

Trusted. Tested. Tough.®



SECTION: Z1.10.400
ZM1373
0524
Supersedes
1223

MAIL TO: P.O. BOX 16347 • Louisville, KY 40256-0347
SHIP TO: 3649 Cane Run Road • Louisville, KY 40211-1961
Tel: (502) 778-2731 • 1 (800) 928-PUMP

Visit our website:
zoellerengineered.com

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



6180 SERIES COMMERCIAL EFFLUENT PUMPS TECHNICAL DATA



| | <input type="checkbox"/> 6186 | <input type="checkbox"/> 6188 | <input type="checkbox"/> 6189 |
|---|---|---|---|
| PUMP NAME PLATE HORSEPOWER: | 1.5 HP | 1.5 HP | 2 HP |
| SOLID SIZE: in (mm) | 3/4" (19mm) | 3/4" (19mm) | 3/4" (19mm) |
| MINIMUM HEAD: ft. (m) | 5.0' (1.5m) | 5.0' (1.5m) | 5.0' (1.5m) |
| MAXIMUM HEAD: ft. (m) | 114' (34.7m) | 91' (27.7m) | 110' (33.5m) |
| MAX.FLOW GPM (L/min) @ MIN. HEAD ft. (m) | 58 GPM @ 5' (229 L/min @ 1.5m) | 145 GPM @ 5' (549 L/min @ 1.5m) | 145 GPM @ 5' (549 L/min @ 1.5m) |
| DISCHARGE SIZE: VERTICAL FEMALE | <input type="checkbox"/> 1-1/2" <input type="checkbox"/> 2" <input type="checkbox"/> 3" NPT | <input type="checkbox"/> 1-1/2" <input type="checkbox"/> 2" <input type="checkbox"/> 3" NPT | <input type="checkbox"/> 1-1/2" <input type="checkbox"/> 2" <input type="checkbox"/> 3" NPT |

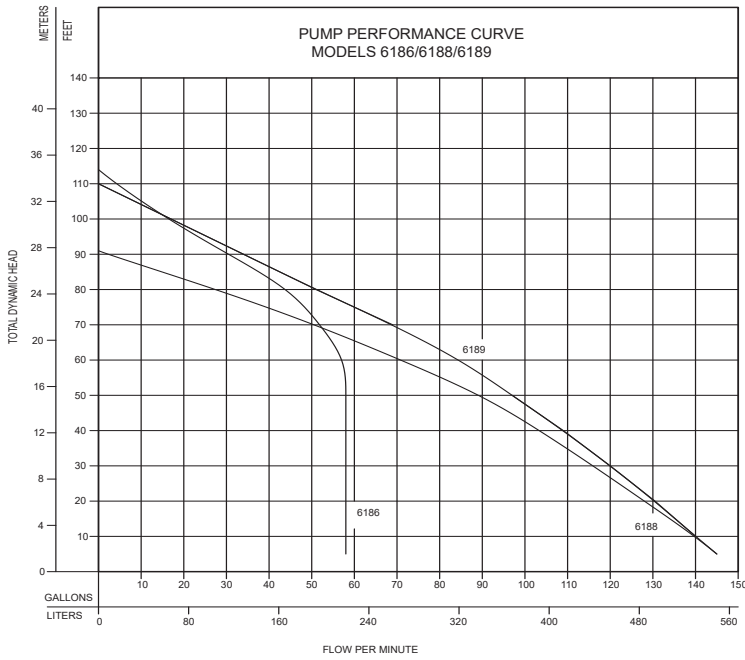
| | | | | |
|----------------------------------|----------------------|---|---|-----------------|
| PUMP NET WEIGHT: lbs (kg) | 89-94 lbs (40-43 kg) | MOTOR TYPE: | SUBMERSIBLE | |
| SERVICE FACTOR: | 1.0 | TYPE SOW POWER CORD LENGTH: ft (m) | 25' (7.62m) <input type="checkbox"/> 50' (15.24m) | |
| MOTOR DESIGN LETTER: | NEMA B | MOTOR SHAFT: | 416 S.S. | |
| IMPELLER TYPE: | CAST IRON VORTEX | STATOR AND LEAD WIRES INSULATION: | 6185 | CLASS B |
| | | | 6186 - 6189 | CLASS F |
| SQUARE RINGS: | VITON | MAXIMUM STATOR TEMPERATURE: | CLASS B | 266 °F (130 °C) |
| RPM: | 3450 | | CLASS F | 311 °F (155 °C) |

