

# FLO FAB

FF  
F  
I

Go

With the  
**FLO**

## Submersible Pumps



[www.flofab.com](http://www.flofab.com)

Manufacturer of Pumps, Tanks, Heat Exchangers & Accessories  
for HVAC Market After-Sales Parts and Services

Submersible Pumps

FLO FAB INC  
LAKE WORTH,  
FLORIDA, USA



**FIGURE 1**

| Description  | Unit Value | Total Used |
|--|------------|------------|
| Bathroom Group, Consisting of Lavatory, Bathtub or Shower and(Direct Flush) Water Closet | 10         |            |
| Bathroom Group, Consisting of Lavatory, Bathtub or Shower and(Flush Tank) Water Closet   | 6          |            |
| Bathtub with 1 1/2" Trap   | 2          |            |
| Bathtub with 2" Trap   | 3          |            |
| Bidet with 1 1/2" Trap   | 3          |            |
| Dental unit or Cuspidor  | 1          |            |
| Drinking Fountain  | 1          |            |
| Dishwasher (Domestic Type)   | 2          |            |
| Kitchen Sink (Domestic)  | 2          |            |
| Kitchen Sink (Domestic) with Waste Grinder   | 3          |            |
| Lavatory with 1 1/2" Trap  | 1          |            |
| Lavatory Barber or Beauty Shop   | 2          |            |
| Laundry Tray (2 compartments)  | 2          |            |
| Shower Tall  | 2          |            |
| Shower Group per head  | 3          |            |
| Sink (Direct Flush Valve)  | 7          |            |
| Sink (Service Type with Floor Drain)   | 3          |            |
| Sink (Scullery)  | 4          |            |
| Sink (Surgeons)  | 3          |            |
| Urinal (with Flush Valve)  | 8          |            |
| Urinal (with Flush Tank)   | 4          |            |
| Water Closet (Flush Valve)   | 7          |            |
| Water Closet (Flush Tank)  | 3          |            |
| Swimming Pools (per 1000 Gal.)   | 1          |            |
| Unlisted Fixture with 1 1/4" Trap  | 2          |            |
| Unlisted Fixture with 1 1/2" Trap  | 3          |            |
| Unlisted Fixture with 2" Trap  | 4          |            |
| Unlisted Fixture with 2 1/2" Trap  | 5          |            |
| Unlisted Fixture with 3" Trap  | 6          |            |
| Unlisted Fixture with 4" Trap  | 7          |            |
| Water Softener (Domestic)  | 4          |            |
| Washing Machine  | 2          |            |
| Total  |            |            |

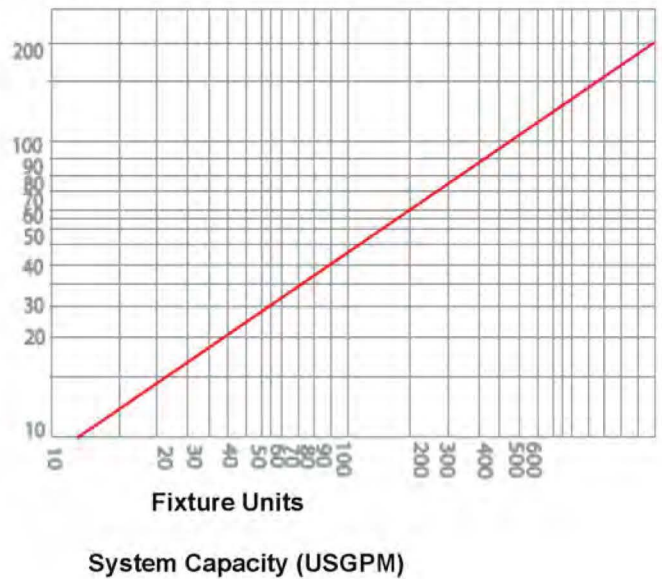
## SYSTEM CAPACITY

The System Capacity refers to the rate of flow in US Gallons Per Minute (USGPM) necessary to efficiently maintain the system. The "Fixture Unit" (figure 1) method is suggested for determining this figure. This approach assigns a relative value to each fixture or group of fixtures normally encountered. Determination of the required System Capacity is as follows:

1) List all fixtures involved in the installation and using Figure 1 assign a Fixture Unit value to each. Add to obtain the total.

2) Referring to Figure 2 locate the total Fixture Unit amount along the horizontal axis of the graph and follow vertically until intersecting the plotted line. Read the System Capacity in USGPM along the vertical axis.

**FIGURE 2**





## How to Select a Pump Model

SUBMITTAL DATA SHEET  
 ISSUE DATE: MAY 2008  
 REVISION DATE: MAY 2008

### EXAMPLE

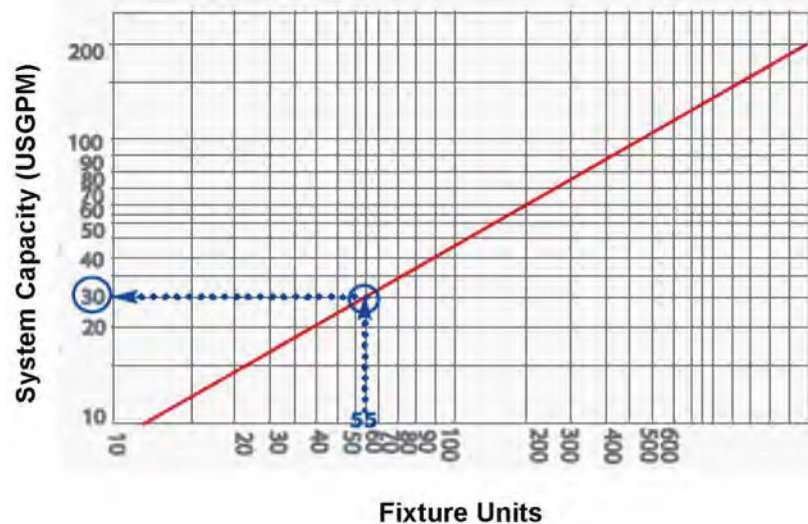
What Pump Capacity would be required to handle the drainage from a 4 bathroom home, also including a dishwasher, a washer, a laundry tray, a kitchen sink, a water softener, a basement shower, a 13 000 gallon pool and a bar sink with a 1 1/2" Trap?

1) From Figure 1

| Description   | Unit Value | Total Used |
|---|------------|------------|
| Bathroom Group, Consisting of Lavatory, Bathtub or Shower and(Flush Tank) | 6          | 24         |
| Dishwasher (Domestic Type)  | 2          | 2          |
| Kitchen Sink (Domestic)   | 2          | 2          |
| Laundry Tray (2 compartments)   | 2          | 2          |
| Shower Tall   | 2          | 2          |
| Swimming Pools (per 1000 Gal.)  | 1          | 13         |
| Bar Sink (Unlisted with 1 1/2" Trap)                                      | 3          | 3          |
| Water Softener (Domestic)   | 4          | 4          |
| Washing Machine   | 2          | 2          |
|   | Total      | 55         |

Find 55 Fixture Units on the horizontal axis. Follow Vertically until intersecting the plotted line then horizontally to the left. The Pump Capacity on the vertical axis is 30 USGPM.

2) Refer to Figure 2





| MODELS         | PICTURES | DESCRIPTION                       | OUTLET |       | Elec. MOTOR |          | FULL LOAD CURRENT |           | MAX. HEAD |      | MAX. CAPACITY |       |
|----------------|----------|-----------------------------------|--------|-------|-------------|----------|-------------------|-----------|-----------|------|---------------|-------|
|                |          |                                   | mm     | in    | kw          | Hp       | 115 volt          | 575 volt  | m         | ft.  | l/min.        | USGPM |
| LB-25-33-0.16  |          | SUBMERSIBLE EFFLUENT PUMP         | 40     | 1 1/2 | 0.25        | 1/3      | 3.5 amp.          |           | 9.5       | 31   | 200           | 53    |
| LB-40-50-0.16  |          |                                   | 50     | 2     | 0.4         | 1/2      | 5 amp             | .57 amp.  | 12        | 39   | 240           | 63    |
| LB-75-1-0.24   |          |                                   | 50     | 2     | 0.4         | 1/2      | 10 amp.           | 1.14 amp. | 16        | 53   | 280           | 74    |
| LB-215-2-0.32  |          |                                   | 50     | 2     | 0.75        | 1.00     | N/A               | 2.3 amp.  | 22        | 72   | 450           | 119   |
| *LB-315-2-0.32 |          |                                   | 80     | 3     | 0.75        | 1.00     | N/A               | 2.3 amp.  | 16        | 53   | 650           | 175   |
| LBV-40-50-0.6  |          | EFFLUENT AND SEWAGE PUMP          | 50     | 2     | 0.4         | 1/2      | 5 amp             | .57 amp.  | 8         | 26.2 | 240           | 63    |
| LBV-75-1-1.1   |          |                                   | 50     | 2     | 0.4         | 1/2      | 10 amp.           | 1.14 amp. | 14        | 46   | 280           | 79    |
| LBV-215-2-1.3  |          |                                   | 50     | 2     | 0.75        | 1.00     | N/A               | 2.3 amp.  | 18        | 59   | 600           | 159   |
| *LBV-315-2-1.3 |          |                                   | 80     | 3     | 0.75        | 1.00     | N/A               | 2.3 amp.  | 16        | 53   | 600           | 159   |
| LBK-75         |          | NON-CLOG EFFLUENT END SEWAGE PUMP | 50     | 2     | 0.4         | 1/2      | 10 amp            | 2.3 amp.  | 10        | 33   | 500           | 125   |
| LBK-215-2-1.8  |          |                                   | 50     | 2     | 0.75        | 1.00     | N/A               | 2.3 amp.  | 18        | 59   | 700           | 185   |
| *LBK-315-2-1.8 |          |                                   | 80     | 3     | 0.75        | 1.00     | N/A               | 1.4 amp.  | 16        | 53   | 700           | 185   |
| FBV-322-3-2.2  |          | SEWAGE VORTEX PUMP                | 80     | 3     | 1.5         | 2.00     | N/A               | 3.42 amp. | 17        | 56   | 1000          | 264   |
| FBV-337-5-2.2  |          |                                   | 80     | 3     | 2.25        | 3.00     | N/A               | 5.7 amp.  | 20        | 66   | 1200          | 317   |
| *FBV-437-5-2.2 |          |                                   | 100    | 4     | 2.25        | 3.00     | N/A               | 5.7 amp.  | 20        | 66   | 1200          | 317   |
| PD-250         |          | MULTI-PURPOSE DRAINAGE PUMP       | 40     | 1 1/2 | 0.25        | 1/3      | 3.5               | N/A       | 11        | 36   | 200           | 53    |
| PD-237         |          |                                   | 50     | 2     | 3.7         | 5.00     | N/A               | 5.7 amp.  | 36        | 118  | 500           | 132   |
| PD-337         |          |                                   | 80     | 3     | 3.7         | 5.00     | N/A               | 5.7 amp.  | 30        | 99   | 900           | 238   |
| PD-437         |          |                                   | 100    | 4     | 3.7         | 5.00     | N/A               | 5.7 amp.  | 18        | 59   | 1500          | 396   |
| PD-355         |          |                                   | 80     | 3     | 5.5         | 5.00     | N/A               | 8.6 amp.  | 32        | 105  | 1200          | 317   |
| PD-455         | 100      | 4                                 | 5.5    | 5.00  | N/A         | 8.6 amp. | 22                | 72        | 1700      | 449  |               |       |
| PD-475         |          | MULTI-PURPOSE DRAINAGE PUMP       | 100    | 4     | 7.5         | 10.00    | N/A               | 11.5 amp. | 42        | 139  | 1600          | 423   |
| PD-675         |          |                                   | 150    | 6     | 7.5         | 10.00    | N/A               | 11.5 amp. | 31        | 102  | 2200          | 581   |
| PD-4110        |          |                                   | 100    | 4     | 11          | 15.00    | N/A               | 17.2 amp. | 51        | 163  | 1700          | 449   |
| PD-6110        |          |                                   | 150    | 6     | 11          | 15.00    | N/A               | 17.2 amp. | 32        | 105  | 2500          | 660   |
| FGC-015        |          | SEWAGE GRINDER PUMP               | 32     | 1 1/4 | 1.5         | 2.00     | N/A               | 2.31 amp. | 25        | 82   | 230           | 61    |
| FGC-022        |          |                                   | 32     | 1 1/4 | 2.2         | 3.00     | N/A               | 3.30 amp. | 30        | 98   | 230           | 61    |
| FGC-037        |          |                                   | 65     | 2 1/2 | 3.7         | 5.00     | N/A               | 6.00 amp. | 25        | 82   | 750           | 180   |
| FGC-055        |          |                                   | 65     | 2 1/2 | 5.6         | 7.50     | N/A               | 8.40 amp. | 30        | 98   | 750           | 180   |

