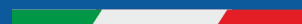


ASSYTECH



MADE IN ITALY



BLUE SYSTEMS

Professional equipment for the storage and dispensing of AUS32, AdBlue® and other additives

ATD05119 Rev.14_09/26

INDEX

1 CERTIFICATIONS AND ABOUT US	4
1.1 Certifications	4
1.2 About Us	5
2 GENERAL INFORMATION	6
2.1 The EURO 4, EURO 5, and EURO 6 standards	6
2.2 AUS 32 in the reduction of pollutant emissions from light-duty vehicles	6
2.3 SCR technology for heavy-duty vehicles	6
2.4 Effect of AUS 32 on exhaust fumes	7
2.5 What is AUS 32	7
3 BLUESYSTEMS LINE DISPENSERS	8
3.1 AT02LC/U series	8
3.2 AT15 series	10
3.3 AT30/U series	12
3.4 AT30/LVU series - 500-liter tank included	14
3.5 AT30/U series trolleyed MID	16
4 TANK DISPENSER	18
4.1 Naked series	20
4.2 Compact series	22
4.3 LC series	24
4.4 Shuttle series tank dispenser	26
4.5 Twin series	28
5 KEY FEATURES	30
5.1 Tank	30
5.2 Transportation	31
5.3 Leak containment	31
5.4 Main components	32
5.5 Main hydraulic components	34
5.6 Dispensing nozzle	35
5.7 Electrical and electronic components	36
5.8 Product level sensor	37
5.9 Electrical connections	38
5.10 User interface	38
6 CUSTOMIZATIONS	39
7 ACCESSORIES	40
8 OPTIONS	41

1 CERTIFICATIONS AND ABOUT US

1.1 Certifications

The equipment is certified in accordance with current regulations applicable to its intended use. The symbols used and their corresponding references are listed below.

COMPANY CERTIFICATIONS



ISO 9001 Quality Management System Certification



Quality Declaration for Production in Accordance with the ATEX Directive 2014/34/EU



Quality Declaration for Production in Accordance with the MID Directive 2014/32/EU



Certificate of Accreditation for a Type C Inspection Body in accordance with UNI CEI EN ISO/IEC 17020:2012

PRODUCT CERTIFICATIONS



EU Declaration of Conformity



ESTI Certificate
(for equipment intended for the Swiss market)



ATEX Certificates



Ministerial certification
(for Category C diesel equipment)



MID Certificates



Certification for equipment used in motor vehicles

Note: Unless otherwise indicated, the products in this catalog comply with EU regulations.

Some of the products listed in the catalog are protected by intellectual property rights and/or industrial property rights.

Assytech reserves the right to take all legal measures available to it to protect its rights in the event that third parties commit serious acts that infringe upon the intellectual property rights and/or proprietary rights belonging to Assytech.

1.2 About Us

Assytech Srl, founded in 1997, is a dynamic company born from the combination of diverse professional skills and experience in the oil and gas sector.

For years, it was the primary dispenser assembly company for Nuovo Pignone and General Electric. Specializing in the design and manufacture of fuel dispensers and refueling management equipment, Assytech is not just a supplier but a partner in providing flexible services, technology, and products that meet all customer requirements.

Assytech, one of the first in Europe, has been manufacturing systems for the storage and dispensing of additives compatible with AUS32 (commonly known as AdBlue®) for over 15 years. Assytech offers technical support throughout the country, either directly or through authorized installers.



 Via Val D'Aosta 169 - Talamona (SO) - Italy

 +39 0342 615506

 commerciale@assytech.it
assytech@registerpec.it

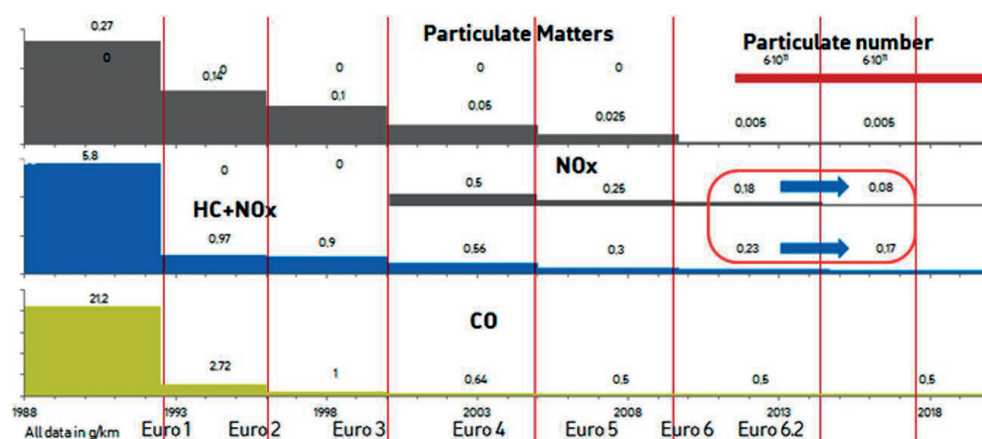

800 278 992
www.assytech.it

2 GENERAL INFORMATION

2.1 The EURO 4, EURO 5, and EURO 6 standards

The EURO 4 directive took effect on October 1, 2006, the EURO 5 directive on January 1, 2008, and the EURO 6 directive on September 1, 2015. These directives regulate the exhaust emission limits for vehicles weighing more than 3.5 tons.

