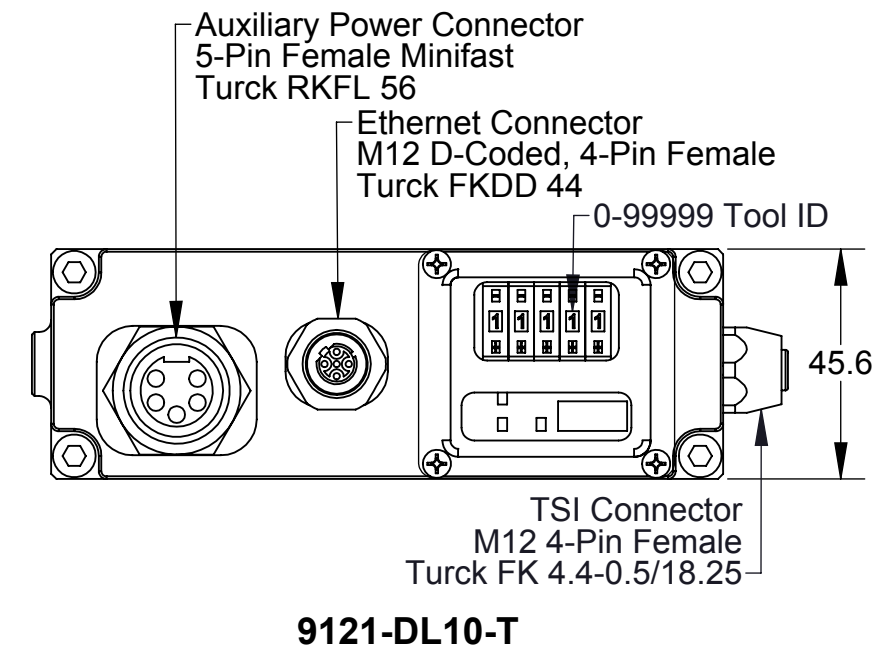
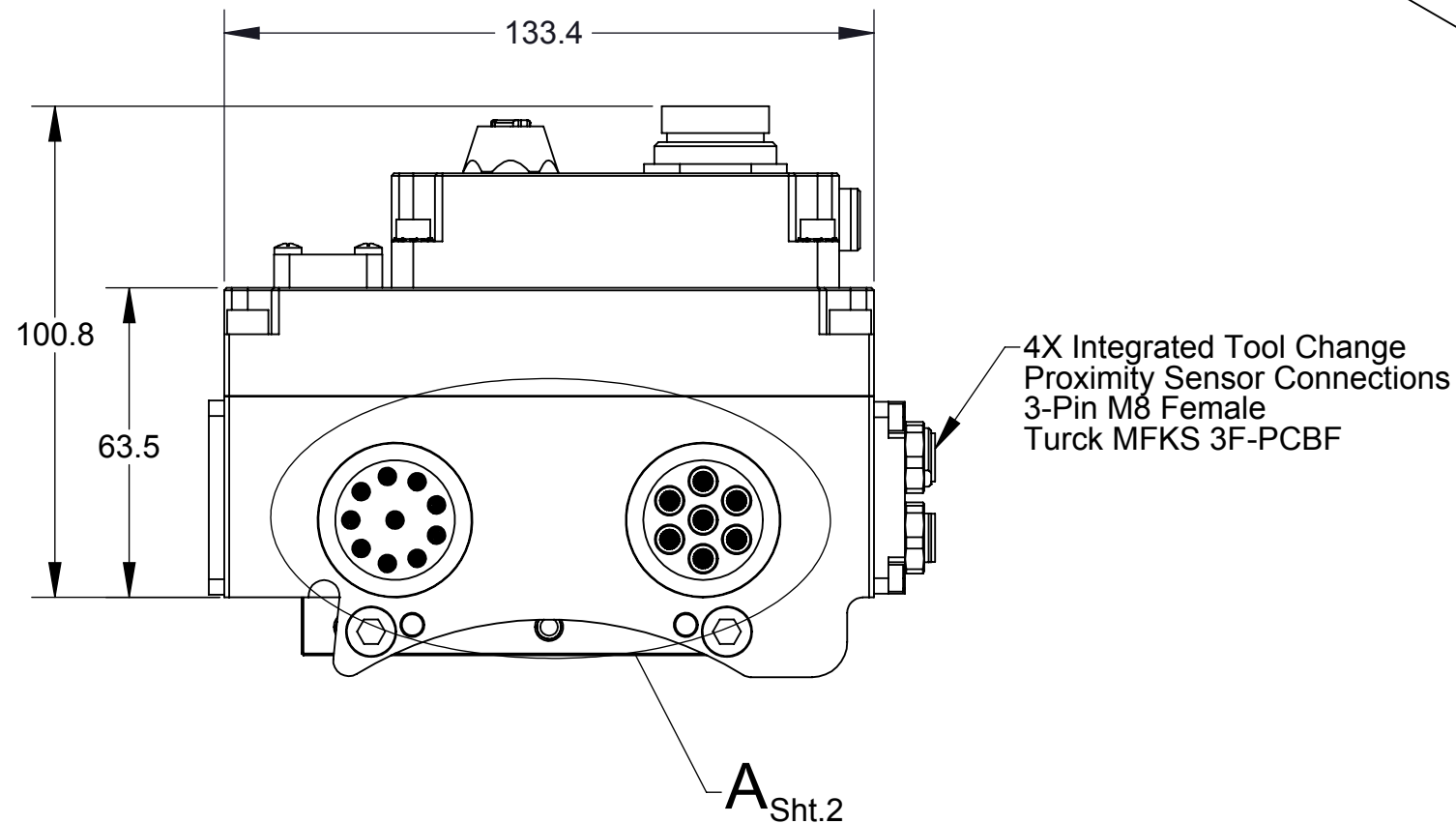
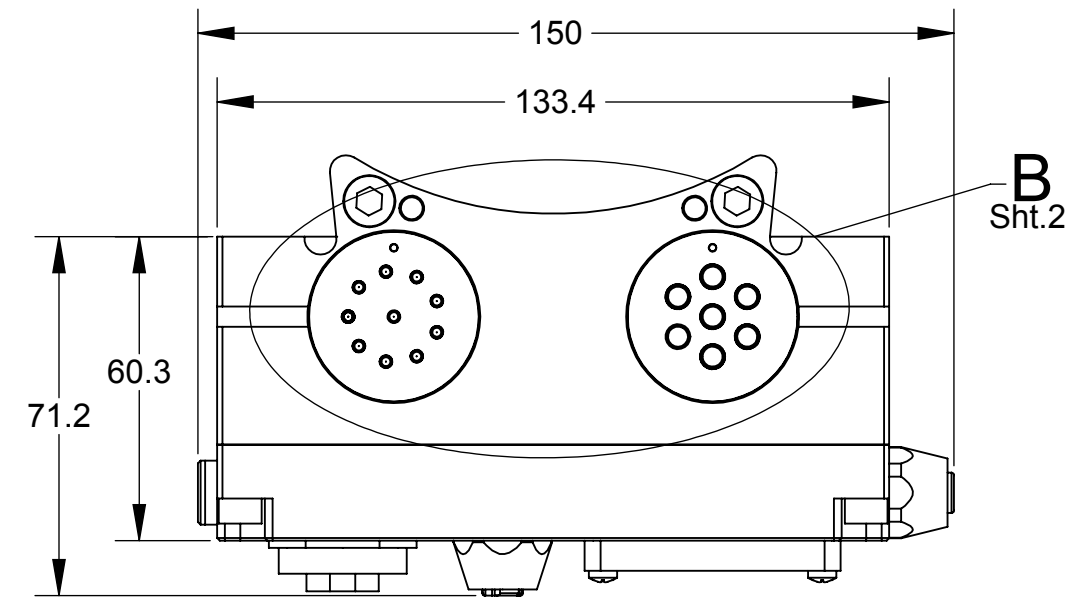
