

Submersible Grinder XP

Specifications:

DISCHARGE:

XGV Vertical 2" NPT
XGVH Flange 2"/2.50"/3", Horizontal
XGVHH Flange 2.50"/3", Horizontal

LIQUID TEMPERATURE 104°F (40°C) Continuous

VOLUTE Cast Iron ASTM A-48, Class 30

MOTOR HOUSING Cast Iron ASTM A-48, Class 30

SEAL PLATE Cast Iron ASTM A-48, Class 30

IMPELLER: Design 12 Vane, Vortex, With Pump Out Vanes
On Back Side. Dynamically Balanced,
ISO G6.3

Material Cast Iron ASTM A-48, Class 30

SHREDDING RING Hardened 440C Stainless Steel,
Rockwell® C-55

CUTTER Hardened 440C Stainless Steel,
Rockwell® C-55

SHAFT 416 Stainless Steel

SQUARE RINGS Buna-N

HARDWARE 300 Series Stainless Steel

PAINT Axalta™ Corlar® Epoxy, Two Coats

SEAL: Design Tandem Mechanical, Oil Filled Reservoir
Material Rotating Faces - Carbon
Stationary Faces - Ceramic

Elastomer - Buna-N

Hardware -300 Series Stainless

CORD ENTRY Custom Molded, Quick Connected
for Sealing and Strain Relief

POWER CORD CSA Certified Submersible Power
Cable 2000V - Ordered Separately

UPPER BEARING:

Design Single Row, Ball, Oil Lubrication
Load Radial

LOWER BEARING:

Design Double Row, Ball, Oil Lubrication
Load Radial & Thrust

MOTOR: Design NEMA B

Three Phase Torque Curve
Oil-Filled, Squirrel Cage Induction,
Inverter Duty rated per NEMA MG1

Insulation Class H Varnish & Magnet Wire

SINGLE PHASE Requires overload protection to be
included in control panel. Requires start
components to be included in panel.
Provided with pump

THREE PHASE Requires overload protection to be
included in control panel

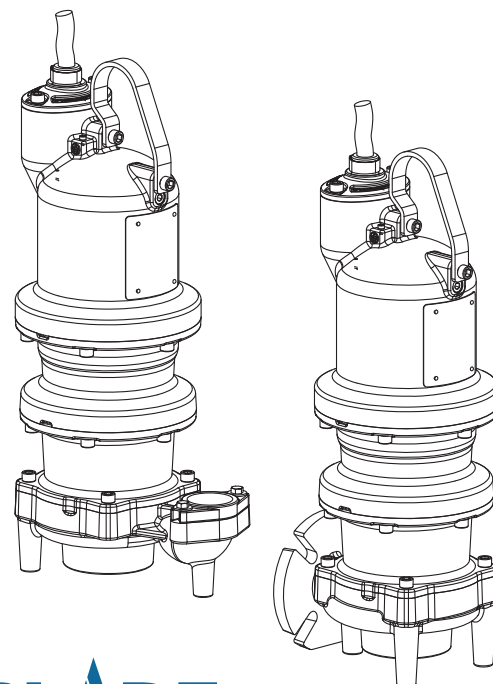
MOISTURE SENSORS Normally Open (N/O), Requires relay
in control panel

TEMPERATURE SENSOR Normally Closed (N/C)
To be wired in series with control circuit

OPTIONAL EQUIPMENT Seal Material, Impeller Trims,
Cord Length, Leg Kit



LR16567



BLADE

Series: XGV
3, 5, 7.5 & 10HP,
3450RPM, 60Hz

Explosion Proof, Class 1,
Division 1, Groups C & D, T4

Sample Specifications: Section 3 Page 15.

DESCRIPTION:

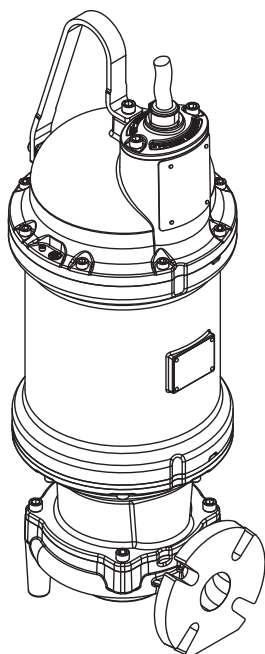
THE GRINDER PUMP IS FOR USE IN **HAZARDOUS** LOCATIONS AND IS DESIGNED TO REDUCE DOMESTIC, COMMERCIAL, INSTITUTIONAL AND LIGHT INDUSTRIAL SEWAGE TO A FINELY GROUND SLURRY.



