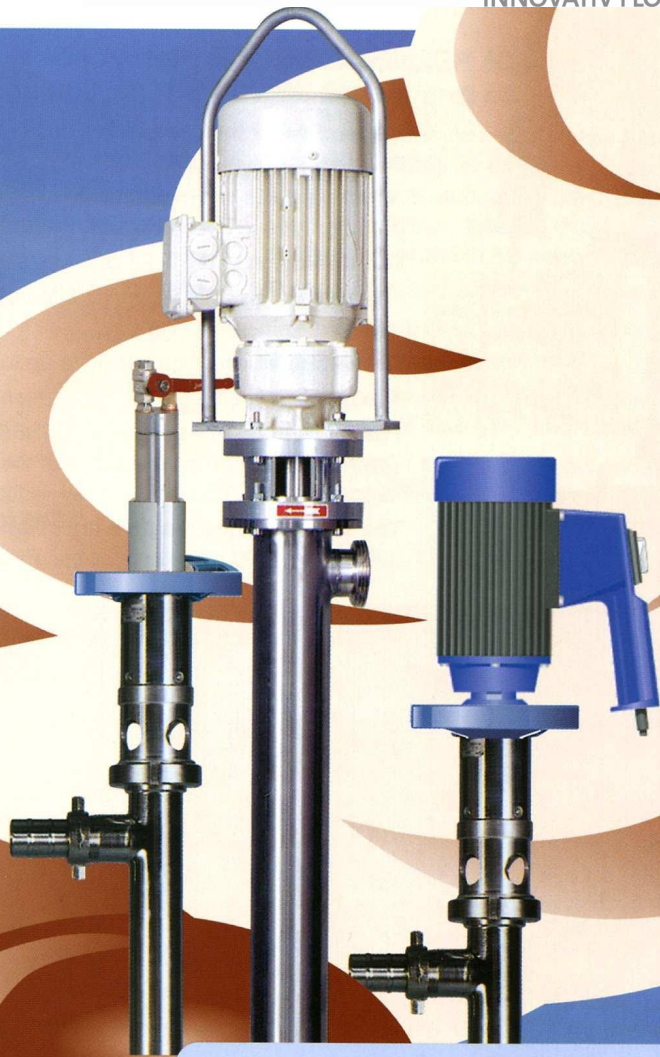


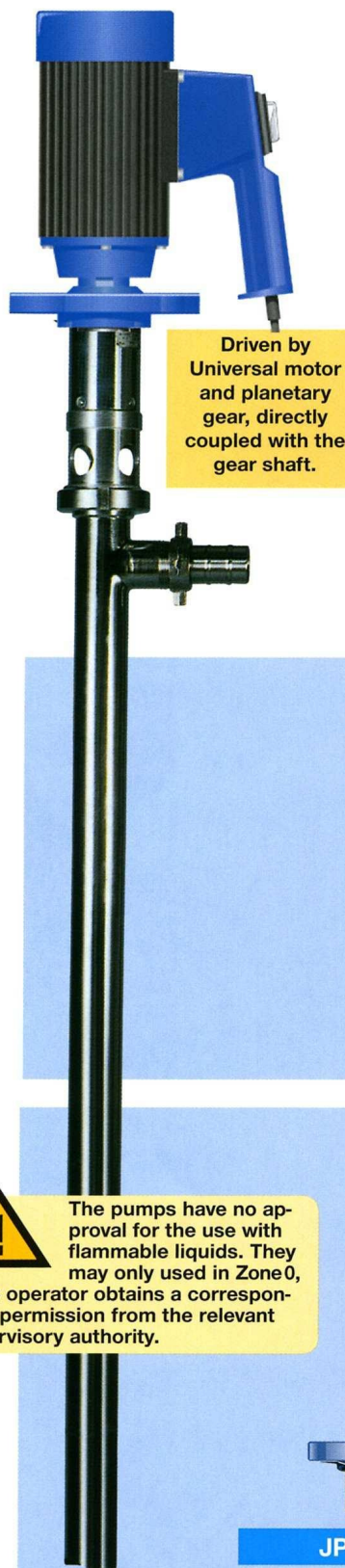
Colly FLOWTECH

INNOVATIV FLÖDESTEKNIK



JP 700

JESSBERGER
High viscosity pumps
for drums and
containers
for viscous liquids
up to 100.000 mPs



Driven by Universal motor and planetary gear, directly coupled with the gear shaft.

