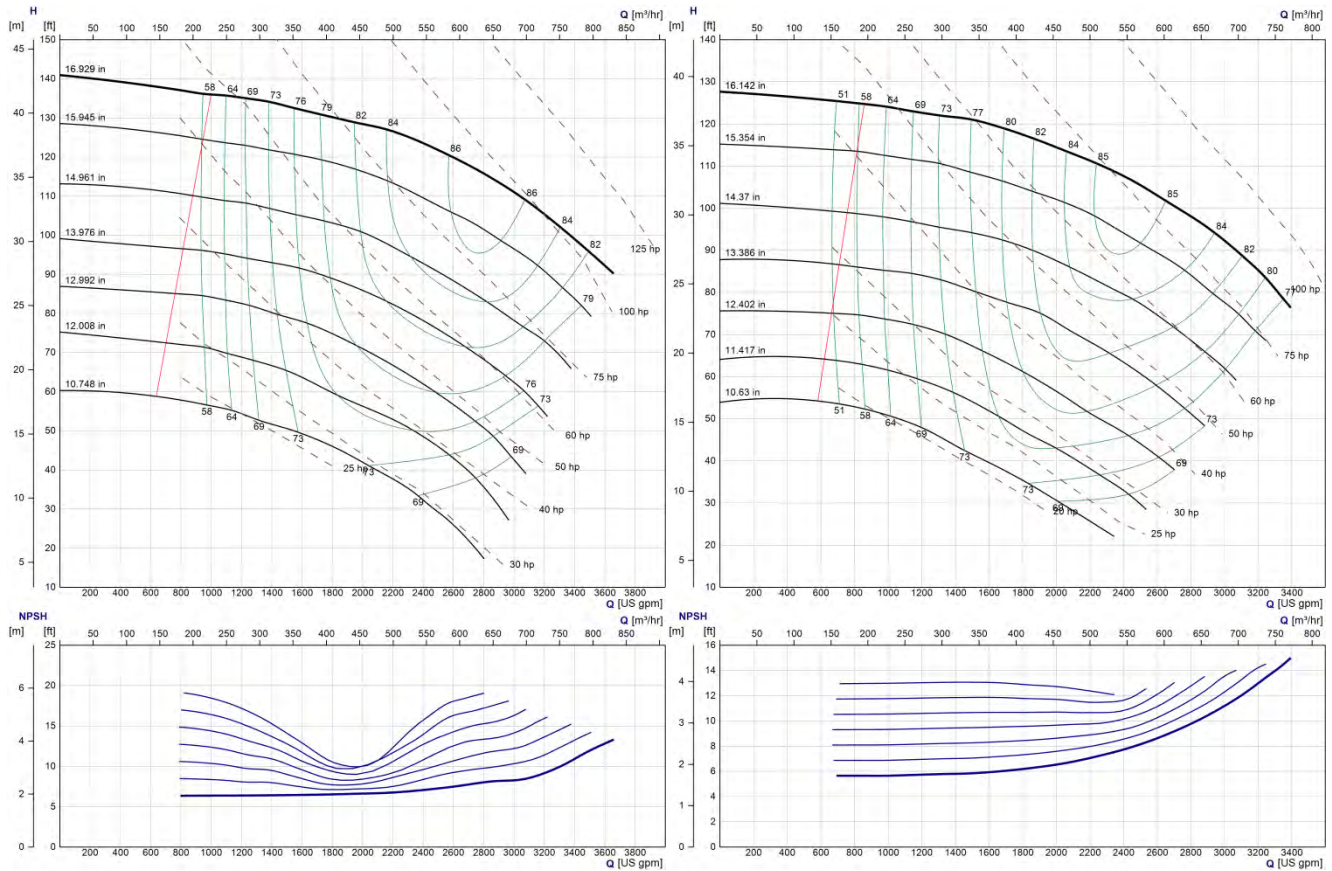
6-Pole Performance (e-HSC 8x10x10 & 8x10x9.5)



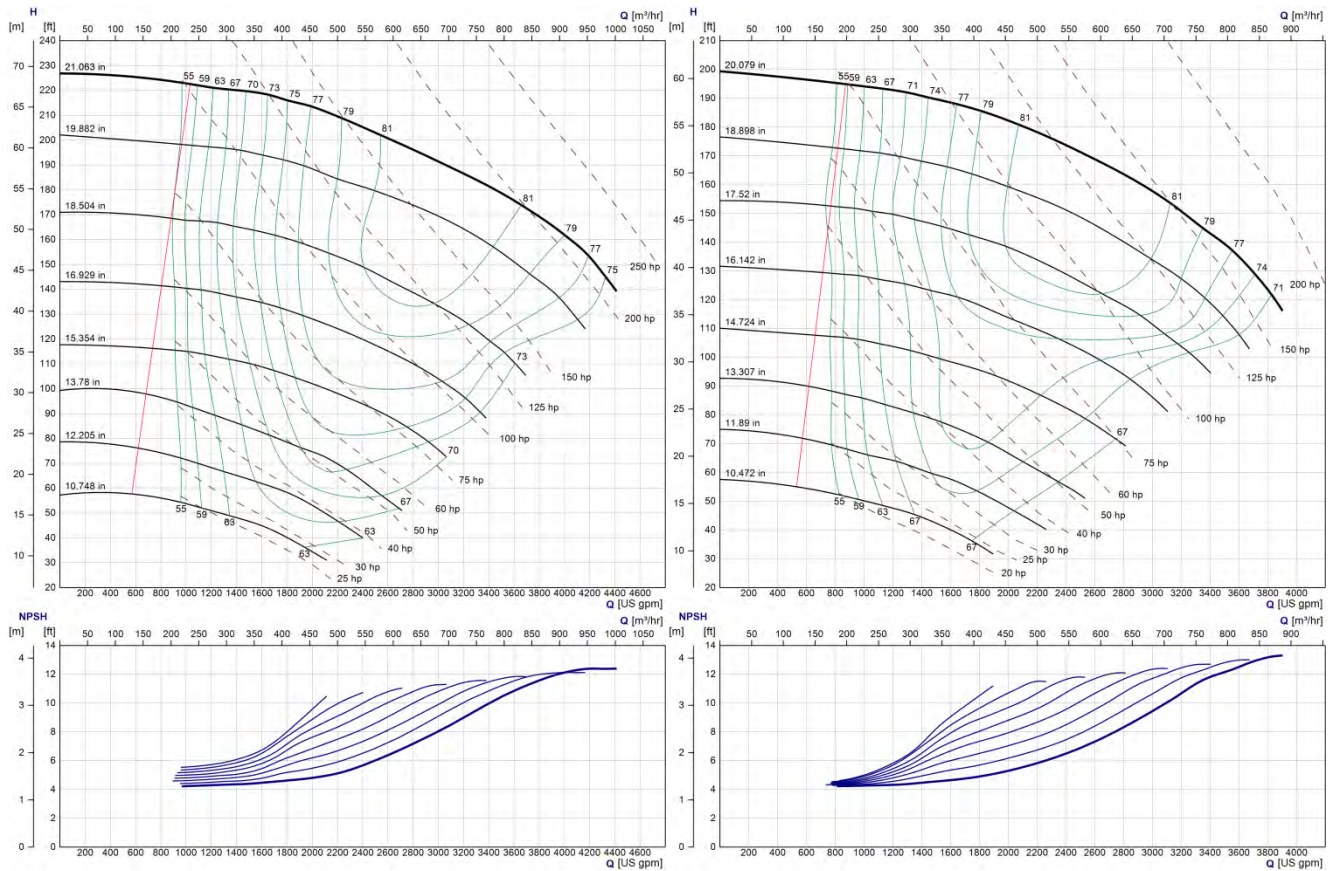
6-Pole Performance (e-HSC 8x10x13.5 & 8x10x13)



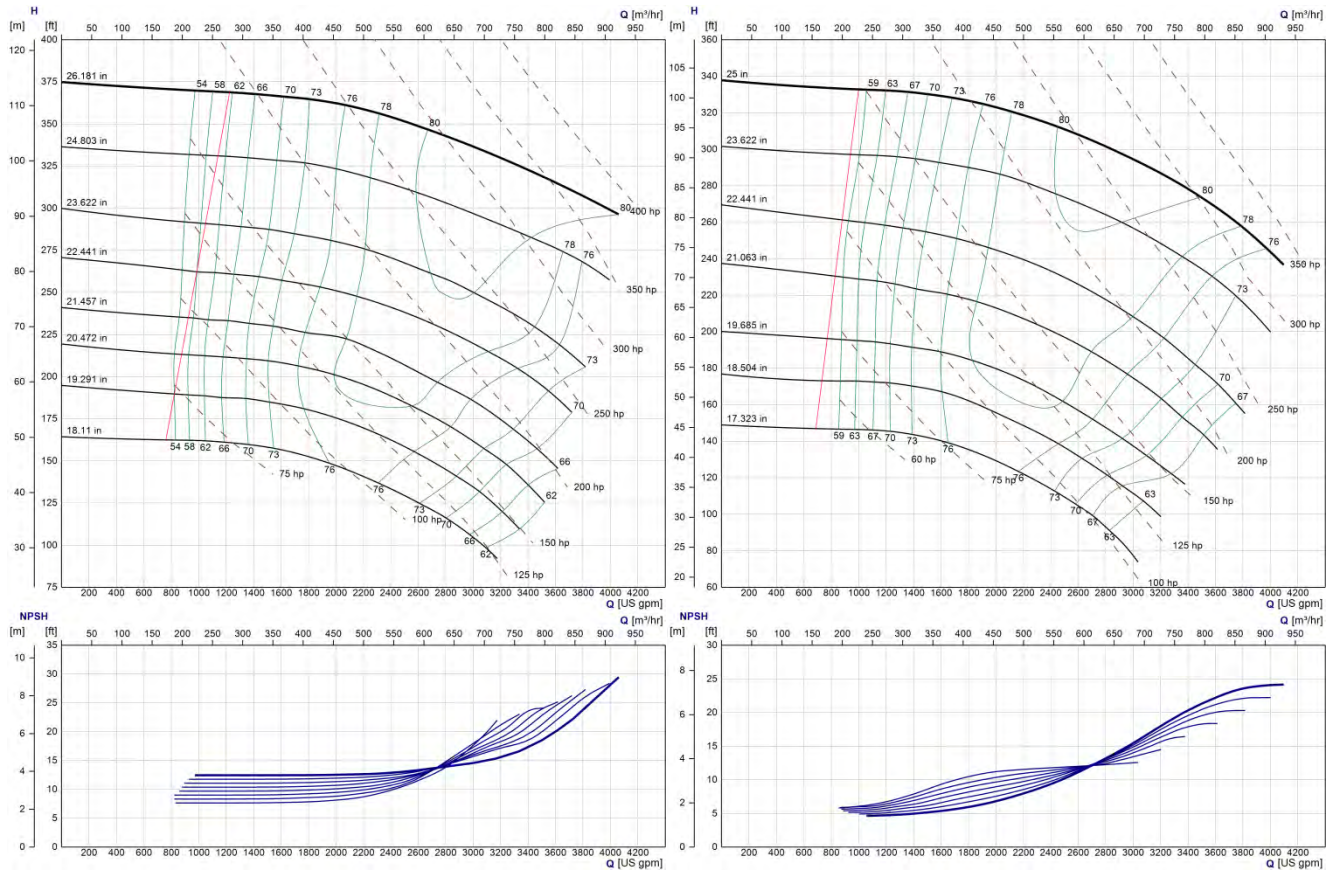
6-Pole Performance (e-HSC 8x10x17 & 8x10x16)



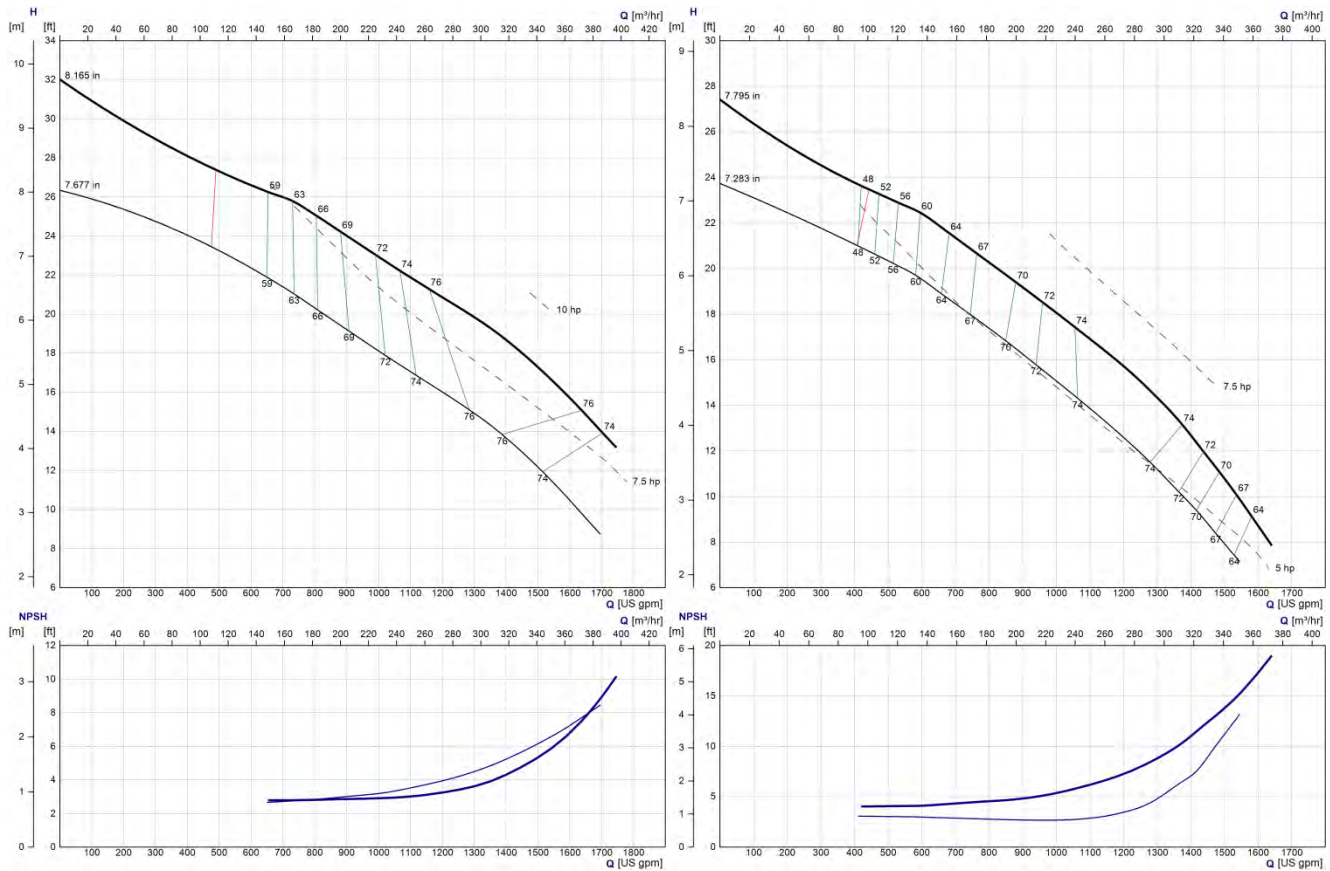
6-Pole Performance (e-HSC 8x10x21 & 8x10x20)



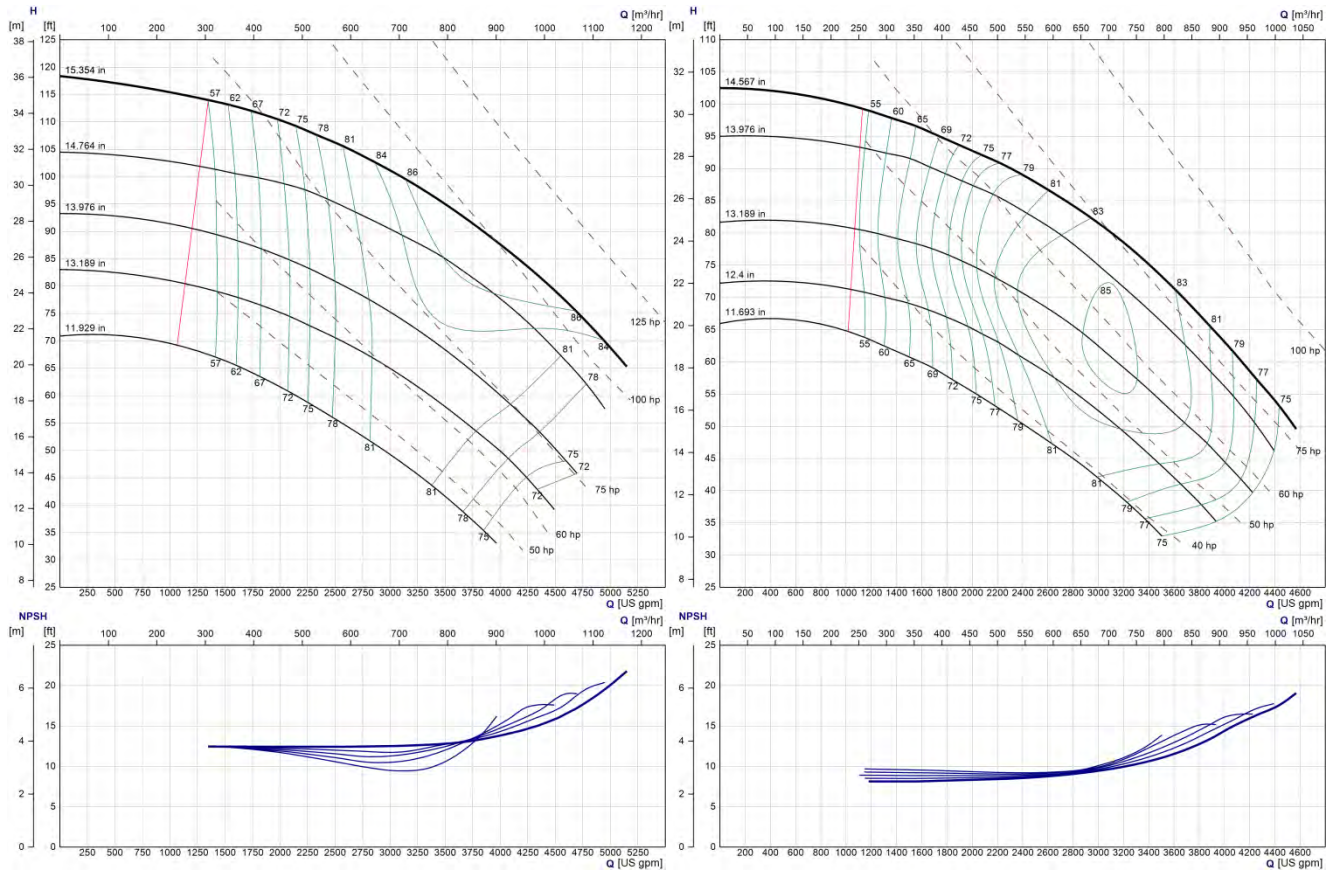
6-Pole Performance (e-HSC 8x10x26 & 8x10x25)



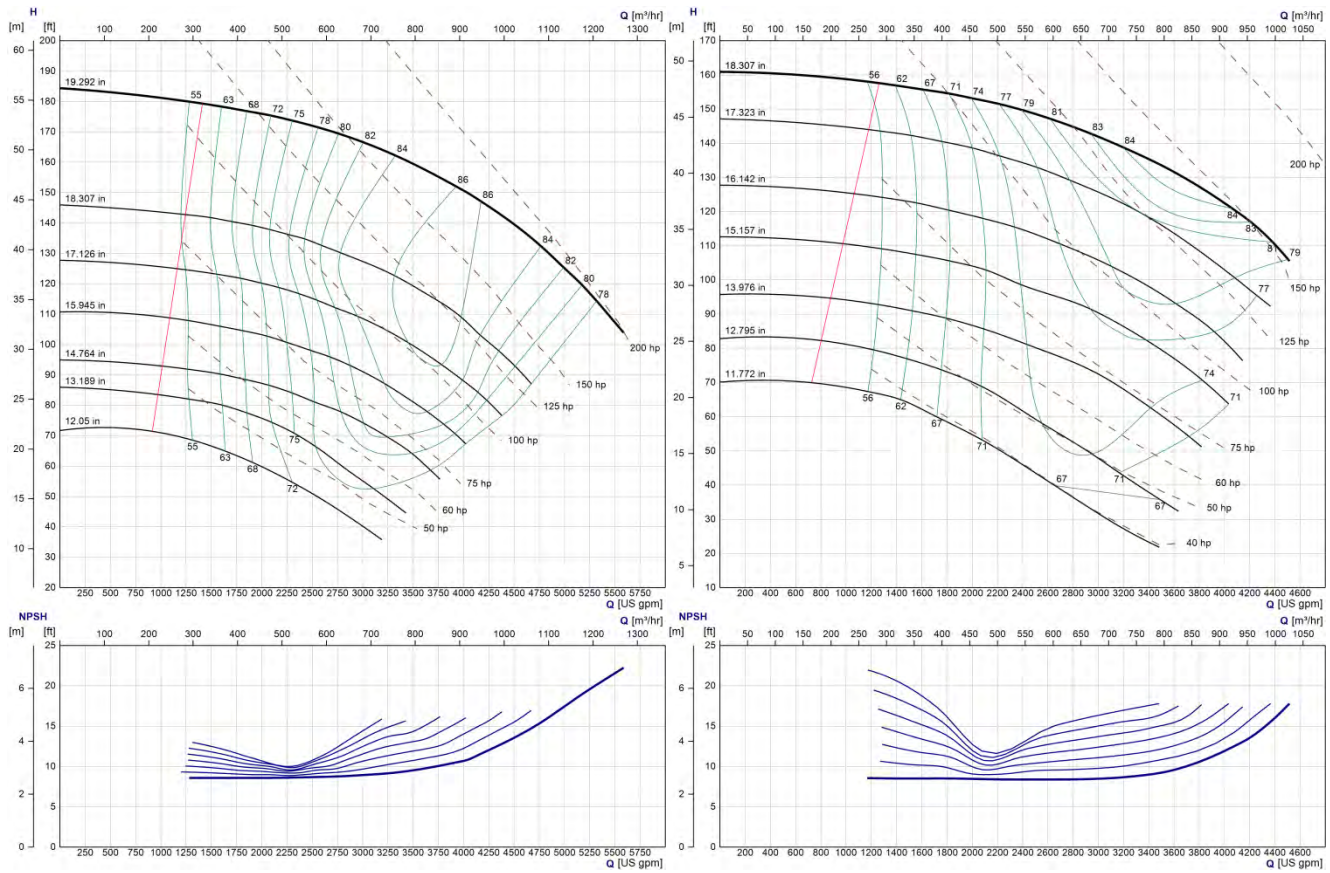
6-Pole Performance (e-HSC 10x10x8 & 10x10x7.5)



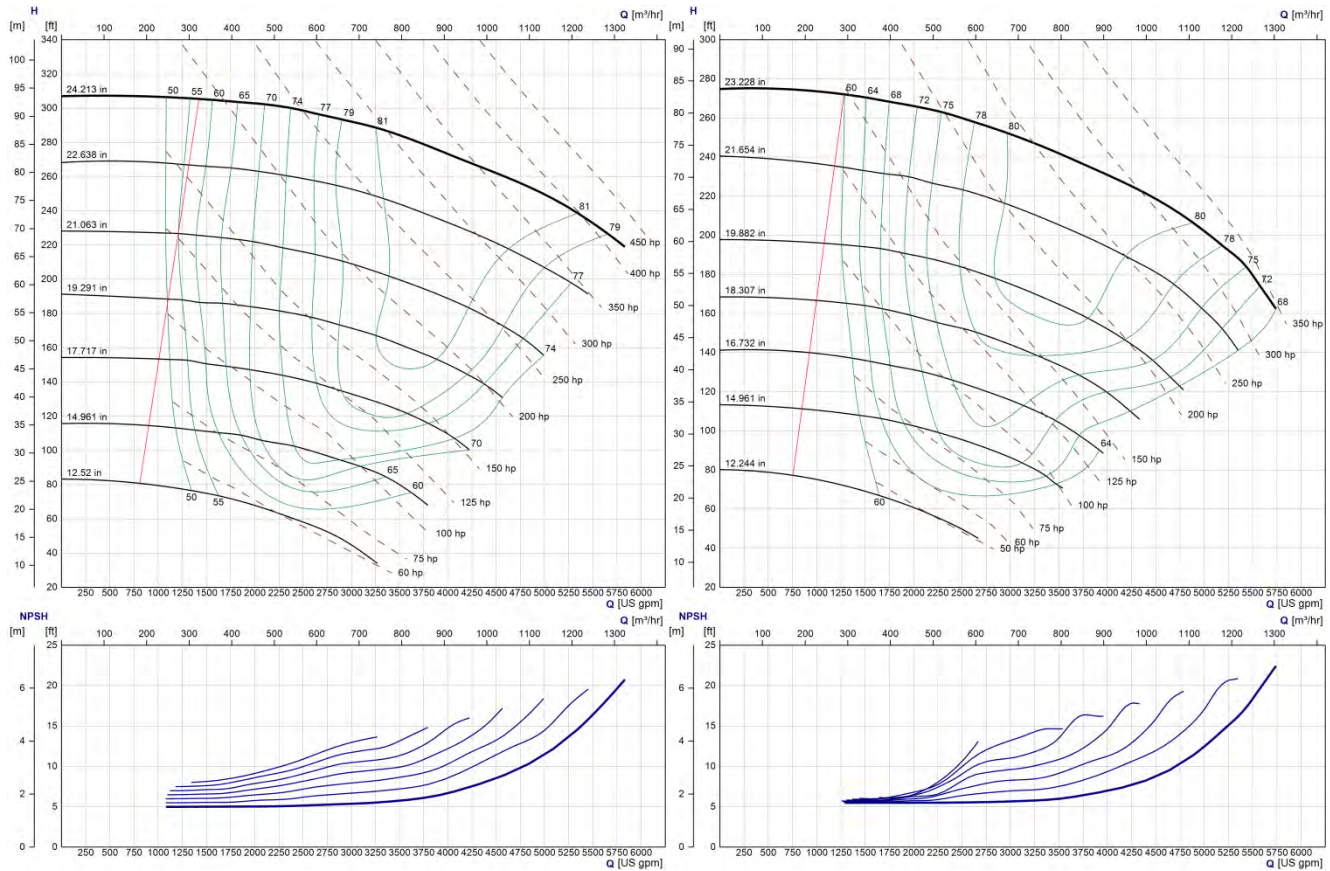
6-Pole Performance (e-HSC 10x12x15.5 & 10x12x14.5)



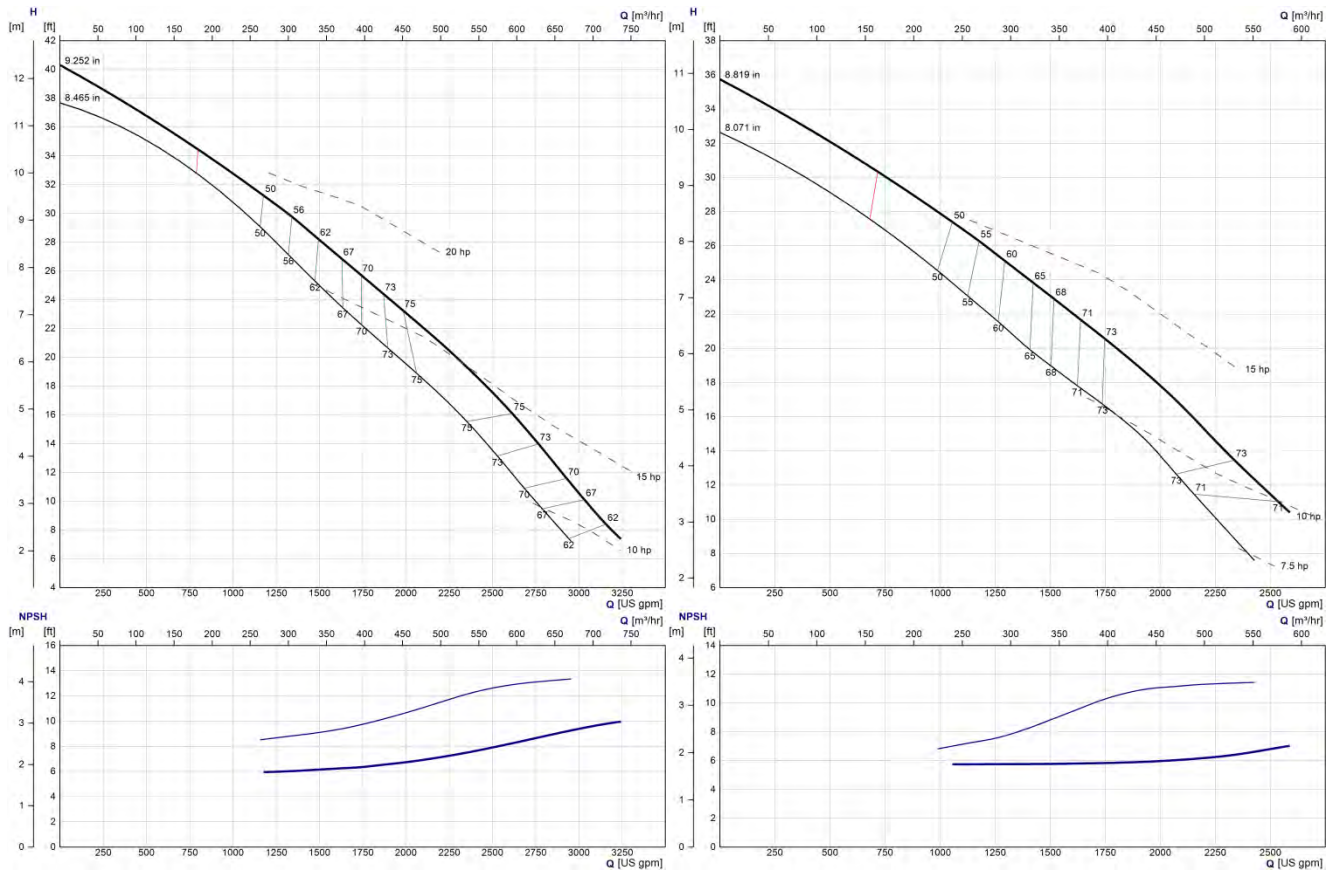
6-Pole Performance (e-HSC 10x12x19 & 10x12x18)



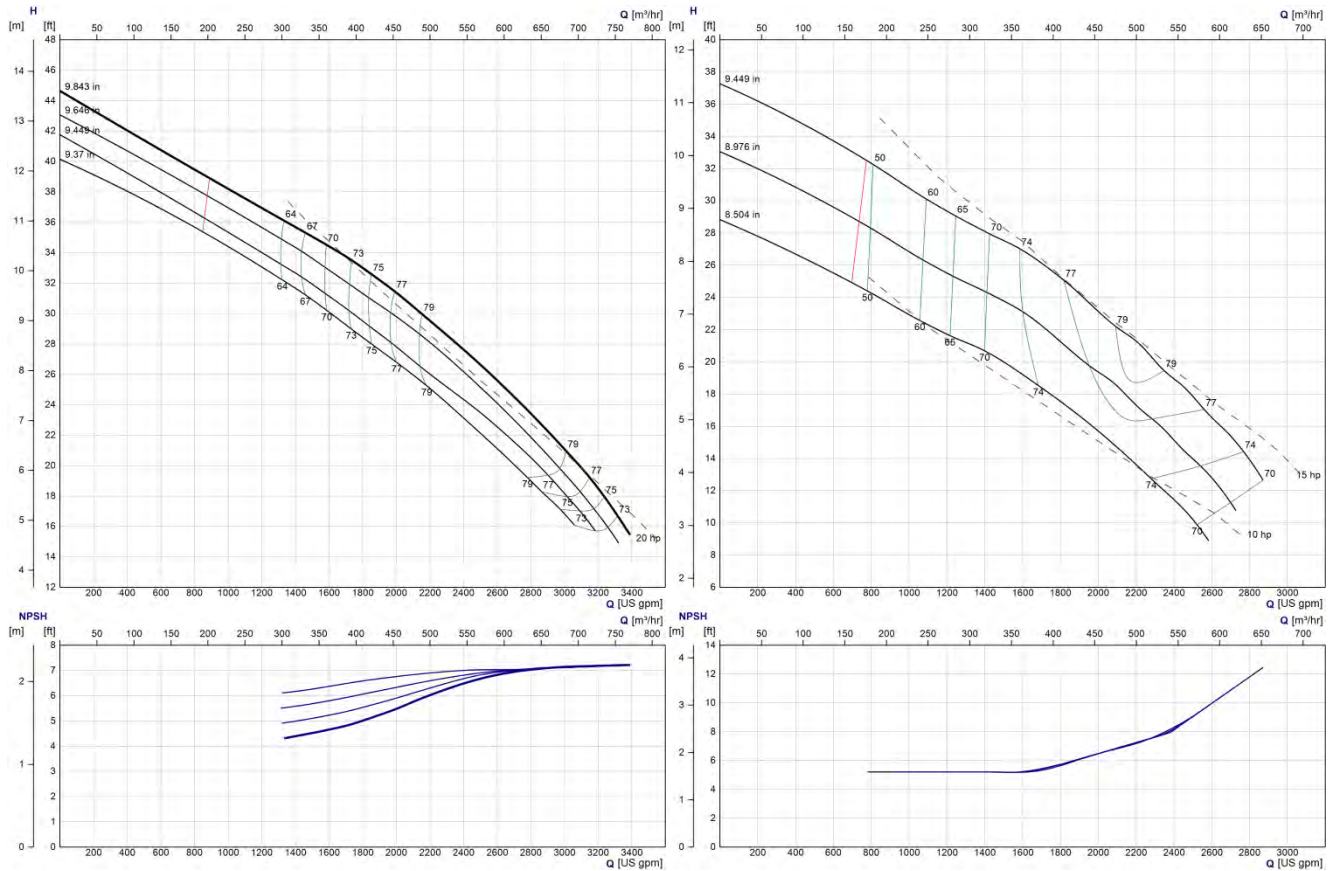
6-Pole Performance (e-HSC 10x12x24 & 10x12x23)



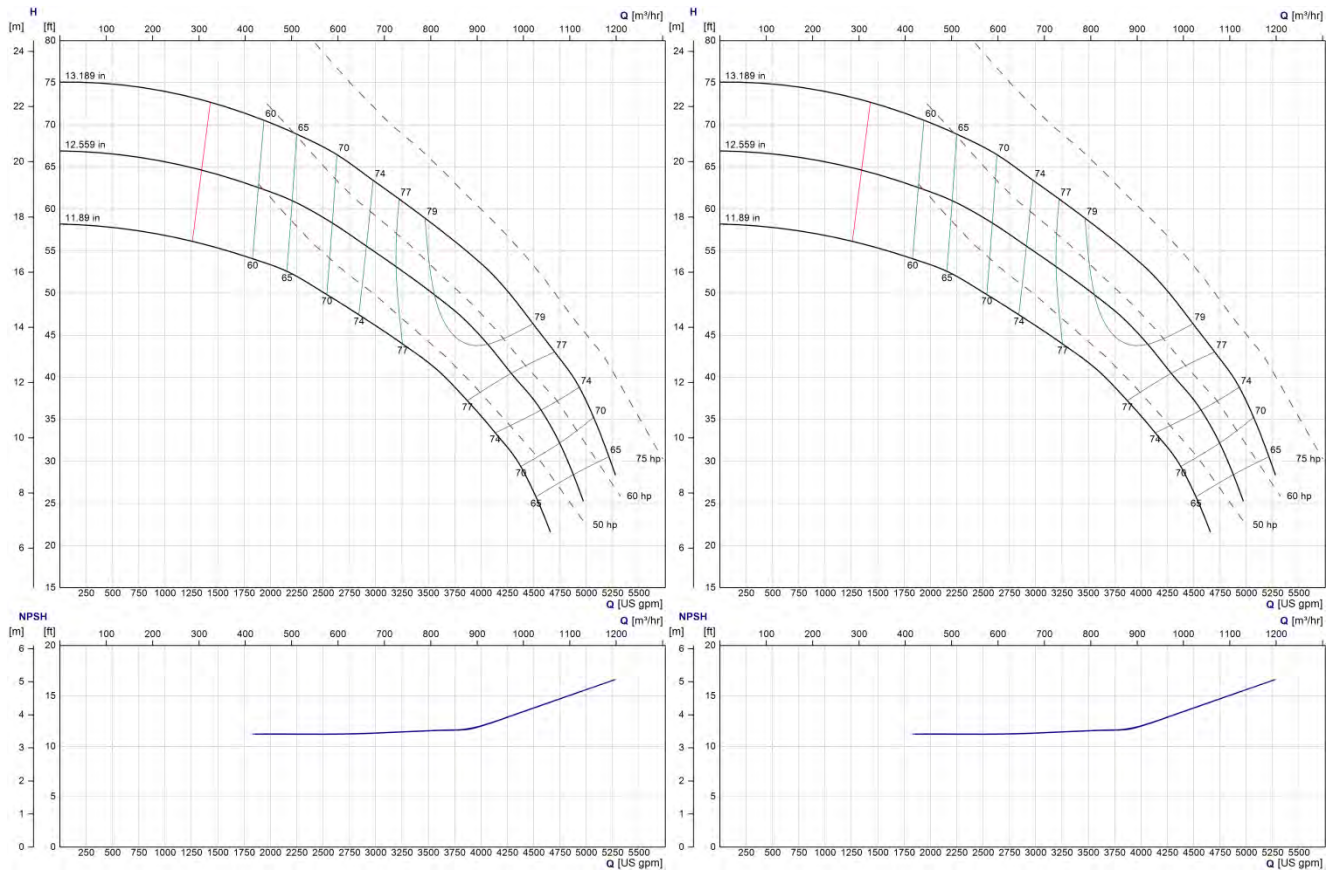
6-Pole Performance (e-HSC 12x12x9 & 12x12x8.5)



