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Small Size – Engineered Plastics

XM/XT-300 Engineered Plastics Series
Brings Continuous Output to Shallow Tanks

Your most complete line of small, polysulfone liquid level sensors...all from Gems Sensors.

- ▶ All-Plastic Wetted Parts
- ▶ 4mm Resolution
- ▶ Indicating Length to 14" (356 mm)

Designed for the needs of the OEM, XM/XT-300 Series transmitters are the ideal level sensor for shallow tanks and reservoirs. Compact and versatile, these plastic level sensors offer a broad choice of mountings and float materials. The following pages illustrate the various design parameters available to configure the versatile XM/XT-300 Series Sensors.

1. Mounting Types

Each mounting type can be configured with stem lengths (L_0) and float materials indicated in this bulletin.

NPT Threads		Straight Threads		
Type 21 1/8" NPT 	Type 22 1" NPT 	Type 31 3/8" - 24 	Type 32 1-5/16" - 12 	Type 33 5/8" - 11
Metric Threads		Compression Types		
Type 41 G 1/4" (1/4" - 19 BSP) 	Type 42 G 1" (1" - 11 BSP) 	Type 51 M12 x 1.5 Straight Thread 	Type 71¹ 5/8" - 11 	Type 11 No Mounting
Flange Mountings ²				
Type 61 2" O.D. Flange 		Type 63 Pop Flange 		

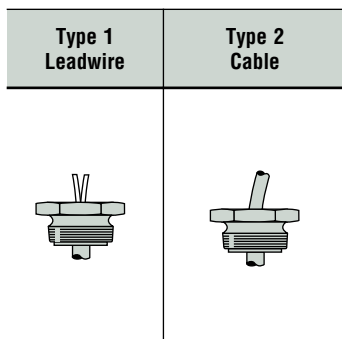
Stem, Mounting and Collar Material	Polysulfone
Max Length (L_0)	20 inches (508 mm), Tolerance of $L_0 = \pm 1/16"$ (1.6 mm)
Mounting Position	Vertical $\pm 30^\circ$ Inclination

Notes:

1. Type 71 mounting to be used with 3/4" diameter float only.
2. Not recommended for pressure applications.

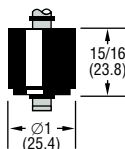
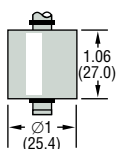
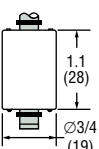
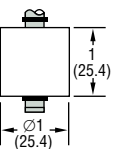
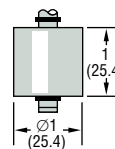
Dimensions expressed as: inches (millimeters)

2. Electrical Connections



Compatible Mounting Type(s)	All	
Protection Rating	IP64	
Extended Leads	#22 AWG PVC Wire, 24" (610mm) Min.	#22 AWG PVC Jacketed Cable, 24" (610mm) Min.

3. Float Types

Float Material	Buna N	Polysulfone	Polypropylene		PVDF	
			Solid Foamed	Hollow – 20% Glass Filled		
Float Dimensions						
Part Number	245900	39005	231500	119455	259125	174515
Float Material Suitable for...	Oil, Fuels	Water-based Liquids	Broad Chemical Use		Low Specific Gravity Liquids	Broad Chemical Use
Operating Temperature¹	Water: to 180°F (80°C) Oil: -40°F to +221°F (-40°C to +105°C)	-40°F to +221°F (-40°C to +105°C)	-40°F to +212°F (-40°C to +100°C)		-40°F to +221°F (-40°C to +105°C)	-40°F to +250°F (-40°C to +121°C)
Pressure, psi (bar) Max.²	250 (17)	50 (3.5)	Atmospheric	250 (17)	50 (3.5)	50 (3.5)
Min. Media Specific Gravity	0.45	0.75	0.95	0.90	0.65	0.86

Notes:

- Operating temperature range based on float ratings.
- When used with mounting Type 21, 32 or 22 only; Mounting Type 61, and 63 are not recommended for pressure applications. Pressures are derated with increasing temperature above 70°F

Dimensions expressed as: inches
(millimeters)

Also Available

XM/XT-350 Combination Siphon and Level Transmitter

Contact Gems for more details. **800-378-1600**

FAX IT!
860-747-4244

Photocopy This Form
Use one form for each product type you are selecting.

