

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
					0-10V
					4-20 mA
					Lower Output Pressure
					Lower Limit of Output Pressure
					Pressure Units
					PSIG
					Upper Output Pressure
					30 PSIG
					100 PSIG
					150 PSIG Upper Limit
					Mounting
					Pipe Mount
					Supply and Output Ports
					1/4 NPT
					1/4 BSPT
					1/4 BSPP
					3/8 NPT
					3/8 BSPT
					3/8 BSPP
					Options
					00 None
					15 15 VDC Supply

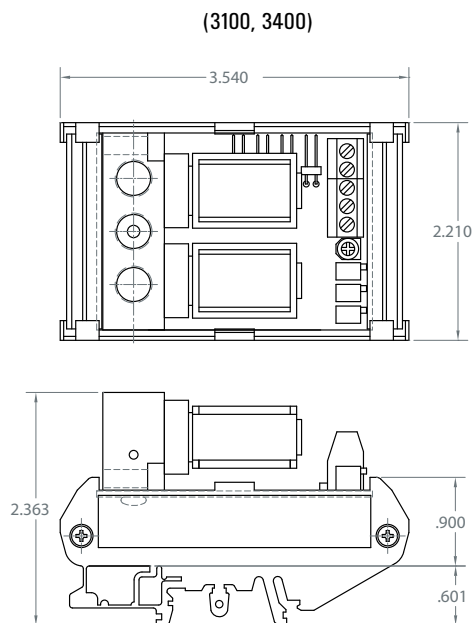


Type 3512/3522

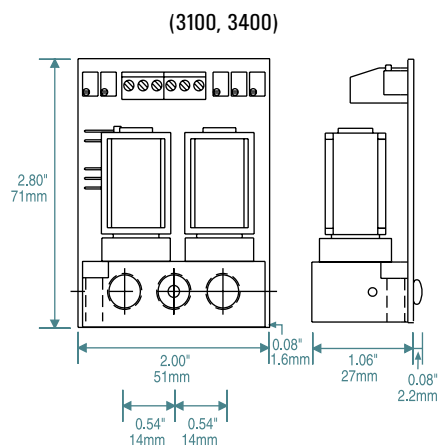
Performance	Full-Scale Accuracy 0.5%
Electrical Inputs	
Supply Voltage	24VDC (optional 15VDC)
Stand by Supply Current	80 mA
Maximum Supply Current	325 mA
Supply Pressure	
	Max. Output PSIG (BAR) Max. Supply PSIG (BAR)
	Up to 5 (.35) 20 (1.4)
	>5 to 15 (.35-1.0) 30 (2.1)
	>15 to 30 (1.0-2.1) 60 (4.1)
	> 30 to 100 (2.1-6.9) 165 (11.4)
	>100 to 150 (6.9-10.3) 200 (13.8)
Outputs	
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
Environmental	
Operating Temperature	32-141 °F (0-60 °C)
Media-Wetted Materials	Aluminum, copper alloys, nickel, buna-n, silicon, 316SS

