

# **TOPWORX**

Process automation solutions for  
**today and tomorrow**



Position Sensing

Valve Control

Field Networking

# TopWorx is the leader in field networking, valve control, and position sensing solutions for the process industries.



We promise to provide:

- Products with superior **quality and value**
- People with leading **experience and expertise**
- Service with outstanding **speed and excellence**

When you do business with TopWorx, you *will* see a difference in these critical areas.

### Quality and Value

Our years of working with plants, mills, and pipelines have resulted in a portfolio of top quality, high performance products. We never compromise our designs – every product is built to operate safely and reliably in demanding plant conditions. Yet we aggressively work to reduce costs in order to deliver maximum value for price paid.

### Experience and Expertise

At TopWorx, everything starts with the customer. With over fifty years of experience in the process industries, we have a deep understanding of customer needs. We couple our process experience with our expertise in modern technologies to create state-of-the-art solutions for today's customers.

### Speed and Excellence

We believe that good service doesn't have to be a lost art. Instead, we have instilled a passion for serving customers that drives everything we do. That's why our customers consistently rank us among their top vendors when it comes to their overall "buying experience."





### Valve Control Solutions

Valvetop® valve control solutions enable automated on/off valves to communicate via FOUNDATION Fieldbus, DeviceNet, and AS-Interface. Better yet, Valvetop discrete valve controllers attach to both rotary and linear valves and actuators, operate in the most demanding plant conditions, and carry a variety of global certifications.



### Position Sensing Solutions

GO® Switch leverless limit switches provide reliable position sensing in extremely hot, cold, wet, dirty, abusive, corrosive, and explosive plant conditions. Using a unique hybrid design, GO Switches combine the advantages of proximity sensors and mechanical limit switches into a single technology that outperforms all others.



### Field Networking Solutions

Networkx™ field networking solutions offer a complete portfolio of best-in-class components that connect field devices to control systems via a variety of fieldbus protocols. In addition, Networkx Support Services help optimize your network by helping with bus network selection, design, implementation, and troubleshooting.

# Discrete Valve Controllers designed by customers... delivered by TopWorx

The Valvetop® range of discrete valve controllers and monitors is the direct result of extensive customer research. We've coupled our experience in the process industries with our expertise in bus networking, sensor, and solenoid technologies to create the finest switchboxes and valve controllers available anywhere.



**valvetop**



## Discrete Valve Controllers



**DXP**  
Tropicalized Aluminum

**EXPLOSION PROOF / FLAMEPROOF / INTRINSICALLY SAFE**

**Explosion Proof/Flameproof**  
Class I Division 1 Groups C-D  
Class I Division 2 Groups A-D  
EEx d IIB II2G (Flameproof)

**Intrinsically Safe**  
Class I Division 1 & 2 Groups A-D  
EEx ia IIc II1G

IP67, Type 4, 4X, 7



**DXS**  
316L Stainless Steel

**EXPLOSION PROOF / FLAMEPROOF / INTRINSICALLY SAFE**

**Explosion Proof/Flameproof**  
Class I Division 1 Groups C-D  
Class I Division 2 Groups A-D  
EEx d IIB II2G (Flameproof)

**Intrinsically Safe**  
Class I Division 1 & 2 Groups A-D  
EEx ia IIc II1G

IP67, Type 4, 4X, 7



**DVC / DVM**  
Direct-mount Resin with LEDs

**NON-INCENDIVE**

**Non-Incendive**  
Class 1 Division 2 Groups A-D  
EEx nc IIC II3G  
Type 4, 4X

Valvetop discrete valve controllers combine bus networking, position sensors, and pilot valves into a variety of globally certified enclosures suitable for every application need.

### Options



#### Sensor-Communications Modules

TopWorx Sensor-Communications Modules are microprocessor based "brains" that combine bus networking, position sensors, solenoid outputs, and wiring terminals into a sealed module that drops into a variety of Valvetop platforms.

- FOUNDATION Fieldbus
- DeviceNet
- Profibus
- AS-Interface



## The Valvetop difference

**Valvetop works with all major control systems.** With today's process plants shifting toward modern fieldbus networking technologies, the link between automated valves and the control system is more important than ever. Valvetop has been proven to work with all major control systems, including ABB, Emerson, Honeywell, Invensys, Rockwell, Siemens, Smar, and Yokogawa.

### Valvetop offers the broadest range on the market today.

Whether your environment is explosion proof, intrinsically safe, non-incendive, general purpose, or your conditions are hot, cold, wet, dirty, abusive, corrosive, explosive, or your application is rotary, linear, bus or conventional, Valvetop has a product to meet your needs.

**Valvetop delivers high quality and performance at affordable costs.** To deliver the value that today's customers require, we have coupled state-of-the-art technology with aggressive sourcing and low cost manufacturing to ensure that customers receive the biggest 'bang for their buck'.

"I love the TopWorx DVC direct mount feature and LEDs. My client will benefit from having LEDs on the TopWorx device. Also, having one DO block for valve feedback will save my client money on licensing fees."

Engineering Contractor



### TXP Direct-mount Aluminum

**FLAMEPROOF / NON-INCENDIVE**

#### Flameproof

Zone 1  
EEx d IIB II2G  
EEx d IIB + H2 II2G (flattop only)  
IP67

#### Non-Incendive

Class I Division 2 Groups A-D  
Type 4, 4X



### TXS Direct-mount Stainless Steel

**FLAMEPROOF / NON-INCENDIVE**

#### Flameproof

Zone 1  
EEx d IIB II2G  
EEx d IIB + H2 II2G (flattop only)  
IP67

#### Non-Incendive

Class I Division 2 Groups A-D  
Type 4, 4X



### TVC Direct-mount Resin

**NON-INCENDIVE**

#### Non-Incendive

Class I Division 2 Groups A-D  
Class II Division 2 Groups E-G  
Type 4, 4X



### TVG Direct-mount Resin

**GENERAL PURPOSE**

#### General Purpose

Ordinary Locations  
Type 4, 4X



#### Position Sensors

- Hermetically sealed GO Switches rated 4amp@120VAC and 3amp@24VDC
- Inductive and reed proximity sensors
- Mechanical limit switches
- Potentiometers
- 4-20mA position transmitters



#### Integral Pilot Valves

- Low power solenoid pilots
- Aluminum, 304, and 316SS valve bodies
- Single or Dual Coil
- Pushbutton or palm actuated manual overrides
- Up to 3.0 Cv

Note: All Valvetop products are intrinsically safe when used with an appropriate barrier or isolator, as long as (a) they contain "simple apparatus" sensors such as GO Switch, reed, or mechanical switches and (b) the solenoid coils are specifically rated for intrinsic safe use.

# Valvetop Ordering Guide

Choose one option from each category to build a complete model number.

