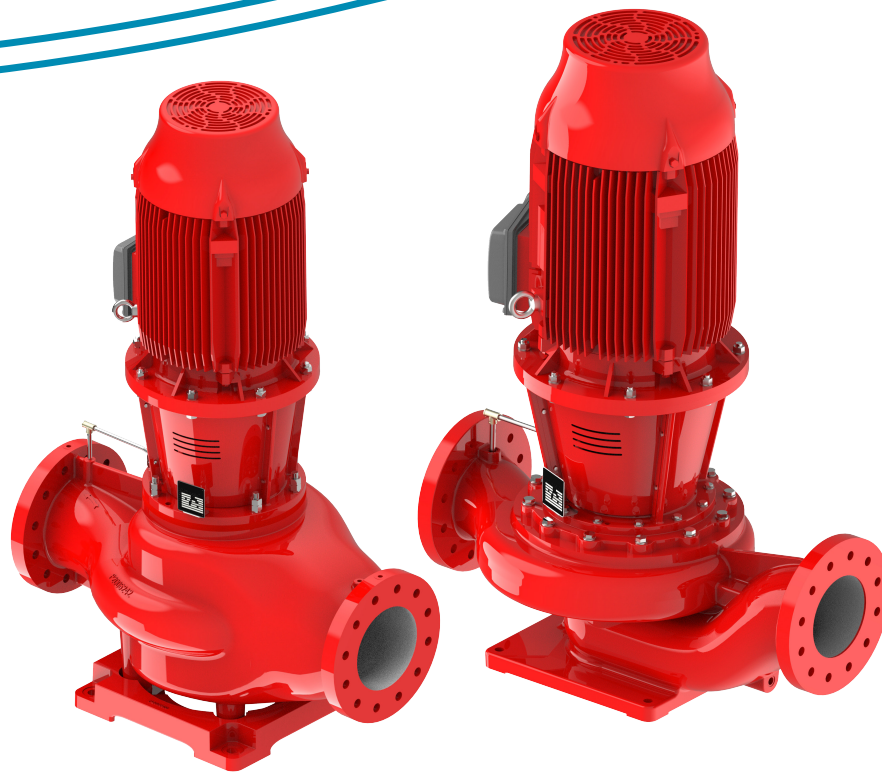
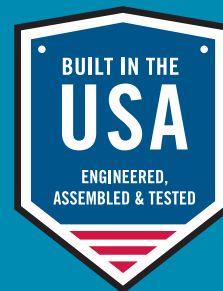




Series e-80SCXL

Split-Coupled Vertical In-Line Mounted Centrifugal Pump
Performance Curves



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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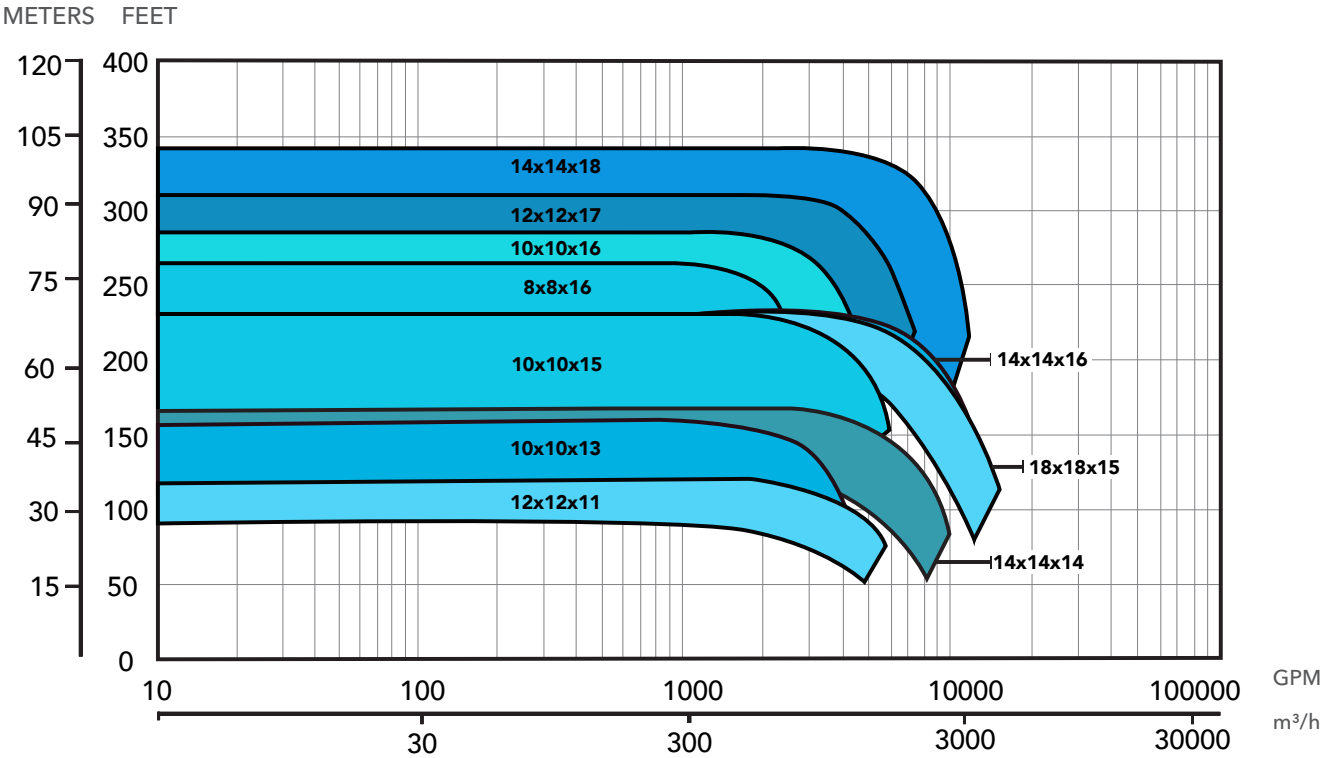
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Model List

No.	Pump Size ¹	Single Suction	Double Suction		No.	Pump Size ¹	365TC	404TC	405TC	444TC	445TC	447TC	449TC	509LLC	5011LLC
			Single Volute	Dual Volute											
1	8x8x16	•			1	8x8x16			•	•	•				
2	10x10x13	•			2	10x10x13	•	•	•	•					
3	10x10x15		•		3	10x10x15				•	•	•			
4	10x10x16	•			4	10x10x16				•	•	•			
5	12x12x11			•	5	12x12x11		•	•	•					
6	12x12x17			•	6	12x12x17					•	•	•	•	•
7	14x14x14		•		7	14x14x14					•	•			
8	14x14x16		•		8	14x14x16					•	•	•	•	•
9	14x14x18			•	9	14x14x18							•	•	•
10	18x18x15			•	10	18x18x15						•	•	•	•

¹Pump model nomenclature: (discharge diameter) x (suction diameter) x (impeller diameter) in inches

e-80SCXL Pump Performance Range



General Introduction

The e-80SCXL vertical in-line centrifugal pumps are an ideal solution for high pressure and high capacity applications. Our expanded line of energy efficient in-line pumps include 10 new split coupled models.

Applications

- Hydronic heating and cooling systems
- Light industrial process
- General service
- Pressure boosting
- OEM applications

Hydraulic Specifications

- Maximum flow: **approx. 14,500 U.S. GPM [3300 m³/h]**
- Maximum head: **approx. 340 ft. [100 m]**
- Hydraulic performance compliant with ANSI/HI 14.6 and ISO 9906:2012 (Grade 2B)

Fluid Temperature Range

- Standard configuration: **-20° to 300°F (-29°C to 149°C)**

Maximum Operating Pressure

- Casing working pressure: **250 psi [17 bar]**

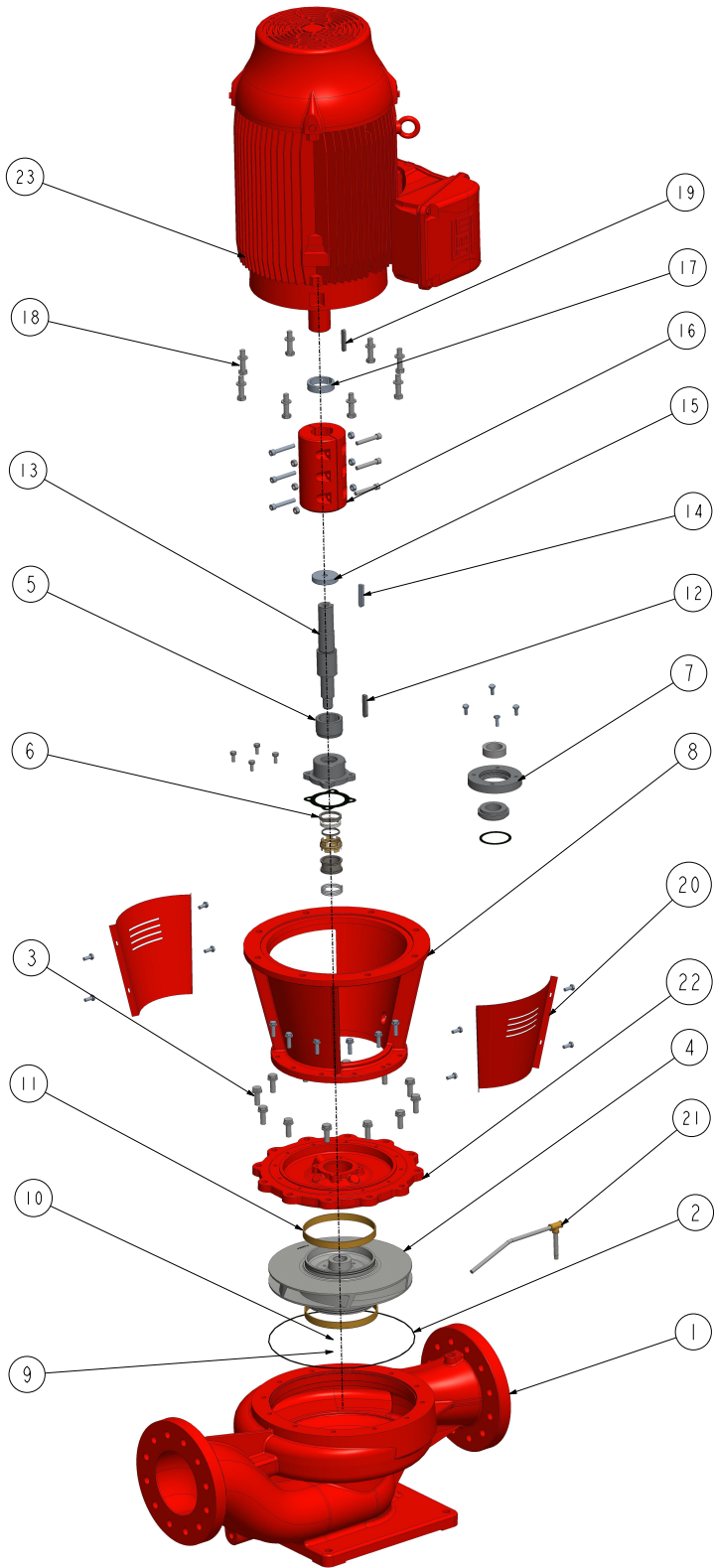
Flange Drilling Specifications

- ASME/ANSI B16.1, 125#
- ASME/ANSI B16.42 250#

Motor Specifications

- **NEMA Premium** efficiency per EISA 2010
- 4-pole ranges
- Maximum 3-phase ambient temperature: **104°F [40°C]**
- Inverter-Duty Ready
- Open Drip Proof (ODP) enclosure (standard)
- Performances according to **NEMA MG-1**
- **Class F** insulation
- Standard voltages: 3-Phase, 200, 230/460, 575 Volt

e-80SCXL General Exploded View



e-80SCXL LEGEND

NO	Description	QTY
1	Casing	1
2	Casing O-Ring	*
3	Volute Bolt & Washer	*
4	Impeller	1
5	Bearing	1
6	Inside Mechanical Seal	1
7	Outisde Mechanical Seal	1
8	Motor Bracket	1
9	Impeller Nut	1
10	Impeller Washer	1
11	Wear Ring	*
12	Impeller Key	1
13	Shaft	1
14	Coupling Key	1
15	Coupling Plate & Shaft Screw	1
16	Coupling Assembly	1
17	Coupling Ring	1
18	Motor Bracket Screw & Washer	*
19	Motor Shaft Key	1
20	Coupling Guard	2
21	Flush Line Assembly	1
22	Cover	1
23	Motor	1

*Quantity varies with pump size

NOTE: For some pumps in the series pump base is separate from pump volute.