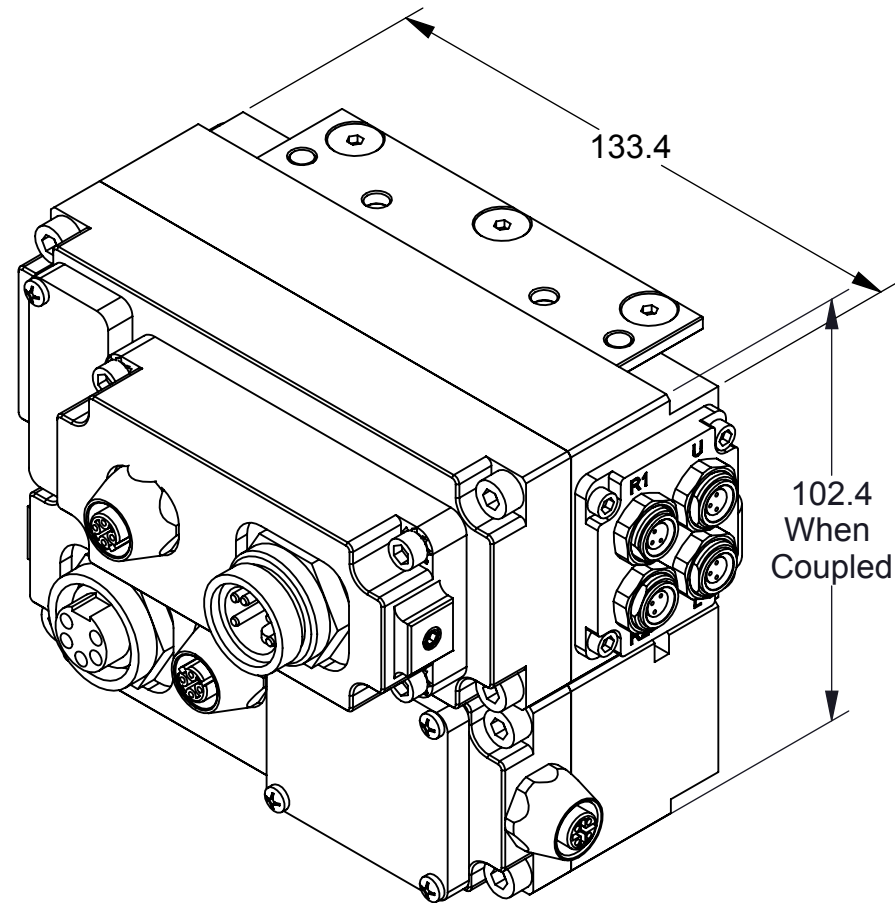
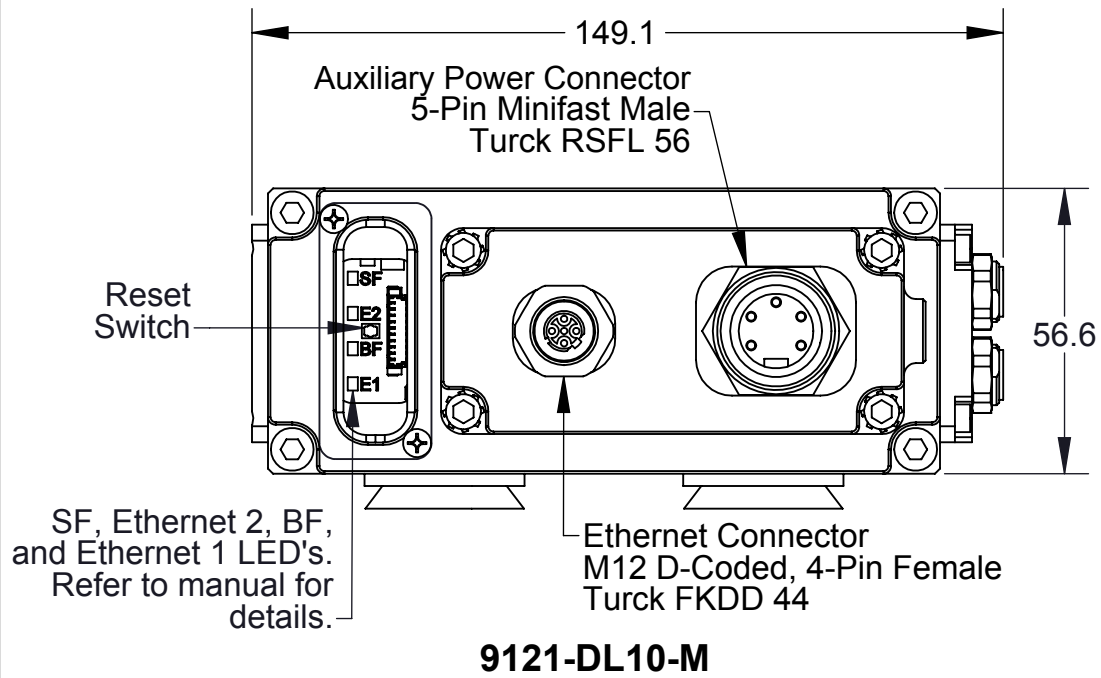


