

# A - X5000

**Material**  
0 = Stainless Steel - 3/4" NPT  
2 = Stainless Steel - M25

**Bluetooth**  
0 = Yes  
1 = No

**Place Holder**  
0 = Future Use

**Sensor #2**  
Check Sensor Label  
See Read First

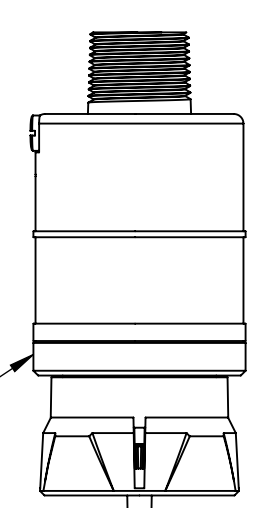
**Approvals**  
F = FM/CSA  
A = ATEX/IEC

**Outputs**  
0 = Analog/HART  
1 = Analog/HART/Relays

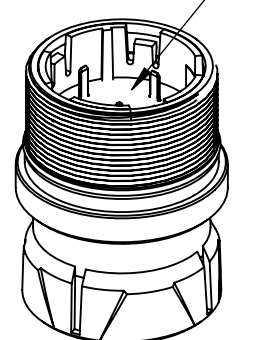
**Sensor #1**  
Check Sensor Label  
See Read First

