

TECHNOLOGY

LOW-VOLTAGE PULSE ①

On-board electronics send a low-voltage electrical pulse down the magnetostrictive wire at the speed of light, ten times per second.

MAGNETS ②

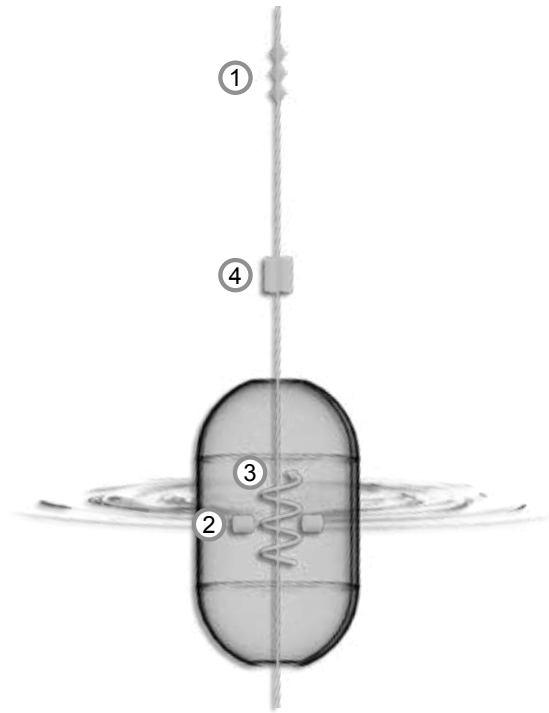
Magnets contained within the float focus their energy toward the wire at the precise location of the liquid level.

TWIST ③

Interaction between the magnetic field, electrical pulse, and magnetostrictive wire cause a slight mechanical disturbance in the wire that travels back up the probe at the speed of sound.