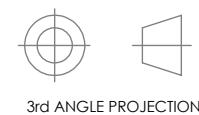
Rev.	Description	Initiator	Date
01P	Initial design.	WB	1/2/2015
02	Release.	WB	4/2/2015



- Notes:**
1. Pin block signal assignments shown on Sheet 2.
 2. Connector pin designations shown on Sheet 3.
 3. Serviceable parts for the DL10 are shown on Sheet 4.
 4. Electrical schematic of DL10 Master and Tool shown on Sheet 5.
 5. The Auxiliary Power and Ethernet connectors are oriented as shown in the drawing.

NOTES: UNLESS OTHERWISE SPECIFIED.

DO NOT SCALE DRAWING. ALL DIMENSIONS ARE IN MILLIMETERS.

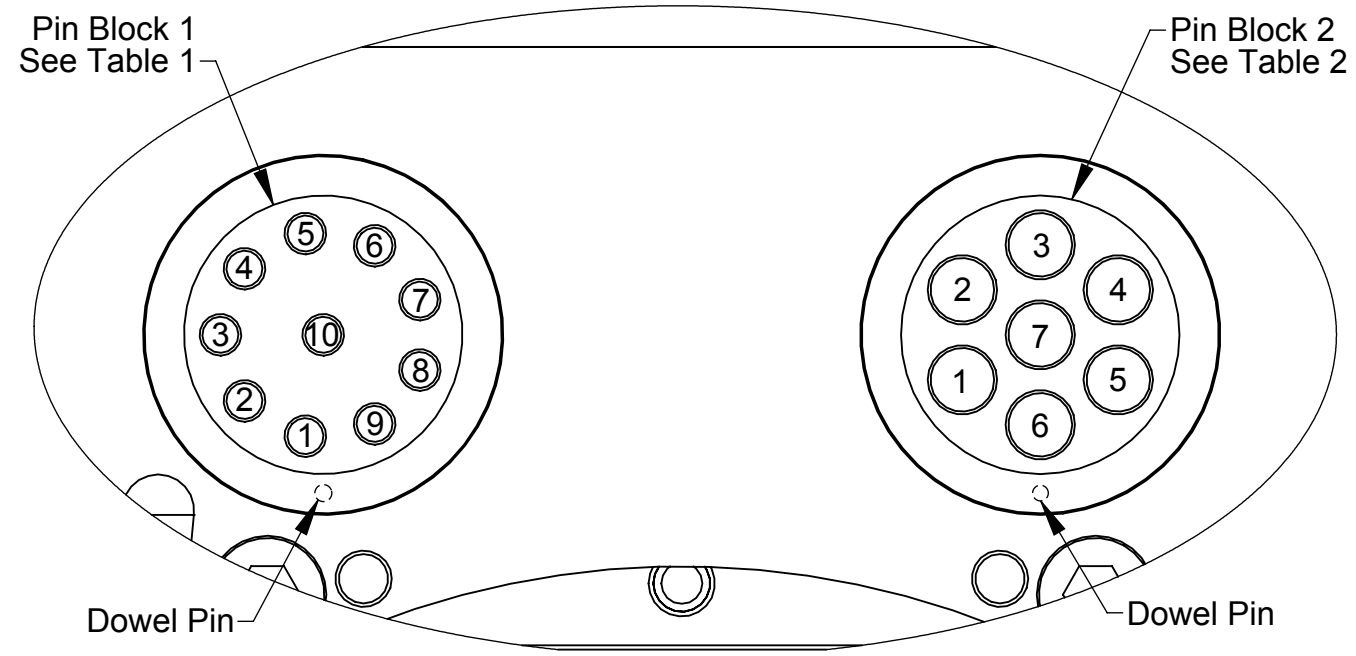


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 Tel: +1.919.772.0115 Email: info@ati-ia.com
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CHECKED BY: A. Takla, 1/23/15 A. Strozer, 1/19/15		DL10 Profinet Module Customer Drawing	
PROJECT # 141212-1 SHEET 1 OF 5	SCALE 1:2	SIZE B	DRAWING NUMBER 9630-20-DL10
			REVISION 02

