

AQUAFORCE[®] e-MTV

VARIABLE SPEED BOOSTERS WITH
VERTICAL MULTISTAGE e-SV PUMPS 60 HZ



Table of Content

General Introduction	3
Major System Components	4
Operating Conditions	4
Typical Arrangements	4
Hydraulic Performance Range	5
Pump Control	6
5SV Curves/Dimensions	7-18
10SV Curves/Dimensions	19-31
15SV Curves/Dimensions	32-43
22SV Curves/Dimensions	44-55
33SV Curves/Dimensions	56-66
46SV Curves/Dimensions	67-77
Product Key	78

General Introduction

Product Description

The AQUAFORCE e-MTV pump systems are pre-engineered and fabricated packaged booster systems designed to transfer and increase the pressure of clean water. The e-MTV provides pressure boosting for a variety of applications:

- Commercial office buildings
- Industrial/plant
- Hospitals
- Schools
- Hotels, inns & resorts
- Condominiums & apartments
- Sports facilities
- Data centers
- HVAC
- Irrigation
- Main water systems
- Rural boosting stations

The e-MTV booster sets are assembled with two to three vertical multistage e-SV pumps fixed onto a single base and connected in parallel via suction and discharge manifolds and fittings. The station is provided with a main system disconnect as well as individual electrical pump isolation to ensure that each pump can be serviced without the need to shut down the entire station.

Major System Components

Number of Pumps: 2 to 3

Motor Power (HP): 5 - 20

Base: 304SS reinforced, formed

Manifolds: 304SS Sch. 10 with Grooved connections

Isolation: Less than 2 inch - Ball
Greater than 2 inch - Butterfly

Check: Less than 2 inch - Silent
Greater than 2 inch - Wafer

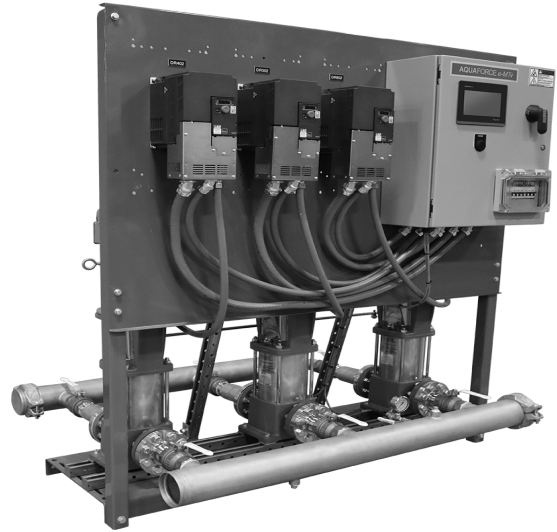
Pump: e-SV vertical multistage

Motor: TEFC Premium Efficient NEMA C-Face

VFD: Shneider ATV 320 Drive, UL Type 1 - IP 21

Panel: UL Type 1 with integrated system disconnect and individual drive circuit breakers

BMS Communication: MODBUS RS-485, TCP/IP



Operating Conditions

Fluids: Water containing now gas or corrosive and/or aggressive substances, no undissolved solids

Flow Rate: Up to 900 GPM

Operating Pressure: Up to 270 PSIG

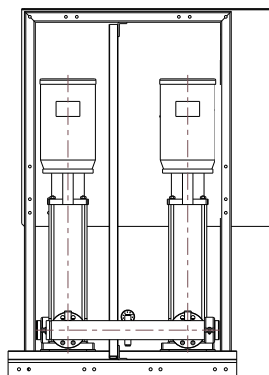
Liquid Temperature: 32°F to 180°F

Ambient Temperature: 32°F to 104°F, avoid direct sunlight

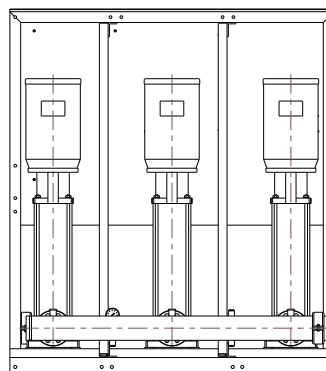
Relative Humidity: 90% non-condensing

Elevation: 3300 ft above sea level without derate

Typical Arrangements

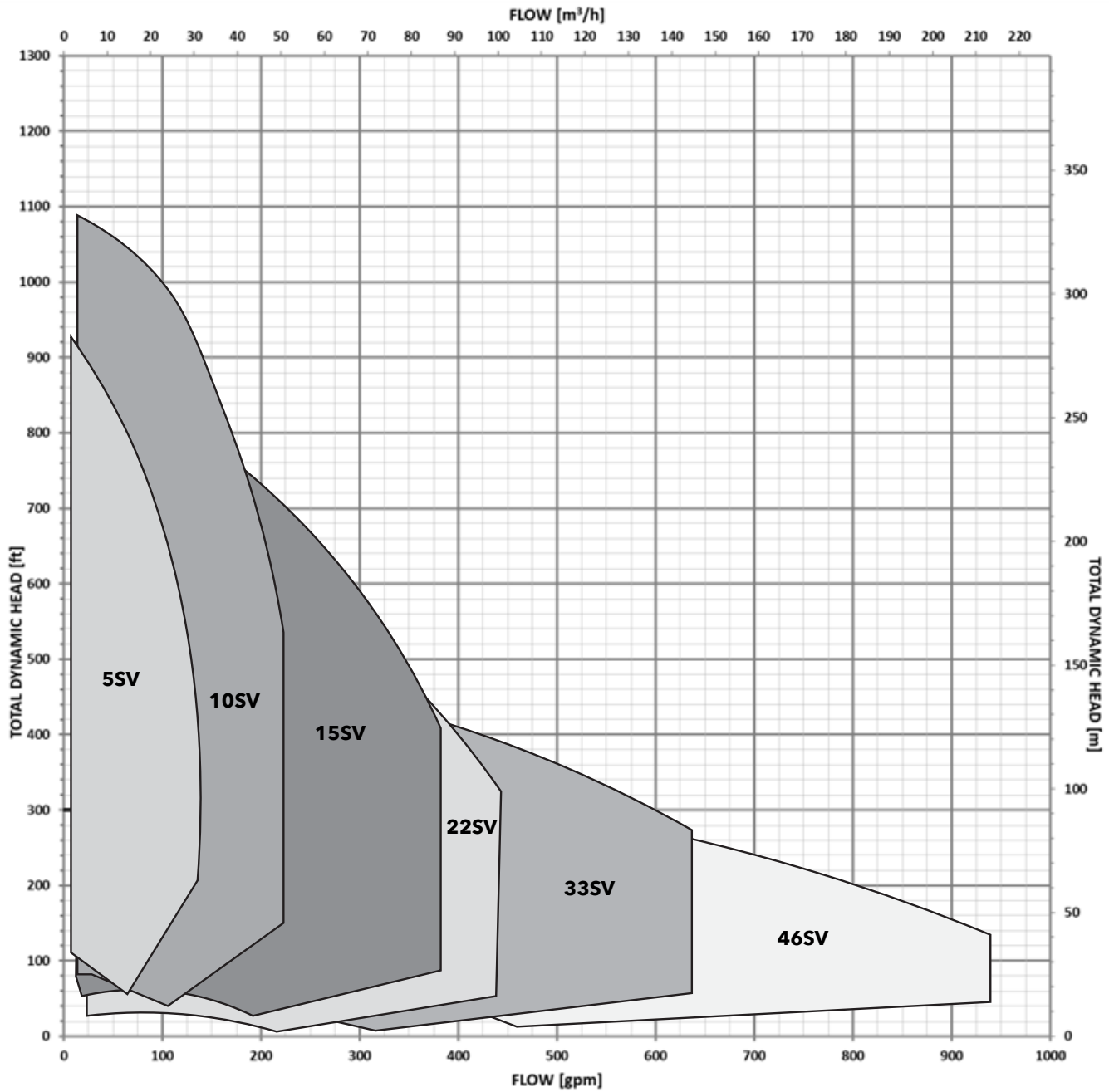


Duplex



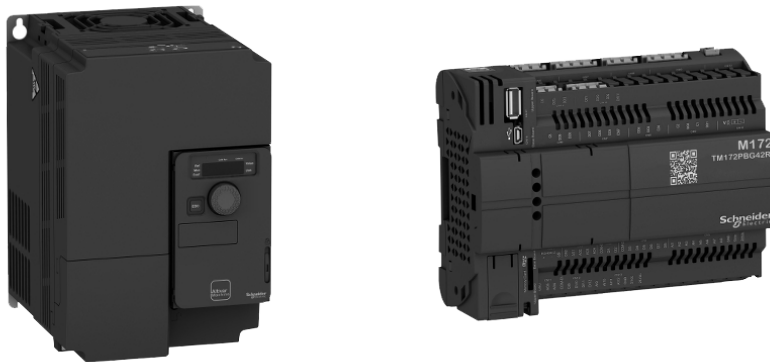
Triplex

Hydraulic Performance Range



Pump Control

The e-MTV utilizes Schneider Electric variable frequency drives in conjunction with Schneider Electric PLC to automatically adjust pump speeds in order to maintain constant pressure in the system. The control panel assembly comes standard with a UL type 1 enclosure rating.



Pressure is measured via a 4-20mA pressure transmitter which can be read on the 7" full color HMI. A simple user interface allows you to set the desired pressure value for optimal adjustment. Multiple login options allow varying degrees of access to the PLC for commissioning, fine tuning or troubleshooting.



The e-MTV interface includes commonly utilized features including menus for staging/destaging with proof timers, speed control, exercise and alternation options, no flow shutdown and line fill mode.

The e-MTV controller includes a standard offering of various system protections including, high system pressure, low system pressure, loss of prime protection, VFD failure, transducer failure. An alarm/events screen clearly indicates which alarms are active and provides a description of each.

The following programmable flow 'Run/Standby' splits are available for multi-pump control:

- 100 + Stdbby
- 50/50
- 50/50 + Stdbby
- 33/33/33

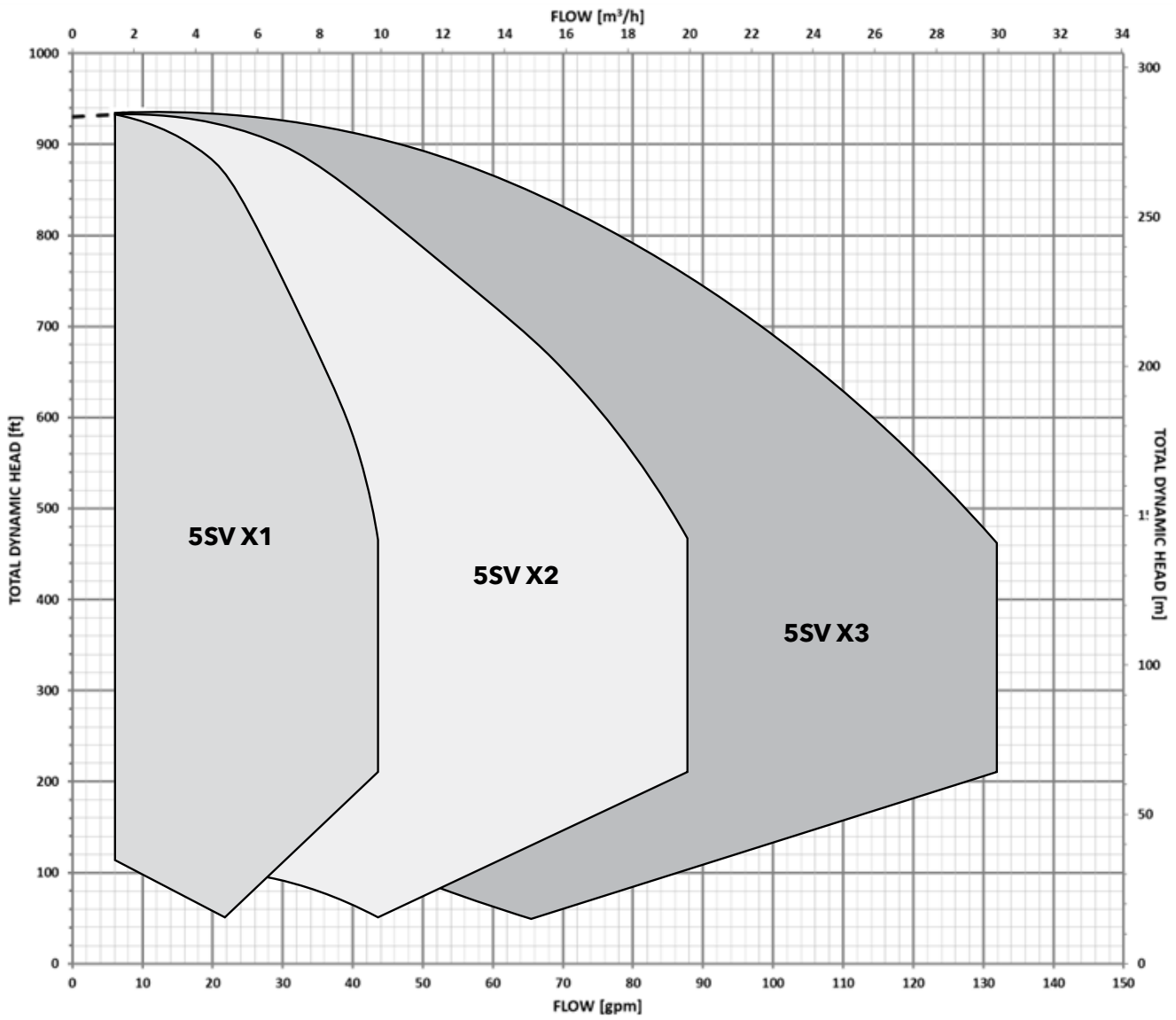
Standard building management system (BMS) communication protocols include:

- MODBUS RTU
- MODBUS TCP-IP

For further information, visit:

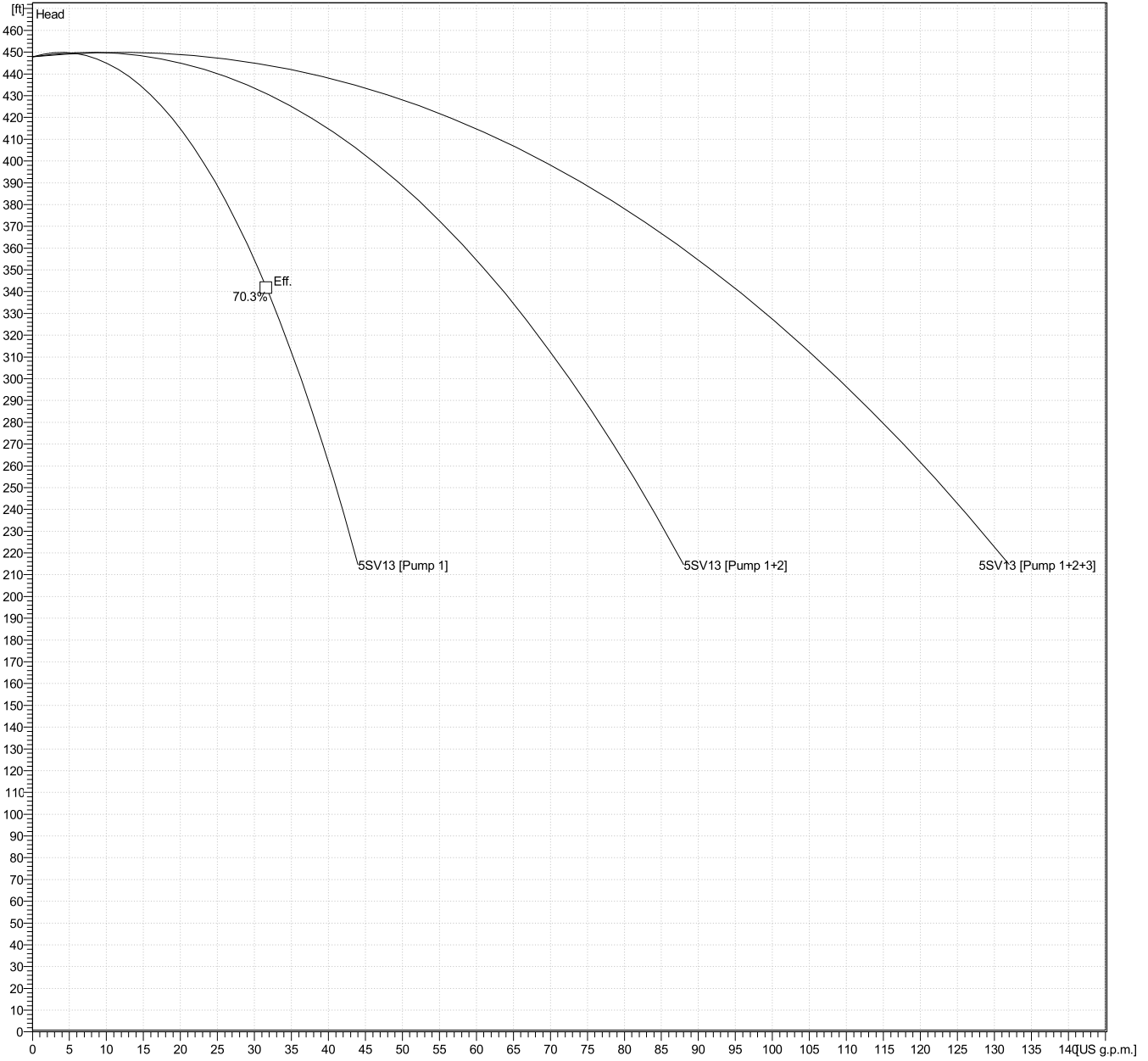


AQUAFORCE e-MTV Curves 5SV



Performance Curve Data

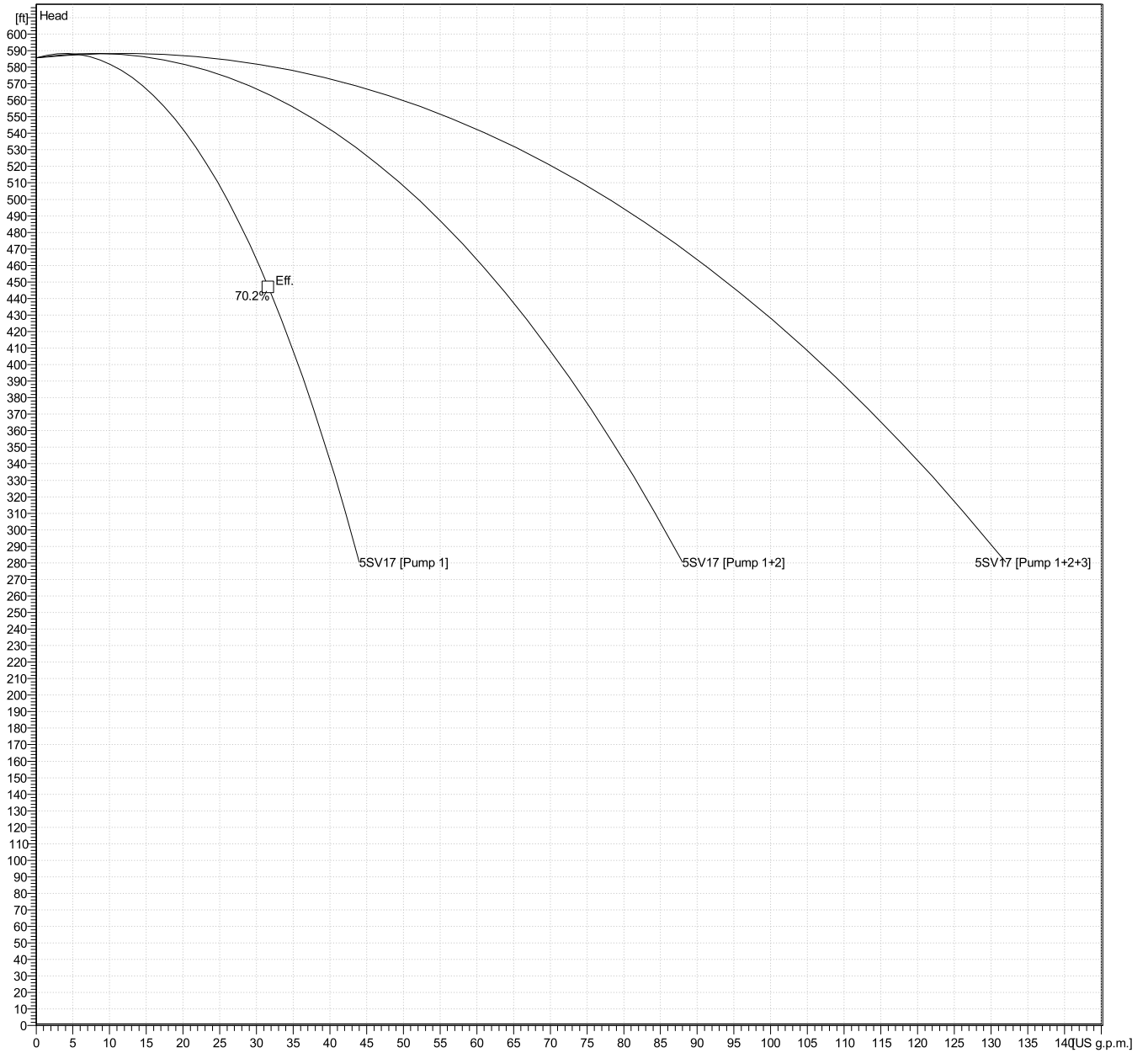
5SV13



Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VCC4G130A2CMV	2	5SV	3"	1.5"	208V/3PH	5	13	0
V2VCC5G130A2CMV	2	5SV	3"	1.5"	230V/3PH	5	13	0
V2VCC6G130A2CMV	2	5SV	3"	1.5"	460V/3PH	5	13	0
V2VCC7G130A2CMV	2	5SV	3"	1.5"	575V/3PH	5	13	0
V3VCC4G130A2CMV	3	5SV	3"	1.5"	208V/3PH	5	13	0
V3VCC5G130A2CMV	3	5SV	3"	1.5"	230V/3PH	5	13	0
V3VCC6G130A2CMV	3	5SV	3"	1.5"	460V/3PH	5	13	0
V3VCC7G130A2CMV	3	5SV	3"	1.5"	575V/3PH	5	13	0

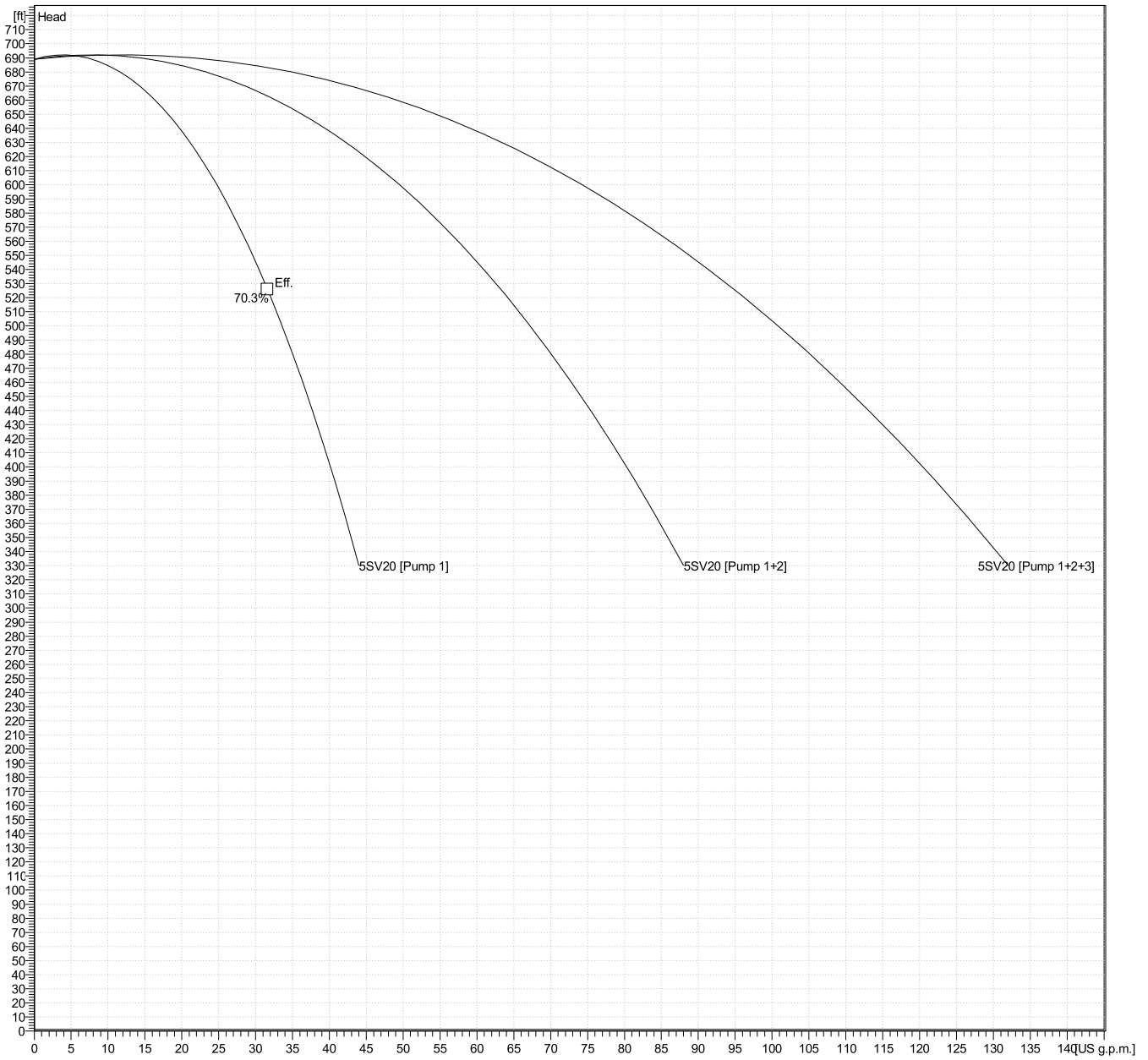
Performance Curve Data

5SV17



Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VCC4G170A2CMV	2	5SV	3"	1.5"	208V/3PH	5	17	0
V2VCC5G170A2CMV	2	5SV	3"	1.5"	230V/3PH	5	17	0
V2VCC6G170A2CMV	2	5SV	3"	1.5"	460V/3PH	5	17	0
V2VCC7G170A2CMV	2	5SV	3"	1.5"	575V/3PH	5	17	0
V3VCC4G170A2CMV	3	5SV	3"	1.5"	208V/3PH	5	17	0
V3VCC5G170A2CMV	3	5SV	3"	1.5"	230V/3PH	5	17	0
V3VCC6G170A2CMV	3	5SV	3"	1.5"	460V/3PH	5	17	0
V3VCC7G170A2CMV	3	5SV	3"	1.5"	575V/3PH	5	17	0

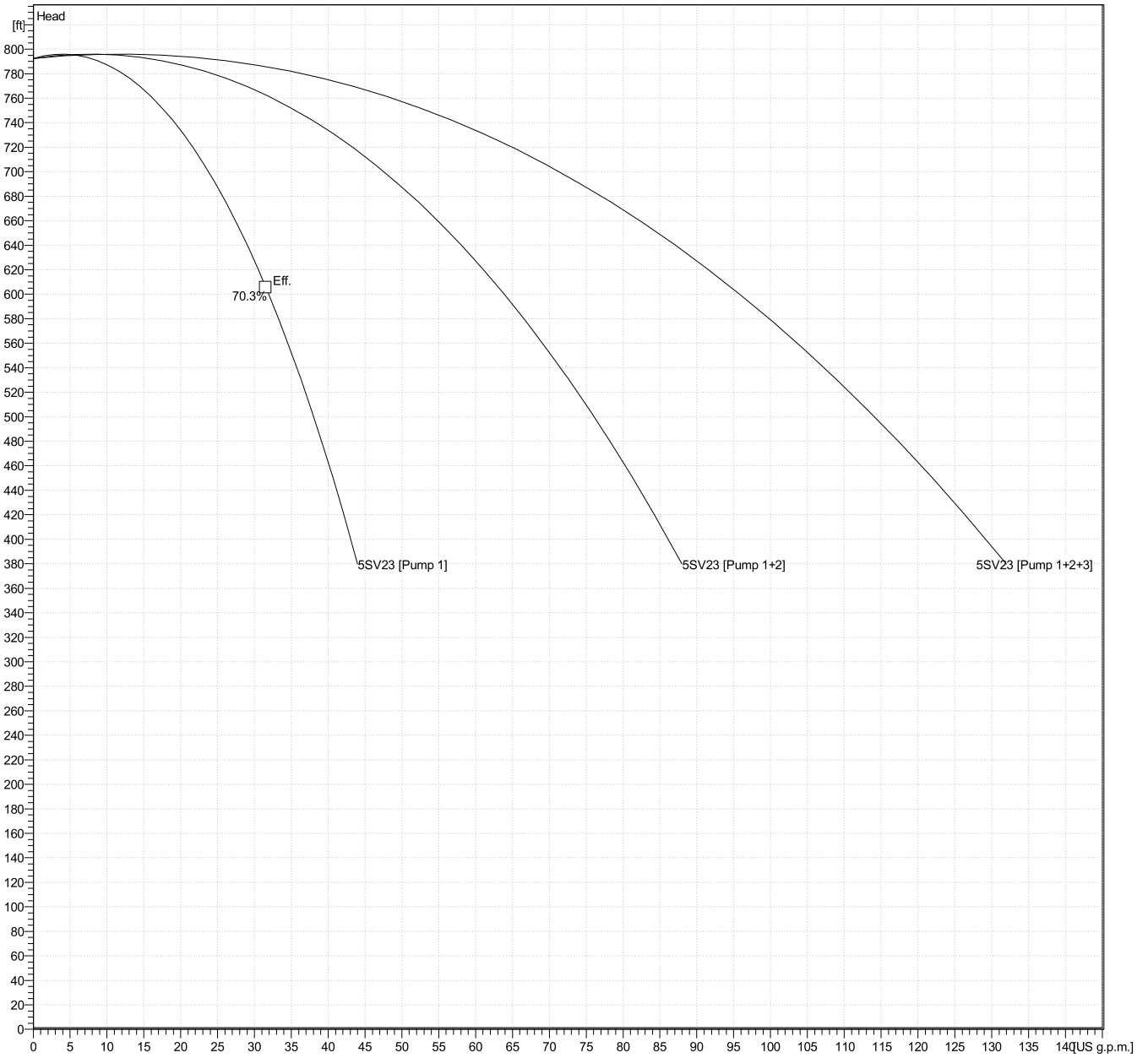
Performance Curve Data 5SV20



Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VCC4H200A2CMV	2	5SV	3"	1.5"	208V/3PH	7.5	20	0
V2VCC5H200A2CMV	2	5SV	3"	1.5"	230V/3PH	7.5	20	0
V2VCC6H200A2CMV	2	5SV	3"	1.5"	460V/3PH	7.5	20	0
V2VCC7H200A2CMV	2	5SV	3"	1.5"	575V/3PH	7.5	20	0
V3VCC4H200A2CMV	3	5SV	3"	1.5"	208V/3PH	7.5	20	0
V3VCC5H200A2CMV	3	5SV	3"	1.5"	230V/3PH	7.5	20	0
V3VCC6H200A2CMV	3	5SV	3"	1.5"	460V/3PH	7.5	20	0
V3VCC7H200A2CMV	3	5SV	3"	1.5"	575V/3PH	7.5	20	0

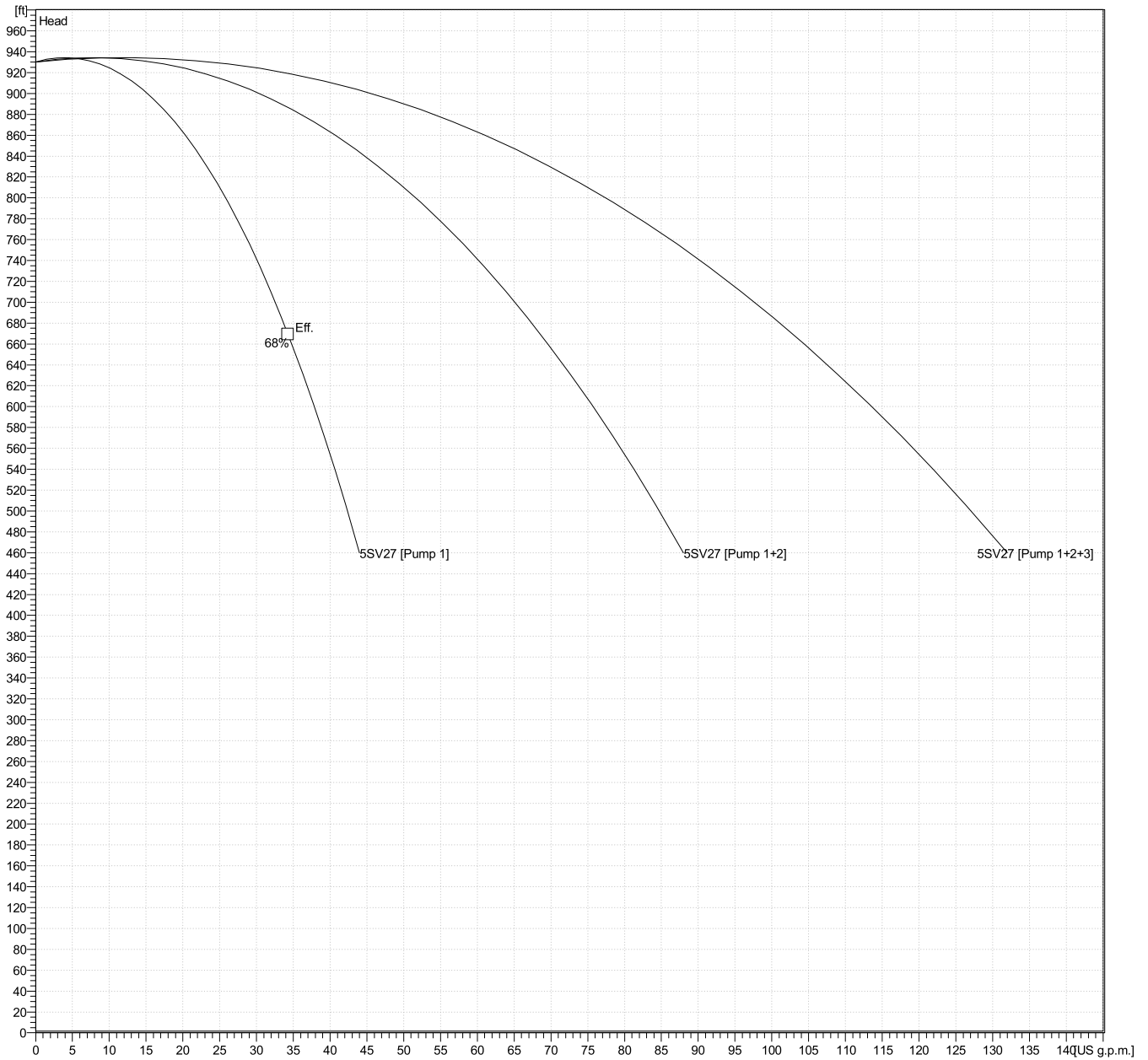
Performance Curve Data

5SV23

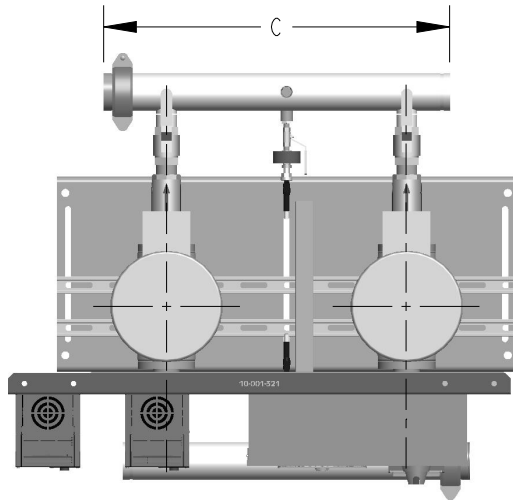


Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VCC4H230A2CMV	2	5SV	3"	1.5"	208V/3PH	7.5	23	0
V2VCC5H230A2CMV	2	5SV	3"	1.5"	230V/3PH	7.5	23	0
V2VCC6H230A2CMV	2	5SV	3"	1.5"	460V/3PH	7.5	23	0
V2VCC7H230A2CMV	2	5SV	3"	1.5"	575V/3PH	7.5	23	0
V3VCC4H230A2CMV	3	5SV	3"	1.5"	208V/3PH	7.5	23	0
V3VCC5H230A2CMV	3	5SV	3"	1.5"	230V/3PH	7.5	23	0
V3VCC6H230A2CMV	3	5SV	3"	1.5"	460V/3PH	7.5	23	0
V3VCC7H230A2CMV	3	5SV	3"	1.5"	575V/3PH	7.5	23	0

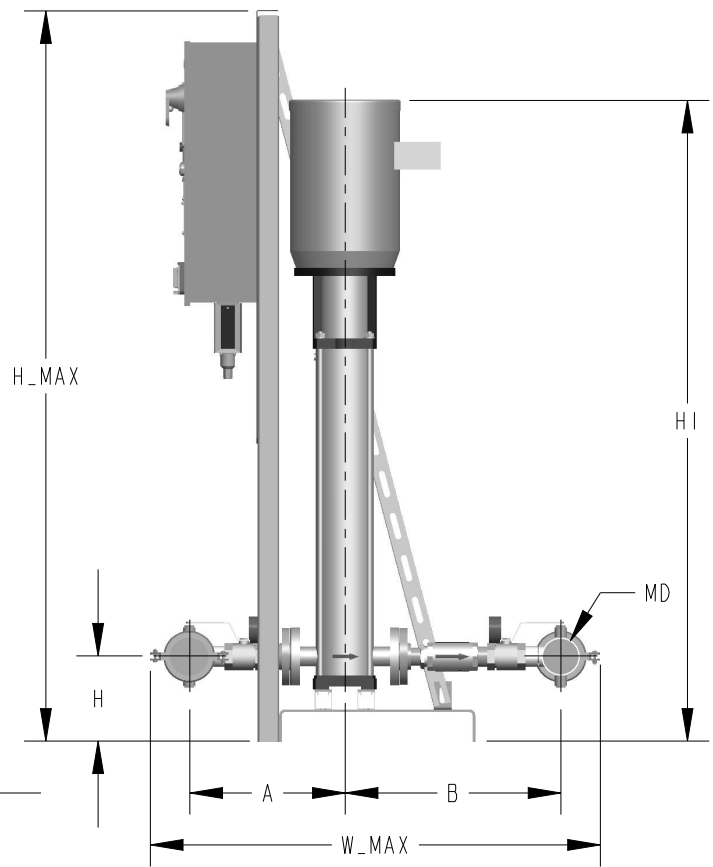
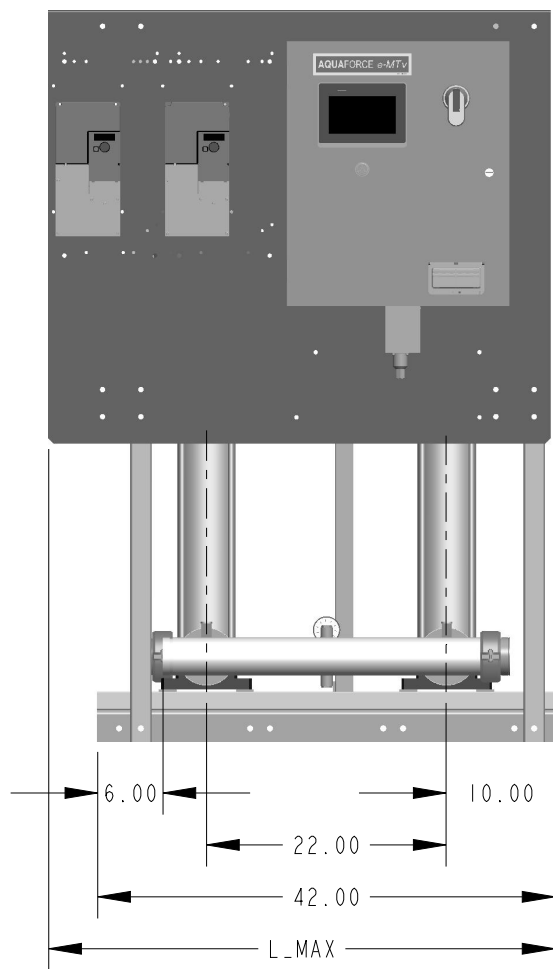
Performance Curve Data 5SV27



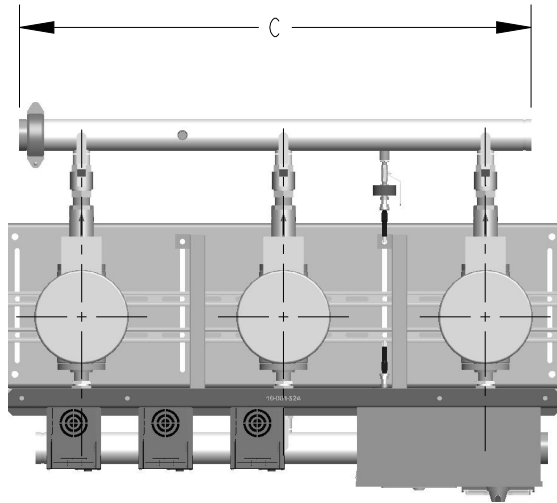
Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VCC4J270A2CMV	2	5SV	3"	1.5"	208V/3PH	10	27	0
V2VCC5J270A2CMV	2	5SV	3"	1.5"	230V/3PH	10	27	0
V2VCC6J270A2CMV	2	5SV	3"	1.5"	460V/3PH	10	27	0
V2VCC7J270A2CMV	2	5SV	3"	1.5"	575V/3PH	10	27	0
V3VCC4J270A2CMV	3	5SV	3"	1.5"	208V/3PH	10	27	0
V3VCC5J270A2CMV	3	5SV	3"	1.5"	230V/3PH	10	27	0
V3VCC6J270A2CMV	3	5SV	3"	1.5"	460V/3PH	10	27	0
V3VCC7J270A2CMV	3	5SV	3"	1.5"	575V/3PH	10	27	0



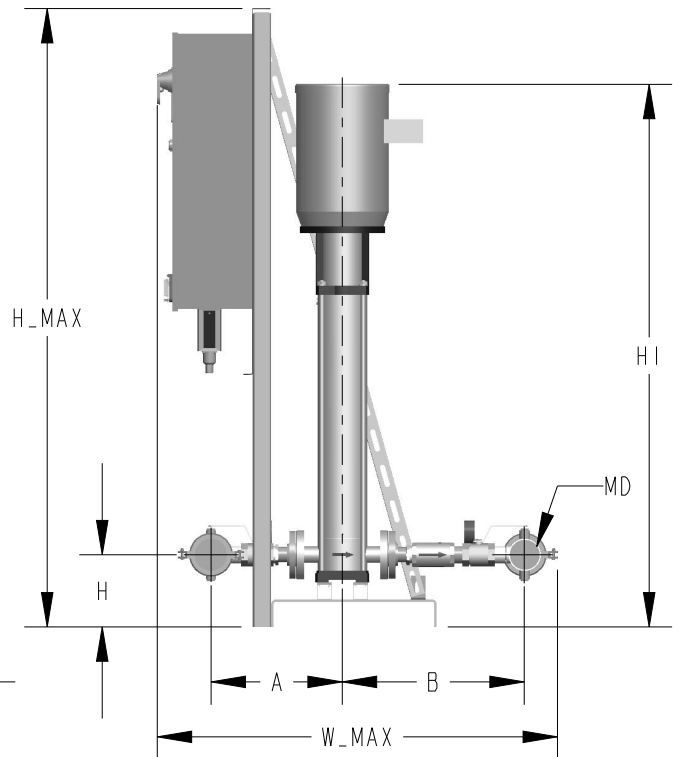
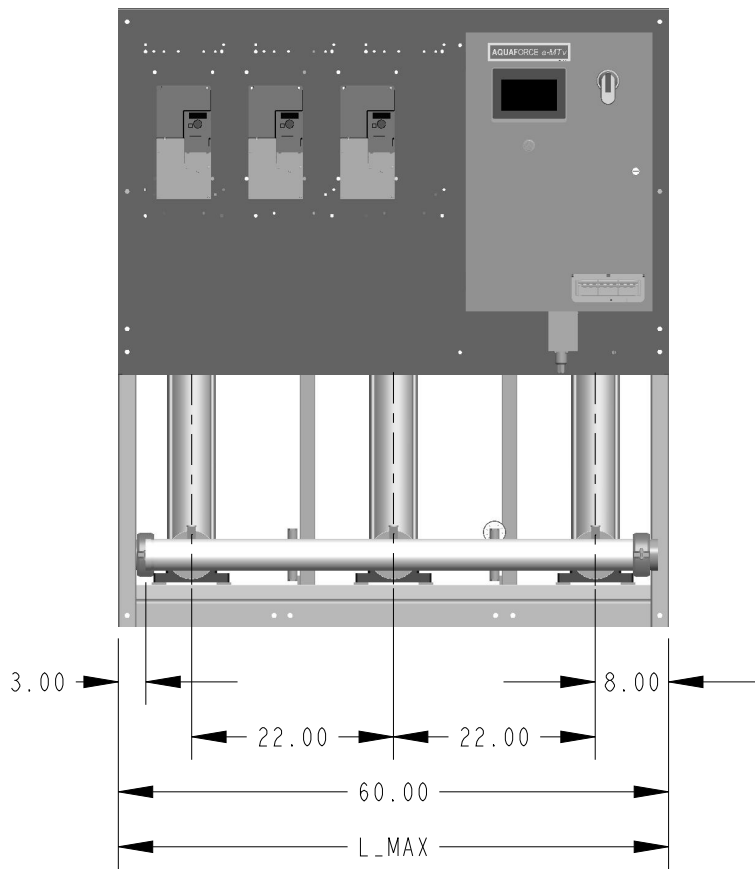
208-230V
AQUAFORCE e-MTV Dimensions 5SV - 2 Pump