As of these dates, all newly registered heavy-duty vehicles (7.35 tons) comply with the new legal requirements. These directives aim to achieve an ever-greater reduction in emissions of fine particulate matter and NO_x (nitrogen oxides), substances that are harmful to the environment and human health. The evolution is shown in the following table.



2.2 AUS 32 in the reduction of pollutant emissions from light-duty vehicles

As of September 1, 2015, all new cars sold in Europe must also meet Euro 6 standards. Euro 6 also applies to new models of light-duty diesel vehicles under 3.5 tons (1), meaning that many cars, vans, and commercial vehicles have a separate tank for AdBlue®.

The requirement took effect in September 2014 for new type approvals, while manufacturers were given one year to update all models in their lineups. European regulations set stricter limits for Euro 6 cars regarding CO₂ emissions and thus fuel consumption, but they are particularly strict regarding nitrogen oxide (NO_x) emissions, which diesel engines produce in large quantities.

2.3 SCR technology for heavy-duty vehicles

To comply with the EURO 4 and EURO 5 Directives, manufacturers of heavy-duty diesel vehicles have developed SCR (Selective Catalytic Reduction) technology (2).

This technology involves the installation of a special catalytic converter that uses AUS 32 as a reducing agent to convert harmful nitrogen oxides (NO_x) into water vapor and nitrogen, which are substances that are harmless to the environment.

2.4 Effect of AUS 32 on exhaust fumes

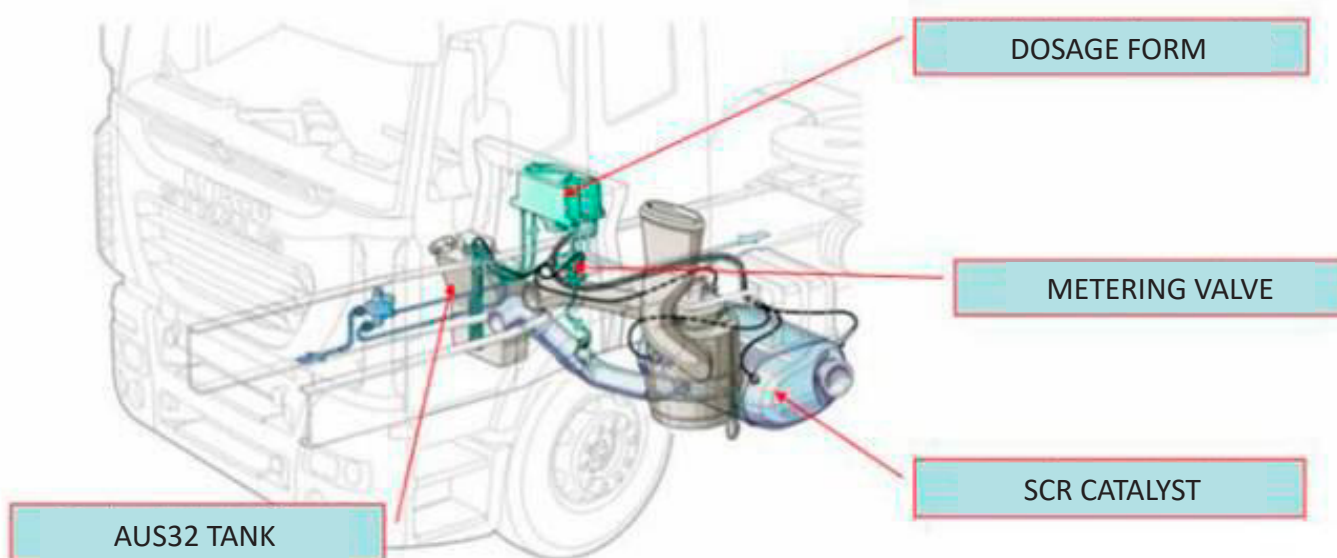
- Urea thermolysis:
 $(\text{NH}_2)_2\text{CO} \rightarrow \text{NH}_3 + \text{HNCO}$
- Hydrolysis:
 $\text{HNCO} + \text{H}_2\text{O} \rightarrow \text{NH}_3 + \text{CO}_2$
- Selective catalytic reduction (Standard-SCR, temperature above 250 degrees):
 $4\text{NO} + 4\text{NH}_3 + \text{O}_2 \rightarrow 4\text{N}_2 + 6\text{H}_2\text{O}$
- Fast SCR (temperature above 170 and up to 300 degrees):
 $\text{NO} + \text{NO}_2 + 2\text{NH}_3 \rightarrow 2\text{N}_2 + 3\text{H}_2\text{O}$

In addition to the diesel particulate filter (DPF) required by Euro 5 standards, the new Euro 6 diesel engines are equipped with NO_x traps or, in the case of larger engines, an exhaust gas treatment system that uses a urea-based additive.