**Tag**  
0 = None  
1 = Stainless Steel affixed tag

### Read First



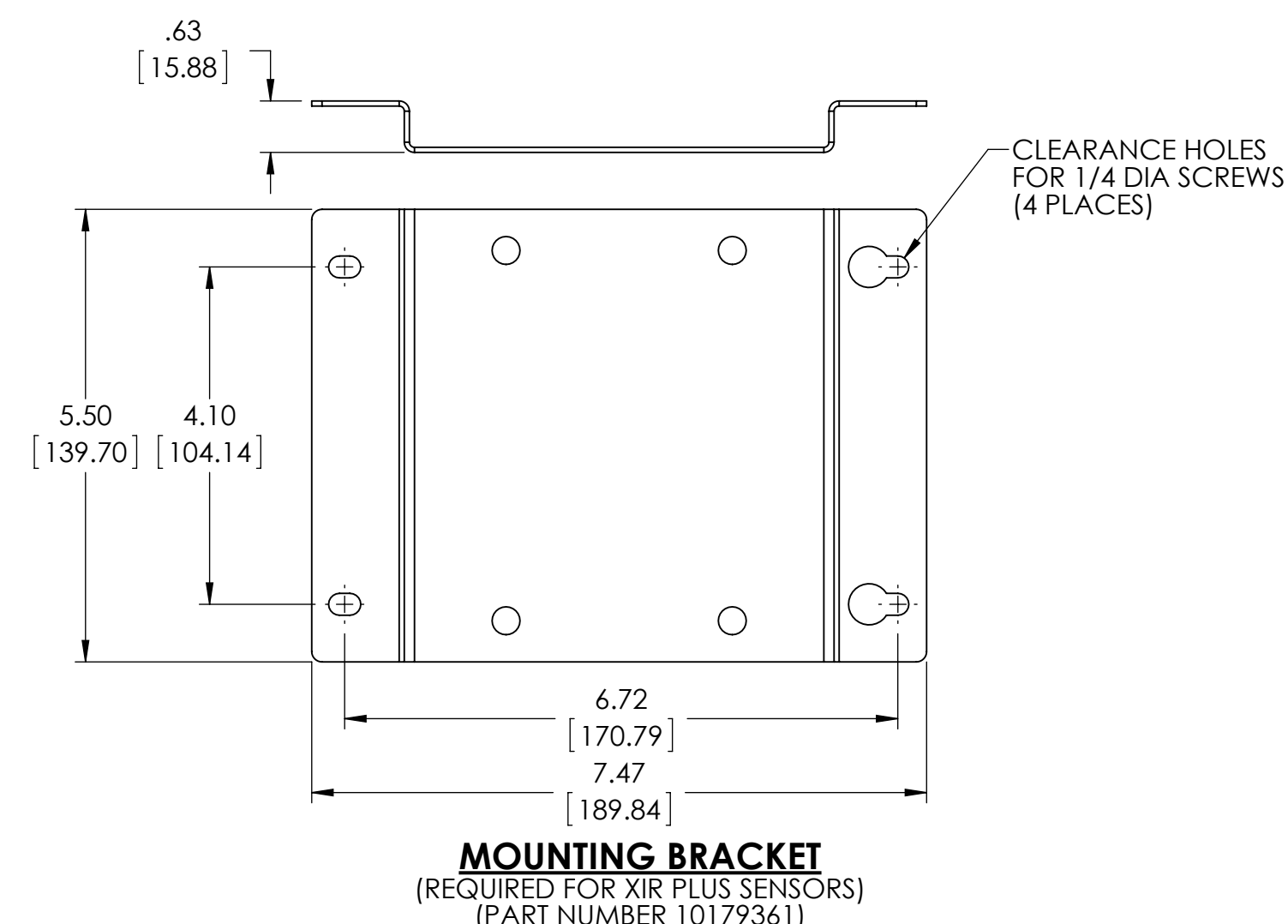
UNSCREW  
SENSOR ASSEMBLY



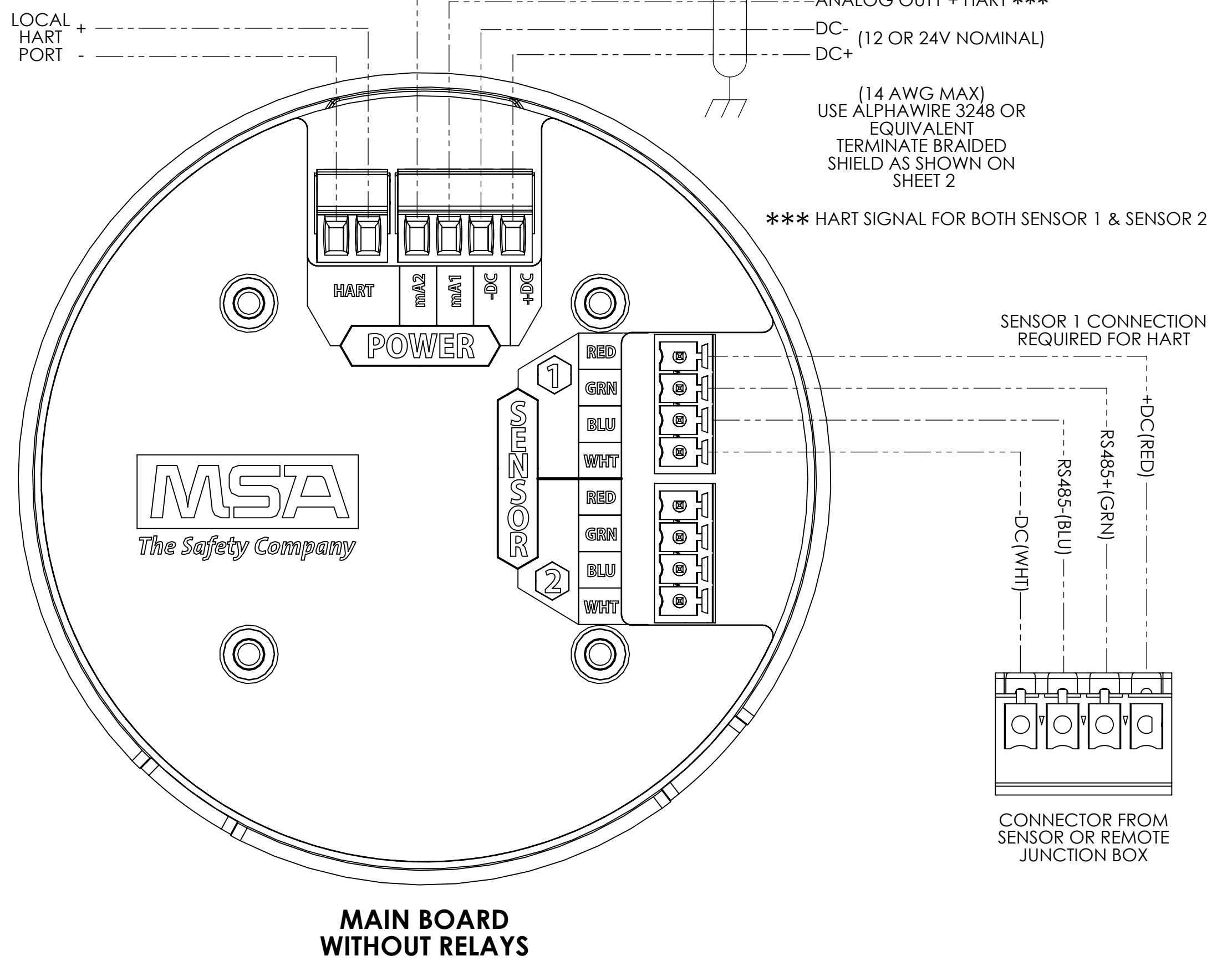
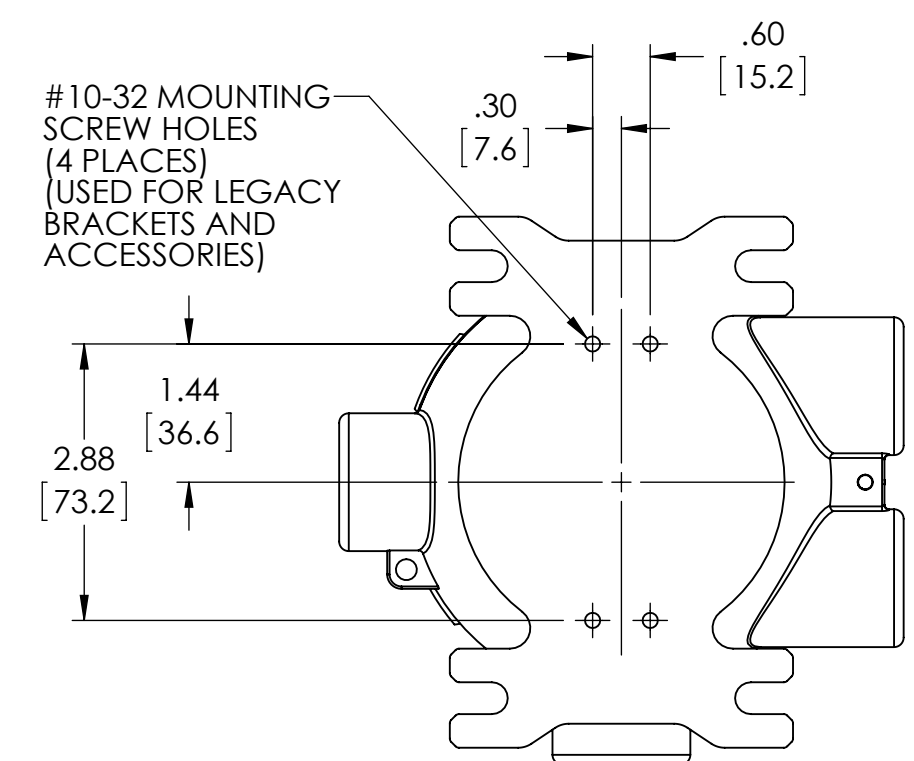
CHECK SENSOR LABEL  
FOR  
GAS TYPE, RANGE AND  
ATO ORDERING NUMBER

