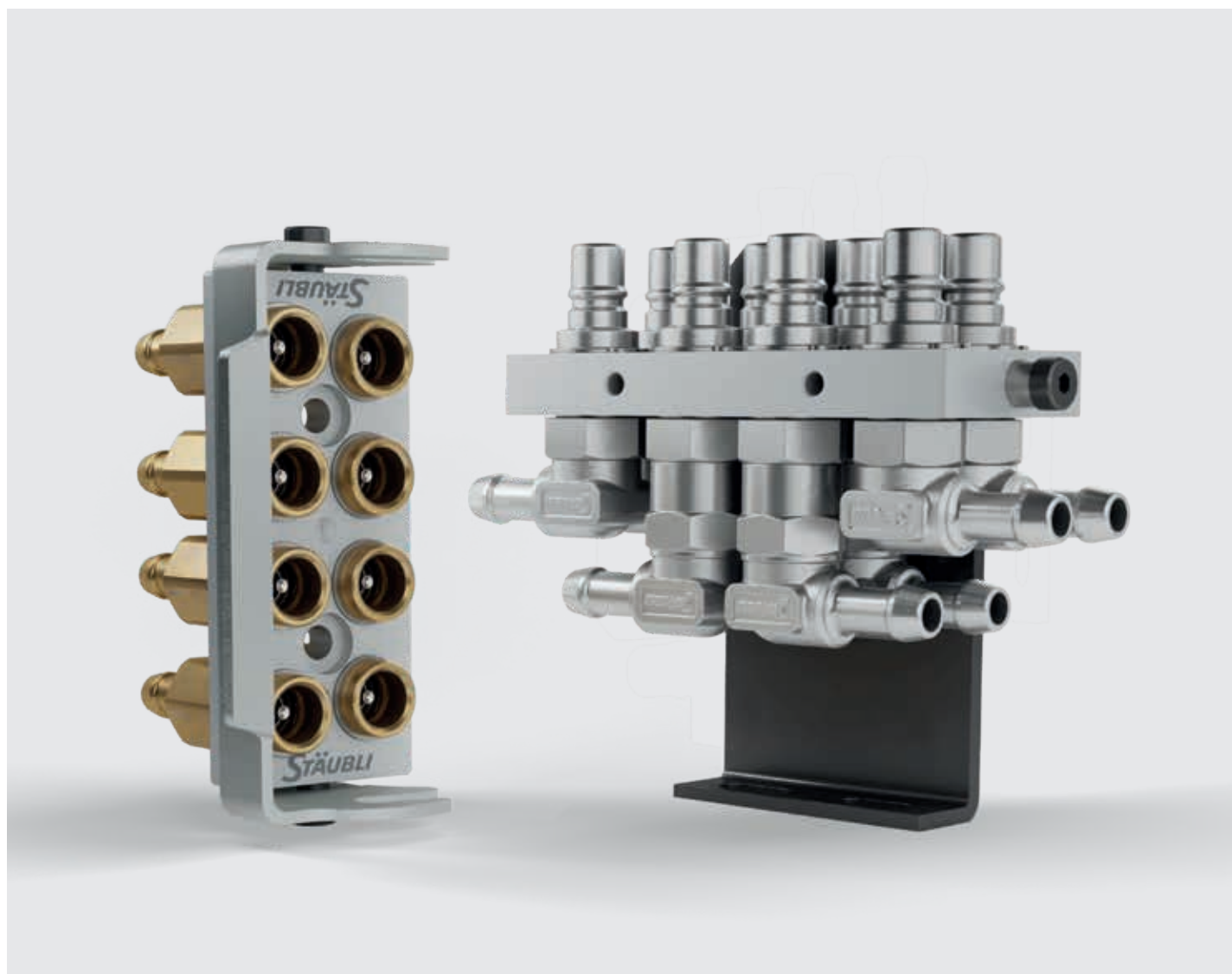


SMI multi-couplings

Temperature control



Application

- Compact solution for temperature control in plastics injection moulding

Summary

Product overview	2
Technical characteristics	3
Part-numbers	4

Compact and ergonomic centralised connections



Patent pending



The SMI multi-connection system is the perfect solution for small injection moulding machines.

This compact and ergonomic system offers outstanding flexibility, as it can be easily installed on both new and existing injection moulding machines and moulds.

Implementing the SMI multi-connection system guarantees correct mould set-ups reducing scrap, boosting production efficiency, and ensuring operator safety.

Key advantages



Fits on small machines and moulds:

The compact layout, low-profile locking mechanism, and small mounting footprint are perfect for applications where space is limited.



