

Three-position device

HD5-B

HD5 is a three-position device developed to meet most demands of the Food and Beverage industry.

A three-position device is used to allow a limited movement of the machine when the operator is in the dangerous area, for example during troubleshooting, test running and programming. The operator pushes the larger black button to a middle position in order to allow a movement. In case of danger, the operator will either release the button or squeeze it to its bottom position and the machine will stop.

The housing of the HD5 is made of PPh, that not only is approved for contact with foodstuff, but also resists the most commonly used chemicals during cleaning in the Food and Beverage industry. Without sharp edges, there are no places where dirt and bacteria can be accumulated. The construction of the HD5 prevents condensation inside the product when subject to temperature changes in a wet environment. The PPh used is fiberglass reinforced to prevent breakage and minimize risk of small broken bits falling in the foodstuff.



Safety and protection

Safe inspection

Up to PL e/Cat 4, with TÜV and cULus approval.

Home position sensor to detect when the device is out of its holder.



Optimum interface

Ergonomic, flexible and suitable for Food and Beverage

HD5 is easy to operate with additional buttons, Integrated emergency stop button and flash-light.

Housing material minimizes risk of breakage and is approved for contact with foodstuff.

No places where dirt and bacteria can be accumulated.



Continuous operation

Avoid unnecessary process stops

HD5 allows the operators to safely inspect the manufacturing process without completely stopping the machine. Resistant to most cleaning fluids and chemicals in Food and Beverage.

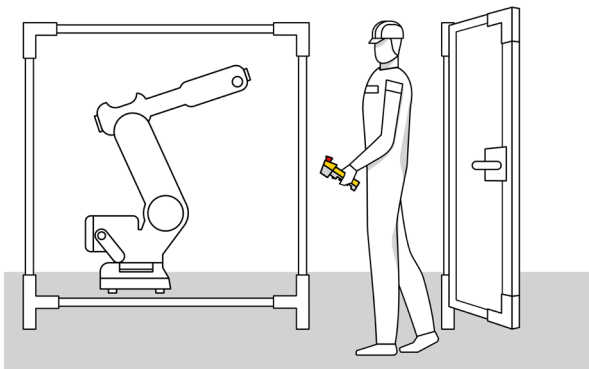
Applications and features

HD5-B

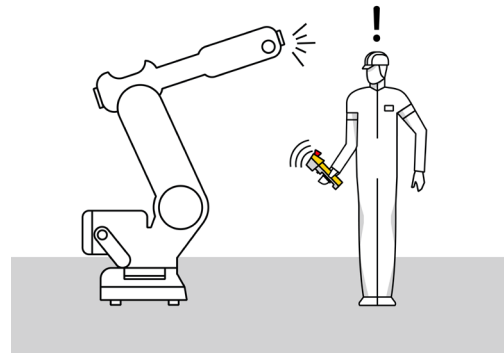
Applications

Safe troubleshooting, programming and testing

If the operator has to enter a risk area for troubleshooting or test running, it is extremely important that he/she is able to stop the machinery without having to rely on someone else pushing a stop button. In addition, no-one else should be able to start the machinery after it has been stopped by the operator. An operator who is under pressure must also be able to give a stop signal, whether in panic he/she pushes harder on the button or just releases it.



HD5 three-position control device can be used for troubleshooting, programming and test running in situations where no other protection is available or feasible. HD5 allows the operator to safely inspect the process without completely stopping the machine. The big black button has 3 distinct positions: released, pressed gently and pressed hard. The middle position allows the machine to run with limited speed or range, but when released or pressed hard the machine stops.



Features

Integrated AS-i technology

HD5 operates in standard-addressing mode, in accordance with the V.3.0 specification.

One green and one red LED indicate the status of the slave on the AS-i Bus.

Indication LEDs

Green and a red high intensity LEDs are integrated in the top of the housing. Their function is user-defined and they can be used, e.g. to indicate whether the three-position device is in the middle position or not. They are controlled via the AS-i bus.

Front button and top buttons

The function of the additional buttons is user-defined. They can be used, e.g. for a start/stop function for individual movements etc. They are controlled via the AS-i bus.

Flashlight

An integrated flashlight can be used to help e.g. troubleshooting in dark spaces. Its function is user-defined and controlled via the AS-i bus.

