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Fine Controls (UK) LTD, Bassendale Road, Croft Business Park,
Bromborough, Wirral, CH62 3QL UK
Tel: 0151 343 9966
Email: sales@finecontrols.com

FAIRCHILD T9000 DIGITAL ELECTRONIC PRESSURE CONTROLLER
Installation Instructions

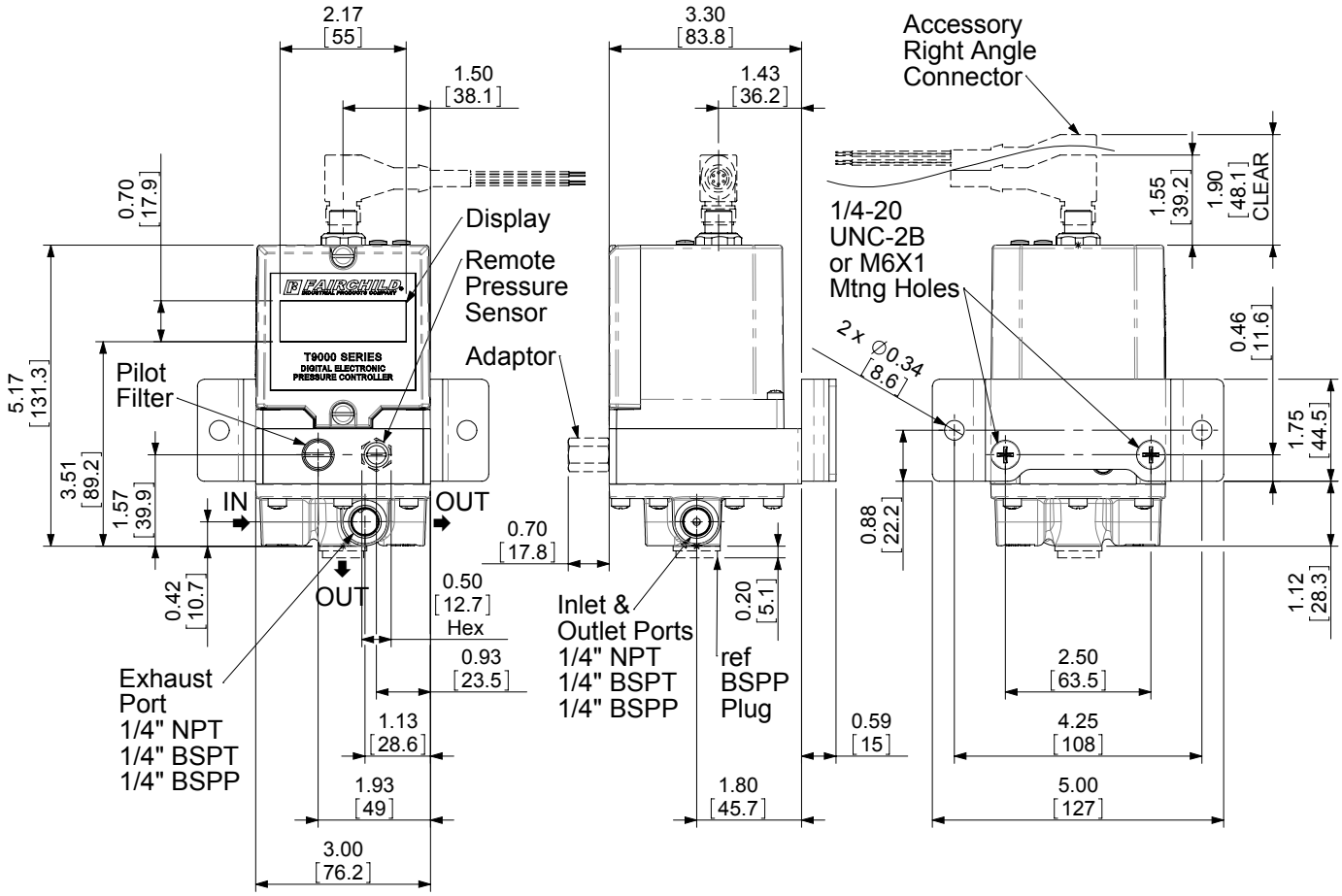


Figure 1. T9000 Outline Dimensions shown with Mounting Kit 19634-3 or -4 **(Included with Unit)**

INSTALLATION
The Model T9000 is supplied with a Mounting Kit 19634-3 (or 19634-4 for metric threads) for Panel or Wall Mounting. For more information, see Figure 1. above.