Ordering Examples:  
DXP-FF0GNEBPA2  
TVC-M22GNEM

✔ Denotes **FastTrack Delivery** option most likely to be available for immediate shipment. - see page 15 for details.



Enclosure	Bus/Sensor	Area Classification	Visual Display	Shaft
<p><b>DXP, DXS, TXP, TXS, TVC, TVG</b></p> <p><b>D Series</b></p> <ul style="list-style-type: none"> <li>✔ <b>DXP</b> Tropicalized Aluminum</li> <li>✔ <b>DXS</b> 316L Stainless Steel</li> </ul> <p><b>T Series</b></p> <ul style="list-style-type: none"> <li>✔ <b>TXP</b> Direct-mount Aluminum</li> <li><b>TXS</b> Direct-mount 316L Stainless Steel</li> <li>✔ <b>TVC</b> Direct-mount Resin</li> <li><b>TVG</b> Direct-mount Resin (Area class G only)</li> </ul>	<p><b>Bus Networking</b></p> <ul style="list-style-type: none"> <li>✔ <b>AS</b> AS-Interface (Area Class must be 1, 2 or G)</li> <li>✔ <b>FF</b> FOUNDATION Fieldbus (Pilot must be P, R, or U) (D Series only)</li> <li>✔ <b>DN</b> DeviceNet (Area Class must be 1) (D Series only)</li> <li><b>MB</b> Modbus (Area Class must be 1) (D Series only)</li> <li><b>PB</b> Profibus DP (T Series only, Area Class 1, 2 or G)</li> </ul> <p><b>GO Switches</b></p> <ul style="list-style-type: none"> <li>✔ <b>L2</b> (2) GO Switches, SPDT hermetic seal</li> <li><b>L4</b> (4) GO Switches, SPDT hermetic seal (D Series only)</li> </ul> <p><b>Mechanical Switches</b></p> <ul style="list-style-type: none"> <li>✔ <b>M2</b> (2) Mechanical SPDT</li> <li><b>M4</b> (4) Mechanical SPDT</li> <li><b>M6</b> (6) Mechanical SPDT (D Series only)</li> <li><b>T2</b> (2) Mechanical DPDT</li> <li><b>K2</b> (2) Mechanical SPDT gold contacts</li> <li><b>K4</b> (4) Mechanical SPDT gold contacts</li> </ul> <p><b>Proximity Switches</b></p> <ul style="list-style-type: none"> <li>✔ <b>R2</b> (2) SPST Hermetic Seal</li> <li><b>R4</b> (4) SPST Hermetic Seal</li> <li><b>P2</b> (2) SPDT Hermetic Seal 3 amp</li> <li><b>P4</b> (4) SPDT Hermetic Seal 3 amp</li> </ul> <p><b>Inductive Sensors</b></p> <ul style="list-style-type: none"> <li><b>E2</b> (2) p+f NJ2-V3-N, inductive NAMUR</li> <li><b>E4</b> (4) p+f NJ2-V3-N, inductive NAMUR</li> <li><b>I2</b> Inductive proximity NPN N/C (T Series only)</li> </ul> <p><b>Analog Output</b> (DXP available w/ 2 switch options only for L, M, E, T and K*) (T Series available w/ 2 switch options only for M &amp; R*) <b>_X</b> 4-20mA transmitter (0-180°)</p> <p>*Examples: LX = (2) GO Switches with transmitter OX = no switches with transmitter AM = AS-I w/ mechanical switches (T Series only)</p>	<p><b>D Series only</b></p> <ul style="list-style-type: none"> <li>✔ <b>0</b> Intrinsically Safe* Class I Div 1 &amp; 2 Groups A-D Zone 0 EEx ia IIC II 1 G IP67 (Pilot 0, 1, 2, or 3 (24V) P, R, U (FF) only) Type 4, 4X, and 7</li> <li>✔ <b>1</b> Explosion Proof/Flameproof Class I Div 1 &amp; 2 Class I Div 2, Grps A-D (Hermetic seal only) Groups C-D Zone 1 EEx d IIB II2G IP67 Type 4, 4X, and 7</li> <li><b>T Series only</b></li> <li>✔ <b>1</b> Flameproof Zone 1 EEx d IIB II 2 G IP67 (Encl TXP &amp; TXS only)</li> <li><b>H</b> Zone 1 EEx d IIB+H2, II 2 G IP67 (TXP &amp; TXS with Visual Display F only; Pilot 0 only)</li> <li>✔ <b>2</b> Non-Incendive Class I &amp; II Div 2 (Hermetic seal only) Grps A-G Type 4, 4X</li> <li>✔ <b>G</b> General Purpose Ordinary Locations Type 4, 4X</li> </ul> <p>* With appropriate I.S. barrier ** Certifications pending</p>	<ul style="list-style-type: none"> <li>✔ <b>G</b> Standard 90° Green OPEN, Red CLOSED</li> <li><b>B</b> 90° Black OPEN, Yellow CLOSED</li> <li><b>F</b> Flat top w/ skirt indicator (TXP &amp; TXS only)</li> <li><b>4</b> 45° Green OPEN, Red CLOSED</li> <li><b>X</b> 45° Black OPEN, Yellow CLOSED</li> </ul>	<ul style="list-style-type: none"> <li>✔ <b>S</b> 1/4" DD 304 stainless steel (DXP only)</li> <li>✔ <b>N</b> NAMUR 304 stainless steel</li> </ul>
<b>Enclosure</b>	<b>Bus/Sensor</b>	<b>Area Class.</b>	<b>Visual Display</b>	<b>Shaft</b>