WARNING:

CANCER AND REPRODUCTIVE HARM -
WWW.P65WARNINGS.CA.GOV

Submersible Grinder XP



BLADE

Series: XGV
15HP,
3450RPM, 60Hz

Explosion Proof, Class 1,
Division 1, Groups C & D, T4

Sample Specifications: Section 3 Page 15.

DESCRIPTION:

THE GRINDER PUMP IS FOR USE IN **HAZARDOUS** LOCATIONS AND IS DESIGNED TO REDUCE DOMESTIC, COMMERCIAL, INSTITUTIONAL AND LIGHT INDUSTRIAL SEWAGE TO A FINELY GROUND SLURRY.



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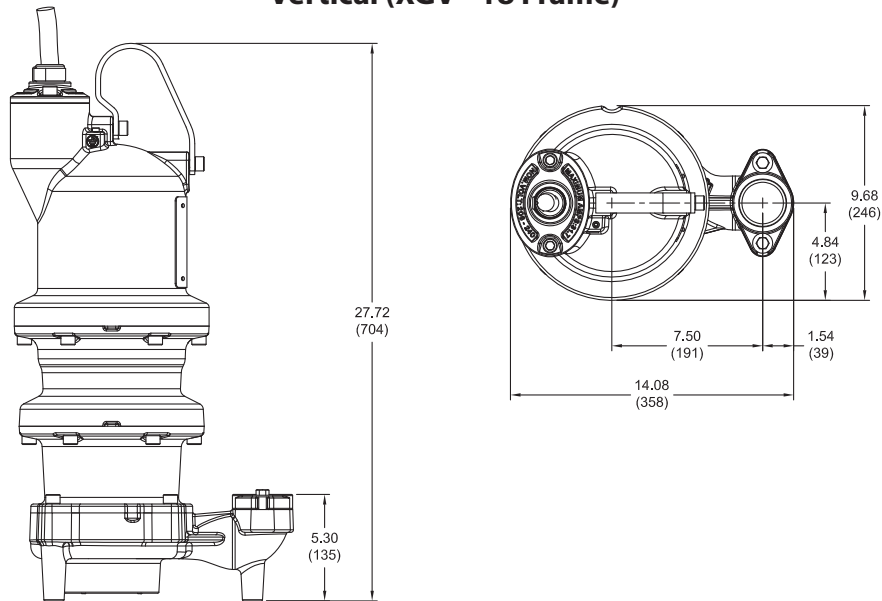
Specifications:

DISCHARGE:	
Flange	2.50"/3", Horizontal
LIQUID TEMPERATURE	104°F (40°C) Continuous
VOLUTE	Cast Iron ASTM A-48, Class 30
MOTOR HOUSING	Cast Iron ASTM A-48, Class 30
SEAL PLATE	Cast Iron ASTM A-48, Class 30
IMPELLER: Design	12 Vane, Vortex, With Pump Out Vanes On Back Side. Dynamically Balanced, ISO G6.3
Material	Cast Iron ASTM A-48, Class 30
SHREDDING RING	Hardened 440C Stainless Steel, Rockwell® C-55
CUTTER	Hardened 440C Stainless Steel, Rockwell® C-55
SHAFT	416 Stainless Steel
SQUARE RINGS	Buna-N
HARDWARE	300 Series Stainless Steel
PAINT	Axalta™ Corlar® Epoxy, Two Coats
SEAL:	<i>Design</i>
	<i>Material</i>
Tandem Mechanical, Oil Filled Reservoir	
Rotating Faces - Carbon	
Stationary Faces - Ceramic	
Elastomer - Buna-N	
Hardware -300 Series Stainless	
CORD ENTRY	Custom Molded, Quick Connected for Sealing and Strain Relief
POWER CORD	CSA Certified Submersible Power Cable 2000V - Ordered Separately
UPPER BEARING:	
Design	Single Row, Ball, Oil Lubrication
Load	Radial
LOWER BEARING:	
Design	Double Row, Ball, Oil Lubrication
Load	Radial & Thrust
MOTOR:	<i>Design</i>
	NEMA B
Three Phase Torque Curve	
Oil-Filled, Squirrel Cage Induction,	
Inverter Duty rated per NEMA MG1	
Class H Varnish & Magnet Wire	
SINGLE PHASE	Requires overload protection to be included in control panel. Requires start components to be included in panel. Provided with pump
THREE PHASE	Requires overload protection to be included in control panel
MOISTURE SENSORS	Normally Open (N/O), Requires relay in control panel
TEMPERATURE SENSOR	Normally Closed (N/C) To be wired in series with control circuit
OPTIONAL EQUIPMENT	Seal Material, Impeller Trims,
	Cord Length, Leg Kit