• Voltage: 1 phase - 115 volts, 3 phase - 575 volts

• 2", 3" & 4" (50, 80 & 100 mm) guide rail pedestals are available upon request

• Auto float switch for water level control is available for single phase pumps up to 1.5 kw (2 Hp) upon request

\*\* Please note that all specifications, dimensions and/or designs of pumps of this brochure, may change without prior notice. \*\*





- Simplex
- Duplex
- Triplex

SUBMITTAL DATA SHEET  
 ISSUE DATE: MAY 2008  
 REVISION DATE: MAY 2008

|                          | MODELS | DISCHARGE | SOLID |
|--------------------------|--------|-----------|-------|
| <input type="checkbox"/> | FS-400 | 2"        | 3/8"  |

**PUMP SPECIFICATIONS:**

- DISCHARGE:** Vertical
- IMPELLER:** 2 vanes open with pump out vanes on back side.
- SHAFT SEAL:** Double mechanical seals (Tungsten on Carbon) in oil chamber for exceptional durability.
- VOLUTE:** Stainless Steel 304
- MOTOR HOUSING:** Stainless Steel 410 motor shaft
- SEAL PLATE:** Stainless Steel.
- SQUARE RING:** BUNA-N. NBR Volute Liner
- HARDWARE:** Stainless Steel.
- SUITABLE FOR:** 104°F (40°C) Liquids.
- STANDARD EQUIPMENT:** All models equipped with legs and 20' (6m) of cable. Single phase size 14/3 type SJOW. Three phase size 14/4 type SOW.
- STRAINER:** Stainless Steel 304

**MOTOR SPECIFICATIONS:**

- SINGLE PHASE:** Air motor with overload protection in motor.
- THREE PHASE:** Air motor, overload protection required in magnetic starter.
- INSULATION:** Class-B
- SHAFT:** 5/8" (16mm) dia., 416 Stainless Steel.
- LOWER BEARING:** Ball, oil lubricated.
- TOP BEARING:** Ball, oil lubricated.

**OPTIONAL EQUIPMENT:**

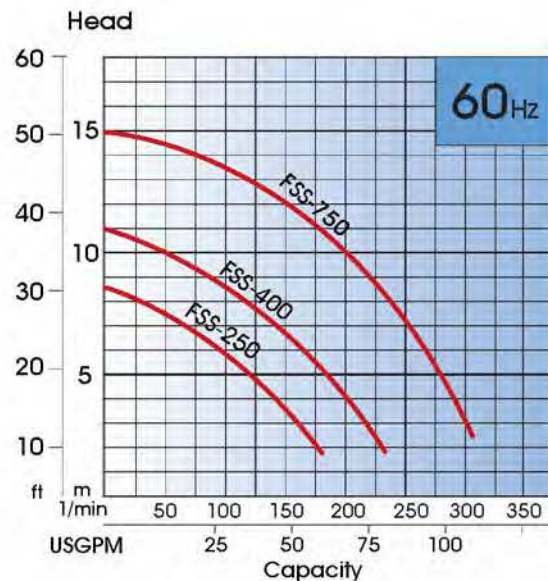
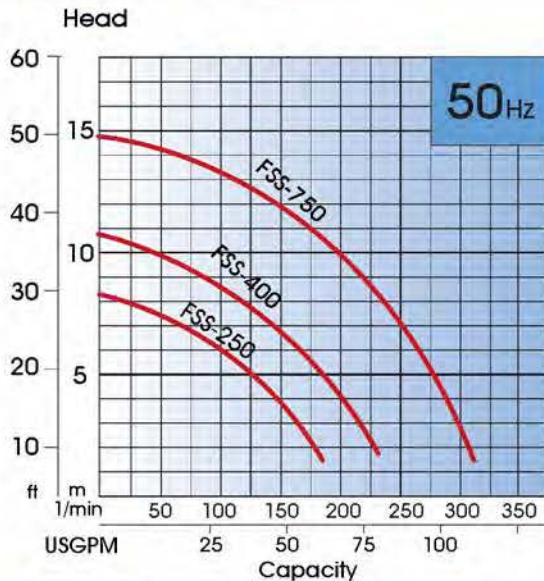
- High temp winding and seal Liquides 190°F
- Slide away coupling
- Impeller trims

## Applications

- a. Abrasion & corrosion resistance for sea water transfer and various irrigation purposes.
- b. Food and beverage processing, chemical transfer or drainage of sump containing chemicals.
- c. Wastewater discharge for households, industries, and small municipalities.
- d. Construction sites & civil engineering projects incl.: subways, tunnels, dams.
- e. Utilities: telecommunications, power generation plants.



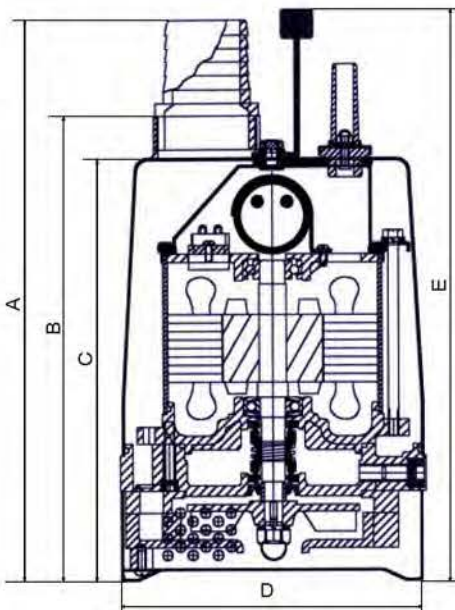
## Performance Curve



## Technical Specifications

| Type    | Outlet |       | Output |     | Voltage<br>1 & 3 p | Nor.Head |    | Nor.Capa. |       | Max.Head |    | Max.Capa |       | Solid Pass. |      | Weight |    |
|---------|--------|-------|--------|-----|--------------------|----------|----|-----------|-------|----------|----|----------|-------|-------------|------|--------|----|
|         | mm     | inch  | watt.  | hp  |                    | m        | ft | l/min     | USgpm | m        | ft | l/min    | USgpm | mm          | inch | kg     | lb |
| FSS-250 | 40     | 1 1/2 | 250    | 1/3 | 110/220v           | 6        | 20 | 100       | 26    | 8.5      | 28 | 200      | 53    | 6           | 0.24 | 12     | 26 |
| FSS-400 | 50     | 2     | 400    | 1/2 | 110-220v           | 7        | 23 | 140       | 37    | 11       | 36 | 240      | 63    | 6           | 0.24 | 12     | 26 |
| FSS-750 | 50     | 2     | 750    | 1   | 575v               | 10       | 33 | 200       | 53    | 15       | 49 | 320      | 85    | 8           | 0.32 | 15     | 33 |

## Dimensions



## Main parts description

- . Epoxy sealed watertight cable gland and waterproof joints.
- . Stainless steel 304 outer case, motor cover, and motor casing.
- . Stainless steel 410 motor shaft
- . Non-toxic rubber latex volute liner
- . Stainless steel casting impeller
- . Stainless steel inlet plate
- . Stainless steel 304 strainer

| Type    | A   |      | B   |      | C   |      | D   |      | E   |      |
|---------|-----|------|-----|------|-----|------|-----|------|-----|------|
|         | mm  | Inch | mm  | Inch | mm  | Inch | mm  | Inch | mm  | Inch |
| FSS-250 | 332 | 13   | 276 | 10.8 | 250 | 9.8  | 179 | 7.0  | 338 | 13.3 |
| FSS-400 | 332 | 13   | 276 | 10.8 | 250 | 9.8  | 179 | 7.0  | 338 | 13.3 |
| FSS-750 | 359 | 14   | 303 | 11.9 | 277 | 10.9 | 179 | 7.0  | 359 | 14.1 |





- Simplex
- Duplex
- Triplex

SUBMITTAL DATA SHEET  
 ISSUE DATE: MAY 2008  
 REVISION DATE: MAY 2008

|                          | MODELS | DISCHARGE | SOLID |
|--------------------------|--------|-----------|-------|
| <input type="checkbox"/> | FS-237 | 2"        | 0.4"  |
| <input type="checkbox"/> | FS-337 | 3"        | 0.4"  |
| <input type="checkbox"/> | FS-437 | 4"        | 0.4"  |
| <input type="checkbox"/> | FS-355 | 3"        | 0.4"  |
| <input type="checkbox"/> | FS-455 | 4"        | 0.4"  |

**PUMP SPECIFICATIONS:**

DISCHARGE : Vertical Cast Iron

IMPELLER : 2 vanes open with pump  
out vanes on back side.

SHAFT SEAL : Double mechanical seals  
(Tungsten on Carbon)  
in oil chamber for exceptional durability.

VOLUTE : Cast Iron, ASTM A-48, Class 30.

MOTOR HOUSING : Stainless Steel 304.

SEAL PLATE : Cast Iron, ASTM A-48, Class 30.

SQUARE RING : BUNA-N.

HARDWARE : Stainless Steel.

SUITABLE FOR : 104 °F (40 °C) Liquids.

STANDARD EQUIPMENT : All models equipped with strainer and  
33" (10m) of cable. Three phase size  
14/4 type SOW.

**MOTOR SPECIFICATIONS:**

SINGLE PHASE : Air motor with overload protection in motor.

THREE PHASE : Air motor, overload protection  
required in magnetic starter.

INSULATION : Class-B

SHAFT : 5/8 " (16mm) dia., 416 Stainless Steel.

LOWER BEARING : Ball, oil lubricated.

TOP BEARING : Ball, oil lubricated.

**OPTIONAL EQUIPMENT:**

- Additional cable
- Impeller trims
-



### SPECIFICATION DATA

Single phase pumps available with a liquid level control for automatic operation.

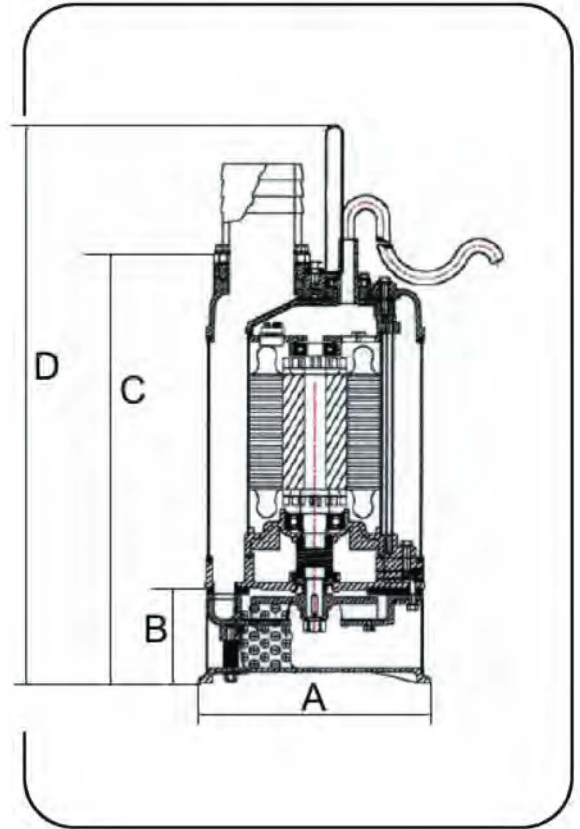
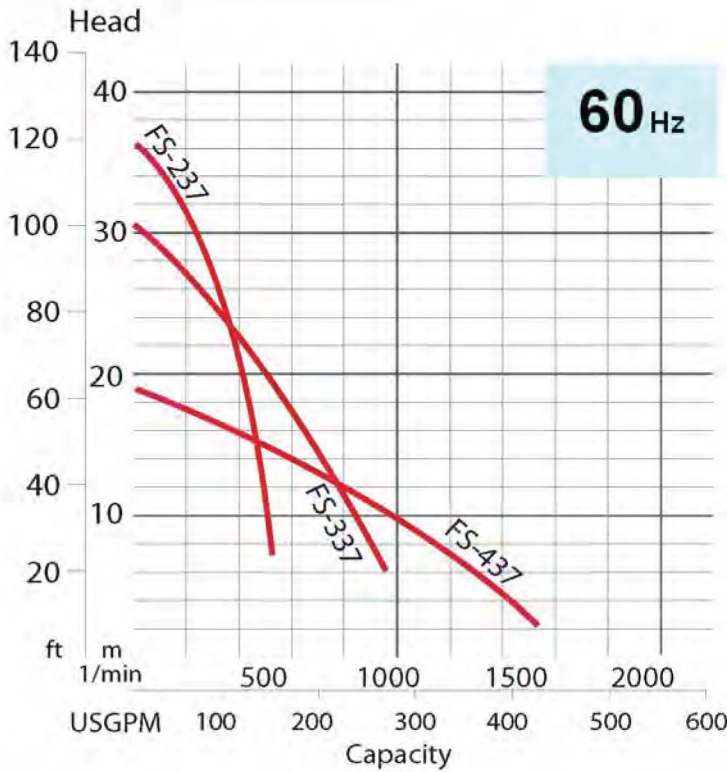
- Simplex
- Duplex
- Triplex

