

GENERAL INFORMATION

SPECIFICATIONS

CROSS-REFERENCE

PACKAGE SYSTEMS

11. 8" Non-Clog Submersible Explosion Proof Pumps

PUMP SERIES:

- 8XSE-HA (20 - 30HP, 850RPM)**
- 8XSE-HA (30 - 75HP, 1150RPM)**
- 8XSE-HA (100 - 150HP, 1750RPM)**

8" Horizontal Discharge XP - Submersible Non-Clog Pumps

*Previous Models		Current Models		
MODEL	P/N	MODEL	P/N	PAGE NO.
R8SEL2004	79878	8XSE20048HA	084778	1 - 3
		8XSE20058HA	089393	1 - 3
R8SEL2504	79880	8XSE25048HA	084779	1 - 3
		8XSE25058HA	089394	1 - 3
R8SEL3004	79881	8XSE30048HA	084780	1 - 3
		8XSE30058HA	089395	1 - 3
R8SE3004	83798	8XSE30046HA	084781	4 - 7
		8XSE30056HA	089361	4 - 7
R8SE4004	79883	8XSE40046HA	084782	4 - 7
		8XSE40056HA	089362	4 - 7
R8SE5004	79884	8XSE50046HA	084783	4 - 7
		8XSE50056HA	089363	4 - 7
R8SE6004	79885	8XSE60046HA	084784	4 - 7
		8XSE60056HA	089364	4 - 7
R8SE7504	79886	8XSE75046HA	084785	4 - 7
		8XSE75056HA	089365	4 - 7
R8SEH10004	79887	8XSE100044HA	084786	4 - 7
		8XSE100054HA	089365	4 - 7
R8SEH12504	79888	8XSE125044HA	084787	4 - 7
		8XSE125054HA	089367	4 - 7
R8SEH13504	79892	8XSE150044HA	084788	4 - 7
		8XSE150054HA	089368	4 - 7

Previous Models are Discontinued. Consult Factory for current replacement if not shown.

8" Horizontal Discharge XP - Submersible Non-Clog Pumps

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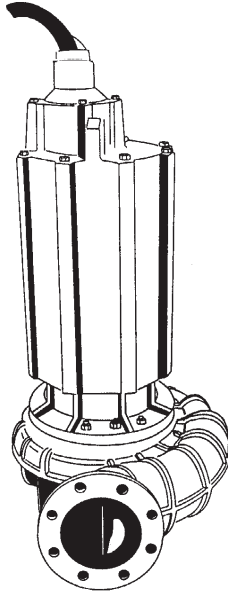
Series 8XSE-HA

3" Spherical Solids Handling
Class I, Groups C & D, Division 1

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8" Horizontal Discharge XP - Submersible Non-Clog Pumps



Series: 8XSE-HA
20 - 30HP, 870RPM, 60Hz



Canadian Standards Association
File No. LR16567-25



Underwriters Laboratories Inc ®
File No. E73842

Sample Specifications: Section 1 Page 21.

DESCRIPTION:

SUBMERSIBLE NON-CLOG SEWAGE PUMP
DESIGNED FOR **HAZARDOUS** RAW
SEWAGE APPLICATIONS.

Specifications:

DISCHARGE	8" NPT, 125 lb. Flange, Horizontal
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30 with Bronze wear ring
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: <i>Design</i>	3 Vane, Enclosed, With Bronze wear ring and Pump Out Vanes on Back Side. Dynamically Balanced ISO G6.3
<i>Material</i>	Cast Iron ASTM A-48, Class 30
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
LIFTING CHAIN	Yoke, Galvanized
PAINT	Air Dry Enamel.
SEAL: <i>Design</i>	Tandem Mechanical, Oil Filled Reservoir.
<i>Material</i>	Rotating Faces - Carbon Stationary Faces - Ceramic Elastomer - Buna-N Hardware - 300 Series Stainless
CORD ENTRY .....	.25 ft. (7.6m) Std. Cord. Epoxy Sealed Housing with Secondary Pressure Grommet for Sealing and Strain Relief
SPEED	870 RPM (Nominal)
UPPER BEARING:	
<i>Design</i>	Single Row, Ball, Grease Lubricated
<i>Load</i>	Radial
LOWER BEARING:	
<i>Design</i>	Double Row, Ball, Grease Lubricated
<i>Load</i>	Radial & Thrust
MOTOR: <i>Design</i>	NEMA B - Three Phase Torque Curve. Air-Filled, Squirrel Cage Induction, Class I, Groups C & D, Division 1, Explosion Proof
<i>Insulation</i>	Class F.
THREE PHASE	Dual Voltage 230/460; Requires Overload Protection to be Included in control panel.
MOISTURE SENSOR	Normally Open (N/O), Requires Relay in Control Panel
TEMPERATURE SENSOR	Normally Closed (N/C), Requires Relay in Control Panel
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims, Cord Length