JESSBERGER High viscosity pumps for drums and containers Series JP 700 SR, particularly suitable for intermittent operation.

are suitable for the use of a big number of liquids. Particularly suitable for highly viscous, neutral, aggressive or lightly flammable liquids also with or without solids.

All pump parts are in stainless-steel (316 L), stators are available in NBR (Buna), NBR_{light} (Food grade), VITON (FKM), HYPALON (CSM) or PTFE.

The delivery rate is 12, 25 or 50 ltr/min.

The delivery head is 6 bar (60 meters) using the single-stage pump or 12 bar (120 meters) using the twin-stage pump.

The temperature of the liquid is up to max. 140°C.

The max. viscosity for the SR-version is up to 30.000 mPas.

The SR-version are driven by JESSBERGER electric Universalmotors or pneumatic motors. The motors can be connected with the pump tube fast and easy without tools by means of a hand-wheel.

The standard tube length's are 700 mm, 1000 mm resp. 1200 mm. Special length's from 500 mm to 1600 mm are possible. Please ask us.

High viscosity pump end

Type	Sizes	Flow rate	Disch. pressure
JP 700.12.1	1.000 mm	12 l / min	6 bar
JP 700.12.2	1.100 mm	12 l / min	12 bar
JP 700.25.1	1.000 mm	25 l / min	6 bar
JP 700.25.2	1.100 mm	25 l / min	12 bar
JP 700.50.1	1.000 mm	50 l / min	6 bar

SR - Version (with planetary gear) approx. 700 rpm. Available air motors: JP AIR 2, JP AIR 3, and electric motors: JP 280, JP 300, JP 320.

Motors



The pumps have no approval for the use with flammable liquids. They may only be used in Zone 0, if the operator obtains a corresponding permission from the relevant supervisory authority.



JP AIR 2

300 W at max. 6 bar operating pressure

Compressed air motor with starting button on the handle. The motor starts running and the pump is transferring liquids when the button is pressed.



JP AIR 3

400 W at max. 6 bar operating pressure

Compressed air motor, stainless steel housing, with plug valve at air intake for compressed air control. This regulates the motor speed and varies the pumping capacity.



JP 280 / JP 300

825 W Universal Motor
230/115 V 50-60Hz
Double isolated, category II, Splash-proofing according to IP 44 (JP280) according to IP 54 (JP300) On/off switch, Overload protection switch



JP 320

800 W Universal Motor
230/115 V 50-60Hz
Double isolated, category II, Splash-proofing according to IP 54. On/off switch, Overload protection switch

JESSBERGER High viscosity pumps for drums and containers JP 700 DR A

are versatile, robust and extremely powerful pumps. They are suitable for the use of fluid to highly viscous liquids such as mud, paste, soap, shampoo, honey, sirup, marmelade, ketchup etc. up to 100.000 mPas. Particularly suitable for continuous operation.

Pump tubes are made of stainless steel SS316L

The pump tubes are available with mechanical seals or with glands.

Stators are available in NBR (Buna), NBR light (Food grade), VITON (FKM) Hypalon (CSM) or PTFE.

The weight of the pumps is depending on the tube length and drive 15-25 kg.

Driven by pneumatic or three-phase motor, directly coupled with extended motor shaft.

Driven by pneumatic or three-phase motor with flexible coupling, pump-shaft with ball-bearing.

Pump-tubes, Ø 54 mm, hose connection G 1 1/2"

Type	Sizes	Flow rate l/min	Delivery head
JP 700 DR	700 mm	12/25/50	60 - 120 m
JP 700 DR	1.000 mm	12/25/50	60 - 120 m
JP 700 DR	1.200 mm	12/25/50	60 - 120 m

DR - Version (speeds will be adjusted individually according to application).

Motors: Pneumatic motors JP AIR4 (0,5 kW), JP AIR 6 (1,0 kW) and JP AIR 8 (1,5 kW).

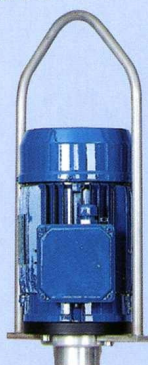
Three-phase motor, three-phase gear motor and three-phase variable gear motor.

Speeds will be adjusted individually according to application.

