

# HCP PUMP

|                  |                   |
|------------------|-------------------|
| <b>Model</b>     | <b>80SFU22.2</b>  |
| <b>Series</b>    | <b>SF</b>         |
| <b>Frequency</b> | <b>50</b>         |
| <b>Phase</b>     | <b>3</b>          |
| <b>Discharge</b> | <b>80 mm (3")</b> |



## Motor Data

|                         |          |
|-------------------------|----------|
| Input Power—P1          | 2.95 kW  |
| Rated Power—P2          | 2.2 kW   |
| Insulation Class        | F        |
| Voltage Range           | 200~525V |
| Max. Starts Per Hour    | 10       |
| Rated Speed (rpm)       | 2840     |
| Start Method            | DOL      |
| Ingress Protection Code | DOL      |
| Explosion-Proof         | IP68     |

## Technology

|                      |                  |
|----------------------|------------------|
| Impeller Type        | Vortex           |
| Mechanical Seal      | Double           |
| Lubricating Oil VG32 | 850 CC           |
| Solid Passage        | 50 mm            |
| Cooling Type         | External cooling |

## Material

|                         |                          |
|-------------------------|--------------------------|
| Motor Frame             | SUS316 (AISI 316)        |
| Shaft                   | SUS316 (X5CrNiMo17-12-2) |
| Casing                  | SCS14 (G-X6CrNiMo1810)   |
| Impeller                | SCS14 (G-X6CrNiMo1810)   |
| 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          | Acid and alkali sewage |

## Others

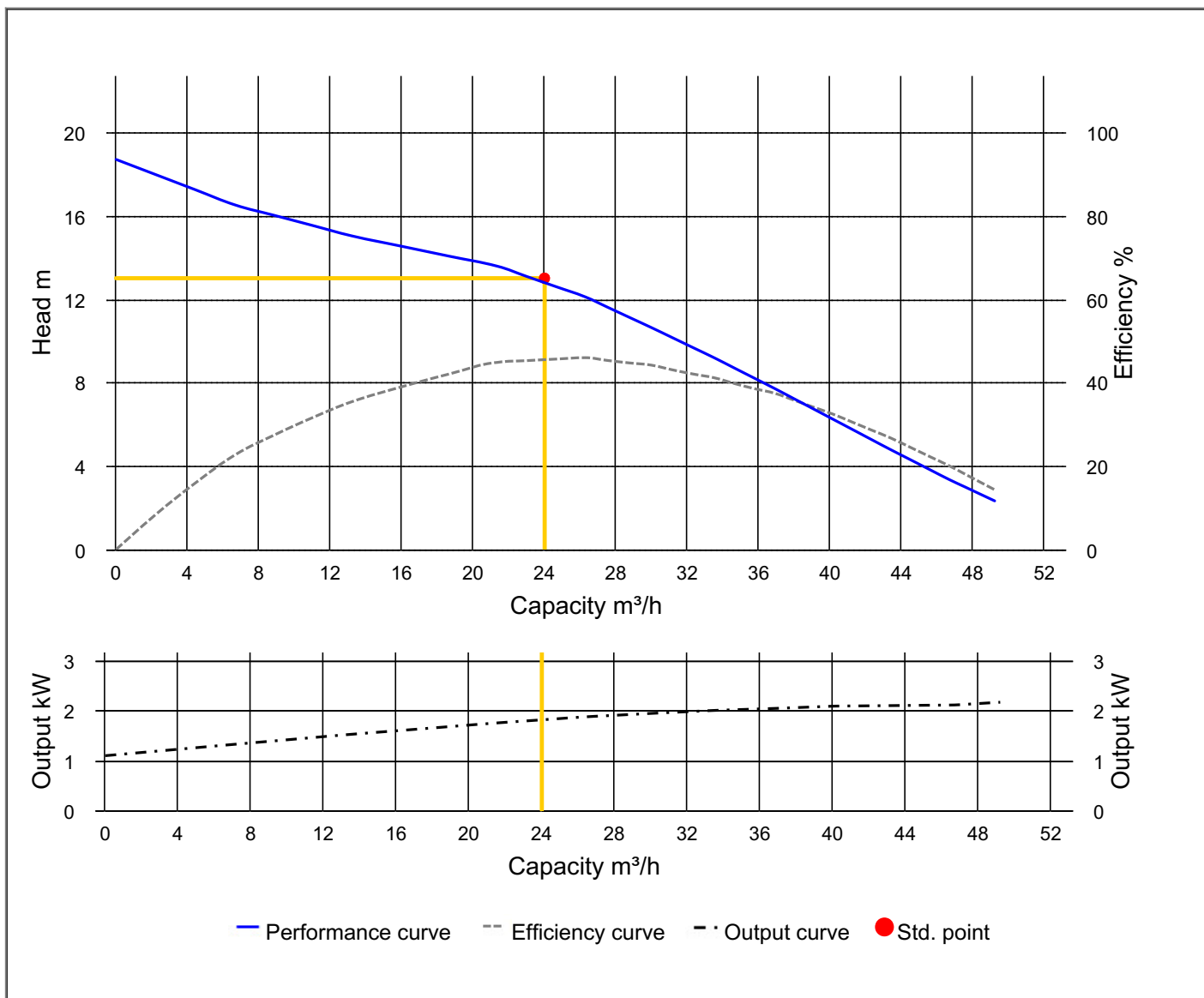
|                   |                    |
|-------------------|--------------------|
| Protection Device | Auto-cut Protector |
| Moisture Sensor   |                    |



