

MEDIUM / HIGH PRESSURE

Black anodised aluminium switchcase and covers to IP65 standards.

PF251 & PF252 pressure settings between 0.14 and 32 Bar.

PF253 & PF254 pressure settings between 1.5 and 338 Bar.

Two independently adjustable set points.

ATEX Flameproof Option

CE  II2G Exd IIC

T6 Tamb -50 to +71°C

T5 Tamb -50 to +86°C

T4 Tamb -50 to +96°C

PF251, PF252, PF253 & PF254 TROJAN ATEX EExd CERTIFIED PRESSURE SWITCH



This range has been used on rotating machinery and process applications worldwide and has been specified extensively on applications where two individual operating points are required, ie. for alarm and shutdown. Diaphragm actuated for operating pressures up to 32 Bar with a piston option for pressure settings up to 338 Bar. For specification and introduction to the Trojan switch range refer to pages 96 and 97.

PF251/PF252 MEDIUM PRESSURE SWITCH RANGES

ADJUSTMENT RANGE (BAR G)	ADJUSTMENT RANGE (PSI)	MAX WORKING PRESSURE (BAR G)	DEADBAND FIXED (BAR G)	BUSH CODE
0.14 - 0.7	2 - 10	20	<0.07	12WE0
0.21 - 1.0	3 - 15	20	<0.10	12WE0
0.35 - 2.5	5 - 35	24	<0.15	87WH1
0.7 - 5.0	10 - 70	24	<0.35	87BE0
2 - 11	30 - 150	24	<0.70	62BE0
7 - 19	100 - 270	32	<1.0	50YW2
14 - 32	200 - 460	32	<1.7	50BE2

PF253/PF254 HIGH PRESSURE SWITCH RANGES

ADJUSTMENT RANGE (BAR G)	ADJUSTMENT RANGE (PSI)	MAX WORKING PRESSURE (BAR G)	DEADBAND FIXED (BAR G)	BUSH CODE	PISTON CODE
1.5 - 3.5	22 - 50	700	<0.35	75BK0	53S6
2 - 11	30 - 160	700	<1.6	75YW0	53S6
5.5 - 20	80 - 300	700	<2.0	75BE1	53S6
14 - 32	200 - 460	700	<3.2	75BE3	53S6
17 - 65	250 - 950	700	<6.5	75BE1	53S3
38 - 100	550 - 1450	700	<10.0	75YW2	53S2
55 - 138	800 - 2000	700	<13.8	75BE2	53S2
117 - 338	1700 - 4900	700	<33.8	75BE0	53S1

PART NUMBER BREAKDOWN - PF251 & PF252 - MEDIUM PRESSURE

A = ALUMINIUM CASE	B = ATEX APPROVAL	BOTTOM COVER CODES (ALL FEMALE) SBC1 = 1/4" BSP.P (SBC7 FOR RANGES UP TO 1 BAR) SBC2 = 1/4" NPT (SBC8 FOR RANGES UP TO 1 BAR) SBC5 = 1/2" BSP.P SBC6 = 1/2" NPT (FOR PF252 USE SBC1)
PF251 = CASE MOUNTED PF252 = STEM MOUNTED	BUSH CODE (see range sheet)	

P F 2 5 1 A 2 B / 1 0 8 7 W H O / S B C 1 J A

2 = 2 X SPDT SWITCH	PROCESS CONNECTIONS 10 = STANDARD FEMALE (PF251) 22 = 1/2" BSP.P MALE (PF252) 24 = 1/2" NPT MALE (PF252)	J = CASE MOUNTING (PF251) K = STEM MOUNTING (PF252)	ELECTRICAL ENTRY A = M20 VIA EE_xe BOX 1 TO 9 CABLE LENGTH IN METRES FOR FLYING LEAD CONNECTION
----------------------------	---	--	--

For detailed drawing refer to page 100

PART NUMBER BREAKDOWN - PF253 & PF254 - HIGH PRESSURE

A = ALUMINIUM SWITCHCASE	PROCESS CONNECTIONS 31 = 1/4" BSP.P (F) (PF253) 32 = 1/4" NPT (F) (PF253) 33 = 1/2" BSP.P (F) (PF253) 34 = 1/2" NPT (F) (PF253) 41 = 1/2" BSP.P (M) (PF254) 42 = 1/2" NPT (M) (PF254)	PISTON CODE (See range sheet)	ELECTRICAL ENTRY A = M20 VIA EE_xe BOX 1 TO 9 CABLE LENGTH IN METRES FOR FLYING LEAD CONNECTION
PF253 = CASE MOUNTED PF254 = STEM MOUNTED			

