

Valve Adapters with Double Solenoid and 1/4" NPT Air Port

Rev.	Description	Initiator	Date
03	Eco 18899; Added Air Filter 3490-0010005-01. Changed Dim 14 to (50). Added Dim (30).	CF	4/14/2020

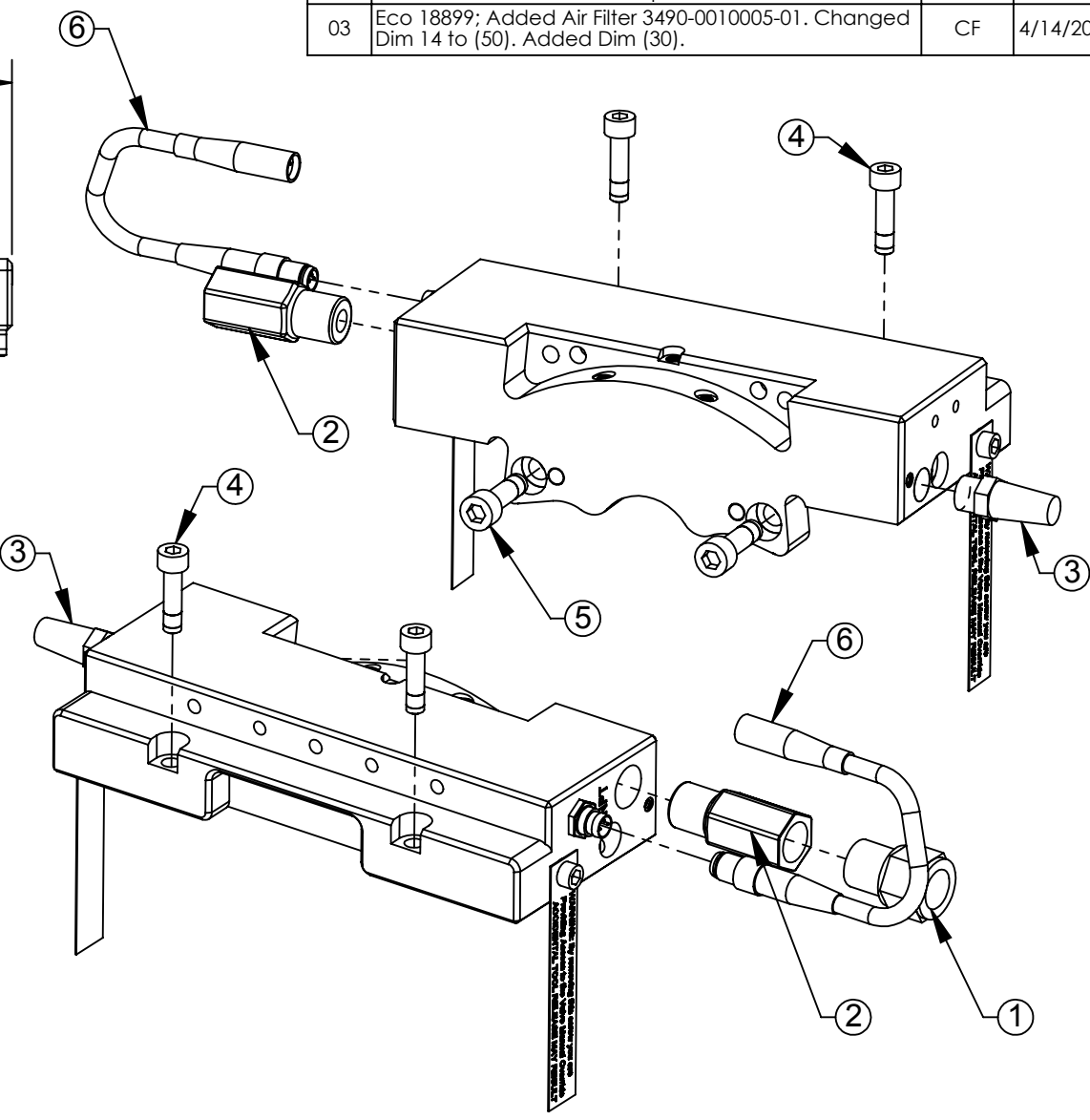
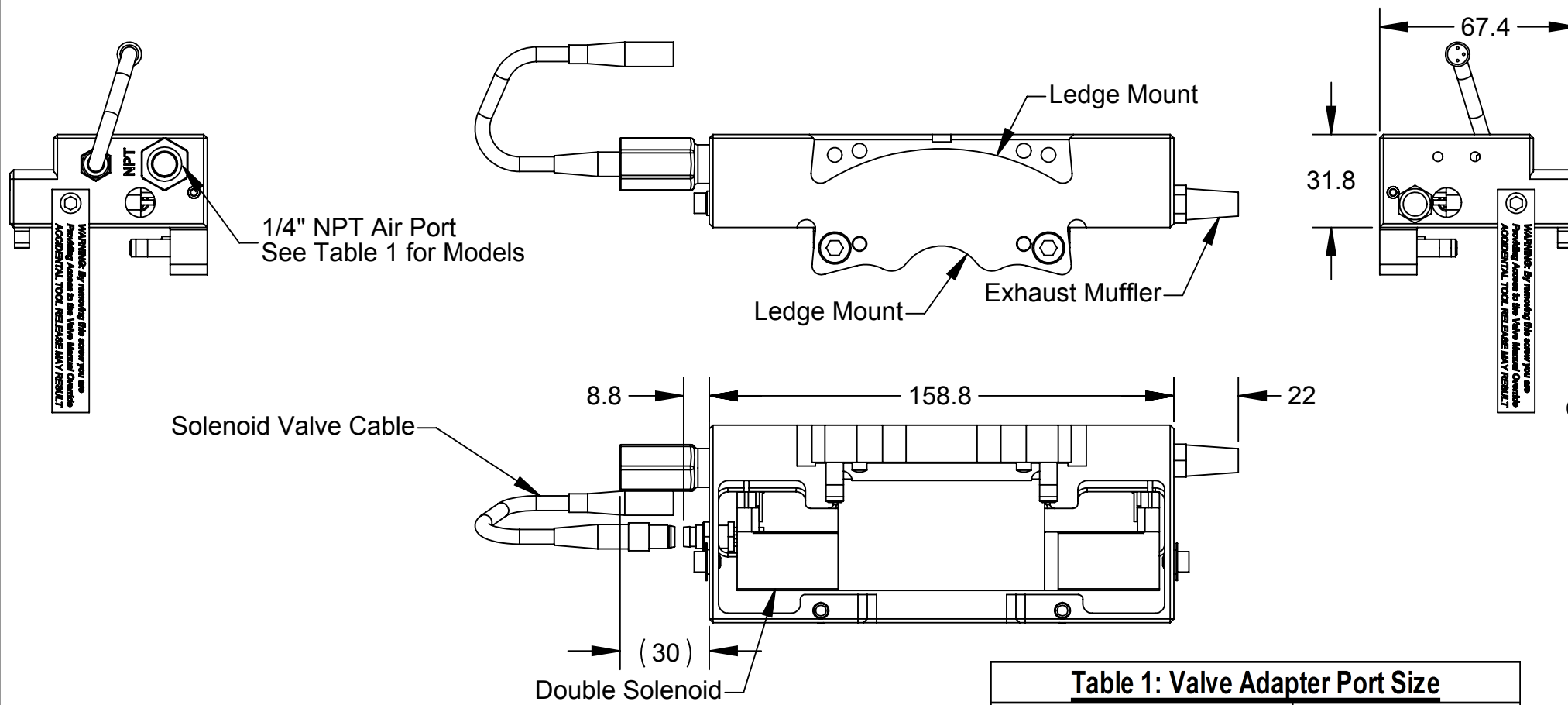
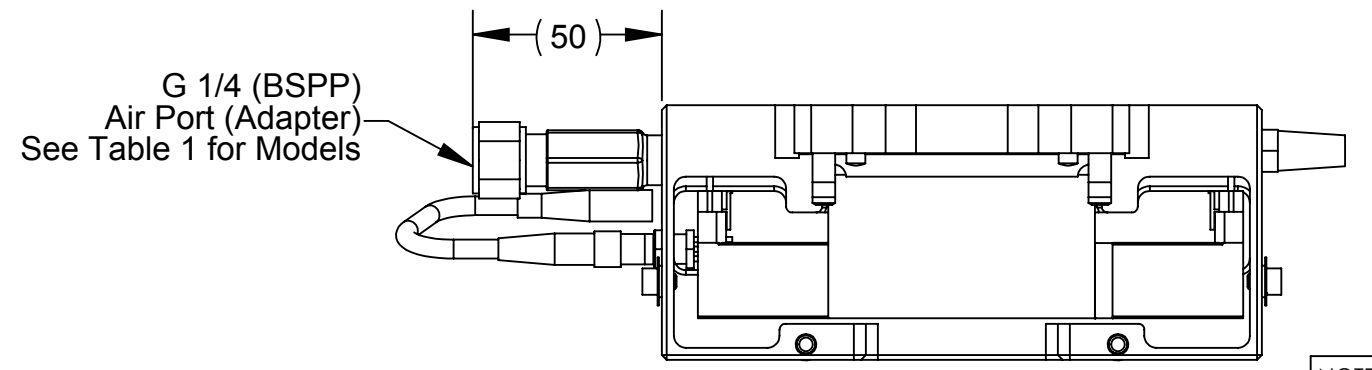


