

MO391 & 387 JOYSTICK

MO391+387
Midi Joystick

- Valittavissa useilla eri painikkeilla ja ohjaimilla
- Kaksiakselinen täysi liikerata
- Analogiset ja CAN versiot
- IP67



TUOTEKUVAUS

Midi joystick perustuu kontaktittomaan Hall mittausperiaatteeseen ja tarjoaa täysin redundanttisen rakenteen. Joystickin kaksiakselinen liikerata on 20 astetta joka suuntaan ja se palautuu automaattisesti keskiasentoon.

Joystick kahvassa on monikäyttöinen ja modulaarinen rakenne. Kahvaosaan voidaan valita useita eri painikkeita sekä rullaohjain ja microjoystick vaihtoehtoja.

Lähdöistä on valittavissa CAN versiot (CAN J1939- tai CANopen) tai analogiset versiot. Ulostulosignaali voidaan ohjelmoida asiakkaan tarpeiden mukaan. Käyttöjännite voi olla 5 V tai 8–32 V. Joystickin kotelointi täyttää IP67-suojausluokan vaatimukset. Liitinvaihtoehtoina ovat 8-napainen Deutsch ja 18-napainen Molex liitin.

Analog

MO 391&387 -	H1X - Hardware	X - Axis of Actuation	PXXX - Program	X - Rear	XX Front Panel
	H10 - S:5V ; O:0-5V Analog Voltage or PWM Output	0 - 2 Axis Full	P001 - Dual Cross	0 - Without Button - Presence Det. Switch	A0 - No push button
	H11 - S:5V ; O:0-32V PWM Low Side Output		*	1 - With Button - Without Presence Det. Switch	A1 - 1 Push Button
	H12 - S:8-32V ; O:0-5V Analog Voltage or PWM Output			2 - Without Button- With Presence Det. Switch	A2 - 2 Push Buttons
	H13 - S:8-32V ; O:0-32V PWM Low Side Output			3 - With Button - Presence Det. Switch	A3 - 3 Push Buttons
	H14 - S:12-32V ; O:0-10V Analog Voltage Output				A4 - 4 Push Buttons
	H15 - S:12-32V ; O:4- 20mA Analog Current Output				A5 - 5 Push Buttons

MO 391&387 -	H1X - Hardware	X - Axis of Actuation	PXXX - Program	X - Rear	XX Front Panel
	H16 - S:8-18V ; O:8-18V PWM or ON/OFF High Side Output (1.5A/Ch)				B1 - 1 Thumbwheel Left Vertical with No Push Button
	H17 - S:8-32V ; O:8-32V PWM or ON/OFF High Side Output (1.5A/Ch)				B2 - 1 Thumbwheel Left Vertical with 1 Push Button
	H18 - S:8-18V ; O:0-5V Analog Voltage Output with Neutral Position (1.5A/Ch) and Direction High Side Outputs (1.5A/Ch)				B3 - 1 Thumbwheel Left Vertical with 2 Push Buttons
	H19 - S:8-32V ; O:0-5V Analog Voltage Output with Neutral Position (1.5A/Ch) and Direction High Side Outputs (1.5A/Ch)				B4 - 1 Rocker Left Vertical with No Push Button
	*				B5 - 1 Rocker Left Vertical with 1 Push Button
					B6 - 1 Rocker Left Vertical with 2 Push Buttons
					B7 - 1 Toggle Left Vertical with No Push Button
					B8 - 1 Toggle Left Vertical with 1 Push Button
					B9 - 1 Toggle Left Vertical with 2 Push Buttons
					C1 - 1 Thumbwheel Right Vertical with No Push Button
					C2 - 1 Thumbwheel Right Vertical with 1 Push Button
					C3 - 1 Thumbwheel Right Vertical with 2 Push Buttons
					C4 - 1 Rocker Right Vertical with No Push Button
					C5 - 1 Rocker Right Vertical with 1 Push Button
					C6 - 1 Rocker Right Vertical with 2 Push Buttons
					C7 - 1 Toggle Right Vertical with No Push Button
					C8 - 1 Toggle Right Vertical with 1 Push Button
					C9 - 1 Toggle Right Vertical with 2 Push Buttons
					D1 - 1 Thumbwheel Horizontal with No Push Button

MO 391&387 -	H1X - Hardware	X - Axis of Actuation	PXXX - Program	X - Rear	XX Front Panel
					D2 - 1 Thumbwheel Horizontal with 1 Push Button
					D3 - 1 Thumbwheel Horizontal with 2 Push Buttons
					D4 - 1 Rocker Horizontal with No Push Button
					D5 - 1 Rocker Horizontal with 1 Push Button
					D6 - 1 Rocker Horizontal with 2 Push Buttons
					D7 - 1 Toggle Horizontal with No Push Button
					D8 - 1 Toggle Horizontal with 1 Push Button
					D9 - 1 Toggle Horizontal with 2 Push Buttons
					E1 - Thumbwheel / Thumbwheel
					E2 - Thumbwheel / Rocker
					E3 - Thumbwheel / Toggle
					E4 - Rocker / Thumbwheel
					E5 - Rocker / Rocker
					E6 - Rocker / Toggle
					E7 - Toggle / Thumbwheel
					E8 - Toggle / Rocker
					E9 - Toggle / Toggle
					F1 - 1 Micro Joystick
					G1 - 1 Micro Joystick Left with 1 Push Button
					G2 - 1 Micro Joystick Left with 2 Push Buttons
					H1 - 1 Micro Joystick Right with 1 Push Button
					H2 - 1 Micro Joystick Right with 2 Push Buttons

