

UCP multi-couplings

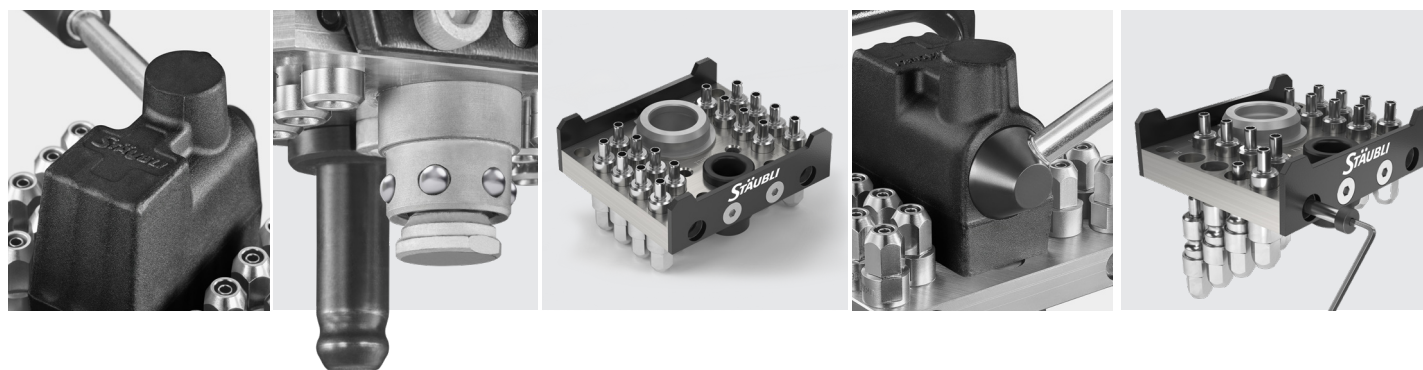
Temperature control | Die casting jet cooling



Summary

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Centralised connections for jet cooling



The UCP multi-connection system is the ideal solution for jet cooling applications, offering high-performance cooling capabilities.

This compact system is designed specifically to supply both cooling water and air to small diameter injectors.

The UCP multi-connection system will not only improve the quality of your products, but also enhance productivity levels.

Key advantages



Compact design

Its small connectors and high number of circuits, grouped together within a small area, make the UCP multi-connection system the ideal solution for applications where space is limited.



Robustness

The robustness of the system ensures its durability and reliability, even within the harsh environmental conditions associated with the die casting process.



Productivity gain

All circuits are connected in a single action and at a single location, optimising mould changeover times, and generating productivity gains by simplifying connections on both old and new machines.



Ergonomic

The ergonomic design of the connection system means that it is simple and intuitive to use.



Easy maintenance

The rapid disassembly principle of the fittings, with just a single screw, means that the connectors can be quickly and easily changed when required.



Technical characteristics



UCP 204.16
16 sockets (8 circuits)



UCP 204.32
32 sockets (16 circuits)

Tightness

- Fluorocarbon (FPM) seal: JV
- Ethylene-Propylene (EPDM): replace JV code with JE code in the part numbers pages 4 to 7

Construction

- Couplings: predominantly nickel-plated brass
- Steel plates

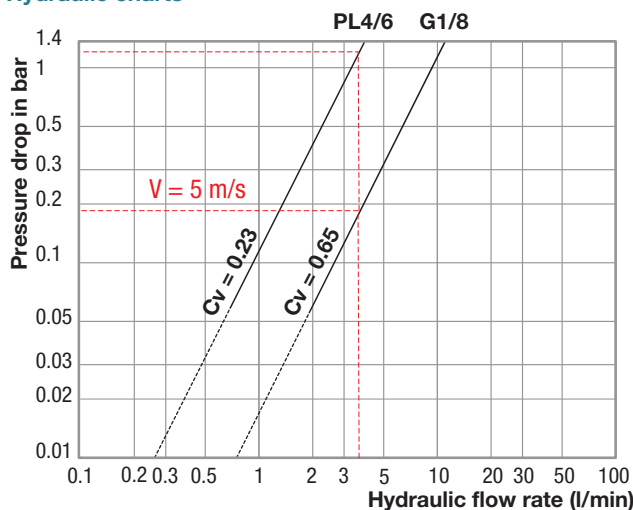
UCP 204 features ⁽¹⁾

	PL4/6	G1/8
Nominal diameter DN (mm)	4	4
Maximum allowable pressure PS (bar) ⁽²⁾	25	50
Minimum and maximum allowable temperatures TS (°C)	+15 to +80°C	-10 to +150°C
Shut-off	Full flow	

