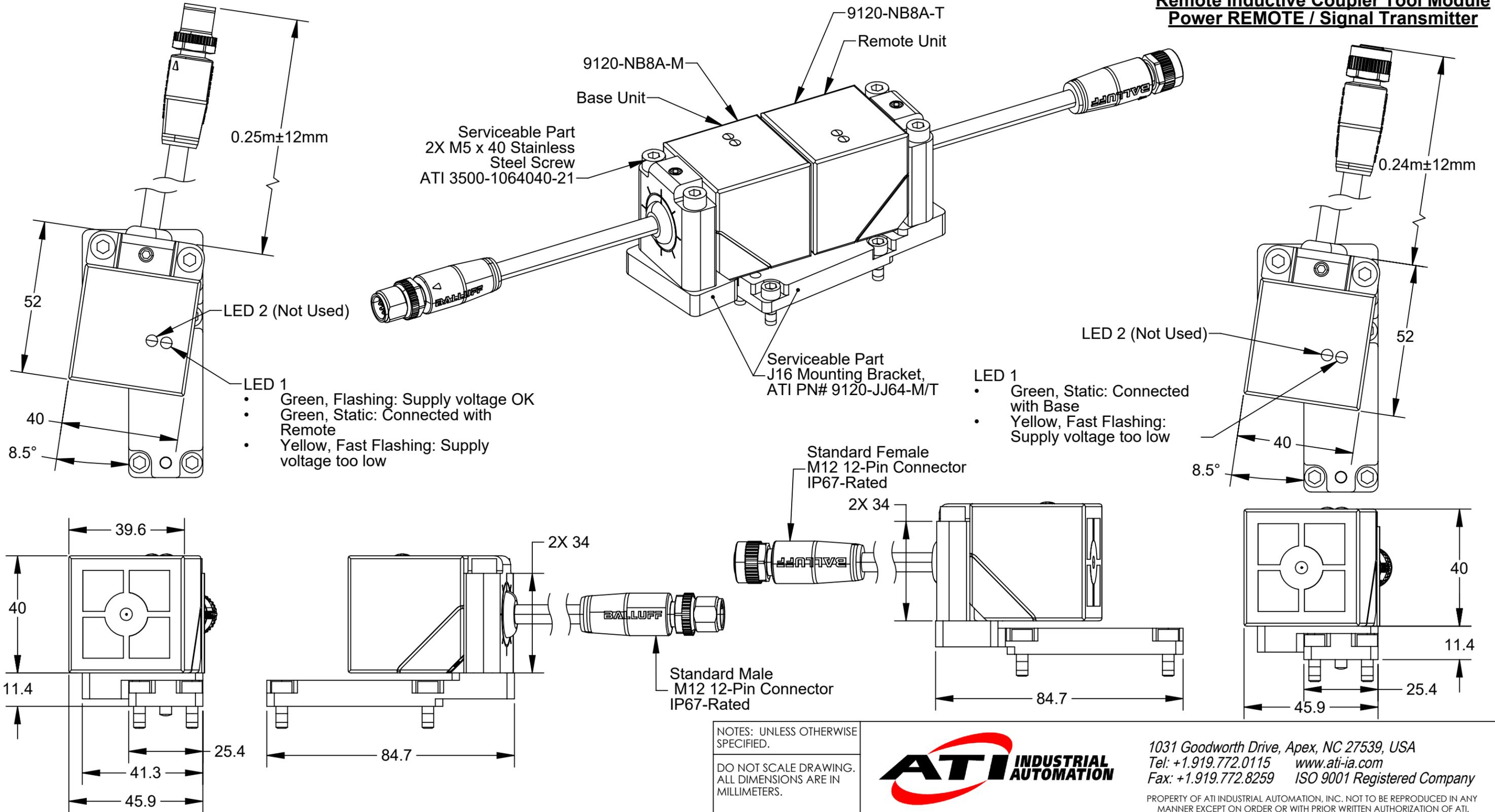


9120-NB8A-M
Base Inductive Coupler Master Module
Power BASE / Signal Receiver

Rev.	Description	Initiator	Date
05	Added torque callouts to mounting screws. Release.	WB	2/2/2021

9120-NB8A-T
Remote Inductive Coupler Tool Module
Power REMOTE / Signal Transmitter



- Notes:
1. Wiring Schematic and Electrical Specifications shown on Sheet 2.
 2. Linear and Angular Offset Misalignment Allowances shown on Sheet 3.

