

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  II2GD EExd 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 90 and 91.

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	7	<0.07	12WE0
0.21 - 1.0	3 - 15	7	<0.10	12WE0
0.35 - 2.5	5 - 35	35	<0.15	87WH1
0.7 - 5.0	10 - 70	35	<0.35	87BE0
2 - 11	30 - 150	45	<0.70	62BE0
7 - 19	100 - 270	45	<1.0	50YW2
14 - 32	200 - 460	45	<1.7	50BE0

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	75BE2	53S1

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PART NUMBER BREAKDOWN - PF251 & PF252 - MEDIUM PRESSURE			
A = ALUMINIUM CASE		B = ATEX APPROVAL	
PF251 = CASE MOUNTED PF254 = STEM MOUNTED		BOTTOM COVER CODES SBC1 = 1/4" BSP.P (ALL FEMALE) SBC2 = 1/4" NPT SBC5 = 1/2" BSP.P SBC6 = 1/2" NPT (FOR PF252 USE SBC1)	
		BUSH CODE (see range sheet)	ELECTRICAL ENTRY A = M20 VIA EExe BOX
<p>P F 2 5 1 A 2 B / 1 0 8 7 W H O / S B C 1 J A</p>			
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)

PART NUMBER BREAKDOWN - PF253 & PF254 - HIGH PRESSURE			
A = ALUMINIUM SWITCHCASE		PROCESS CONNECTIONS	
PF251 = CASE MOUNTED PF254 = STEM MOUNTED		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 EExe BOX	
<p>P F 2 5 3 A 2 B / 3 1 7 5 Y W 1 / 5 3 S 1 J A</p>			
2 = 2 X SPDT MICROSWITCHES		BUSH CODE (See range sheet)	J = CASE MOUNTING (PF253) K = STEM MOUNTING (PF252)
		B = ATEX APPROVAL	

