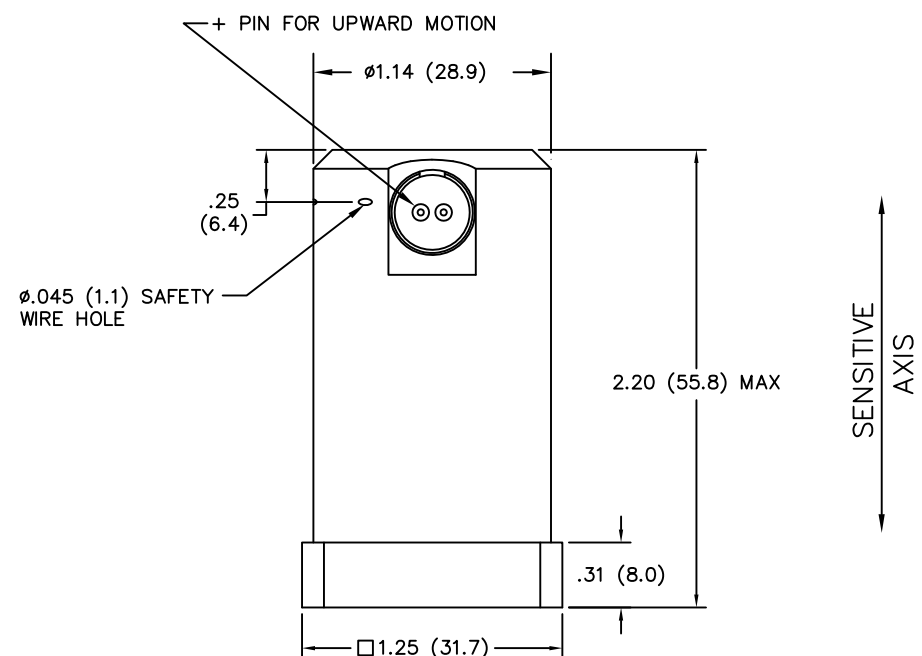
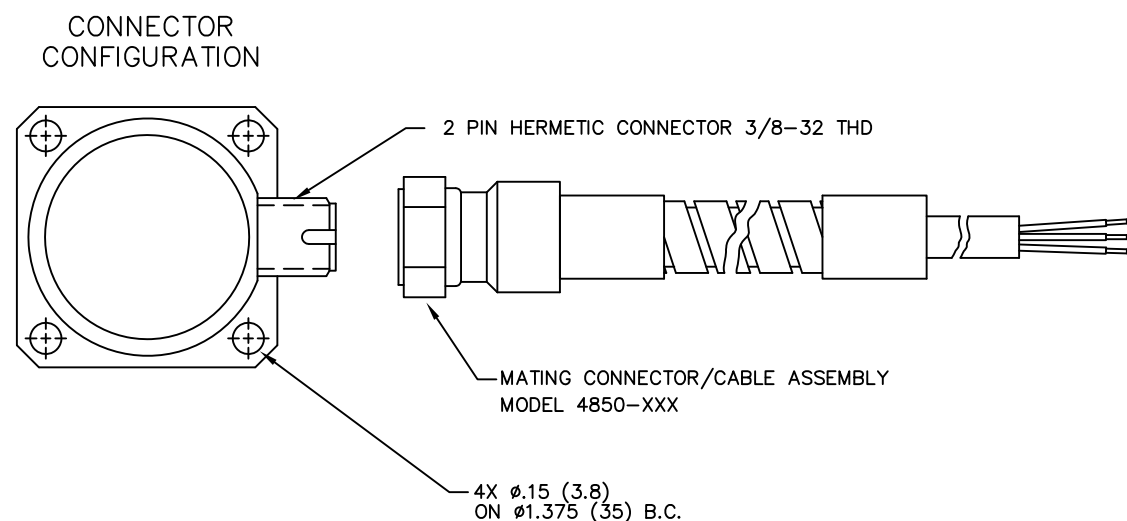
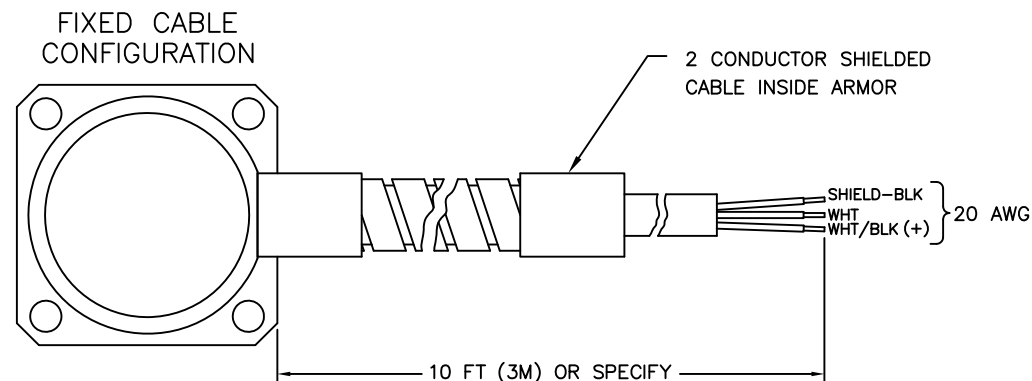


