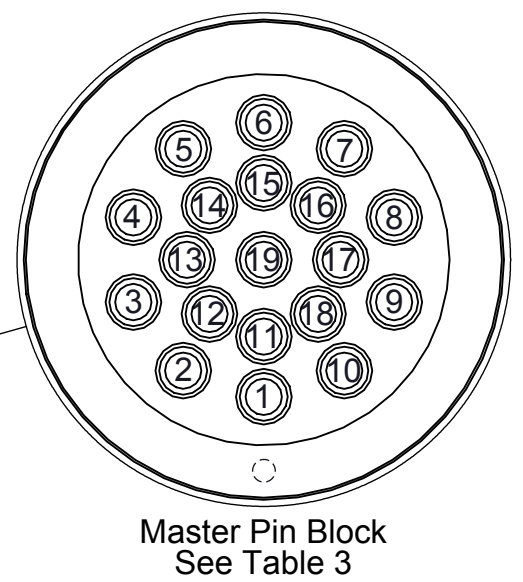
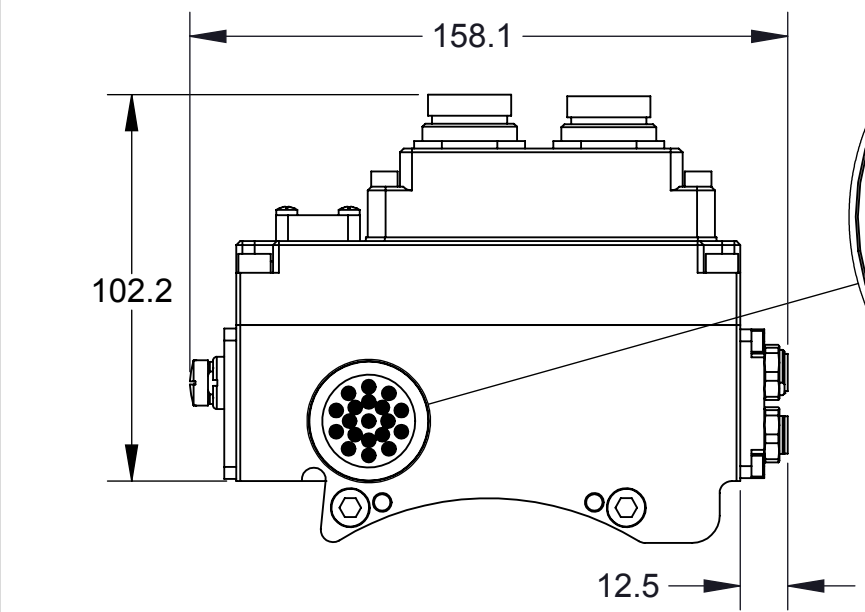
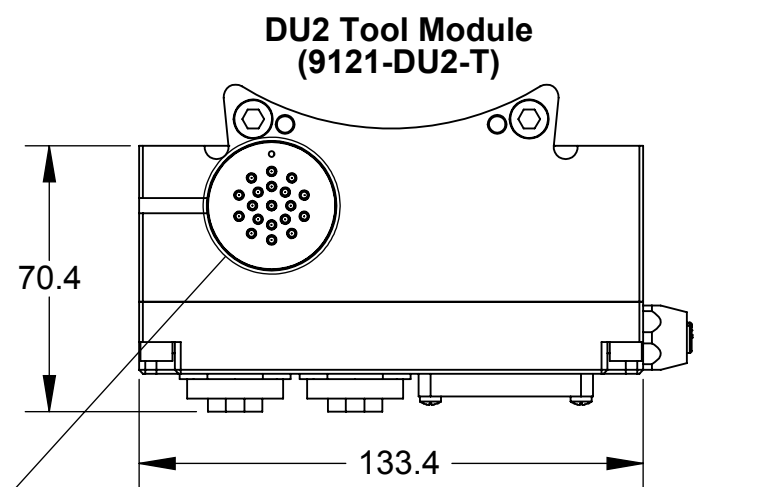
