

QUICK-CHANGE ZEUS™ for Next-Generation Robots

QUICK-CHANGE ZEUS™

QUICK-CHANGE ZEUS™ is available such as spot-welding gun exchange, material handling and tool changing. It can use for robot payloads of 150-230kg. ZEUS incorporates the proven locking mechanism of the BL Quick-Change. It is a new, advanced Quick-Change, and ZEUS is light weight and thinness when coupled.

Compact, Light, Thin!

The weight has been reduced by 50% and the outer dimension is 70% compared with our Servo Gun Changer for 220kg payloads. It is only 110mm thick when coupled, which minimizes stress on the robot. The round shape reduces interference by the wiring and hose on the robot arm.

Enhanced mechanical fail-safe function!

Our proven mechanical fail-safe mechanism has been further enhanced with the addition of a spring back-up for greater reliability, so the Master and Tool Plates will not separate, even if pneumatic pressure fails.

Conforms to ISO standards for robot flanges!

The bolt patterns on ZEUS match the ISO 9409 "mechanical interface" for pitches of ϕ125mm and ϕ160mm. It can be installed on almost all industrial robots with 150-230 kg capacity. We can custom-manufacture to suit other robot flanges.

Standard equipped lock/unlock sensor & LED indication!

A lock/unlock sensor and LED indications for "lock" or "unlock" are standard equipped on ZEUS, and an approach sensor (with LED indication) useful for teaching is available as an option.

Resolves communication errors!

Resolves servo signal communication errors with a plug-in module.

Various options available!

Options, such as fool-proof valves for drop prevention in predefined positions, solenoid valves and field bus systems are available. Please contact us for details.



Master plate
(ZEUS-M1N-SEAM-FL6BM-WPCM-IS-AS-XN)



Tool plate
(ZEUS-T-SEAT-FL6BT-WPCT-X)

Specifications

Main body			
Weight capacity(Rated load)		1,470~2,254N(150~230kg)	
Positioning repeatability		±0.025mm	
Allowable dynamic moment	Bending direction(Tx,Ty)	3,332N・m(340kgf・m)	
	Torsional direction(Tz)	3,332N・m(340kgf・m)	
Coupling force(at 0.49MPa air pressure) ※1		27,444N(2,800kgf)	
Material	Frame	Aluminum alloy	
	Lock/unlock mechanism	stainless steel	
Outer dimension (When coupled)		φ226×H110 mm	
Product weight (Main body)	Master Plate	5.4kg	
	Tool Plate	2.3kg	
Electric signal connection(Built-in)	Connector(Master side)	5A×20	D/MS3102A24-28P
	Connector(Tool side)	※2	D/MS3102A24-28S
Lock/unlock mechanism		Ball-locking mechanism	
Lock/unlock operation required air pressure		0.39 ~ 0.68MPa(4 ~ 7kgf/cm ²)	
Allowable temperature and humidity range		0 ~ 50°C, 35 ~ 90%(Non-condensing)	
Lock/unlock sensor	Lock status	1 built-in proximity switch	
	Unlock status	1 built-in proximity switch	
Insulation plate set	Model	With/without insulation plate	
	IS	Insulation plate (Fiber-reinforced Bakelite)	
	IN	Without insulation plate	

Accessories for master plate (in case of Master plate is IN02) ※Select necessaryplates and options based on an application or a robot flange.

In case of type of Master plate is M1 (PCD125) (M1)...Stepped Parallel Pin(ϕ10×25)×2pcs, Hexagon socket bolt(custom) (M10×65)×6pcsWasher(ϕ14)×6pcs
In case of type of Master plate is M2(PCD160) (M2)...Stepped Parallel Pin(ϕ10×25)×2pcs, Hexagon socket bolt(custom) (M10×50)×6pcsHexagon socket bolt(custom) (M10×20)×6pcs, Washer(ϕ14)×12pcs,
(M3)...Stepped Parallel Pin(ϕ10×25)×2pcs, Hexagon socket bolt(custom) (M10×50)×6pcsHexagon socket bolt(custom) (M10×20)×6pcs, Washer(ϕ14)×6pcs,
Washer(for M12)×6pcs

