

Quick Start Manual



ICON™ Corrosion-Free
PROCESS CONTROLS Instrumentation Equipment™

Read the user's manual carefully before starting to use the unit.
Producer reserves the right to implement changes without prior notice.

Safety Instructions

- ✔ Only qualified personnel should perform installation, electrical wiring, and maintenance.
- ✔ Always comply with workplace safety regulations and national standards.
- ✔ Do not modify the device or attempt unauthorized repairs.
- ✔ Never install or remove the pressure switch under pressure or while powered.
- ✔ Ensure compatibility with fluid type, pressure, and temperature before installation.



WARNING

- ✔ It must be ensured that the values given for voltage, current, and power are not exceeded.
- ✔ When switched on, a load must be connected in series.
- ✔ The electrical details apply to ohmic loads. (Capacitive or inductive loads must be operated using a protective circuit.)

Introduction

The **LevelPro® LPS Series** Pressure Switches uses a monocrystalline silicon diaphragm for precise pressure measurement, with built-in circuits converting signals to standard industrial outputs and digital displays.



Specifications

Supply Voltage	12~30VDC
Power Supply	24VDC
No-Load Current Consumption	Max. 30mA
Switch Load	<200mA
Response Time	<10ms
Switching Accuracy	±0.5% of range
Wiring Protection	Inverted Phase, Overload
Accuracy	±0.5% of Range
Stability	±0.3% of Range
Temperature Range	-4°F ~ 185°F -20°C ~ 85°C
Diaphragm Process Connection	SS316 1/4" NPT
Body Material	PBT
Protection Class	IP67
Output	PNP / NPN NO / NC Programmable

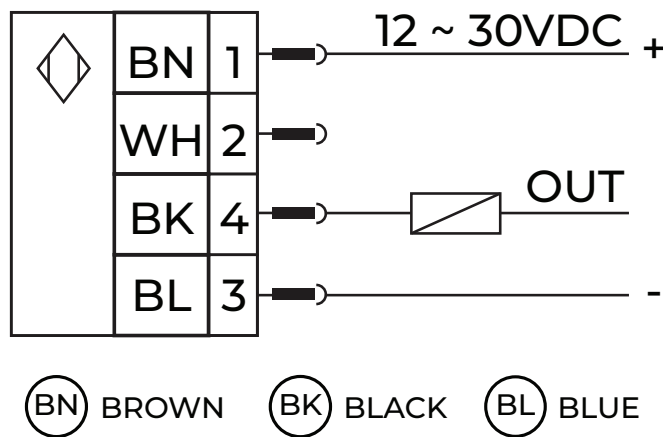
LevelPro® – LPS50 Series

Digital Pressure Switch

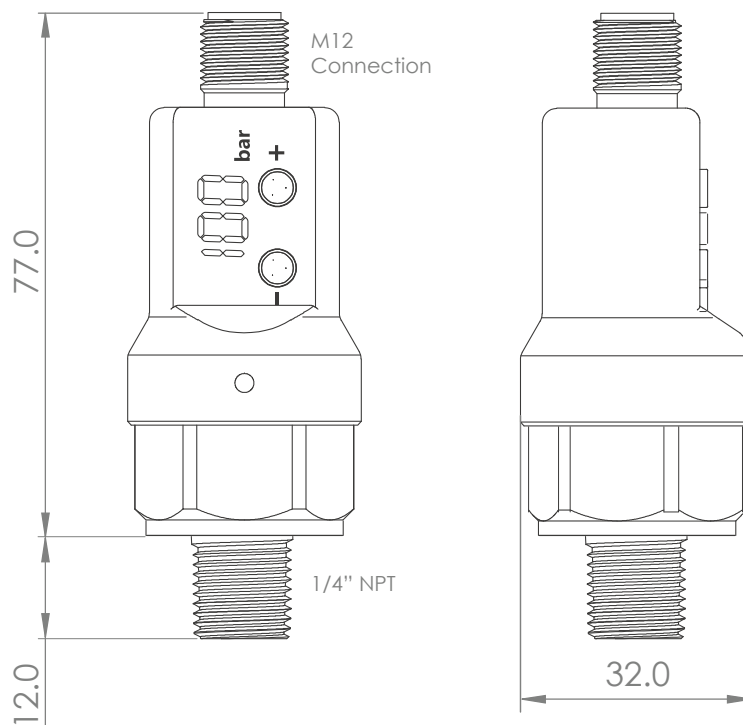
Pressure Range

Pressure Range	Bar	-1	1	2	5	10	16	25	60	100
	Psi	-15	15	29	73	145	232	363	870	1450
Max. Overload Pressure		5x				3x			2x	
Min. Damage Pressure		6x				4x			3x	

Wiring Diagram



Dimensions



Setting Mode

In this mode, you can adjust the pressure value at which the switch activates using the two push buttons. The LED display blinks while in setting mode.



Press Left Key (-)

The Pressure Set Point Value Decreases

Press Right Key (+)

The Pressure Set Point Value Increases

After entering the desired value, wait a few seconds. The display will stop blinking, confirming the pressure set point has been successfully saved.

