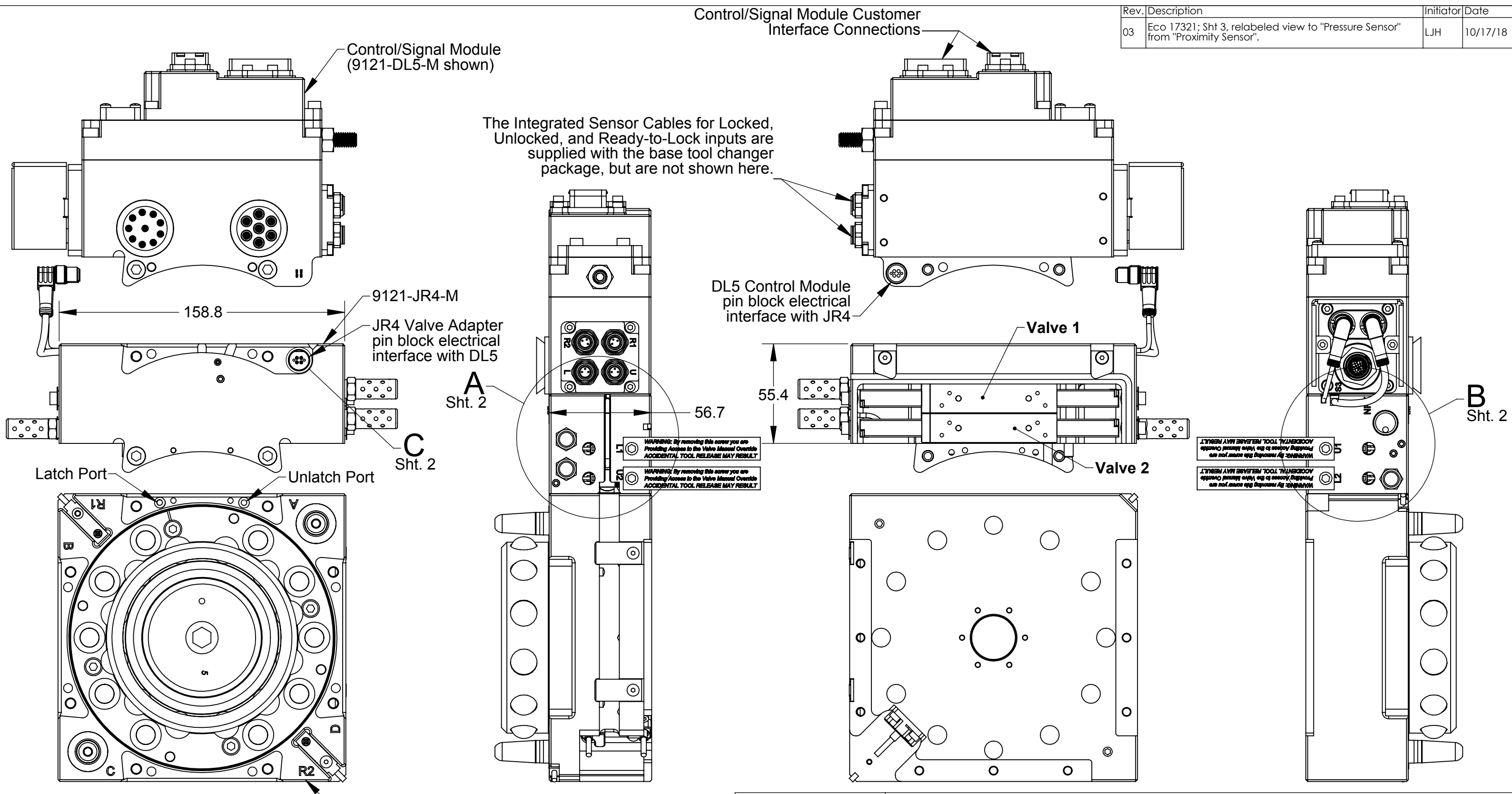


Rev.	Description	Initiator	Date
03	Eco 17321; Sht 3, relabeled view to "Pressure Sensor" from "Proximity Sensor".	LJH	10/17/18



- General Notes:**
1. Refer to Sheet 2 for functional notes and information concerning the connector pin designations and use of the manual override.
 2. Refer to Sheet 3 for the pneumatic circuit diagram and operational details.
 3. The 9121-210AM-JR4DL5-0-0-0-0-SM shown above includes:
 - 9121-210AM-0-0-0-0-SM: QC-210 Tool Changer, Integrated PNP Sensors w/ LEDs
 - 9121-JR4-M: Valve Adapter, Dual Double Solenoid Valves, NPT, QC-210, w/ Proximity and Pressure Sensor
 - 9121-DL5-M: PL d Compliant Profinet Control Module
 4. Valve Adapter spacer block 9121-JR4-T must be used opposite the JR4-M on the Tool Side of the Tool Changer.