Home position sensor

Used with an active holder, this sensor detects whether the HD5 is in place in its holder. The signal from the sensor is transmitted via the AS-i Bus.

Emergency stop button with integrated LED in housing

Some models are fitted with an emergency stop button and two rows of LEDs are integrated into the housing of the HD5, below the emergency stop button, one green and one red. They are controlled via the AS-i bus.

Ordering information

HD5-B



HD5-B-101

HD5 ordering information

Features	Emergency stop	Type	Order code
AS-i communication One front additional button Two top additional buttons Sensor home position Assist LED	Yes	HD5-B-101	2TLA920502R0003
M12-5 male connector	No	HD5-B-102	2TLA920502R0004



HD5-B-102

HD5 accessories

Description	Type	Order code
Active holder	HD5-M-001	2TLA920509R0001
Passive holder	HD5-M-002	2TLA920509R0002
5 m cable with M12-5 female connector, no shield	M12-C51-ASi	2TLA910093R0000
2,5 m spiral cable with M12-5 female connector, no shield	M12-C251S-ASi	2TLA910094R0000

Note: always use cables without additional shielding in order to prevent interference.





HD5-M-001

Technical data

HD5-B

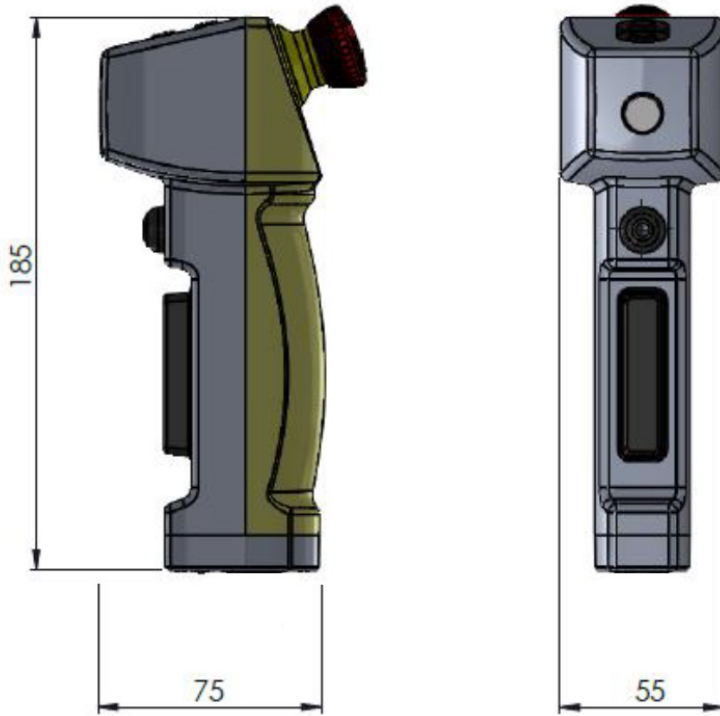
Technical data

Approvals	 
Conformity	CE 2006/42/EC - Machines 2014/30/EU - EMC 2011/65/EU - RoHS 2 2015/863/EU - RoHS 3 EN ISO 12100-1:2010, EN ISO 13849-1:2015, EN 62061:2015, EN 60204-1:2006+A1:2009
Functional safety data	
Three-position switches	Up to PL e, category 4, SILCL3
Emergency stop button	B _{10d} : 2 000 000 released to middle to released position B _{10d} : 968 000 middle to end to middle position
EN ISO 13849-1:2016	B _{10d} : 250 000
Electrical data	
Operational voltage	30 VDC, AS-i Bus, tolerance 26 - 31.6 VDC
Overall power consumption	< 150 mA
Connection	M12-5 male connector, A-coded
Actuating force	
Three-position button	Approx. 20 N from release to middle position Approx. 45 N from middle to end position
Additional buttons	Approx. 3 N for front button Approx. 7 N for top button
Mechanical data	
Operating temperature	- 10 ... +50 °C (no icing, no direct sunlight)
Protection class	IP65
Weight	Approx. 0.2 kg without connection cable
Material	
Housing	Fiberglass reinforced plastic, PPh + 30% glass fibre
Holders	Fiberglass reinforced plastic, PPh + 30% glass fibre
Operating buttons	TPE

Dimension drawings

HD5-B

Dimension drawings



HD5-B-101

All dimensions in mm

Contact us

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