

# Data Sheet for Joysticks

Switchstick

Series 841



- Single/double pole or progressive switching
- Switching up to 1 A (optional)
- Center detect switch (optional)
- Up to IP class 65 (above panel)
- High durability
- Large selection of different handles

Joysticks of the 841 series come with high quality micro switches. Switching a single pole, double pole, or progressively - the robust mechanism guarantees a long lifetime even at intense usage.

## Technical Data

Lifetime	> 1 million cycles
Max. Voltage	125 VAC
Max. Current	1 A
Switch contacts	Gold plated
Protection grade	up to IP65 (above panel)
Angle of Movement X-, Y-Axis	36° (±18° from center)
Breakout Force	typ. > 1,6 N (from center)
Operating Temperature Range	-25°C .. + 80°C
Weight	ca. 98 g
Max. Panel Thickness	3 mm

## Wiring

Color	Function	Color	Function	Cable specification
Black	: First Switch East	Brown	: First Switch North	Microswitch: 14/0,12 tinned annealed wire PVC insulated, nom. outer diameter 1 mm; length fo twisted cable harness ca. 150 mm.
Yellow	: Second Switch East	Orange	: Second Switch North	
Green	: First Switch West	Purple	: First Switch South	
Blue	: Second Switch West	White	: Second Switch South	
Red	: Common	Grey	: Center Detect	
Orange	: First Pushbutton (Top of Handle)	Green	: Second Pushbutton (Side of Handle)	Pushbuttons inside handle: 7/0,13 wires tinned copper wire ETFE insulated, nom. outer diameter 0,7 mm

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## Order Code

<b>Series</b>	841							
<b>Axes:</b>								
1 Axis (*)		1 (*)						
<b>2 Axes</b>		<b>2</b>						
<b>Rubber Boot:</b>								
No Bezel, below panel mounting (*)			1 (*)					
<b>Square Bezel, drop-in mounting</b>			<b>2</b>					
<b>Circular Bezel, below panel mounting</b>			<b>3</b>					
<b>Spring Return:</b>					<b>1</b>			
Spring Return with Guided Feel in X & Y (*)		(2)			2 (*)			
<b>Handles:</b>								
Handle A, round (*)						A (*)		
Handle B, cylindrical (*)						B (*)		
Handle F, cylindrical, skirted (*)						F (*)		
<b>Handle C, conical mid-size</b>						<b>C</b>		
<b>Handle H, with 1 Pushbutton</b>						<b>H</b>		
<b>Handle G, with 2 Pushbuttons</b>						<b>G</b>		
<b>Limiters:</b>								
Single Axis (**)		(1)					1	
<b>X-Y-Plus „+“</b>							<b>3</b>	
<b>Square</b>							<b>6</b>	
Square 45° rotated (*)							4 (*)	
<b>Circular</b>							<b>5</b>	
<b>Switch Configurations:</b>								
Single Axis, Single Pole (n.o.) (*)		(1)						1 (*)
Single Axis, Double Pole (n.o.) (*)		(1)						2 (*)
Single Axis, Progressive (n.o.) (*)		(1)						3 (*)
Single Axis, Progressive (n.o.), with Detents (*)		(1)						4 (*)
<b>Two Axes, Single Pole (n.o.)</b>		(2)						<b>5</b>
<b>Two Axes, Double Pole (n.o.)</b>		(2)						<b>6</b>
<b>Center Detect:</b>								
<b>none</b>								<b>0</b>
fitted (n.o.) (*) (non-progressive only)								1 (*)

\*upon request

\*\* single axis is realised always as Y only type

## For higher quantities or on-going demand, additional options are available

For example:

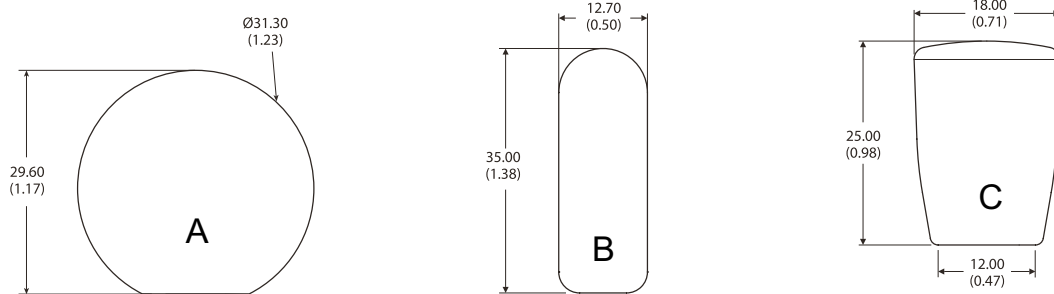
- Specific switch configurations
- Customer-specific cable
- Further handle versions

