

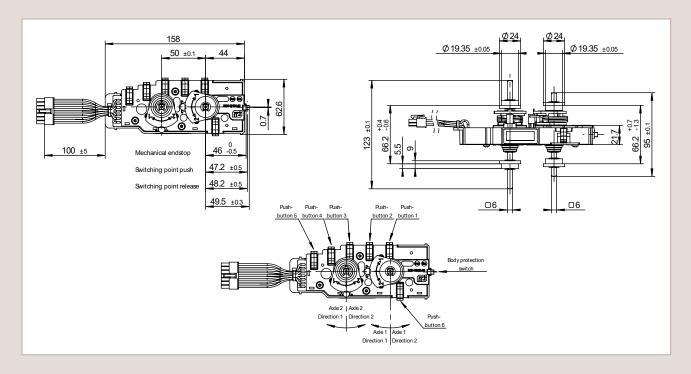
## INTEGO COMBI TRACTION SWITCH

The unique INTEGO combi traction switch combines all the main tiller head functions in one unit: Besides the classic traction switch function when driving, the body protection switch function and, depending on the version selected, additional functions such as the horn and analogue or digital lifting/lowering can be implemented. Two additional digital functions round off the range of functions. Thus, INTEGO constitutes the central unit of a customer-specific tiller head, which can cover all functions depending on the option selected.

- Integration of all the main tiller head functions
- Non-contacting Hall-effect technology
- One or two analogue functions via 6 mm square shafts
- Up to five digital functions using the upper pushbuttons
- One digital function using the lower pushbutton
- · Optimised for use with combi controllers
- Optional CANopen interface
- Protection class: IP 68
- Ideal for the design of customer-specific tiller heads



## Dimensions [mm]



Technical data		
Operation elements		
Technology	Contactless via Hall sensors	
Electrical data		
Voltage supply (Ub)	16.8 to 31.2 VDC	
Analogue outputs	Characteristic curve (single- ended signal): 0.5 – 4.5 V Max. 1 mA	
Digital outputs	Switch to Ub (without internal pull-down) max. 50 mA	
Connector system	Molex Mini-Fit Jr. 14-pin. (39-01-2140)	
Mechanical data		
Mechanical angle of rotation	± 45°	
Operating conditions		
Operating temperature range	-30°C to +50°C	
Protection class according to EN 60529	IP 68 (except for the Molex plug-in connector)	

## Version

Axle 2 and pushbuttons 1 - 6 can be optionally selected.

\*) Pushbuttons 4 + 5 not available in combination with axle 2.

Customer-specific axle lengths are possible with corresponding purchase quantity.

Order data	
Part No.	Designation
3105-00190-XX	The INTEGOaccelerator switch is configured
	in a customer-specific manner

Connector pin assignment Molex Mini-Fit Jr. 14-pin. (39-01-2140)	
PIN number	Role
1	_
2	Axle 2, direction 2 / pushbutton 5 *)
3	Personal protection switch
4	Pushbutton 6
5	Axle 1, direction 1
6	Pushbutton 3
7	GND
8	Analogue output 0.5 – 4.5 V (axle 1)
9	Analogue output 0.5 – 4.5 V (axle 2)
10	Pushbutton 1
11	Axle 1, direction 2
12	Pushbutton 2
13	Axle 2, direction 1 / pushbutton 4 *)
14	+Ub (24 V)

Axle 2 and pushbuttons 1 - 6 can be optionally selected.
\*)Pushbutton 4 + 5 not available in combination with axle 2.

## Characteristic curve (single-ended signal)