Enclosure	Bus/Sensor	Area Classification	Visual Display	Conduit Entries	Pilot Valve
<p><b>DVC, DVM, IVC, IVM</b></p> <ul style="list-style-type: none"> <li>✔ <b>DVC</b> Direct-mount Resin</li> <li><b>DVM</b> Direct-mount Resin</li> <li><b>IVC</b> Direct-mount Resin</li> <li><b>IVM</b> Direct-mount Resin</li> </ul>	<p><b>Bus Networking</b></p> <ul style="list-style-type: none"> <li>✔ <b>AS</b> AS-Interface (DVC &amp; DVM only; Area Class Z2 only)</li> <li>✔ <b>FF</b> FOUNDATION Fieldbus (DVC &amp; DVM only)</li> <li>✔ <b>DN</b> DeviceNet (DVC &amp; DVM only; Area Class Z2 only)</li> <li><b>MB</b> Modbus (DVC &amp; DVM only; Area Class Z2 only)</li> </ul> <p><b>Proximity Switches</b></p> <ul style="list-style-type: none"> <li><b>D2</b> (2) Proximity sensors Herm sealed SPDT (IVC &amp; IVM only)</li> </ul>	<ul style="list-style-type: none"> <li>✔ <b>Z0</b> Intrinsically Safe* Class I Div 1&amp;2, Grps A-D; Class II Div 2 Grps F &amp; G Zone 0 EEx ia IIC, II 1 G (IVC - S44 or S45 only) (DVC-FF - P44 or P45 only)</li> <li>✔ <b>Z2</b> Non-Incendive Class I, Div 2, Grps A-D Class II Div 2, Grps F &amp; G Zone 2 EEx nc IIC</li> </ul> <p>* With appropriate I.S. barrier</p>	<ul style="list-style-type: none"> <li>✔ <b>B</b> Dome and LEDs</li> <li><b>R</b> Dome and LEDs Reverse Acting</li> </ul>	<ul style="list-style-type: none"> <li>✔ <b>P</b> (2) 1/2" NPT conduit</li> <li><b>M</b> (2) M20 metric conduit</li> </ul>	<p><b>Blank</b> No valve - DVM &amp; IVM only</p> <ul style="list-style-type: none"> <li>✔ <b>S44</b> 24Vdc, 4-way Aluminum (Not available with FF)</li> <li><b>S45</b> 24Vdc, 4-way 316 Stainless Steel (Not available with FF)</li> <li><b>144</b> 110Vac, 4-way (IVC only)</li> <li><b>145</b> 110Vac, 4-way 316 Stainless Steel (IVC only)</li> <li>✔ <b>P44</b> Piezo valve, 4-way Aluminum (Bus option FF only)</li> <li><b>P45</b> Piezo valve, 4-way 316 Stainless steel (Bus option FF only)</li> </ul>
<b>Enclosure</b>	<b>Bus/Sensor</b>	<b>Area Class.</b>	<b>Visual Disp.</b>	<b>Conduit Entries</b>	<b>Pilot Valve</b>



DeviceNet



Did you know?

- TopWorx offers the broadest range of valve control solutions available:
  - Zone 0,1,2 and Division 1 & 2 hazardous areas
  - ATEX, UL, and CSA certifications
  - Direct-mount low profile switchboxes
  - Wide array of bus networks, sensors, and solenoids
  - Thousands of mounting kits to attach to valves and actuators

Valvetop

Conduit Entries	O-Rings	Pilot	Spool Valve	Valve Cv	Manual Override
<p><b>D Series only</b>  <input checked="" type="checkbox"/> <b>E</b> (2) 3/4" NPT</p> <p><b>4</b> (2) 3/4" NPT            (2) 1/2" NPT</p> <p><b>M</b> (2) M20</p> <p><b>3</b> (4) M20</p> <hr/> <p><b>T Series only</b>  <input checked="" type="checkbox"/> <b>E</b> (2) 1/2" NPT</p> <p><b>M</b> (2) M20</p>	<p><b>D Series only</b>  <input checked="" type="checkbox"/> <b>B</b> Buna-N</p> <hr/> <p><b>T Series only</b>  <input checked="" type="checkbox"/> <b>M</b> Buna/EPDM</p>	<p><b>D Series only</b></p> <p><b>Blank</b> No pilot device(s)</p> <p><input checked="" type="checkbox"/> <b>1</b> (1) 24Vdc pilot, .5W, fail open/closed</p> <p><b>2</b> (2) 24Vdc pilots, .5W, fail last position</p> <p><b>3</b> (2) 24Vdc pilots, .5W, block center</p> <p><input checked="" type="checkbox"/> <b>7</b> (1) 110Vac pilot, 1.1W, fail open/closed</p> <p><b>8</b> (2) 110Vac pilots, 1.1W, fail last position</p> <p><b>9</b> (2) 110Vac pilots, 1.1W, block center</p> <p><input checked="" type="checkbox"/> <b>P</b> (1) piezo pilot, fail open/closed (FF only)</p> <p><b>R</b> (2) piezo pilots, fail last position (FF only)</p> <p><b>U</b> (2) piezo pilots, block center (FF only)</p> <hr/> <p><b>T Series only</b></p> <p><b>Blank</b> No pilot device</p> <p><input checked="" type="checkbox"/> <b>1</b> (1) 24Vdc pilot, 1W, fail open/closed</p> <p><b>2</b> (2) 24Vdc pilots, 1W, fail last position (TVC &amp; TVG only)</p> <p><b>7</b> (1) 110Vac pilot, 3W, fail open/closed</p> <p><b>8</b> (2) 110Vac pilots, 3W, fail last position (TVC &amp; TVG only)</p> <p><b>A</b> (1) 220Vac pilot, 3W, fail open closed</p> <p><b>B</b> (2) 220Vac pilots, 3W, fail last position (TVC &amp; TVG only)</p>	<p><b>Blank</b> No spool valve</p> <p><input checked="" type="checkbox"/> <b>A</b> Aluminum hard coat anodized</p> <p><b>S</b> 304 Stainless Steel (DXP only)</p> <p><b>6</b> 316 Stainless Steel</p>	<p><b>Blank</b> No spool valve</p> <p><b>D Series only</b></p> <p><input checked="" type="checkbox"/> <b>2</b> 1.2 Cv (1/4" NPT ports)</p> <p><b>3</b> 3.0 Cv (1/2" NPT ports)</p> <hr/> <p><b>T Series only</b></p> <p><b>1</b> 1.0 Cv (1/4" NPT ports)</p>	<p><b>Blank</b> No override</p> <p><b>D Series only</b></p> <p><input checked="" type="checkbox"/> <b>1</b> Single Pushbutton Momentary/Latching</p> <p><b>2</b> Dual Pushbutton Momentary/Latching</p> <p><b>3</b> Single Pushbutton Momentary</p> <p><b>4</b> Dual Pushbutton Momentary</p> <p><b>A</b> Single palm actuator Momentary/Latching</p> <p><b>B</b> Dual palm actuator Momentary/Latching</p> <p><b>C</b> Single palm actuator Momentary</p> <p><b>D</b> Dual palm actuator Momentary</p>
<b>Conduit Entries</b>	<b>O-Rings</b>	<b>Pilot</b>	<b>Spool Valve</b>	<b>Valve Cv</b>	<b>Manual Override</b>

Mounting Kits

Over 1,500 custom mounting kits to fit Valvetop and GO Switch products to virtually any valve or actuator - rotary, linear, Namur and non-Namur.

Consult factory for additional information.

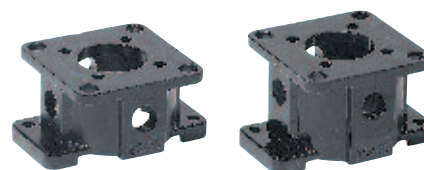
For ISO/Namur Quarter-Turn Actuators

Stainless Steel Brackets

- 4N20080-G41S
- 4N30080-G41S
- 4N50130-G41S

Aluminum Brackets

- 4N20080-G41A
- 4N30080-G41A
- 4N50130-G41A



T-Series mount directly on ISO/Namur actuators. Mounting plate is included for 20x80 sizes.

