

Reel evolution at your service: Collaborative robot, call this version — Yaskawa, HC10 palletizer — Conveniently design for easy operation by Roboman-pta - using Yaskawa HC10 for highest standard in stability and safety.

- Workspace:
- Pay load:
- Speed mode:
  - Collaborate mode 0,25m/sec
  - Hybrid mode5 times faster
- Customized:
  - o Gripper
  - Software standard
  - Soft-touch screen
  - Screen guidance
  - Vision check
  - Laser detection
  - Standards
- Benefits
  - Collaborate
  - o Hybrid speed
  - The best from both worlds
  - o Customized
  - Industrial quality
  - Proved and safe
- IPR

## 2x euro pallet (0,8x1,2) x height 1,2 meters 10 kg

#### Flexible solution without limits

Safety speed near humans

Speed with security enabled

#### Optimized for customer use

Magnetic, pneumatic, mechanic

Palletizing select work object dimensions

Operators menu – "what do you want now"

Robots info – "what you should do now"

Designed after your needs, placed in front

Mounted on gripper, find your parts

All Collaborative tools available

#### When your needs changes

Works with humans

Higher capacity

Collaborative mode and Hybrid speed

Wide range of solutions – at work

Result with nearly 50 years' experience, Yaskawa

In cooperation with Danish Technological institute

### **3 Patent Pending**



Roboman-pta is a company placed in the middle of the geographical robot heart of Denmark: "#we are robot heroes"

The product is based on the collaborative platform from the best robot supplier in the world; Yaskawa. Look at the video and be inspired - don't hesitate to call us.

Contact: Flemming Thinggaard +45 51952270

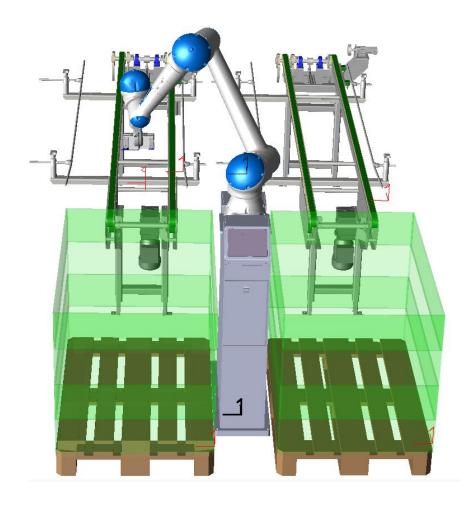
- it is human to get others to do the work –the robots do not disagree.



**Solutions with** On-Robot or Schunk grippers, ask for more information.



**Simulation:** to ensure the right solution, send us a stp-file or similar (your parts), and a small project description – and we will respond to you.





## **YASKAWA**

# MOTOMAN HC10, HC10DT

Human-Collaborative Robot 6 integrated Torque Sensors







www.yaskawa.au.com

MOTOMAN HC10 is a 6 axes human-collaborative robot with a payload of up to 10 kg. Operator's safety is assured by a Power and Force Limit technology that stops the robot in case of contact with an operator.

The robot arm can be hand guided by an operator and robot positions and gripper operation can be registered via so called "Easy Teaching Switch Box". These teatures offer time saving during the robot programming. The robots arm geometry was designed to avoid pinch points (finger).

The MOTOMAN HC10 robot can operate without additional protective measures like a safety fence, depending on the risk assessment. This saves space and costs, its installation area is very flexible and therefore able to operate at different workplaces.

#### KEY BENEFITS

#### Controller

- Fully industrial robot controller
  - YRC1000 for HC10 and HC10DT
- YRC1000micro for HC10DT

#### High safety

- Contact force between operator and robot is limited to a safe level
- Arm geometry designed to avoid pinch points (finger protection)
- 8afety standards applications for industrial robots: ISO 10218-1 (5.10.5 Power and Force limiting)
- Complies to ISO TS 15066
- Satety functions industrial robot controller: ISO 13849-1, PLd, Cat. 3
- · Functional Safety Unit Included

#### Easy teaching

 Move the robot arm directly via hand guiding function: easy teaching mode with a switch box

#### No safety fence

 Depending on the application, the HC10 can be used without a safely fence

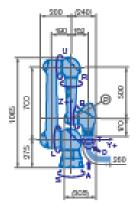


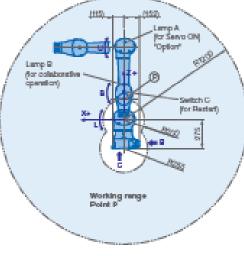


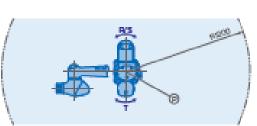


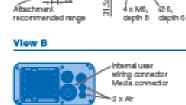
#### MOTOMAN HC10DT







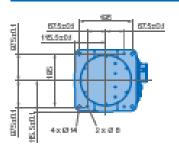




200

#### View C

View A



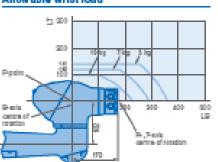
Mounting options: Floor, celling, wall, tith " slow in condition of angle - see (activities)

Robot installation angle © [deg.]	S-axis spectring range [deg.]
0 < 0 4 60	no limit
50 < 0	within s80

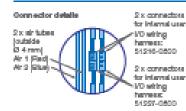




#### Allowable wrist load



#### View D



Opecifications HO 10 DT							
Acces	Heatmun Heatmun speed [*] (**vec.)		Allowable recovers:	Allowable moment of inertia	Controlled stee	6	
		[Hn]	[log · m <sup>2</sup> ]	Mex. payload [kg]	10		
0	±180	130	-	-	Repostability [mm]	20.1	
L	±180	130	-	-	Hex. working range R [mm]	1200	
U	+955'-5	180	-	-	Temperature [*0]	0 to +40	
R	±180	180	25.3	0.79	Humidity [94]	20 - 80	
	±180	250	25.3	0.79	Weight [kg]	45	
T	2180	250	9.8	0.1	Power supply, everage [KVA]	1	