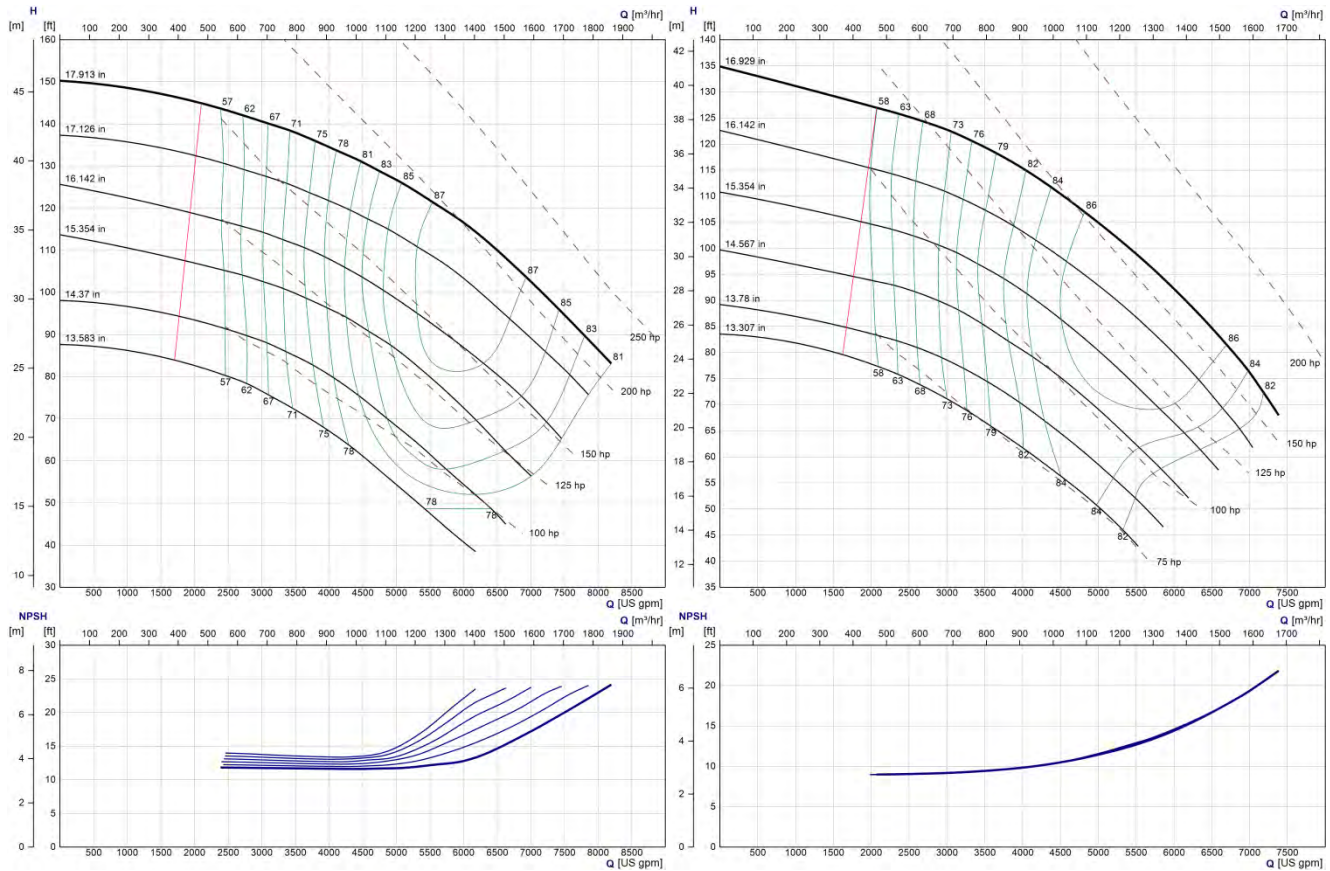
6-Pole Performance (e-HSC 12x12x10 & 12x12x9.5)



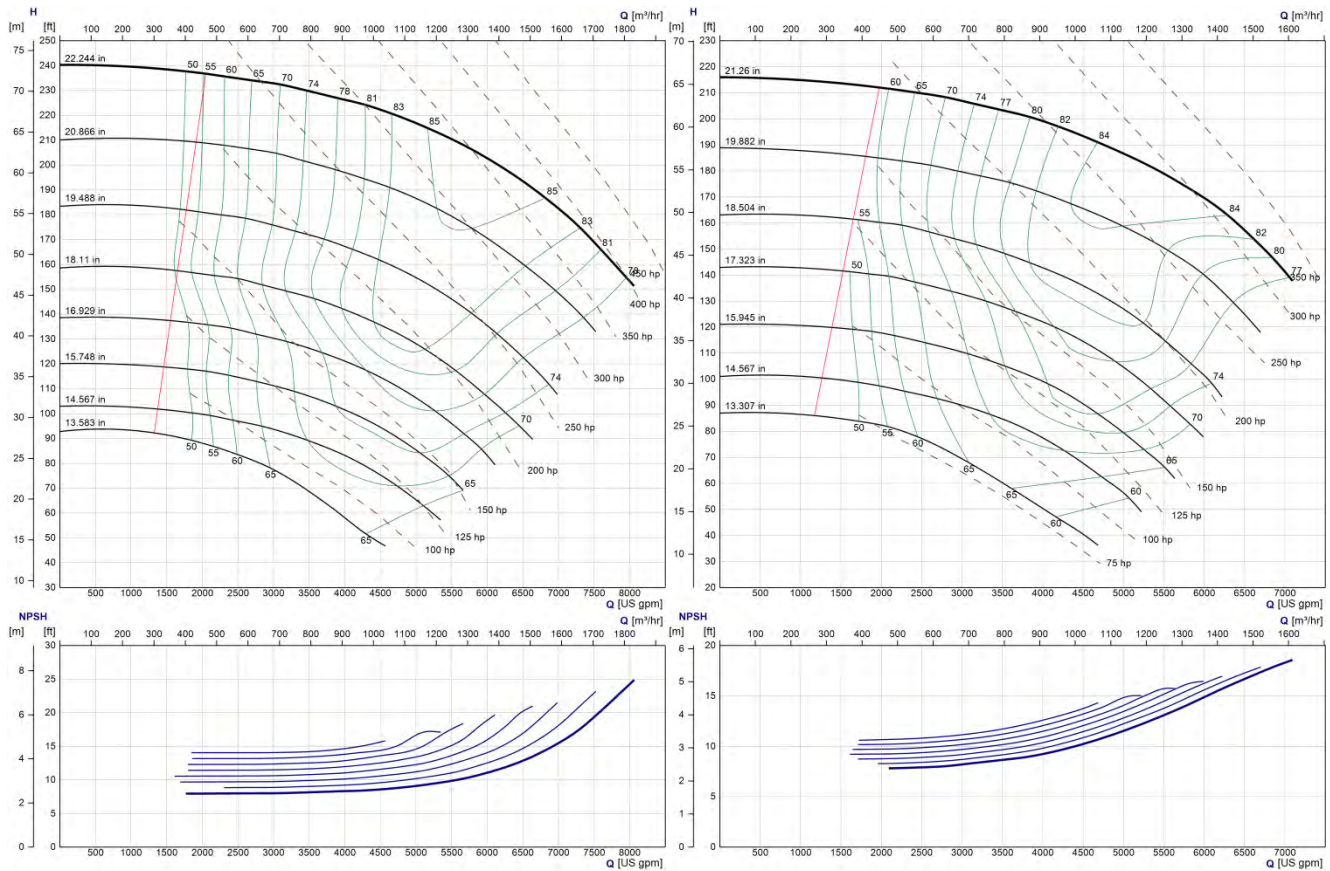
6-Pole Performance (e-HSC 12x14x13 & 12x14x12.5)



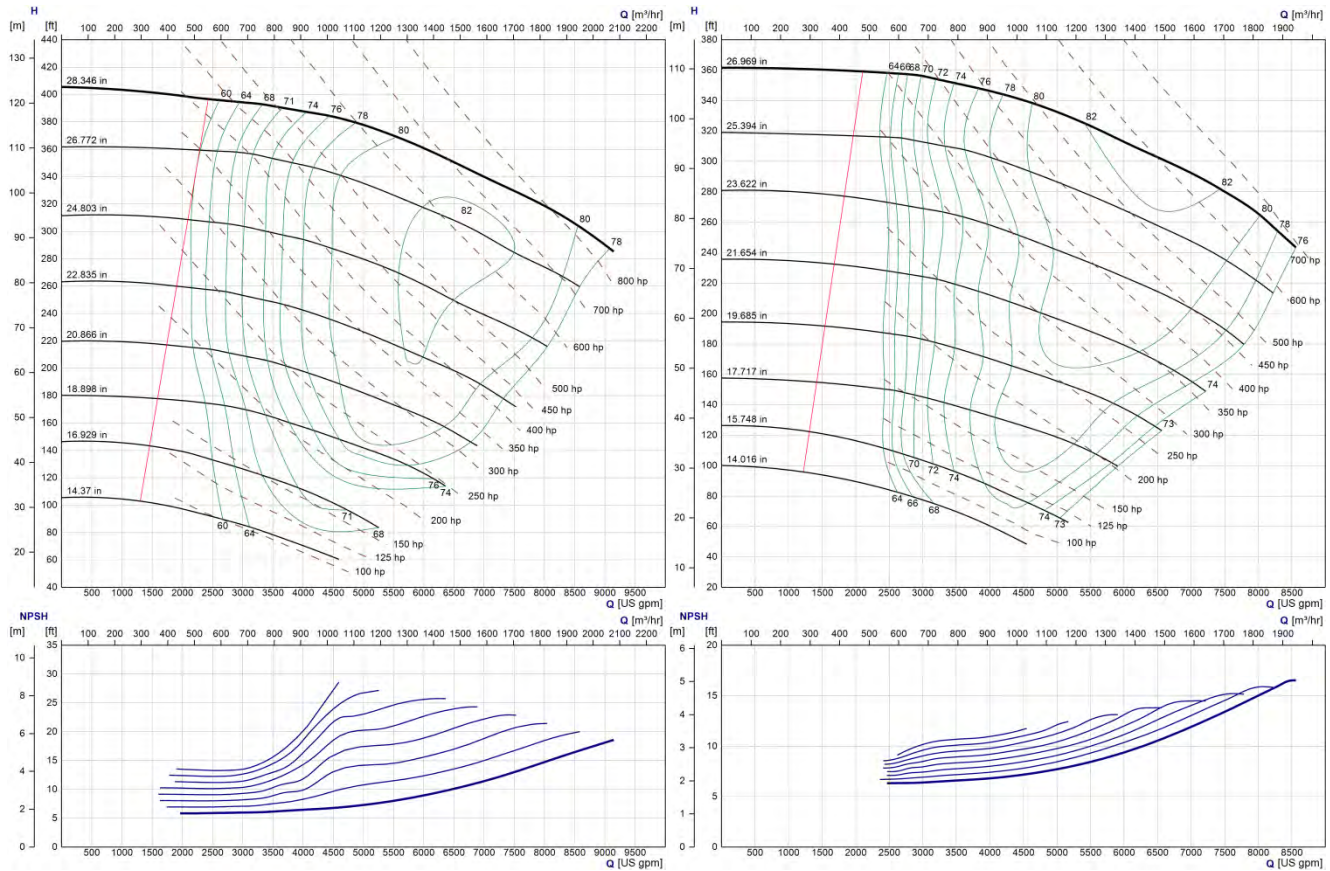
6-Pole Performance (e-HSC 12x16x18 & 12x16x17)



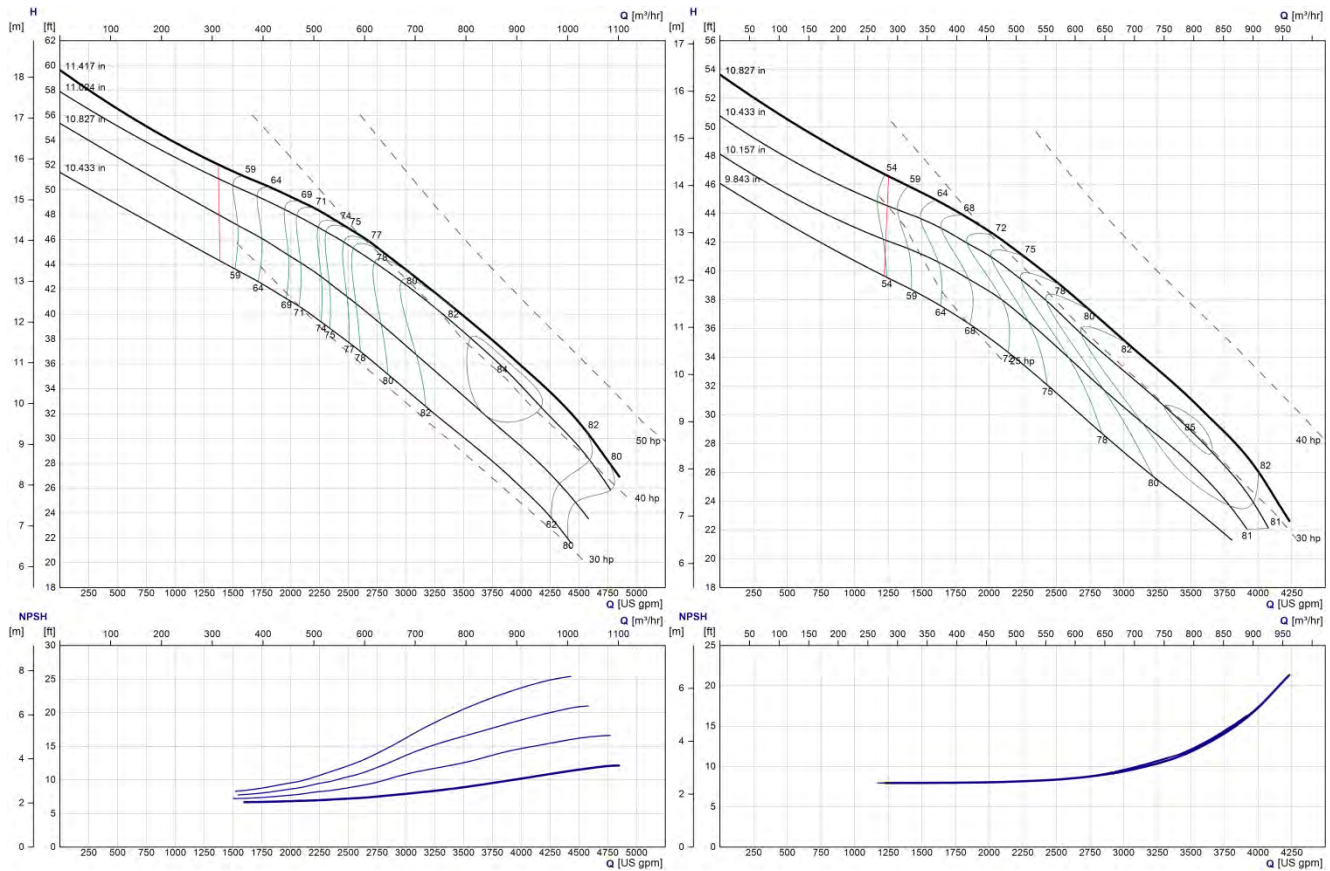
6-Pole Performance (e-HSC 12x16x22 & 12x16x21)



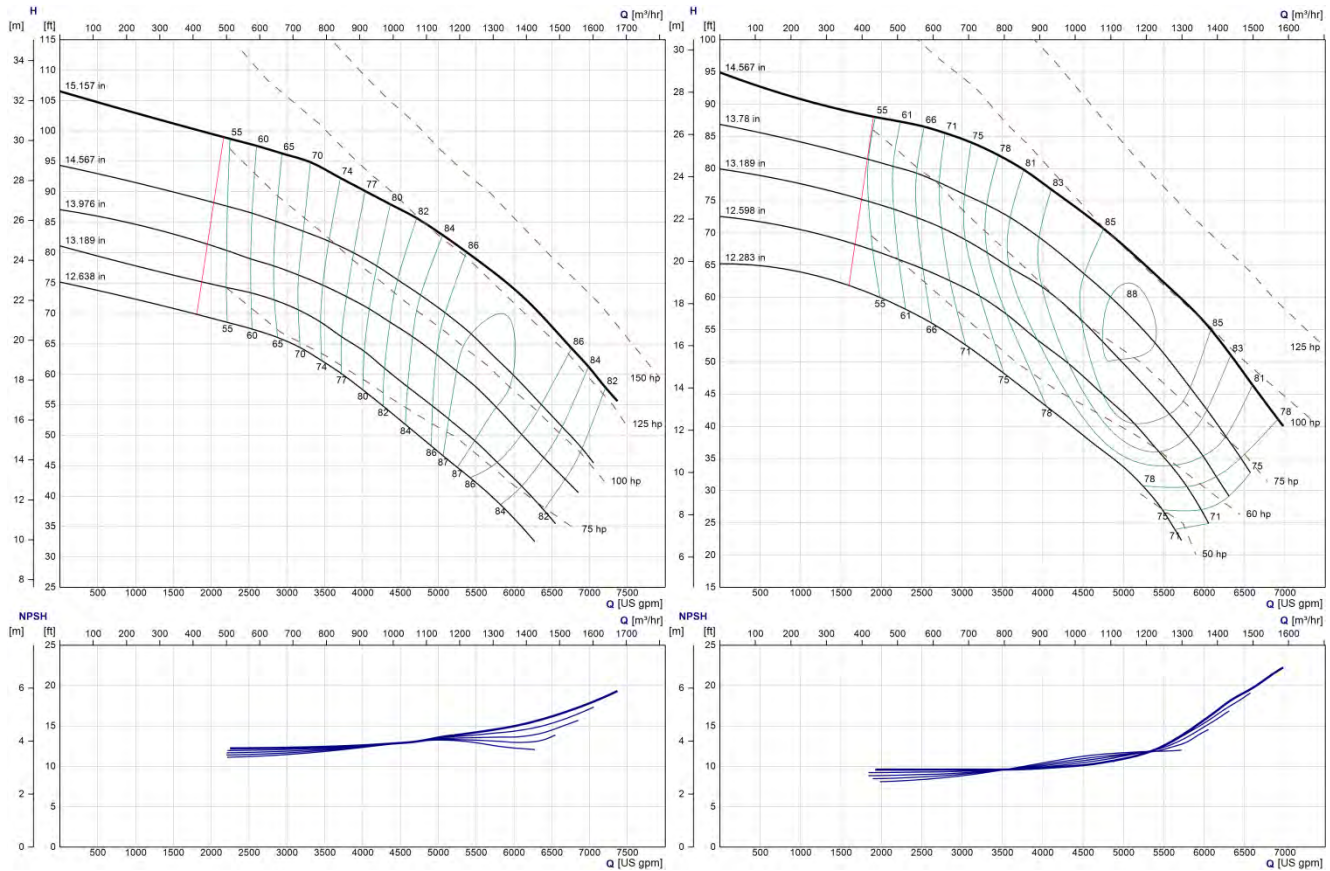
6-Pole Performance (e-HSC 12x16x28 & 12x16x27)



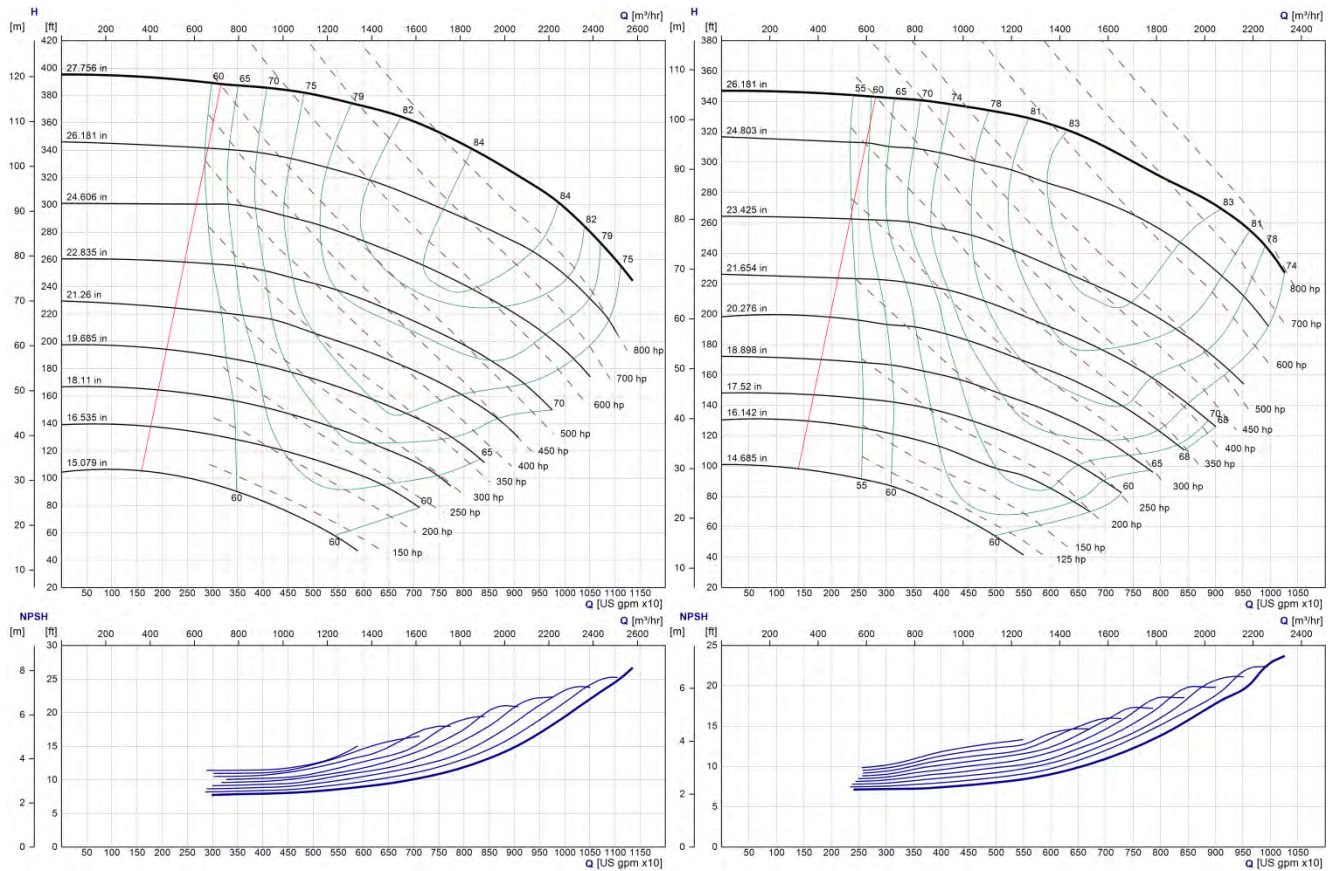
6-Pole Performance (e-HSC 14x14x12 & 14x14x11)



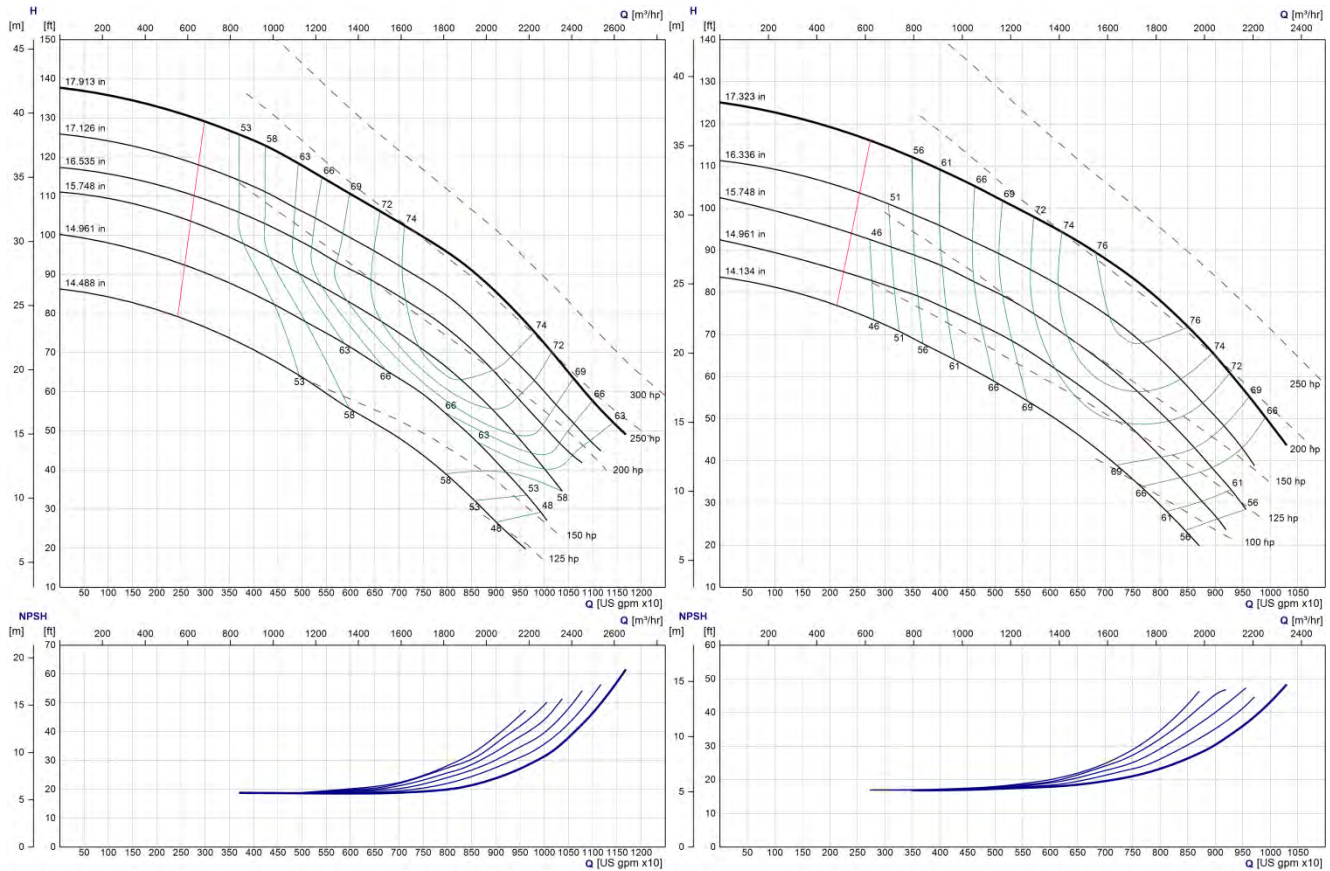
6-Pole Performance (e-HSC 14x16x15 & 14x16x14.5)



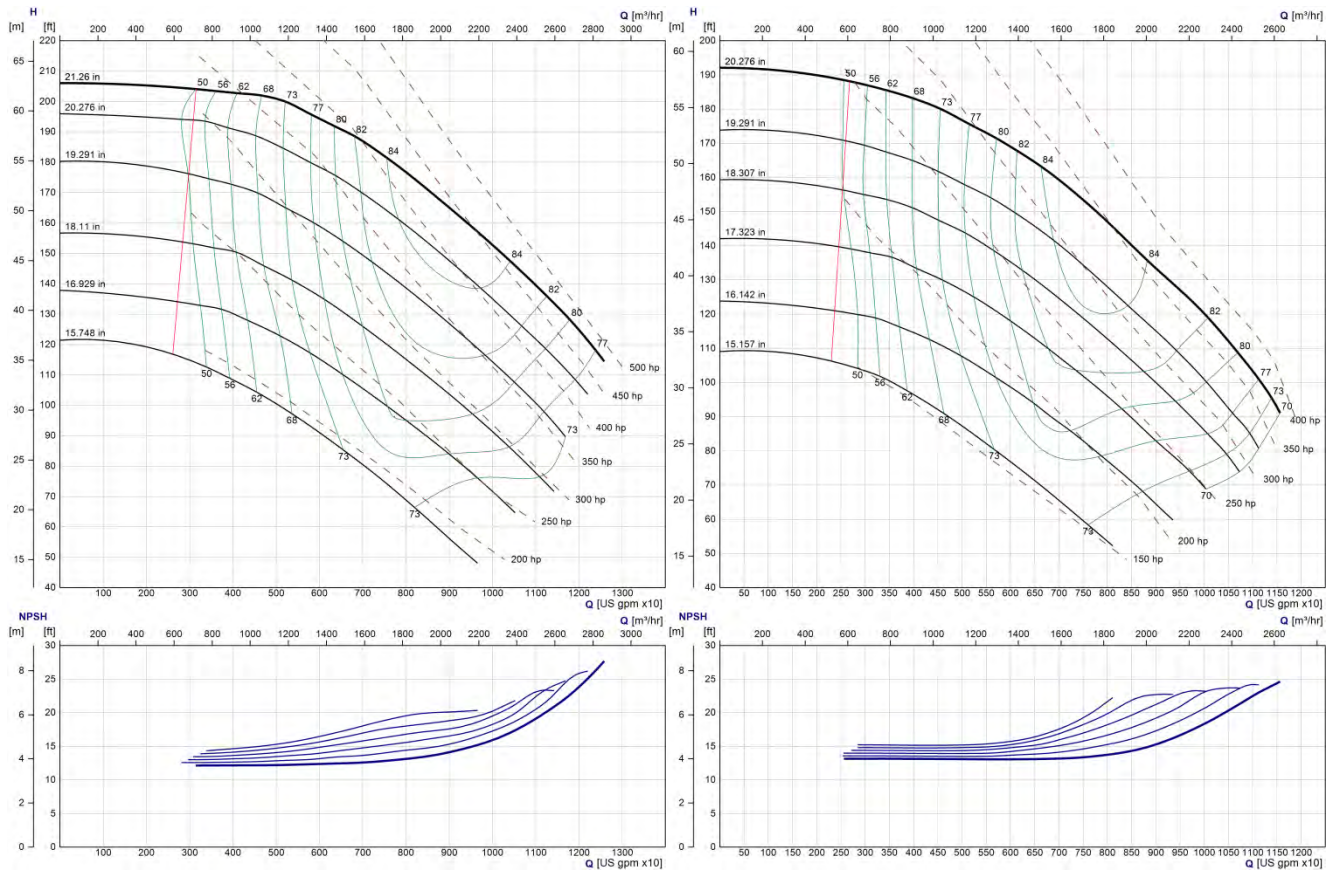
6-Pole Performance (e-HSC 14x16x27.5 & 14x16x26)



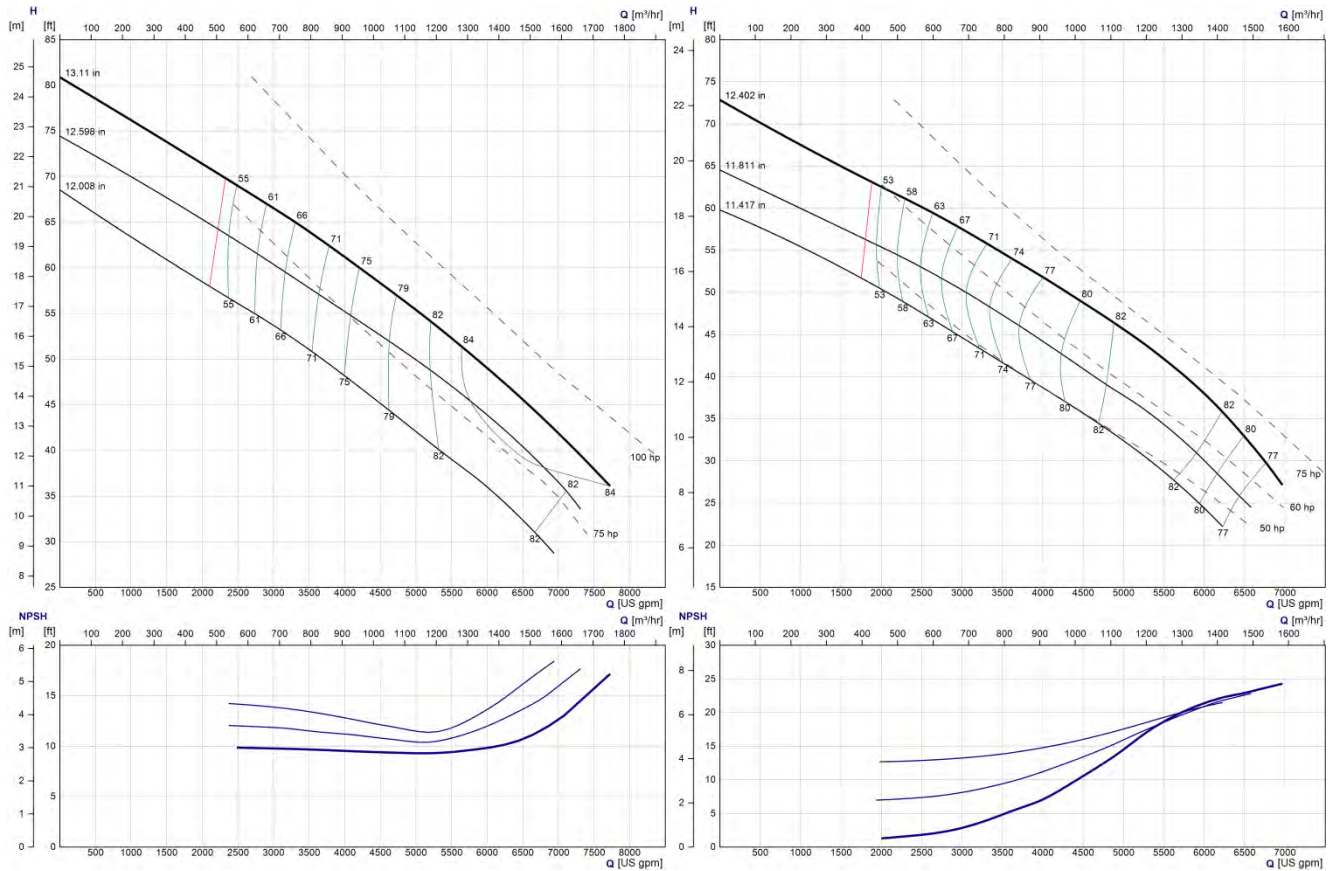
6-Pole Performance (e-HSC 14x18x18 & 14x18x17)



