**VPS Low Profile Inductive Sensor**

- Rugged PBT housing provides corrosion resistance and moisture protection.
- Easily and directly mounts to actuators with ISO-NAMUR topworks.
- Protected against vibration and shock with epoxy-embedded solid-state components.

**Mounting Kits**

- Each kit is specially designed for the particular valve or actuator.
- Stainless steel drive yoke and coupling fit securely with no slippage or binding.
- No special alignment fixtures are required due to switch offset design.

**Quick-View®**

- 360° visibility in a compact design.
- Backlighting available for maximum visibility.
- Flame retardant and UV protected.
- Available with up to four switches.

**DT Detector™**

- Sensor consists of a hermetically-sealed reed switch potted in a stainless steel housing and a separate stainless steel magnetic actuator bolt.
- No moving parts, and can be oriented in any position.
- Designed for use in NEMA 1, 3, 4, 6, 6X, 7, 9, 12, and 13.
- CSA and/or ATEX listed for Class I, Groups B, C, and D; Class II, Groups E, F and G; Division 1 and 2.
**MARK SERIES POSITION INDICATORS/SWITCHES/TRANSMITTERS**

**MARK 1 MAGNETIC COUPLING**
- Features a patented magnetic coupling that isolates the switch compartment, completely separating it from the surrounding atmosphere for maximum hazard and leak protection.
- EZ set cams on switch models provide simple set point adjustment.
- Stainless Steel marking ensures long life and durability.
- Available for Mark 1 and 4 model indicators.

**MARK 2 BUSINESS SIZE**
- The Mark 2 is available on Mark 1, 3, and 4 model indicators.
- HART® is available on Mark 3 and 4 model indicators.
- 4-20 mA current loop transmission with HART® communications.
- HART® fieldbus included.
- Digital indication of sensor failure, programmable to 3.8 or 21 mA.
- Indication of sensor failure, programmable to 4 or 20 mA.
- No switch.

**MARK 3 MULTI-TURN**
- Features a patented magnetic coupling that isolates the switch compartment, completely separating it from the surrounding atmosphere for maximum hazard and leak protection.
- EZ set cams on switch models provide simple set point adjustment.
- Stainless Steel marking ensures long life and durability.
- Available for Mark 1 and 4 model indicators.

**MARK 4 THRU-SHAFT**
- The thru-shaft design that features a 3-piece molded long life and wins to seal the switch compartment, is available for Mark 1, 3, and 4 model indicators.
- EZ set cams on switch models provide simple set point adjustment.
- Stainless Steel marking ensures long life and durability.
- Available with 1 or 2 incorporated external meters.

**MARK SERIES COMMUNICATIONS**
- WirelessHART® is available on Mark 1, 2 and 3 model indicators.
- WirelessHART® allows for adjustment of all settings without removing the device from service.
- Wireless ability saves on installation costs associated with running conduit and wires.

**FACTORY SEALED LEADS**
- Developed for possible or indoor use where condensation and the moisture may be near. 250 VAC (115 VAC), 2 A. Available with Switch Types B, I, R, W.
- Available with Switch Types B, I, R, W.
- Available with Switch Types B, I, R, W.
- Available with Switch Types B, I, R, W.
- Available with Switch Types B, I, R, W.
- Available with Switch Types B, I, R, W.

**AS-INTERFACE**
- All four alarm outputs of up to 31 devices are industry standard 2-wire interface.
- Option for Mark 3 and 4 model indicators.
- Available with 1 or 2 incorporated external meters.

**MARK SERIES MODEL CHART**

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*Note: 12VD0-J1. Mark 1, 2 Switches both Type V – SPST, Direct Drive, Painted Aluminum Enclosure with Junction Package.*
MARK SERIES POSITION INDICATORS/SWITCHES/TRANSMITTERS

MARK 1 MAGNETIC COUPLING

- Three-pole, magnetic coupling makes it easy for each series between, completely ensuring the unit is not affected by magnetic fields and impact and will prevent damage.
- Flexibility allows multiple switch and transmitter options.
- Ideal for severe environments.

MARK 3 MULTI-TURN

- Produces a proportional magnetic output signal by taking the sealed component, completely setting the unit from the surrounding atmosphere for maximum hazard and leak protection.
- Single-turn, multi-turn, or multi-turn with zero and span features.
- Ideal for severe environments.

