

# NEW

## HJW

Heavy Duty Joystick

 walvoil



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FLUID POWER E|MOTION



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## Heavy Duty Joystick



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.

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

### Working conditions

#### Electrical specifications

Supply voltage (VBB)	From 8 to 32 V
Max. supply current	without grip 100 mA (no load)
CAN bus Output	SAEJ1939, CanOpen, CanOpen Safety, ISOBUS

#### Mechanical specifications

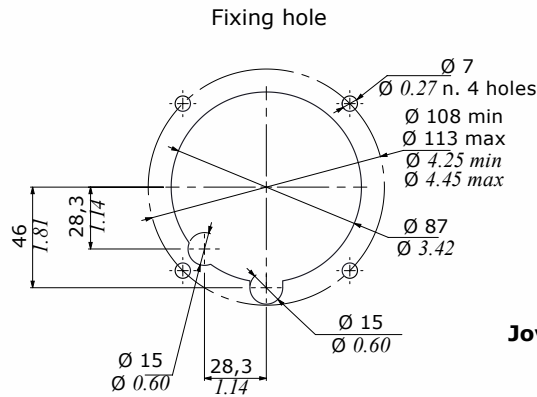
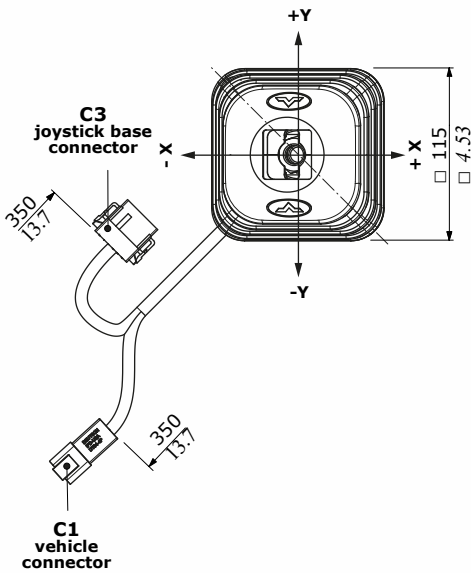
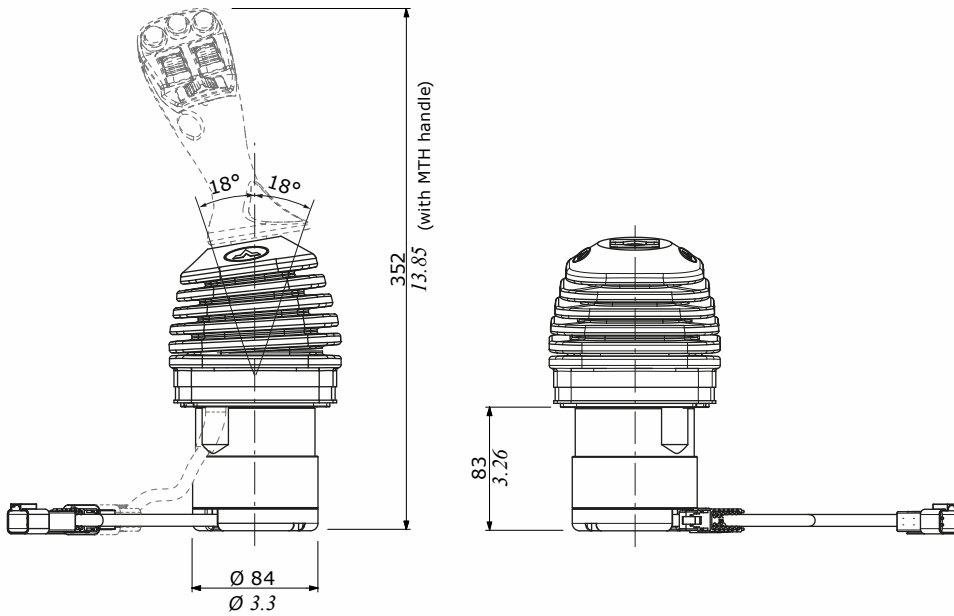
Mechanical and Electrical life	3.000.000 cycles
Lever angle	operation $\pm 18^\circ$ for axis

#### Environmental specifications

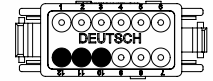
Temperature operating	from $-40^\circ\text{C}$ to $85^\circ\text{C}$ - from $-40^\circ\text{F}$ to $185^\circ\text{F}$
Storage temperature	from $-40^\circ\text{C}$ to $100^\circ\text{C}$ - from $-40^\circ\text{F}$ to $212^\circ\text{F}$
Weather protection	IP 67/IPx9K
EMC	according to ISO 14982 /13766

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## Dimensions and pin-out connectors

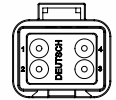


PINOUT C3 CONNECTOR  
DEUTSCH DTM06-12SA



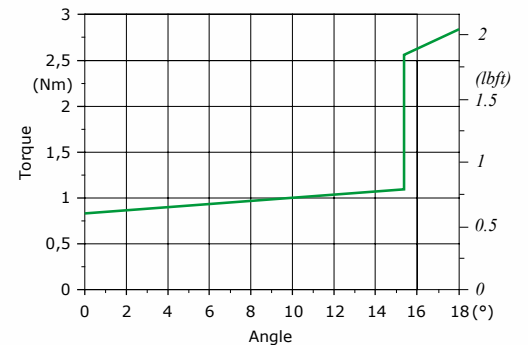
PIN	COLOR	FUNCTION
1	White/blue	5V out
2	Brown	GND
3	White	Analog input 1
4	Red	Analog input 2
5	Orange	Analog input 3
6	Yellow	Analog input 4
7	Green	Analog input 5
8	Grey	Analog input 6
9	Blue	Analog input 7
10	-	Not connected
11	-	Not connected
12	-	Not connected

PINOUT C1 CONNECTOR  
DEUTSCH DT04-4P



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

Joystick axes actuation forces  
(typical example)



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