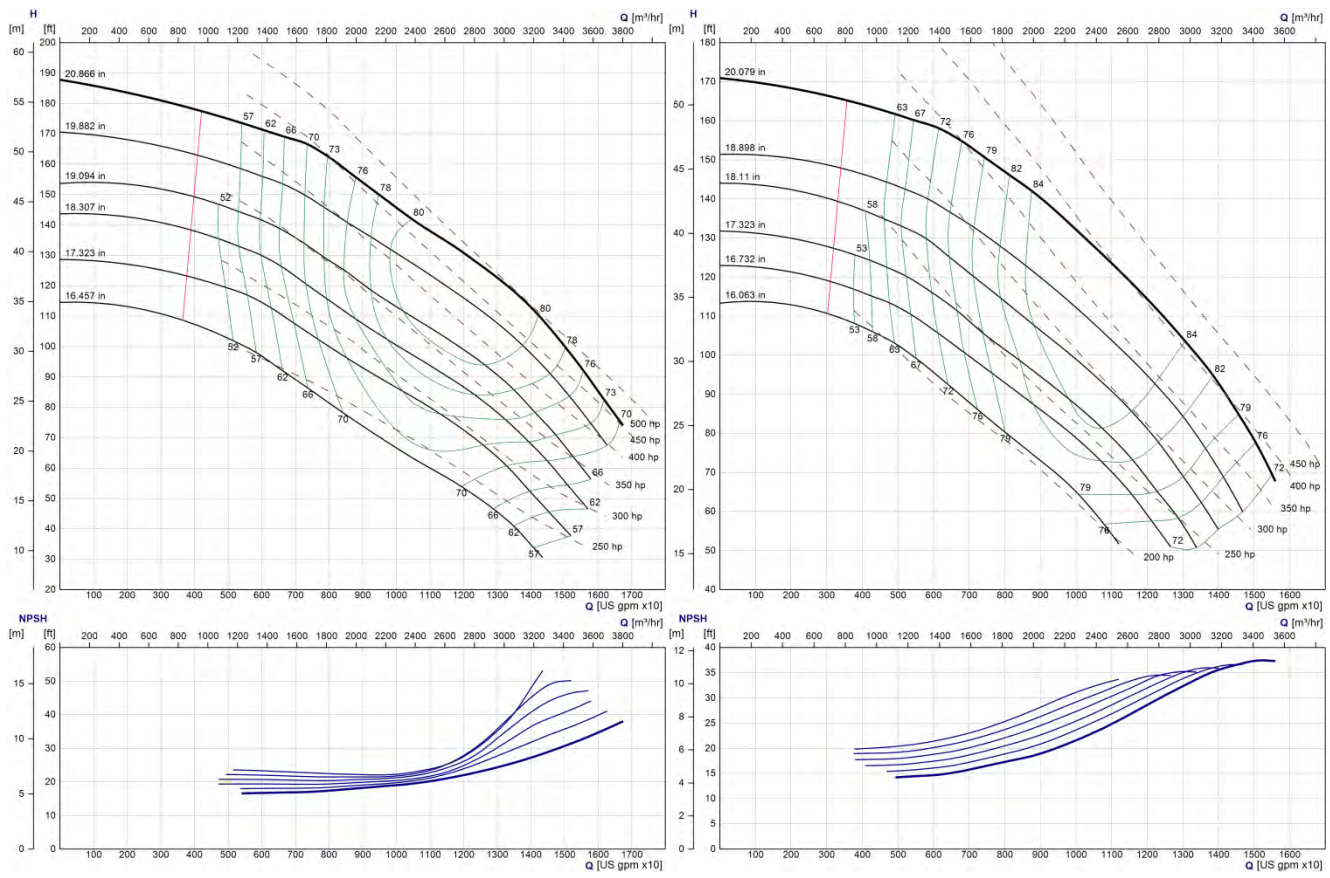
6-Pole Performance (e-HSC 14x18x21 & 14x18x20)



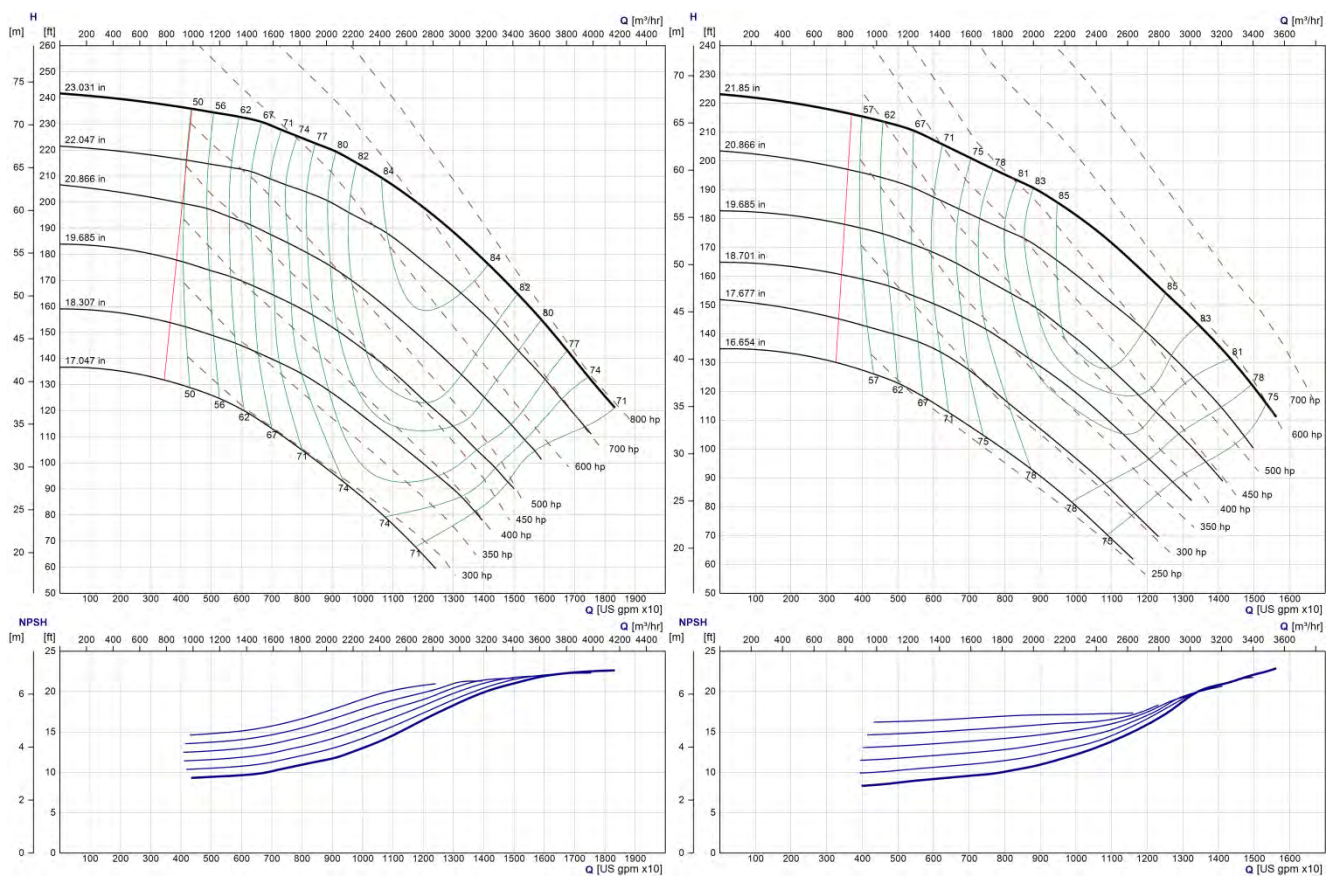
6-Pole Performance (e-HSC 16x16x13.5 & 16x16x13)



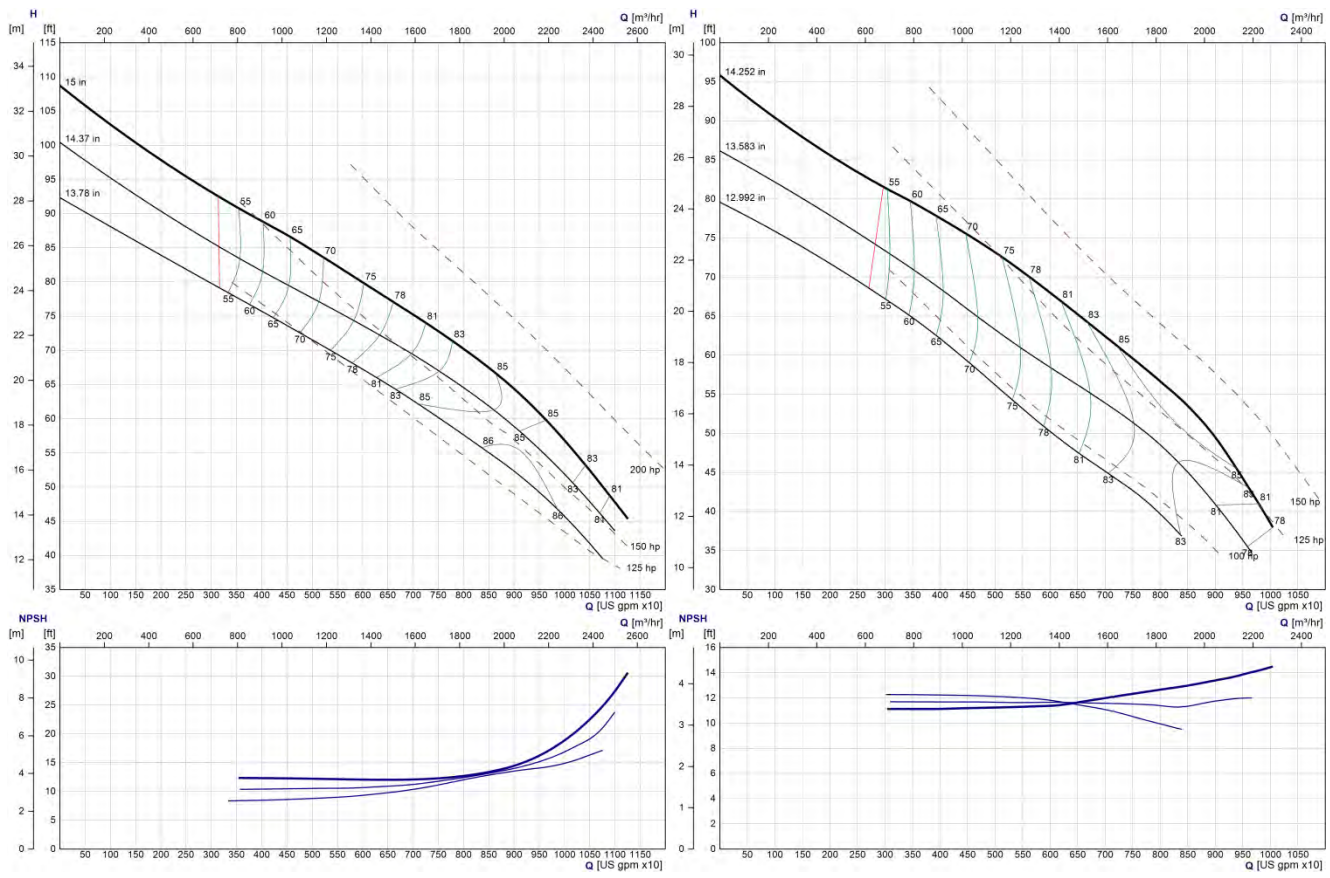
6-Pole Performance (e-HSC 16x20x20.5 & 16x20x19.5)



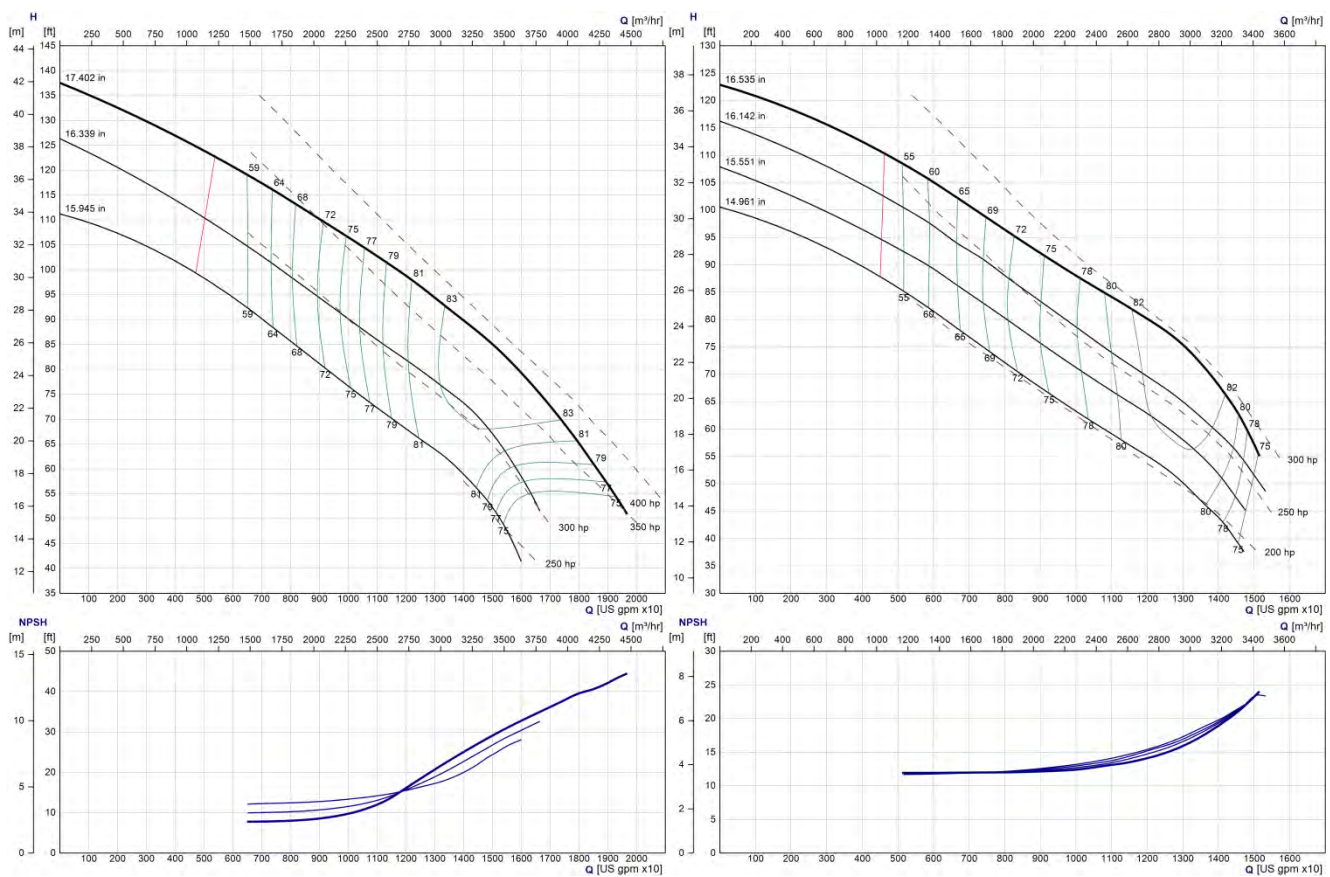
6-Pole Performance (e-HSC 16x20x23 & 16x20x22)



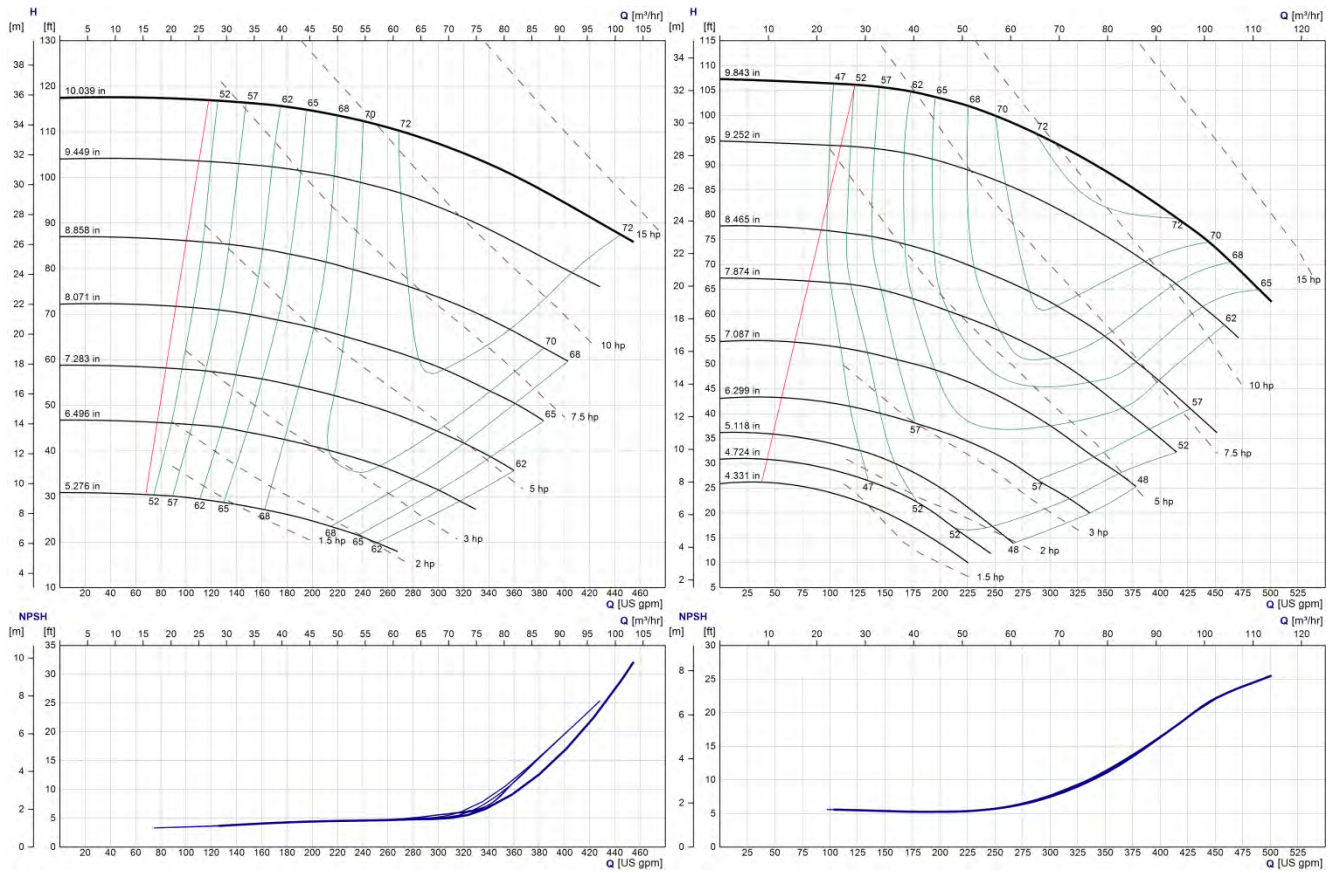
6-Pole Performance (e-HSC 18x20x15.5 & 18x20x14.5)



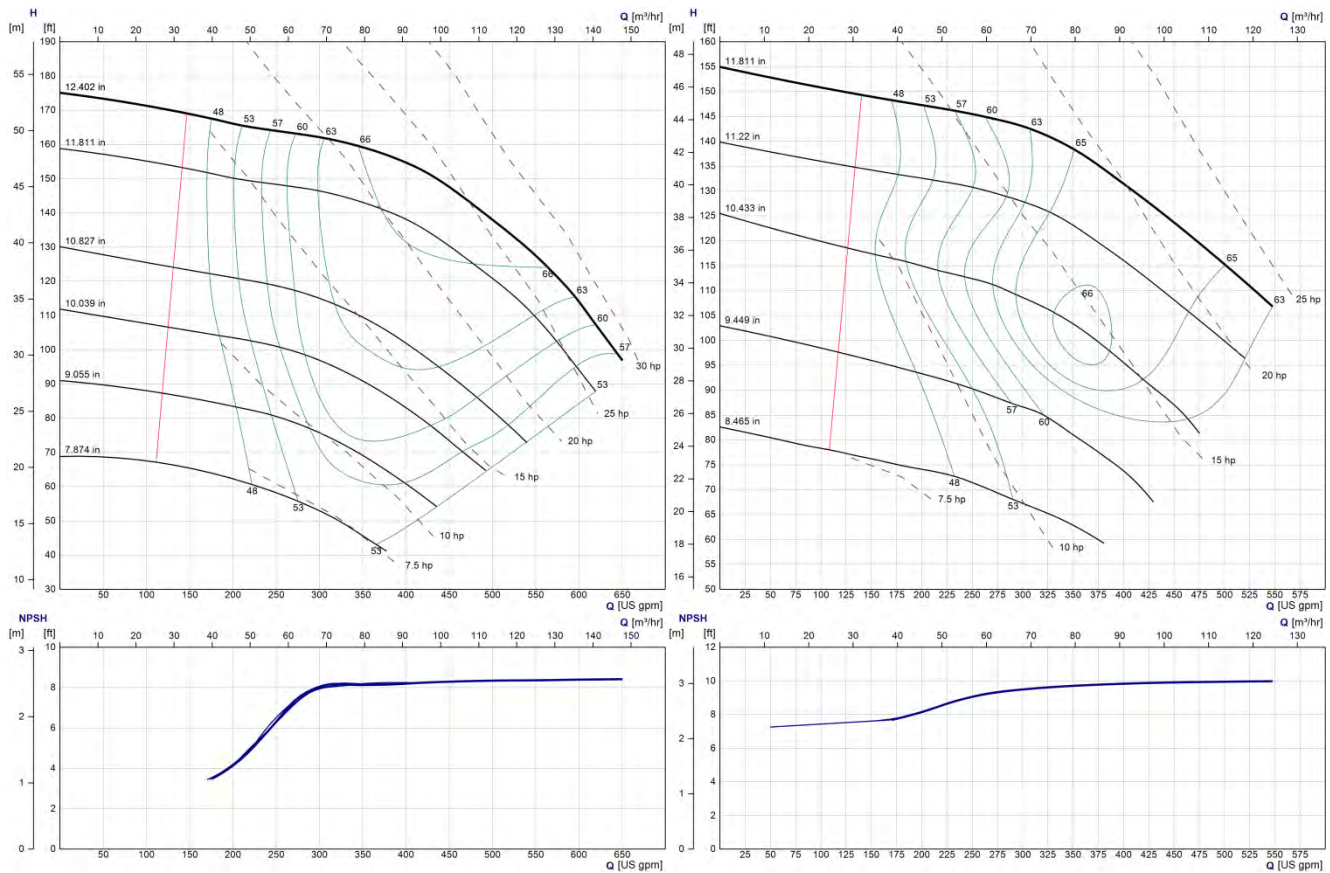
6-Pole Performance (e-HSC 20x24x18 & 20x24x17)



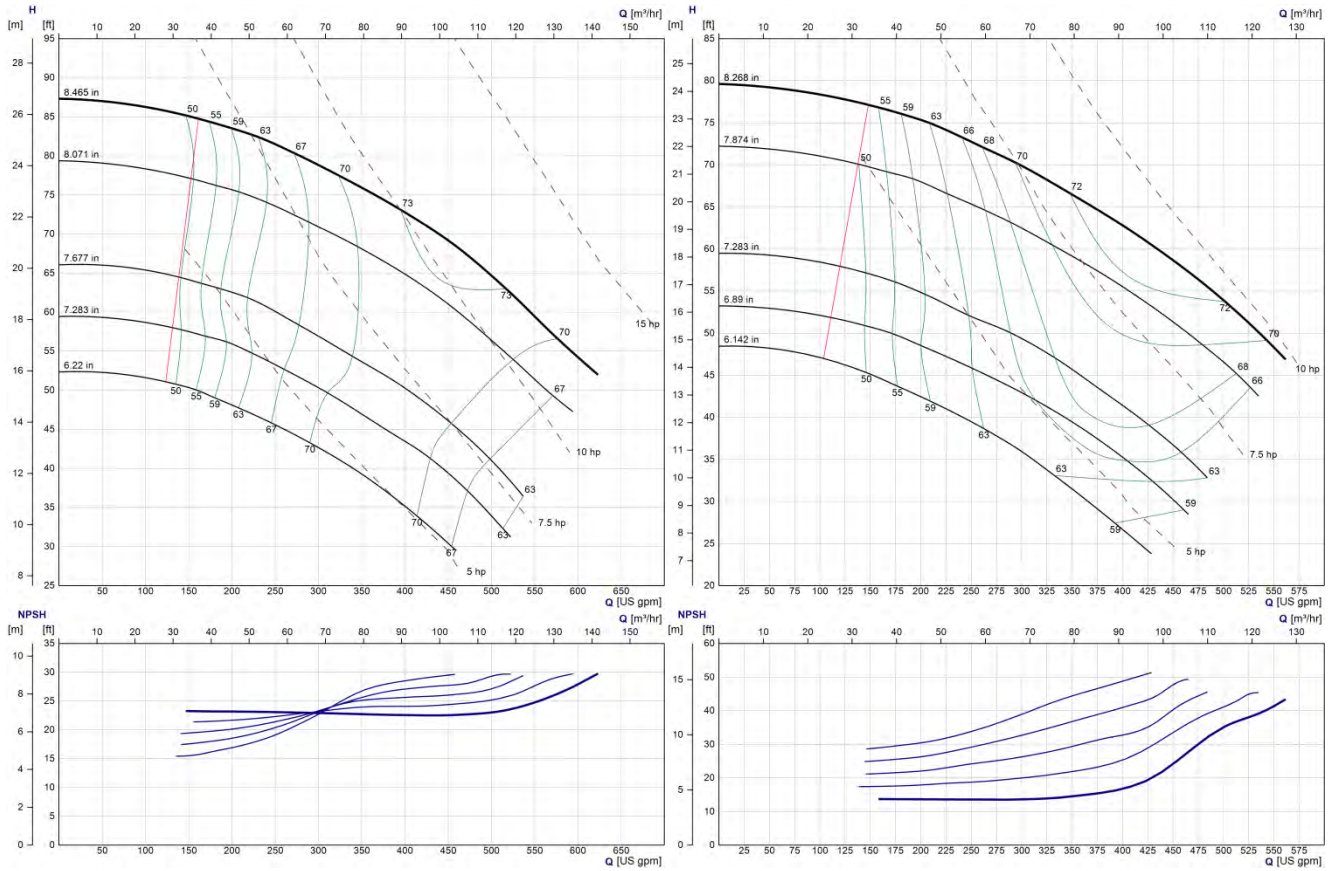
4-Pole Performance (e-HSC 2.5x4x10.5 & 2.5x4x10)



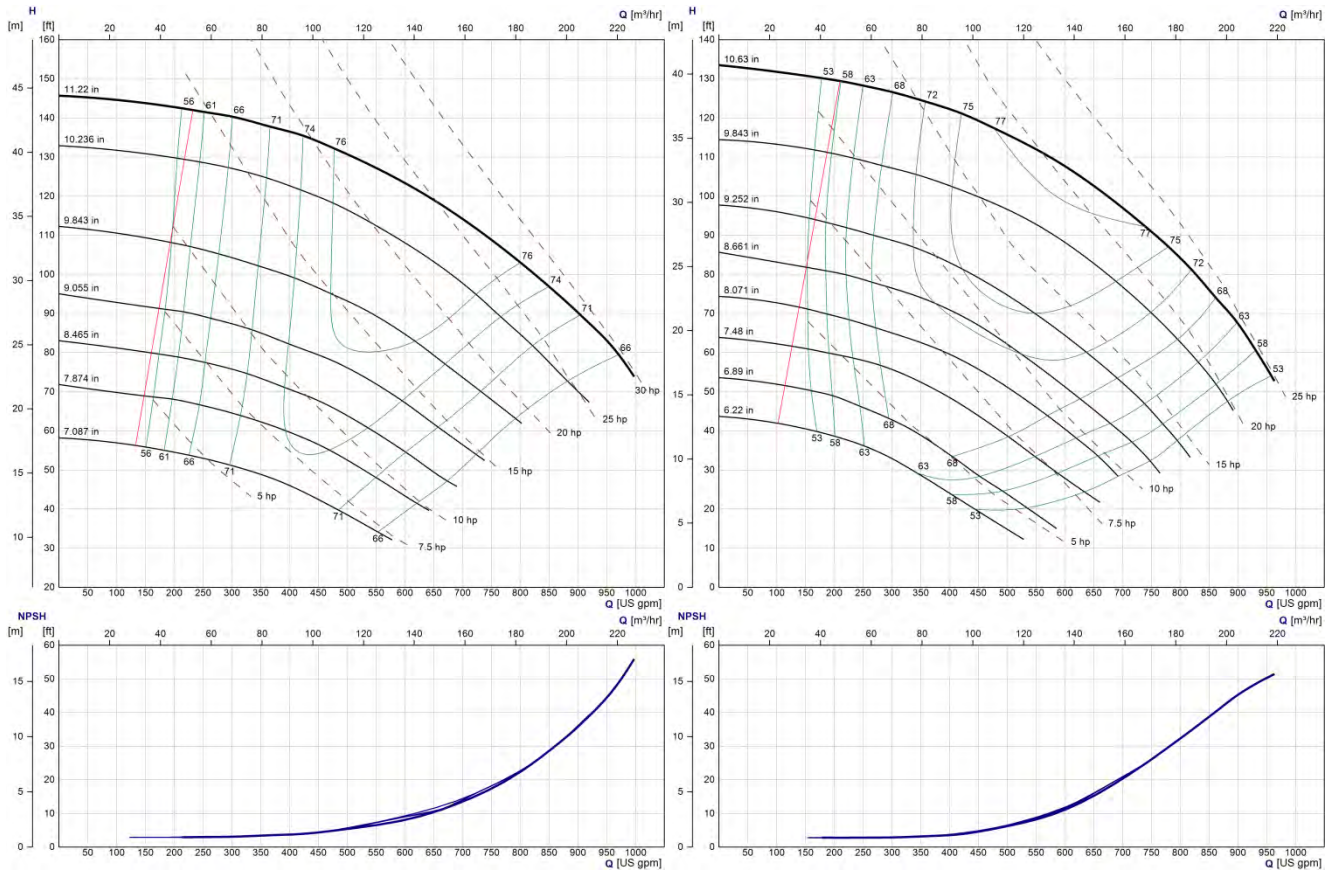
4-Pole Performance (e-HSC 3x4x12.5 & 3x4x12)



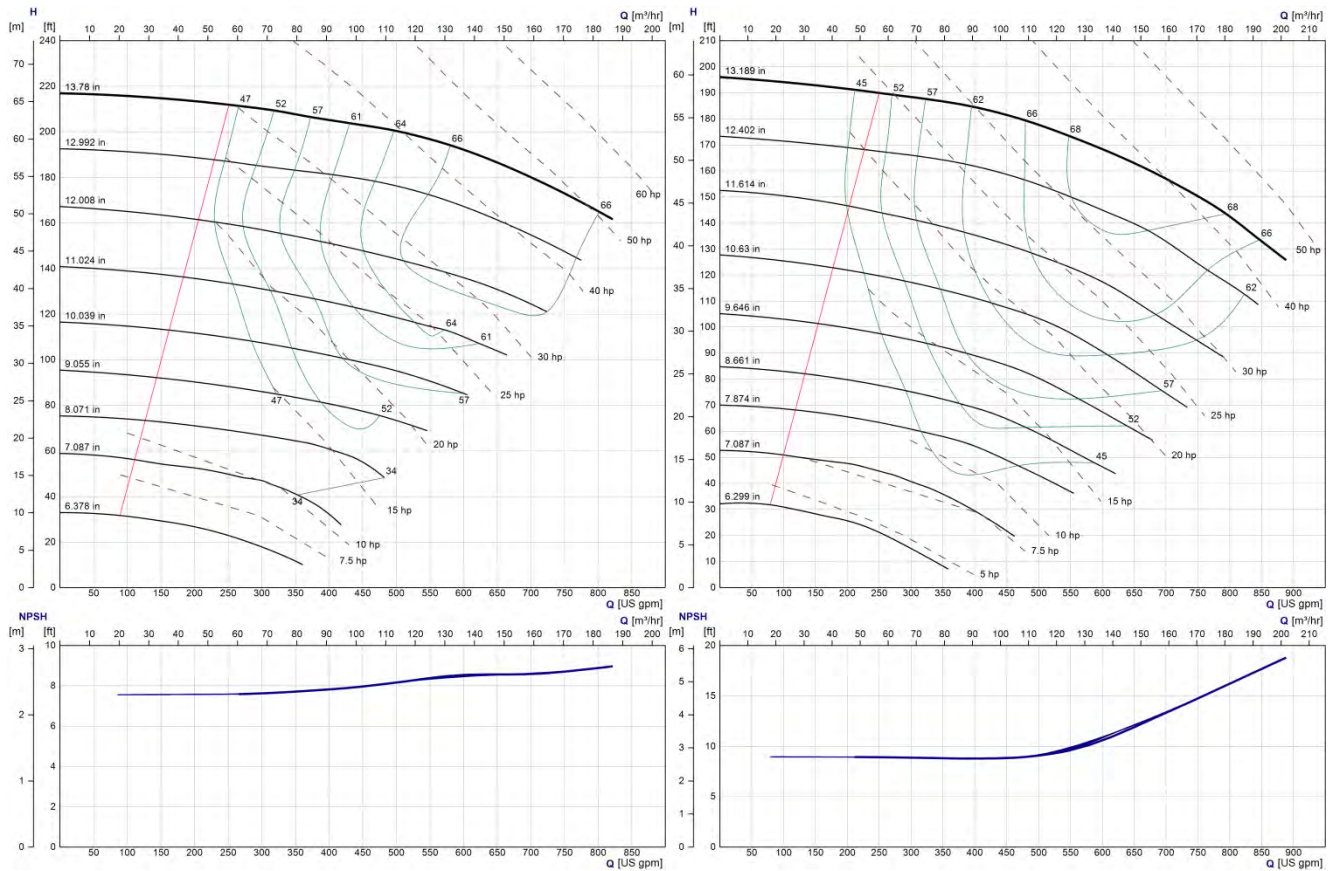
4-Pole Performance (e-HSC 3x5x8.5 & 3x5x8)



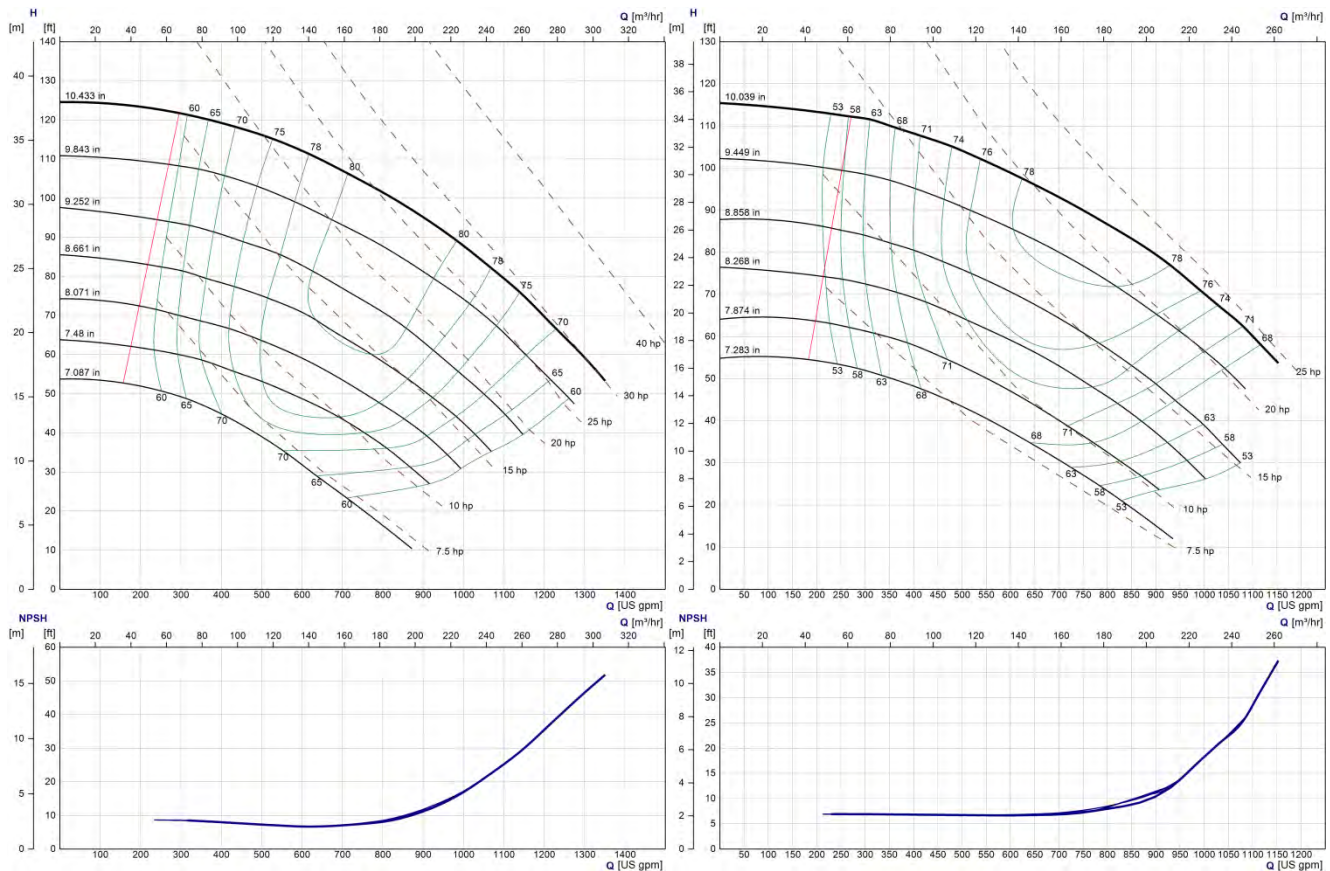
4-Pole Performance (e-HSC 3x5x11 & 3x5x10.5)



