

# HIL-V IN-LINE VERTICAL MULTISTAGE PUMPS



- Impellers, diffusers and shaft in stainless steel. AISI 304
- Suitable for boiler feed, wash down, irrigation, processing industry and booster pump duties
- Maximum flow rate 80 m<sup>3</sup>/h, maximum head 400 m
- Temperature range - 15° C to +120° C
- New HIL-S models for sea water, and various other liquids. AISI 316
- Heavy duty ceramic bearings
- High pressure mechanical seals in carbon-silicon carbide
- 1400 rpm models available upon request
- Models available with integral frequency inverter

# HIL-V IN-LINE VERTICAL MULTISTAGE PUMPS

## Features

### Shaft sealing

Spring loaded DIN seal with bellow construction and the fit to purpose material combinations ensures long life time. For models with heavy motors a cartridge version is provided, which enables seal exchange without removing the motor.

Construction with minimized number of parts enables easy assembly and disassembly

### Top bracket

One piece casting ensures maximum stability  
Stainless steel inlay for maximum corrosion resistance

### Stainless steel pump shaft

Flat faces on shaft for strong shaft/ impeller construction.

### Sleeve sealing

Sleeve construction ensures total compensation of thermal expansion. Special shaped oring grooves for optimal sealing.

### Stainless steel diffuser

Special design reduces internal losses which improves the efficiency of the pump.

### Pump bearings

Shaft bearing through combination of tungsten carbide bearing on shaft and ceramic bearing in diffuser.

### Tie rods

Made of stainless steel for maximum resistance against corrosion caused by environmental influences.



### Suction discharge casing

Separate baseplate enables special corrosion resistance treatments. Entire housing made of stainless steel.

### Free floating sliding flange

Connection rotates to match flange and bolt orientation. Easy connection for misalignments. Victaulic connection available on selected series.

# HIL-V IN-LINE VERTICAL MULTISTAGE PUMPS

## Material specification

### Construction:

- Vertical multistage centrifugal pump.
- Durable and high efficiency hydraulic design.
- In-line suction and discharge connections.
- Expansion free radial sleeve sealing.
- Mechanical shaft seal.
- All wetted parts are produced of stainless steel.

| Pump serie  | HIL V                                  | HIL (S)V                                |
|---|--|---|
| <b>Material specification</b>   |  |   |
| Complete hydraulic assembly (suction and discharge casing, impeller, diffuser, shaft, sleeve and top plate) | AISI 303 (1.4305)<br>AISI 304 (1.4301) | AISI 316 (1.4401)<br>AISI 316L (1.4404) |
| Base plate and motor latern   | GG25 (GJL-250)                         | -                                       |
| Suction and discharge casing and top bracket  | -                                      | -                                       |
| (Collar) flange   | GGG40 (GJS-400)                        | -                                       |
| Elastomers  | EPDM                                   | Viton                                   |
| Liquid lubricated bearings  | ceramic/tungsten-carbide               |   |
| Dearating and drain plug  | brass                                  | AISI 316 (1.4401)                       |

| Duty range                    |           |      |
|-------------------------------|-----------|------|
| Max. working pressure [kPa]   | 2500      | 2500 |
| Temperature range [°C]        | -20 - 120 |      |
| Max. ambient temperature [°C] | 50        |      |

## Model identification

|                         | HIL    | F | 45 | - 50 |  |
|-------------------------|--------|---|----|------|--|
| <b>Basic materials</b>  | HIL V  | ↓ | ↓  | ↓    | HIL Vertical pumps in AISI 304 (1.4301)                  |
|                         | HIL VS |   |    |      | HIL Vertical pumps in superior grade AISI 316 (1.4401)   |
| <b>Pump connections</b> |        | ↓ | ↓  | ↓    | Oval counterflanges with female thread                   |
|                         |        |   |    |      | F  |
| <b>Model/flow</b>       |        |   | 45 | ↓    | Pump model indicates nominal flow in [M <sup>3</sup> /h] |
| <b>Stages/head</b>      |        |   |    | - 50 | Indicates number of impeller stages (50=5)               |

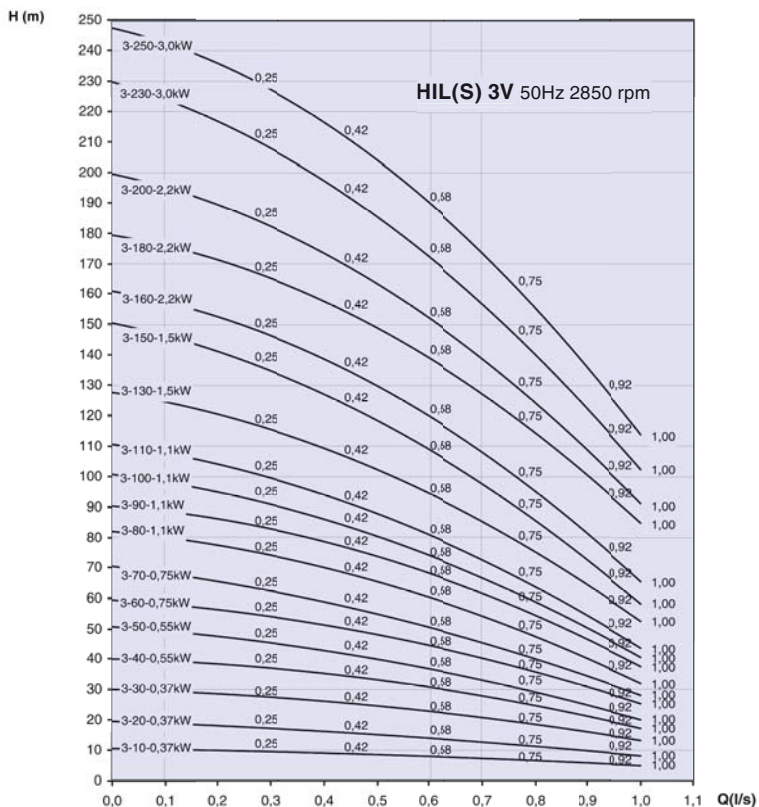
# HIL-V IN-LINE VERTICAL MULTISTAGE PUMPS

## Motor specifications

- Specially developed three-phase improved efficiency motors according IEC standard.
- Nominal power supply [V] : 380 and 420
- Frequency [Hz] : 50
- Nominal rotation speed [ $\text{min}^{-1}$ ] : 2850
- Protection class : IP55
- Insulation class : F
- Efficiency class : eff2

| 2850 [ $\text{min}^{-1}$ ] |            |               |                                 | 230/400V |      | 400/692V |      |
|----------------------------|------------|---------------|---------------------------------|----------|------|----------|------|
| P [kW]                     | $\eta$ [%] | $L_p$ [dB(A)] | Max. Starts [ $\text{h}^{-1}$ ] | I [A]    |      | I [A]    |      |
| 0,37                       | 70         | 58            | 50                              | 1,9      | 1,1  |          |      |
| 0,55                       | 70         | 58            | 50                              | 3,0      | 1,7  |          |      |
| 0,75                       | 76         | 65            | 50                              | 3,8      | 2,3  |          |      |
| 1,10                       | 80         | 65            | 50                              | 5,2      | 3,2  |          |      |
| 1,50                       | 78         | 65            | 30                              | 6,8      | 3,9  |          |      |
| 2,20                       | 82         | 65            | 30                              | 9,2      | 5,3  | 5,3      | 3,1  |
| 3,00                       | 83         | 66            | 20                              | 12,0     | 6,9  | 6,9      | 4,0  |
| 4,00                       | 85         | 69            | 20                              | 15,5     | 8,9  | 8,9      | 5,2  |
| 5,50                       | 86         | 69            | 15                              | 21,6     | 12,5 | 12,5     | 7,2  |
| 7,50                       | 87         | 69            | 12                              | 27,1     | 15,7 | 15,7     | 9,1  |
| 11,00                      | 89         | 76            | 11                              | 43,9     | 25,4 | 25,4     | 14,7 |
| 15,00                      | 90         | 76            | 10                              | 55,7     | 32,2 | 32,2     | 18,6 |
| 18,50                      | 91         | 76            | 10                              | 67,9     | 39,2 | 39,2     | 22,6 |
| 22,00                      | 91         | 76            | 10                              | 81,3     | 46,9 | 46,9     | 27,1 |
| 30,00                      | 91         | 84            | 6                               |          |      | 59,4     | 34,3 |
| 37,00                      | 92         | 84            | 6                               |          |      | 72,6     | 38,0 |