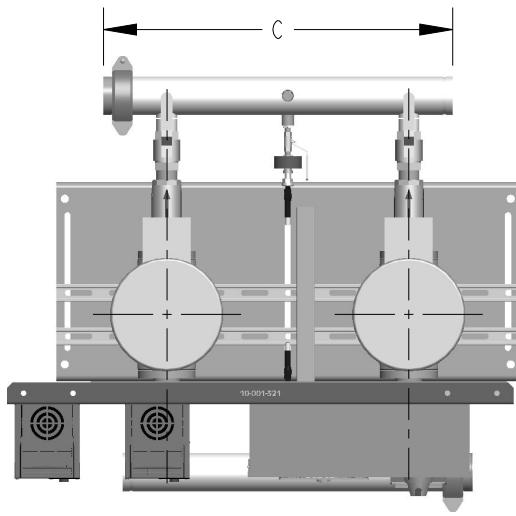
PUMP	MD	L_MAX	W_MAX	H_MAX	H	H1	A	B	C	Wt.(lb)
5SV13GG4F60-BP	3"	46.50	41.34	67.50	7.88	43.21	14.28	19.81	31.78	872.67
5SV17GG4F60-BP	3"	46.50	41.34	67.50	7.88	47.35	14.28	19.81	31.78	918.70
5SV20GH4F60-BP	3"	46.50	41.34	67.50	7.88	52.00	14.28	19.81	31.78	1065.36
5SV23GH4F60-BP	3"	46.50	41.34	67.50	7.88	54.56	14.28	19.81	31.78	1098.65
5SV27GJ4F60-BP	3"	46.50	41.34	67.50	7.88	59.23	14.28	19.81	31.78	1542.48



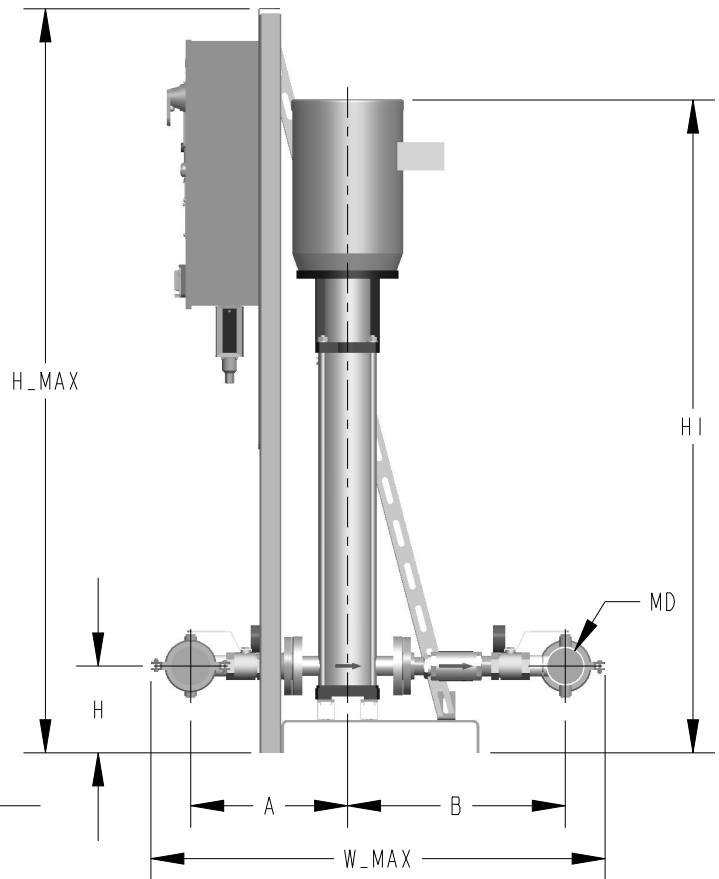
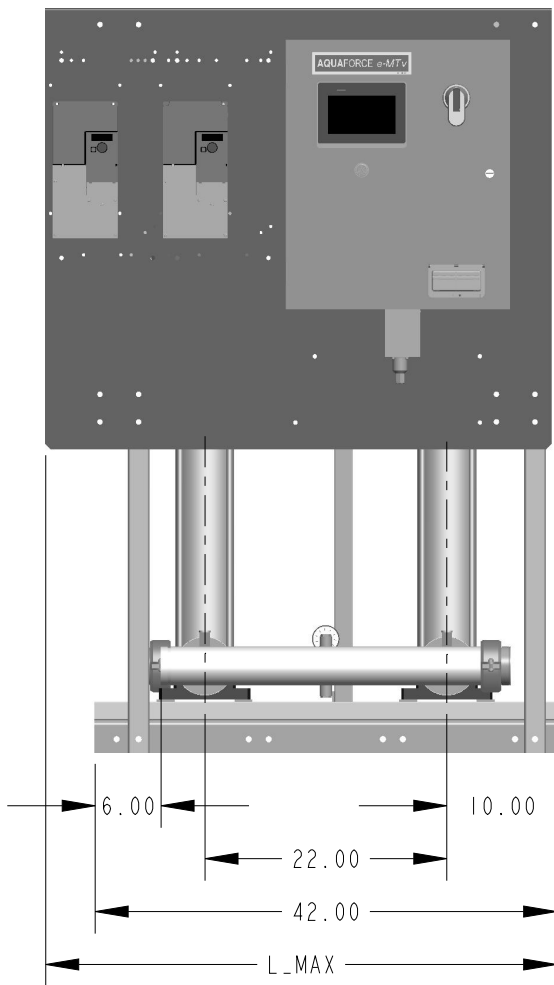
208-230V
AQUAFORCE e-MTV Dimensions 5SV - 3 Pump



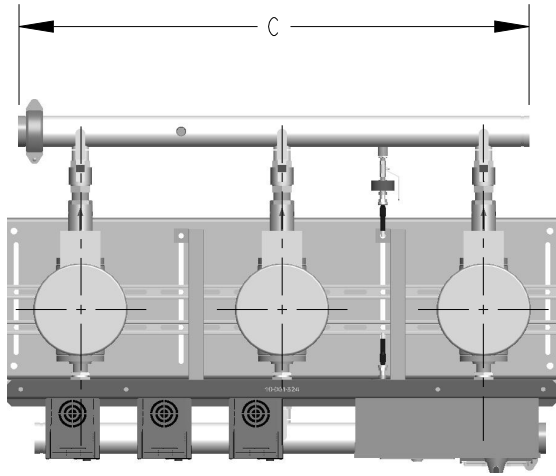
PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
5SV13GG4F60-BP	3"	60.00	41.64	67.50	7.88	43.21	14.30	19.84	55.78	1190.80
5SV17GG4F60-BP	3"	60.00	41.64	67.50	7.88	47.35	14.30	19.84	55.78	1259.85
5SV20GH4F60-BP	3"	60.00	41.64	67.50	7.88	52.00	14.30	19.84	55.78	1479.85
5SV23GH4F60-BP	3"	60.00	41.64	67.50	7.88	54.56	14.30	19.84	55.78	1529.77
5SV27GJ4F60-BP	3"	60.00	43.64	67.50	7.88	59.23	14.30	19.84	55.78	2195.52



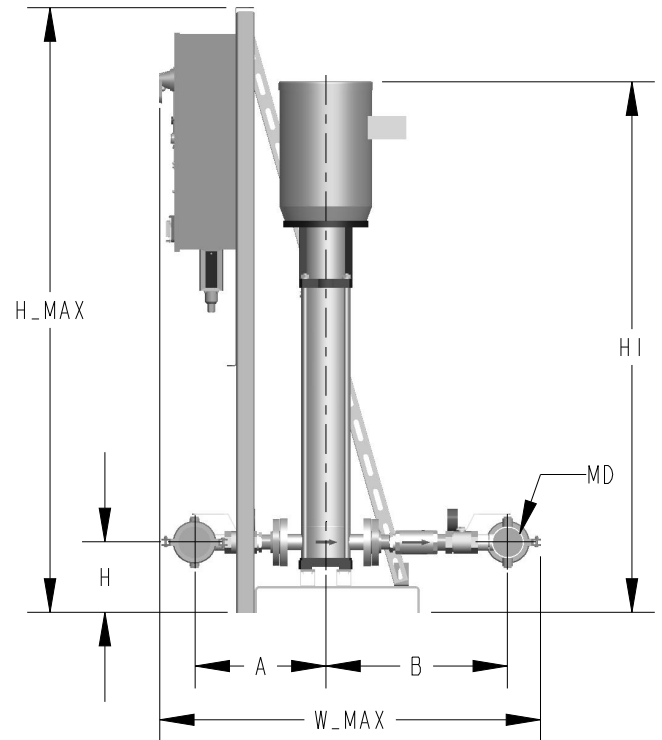
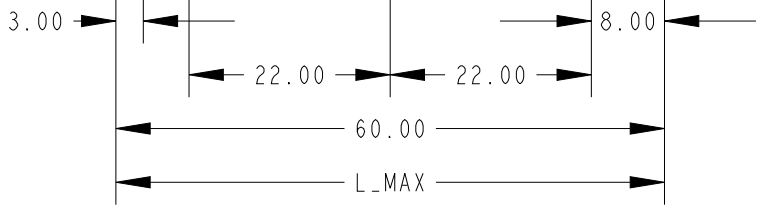
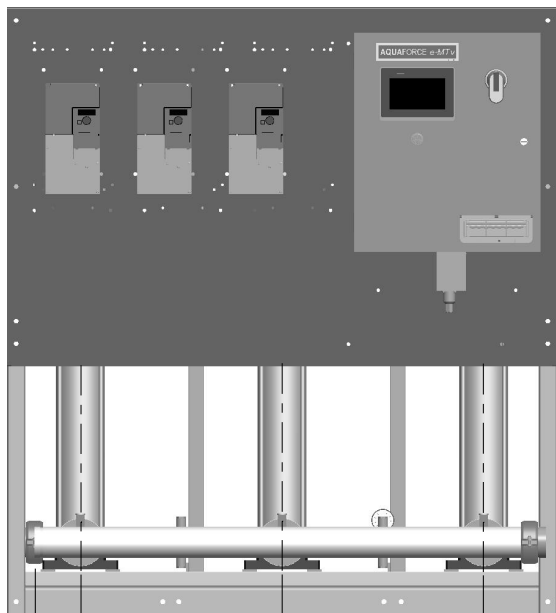
460V
AQUAFORCE e-MTV Dimensions 5SV - 2 Pump



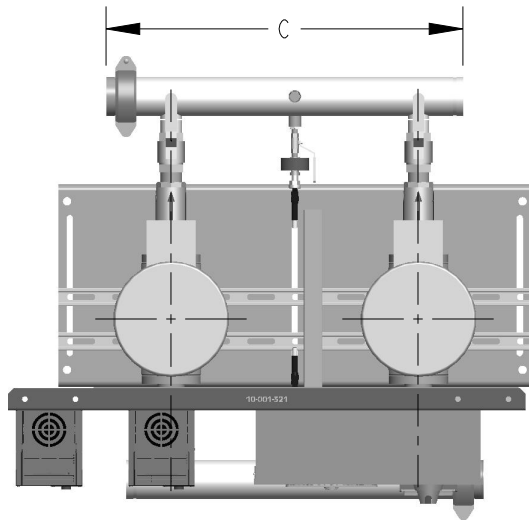
PUMP	MD	L_MAX	W_MAX	H_MAX	H	H1	A	B	C	Wt.(lb)
5SV13GG4F60-BP	3"	46.50	41.34	67.50	7.88	43.21	14.28	19.81	31.78	872.67
5SV17GG4F60-BP	3"	46.50	41.34	67.50	7.88	47.35	14.28	19.81	31.78	918.70
5SV20GH4F60-BP	3"	46.50	41.34	67.50	7.88	52.00	14.28	19.81	31.78	1065.36
5SV23GH4F60-BP	3"	46.50	41.34	67.50	7.88	54.56	14.28	19.81	31.78	1098.65
5SV27GJ4F60-BP	3"	46.50	41.34	67.50	7.88	59.23	14.28	19.81	31.78	1542.48



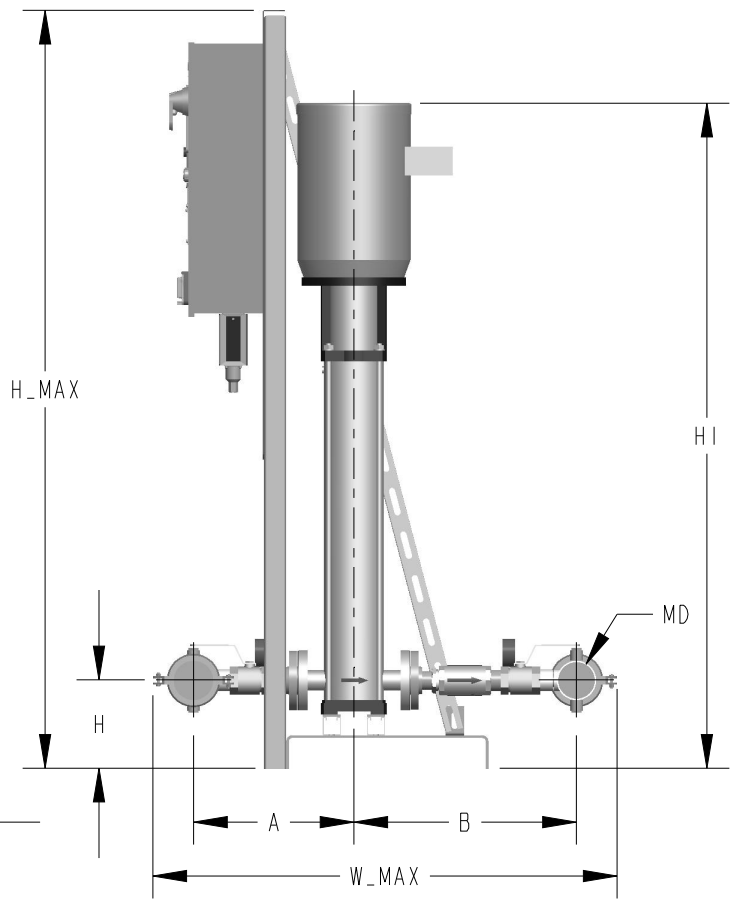
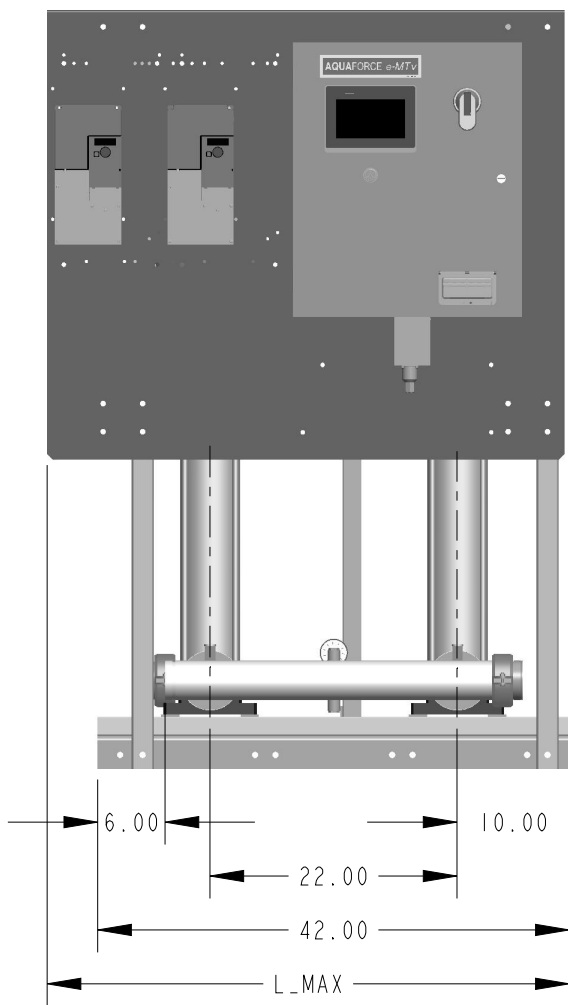
460V
AQUAFORCE e-MTV Dimensions 5SV - 3 Pump



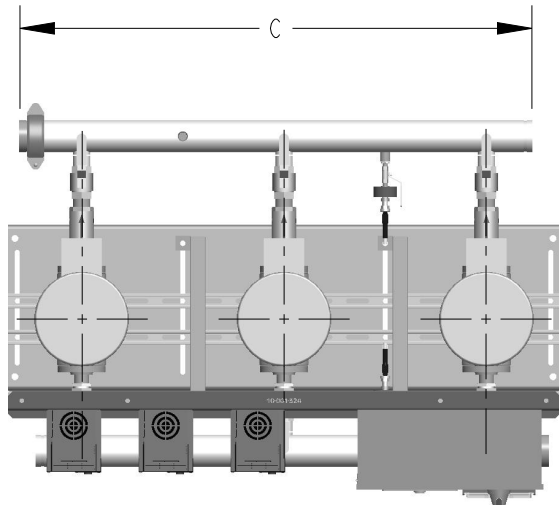
PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
5SV13GG4F60-BP	3"	60.00	41.64	67.50	7.88	43.21	14.30	19.84	55.78	1190.80
5SV17GG4F60-BP	3"	60.00	41.64	67.50	7.88	47.35	14.30	19.84	55.78	1259.85
5SV20GH4F60-BP	3"	60.00	41.64	67.50	7.88	52.00	14.30	19.84	55.78	1479.85
5SV23GH4F60-BP	3"	60.00	41.64	67.50	7.88	54.56	14.30	19.84	55.78	1529.77
5SV27GJ4F60-BP	3"	60.00	41.64	67.50	7.88	59.23	14.30	19.84	55.78	2195.52



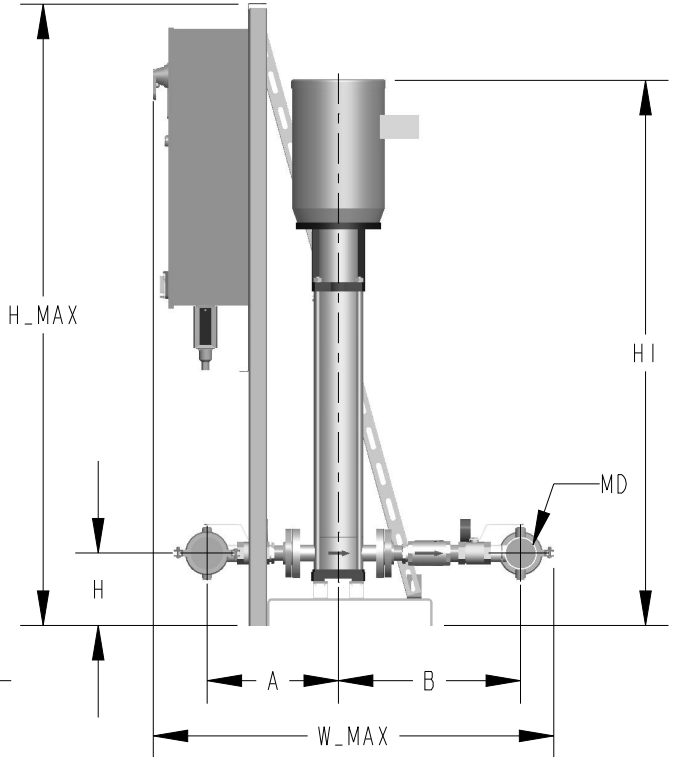
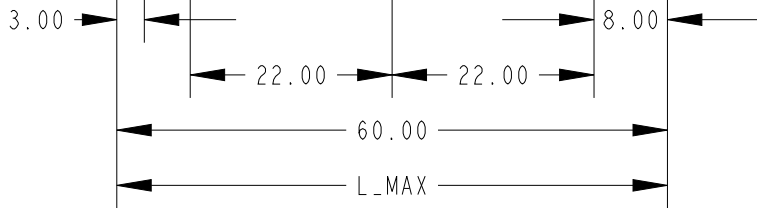
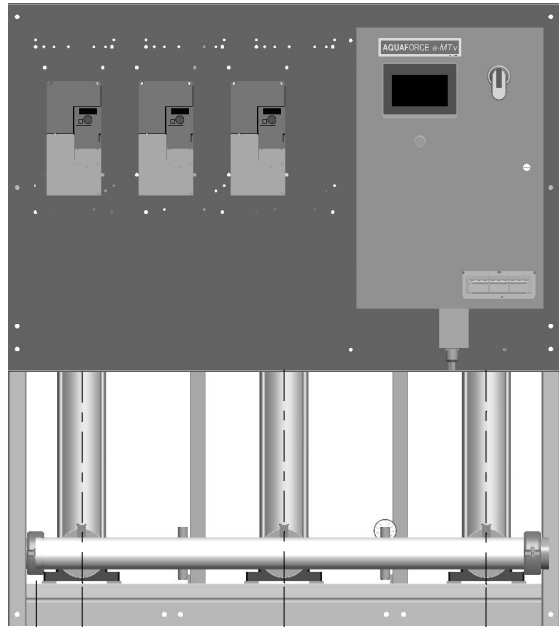
575V
AQUAFORCE e-MTV Dimensions 5SV - 2 Pump



PUMP	MD	L_MAX	W_MAX	H_MAX	H	H_I	A	B	C	Wt.(lb)
5SV13GG4E60-BP	3"	46.50	41.34	67.50	7.88	43.21	14.28	19.81	31.78	872.67
5SV17GG4E60-BP	3"	46.50	41.34	67.50	7.88	47.35	14.28	19.81	31.78	918.70
5SV20GH4E60-BP	3"	46.50	41.34	67.50	7.88	52.00	14.28	19.81	31.78	1065.36
5SV23GH4E60-BP	3"	46.50	41.34	67.50	7.88	54.56	14.28	19.81	31.78	1098.65
5SV27GJ4E60-BP	3"	46.50	41.34	67.50	7.88	59.23	14.28	19.81	31.78	1542.48

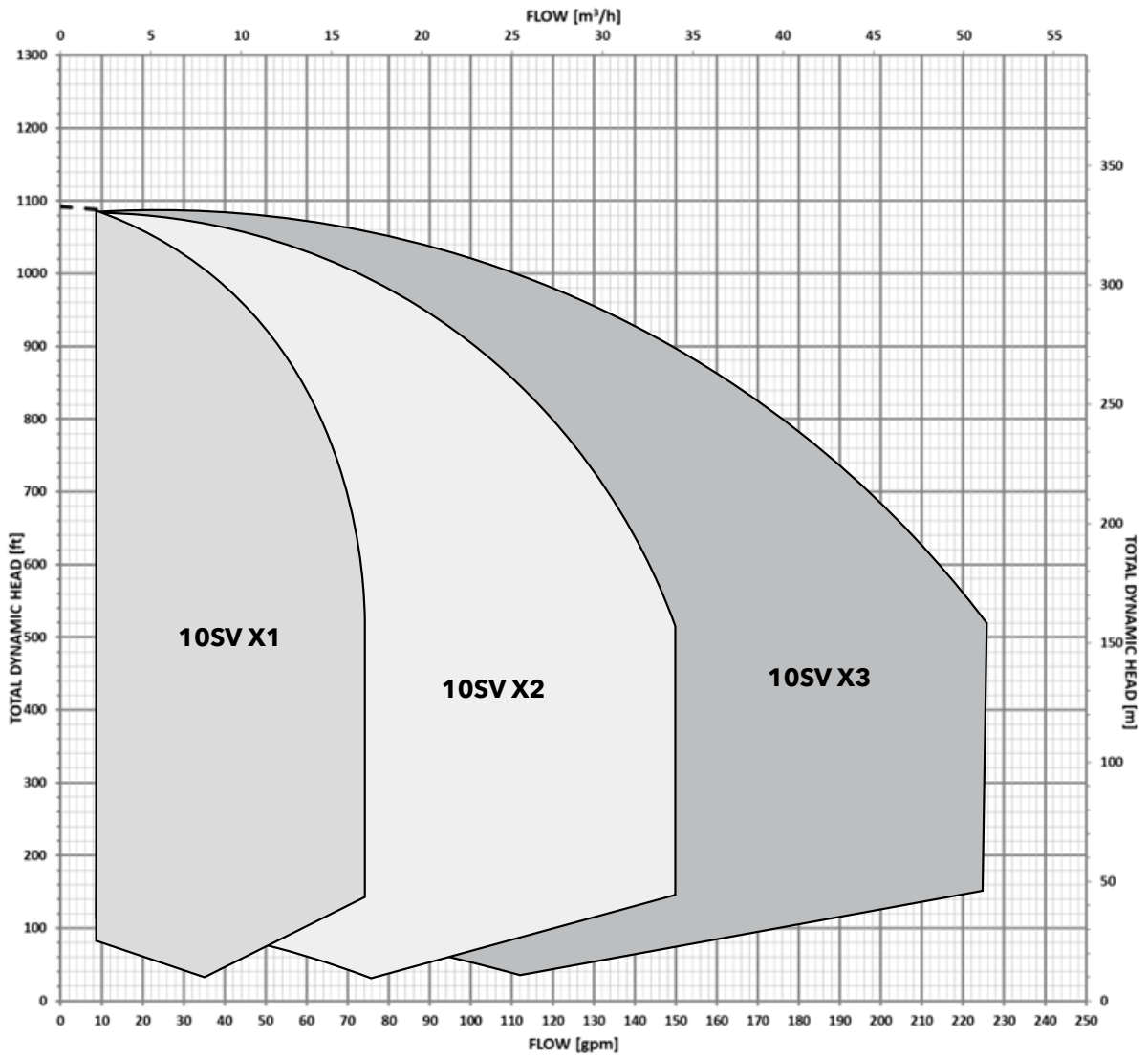


575V
AQUAFORCE e-MTV Dimensions 5SV - 3 Pump



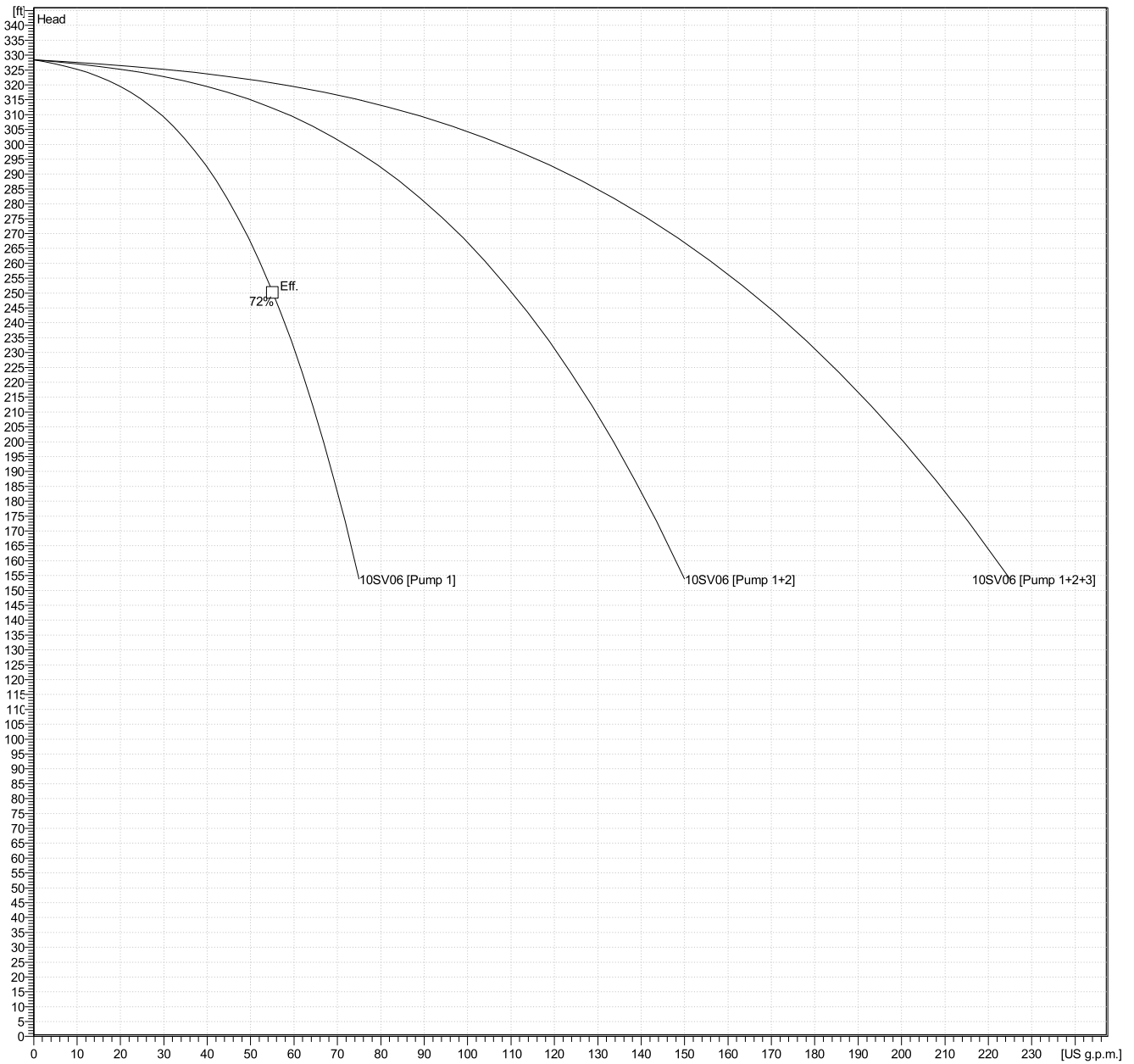
PUMP	MD	L_MAX	W_MAX	H_MAX	H	H1	A	B	C	Wt.(lb)
5SV13GG4E60-BP	3"	60.00	41.64	67.50	7.88	43.21	14.30	19.84	55.78	1190.80
5SV17GG4E60-BP	3"	60.00	41.64	67.50	7.88	47.35	14.30	19.84	55.78	1259.85
5SV20GH4E60-BP	3"	60.00	41.64	67.50	7.88	52.00	14.30	19.84	55.78	1479.85
5SV23GH4E60-BP	3"	60.00	41.64	67.50	7.88	54.56	14.30	19.84	55.78	1529.77
5SV27GJ4E60-BP	3"	60.00	41.64	67.50	7.88	59.23	14.30	19.84	55.78	2195.52

AQUAFORCE e-MTV Curves 10SV



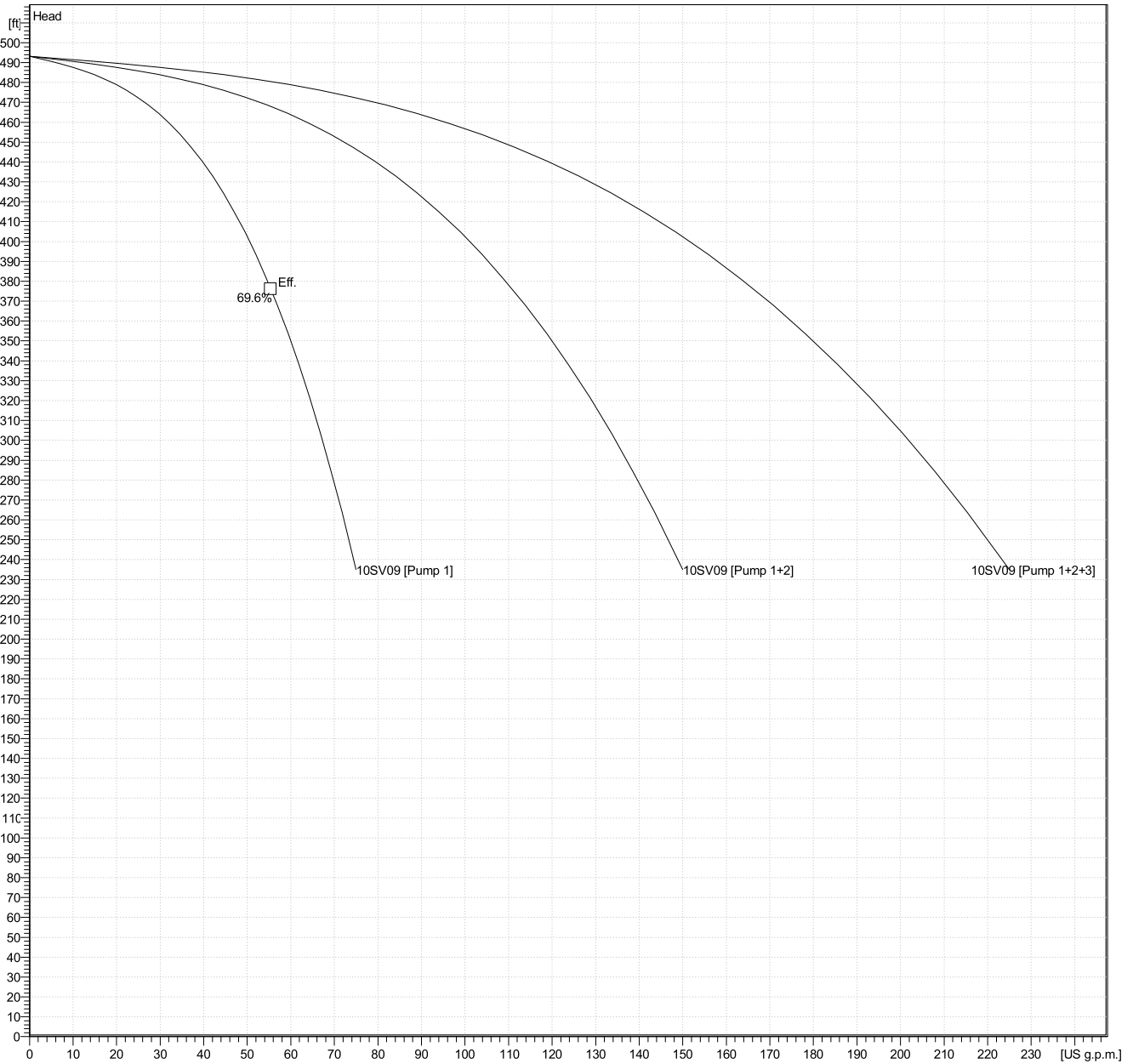
Performance Curve Data

10SV6



Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VDC4G60B2CMV	2	10SV	3"	2"	208V/3PH	5	6	0
V2VDC5G60B2CMV	2	10SV	3"	2"	230V/3PH	5	6	0
V2VDC6G60B2CMV	2	10SV	3"	2"	460V/3PH	5	6	0
V2VDC7G60B2CMV	2	10SV	3"	2"	575V/3PH	5	6	0
V3VDD4G60B2CMV	3	10SV	4"	2"	208V/3PH	5	6	0
V3VDD5G60B2CMV	3	10SV	4"	2"	230V/3PH	5	6	0
V3VDD6G60B2CMV	3	10SV	4"	2"	460V/3PH	5	6	0
V3VDD7G60B2CMV	3	10SV	4"	2"	575V/3PH	5	6	0

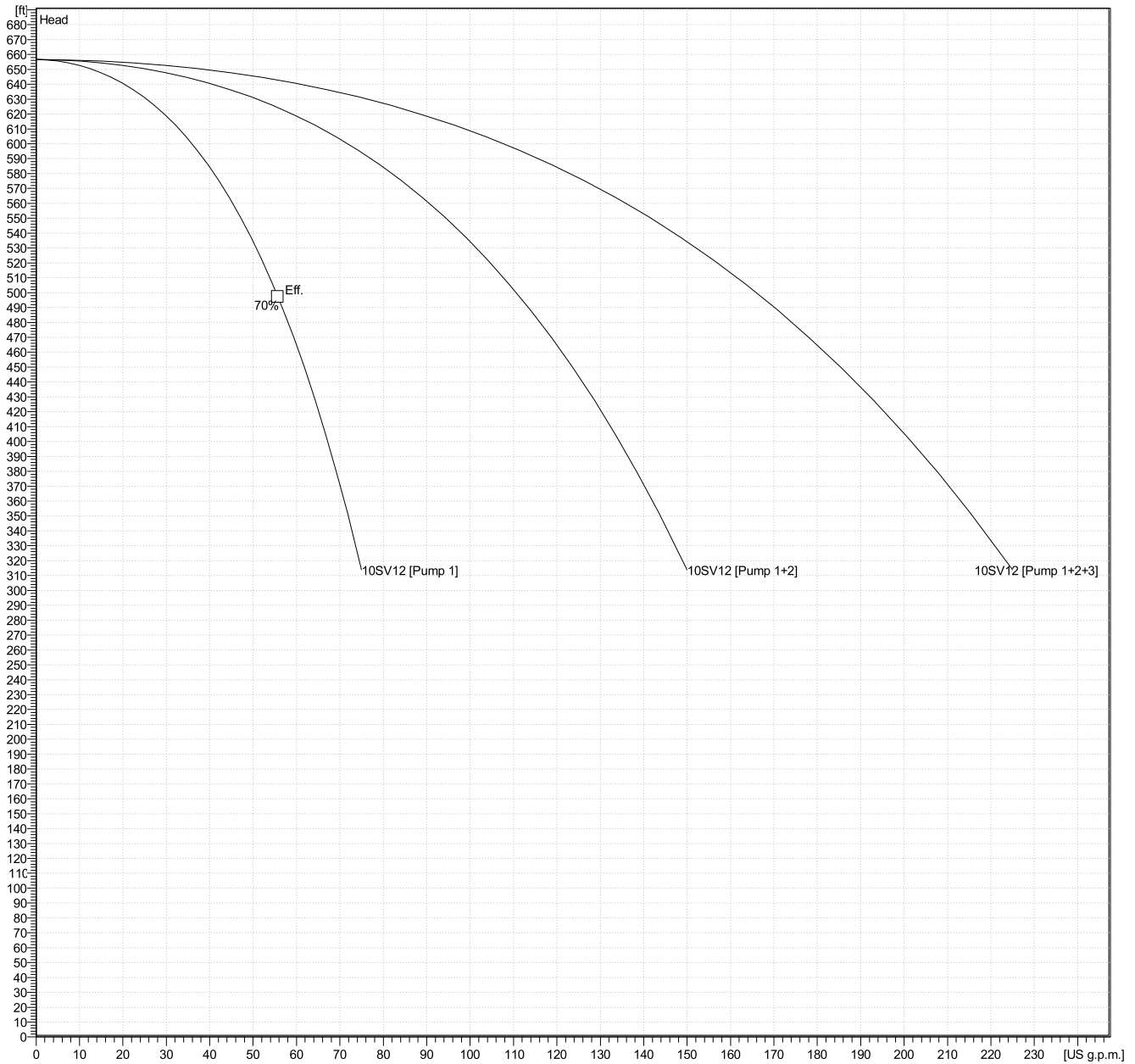
Performance Curve Data 10SV9



Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VDC4H90B2CMV	2	10SV	3"	2"	208V/3PH	7.5	9	0
V2VDC5H90B2CMV	2	10SV	3"	2"	230V/3PH	7.5	9	0
V2VDC6H90B2CMV	2	10SV	3"	2"	460V/3PH	7.5	9	0
V2VDC7H90B2CMV	2	10SV	3"	2"	575V/3PH	7.5	9	0
V3VDD4H90B2CMV	3	10SV	4"	2"	208V/3PH	7.5	9	0
V3VDD5H90B2CMV	3	10SV	4"	2"	230V/3PH	7.5	9	0
V3VDD6H90B2CMV	3	10SV	4"	2"	460V/3PH	7.5	9	0
V3VDD7H90B2CMV	3	10SV	4"	2"	575V/3PH	7.5	9	0

Performance Curve Data

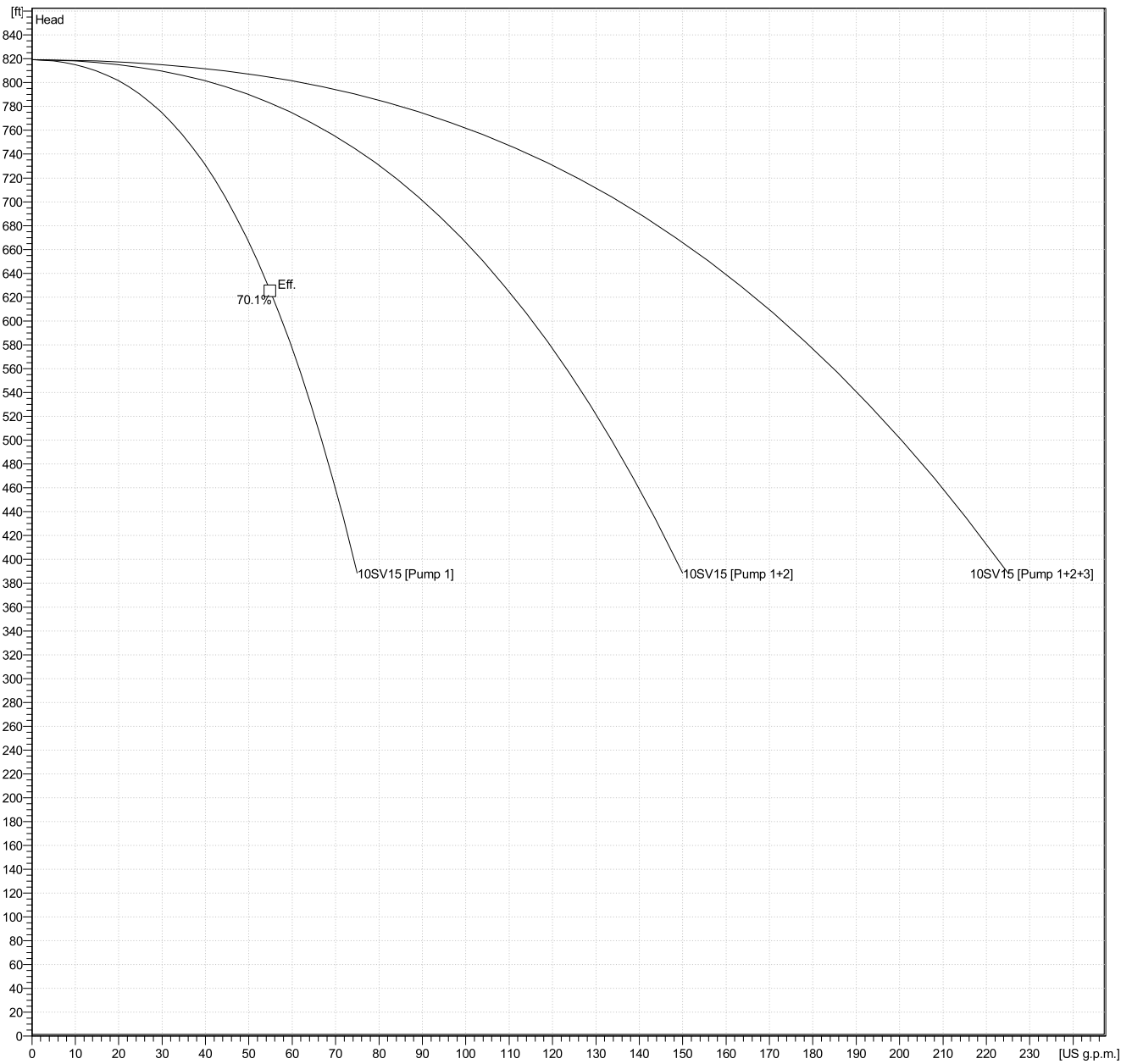
10SV12



Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VDC4J120B2CMV	2	10SV	3"	2"	208V/3PH	10	12	0
V2VDC5J120B2CMV	2	10SV	3"	2"	230V/3PH	10	12	0
V2VDC6J120B2CMV	2	10SV	3"	2"	460V/3PH	10	12	0
V2VDC7J120B2CMV	2	10SV	3"	2"	575V/3PH	10	12	0
V3VDD4J120B2CMV	3	10SV	4"	2"	208V/3PH	10	12	0
V3VDD5J120B2CMV	3	10SV	4"	2"	230V/3PH	10	12	0
V3VDD6J120B2CMV	3	10SV	4"	2"	460V/3PH	10	12	0
V3VDD7J120B2CMV	3	10SV	4"	2"	575V/3PH	10	12	0

Performance Curve Data

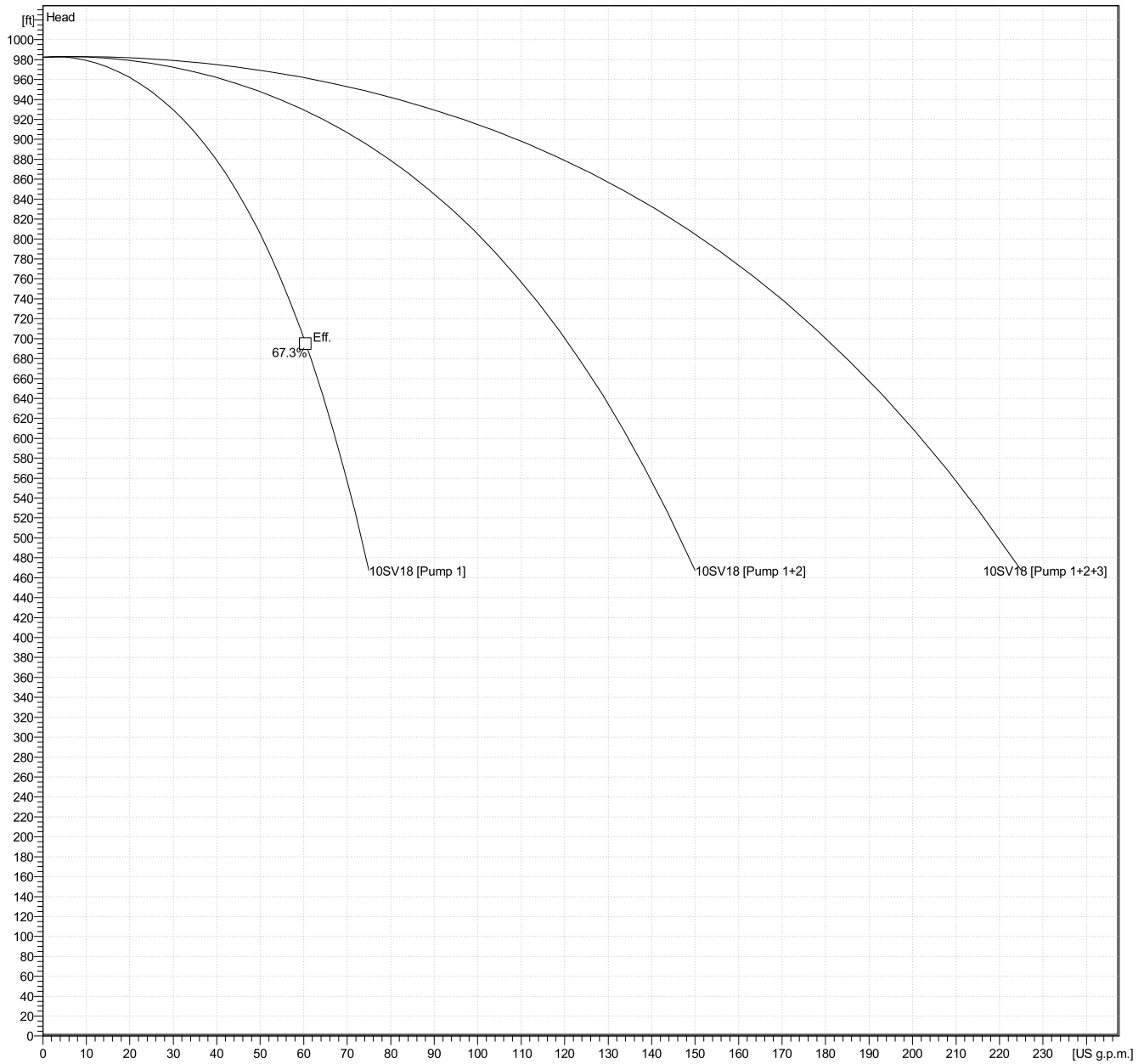
10SV15



Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VDC4K150B2CMV	2	10SV	3"	2"	208V/3PH	15	15	0
V2VDC5K150B2CMV	2	10SV	3"	2"	230V/3PH	15	15	0
V2VDC6K150B2CMV	2	10SV	3"	2"	460V/3PH	15	15	0
V2VDC7K150B2CMV	2	10SV	3"	2"	575V/3PH	15	15	0
V3VDD4K150B2CMV	3	10SV	4"	2"	208V/3PH	15	15	0
V3VDD5K150B2CMV	3	10SV	4"	2"	230V/3PH	15	15	0
V3VDD6K150B2CMV	3	10SV	4"	2"	460V/3PH	15	15	0
V3VDD7K150B2CMV	3	10SV	4"	2"	575V/3PH	15	15	0