GAS NAME AND RANGE  
REF A-5K-SENS-X-X-X-X  
SN: XXXXXX

EXAMPLE SENSOR ATO LABEL

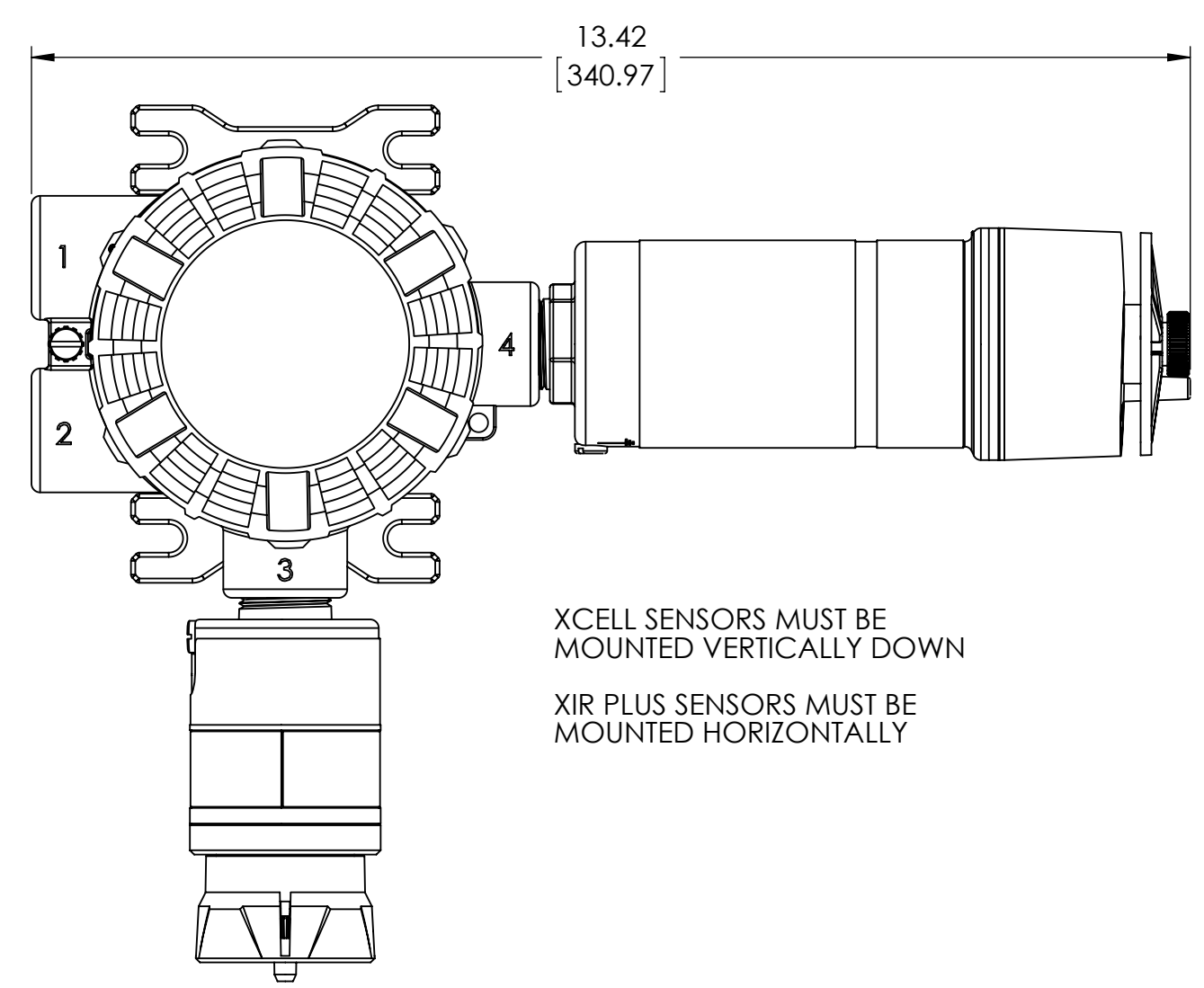