P F 2 5 3 A 2 B / 3 1 7 5 Y W 1 / 5 3 S 1 J A

2 = 2 X SPDT MICROSWITCHES	B = ATEX APPROVAL	BUSH CODE (See range sheet)	J = CASE MOUNTING (PF253) K = STEM MOUNTING (PF254)
-----------------------------------	--------------------------	---------------------------------------	--

For detailed drawing refer to page 101

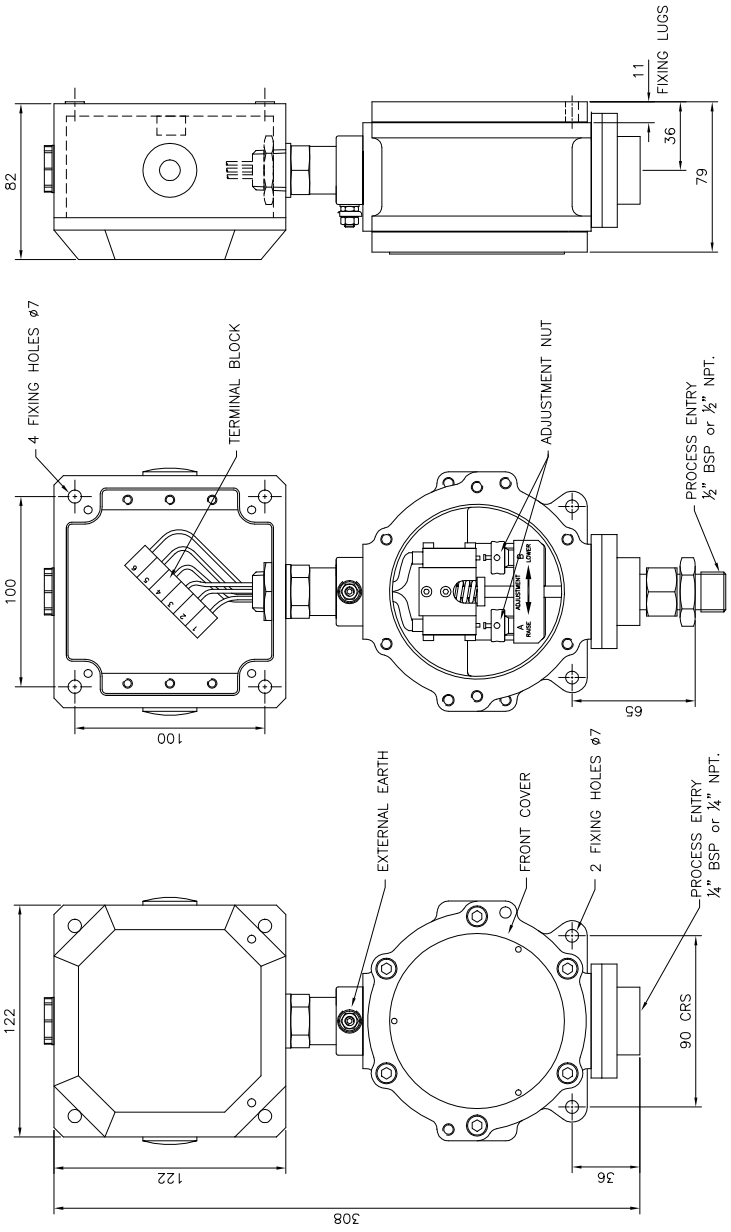
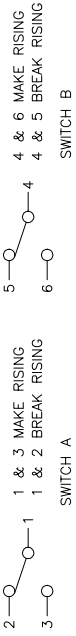
SPECIFICATION

Wetted parts: 316 St. steel or monel
Diaphragm: Nitrile or viton

Process connections: 1/4" or 1/2" BSP.P or NPT female (bottom) 1/2" BSP.P or NPT male (bottom)

