

CX1^{EN}

E-Series



CAMPETELLA

Linear Robot CX1 E-Series evo

125
Years

our history, our strength

 *Campetella,
the right way
to save energy.*

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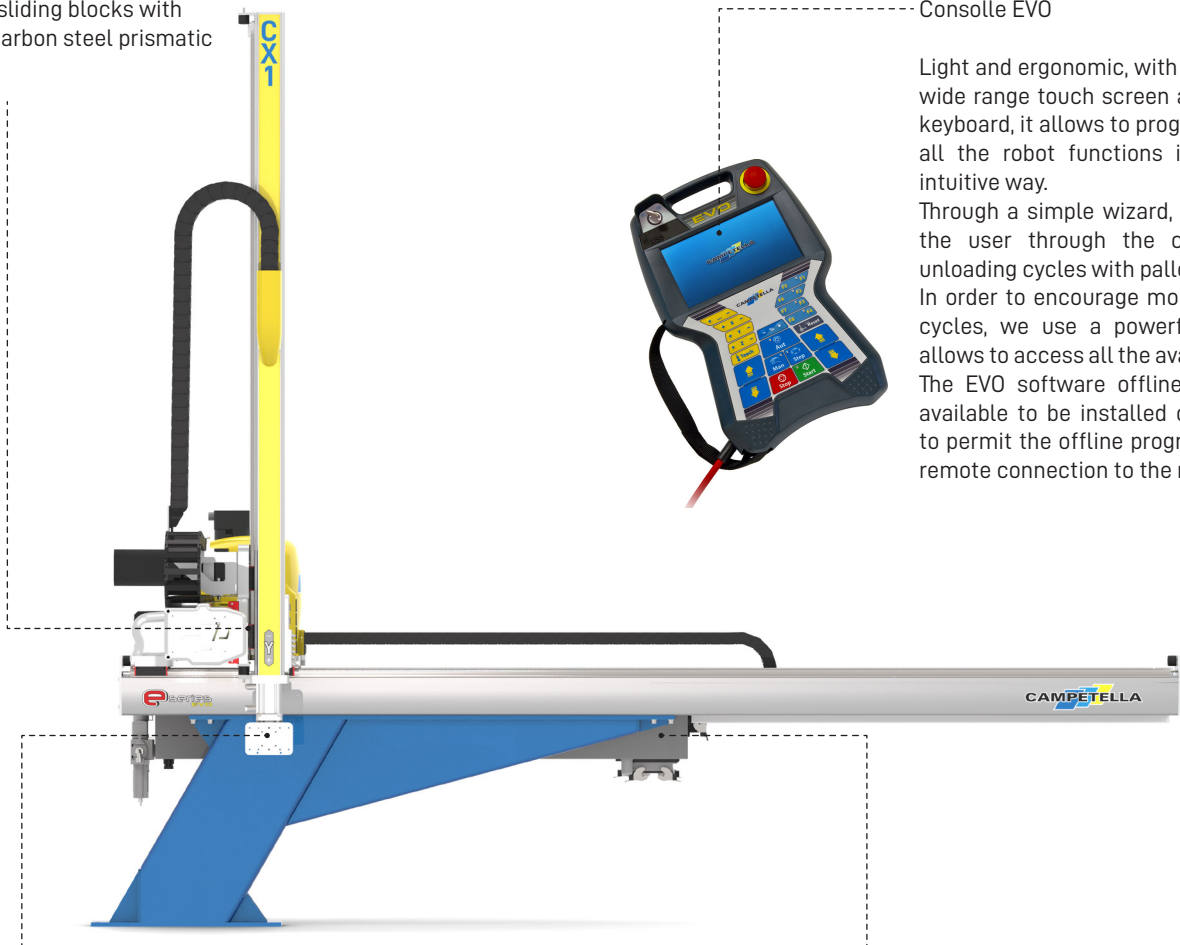
CX1 E-Series evo

The compact robot for small and medium-sized tonnage injection molding machines

The CX1 E-Series model is recommended for the automation of small and medium tonnage injection molding machines.

Featured by the extraction axis cantileverally fixed on the side opposite the hopper. The strength of this architecture is the absence of collision problems between the robot and the hopper.

Self-lubricating sliding blocks with roll-by balls on carbon steel prismatic guides



Consolle EVO

Light and ergonomic, with a 7" TFT 800x480 wide range touch screen and a membrane keyboard, it allows to program and manage all the robot functions in a simple and intuitive way.

Through a simple wizard, it quickly guides the user through the creation of IMM unloading cycles with palletizing functions. In order to encourage more complex work cycles, we use a powerful editor, which allows to access all the available functions. The EVO software offline version is also available to be installed on a PC in order to permit the offline programming and the remote connection to the robot.