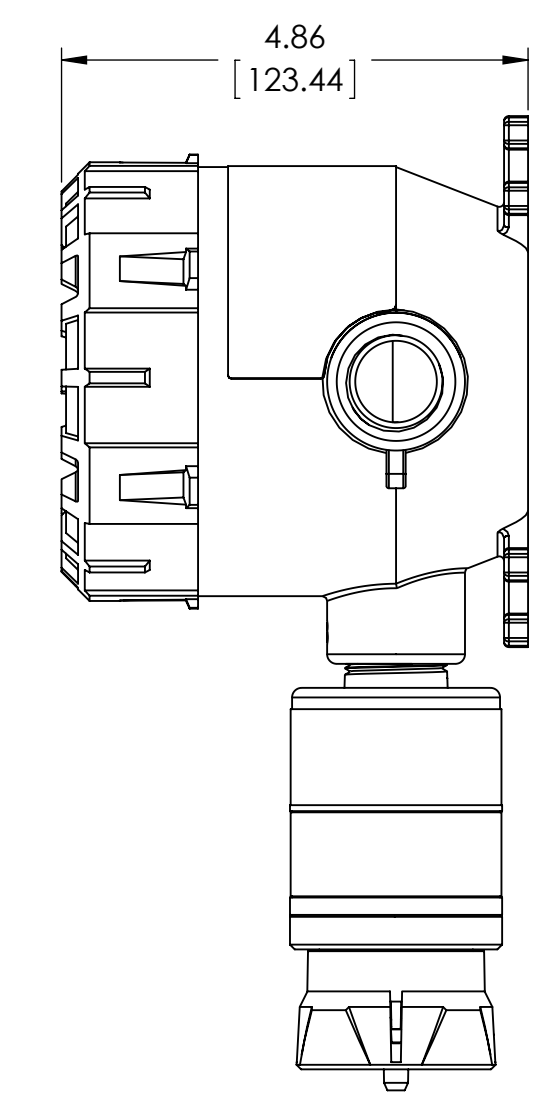
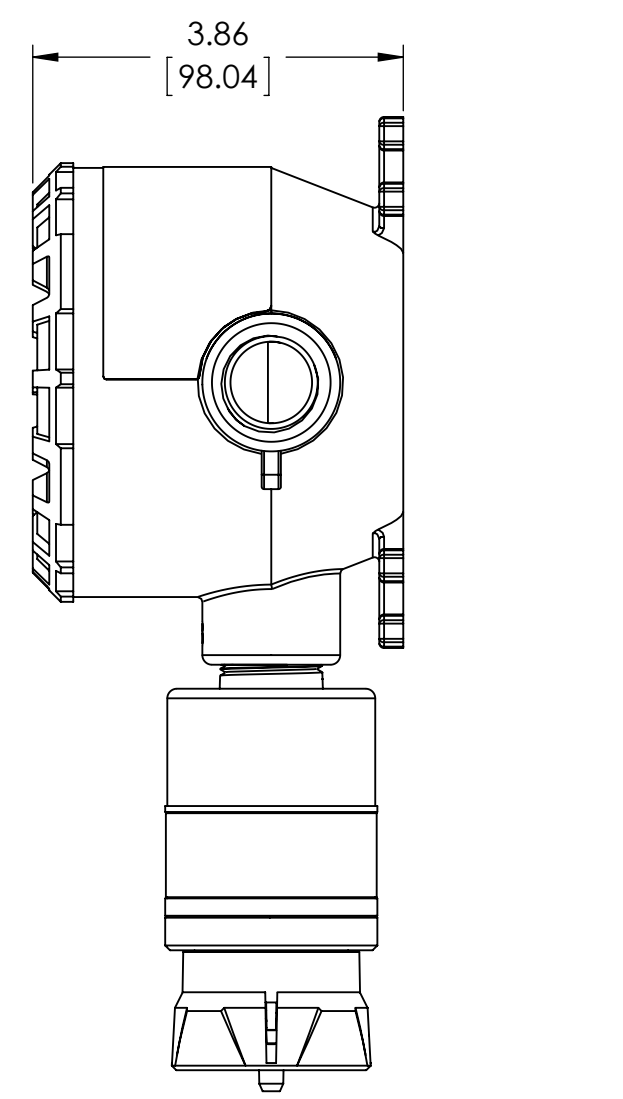
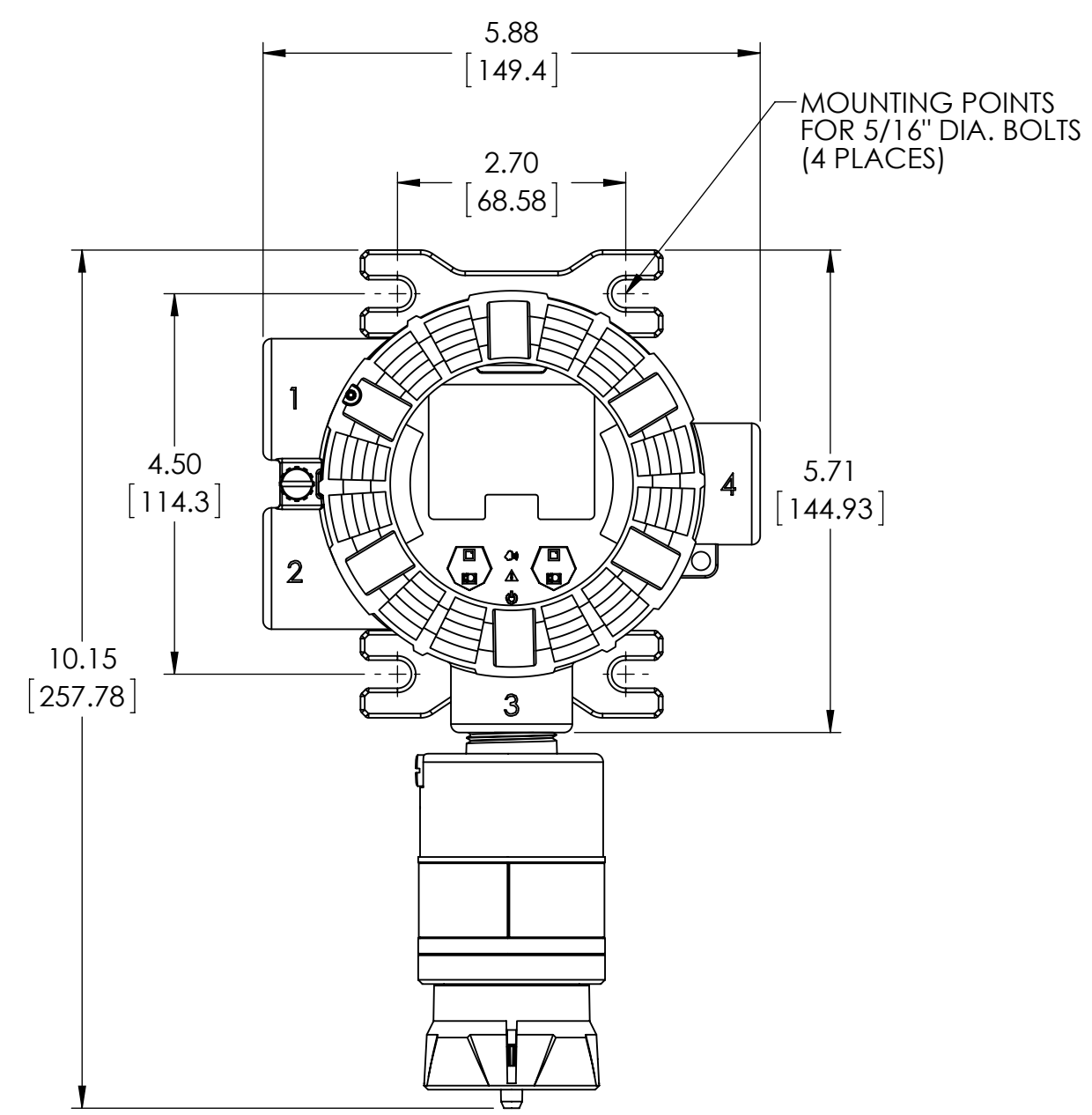


