

REV	DOCUMENT	CHANGED BY	CHECK
A	0036918	KVS 23JUN08	BLR

HONEYWELL PART NUMBER
728265-01

D

C

B

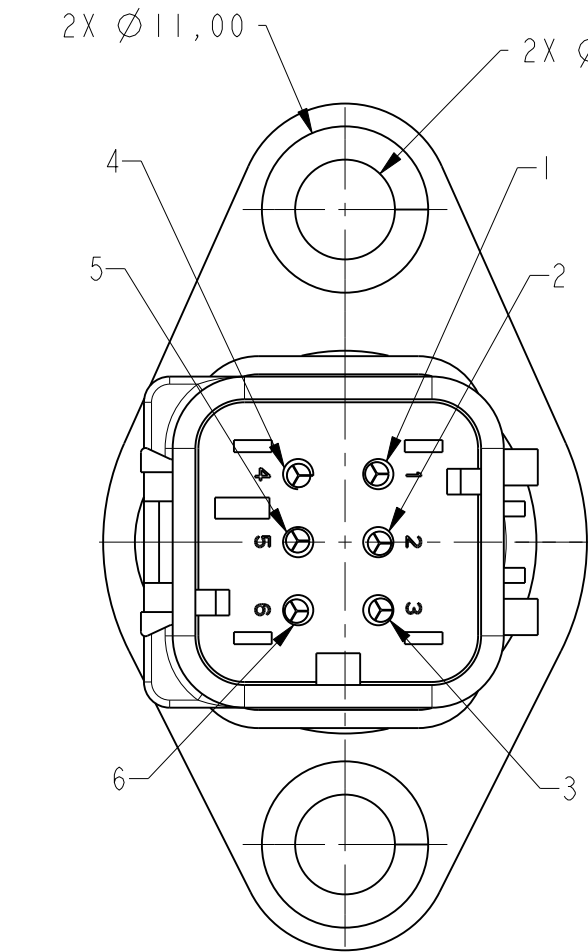
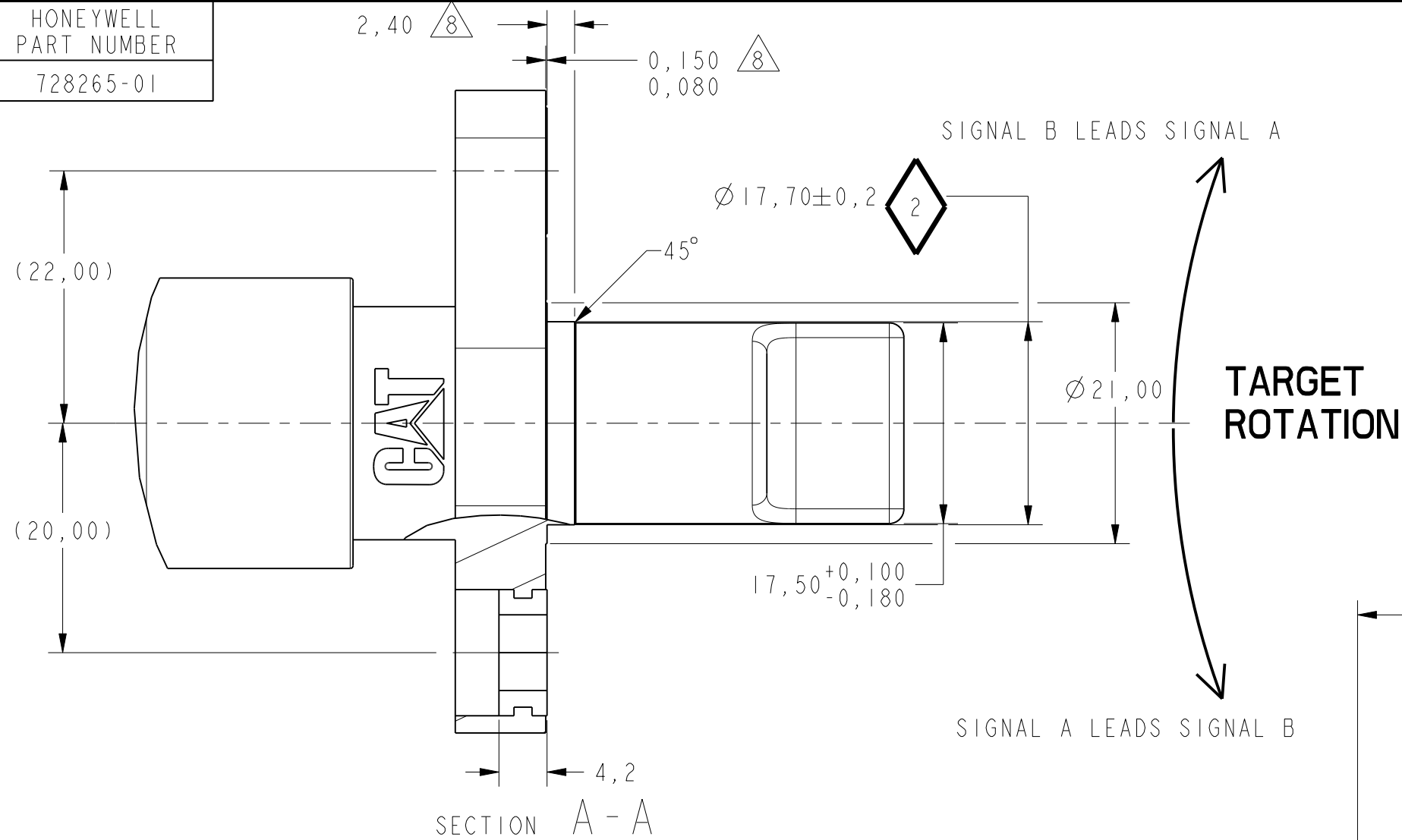
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