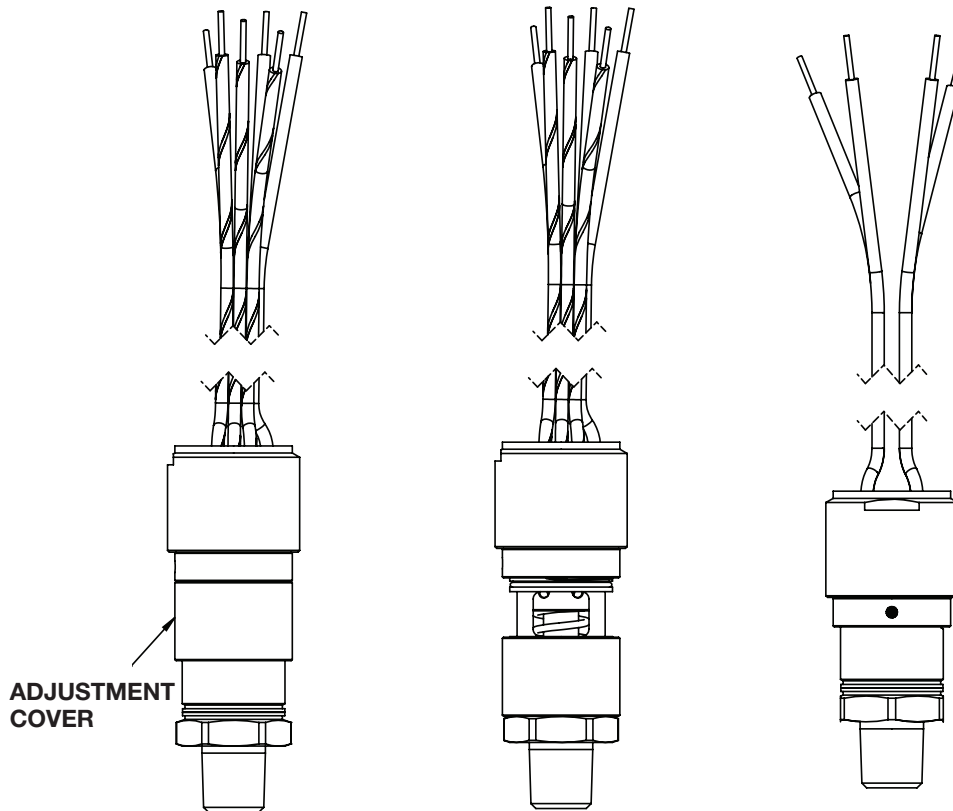


**Installation and Maintenance Instructions  
for Ashcroft A-Series Miniature  
Watertight Pressure Switches**



**FIELD ADJUSTABLE**

**FACTORY SET**



**SLIDE COVER DOWN  
TO ACCESS SETPOINT  
ADJUSTMENT SLIDE  
COVER UP TO CLOSE AND  
SEAL ADJUSTMENT**

**ROTATE LEFT ←  
TO INCREASE SETPOINT  
ROTATE RIGHT →  
TO DECREASE SETPOINT  
Ø .095 OR SMALLER TOOL  
REQUIRED TO ROTATE NUT**



**INTRODUCTION**

The APS and APA pressure switch have NEMA 6, IP 67 Rated 316 stainless steel housing and process connections. The APS has a factory fixed setpoint which cannot be changed in the field. The APA is field adjustable and can easily be adjusted by following the instructions in the diaphragm above.

**ELECTRICAL CONNECTION**

The APS and APA switch is available with many various electrical connections. Refer to the figures on other side for wiring color codes and identification of terminals. Depending on the configuration, the Micro DIN mating connector may or may not be supplied with the switch.

- Only trained and skilled personnel are allowed to attach the wires to the electrical terminals of the switch.
- Cable couplers, glands and conduit connectors must have the correct electrical approvals as required by local electrical codes.

- The ground wire/connector is connected to the switch housing.
- Fully insulated mating spade terminals must be used on all spade terminal connections to prevent a shock hazard and maintain compliance with approvals.

