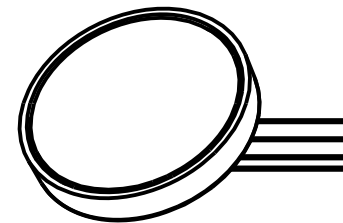
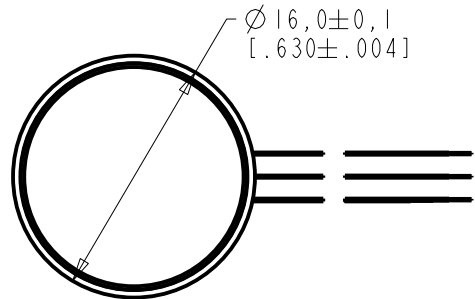
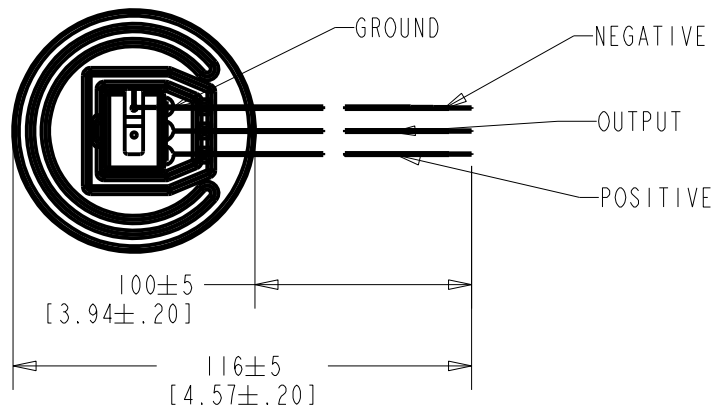
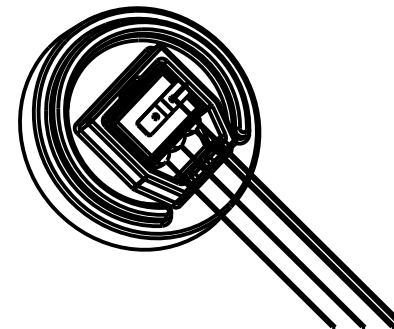
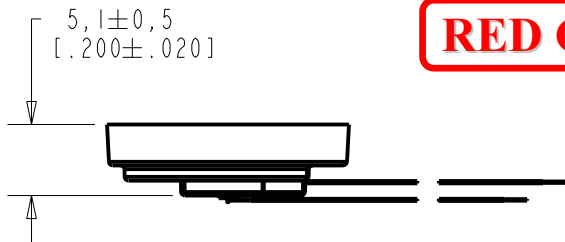