NOTES: UNLESS OTHERWISE SPECIFIED.
DO NOT SCALE DRAWING. ALL DIMENSIONS ARE IN MILLIMETERS.

3rd ANGLE PROJECTION



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DRAWN BY: W. Berrocal, 2/14/13	TITLE		
CHECKED BY: M. Manning, 2/14/13	Valve Adapter, Dual Double Solenoid Valves, NPT, QC-210, w/ Proximity and Pressure Sensor		
PROJECT # 120531-2 SHEET 1 OF 3	SCALE 1:2	SIZE B	DRAWING NUMBER 9630-20-JR4
			REVISION 03

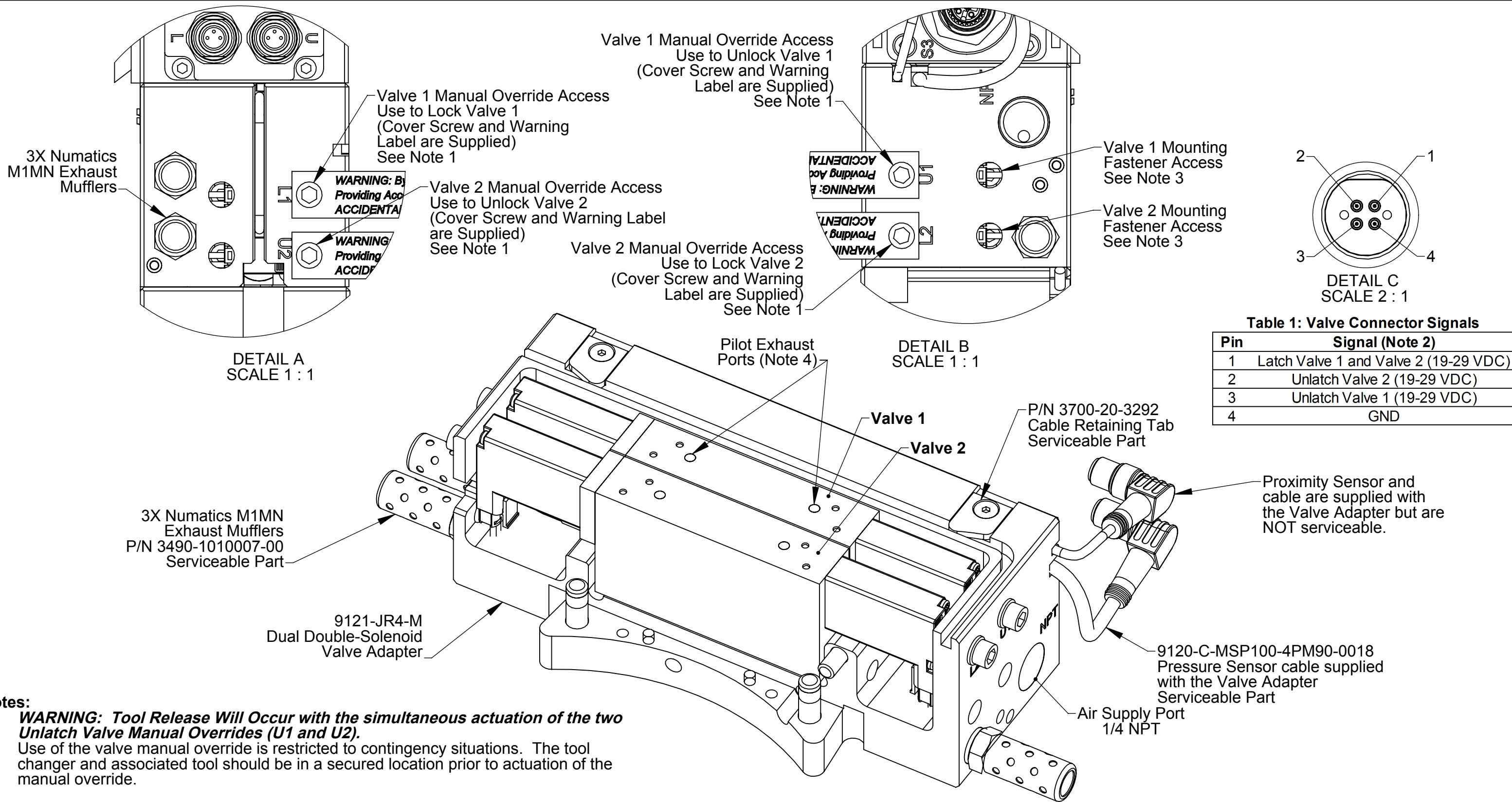


Table 1: Valve Connector Signals

Pin	Signal (Note 2)
1	Latch Valve 1 and Valve 2 (19-29 VDC)
2	Unlatch Valve 2 (19-29 VDC)
3	Unlatch Valve 1 (19-29 VDC)
4	GND