LEGAL NOTICE:
The information set forth in the foregoing Installation, Operation and Maintenance Instructions shall not be modified or amended in any respect without prior written consent of Fairchild Industrial Products Company. In addition, the information set forth herein shall be furnished with each product sold incorporating Fairchild's unit as a component thereof.

REMOTE PRESSURE SENSING
The T9000 series pressure controllers can sense pressure from a remote location in the process system by employing the remote pressure sensing port. Remote pressure sensing can be usefull for improving system response and eliminating the pressure drop associated with air flowing through the outlet tubing between the pressure controller and the process.

Remote pressure sensing is accomplished by removing the remote sensing port plug and inserting the 21665-* remote pressure sensing adaptor in the port. This special adaptor blocks the pressure sensing passage coming from the outlet chamber of the pressure controller and makes the on board feedback pressure sensor connection available at the adaptor.

CAUTION:
Because of propagation delays in long feedback lines, the there is a limit in the length of the feedback line that can be employed, otherwise the system pressure will oscillate. In general terms, the longer the feedback line, the larger the line must be to affect a stable system. Adjustment of the T9000's PID constants may also be required. Be sure there are no restrictions (kinks in the line or undersize fittings) in the feedback line. Some experimentation may be required to determine the line size for the length of run of the feedback line.

CAUTION:
To prevent damage to the Remote Pressure Sense Port Adaptor, support the Remote Pressure Sense Adapter with a wrench when installing the air line fitting. For more information,see Figure 3. below.

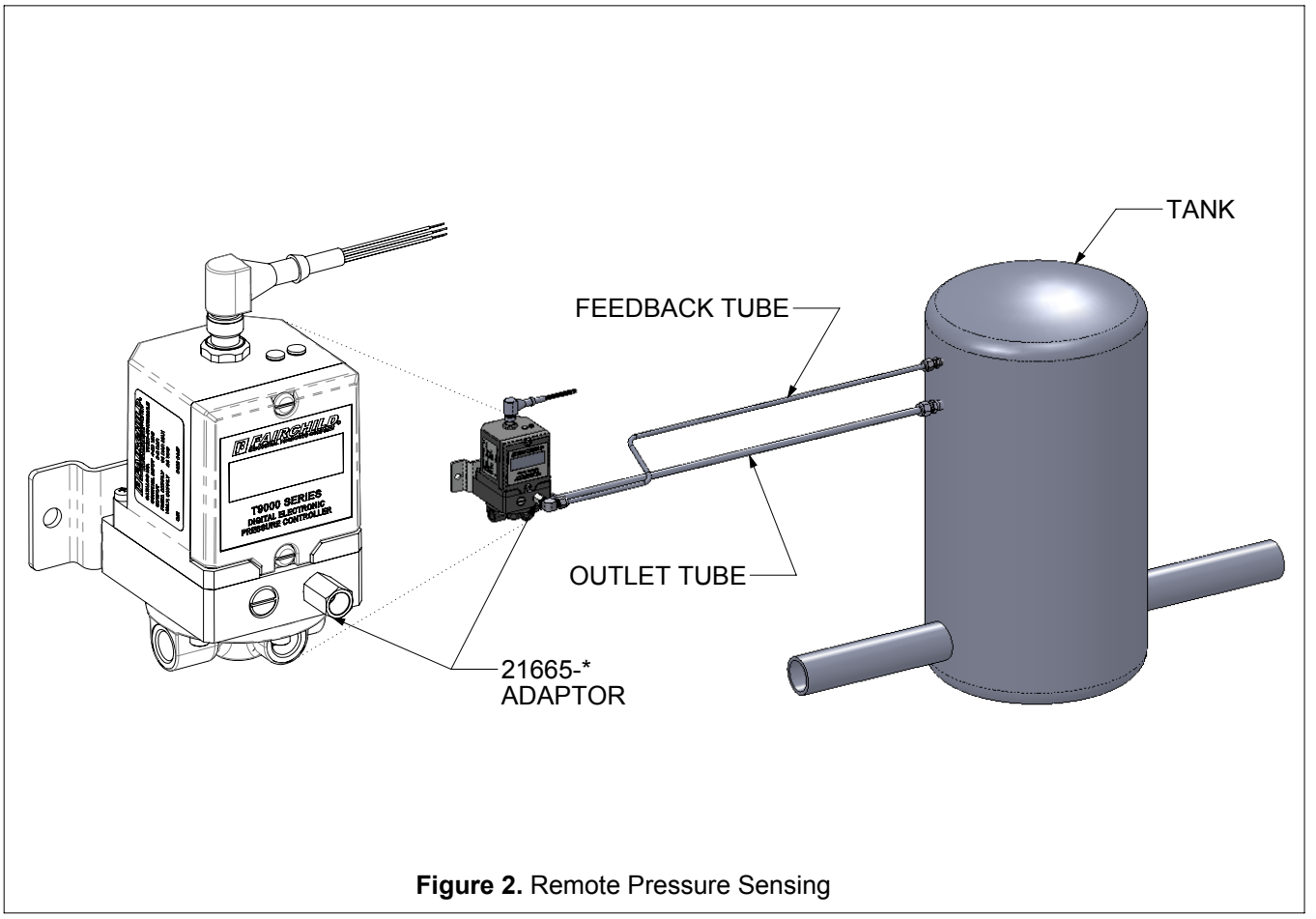
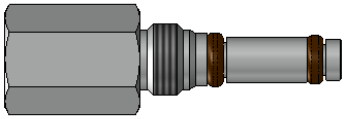