# HCP PUMP

## PUMP PERFORMANCE CURVES

|                         |                      |                                |                |
|-------------------------|----------------------|--------------------------------|----------------|
| <b>Model</b>            | 80SFU22.2            | <b>File NO.</b>                | 20210210220555 |
| <b>Frequency</b>        | 50 Hz                | <b>Ver NO.</b>                 | 202003060911   |
| <b>Discharge</b>        | 3" / 80 mm           | <b>REFERENCE SPECIFICATION</b> |                |
| <b>Output</b>           | 3 HP / 2.2 kW        | <b>Output</b>                  | 1.82 kW        |
| <b>Std. Head</b>        | 13 m                 | <b>Efficiency</b>              | 45.5 %         |
| <b>Std. Capacity</b>    | 24 m <sup>3</sup> /h |                                |                |
| <b>Phase / Volt</b>     | 3 Ø / 380 V          |                                |                |
| <b>Rated Current</b>    | 5.10 A               |                                |                |
| <b>Pole / rpm</b>       | 2 P / 2840 rpm       |                                |                |
| <b>Start Method</b>     | DOL                  |                                |                |
| <b>Insulation Class</b> | F                    |                                |                |

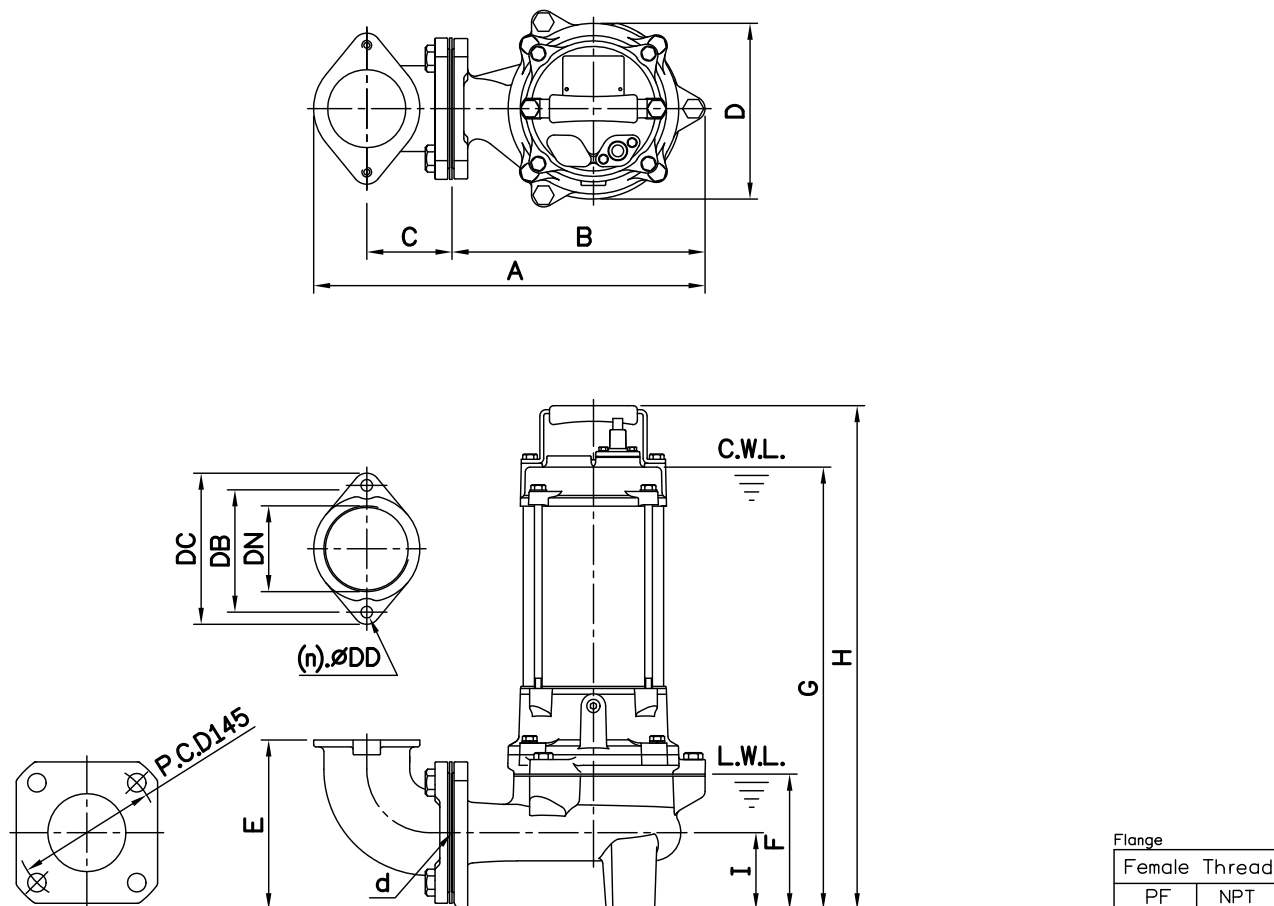


## DIMENSIONS

NO: S3SFU222030-00

MODEL: 80SFU21.5 / 22.2

50Hz 1Ø / 3Ø



Dimensions—mm

Weight:kg

| Model        | d  | A   | B   | C  | D   | E   | F   | G   | H   | I  | WT1 | Elbow (Flange)Set | DN | DB  | DC  | DD | (n)QTY | WT2 |
|--------------|----|-----|-----|----|-----|-----|-----|-----|-----|----|-----|-------------------|----|-----|-----|----|--------|-----|
| 80SFU21.5 1Ø | 80 | 402 | 260 | 88 | 202 | 174 | 139 | 523 | 586 | 79 | 31  | ESB3-130K         | 80 | 130 | 155 | 12 | 2      | 4   |
| 80SFU21.5 3Ø | 80 | 402 | 260 | 88 | 202 | 174 | 139 | 454 | 517 | 79 | 27  | ESB3-130K         | 80 | 130 | 155 | 12 | 2      | 4   |
| 80SFU22.2 1Ø | 80 | 402 | 260 | 88 | 202 | 174 | 139 | 535 | 598 | 79 | 34  | ESB3-130K         | 80 | 130 | 155 | 12 | 2      | 4   |
| 80SFU22.2 3Ø | 80 | 402 | 260 | 88 | 202 | 174 | 139 | 454 | 517 | 79 | 29  | ESB3-130K         | 80 | 130 | 155 | 12 | 2      | 4   |