2.5 What is AUS 32

AUS 32 or AdBlue® (3) is a special, ultra-high-purity 32.5% urea solution, whose consistent quality is ensured by compliance with DIN 70070 and ISO 22241-3:2008.

This substance is stored in an auxiliary tank on the vehicle, and the amount used, according to the EURO 4 directive, corresponds to approximately 5% of fuel consumption. Only the use of AUS 32 can guarantee the proper functioning of the catalytic converter. AUS 32 is a non-hazardous substance and has a freezing point of -11°C.



(1) LV: Light vehicle weighing less than 3.5 tons

(2) Selective Catalytic Reduction, a system designed to minimize nitrogen oxide emissions by injecting a urea solution into diesel exhaust gas

(3) **Trademark registered by the German Association of the Automotive Industry (VDA) for urea solution: 32.5% ISO 22241-3 / DIN 70070.** Synonyms: Acqueus Urea Solution "AUS 32", Diesel Exhaust Fluid "DEF" (USA), Automotive Liquid Reducing Agent "ARLA32" (Brazil)

ISO 22241-3:2008 General standard specifying the characteristics of AUS32 (AdBlue®)

ISO 22241-3-3 Storage and handling of AUS32 (AdBlue®)

ISO 22241-3-4 AUS32 nozzle for vehicles weighing more than 3.5 tons

ISO 22241-3-5 AUS32 nozzle for vehicles weighing less than 3.5 tons

3 BLUESYSTEMS LINE DISPENSERS

3.1 AT02LC/U series



DESCRIPTION

AUS 32 dispenser with a flow rate of 2 to 40 l/min, available in single or alternating versions. Constructed with an AISI 304 steel frame, AISI 316 fittings, an electronic metering unit with no moving parts, and an Elaflex hose compatible with AUS 32.

Designed and manufactured to high quality standards, the AT02LC/U represents a reliable and technologically advanced solution, the result of extensive manufacturing experience and a continuous process of innovation.

It complies with the requirements of ISO 22241-3.

- Flow rate up to 40 l/min
- Volumetric or volumetric-metric for use in transactions with third parties
- Maintenance-free backlit LED display
- Single-sided or double-sided
- Non-resettable electronic and electromechanical totalizer
- MID-compliant electronic meter with no moving parts

TECHNICAL SPECIFICATIONS

Structure	AISI 304 stainless steel
Fittings	AISI 316 stainless steel
Dispensing hoses	Elaflex additive version compatible with AUS32
Dispensing nozzle	Elaflex automatic type ZVA LV for AdBlue® for light-duty vehicles, ZVA HV AdBlue® for heavy-duty vehicles
Electronic header	CPTH02, electronic model, with backlit LCD display, 6 digits, 1-inch height
Accuracy	± 0,5% (MID Compliant)
Heater	150 W (optional)
Flow rate	2-10 l/min (light-duty vehicles); 4-40 l/min (heavy-duty vehicles)
Operating temperature	0°C ÷ +40°C
Dimensions (WxDxH)	560X448X1523 mm
Marking	CE-M EU Type Approval No. T10821 (MID 2014/32/UE)

POSSIBLE CONFIGURATIONS

PUMP	SUBMERGED AUS32	U								
HYDRAULICS	SINGLE		1							
	ALTERNATING		4							
1° NOZZLE	10 l/min			1						
	40 l/min			2						
2° NOZZLE	ABSENT				0					
	10 l/min				1					
	40 l/min				2					
PRODUCT 1	AUS32					A				
PRODUCT 2	NO ONE						N			
	AUS32						A			
VIEWING	SINGLE-FACE							M		
	DOUBLE-FACE							B		
DISPLAY	VOLUMETRIC								V	
	CONTOMETRIC								C	
VERSION	INDUSTRIAL									I
	MID									M



3.2 AT15 series

DESCRIPTION

AUS 32 dispenser with a flow rate of 2 to 40 l/min, available in single, alternating, or dual versions. Constructed with an AISI 304 steel frame, AISI 316 fittings, an electronic metering unit with no moving parts, and an Elaflex flexible hose for additives compatible with AUS 32.

Designed and manufactured to high quality standards, the AT02LC/U represents a reliable and technologically advanced solution, the result of extensive manufacturing experience and a continuous process of innovation.

It complies with the requirements of ISO 22241-3.