CUSTOMER \_\_\_\_\_  
P.O. NO. \_\_\_\_\_  
MSA NO. \_\_\_\_\_  
LOCATION \_\_\_\_\_  
TAG NO. \_\_\_\_\_  
TOTAL NO. OF UNITS \_\_\_\_\_



MAXIMUM WIRE LENGTH TO MAIN TRANSMITTER WITH LOCAL MOUNTED SENSOR(S)									
Sensor Mounting	Sensor 1	Sensor 2	Nominal Max Power (W)	Max Distance (ft)					
				12 VDC Supply			24 VDC Supply		
				16 AWG	14 AWG	12 AWG	16 AWG	14 AWG	12 AWG
Locally Mounted	Toxic	None	2.8	330	530	800	3410	5340	8630
		Toxic	3.6	300	480	790	3200	5095	8095
		Catalytic	5.3	180	320	515	2270	3671	5890
	Catalytic	XIR PLUS	7	131	237	410	1680	2735	4400
		None	5.5	230	370	565	2370	3771	5990
		Catalytic	10.6	170	270	430	1752	2790	4430
XIR PLUS	XIR PLUS	9.6	170	240	350	1285	1990	3100	
	None	6.7	181	287	460	1780	2835	4500	
	XIR PLUS	11.6	120	190	300	1185	1890	3000	

NOTES:  
1. DIMENSIONS SHOWN ARE IN INCHES [MILLIMETERS]  
2. MAIN HOUSING AND REMOTE JUNCTION BOX HAVE THE SAME DIMENSIONS.