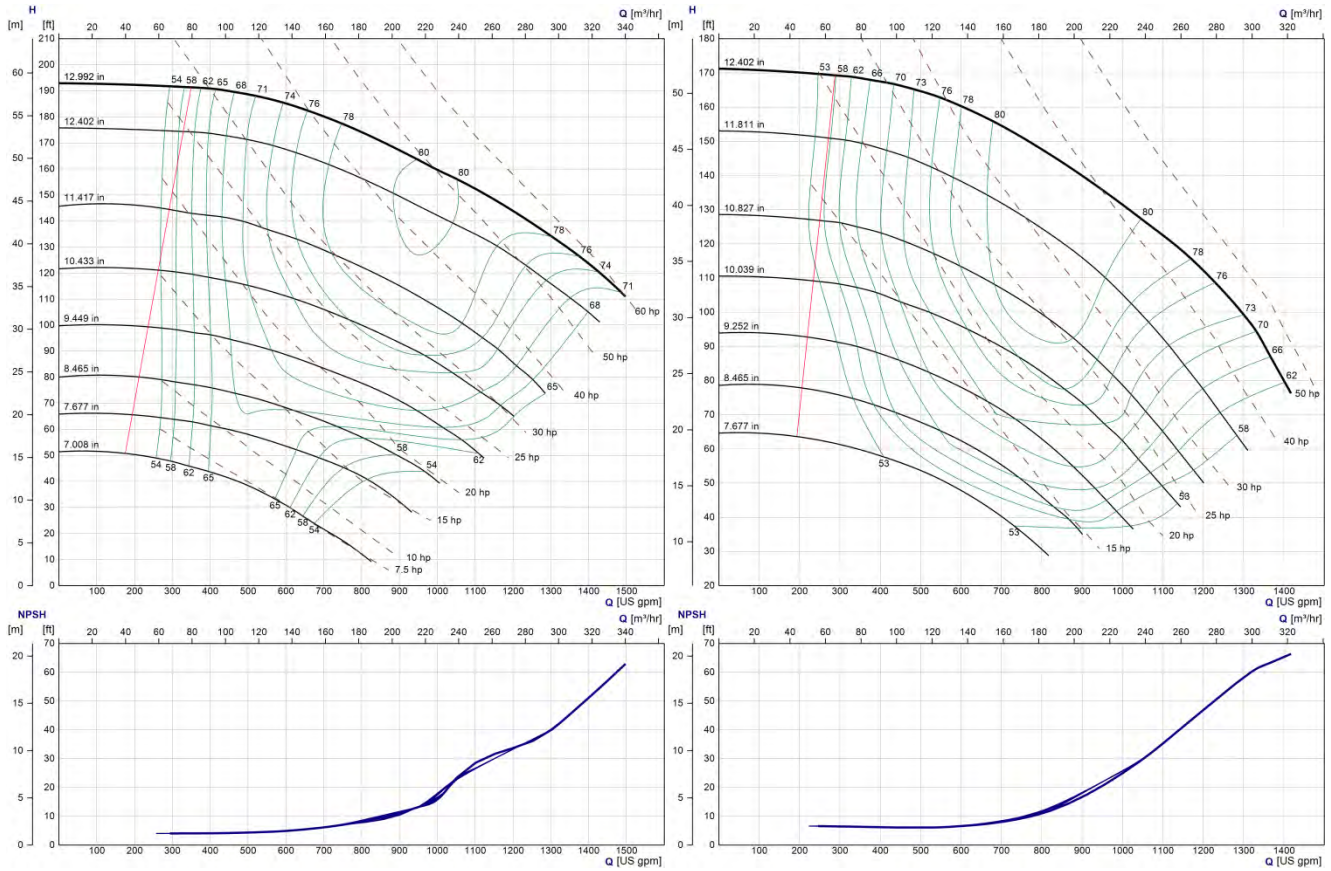
4-Pole Performance (e-HSC 3x5x13.5 & 3x5x13)



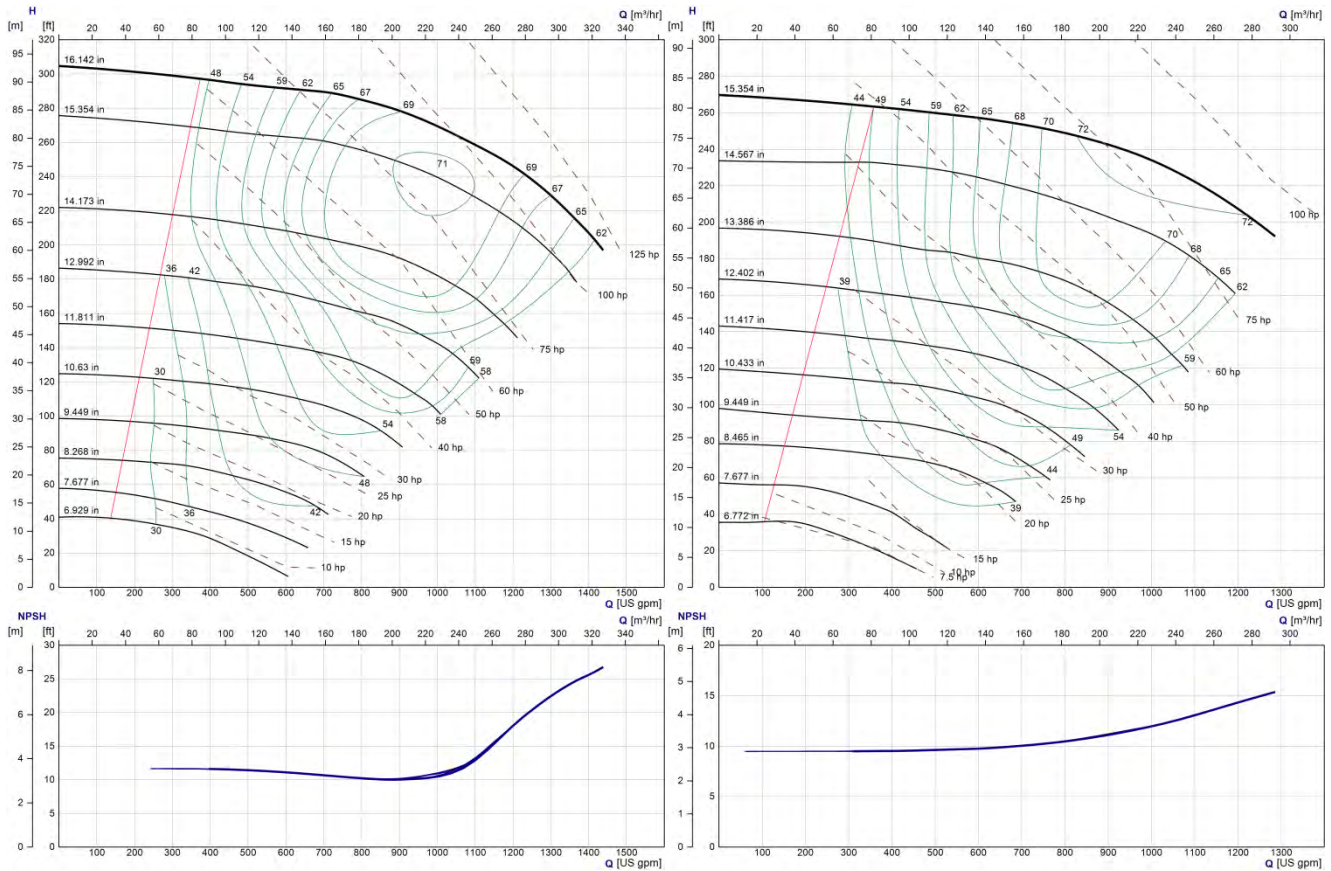
4-Pole Performance (e-HSC 4x6x10 & 4x6x9.5)



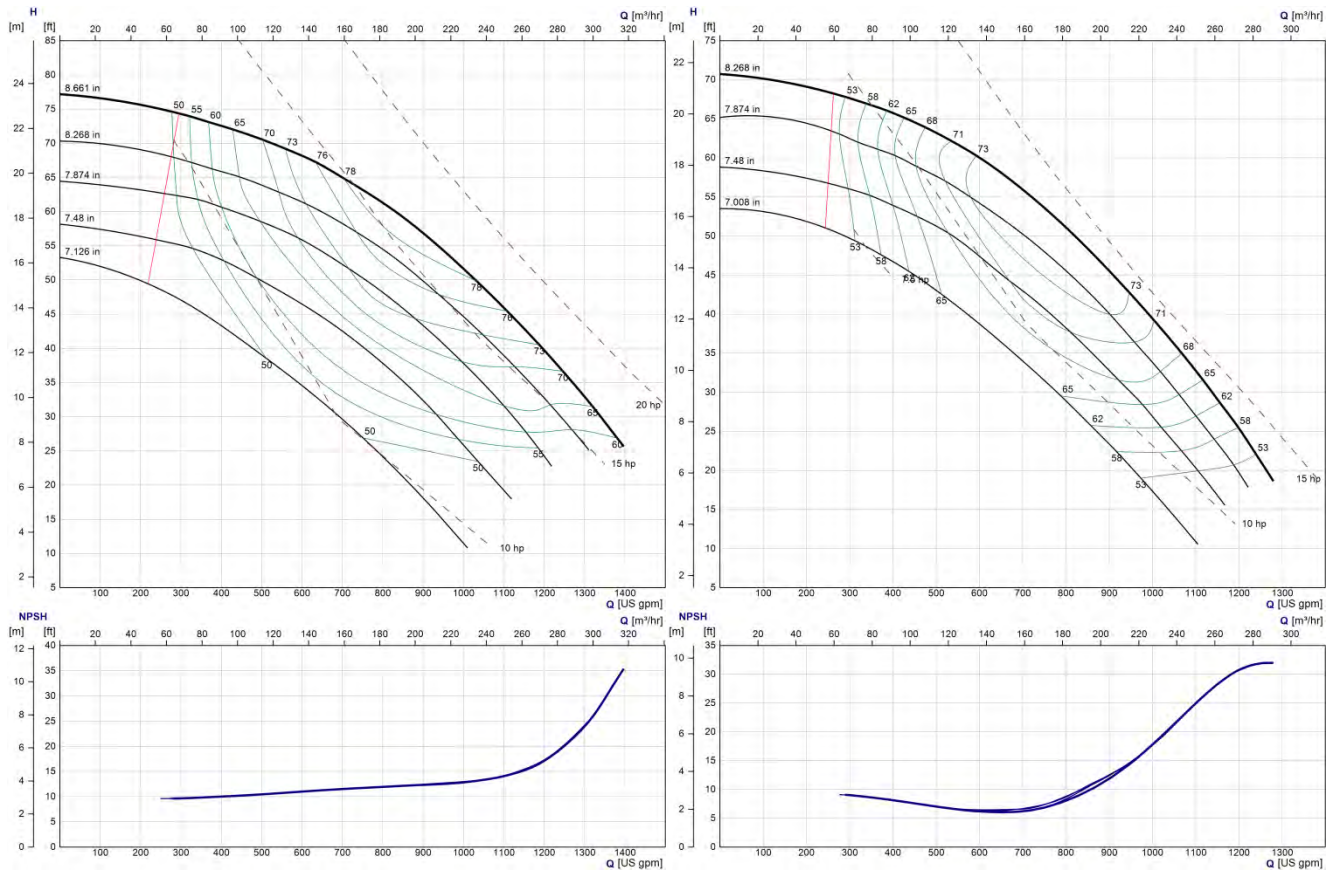
4-Pole Performance (e-HSC 4x6x13 & 4x6x12)



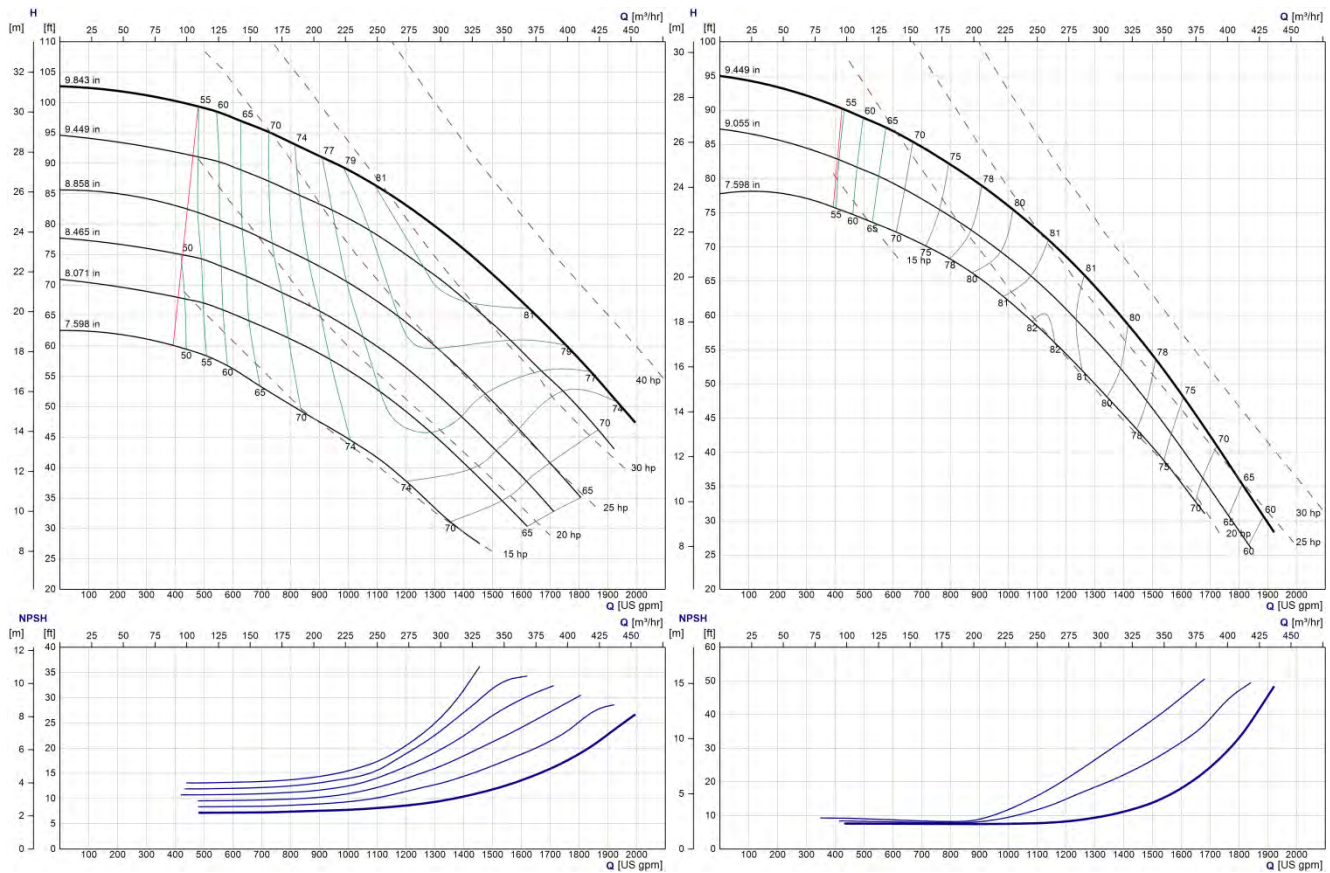
4-Pole Performance (e-HSC 4x6x16 & 4x6x15.5)



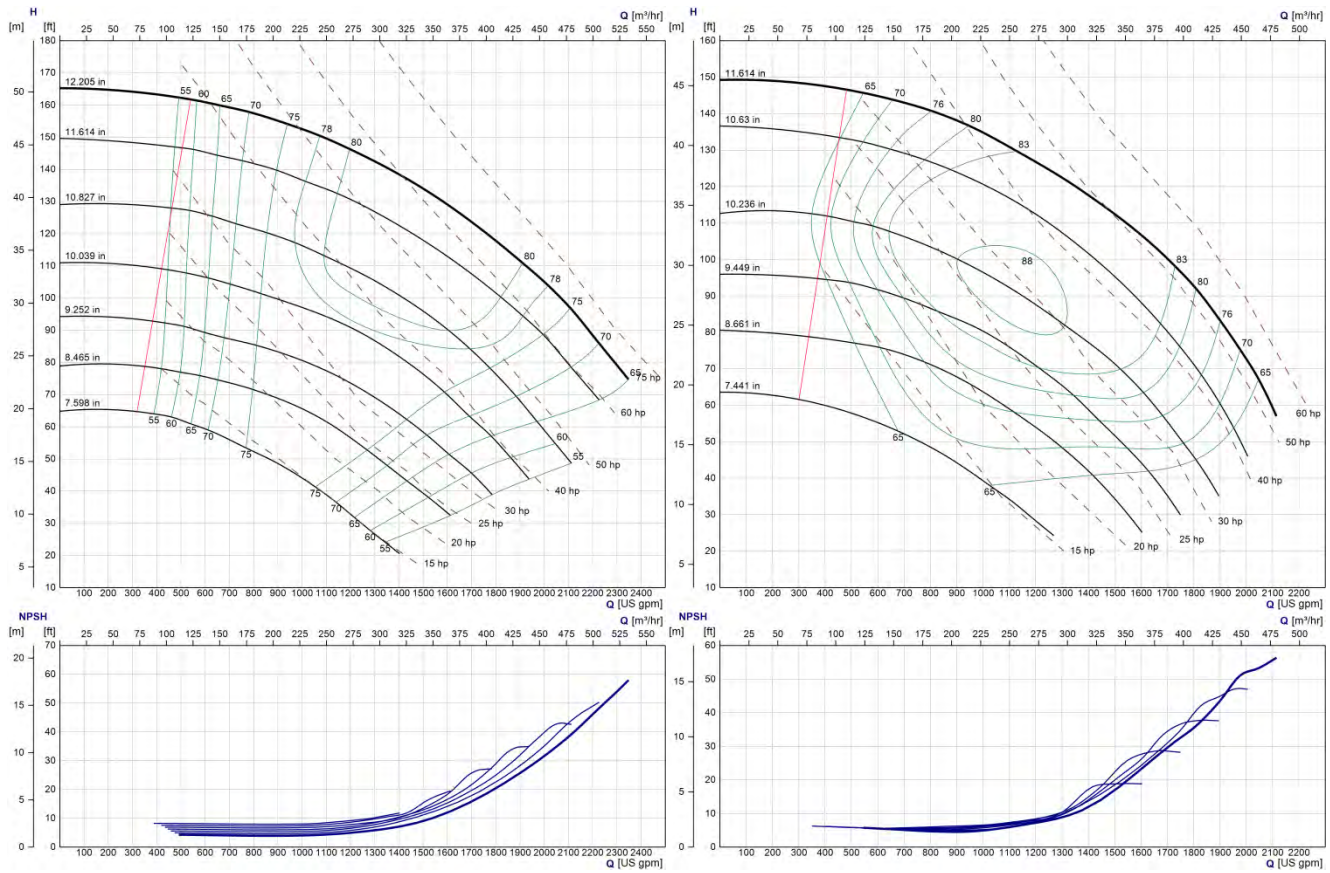
4-Pole Performance (e-HSC 5x6x9 & 5x6x8.5)



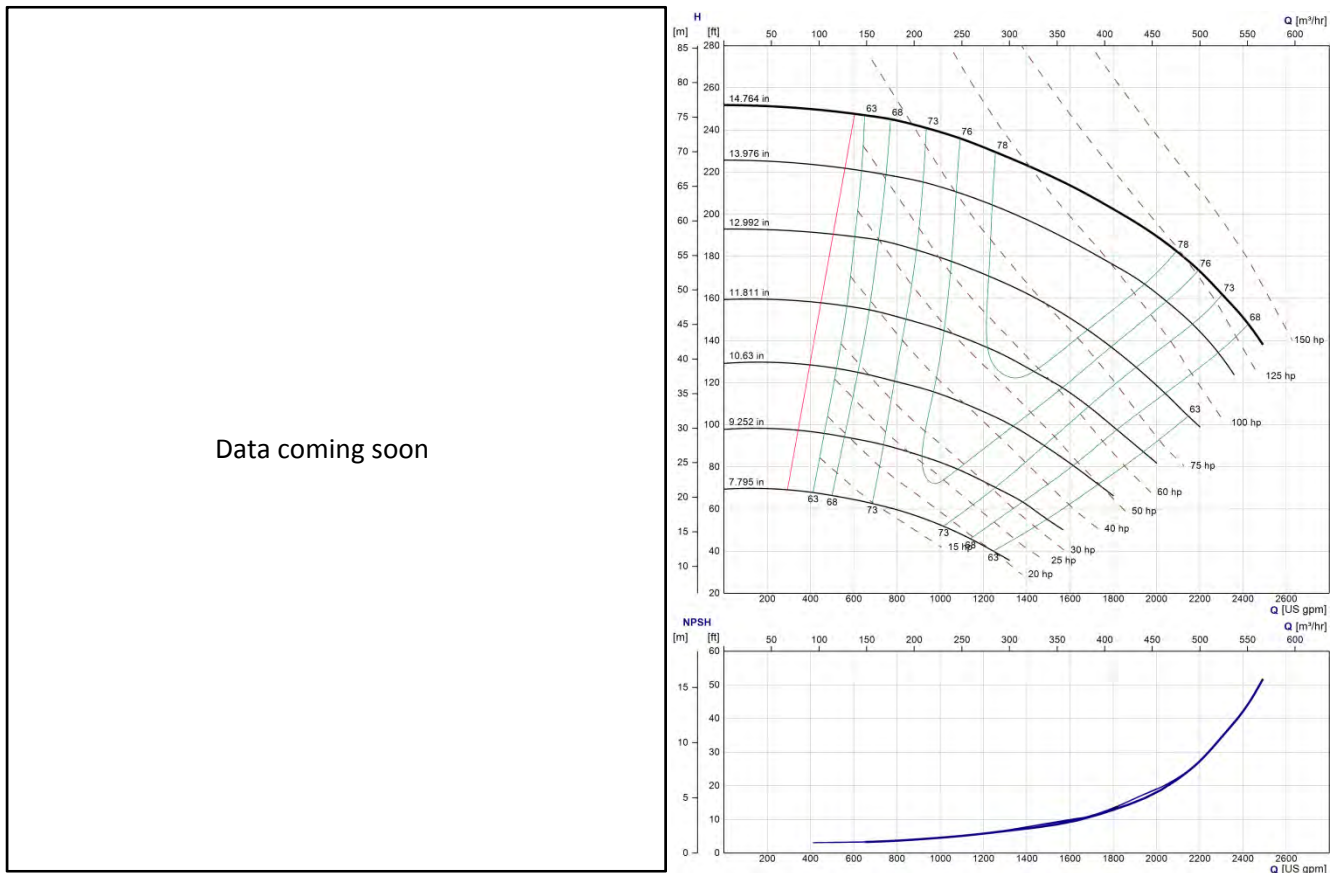
4-Pole Performance (e-HSC 5x8x9.5 & 5x8x9)



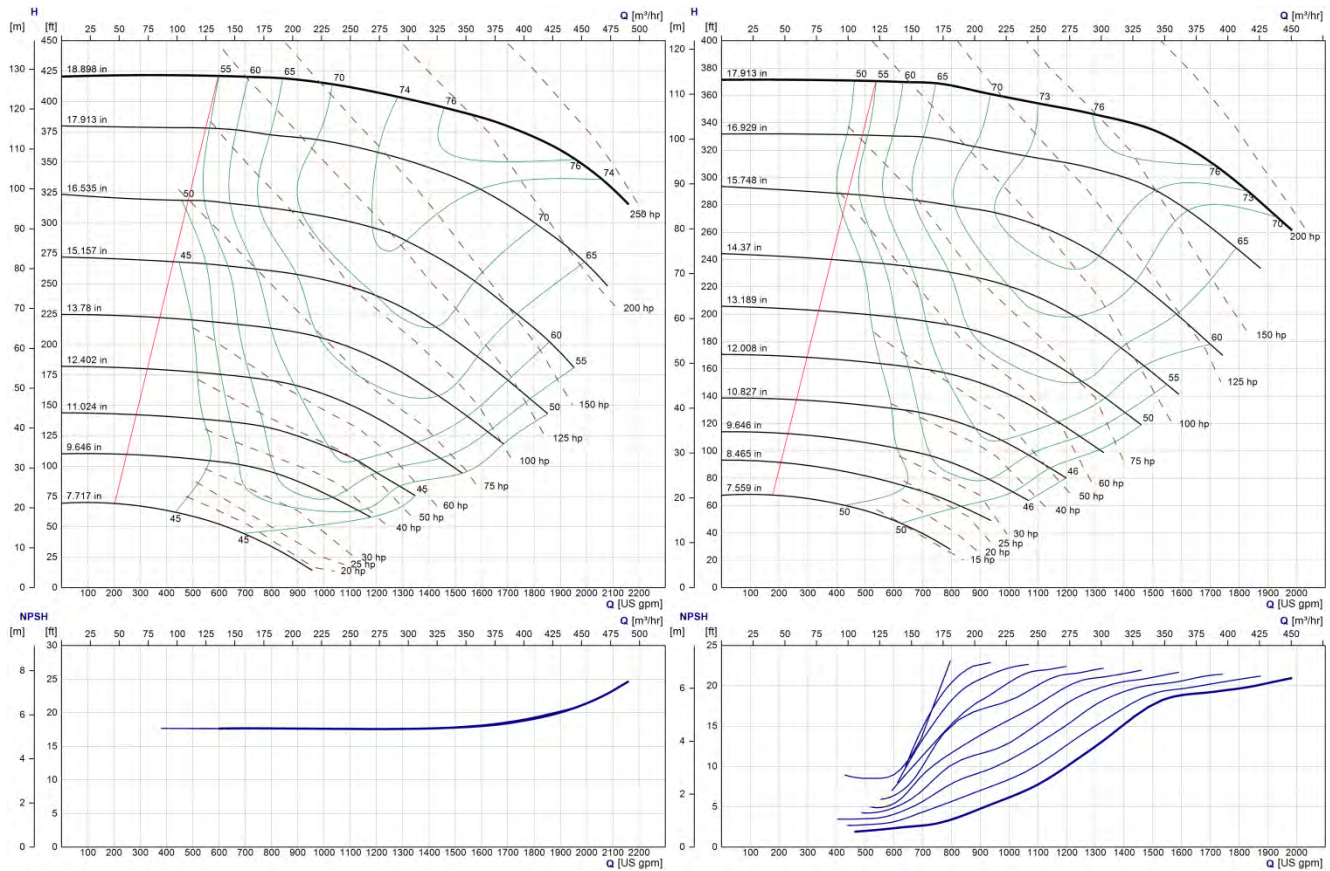
4-Pole Performance (e-HSC 5x8x12 & 5x8x11)



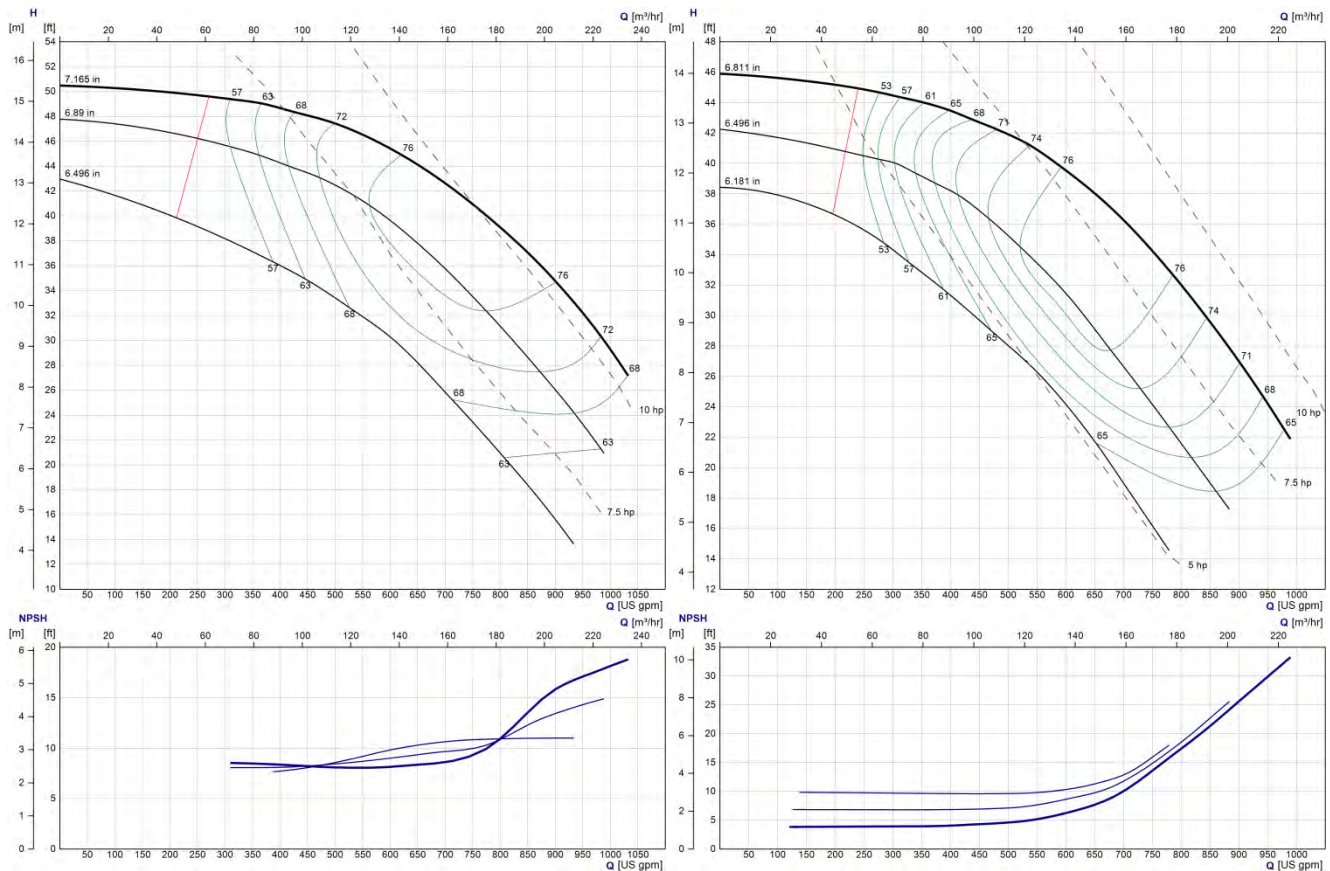
4-Pole Performance (e-HSC 5x8x15.5 & 5x8x14.5)



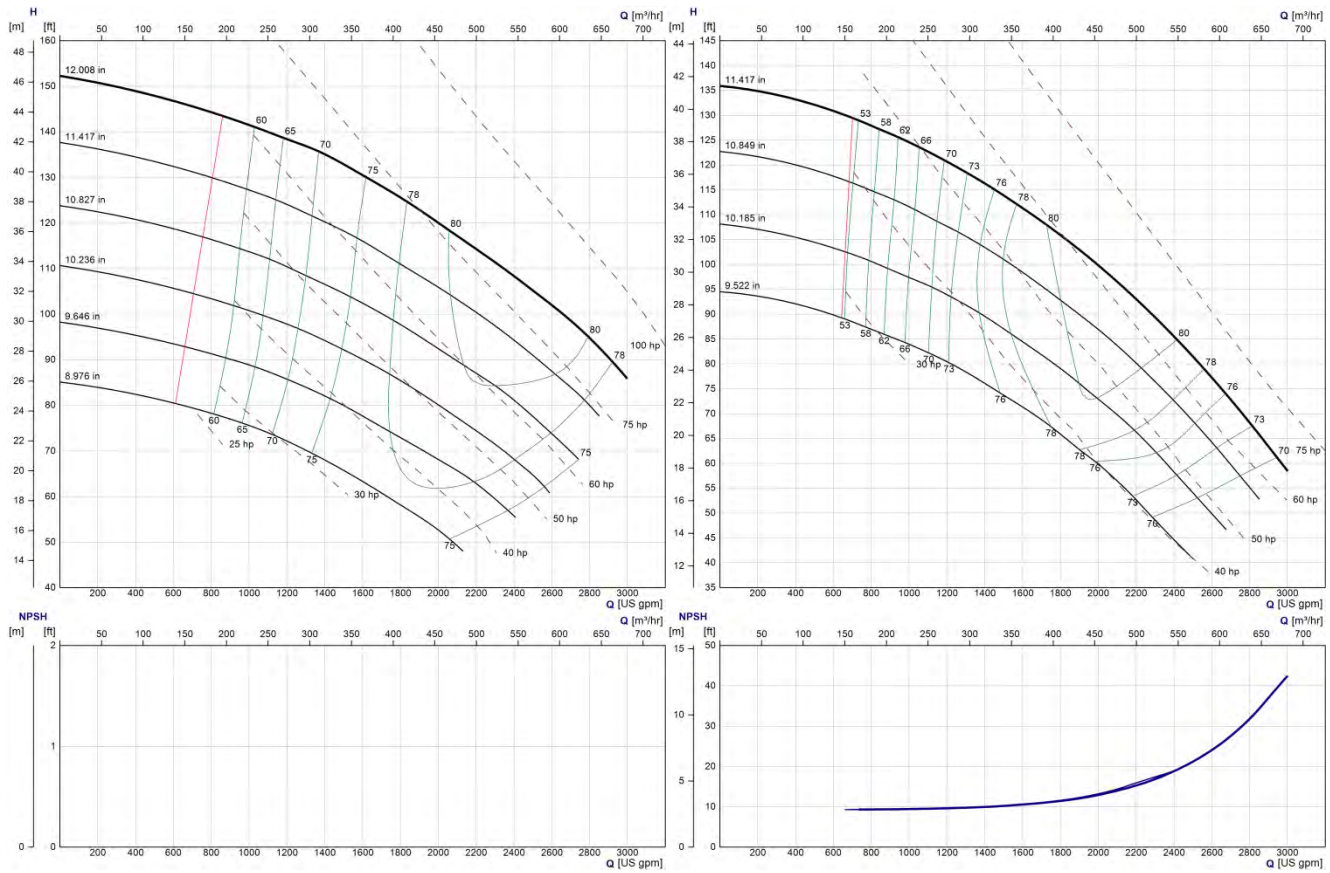
4-Pole Performance (e-HSC 5x8x19 & 5x8x18)