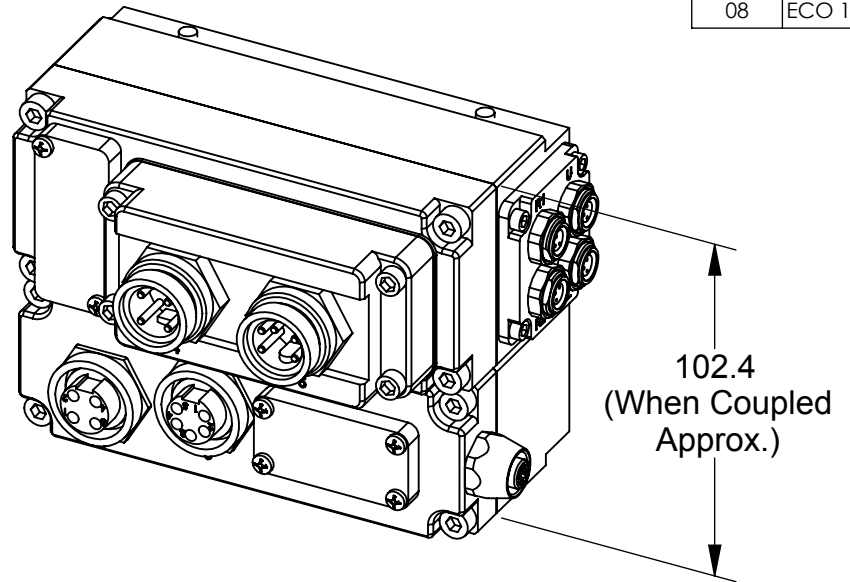
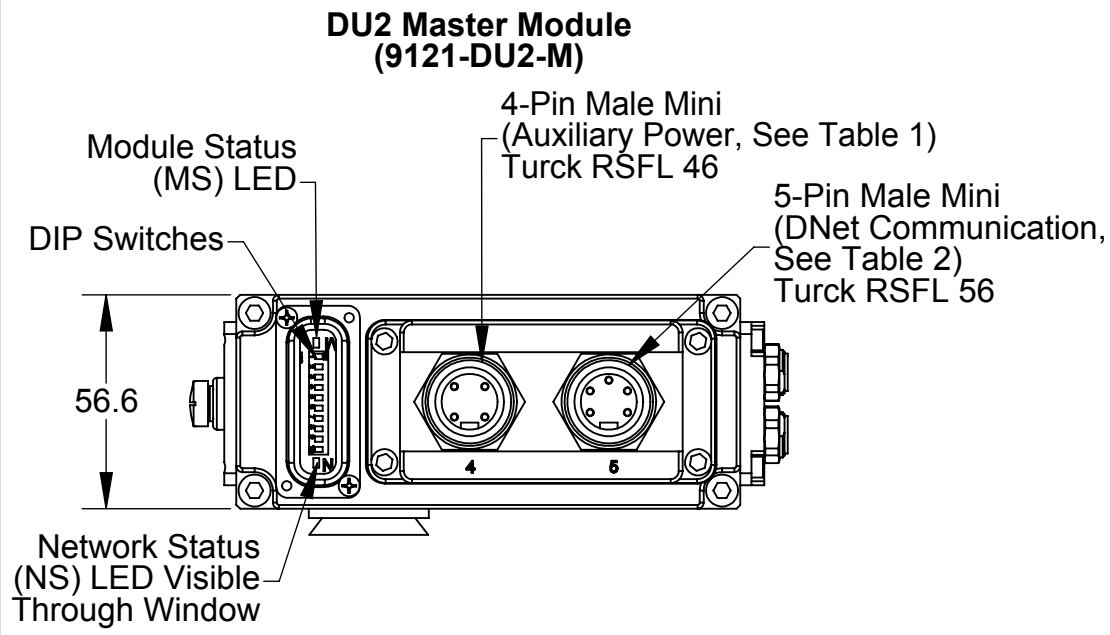
