

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.

Rev.	Description	Initiator	Date
04	ECO 20533; Sheet 1 changed Turck FKDD 4413 to Signal 120404-04-064 for Tool Ethernet Connection. Updated title blocks. Removed revision tables from sheets 2-4	DS	3/3/2022

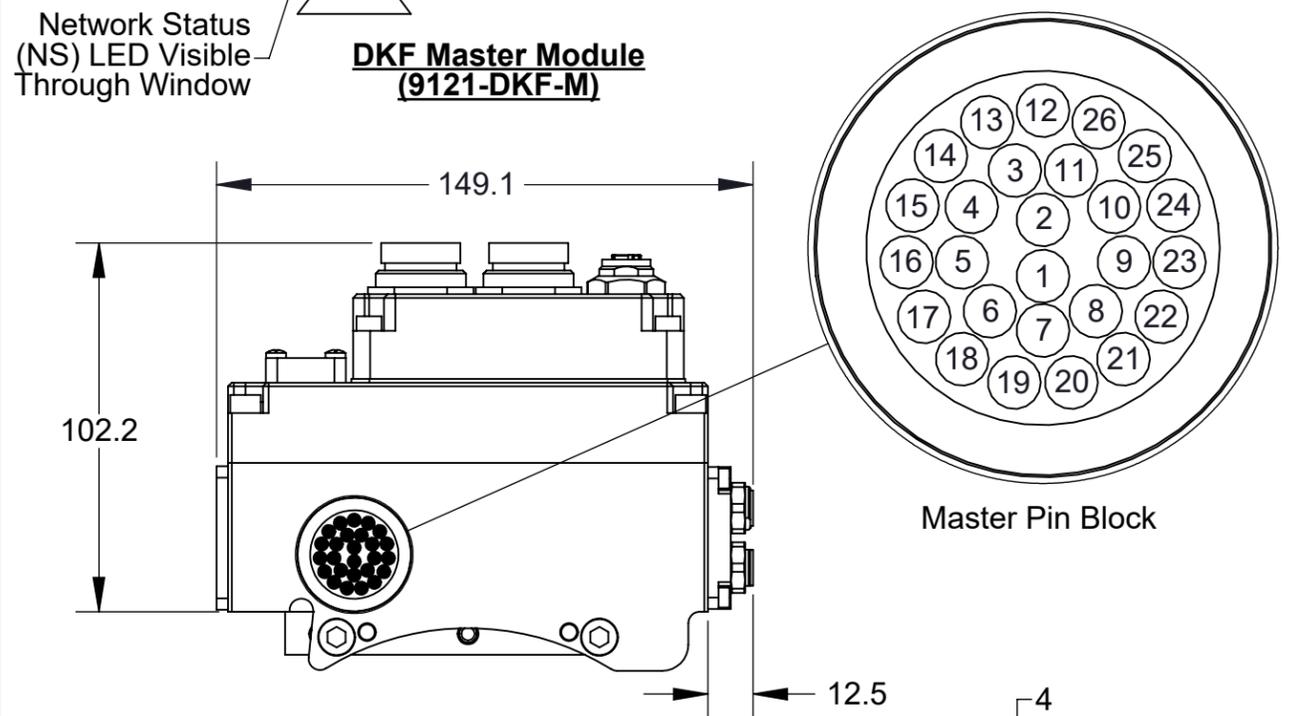
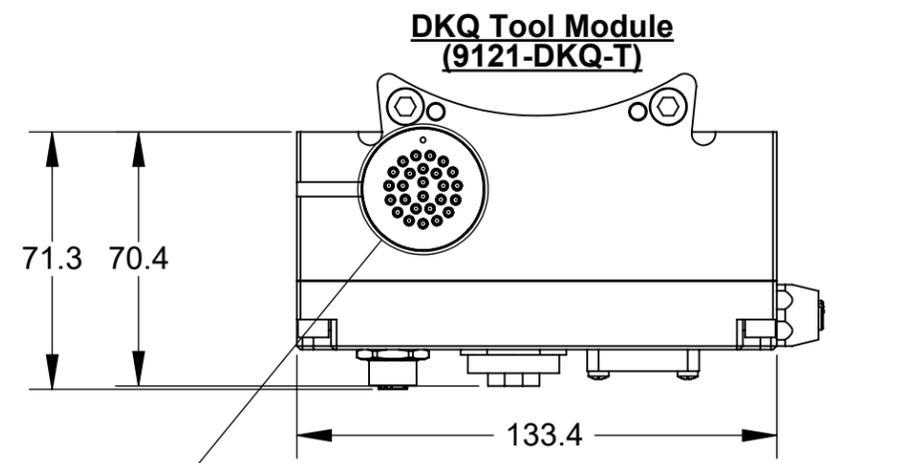
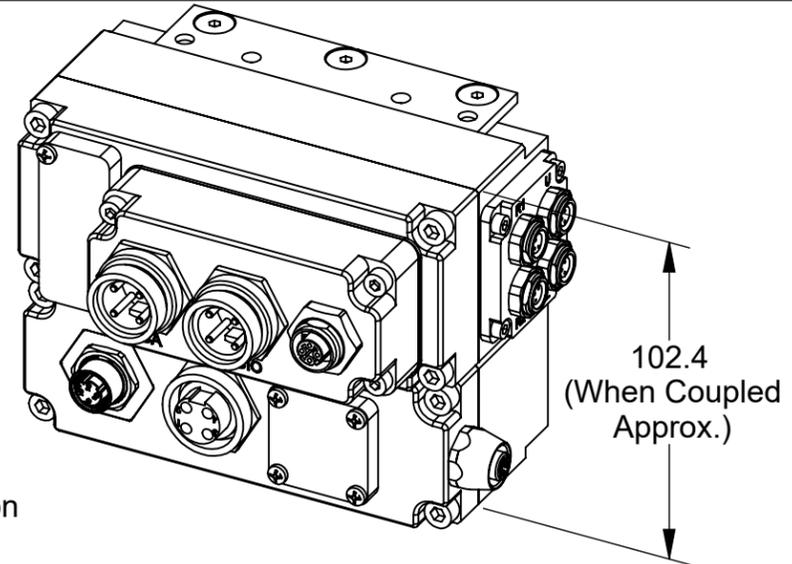