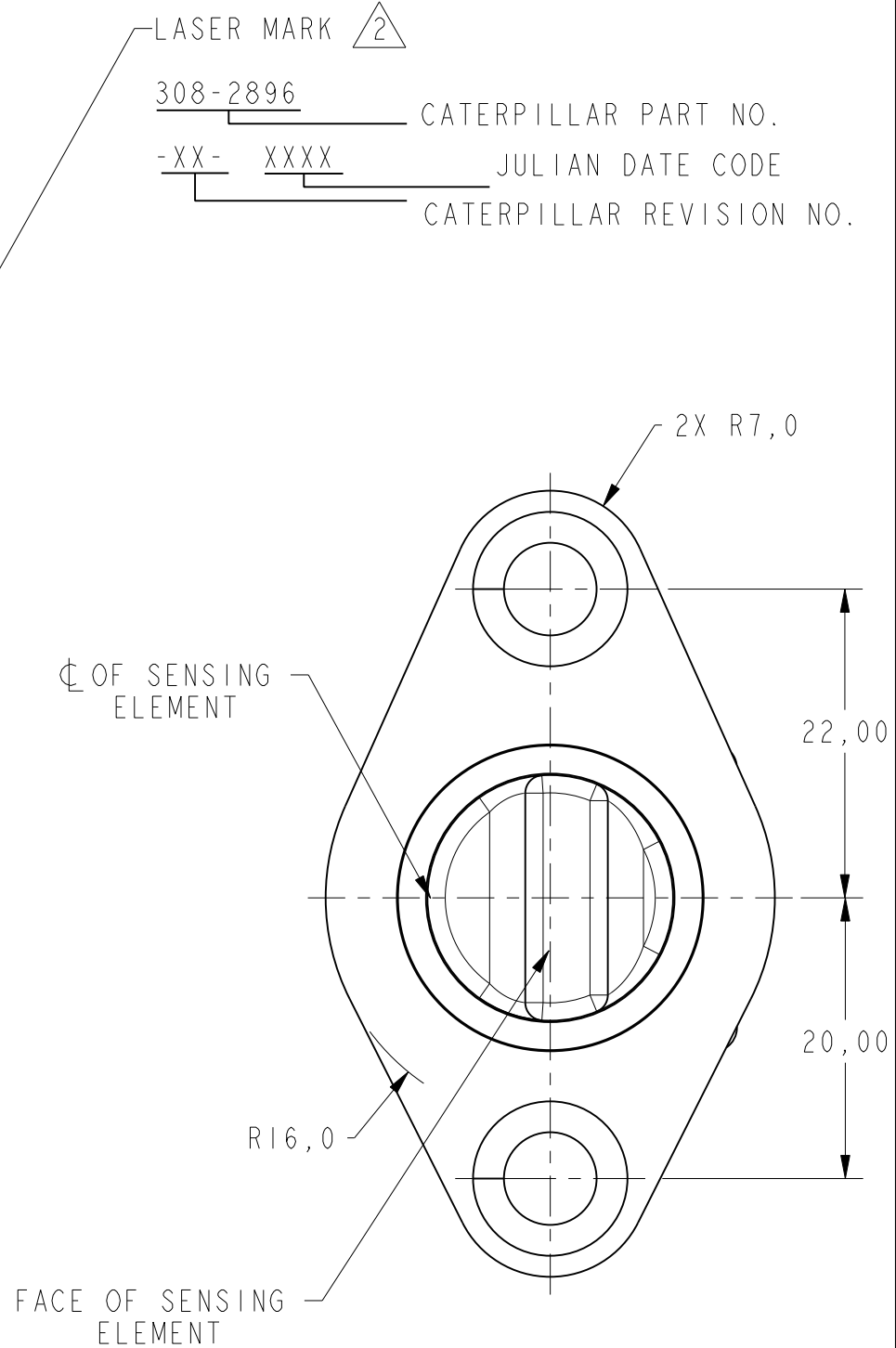
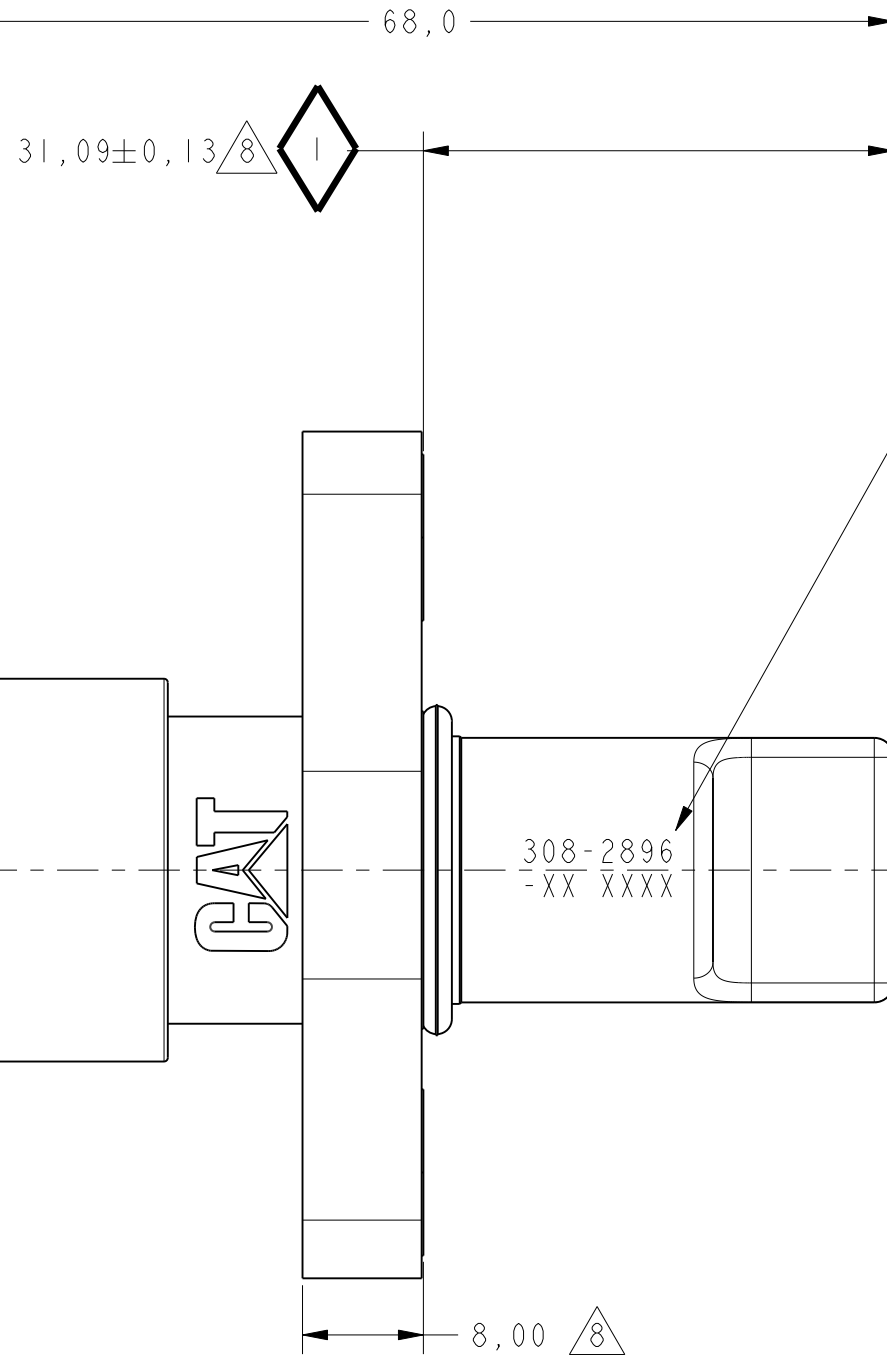
A

