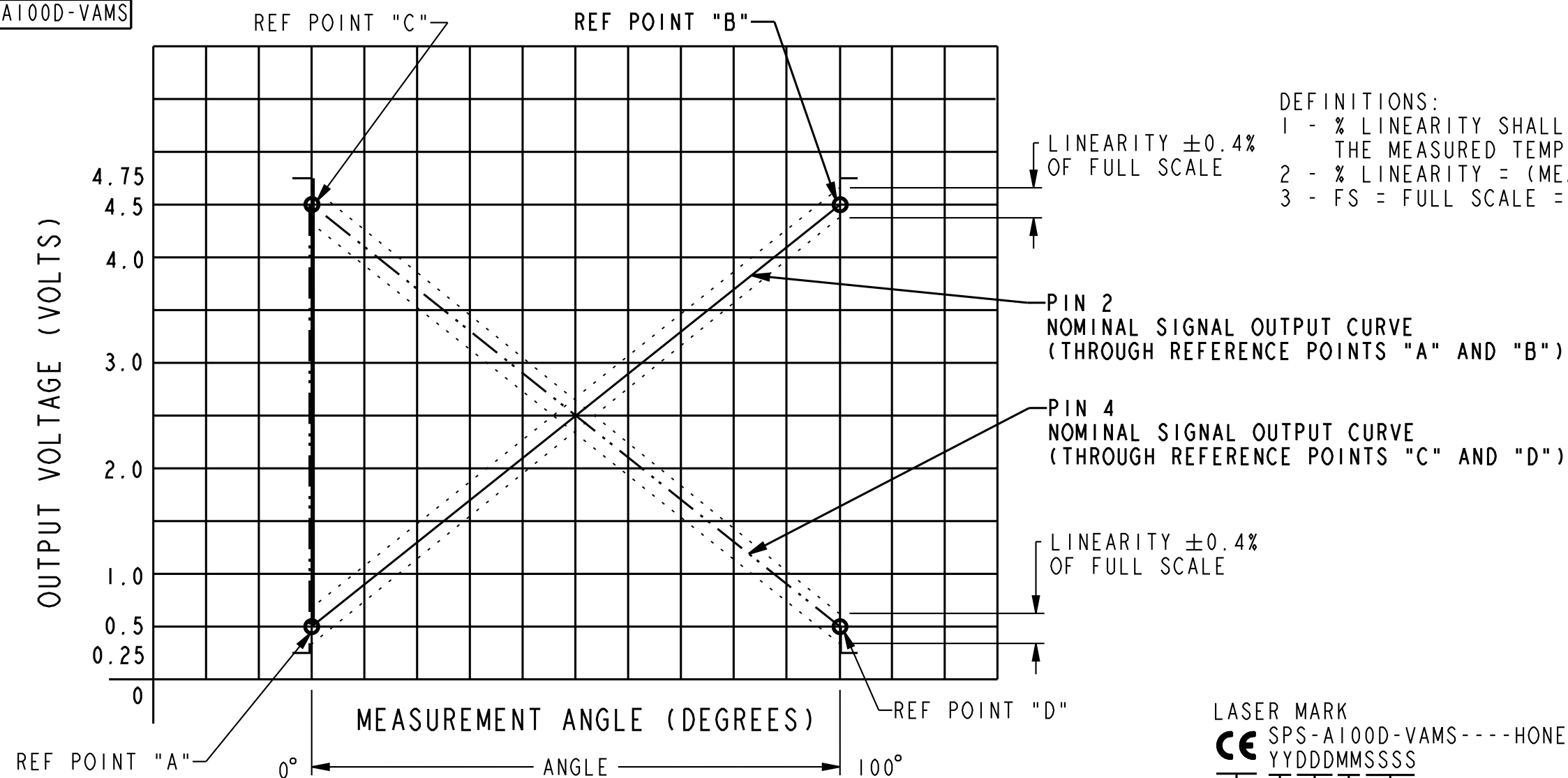


## SENSOR OUTPUT PERFORMANCE CHART

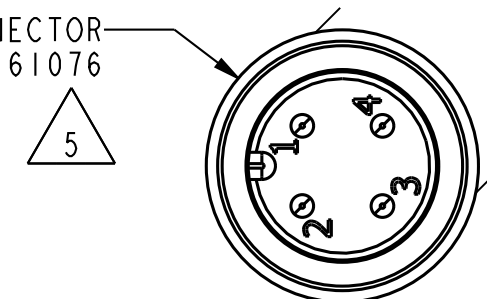
