

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 2. The electrical schematic is shown on Sheet 3. The electrical schematic notes are on Sheet 4.

Rev.	Description	Initiator	Date
03	Eco 15862; Released Drawing	CF	07/27/2017
04	ECO 16088; Added Euchner RFD based safety switch to electrical schematic. Moved electrical schematic notes to Sheet 4. Added ATI PN# of Safety Switch to Figure 1.	WB	9/1/2017

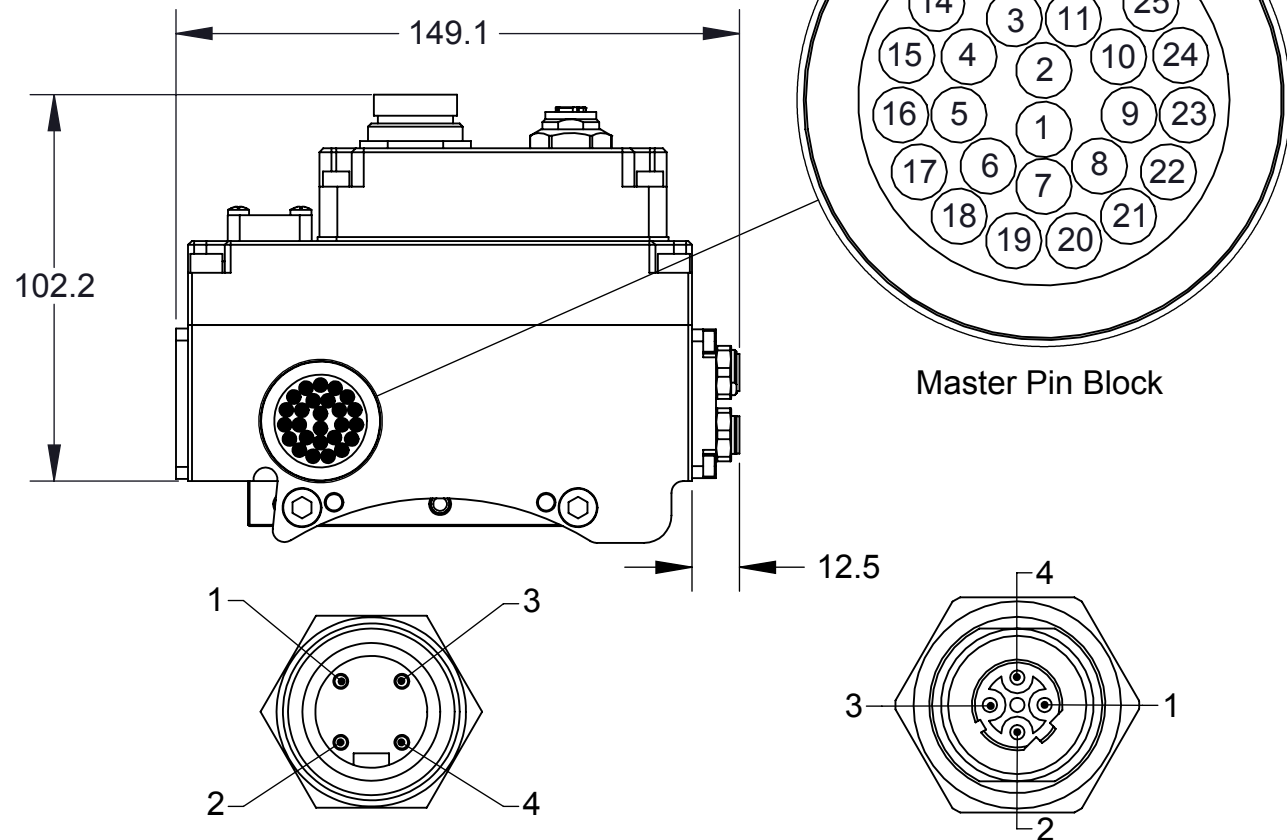
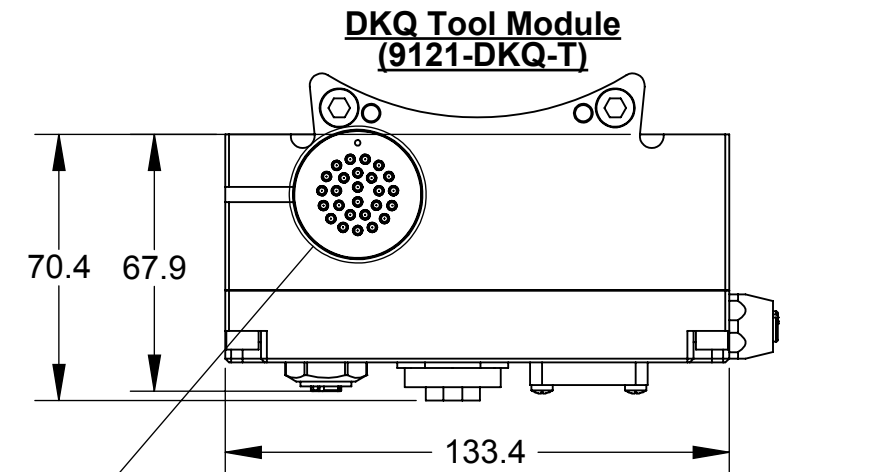
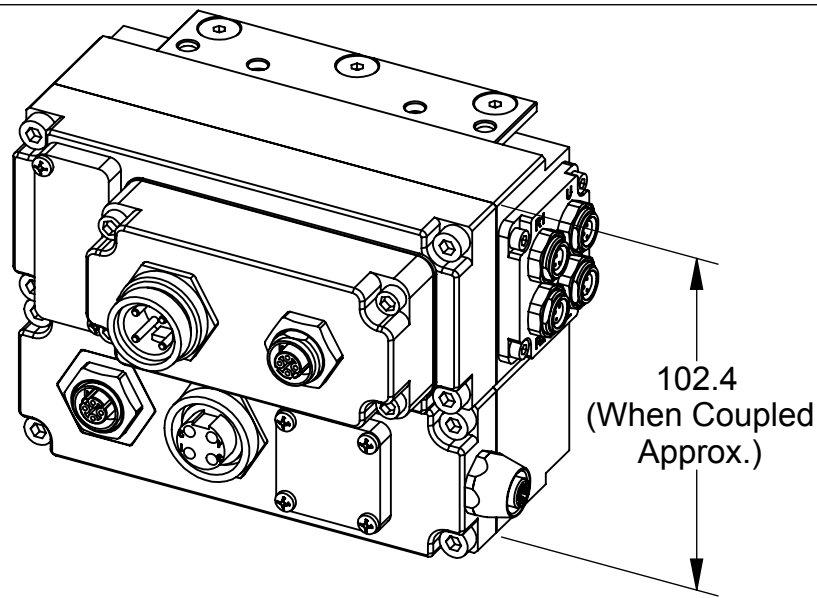
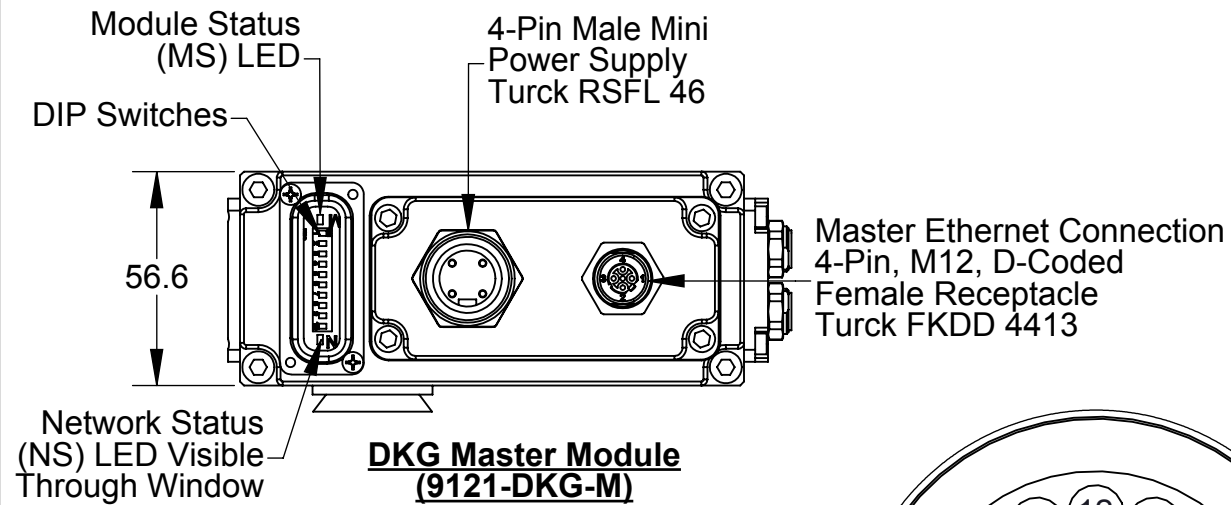


