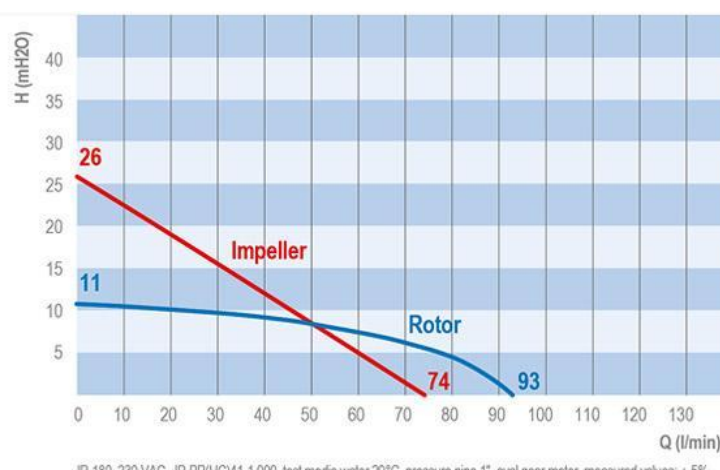




Representative Image

Performance Curve



NOTE: When using a Nozzle, the Flow Rate is reduced to 60...80 l/min

Specification

Identification

Part Code	TPUK-SMARTSET-JP-180-PP-HC-1000
Description	Smart Pump Set JP-180-PP (HC) 1000 – 230V / 1 Ph Electrically Operated Drum Pump Set with Integrated Batch Control for all standard Chemicals such as Acids, Alkalies, Ad-Blue & Detergents up to a Max Temp of 50°C

Materials and Specifications

Part description and part No	Material description
Tube Set	41 mm ø x 1000 mm PP w/ Hastelloy-C Shaft, 1¼" ISO G Outlet w/ 1" Hose Tail & Rotor
Electric Motor	JP-180 Smart – 640 W / 230V / 1 Ph / 50-60 Hz / IP24, Double Insulation Class II w/ Overload Protection Switch, Low-Voltage Release & 5 m Cable w/ Euro Plug & Electronic Set for Batch Control Integrated into Motor Handle
Flow Meter	FM 120 M01 PP – 1" Turbine Flow Meter in PP / FKM w/ Display & Integrated Batch Control
Fittings	P/N: 1111 – PP Flow Meter Fittings, 1" ISO G F x 1¼" ISO G F P/N: 2194 (2 Off) – 30 mm ø PTFE Seal P/N: 2195 – 45 ø PTFE Seal P/N: 1107 – PP Hose Connector, 1" ISO G x 1" Hose Tail
Hand Nozzle	PP w/ 1" Swivel Inlet, FKM Elastomers, Hastelloy-C Spring
Discharge Hose	2 m x 1" Multi-Purpose UHMWPE w/ 2 x SS Hose Clamps

Performance Data

Max Flow Rate	93 l/min
Max Head	11 m
Max Density	1.5 kg/dm ³
Max Viscosity	600 mPas
Max Temperature	50°C



Main Components



Tube Set – 2141 0100

41 mm ø x 1000 mm PP w/ Hastelloy-C Shaft & Rotor, 1¼" ISO G Outlet w/ 1" Hose Tail & SS Hose Clamp



JP-180 Smart Universal Motor w/ Electronic Set for Batch Control Integrated into Motor Handle – 1180 2304

640 Watt / 230V / 50...60 Hz / IP24 with Double Insulation Protection Class II. Overload Protection Switch w/ Integrated No-Volt Release, 5 m Cable & Plug. 115V / 60 Hz & Speed Control on request.

Max Flow: 93 l/min (Rotor) / 74 l/min (Impeller)

Max Head: 11 m (Rotor) / 26 m (Impeller)

Max Viscosity: 600 mPas

Max Density: 1.5 kg/m³



1" PP Hand Nozzle with Swivel Connection - 9103

Housing and internal parts made of polypropylene, valve seat and O-Rings made of FKM, spring in Hastelloy 2.4610

Inlet: 1" Swivel Hose Tail

Max Flow Rate: 80 l/min

Max Viscosity: 800 mPas

Max Operating Pressure: 3 bar

Weight: 210 g



1" x 2 m Multi-Purpose, Conductive, Chemical Hose

Smooth Walled Conductive UHMWPE suitable for nearly all chemicals, oils and gasoline. Not suitable for oleum, bromine and chlorsulfon acide.

