

Submission Data Sheet

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



Helix EXCEL Complete V20-05-1/1.5/460

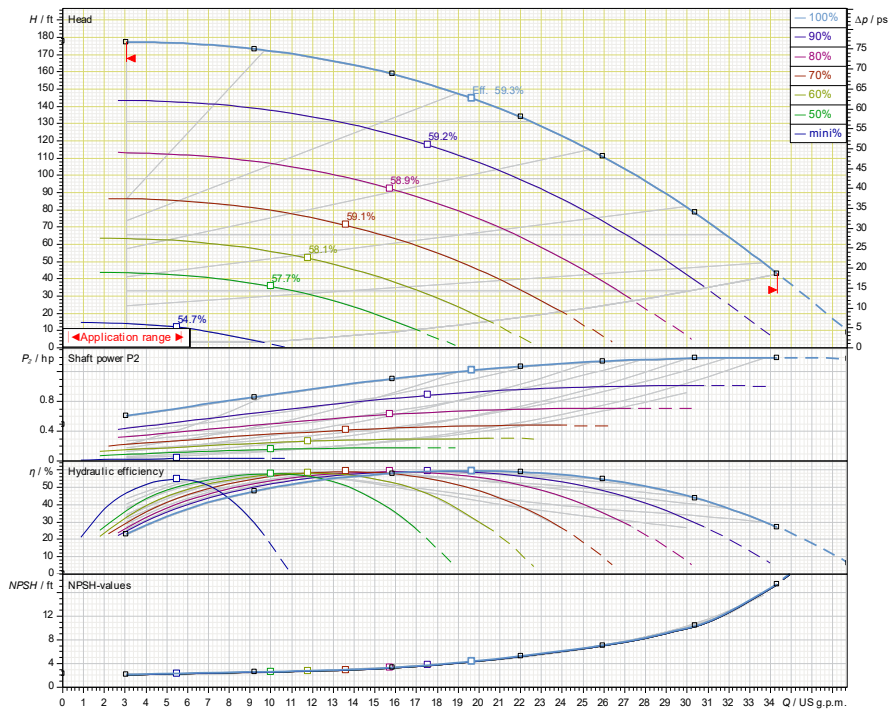


Project:	
Engineer:	
Contractor:	
Submitted By:	Date:
Approved By:	Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	Helix EXCEL Complete V20-05-1/1.5/460				1.5			3600