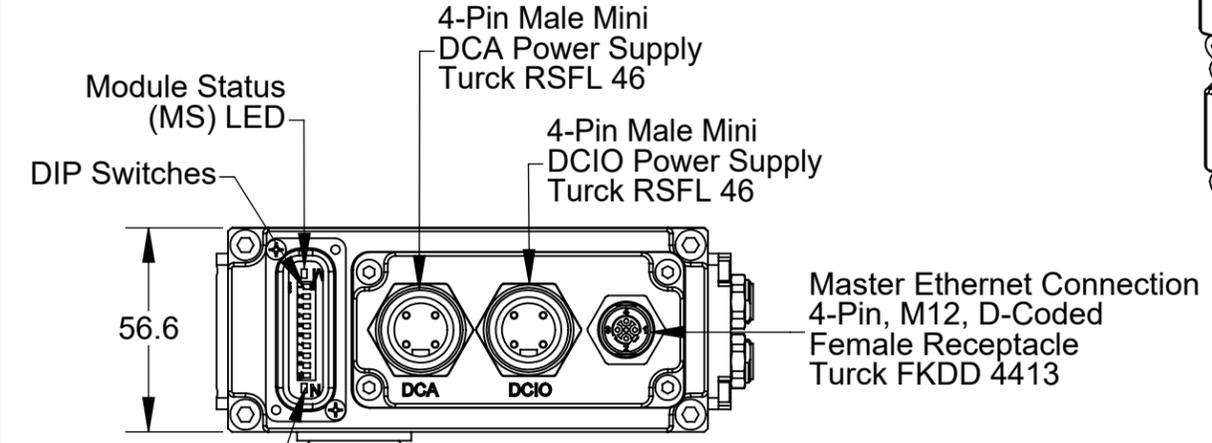
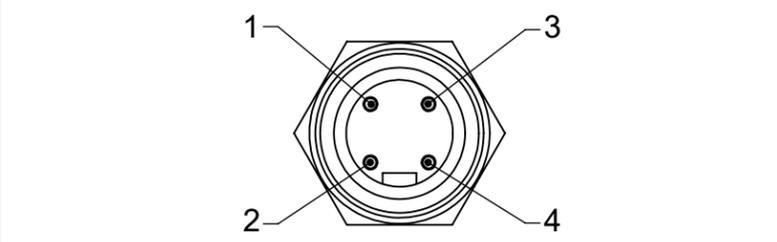
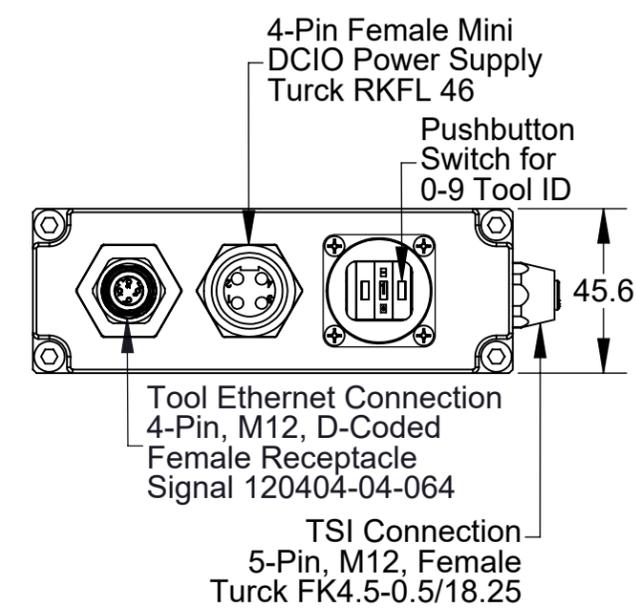
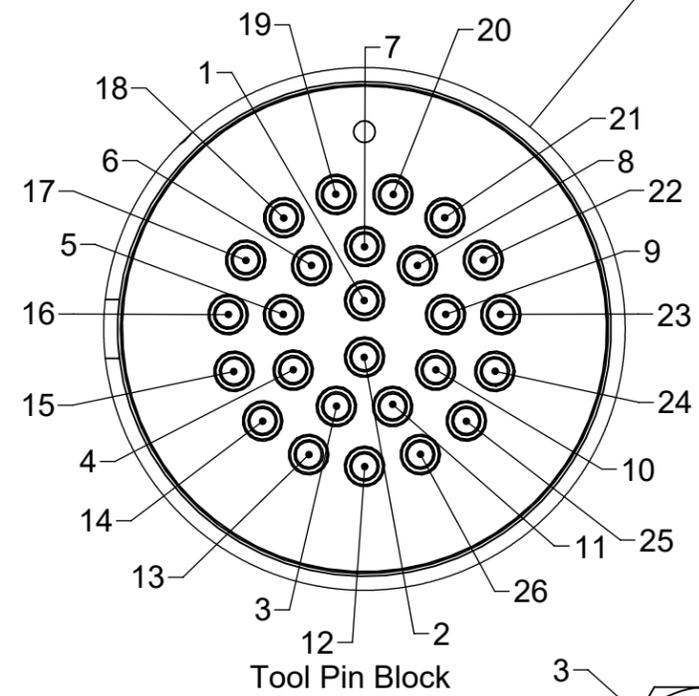


