


# Submission Data Sheet

Wilo-Helix EXCEL Complete- NSF 61/372 Pressure Boosting System

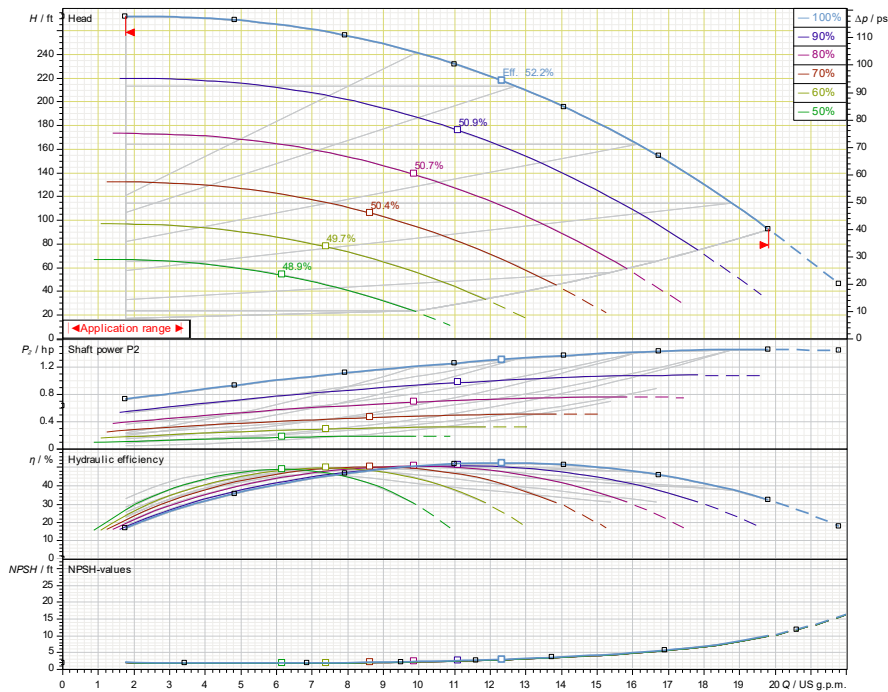


## Helix EXCEL Complete V10-08-1/1.5/460

	Project:							
	Engineer:							
	Contractor:							
	Submitted By:				Date:			
	Approved By:				Date:			
Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	Helix EXCEL Complete V10-08-1/1.5/460				1.5			3600

### Article Number: 2701078

Helix EXCEL Complete V10-08-1/1.5/460



### Applications

- Water Supply
- Pressure Boosting
- Agriculture
- Cooling Circuits
- Washing / Sprinkling Systems
- Condensate Return

### Materials of Construction

Pump Volute	AISI304 stainless steel with ANSI flanges
Impeller	3D Laser welded AISI 304 Stainless Steel
Shaft	AISI304, AISI318 LN, or AISI431 Stainless Steel
Elastomers	EPDM
Isolation Valves	304 Stainless Steel Ball Valves
Suction/Discharge Piping	AISI304 Stainless Steel with Male Threaded System Connections
Check Valves	316 Stainless Steel, Non-slam, Plunger-type with EPDM seal
Mechanical Seal	Cartridge Seal: Sleeve AISI316L / Spring Clips AISI304
Pressure Transducers	316 Stainless Steel
Pressure Guages	304 Stainless Steel Housing with 316 Stainless Steel wetted parts
System base	Steel (S235JR)
Vibration Isolators	Neoprene, Height Adjustable

### Technical Data - Operational Ranges

Liquid Temp Range	-4°F to +180°F (Min. 32 °F for Domestic Water)
Ambient Temp Range	+32°F to +104 °F
Max Inlet Pressure	145 PSI
Max System Pressure	232 PSI/363 (Depending on number of stages)