Article Number: 2700930

Helix EXCEL Complete V20-05-1/1.5/460



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

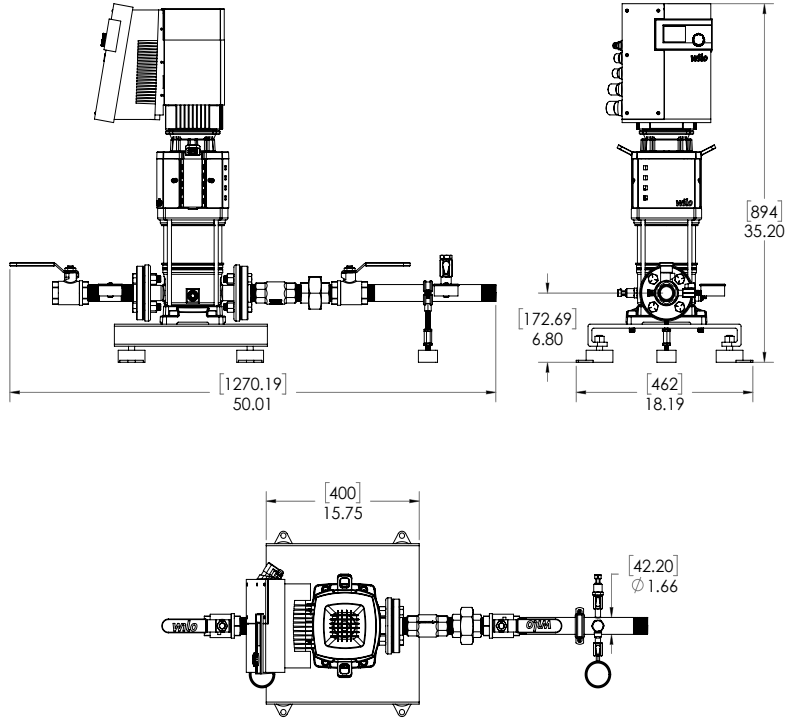
Submittal Data Sheet

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



Helix EXCEL Complete V20-05-1/1.5/460

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	Hydrunumatic Tank Valve on Manifold (Plugged)	Pump Weight (lbs)	Package Weight (lbs)
Helix EXCEL Complete V20-05-1/1.5/460	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	108	120

EC Motor Data (Single Motor Operation)

Model	P2		Phase (-)	Voltage (V)	FLA (per pump) (A)	Efficiency η _m 100%	P _{max} (PSI)
	(HP)	(KW)					
Helix EXCEL Complete V20-05-1/1.5/460	1.5	1.1	3	460 (±10%)	1.76	92	363

Submittal Data Sheet

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

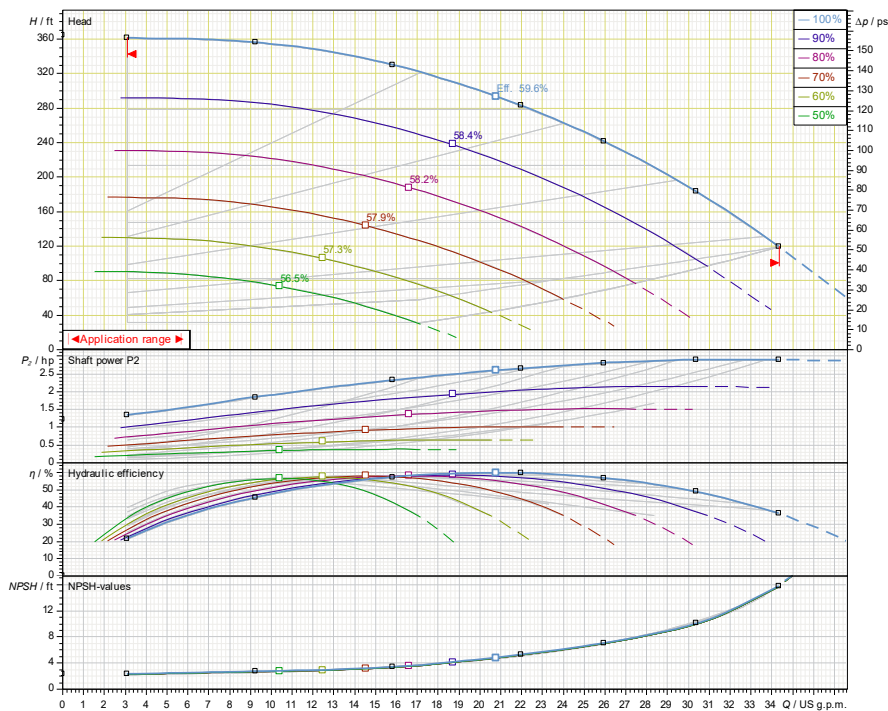


Helix EXCEL Complete V20-10-1/3/460

	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 V20-10-1/3/460				3			3600

Article Number: 2700931

Helix EXCEL Complete V20-10-1/3/460



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 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

