

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

CORD ENTRY Hardware -300 Series Stainless
 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

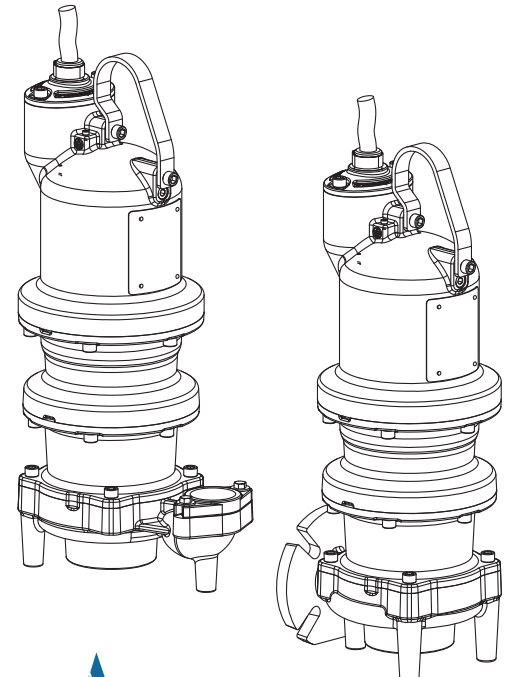
SINGLE PHASE Requires overload protection to be
 included in control panel. Requires start
 components to be included in panel.
 Provided with pump

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, 3" Spool Kit



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:

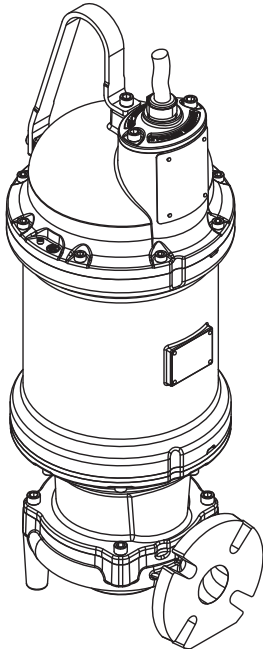
CANCER AND REPRODUCTIVE HARM -
 WWW.P65WARNINGS.CA.GOV



LR16567



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.

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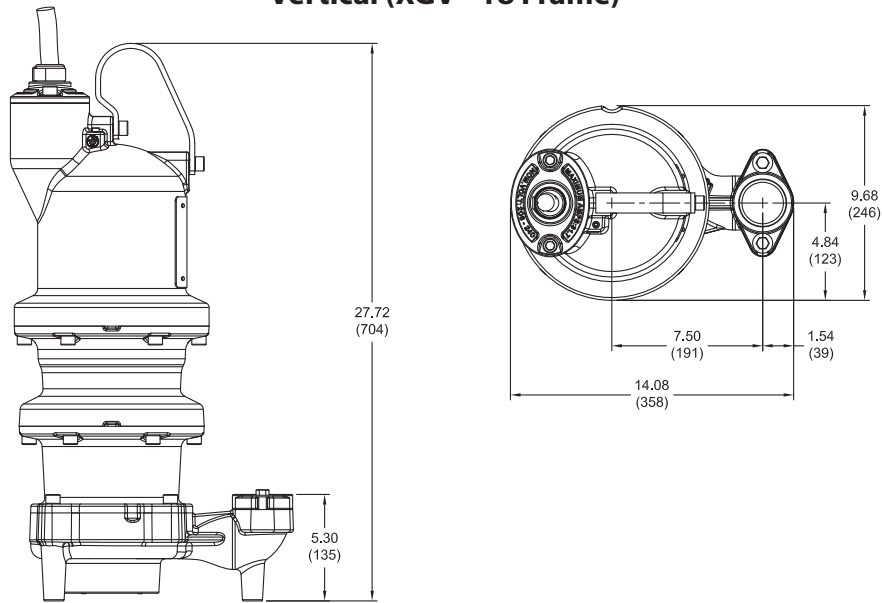
Specifications:

DISCHARGE:	
<i>Flange</i>	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
<i>Material</i>	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
<i>Material</i>	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:	
<i>Design</i>	Single Row, Ball, Oil Lubrication
<i>Load</i>	Radial
LOWER BEARING:	
<i>Design</i>	Double Row, Ball, Oil Lubrication
<i>Load</i>	Radial & Thrust
MOTOR: Design	NEMA B Three Phase Torque Curve Oil-Filled, Squirrel Cage Induction, Inverter Duty rated per NEMA MG1
<i>Insulation</i>	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



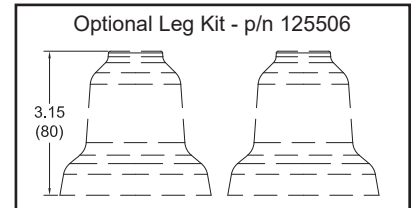
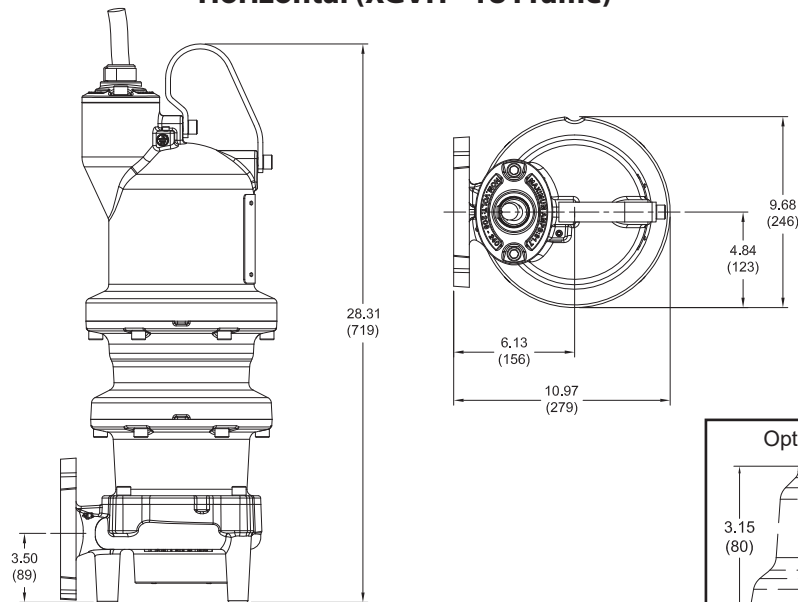
Submersible Grinder XP

Vertical (XGV - 18 Frame)



inches
(mm)

Horizontal (XGVH - 18 Frame)



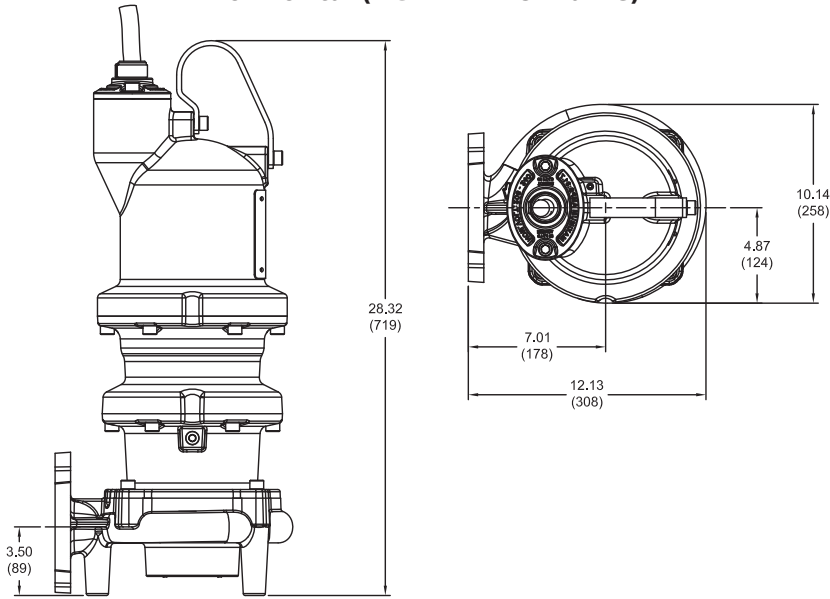
IMPORTANT !