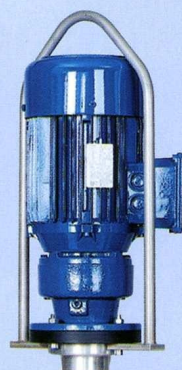


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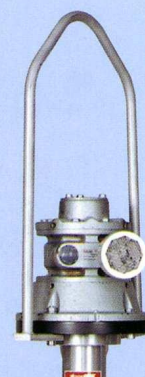
Motors



Three-phase motor
0,37-2,2 kW



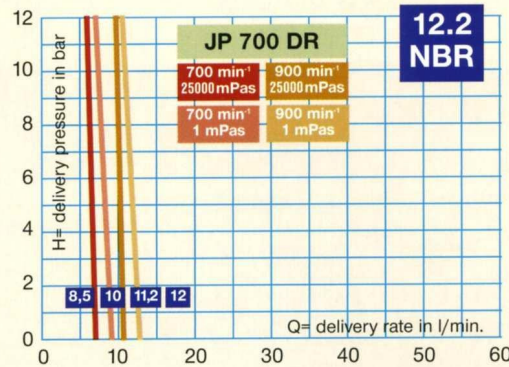
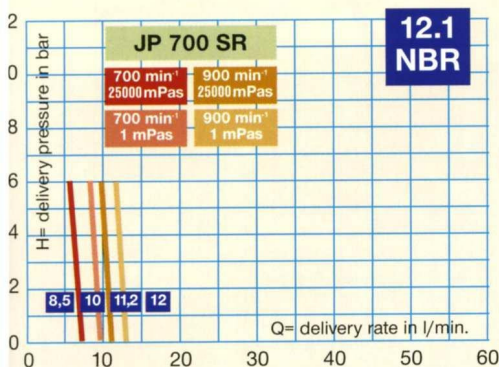
Tree-phase gear
motor



Pneumatic motor

Performance chart JP700 SR / JP 700 DR

The flow charts below show in various examples the flow rates for a Elastomer stator (NBR) as well as for a PTFE stator (solid matters) at different speeds (rpm) and viscosities



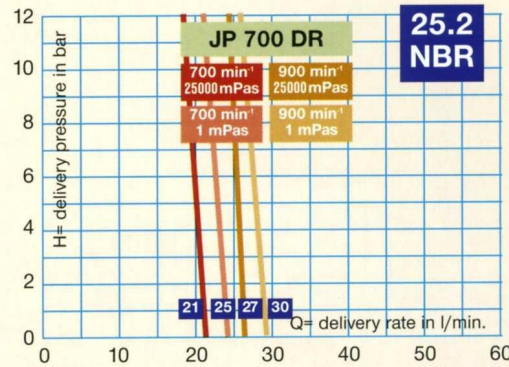
Delivery rate in l/min. at different delivery pressures

JP 700.12.1-12.2 $n = 700 \text{ min}^{-1}$ $n = 900 \text{ min}^{-1}$
max. 6 bar max. 12 bar

0 mPas	10	12
25.000 mPas	8,5	11

JP 700.25.1-25.2 $n = 700 \text{ min}^{-1}$ $n = 900 \text{ min}^{-1}$
max. 6 bar max. 12 bar

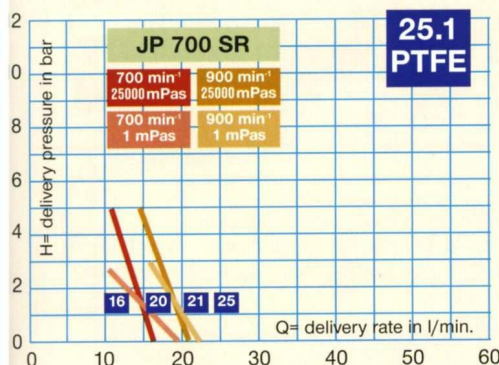
0 mPas	23	30
25.000 mPas	22	27



JP 700.50.1 $n = 700 \text{ min}^{-1}$ $n = 900 \text{ min}^{-1}$

0 mPas	47	57
20.000 mPas	43	52

PTFE stators are not suitable for fluid liquids. Depending on the viscosity and delivery height there will be a reduction of delivery rate of up to 60% compared to NBR stators.



