

# RMP 49 multi-couplings

**Hydraulics** 



# Centralised connections...













**Registered Community Design** 

# ... for more safety

#### High performance couplings

High flow volume and speed (up to **30 m/s**) perfectly matched to the needs of your core pull applications.

#### Safe

No connection error possible: coupling in a single position.

Foolproof keying system available to prevent any cross connection in the event of the use of several plates on the same mould.

Robust locking system.

Automatic shutoff of supply circuits upon disconnection.

#### Efficient and fast

Safe and fast connections and disconnections with simple rotation of the control lever.

### Plates fitted with clean-break design couplings

- no risk of spillage of oil into the mould at disconnection.
- no ingress of air nor pollution into the hydraulic circuits at connection.

#### **Even better performance**

Optimum mechanical strength and temperature resistance.

Reliable and robust ball locking.

#### Flexibility of use

Systems tailored to both existing and new presses and moulds.

#### **Applications**

Centralised connections of hydraulic circuits:

- Optimised time for changing moulds,
- Streamlined connections.



The opportunity to spend less and contribute to a sustainable development programme.

With Stäubli, you can rely on:

- the performance of your equipment
- reliability of long-term investments
- no workplace pollution

# 3 standard configurations

depending on the number of circuits to connect.



#### **VERY COMPREHENSIVE AND MODULAR RANGE**

# **Options**

Integrated into the product upon order: see corresponding codes on pages 6 to 8. All options can be used together.







#### 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.





#### **Reversed control lever**

LH option

This option makes it possible for moulds with many circuits, to install 2 multi-couplings side by side in a small space whilst keeping the same direction of use for the control lever.

Immediate identification of the LH option by a green mark.



### The VS and LH options can be combined in a single VS/LH version

VS/LH option

This version combines locking safety with flexible operation and equipment design.



# Options

Integrated into the product upon order: see corresponding codes on pages 6 to 8. All options can be used together.

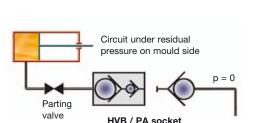
#### Connection under residual pressure

PA option

A central relief valve built into the socket or the plug valve allows for the reduction of the residual pressure in the circuit.

This option is especially recommended on mould side in case of temperature increase in the mould when storing (see drawing below).

The /PA option can also be used on the press side or on both sides.



with pressure relief



#### **Proximity sensors**

**DP** option

Controls "connected" and "disconnected" positions.

PNP sensors.

Wire connections using standard M12 electrical connectors make connection to the electrical cabinet easier, enable the quick replacement of the sensor and avoid any wiring errors.



# Additional equipment

to be ordered separately: see part-numbers on page 9.

#### Parking plate

equipped with a locking system for storage of the plate when not in use.

Parking plate can be fitted with a proximity sensor (optional).



#### **Quick resting plate**

for temporary resting of the plate during quick mould change operations.



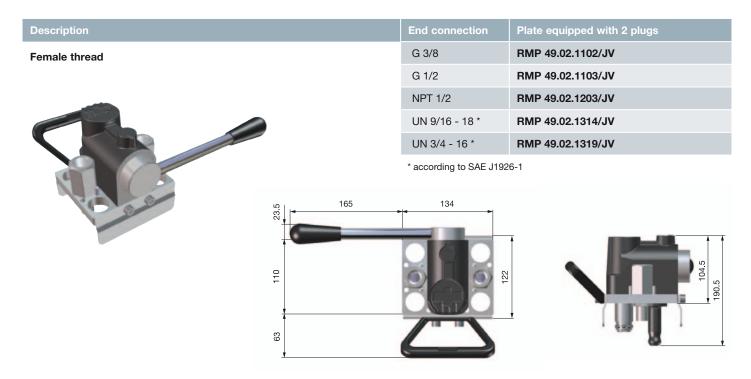
#### Foolproof keying system

Enables all connection errors to be avoided when using several plates on the same mould.



# Part-numbers

RMP 49.02 - 2 sockets / 1 circuit version - Press equipment



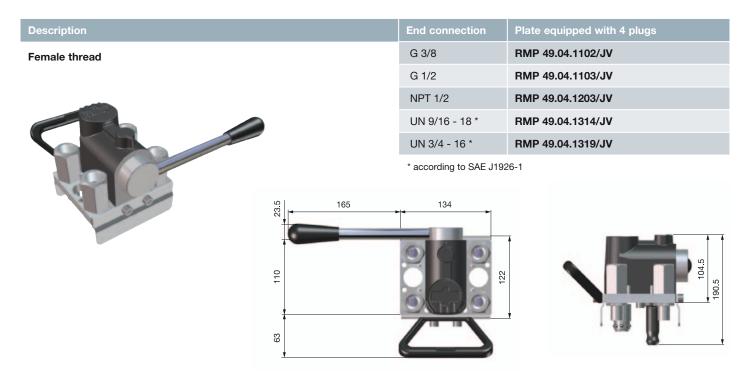
RMP 49.02 - 2 sockets / 1 circuit version - Mould equipment

Description	End connection	Plate equipped with 2 sockets
Female thread	G 3/8	RMP 49.02.7102/JV
Tentale tiread	G 1/2	RMP 49.02.7103/JV
	NPT 1/2	RMP 49.02.7203/JV
060	UN 9/16 - 18 *	RMP 49.02.7314/JV
	UN 3/4 - 16 *	RMP 49.02.7319/JV
C.	* according to SAE J192	26-1
	134	
010		2 x outputs

#### **Options**

Add the corresponding option codes to the RMP 49.xx.1xxx/JV (press equipment) p. 6 and 7:

RMP 49.04 - 4 sockets / 2 circuits version - Press equipment



RMP 49.04 - 4 sockets / 2 circuits version - Mould equipment

Description	End connection	Plate equipped with 4 sockets
Female thread	G 3/8	RMP 49.04.7102/JV
	G 1/2	RMP 49.04.7103/JV
	NPT 1/2	RMP 49.04.7203/JV
Deir	UN 9/16 - 18 *	RMP 49.04.7314/JV
	UN 3/4 - 16 *	RMP 49.04.7319/JV
0.	* according to SAE J19	926-1
	134	2 x outputs

#### **Options**

Add the following code to the plates p. 6 and 7 (for press plates or/and mould plates equipment).