# Data Sheet for Joysticks

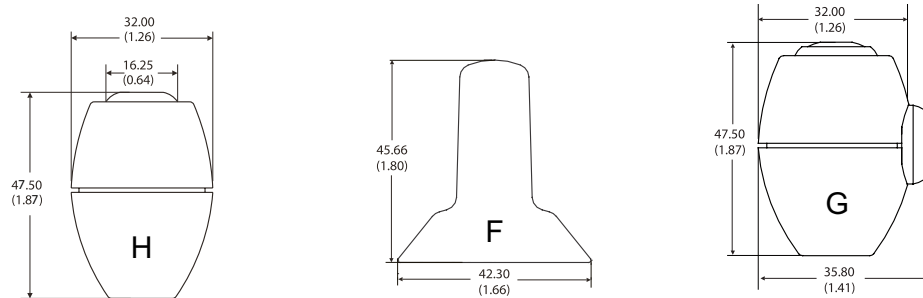
Switchstick

Series 841

## Handles



Handles	A	B	C
Material	Nylon	Aluminium	Nylon
Finish	Sparked Matt	Anodised	Sparked Matt
Color	Black	Black	Black



Handles	H	F	G
Material	ABS	Nylon	ABS
Finish	Sparked Matt	Sparked Matt	Sparked Matt
Color	Black	Black	Black

Dimensions in mm (inches)

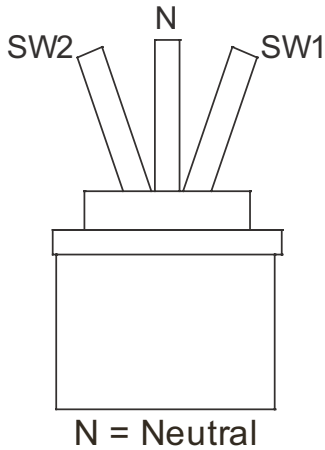
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Switchstick

Series 841

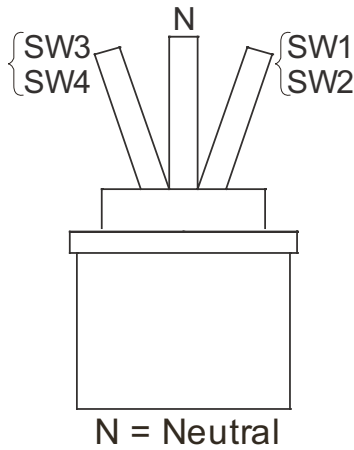
## Switch Configurations

**„1“ : One Axis, Single Pole**



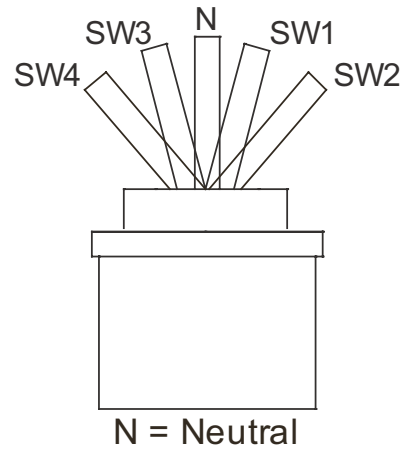
One switch will actuate as the joystick moves away from center in either direction.

**„2“ : One Axis, Double Pole**



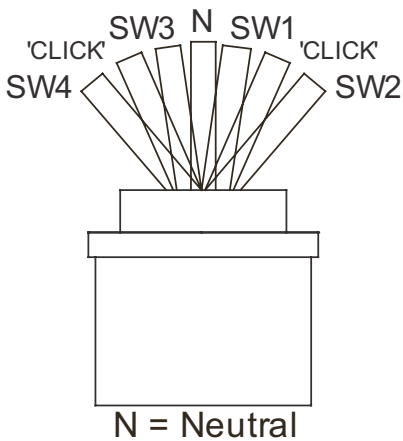
Two switches will actuate as the joystick moves away from center, in either direction.

**„3“ : One Axis, Progressive**



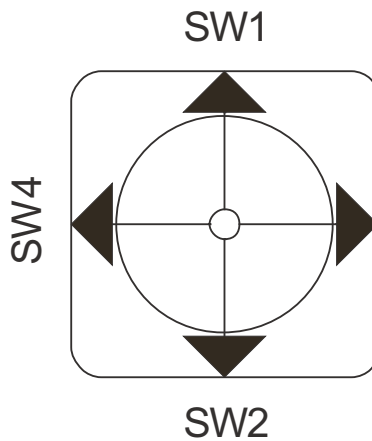
One switch will actuate after 50% of travel, with a further switch at the end of travel, in either direction.