Table 1: Valve Adapter Port Size

Valve Adapter Model	Air Port Size
9121-JE3-M	1/4" NPT
9121-JF3-M	G 1/4 BSPP

Valve Adapters with Double Solenoids and G 1/4 (BSPP) Air Ports



ITEM NO.	QTY	PART NUMBER	DESCRIPTION
1	1	3405-1030005-01	Fitting, Adapter, 1/4NPT to G1/4
2	1	3490-0010005-01	Air Filter, 1/4 NPT Male X 1/4 NPT Female
3	1	3490-1010002-00	Conical Breather 1/8 NPT
4	2	3500-1064020-15A	M5-0.8 x 20mm SHCS, Blue, Pre-Applied
5	2	3500-1066020-15A	M6-1 x 20mm SHCS, Blue, Pre-Applied
6	1	9120-C-3PM-3PF-0016	3-Pin Pico Extension Cable, 0.16m Long

NOTES: UNLESS OTHERWISE SPECIFIED.

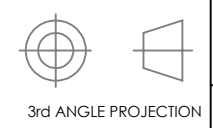
DO NOT SCALE DRAWING. ALL DIMENSIONS ARE IN MILLIMETERS.



1031 Goodworth Drive, Apex, NC 27539, USA
 Tel: +1.919.772.0115 www.ati-ia.com
 Fax: +1.919.772.8259 ISO 9001 Registered Company

PROPERTY OF ATI INDUSTRIAL AUTOMATION, INC. NOT TO BE REPRODUCED IN ANY MANNER EXCEPT ON ORDER OR WITH PRIOR WRITTEN AUTHORIZATION OF ATI.