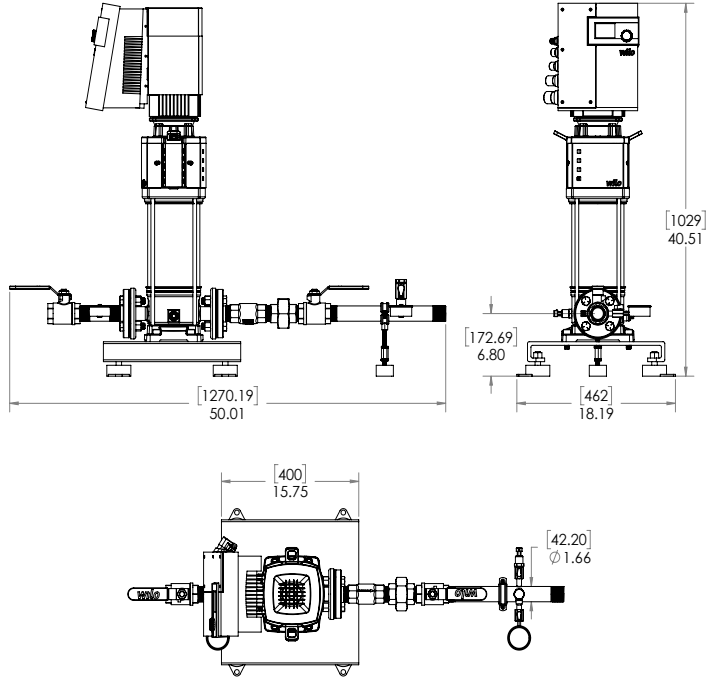
Submittal Data Sheet

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



Helix EXCEL Complete V20-10-1/3/460

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	Hydrunumatic Tank Valve on Manifold (Plugged)	Pump Weight (lbs)	Package Weight (lbs)
Helix EXCEL Complete V20-10-1/3/460	460 V	40-1/2	18-1/4	50	1-1/4" MNPT	1-1/4"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	122	134

EC Motor Data (Single Motor Operation)


Model	P2		Phase (-)	Voltage (V)	FLA (per pump) (A)	Efficiency η _m 100%	P _{max} (PSI)
	(HP)	(KW)					
Helix EXCEL Complete V20-10-1/3/460	3	2.2	3	460 (±10%)	4.4	93	363

Submission Data Sheet

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

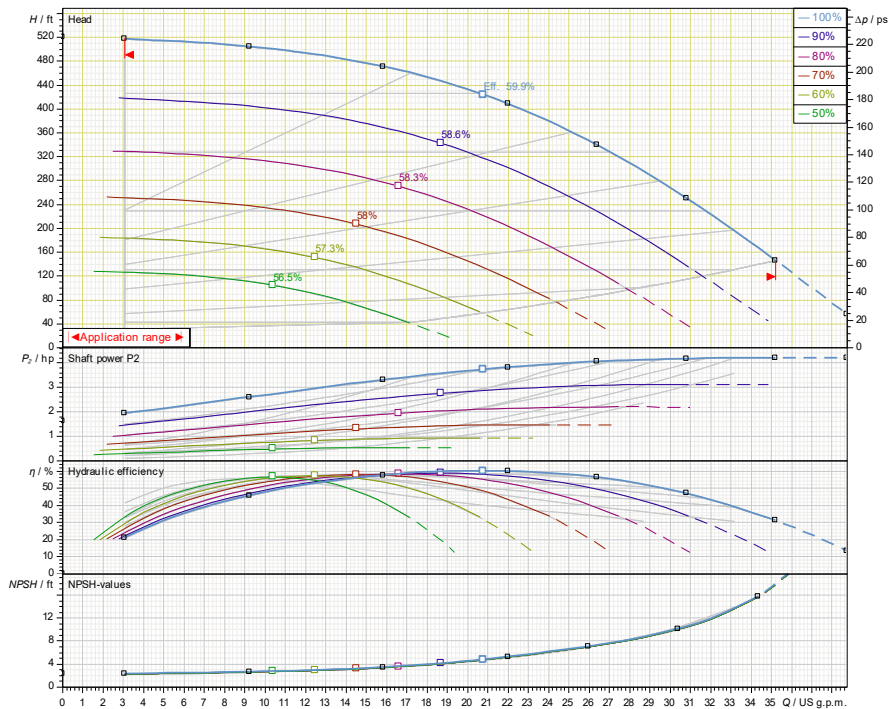


Helix EXCEL Complete V20-14-1/4.3/460

	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 V20-14-1/4.3/460				4.3			3600

Article Number: 2700932

Helix EXCEL Complete V20-14-1/4.3/460



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 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