TABLE 3: 26-PIN BLOCK

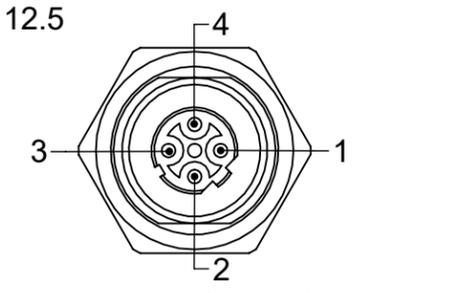
Pin	Description
1	Tool Presence In
2	N/C
3	Tx+
4	Aux V+ (Unswitched)
5	Tool Presence Out
6	N/C
7	N/C
8	Rx+
9	Rx-
10	Ethernet Shield
11	N/C
12	TSIV
13	Tx-
14	Tool ID 1
15	Tool ID 2
16	Tool ID 4
17	Tool ID 8
18	Aux V+ (Switched)
19	TSRV
20	N/C
21	Aux V- (Unswitched)
22	TSI Out
23	DCA V-
24	TSI In
25	Aux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



DCA and DCIO Power Mini (Master)

TABLE 1: POWER CONNECTOR

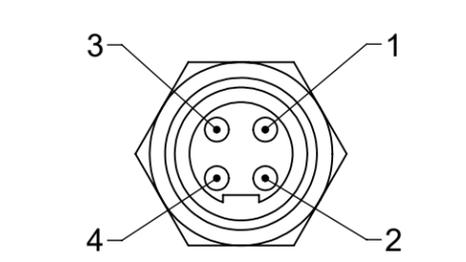
Pin	DCA Power Supply	DCIO Power Supply
1	N/C	Aux V+ (Switched)
2	DCA V+	Aux V+ (Unswitched)
3	DCA V-	Aux V- (Unswitched)
4	N/C	Aux V- (Switched)



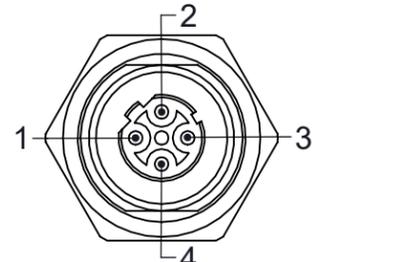
Ethernet (Master)
4-Pin, D-Coded Female

TABLE 2: ETHERNET CONNECTOR

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



DCIO Power Supply Mini (Tool)
4-Pin Female
(See Table 1 lower left)



Ethernet (Tool)
4-Pin, D-Coded Female
(See Table 2 lower left)

NOTES: UNLESS OTHERWISE SPECIFIED.

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DRAWN BY: W. Berrocal, 10/27/16		TITLE	
CHECKED BY: A. Takla, 11/15/16		DKF Master, DKQ Tool Ethernet Module Customer Drawing	
F. Alonso, 3/6/17		SCALE	REVISION
PROJECT # 161025-1	SHEET 1 OF 4	1:2	04
		SIZE	DRAWING NUMBER
		B	9630-20-DKFM DKQT