# HIL-V IN-LINE VERTICAL MULTISTAGE PUMPS



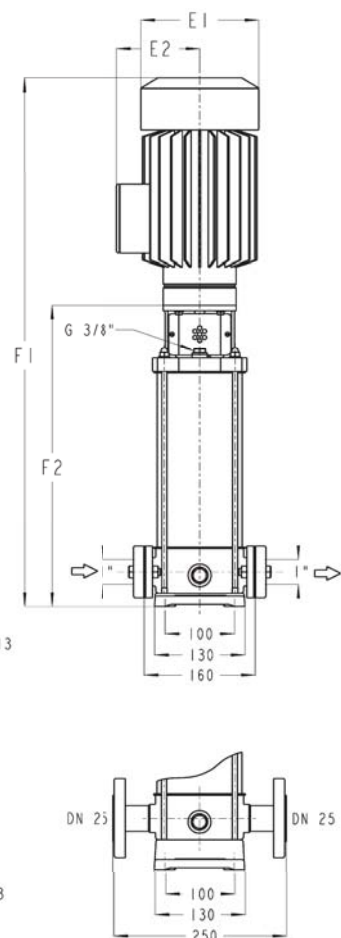
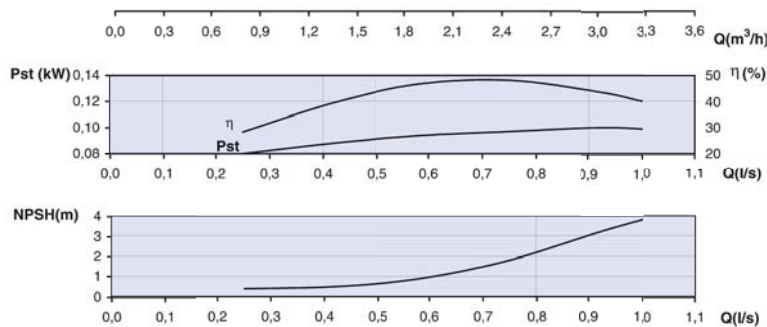
**Performance curve**  
according to:  
DIN 2548 Class C  
50 Hz 2850 min<sup>-1</sup>

**H (m)**

1 m = 1,42 Psi  
3,28 feet  
9,806 kPa  
0,098 Bar

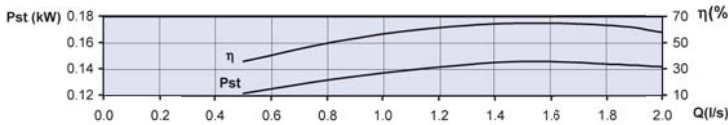
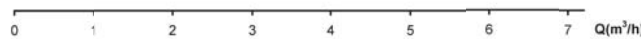
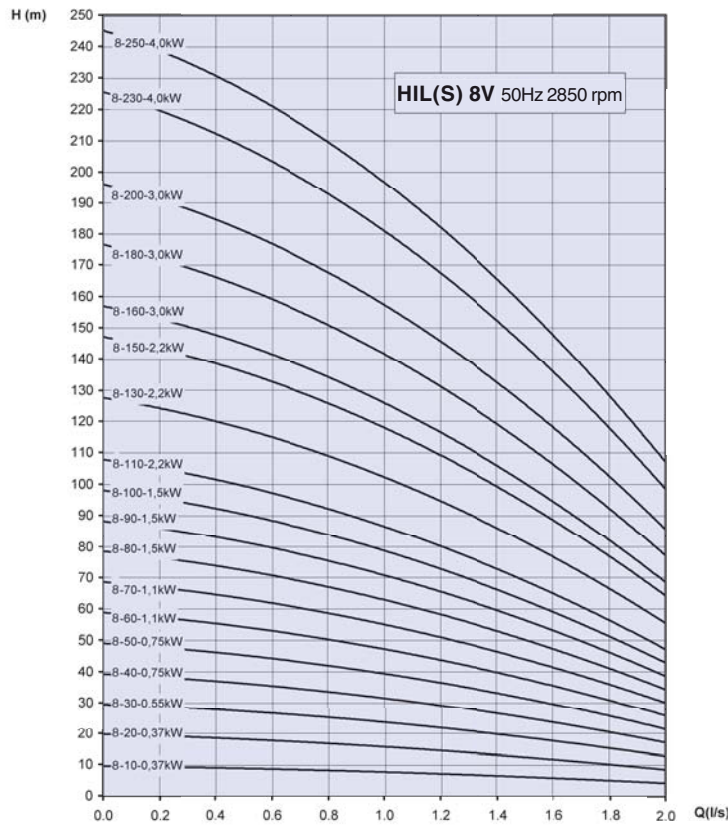
**Q (l/s)**