# Leverless Limit Switches built to last in the most demanding plant conditions



GO® Switch leverless limit switches provide reliable, durable position sensing in the most demanding plant conditions. Unlike mechanical limit switches or inductive proximity sensors, GO Switches use a unique hybrid technology that eliminates wear and tear. As a result, GO Switches are more dependable and last longer in the toughest applications.

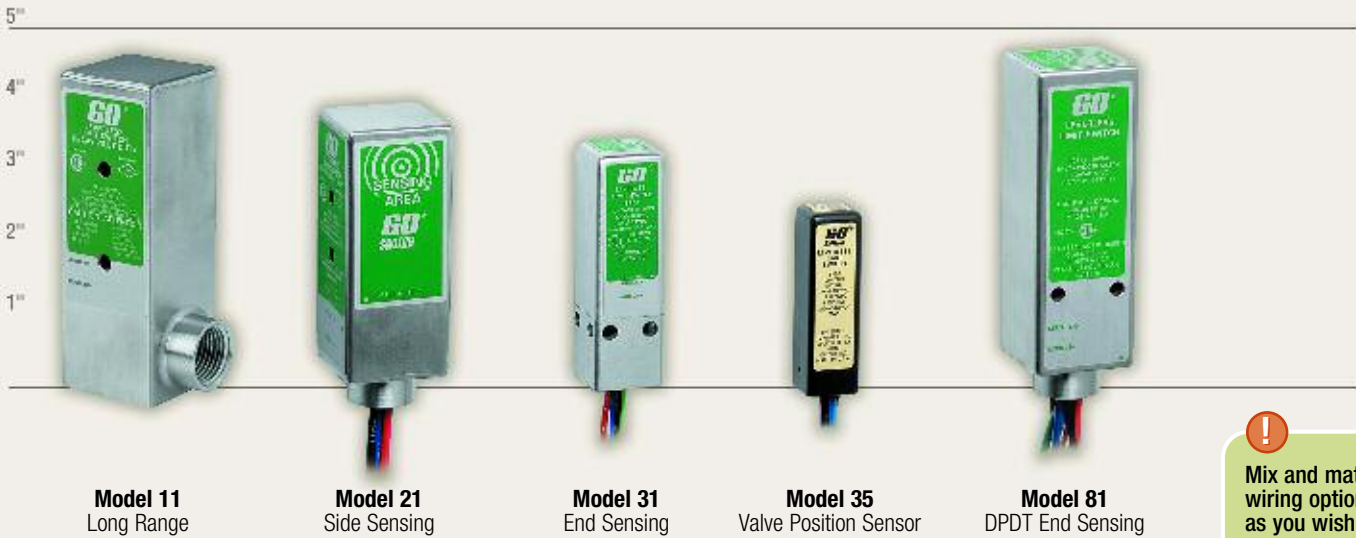


CENELEC



ATEX

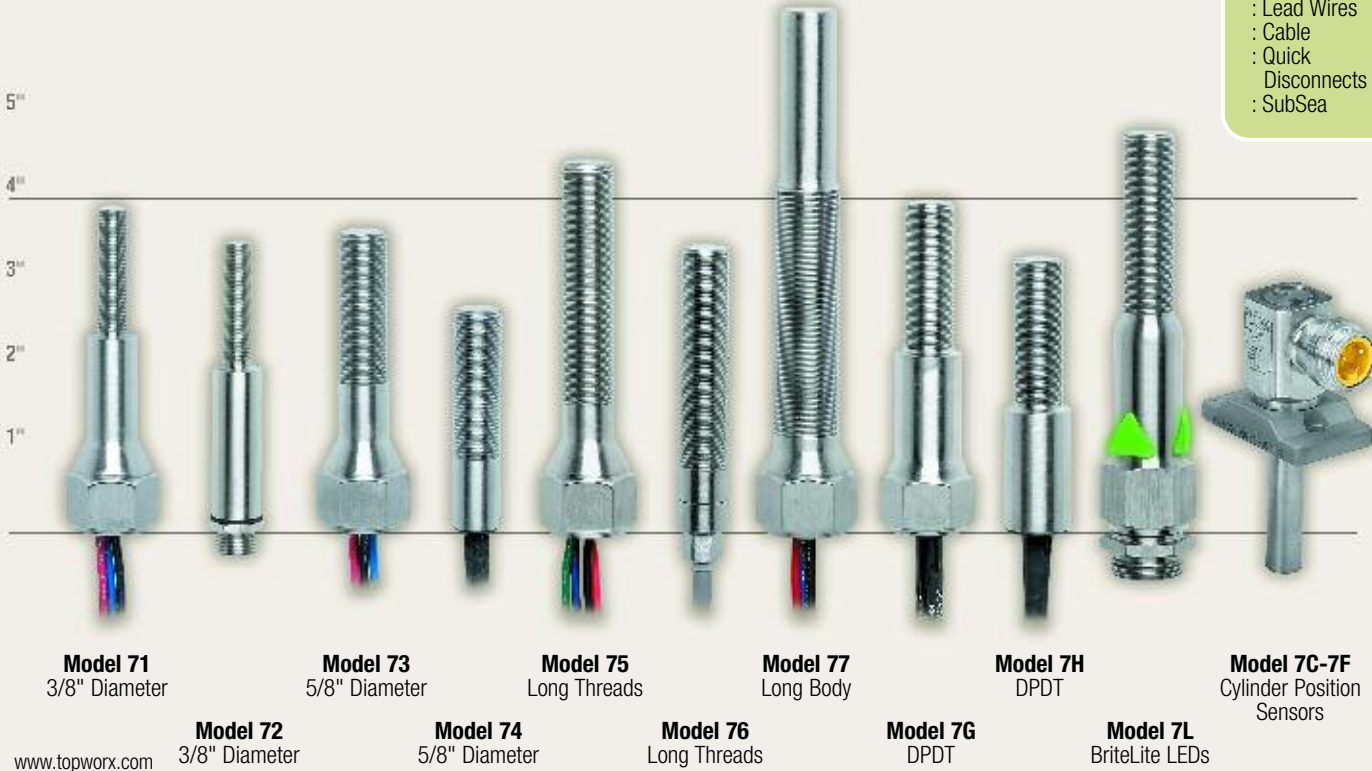
Square Switches



**Mix and match wiring options as you wish**

- : Lead Wires
- : Cable
- : Quick Disconnects
- : SubSea

Round Switches



## The GO Switch difference

**Unique hybrid technology.** GO Switches have a one-of-a-kind “leverless limit switch” design that combines the advantages of existing limit switch and proximity sensor technologies. As a result, GO Switches deliver better performance in the most demanding applications.

**Reliability in a variety of industries.** For over forty years, GO Switches have set the standard for mission-critical position sensing in the automotive, cement, chemical, diecasting, food & beverage, hydrocarbon, manufacturing, mining, oil & gas, petrochemical, power generation, pulp and paper, steel & aluminum, tire & rubber, and water & wastewater industries.