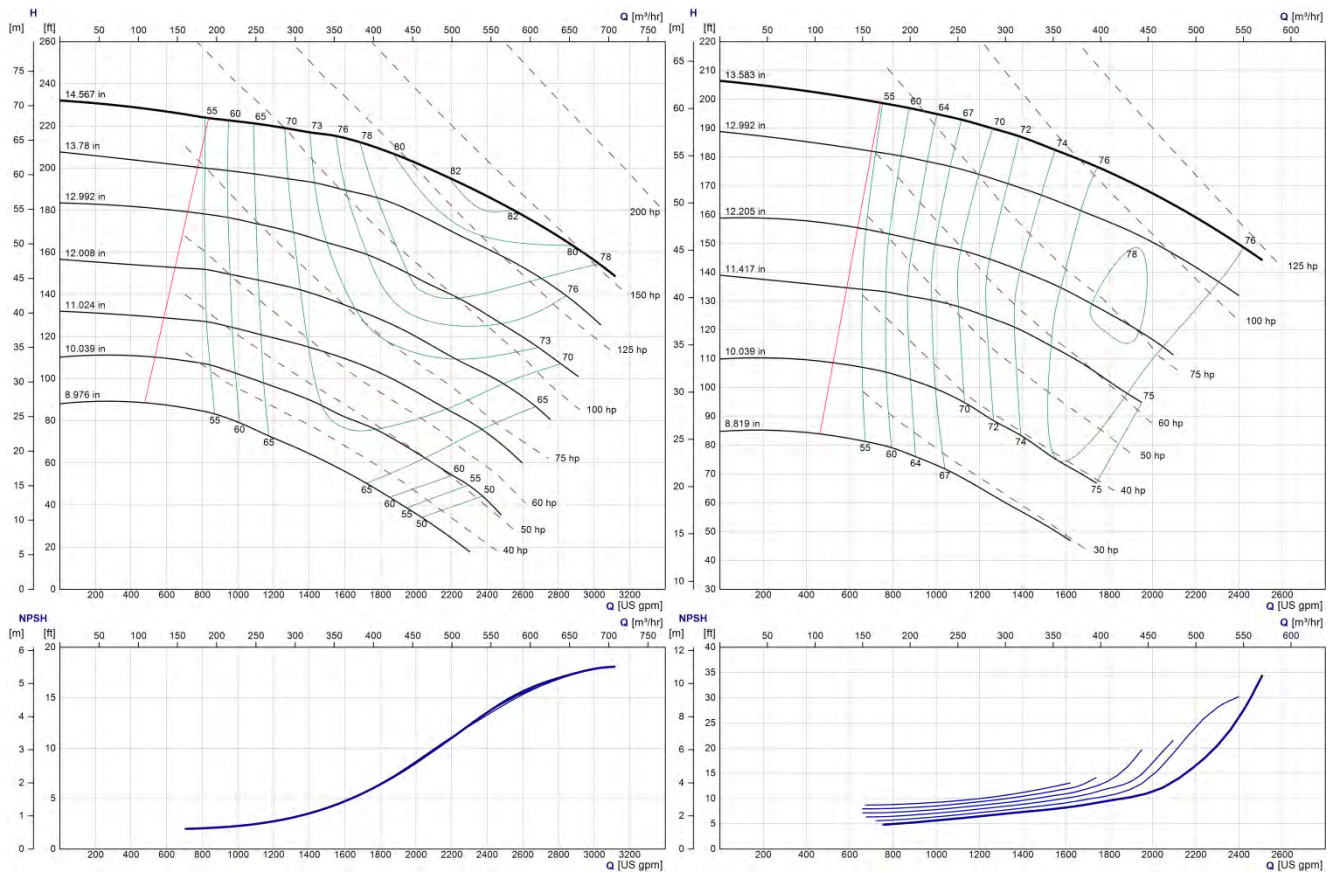
4-Pole Performance (e-HSC 6x8x6.5 & 6x8x6)



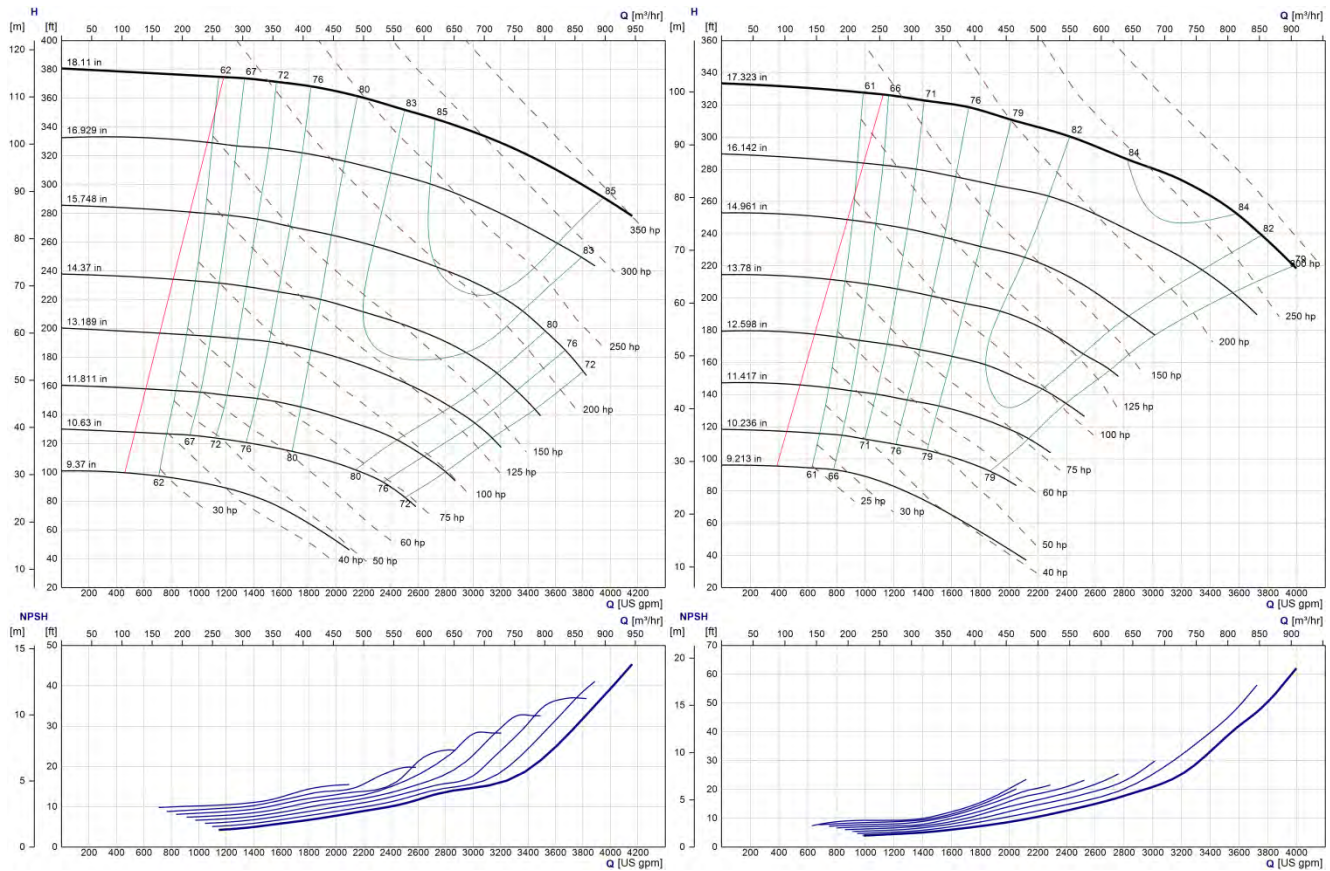
4-Pole Performance (e-HSC 6x8x12 & 6x8x11)



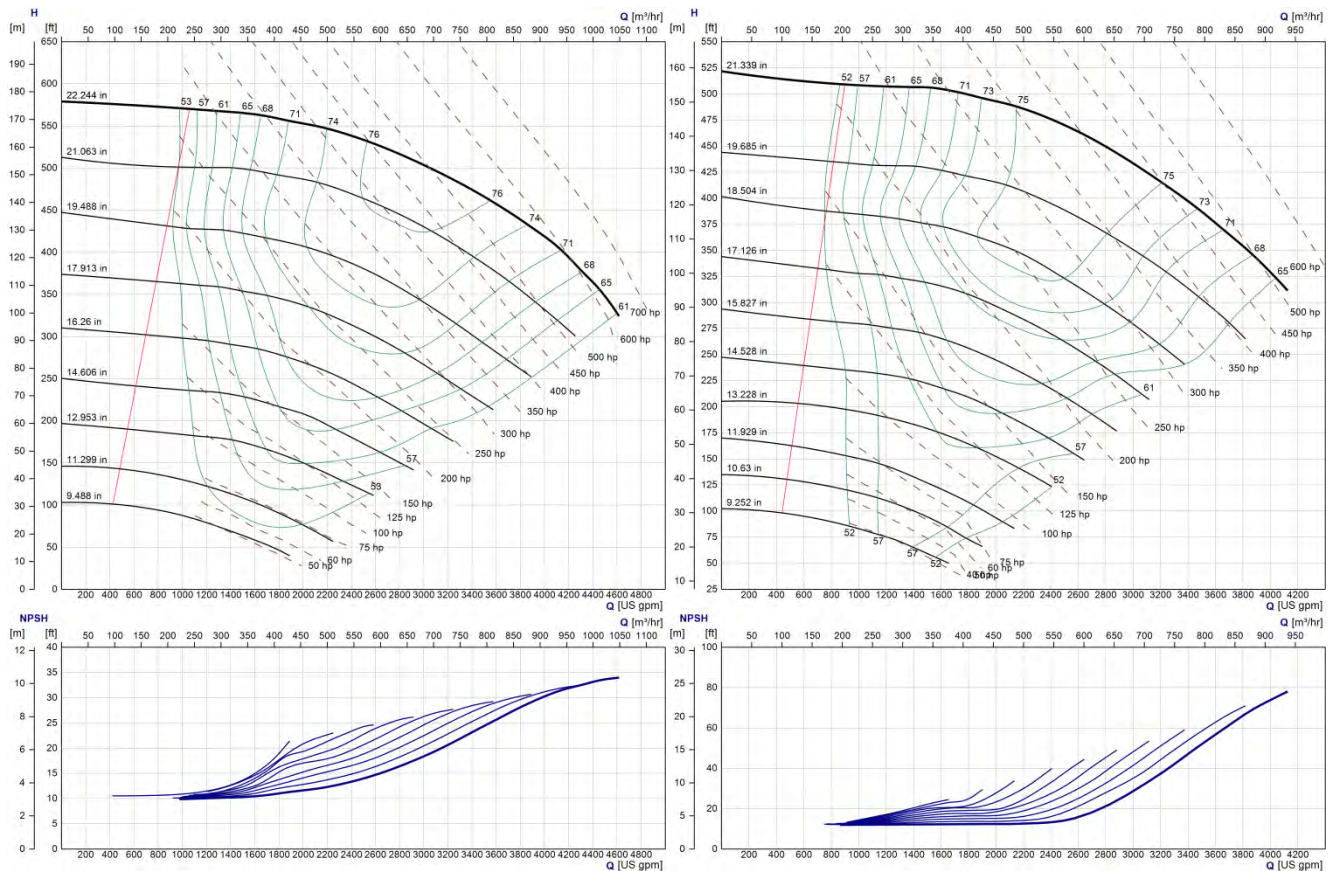
4-Pole Performance (e-HSC 6x8x14 & 6x8x13.5)



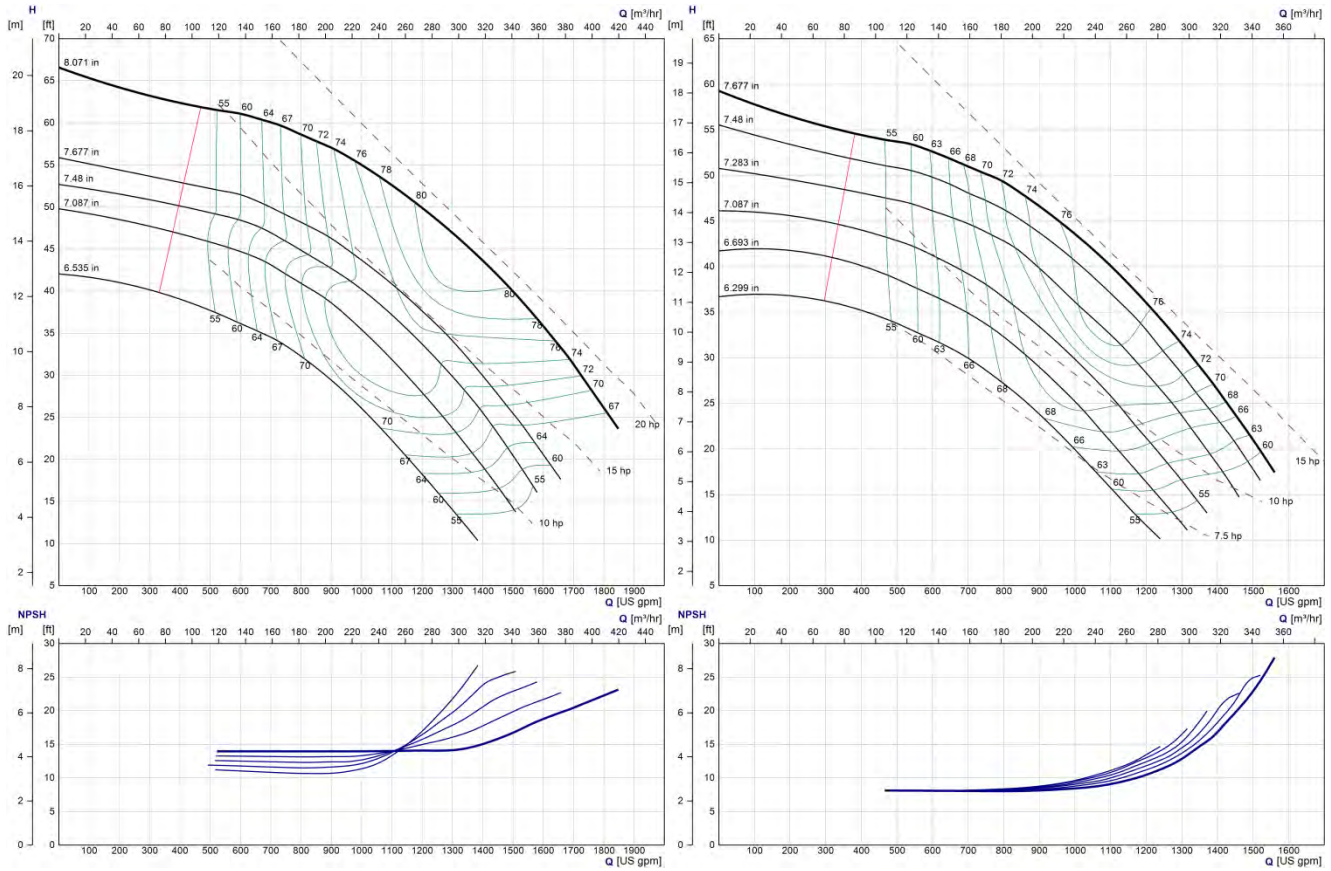
4-Pole Performance (e-HSC 6x8x18 & 6x8x17)



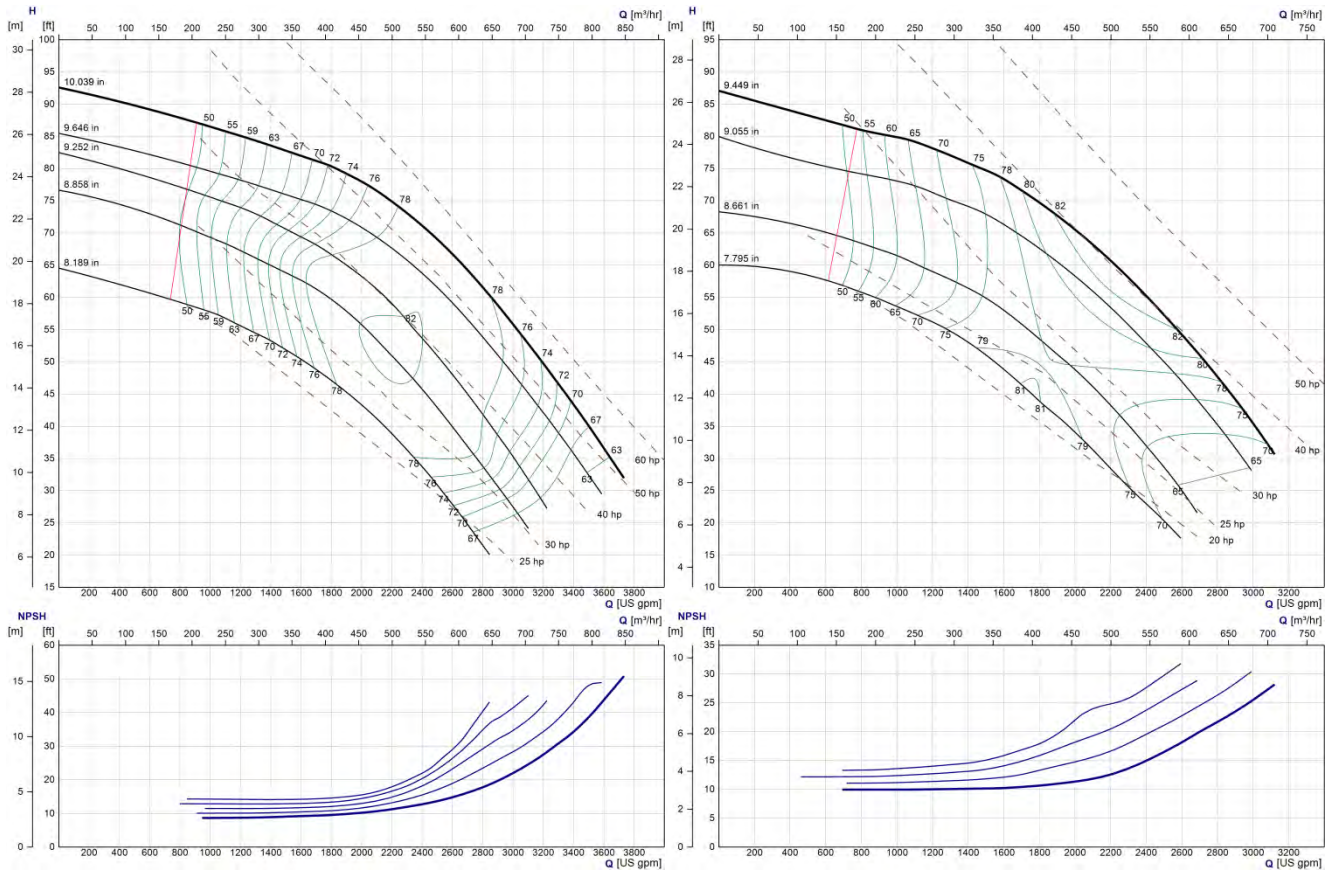
4-Pole Performance (e-HSC 6x8x22 & 6x8x21)



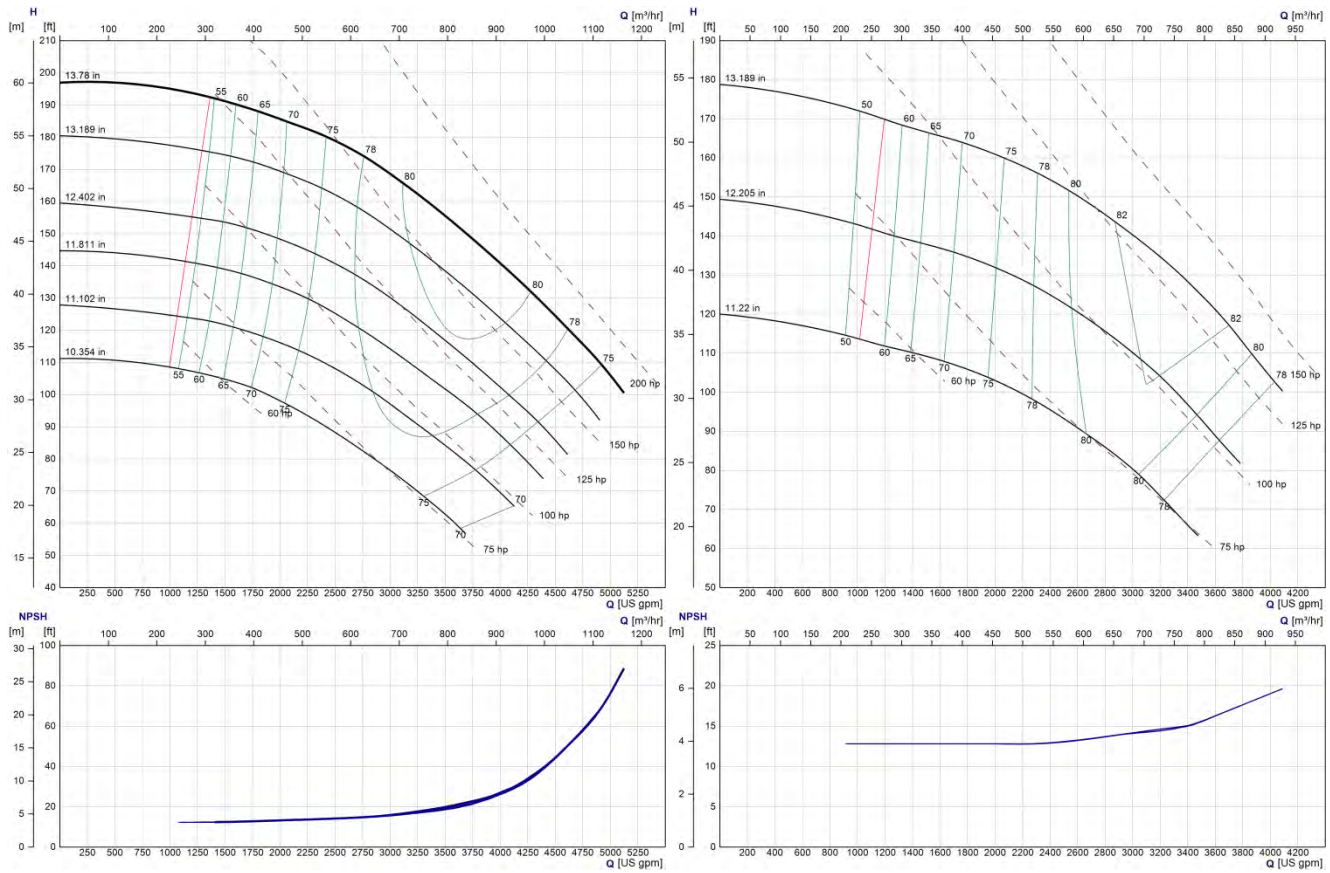
4-Pole Performance (e-HSC 8x8x8 & 8x8x7.5)



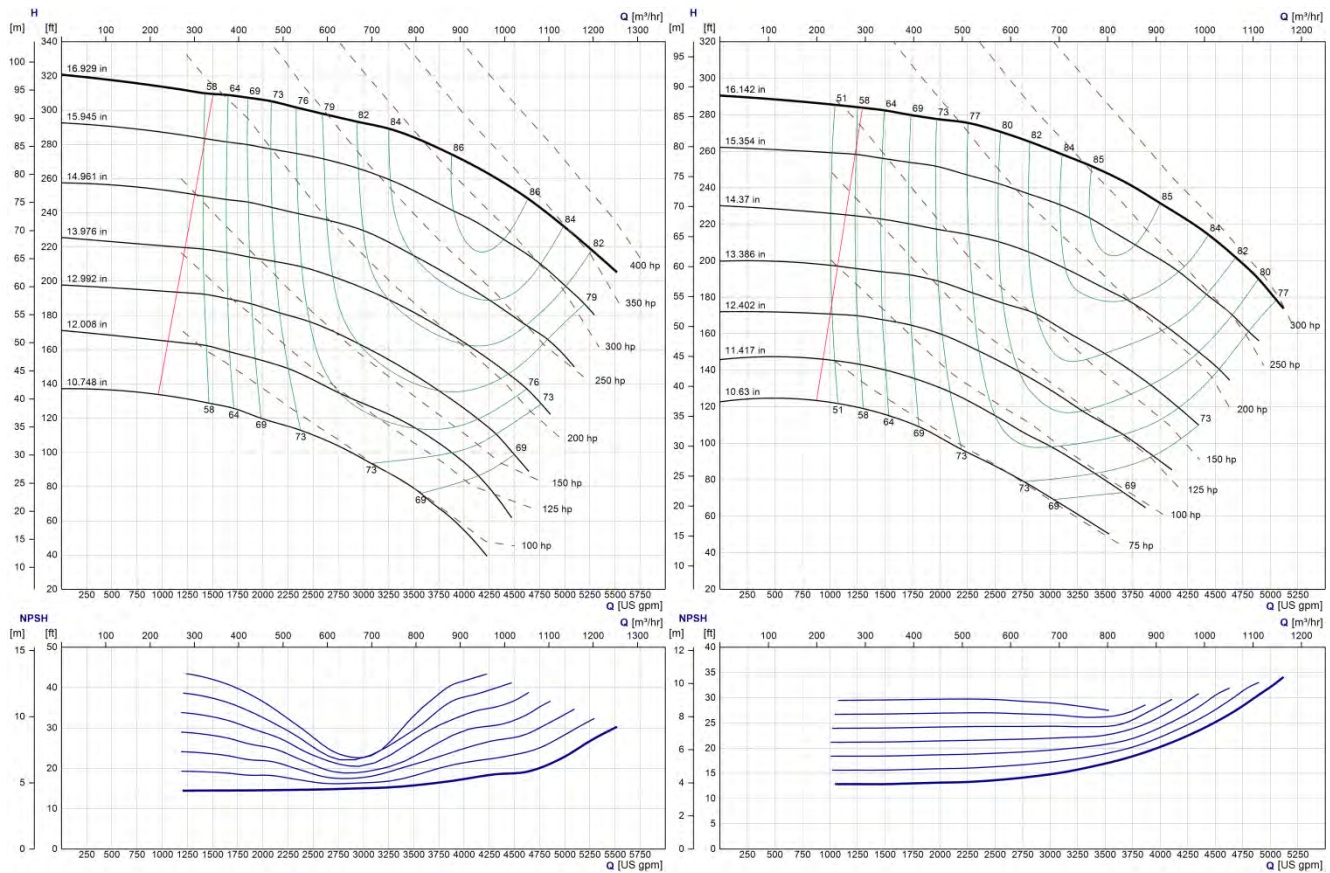
4-Pole Performance (e-HSC 8x10x10 & 8x10x9.5)



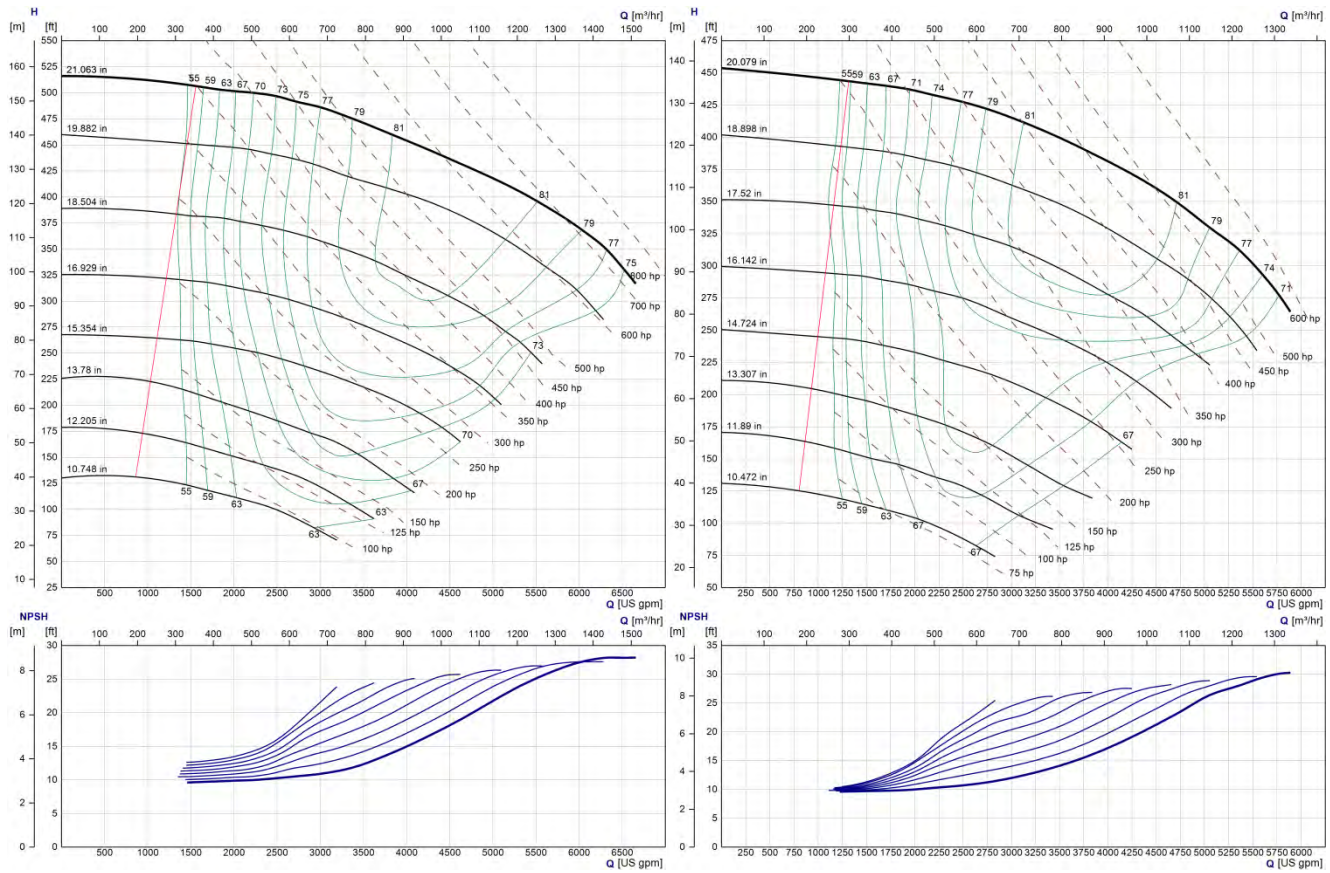
4-Pole Performance (e-HSC 8x10x13.5 & 8x10x13)



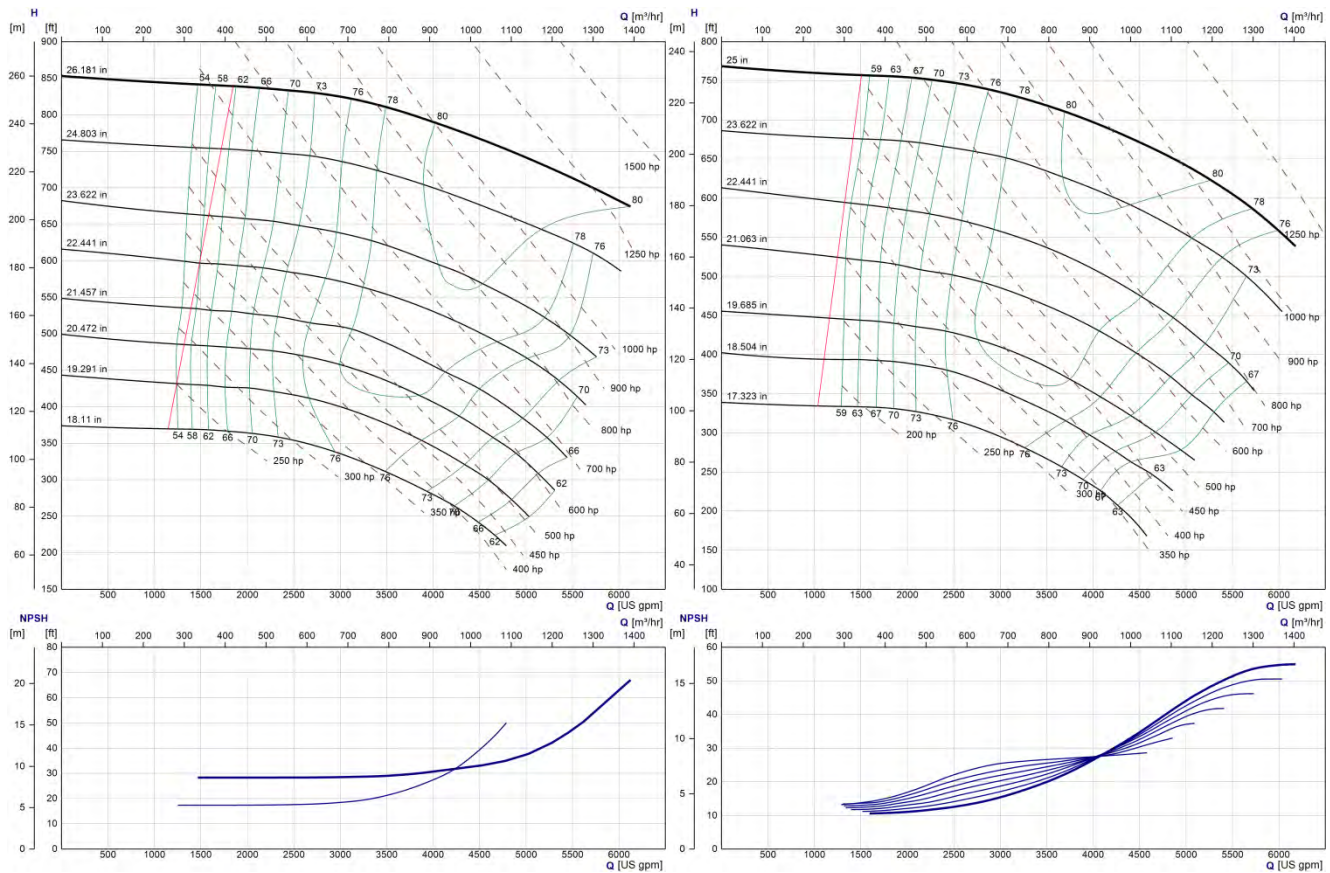
4-Pole Performance (e-HSC 8x10x17 & 8x10x16)



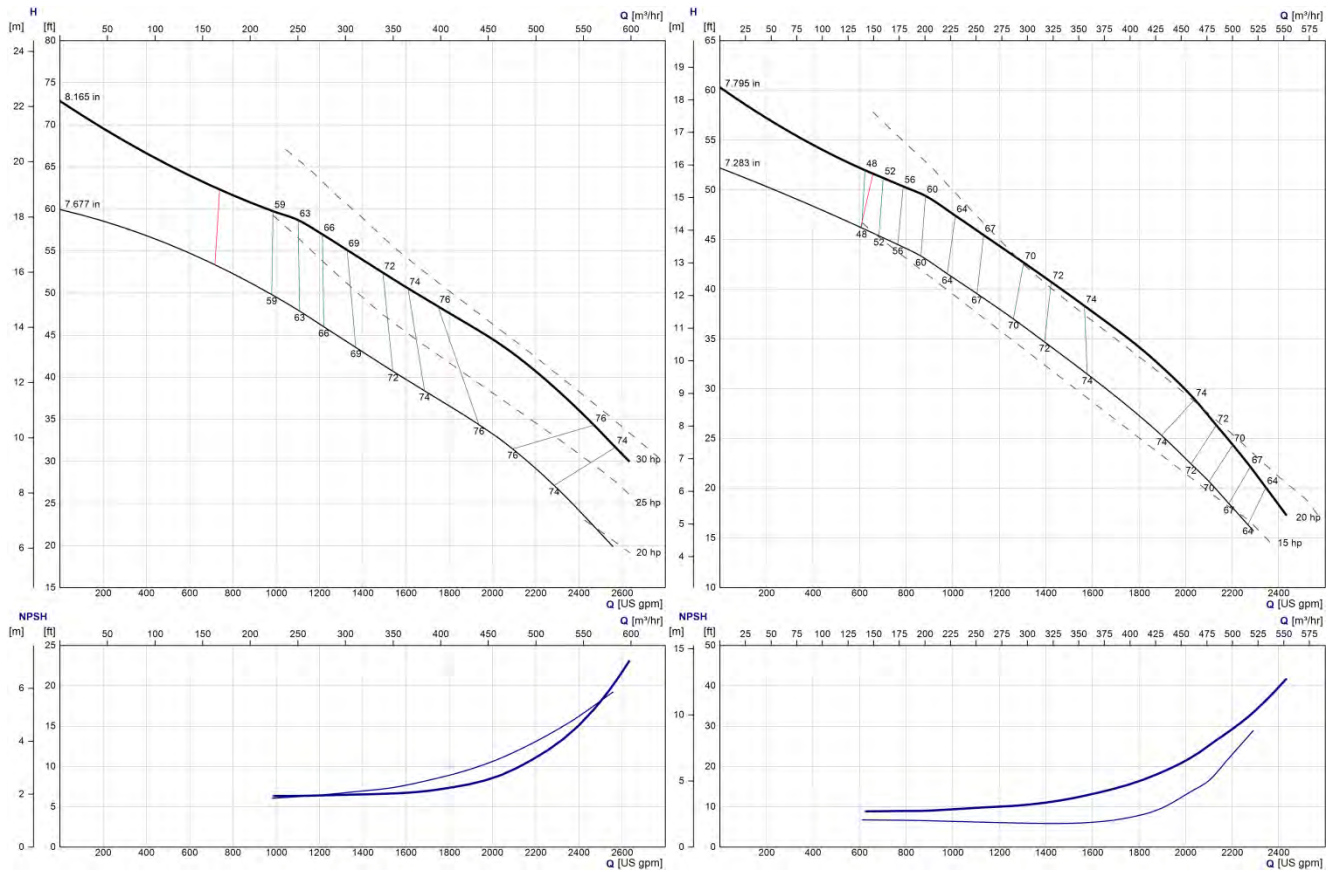
4-Pole Performance (e-HSC 8x10x21 & 8x10x20)