1 l/s = 15,85 US.Gpm  
13,20 Imp.Gpm  
60 l/min



| Pump type<br>HIL(S)F/V | General             |                       |                       |                                      | HIL(S)V               |                       |                    |                      | HIL(S)V F             |                       |                    |                      |
|------------------------|---------------------|-----------------------|-----------------------|--------------------------------------|-----------------------|-----------------------|--------------------|----------------------|-----------------------|-----------------------|--------------------|----------------------|
|                        | Motor power<br>[kW] | Dimensions E1<br>[mm] | Dimensions E2<br>[mm] | Shipping volume<br>[m <sup>3</sup> ] | Dimensions F1<br>[mm] | Dimensions F2<br>[mm] | Net weight<br>[kg] | Gross weight<br>[kg] | Dimensions F1<br>[mm] | Dimensions F2<br>[mm] | Net weight<br>[kg] | Gross weight<br>[kg] |
| 3 - 10                 | 0,37                | 143                   | 93                    | 0,042                                | 433                   | 232                   | 13                 | 17                   | -                     | -                     | -                  | -                    |
| 3 - 20                 | 0,37                | 143                   | 93                    | 0,042                                | 433                   | 232                   | 13                 | 17                   | -                     | -                     | -                  | -                    |
| 3 - 30                 | 0,37                | 143                   | 93                    | 0,042                                | 454                   | 253                   | 14                 | 17                   | -                     | -                     | -                  | -                    |
| 3 - 40                 | 0,55                | 143                   | 93                    | 0,042                                | 475                   | 274                   | 15                 | 19                   | -                     | -                     | -                  | -                    |
| 3 - 50                 | 0,55                | 143                   | 101                   | 0,042                                | 496                   | 295                   | 16                 | 19                   | -                     | -                     | -                  | -                    |
| 3 - 60                 | 0,75                | 150                   | 101                   | 0,049                                | 553                   | 326                   | 17                 | 21                   | -                     | -                     | -                  | -                    |
| 3 - 70                 | 0,75                | 160                   | 101                   | 0,049                                | 574                   | 347                   | 18                 | 21                   | -                     | -                     | -                  | -                    |
| 3 - 80                 | 1,10                | 160                   | 101                   | 0,049                                | 595                   | 368                   | 20                 | 23                   | -                     | -                     | -                  | -                    |
| 3 - 90                 | 1,10                | 160                   | 101                   | 0,049                                | 616                   | 389                   | 20                 | 24                   | -                     | -                     | -                  | -                    |
| 3 - 100                | 1,10                | 160                   | 101                   | 0,049                                | 637                   | 410                   | 21                 | 24                   | -                     | -                     | -                  | -                    |
| 3 - 110                | 1,10                | 160                   | 101                   | 0,055                                | 658                   | 431                   | 21                 | 25                   | -                     | -                     | -                  | -                    |
| 3 - 130                | 1,50                | 174                   | 142                   | 0,069                                | 739                   | 483                   | 27                 | 31                   | -                     | -                     | -                  | -                    |
| 3 - 150                | 1,50                | 174                   | 142                   | 0,069                                | 781                   | 525                   | 28                 | 32                   | -                     | -                     | -                  | -                    |
| 3 - 160                | 2,20                | 174                   | 142                   | 0,069                                | -                     | -                     | -                  | -                    | 852                   | 571                   | 32                 | 35                   |
| 3 - 180                | 2,20                | 174                   | 142                   | 0,069                                | -                     | -                     | -                  | -                    | 894                   | 613                   | 33                 | 36                   |
| 3 - 200                | 2,20                | 174                   | 142                   | 0,069                                | -                     | -                     | -                  | -                    | 936                   | 655                   | 34                 | 37                   |
| 3 - 230                | 3,00                | 198                   | 155                   | 0,114                                | -                     | -                     | -                  | -                    | 1042                  | 728                   | 44                 | 49                   |
| 3 - 250                | 3,00                | 198                   | 155                   | 0,114                                | -                     | -                     | -                  | -                    | 1084                  | 770                   | 45                 | 50                   |

# HIL-V IN-LINE VERTICAL MULTISTAGE PUMPS



**Performance curve**  
according to:  
DIN 2548 Class C  
50 Hz 2850 min<sup>-1</sup>

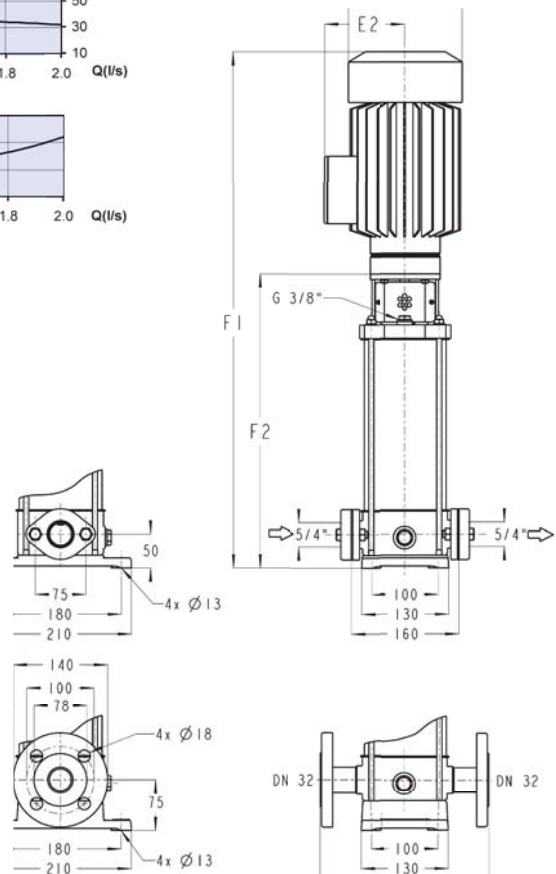
**H (m)**

1 m = 1,42 Psi  
3,28 feet  
9,806 kPa  
0,098 Bar

**Q (l/s)**

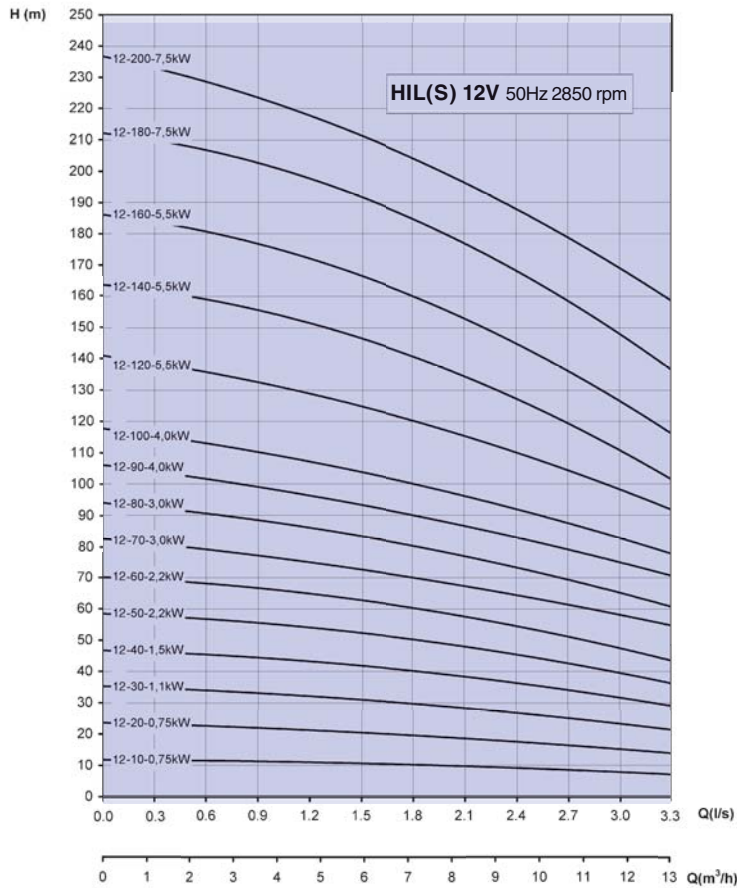
1 l/s = 15,85 US.Gpm  
13,20 Imp.Gpm  
60 l/min