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MSA STANDARD SHOP PRACTICES APPLY

JOB NO. 30012996 PH0705

APPROVAL AGENCY CODE: N | NIOSH ATTR. DOC.:

DRAWN BY: WJE DATE: 9-29-2016

CHECKED BY: C.STARTA 3-28-2017

PROJECT ENGR. N.CICCONE 3-28-2017

QUALITY ASSURANCE J.DANNHARDT 3-28-2017

MANUFACTURING M.ZIRNSAK 3-28-2017

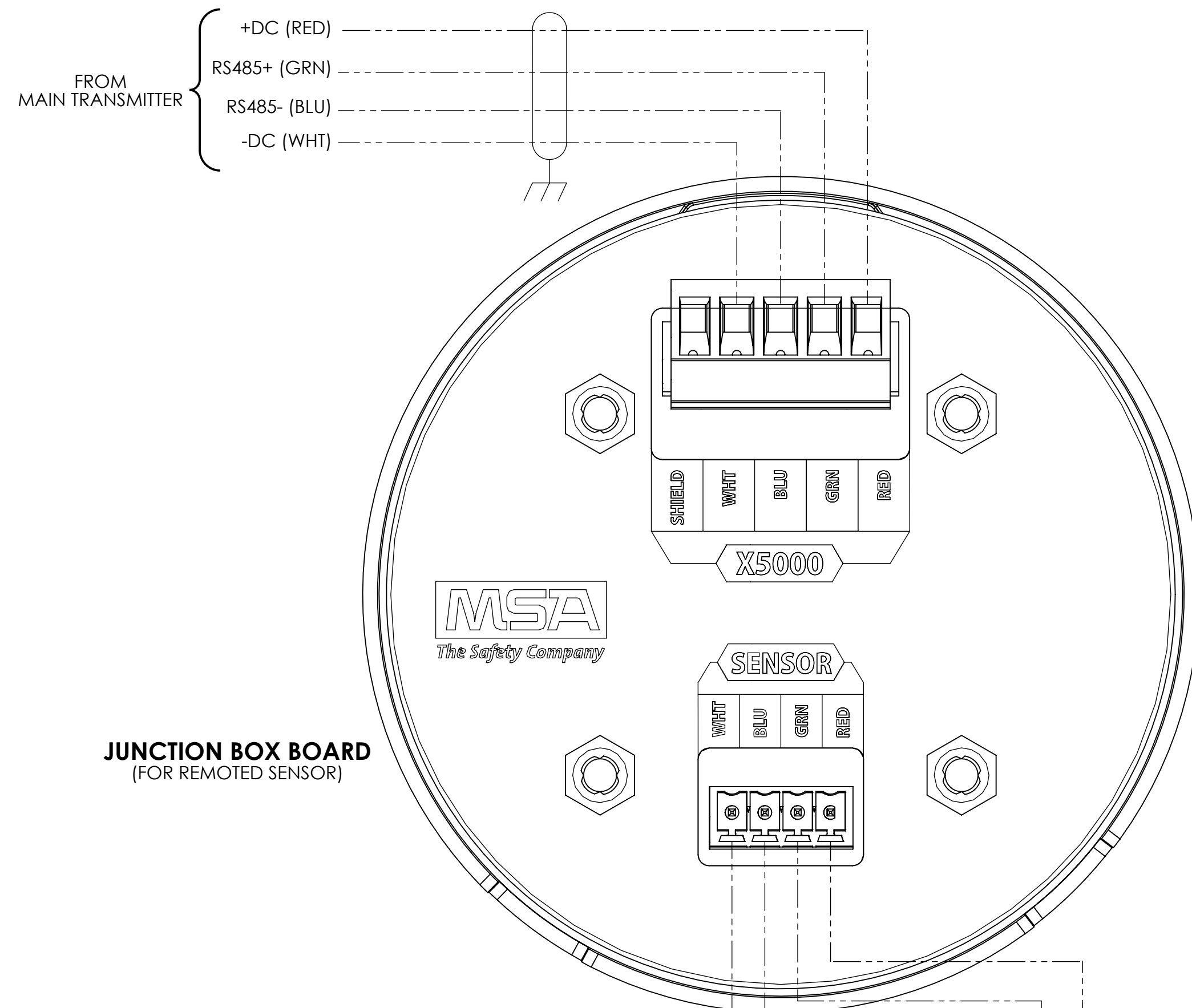
CADD REF: SK3015-1051

SCALE: 1:2

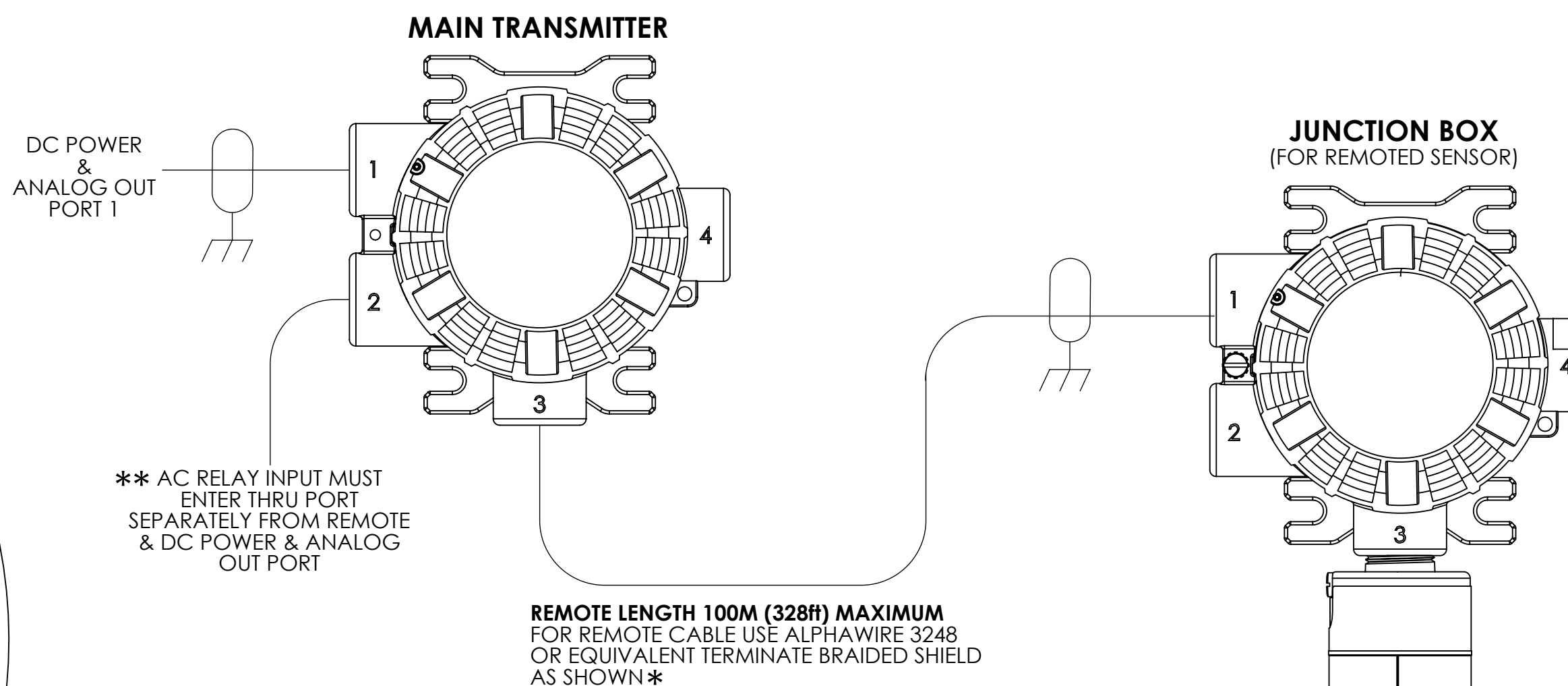
**SK3015-1051**

SHEET 1 OF 3

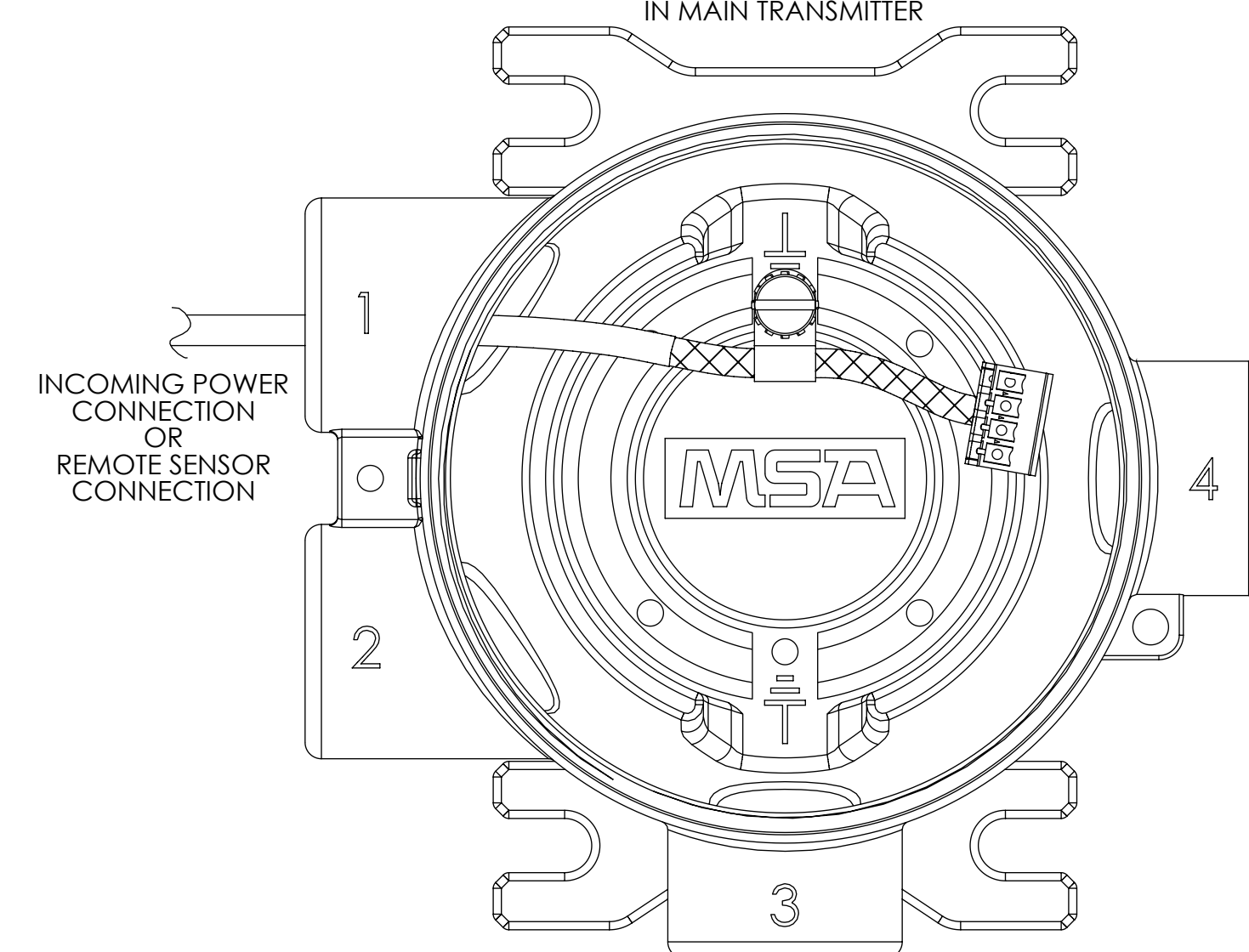
REVISIONS	
REVISION	0
LIFECYCLE STATE	Production



