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HEAVY EQUIPMENT & MATERIAL HANDLING GRIPS

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OTTO Controls manufactures a wide range of styles in its G3 Universal Grips series. G3 grips deliver high performance and long-lasting durability and are ideal for vehicles and machinery in construction, agriculture, material handling, mining and many other commercial and industrial applications.

All grips have a modular design and accommodate OTTO JH, JHL and JHM series Hall effect joysticks. Visit the Joystick Bases

and Grips section of the website to see integrated joystick/grip assemblies.

Customize OTTO grips to meet unique requirements or choose from many standard faceplates and features. Grips come with a variety of pushbuttons, rockers, toggles and Hall effect switches. Triggers are available on most grip handles.

## G3 UNIVERSAL AND CONTROL GRIP MODELS



**G3-A:** smaller grip with up to four switches on its faceplates and has a Z-axis option



**G3-CK:** medium, ergonomic grip with eight faceplate pushbuttons and an optional side keypad



**G3-B:** larger grip that fits as many as six faceplate switches and has a Z-axis option



**G3-D:** control grip that can be configured with a rocker or pushbutton at the top of the handle and an Operator Presence switch



**G3-C:** medium, ergonomic grip with more switch content, a Z-axis option and other advanced functions



**G3-E:** control grip with five or seven pushbuttons and a rocker on the handle



**G3-M:** medium grip that fits up to four switches on its faceplate

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The rugged, ergonomically designed G3-D control grip can be configured with a rocker switch or a pushbutton at the top of the grip handle. An Operator Presence switch, which helps prevent inadvertent activation, may be added to the side of the handle.

The G3-D grip may be combined with an OTTO JH, JHL or JHM series joystick, providing a variety of gating options, including single axis, dual axis, friction held and omni-directional. Output choices include analog, PWM and USB.

The G3-D is well suited for industrial, agricultural, mining, utility and construction applications, such as aerial work platforms, scissor lifts, bucket trucks, telehandlers, trenchers and track trucks.

## Features:

- Compatible with OTTO JH, JHL and JHM series Hall effect joysticks
- Operator Presence option
- Rocker or pushbutton switch option for the top of the handle
- Switches sealed watertight to IP68S
- Top or bottom mount
- RoHS compliant



Top Mount G3-D with Rocker Switch and Operator Presence



G3-D with Rocker Switch, Operator Presence and Top Mount JHM Joystick



G3-D with Pushbutton and Bottom Mount JHM Joystick

Standard Characteristics/Ratings:				
<b>ELECTRICAL RATINGS:</b>				
<b>P9 Switches</b>				
Electrical Rating @ 28 VDC	50mA Resistive Load			
Electrical Life	1,250,000 Cycles			
<b>MECHANICAL RATINGS</b>				
<b>P9 Switches</b>				
Mechanical Life	1,250,000 Cycles			
<b>ENVIRONMENTAL:</b>				
<b>Operating Temperature:</b>	<b>Units</b>	<b>Min</b>	<b>Typ</b>	<b>Max</b>
	° C	-40	20	85
<b>P9 Switches</b>				
Enclosure Design	ISO 20653, IP68S - Dusttight, Continuous Immersion, 1 Meter For 31 Minutes, Static During Test(s), and IP69K			
<b>Grip</b>				
Enclosure Design	ISO 20653, IP65 - Dusttight, Water Jets, Static During Test(s)			
<b>MATERIALS:</b>				
<b>Grip Halves, Faceplate</b>	Thermoplastic, Glass Reinforced, Black			
<b>Lever, Rocker</b>	Thermoplastic, Unfilled, Black			
<b>Boot</b>	Elastomer, 40 Durometer, Black			

## G3-D PART NUMBER CODE

G3-D X

### Mounting

1. Top Mount
2. Bottom Mount

XX

### Configuration

11. Rocker (ON)-OFF-(ON) and Operator Presence
22. Rocker (ON)-OFF-(ON) and No Operator Presence
33. One Pushbutton and Operator Presence
44. One Pushbutton and No Operator Presence
55. No Pushbutton, No Rocker and Operator Presence
66. No Pushbutton, No Rocker and No Operator Presence