- (1) Check that maximum pressure and minimum/maximum working temperatures of both the hoses and connections are not exceeded.
 (2) Make sure to distribute the inlet/outlet circuits to balance the pressures on either side of the locking system.

Flow rate / pressure drop

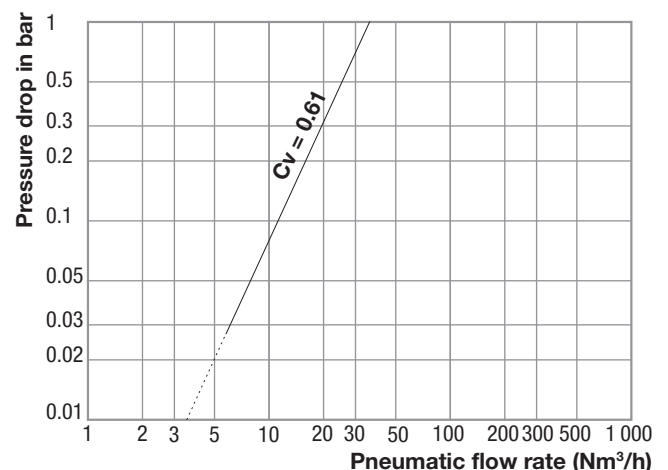
Hydraulic charts



Test conditions:

- Fluid: water
- Density: 998 kg/m³
- Viscosity: 1,08 cSt
- Direction of flow: socket → plug

Pneumatic charts



Test conditions:

- Fluid: air at 20 degrees
- Pressure relative: 6 bar
- Direction of flow: socket → plug

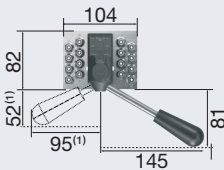


Part numbers

UCP 204.16

Machine equipment – Mobile plate

Equipped plates	
End connection	Plate with sockets

	PL4/6*	UCP204.16.1904/JV**
	G1/8F	UCP204.16.1100/JV**

Components for tailor-made configuration		
Plate without socket	End connection	Socket only

	PL4/6*	UCP04.2904/JV
	G1/8F	UCP04.2100/JV

⁽¹⁾ Short lever option

*Compression fitting for plastic tube ID=4mm, OD=6mm


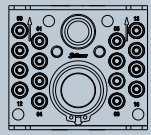
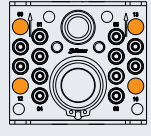
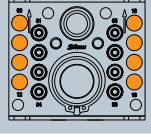
**Options: see details on page 6.

Add the corresponding option codes to the UCP 204.xx.1xxx/JV

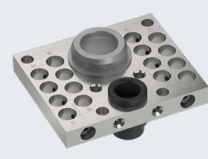
- Safety locking.....**VS code**
- Reversed control lever.....**LH code**
- Short lever.....**SL code**
- Carrying handle.....**VT code**

Tool equipment – Fixed plate

Equipped plates	
End connection	Plate with sockets

	PL4/6*	UCP204.16.6904**	
	G1/8F	UCP204.16.6100**	
Equipped with 12 plugs and 4 blind caps***	PL4/6*	UCP204.12.6904**	
	G1/8F	UCP204.12.6100**	
Equipped with 8 plugs and 8 blind caps***	PL4/6*	UCP204.08.6904**	
	G1/8F	UCP204.08.6100**	

Components for tailor-made configuration		
Plate without plug	End connection	Plug only

	PL4/6*	UCP04.4904
	G1/8F	UCP04.4100
	Blind cap	UCP04.8500

*Compression fitting for plastic tube ID=4mm, OD=6mm

**Options: see details on page 6.

Add the corresponding option code to the UCP204.xx.6xxx (tool equipment)

- Lateral protection.....**PP code**

***Installation: distribute the inlet/outlet circuits so as to balance the pressures on either side of the locking system. Stäubli provides you, on request, with installation plans for the plates, options and accessories.