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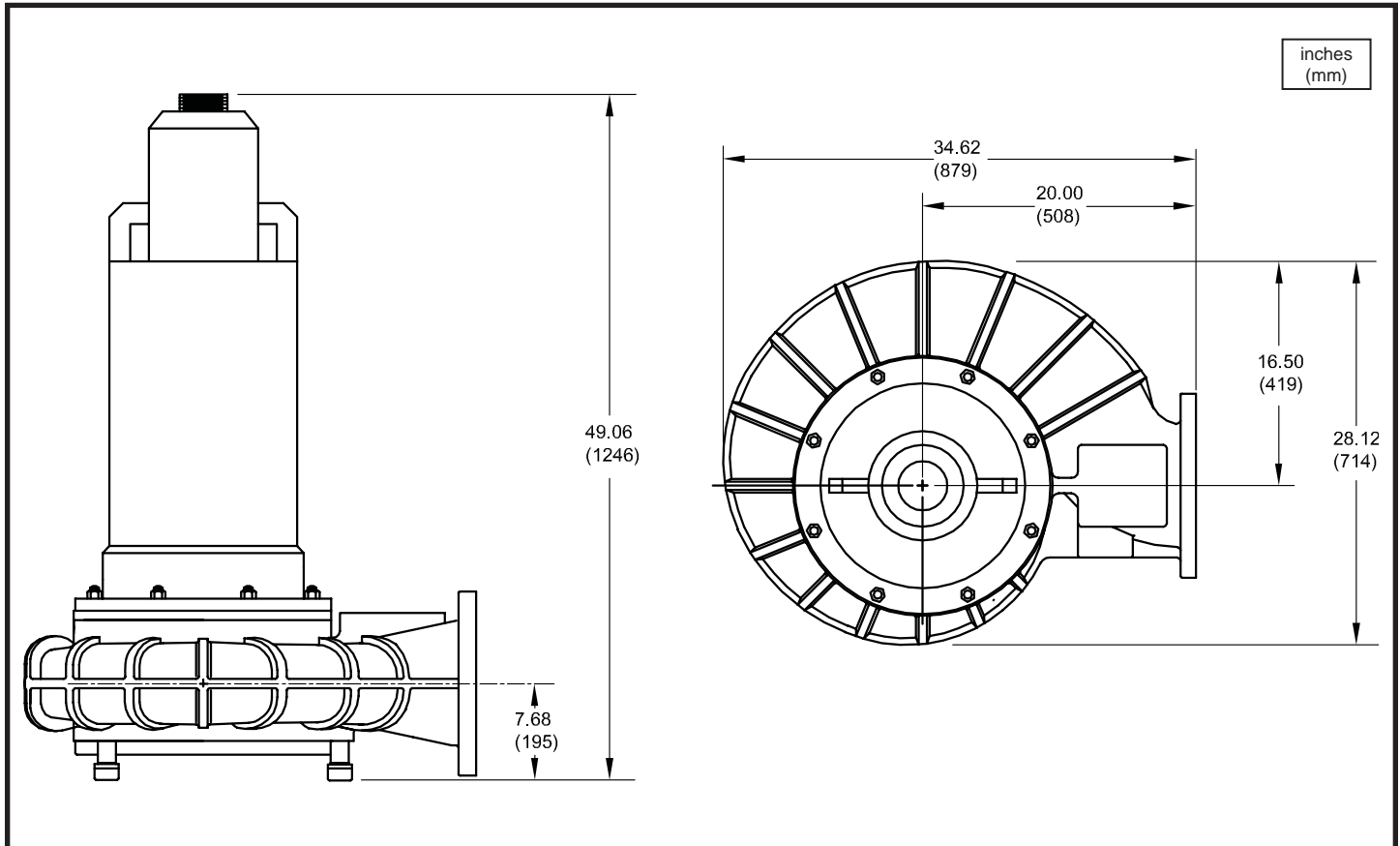
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8" Horizontal Discharge XP - Submersible Non-Clog Pumps



