

MC-I 700

2-component high-pressure injection pump with separate purging pump



PRODUCT PROPERTIES

- Powerful, pneumatically driven high-pressure pump
- Compact construction on a frame
- Complete with high pressure hoses and mixing head
- Efficient grid-mixing technology, optionally expandable for higher-viscosity pumping media

AREAS OF APPLICATION

- Dosage, mixing and injection of reactive resins with approximately the same viscosity of the single components
- Combined pre-injection of water-stopping elastomer foam using a 1K pump and main injection using a 2K pump without complex material changes

APPLICATION ADVICE

Proper use: The MC-I 700 is used to inject 2-component injection products in a standard mixing ratio of 1:1 by volume. Alternatively, the flushing pump can be used for one-component injection. The modular construction of the injection device allows both pumps to be used independently.

The individual components of an injection material are delivered separately via high-pressure hoses to the mixing head, where they are homogeneously mixed. The mixing section must be selected depending on the viscosity of the injection product (see table "Technical data"). Information on mixing ratios, processing conditions, processing times and protective measures can be found in the data sheet of the respective product and must be observed.

The delivery pistons of the 2-component unit are driven synchronously by a central air motor. The delivery rate is influenced by the hose length, hose diameter, delivery height, length and equipment of the mixing tube and the properties of the injection material.

The ingoing air pressure of the air motor must not exceed 8 bar! The pump can be operated with dry, oil-free or oil-containing compressed air. Important: After using compressed air containing oil, compressed air containing oil must always be used!

The 2-component delivery unit must be calibrated before each start-up. The mixing ratio must be checked regularly. The function of the valves and sealing packages must be checked. The addition of anti-freeze to the compressed air is only necessary in case of high humidity (> 70%). Set antifreeze (e.g. Glycoshell, Shell) to add 1 drop to 8 double strokes. The function of the frost protection unit and the water separator on the air motor must be checked daily.

The MC-I 700 is equipped with an independently working flushing pump. It has the performance characteristics of a 1-component high-pressure pump and thus always achieves optimal flushing performance. The 1K pump can be used separately to inject suitable products. Multi-component resins have to be mixed beforehand and stored in a separate container from which they can be sucked.

The MC-I 700 must be cleaned and serviced thoroughly before long breaks in work or after the injection work has been completed. As a rule, a cleaning agent matched to the injection material should be used for this. After thorough cleaning, a preservative oil must be pumped through the pump so that all parts of the pump are wetted with it. This also applies to the flushing pump.

Test cycles and maintenance plan: Information on testing, maintenance and replacement of wearing parts can be found in the user manual.

TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Weight	kg	approx. 50	
Dimensions (L:W:H)	cm	55 / 50 / 100	
Air inlet pressure (maximum)	bar	8	
Air requirement	l/min	500	minimum
	l/stroke	18.5	minimum
Material hoses	piece	3	pair of 7.5 m high-pressure hoses Ø 4 mm for 2c pump / 7.5 m high-pressure hose Ø 4 mm for 1c pump
Suction tubes	piece	3	
Sliding couplings	piece	2	for 2c pump and MC-Bore Packers LS 18
Cone head coupling	piece	2	1c pump MC-Bore Packer DS 14 / MC-Adhesive Packer HP
Number of mixing tubes	piece	1	MC-Injekt GL-95 (and the like)
		2	MC-Injekt 2700 (and the like)
		2	MC-Injekt 2300 top (and the like)
Number of inline static mixers	piece	10	
Operating pressure (maximum)	bar		
2c pump		200	
purging pump		264	
Discharge rate (maximum)	l/min		free-flowing discharge from the pump
2c pump		approx. 14	
purging pump		approx. 3	
Transmission ratio			
2c pump		1:25	
purging pump		1:33	
Mixing ratio	parts by volume	1 : 1	

Storage

Safety instructions

Note: The information contained in this data sheet is based on our experience and is correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual structure, to the specific application and to non-standard local conditions. Application-specific conditions must be checked in advance by the planning engineer/specifier and, where different from the standard conditions indicated, will require individual approval. Technical advice provided by MC's specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to this prerequisite, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets are only binding for us if they are confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed. The information given in this technical data sheet is valid for the product supplied by the country company listed in the footer. It should be noted that data in other countries may differ. The product data sheets valid for the relevant foreign country must be observed. The latest technical data sheet shall apply to the exclusion of previous, duly superseded versions; the date of issue in the footer must be observed. The latest version is available from us on request or may be downloaded from our website. [2100004200]