


FLOW

Black anodised aluminium switchcase and covers to IP65 standards.

Pipe sizes 15 - 250mm.

Easy installation between pipe flanges

Dual microswitch

ATEX Flameproof
CE  II2G Exd IIC
T6 Tamb -50 to +71°C
T5 Tamb -50 to +86°C
T4 Tamb -50 to +96°C

FF502 TROJAN ATEX EExd, CERTIFIED FLOW SWITCH



As will be apparent from the illustrations the complete flow switch comprising orifice plate, differential pressure sensitive element and switching mechanism are combined in a single compact assembly which enables easy installation between pipe flanges, models being available for pipe sizes 15 to 250mm diameter. This unit can incorporate two independently adjustable microswitch allowing one instrument to give alarm and shutdown alarms.

Each instrument can be provided with one of seven standard orifice ratios which enables a wide range of flow rates to be accommodated.

When using fluids other than fresh water these values will of course alter. It should also be noted that the head loss values are those occurring immediately across the orifice and that up to 50% of this head loss can be recovered by providing at least ten diameters of straight plain pipe either side of flow switch.

Each instrument is tested before despatch and switch set point marked on adjustment scale. If specially ordered this scale can be calibrated to indicate the adjustable range of flow rate in litres, hour or other units of measurement as required.

The accuracy of such calibration will be affected by many external factors such as fluid temperature change, pipe layout etc, but experience has shown this to be within +/-5% for a given set of conditions.


These sensors incorporate a spring loaded pressure sensitive flexible diaphragm, which when deflected by pressure drop across the orifice plate, actuates directly by push rod a snap action S.P.D.T. microswitch at the flow setting selected on the adjustment scale.

Maximum working pressure : 12 bar Max working temperature : 100°C
For detailed drawing showing options refer to page 105.

For part number breakdown please refer to our sales office.

TROJAN ATEX EExd SWITCHES

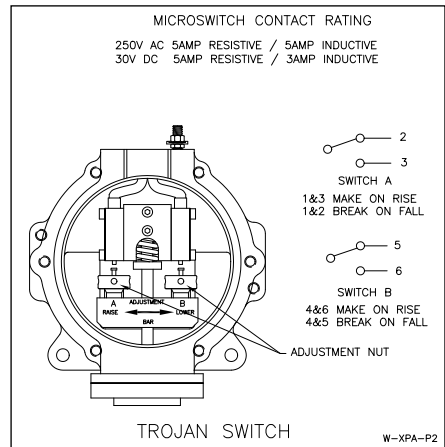
INTRODUCTION

The Trojan **pressure, temperature and flow** switches are designed for use in environments where explosive gases, dusts and extremes of both high and low ambient temperature can be present (e.g. Gas fields, oil rigs and chemical plants etc.) They have been ATEX certified for CAT 2 CE  II2GD Exd IIC T6,T5 & T4 and have an ATEX Exe IIC terminal housing.

These switches are manufactured from black anodised aluminium offering a robust construction and protection to IP65 for use within heavily polluted industrial and marine environments. These instruments can be adjusted with the power on and the switch in operation. Switches must be installed in accordance with BS EN 60079-14.

CALIBRATION

On removal of the adjustment cover both operating points can be changed. This can be carried out with the power on and the instrument in operation. To change the setting the adjuster screw for the relative micoswitch can be rotated with a 3mm diameter pin. Rotation to the left will increase the set point and to the right decrease the set point. The adjustment mechanism incorporates a friction device to ensure set point will not change under vibration conditions. These switches can either be supplied set to customers specific requirements or set to a mid range point and then adjusted to suit the application with the use of an external indicating device.



When we are requested to supply switches set at a specific point we can guarantee setting accuracy of less than 2%.

SPECIFICATIONS

Switchcase and covers : Black anodised aluminium with glass reinforced polyester junction box.

Environmental Protection : IP65

Temperature Limitations : Pressure switch.

Ambient : This is limited by the EExe junction box -40 to +55°C for the standard and +90°C for the special high temperature version.

Process : Diaphragm actuated -20 to +150°C Viton.

Piston actuated -40 to +120°C (Nitrile) or -20 to +150°C Viton.

Storage : -60 to +80°C

(For temperature and flow switches please refer to specific pages)

Certification : All switches are CE certified and marked in accordance with the following EU directives

EExd : 94/9/EC ATEX coded CE Ex II2GD EExd IIC for CAT 2 (Zone 1) areas

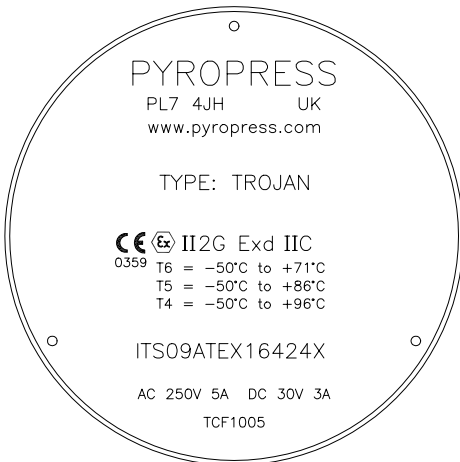
Accuracy : 1% at 20°C, Setting accuracy 2%

Microswitch : 2 x SPCO/SPDT independently adjustable

Microswitch rating : 5 Amps @ 250 VAC resistive and inductive

5 Amps @ 30VDC resistive, 3 Amps @ 30 VDC inductive

Electrical Connection : Via Exe certified junction box with 3 x M20 x 1.5 ISO entries and 2 x Exe certified blanking plugs



STANDARD LABEL



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