

**Fixed Setting Design**  
**316 Stainless Steel Construction**  
**Pressure Range: 6 to 5000 PSI**  
**Hazardous Location Rated, Explosion Proof**



### DESCRIPTION

The Model 703-U, Fixed is a heavy duty fixed pressure switch for use in gaseous or liquid fluid systems. Its 316 stainless steel construction resists the effects of corrosive elements. The Model 703-U, Fixed has been used in applications where its rugged piston design assures high over-pressure capability with exceptional accuracy and repeatability. Its hazardous location rating and explosion proof design is uniquely suited to off-shore exploration, transportation and processing of petro-chemicals.

### FEATURES

- ✓ High Over Pressure Capability
- ✓ Corrosion Resistant Stainless Steel Construction (AISI 316SS conforming to NACE MR-01-75)
- ✓ UL Listed for Use in Hazardous Locations Class 1: Division 1, Groups A, B, C, D Class 2: Groups E, F, G
- ✓ NEMA Type 7 Rating

### APPLICATIONS

- ✓ Off-shore Exploration
- ✓ Petro-chemical Processing
- ✓ Industrial OEM Equipment

### STANDARD SPECIFICATIONS

| Pressure Connection          | Electrical  | Electrical Configuration        | Electrical Connection   | Lubrication             | Materials  | Temperature Range                               | Filtering   | Shipping Weight |
|------------------------------|---|---------------------------------|---|-------------------------|--|---|---|-----------------|
| 1/4"- 18 NPT (Male) Standard | Snap-action Electrical Switch Listed by UL & CSA                    | Single Pole Double Throw (SPDT) | 1/2"-NPT (Male) w/ 5 full threads for conduit engagement                                      | Silicone Base           | Hydraulic & Electric Modules AISI 316 Stainless Steel, Conforming to NACE MR-01-75 | Fluorocarbon Seals +20°F to 160°F +6°C to +71°C | Pressure Ranges through 750 PSIG, inlet port contains 316 SST | Approx. 1 lb    |
| Other Options Available      | At 28 VDC: 7 Amps Resistive; 4 Amps Inductive; 2 1/2 Amps Lamp Load | Double Pole Double Throw (DPDT) | Lead wires - Type UL 1015 AWG #18, 24" Long, factory sealed. Conforms to UL 698 Tenth Edition | Other Options Available |  | Nitrite Seals -40°F to + 160°F -40°C to + 71°C  | Sintered porous disc rated 20 microns maximum                 |                 |
|                              | UL Listed Hazardous Locations (Explosion Proof)                     |                                 |   |                         |  | Withstands All-weather Use; NEMA Type 7         |   |                 |

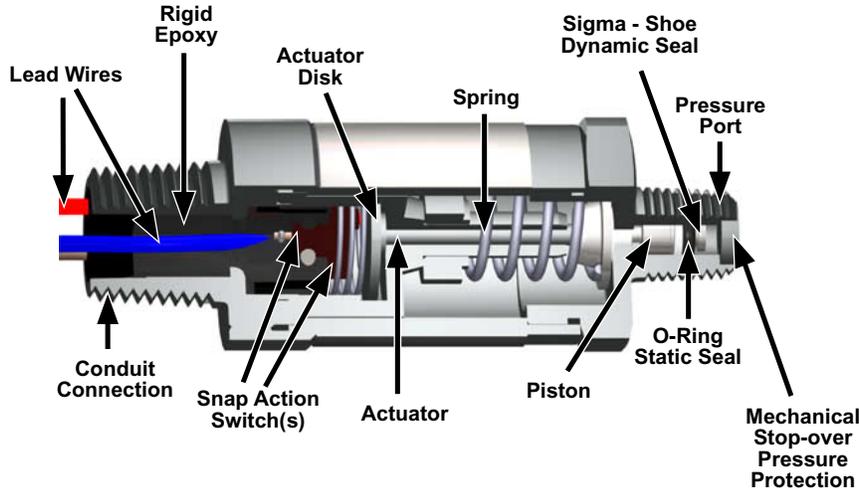
\*Pressure adjustment is factory set to be held on rising or falling pressure. \*\*Consult factory for non-standard options

### OPERATING PRESSURE DATA

| Series | Set Point Range | Tolerance On Set Point | Dead Band* | Max System Pressure | Proof Pressure |
|--------|-----------------|------------------------|------------|---------------------|----------------|
| 703-U  | 6 - 50          | ± 1 / ± 3              | 2 / 6      | 400                 | 600            |
| 703-U  | 50 - 200        | ± 3 / ± 10             | 8 / 20     | 600                 | 900            |
| 703-U  | 200 - 750       | ± 12 / ± 15            | 25 / 70    | 3000                | 4500           |
| 703-U  | 750 - 2500      | ± 20 / ± 40            | 80 / 225   | 5000                | 7500           |
| 703-U  | 2500 - 5000     | ± 50 / ± 75            | 220 / 400  | 7500                | 10000          |

Note: Pressure in PSIG, \*Interpolate for Intermediate Pressures.

## BASIC PRINCIPLES OF DESIGN



## ORDERING SEQUENCE

### Series

- 703-U - Environmentally Sealed Fixed Setting Pressure Switch
- See Operating Pressure Data table

### Electrical Configuration

- A - Single Pole Double Throw (SPDT)
- AA - Double Pole Double Throw (DPDT)

### Set Pressure to be Held on

- R - Rising Pressure
- F - Falling Pressure

### Set Pressure

- Specify factory set pressure in 4-place PSIG (Example: 1250 or 0060 for 60 PSIG)

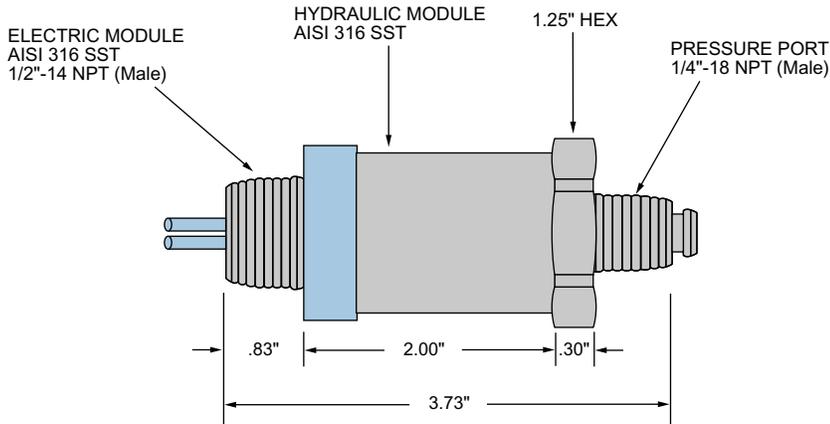
### Seal Materials

- V - Fluorocarbon - Standard
- N - Nitrile (BUNA-N)
- As low as -40°F (-40°C) operation

### Special Items

- Wire, cable, and cable length
- Pressure connection
- Seal materials
- Gold electrical contacts for low current applications
- Consult factory for special items

## ENVELOPE DIMENSIONS



\*All dimensions are reference

## ORDERING PROCEDURE

| Series Number | Electrical Configuration | Set Pressure Held On      | Set Pressure      | Seal Material         |
|---------------|--------------------------|---------------------------|-------------------|-----------------------|
| 703-U         | AA                       | F                         | 0060              | N                     |
|               | A=SPDT<br>AA=DPDT        | R = Rising<br>F = Falling | 0060 =<br>60 PSIG | N=Nitrile<br>(Buna-N) |

\*Insert available option number or letter as required

Example: 703-UAAF-0060 N