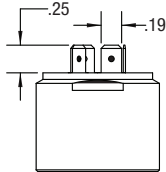
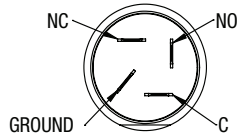
**MICRO SWITCH RATINGS**

CODE	VAC RATING	VDC RATING
H	5 A @ 125/250 VAC	5 A @ 28 Vdc resistive 3 A @ 28 Vdc inductive
P	3 A @ 125 VAC	2 A @ 30 Vdc resistive
G	0.1 A @ 125 VAC	0.1 A @ 30 Vdc resistive
L	1 A @125 VAC	1 A @ 28 Vdc resistive
L	1 A @125 VAC	0.5 A @ 28 Vdc inductive

# Installation and Maintenance Instructions for Ashcroft A-Series Miniature Watertight Pressure Switches

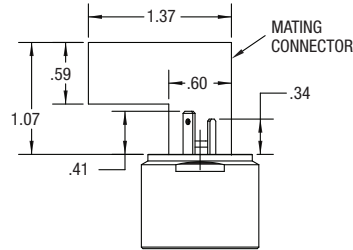
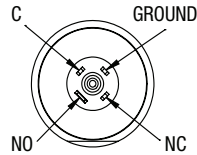


## SPADE TERMINALS



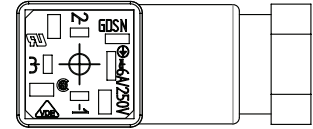
SPADE PIN FUNCTIONS	
PIN #	FUNCTION
1	C
2	NO
3	NC
4	GROUND

## MICRO DIN CONNECTOR



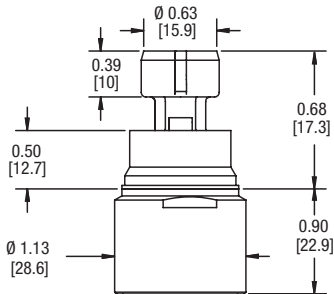
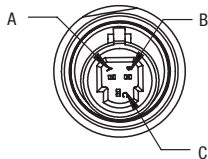
MICRO DIN  
(000H) NO CONN.  
(001H) WITH CONN.

MICRO-DIN FUNCTIONS	
PIN #	FUNCTION
1	C
2	NO
3	NC
4	GROUND



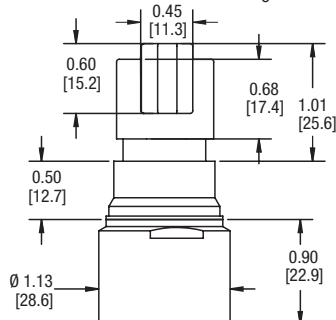
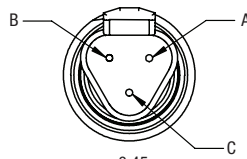
- 1 - COMMON
- 2 - NORMALLY CLOSED
- 3 - NORMALLY OPEN
- 4 - Ground

## METRI-PACK CODE: 00GN



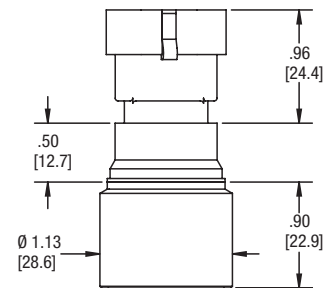
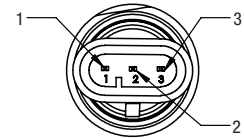
METRI-PACK PIN FUNCTIONS	
PIN #	FUNCTION
A	C
B	NO
C	NC