VWP-F-30609-000  
SHT 1.1



**RED CONTROLLED**

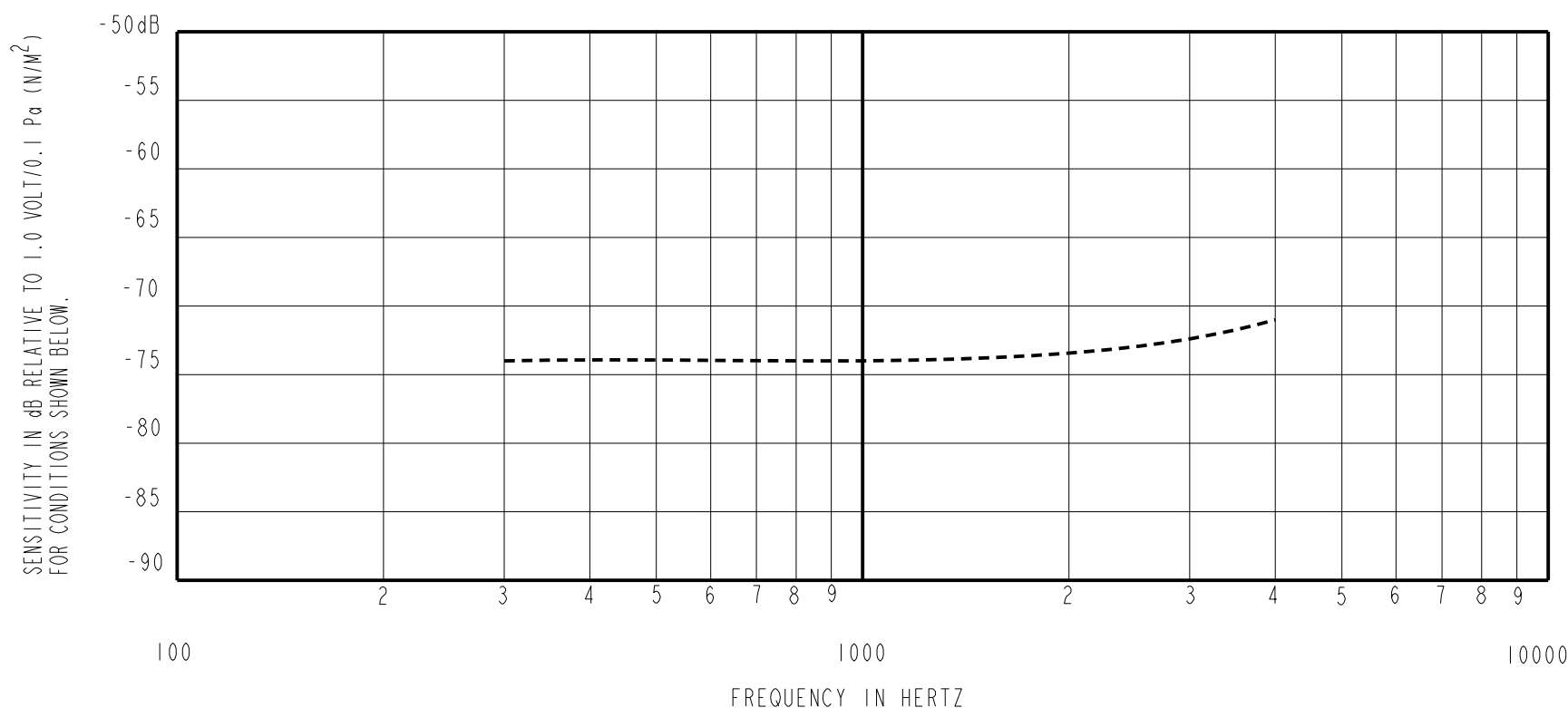


WIRE COLOUR				WEIGHT GRAMS
POSITIVE	OUTPUT	NEGATIVE	GROUND	
RED	WHITE	BLACK	GREEN	---

DIMENSIONS IN MILLIMETERS [INCHES]

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
B	C40101206	3-7-13	<b>Active</b>	<b>B</b>
A	C10110738	6-24-10		
SCALE: 2:1				
DO NOT SCALE DRAWING			DR. BY	DATE
TITLE: <b>WATERPROOF MICROPHONE &amp; CABLE</b>			CW	6-24-10
OUTLINE DRAWING			CK. BY	DATE
VWP-F-30609-000			GJP	6-30-10
SHT 1.1			APP. BY	DATE
			GJP	6-30-10

**KNOWLES ELECTRONICS**  
ITASCA, ILLINOIS U.S.A.

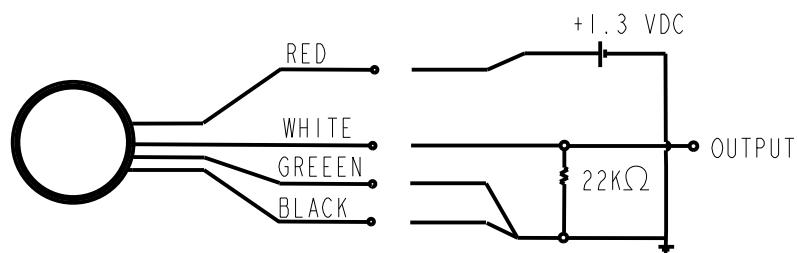


**RED CONTROLLED**

FREQUENCY	SENSITIVITY			DEVICE CONFORMITY	
	MIN.	NOM.	MAX.	RANGE OF DEVIATION FROM 1KHz	
300	---	-74.0	---	-3.0	+3.0
1000	-77.0	-74.0	-71.0	0.0	0.0
4000	---	-71.0	---	0.0	+6.0

NOTES:

- MICROPHONE TO BE FUNCTION WITH 10 VDC SUPPLY.
- SENSITIVITY VALUES INDICATED ON THIS SPECIFICATION ARE VALID AT 50% HUMIDITY.
- TEST CONDITIONS:  
SEAL PRODUCT TO 74 dB SPL SWEPT  
SOUND FIELD CREATED BY VOICE APERTURE.  
ARTIFICIAL VOICE:  
B & K 4227 MOUTH SIMULATOR.
- FOR MICROPHONE CAPSULE SPEC. SEE DRAWING WP-30113-000.
- SURVIVES SUBMERSION IN 1m OF WATER FOR 30 MINUTES;  
SENSITIVITY WITHIN 3dB OF INITIAL SENSITIVITY AFTER DRYING  
FOR 30 MINUTES AT ROOM TEMPERATURE.
- CONNECT SHIELD WIRE TO NEGATIVE WIRE FOR TEST.



