

Data Sheet for Joysticks

Finger Joystick

Series 844



- Analog or pulse-width modulated signal output
- Supply voltages 5 V or 3,3 V
- Small installation depth <20 mm

Minimal installation depth, maximal robustness - joysticks of the 844 series do not require much space to guarantee long lifetime with their hall sensors. Additionally, many different handle designs and output options are available.

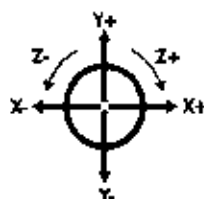
Technical Data

Sensor	Hall Effect
Power Supply Vsupply	5 VDC $\pm 0,5$ V transientfree (optionally 3,3 VDC $\pm 0,1$ V)
Voltage in Center Position	Vsupply/2 $\pm 5\%$
Current Consumption	<13 mA (2 axes) / <20 mA (3 axes)
Impedance	Min. 10 kOhm, > 100 kOhm preferred
Life Cycles	10 Mio. cycles (5 Mio. with 3 axes)
Output Signal	0..5 V / 0,5..4,5 V / others upon request
Angle of Movement X-, Y-Axis	36° ($\pm 18^\circ$ from center)
Angle of Movement Z-Axis	50° ($\pm 25^\circ$ from center)
Breakout Force	typ. 1,3 N
Max. Load to Mechanism	400 N
Operating Temperature	-25°C..+70°C
Storage Temperature	-40°C..+70°C
IP Class	Up to IP65 above panel (depending on specific handle)
EMC Emission	EN61000-6-3 CISPR 22:2005 Class B 30 MHz - 11 GHz
EMV Immunity	100 V/m 80 MHz - 2,7 GHz, 1kHz 80% sine wave modul., EN61000-4-3 (extended)
ESD	EN61000-4-2 (extended) ± 8 kV (20 contacts) & ± 15 kV (20 air discharges)
Vibration	100 Hz - 200 Hz @ 0,13 g ² /Hz, total 3,6 g RMS 1h in each of three perp. axes

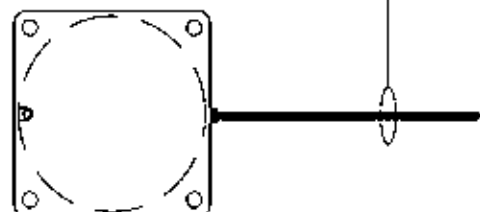
Wiring

Pin	Function	Color
1	Ground	black
2	Center Tap	green
3	Z-Axis	purple
4	Y-Axis	yellow
5	X-Axis	blue
6	Vsupply	red
7	Center Detect	orange
8	Pushbutton	orange
9	Pushbutton	orange

Orientation / Polarity



Cables exit to East
(viewed from above)



The joysticks come with 150 mm long cables and seven way connector (nine way connector for handles with pushbutton), industry standard 2,5 mm pitch. Further non-standard cable and connector options available upon request.

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Order Description / Options							
Series	844						
Axes							
2 Axes		2					
3 Axes		3					
Rubber Boot							
Circular Bezel, below panel mounting			3				
Circular Bezel, drop-in mounting			4				
No Bezel, below panel mounting (*)			1 (*)				
Square Bezel, drop-in mounting (*)			2 (*)				
Spring Return				1			
Spring Return with Guided Feel in X & Y (*)				2 (*)			
Handles							
Handle C, conical mid-size					C		
Handle E, with Pushbutton					E		
Handle I, for 3 Axes					I		
Handle A, round (*)					A (*)		
Handle F, cylindrical, skirted (*)					F (*)		
Limiters							
Circular						5	
Square						6	
Square 45° rotated (*)						4 (*)	
Single Axis X (*)						1 (*)	
Single Axis Y (*)						2 (*)	
X-Y-Cross „X“ (*)						7 (*)	
X-Y-Plus „+“ (*)						3 (*)	
Sensor							
Hall Sensor 5 VDC Supply							S
Hall Sensor 3,3 VDC Supply (*)							L (*)
Dual Hall-Sensor 5 VDC Supply, Parallel Output (*)							P (*)
Dual Hall-Sensor 5 VDC Supply, Inverse Output (*)							I (*)
PWM (*)							W (*)
Output Signal							
0..5,0 V (±50% * VSupply)							5
0,5..4,5 V (±40% * VSupply)							4
others (*)							
Pulse-Width Modulation (*)							xO (*)

