Mix-Pump-Unit semi-automatic **MPS 110-E-C-HA**



Drive Electro-hydraulic **Drive Power** 30,0 kW **Total Power Consumption** approx. 36,0 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

G 1 1/4 BSPP IG DN 32 - RD 55 Pressure line G 1 BSPP IG DN 25 - RD 32 Circulation line

Dimensions (L x W x H)

approx. 2.950 kg

Weight

Application

Mixing and pumping of cement-, micro-cement, fly

ash and bentonite suspensions at anchoring, injections, backfillings, groutings, flushings,

sealings, piling and vibrating jobs

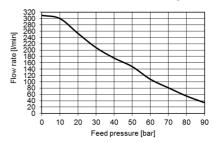
2.450 x 1.650 x 2.100 (mm)

Performance Mixer

Hand feed Feed per dosing up to 3,5 m³/h

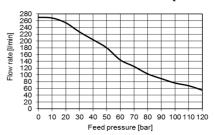
screw-conveyor up to 4,5 m³/h Delivery Pump (RA = Ring Area)

Pressure max. 90 bar1) [max. 1.305 psi]1) [max. 82 gal U.S.]1) Flow rate max. 310 I/min.1)



Delivery Pump (PA = Piston Area)

Pressure max. 120 bar1) [max. 1.740 psi]¹⁾ Flow rate max. 270 I/min.1) [max. 71 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, lashing points for truck load securing, fork lift guides lengthwise and crosswise, machine room sound proofed, lockable doors, finishing 2K-paint RAL 5005 (signal blue) or on customer desire unicoloured

Electric Drive

electric motor 30,0 kW, 1.500 rpm, 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

oil tank volume 170 I [45 gal U.S.], axial piston pump and gear pumps, oil cooler with thermostat, main and control oil filter, oil filling and ventilation filter, electrical oil filter pollution control, oil level and temperature indicator, manometer for hydraulic and control oil pressure, pressure and flow infinitely variable

Delivery Pump

vertical two-plunger pump \emptyset 110 mm, flow rate per double stroke V = 4,5 I [1,18 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, automatic grease system for plunger sealing sleeves and manually with plunger oil, protective grid with safety function

Delivery Pressure Measurement

manometer 0-100 bar [1.450 psi] Ø 100 mm completely with stainless steel membrane

Water tank with Water Dosage

made of stainless steel (brushed), water storing and dosing tank V = 250 I [66 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 I [66 gal U.S.], effective volume 200 I [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 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 550 I [145 gal U.S.], effective volume 500 I [132 gal U.S.], agitator drive hydraulic motor (rotation speed infinitely variable), 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

Operating Elements

main switch, control lights POWER SUPPLY, CONTROL VOLTAGE, OIL COOLER OPERATION and MIXER/AGITATOR ON/OFF, warning lights OIL FILTER PUMP, OIL FILTER MIXER/AGITATOR, OIL COOLER FAULT and COMPRESSED AIR FAILURE, buttons HYDRAULIC MOTOR ON/OPERATION and HYDRAULIC MOTOR OFF/FAULT, button MIXER/AGITATOR ON/OFF, buttons PUMP ON SUSPENSION, PUMP ON WATER and PUMP OFF, button WATER DOSAGE START/STOP, buttons EMERGENCY-STOP (2x), switch REMOTE CONTROL ON/OFF, switch MANUAL/AUTO, switch DEWATERING, switch LIGHT ON/OFF for inside rod lamp and switch LIGHT ON/OFF for outside working lamps, rotary knob for max. DELIVERY PRESSURE adjustment, potentiometer FLOW RATE, flow rate counter I/min. and I/total with zero setting (2x), auto-preset counter flow rate I/total, valve for switch-off / adjustment of mixer speed, valve for switch-off / adjustment of agitator speed, 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

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, air compressor (industrial device, fixed installed), corded LED rod lamp inside, 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, 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!