| Pump type<br>HIL(S)(F)V | General             |                       |                       |                                      |                       | HIL(S)V               |                    |                      |                       | HIL(S)V F             |                    |                      |  |
|-------------------------|---------------------|-----------------------|-----------------------|--------------------------------------|-----------------------|-----------------------|--------------------|----------------------|-----------------------|-----------------------|--------------------|----------------------|--|
|                         | Motor power<br>[kW] | Dimensions E1<br>[mm] | Dimensions E2<br>[mm] | Shipping volume<br>[m <sup>3</sup> ] | Dimensions F1<br>[mm] | Dimensions F2<br>[mm] | Net weight<br>[kg] | Gross weight<br>[kg] | Dimensions F1<br>[mm] | Dimensions F2<br>[mm] | Net weight<br>[kg] | Gross weight<br>[kg] |  |
| 8 - 10                  | 0,37                | 143                   | 93                    | 0,042                                | 433                   | 232                   | 13                 | 17                   | -                     | -                     | -                  | -                    |  |
| 8 - 20                  | 0,37                | 143                   | 93                    | 0,042                                | 433                   | 232                   | 13                 | 17                   | -                     | -                     | -                  | -                    |  |
| 8 - 30                  | 0,55                | 143                   | 93                    | 0,042                                | 454                   | 253                   | 15                 | 18                   | -                     | -                     | -                  | -                    |  |
| 8 - 40                  | 0,75                | 160                   | 101,5                 | 0,042                                | 511                   | 284                   | 16                 | 20                   | -                     | -                     | -                  | -                    |  |
| 8 - 50                  | 0,75                | 160                   | 101,5                 | 0,042                                | 532                   | 305                   | 17                 | 20                   | -                     | -                     | -                  | -                    |  |
| 8 - 60                  | 1,10                | 160                   | 101,5                 | 0,049                                | 553                   | 326                   | 19                 | 22                   | -                     | -                     | -                  | -                    |  |
| 8 - 70                  | 1,10                | 160                   | 101,5                 | 0,049                                | 574                   | 347                   | 19                 | 23                   | -                     | -                     | -                  | -                    |  |
| 8 - 80                  | 1,50                | 174                   | 142                   | 0,049                                | 634                   | 378                   | 25                 | 28                   | -                     | -                     | -                  | -                    |  |
| 8 - 90                  | 1,50                | 174                   | 142                   | 0,055                                | 655                   | 399                   | 25                 | 29                   | -                     | -                     | -                  | -                    |  |
| 8 - 100                 | 1,50                | 174                   | 142                   | 0,055                                | 676                   | 420                   | 26                 | 29                   | -                     | -                     | -                  | -                    |  |
| 8 - 110                 | 2,20                | 174                   | 142                   | 0,055                                | 722                   | 441                   | 29                 | 33                   | -                     | -                     | -                  | -                    |  |
| 8 - 130                 | 2,20                | 174                   | 142                   | 0,069                                | 764                   | 483                   | 30                 | 34                   | -                     | -                     | -                  | -                    |  |
| 8 - 150                 | 2,20                | 174                   | 142                   | 0,069                                | 806                   | 525                   | 31                 | 36                   | -                     | -                     | -                  | -                    |  |
| 8 - 160                 | 3,00                | 198                   | 155                   | 0,095                                | -                     | -                     | -                  | -                    | 895                   | 581                   | 42                 | 46                   |  |
| 8 - 180                 | 3,00                | 198                   | 155                   | 0,095                                | -                     | -                     | -                  | -                    | 937                   | 623                   | 42                 | 47                   |  |
| 8 - 200                 | 3,00                | 198                   | 155                   | 0,114                                | -                     | -                     | -                  | -                    | 979                   | 665                   | 43                 | 48                   |  |
| 8 - 230                 | 4,00                | 224                   | 168                   | 0,114                                | -                     | -                     | -                  | -                    | 1051                  | 728                   | 51                 | 56                   |  |
| 8 - 250                 | 4,00                | 224                   | 168                   | 0,114                                | -                     | -                     | -                  | -                    | 1093                  | 770                   | 52                 | 57                   |  |





# HIL-V IN-LINE VERTICAL MULTISTAGE PUMPS



## Performance curve

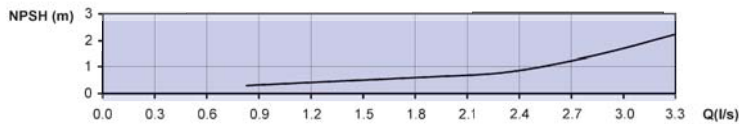
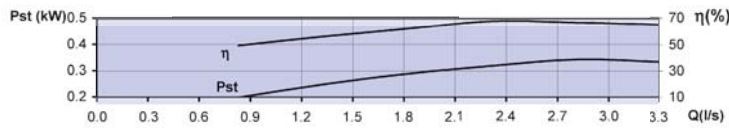
according to:  
DIN 2548 Class C  
50 Hz 2850 min<sup>-1</sup>

### H (m)

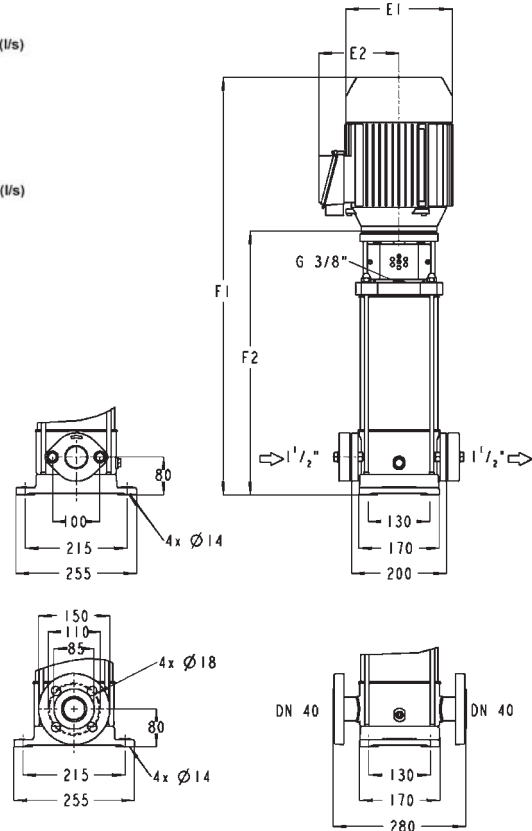
1 m = 1,42 Psi  
3,28 feet  
9,806 kPa  
0,098 Bar

### Q (l/s)

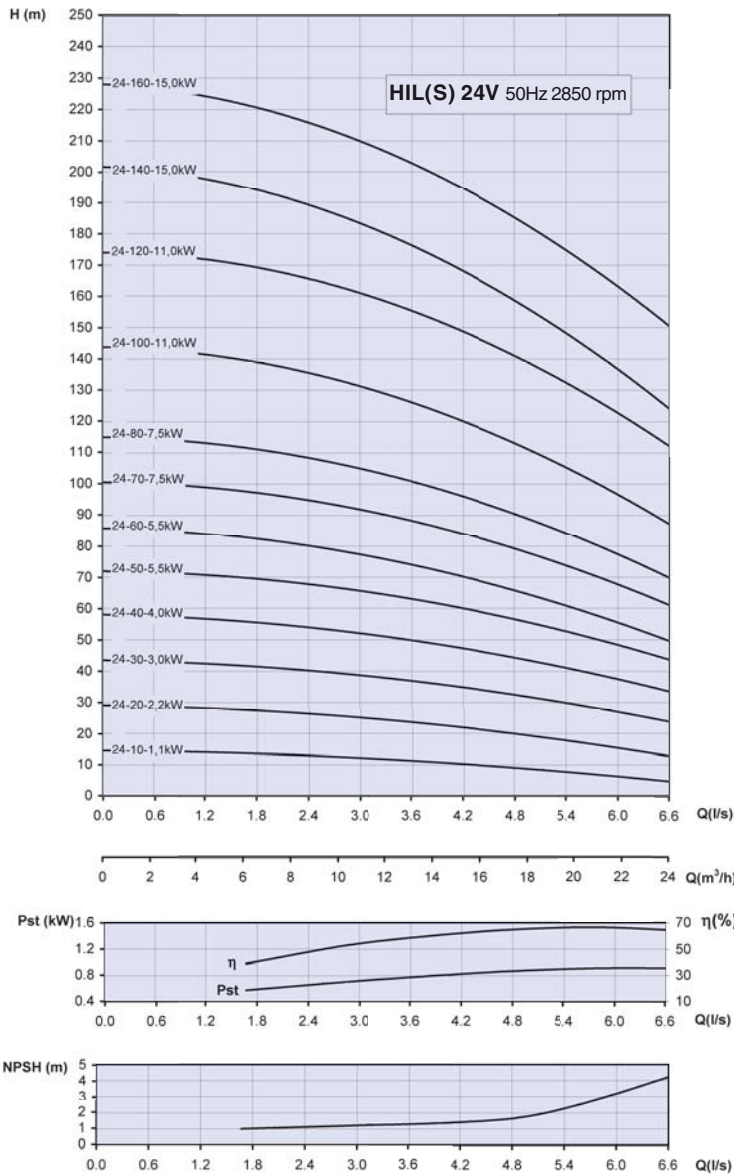
1 l/s = 15,85 US.Gpm  
13,20 Imp.Gpm  
60 l/min