### Technical Data - Power Head

User Interface	3" Diagonal LCD with Green Button selection
Supply Voltage	24VDC
Number of Analog Inputs	2 (1 External set value/1 Pressure sensor)
Number of Analog Outputs	0
Number of Digital Inputs	1 (External On/Off)
Number of Digital Outputs	0
Optional Communications	Gateways for Modbus, BacNET, and LonWorks
Dip Switches	4

### Motor Data

Power Supply	460V-3
Motor Enclosure	Totally Enclosed Fan Cooled (TEFC)
Motor Efficiency	IEC Premium Efficiency (IE5) - Electronically Commutated Motor (EC Motor with Powerhead control)
Enclosure Construction	Cast Iron
Motor Protection Index	IP55
Insulation Class	F

Approval Stamp

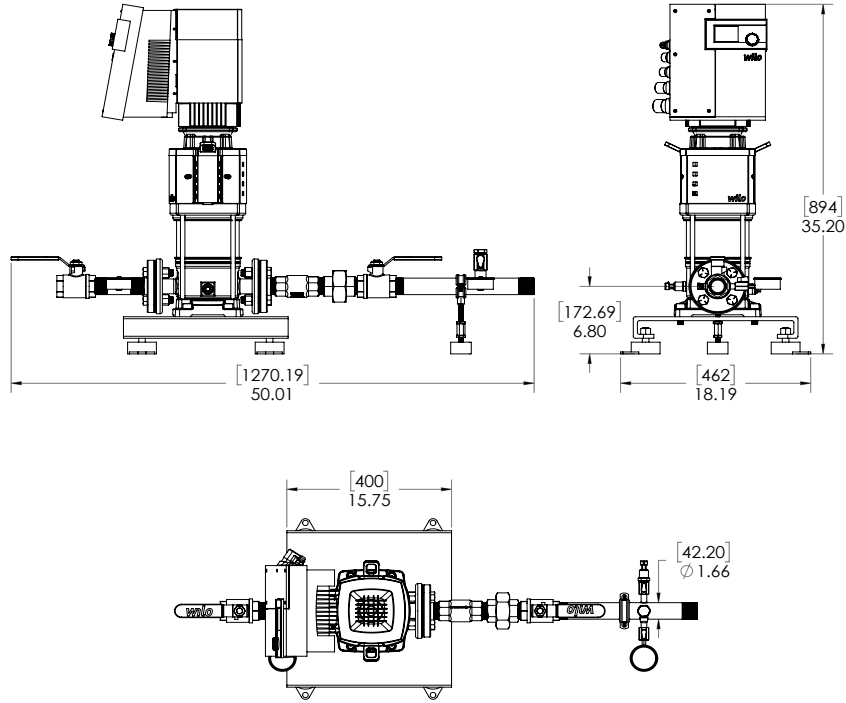
# Submittal Data Sheet

Wilo-Helix EXCEL Complete- NSF 61/372 Pressure Boosting System



## Helix EXCEL Complete V10-08-1/1.5/460

460 V~3



Special Note: All weights and dimensions are approximate and should not be used as exact rough-in dimensions

### Dimensions and Weights

Model	Voltage (V)	H (in)	W (in)	L (in)	Dimensions-inches					Individual Pump Weight	Package Weight
					System Header Size	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size	Hydronomous Tank Valve on Manifold (Plugged)	Pump Weight (lbs)	Package Weight (lbs)
Helix EXCEL Complete V10-08-1/1.5/460	460 V	35-1/4	18-1/4	50	1-1/4" MNPT	1-1/4"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	115	127

### EC Motor Data (Single Motor Operation)


Model	P2		Phase (-)	Voltage (V)	FLA (per pump) (A)	Efficiency η <sub>m</sub> 100%	P <sub>max</sub> (PSI)
	(HP)	(KW)					
Helix EXCEL Complete V10-08-1/1.5/460	1.5	1.1	3	460 (±10%)	1.76	92	363