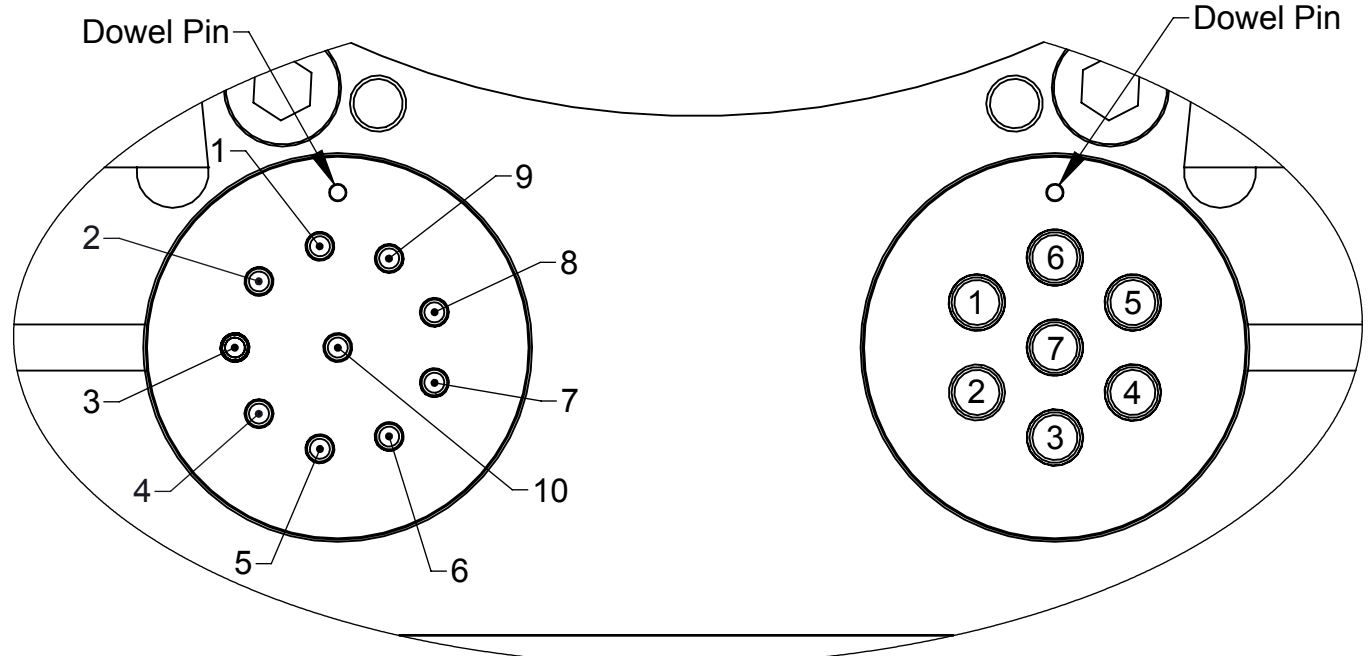
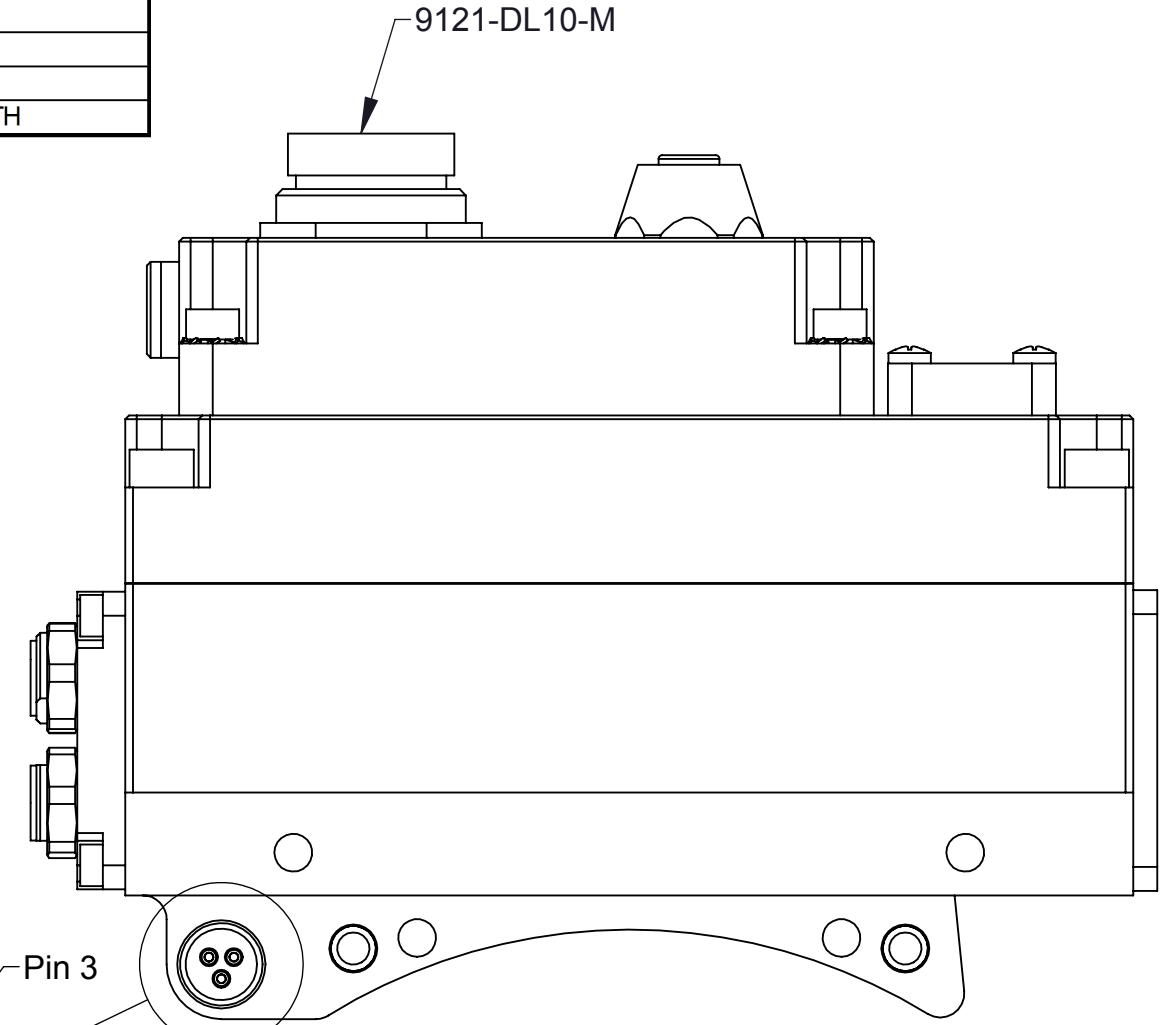
Rev.	Description	Initiator	Date
-	See Sheet1	-	-