REVISIONS	
REV	OR/CHANGE
C	CR1078/SHOW REVISED HOUSING PROFILE
W	CR1231/REVISE PER AGENCY SPECS



SPECIFICATIONS

TYPE: SPRING SUSPENDED DUAL COIL BOBBIN IN PERMANENT MAGNETIC FIELD. NO SLIDING PARTS. ZERO FRICTION.

AXIS ORIENTATION: ANY

SENSITIVITY: SEE TABLE A (+/- 5% AT 100 Hz)

CROSS AXIS SENSITIVITY: LESS THAN 10%

EXTERNAL FIELD SENSITIVITY: < .005 IPS/GAUSS AT 60Hz

COIL RESISTANCE: (25°C) = SEE TABLE A

TEMPERATURE LIMITS: (SEE SHEET 3, NOTE 10.)

CONTINUOUS: -54°C TO 375°C

INTERMITTENT: -54°C TO 400°C

FREQUENCY RANGE: 15 Hz TO 2000 Hz

DISPLACEMENT LIMIT: 0.07 (1.8) PK - PK

SENSITIVITY SHIFT VS POSITION: 5% MAX.

SENSITIVITY VS TEMPERATURE: -.02%/°C, MAX.

ACCELERATION LIMITS: 0 TO 50 G's

DAMPING (ELECTRO-MAGNETIC):

AT 20°C: 0.8

AT 200°C: 0.55

AT 375°C: 0.4

CASE TO COIL ISOLATION:

AT 20°C: 100 MEGOHMS, MIN.

AT 375°C: 10 MEGOHMS MIN.

CASE MATERIAL: STAINLESS STEEL, HERMETIC SEAL

WEIGHT: 7.5 OZ. (.21 KG)

HAZARD RATING: SEE SHEET 3

SEE SHEETS 2 AND 3 FOR WIRING.

MODEL	SENSITIVITY	COIL RESISTANCE	TERMINATION
5485C-001-XXX *	105MV/IPS	73 OHMS	FIXED CABLE
5485C-002	105MV/IPS	73 OHMS	CONNECTOR
5485C-003-XXX *	145MV/IPS	102 OHMS	FIXED CABLE
5485C-004	145MV/IPS	102 OHMS	CONNECTOR
5485C-005-XXX *	200MV/IPS	135 OHMS	FIXED CABLE
5485C-006	200MV/IPS	135 OHMS	CONNECTOR
5485C-007-XXX *	150MV/IPS	105 OHMS	FIXED CABLE
5485C-008	150MV/IPS	105 OHMS	CONNECTOR

* -XXX INDICATES CABLE LENGTH IN FEET
(EX: -010 = 10 FEET)