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 www.ati-ia.com
 Fax: +1.919.772.8259 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.

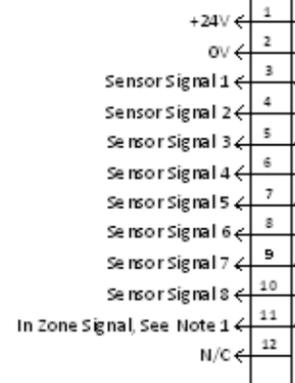
DRAWN BY: W. Berrocal, 11/16/20		TITLE Balluff-Labeled Base Inductive Coupler Master Module, PNP-Compatible, 8X Signal Pass Thru with 0.2m Pigtail Male M12 12-Pin Connector	
CHECKED BY: D. Simons, 8/31/2020			
PROJECT # 200824-1	SHEET 1 OF 4	SCALE 1:2	REVISION 05
SIZE B	DRAWING NUMBER 9630-20-NB8A		

ELECTRICAL SCHEMATIC

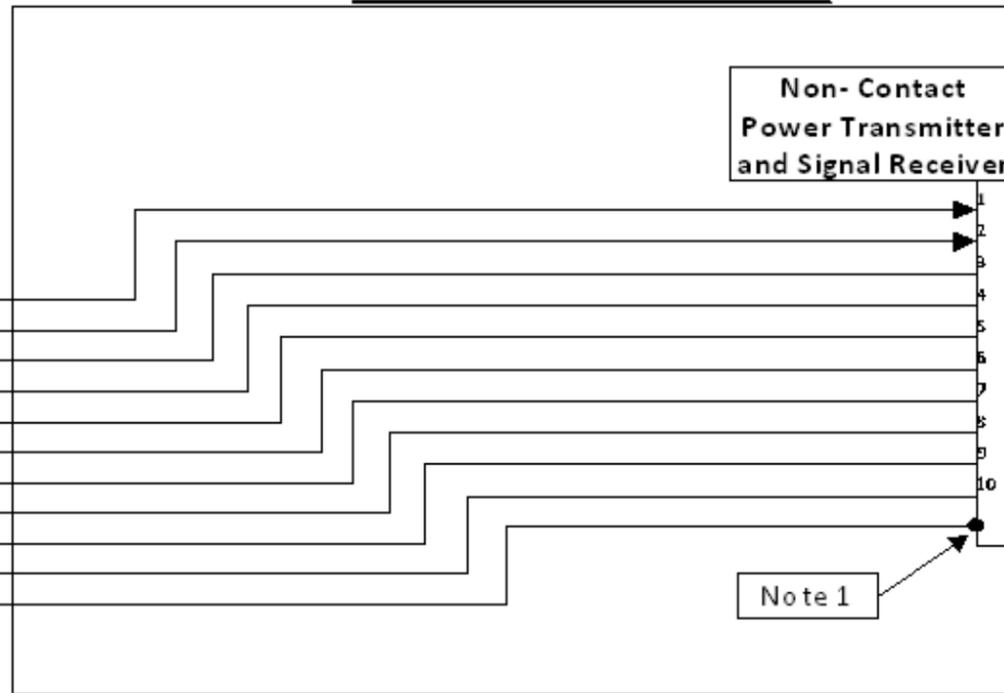
9120-NB8A-M Base Unit

9120-NB8A-T Remote Unit

Male M12 12-Pin Standard Connector

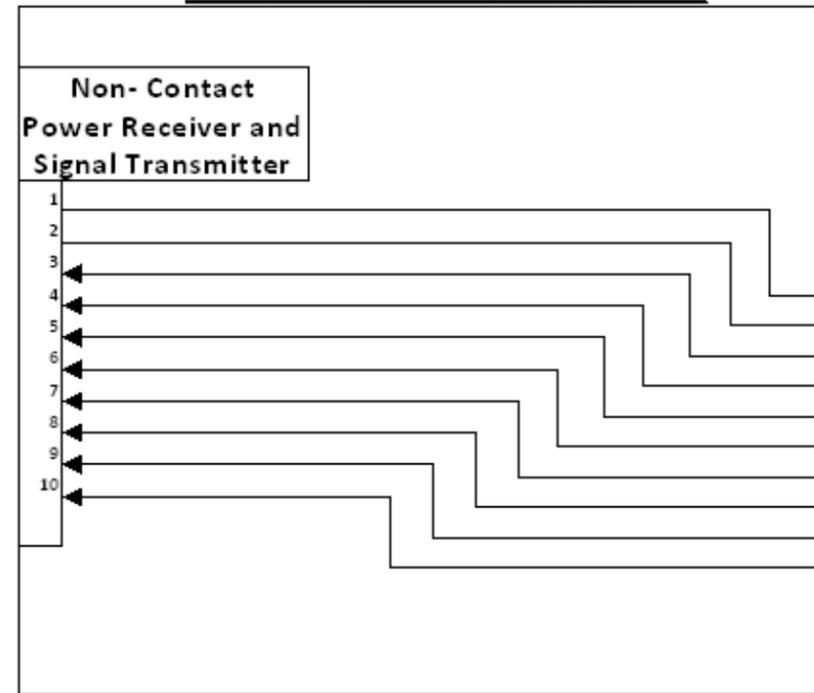


Non- Contact
Power Transmitter
and Signal Receiver

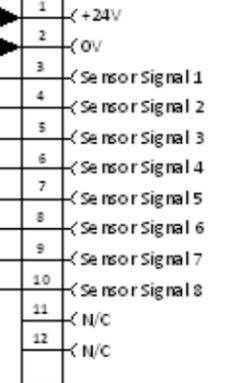


Note 1

