



# VERTICAL CENTRIFUGAL PUMPS

made of Polypropylene and PVDF for conveying  
aggressive media such as acids and alkalis.

**JESSBERGER**<sup>®</sup>  
pumps and systems

# JP-830

## VERTICAL CENTRIFUGAL PUMPS

**Especially suitable for high aggressive media like acids and alkalis.**

- JP-830 **vertical centrifugal pumps** are high performance pumps for fixed installations with the pump immersed directly in the tank.
- These pumps are used to quickly empty the fluid, with **flow rates ranging from 6 to 78 m<sup>3</sup>/h**. The special semi-opened impeller design, allows continuous pumping even with dirty fluids with apparent viscosity up to 800 mPas and small suspended solids.
- JP-830 are electric motor driven pumps that, through a **flexible coupling**, transmitting the rotation to the shaft and the impeller, due to centrifugal effect, creates a suction on the central duct and a delivery on the peripheral tube.

### Main Features:

- Casing and impeller in PP and PVDF.
- O-ring in EPDM and VITON.
- Length from 250 mm to 1400 mm.
- Max. delivery head 45 m
- Max. flow - Rate: 78 m<sup>3</sup>/h.
- Temperature: from -20 °C to + 95 °C.
- Max viscosity: 800 mPas
- Electric motors from 0,37 kW up to 18,5 kW.
- Specific Gravity up to 1.9.

Gear motor

Pump tube

Electric motor

Radial bearing

Outer column

Shaft

SiC bushing

PVDF bolt

Impeller

Suction side

Discharge side

Version PP

Version PVDF

Concentrated media

Viscous media

- **Pump principle:** The impeller is connected over the shaft with the direct-drive electric motor. It rotates at a preset speed and produces a centrifugal effect (suction on the inlet and discharge on the outlet).

# JP-830

## VERTICAL CENTRIFUGAL PUMPS

### Flexible coupling

- The coupling is a **flexible and homokinetic coupling** that assures the best performance in relation to the physical space occupied in its class.
- It has a very compact design and allows safe power transmission by absorbing peak loads and torsional vibrations. Moreover, the elastic design of the polyurethane gear ring compensates for angular and radial misalignments and also absorbs small shaft length variations.

### Main Features:

- Compact Design
- Safe power transmission by absorbing peak loads and torsional vibrations.
- Compensates for axial misalignments
- Elastic gear ring resistant to chemical agents

Cover shaft guide

Shaft

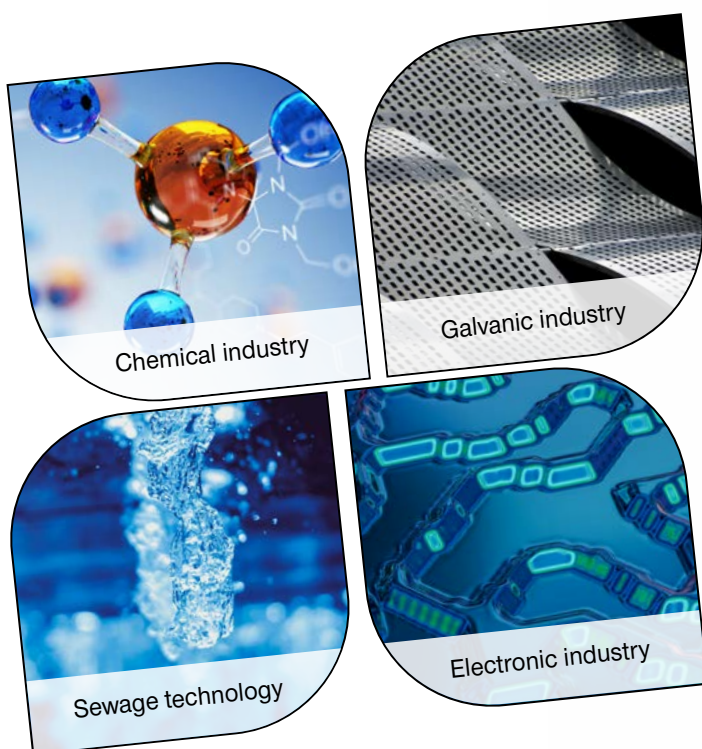
SIC bushing

PTFE drive bushing

Impeller semi-opened  
PP/PVDF

Drive coupling

Lantern



- **Installation - dry running:** Suitable devices should be filled to prevent dry running and the formation of a vortex and possible air suction. Running dry or with air bubbles can cause damage to the pump.





# JP-830.80



## TECHNICAL DATA JP-830.80

### JP-830.80

**Inlet connections:** 1½" F BSPP

**Outlet connections:** 1" M BSPP

**Max. Flow rate:** 6 m³/h

**Max. Delivery head:** 8 m

**Max. Viscosity:** 100 mPas

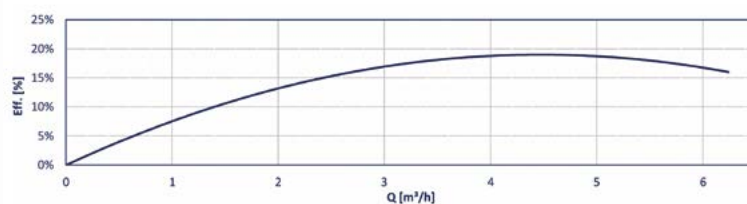
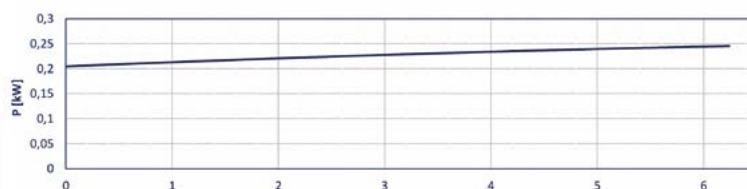
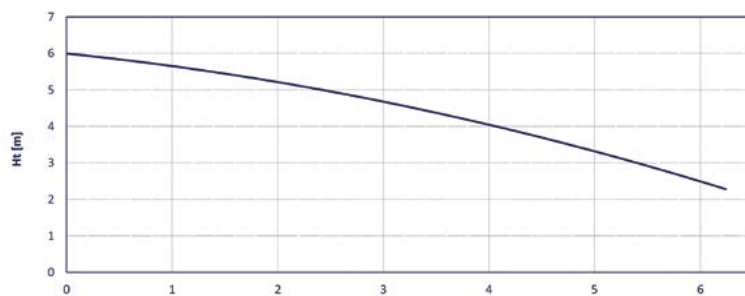
**Impeller:** Semi-opened