**Durability when it matters most.** GO Switches last longer in plant conditions that are hot, cold, wet, dirty, abusive, corrosive,

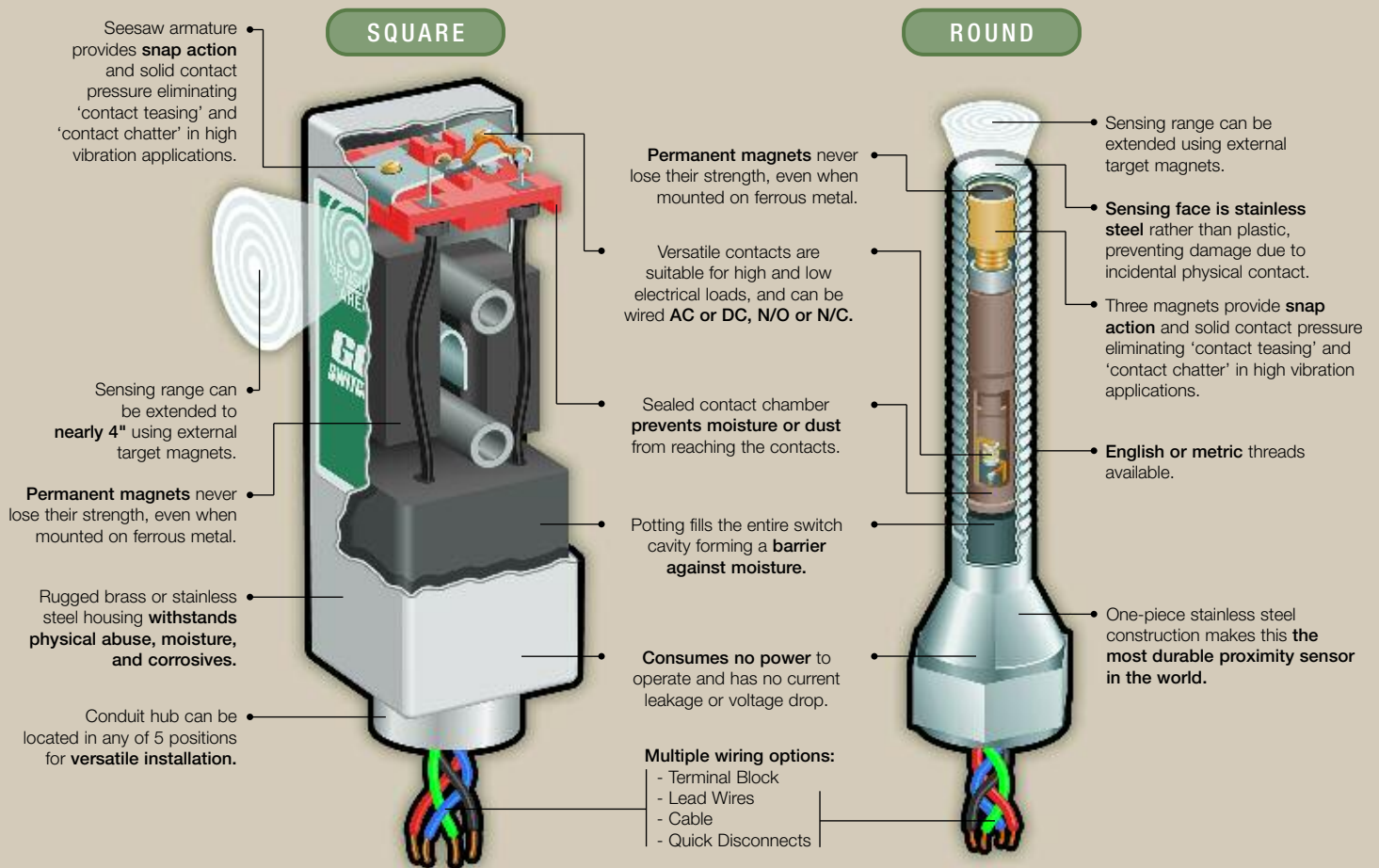
and explosive. A wide variety of GO Switches are certified for use in all hazardous areas including Zone 0 (intrinsically safe), Zone 1 (explosion proof), and Zone 2 (non-incendive). With no exposed moving parts and no delicate electronics, GO Switches have been designed to withstand caustics, corrosives, salt water, submersion, physical abuse, vibration, and temperatures ranging from -58°F/ -50°C to 400°F/204°C.

“GO Switch is one of the most reliable products in our plant. I wish everything we buy would last as long and perform as well as GO Switch.”

Lead Engineer - Oil Refinery

## Leverless Limit Switches

GO Switches outperform conventional limit switches and proximity sensors in the toughest applications.



### Options Available

- Explosion Proof
- SPDT or DPDT
- HiTemp™ to 350°F
- SubSea™ Submersible
- Latching


### Options Available

- Explosion Proof
- SPDT or DPDT
- HiTemp™ to 400°F
- SubSea™ Submersible
- Hermetically Sealed
- High Pressure to 10,000psi
- English or metric threads

# GO Switch Ordering Guide

Choose one option from each category to build a complete model number.

Ordering Examples:  
11-12110-00  
73-13528-A2

 Denotes **FastTrack Delivery** option  
- see page 15 for details.



Model	Contact Form	Sensing Range	Outlet Position
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### Square Body (11, 21, 81)

- 11** 1-1/2" square x 4-9/16"  
Add 1/2" for bottom conduit outlet
- 21** 1-1/2" square x 3-13/16"  
Add 1/2" for bottom conduit outlet
- 81** 1-1/2" square x 3-7/8"  
Add 1/2" for bottom conduit outlet



### Round Body (71-7H)

- 71** 3/8" x 3-15/16" - 1/2" NPT conduit
- 72** 3/8" x 3-3/8" - No conduit
- 73** 5/8" x 3-5/8" - 1/2" NPT conduit
- 74** 5/8" x 2-3/4" - No conduit
- 75** 5/8" x 4-5/16" - 1/2" NPT conduit
- 76** 5/8" x 3-3/16" - No conduit
- 77** 3/4" x 5-13/16" - 1/2" NPT conduit
- 7G** 5/8" x 4" - 1/2" NPT conduit
- 7H** 5/8" x 3-1/4" - No conduit

Note: For metric threads add "M" after first group. Example: 73M-XXXX-XX

Models 71-72 : 12mm  
Models 73-76 : 18mm  
Models 7G-7H : 18mm



### Square Body

- 1** Single Pole Double Throw (Form C)
- 2** Double Pole Double Throw (Form CC) (Models 81 only)
- 3** Single Pole Double Throw (Form C) Latching (maintained contact) (Models 11 & 21, Outlet 2, 4, 5 only)
- 5** Double Make Double Break (Form Z) Two-circuit (Models 11 & 21 only)
- 6** Double Make Double Break (Form Z) Two-circuit, Latching (maintained contact) (Models 11 & 21, Outlet 2, 4, 5 only)

