

HORIZONTAL MOUNTING

ANC4B 316 stainless steel or black anodised aluminium switchcase.

IP66/IP67 certified housing.

Single or dual microswitch option.

Manual reset pushbutton option.

ATEX Certified Option

CE  II1G Ex ia IIC

T6 Tamb -50 to +78°C

T5 Tamb -50 to +93°C

T4 Tamb -50 to +128°C

L1100 GUARDIAN INDUSTRIAL & ATEX Exia CERTIFIED HORIZONTAL LEVEL SWITCH



These liquid level switches are designed to give indication of high or low level alarms in tanks or vessels. They are fitted with a round or cylindrical float, the movement of which operates an SPCO microswitch via an offset pivot and push rod. A second microswitch can be fitted to give an additional signal.

SPECIFICATION

Process limitations : Full vacuum

Float and Rod : 316 Stainless steel

Max. pressure : 3.5 Bar

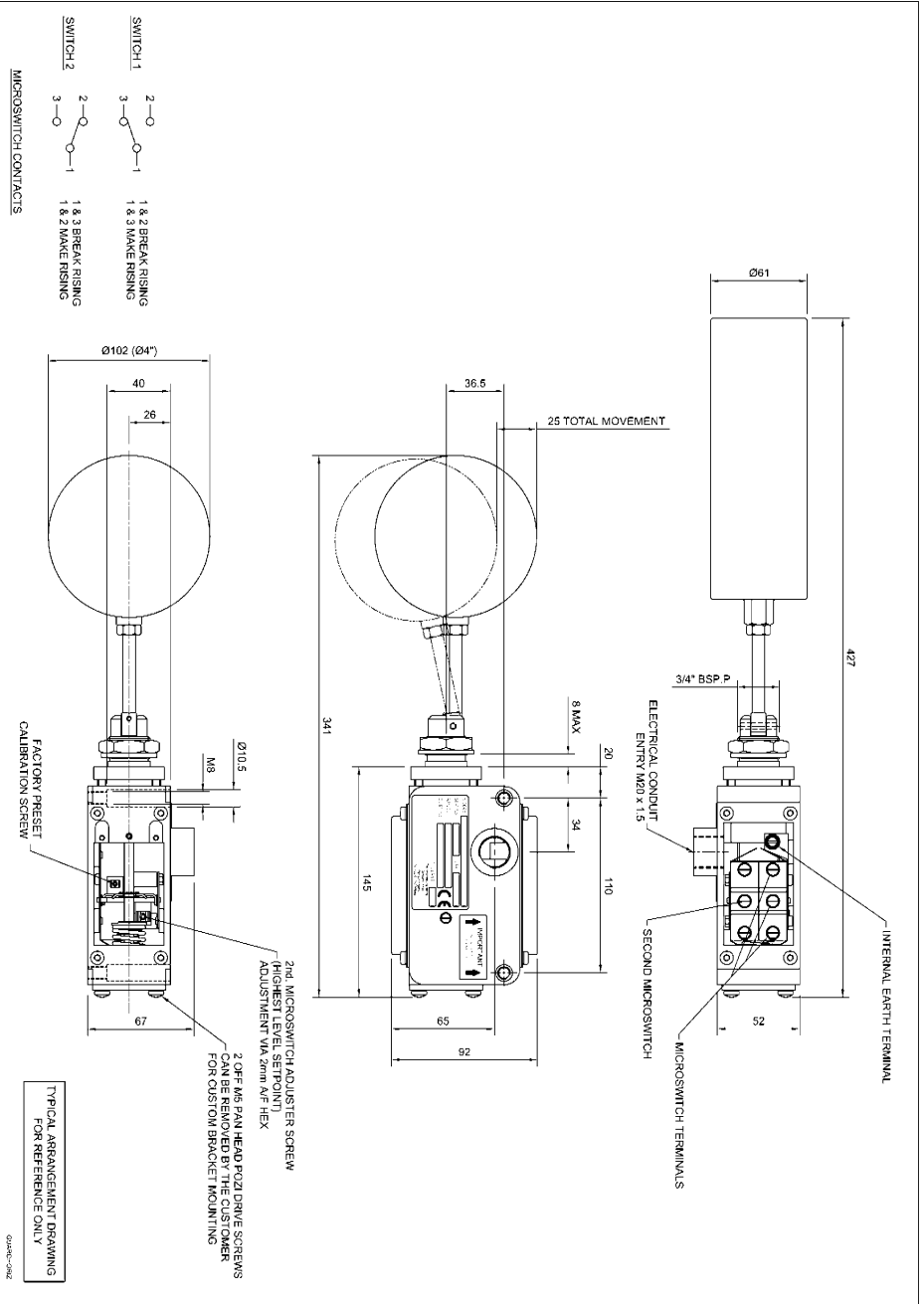
Mounting : 3/4" BSP.P thread suitable for 27mm OD hole supplied with a bonded seal and backing nut. Alternatively a suitably sized flange can be provided to enable insertion complete with float.

Max. temperature : 100 C°

Switching action : High or Low level alarm (exact requirement to be stated upon ordering).