Pneumatic C-axis
Maximum Payload 6 Kg

Electrical panel on board



Float
Balanced Axis

Carbon
Technology

Dynamic
Vacuum

K.E.R.S.

H.S.I.

3DP
Device

V.O.S.

Jog Over

Pneumatic C Axis

The C pneumatic axis facilitates the deposit in plan of the molded pieces picked up from the mold, choosing from the program between two positions (vertical/horizontal).

(sample image may differ from actual supply)

Pneumatic AB Axis

For applications that require it, it is possible to choose the wrist with the additional pneumatic axis AB, which allows the rotation on its axis of the end of tool arm by choosing from the program between two positions mechanically fixed on the 0° -90° or 0° -180°

(sample image may differ from actual supply)

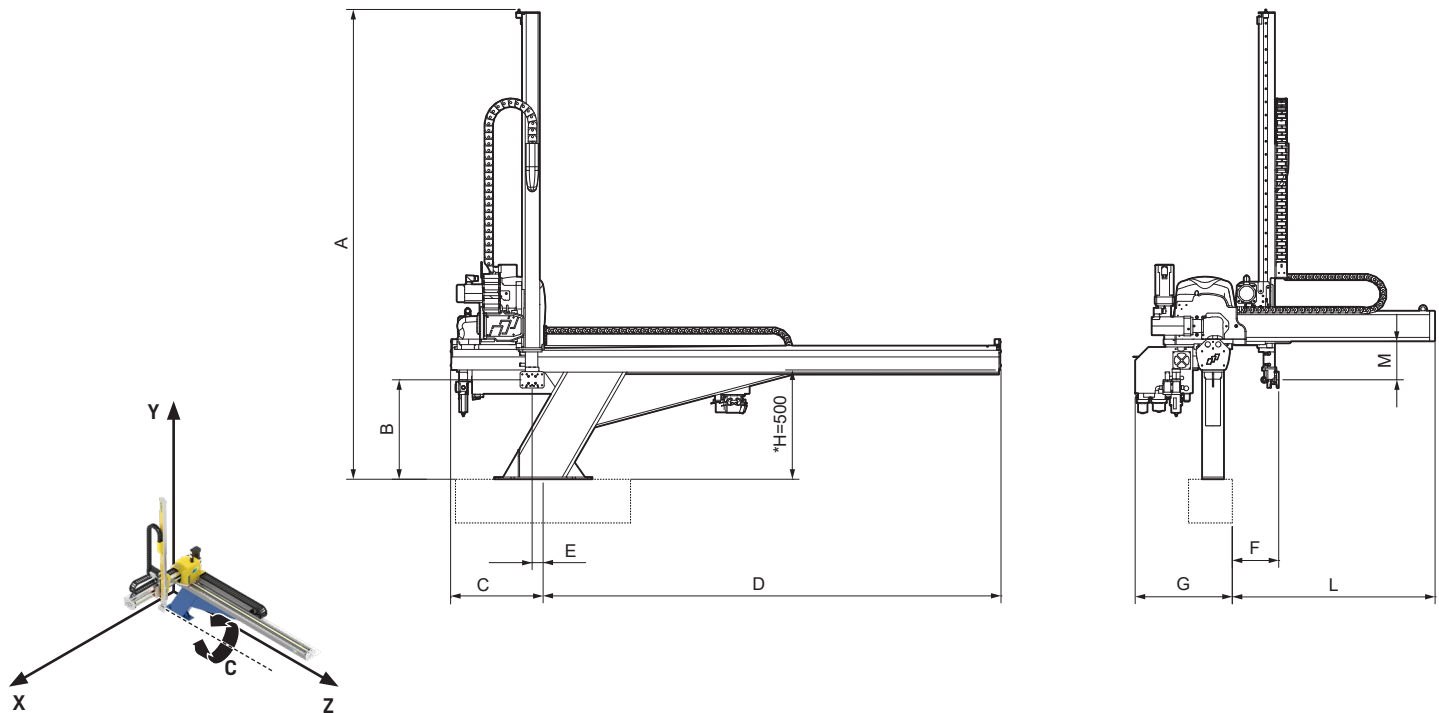
Electric B Axis

The B interpolated electrical axis, can be added when both have the need to rotate the wrist on itself in different positions, both in the case of palletization, or simply choose from program the side of the mold on which to intervene.