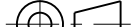


PIN	CIRCUIT	WIRE COLOR
1	Vs	RED
2	RETURN	BLACK
3	SIGNAL A, HIGH SPEED (LOW RESOLUTION)	GREEN
4	SIGNAL B, HIGH SPEED (LOW RESOLUTION)	GRAY
5	SIGNAL A, LOW SPEED (HIGH RESOLUTION)	DK BLUE
6	SIGNAL B, LOW SPEED (HIGH RESOLUTION)	WHITE

- NOTES
- 1 - CUSTOMER: CATERPILLAR INC CUSTOMER P/N 308-2896
  - 2 - PART NO. CHANGE LEVEL AND ADN SUPPLIER DATE CODE. MIN SIZE 2.4
  - 3 - WIRE TO BE SAE J1128 TYPE SXL OR EQUIVALENT
  - 4 - DUTY CYCLE AND PHASE ANGLE DEPENDANT ON TARGET MAGNETIZATION
  - 5 - SIMPLIFIED SOLID MODEL 3082896\_SM.PRT
  - 6 - DENOTES KEY CHARACTERISTIC

- 7 - MATERIALS:
- ENCLOSURE - PLASTIC
  - CONNECTOR - PLASTIC
  - SLEEVE - FIBERGLASS
  - BOOT/STRAIN RELIEF - SILICONE
- DIMENSION MEASURED FROM FACE OF BUSHINGS



DESIGN UNITS: MM			DRAWN	WJK	02APR08	<b>Honeywell</b>						
TOLERANCES UNLESS NOTED:			CHECK	ASD	02APR08							
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	±	0.400				SENSOR SOLID STATE, CENTURY AMR					
TWO PLACE	.XX	±	0.150				SIZE					
THREE PLACE	.XXX	±	0.005				TYPE					
FOUR PLACE	.XXXX	±	0.0050				DRAWING NAME					
ANGLES	X	±	3°	INTERPRET PER ASME Y14.5M-1994 OTHER HONEYWELL ENGINEERING STANDARDS MAY APPLY			C	I	728265-01		REV A	
THIRD ANGLE PROJECTION			Pro/ENGINEER			3D	SCALE		2:1	SHEET		1 OF 2
												