- 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.

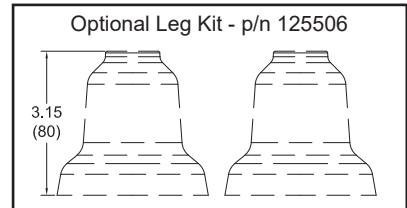
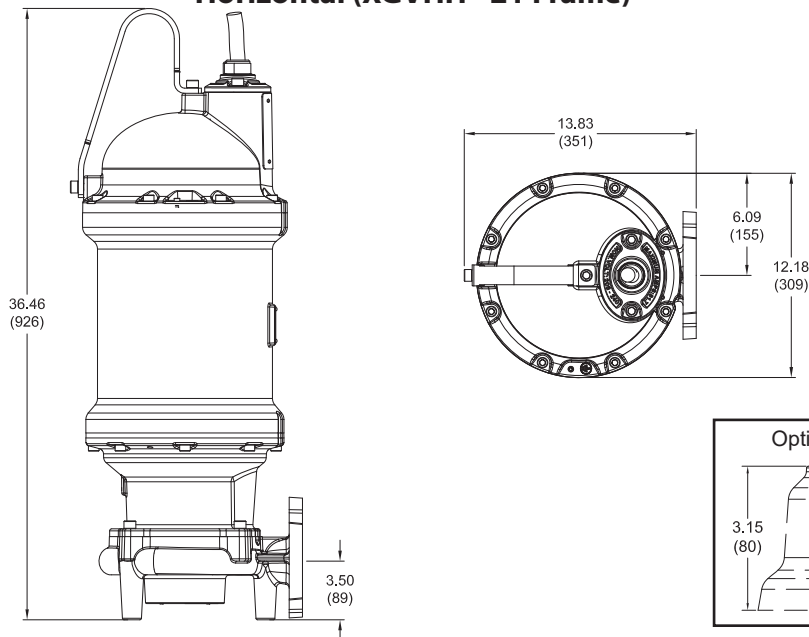
Submersible Grinder XP

Horizontal (XGVHH - 18 Frame)

inches
(mm)



Horizontal (XGVHH - 21 Frame)



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.
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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					47.6						
			575					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
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					47.6						
			575					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					201.0						
			460					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

BLADE XGV Pump - Vertical

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

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	
			230				M	23.2		131.2					
			208				P	12.1		85.4					
XGVH30N2	141351	3.0	230	3	60	3450	P	12.6	1.0	95.2	18	125496	12/4 - 18/4	.86 ± .02	
			460					47.6							
			575					38.1							
XGVH3052	141353	3.0	575	3	60	3450	P	5.0	1.0	38.1	18	125497	12/4 - 18/4	.86 ± .02	
			208					E		34.1					113.2
			230					G		29.9					131.2
XGVH50N2	141355	5.0	208	3	60	3450	J	17.8	1.0	85.4	18	125496	12/4 - 18/4	.86 ± .02	
			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	
			208					28.0		173.9					
			230					28.2		201.0					
XGVH75N2	141358	7.5	460	3	60	3450	M	14.1	1.0	100.5	18	125496	12/4 - 18/4	.86 ± .02	
			575					11.3		80.4					
			575					11.3		80.4					
XGVH7552	141360	7.5	575	3	60	3450	M	11.3	1.0	80.4	18	125497	12/4 - 18/4	.86 ± .02	
			208					28.0		173.9					
			230					28.2		201.0					
XGVH7552	141360	7.5	460	3	60	3450	M	14.1	1.0	100.5	18	125497	12/4 - 18/4	.86 ± .02	
			575					11.3		80.4					
			575					11.3		80.4					

BLADE XGVH Pump - Horizontal

NOTE: A 3" Pipe Spool Kit is recommended for use of a XGVH with a 3x3 BAF.

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

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
			230					201.0						
			460					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
			230					201.0						
			460					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
			230					88.5						
			460					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

BLADE XGVHH Pump - Horizontal

NOTE: A 3" Pipe Spool Kit is recommended for use of a XGVHH with a 3x3 BAF.

IMPORTANT !