**Temperature PP:** -5 °C +65 °C

**Temperature PVDF:** -20 °C +90 °C

**Motor:** 0,37 kW, 0,55 kW and 0,75 kW

**Material:** PP and PVDF



## SPECIFIC GRAVITY TABLE

L = 0,37 kW	M = 0,55 kW	H = 0,75 kW
up to 1,2	up to 1,5	up to 1,9

## MOTOR SPECIFICATION

SIZE	kW	DESIGN
IEC 71	0,37	B5
IEC 71	0,55	B5
IEC 71	0,75	B5

The curves and performance values refer to pumps with free delivery outlet with water at 20 °C, and two poles motor 50 Hz. These data may vary according to the construction materials, hydraulic conditions and the length of the pump.

## MATERIAL | COMPOSITION

MODEL	CASING	O-RING	LENGTH mm	CONNECTIONS	PUMP DESIGN	MOTOR VERSION
JP-830.80	P = PP K = PVDF	D = EPDM V = VITON	250 500 800 1000	1 = BSP STD 2 = FLANGED	L = LOW DENSITY M = MEDIUM DENSITY H = HIGH DENSITY	IE = IEC FLANGE

# JP-830.90

## TECHNICAL DATA JP-830.90

### JP-830.90

**Inlet connections:** 1½" F BSPP

**Outlet connections:** 1" M BSPP

**Max. Flow rate:** 10 m³/h

**Max. Delivery head:** 10 m

**Max. Viscosity:** 150 mPas

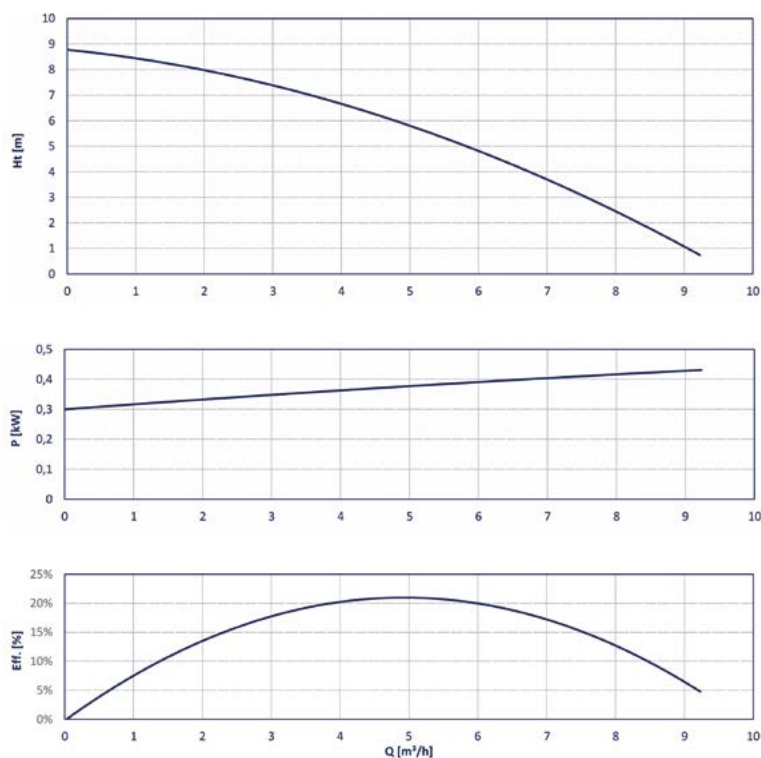
**Impeller:** Semi-opened

**Temperature PP:** -5 °C +65 °C

**Temperature PVDF:** -20 °C +90 °C

**Motor:** 0,55 kW, 0,75 kW and 1,1 kW

**Material:** PP and PVDF



## SPECIFIC GRAVITY TABLE

L = 0,55 kW	M = 0,75 kW	H = 1,1 kW
up to 1,2	up to 1,5	up to 1,9

## MOTOR SPECIFICATION

SIZE	kW	DESIGN
IEC 71	0,55	B5
IEC 71	0,75	B5
IEC 80	1,1	B5

The curves and performance values refer to pumps with free delivery outlet with water at 20 °C, and two poles motor 50 Hz. These data may vary according to the construction materials, hydraulic conditions and the length of the pump.