Notes:

1. **WARNING: Tool Release Will Occur with the simultaneous actuation of the two Unlatch Valve Manual Overrides (U1 and U2).** Use of the valve manual override is restricted to contingency situations. The tool changer and associated tool should be in a secured location prior to actuation of the manual override.

- Insert a ball-end 2mm hex key or similar blunt object in the two locations shown and manually depress both valve manual overrides (must be depressed simultaneously). Replace the cover screws and warning labels when finished.
- Signals are sourced from the Control Module via the 4-Pin Block. The JR4 is designed to operate with a Control Module generating two independent Unlatch signals (i.e. dual channel) such as the 9121-DL5-M PL d Compliant Profinet Module.
 - The valve mounting access holes are to be used only in a valve replacement situation. A 3mm hex key is to be used to loosen the cone point set screws that retain the valve. Care should be taken to avoid damaging the valve solenoid connector during the valve removal process.
 - To ensure proper valve operation, do not block or restrict the Pilot Exhaust ports.

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PROXIMITY AND PRESSURE SENSOR

3rd ANGLE PROJECTION

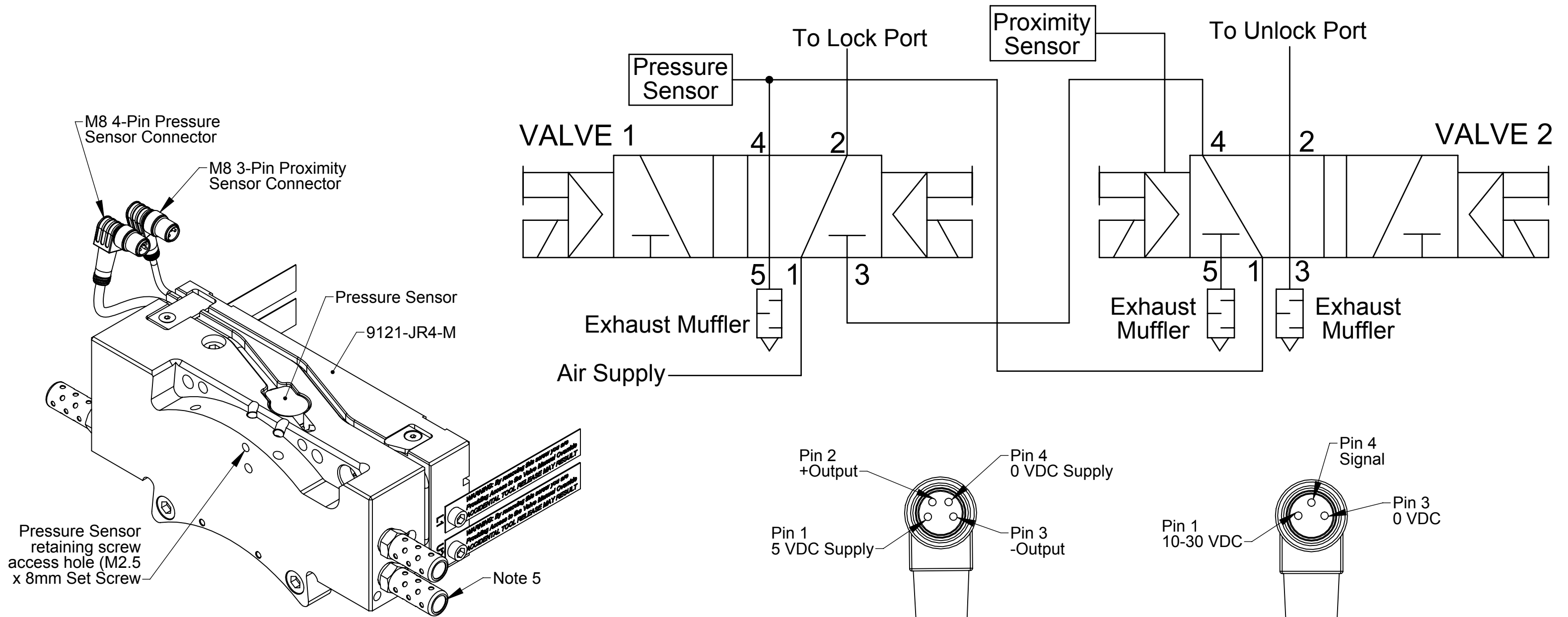
DRAWN BY: W. Berrocal, 2/14/13
 CHECKED BY: M. Manning, 2/14/13

