

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

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

(*) upon request

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

For example:

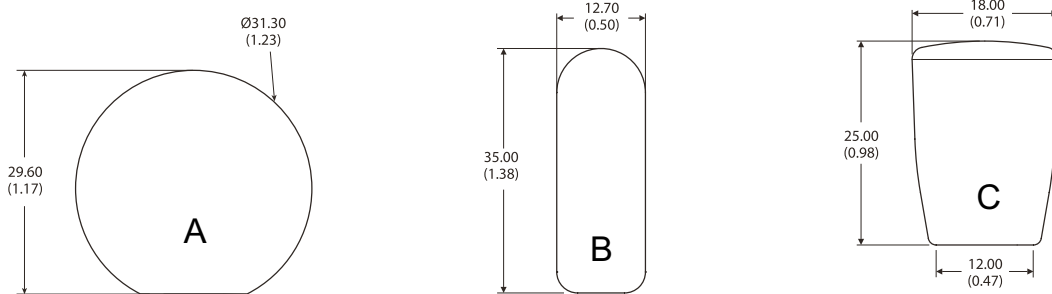
- Specific switch configurations
- Customer-specific cable
- Further handle versions

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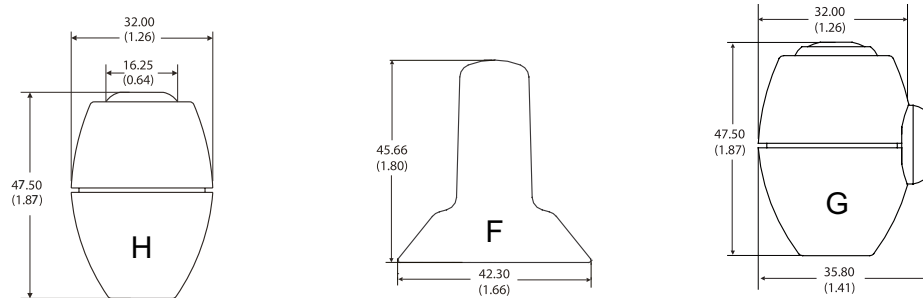
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Handles



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

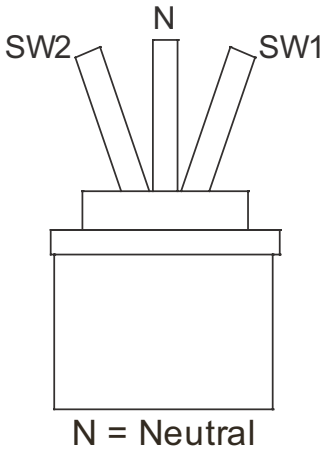


Handles	H	F	G
Material	ABS	Nylon	ABS
Finish	Sparked Matt	Sparked Matt	Sparked Matt
Color	Black	Black	Black

Dimensions in mm (inches)

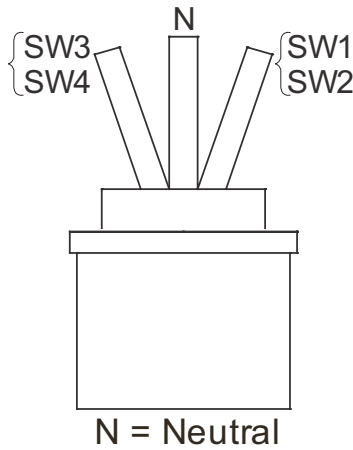
Switch Configurations

„1“ : One Axis, Single Pole



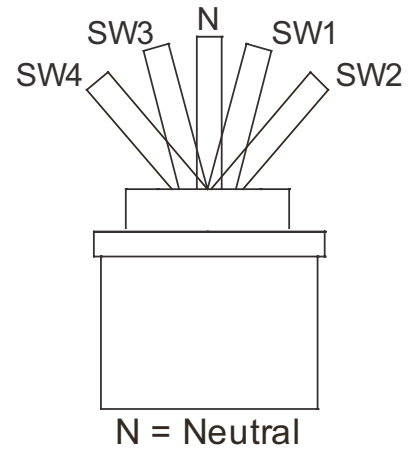
One switch will actuate as the joystick moves away from center in either direction.

„2“ : One Axis, Double Pole



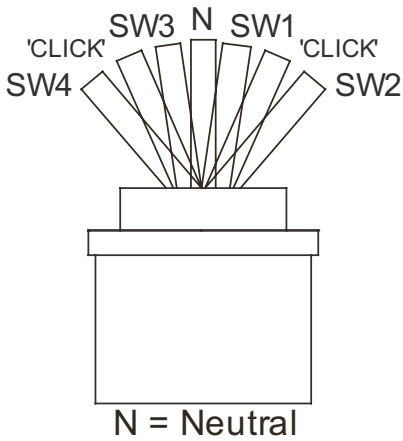
Two switches will actuate as the joystick moves away from center, in either direction.