# Submission Data Sheet

Wilo-Helix EXCEL Complete- NSF 61/372 Pressure Boosting System

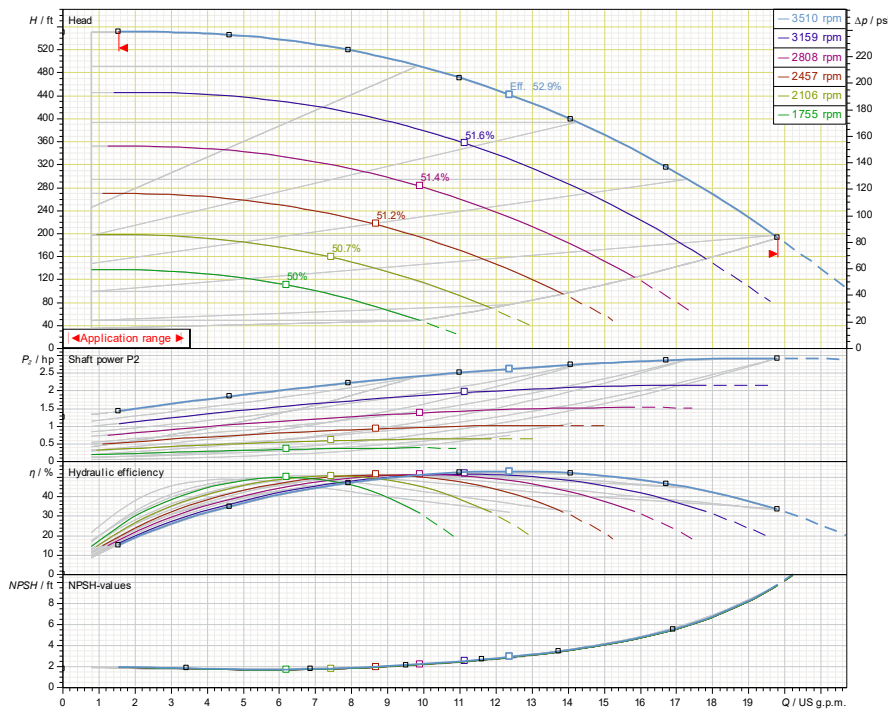


## Helix EXCEL Complete V10-16-1/3/460

	Project:							
	Engineer:							
	Contractor:							
	Submitted By:				Date:			
	Approved By:				Date:			
Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	Helix EXCEL Complete V10-16-1/3/460				3			3600

### Article Number: 2701079

Helix EXCEL Complete V10-16-1/3/460



### Applications

- Water Supply
- Pressure Boosting
- Agriculture
- Cooling Circuits
- Washing / Sprinkling Systems
- Condensate Return

### Materials of Construction

Pump Volute	AISI304 stainless steel with ANSI flanges
Impeller	3D Laser welded AISI 304 Stainless Steel
Shaft	AISI304, AISI318 LN, or AISI431 Stainless Steel
Elastomers	EPDM
Isolation Valves	304 Stainless Steel Ball Valves
Suction/Discharge Piping	AISI304 Stainless Steel with Male Threaded System Connections
Check Valves	316 Stainless Steel, Non-slam, Plunger-type with EPDM seal
Mechanical Seal	Cartridge Seal: Sleeve AISI316L / Spring Clips AISI304
Pressure Transducers	316 Stainless Steel
Pressure Gauges	304 Stainless Steel Housing with 316 Stainless Steel wetted parts
System base	Steel (S235JR)
Vibration Isolators	Neoprene, Height Adjustable

### Technical Data - Operational Ranges

Liquid Temp Range	-4°F to +180°F (Min. 32 °F for Domestic Water)
Ambient Temp Range	+32°F to +104 °F
Max Inlet Pressure	145 PSI
Max System Pressure	232 PSI/363 (Depending on number of stages)