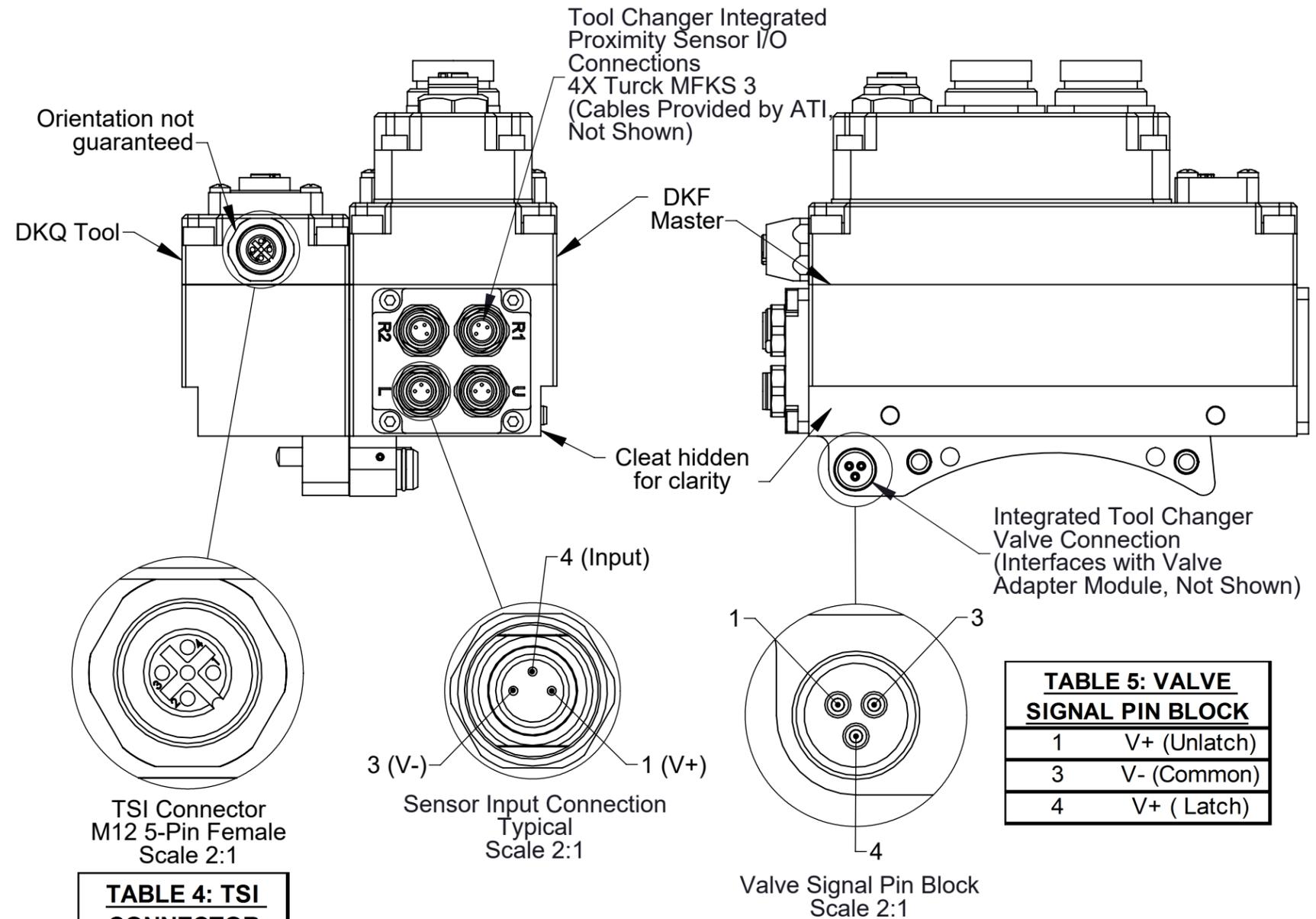