FO-55112-B		4	3	2	1	
D	GENERAL DATA	AIR GAP	1,0±.5			
		TEST TARGET	309-2898			
		TARGET MATERIAL	MAGNETIC ENCODER: HNBR FERRITE FILLED PLASTIC STAMPED HUB: 1008-1010 STEEL			
	INPUT DATA	SUPPLY VOLTAGE RANGE	8 TO 15.75 12 VDC NOMINAL REGULATED SUPPLY - NO DIRECT CONNECTIONS TO BATTERY ALLOWED			
		INPUT CURRENT	70 mA MAX AT STARUP, (NOMINAL TBD)			
		REVERSE VOLTAGE PROTECTION	REVERSE POLARITY OF POWER AND RETURN			
		SHORT CIRCUIT PROTECTION	PROTECTED FROM SHORT TO GROUND AND SHORT TO BATTERY.			
		ECM INPUT CAPABILITY	INPUT			
	SPEED RANGE	0- 8000 RPM CW AND CCW				
	OUTPUT DATA	SIGNAL CURRENT STATE	>7.5 mA SINK OR SOURCE @14 VDC 2.7 kΩ LOAD			
		PHASE ANGLE	PHASE SHIFT: 90°±20° OVER ALL CONDITIONS 90°±11°@25°C AND 1mm AIR GAP			
		DUTY CYCLE	DUTY A CYCLE: 50%±7% OVER ALL CONDITIONS 50%±5%@25°C AND 1mm AIR GAP			
		SIGNAL STATE TRANSITION	SIGNAL A LEADS SIGNAL B WHEN TARGET ROTATION IS FROM LONG MOUNTING DIMENSION (22,0) TO THE SHORT MOUNTING DIMENSION (20,00)			
	OUTPUT TYPE	SIGNAL HIGH: > Vs - 2.3 VDC				
SIGNAL LOW: < 1.0 VDC						
SIGNAL STARTUP TIME: ACCURATE SIGNAL < OR = TO 100 m/s AFTER POWER REACHES MIN OPERATING VOLTAGE						
SLEW RATE: 2.5 V/μS RISE 20% TO 80%, FALL 80% TO 20%						
ABSOLUTE ANGULAR ACCURACY: .9375 DEGREES MAX						
ENVIRONMENTAL DATA	OPERATING TEMPERATURE RANGE	-40°C TO 120°C				
	STORAGE TEMPERATURE RANGE	-55°C TO 150°C				
	VIBRATION RANDOM	15.4 G RMS AT 24 TO 2000 Hz RANDOM PROFILE IN 3 ORTHOGONAL PLANES AT 20 HOURS EACH				
	SEALING	689 kPa MAX PROOF PRESSURE AND 2067 kPa MIN BURST PRESSURE AT TIP AND SEAL OF SENSOR.				
	EMI (RADIATED IMMUNITY)	SAE J1113-21 JAN 98 100 V/m, 10 kHz TO 1000 MHz CLASS C DEVICE REGION 1 OPERATIONAL FUNCTION				
	EMI (CONDUCTED IMMUNITY)	30 Hz TO 250 kHz LOW FREQUENCY TRANSFORMER COUPLED NOISE PER SAE J1113-2 JUL 04 LEVEL 3 OPERATIONAL FUNCTION 1 TO 400 MHz BULK CURRENT INJECTION PER SAE J1113-4 JUL 04 LEVEL 3 OPERATIONAL FUNCTION				
	EMI (ESD)	TESTED TO ±8 kV DIRECT DISCHARGE & ±15 kV AIR DISCHARGE. HUMAN ESD MODEL PER IEC 61000-4-2, 2001-4				
	CHEMICAL COMPATABILITY	SAE J1455 AUG 94 SECTION 4.4 FOR ENGINE OILS, DIESEL FUEL, ALKALINE DEGREASERS AND OTHERS				
INSTALLATION GUIDELINES	HARNESS CLIPPING	PIGTAIL MUST BE CLIPPED OR TIED DOWN NO MORE THAN 150 FROM SENSOR TO PREVENT CONNECTOR PIN FRETTING				
	CONNECTOR ORIENTATION	SENSOR BODY SHOULD BE ORIENTATED HORIZONTAL OR POINTED DOWNWARD TO PREVENT WATER, DUST, AND DEBRIS COLLECTION INSIDE SENSOR.				
	HARNESSING	TBD				
		IF THE HARNESS CARRIES HIGH CURRENT SIGNALS THEN THE SPEED SENSOR CONDUCTORS SHOULD BE BROKEN OUT INTO A SEPARATE RUN AND ROUTED NONPARALLEL TO THE HIGH CURRENT RUN.				
		MOUNTING BOLT TORQUE: 12±3 N*m. REQUIRES A M6 SOCKET HEAD CAP SCREW				
CONTACT DESIGN CONTROL FOR ASSISTANCE IN APPLICATION MOUNTING OF SENSOR PERFORMANCE INFORMATION						
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<div><div><div><div><div><div>Honeywell</div></div></div><div><div>SIZE</div><div>DWG TYPE</div><div>DRAWING NAME</div><div>REV</div></div><div><div>C</div><div>I</div><div>728265-01</div><div>A</div></div></div><div><div>SCALE</div><div>2:1</div><div></div><div>SHEET</div><div>2 OF 2</div></div></div></div>						
4		3	2	1		