Performance Curve Data

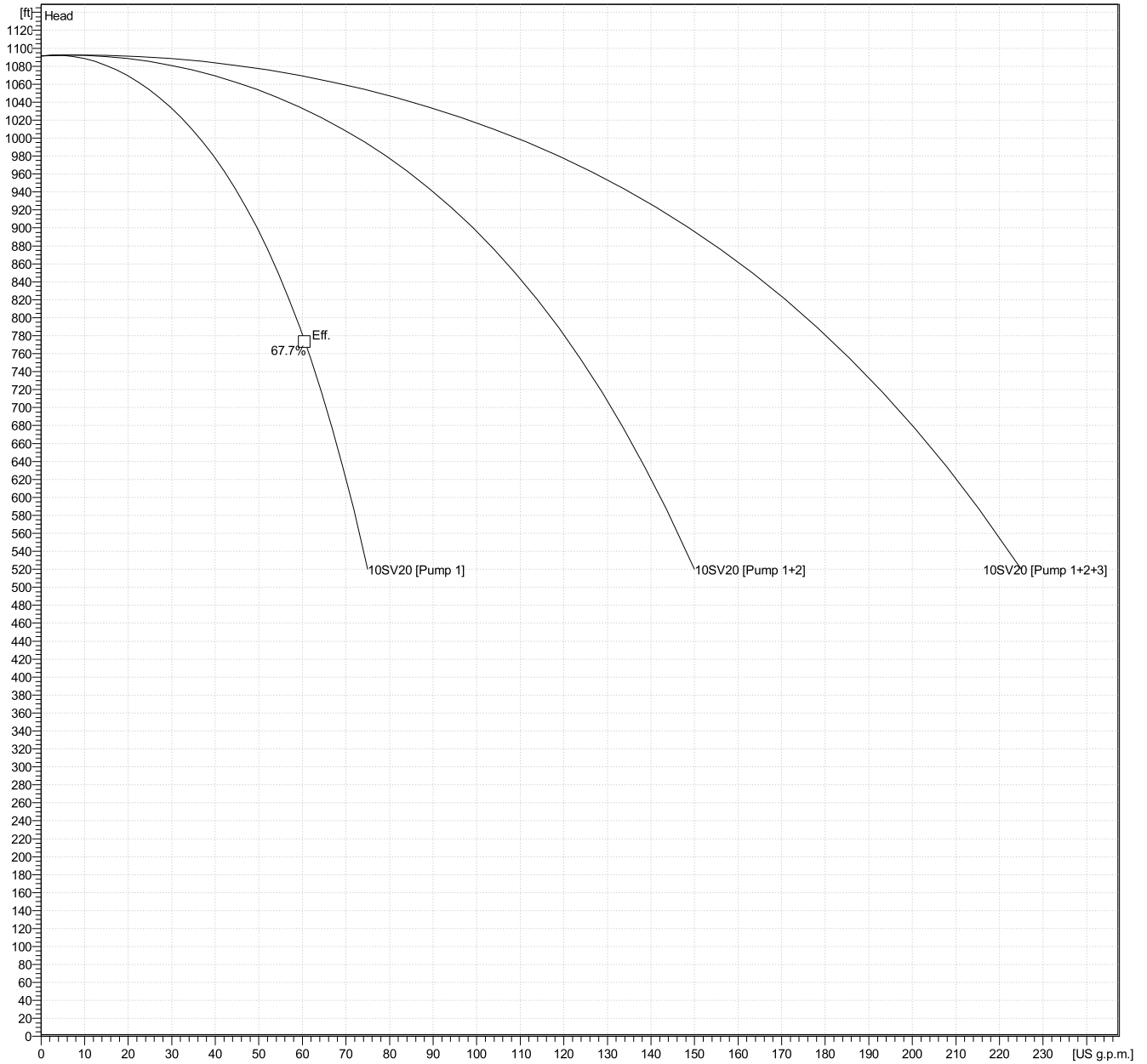
10SV18



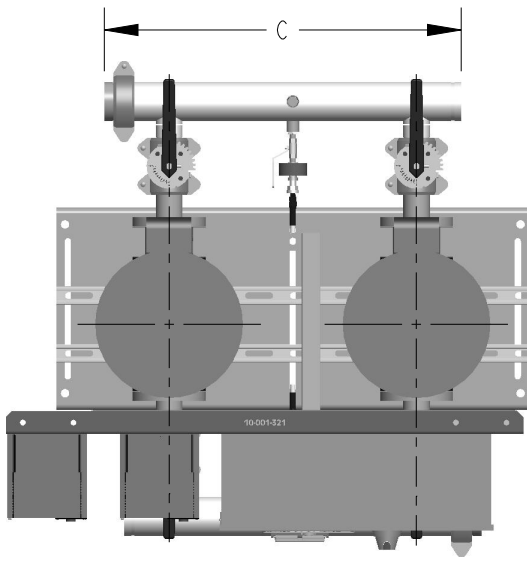
Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VDC4K180B2CMV	2	10SV	3"	2"	208V/3PH	15	18	0
V2VDC5K180B2CMV	2	10SV	3"	2"	230V/3PH	15	18	0
V2VDC6K180B2CMV	2	10SV	3"	2"	460V/3PH	15	18	0
V2VDC7K180B2CMV	2	10SV	3"	2"	575V/3PH	15	18	0
V3VDD4K180B2CMV	3	10SV	4"	2"	208V/3PH	15	18	0
V3VDD5K180B2CMV	3	10SV	4"	2"	230V/3PH	15	18	0
V3VDD6K180B2CMV	3	10SV	4"	2"	460V/3PH	15	18	0
V3VDD7K180B2CMV	3	10SV	4"	2"	575V/3PH	15	18	0

Performance Curve Data

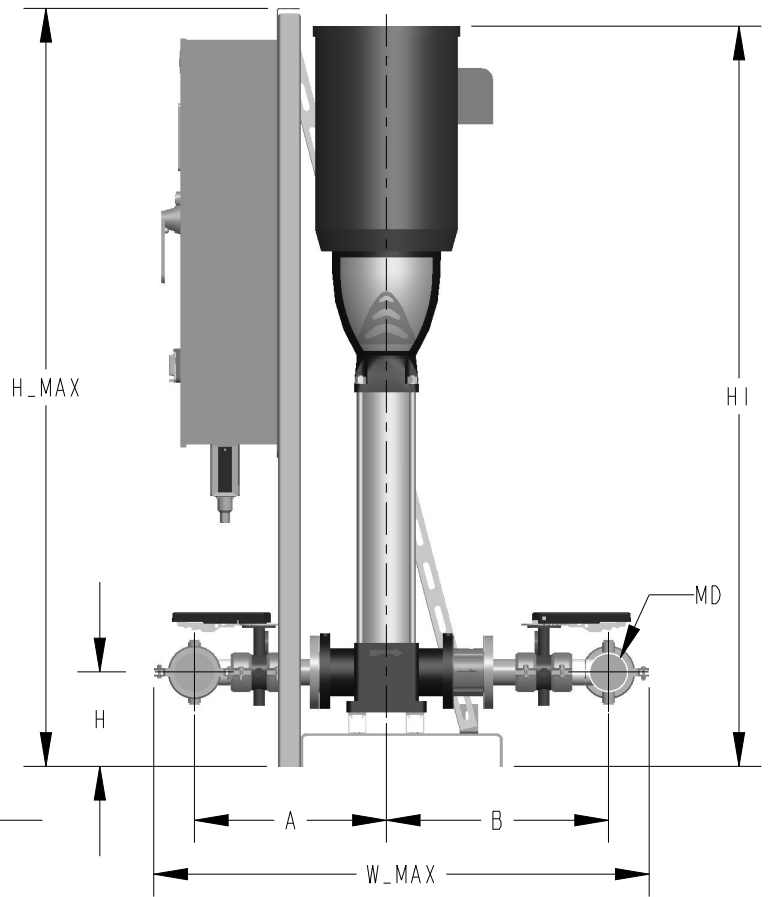
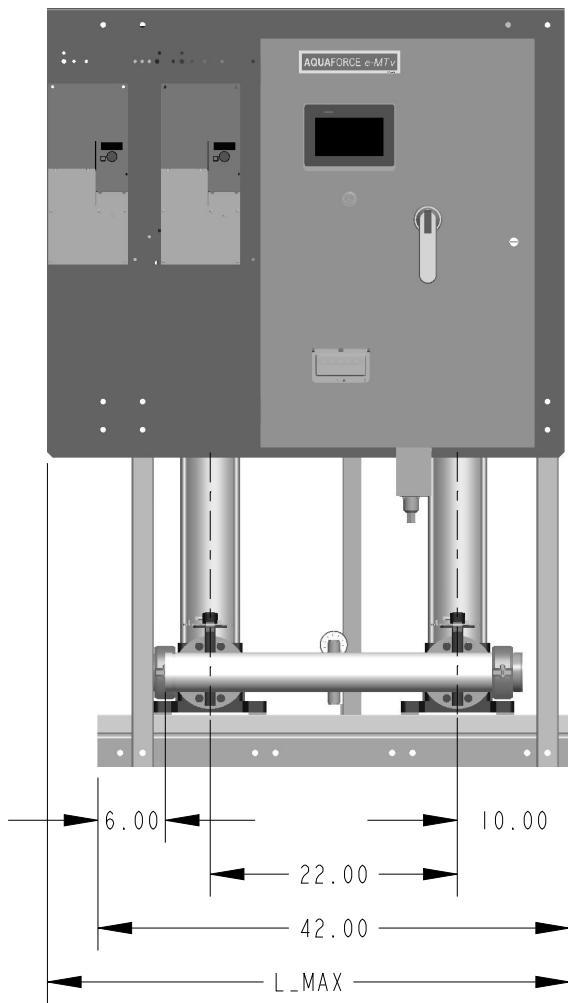
10SV20



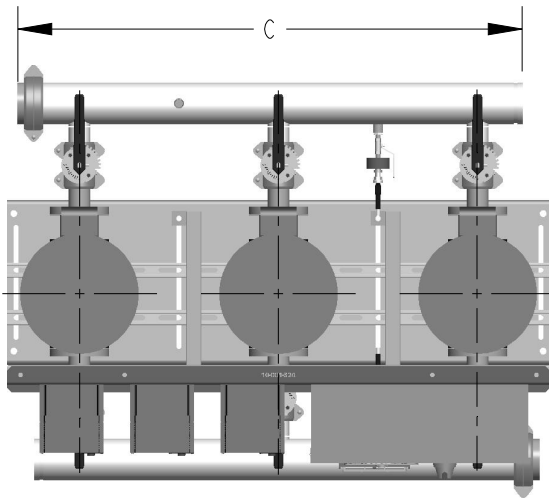
Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VDC4L200B2CMV	2	10SV	3"	2"	208V/3PH	20	20	0
V2VDC5L200B2CMV	2	10SV	3"	2"	230V/3PH	20	20	0
V2VDC6L200B2CMV	2	10SV	3"	2"	460V/3PH	20	20	0
V2VDC7L200B2CMV	2	10SV	3"	2"	575V/3PH	20	20	0
V3VDD4L200B2CMV	3	10SV	4"	2"	208V/3PH	20	20	0
V3VDD5L200B2CMV	3	10SV	4"	2"	230V/3PH	20	20	0
V3VDD6L200B2CMV	3	10SV	4"	2"	460V/3PH	20	20	0
V3VDD7L200B2CMV	3	10SV	4"	2"	575V/3PH	20	20	0



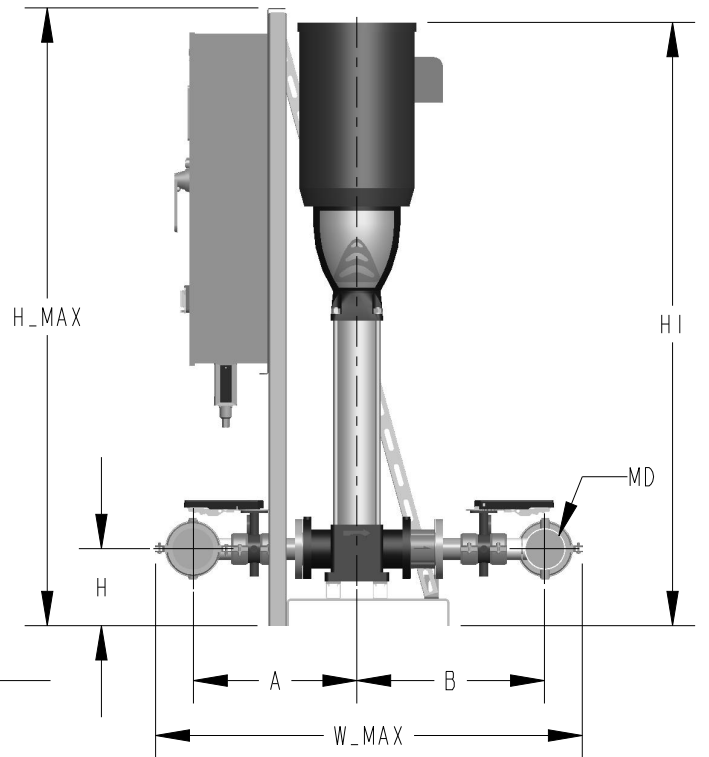
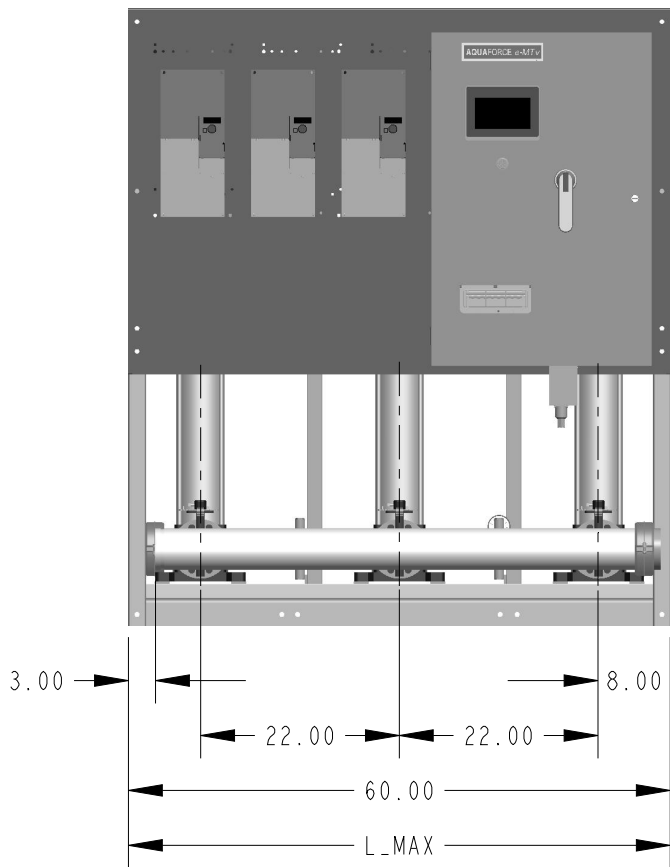
208-230V
AQUAFORCE e-MTV Dimensions 10SV - 2 Pump



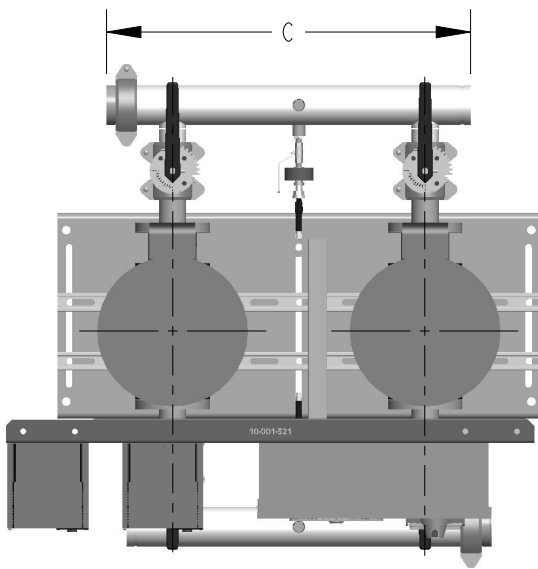
PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
10SV6GG4F60-BP	3"	46.50	44.12	67.50	8.42	40.91	17.09	19.78	31.78	602.01
10SV9GH4F60-BP	3"	46.50	44.12	67.50	8.42	46.19	17.09	19.78	31.78	640.99
10SVI2GJ4F60-BP	3"	46.50	44.12	67.50	8.42	49.83	17.09	19.78	31.78	729.96
10SVI5GK4F60-BP	3"	46.50	44.12	67.50	8.42	56.11	17.09	19.78	31.78	877.28
10SVI8GK4F60-BP	3"	46.50	44.12	67.50	8.42	59.89	17.09	19.78	31.78	897.43
10SV20GL4F60-BP	3"	46.50	44.12	67.50	8.42	65.92	17.09	19.78	31.78	1278.07



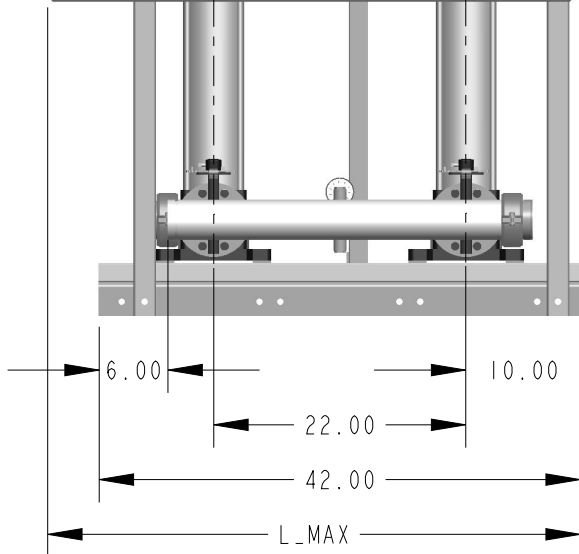
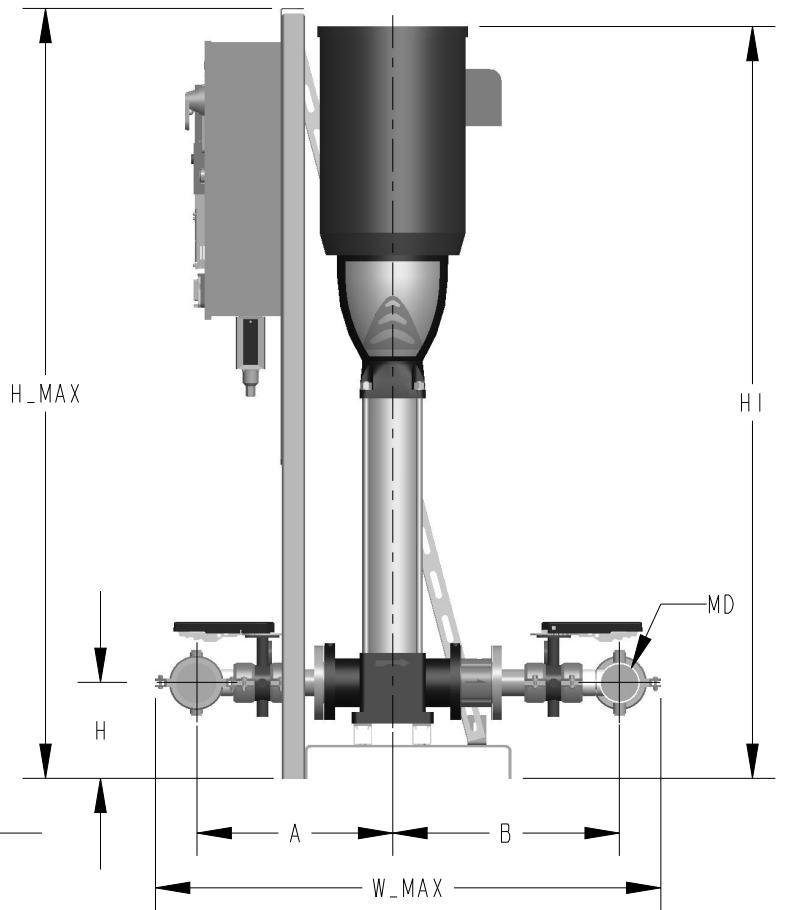
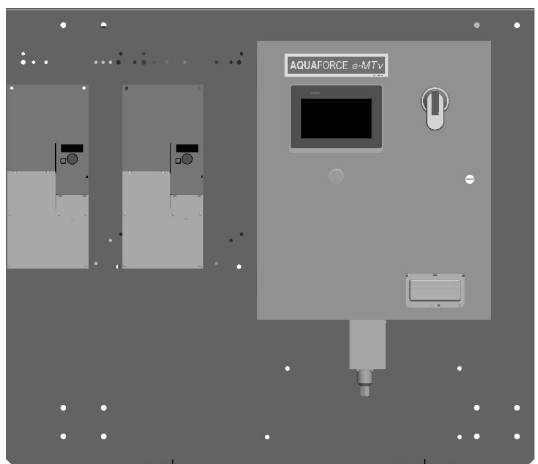
208-230V
AQUAFORCE e-MTV Dimensions 10SV - 3 Pump



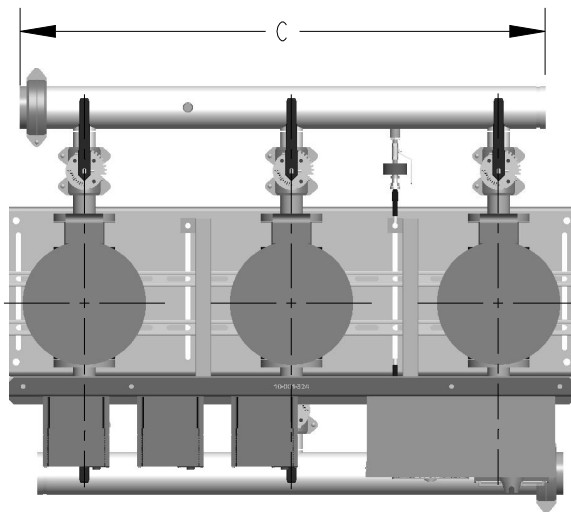
PUMP	MD	L_MAX	W_MAX	H_MAX	H	H_I	A	B	C	Wt.(lb)
10SV6GG4F60-BP	4"	60.00	47.25	67.50	8.42	40.91	18.09	20.78	55.84	803.26
10SV9GH4F60-BP	4"	60.00	47.25	67.50	8.42	46.19	18.09	20.78	55.84	861.73
10SV12GJ4F60-BP	4"	60.00	47.25	67.50	8.42	49.83	18.09	20.78	55.84	995.18
10SV15GK4F60-BP	4"	60.00	47.25	67.50	8.42	56.11	18.09	20.78	55.84	1216.17
10SV18GK4F60-BP	4"	60.00	47.25	67.50	8.42	59.89	18.09	20.78	55.84	1246.38
10SV20GL4F60-BP	4"	60.00	47.25	67.50	8.42	65.92	18.09	20.78	55.84	1817.34



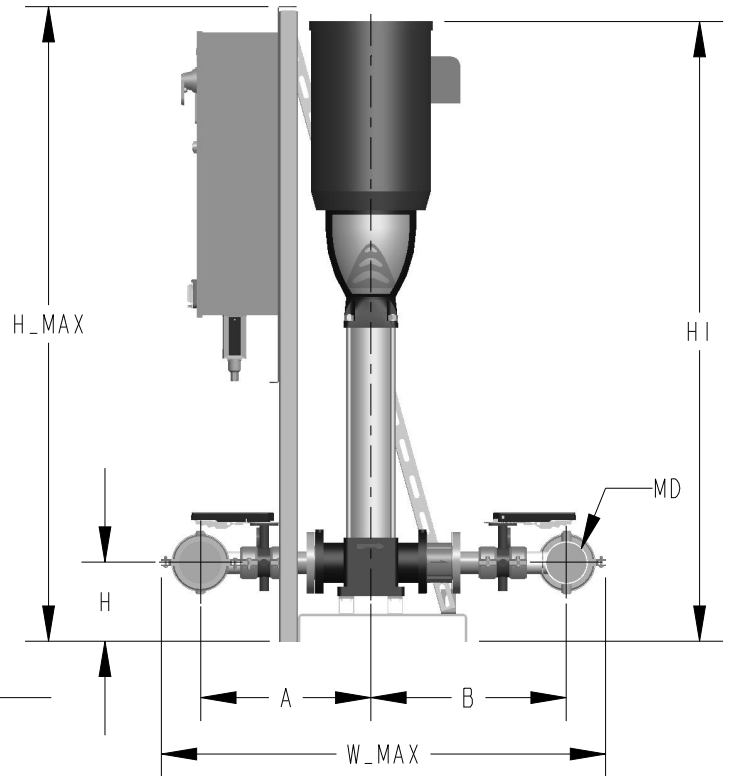
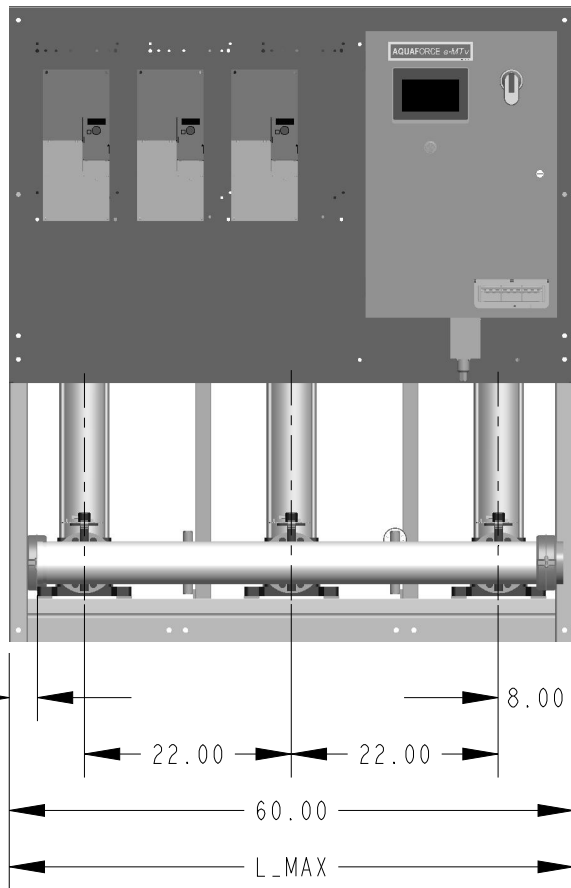
460V
AQUAFORCE e-MTV Dimensions 10SV - 2 Pump



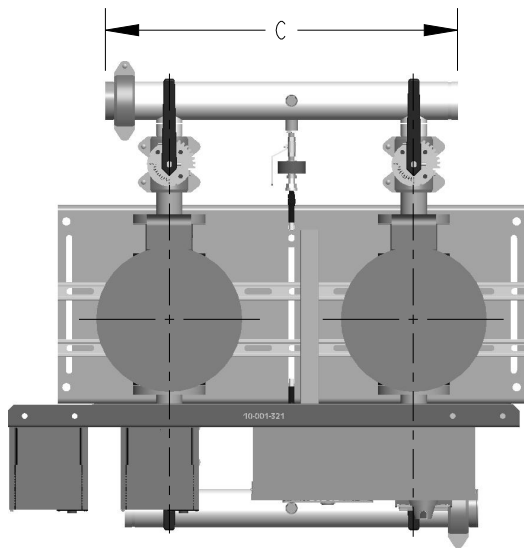
PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
10SV6GG4F60-BP	3"	46.50	44.12	67.50	8.42	40.91	17.09	19.78	31.78	602.01
10SV9GH4F60-BP	3"	46.50	44.12	67.50	8.42	46.19	17.09	19.78	31.78	640.99
10SV12GJ4F60-BP	3"	46.50	44.12	67.50	8.42	49.83	17.09	19.78	31.78	729.96
10SV15GK4F60-BP	3"	46.50	44.12	67.50	8.42	56.11	17.09	19.78	31.78	877.28
10SV18GK4F60-BP	3"	46.50	44.12	67.50	8.42	59.89	17.09	19.78	31.78	897.43
10SV20GL4F60-BP	3"	46.50	44.12	67.50	8.42	65.92	17.09	19.78	31.78	1278.06



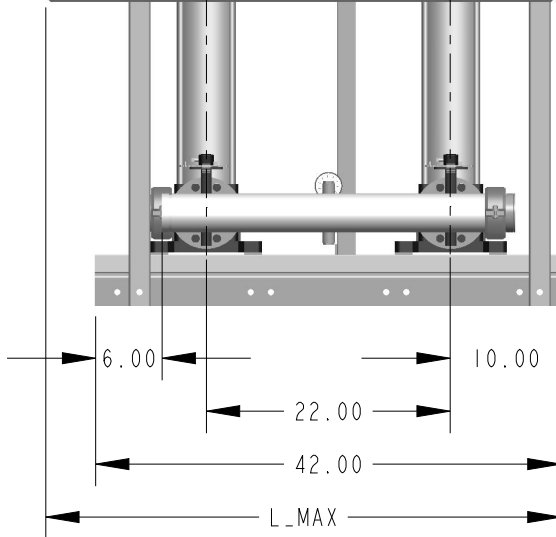
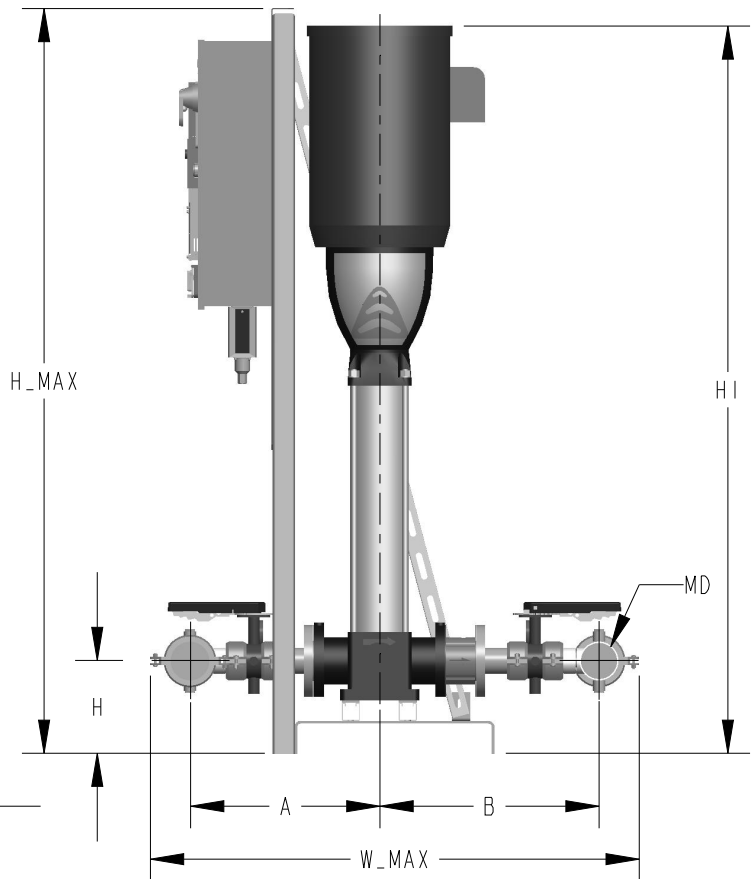
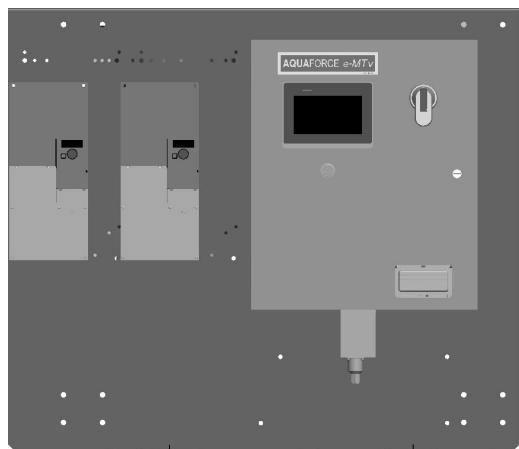
460V
AQUAFORCE e-MTV Dimensions 10SV - 3 Pump



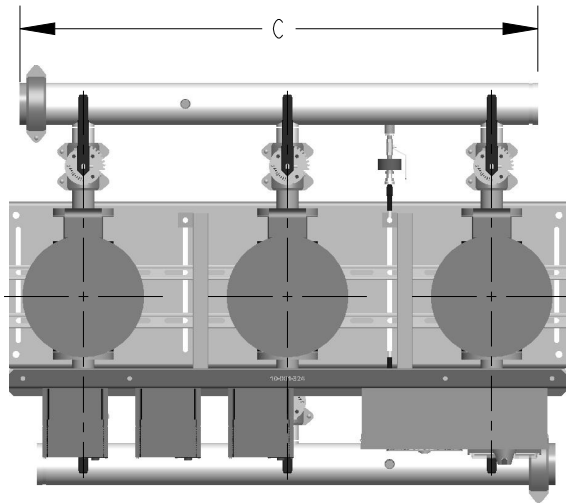
PUMP	MD	L_MAX	W_MAX	H_MAX	H	H1	A	B	C	Wt.(lb)
10SV6GG4F60-BP	4"	60.00	47.25	67.50	8.42	40.91	18.09	20.78	55.84	803.26
10SV9GH4F60-BP	4"	60.00	47.25	67.50	8.42	46.19	18.09	20.78	55.84	861.73
10SV12GJ4F60-BP	4"	60.00	47.25	67.50	8.42	49.83	18.09	20.78	55.84	995.18
10SV15GK4F60-BP	4"	60.00	47.25	67.50	8.42	56.11	18.09	20.78	55.84	1216.17
10SV18GK4F60-BP	4"	60.00	47.25	67.50	8.42	59.89	18.09	20.78	55.84	1246.38
10SV20GL4F60-BP	4"	60.00	47.25	67.50	8.42	65.92	18.09	20.78	55.84	1817.33



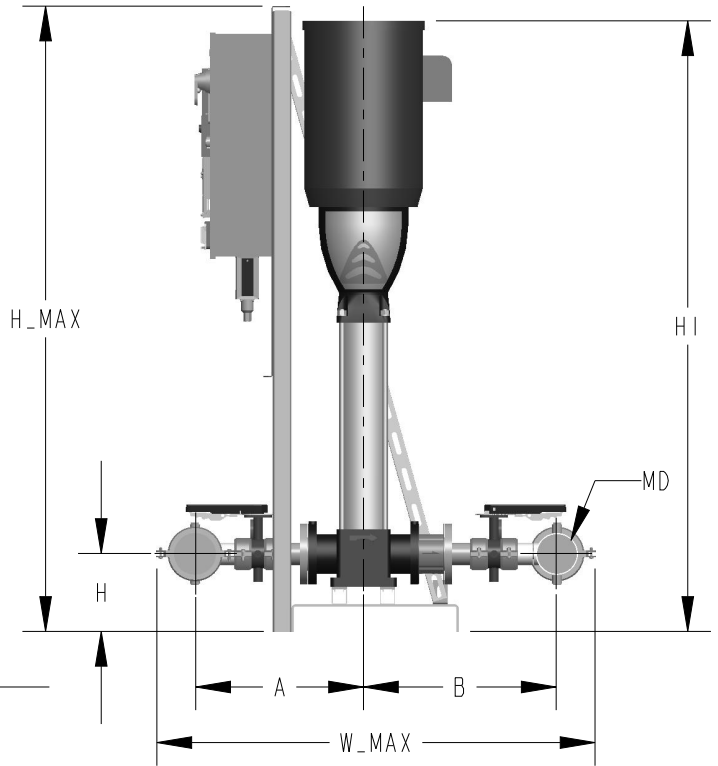
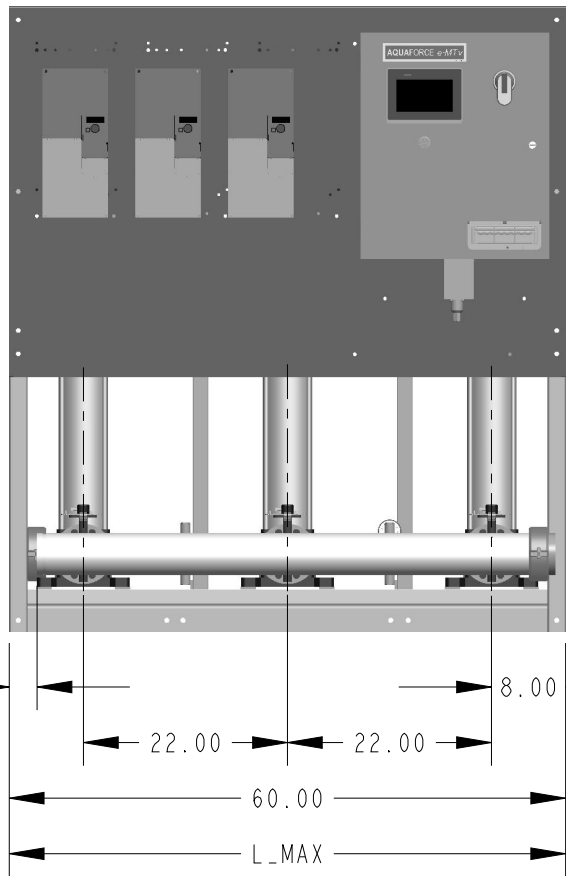
575V
AQUAFORCE e-MTV Dimensions 10SV - 2 Pump



PUMP	MD	L_MAX	W_MAX	H_MAX	H	H_I	A	B	C	Wt.(lb)
10SV6GG4E60-BP	3"	46.50	44.12	67.50	8.42	40.91	17.09	19.78	31.78	602.01
10SV9GH4E60-BP	3"	46.50	44.12	67.50	8.42	46.19	17.09	19.78	31.78	640.99
10SV12GJ4E60-BP	3"	46.50	44.12	67.50	8.42	49.83	17.09	19.78	31.78	729.96
10SV15GK4E60-BP	3"	46.50	44.12	67.50	8.42	56.11	17.09	19.78	31.78	877.28
10SV18GK4E60-BP	3"	46.50	44.12	67.50	8.42	59.89	17.09	19.78	31.78	897.43
10SV20GL4E60-BP	3"	46.50	44.12	67.50	8.42	65.92	17.09	19.78	31.78	1278.06

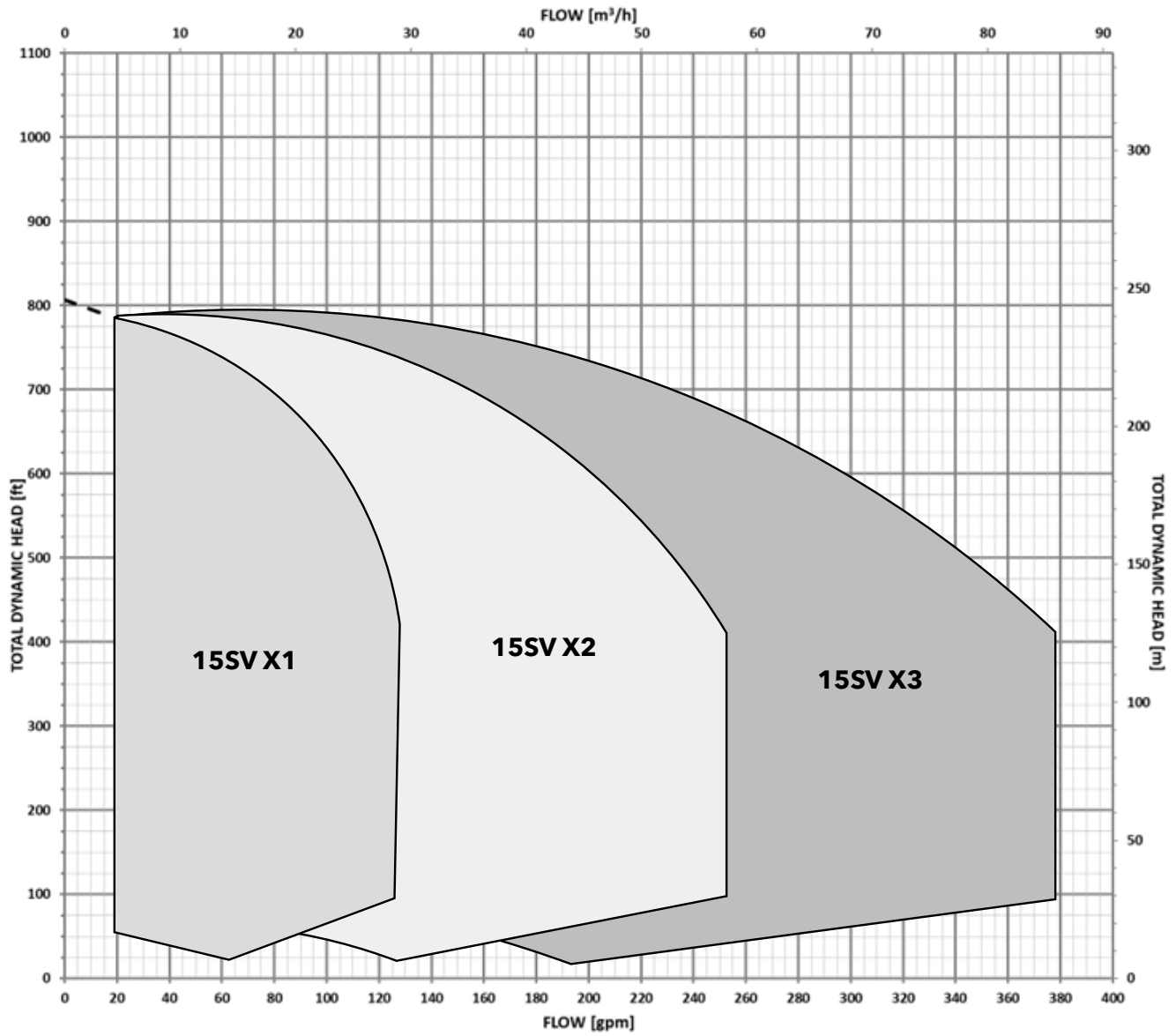


575V
AQUAFORCE e-MTV Dimensions 10SV - 3 Pump



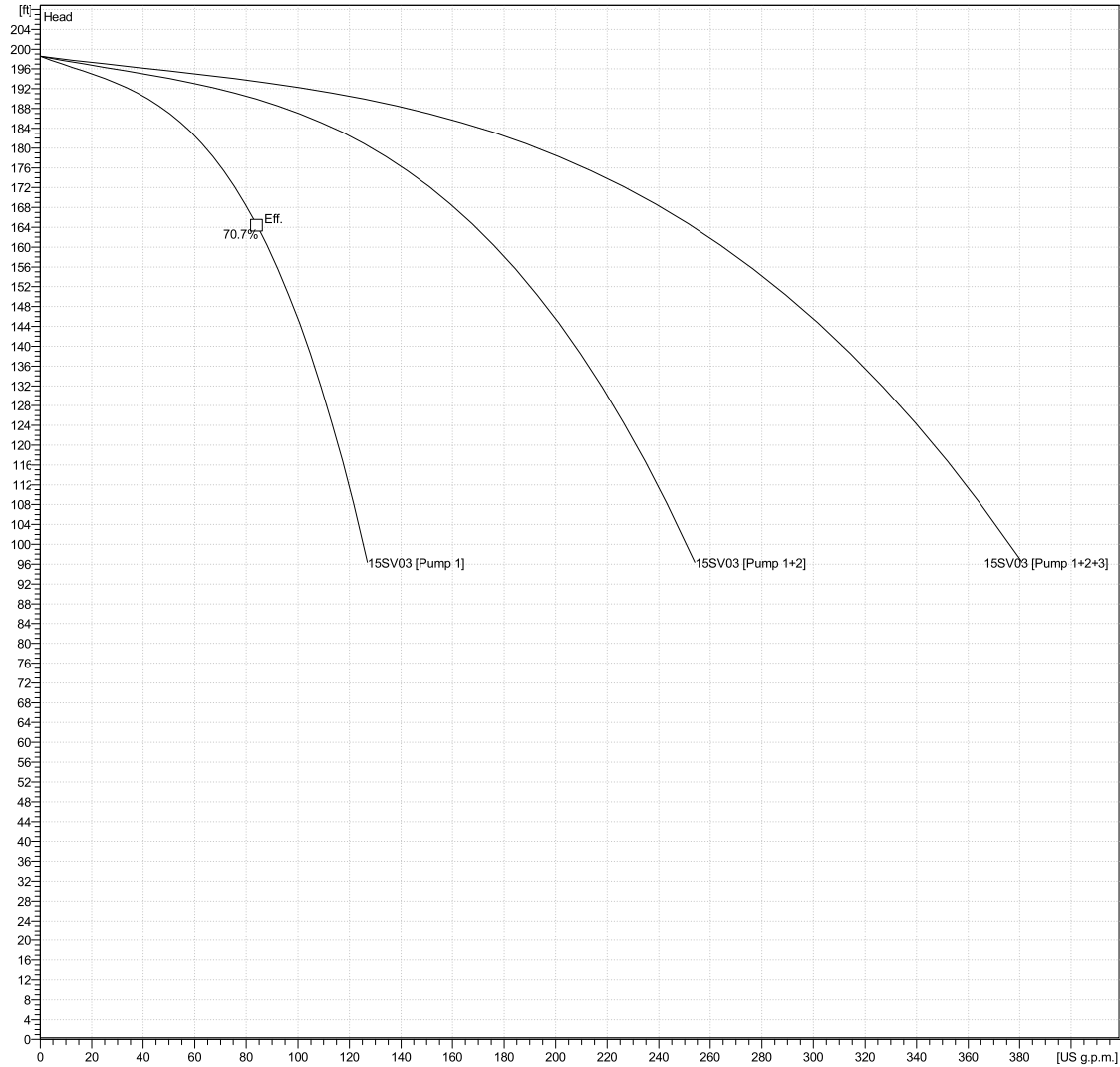
PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
10SV6GG4E60-BP	4"	60.00	47.25	67.50	8.42	40.91	18.09	20.78	55.84	803.26
10SV9GH4E60-BP	4"	60.00	47.25	67.50	8.42	46.19	18.09	20.78	55.84	861.73
10SV12GJ4E60-BP	4"	60.00	47.25	67.50	8.42	49.83	18.09	20.78	55.84	995.18
10SV15GK4E60-BP	4"	60.00	47.25	67.50	8.42	56.11	18.09	20.78	55.84	1216.17
10SV18GK4E60-BP	4"	60.00	47.25	67.50	8.42	59.89	18.09	20.78	55.84	1246.38
10SV20GL4E60-BP	4"	60.00	47.25	67.50	8.42	65.92	18.09	20.78	55.84	1817.33