For joysticks available from stock please see our stock types list: <http://www.megatron.de/en/stocklists/joysticks/lagerliste.html>

Bold print = Standard options

(*) upon request

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

For example:

- Redundant Output Signals (inverted or parallel)
- Customer-specific cable
- Further handle versions

Available options for small quantity orders can be found on our stock types list on:

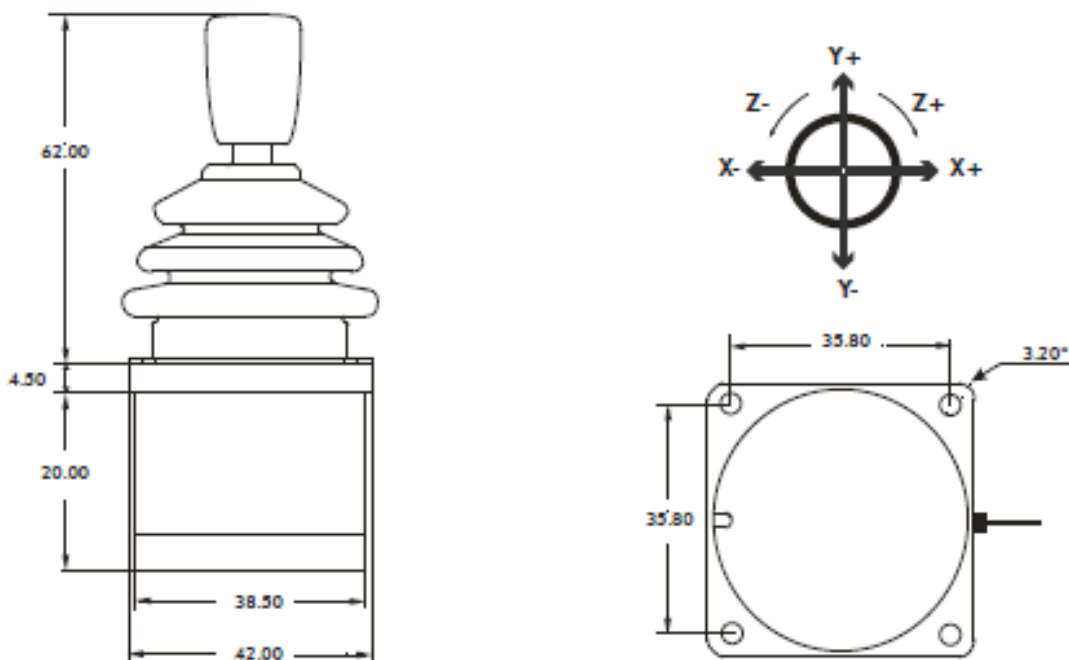
<http://www.megatron.de/en/stocklists/joysticks/lagerliste.html>

In addition, we have an extensive stock of samples for project needs.

For technical advice, projects, samples, questions about pricing, delivery times and availability please contact us

Tel.: +49 89 46094-500
 export@megatron.de

Technical Drawing



All Dimensions in mm

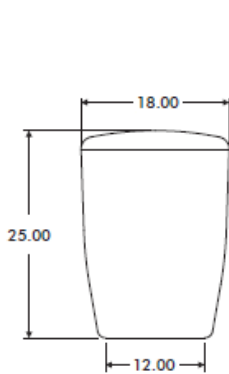
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Series 844

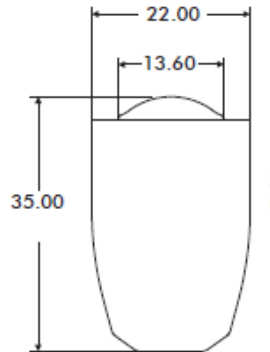
Handles

Standard Handles



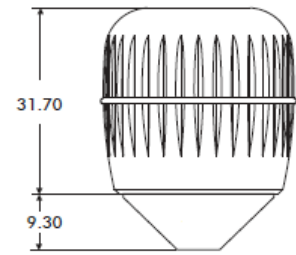
Handle C

MATERIAL Nylon
FINISH Sparked Matt
STANDARD COLOR Black
OTHER COLORS not available
NOTES 1-2 Axes