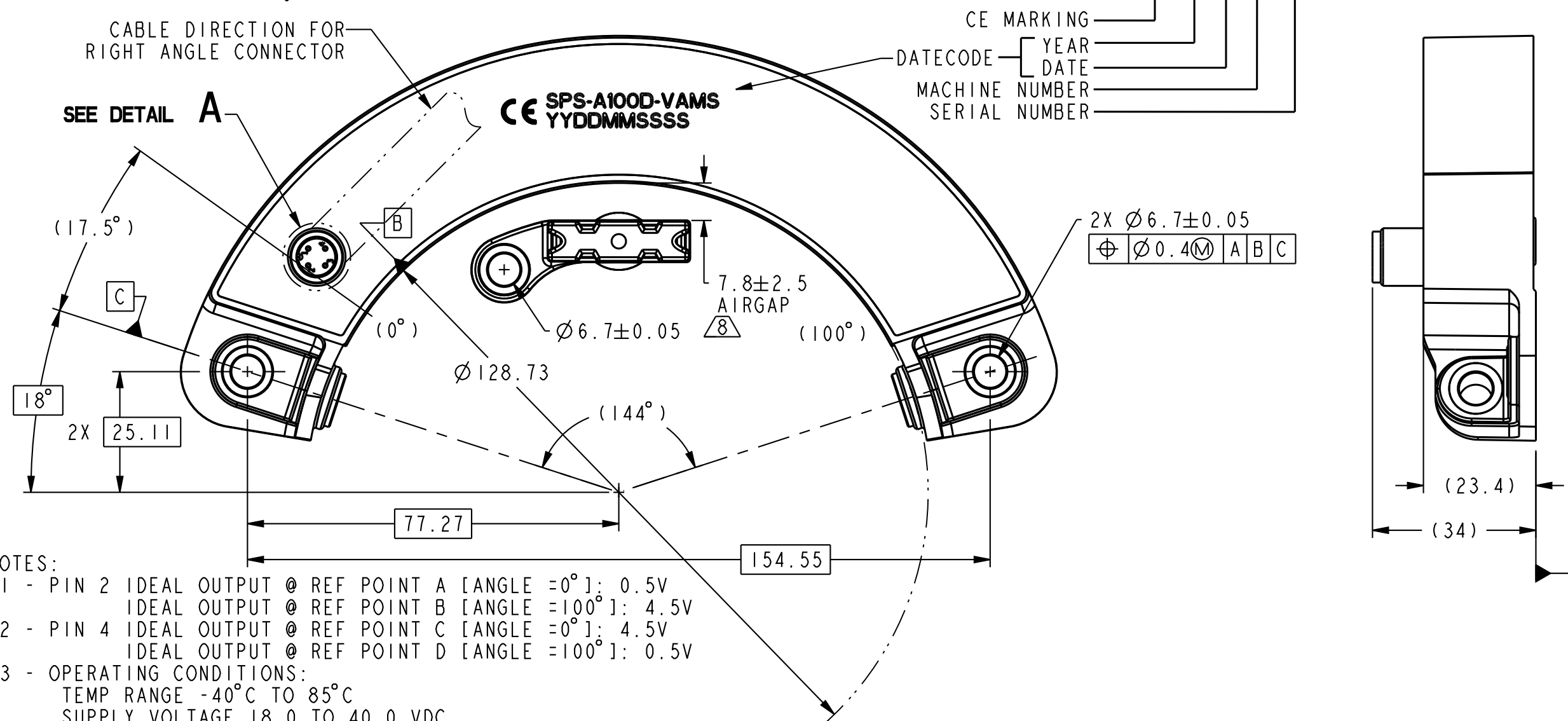
REV	DOCUMENT	CHANGED BY	CHECK
F	0076277	MBN 11APR11	DSK