SUBMITTAL DATA SHEET  
 ISSUE DATE: MAY 2008  
 REVISION DATE: MAY 2008

### Tag / Identification

\_\_\_\_\_

Specified Capacity / Capacité Spécifié e: \_\_\_\_\_



### SPECIFICATIONS

| MODELS                          | OUTLET |    | Elec. MOTOR |       |       | Voltage / Phase / HZ | Solid Pass |     | Weight Poids |     |
|---------------------------------|--------|----|-------------|-------|-------|----------------------|------------|-----|--------------|-----|
|                                 | mm     | in | Hp          | Amp.  |       |                      | mm         | in. | kg.          | lbs |
|                                 |        |    |             | Start | Run   |                      |            |     |              |     |
| <input type="checkbox"/> FS-237 | 50     | 2  | 5           | 74    | 15    | 220/3/60             | 11         | 0.4 | 58           | 127 |
| <input type="checkbox"/> FS-237 | 50     | 2  | 5           | 45.9  | 8.7   | 380/3/60             | 11         | 0.4 | 58           | 127 |
| <input type="checkbox"/> FS-237 | 50     | 2  | 5           | 37    | 7.5   | 440/3/60             | 11         | 0.4 | 58           | 127 |
| <input type="checkbox"/> FS-237 | 50     | 2  | 5           | 30    | 5.7   | 575/3/60             | 11         | 0.4 | 58           | 127 |
| <input type="checkbox"/> FS-337 | 80     | 3  | 5           | 45.9  | 8.7   | 220/3/60             | 11         | 0.4 | 58           | 127 |
| <input type="checkbox"/> FS-337 | 80     | 3  | 5           | 45.9  | 8.7   | 380/3/60             | 11         | 0.4 | 58           | 127 |
| <input type="checkbox"/> FS-337 | 80     | 3  | 5           | 37    | 7.5   | 440/3/60             | 11         | 0.4 | 58           | 127 |
| <input type="checkbox"/> FS-337 | 80     | 3  | 5           | 30    | 5.7   | 575/3/60             | 11         | 0.4 | 58           | 127 |
| <input type="checkbox"/> FS-437 | 100    | 4  | 5           | 60    | 11.50 | 220/3/60             | 11         | 0.4 | 58           | 127 |
| <input type="checkbox"/> FS-437 | 100    | 4  | 5           | 45.9  | 8.7   | 380/3/60             | 11         | 0.4 | 58           | 127 |
| <input type="checkbox"/> FS-437 | 100    | 4  | 5           | 37    | 7.5   | 440/3/60             | 11         | 0.4 | 58           | 127 |
| <input type="checkbox"/> FS-437 | 100    | 4  | 5           | 30    | 5.7   | 575/3/60             | 11         | 0.4 | 58           | 127 |

### Models

**FS-237/337/437**

- A: 11.2" (284.48 mm)
- B: 4.7" (119.38 mm)
- C: 19.6" (497.84 mm)
- D: 25.2" (640.08 mm)



## Submersible Dewatering Pumps FS Series

### SPECIFICATION DATA

Single phase pumps available with a liquid level control for automatic operation.

- Simplex
- Duplex
- Triplex

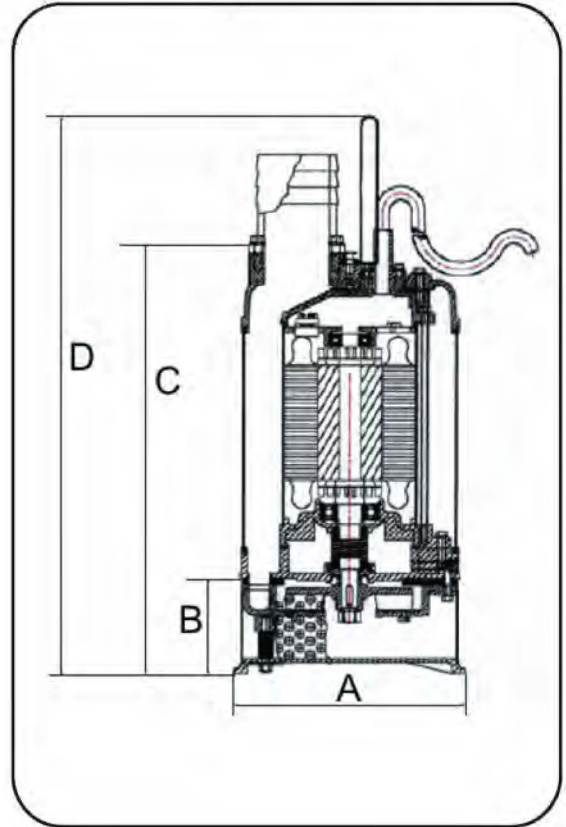
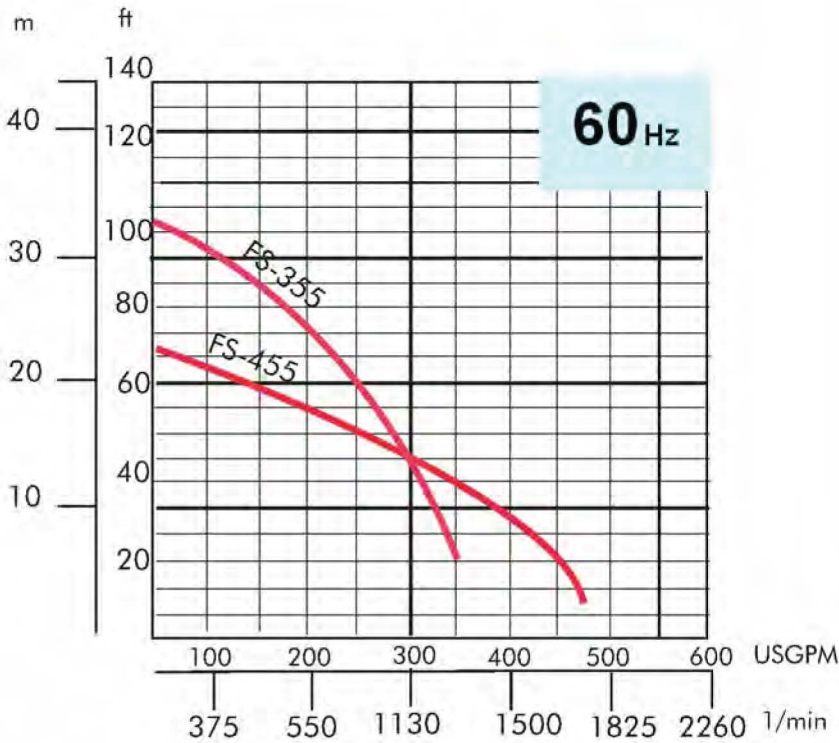
SUBMITTAL DATA SHEET  
 ISSUE DATE: MAY 2008  
 REVISION DATE: MAY 2008

### Tag / Identification

\_\_\_\_\_

### Specified Capacity / Capacité Spécifié e:

\_\_\_\_\_



### SPECIFICATIONS

| MODELS                          | OUTLET |    | Elec. MOTOR |       |       | Voltage / Phase / HZ | Solid Pass |     | Weight Poids |     |
|---------------------------------|--------|----|-------------|-------|-------|----------------------|------------|-----|--------------|-----|
|                                 | mm     | in | Hp          | Amp.  |       |                      | mm         | in. | kg.          | lbs |
|                                 |        |    |             | Start | Run   |                      |            |     |              |     |
| <input type="checkbox"/> FS-355 | 80     | 3  | 5.5         | 105.6 | 22.5  | 220/3/60             | 19         | 3/4 | 50           | 110 |
| <input type="checkbox"/> FS-355 | 80     | 3  | 5.5         | 56.8  | 15    | 380/3/60             | 19         | 3/4 | 50           | 110 |
| <input type="checkbox"/> FS-355 | 80     | 3  | 5.5         | 54    | 10.25 | 440/3/60             | 19         | 3/4 | 50           | 110 |
| <input type="checkbox"/> FS-355 | 80     | 3  | 5.5         | 50    | 7.50  | 575/3/60             | 19         | 3/4 | 50           | 110 |
| <input type="checkbox"/> FS-455 | 100    | 4  | 5.5         | 105.6 | 22.5  | 220/3/60             | 19         | 3/4 | 50           | 110 |
| <input type="checkbox"/> FS-455 | 100    | 4  | 5.5         | 56.8  | 15    | 380/3/60             | 19         | 3/4 | 50           | 110 |
| <input type="checkbox"/> FS-455 | 100    | 4  | 5.5         | 54    | 10.25 | 440/3/60             | 19         | 3/4 | 50           | 110 |
| <input type="checkbox"/> FS-455 | 100    | 4  | 5.5         | 50    | 7.50  | 575/3/60             | 19         | 3/4 | 50           | 110 |

### Models FS-355/455

- A: 11.2" (284.48 mm)
- B: 4.7" (119.38 mm)
- C: 20.6" (423 mm)
- D: 26.4" (670 mm)



SUBMITTAL DATA SHEET  
ISSUE DATE: MAY 2008  
REVISION DATE: MAY 2008

- Simplex
- Duplex
- Triplex

|                          | MODELS  | DISCHARGE | SOLID |
|--------------------------|---------|-----------|-------|
| <input type="checkbox"/> | FS-475  | 4"        | 0.6"  |
| <input type="checkbox"/> | FS-675  | 6"        | 0.6"  |
| <input type="checkbox"/> | FS-4110 | 4"        | 0.6"  |
| <input type="checkbox"/> | FS-6110 | 8220 6"   | 0.6"  |

### PUMP SPECIFICATIONS:

DISCHARGE : Vertical Cast Iron.

IMPELLER : 2 vanes open with pump out vanes on back side.

SHAFT SEAL : Double mechanical seals (Tungsten on Carbon) in oil chamber for exceptional durability.

VOLUTE : Cast Iron, ASTM A-48, Class 30.

MOTOR HOUSING : Stainless Steel 304.

SEAL PLATE : Cast Iron, ASTM A-48, Class 30.

SQUARE RING : BUNA-N.

HARDWARE : Stainless Steel.

SUITABLE FOR : 104 °F (40 °C) Liquids.

STANDARD EQUIPMENT : All models equipped with strainer and 33" (10m) of cable. Three phase size 14/4 type SOW.

### MOTOR SPECIFICATIONS:

SINGLE PHASE : Air motor with overload protection in motor.

THREE PHASE : Air motor, overload protection required in magnetic starter.

INSULATION : Class-B

SHAFT : 5/8 " (16mm) dia., 416 Stainless Steel.

LOWER BEARING : Ball, oil lubricated.

TOP BEARING : Ball, oil lubricated.

