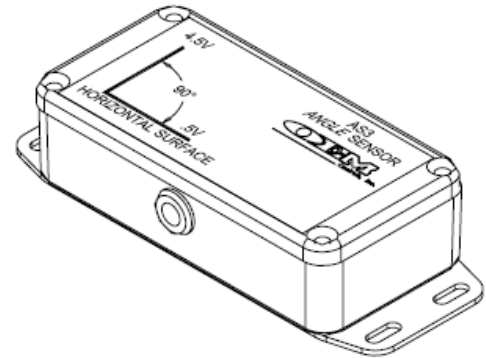


AS3 / LS3 & AS4: Angle & Level Sensors

Description:

The **AS3 (angle sensor)** & **LS3 (level sensor)** are gravity based, single axis sensors with a single proportional voltage output indicating the orientation of the sensor relative to straight down (horizontal for LS3). Applications include boom or ladder angle up to 140 degrees. Platform leveling (**LS3**).

The **AS4** is a gravity based, single or dual axis sensor with either a proportional voltage output or CAN signal indicating the orientation of the sensor relative to straight down. This also has dual sensors for redundancy standards. Applications include boom or ladder angle 180 degrees. Platform leveling. Full 360 degree sensing. 2 axis Tilt sensing.



Power:

- AS3 & LS3: 9-30V or 5V +/- 0.25 volts
- AS4: 8-30V only

Range of motion sensed:

- AS3: Hardware configurable from 5 degrees to 140 degrees.
- LS3: Hardware configurable from +/- 2.5 degrees to +/- 70 degrees.
- AS4: Analog Single or dual axis Hardware configurable from +/- 5 degrees to +/- 180 degrees; CAN version software configurable 360 degrees

Adjustment:

- AS3 & LS3: One trimpot provided for fine leveling.
- AS4: Factory calibrated for level. The system application decides what is level in the machine.

Output:

- AS3 & LS3: 0.5-4.5V, digisensor option
- AS4: 0.5-4.5V, 0.5-9.5V (supply voltage above 9 volts), CAN, no digisensor option.

Resolution:

- AS3 & LS3: Infinite analog
- AS4: Infinite analog; 0.1 degree for CAN

Damping:

- AS3 & LS3: hardware configurable, 0.1-2 seconds for full-scale response
- AS4: hardware AND software configurable, 0.1 to hundreds of seconds if desired

Connections:

- AS3: 3 wires (power, ground, signal)
- AS4: Single axis analog with 3 wires, Dual axis analog with 4 wires, CAN with 4 wires (internal ID) or CAN with 6 wires (external ID)

Indicators:

- AS3 & LS3: 2 optional LED indicators for level indication
- AS4: LED for diagnostics, CANopen LED

Environment:

- Temp: - 40C - +70C
- Humidity: 10- 95% RH
- EMI Certification:
 - Radiated Immunity, IEC 61000- 4- 3:1995, 30V/m
 - Electrical Fast Transient, IEC 61000- 4- 4:1994, +/- 2kV, power and signal
 - Conducted Immunity, IEC 61000- 4- 6:1996, 10Vrms, power and signal
 - ESD, IEC 61000- 4- 2:1995, +/- 8kV air discharge
 - Radiated Emissions, EN55011:1998, complies to class B, group 1
 - Radiated Emissions. EN55022:1998, complies to class B

Enclosure:

- AS3 & LS3: Die- cast aluminum, 2.0" H x 3.9" W (5.0" with mtg feet), x 1.0" D
- AS4: Die- cast aluminum, 2.4"H X 4.4"W (5.4" with mounting feet) X 1.2"D

