

# Type 3512 & 3522

## Digital Weatherproof Regulators

### Description

The Type 3512 single loop and 3522 double loop are single units - integrated controller and booster. The 3512/3522 offers solenoid valve technology with forward flow exceeding those of most standard industrial electronic regulators or I/P transducers. Available with a local keypad programming option or RS-485 digital communications for PLC or PC control. Many output pressure ranges are available up to 150 PSI. With a reliable twin solenoid valve system, and an integral pressure sensor, an accuracy of  $\pm 0.5\%$  is obtainable.

Applications include; Gripper Control, Welding Operations, Actuator Control, Machinery Automation, Precision Robotics, Web Tension, Semiconductor Equipment, Molding and Forming Operations and Tire Manufacturing and Testing.

### Features

- Serial Interface
- Digital or Analog Inputs
- Analog Monitor Output
- Single Loop and Dual Loop Control
- Forward Flow up to 60 SCFM
- Digital Display

### Type 3512 and 3522 Ordering Information

5	2	0	P	1	
↑	↑	↑	↑	↑	Loops
1					1 loop
2					2 loops
2					
					Digital Interface
	S				Serial RS-485 (RS-232 and USB via converters)
	P				Keypad/display programmer
					Analog Control Signal
	E				0-10V
	I				4-20 mA
					Lower Output Pressure
		O			Lower Limit of Output Pressure
					Pressure Units
			G		PSIG
					Upper Output Pressure
		030			30 PSIG
		100			100 PSIG
		150			150 PSIG Upper Limit
					Mounting
			P		Pipe Mount
					Supply and Output Ports
				0	1/4 NPT
				1	1/4 BSPT
				2	1/4 BSPP
				3	3/8 NPT
				4	3/8 BSPT
				5	3/8 BSPP
				1	
					Options
				00	None
				15	15 VDC Supply



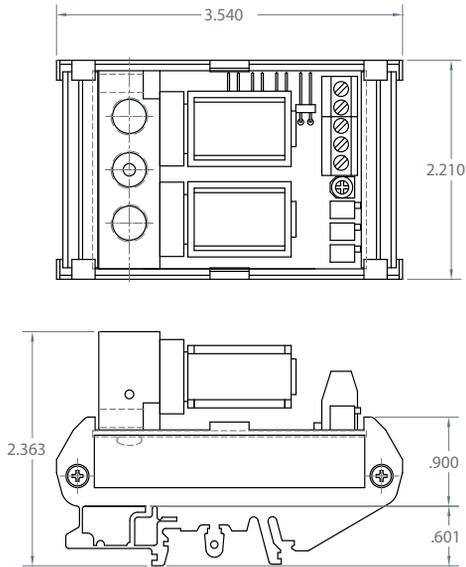
### Type 3512/3522

Performance	Full-Scale Accuracy 0.5%	
<b>Electrical Inputs</b>		
Supply Voltage	24VDC (optional 15VDC)	
Stand by Supply Current	80 mA	
Maximum Supply Current	325 mA	
<b>Supply Pressure</b>	Max. Output PSIG (BAR)	Max. Supply PSIG (BAR)
	Up to 5 (.35)	20 (1.4)
	>5 to 15 (.35-1.0)	30 (2.1)
	>15 to 30 (1.0-2.1)	60 (4.1)
	> 30 to 100 (2.1-6.9)	165 (11.4)
	>100 to 150 (6.9-10.3)	200 (13.8)
<b>Outputs</b>		
Atmospheric Pressure Ranges	30, 100, 150 PSIG 0.35, 1.03, 2.07, 6.9, 10.34 BAR	
Forward Flow Capacity	60 SCFM (1700 LPM)	
Exhaust Flow Capacity	15 SCFM (425 LPM)	
Analog Setpoint Control	0-5V, 0-10V, 4-20mA	
Digital Setpoint Control	0-100% full scale (installed sensor=100%)	
Digital Communications	Serial RS-485 interface	
Serial Address	Addresses a-z available (except p and q reserved). 'r' default selectable and configurable via Serial or Keypad Display Interface	
Loop Options	Regulate first loop (onboard sensor) or 2nd loop (remote sensor)	
Remote Sensor Feedback	0-10V, 0-5V, 4-20 mA, (Forward and Reverse Acting)	
Analog Output Source	Follow Setpoint, Output Pressure, or Remote Sensor	
Analog Output Range	0-10V, 0-5V	
<b>Environmental</b>		
Operating Temperature	32-141 °F (0-60 °C)	
Media-Wetted Materials	Aluminum, copper alloys, nickel, buna-n, silicon, 316SS	