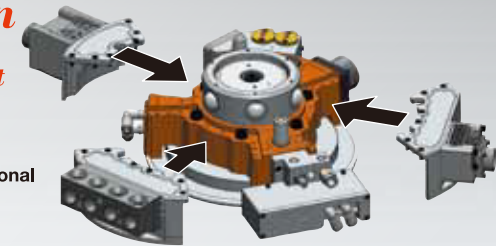
(※1)Coupling force means force which assure repeatability, coupling of Quick changeis kept until supplying air for uncoupling or destroyed by crush. (※2)Max.93.6A is allowed as connector

Over 1 million combinations available to meet your needs with flexible options!

May be used wiht conventional Quick Change modules.



Drop-prevention valve [Mechanical fool-proof system]



Optional safety system in case of lock/unlock solenoid valve malfunction. The Tool plate will not release from the Master plate except when it is located above the tool stand.



Lock/unlock Solenoid valve

A lock/unlock solenoid valve attached to the Master plate is available as an option.

Option

Module for A side and B side

	Model	Capacity and number of contacts	Connector for Master Plate side	Connector for Tool Plate side	
Servo module	SEAM(T) SEBM(T)	Servo powers 20A(500V)×6 ※1 Electric signals 5A(220V)×17 ※2	D/MS3102A20-17P D/MS3102A20-29P	D/MS3102A20-17S D/MS3102A20-29S	
	SEYAM(T) SEYBM(T)	Servo powers 20A(500V)×6 ※5 Electric signals 5A(220V)×17 ※2	D/MS3102A20-15P D/MS3102A20-29P	D/MS3102A20-15S D/MS3102A20-29S	
	SEPAM(T) SEPB(M)(T)	Servo powers 20A(500V)×6 ※1 Electric signals 5A(220V)×17 ※2 Electric signals 5A(220V)×37 ※6	D/MS3102A20-17P D/MS3102A20-29P D/MS3102A28-21P	D/MS3102A20-17S D/MS3102A20-29S D/MS3102A28-21S	
	Fluid module ※3	FL4AM/FL4BM	4 ports	Master Plate side	4 ports Rc3/8(self-sealing) for both of coolant and pneumatic
		FL4AT/FL4BT		Tool Plate side	
		FP4AT/FP4BT	6 ports	Tool Plate side	4 ports Rc3/8(pass-through)for pneumatic
FL6AM/FL6BM		Master Plate side		6 ports Rc3/8(self-sealing)for both of coolant and pneumatic	
FL6AT/FL6BT	Tool Plate side				
FP6AT/FP6BT	Tool Plate side				
Pneumatic port	P38AM(T)*	4 ports	Rc3/8×4(pass-through)		
Electric signal module	JXAM(T)* JXBM(T)*	5A×16 ※7	JMR-2116M-D	JMR-2116F-D	
	RXAT* RXBT*	5A×16(without connector) ※9		terminal for solder	
	MWXAM(T) MWXBM(T)	13A×10 Resistance to dust and water			D/MS3102A18-1P
	BNXAM(BDXAT)* BNXBM(BDXBT)*	non-contact electric signal 15 NPN output	WEBR2119MS-D	WEBR2116FS-D	
	BPXAM(BDXAT)* BPXBM(BDXBT)*	non-contact electric signal 15 PNP output	WEBR2119MS-D	WEBR2116FS-D	
	Ground contact module	E51AM(T)* E51BM(T)*	500A×1 (usage : 50%)		
Attachment module	GLAM(T) GLBM(T)	Attachment module for A or B side. (For adding conventional Quick change options)			
Cover	LCAM(T) LCBM(T)	Cover for A side or B side (always use cover when the modules are not in use)			

*include attachment module

(※1)Allowable current is Max.20A for pin(13A for pin No.F) and total allowable current is 71.6A for connector. (※2)Allowable current is total 81.7A for connector. (※3)Port with self-sealing of Fluid module cannot be used for vacuum. (※4)Allowable current is total 290.6A for connector. (※5)Allowable current is total 83.7A for connector. Connector has 7 pins. (※6)Allowable current is total 120.2A for connector. (※7)Allowable current is total 30.4A for connector. (※8) Allowable current is total 57.2A for connector. (※9)Type of connector for master side is JMA.