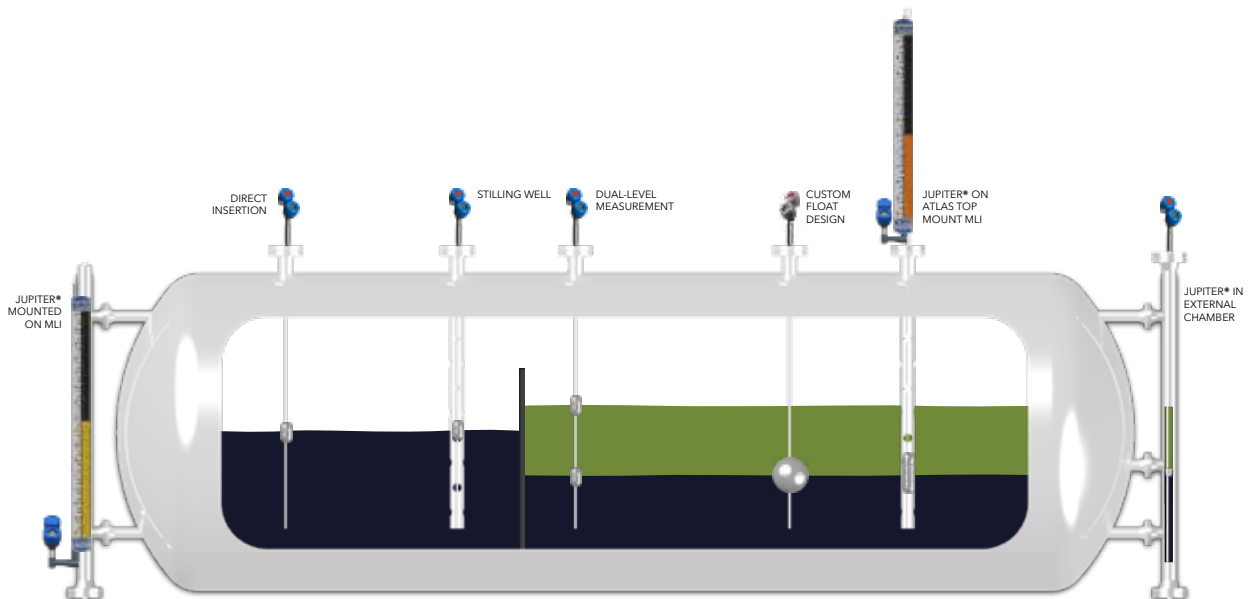
PIEZOELECTRIC CRYSTALS ④

The mechanical wave is converted back into electrical energy by two piezoelectric crystals. The on-board electronics interpret the time-of-flight data and indicate the position of the float magnets.



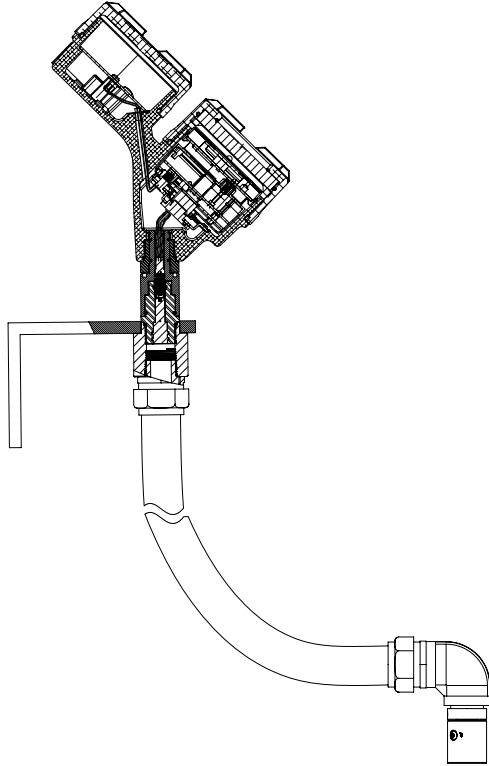
APPLICATIONS

As direct insertion model: Jupiter can be mounted inside a bridle, stillwell, external cage or directly inside the vessel.
As external mount model: Jupiter can be mounted on the outside of a magnetic level indicator (MLI).



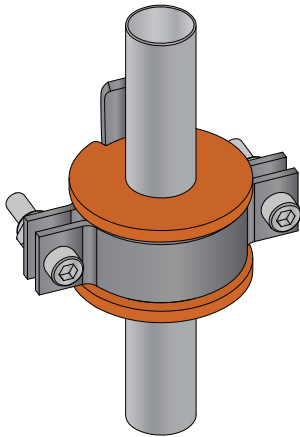
OPTIONS

REMOTE MOUNTED ELECTRONICS



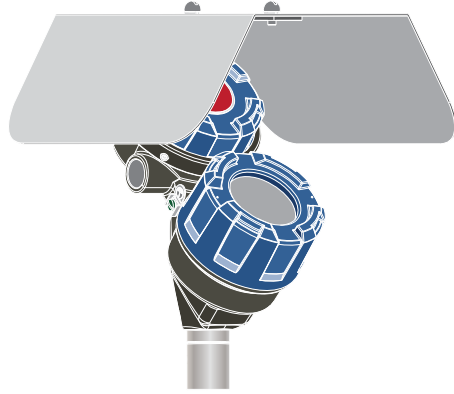
Remote mount option, ideal for installation space constraints.

VIBRATION KIT



Silicone-based damping material eliminates metal-on-metal contact between the probe and the chamber. Increases signal stability in high vibration applications by reducing mechanical noise.