Figure 2. Remote Pressure Sensing

* Remote Pressure Sense Port Adaptors

Part Number	Pipe Connection
21665-1N	1/8-27 NPTF
21665-1U	1/8-28 BSPT



PNEUMATIC CONNECTIONS

Clean all pipelines to remove dirt and scale before installation.

Apply a minimum amount of pipe compound to the male threads of the air line only. **Do Not use teflon tape as a sealant.** Start with the third thread back and work away from the end of the pipeline to avoid the possibility of getting pipe compound into the air lines.

The inlet and outlet ports are labeled on the bottom of the Pressure Controller. Tighten connections securely. Avoid undersized fittings that will limit the flow through the transducer. For more information, see Figure 1. "T9000 Outline Dimensions" on page 1.

CAUTION:
Oil free air is required. Use a filter to remove dirt and liquid in the air line ahead of the pressure controller. If an air line lubricator is used, it MUST be located downstream to avoid interference with pressure controller performance.

Supply pressure must be no less than 5 psig, [0.35 BAR], (35 kPa), above maximum output.

ELECTRIC CONNECTION

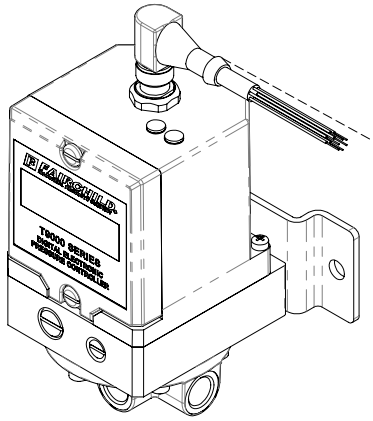
For the T9000 Pressure Controller, make connections as shown below in Figure 2. "Electrical Connections". For compatible cord sets and connections refer to Table 1. below.

For signal lines of six feet or less, 22 gage wire may be used. For longer signal lines, use 18 gage wire. Shielded cable must be used for the signal lines for noise immunity.

Table 1. T9000 Cables ***(Sold Separately)***

Part number	Description
032-IPI-018-2	Cable w/one straight connector (2 meter)
032-IPI-019-2	Cable w/one right angle connector (2 meter) shown

Model T9000 Series



Pressure Controller Electrical Connections

PIN #	Wire Color	Function
1	Brown	(+) 4-20mA or 0-10vdc FEEDBACK
2	White	(-) FEEDBACK RETURN
3	Blue	(+) 4-20mA or 0-10vdc CONTROL SIGNAL
4	Black	(-) CONTROL SIGNAL RETURN
5	Gray	(-) SUPPLY RETURN
6	Pink	(+) 18-32VDC SUPPLY

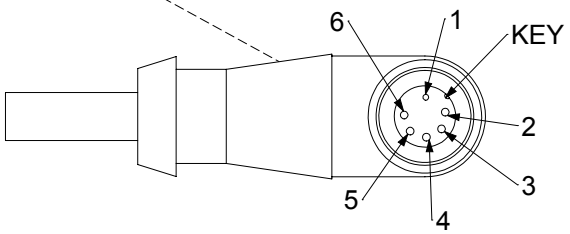


Figure 2. Electrical Connections.

¹ Colors apply only to FIPC DeviceNet compatible cables.

Fairchild Products Company
3920 West Point Blvd. • Winston-Salem, NC 27103
phone: (336) 659-3400 • fax: (336) 659-9323
sales@fairchildproducts.com • www.fairchildproducts.com

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