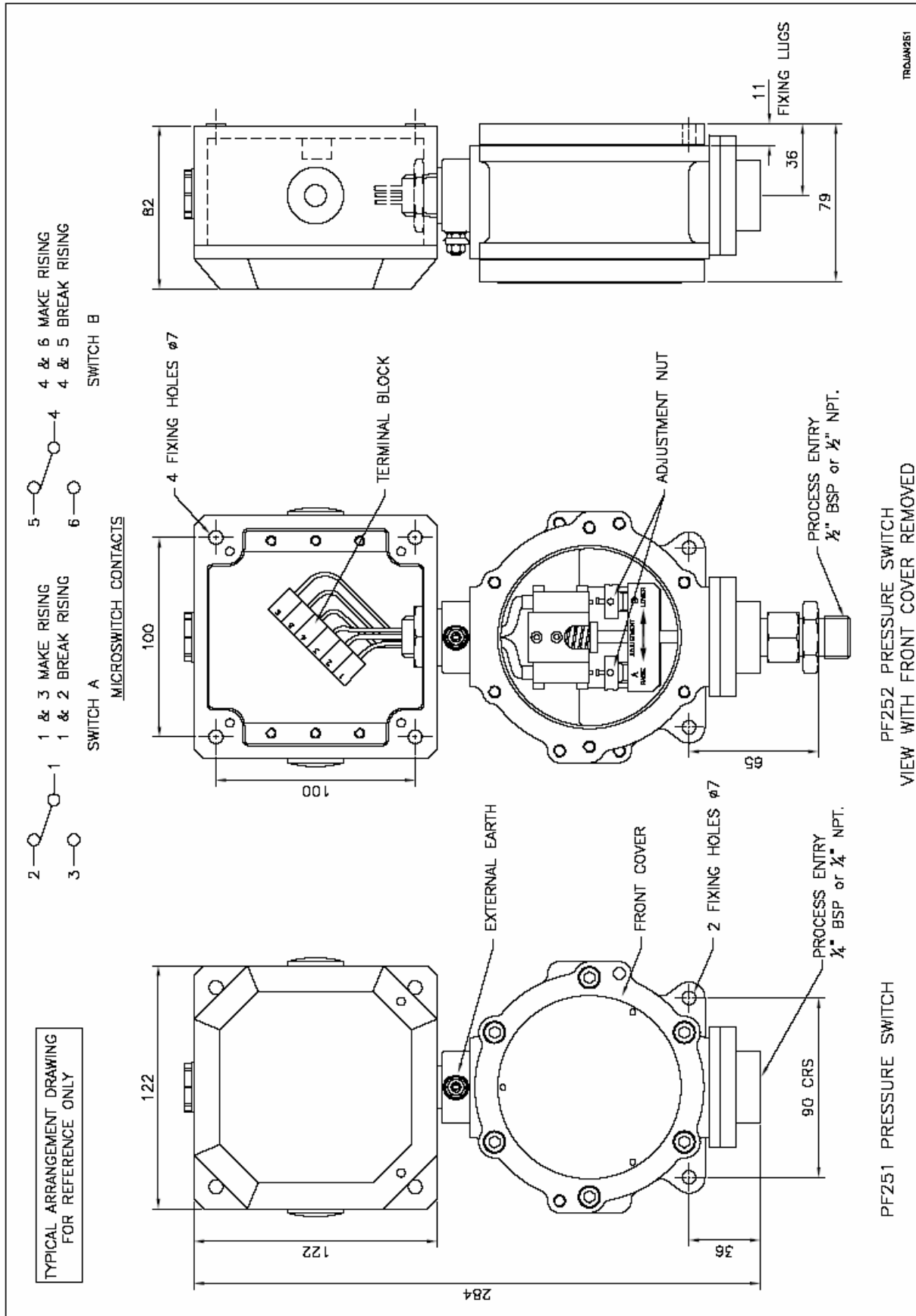
SPECIFICATION

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)