Power requirement in kW at different viscosities

JP 700.12.1 $n = 700 \text{ min}^{-1}$ $n = 900 \text{ min}^{-1}$

up 7.000 mPas	0,55	0,55
to 20.000 mPas	0,75	0,75
over 20.000 mPas	1,10	1,10

JP 700.12.2 $n = 700 \text{ min}^{-1}$ $n = 900 \text{ min}^{-1}$

up 7.000 mPas	0,55	0,55
to 20.000 mPas	0,75	0,75
over 20.000 mPas	1,10	1,10

JP 700.25.1 $n = 700 \text{ min}^{-1}$ $n = 900 \text{ min}^{-1}$

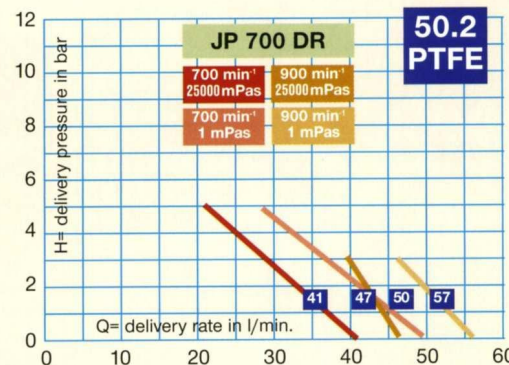
up 7.000 mPas	0,75	0,75
to 20.000 mPas	1,10	1,10
over 20.000 mPas	1,10	1,10

JP 700.25.2 $n = 700 \text{ min}^{-1}$ $n = 900 \text{ min}^{-1}$

up 7.000 mPas	0,75	0,75
to 20.000 mPas	1,10	1,10
over 20.000 mPas	1,10	1,10

JP 700.50.1 $n = 700 \text{ min}^{-1}$ $n = 900 \text{ min}^{-1}$

up 7.000 mPas	1,10	1,10
to 20.000 mPas	1,10	1,10
over 20.000 mPas	1,50	1,50





Selection of stators (valid for all pumps)

NBR black (Perbunan),
max. 90 °C, suitable for liquids
containing oils and fats, alcohol
and aqueous solutions.

*Not resistant to acids, caustic
solutions and solvents.*

NBR white (Food grade),
max. 90 °C, suitable for liquids
containing oils and fats, alcohol
and food.

*Not resistant to acids, caustic
solutions and solvents.*

CSM (Hypalon), max. 90 °C,
suitable for liquids containing
acid- and caustic solutions.

*Not resistant to oils, fats and
solvents.*

Viton (FKM), max. 150 °C,
high chemical resistance.

PTFE (Teflon), max. 150 °C,
high chemical resistance, food,
pharmaceutical and cosmetic
products.



Information needed to chose the right high viscosity pump

Spezifikation of the liquid

**Viscosity and operating
temperature of the liquid**

Density

Required delivery rate

**Delivery head
(incl. pipeline losses)**

**Content as well as typ and
size of solid matters**

Operating hours sper day

**Will the pump be used mobil
or stationary, vertical or hori-
zontal?**



JESSBERGER drum- and container pumps JP 700.80.1 / 80.2 / 150.1 / 150.2

Are suitable for the use of liquids with low and high
viscosity, neutral or aggressiv, with or without solids.

Pump tubes in stainless steel SS316L,
pearl-blasted surface, max. Ø 105 mm, max. tube
length 1600 mm, hose connection male thread G2".

Flexible shaft of Polypropylen with 30% GF

Rotor of stainless steel SS316L

Flexible shaft of stainless steel ss316L

Material of shaft seal:

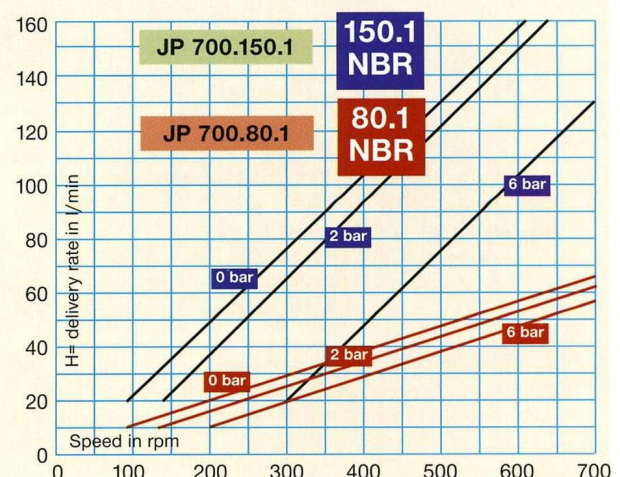
Mechanical seal of chrome/carbon or SiC/SiC,
O-rings in Viton or FEP, alternativ: Gland of PTFE

**Stators NBR (Buna), NBR light (food grade),
Hypalon (CSM), Viton (FKM), PTFE (Teflon)**

Pump lantern of Polyamid or Aluminium.

Divergence in food grade execution:

Outlet connection milk thread, coupling rod and
rotor in stainless steel ss316L polished, pin joints
open, lantern Aluminium.



The pumps have no ap-
proval for the use with
flammable liquids. They
may only used in Zone0,
if the operator obtains a correspon-
ding permission from the relevant
supervisory authority.