**„4“ : One Axis, Progressive**



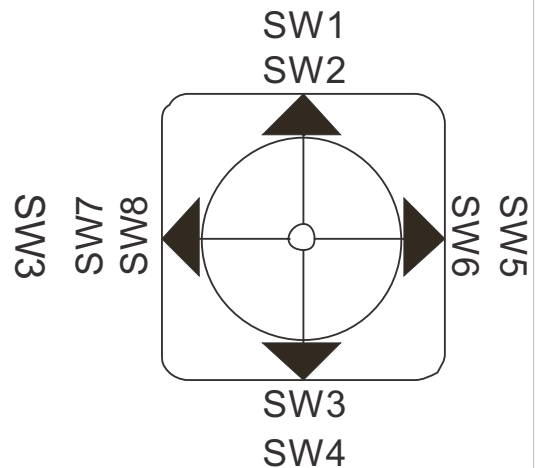
As per option „3“, but with a mechanical detent between actuation of the first and second switch.

**„5“ : Two Axes, Single Pole**



One switch will actuate in each of the four directions: North, South, East & West.

**„6“ : Two Axes, Double Pole**



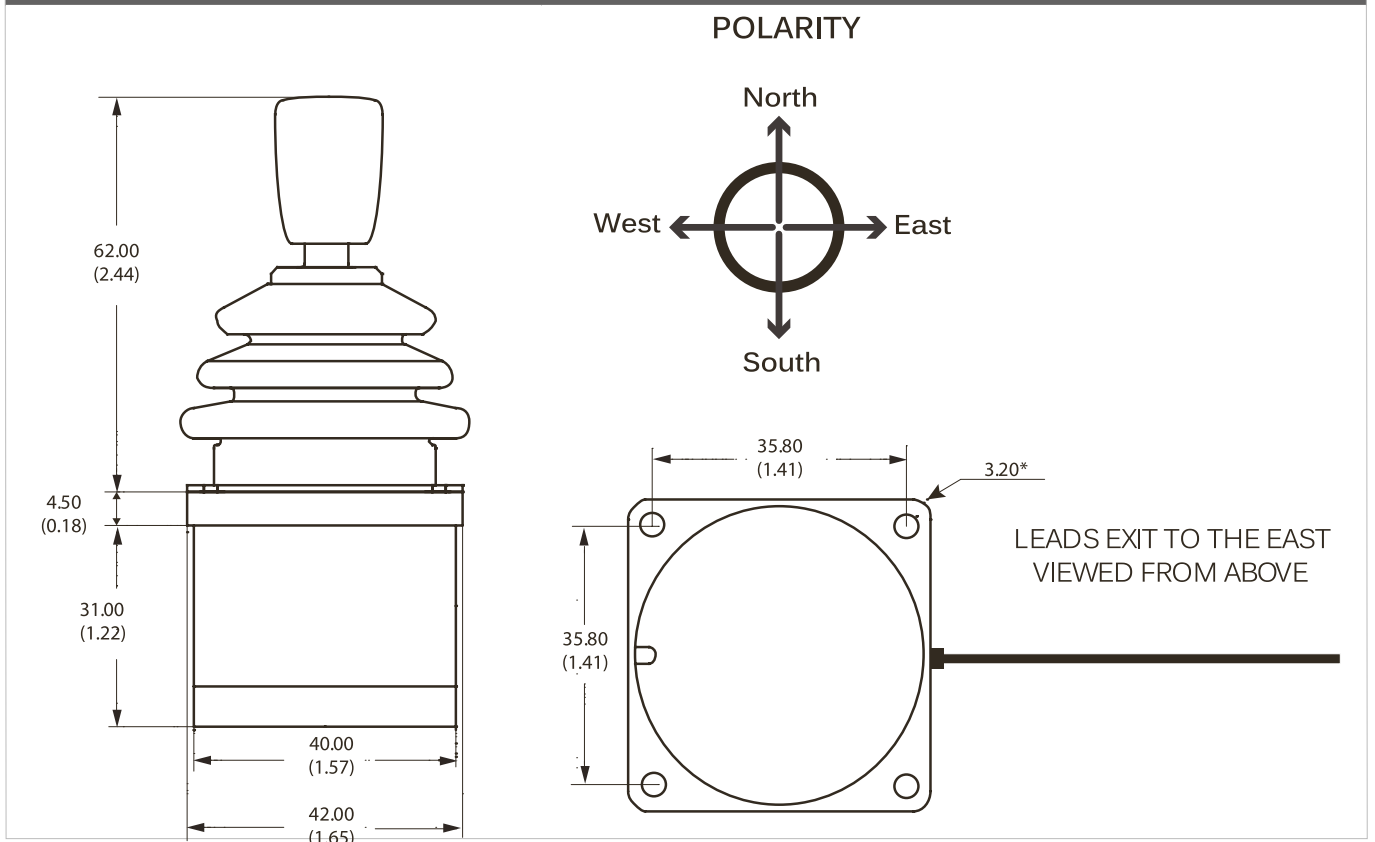
Two switches will actuate in each of the four directions: North, South, East & West.

