

# Technical Data:

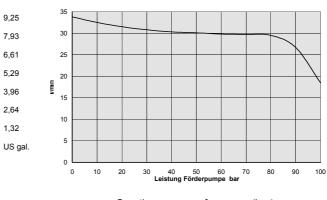
## Grout pump DP 50-4-...

Applications Grouting materials

: post-grouting grouting

: water with solids in suspension sodium silicate mixtures





BERMANN

Grouting pump performance (bar)

psi 142.2 284 426.6 568.8 711 853.2 995.4 1137.6 1279.8 1422

#### **Technical data**

Туре	DP 50-4-F	DP 50-4-G
Max. pump volume in I/min. <sup>1)</sup> Max. pump pressure in bar <sup>1)</sup> Self-acting pump valves <b>Special suitability for viscous suspensions and low pump</b>	34 100 ● speed	34 100
Pump valves, and circulation valve are hydraulically operated		•
Electro-hydraulic drive Drive output in kW Electric connection Voltage and frequency (V / Hz)	7.5 CEE 16A / 5P 400 / 50	7.5 CEE 16A / 5P 400 / 50
Suction connection to pump (x 2)	Connecting system size I	Connecting systems size I
Pressure connection Circulation connection	G ¾ / RD 32	G ¾ / RD 32 G ¾ / RD 32
Dimensions L x W x H in mm	790 x 620 x 1480 $^{1)}$ / 1560 $^{2)}$	790 x 620 x 1480 $^{1)}$ / 1560 $^{2)}$
Weight in kg	280	300

Infinitely variable - max. volume and max. pressure cannot both be achieved simultaneously Performance: typical performance, determined with water 1 bar =  $1 \times 10^5$  N/m<sup>2</sup> <sup>1)</sup> lifting eye unscrewed

<sup>2)</sup> lifting eye fixed

Issue date: April 2005. Subject to modification

### DP 50-4-... MACHINE TECHNOLOGY

#### Frame:

- skid mounted steel frame, partly encased
- fork lift guide
- central lifting eye
- painted in colour RAL 3000 (red)

#### Grouting pump:

**DP 50-4-F:** pump with ball valves **DP 50-4-G:** pump valves and circulation valve hydraulically operated

- upright double plunger pump,  $\varnothing$  50 mm
- pump valves easy for maintenance
- all important pump parts are surface treated and can be cleaned without damage

#### Hydraulic:

- oil tank working capacity approx. 40 I (11 US gal)
- oil tank of aluminium, suitable for bio-oil
- Bio oil (B10)<sup>3)</sup>

#### **Electric:**

- electric motor for drive of the hydraulic pump
- 7.5 kW, 400 V, 50 Hz, IP 54
- automatic phase correction
- control voltage for valves and remote control 24 V DC
- neutral wire in CEE 16 A conductor not necessary machine for power supply with 60 Hz (Freq. 60) <sup>3)</sup>

#### **Operation and indication elements:**

- digital indication of grouting pressure <sup>1)</sup>
- adjustment of grouting pressure: max. hydraulic pressure
- electroprop. adjustment of the pump speed (SD 20) 3)
- control unit Watch A1 (SD 30) 3)
- indication of flowrate in I/min.<sup>2)</sup>
- volume preselection in I total, with remainder indication in I <sup>2)</sup>
- total volume indication with and without reset
- remote control connection (SD 9)
- remote control <sup>3)</sup>
- cable remote control RC 1 or RC 2

#### Accessories:

special tools for operation and maintenance, if necessary operation manual and list of spare parts, 3fold spare parts package (mini, standard, overseas)<sup>3)</sup> suction hoses<sup>3)</sup> pressure hoses<sup>3)</sup> pressure and flow measuring devices<sup>3)</sup>

#### Additional machines and products:

- Mixer, storage tank
- mixing plant for solid agent suspensions or sodium silicate mixtures
- Electronic pressure and flow measuring devices
- LOG-data registration unit and software,
- also suitable for remote control of grouting pumps grouting packers

<sup>1)</sup> pressure measurement either directly at grouting pump or by separate pressure sensor type MAP at grouting point

- <sup>2)</sup> measurement of flowrate by stroke at grouting pump
- <sup>3)</sup> optional