## DEFINITIONS:

- 1 - % LINEARITY SHALL BE THE QUOTIENT OF THE MEASURED OUTPUT DEVIATION FROM THE BEST FIT LINE AT THE MEASURED TEMPERATURE TO THE FULL SCALE OUTPUT SPAN
- 2 - % LINEARITY = (MEASURE VOLTAGE @ T - INDEX VOLTAGE [DEFINED BY BEST FIT LINE @ T]) / (FULL SCALE OUTPUT SPAN) X 100
- 3 - FS = FULL SCALE = 4 V



SENSOR OUTPUT PERFORMANCE				
PARAMETER	MIN	TYP	MAX	UNITS
SENSITIVITY	38.40	40.00	41.60	mV/DEGREE
MEASUREMENT DISTANCE	0	100		DEGREES
% LINEARITY	-0.4	0	0.4	% FS

M12 (4 POS) CONNECTOR  
A-KEYED PER IEC 61076DETAIL A  
SCALE 3:1

## NOTES:

- 1 - PIN 2 IDEAL OUTPUT @ REF POINT A [ANGLE = 0°]: 0.5V  
IDEAL OUTPUT @ REF POINT B [ANGLE = 100°]: 4.5V
- 2 - PIN 4 IDEAL OUTPUT @ REF POINT C [ANGLE = 0°]: 4.5V  
IDEAL OUTPUT @ REF POINT D [ANGLE = 100°]: 0.5V
- 3 - OPERATING CONDITIONS:  
TEMP RANGE -40°C TO 85°C  
SUPPLY VOLTAGE 18.0 TO 40.0 VDC  
SUPPLY CURRENT 45mA MAX
- 4 - MOUNTING  
MAGNET PIN LOCATING HOLE:  $\varnothing 10.25 \pm 0.10$   
MOUNTING SCREWS: 1/4-20 OR M6  
RECOMMENDED INSTALLATION TORQUE: 53.1 TO 70.8 IN-LBS (6 TO 8 N-M)
- 5 - CONNECTOR PINOUT:  
PIN 1: SUPPLY VOLTAGE (+) PIN 2: OUTPUT  
PIN 3: GROUND (-) PIN 4: INVERTED OUTPUT  
ONLY OUTPUT PIN 2 OR PIN 4 CAN BE CONNECTED AT A TIME
- 6 - FERROUS MATERIAL WITHIN 100 MM (3.9") RADIUS OF MAGNET MAY IMPACT SENSOR PERFORMANCE
- 7 - DIAGNOSTIC - MAGNET OUT OF RANGE: PIN 2 > 4.55, PIN 4 < .45
- 8 - TOLERANCE APPLIES FOR FULL SENSE RANGE
- 9 - DEVICE USED TO READ ANALOG OUTPUT MUST HAVE INPUT IMPEDANCE GREATER THAN 1 MEGAOHM
- 10 - OUTSIDE OF THE VALID MEASUREMENT RANGE THE OUTPUT VOLTAGE WILL BE INDETERMINATE.
- 11 - DIRECT IMPACT TO THE CONNECTOR MAY COMPROMISE THE INTEGRITY OF THE SENSOR AND COMPROMISE THE SEAL RATING. HONEYWELL ADVISES MEASURES BE ESTABLISHED TO PREVENT DIRECT IMPACT.

HONEYWELL CONFIDENTIAL  
COPYRIGHT © 2010  
HONEYWELL INTERNATIONAL INC.  
UNPUBLISHED WORK. ALL RIGHTS RESERVED.

DESIGN UNITS: MM				DRAWN		JLH		19JUL10		<div>Honeywell</div>									
TOLERANCES UNLESS NOTED:				CHECK		JLH		19JUL10											
NO PLACES X ± 1.000				THIS DRAWING COVERS A PROPRIETARY ITEM AND IS THE PROPERTY OF HONEYWELL. THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE PERMISSION OF HONEYWELL.						TITLE									
ONE PLACE .X ± 0.40										SMART POSITION SENSOR, 100 ARC									
TWO PLACE .XX ± 0.150																			
THREE PLACE .XXX ± 0.005				INTERPRET PER ASME Y14.5M-1994 OTHER HONEYWELL ENGINEERING STANDARDS MAY APPLY						SIZE		TYPE		CAGE CODE		DRAWING NAME		REV	
ANGLES X ± 3.0°										A2		I		-		SPS-A100D-VAMS			
THIRD ANGLE PROJECTION				Pro/ENGINEER 3D						SCALE		1:1		SHEET		1 OF 1			
