

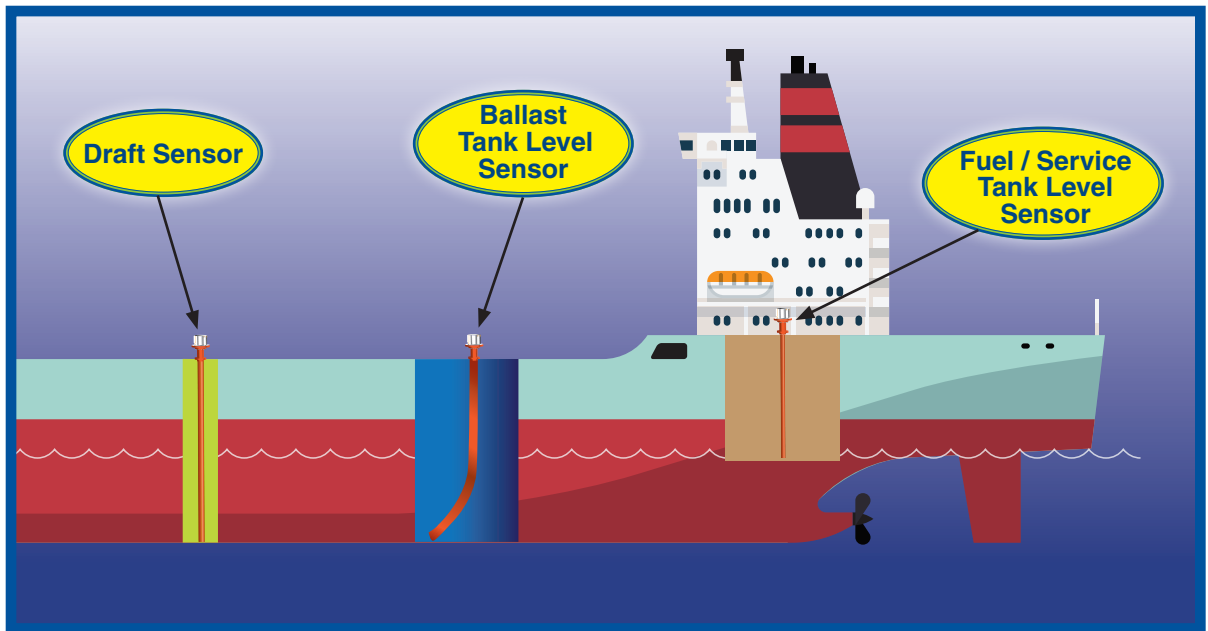
Metritape[®]

by JOWA USA

Level Gauging for Fuel, Ballast, Draft and Service



With our innovative resistance-tape technology, JOWA's Metritape sensors provide reliable level gauging solutions for a diverse and demanding mix of applications, including hazardous locations.



Sensors for Fuel / Ballast / Draft / Service

- No tank entry required
- Flexible sensor fits “J-shaped” wing tanks
- Integrated temperature measurement option
- Unaffected by sediment / sludge at tank bottom
- Excellent performance in pressurized tanks
- Compatible with all BWT systems
- Stable, repeatable outputs
- Proven design backed by 50 years of experience

 **Metritape**[®]

Simple

Rugged

Reliable

JOWA offers a variety of instrumentation that directly interfaces with our Metritape sensors and offers features and options to meet any need.



Metrimeter

Metrimeter

- Single tank instrument with digital and bar graph display
- Inputs for Level, Temperature, IHA / Overfill
- Alarm / fault indicators & relay outputs
- Data output via serial interface
- Remote alarm acknowledge and/or horn silence

Sentry / Vanguard

Sentry / Vanguard Monitoring System

- Detailed tank information
- Multiple alarm indications and relay outputs
- Data outputs via serial interfaces
- Highly configurable to serve user requirements
- Tank pressure monitoring option



MetriGuard Tank Monitor



MetriGuard Tank Monitor

- Data output to console via serial interface
- Reliable and cost effective
- Ideal for fuel tank gauging
- Automates MEPC.278(70) compliance
- Robust self-diagnostics

Technology Comparison

	Resistance-tape	Radar	Floats	Pressure Cells	Air Purge
PERFORMANCE					
Affected by Specific Gravity / Temperature	No	No	Yes	Yes	Yes
Affected by Sediment / Residue	No	No	Yes	Yes	Yes
Affected by Waves / Foam	No	Yes	Yes	No	No
Reads into Sump with Same Accuracy as at Top	Yes	No	No	No	No
± 2.5mm Sensor Resolution	Yes	Yes	No	No	No
Single Sensor Reads to Bottom of "J" Tank	Yes	No	No	Yes	Yes
Has Moving Parts to Stick, Break, or Corrode	No	No	Yes	No	No
Same Level Technology Used for All Tanks	Yes	No	No	No	No
INSTALLATION					
Number of Deck Penetrations Per Tank for Level, Temperature and Independent High Alarm	1	3	2	—	—
Number of Cable Runs Per Tank for Level, Temperature and Independent High Alarm	1	3	2	—	—
MAINTENANCE					
Requires Frequent Recalibration	No	No	Yes	Yes	Yes
Requires Frequent Cleaning	No	No	Yes	Yes	Yes
Requires Gas Free and Tank Entry to Service Sensor	No	No	Yes	Yes	Yes
VALUE					
Purchase Cost (Low, Moderate, or High)	Mod.	High	Mod.	Low	Low
Installation Cost (Low, Moderate, or High)	Low	High	High	Mod.	Mod.
Maintenance Cost (Low, Moderate, or High)	Low	Low	High	High	High

Superior Performance
Low Maintenance
Best Value