## MATERIAL | COMPOSITION

MODEL	CASING	O-RING	LENGTH mm	CONNECTIONS	PUMP DESIGN	MOTOR VERSION
JP-830.90	P = PP K = PVDF	D = EPDM V = VITON	250 500 800 1000	1 = BSP STD 2 = FLANGED	L = LOW DENSITY M = MEDIUM DENSITY H = HIGH DENSITY	IE = IEC FLANGE

# JP-830.95



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## TECHNICAL DATA JP-830.95

### JP-830.95

**Inlet connections:** 1½" F BSPP

**Outlet connections:** 1" M BSPP

**Max. Flow rate:** 15 m³/h

**Max. Delivery head:** 12 m

**Max. Viscosity:** 200 mPas

**Impeller:** Semi-opened

**Temperature PP:** -5 °C +65 °C

**Temperature PVDF:** -20 °C +90 °C

**Motor:** 0,75 kW, 1,1 kW and 1,5 kW

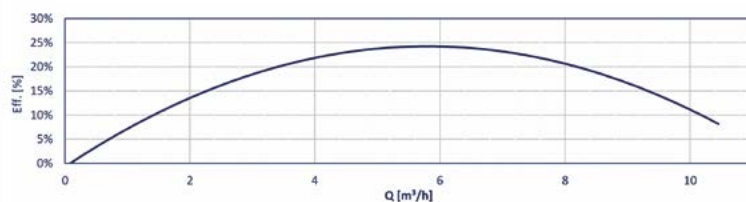
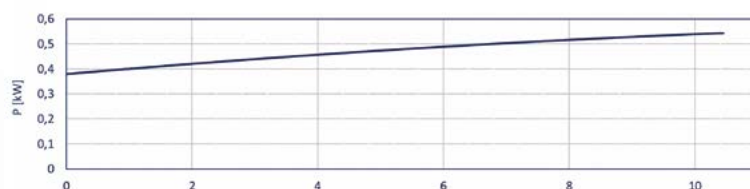
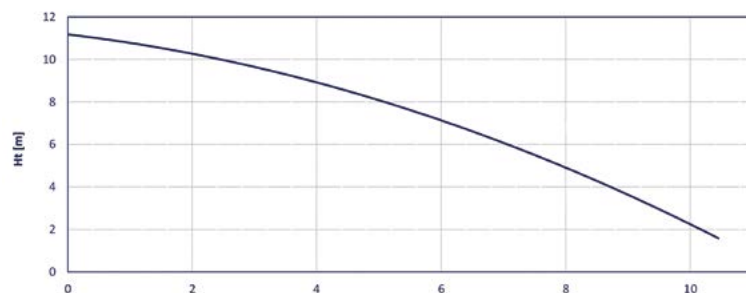
**Material:** PP and PVDF

## SPECIFIC GRAVITY TABLE

L = 0,75 kW	M = 1,1 kW	H = 1,5 kW
up to 1,2	up to 1,5	up to 1,9

## MOTOR SPECIFICATION

SIZE	kW	DESIGN
IEC 80	0,75	B5
IEC 80	1,1	B5
IEC 80	1,5	B5



The curves and performance values refer to pumps with free delivery outlet with water at 20 °C, and two poles motor 50 Hz. These data may vary according to the construction materials, hydraulic conditions and the length of the pump.

## MATERIAL | COMPOSITION

MODEL	CASING	O-RING	LENGTH mm	CONNECTIONS	PUMP DESIGN	MOTOR VERSION
JP-830.95	P = PP K = PVDF	D = EPDM V = VITON	250 500 800 1000	1 = BSP STD 2 = FLANGED	L = LOW DENSITY M = MEDIUM DENSITY H = HIGH DENSITY	IE = IEC FLANGE

# JP-830.110

## TECHNICAL DATA JP-830.110

### JP-830.110

**Inlet connections:** 2" F BSPP

**Outlet connections:** 1½" M BSPP

**Max. Flow rate:** 20 m³/h

**Max. Delivery head:** 15 m

**Max. Viscosity:** 300 mPas

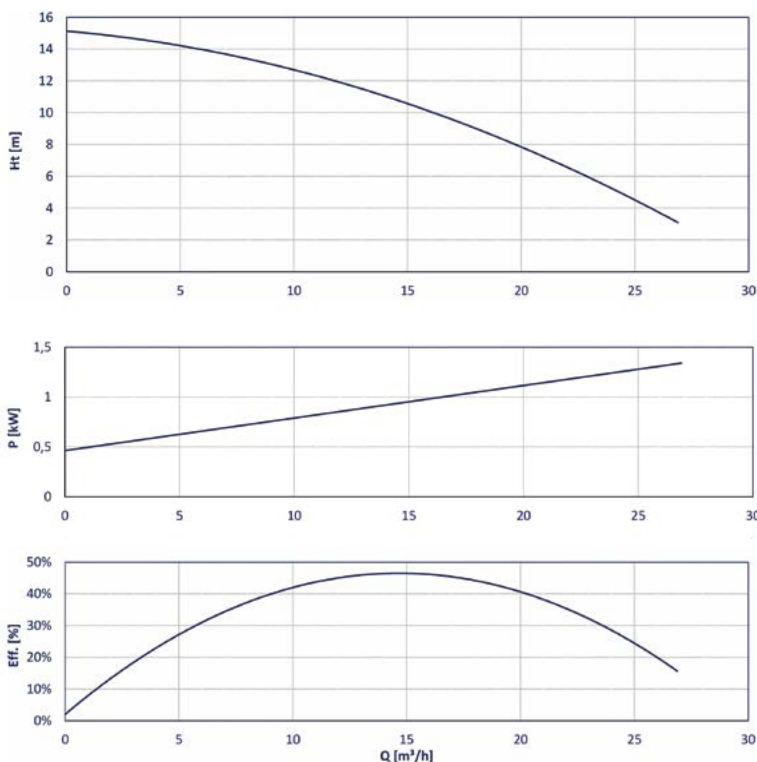
**Impeller:** Semi-opened

**Temperature PP:** -5 °C +65 °C

**Temperature PVDF:** -20 °C +90 °C

**Motor:** 1,1 kW, 1,5 kW and 2,2 kW

**Material:** PP and PVDF



## SPECIFIC GRAVITY TABLE

L = 1,1 kW	M = 1,5 kW	H = 2,2 kW
up to 1,2	up to 1,5	up to 1,9

## MOTOR SPECIFICATION

SIZE	kW	DESIGN
IEC 80	1,1	B5
IEC 90	1,5	B5
IEC 90	2,2	B5

The curves and performance values refer to pumps with free delivery outlet with water at 20 °C, and two poles motor 50 Hz. These data may vary according to the construction materials, hydraulic conditions and the length of the pump.