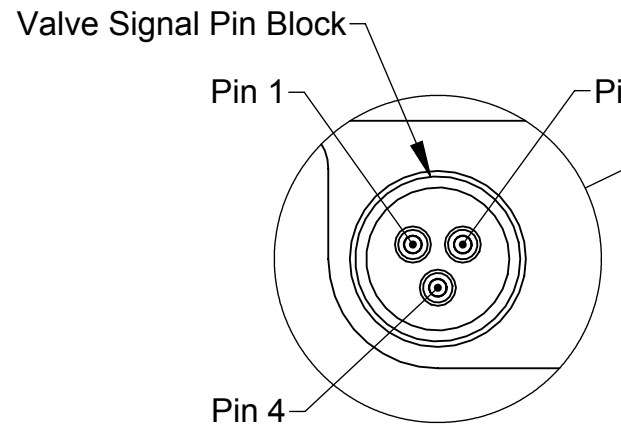
DETAIL A
SCALE 1.5 : 1

Table 1	
Pin Block 1	
1	RX1+
2	RX1-
3	RS485+
4	RS485-
5	TSI IN
6	TSRV
7	TX1+
8	TX1-
9	TSI OUT
10	TSIV

Table 2	
Pin Block 2	
1	US1+
2	TOOL_PRESENT
3	US1-
4	US2-
5	FE
6	US2+
7	24V_TH



DETAIL B
SCALE 1.5 : 1



DETAIL C
SCALE 2 : 1

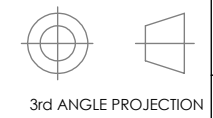
Table 3		
Internal Valve Connection		
Pin 1	V+	Unlatch Output
Pin 3	V-	Common
Pin 4	V+	Latch Output

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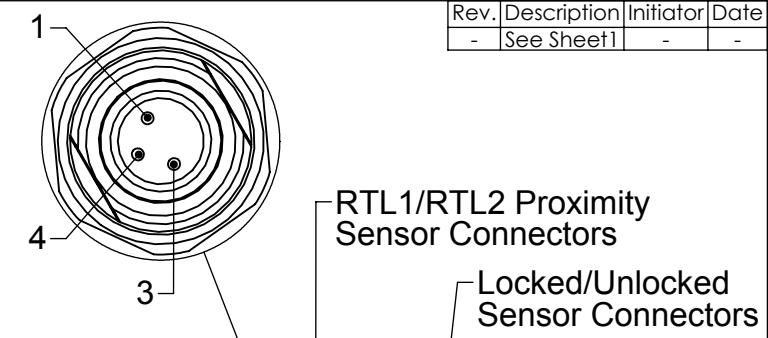
CHECKED BY: A. Takla, 1/23/15
A. Strozer, 1/19/15

