



P R E S S U R E  
T E M P E R A T U R E  
L E V E L  
I N S T R U M E N T A T I O N  
F L O W  
A N A L Y T I C A L

**omd** ■ 800-648-3326  
oliver m. dean, inc. ■ [www.omdean.com](http://www.omdean.com)

## "SX" Level Transmitter

**New technology proven to eliminate long-term signal drift —  
provides substantial savings in all inventory applications!**

### "Driftless" transmitters mean:

- *Fewer tune-ups*
- *No more overflows*
- *More reliable inventories*

### Special Features Include:

- *Quick Disconnect  
Receptacles with optional  
Field Wiring Connectors*
- *One-Touch Field Calibration*

Anderson Instrument Company introduces its latest innovation for measuring liquid level in sanitary applications - the "SX" Level Transmitter. This line of sensors provide superior signal stability. The field tested performance of the "SX" transmitter means the elimination of expensive, repetitive re-calibrations along with protection against costly overflow/run-dry situations that can occur with less stable level transmitters. The 0.2% accuracy experienced at installation can

now be expected a year later!

We've also incorporated a new field calibration feature that provides "one-touch" sensor zeroing as well as simple range calibration, without the need for special tools and fixtures, pressure sources, or removal of the transmitter from the tank. This translates to real cost savings during installation or when adjusting for new application requirements.

Of course the "SX" Transmitter

is available in all standard fitting and range combinations you'll need to fit any sanitary tank application. All variations are CE compliant, meet Intrinsically Safe requirements, 3-A Sanitary Standards, and are backed by a 2-year warranty.

Complete specifications and ordering information are available on the reverse. For more information please visit our Web Site at [www.andinst.com](http://www.andinst.com), or contact your local Authorized Anderson Distributor.



# SX Specifications

## Performance

Level Measurement Ranges: (Factory calibrated at no charge and easily field calibrated within the parameters listed below)

	Minimum	Maximum (URL*)	Proof Pressure
SX5 Series	0-30 " w.c.**	0-140 " w.c.	10 psig
SX6 Series	0-140.1 " w.c.	0-415 " w.c.	30 psig
SX7 Series	0-415.1 " w.c.	0-830 " w.c.	60 psig
SX8 Series	0-830.1 " w.c.	0-1385 " w.c.	100 psig

Ranges to accommodate vacuum available on request

Calibrated Accuracy: (includes repeatability, hysteresis, and linearity)  
 $\pm 0.20\%$  of URL at stable calibration temperature

Repeatability:  $\pm 0.075\%$  of URL  
 Hysteresis:  $\pm 0.075\%$  of URL  
 Linearity (BFSL):\*\*\*  $\pm 0.05\%$  of URL  
 Calibration Stability: Within  $\pm 0.2\%$  of URL for one (1) year minimum

Resolution: Infinite  
 Process Temperature Limits: -18°C to 130°C (0°F to 265°F)  
 Ambient Temperature Limits: -9°C to 49°C (15°F to 120°F)  
 Compensated Temp. Range: (process) -18°C to 121°C (0°F to 250°F)  
 Temperature Stability:  $\pm 0.2\%$  of Upper Range Limit (URL) per 5.5°C (10°F)

Over-Range Capacity: 2 times the URL (see table above)  
 Response Time: 526 mSec

### Power Signal

Loop Power (excitation): 12-40 vdc  
 Output: 4-20mA dc, 2-wire. Internal test points supplied

Loop Resistance: 1550 ohms (max.) at 40 vdc, 750 ohms (max) at 24 vdc

\* URL = Upper Range Limit  
 \*\* w.c. = water column  
 \*\*\* BFSL = Best Fit Straight Line

Cable Recommended: 2 conductor, stranded, 18-24 AWG, shielded with ground 0.17 - 0.26" Cable Sheath OD for use with field wiring connector. Anderson molded cord set recommended for best EMI and water protection.