### OPTIONAL EQUIPMENT:

- Additional cable
- Impeller trims



## Submersible Dewatering Pumps FS Series

### SPECIFICATION DATA

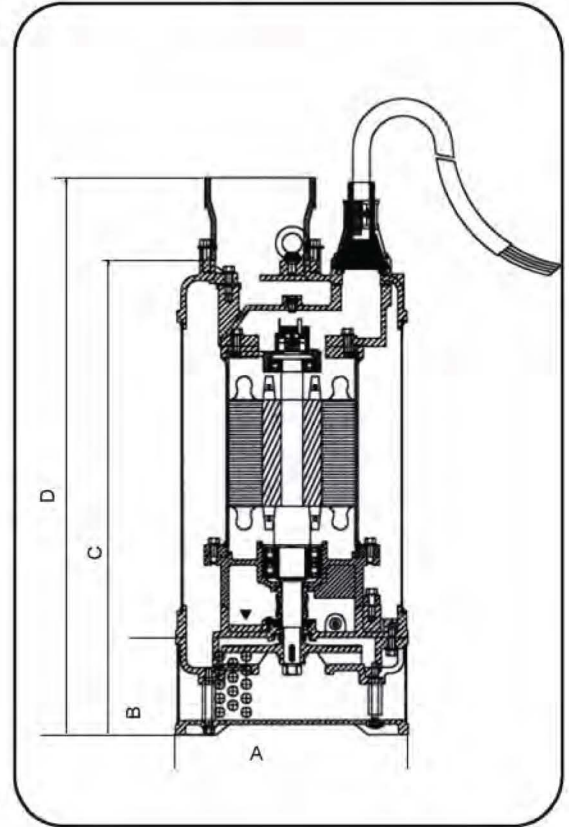
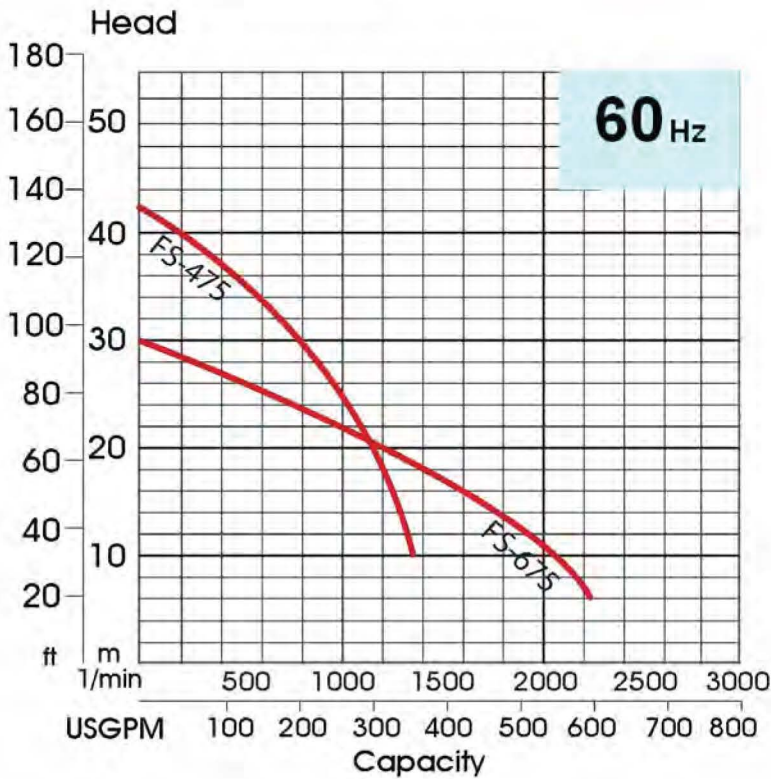
Single phase pumps available with a liquid level control for automatic operation.

- Simplex
- Duplex
- Triplex

SUBMITTAL DATA SHEET  
ISSUE DATE: MAY 2008  
REVISION DATE: MAY 2008

### Tag / Identification

Specified Capacity / Capacité Spécifiée:



### SPECIFICATIONS

| MODELS                          | OUTLET |    | Elec. MOTOR |       |      | Voltage / Phase / HZ | Solid Pass |     | Weight Poids |     |
|---------------------------------|--------|----|-------------|-------|------|----------------------|------------|-----|--------------|-----|
|                                 | mm     | in | Hp          | Amp.  |      |                      | mm         | in. | kg.          | lbs |
|                                 |        |    |             | Start | Run  |                      |            |     |              |     |
| <input type="checkbox"/> FS-475 | 100    | 4  | 10          | 113.5 | 30   | 220/3/60             | 15         | 0.6 | 128          | 282 |
| <input type="checkbox"/> FS-475 | 100    | 4  | 10          | 65    | 17.4 | 380/3/60             | 15         | 0.6 | 128          | 282 |
| <input type="checkbox"/> FS-475 | 100    | 4  | 10          | 74    | 15   | 440/3/60             | 15         | 0.6 | 128          | 282 |
| <input type="checkbox"/> FS-475 | 100    | 4  | 10          | 60    | 11.5 | 575/3/60             | 15         | 0.6 | 128          | 282 |
| <input type="checkbox"/> FS-675 | 150    | 6  | 10          | 113.5 | 30   | 220/3/60             | 15         | 0.6 | 128          | 282 |
| <input type="checkbox"/> FS-675 | 150    | 6  | 10          | 65    | 17.4 | 380/3/60             | 15         | 0.6 | 128          | 282 |
| <input type="checkbox"/> FS-675 | 100    | 6  | 10          | 74    | 15   | 440/3/60             | 15         | 0.6 | 128          | 282 |
| <input type="checkbox"/> FS-675 | 150    | 6  | 10          | 74    | 15   | 575/3/60             | 15         | 0.6 | 128          | 282 |

### Models

**FS-475/675**

- A: 13.8" (350 mm)
- B: 6.9" (176 mm)
- C: 27.4" (685 mm)
- D: 32.2" (843 mm)



### SPECIFICATION DATA

Single phase pumps available with a liquid level control for automatic operation.

- Simplex
- Duplex
- Triplex

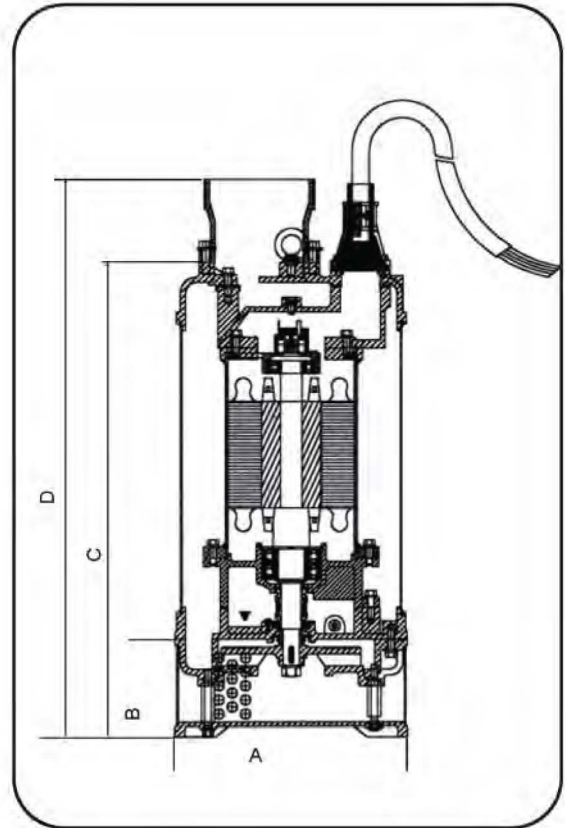
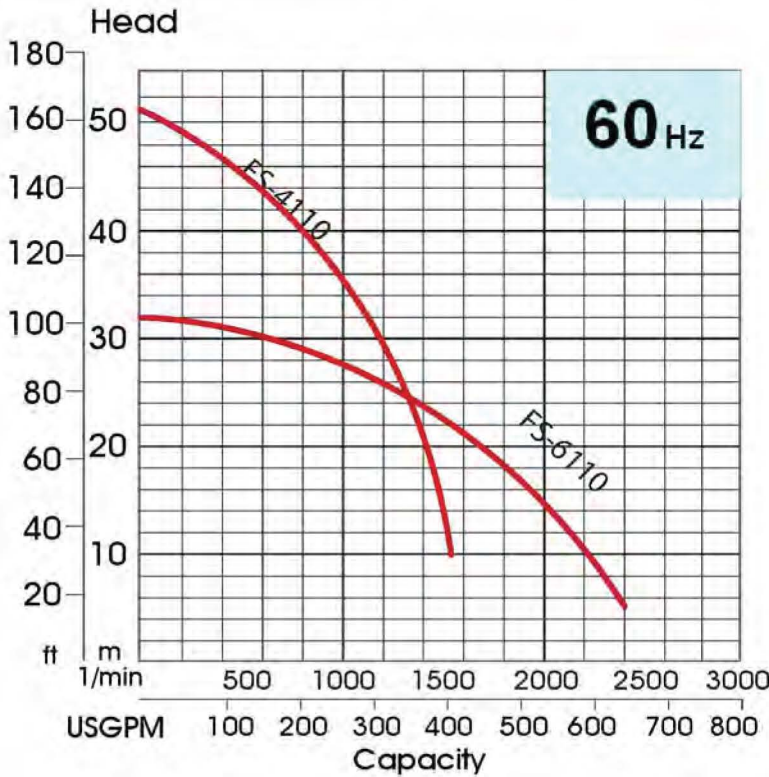
### Tag / Identification

\_\_\_\_\_

### Specified Capacity / Capacité Spécifié e:

\_\_\_\_\_

SUBMITTAL DATA SHEET  
 ISSUE DATE: MAY 2008  
 REVISION DATE: MAY 2008



### SPECIFICATIONS

| MODELS                           | OUTLET |    | Elec. MOTOR |       |      | Voltage / Phase / HZ | Solid Pass |     | Weight Poids |     |
|----------------------------------|--------|----|-------------|-------|------|----------------------|------------|-----|--------------|-----|
|                                  | mm     | in | Hp          | Amp.  |      |                      | mm         | in. | kg.          | lbs |
|                                  |        |    |             | Start | Run  |                      |            |     |              |     |
| <input type="checkbox"/> FS-4110 | 100    | 4  | 15          | 120   | 45   | 220/3/60             | 15         | 0.6 | 134          | 295 |
| <input type="checkbox"/> FS-4110 | 100    | 4  | 15          | 96    | 26.1 | 380/3/60             | 15         | 0.6 | 134          | 295 |
| <input type="checkbox"/> FS-4110 | 100    | 4  | 15          | 110   | 22.5 | 440/3/60             | 15         | 0.6 | 134          | 295 |
| <input type="checkbox"/> FS-4110 | 100    | 4  | 15          | 120   | 17.2 | 575/3/60             | 15         | 0.6 | 124          | 295 |
| <input type="checkbox"/> FS-6110 | 150    | 6  | 15          | 120   | 45   | 220/3/60             | 15         | 0.6 | 134          | 295 |
| <input type="checkbox"/> FS-6110 | 150    | 6  | 15          | 96    | 26.1 | 380/3/60             | 15         | 0.6 | 134          | 295 |
| <input type="checkbox"/> FS-6110 | 150    | 6  | 15          | 110   | 22.5 | 440/3/60             | 15         | 0.6 | 134          | 295 |
| <input type="checkbox"/> FS-6110 | 150    | 6  | 15          | 120   | 17.2 | 575/3/60             | 15         | 0.6 | 134          | 295 |

### Models

#### FS-4110/6110

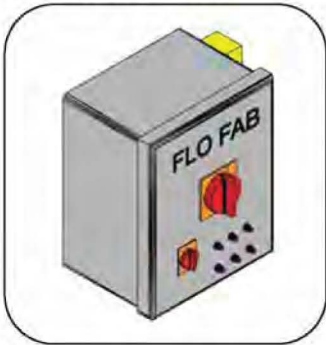
- A: 13.8" (350 mm)
- B: 6.9" (176 mm)
- C: 27.4" (685 mm)
- D: 32.2" (843 mm)





SUBMITTAL DATA SHEET  
 ISSUE DATE: MAY 2008  
 REVISION DATE: MAY 2008

### Control Panel

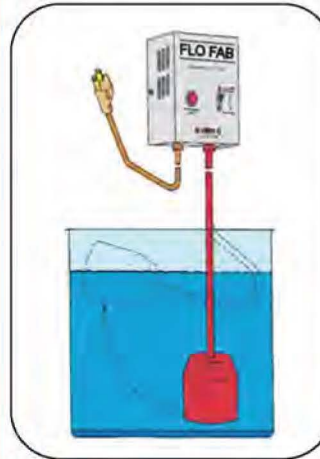


FLO FAB Standard UL or CSA - NEMA 1- enclosure. Includes main disconnect switch, internal circuit, breakers, transformer, low suction pressure switch and pilot light, hand-off auto switch, pump running light, current-relay, minimum run timer, automatic transfer to lag pump circuit, lead pump selector switch, power on light, dry contact for remote signal.

