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# G3-E CONTROL GRIP

**G3-E**  
COMMERCIAL  
GRIPS

HEAVY EQUIPMENT AND MATERIAL HANDLING GRIPS

## G3-E CONTROL GRIP



Left-Handed Grip

Right-Handed Grip

The G3-E Control Grip is a multi-function, compact grip with five momentary pushbuttons and a proportional Hall effect rocker. Available in both left-handed and right-handed versions, the two often work together within the same control seat. The grip's switches are sealed to IP68S and provide a high cycle life.

The G3-E is a standalone grip or it can be mounted on a joystick. Mounting the G3-E on an OTTO bottom mount JHM joystick is a standard offering available as a JHM-61xxxxx or a JHM-62xxxxx (see JHM page) with a large variety of gating options.

The G3-E Control Grip is great for forestry applications, and also works well in construction, off-road and other demanding applications where reliability is paramount.

### Features:

- Available in left-handed and right-handed versions
- Switches sealed to IP68S
- High cycle life
- Variety of output options
- RoHS compliant

Standard Characteristics/Ratings:				
<b>ELECTRICAL RATINGS:</b>				
<b>U2 Hall Effect Rocker</b>				
Rated @ Vcc = 5V @ 25°C Load = 1ma (4-7Ω)	<b>Units</b>	<b>Min</b>	<b>Typ</b>	<b>Max</b>
Supply Voltage	VDC	4.50	5.00	5.50
Output Voltage +Z, -Z 0° Deflection	VDC @5V Vcc	-0.25	N/A	0.25
Output at Full Travel +Z Direction	VDC @5V Vcc	-0.25	N/A	0.25
Output at Full Travel -Z Direction	VDC @5V Vcc	-0.25	N/A	0.25
Supply Current B=0, Vcc=5V, Io=0	mA	N/A	N/A	10
Output Source Current Limit B=X*, Vo=0	mA	-1.2	N/A	1.2
<b>Pushbuttons</b>				
Electrical Rating @ 5 VDC	10 mA Resistive Load			
Circuit	SPST-NO			
<b>MECHANICAL RATINGS</b>				
<b>U2 Hall Effect Rocker</b>				
Mechanical Life	2,500,000 Cycles			
Operating Force at 25° C	OZ	3.5	6.5	9.5
Maximum Allowable Radial Load	Lbs	N/A	N/A	30
Full Travel Angle (From Center)	Degree	15	17	19
Minimum Return Force	OZ	2.0	N/A	N/A
<b>Pushbuttons</b>				
Mechanical Life	3,000,000 Cycles			
Operating Force at 25° C	OZ	4.0	8.0	12.0
	N	1.1	2.2	2.3
<b>ENVIRONMENTAL:</b>				
<b>Operating Temperature:</b>	<b>Units</b>	<b>Min</b>	<b>Typ</b>	<b>Max</b>
	°C	-40	20	85
<b>U2 Hall Effect Rocker</b>				
Electronics Enclosure Design	IP68S			
<b>Pushbuttons</b>				
Electronics Enclosure Design	IP68S			
<b>MATERIALS:</b>				
<b>U2 Hall Effect Rocker Wires</b>	24 AWG, MIL-W-16878			
<b>Pushbutton Wires</b>	24 AWG, MIL-W-22759/33			

### G3-E PART NUMBER CODE

G3-E X X  
 Configuration Grip Orientation  
 1. 5-Button 1. Left  
 2. Right

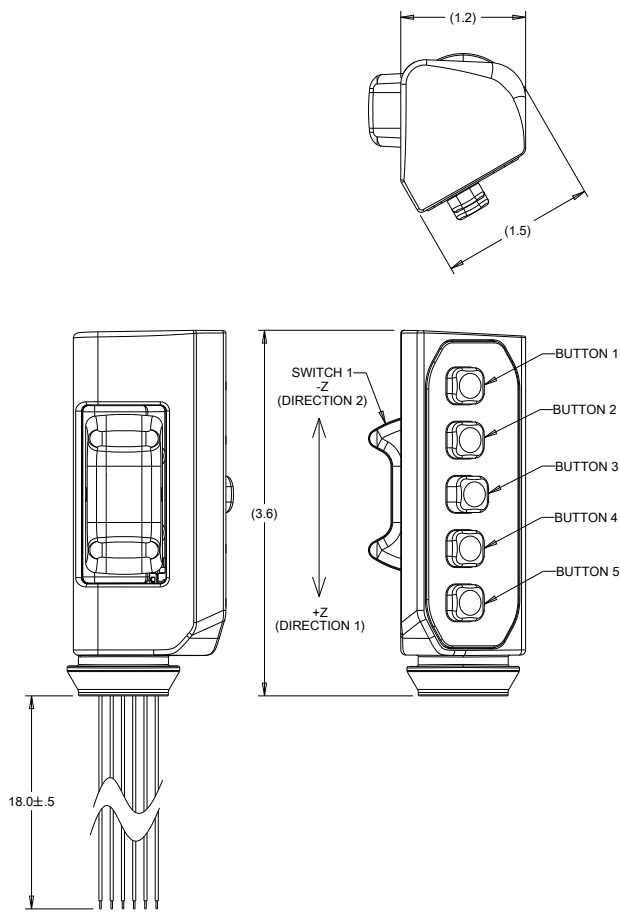
X X  
 Rocker Output 1\* Rocker Output 2\*\*  
 AA. 2.5 +/- 2.0 Vdc None  
 BB. 2.5 +/- 2.0 Vdc 2.5 +/- 2.0 Vdc  
 CC. 2.5 +/- 2.0 Vdc 2.5 +/- 2.0 Vdc  
 DD. 2.5 +/- 1.5 Vdc None  
 EE. 2.5 +/- 1.5 Vdc 2.5 +/- 1.5 Vdc  
 FF. 2.5 +/- 1.5 Vdc 2.5 +/- 1.5 Vdc  
 GG. 1.0 - 4.0 Vdc 1.0 - 4.0 Vdc  
 HH. 0.5 - 4.5 Vdc 0.5 - 4.5 Vdc

