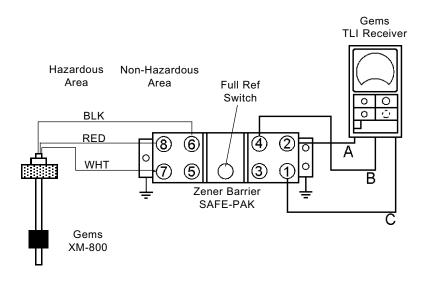
Wiring Connections

Gems Transmitters interface with intrinsically safe barriers.



Important Points!

Product must be maintained and installed in strict accordance with the National Electrical Code and GEMS technical brochure and instruction bulletin. Failure to observe this warning could result in serious injuries or damages.

An appropriate explosion-proof enclosure or intrinsically safe interface device must be used for hazardous area applications involving such things as *(but not limited to)* ignitable mixtures, combustible dust and flammable materials.

Pressure and temperature limitations shown on individual catalog pages and drawings for the specified liquid level transmitters must not be exceeded. These pressures and temperatures take into consideration possible system surge pressures/ temperatures and their frequencies.

The liquids used must be compatible with the materials of construction. Specifications of materials will be given upon request.

Physical damage sustained by the product may render it unserviceable.



Gems Sensors Inc. One Cowles Road Plainville, CT 06062.1198

tel 860.747.3000 fax 860.747.4244



XM-800 Compact Transmitters

Instruction Bulletin No. 140894

General Information

GEMS XM-800 Series provides an output suitable for use with our analog receiver stations or Level Cube receivers. The units mount internally and are accurate to \pm 1/4", regardless of tank depth

Installation and Maintenance

The XM-800 may be installed through the tank top with mounting plug or flange, up to 30° vertical. Maintenance requirements are minimal and usually limited to occasional removal of accumulated scum or scale.

- Mounting Types -

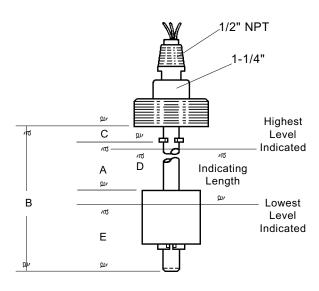
Type 1	Type 3	Type 4
1/2" NPT	2" NPT	3" - 150# Flange
3/4" 1-1/4" FLHTS	1/2" NPT 1-1/4"	1/2" NPT

1.1

Stem Material	Brass or 316 Stainless Steel (Types 1 and 3) 316 Stainless Steel (Type 4)	
Mounting Material	Brass or 316 Stainless Steel (Types 1 and 3) Carbon or 316 Stainless Steel (Type 4)	
Float Stop Material	Grip Rings (18-8 Stainless Steel)	
Operating Temperature*	Buna N Float Oil: -40°F to +230°F (-40°C to 110°C) Water: to +180°F (82.2°C) Stainless Steel Float -40°F to +230°F (-40°C to 110°C)	
Operating Pressure	Dependent on Float Type (See Next Page)	
Overall Length, Max.	70" (Please consult Factory for longer lengths)	

* Consult Factory for Higher Temperature Ranges

Typical Dimensions



Dimensions

A: Float Travel = Indicating Length +3/8"

B: Overall Length

- With Buna N Float: Indicating Length + 2-1/2" + C

- With Stainless Steel Float: Indicating Length + 3-7/16" + C

C: Distance to Float Stop (Specified by Customer): 1/4", Min.

D: With Buna N Float: 1-3/16"

With Stainless Steel Float: 1-9/16"

E: With Buna N Float: 1-5/16"

With Stainless Steel Float: 1-3/4"

Notes

- 1. Distances for highest and lowest level indicated are based on use in liquid of 1.0 and are approximate values.
- 2. Indicating length must be specified in even increments of 1/2".

Float Types

Float Material	Buna N	Stainless Steel
Float Dimensions	1-13/16" Typ. a 1-7/8" 9 Dia. Typ.	2-3/4" Typ. à 2-1/16" \(\$\text{\$\exititt{\$\text{\$\exititt{\$\text{\$\text{\$\text{\$\text{\$\exititt{\$\text{\$\text{\$\exititt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\e
Part Number	43359	43590
Min. Liquid Specific Gravity	.55	.75
Operating Pressure, Max.	150 PSI	300 PSI

Input / Output

For XM-800 Series, no special output designation is necessary.

Input Voltage	Output Signal	Electrical Termination
10 to 30 VDC	Proportional Voltage	Lead Wires (3), #22 AWG, 24" Teflon® Jacket