

**NON-HAZARDOUS LOCATION**

**HAZARDOUS LOCATION**

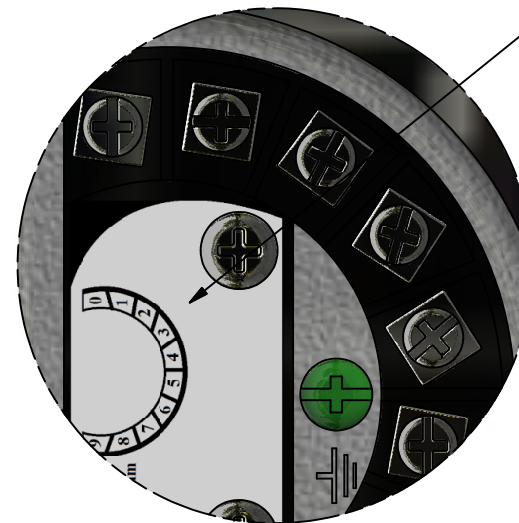
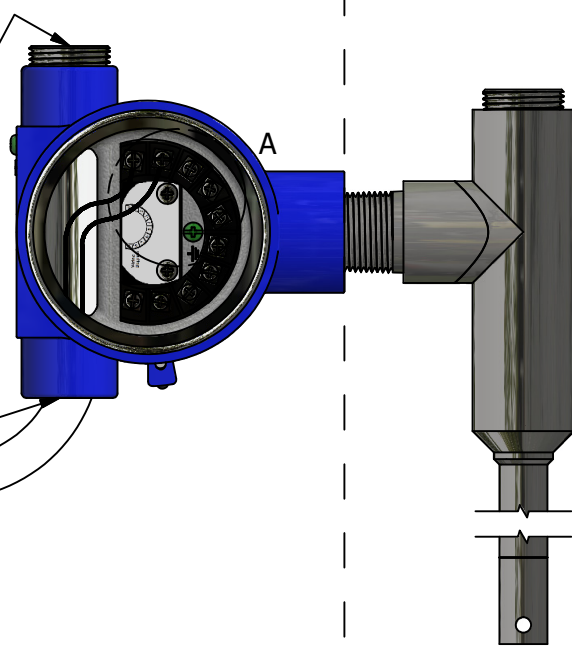
24 VDC (Um = 28VDC)  
COMMON -  
EARTH GROUND

APPROVED ISOLATOR BARRIER

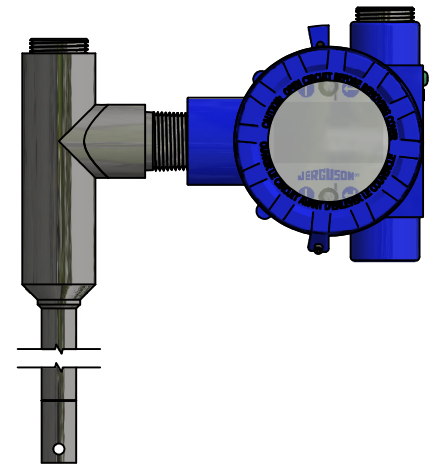
"Ex ia" CLASSIFICATION PORTION (HOUSING ONLY) ZONE 1

"Ex db" CLASSIFICATION PORTION (TEE/SENSOR ROD ONLY) ZONE 0

3/4-14 NPT EITHER SIDE



- 0 = (+) POS ] LOOP
- 1 = (-) NEG ]
- 2 = HART ]
- 3 = HART ]
- 4 = (+) POS ] TEST
- 5 = (-) NEG ]
- 6 = N/A ]
- 7 = N/A ]
- 8 = N/A ]
- 9 = N/A ]



**DETAIL A**

**PARAMETER**

**SPECIFICATION**

**LEVEL OUTPUT**  
MEASURED VARIABLE:  
OUTPUT:  
FULL RANGE:

LIQUID LEVEL, INTERFACE LEVEL  
4-20 mA, HART  
12" TO 360" [304.8mm TO 9144mm]

**GAUGE LOOP**  
INPUT VOLTAGE RANGE:  
REVERSE POLARITY PROTECTION:

12.5 TO 28VDC (12.5 V @ 20mA)  
SERIES DIODES

**ENTITY PARAMETERS:**

Ui = 28 VDC  
Ii = 0.093 A  
Pi = 0.650 W  
Ci = 0.41 µF  
Li = 12 µH

**TRANSIENT PROTECTION:**

STAGE 1: LINE-TO-GROUND SURGE SUPPRESSORS;  
STAGE 2: LINE-TO-LINE AND LINE-TO-GROUND TRANSIENT SUPPRESSORS: 1500 WATTS PEAK (10/1000 µSEC.)