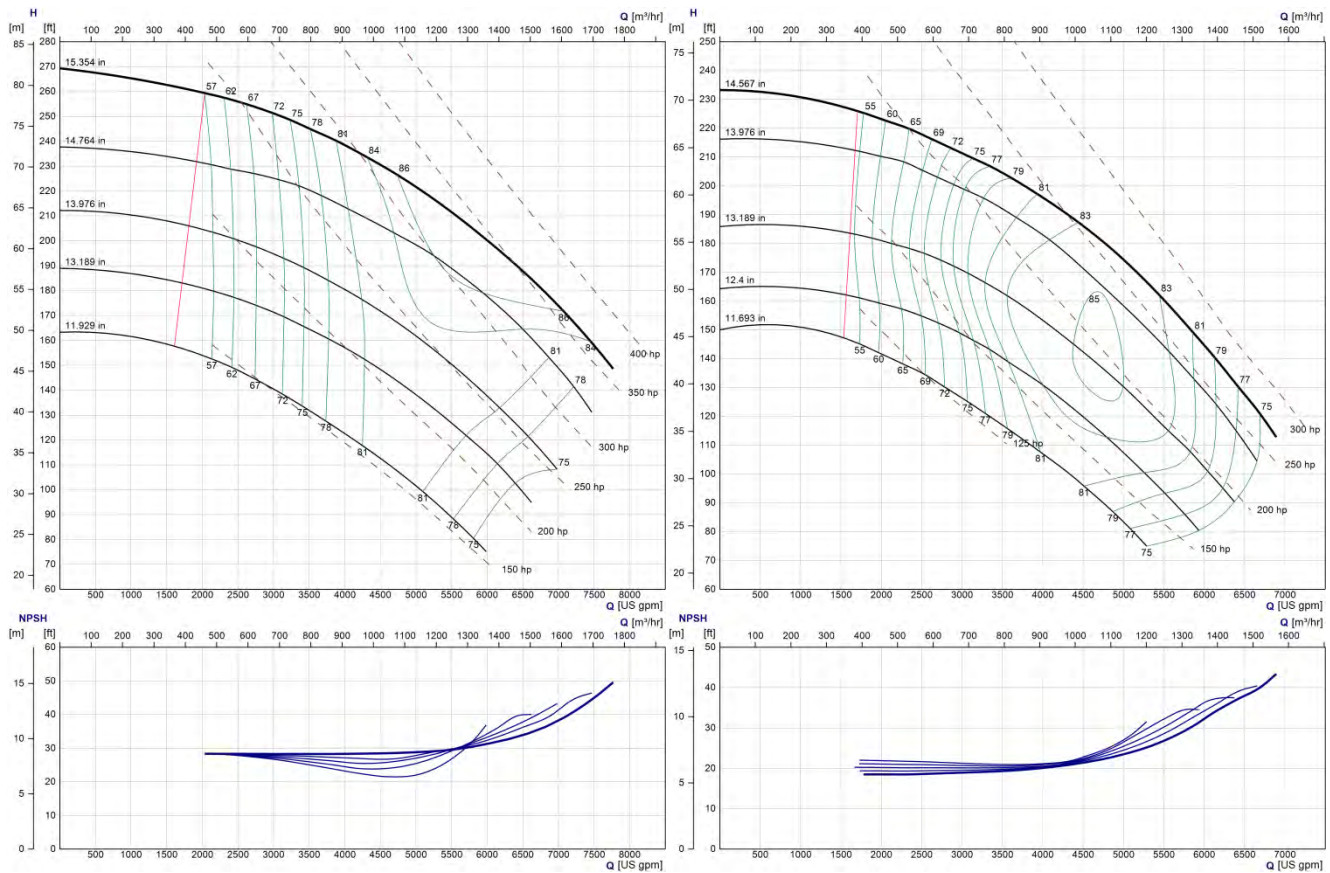
4-Pole Performance (e-HSC 8x10x26 & 8x10x25)



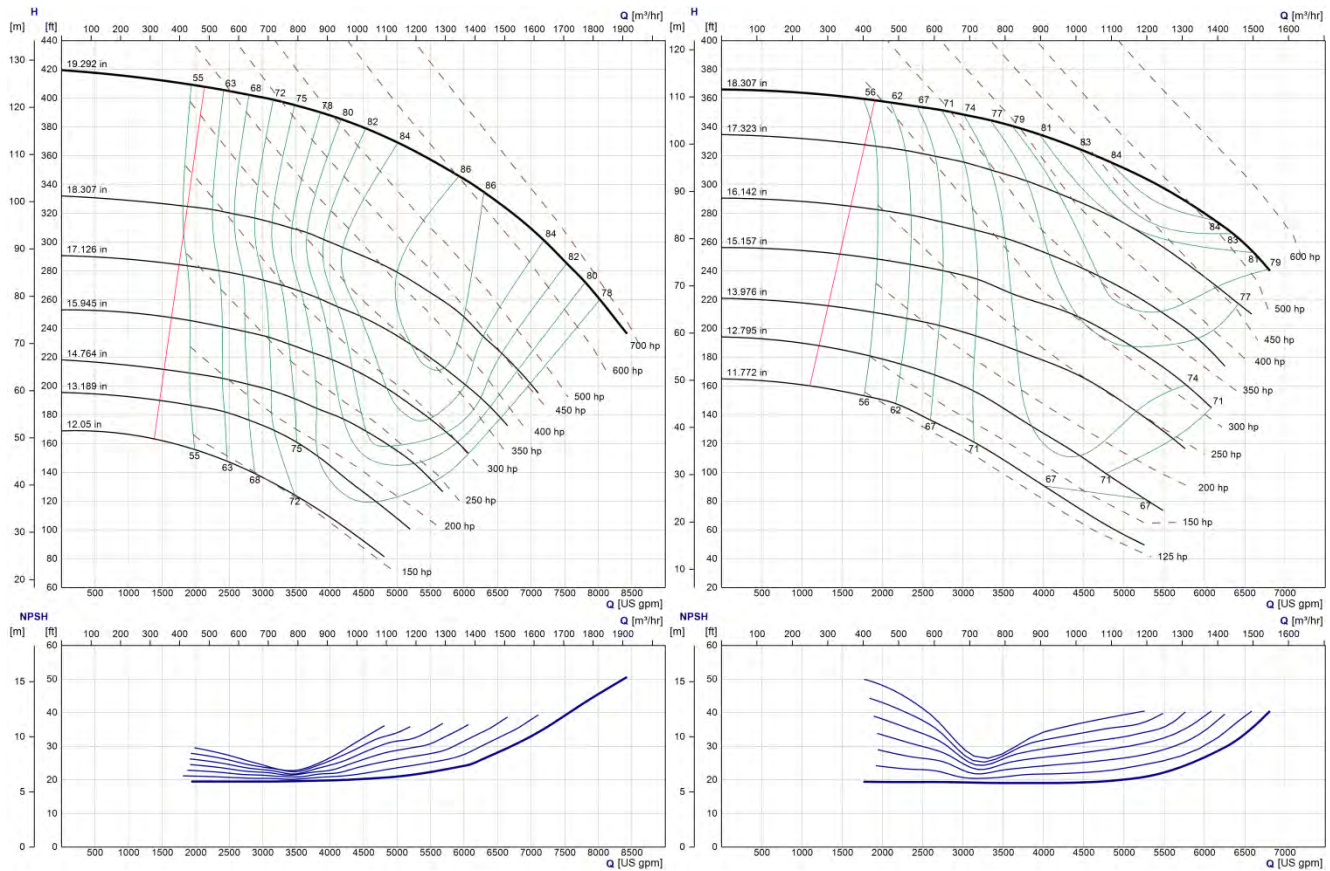
4-Pole Performance (e-HSC 10x10x8 & 10x10x7.5)



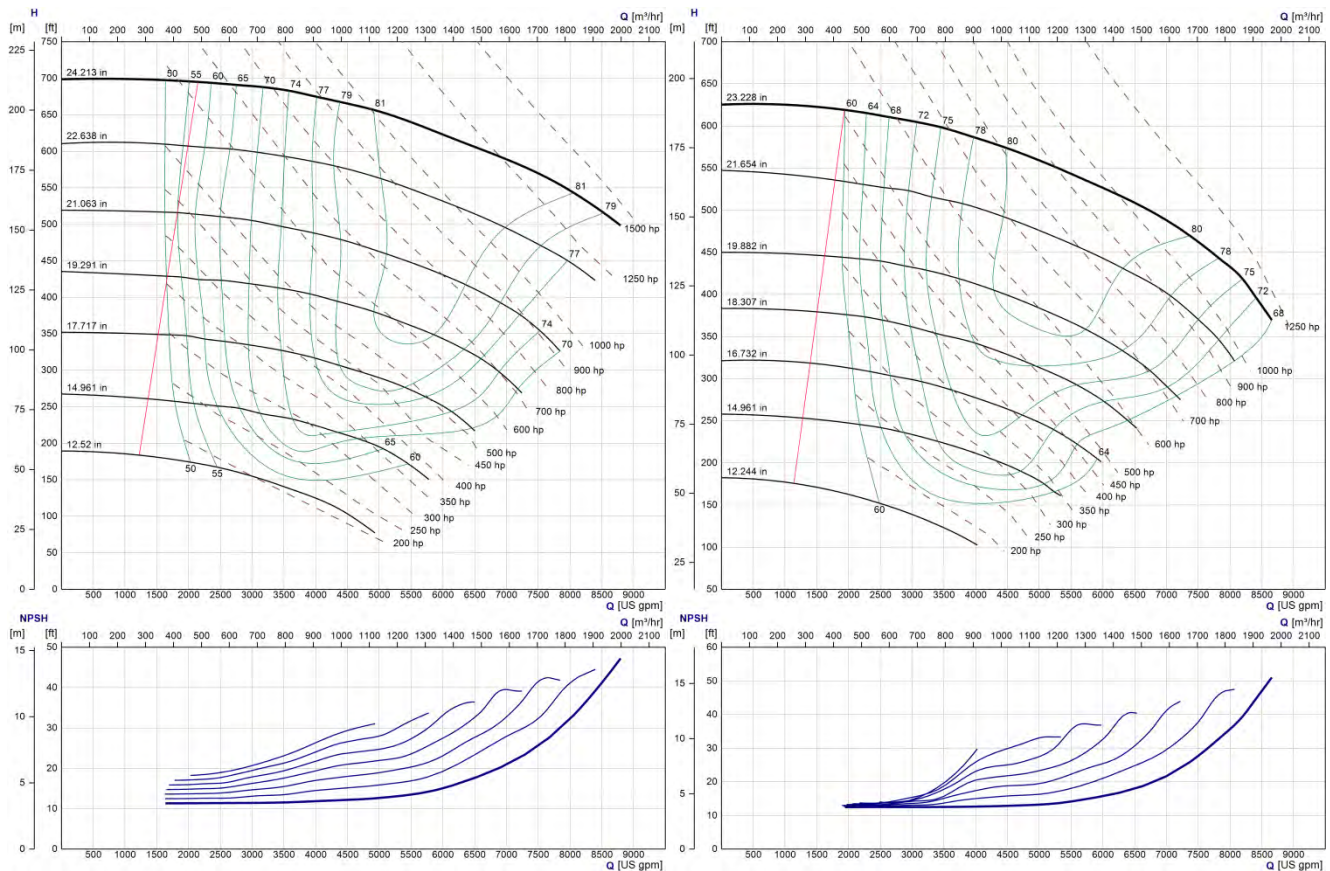
4-Pole Performance (e-HSC 10x12x15.5 & 10x12x14.5)



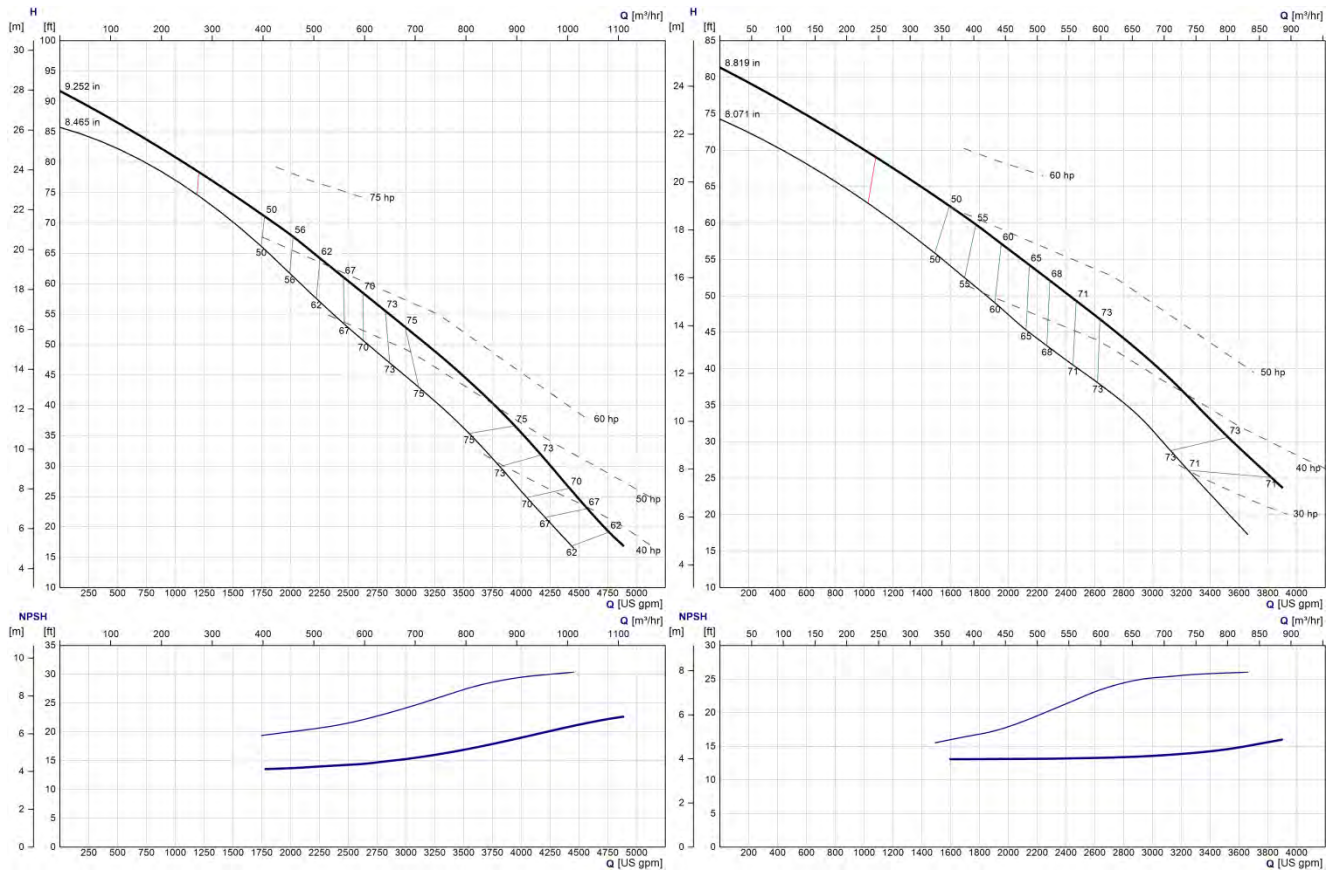
4-Pole Performance (e-HSC 10x12x19 & 10x12x18)



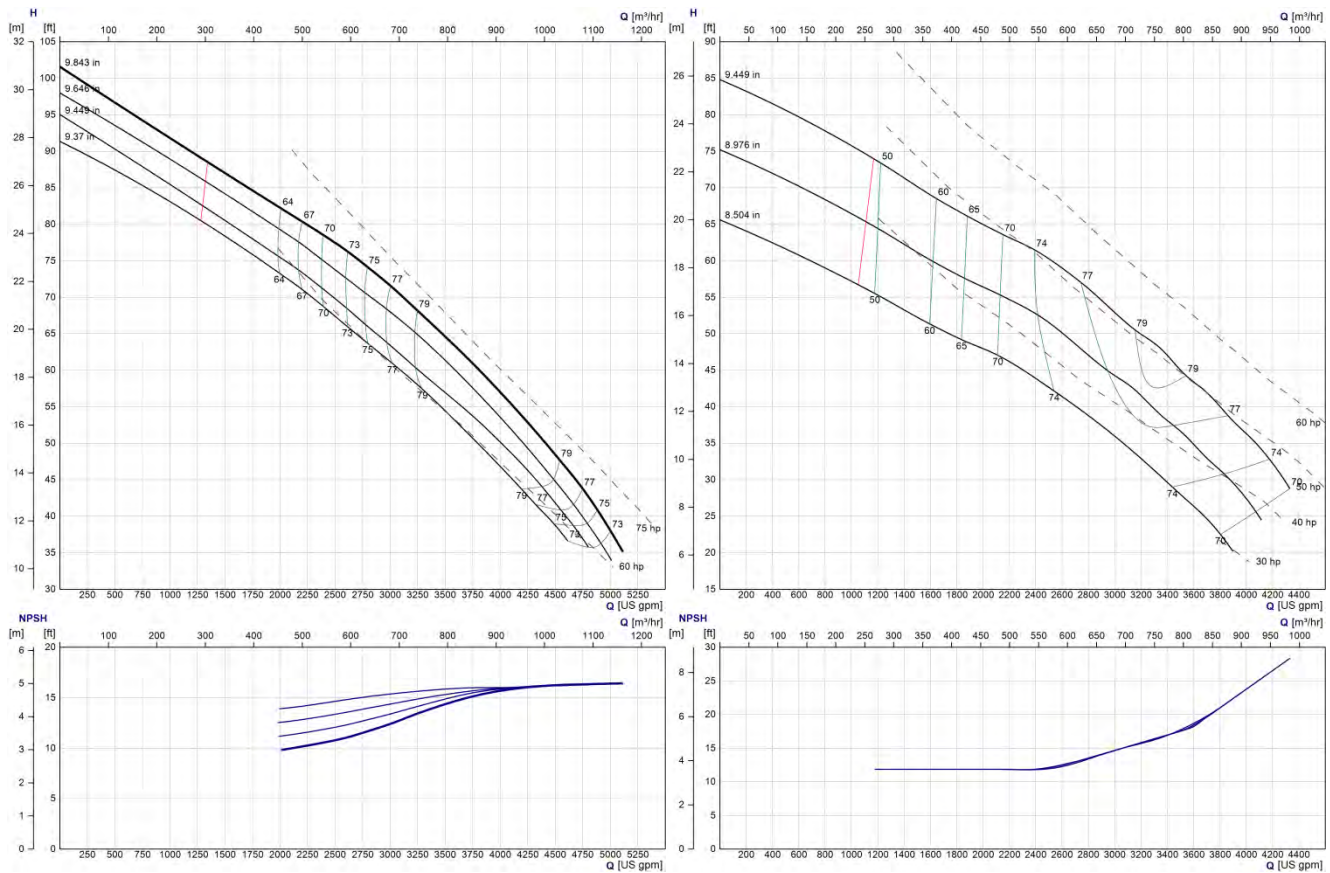
4-Pole Performance (e-HSC 10x12x24 & 10x12x23)



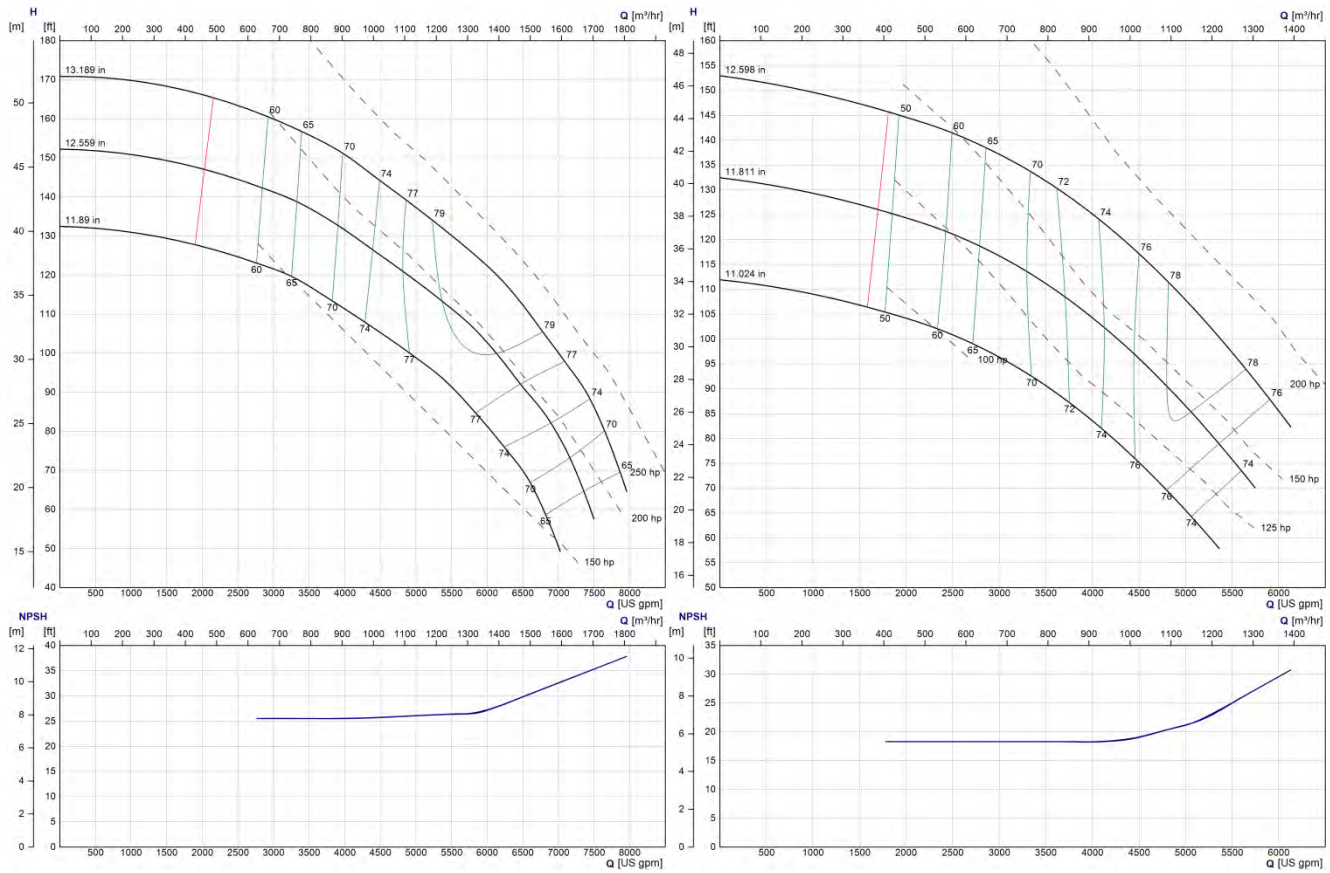
4-Pole Performance (e-HSC 12x12x9 & 12x12x8.5)



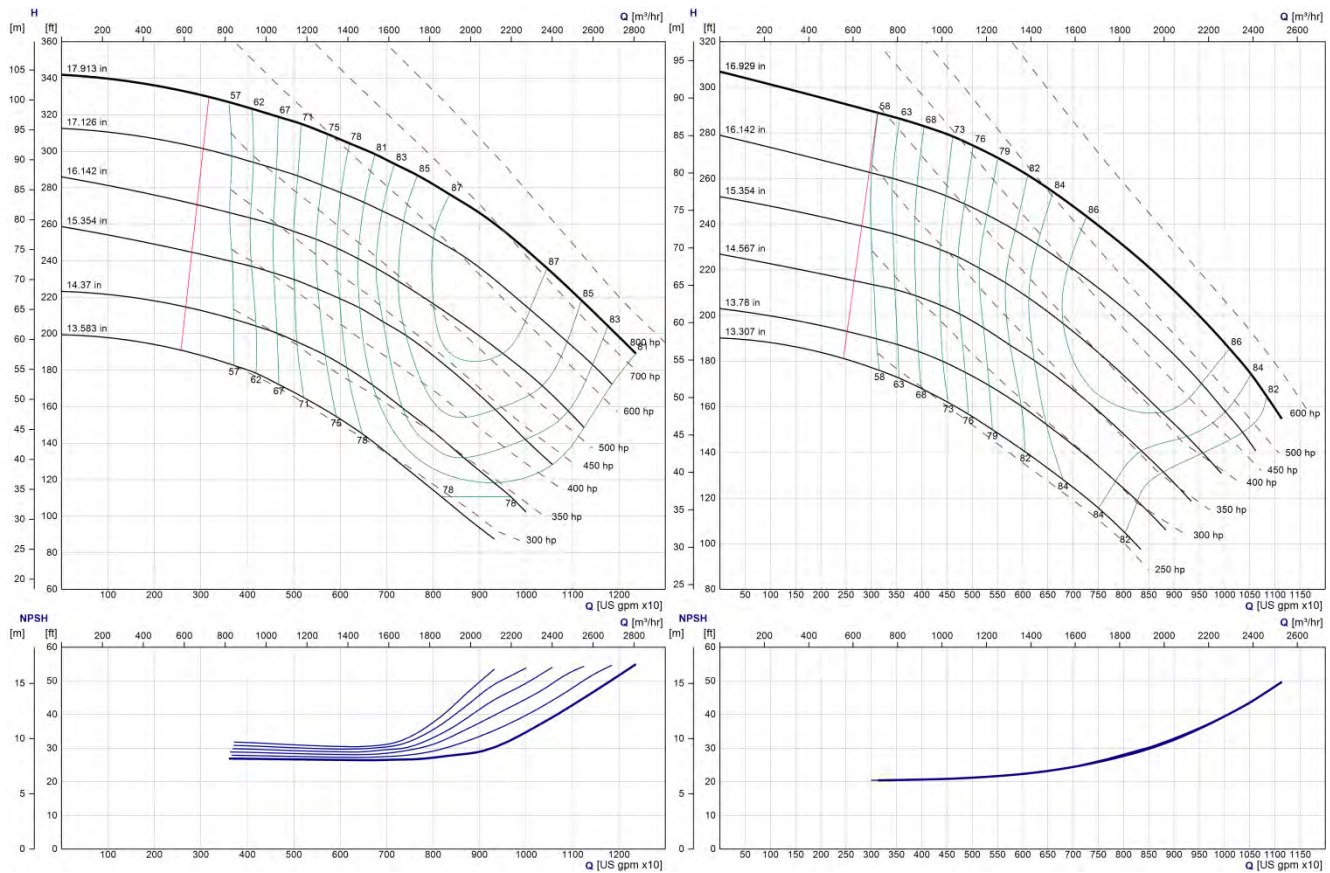
4-Pole Performance (e-HSC 12x12x10 & 12x12x9.5)



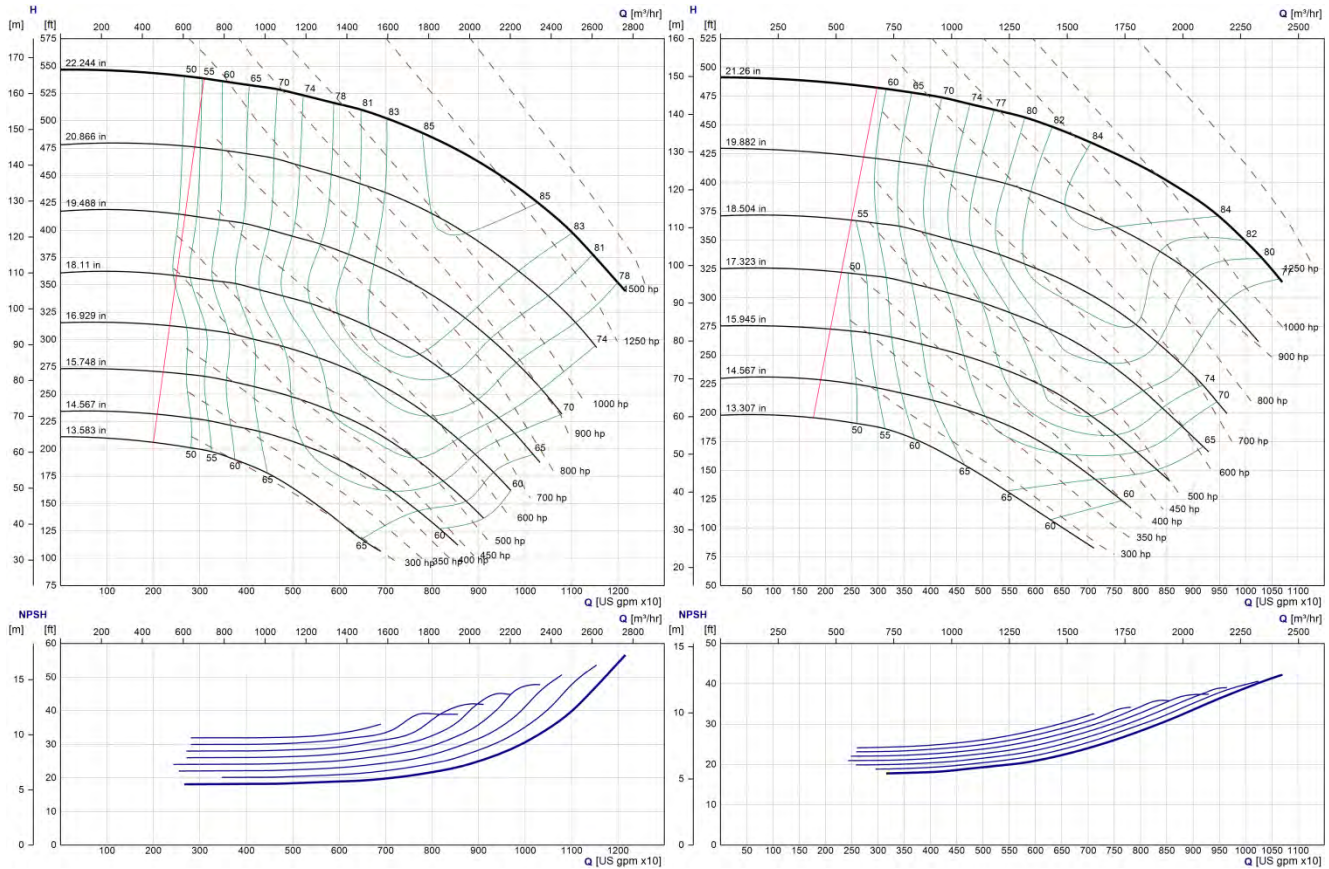
4-Pole Performance (e-HSC 12x14x13 & 12x14x12.5)



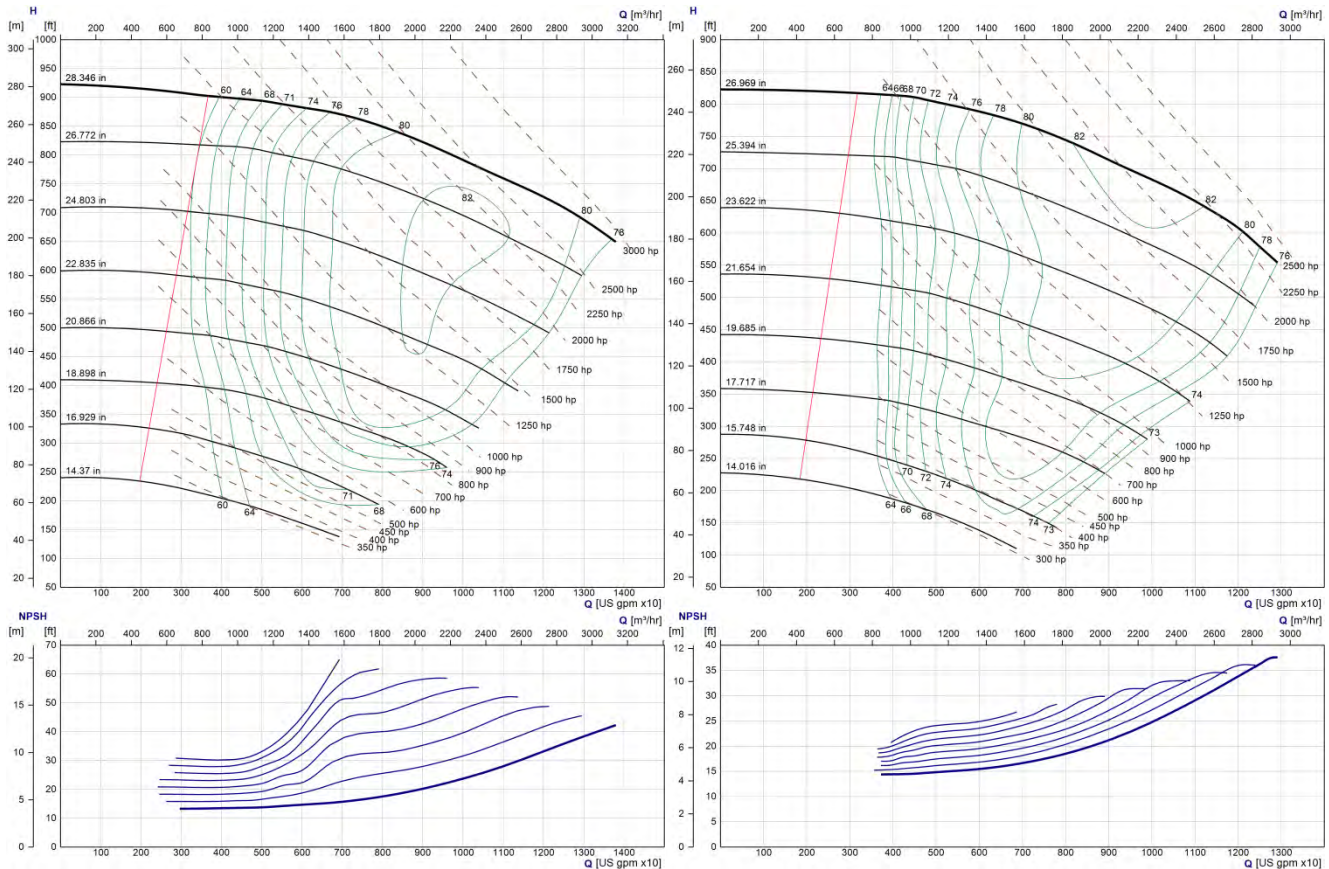
4-Pole Performance (e-HSC 12x16x18 & 12x16x17)



