

REVISION HISTORY					
REV	DOCUMENT	DESCRIPTION	CHGD BY	DATE	APPROVED
A	0107680	INITIAL RELEASE	MKB	2014-02-10	J. ANTON

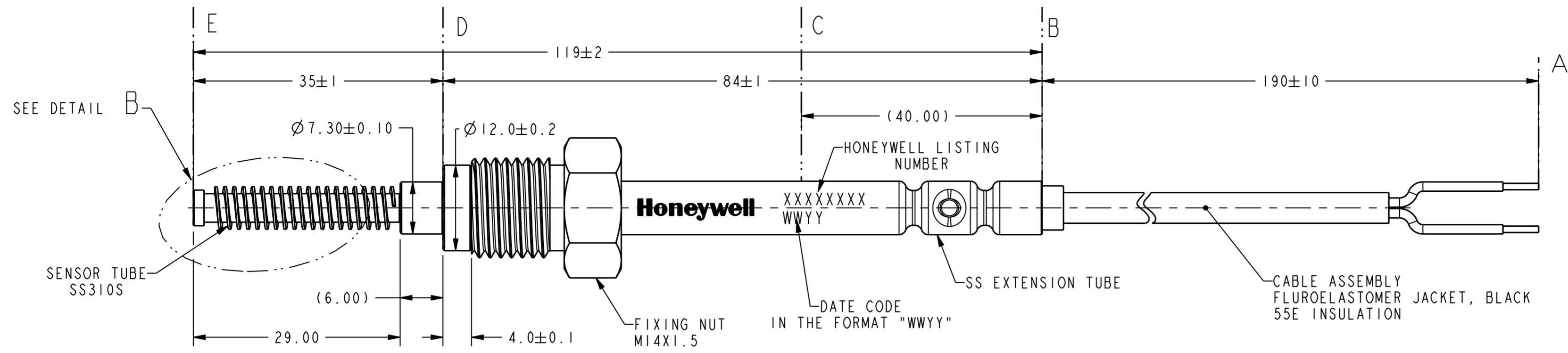
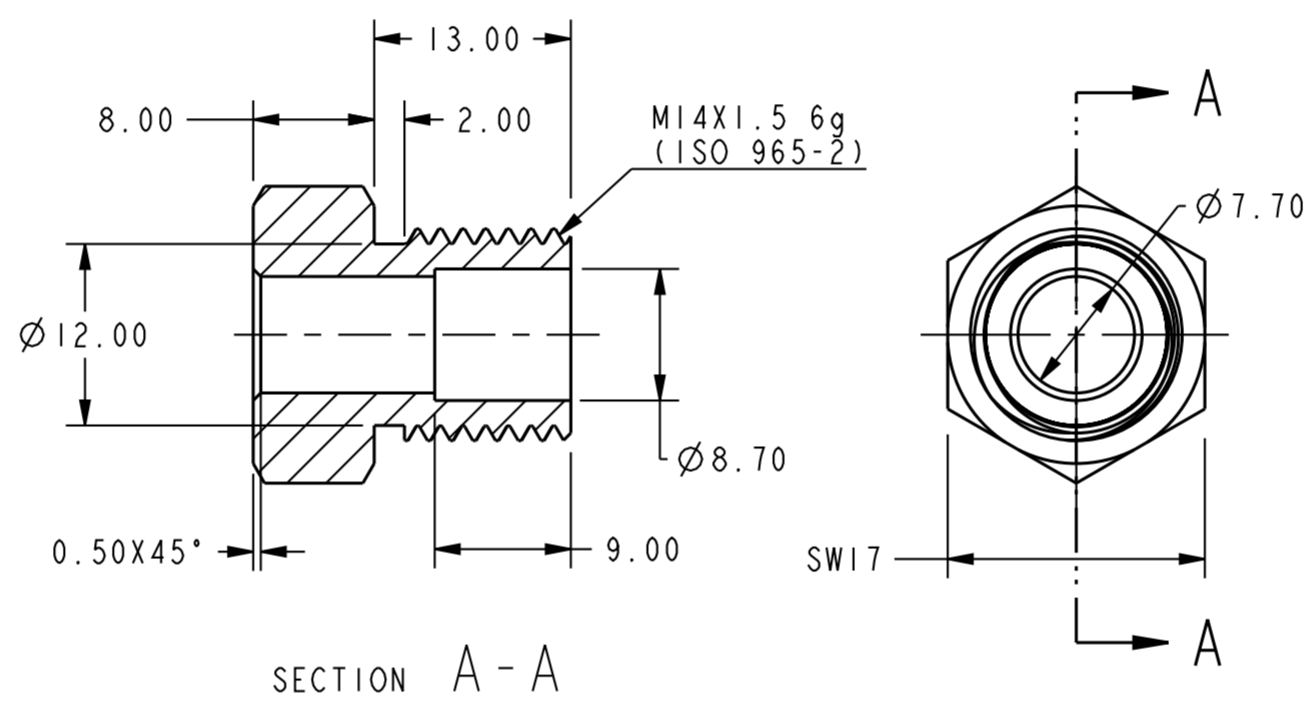
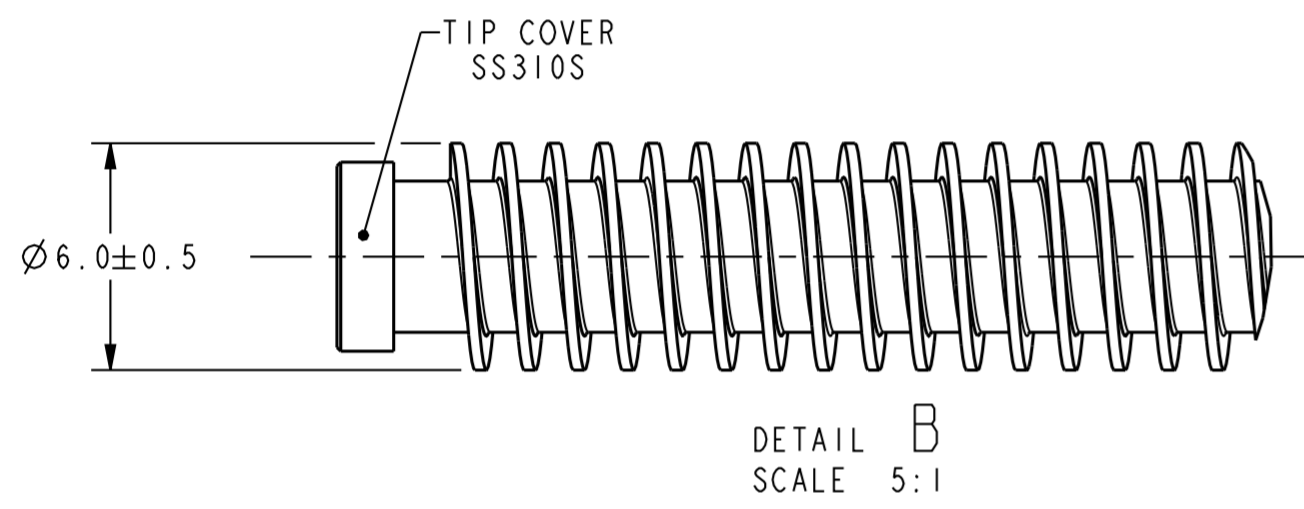


TABLE-2
TRANSITION AREA TEMPERATURE LIMITS

Area	Temperature Limit
A-B	< 125°C
B-C	< 200°C
C-D	200°C TO 700°C
D-E	700°C TO 850°C

TABLE-1
TEMPERATURE RANGE ACCURACY ON °C

Temperature Range	Accuracy on °C
-40°C TO 300°C	±4.5
300°C TO 500°C	±7.5
500°C TO 750°C	±12.5



$$R_s = R_l + R_o(1 + \alpha T + bT^2)$$

$$R_l = 0.5 \Omega$$

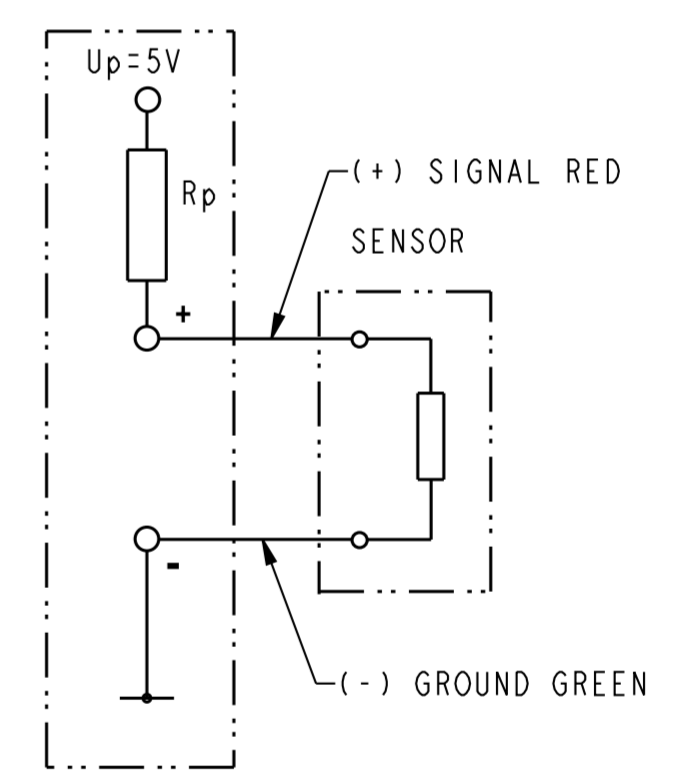
$$\alpha = 3.8285 \times 10^{-3}$$

$$b = -5.85 \times 10^{-7}$$

TABLE-3

T (°C)	R _s (Ω)
-40	169.7
-20	185.1
0	200.5
25	219.6
50	238.5
100	275.9
150	312.7
200	349.0
250	384.6
300	419.7
350	454.2
400	488.1
450	521.4
500	554.1
600	617.8
700	679.2
800	738.2
900	794.9
1000	849.2

EXAMPLE SCHEMATIC VIEW



TYPICAL VOLTAGES
POWER SUPPLY: $U_p = +5 \pm 0.1VDC$

TYPICAL RESISTANCES
PULL-UP RESISTANCE: $R_p = 1K16\Omega \pm 0.1\%$
LEAD RESISTANCE: $R_l = 0.5\Omega$
P1200 RESISTANCE AT 0°C: $R_o = 200\Omega$

- NOTES:
- 1 - MASS OF THE PRODUCT - 65 GRAMS
 - 2 - FIXING NUT TO BE TIGHTENED/LOOSENED BELOW 100°C
 - 3 - RoHS COMPLIANT

INPUT DATA	MAX OPERATING TEMPERATURE OF PROBE TIP	850°C, (INTERMITTENT 1000°C FOR 1 MINUTE MAX.)
	MAX OPERATING TEMPERATURE OF CABLE END	<125°C (REFER TO TABLE-2 FOR DETAILS)
	MIN OPERATING TEMPERATURE OF ASSEMBLY	-40 °C
	SUPPLY VOLTAGE RANGE	+5±0.1VDC TYPICAL, DO NOT CONNECT TO BATTERY VOLTAGE
	SUPPLY VOLTAGE PROTECTION	NONE
	SHORT CIRCUIT PROTECTION	NONE
	SUPPLY CURRENT	DEPENDENT ON SYSTEM CIRCUIT
OUTPUT DATA	TYPE	PASSIVE
	SENSOR ACCURACY (W/O SYSTEM LOSS)	AS INDICATED IN TABLE I (SPECIFIED ACCURACY EXCLUDES SUPPLY VOLTAGE AND PULL UP RESISTANCE TOLERANCE)
	MAX CURRENT	2.5 mA (SELF HEATING TO BE CONSIDERED, NOT INCLUDED IN ACCURACY)
	TRANSFER FUNCTION	DEPENDENT ON SYSTEM CIRCUIT, SEE TABLE-3 FOR TEMP VS RES. OUTPUT
	RESPONSE TO STEP INPUT CHANGE	T63.2~8Secs FROM ROOM TEMPERATURE TO 300°C IN 20 m/s GAS FLOW
ENVIRONMENTAL DATA	VOLTAGE	DEPENDENT ON SYSTEM CIRCUIT
	STORAGE TEMPERATURE RANGE	-40 °C TO +125 °C
	VIBRATION RANDOM	30G pk 10Hz TO 2000Hz
	SENSED MEDIUM (TYPICAL)	EXHAUST GAS
INSTALLATION GUIDELINES	SENSOR SEAL	IP69K
	PROBE TO HOUSING SEAL	30K pa
	INSTALLATION TORQUE	40±10% Nm
	CONNECTOR SEAL	N/A
	ELECTRICAL INTERFACE	TWO CORE PIGTAIL CABLE (20AWG)
	WIRE SEALED	N/A
	MATING CONNECTOR	N/A
MOUNTING	M14X1.5 6g SS HEX NUT	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM		THIRD ANGLE PROJECTION				<h1>Honeywell</h1>		
DECIMAL TOL	NO PLACE --- ±0.4 1 PLACE --- ±0.2 2 PLACE --- ±0.10 3 PLACE --- ±0.005	ANGULAR TOL	±1° CHAMFER - ±					TITLE PT200 EGT SENSOR
MATERIAL		SIZE A2	CAGE CODE -	DWG NO R850-F35-M14-20P	TYPE I	REV A	HONEYWELL CONFIDENTIAL THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION AND SUCH INFORMATION MAY NOT BE DISCLOSED TO OTHERS FOR ANY PURPOSE, NOR USED FOR MANUFACTURING PURPOSES WITHOUT WRITTEN PERMISSION FROM HONEYWELL	
FINISH		SCALE 2:1	REF WT.	SHEET 1 of 1				
APPLICABLE DOCUMENTS: ASME Y14.100-2004 ASME Y14.5-2009		RELEASE DATE 2014-02-10	DRW: NAGOJI 2013-04-08	RDE: J. ANTON 2013-04-08	QA: C. DIARMUID 2014-02-10	CHK: J. ANTON 2013-04-08		
COMPUTER GENERATED DRAWING: PRO/ENGINEER								