

QC-150C

Lock without touching

The Master plate can lock onto the Tool plate with a gap between them.

Superior fail-safe locking mechanism

BL's unique lock/unlock mechanism contains a mechanical fail-safe feature which does not allow the Master and Tool plates to uncouple if the air pressure is shut off.



Master plate Attachments  
• 6 bolts (M10×60)  
• 1 locating pin  
※ Seal plate, O-ring and screws are pre-assembled.








Specifications

Main Body		
Load capacity (rated load)		1,470N(150kg)
Positional repeatability		±0.015mm
Allowable dynamic moment	Bending direction (Tx, Ty)	1,960N·m(200kgf·m)
	Twisting direction (Tz)	1,960N·m(200kgf·m)
Coupling force (with air pressure of 0.49MPa) ※1		14,317N(1,460kgf)
Materials	Frame	Anodized aliminum
	Lock/unlock mechanism	Stainless steel
Overall dimension (when coupled)		φ200×H90mm
Weight (Main body)	Master plate	5,810g
	Tool plate	2,860g
Self-separating mechanism		Ball-locking mechanism
Required air pressure		0.39~0.68MPa(4~7kgf/cm²)
Allowable temperature and humidity ranges		0~50°C, 35~90%(Non-condensing)
Utilities	Electical signals Max3 AC50V Probe contact	3A×37 or none ※2
	Pneumatic ports	Rc3/8×10

Options			
Utilities	D37Z	Electical signals	3A×37 ※2
	J16Z	Electical signals	5A×16 ※3 ※4
	M10Z	Electical signals	13A×10 ※3 ※5
	M19Z	Electical signals	13A×19 ※3 ※6
	A16Z	Electical signals	Approach sensor+5A×16 ※3 ※4
	A08Z	Electical signals	Approach sensor+13A×8 ※3 ※5
	B15NZ	Electric signals Max.50mA DC24V WEB series connector ※3 In Zone 1 IP67	50mA×15
	B15PZ	Non-contact system (Please refer to page 41 for details.)	WEB series connector ※3 IP67
	B15DZ	Electric signals Max.5mA DC12V Non-contact system (Please refer to page 41 for details.)	5mA×15
	E50Z	Ground	500A (50% usage) ×1
	P18Z	Pneumatic ports	Rc1/8×4
	P14Z	Pneumatic ports	Rc1/4×2
	P38Z	Pneumatic ports	Rc3/8×4
	P3WZ	Pneumatic ports	Rc3/8×2
	Lock/unlock sensor ※7		Two built-in proximity switches

