

# NEW

# MOTOMAN HC30PL

## Human-Collaborative Robot 6 integrated Sensors

The MOTOMAN HC30PL is the largest cobot of the HC product family, with a remarkable payload of 30 kg, a maximum reach of 1,700 mm and outstanding repeatability. This makes the cobot an ideal choice for fenceless palletizing tasks, such as in end-of-line packaging applications. The food-grade grease also opens up further applications in the food and pharmaceutical industries. Due to the integrated torque sensors, the cobot can be used in human-robot collaboration without any protection fence. Plug&Play installation of grippers is facilitated by the ISO flange and configuration wizards on the Smart Pendant.

The MOTOMAN HC cobot series from Yaskawa was developed for easy entry into robotic automation. Besides the easy programming philosophy with hand guiding and direct teach buttons on the cobot's wrist, online tutorials and the application builder assists you in your robot automation journey. The convenient tablet-based Smart Pendant guides you intuitively through the individual steps – from programming to safety configuration, simple menus provide the perfect overview of your application. Simply set up the cobot, connect the manipulator with controller and peripherals, and you are ready to start programming. Various compatible and Plug&Play products – supplied by Yaskawa or partners of the Yaskawa Ecosystem – enable a fast and easy cobot installation in different application fields.



Controlled by  
**YRC1000**

Controlled by  
**YRC1000  
micro**

### KEY BENEFITS

#### Easy-to-use

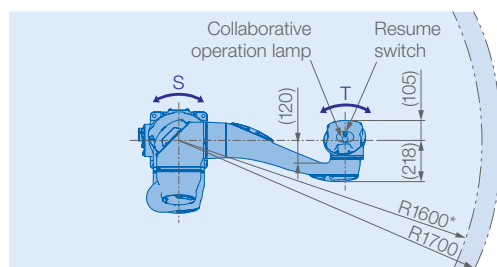
- Simple programming with Smart Pendant incl. Smart Frame and hand guiding
- Complex programming with Teach Pendant
- Pendants with standard 3-position enabling switch
- Wizard programming for applications and accessories
- Ecosystem of Plug&Play partner products
- ISO flange for easy connection of accessories
- Yaskawa simulation software MotoSim EG VRC

#### Smart safety

- PL d Cat. 3 certification with 25 safety-related hardware and software functions
- High-resolution torque sensors in each joint
- Easy configuration of the safety unit, such as definition of ranges, plains and precise envelopes for manipulator and gripper
- Two retract movements: Retract & Clamp Release function
- Pushback function for pushing the cobot away during operation

#### Industrial design for hybrid operation

- High payload and reach
- IP67 protection class with high-quality seals
- Food grade grease
- Robust aluminium cast in lightweight design
- Powerful Yaskawa 200 V servo drives
- Internal media routing
- Automatic calibration possible
- High speeds of up to 2,000 m/s
- Industrial control options YRC1000 and YRC1000micro



\* for over 27 kg payload

Connector for I/O Cable

2 x Ø 6H7, depth 6

50

4 x M6 x P1.0, depth 10

45°

25±0.04

25±0.04

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Diagram of the rear panel of the device. The panel features a central Ethernet port (RJ45) and a circular I/O port. Labels with arrows point to these ports:

- Connector for ethernet cable
- Connector for I/O cable

Technical drawing of the front view of a square flange. The drawing shows a square flange with a central circular hole and four smaller holes at the corners. Dimensions are given in millimeters (mm) with tolerances. The overall width and height are 260 mm. The distance from the center to the outer edge is 106 ± 0.1 mm. The distance from the center to the center of the corner holes is 153 ± 0.1 mm. The distance from the center to the center of the mounting holes is 130 ± 0.1 mm. The central hole has a diameter of 12H7 and a depth of 12. The corner holes have a diameter of 18 mm. The mounting holes have a diameter of 8H7.

2 x Ø 12H7,  
depth 12

4 x Ø 18  
(for installation)

\*\*\* The tolerance applies to Ø 8H7 holes

Mounting options: Floor  
IP Protection: IP67



Connector for ethernet cable



Specifications HC30PL						
Axes	Maximum motion range [°]	Maximum speed [°/s]	Allowable moment [Nm]	Allowable moment of inertia [kg · m²]	Controlled axes	6
					Max. payload [kg]	30
S	±210	80	–	–	Repeatability [mm]	±0.05
L	±180/–154	80	–	–	Max. working range R [mm]	1700 / 1600*
U	+247/–67	120	–	–	Temperature [°C]	0 to +40
R	±15	112	–	–	Humidity [%]	20 – 80
B	±15	132	–	–	Weight [kg]	140
T	±210	180	–	2.0	Power supply, average [kVA]	1.5

\* for over 27 kg payload

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All drawing dimensions in mm. Technical data may be subject to change without previous notice.  
Please request detailed drawings at [webenquiry@ragroup.com.au](mailto:webenquiry@ragroup.com.au) MOTOPAL-

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