SUNSHADE

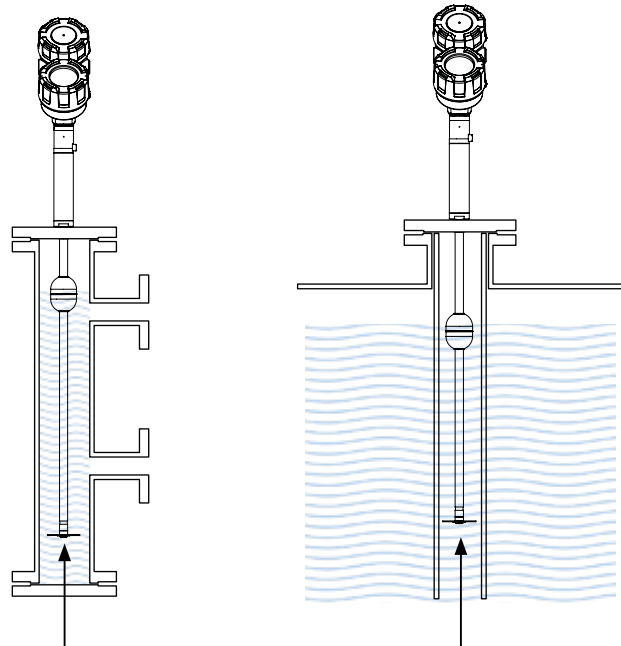


Reduces glare and radiant heating of the transmitter enclosure. Also minimizes impact of direct solar radiation to the graphic liquid crystal display.

CENTERING DISC

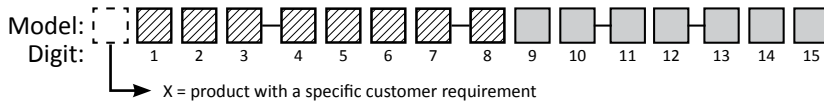


The centering disc is an invaluable aid when utilizing the Jupiter in a direct insertion environment, such as a stilling well or modular instrumentation bridge. By keeping the transmitter probe centered, potential for impingement is mitigated.



Units mounted in stilling wells or chambers are provided with centering disc at the base of the probe, guaranteeing free movement of the float.

2. Order code for Jupiter JM4 direct insertion probe



Sizing chart for chambers & stilling wells

Reference the chart below to identify an appropriate chamber or stilling well size for your application. Adequate clearance is recommended to ensure proper operation.

Float Diameter mm (inches)	Probe lengths ≤ 366 cm (144")						Probe lengths > 366 cm (144")	
	3" sch. 5/10	3" sch. 40	4" sch. 5/10	4" sch. 40	4" sch. 80	4" sch. 160	4" sch. 10	4" sch. 40
47 (1.85)	•	•	•	•	•	•	•	•
51 (2.0)	•		•	•	•	•	•	•
57 (2.25)			•	•	•		•	
64 (2.5)			•	•				
76 (3.0)								

9 | CONSTRUCTION GRADE

0	Industrial
K	ASME B31.1
L	ASME B31.3
M	ASME B31.3 & NACE MR0175/MR0103
N	Industrial & NACE MR0175/MR0103

10 | LEVEL / INTERFACE MEASUREMENT

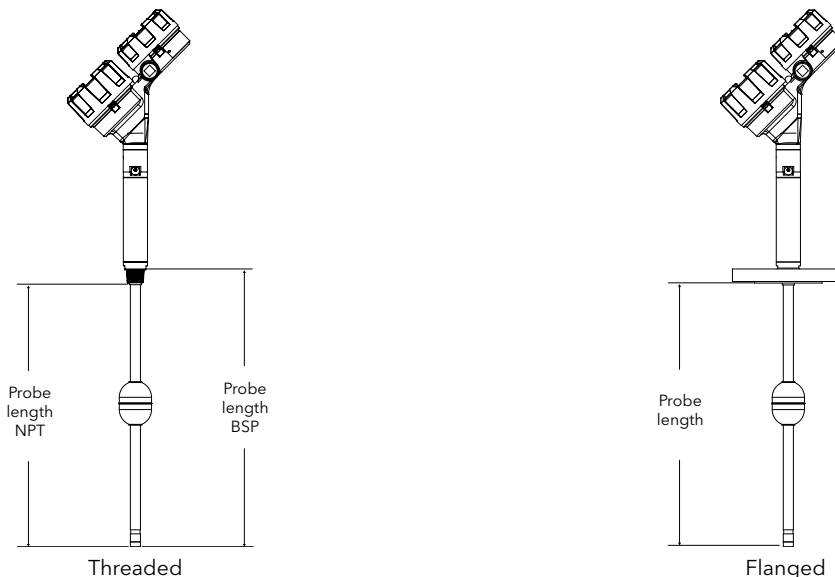
1	Measure only the total liquid level
2	Measure only the interface level
3	Measure both total and interface level