MODEL NO	PART NO	"A" DIM	HP	VOLT/Ph	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D. ± .02 (.5) in (mm)
8XSE20048HA	084778	49.06	20	460/3	60	870	G	27.8	141.0	8/4	SOW	0.985 (25)
8XSE20058HA	089393	49.06	20	575/3	60	870	G	22.0	109.0	8/4	SOW	0.985 (25)
8XSE25048HA	084779	49.06	25	460/3	60	870	G	36.5	174.0	8/4	SOW	0.985 (25)
8XSE25058HA	089394	49.06	25	575/3	60	870	G	28.8	139.2	8/4	SOW	0.985 (25)
8XSE30048HA	084780	49.06	30	460/3	60	870	F	43.0	199.0	8/4	SOW	0.985 (25)
8XSE30058HA	089395	49.06	30	575/3	60	870	F	34.4	159.0	8/4	SOW	0.985 (25)

Moisture and Temperature sensor cord for all models is 18/5 SOW, 0.485 (12.3mm) ± .02 (.51mm) O.D.

IMPORTANT !

- 1.) MOISTURE AND TEMPERATURE SENSORS MUST BE CONNECTED TO VALIDATE THE UL LISTING.
- 2.) A **NON-SPARKING** BREAK AWAY FITTING MUST BE USED TO VALIDATE THE UL LISTING.
- 3.) A SPECIAL MOISTURE SENSOR RELAY IS REQUIRED IN THE CONTROL PANEL FOR PROPER OPERATION OF THE MOISTURE SENSORS. CONTACT BARNES PUMPS FOR INFORMATION CONCERNING MOISTURE SENSING RELAYS FOR CUSTOMER SUPPLIED CONTROL PANELS.
- 4.) THESE PUMPS ARE UL LISTED FOR PUMPING WATER AND WASTEWATER. **DO NOT USE TO PUMP FLAMMABLE LIQUIDS.**
- 5.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN WIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