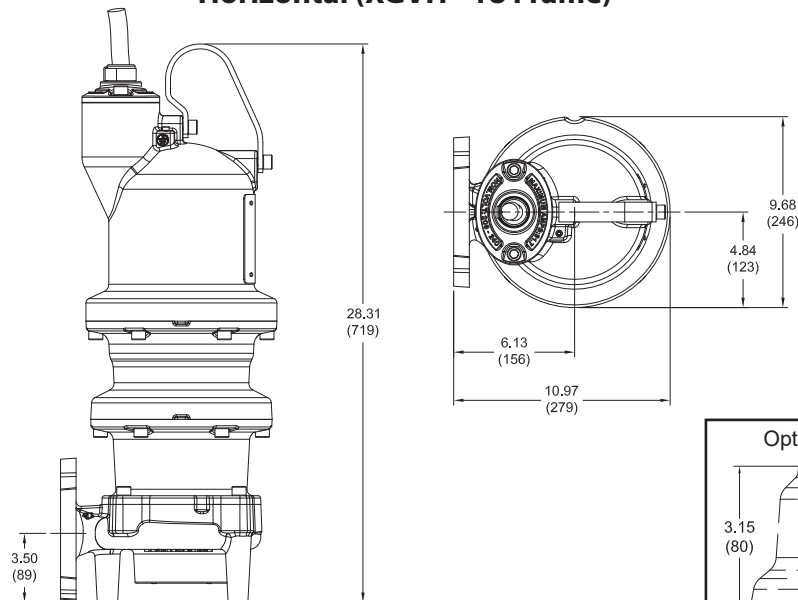
Submersible Grinder XP

Vertical (XGV - 18 Frame)

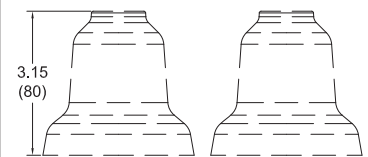


inches
(mm)

Horizontal (XGVH - 18 Frame)



Optional Leg Kit - p/n 125506

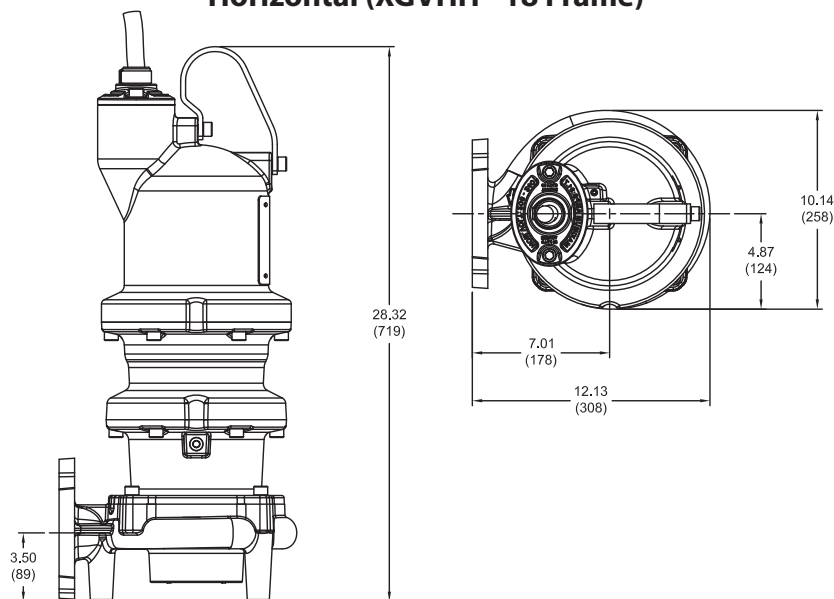


IMPORTANT !