Size: 1"

Max Operating pressure: 10 bar

Temperature Range: -25°C...+90°C

FM 120 M01 PP - Electronic Flow Meter w/ Integrated Batch Control

Application

For neutral and aggressive media such as diesel, heating oil, sodium hydroxide, phosphoric acid, chlorine bleach, chromic acid, hydrochloric acid, seawater, water, citric acid

Benefits

- The user can select his desired flow rate by means of a clearly structured and easy to use keypad. He can start the filling process immediately by a further keystroke and interrupt it any time. To ensure best dosing accuracy, the flowmeter can be calibrated for different media.
- From a fluid dynamic aspect, the minimum flow volume is 20 liters in these turbine wheel meters.
- The electronics located in the white remote switch or the handle of a non-explosion-proof drum pump ensures that upon reaching the user specified delivery rate the signal output is opened and switches off the pump reliably or a magnetic valve or a ball valve is closed.
- Factory pre-calibrated in the range 1 for water-like media. For the user there is the option to calibrate the turbine wheel meter according for more low-viscosity fluids. For this, three additional calibration ranges are available. The counter is set by default to liters and can be changed by a few keystrokes on gallons.

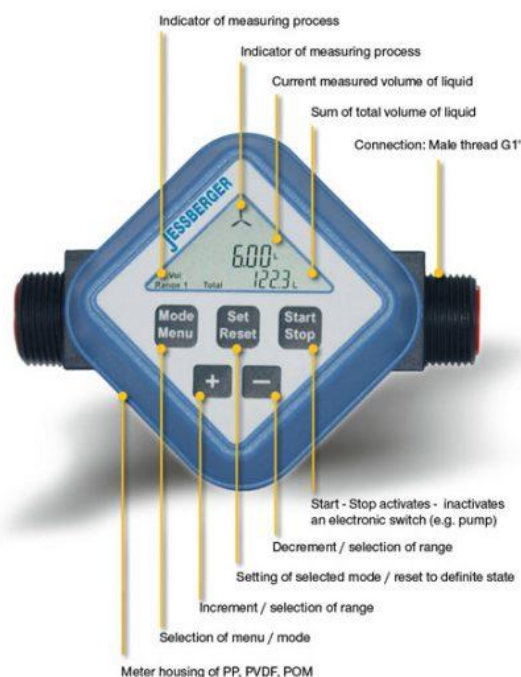
Specification

Flow Range:	20...120 l/min
Min. Volume:	20 Litres
Accuracy:	+/- 1% (*)
Measuring Resolution:	0.03 Litres
Display Resolution:	0.05 Litres
Repeatability:	+/- 0.5%
Max Viscosity:	20 mPas
Max Pressure:	6 Bar
Design Pressure:	12 Bar
Operating Temperature Range:	+5°C...+50°C
Connections:	1" ISO G M
Casing:	PP
Turbine:	PVDF
Shaft:	NiCroFer 2.4605
Seal:	FKM

Operating Principle:	Turbine Flow w/ Proportional Pulse Generator, Open Drain with MOSFET Switching Transistor
Connection:	2-Wire Cable x 1.5 m Length with 3-Pole Diode Switch
Configuration:	Pin 1 = GND / Pin 3 = Drain
Electronics:	Open Drain, 30V DC Max (10 mA Max)
Display:	LCD Display, Two 6-Digit, 7-Segment Displays and 28 Graphic Symbols w/ 5 Short-Stroke Keys
Protection:	Foil / IP65

(*) Medium Water, ambient and water temperature: 20°C. Compliance with the requirements for the minimum inlet and outlet sections and the appropriate internal diameter of the piping. In an optimal installation, both inlet and outlet sections are at least 75 cm with a tube diameter of 1".