In case of order options as part, model might be different from the above table. Please ask to our company's staff.

Ordering Information

Master plate

ZEUS -M1N-
-M2N-
-M3N-
-M1P-
-M2P-
-M3P-

Module for A-side

Module for B-side

Module for C-side

Insulation plate
(Adaptor plate with boss)

Approach sensor

Drop-prevention valve
Lock/unlock Solenoid valve

→ PCD mounting robot
type of sensors PNP or NPN
(for lock/unlock and approach)

M1=PCD125mm,M10
M2=PCD160mm,M10
M3=PCD160mm,M12
N =Sensor output NPN
P =Sensor output PNP

IS With insulation plate
IN02 Without insulation plate, knock pin x 2
IN50 Without insulation plate, inlay ϕ50 n7
IN63 Without insulation plate, inlay ϕ63 n7
IN80 Without insulation plate, inlay ϕ80 n7
IN10 Without insulation plate, inlay ϕ100 n7
INAB For ABB robot (Boss ϕ100) n7

AS With approach sensor
AN Without approach sensor
(Master Plate side only)

VE With valve for prevent releasing tool plate
With solenoid valve for lock/unlock ※
VN With valve
Without solenoid valve
XE Without valve
With solenoid valve ※
XN Without valve
Without solenoid valve
※When you add solenoid valve, usable electric signal(Built-in) are limited upto 18.

Tool plate

ZEUS -T-

Module for A-side

Module for B-side

Module for C-side

[Servo module]

SE Servo power 20A×6 ※1
Electric signal 5A×17 ※2
SEY Servo power 20A×6 ※1
Electric signal 5A×17 ※2
SEP Servo power 20A×6 ※1
Electric signal 5A×17 ※2
Electric signal 5A×37 ※6
37prove contacts is added in servo module
LC Covers for A and B
(always use the over when the modules are not in use)

[Fluid module]

FL4 4 cooling water ports or pneumatic port
FP4 4 pneumatic ports for Tool Plate
FL6 6 cooling water ports or pneumatic port
FP6 6 pneumatic ports for Tool Plate
LC Covers for A and B
(always use the over when the modules are not in use)

[Pneumatic port]

P38 Pneumatic Rc3/8×4
LC Covers for A and B
(always use the over when the modules are not in use)
[Electronic signal module]
J J16A module 5A×16
R 5A×16 for Tool Plate
MW 13A×10Resistance to dust and wator
BN non-contact electric signal15 NPN output for Master Plate
BP non-contact electric signal15 PNP output for Master Plate
BD non-contact electric signal 15 Sensor input for Tool Plate

[Other]

E51 500A×1
GL Attachment module
LC Covers for A and B
(always use the over when the modules are not in use)

[Primary current module]

WP 200A(usage: 25%) 600V
WS Sequence 100A(600V)×3 ※4
Thermo signal: 5A(200V)×3
(WP : receptacle type
(WS : seal connector type)
SC Cover for C side
(always use the cover when the modules are not in use)

[Pneumatic port]

P18 Pneumatic Rc1/8×4
P3W Pneumatic Rc3/8×2
SC Cover for C side
(always use the cover when the modules are not in use)

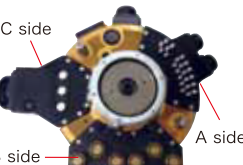
[Electric signal module]

J J16A module 5A×16
R 5A×16(without connector) for Tool Plate
M 13A×10(insertion contact)
MW 13A×10 Resistance to dust and wator
BN non-contact electric signal15 NPN output (available for master plate only)
BP non-contact electric signal15 PNP output (available for master plate only)
BD non-contact electric signal15 Sensor input (available for tool plate only)
SC Cover for C side (the modules are not in use)