- Flow rate up to 40 l/min
- Volumetric or volumetric-metric for use in transactions with third parties
- Maintenance-free backlit LED display
- Single-sided or double-sided
- Non-resettable electronic and electromechanical totalizer
- MID-compliant electronic meter with no moving parts

TECHNICAL SPECIFICATIONS

Structure	Stainless steel
Fittings	AISI 316 stainless steel
Dispensing hoses	Elaflex additive version compatible with AUS32
Dispensing nozzle	Elaflex automatic type ZVA LV for AdBlue® for light-duty vehicles, ZVA HV AdBlue® for heavy-duty vehicles
Electronic header	CPTH02, electronic model, with backlit LCD display, 6 digits, 1-inch height
Heater	Included (150 W)
Flow rate	2÷10 l/min (light vehicles) , 4÷40 l/min (heavy-duty vehicles)
Operating temperature	0°C ÷ +40°C
Dimensions (WxDxH)	950X448X1750 mm
Marking	CE MID 2014/32/UE

POSSIBLE CONFIGURATIONS										
PUMP	SUBMERGED	S								
	DIESEL SUCTION/ SUBMERSIBLE AUS32	D								
HYDRAULICS	SINGLE		1							
	DOUBLE DUAL PUMP		2							
	DOUBLE SINGLE PUMP		3							
	ALTERNATING		4							
	HIGH FLOW RATE		5							
	ASPIRATED/SUBTONED		6							
1° NOZZLE	10 l/min			1						
	40 l/min			2						
2° NOZZLE	ABSENT				0					
	10 l/min				1					
	40 l/min				2					
PRODUCT 1	AUS32					A				
PRODUCT 2	NO ONE						N			
	AUS32						A			
VIEWING	SINGLE-FACE							M		
	DOUBLE-FACE							B		
DISPLAY	VOLUMETRIC								V	
	CONTOMETRIC								C	
VERSION	INDUSTRIAL									I
	MID									M



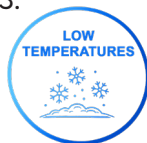
3.3 AT30/U series

DESCRIPTION

AUS 32 dispenser with a flow rate of 2 to 40 l/min, available in single, alternating, or dual configurations. Constructed with an AISI 304 steel frame, AISI 316 fittings, an electronic metering unit with no moving parts, and an Elaflex flexible hose for additives compatible with AUS 32.

Designed and manufactured to high quality standards, the AT02LC/U represents a reliable and technologically advanced solution, the result of extensive manufacturing experience and a continuous process of innovation.

It complies with the requirements of ISO 22241-3.



- Flow rate up to 40 l/min
- Volumetric or volumetric-metric for use in transactions with third parties
- Maintenance-free backlit LED display
- Single-sided or double-sided
- Non-resettable electronic and electromechanical totalizer
- MID-compliant electronic meter with no moving parts
- Designed for operation at temperatures below -10°C



TECHNICAL SPECIFICATIONS

Structure	Stainless steel
Fittings	AISI 316 stainless steel
Dispensing hoses	Elaflex additive version compatible with AUS32
Dispensing nozzle	Elaflex automatic type ZVA LV for AdBlue® for light-duty vehicles, ZVA HV AdBlue® for heavy-duty vehicles
Electronic header	CPTH02, electronic model, with backlit LCD display, 6 digits, 1-inch height
Accuracy	± 0,5% (MID Compliant)
Heater	including (150 W)
Flow rate	2÷10 l/min (light vehicles) , 4÷40 l/min (heavy-duty vehicles)
Operating temperature	-10°C ÷ +40°C (for temperatures below -10°C, an additional heater kit is required)
Dimensions (WxDxH)	695X720X1677 mm
Marking	CE-M EU Type Approval No. T10821 (MID 2014/32/UE)

POSSIBLE CONFIGURATIONS

PUMP	SUBMERGED	U							
HYDRAULIC	SINGLE		8						
	ALTERNATING		9						
1° NOZZLE	10 l/min			1					
	40 l/min (max. 50 l/min)			2					
2° NOZZLE	ABSENT				0				
	10 l/min				1				
	40 l/min (max.50 l/min)				2				
PRODUCT	AUS32					A			
VIEWING	SINGLE-FACE						M		
	DOUBLE-FACE						B		
DISPLAY	VOLUMETRIC							V	
	CONTOMETRIC							C	
VERSION	INDUSTRIAL								I
	MID								M



3.4 AT30/LVU series - 500-liter tank included



DESCRIPTION

Dispenser with a flow rate of 2 to 40 l/min, complete with a 500-liter tank, available in single, dual, or alternating configurations. Constructed with an AISI 304 steel frame, AISI 316 fittings, an electronic metering unit with no moving parts, and an Elaflex flexible hose for additives compatible with AUS32.

Designed and manufactured to high quality standards, the AT30LVU represents a reliable and technologically advanced solution, the result of extensive manufacturing experience and a continuous process of innovation.

It complies with the requirements of ISO 22241-3.

