

Mix-Pump-Unit fully-automatic

MPS 80-E-B-KV-AUT 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

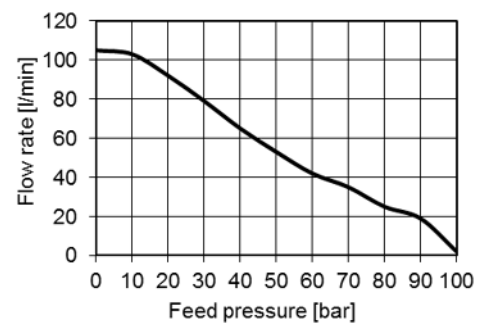
Dimensions (L x W x H) 2.450 x 1.200 x 1.700 (mm)
 Weight approx. 1.950 kg

Application Fully-automatic mixing and pumping of cement-, micro-cement, fly ash and bentonite suspensions at anchoring, injections, backfillings, groutings, flushings, sealings

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

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

Delivery Pump
 Injection Pump IP 80-E-B-KV
 Pressure max. 100 bar¹⁾
 [max. 1.450 psi]¹⁾
 Flow rate max. 103 l/min.¹⁾
 [max. 27 gal U.S.]¹⁾



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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 Ø 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] Ø 100 mm completely with stainless steel membrane, electronic pressure sensor 0-100 bar [1.450 psi] 4-20 mA G ½ 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 and water tank outlet valve DN 50 pneumatically controlled, fully-automatic water metering with fluid level indicator

Mixing Tank (Colloid Mixer) with Weighing

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 electric motor with toothed belt drive 5,5 kW, 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 pneumatically controlled, transport locking screws

Tools in Mixing Tank

2 fast turning mixing tools on one common drive shaft with pump down function, 1 mixing blade Ø 250 mm, 1 pumping wheel Ø 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 and stream screen, fluid level control per ultrasonic sensor

Control Elements Mixing Plant

main switch, control lights POWER SUPPLY and CONTROL VOLTAGE, warning lights EMERGENCY-STOP ACTIVATED, MIXER FAULT and AGITATOR FAULT, buttons FILL WATER TANK and EMPTY WATER TANK, buttons MIXER CIRCULATION and EMPTY MIXER, button MIXER ON/OFF, button AGITATOR ON/OFF, buttons PUMP ON SUSPENSION, PUMP ON WATER and PUMP OFF, button AUTOMATIC START/STOP, button SCREW CONVEYOR ON/OPERATION/FAULT, switch REMOTE CONTROL ON/OFF, switch MIXTURE 1-2-3, switch AUTOMATIC/MANUAL/ AUTO PRESET, DRAINING SUSP./WATER / ALL VALVES, buttons EMERGENCY-STOP (2x), button RESET PRESSURE FAILURE, switch LIGHT ON/OFF for external working lamps, potentiometer FLOW RATE [l/min.], potentiometer MIXING TIME, potentiometer AGITATOR SPEED, flow rate counter l/min. and l/total with zero setting, auto preset counter for flow rate l/total, LCD display with scale setting for total weight (water and solids), batch and preset counter for mixtures with zero setting, LCD display for filling level of storage tank (ultrasonic sensor), **Connection Options:** socket REMOTE CONTROL 14-pin with EMERGENCY-STOP bridge plug, socket EMERGENCY-STOP BRIDGE, socket SCREW CONVEYOR 32 A, socket VIBRATOR 16 A, 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

Automatic Mode: production of the mixtures automatically or in manual mode, infinitely variable setting of the mixing time, automatic pumping in circulation and pump-off, automatic control of the screw conveyor, all shut-off flaps are pneumatically controlled

Accessories (included)

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

Further devices, special equipments and accessories on request!