

**GO Gets It.**

# One Answer For All Environments

## GO™ Switch Models 12 & 22 with ATEX/IECEx Zone 1 Ex 'de' Approvals

GO™ Switch Models 12 and 22, are specifically designed to function in ATEX/IECEx Zone 1 hazardous locations. These two models are variations of our popular 11 and 21 models and are available with an Ex 'de' explosion proof, increased safety certification.

Models 12 and 22 give the end-user the ability to terminate directly into the switch without the need of an external junction head/box. An additional benefit of an Ex 'de' certification is lower installation costs by allowing the end user to use an Ex 'e' gland, rather than an Ex 'd' gland and still meet Zone 1 requirements.

GO™ Switch models 12 and 22 are recommended for applications that require extended sensing distances. Standard sensing distance on ferrous metal is 10mm (3/8"), but can be extended with the use of an external target magnet. For example, with an AMS4 magnet, model 12 can achieve a sensing distance of 95mm (3-3/4").

### ATEX/IECEx Approval Options:



Ex de IIC T6 Gb, Ex tb IIIC T85°C Db -40°C ≤ Ta ≤ 60°C, IP66/IP68



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# Models 12 & 22

www.topworx.com



## Models 12 & 22

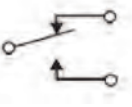
Models 12 and 22 are ATEX/IECEX Zone 1 Ex de approved GO Switches with an integral terminal block. The terminal block gives the installer the ability to terminate directly on the switch.

### Features:

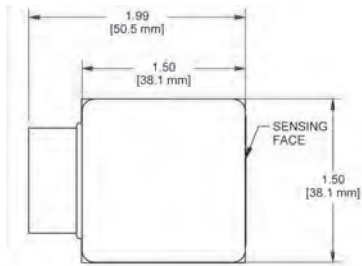
- -40°C to +60°C operating temperature

### Options:

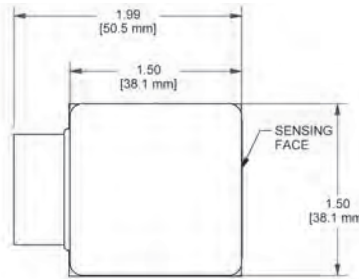
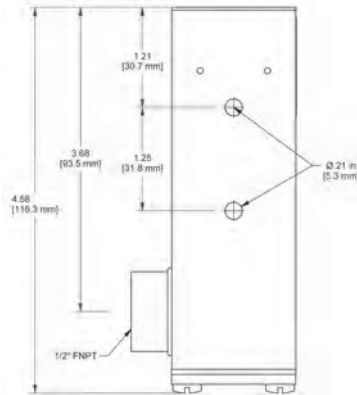
- M20 or 1/2" NPT conduit entries

| Model   | Contact Form  | Sensing Range | Outlet Position |    |  |       |      |       |      |    |      |    |      |   |  |
|---|---|---------------|-----------------|----|--|-------|------|-------|------|----|------|----|------|---|--|
| <b>Repeatability:</b> .002" (.05mm) typical<br><b>Response Time:</b> 8 milliseconds<br><b>Differential:</b> Approx. 5/16" (.8 mm)<br><b>Operating Temperature:</b> -40°F to 140°F (-40°C to +60°C).<br><b>12</b> 1-1/2" square x 4-9/16" overall. Add 1/2" for bottom conduit outlet.<br><b>22</b> 1-1/2" square x 3-3/16" overall. Add 1/2" for bottom conduit outlet. | 1 SPDT (Form C)<br>3 SPDT (Form C) Latching (maintained contact) (Outlet position must be 2, 4 or 5)<br><table border="1"> <thead> <tr> <th colspan="2">AC</th><th colspan="2">DC</th></tr> <tr> <th>Volts</th><th>Amps</th><th>Volts</th><th>Amps</th></tr> </thead> <tbody> <tr> <td>30</td><td>0.25</td><td>30</td><td>0.25</td></tr> </tbody> </table> <br>Form C - SPDT | AC            |                 | DC |  | Volts | Amps | Volts | Amps | 30 | 0.25 | 30 | 0.25 | <b>Target Material:</b> Ferrous steel<br><b>Sensing Range:</b> Approx. 3/8" (10mm) standard; 9/16" (14mm) extended sensing (Model 12)<br><b>Sensing Range with Target Magnet:</b> up to 3 3/4" (95mm) (max)<br>1 Standard sensing approx. 3/8" (10mm) side sensing<br>2 Extended sensing approx. 9/16" (14mm) side sensing (Contact Form must be 1 or 3) (Model 12)<br>7 Precision sensing approx. 1/4" (6mm) side sensing (minimal differential) | 1 Behind sensing area<br>2 Left of sensing area<br>3 Right of sensing area<br>4 Same side as sensing area<br>5 Bottom of enclosure |
| AC  |   | DC            |                 |    |  |       |      |       |      |    |      |    |      |   |  |
| Volts   | Amps  | Volts         | Amps            |    |  |       |      |       |      |    |      |    |      |   |  |
| 30  | 0.25  | 30            | 0.25            |    |  |       |      |       |      |    |      |    |      |   |  |
| <b>Ordering Guide</b><br>Fill in the boxes to create your 'ordering number'   |   |               |                 |    |  |       |      |       |      |    |      |    |      |   |  |
| Model   | Contact Form  | Sensing Range | Outlet Position |    |  |       |      |       |      |    |      |    |      |   |  |