AQUAFORCE e-MTV Curves 15SV



Performance Curve Data

15SV3



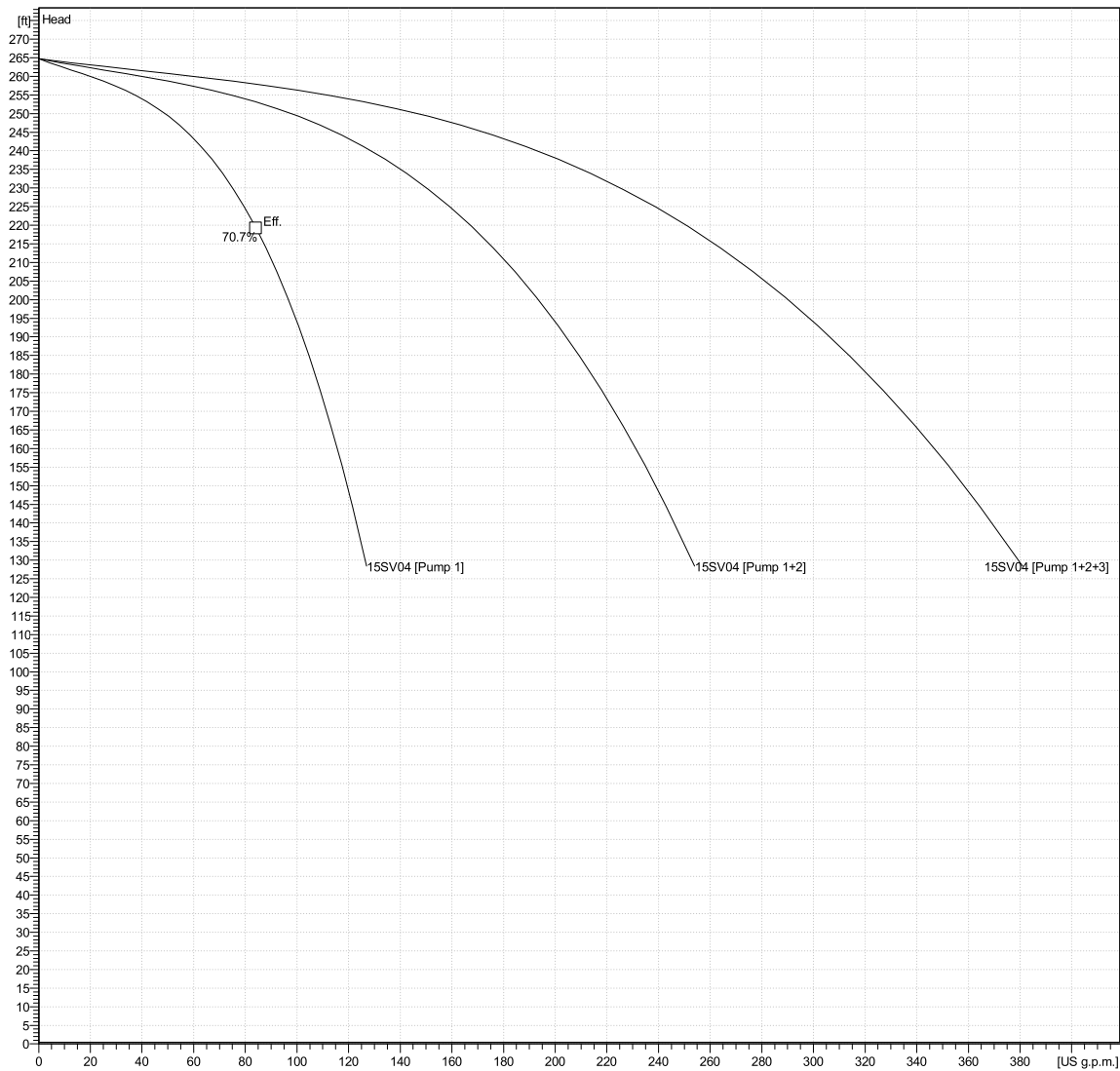
Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VEC4G30B2CMV	2*	15SV	3"	2"	208V/3PH	5	3	0
V2VEC5G30B2CMV	2*	15SV	3"	2"	230V/3PH	5	3	0
V2VEC6G30B2CMV	2*	15SV	3"	2"	460V/3PH	5	3	0
V2VEC7G30B2CMV	2*	15SV	3"	2"	575V/3PH	5	3	0
V2VED4G30C2CMV	2*	15SV	4"	2.5"	208V/3PH	5	3	0
V2VED5G30C2CMV	2*	15SV	4"	2.5"	230V/3PH	5	3	0
V2VED6G30C2CMV	2*	15SV	4"	2.5"	460V/3PH	5	3	0
V2VED7G30C2CMV	2*	15SV	4"	2.5"	575V/3PH	5	3	0
V3VED4G30B2CMV	3**	15SV	4"	2"	208V/3PH	5	3	0
V3VED5G30B2CMV	3**	15SV	4"	2"	230V/3PH	5	3	0
V3VED6G30B2CMV	3**	15SV	4"	2"	460V/3PH	5	3	0
V3VED7G30B2CMV	3**	15SV	4"	2"	575V/3PH	5	3	0
V3VEE4G30C2CMV	3**	15SV	6"	2.5"	208V/3PH	5	3	0
V3VEE5G30C2CMV	3**	15SV	6"	2.5"	230V/3PH	5	3	0
V3VEE6G30C2CMV	3**	15SV	6"	2.5"	460V/3PH	5	3	0
V3VEE7G30C2CMV	3**	15SV	6"	2.5"	575V/3PH	5	3	0

*Duplex: Select 3" header and 2" branch size for 210 GPM and less. Select 4" header and 2.5" branch size for greater than 210 GPM

**Triplex: Select 4" header and 2" branch for 315 GPM and less. Select 6" header and 2.5" branch for greater than 315 GPM

Performance Curve Data

15SV4



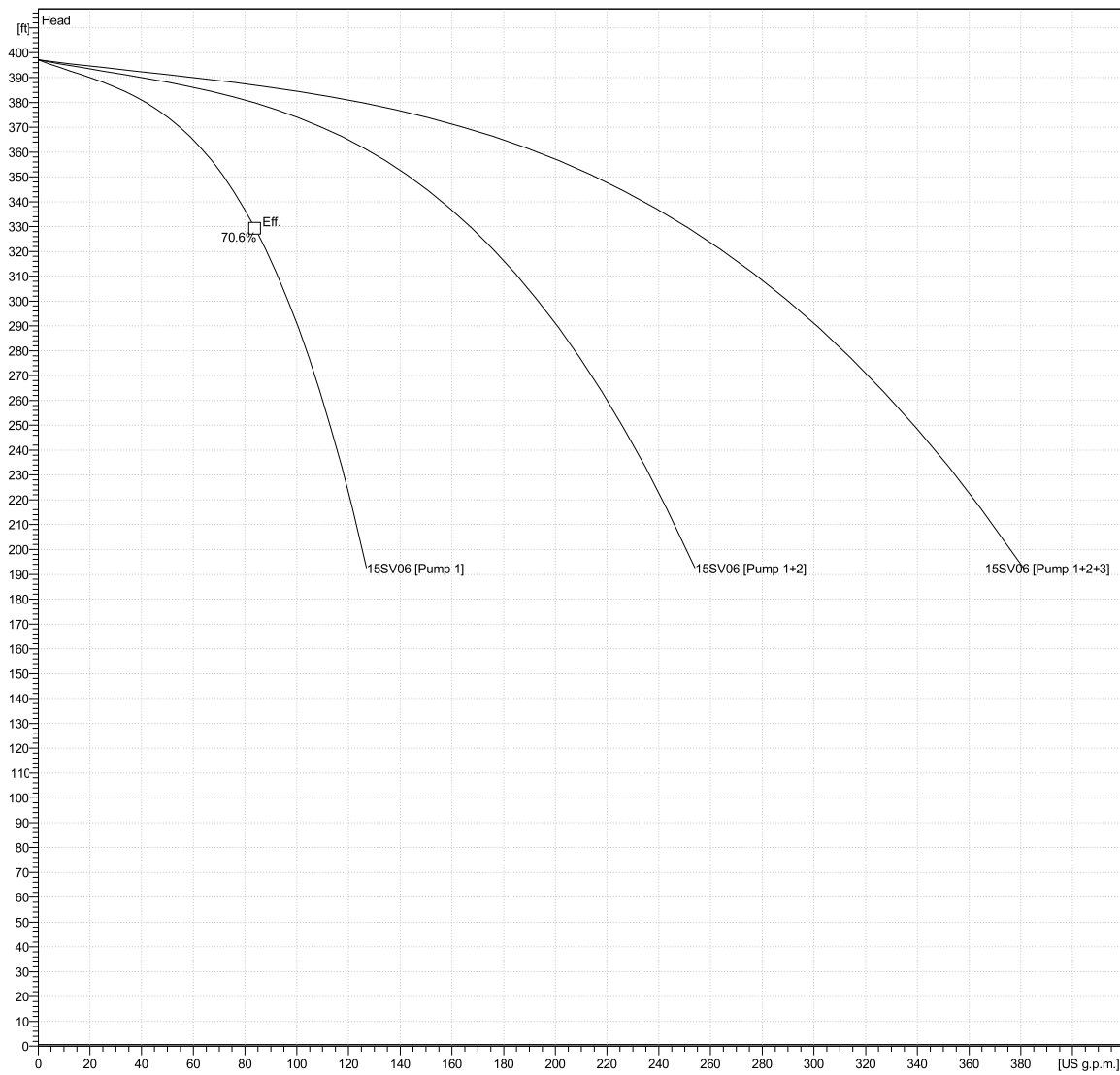
Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VEC4H40B2CMV	2*	15SV	3"	2"	208V/3PH	7.5	4	0
V2VEC5H40B2CMV	2*	15SV	3"	2"	230V/3PH	7.5	4	0
V2VEC6H40B2CMV	2*	15SV	3"	2"	460V/3PH	7.5	4	0
V2VEC7H40B2CMV	2*	15SV	3"	2"	575V/3PH	7.5	4	0
V2VED4H40C2CMV	2*	15SV	4"	2.5"	208V/3PH	7.5	4	0
V2VED5H40C2CMV	2*	15SV	4"	2.5"	230V/3PH	7.5	4	0
V2VED6H40C2CMV	2*	15SV	4"	2.5"	460V/3PH	7.5	4	0
V2VED7H40C2CMV	2*	15SV	4"	2.5"	575V/3PH	7.5	4	0
V3VED4H40B2CMV	3**	15SV	4"	2"	208V/3PH	7.5	4	0
V3VED5H40B2CMV	3**	15SV	4"	2"	230V/3PH	7.5	4	0
V3VED6H40B2CMV	3**	15SV	4"	2"	460V/3PH	7.5	4	0
V3VED7H40B2CMV	3**	15SV	4"	2"	575V/3PH	7.5	4	0
V3VEE4H40C2CMV	3**	15SV	6"	2.5"	208V/3PH	7.5	4	0
V3VEE5H40C2CMV	3**	15SV	6"	2.5"	230V/3PH	7.5	4	0
V3VEE6H40C2CMV	3**	15SV	6"	2.5"	460V/3PH	7.5	4	0
V3VEE7H40C2CMV	3**	15SV	6"	2.5"	575V/3PH	7.5	4	0

*Duplex: Select 3" header and 2" branch size for 210 GPM and less. Select 4" header and 2.5" branch size for greater than 210 GPM

**Triplex: Select 4" header and 2" branch for 315 GPM and less. Select 6" header and 2.5" branch for greater than 315 GPM

Performance Curve Data

15SV6



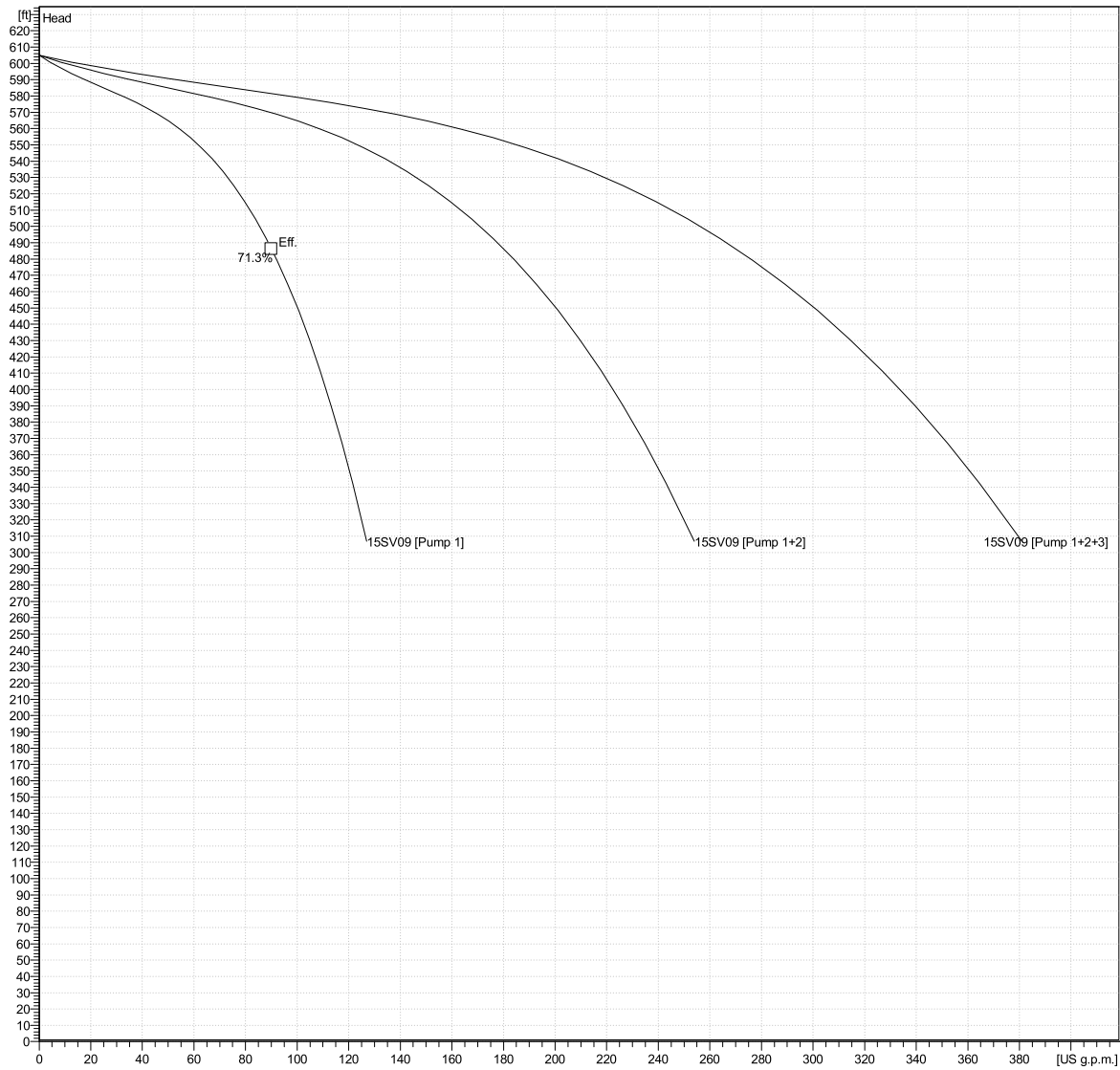
Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VEC4J60B2CMV	2*	15SV	3"	2"	208V/3PH	10	6	0
V2VEC5J60B2CMV	2*	15SV	3"	2"	230V/3PH	10	6	0
V2VEC6J60B2CMV	2*	15SV	3"	2"	460V/3PH	10	6	0
V2VEC7J60B2CMV	2*	15SV	3"	2"	575V/3PH	10	6	0
V2VED4J60C2CMV	2*	15SV	4"	2.5"	208V/3PH	10	6	0
V2VED5J60C2CMV	2*	15SV	4"	2.5"	230V/3PH	10	6	0
V2VED6J60C2CMV	2*	15SV	4"	2.5"	460V/3PH	10	6	0
V2VED7J60C2CMV	2*	15SV	4"	2.5"	575V/3PH	10	6	0
V3VED4J60B2CMV	3**	15SV	4"	2"	208V/3PH	10	6	0
V3VED5J60B2CMV	3**	15SV	4"	2"	230V/3PH	10	6	0
V3VED6J60B2CMV	3**	15SV	4"	2"	460V/3PH	10	6	0
V3VED7J60B2CMV	3**	15SV	4"	2"	575V/3PH	10	6	0
V3VEE4J60C2CMV	3**	15SV	6"	2.5"	208V/3PH	10	6	0
V3VEE5J60C2CMV	3**	15SV	6"	2.5"	230V/3PH	10	6	0
V3VEE6J60C2CMV	3**	15SV	6"	2.5"	460V/3PH	10	6	0
V3VEE7J60C2CMV	3**	15SV	6"	2.5"	575V/3PH	10	6	0

*Duplex: Select 3" header and 2" branch size for 210 GPM and less. Select 4" header and 2.5" branch size for greater than 210 GPM

**Triplex: Select 4" header and 2" branch for 315 GPM and less. Select 6" header and 2.5" branch for greater than 315 GPM

Performance Curve Data

15SV9



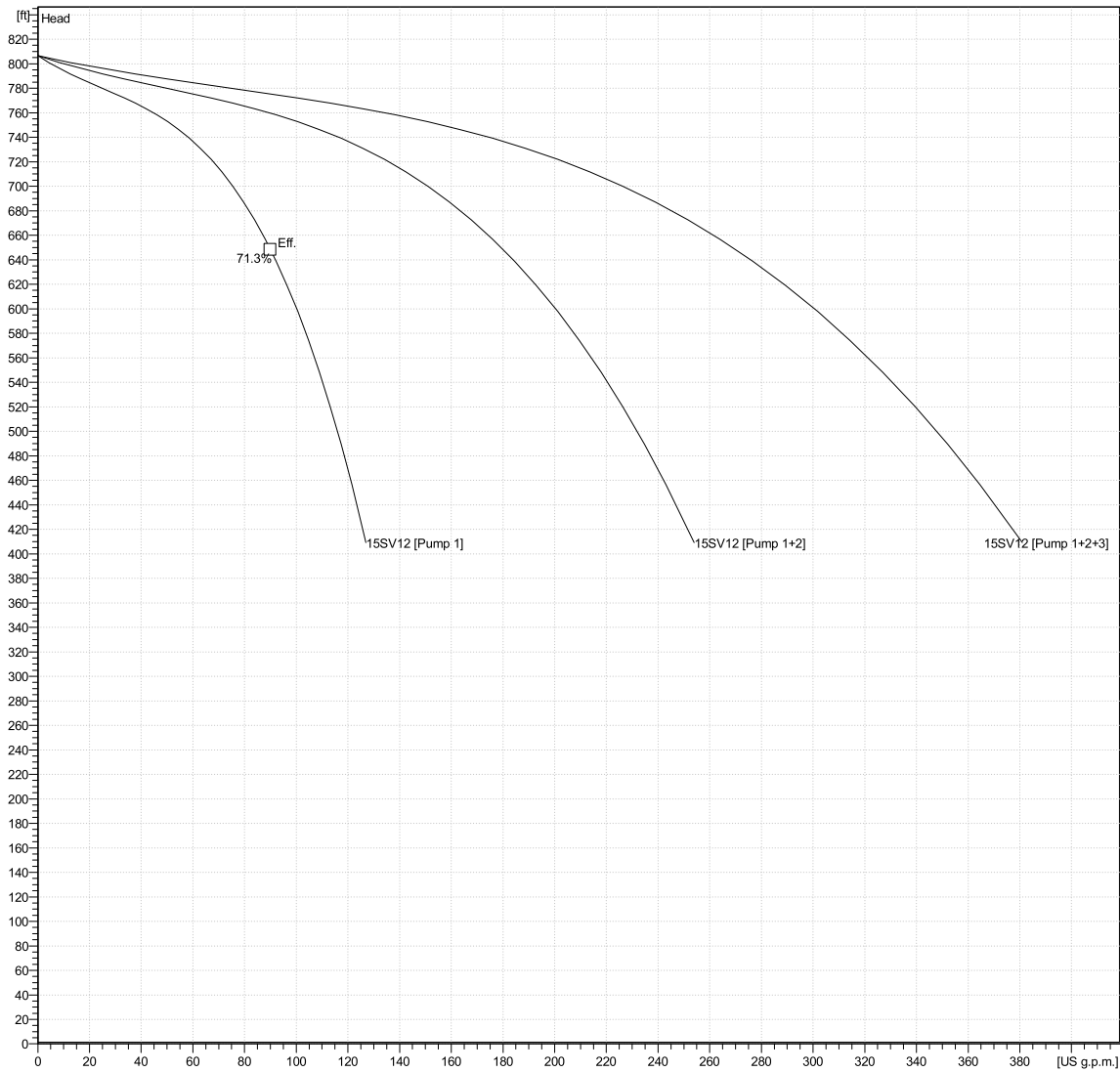
Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VEC4K90B2CMV	2*	15SV	3"	2"	208V/3PH	15	9	0
V2VEC5K90B2CMV	2*	15SV	3"	2"	230V/3PH	15	9	0
V2VEC6K90B2CMV	2*	15SV	3"	2"	460V/3PH	15	9	0
V2VEC7K90B2CMV	2*	15SV	3"	2"	575V/3PH	15	9	0
V2VED4K90C2CMV	2*	15SV	4"	2.5"	208V/3PH	15	9	0
V2VED5K90C2CMV	2*	15SV	4"	2.5"	230V/3PH	15	9	0
V2VED6K90C2CMV	2*	15SV	4"	2.5"	460V/3PH	15	9	0
V2VED7K90C2CMV	2*	15SV	4"	2.5"	575V/3PH	15	9	0
V3VED4K90B2CMV	3**	15SV	4"	2"	208V/3PH	15	9	0
V3VED5K90B2CMV	3**	15SV	4"	2"	230V/3PH	15	9	0
V3VED6K90B2CMV	3**	15SV	4"	2"	460V/3PH	15	9	0
V3VED7K90B2CMV	3**	15SV	4"	2"	575V/3PH	15	9	0
V3VEE4K90C2CMV	3**	15SV	6"	2.5"	208V/3PH	15	9	0
V3VEE5K90C2CMV	3**	15SV	6"	2.5"	230V/3PH	15	9	0
V3VEE6K90C2CMV	3**	15SV	6"	2.5"	460V/3PH	15	9	0
V3VEE7K90C2CMV	3**	15SV	6"	2.5"	575V/3PH	15	9	0

*Duplex: Select 3" header and 2" branch size for 210 GPM and less. Select 4" header and 2.5" branch size for greater than 210 GPM

**Triplex: Select 4" header and 2" branch for 315 GPM and less. Select 6" header and 2.5" branch for greater than 315 GPM

Performance Curve Data

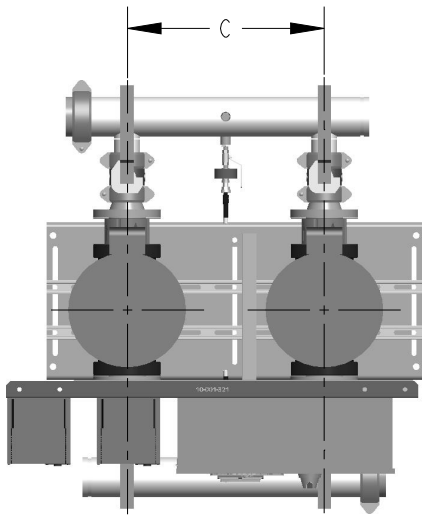
15SV12



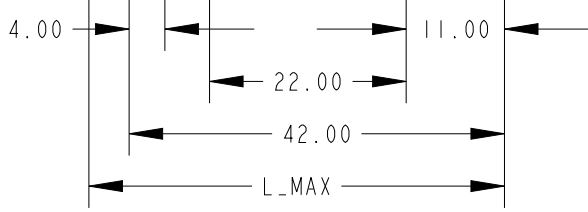
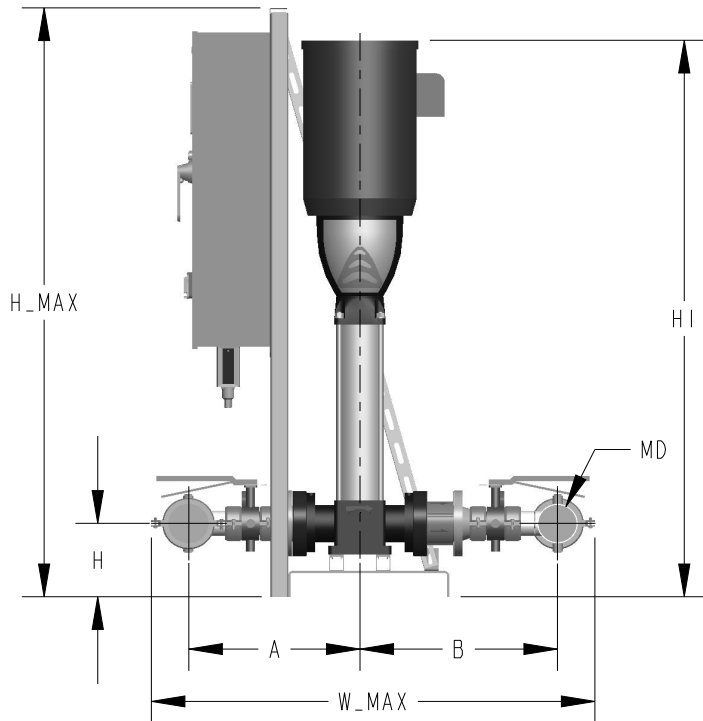
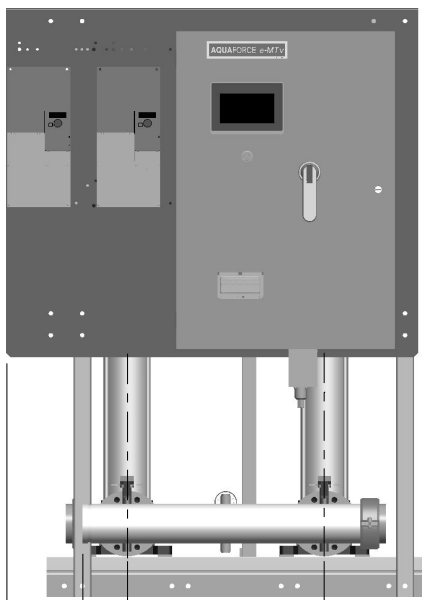
Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VEC4L120B2CMV	2*	15SV	3"	2"	208V/3PH	20	12	0
V2VEC5L120B2CMV	2*	15SV	3"	2"	230V/3PH	20	12	0
V2VEC6L120B2CMV	2*	15SV	3"	2"	460V/3PH	20	12	0
V2VEC7L120B2CMV	2*	15SV	3"	2"	575V/3PH	20	12	0
V2VED4L120C2CMV	2*	15SV	4"	2.5"	208V/3PH	20	12	0
V2VED5L120C2CMV	2*	15SV	4"	2.5"	230V/3PH	20	12	0
V2VED6L120C2CMV	2*	15SV	4"	2.5"	460V/3PH	20	12	0
V2VED7L120C2CMV	2*	15SV	4"	2.5"	575V/3PH	20	12	0
V3VED4L120B2CMV	3**	15SV	4"	2"	208V/3PH	20	12	0
V3VED5L120B2CMV	3**	15SV	4"	2"	230V/3PH	20	12	0
V3VED6L120B2CMV	3**	15SV	4"	2"	460V/3PH	20	12	0
V3VED7L120B2CMV	3**	15SV	4"	2"	575V/3PH	20	12	0
V3VEE4L120C2CMV	3**	15SV	6"	2.5"	208V/3PH	20	12	0
V3VEE5L120C2CMV	3**	15SV	6"	2.5"	230V/3PH	20	12	0
V3VEE6L120C2CMV	3**	15SV	6"	2.5"	460V/3PH	20	12	0
V3VEE7L120C2CMV	3**	15SV	6"	2.5"	575V/3PH	20	12	0

*Duplex: Select 3" header and 2" branch size for 210 GPM and less. Select 4" header and 2.5" branch size for greater than 210 GPM

**Triplex: Select 4" header and 2" branch for 315 GPM and less. Select 6" header and 2.5" branch for greater than 315 GPM

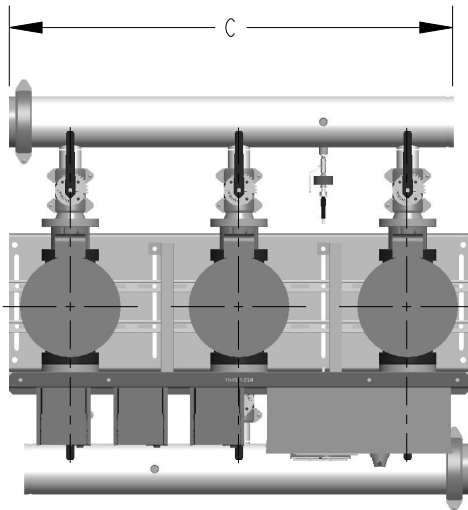


208-230V
AQUAFORCE e-MTV Dimensions 15SV - 2 Pump

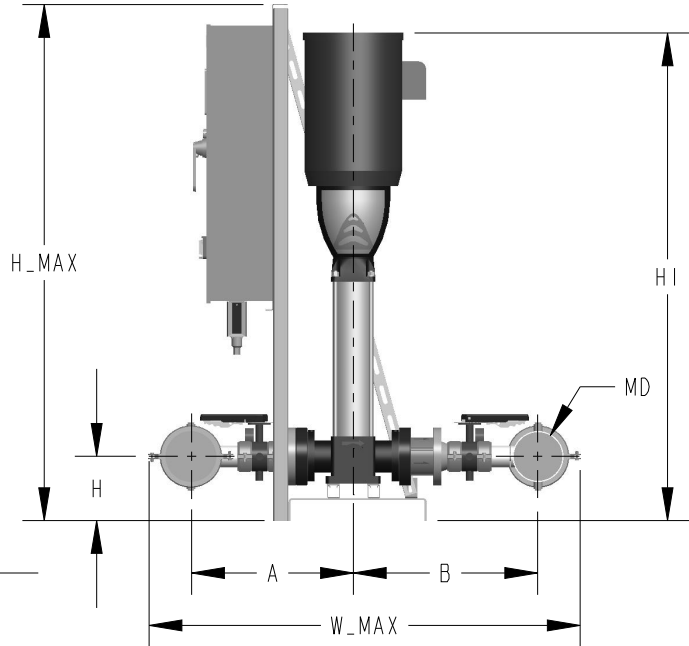
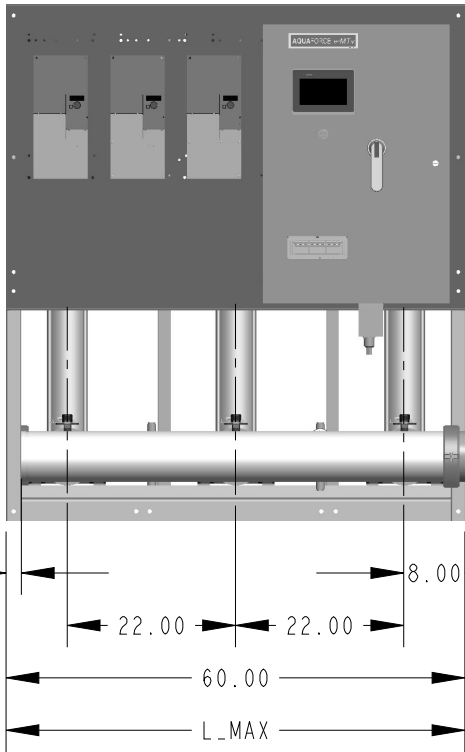


PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
15SV3GG4F60-BP	3"	46.50	44.12	67.50	8.42	39.41	17.09	19.78	31.78	597.36
15SV4GH4F60-BP	3"	46.50	44.12	67.50	8.42	42.80	17.09	19.78	31.78	629.84
15SV6GJ4F60-BP	3"	46.50	44.12	67.50	8.42	47.25	17.09	19.78	31.78	719.65
15SV9GK4F60-BP	3"	46.50	44.12	67.50	8.42	54.61	17.09	19.78	31.78	866.10
15SVI2GL4F60-BP	3"	46.50	44.12	67.50	8.42	63.79	17.09	19.78	31.78	1258.86

PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
15SV3GG4F60-BP	4"	46.50	49.63	67.50	8.42	39.41	19.15	22.09	33.84	704.75
15SV4GH4F60-BP	4"	46.50	49.63	67.50	8.42	42.80	19.15	22.09	33.84	737.23
15SV6GJ4F60-BP	4"	46.50	49.63	67.50	8.42	47.25	19.15	22.09	33.84	827.03
15SV9GK4F60-BP	4"	46.50	49.63	67.50	8.42	54.61	19.15	22.09	33.84	973.48
15SVI2GL4F60-BP	4"	46.50	49.63	67.50	8.42	63.79	19.15	22.09	33.84	1366.25

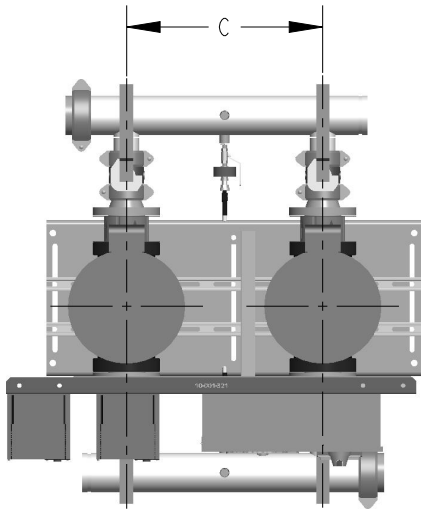


208-230V
AQUAFORCE e-MTV Dimensions 15SV - 3 Pump

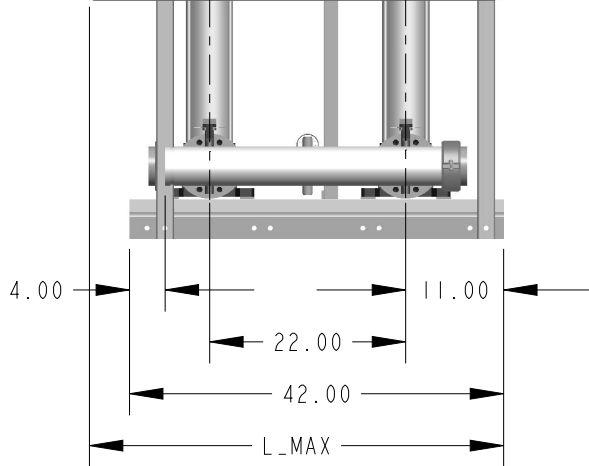
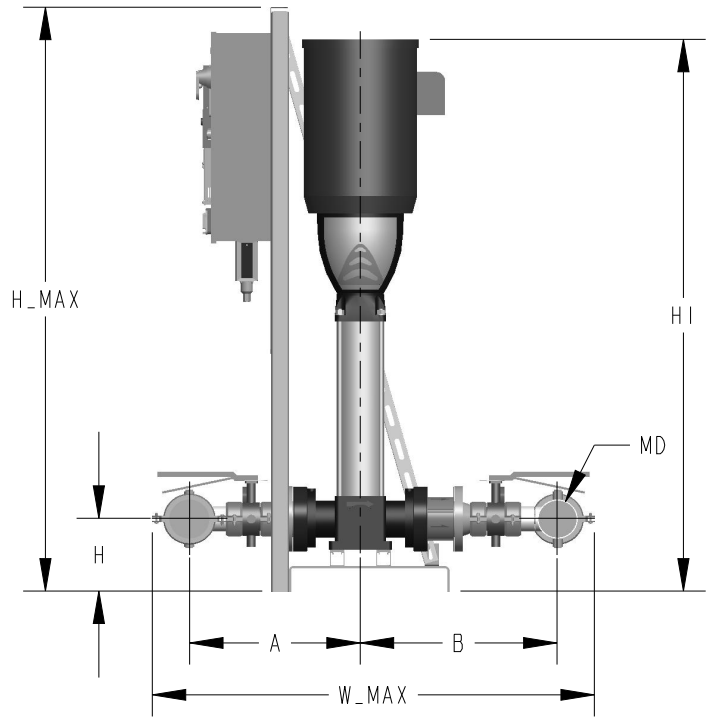
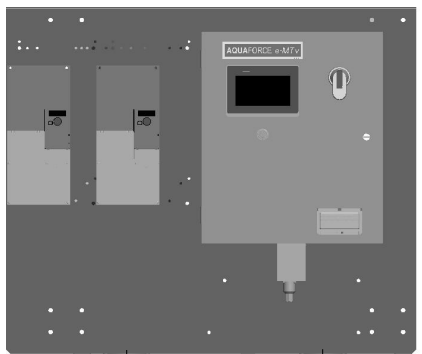


PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
15SV3GG4F60-BP	4"	60.00	47.25	67.50	8.42	39.41	18.09	20.78	55.84	796.29
15SV4GH4F60-BP	4"	60.00	47.25	67.50	8.42	42.80	18.09	20.78	55.84	845.01
15SV6GJ4F60-BP	4"	60.00	47.25	67.50	8.42	47.25	18.09	20.78	55.84	979.71
15SV9GK4F60-BP	4"	60.00	47.25	67.50	8.42	54.61	18.09	20.78	55.84	1199.39
15SV12GL4F60-BP	4"	60.00	47.25	67.50	8.42	63.79	18.09	20.78	55.84	1788.53

PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
15SV3GG4F60-BP	6"	60.00	56.37	67.50	8.42	39.41	21.15	24.09	57.97	1000.86
15SV4GH4F60-BP	6"	60.00	56.37	67.50	8.42	42.80	21.15	24.09	57.97	1049.58
15SV6GJ4F60-BP	6"	60.00	56.37	67.50	8.42	47.25	21.15	24.09	57.97	1184.29
15SV9GK4F60-BP	6"	60.00	56.37	67.50	8.42	54.61	21.15	24.09	57.97	1403.97
15SV12GL4F60-BP	6"	60.00	56.37	67.50	8.42	63.79	21.15	24.09	57.97	1993.11

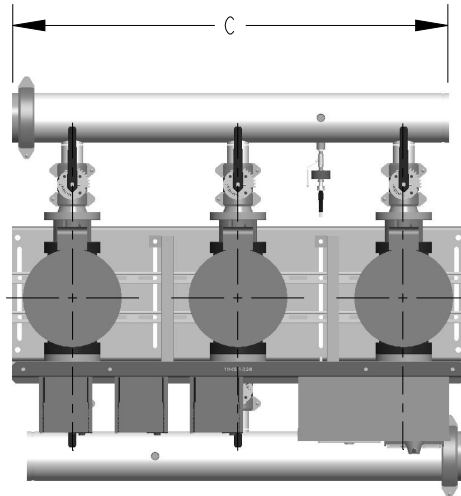


460V
AQUAFORCE e-MTV Dimensions 15SV - 2 Pump

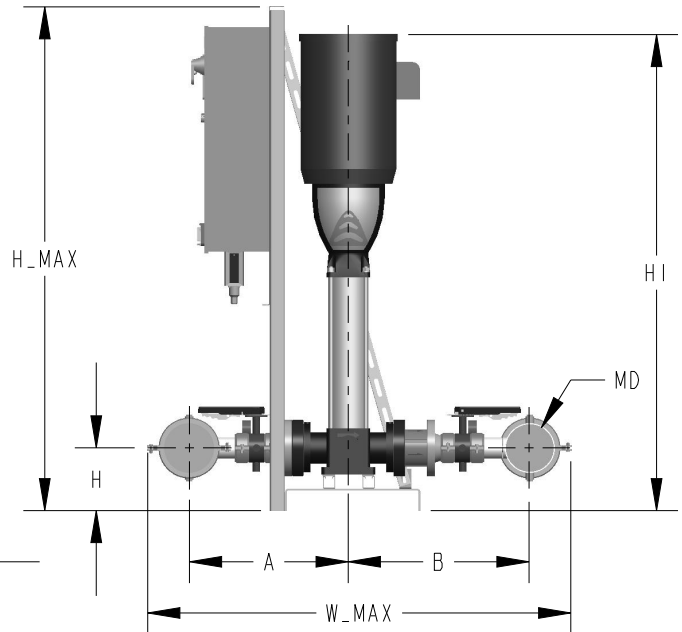
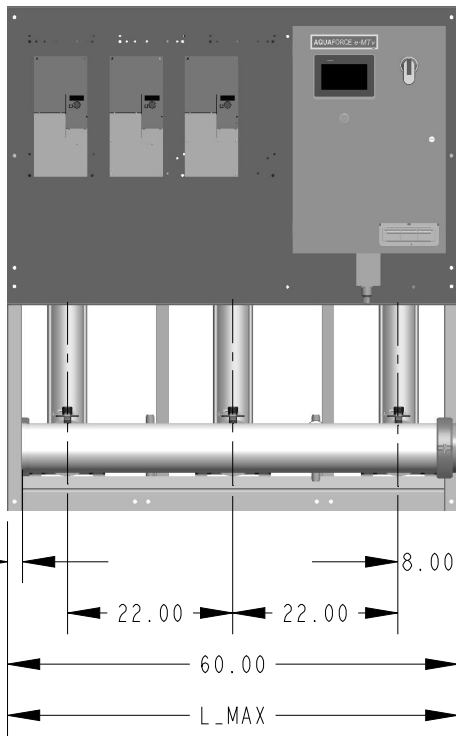


PUMP	MD	L.MAX	W.MAX	H.MAX	H	H1	A	B	C	Wt.(lb)
15SV3GG4F60-BP	3"	46.50	44.12	67.50	8.42	39.41	17.09	19.78	31.78	597.36
15SV4GH4F60-BP	3"	46.50	44.12	67.50	8.42	42.80	17.09	19.78	31.78	629.84
15SV6GJ4F60-BP	3"	46.50	44.12	67.50	8.42	47.25	17.09	19.78	31.78	719.65
15SV9GK4F60-BP	3"	46.50	44.12	67.50	8.42	54.61	17.09	19.78	31.78	866.10
15SV12GL4F60-BP	3"	46.50	44.12	67.50	8.42	63.79	17.09	19.78	31.78	1258.85

PUMP	MD	L.MAX	W.MAX	H.MAX	H	H1	A	B	C	Wt.(lb)
15SV3GG4F60-BP	4"	46.50	49.63	67.50	8.42	39.41	19.15	22.09	33.84	704.75
15SV4GH4F60-BP	4"	46.50	49.63	67.50	8.42	42.80	19.15	22.09	33.84	737.23
15SV6GJ4F60-BP	4"	46.50	49.63	67.50	8.42	47.25	19.15	22.09	33.84	827.03
15SV9GK4F60-BP	4"	46.50	49.63	67.50	8.42	54.61	19.15	22.09	33.84	973.48
15SV12GL4F60-BP	4"	46.50	49.63	67.50	8.42	63.79	19.15	22.09	33.84	1366.23

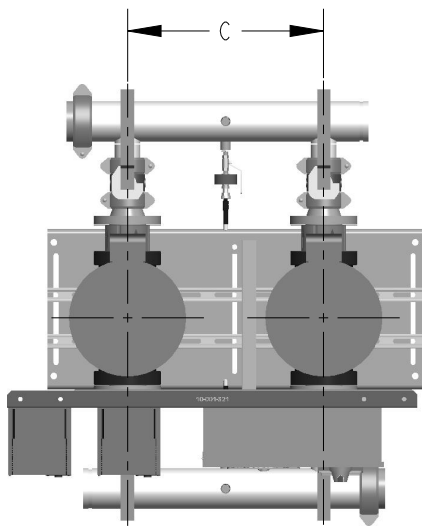


460V
AQUAFORCE e-MTV Dimensions 15SV - 3 Pump

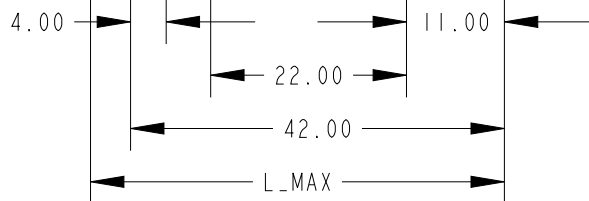
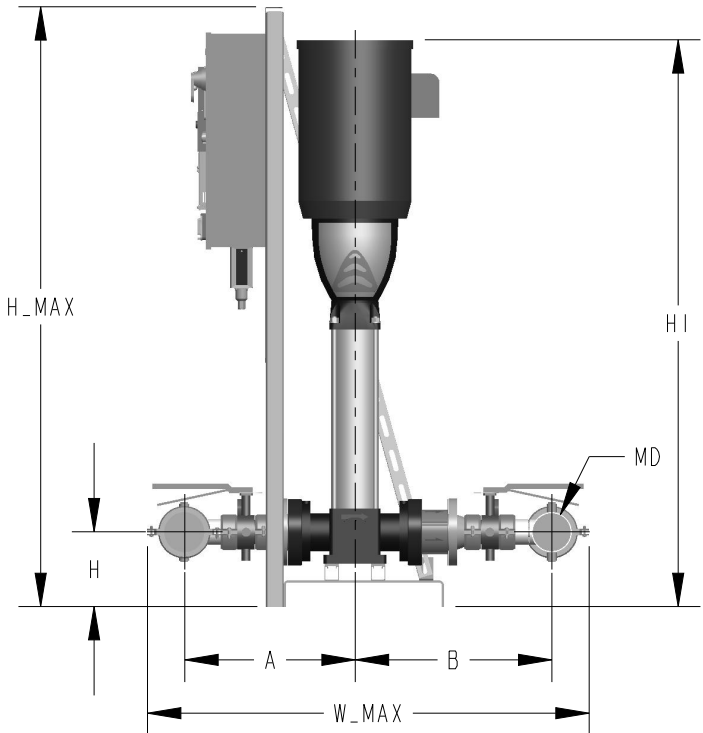
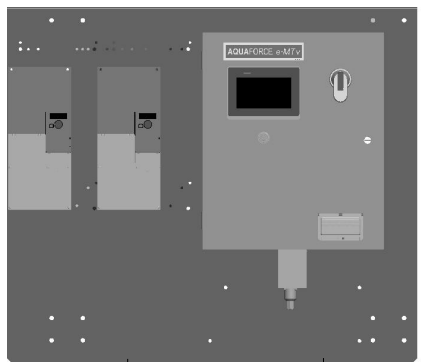


PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
15SV3GG4F60-BP	4"	60.00	47.25	67.50	8.42	39.41	18.09	20.78	55.84	796.29
15SV4GH4F60-BP	4"	60.00	47.25	67.50	8.42	42.80	18.09	20.78	55.84	845.01
15SV6GJ4F60-BP	4"	60.00	47.25	67.50	8.42	47.25	18.09	20.78	55.84	979.71
15SV9GK4F60-BP	4"	60.00	47.25	67.50	8.42	54.61	18.09	20.78	55.84	1199.39
15SVI2GL4F60-BP	4"	60.00	47.25	67.50	8.42	63.79	18.09	20.78	55.84	1788.52

PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
15SV3GG4F60-BP	6"	60.00	56.37	67.50	8.42	39.41	21.15	24.09	57.97	1000.86
15SV4GH4F60-BP	6"	60.00	56.37	67.50	8.42	42.80	21.15	24.09	57.97	1049.58
15SV6GJ4F60-BP	6"	60.00	56.37	67.50	8.42	47.25	21.15	24.09	57.97	1184.29
15SV9GK4F60-BP	6"	60.00	56.37	67.50	8.42	54.61	21.15	24.09	57.97	1403.97
15SVI2GL4F60-BP	6"	60.00	56.37	67.50	8.42	63.79	21.15	24.09	57.97	1993.09

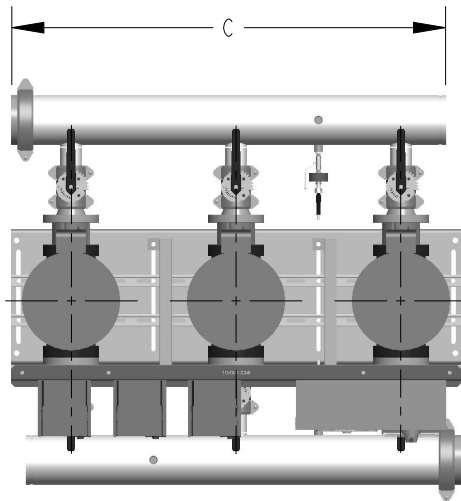


575V
AQUAFORCE e-MTV Dimensions 15SV - 2 Pump

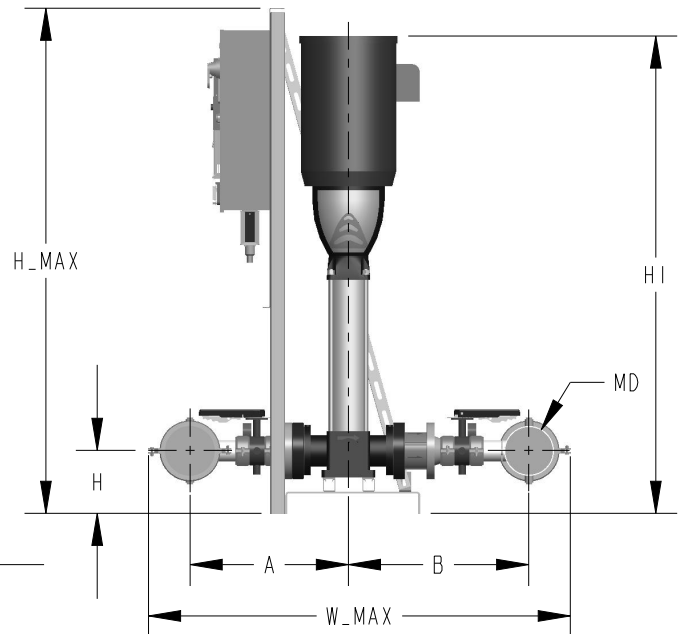
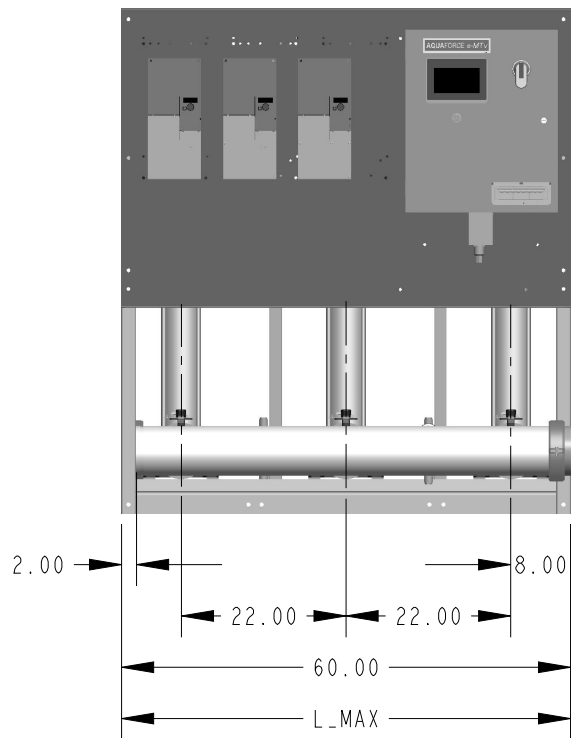


PUMP	MD	L_MAX	W_MAX	H_MAX	H	H_I	A	B	C	Wt.(lb)
15SV3GG4E60-BP	3"	46.50	44.12	67.50	8.42	39.41	17.09	19.78	31.78	597.36
15SV4GH4E60-BP	3"	46.50	44.12	67.50	8.42	42.80	17.09	19.78	31.78	629.84
15SV6GJ4E60-BP	3"	46.50	44.12	67.50	8.42	47.25	17.09	19.78	31.78	719.65
15SV9GK4E60-BP	3"	46.50	44.12	67.50	8.42	54.61	17.09	19.78	31.78	866.10
15SV12GL4E60-BP	3"	46.50	44.12	67.50	8.42	63.79	17.09	19.78	31.78	1258.85

PUMP	MD	L_MAX	W_MAX	H_MAX	H	H_I	A	B	C	Wt.(lb)
15SV3GG4E60-BP	4"	46.50	49.63	67.50	8.42	39.41	19.15	22.09	33.84	704.75
15SV4GH4E60-BP	4"	46.50	49.63	67.50	8.42	42.80	19.15	22.09	33.84	737.23
15SV6GJ4E60-BP	4"	46.50	49.63	67.50	8.42	47.25	19.15	22.09	33.84	827.03
15SV9GK4E60-BP	4"	46.50	49.63	67.50	8.42	54.61	19.15	22.09	33.84	973.48
15SV12GL4E60-BP	4"	46.50	49.63	67.50	8.42	63.79	19.15	22.09	33.84	1366.23



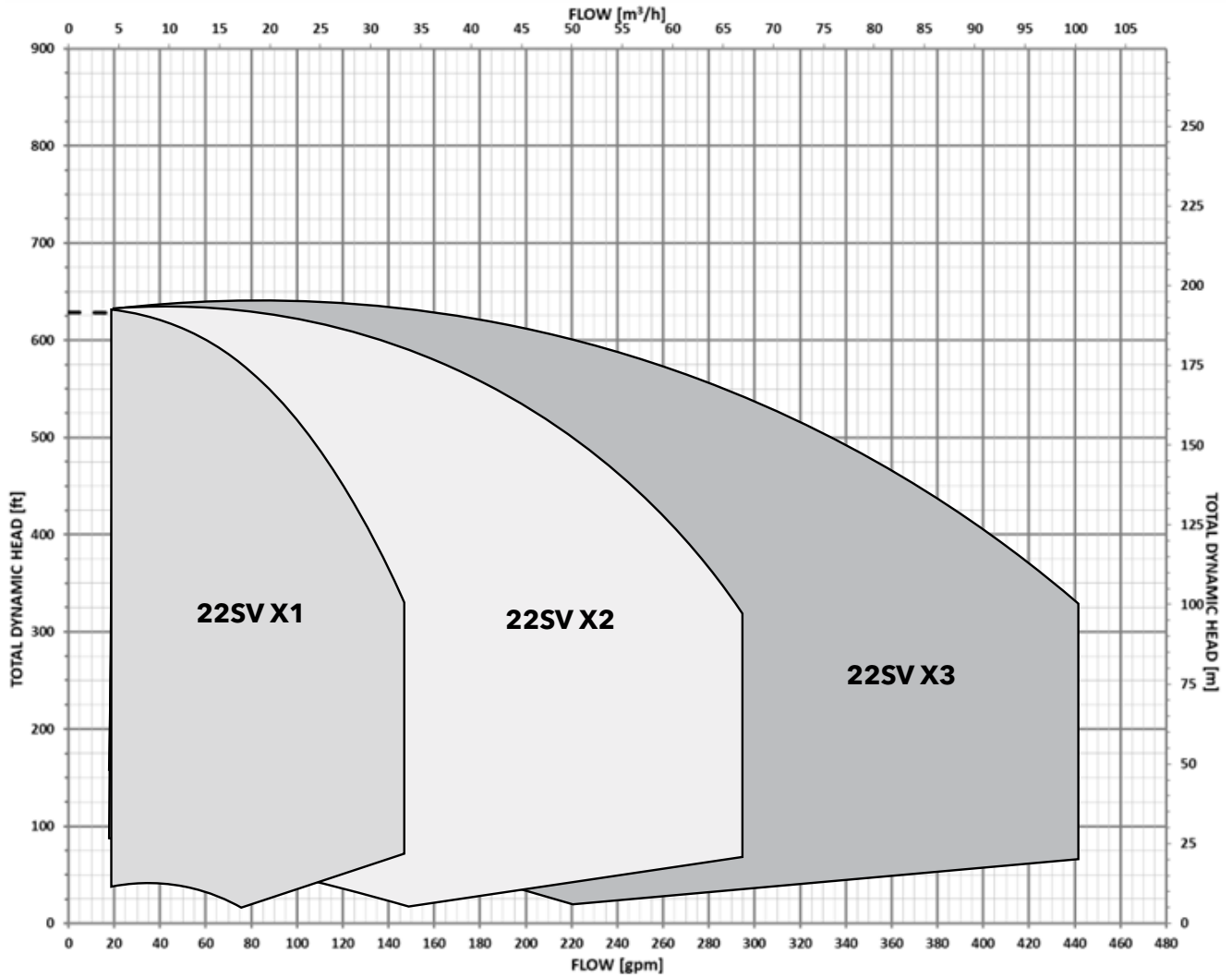
575V
AQUAFORCE e-MTV Dimensions 15SV - 3 Pump



PUMP	MD	L_MAX	W_MAX	H_MAX	H	H_I	A	B	C	Wt.(lb)
15SV3GG4E60-BP	4"	60.00	47.25	67.50	8.42	39.41	18.09	20.78	55.84	796.29
15SV4GH4E60-BP	4"	60.00	47.25	67.50	8.42	42.80	18.09	20.78	55.84	845.01
15SV6GJ4E60-BP	4"	60.00	47.25	67.50	8.42	47.25	18.09	20.78	55.84	979.71
15SV9GK4E60-BP	4"	60.00	47.25	67.50	8.42	54.61	18.09	20.78	55.84	1199.39
15SV12GL4E60-BP	4"	60.00	47.25	67.50	8.42	63.79	18.09	20.78	55.84	1788.52

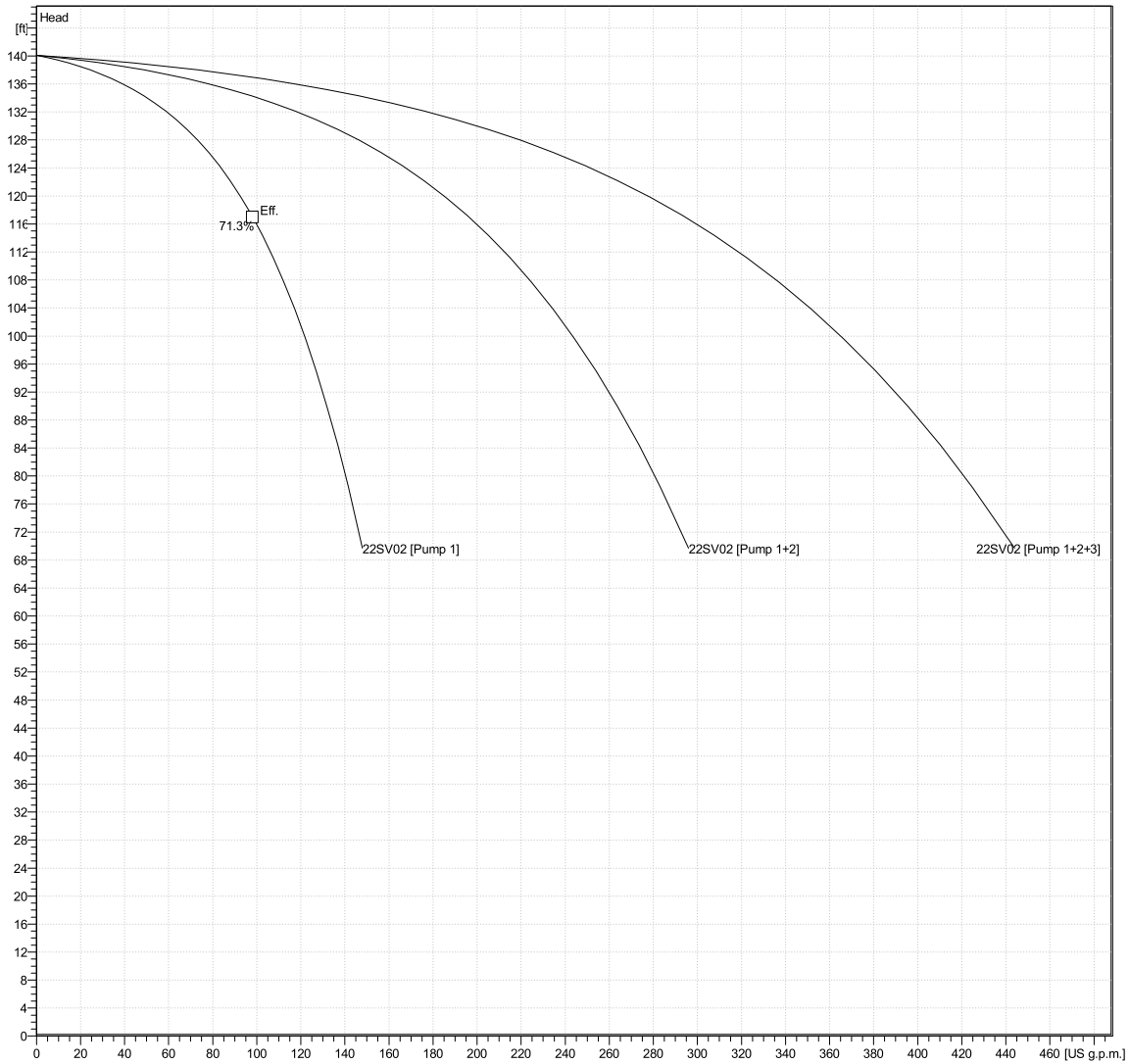
PUMP	MD	L_MAX	W_MAX	H_MAX	H	H_I	A	B	C	Wt.(lb)
15SV3GG4E60-BP	6"	60.00	56.37	67.50	8.42	39.41	21.15	24.09	57.97	1000.86
15SV4GH4E60-BP	6"	60.00	56.37	67.50	8.42	42.80	21.15	24.09	57.97	1049.58
15SV6GJ4E60-BP	6"	60.00	56.37	67.50	8.42	47.25	21.15	24.09	57.97	1184.29
15SV9GK4E60-BP	6"	60.00	56.37	67.50	8.42	54.61	21.15	24.09	57.97	1403.97
15SV12GL4E60-BP	6"	60.00	56.37	67.50	8.42	63.79	21.15	24.09	57.97	1993.09

AQUAFORCE e-MTV Curves 22SV



Performance Curve Data

22SV2



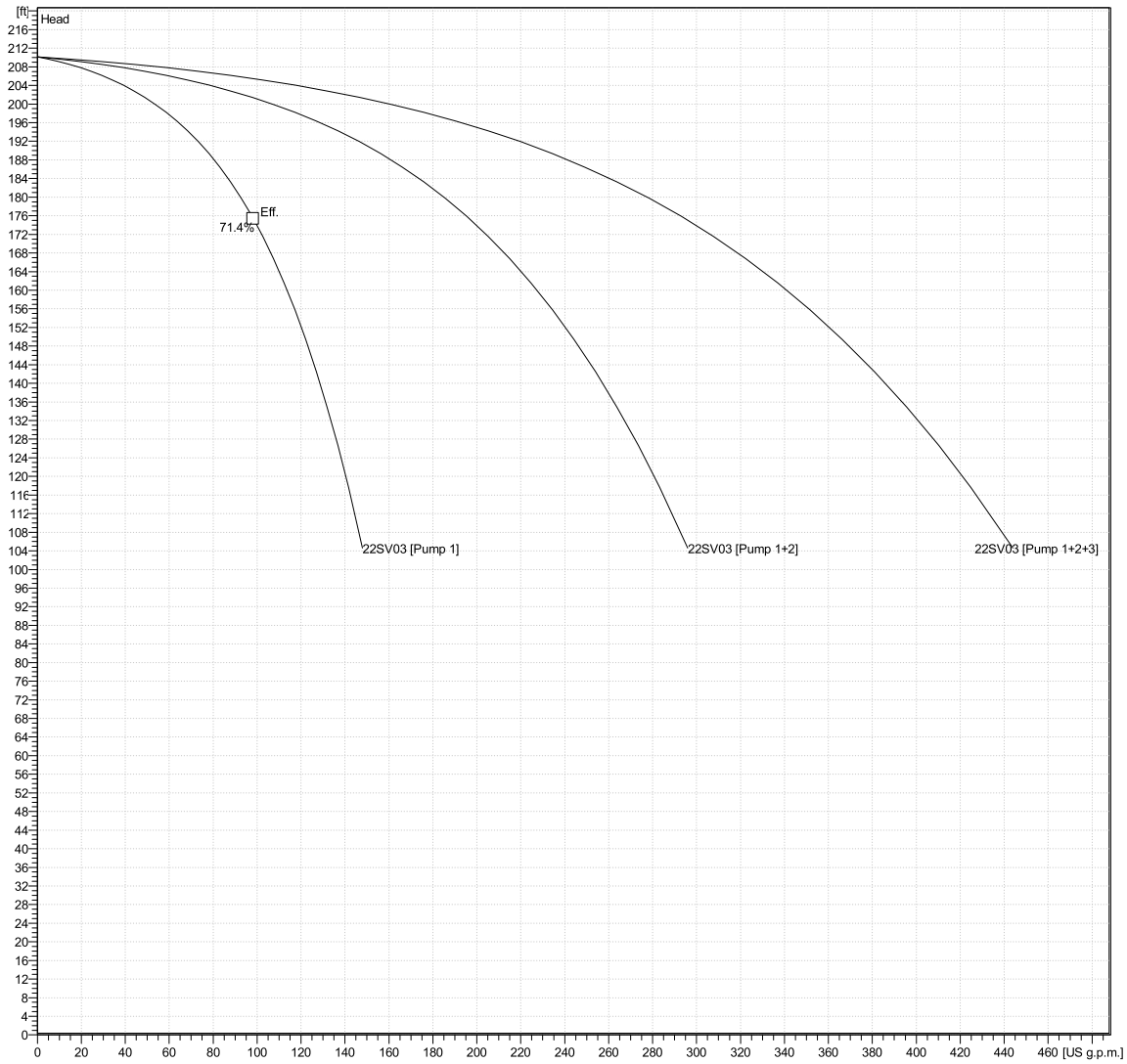
Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VFC4G20B2CMV	2*	22SV	3"	2"	208V/3PH	5	2	0
V2VFC5G20B2CMV	2*	22SV	3"	2"	230V/3PH	5	2	0
V2VFC6G20B2CMV	2*	22SV	3"	2"	460V/3PH	5	2	0
V2VFC7G20B2CMV	2*	22SV	3"	2"	575V/3PH	5	2	0
V2VFD4G20C2CMV	2*	22SV	4"	2.5"	208V/3PH	5	2	0
V2VFD5G20C2CMV	2*	22SV	4"	2.5"	230V/3PH	5	2	0
V2VFD6G20C2CMV	2*	22SV	4"	2.5"	460V/3PH	5	2	0
V2VFD7G20C2CMV	2*	22SV	4"	2.5"	575V/3PH	5	2	0
V3VFD4G20B2CMV	3**	22SV	4"	2"	208V/3PH	5	2	0
V3VFD5G20B2CMV	3**	22SV	4"	2"	230V/3PH	5	2	0
V3VFD6G20B2CMV	3**	22SV	4"	2"	460V/3PH	5	2	0
V3VFD7G20B2CMV	3**	22SV	4"	2"	575V/3PH	5	2	0
V3VFE4G20C2CMV	3**	22SV	6"	2.5"	208V/3PH	5	2	0
V3VFE5G20C2CMV	3**	22SV	6"	2.5"	230V/3PH	5	2	0
V3VFE6G20C2CMV	3**	22SV	6"	2.5"	460V/3PH	5	2	0
V3VFE7G20C2CMV	3**	22SV	6"	2.5"	575V/3PH	5	2	0

*Duplex: Select 3" header and 2" branch size for 210 GPM and less. Select 4" header and 2.5" branch size for greater than 210 GPM

**Triplex: Select 4" header and 2" branch for 315 GPM and less. Select 6" header and 2.5" branch for greater than 315 GPM

Performance Curve Data

22SV3



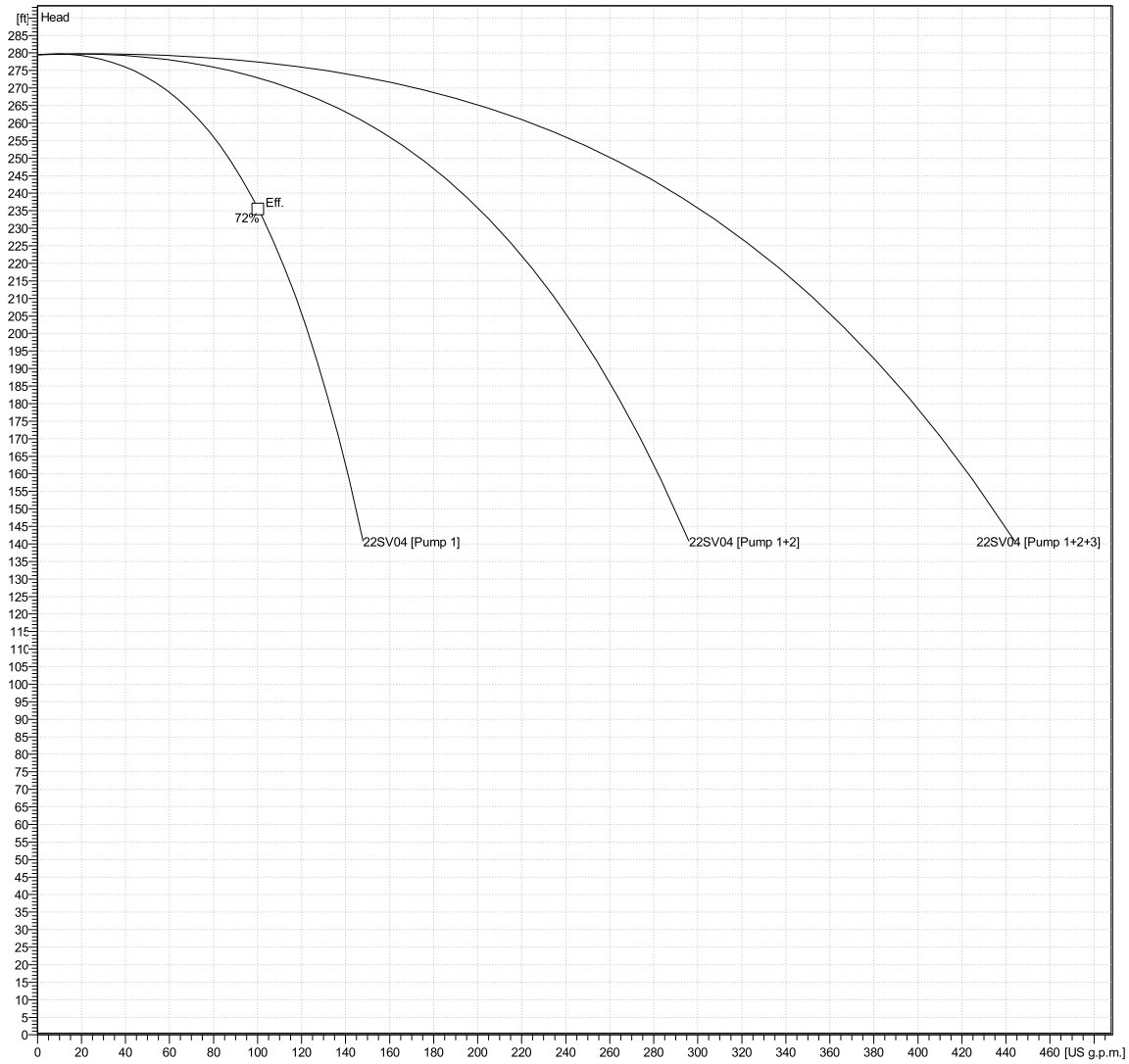
Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VFC4H30B2CMV	2*	22SV	3"	2"	208V/3PH	7.5	3	0
V2VFC5H30B2CMV	2*	22SV	3"	2"	230V/3PH	7.5	3	0
V2VFC6H30B2CMV	2*	22SV	3"	2"	460V/3PH	7.5	3	0
V2VFC7H30B2CMV	2*	22SV	3"	2"	575V/3PH	7.5	3	0
V2VFD4H30C2CMV	2*	22SV	4"	2.5"	208V/3PH	7.5	3	0
V2VFD5H30C2CMV	2*	22SV	4"	2.5"	230V/3PH	7.5	3	0
V2VFD6H30C2CMV	2*	22SV	4"	2.5"	460V/3PH	7.5	3	0
V2VFD7H30C2CMV	2*	22SV	4"	2.5"	575V/3PH	7.5	3	0
V3VFD4H30B2CMV	3**	22SV	4"	2"	208V/3PH	7.5	3	0
V3VFD5H30B2CMV	3**	22SV	4"	2"	230V/3PH	7.5	3	0
V3VFD6H30B2CMV	3**	22SV	4"	2"	460V/3PH	7.5	3	0
V3VFD7H30B2CMV	3**	22SV	4"	2"	575V/3PH	7.5	3	0
V3VFE4H30C2CMV	3**	22SV	6"	2.5"	208V/3PH	7.5	3	0
V3VFE5H30C2CMV	3**	22SV	6"	2.5"	230V/3PH	7.5	3	0
V3VFE6H30C2CMV	3**	22SV	6"	2.5"	460V/3PH	7.5	3	0
V3VFE7H30C2CMV	3**	22SV	6"	2.5"	575V/3PH	7.5	3	0

*Duplex: Select 3" header and 2" branch size for 210 GPM and less. Select 4" header and 2.5" branch size for greater than 210 GPM

**Triplex: Select 4" header and 2" branch for 315 GPM and less. Select 6" header and 2.5" branch for greater than 315 GPM

Performance Curve Data

22SV4



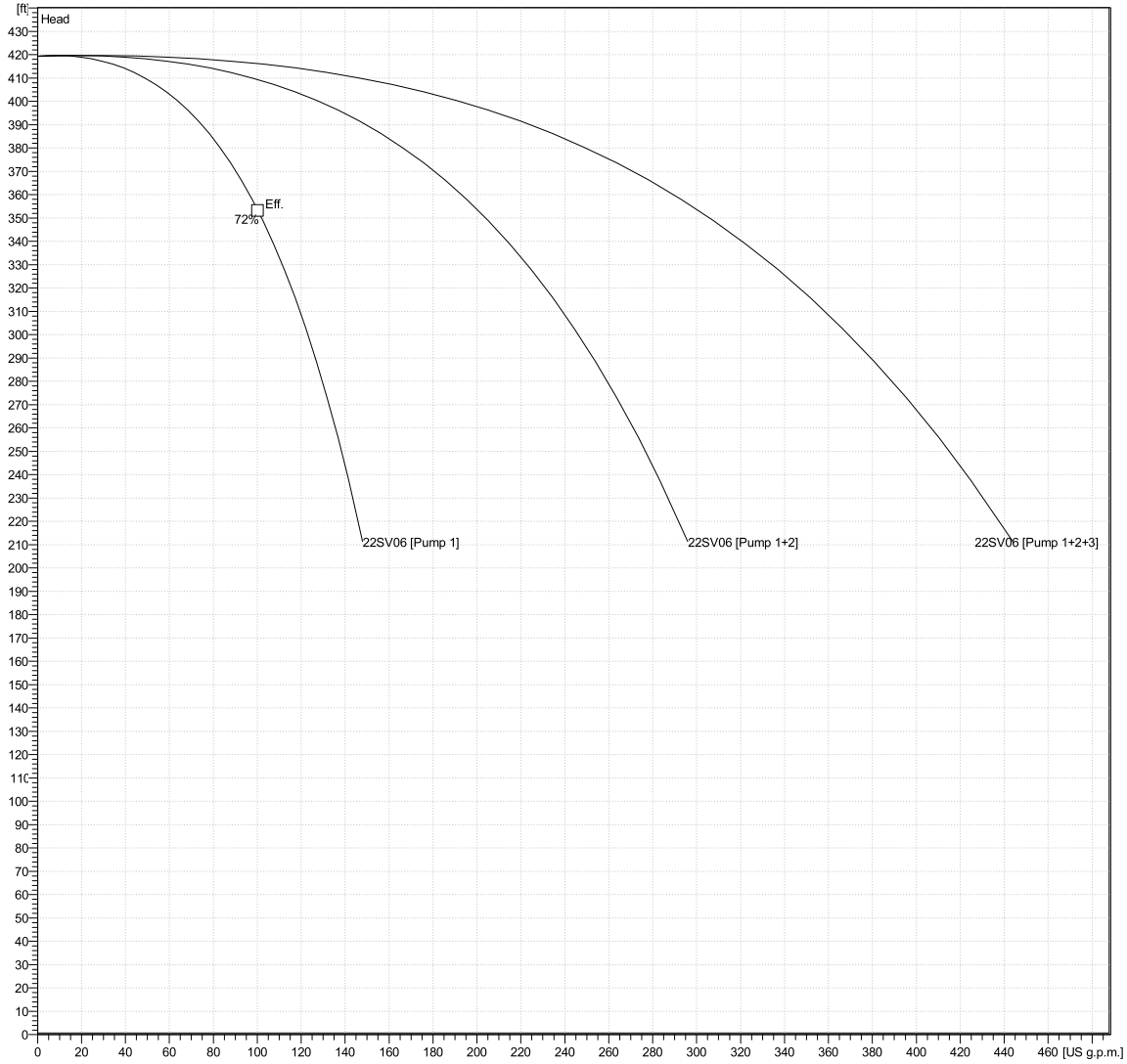
Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VFC4J40B2CMV	2*	22SV	3"	2"	208V/3PH	10	4	0
V2VFC5J40B2CMV	2*	22SV	3"	2"	230V/3PH	10	4	0
V2VFC6J40B2CMV	2*	22SV	3"	2"	460V/3PH	10	4	0
V2VFC7J40B2CMV	2*	22SV	3"	2"	575V/3PH	10	4	0
V2VFD4J40C2CMV	2*	22SV	4"	2.5"	208V/3PH	10	4	0
V2VFD5J40C2CMV	2*	22SV	4"	2.5"	230V/3PH	10	4	0
V2VFD6J40C2CMV	2*	22SV	4"	2.5"	460V/3PH	10	4	0
V2VFD7J40C2CMV	2*	22SV	4"	2.5"	575V/3PH	10	4	0
V3VFD4J40B2CMV	3**	22SV	4"	2"	208V/3PH	10	4	0
V3VFD5J40B2CMV	3**	22SV	4"	2"	230V/3PH	10	4	0
V3VFD6J40B2CMV	3**	22SV	4"	2"	460V/3PH	10	4	0
V3VFD7J40B2CMV	3**	22SV	4"	2"	575V/3PH	10	4	0
V3VFE4J40C2CMV	3**	22SV	6"	2.5"	208V/3PH	10	4	0
V3VFE5J40C2CMV	3**	22SV	6"	2.5"	230V/3PH	10	4	0
V3VFE6J40C2CMV	3**	22SV	6"	2.5"	460V/3PH	10	4	0
V3VFE7J40C2CMV	3**	22SV	6"	2.5"	575V/3PH	10	4	0

*Duplex: Select 3" header and 2" branch size for 210 GPM and less. Select 4" header and 2.5" branch size for greater than 210 GPM

**Triplex: Select 4" header and 2" branch for 315 GPM and less. Select 6" header and 2.5" branch for greater than 315 GPM

Performance Curve Data

22SV6



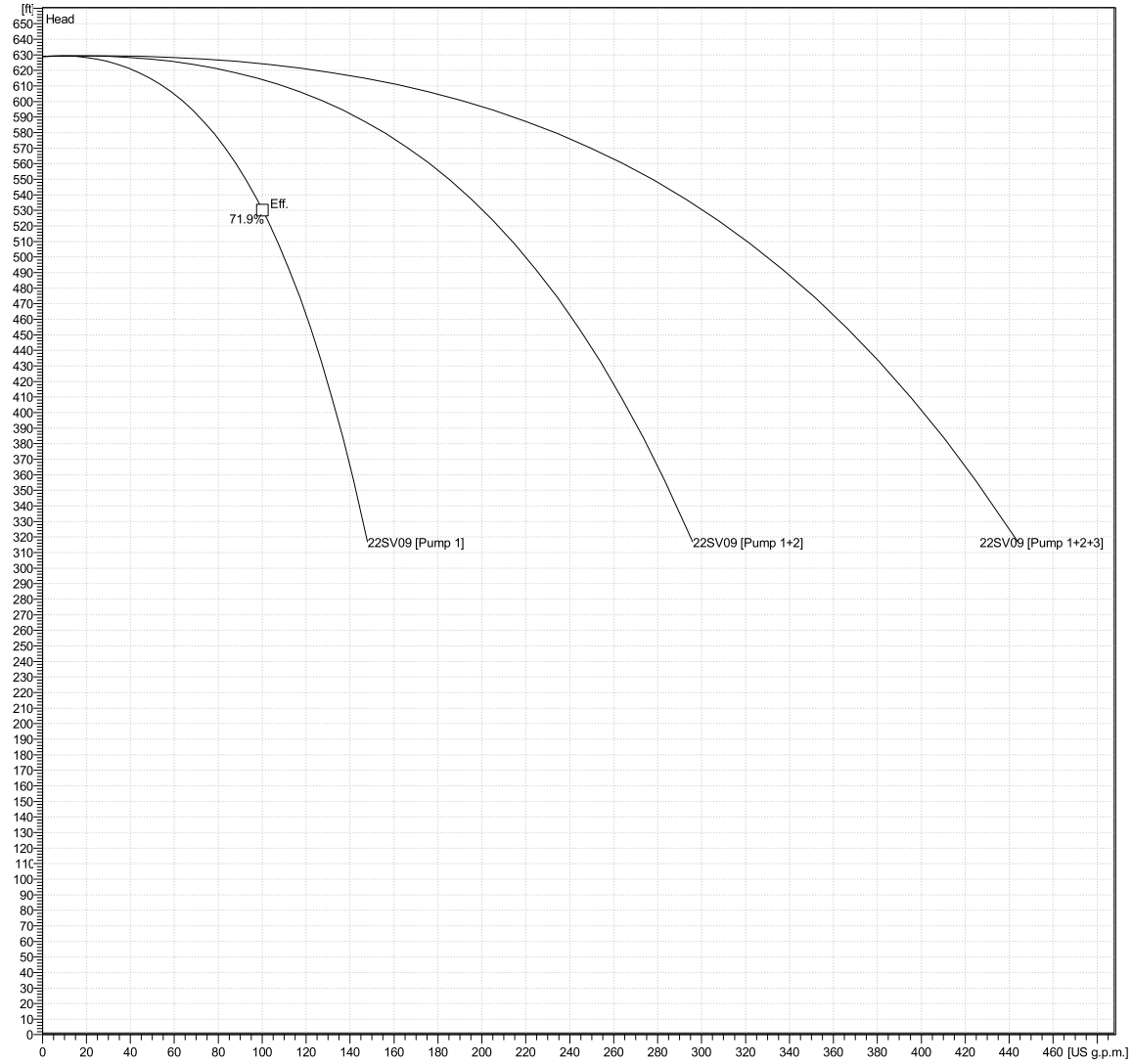
Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VFC4K60B2CMV	2*	22SV	3"	2"	208V/3PH	15	6	0
V2VFC5K60B2CMV	2*	22SV	3"	2"	230V/3PH	15	6	0
V2VFC6K60B2CMV	2*	22SV	3"	2"	460V/3PH	15	6	0
V2VFC7K60B2CMV	2*	22SV	3"	2"	575V/3PH	15	6	0
V2VFD4K60C2CMV	2*	22SV	4"	2.5"	208V/3PH	15	6	0
V2VFD5K60C2CMV	2*	22SV	4"	2.5"	230V/3PH	15	6	0
V2VFD6K60C2CMV	2*	22SV	4"	2.5"	460V/3PH	15	6	0
V2VFD7K60C2CMV	2*	22SV	4"	2.5"	575V/3PH	15	6	0
V3VFD4K60B2CMV	3**	22SV	4"	2"	208V/3PH	15	6	0
V3VFD5K60B2CMV	3**	22SV	4"	2"	230V/3PH	15	6	0
V3VFD6K60B2CMV	3**	22SV	4"	2"	460V/3PH	15	6	0
V3VFD7K60B2CMV	3**	22SV	4"	2"	575V/3PH	15	6	0
V3VFE4K60C2CMV	3**	22SV	6"	2.5"	208V/3PH	15	6	0
V3VFE5K60C2CMV	3**	22SV	6"	2.5"	230V/3PH	15	6	0
V3VFE6K60C2CMV	3**	22SV	6"	2.5"	460V/3PH	15	6	0
V3VFE7K60C2CMV	3**	22SV	6"	2.5"	575V/3PH	15	6	0

*Duplex: Select 3" header and 2" branch size for 210 GPM and less. Select 4" header and 2.5" branch size for greater than 210 GPM

**Triplex: Select 4" header and 2" branch for 315 GPM and less. Select 6" header and 2.5" branch for greater than 315 GPM

Performance Curve Data

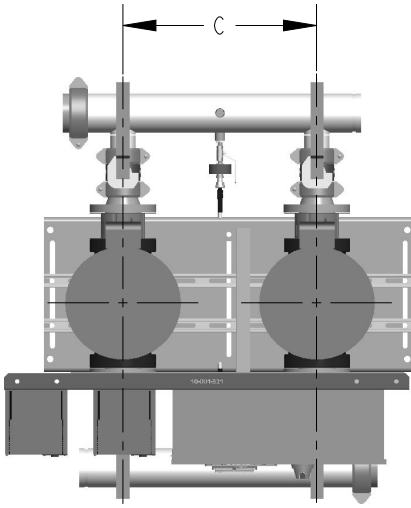
22SV9



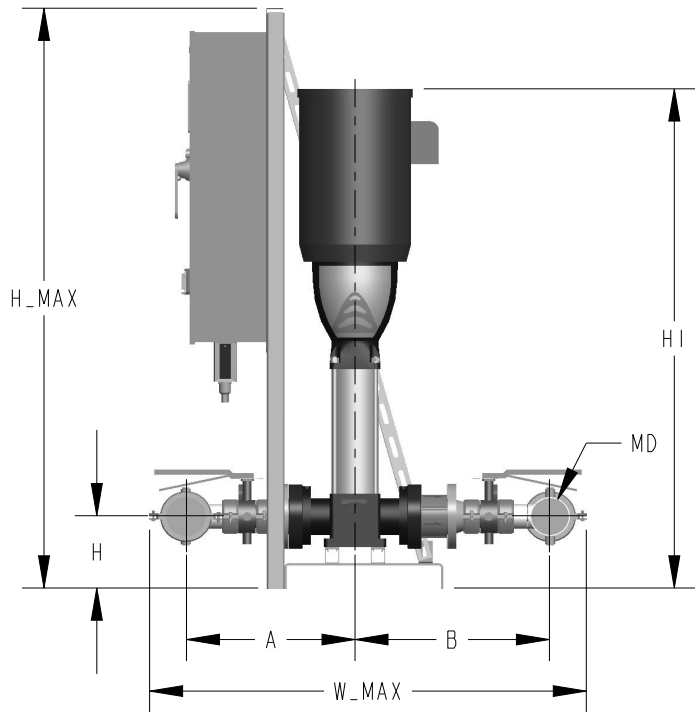
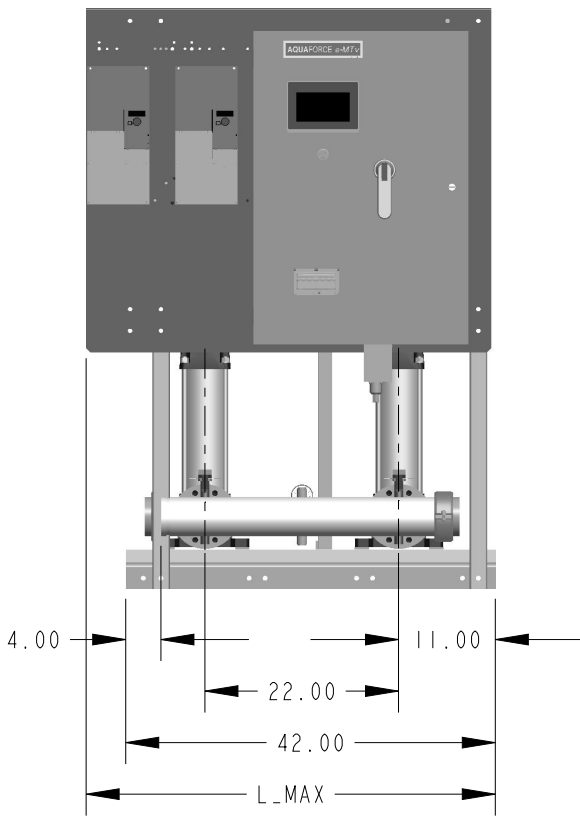
Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VFC4L90B2CMV	2*	22SV	3"	2"	208V/3PH	20	9	0
V2VFC5L90B2CMV	2*	22SV	3"	2"	230V/3PH	20	9	0
V2VFC6L90B2CMV	2*	22SV	3"	2"	460V/3PH	20	9	0
V2VFC7L90B2CMV	2*	22SV	3"	2"	575V/3PH	20	9	0
V2VFD4L90C2CMV	2*	22SV	4"	2.5"	208V/3PH	20	9	0
V2VFD5L90C2CMV	2*	22SV	4"	2.5"	230V/3PH	20	9	0
V2VFD6L90C2CMV	2*	22SV	4"	2.5"	460V/3PH	20	9	0
V2VFD7L90C2CMV	2*	22SV	4"	2.5"	575V/3PH	20	9	0
V3VFD4L90B2CMV	3**	22SV	4"	2"	208V/3PH	20	9	0
V3VFD5L90B2CMV	3**	22SV	4"	2"	230V/3PH	20	9	0
V3VFD6L90B2CMV	3**	22SV	4"	2"	460V/3PH	20	9	0
V3VFD7L90B2CMV	3**	22SV	4"	2"	575V/3PH	20	9	0
V3VFE4L90C2CMV	3**	22SV	6"	2.5"	208V/3PH	20	9	0
V3VFE5L90C2CMV	3**	22SV	6"	2.5"	230V/3PH	20	9	0
V3VFE6L90C2CMV	3**	22SV	6"	2.5"	460V/3PH	20	9	0
V3VFE7L90C2CMV	3**	22SV	6"	2.5"	575V/3PH	20	9	0

*Duplex: Select 3" header and 2" branch size for 210 GPM and less. Select 4" header and 2.5" branch size for greater than 210 GPM

**Triplex: Select 4" header and 2" branch for 315 GPM and less. Select 6" header and 2.5" branch for greater than 315 GPM

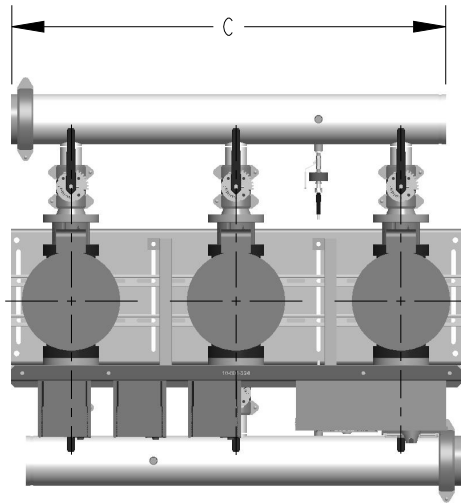


208-230V
AQUAFORCE e-MTV Dimensions 22SV - 2 Pump

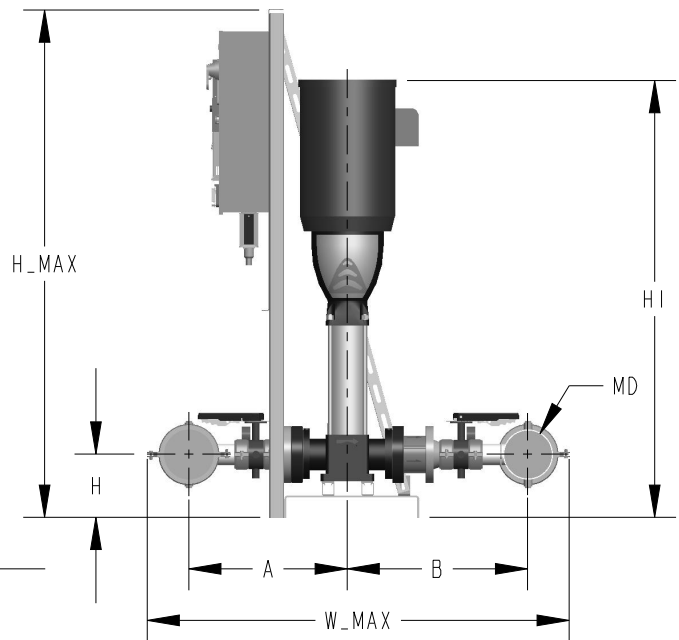
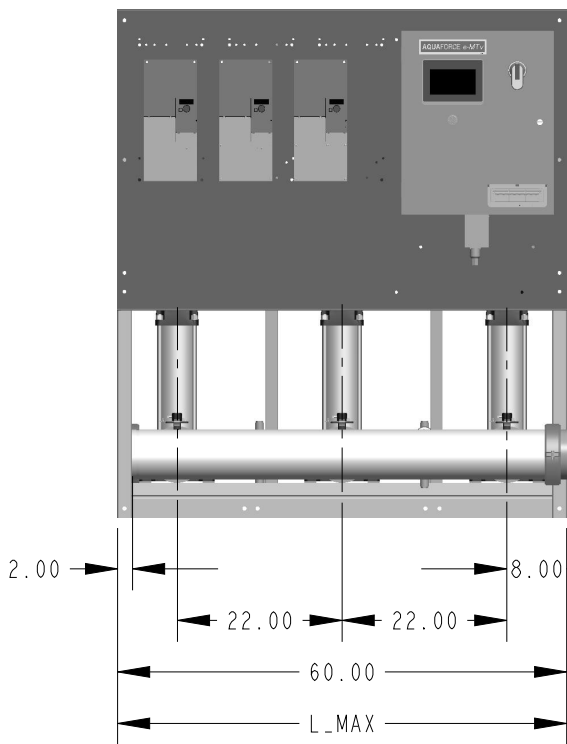


