

"QUALITY PUMPS SINCE 1939"

Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.

ZOELLER
PUMP CO.



SECTION: 2.40.025

FM1746

0409

Supersedes

0306

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www.zoeller.com

COMPARE THESE FEATURES

- FM listed motor for Class 1, Division 1, Group C & D environments.



WARNING Not for use in acidic, methanol, or ethyl acetate atmospheres.

- Non-clogging vortex impeller design bronze class 88-8-0-4.
- Stainless steel rotor shaft.
- Durable cast construction. Cast iron cover, motor adapter and pump housing. All cast iron class 30, 30000# tensile strength.
- 20 ft. UL Listed 5-wire (1 PH) or 8-wire (3 PH) neoprene cord. Extra cords lengths available in 25'-35'-50' length only. Sensor leads & power leads in one cord for easy installation.
- Stainless steel plate, bolts, handle, guard and float rod guide, switch arm and actuator assembly.
- Brass float and float rod.
- Threaded conduit connection for protecting cords in extra heavy duty applications: 1¼" NPT (nonauto); 1½" NPT (auto).
- Moisture sensors prewired in motor housing (requires indicator in panel).
- Zoeller custom panel with intrinsically safe relays and moisture indicator is required with nonautomatic units.
- 3 phase models available.
- Motor - 60 Hz, 3450 RPM, oil-filled, hermetically sealed, automatic reset thermal overload protected (3 phase requires circuit in control panel).
- Maximum temperature for effluent or dewatering 104°F (40°C).
- Shaft Seal - Stainless steel wetted parts, carbon & ceramic rotary face seal.
- Upper ball bearing and lower ball bearing running in bath of oil.
- Neoprene square ring seals.
- All X180 series pass ¾" spherical solids. Model X191 pump passes 5/8" spherical solids.
- Major width 13 5/16". Height 22" (Nonauto) & 24 15/16" (Auto).
- On point 19½"; off point 9¾" for automatic model.
- 1½" NPT discharge standard, 2" & 3" NPT flange available.
- 100% computerized testing and 100% tested submerged in water.
- Corrosion resistant powder coated epoxy finish, with stainless steel screws and handle.

Note: The sizing of effluent systems normally requires variable level float(s) controls and properly sized basins to achieve required pumping cycles or dosing timers with nonautomatic pumps.

X185 - X186 - X188 - X189 - X191

(For Pump Prefix Identification see News & Views 0052)

**HIGH HEAD
EXPLOSION PROOF**

SUBMERSIBLE

EFFLUENT

OR DEWATERING PUMP

1½" NPT DISCHARGE STANDARD

2" AND 3" NPT FLANGE AVAILABLE



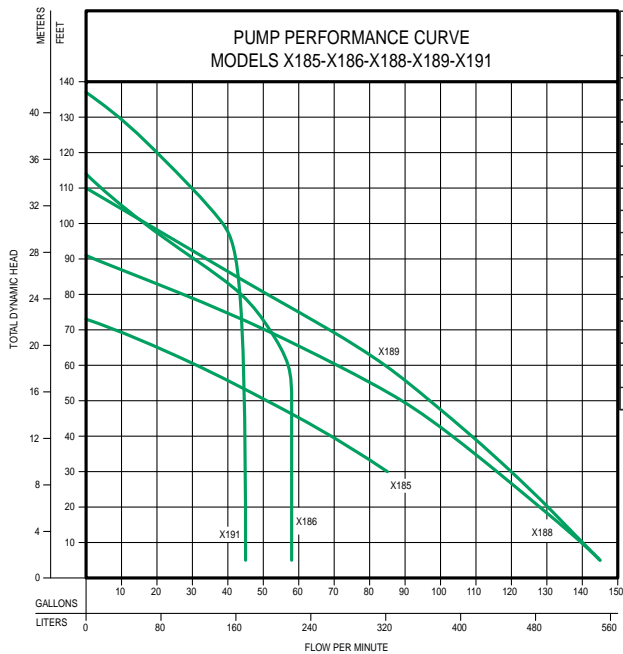
Automatic Model

Product may not be exactly as pictured.



Nonautomatic
Models for variable
level systems

*See back page For FM Listing.

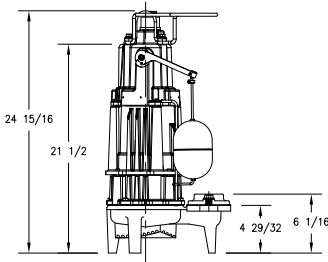
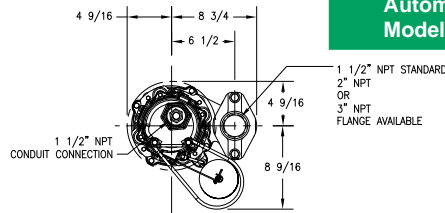


MODELS		X185		X186		X188		X189		X191	
Feet	Meters	Gal.	Liters	Gal.	Liters	Gal.	Liters	Gal.	Liters	Gal.	Liters
5	1.5	--	--	58	220	145	549	145	549	45	170
10	3.0	--	--	58	220	140	530	140	530	45	170
20	6.1	--	--	58	220	128	484	130.5	494	45	170
30	9.1	85	322	58	220	116	439	120	454	45	170
40	12.2	70	265	58	220	103.5	392	109	413	45	170
50	15.2	51	193	58	220	90	341	97	367	45	170
60	18.3	32	121	58	220	71	269	85	322	45	170
70	21.3	9	34	52	197	51	193	69	261	45	170
80	24.4	--	--	45	170	28	106	51	193	45	170
90	27.4	--	--	30.5	115	2	8	34	129	45	170
100	30.5	--	--	16	60	--	--	17	64	40	151
110	32	--	--	4	15	--	--	--	--	30	114
120	36.6	--	--	--	--	--	--	--	--	20	76
130	39.6	--	--	--	--	--	--	--	--	10	38
Shut-off Head		73 ft. (22m)		114 ft. (35m)		91 ft. (28m)		110 ft. (34m)		137 ft. (42m)	

