

# Mix-Pump-Unit semi-automatic

## MPS 80-E-B-KV-HA 2P compact



### Technical Data

Drive Electro-hydraulic  
 Drive Power 7,5 kW  
 Total Power Consumption approx. 18,0 kW

Connections  
 Electrical CEE 63 A / 400 V AC, 50 Hz, IP 54  
 Water inlet G 2 BSPP AG DN 50 - C-coupling  
 G 1 BSPP IG DN 25 - GEKA

Outlet  
 Pressure line G 1 BSPP IG DN 25 - RD 38  
 Circulation line G 1 BSPP IG DN 25 - RD 32

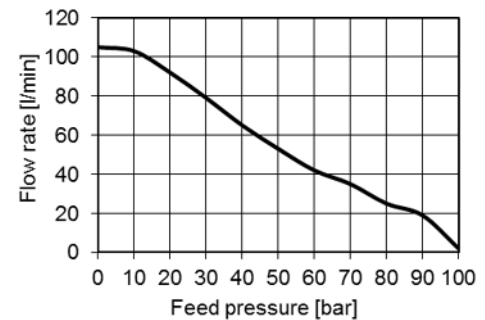
Dimensions (L x W x H) 2.450 x 1.200 x 1.700 (mm)  
 Weight approx. 1.900 kg

Application Mixing and pumping of cement-, micro-cement, fly ash and bentonite suspensions at anchoring, injections, backfillings, groutings, flushings, sealings, piling and vibrating jobs

Special Feature: Injection-Pump (= IP 80) as an element removable and separate applicable

Performance Mixer  
 Hand feed up to 3,5 m³/h  
 Feed per dosing screw-conveyor up to 4,5 m³/h

Delivery Pump  
 Injection Pump IP 80-E-B-KV  
 Pressure max. 100 bar<sup>1)</sup>  
 [max. 1.450 psi]<sup>1)</sup>  
 Flow rate max. 103 l/min.<sup>1)</sup>  
 [max. 27 gal U.S.]<sup>1)</sup>





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## Standard Features

### Framework

skid steel frame, partially enclosed and with partition panel, floor and oil pan, central towing device, fork lift guides crosswise, machine room sound proofed, lockable doors, finishing 2K-paint RAL 5005 (signal blue) or on customer desire unicoloured

### Electric Drive

electric motor (injection pump IP 80-E-B-KV) 7,5 kW, 1.500 rpm, 400 V AC, 50 Hz, IP 54, electric motor (with toothed belt) mixer 5,5 kW, 1.500 rpm, 400 V AC, 50 Hz, IP 54 and gear motor for agitator 1,1 kW, max. 41 rpm (frequency controlled), 400 V AC, 50 Hz, IP 54, automatic phase correction, motor safety switch, control voltage 24 V DC (for valves and remote control), operating hour meter

### Hydraulic IP 80-E-B-KV

oil tank volume 80 l [21 gal U.S.], axial piston pump and gear pump, oil cooler, main oil filter, oil filling and ventilation filter, electrical oil filter pollution control, oil level and temperature indicator, membrane accumulator, manometer for hydraulic and control oil pressure, pressure and flow infinitely variable

### Delivery Pump IP 80-E-B-KV

vertical two-plunger pump  $\varnothing$  80 mm, flow rate per double stroke  $V = 1,7$  l [0,45 gal U.S.], pump valves (suction- and pressure line) self-acting (ball valves), circulation and pump-down valves manually actuated, flow rate adjustment electro-proportional, manual grease system for plunger sealing sleeves and manually with plunger oil, protective grid

### Delivery Pressure Measurement

manometer 0-100 bar [1.450 psi]  $\varnothing$  100 mm completely with stainless steel membrane, electronic pressure sensor 0-100 bar [1.450 psi] 4-20 mA G  $\frac{1}{2}$  BSPP AG

### Water tank with Water Dosage

made of stainless steel (brushed), water storing and dosing tank  $V = 130$  l [34 gal U.S.], fixed overflow pipe, water connection C-coupling with flushing connection and butterfly valve DN 50 pneumatically controlled, water tank inlet valve DN 25 electrical and water tank outlet valve DN 50 manually actuated, semi-automatic water metering with fluid level indicator

