

**Pneumatic pressure and electric signal coupling**

**CJ2**

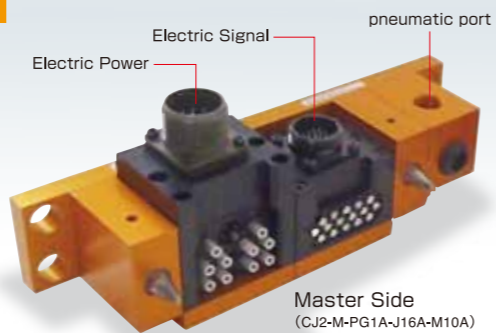
Couple Joint is a device used to easily and simultaneously connect and disconnect pneumatics and electric signals. Now electric signal lines and pneumatic fittings can be changed with the touch of the hand, shortening the traditional manual set-up times. The modules incorporate the same designs as the BL Quick-Change, with proven reliability and durability.

**Abundant utilities**

Up to three modules can be selected for various applications to exchange dies or jigs in stamping and welding processes. Self-sealing pneumatic ports are also available.

**Floating function ±1mm**

Couple Joint has a floating function for position compliance and gap adjustment between the master side and tool side.



3Modules Type



Tool Side (CJ2-T-PG1A-J16A-M10A)

**Specifications**

Outer dimension and weight	3 modules (with pneumatic port)	244x91x109 mm ,	2.9kg CJ2 In case of- PS1A-J16A-M10A
	(without pneumatic port)	269x91x109 mm ,	3.3kg In case of CJ2-J16A-M10A-M10A
	2 modules (with pneumatic port)	183x91x109 mm ,	2.2kg In case of CJ2-PS1A-M10A
	(without pneumatic port)	208x91x109 mm ,	2.4kg In case of CJ2-J16A-M10A
Connection utilities	1 module (with pneumatic port)	122x91x109 mm ,	1.3kg In case of CJ2-PS1A
	(without pneumatic port)	147x91x109 mm ,	1.6kg In case of CJ2-J16A
Allowable temperature and humidity ranges	Electric signals MAX.5A DC/AC 200V with contact probes	5A×16 ※1 ※2	Master side JMR 2116M-D Tool side JMR 2116F-D
	Electric signals MAX.13A DC250V/AC 200V with plug-in contacts	13A×10 ※1 ※3	Master side D/MS3102A18-1P Tool side D/MS3102A18-1S
	Pneumatic ports (with or without self sealing valve)	Rc3/8	
		0 ~ 55°C, 0 ~ 95% (non-condensing)	

※1 The plugs must be provided by user  
 ※2 Max.30.4A per connector  
 ※3 Max57.2A per connector

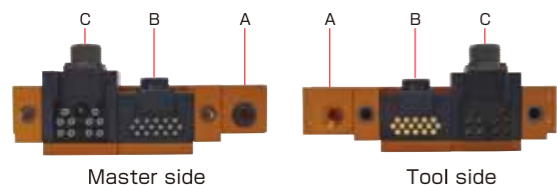
**Model Selection**

<b>Master side</b>	<b>CJ2 -M-</b>	Module 1 (A)	Module 2 (B)	Module 3 (C)
<b>Tool side</b>	<b>CJ2 -T-</b>	Module 1 (A)	Module 2 (B)	Module 3 (C)

<b>J16A</b>	Electric signals 5A×16	No options	No options
<b>M10A</b>	Electric signals 13A×10	<b>J16A *1</b> Electric signals 5A×16	<b>J16A *1</b> Electric signals 5A×16
<b>PG1A *2</b>	Pneumatic port Rubber bushing Rc3/8	<b>M10A *2</b> Electric signals 13A×10	<b>M10A *2</b> Electric signals 13A×10
<b>PS1A *2</b>	Pneumatic port, self-sealing valve (both master and tool sides) Rc3/8		
<b>PF1A *2</b>	Pneumatic port, self-sealing valve (master side only) Rc3/8		

\*1 Max.30.4A per connector  
 \*2 Max.57.2A per connector  
 \*3 Only one pneumatic port can be installed, regardless of the number of modules  
 Please select the same part number for both the Master side and the Tool side.

