

# ***COP-05 Joystick Panel (Kwant Controls)***

## ***Hardware Module Description***

Kongsberg Maritime Part no.304849



307003/A  
January 2007

## Document history

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### Note

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### Comments

To assist us in making improvements to the product and to this manual, we welcome comments and constructive criticism.

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## **1 OVERVIEW**

The COP-05 Joystick Panel contains a three-axis joystick used in DP systems. The joystick has three potentiometers that work in the three axis.

## 2 CONFIGURATION

The illustration below shows the front layout of the COP-05 Joystick Panel.

*Figure 1 Front layout of the COP-05 Joystick Panel*



### 2.1 Joystick connector

The joystick connector is a twelve-terminal, tension spring connector with plugable header. The header can be locked to the connector body by one screw at each end of the header.

*Table 1 Joystick connector terminal allocation*

Pin no.	Name	Colour	Function	
1	VCC	brown	+5 Vdc for potentiometer	x-axis
2	GND	orange	0 Vdc for potentiometer	
3	-	-	Not connected	
4	Wiper	red	Potentiometer wiper (0–5 V)	y-axis
5	VCC	orange	+5 V	
6	GND	brown	0 Vdc for potentiometer	
7	-	-	Not connected	z-axis
8	Wiper	red	Potentiometer wiper (0–5 V)	
9	VCC	1	+5 V	
10	GND	2	0 Vdc for potentiometer	z-axis
11	-	-	Not connected	
12	Wiper	yellow/green	Potentiometer wiper (0–5 V)	

### 3 TECHNICAL SPECIFICATIONS

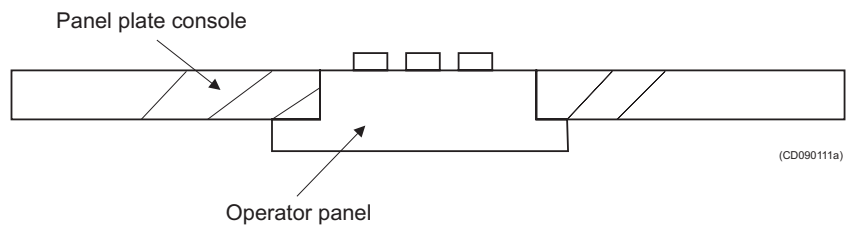
Table 2 Technical specifications

<b>Connectors</b>	
Analog output	Weidmüller BLZF 3.5/12/180F SN SW
<b>Potentiometers</b>	
X-axis and Y-axis	Novotechnik SP2801-A502 (5kohm)
Z-axis	Bourns 6539S (2kohm)
<b>Mechanical specification</b>	
Size with joystick (WxHxD) Diameter	120 x 120 x 155 mm 110 mm
Size without joystick (WxHxD) Diameter	120 x 120 x 55 mm 110 mm
Weight	1.103 kg
IP	IP22
<b>Environmental requirements</b>	
Operating temperature	0 to +55 °C
Refer to Kongsberg Maritime Environmental Specification, reg. no.: 848-161011	
<b>Life cycle specifications</b>	
MTBF	not yet available

## 4 INSTALLATION

### 4.1 Mechanical preparation before installation

- 1 Make a cut-out in the panel plate according to dimensions shown in the drawing 308830 attached.
- 2 Attach bolts to the panel plate on its rear side for the four fixing nuts of the COP-05 Joystick Panel.



### 4.2 Electrical installation

- 1 Place the COP-05 Joystick Panel in its position and fasten the four nuts attaching the COP-05 Joystick Panel to the panel plate.
- 2 Connect the joystick connector to the appropriate panel.
- 3 Provided the corresponding operator station (computer and monitor) is up and running, verify that the joystick is functioning OK.
- 4 Calibrate the joystick as described in the *DP Operator Manual*.



## 5 REPLACEMENT

- 1 Remove bolts that fixes the panel plate to its console body.
- 2 Place the panel plate in a position you can gain access on both sides.
- 3 Remove the joystick connector from the panel it is connected to.
- 4 Release the four nuts attaching the COP-05 Joystick Panel to the panel plate.
- 5 Lift the COP-05 Joystick Panel out of the panel plate.
- 6 Label the old joystick panel with its error symptoms and put it aside.
- 7 Place the COP-05 Joystick Panel in its position and fasten the four nuts attaching the COP-05 Joystick Panel to the panel plate.
- 8 Reconnect the joystick connector to the appropriate panel.
- 9 Provided the corresponding operator station (computer and colour monitor) is up and running, verify that the COP-05 Joystick Panel is functioning OK.
- 10 Calibrate the joystick as described in the *DP Operator Manual*.