TITLE: Valve Adapter, Dual Double Solenoid Valves, NPT, QC-210, w/ Proximity and Pressure Sensor

PROJECT # 120531-2 SHEET 2 OF 3

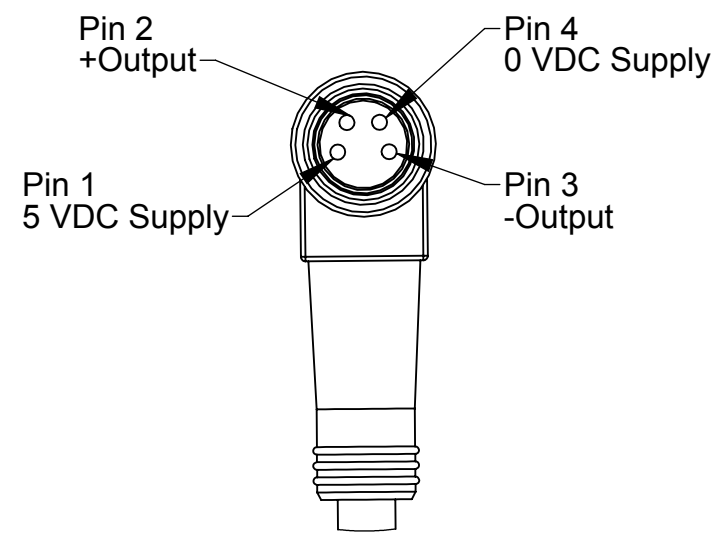
SCALE	SIZE	DRAWING NUMBER	REVISION
1:2	B	9630-20-JR4	03

9121-JR4-M PNEUMATIC CIRCUIT (Note 1)

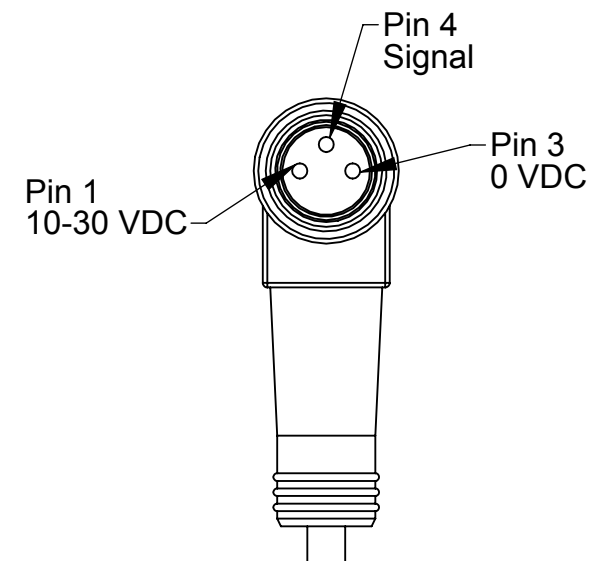


Notes:

1. The 9121-JR4-M valve adapters pneumatically interlink two 5/2 valves to reduce the probability of an unintended tool unlock. With this design, the Tool Changer will unlock ONLY when BOTH valves are in the UNLATCH position. Note: Two independent Unlatch signals are required to energize the two valves and cause the Tool Changer to unlock. To lock the Tool Changer, a single Latch signal is provided to both valves.
2. The 9121-JR4-M Valve Adapter must be used with a Control Signal module that can support the pressure sensor and proximity sensor inputs generated by the JR4 (ex. 9121-DL5-M). Reference manual for detailed instructions on the operation of the JR4.
3. The valves require supply voltage between 19-29V, the pressure sensor requires 5V, and the proximity sensor 10-30V.
4. The valves 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. NOTE: The valves will NOT operate correctly if insufficient air pressure is supplied.
5. 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.



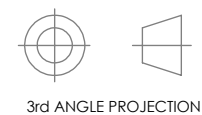
Pressure Sensor Interface Connector



Proximity Sensor Interface Connector

NOTES: UNLESS OTHERWISE SPECIFIED.

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DRAWN BY: W. Berrocal, 2/14/13 CHECKED BY: M. Manning, 2/14/13	TITLE Valve Adapter, Dual Double Solenoid Valves, NPT, QC-210, w/ Proximity and Pressure Sensor	SCALE 1:2	SIZE B	DRAWING NUMBER 9630-20-JR4	REVISION 03
PROJECT # 120531-2 SHEET 3 OF 3					