**Example of position of 3modules**

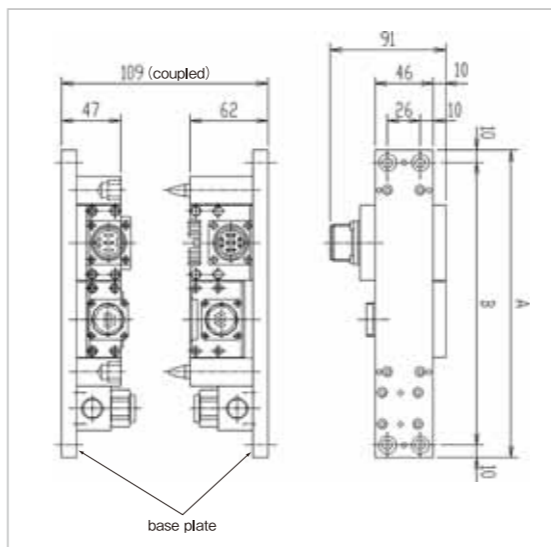


※ Select the modules order from A→B→C  
 ※ Combination of master modules and tool modules must be the same.  
 ※ Above combinations are considered standard. If you want 2 or more pneumatic ports or want to fit a single module onto 2 or 3 module base plates, please contact us.

**⚠ [Caution for connecting electric signals]**

Electric signal modules, like a 16A, D15, D37 use a contact-probe method, the connecting surface is the touch point. Do not use a real-time connection like a wire-saving, servo-encoder. When using a real-time connection type, please use a plug-in method like M10A. Please contact us for further information.

**Dimensions**



Number of modules		3	2	1
With pneumatic port	A type	244	183	122
	B type	224	163	102
Without pneumatic port	A type	269	208	147
	B type	249	188	127

**⚠ [Notes on use]**

- Please attach the equipment to the base plate when the master and tool side coupling surfaces are aligned.
- Make sure that force when coupled is within the following range for uniform base plate operation:  
 Pneumatic port w/ self-sealing valve: 500N~2000N Pneumatic port w/o self-sealing valve: 250N~2000N
- Please keep lock/unlock speed at 30mm/s or less.
- Use a protective cover and/or compressed air to keep coupling surfaces clean if used in a dusty environment.

**Option Examples**

**2-Module specification**



**CJ2-M-PS1A-J16A**  
**CJ2-T-PS1A-J16A**

**1-Module specification**



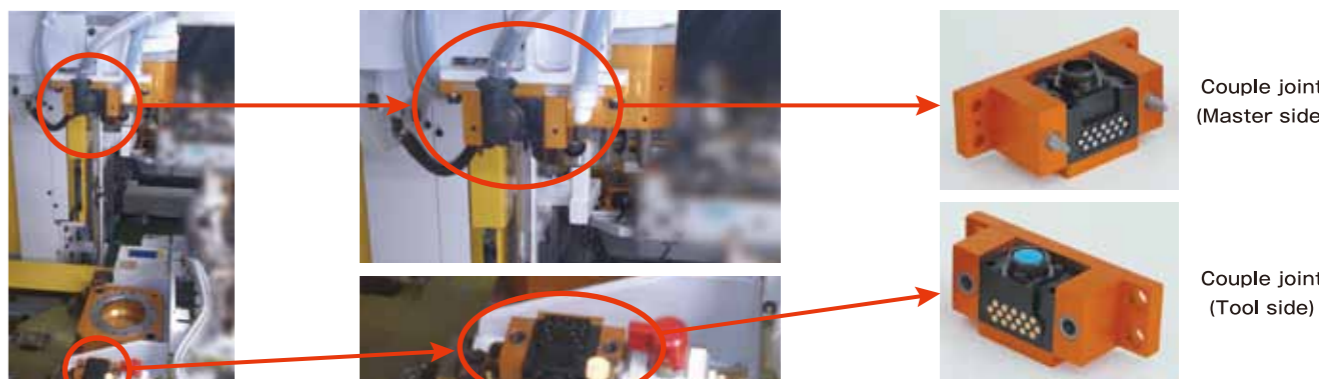
**CJ2-M-J16A**  
**CJ2-T-J16A**

**Pneumatic port**

	<b>Master side PS1A</b> Self-sealing type		<b>Tool side PF1A</b> Self-sealing type
	<b>Master side PG1A</b> Rubber bushing		<b>Tool side PG1A</b> Rubber bushing

※ Please refer "model selection" on the first page.

**Examples of Use**



Example of exchanging jigs(Combination use of Quick Change and Couple Joint)

Next-Generation Robots

ZEUS

GIGA

Automatic Tool Changer

1kg

5kg

10kg

20kg

40kg

60kg

70kg

100kg

150kg

220kg

300kg

Press Handling Specification

100kg

Spot-Welding Gun-Changer

300kg

Options

Wire-Saving module / Contact Block

Non-contact electric signal block

A mechanical safety valve prevents Tool plate drops

List

Product Overview

Rotary Joint

PN-ZERO Series

Wrist Complainer

ROC DEVICE LOCK-PROTECTIVE

Couple Joint

CJ2