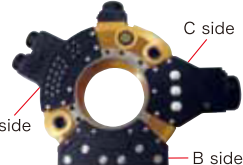
[Other]

E51 500A×1
GL Attachment module
SC Cover for C side (always use the cover when the modules are not in use)

Installing position



Master Plate



Tool Plate

Please contact BL Autotec, Ltd. for detailed information on the options.
• The electric connector and plugs are user-provided. • Please contact BL Autotec, Ltd. for detailed information on the modules.
• Please contact BL Autotec, Ltd. for special conditions and specific applications. • Please refer to the Installation & Maintenance Manual when using.
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The configuration and specifications for this series are subject to change.

Wire-Saving Module / Contact Block

At the site of FA, it is becoming popular to adapt various network systems in order to reduce wiring. Networks at factories are hierarchically (configurationally) classified by place and information transmission in the network. Our Wire-Saving Module / Contact Block is compliant with networks of several standardized serial data communications and, thus, effective for reducing wiring at factories. We have prepared connectors conforming to several standardized serial data communications.

Contact Blocks that can be equipped with QUICK-CHANGE™ / QUICK-CHANGE ZEUS™ / QUICK-CHANGE GIGA™

Examples of optional modules

Master plate side



DeviceNet with M12 connector type
C1M



CC-Link connector type
C2M



DeviceNet with UN connector type
C3M



PROFIBUS connector type
C4M



Ethernet connector type
C5M



Powered M12 connector type
C6M



Powered UN connector type
C7M

Contact Blocks that can be equipped with QUICK-CHANGE ZEUS™ / QUICK-CHANGE GIGA™

Examples of optional modules (A or B side)

Integrated type



KUKA standard connector type
C1KAM/C1KBM



Ethernet connector type
CSSAM/CSSBM



DeviceNet with M12 connector type
C1EAM/C1KBM



KUKA standard connector type
C16KAT/C16KBT

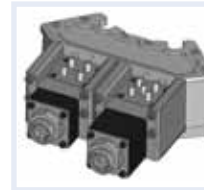


Ethernet connector type
C5SAT/C5SBT



CC-Link connector type
C2EAT/C2EBT

Combined type



DeviceNet with UN connector type
C7C3AM/C7C3BM



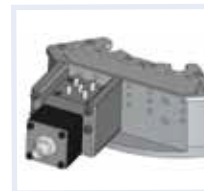
CC-Link & Powered UN connector type
C2C7AM/C2C7BM



PROFIBUS connector & Powered M12 connector type
C6C4AT/C6C4BT



Ethernet & Powered M12 connector type
C5C6AT/C5C6BT



DeviceNet with M12 connector type
C1XAM/C1XBM



PROFIBUS connector type
C4XAT/C4XBT

Conforming to several standardized serial data communications

DeviceNet	Using dedicated thin cable conforming to DeviceNet standard. We have mini-connectors and micro-connectors available.
CC-Link	Using a dedicated Ver. 1.10 compatible CC-Link cable that is a twisted three-core cable with shield. We have M12 Micro type four-contact A-coding connectors available.
PROFIBUS	Using PROFIBUS DP type-A cable that is twisted wiring with shield. We have M12 Micro type four-contact B-coding connectors available.
Industrial Ethernet	We have category 5e equivalent cable with two pairs of shield is used and M12 Micro type four-contact D-coding connectors available. These connectors conform to EtherNet/IP, EtherCAT, PROFINET.

