

TopWorx™ GO™ Switch

Models 73 and 73M

Series
70

General Description

The GO™ Switch Model 73 is the world's most used and widely trusted leverless limit switch with no external moving parts, no springs or cams, and no reed element. There is nothing to wear or fail.

Features

- Single Pole Double Throw (SPDT) 2A/240VAC, 4A/120VAC, 3A/24VDC
- AC/DC, NO/NC Wiring Flexibility
- -50 °C to +105 °C (-58 °F to +221 °F) operating temperature
- 2.5 mm (0.100 in) Sensing Distance (Ferrous metal)
- Dry Contact
- Intrinsically Safe
- End Sensing
- Palladium Silver Contacts
- Stainless Steel 316L Housings

Options

- High Temperature: -50 °C to +204 °C (-58 °F to +400 °F)
- Pressure Rating: 2,000, 5,000, 10,000 PSI, (140, 345, 690 bars)
- Lead Wires or Cables
- SubSea Connectors
- Hermetic Seal
- Quick Disconnects – Micro or Mini
- 5/8" or M18 metric thread
- Global Hazardous Area Approvals

Approvals

- Ex ia IIC T* Ga; Ex ia IIIC T* Da
IECEX BAS 09.0080X / Baseefa 09ATEX0173X
- PESO P400173 / P473610
EAC RU C-US.ΓΩ02.B.00061
- Ex db IIC T* Gb; Ex tb IIIC T* Db (DIP A21 T*)
IECEX BAS 08.0122X / Baseefa 08ATEX0360X
EAC TC RU C-US.ΓΩ02.B.00063
NEPSI GYJ16.1507X
PESO P396877
KOSHA 14-AV4BO-0160X & 14-AV4BO-0161X
InMetro UL-BR 18.0097X
- Ex db eb IIC T* Gb; Ex tb IIIC T* Db
Baseefa 09ATEX0281X / IECEX BAS 09.0135X
KOSHA 14-KB4BO-0484X
PESO P333425
- USL/CNL Class I, Div 1, GrABCD; Class II, Div 1, GrEFG; Class III
USL/CNL Class I, Div 2, GrABCD; Class II, Div 2, GrFG; Class III
UL File E79070
- USL/CNL General Purpose
UL File E81878
- Ex eC nC IIC T* Gc
IECEX BAS 18.0044X / Baseefa 18ATEX0064X
USL/CNL Class 1, GrABCD High Ambient Temp of 205°C

Environmental Ratings: Type 4, 4X; IP 66/67/68

Conformance to Directives: ATEX 2014/34/EU, EMC 2014/30/EU, LVD 2014/35/EU



Construction

| | |
|---------------------|-----------------------------|
| Enclosure Material | 316L Stainless Steel |
| Mounting Thread 73 | 5/8-18 Threads |
| Mounting Thread 73M | M18 |
| Conduit Entry | Hex Head |
| Wiring | Leads, Cables & QDC options |

Installation

The 70 Series GO™ Switches can be installed in any position, directly with the threaded body or through mounting kits designed for the application.

Ordering Information

Nomenclature guide below. Choose codes for desired feature(s). Not all feature combinations are compatible. Please consult TopWorx or Online “Configure Your Product” guide at www.topworx.com for confirmation.

Codification

| | | | | | | | | | | | |
|----------------------------|---|---|----------|----------|----------|----------|----------|---|-----------|----------------------------------|---|
| | 73 | - | 1 | 3 | 5 | 6 | 4 | - | A2 | | |
| Model | | | | | | | | | | Wiring Options | |
| 73 | 5/8" - 18 mounting thread 1/2" NPT conduit entry | | | | | | | | | AX(A2 to A8) | 18 Gauge , PVC insulated Lead Wires Lengths from (3' to 250') |
| 73M | M18 - 1 mounting thread M20 conduit entry | | | | | | | | | BX(B2 to B8) | 18 Gauge , PVC insulated Cable Lengths from (3' to 250') |
| Contact Form | | | | | | | | | | FX(F2 to F8) | 18 Gauge , Teflon Hi-Temp Lead Wires Lengths from (3' to 250') |
| 1 | SPDT Single Pole Double Throw | | | | | | | | | HX(H2 to H8) | 18 Gauge , Peek Hi-Temp Lead Wires Lengths from (3' to 250') |
| Sensing Range | | | | | | | | | | SX(S2 to S8) | 18 Gauge , Silicone Blue Cable Lengths from (3' to 250') |
| 3 | Standard sensing .100" end sensing | | | | | | | | | SubSea Connector | |
| 4 | .072" end sensing | | | | | | | | | 3DD | 3 pin |
| 5 | 0.060" end sensing | | | | | | | | | 4DD | 4 pin |
| Outlet Position | | | | | | | | | | 3DE | 3 pin 90° |
| 5 | Bottom of enclosure | | | | | | | | | 4DE | 4 pin 90° |
| Enclosure Material | | | | | | | | | | Quick Disconnect | |
| 6 | 316L Stainless steel | | | | | | | | | DCA | 3 pin |
| Area Classification | | | | | | | | | | DCD | 4 pin |
| 2 | HiTemp to 400°F | | | | | | | | | Connection Head Terminals | |
| 3 | UL Cl I, Div 1, Grps A-D; Cl II, Div 1, Grps E-G; Cl III | | | | | | | | | JAM | Aluminum, M20 conduit entry |
| 4 | cULus Cl I, Div 1, Grps A-D; Cl II, Div 1, Grps E-G; Cl III | | | | | | | | | JSM | Stainless Steel, M20 conduit entry |
| 5 | UL Cl I, Div 2, Grps A-D; Cl II, Div 2, Grps F-G; Cl III | | | | | | | | | JAP | Aluminum, 1/2" NPT conduit entry |
| 6 | cULus Cl I, Div 2, Grps A-D; Cl II, Div 2, Grps F-G; Cl III | | | | | | | | | JSP | Stainless Steel, 1/2" NPT conduit entry |
| K | cULus Cl I, Div I; Grps A-D (-40°C ≤ Ta ≤ 205°C) | | | | | | | | | | |
| 7 | cUL General Purpose | | | | | | | | | | |
| 8 | UL General Purpose | | | | | | | | | | |
| 9 | ATEX/IECEX Zone 1 | | | | | | | | | | |
| T | ATEX/IECEX Zone 1 | | | | | | | | | | |
| F | ATEX/IECEX Zone 0 | | | | | | | | | | |
| G | ATEX/IECEX Zone 0 | | | | | | | | | | |
| H | ATEX/IECEX Zone 0 | | | | | | | | | | |
| U | ATEX/IECEX Zone 2 | | | | | | | | | | |
| X | ATEX/IECEX Zone 1 | | | | | | | | | | |
| Y | ATEX/IECEX Zone 1 | | | | | | | | | | |