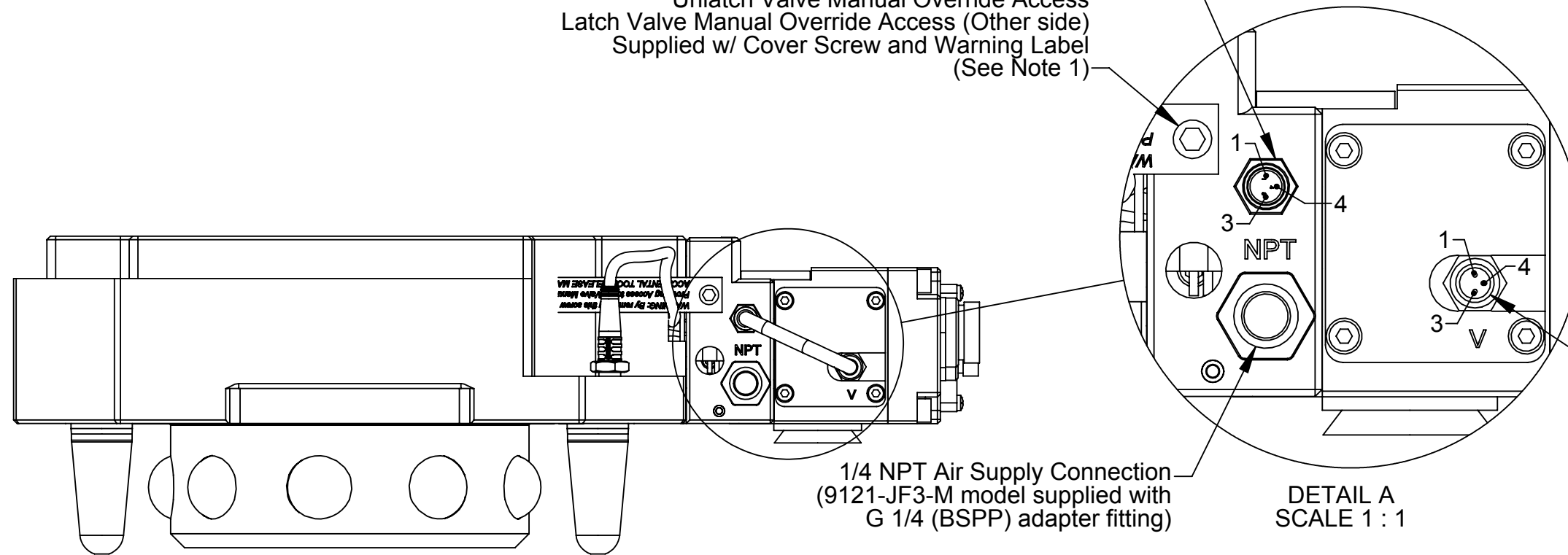
- Notes:
1. Valve Adapter to Tool Changer mounting and Valve Connector signals are shown on Sheet 2.
 2. Pneumatic and Electrical Schematic are shown on Sheet 3.
 3. Other models are covered in the 9620-20-C-Jxx Valve adapter with a Double Solenoid manual.



DRAWN BY: J. Handy, 1/7/16		TITLE	
CHECKED BY: W Berrocal, 9/9/16		QC-310 Valve Adapter with Double Solenoid, Valve Pass Through	
PROJECT #	SHEET 1 OF 3	SCALE	SIZE
		1:2	B
		DRAWING NUMBER	REVISION
		9630-20-Jxx Double Solenoid for QC-310	03

9121-JE3-M
Valve Connector
M8, 3-Pin Male
Connector orientation not guaranteed
Cable Not Shown (See Table 2)

WARNING
Unlatch Valve Manual Override Access
Latch Valve Manual Override Access (Other side)
Supplied w/ Cover Screw and Warning Label
(See Note 1)



Pin	Signal	Wire
1	Unlatch (+19-29 VDC)	Brown
3	0 VDC	Blue
4	Latch (+19-29 VDC)	Black

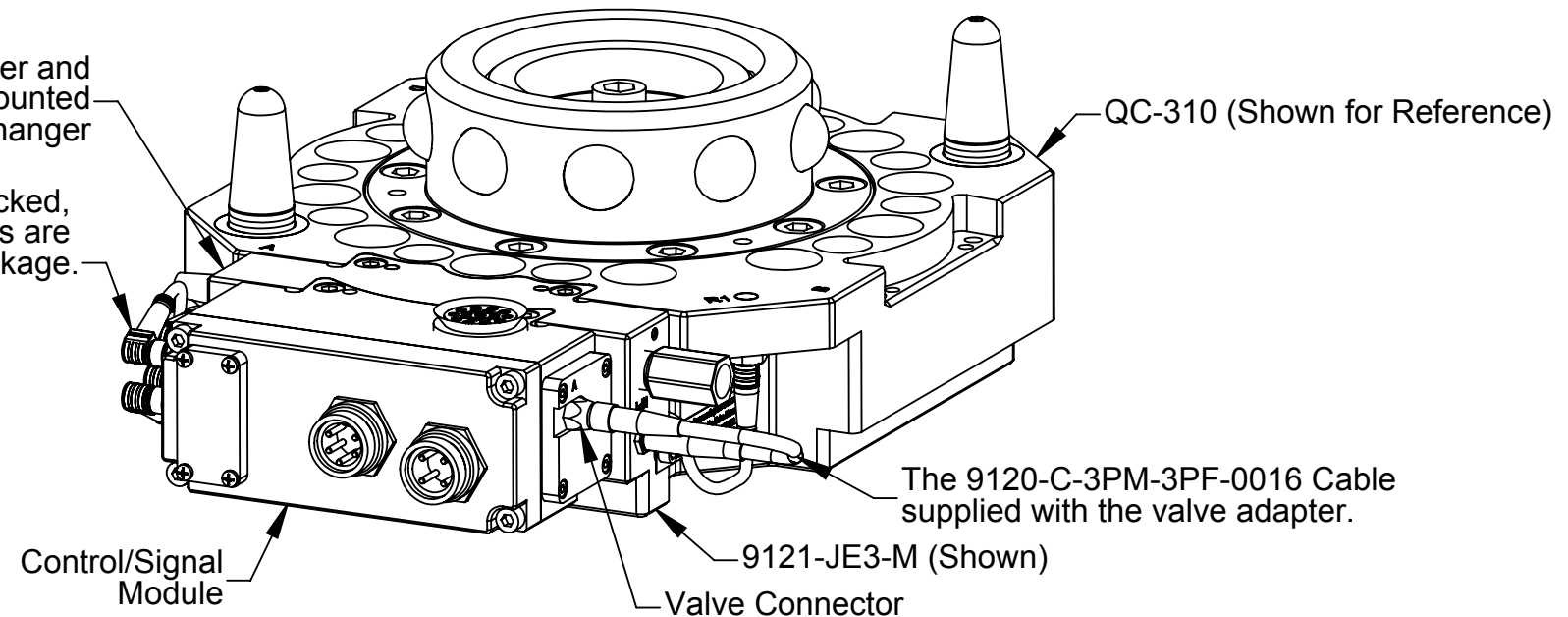
Control/Signal Module
Valve Connector
M8, 3-Pin Female
Cable Not Shown (See Table 2)