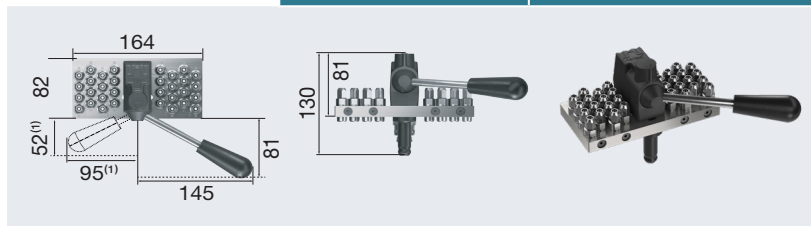


Part numbers

UCP204.32

Machine equipment – Mobile plate

Equipped plates	
End connection	Plate with sockets



Equipped with 32 sockets	PL4/6*	UCP204.32.1904/JV**
	G1/8F	UCP204.32.1100/JV**

⁽¹⁾ Short lever option

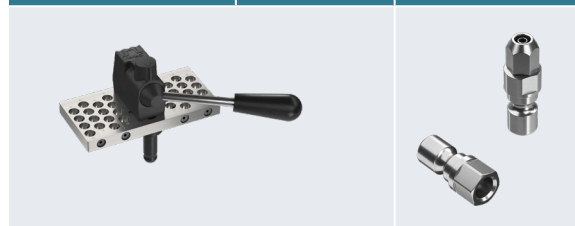
*Compression fitting for plastic tube ID=4mm, OD=6mm

**Options: see details on page 6.

Add the corresponding option codes to the UCP 204.xx.1xxx/JV

- Safety locking.....**VS code**
- Reversed control lever.....**LH code**
- Short lever.....**SL code**
- Carrying handle.....**VT code**

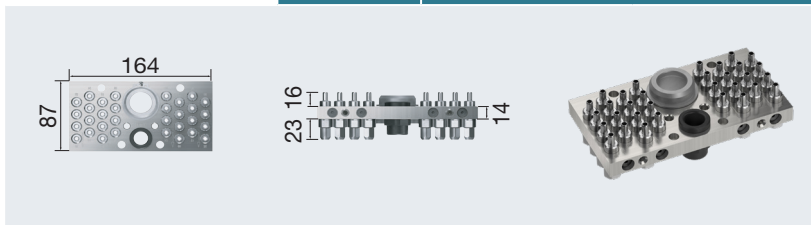
Components for tailor-made configuration		
Plate without socket	End connection	Socket only



UCP204.32.1000**	PL4/6*	UCP04.2904/JV
	G1/8F	UCP04.2100/JV

Tool equipment – Fixed plate

Equipped plates	
End connection	Plate with sockets



Equipped with 32 plugs	PL4/6*	UCP204.32.6904	
	G1/8F	UCP204.32.6100	

Equipped with 28 plugs and 4 blind caps***	PL4/6*	UCP204.28.6904	
	G1/8F	UCP204.28.6100	

Equipped with 24 plugs and 8 blind caps***	PL4/6*	UCP204.24.6904	
	G1/8F	UCP204.24.6100	

Equipped with 20 plugs and 12 blind caps***	PL4/6*	UCP204.20.6904	
	G1/8F	UCP204.20.6100	

Components for tailor-made configuration		
Plate without plug	End connection	Plug only



UCP204.16.6000**	PL4/6*	UCP04.4904
	G1/8F	UCP04.4100
	Blind cap	UCP04.8500

*Compression fitting for plastic tube ID=4mm, OD=6mm

**Options: see details on page 6.

Add the corresponding option code to the UCP204.xx.6xxx (tool equipment)

- Lateral protection.....**PP code**
- ***Installation: distribute the inlet/outlet circuits to balance the pressures on either side of the locking system. Stäubli provides you, on request, with installation plans for the plates, options and accessories.