X

### OP & PB Configuration

1. None\*
2. Normally Open (NO)
3. 2 Circuit (NO/NC)\*\*
4. 2 Circuit (NO/NC)\*\*\*

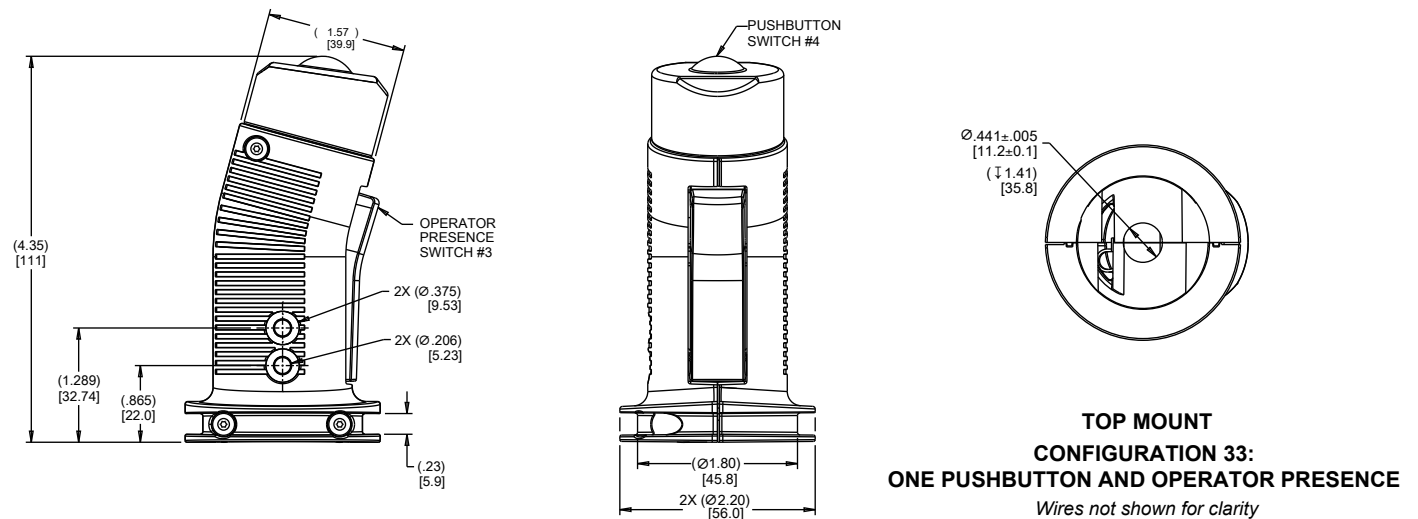
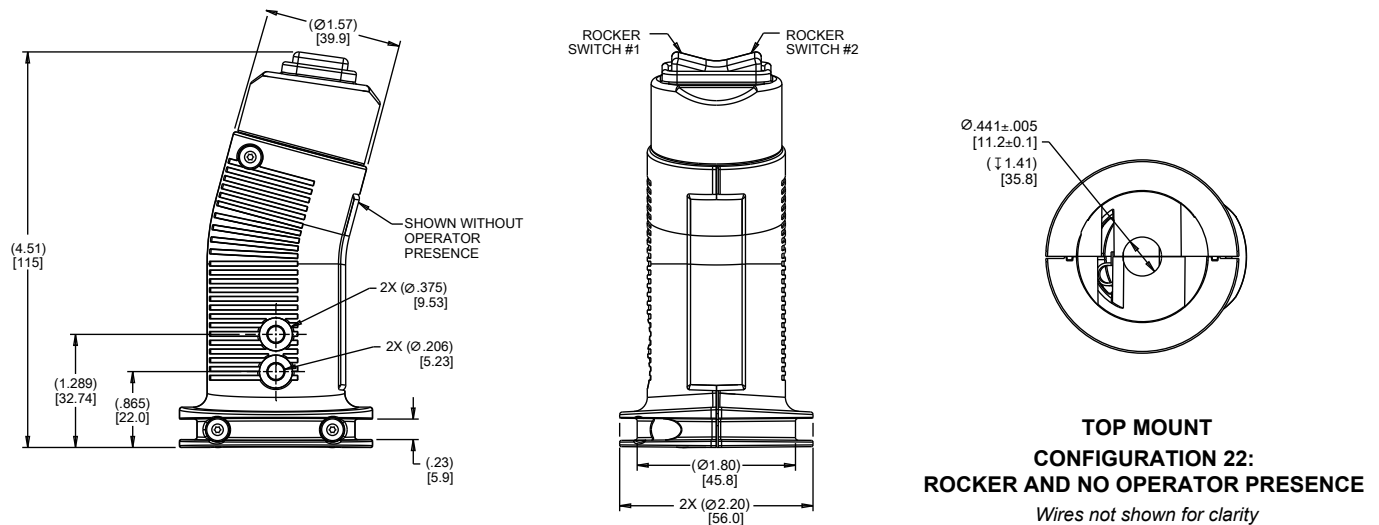
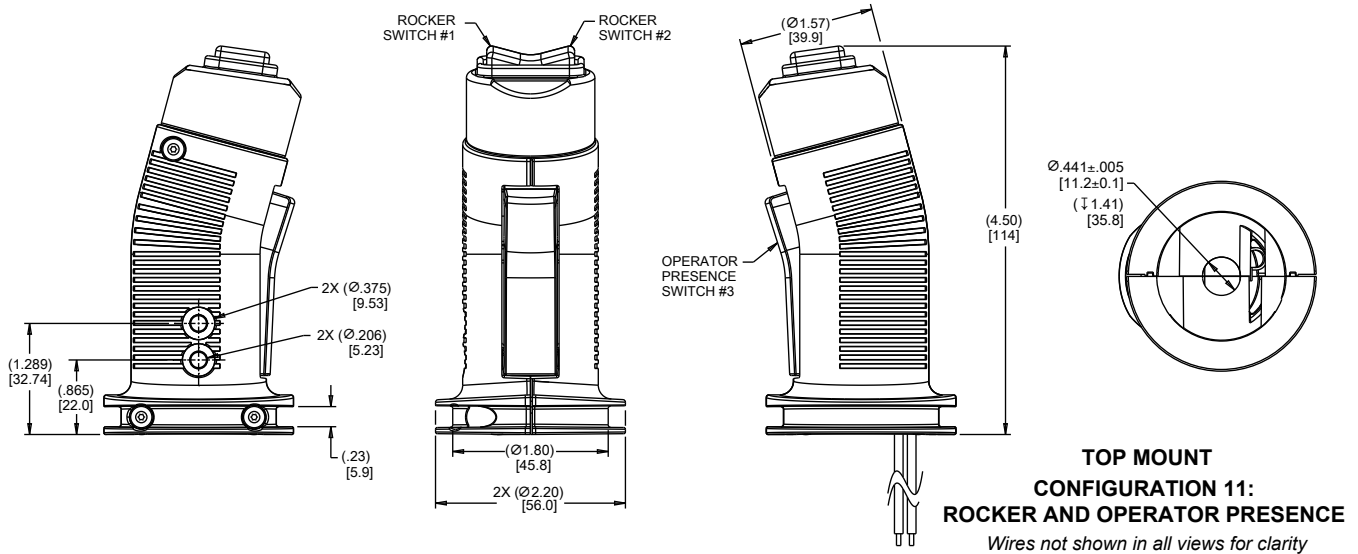
\* can only be used with configurations 22 and 66  
 \*\* for options 11 (Operator Presence), 44, 55  
 \*\*\* for option 33  
 \*\*\*\* can only be used with configuration 66

