

Qmax 170 m<sup>3</sup>/h - 2833 l/min (748 USgpm) - Hmax 28 m (92 ft) Code 4810062109



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 - 4" ISO 228 (BSP)

Delivery port

Threaded - 4" ISO 228 (BSP)

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170 m<sup>3</sup>/h - 2833 l/min (748 USgpm)

Hmax

28 m (92 ft)

Solids handling

45 mm (1,78")

Weight

130 kg (287 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 cast iron 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.



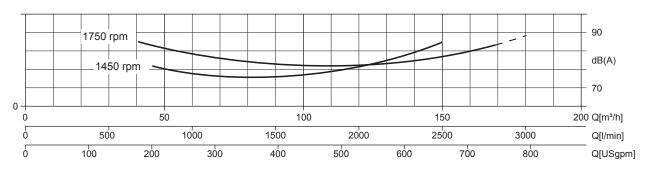
#### PERFORMANCE CURVES

Test according to UNI EN ISO 9906 standard - level 2B Installed power: 5,5 kW - 7,5 HP (1.450 rpm)

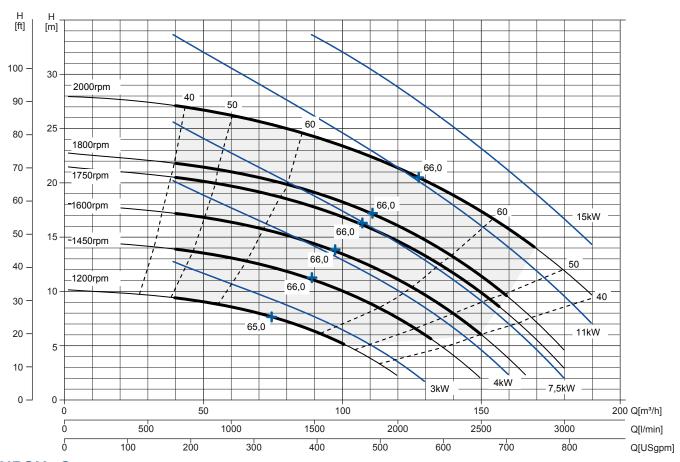
Test liquid: clean water, density 1.000 kg/m<sup>3</sup> Spherical solids handling: D.45 mm (1,78")

#### **Noise Curve**

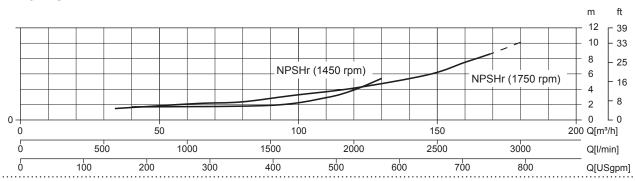
#### dB(A)=max noise level at 1 m



## **Multiple Speed Curve**



## **NPSHr Curve**





## **TECHNICAL DATA**

#### **Pump**

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Pump model	JS 4-220 P11
Qmax [2.000 rpm]	170 m³/h - 2833 l/min (748 USgpm)
Hmax [2.000 rpm]	28 m (92 ft)
Suction port	Threaded - 4" ISO 228 (BSP)
Delivery port	Threaded - 4" ISO 228 (BSP)
Impeller type	Semi-open, 3 vanes
Solids handling	45 mm (1,78")
Casing	EN 1561 EN-GJL-200 cast iron
Impeller	EN 1563 EN-GJS-500 cast iron
Wear plate	EN 1561 EN-GJL-200 cast iron
Non-return valve	check-valve, FKM
Shaft	39NiCrMo3 EN 10083-3 steel
Mechanical seal	Silicon carbide / Silicon carbide
Elastomers	FKM
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)*	741 x 421 x 490 mm (29,2 x 16,6 x 19,3")	
Coating	Polyurethane enamel, average thickness of 100 μm	
Color	RAL 5010 blue (standard)	
Height connection	0,36 m (1,2 ft)	

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

#### **Optionals**

Flanged ports DN100 PN16 EN1092-2 Type B	Complete pump set code available on request
Flanged ports 4" 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

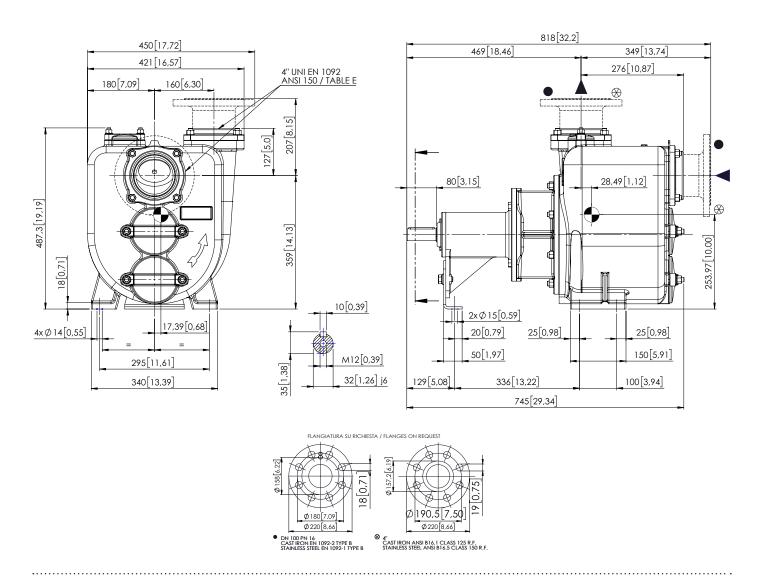
## Weight

Net weight	130 kg (287 lb)
Gross weight (pump + packing)	143 kg (316 lb)



### **DIMENSIONS**

mm [in]



#### PACKAGING DIMENSIONS

#### **Dimensions**

JS 4-220 P11 (L x W x H) Gross weight (pump + packing) 840 x 680 x 650 mm 143 kg (316 lb)

