

1.0 SCOPE: THIS PRODUCT SPECIFICATION COVERS THE REQUIREMENTS FOR AI-TEK SPEED SENSOR PN 70085-1010-375.

2.0 APPLICABLE DOCUMENTS: THE FOLLOWING DOCUMENTS FORM A PART OF THIS SPECIFICATION TO THE EXTENT SPECIFIED WITHIN.  
 676-0122-001 MARKING REQUIREMENTS, DATE CODE  
 900-0110-001 ACCEPTANCE TEST PROCEDURE

3.0 REQUIREMENTS:

3.1 GENERAL: THIS SPECIFICATION DELINEATES ALL FUNCTIONAL/ DIMENSIONAL REQUIREMENTS FOR AI-TEK SPEED SENSOR PN 70085-1010-375.

3.2 CHARACTERISTICS:

3.2.1 PHYSICAL:

3.2.1.1 CONFIGURATION: OUTLINE & MOUNTING DIMENSION AS SHOWN.

3.2.1.2 MOUNTING TORQUE: THE SENSOR INSTALLED MOUNTING TORQUE SHALL NOT EXCEED 200 IN-LB.

3.2.2 OUTPUT: VOLTAGE OUTPUT TO BE 5.5 TO 11.5 VOLTS PEAK TO PEAK WHEN SENSING A 20 PITCH, 30 TOOTH STEEL GEAR WITH A 100,000 OHM LOAD, SHUNTED BY A 250 pF CAPACITOR, AN AIR GAP OF .005" [.127mm] AND A SURFACE SPEED OF 1000 IPS [25.4 M/S]. SEE WIRING SCHEMATIC.

3.2.2.2 DC RESISTANCE: 33-55 OHMS

3.2.2.3 INDUCTANCE: 7-11 mH @ 1K Hz

3.2.2.4 POLARITY: PIN "B" SHALL BE POSITIVE WITH RESPECT TO PIN "A" ON APPROACH OF FERROUS MATERIAL.

3.2.2.5 INSULATION RESISTANCE: 100 MEG MINIMUM AT 500 VDC BETWEEN COIL AND SHELL.

3.3 ENVIRONMENTAL:

3.3.1 OPERATING TEMPERATURE: -100°F TO +550°F

3.4 MATERIALS:

3.4.1 HOUSING: 300 SERIES SST

3.4.2 INTERNAL: UNITS ARE ENCAPSULATED WITH MATERIAL APPROPRIATE FOR THE UNIT'S RATED TEMPERATURE.

3.5 IDENTIFICATION OF PRODUCT: THE SENSOR SHALL BE PERMANENTLY MARKED WITH THE FOLLOWING INFORMATION IN .06 MIN HEIGHT CHARACTERS:  
 AI-TEK/70085-1010-375 XXX <--- DATE CODE, 676-0122-001

4.0 QUALITY ASSURANCE PROVISIONS:

4.1 QUALITY CONFORMANCE INSPECTION: IN ACCORDANCE WITH ATP 900-0110-001.

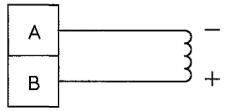
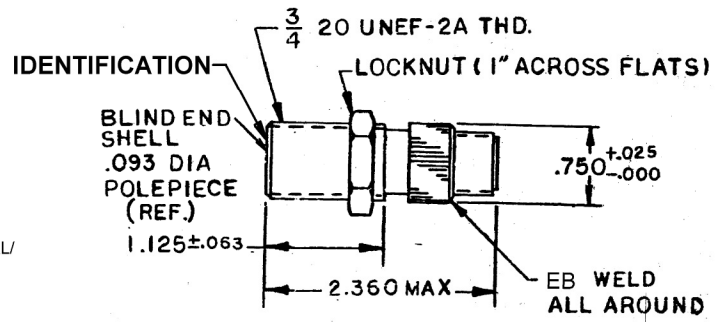
5.0 PREPARATION FOR DELIVERY: UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR PURCHASE ORDER, ALL ITEMS SUPPLIED IN ACCORDANCE WITH THIS SPECIFICATION SHALL BE PACKAGED & PACKED IN A MANNER TO ASSURE ACCEPTANCE BY COMMON CARRIER & SAFE DELIVERY AT DESTINATION.

6.0 NOTES

6.1 MATING CONNECTOR

6.1.2 BELOW 250°F: MS3106A-10SL-4S

6.1.3 UP TO 360°F: AMPHENOL 97-3106A10SL-4S(04)(604)



WIRING SCHEMATIC

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APVD
	D	REDRAWN PER C.O.6577	4/12/11	CSK

**PRODUCT SPECIFICATION**

VERIFY REVISION BEFORE USING

FINAL	70085-1010-375	MATERIAL: _____			
NEXT ASSY	USED ON	FINISH: _____			
ORIGINAL APPLICATION		TOLERANCES UNLESS OTHERWISE SPECIFIED			
INTERPRET DRAWING PER ANSI Y14.5		FRAC DIM ± _____	X.XXX DIM ± .005		
UNLESS OTHERWISE SPECIFIED ALL DIM RFS		X.XX DIM ± .01	ANGLES ± _____		
DO NOT SCALE DWG		DIMENSIONS = INCHES			
<p>THIRD ANGLE PROJECTION</p>		APPROVALS	DATE	APPROVALS	DATE
		DWN BY	KAE 4/11/11	DSGN ENGRG	
		CHK BY		MFG ENGRG	
		QUAL ENGR			

AI-TEK Instruments, LLC Cheshire, CT USA 06410		
TITLE SENSOR, SPEED		
SIZE C	CODE IDENT NO 1XP56	DWG NO 70085-1010-375
SCALE		SHEET 1 OF 1

70085-1010-375

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