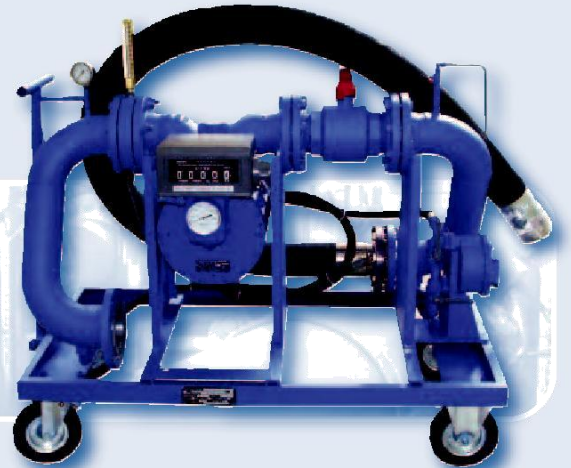


Countum Group

SATAM

Metering Solutions



Master meter

ZCV 17

The Satam “Master Meter” product range is dedicated to periodic calibration of custody transfer measuring equipment.

The ZCV 17 is a working standard that can be used regularly to check and calibrate measuring instruments or measuring systems. With minimal dimensions, it can easily be moved to several different sites without the requirement for lifting tools. Equipped with an Equalis electronic register that ensures linearization of measurements, it can be used with liquids of various viscosities without no loss of accuracy.

Flow measuring computers systems

Flow meters accessories

Sector of application

Oil depots

For oil product reception and loading stations for tank truck, tank car and ships.

Hydrocarbon transportation

Distribution of fuel oil or fuel by road tanker.

Aircraft refuelling

Aircraft dispensers and aircraft fuelling tankers.

Army

Depot supplies and loading of trucks.

Transport companies

Refuelling of locomotives, trucks and public transport coaches.

Marine applications

Refuelling of ships.

Mining sites

Refuelling of trucks or site machinery.

Design of the master meter

Robust construction

Positive displacement meter with moving blades.

Modular design

Available with mechanical or electronic register.

Calibration for different viscosities

ZCV17 is supplied with one calibration certificate per each operating viscosity.

Key points

Compact design

Calibration device of reduced weight and dimensions.

Possibility to move the ZCV17 to different sites without the requirement for lifting tools

Self powered technology

Functioning of the mechanical register version without any power supply.

Modular design

Wide range of accessories to create your customized calibration device.

Can be installed on a trolley as mobile calibration equipment.

Stability and accuracy of measurements

Stable and accurate volume measurement without any influence of installation position.

Flowmeter manifold separated from measurement chamber to eliminate any possible influence of external mechanical stresses on measurement accuracy.



Technical data - Master meter ZCV 17

Model	ZCV 17	24	48	80	150	250	
Application		Master meter dedicated to calibration of custody transfer volume measuring equipments					
Max. Operating flowrate	m ³ /h - L/mn - USGPM	24 - 400 - 105	48 - 800 - 210	80 - 1333 - 360	150 - 2500 - 660	250 - 4166 - 1100	
Min. Operating flowrate	m ³ /h - L/mn - USGPM	2.4 - 40 - 10.5	4.8 - 80 - 21	8 - 133.3 - 36	15 - 250 - 66	25 - 416.6 - 110	
Measured parameters		Operating volume Base volume (only for ZCV17 IE)					
Measured liquids		Petrol, premium fuels, diesel, E5...E85, bio-diesel, ethanol, methanol, kerosene, fatty acid methyl ester oils					
Connections		Flanges or dry couplings* 2 x 3 m hoses*					
	Diameter	2"	2"	3"	4"	6"	
	PD meter	ZC17-24	ZC17-48	ZC17-80	ZC17-150	ZC17-250	
Versions	ZCV17 IM			ZCV17 IE			
	Register	Mechanical register (VR)			Electronic register (Equalis)		
		Total volume with reset: 5 digits Total volume without reset: 8 digits			Total volume: 6 digits Secure storage of ZCV17 calibration curves Calculation of reference volume		
	Volume display	Operating volume			Operating volume, base volume		
	Flowrate display	Included with IDI module L/mn or m ³ /h			Included		
	Calibration curve	7 flowrate values with 2 values per flowrate One curve per operating viscosity					
	Calculation of reference volume	Manual calculation			Automatic calculation		
	Temperature measurement*	Local display			Pt 100		
	Pressure measurement*	Local display					
	Drainage equipment*	Manual drainage pump with purge valve and 2 release valves					
	Trolley*	Calibration device mounted on chassis with 4 pivoting wheels					
Operating conditions	Pressure	10 bar max.					
	Viscosity	50 cSt max.					
	Liquid temperature	-10 °C to +80 °C					
	Ambient temperature	Standard : - 25 °C to + 55 °C - Option : - 40 °C to + 55 °C Contact us for higher or lower temperatures					
Metrological performances	Volume accuracy	< ± 0,1%			< ± 0,05% with linearization		
	Volume repeatability	< ± 0,02%					
	Temperature accuracy	< ± 0.5°C					
	Calibration certificate - Linearization curve	Calibration certificat according to OIML R117					
Installation	Electrical power supply	No (self-powered device)			24 VCC or 230 VCA		
	ATEX certification	Zone 1 ; II 2 G					

* : optional supply