OPTIONAL EXTRAS INCLUDE:

- 2" TODO Quick Connect Fitting
- Level sensor



- Flow rate up to 40 l/min
- Volumetric or volumetric-metric for use in third-party applications
- Maintenance-free backlit LED display
- Single-sided or double-sided
- Non-resettable electronic and electromechanical totalizer
- MID-compliant electronic meter with no moving parts
- Designed for operation at temperatures below -10°C

TECHNICAL SPECIFICATIONS

Structure	Stainless steel
Fittings	AISI 316 stainless steel
Dispensing hoses	Elaflex additive version compatible with AUS32
Dispensing nozzle	Elaflex automatic type ZVA LV for AdBlue® for light-duty vehicles, ZVA HV AdBlue® for heavy-duty vehicles
Electronic header	CPTH02 (MID Approved), 6-digit backlit LCD display with 1-inch-high digits. Data storage without a backup battery.
Electromagnetic meter	Electronic, made of stainless steel, with no moving mechanical parts
Accuracy	± 0,5% (MID Compliant)
Heater	Including (150 W)
Flow rate	2÷10 l/min (light vehicles); 4÷40 l/min (heavy-duty vehicles)
Integrated tank capacity	500 L, complete with a pressure relief valve and a level sensor
Operating temperature	-10°C ÷ +40°C (for temperatures below -10°C, an additional heater kit is required)
Dimensions (WxDxH)	1608,50X 686,50X1298,50 mm
Marking	CE-M EU Type Approval No. T10821 (MID 2014/32/UE)

POSSIBLE CONFIGURATIONS

PUMP	SUBMERGED	U									
HYDRAULICS	SINGLE		8								
	ALTERNATING		9								
1° NOZZLE	10 l/min			1							
	40 l/min			2							
2° NOZZLE	ABSENT				0						
	10 l/min				1						
	40 l/min				2						
PRODUCT 1	AUS32					A					
PRODUCT 2	NO ONE						N				
	AUS32						A				
VIEWING	SINGLE-FACE							M			
	DOUBLE-FACE							B			
DISPLAY	CONTOMETRIC								C		
VERSION	INDUSTRIAL									I	
	MID									M	
TANK CAPACITY	500 L										5



3.5 AT30/U series trolleyed MID

DESCRIPTION

AUS 32 AT30/U wheeled MID dispenser, compatible with drums up to 1000 L, 24 VDC or 230 VAC.

- Mounting for 25- to 200-liter drums or 1,000-liter IBC containers
- Flow rate up to 40 l/min
- Volumetric or metered for use in transactions with third parties
- Maintenance-free backlit LED display
- Single-sided design
- Non-resettable electronic and electromechanical totalizer
- Self-priming pump with pressure switch
- Non-intrusive low-level sensor
- Electrical protection and control devices
- MID-compliant electronic meter with no moving parts



OPTIONAL EXTRAS INCLUDE:

- Receipt printer
- Kit for presetting the volume or amount to be dispensed
- Elaflex ZVA dispensing nozzles for AdBlue®
- Backup batteries for operation without power

TECHNICAL SPECIFICATIONS

Power supply	110–240 VAC, single-phase	
Maximum consumption	500 W	
Heating (optional)	230 VAC 150 W	
Delivery pump	Self-priming pump with pressure switch	
Flow rate	5 ÷ 15 l/min	
Battery backup	200-liter fuel tank	
Measurement accuracy	± 0,5% MID	
Electronic header	CPTH02, electronic model, with backlit LCD display, 6 digits, 1-inch height	
Dispensing tube	Length: 2.5 meters	
Operating temperature	0°C ÷ +40°C (-20°C ÷ +60°C upon request)	
Applicable drum capacity	200 l / IBC 1000 l	
Dimensions (WxDxH)	200 l 759,50X999x1286 mm	IBC 1000 l 1000X1485X1375 mm

POSSIBLE CONFIGURATIONS

DRUM CAPACITY	200 l	1				
	IBC 1000 l	3				
POWER SUPPLY	230 VAC		1			
	24 VCC		2			
PREDETERMINATION	ABSENT			0		
	PRESENT			1		
HEATING	ABSENT				0	
	PRESENT				1	
PRINTER	ABSENT					0
	PRESENT					1



4 TANK DISPENSER

Tank dispensers are containers designed for the storage of AUS32, AdBlue®, and other additives. They feature a galvanized steel frame, double-walled insulated panels made of pre-painted steel, an insulated aluminum checker plate floor, and stainless steel metering units that are particularly suitable for these types of products.