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TYPE PF251 AND PF252 TROJAN MEDIUM PRESSURE SWITCH

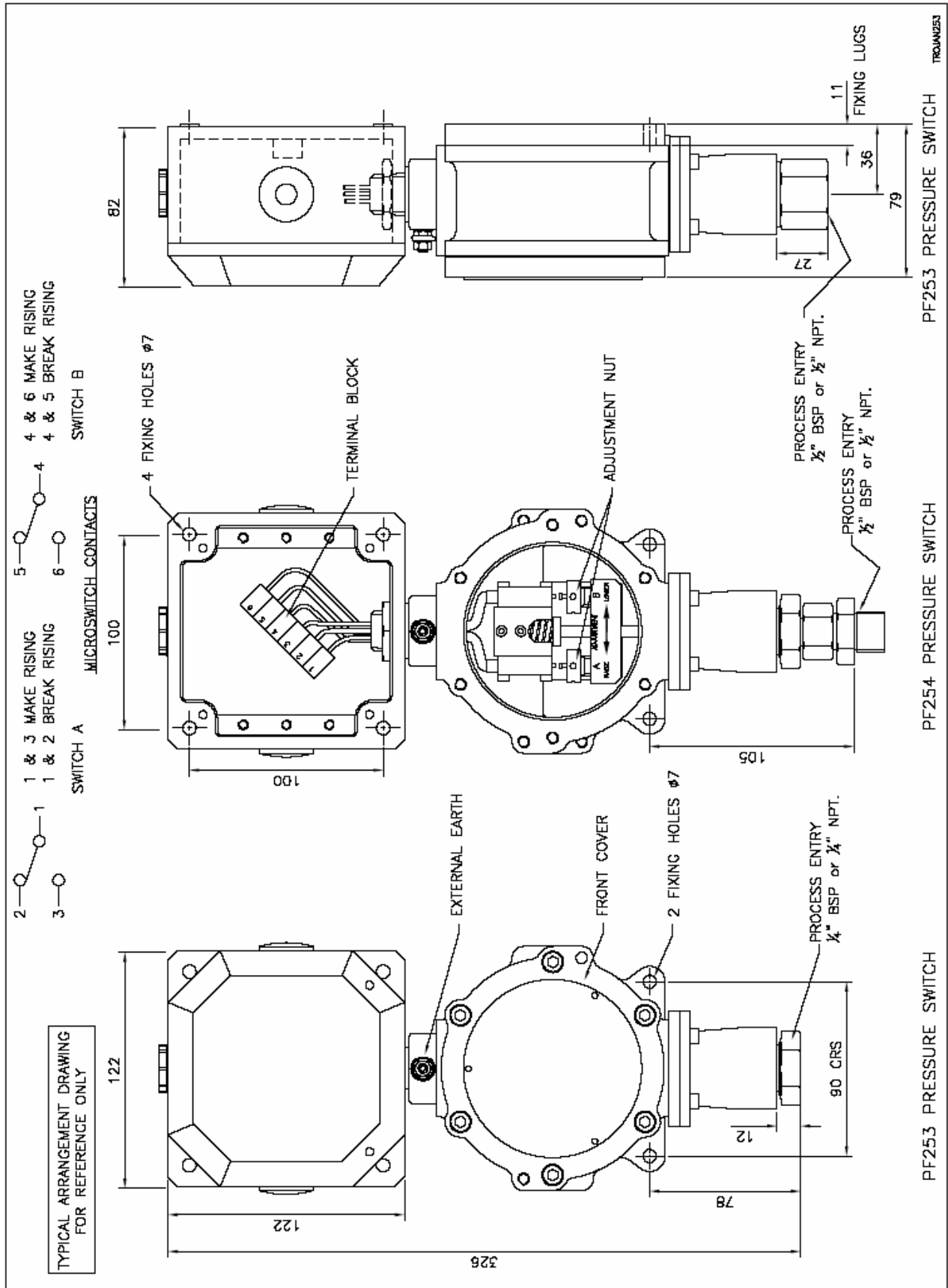


TROJAN261

VIEW WITH FRONT COVER REMOVED

PF251 PRESSURE SWITCH

TYPE PF263 AND PF264 TROJAN HIGH PRESSURE SWITCH



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TROJAN ATEX EExd SWITCHES

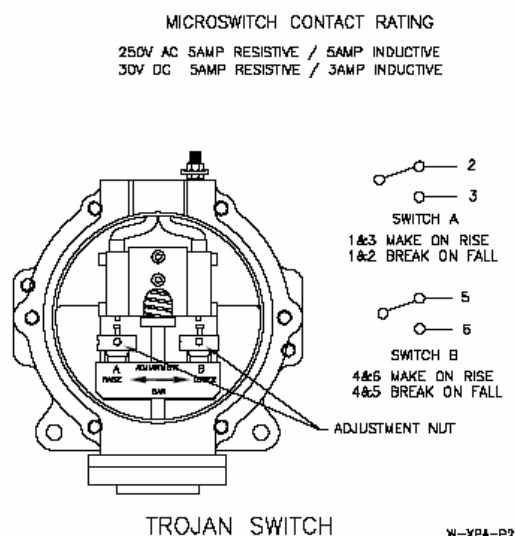
INTRODUCTION

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 EExd IIC T6,T5 & T4 and have an ATEX EExe 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.

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.



SPECIFICATIONS

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

Environmental Protection : IP65

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Temperature Limitations : Pressure switch.

Ambient : This is limited by the EExe junction box -50 to +65°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

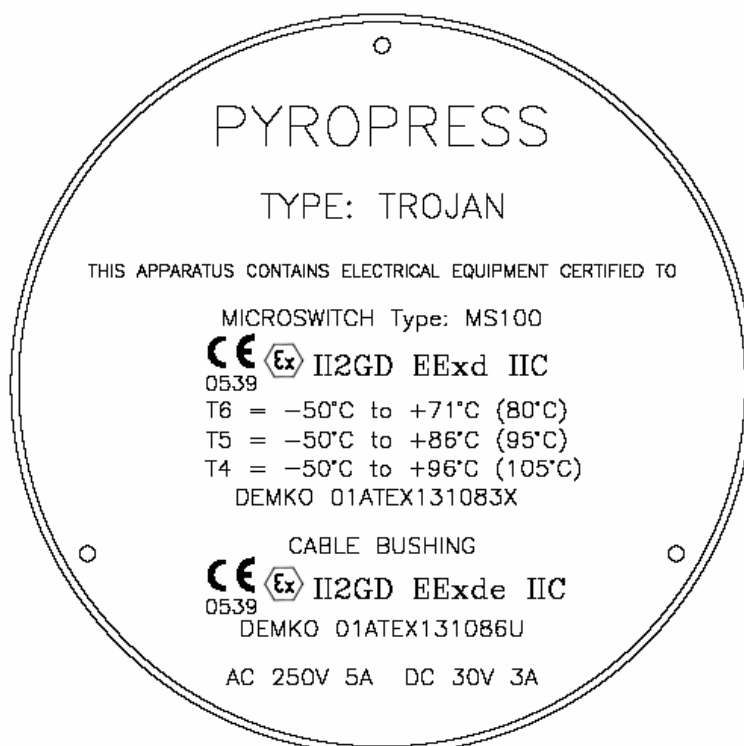
Accuracy : 1% at 20°C, Setting accuracy 2%

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 EExe certified junction box with 3 x M20 x 1.5 ISO entries and 2 x EExe certified blanking plugs



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