MARK 4 THRU-SHAFT

- The thru-shaft design allows remote switching of up to 31 switches over 2 wire networks.
- Optional for Mark 3 and 4 models.
- Available with 0.1 in. incorporated external valve.

HART® COMMUNICATIONS

- HART® is available on Mark 1, 3, and 5 model indicators.
- RS485 digital communication interface with HART® communications.
- HART® field coil included.
- Digital indication of status.
- 2 digital programmable function modules.
- Exklusion of air and oxygen at the device from pollution and through HART® module.
- Indication of sensor failure, programmable to 3.2 or 21 ohm.
- Programmable fail sensing.
- Safe-area.

WIRELESSHART® COMMUNICATIONS

- WirelessHART® is available on Mark 1 and 3 model indicators.
- WirelessHART® allows for adjustment of setpoints without removing the device.
- WirelessHART® meets all WirelessHART® standards for increasing the control of systems.
- WirelessHART® makes installation costs associated with wiring and cabling.

FACTORY SEALED LEADS

- Available in variations of 91 reactions available at the device.
- Option for Mark 3 and 4 model indicators.
- Available with switch types A, D, G, M or T. WirelessHART® not available with switches.
- Available with switch type S. Mark 3 potentiometer and transmitter outputs will have no switches if ordered with switch type O, and 2 switches if ordered with switch type T.
- *Note:

AS-INTERFACE

- 20 Digital inputs available for 1-31 switches over 2-wire network.
- Option for Mark 3 and 4 model indicators.
- Available with 1-2 incorporated external valves.

MARK SERIES MODEL CHART

- Available with switch types A, D, G, M or T. WirelessHART® not available with switches.
- Available with switch type S. Mark 3 potentiometer and transmitter outputs will have no switches if ordered with switch type O, and 2 switches if ordered with switch type T.
- *Note:
MARK SERIES POSITION INDICATORS/SWITCHES/TRANSMITTERS

MARK SERIES POSITION INDICATORS/SWITCHES/TRANSMITTERS

MARK 1 MAGNETIC COUPLING
- Features a patented magnetic coupling that enables for switch version 1, completely removing the need for the maintenance of mechanical switches and gear and provides corrosion resistance and long life
- Flexible design allows multiple switches and transmitter options
- Ideal for severe environments

MARK 2 THRU-SHAFT
- Features a patented magnetic coupling that enables for switch version 2, completely removing the need for the maintenance of mechanical switches and gear and provides corrosion resistance and long life
- Flexible design allows multiple switches and transmitter options
- Ideal for severe environments

MARK 3 MULTI-TURN
- Features a patented magnetic coupling that enables for switch version 3, completely removing the need for the maintenance of mechanical switches and gear and provides corrosion resistance and long life
- Flexible design allows multiple switches and transmitter options
- Ideal for severe environments

MARK 4 THRU-SHAFT
- The thru-shaft design that features a 1-360° brushless drive and strings to seal the switch mounting hole, is aligned, compact, and easy to replace
- Flexible design allows multiple switches and transmitter options
- Ideal for severe environments

HART® COMMUNICATIONS
- HART® is available on Mark 1, 2, and 3 model indicators
- HART® feature distance transmission with HART® communications
- HART® feature includes:
  - Digital output indicator
  - Digital programmable setpoint

WIRELESSHART® COMMUNICATIONS
- WirelessHART® is available on Mark 1, 2, and 3 model indicators
- WirelessHART® allows adjustment of setpoints without removing the device
- WirelessHART® allows monitoring of sensor failures, programmable to 3.8 or 21 mA
- Adjustable visual indicator that displays OPEN/CLOSED status and degrees is standard on direct drive only

FACTORY SEALED LEADS
- Available with potentiometer and transmitter outputs

AS-INTERFACE
- Available with 1 or 2 incorporated external sensors

MARK SERIES MODEL CHART

Example:
- 4-320W: 320°F (160°C) FKM Seals
- 320W: 320°F (160°C) Long Dwell Cam (not on Mark 3)
- 32: 32°F (-1°C), Silicon Seals
- 2: 2°F (-18°C), Stainless Steel Tag Wired