- 1.) MOISTURE AND TEMPERATURE SENSORS MUST BE CONNECTED TO VALIDATE THE CSA LISTING.
- 2.) 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.
- 3.) THESE PUMPS ARE CSA AND LISTED FOR PUMPING WATER AND WASTEWATER. **DO NOT USE TO PUMP FLAMMABLE LIQUIDS.** NOT SUITABLE FOR ENVIRONMENTS CONTAINING GASOLINE OR HEXANE.
- 4.) 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 SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.
- 5.) A **NON-SPARKING** BREAKAWAY FITTING MUST BE USED TO VALIDATE THE EXPLOSION PROOF LISTING.

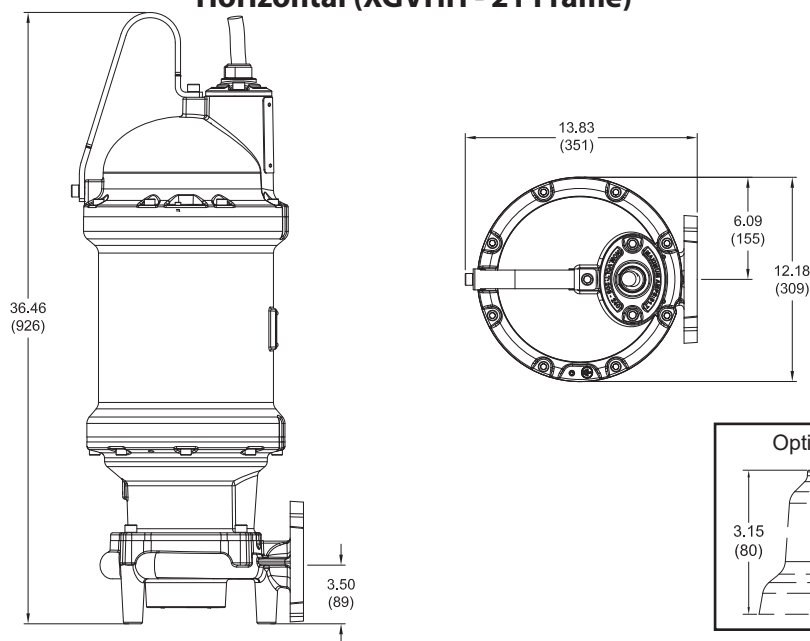
Submersible Grinder XP

Horizontal (XGVHH - 18 Frame)

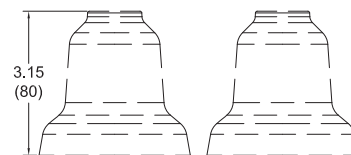


inches
(mm)

Horizontal (XGVHH - 21 Frame)



Optional Leg Kit - p/n 125506



IMPORTANT !

- 1.) MOISTURE AND TEMPERATURE SENSORS MUST BE CONNECTED TO VALIDATE THE CSA LISTING.
- 2.) 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.
- 3.) THESE PUMPS ARE CSA LISTED FOR PUMPING WATER AND WASTEWATER. **DO NOT USE TO PUMP FLAMMABLE LIQUIDS.** NOT SUITABLE FOR ENVIRONMENTS CONTAINING GASOLINE OR HEXANE.
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Submersible Grinder XP

MODEL NO	PART NO	HP	VOLT	PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	SERVICE FACTOR	LOCKED ROTOR AMPS	DRIVER FRAME	CORD P/N ▲	CORD SIZE	CORD O.D.
XGV3072	141339	3.0	208	1	60	3450	J	25.0	1.0	113.2	18	125496	12/4 - 18/4	.86 ± .02
			230				M	23.2		131.2				
			208				P	12.1		85.4				
XGV30N2	141340	3.0	230	3	60	3450	P	12.6	1.0	95.2	18	125496	12/4 - 18/4	.86 ± .02
			460					6.3		47.6				
			575					5.0		38.1				
XGV3052	141342	3.0	575	3	60	3450	P	5.0	1.0	38.1	18	125497	12/4 - 18/4	.86 ± .02
BLADE XGV Pump - Vertical														
XGV5072	141343	5.0	208	1	60	3450	E	34.1	1.0	113.2	18	125498	8/4 - 18/4	1.12 ± .02
			230				G	29.9		131.2				
			208				J	17.8		85.4				
XGV50N2	141344	5.0	230	3	60	3450	J	16.0	1.0	95.2	18	125496	12/4 - 18/4	.86 ± .02
			460					8.0		47.6				
			575					6.4		38.1				
XGV5052	141346	5.0	575	3	60	3450	J	6.4	1.0	38.1	18	125497	12/4 - 18/4	.86 ± .02
XGV75N2	141347	7.5	208	3	60	3450	M	28.0	1.0	173.9	18	125496	12/4 - 18/4	.86 ± .02
			230					28.2		201.0				
			460					14.1		100.5				
XGV7552	141349	7.5	575	3	60	3450	M	11.3	1.0	80.4	18	125497	12/4 - 18/4	.86 ± .02

IMPORTANT !