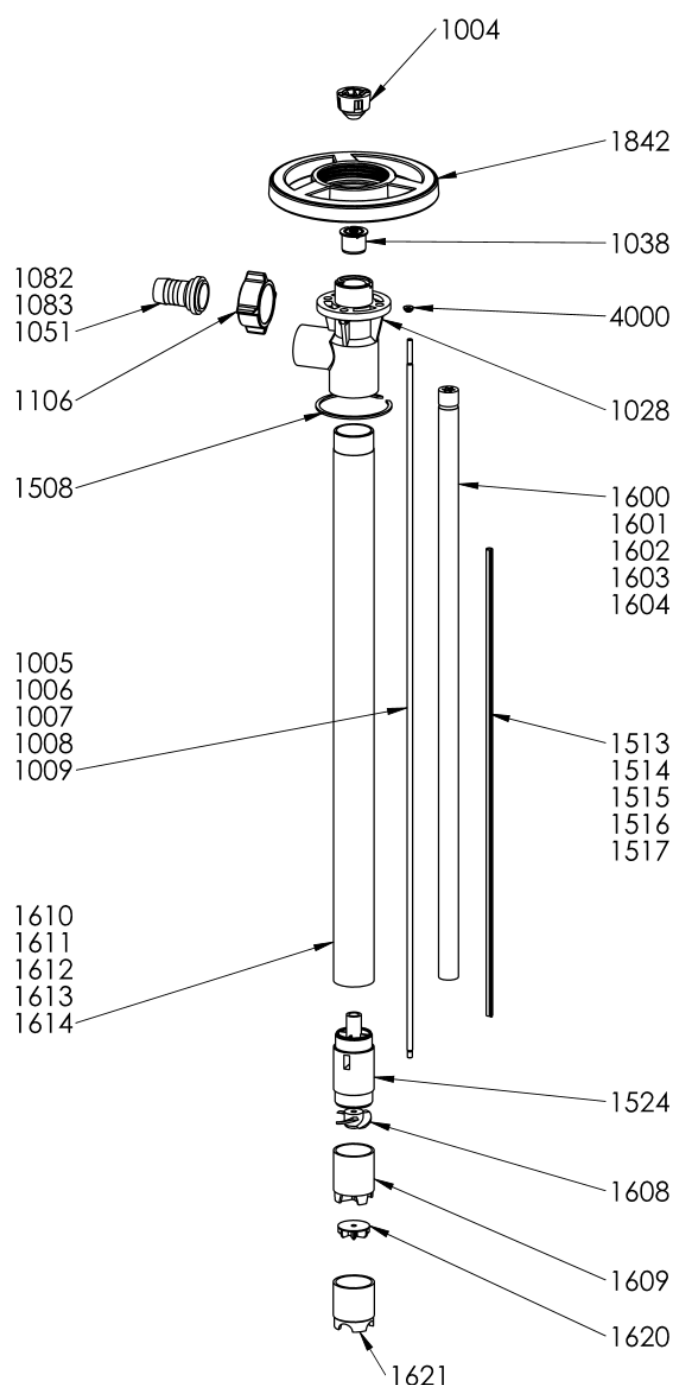
Recommended installation: Upright (display above keys down), position of the measuring system up, the flow should be in the direction of arrow.





