

SUBMITTAL DATA SHEET

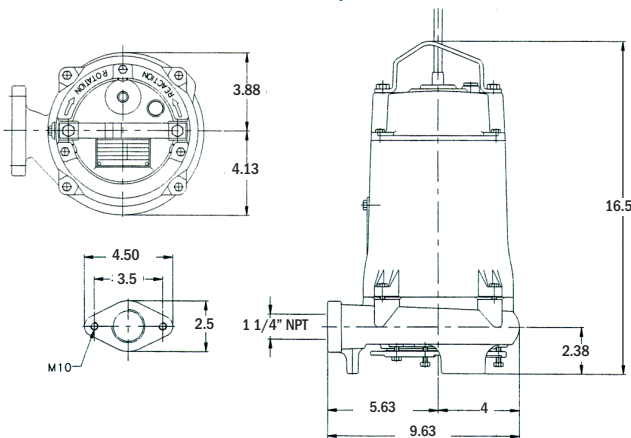
Waste Water Effluent | Sewage Ejectors | Grinders Effluent Pumps - 1/2 & 1 HP



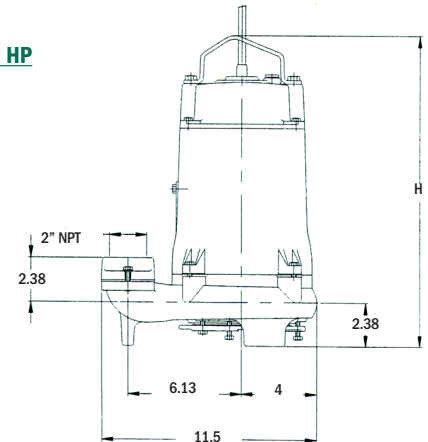
Rugged, cast iron construction with stainless steel fasteners and motor shaft submersible pumps for residential, commercial, municipal, and industrial applications. Single phase models are available 1/2 and 1 HP and three phase models come with 1 HP.

With the exclusive triple seal system, this pump offers three levels of sealing for outstanding reliability! A double mechanical seal located inside the oil chamber provides two full levels of sealing. An additional V-Ring type lip seal between the oil chamber and pump volute provides a third, extra level of sealing, and enhanced mechanical seal protection.

1/2 & 1 HP HH



1 HP



Effluent Pump Specifications

Model Number	Voltage	HP	Phase	Solids Size	Hertz	Speed (RPM)	Discharge	Weight	Cable Length (ft.)	Float Included
405011EFH	115	1/2	1	5/8"	60	3450	Horizontal NPT 1 1/4"	78	15	N
405012EFH	230	1/2	1	5/8"	60	3450	Horizontal NPT 1 1/4"	78	15	N
410012EF	208-230	1	1	3/4"	60	3450	Vertical NPT 2"	71	15	N
410032EF	208-230	1	3	3/4"	60	3450	Vertical NPT 2"	58	15	N
410034EF	460	1	3	3/4"	60	3450	Vertical NPT 2"	58	15	N
410012EFH	230	1	1	5/8"	60	3450	Horizontal NPT 1 1/4"	70	20	N

Cable Specifications

Model Number	Volts	Power Cable	Diameter	Length (Feet)	Outer Jacket
405011EFH	115 Volt	14/3 SJE00W	0.36IN (9.2MM)	20ft (6m)	Thermoplastic Elastomer
405012EFH	230 Volt	14/3 SJE00W	0.36IN (9.2MM)	20ft (6m)	Thermoplastic Elastomer
410012EF	230	14/3 SJE00W	0.36IN (9.2MM)	20ft (6m)	Thermoplastic Elastomer
410032EF	208-230	16/4 SE00W	0.43IN (10.9MM)	20ft (6m)	Thermoplastic Elastomer
410034EF	460	16/4 SE00W	0.43IN (10.9MM)	20ft (6m)	Thermoplastic Elastomer
410012EFH	230	14/3 SJE00W	0.36IN (9.2MM)	20ft (6m)	Thermoplastic Elastomer

- Maximum submergence, ft. - 30

- Maximum temp. of pumped fluid - (40°C) 104°F continuous, (50°C) 122°F intermittent

NO-LEAD: The weighted average of the wetted surface of this no-lead product contacted by consumable water contains less than one quarter of one percent (0.25%) lead.



A.Y. McDonald Mfg. Co.
P.O. Box 508
Dubuque, IA 52004-0508

Toll Free: 1-800-292-2737
Fax: 1-800-832-9296
Hours: 7:00 a.m. - 5:00 p.m., CST

sales@aymcdonald.com
www.aymcdonald.com

A.Y. McDonald considers the information on this assembly drawing correct when published. Item and option availability, including specifications, are subject to change without notice.