| | | |
|--|--|--|
| SHAFT SEAL CONSTRUCTION: | STANDARD | UPPER-CARBON/CERAMIC, LOWER-SILICON CARBIDE/ CARBON |
| | OPTIONAL <input type="checkbox"/> UPPER <input type="checkbox"/> LOWER | <input type="checkbox"/> SILICON CARBIDE / SILICON CARBIDE <input type="checkbox"/> SILICON CARBIDE / SILICON CARBIDE |
| MOTOR THERMAL SHUTOFF: | STANDARD (Single Phase Only) | THERMAL OVERLOAD WITH AUTOMATIC RESET |
| MOISTURE DETECTION: | <input type="checkbox"/> OPTIONAL* | MOISTURE SENSING PROBES |
| MINIMUM RECOMMENDED FLUID LEVEL: in (m) | | 10" (0.25m) |
| MAXIMUM WATER TEMPERATURE: | | 130 °F (54 °C) 120 °F (49 °C) FOR WD6189 |

*Requires a circuit in control panel to function.

| MODEL | HP | 200V/1PH | | <input type="checkbox"/> 230V/1PH | | <input type="checkbox"/> 200V/3PH | | <input type="checkbox"/> 230V/3PH | | <input type="checkbox"/> 460V/3PH | |
|-------------------------------|-------|----------|------|-----------------------------------|-----|-----------------------------------|-----|-----------------------------------|-----|-----------------------------------|-----|
| | | FLA | LRA | FLA | LRA | FLA | LRA | FLA | LRA | FLA | LRA |
| <input type="checkbox"/> 6186 | 1-1/2 | 17.2 | 48.3 | 13.7 | 38 | 10.3 | 42 | 9.2 | 35 | 4.6 | 18 |
| <input type="checkbox"/> 6188 | 1-1/2 | 16.8 | 48.3 | 14.0 | 38 | 10.3 | 42 | 8.9 | 35 | 4.6 | 18 |
| <input type="checkbox"/> 6189 | 2 | 20.5 | 48.3 | 17.1 | 38 | 13.2 | 42 | 11.2 | 35 | 6.0 | 18 |

Refer to reverse side for Head/Capacity Performance Curves



**TOTAL DYNAMIC HEAD/FLOW
PER MINUTE
EFFLUENT AND DEWATERING**

| MODELS | | 6186 | | 6188 | | 6189 | |
|---------------|--------|---------------|--------|--------------|--------|---------------|--------|
| Feet | Meters | Gal. | Liters | Gal. | Liters | Gal. | Liters |
| 5 | 1.5 | 58 | 220 | 145 | 549 | 145 | 549 |
| 10 | 3.0 | 58 | 220 | 140 | 530 | 140 | 530 |
| 20 | 6.1 | 58 | 220 | 128 | 484 | 130.5 | 494 |
| 30 | 9.1 | 58 | 220 | 116 | 439 | 120 | 454 |
| 40 | 12.2 | 58 | 220 | 103.5 | 392 | 109 | 413 |
| 50 | 15.2 | 58 | 220 | 90 | 341 | 97 | 367 |
| 60 | 18.3 | 58 | 220 | 71 | 269 | 85 | 322 |
| 70 | 21.3 | 52 | 197 | 51 | 193 | 69 | 261 |
| 80 | 24.4 | 45 | 170 | 28 | 106 | 51 | 193 |
| 90 | 27.4 | 30.5 | 115 | 2 | 8 | 34 | 129 |
| 100 | 30.5 | 16 | 60 | -- | -- | 17 | 64 |
| 110 | 32 | 4 | 15 | -- | -- | -- | -- |
| 120 | 36.6 | -- | -- | -- | -- | -- | -- |
| 130 | 39.6 | -- | -- | -- | -- | -- | -- |
| Shut-off Head | | 114 ft. (35m) | | 91 ft. (28m) | | 110 ft. (34m) | |