1/4 NPT Air Supply Connection
(9121-JF3-M model supplied with
G 1/4 (BSPP) adapter fitting)

DETAIL A
SCALE 1 : 1

The valve adapter and
control/signal module are mounted
to Flat A on the Tool Changer

The Integrated Sensor Cables for Locked,
Unlocked and Ready-to-Lock inputs are
supplied with the base tool changer package.



QC-310 (Shown for Reference)

The 9120-C-3PM-3PF-0016 Cable
supplied with the valve adapter.

Control/Signal
Module

9121-JE3-M (Shown)
Valve Connector

Notes:
1. **WARNING: Tool Release Will Occur with actuation of the Unlatch Valve Manual Override. Use of the valve manual override is restricted to contingency situations. The tool changer and associated tool should be in a stand or storage location prior to actuation of the manual override.**

NOTICE: Actuation of valve override buttons requires very little travel (~1mm) and only a small amount of force. Applying excess force can damage the solenoid or cause override button to stick in one position. Use non-sharp object, similar to ball nose 2mm Allen key, to gently depress the override button; an air release should be heard when the solenoid is activated.

2. The valve adapters with double solenoid are designed to mount to QC-310, QC-313, QC-510, and QC-1210 Tool Changers.
3. The valve adapters with double solenoid are designed to be integrated with specific models of control/signal modules with a valve connector.

NOTES: UNLESS OTHERWISE SPECIFIED.

DO NOT SCALE DRAWING. ALL DIMENSIONS ARE IN MILLIMETERS.