Mechanical Seals

Material	Standard Bellows Seal, EPR/Carbon/Silicon Carbide	Optional Bellows Seal, Viton/Carbon/Silicon Carbide	Optional Bellows Seal, EPR/Carbon/Tungsten Carbide	Optional Bellows Seal, EPR/Silicon Carbide/Silicon Carbide	Optional Bellows Seal, Viton/Carbon/Tungsten Carbide	Optional Balanced Seal, Viton/Silicon Carbide/Silicon Carbide
Operating Temperature Range	-20 to 250°F	-10 to 225°F	-20 to 250°F	-20 to 250°F	-20 to 250°F	-15F to 400°F
pH Range limits	7.0 to 9.0	7.0 to 9.0	7.0 to 11.0	7.0 to 12.5	7.0 to 9.0	4.0 to 10.0
Resistance to Dissolved Solids	Low	Low	Low-Medium	Medium-High	Low-Medium	High
Maximum Glycol/Water Concentration	50/50%	50/50%	50/50%	60/40%	50/50%	50/50%

Material Configurations

Component	Standard Option	
Casing	Cast Iron	Ductile Iron
Impeller	Stainless Steel	
Wear Ring	Bronze	

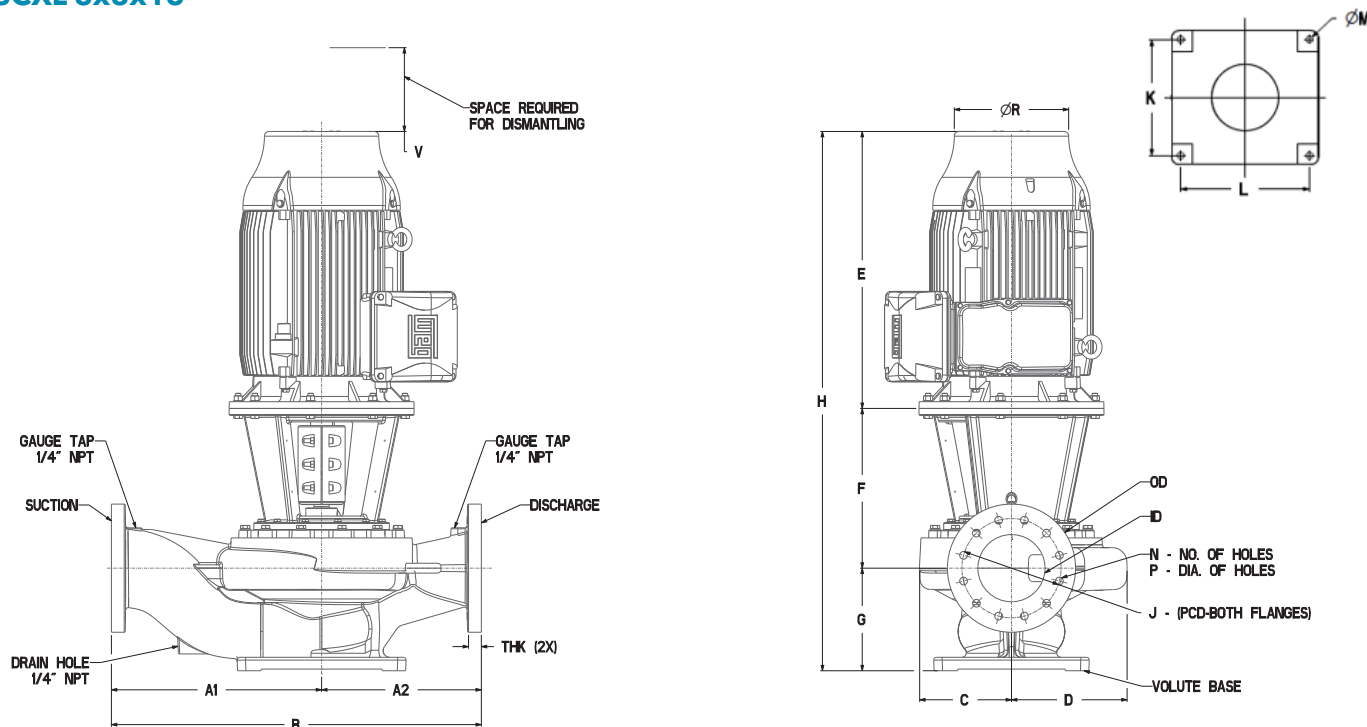
Other Accessories
Cuno Filter ¹
Sediment Separator ¹
Heat Exchanger ²

¹Available as a standalone kit only with sight flow indicator

²Available as kit only

e-80SCXL Pump Dimensional Data

e-80SCXL 8x8x16



**e-80SCXL Standard Configuration
DIMENSIONS - inches (mm)**

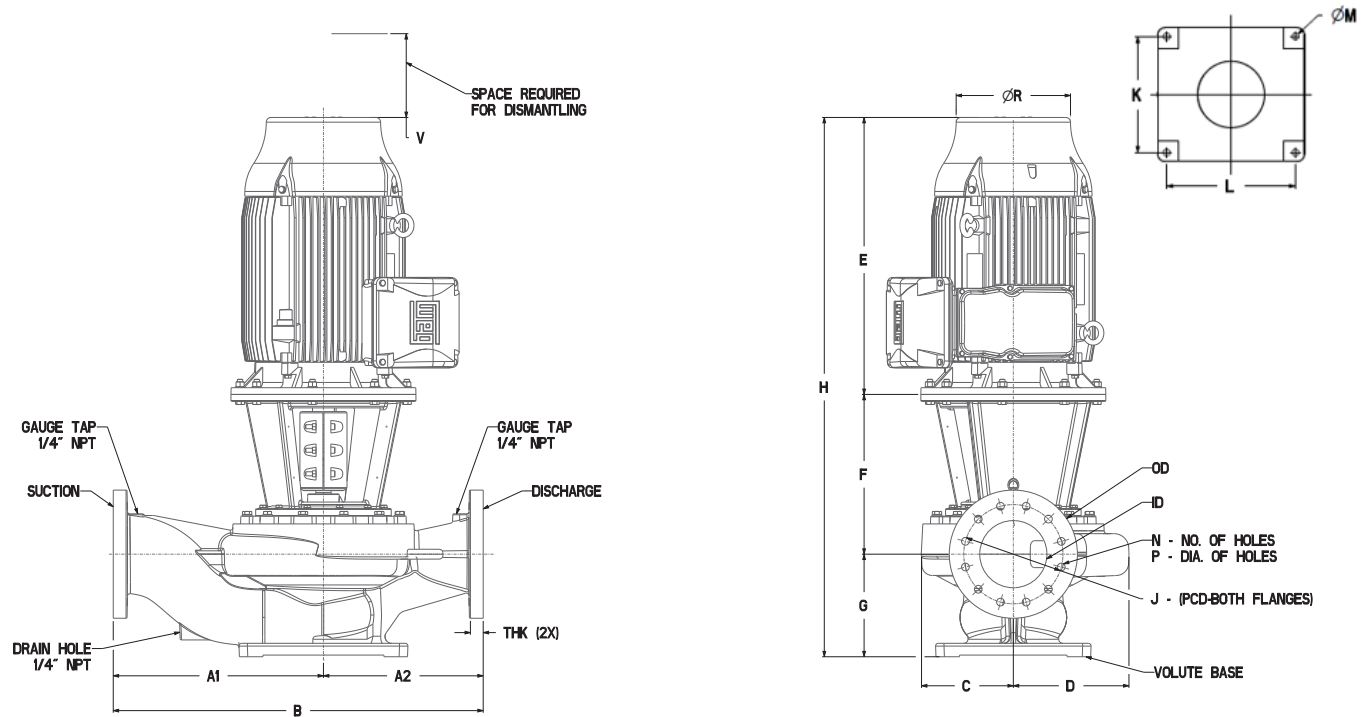
MOTOR FRAME	A1	A2	B	V (min)	Gauge Taps (NPT)	Drain Tap (NPT)	L	K	M	THK
405TC	24.61	18.70	43.31	8.25	0.25	0.25	17.32	15.75	0.91	1.61
	(625)	(475)	(1100)	(210)			(440)	(400)	(23)	(41)
444TC	24.61	18.70	43.31	9.50	0.25	0.25	17.32	15.75	0.91	1.61
	(625)	(475)	(1100)	(241)			(440)	(400)	(23)	(41)
445TC	24.61	18.70	43.31	9.50	0.25	0.25	17.32	15.75	0.91	1.61
	(625)	(475)	(1100)	(241)			(440)	(400)	(23)	(41)

**e-80SCXL Standard Configuration
DIMENSIONS - inches (mm)**

MOTOR FRAME	C	D	E (max)	F	G	H (max)	125# ANSI			250# ANSI			R	ID	OD
							J	N	P	J	N	P			
405TC	10.82	13.58	32.50	19.90	12.00	64.40	11.75	8	0.88	13.00	12	0.88	18.44	7.87	15.00
	(275)	(345)	(826)	(505)	(305)	(1636)	(298)		(22)	(330)		(22)	(468)	(200)	(381)
444TC	10.82	13.58	47.88	21.85	12.00	81.73	11.75	8	0.88	13.00	12	1.00	22.69	7.87	15.00
	(275)	(345)	(1216)	(555)	(305)	(2076)	(298)		(22)	(330)		(25)	(576)	(200)	(381)
445TC	10.82	13.58	47.88	21.85	12.00	81.73	11.75	8	0.88	13.00	12	1.00	22.69	7.87	15.00
	(275)	(345)	(1216)	(555)	(305)	(2076)	(298)		(22)	(330)		(25)	(576)	(200)	(381)

Dimensions are subject to change. Not to be used for construction purposes unless certified.

e-80SCXL 10x10x13

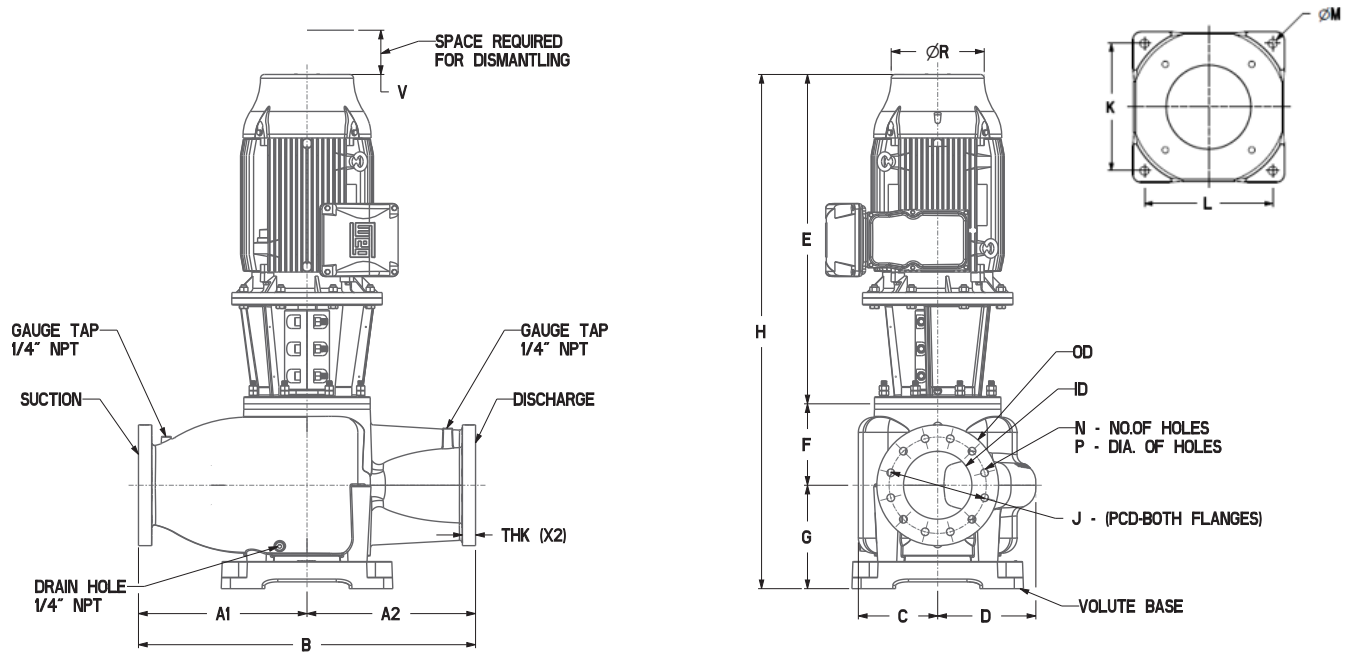


e-80SCXL Standard Configuration DIMENSIONS - inches (mm)										
MOTOR FRAME	A1	A2	B	V (min)	Gauge Taps (NPT)	Drain Tap (NPT)	L	K	M	THK
365TC	22.64	16.73	39.37	6.88	0.25	0.25	17.32	17.32	0.91	1.89
	(575)	(425)	(1000)	(175)			(440)	(440)	(23)	(48)
404TC	22.64	16.73	39.37	8.25	0.25	0.25	17.32	17.32	0.91	1.89
	(575)	(425)	(1000)	(210)			(440)	(440)	(23)	(48)
405TC	22.64	16.73	39.37	8.25	0.25	0.25	17.32	17.32	0.91	1.89
	(575)	(425)	(1000)	(210)			(440)	(440)	(23)	(48)
444TC	22.64	16.73	39.37	9.50	0.25	0.25	17.32	17.32	0.91	1.89
	(575)	(425)	(1000)	(241)			(440)	(440)	(23)	(48)