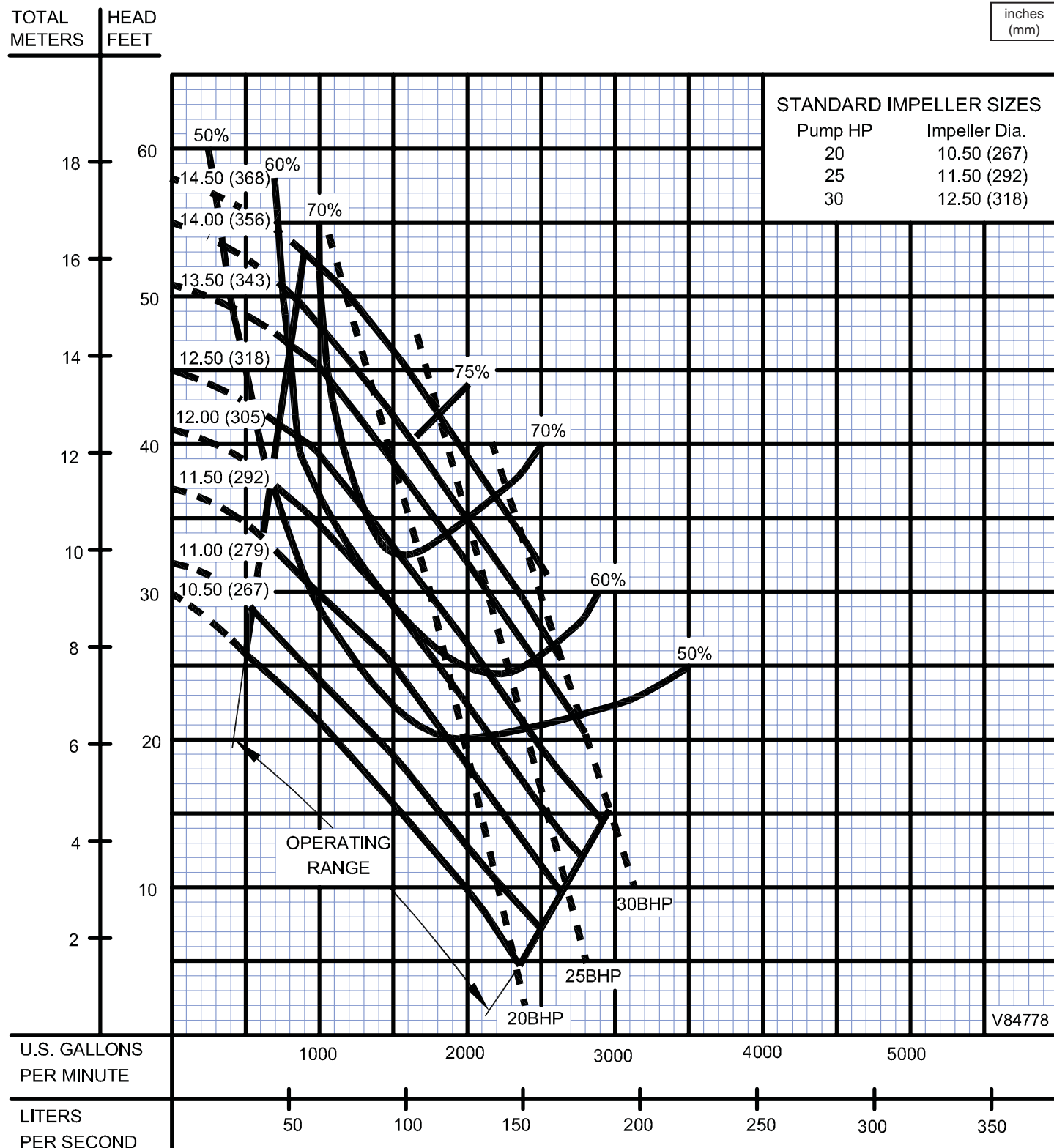
Series 8XSE-HA

Performance Curve - Class I, Groups C & D, Division 1
20, 25 & 30HP, 870RPM, 60Hz



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8" Horizontal Discharge XP - Submersible Non-Clog Pumps



Testing is performed with water, specific gravity 1.0 @ 68° F @ (20°C), other fluids may vary performance

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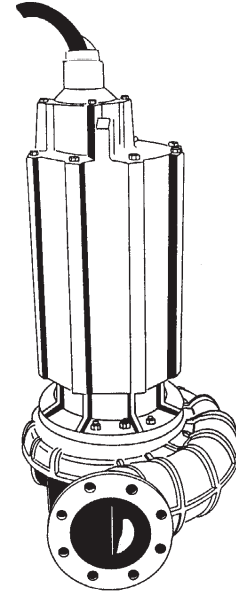
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8" Horizontal Discharge XP - Submersible Non-Clog Pumps

Specifications:

