

# MC-I 700

## 2-component, high-pressure injection pump with separate flushing pump

### Product Properties

- High-performance, pneumatically driven high-pressure pump
- Compact construction on two-wheel chassis
- Completely supplied with high-pressure hoses and mixing head
- Efficient grid-mixer technology, optionally extensible for high-viscous materials

### Areas of Application

- Dosage, mixing and injection of reaction resins with similar viscosity of the single components
- Combined 1-component pre-injection of water-stopping elastomer foam and 2-component main injection

### Application

#### Proper Use

The MC-I 700 is used for injection of 2-component injection resins in the standard mixing ratio of 1 : 1 (parts by volume). For 1-component products the flushing pump can be used optionally. The modular construction provides separate usage.

Through high-pressure hoses the single components of an injection resin are delivered separately to the mixing head and mixed homogeneously. Depending on viscosity of the injection material the mixing tube must be chosen (see table "Technical Data"). Therefore an optionally available mixing pipe is required. Please consult the technical data sheets of the injection products for mixing ratio, application conditions, pot life and protective measures.

The delivery plungers of the 2-component unit are driven synchronously by a central air motor. The discharge flow depends on hose length, hose diameter, delivery height, length and equipment of the mixing pipe as well as the properties of the injection material.

The air inlet pressure of the air motor must not exceed 8 bar. The pump can be driven with dry, oil-free or oily compressed air. Important: After once oily compressed air was used, the pump cannot be driven dry or oil-free anymore.

Before each operation the 2-component pump must be calibrated. Mixing ratio must be checked regularly. Functionality of valves and seals must be checked. Addition of antifreeze agents to compressed air is generally required in case of high humidity (> 70 %). The antifreeze agent (e.g. Glycoshell by Shell) is to be set to 8 double strokes per drop. Functionality of antifreeze-unit and water separator must be checked daily.

The MC-I 700 is equipped with a self-working flushing pump. Due to performance characteristics of a 1-component high-pressure pump an ideal flushing performance is achieved. The 1-component pump can be used separately to inject suitable products. Therefore multi-component products must be mixed and repotted into a separate container which is connected to the intake hose.

In case of longer interruption of work and after finishing injection the MC-I 700 must be maintained and cleaned thoroughly. Cleaning agents must be chosen generally in accordance with the injection material's product specifications. After cleaning preserving oil must be delivered through the pump until all delivery components of the pump are wetted. Same is valid for the flushing pump.

## Technical Data for MC-I 700

Characteristic	Unit	Value	Comments
Weight	kg	approx. 50	
Dimensions (height, width, length)	cm	55/50/100	
<b>Details on 2-component pump unit</b>			
Output pressure (max.)	bar	200	
Flowrate (max. free discharge at the pump)	l/min	approx. 14	
Transmission ratio		1 : 25	
Mixing ratio	p.b.v.	1 : 1	
Air input pressure (max.)	bar	8	
Air requirement (min.)	l/min l/Hub	500 18.5	
Number of inline static mixers per mixing tube	units	10	
Required number of mixing tubes:			
for MC-Injekt GL-95 etc.	units	1	
for MC-Injekt 2700 etc.	units	2	
for MC-Injekt 2300 top	units	2	
<b>Details on flushing pump</b>			
Output pressure (max.)	bar	264	
Flowrate (max. free discharge at the pump)	l/min	approx. 3	
Transmission ratio		1 : 33	
Material hoses	units	3	7.5 m high-pressure hose pairs ø 4 mm for 2-component pump 7.5 m high-pressure hose ø 4 mm for 1-component pump
Intake hoses	units	3	
Sliding coupling	units	2	for 2-component pump MC-Stahlpacker 18/300
Cone-head coupling	units	2	for 1-component pump MC-Injektionpacker / MC-Klebepacker

### Safety Advice:

The MC-I 700 is a high-pressure pump with injection pressures of up to 200 bar at the 2-component pump unit and up to 264 bar at the flushing pump. Before initial operation of the pump please read the instruction manual carefully. The instruction manual is to be kept within reach on site. Especially the injection jet must never be pointed against persons. Protective clothing, goggles and gloves must be worn by each person involved.

**Note:** The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are only binding if given in written form. The accepted engineering rules must be observed at all times.

Edition 08/14. Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.