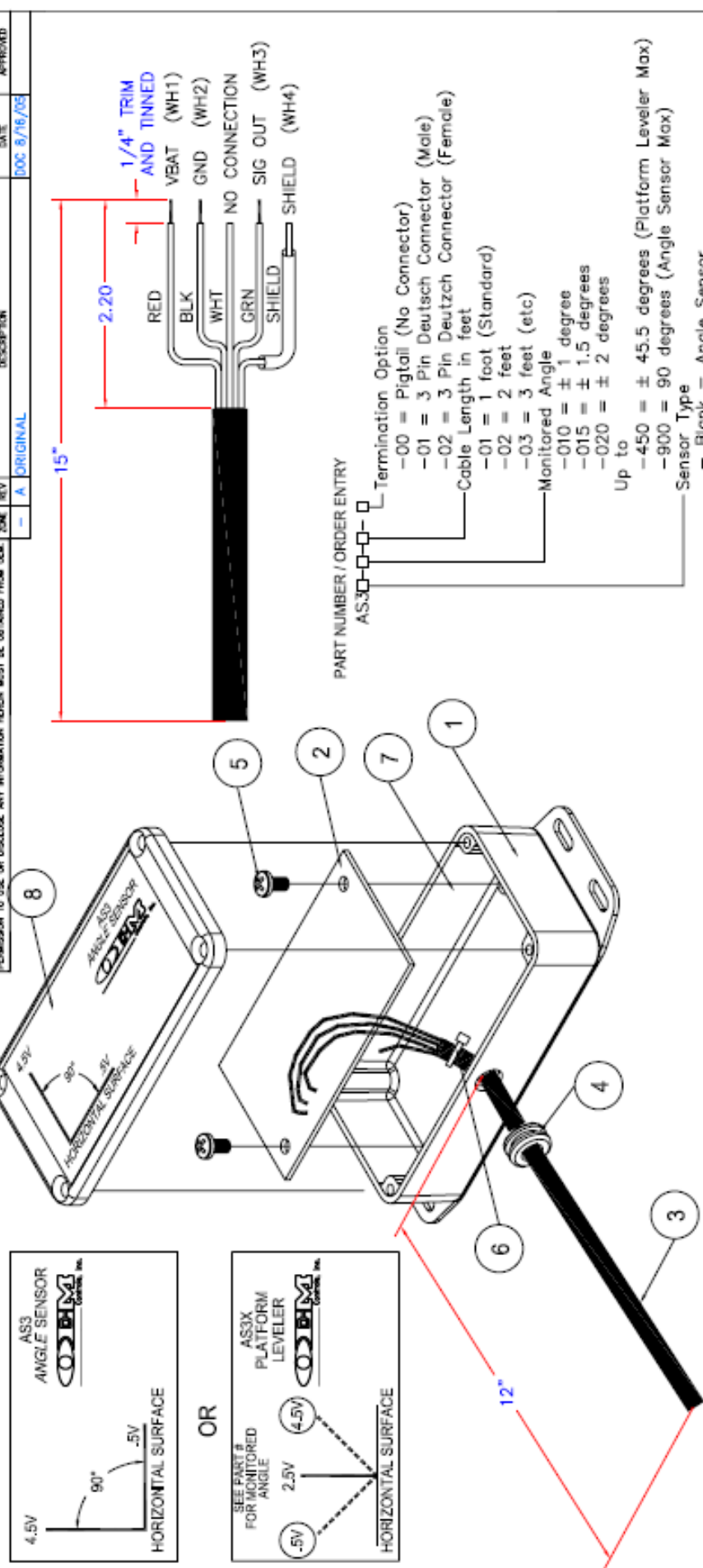
WARNING: It is the purchaser's responsibility to determine the suitability of any OEM Controls product for an intended application, and to insure that it is installed and guarded in accordance with all federal, state, local and private safety and health regulations, codes and standards.

Due to the unlimited variety of machines, vehicles and equipment on which our controls are used, and the numerous standards which are frequently the subject of varying interpretation, it is impossible for OEM Controls personnel to provide expert advice regarding the suitability of a given controller for a specific application. The flexibility of our products allows us to offer thousands of custom configurations. We can advise you of the various features that are available and you can examine models to see what meets your needs. We believe our customers' engineering departments should be the qualified experts in their own product field. If the product will be used in a safety critical application, the customer must undertake appropriate testing and evaluation to prevent injury to the ultimate user.

Should you have any questions or if any of the above warning is unclear, please contact OEM Controls at 10 Controls Drive, Shelton, CT 06484, FAX: 203.929.3867, TEL: 203.929.8431.

ZONE	REV	DESCRIPTION	DATE	APPROVED
-	A	ORIGINAL	08/16/05	

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PART NUMBER / ORDER ENTRY

- AS-30-□-□-□-□-□
- Termination Option
 - 00 = Pigtail (No Connector)
 - 01 = 3 Pin Deutsch Connector (Male)
 - 02 = 3 Pin Deutsch Connector (Female)
 - Cable Length in feet
 - 01 = 1 foot (Standard)
 - 02 = 2 feet
 - 03 = 3 feet (etc)
 - Monitored Angle
 - 010 = ± 1 degree
 - 015 = ± 1.5 degrees
 - 020 = ± 2 degrees
- Up to
- 450 = ± 45.5 degrees (Platform Leveler Max)
 - 900 = 90 degrees (Angle Sensor Max)

Sensor Type

- Blank = Angle Sensor
- X = Platform Leveler
- X = Monitors from Horizontal to 90 degrees
- X = Monitors from Horizontal to ± 45 degrees

UNLESS OTHERWISE SPECIFIED	FINISH	DOC	DATE
TOLERANCE	ANGLES	SECONDS	8/16/05
.X	X ± 1°		
.XX	X ± 0.1°		
.XXX	X ± 0.05°		
.XXXX	X ± 0.010°		
DIMENSIONAL UNITS	INCHES		
UNDIMENSIONED SIZE	0		
PROJECTION	FIRST ANGLE		
BREAK ALL SHARP CORNERS, EDGES & SURFS.			

10 Control Drive - Walling, CT 06494
 Part # (203) 639-601 Fax: (203) 639-346

MECHANICAL ASSEMBLY
AS-3 ANGLE SENSOR

- NOTES**
- STEP #1:** SOLDER EPWB/676 (ITEM #3) CABLE TO PC BOARD (ITEM #2) USING WIRES TO AREA'S AS SHOWN.
 - STEP #2:** INSTALL GROMMET (ITEM #4) INTO ENCLOSURE (ITEM #1).
 - STEP #3:** INSTALL CABLE (ITEM #3) THROUGH GROMMET (ITEM #4) AND SECURE PC BOARD (ITEM #2) TO ENCLOSURE WITH SCREWS (ITEM #5).
 - STEP #4:** TYRAP (ITEM #6) STRAIN RELIEF (ITEM #4).
 - STEP #5:** APPLY EPOXY POTTING MATERIAL (ITEM #7) EVEN TO TOP OF TRIM POT.