# Diesel - Qmax 45 l/s - Hmax 19 m



ndicative picture of the product

## **PAS MF - Vacuum prime centrifugal pumps**

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 meters the machine rapidly evacuates the air from the suction pipe and starts to pump. Additionally, thanks to the semi-open impeller, the PAS MF range is also suitable for pumping liquids with solids in suspension.

### **Applications**

Both Atlas Copco and Varisco have decades of experience in designing and producing pumps. We have put those years of expertise into providing solutions that work across multiple applications. The PAS MF (medium flow) range is packed with features that not only meet, but exceed the needs of the market. We are focused on an efficient, extremely versatile pump that is suitable for many industries, including construction, general dewatering and emergency applications, such as flood clean up.

### **Benefits**

#### Pump

High efficiency: 68% (B.E.P.)

## Rapid "dry" priming

Up to a height of 7,5 m (24.6 ft)

### **High resistance**

To abrasive liquids and turbid sandy waters

#### Semi-open impeller

Solids handling up to 40 mm (1.6")

### Diaphragm vacuum pump

Oil free suitable for dry running: no contamination of the environment

#### Mechanical shaft seal in oil bath

It allows the "dry running" operation of the pump

#### Wear plate

Cast iron (G10 rubber lined) or stainless steel wear plate, that is easily replaceable

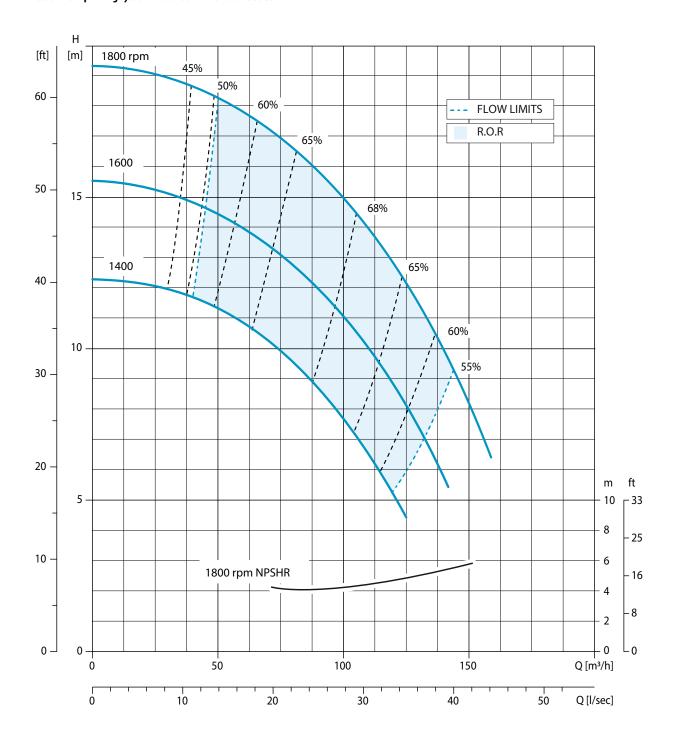
### **Easy maintenance**

Hinged cover for direct access to the impeller (without lifting devices). Link belt quick to replace on the field.



# **Performance curves**

Test according to UNI EN ISO 9906 standard - level 2 Test liquid: clean water, density 1,000 kg/m³ Losses from priming system and check valve not included Spherical solids handling: D.40 mm (1.6")
Max absorbed power: 7,5 kW - 10.1 HP (1.800 rpm)





# **Technical data**

### **Pump**

| Model           | PAS                     | 5 80MF                |
|-----------------|-------------------------|-----------------------|
| Qmax            | 45 l/s - 160 m³/h - 2.6 | 670 l/min (700 USgpm) |
| Hmax            | 19 m                    | n (62 ft)             |
| Q max eff.      | 28 l/s - 100 m³/h - 1.6 | 670 l/min (440 USgpm) |
| Eff. max        | 6                       | 58 %                  |
| Suction port    | Flanged - 80 T/         | TABLE E (AS 2129)     |
| Delivery port   | Flanged - 80 T/         | TABLE E (AS 2129)     |
| Impeller type   | Semi-Op                 | pen, 2 vane           |
| Solids handling | 40 mr                   | m (1.6 ")             |
| Material        | G10                     | F10                   |

