

PERPLEX – II

The right solution for all grinding and polishing applications



Technical Details

Weight	630 g
Air inlet	R ¼"
Compound inlet	R ¼"
Mounting screw	M 10

Operating instructions for spray gun Perplex - I

Fix the gun by means of an M10 screw fitting into the corresponding hole on the gun body no. 6.

Mount the spray gun so that the distance between nozzle and wheel / workpiece is about 100 – 150 mm.

Join the connection for emulsions by means of an appropriate connecting piece (90° elbow fitting with ¼" pipe threads). The cross section of the paste supply lines and of the connection pieces should be selected as large as possible (9 mm) so as to ensure a constant supply even in the event of highly viscous emulsions and long distances from the pressure vessel.

Join the air connection with ¼" PT in the same manner. When laying the air line, make sure to fit the solenoid or manually actuated 3-way valve (currentless connection) as close as possible to the gun (distance not more than 3 m), wherever practicable. The inside diameter of the air lines between solenoid valve and gun(s) must be 9 mm.

The supply line to the solenoid valve should be at least as big as the passage of the valve.

The use of a ¼" **solenoid valve** for connecting 1 - 2 guns requires 2.5 – 4.5 atmos gauged.

Installation of a ½" **solenoid valve** for connecting 3 – 8 guns necessitates 4 atmos gauged of minimum pressure. A condition for this is, however, that manifold for the individual guns be installed directly behind the solenoid valve outlet.

To adapt the gun to the emulsion actually needed, proceed as follows:

Close the dosing screw no. 18 until no emulsion emerges any longer. Then re-open the dosing screw only so far that sufficient emulsion sprays out. The compound flow has to remain constant, i.e. the spray jet must not tear off during the spraying procedure.

Possible Causes in the event of Malfunctions

1. *The spray jet is not steady; it stops intermittently or, in technical terms, it flutters:*

The paste nozzle no. 2 is not seated firmly enough in the gun body, the compressed air penetrates through the thread into the spray agent space and so displaces the emulsion.

2. *When the plunger closes, the nozzle carries unsprayed emulsion drops on to the wheel – or, also termed, it sputters:*

The compression spring no. 14 may have weakened and is to be replaced by a new one.

3. *Emulsion escapes from the stuffing box no. 5:*

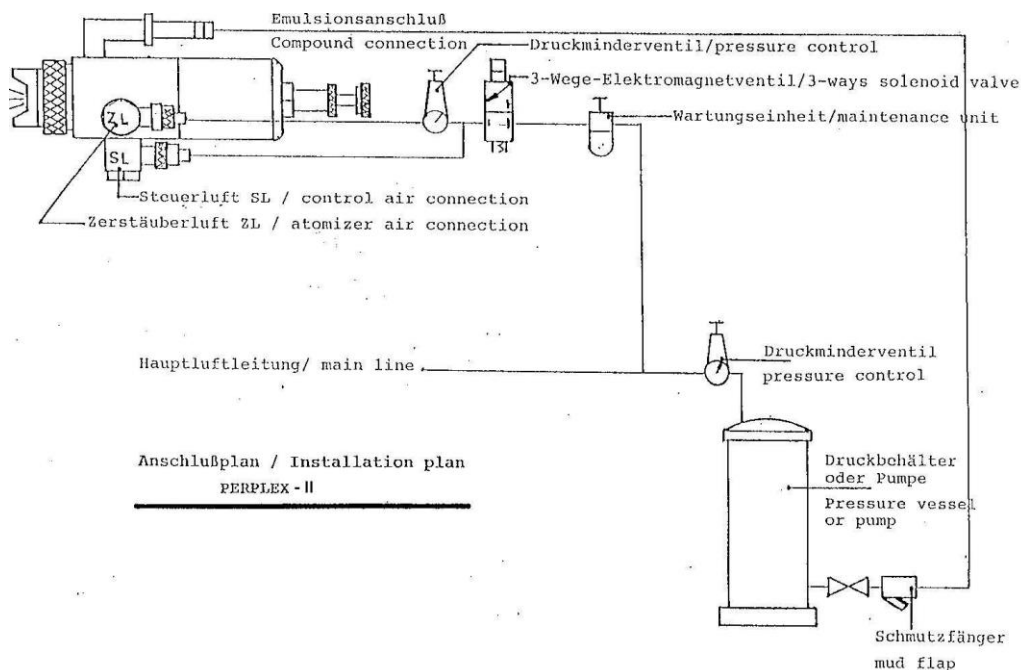
The O-ring no. 9 has to be replaced.

Approx. 8 hours after initial commissioning of the gun, the stuffing box packing is to be retightened somewhat during the spraying action, whenever practicable.

4. *The gun keeps on spraying for too long after shutdown of the air interrupting valve:*

The pipe or hose line from the valve to the spray gun is too long or its diameter is too big, causing too much air to collect in the compressed air line. It might also be possible that spraying is effected at too high a pressure also involving too high an air collection in the line. The normal spraying pressure is 2.5 – 4.5 atmos gauged.

For repairing and cleaning of the gun, absolutely use the drawing with parts list shown on page 4.



Spare parts list

No.	Designation	Order No.
1	Air nozzle	7401
2	Paste nozzle	7402
3	Ring nut	7403
4	Perforated rubber washer	7404
6	Gun body	7406
8	Plunger	7408
9	'O' ring	7409
10	Plunger guide	7410
11	Piston	7411
12	Grooved annular collar	7412
13	Nut M5	7413
14	Compression spring	7414
15	Valve body	7415
16	Valve body cover	7416
17	Lock nut	7417
18	Dosing screw	7418
19	Pull rod	7419
20	Diamond knurled nut	7420