**Model**

- |                                  |                              |                                  |                                  |
|----------------------------------|------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> Simplex | <input type="checkbox"/> SSP | <input type="checkbox"/> 115 / 1 | <input type="checkbox"/> 208 / 3 |
| <input type="checkbox"/> Duplex  | <input type="checkbox"/> DSP | <input type="checkbox"/> 230 / 1 | <input type="checkbox"/> 460 / 3 |
| <input type="checkbox"/> Triplex | <input type="checkbox"/> TSP | <input type="checkbox"/> 575 / 3 |                                  |

### Tank Alert Float



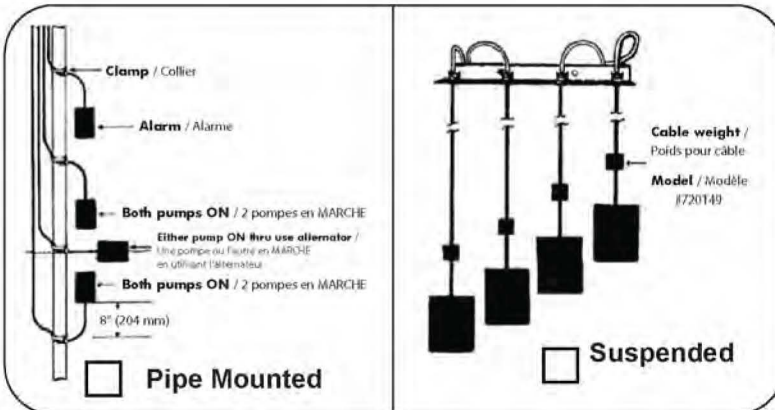
- Nema 1 Compliance in a metal alarm panel
- When used with a pump application, the Tank Alert may be connected to a circuit breaker other than the pump circuit. This allows the Tank Alert to operate even if the pump circuit should fail.

**Model**

- |                                 |  |
|---------------------------------|--|
| <input type="checkbox"/> 101 HW | <input type="checkbox"/> With Dry Contact    |
| <input type="checkbox"/> 101 LW | <input type="checkbox"/> Without Dry Contact |

120 / 1 / 60

### Mechanical Float Switch



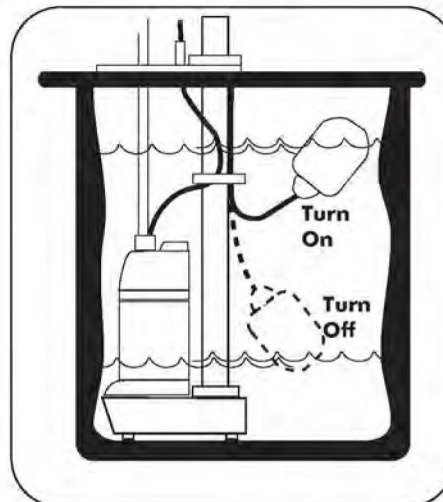
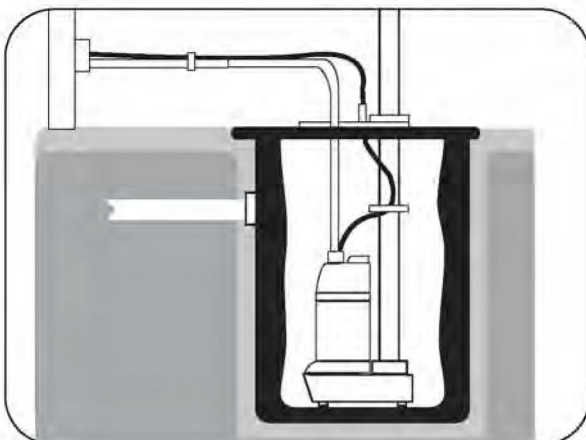
**# 720145 Bracket**

- Not Included  
 Included

|                             | Model  | Contacts  |
|-----------------------------|--------|---|
| <input type="checkbox"/> 15 | 720163 | N/O   |
| <input type="checkbox"/> 30 | 720165 | N/O   |
| <input type="checkbox"/> 15 | 720163 | <input type="checkbox"/> With Plug<br><input type="checkbox"/> Without Plug |

QTY. \_\_\_\_\_

### General Arrangement for Single Pump float operation (plug in type)

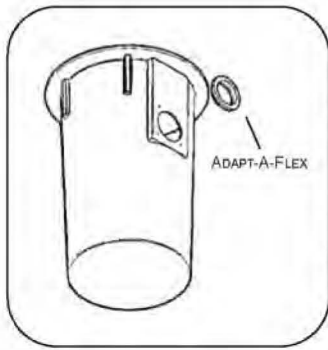


**Float Model**                      **Contacts**

- |                              |        |     |
|------------------------------|--------|-----|
| <input type="checkbox"/> 15" | 720163 | N/O |
| <input type="checkbox"/> 30" | 720165 | N/O |

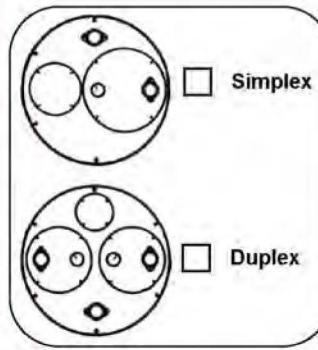
QTY. \_\_\_\_\_

### Polyethylene Basin



- Polyethylene
  - Fiberglass
- Model
- 1830 - 30 gal.
  - 2436 - 70 gal.
  - 3636 - 159 gal.
  - 4848 - 376 gal.

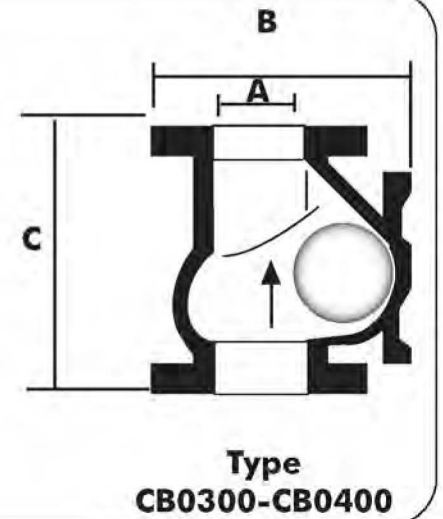
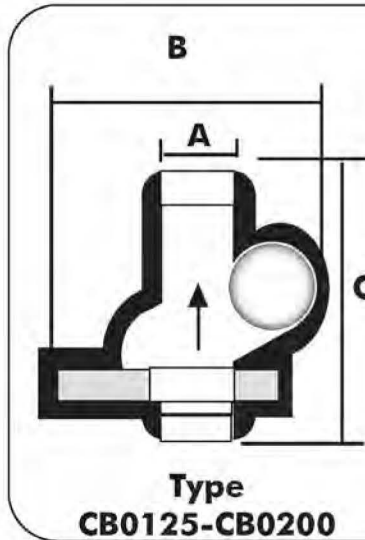
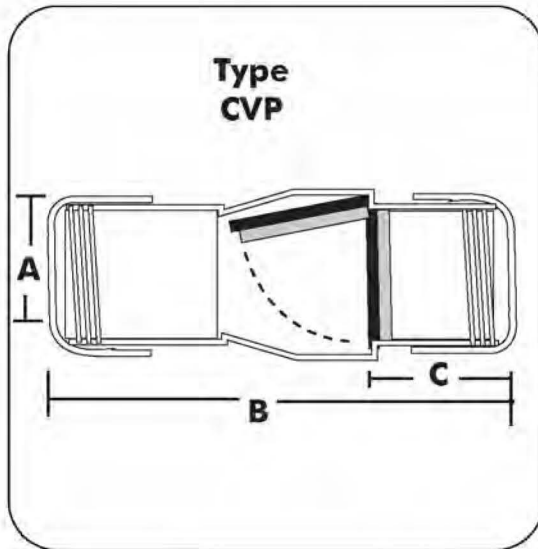
### Steel Basin Covers



SUBMITTAL DATA SHEET  
ISSUE DATE: MAY 2008  
REVISION DATE: MAY 2008

- Model
- 18"
  - 24"
  - 36"
  - 48"

### Check Valve



| Models  | A          | B       |     | C       |     | Pressure Test<br>lb/po/ca |
|---------|------------|---------|-----|---------|-----|---------------------------|
|         |            | po      | mm  | po      | mm  |                           |
| CVP0125 | 1 1/4" NPT | 5 1/4   | 132 | 1 1/8   | 28  |                           |
| CVP0150 | 1 1/2" NPT | 5 1/4   | 132 | 1 1/8   | 28  |                           |
| CVP0200 | 2" NPT     | 9 3/4   | 245 | 2 3/4   | 70  |                           |
| CVP0300 | 3" NPT     | 14      | 350 | 4       | 100 |                           |
| CB0125  | 1 1/4" NPT | 4 11/16 | 119 | 5 5/16  | 135 | 150                       |
| CB0150  | 1 1/2" NPT | 4 11/16 | 119 | 5 5/16  | 135 | 150                       |
| CB0200  | 2" NPT     | 6 3/16  | 157 | 6 7/8   | 175 | 150                       |
| CB0300  | 3" Flanged | 8 7/16  | 214 | 9 1/16  | 246 | 150                       |
| CB0400  | 4" Flanged | 11 1/8  | 282 | 11 3/16 | 300 | 150                       |

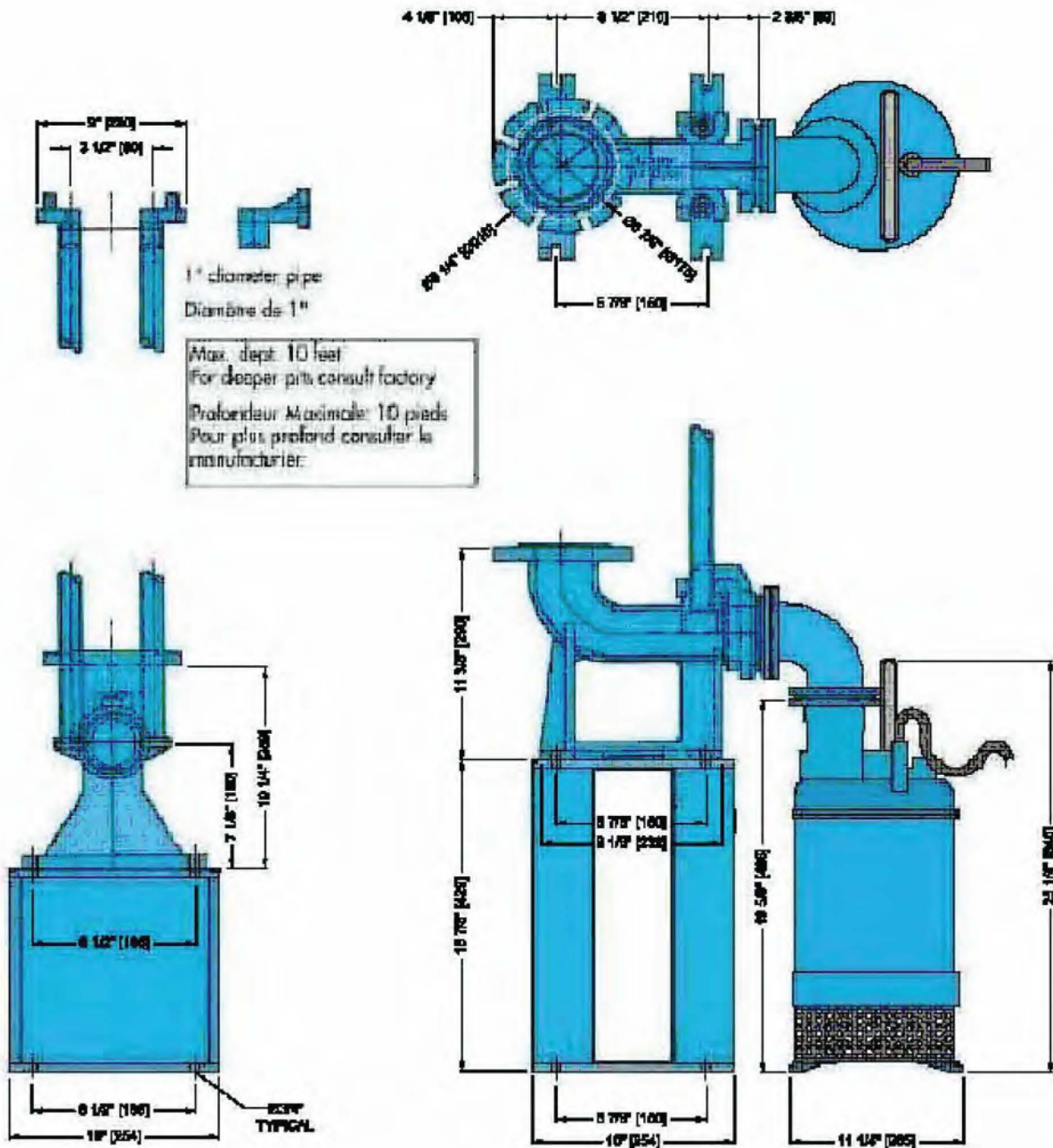




## Slide Away Coupling : FS 3" & 4"

SUBMITTAL DATA SHEET  
ISSUE DATE: MAY 2008  
REVISION DATE: MAY 2008

- FS - 3" Model BAFFS0300
- FS - 4" Model BAFFS0400



## STANDARD FOR SIMPLEX SUBMERSIBLE PANELS

A NEMA 1 enclosure, including a main disconnect switch, one set of HRC fuses for short-circuit protection, one magnetic starter, one transformer with primary and secondary fuses(for system other than 120v), 120v control circuit, provision to connect three N.O. floats(FL1: stop float, FL2: pump start, FL3: high water level), one "Hand Off Auto" selector switch, "Power on", "Pump run", "High water level", pilot lights, audible alarm with silencer and test and dry contact for remote alarm.