PART NUMBER	
PREFIX WITH 'S' FOR STAINLESS STEEL SWITCHCASE	
(S) L 1 1 _ / F S 0 5 _ S / X	
MICROSWITCH OPTIONS 01 = SINGLE SWITCH 02 = DUAL SWITCHES 03 = USE 01 04 = USE 02 05 = SINGLE - FOR Exia USE 06 = DUAL - FOR Exia USE	FLOAT 0 = ROUND 4" ROD 1 = CYLINDRICAL 4" ROD 2 = CYLINDRICAL 8" ROD 3 = CYLINDRICAL 2" ROD

FIG. 14 TYPE L1100 GUARDIAN HORIZONTAL LEVEL SWITCH



GUARDIAN INDUSTRIAL & ATEX Exia SWITCHES

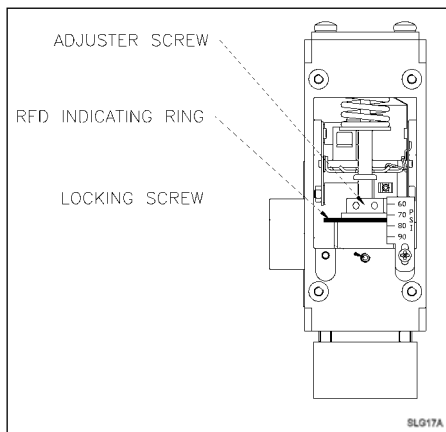
INTRODUCTION

The Guardian **pressure, differential pressure, temperature, level and flow** switches are a part of our extensive range of specialist process sensors. They utilise the expertise gained from over 50 years experience of designing and manufacturing control devices for industrial, marine and hazardous area applications.

These switches are constructed with either a robust aluminium or stainless steel enclosure. The aluminium casting is black anodised and supplied with 316 stainless steel covers. The stainless steel case is a natural finish. Covers are gasketed and sealed to achieve an environmental seal to IP66 & IP67 standards. The internals utilise a unique mechanism designed by the engineers at PYROPRESS to produce a wide range, low switching differential and excellent repeatability. This combined with a variety of microswitches, mountings and sensor options has produced a switch range suitable for all weatherproof and intrinsically safe applications.

CALIBRATION

The design features a simple form of calibration adjustment against a scale plate. This allows users to either order units with a specific setting, or stock a mid range setting and then calibrate to suit the application. Calibration is performed on the opposite side of the switch to the electrical connections, and can be set safely with the switch supply live. On removal of the adjustment cover a small grub screw can be loosened allowing the adjusting ring to be turned with a small Tommy bar or Allen key. The setting is read from the centre of the red indicating ring against the calibrated scale plate.



Calibration procedures for dual microswitches and adjustable switching differential switches are detailed on the operating and maintenance instructions supplied with each switch.

TECHNICAL SPECIFICATION

Switchcase and covers : ANC4B 316 stainless steel switchcase with 316 stainless steel covers or black anodised aluminium switchcase and 316 stainless steel covers. Optional 304 stainless steel mounting bracket.

Microswitch : SPCO/SPDT. Options include single or twin switch assemblies for simultaneous or separately adjustable set points, adjustable switching differential, manual reset and noble metal contacts for use on intrinsically safe circuits.

Microswitch rating

Standard microswitch : 6 Amps @ 480 V.AC
: 10 Amps @ 250 V.AC & 125 V.AC
: 5 Amps @ 30 V.DC & 0.5 Amps @ 125 V.DC
Adjustable deadband and high : 10 Amps @ 250 V.AC or DC
Current DC switching

Electrical Connections : Screwed terminals direct onto microswitch, suitable for cable up to 2.5 mm². (Manual reset microswitch is supplied with 6BA solder tags).

Electrical Conduit Entry : M20 x 1.5 straight entry. Adaptors are available.

Environmental Protection : Switches have been tested and certified by an external test house to IP66 in accordance with BS EN 60529 : 1992. In addition further internal tests confirm that the switchcase meets the requirements of IP67.

Vibration and shock parameters : Switches were subjected to Lloyds Register Type Approval System Test Specification No.1 Clause 130 Vibration Test 142 and shock tested to BS EN 60068-2-27 : 1987.

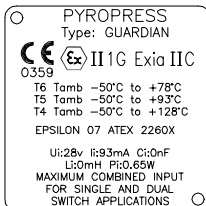
Temperature Limitations: Pressure, Vacuum and Differential Pressure.

Process : Diaphragm actuated unless otherwise stated -50 to +90°C (Nitrile) or -20 to +150°C (Viton). Piston actuated -40 to +120°C (Nitrile), or -20 to +150°C (Viton) or -60 to +150°C (PTFE). **Ambient :** -10 to +80 Deg.C.

Storage : -60 to +80°C. (For temp, level and flow refer to specific pages).

Certification: All switches are CE certified and marked in accordance with the following EU directives. Industrial : 2006/95/EC (Low Voltage Directive). Exia : 94/9/EC ATEX coded CE Ex II1G Exia IIC. CAT 1 (Zone 0) areas Special conditions for safe use. (Category 1, Zone 0) Aluminium may only be used when the ignition hazardous assessment shows that there is not risk of ignition from incensive, impact or abrasion sparks.

Accuracy: 1% @ 20°C.



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 06/09