### Technical Data - Power Head

User Interface	3" Diagonal LCD with Green Button selection
Supply Voltage	24VDC
Number of Analog Inputs	2 (1 External set value/1 Pressure sensor)
Number of Analog Outputs	0
Number of Digital Inputs	1 (External On/Off)
Number of Digital Outputs	0
Optional Communications	Gateways for Modbus, BacNET, and LonWorks
Dip Switches	4

### Motor Data

Power Supply	460V-3
Motor Enclosure	Totally Enclosed Fan Cooled (TEFC)
Motor Efficiency	IEC Premium Efficiency (IE5) - Electronically Commutated Motor (EC Motor with Powerhead control)
Enclosure Construction	Cast Iron
Motor Protection Index	IP55
Insulation Class	F

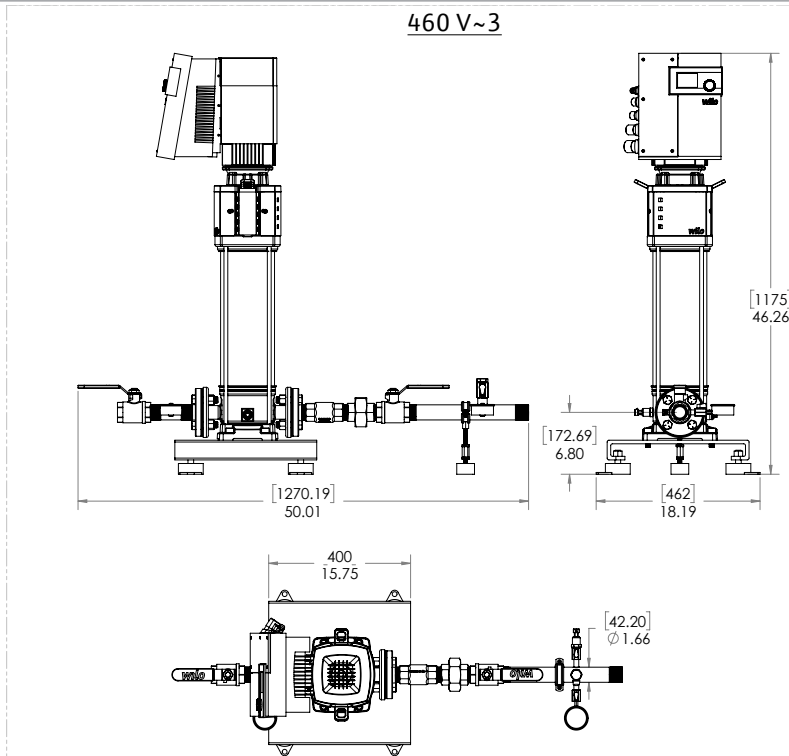
Approval Stamp

# Submittal Data Sheet

Wilo-Helix EXCEL Complete- NSF 61/372 Pressure Boosting System



## Helix EXCEL Complete V10-16-1/3/460



Special Note: All weights and dimensions are approximate and should not be used as exact rough-in dimensions

### Dimensions and Weights

Model	Voltage (V)	H (in)	W (in)	L (in)	Dimensions-inches				Hydrunumatic Tank Valve on Manifold (Plugged)	Individual Pump Weight	Package Weight
					System Header Size	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size		Pump Weight (lbs)	Package Weight (lbs)
Helix EXCEL Complete V10-16-1/3/460	460 V	46-1/4	18-1/4	50	1-1/4" MNPT	1-1/4"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	130	142

### EC Motor Data (Single Motor Operation)

Model	P2		Phase (-)	Voltage (V)	FLA (per pump) (A)	Efficiency η <sub>m</sub> 100%	P <sub>max</sub> (PSI)
	(HP)	(KW)					
Helix EXCEL Complete V10-16-1/3/460	3	2.2	3	460 (±10%)	4.4	93	363