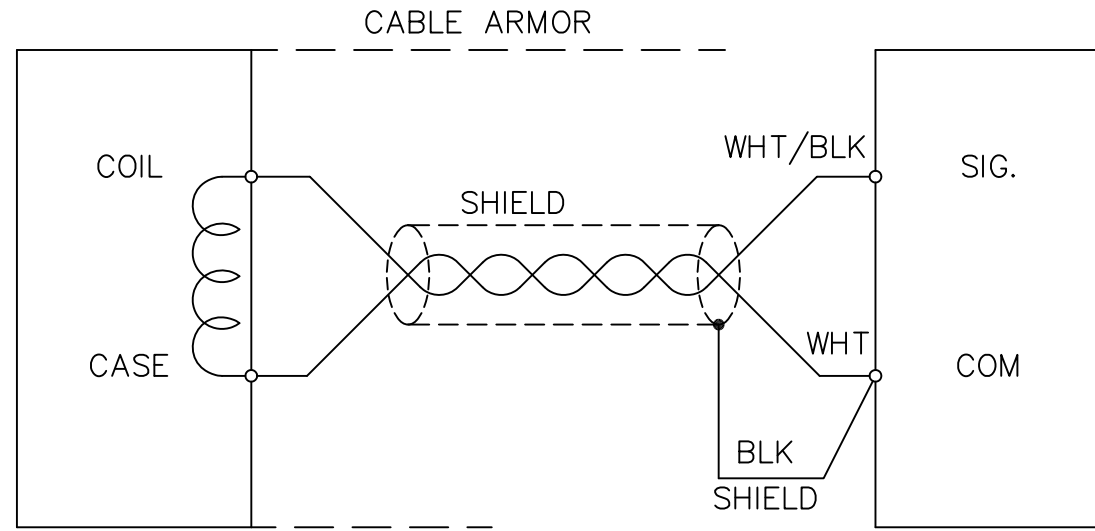
AGENCY APPROVED PRODUCT

DO NOT DEVIATE FROM DOCUMENTED CONSTRUCTION OR LISTED PARTS

MATERIAL:	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. ALL CORNERS BROKEN TO .010 MIN RADIUS AND TOLERANCES ARE:	APPROVALS	DATE				
FINISH:		DRAWN BY:					
		J.T.	01-08-85				
		CHECKED BY:					
THIS DOCUMENT AND ALL INFORMATION HEREON IS THE PROPERTY OF METRIX INSTRUMENT CO. APPROVAL MUST BE OBTAINED BEFORE IT IS REPRODUCED OR INFORMATION HEREON IS ISSUED TO A THIRD PARTY. THIS DOCUMENT MUST BE RETURNED UPON REQUEST.	FRACTIONS: DECIMALS: ±1/64 .XX ±.01 .XXX ±.005 ANGLES: ±1° SURFACE FINISH 64	JAM	01-11-85	SPECIFICATION, MODEL 5485C, HIGH TEMPERATURE VELOCITY TRANSDUCER			
		APPROVED BY:					
		R.L. MORRISON	11-10-89				
		5485C		DRAWING NO.	7623	REV.	W
		NEXT ASSY USED ON		SCALE: 1:2		SHEET: 1 of 3	