X

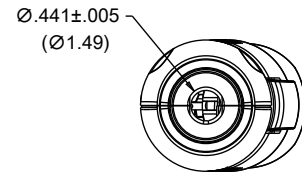
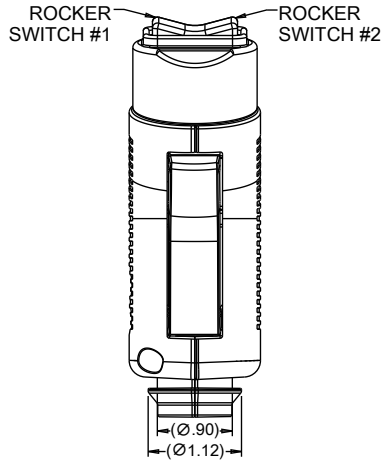
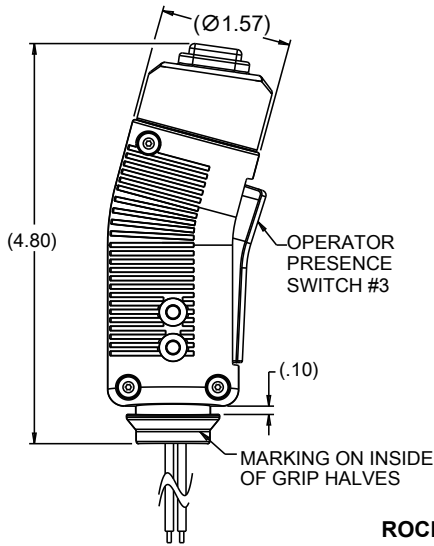
### Termination