# Submittal Data Sheet

Wilo-Helix EXCEL Complete- NSF 61/372 Pressure Boosting System



## Helix EXCEL Complete V10-22-1/4.3/460

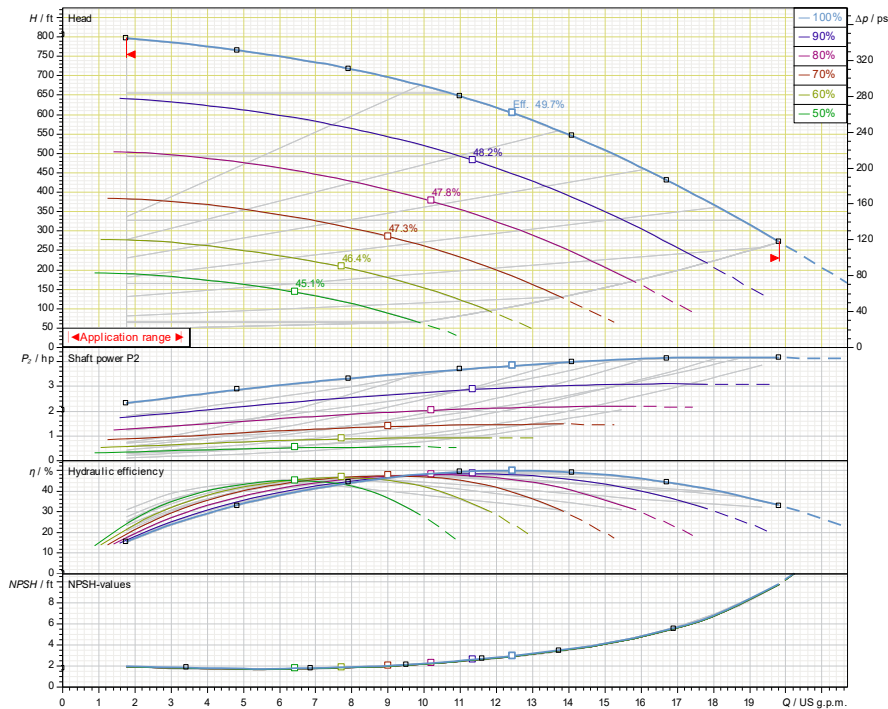


Project:	
Engineer:	
Contractor:	
Submitted By:	Date:
Approved By:	Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	Helix EXCEL Complete V10-22-1/4.3/460				4.3			3600

### Article Number: 2701080

Helix EXCEL Complete V10-22-1/4.3/460



### Applications

- Water Supply
- Pressure Boosting
- Agriculture
- Cooling Circuits
- Washing / Sprinkling Systems
- Condensate Return

### Materials of Construction

Pump Volute	AISI304 stainless steel with ANSI flanges
Impeller	3D Laser welded AISI 304 Stainless Steel
Shaft	AISI304, AISI318 LN, or AISI431 Stainless Steel
Elastomers	EPDM
Isolation Valves	304 Stainless Steel Ball Valves
Suction/Discharge Piping	AISI304 Stainless Steel with Male Threaded System Connections
Check Valves	316 Stainless Steel, Non-slam, Plunger-type with EPDM seal
Mechanical Seal	Cartridge Seal: Sleeve AISI316L / Spring Clips AISI304
Pressure Transducers	316 Stainless Steel
Pressure Guages	304 Stainless Steel Housing with 316 Stainless Steel wetted parts
System base	Steel (S235JR)
Vibration Isolators	Neoprene, Height Adjustable

### Technical Data - Operational Ranges

Liquid Temp Range	-4°F to +180°F (Min. 32 °F for Domestic Water)
Ambient Temp Range	+32°F to +104 °F
Max Inlet Pressure	145 PSI
Max System Pressure	232 PSI/363 (Depending on number of stages)