TABLE 3: 26-PIN BLOCK

Pin	Description
1	Tool Presence In
2	N/C
3	Tx+
4	Input and Logic Power V+
5	Tool Presence Out
6	N/C
7	N/C
8	Rx+
9	Rx-
10	Ethernet Shield
11	N/C
12	TSIV
13	Tx-
14	Tool ID 1
15	Tool ID 2
16	Tool ID 4
17	Tool ID 8
18	Output Power V+
19	TSRV
20	N/C
21	Input and Logic Power V-
22	TSI Out
23	Input and Logic Power V-
24	TSI In
25	Output Power V-
26	N/C

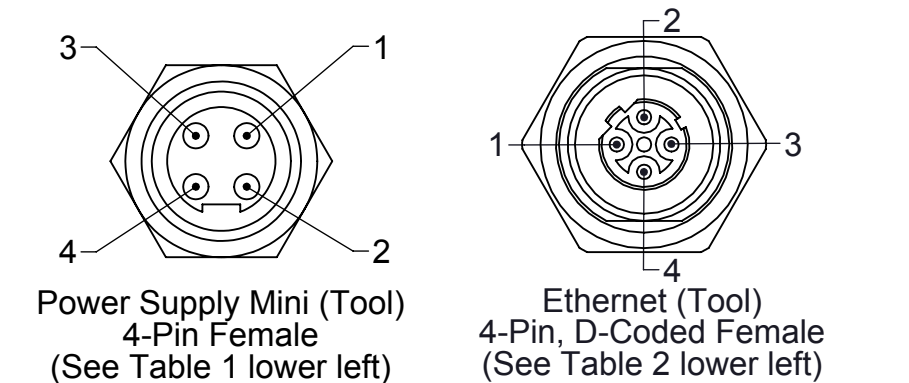
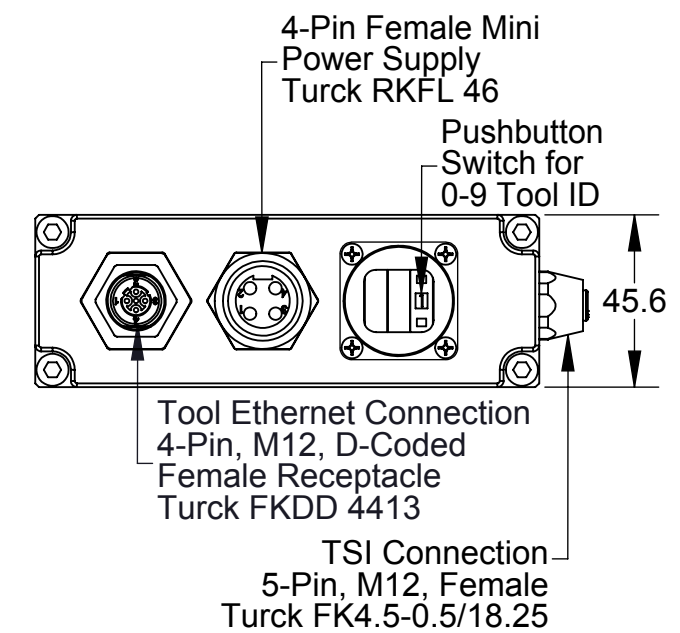
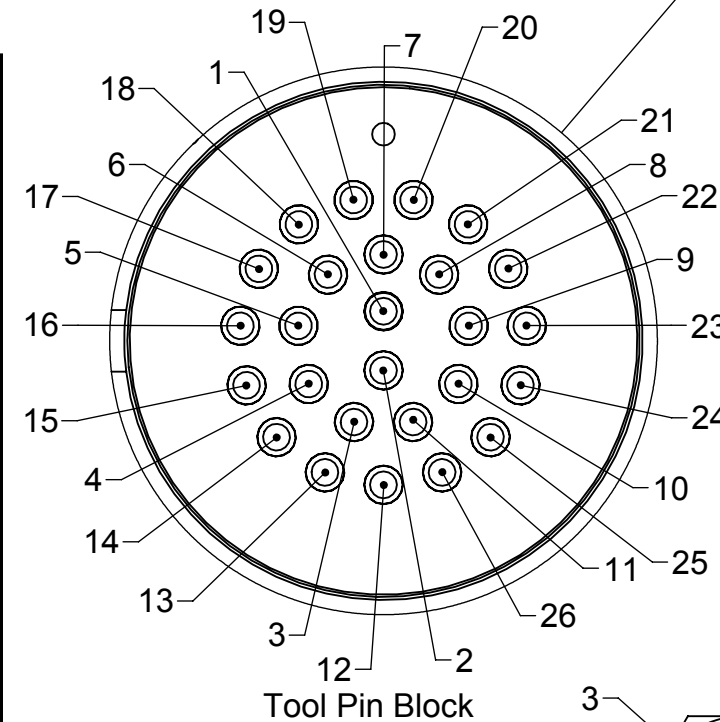