Dimensional Drawings

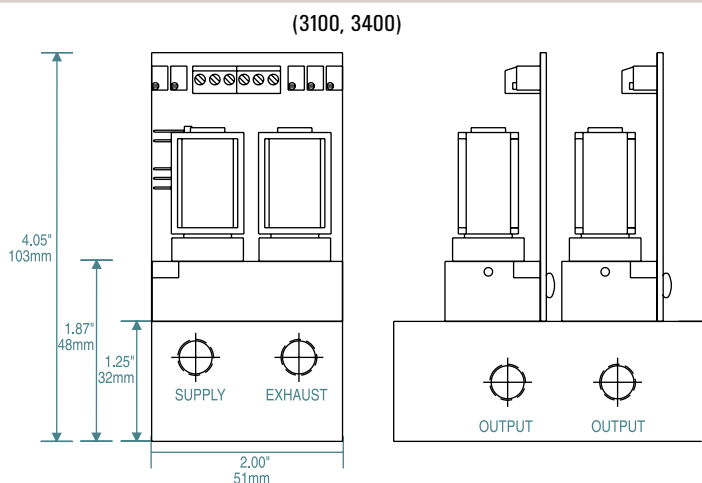
DIN Tray Mount



Panel Mount

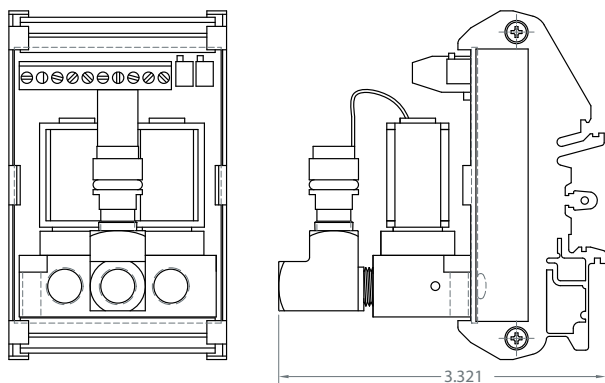


Manifold Mount

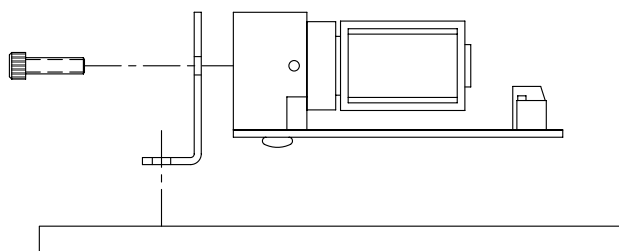


High-Pressure Units (>150 PSIG) T3111, 3410 and 3420

High Pressure (>150 PSIG / 10.3 BAR) units

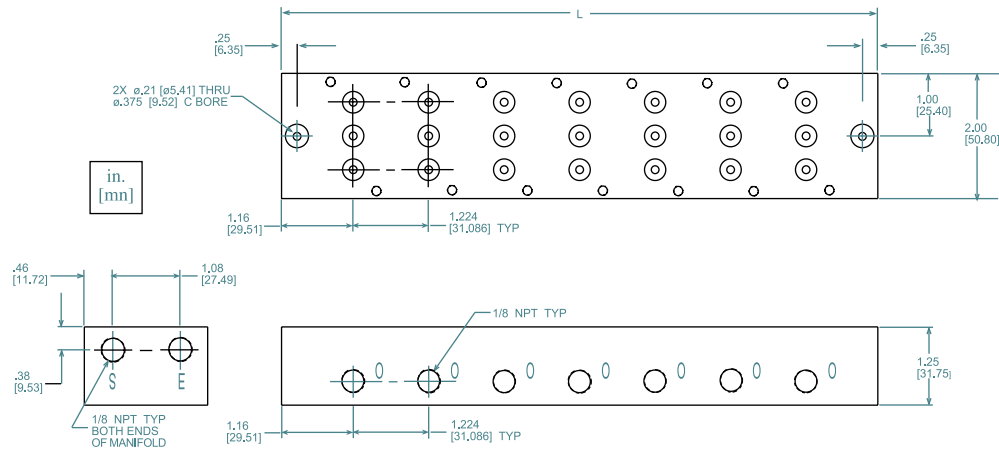


Flush Panel Mount T3100, T3111



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:

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

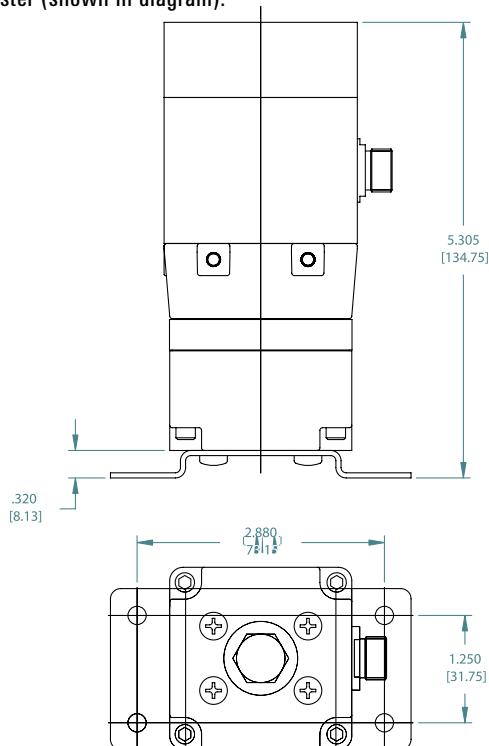
$$L = 9.664 \text{ in. } [245.47 \text{ mm}]$$