## MATERIAL | COMPOSITION

MODEL	CASING	O-RING	LENGTH mm	CONNECTIONS	PUMP DESIGN	MOTOR VERSION
JP-830.110	P = PP K = PVDF	D = EPDM V = VITON	500 800 1000 1250	1 = BSP STD 2 = FLANGED	L = LOW DENSITY M = MEDIUM DENSITY H = HIGH DENSITY	IE = IEC FLANGE

# JP-830.120



## SPECIFIC GRAVITY TABLE

L = 1,5 kW	M = 2,2 kW	H = 3 kW
up to 1,2	up to 1,5	up to 1,9

## MOTOR SPECIFICATION

SIZE	kW	DESIGN
IEC 90	1,5	B5
IEC 90	2,2	B5
IEC 100	3	B5

The curves and performance values refer to pumps with free delivery outlet with water at 20 °C, and two poles motor 50 Hz. These data may vary according to the construction materials, hydraulic conditions and the length of the pump.

## MATERIAL | COMPOSITION

MODEL	CASING	O-RING	LENGTH mm	CONNECTIONS	PUMP DESIGN	MOTOR VERSION
JP-830.120	P = PP K = PVDF	D = EPDM V = VITON	500 800 1000 1250	1 = BSP STD 2 = FLANGED	L = LOW DENSITY M = MEDIUM DENSITY H = HIGH DENSITY	IE = IEC FLANGE

## TECHNICAL DATA JP-830.120

### JP-830.120

**Inlet connections:** 2" F BSPP

**Outlet connections:** 1½" M BSPP

**Max. Flow rate:** 25 m³/h

**Max. Delivery head:** 16 m

**Max. Viscosity:** 400 mPas

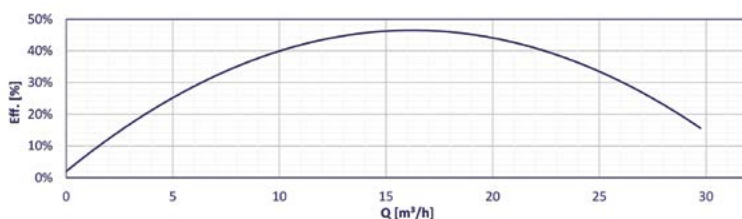
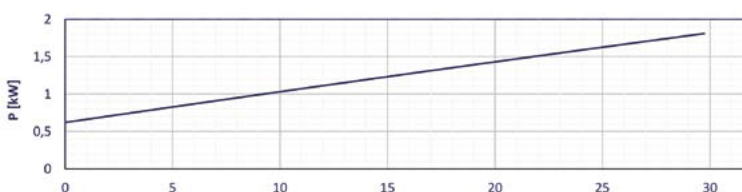
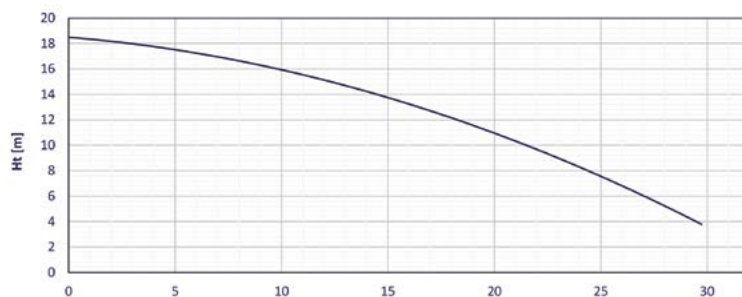
**Impeller:** Semi-opened