DISCHARGE8" NPT, 125 lb. Flange Horizontal
LIQUID TEMPERATURE	.....104°F (40°C) Continuous
VOLUTE	.....Cast Iron ASTM A-48, Class 30, with Bronze wear ring
MOTOR HOUSING	.....Cast Iron ASTM A-48, Class 30
SEAL PLATE	.....Cast Iron ASTM A-48, Class 30
IMPELLER: Design	.....3 Vane, Enclosed With Pump Out Vanes on Back Side. Dynamically Balanced ISO G6.3
Material	.....Cast Iron ASTM A-48, Class 30
SHAFT	.....416 Stainless Steel
SQUARE RINGS	.....Buna-N
LIFTING CHAIN	.....Yoke, Galvanized
HARDWARE	.....300 Series Stainless Steel
PAINT	.....Air Dry Enamel.
SEAL: Design	.....Tandem Mechanical, Oil Filled Pressure Equalized Reservoir
Material	.....Rotating Faces - Carbon Stationary Faces - Ceramic Elastomer - Buna-N Hardware -300 Series Stainless
CORD ENTRY	.....25 ft. (7.6m) Std. Cord. Epoxy Sealed Housing with Secondary Pressure Grommet for Sealing and Strain Relief
SPEED	.....1150 or 1750 RPM (Nominal)
UPPER BEARING:	
Design	.....Single Row, Ball, Grease Lubricated
Load	.....Radial
LOWER BEARING:	
Design	.....Double Row, Ball, Grease Lubricated
Load	.....Radial & Thrust
MOTOR: Design	.....NEMA B - Three Phase Torque Curve. Air-Filled, Squirrel Cage Induction
Insulation	.....Class F.
THREE PHASE	.....Dual Voltage 230/460; Requires Overload Protection to be Included in control panel.
MOISTURE SENSOR	.....Normally Open (N/O), Requires Relay in Control Panel
TEMPERATURE SENSOR	.....Normally Closed (N/C), Requires Relay in Control Panel
OPTIONAL EQUIPMENT	.....Seal Material, Impeller Trims, Cord Length



Series: 8XSE-HA
30 - 75HP, 1150RPM, 60Hz
Series: 8XSE-HA
100-150HP, 1750RPM, 60Hz



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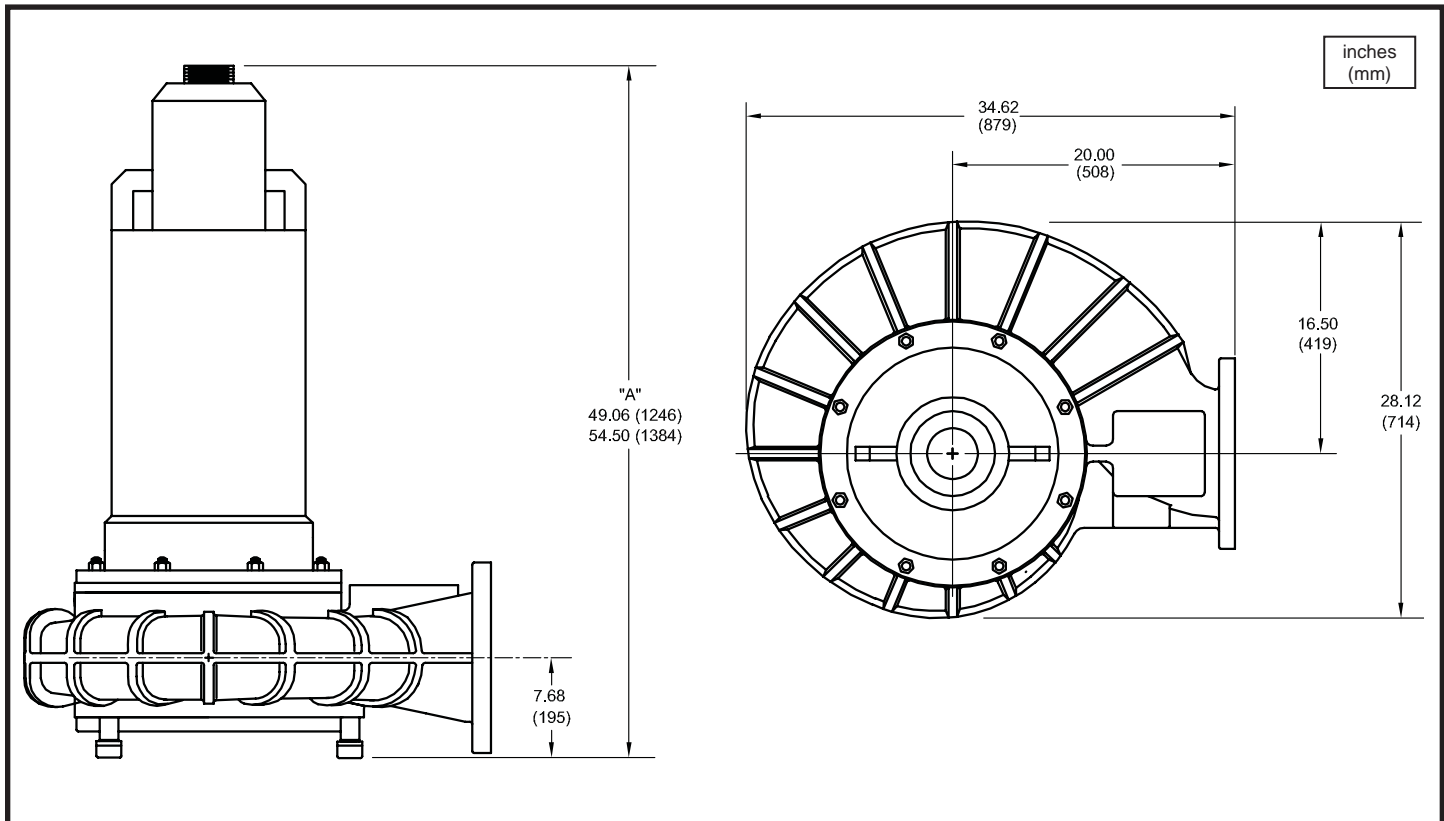
Series 8XSE-HA

