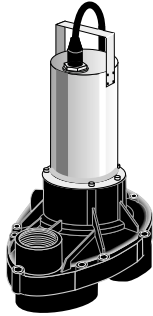


## Submittal Data

## 60 Hertz



JOB or CUSTOMER: \_\_\_\_\_

ENGINEER: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

SUBMITTED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

ORDER NO: \_\_\_\_\_ DATE: \_\_\_\_\_

SPECIFICATION REF: \_\_\_\_\_

| QUANTITY | TAG NO. | MODEL NO. | GPM | FEET | VOLT | PHASE | COMMENTS |
|----------|---------|-----------|-----|------|------|-------|----------|
|          |         |           |     |      |      |       |          |
|          |         |           |     |      |      |       |          |

### Technical Data

#### PERFORMANCE RANGE:

- Flow: 0 – 120 U.S. GPM
- Head: 0 – 90 feet of water
- Horsepower: 1/3 – 1 1/2 HP

#### SOLIDS HANDLING:

- 3/4" spherical solids

#### MOTOR TYPE:

- AC induction
- Permanent split capacitor
- Oil filled
- Class F insulation
- Manufactured by Grundfos

#### MOTORDUTY:

- Continuous, not to exceed 8 hours per 24 hour period

#### THERMAL PROTECTION:

- Automatic reset
- STARTS PER HOUR:**
- Maximum 20 starts per hour
  - Evenly distributed once every 3 minutes

#### MOTOR BEARING SYSTEM:

- 1 ball / 1 sleeve bearing

#### TEMPERATURE LIMITS:

- Fluid temperature, pump fully submerged.
- Normal motor duty – 104°F (40° C)
- Intermittent operation (approx. 3-4 minutes) – 140°F (60° C)

#### DISCHARGE SIZE:

- 2" female NPT

#### IMPELLER DESIGN:

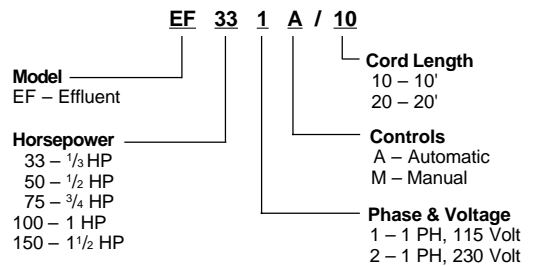
- Semi-open centrifugal

#### APPROVALS:

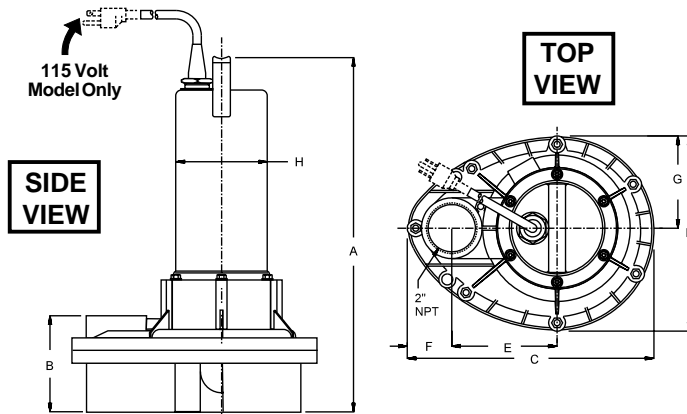
- Listed 99K4



### Type Designation



### Dimensions



#### Maximum Dimensions

| HP          | A             | B     | C      | D     | E   | F      | G     | H      |
|-------------|---------------|-------|--------|-------|-----|--------|-------|--------|
| 1/3         | Inches 15 1/8 | 4 5/8 | 11 5/8 | 9 1/4 | 5   | 2 3/16 | 4 3/8 | 4 5/16 |
|             | mm 384        | 117   | 296    | 235   | 127 | 55     | 111.5 | 110    |
| 1/2 – 1 1/2 | Inches 16 3/4 | 4 5/8 | 11 5/8 | 9 1/4 | 5   | 2 3/16 | 4 3/8 | 4 5/16 |
|             | mm 424        | 117   | 296    | 235   | 127 | 55     | 111.5 | 110    |