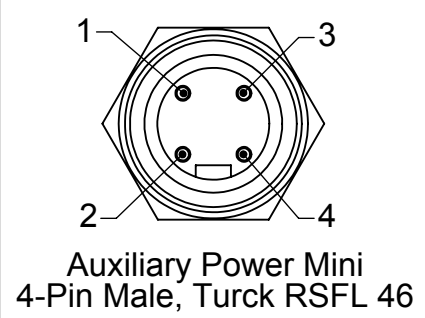
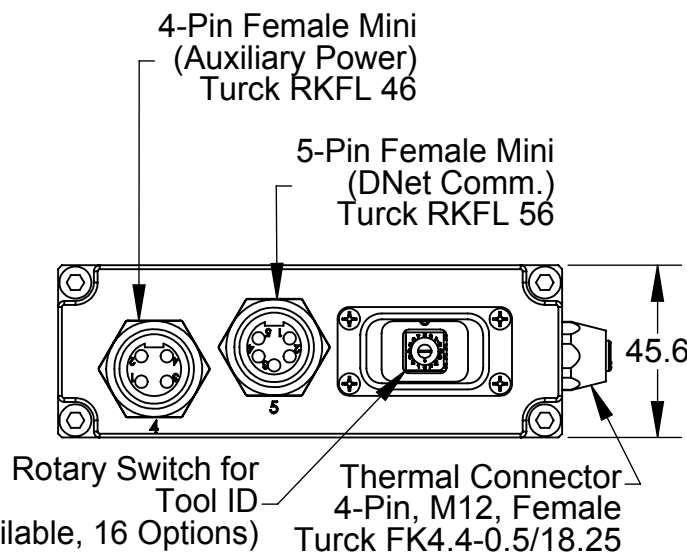
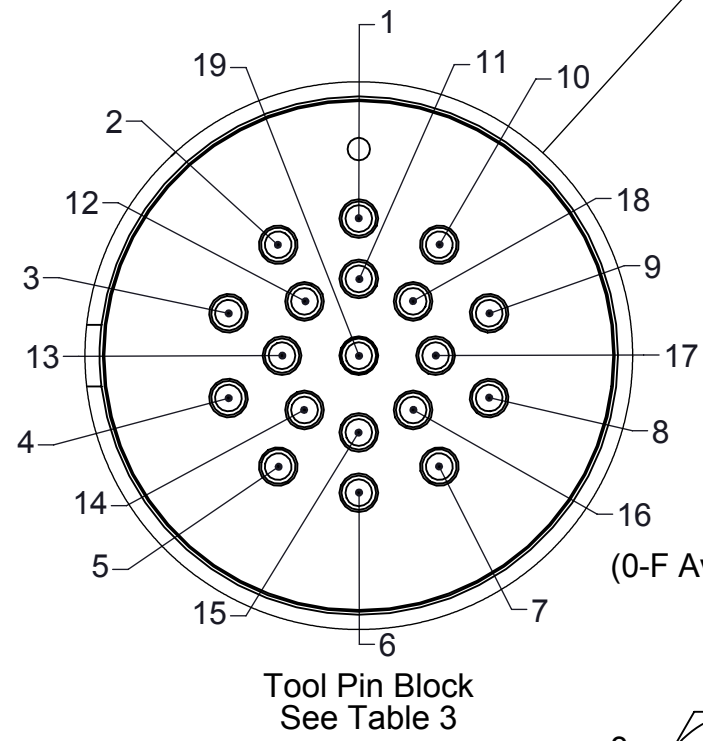


