



**walvoil**  
MOTION BY PEOPLE

NEW

**HJW**

Heavy Duty Joystick

**HJW  
JOYSTICK**

- Hall effect contactless sensor
- Suitable for Safety application
- Rugged construction suitable for all Walvoil handles
- Electromagnetic detent option



Thanks to its strong mechanical structure and advanced electronic design, this new Hall Effect joystick is suitable for harsh environments and safety applications. The joystick mechanical and electrical life reaches 3 million cycles on each axis.

It is possible to customize the actuating force and the pre-feeling of each axis with the 4 independent plungers and springs.

With the Deutsch connectors and the electronic board potted with resin, the joystick base is completely sealed (IP67/IPx9K).

As option the electromagnetic detent of each axis, is available. With the high number of input pins, the electronic board can collect all the signals of the handle (thumbwheels, push buttons, rocker switches, ...) and send them over the CANbus network with SAE J1939, CanOpen, CanOpen Safety or ISOBUS protocol. The electronic board of the joystick is designed with Hardware Category 2 and is capable of reach Performance Level D / SIL 2.

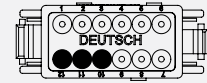
## WORKING CONDITIONS



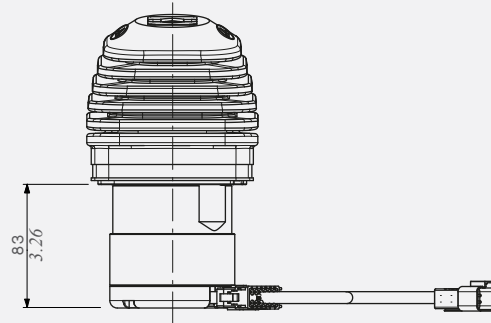
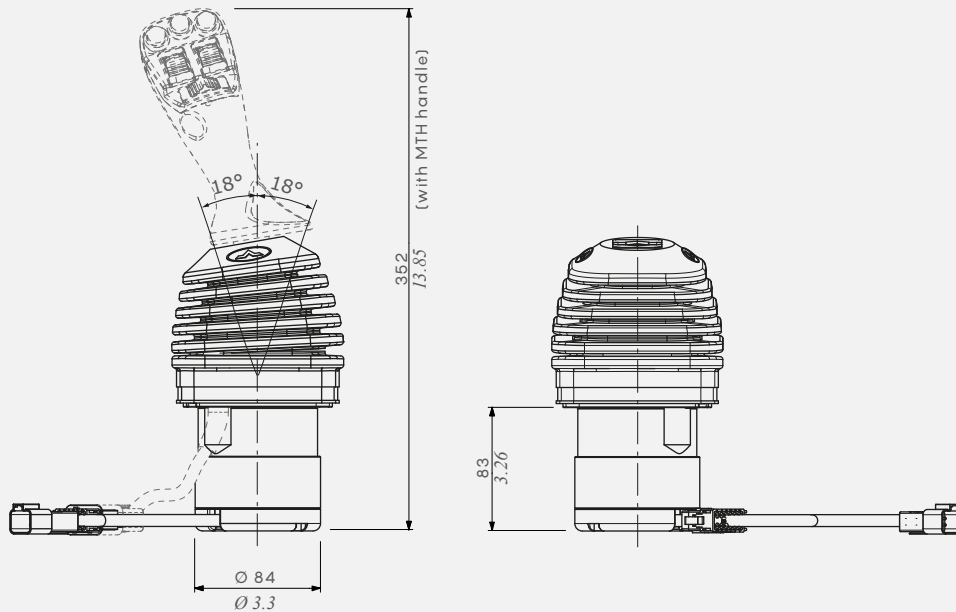
	Electrical Specifications	
Supply voltage (VBB)	from 8 to 32 V	
Max. supply current	Without grip	100 mA (no load)
CANbus Output	SAEJ1939, CanOpen, CanOpen Safety, ISOBUS	
	Mechanical specifications	
Mechanical and Electrical life	3.000.000 cycles	
Lever angle	Operation	±18° for axis
	Environmental specifications	
Temperature operating	from -40° C to 85° C <i>from -40° F to 185° F</i>	
Storage temperature	from -40° C to 100° C <i>from -40° F to 212° F</i>	
Weather protection	IP 67/IPx9K	
EMC	according to ISO 14982 /13766	

DIMENSIONAL DATA

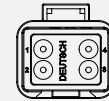
PINOUT C3 CONNECTOR  
DEUTSCH DTM06-12SA



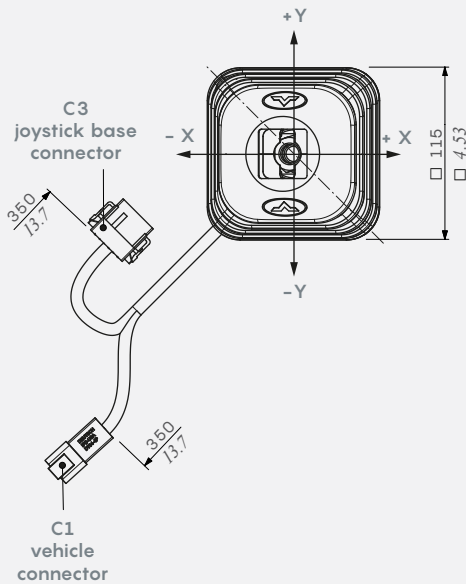
PIN	COLOR	FUNCTION
1	White/blue	5V out
2	Brown	GND
3	White	Analog input 1
4	Red	Analog input 2
5	Orange	Analog input 3
6	Yellow	Analog input 4
7	Green	Analog input 5
8	Grey	Analog input 6
9	Blue	Analog input 7
10	-	Not connected
11	-	Not connected
12	-	Not connected



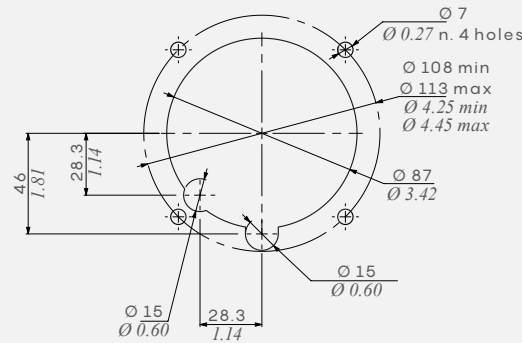
PINOUT C1 CONNECTOR  
DEUTSCH DT04-4P



PIN	COLOR	FUNCTION
1	Red	VBB
2	Yellow	CAN_H
3	Green	CAN_L
4	Black	GND



Fixing hole



Joystick axes actuation forces  
[typical example]