CAN

MO 391&387 - H20 -	SXX - CAN Protocol	X - Node ID <i>J1939 - CANopen</i>	X - Axis of Actuation	PXXX - Program	X - Rear	XX Front Panel
	S10 - SAE J1939	A - <u>128(80h)</u> - <u>4(04h)</u>	0 - 2 Axis Full	P001 - Dual Cross	0 - Without Button and Present Det. Switch	A0 - No push button

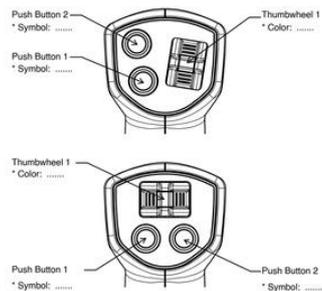
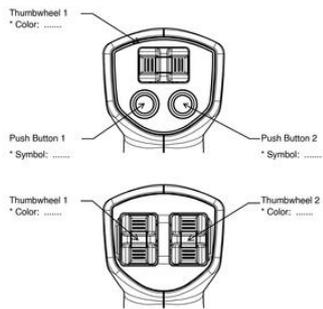
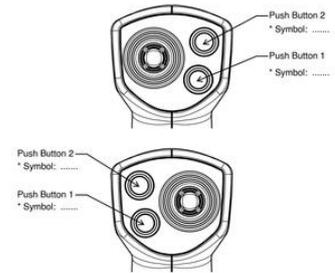
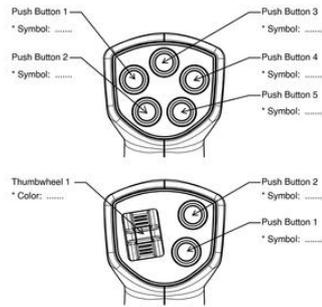
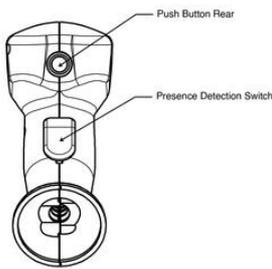
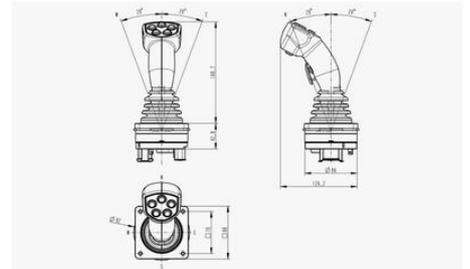
MO 391&387 - H20 -	SXX - CAN Protocol	X - Node ID <i>J1939 - CANopen</i>	X - Axis of Actuation	PXXX - Program	X - Rear	XX Front Panel
	S11 - CANopen	B - 129(81h) - 5(05h)		*	1 - With Button - Without Present Det. Switch	A1 - 1 push button
	*	C - 130(82h) - 6(06h)			2 - Without Button- With Present Det. Switch	A2 - 2 push button
					3 - With Button and Present Det. Switch	A3 - 3 push button
						A4 - 4 push button
						A5 - 5 push button
						B1 - 1 Thumbwheel left vertical with no push button
						B2 - 1 Thumbwheel left vertical with 1 push button
						B3 - 1 Thumbwheel left vertical with 2 push button
						B4 - 1 Rocker left vertical with no push button
						B5 - 1 Rocker left vertical with 1 push button
						B6 - 1 Rocker left vertical with 2 push button
						B7 - 1 Toggle left vertical with no push button
						B8 - 1 Toggle left vertical with 1 push button
						B9 - 1 Toggle left vertical with 2 push button
						C1 - 1 Thumbwheel right vertical with no push button
						C2 - 1 Thumbwheel right vertical with 1 push button
						C3 - 1 Thumbwheel right vertical with 2 push button
						C4 - 1 Rocker right vertical with no push button
						C5 - 1 Rocker right vertical with 1 push button
						C6 - 1 Rocker right vertical with 2 push button
						C7 - 1 Toggle right vertical with no push button
						C8 - 1 Toggle right vertical with 1 push button
						C9 - 1 Toggle right vertical with 2 push button