3rd ANGLE PROJECTION

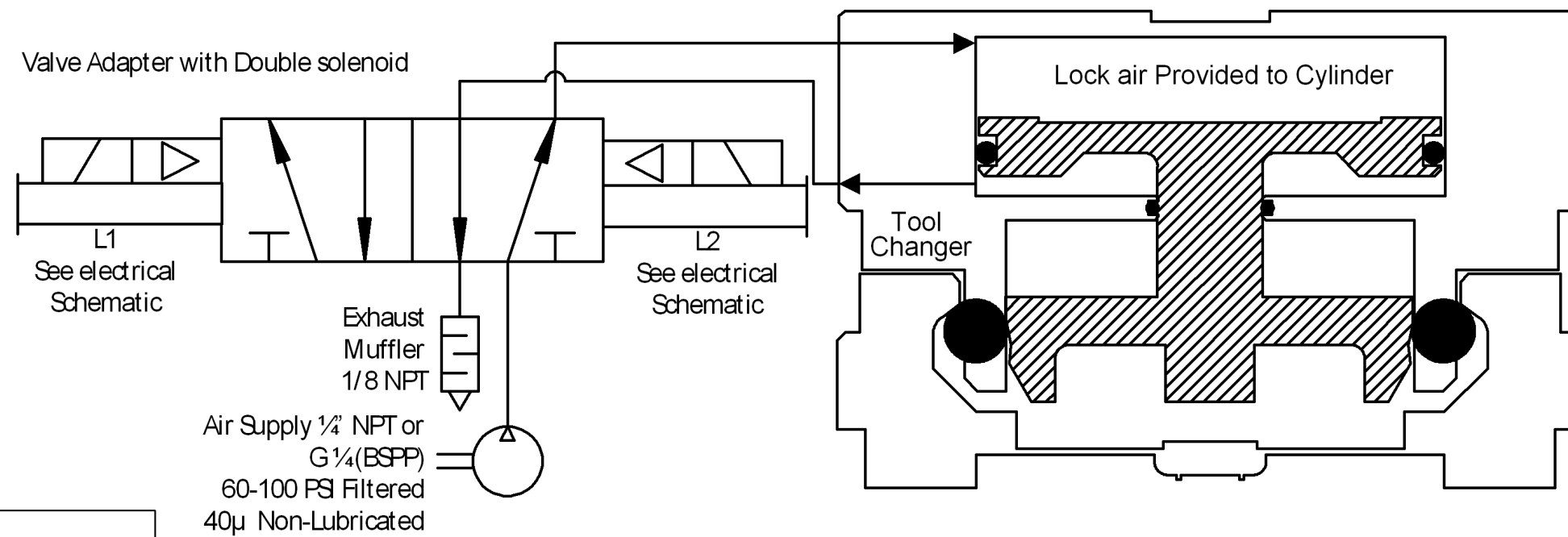


1031 Goodworth Drive, Apex, NC 27539, USA
Tel: +1.919.772.0115 Email: info@ati-ia.com
Fax: +1.919.772.8259 www.ati-ia.com
ISO 9001 Registered Company

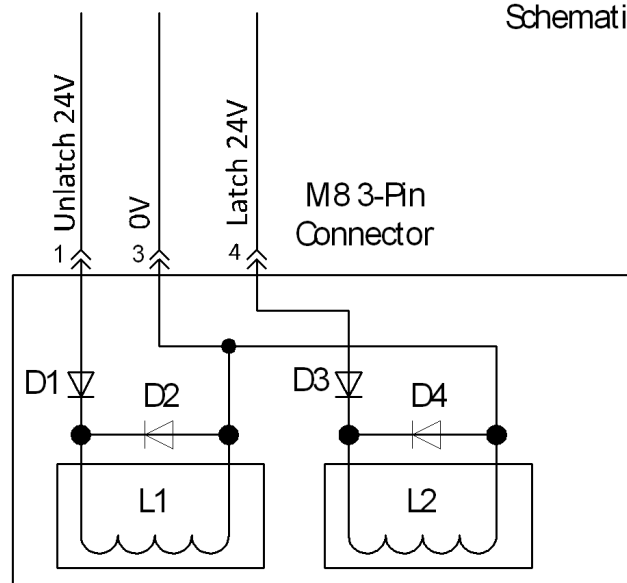
PROPERTY OF ATI INDUSTRIAL AUTOMATION, INC. NOT TO BE REPRODUCED IN ANY MANNER EXCEPT ON ORDER OR WITH PRIOR WRITTEN AUTHORIZATION OF ATI.

DRAWN BY: J. Handy, 1/7/16		TITLE	
CHECKED BY: W Berrocal, 9/9/16		QC-310 Valve Adapter with Double Solenoid, Valve Pass Through	
PROJECT #	SHEET 2 OF 3	SCALE	REVISION
		1:2	03
		SIZE	DRAWING NUMBER
		B	9630-20-Jxx Double Solenoid for QC-310