e-80SCXL Standard Configuration DIMENSIONS - inches (mm)															
MOTOR FRAME	C	D	E (max)	F	G	H (max)	125# ANSI			250# ANSI			R	ID	OD
							J	N	P	J	N	P			
365TC	11.34	13.98	28.69	19.90	14.57	63.15	14.25	12	1.00	15.25	16	1.13	17.50	9.84	17.52
	(288)	(355)	(729)	(505)	(370)	(1604)	(362)		(25)	(387)		(29)	(445)	(250)	(445)
404TC	11.34	13.98	32.50	19.90	14.57	66.97	14.25	12	1.00	15.25	16	1.13	18.44	9.84	17.52
	(288)	(355)	(826)	(505)	(370)	(1701)	(362)		(25)	(387)		(29)	(468)	(250)	(445)
405TC	11.34	13.98	32.50	19.90	14.57	66.97	14.25	12	1.00	15.25	16	1.13	18.44	9.84	17.52
	(288)	(355)	(826)	(505)	(370)	(1701)	(362)		(25)	(387)		(29)	(468)	(250)	(445)
444TC	11.34	13.98	47.88	21.20	14.57	83.64	14.25	12	1.00	15.25	16	1.13	22.69	9.84	17.52
	(288)	(355)	(1216)	(538)	(370)	(2125)	(362)		(25)	(387)		(29)	(576)	(250)	(445)

Dimensions are subject to change. Not to be used for construction purposes unless certified.

e-80SCXL 10x10x15



**e-80SCXL Standard Configuration
DIMENSIONS - inches (mm)**

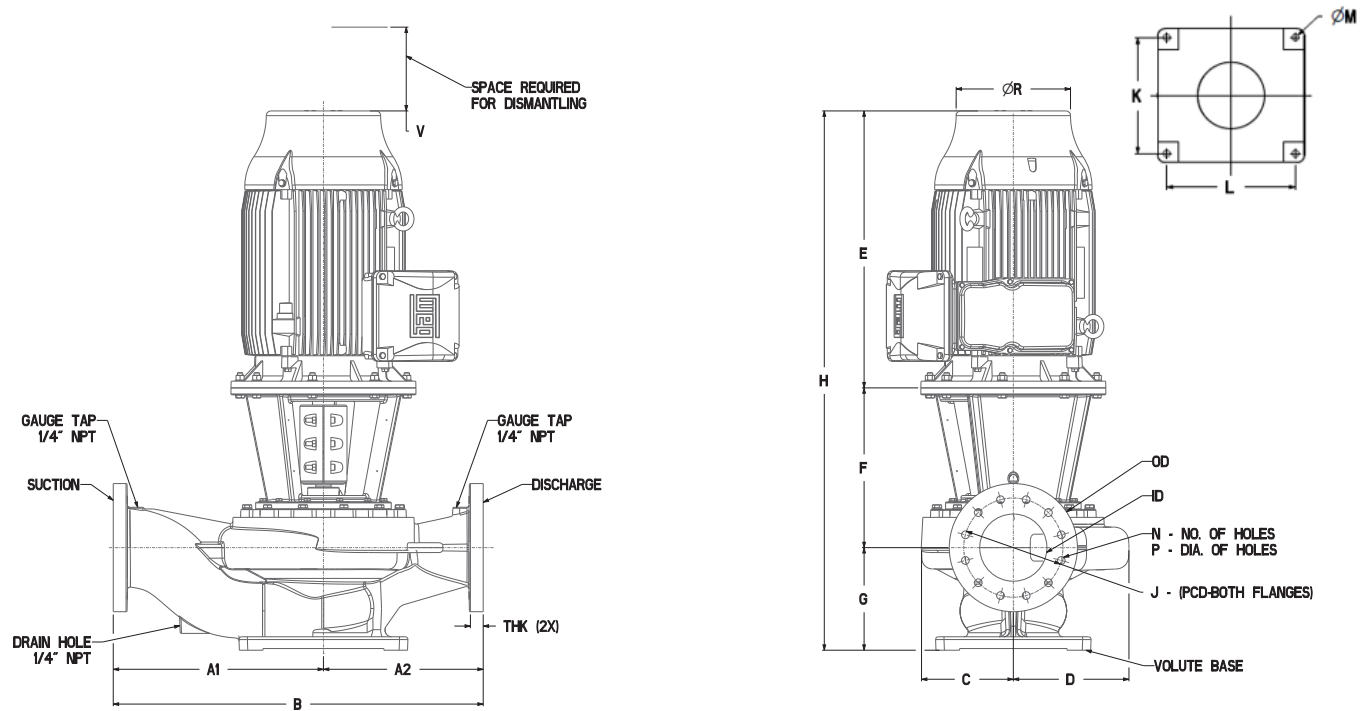
MOTOR FRAME	A1	A2	B	V (min)	Gauge Taps (NPT)	Drain Tap (NPT)	L	K	M	THK
444TC	24.25	24.25	48.50	9.50	0.25	0.25	20.87	20.87	1.42	1.89
	(616)	(616)	(1232)	(241)			(530)	(530)	(36)	(48)
445TC	24.25	24.25	48.50	9.50	0.25	0.25	20.87	20.87	1.42	1.89
	(616)	(616)	(1232)	(241)			(530)	(530)	(36)	(48)
447TC	24.25	24.25	48.50	9.50	0.25	0.25	20.87	20.87	1.42	1.89
	(616)	(616)	(1232)	(241)			(530)	(530)	(36)	(48)

**e-80SCXL Standard Configuration
DIMENSIONS - inches (mm)**

MOTOR FRAME	C	D	E (max)	F	G	H (max)	125# ANSI			250# ANSI			R	ID	OD
							J	N	P	J	N	P			
444TC	11.65	14.33	47.88	29.15	15.00	92.03	14.25	12	1.00	15.25	16	1.13	22.69	9.84	17.52
	(296)	(364)	(1216)	(740)	(381)	(2338)	(362)		(25)	(387)		(29)	(576)	(250)	(445)
445TC	11.65	14.33	47.88	29.15	15.00	92.03	14.25	12	1.00	15.25	16	1.13	22.69	9.84	17.52
	(296)	(364)	(1216)	(740)	(381)	(2338)	(362)		(25)	(387)		(29)	(576)	(250)	(445)
447TC	11.65	14.33	47.88	29.15	15.00	92.03	14.25	12	1.00	15.25	16	1.13	22.69	9.84	17.52
	(296)	(364)	(1216)	(740)	(381)	(2338)	(362)		(25)	(387)		(29)	(576)	(250)	(445)

Dimensions are subject to change. Not to be used for construction purposes unless certified.

e-80SCXL 10x10x16

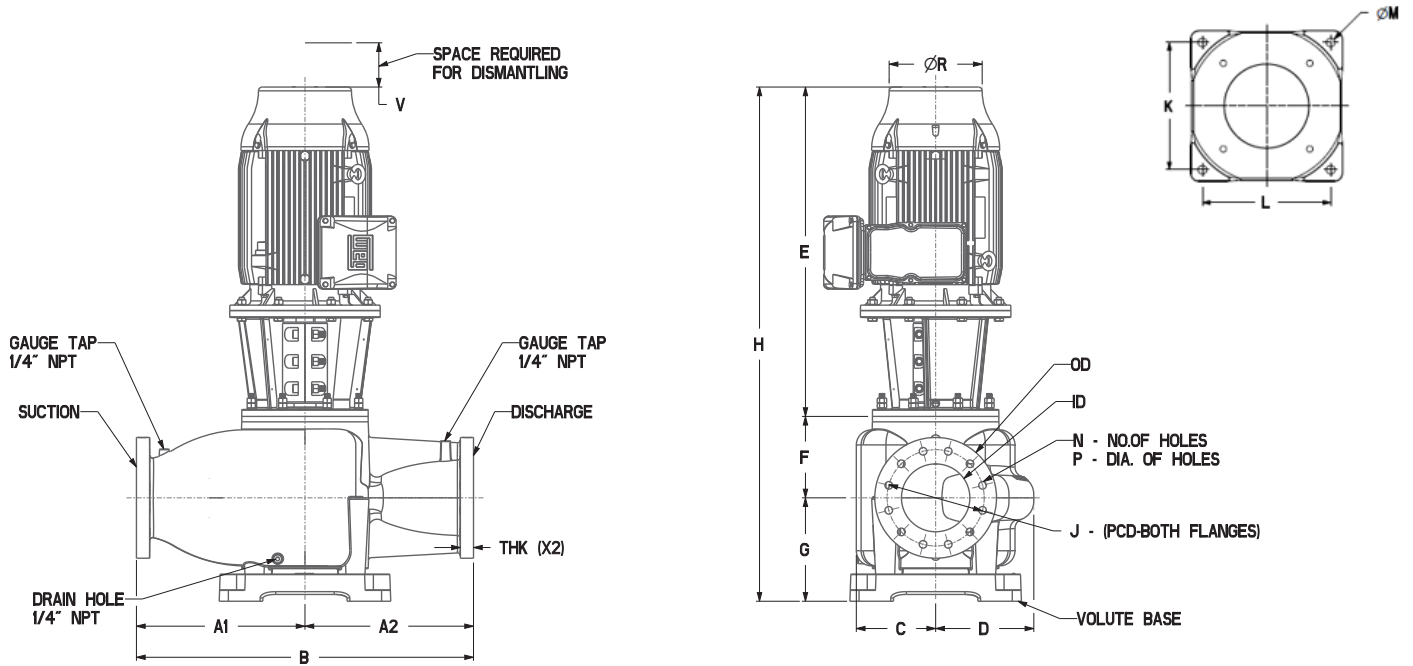


e-80SCXL Standard Configuration DIMENSIONS - inches (mm)										
MOTOR FRAME	A1	A2	B	V (min)	Gauge Taps (NPT)	Drain Tap (NPT)	L	K	M	THK
444TC	25.59	19.69	45.28	9.50	0.25	0.25	17.32	17.32	0.95	1.89
	(650)	(500)	(1150)	(241)			(440)	(440)	(24)	(49)
445TC	25.59	19.69	45.28	9.50	0.25	0.25	17.32	17.32	0.95	1.89
	(650)	(500)	(1150)	(241)			(440)	(440)	(24)	(48)
447TC	25.59	19.69	45.28	9.50	0.25	0.25	17.32	17.32	0.95	1.89
	(650)	(500)	(1150)	(241)			(440)	(440)	(24)	(48)

e-80SCXL Standard Configuration DIMENSIONS - inches (mm)															
MOTOR FRAME	C	D	E (max)	F	G	H (max)	125# ANSI			250# ANSI			R	ID	OD
							J	N	P	J	N	P			
444TC	12.36	14.69	47.88	25.81	13.98	87.66	14.25	12	1.00	15.25	16	1.13	22.69	9.84	17.52
	(314)	(373)	(1216)	(655)	(355)	(2227)	(362)		(25)	(387)		(29)	(579)	(250)	(445)
445TC	12.36	14.69	47.88	25.81	13.98	87.66	14.25	12	1.00	15.25	16	1.13	22.69	9.84	17.52
	(314)	(373)	(1216)	(655)	(355)	(2227)	(362)		(25)	(387)		(29)	(576)	(250)	(445)
447TC	12.36	14.69	47.88	25.81	13.98	87.66	14.25	12	1.00	15.25	16	1.13	22.69	9.84	17.52
	(314)	(373)	(1216)	(655)	(355)	(2227)	(362)		(25)	(387)		(29)	(576)	(250)	(445)

Dimensions are subject to change. Not to be used for construction purposes unless certified.