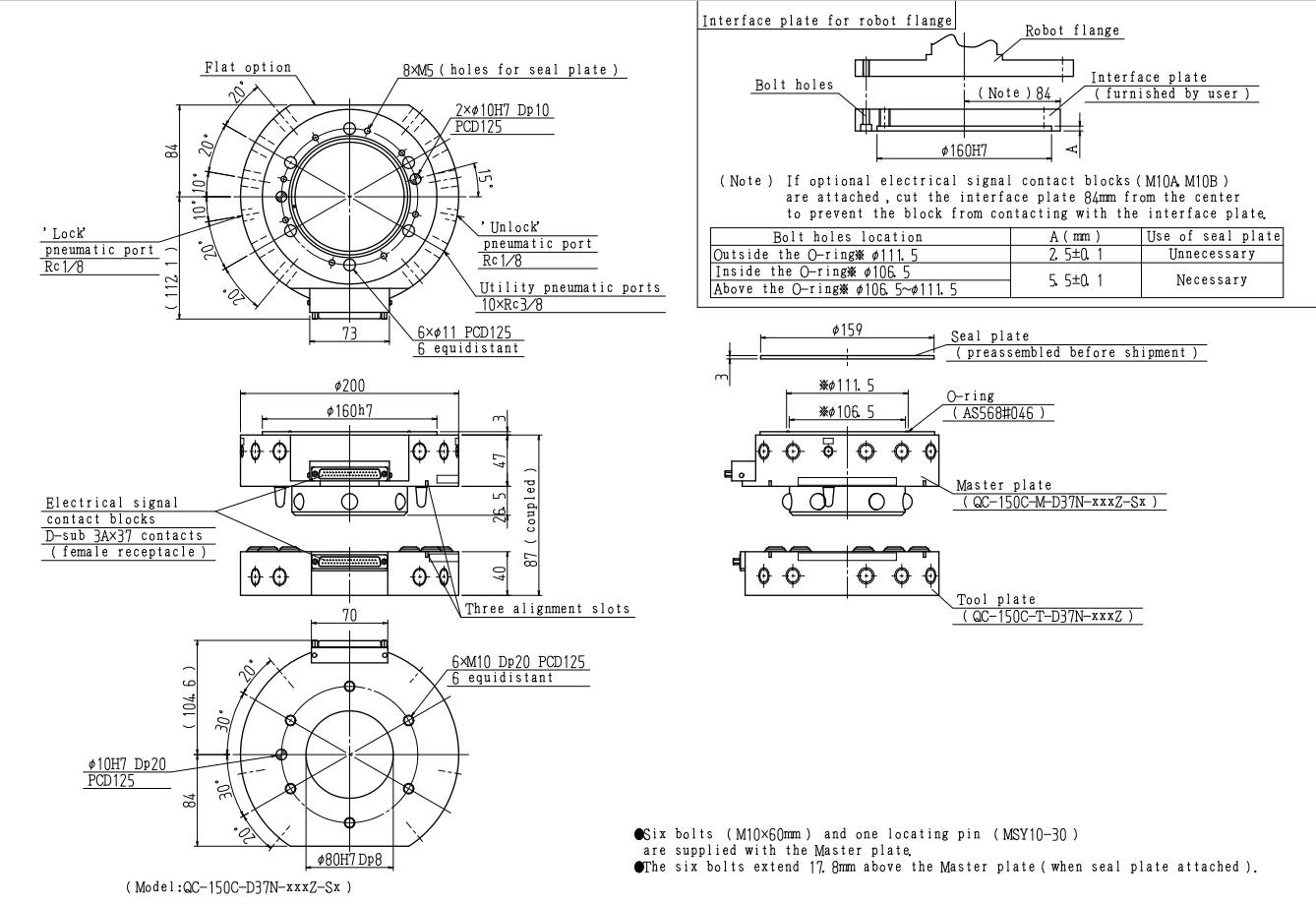
QC-150C Ordering Information

Master plate	QC-150C	-M-	(Option N)	-	(Option Z)	-	(lock unlock sensor)
							
Tool plate	QC-150C	-T-	(Option N)	-	(Option Z)		
							
			DXXN	No electrical signal			
			D37N	Electrical signals 3A×37#2			
					XXXZ	No option	
					D37Z	Electrical signals 3A×37#2	
					J16Z	Electrical signals 3A×16#3 #4	
					M10Z	Electrical signals 13A×10#3 #5	
					M19Z	Electrical signals 13A×19#3 #6	
					A16Z	Approch sensors +Electrical signals 5A×16#3 #4	
					A08Z	Approch sensors +Electrical signals 13A×8#3 #5	
					B15NZ	Non-contact electric signal block Master side NPN output	
					B15PZ	Non-contact electric signal block Master side PNP output	
					B15DZ	Non-contact electric signal block Tool side	
					E50Z	Ground 500A×1	
					P18Z	Pneumatic ports Rc1/8×4	
					P14Z	Pneumatic ports Rc1/4×3	
					P38Z	Pneumatic ports Rc3/3×4	
					P3WZ	Pneumatic ports Rc3/8×2	
						SX	No lock/unlock sesor
						SA	Lock/unlock sensor A-Type (Customers processes the adaptor plate)
						SB	Lock/unlock sensor B-Type (BL Autotec processes the adaptor plate)

Note) Please provide specifics on the electric signal contact block as follows.  
(Model D37N-M for master plate, Model D37N-T for Tool plate).

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(Model D37N-M for master plate, Model D37N-T for Tool plate).

Main Body Dimensions



●Six bolts (M10×60mm) and one locating pin (MSY10-30) are supplied with the Master plate.  
●The six bolts extend 17,8mm above the Master plate (when seal plate attached).

Options

Electrical signal contact block

<b>D37Z</b> 3A×37 D-sub 37 contacts (female receptacles)※2 ※Plug side is DOK, 17 JE-23370-02 (D8A)-CG, or its equivalent.	<b>J16Z</b> 5A×16 (JM connector)※3 ※4 Use JMR2116M-D for the J16Z Master side Use JMR2116F-D for the J16Z Tool side	<b>M10Z</b> 13A×10 (MS connector)※3 ※5 Use D/MS3102A18-1P for the M10Z Master side Use D/MS3102A18-1S for the M10Z Tool side	<b>M19Z</b> 13A×19 (MS connector)※3 ※6 Use D/MS3102A22-14P for the M19Z Master side Use D/MS3102A22-14S for the M19Z Tool side	<b>A16Z</b> Approach Sensor 5A×16 (JM connector)※3 ※4 Use JMR2119M-D for the A16Z Master side Use JMR2119F-D for the A16Z Tool side	<b>A08Z</b> Approach Sensor 13A×8 (MS connector)※3 ※5 Use D/MS3102A18-1P for the A08Z Master side Use D/MS3102A18-1S for the A08Z Tool side
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Non-contact electric signal block



**B15NZ, B15PZ**  
**B15DZ (Tool side only)**  
B15NZ NPN output  
B15PZ PNP output  
Receptacle connector: WEBR-2119S-D for B15NZ and B15PZ  
Receptacle connector: WEBR-2116F-S-D for B15DZ

Ground



**E50Z**  
Ground 500A×1

Pneumatic ports



**P18Z**  
Rc1/8×4



**P14Z**  
Rc1/4×2



**P38Z**  
Rc3/8×4



**P3WZ**  
Rc3/8×2

Lock/unlock sensor



Please contact BL Autotec, Ltd.  
for detailed information on the options.

SA, SB

Two built-in proximity switches verify piston position, thus reliably checking the lock and unlock status.

※1 Coupling force is the force to achieve specified repeatability. Coupling will be maintained until unlock pressure is applied or the device is damaged. ※2 Plug connector is not included. Please prepare plug connector type 17JE-23150-02(D8A)-CG or compatible type. ※3 Plug connector is not included. Please prepare plug connector by customer. For connector, please see correspondence table on page 46. ※4 Allowable current is total 30.4A for connector. ※5 Allowable current is total 57.2A for connector. ※6 Allowable current is total 88.9AA for connector. ※3 Allowable current is total 30.4A for connector. ※4 Allowable current is total 57.2A for connector.