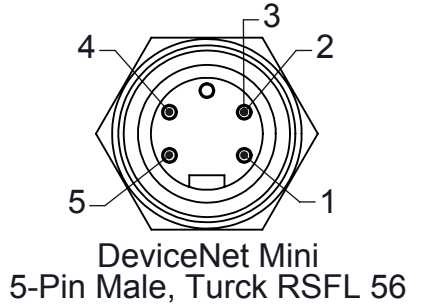
Rev.	Description	Initiator	Date
08	ECO 12581: Changed Tool ID Switch to a Rotary Hexadecimal Switch	RMH	8/15/2014



1	N1 (-24V)
2	N/C
3	CAN V+
4	Tool Presence Out
5	Tool ID 1
6	CAN_L
7	CAN V-
8	P2 (0V)
9	THERMAL 1
10	N2 (-24V)
11	N/C
12	Tool ID 2
13	Tool ID 4
14	Tool ID 8
15	CAN_H
16	P1 (0V)
17	Drain
18	THERMAL 2
19	Tool Presence In

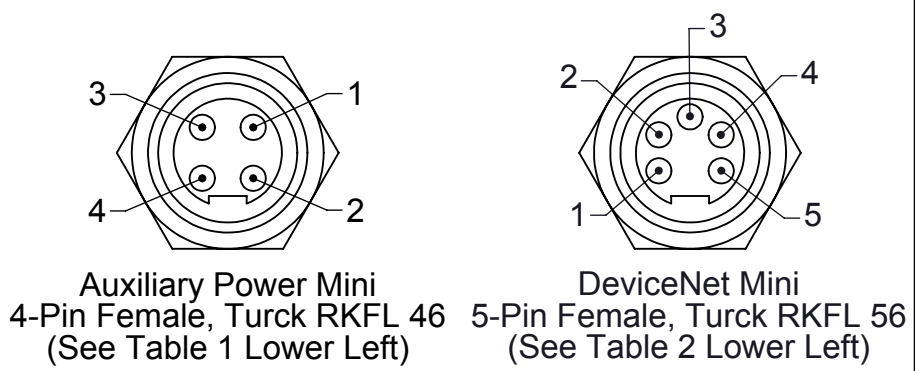


1	P2 (0V SW)
2	P1 (0V UNSW)
3	N1 (-24V UNSW)
4	N2 (-24V SW)



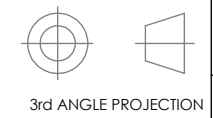
1	Drain
2	CAN V+
3	CAN V-
4	CAN_H
5	CAN_L

- Notes:
1. Reference the manual for information related to DIP switch settings, LED behavior and general product operation.
 2. Connectors are oriented as shown unless otherwise specified.
 3. Unless otherwise noted, connectors at 1:1 scale, pin blocks at 2:1 scale.
 4. Serviceable Parts are listed on Sheet 3. Electrical schematic is shown on Sheet 4.



NOTES: UNLESS OTHERWISE SPECIFIED.

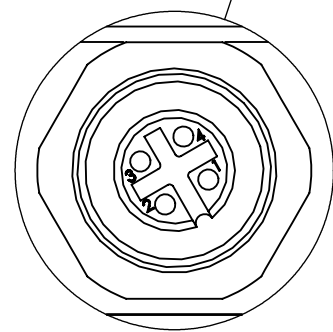
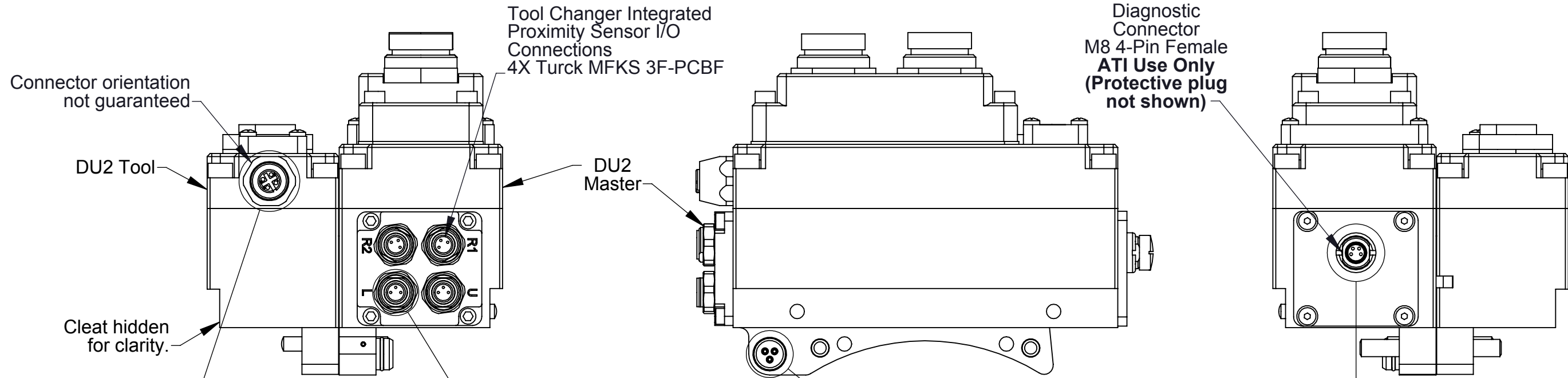
DO NOT SCALE DRAWING. ALL DIMENSIONS ARE IN MILLIMETERS.



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

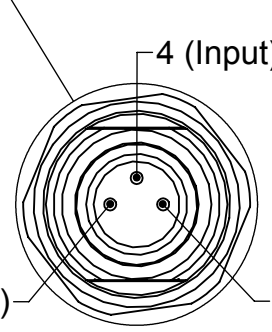
PROPERTY OF ATI INDUSTRIAL AUTOMATION, INC. NOT TO BE REPRODUCED IN ANY MANNER EXCEPT ON ORDER OR WITH PRIOR WRITTEN AUTHORIZATION OF ATI.