PORT  
(FRONT)

LEAD IDENTIFICATION  
& TEST CIRCUIT

Revision	C.O. #	Implementation Date	RELEASE LEVEL	REVISION
B	C40101206	3-7-13	Active	B
A	C10110738	6-24-10		

**KNOWLES ELECTRONICS**  
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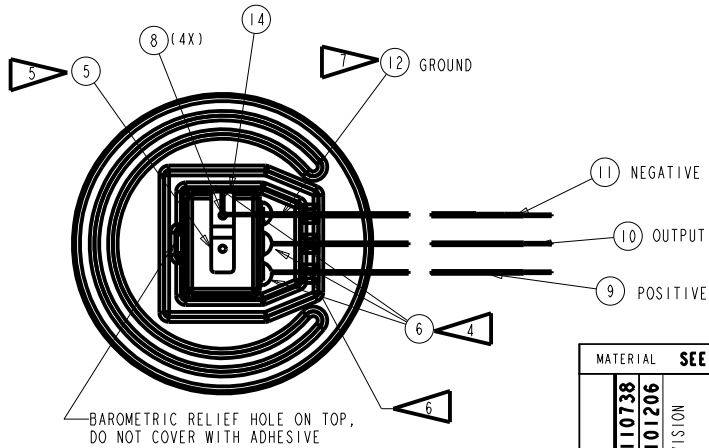
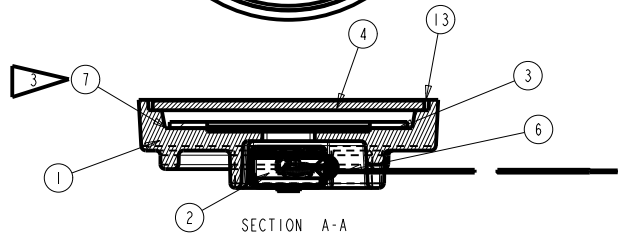
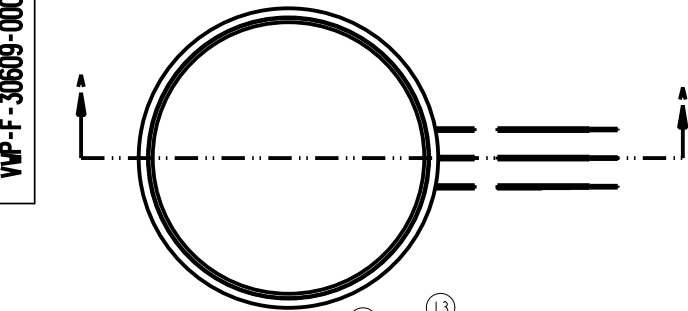
WHEN TEST LIMITS ARE USED TO ESTABLISH INCOMING INSPECTION ACCEPTANCE/REJECTION CRITERIA, CORRELATION OF TEST EQUIPMENT WITH KNOWLES IS ALSO REQUIRED FOR ELIMINATION OF EQUIPMENT AND TEST METHOD VARIATION

TITLE: **WATERPROOF MICROPHONE & CABLE** **VWP-F-30609-000**  
PERFORMANCE SPECIFICATION **SHT 2.1**

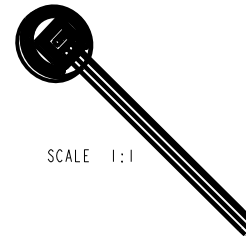
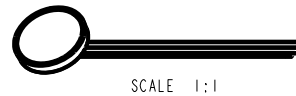
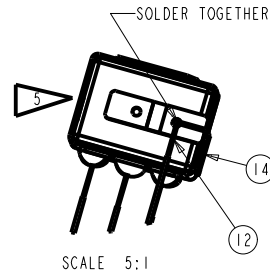
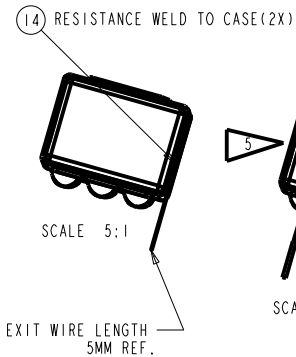
DR. BY	DATE
CW	6-24-10
CK. BY	DATE
GJP	6-30-10
APP. BY	DATE
GJP	6-30-10