e-80SCXL 12x12x11



**e-80SCXL Standard Configuration
DIMENSIONS - inches (mm)**

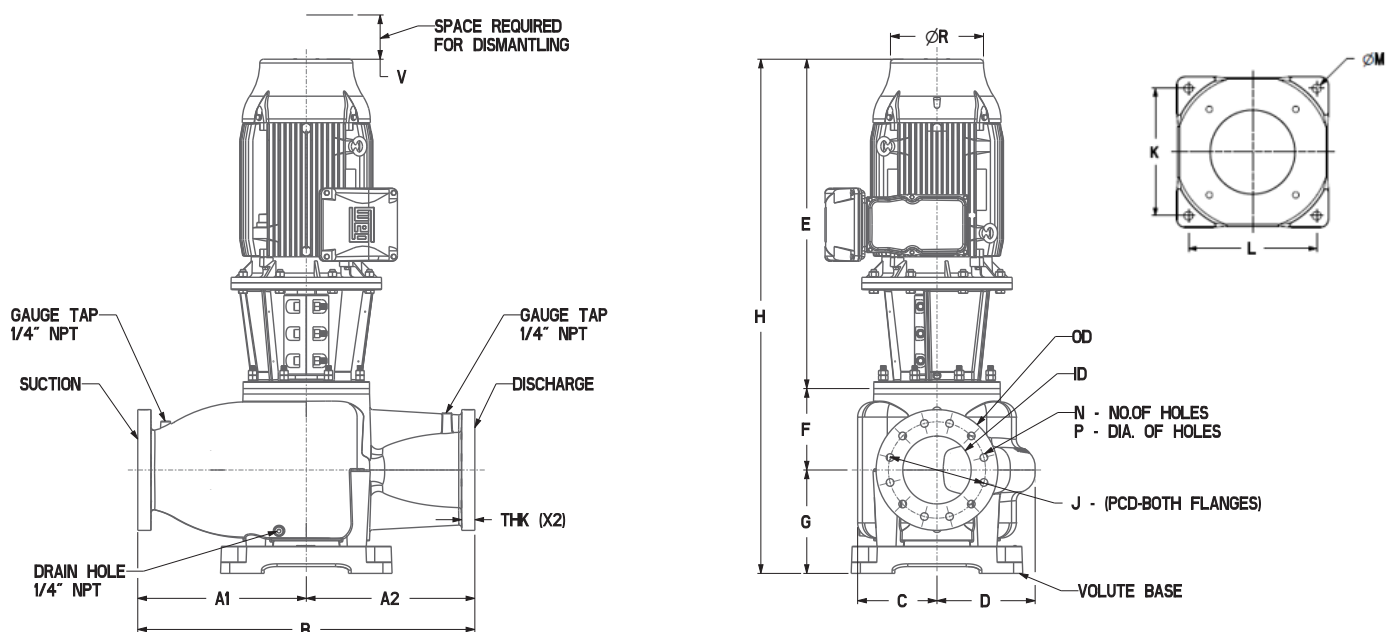
MOTOR FRAME	A1	A2	B	V (min)	Gauge Taps (NPT)	Drain Tap (NPT)	L	K	M	THK
404TC	22.13	20.87	42.99	8.25	0.25	0.25	24.02	24.02	1.42	2.00
	(562)	(530)	(1092)	(210)			(610)	(610)	(36)	(51)
405TC	22.13	20.87	42.99	8.25	0.25	0.25	24.02	24.02	1.42	2.00
	(562)	(530)	(1092)	(210)			(610)	(610)	(36)	(51)
444TC	22.13	20.87	42.99	9.50	0.25	0.25	24.02	24.02	1.42	2.00
	(562)	(530)	(1092)	(241)			(610)	(610)	(36)	(51)

**e-80SCXL Standard Configuration
DIMENSIONS - inches (mm)**

MOTOR FRAME	C	D	E (max)	F	G	H (max)	125# ANSI			250# ANSI			R	ID	OD
							J	N	P	J	N	P			
404TC	11.54	16.62	32.50	26.91	13.07	72.48	17.00	12	1.00	17.75	16	1.25	18.44	11.81	20.51
	(293)	(422)	(826)	(683)	(332)	(1841)	(432)		(25)	(451)		(32)	(468)	(300)	(521)
405TC	11.54	16.62	32.50	26.91	13.07	72.48	17.00	12	1.00	17.75	16	1.25	18.44	11.81	20.51
	(293)	(422)	(826)	(683)	(332)	(1841)	(432)		(25)	(451)		(32)	(468)	(300)	(521)
444TC	11.54	16.62	47.88	28.22	13.07	89.17	17.00	12	1.00	17.75	16	1.25	22.69	11.81	20.51
	(293)	(422)	(1216)	(717)	(332)	(2265)	(432)		(25)	(451)		(32)	(576)	(300)	(521)

Dimensions are subject to change. Not to be used for construction purposes unless certified.

e-80SCXL 12x12x17



**e-80SCXL Standard Configuration
DIMENSIONS - inches (mm)**

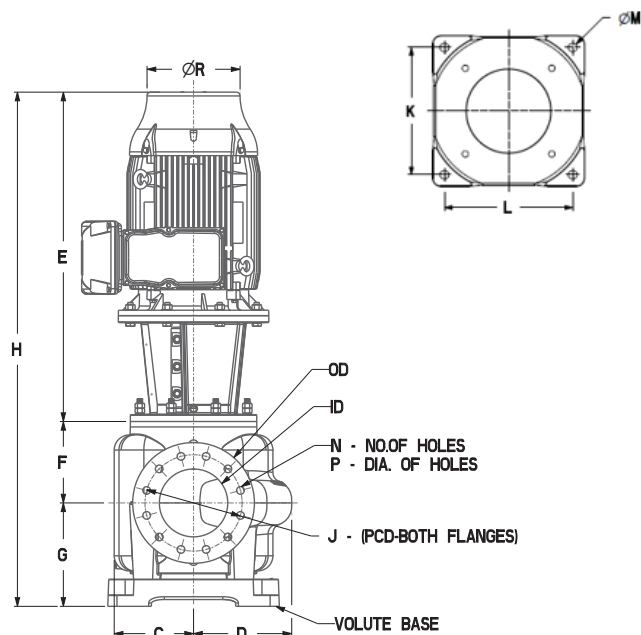
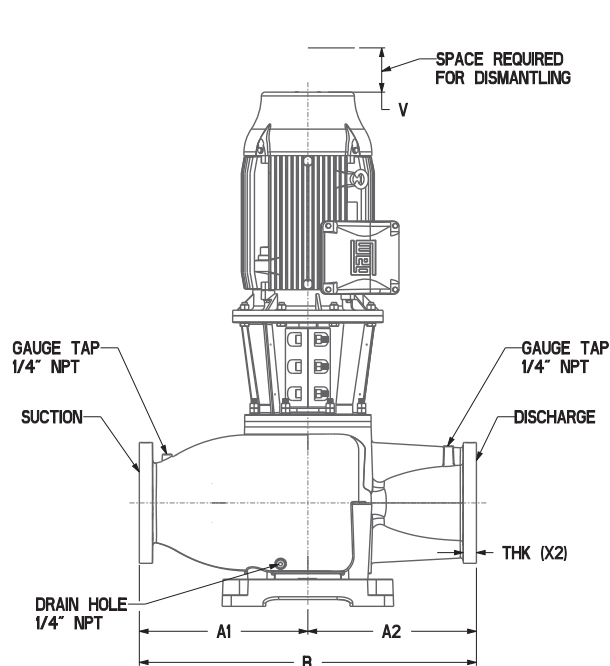
MOTOR FRAME	A1	A2	B	V (min)	Gauge Taps (NPT)	Drain Tap (NPT)	L	K	M	THK
445TC	24.88	23.62	48.50	9.50	0.25	0.25	27.95	27.95	1.42	2.00
	(632)	(600)	(1232)	(241)			(710)	(710)	(36)	(51)
447TC	24.88	23.62	48.50	9.50	0.25	0.25	27.95	27.95	1.42	2.00
	(632)	(600)	(1232)	(241)			(710)	(710)	(36)	(51)
449TC	24.88	23.62	48.50	9.50	0.25	0.25	27.95	27.95	1.42	2.00
	(632)	(600)	(1232)	(241)			(710)	(710)	(36)	(51)
509LLC	24.88	23.62	48.50	10.88	0.25	0.25	27.95	27.95	1.42	2.00
	(632)	(600)	(1232)	(276)			(710)	(710)	(36)	(51)
5011LLC	24.88	23.62	48.50	10.88	0.25	0.25	27.95	27.95	1.42	2.00
	(632)	(600)	(1232)	(276)			(710)	(710)	(36)	(51)

**e-80SCXL Standard Configuration
DIMENSIONS - inches (mm)**

MOTOR FRAME	C	D	E (max)	F	G	H (max)	125# ANSI			250# ANSI			R	ID	OD
							J	N	P	J	N	P			
445TC	13.50	17.58	47.88	28.56	12.40	88.84	17.00	12	1.00	17.75	16	1.25	22.69	11.81	20.51
	(343)	(447)	(1216)	(725)	(315)	(2257)	(432)		(25)	(451)		(32)	(576)	(300)	(521)
447TC	13.50	17.58	47.88	28.56	12.40	88.84	17.00	12	1.00	17.75	16	1.25	22.69	11.81	20.51
	(343)	(447)	(1216)	(725)	(315)	(2257)	(432)		(25)	(451)		(32)	(576)	(300)	(521)
449TC	13.50	17.58	47.88	28.56	12.40	88.84	17.00	12	1.00	17.75	16	1.25	22.69	11.81	20.51
	(343)	(447)	(1216)	(725)	(315)	(2257)	(432)		(25)	(451)		(32)	(576)	(300)	(521)
509LLC	13.50	17.58	53.38	27.31	12.40	93.09	17.00	12	1.00	17.75	16	1.25	26.00	11.81	20.51
	(343)	(447)	(1356)	(694)	(315)	(2364)	(432)		(25)	(451)		(32)	(660)	(300)	(521)
5011LLC	13.50	17.58	61.38	27.31	12.40	101.09	17.00	12	1.00	17.75	16	1.25	26.00	11.81	20.51
	(343)	(447)	(1559)	(694)	(315)	(2568)	(432)		(25)	(451)		(32)	(660)	(300)	(521)

Dimensions are subject to change. Not to be used for construction purposes unless certified.

e-80SCXL 14x14x14

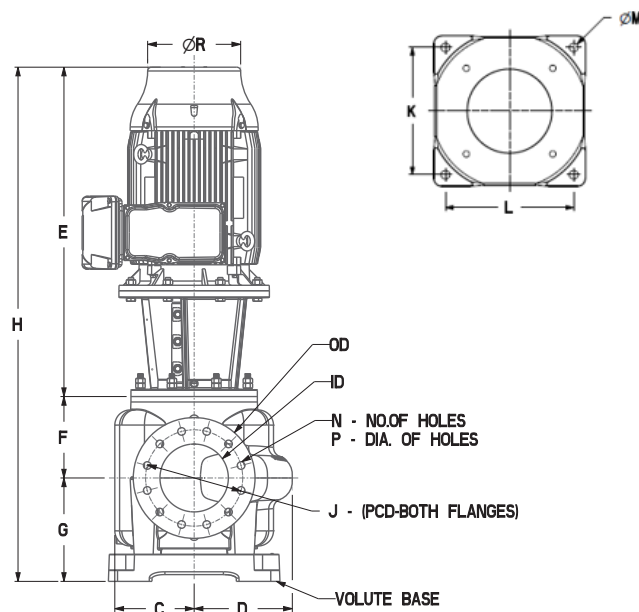
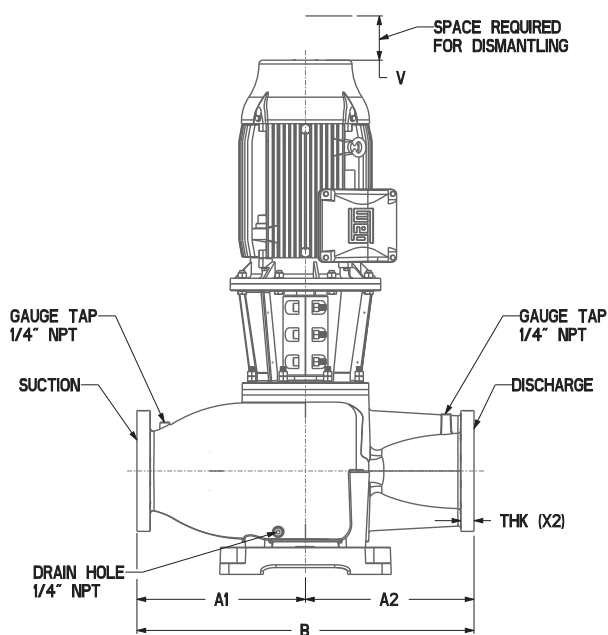


e-80SCXL Standard Configuration DIMENSIONS - inches (mm)										
MOTOR FRAME	A1	A2	B	V (min)	Gauge Taps (NPT)	Drain Tap (NPT)	L	K	M	THK
445TC	26.00	26.00	52.01	9.50	0.25	0.25	20.87	20.87	1.42	2.13
	(660.50)	(660.50)	(1321)	(241)			(530)	(530)	(36)	(54)
447TC	26.00	26.00	52.01	9.50	0.25	0.25	20.87	20.87	1.42	2.13
	(660.50)	(660.50)	(1321)	(241)			(530)	(530)	(36)	(54)

e-80SCXL Standard Configuration DIMENSIONS - inches (mm)															
MOTOR FRAME	C	D	E (max)	F	G	H (max)	125# ANSI			250# ANSI			R	ID	OD
							J	N	P	J	N	P			
445TC	11.93	16.87	47.88	29.74	15.31	92.93	18.75	12	1.13	20.25	20	1.25	22.69	13.78	22.99
	(303)	(429)	(1216)	(755)	(389)	(2360)	(476)		(29)	(514)		(32)	(576)	(350)	(584)
447TC	11.93	16.87	47.88	29.74	15.31	92.93	18.75	12	1.13	20.25	20	1.25	22.69	13.78	22.99
	(303)	(429)	(1216)	(755)	(389)	(2360)	(476)		(29)	(514)		(32)	(576)	(350)	(584)