### Technical Data - Power Head

User Interface	3" Diagonal LCD with Green Button selection
Supply Voltage	24VDC
Number of Analog Inputs	2 (1 External set value/1 Pressure sensor)
Number of Analog Outputs	0
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Number of Digital Outputs	0
Optional Communications	Gateways for Modbus, BacNET, and LonWorks
Dip Switches	4

### Motor Data

Power Supply	460V-3
Motor Enclosure	Totally Enclosed Fan Cooled (TEFC)
Motor Efficiency	IEC Premium Efficiency (IE5) - Electronically Commutated Motor (EC Motor with Powerhead control)
Enclosure Construction	Cast Iron
Motor Protection Index	IP55
Insulation Class	F

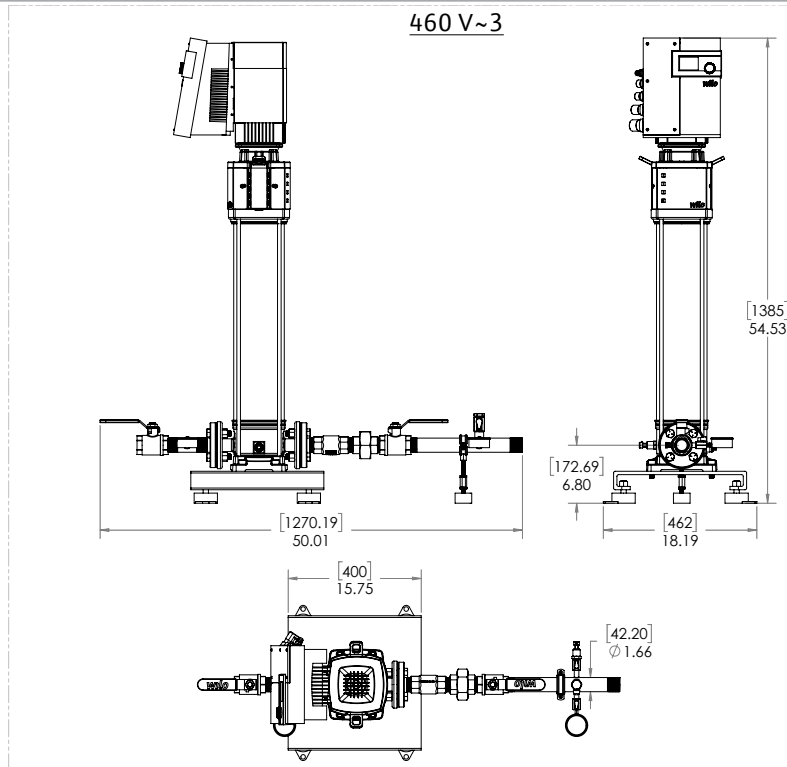
Approval Stamp

# Submittal Data Sheet

Wilo-Helix EXCEL Complete- NSF 61/372 Pressure Boosting System



## Helix EXCEL Complete V10-22-1/4.3/460



Special Note: All weights and dimensions are approximate and should not be used as exact rough-in dimensions

### Dimensions and Weights

Model	Voltage (V)	H (in)	W (in)	L (in)	Dimensions-inches				Hydronumatic Tank Valve on Manifold (Plugged)	Individual Pump Weight	Package Weight
					System Header Size	Suction / Discharge Pump Size (300 Class ANSI)	Gauge Tap Size	Transducer Tap Size		Pump Weight (lbs)	Package Weight (lbs)
Helix EXCEL Complete V10-22-1/4.3/460	460 V	54-1/2	18-1/4	50	1-1/4" MNPT	1-1/4"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	135	149

### EC Motor Data (Single Motor Operation)

Model	P2		Phase (-)	Voltage (V)	FLA (per pump) (A)	Efficiency η <sub>m</sub> 100%	P <sub>max</sub> (PSI)
	(HP)	(KW)					
Helix EXCEL Complete V10-22-1/4.3/460	4.3	3.2	3	460 (±10%)	6	93	363