VERSIONS

NAKED - For internal use only

COMPACT - For fleet refueling

SHUTTLE - For gas stations

TWIN - With attached dispenser

DISPENSING SIDES

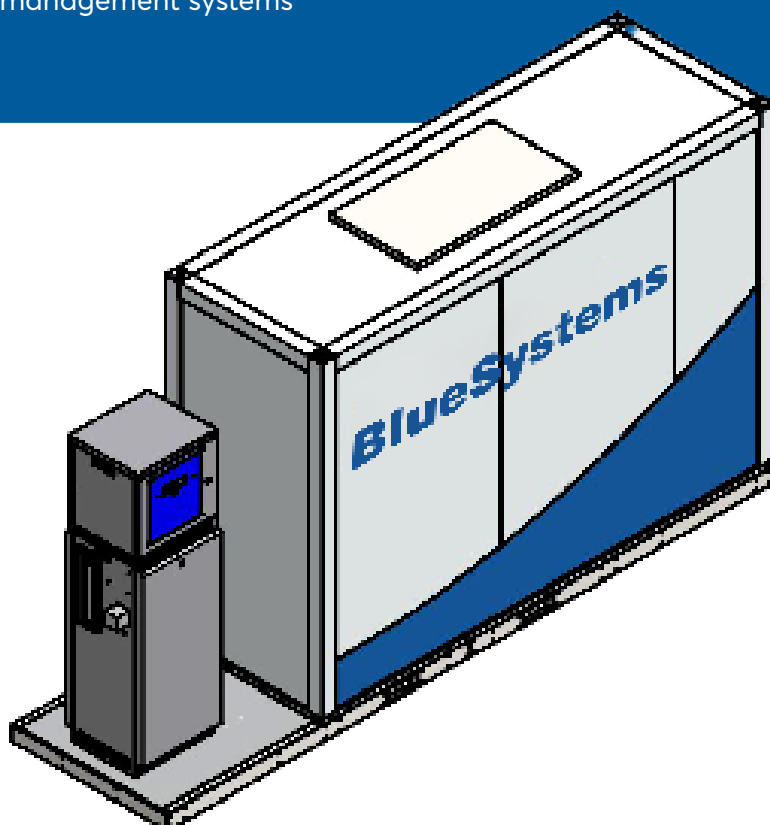
- » Right side
- » Front
- » Left side
- » Customizable



KEY FEATURES

- Self-supporting, seamless galvanized steel structure for use in marine environments
- External insulation with a double-walled, powder-coated metal thermal insulation panel
- Key-operated access panel for maintenance
- Base made of checkered aluminum sheet insulated with anti-condensation material
- HDPE tank with metal reinforcements (Shuttle version)
- No openings in the lower part of the tank to prevent spills
- Automatic forced ventilation with thermostat
- Automatic-opening ventilation grilles
- Mechanical stainless steel pressure relief valve
- Visual and audible low/high-level alarm with reset button
- Safety anti-siphon solenoid valve
- Stainless steel hose reel with Elaflex hose (length: 5.5 meters)
- ZVA Elaflex dispensing nozzle equipped with a swivel fitting and magnetic tank recognition device
- Level measurement probe with 1" backlit LCD display
- Electrical control panel with circuit breakers and motor protection
- Option to connect multiple tanks in series
- Automatic leak detection system (optional)
- MID-certified dispenser for indoor or commercial use, with a stainless steel magnetic meter featuring no moving parts and a measurement accuracy of less than $\pm 0.5\%$
- OIML certified
- Non-resettable electronic and electromechanical totalizer
- Compatible with major service station management systems

Twin version



4.1 Naked series

These tanks are designed to hold additives while taking up as little space as possible. They are intended for indoor use.

Tank capacity:

- 2000 LITERS
- 3000 LITERS
- 5000 LITERS



TECHNICAL SPECIFICATIONS

Support structure	FE430B steel, painted		
Handling	By forklift, with an empty tank		
Tank material	High-density linear polyethylene or stainless steel (upon request)		
Tank capacity	2000 l	3000 l	5000 l
Dimensions	1,75x2,40	1,90x2,45	1,85x3,20
Level indicator	Capacity (in cm and liters)		
Delivery pump	Stainless steel parts that come into contact with the product		
Flow rate	40 ÷ 50 l/min		
Power Supply	230 VAC		
Maximum current (A)	Max 3 KW		
Pump motor power supply	230 VAC 0,74 KW		
Heating	230 VAC 1200 W		
Ventilation	230 VAC 60 W		
Electronics	24 VAC 50 W		
Operating temperature	0°C ÷ +40°C (+60°C upon request)		

AT30/U Integrated Dispenser (if included)

Flow rate	4,5 ÷ 45 l/min
Measurement accuracy	± 1,5 %
Electronic header	CPTH02
System Integration	Serial or parallel (see options)
Indicator	6-digit, 1-inch-tall backlit display
Counter	Non-resettable electronic and electromechanical type, 7 digits
Dispensing nozzle	Elaflex automatic type ZVA LV for AdBlue® for light-duty vehicles, ZVA HV AdBlue® for heavy-duty vehicles
Dispensing tube	Length: 5.5 m with reel
Cable reel	Made of AISI 304 stainless steel with EPDM gaskets

CODES

AT03711	Capacity
	/200: 2000 l
	/300: 3000 l
	/500: 5000 l

4.2 Compact series

Tanks designed to store additives while taking up as little space as possible. They must be installed in designated storage areas.

Tank capacity:

- 2000 LITERS
- 3000 LITERS
- 5000 LITERS
- 11600 LITERS

Containment only v. /EA



With built-in dispenser, v. /GE/EC/EV

TECHNICAL SPECIFICATIONS

Support structure	Seamless galvanized FE430B steel			
Walls and roof	Insulated panels with a layer of self-extinguishing polyurethane foam, double-walled, made of pre-painted steel. Color: white Thickness: 25 mm			
Walkable flooring	Insulated diamond-patterned aluminum sheet. Thickness: 3 mm + (1.5 mm)			
Handling	By forklift, with an empty tank			
Tank material	High-density linear polyethylene or stainless steel (upon request)			
Tank capacity	2000 l	3000 l	5000 l	11600 l
Dimensions	1,50x2,32 H2,20 m	1,78x2,75 H2,20 m	2,00x2,94 H2,20 m	2,40x4,00 H2,55 m
Weight	600 Kg	650 Kg	800 Kg	1200 Kg
Level indicator	Capacity (in cm and liters)			
Delivery pump	Stainless steel parts that come into contact with the product			
Flow rate	40 ÷ 50 l/min			
Power Supply	230 VAC			
Maximum current (A)	Max 3 KW			
Pump motor power supply	230 VAC 0,74 KW			
Heating	230 VAC 1200 W			
Ventilation	230 VAC 60 W			
Electronics	24 VAC 50 W			
Operating temperature	-10°C ÷ +40°C			

