



F SEWAGE/EFFLUENT SUBMERSIBLE PUMPS

FEATURE

- A precision manufactured motor is achieved by utilizing the highest standard of quality control. All rotors adopt heat treatment methods for drive shaft assembling, and stator winding impregnated with varnish that is heat dried in an industrial oven. The Water Resistance for Pump can reach IP68 Grade.
- HCP's professional assembly line, complimented with a synthesized production test, ensures the highest level of pump quality.
- Standard accessories include : cable with an epoxy resin sealed water-resistant cable base, AC thermal motor protector, dual mechanical seals and lip seal design.
- The F-05A is a practical pump, with an oil filled motor and single seal design (CA/CE).



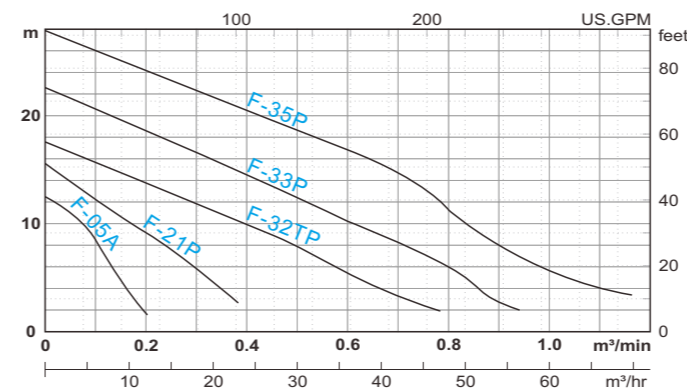
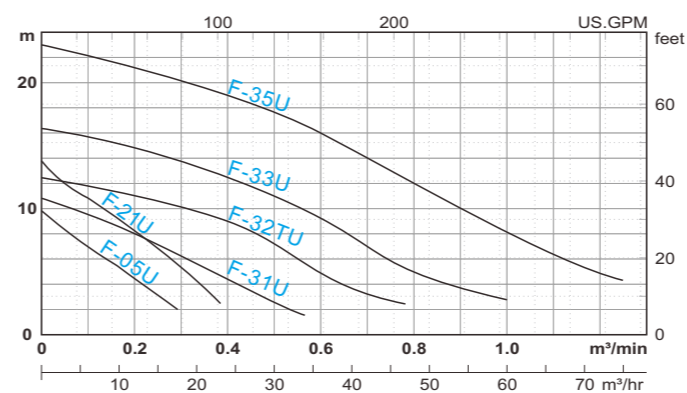
APPLICATIONS

- Drainage of sewage from the building basements, hotel industry, and waste water from factories.
- Drainage of sewage from industrial process factories.
- Emptying of septic tanks, cesspits and sewage pump stations.
- Pumping surface and drainage water from garages and sprinkler systems.

PRODUCT NOMENCLATURE

| | | | | |
|------|---|----------------|-------|---------------------|
| F | — | 05 | A | |
| Type | | HP | Style | |
| F | — | 2 | 1 | P |
| Type | | Discharge inch | HP | Impeller type (P/U) |

PERFORMANCE CURVES



PERFORMANCE SPEC.

| Model | HP(kW) | Discharge Inch(mm) | Phase Ø | Start Method | Standard | | Solid Passage mm(inch) | Weight kg(lb) | | Dimension (mm) | | | | |
|--------|----------|--------------------|---------|------------------|------------|----------|------------------------|---------------|---------|----------------|-----|-----|-------|-----|
| | | | | | m - m³/min | ft - GPM | | 1Ø | 3Ø | A | B | C | 10 3Ø | |
| F-05U | ½ (0.4) | 2" (50) | 1/3 | Capacitor Direct | 5.5 - 0.15 | 18 - 40 | 35 (1½") | 16 (35) | 15 (33) | 237 | - | 154 | 427 | 427 |
| F-21U | 1 (0.75) | 2" (50) | 1/3 | Capacitor Direct | 8 - 0.2 | 25 - 52 | 35 (1½") | 17 (38) | 16 (35) | 237 | - | 154 | 427 | 427 |
| F-31U | 1 (0.75) | 3" (80) | 1/3 | Capacitor Direct | 6 - 0.3 | 20 - 80 | 30 (1¼") | 18 (40) | 17 (38) | 278 | - | 173 | 457 | 457 |
| F-32TU | 2 (1.5) | 3" (80) | 1/3 | Capacitor Direct | 8.5 - 0.4 | 28 - 106 | 25 (1") | 38 (84) | 33 (73) | 408 | 270 | 258 | 610 | 530 |
| F-33U | 3 (2.2) | 3" (80) | 1/3 | Capacitor Direct | 11 - 0.5 | 35 - 132 | 25 (1") | 40 (88) | 34 (75) | 408 | 270 | 258 | 610 | 530 |
| F-35U | 5 (3.7) | 3" (80) | 3 | Direct | 16 - 0.6 | 52 - 158 | 25 (1") | - | 38 (84) | 465 | 351 | 258 | - | 545 |
| F-21P | 1 (0.75) | 2" (50) | 1/3 | Capacitor Direct | 9 - 0.2 | 30 - 52 | 22 (¾") | 18 (40) | 17 (38) | 276 | - | 235 | 460 | 460 |
| F-32TP | 2 (1.5) | 3" (80) | 1/3 | Capacitor Direct | 8.5 - 0.45 | 28 - 120 | 30 (1¼") | 38 (84) | 34 (75) | 408 | 270 | 258 | 610 | 530 |
| F-33P | 3 (2.2) | 3" (80) | 1/3 | Capacitor Direct | 10 - 0.6 | 32 - 158 | 30 (1¼") | 40 (88) | 34 (75) | 408 | 270 | 258 | 610 | 530 |
| F-35P | 5 (3.7) | 3" (80) | 3 | Direct | 17 - 0.6 | 55 - 158 | 35 (1½") | - | 37 (82) | 465 | 351 | 258 | - | 545 |
| F-05A | ½ (0.4) | 2" (50) | 1/3 | Capacitor Direct | 8 - 0.1 | 25 - 26 | 10 (½") | 12 (27) | 11 (24) | 226 | - | 161 | 352 | 350 |

Note: Weight Without Cable & Elbow Set
 Note: 3Phase U type Vortex impeller will cause higher amperage when operated in reverse direction

SPECIFICATIONS

| Discharge (mm) | | 50 • 80 |
|----------------|---|---|
| Limits Of Use | Liquid Temp. | 0~40°C (32~104°F) |
| | Applications | General wastewater • Sewage water and industrial waster |
| | Submersion Depth | 30m (100feet) |
| Type | Frequency | 60Hz |
| | Motor | 2P (3600RPM) • Dry Motor (F-05A: Oil Motor) |
| | Insulation | Class B |
| | Protection | IP68 |
| | Protector | Auto-cut (F-05A 3Ø: none, F-05A/U 1Ø: Overheat) |
| | Bearing | Ball Type |
| Material | M.seal | Double M.seals (F-05A: Single M.seal) |
| | Impeller | Semi-open |
| | Upper Cover | FC-200 |
| | Motor Frame | SUS304 |
| | Shaft End | SUS410(0.5~1HP) •SUS403 (2~3HP) |
| | M.seal | Upper: Carbon/Ceramic Lower: Silicon/Silicon (F-05A: Carbon/Ceramic) |
| | Casing | FC-200 |
| | Impeller | FC-200 (F-05A: PA) |
| Cable | VCT or H07RN-F or SJOW/SOW | |
| Optional | Pumps can be customized to fit specifications | |