VMP-F-30609-000

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WIRE COLOUR				WEIGHT GRAMS
POSITIVE	OUTPUT	NEGATIVE	GROUND	---
RED	WHITE	BLACK	GREEN	---



NOTES:

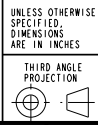
- ITEM NUMBERS (SHOWN THUS ON DRAWING CORRESPOND WITH ITEM NUMBERS ON BILL OF MATERIAL.
- ATTACH ITEM (4) TO ITEM (1) USING CEMENT ITEM (13).
- ITEM (7) FORMS WATERPROOF SEAL BETWEEN ITEMS (1)&(3).
- SEAL WHOLE CAVITY WITH ITEM (6). INCLUDE TERMINAL STRIP, BAROMETRIC RELIEF HOLE ON TOP CAN NOT BE SEALED.
- TERMINAL PAD SHOULD NOT OVERLAP THE EDGE OF MICROPHONE ELEMENT, PLACE TERMINAL PAD IN LOCATION PICTURED BY ITEM (15).
- SLOTS NEED TO BE BLOCKED BY CEMENT ITEM (6) AND MAKE SURE CEMENT WILL NOT FLOW OUT OF POCKET.
- GREEN WIRE RUN ABOVE THE BLACK WIRE AND NEED TO BE CEMENTED TO MICROPHONE BY ITEM (6).

**RED CONTROLLED**

DIMENSIONS IN MILLIMETERS [INCHES]

MATERIAL		SEE BILL OF MATERIALS	FINISH	---
REF.	A	C10110738		
	B	C40101206		
	UPDATE THE REVISION 00 3-7-13			

RELEASE LEVEL		REVISION
Active		B
SCALE: 4:1	DO NOT SCALE DRAWING	
DR. BY DATE <b>CW 6-24-10</b> CH. BY DATE <b>GJP 6-30-10</b> APP. BY DATE <b>GJP 6-30-10</b>		
TITLE <b>WATERPROOF MICROPHONE &amp; CABLE ASSEMBLY</b>		VMP-F-30609-000 SHEET 3.1



<b>VWP-F-30609-000</b>	<b>KNOWLES ELECTRONICS</b> <b>ITASCA, ILLINOIS U.S.A.</b>	<b>VWP-F-30609-000</b>
Sheet <b>4.1</b>		Sheet <b>4.1</b>
Dr. By CW Date 6-24-10	<b>Subject:</b> <b>WATERPROOF MICROPHONE &amp; CABLE ASSEMBLY</b>	<b>Revision</b> <b>B</b>
Ch. GJP 6-30-10		
App. GJP 6-30-10		
		Release Level <b>Active</b>

COL. 1	2	3	4	Item No.	Line No.
Part or Dwg. no.	Tot. Req.	Nomenclature:	Applicable Specs or Remarks		
VEK-001	1	HOUSING		1	1
WP-30113-000	1	MICROPHONE ASSEMBLY		2	2
FB-234	1	MEMBRANE		3	3
FB-223	1	SCREEN DISC		4	4
BC-097	1	TAB		5	5
13-092-120103	A/R	CEMENT		6	6
13-092-120101	A/R	CEMENT		7	7
285-007-001	A/R	SOLDER LEAD FREE		8	8
VEK-007-002	A/R	WIRE RED		9	9
VEK-007-009	A/R	WIRE WHITE		10	10
VEK-007-000	A/R	WIRE BALCK		11	11
VEK-007-005	A/R	WIRE GREEN		12	12
13-724	1	ADHESIVE		13	13
103-071	A/R	WIRE		14	14
13-677	A/R	INSTANT ADHESIVE		15	15

RED CONTROLLED

<b>REVISION</b>	A	c.o. C10110738
	B	c.o. C40101206
	FB-234 WAS FB-038 00 3-7-13	

**VWP-F-30609-000**  
Sheet **4.1**

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REF: 1004-PART-00-PW REF: 0