DRAWN BY: W. Berrocal, 10/29/12		TITLE	
CHECKED BY: A. Strotzer, 12/4/12		DU2 Devicenet Module Customer Drawing	
PROJECT #	121017-5	SHEET	1 OF 4
SCALE	1:2	SIZE	B
DRAWING NUMBER	9630-20-DU2	REVISION	08

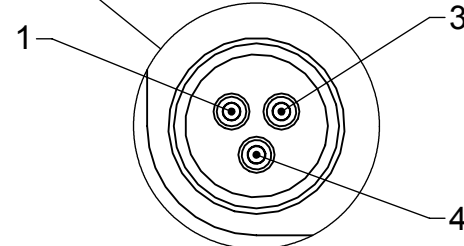


Thermal Connector
Turck M12 4-Pin Female
FK4.4-0.5/18.25
Scale 2:1

Table 4: Thermal Input Connector	
1	P1 (0V UNSW)
2	THERMAL 1
3	N1 (-24V UNSW)
4	THERMAL 2

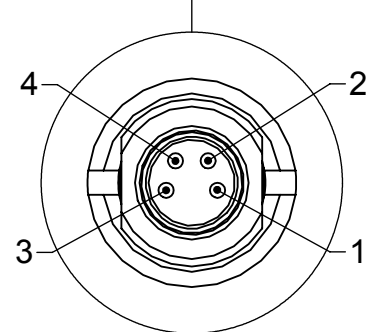


Sensor Input Connection
M8 3-Pin Female
Turck MFKS 3F-PCBF
Typical
Scale 2:1



DETAIL J
SCALE 2 : 1

Table 5: Valve Signal Pin Block	
1	UNLATCH (0V)
3	N2 (-24V SW)
4	N/C



Diagnostic Connection
M8 4-Pin Female
Turck MFKS 4F
Scale 2:1

Table 6: Diagnostic Connector	
1	Tx+
2	Tx-
3	Rx+
4	Rx-

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: W. Berrocal, 10/29/12