3" Spherical Solids Handling
Class I, Groups C & D, Division 1

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8" Horizontal Discharge XP - Submersible Non-Clog Pumps



MODEL NO	PART NO	"A" DIM	HP	VOLT/Ph	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D. ± .02 (.5) in (mm)
8XSE30046HA	084781	49.06	30	460/3	60	1150	G	40.0	210.0	8/4	SOW	0.985 (25)
8XSE30056HA	089361	49.06	30	575/3	60	1150	G	32.0	168.0	8/4	SOW	0.985 (25)
8XSE40046HA	084782	49.06	40	460/3	60	1150	G	52.0	282.0	6/4	SOW	1.125 (29)
8XSE40056HA	089362	49.06	40	575/3	60	1150	G	42.6	226.0	6/4	SOW	1.125 (29)
8XSE50046HA	084783	49.06	50	460/3	60	1150	F	67.0	322.0	4/4	SOW	1.350 (34)
8XSE50056HA	089363	49.06	50	575/3	60	1150	F	53.6	258.0	4/4	SOW	1.350 (34)
8XSE60046HA	084784	49.06	60	460/3	60	1150	F	76.9	409.0	2/4	SOW	1.550 (39)
8XSE60056HA	089364	49.06	60	575/3	60	1150	F	61.4	315.0	2/4	SOW	1.550 (39)
8XSE75046HA	084785	54.50	75	460/3	60	1150	G	92.0	534.0	2/4	SOW	1.550 (39)
8XSE75056HA	089365	54.50	75	575/3	60	1150	G	73.6	427.0	2/4	SOW	1.550 (39)
8XSE100044HA	084786	54.50	100	460/3	60	1750	G	123.0	703.0	1/4	SOW	1.680 (43)
8XSE100054HA	089366	54.50	100	575/3	60	1750	G	98.4	562.0	1/4	SOW	1.680 (43)
8XSE125044HA	084787	54.50	125	460/3	60	1750	F	153.0	864.0	2/0/4	SOW	1.930 (49)
8XSE125054HA	089367	54.50	125	575/3	60	1750	F	122.0	691.0	2/0/4	SOW	1.930 (49)
8XSE150044HA	084788	54.50	150	460/3	60	1750	E	182.0	1080.0	3/0/4	SOW	2.070 (53)
8XSE150054HA	089368	54.50	150	575/3	60	1750	E	145.0	864.0	3/0/4	SOW	2.070 (53)

Moisture and Temperature sensor cord for all models is 18/5 SOW, 0.485 (12.3mm) ± .02 (.51mm) O.D.