PUMP	MD	L_MAX	W_MAX	H_MAX	H	H1	A	B	C	Wt.(lb)
22SV2GG4F60-BP	3"	46.50	44.12	67.50	8.42	37.52	17.09	19.78	31.78	593.15
22SV3GH4F60-BP	3"	46.50	44.12	67.50	8.42	40.91	17.09	19.78	31.78	625.07
22SV4GJ4F60-BP	3"	46.50	44.12	67.50	8.42	43.45	17.09	19.78	31.78	702.55
22SV6GK4F60-BP	3"	46.50	44.12	67.50	8.42	48.94	17.09	19.78	31.78	836.14
22SV9GL4F60-BP	3"	46.50	44.12	67.50	8.42	58.12	17.09	19.78	31.78	1211.44

PUMP	MD	L_MAX	W_MAX	H_MAX	H	H1	A	B	C	Wt.(lb)
22SV2GG4F60-BP	4"	46.50	49.63	67.50	8.42	37.52	19.15	22.09	33.84	700.53
22SV3GH4F60-BP	4"	46.50	49.63	67.50	8.42	40.91	19.15	22.09	33.84	732.45
22SV4GJ4F60-BP	4"	46.50	49.63	67.50	8.42	43.45	19.15	22.09	33.84	809.93
22SV6GK4F60-BP	4"	46.50	49.63	67.50	8.42	48.94	19.15	22.09	33.84	943.52
22SV9GL4F60-BP	4"	46.50	49.63	67.50	8.42	58.12	19.15	22.09	33.84	1318.82

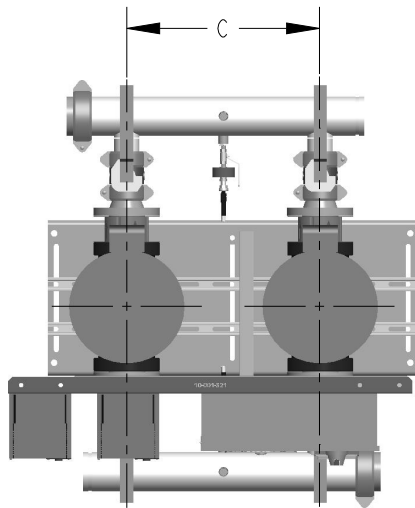


208-230V
AQUAFORCE e-MTV Dimensions 22SV - 3 Pump

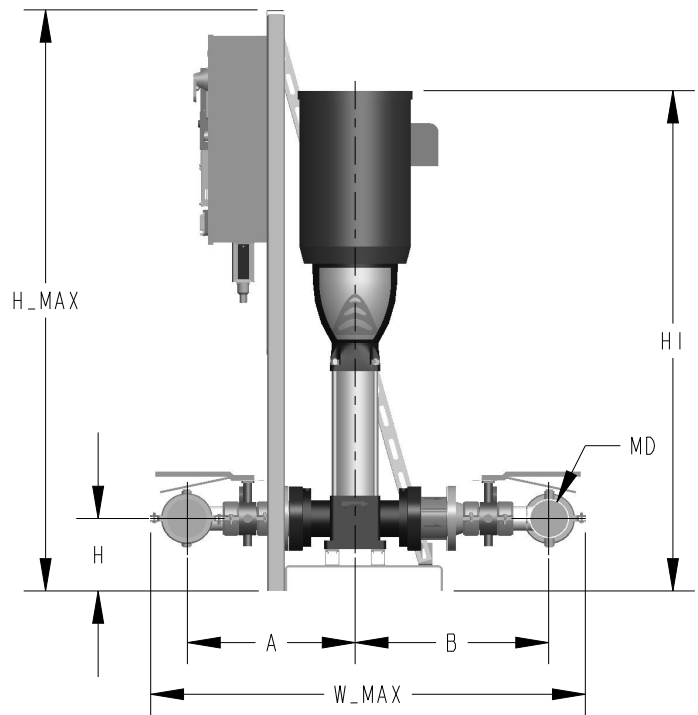
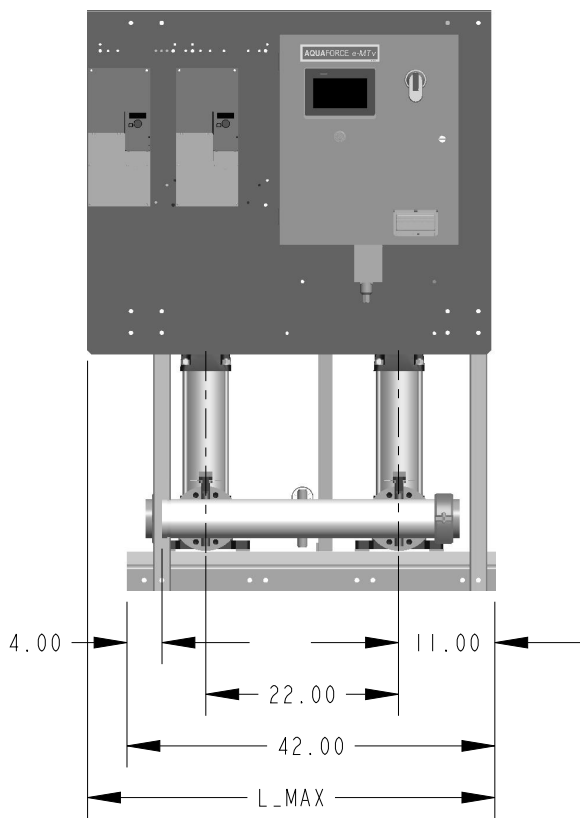


PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
22SV2GG4E60-BP	4"	60.00	47.25	67.50	8.42	37.52	18.09	20.78	55.84	789.97
22SV3GH4E60-BP	4"	60.00	47.25	67.50	8.42	40.91	18.09	20.78	55.84	837.85
22SV4GJ4E60-BP	4"	60.00	47.25	67.50	8.42	43.45	18.09	20.78	55.84	954.06
22SV6GK4E60-BP	4"	60.00	47.25	67.50	8.42	48.94	18.09	20.78	55.84	1154.45
22SV9GL4E60-BP	4"	60.00	47.25	67.50	8.42	58.12	18.09	20.78	55.84	1717.38

PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
22SV2GG4E60-BP	6"	60.00	56.37	67.50	8.42	37.52	21.15	24.09	57.97	994.54
22SV3GH4E60-BP	6"	60.00	56.37	67.50	8.42	40.91	21.15	24.09	57.97	1042.42
22SV4GJ4E60-BP	6"	60.00	56.37	67.50	8.42	43.45	21.15	24.09	57.97	1158.64
22SV6GK4E60-BP	6"	60.00	56.37	67.50	8.42	48.94	21.15	24.09	57.97	1359.03
22SV9GL4E60-BP	6"	60.00	56.37	67.50	8.42	58.12	21.15	24.09	57.97	1921.95

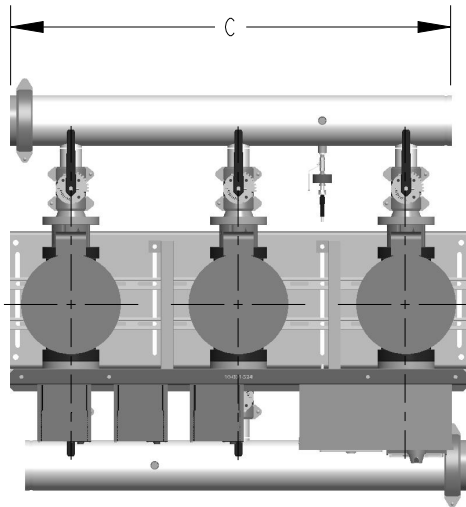


460V
AQUAFORCE e-MTV Dimensions 22SV - 2 Pump

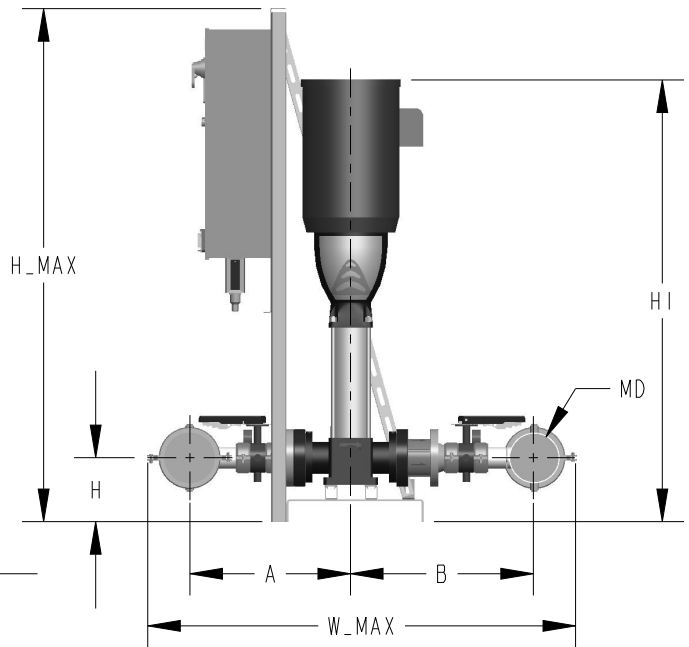
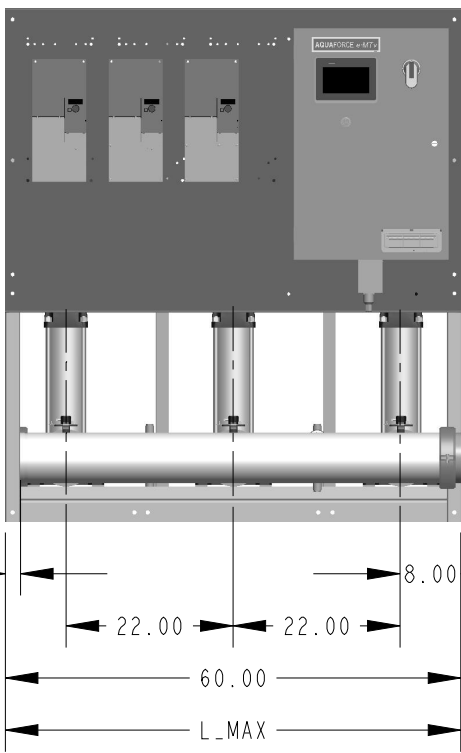


PUMP	MD	L_MAX	W_MAX	H_MAX	H	H_I	A	B	C	Wt.(lb)
22SV2GG4F60-BP	3"	46.50	44.12	67.50	8.42	37.52	17.09	19.78	31.78	593.15
22SV3GH4F60-BP	3"	46.50	44.12	67.50	8.42	40.91	17.09	19.78	31.78	625.07
22SV4GJ4F60-BP	3"	46.50	44.12	67.50	8.42	43.45	17.09	19.78	31.78	702.55
22SV6GK4F60-BP	3"	46.50	44.12	67.50	8.42	48.94	17.09	19.78	31.78	836.14
22SV9GL4F60-BP	3"	46.50	44.12	67.50	8.42	58.12	17.09	19.78	31.78	1211.42

PUMP	MD	L_MAX	W_MAX	H_MAX	H	H_I	A	B	C	Wt.(lb)
22SV2GG4F60-BP	4"	46.50	49.63	67.50	8.42	37.52	19.15	22.09	33.84	700.53
22SV3GH4F60-BP	4"	46.50	49.63	67.50	8.42	40.91	19.15	22.09	33.84	732.45
22SV4GJ4F60-BP	4"	46.50	49.63	67.50	8.42	43.45	19.15	22.09	33.84	809.93
22SV6GK4F60-BP	4"	46.50	49.63	67.50	8.42	48.94	19.15	22.09	33.84	943.52
22SV9GL4F60-BP	4"	46.50	49.63	67.50	8.42	58.12	19.15	22.09	33.84	1318.81

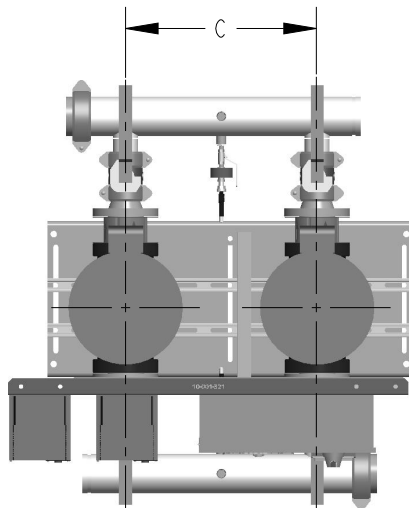


460V
AQUAFORCE e-MTV Dimensions 22SV - 3 Pump

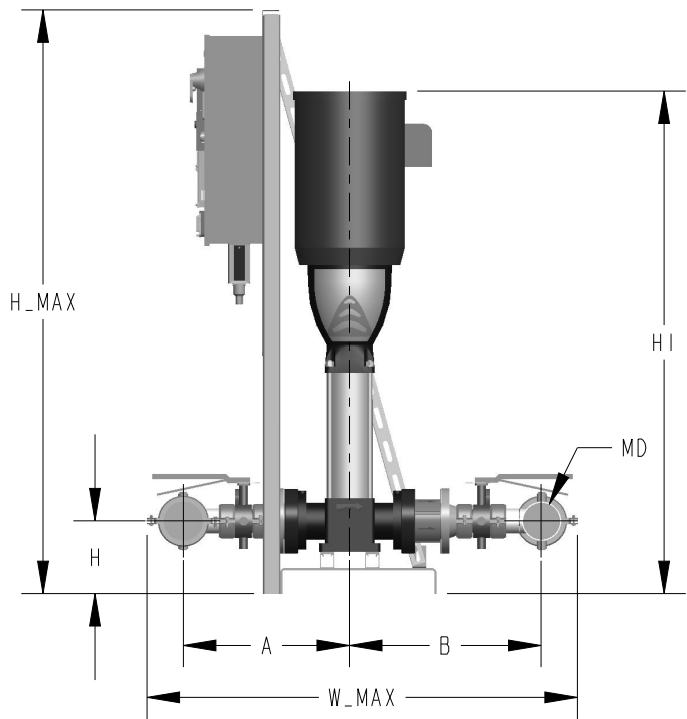
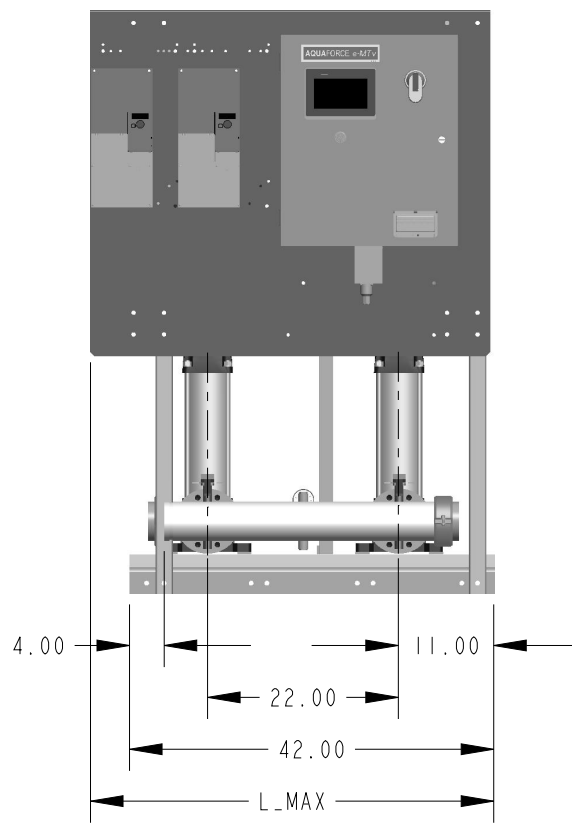


PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
22SV2GG4F60-BP	4"	60.00	47.25	67.50	8.42	37.52	18.09	20.78	55.84	789.97
22SV3GH4F60-BP	4"	60.00	47.25	67.50	8.42	40.91	18.09	20.78	55.84	837.85
22SV4GJ4F60-BP	4"	60.00	47.25	67.50	8.42	43.45	18.09	20.78	55.84	954.06
22SV6GK4F60-BP	4"	60.00	47.25	67.50	8.42	48.94	18.09	20.78	55.84	1154.45
22SV9GL4F60-BP	4"	60.00	47.25	67.50	8.42	58.12	18.09	20.78	55.84	1717.38

PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
22SV2GG4F60-BP	6"	60.00	56.37	67.50	8.42	37.52	21.15	24.09	57.97	994.54
22SV3GH4F60-BP	6"	60.00	56.37	67.50	8.42	40.91	21.15	24.09	57.97	1042.42
22SV4GJ4F60-BP	6"	60.00	56.37	67.50	8.42	43.45	21.15	24.09	57.97	1158.64
22SV6GK4F60-BP	6"	60.00	56.37	67.50	8.42	48.94	21.15	24.09	57.97	1359.03
22SV9GL4F60-BP	6"	60.00	56.37	67.50	8.42	58.12	21.15	24.09	57.97	1921.95

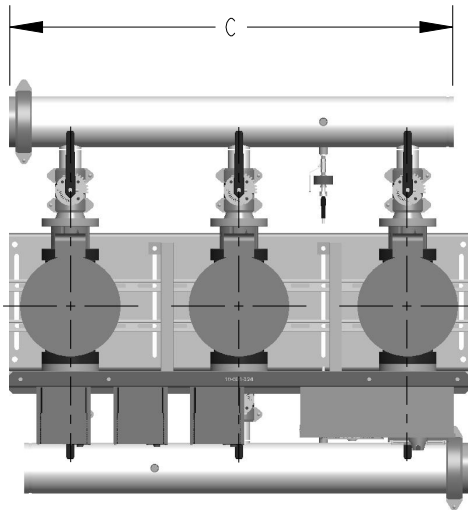


575V
AQUAFORCE e-MTV Dimensions 22SV - 2 Pump

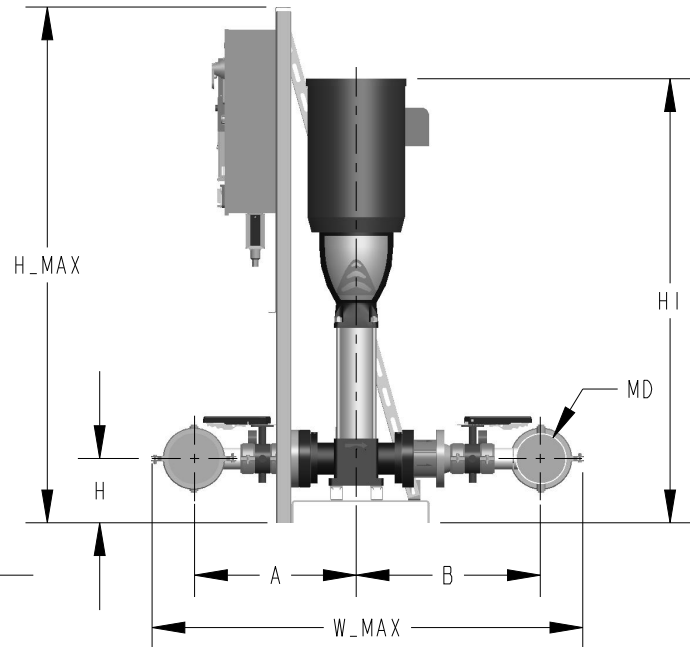
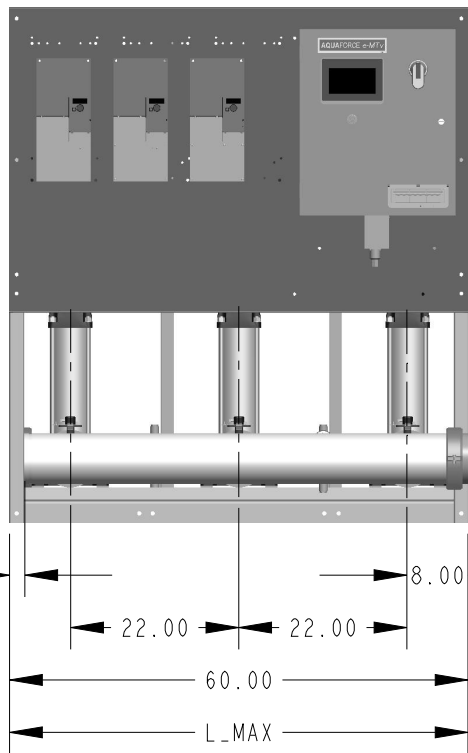


PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
22SV2GG4E60-BP	3"	46.50	44.12	67.50	8.42	37.52	17.09	19.78	31.78	593.15
22SV3GH4E60-BP	3"	46.50	44.12	67.50	8.42	40.91	17.09	19.78	31.78	625.07
22SV4GJ4E60-BP	3"	46.50	44.12	67.50	8.42	43.45	17.09	19.78	31.78	702.55
22SV6GK4E60-BP	3"	46.50	44.12	67.50	8.42	48.94	17.09	19.78	31.78	836.14
22SV9GL4E60-BP	3"	46.50	44.12	67.50	8.42	58.12	17.09	19.78	31.78	1211.42

PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
22SV2GG4E60-BP	4"	46.50	49.63	67.50	8.42	37.52	19.15	22.09	33.84	700.53
22SV3GH4E60-BP	4"	46.50	49.63	67.50	8.42	40.91	19.15	22.09	33.84	732.45
22SV4GJ4E60-BP	4"	46.50	49.63	67.50	8.42	43.45	19.15	22.09	33.84	809.93
22SV6GK4E60-BP	4"	46.50	49.63	67.50	8.42	48.94	19.15	22.09	33.84	943.52
22SV9GL4E60-BP	4"	46.50	49.63	67.50	8.42	58.12	19.15	22.09	33.84	1318.81



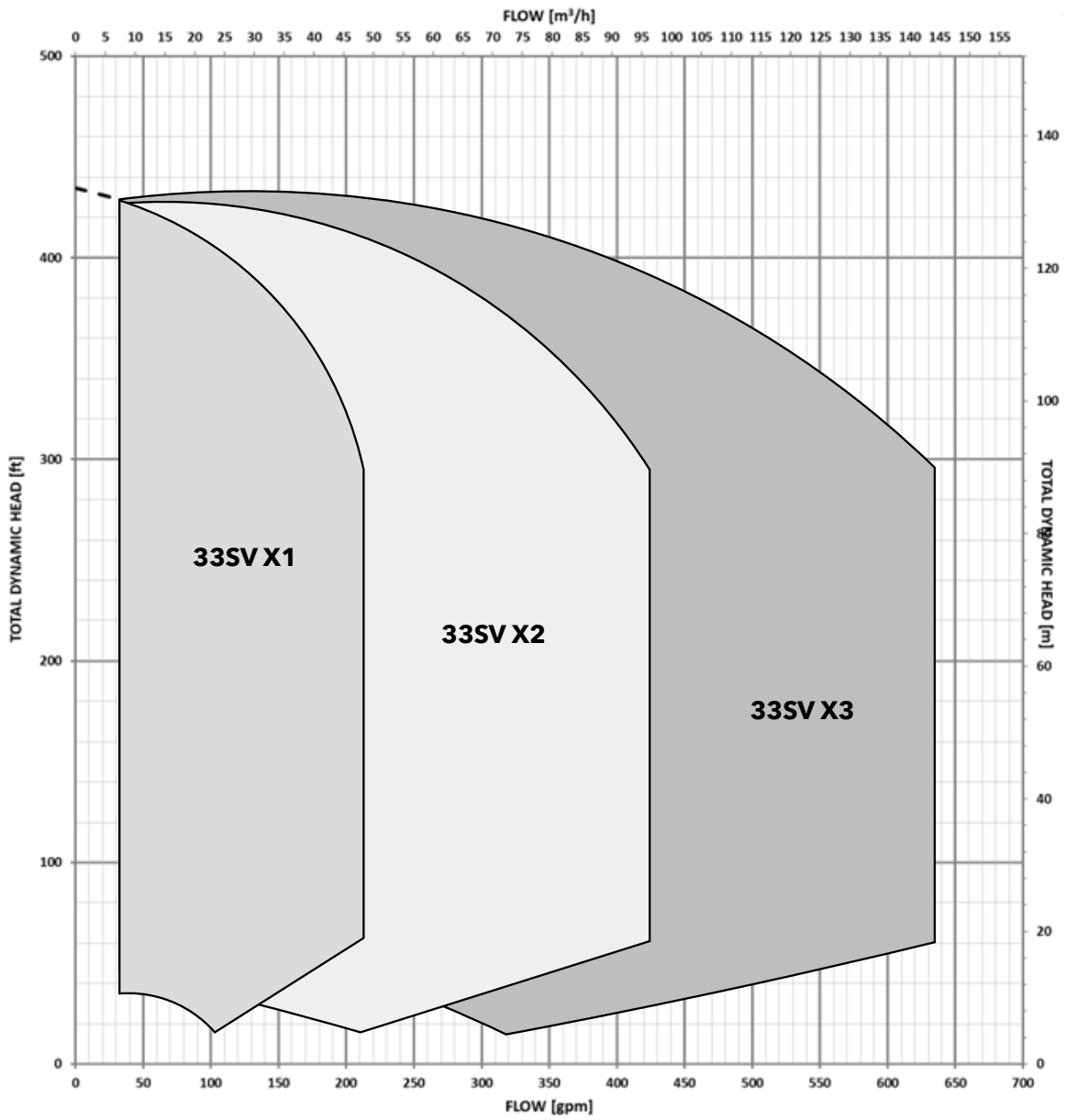
575V
AQUAFORCE e-MTV Dimensions 22SV - 3 Pump



PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
22SV2GG4E60-BP	4"	60.00	47.25	67.50	8.42	37.52	18.09	20.78	55.84	789.97
22SV3GH4E60-BP	4"	60.00	47.25	67.50	8.42	40.91	18.09	20.78	55.84	837.85
22SV4GJ4E60-BP	4"	60.00	47.25	67.50	8.42	43.45	18.09	20.78	55.84	954.06
22SV6GK4E60-BP	4"	60.00	47.25	67.50	8.42	48.94	18.09	20.78	55.84	1154.45
22SV9GL4E60-BP	4"	60.00	47.25	67.50	8.42	58.12	18.09	20.78	55.84	1717.38

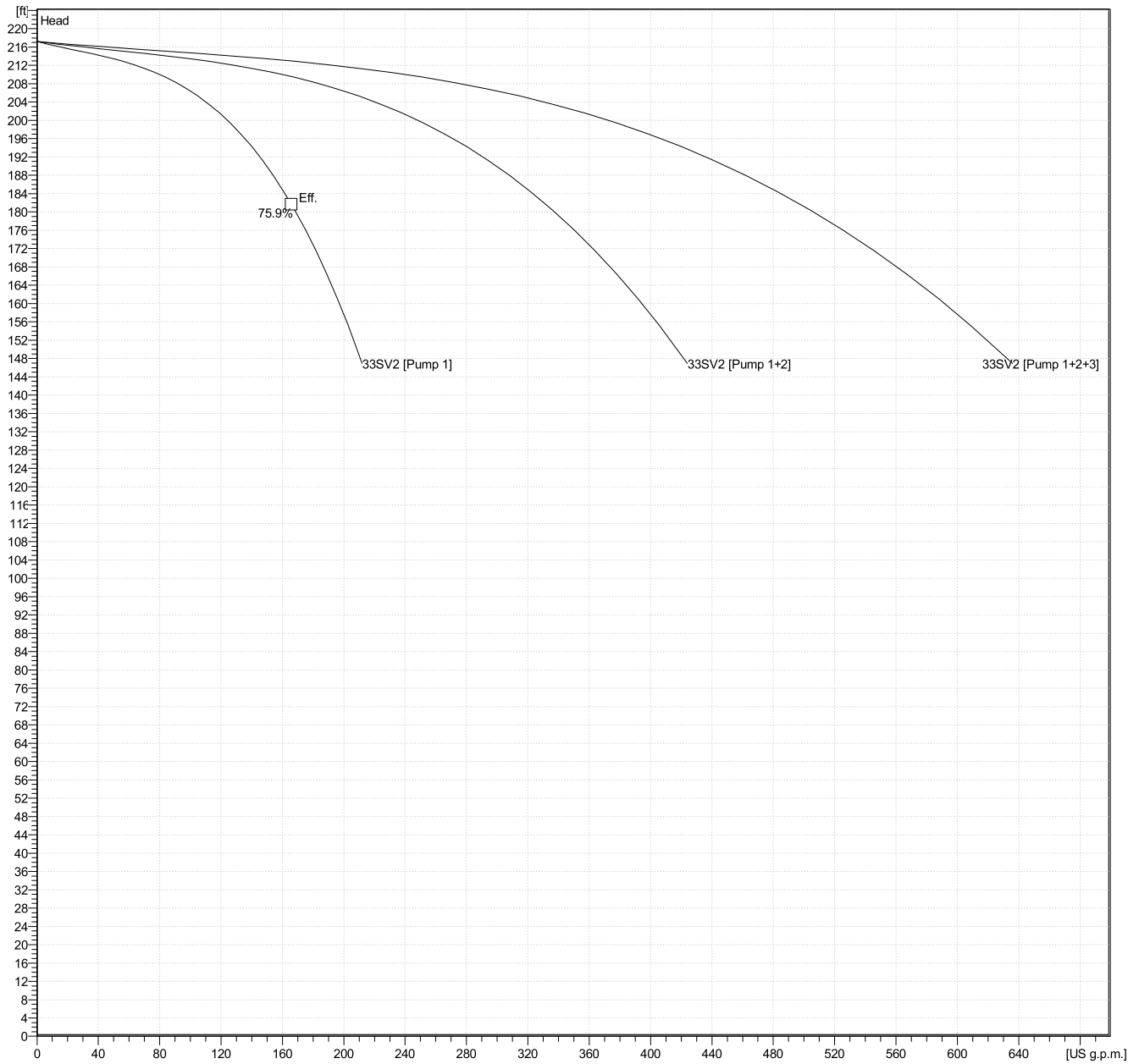
PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
22SV2GG4E60-BP	6"	60.00	56.37	67.50	8.42	37.52	21.15	24.09	57.97	994.54
22SV3GH4E60-BP	6"	60.00	56.37	67.50	8.42	40.91	21.15	24.09	57.97	1042.42
22SV4GJ4E60-BP	6"	60.00	56.37	67.50	8.42	43.45	21.15	24.09	57.97	1158.64
22SV6GK4E60-BP	6"	60.00	56.37	67.50	8.42	48.94	21.15	24.09	57.97	1359.03
22SV9GL4E60-BP	6"	60.00	56.37	67.50	8.42	58.12	21.15	24.09	57.97	1921.95

AQUAFORCE e-MTV Curves 33SV



Performance Curve Data

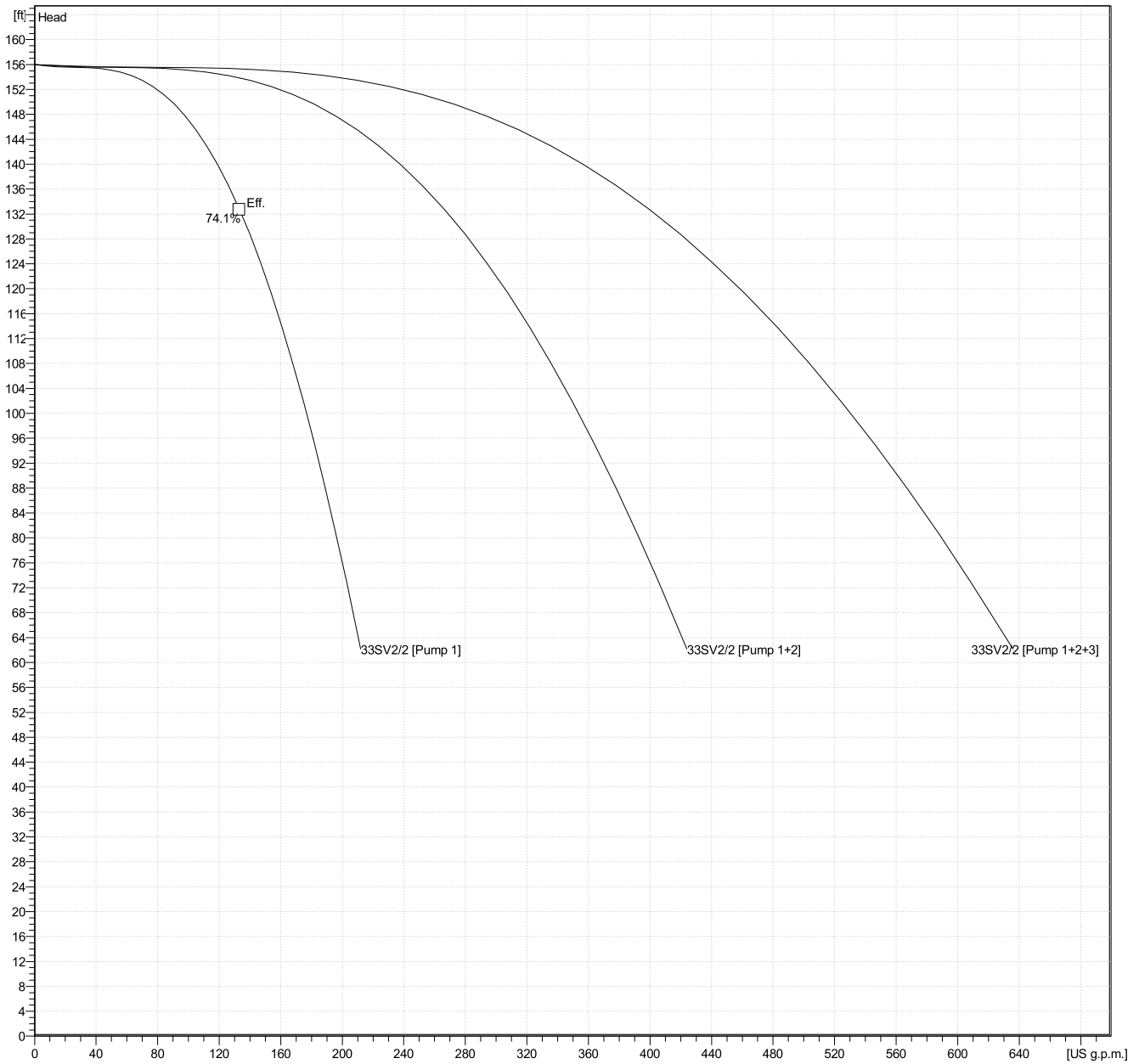
33SV20



Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VGD4J20D2CMV	2	33SV	4"	3"	208V/3PH	10	2	0
V2VGD5J20D2CMV	2	33SV	4"	3"	230V/3PH	10	2	0
V2VGD6J20D2CMV	2	33SV	4"	3"	460V/3PH	10	2	0
V2VGD7J20D2CMV	2	33SV	4"	3"	575V/3PH	10	2	0
V3VGE4J20D2CMV	3	33SV	6"	3"	208V/3PH	10	2	0
V3VGE5J20D2CMV	3	33SV	6"	3"	230V/3PH	10	2	0
V3VGE6J20D2CMV	3	33SV	6"	3"	460V/3PH	10	2	0
V3VGE7J20D2CMV	3	33SV	6"	3"	575V/3PH	10	2	0

Performance Curve Data

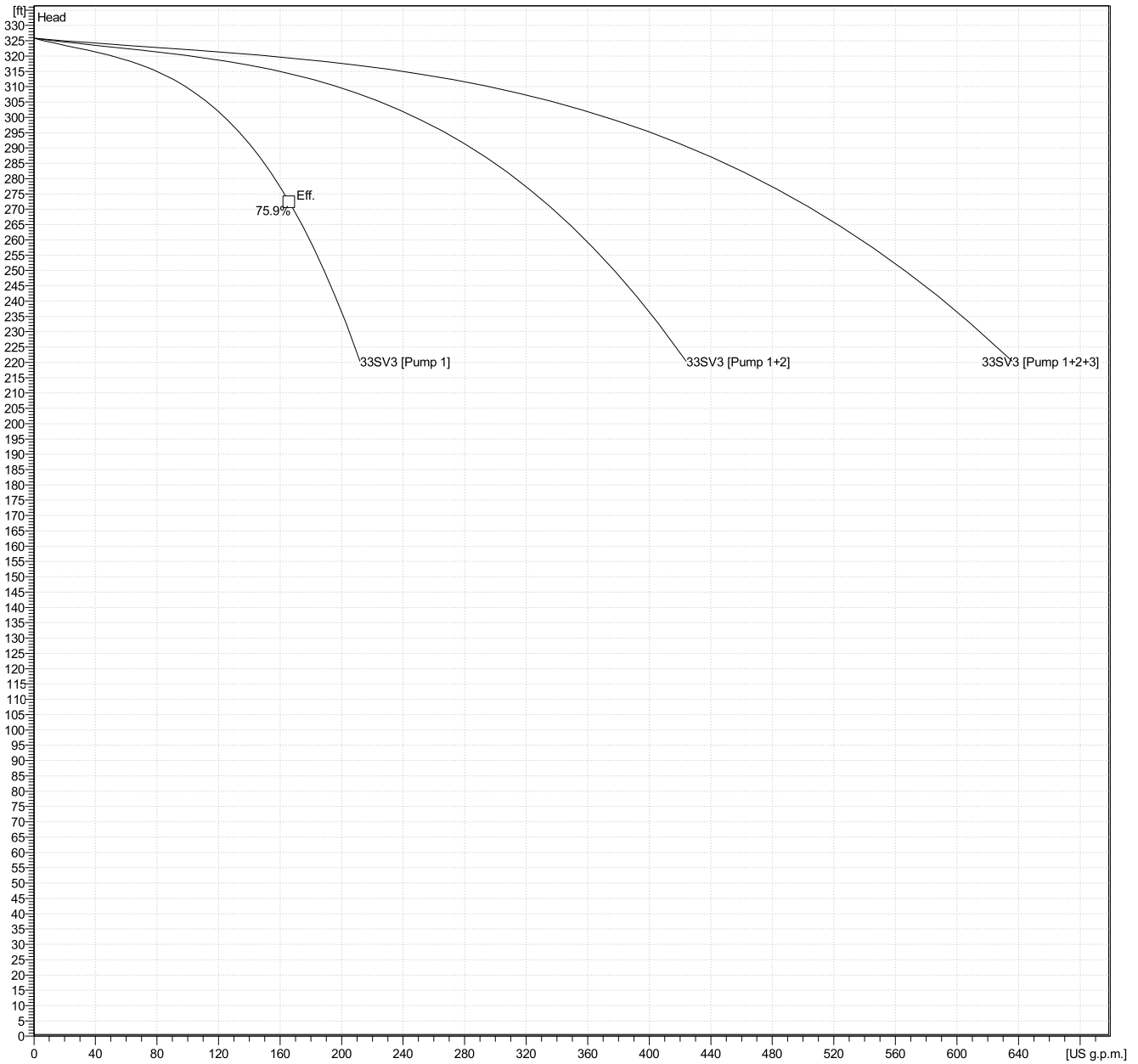
33SV22



Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VGD4H22D2CMV	2	33SV	4"	3"	208V/3PH	7.5	2	2
V2VGD5H22D2CMV	2	33SV	4"	3"	230V/3PH	7.5	2	2
V2VGD6H22D2CMV	2	33SV	4"	3"	460V/3PH	7.5	2	2
V2VGD7H22D2CMV	2	33SV	4"	3"	575V/3PH	7.5	2	2
V3VGE4H22D2CMV	3	33SV	6"	3"	208V/3PH	7.5	2	2
V3VGE5H22D2CMV	3	33SV	6"	3"	230V/3PH	7.5	2	2
V3VGE6H22D2CMV	3	33SV	6"	3"	460V/3PH	7.5	2	2
V3VGE7H22D2CMV	3	33SV	6"	3"	575V/3PH	7.5	2	2

Performance Curve Data

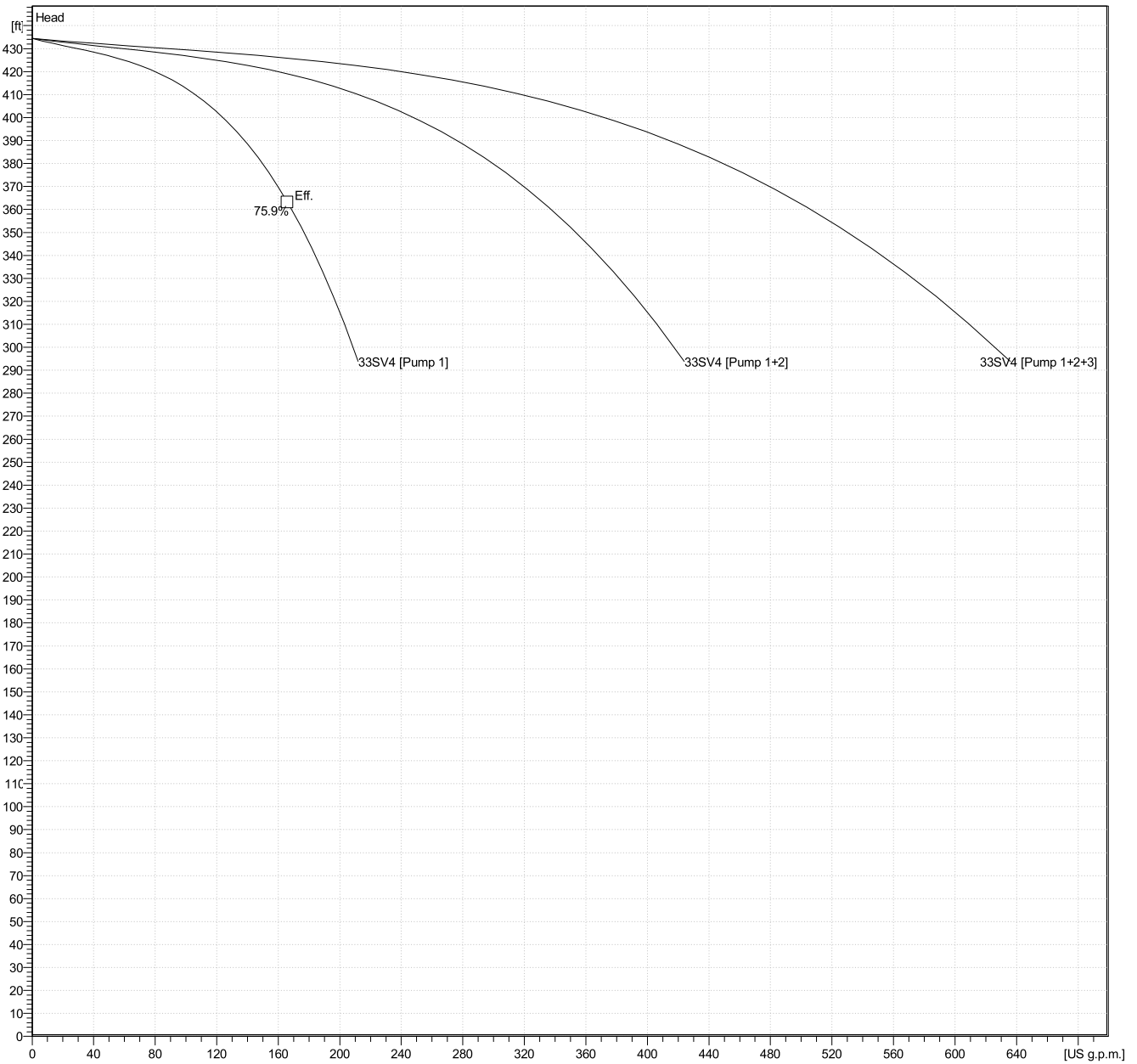
33SV30



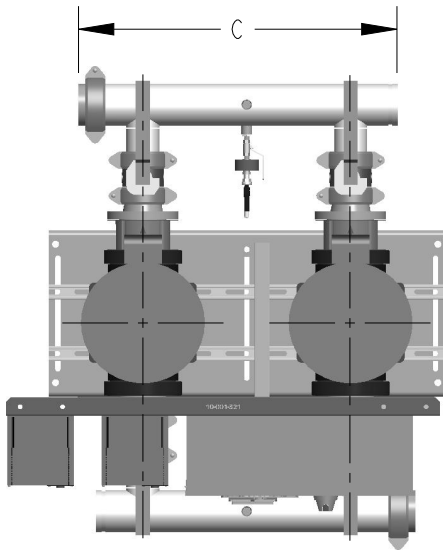
Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VGD4K30D2CMV	2	33SV	4"	3"	208V/3PH	15	3	0
V2VGD5K30D2CMV	2	33SV	4"	3"	230V/3PH	15	3	0
V2VGD6K30D2CMV	2	33SV	4"	3"	460V/3PH	15	3	0
V2VGD7K30D2CMV	2	33SV	4"	3"	575V/3PH	15	3	0
V3VGE4K30D2CMV	3	33SV	6"	3"	208V/3PH	15	3	0
V3VGE5K30D2CMV	3	33SV	6"	3"	230V/3PH	15	3	0
V3VGE6K30D2CMV	3	33SV	6"	3"	460V/3PH	15	3	0
V3VGE7K30D2CMV	3	33SV	6"	3"	575V/3PH	15	3	0

