

# **HCP PUMP**

|                      |                    |
|----------------------|--------------------|
| <b>Model</b>         | <b>80HDG21.5</b>   |
| <b>Series</b>        | <b>HDG</b>         |
| <b>Frequency</b>     | <b>50</b>          |
| <b>Phase / Volt</b>  | <b>3 Ø / 400 V</b> |
| <b>Rated Current</b> | <b>3.4 A</b>       |
| <b>Discharge</b>     | <b>80 mm (3")</b>  |



## **Motor Data**

|                         |        |
|-------------------------|--------|
| Input Power—P1          | 2 kW   |
| Rated Power—P2          | 1.5 kW |
| Insulation Class        | F      |
| Max. Starts Per Hour    | 10     |
| Rated Speed (rpm)       | 2800   |
| Start Method            | DOL    |
| Ingress Protection Code | IP68   |
| Explosion-Proof         | NO     |

## **Technology**

|                      |              |
|----------------------|--------------|
| Impeller Type        | Close        |
| Mechanical Seal      | Double       |
| Lubricating Oil VG32 | 500 CC       |
| Solid Passage        | 10 mm (3/8") |
| Cooling Type         | Self-cooling |

## **Material**

|                         |                  |
|-------------------------|------------------|
| Motor Frame             | FC200 (GG-20)    |
| Shaft                   | SUS403 ( X5Cr13) |
| Casing                  | FC200 (GG-20)    |
| Impeller                | HiCrFC           |
| Mechanical Seal         | CA/CE&SiC/SiC    |
| Cable                   | VCT,H07RN-F      |
| Upper and Lower Bearing | 6204ZZ,6305ZZ    |

## **Liquid**

|                             |                       |
|-----------------------------|-----------------------|
| Maximum Ambient Temperature | 0~40°C (32~104°F)     |
| Maximum Installation Depth  | 20m (66ft)            |
| Highest Liquid Temperature  | 40 °C (104°F)         |
| Liquid Transported          | Construction drainage |