Moisture and Temperature sensor leads are integral to power cord.
Pump rated for operation at ± 10% voltage at motor.
▲ Cord Suffix: XC - 30 Feet, XF - 50 Feet, XJ - 75 Feet, or XL - 100 Feet.
▲ Cord sold separately.
Single Phase pumps require start components to be included in panel. Provided with pump.

Submersible Grinder XP

BLADE XGVH Pump - Horizontal														
MODEL NO	PART NO	HP	VOLT	PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	SERVICE FACTOR	LOCKED ROTOR AMPS	DRIVER FRAME	CORD P/N ▲	CORD SIZE	CORD O.D.
XGVH3072	141350	3.0	208	1	60	3450	J	25.0	1.0	113.2	18	125496	12/4 - 18/4	.86 ± .02
			M				23.2	131.2						
			XGVH30N2	141351	3.0		208	3	60	3450	P	12.1	85.4	18
230	12.6	95.2												
460	6.3	47.6												
XGVH3052	141353	3.0	575	3	60	3450	P	5.0	1.0	38.1	18	125497	12/4 - 18/4	.86 ± .02
XGVH5072	141354	5.0	208	1	60	3450	E	34.1	1.0	113.2	18	125498	8/4 - 18/4	1.12 ± .02
			230				29.9	131.2						
			XGVH50N2	141355	5.0		208	3	60	3450	J	17.8	85.4	18
230	16.0	95.2												
460	8.0	47.6												
XGVH5052	141357	5.0	575	3	60	3450	J	6.4	1.0	38.1	18	125497	12/4 - 18/4	.86 ± .02
XGVH75N2	141358	7.5	208	3	60	3450	M	28.0	1.0	173.9	18	125496	12/4 - 18/4	.86 ± .02
			230					28.2		201.0				
			460	14.1	100.5									
XGVH7552	141360	7.5	575	3	60	3450	M	11.3	1.0	80.4	18	125497	12/4 - 18/4	.86 ± .02

IMPORTANT !

Moisture and Temperature sensor leads are integral to power cord.

Pump rated for operation at $\pm 10\%$ voltage at motor.

▲ Cord Suffix: XC - 30 Feet, XF - 50 Feet, XJ - 75 Feet, or XL - 100 Feet.

▲ Cord sold separately.

Single Phase pumps require start components to be included in panel. Provided with pump.

Submersible Grinder XP

BLADE XGVHH Pump - Horizontal														
MODEL NO	PART NO	HP	VOLT	PH	Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	SERVICE FACTOR	LOCKED ROTOR AMPS	DRIVER FRAME	CORD P/N ▲	CORD SIZE	CORD O.D.
XGVHH75N2	143385	7.5	208	3	60	3450	M	28.0	1.0	173.9	18	125496	12/4 - 18/4	.86 ± .02
			28.2					201.0						
			14.1					100.5						
XGVHH7552	143386	7.5	575	3	60	3450	M	11.3	1.0	80.4	18	125497	12/4 - 18/4	.86 ± .02
XGVHH100N2	143387	10.0	208	3	60	3450	K	37.0	1.0	173.9	18	125498	8/4 - 18/4	1.12 ± .02
			34.8					201.0						
			17.4					100.5						
XGVHH10052	143388	10.0	575	3	60	3450	K	13.9	1.0	80.4	18	125497	12/4 - 18/4	.86 ± .02
XGVHH150N2	141375	15.0	208	3	60	3450	E	59.0	1.0	195.7	21	125498	8/4 - 18/4	1.12 ± .02
			57.1					88.5						
			28.5					70.8						
XGVHH15052	141377	15.0	575	3	60	3450	E	22.8	1.0	70.8	21	125497	12/4 - 18/4	.86 ± .02

IMPORTANT !