### Round Body

- 1** Single Pole Double Throw (Form C)
- 2** Double Pole Double Throw (Form CC) (7G & 7H only)

### Square Body

- 0** 1/4" end sensing (Model 81 only)
- 1** Standard sensing - 3/8" side sensing (Models 11 & 21 only)
- 2** Extended sensing - 9/16" side sensing (Model 11, Contact Form 1 or 3 only)
- 7** Precision sensing - 1/4" side sensing (minimal differential) (Models 11 & 21 only)

### Round Body

- 3** Standard sensing - .100" end sensing (Models 73-77, 7G-7H; Enclosure 2 or 6 only)
- 4** .072" end sensing (Models 73-77; Enclosure 3; Approvals 2, 7, 8, or 9 only)
- 5** .060" end sensing (Models 73-77; Enclosure 4; Approvals 2, 7, or 8 only)
- 6** .040" end sensing (Models 71 & 72 only)

### Square Body

- 1** Behind sensing area
- 2** Left of sensing area (Models 11 & 21 only)
- 3** Right of sensing area (Models 11 & 21 only)
- 4** Same side as sensing area (Models 11 & 21 only)
- 5** Bottom of enclosure

### Round Body

- 5** Bottom of enclosure

Model

Contact Form

Sensing Range

Outlet Position



**Did you know?**

There are GO Switch options for virtually any tough application:

- Zone 0, 1, 2 and Division 1 & 2 hazardous areas
- ATEX, UL, CSA, and other certifications
- High temperatures up to 400°F / 204°C
- Underwater to depths of 23,000 ft. / 7,000 meters
- High pressure to 10,000 psi / 700 Bar
- Nuclear power plant qualified switches
- Extended sensing up to 4" with target magnets
- LEDs, DPDT contacts, metric threads

**Enclosure Material**

**Square Body**

- ✓ 1 Brass with flat black lacquer coating
  - ✓ 2 Stainless steel\*
  - 3 Brass with corrosion resistant coating
  - 4 Stainless steel with corrosion resistant coating
- \* Stainless steel switches are recommended for wet or harsh environments.

**Round Body**

- ✓ 2 303 stainless steel (rated 2,000psi) (Models 71-77, 7G-7H; Sensing 3 only)
- 3 HiPressure - 303 stainless steel (rated 5,000psi) (Models 73-77; Sensing 4; Approval 2, 7, 8, or 9 only)
- 4 HiPressure - 303 stainless steel (rated 10,000psi) (Models 73-77; Sensing 5; Approval 2, 7, 8 only)
- 6 316 stainless steel (rated 2,000psi)
- 7 HiPressure - 303 stainless steel (rated 3,500psi) (Models 73, 75, 77; Sensing 4; Approval 3 only)

**Enclosure Material**

**Approvals**

**Square Body**

- ✓ 0 CSA / FM Cl I, Div 2, Grps A-D; Cl II, Div 2, Grps F & G; Cl III Terminal block (Models 11 & 21 only) (Contact Form 1 or 3; Wiring 00 only)
- 2 HiTemp to 350°F (Models 11 & 81; Contact Form 1 or 3) (Sensing 1 (0 for Model 81); Enclosure 2; Wiring F only)
- ✓ 3 UL Cl I, Div 1 & 2; Grps A-D; Cl II, Div 1 & 2, Grps E-G; Cl III (Enclosure 2 or 4 only) (Lead seal required)
- ✓ 4 CSA / FM Cl I, Div 1; Grps A-D; Cl II, Div 1, Grps E-G; Cl III (Enclosure 2 or 4 only) (Lead seal required)
- ✓ 6 CSA FM Cl I, Div 2; Grps A-D; Cl II, Div 2, Grps E-G; Cl III (Lead seal required)
- 7 CSA certified General Purpose
- ✓ 8 UL listed General Purpose

**Round Body**

- 2 HiTemp to 400°F (Wiring F only)
- ✓ 3 UL Cl I Div 1 & 2 Grps A-D; Cl II Div 1 & 2, Grps E-G (Models 71, 73, 75 & 77; 7G only) (Wiring A, B, or F only) (Lead seal required)
- ✓ 4 CSA Cl I Div 1; Grps A-D; Cl II Div 1, Grps E-G; Cl III (Models 71, 73, 75 & 77; 7G only) (Wiring A, B, or F) (Lead seal required)
- ✓ 6 CSA Cl I, Div 2; Grps A-D; Cl II, Div 2; Grps E-G; Cl III (Models 71, 73, 75, 77, 7G only) (Wiring A, B, or F only) (Lead seal required)
- 7 CSA certified General Purpose
- ✓ 8 UL listed General Purpose
- 9 CENELEC: EEx d IIC T6 Zone 1 (Models 73, 75, 77; 7G) (Wiring A or B only)
- ✓ T ATEX Zone 1 EEx d IIC T6 (-20°C to +50°C), II 2G (Models 73 & 7G only) -20°C to 50°C with Wiring A & B -40°C to 150°C with Wiring H

**Approvals**

**Wiring Options**

All options apply to Square Body and Round Body

**Terminal Block**

- ✓ 00 (Models 11 & 21 only)

**Lead Wires - 18 Gauge (7G - 7H = 20 gauge)**

- ✓ A2 36"
- A3 72"
- A4 144"
- A\_\_\_ Greater than 144" - specify length in 5 ft. increments

**Cable - 18 Gauge (7G - 7H = 20 gauge)**

- ✓ B2 36"
- B3 72"
- B4 144"
- B\_\_\_ Greater than 144" - specify length in 5 ft. increments

**Water Resistant Squeeze Connector**

- (Models 72, 74, 76 only) (Approval 7 or 8 only)
- C2 36"
  - C3 72"
  - C4 144"
  - C\_\_\_ Greater than 144" - specify length in 5 ft. increments

**Mini Change Connector**

- (Models 11, 21, 81, 71, 73, 75, 77, 7G only) (Approval 7 or 8 only; 3 pin is 8 only)
- ✓ DCA 3 pin
  - DCD 4 pin
  - DCH 7 pin (7G and 81 only)

**Micro Change Connector**

- (Models 11, 21, 81, 72, 74, 76) (Approval 7 or 8 only; 3 pin is 8 only)
- ✓ DBA 3 pin
  - DBD 4 pin

**SubSea Connector**

- (Models 73, 75, or 77 only) (11, 21, or 81, Enclosure 2 or 4 only) (Approval 7 or 8 only; 3 pin 8 only)
- 3DD 3 pin
  - 4DD 4 pin
  - 8DD 8 pin
  - 3DE 3 pin 90°
  - 4DE 4 pin 90°

**HiTemp™ Leads (Teflon insulated)**

- 18 gauge (7G - 7H = 20 gauge)
- F2 36"
  - F3 72"
  - F4 144"
  - F\_\_\_ Greater than 144" - specify length in 5 ft. increments

**HiTemp™ Leads (Peek insulated)**

- (Models 71-77)
- H2 36"
  - H3 72"
  - H4 144"
  - H\_\_\_ Greater than 144" - specify length in 5 ft. increments

**Wiring Options**

# Field Networking Solutions make it easy to connect and communicate

TopWorx has assembled a complete portfolio of products and services that enable process manufacturers to reap the benefits of modern bus networking technologies. Networkx™ is a comprehensive, single solution that delivers everything you need to build a modern network.

