

Qmax 50 m³/h - 833 l/min (220 USgpm) - Hmax 38 m (124 ft) Code 10009681



Indicative picture of the product

## Self-priming centrifugal bare shaft pump

### **Characteristics**

The J series self-priming centrifugal pumps are used in applications where a rapid priming capacity is required from demanding suction heights combined with the ability to transfer and manage polluted fluids, dirty and abrasives with suspended large diameter solids. The system is based on an inspectable pump casing which also acts as a water tank allowing a first quick priming without auxiliary systems, simplifying management of the system and reducing the time for maintenance. Within the physically permitted suction height limits, J pumps are a more comfortable and reliable solution than submersible pumps and vertical submersed impeller pumps.

### **Product Data**

Suction port

Threaded - 2" ISO 228 (BSP)

Delivery port

Threaded - 2" ISO 228 (BSP)

**Qmax** 

50 m<sup>3</sup>/h - 833 l/min (220 USgpm)

Hmax

38 m (124 ft)

Solids handling

15 mm (0.6 ")

Weight

54 kg (119 lb)

## **EX** version



Pump with dedicated code, including thermowell predisposition for temperature sensor and glass oiler for mechanical seal quench fluid, according to ATEX 2014/34/EU.

## **Benefits**

#### 1) Rapid self-priming

Without foot valve up to a height of 7.5 m (24.5 ft)

#### 2) High resistance

To abrasive liquids which are turbid and sandy

#### 3) Semi-open impeller

High thickness casting impact resistant

#### 4) Wear plate/plates

Easily replaceable stainless steel wear plate/ plates

#### 5) Easy inspection and cleaning

Removable front covers for access to the impeller

## **Applications**

#### Industry:

clean, dirty, sandy, muddy, neutral, alkaline, acidic liquids; low viscous petroleum products, solvents even if dirty; milk of lime, caustic soda; washing, cooling, recirculation, smoke scrubbing.

#### Treatment:

pumping polluted corrosive wastewater containing sand, mud or solids in suspension; dosing neutralizing liquids; pumping out settled sludge.

#### Naval

loading and unloading; bilge pumping; washing, firefighting, stripping, sanitary duty and circulation.

#### Agriculture:

surface irrigation; liquid manure oxygenation; transfer and spraying liquid manure or fertilizers; distribution of liquid animal feed; transfer of wine must; washing.

Varisco S.r.I. has certified its Quality, Environment and Safety Management System in accordance with the requirements of the international standard ISO 9001-14001-45001, recognized by the Lloyd Register.



### PERFORMANCE CURVES

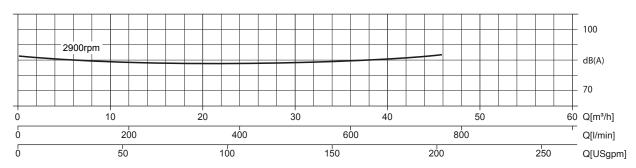
Test according to UNI EN ISO 9906 standard - level 2B

Max. applicable motor power: 11 kW - 15 HP

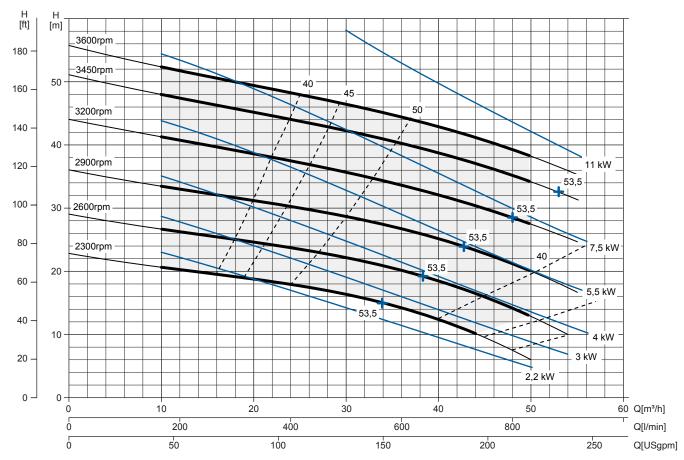
Test liquid: clean water, density 1.000 kg/m<sup>3</sup> Spherical solids handling: D.15 mm (0.6 ")