Moisture and Temperature sensor leads are integral to power cord.
Pump rated for operation at $\pm 10\%$ voltage at motor.

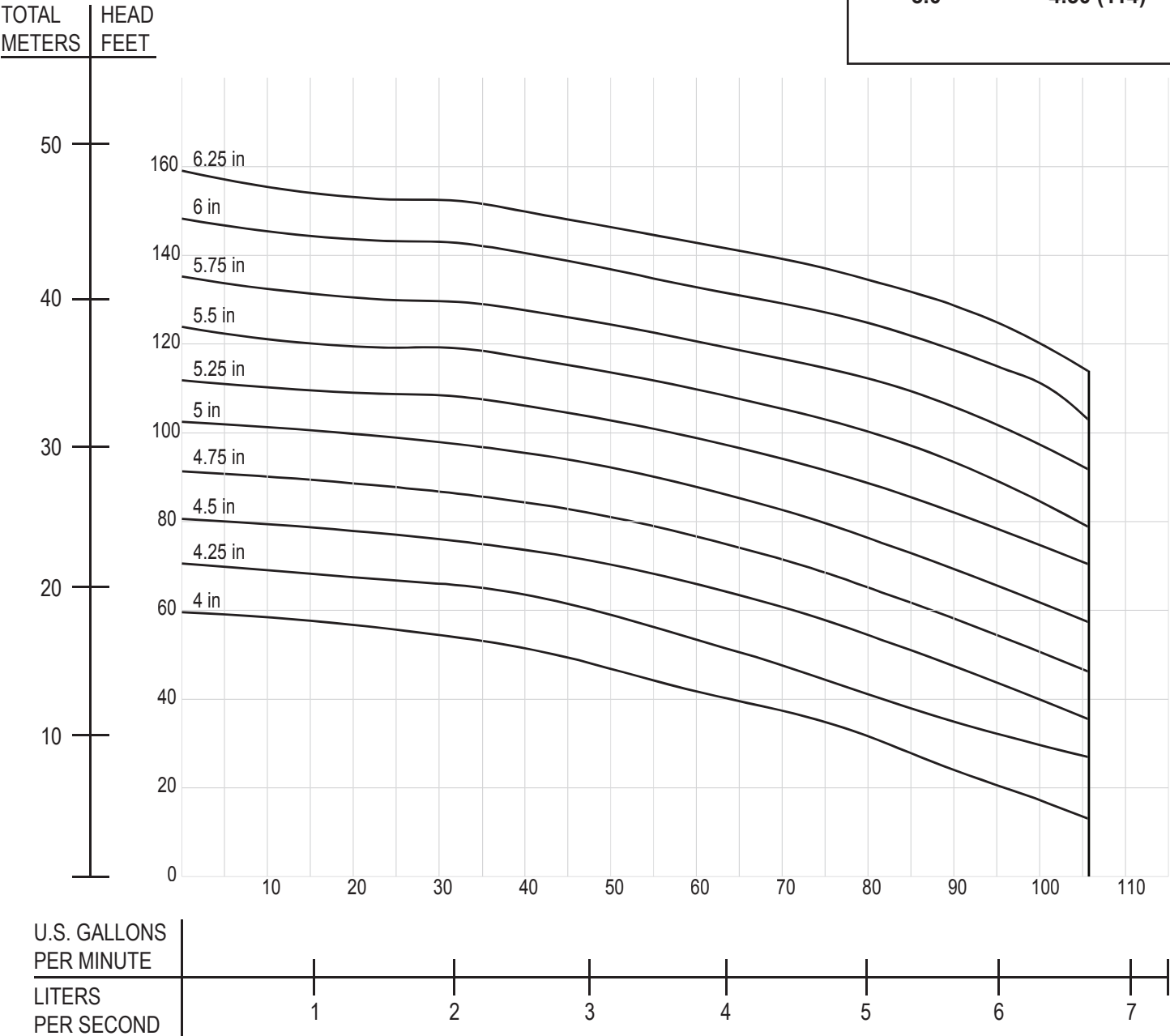
Pump rated for operation at $\pm 10\%$ voltage at motor.

▲ Cord Suffix: XC - 30 Feet, XF - 50 Feet, XJ - 75 Feet, or XL - 100 Feet.

▲ Cord sold separately.