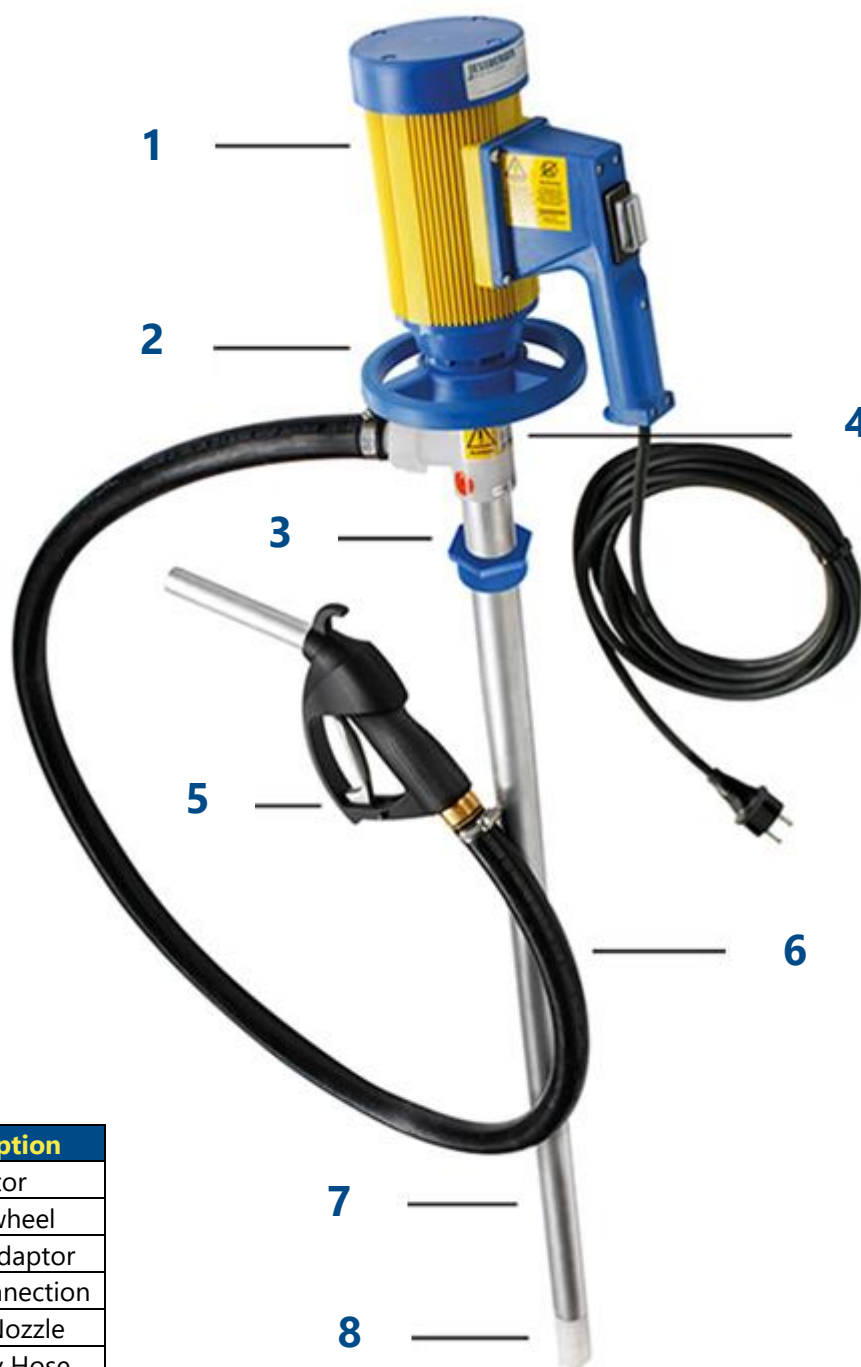
Tube Set Exploded View & Parts List

Item No	Description	Qty
1004	Pump Coupling	1
1006	Hastelloy-C Drive Shaft x 1000 mm	1
1028	Discharge Piece	1
1038	Bearing Unit	1
1082	1" Hose Tail	1
1106	Wing Nut	1
1508	Snap Ring	1
1514	PTFE Guide Sleeve x 1000 mm	1
1524	Pump Housing w/ PTFE Bushing	1
1601	Inner Tube x 1000 mm	1
1608	PP Rotor	1
1609	Rotor Pump Foot	1
1611	Outer Tube x 1000 mm	1
1842	Hand Wheel	1
4000	V-Seal	1





Drum & Container Pump Set Typical Structure



Item No.	Description
1	Motor
2	Handwheel
3	Barrel Adaptor
4	Hose Connection
5	Hand Nozzle
6	Delivery Hose
7	Pump Tube
8	Pump Foot