### Weights

| Pump Type<br>EF          | HP    | Pump Only | Pump w/<br>Power Cord |       | Pump w/<br>Cord &<br>Float Switch |       |
|--------------------------|-------|-----------|-----------------------|-------|-----------------------------------|-------|
|                          |       |           | 10'                   | 20'   | 10'                               | 20'   |
| Dry Wt. (lbs.)           | 1/3   | 18        | 19                    | 19.5  | 20                                | 21.5  |
|                          | 1/2   | 22        | 23                    | 23.5  | 24                                | 25.5  |
|                          | 3/4   | 22        | 23                    | 23.5  | 24                                | 25.5  |
|                          | 1     | 22        | 23                    | 23.5  | 24                                | 25.5  |
|                          | 1 1/2 | 25        | 26                    | 26.5  | 27                                | 28.5  |
| Dry Wt. (kilograms)      | 1/3   | 8.16      | 8.62                  | 8.85  | 9.07                              | 9.75  |
|                          | 1/2   | 9.98      | 10.43                 | 10.66 | 10.89                             | 11.57 |
|                          | 3/4   | 9.98      | 10.43                 | 10.66 | 10.89                             | 11.57 |
|                          | 1     | 9.98      | 10.43                 | 10.66 | 10.89                             | 11.57 |
|                          | 1 1/2 | 11.34     | 11.79                 | 12.02 | 12.25                             | 12.93 |
| Shipping Wt. (lbs.)      | 1/3   | 22        | 23                    | 23.5  | 24                                | 25.5  |
|                          | 1/2   | 26        | 27                    | 27.5  | 28                                | 30    |
|                          | 3/4   | 26        | 27                    | 27.5  | 28                                | 32    |
|                          | 1     | 26        | 27                    | 27.5  | 28                                | 33.5  |
|                          | 1 1/2 | 29        | 30                    | 30.5  | 31                                | 33    |
| Shipping Wt. (Kilograms) | 1/3   | 9.98      | 10.43                 | 10.66 | 10.89                             | 11.57 |
|                          | 1/2   | 11.79     | 12.25                 | 12.47 | 12.70                             | 13.61 |
|                          | 3/4   | 11.79     | 12.25                 | 12.47 | 12.70                             | 14.51 |
|                          | 1     | 11.79     | 12.25                 | 12.47 | 12.70                             | 15.20 |
|                          | 1 1/2 | 13.15     | 13.61                 | 13.83 | 14.06                             | 14.97 |

### Shipping Volume (1/3 – 1 1/2 HP)

| Pump Type-EF | Pump w/ Power Cord |       | Pump w/ Cord & Float Switch |       |
|--------------|--------------------|-------|-----------------------------|-------|
|              | 10'                | 20'   | 10'                         | 20'   |
| Cu. Ft.      | 1.82               | 1.82  | 1.82                        | 1.82  |
| Cu. M.       | 0.052              | 0.052 | 0.052                       | 0.052 |

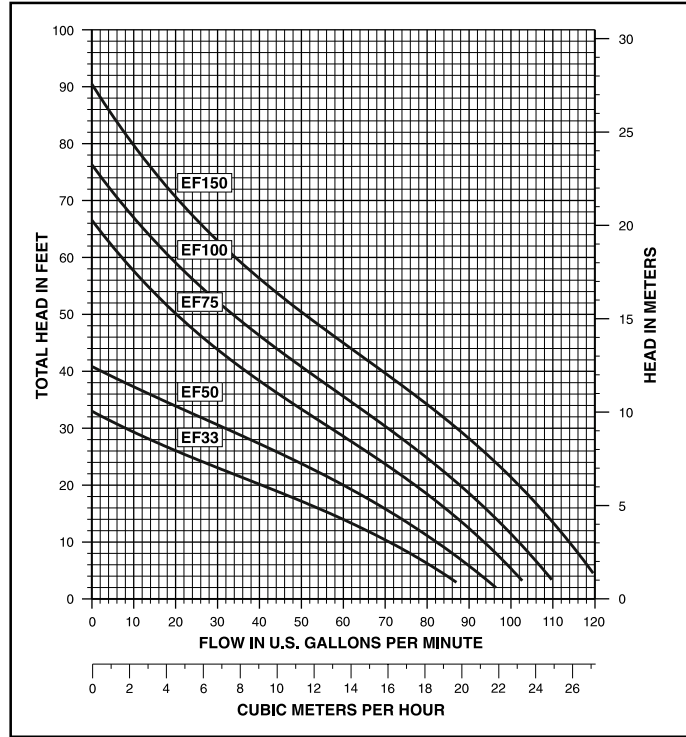
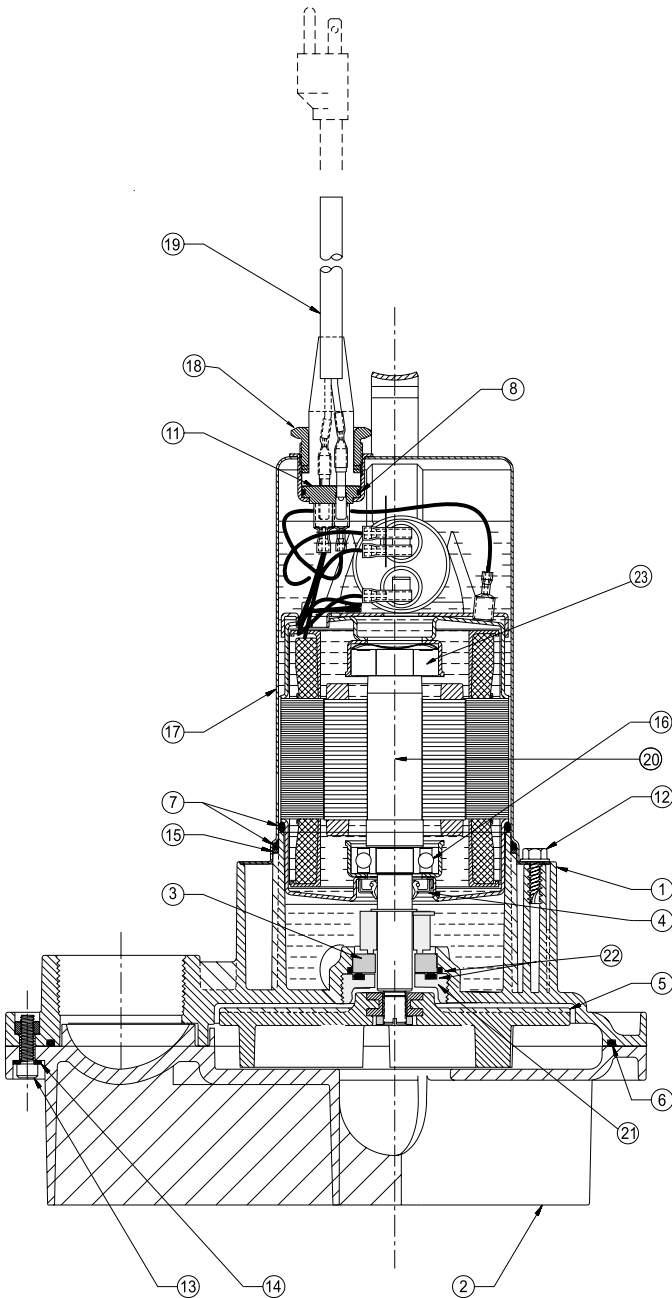
### Electrical Data