# Dimensional Drawings

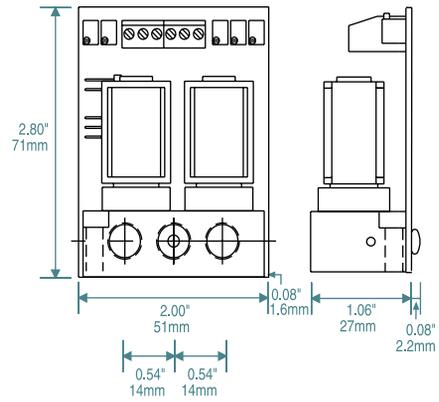
## DIN Tray Mount

(3100, 3400)



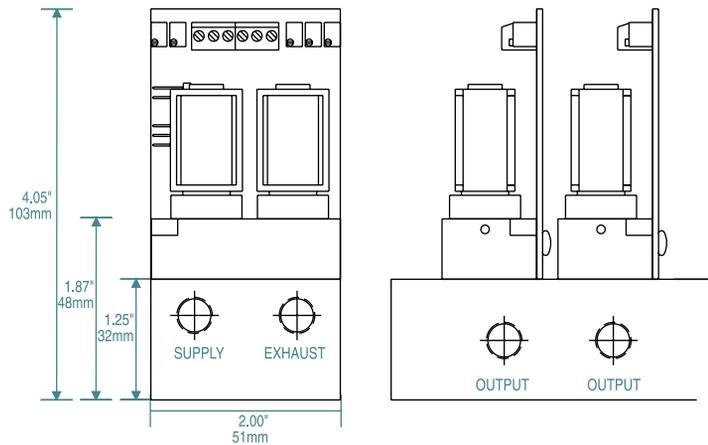
## Panel Mount

(3100, 3400)



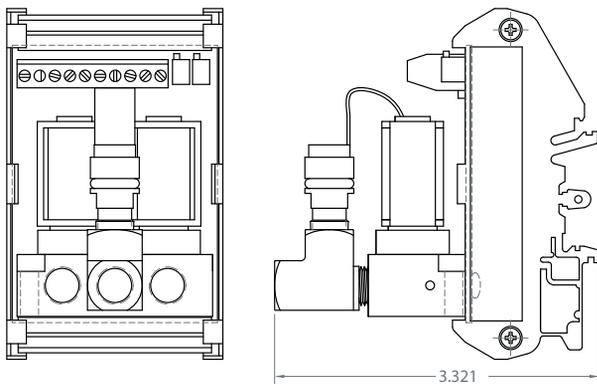
## Manifold Mount

(3100, 3400)