(sample image may differ from actual supply)

Technical specifications

Maximum payload [kg]:	6	6
Vertical axis:	Direct	Direct
Vertical axis pneumatic balancing:	-	-
Z-axis stroke - Horizontal [mm]:	1500	2000
X-axis stroke - Extraction [mm]:		600
Y-axis stroke - Vertical [mm]:	1200	1200
X, Y, Z axes motion:	AC synchronous brushless servo motors	
X,Y,Z axes guidance system:	Self-lubricating sliding blocks with roll-by balls on carbon steel prismatic guides	
Positioning repeatability [mm]:	± 0,1	
Pneumatic C axis rotation [deg]:	0°/90°	
Electrical C axis rotation [deg]:	-	
Pneumatic AB axis rotation [deg]:	0°+180°	
Electrical AB axis rotation [deg]:	-	
Electrical B axis rotation [deg]:	0°+332°	
Pneumatic C axis torque [Nm]:	16	
Pneumatic AB axis torque [Nm]:	1	
Electrical C axis torque [Nm]:	-	
Electrical AB axis torque [Nm]:	-	
Electrical B axis torque [Nm]:	15	
Control unit:	Campetella EVO proprietary system	
Minimum cycle time with maximum load [s]:	5,5	5,5
Electrical power supply:	230 VAC • 50-60Hz • 1P + N + T	
Installed electrical power [kVA]:	5,96	
Pneumatic power supply [bar]:	6	6
Approximate weight [kg]:	150	



Model	A	B	C	D	E	F	G	H	I	L	M
CX1-1-A	2137	455	420	1592	50	213	444	*	N/A	928	176
CX1-2-A	2137	455	420	2092	50	213	444	*	N/A	928	176

The drawings refer to a robot with a pneumatic C-axis and support H = 500mm

*Available standard supports H = 400-500-600mm The dimensions A, B and I vary by difference according to the chosen support

	CX1-1A	CX1-2A
Wrist		
Pneumatic C-axis	●	●
Pneumatic C-axis + Pneumatic AB-axis (1)	○	○
Pneumatic C-axis + Electric B-axis (1)	○	○
Pneumatic C-axis + Pneumatic AB-axis + Electric B-axis (1)	○	○
Electric C-axis + Electric AB-axis (1)	–	–
(1) With maximum load reduction [kg]		

Gripping system Pneumatics		
First vacuum circuit with release blows	●	●
First pressure circuit for mechanical gripper	●	●
Additional vacuum circuits with release blows (n.4 max) (2)	○	○
Additional pressure circuits for mechanical gripper (n.4 max) (2)	○	○
Kit 4 valves 5/2 monostable + 12 input on the wrist	○	○
Kit 4 valves 5/2 bistable + 12 input on the wrist	○	○
Kit 8 valves 5/2 monostable + 12 input on the wrist	○	○
(2) Up to a maximum of 6 pneumatic lines total		

Electronics and Software		
Euromap 67 interface	●	●
Ethernet interface	●	●
USB interface	●	●
Socket for digital signals on the wrist: 5 (Programmable Input/Output) + 2*(Input)	●	●
Socket for user safety signals	●	●
Socket for conveyor belt signals: 1 (Input) + 2 (Output) + 1 (Relais Output)	●	●
Socket for digital signals: 4 (Input) + 3 (Output relay)	●	●
Vertical axis approaching sensor	○	○
Industry 4.0 kit (ethernet router + software)	○	○
Board kit I/O external 16I + 16O with 8mt cable	○	○
Electrical panel on board	●	●
Electrical cabinet on the ground	–	–
Ground cabinet air conditioning	–	–
IML ready with high-voltage cable (high-voltage wiring for IML predisposition) (3)	–	–
PLC software integrated into the CNC	○	○
Off-line programming software	○	○

* 2 dedicated inputs to optional pneumatic AB axis

(3) Not compatible with electrical axis on the wrist.

Accessories

IMM connecting cable:

For Euromap 67 interface, available lengths [m]: 10 (●) 12 (○) 14 (○)

For JIS interface, available lengths [m]: 10 (○)

Electrowelded steel robot support base (●):

Available heights [mm]: 400, 500, 600

Adapter counter plate (-):

Euromap 18 hole pattern available: E7, E8-E9, E10, E11

NOTE: Custom supports and counter plate available on demand

Additional ground base to horizontal axis support(-):

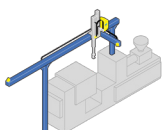
Pushbutton remote control panel for basic functions (○)

EVO console cable winder (○)

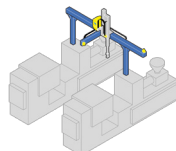
● Standard ○ Optional – Not available

SPECIAL CONFIGURATION

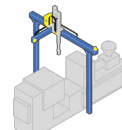
Longitudinal discharge application



Double IMM application



Portal application



Campetella Robotic Center Srl