AT30/U Integrated Dispenser (if included)

Flow rate	2 ÷ 30 l/min
Measurement accuracy	± 1,5 % version GE; ± 0,5% version MID EC
Electronic header	CPTH02
System Integration	Serial or parallel (see options)
Indicator	6-digit, 1-inch-tall backlit display
Counter	Non-resettable electronic and electromechanical, 7 digits
Dispensing nozzle	Elaflex automatic type ZVA LV for AdBlue® for light-duty vehicles, ZVA HV AdBlue® for heavy-duty vehicles
Dispensing tube	Length: 5.5 m with cable reel
Cable reel	Made of AISI 304 stainless steel with EPDM gaskets

CODES

AT09906	Capacity	Basin of cont.	Dispenser	Dispenser type
	/200: 2000 l /300: 3000 l /500: 5000 l /116: 11600 l	/V: with basin containment /N: without a basin containment	/EA: dispenser or dispensing unit missing /GE: dispensing unit /EC: metered dispenser for sale to third parties, MID-certified /EV: Volumetric dispenser for sale to third parties, MID-certified	/SF: single front /SD: single right /SS: single left /DD: double /AX*: alternating

*AX: AA= alternating double-face (1 nozzle per side), AS= alternating one-face left, AD= alternating one-face right, AF= alternating one-face front, AB= alternating double double-face (2 nozzle per side)

4.3 LC series

These tanks are designed with a compact width so they can be installed directly on the refueling island.



Capacity tank:

- 500 LITERS
- 1000 LITERS

Capacity tank:

- 2000 LITERS
- 3000 LITERS
- 4000 LITERS
- 5000 LITERS



With built-in dispenser v. /GE/EC/EV

TECHNICAL SPECIFICATIONS

Support structure	Galvanized FE430B steel						
Walls and roof	Insulated panels containing a layer of self-extinguishing polyurethane foam, double-walled, made of pre-painted steel. Color: white. Thickness: 25 mm						
Handling	By forklift, with an empty tank						
Tank material	High-density linear polyethylene						
Tank capacity	500 l	1000 l	2000 l	2950 l	3000 l	4000 l	5000 l
Dimensions (m)	1,00x1,17 +0,15 H 2,25	1,25x1,40 +0,15 H 2,25	0,90x2,95 +0,15 H 2,25	1,17x3,15 +0,15 H 1,92	1,17x3,15 +0,15 H 2,25	1,17x3,30 +0,15 H 2,15	1,50x3,30 +0,15 H 2,25
Weight (Kg)	225 (SGL) 250 (DBL)	300 (SGL) 325 (DBL)	500 (SGL) 525 (DBL)	600 (SGL) 700 (DBL)	600 (SGL) 625 (DBL)	700 (SGL) 725 (DBL)	750 (SGL) 850 (DBL)
Indicator di livello	Capacity (in cm and liters)						
Delivery pump	Stainless steel parts that come into contact with the product						
Flow rate	40 ÷ 50 l/min						
Power supply	230 VAC						
Maximum current (A)	Max 3 KW						
Pump motor power supply	230 VAC 0,74 KW						
Heating	230 VAC 1200 W						
Ventilation	230 VAC 60 W						
Electronics	24 VAC 50 W						
Operating temperature	0°C ÷ +40°C						

AT30/U Integrated Dispenser (if available)

Flow rate di erogazione	2 ÷ 30 l/min
Measurement accuracy	± 1,5 % version GE; ± 0,5% version MID EC
Electronic header	CPTH02
System Integration	Serial or parallel (see options)
Indicator	6-digit, 1-inch-tall backlit display
Total liters dispensed	Non-resettable electronic and electromechanical, 7 digits
Dispensing nozzle	Elaflex automatic type ZVA LV for AdBlue® for light-duty vehicles, ZVA HV AdBlue® for heavy-duty vehicles
Dispensing tube	Length: 3 m

CODES

AT13121	Capacity	Basin of cont.	Dispenser	Dispenser type
	/500: 500 l /100: 1000 l /200: 2000 l /295: 2950 l /300: 3000 l /400: 4000 l	/V: with basin containment /N: without a basin containment	/EA: dispenser or dispensing unit missing /GE: dispensing unit industrial volumetric /EC: metered dispenser for sale to third parties, MID-certified /EV: Volumetric dispenser for sale to third parties, MID-certified	/SB: single front /SD: single right /SS: single left /DD: double /AX*: alternating