LED Display Status

- ✔ **Blinking Display:** You're viewing or setting the pressure set point.
- ✔ **Non-Blinking Display:** The screen shows the current pressure reading.

Lock Codes

Code	Access Menu	Available Settings
006	Basic Programming	Display Offset Response Rate Reset PNP/NPN
001	Output Programming	Setpoint Delay Time NO/NC

LevelPro® – LPS50 Series

Digital Pressure Switch

Basic Programming

Press + to enter a parameter / Confirm | Use & to change digits

STEPS	DISPLAY	OPERATION
1 Home Screen 		Home Screen
2 Lock (Press + to enter the parameter)		Lock Settings Enter Code 006 to Unlock (Press + to save)
3 Display Offset (Press + to enter the parameter)		Display Offset Adjusts the display to compensate for installation or zero errors. (Factory Default: 0) (Press + to save)
4 Filter Coefficient (Press + to enter the parameter)		Filter Coefficient Controls how much the sensor smooths out noise or fluctuations. Range: 0-100. (Factory Default: 5) (Press + to save)
5 Response Rate (Press + to enter the parameter)		Response Rate Adjusts how fast the display responds to process changes. (Factory Default: 10) Note: Higher value = Faster update (Press + to save)
6 Reset (Press + to enter the parameter)		Reset Resets settings to factory default. (Enter 1 to reset the device) (Press + to save)
7 PNP NPN (Press + to enter the parameter)		PNP NPN Mode Changes the output signal type: PNP or NPN (Factory Default: PnP) (Press + to save)
8 Confirm Settings 		Confirm Settings Confirms all settings and exits back to the main screen.

LevelPro® – LPS50 Series

Digital Pressure Switch

Output Programming

Press + to enter a parameter / Confirm | Use & to change digits

STEPS	DISPLAY	OPERATION
1 Home Screen 		Home Screen
2 Lock (Press + to enter the parameter)		Lock Settings Enter Code 001 to Unlock (Press + to save)
3 Set Point 1 (Press + to enter the parameter)		Set Point 1 The pressure point where the switch activates. (Factory Default: 0.2% of Range) (Press + to save)
4 Reset Point (Press + to enter the parameter)		Pressure Reset Point (Hysteresis) The pressure at which the switch turns OFF again. (Factory Default: SP1-0.5%) (Press + to save)
5 Turn-on Delay (Press + to enter the parameter)		Turn-On Delay (OUT) Delay time before the switch activates after reaching SP1 (Factory Default: 0.0 Seconds) (Press + to save)
6 Turn-off Delay (Press + to enter the parameter)		Turn-Off Delay (OUT) Delay time before the switch deactivates after pressure drops below RP1 (Factory Default: 0.0 Seconds) (Press + to save)
7 Switching Mode (Press + to enter the parameter)		Switching Mode Choose output type: NO or NC (Factory Default: NO) (Press + to save)
8 Confirm Settings 		Confirm Settings Confirms all settings and exits back to the main screen.

Warranty, Returns and Limitations

Warranty

Icon Process Controls Ltd warrants to the original purchaser of its products that such products will be free from defects in material and workmanship under normal use and service in accordance with instructions furnished by Icon Process Controls Ltd for a period of one year from the date of sale of such products. Icon Process Controls Ltd obligation under this warranty is solely and exclusively limited to the repair or replacement, at Icon Process Controls Ltd option, of the products or components, which Icon Process Controls Ltd examination determines to its satisfaction to be defective in material or workmanship within the warranty period. Icon Process Controls Ltd must be notified pursuant to the instructions below of any claim under this warranty within thirty (30) days of any claimed lack of conformity of the product. Any product repaired under this warranty will be warranted only for the remainder of the original warranty period. Any product provided as a replacement under this warranty will be warranted for the one year from the date of replacement.

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Products cannot be returned to Icon Process Controls Ltd without prior authorization. To return a product that is thought to be defective, go to www.iconprocon.com, and submit a customer return (MRA) request form and follow the instructions therein. All warranty and non-warranty product returns to Icon Process Controls Ltd must be shipped prepaid and insured. Icon Process Controls Ltd will not be responsible for any products lost or damaged in shipment.

Limitations

This warranty does not apply to products which:

1. are beyond the warranty period or are products for which the original purchaser does not follow the warranty procedures outlined above;
2. have been subjected to electrical, mechanical or chemical damage due to improper, accidental or negligent use;
3. have been modified or altered;
4. anyone other than service personnel authorized by Icon Process Controls Ltd have attempted to repair;
5. have been involved in accidents or natural disasters; or
6. are damaged during return shipment to Icon Process Controls Ltd

Icon Process Controls Ltd reserves the right to unilaterally waive this warranty and dispose of any product returned to Icon Process Controls Ltd where:

1. there is evidence of a potentially hazardous material present with the product;
2. or the product has remained unclaimed at Icon Process Controls Ltd for more than 30 days after Icon Process Controls Ltd has dutifully requested disposition.

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If any portion of this warranty is held to be invalid or unenforceable for any reason, such finding will not invalidate any other provision of this warranty.

For additional product documentation and technical support visit:

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