009903

CAUTION Model 6185 should not be operated below 30' TDH

| Standard all models - 25 ft. cord - 1.5 HP | | | | |
|--|-------------------|----|------|----------------------|
| 6186 MODELS | Control Selection | | | Listings c CSA us |
| | Volts | PH | Amps | |
| *E6186 | 230 | 1 | 13.7 | Yes |
| I6186 | 200 | 1 | 17.2 | Yes |
| J6186 | 200 | 3 | 10.3 | Yes |
| F6186 | 230 | 3 | 9.2 | Yes |
| G6186 | 460 | 3 | 4.6 | Yes |

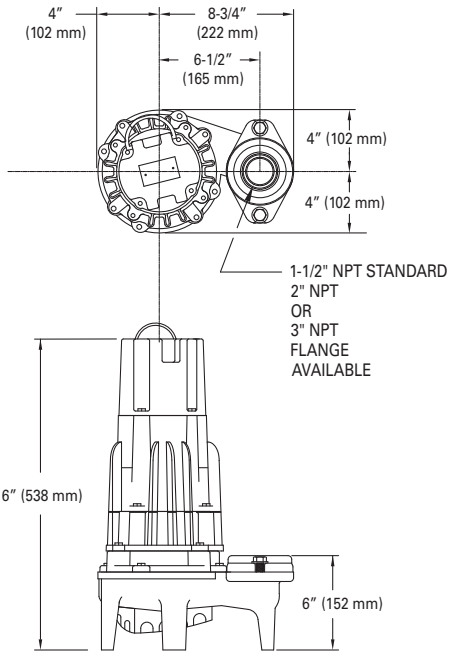
| Standard all models - 25 ft. cord - 1.5 HP | | | | |
|--|-------------------|----|------|----------------------|
| 6188 MODELS | Control Selection | | | Listings c CSA us |
| | Volts | PH | Amps | |
| *E6188 | 230 | 1 | 14.0 | Yes |
| I6188 | 200 | 1 | 16.8 | Yes |
| J6188 | 200 | 3 | 10.3 | Yes |
| F6188 | 230 | 3 | 8.9 | Yes |
| G6188 | 460 | 3 | 4.6 | Yes |

| Standard all models - 25 ft. cord - 2 HP | | | | |
|--|-------------------|----|------|----------------------|
| 6189 MODELS | Control Selection | | | Listings c CSA us |
| | Volts | PH | Amps | |
| *E6189 | 230 | 1 | 17.1 | No ⁽¹⁾ |
| *WD6189 | 230 | 1 | 17.1 | No |
| I6189 | 200 | 1 | 20.5 | Yes |
| J6189 | 200 | 3 | 13.2 | Yes |
| F6189 | 230 | 3 | 11.2 | Yes |
| G6189 | 460 | 3 | 6.0 | Yes |

(1) Factory shipped with 20 amp plug.
* Molded plug

CAUTION

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 Electric Code (NEC) and the Occupational Safety and Health Act (OSHA).



SK1413

FEATURES

- Durable epoxy coated cast iron construction
- Motor 1.5-2 HP, 60 Hz, 3450 RPM, 1 PH or 3 PH, oil-filled, hermetically sealed, automatic reset, thermal overload protected (1 PH)
- Bearings - upper and lower ball bearings
- Stainless steel motor shaft
- Dual mechanical shaft seals - upper carbon/ceramic, lower silicon carbide/carbon. Optional seal materials available
- Viton square ring seals
- Impeller - non-clogging cast iron vortex design passes 3/4" spherical solids
- 25 foot listed 3 wire neoprene cord and plug.
- No screens to clog
- Stainless steel screws, bolts and handle
- 1-1/2" NPT discharge with 2" or 3" flange available
- Corrosion resistant powder coated epoxy finish
- Moisture sensors available for early warning of seal failure. (Optional)
- 100% computerized tested.