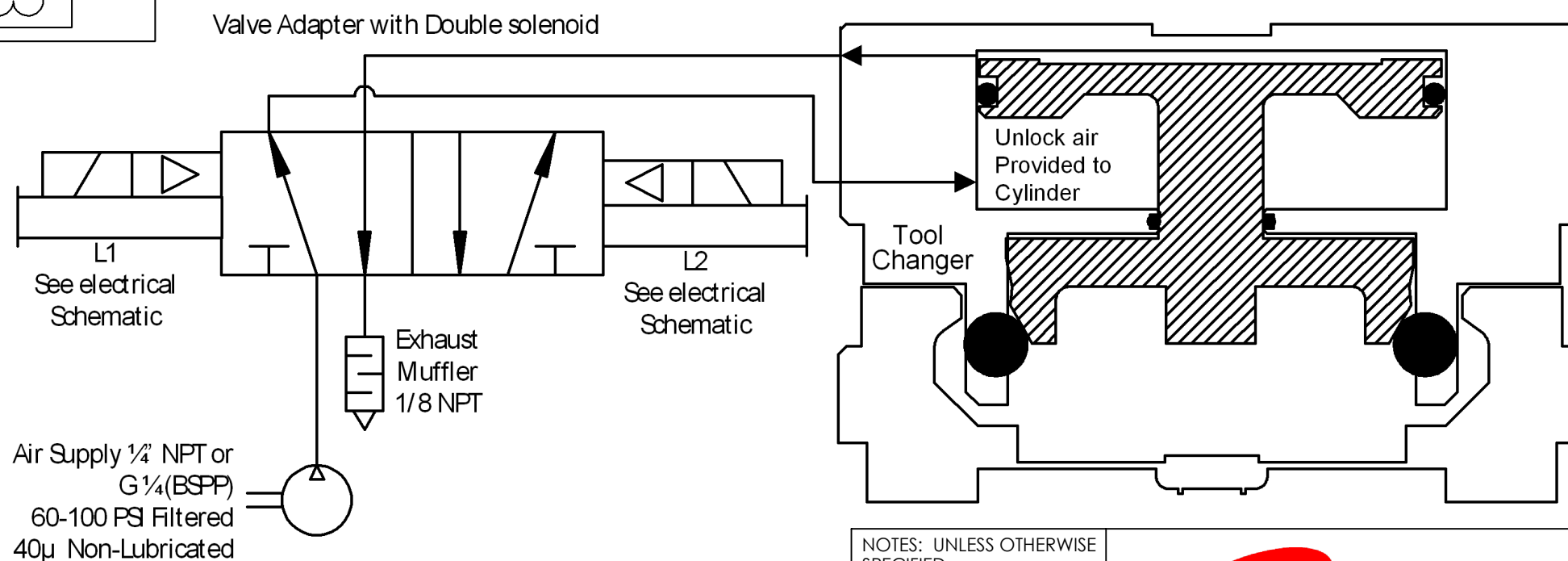
Double Solenoid shown with Energized Lock Solenoid (L2)



Electrical Schematic



Double Solenoid shown with Energized Unlock Solenoid (L1)



- Notes:
1. The valve adapters utilize a double solenoid 5/2 valve. The valve requires supply voltage between 19-29V. The Valve CV is 1.1.
 2. The valve must be supplied clean, dry, non-lubricated air at 60 to 100 psi (4.1-6.9 Bar) and filtered at 40 microns or better. The valve will NOT operate correctly if insufficient air pressure is supplied.
 3. It is critical that the exhaust mufflers are not restricted. As part of a preventative maintenance program, periodically inspect and/or replace the exhaust mufflers.

NOTES: UNLESS OTHERWISE SPECIFIED.

DO NOT SCALE DRAWING. ALL DIMENSIONS ARE IN MILLIMETERS.



3rd ANGLE PROJECTION



1031 Goodworth Drive, Apex, NC 27539, USA
 Tel: +1.919.772.0115 Email: info@ati-ia.com
 Fax: +1.919.772.8259 www.ati-ia.com
 ISO 9001 Registered Company

PROPERTY OF ATI INDUSTRIAL AUTOMATION, INC. NOT TO BE REPRODUCED IN ANY MANNER EXCEPT ON ORDER OR WITH PRIOR WRITTEN AUTHORIZATION OF ATI.

DRAWN BY: J. Handy, 1/7/16		TITLE	
CHECKED BY: W Berrocal, 9/9/16		QC-310 Valve Adapter with Double Solenoid, Valve Pass Through	
PROJECT #	SHEET 3 OF 3	SCALE	SIZE
		1:5	B
DRAWING NUMBER		REVISION	
9630-20-Jxx Double Solenoid for QC-310		03	