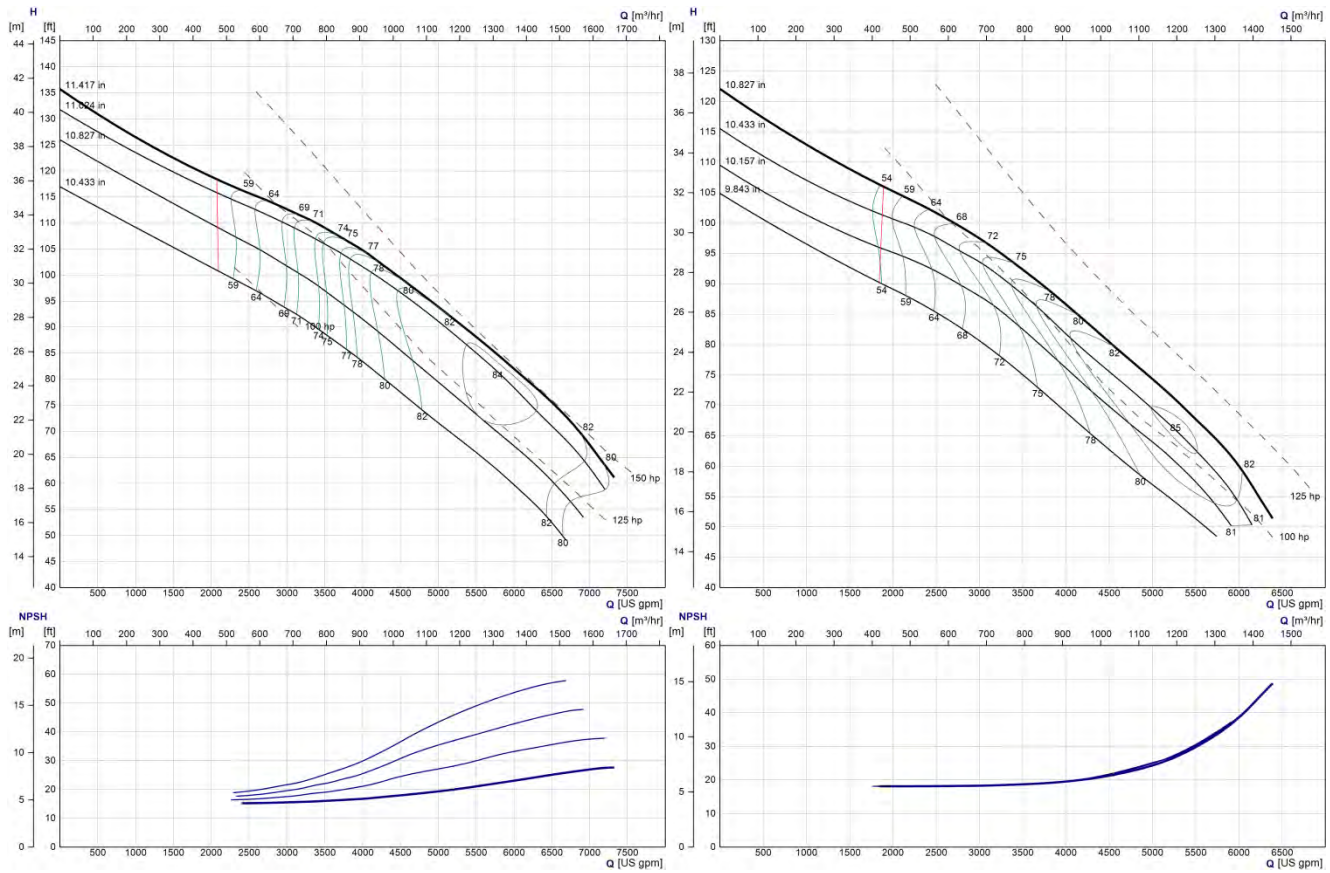
4-Pole Performance (e-HSC 12x16x22 & 12x16x21)



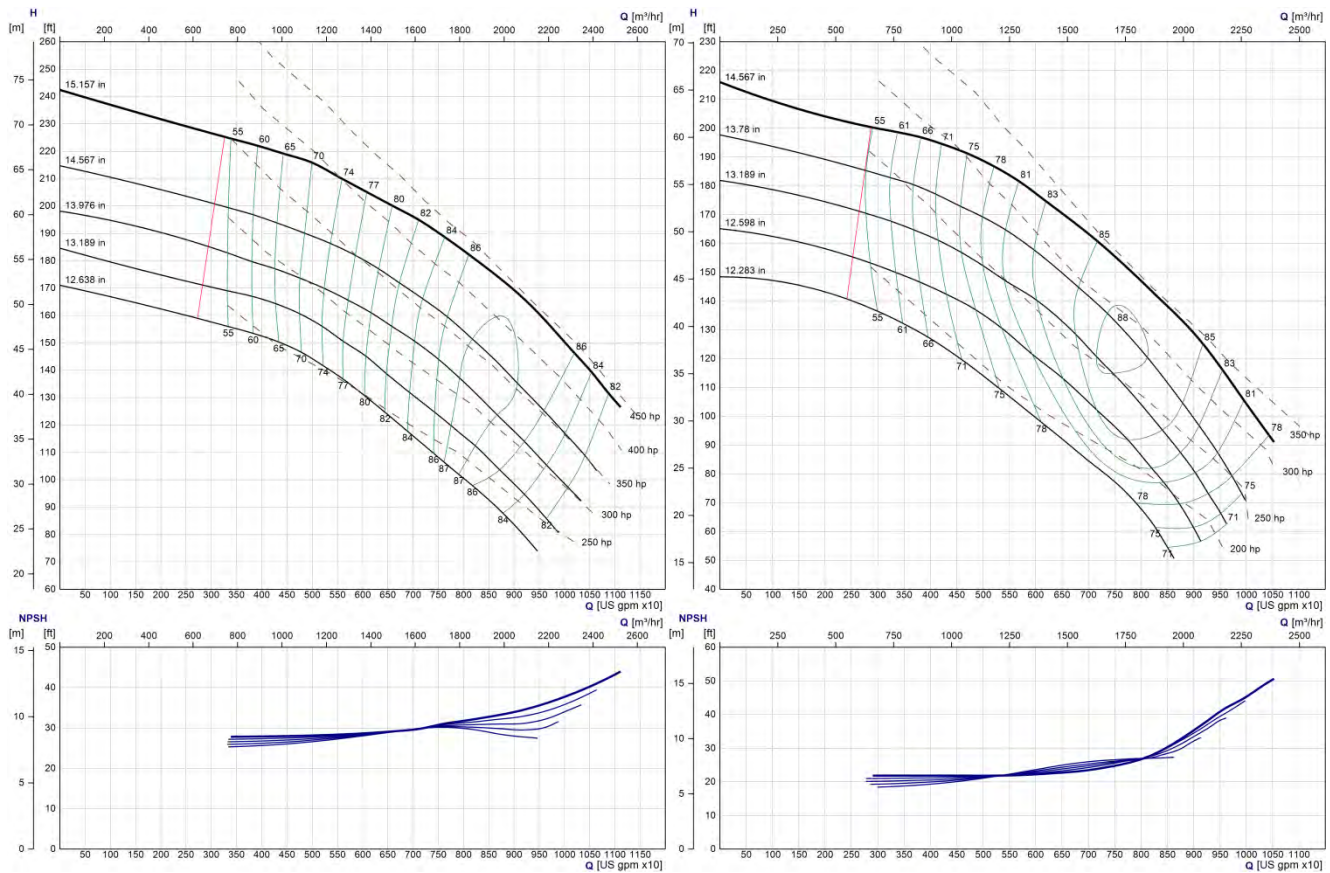
4-Pole Performance (e-HSC 12x16x28 & 12x16x27)



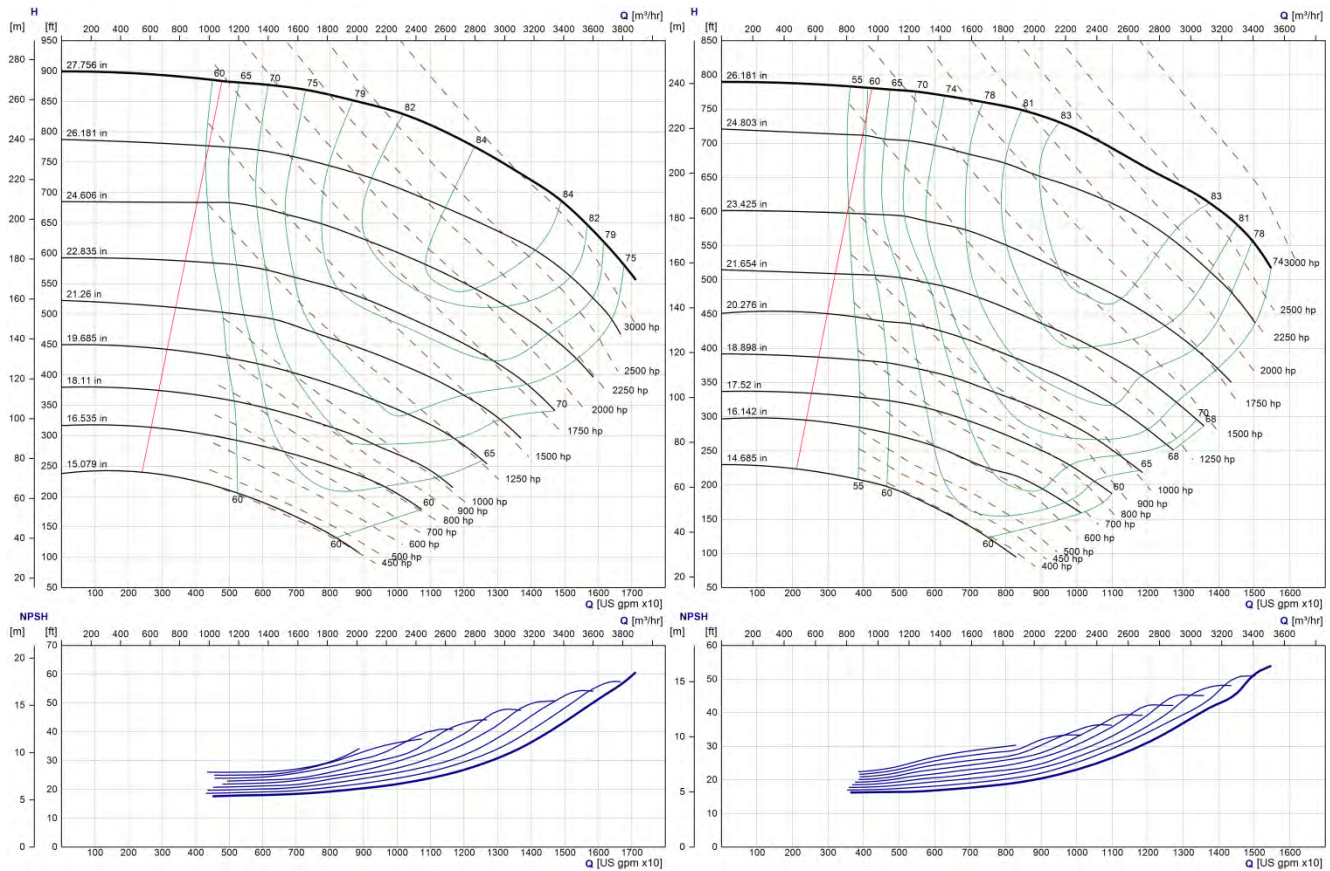
4-Pole Performance (e-HSC 14x14x12 & 14x14x11)



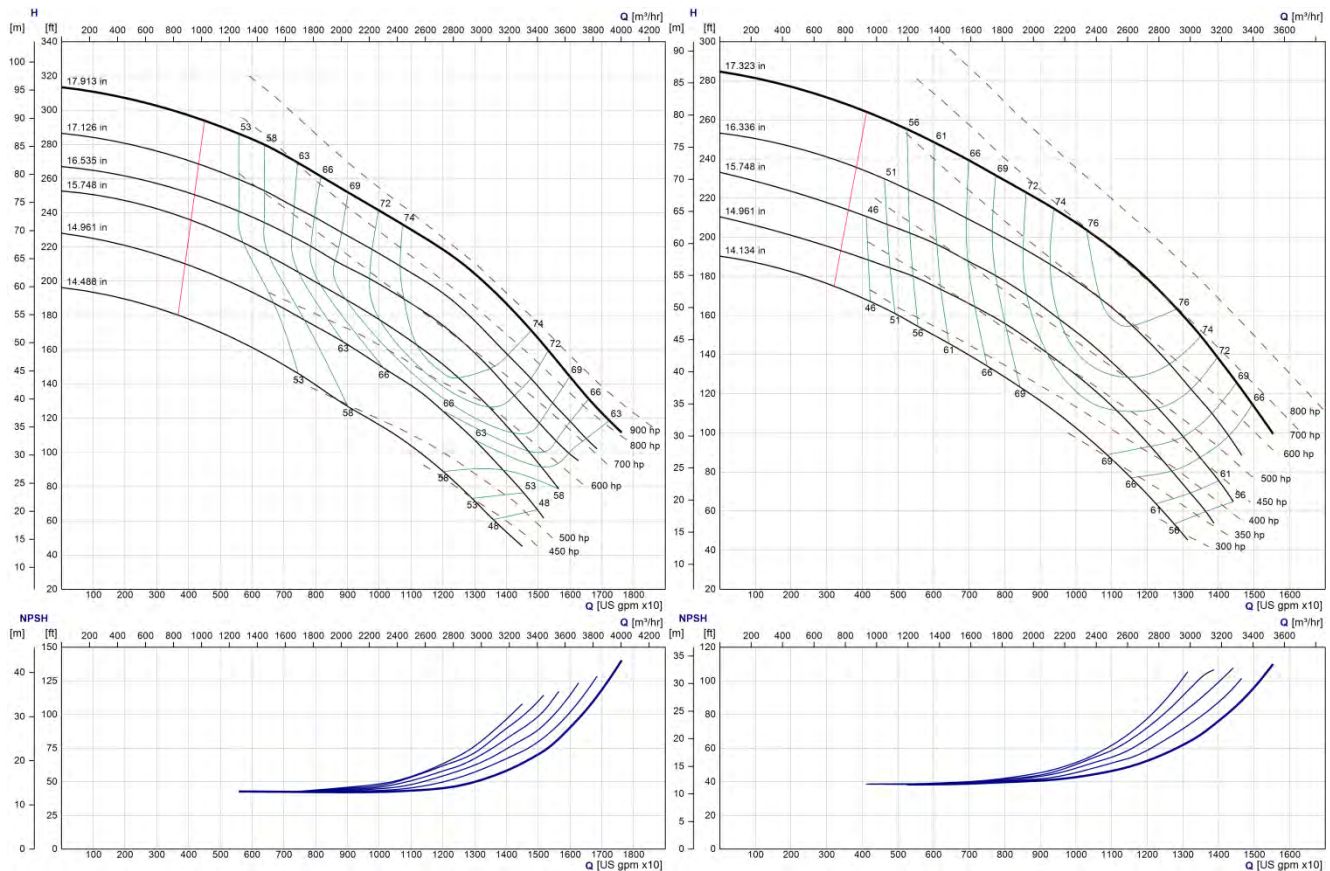
4-Pole Performance (e-HSC 14x16x15 & 14x16x14.5)



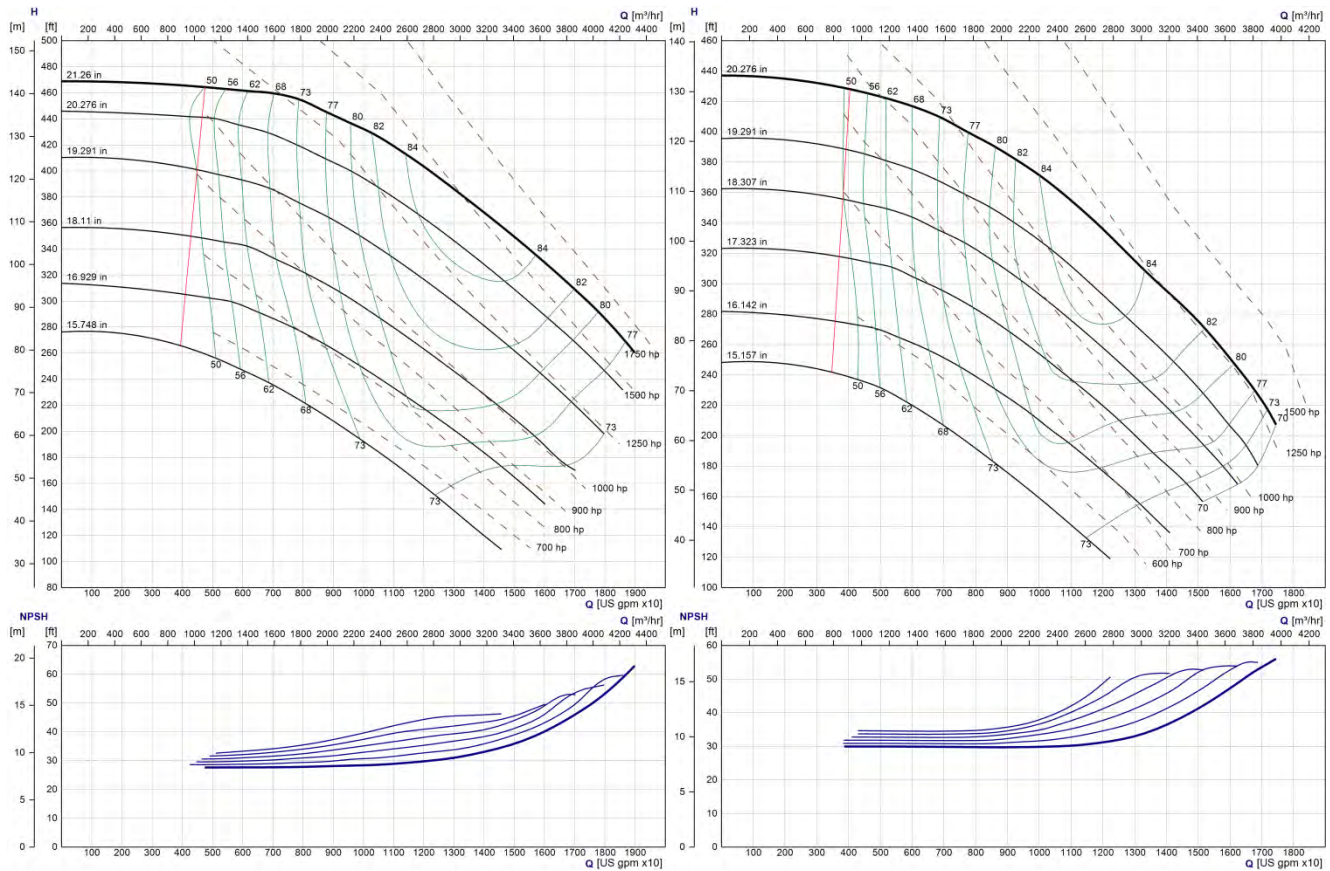
4-Pole Performance (e-HSC 14x16x27.5 & 14x16x26)



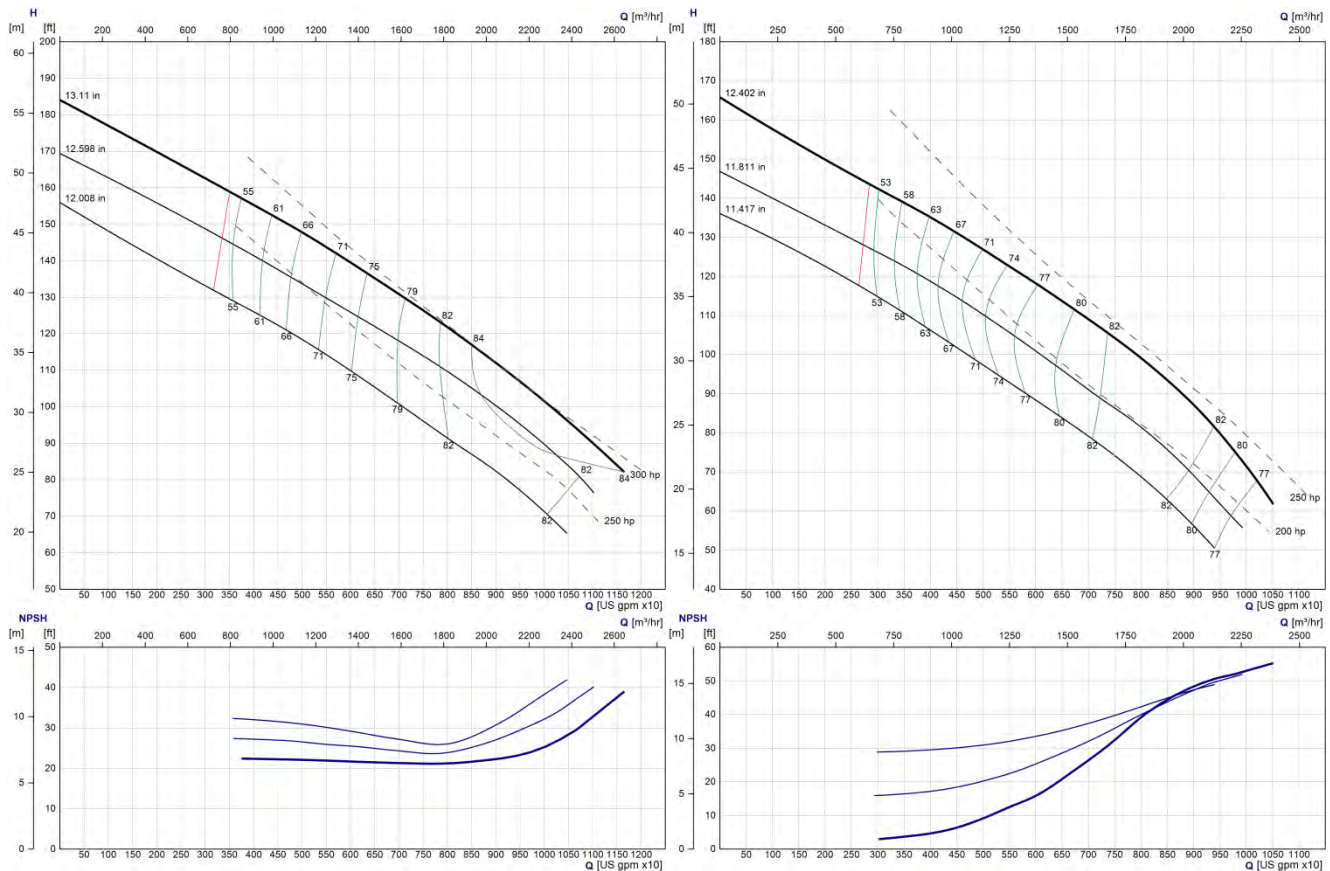
4-Pole Performance (e-HSC 14x18x18 & 14x18x17)



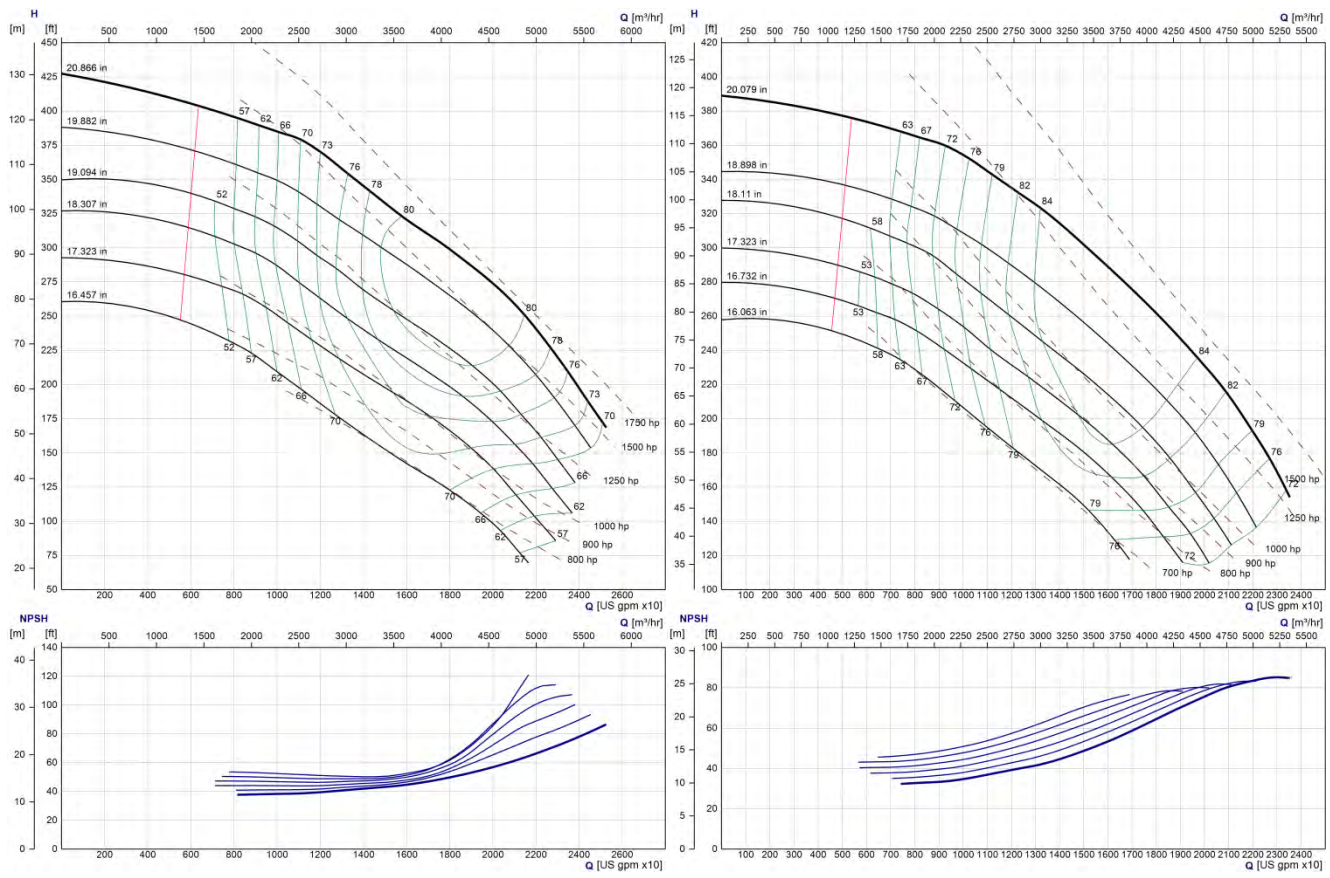
4-Pole Performance (e-HSC 14x18x21 & 14x18x20)



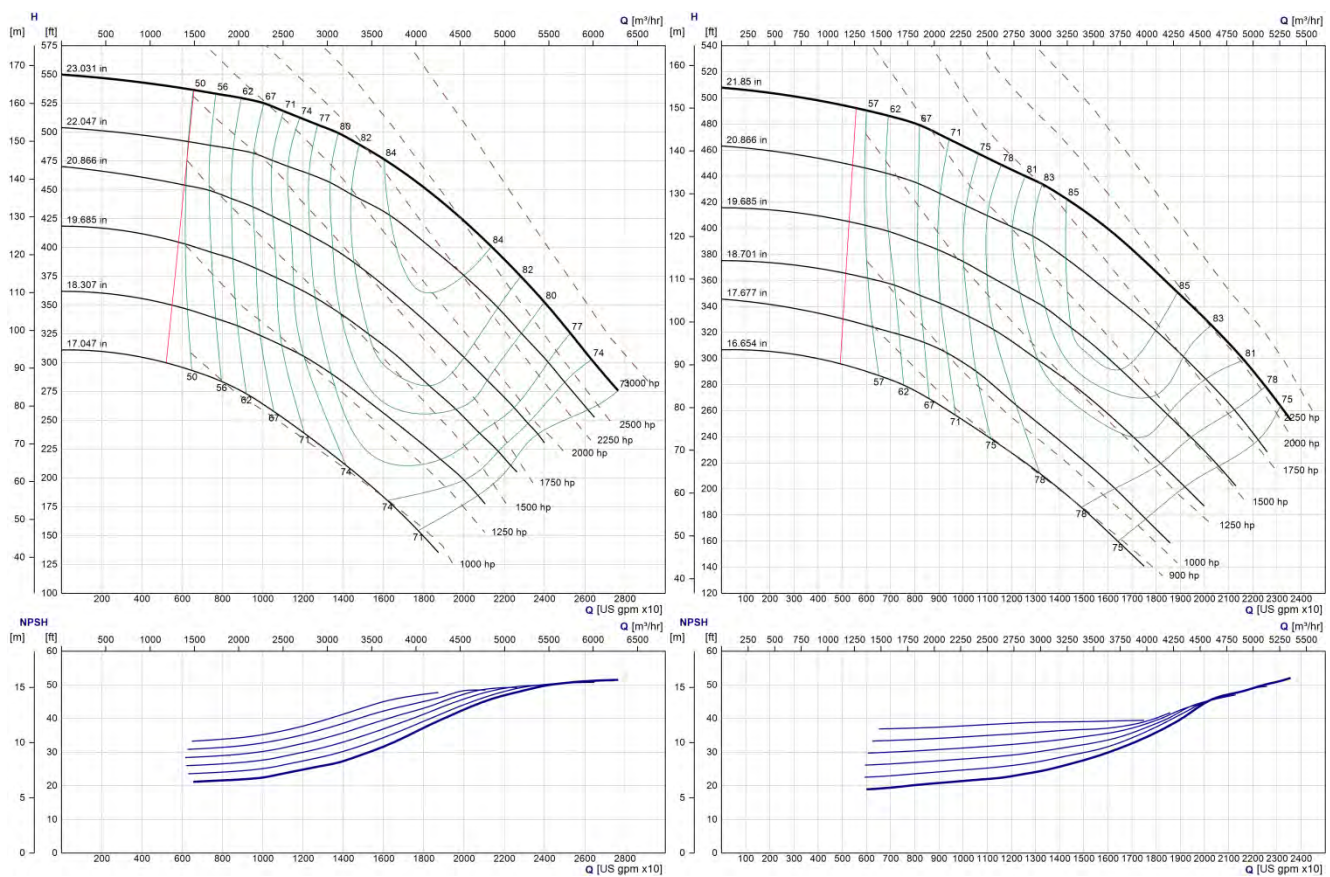
4-Pole Performance (e-HSC 16x16x13.5 & 16x16x13)



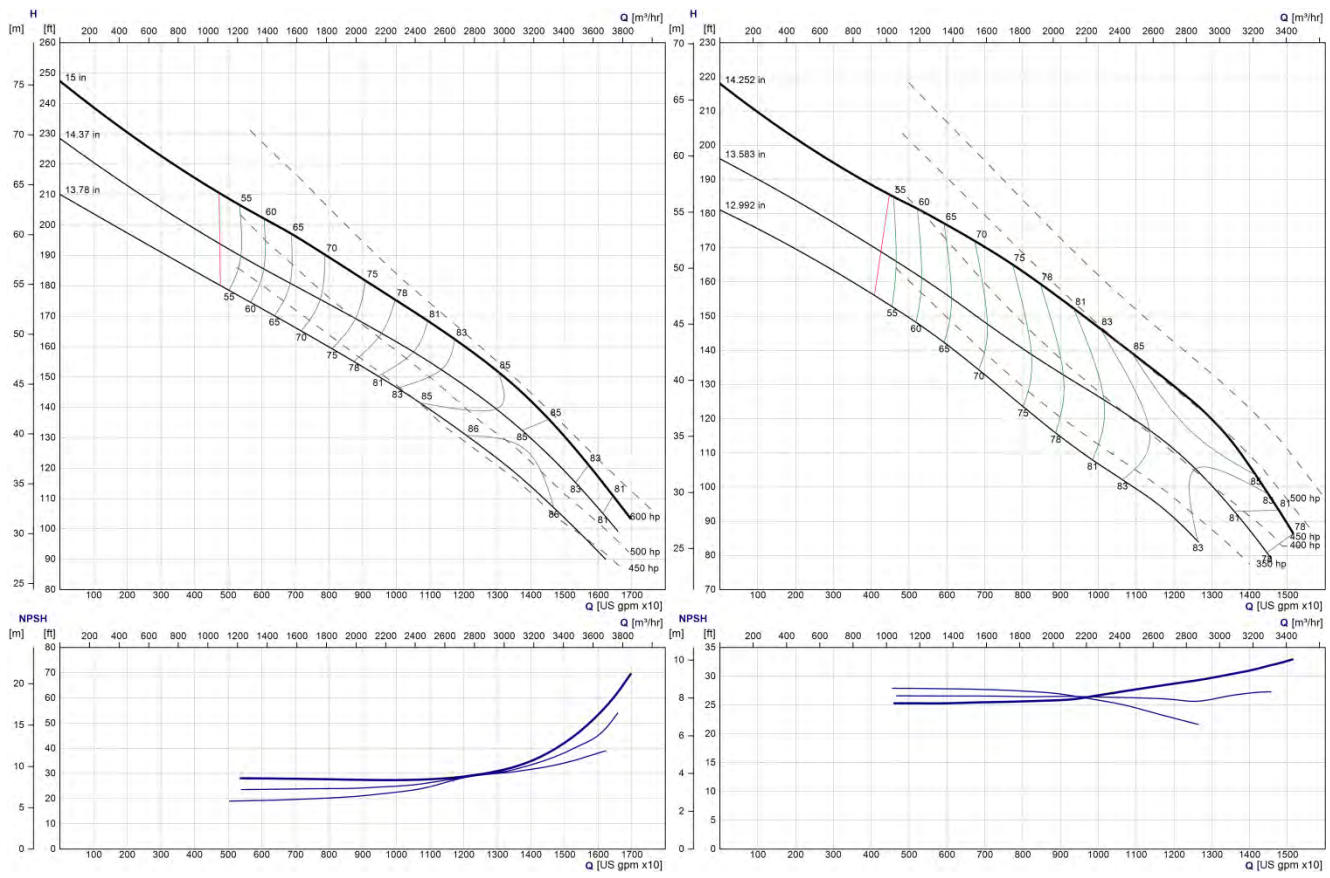
4-Pole Performance (e-HSC 16x20x20.5 & 16x20x19.5)



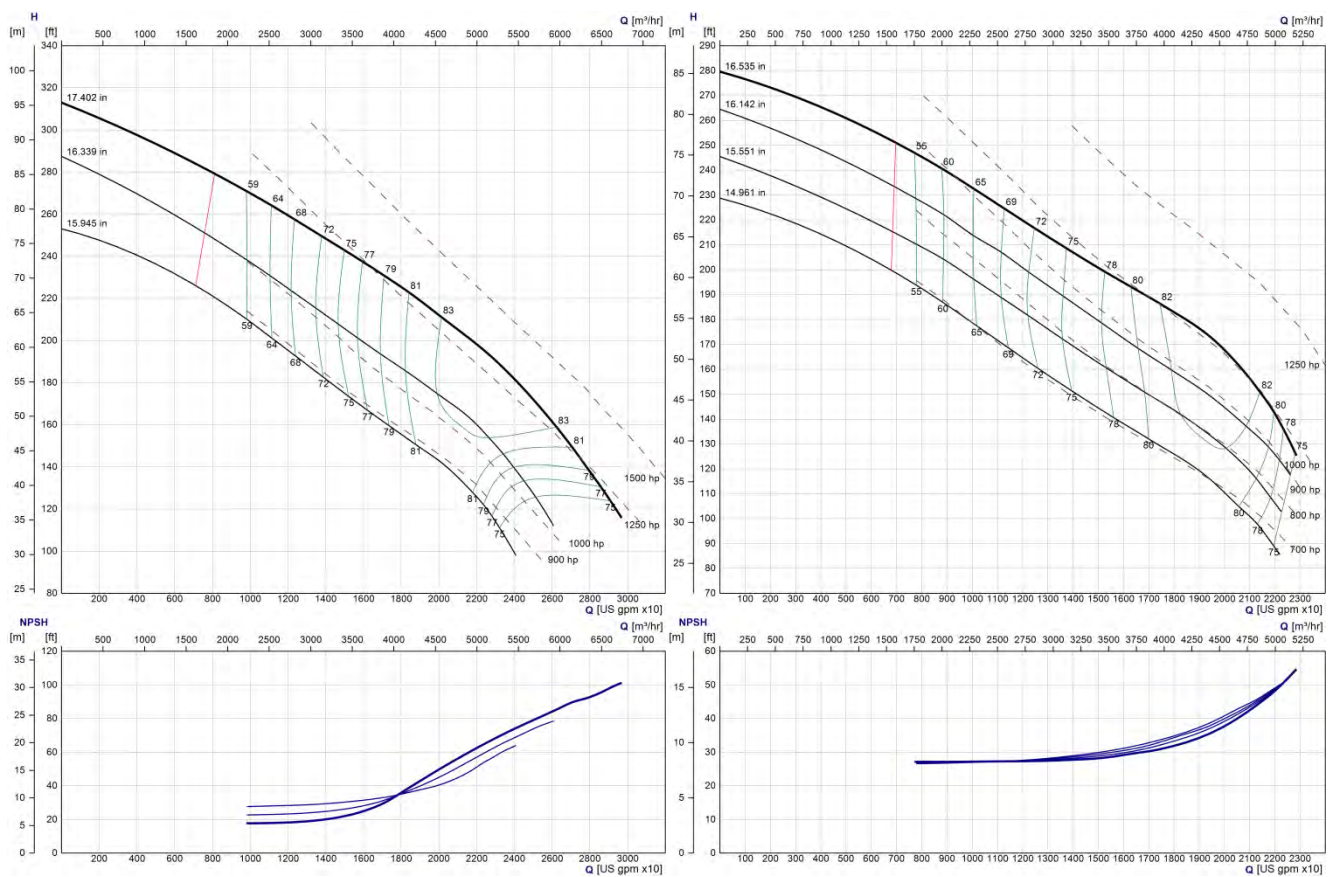
4-Pole Performance (e-HSC 16x20x23 & 16x20x22)