TABLE 1: POWER Connector

Pin	Power Supply
1	Output Power V+
2	Input and Logic Power V+
3	Input and Logic Power V-
4	Output Power V-

TABLE 2: ETHERNET CONNECTOR

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

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: D. Swanson, 2/16/17		TITLE	
CHECKED BY: W. Berrocal, 2/17/17 F. Alonso, 7/28/17		DKG Master DKQ Tool Ethernet Module	
PROJECT # 161025-1	SHEET 1 OF 4	SCALE 1:2	SIZE B
DRAWING NUMBER 9630-20-DKGM DKQT		REVISION 04	

Rev.	Description	Initiator	Date
-	See Sheet 1	-	-

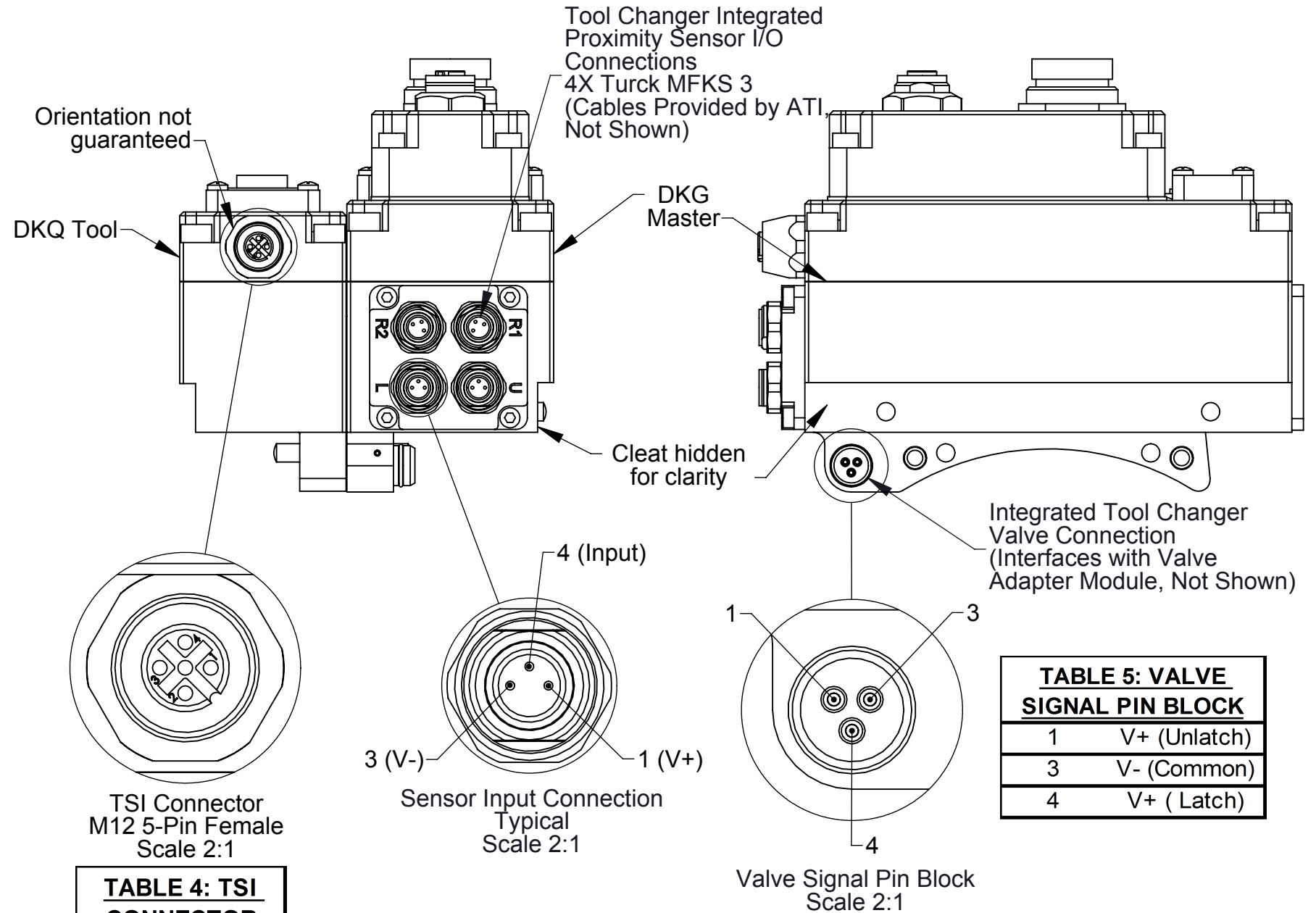
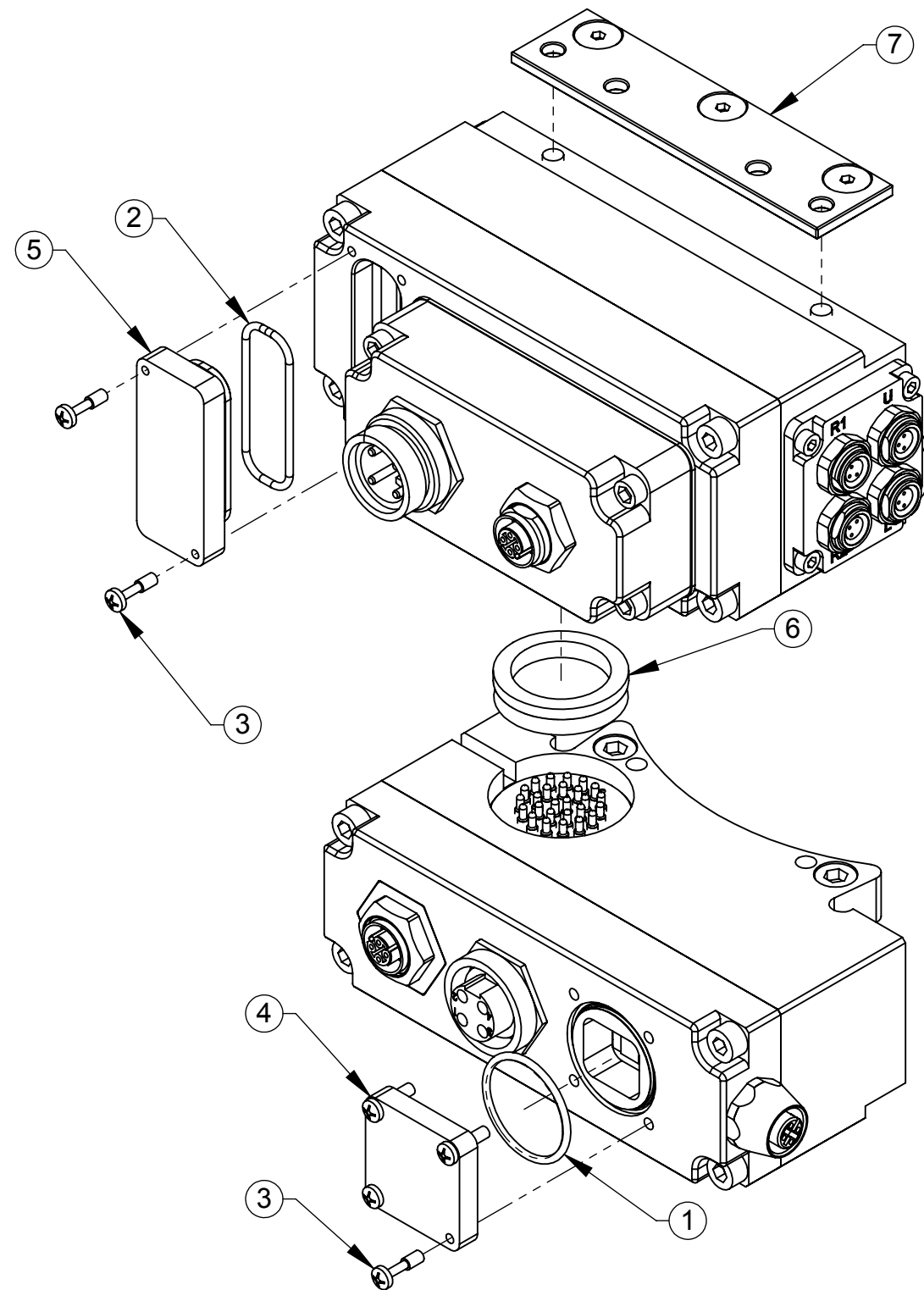