**networkx**

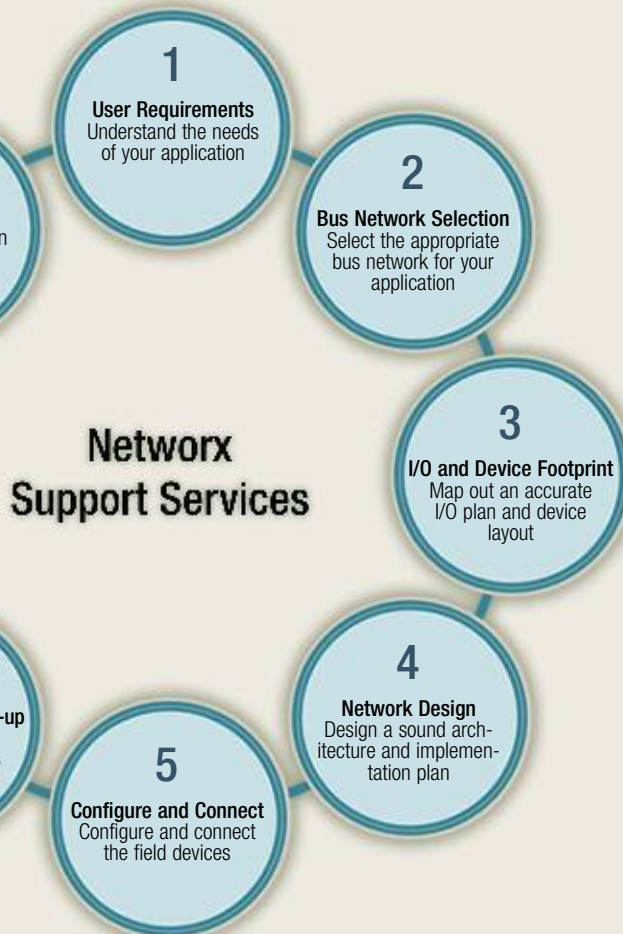


**DeviceNet**  
**MODBUS**



## Networkx Support Services

Networkx Support Services help plant personnel understand and implement bus networking technologies. We can help select the appropriate protocol for your application, map out an accurate I/O plan, design a sound implementation plan, configure and connect the field devices, commission and start-up the process, and troubleshoot any potential problems.



## HazLink® Connectivity Enclosures

Networkx HazLink® connectivity enclosures make it safe and simple to use bus networks in Class I Division 1 and 2 (Zone 1 and 2) hazardous areas.

HazLink connectivity options:

- Disconnect Switches
- I/O Modules
- Wiring Tees

## Cables, Connectors & Cordsets

Networkx provides a vast selection of connectivity options to meet your needs, including bulk cabling, field installable connectors, linking modules, tees, terminators, and pre-molded cordsets that meet the specifications of each fieldbus protocol.

## The Networkx difference

**Networkx bridges the gap between the control room and the field.** With a variety of connectivity components for every major protocol, Networkx takes charge of the critical physical layer between field devices and the control system. Networkx enables you to link devices safely and economically in every process environment and application.

### Networkx is a single source for 'best-in-class' products.

The Networkx portfolio is a collection of the best products available from a variety of sources. With all the leading products under one umbrella, Networkx delivers the finest quality and most extensive selection all from a single source.

**Networkx complements your control system.** Since Networkx is a neutral solution, it works well with all major process control systems available today, including ABB, Emerson, Honeywell,

Invensys, Rockwell, Siemens, Smar, and Yokogawa systems. In fact, several of these companies frequently recommend our products and services to help meet their customers' needs.

“TopWorx provided us with some very helpful conceptual design information that led us to what I feel is an excellent bus design. Our design offers better potential for reliability and is actually cheaper than conventional bus designs by eliminating expensive AS-i power supplies.”

Engineering Specialist - Food & Beverage Processor

## Power Supplies & Repeaters

Networkx power supplies are specifically designed for each protocol. Our selection includes bulk power supplies for control systems and devices, bus-level power supplies and power conditioners for network communications isolation, and repeaters for extending distance limits.



## Masters & Gateways

Networkx masters and gateways control sensor level buses and facilitate connection to higher-level buses. Gateways show up as a node on the higher-level bus and act as a master for the sensor level bus to initialize and diagnose the network and identify and control the field devices.

## I/O Modules, Tees & Disconnect Switches

Networkx Input/Output Modules provide a cost-effective way to connect conventional (non-bus) analog and discrete devices to bus networks. Wiring Tees connect field devices to bus lines. Disconnect Switches allow users to repair or replace field devices without disturbing the network.



# TopWorx delivers Experience + Expertise wherever and whenever you need it

In the process industries, availability is critical to success. And most process plants operate 24 hours a day, 7 days a week. So part of our vision at TopWorx is to make sure that if you need help, you can get it whenever and wherever you need it.

That's why we've created a global support system to serve the unique needs of process plants. Whether you need training for your personnel, configuration of your devices, or quick answers during a start-up, TopWorx can help deliver the kind of support you need.



"I know of no other vendor that could have offered the type of outstanding support that TopWorx has provided to our company."

Engineering Manager  
Pharmaceutical Manufacturer

## TopWorx Channel Partners

**TopWorx Channel Partners are available around the world.**

An important part of our global support system is the relationship that TopWorx enjoys with hundreds of companies around the world. These specialized channel partners have proven expertise in areas such as bus networking, valve automation, or systems integration and must meet rigid criteria in order to become Certified Channel Partners.

### Certified Product Distributor TOPWORX

These partners are authorized to sell and support one or more TopWorx product groups: Valvetop, GO Switch or Networkx.

### Certified Service Provider TOPWORX

These partners are qualified to deliver Networkx Support Services to our customers on behalf of TopWorx.