Dimensions—inch

Weight:lb

| Model        | d | A                               | B                              | C                              | D                               | E                             | F                             | G                               | H                               | I                             | WT1 | Elbow (Flange)Set | DN | DB                            | DC                            | DD  | (n)QTY | WT2 |
|--------------|---|---------------------------------|--------------------------------|--------------------------------|---------------------------------|-------------------------------|-------------------------------|---------------------------------|---------------------------------|-------------------------------|-----|-------------------|----|-------------------------------|-------------------------------|-----|--------|-----|
| 80SFU21.5 1Ø | 3 | 15 <sup>3</sup> / <sub>16</sub> | 10 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>16</sub> | 7 <sup>15</sup> / <sub>16</sub> | 6 <sup>7</sup> / <sub>8</sub> | 5 <sup>1</sup> / <sub>2</sub> | 20 <sup>9</sup> / <sub>16</sub> | 23 <sup>1</sup> / <sub>16</sub> | 3 <sup>1</sup> / <sub>8</sub> | 68  | ESB3-130K         | 3  | 5 <sup>1</sup> / <sub>8</sub> | 6 <sup>1</sup> / <sub>8</sub> | 1/2 | 2      | 9   |
| 80SFU21.5 3Ø | 3 | 15 <sup>3</sup> / <sub>16</sub> | 10 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>16</sub> | 7 <sup>15</sup> / <sub>16</sub> | 6 <sup>7</sup> / <sub>8</sub> | 5 <sup>1</sup> / <sub>2</sub> | 17 <sup>7</sup> / <sub>8</sub>  | 20 <sup>3</sup> / <sub>8</sub>  | 3 <sup>1</sup> / <sub>8</sub> | 60  | ESB3-130K         | 3  | 5 <sup>1</sup> / <sub>8</sub> | 6 <sup>1</sup> / <sub>8</sub> | 1/2 | 2      | 9   |
| 80SFU22.2 1Ø | 3 | 15 <sup>3</sup> / <sub>16</sub> | 10 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>16</sub> | 7 <sup>15</sup> / <sub>16</sub> | 6 <sup>7</sup> / <sub>8</sub> | 5 <sup>1</sup> / <sub>2</sub> | 21 <sup>1</sup> / <sub>16</sub> | 23 <sup>3</sup> / <sub>16</sub> | 3 <sup>1</sup> / <sub>8</sub> | 75  | ESB3-130K         | 3  | 5 <sup>1</sup> / <sub>8</sub> | 6 <sup>1</sup> / <sub>8</sub> | 1/2 | 2      | 9   |
| 80SFU22.2 3Ø | 3 | 15 <sup>3</sup> / <sub>16</sub> | 10 <sup>1</sup> / <sub>4</sub> | 3 <sup>3</sup> / <sub>16</sub> | 7 <sup>15</sup> / <sub>16</sub> | 6 <sup>7</sup> / <sub>8</sub> | 5 <sup>1</sup> / <sub>2</sub> | 17 <sup>7</sup> / <sub>8</sub>  | 20 <sup>3</sup> / <sub>8</sub>  | 3 <sup>1</sup> / <sub>8</sub> | 64  | ESB3-130K         | 3  | 5 <sup>1</sup> / <sub>8</sub> | 6 <sup>1</sup> / <sub>8</sub> | 1/2 | 2      | 9   |