„3“ : One Axis, Progressive



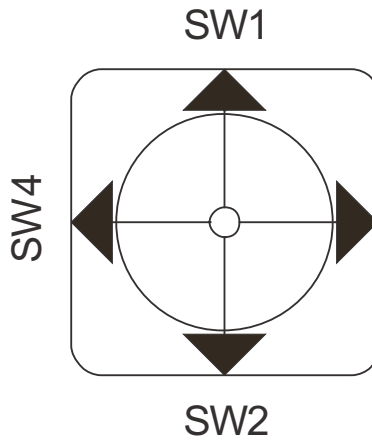
One switch will actuate after 50% of travel, with a further switch at the end of travel, in either direction.

„4“ : One Axis, Progressive



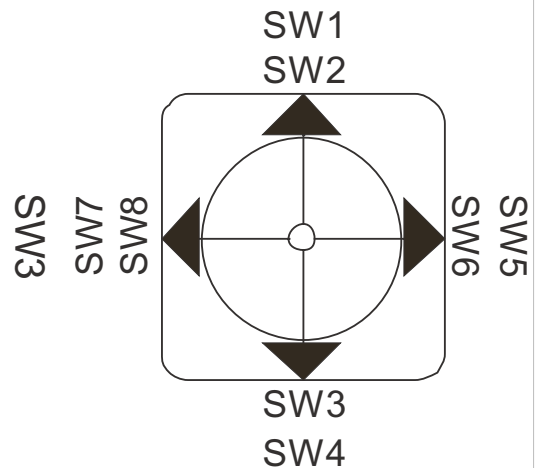
As per option „3“, but with a mechanical detent between actuation of the first and second switch.

„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.

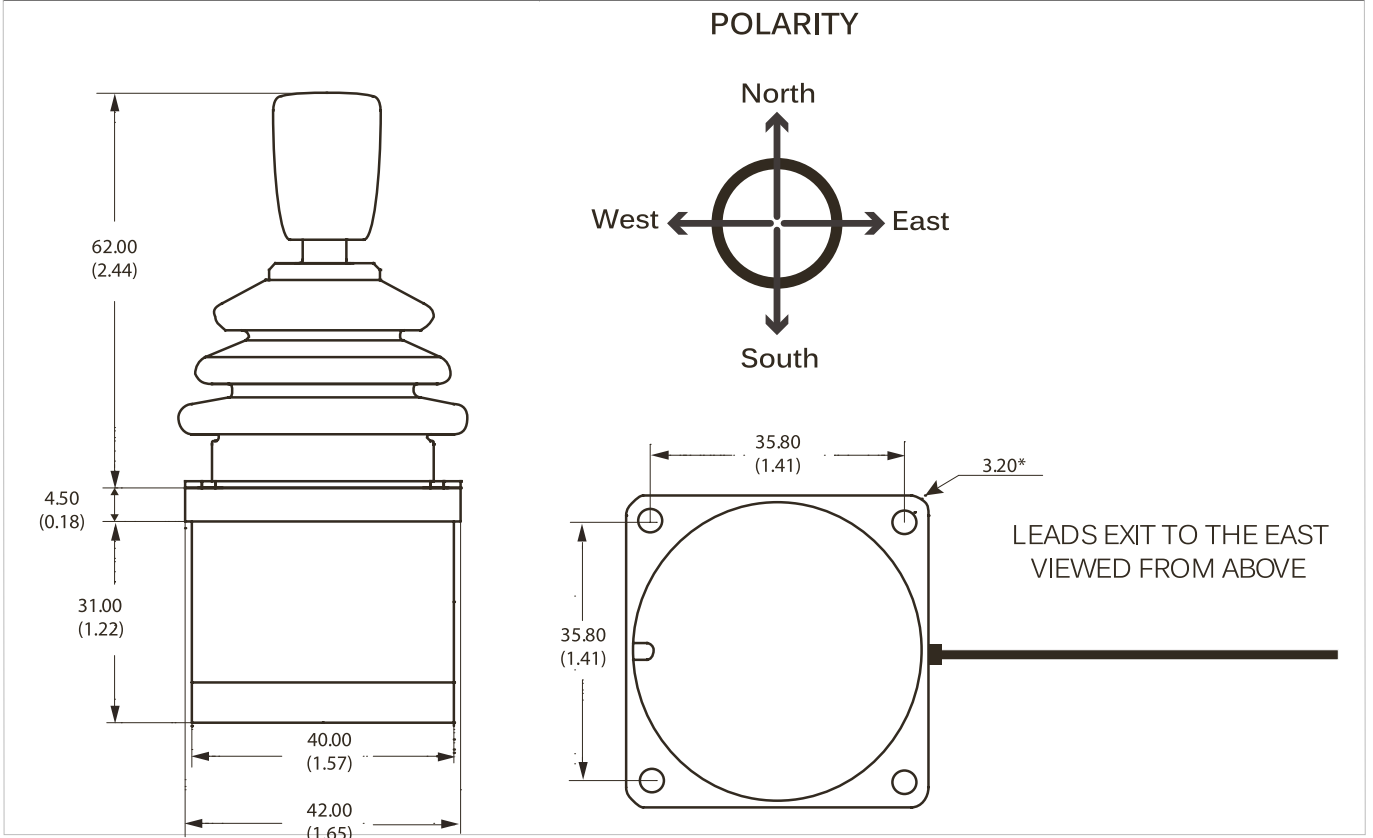
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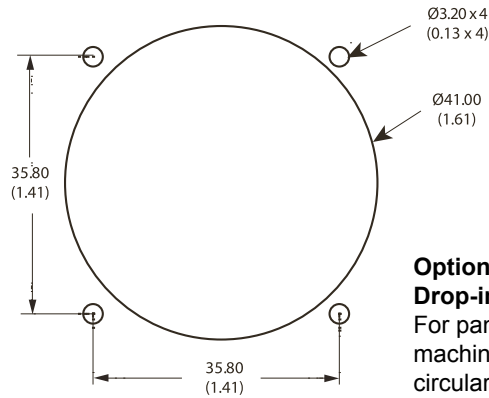
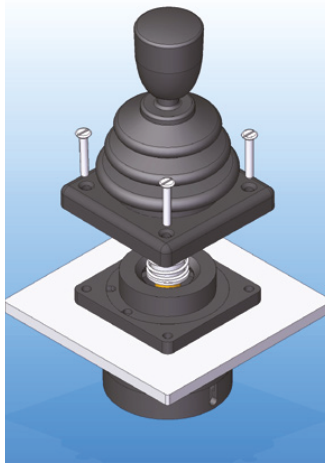
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Technical Drawing