CHECKED BY: A. Stotzer, 12/4/12

PROJECT # 121017-5 SHEET 2 OF 4

TITLE

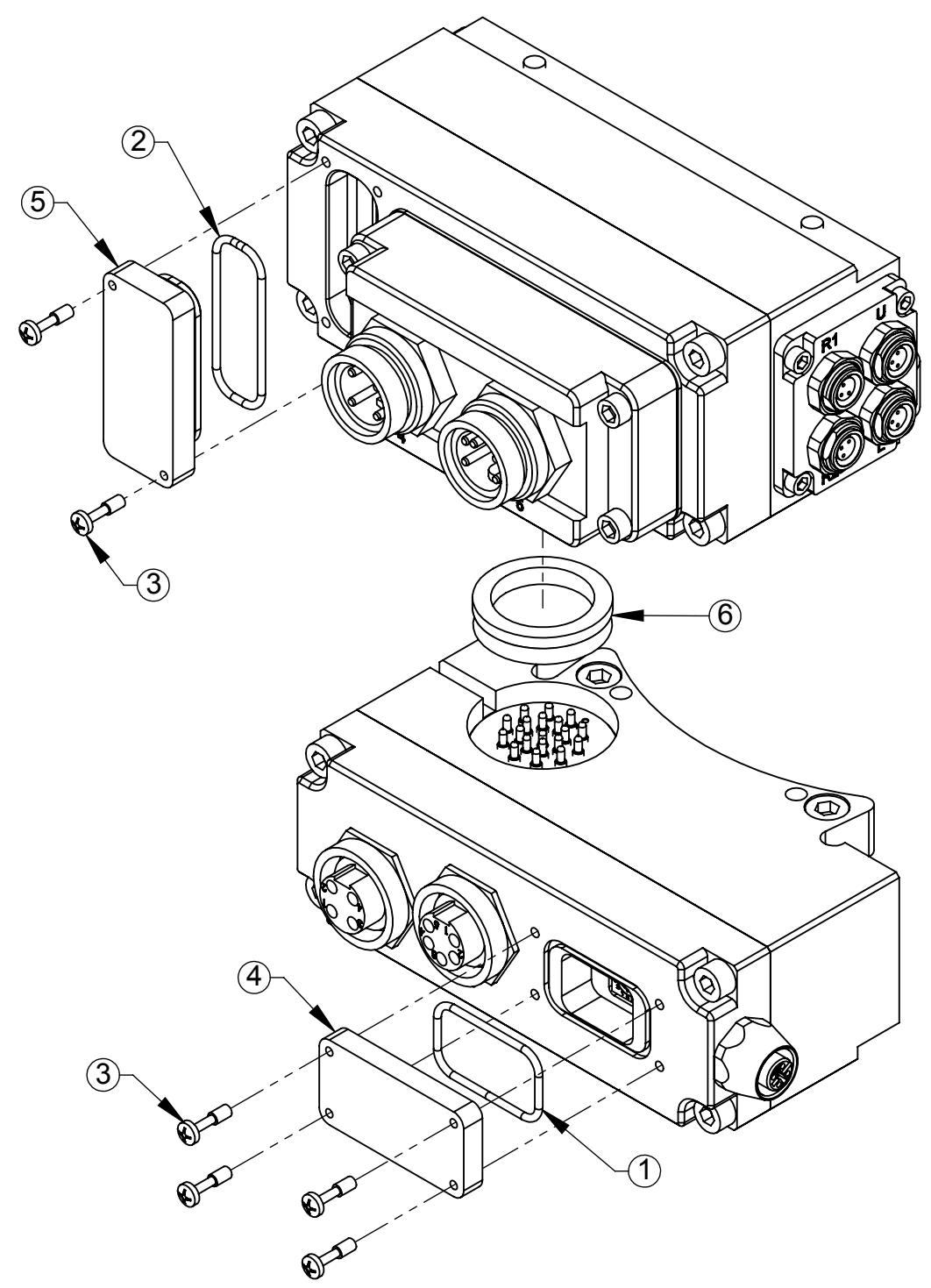
DU2 Devicenet Module Customer Drawing

SCALE
2:3

SIZE
B

DRAWING NUMBER
9630-20-DU2

REVISION
08



9121-DU2-M/T SERVICEABLE PARTS			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	3410-0001092-01	O-ring, Buna N 70D, AS568-023
2	1	3410-0001201-01	O-Ring AS568-024
3	6	3500-9957012-21	Pan Head M3 Captive Screw M3 X 12
4	1	3700-20-2696	Device Net Master Window, Thick
5	1	3700-20-4820	Window, DJ Master, Annular Seal
6	1	4010-0000030-01	V-Ring Seal V-22A Nitrile
7	1	9005-20-1198	Master Cleat Sub-Assembly
8	1	9005-20-1199	Tool Cleat Sub-Assembly

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 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.