X X  
 Operate Force Termination  
 1. Standard 1. Flying Leads

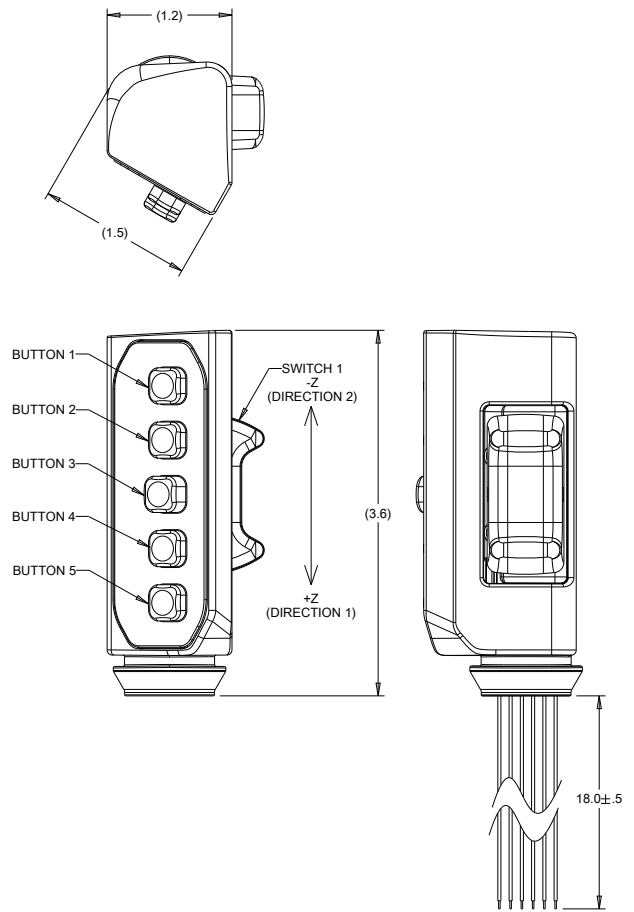
\* Outputs are from the center position to the full travel position in each direction. Options "AA" "BB" "CC" "DD" "EE" "FF" provide increasing voltage in direction 1 and decreasing voltage in direction 2 from a single output. Option "GG" and "HH" provide increasing voltages in both directions from two separate outputs.  
 \*\*Option "BB" and "EE" provide redundant output 2 which duplicates output 1. Option "CC" and "FF" provide redundant output 2 which is inverse of output 1.

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## G3-E CONTROL GRIP

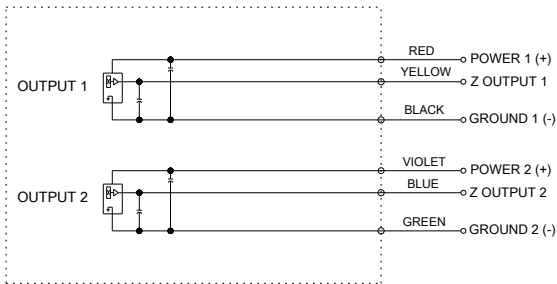


GRIP ORIENTATION LEFT



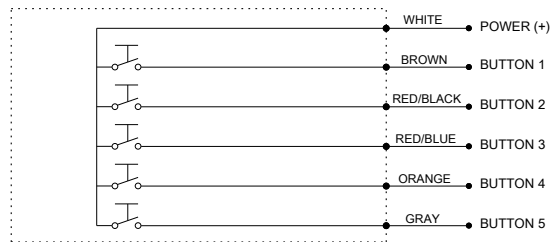
GRIP ORIENTATION RIGHT

## G3-E CONTROL GRIP SCHEMATICS



SWITCH 1 SCHEMATIC

OUTPUT 2 IS NOT PRESENT IN ALL CONFIGURATIONS



PUSHBUTTON SCHEMATIC

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### G3-E CONTROL GRIP OUTPUT