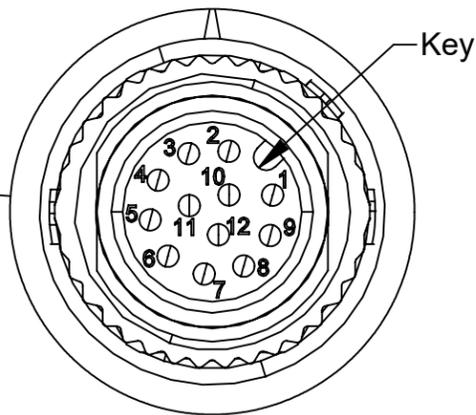
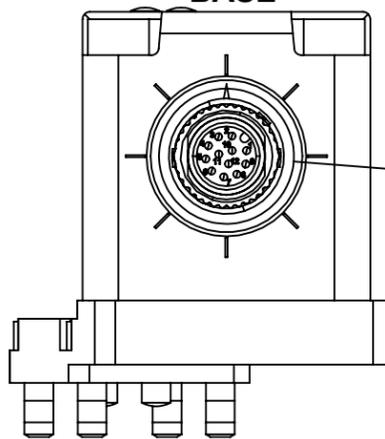
Non- Contact
Power Receiver and
Signal Transmitter



Female M12 12-Pin Standard Connector

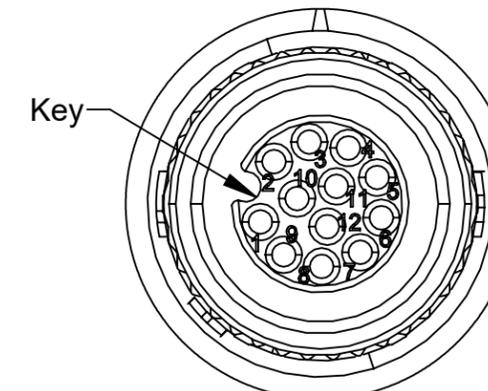


9120-NB8A-M BASE



DETAIL A
SCALE 3 : 1

9120-NB8A-T REMOTE



DETAIL B
SCALE 3 : 1

Specification	9120-NB8A-M Inductive BASE Master Module
Current Load Per Output Max.	200mA
Rated Operating Current	1000 mA
Rated Operating Voltage	24V +/- 10% (See Note 2)
Ready Delay Max.	100 ms
Number of Signals	Eight (8) Digital Outputs (PNP) One (1) Connection Status
Circuit Protection	Short Circuit Protection Reverse Polarity Protection
Switching Frequency	60 Hz
Transmission Power	12.0 W
Operating Temperature	-5 °C - 65 °C
Interference Immunity	EN 61000-4-2/3/4/6
Protection Class	IP67

Specification	9120-NB8A-T Inductive REMOTE Tool Module
Rated Output Current	500mA
Rated Operating Current	1000 mA
Rated Operating Voltage	24V +/- 10% (See Note 2)
Ready Delay Max.	100 ms
Number of Signals	Eight (8) Digital Inputs (PNP)
Circuit Protection	Short Circuit Protection Reverse Polarity Protection
Switching Frequency	60 Hz
Transmission Power	12.0 W
Operating Temperature	-5 °C - 65 °C
Interference Immunity	EN 61000-4-2/3/4/6
Protection Class	IP67

Notes:

- The INZONE signal is generated by the inductive coupler transmitter and receiver when the coupler pairs are close enough to reliably couple. This signal can be used by the customer to determine if the inductive couplers are connected and is not an external sensor signal channel.
- Caution: Do not exceed rated supply voltage. Exceeding rated supply voltage will lead to permanent damage to master (base) module.

NOTES: UNLESS OTHERWISE SPECIFIED.

DO NOT SCALE DRAWING. ALL DIMENSIONS ARE IN MILLIMETERS.



3rd ANGLE PROJECTION

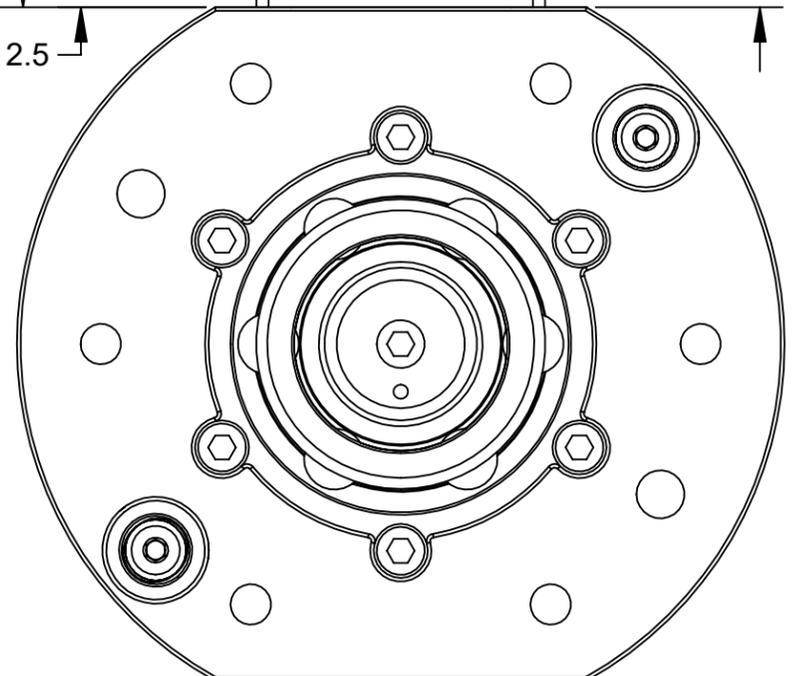
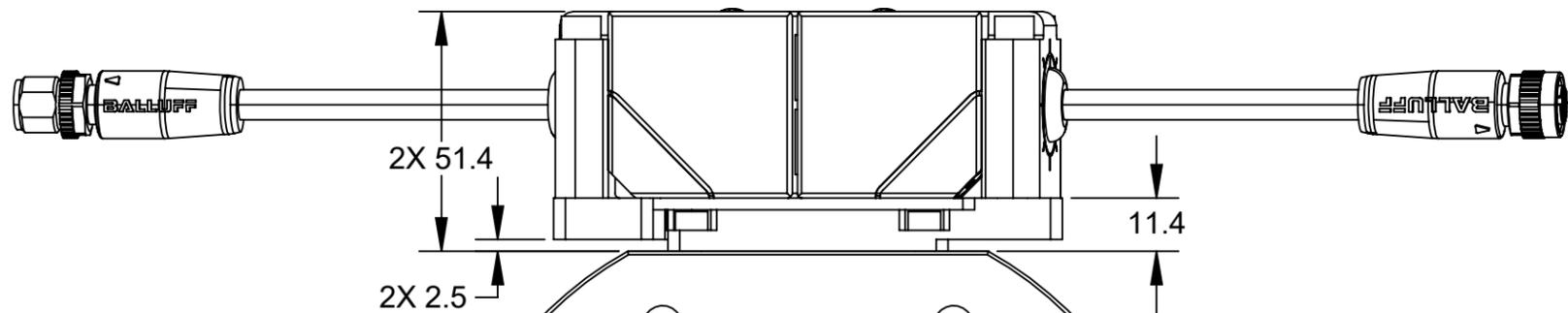
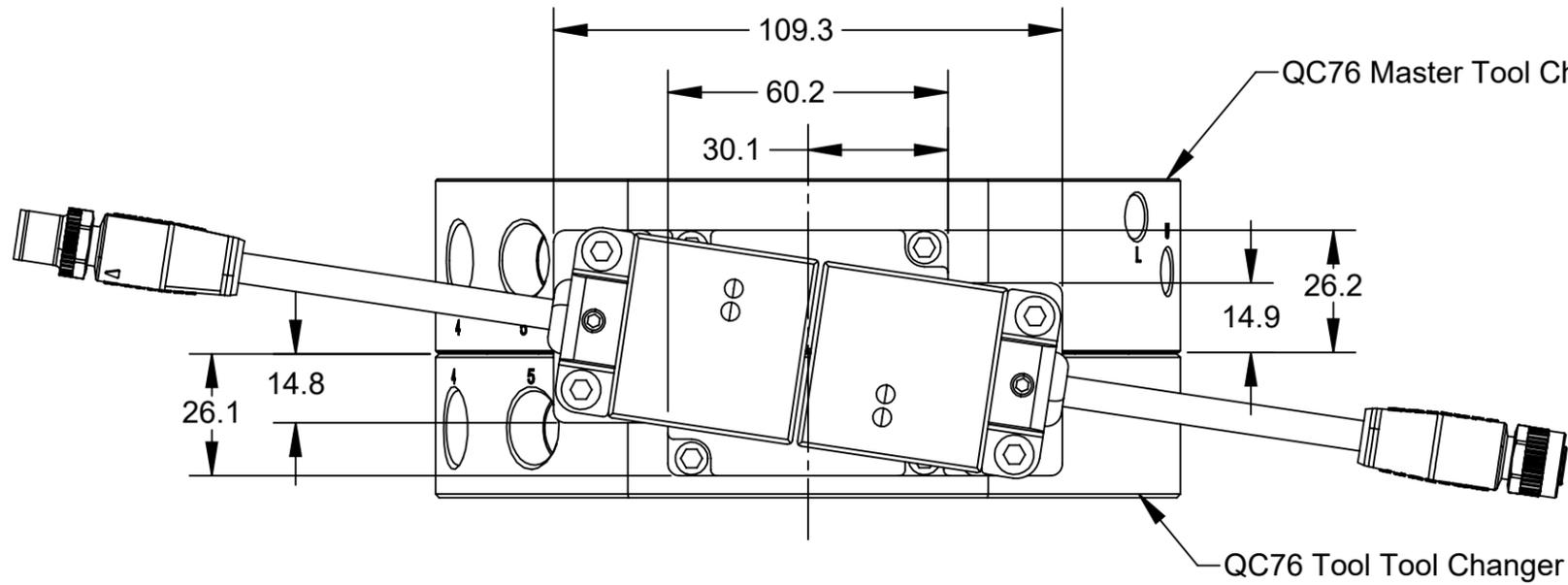


1031 Goodworth Drive, Apex, NC 27539, USA
Tel: +1.919.772.0115 Email: info@ati-ia.com
Fax: +1.919.772.8259 www.ati-ia.com
ISO 9001 Registered Company

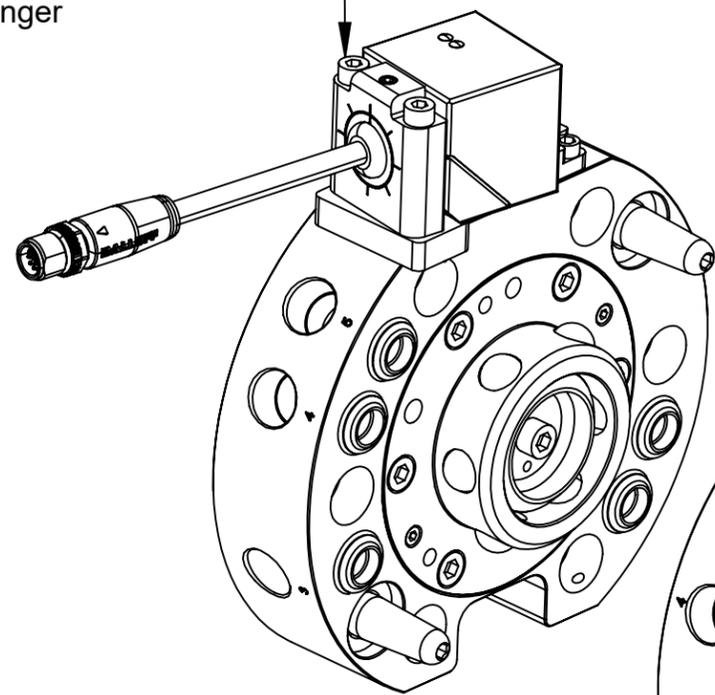
PROPERTY OF ATI INDUSTRIAL AUTOMATION, INC. NOT TO BE REPRODUCED IN ANY MANNER EXCEPT ON ORDER OR WITH PRIOR WRITTEN AUTHORIZATION OF ATI.

DRAWN BY: W. Berrocal, 11/16/20		TITLE	
CHECKED BY: D. Simons, 8/31/2020		Balluff-Labeled Base Inductive Coupler Master Module, PNP-Compatible, 8X Signal Pass Thru with 0.2m Pigtail Male M12 12-Pin Connector	
PROJECT # 200824-1	SHEET 2 OF 4	SCALE 1:2	SIZE B
		DRAWING NUMBER 9630-20-NB8A	REVISION 05

NB8A Modules on a QC76

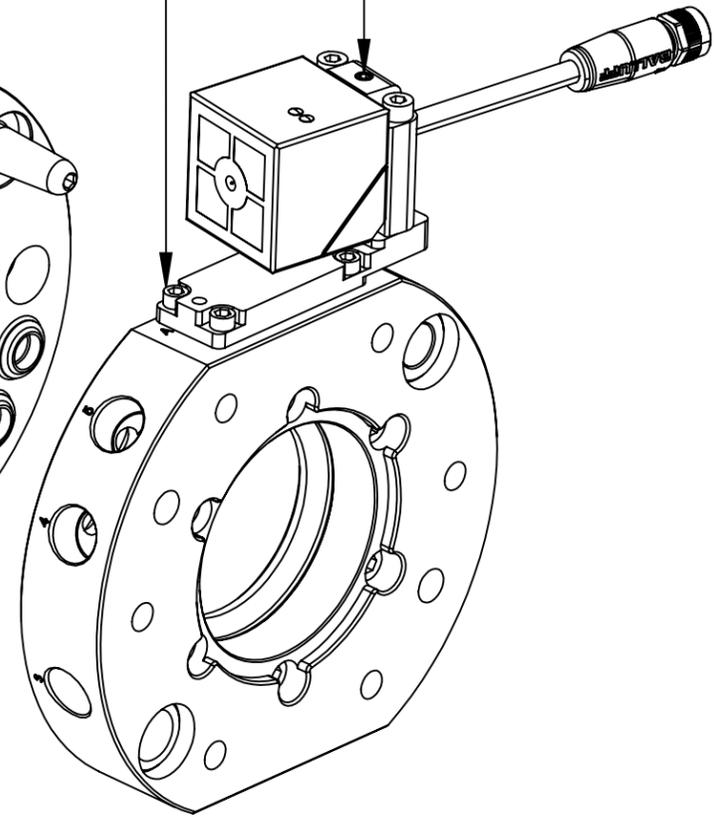


M5 x 40mm Screws
Tightening Torque:
10 in-lb [1.13 N-m]



M4 x 12mm Screws
Tightening Torque:
12 in-lb [1.36 N-m]

Orientation Screw
Tightening Torque:
48 in-oz [0.34 N-m]



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 www.ati-ia.com
Fax: +1.919.772.8259 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, 11/16/20

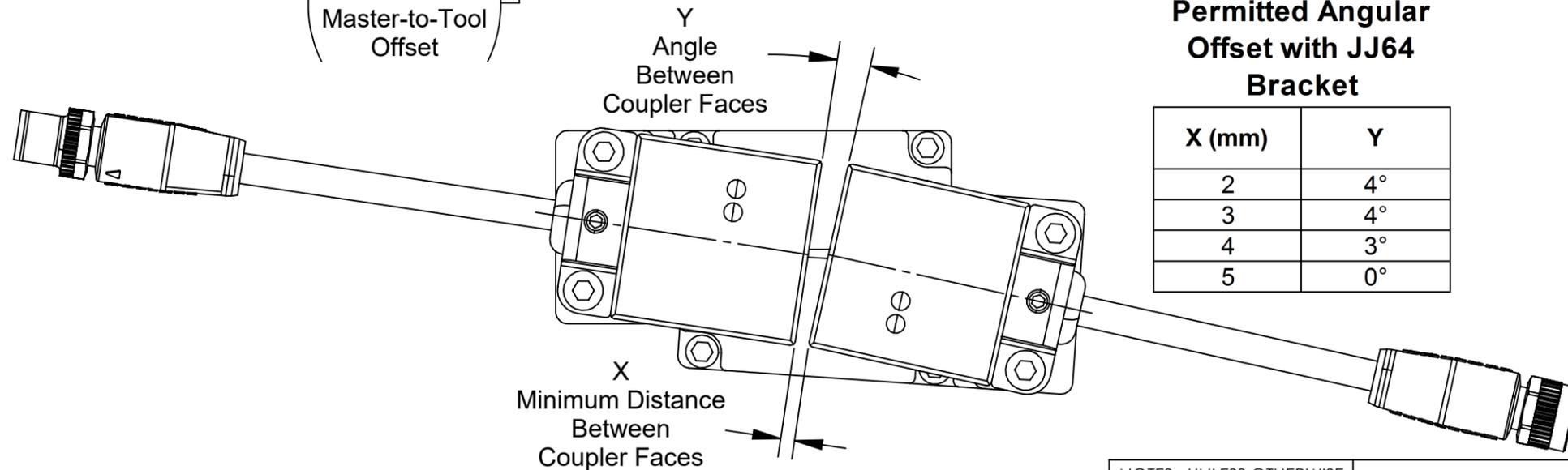
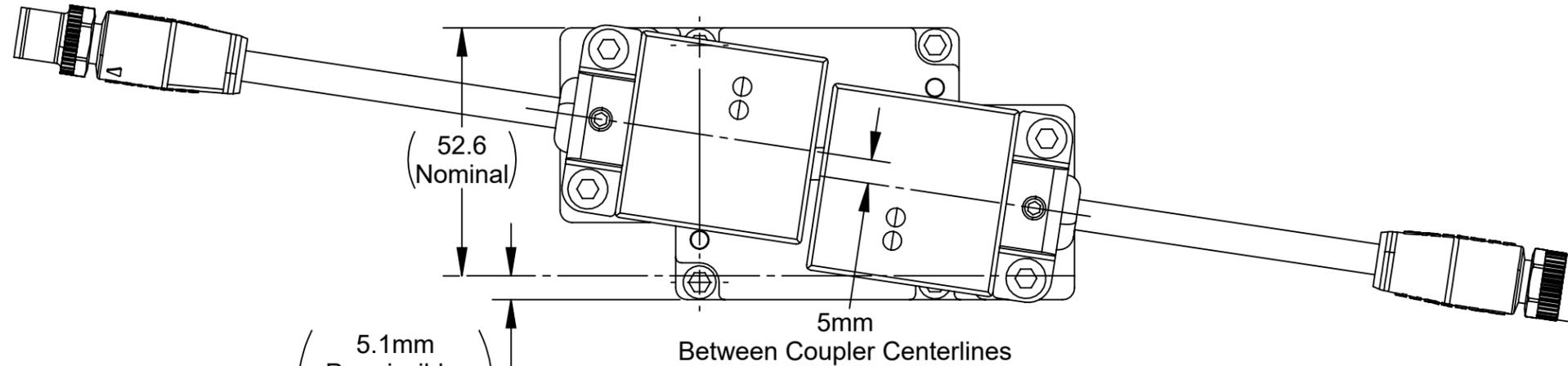
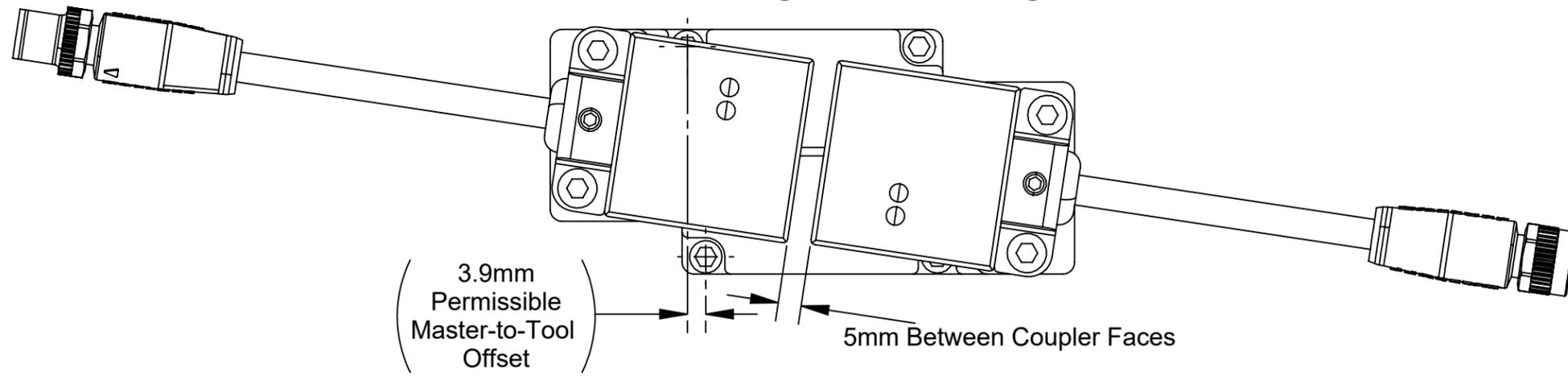
CHECKED BY: D. Simons, 8/31/2020

PROJECT # 200824-1 SHEET 3 OF 4

TITLE
Balluff-Labeled Base Inductive Coupler Master Module, PNP-Compatible, 8X Signal Pass Thru with 0.2m Pigtail Male M12 12-Pin Connector

SCALE	SIZE	DRAWING NUMBER	REVISION
1:5	B	9630-20-NB8A	05

Maximum Linear and Angular Offset Misalignment Allowances



Permitted Angular Offset with JJ64 Bracket

X (mm)	Y
2	4°
3	4°
4	3°
5	0°

- Notes:
- The Inductive Modules are accurately secured to the JJ64 adapter plates. The JJ64 adapter plates are in turn accurately secured to the Tool Changer. Mis-alignment of the Inductive Modules can occur during the Tool Changer Pick and Drop process. The customer should ensure that the tool change process is performed and that alignment is maintained within the boundaries shown in the drawing view.
 - NOTE: The indicated misalignments may not be achievable on every tool changer configuration.

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, 11/16/20

CHECKED BY: D. Simons, 8/31/2020

PROJECT # 200824-1 SHEET 4 OF 4

TITLE
Balluff-Labeled Base Inductive Coupler Master Module, PNP-Compatible, 8X Signal Pass Thru with 0.2m Pigtail Male M12 12-Pin Connector

SCALE	SIZE	DRAWING NUMBER	REVISION
1:5	B	9630-20-NB8A	05