Options

Module for A side and B side

	Model	Capacity and number of contacts	Connector for Master Plate side	Connector for Tool Plate side
Industrial Network Module with attachment	C1XAM(T) C1XBM(T)	3A (60v) x 5 contacts type for DeviceNet M12 connector *including drain wire	Micro-style Connector M12, A-coding, 5 contacts Male	Micro-style Connector M12, A-coding, 5 contacts Female
	C2XAM(T) C2XBM(T)	3A(125V) x 4 contacts type for CC-Link *including shield	Micro-style Connector M12, A-coding, 4 contacts Male	Micro-style Connector M12, A-coding, 4 contacts Female
	C3XAM(T) C3XBM(T)	8A (24v) x 5 contacts type for DeviceNet UN connector *including drain wire	Mini-style Connector 7/8-16UN, 5 contacts Male	Mini-style Connector 7/8-16UN, 5 contacts Female
	C4XAM(T) C4XBM(T)	4A (160v) x 2 contacts type for PROFIBUS connector	Micro-style Connector M12, B-coding, 4 contacts Male	Micro-style Connector M12, B-coding, 4 contacts Female
	C5XAM(T) C5XBM(T)	3A (30v) x 4 contacts type for Ethernet connector	Micro-style Connector M12, D-coding, 4 contacts Female	Micro-style Connector M12, D-coding, 4 contacts Female
	C6XAM(T) C6XBM(T)	3A (125v) x 4 contacts type for Powered M12 connector	Micro-style Connector M12, A-coding, 4 contacts Male	Micro-style Connector M12, A-coding, 4 contacts Female
	C7XAM(T) C7XBM(T)	13A (25v) x 4 contacts type for Powered UN connector	Mini-style Connector 7/8-16UN, 4 contacts Male	Mini-style Connector 7/8-16UN, 4 contacts Female
	C1SAM(T) C1SBM(T)	Servo Power 20A(500V) x 6 Servo Signal 5A(220V) x 17 3A (60v) x 5 contacts type for DeviceNet M12 connector *including drain wire	D/M3102A20-17P D/M3102A20-29P Micro-style Connector M12, A-coding, 5 contacts Male	D/M3102A20-17S D/M3102A20-29S Micro-style Connector M12, A-coding, 5 contacts Female
Servo/Industrial Network Module	C2SAM(T) C2SBM(T)	Servo Power 20A(500V) x 6 Servo Signal 5A(220V) x 17 3A(125V) x 4 contacts type for CC-Link *including shield	D/M3102A20-17P D/M3102A20-29P Micro-style Connector M12, A-coding, 4 contacts Male	D/M3102A20-17S D/M3102A20-29S Micro-style Connector M12, A-coding, 4 contacts Female
	C3SAM(T) C3SBM(T)	Servo Power 20A(500V) x 6 Servo Signal 5A(220V) x 17 8A (24v) x 5 contacts type for DeviceNet UN connector *including drain wire	D/M3102A20-17P D/M3102A20-29P Mini-style Connector 7/8-16UN, 5 contacts Male	D/M3102A20-17S D/M3102A20-29S Mini-style Connector 7/8-16UN, 5 contacts Female
	C4SAM(T) C4SBM(T)	Servo Power 20A(500V) x 6 Servo Signal 5A(220V) x 17 4A (160v) x 2 contacts type for PROFIBUS connector	D/M3102A20-17P D/M3102A20-29P Micro-style Connector M12, B-coding, 4 contacts Male	D/M3102A20-17S D/M3102A20-29S Micro-style Connector M12, B-coding, 4 contacts Female
	C5SAM(T) C5SBM(T)	Servo Power 20A(500V) x 6 Servo Signal 5A(220V) x 17 3A (30v) x 4 contacts type for Ethernet connector	D/M3102A20-17P D/M3102A20-29P Micro-style Connector M12, D-coding, 4 contacts Male	D/M3102A20-17S D/M3102A20-29S Micro-style Connector M12, D-coding, 4 contacts Female
	C1EAM(T) C1EBM(T)	Servo Power 20A(500V) x 6 3A (60v) x 5 contacts type for DeviceNet M12 connector *including drain wire	D/M3102A20-17P Micro-style Connector M12, A-coding, 5 contacts Male	D/M3102A20-17S Micro-style Connector M12, A-coding, 5 contacts Female
	C2EAM(T) C2EBM(T)	Servo Power 20A(500V) x 6 3A(125V) x 4 contacts type for CC-Link *including shield	D/M3102A20-17P Micro-style Connector M12, A-coding, 4 contacts Male	D/M3102A20-17S Micro-style Connector M12, A-coding, 4 contacts Female
	C3EAM(T) C3EBM(T)	Servo Power 20A(500V) x 6 8A (24v) x 5 contacts type for DeviceNet UN connector *including drain wire	D/M3102A20-17P Mini-style Connector 7/8-16UN, 5 contacts Male	D/M3102A20-17S Mini-style Connector 7/8-16UN, 5 contacts Female
	C4EAM(T) C4EBM(T)	Servo Power 20A(500V) x 6 4A (160v) x 2 contacts type for PROFIBUS connector	D/M3102A20-17P Micro-style Connector M12, B-coding, 4 contacts Male	D/M3102A20-17S Micro-style Connector M12, B-coding, 4 contacts Female
	C5EAM(T) C5EBM(T)	Servo Power 20A(500V) x 6 3A (30v) x 4 contacts type for Ethernet connector	D/M3102A20-17P Micro-style Connector M12, D-coding, 4 contacts Male	D/M3102A20-17S Micro-style Connector M12, D-coding, 4 contacts Female
	C1NAT C1NBT	3A (60v) x 5 contacts type for DeviceNet M12 connector *including drain wire	Micro-style Connector M12, A-coding, 5 contacts Male	Micro-style Connector M12, A-coding, 5 contacts Female
	C2NAT C2NBT	3A(125V) x 4 contacts type for CC-Link *including shield	Micro-style Connector M12, A-coding, 4 contacts Male	Micro-style Connector M12, A-coding, 4 contacts Female
	C3NAT C3NBT	8A (24v) x 5 contacts type for DeviceNet UN connector *including drain wire	Mini-style Connector 7/8-16UN, 5 contacts Male	Mini-style Connector 7/8-16UN, 5 contacts Female
	C4NAT C4NBT	4A (160v) x 2 contacts type for PROFIBUS connector	Micro-style Connector M12, B-coding, 4 contacts Male	Micro-style Connector M12, B-coding, 4 contacts Female
	C5NAT C5NBT	3A (30v) x 4 contacts type for Ethernet connector	Micro-style Connector M12, D-coding, 4 contacts Male	Micro-style Connector M12, D-coding, 4 contacts Female