## **Others(Optional)**

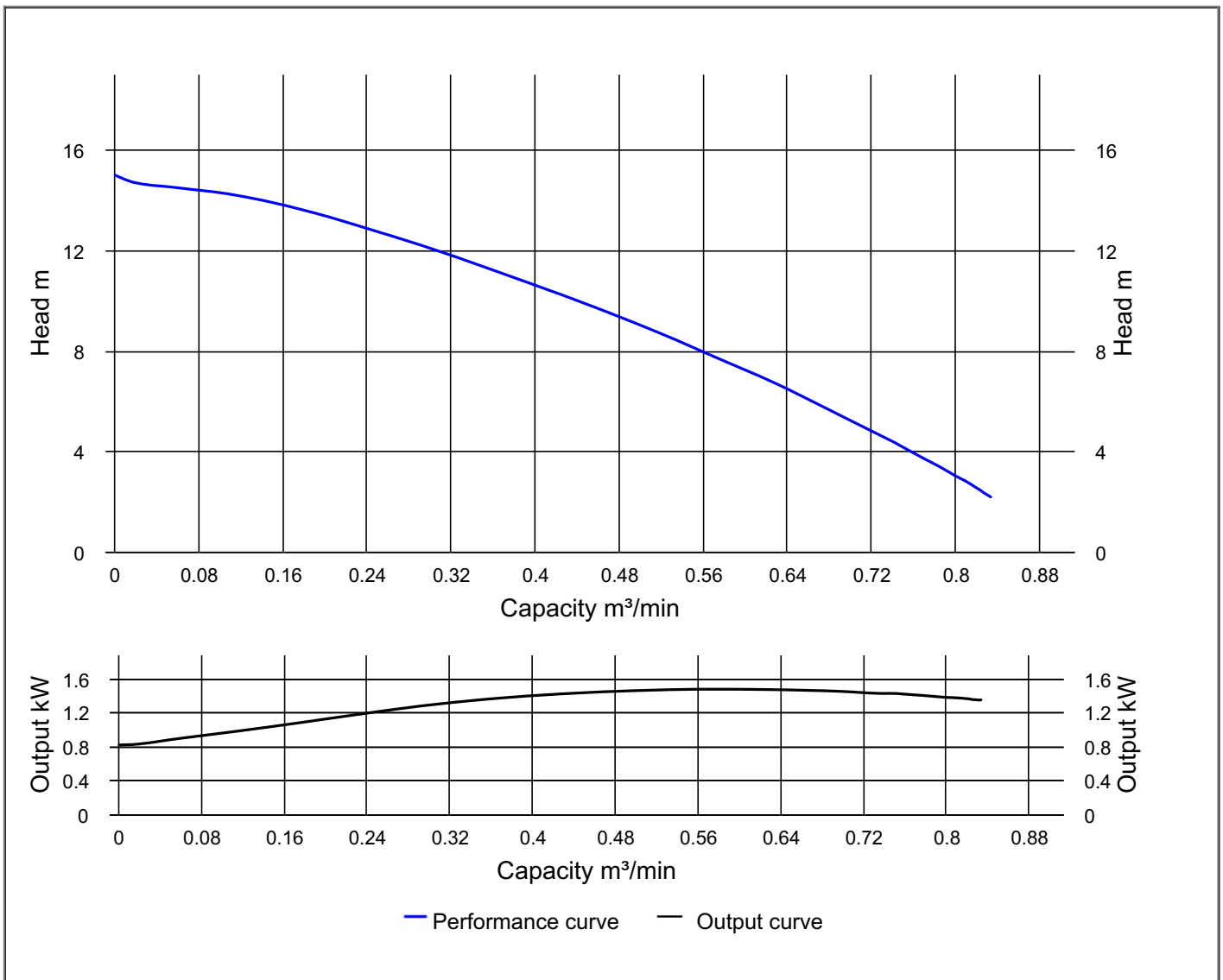
|                   |                    |
|-------------------|--------------------|
| Protection Device | Auto-cut Protector |
| Moisture Sensor   |                    |



# HCP PUMP

## PUMP PERFORMANCE CURVES

|                         |                         |                                |                |
|-------------------------|-------------------------|--------------------------------|----------------|
| <b>Model</b>            | 80HDG21.5               | <b>File NO.</b>                | 20230217211634 |
| <b>Frequency</b>        | 50 Hz                   | <b>Ver NO.</b>                 | 202003060911   |
| <b>Discharge</b>        | 3" / 80 mm              | <b>REFERENCE SPECIFICATION</b> |                |
| <b>Output</b>           | 2 HP / 1.5 kW           | <b>Output</b>                  | 1.46 kW        |
| <b>Std. Head</b>        | 9 m                     | <b>Efficiency</b>              | 50.1 %         |
| <b>Std. Capacity</b>    | 0.5 m <sup>3</sup> /min |                                |                |
| <b>Phase / Volt</b>     | 3 Ø / 400 V             |                                |                |
| <b>Rated Current</b>    | 3.4 A                   |                                |                |
| <b>Pole / rpm</b>       | 2 P / 2800 rpm          |                                |                |
| <b>Start Method</b>     | DOL                     |                                |                |
| <b>Insulation Class</b> | F                       |                                |                |