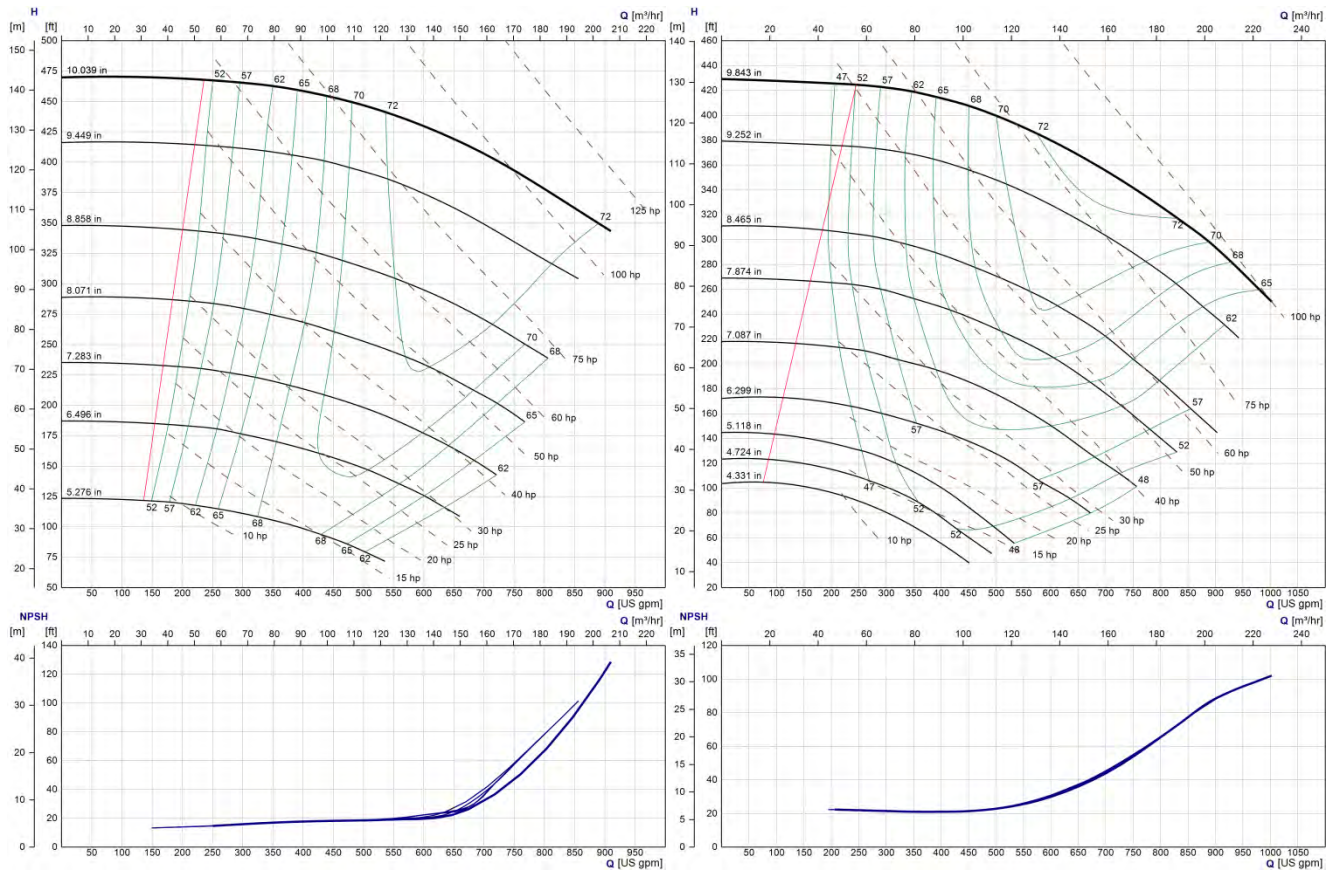
4-Pole Performance (e-HSC 18x20x15.5 & 18x20x14.5)



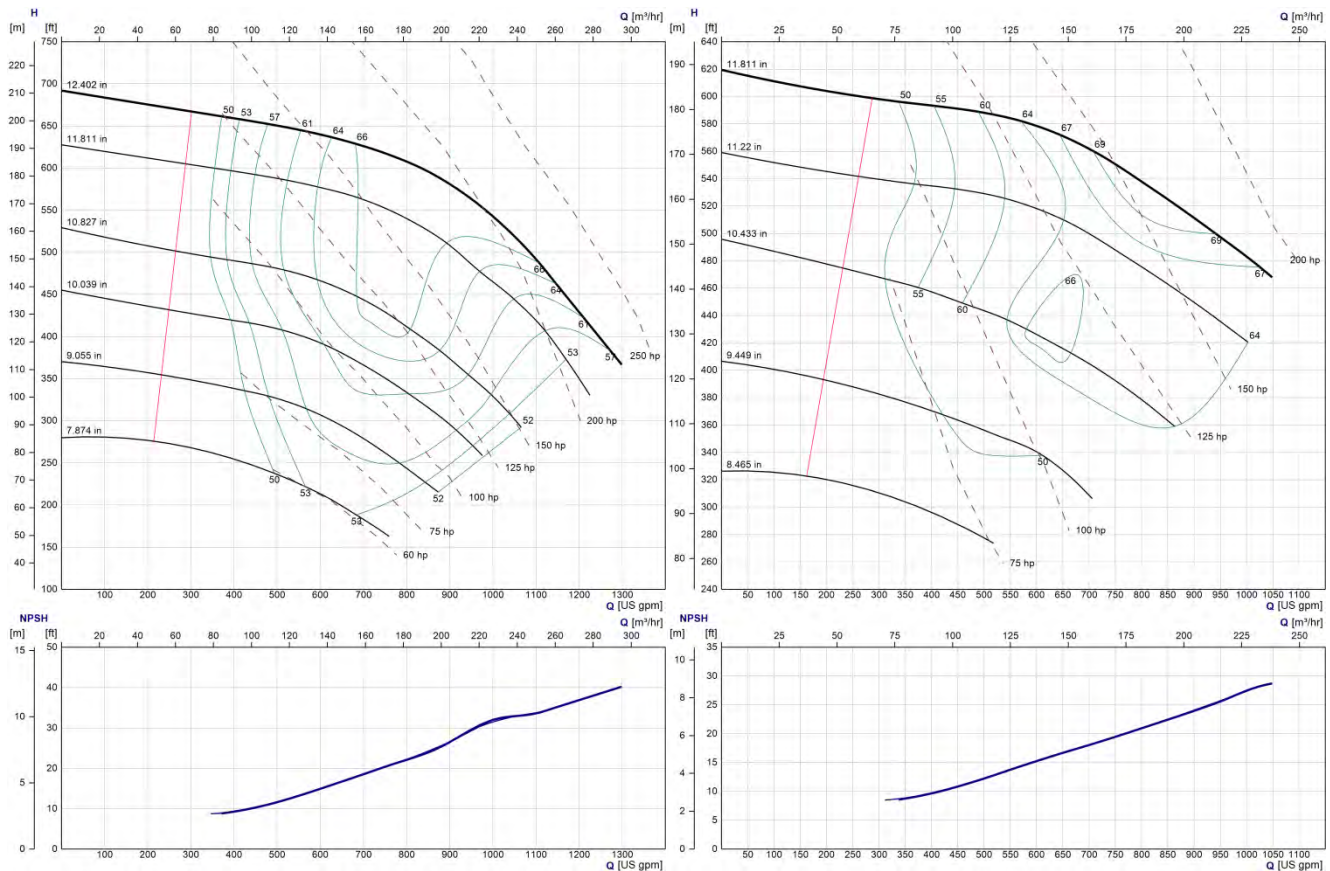
4-Pole Performance (e-HSC 20x24x18 & 20x24x17)



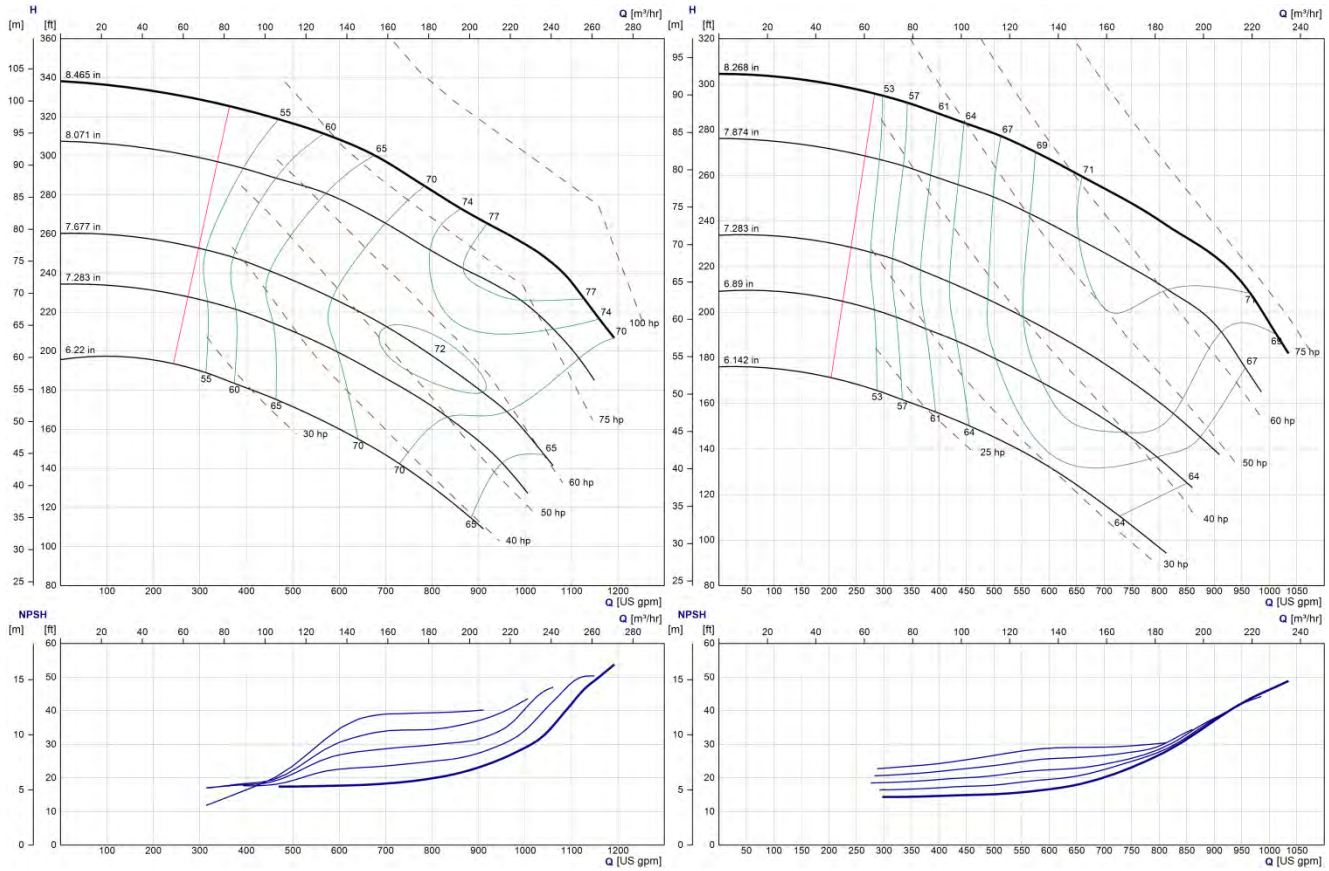
2-Pole Performance (e-HSC 2.5x4x10.5 & 2.5x4x10)



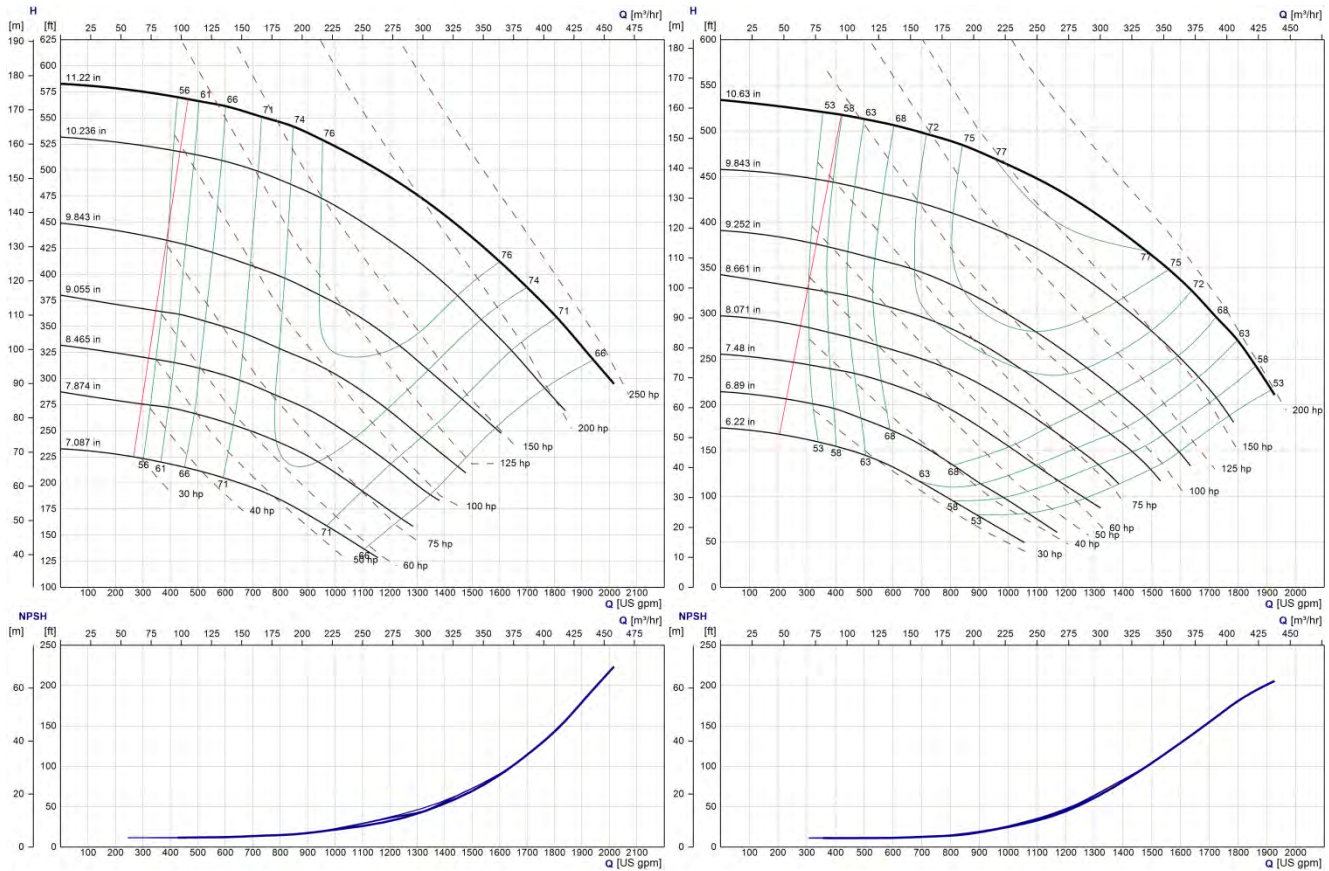
2-Pole Performance (e-HSC 3x4x12.5 & 3x4x12)



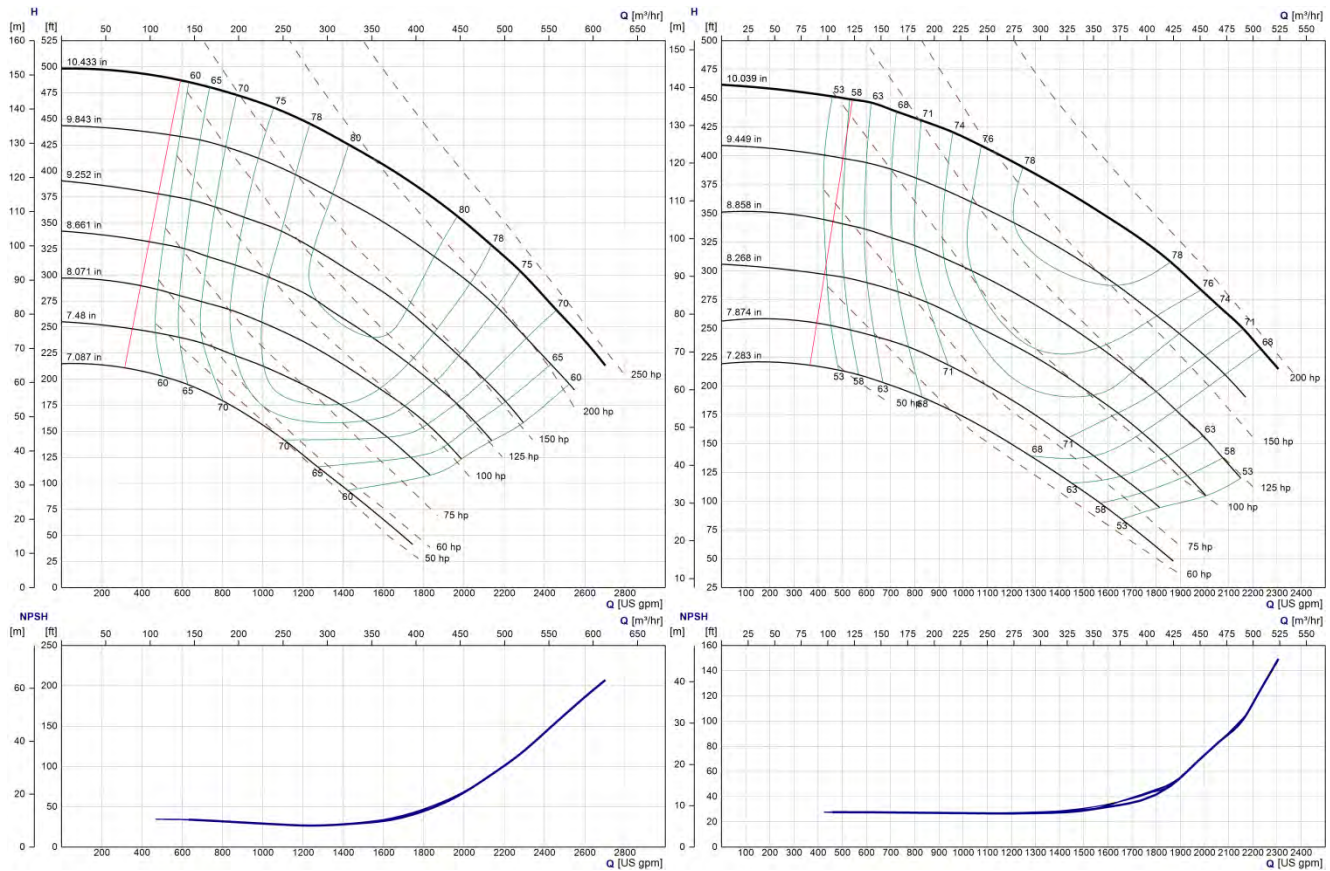
2-Pole Performance (e-HSC 3x5x8.5 & 3x5x8)



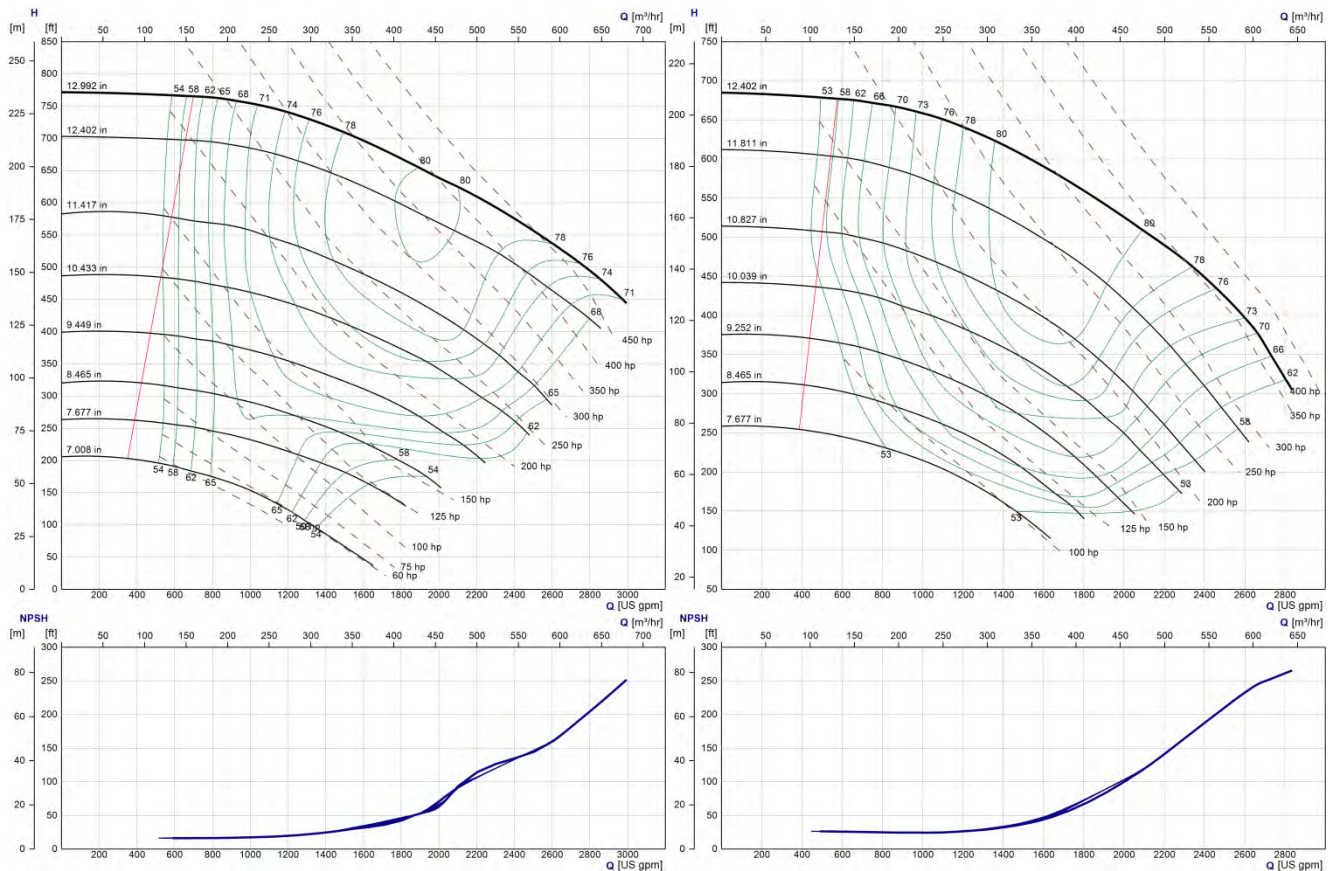
2-Pole Performance (e-HSC 3x5x11 & 3x5x10.5)



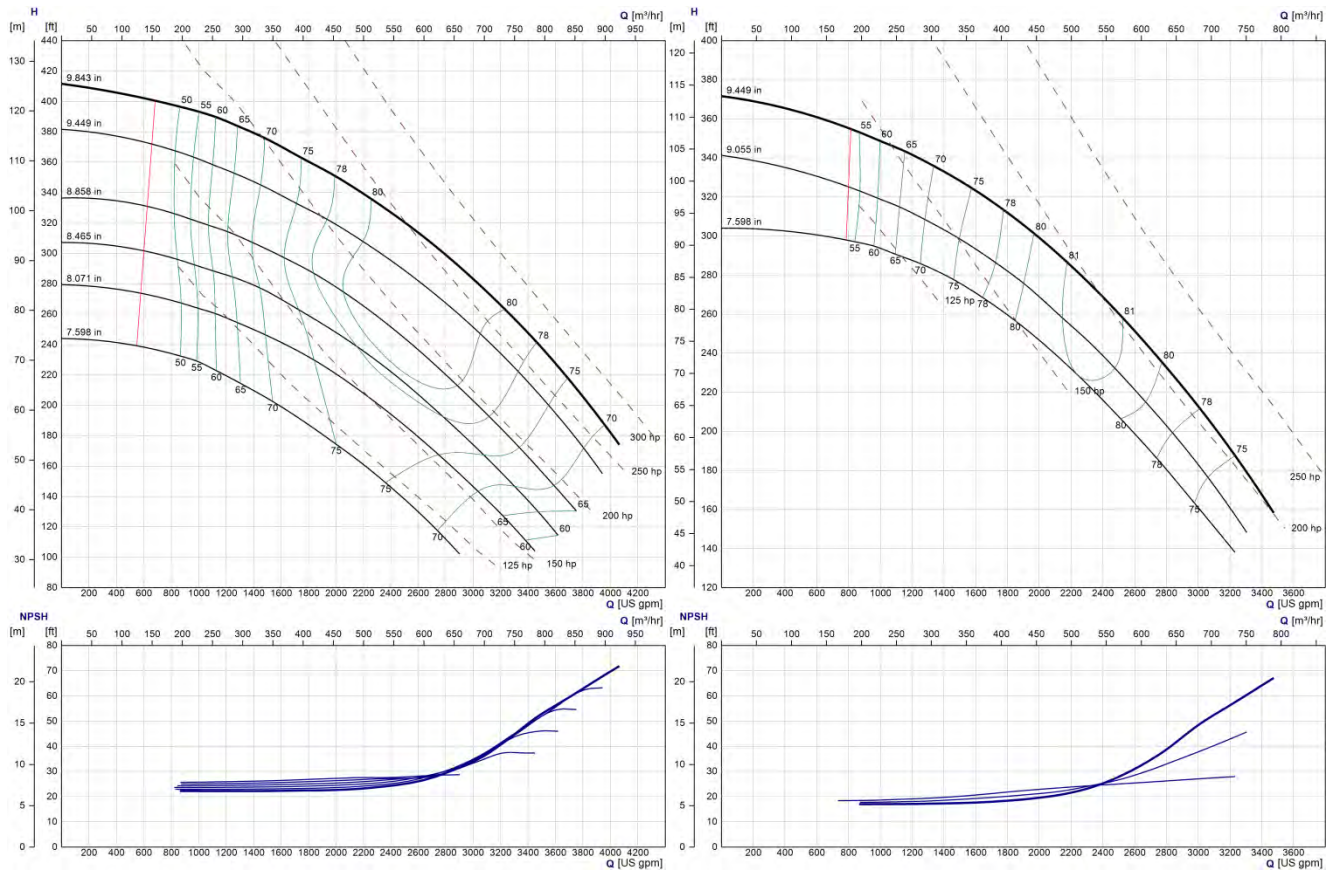
2-Pole Performance (e-HSC 4x6x10 & 4x6x9.5)



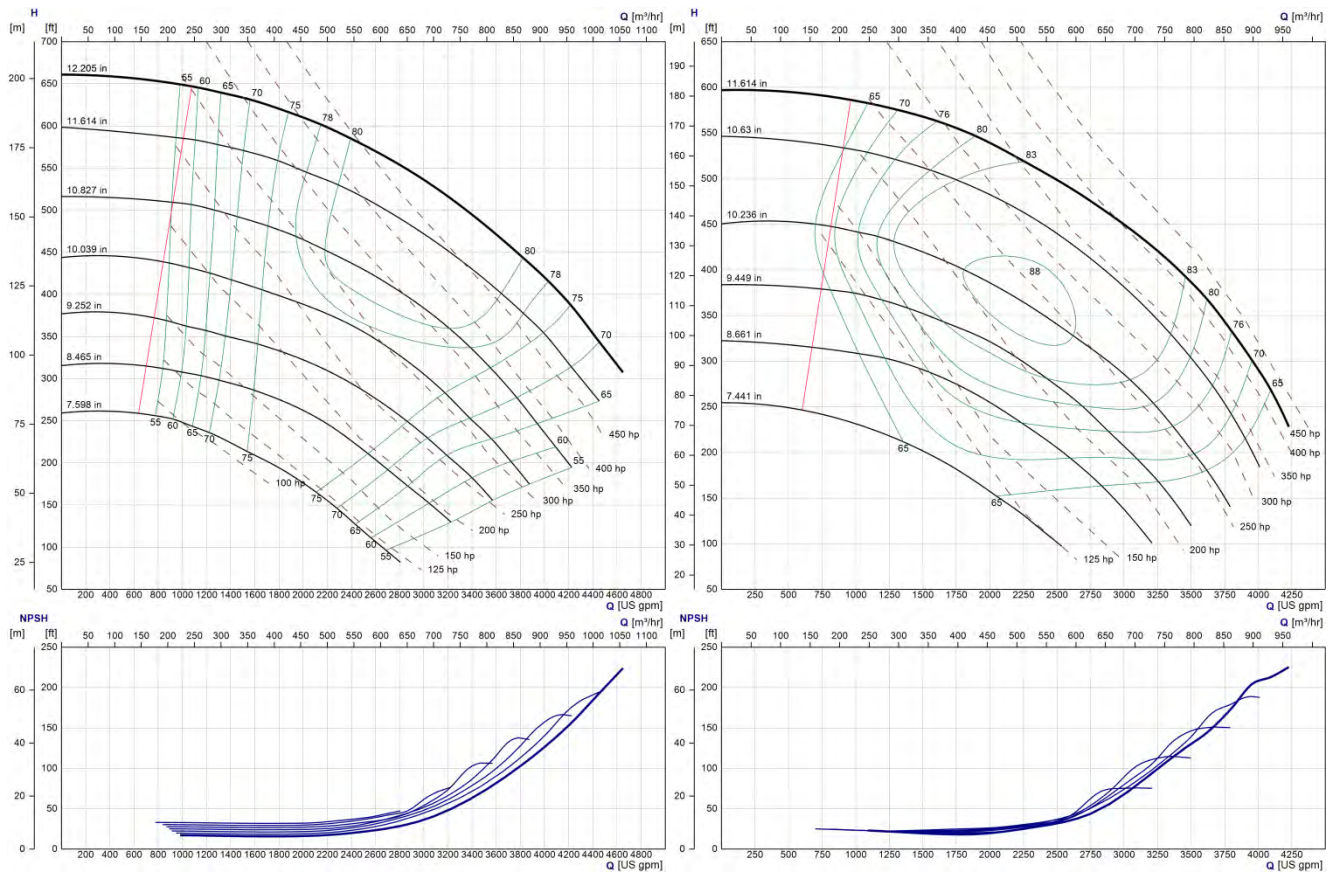
2-Pole Performance (e-HSC 4x6x13 & 4x6x12)



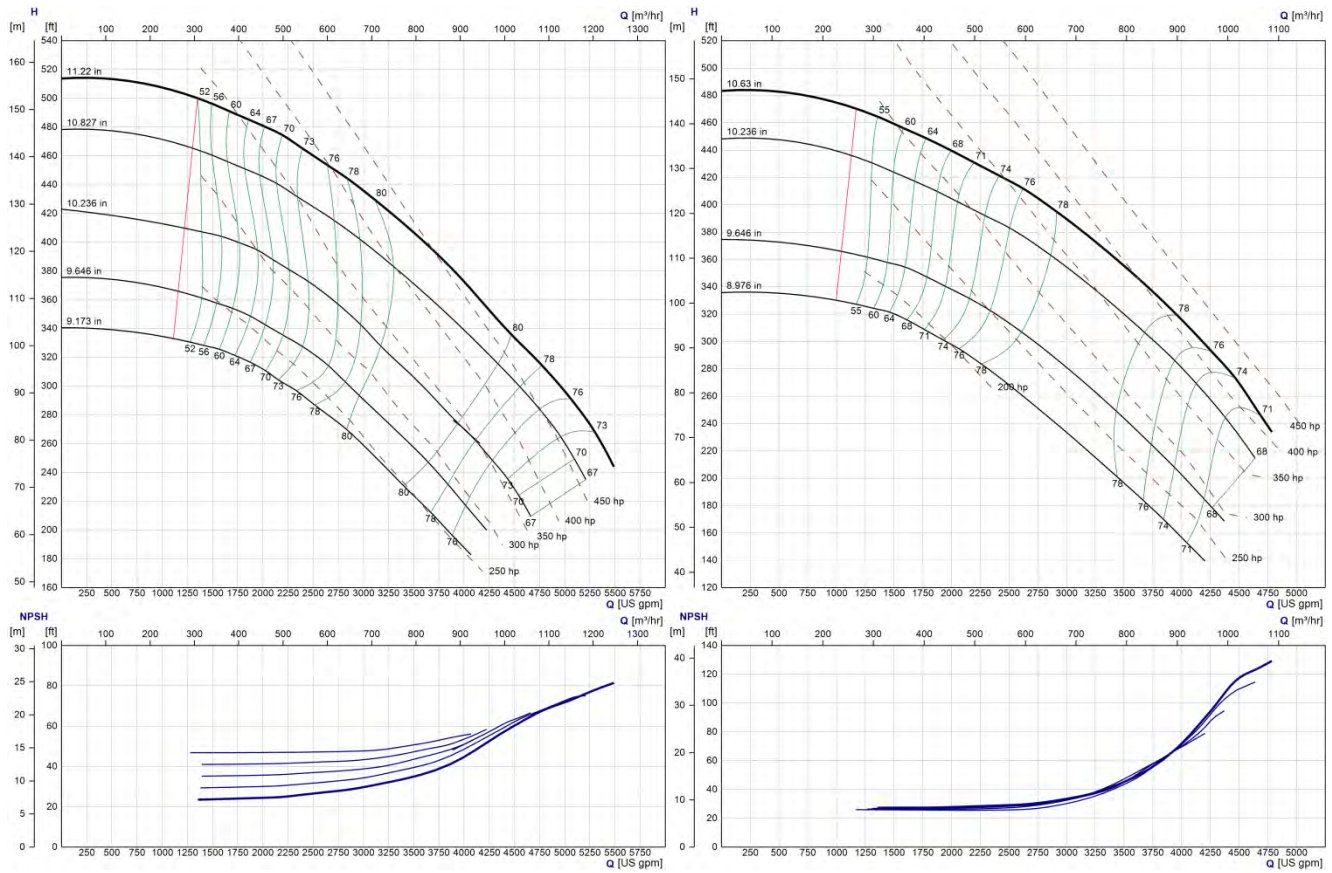
2-Pole Performance (e-HSC 5x8x9.5 & 5x8x9)



2-Pole Performance (e-HSC 5x8x12 & 5x8x11)



2-Pole Performance (e-HSC 6x10x11 & 6x10x10.5)



Useful Pump Formulas

Pressure (PSI) =	$\frac{\text{Head (Feet)} \times \text{Specific Gravity}}{2.31}$
Head (Feet) =	$\frac{\text{Pressure (PSI)} \times 2.31}{\text{Specific Gravity}}$
Vacuum (in. of Mercury) =	Dynamic Suction Lift (Feet) x .883 x Specific Gravity
Horsepower (Brake) =	$\frac{\text{GPM} \times \text{Head (Feet)} \times \text{Specific Gravity}}{3960 \times \text{Pump Efficiency}}$
Horsepower (Water) =	$\frac{\text{GPM} \times \text{Head (Feet)} \times \text{Specific Gravity}}{3960}$
Efficiency (Pump) =	$\frac{\text{Horsepower (Water)}}{\text{Horsepower (Brake)}} \times 100\%$
NPSH (Available) =	Positive Factors - Negative Factors

Affinity Laws: Effect of varying speed or impeller diameter.

	GPM Capacity	Head (Feet)	BHP
Impeller Diameter Change	$Q_2 = \frac{D_2}{D_1} \times Q_1$	$H_2 = \left(\frac{D_2}{D_1}\right)^2 \times H_1$	$P_2 = \left(\frac{D_2}{D_1}\right)^3 \times P_1$
Speed Change	$Q_2 = \frac{\text{RPM}_2}{\text{RPM}_1} \times Q_1$	$H_2 = \left(\frac{\text{RPM}_2}{\text{RPM}_1}\right)^2 \times H_1$	$P_2 = \left(\frac{\text{RPM}_2}{\text{RPM}_1}\right)^3 \times P_1$

Where Q = GPM, H = Head, P = BHP, D = Impeller Diameter, RPM = Pump Speed

Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services settings. Xylem also provides a leading portfolio of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

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We value your feedback. Please take our 3 question survey at **bellgossett.com/survey** to let us know how we are doing.



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