TABLE 4: TSI CONNECTOR

1	Input V+
2	TSI1
3	Input V-
4	TSI2
5	N/C

TABLE 5: VALVE SIGNAL PIN BLOCK

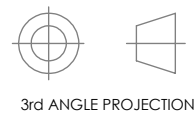
1	V+ (Unlatch)
3	V- (Common)
4	V+ (Latch)

TABLE 6: 9121-DKG-M/9121-DKQ-T SERVICEABLE PARTS

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	3410-0001091-01	O-ring AS568A-019
2	1	3410-0001201-01	O-Ring AS568-024
3	6	3500-9957012-21	Pan Head M3 Captive Screw M3 X 12
4	1	3700-20-5844	Tool ID Window
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

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

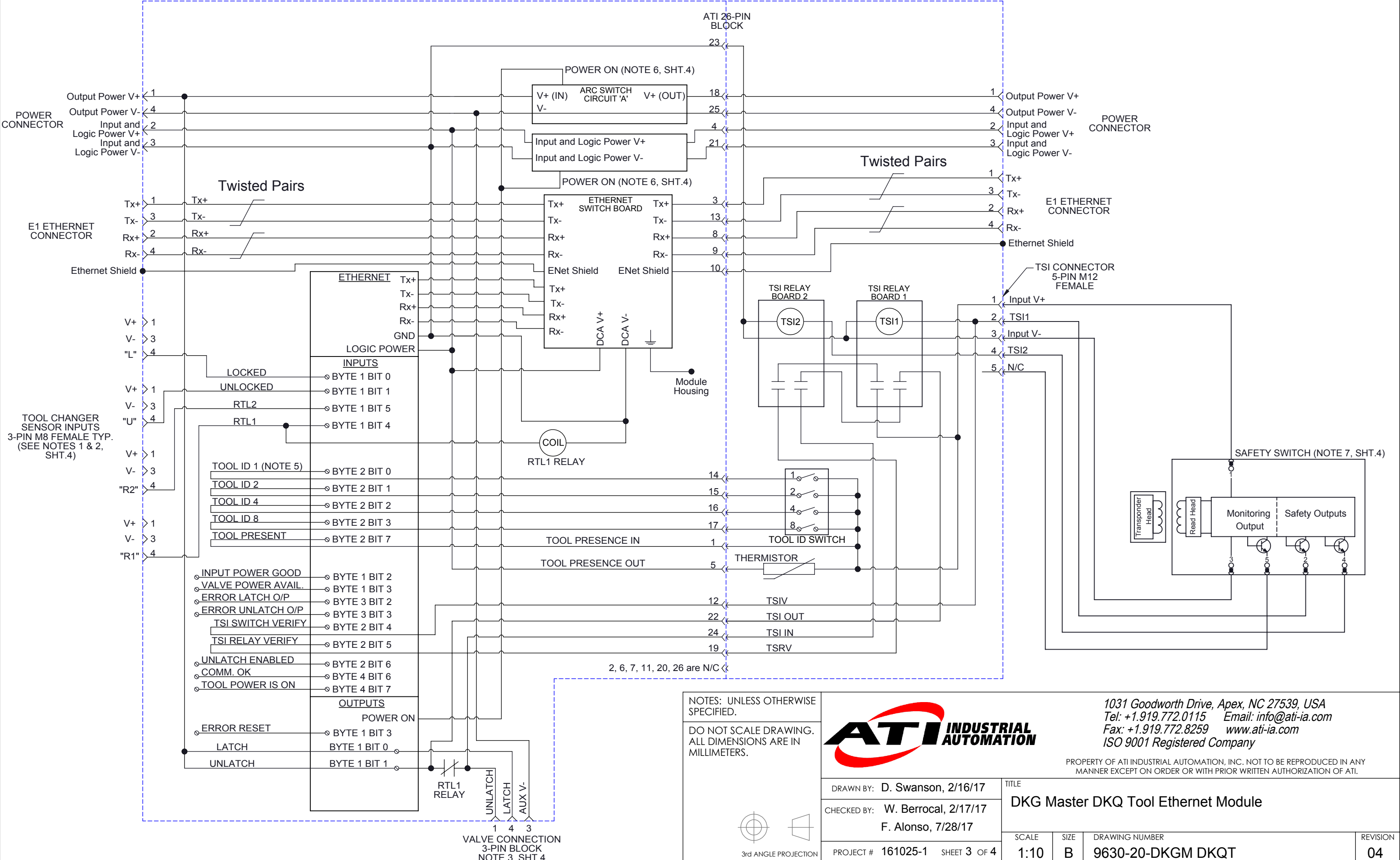
PROPERTY OF ATI INDUSTRIAL AUTOMATION, INC. NOT TO BE REPRODUCED IN ANY MANNER EXCEPT ON ORDER OR WITH PRIOR WRITTEN AUTHORIZATION OF ATI.