Dimensions are subject to change. Not to be used for construction purposes unless certified.

e-80SCXL 14x14x16



**e-80SCXL Standard Configuration
DIMENSIONS - inches (mm)**

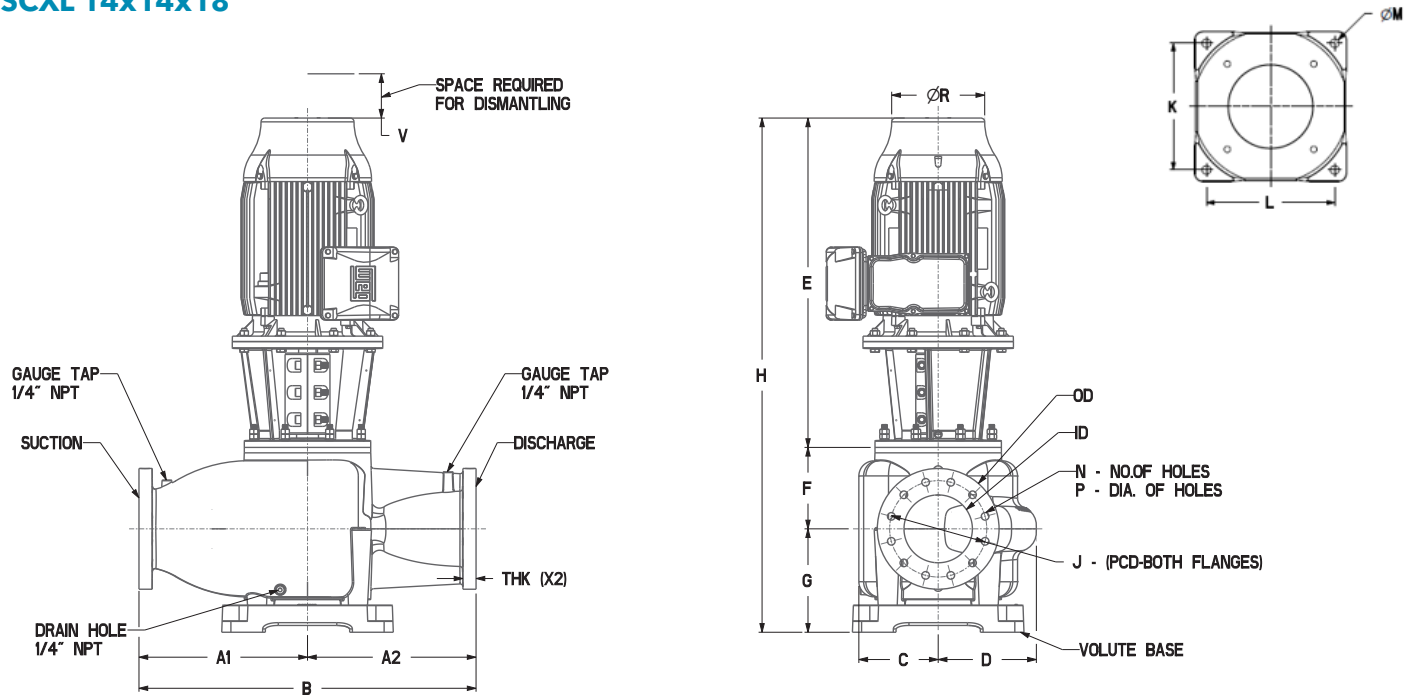
MOTOR FRAME	A1	A2	B	V (min)	Gauge Taps (NPT)	Drain Tap (NPT)	L	K	M	THK
445TC	27.17	24.80	51.97	9.50	0.25	0.25	20.87	20.87	1.10	2.13
	(690)	(630)	(1320)	(241)			(530)	(530)	(28)	(54)
447TC	27.17	24.80	51.97	9.50	0.25	0.25	20.87	20.87	1.10	2.13
	(690)	(630)	(1320)	(241)			(530)	(530)	(28)	(54)
449TC	27.17	24.80	51.97	9.50	0.25	0.25	20.87	20.87	1.10	2.13
	(690)	(630)	(1320)	(241)			(530)	(530)	(28)	(54)
509LLC	27.17	24.80	51.97	10.88	0.25	0.25	20.87	20.87	1.10	2.13
	(690)	(630)	(1320)	(276)			(530)	(530)	(28)	(54)
5011LLC	27.17	24.80	51.97	10.88	0.25	0.25	20.87	20.87	1.10	2.13
	(690)	(630)	(1320)	(276)			(530)	(530)	(28)	(54)

**e-80SCXL Standard Configuration
DIMENSIONS - inches (mm)**

MOTOR FRAME	C	D	E (max)	F	G	H (max)	125# ANSI			250# ANSI			R	ID	OD
							J	N	P	J	N	P			
445TC	14.35	17.78	47.88	27.00	15.94	90.82	18.75	12	1.13	20.25	20	1.25	22.69	13.78	22.99
	(365)	(452)	(1216)	(686)	(405)	(2307)	(476)		(29)	(514)		(32)	(576)	(350)	(584)
447TC	14.35	17.78	47.88	27.00	15.94	90.82	18.75	12	1.13	20.25	20	1.25	22.69	13.78	22.99
	(365)	(452)	(1216)	(686)	(405)	(2307)	(476)		(29)	(514)		(32)	(576)	(350)	(584)
449TC	14.35	17.78	47.88	27.00	15.94	90.82	18.75	12	1.13	20.25	20	1.25	22.69	13.78	22.99
	(365)	(452)	(1216)	(686)	(405)	(2307)	(476)		(29)	(514)		(32)	(576)	(350)	(584)
509LLC	14.35	17.78	53.38	25.75	15.94	95.07	18.75	12	1.13	20.25	20	1.25	26.00	13.78	22.99
	(365)	(452)	(1356)	(654)	(405)	(2415)	(476)		(29)	(514)		(32)	(660)	(350)	(584)
5011LLC	14.35	17.78	61.38	25.75	15.94	103.07	18.75	12	1.13	20.25	20	1.25	26.00	13.78	22.99
	(365)	(452)	(1559)	(654)	(405)	(2618)	(476)		(29)	(514)		(32)	(660)	(350)	(584)

Dimensions are subject to change. Not to be used for construction purposes unless certified.

e-80SCXL 14x14x18

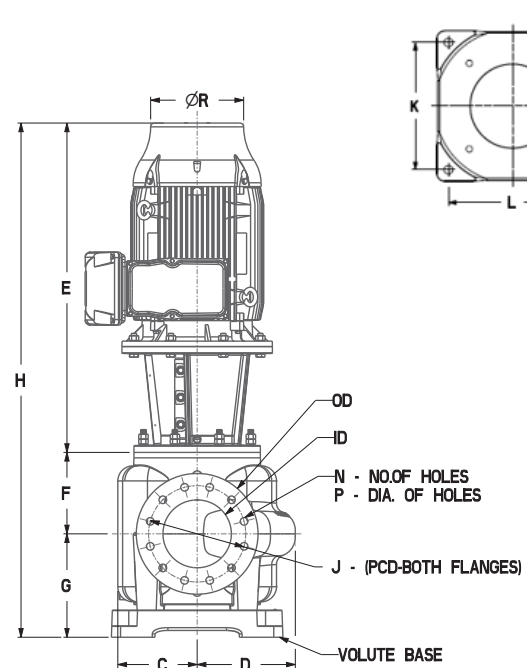
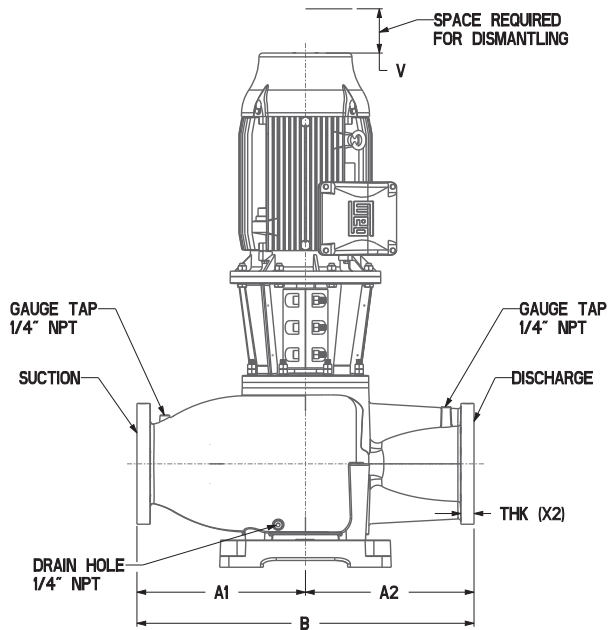


e-80SCXL Standard Configuration DIMENSIONS - inches (mm)										
MOTOR FRAME	A1	A2	B	V (min)	Gauge Taps (NPT)	Drain Tap (NPT)	L	K	M	THK
449TC	25.04	27.56	52.60	9.50	0.25	0.25	27.95	27.95	1.42	2.13
	(636)	(700)	(1336)	(241)			(710)	(710)	(36)	(54)
509LLC	25.04	27.56	52.60	10.88	0.25	0.25	27.95	27.95	1.42	2.13
	(636)	(700)	(1336)	(276)			(710)	(710)	(36)	(54)
5011LLC	25.04	27.56	52.60	10.88	0.25	0.25	27.95	27.95	1.42	2.13
	(636)	(700)	(1336)	(276)			(710)	(710)	(36)	(54)

e-80SCXL Standard Configuration DIMENSIONS - inches (mm)															
MOTOR FRAME	C	D	E (max)	F	G	H (max)	125# ANSI			250# ANSI			R	ID	OD
							J	N	P	J	N	P			
449TC	14.85	19.89	47.88	30.92	15.35	94.15	18.75	12	1.13	20.25	20	1.25	22.69	13.78	22.99
	(377)	(505)	(1216)	(785)	(390)	(2391)	(476)		(29)	(514)		(32)	(576)	(350)	(584)
509LLC	14.85	19.89	53.38	29.70	15.35	98.43	18.75	12	1.13	20.25	20	1.25	26.00	13.78	22.99
	(377)	(505)	(1356)	(754)	(390)	(2500)	(476)		(29)	(514)		(32)	(660)	(350)	(584)
5011LLC	14.85	19.89	61.38	29.70	15.35	106.43	18.75	12	1.13	20.25	20	1.25	26.00	13.78	22.99
	(377)	(505)	(1559)	(754)	(390)	(2703)	(476)		(29)	(514)		(32)	(660)	(350)	(584)

Dimensions are subject to change. Not to be used for construction purposes unless certified.

