Countum Group

SATA

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Metering Solutions

Fuel dispenser for marina, fishing harbour and heavy duty vehicles



ZCE 17

ZCE 17 is designed for refuelling of ships and motorized vehicles. Different versions and options are adapted to the constraints of specific application and tailored for the maximum safety, reliability and accuracy.

The versions fitted with electronic register provide a safe control, secured and backup of each transaction and direct data transmission to the Customer's administration and management information system.



Field of application

- Fuel distribution for rail locomotives, worksite machinery, mining and industrial vehicles
- Fuel dispenser for marina on floating quay or on harbours' dockside
- Fuel distribution for private fleets (fuel, diesel, gasoline)
- Very high capacity dispensing units: flow rate from 8 to 30 m³/h

Key points

Reduced installation cost

This metering set is provided on a frame and is fully assembled, wired and tested in factory.

Reduced maintenance cost, safe to use

Simple, robust and reliable construction with minimal mechanical components, certified for use in hazardous areas.

Available in autonomous version

Can operate without any external electrical or pneumatic power source.

Certified for custody transfer

Metering unit certified for fuel custody transfer according to international regulations and local Weight and Measures authorities.

A fully modular design technology

Register module

Mechanical register with manual reset, graduation in liters, 5 digits zeroing counter, and 8 digits totalizer.

Electronic register for optimized refuelling control and transactions data management.

Skid mounted measuring system

Stainless steel support frame with product receiving drum to avoid spilling fuel on the ground.

Electro-pumping suction unit with Ex-proof motor, strainer and gas elimination device.

Positive displacement meter ZC17 with built-in adjustment mechanism.

Delivery flexible hose (10 ml standard length) equipped with manual or motorized hose retraction system.

Nozzle support.

A wide range of options for a customized solution

Epoxy coated carbon steel or stainless steel cabinet.

Pulser on mechanical register for data transmission.

Automatic and motorized hose retractor.

Electric contact nozzle hook.

ATEX lightning.

Technical data - ZCE 17 fuel dispenser

model		ZCE 17 - 10	ZCE 17 - 30	ZCE 17 - 30
Description		refuelling of ships and motorized vehicles		
Maximum flowrate	m³/h L/mn	10 166	20 333	30 500
Measured and calculated parameters		Operating volume Base volume*, temperature* (with electronic register)		
Measured medium		Diesel oil, gasoline, bio-fuels		
Equipments	Support frame	Epoxy coated carbon steel or stainless steel*		
Cabinet housing		Epoxy coated carbon steel or stainless steel*		
Product receiving drum		Epoxy coated carbon steel or stainless steel*		
Product receiving tank*		100 liters stainless steel tank with high level switch (connected to the gas removal pipe of the gas elimination device)		
Pumping unit	Electric*	3.2 kW	5.5 kW	7.3 kW
	Thermal group*	Upon request		
Manual pump*		Upon request		
		200 μm for diesel – 50 to 100 μm for premium		
Gas elimination device		Included		
Positi	ve Displacement meter	ZC17 - 12	ZC17 - 24	ZC17 - 48
Temperature* Stop valve Lockout valve* Register Lightning*		Pt100 (with electronic register)		
		Manual ball valve		
		Electric valve		
		Mechanical register (VR) 5 digits resettable and 8 digits totalizer, volume preset*, printer* or Electronic register * 6 digits (Equalis MPC) with display, secured data storage and RS485 Modbus for communication with administration system		
		ATEX certified		
Delivery hose	Diameter	32 mm	40 mm	50 mm
Length		10 ml (standard) / 30 ml (option)		
Retraction system		Back spring for 10 ml hose ; Motorized for 30 ml hose		
4-way rewind rollers assembly for hose guidance*		Stainless steel		
Grounding system*		Option		
	Nozzle	Automatic shutoff nozzle	Manual shutoff nozzle	Manual shutoff nozzle
Nozzle hook detection*		Electric switch		
Operating conditions Pressure Temperature		8 bar max. (diesel oil) – 6 bar max (gasoline)		
		-10 to +80 °C (liquid) ; -25 (option -40 °C) to +55 °C (ambient)		
Metrological performances	Volume accuracy	≤ ±0.15 %	- Option $\leq \pm 0.1$ % - for measuring r	ange 10 : 1
	Volume repeatability		≤ ±0.02 %	
Installation Power supply		380VAC or 230 VAC (pumping unit) 230VAC (electronic register)		
ATEX certification		Zone 1 - II 2 G		
Custody transfer approval		EC-MID type examination certificate n°LNE – 11123 (EMS 12, 24, 48) Type compliance certificate OIML R117 n°LNE-24351 (EMS12, 24, 48)		

* option

Headquarters and Sales Department

PARIS NORD II Bat. le Gauguin - 47, allée des Impressionnistes BP 85012 Villepinte 95931 Roissy CDG Cedex FRANCE

Phone: +33 (0)1 48 63 02 11 Fax: +33 (0)1 49 38 41 01 E-mail: sales@satam.eu

Manufacturing facility

Avenue de Verdun - CS 60129 14700 Falaise FRANCE Tél.: +33 (0)2 31 41 41 41

Fax: +33 (0)2 31 40 75 61



www.satam.eu