DRAWN BY: D. Swanson, 2/16/17		TITLE	
CHECKED BY: W. Berrocal, 2/17/17 F. Alonso, 7/28/17		DKG Master DKQ Tool Ethernet Module	
PROJECT #	161025-1	SHEET	2 OF 4
SCALE	2:3	SIZE	B
DRAWING NUMBER	9630-20-DKGM DKQT		REVISION
			04

Rev.	Description	Initiator	Date
-	See Sheet1	-	-

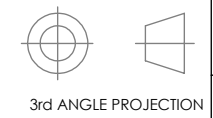
9121-DKG-M

9121-DKQ-T



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.

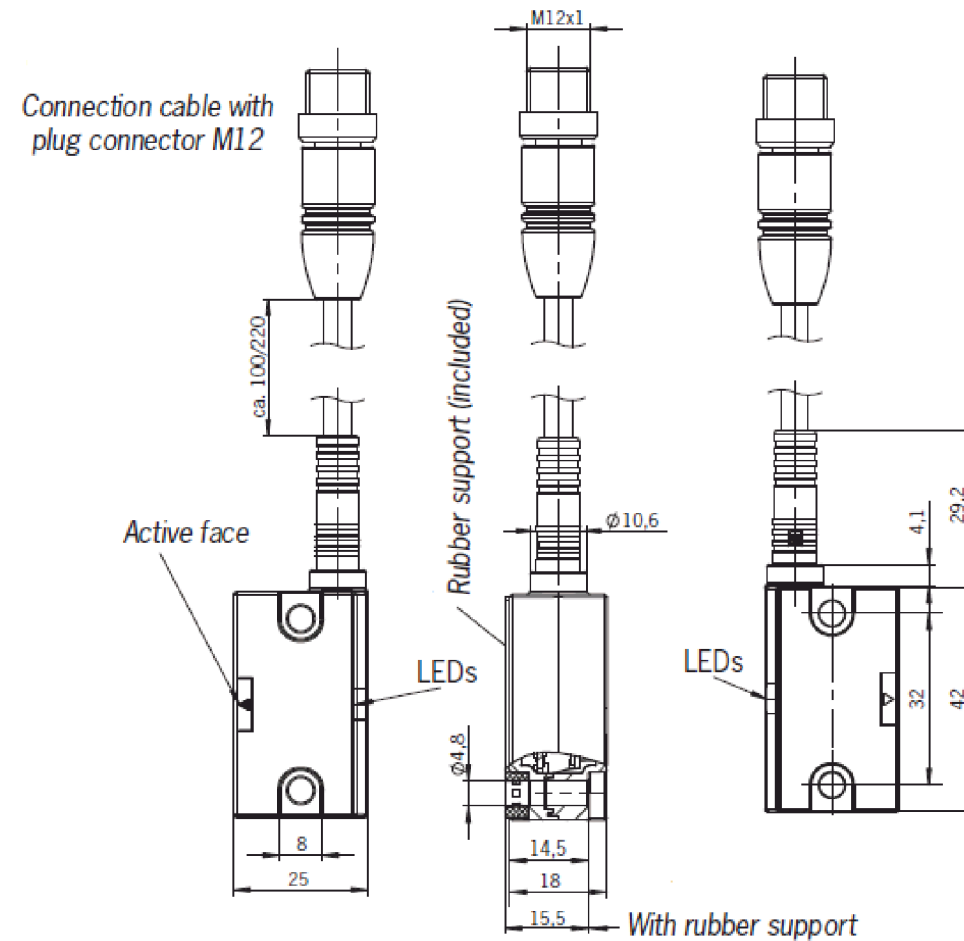
DRAWN BY: D. Swanson, 2/16/17		TITLE	
CHECKED BY: W. Berrocal, 2/17/17		DKG Master DKQ Tool Ethernet Module	
F. Alonso, 7/28/17		SCALE	REVISION
PROJECT # 161025-1	SHEET 3 OF 4	1:10	04
DRAWING NUMBER		SIZE	
9630-20-DKGM DKQT		B	