**Temperature PP:** -5 °C +65 °C

**Temperature PVDF:** -20 °C +90 °C

**Motor:** 1,5 kW, 2,2 kW and 3 kW

**Material:** PP and PVDF





# JP-830.130

## TECHNICAL DATA JP-830.130

### JP-830.130

**Inlet connections:** 2" F BSPP

**Outlet connections:** 1½" M BSPP

**Max. Flow rate:** 30 m³/h

**Max. Delivery head:** 20 m

**Max. Viscosity:** 500 mPas

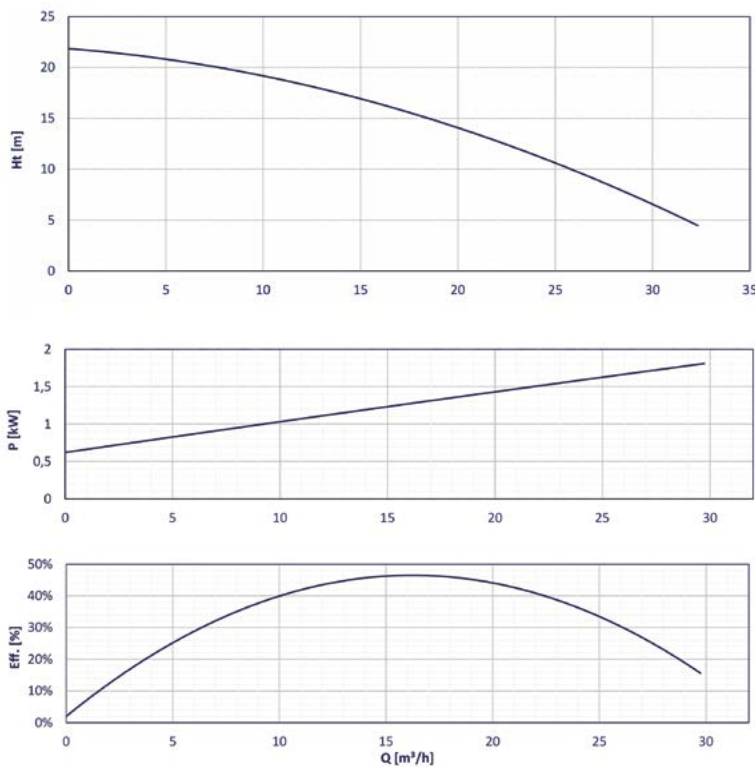
**Impeller:** Semi-opened

**Temperature PP:** -5 °C +65 °C

**Temperature PVDF:** -20 °C +90 °C

**Motor:** 2,2 kW, 3 kW and 4 kW

**Material:** PP and PVDF



## SPECIFIC GRAVITY TABLE

L = 2,2 kW	M = 3 kW	H = 4 kW
up to 1,2	up to 1,5	up to 1,9

## MOTOR SPECIFICATION

SIZE	kW	DESIGN
IEC 90	2,2	B5
IEC 100	3	B5
IEC 112	4	B5

The curves and performance values refer to pumps with free delivery outlet with water at 20 °C, and two poles motor 50 Hz. These data may vary according to the construction materials, hydraulic conditions and the length of the pump.

## MATERIAL | COMPOSITION

MODEL	CASING	O-RING	LENGTH mm	CONNECTIONS	PUMP DESIGN	MOTOR VERSION
JP-830.130	P = PP K = PVDF	D = EPDM V = VITON	500 800 1000 1250	1 = BSP STD 2 = FLANGED	L = LOW DENSITY M = MEDIUM DENSITY H = HIGH DENSITY	IE = IEC FLANGE

# JP-830.140



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## SPECIFIC GRAVITY TABLE

L = 3 kW	M = 4 kW	H = 5,5 kW
up to 1,2	up to 1,5	up to 1,9

## MOTOR SPECIFICATION

SIZE	kW	DESIGN
IEC 100	3	B5
IEC 112	4	B5
IEC 112	5,5	B5

## TECHNICAL DATA JP-830.140

### JP-830.140

**Inlet connections:** 2" F BSPP

**Outlet connections:** 1½" M BSPP

**Max. Flow rate:** 40 m³/h

**Max. Delivery head:** 25 m

**Max. Viscosity:** 500 mPas

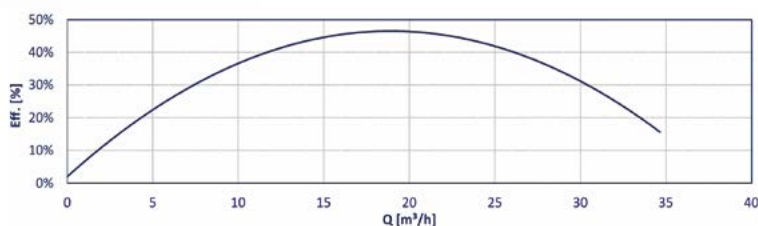
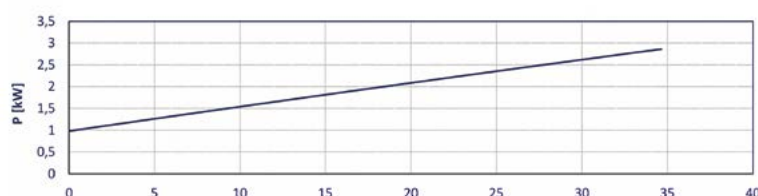
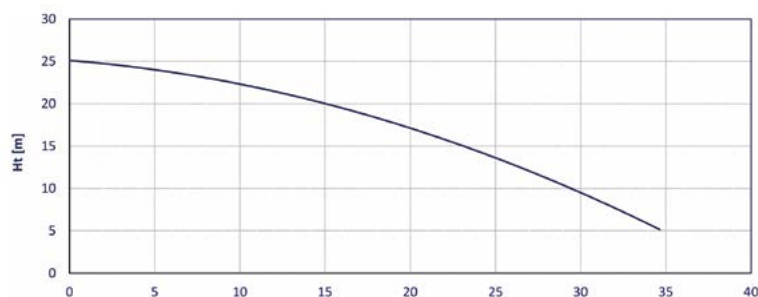
**Impeller:** Semi-opened

**Temperature PP:** -5 °C +65 °C

**Temperature PVDF:** -20 °C +90 °C

**Motor:** 3 kW, 4 kW and 5,5 kW

**Material:** PP and PVDF



The curves and performance values refer to pumps with free delivery outlet with water at 20 °C, and two poles motor 50 Hz. These data may vary according to the construction materials, hydraulic conditions and the length of the pump.