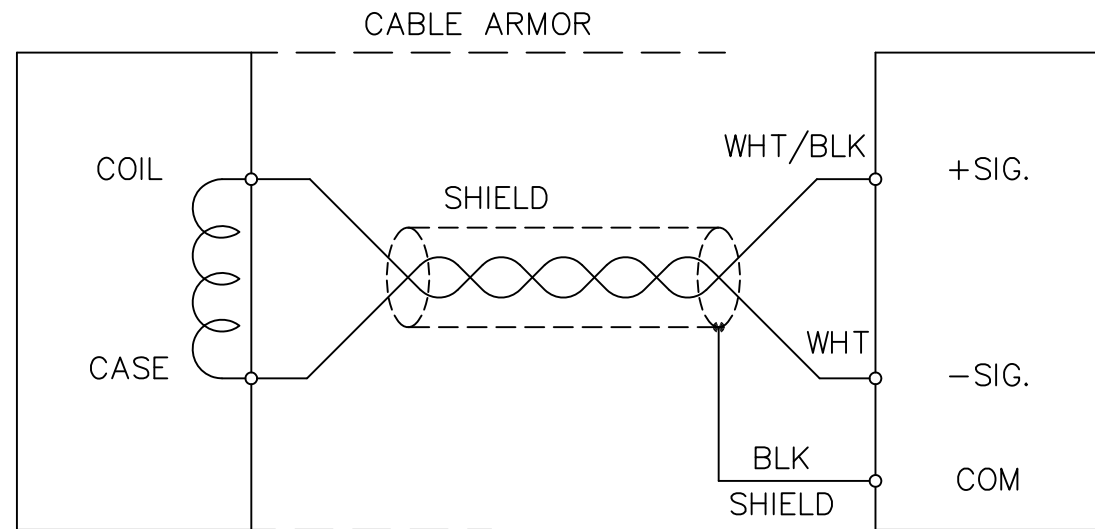
5485C
TRANSDUCER

SINGLE ENDED INPUT
RECEIVER



5485C
TRANSDUCER

DIFFERENTIAL INPUT
RECEIVER



AGENCY APPROVED PRODUCT
DO NOT DEVIATE FROM
DOCUMENTED CONSTRUCTION
OR LISTED PARTS

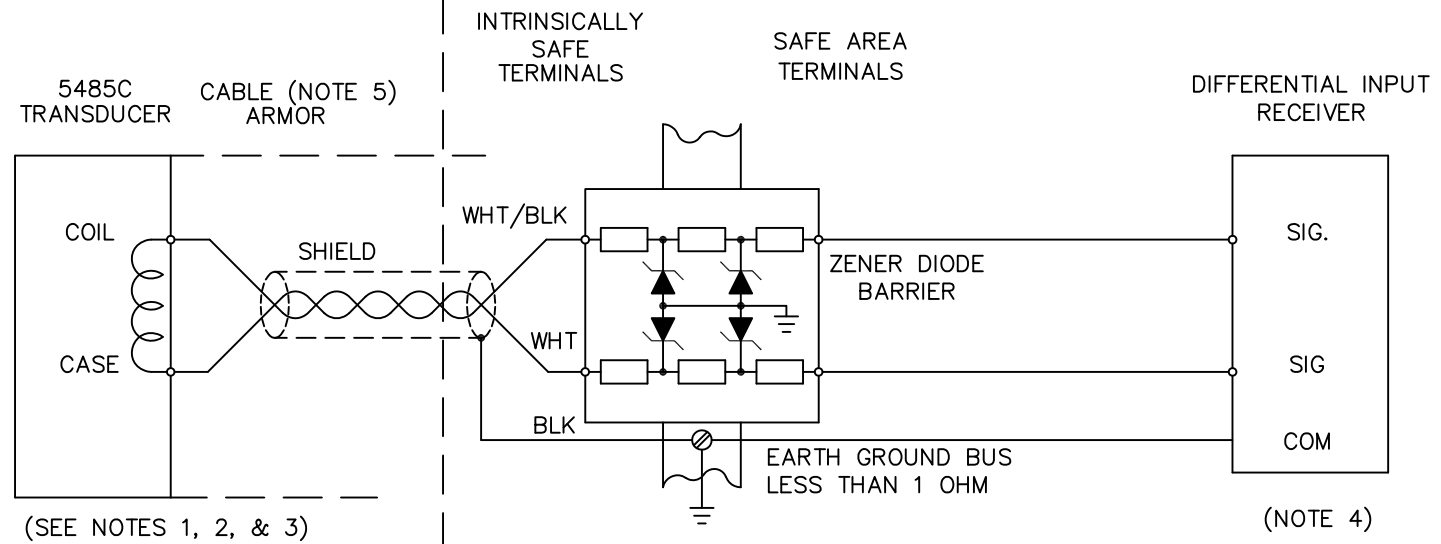
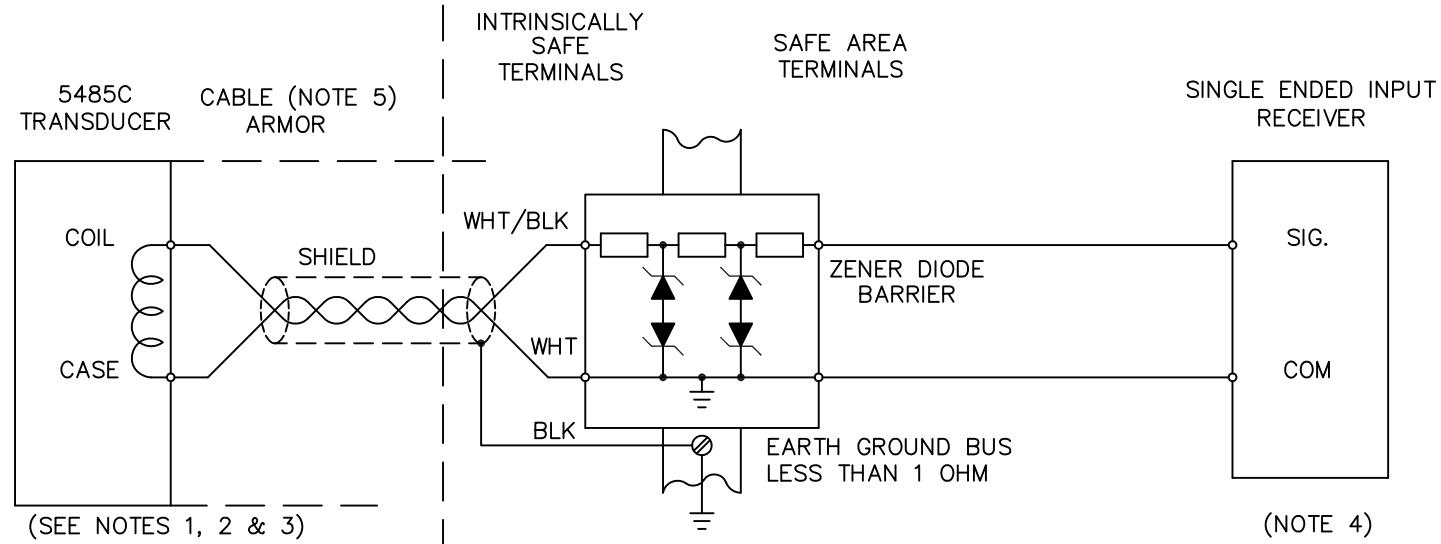
METRIX HOUSTON, TEXAS
USA