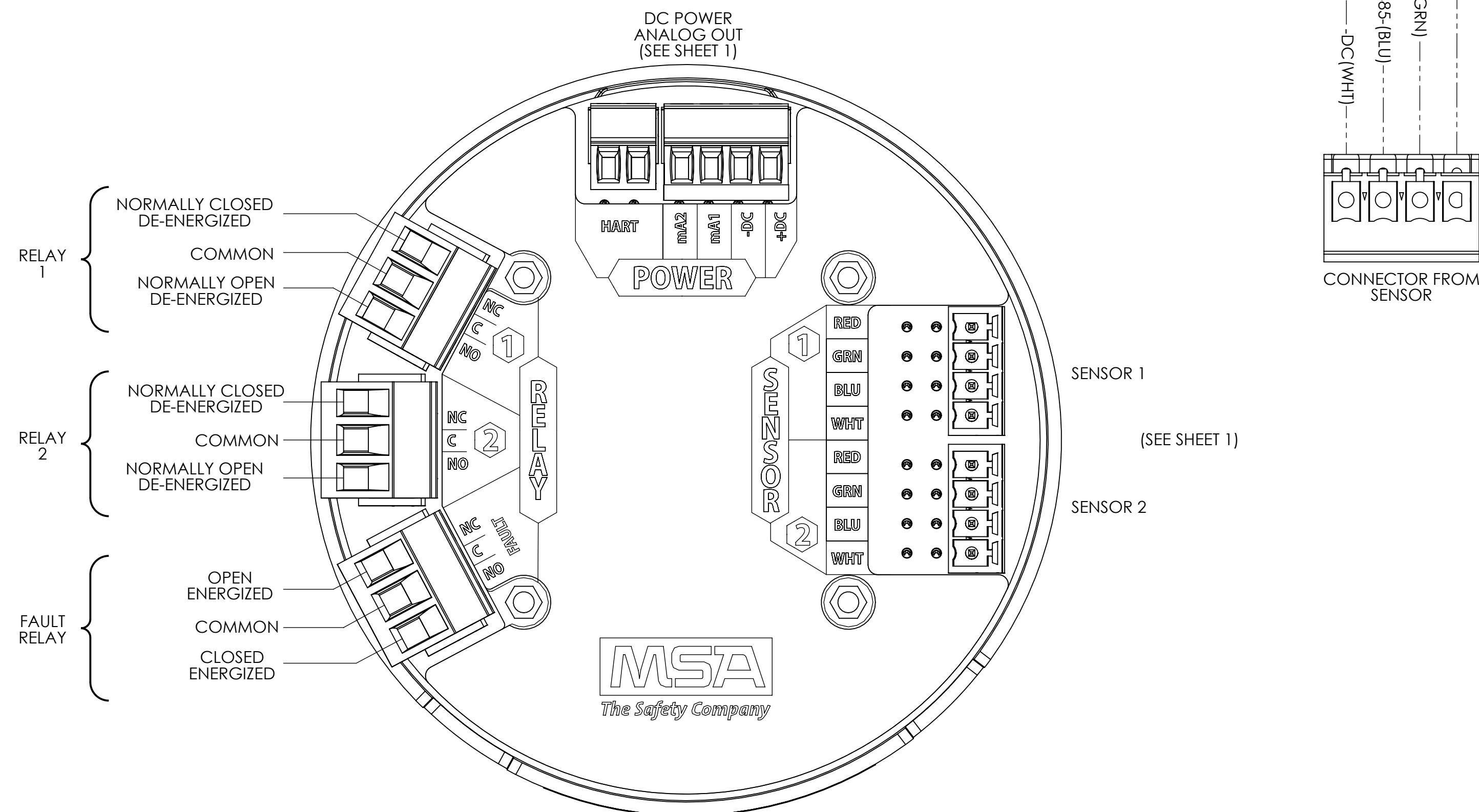
**JUNCTION BOX BOARD**  
(FOR REMOTED SENSOR)



**\* BRAIDED SHIELD TERMINATION**  
IN MAIN TRANSMITTER



**MAIN BOARD WITH RELAY OPTION**



**MAXIMUM WIRE LENGTH TO MAIN TRANSMITTER WITH 1 REMOTED SENSOR**

Sensor Mounting	Sensor 1	Sensor 2	Nominal Max Power (W)	Max Distance (ft)					
				12 VDC Supply			24 VDC Supply		
				16 AWG	14 AWG	12 AWG	16 AWG	14 AWG	12 AWG
One Sensor Remote (328 ft max)	Toxic	None	2.8	290	470	750	3116	4963	7890
		Toxic	3.6	290	470	750	3116	4963	7890
		Catalytic	5.3	90	190	330	1682	2705	4322
		XIR Plus	7	80	80	180	1110	1830	2920
Catalytic	None	5.5	90	190	330	1682	2705	4322	
		Catalytic	10.6	90	190	330	1682	2705	4322
		XIR Plus	9.6	8	80	180	1110	1830	2920
		XIR Plus	11.6	8	80	180	1110	1830	2920

LIFECYCLE STATE: **Production** REVISION: **0**

**MSA**  
The Safety Company  
www.MSAafety.com

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MSA STANDARD SHOP PRACTICES APPLY