## MATERIAL | COMPOSITION

MODEL	CASING	O-RING	LENGTH mm	CONNECTIONS	PUMP DESIGN	MOTOR VERSION
JP-830.140	P = PP K = PVDF	D = EPDM V = VITON	500 800 1000 1250	1 = BSP STD 2 = FLANGED	L = LOW DENSITY M = MEDIUM DENSITY H = HIGH DENSITY	IE = IEC FLANGE

# JP-830.145

## TECHNICAL DATA JP-830.145

### JP-830.145

**Inlet connections:** 2½" F BSPP

**Outlet connections:** 2" M BSPP

**Max. Flow rate\*:** 60 m³/h

**Max. Delivery head\*:** 26 m

**BEP flow rate\*:** 35 m³/h

**BEP delivery head\*:** 21 m

**Max. Viscosity:** 500 mPas

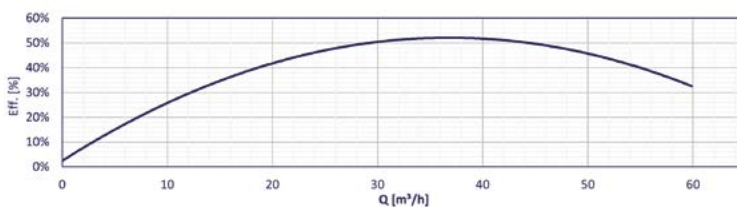
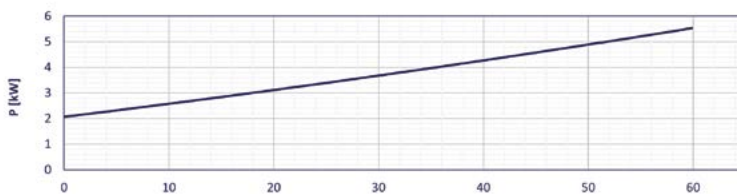
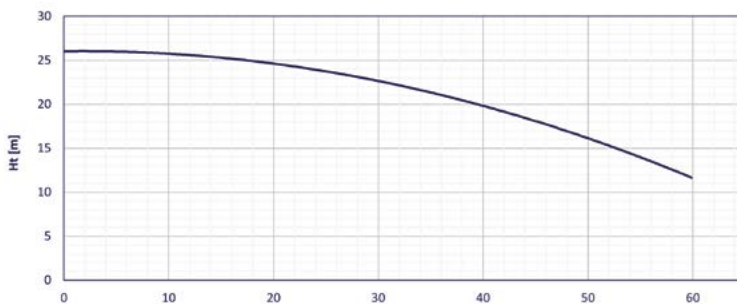
**Impeller:** Semi-opened

**Temperature PP:** -5 °C +65 °C

**Temperature PVDF:** -20 °C +90 °C

**Motor:** 3 kW, 4 kW, 5,5 kW, 7,5 kW, 11 kW, 15 kW and 18,5 kW

**Material:** PP and PVDF



## MOTOR SPECIFICATION

<b>N° POLES</b>	2
<b>RPM</b>	2900
<b>FREQUENCY</b>	50 Hz
<b>VOLTAGE</b>	230/400 V
<b>PROTECTION</b>	IP 55
<b>FLANGES</b>	IEC
<b>DESIGN</b>	B5

The curves and performance values refer to pumps with free delivery outlet with water at 20 °C, and two poles motor 50 Hz.

\*These data may vary according to the construction materials, hydraulic conditions and the length of the pump.

## MATERIAL | COMPOSITION

MODEL	CASING	O-RING	LENGTH mm	CONNECTIONS	FRAME SIZE	MOTOR VERSION
<b>JP-830.145</b>	<b>P</b> = PP <b>K</b> = PVDF	<b>D</b> = EPDM <b>V</b> = VITON	800 1000 1250 1500 1750	<b>1</b> = BSP STD <b>2</b> = FLANGED	100 112 132 160	<b>IE</b> = IEC FLANGE - = NO MOTOR

F = female thread M = male thread

# JP-830.150



## TECHNICAL DATA JP-830.150

### JP-830.150

**Inlet connections:** 2½" F BSPP

**Outlet connections:** 2" M BSPP

**Max. Flow rate\*:** 64 m³/h

**Max. Delivery head\*:** 30,5 m

**BEP flow rate\*:** 38 m³/h

**BEP delivery head\*:** 26 m

**Max Viscosity:** 600 mPas

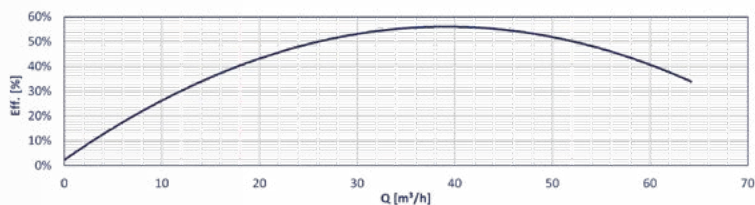
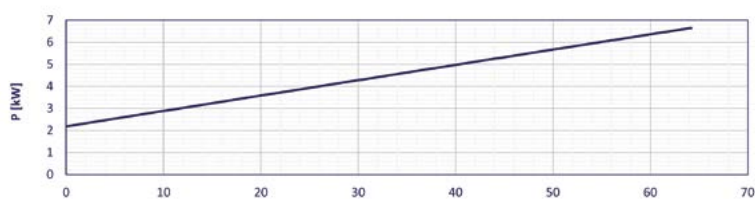
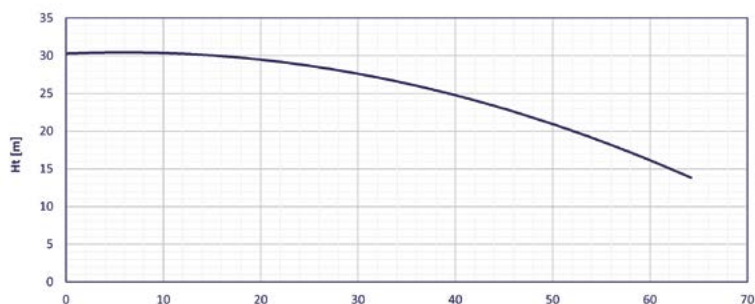
**Impeller:** Semi-opened

**Temperature PP:** -5 °C +65 °C

**Temperature PVDF:** -20 °C +95 °C

**Motor:** 3 kW, 4 kW, 5,5 kW, 7,5 kW, 11 kW, 15 kW and 18,5 kW

**Material:** PP and PVDF



## MOTOR SPECIFICATION

<b>N° POLES</b>	2
<b>RPM</b>	2900
<b>FREQUENCY</b>	50 Hz
<b>VOLTAGE</b>	230/400 V
<b>PROTECTION</b>	IP 55
<b>FLANGES</b>	IEC
<b>DESIGN</b>	B5

The curves and performance values refer to pumps with free delivery outlet with water at 20 °C, and two poles motor 50 Hz.  
\*These data may vary according to the construction materials, hydraulic conditions and the length of the pump.