| Pump type<br>HIL(S)FV | General             |                       |                       |                                      | HIL(S)V               |                       |                    |                      | HIL(S)V F             |                       |                    |                      |
|-----------------------|---------------------|-----------------------|-----------------------|--------------------------------------|-----------------------|-----------------------|--------------------|----------------------|-----------------------|-----------------------|--------------------|----------------------|
|                       | Motor power<br>[kW] | Dimensions E1<br>[mm] | Dimensions E2<br>[mm] | Shipping volume<br>[m <sup>3</sup> ] | Dimensions F1<br>[mm] | Dimensions F2<br>[mm] | Net weight<br>[kg] | Gross weight<br>[kg] | Dimensions F1<br>[mm] | Dimensions F2<br>[mm] | Net weight<br>[kg] | Gross weight<br>[kg] |
| 12-10                 | 0,75                | 160                   | 102                   | 0,066                                | 549                   | 322                   | 21                 | 28                   | -                     | -                     | -                  | -                    |
| 12-20                 | 0,75                | 160                   | 102                   | 0,066                                | 549                   | 322                   | 21                 | 28                   | -                     | -                     | -                  | -                    |
| 12-30                 | 1,10                | 160                   | 102                   | 0,066                                | 576                   | 349                   | 23                 | 30                   | -                     | -                     | -                  | -                    |
| 12-40                 | 1,50                | 174                   | 142                   | 0,076                                | 642                   | 386                   | 29                 | 35                   | -                     | -                     | -                  | -                    |
| 12-50                 | 2,20                | 174                   | 142                   | 0,076                                | 694                   | 413                   | 33                 | 39                   | -                     | -                     | -                  | -                    |
| 12-60                 | 2,20                | 174                   | 142                   | 0,076                                | 721                   | 440                   | 33                 | 40                   | -                     | -                     | -                  | -                    |
| 12-70                 | 3,00                | 198                   | 155                   | 0,095                                | 791                   | 477                   | 43                 | 50                   | -                     | -                     | -                  | -                    |
| 12-80                 | 3,00                | 198                   | 155                   | 0,095                                | 818                   | 504                   | 44                 | 50                   | -                     | -                     | -                  | -                    |
| 12-90                 | 4,00                | 224                   | 168                   | 0,095                                | 854                   | 531                   | 51                 | 57                   | -                     | -                     | -                  | -                    |
| 12-100                | 4,00                | 224                   | 168                   | 0,095                                | 881                   | 558                   | 51                 | 58                   | -                     | -                     | -                  | -                    |
| 12-120                | 5,50                | 225                   | 168                   | 0,112                                | 974                   | 632                   | 65                 | 84                   | -                     | -                     | -                  | -                    |
| 12-140                | 5,50                | 225                   | 168                   | 0,112                                | 1028                  | 686                   | 66                 | 85                   | -                     | -                     | -                  | -                    |
| 12-160                | 5,50                | 225                   | 168                   | 0,112                                | -                     | -                     | -                  | -                    | 1082                  | 740                   | 69                 | 86                   |
| 12-180                | 7,50                | 225                   | 168                   | 0,133                                | -                     | -                     | -                  | -                    | 1163                  | 794                   | 74                 | 92                   |
| 12-200                | 7,50                | 225                   | 168                   | 0,133                                | -                     | -                     | -                  | -                    | 1217                  | 848                   | 76                 | 94                   |



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**Performance curve**  
according to:  
DIN 2548 Class C  
50 Hz 2850 min<sup>-1</sup>