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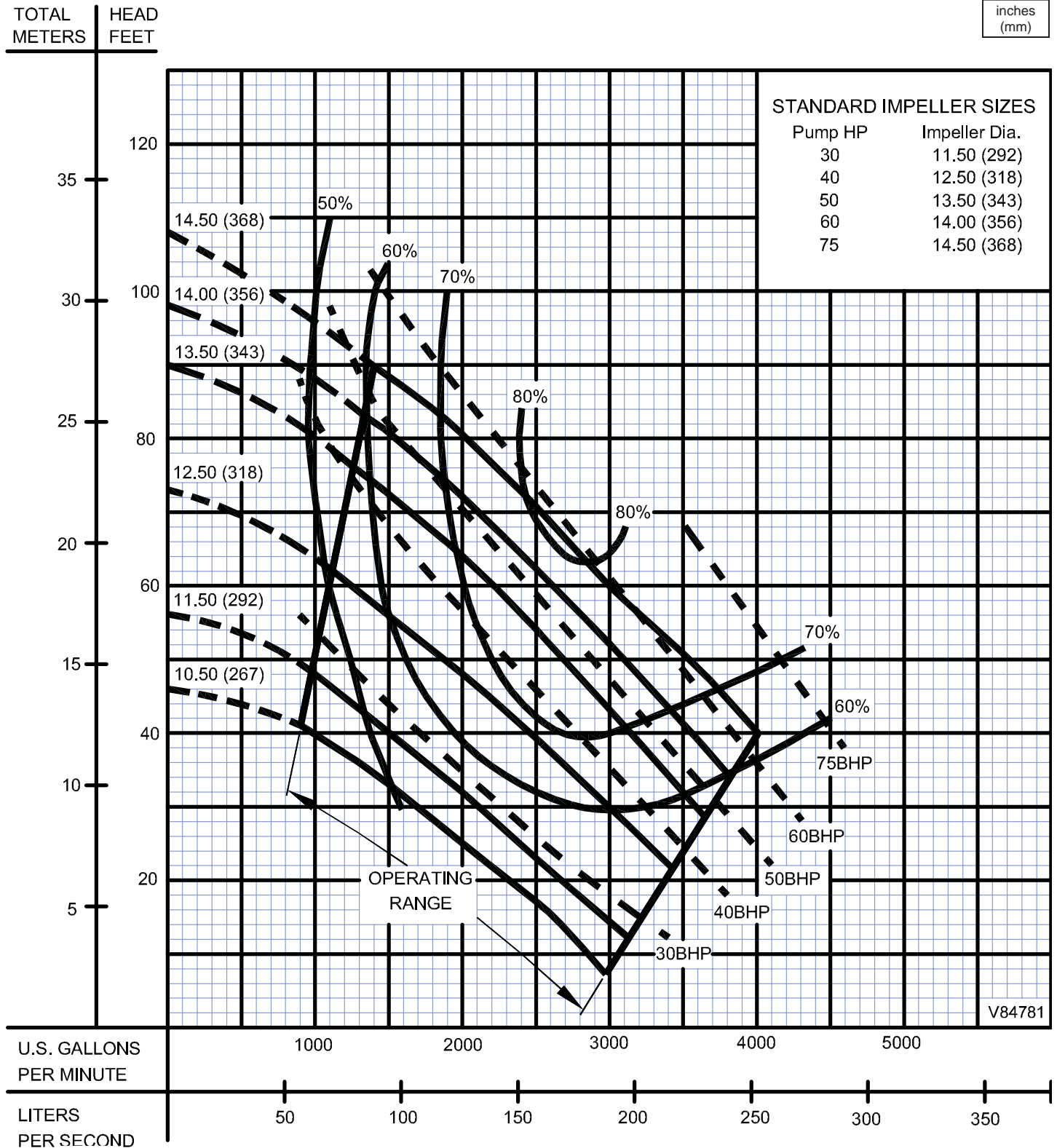
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8" Horizontal Discharge XP - Submersible Non-Clog Pumps



