

Electric - Qmax 24 m³/h - (105 USgpm) - Hmax 16 m (52 ft) Code 8381064133



Indicative picture of the product

## **Product Data**

Suction port

Threaded - 1"1/2 ISO 228 (BSP)

Delivery port

Threaded - 1"1/2 ISO 228 (BSP)

**Qmax** 

24 m<sup>3</sup>/h - 400 l/min (105 USgpm)

Hmax

16 m (52 ft)

Solids handling

20 mm (0.8 ")

Motor power

1.1 kW - 1.5 HP

Motor type

**IEC** standard

Winding for inverters

Cast iron frame

Motor brand

**WEG W22 Premium** 

Weight

32 kg (67 lb)

# Close-coupled self-priming centrifugal pump with electric motor

# 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.

## **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

Easily replaceable stainless steel wear plate, front to the impeller

#### 5) Easy maintenance

Removable front cover for direct 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.l. 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**

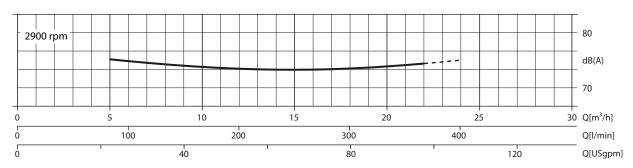
Test according to UNI EN ISO 9906 standard - level 2B Test liquid: clean water, density 1.000 kg/m³

Priming time (2.900 rpm): **26s from 1,5 m (5 ft)** Installed power: **1.1 kW - 1.5 HP (2900 rpm)** 

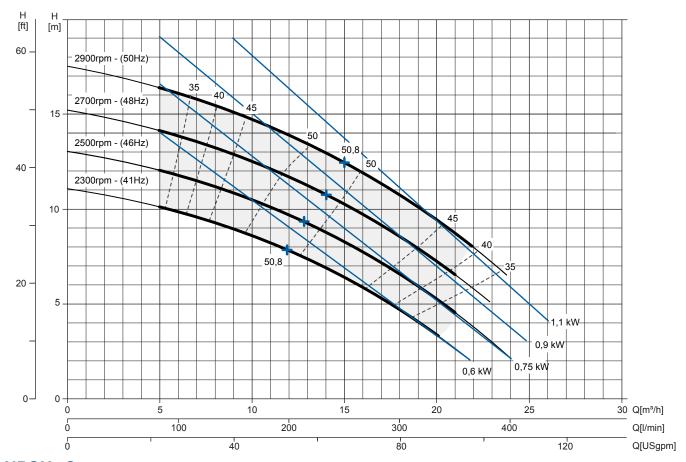
Spherical solids handling: D.20 mm (0.8 ")

## **Noise Curve**

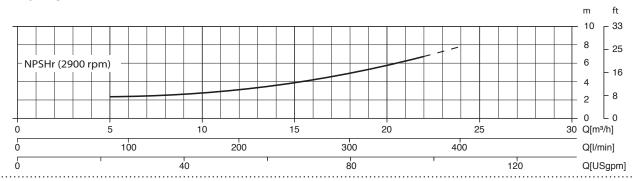
dB(A)=max noise level at 1 m



# **Multiple Speed Curve**



## **NPSHr Curve**





## **TECHNICAL DATA**

#### **Pump**

Pump model	J 1-110 F20
Qmax [2.900 rpm]	24 m³/h - 400 l/min (105 USgpm)
Hmax [2.900 rpm]	16 m (52 ft)
Suction port	Threaded - 1"1/2 ISO 228 (BSP)
Delivery port	Threaded - 1"1/2 ISO 228 (BSP)
Impeller type	Semi-open. 3 vanes
Solids handling	20 mm (0.8")
Casing	EN 1561 EN-GJL-200 cast iron
Impeller	ASTM A351 CF3M stainless steel
Wear plate	AISI 316L stainless steel
Non-return valve	Check-valve. PTFE
Shaft	SAF 2205 stainless steel
Mechanical seal	Tungsten carbide/Tungsten carbide
Elastomers	PTFE
Lubrication	Grease

## Motor

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Mains supply (Three-phase)	220 VD/380 VY ± 5%	230 VD/400 VY ± 10%	240 VD/415 VY ± 5%
Frequency (Nominal speed)		50 Hz ± 3% / 2.900 rpm	
Absorbed current	4.21/2.43 A	4.23/2.43 A	4.06/2.35 A
Starting Current Is/In	6.6	6.8	7.7
Efficiency (100%)	82.7% ( IE3 )	82.7% ( IE3 )	83.4% ( IE3 )
Model	WEG W22 Premium		
Standards	IEC 60034-1		
Construction	Cast iron. TEFC		
Mounting arrangement	IM 2101 B34		
No. poles	2		
Rated power	1.1 kW - 1.5 HP		
Degree of protection	IP55		
Markings	CE. UL. CSA. EAC		
Insulation class/Temperature		F/80°K	
Duty type	Variat	Continuous - S1 ble - suitable for inverter use (30-50	Hz)
Temperature sensors		PTC, available as option	

## Arrangement

Model	Close-coupled N
Dimensions	171 x 484 x 236 mm (6.73 x 19 x 9.28")
Coating	Polyurethane enamel, average thickness of 100 μm
Color	RAL 5010 blue (standard)
Features	Close-coupled with rigid coupling "N"
Height connection	0.17 m (0.55 ft)

## **Optionals**

Flanged ports DN40 PN16 EN1092-2 Type B	Cod. 10042259
Flanged ports 1"1/2 ANSI B16.1 Class 125 R.F.	Cod. 10042817
Automatic mechanical seal greaser	Cod. 10008316
Integrated VSD motor inverter	Available by 2021

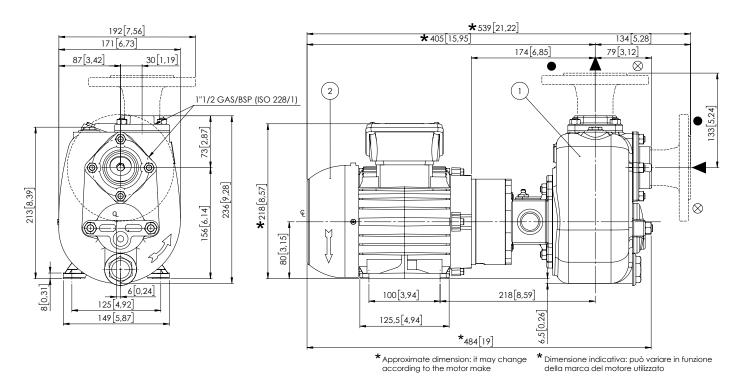
#### Weigh

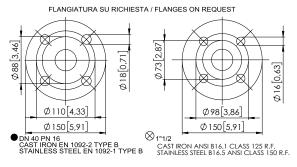
Net weight	32 kg (67 lb)



## **DIMENSIONS**

mm [in]





## PACKAGING DIMENSIONS

#### **Dimensions**

JE 1-110 F20 NT20 (L x W x H mm) Gross weight (pump + packing) 720 x 270 x 480 + BOX 36 Kg