e-80SCXL 18x18x15



**e-80SCXL Standard Configuration
DIMENSIONS - inches (mm)**

MOTOR FRAME	A1	A2	B	V (min)	Gauge Taps (NPT)	Drain Tap (NPT)	L	K	M	THK
447TC	31.10	29.53	60.63	9.50	0.25	0.25	27.95	27.95	1.42	2.36
	(790)	(750)	(1540)	(241)			(710)	(710)	(36)	(60)
449TC	31.10	29.53	60.63	9.50	0.25	0.25	27.95	27.95	1.42	2.36
	(790)	(750)	(1540)	(241)			(710)	(710)	(36)	(60)
509LLC	31.10	29.53	60.63	10.88	0.25	0.25	27.95	27.95	1.42	2.36
	(790)	(750)	(1540)	(276)			(710)	(710)	(36)	(60)
5011LLC	31.10	29.53	60.63	10.88	0.25	0.25	27.95	27.95	1.42	2.36
	(790)	(750)	(1540)	(276)			(710)	(710)	(36)	(60)

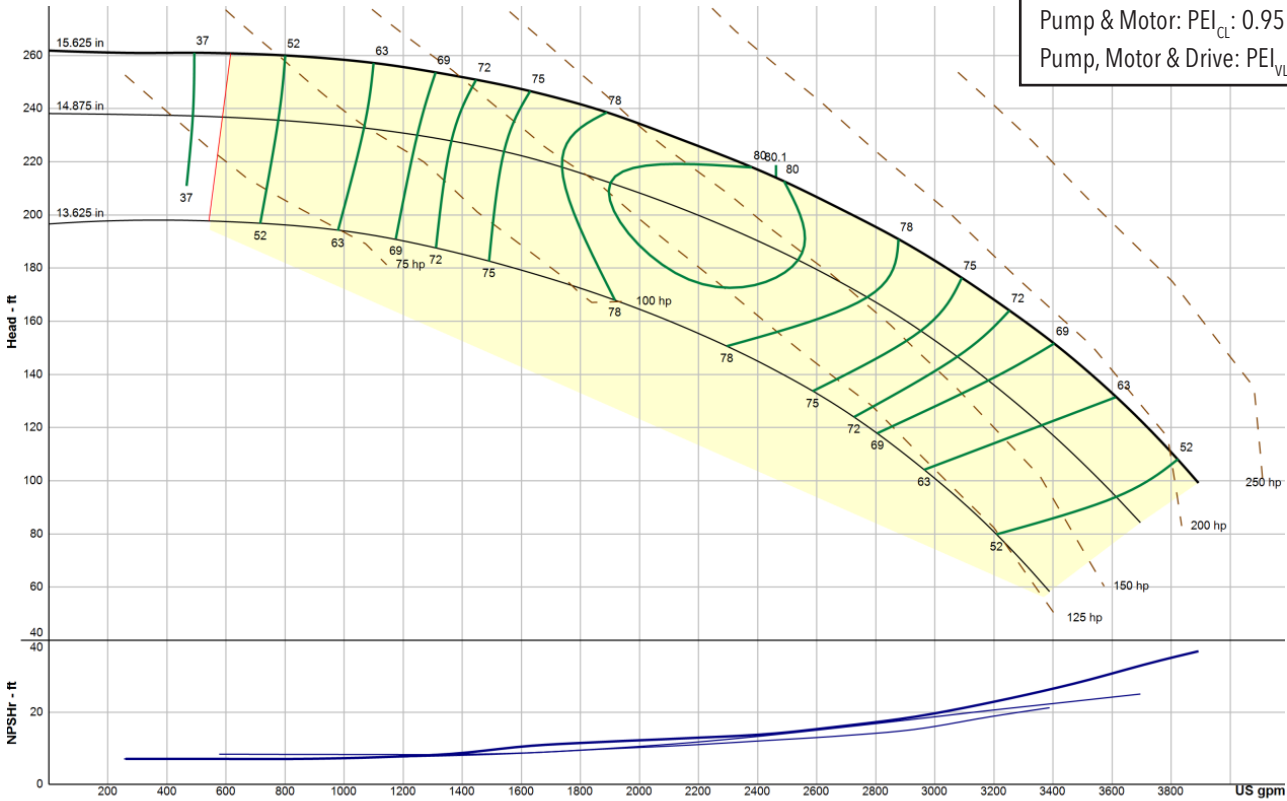
**e-80SCXL Standard Configuration
DIMENSIONS - inches (mm)**

MOTOR FRAME	C	D	E (max)	F	G	H (max)	125# ANSI			250# ANSI			R	ID	OD
							J	N	P	J	N	P			
447TC	15.12	20.93	47.88	34.08	17.91	99.87	22.75	16	1.25	24.75	24	1.38	22.69	17.72	27.99
	(384)	(532)	(1216)	(866)	(455)	(2537)	(578)		(32)	(629)		(35)	(576)	(450)	(711)
449TC	15.12	20.93	47.88	34.08	17.91	99.87	22.75	16	1.25	24.75	24	1.38	22.69	17.72	27.99
	(384)	(532)	(1216)	(866)	(455)	(2537)	(578)		(32)	(629)		(35)	(576)	(450)	(711)
509LLC	15.12	20.93	53.38	32.83	17.91	104.12	22.75	16	1.25	24.75	24	1.38	26.00	17.72	27.99
	(384)	(532)	(1356)	(834)	(455)	(2645)	(578)		(32)	(629)		(35)	(660)	(450)	(711)
5011LLC	15.12	20.93	61.38	32.83	17.91	112.12	22.75	16	1.25	24.75	24	1.38	26.00	17.72	27.99
	(384)	(532)	(1559)	(834)	(455)	(2848)	(578)		(32)	(629)		(35)	(660)	(450)	(711)

Dimensions are subject to change. Not to be used for construction purposes unless certified.

e-80SC XL Pump Performance Data

e-80SCXL 8x8x16 (1785 RPM)

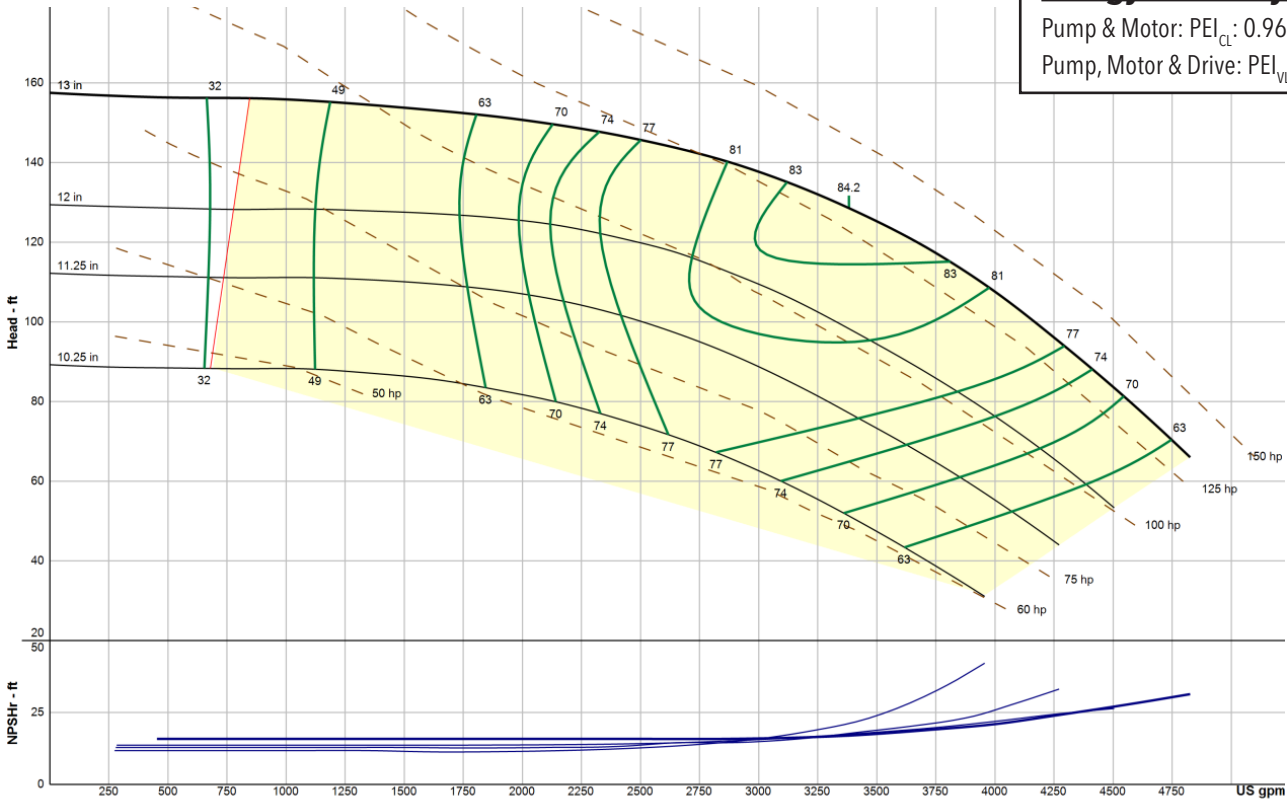


Energy Efficiency Ratings:

Pump & Motor: $PEI_{cl}: 0.95$ $ER_{cl}: 5$

Pump, Motor & Drive: $PEI_{vl}: 0.45$ $ER_{vl}: 55$

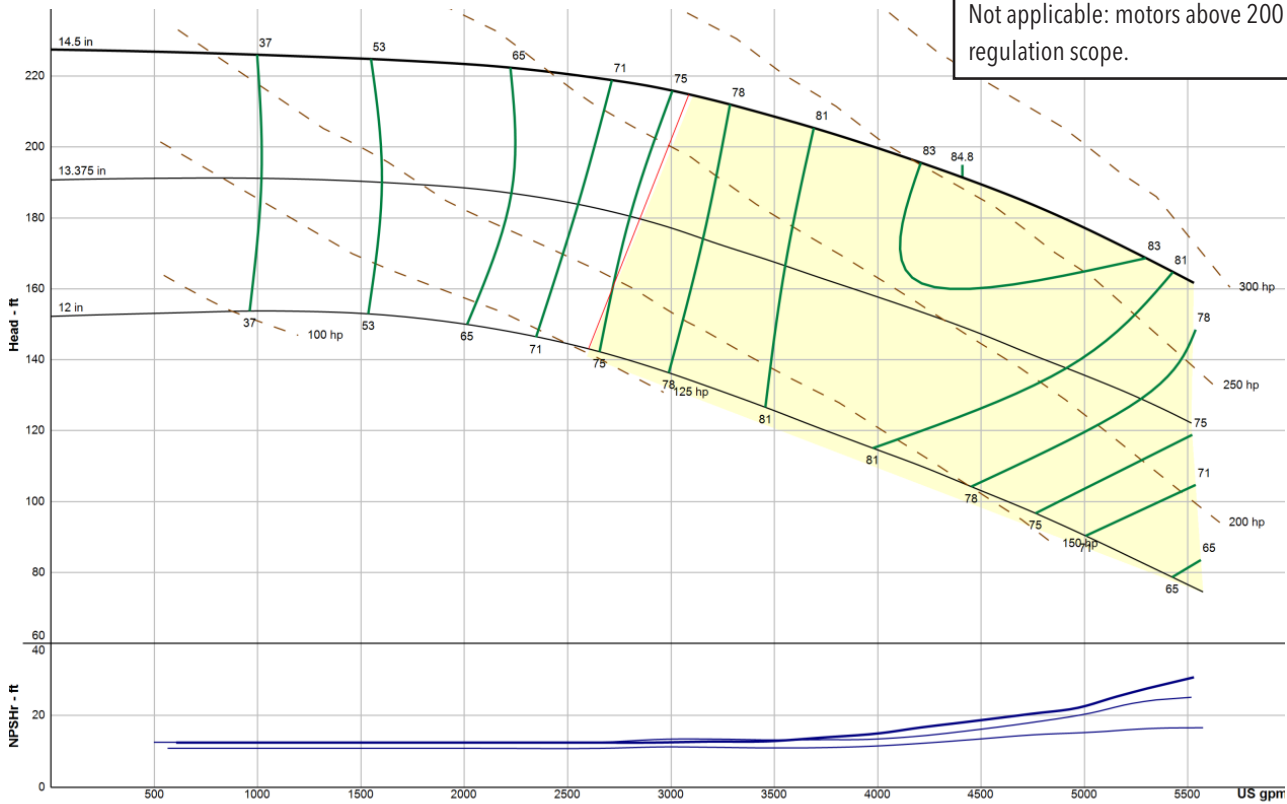
e-80SCXL 10x10x13 (1785 RPM)



