

Countum Group

SATAM

Metering Solutions



Gravity metering system

ZCE 11-48

ZCE11-48 is a gravity metering unit for fuels. It is designed to rule out any fraud possibility during fuel transportation between depot and gas station. It allows to determine and to verify the delivered quantities without any contestation.

Flow computers

Measuring systems

Flow meters

Accessories

An anti-fraud system for gas station

Situation

The fuel delivered to the service station by the oil company is accurately measured in the depot during the truck loading. However, an accurate verification of quantities delivered to the gas station is almost impossible to perform.

Thus there is a possibility of product loss during fuel transportation from depot to gas station.

ZCE11-48 allows an accurate and non contestable measurement of fuel quantity delivered by the tank truck to the gas station.

A well tried technology

- A rugged and reliable metering unit
- Autonomous system, no need for power supply
- Volumetric meter certified for fuel custody transfer measurements
- Gas elimination device without connection to external atmosphere
- Stainless strainer with easy access
- Printer for delivery ticket as an option
- Safe and user friendly device

A simple and user friendly device

- Batch volume register with 5 digits and reset
- Permanent volume totalizer with 8 digits
- Easy to read display
- Anti-fraud technology

An unfailing reliability

- Certified for custody transfer measurements
- Multi-product measurement
- Not sensitive against temperature changes
- Excellent measurement stability
- Adjusting mechanism protected by sealing
- Gas elimination directly downstream the meter with no risk of environmental pollution
- Minimized maintenance costs

Technical data - Gravity metering system



Connection to underground tank

Model		ZCE 11-48
Maximum flow rate	m ³ /h - L/mn - USGPM	24 - 450 - 121
Application		Horizontal unit for gravity reception
Measured parameters		Actual volume
Measured liquids		Petrol, premium fuels, diesel, E5...E85, bio-diesel, ethanol, methanol, kerosene, fatty acid methyl ester, oils
Materials	Register material	Cast aluminum & Zamac (mechanical register) UV resistant polycarbonate (electronic register)
	Meter material	Ductile or Ni resist Iron (casing) Aluminium (rotor) Graphite (blades)
Power supply		Not needed for mechanical register – 24VAC or 230 VDC for electronic register
Equipment	Strainer - Gas elimination device	EC 42 / FS 24 model 200µ filtering (70 Mesh) – horizontal basket filter Gas release controlled by float and differential valve Gas release direct after the meter
	Meter	ZC 17-48 model PD Meter
	flow register	Mechanical register model VR, preset*, printer*, pulser*, (* : option) or Equalis electronic register with display, secure archiving of transactions
Operating conditions	Pressure	10 bar upon request
	Viscosity	20cSt max. – contact us about higher viscosities
	Liquid temperature	-10 to + 55 °C
	Ambient temperature	Standard -20 to + 55 °C Contact us about higher or lower temperatures
Metrological performance	Accuracy	≤±0.15% - Option ≤±0.1% - for measurement range of 10 : 1
	Repeatability	≤±0.02%
	Temperature accuracy	≤0.5°C (only with electronic register)
Installation	ATEX certification	Zone 1 - II 2 G
Custody transfer approval		MID - CE type approval n°LNE 11123 (ZCE17) Type compliance certificate OIML R117 n°LNE-24351(ZC17) GOST Standard : FRC24.004.A n°21011 (metering unit) FRC24.004.A n°21012 (ZCE17)

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