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

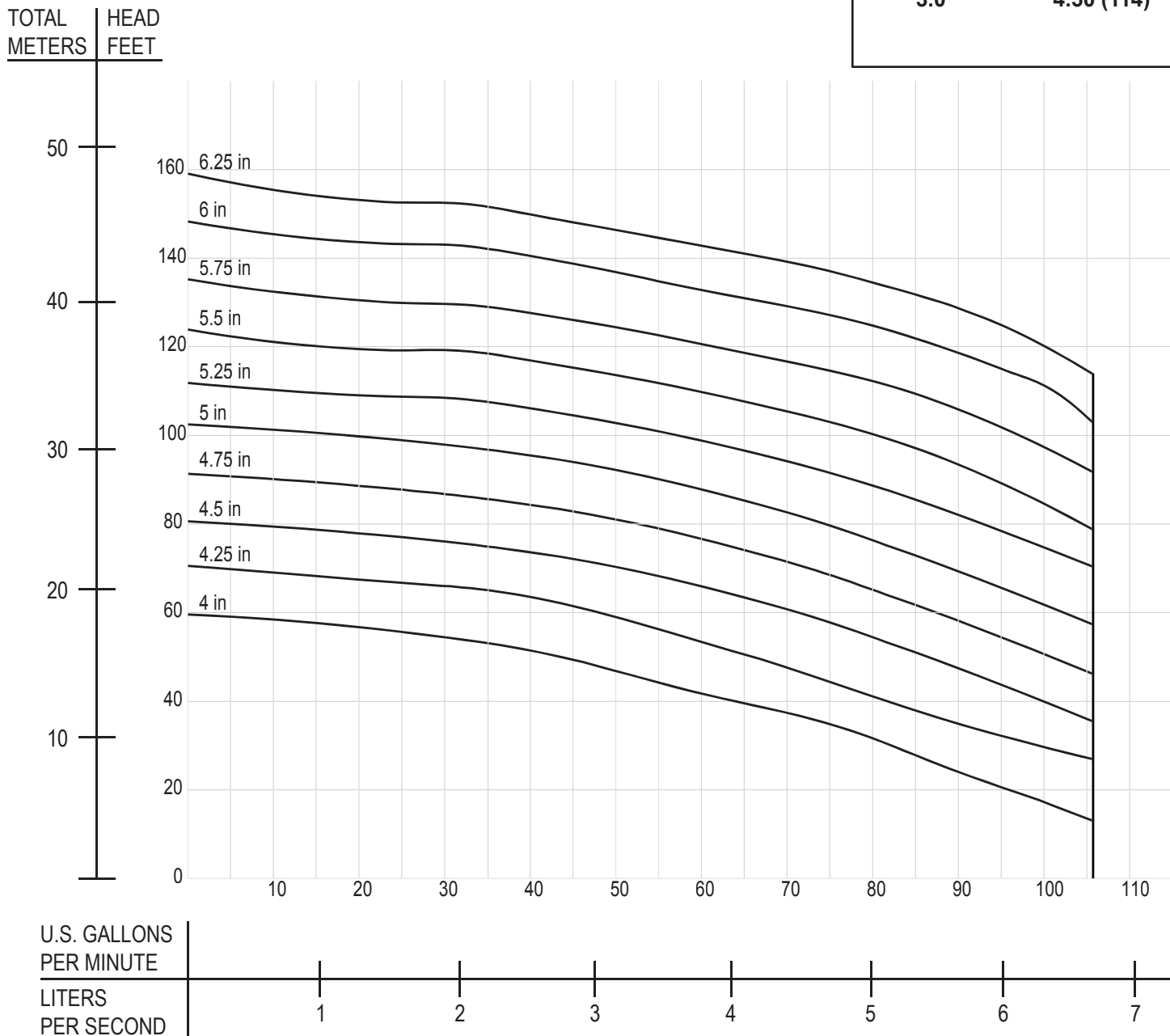
▲ Cord Suffix: XC - 30 Feet, XF - 50 Feet, XJ - 75 Feet, or XL - 100 Feet.

▲ Cord sold separately.