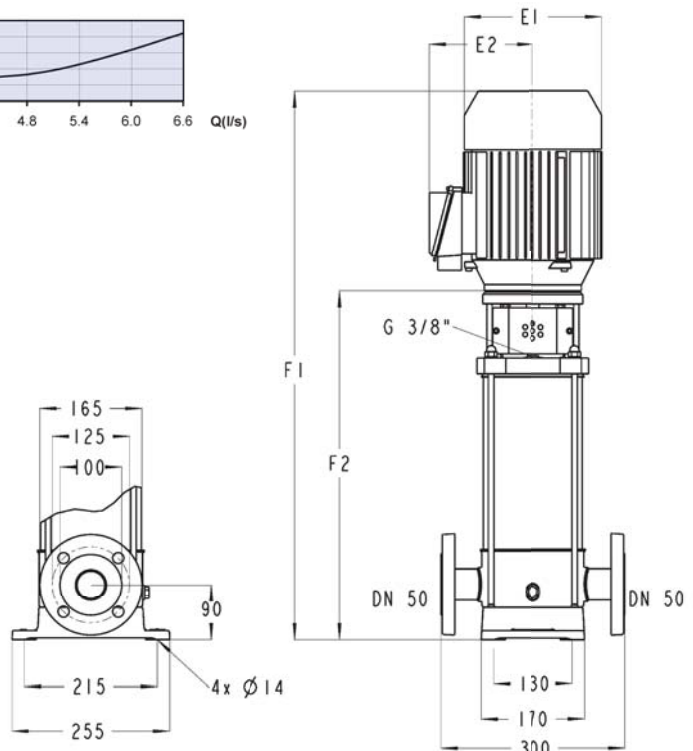
**H (m)**

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**Q (l/s)**

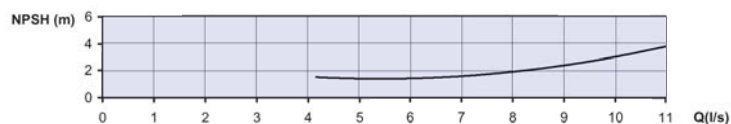
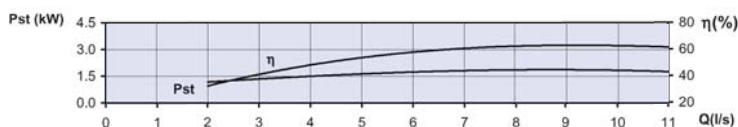
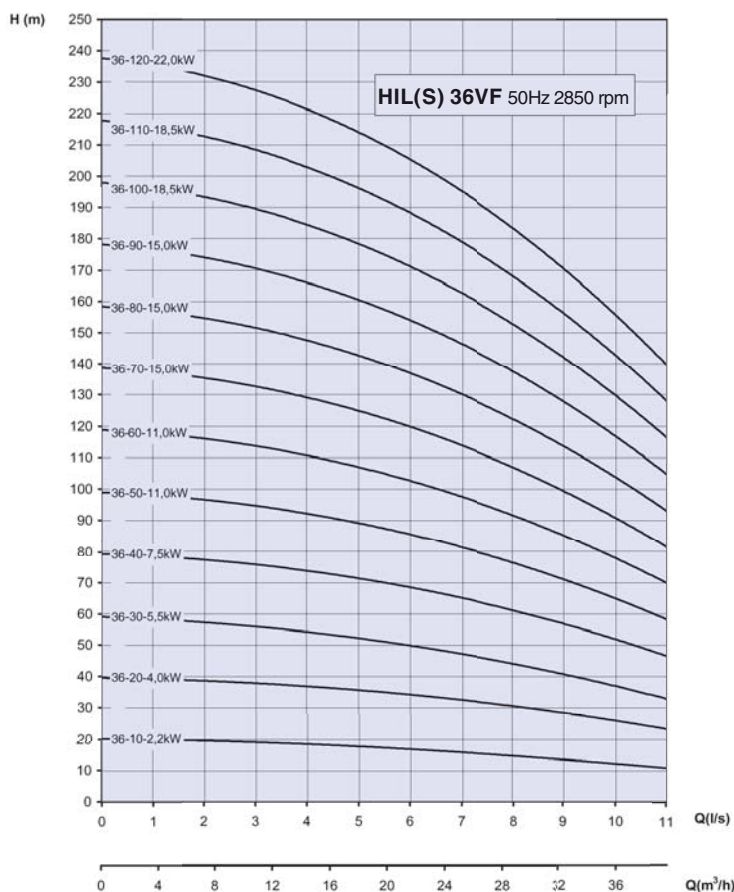
1 l/s = 15,85 US.Gpm  
13,20 Imp.Gpm  
60 l/min

| Pump type<br>HIL(S)FV | General             |                       |                       |                                      | HIL(S)VF              |                       |                    |                      |
|-----------------------|---------------------|-----------------------|-----------------------|--------------------------------------|-----------------------|-----------------------|--------------------|----------------------|
|                       | Motor power<br>[kW] | Dimensions E1<br>[mm] | Dimensions E2<br>[mm] | Shipping volume<br>[m <sup>3</sup> ] | Dimensions F1<br>[mm] | Dimensions F2<br>[mm] | Net weight<br>[kg] | Gross weight<br>[kg] |
| 24- 10                | 1,10                | 160                   | 102                   | 0,066                                | 574                   | 347                   | 25                 | 29                   |
| 24- 20                | 2,20                | 174                   | 142                   | 0,076                                | 638                   | 357                   | 33                 | 37                   |
| 24- 30                | 3,00                | 198                   | 155                   | 0,076                                | 715                   | 401                   | 43                 | 47                   |
| 24- 40                | 4,00                | 224                   | 168                   | 0,095                                | 759                   | 436                   | 50                 | 54                   |
| 24- 50                | 5,50                | 225                   | 168                   | 0,102                                | 832                   | 490                   | 63                 | 78                   |
| 24- 60                | 5,50                | 225                   | 168                   | 0,102                                | 867                   | 525                   | 64                 | 79                   |
| 24- 70                | 7,50                | 225                   | 168                   | 0,112                                | 928                   | 559                   | 69                 | 85                   |
| 24- 80                | 7,50                | 225                   | 168                   | 0,112                                | 963                   | 594                   | 70                 | 86                   |
| 24- 100               | 11,00               | 312                   | 230                   | 0,377                                | 1130                  | 693                   | 144                | 170                  |
| 24- 120               | 11,00               | 312                   | 230                   | 0,377                                | 1199                  | 762                   | 146                | 172                  |
| 24- 140               | 15,00               | 312                   | 230                   | 0,377                                | 1268                  | 831                   | 155                | 181                  |
| 24- 160               | 15,00               | 312                   | 230                   | 0,431                                | 1337                  | 900                   | 157                | 186                  |





# HIL-V IN-LINE VERTICAL MULTISTAGE PUMPS



| Pump type<br>HIL(S)(F)V | General             |                       |                       |                                      | HIL(S)VF              |                       |                    |                      |
|-------------------------|---------------------|-----------------------|-----------------------|--------------------------------------|-----------------------|-----------------------|--------------------|----------------------|
|                         | Motor power<br>[kW] | Dimensions E1<br>[mm] | Dimensions E2<br>[mm] | Shipping volume<br>[m <sup>3</sup> ] | Dimensions F1<br>[mm] | Dimensions F2<br>[mm] | Net weight<br>[kg] | Gross weight<br>[kg] |
| 36 - 10                 | 2,20                | 174                   | 142                   | 0,092                                | 739                   | 458                   | 60                 | 74                   |
| 36 - 20                 | 4,00                | 224                   | 168                   | 0,102                                | 829                   | 506                   | 76                 | 91                   |
| 36 - 30                 | 5,50                | 225                   | 168                   | 0,102                                | 917                   | 575                   | 91                 | 106                  |
| 36 - 40                 | 7,50                | 225                   | 168                   | 0,112                                | 992                   | 623                   | 97                 | 113                  |
| 36 - 50                 | 11,00               | 312                   | 230                   | 0,377                                | 1214                  | 777                   | 173                | 199                  |
| 36 - 60                 | 11,00               | 312                   | 230                   | 0,377                                | 1262                  | 825                   | 175                | 201                  |
| 36 - 70                 | 15,00               | 312                   | 230                   | 0,431                                | 1311                  | 874                   | 186                | 215                  |
| 36 - 80                 | 15,00               | 312                   | 230                   | 0,431                                | 1359                  | 922                   | 188                | 217                  |
| 36 - 90                 | 15,00               | 312                   | 230                   | 0,431                                | 1408                  | 971                   | 190                | 219                  |
| 36 - 100                | 18,50               | 312                   | 230                   | 0,485                                | 1496                  | 1019                  | 209                | 243                  |
| 36 - 110                | 18,50               | 312                   | 230                   | 0,485                                | 1545                  | 1068                  | 211                | 245                  |
| 36 - 120                | 22,00               | 312                   | 230                   | 0,485                                | 1633                  | 1116                  | 234                | 268                  |

## Performance curve

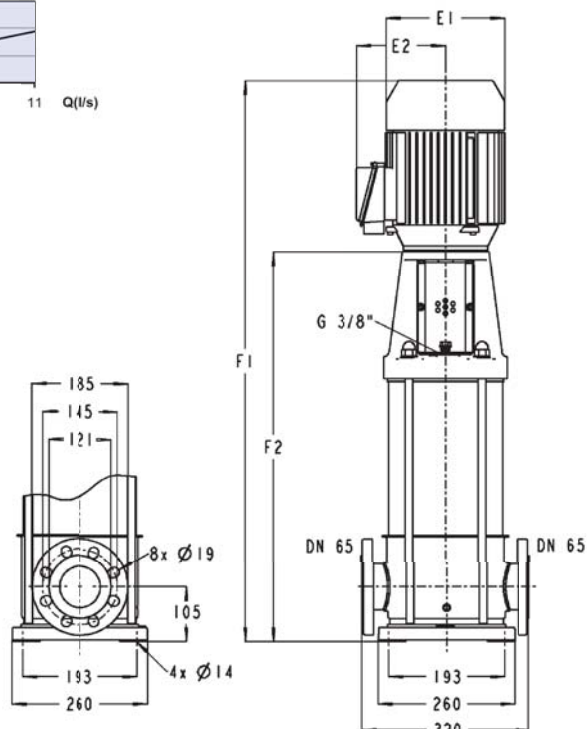
according to:  
DIN 2548 Class C  
50 Hz 2850 min<sup>-1</sup>