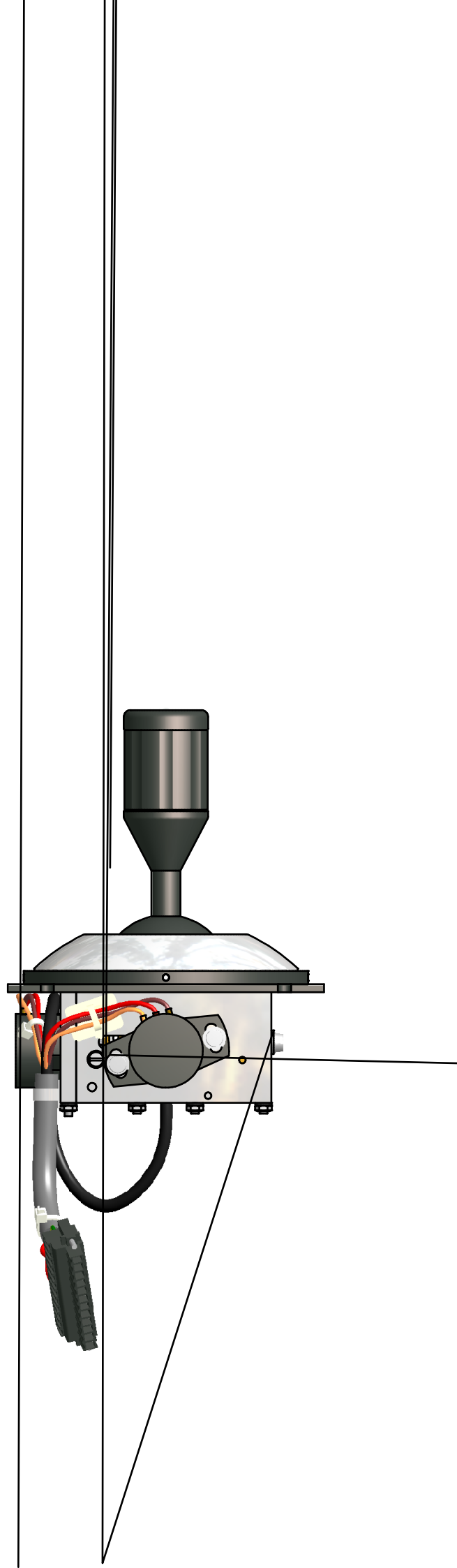
## **6 ATTACHMENT**

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JOYSTICK KC 06-K

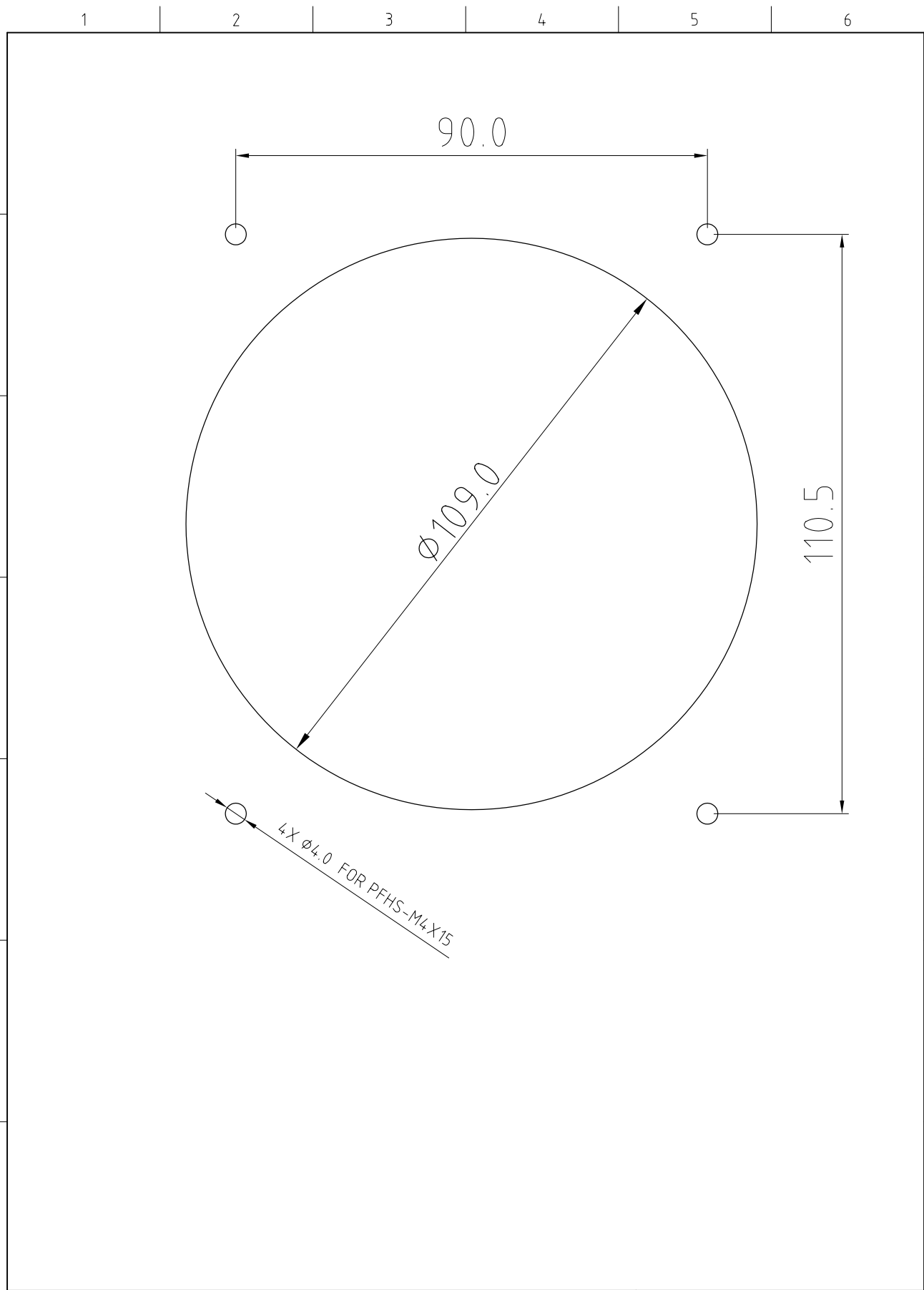
**308830/A**


CUTOUT, JOYSTICK KC 06-K





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