PROJECT # 141212-1 SHEET 2 OF 5

TITLE
DL10 Profinet Module Customer Drawing

SCALE	SIZE	DRAWING NUMBER	REVISION
1:2	B	9630-20-DL10	02

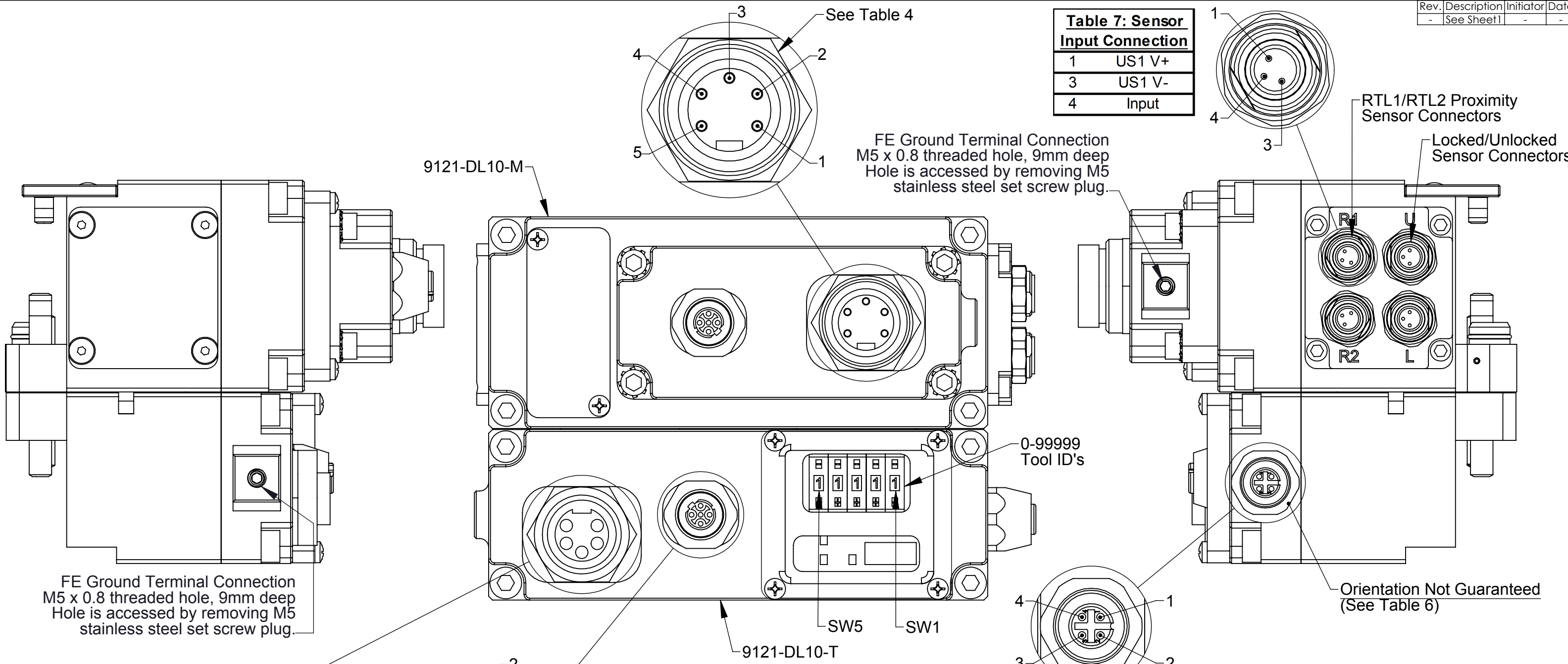
1	US1 V+
3	US1 V-
4	Input



RTL1/RTL2 Proximity Sensor Connectors

Locked/Unlocked Sensor Connectors

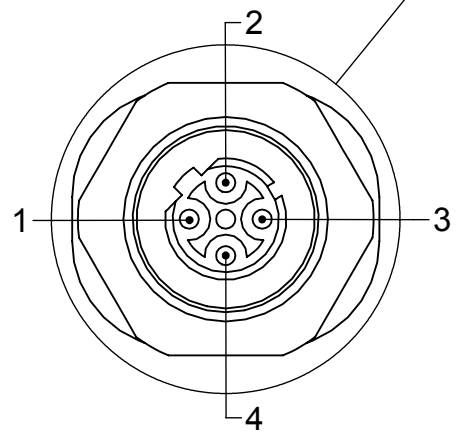
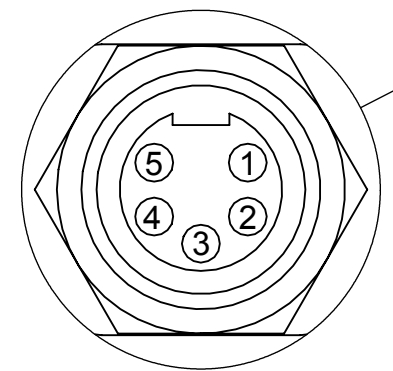
FE Ground Terminal Connection
M5 x 0.8 threaded hole, 9mm deep
Hole is accessed by removing M5 stainless steel set screw plug.



FE Ground Terminal Connection
M5 x 0.8 threaded hole, 9mm deep
Hole is accessed by removing M5 stainless steel set screw plug.

0-99999
Tool ID's

Orientation Not Guaranteed
(See Table 6)



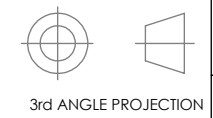
1	24V_TH
2	24V_TH
3	TSI Relay Control
4	TSIV Input

1	US2- (Switched)
2	US1- (Unswitched)
3	FE
4	US1+ (Unswitched)
5	US2+ (Switched)

	Master	Tool
1	Tx+	Tx+
2	Rx+	Rx+
3	Tx-	Tx-
4	Rx-	Rx-

NOTES: UNLESS OTHERWISE SPECIFIED.

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PROJECT # 141212-1	SHEET 3 OF 5	SCALE 1:2	SIZE B
		DRAWING NUMBER 9630-20-DL10	REVISION 02