C.W.L.:Continuous Running Water Level  
L.W.L.:Lowest Running Water Level

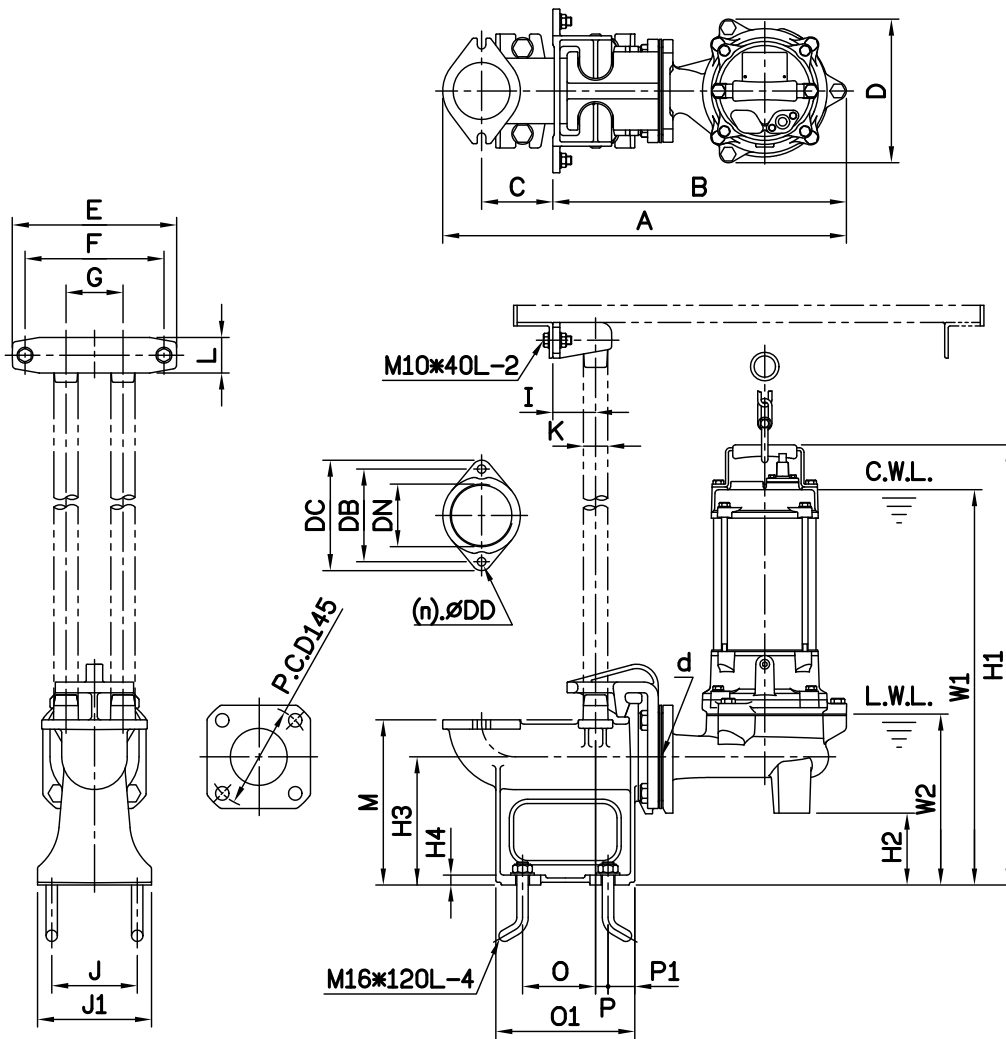
WT1:Pump Weight(Without Cable)  
WT2:Elbow Set Weight

## DIMENSIONS

NO: T3SFU222030-00

MODEL: 80SFU21.5 / 22.2

50Hz 1Ø / 3Ø



| Flange        |     |
|---------------|-----|
| Female Thread |     |
| PF            | NPT |

Dimensions-mm

| Elbow (Flange)Set | DN | DB  | DC  | DD | (n)QTY |
|-------------------|----|-----|-----|----|--------|
| ESF3-130          | 80 | 130 | 155 | 12 | 2      |

Dimensions-inch

| Elbow (Flange)Set | DN | DB    | DC    | DD  | (n)QTY |
|-------------------|----|-------|-------|-----|--------|
| ESF3-130          | 3  | 5 1/8 | 6 1/8 | 1/2 | 2      |