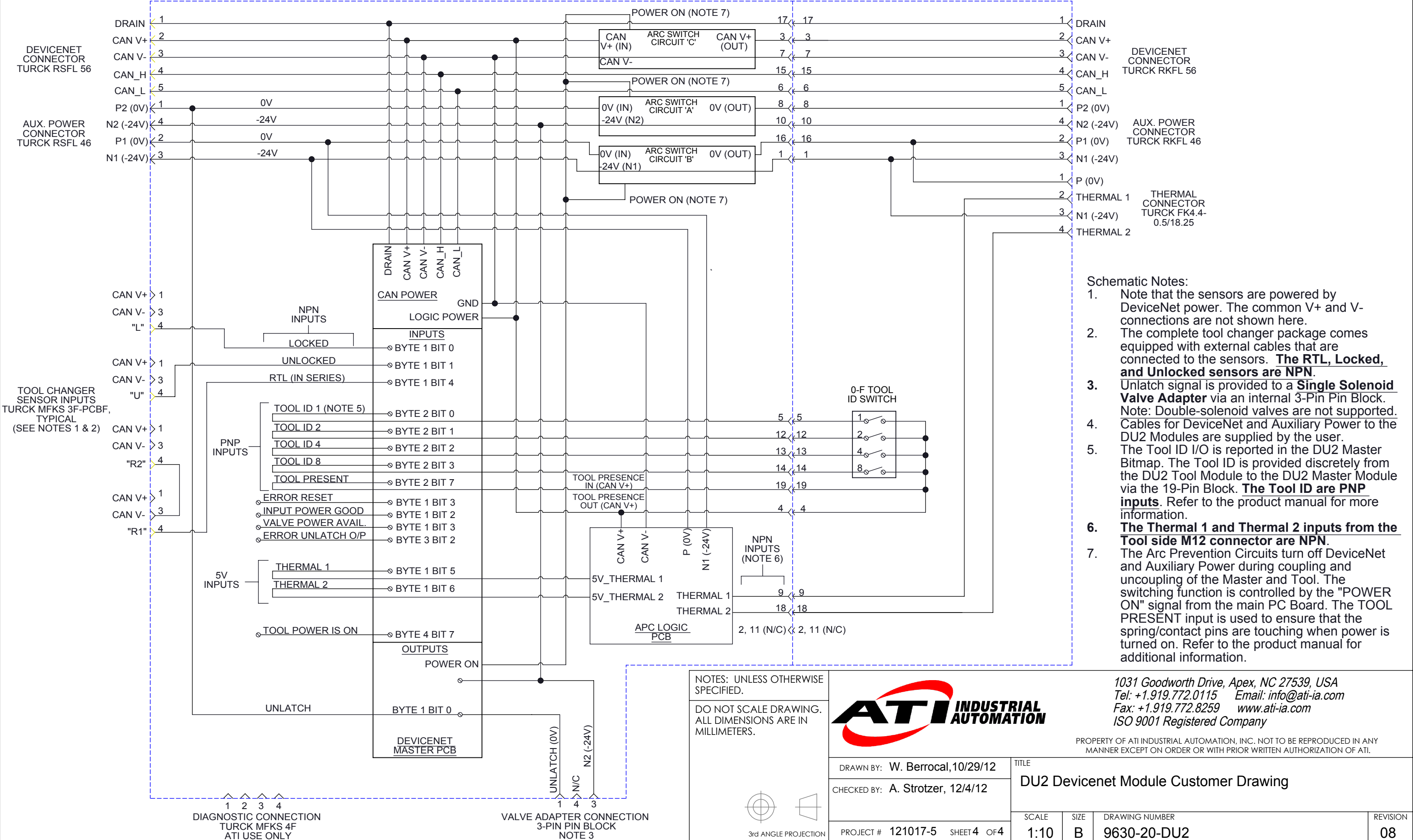
DRAWN BY: W. Berrocal, 10/29/12		TITLE	
CHECKED BY: A. Strotzer, 12/4/12		DU2 Devicenet Module Customer Drawing	
PROJECT # 121017-5 SHEET 3 OF 4	SCALE 2:3	SIZE B	DRAWING NUMBER 9630-20-DU2
			REVISION 08

Rev.	Description	Initiator	Date
-	See Sheet1	-	-

9121-DU2-M

9121-DU2-T

19-PIN BLOCK INTERFACE



- Schematic Notes:**
- Note that the sensors are powered by DeviceNet power. The common V+ and V- connections are not shown here.
 - The complete tool changer package comes equipped with external cables that are connected to the sensors. **The RTL, Locked, and Unlocked sensors are NPN.**
 - Unlatch signal is provided to a **Single Solenoid Valve Adapter** via an internal 3-Pin Pin Block. Note: Double-solenoid valves are not supported.
 - Cables for DeviceNet and Auxiliary Power to the DU2 Modules are supplied by the user.
 - The Tool ID I/O is reported in the DU2 Master Bitmap. The Tool ID is provided discretely from the DU2 Tool Module to the DU2 Master Module via the 19-Pin Block. **The Tool ID are PNP inputs.** Refer to the product manual for more information.
 - The Thermal 1 and Thermal 2 inputs from the Tool side M12 connector are NPN.**
 - The Arc Prevention Circuits turn off DeviceNet and Auxiliary Power during coupling and uncoupling of the Master and Tool. The switching function is controlled by the "POWER ON" signal from the main PC Board. The TOOL PRESENT input is used to ensure that the spring/contact pins are touching when power is turned on. Refer to the product manual for additional information.

NOTES: UNLESS OTHERWISE SPECIFIED.

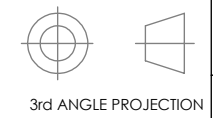
DO NOT SCALE DRAWING. ALL DIMENSIONS ARE IN MILLIMETERS.



1031 Goodworth Drive, Apex, NC 27539, USA
 Tel: +1.919.772.0115 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: W. Berrocal, 10/29/12		TITLE	
CHECKED BY: A. Strotzer, 12/4/12		DU2 Devicenet Module Customer Drawing	
PROJECT # 121017-5	SHEET 4 OF 4	SCALE 1:10	SIZE B
DRAWING NUMBER 9630-20-DU2		REVISION 08	



DIAGNOSTIC CONNECTION
TURCK MFKS 4F
ATI USE ONLY

VALVE ADAPTER CONNECTION
3-PIN PIN BLOCK
NOTE 3