| Material         | G10                                 | F10                                 |
|------------------|-------------------------------------|-------------------------------------|
| Casing           | EN-GJL-200 cast iron                | EN-GJL-200 cast iron                |
| Impeller         | EN-GJS-500 ductile iron             | CF8M stainless steel                |
| Wear plates      | EN-GJL-200 rubber lined cast iron   | CF8M stainless steel                |
| Number of plates | 2                                   | 2                                   |
| Shaft            | 39NiCrMo3 steel                     | SAF 2205 stainless steel            |
| Mechanical seal  | Tungsten carbide / Tungsten carbide | Tungsten carbide / Tungsten carbide |
| Elastomers       | VITON                               | VITON                               |

# **Priming system**

| Vacuum pump          | V20                  |
|----------------------|----------------------|
| Vacuum pump type     | Diaphragm            |
| Nominal air capacity | 50 m³/h (29.4 cfm)   |
| Max vacuum           | 0,9 bar              |
| Separator type       | Valmatic             |
| Separator material   | EN-GJL-200 cast iron |
| Drives               | Link belt            |

# **Engine**

| Make              |                                    | Hatz        |      |
|-------------------|------------------------------------|-------------|------|
| Model             |                                    | 2G40 (HT44) |      |
| Туре              | Diesel direct injection, aspirated |             |      |
| Displacement      | 997 cm³ (61 in³)                   |             |      |
| No. cylinders     | 2                                  |             |      |
| Cooling           |                                    | Air         |      |
| Rpm type          | Variable                           |             |      |
| Standard speed    | 1.800 rpm                          |             |      |
| EU emissions      | 2002/88/CE Stage V                 |             |      |
| Starting          | Electric                           |             |      |
| Starting voltage  |                                    | 12 V        |      |
| Speed [rpm]       | 1400                               | 1600        | 1800 |
| Consumption [l/h] | 1,3                                | 1,5         | 1,8  |
| Power [kW]        | 6                                  | 7,4         | 8,6  |
| Power [HP]        | 8                                  | 9.9         | 11.5 |

# **Control panel**

| Model | PW250 (PW1)  |
|-------|--|
|       | Manual operation   |
|       | Automatic operation: start-stop with transducers or floats     |
|       | Digital display with 6 languages (IT,EN, FR, DE, ES, PT) with: |
|       | Hour meter, Rev counter,                                       |
|       | Battery voltmeter, Fuel level (%)                              |
|       | Automatic engine shutdown in case of:                          |
|       | - low oil pressure   |
|       | - water overheating  |
|       | - low battery voltage  |
|       | (engine failure alarms with LED lights and display message)    |
|       | Emergency stop button  |
|       | Throttle rod   |
|       | (PW1 FleetLink control as option)                              |



# Arrangement

| Technical data  |   |
|-----------------|---|
| Material        | S235JR EN 10025-2 carbon steel                              |
| Coatings        | Epoxy powder, average thickness of 80 μm                    |
| Color           | Yellow and grey Atlas Copco (standard)                      |
| Features        | Painted steel base. Stackable frame.                        |
| Battery         | Acid charge Pb-Ca maintenance free<br>12 V - 100 Ah - 400 A |
| Tank            | 200 I (52.8 USG)  |
| Optional supply | (External fuel connection as option)                        |
| Drip pan        | 220,0 I (58.1 USG) (110% of the total volume of the tank)   |
| Emergency stop  | Outside the canopy  |
| Locking keys    | Control panel door and canopy doors                         |

# CNP PAS 80MF



| Dimensions     | 1170 x 1860 x 1480 mm     |
|----------------|---------------------------|
|                | 46 x 73 x 58 "            |
| H suction port | 0,7 m (2.3 ft)            |
| Dry weight     | 900 kg (1,980 lb)         |
| Noise level    | 65-70 dB(A) @10 m (32 ft) |