Options

Mobile plate ⁽¹⁾



Safety locking

VS option

This safety feature automatically triggered during connection, prevents any plates from accidental disconnection, even if the control lever is knocked. To disconnect, simultaneously pull the safety system button and turn the control lever.

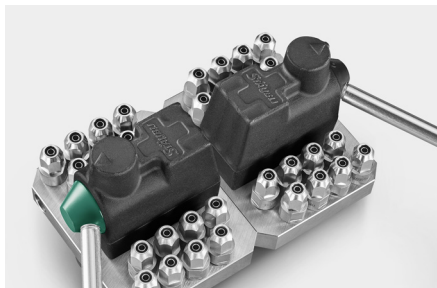
Visual check: when the safety device is triggered, the grey marker can no longer be seen.



Short lever

SL option

The short lever option allows multicouplings to be installed in a reduced space.



Reversed control lever

LH option

This option makes it possible to install 2 multicouplings side by side in a small area on molds which have multiple circuits, whilst maintaining the same direction of operation for the control lever. Immediate identification of the LH option is achieved by a green mark.

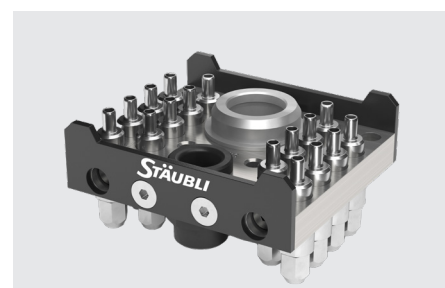


With carrying handle

VT option

For even easier handling.

Fixed plate



With lateral protection

PP option

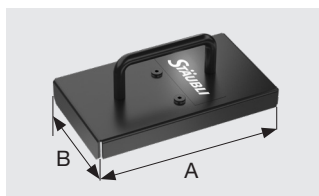
To protect the fixed plate from impact.

⁽¹⁾ All options for mobile plate can be combined.



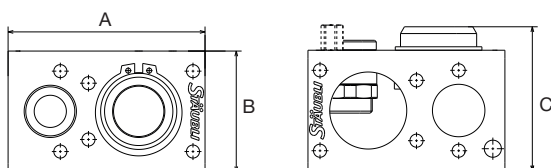
Additional equipment

Protective cover for tool equipment - Fixed plate



Model	Dimension (mm)		Part number
	A	B	
UCP 204.16	112	102	UCP 204.16.8550
UCP 204.32	172	102	UCP 204.32.8550

Parking plate



Dimension (mm)			Part number
A	B	C	Parking plate
98	60	72	MPP01.9001

Proximity sensor option:
add /DP code to the part number.

Foolproof keying kits

Part number
KCP 01.9006

To perform the coding of plates, it is necessary to use 2 keying kits: 1 kit on press side + 1 kit on mold side.



Lateral protection

Model	Part number
UCP 204.16	100074516
UCP 204.32	100074517

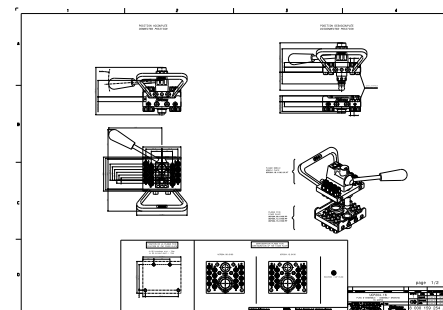
Set of lateral protections for the fixed plate to protect the plugs from impact.



Legs and screws

Model (L)	Part number
60mm	100074577
90mm	100074578

Allows the fixed plate to be fixed to the mold according to the height.



Stäubli offers, on simple request, drawings containing detailed information about plate assembly, circuit wiring, keying kit as well as all the other options and additional equipment.

Model	Part number
UCP 204.16	8000159254
UCP 204.32	8000159255



CAD files available on request from our sales network.





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