009903

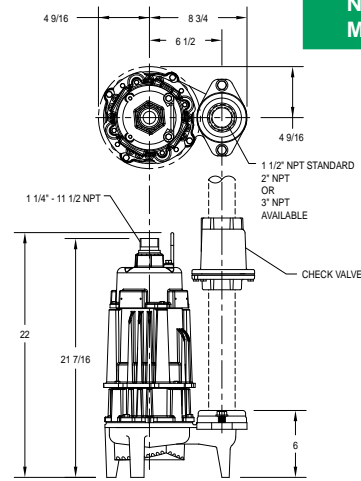
009920C

Automatic Model



SK2506

Nonautomatic Model



SK1912

185 MODELS		Control Selection					Listing
Single Seal	Volts - Ph	Mode	Amps	Simplex	Duplex	FM	
DX185	230 1	Auto	9.8	5	---	Y	
EX185	230 1	Non	9.8	1 & 3	1 & 3 or 2	Y	
HX185	200 1	Auto	11.5	5	---	Y	
IX185	200 1	Non	11.5	1 & 3	1 & 3 or 2	Y	
FX185	230 3	Non	7.4	1 & 3	1 & 3 or 2	Y	
JX185	200 3	Non	7.5	1 & 3	1 & 3 or 2	Y	
GX185	460 3	Non	3.7	1 & 3	1 & 3 or 2	Y	
BAX185	575 3	Non	3.3	1 & 3	1 & 3 or 2	Y	

Standard all models - 20 ft. cord - 1 HP

186 MODELS		Control Selection					Listing
Single Seal	Volts - Ph	Mode	Amps	Simplex	Duplex	FM	
DX186	230 1	Auto	13.7	5	---	Y	
EX186	230 1	Non	13.7	1 & 3	1 & 3 or 2	Y	
FX186	230 3	Non	9.2	1 & 3	1 & 3 or 2	Y	
GX186	460 3	Non	4.6	1 & 3	1 & 3 or 2	Y	

Standard all models - 20 ft. cord - 1 1/2 HP

188 MODELS		Control Selection					Listing
Single Seal	Volts - Ph	Mode	Amps	Simplex	Duplex	FM	
DX188	230 1	Auto	14.0	5	---	Y	
EX188	230 1	Non	14.0	1 & 3	1 & 3 or 2	Y	
HX188	200 1	Auto	16.8	5	---	Y	
IX188	200 1	Non	16.8	1 & 3	1 & 3 or 2	Y	
FX188	230 3	Non	8.9	1 & 3	1 & 3 or 2	Y	
JX188	200 3	Non	10.3	1 & 3	1 & 3 or 2	Y	
GX188	460 3	Non	4.6	1 & 3	1 & 3 or 2	Y	
BAX188	575 3	Non	3.5	1 & 3	1 & 3 or 2	Y	

Standard all models - 20 ft. cord - 1 1/2 HP

189 MODELS		Control Selection					Listing
Single Seal	Volts - Ph	Mode	Amps	Simplex	Duplex	FM	
DX189	230 1	Auto	17.1	5	---	Y	
EX189	230 1	Non	17.1	1 & 3	1 & 3 or 2	Y	
HX189	200 1	Auto	20.5	5	---	Y	
IX189	200 1	Non	20.5	1 & 3	1 & 3 or 2	Y	
FX189	230 3	Non	11.2	1 & 3	1 & 3 or 2	Y	
JX189	200 3	Non	13.2	1 & 3	1 & 3 or 2	Y	
GX189	460 3	Non	6.0	1 & 3	1 & 3 or 2	Y	
BAX189	575 3	Non	5.8	1 & 3	1 & 3 or 2	Y	

Standard all models - 20 ft. cord - 2 HP

191 MODEL		Control Selection					Listing
Single Seal	Volts - Ph	Mode	Amps	Simplex	Duplex	FM	
DX191	230 1	Auto	14.5	5	---	Y	
EX191	230 1	Non	14.5	1 & 3	1 & 3 or 2	Y	

Standard all models - 20 ft. cord - 2 HP

For information on additional Zoeller products refer to catalog on Variable level control switch, FM0526; Duplex and Simplex controls, FM1705; Mechanical Alternator, FM0495; Sump/Sewage Basins, FM0487; and Rail Systems, FM0787.

All installation of controls, protection devices and wiring should be done by a qualified licensed electrician. All electrical and safety codes should be followed including the most recent National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA).

CAUTION

1. See FM1705 for correct intrinsically safe simplex or duplex panel.
2. Mechanical alternator "M-Pak" 10-0076 or 10-0077 (See FM0495).
3. Variable level control switch used as a control activator. Quantity required dependent upon panel selection.
4. Prepackaged "913" and "914" system (See FM1783).
5. Integral float operated mechanical switch. No External control required. Seal failure indicator panel (10-1031) required for moisture sensors.

RESERVE POWERED DESIGN

For unusual conditions a reserve safety factor is engineered into the design of every Zoeller pump.

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