TYPE PF251 AND PF252 TROJAN MEDIUM PRESSURE SWITCH

TYPICAL ARRANGEMENT DRAWING FOR REFERENCE ONLY



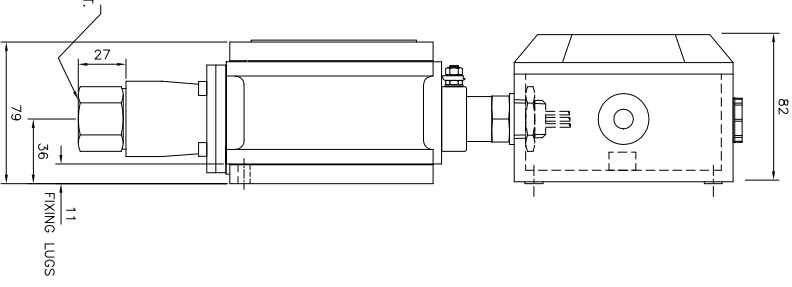
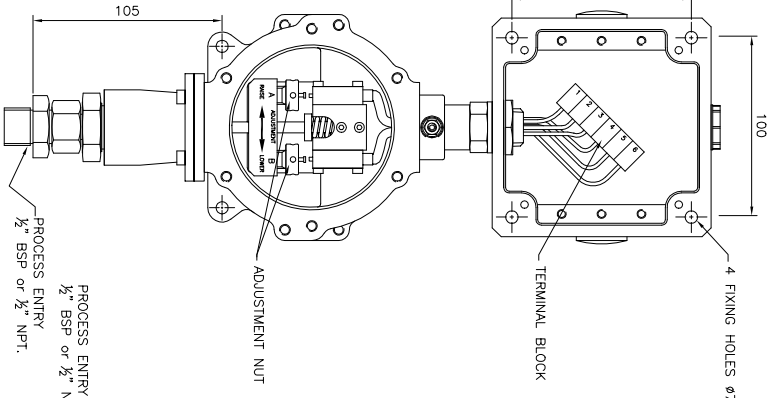
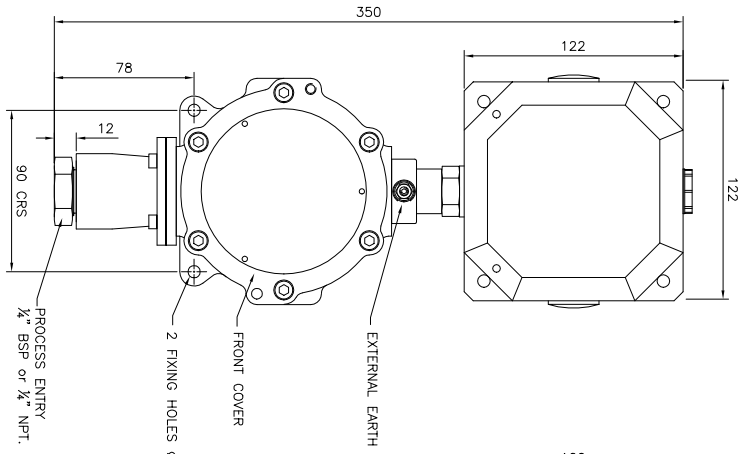
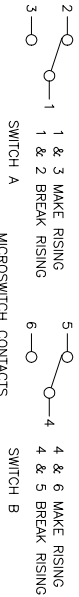
PF251 PRESSURE SWITCH

PF252 PRESSURE SWITCH
VIEW WITH FRONT COVER REMOVED

TROJAN251B

TYPE PF263 AND PF264 TROJAN HIGH PRESSURE SWITCH


TYPICAL ARRANGEMENT DRAWING FOR REFERENCE ONLY



TROJAN2539

TROJAN ATEX EExd SWITCHES

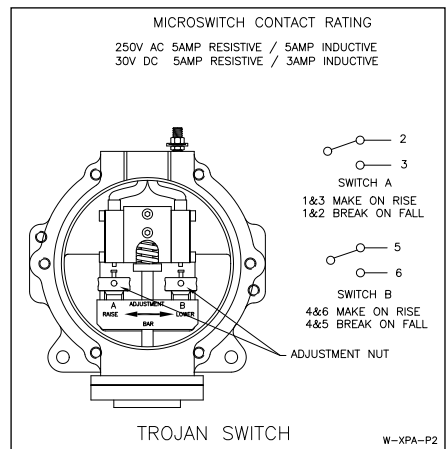
INTRODUCTION

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

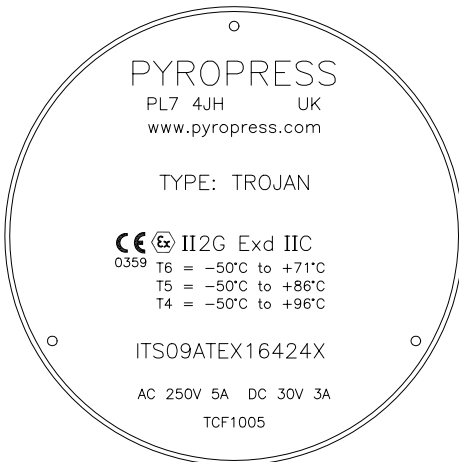
Accuracy : 1% at 20°C, Setting accuracy 2%

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



The Pyropress Engineering Company Ltd.
Bell Close, Newnham Industrial Estate,
Plympton, Plymouth. Devon PL7 4JH England.
Tel: +44 (0)1752 339866
Fax: +44 (0)1752 336681
E-mail: sales@pyropress.com
Website: www.pyropress.com
Revision: D 04/10