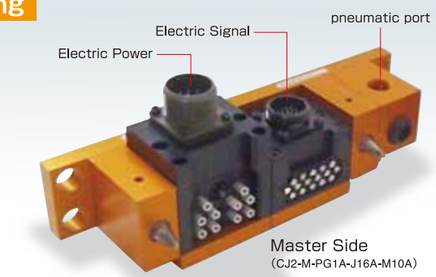
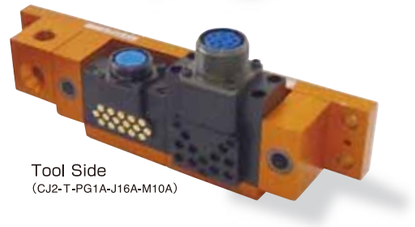
Pneumatic pressure and electric signal coupling

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.



3Modules Type



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

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 ±1㎜

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

Specifications

Outer dimension and weight	3 modules (with pneumatic port)	244×91×109㎜, 2.9kg CJ2 In case of- PS1A-J16A-M10A
	(without pneumatic port)	269×91×109㎜, 3.3kg In case of CJ2-J16A-M10A-M10A
	2 modules (with pneumatic port)	183×91×109㎜, 2.2kg In case of CJ2-PS1A-M10A
	(without pneumatic port)	208×91×109㎜, 2.4kg In case of CJ2-J16A-M10A
	1 module (with pneumatic port)	122×91×109㎜, 1.3kg In case of CJ2-PSIA
	(without pneumatic port)	147×91×109㎜, 1.6kg In case of CJ2-J16A
Connection utilities	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
Allowable temperature and humidity ranges		0～55℃, 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

		Module 1(A)		Module 2(B)		Module 3(C)
Master side	CJ2 -M-	□□□□	–	□□□□	–	□□□□
Tool side	CJ2 -T-	□□□□	–	□□□□	–	□□□□

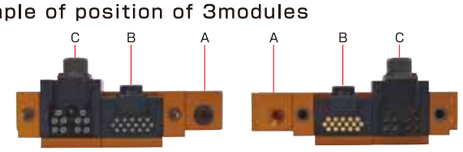
Module 1(A)	
J16A	Electric signals 5A×16
M10A	Electric signals 13A×10
PG1A ※2	Pneumatic port Rubber bushing Rc3/8
PS1A ※2	Pneumatic port, self-sealing valve (both master and tool sides) Rc3/8
PF1A ※2	Pneumatic port, self-sealing valve (master side only) Rc3/8

Module 2(B)	
	No options
J16A ※1	Electric signals 5A×16
M10A ※2	Electric signals 13A×10

Module 3(C)	
	No options
J16A ※1	Electric signals 5A×16
M10A ※2	Electric signals 13A×10

※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



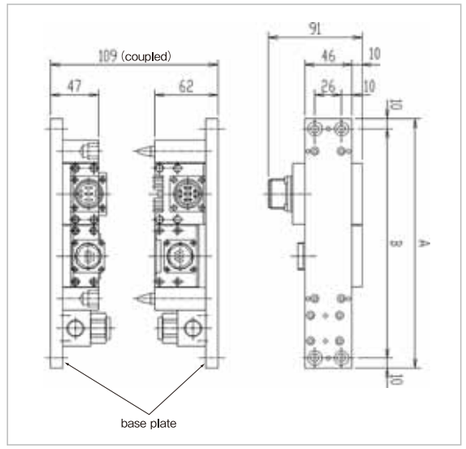
Master side Tool side

※ 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】

1.Please attach the equipment to the base plate when the master and tool side coupling surfaces are aligned.
2.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
3.Please keep lock/unlock speed at 30mm/s or less.
4.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

Please refer to the photo on the left page for an example of 3-module.

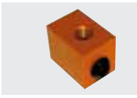
■1-Module specification

CJ2-M-J16A
CJ2-T-J16A

■Pneumatic port

Master side **PS1A** Self-sealing type

Tool side **PF1A** Self-sealing type

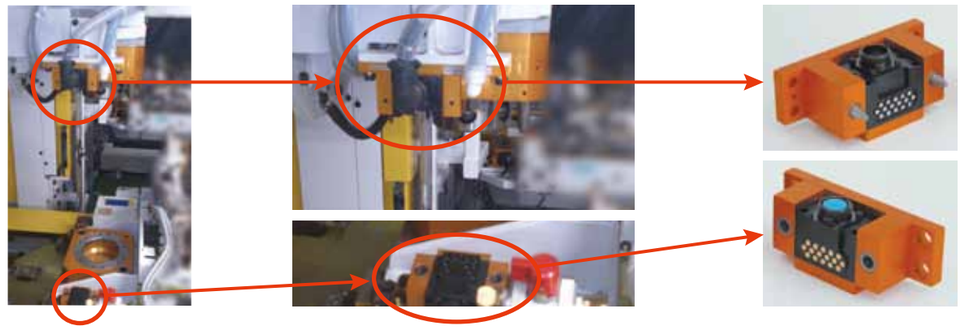


Master side **PG1A** Rubber bushing

Tool side **PG1A** Rubber bushing

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

Examples of Use



Couple joint (Master side)

Couple joint (Tool side)

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