## MATERIAL | COMPOSITION

MODEL	CASING	O-RING	LENGTH mm	CONNECTIONS	FRAME SIZE	MOTOR VERSION
<b>JP-830.150</b>	<b>P = PP</b> <b>K = PVDF</b>	<b>D = EPDM</b> <b>V = VITON</b>	800 1000 1250 1500 1750	<b>1 = BSP STD</b> <b>2 = FLANGED</b>	100 112 132 160	<b>IE = IEC FLANGE</b> <b>- = NO MOTOR</b>



# JP-830.160

## TECHNICAL DATA JP-830.160

### JP-830.160

**Inlet connections:** 2½" F BSPP

**Outlet connections:** 2" M BSPP

**Max. Flow rate\*:** 68,5 m³/h

**Max. Delivery head\*:** 35 m

**BEP flow rate\*:** 40,5 m³/h

**BEP delivery head\*:** 29,5 m

**Max Viscosity:** 700 mPas

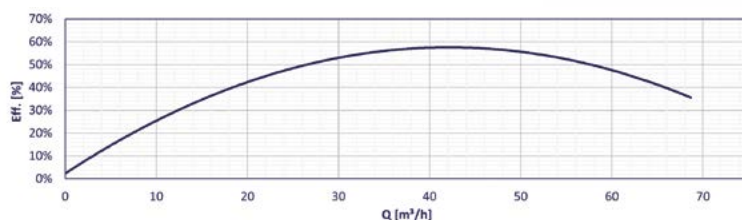
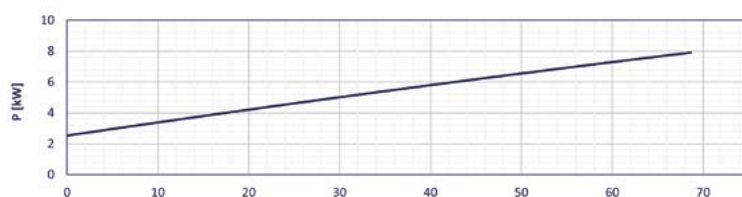
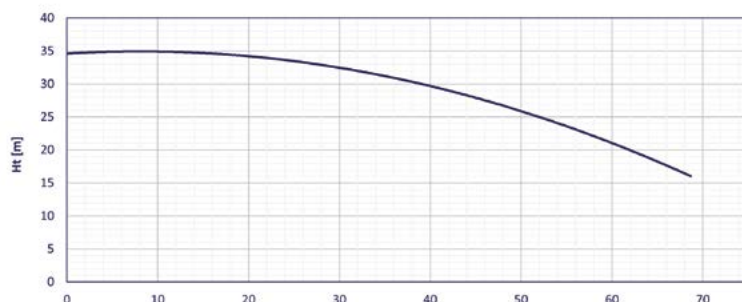
**Impeller:** Semi-opened

**Temperature PP:** -5 °C +65 °C

**Temperature PVDF:** -20 °C +95 °C

**Motor:** 3 kW, 4 kW, 5,5 kW, 7,5 kW, 11 kW, 15 kW and 18,5 kW

**Material:** PP and PVDF



## MOTOR SPECIFICATION

N° POLES	2
RPM	2900
FREQUENCY	50 Hz
VOLTAGE	230/400 V
PROTECTION	IP 55
FLANGES	IEC
DESIGN	B5

The curves and performance values refer to pumps with free delivery outlet with water at 20 °C, and two poles motor 50 Hz.

\* These data may vary according to the construction materials, hydraulic conditions and the length of the pump.

## MATERIAL | COMPOSITION

MODEL	CASING	O-RING	LENGTH mm	CONNECTIONS	FRAME SIZE	MOTOR VERSION
JP-830.160	P = PP K = PVDF	D = EPDM V = VITON	800 1000 1250 1500 1750	1 = BSP STD 2 = FLANGED	100 112 132 160	IE = IEC FLANGE - = NO MOTOR