|                                |   |
|--------------------------------|---|
| NEMA Type 1<br>General Purpose | To prevent accidental contact with enclosed apparatus. Suitable for application Indoors. where not exposed to unusual service conditions. |
|--------------------------------|---|

|                          |  |
|--------------------------|--|
| NEMA Type 2<br>Driptight | To prevent accidental contact with enclosed apparatus. Excludes falling moisture or dirt |
|--------------------------|--|

|                           |  |
|---------------------------|--|
| NEMA Typo 4<br>Watertight | Designed to exclude water applied in form of hose stream. To protect against steam of water during cleaning operations, etc. |
|---------------------------|--|

|                                     |   |
|-------------------------------------|---|
| NEMA Type 4X<br>Corrosion Resistant | Designed to exclude water supplied in form of hose stream and used in areas where serious corrosion problem exists. |
|-------------------------------------|---|

|                                |  |
|--------------------------------|--|
| NEMA Type 12<br>Industrial Use | Excludes dust, lint, fibers and flyings or oil or coolant seepage. |
|--------------------------------|--|





## STANDARD FOR SIMPLEX SUBMERSIBLE PANELS

| OPT# | DESCRIPTION   |
|------|---|
| 1    | Enclosure Eemac/Nema 2 – Indoor – Falling water & light splashing   |
| 2    | Inner door for tamper proofing any enclosure  |
| 3    | Enclosure Eemac/Nema 12 – Dust tight  |
| 4    | Enclosure Eemac/Nema 4 – Outdoor – Protection against hose directed water   |
| 4A   | Enclosure Eemac/Nema 4X – Same as Item 4 but fibreglass corrosion proof   |
| 4B   | Enclosure Eemac/Nema 4X – Same as item 4 but stainless steel painted corrosion proof (brushed finish available)               |
| 5    | Alarm relay for remote indication   |
| 6    | Alarm block (buzzer-silence selector-pilot light)   |
| 6A   | Alarm block – as above but with silence push button   |
| 7    | Motor overload (over current) indication per pump (pilot light)   |
| 7A   | As above but with dry contact for remote indication   |
| 8    | Seal leak fault per pump (conductivity relay with pilot light)  |
| 8A   | As above but with dry contact for remote indication   |
| 9    | Motor overheat fault indication per pump (pilot light)  |
| 9A   | As above but with dry contact for remote indication   |
| 10   | Pilot light for various function  |
| 11   | Alarm bell  |
| 12   | Elapsed time meter (Nema 1) per pump  |
| 13   | Intrinsic safe relay (use when floats or electrodes are located in explosive medium)  |
| 14   | Pump control using conductivity relay and electrodes  |
| 15   | Loss of phase fault indication (pilot light) on incoming power (use with 3 phase supply)                                      |
| 17   | Globe alarm (25 watt-non flashing-shatter proof)  |
| 18   | Pump protection with breaker on single phase system - Max. 40 Amps - (branch circuit protection device rated – Type E rating) |
| 19   | Heater element + thermostat   |
| 22   | Installation of capacitor pack in panel (for starting single phase pump)  |
| 24   | Fault indication (Relay + pilot light)  |
| 31   | Stop/Start with one float   |
| 32   | Stop/Start with two floats  |
| 35   | 120V Supply for external load (Specify load)  |
| 36   | Emergency stop push button  |
| 38   | Low level indication (pilot light)  |
| 38A  | Low level indication – shutdown with remote indication  |
| 39   | Low low level indication (pilot light)  |
| 39A  | Low low level indication – shut down with remote indication   |
| 40   | Additional stop-start push button per pump  |
| 41   | Provision for connection of solenoid  |
| 43   | Remote start/stop signal  |
| 43A  | 24 Volt start signal  |
| 44   | Lamp test push button   |
| 44A  | Push to test push button  |
| 46   | On delay timer (use to avoid nuisance tripping on certain faults)   |
| 47   | Off delay timer   |



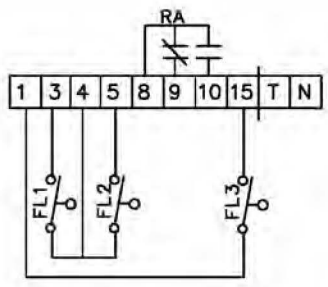
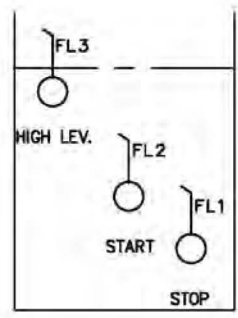
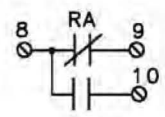
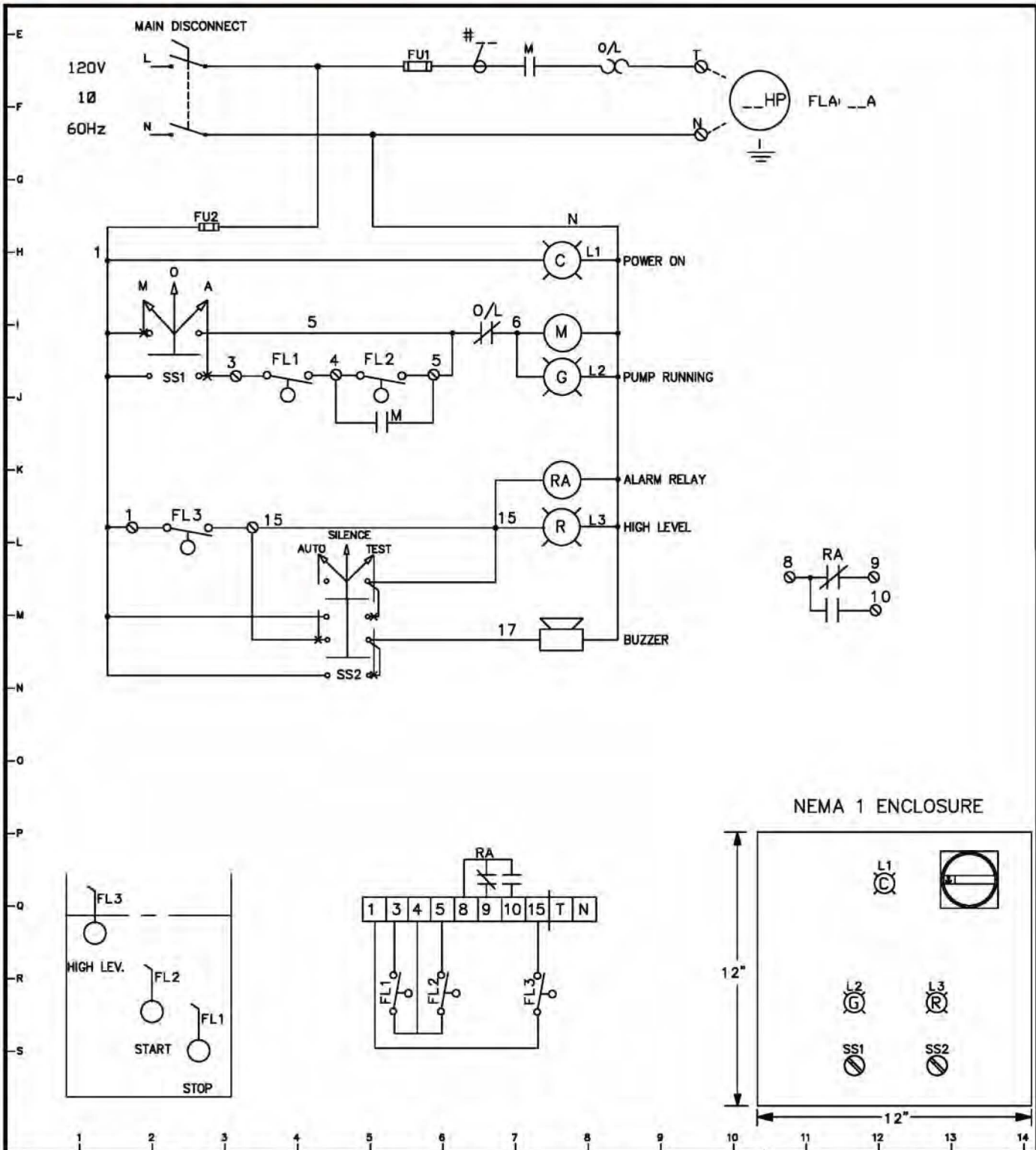
## STANDARD FOR SIMPLEX SUBMERSIBLE PANELS

| OPTIO | DESCRIPTION  |
|-------|--|
| 48    | Two positions selector   |
| 55    | Indication only of pump failure to start   |
| 60    | Float failure alarm  |
| 63    | Ammeter – CT operated – for one pump   |
| 64    | Voltmeter for system voltage – Direct read   |
| 65    | Pump stop indication   |
| 67    | Fault with latching relay and reset button   |
| 68    | Remote signal for low of power   |
| 69    | Current detection relay per pump (to confirm pump running)   |
| 70    | Loss of phase and phase reversal detection and indication (three phase system)                                   |
| 72    | Timer for minimum run  |
| 73    | Timer for maximum run  |
| 74    | General alarm indication with relay  |
| 77    | Lightning arrestor   |
| 78    | Extra for flashing function on pilot light or globe  |
| 79    | Ground fault indication with pilot light (no stopping of pump)   |
| 80    | Duplex receptacle – 120 V – 100Watts   |
| 81    | Motor circuit interrupter (instead of fuses) – Max. 40 Amps – Rated as branch circuit protection device – Type E |
| 81A   | Moulded case circuit protector (replaces fuses)  |
| 82    | Repeat cycle timer   |
| 84    | Telephone dialler with battery back-up   |
| 85    | Push button for misc. sequence (describe sequence)   |
| 86    | Alarm high level   |
| 87    | Pump start counter   |
| 88    | Variable freq. drive for variable speed pumps  |
| 89    | Line or load reactor for above   |
| 91    | Stop pump on low level in manual mode  |
| 93    | Horn   |
| 95    | Auto reset of latched faults on resumption of power  |
| 99    | Blown fuse indication for single phase system  |
| 101A  | Circuit breaker protection for primary and secondary of transformer  |
| 101B  | Circuit breaker protection for secondary of transformer  |
| 103   | Soft start for reduced voltage starting  |
| 105   | Forced ventilation (Louvre-Fan-Thermostat)   |
| 106   | Reversing starter  |
| 108   | Through the door overload reset buttons  |
| 109   | Tank alert   |
| 112   | U/L approval of panel  |
| 113   | Provision for padlock on enclosure   |
|       |  |
|       |  |
|       |  |
|       |  |

