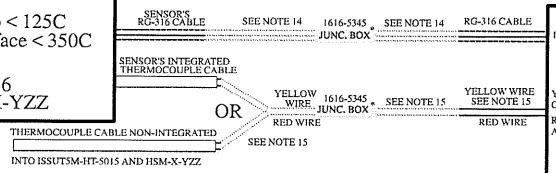
REV	NOTE	INITIAL	DATE
1	FIRST RELEASE	EPL	4/28/16
2	SEE ECN 6092	EPL	8/14/18
3	SEE ECN 6314	HZ	2/25/19
4	SEE CO 10177	RJF	7/2/2021

HAZARDOUS LOCATION

ISSUT5M-HT-5015
or HSM-X-YZZ**
HIGH TEMPERATURE
UT TRANSDUCER

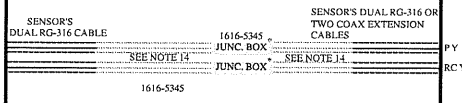
-55C < Tamb < 125C
-55C < Tsurface < 350C

** SEE NOTE 16
FOR HSM-X-YZZ



ISDUTXXM(XX=2 or 5)
UT TRANSDUCER

-55C < Tamb < 75C
-55C < Tsurface < 150C



* "JUNC. BOX" DENOTES A CHANNEL IN THE JUNCTION BOX.

IS/Class I, Division 1, Groups A, B, C and D;
AEx ia for Class I. Zone 0, Group IIC (US);
Ex ia for Class I, Zone 0, Group IIC (CA);
II 1 G Ex ia IIC T4 for -55°C < Ta < 70°C; IP66.
FM18US0162X; FM18CA0074X; FM15ATEX0043X

1616-5015-IP66
WIRELESS UT NODE

IS/Class I, Division 1, Groups A, B, C and D;
AEx ia for Class I, Zone 0, Group IIC (US);
Ex ia for Class I, Zone 0, Group IIC (CA);
T4 for -55°C < Ta < +70°C; IP66.

II 1 G Ex ia IIC T4 for -55°C < Ta < +70°C; IP66.
FM18US0162X;FM18CA0074X;FM15ATEX0043X

BATTERY
P/N E950-0036 (2 REQUIRED)

IS CERTIFIED PRODUCT

No Modifications permitted without reference to Approval Agency

NOTES:

1. THE INSTALLATION MUST CONFORM TO THE NATIONAL REQUIREMENTS OF THE COUNTRY OF USE.
2. THE 1616-5015-IP66 CAN BE USED WITH UP TO 4 UT TRANSDUCERS.
3. THE 1616-5015-IP66 MAY ONLY BE USED WITH THE ISSUT5M-HT-5015, HSM-X-YZZ AND ISDUTXXM UT TRANSDUCERS.
4. THE ISDUTXXM UT TRANSDUCERS CAN BE XX=2 FOR 2.25 MHz 0R XX=5 FOR 5 MHz.
5. THE 1616-5015-IP66 CAN ONLY BE USED WITH E950-0036 BATTERY. TWO BATTERIES ARE REQUIRED.
6. THE 1616-5015-IP66 HOUSING CONTAINS ALUMINUM AND IS CONSIDERED A POTENTIAL RISK. OF IGNITION BY IMPACT OR FRICTION. CARE MUST BE TAKEN INTO ACCOUNT DURING INSTALLATION AND USE TO PREVENT IMPACT AND FRICTION.
7. TO AVOID ELECTROSTATIC DISCHARGE CLEAN PLASTICTIC ANTENNA SURFCE WITH A DAMP CLOTH.
8. SERVICE AND REPAIR OF THE WIRELESS UT NODE MUST BE MADE BY AUHORIZED PERSONNEL AT A SERVICE CENTER.
9. SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINISIC SAFETY.
10. FOR P Y OR RC Y, Y = TRANSDUCER NUMBER 1, 2, 3 OR 4.
11. UNUSED GLAND CONNECTORS (OF EITHER 1616-5015 OR JUNCTION BOX ASSEMBLY 1616-5345) SHOULD BE PLUGGED WITH PLUG 1616-5310.
12. TIGHTEN EACH GLAND CONNECTOR TO 33 INCH-LBS TORQUE.
13. THE HSM-X-YXX TRANSDUCER CAN BE X=T FOR THE THERMOCOUPLE, N FOR NO THERMOCOUPLE Y=T=THREAED, N=NO THREADED, H=HEX, C=CUSTOM GEOMETRY ZZ=DELAY LINE LENGTH IN 0.1', MINIMUM LENGTH=1.0'.
14. THE COAX CABLE FROM ALL SENSORS CONNECTS TO THE MAIN UNIT 1616-5015 EITHER DIRECTLY OR INDIRECTLY VIA THE EXTENSION CABLES (THE LATTER CASE WHEN THE SENSOR IS FAR FROM THE MAIN UNIT). COAX CABLE CAN BE EXTENDED WITH 1616-4003-X EXTENSION CABLES. THE EXTENSION CABLES WILL COUPLE TO EACH OTHER INSIDE THE JUNCTION BOX 1616-5345.
15. THE TWO SENSORS ISSUT5M-HT-5015 AND HSM-X-YZZ COME IN TWO TYPES: WITH INTEGRATED THERMOCOUPLE CABLE AND WITHOUT INTEGRATED THERMOCOUPLE CABLE. IN THE LATTER CASE, A STANDALONE THERMOCOUPLE CABLE 1616-4004-YYZ IS USED INSTEAD. IN BOTH CASES, THE THERMOCOUPLE CABLE CONNECTS TO THE MAIN UNIT 1616-5015 EITHER DIRECTLY OR INDIRECTLY THROUGH THERMOCOUPLE EXTENSION CABLES 1616-4002 (AND THE JUNCTION BOXES INSIDE WHICH THE THERMOCOUPLE CABLES COUPLE TOGETHER).
16. THE FRONT FACE OF THE HIGH-TEMPERATURE SENSOR HSM-X-YZZ CAN BE PLACED ON SURFACES WITH TEMPERATURES AS HIGH AS 640C. BUT CARE MUST BE TAKEN THAT THE OTHER SENSOR PARTS EXPOSED TO THE GAS FOR WHICH THERE IS A CERTIFIED RATING (AS SHOWN ON THE DRAWING), WILL NOT HAVE A TEMPERATURE WHICH EXCEEDS WHAT MANDATED BY THE APPROVAL RATING.
17. THE STANDALONE THERMOCOUPLE CABLE 1616-4004-YYZ, AND ALSO THE COAX AND THERMOCOUPLE EXTENSION CABLES AS WELL AS THE JUNCTION BOX SHALL COMPLY WITH ALL THE APPLICABLE REQUIREMENTS FOR SIMPLE APPARATUS FROM ANSI/ISA 60079-11.

	SIGNATURE	DATE
DRAWN BY	ED LOWENHAR	
CHECKED		
ENGINEER	E.P.Lowenhar	6/5/19
PRODUCTN		
QUALITY		
OPTIONAL		

MISTRAS GROUP INC.
195 Clarksville Road
Princeton Junction, NJ 08550

TITLE: Wireless UT Thickness Node
CONTROL DRAWING

MODIFIED: 7/2/2021 BY: Richard Fustos

SIZE: B | DRAWING # 1616-6000

FILE: \\mistras\ALTIUM\1616_UT_Node\1616-6000_sh1616-6000_c.ASM | SHEET 1 OF 1