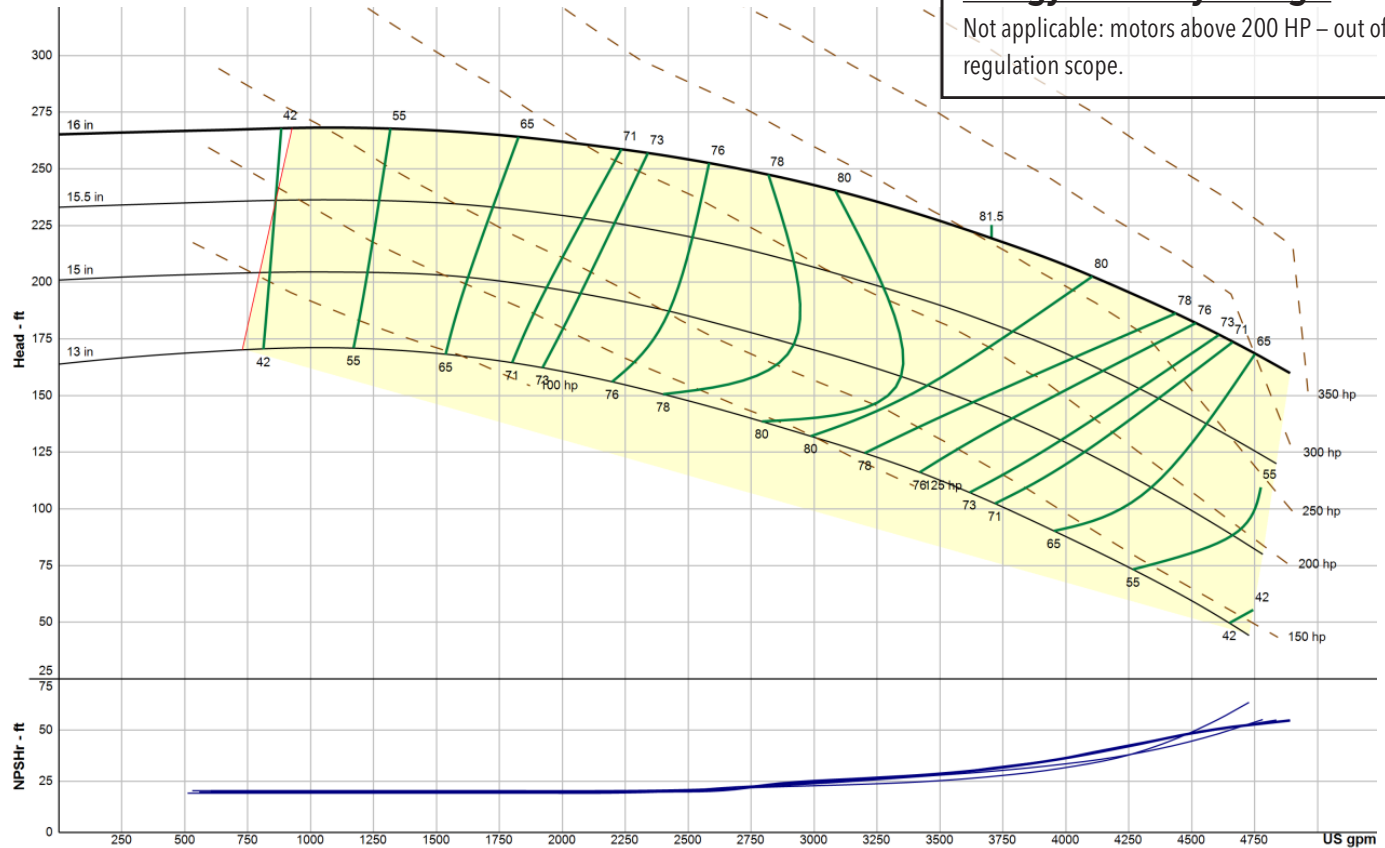
Energy Efficiency Ratings:

Pump & Motor: $PEI_{cl}: 0.96$ $ER_{cl}: 4$

Pump, Motor & Drive: $PEI_{vl}: 0.46$ $ER_{vl}: 54$

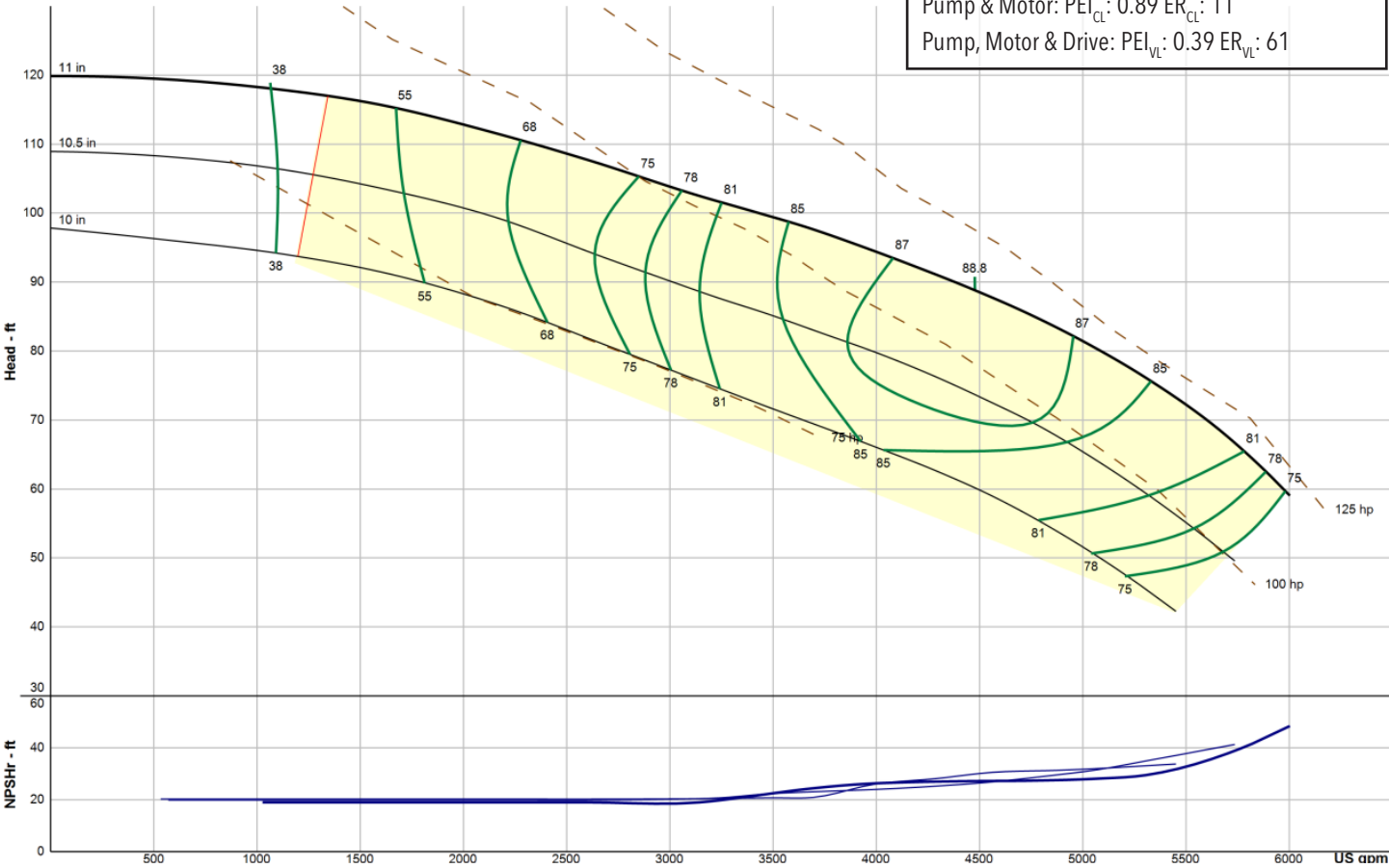
e-80SCXL 10x10x15 (1785 RPM)**Energy Efficiency Ratings:**

Not applicable: motors above 200 HP – out of DOE regulation scope.

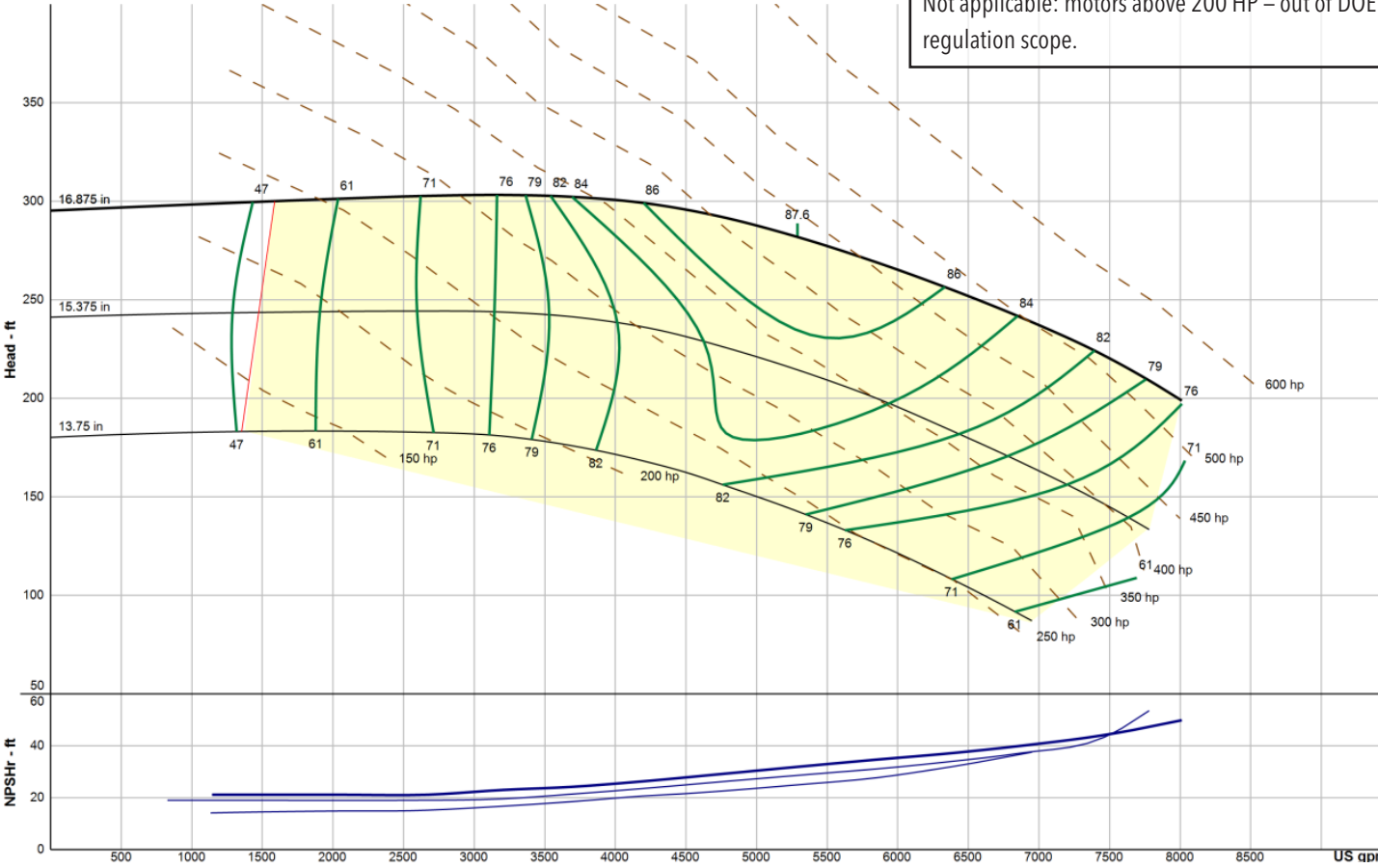
e-80SCXL 10x10x16 (1790 RPM)**Energy Efficiency Ratings:**

Not applicable: motors above 200 HP – out of DOE regulation scope.

e-80SCXL 12x12x11 (1775 RPM)



