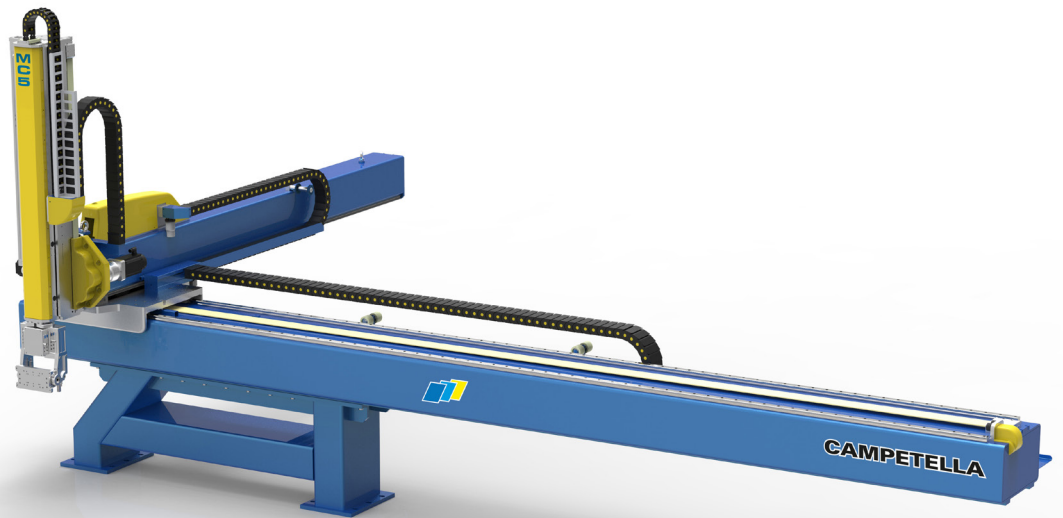


MC5^{EN}

X-Series



CAMPETELLA

Linear Robot MC5 X-Series evo

125
Years

our history, our strength

 **Campetella,**
the right way
to save energy.

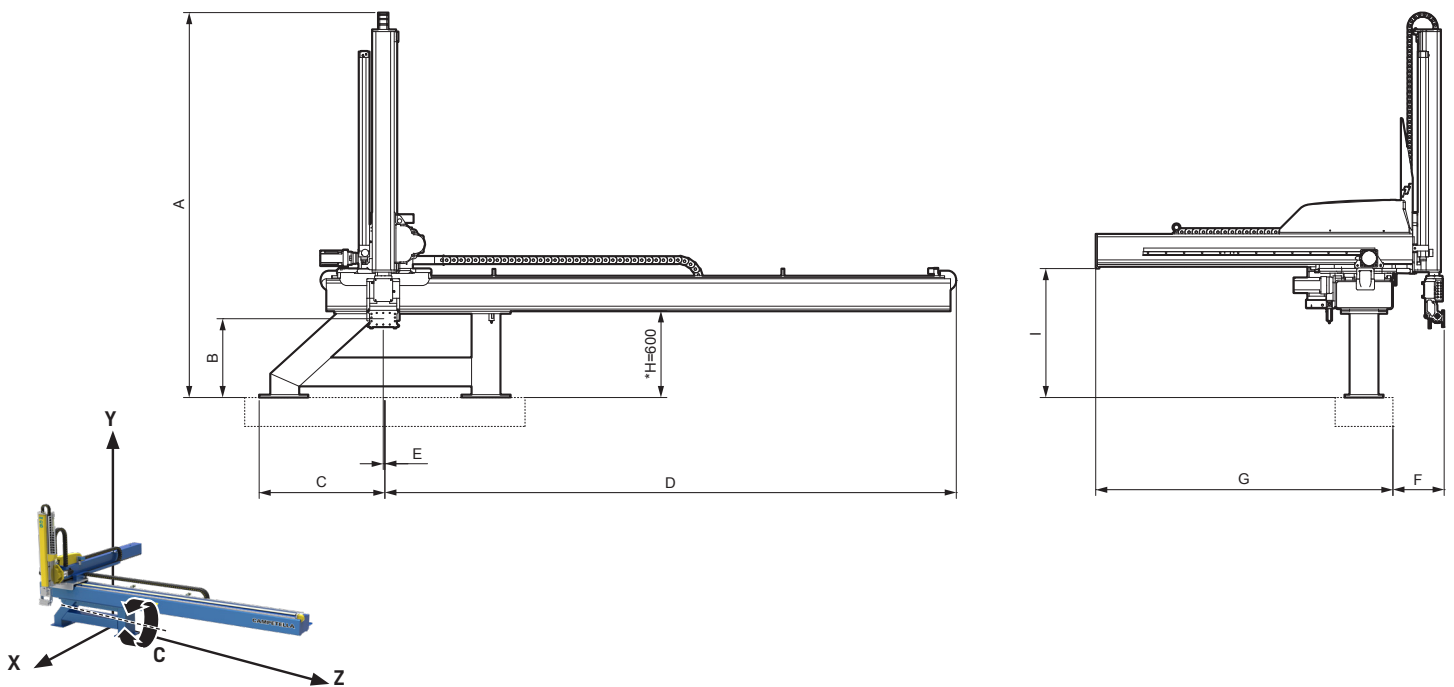
FOLLOW US:



Xseries
EVO

MC5 X-Series evo

| | MC5 - 1H | MC5 - 1T | MC5 - 2H | MC5 - 2T |
|---|---|----------------|----------------|----------------|
| Technical specifications: | | | | |
| Maximum Payload [kg]: | 60 | 40 | 60 | 40 |
| Vertical axis: | Telescopic(2x) | Telescopic(3x) | Telescopic(2x) | Telescopic(3x) |
| Vertical axis pneumatic balancing: | • | • | • | • |
| Z-axis stroke - Horizontal [mm]: | 4000 | 4000 | 5000 | 5000 |
| X - axis stroke - Extraction [mm]: | 2000 | 2000 | 2500 | 2500 |
| Y-axis stroke - Vertical [mm]: | 2400 | 2400 | 2800 | 2800 |
| 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]: | 0°+180° | | | |
| Pneumatic AB axis rotation [deg]: | 0°/90° o 0°/180° | | | |
| Electrical AB axis rotation [deg]: | 0°+360° | | | |
| Electrical B axis rotation [deg]: | 0° ± 340° | | | |
| Pneumatic C axis torque [Nm]: | 185 | 100 | 185 | 100 |
| Pneumatic AB axis torque [Nm]: | 72 | 36 | 72 | 36 |
| Electrical C axis torque [Nm]: | 45 | 43 | 45 | 43 |
| Electrical AB axis torque [Nm]: | 39 | 39 | 39 | 39 |
| Electrical B axis torque [Nm]: | 79 | 49 | 79 | 49 |
| Control unit: | Campetella EVO proprietary system | | | |
| Minimum cycle time with maximum load [s]: | 20 | | | |
| Electrical power supply: | 400-480 VAC • 50-60Hz • 3P+T | | | |
| Installed electrical power [kVA]: | 19,79 | | | |
| Pneumatic power supply [bar]: | 6 | 6 | 6 | 6 |
| Approximate weight [kg]: | 2.000 | | | |



| Model | A | B | C | D | E | F | G | H | I |
|---------|------|-----|-----|------|-----|-----|------|---|------|
| MC5-1-H | 2894 | 640 | 563 | 4560 | 550 | 430 | 3258 | * | 1006 |
| MC5-2-H | 3094 | 640 | 563 | 5593 | 550 | 430 | 3258 | * | 1006 |
| MC5-1-T | 2429 | 686 | 563 | 4560 | 550 | 520 | 3258 | * | 1006 |
| MC5-2-T | 2629 | 686 | 563 | 5593 | 550 | 520 | 3258 | * | 1006 |

The drawings refer to a robot with a pneumatic C-axis and support H = 600mm

*Available standard supports H = 700-800-900mm The dimensions A, B and I vary by difference according to the chosen support

| | MC5 - 1 H | MC5 - 1 T | MC5 - 2 H | MC5 - 2 T |
|--|-----------|-----------|-----------|-----------|
| 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 | ○ | ○ | ○ | ○ |

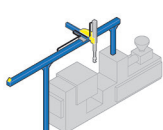
* 2 dedicated inputs to optional pneumatic AB axis

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

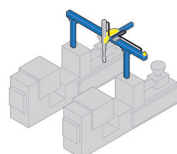
| | | | | |
|--|--|--|--|--|
| Accessories | | | | |
| IMM connecting cable: | | | | |
| For Euromap 67 interface, available lengths [m]: 12 (●) 14 (○) | | | | |
| For JIS interface, available lengths [m]: 10 (○) | | | | |
| Electrowelded steel robot support base (●): | | | | |
| Available heights [mm]: 700, 800, 900 | | | | |
| Adapter counter plate (○) : | | | | |
| Euromap 18 hole pattern available: E18 , E19 , E20 | | | | |
| NOTE: Custom supports and counter plate available on demand | | | | |
| Additional ground base to horizontal axis support (○): | | | | |
| EVO console cable winder (○) | | | | |
| ● Standard ○ Optional – Not available | | | | |

SPECIAL CONFIGURATION

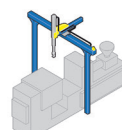
Longitudinal discharge application



Double IMM application



Portal application



Campetella Robotic Center Srl

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