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70

Specification

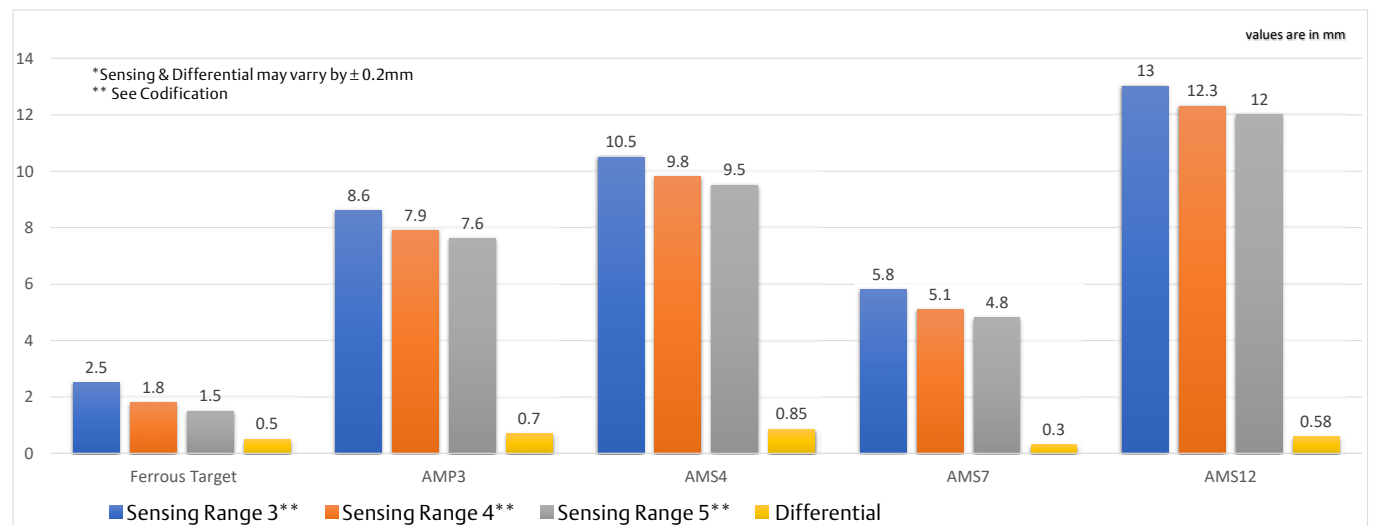
| | | |
|--|--|------------------|
| Electrical Ratings | AC | 4A@120V/2A@240V |
| | DC | 3A@24V/1.25A@48V |
| Operation rating examples based on calculation by maintaining the overall power rating | | |
| Contact Resistance | 0.5 Ohm Max | |
| Temperature Range | -65°C to 205°C | |
| Environmental Rating | TopWorx Certified: IP66/67/68, NEMA 4x/6/6P RoHS Compliant | |
| Frequency | 50Hz | |
| Response Time | 8 milliseconds | |
| Repeatability | 0.002"(0.5mm) typical | |
| SIL Rating | | |
| MTBF | | |
| System Compatibility | Polarity | NPN & PNP |
| | Configuration | NO & NC |

SIRA IEC 61508 Probability of Operation Confidence Level

| Model | 5 Years | 15 Years | 50 Years |
|---|---------|----------|----------|
| 70 Series | 99.78% | 99.34% | 98.44% |
| Probability of failures/hour: 5.06E-08 | | | |
| MTBF (Years) – 2,256 | | | |
| Source: Report 70217010 SIRA Certification Service (CSA Group UK) | | | |

*IEC 61508 standards are lab condition tests. Field conditions and various product features will affect performance. Results are not warranty claims but should be used to assess relative confidence of switch performing

Sensing Distance Graph - Standard and with Optional Target Magnets



Dimensions in inches [mm]