Connection under residual pressure...... PA code

#### **Additional equipment**

Parking plate, quick resting plate and foolproof keying system: see part-numbers page 9.

Options and additional equipment shown on pages 4 and 5.

### Part-numbers

#### RMP 49.06 - 6 sockets / 3 circuits version - Press equipment



#### RMP 49.06 - 6 raccords / 3 circuits version - Mould equipment

escription	End connection	Plate equipped with 6 sockets
emale thread	G 3/8	RMP 49.06.7102/JV
	G 1/2	RMP 49.06.7103/JV
	NPT 1/2	RMP 49.06.7203/JV
000	UN 9/16 - 18 *	RMP 49.06.7314/JV
	UN 3/4 - 16 *	RMP 49.06.7319/JV
	* according to SAE J	1926-1
	21 134	21 × 2 x outputs 2 x outputs

#### **Options**

Add the corresponding option codes to the RMP 49.06.1xxx/JV (press equipment) above:

Options and additional equipment shown on pages 4 and 5.

Add the following code to the plates p. 8 (for press plates or/and mould plates equipment).

■ Connection under residual pressure ......PA code

#### **Additional equipment**

Parking plate, quick resting plate and foolproof keying system: see part-numbers page 9.



# Part-numbers

### Plate component



#### **Press equipment**

Plug	End connection	Part-numbers
	G 3/8	HVB 09.5102/IA/JV
	G 1/2	HVB 09.5103/IA/JV
	NPT 1/2	HVB 09.5203/IA/JV
	UN 9/16 - 18 *	HVB 09.5314/IA/JV
	UN 3/4 - 16 *	HVB 09.5319/IA/JV

#### Mould equipment

Socket	Part-number
	HVB 09.2000/IA/JV



\* according to SAE J1926-1

Connection under residual pressure: add /PA code to the plug and socket part-numbers above.

### Additional equipment

#### **Parking plate**

	Part-number
8	MPP 01.9003
8	Proximity sensor option: add /DP code to the above part-number.

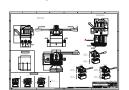
#### **Quick resting plate**



#### Foolproof keying kits

Equipment	Kit part-numbers
Press equipment	KCP 01.9005
Mould equipment	KCP 01.9006/Q3

#### For optimal use of your multi-connection plates



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

Plate model	Plate part-numbers	Drawing part-number
RMP 49	RMP 49.0x.110x/JV + RMP 49.0x.710x/JV	R 359 049 00

# Technical characteristics

		RMP 49
Nominal diameter	er DN (mm)	9
Shut-off	double	<del>-</del> >+<-

Non-spill, flat face socket and plug.

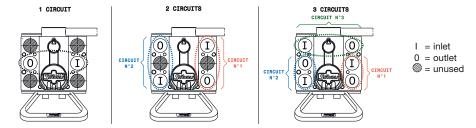
#### **Tightness**

Fluorocarbon (FPM) seals as standard.

#### Conditions of use of the RMP 49 (1) plates

- Maximum allowable pressure PS (bar) (2):
   180 bar, with the following configuration: 3 sockets at 180 bar (inlet circuit) and 3 sockets at 10 bar (outlet circuit)
- Minimum and maximum allowable temperatures TS (°C): -10 and +120 (3)
- (1) Check that max. pressure and min./max. working temperatures of hoses, fitting pipes to the mould and of the connection are not exceeded.
- <sup>(2)</sup> Make sure to distribute the inlet/outlet circuits so as to balance the pressures on either side of the locking system as indicated on the drawing below.

  For more information, consult us.

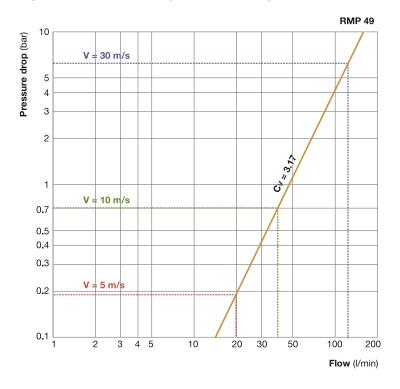


<sup>(3)</sup> Higher temperatures: please consult us.

#### **Proximity sensor**

- PNP M8 x 1
- M 12 connector + 5 m of 3 wire cable

#### Hydraulic flow rate/pressure drop chart for a circuit



Speed (m/s)	Flow (I/min)
5	19
10	38
30	114

#### Test conditions:

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

# The complete Stäubli offer for the centralised connection of energies...

#### **Temperature control circuits**



RMI multi 4 passage diameters. Completely modular range.



Antipollution flat faces.



High temperature circuits.

#### High pressure hydraulic circuits



**RMP 49** For high flow volume and speed (up to 30 m/s). Antipollution flat faces.



**RMP 79** For high flow volume and speed (up to 30 m/s). Screw locking system. Antipollution flat faces.



**RMP 48** Antipollution flat faces.



**RMP 78** Antipollution flat faces. Screw locking system.



SPC multi For sequential injection.

#### **Electrical circuits**



For power and signal electrical circuits, optical fiber, data transfer...



### Global presence of the Stäubli Group

www.staubli.com