**FIELD INSTALLATION**  
MOUNTING:  
WIRING:

ON SIDE OF MAGNETIC LEVEL GAGE VIA BRACKETS AND HOSE CLAMPS  
2-WIRE CONNECTION, SHIELDED, TWISTED PAIR, WITH OVERALL SHIELD TO SCREW TERMINALS THROUGH A 3/4 NPT CONDUIT OPENING. MIN 24 AWG/ MAX 16 AWG [.20mm<sup>2</sup>/1.31mm<sup>2</sup>]  
MAX CABLE LENGTH: SHIELDED TWISTED PAIR: 10,000 ft [3048 m]

**AGENCY APPROVALS**  
NORTH AMERICAN

Class I Div. 1 Groups C,D T4 IP66/TYPE 4X  
Class I Zone 1 AEx db ia IIB T4 Gb IP66/TYPE 4X  
C<sub>ES</sub> II 2G Ex db ia IIB T4 Gb IP66/TYPE 4X  
Ex db ia IIB T4 Gb IP66/TYPE 4X

**AMBIENT TEMP. RANGE**

-40°F [-40°C] ≤ Ta ≤ +140°F [+60°C]

**CERTIFICATE NUMBERS**

ATEX CERTIFICATE NUMBER:  
IECEx CERTIFICATE NUMBER:

ITS-I21ATEX28848X  
IECEx ETL 21.0003X

**CONTROL NUMBER AND STANDARDS:**

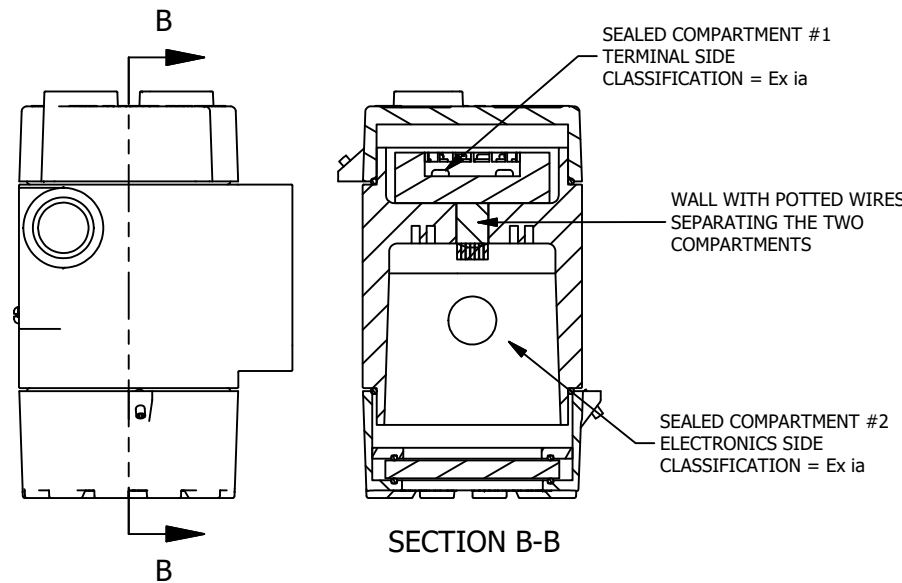
5014669  
CONFORMS TO UL STDS 913, 1203, 60079-0, 60079-1, & 60079-11  
CERTIFIED TO CSA STDS C22.2 #30, 60079-0, 60079-1, & 60079-11

**NOTES:**

- JMTG SHOWN.
- THIS DEVICE IS A LOOP (4/20mA) POWERED LIQUID LEVEL SENSOR. DESIGNED TO BE USED WITH MAGNET LEVEL GAGES OR MAGNETIC FLOAT SYSTEM.
- AGENCY CONTROLLED DOCUMENT.