Certificate of Conformance
- Certificate of compliance for Devices Covered by IECEx 03ATEX1392 X, 0518 II 1G Ex ia IIC T4 Ga.
- Certificate of compliance for Devices Covered by IECEx 03ATEX2391 X, 0518 II 2G Ex db IIC T6
- Certificate of compliance for Devices Covered by Directive 2014/34/EU, KEMA 03ATEX2391 X, 0518 II 2G Ex db IIC T6

Marking:
- Marking: Certificate of Conformance and the model number (Mark 1, Mark 2, Mark 3, Mark 4)
- Certificate Type: IECEx 03ATEX1392 X, 0518 II 1G Ex ia IIC T4 Ga.
- Certificate Type: Directive 2014/34/EU, KEMA 03ATEX2391 X, 0518 II 2G Ex db IIC T6
- Certificate Type: Directive 2014/34/EU, KEMA 03ATEX2391 X, 0518 II 2G Ex db IIC T6

Type
- Type: 4-320W: 320°F (160°C) FKM Seals
- Type: 320W: 320°F (160°C) Long Dwell Cam (not on Mark 3)
- Type: 32: 32°F (-1°C), Silicon Seals
- Type: 2: 2°F (-18°C), Stainless Steel Tag Wired

Suffix
- Suffix: MJ: Stainless Steel Tag Wired
- Suffix: ME: Stainless Steel Tag Riveted
- Suffix: LW: Plug J1, J2 Ports
- Suffix: EW: Output
- Suffix: LW: Battery
- Suffix: LW: Battery
- Suffix: LW: Calibration of zero and span at the device from pushbuttons or through HART master

Terminal
- Terminal: Potentiometer and transmitter outputs
- Terminal: WirelessHART® communication
VPS LOW PROFILE INDUCTIVE SENSOR
- Rugged PBT housing provides corrosion resistance and moisture protection
- Easily and directly mounts to actuators with ISO-NAMUR topworks
- Protected against vibration and shock with epoxy embedded solid state components

MOUNTING KITS
- Each kit is specially designed for the particular valve or actuator
- Stainless steel drive yoke and coupling fit securely with no slippage or binding
- No special alignment fixtures are needed due to unique offset design

QUICK-VIEW®
- 360° visibility in a compact design
- Backlighting option available for maximum visibility
- Flame retardant and UV protected
- Available with up to four switches

DT DETECTOR™
- Sensor consists of hermetically-sealed reed switch mounted in stainless steel housing and a separate stainless steel magnetic actuator bolt
- No moving parts, and can be mounted in any position
- Designed to meet NEMA 1, 3, 4, 4X, 6, 7, 9, 12 and 13
- CSA and UL Listed for Class I, Groups B, C and D; Class II, Groups E, F and G; Divisions 1 and 2

DEMAND RELIABLE POSITION INDICATORS FOR SEVERE ENVIRONMENTS

ADDITIONAL POSITION INDICATORS AND SENSORS
VPS LOW PROFILE INDUCTIVE SENSOR

- Rugged PTFE housing provides corrosion resistance and moisture protection
- Easily and directly mounts to actuators with ISO-NAMUR topworks
- Protected against vibration and shock with epoxy-embedded solid-state components

MOUNTING KITS

- Each kit is specially designed for the particular valve or actuator
- Stainless steel drive yoke and coupling fit securely with no slippage or binding
- No special alignment fixtures are needed due to built-in offset design

QUICK-VIEW®

- 360° visibility in a compact design
- Backlighting option available for maximum visibility
- Panel mounted for direct viewing
- Available with up to ten switches

DT DETECTOR™

- Sensor consists of a hermetically sealed reed switch poted in a stainless steel housing and a separate stainless steel magnetic actuator bolt
- No moving parts, and can be mounted in any position
- Designed for use in Class I, Groups C, D; Class II, Groups E, F, and G
- CSA and UL listed for Class I, Groups B, C, and D; Class II, Groups E, F, and G

DEMAND RELIABLE POSITION INDICATORS FOR SEvere ENVIRONMENTS

PROXIMITY®

- By Dwyer

ADDITIONAL POSITION INDICATORS AND SENSORS

- QUICK-VIEW®
- VPS LOW PROFILE INDUCTIVE SENSOR
- DT DETECTOR™
- MOUNTING KITS

DEMAND RELIABLE POSITION INDICATORS FOR SEvere ENVIRONMENTs