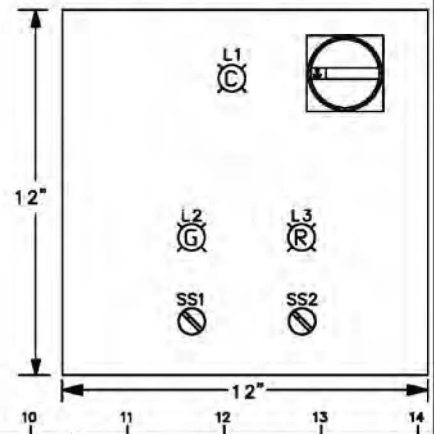




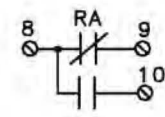
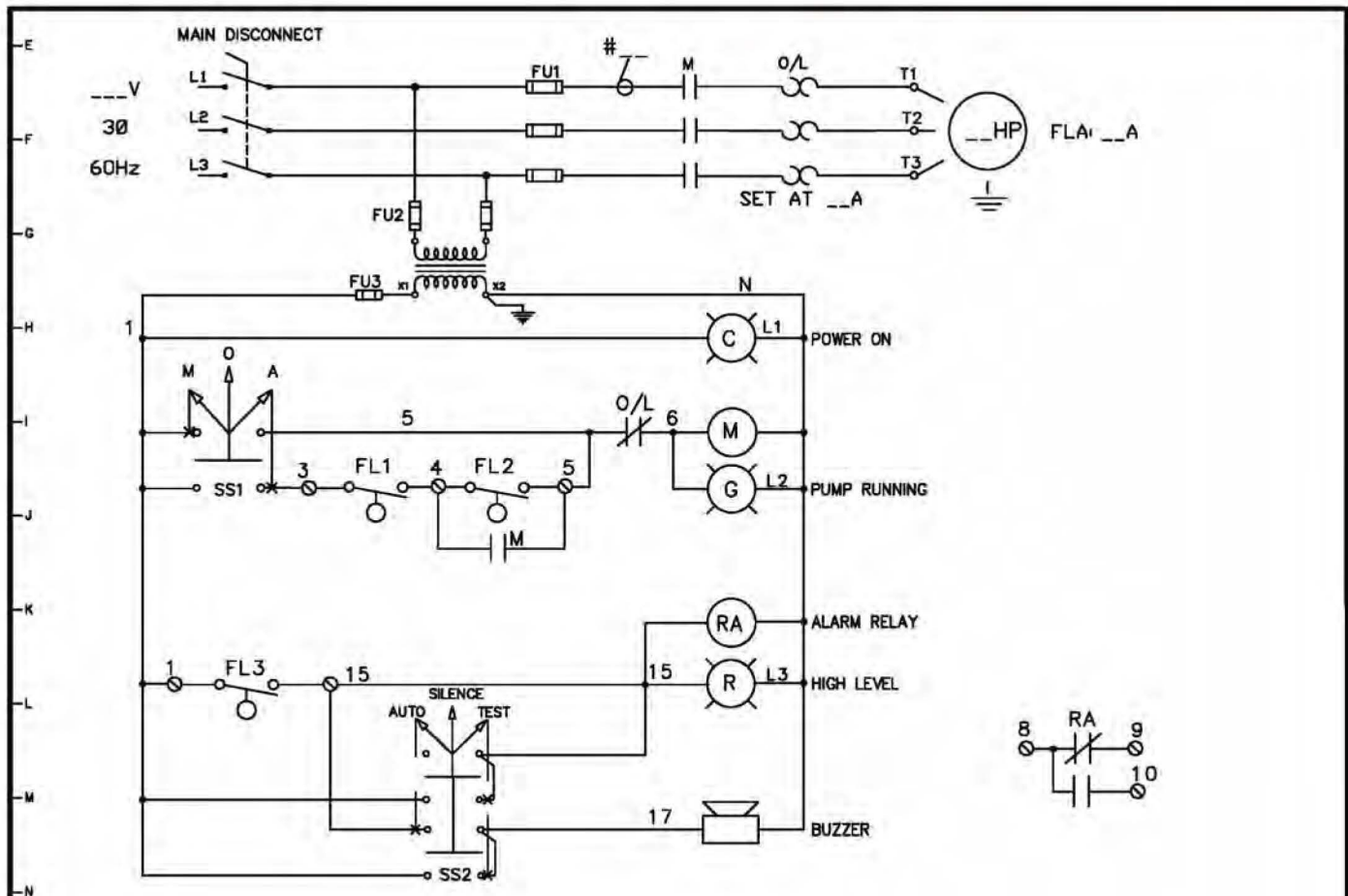
# FLO FAB



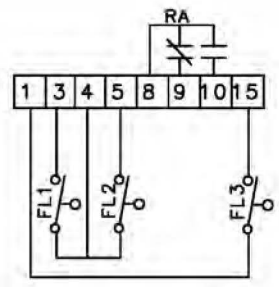
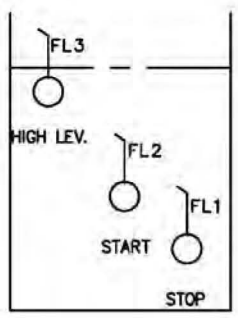
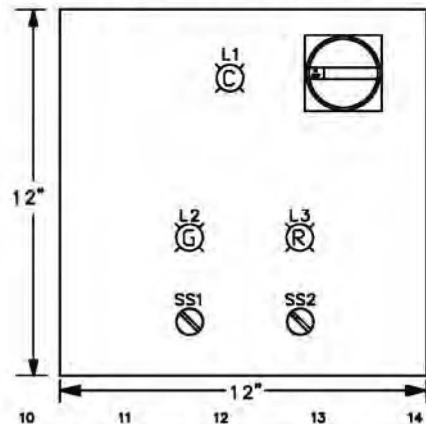
NEMA 1 ENCLOSURE




|                            |  |                     |                          |             |                            |               |
|----------------------------|--|---------------------|--------------------------|-------------|----------------------------|---------------|
| REMARKS:<br>REMARQUES :    |  | UL                  | TITLE:<br>SIMPLEX SEWAGE |             | REV.                       | DESCRIPTION   |
| DRAWN BY:<br>S. DeMONTIGNY |  |                     | PROJECT:                 |             | DRAWING #:<br>S. D. 8506-A | DPT. #:<br>00 |
| CONTROLLED BY:             |  | DATE:<br>12-05-2000 |                          | PAGE 1 OF 1 |                            |               |



NEMA 1 ENCLOSURE



|                            |  |   |                          |                            |      |               |
|----------------------------|--|---|--------------------------|----------------------------|------|---------------|
| REMARKS:<br>REMARQUES :    |  |  | TITLE:<br>SIMPLEX SEWAGE |                            | REV. | DESCRIPTION   |
|                            |  |   | PROJECT:                 |                            |      |               |
| DRAWN BY:<br>S. DeMONTIGNY |  | CONTROLLED BY:  | DATE:<br>12-05-2000      | DRAWING #:<br>S. D. 8532-A |      | DPT. #:<br>00 |
|                            |  |   |                          | PAGE 1 OF 1                |      |               |



## STANDARD FOR DUPLEX SUBMERSIBLE PANELS

A NEMA 1 enclosure, including a main disconnect switch, two sets of HRC fuses for short-circuit protection, two magnetic starters, one transformer with primary and secondary fuses(for system other than 120v), 120v control circuit, alternating circuit, provision to connect four N.O. floats(FL1: stop float, FL2: lead pump start, FL3: lag pump start, FL4: high water level), automatic transfer to lag pump in case of lead pump overload, two "Hand Off Auto" selectors switches, "Power on", "Pump 1 run", "Pump 2 run", "High water level", pilot lights, audible alarm with silencer and test and dry contact for remote alarm.

|                                     |   |
|-------------------------------------|---|
| NEMA Type 1<br>General Purpose      | To prevent accidental contact with enclosed apparatus. Suitable for application Indoors. where not exposed to unusual service conditions. |
| NEMA Type 2<br>Driptight            | To prevent accidental contact with enclosed apparatus. Excludes falling moisture or dirt  |
| NEMA Type 4<br>Watertight           | Designed to exclude water applied in form of hose stream. To protect against steam of water during cleaning operations, etc.              |
| NEMA Type 4X<br>Corrosion Resistant | Designed to exclude water supplied in form of hose stream and used in areas where serious corrosion problem exists.                       |
| NEMA Type 12<br>Industrial Use      | Excludes dust, lint, fibers and flyings or oil or coolant seepage.  |



## STANDARD FOR DUPLEX SUBMERSIBLE PANELS

| OPTIO | DESCRIPTION   |
|-------|---|
| 1     | Enclosure Eemac/Nema 2 – Indoor – Falling water & light splashing   |
| 2     | Inner door for tamper proofing any enclosure  |
| 3     | Enclosure Eemac/Nema 12 – Dust tight  |
| 4     | Enclosure Eemac/Nema 4 – Outdoor – Protection against hose directed water   |
| 4A    | Enclosure Eemac/Nema 4X – Same as Item 4 but fibreglass corrosion proof   |
| 4B    | Enclosure Eemac/Nema 4X – Same as item 4 but stainless steel painted corrosion proof (brushed finish available)               |
| 5     | Alarm relay for remote indication   |
| 6     | Alarm block (buzzer-silence selector-pilot light)   |
| 6A    | Alarm block – as above but with silence push button   |
| 7     | Motor overload (over current) indication per pump (pilot light)   |
| 7A    | As above but with dry contact for remote indication   |
| 8     | Seal leak fault per pump (conductivity relay with pilot light)  |
| 8A    | As above but with dry contact for remote indication   |
| 9     | Motor overheat fault indication per pump (pilot light)  |
| 9A    | As above but with dry contact for remote indication   |
| 10    | Pilot light for various function  |
| 11    | Alarm bell  |
| 12    | Elapsed time meter (Nema 1) per pump  |
| 13    | Intrinsic safe relay (use when floats or electrodes are located in explosive medium)  |
| 14    | Pump control using conductivity relay and electrodes  |
| 15    | Loss of phase fault indication (pilot light) on incoming power (use with 3 phase supply)                                      |
| 17    | Globe alarm (25 watt-non flashing-shatter proof)  |
| 18    | Pump protection with breaker on single phase system - Max. 40 Amps - (branch circuit protection device rated – Type E rating) |
| 19    | Heater element + thermostat   |
| 20    | Time clock (use for alternating pumps – Specify 12 hours/24 hours/weekly)   |
| 21    | Main disconnect   |
| 21A   | Disconnect for each pump controlled by panel  |
| 22    | Installation of capacitor pack in panel (for starting single phase pumps)   |
| 23    | Alternating relay (Electro-Mech)  |
| 24    | Fault indication (Relay + pilot light)  |
| 25    | Alternating relay - Electronic  |
| 26    | Alternator - Mechanical   |
| 27    | Programmable controller   |
| 31    | Stop/Start with one float   |
| 32    | Stop/Start with two floats  |
| 35    | 120V Supply for external load (Specify load)  |
| 36    | Emergency stop push button  |
| 38    | Low level indication (pilot light)  |
| 38A   | Low level indication – shutdown with remote indication  |
| 39    | Low low level indication (pilot light)  |
| 39A   | Low low level indication – shut down with remote indication   |
| 40    | Additional stop-start push button per pump  |
| 41    | Provision for connection of solenoid  |
| 43    | Remote start/stop signal  |
| 43A   | 24 Volt start signal  |
| 44    | Lamp test push button   |
| 44A   | Push to test push button  |