	Model	Capacity and number of contacts	Connector for Master Plate side	Connector for Tool Plate side
Servo/Industrial Network Module for KUKA	C1KAM C1KBM	Servo Power 20A(500V) x 6 *including ground Servo Signal 5A(220V) x 17 *including shield 7A (125v) x 9 contacts type for DeviceNet & Power connector *including drain wire	BEGA116NN00000201000 AEGA052NN00000200000 AEGA113NN00000200000	
	C4KAM C4KBM	Servo Power 20A(500V) x 6 *including ground Servo Signal 5A(220V) x 17 *including shield 7A (125v) x 7 contacts type for PROFIBUS & Power connector *including shield	BEGA116NN00000201000 AEGA052NN00000200000 AEGA113NN00000200000	
	SEKAT SEKBT	Servo Power 20A(500V) x 6 *including ground Servo Signal 7A(160V) x 12 *including shield		BEGA116NN00000201000 AEGA052NN00000200000
	C16KAT C16KBT	3A (60v) x 5 contacts type for DeviceNet M12 connector *including drain wire 3A (125v) x 4 contacts type for Powered M12 connector		Micro-style Connector M12, A-coding, 5 contacts Female Micro-style Connector M12, A-coding, 4 contacts Female
Industrial Network Module for KUKA	C17KAT C17KBT	3A (60v) x 5 contacts type for DeviceNet M12 connector *including drain wire 7A (25v) x 4 contacts type for Powered UN connector		Micro-style Connector M12, A-coding, 5 contacts Female Mini-style Connector 7/8-16UN, 4 contacts Female
	C36KAT C36KBT	7A (24v) x 5 contacts type for DeviceNet UN connector *including drain wire 3A (125v) x 4 contacts type for Powered M12 connector		Mini-style Connector 7/8-16UN, 5 contacts Female Micro-style Connector M12, A-coding, 4 contacts Female
	C37KAT C37KBT	7A (24v) x 5 contacts type for DeviceNet UN connector *including drain wire 7A (25v) x 4 contacts type for Powered UN connector		Mini-style Connector 7/8-16UN, 5 contacts Female Mini-style Connector 7/8-16UN, 4 contacts Female
	C46KAT C46KBT	4A (160v) x 2 contacts type for PROFIBUS connector 3A (125v) x 4 contacts type for Powered M12 connector		Micro-style Connector M12, B-coding, 4 contacts Female Micro-style Connector M12, A-coding, 4 contacts Female
	C47KAT C47KBT	4A (160v) x 2 contacts type for PROFIBUS connector 7A (25v) x 4 contacts type for Powered UN connector		Micro-style Connector M12, B-coding, 4 contacts Female Mini-style Connector 7/8-16UN, 4 contacts Female

※ The Master for KUKA can be only coupled with the tool for KUKA

Module for C side and D side

	Model	Capacity and number of contacts	Connector for Master Plate side	Connector for Tool Plate side
Industrial Network Module with attachment	C1CM(T) C1DM(T)	3A (60v) x 5 contacts type for DeviceNet M12 connector *including drain wire	Micro-style Connector M12, A-coding, 5 contacts Male	Micro-style Connector M12, A-coding, 5 contacts Female
	C2CM(T) C2DM(T)	3A(125V) x 4 contacts type for CC-Link *including shield	Micro-style Connector M12, A-coding, 4 contacts Male	Micro-style Connector M12, A-coding, 4 contacts Female
	C3CM(T) C3DM(T)	8A (24v) x 5 contacts type for DeviceNet UN connector *including drain wire	Mini-style Connector 7/8-16UN, 5 contacts Male	Mini-style Connector 7/8-16UN, 5 contacts Female
	C4CM(T) C4DM(T)	4A (160v) x 2 contacts type for PROFIBUS connector	Micro-style Connector M12, B-coding, 4 contacts Male	Micro-style Connector M12, B-coding, 4 contacts Female
	C5CM(T) C5DM(T)	3A (30v) x 4 contacts type for Ethernet connector	Micro-style Connector M12, D-coding, 4 contacts Male	Micro-style Connector M12, D-coding, 4 contacts Female
	C6CM(T) C6DM(T)	3A (125v) x 4 contacts type for Powered M12 connector	Micro-style Connector M12, A-coding, 4 contacts Male	Micro-style Connector M12, A-coding, 4 contacts Female
	C7CM(T) C7DM(T)	13A (25v) x 4 contacts type for Powered UN connector	Mini-style Connector 7/8-16UN, 4 contacts Male	Mini-style Connector 7/8-16UN, 4 contacts Female

Details of Attachment part number

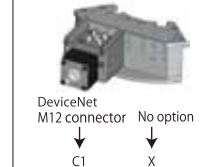
Abbreviation	Module part number	Details
J	J16A	5A x 16 (JM connector)
M	M10A	13A x 10 (MS connector)
MW	M10WA	13A x 10 (Drip-Proof MS connector)
R	R16	5A x 16 (Connector-less specification for Tool side only)
BN	BFN	Non-Contact Electric Signal Block with 15 contacts, NPN Output only for Master side
BP	BFP	Non-Contact Electric Signal Block with 15 contacts, PNP Output only for Master side
BD	BFD	Non-Contact Electric Signal Block with 15 contacts, Sensor Input only for Tool side
C1	C1	DeviceNet M12 connector
C2	C2	CC-Link connector
C3	C3	DeviceNet UN connector
C4	C4	PROFIBUS connector
C5	C5	Ethernet connector
C6	C6	Powered M12 connector
C7	C7	Powered UN connector

Examples

JMAM	J16+M10 A Side Master
XMBM	No option +M10 B Side Master
JC1AT	J16+C1 A Side Tool

C1XAM : DeviceNet M12 Connector

+No option A Side Master



※ Please Keep in mind that compared to the picture above left and right will be opposite in actual installation