- N. No Wires\*\*\*\*
1. 20' Flying Leads 22 AWG

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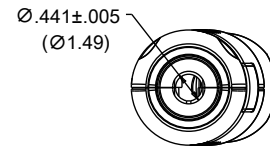
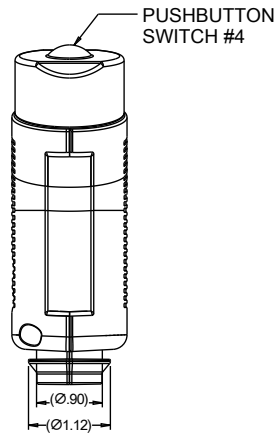
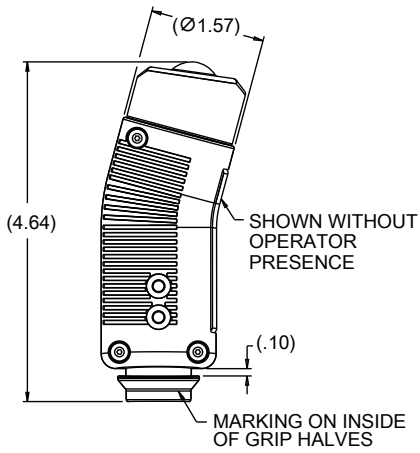


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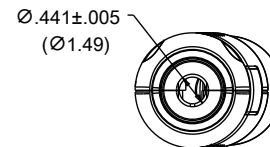
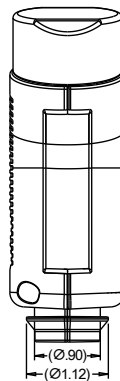
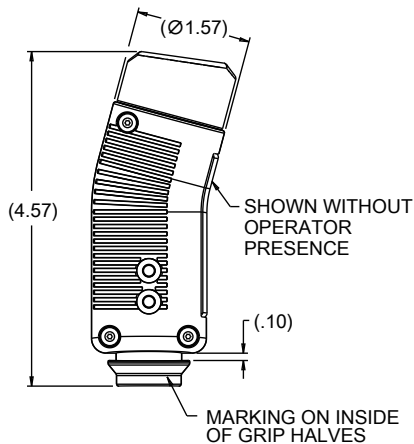
**BOTTOM MOUNT  
ROCKER AND OPERATOR PRESENCE CONFIGURATION**

*Wires not shown in all views for clarity*



**BOTTOM MOUNT  
ONE PUSHBUTTON CONFIGURATION**

*Wires not shown for clarity*

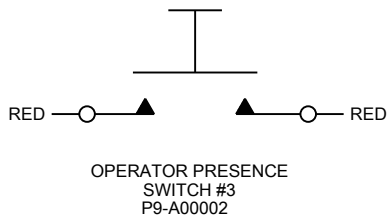
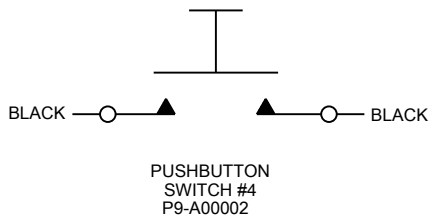
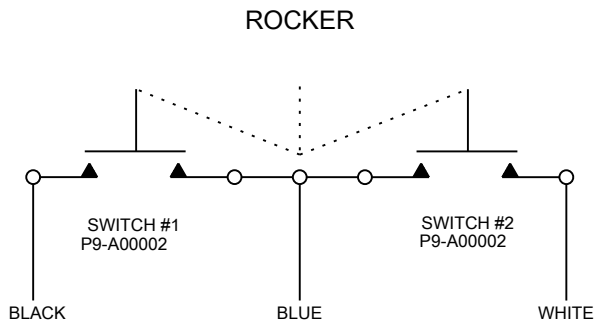


**BOTTOM MOUNT  
NO SWITCHES CONFIGURATION**

*Wires not shown for clarity*

## G3-D SCHEMATICS

### NORMALLY OPEN (NO) CIRCUITS



### NORMALLY OPEN/NORMALLY CLOSED (NO/NC) CIRCUITS