Handle E

MATERIAL Aluminium
FINISH Anodised
STANDARD COLOR Black
OTHER COLORS not available
NOTES 1-2 Axes with Pushbutton

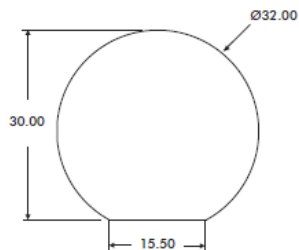


Handle I

MATERIAL Nylon
FINISH Sparked Matt
STANDARD COLOR Black
OTHER COLORS upon request
NOTES 3 Axes

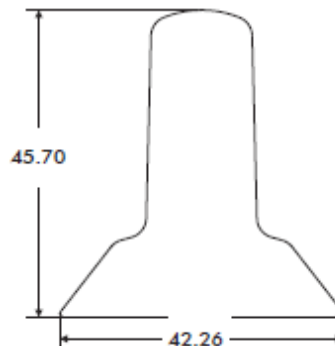
MATERIAL
FINISH
STANDARD COLOR
OTHER COLORS
NOTES

These and further handle versions available upon request:



Handle A

Material: Nylon
matt black



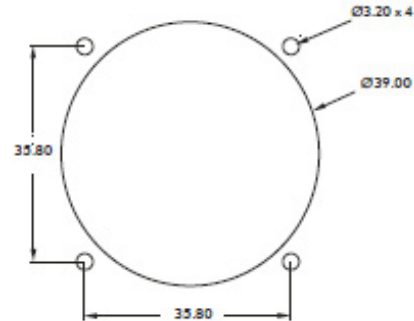
Handle F

Material: Nylon
matt black



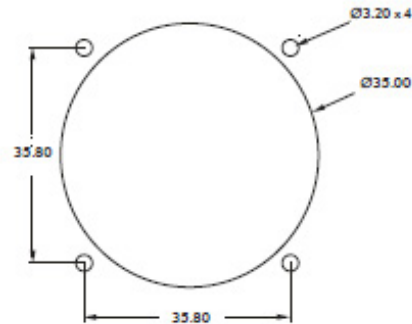
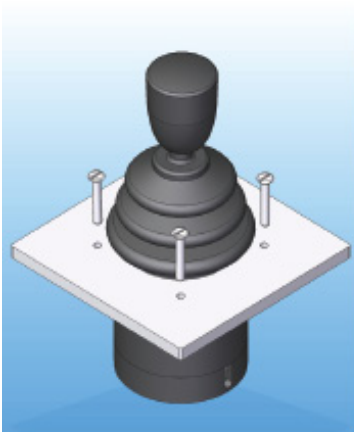
All Dimensions in mm

Mounting Options



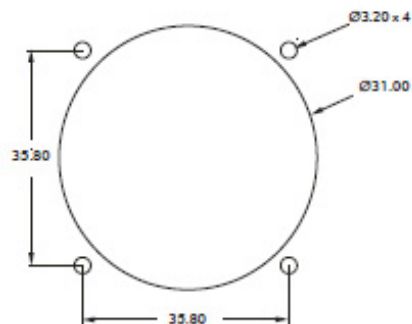
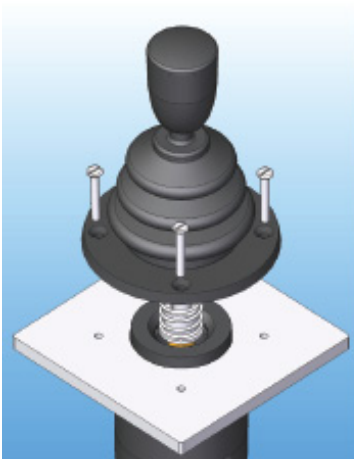
Drop-in of Joystick into panel cut-out.

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



Mounting of Joystick from beneath the panel.

No bezel needed. M3 machine screws recommended.



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 screwa are recommended.

All Dimensions in mm