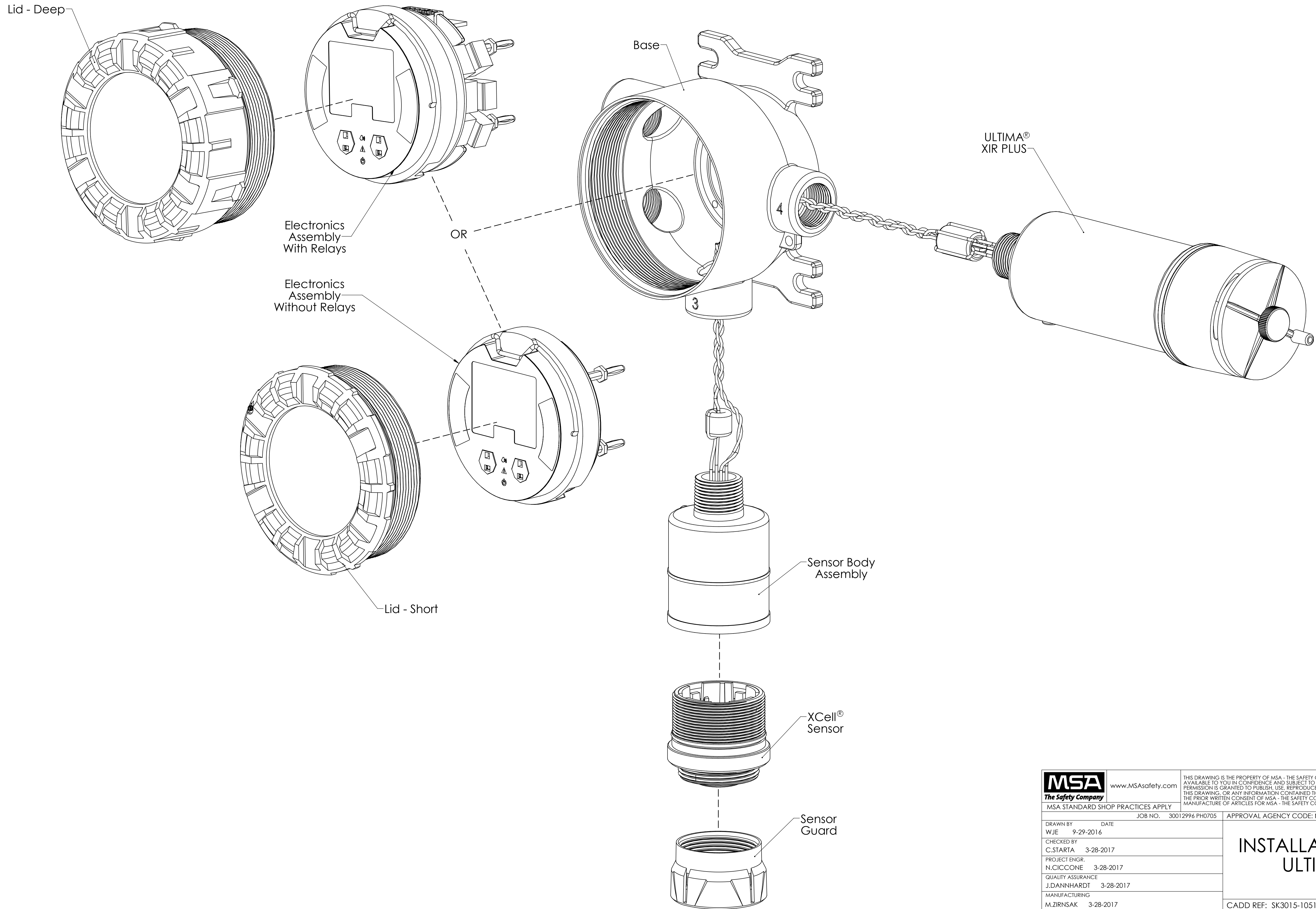
JOB NO. 30012996 PH0705 APPROVAL AGENCY CODE: N | NIOSH ATTR. DOC.:

DRAWN BY: WJE DATE: 9-29-2016  
 CHECKED BY: C.STARTA 3-28-2017  
 PROJECT ENGR: N.CICCONE 3-28-2017  
 QUALITY ASSURANCE: J.DANNHARDT 3-28-2017  
 MANUFACTURING: M.ZIRNSAK 3-28-2017

**INSTALLATION OUTLINE, ULTIMA X5000**

CADD REF: SK3015-1051 SCALE: 1:2

SHEET SIZE: **D SK3015-1051** SHEET 2 OF 3



LIFECYCLE STATE	REVISION

	<a href="http://www.MSAafety.com">www.MSAafety.com</a>	<small>THIS DRAWING IS THE PROPERTY OF MSA - THE SAFETY COMPANY AND IS MADE AVAILABLE TO YOU IN CONFIDENCE AND SUBJECT TO THE FOLLOWING: NO PERMISSION IS GRANTED TO PUBLISH, USE, REPRODUCE, TRANSMIT OR DISCLOSE THIS DRAWING, OR ANY INFORMATION CONTAINED THEREIN TO OTHERS WITHOUT THE PRIOR WRITTEN CONSENT OF MSA - THE SAFETY COMPANY EXCEPT FOR THE MANUFACTURE OF ARTICLES FOR MSA - THE SAFETY COMPANY.</small>	 THIRD-ANGLE PROJECTION	<small>DO NOT SCALE DWG.</small>
	<small>MSA STANDARD SHOP PRACTICES APPLY</small>			
<small>DRAWN BY</small> WJE	<small>DATE</small> 9-29-2016	<small>JOB NO.</small> 30012996 PH0705	<small>APPROVAL AGENCY CODE: N   NIOSH ATTR. DOC.:</small>	
<small>CHECKED BY</small> C.STARTA	<small>3-28-2017</small>	<small>PROJECT ENGR.</small> N.CICCONE	<h2 style="text-align: center;">INSTALLATION OUTLINE, ULTIMA X5000</h2>	
<small>QUALITY ASSURANCE</small> J.DANNHARDT	<small>3-28-2017</small>	<small>MANUFACTURING</small> M.ZIRNSAK	<small>3-28-2017</small>	<small>CADD REF: SK3015-1051</small>
<small>SHEET SIZE</small> <b>D</b>		<b>SK3015-1051</b>		<small>SHEET</small> 3 OF 3
<small>SCALE:</small> 1:2			<small>SHEET</small> 3 OF 3	