## **PAC F66 E 75HP**

### Qmax 2,640 USgpm - Hmax 166 ft



Indicative picture of the product

### **PAC Flow series**

The pump system consists of a centrifugal pump and a separator, which enables air to be separated from the liquid and be sucked by a vacuum pump - making automatic priming possible. Even with suction heights of several feet the machine rapidly evacuates the air from the suction pipe and starts to pump. The PAC range is also suitable for pumping liquids with solids in suspension with best possible efficiency.

### **Applications**

The PAC F66 Atlas Copco pump is designed to withstand toughest applications and delivers best in class pumping efficiency. One of the most common area of utilization is the mining and Oil & Gas segment where reliability, efficiency and versatility is the key to provide a customized solution. Other suitable applications within Construction and General dewatering, Municipal as well as General Industry are ideal for the PAC F66 pump. Atlas Copco pumps are packed with features that not only meet, but exceed the needs of our customers.

### **Benefits**

### **Efficiency**

The 12" impeller with 79% efficiency at B.E.P. provides best pumping result with minimal efforts

### **Solids handling**

Closed impeller type with solids handling capability of 3" for trouble free operation

#### **Easy maintenance**

Hinged cover for direct access to the impeller and pump volute



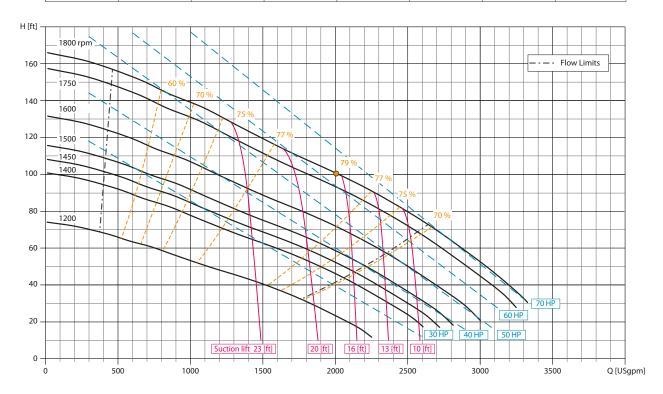
## **PAC F66 E 75HP**

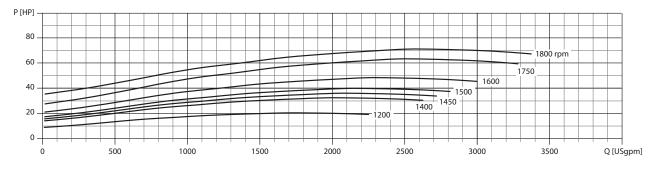
### **Performance curves**

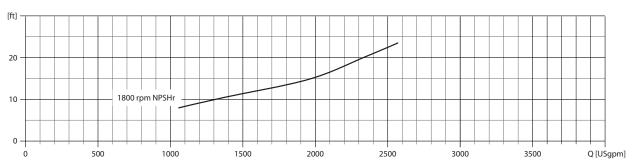
Test according to UNI EN ISO 9906 standard - level 2B Test liquid: clean water, density 62.43 lb/ft3 (8.345 lb/gal)

### Losses from priming system and check valve not included

| Speed   | Impeller Dia. | Style  | Solids Dia. | Ns       | Suction     | Discharge   | No. Vanes |
|---------|---------------|--------|-------------|----------|-------------|-------------|-----------|
| Various | 12" / 315 mm  | Closed | 3" / 76 mm  | 1800 rpm | 6" / 150 mm | 6" / 150 mm | 2         |









# **PAC F66 E 75HP**

## **Technical data**

### **Pump**

| Model                 | PAC F66                                   |  |  |
|-----------------------|---|--|--|
| Qmax                  | 2,640 USgpm                               |  |  |
| Hmax                  | 166 ft                                    |  |  |
| Q max eff.            | 2,010 USgpm                               |  |  |
| Eff. max              | 79 %                                      |  |  |
| Suction port          | 6" Flange - ANSI class 150                |  |  |
| Delivery port         | 6" Flange - ANSI class 150                |  |  |
| Impeller type         | Closed, 2 vane                            |  |  |
| Impeller diameter     | 12"                                       |  |  |
| Solids handling       | 3"  |  |  |
| Material              |   |  |  |
| Casing                | ASTM A536 ductile iron                    |  |  |
| Impeller              | ASTM A536 ductile iron                    |  |  |
| Wear ring             | ASTM A48 Class 20 grey iron               |  |  |
| Wear plate            | ASTM A48 Class 20 grey iron               |  |  |
| Shaft                 | AISI 630 stainless steel                  |  |  |
| Mechanical Seal faces | Silicon carbide / Silicon carbide / VITON |  |  |
| Elastomers            | NBR + VITON                               |  |  |
| Lubrication           | Grease (bearings)                         |  |  |
| Check Valve           | ASTM A536 ductile iron + NBR rubber flap  |  |  |
| Separator             | Aluminium alloy                           |  |  |
|                       |   |  |  |

### **Priming system**

| Vacuum pump          |             |  |  |  |
|----------------------|-------------|--|--|--|
| Vacuum pump type     | Diaphragm   |  |  |  |
| Nominal air capacity | 50 cfm      |  |  |  |
| Max vacuum           | - 26.6 inHg |  |  |  |
| Drives               | Link belt   |  |  |  |