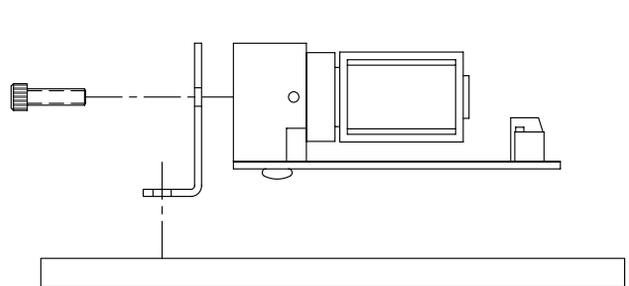


## High-Pressure Units (>150 PSIG) T3111, 3410 and 3420

High Pressure (>150 PSIG / 10.3 BAR) units

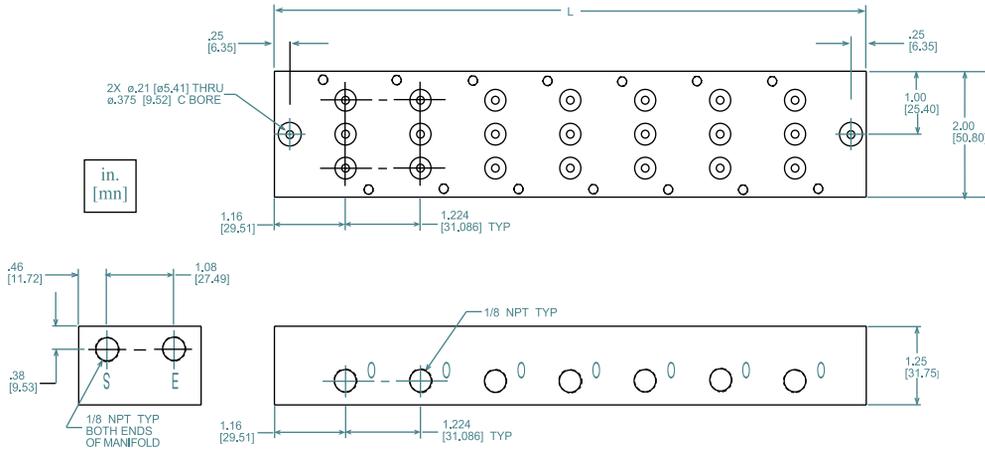


## Flush Panel Mount T3100, T3111



## Type 3100 and 3400 Series Manifold Block ( 7 Station Manifold Shown)

( 7 station manifold shown)



Manifolds are available in 2 to 10 stations.

To calculate the overall length "L" of the manifold use the following formula:

$$L = 2 \times 1.16 + (S-1) \times 1.224$$

Where S = the number of manifold stations

EXAMPLE: 7 Station Manifold:

$$L = 2 \times 1.16 + (7-1) \times 1.224$$

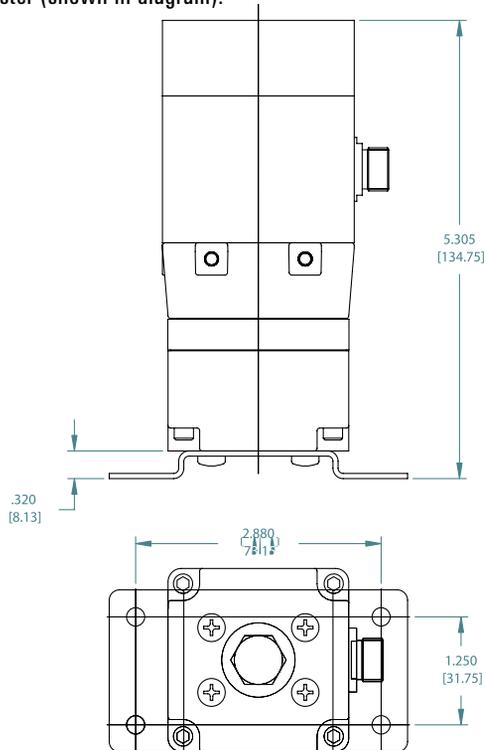
$$L = 9.664 \text{ in. [245.47 mm]}$$

## Circuit Board Regulators — Mounting and Packaging

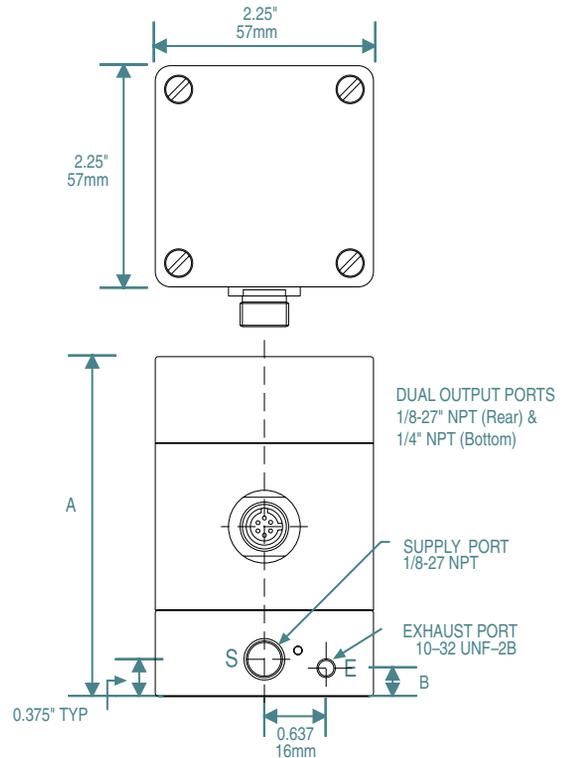
Mounting	Product Configuration	Accessories
DIN Tray	Product mounted in DIN Tray	None
Panel	Product configured for panel mounting	For 'flush' mounting, order Flush Mount Bracket (161-520-00) separately
Multi-Unit Manifold	Product configured for multi-unit manifold mounting	Order Multi-Unit Manifold (350-110-XX) separately. XX = # stations.

