

Countum Group

# SATAM

Metering Solutions

## Vertical measuring unit for truck and railcar loading



### ZCE 5

ZCE 5 vertical metering unit is designed for truck and train tankers loading stations in a top or bottom loading configuration.

ZCE5 space-saving configuration enables easy installation in smaller facilities and in compact pipeline network.

Flow computers

Measuring systems

Flow meters

Accessories

### Sectors of application

- Tanker trucks and railcars loading applications
- Preparation of bio-fuels by means of online or batch blending
- Measurement of white products and bio-fuels
- Additive injection control

### High reliability measuring system

#### Ready-made technology

ZCE 5 vertical measuring units are completely assembled, wired and tested in the production facility in order to ensure a maximum reliability.

#### Measurement stability and accuracy

Measurement accuracy guaranteed over a period of many years without any deviation in the calibration curve.

#### Modular design

Extensive line of accessories to create customized measurement applications.

### Key points

#### Low installation costs

Complete and ready-to-install compact measuring unit including strainer, air eliminator, PD meter, valve and register.

#### Low maintenance costs

Simple and robust construction with minimal moving parts. Interchangeable mechanical components.

#### Space-saving installation

Compact metering unit for installation in smaller areas and in vertical pipeline networks.

#### A safe and easy-to-use technology

Automatic gas elimination system to start loading operation with empty pipe.

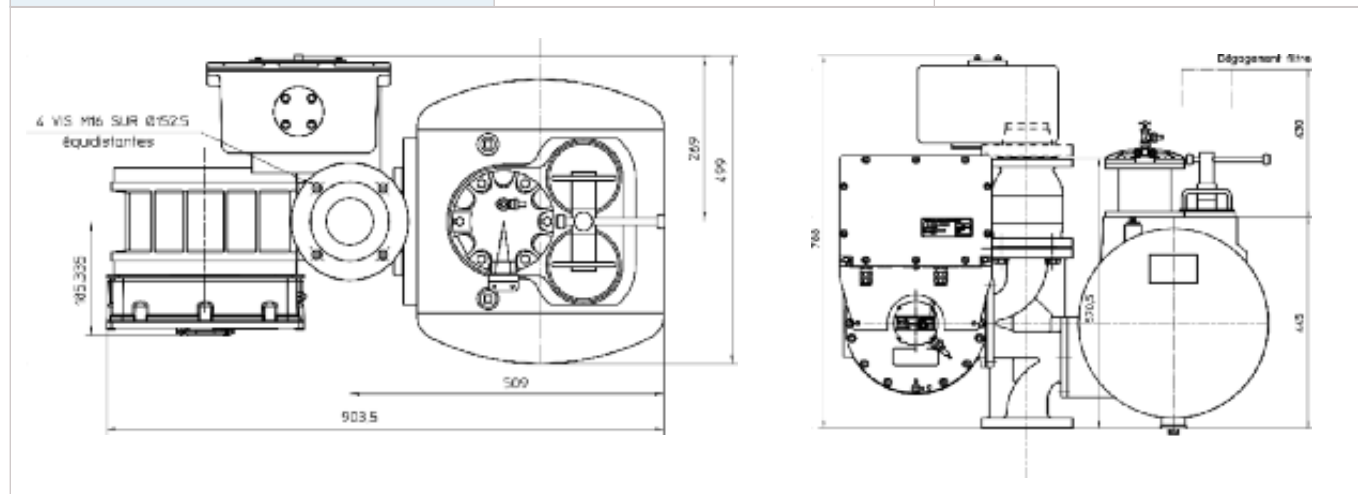
Filtering system with automatic clogging detection.

#### Communication

Direct communication with supervisory system.

# Technical data - Vertical measuring unit for loading

Model		ZCE 5-80	ZCE 5-150
Maximum flow rate	m <sup>3</sup> /h - L/mn - USGPM	80 - 1333 - 360	150 - 2500 - 660
Connections	Flanges	3" ASA 150 RF	4" ASA150 RF
Description		Compact vertical metering unit	
Measured parameters		Actual volume, temperature-corrected volume*, mass*, flow rate**, temperature* (* : only for electronic register version, ** : option for mechanical register version)	
Measured liquids		Petrol, premium fuels, diesel, E5...E85, bio-diesel, ethanol, methanol, kerosene, fatty acid methyl ester, oils	
Equipment	Strainer - Gas elimination device	Model EC 29 50 to 450 filtering (270 to 40 Mesh) depending on the liquid Gas release controlled by float and differential valve	
	PD meter	ZC 17-80	ZC 17-150
	Temperature measurement	4-wire Pt100 (option for electronic calculator version)	
	Multi-function valve	XAD 37	XAD 36
		Small and large flow authorisation, flow limitation Electrical control or mechanical control	
	Flow register	Mechanical register model VR with pre set*, printer*, pulser* or Equalis electronic register with display, secure archiving of transactions	
Operating conditions	Pressure	10 bar max.	
	Viscosity	20cSt max. – Contact us about higher viscosities	
	Liquid temperature	-10 à +80 °C	
	Ambient temperature	Standard -25 to +55 °C ; Option -40 to +55 °C Contact us about higher or lower temperatures	
Metrological performance	Volume accuracy	≤±0.15% - Option ≤±0.1% - for measurement range of 10 : 1	
	Volume repeatability	≤ ±0.02 %	
	Temperature accuracy	≤ 0.5 °C	
Installation	ATEX certification	Zone 1 - II 2 G	
Custody transfer approval		MID - CE type approval n° LNE 6184 Type compliance certificate OIML R117 n°LNE-24351	
Dimensions and weight	net weight without extension	200 kg	240 kg
	Net weight with extension	235 kg	275 kg



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