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)

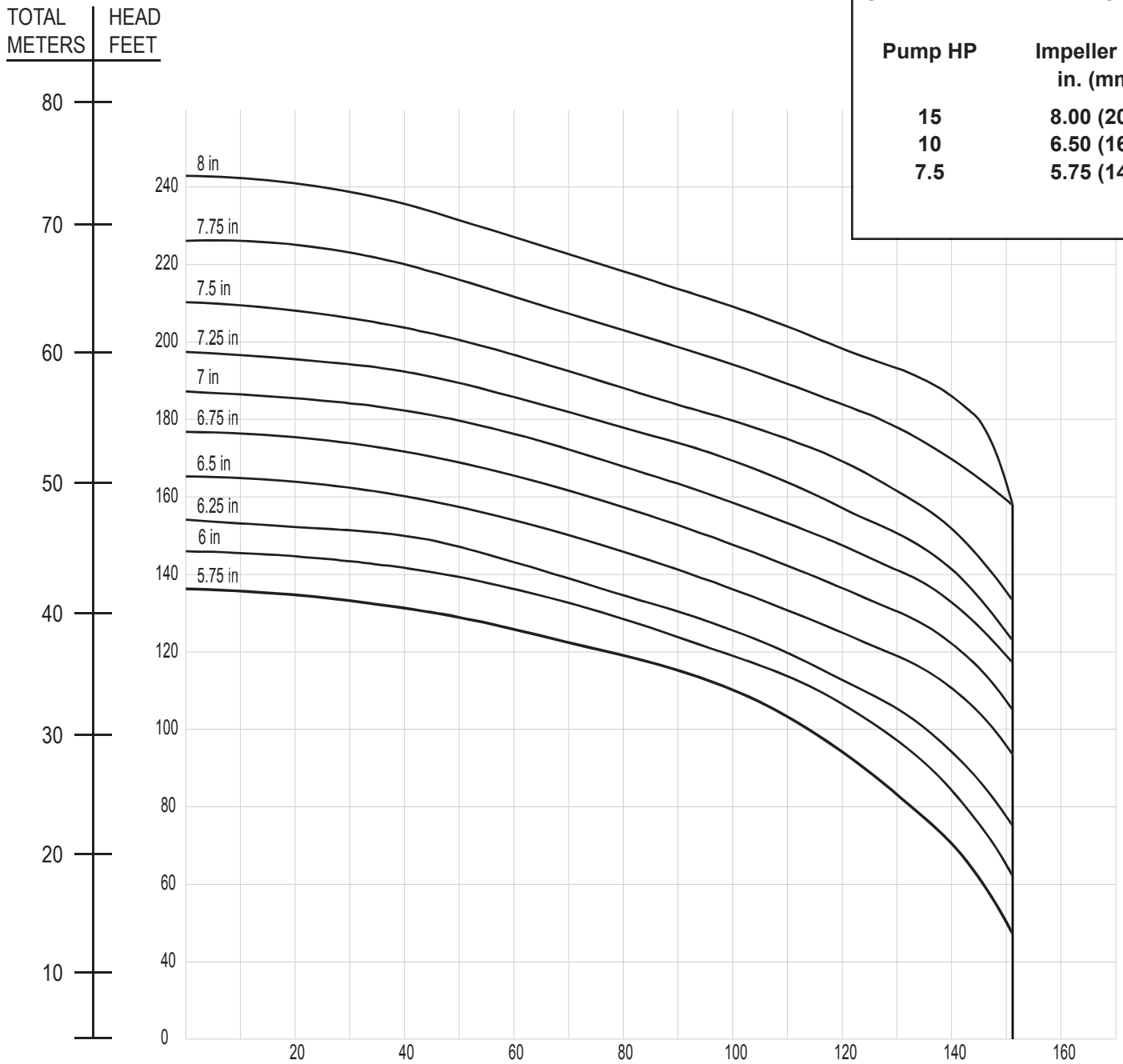


Testing is performed with water, specific gravity 1.0 @ 68° F @ (20°C), other fluids may vary performance

Submersible Grinder XP

STANDARD IMPELLER SIZES

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



U.S. GALLONS PER MINUTE

LITERS PER SECOND

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