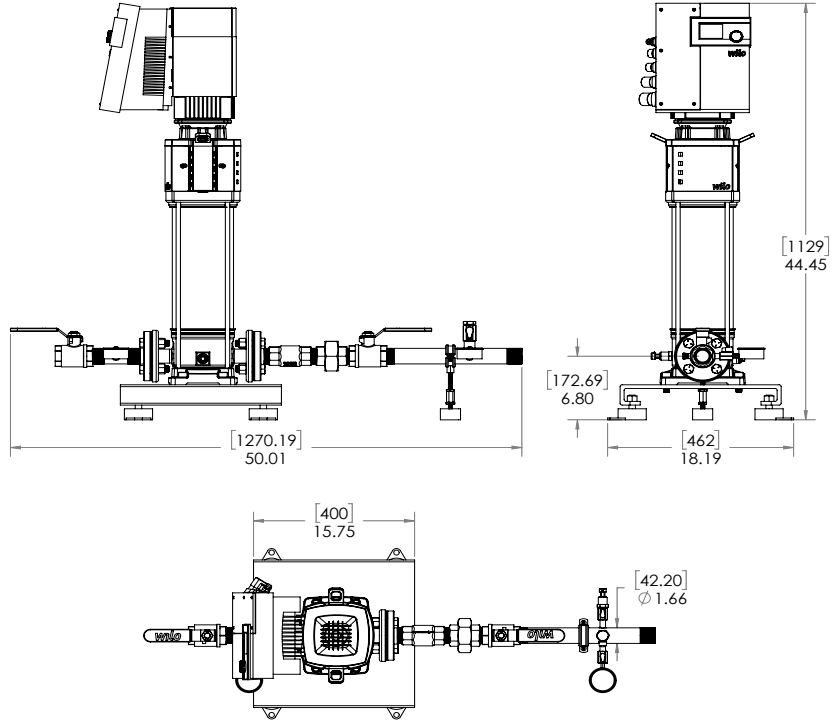
Submittal Data Sheet

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



Helix EXCEL Complete V20-14-1/4.3/460

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	Hydrunumatic Tank Valve on Manifold (Plugged)	Pump Weight (lbs)	Package Weight (lbs)
Helix EXCEL Complete V20-14-1/4.3/460	460 V	44-1/2	18-1/4	50	1-1/4" MNPT	1-1/4"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	126	138

EC Motor Data (Single Motor Operation)

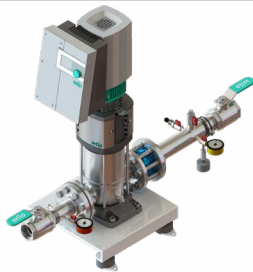
Model	P2		Phase (-)	Voltage (V)	FLA (per pump) (A)	Efficiency η _m 100%	P _{max} (PSI)
	(HP)	(KW)					
Helix EXCEL Complete V20-14-1/4.3/460	4.3	3.2	3	460 (±10%)	6	93	363

