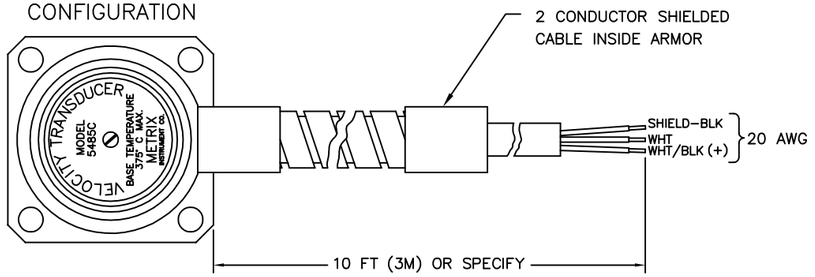
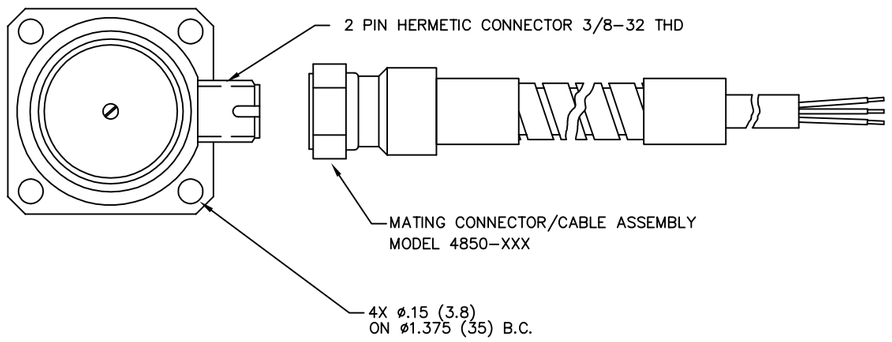
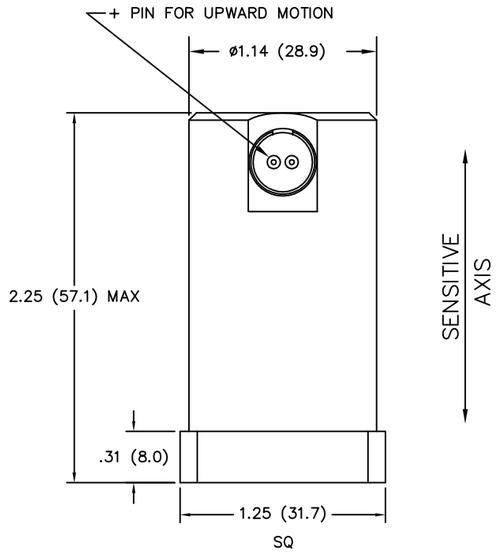
FIXED CABLE CONFIGURATION



CONNECTOR CONFIGURATION





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:
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.

TABLE A

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:

FINISH:

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. ALL CORNERS BROKEN TO .010 MIN RADIUS AND TOLERANCES ARE:

FRACTIONS: ±1/64 DECIMALS: .XX ±.01 .XXX ±.005

ANGLES: ±1°

SURFACE FINISH 64

NEXT ASSY	USED ON
	5485C
APPLICATION	

APPROVALS	DATE
DRAWN BY:	
J.T.	01–08–85
CHECKED BY:	
JAM	01–11–85
APPROVED BY:	
R.L. MORRISON	11–10–89

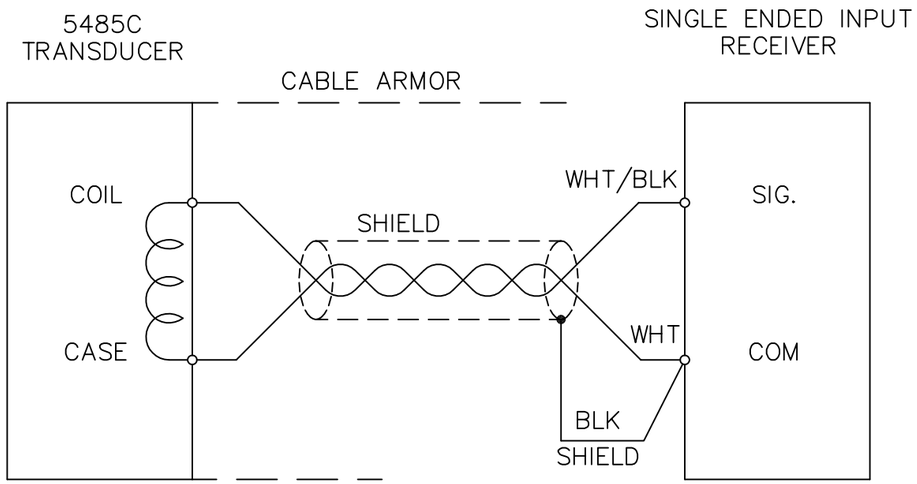
DO NOT SCALE DRAWING

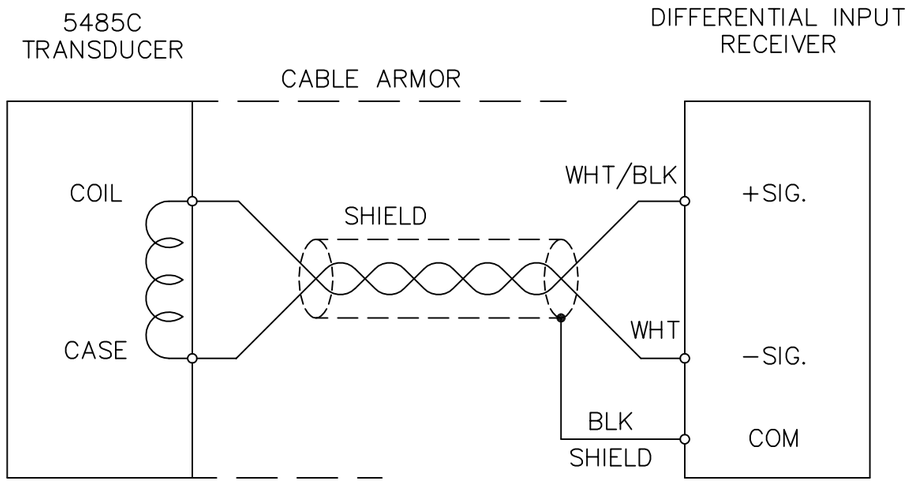
METRIX
HOUSTON, TEXAS U.S.A.

SPECIFICATION, MODEL 5485C, HIGH TEMPERATURE VELOCITY TRANSDUCER

SIZE C | DRAWING NO. 7623 | REV. U

SCALE: 1:2





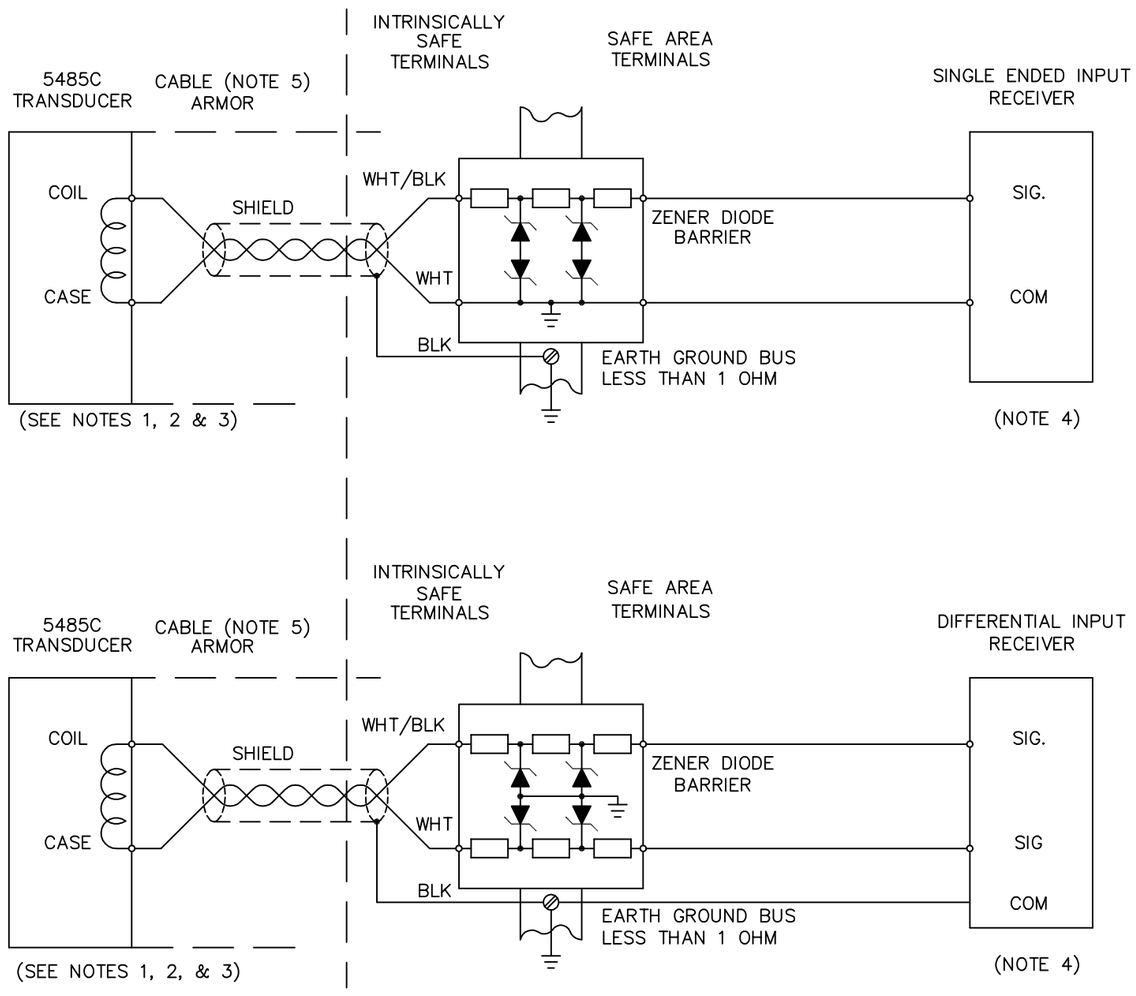
AGENCY APPROVED PRODUCT

DO NOT DEVIATE FROM
DOCUMENTED CONSTRUCTION
OR LISTED PARTS

METRIX
HOUSTON, TEXAS U.S.A.

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

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



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:

1. UL LISTED AND CSA CERTIFIED AS INTRINSICALLY SAFE (CLASS I, GROUPS A, B, C, & D) WHEN USED WITH ZENER 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.

   ENTITY PARAMETERS OF TRANSDUCER:
   MAX. VOLTAGE (Vmax) = 28 Vdc
   MAX. CURRENT (Imax) = 0.25 A
   UNPROTECTED INTERNAL CAPACITANCE (Ci) = 0 uF
   UNPROTECTED INTERNAL INDUCTANCE (Li) = 0.88 mH MAX.
   MAX. POWER (Pimax) = 0.625 W (UL ONLY)

   SUCH THAT THE FOLLOWING CONDITIONS ARE SATISFIED:

   $Voc \leq Vmax$ $\quad La \geq Li + Lcable$ $\quad Pmax \geq Po$
   $Isc \leq Imax$ $\quad Ca \geq Ci + Ccable$

   IF Po OF THE ASSOCIATED APPARATUS IS NOT KNOWN, IT MAY BE CALCULATED USING THE FORMULA $Po = (Voc * Isc)/4 = (Uo * Io)/4$.

2. 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.

3. CENELEC (LCIE) CERTIFIED EEx ia IIC T6

TRANSDUCER SENSITIVITY	ENTITY PARAMETERS OF TRANSDUCER: Vmax	Leq	Ri
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

4. 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.

5. CABLE LENGTH BETWEEN TRANSDUCER AND ZENER DIODE BARRIER SHALL NOT EXCEED 1000 FT. (300 m).

6. 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.

7. 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.

8. 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.

9. ASSOCIATED APPARATUS MUST NOT BE USED IN COMBINATION UNLESS PERMITTED BY THE ASSOCIATED APPARATUS CERTIFICATION

METRIX
HOUSTON, TEXAS U.S.A.

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

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