F = female thread M = male thread

# JP-830.170



## TECHNICAL DATA JP-830.170

### JP-830.170

**Inlet connections:** 2½" F BSPP

**Outlet connections:** 2" M BSPP

**Max. Flow rate\*:** 73 m³/h

**Max. Delivery head\*:** 40 m

**BEP flow rate\*:** 43 m³/h

**BEP delivery head\*:** 34 m

**Max Viscosity:** 800 mPas

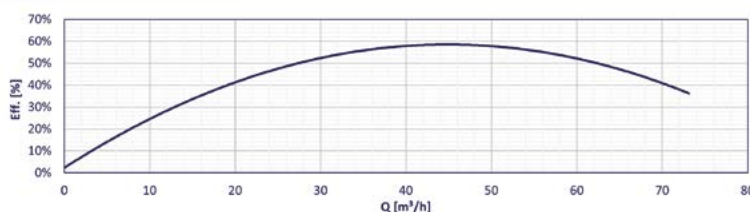
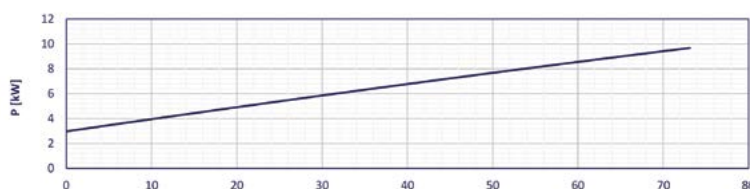
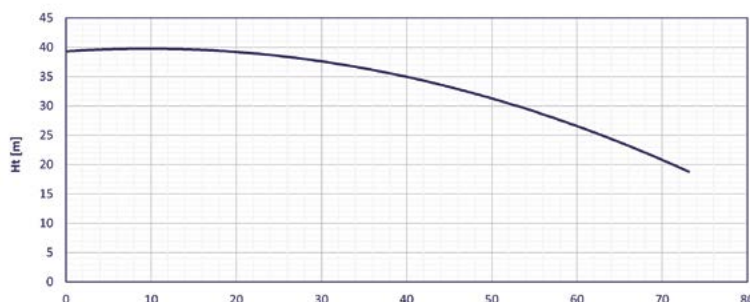
**Impeller:** Semi-opened

**Temperature PP:** -5 °C +65 °C

**Temperature PVDF:** -20 °C +95 °C

**Motor:** 3 kW, 4 kW, 5,5 kW, 7,5 kW, 11 kW, 15 kW and 18,5 kW

**Material:** PP and PVDF



## MOTOR SPECIFICATION

<b>N° POLES</b>	2
<b>RPM</b>	2900
<b>FREQUENCY</b>	50 Hz
<b>VOLTAGE</b>	230/400 V
<b>PROTECTION</b>	IP 55
<b>FLANGES</b>	IEC
<b>DESIGN</b>	B5

The curves and performance values refer to pumps with free delivery outlet with water at 20 °C, and two poles motor 50 Hz.

\*These data may vary according to the construction materials, hydraulic conditions and the length of the pump.

## MATERIAL | COMPOSITION

MODEL	CASING	O-RING	LENGTH mm	CONNECTIONS	FRAME SIZE	MOTOR VERSION
JP-830.170	P = PP K = PVDF	D = EPDM V = VITON	800	1 = BSP STD 2 = FLANGED	100	IE = IEC FLANGE - = NO MOTOR
			1000		112	
			1250		132	
			1500		160	
			1750			

# JP-830.180

## TECHNICAL DATA JP-830.180

### JP-830.180

**Inlet connections:** 2½" F BSPP

**Outlet connections:** 2" M BSPP

**Max. Flow rate\*:** 78 m³/h

**Max. Delivery head\*:** 45 m

**BEP flow rate\*:** 50 m³/h

**BEP delivery head\*:** 37 m

**Max Viscosity:** 800 mPas

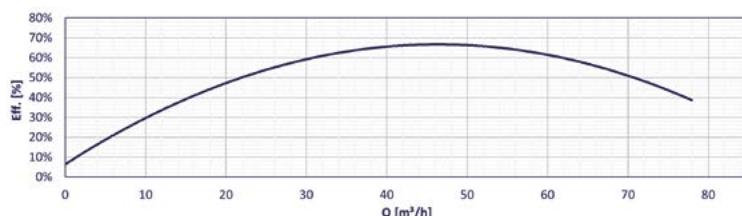
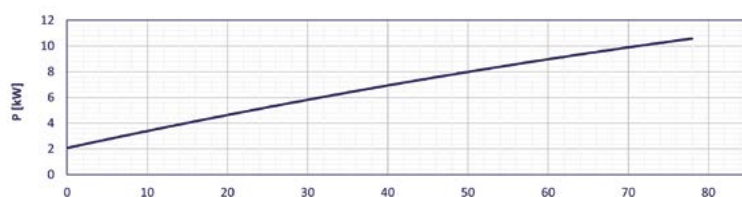
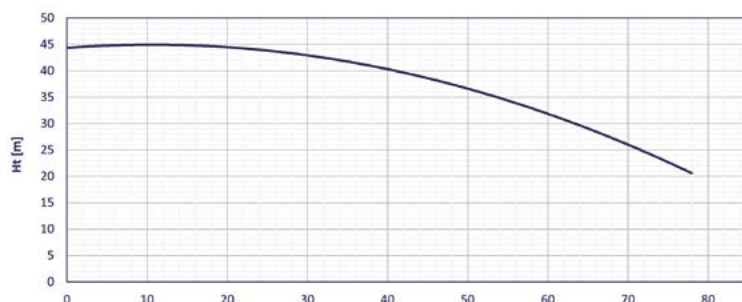
**Impeller:** Semi-opened

**Temperature PP:** -5 °C +65 °C

**Temperature PVDF:** -20 °C +95 °C

**Motor:** 3 kW, 4 kW, 5,5 kW, 7,5 kW, 11 kW, 15 kW and 18,5 kW

**Material:** PP and PVDF



## MOTOR SPECIFICATION

N° POLES	2
RPM	2900
FREQUENCY	50 Hz
VOLTAGE	230/400 V
PROTECTION	IP 55
FLANGES	IEC
DESIGN	B5

The curves and performance values refer to pumps with free delivery outlet with water at 20 °C, and two poles motor 50 Hz.

\*These data may vary according to the construction materials, hydraulic conditions and the length of the pump.

## MATERIAL | COMPOSITION

MODEL	CASING	O-RING	LENGTH mm	CONNECTIONS	FRAME SIZE	MOTOR VERSION
JP-830.180	P = PP K = PVDF	D = EPDM V = VITON	800 1000 1250 1500 1750	1 = BSP STD 2 = FLANGED	100 112 132 160	IE = IEC FLANGE - = NO MOTOR

F = female thread M = male thread



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