This form may also be completed online at gemssensors.com for RFQ.

This is a Request for a Quote Name _____
Order P.O. _____ Company _____

Quantity Needed _____ Street _____

Date Required ____/____/____ City _____ State ____ Zip _____

Shipping Method: _____ Phone (_____) _____

Partials Accepted: Yes _____ No _____ Fax (_____) _____

XM/XT-300 Engineered Plastics Custom Length, Float Type Level Transmitter Check List

Operational Parameters

This information is essential to the accurate and proper operation of your GEMS configurable sensor. Please complete fully and accurately before ordering.

1. **Liquid Media:** _____
2. **Pressure:** Minimum _____ psig Maximum _____
F
C
3. **Temperature:** Minimum _____ Maximum _____
4. **Specific Gravity:** Minimum _____ Maximum _____
5. **Viscosity:** _____ SSU
6. **Tank Material:** _____
Tank Depth: _____
7. **Unit is Mounted In:** T – Top Mounted B – Bottom Mounted

Product Parameters

1. Mounting Type (select one):

- | | |
|---------------------|------------------------------------|
| 11 – No Mounting | 21 – 1/8" NPT |
| 22 – 1" NPT | 31 – 3/8"-24 Straight Thread |
| 32 – 1-5/16"-12 | 41 – G1/4" (1/4"-19BSP) |
| 42 – G1" (1"-11BSP) | 51 – M12 x 1.5 Straight Thread |
| 61 – 2" O.D. Flange | 33 – 5/8"-11 |
| 63 – Pop Flange | 71 – 5/8"-11 with 3/4" floats only |

2. Electrical Connections:

<input checked="" type="checkbox"/>	Type	Description	Compatible Mounting Types
	1	Lead Wires, 24" to 26" (610mm, Min.)	All
	2	Cable, 24" to 26" (610mm, Min.)	All

* Select one

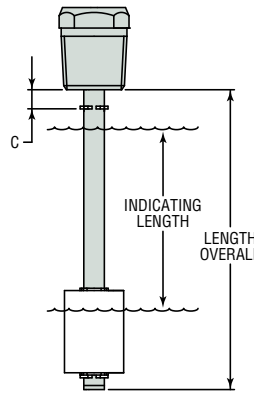
3. Float Type (select one):

- Buna-N – P/N 245900
- Polysulfone – P/N 39005
- Solid Foamed Polypropylene – P/N 119455
- Solid Foamed Polypropylene – P/N 231500
- Hollow Polypropylene – P/N 259125
- PVDF – P/N 174515

Please contact GEMS Sensors Inc. for any configuration or special requirements not covered on this form. **800-378-1600**



4. Dimensions:



Note: For Proportional values of "0" no upper grip ring is installed. Float stops at bottom of mount.

C: Minimum distance from bottom of mounting to upper float stop.

Mounting	C Dim. Value per Output Type (Inches)		
	Proportional	Volt	Current
11	0.5	1.5	2.25
21	0	0.75	1.5
22	0	0.19	0.94
31	0	0.63	1.38
32	0	0.63	1.38
33	0	0.19	0.94
41	0	0.81	1.56
42	0	0.63	1.38
51	0	0.81	1.56
61	0	1.25	2
63	0	0.63	1.38
71	0	0.19	0.94

Provide values for both items and check the box next to the most critical value.

Indicating Length _____ Inches Millimeters
 Length Overall _____ Inches Millimeters

5. Output:

XM-300
 Proportional Voltage _____
 Resistive (Quantity Dependent - Contact Factory)
 Planned Input Voltage _____

XT-300
 2-Wire, Loop Powered 4-20mA Output (Insert Mounted)
 3-Wire, 0-5 VDC (Insert Mounted)
 3-Wire, 0-10 VDC (Insert Mounted)