

## Small Size – Alloys

### XM/XT-800 Series – Compact Analog Sensors

- ▶ Stainless or Brass Construction
- ▶ 1/4" Resolution
- ▶ Lengths to 144 inches (366 cm)
- ▶ OEM Configurations Available

These compact transmitters feature the rugged durability of stainless steel or brass construction. The XM-800 series provides analog output, and can be combined with GEMS Digital Meter Receiver Stations and compact Level Cubes described in this catalog. Our versatile XT-800 Series adds a choice of signal conditioning for use with GEMS digital bargraph receivers or other digital display and control equipment.

#### Approvals

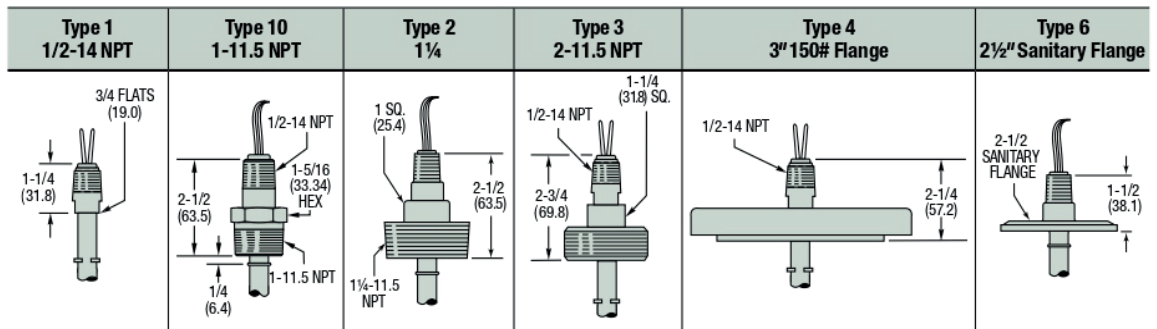
XM-800 and XT-800 Series transmitters may carry the following commercial approvals:

 UL-Recognized.

XM-800 Series transmitters only:

 CSA Certified

#### 1. Mounting Types



<b>Stem Material</b>	Brass or 316 Stainless Steel	316 Stainless Steel	
<b>Mounting Material</b>	Brass or 316 Stainless Steel	Carbon Steel or 316 SS	316 Stainless Steel
<b>Float Stop Material</b>	Brass Units: Beryllium Copper Grip Rings; Stainless Steel Units: S.S. Armco PH-15-7MO Grip Rings		
<b>Operating Temperature*</b> With J. Box Mounted or XM Signal Conditioners	Oil: -40 °F to +230 °F (-40 °C to +110 °C), Water: up to +180 °F (82.2 °C) — Buna-N Float -40 °F to +230 °F (-40 °C to +110 °C) — Stainless Steel Float		
<b>With Stem Mounted Signal Conditioners</b>	+5 °F to +160 °F (-15 °C to +70 °C)		
<b>Operating Pressure</b>	Dependent on Float Type; See Next Page		
<b>Maximum Overall Length</b>	72" (183 cm) Tubing; 144" (366 cm) Pipe (Types 3 & 4 only)		

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Easy online ordering too!

Lengths  
to 12 ft!



## 2. Float Types

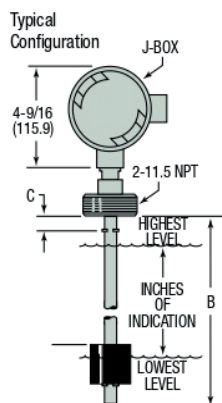
Based on the overall length required by your tank, select from two main subsets of floats below; further refine selection based on material and performance parameters.

Float Material	For Overall Lengths To 72"				For Lengths Greater Than 72" (144" Max.)		
	Buna N		Stainless Steel		Buna N	Stainless Steel	
Float Dimensions							
Compatible Mountings	1, 2, 3, 4, 6, 10	1, 2, 3, 4, 6	1, 3, 4	1, 3, 4, 6	1, 3, 4	3, 4	3, 4
Part Number	<b>253644</b>	<b>164255<sup>2</sup></b>	<b>43359</b>	<b>156490</b>	<b>43590</b>	<b>69654</b>	<b>52084</b>
Min. Liquid Spec. Gravity	0.55		0.70		0.75	0.55	0.75
Maximum Operating Pressure <sup>1</sup>	150 psi (10 bar)		80 psi (6 bar)		300 psi (21 bar)	150 psi (10 bar)	300 psi (21 bar)
Maximum Operating Temperature	Water: 180 °F (82 °C) Oil: 230 °F (110 °C)		230 °F (110 °C) <sup>3</sup>			Water: 180 °F (82 °C) Oil: 230 °F (110 °C)	230 °F (110 °C) <sup>3</sup>

Notes:

- ① Ambient Temperature
- <sup>2</sup> Recommended for Type 2 mounting only.
- <sup>3</sup> Consult factory for higher temperature range.

## 3. To Determine Dimensions



B: Overall Length = Inches of Indication + C + X (See Table at Right)

C: Distance From Bottom of Mounting to Float Stop (Customer Specified):

- 1/4" (6.4 mm) Minimum
- 1-1/4" (31.8 mm) Minimum on Type 1, XT Series only

Calculating Length

To find Overall Length when Inches or Indication is known:

• Inches of Indication + C\* + X = Overall Length

To find Maximum Inches of Indication when Overall Length is known:

• Overall Length – C\* – X = Maximum Inches of Indication

\* C dimension is determined by customer.

Float Factor – X

Float Part Number	X
<b>253644</b>	2.125" (54.0 mm)
<b>164255</b>	2.0" (50.8 mm)
<b>43359</b>	2.5" (63.5 mm)
<b>156490</b>	2.062" (52.4 mm)
<b>43590</b>	3.437" (87.3 mm)
<b>69654</b>	2.687" (68.3 mm)
<b>52084</b>	3.625" (92.1 mm)

## 4. Input/Output

For XM-800 Series, no special output designation is necessary. For XT-800 Series, specify the desired signal conditioning by Part Number.

Additional information about GEMS signal conditioning modules is found on Page C-26.

Series	Input Voltage	Output Signal	Part Number	Electrical Termination	Compatible Mountings	
					Type 1	Types 2, 3, 4, 6 & 10
XM-800	10–30 VDC	Proportional Voltage	—	Lead Wires (3), 22 AWG, 24" (60.9 cm), PTFE Jacket	●	●
	8–24 VDC*	0–5 VDC	<b>51965</b>	Lead Wires, 22 AWG, 24" (60.9 cm), PTFE Jacket	●	●
14–30 VDC*	0–12 VDC	<b>51970</b>	●		●	
XT-800	8–24 VDC*	0–5 VDC	<b>52536</b>	Junction Box		●
	15–30 VDC*	0–12 VDC	<b>52537</b>			●
	10–40 VDC	4–20 mA	<b>52555</b>	Panel Mount with Plug-in Base	●	●
		4–20 mA	<b>112300 ⚡</b>		●	●
	7–24 VDC*	4–20 mA	<b>239896</b>	Lead Wires (2), 22 AWG, 24" (60.9 cm), PTFE Jacket	●	●

\* Stem mounted

⚡ Stock item