Testing is performed with water, specific gravity 1.0 @ 68° F @ (20°C), other fluids may vary performance

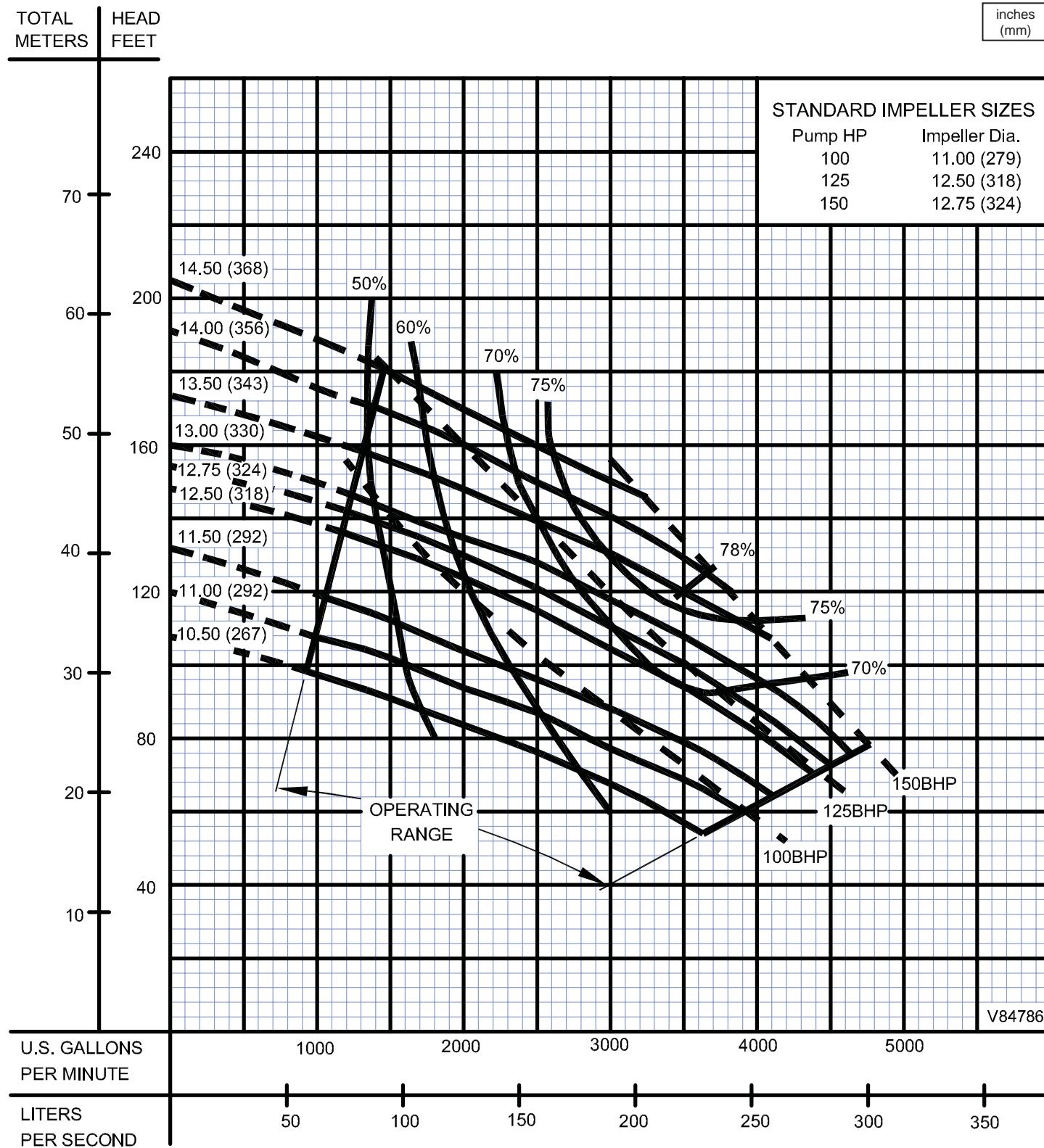
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