Circuit Board Regulators — Mounting and Packaging

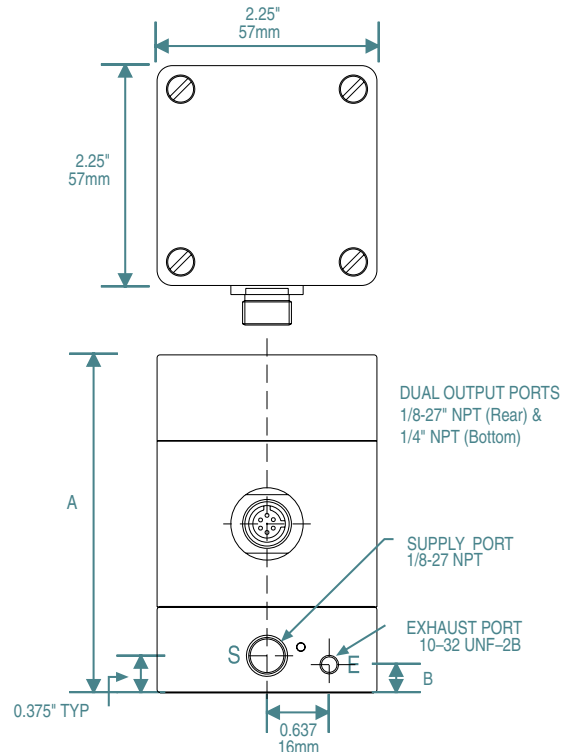
Mounting	Product Configuration	Accessories
DIN Tray	Product mounted in DIN Tray	None
Panel	Product configured for panel mounting	For 'flush' mounting, order Flush Mount Bracket (161-520-00) separately
Multi-Unit Manifold	Product configured for multi-unit manifold mounting	Order Multi-Unit Manifold (350-110-XX)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

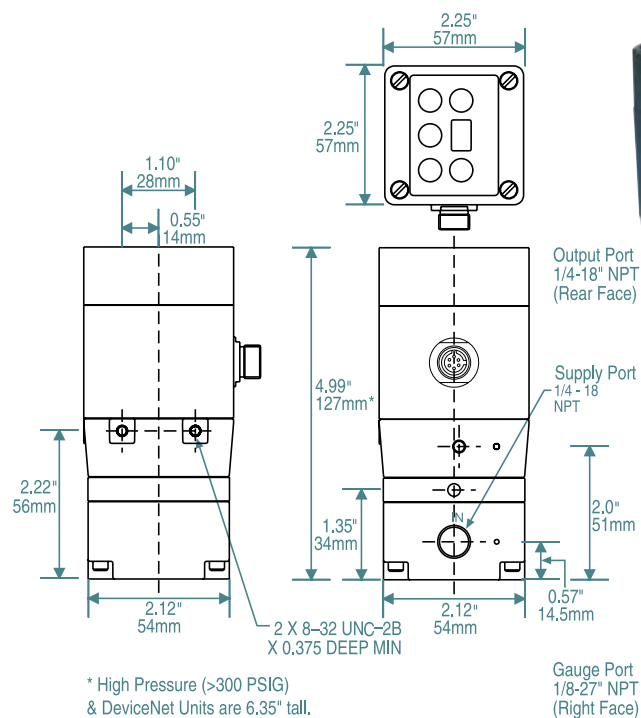


Low-Flow Weatherproof T3210, T3220, T3510, T3520

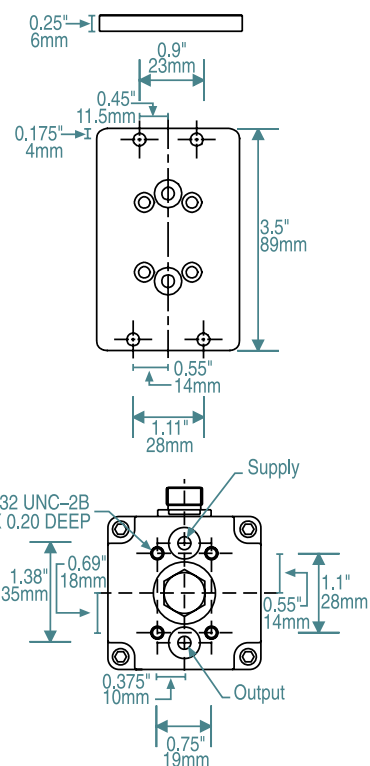


	"A" Dimensions		"B" Dimension	
	Inches	mm	Inches	mm
0-165 PSIG	3.46"	88 mm	0.285"	7.2 mm
0-350 PSIG	3.87"	98.3 mm	0.71"	18.0 mm
0-600 PSIG	5.43"	138 mm	0.71"	18.0 mm

Medium-Flow Weatherproof T3211, T3221, 3511, 3521



Manifold Mount T3211, T3221, 3511, 3521



High -Flow Weatherproof T3212, T3222