Receptacle: 5-pin M12 Quick Disconnect Receptacle

### Materials/Construction

Housing Material: 304 and 316 stainless steel finished to 32R<sub>a</sub> max.  
 Wetted Parts: 316L stainless steel electropolished to 8R<sub>a</sub> max.  
 Gasket: Anderson Flush Gasket USP VI  
 Ratings: NEMA 4X, IP66, IP67

### Agency Approvals

Hazardous Locations: Intrinsically safe for use in Class 1, Div. 1, Groups A-D

Electromagnetic Compatibility (EMC): CE Compliant  
 Standards: 3-A compliant; Third party verified in accordance with standard 74-04

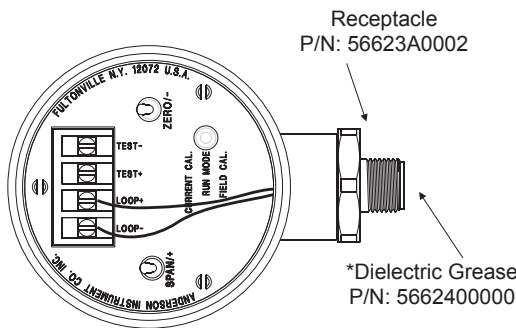
Designed and manufactured to sound engineering practices in accordance with Article 3.3 of the PED 97/23/EC.

CSA B51-03  
 CRN# CSA0F9754.5C

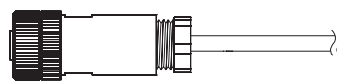
Warranty: All units are covered by a two (2) year warranty against defects in material and workmanship when installed and maintained according to the instruction manual provided.

## Electrical Connections and Wiring Options

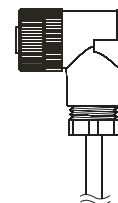
0.17-0.26" Cable Sheath Diameter



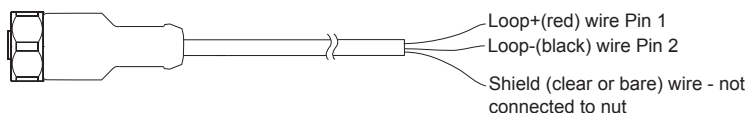
Field Wireable Connector (assembled)  
 P/N: 42119B0000 (without cable)



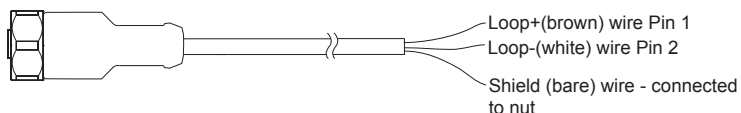
90° Field Wireable Connector (assembled)  
 P/N: 42119A0000 (without cable)



Molded Cordset



Heavy Duty Connected Shield Cordset



# How to Order



## SPAN RANGE

- 5 0-30" min to 0-140" max
- 6 0-140.1" to 0-415" max
- 7 0-415.1" to 0-830" max
- 8 0-830.1" to 0-1385" max

## FITTING

- 089 Anderson Flush Mount Long - with USP VI gasket (71060-A3, A5, A7, A9)
- 088 Anderson Flush Mount Short - with USP VI gasket (71060-A4, A6, A8)
- 091 Cherry Burrell Flush Mount Long (insulated tank)
- 090 Cherry Burrell Flush Mount Short (uninsulated tank)
- 092 King Gage Flush Mount Long (1777-3)
- 093 King Gage Flush Mount Medium (1777-1, -6 Standard)
- 094 King Gage Flush Mount Short (1777-2 non-insulated)
- 097 Tank Mate Flush Mount Long\* (208WVE)
- 096 Tank Mate Flush Mount Medium\* (205WVE)
- 095 Tank Mate Flush Mount Short\* (200WVE)
- 004 1-1/2" Tri-Clamp®
- 005 2" Tri-Clamp®
- 059 1-1/2" NPT
- 141 Rosemount / Foxboro Sanitary Spud - Short
- 142 Rosemount / Foxboro Sanitary Spud - Long
- 154 Endress & Hauser Universal Adaptor - short
- 155 Endress & Hauser Universal Adaptor - long

## DIAPHRAGM

- 1 SS-316L Electropolished
- 2 Hastelloy "C"  
(N/A with King-Gage, Tank Mate, or Endress & Hauser Fittings)