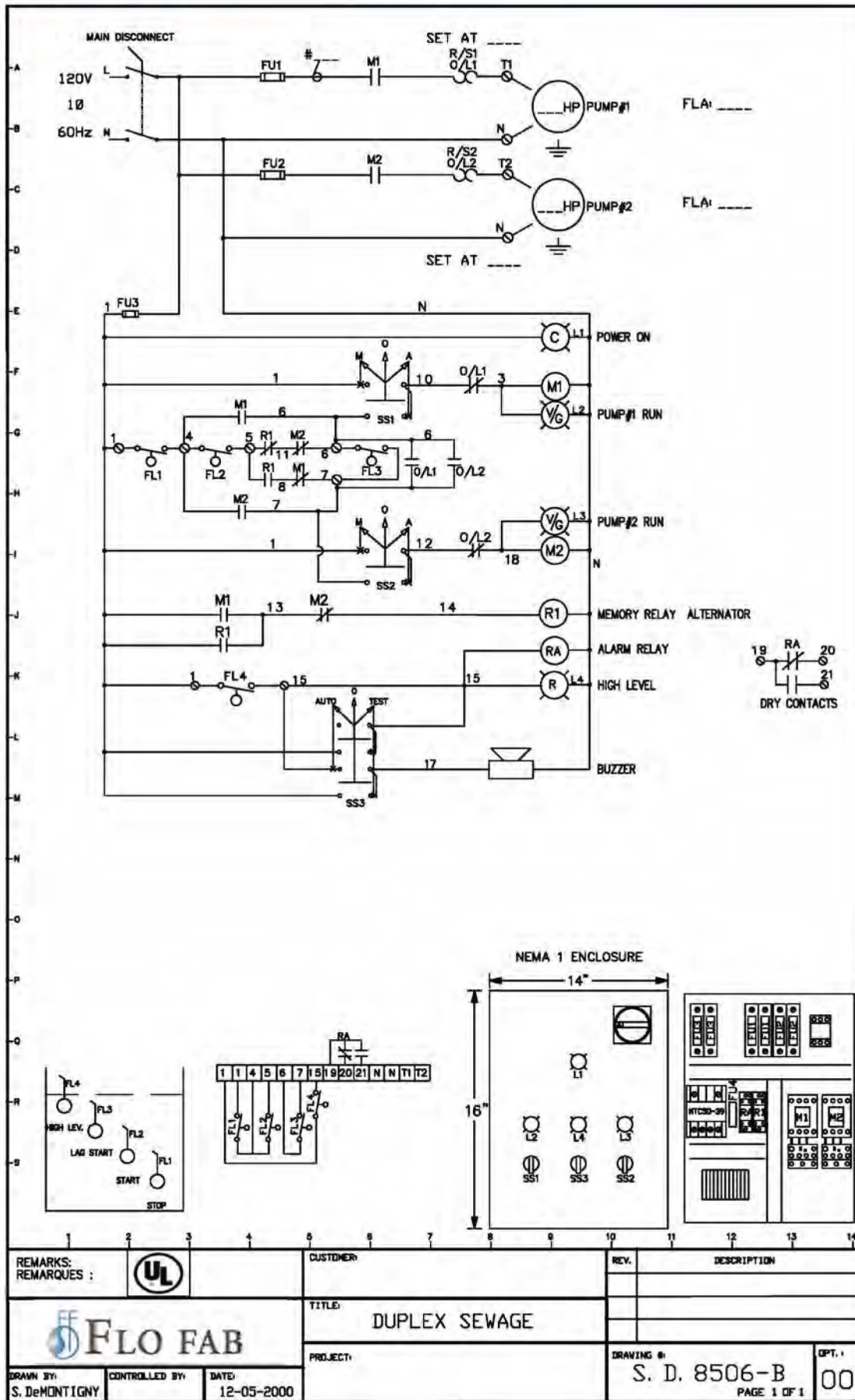


## STANDARD FOR DUPLEX SUBMERSIBLE PANELS

| OPTIO | DESCRIPTION  |
|-------|--|
| 46    | On delay timer (use to avoid nuisance tripping on certain faults)  |
| 47    | Off delay timer  |
| 48    | Two positions selector   |
| 55    | Indication only of pump failure to start   |
| 60    | Float failure alarm  |
| 62    | Lead pump selector switch  |
| 63    | Ammeter – CT operated – for two pumps  |
| 64    | Voltmeter for system voltage – Direct read   |
| 65    | Pump stop indication   |
| 67    | Fault with latching relay and reset button   |
| 68    | Remote signal for low of power   |
| 69    | Current detection relay per pump (to confirm pump running)   |
| 70    | Loss of phase and phase reversal detection and indication (three phase system)                                   |
| 72    | Timer for minimum run  |
| 73    | Timer for maximum run  |
| 74    | General alarm indication with relay  |
| 75    | Lag pump demand indication (pilot light)   |
| 77    | Lightning arrester   |
| 78    | Extra for flashing function on pilot light or globe  |
| 79    | Ground fault indication with pilot light (no stopping of pump)   |
| 80    | Duplex receptacle – 120 V – 100Watts   |
| 81    | Motor circuit interruptor (instead of fuses) – Max. 40 Amps – Rated as branch circuit protection device – Type E |
| 81A   | Moulded case circuit protector (replaces fuses)  |
| 82    | Repeat cycle timer   |
| 84    | Telephone dialler with battery back-up   |
| 85    | Push button for misc. sequence (describe sequence)   |
| 86    | Alarm high level   |
| 86A   | Start lag pump on high level   |
| 87    | Pump start counter   |
| 88    | Variable freq. drive for variable speed pumps  |
| 89    | Line or load reactor for above   |
| 91    | Stop pump on low level in manual mode  |
| 93    | Horn   |
| 95    | Auto reset of latched faults on resumption of power  |
| 99    | Blown fuse indication for single phase system  |
| 100   | Incoming power from two sources with one control transformer   |
| 100A  | Incoming power from two sources with two control transformers  |
| 101A  | Circuit breaker protection for primary and secondary of transformer  |
| 101B  | Circuit breaker protection for secondary of transformer  |
| 103   | Soft start for reduced voltage starting  |
| 104   | Mini-Cas II for seal and temperature fault on Flyght pumps (one per pump)  |
| 105   | Forced ventilation (Louvre-Fan-Thermostat)   |
| 106   | Reversing starter  |
| 108   | Through the door overload reset buttons  |
| 109   | Tank alert   |
| 112   | U/L approval of panel  |
| 113   | Provision for padlock on enclosure   |



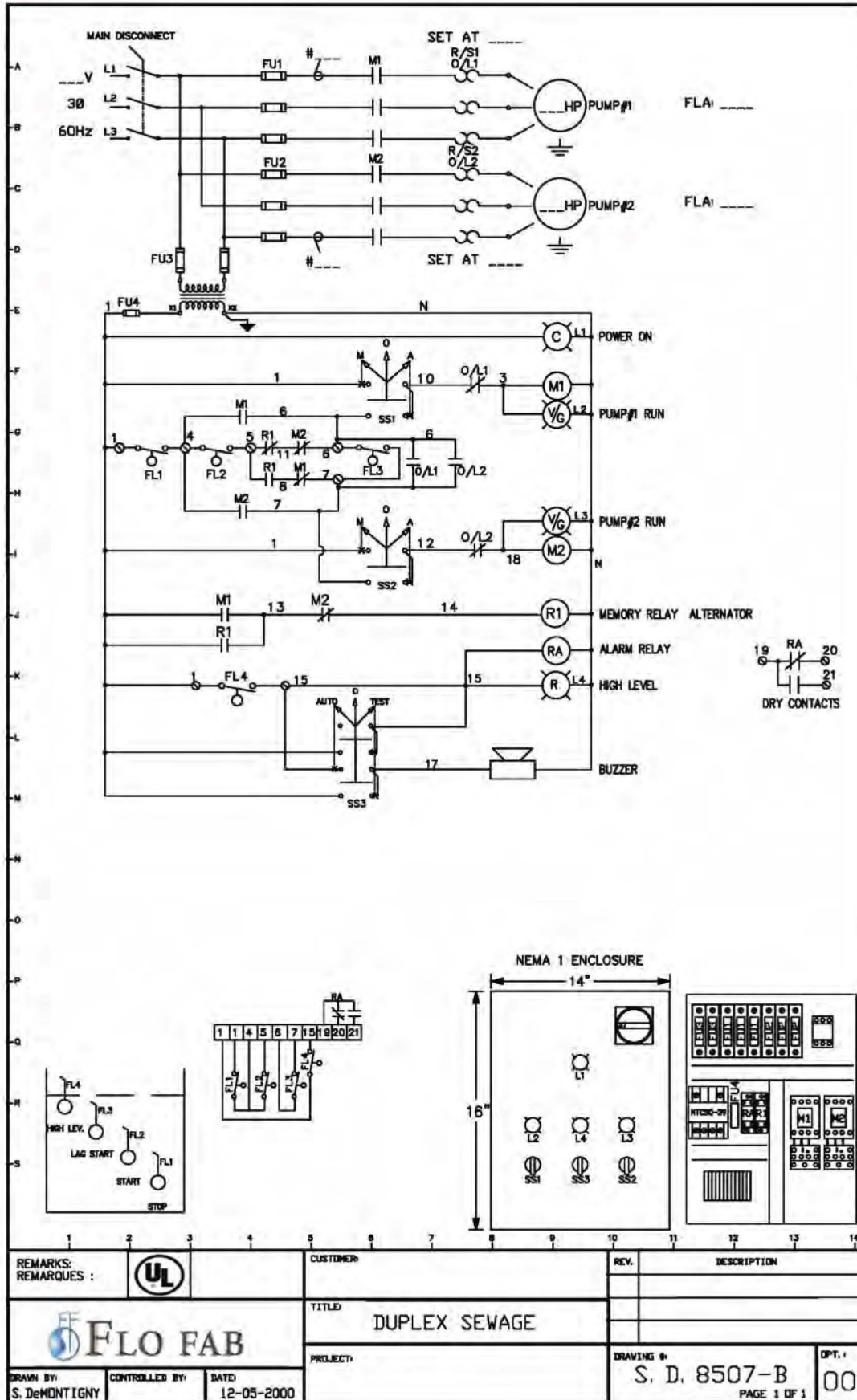
# FLO FAB



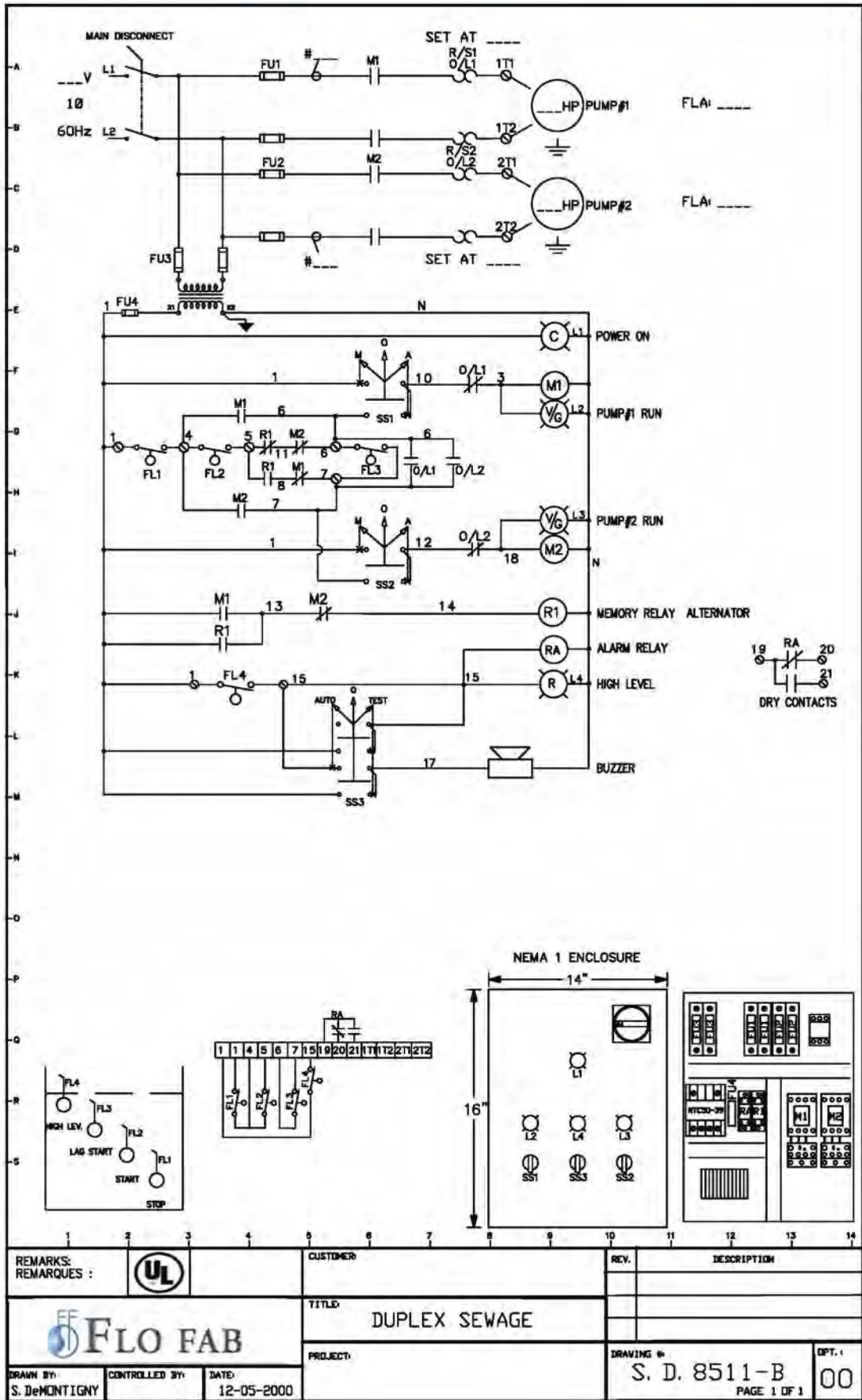




# FLO FAB



|                            |                |                     |                                |                                   |                      |
|----------------------------|----------------|---------------------|--------------------------------|-----------------------------------|----------------------|
| REMARKS:<br>REMARQUES :    |                |                     | CUSTOMER:                      | REV.                              | DESCRIPTION          |
|                            |                |                     | TITLE:<br><b>DUPLEX SEWAGE</b> |                                   |                      |
|                            |                |                     | PROJECT:                       | DRAWING #:<br><b>S. D. 8507-B</b> | OPT. #:<br><b>00</b> |
| DRAWN BY:<br>S. DeMONTIGNY | CONTROLLED BY: | DATE:<br>12-05-2000 |                                | PAGE 1 OF 1                       |                      |





FF

# FLO FAB



**Manufacturer of Pumps, Tanks, Heat Exchangers & Accessories  
for HVAC Market After-Sales Parts and Services**

[www.flofab.com](http://www.flofab.com)

860, boul Industriel  
Bois-des-Filions, QC,  
Canada, J6Z 4V7

Tel.: (450) 621-2995  
Fax.: (450) 621-4995

Lake Worth  
Florida  
USA  
33467-5749

MAY 2008