MO 391&387 - H20 -	SXX - CAN Protocol	X - Node ID <i>J1939 - CANopen</i>	X - Axis of Actuation	PXXX - Program	X - Rear	XX Front Panel
						D1 - 1 Thumbwheel horizontal with no push button
						D2 - 1 Thumbwheel horizontal with 1 push button
						D3 - 1 Thumbwheel horizontal with 2 push button
						D4 - 1 Rocker horizontal with no push button
						D5 - 1 Rocker horizontal with 1 push button
						D6 - 1 Rocker horizontal with 2 push button
						D7 - 1 Toggle horizontal with no push button
						D8 - 1 Toggle horizontal with 1 push button
						D9 - 1 Toggle horizontal with 2 push button
						E1 - Thumbwheel / Thumbwheel
						E2 - Thumbwheel / Rocker
						E3 - Thumbwheel / Toggle
						E4 - Rocker / Thumbwheel
						E5 - Rocker / Rocker
						E6 - Rocker / Toggle
						E7 - Toggle / Thumbwheel
						E8 - Toggle / Rocker
						E9 - Toggle / Toggle
						F1 - 1 Micro Joystick
						G1 - 1 Micro Joystick left with 1 push button
						G2 - 1 Micro Joystick left with 2 push button
						H1 - 1 Micro Joystick right with 1 push button
						H2 - 1 Micro Joystick right with 2 push button

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TEKNISET TIEDOT

IP-luokka	IP67
Käyttölämpötila-alue	-40 - 85 °C
Liikerata	20°
Lähdöt	CAN / Analog / PWM
Pituus	212 mm
Syöttöjännite	5V tai 8-32V



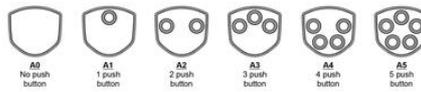
1 Thumbwheel Right (Vertical) with Push Button



1 Thumbwheel (Horizontal) with Push Button



Push Button



1 Thumbwheel Left (Vertical) with Push Button

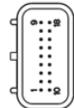


DEUTSCH CONNECTOR

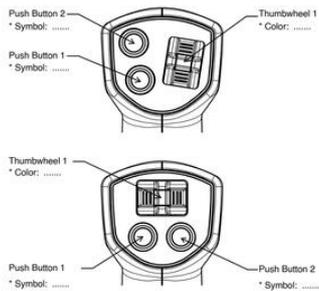
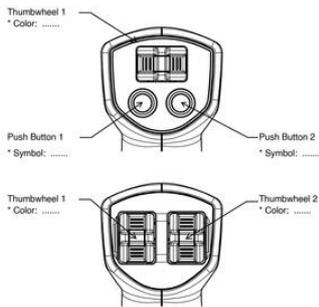
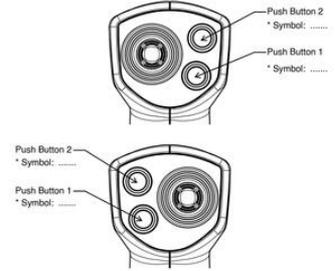
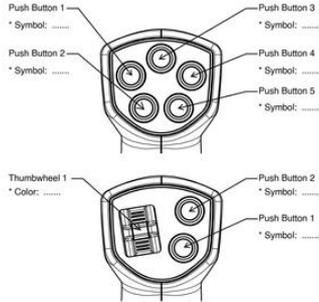
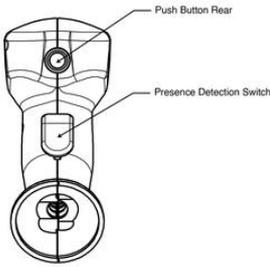
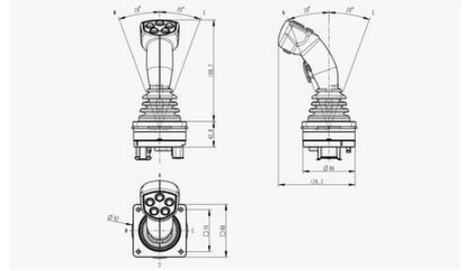


Mating Connector : DT 06-08SA

TYCO CONNECTOR



Mating Connector : TE 2203663-5



2 Thumbwheel



E1
2 Thumbwheel

1 Micro Joystick



E1
1 Micro Joystick

1 Micro Joystick Left with Push Button



G1
1 Micro Joystick left with 1 push button



G2
1 Micro Joystick left with 2 push button

1 Micro Joystick Right with Push Button



H1
1 Micro Joystick right with 1 push button



H2
1 Micro Joystick right with 2 push button

1 Thumbwheel Right (Vertical) with Push Button



C1
1 Thumbwheel right vertical with no push button



C2
1 Thumbwheel right vertical with 1 push button



C3
1 Thumbwheel right vertical with 2 push button

1 Thumbwheel (Horizontal) with Push Button



D1
1 Thumbwheel horizontal with no push button



D2
1 Thumbwheel horizontal with 1 push button



D3
1 Thumbwheel horizontal with 2 push button

Push Button



A0
No push button



A1
1 push button



A2
2 push button



A3
3 push button



A4
4 push button



A5
5 push button

1 Thumbwheel Left (Vertical) with Push Button



B1
1 Thumbwheel left vertical with no push button



B2
1 Thumbwheel left vertical with 1 push button



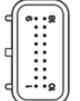
B3
1 Thumbwheel left vertical with 2 push button

DEUTSCH CONNECTOR



Mating Connector : DT 06-08SA

TYCO CONNECTOR



Mating Connector : TE 2203663-5