Performance Curve Data

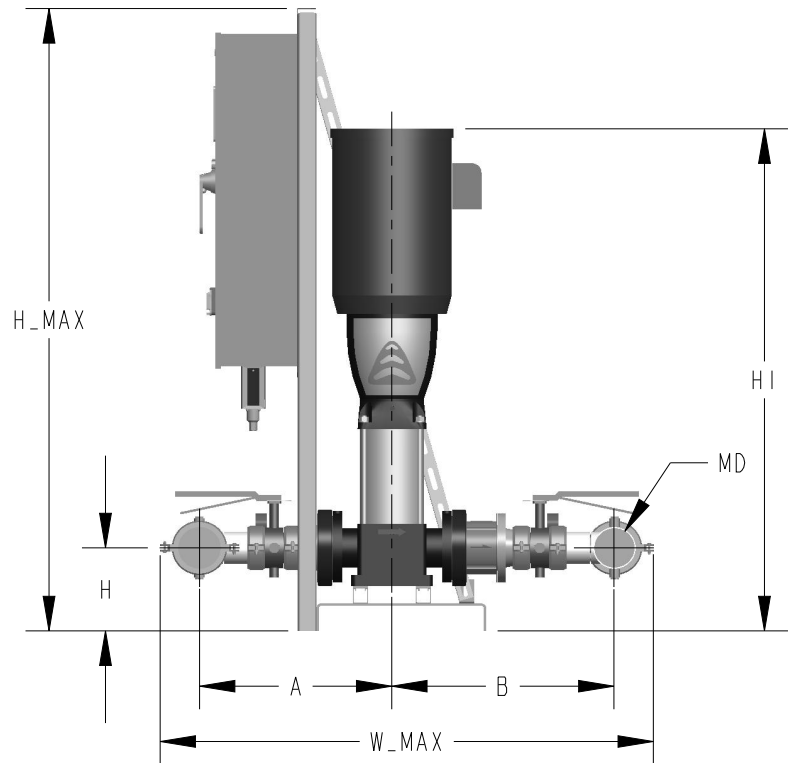
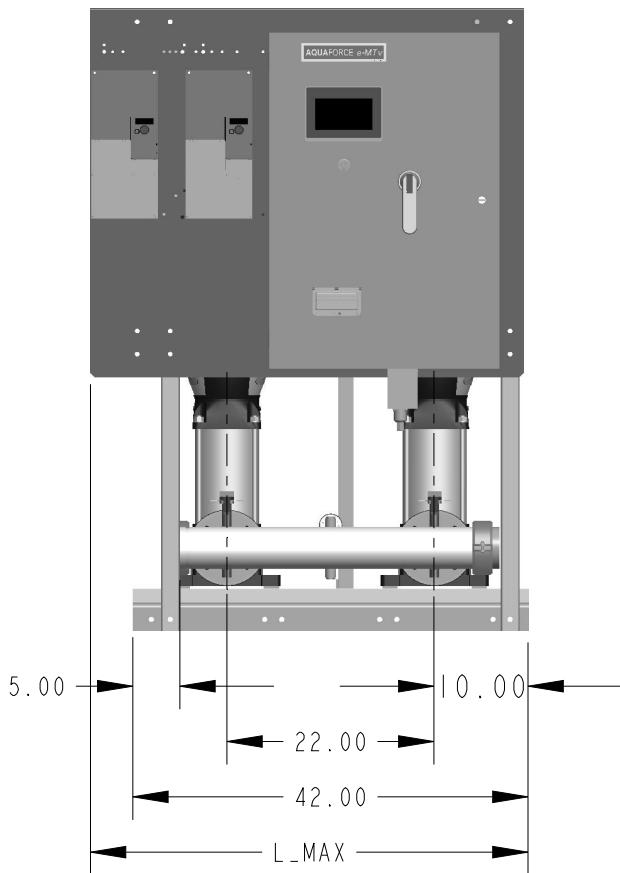
33SV40



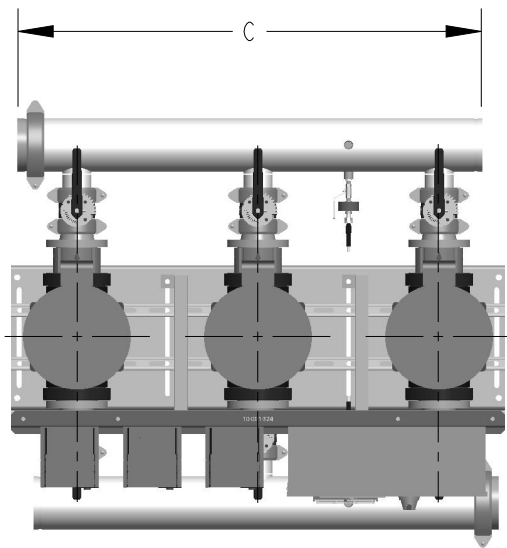
Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VGD4L40D2CMV	2	33SV	4"	3"	208V/3PH	20	4	0
V2VGD5L40D2CMV	2	33SV	4"	3"	230V/3PH	20	4	0
V2VGD6L40D2CMV	2	33SV	4"	3"	460V/3PH	20	4	0
V2VGD7L40D2CMV	2	33SV	4"	3"	575V/3PH	20	4	0
V3VGE4L40D2CMV	3	33SV	6"	3"	208V/3PH	20	4	0
V3VGE5L40D2CMV	3	33SV	6"	3"	230V/3PH	20	4	0
V3VGE6L40D2CMV	3	33SV	6"	3"	460V/3PH	20	4	0
V3VGE7L40D2CMV	3	33SV	6"	3"	575V/3PH	20	4	0



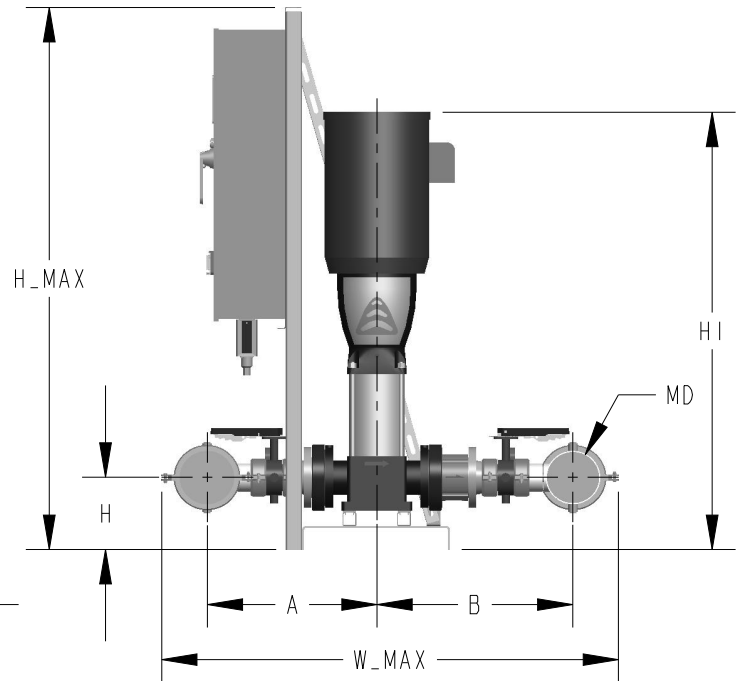
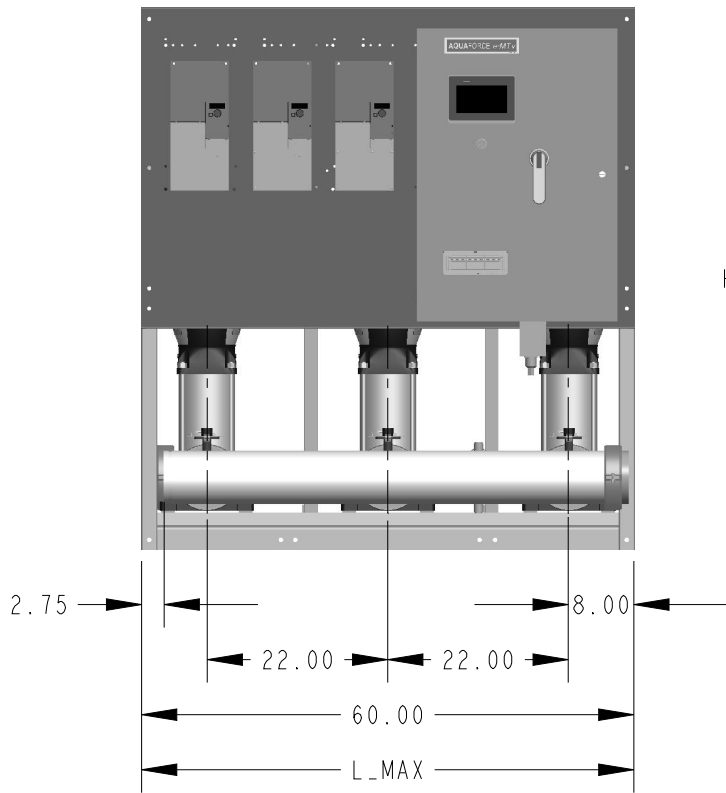
208-230V
AQUAFORCE e-MTV Dimensions 33SV - 2 Pump



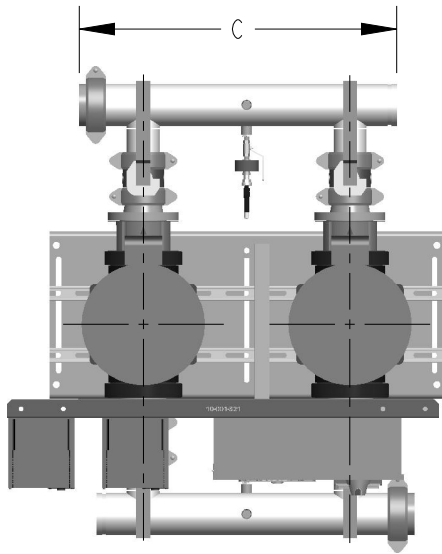
PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
33SV22GH4F60-BP	4"	46.50	52.42	67.50	9.01	43.89	20.42	23.61	33.84	1002.12
33SV20GJ4F60-BP	4"	46.50	52.42	67.50	9.01	43.97	20.42	23.61	33.84	1121.12
33SV30GK4F60-BP	4"	46.50	52.42	67.50	9.01	47.99	20.42	23.61	33.84	1333.72
33SV40GL4F60-BP	4"	46.50	52.42	67.50	9.01	54.46	20.42	23.61	33.84	1967.90



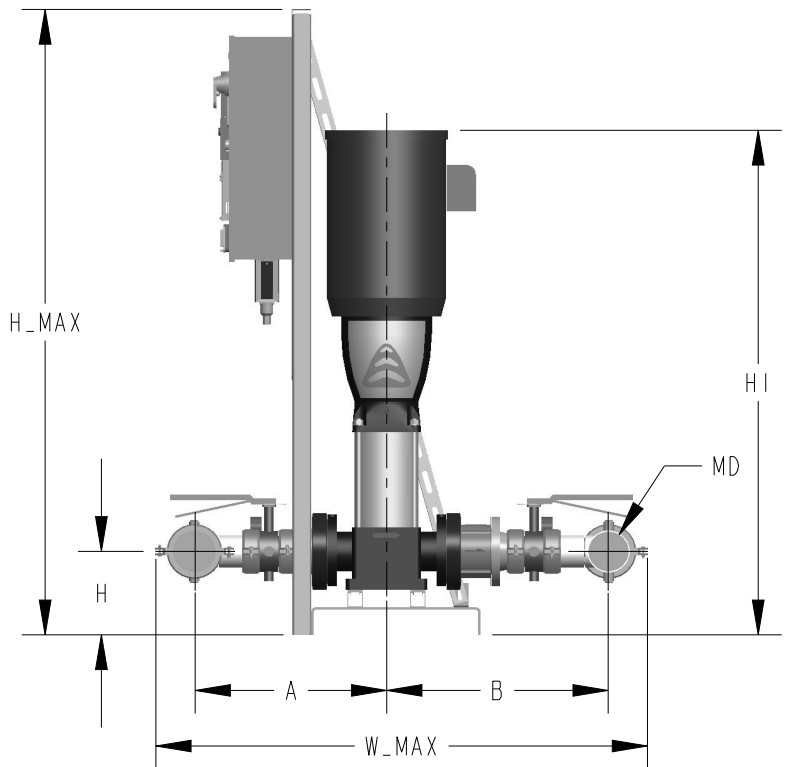
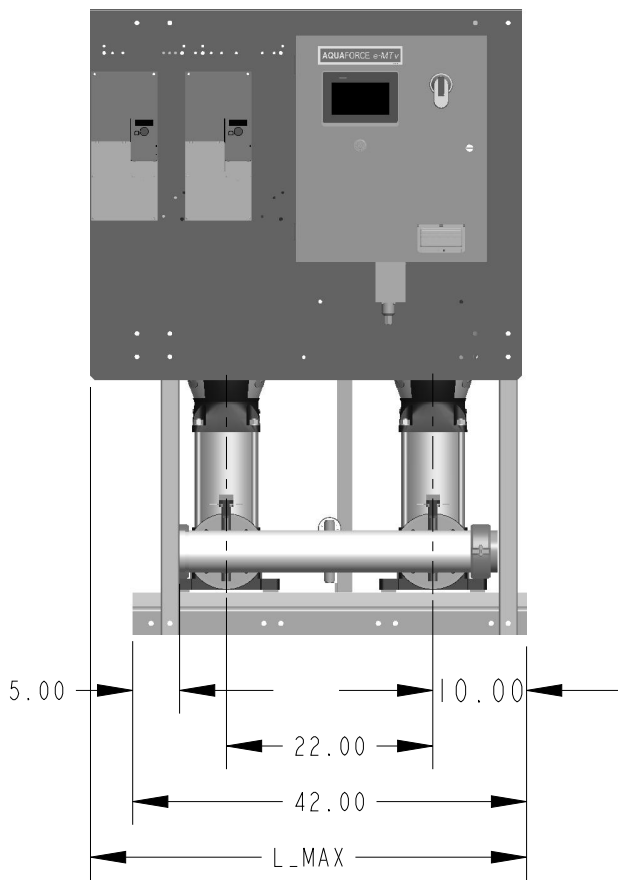
208-230V
AQUAFORCE e-MTV Dimensions 33SV - 3 Pump



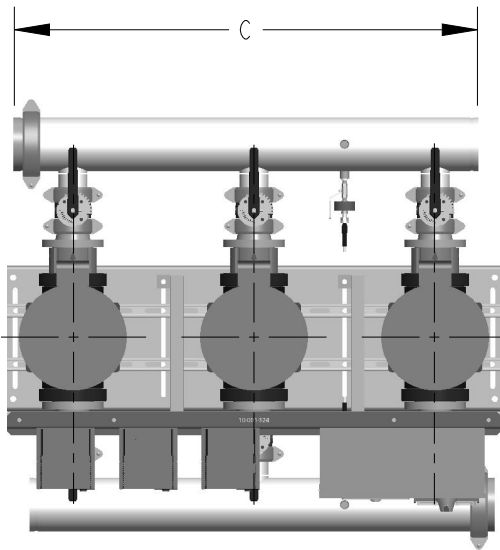
PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
33SV22GH4F60-BP	6"	60.00	55.66	67.50	9.01	43.89	20.67	23.86	56.47	1438.67
33SV20GJ4F60-BP	6"	60.00	55.66	67.50	9.01	43.97	20.67	23.86	56.47	1617.17
33SV30GK4F60-BP	6"	60.00	55.66	67.50	9.01	47.99	20.67	23.86	56.47	1936.07
33SV40GL4F60-BP	6"	60.00	55.66	67.50	9.01	54.46	20.67	23.86	56.47	2887.32



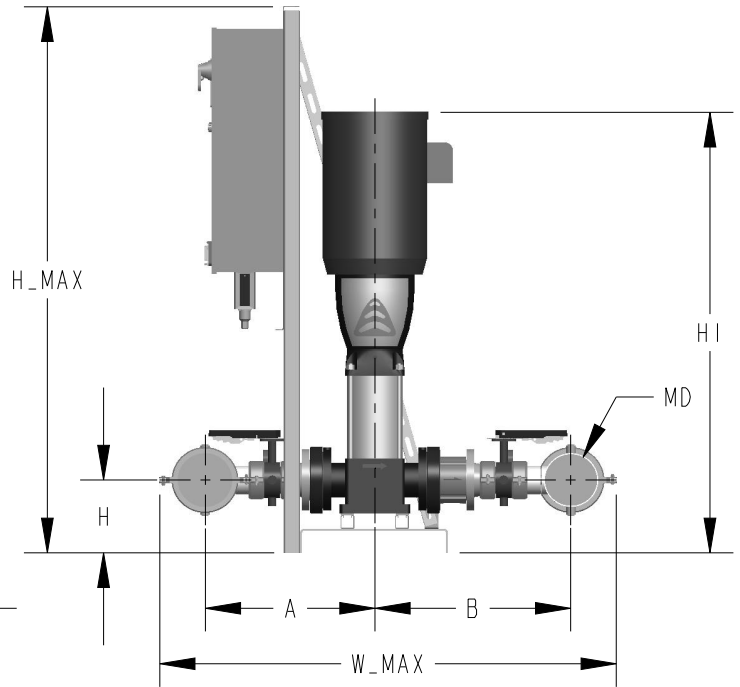
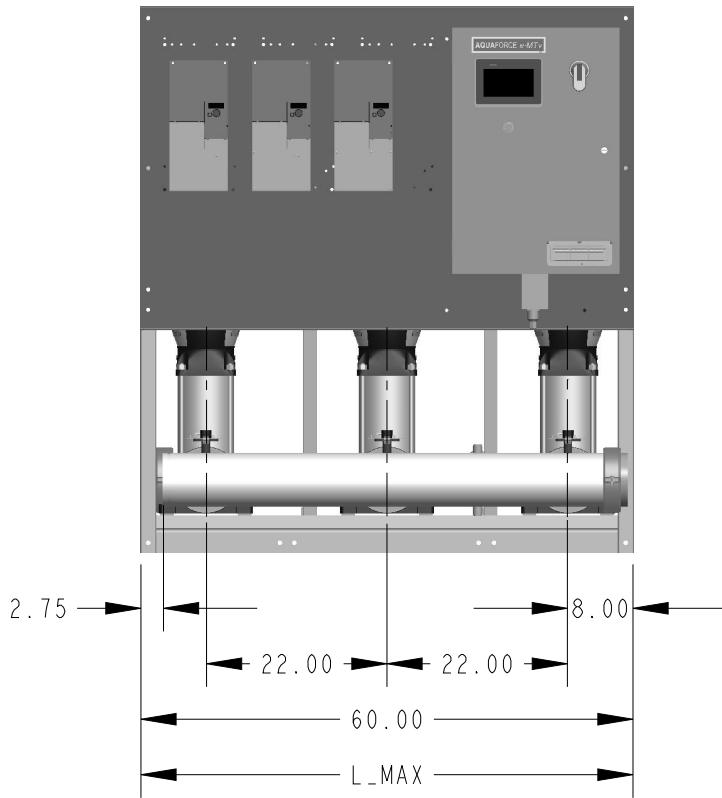
460V
AQUAFORCE e-MTV Dimensions 33SV - 2 Pump



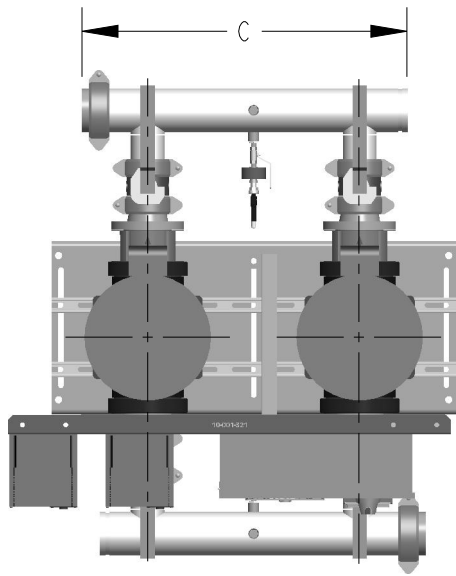
PUMP	MD	L_MAX	W_MAX	H_MAX	H	H1	A	B	C	Wt.(lb)
33SV22GH4F60-BP	4"	46.50	52.42	67.50	9.01	43.89	20.42	23.61	33.84	1002.12
33SV20GJ4F60-BP	4"	46.50	52.42	67.50	9.01	43.97	20.42	23.61	33.84	1121.12
33SV30GK4F60-BP	4"	46.50	52.42	67.50	9.01	47.99	20.42	23.61	33.84	1333.72
33SV40GL4F60-BP	4"	46.50	52.42	67.50	9.01	54.46	20.42	23.61	33.84	1967.88



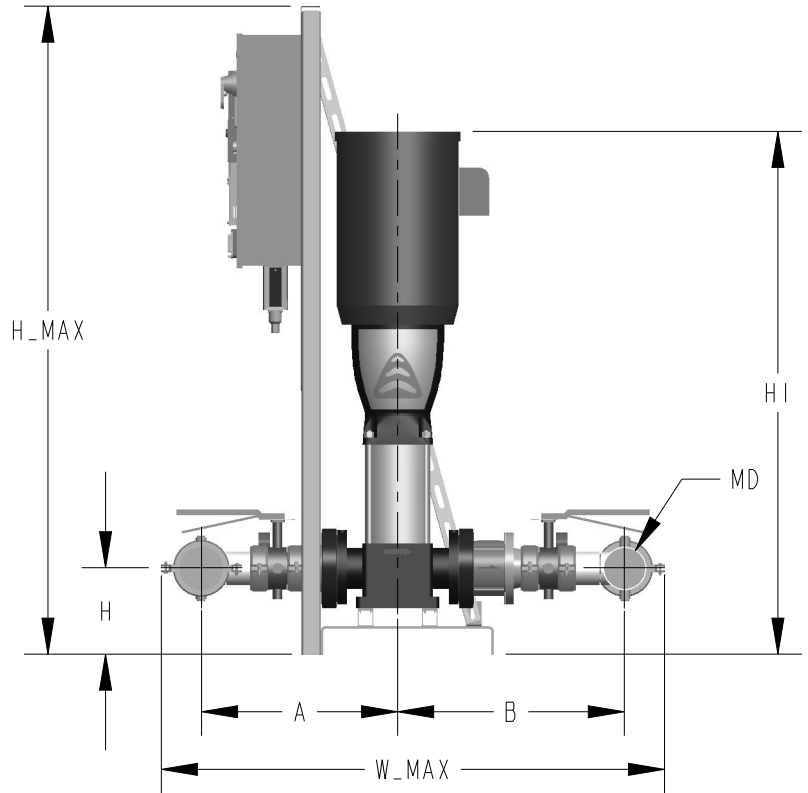
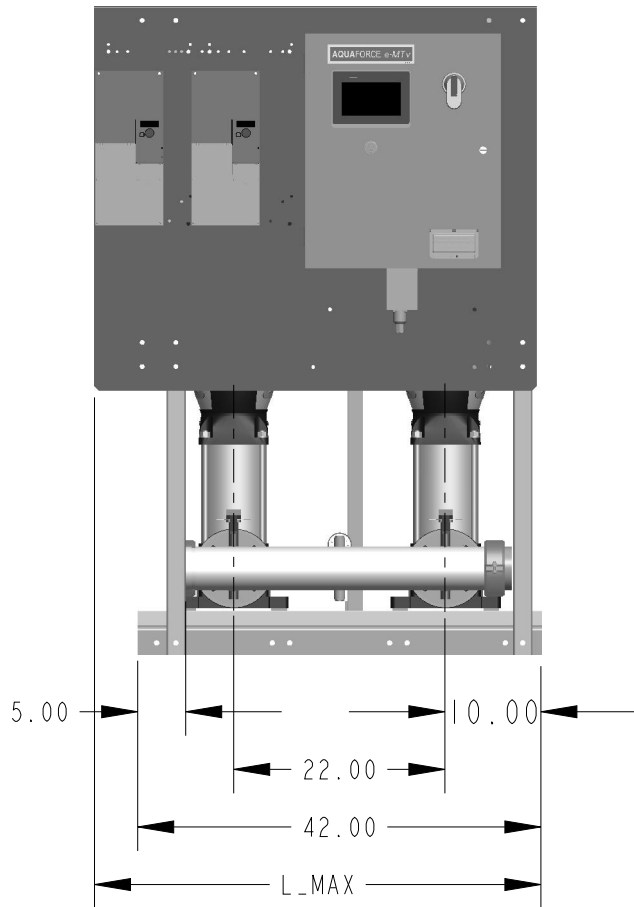
460V
AQUAFORCE e-MTV Dimensions 33SV - 3 Pump



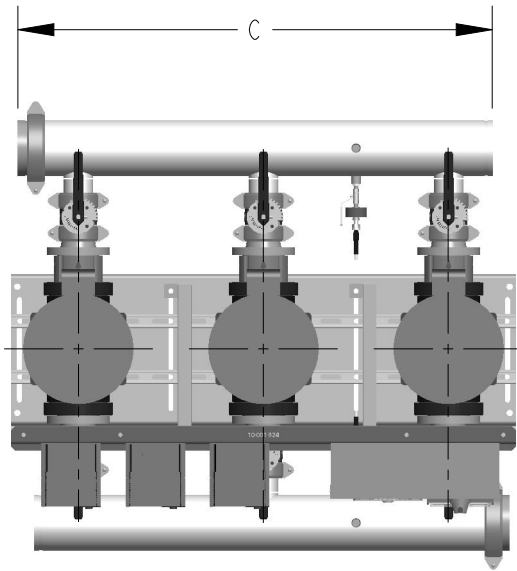
PUMP	MD	L_MAX	W_MAX	H_MAX	H	H_I	A	B	C	Wt.(lb)
33SV22GH4F60-BP	6"	60.00	55.66	67.50	9.01	43.89	20.67	23.86	56.47	1438.67
33SV20GJ4F60-BP	6"	60.00	55.66	67.50	9.01	43.97	20.67	23.86	56.47	1617.17
33SV30GK4F60-BP	6"	60.00	55.66	67.50	9.01	47.99	20.67	23.86	56.47	1936.07
33SV40GL4F60-BP	6"	60.00	55.66	67.50	9.01	54.46	20.67	23.86	56.47	2887.30



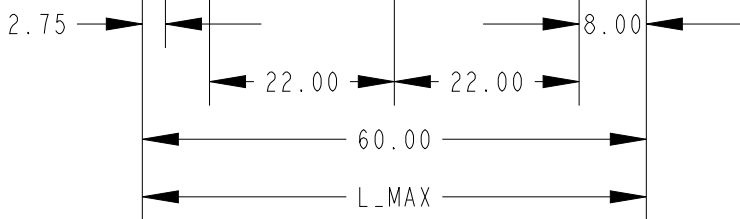
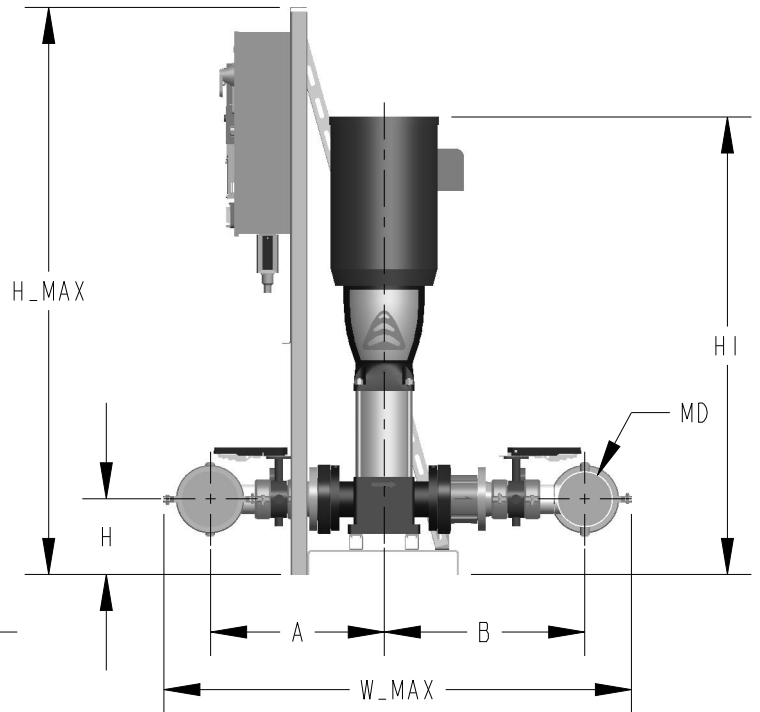
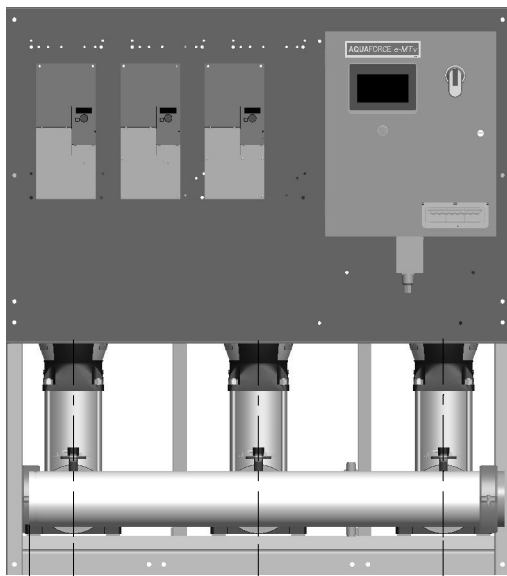
575V
AQUAFORCE e-MTV Dimensions 33SV - 2 Pump



PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
33SV22GH4E60-BP	4"	46.50	52.42	67.50	9.01	43.89	20.42	23.61	33.84	1002.12
33SV20GJ4E60-BP	4"	46.50	52.42	67.50	9.01	43.97	20.42	23.61	33.84	1121.12
33SV30GK4E60-BP	4"	46.50	52.42	67.50	9.01	47.99	20.42	23.61	33.84	1333.72
33SV40GL4E60-BP	4"	46.50	52.42	67.50	9.01	54.46	20.42	23.61	33.84	1968.29

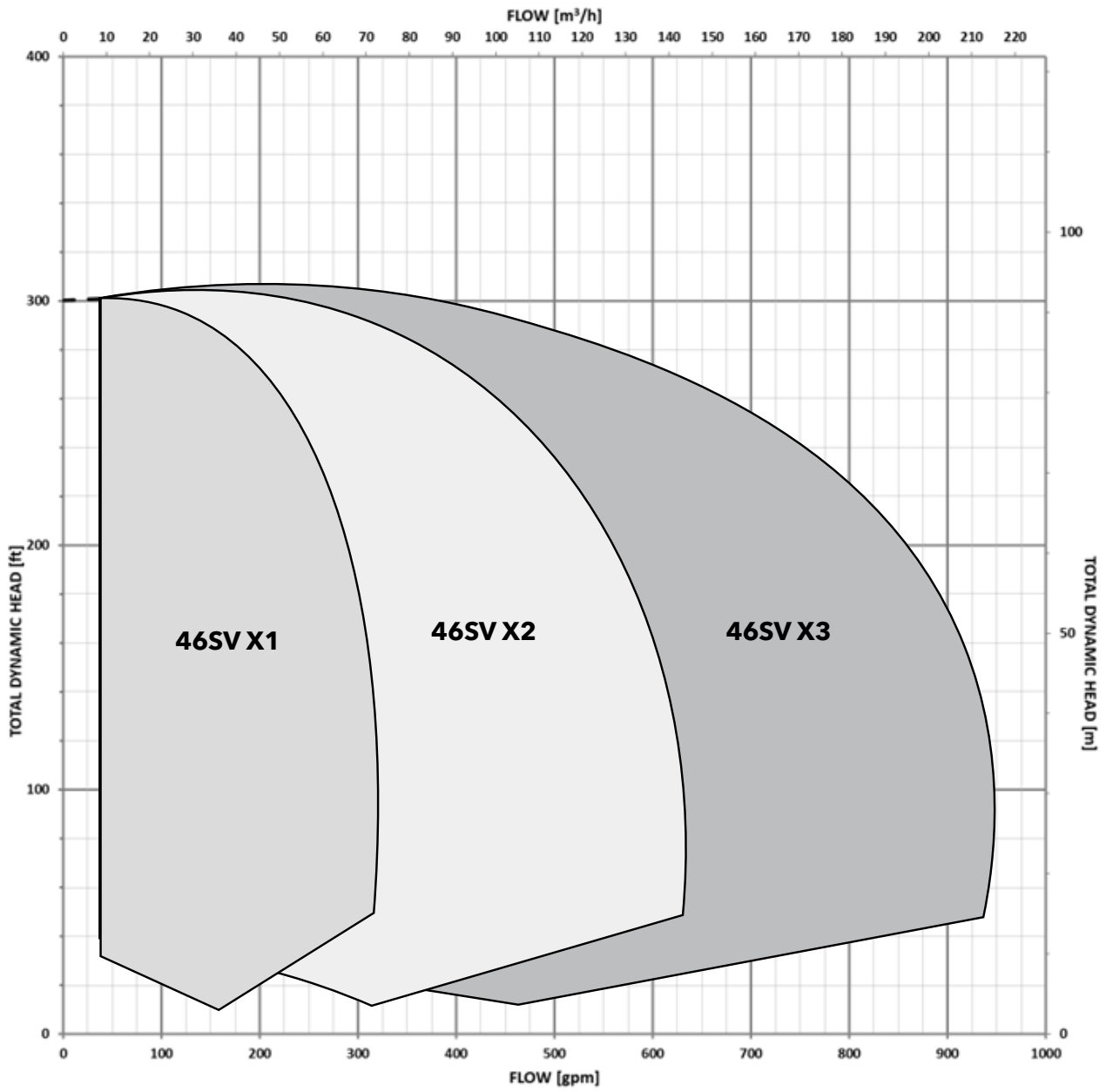


575V
AQUAFORCE e-MTV Dimensions 33SV - 3 Pump



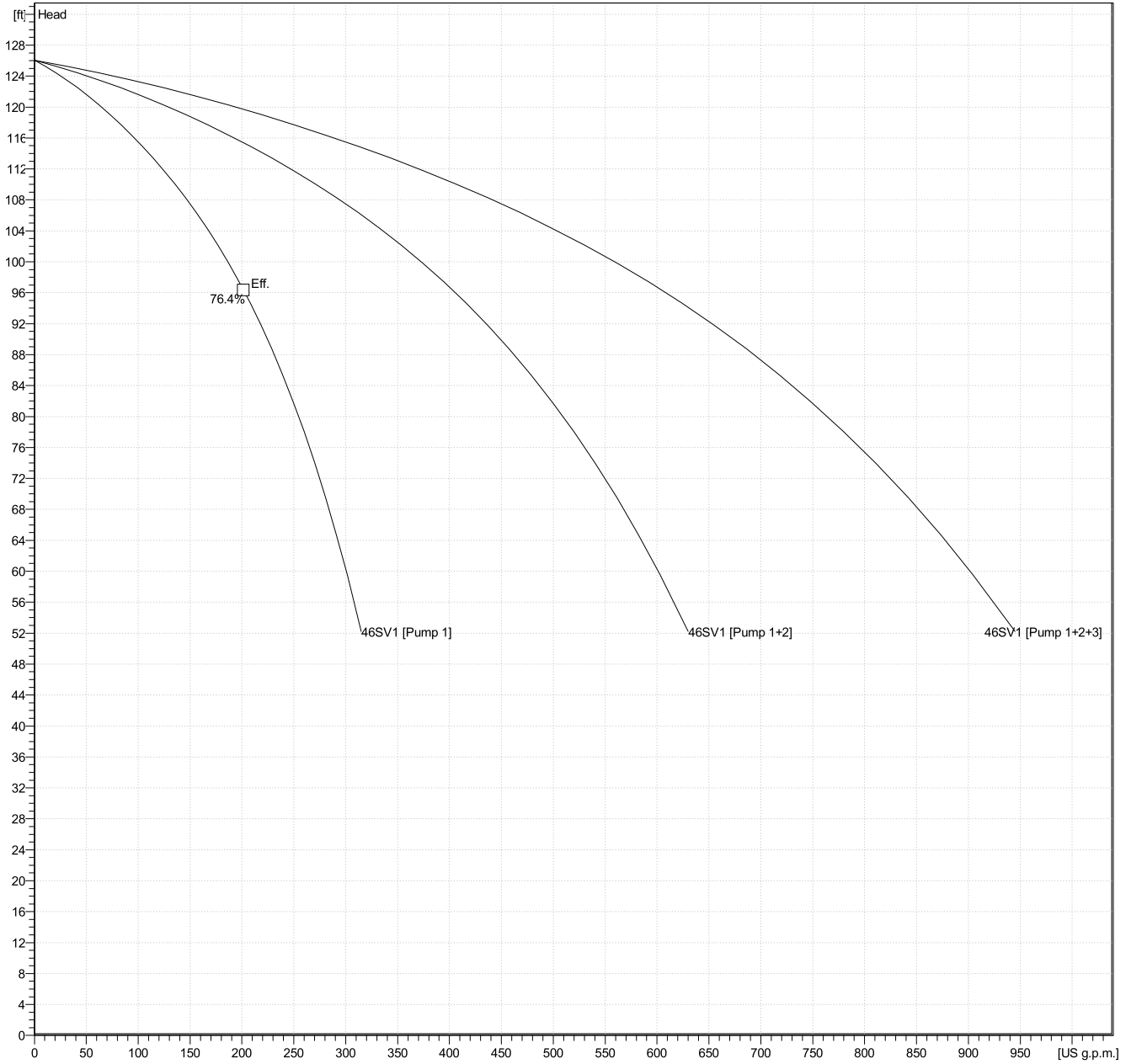
PUMP	MD	L_MAX	W_MAX	H_MAX	H	H1	A	B	C	Wt.(lb)
33SV22GH4E60-BP	6"	60.00	55.66	67.50	9.01	43.89	20.67	23.86	56.47	1438.67
33SV20GJ4E60-BP	6"	60.00	55.66	67.50	9.01	43.97	20.67	23.86	56.47	1617.17
33SV30GK4E60-BP	6"	60.00	55.66	67.50	9.01	47.99	20.67	23.86	56.47	1936.07
33SV40GL4E60-BP	6"	60.00	55.66	67.50	9.01	54.46	20.67	23.86	56.47	2887.92

AQUAFORCE e-MTV Curves 46SV



Performance Curve Data

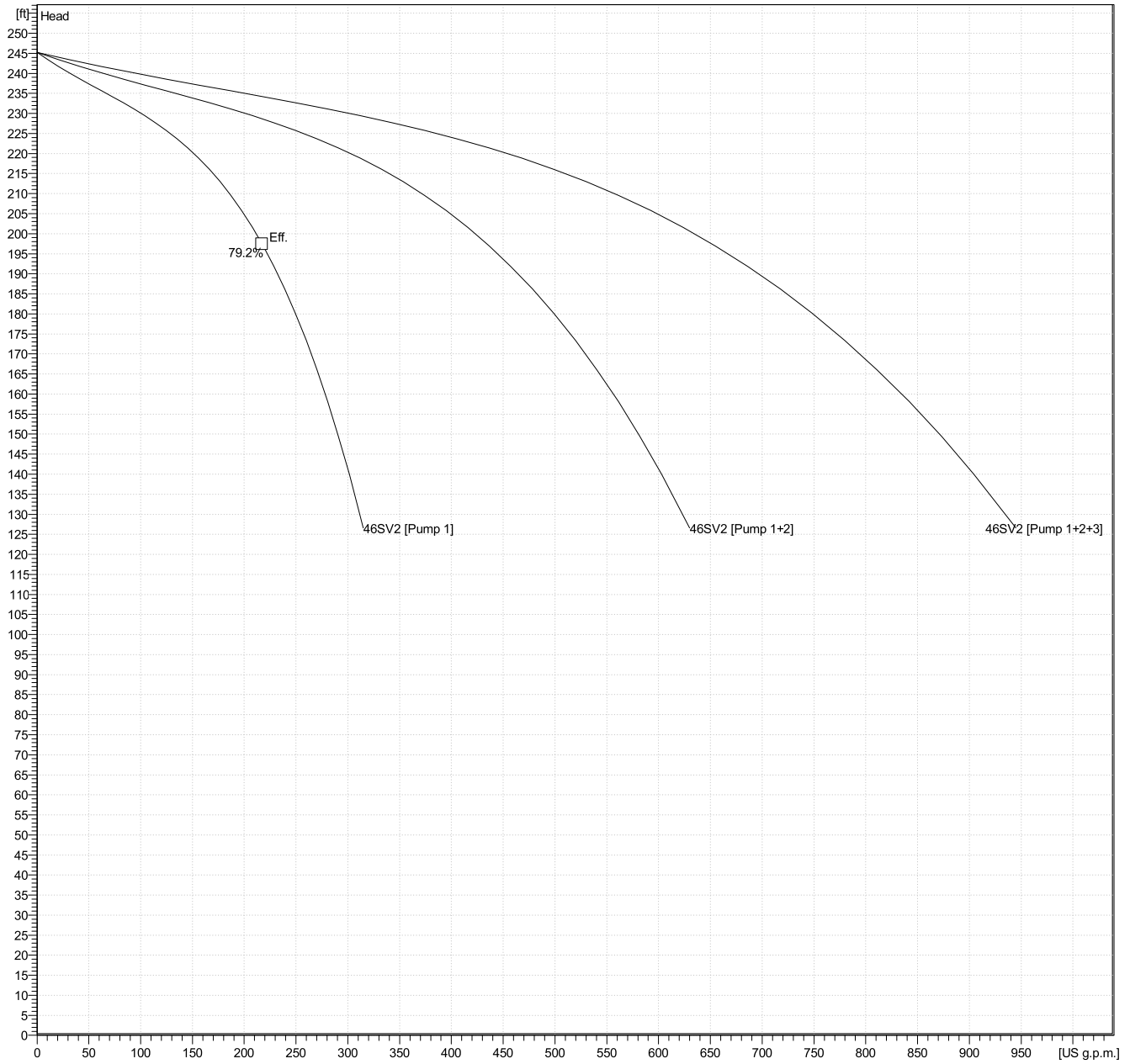
46SV1



Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VHE4J10E2CMV	2	46SV	6"	4"	208V/3PH	10	1	0
V2VHE5J10E2CMV	2	46SV	6"	4"	230V/3PH	10	1	0
V2VHE6J10E2CMV	2	46SV	6"	4"	460V/3PH	10	1	0
V2VHE7J10E2CMV	2	46SV	6"	4"	575V/3PH	10	1	0
V3VHF4J10E2CMV	3	46SV	8"	4"	208V/3PH	10	1	0
V3VHF5J10E2CMV	3	46SV	8"	4"	230V/3PH	10	1	0
V3VHF6J10E2CMV	3	46SV	8"	4"	460V/3PH	10	1	0
V3VHF7J10E2CMV	3	46SV	8"	4"	575V/3PH	10	1	0

Performance Curve Data

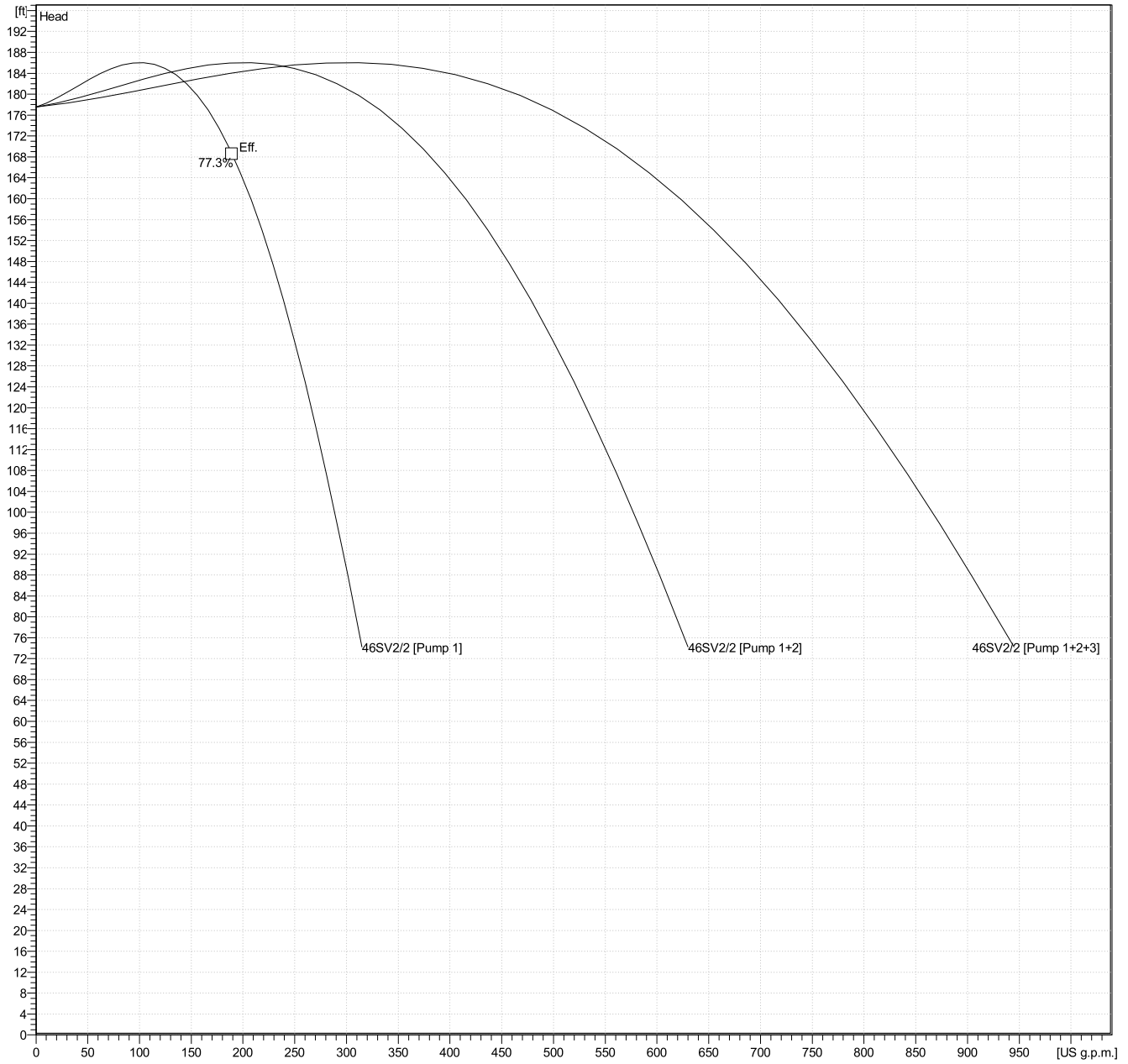
46SV2-0



Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VHE4K22E2CMV	2	46SV	6"	4"	208V/3PH	15	2	2
V2VHE5K22E2CMV	2	46SV	6"	4"	230V/3PH	15	2	2
V2VHE6K22E2CMV	2	46SV	6"	4"	460V/3PH	15	2	2
V2VHE7K22E2CMV	2	46SV	6"	4"	575V/3PH	15	2	2
V3VHF4K22E2CMV	3	46SV	8"	4"	208V/3PH	15	2	2
V3VHF5K22E2CMV	3	46SV	8"	4"	230V/3PH	15	2	2
V3VHF6K22E2CMV	3	46SV	8"	4"	460V/3PH	15	2	2
V3VHF7K22E2CMV	3	46SV	8"	4"	575V/3PH	15	2	2