| Pump Type | HP    | Service Factor | PH | Input Voltage (Volts) | Maximum Power Consumption (Watts) | Maximum Current (Amps) | Locked Rotor Current (Amps) | Nominal Speed (Rpm) |
|-----------|-------|----------------|----|-----------------------|-----------------------------------|------------------------|-----------------------------|---------------------|
| EF        | 1/3   | 1.7            | 1  | 115                   | 905                               | 8.4                    | 18                          | 1650                |
|           |       | 1.7            | 1  | 230                   | 830                               | 3.9                    | 9                           | 1640                |
|           | 1/2   | 1.6            | 1  | 115                   | 1190                              | 11.5                   | 24                          | 1655                |
|           |       | 1.6            | 1  | 230                   | 1115                              | 5.4                    | 12                          | 1655                |
|           | 3/4   | 1.5            | 1  | 230                   | 1690                              | 7.6                    | 23                          | 3390                |
|           | 1     | 1.4            | 1  | 230                   | 2240                              | 10.1                   | 23                          | 3290                |
|           | 1 1/2 | 1.3            | 1  | 230                   | 2880                              | 13.1                   | 30                          | 3340                |

# Effluent (EF – Single Phase)

## Sectional Drawing

## Performance Curve



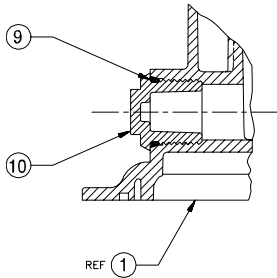
OBJECT AND MATING BOSS HAVE BEEN ROTATED 30° INTO VIEW

## Materials of Construction

| Pos.             | Description           | Material                       |
|------------------|-----------------------|--------------------------------|
| 1                | Volute, Top           | Amodel 1125 HS ®/Polypropylene |
| 2                | Volute, Lower         | Polypropylene                  |
| 3                | Mechanical Shaft Seal | Ceramic, Carbon, NBR, 316 SS   |
| 4                | Lip Seal              | NBR                            |
| 5                | Impeller              | Ryton BR111                    |
| 6                | Volute O'Ring         | NBR                            |
| 7                | Motor Housing O'Ring  | NBR                            |
| 8                | Pin Connector O'Ring  | NBR                            |
| 9                | Port Plug O'Ring      | NBR                            |
| 10               | Port Plug             | Amodel 1125 HS ®               |
| 11               | 3-Pin Connector       | Rynite 530FR                   |
| 12               | Screw, Hi-Lo TorX     | 303 SS                         |
| 13               | Screw Coated & Nut    | 304 SS                         |
| 14               | Washer 1/4"           | 303 SS                         |
| 15               | Spacer O'Ring         | ABS Plastic                    |
| 16               | Ball Bearing          | 304 SS                         |
| 17               | Motor Housing         | 316 SS                         |
| 18               | Cable Nut             | 316 SS                         |
| 19               | Power Cord            | SJOW-A-Neoprene                |
| 20               | Motor/Pump Shaft      | ST 50 mild steel / 304 SS      |
| 21               | Upper Volute Gland    | Ryton BR111                    |
| 22               | Shaft Seal O'Rings    | NBR                            |
| 23               | Sleeve bearing        | Bronze                         |
| Interior of Mtr. | Motor Oil             | Polyalphaolefin                |

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## Port & Plug



**GRUNDFOS**

Leaders in Pump Technology

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Canada: Oakville, Ontario • Mexico: Apodaca, N.L.

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