### Motor

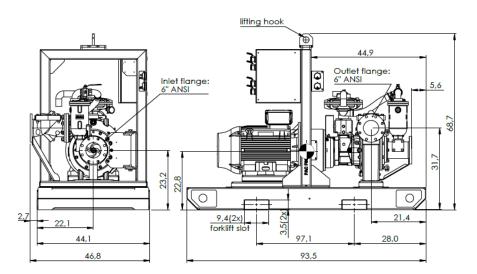
| Make               | Weg                           |
|--------------------|-------------------------------|
| Туре               | Three Phase Induction Motor   |
| Cooling method     | IC411 - TEFC                  |
| No. poles          | 4                             |
| Tension supply     | 460 V                         |
| Frequency          | 60 Hz                         |
| Rated power        | 75 HP                         |
| Rated speed        | 1,785 rpm                     |
| Rated current      | 85.1 A                        |
| Efficiency class   | W22 NEMA premium efficiency   |
| Max efficiency     | 95.4 %                        |
| Protection rating  | IPW55                         |
| Insulation class   | F                             |
| Thermal protection | Thermistors 2 Wires - 311degF |
| Duty cycle         | Continuous - S1               |

### **Arrangement**

| Technical data |   |
|----------------|---|
| Material       | ASTM A36 steel  |
| Coatings       | Epoxy powder, average thickness of 3 MIL                          |
| Features       | Lifting beam, Fork lift pockets, Pump access through hinged door. |
| Dry weight     | 3415 lbs  |

## Dimensional drawing

[in]





### **DATA SHEET**

## Three Phase Induction Motor - Squirrel Cage



Customer : WEG BENELUX S.A.

Product line : W22 Tru Metric - IE3 NemaPremium Efficiency

(Derating)

: 250S/M Cooling method : IC411 - TEFC Frame

Insulation class : F Mounting : B35T Rotation<sup>1</sup> Duty cycle : S1 : Both

: -20 °C to +40 °C Ambient temperature Starting method : Direct On Line Altitude : 3280 ft Approx. weight3 : 1144 lb

Protection degree : IPW55 Moment of inertia (J) : 26.3 sq.ft.lb

| Design                   | : N   |                         |                  |               |
|--------------------------|-------|-------------------------|------------------|---------------|
| Output                   |       | 75 HP (55 kW)           | 75 HP (55 kW)    | 75 HP (55 kW) |
| Poles                    |       | 4                       | 4                | 4             |
| Frequency                |       | 60 Hz                   | 50 Hz            | 50 Hz         |
| Rated voltage            |       | 460 V                   | 380 V            | 415 V         |
| Rated current            |       | 85.1 A                  | 102 A            | 95.2 A        |
| L. R. Amperes            |       | 698 A                   | 714 A            | 762 A         |
| LRC                      |       | 8.2 x Code J            | 7.0 x Code G     | 8.0 x Code J  |
| No load current          |       | 33.0 A                  | 33.0 A           | 37.0 A        |
| Rated speed              |       | 1785 rpm                | 1475 rpm         | 1483 rpm      |
| Slip                     |       | 0.83 %                  | 1.67 %           | 1.13 %        |
| Rated torque             |       | 299 Nm                  | 362 Nm           | 360 Nm        |
| Locked rotor torque      | ;     | 290 %                   | 220 %            | 270 %         |
| Pull up torque           |       | 200 %                   | 160 %            | 200 %         |
| Breakdown torque         |       | 310 %                   | 240 %            | 300 %         |
| Service factor           |       | 1.25                    | 1.00             | 1.00          |
| Temperature rise         |       | 80 K                    | 80 K             | 80 K          |
| Noise level <sup>2</sup> |       | 68.0 dB(A)              | 64.0 dB(A)       | 64.0 dB(A)    |
| Locked rotor time (h     | not)  | 20 s                    | 14 s             | 14 s          |
| Locked rotor time (d     | cold) | 36 s                    | 25 s             | 25 s          |
|                          | 50%   | 93.6                    | 94.0             | 94.4          |
| Efficiency (%)           | 75%   | 94.5                    | 94.6             | 94.6          |
|                          | 100%  | 95.4                    | 94.6             | 94.6          |
|                          | 50%   | 0.70                    | 0.75             | 0.68          |
| Power Factor             | 75%   | 0.80                    | 0.83             | 0.79          |
|                          | 100%  | 0.85                    | 0.87             | 0.85          |
|                          |       | Drive end Non drive end | Foundation loads |               |
| <b>D</b>                 |       | 001100 001100           | la a constant    | 7050 N        |

Bearing type 6314-C3 Max. traction : 7953 N 6314-C3 Lubrication interval 12000 h 12000 h Max. compression : 13044 N 27 g Lubricant amount 27 g Load type MOBIL POLYREX EM Load torque Lubricant type Load inertia (J=GD2/4)

#### Notes

| g     | Specification | : MG1 - Part 10 | Vibration | : MG1 - Part 7  |
|-------|---------------|-----------------|-----------|-----------------|
| ındar | Test          | : MG1 - Part 12 | Tolerance | : MG1 - Part 12 |
| Star  | Noise         | : MG1 - Part 9  |           |                 |

This revision replaces and cancel the previous one, which

must be eliminated. (1) Looking the motor from the shaft end.

- (2) Measured at 1m and with tolerance of +3dB(A).
- (3) Approximate weight, subject to be changed after manufacturing process.

(4) At 100% of full load.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in IEC . 60034-1.

| ( <del>+</del> ) At 100 /0 01 10 | iii ioad.       |  |      |         |       |
|----------------------------------|-----------------|--|------|---------|-------|
| Rev.                             | Changes Summary |  | Rev. | Checked | Date  |
|                                  |                 |  |      |         |       |
| Performed by                     | weiss           |  |      | 12849   | 39274 |
| Checked by                       | AUTOMATICO      |  |      | Page    | Rev.  |
| Date                             | 23/06/2022      |  |      | 1 / 1   | 0     |

