



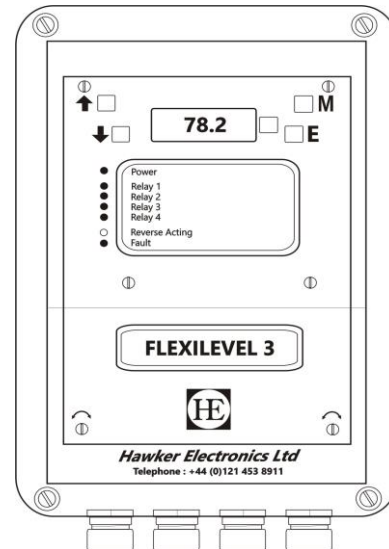
HAWKER

LEVEL CONTROL SYSTEMS

The Digital Flexilevel 3

Level Indicator/Controller for Capacitive,
Ultrasonic, Hydrostatic Level Transducers

- Programmable display
- 4 control relays
- AC or DC supply
- Sensor failure alarm
- Simulator



The FXL3 Flexilevel 3 provides digital indication with 4 control/alarm relays for use with loop powered transmitters, such as the Hawker Flexicap, Minisonda, and Pressure transmitter. It will accept most milliamp signals from self powered systems, an integral 4 button keypad and display allows the user to programme the various functions to suit the application in hand. No programming experience is necessary. Using a simple 'menu' procedure calibration and mode operation are programmed as follows

Zero and Span similar to analogue instruments. These are set using the milliamp signal generated by the transducer when the vessel is empty and full, or as near full a possible.

Scaling the digital display can be scaled 0-100% or in engineering units to provide any numerical display commencing from 0000 to 9999, e.g. 0000-2500. The decimal point can be positioned as required.

Simulator mode overrides the sensor and allows the user to test all the settings without having to change the tank contents

Control/Alarm Relay each of the four relays has fully adjustable hysteresis such that it can be energised at any point of the range and de-energised at any point thus providing a wide differential for pump or valve control, or small differential for alarms or close control. Fail safe high or fail safe low is determined by the de-energised level being set higher, or lower than the energising level.

Re-transmission isolated milliamp and voltage signals commencing from low scale are provided. These can be used to drive an analogue indicator or graphics for VDU etc. The re-transmission signals can be made reverse acting i.e. decreasing for increasing input signal such as maybe required for depths below datum as often used for borehole applications.

Failure Relay this de-energises should the milliamp input signal rise above or fall below the programmed zero and span values, allowing an alarm to be raised for short or open circuits in the loop powered systems.

Manual/Real Time Programming allows the user to use the real time sensor readings or optionally can input manual known readings



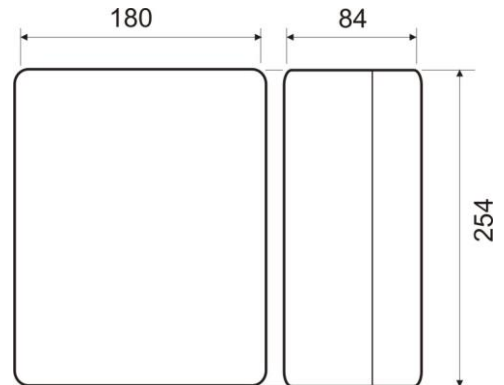
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TECHNICAL SPECIFICATION

Technical Data

Display:	4 digit 9mm LCD scalable between 0000 and 9999. User adjustable decimal point
Input Resolution	00.01mA
Input Response Time	< 750 ms 63% FS
Input Display Accuracy	0.1%
Input/Output Resolution	0.01 mA input- 0.02 mA output
IO Response time	0.03mA input – 0.001V output retransmission <1.5s 63% FS
Input:	0-25mA any part of (min span 2mA) input circuit fully isolated.
Input resistance:	10 ohms standard.
Zero suppression:	A live zero can be set anywhere within the range.
Accuracy: Resolution;	Better than 1% for 4-20mA input. 0.1%
Input supply:	110V/230V,50/60 Hz or nominal 24VDC +/- 10%
Input Power	VAC 8 VA, VDC 4.5W
Inrush Current	2.7A@24VDC 10ms, 145 mA@2230VAC 10 ms
Installation Category	Over Voltage Cat II
Operating temp.	-10 to +40 ° C
Tank Cycling:	Simulated tank cycling via keypad 0.1% steps of FS LCD setting
Password:	Program menu access, 4 digit 0000 to 9999
Sensor supply:	24VDC, +/- 10% (optional 36 VDC) fully isolated from input and supply. Current limiting at 30mA
Four control relays:	SPCO contacts. 4A 250VAC, 30VDC resistive load 1x10 ⁷ ops mechanical endurance, 1 x 10 ⁵ ops electrical endurance Each having fully adjustable hysteresis with programmable fail to safe action.
One failure relay:	De-energised on loss of, or excess current in a loop powered system. De-energised for lost echo when used with Minisonda.
L.E.D.'s:	4 off 'relay energised' 1 off 'power on' 1 off 'reverse acting' re-transmission signal 1 off 'fault' (flashing on failure condition)
Re-transmission:	Programmable within 0-21mA. Max loop resistance 1000 ohms. Voltage output 1-5V into max 2Kohms. Outputs are fully isolated from input and supply.
Enclosure:	Weather resistant to IP66, clear polycarbonate, (254H x 180W x 84D).
Mounting holes:	(x4) 165mm (hor) 239mm (vert) screws 6 – 8 mm dia.
Weight:	1.5Kg

Flexilevel 3 Enclosure Details



Ordering Information

Model	Voltage
FXL3	110V A.C./230V A.C./24V D.C.

Compatible Hawker Products

Product	Data sheet No
Minisonda	326
Sondaloop Remote	299
Flexicap	254
Flexicap 4-20	278
PTX 1830	234
Series 360	249
Series H500	285
HPTX 23	286

This product has been designed and complies to the relevant standards as listed in its certificate of conformity. The installer/user must ensure compliance. The crossed out bin symbol, placed on the product, reminds you of the need to dispose of the product correctly at the end of its life. Because of continuing development we reserve the right to change the specifications without notice

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