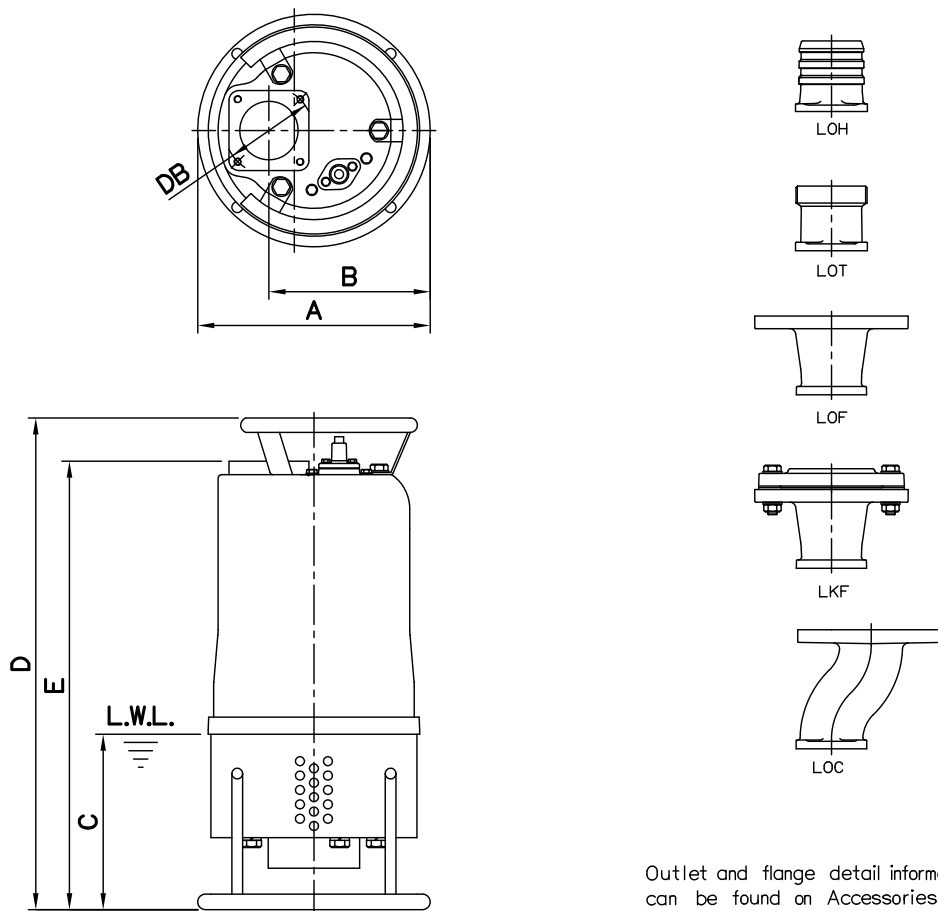


## DIMENSIONS

NO: S3HDG237030-00

MODEL: 80HDG21.5 / 22.2 / 23.7

60Hz 1Ø / 3Ø



Outlet and flange detail information can be found on Accessories section.

Dimensions-mm

Weight:kg

| Model        | A   | B   | C   | D   | E   | DB | WT1 | Optional Outlet Accessories |         |                 |             |             |
|--------------|-----|-----|-----|-----|-----|----|-----|-----------------------------|---------|-----------------|-------------|-------------|
|              |     |     |     |     |     |    |     | LOH                         | LOT     | LOF             | LKF         | LOC         |
| 80HDG21.5 1Ø | 260 | 179 | 195 | 592 | 546 | 98 | 41  | LOH3-98                     | LOT3-98 | LOF3-150-160*98 | LKF3-150*98 | LOC3-150*98 |
| 80HDG21.5 3Ø | 260 | 179 | 195 | 547 | 502 | 98 | 36  | LOH3-98                     | LOT3-98 | LOF3-150-160*98 | LKF3-150*98 | LOC3-150*98 |
| 80HDG22.2 1Ø | 260 | 179 | 195 | 622 | 577 | 98 | 45  | LOH3-98                     | LOT3-98 | LOF3-150-160*98 | LKF3-150*98 | LOC3-150*98 |
| 80HDG22.2 3Ø | 260 | 179 | 195 | 547 | 502 | 98 | 40  | LOH3-98                     | LOT3-98 | LOF3-150-160*98 | LKF3-150*98 | LOC3-150*98 |
| 80HDG23.7 3Ø | 260 | 179 | 195 | 577 | 532 | 98 | 45  | LOH3-98                     | LOT3-98 | LOF3-150-160*98 | LKF3-150*98 | LOC3-150*98 |