## DEUTSCH DT04-3P CODE: 00DT



DEUTSCH DT04-3P PIN FUNCTIONS	
PIN #	FUNCTION
A	C
B	NO
C	NC

## AMP SUPERSEAL CODE: 00AP

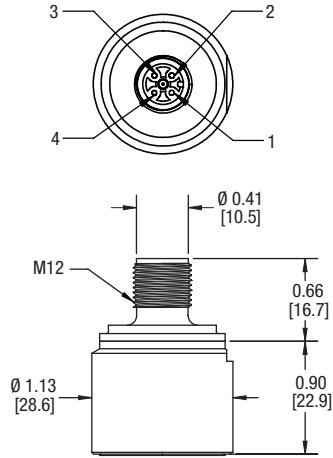


AMP SUPERSEAL PIN FUNCTIONS	
PIN #	FUNCTION
1	C
2	NO
3	NC

# Installation and Maintenance Instructions for Ashcroft A-Series Miniature Watertight Pressure Switches

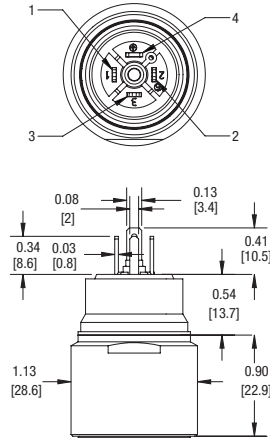


**M12**  
CODE: 00EW



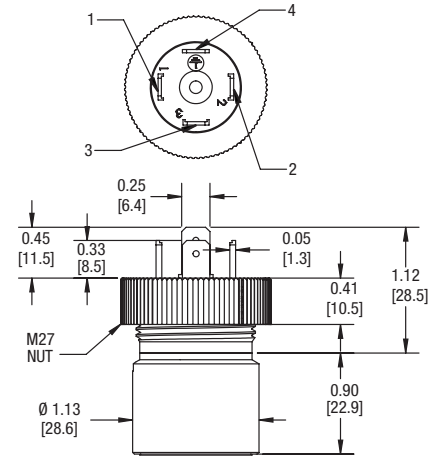
M12 PIN FUNCTIONS	
PIN #	FUNCTION
1	C
2	NO
3	NC
4	GROUND

**EN 175301-803 Form C**  
CODE: 00DC



EN 175301-803 FORM C PIN FUNCTIONS	
PIN #	FUNCTION
1	C
2	NO
3	NC
4	GROUND

**EN 175301-803 Form A**  
CODE: 00DN

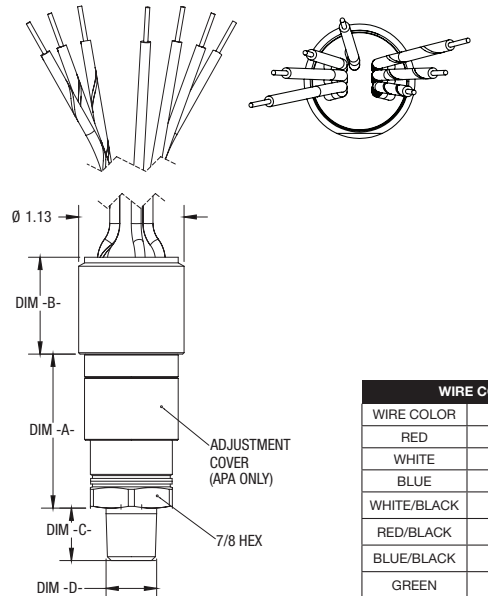
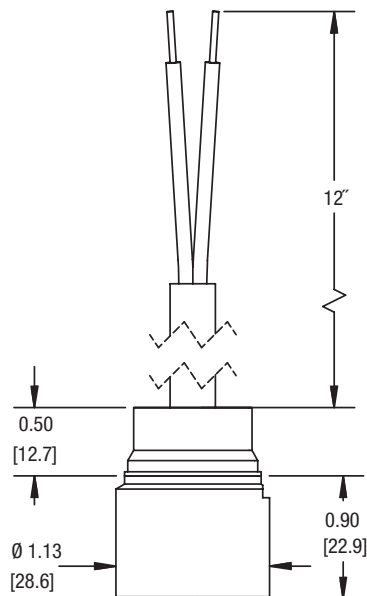
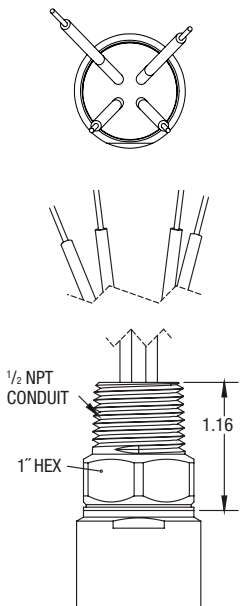