Easy to use:

The intuitive and ergonomic design ensures anyone can operate the system without special training, skills, or tools, making work easier, safer, and efficient for all employees.



Eliminates mould set-up mistakes:

Mechanically designed to prevent any cross-connection of water circuits, eliminating set-up scrap and machine downtime for errors.



Increases production time:

All circuits are connected and disconnected simultaneously, in a single action at a single location, significantly reducing downtime during mould changes.



Brings standardisation:

Connections and disconnections across all machines and moulds become identical, reducing variability in the mould change and moulding processes, creating a foundation for Lean Manufacturing.



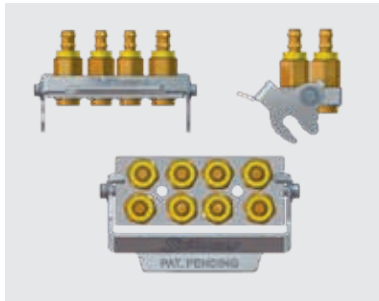
The opportunity to contribute to a sustainable development programme

With Stäubli, you can rely on:

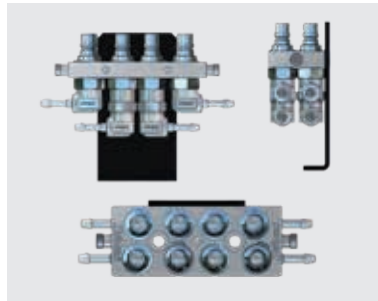
- the overall performance of your equipment (OEE) reliability of long-term investments
- no workplace pollution



Technical characteristics



Machine side



Mould side




Construction

- Couplings: brass / nickel-plated brass
- Aluminum plates

Seals

- Fluorocarbon (FPM): JV

SMI 209 features ⁽¹⁾

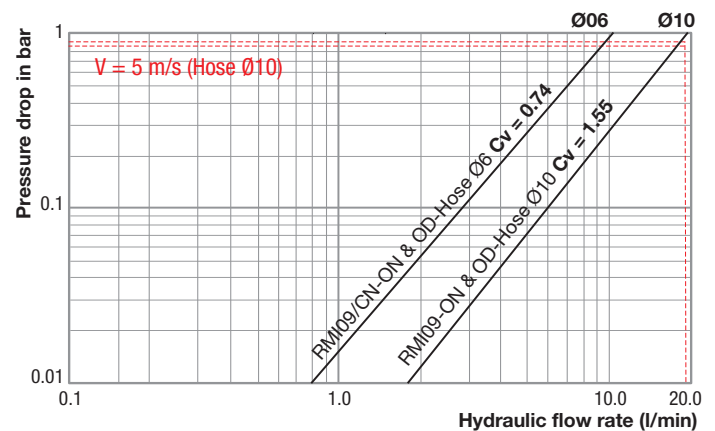
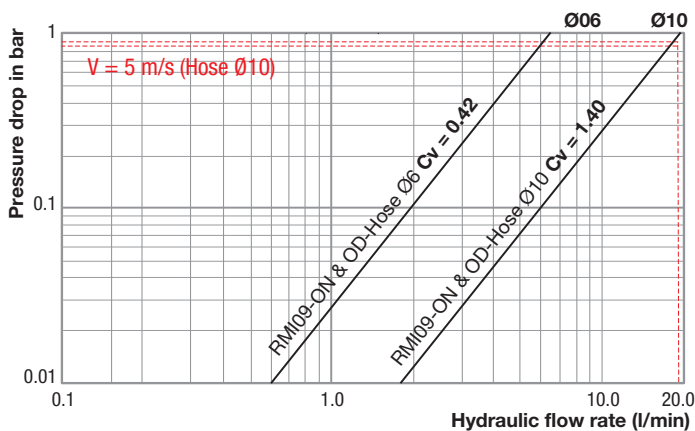
	Ø6	Ø6 CN*	Ø10	Ø10 CN*
Nominal diameter DN (mm)	6	6	9	9
Maximum allowable pressure PS (bar) ⁽¹⁾	10	10	10	10
Minimum and maximum allowable ⁽²⁾ temperatures TS (°C)	+15 to +120°C	+15 to +90°C	+15 to +120°C	+15 to +90°C
Shut-off	Machine side	shut-off sockets 		
	Mould side	full flow 		
	Mould side	auto shut-off 		

* self-locking hose

- (1) Check that max. pressure and min./max. working temperatures of hoses and of the connection are not exceeded.
- (2) Make sure to distribute the inlet/outlet circuits so as to balance the pressures on either side of the locking system.