Submittal Data Sheet

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



Helix EXCEL Complete V20-18-1/5.6/460

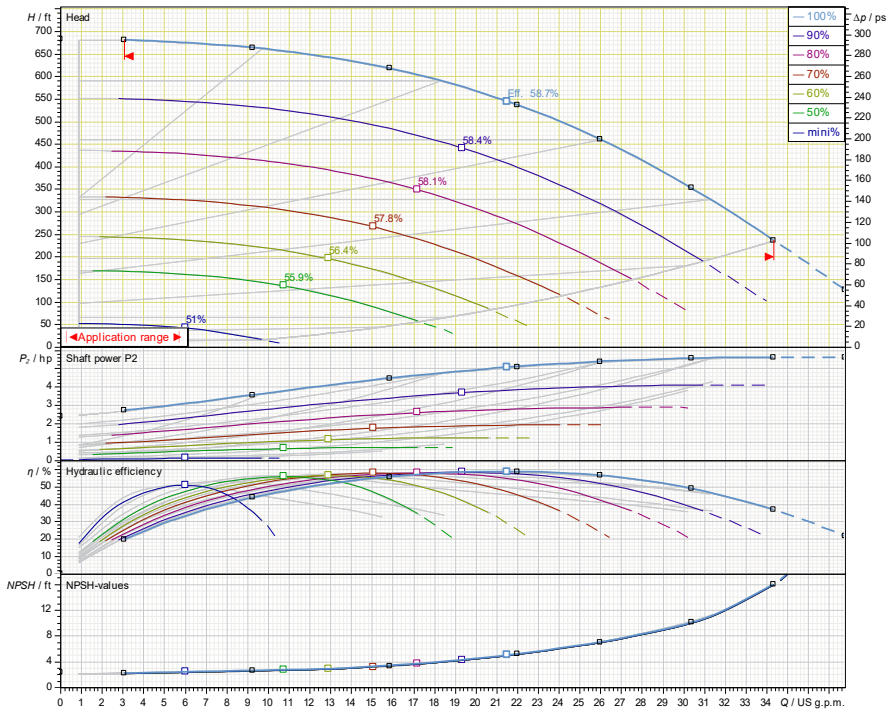


Project:	
Engineer:	
Contractor:	
Submitted By:	Date:
Approved By:	Date:

Tag #	Model #	Flow	BOOST PSI	Min. Inlet PSI	HP/Pump	Phase	Voltage	RPM
	Helix EXCEL Complete V20-18-1/5.6/460				5.6			3600

Article Number: 2700933

Helix EXCEL Complete V20-18-1/5.6 /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

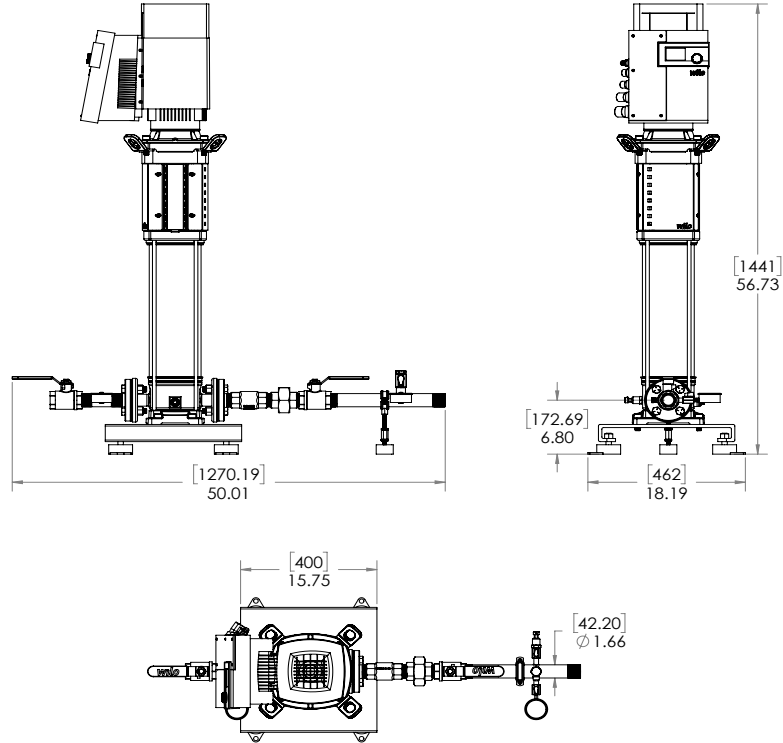
Submittal Data Sheet

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



Helix EXCEL Complete V20-18-1/5.6/460

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 V20-18-1/5.6/460	460 V	56-3/4	18-1/4	50	1-1/4" MNPT	1-1/4"	1/4" FNPT	1/4" FNPT	3/4" MNPT x 3/4" FNPT	158	171

EC Motor Data (Single Motor Operation)

Model	P2		Phase (-)	Voltage (V)	FLA (per pump) (A)	Efficiency η _m 100%	P _{max} (PSI)
	(HP)	(KW)					
Helix EXCEL Complete V20-18-1/5.6/460	5.6	4.2	3	460 (±10%)	6.5	95.8	363