DL10 Master and Tool Seviceable Parts

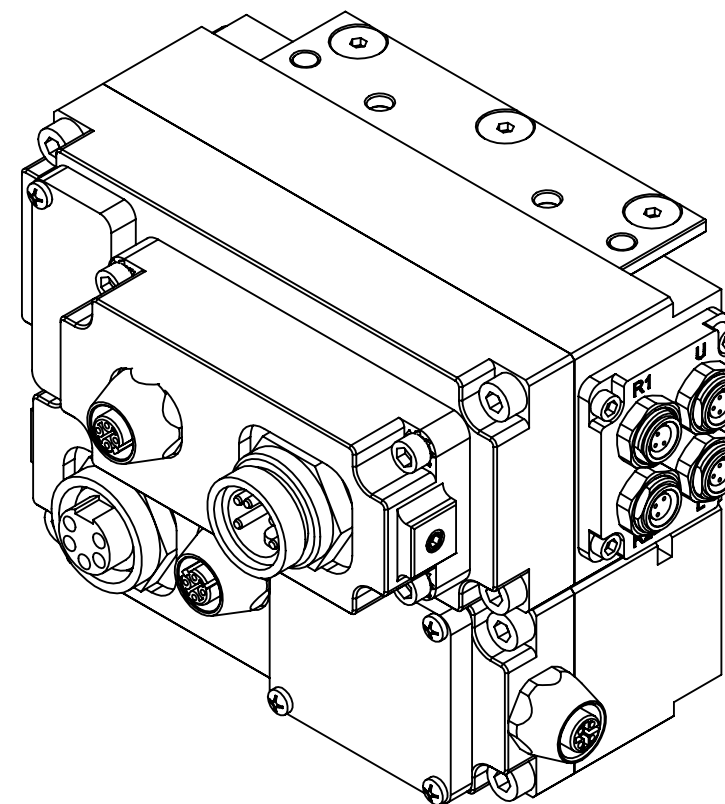
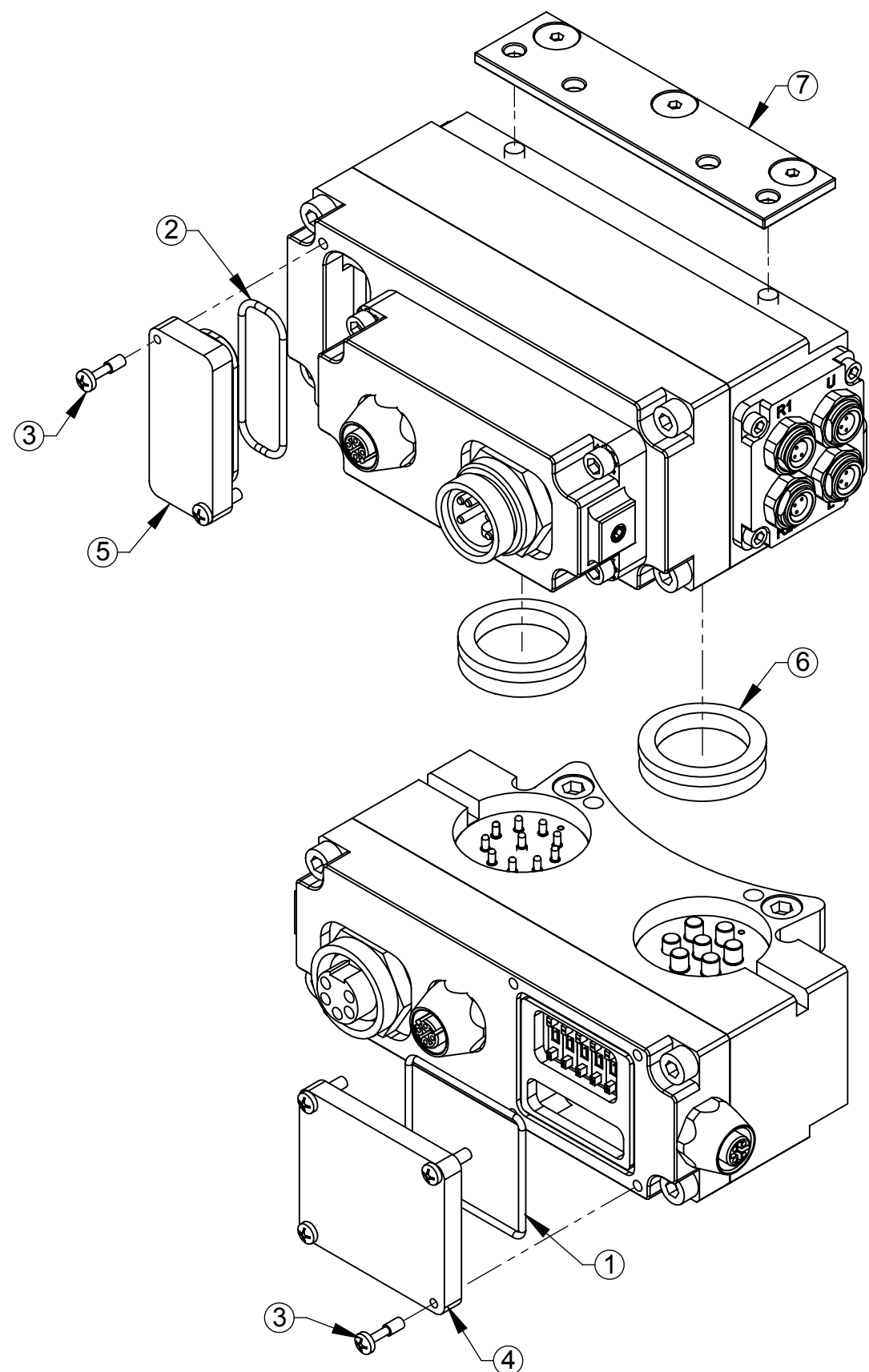


Table 8: DL10 Master and Tool Seviceable Parts

ITEM NO.	QTY.	PART NUMBER	DESCRIPTION
1	1	3410-0001021-01	O-ring, AS568-031
2	1	3410-0001201-01	O-ring, AS568-024
3	6	3500-9957012-21	Captive Screw M3 x 12 Slotted Head SS
4	1	3700-20-3058	Tool ID Window
5	1	3700-20-4820	Window, Master, DJ Module, Annular Seal
6	2	4010-0000030-01	V-Ring Seal
7	1	9005-20-1198	Master Cleat Assembly

NOTES: UNLESS OTHERWISE SPECIFIED.