EN 175301-803 FORM A PIN FUNCTIONS	
PIN #	FUNCTION
1	C
2	NO
3	NC
4	GROUND

**CONDUIT (XXXC)**  
XXX = WIRE LENGTH (IN.)

**CONNECTOR JACKETED CABLE WITH  
18 AWG WIRES WITHOUT CONDUIT**

**WIRE LEAD (XXXL) CONNECTION WITH DUAL SWITCH SHOWN**  
XXX = WIRE LENGTH (IN.)



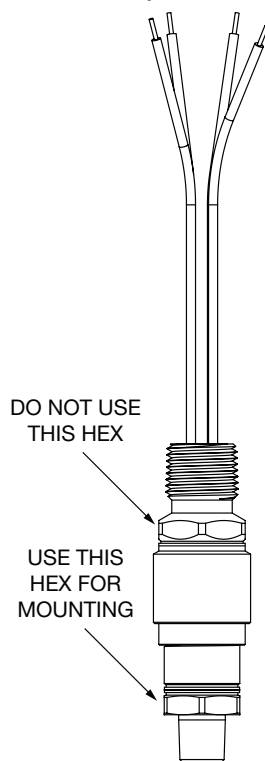
WIRE COLOR/FUNCTION		
WIRE COLOR	SWITCH	FUNCTION
RED	SW1	NC
WHITE	SW1	C
BLUE	SW1	NO
WHITE/BLACK	SW2	C
RED/BLACK	SW2	NC
BLUE/BLACK	SW2	NO
GREEN	-	GROUND

# Installation and Maintenance Instructions for Ashcroft A-Series Miniature Watertight Pressure Switches



## INSTALLATION

- To minimize the risk of injury, the switch enclosure must be selected according to the area classification and installed according to the required safety and electrical codes.
- Torque should always be applied to the hex portion nearest to the process connection of the body, never to any other part of the body for it may alter the setpoint. It is recommended that Teflon™ tape or other sealant be used on the threads prior to installing to prevent leaks in the system.
- The ambient temperature limits for the switches are -40 ° to 100 °C (varies with seal ordered).
- Switch should be protected from excessive shock and vibration.
- The cover of the APA switch should be closed at all times when the switch is in operation.



## CAUTIONS

- Always close the cover of the APA switch after making any setpoint adjustments.
- Do not exceed current or voltage limits.
- The protection degree of the switch is only valid when the switch is installed in accordance with all safety and electrical codes and regulations.

## CLEANING

- Never use aggressive solvents.
- Do not use high pressure water to clean the switch.

## MAINTENANCE/TROUBLESHOOTING

- All Ashcroft switches require little or no maintenance.
- Be sure the cover on the APA switch is closed at all times.
- When the switch is exposed to process media that may harden and/or build up in the pressure port, the switch should be removed and cleaned as required.
- If the switch does not function, only trained and skilled personnel should check on the wiring, power supply and/or mounting.
- If the problem cannot be solved, please contact one of the Ashcroft affiliates or distributors.

## FACTORY SETPOINTS

The APS switches and APA switches with a setpoint called out in the product code are set at the factory as follows:

- Increasing Setpoint (R) Rising Pressure or Decreasing Vacuum – Normally Open contact will close when the pressure is raised from 0 psig to the setpoint. The resetpoint is then measured from the setpoint, reducing the pressure until the Normally Open contact opens.
- Decreasing Setpoint (D) Decreasing Pressure or Increasing Vacuum – Normally closed contact will close when the pressure is lowered from full range pressure to the setpoint. The reset is then measured from the setpoint, increasing the pressure until the Normally Closed contact opens.

**Note:** When ordered as a -15/15 psi range switch, depending on setpoint, the Normally Open contact may be closed as received.

Safety Manual and SIL Certificate, CRN available on [www.ashcroft.com](http://www.ashcroft.com)

For the name and location of the nearest sales representative, contact the Stratford Office.

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Fax: 203-385-0408  
[www.ashcroft.com](http://www.ashcroft.com)