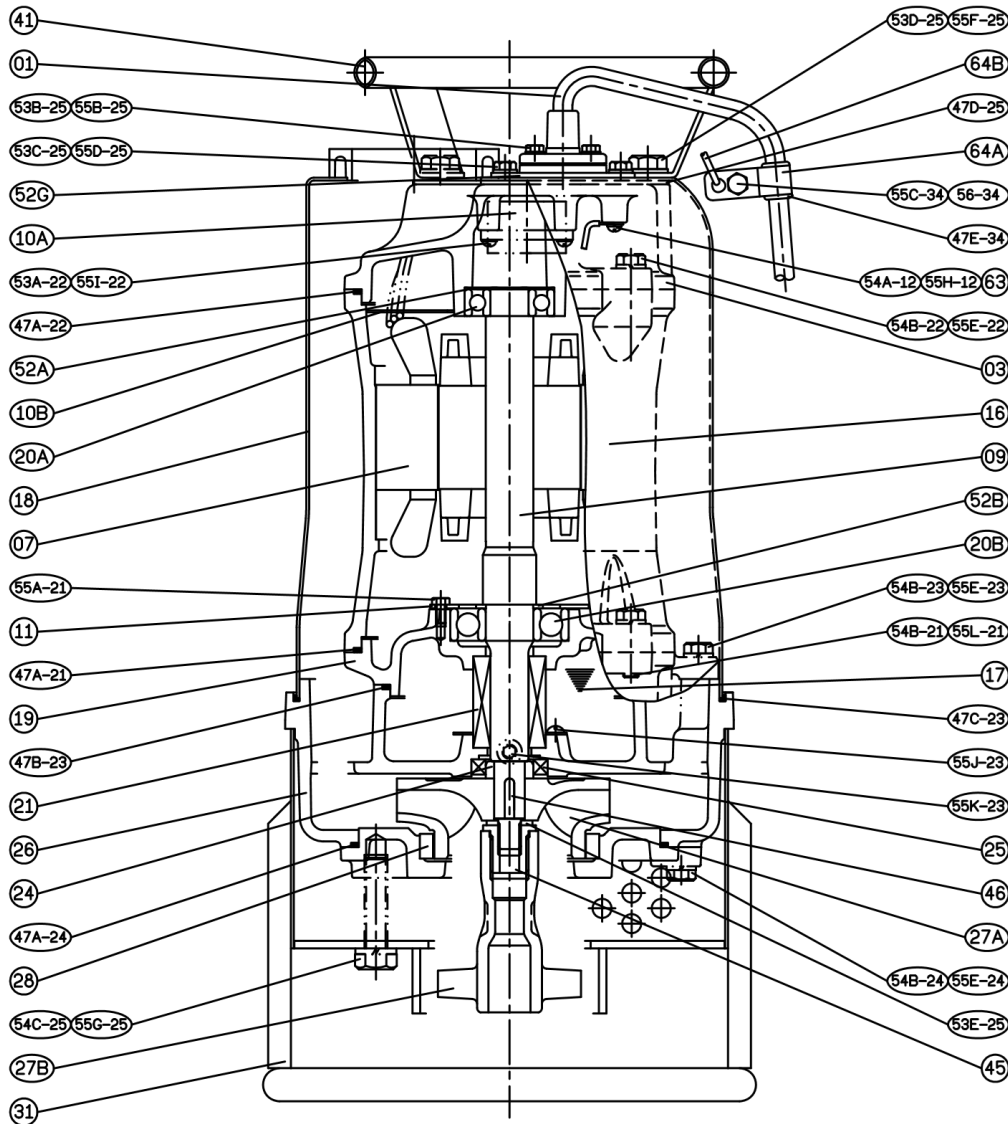
Dimensions-inch

Weight:lb

| Model        | A   | B                | C                | D                 | E                 | DB | WT1 | Optional Outlet Accessories |         |                 |             |             |
|--------------|-----|------------------|------------------|-------------------|-------------------|----|-----|-----------------------------|---------|-----------------|-------------|-------------|
|              |     |                  |                  |                   |                   |    |     | LOH                         | LOT     | LOF             | LKF         | LOC         |
| 80HDG21.5 1Ø | 10¼ | 7½ <sub>16</sub> | 7¾ <sub>16</sub> | 23¾ <sub>16</sub> | 21½               | 3¾ | 90  | LOH3-98                     | LOT3-98 | LOF3-150-160*98 | LKF3-150*98 | LOC3-150*98 |
| 80HDG21.5 3Ø | 10¼ | 7½ <sub>16</sub> | 7¾ <sub>16</sub> | 21¾ <sub>16</sub> | 19¾               | 3¾ | 79  | LOH3-98                     | LOT3-98 | LOF3-150-160*98 | LKF3-150*98 | LOC3-150*98 |
| 80HDG22.2 1Ø | 10¼ | 7½ <sub>16</sub> | 7¾ <sub>16</sub> | 24½               | 22¾ <sub>16</sub> | 3¾ | 99  | LOH3-98                     | LOT3-98 | LOF3-150-160*98 | LKF3-150*98 | LOC3-150*98 |
| 80HDG22.2 3Ø | 10¼ | 7½ <sub>16</sub> | 7¾ <sub>16</sub> | 21¾ <sub>16</sub> | 19¾               | 3¾ | 88  | LOH3-98                     | LOT3-98 | LOF3-150-160*98 | LKF3-150*98 | LOC3-150*98 |
| 80HDG23.7 3Ø | 10¼ | 7½ <sub>16</sub> | 7¾ <sub>16</sub> | 22¾ <sub>16</sub> | 20¾ <sub>16</sub> | 3¾ | 99  | LOH3-98                     | LOT3-98 | LOF3-150-160*98 | LKF3-150*98 | LOC3-150*98 |