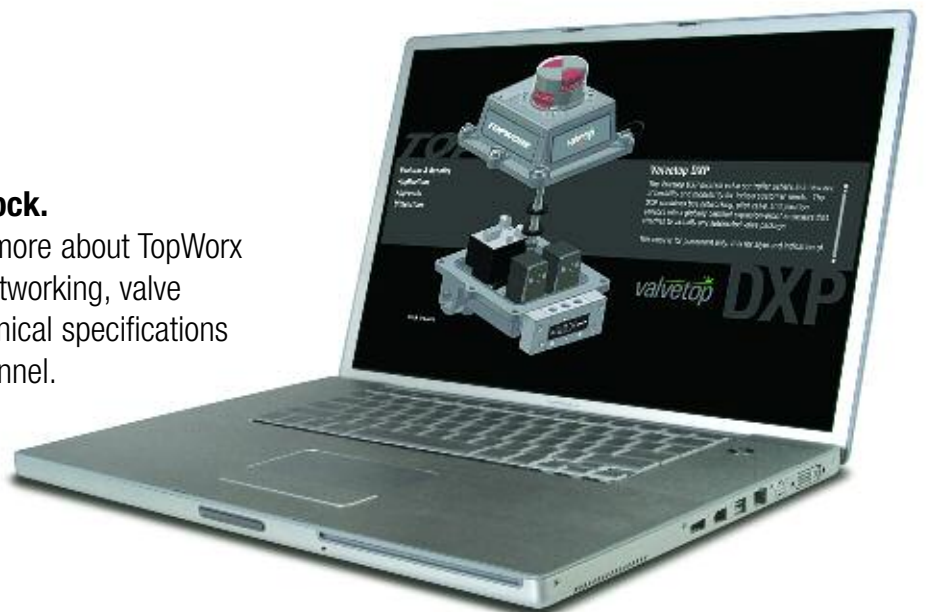
### Certified Product Integrator TOPWORX

These partners are able to integrate one or more TopWorx product groups into larger, more sophisticated control systems and automated valve packages.

[www.topworx.com](http://www.topworx.com)

### TopWorx.com is available around the clock.

Please visit [www.topworx.com](http://www.topworx.com) to find out more about TopWorx products and services, to learn about bus networking, valve control, and position sensing, to access technical specifications and drawings, and to contact TopWorx personnel.



# TopWorx serves you with Speed + Excellence

At TopWorx, we are passionate about delivering a great “buying experience” to our customers. Whether it's a technical question over the phone, finding a drawing on the website, or ordering product for quick delivery, we have the people and processes in place to exceed your expectations.

“I'm truly impressed with the extraordinary service and support. If this is how TopWorx supports its customers, there is no doubt whom I shall look to in the future.”

Team Leader  
Original Equipment Manufacturer



## FastTrack™ Delivery



Standard products that are most likely to be available for immediate shipment.

### Zone 1 / Div 1 Explosion/Flame Proof\*

### Zone 2 / Div 2 Non-Incendive\*

### General Purpose / Ordinary Locations

\* Many Valvetop and GO Switch products are intrinsically safe - please refer to the TopWorx catalog or [www.topworx.com](http://www.topworx.com) for details.

Valvetop	Integral Pilot	No Pilot	Integral Pilot	No Pilot	Integral Pilot	No Pilot
	<b>DXP-FF_G□EBPA2</b> FOUNDATION Fieldbus 5/2 Aluminum pilot valve <input type="checkbox"/> For Shaft, choose S or N _ For Area Classification, choose 0 (I.S.) or 1 (Exp. Proof)		<b>DVC-FFZ_BPP44</b> FOUNDATION Fieldbus 5/2 Aluminum _ For Area Classification, choose 0 (I.S.) or 2 (Non-Inc)			
	<b>DXP-DN1G□EB1A2</b> DeviceNet 5/2 Aluminum pilot valve <input type="checkbox"/> For Shaft, choose S or N		<b>DVC-DNZ2BPS44</b> DeviceNet 5/2 Aluminum pilot valve			
	<b>TXP-AS1GNEM1A2</b> AS-Interface Aluminum pilot valve	<b>TXP-AS1GNEM</b> AS-Interface	<b>TVC-AS2GNEM1A2</b> AS-Interface 24V Aluminum pilot valve			<b>TVG-ASGGNEM</b> AS-Interface
		<b>DXP-L21G□EB</b> (2) GO Switches				
			<b>TVC-R22GNEM1A2</b> (2) SPST proximity 24V Aluminum valve	<b>TVC-R22GNEM</b> (2) SPST proximity		<b>TVG-R2GGNEM</b> (2) SPST proximity
		<b>TXP-M21GNEM</b> (2) Mechanical				<b>TVG-M2GGNEM</b> (2) Mechanical
<b>Valvetop Accessories</b>	<b>4N20080-G41SC</b> NAMUR 20/80 Stainless Bracket	<b>4N30080-G41S</b> NAMUR 30/80 Stainless Bracket	<b>4N30130-G41S</b> NAMUR 30/130 Stainless Bracket	<b>4N50130-G41S</b> NAMUR 50/130 Stainless Bracket		
GO Switch	Round	Square	Round	Square	Round	Square
	<b>73-13523-A2</b> SPDT, stainless 3 ft. leads	<b>21-11524-A2</b> SPDT, stainless 3 ft. leads	<b>73-13526-A2</b> SPDT, stainless 3 ft. leads	<b>11-12110-00</b> SPDT 9/16" sensing Side Terminals	<b>73-13528-A2</b> SPDT, stainless 3 ft. leads	<b>21-11518-A2</b> SPDT, 3/8" sensing 3 ft. leads
	<b>73-13524-A2</b> SPDT, stainless 3 ft. leads		<b>7G-23526-A2</b> DPDT, stainless 3 ft. leads	<b>11-11110-00</b> DPDT 3/8" sensing Side Terminals	<b>73-13528-DCA</b> SPDT, stainless Mini Connector	
	<b>73-1352T-A2</b> SPDT, ATEX 3 ft. leads		<b>LPS-DZ2_A2</b> Proximity, 3 ft. leads _ Choose R or G LED color	<b>21-11510-00</b> SPDT 3/8" sensing Bottom Terminals	<b>74-13528-B2</b> SPDT, stainless 3 ft. cable	
	<b>7G-23523-A2</b> DPDT, stainless 3 ft. leads		<b>7L_-1356E-A2</b> GO Switch, 3 ft. leads _ Choose R or G LED color	<b>81-20516-A2</b> DPDT 1/4" sensing Bottom Leads	<b>74-13528-DBA</b> SPDT, stainless Micro Connector	
<b>GO Switch Accessories</b>	<b>AMP3</b> Plastic covered Target Magnet	<b>AMS4</b> Stainless covered Target Magnet	<b>AMC5</b> Stainless covered Target Magnet	<b>ABS9</b> 70 Series Stainless Mounting Bracket	<b>A-ECB</b> 3 pin, 6 ft. Mini Connector	<b>A-EBB</b> 3 pin, 6 ft. Micro Connector

Note: This list is subject to change – please refer to [www.topworx.com](http://www.topworx.com) for the most current list of FastTrack Delivery products.

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