SPECIFICATION, MODEL 5485C,
HIGH TEMPERATURE
VELOCITY TRANSDUCER
WIRING (ORDINARY LOCATIONS)

SIZE C	DRAWING NO. 7623	REV. W
SCALE:	SHEET: 2 of 3	

HAZARDOUS AREA

SAFE AREA



WARNING: TO PREVENT IGNITION OF FLAMMABLE OR COMBUSTIBLE ATMOSPHERE, DISCONNECT POWER BEFORE SERVICING

AGENCY APPROVED PRODUCT

DO NOT DEVIATE FROM DOCUMENTED CONSTRUCTION OR LISTED PARTS

NOTES:

- UL LISTED AND CSA CERTIFIED AS INTRINSICALLY SAFE (CLASS I, GROUPS A, B, C & D); CLASS I, ZONE 0 AEx ia IIC T6...T1; Ex ia IIC T6...T1 Ga) WHEN USED WITH ZENOR DIODE BARRIER HAVING A MAXIMUM OPEN CIRCUIT VOLTAGE OF 28 Vdc OR A MAXIMUM SHORT CIRCUIT CURRENT OF 0.25 A ACROSS THE INTRINSICALLY SAFE TERMINALS, AND AT THE DESIGNATED AMBIENT TEMPERATURES IN NOTE 10.

ENTITY PARAMETERS OF TRANSUCER:

MAX. VOLTAGE (V_{max}) = 28 Vdc
 MAX. CURRENT (I_{max}) = 0.12 A
 UNPROTECTED INTERNAL CAPACITANCE (C_i) = 0 uF
 UNPROTECTED INTERNAL INDUCTANCE (L_i) = 0.88 mH MAX.
 MAX. POWER (P_{imax}) = 0.625 W (UL ONLY)

SUCH THAT THE FOLLOWING CONDITIONS ARE SATISFIED:

$$V_{oc} \leq V_{max} \quad L_a \geq L_i + L_{cable} \quad P_{max} \geq P_o$$

$$I_{sc} \leq I_{max} \quad C_a \geq C_i + C_{cable}$$

IF P_o OF THE ASSOCIATED APPARATUS IS NOT KNOWN, IT MAY BE CALCULATED USING THE FORMULA $P_o = (V_{oc} * I_{sc})/4 = (U_o * I_o)/4$.