Performance Curve Data

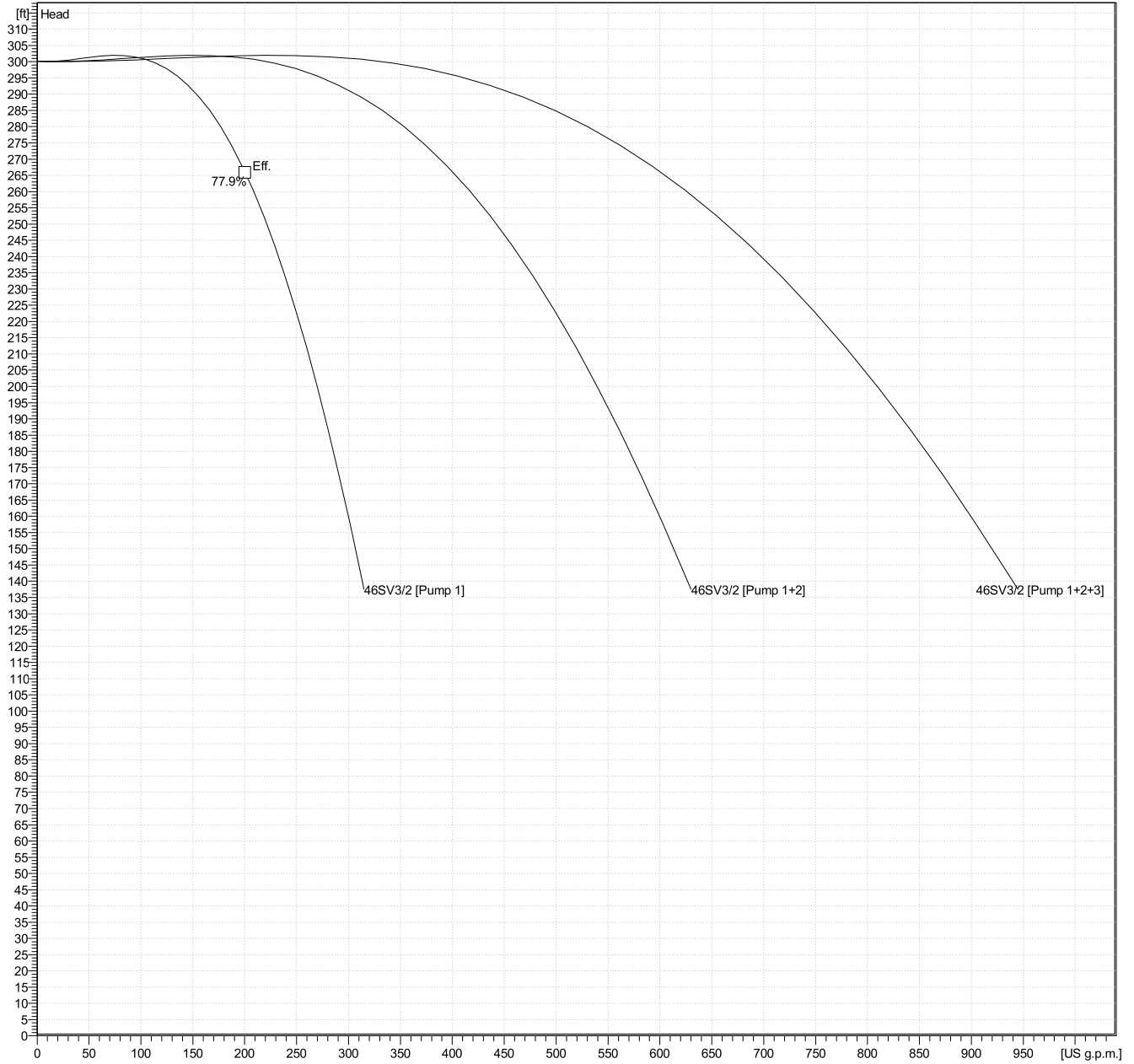
46SV2-2



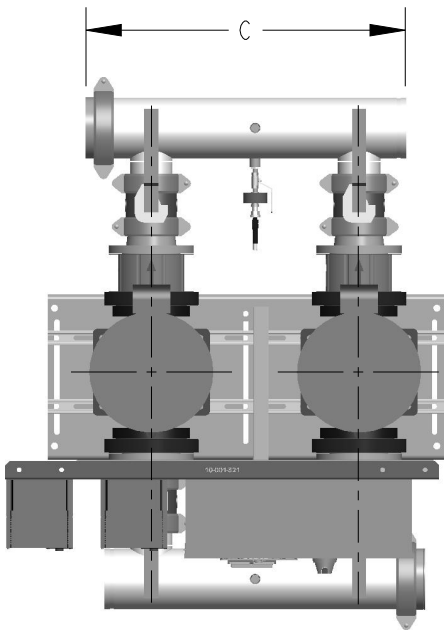
Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VHE4K20E2CMV	2	46SV	6"	4"	208V/3PH	15	2	0
V2VHE5K20E2CMV	2	46SV	6"	4"	230V/3PH	15	2	0
V2VHE6K20E2CMV	2	46SV	6"	4"	460V/3PH	15	2	0
V2VHE7K20E2CMV	2	46SV	6"	4"	575V/3PH	15	2	0
V3VHF4K20E2CMV	3	46SV	8"	4"	208V/3PH	15	2	0
V3VHF5K20E2CMV	3	46SV	8"	4"	230V/3PH	15	2	0
V3VHF6K20E2CMV	3	46SV	8"	4"	460V/3PH	15	2	0
V3VHF7K20E2CMV	3	46SV	8"	4"	575V/3PH	15	2	0

Performance Curve Data

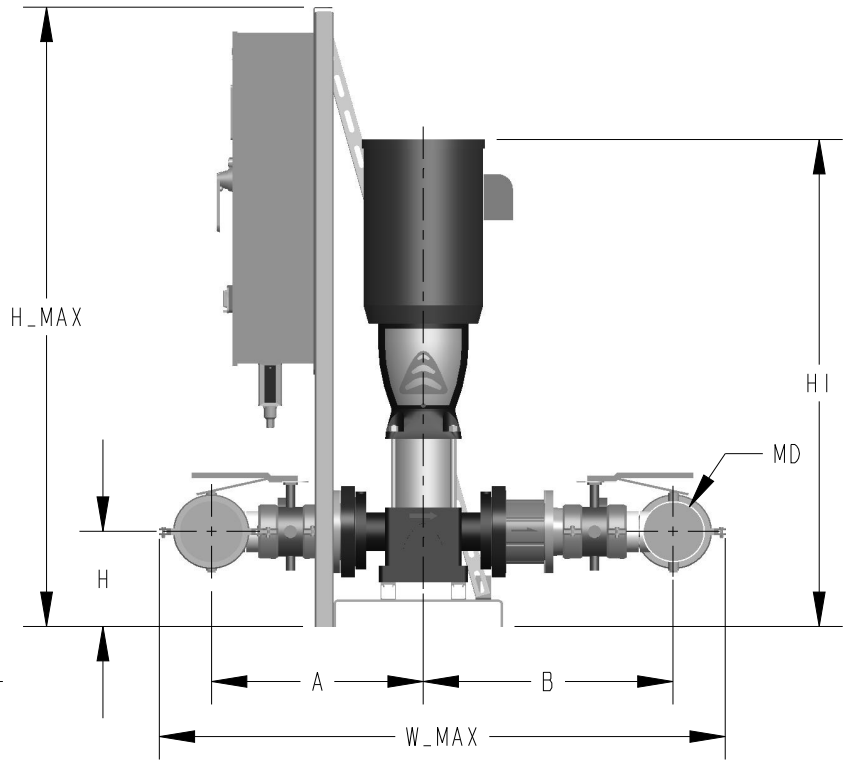
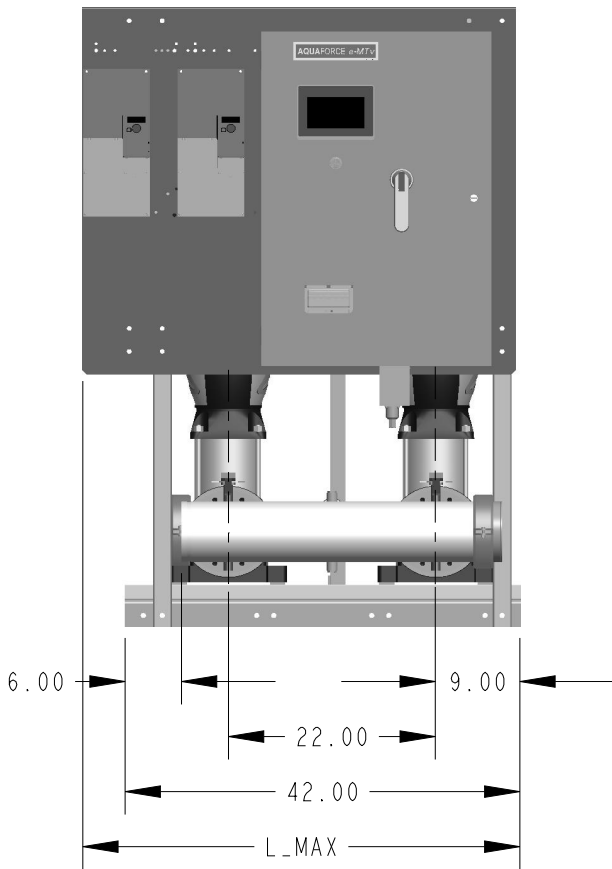
46SV3-2



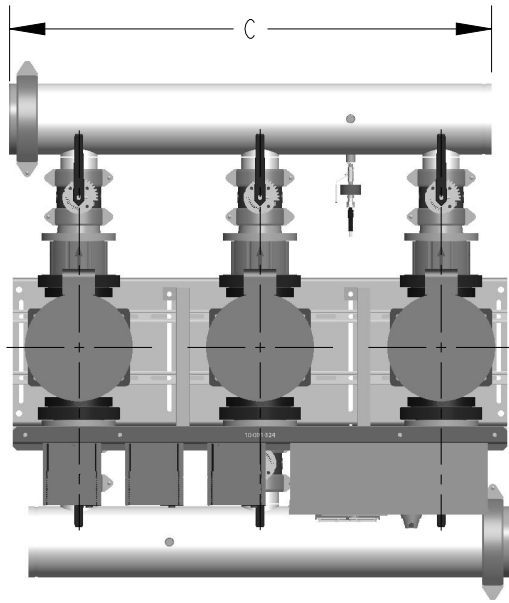
Package Part Number	Pump Quantity	Pump Size	Header Size	Branch Size	Supply Voltage	HP	Stages	Reduced Stages
V2VHE4L32E2CMV	2	46SV	6"	4"	208V/3PH	20	3	0
V2VHE5L32E2CMV	2	46SV	6"	4"	230V/3PH	20	3	0
V2VHE6L32E2CMV	2	46SV	6"	4"	460V/3PH	20	3	0
V2VHE7L32E2CMV	2	46SV	6"	4"	575V/3PH	20	3	0
V3VHF4L32E2CMV	3	46SV	8"	4"	208V/3PH	20	3	0
V3VHF5L32E2CMV	3	46SV	8"	4"	230V/3PH	20	3	0
V3VHF6L32E2CMV	3	46SV	8"	4"	460V/3PH	20	3	0
V3VHF7L32E2CMV	3	46SV	8"	4"	575V/3PH	20	3	0



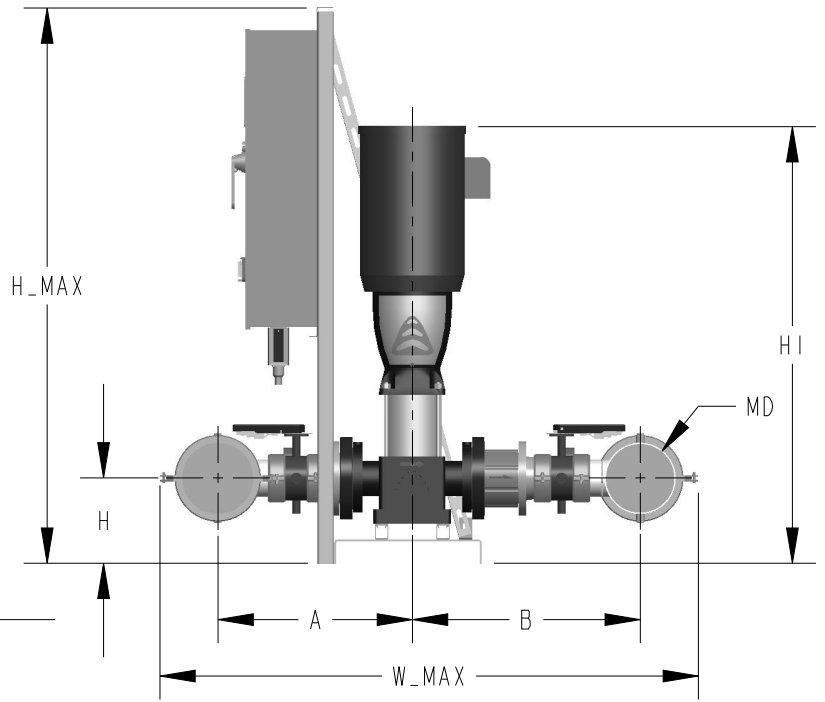
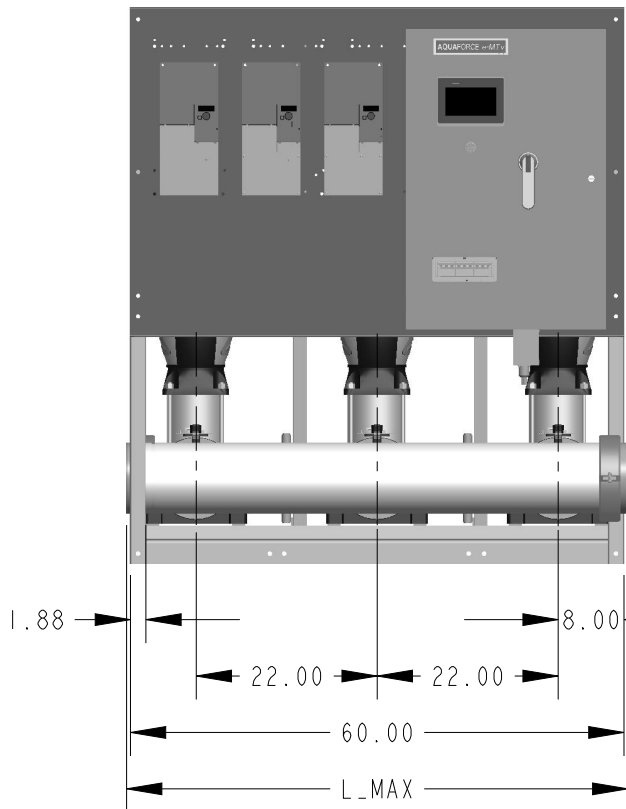
208-230V
AQUAFORCE e-MTV Dimensions 46SV - 2 Pump



PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
46SV10GJ4F60-BP	6"	46.50	60.21	67.50	10.38	42.58	22.51	26.58	33.97	1348.53
46SV22GK4F60-BP	6"	46.50	60.21	67.50	10.38	46.64	22.51	26.58	33.97	1531.94
46SV20GK4F60-BP	6"	46.50	60.21	67.50	10.38	46.64	22.51	26.58	33.97	1531.94
46SV32GL4F60-BP	6"	46.50	60.21	67.50	10.38	53.08	22.51	26.58	33.97	2202.05

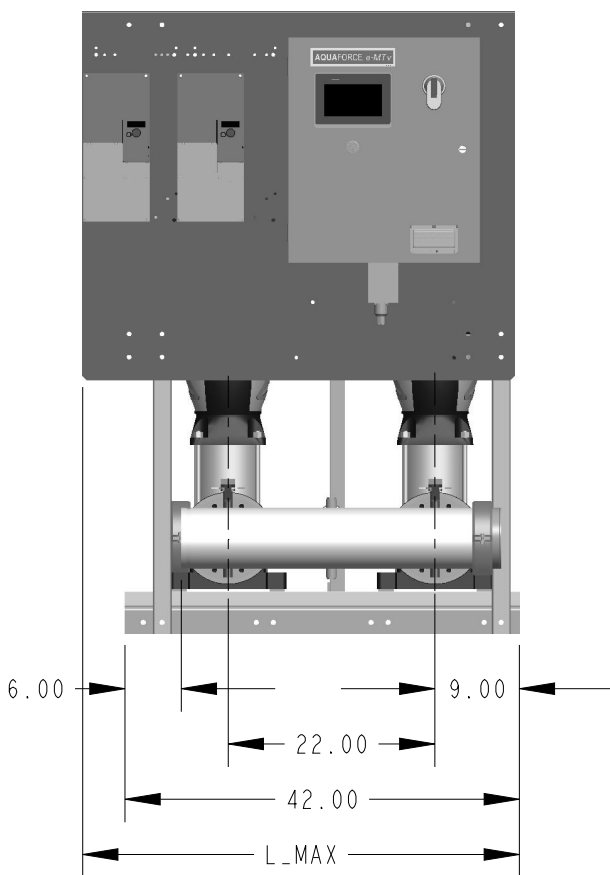
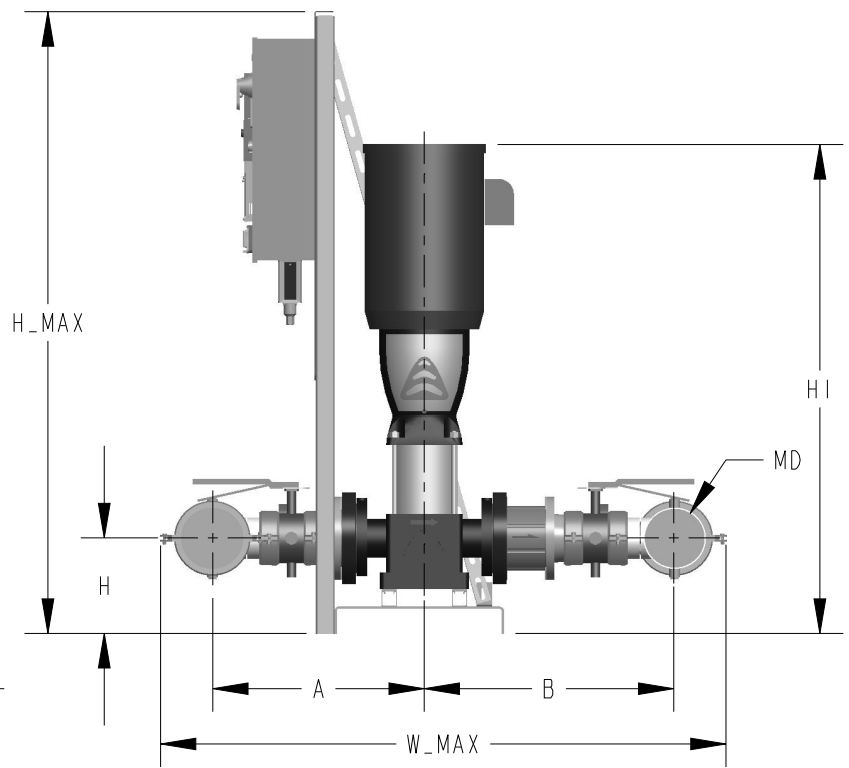
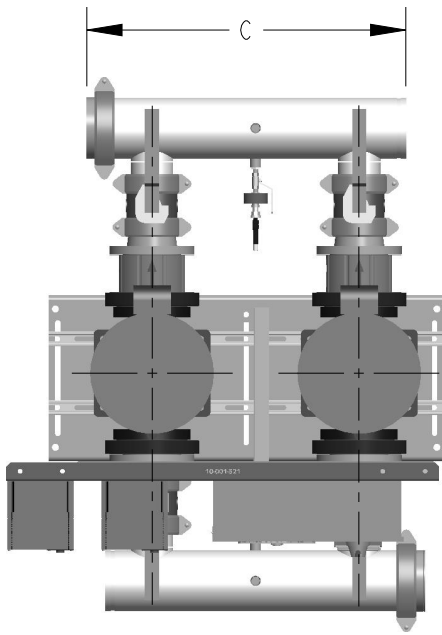


208-230V
AQUAFORCE e-MTV Dimensions 46SV - 3 Pump

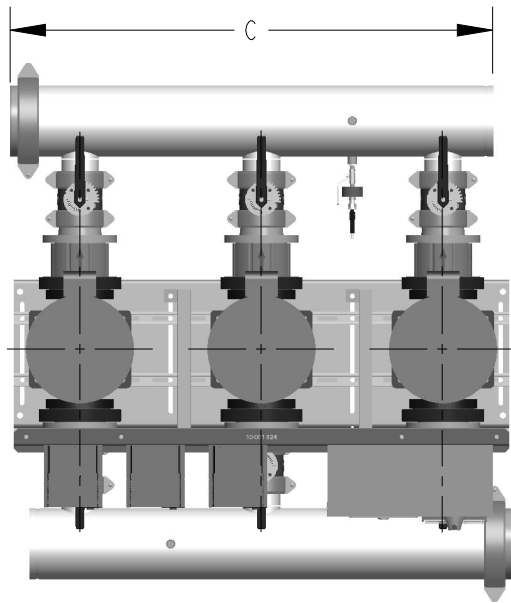


PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
46SV10GJ4F60-BP	8"	60.94	65.46	67.50	10.38	42.58	23.64	27.70	58.59	1692.35
46SV22GK4F60-BP	8"	60.94	65.46	67.50	10.38	46.64	23.64	27.70	58.59	1877.36
46SV20GK4F60-BP	8"	60.94	65.46	67.50	10.38	46.64	23.64	27.70	58.59	1877.36
46SV32GL4F60-BP	8"	60.94	65.46	67.50	10.38	53.08	23.64	27.70	58.59	2546.80

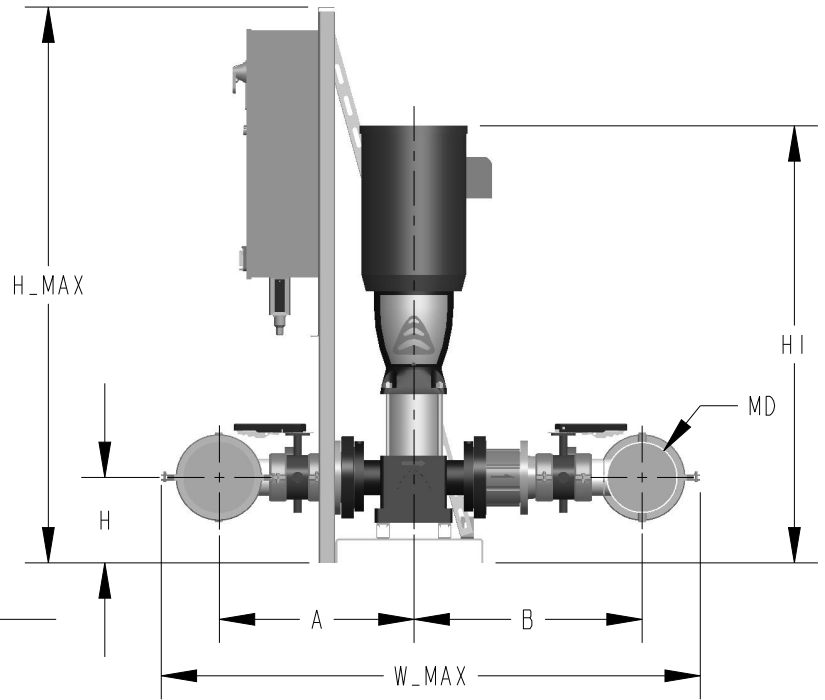
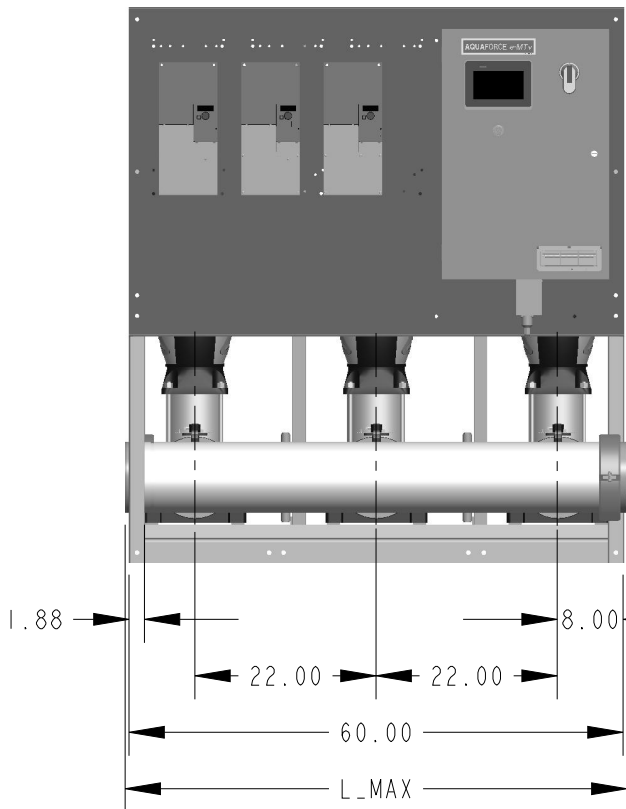
460V
AQUAFORCE e-MTV Dimensions 46SV - 2 Pump



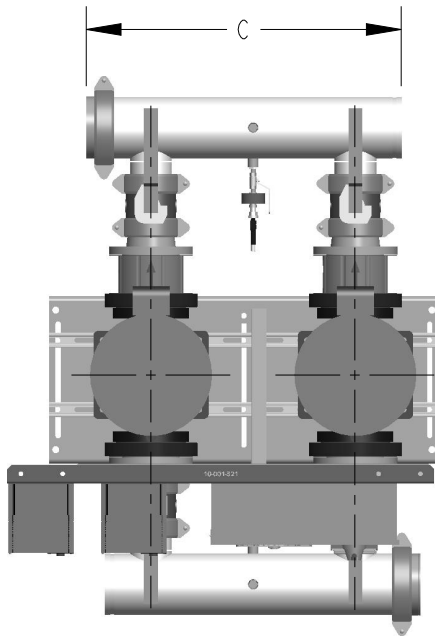
PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
46SV10GJ4F60-BP	6"	46.50	60.21	67.50	10.38	42.58	22.51	26.58	33.97	1348.53
46SV22GK4F60-BP	6"	46.50	60.21	67.50	10.38	46.64	22.51	26.58	33.97	1531.94
46SV20GK4F60-BP	6"	46.50	60.21	67.50	10.38	46.64	22.51	26.58	33.97	1531.94
46SV32GL4F60-BP	6"	46.50	60.21	67.50	10.38	53.08	22.51	26.58	33.97	2202.03



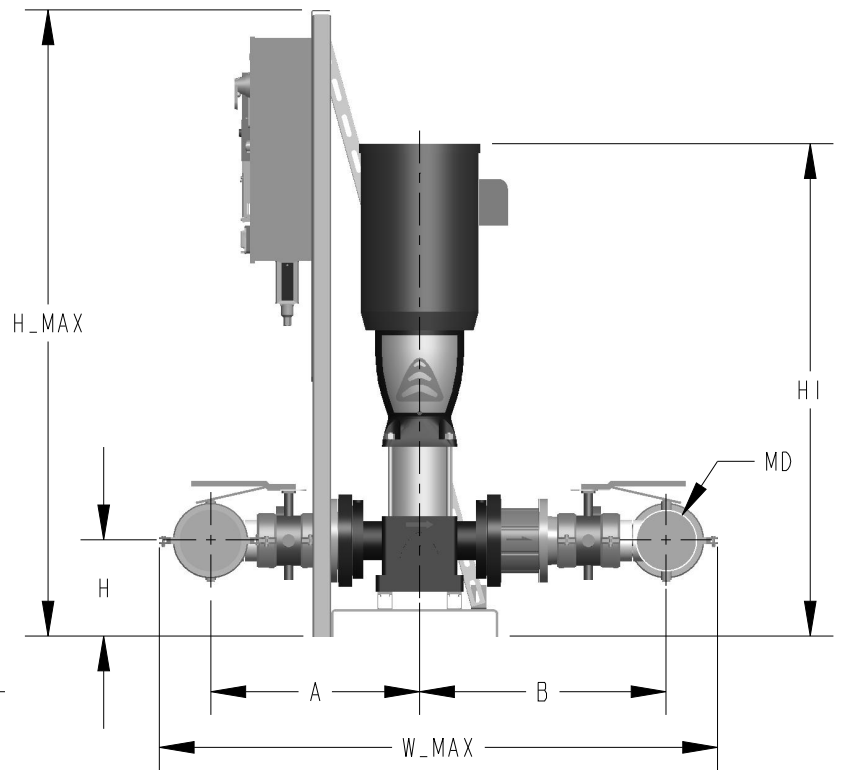
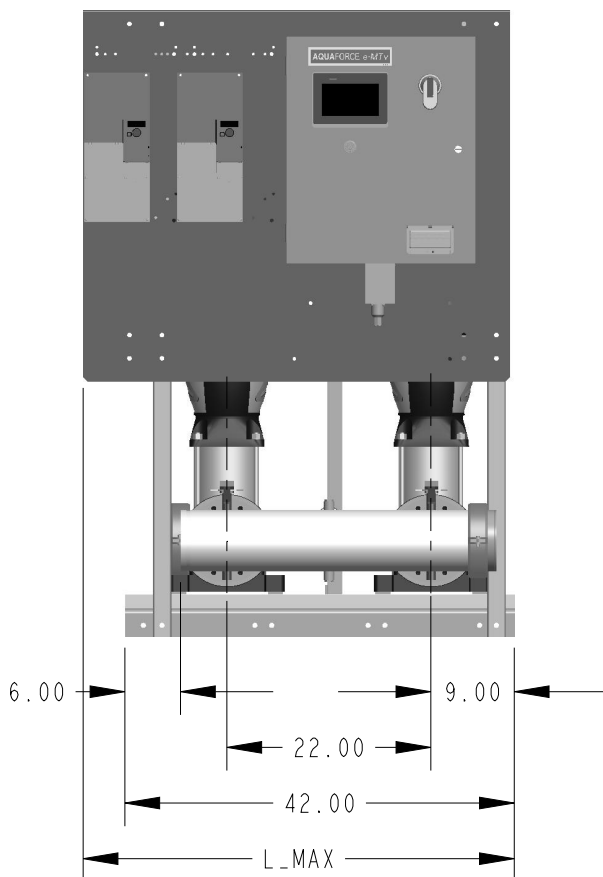
460V
AQUAFORCE e-MTV Dimensions 46SV - 3 Pump



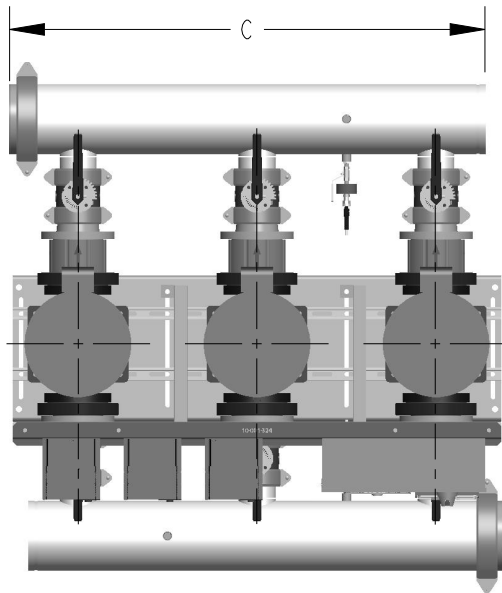
PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
46SV10GJ4F60-BP	8"	60.94	65.46	67.50	10.38	42.58	23.64	27.70	58.59	1692.35
46SV22GK4F60-BP	8"	60.94	65.46	67.50	10.38	46.64	23.64	27.70	58.59	1877.36
46SV20GK4F60-BP	8"	60.94	65.46	67.50	10.38	46.64	23.64	27.70	58.59	1877.36
46SV32GL4F60-BP	8"	60.94	65.46	67.50	10.38	53.08	23.64	27.70	58.59	2546.78



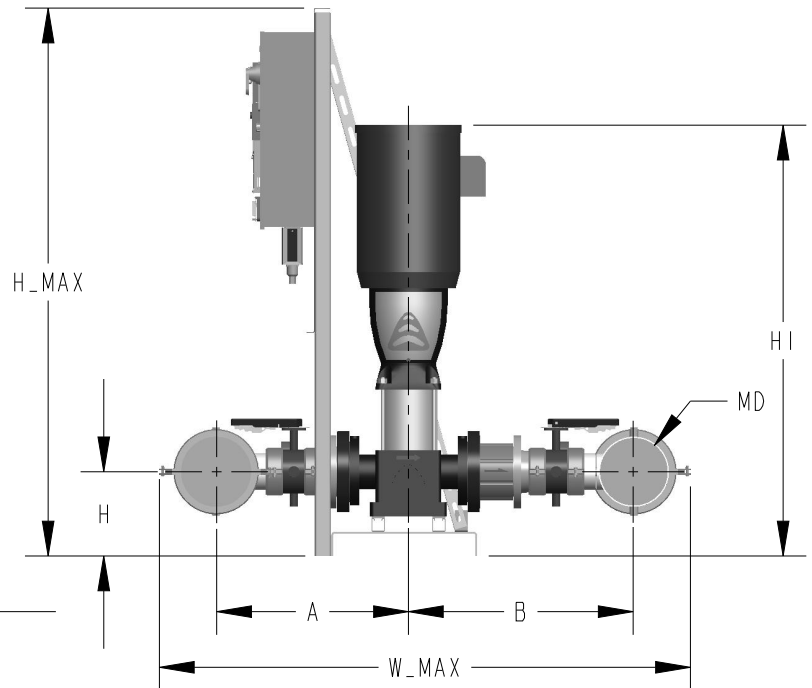
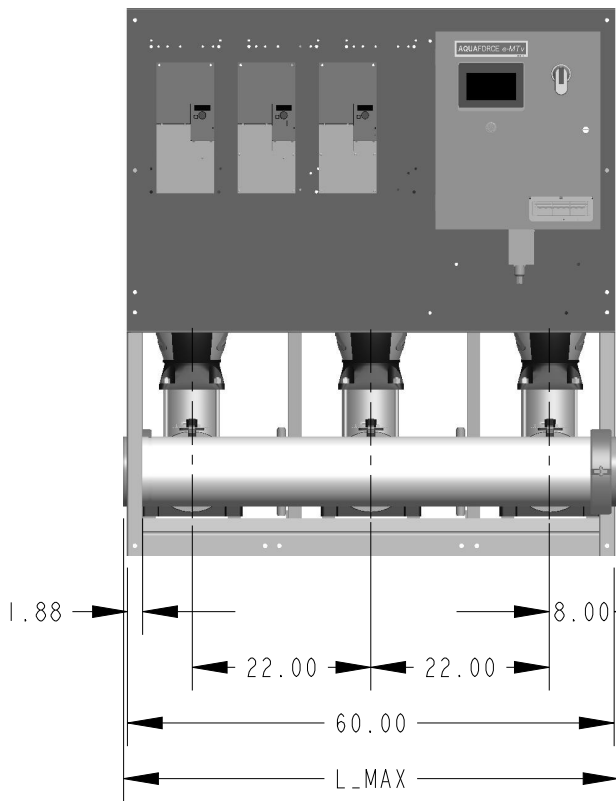
575V
AQUAFORCE e-MTV Dimensions 46SV - 2 Pump



PUMP	MD	L_MAX	W_MAX	H_MAX	H	HI	A	B	C	Wt.(lb)
46SV10GJ4E60-BP	6"	46.50	60.21	67.50	10.38	42.58	22.51	26.58	33.97	1348.53
46SV22GK4E60-BP	6"	46.50	60.21	67.50	10.38	46.64	22.51	26.58	33.97	1531.94
46SV20GK4E60-BP	6"	46.50	60.21	67.50	10.38	46.64	22.51	26.58	33.97	1531.94
46SV32GL4E60-BP	6"	46.50	60.21	67.50	10.38	53.08	22.51	26.58	33.97	2202.45

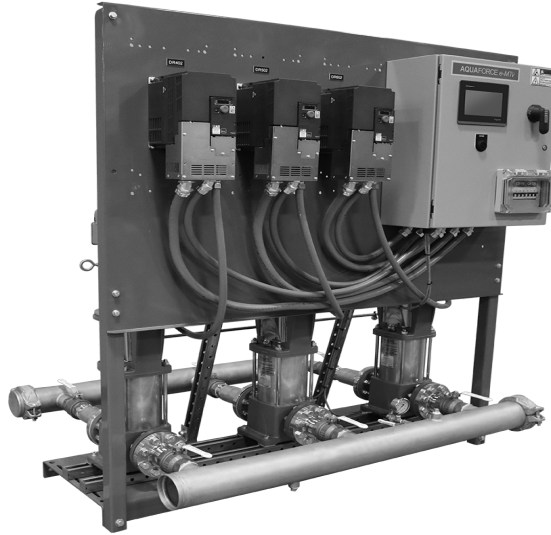


575V
AQUAFORCE e-MTV Dimensions 46SV - 3 Pump



PUMP	MD	L_MAX	W_MAX	H_MAX	H	H1	A	B	C	Wt.(lb)
46SV10GJ4E60-BP	8"	60.94	65.46	67.50	10.38	42.58	23.64	27.70	58.59	1692.35
46SV22GK4E60-BP	8"	60.94	65.46	67.50	10.38	46.64	23.64	27.70	58.59	1877.36
46SV20GK4E60-BP	8"	60.94	65.46	67.50	10.38	46.64	23.64	27.70	58.59	1877.36
46SV32GL4E60-BP	8"	60.94	65.46	67.50	10.38	53.08	23.64	27.70	58.59	2547.21

Product Key



First Character	
Variable Speed	V

Second Character	
Number of Pumps	2
	3

Third and Forth Characters	
Pump Size	VC = 5SV
	VD = 10SV
	VE = 15SV
	VF = 22SV
	VG = 33SV
	VH = 46SV

Fifth Character	
Header Size	C = 3"
	D = 4"
	E = 6"
	F = 8"

Sixth Character	
Supply Voltage	4 = 208V/3PH
	5 = 230V/3PH
	6 = 460V/3PH
	7 = 575V/3PH

Seventh Character	
HP	E = 2
	F = 3
	G = 5
	H = 7.5
	J = 10
	L = 20

Eighth Character	
Stages	1 = 1
	2 = 2
	Etc.

Ninth Character	
Reduced Stages	0 = 0
	1 = 1
	2 = 2
	Etc.

Tenth Character	
Branch Size	A = 1-1/2"
	B = 2"
	C = 2.5"
	D = 3"
	E = 4"
	F = 6"

Eleventh Character	
Brand	2 = GWT

Twelfth Character	
High Temp Relief Valve	C

Thirteenth and Fourteenth Characters	
e-MTV	MV

Cybersecurity

Xylem values system security and resilience. Defending against cybersecurity threats is a shared responsibility. Xylem builds products that are secure by design. Our customers have a responsibility to understand the risks inherent in their processes and take steps to operate and maintain their solutions securely. This section reviews security features and provides guidance to help securely operate this product. For details and updates on Xylem product cybersecurity visit xylem.com/security

Xylem Product Cybersecurity

Xylem performs appropriate due care in building security and resilience into products. Xylem performs the following security activities for defense-in-depth:

- Security engineers perform threat modeling to identify testable controls
- Code is scanned for flaws with static analysis tools and hardened
- Product components are analyzed and hardened
- Security controls are verified through automated and manual tests
- Xylem maintains relationships with customers, integrators, and the cybersecurity research community and the Product Security Incident Response Team (PSIRT) coordinates the collection, analysis, remediation, and responsible disclosure of vulnerability and remediation information to keep products secure
- Cloud connections, data flows, and cloud infrastructure are continuously monitored by the Product Security Operations Center (PSOC)
- Product security is governed through a three lines of defense model that includes: product developers, product security engineers, and audit staff

Security Recommendations for End-User

AQUAFORCE e-MTV is developed considering the security best practices. The following guidance provides recommendation for secure operations, hardening and account management. In the table below: Safeguards describe the security guidance, Security Context & Rationale provide overview of security features and value of the security safeguard, and References provide additional resources for further investigation for implementing the recommended safeguards.

Notice - Industrial Control Protocols

Certain Industrial Control Protocols do not offer security protections at protocol level and may be exposed to additional Cybersecurity risk. Customer security precautions including physical security measures are an important layer of defense in such cases. Xylem Goulds Water Technology AQUAFORCE e-MTV Variable Speed Boosters is designed with the consideration that it would be deployed and operated in a physically secure location.

- Xylem suggests that physical access to cabinets and/or enclosures containing AQUAFORCE e-MTV Variable Speed Boosters and the associated system should be restricted, monitored and logged at all times.
- Xylem recommends that customers inventory and document all industrial equipment running on their premises including model name, software version, and how devices are connected to each other and the local network.
- Xylem recommends creating and maintaining offline copies of configuration backups to all equipment involved in controlling critical processes.
- In cases where control commands for Xylem equipment are issued from SCADA or building management systems, Xylem recommends a regular check by operators to ensure the integrity of communications between these systems and Xylem equipment.
- Physical access to the communication lines should be restricted to prevent any attempts of wiretapping, sabotage. Best practice is to use metal conduits for the communication lines running between one cabinet to another cabinet.
- People with unauthorized physical access to the device could cause serious disruption of the device functionality. A combination of physical access controls to the location should be used, such as locks, card readers, and/or guards etc.
- Xylem Goulds Water Technology AQUAFORCE e-MTV Variable Speed Boosters supports the following physical access ports
 - RJ45 connector for removable keypad as well as Modbus RTU communications
 - RJ45 for Modbus TCP communications
 - Terminal block for Modbus RTU and other Digital IOs
- Xylem suggests access to above physical ports need to be restricted

Xylem Product Cybersecurity

Xylem values your system security and the availability of your critical services. For more information on Xylem cybersecurity practices or to contact the cybersecurity team please visit xylem.com/security.

Safeguard	Security Context & Rationale	References
<p>Restrict physical access</p> <p>Ensure physical access to assets is limited. Include physical isolation to protect the environment and equipment therein.</p> <p>Ensure strict control over physical access in and out of the facility.</p>	<p>The communication ports have been hardened to restrict access and ensure integrity of device operations. This safeguard supports the ability to further limit exposure associated with physical threats to the device such as rogue/malicious device joining the Modbus RTU network over RS485 interface.</p>	<p>ATT&CK for ICS: M0801 NIST SP 800-53 Rev5: AC-3, PE-3 ISA/IEC 62443-3-3: SR 2.1</p>
<p>Ensure that the device is not exposed to internet, using below recommendations:</p> <p>Secure the network access to the device using VPN connections.</p> <p>Implement firewall & define rules to protect device from Denial-of-service attempts.</p> <p>Protect the network address information of device using Network Address Translation (NAT) technique.</p>	<p>This safeguard ensures that data and SCADA controls are not exposed to internet. This also helps in preventing Man-in-the-middle attacks when the device is accessed via Modbus over TCP/IP or BACnet IP.</p> <p>We recommend using network segmentation and segregation so that we can minimize access to sensitive information for those systems and people who don't need it, while ensuring that the organization can continue to operate effectively.</p>	<p>ATT&CK for ICS: M0930 NIST SP 800-95 NIST SP 800-44 v2 ISA/IEC 62443-3-3: SR 5.1, SR 7.1</p>
<p>Ensure cybersecurity policies, awareness, and training to the operators, administrators and other personnel.</p>	<p>This safeguard prevents Social Engineering attacks and promotes awareness related to cybersecurity.</p>	<p>ATT&CK for ICS: M0917 NIST SP 800-53 Rev5: AT-2 ISA/IEC 62443-2-4: SP.01</p>
<p>Ensure patch management is done regularly and updated appropriately.</p>	<p>This safeguard prevents attacks related using components with known vulnerabilities. Sometime vulnerabilities are discovered, and we work with our partners to deploy updates to security and resilience. This safeguard mitigates exploitation risks and ensures security patching</p>	<p>ATT&CK for ICS: M0951 NIST SP 800-53 Rev5: MA-2 ISA/IEC 62443-2-3</p>
<p>Ensure hardening guidelines are implemented, only desired ports and services should be open, and RBAC should be followed.</p>	<p>This safeguard helps in prevention of attacks due to misconfigurations or default configurations.</p>	<p>ATT&CK for ICS: M0937, M0918, M0801 NIST SP 800-53 Rev5: AC-3(7), SC-7(5) ISA/IEC 62443-3-3: SR 2.1, SR 5.1</p>
<p>Ensure strong password policy is implemented and default credentials should not be used, passwords must be changed periodically.</p>	<p>This safeguard will help in prevention of passwords and account takeover attacks.</p>	<p>ATT&CK for ICS: M0927 NIST SP 800-53 Rev5: IA-5 ISA/IEC 62443-3-3: SR 1.7</p>
<p>Conduct back-ups of device-level and system-level information.</p>	<p>The ability of up-to-date backups provides for recovery from control system failures or misconfigurations. This provides systems resilience, including against ransomware.</p>	<p>ATT&CK for ICS: M0953 NIST SP 800-53 Rev5: CP-9 ISA/IEC 62443-3-3: SR 7.3</p>
<p>Implement specific inventory, logging and monitoring of hardware and report security-related incidents to Xylem at product.security@xylem.com. These might include unexpected operations, confirmed tampering, or theft of the device.</p>	<p>Devices are hardened and Xylem provides PSIRT to help customers investigate potential security incidents. This safeguard supports the ability to track assets and recognize potential security events.</p>	<p>ATT&CK for ICS: M0947 NIST SP 800-53 Rev5: SM-8 ISA/IEC 62443-3-3: SR 1.11, SR 2.8, SR 3.4</p>

For additional information see references:

1. ATT&CK for ICS available online: <https://attack.mitre.org/mitigations/ics/>
2. NIST SP 800-53 Rev 5 available online: <https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-53r5.pdf>
3. ISA/IEC 62443 standards available for purchase from ISA, IEC, or ANSI.

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.

For more information on how Xylem can help you, go to www.xylem.com

to learn more about
AQUAFORCE e-MTV, visit:



xylem
Let's Solve Water

Xylem Inc.
2881 East Bayard Street Ext., Suite A
Seneca Falls, NY 13148
Phone: (844) XYL-PUMP [844-995-7867]
Fax: (888) 322-5877
www.xylem.com/goulds

Xylem and AQUAFORCE are trademarks or registered trademarks of Xylem Inc. or one of its subsidiaries. Goulds is a registered trademark of ITT Manufacturing Enterprises LLC and is used under license. MODBUS is a registered trademark of Schneider Electric USA, Inc. All other trademarks or registered trademarks are property of their respective owners

© 2024 Xylem Inc. GWTTBe-MTV400002 R3 February 2024