Rev.	Description	Initiator	Date
-	See Sheet 1	-	-

Schematic Notes:

- Note that the sensors are powered by Input and Logic V+ 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.
- An internal pin block is used to transmit the Latch/Unlatch signal to the Valve Adapter.
- Cables for Ethernet and Auxiliary Power to the DKG/DKQ Modules are supplied by the user.
- The Tool ID I/O is reported in the DKG Master Bitmap. Refer to the product manual for more information.
- The Arc Prevention Circuits turn off Switched Auxiliary and Unswitched 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.
- IMPORTANT:** The 9121-DKQ-T module requires the use of a two channel, PL e rated contactless Safety Sensor, specifically Euchner CES-I-AP-M-C04-USB-117324 (see Figure 1). The Safety Sensor is not included with the DKQ but is available from ATI (ATI PN# 9120-TSL-SS-9019). The Safety Sensor is powered by Input V+/Input V-.

Safety Switch: ATI PN# 8600-117324



Actuator: ATI PN# 8605-115271

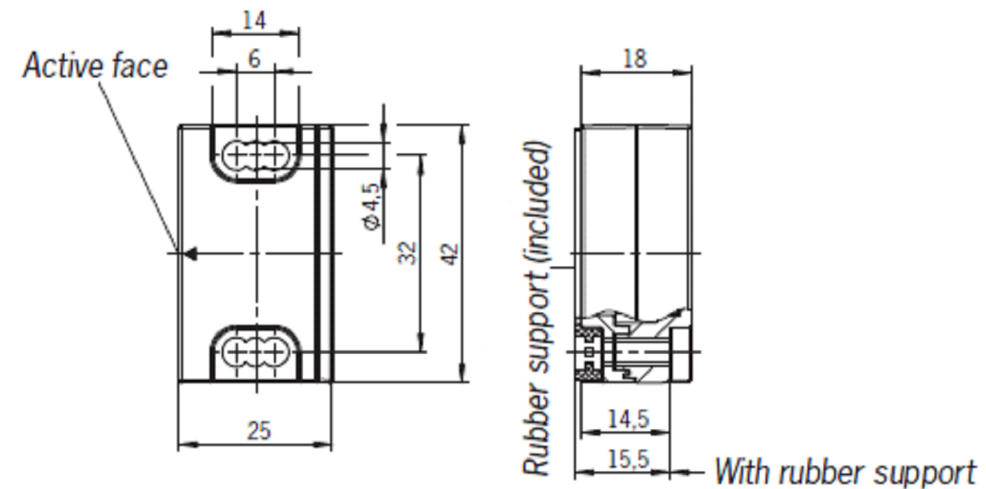
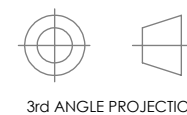


Figure 1: Euchner CES-AP-C04 Series Safety Sensor Available Separately from ATI (PN# 9120-TSL-SS-9019)

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: D. Swanson, 2/16/17

CHECKED BY: W. Berrocal, 2/17/17

F. Alonso, 7/28/17

PROJECT # 161025-1 SHEET 4 OF 4

TITLE

DKG Master DKQ Tool Ethernet Module

SCALE
1:10

SIZE
B

DRAWING NUMBER
9630-20-DKGM DKQT

REVISION
04