Dimensions-mm

| Model        | d  | A   | B   | C   | D   | E   | F   | G  | I  | J   | J1  | K      | L  | M   | O   | O1  | P  | P1 | W1  | W2  | H1  | H2  | H3  | H4 | WT1 | Weight:kg |     |
|--------------|----|-----|-----|-----|-----|-----|-----|----|----|-----|-----|--------|----|-----|-----|-----|----|----|-----|-----|-----|-----|-----|----|-----|-----------|-----|
|              |    |     |     |     |     |     |     |    |    |     |     |        |    |     |     |     |    |    |     |     |     |     |     |    |     | GRS Set   | WT2 |
| 80SFU21.5 Ø1 | 80 | 567 | 412 | 100 | 202 | 230 | 195 | 80 | 60 | 120 | 160 | 1 1/4" | 50 | 232 | 103 | 195 | 18 | 38 | 624 | 240 | 687 | 101 | 180 | 14 | 31  | ST2-80    | 19  |
| 80SFU21.5 Ø3 | 80 | 567 | 412 | 100 | 202 | 230 | 195 | 80 | 60 | 120 | 160 | 1 1/4" | 50 | 232 | 103 | 195 | 18 | 38 | 555 | 240 | 618 | 101 | 180 | 14 | 27  | ST2-80    | 19  |
| 80SFU22.2 Ø1 | 80 | 567 | 412 | 100 | 202 | 230 | 195 | 80 | 60 | 120 | 160 | 1 1/4" | 50 | 232 | 103 | 195 | 18 | 38 | 636 | 240 | 699 | 101 | 180 | 14 | 34  | ST2-80    | 19  |
| 80SFU22.2 Ø3 | 80 | 567 | 412 | 100 | 202 | 230 | 195 | 80 | 60 | 120 | 160 | 1 1/4" | 50 | 232 | 103 | 195 | 18 | 38 | 555 | 240 | 618 | 101 | 180 | 14 | 29  | ST2-80    | 19  |

Dimensions-inch

| Model        | d | A       | B      | C       | D       | E      | F      | G     | I     | J     | J1     | K     | L | M     | O      | O1      | P      | P1    | W1      | W2     | H1      | H2 | H3     | H4   | WT1 | Weight:lb |     |
|--------------|---|---------|--------|---------|---------|--------|--------|-------|-------|-------|--------|-------|---|-------|--------|---------|--------|-------|---------|--------|---------|----|--------|------|-----|-----------|-----|
|              |   |         |        |         |         |        |        |       |       |       |        |       |   |       |        |         |        |       |         |        |         |    |        |      |     | GRS Set   | WT2 |
| 80SFU21.5 Ø1 | 3 | 22 3/16 | 16 1/4 | 3 15/16 | 7 15/16 | 9 1/16 | 7 1/16 | 3 3/8 | 2 3/8 | 4 3/4 | 6 7/16 | 1 1/4 | 2 | 9 3/8 | 4 1/16 | 7 15/16 | 1 1/16 | 1 1/2 | 24 3/16 | 9 7/16 | 27 1/16 | 4  | 7 1/16 | 7/16 | 68  | ST2-80    | 42  |
| 80SFU21.5 Ø3 | 3 | 22 3/16 | 16 1/4 | 3 15/16 | 7 15/16 | 9 1/16 | 7 1/16 | 3 3/8 | 2 3/8 | 4 3/4 | 6 7/16 | 1 1/4 | 2 | 9 3/8 | 4 1/16 | 7 15/16 | 1 1/16 | 1 1/2 | 21 1/8  | 9 7/16 | 24 5/16 | 4  | 7 1/16 | 7/16 | 60  | ST2-80    | 42  |
| 80SFU22.2 Ø1 | 3 | 22 3/16 | 16 1/4 | 3 15/16 | 7 15/16 | 9 1/16 | 7 1/16 | 3 3/8 | 2 3/8 | 4 3/4 | 6 7/16 | 1 1/4 | 2 | 9 3/8 | 4 1/16 | 7 15/16 | 1 1/16 | 1 1/2 | 25 1/16 | 9 7/16 | 27 1/2  | 4  | 7 1/16 | 7/16 | 75  | ST2-80    | 42  |
| 80SFU22.2 Ø3 | 3 | 22 3/16 | 16 1/4 | 3 15/16 | 7 15/16 | 9 1/16 | 7 1/16 | 3 3/8 | 2 3/8 | 4 3/4 | 6 7/16 | 1 1/4 | 2 | 9 3/8 | 4 1/16 | 7 15/16 | 1 1/16 | 1 1/2 | 21 1/8  | 9 7/16 | 24 3/16 | 4  | 7 1/16 | 7/16 | 64  | ST2-80    | 42  |

C.W.L.:Continuous Running Water Level  
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