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3rd ANGLE PROJECTION



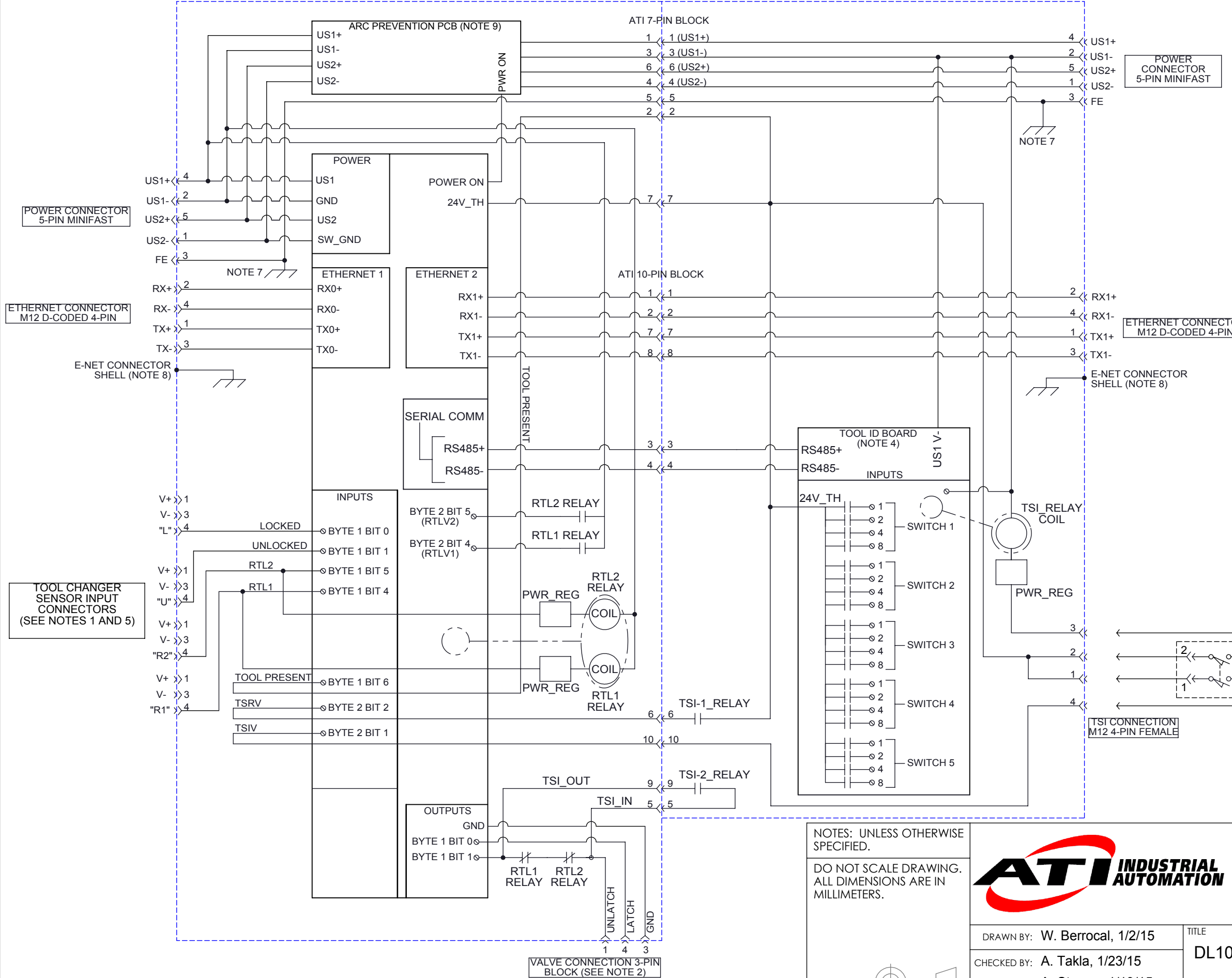
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PROJECT # 141212-1	SHEET 4 OF 5	SCALE 2:3	SIZE B
DRAWING NUMBER 9630-20-DL10		REVISION 02	

**MASTER MODULE
9121-DL10-M**

**TOOL MODULE
9121-DL10-T**



- Schematic Notes:**
- The complete tool changer package comes equipped with external cables that are connected to the sensors.
 - An internal pin block is used to connect the Latch/Unlatch signal to the Valve Adapter.
 - Power, Ethernet, and Safety Switch cables for the DL10 Modules are supplied by the customer.
 - The Tool ID I/O is reported in the DL10 Master Bitmap. Refer to the product manual for more information.
 - Note that the sensors are powered by unswitched Profinet Power. The common, V+, and V- connections are not shown here.
 - The following twisted pairs are maintained:
 - RX1+ and RX1-
 - TX1+ and TX1-
 - RX0+ and RX0-
 - TX0+ and TX0-
 - FE is connected directly to the Module housings.
 - The Ethernet Connector Shell is connected directly to the Module housings.
 - The Arc Prevention Board turns off US1+ and US2+ 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" circuit is used to ensure that the spring/contact pins are touching when power is turned on. Refer to the product manual for additional information.
 - The 9121-DL10-T module supports the use of a mechanical limit switch for integration with TSI. The limit switch connected to the TSI connector must have two sets of N.O. contacts (double-pole, single-throw). A limit switch is available from ATI (p/n 9005-20-1165) but is not included with the DL10 modules. Contact ATI for specific switch requirements.

NOTE:
TSI SWITCH MUST USE 2 NORMALLY OPEN CONTACTS. THE SWITCH IS MOUNTED TO THE END EFFECTOR (SEE NOTE 10)

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PROJECT # 141212-1	SHEET 5 OF 5	SCALE 1:10	SIZE B
		DRAWING NUMBER 9630-20-DL10	REVISION 02