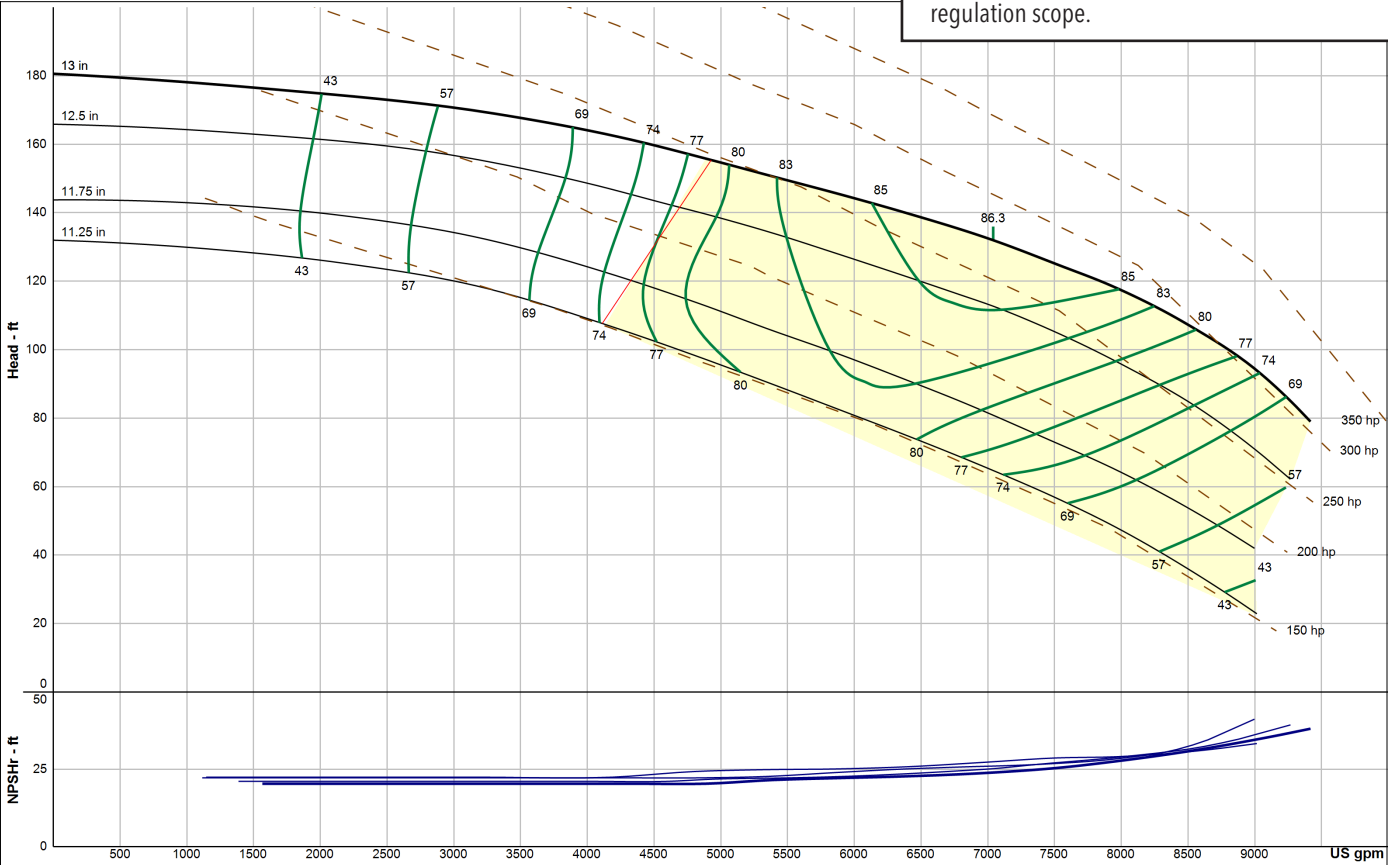
e-80SCXL 12x12x17 (1790 RPM)



e-80SCXL 14x14x14 (1790 RPM)

Energy Efficiency Ratings:

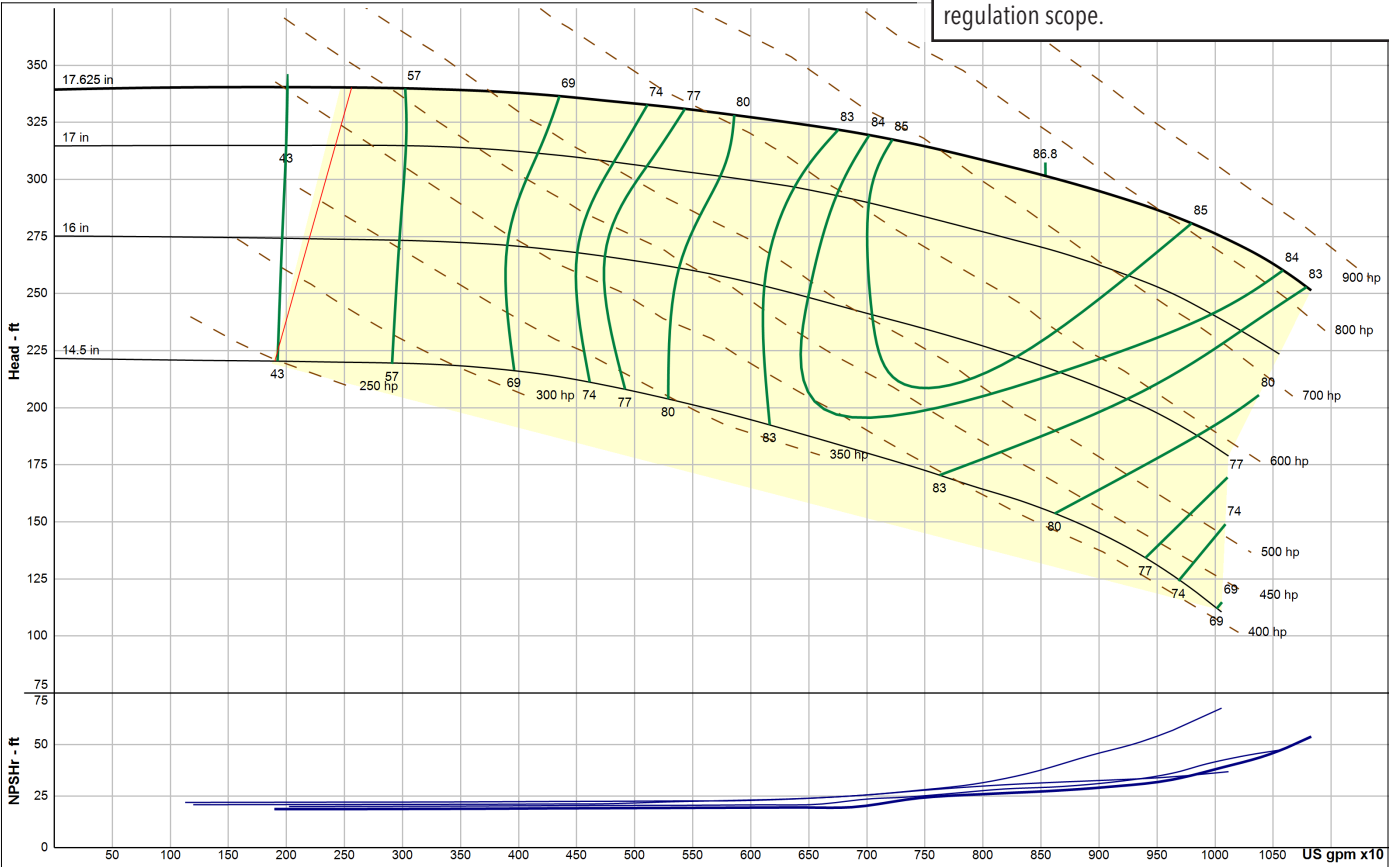
Not applicable: motors above 200 HP – out of DOE regulation scope.



e-80SCXL 14x14x18 (1790 RPM)

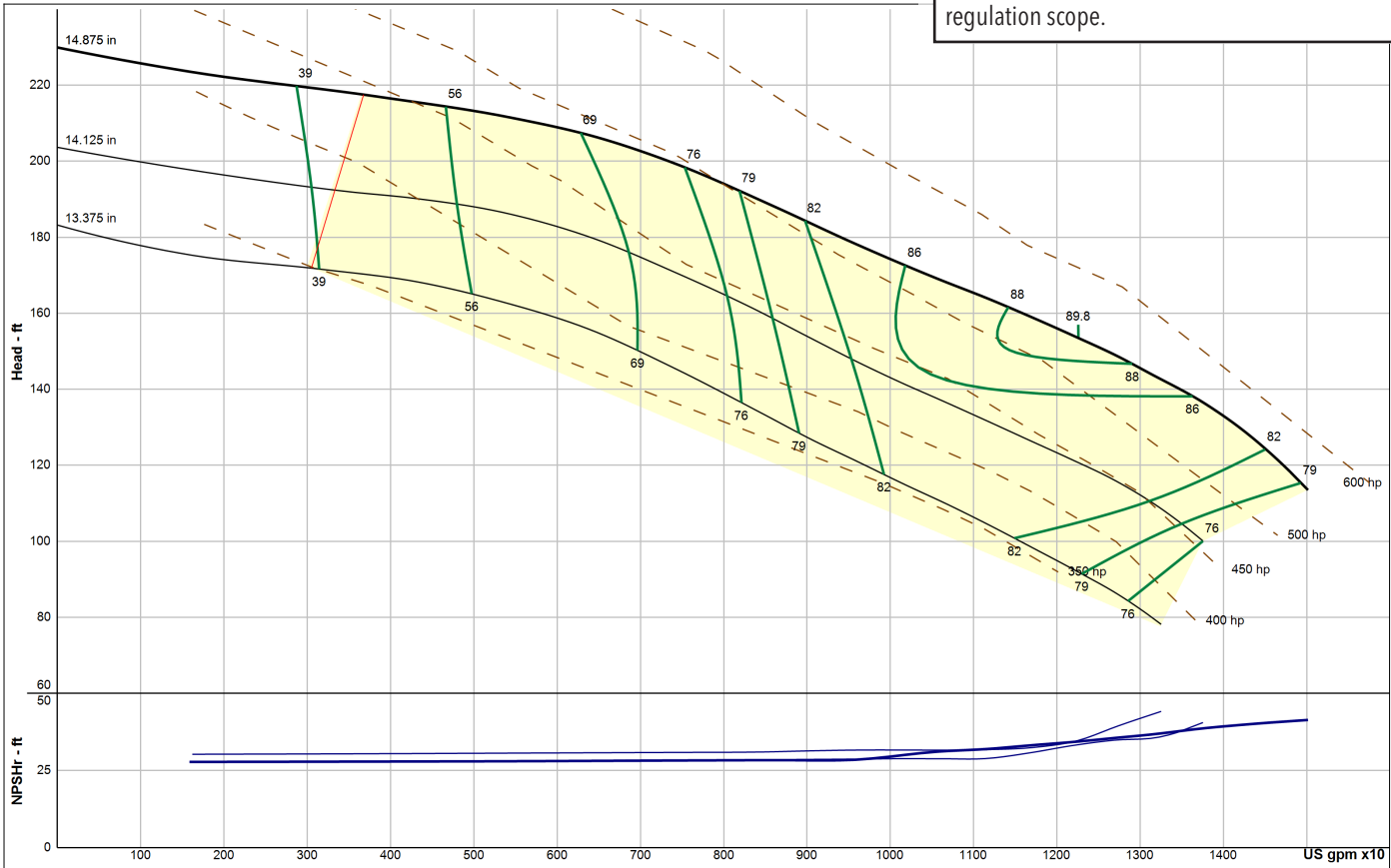
Energy Efficiency Ratings:

Not applicable: motors above 200 HP – out of DOE regulation scope.



e-80SCXL 18x18x15 (1790 RPM)

Energy Efficiency Ratings:
Not applicable: motors above 200 HP – out of DOE regulation scope.



Useful Pump Formulas

$$\text{Pressure (PSI)} = \frac{\text{Head (Feet)} \times \text{Specific Gravity}}{2.31}$$

$$\text{Head (Feet)} = \frac{\text{Pressure (PSI)} \times 2.31}{\text{Specific Gravity}}$$

$$\text{Vacuum (in. of Mercury)} = \text{Dynamic Suction Lift (Feet)} \times .883 \times \text{Specific Gravity}$$

$$\text{Horsepower (Brake)} = \frac{\text{GPM} \times \text{Head (Feet)} \times \text{Specific Gravity}}{3960 \times \text{Pump Efficiency}}$$

$$\text{Horsepower (Water)} = \frac{\text{GPM} \times \text{Head (Feet)} \times \text{Specific Gravity}}{3960}$$

$$\text{Efficiency (Pump)} = \frac{\text{Horsepower (Water)}}{\text{Horsepower (Brake)}} \times 100\%$$

$$\text{NPSH (Available)} = \text{Positive Factors} - \text{Negative Factors}$$

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

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- 2) a leading global water technology company.

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Learn more about Series
e-80SCXL Pumps:



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Morton Grove, Illinois 60053
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Fax: (847) 965-8379
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