**WARNINGS:**

- ALL NATIONAL AND LOCAL CODES AND REGULATIONS MUST BE ADHERED TO WHEN INSTALLING THE LEVEL INSTRUMENT IN A HAZARDOUS ENVIRONMENT.
- APPROVED Ex SEALING FITTING WITHIN 457mm (18") OF ENCLOSURE.
- WARNING: THE EQUIPMENT CONTAINS NON-METALLIC/PAINTED ENCLOSURE PARTS. TO PREVENT THE RISK OF ELECTROSTATIC SPARKING, THE NON-METALLIC/PAINTED SURFACES SHOULD ONLY BE CLEANED WITH A DAMP CLOTH.  
AVERTISSEMENT : LES ÉQUIPEMENTS CONTIENNENT DES PIÈCES DE BOÎTIERS NON MÉTALLIQUES/PEINTES. AFIN DE PRÉVENIR UN RISQUE D'ÉTINCELLES ÉLECTROSTATIQUE, LES SURFACES NON MÉTALLIQUES/PEINTES NE DEVRAIENT ÊTRE NETTOYÉES QU'AVEC UN TISSU HUMIDE.
- CABLES SHOULD BE RATED >9°F [5°C] ABOVE MAXIMUM AMBIENT TEMPERATURE.
- THE CONNECTION OF THE OUTSIDE GROUND LUG TO A SAFETY EARTHING GROUND SYSTEM IS REQUIRED.
- SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY.



REV	DATE	REVISION	BY
6	02/03/2021	ADD ATEX AND IECEx CERTIFICATION NUMBERS; RELEASE TO PRODUCTION ON CDC 21-021	TBL
5	01/06/2021	COMBINE THE TWO WARNINGS INTO ONE AND ADD IN FRENCH TRANSLATION; RE-ARRANGED NOTES INTO SECTIONS; ADDED ZONE LOCATIONS IN UPPER LEFT VIEW; ADDED Um, CHANGED Pd TO Pi: CDC 20-598	TBL
4	08/31/2020	CHANGE Ci VALUE FROM 0.40 TO 0.41. CHANGE ALL "T6" MARKINGS TO "T4". REMOVE TERMINAL SIDE ONLY NOTE IN UPPER LEFT VIEW AND CHANGE "db" TO "ia" IN SECTION B-B. CDC 20-445	TBL
3	08/27/2020	REMOVED NOTE ABOUT DISCONNECTING POWER BEFORE SERVICING. ADDED NOTE ABOUT DIFFERENT INGRESS PROTECTION SCENARIOS FOR SPECIAL CONDITIONS OF USE. CDC 20-441	TBL
2	08/19/2020	CHANGE UPPER LEFT VIEW TO SHOW THE WIRES GOING INTO TERMINAL BLOCK INSTEAD.	TBL
1	6/17/2020	UPDATED ENTITY PARAMETER Ci FROM 10nF TO 0.4µF. UPDATED ENTITY PARAMETER Li FROM 5µH TO 12µH. ADDED VIEWS DETAILING THE DUAL COMPARTMENTS. CDC 20-332	TBL
0	04/01/2020	DRAWING AT AGENCY FOR APPROVAL. CDC 20-330/TBL	TBL

**INSTALLATION:**

- INSPECT ALL PARTS FOR DAMAGE BEFORE INSTALLATION.
- SEE PRODUCT IOM DOCUMENTATION FOR MECHANICAL INSTALLATION.

**SPECIAL CONDITION OF USE:**

- IP66: ALL COVERS FULLY CLOSED.
- IP20: WHEN THE WINDOW COVER IS OPEN EXPOSING ELECTRONICS TO ATMOSPHERE. USER SHOULD TAKE PRECAUTIONS TO AVOID INGRESS THAT MIGHT DAMAGE PROTECTIONS WHEN COVER IS REMOVED.
- VOLTAGE NEEDS TO BE SUPPLIED THROUGH APPROVED HART® COMPATIBLE ISOLATOR BARRIER.
- TAKE PRECAUTION TO AVOID POSSIBLE IGNITION HAZARDS BY IMPACT OR FRICTION.

MANUFACTURED BY  
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**CONTROL AND INSTALLATION DRAWING:**  
**INTRINSICALLY SAFE: JMT**

**JERGUSON®**

<b>DRAWN:</b> TBL	<b>DRAWING NO.:</b>	<b>REV.:</b>
<b>CHECKED:</b> SS	<b>CI-35152-IS</b>	<b>6</b>
<b>DATE:</b> 04/01/2020		
<b>CDC:</b> 6 : 21-021 : TBL : 02/03/2021	<b>TOLERANCES (U.O.N.):</b>	
<b>MATERIAL:</b> PER ORDER	3 Decimal Places: ± .008"	
<b>PART NUMBER:</b>	2 Decimal Places: ± .015"	
<b>CI35152 IS</b>	Fractions: ± .025"	
	Machined Holes: ± .005"	
	Angles: ± 1°	
	Finish Marks: ≤ 125 RMS	
	(See PES-004 for details.)	