L.W.L.:Lowest Running Water Level

WT1:Pump Weight(Without Cable)



| NO. | Part name          | Material        | QTY |
|-----|--------------------|-----------------|-----|
| 01  | Cable              |                 | 1   |
| 03  | Upper Cover        | FC200           | 1   |
| 07  | Stator             |                 | 1   |
| 09  | Shaft End          | SUS403          | 1   |
| 10A | Auto-cut Protector |                 | 1   |
| 10B | Protective Plate   |                 | 1   |
| 11  | Bearing Fixer      | SPCC            | 1   |
| 16  | Motor Frame        | FC200           | 1   |
| 17  | Lubricant          |                 |     |
| 18  | Outer Cover        | SUS304          | 1   |
| 19  | Bearing Bracket    | FC200           | 1   |
| 20A | Bearing            |                 | 1   |
| 20B | Bearing            |                 | 1   |
| 21  | M. Seal            | CA/CE & SiC/SiC | 1   |

| NO. | Part name              | Material     | QTY |
|-----|------------------------|--------------|-----|
| 24  | Oil Seal Bush          | SUS403       | 1   |
| 25  | Oil Seal               | SUS304+NBR   | 1   |
| 26  | Casing                 | FC200        | 1   |
| 27A | Impeller               | HiCrFC       | 1   |
| 27B | Agitator               | FCD700       | 1   |
| 28  | Casing Cover+Wear Ring | FC200+HiCrFC | 1   |
| 31  | Strainer               | SUS304       | 1   |
| 41  | Handle                 | SUS304       | 1   |
| 46  | Impeller Key           | SUS304       | 1   |
| 47  | Gasket Kit             |              |     |