11-12 | MAGNETIC FLOAT(S)

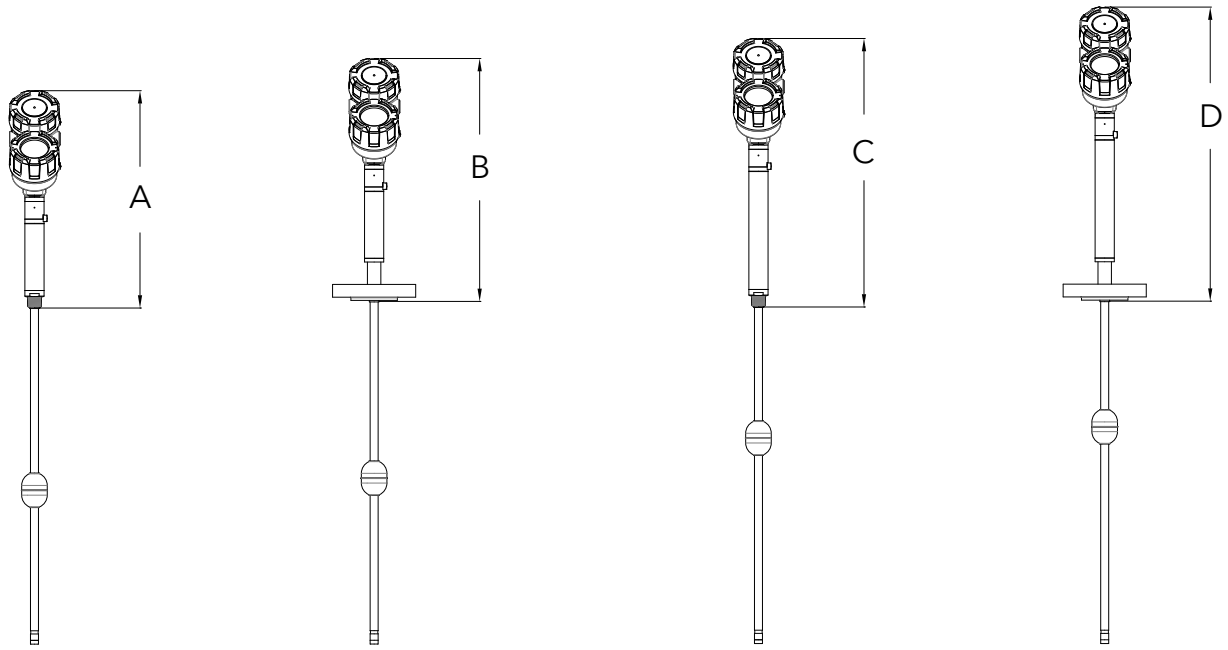
See separate page for our standard direct insertion floats offering. If a listed float does not meet your application requirements, consult factory for a custom design.

13-15 | PROBE LENGTH - Specify per cm (0.39") increment

030	Min 30 cm (12")
488	Max 488 cm (192") - 2C8
999	Max 999 cm (393") - 2C1, 2C2



Units with direct insertion probe



Probe model	Dimensions	
	Threaded	Flanged
2C1	A = 432 (17.0)	B = 483 (19.0)
2C2, 2C8	C = 533 (21.0)	D = 584 (23.0)



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UNDER RESERVE OF MODIFICATIONS

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