- \* Requires Adapter:  
57200A0001 (insulated)  
57200A0002 (uninsulated)

**\*\*Note:**  
Calibration of span is in units "inches water column".  
Consult factory for assistance.

## CALIBRATION

- ##### Height in inches w.c.\*\*  
(to nearest tenth)  
00000 Field Calibrated

### Examples:

- 10850 1,085.0 inches
- 00305 30.5 inches

## SENSOR WIRING

- 00 Quick Disconnect Receptacle (QDR) w/No Cable
- R0 QDR & 90° FWC w/No Cable
- 01 QDR & Field Wireable Connector (FWC) w/No Cable
- 05 QDR w/25 ft Standard Molded Cordset
- 10 QDR w/25 ft Standard Molded Cordset
- 20 QDR w/25 ft Standard Molded Cordset
- 99 1/2" NPT No QDR, no FWC and no Cable (No sensor warranty for water damage)

## MOUNTING

- 0 Horizontal
- 1 Vertical
- 2 Other (specify angle from vertical or from horizontal)

## ACCESSORIES

### Anderson Weld-In Shells for Flush Mount Level Transmitters

- 71060A0003 Insulated Vessel - Standard Flange - 316L
- 71060A0004 Uninsulated Vessel - Standard Flange - 316L
- 71060A0005 Insulated Vessel - Pressure Vessel Flange - 316L
- 71060A0006 Uninsulated Vessel - Pressure Vessel Flange - 316L
- 71060A0009 Insulated Vessel - H/D Press. Vessel Flange - 316L

### Shell Adaptor

- Tank Mate, uninsulated 57200A0002
- Tank Mate, insulated 57200A0001

### Gaskets for Flush Mount Level Transmitters

- Anderson USP VI 44348A0003
- Cherry Burrell 44292A0001
- King Gage 36240S0212
- Tank Mate 36240S0123
- Continental 5658900000
- Rosemount/Foxboro 36240E2341

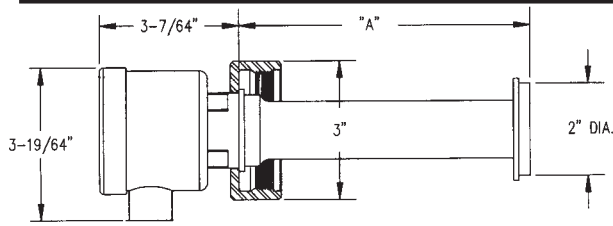
### Sensor Calibration Adaptors

- Anderson fitting 73198A0001
- Cherry Burrell fitting 73198A0002
- King Gage Fitting 73198A0003
- Tankmate 73198A0004

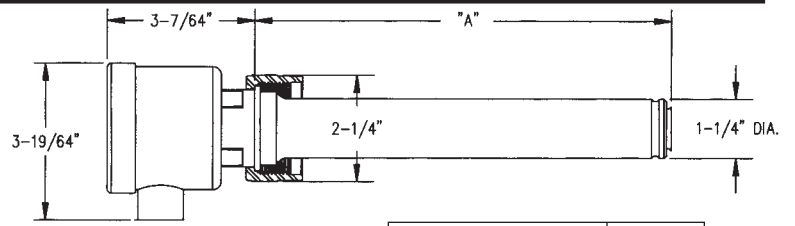
### Cord Sets

- Molded w/25' cable 42117K0025
- Molded w/50' cable 42117K0050
- Molded w/100' cable 42117K0100
- Heavy Duty Shielded w/25' cable 42117F0025
- Heavy Duty Shielded w/50' cable 42117F0050
- Heavy Duty Shielded w/100' cable 42117F0100