## Weatherproof Regulator Mounting Options

The Type 3200 and 3500 regulators can be mounted in-line or by brackets which are available separately (DIN-rail bracket — 010-115-000; Panel bracket — 010-135-000). Bracket mounting holes (2 X 8-32 UNC 2B X 0.375"/9.5mm deep minimum) are available on the rear and right faces (when looking at product with IN/OUT flow from left to right) and also on the bottom of the medium-flow booster (shown in diagram).

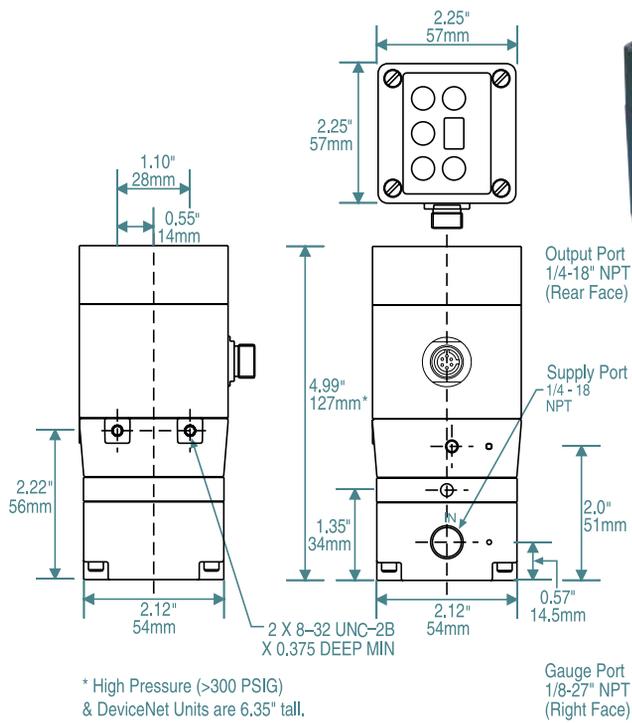


## Low-Flow Weatherproof T3210, T3220, T3510, T3520

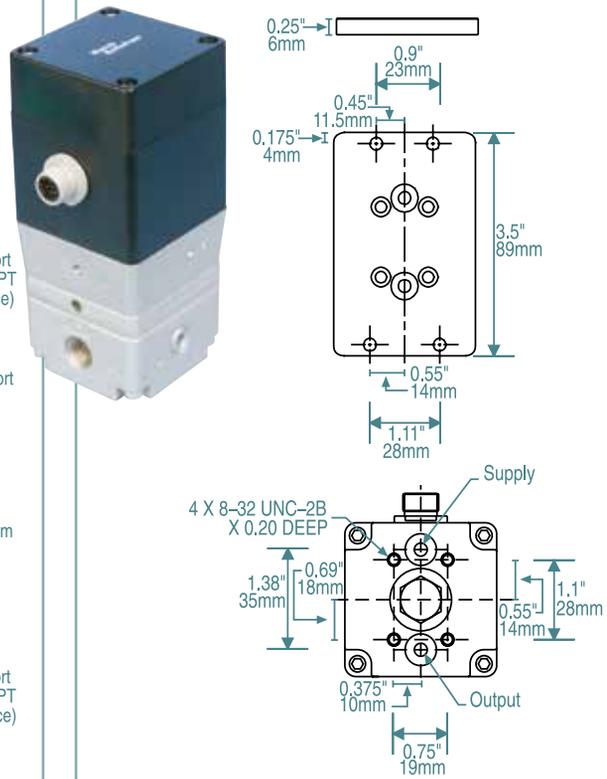


	Pressure Range			
	"A" Dimensions		"B" Dimension	
	Inches	mm	Inches	mm
0-165 PSIG	3.46"	88 mm	0.285"	7.2 mm
0-350 PSIG	3.87"	98.3 mm	0.71"	18.0 mm
0-600 PSIG	5.43"	138 mm	0.71"	18.0 mm

### Medium-Flow Weatherproof T3211, T3221, 3511, 3521



### Manifold Mount T3211, T3221, 3511, 3521



### High-Flow Weatherproof T3212, T3222