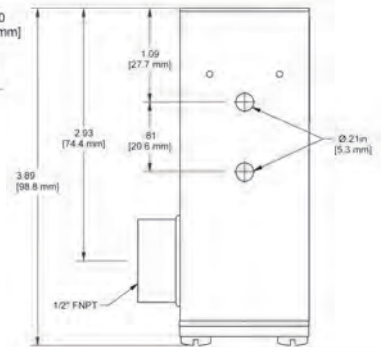
## Dimensions



**Model 12**



**Model 22**



| Enclosure Material           | Approvals   | Wiring Options   |
|------------------------------|---|--|
| <p>2 304 stainless steel</p> | <p>9 ATEX/IEC Ex Zone 1, Ex de IIC T6 Gb,<br/>Ex tb IIIC T85°C Db (-40°C ≤ Ta ≤ 60°C)<br/>IP66/IP68</p> | <p>00 1/2" NPT Conduit Entry<br/>00M M20 Conduit Entry</p> |
| Enclosure Material           | Approvals   | Wiring Options   |

## The TopWorx™ Family of Products



### GO™ SWITCH

Using a unique technology, GO Switch outperforms conventional limit switches and proximity sensors in the toughest applications. If your plant conditions are hot, cold, wet, dirty, abusive, corrosive, or explosive, be sure to specify GO Switch for a long, trouble-free life.



### TopWorx™

TopWorx™ D-Series discrete valve controllers are certified for use in every world area. They carry IECEx, ATEX, UL, and CSA certifications in a single model, making it easier for global customers to standardize across plants in multiple world areas. Other certifications available include NEPSI, KOSHA, InMetro, and GOST. TopWorx™ D-Series discrete valve controllers can survive in virtually any plant condition. Their heavy-duty construction and corrosion resistance enable superior performance in the most demanding applications.



TopWorx™ T-Series switchboxes deliver outstanding value by providing full functionality in compact, direct-mount enclosures. Available with a variety of position sensors, integral solenoid valves, and bus networks, the T-Series is suitable for use in all hazardous areas and carry IECEx, ATEX, and CSA certifications.



TopWorx SIL-3 ESD Valve Controllers provide a complete Partial Stroke Test Solution with unique features and functionality that enable partial stroke testing of emergency shutdown valves without disrupting or shutting down the process.



### WIRELESS

The TopWorx™ 4310 Wireless Position Monitor is a component of Emerson's Smart Wireless solutions for field instrumentation. Smart Wireless extends PlantWeb's predictive intelligence into areas that were previously out of physical or economic reach, opening the door for new possibilities in process management.



### WIRELESS SAFETY SHOWER MONITORING SOLUTION

The TopWorx™ Wireless Safety Shower Monitoring Solution combines two 10 Series, latching GO Switches with a Rosemount 702 Wireless Transmitter that provide on/off indication, time stamping, and automated reporting functions for safety shower/eyewash stations.



### VIP BRACKETS

With over 1,500 mounting kit designs, TopWorx products can be mounted on any rack-n-pinion, scotch-yoke, or vane actuator, quarter-turn manual valves, linear knifegate and control valves, and positioners.

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**EMERSON**  
Process Management

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