Flow rate / pressure drop

Hydraulic charts



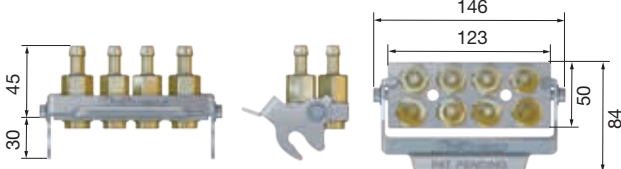
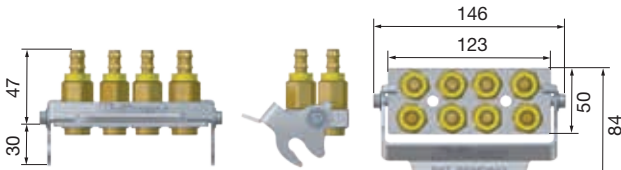
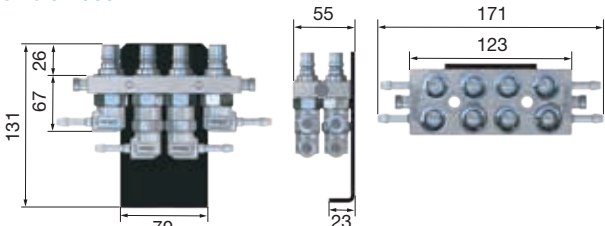
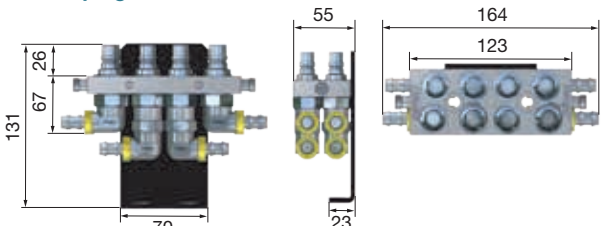
Test conditions:

- Fluid: water
- Direction of flow: socket → plug



Part-numbers

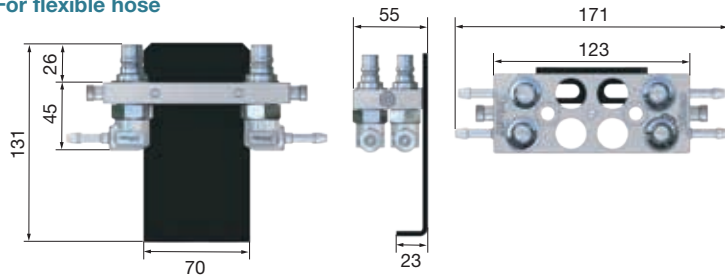
SMI 209.08

Machine-side plates with 8 sockets		End connection	Part-numbers
For flexible hose with auto shut-off socket		06 mm int. Ø	SMI209.08.1806/JV
		10 mm int. Ø	SMI209.08.1810/JV
			
For self-clamping flexible hose with auto shut-off socket		End connection	Part-numbers
For self-clamping flexible hose with auto shut-off socket		06 mm int. Ø	SMI209.08.1806/CN/JV
		10 mm int. Ø	SMI209.08.1810/CN/JV
			
Mould-side plates with 8 plugs		End connection	Part-numbers
For flexible hose		with full flow plugs	06 mm int. Ø SMI209.08.6806/RE
			10 mm int. Ø SMI209.08.6810/RE
		with auto shut-off plugs	06 mm int. Ø SMI209.08.7806/JV/RE
			10 mm int. Ø SMI209.08.7810/JV/RE
			
For self-clamping flexible hose		with full flow plugs	06 mm int. Ø SMI209.08.6806/CN/RE
			10 mm int. Ø SMI209.08.6810/CN/RE
		with auto shut-off plugs	06 mm int. Ø SMI209.08.7806/CN/JV/RE
			10 mm int. Ø SMI209.08.7810/CN/JV/RE
			