- CSA CERTIFIED INTRINSICALLY SAFE SYSTEM WHEN USED WITH CSA CERTIFIED BARRIER RATED 14 VOLTS MAX., 50 OHMS MIN.; OR 22 VOLTS MAX., 300 OHMS MIN.

- GENELEC (BASEEFA) CERTIFIED EEx ia IIC T6

TRANSUCER SENSITIVITY	ENTITY PARAMETERS OF TRANSUCER:		
	V_{max}	L_{eq}	R_i
105 mV/ips	28 Vdc	.39 mH	46 ohms
145 mV/ips	28 Vdc	.77 mH	66 ohms
150 mV/ips	28 Vdc	.82 mH	68 ohms
200 mV/ips	28 Vdc	1.50 mH	87 ohms

- THE RECEIVER MUST NOT BE SUPPLIED FROM, NOR CONTAIN A SOURCE OF POTENTIAL WITH RESPECT TO GROUND UNDER NORMAL OR FAULT CONDITIONS EXCEEDING 250 VRMS.
- CABLE LENGTH BETWEEN TRANSUCER AND ZENER DIODE BARRIER SHALL NOT EXCEED 1000 FT. (300 m).
- ASSOCIATED AND INTRINSICALLY SAFE APPARATUS MUST BE INSTALLED IN ACCORDANCE WITH ITS MANUFACTURER'S CONTROL DRAWING AND ARTICLE 504 OF THE NATIONAL ELECTRICAL CODE (ANSI/NFPA 70) FOR INSTALLATION IN THE UNITED STATES, OR SECTION 18 OF THE CANADIAN ELECTRICAL CODE FOR INSTALLATIONS IN CANADA.
- WHEN REQUIRED BY THE MANUFACTURER'S CONTROL DRAWING, THE ASSOCIATED APPARATUS MUST BE CONNECTED TO A SUITABLE GROUND ELECTRODE PER THE NATIONAL ELECTRICAL CODE (ANSI/NFPA 70), THE CANADIAN ELECTRICAL CODE, OR OTHER LOCAL INSTALLATION CODES, AS APPLICABLE. THE RESISTANCE OF THE GROUND PATH MUST BE LESS THAN 1 OHM.
- WHERE MULTIPLE CIRCUITS EXTEND FROM THE SAME PIECE OF INTRINSICALLY SAFE EQUIPMENT TO ASSOCIATED APPARATUS, THEY MUST BE INSTALLED IN SEPARATE CABLES OR IN ONE CABLE HAVING SUITABLE INSULATION. REFER TO ARTICLE 504.30(B) OF THE NATIONAL ELECTRICAL CODE (ANSI/NFPA 70) AND INSTRUMENT SOCIETY OF AMERICA RECOMMENDED PRACTICE ISA RP12.6 FOR INSTALLING INTRINSICALLY SAFE EQUIPMENT.
- ASSOCIATED APPARATUS MUST NOT BE USED IN COMBINATION UNLESS PERMITTED BY THE ASSOCIATED APPARATUS CERTIFICATION

- UL LISTED AND CSA CERTIFIED FOR THE FOLLOWING TEMPERATURE CLASSIFICATIONS AT THE STATED AMBIENT AS INDICATED BELOW.

TEMPERATURE CLASSIFICATION	AMBIENT TEMPERATURE (T_a)
T6	$-54^{\circ}\text{C} \leq T_a \leq +45^{\circ}\text{C}$
T5	$-54^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$
T4	$-54^{\circ}\text{C} \leq T_a \leq +95^{\circ}\text{C}$
T3	$-54^{\circ}\text{C} \leq T_a \leq +160^{\circ}\text{C}$
T2	$-54^{\circ}\text{C} \leq T_a \leq +260^{\circ}\text{C}$
T1	$-54^{\circ}\text{C} \leq T_a \leq +375^{\circ}\text{C}$

METRIX HOUSTON, TEXAS USA

SPECIFICATION, MODEL 5485C, HIGH TEMPERATURE VELOCITY TRANSUCER WIRING (HAZARDOUS LOCATIONS)

SIZE: C	DRAWING NO. 7623	REV. W
SCALE:	SHEET: 3 of 3	