### Mixing Tank (Colloid Mixer)

made of stainless steel (brushed), round tank with conical floor, volume 250 l [66 gal U.S.], effective volume 200 l [53 gal U.S.], mixer drive hydraulic motor (rotation speed infinitely variable), foldable and lockable tank covers with safety end switches, cover for screw conveyor inlet with inspection flap, hopper with bag ripper, circulation and pump down valves DN 50 manually actuated

### Tools in Mixing Tank

2 fast turning mixing tools on one common drive shaft with pump down function, 1 mixing blade  $\varnothing$  250 mm, 1 pumping wheel  $\varnothing$  185 mm, drive shaft bearing above mixer fluid level (No stuffing box, so dry running possible w/o any problems!)

### Storing Tank

made of stainless steel (brushed), round tank with straight floor, volume 265 l [70 gal U.S.], effective volume 230 l [61 gal U.S.], agitator drive electric gear motor 1,1 kW (rotation speed infinitely variable, frequency controlled), foldable and lockable tank covers with safety end switches

and inspection flap, suspension inlet DN 50 with inlet basket, suspension outlet DN 50 with pneumatically controlled valve and suction basket, cleaning cover sidewise, slowly turning agitator with a floor scraper

### Control Elements Mixing Plant

main switch, control lights POWER SUPPLY, CONTROL VOLTAGE, MIXER OPERATION and AGITATOR OPERATION, warning lights EMERGENCY-STOP ACTIVATED, MIXER FAULT, AGITATOR FAULT and COMPRESSED AIR FAILURE, button WATER DOSAGE START/STOP, buttons MIXER ON/OPERATION and MIXER OFF/FAULT, buttons AGITATOR ON/OPERATION and AGITATOR OFF/FAULT, buttons PUMP ON SUSPENSION, PUMP ON WATER and PUMP OFF, switch DEWATERING, buttons EMERGENCY-STOP (2x), button LIGHT ON/OFF for working lamps outside, potentiometer FLOW RATE, **Connection Options:** socket REMOTE CONTROL 14-pin with EMERGENCY-STOP bridge plug, free sockets 400 V / 16 A (2x), free socket 230 V / 16 A

### Operating Elements Injection Pump

main switch, control lights POWER SUPPLY and CONTROL VOLTAGE, warning light EMERGENCY-STOP ACTIVATED, buttons HYDRAULIC MOTOR ON/OPERATION and HYDRAULIC MOTOR OFF/FAULT, button EMERGENCY-STOP, buttons PUMP ON SUSPENSION, PUMP ON WATER and PUMP OFF, switch REMOTE CONTROL ON/OFF, switch MANUAL/AUTO, button AUTOMATIC START/STOP, rotary knob for max. DELIVERY PRESSURE adjustment, potentiometer FLOW RATE, flow rate counter l/min. and l/total with zero setting, auto-preset counter flow rate l/total, **Connection Options:** socket REMOTE CONTROL 14-pin with EMERGENCY-STOP bridge plug, socket EMERGENCY-STOP BRIDGE with bridge plug, socket PRESSURE SIGNAL 6-pin, free socket 230 V / 16 A

### Accessories (included)

documentation, special tools for operation and maintenance, radio remote control, cable remote control 15 m and cable reel 100 m, circulation hose, high pressure cleaner 4,0 kW, 950 rpm, 200 bar [3.045 psi] (industrial device, fixed installed) with water inlet filter, LED work lamps for mixing and storing tank outside

### Accessories (optional)

spare part kits, grouting hoses, suction hoses, fittings, grouting grippers

### Supplementary Devices

storing tanks for solid suspensions, dosing devices, screw-conveyors, radio remote control, control devices, electronic data acquisition and recording, regulating and measuring systems RMS with computer evaluation per USB and injection journal, flow meter with delivery pressure measuring, electronic delivery pressure devices (pressure transmitter) at injection place, devices for radio data transmission

*Further devices, special equipments and accessories on request!*