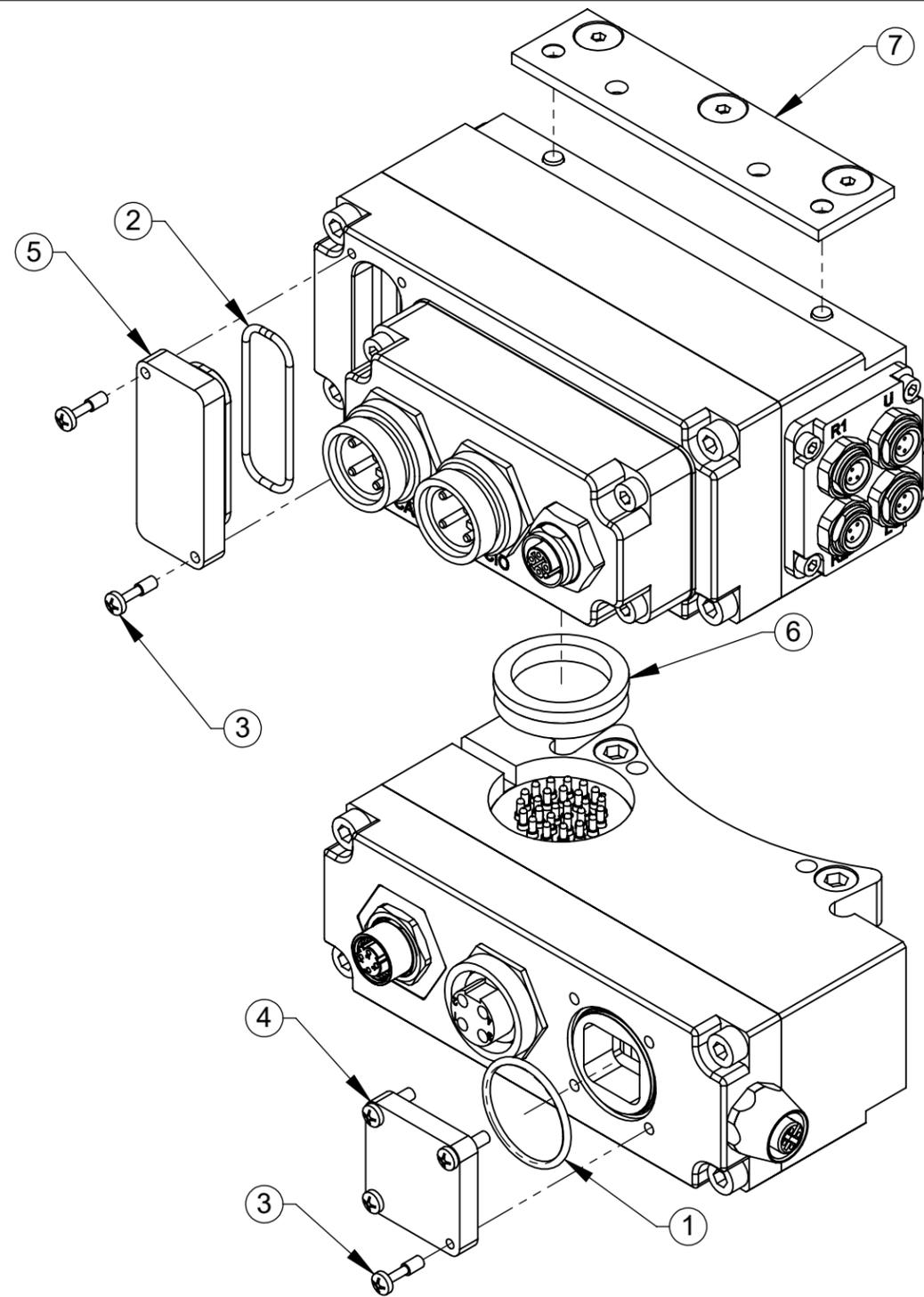