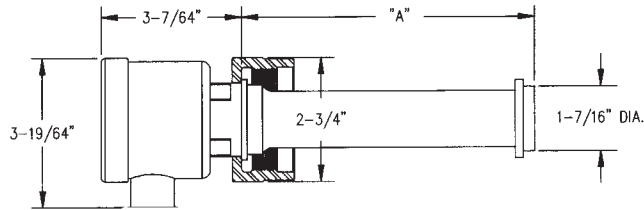
# Sensor Fittings and Dimensions



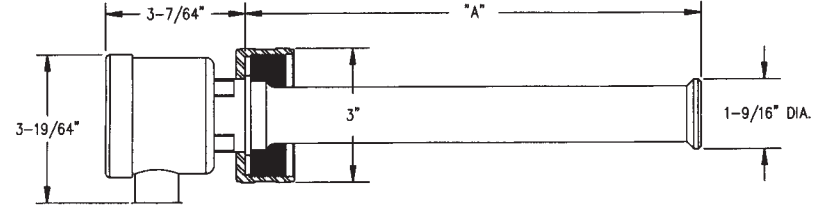
ANDERSON SHELL TYPE	"A"
NON INSULATED	2-3/16
INSULATED	6-1/2



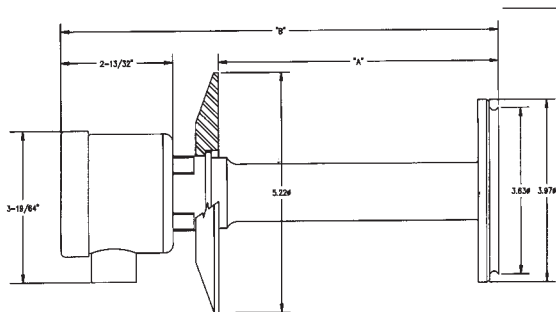
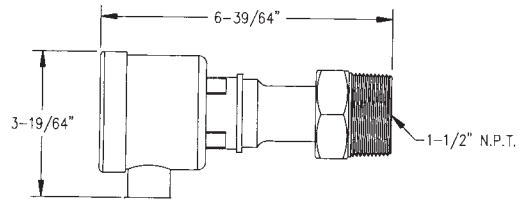
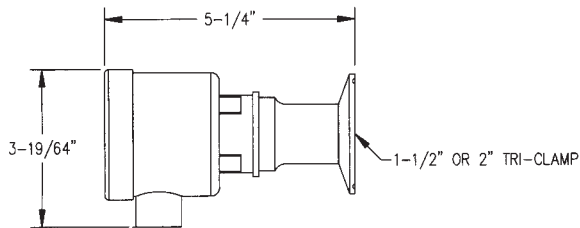
KING SHELL TYPE	"A"
NON INSULATED	2-3/16
STANDARD	6-9/16
LONG	8-13/16



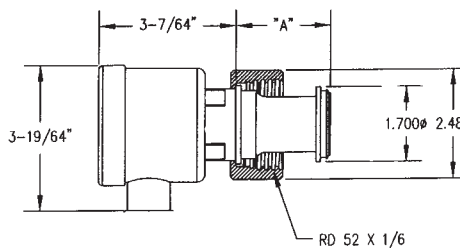
CHERRY BURRELL SHELL TYPE	"A"
NON INSULATED	2-3/16
INSULATED	6-1/2



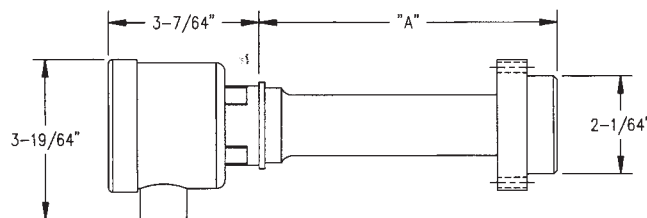
TANK MATE SHELL TYPE	"A"
SHORT	5-7/32
MEDIUM	7-19/64
LONG	10-3/16



FITTING	"A" DIM.	"B" DIM.
ROSEMOUNT SHORT	2.11"	5-1/2"
ROSEMOUNT LONG	6.11"	9-1/2"



DESCRIPTION - USE	"A" DIM.
E+H LONG (6" SHELL)	6.60
E+H SHORT (1-9/16" SHELL)	2.16



CONTINENTAL SHELL TYPE	"A"
NON INSULATED	2-5/32
INSULATED	6-3/16