## H (m)

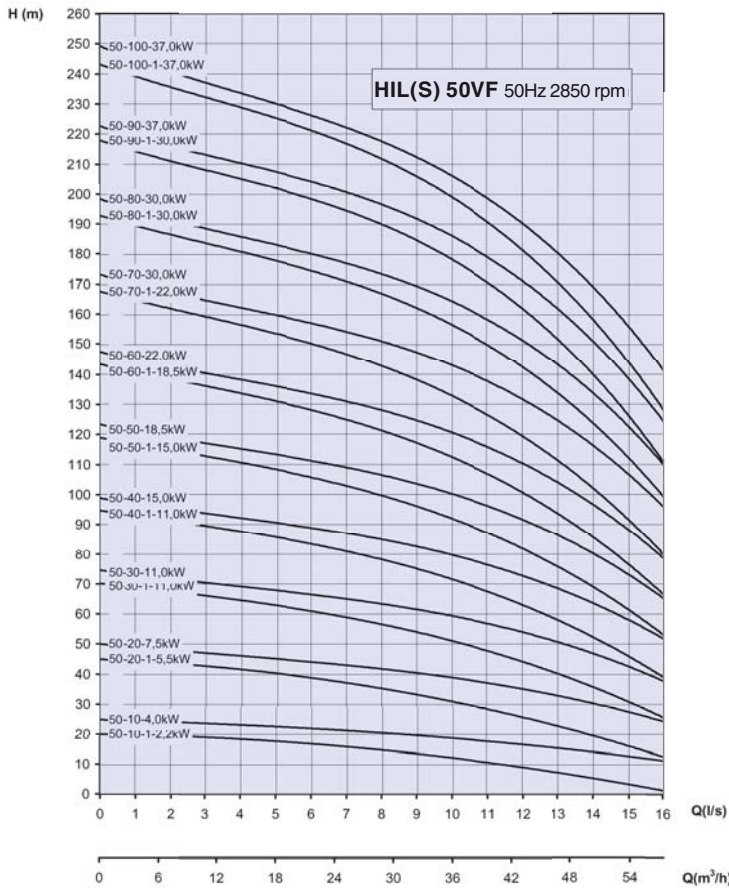
1 m = 1,42 Psi  
3,28 feet  
9,806 kPa  
0,098 Bar

## Q (l/s)

1 l/s = 15,85 US.Gpm  
13,20 Imp.Gpm  
60 l/min



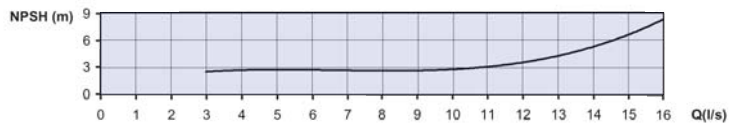
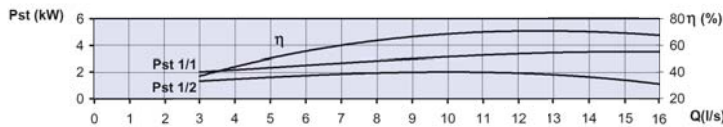
# HIL-V IN-LINE VERTICAL MULTISTAGE PUMPS



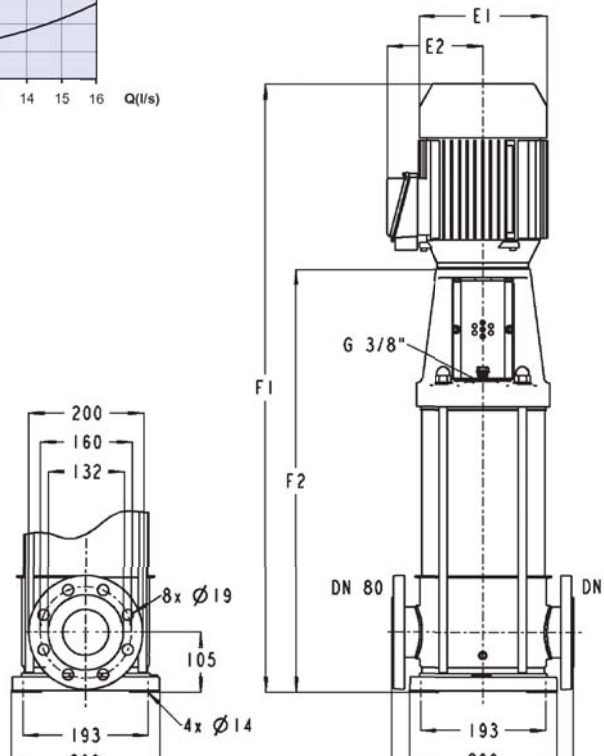
**Performance curve**  
according to:  
DIN 2548 Class C  
50 Hz 2850 min<sup>-1</sup>

**H (m)**  
1 m = 1,42 Psi  
3,28 feet  
9,806 kPa  
0,098 Bar

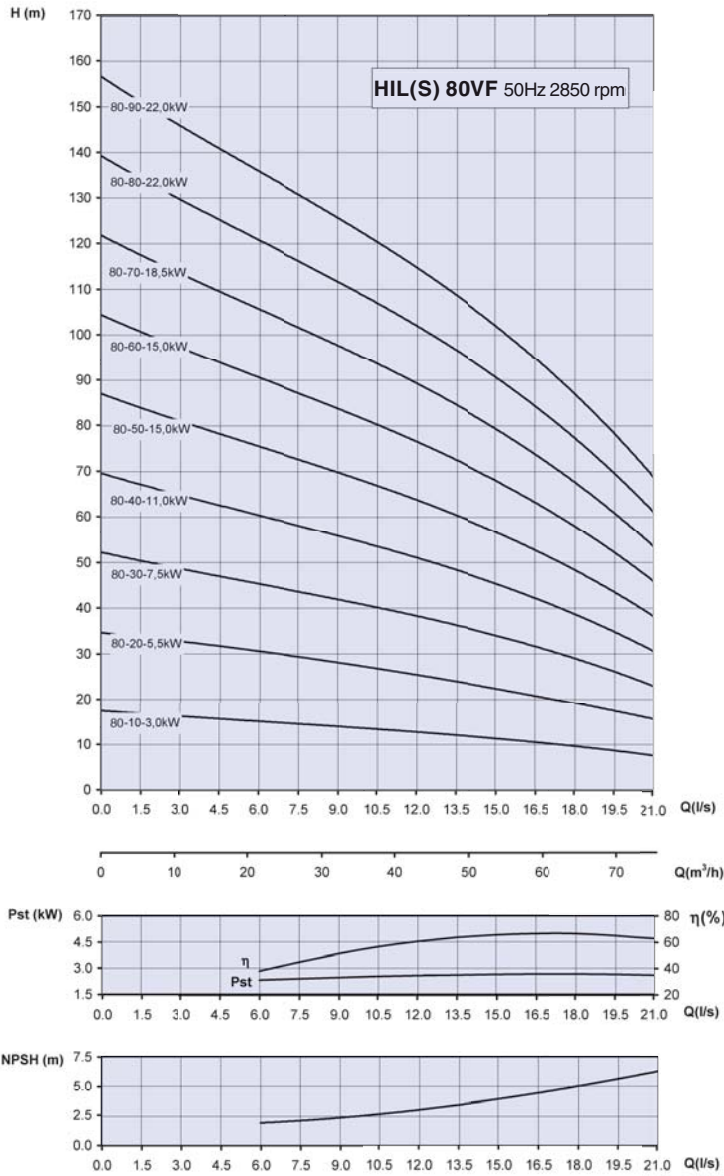
**Q (l/s)**  
1 l/s = 15,85 US.Gpm  
13,20 Imp.Gpm  
60 l/min