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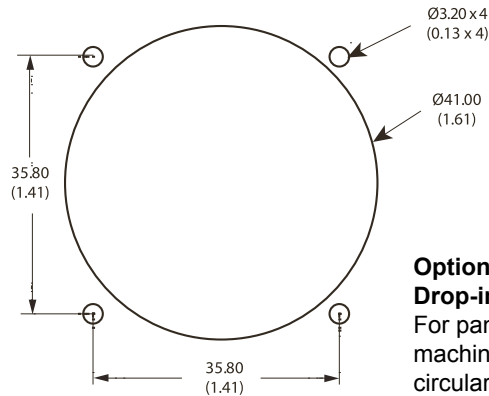
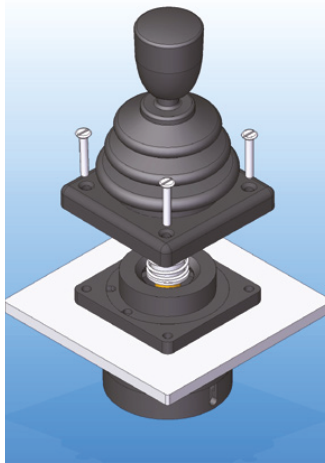
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## Technical Drawing



Dimensions in mm (inches)

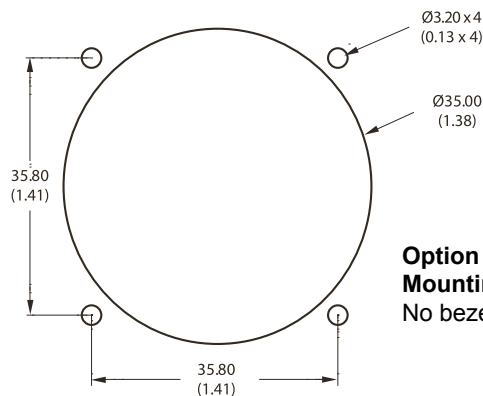
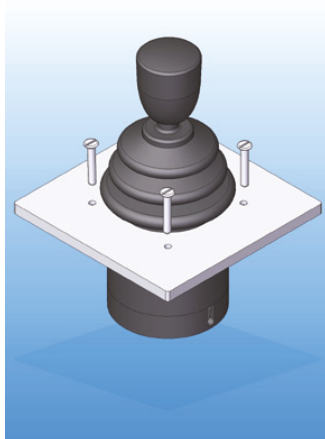
## Mounting Options



**Option „2“:**

**Drop-in of Joystick into panel cut-out.**

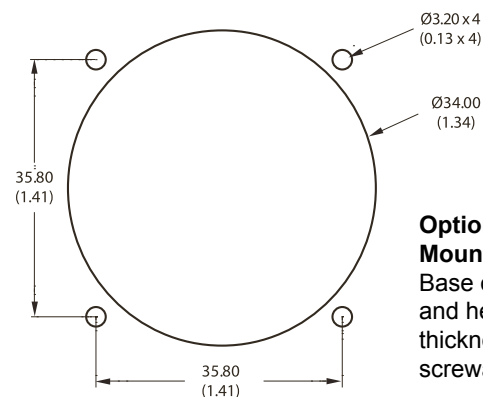
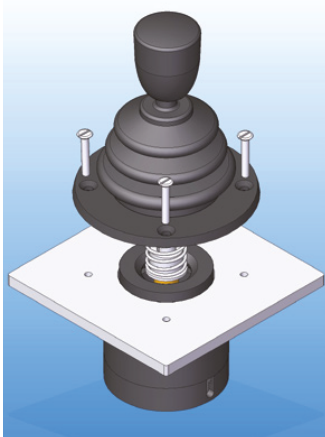
For panel thickness < 3 mm, M3 x 16 countersunk machine screw are recommended. Also available with circular bezel.



**Option „1“:**

**Mounting of Joystick from beneath the panel.**

No bezel needed. M3 machine screws recommended.



**Option „3“:**

**Mounting of Joystick from beneath the panel.**

Base of boot must be brought through panel cut-out and held in place with the circular bezel. For panel thickness < 3 mm, M3 x 16 countersunk machine screws are recommended.

Dimensions in mm (inches)