Submitted by:

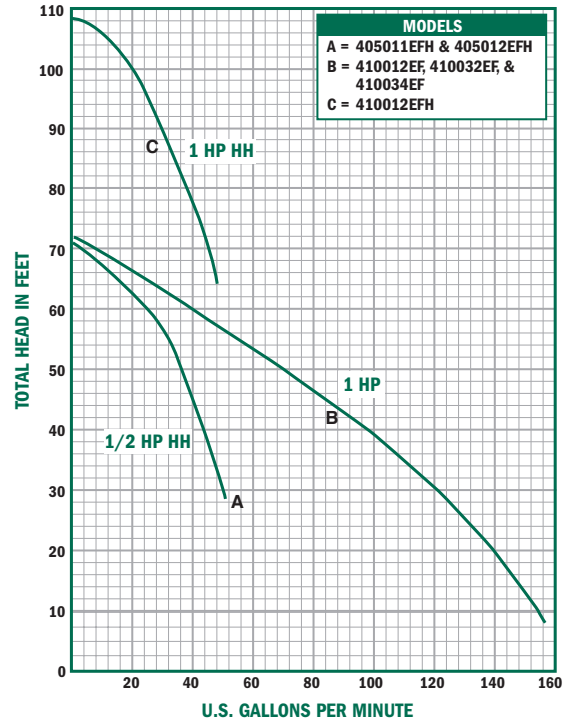
SUBMITTAL DATA SHEET

Waste Water Effluent | Sewage Ejectors | Grinders Effluent Pumps - 1/2 & 1 HP



Materials of Construction & Motor Specifications

Upper Motor Lid	Cast Iron ASTM A48 Class 30
Motor Housing	Cast Iron ASTM A48 Class 30
Oil Chamber	Cast Iron ASTM A48 Class 30
Volute	Cast Iron ASTM A48 Class 30
Bottom Plate	Cast Iron ASTM A48 Class 30
Impeller	Cast Iron ASTM A48 Class 30
Lifting Bail	AISI 304 Stainless Steel
Oil (motor & oil chamber)	Non-toxic white mineral oil (Marcol 52)
External Hardware	AISI 304 Stainless Steel
O-rings	Buna-N
Motor Shaft	AISI 420 Stainless Steel
Upper & Lower Bearing(s)	Single row ball bearing
Upper Shaft Seal (secondary)	Rotating carbon face w/ stationary ceramic face
Lower Shaft Seal (primary)	Rotating carbon face w/ stationary ceramic face Includes V-ring lip seal for lower seal protection.
Motor Design	NEMA design B, squirrel cage induction, oil filled, non toxic oil
Motor Type	Enclosed submersible
Insulation Class	Class B, rated at 248° F
Motor Protection	Single Phase: Internal thermal protection with automatic reset. Installer must provide circuit breaker for short circuit protection per N.E.C. standards. Three Phase: Installer must provide external motor overload protection device such as a contactor w/ thermal relay, and circuit breaker for short circuit protection per N.E.C. standards.
Service Factor	1.15
Voltage Tolerance	± 10% from name plate rating



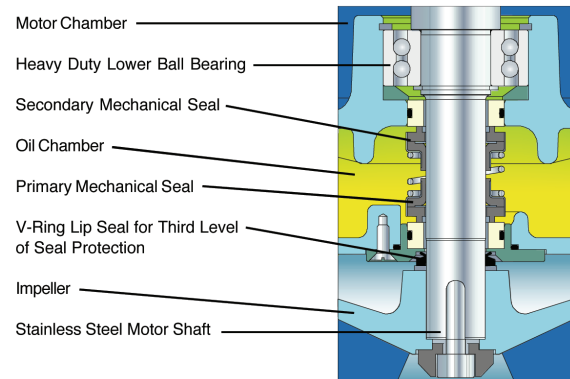
Motor Data, 60 Hz

Model Number	Phase	Rated Output BHP	Volts	Full Load Amps	Locked Rotor Amps	NEMA Code Letter	Pole/Speed (RPM)
405011EFH	1*	0.5	115	15.0	91	U	2/3450
405012EFH	1*	0.5	230	7.5	45.5	U	2/3450
410012EF	1*	1.0	230	13.0	45.5	M	2/3450
410032EF	3**	1.0	208-230	6.4-5.8	24-21.8	K	2/3450
410034EF	3**	1.0	460	2.9	10.9	K	2/3450
410012EFH	1	1.0	230	13.0	45.5	M	2/3450

* Start switch and capacitor integrated into top of pump.

** These three phase motors are tri-voltage, 208/230/460.

Triple Seal System



SUBMITTAL INFORMATION

- Unique triple seal design
- Patented Contra Block® impeller with adjustable wear plate system for clog-free operation
- Discharges: 1 1/4" on 1/2 HP and 1 HP High Head,
- 2" on 1 HP Standard Head
- High torque capacitor start single phase motors
- Oil-filled motors (non-toxic oil)
- Stainless steel open loop lifting bale for ease of removal

NO-LEAD: The weighted average of the wetted surface of this no-lead product contacted by consumable water contains less than one quarter of one percent (0.25%) lead.



A.Y. McDonald Mfg. Co.
P.O. Box 508
Dubuque, IA 52004-0508

Toll Free: 1-800-292-2737
Fax: 1-800-832-9296
Hours: 7:00 a.m. - 5:00 p.m., CST

sales@aymcdonald.com
www.aymcdonald.com

A.Y. McDonald considers the information on this assembly drawing correct when published. Item and option availability, including specifications, are subject to change without notice.

Submitted by: