

REVISIONS				
REV	DESCRIPTION	DATE	GUARDIAN	APPROVED
-	-	-	-	-
A	ECN-C00362-1	OCT16/24	B. COPPING	K. LAMBIE

ORDERING CODE: **N D 9 - X N X X - 0 A**

SERIES, IX INDUSTRIAL
ETHERNET

A = A KEY FOR ETHERNET
B = B KEY

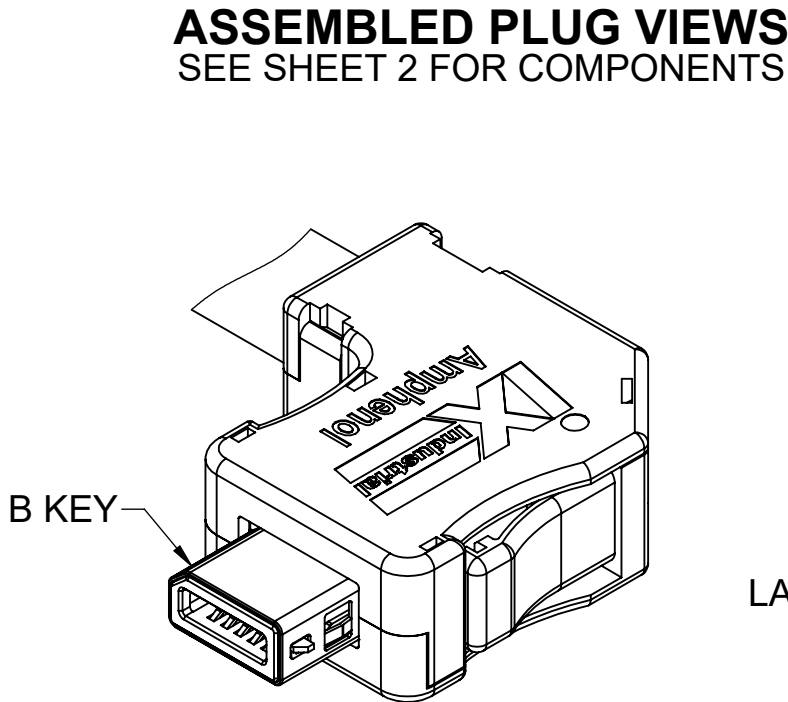
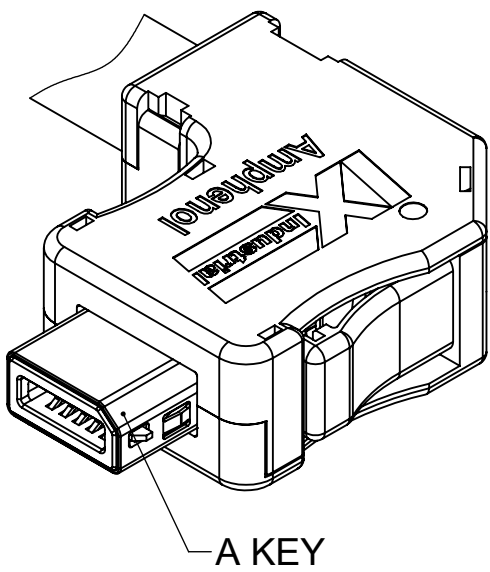
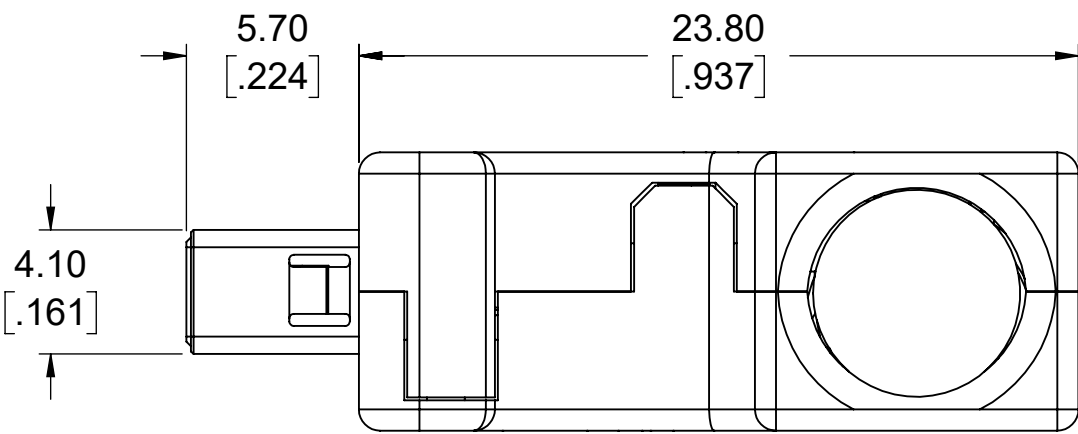
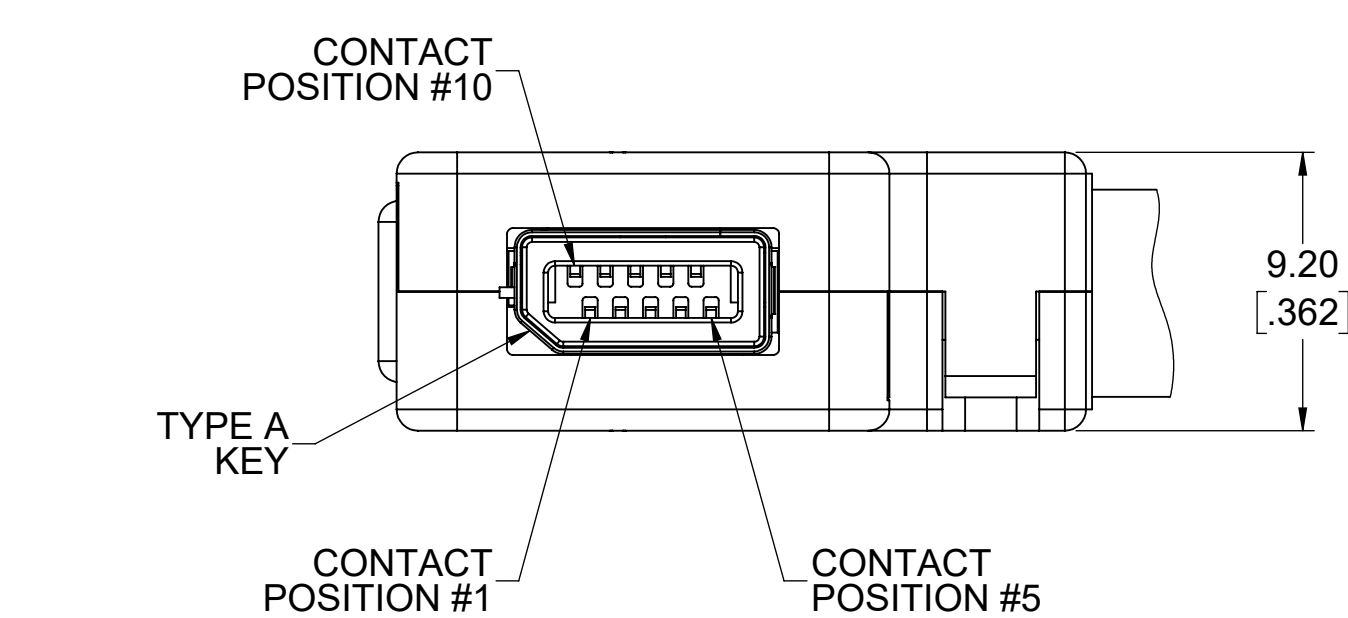
RIGHT ANGLE PLUG

CONTACT TERMINATION
5 = SOLDER PAD
6 = IDC FOR 24-25 AWG WIRES
7 = IDC FOR 26-28 AWG WIRES

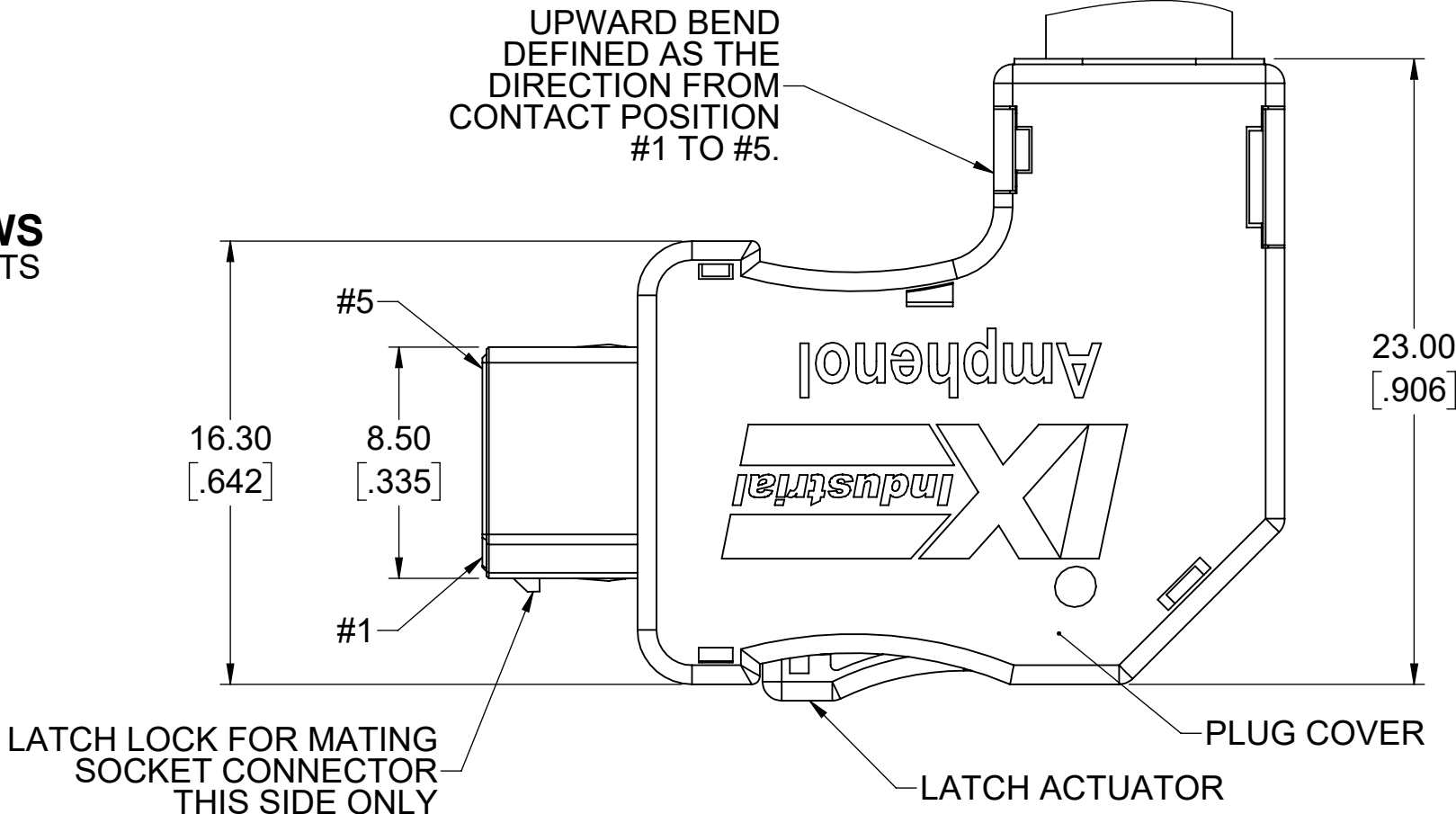
MATING AREA PLATING
1 = GOLD FLASH
2 = 0.2µm (8µ") GOLD
3 = 0.76µm (30µ")
4 = 1.27µm (50µ") GOLD
7 = 0.76µm (30µ") PALLADIUM NICKEL
WITH GOLD FLASH

STANDARD

CABLE EXIT DIRECTION
A = UPWARD BEND



ASSEMBLED PLUG VIEWS
SEE SHEET 2 FOR COMPONENTS



NOTES:

- MATERIAL: RoHS COMPLIANT PER EU DIRECTIVE 2011/65/EU AND AMENDMENTS.
 - SHIELDS: STAINLESS STEEL, NICKEL PLATED
 - INSERTS: GLASS REINFORCED ENGINEERING THERMOPLASTIC, UL 94V-0, BLACK
 - SIDE COVERS & IDC GUIDES: POLYCARBONATE UL 94V-0, COVER BLACK, GUIDES CLEAR (WITH YELLOW TINT FOR 24-25 AWG SIZE)
 - CONTACTS: PHOSPHOR BRONZE WITH MATING AREA PLATING PER ORDERING CODE AND MATTE TIN ON THE SOLDER OR IDC TERMINALS. OVERALL UNDERPLATING 1.27µm (50µ") MINIMUM NICKEL.
- DESIGNED TO CONFORM TO REQUIREMENTS OF IEC 61076 PART 3-124 SPECIFICATION. THE TYPE A KEY FEATURE SHOWN IS INTENDED FOR USE WITH ETHERNET APPLICATIONS, EITHER 10/100 MBit/S OR 1 TO 10 GBit/S (CAT 5e, 6 & 6A). THE B KEY IS INTENDED FOR OTHER APPLICATIONS BUT CAN BE USED FOR ETHERNET IF DESIRED.
- CURRENT RATING: 1.5 AMPERES (1.25 AMPERE RATING IF PLUG TERMINATED WITH 28 AWG WIRE) VOLTAGE RATING: 50V AC rms OR 60V DC
- OPERATING TEMPERATURE -55° TO +105°C.
- DIELECTRIC WITHSTANDING VOLTAGE: 500V DC
- CONTACT RESISTANCE: 30 MILLIOHMS MAXIMUM, INITIAL.
- INSULATION RESISTANCE: 500 MEGOHMS MINIMUM.
- MATING & UNMATING FORCE: 25N (5.6 lbf) MAXIMUM.
- CUSTOMER TO CONFIRM THAT ANY PROCESS CLEANERS USED NEAR THE SIDE COVERS OR IDC GUIDES TO BE POLYCARBONATE COMPATIBLE.



UNLESS SPECIFIED OTHERWISE	DRAWN B. COPPING	OCT16/24
PRIMARY UNITS MILLIMETRES	CHECKED -	-
SECONDARY INCHES	M.E. APP'D -	-
REFERENCE IN PARENTHESES	Q.A. APP'D -	-
GENERAL TOLERANCES	DWG APP'D K. LAMBIE	OCT16/24
1 DECIMAL PLACE	ENG NO.	EAR 15000
2 DECIMAL PLACES ±0.15	RELEASE STATE	RELEASED
3 DECIMAL PLACES	THIRD ANGLE PROJECTION	DO NOT SCALE DRAWING
ANGULAR DEGREES		

Amphenol Canada Corp.

Commercial Products

IX INDUSTRIAL ETHERNET, RIGHT
ANGLE PLUG, A & B KEY, CABLE
TERMINATION OPTIONS, UPWARD
CABLE EXIT, RoHS COMPLIANT

P-ND9-XNXX-0A

DWG. NO.				REV A
P-ND9-XNXX-0A				
CODE ID NO.	03554	DWG SIZE: C	SCALE: 1:1	SHEET 1 OF 2

RECOMMENDED CABLE SPECIFICATIONS				
ITEMS		IDC 26 - 28 AWG	IDC 24 - 25 AWG	SOLDER PAD
CONDUCTORS	SIZE	26 - 28 AWG	24 - 25 AWG	22 - 28 AWG
	STRANDS	7 STRANDS PER WIRE		-
	MATERIAL	ANNEALED COPPER WIRE		-
INSULATION OUTSIDE DIAMETER		Ø 0.95 - 1.05mm (Ø .037 - .041")	Ø 1.10 - 1.25mm (Ø .043 - .049")	Ø 1.55mm MAX (Ø .061" MAX)
BRAIDED SHIELD		TIN PLATED		
JACKET OUTSIDE DIAMETER		Ø 6.30 - 7.20mm (Ø .248 - .283")		

CONNECTOR PIN ASSIGNMENT (IF USED FOR ETHERNET)				
POSITION NUMBER	PIN ASSIGNMENT 10 OR 100 MBit/S ETHERNET	PIN ASSIGNMENT 1, 2.5, 5 OR 10 GBit/S ETHERNET	WIRE COLOUR (TIA/EIA 568-A)	WIRE COLOUR (TIA/EIA 568-B)
1	TX +	BI_DA +	WHITE/GREEN	WHITE/ORANGE
2	TX -	BI_DA -	GREEN	ORANGE
3	NOT USED	-	-	-
4	NOT USED	BI_DC +	BLUE	BLUE
5	NOT USED	BI_DC -	WHITE/BLUE	WHITE/BLUE
6	RX +	BI_DB +	WHITE/ORANGE	WHITE/GREEN
7	RX -	BI_DB -	ORANGE	GREEN
8	NOT USED	-	-	-
9	NOT USED	BI_DD +	WHITE/BROWN	WHITE/BROWN
10	NOT USED	BI_DD -	BROWN	BROWN

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A	ECN-C00362-1	OCT16/24	B. COPPING	K. LAMBIE

PLUG KIT COMPONENTS

ND9-AN5X-0A OR ND9-BN5X-0A
SOLDER PAD TERMINATION

SIDE COVER

SOLDER PAD
INSERT ASSEMBLY

FRONT SHIELD

A KEY SHOWN IN
THESE VIEWS

SIDE COVER

0.40 REF

[.016]

PLUG COVER TO
RECEPTACLE
SHIELD

PANEL

PLUG MATES TO
ALL STYLES OF IX
INDUSTRIAL
RECEPTACLES.
ND9-AS2X-00
RECEPTACLE
SHOWN

PCB

2.00

[.079]

REF

MATED VIEW
SCALE 4:1

ND9-AN6X-0A & ND9-AN7X-0A,
ND9-BN6X-0A & ND9-BN7X-0A
IDC CONTACT TERMINATION

SIDE COVER

IDC WIRE GUIDE

IDC INSERT ASSEMBLY

FRONT SHIELD

A KEY SHOWN IN
THESE VIEWS

REAR CRIMP
SHIELD

IDC WIRE GUIDE

SIDE COVER



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2 DECIMAL PLACES ±0.15	RELEASE STATE	RELEASED	
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Amphenol Canada Corp.

Commercial Products

IX INDUSTRIAL ETHERNET, RIGHT
ANGLE PLUG, A & B KEY, CABLE
TERMINATION OPTIONS, UPWARD
CABLE EXIT, RoHS COMPLIANT

P-ND9-XNXX-0A

REV
A

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CODE ID NO.	03554	DWG SIZE:	C	SCALE:	3:1	SHEET	2 OF 2
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