| Pump type<br>HIL(S)VF | General             |                       |                       |                         | HIL(S)VF              |                       |                    |                      |
|-----------------------|---------------------|-----------------------|-----------------------|-------------------------|-----------------------|-----------------------|--------------------|----------------------|
|                       | Motor power<br>[kW] | Dimensions E1<br>[mm] | Dimensions E2<br>[mm] | Shipping volume<br>[m³] | Dimensions F1<br>[mm] | Dimensions F2<br>[mm] | Net weight<br>[kg] | Gross weight<br>[kg] |
| 50 - 10 - 1           | 2,20                | 174                   | 142                   | 0,092                   | 739                   | 458                   | 61                 | 75                   |
| 50 - 10               | 4,00                | 224                   | 168                   | 0,092                   | 781                   | 458                   | 75                 | 89                   |
| 50 - 20 - 1           | 5,50                | 225                   | 168                   | 0,102                   | 868                   | 526                   | 90                 | 105                  |
| 50 - 20               | 7,50                | 225                   | 168                   | 0,102                   | 895                   | 526                   | 94                 | 109                  |
| 50 - 30 - 1           | 11,00               | 312                   | 230                   | 0,377                   | 1117                  | 680                   | 170                | 196                  |
| 50 - 30               | 11,00               | 312                   | 230                   | 0,377                   | 1117                  | 680                   | 170                | 196                  |
| 50 - 40 - 1           | 11,00               | 312                   | 230                   | 0,377                   | 1165                  | 728                   | 172                | 198                  |
| 50 - 40               | 15,00               | 312                   | 230                   | 0,377                   | 1165                  | 728                   | 180                | 206                  |
| 50 - 50 - 1           | 15,00               | 312                   | 230                   | 0,377                   | 1214                  | 777                   | 183                | 209                  |
| 50 - 50               | 18,50               | 312                   | 230                   | 0,377                   | 1254                  | 777                   | 199                | 225                  |
| 50 - 60 - 1           | 18,50               | 312                   | 230                   | 0,431                   | 1302                  | 825                   | 201                | 230                  |
| 50 - 60               | 22,00               | 312                   | 230                   | 0,431                   | 1342                  | 825                   | 222                | 251                  |
| 50 - 70 - 1           | 22,00               | 312                   | 230                   | 0,431                   | 1391                  | 874                   | 224                | 253                  |
| 50 - 70               | 30,00               | 438                   | 321                   | 0,631                   | 1569                  | 874                   | 323                | 370                  |
| 50 - 80 - 1           | 30,00               | 438                   | 321                   | 0,705                   | 1617                  | 922                   | 325                | 380                  |
| 50 - 80               | 30,00               | 438                   | 321                   | 0,705                   | 1617                  | 922                   | 325                | 380                  |
| 50 - 90 - 1           | 30,00               | 438                   | 321                   | 0,705                   | 1666                  | 971                   | 327                | 382                  |
| 50 - 90               | 37,00               | 438                   | 321                   | 0,705                   | 1666                  | 971                   | 347                | 402                  |
| 50 - 100 - 1          | 37,00               | 438                   | 321                   | 0,705                   | 1714                  | 1019                  | 350                | 405                  |
| 50 - 100              | 37,00               | 438                   | 321                   | 0,705                   | 1714                  | 1019                  | 350                | 405                  |



# HIL-V IN-LINE VERTICAL MULTISTAGE PUMPS



**Performance curve**  
according to:  
DIN 2548 Class C  
50 Hz 2850 min<sup>-1</sup>

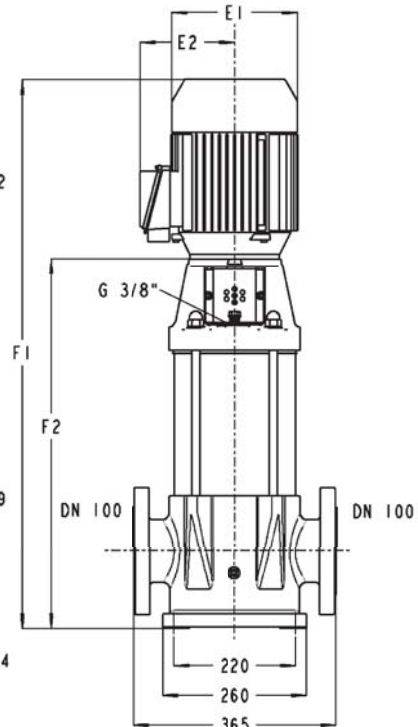
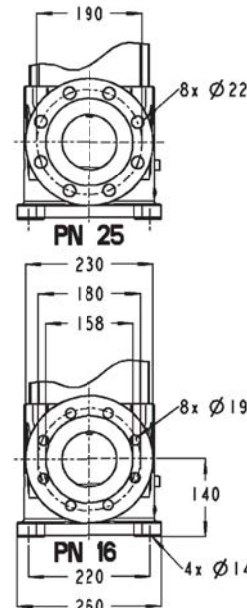
## H (m)

1 m = 1,42 Psi  
3,28 feet  
9,806 kPa  
0,098 Bar

## Q (l/s)

1 l/s = 15A,85 US.Gpm  
13,20 Imp.Gpm  
60 l/min

| Pump type<br>HIL(S) VF | General             |                       |                       |                                      | HIL(S) V F            |                       |                    |                      |
|------------------------|---------------------|-----------------------|-----------------------|--------------------------------------|-----------------------|-----------------------|--------------------|----------------------|
|                        | Motor power<br>[kW] | Dimensions E1<br>[mm] | Dimensions E2<br>[mm] | Shipping volume<br>[m <sup>3</sup> ] | Dimensions F1<br>[mm] | Dimensions F2<br>[mm] | Net weight<br>[kg] | Gross weight<br>[kg] |
| 80-10                  | 3,00                | 198                   | 155                   | 0,323                                | 884                   | 570                   | 80                 | 104                  |
| 80-20                  | 5,50                | 225                   | 168                   | 0,323                                | 1021                  | 679                   | 101                | 125                  |
| 80-30                  | 7,50                | 225                   | 168                   | 0,377                                | 1137                  | 768                   | 109                | 135                  |
| 80-40                  | 11,00               | 312                   | 230                   | 0,431                                | 1324                  | 887                   | 184                | 213                  |
| 80-50                  | 15,00               | 312                   | 230                   | 0,431                                | 1413                  | 976                   | 196                | 225                  |
| 80-60                  | 15,00               | 312                   | 230                   | 0,485                                | 1502                  | 1065                  | 199                | 233                  |
| 80-70                  | 18,50               | 312                   | 230                   | 0,485                                | 1631                  | 1154                  | 219                | 253                  |
| 80-80                  | 22,00               | 312                   | 230                   | 0,539                                | 1760                  | 1243                  | 243                | 282                  |
| 80-90                  | 22,00               | 312                   | 230                   | 0,539                                | 1849                  | 1332                  | 246                | 285                  |



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*Whilst every care has been taken to ensure that data is correct, no responsibility can be accepted for inaccuracies or misprints.*

*It is SMEDEGGARD's policy to continually improve and develop the product range. We reserve the right to change specifications without prior notice.*

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