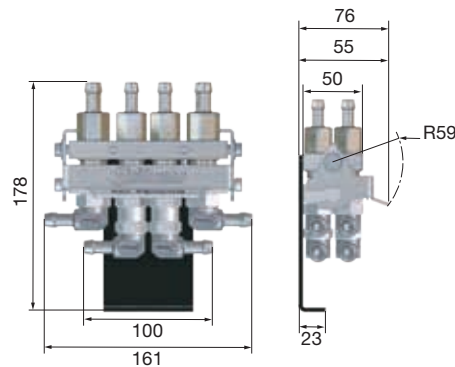
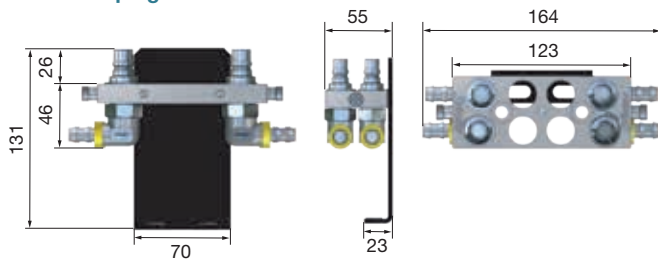
Part-numbers

SMI 209.04

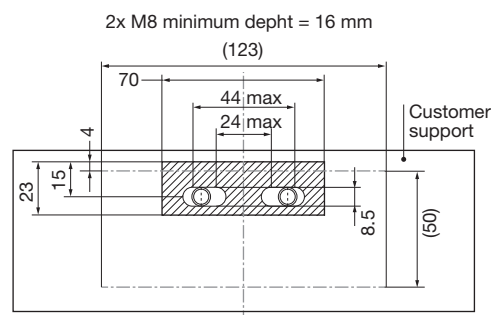
Mould-side plates with 4 plugs	End connection	Part-numbers
For flexible hose	with full flow plugs	06 mm int. Ø SMI209.04.6806/RE
	10 mm int. Ø	SMI209.04.6810/RE
	with auto shut-off plugs	06 mm int. Ø SMI209.04.7806/JV/RE
	10 mm int. Ø	SMI209.04.7810/JV/RE



For self-clamping flexible hose	with full flow plugs	06 mm int. Ø SMI209.04.6806/CN/RE
	10 mm int. Ø	SMI209.04.6810/CN/RE
	with auto shut-off plugs	06 mm int. Ø SMI209.04.7806/CN/JV/RE
	10 mm int. Ø	SMI209.04.7810/CN/JV/RE

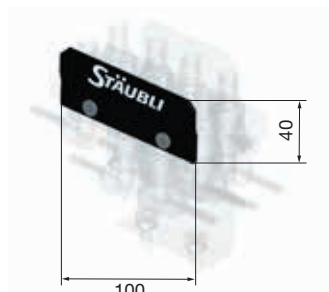


Fixed plate measurements



Additional equipment

Side shield

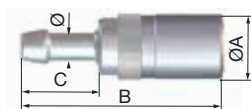


Model	Part-number
SMI 209	100091384

Protective piece for the mould-side plate to prevent impacts from damaging the plugs.

Socket for purging individual lines

Socket with shut-off valve for flexible hoses

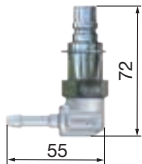


for flexible hose
for self-clamping flexible hose

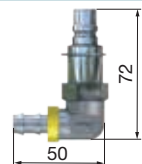
Models	Dimensions (mm)				Part-numbers
	Ø	Ø A	B	C	
RMI 09	10	25	66	23	RMI 09.1810/JV
RMI 09	10	25	66	23	RMI 09.1810/CN/JV

Spare parts

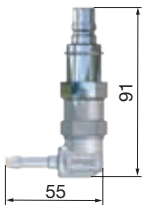
For flexible hoses

Models		End connection	Part-numbers
	Full flow	6	RMI09.4806/RE1
		10	RMI09.4810/RE1
	Auto shut off	6	RMI09.5806/JV/RE1
		10	RMI09.5810/JV/RE1

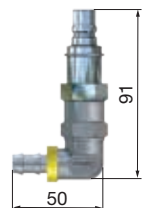
For self clamping hoses

Models		End connection	Part-numbers
	Full flow	6	RMI09.4806/CN/RE1
		10	RMI09.4810/CN/RE1
	Auto shut off	6	RMI09.5806/CN/JV/RE1
		10	RMI09.5810/CN/JV/RE1

For flexible hoses

Models		End connection	Part-numbers
	Full flow	6	RMI09.4806/RE2
		10	RMI09.4810/RE2
	Auto shut off	6	RMI09.5806/JV/RE2
		10	RMI09.5810/JV/RE2

For self clamping hoses

Models		End connection	Part-numbers
	Full flow	6	RMI09.4806/CN/RE2
		10	RMI09.4810/CN/RE2
	Auto shut off	6	RMI09.5806/CN/JV/RE2
		10	RMI09.5810/CN/JV/RE2



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