Dimensions in mm (inches)

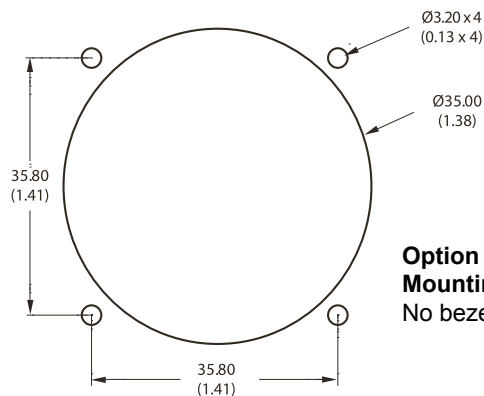
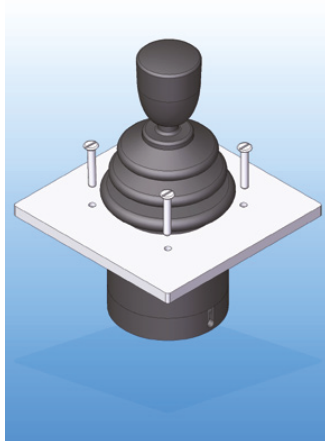
Mounting Options



Option „2“:

Drop-in of Joystick into panel cut-out.

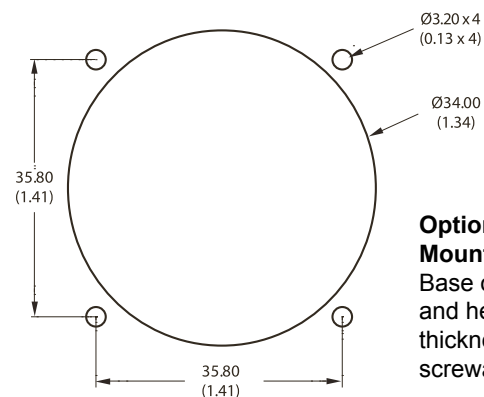
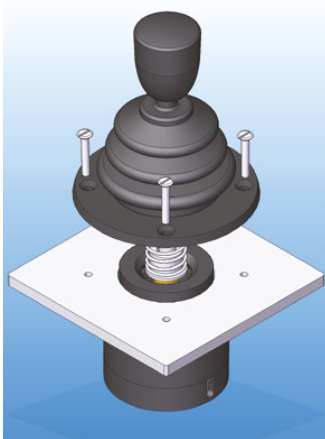
For panel thickness < 3 mm, M3 x 16 countersunk machine screw are recommended. Also available with circular bezel.



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)