## **Noise Curve**

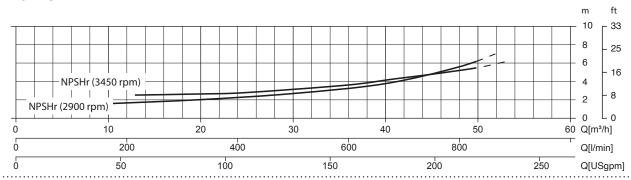
dB(A)=max noise level at 1 m



## **Multiple Speed Curve**



#### **NPSHr Curve**





## **TECHNICAL DATA**

#### **Pump**

| Pump model       | JS 2-180 K20  |
|------------------|---|
| Qmax [3.600 rpm] | 50 m³/h - 833 l/min (220 USgpm)   |
| Hmax [3.600 rpm] | 38 m (124 ft)   |
| Suction port     | Threaded - 2" ISO 228 (BSP)   |
| Delivery port    | Threaded - 2" ISO 228 (BSP)   |
| Impeller type    | Semiaperta, 4 pale  |
| Solids handling  | 15 mm (0.6 ")   |
| Casing           | ASTM A351 CF3M stainless steel  |
| Impeller         | ASTM A351 CF3M stainless steel  |
| Wear plate       | ASTM A351 CF3M stainless steel  |
| Non-return valve | check-valve, PTFE   |
| Shaft            | SAF 2205 stainless steel  |
| Mechanical seal  | Silicon carbide / Silicon carbide   |
| Elastomers       | PTFE  |
| Lubrication      | Grease  |
| Bearing bracket  | EN 1561 EN-GJL-200 cast iron, with grease lubricated ball bearings for life |

## Arrangement

| Model                   | Bare shaft                                       |
|-------------------------|--|
| Dimensions (L x W x H)* | 294 x 545 x 388 mm (11.6 x 21.5 x 15.3")         |
| Coating                 | Polyurethane enamel, average thickness of 100 μm |
| Color                   | RAL 5010 blue (standard)                         |
| Height connection       | 0,3 m (0,95 ft)                                  |

<sup>\*</sup>without flanged ports

### **Optionals**

| Flanged ports DN50 PN16 EN1092-1 Type B       | Complete pump set code available on request  |
|---|--|
| Flanged ports 2" ANSI B16.1 Class 125 R.F.    | Complete pump set code available on request  |
| Automatic mechanical seal greaser             | Code: 10008316                               |
| Thermocouple temperature sensor for ATEX pump | TC - Range temperature from 0 up to 300°C    |
| Temperature sensors for ATEX pump             | PT100 - Range temperature from 0 up to 300°C |

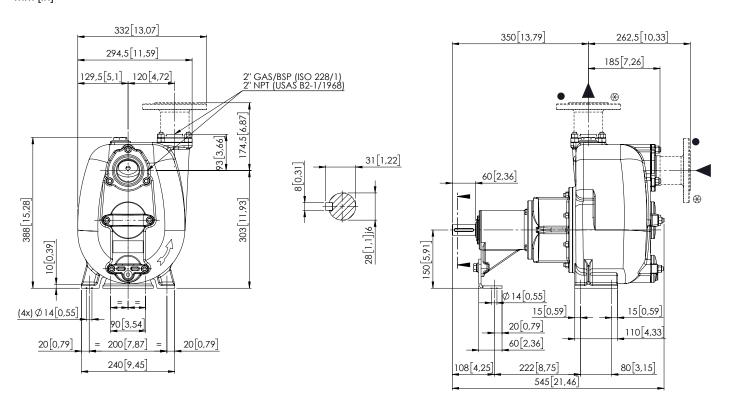
## Weight

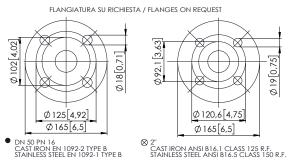
| Net weight                    | 54 kg (119 lb) |
|-------------------------------|----------------|
| Gross weight (pump + packing) | 67 kg (148 lb) |



## **DIMENSIONS**

#### mm [in]





### PACKAGING DIMENSIONS

#### **Dimensions**

JS 2-180 K20 (L x W x H) Gross weight (pump + packing)

840 x 680 x 650 mm 67 kg (148 lb)