Submersible Grinder XP

STANDARD IMPELLER SIZES	
Pump HP	Impeller Dia. in. (mm)
7.5	6.25 (159)
5.0	5.25 (133)
3.0	4.50 (114)

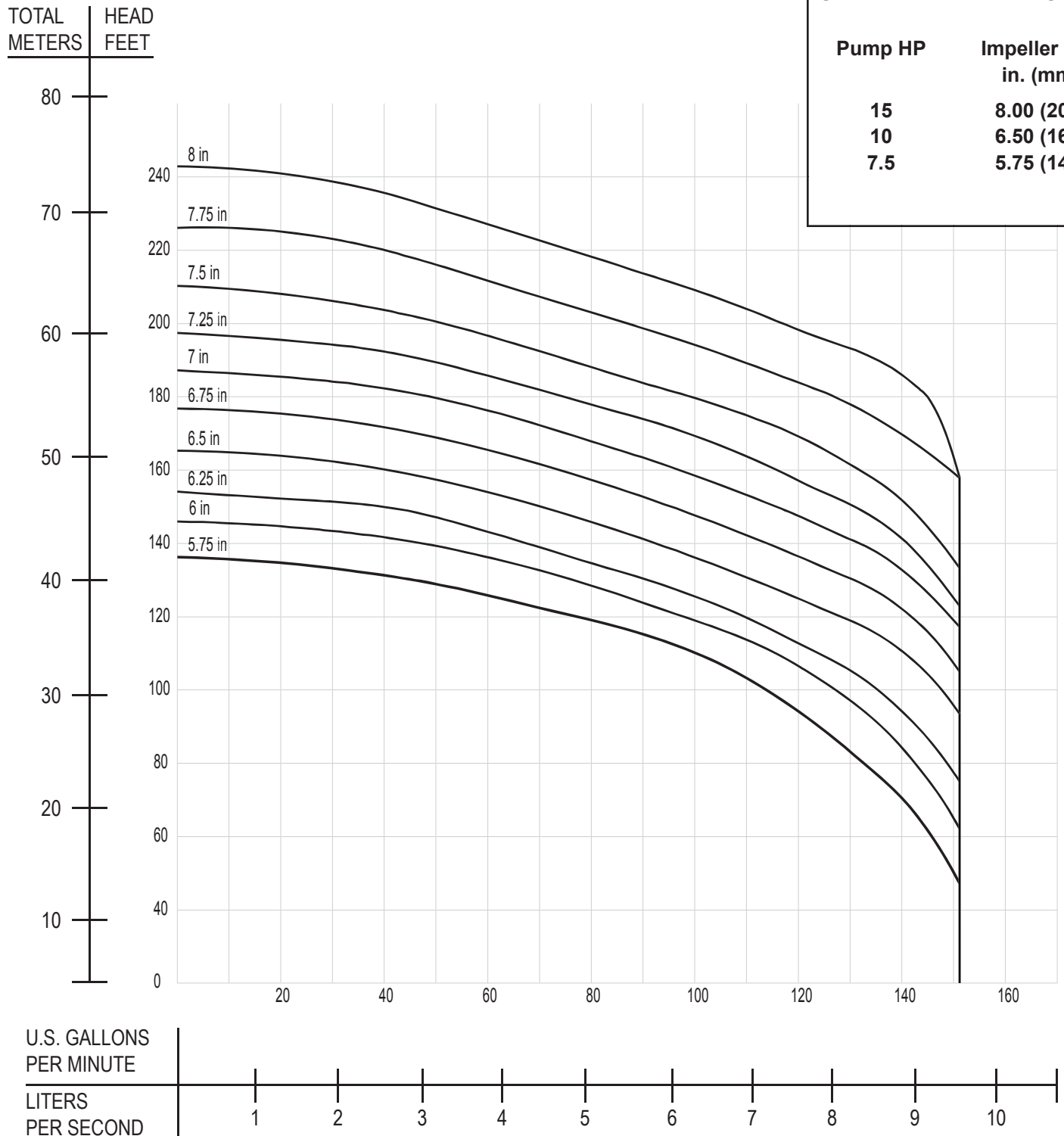


Testing is performed with water, specific gravity 1.0 @ 68° F @ (20°C), other fluids may vary performance

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STANDARD IMPELLER SIZES

Pump HP	Impeller Dia. in. (mm)
15	8.00 (203)
10	6.50 (165)
7.5	5.75 (146)



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