TABLE 4: TSI CONNECTOR

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

TABLE 5: VALVE SIGNAL PIN BLOCK

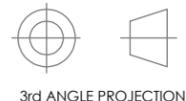
1	V+ (Unlatch)
3	V- (Common)
4	V+ (Latch)

TABLE 6: 9121-DKF-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

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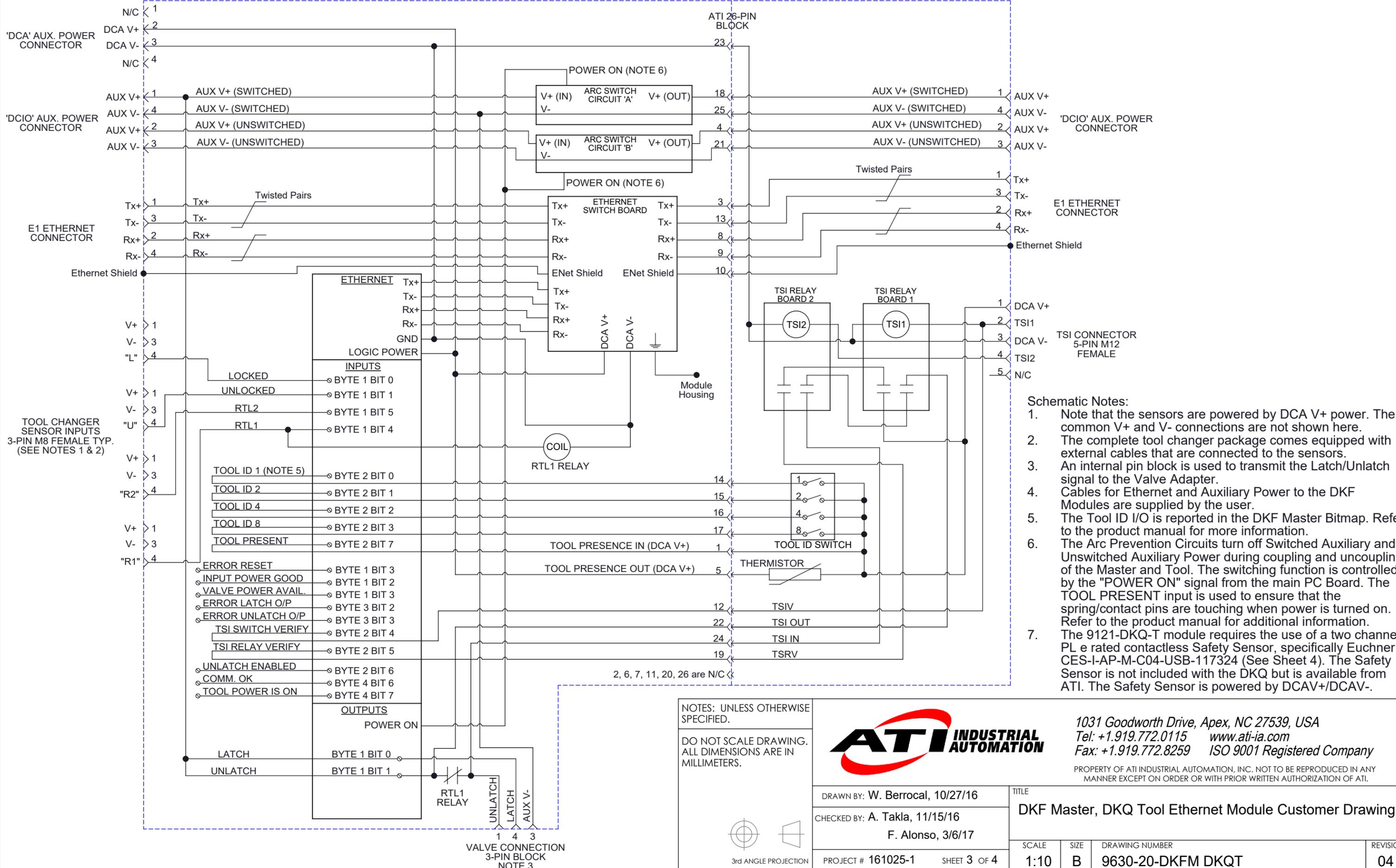
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F. Alonso, 3/6/17		SCALE	SIZE
PROJECT # 161025-1	SHEET 2 OF 4	2:3	B
		DRAWING NUMBER	REVISION
		9630-20-DKFM DKQT	04

9121-DKF-M

9121-DKQ-T



- Schematic Notes:**
- Note that the sensors are powered by DCA 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 DKF Modules are supplied by the user.
 - The Tool ID I/O is reported in the DKF 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.
 - 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 Sheet 4). The Safety Sensor is not included with the DKQ but is available from ATI. The Safety Sensor is powered by DCAV+/DCAV-.

NOTES: UNLESS OTHERWISE SPECIFIED.

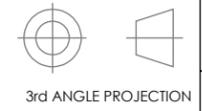
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PROJECT # 161025-1	SHEET 3 OF 4	1:10	04
		SIZE	DRAWING NUMBER
		B	9630-20-DKFM DKQT



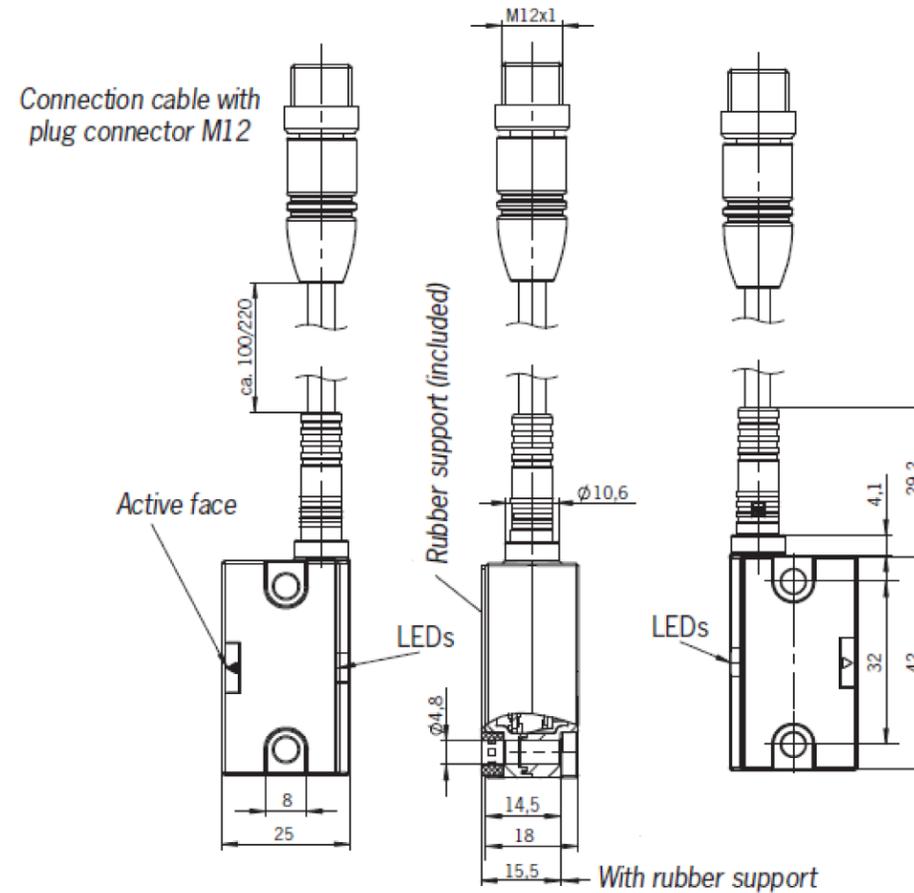
VALVE CONNECTION 3-PIN BLOCK NOTE 3

2, 6, 7, 11, 20, 26 are N/C

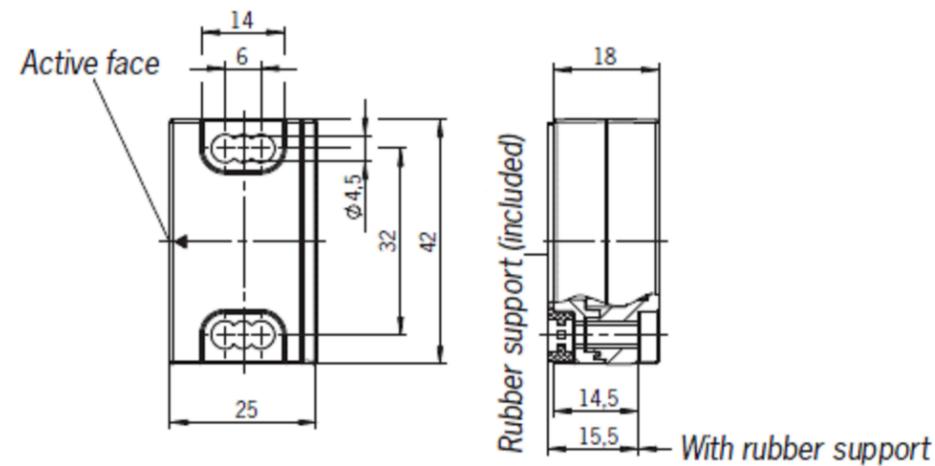


Figure 1: Euchner CES-AP-C04 Series Safety Sensor

Safety Switch: ATI PN# 8600-117324



Actuator: ATI PN# 8605-115271



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PROJECT # 161025-1	SHEET 4 OF 4	SCALE 1:10	SIZE B
		DRAWING NUMBER 9630-20-DKFM DKQT	REVISION 04