*AX: AA= alternating double-face (1 nozzle per side), AS= alternating one-face left, AD= alternating one-face right, AF= alternating one-face front, AB= alternating double double-face (2 nozzle per side)

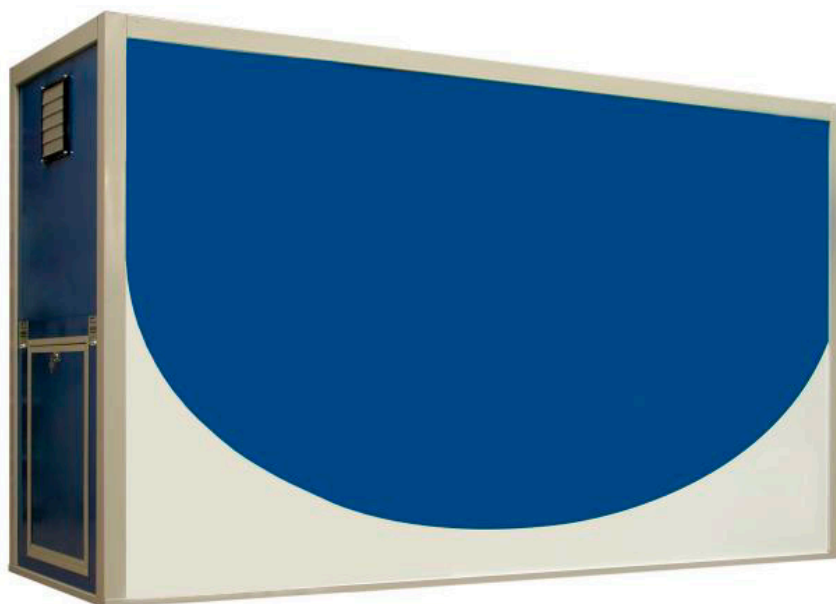
4.4 Shuttle series tank dispenser

These tanks are designed with a compact width so they can be installed directly on the refueling island.

Capacity tank:

- 1350 LITERS
- 2000 LITERS
- 3000 LITERS
- 4000 LITERS
- 5000 LITERS

Containment only v. /EA



With built-in dispenser v. /GE/EC/EV

TECHNICAL SPECIFICATIONS

Support structure	Seamless galvanized FE430B steel					
Walls and roof	Insulated panels containing a layer of self-extinguishing polyurethane foam, double-walled, made of pre-painted steel. Color: white. Thickness: 25 mm					
Walkable flooring	Insulated diamond-patterned aluminum sheet. Thickness: 3 mm + (1.5 mm)					
Handling	By forklift, with an empty tank					
Tank material	High-density linear polyethylene or stainless steel (upon request)					
Tank capacity	1350 l	2000 l	2950 l	3000 l	4000 l	5000 l
Dimensions EA (m)	0,90x2,50 H 1,92	0,90x2,60 H 1,92	1,17x2,75 H 1,92	1,00x2,75 H 2,25	1,17x2,94 H 2,15	1,50x2,94 H 2,25
Dimensions EC/GE (m)	0,90x2,50 H 1,92	0,90x2,95 H 1,92	1,17x3,15 H 1,92	1,00x3,15 H 2,25	1,17x3,30 H 2,15	1,50x3,30 H 2,25
Weight (Kg)	450 (SGL) 600 (DBL)	500 (SGL) 650 (DBL)	600 (SGL) 700 (DBL)	600 (SGL) 700 (DBL)	700 (SGL) 800 (DBL)	750 (SGL) 850 (DBL)
Level Indicator	Capacity (in cm and liters)					
Delivery pump	Stainless steel parts that come into contact with the product					
Flow rate	40 ÷ 50 l/min					
Power supply	230 VAC single-phase					
Maximum current (A)	Max 3 KW					
Pump motor power supply	230 VAC 0,74 KW					
Heating	230 VAC 1200 W					
Ventilation	230 VAC 60 W					
Electronics	24 VAC 50 W					
Operating temperature	-10°C ÷ +40°C (-20°C ÷ +60°C (upon request)					

AT30/U INTEGRATED DISPENSER (if available)

Flow rate di erogazione	2 ÷ 30 l/min
Measurement accuracy	± 1,5 % version GE; ± 0,5% version MID EC
Electronic header	CPTH02
System Integration	Serial or parallel (see options)
Indicator	6-digit, 1-inch-tall LED backlit display
Total liters dispensed	Non-resettable electronic and electromechanical, 7 digits
Dispensing nozzle	Elaflex automatic type ZVA LV for AdBlue® for light-duty vehicles, ZVA HV AdBlue® for heavy-duty vehicles
Dispensing tube	Length: 5.5 m with cable reel
Cable reel	Made of AISI 304 stainless steel with EPDM gaskets

CODES

AT28007	Capacity	Basin of cont.	Dispenser	Dispenser type
	/135: 1350 l /200: 2000 l /295: 2950 l /300: 3000 l /400: 4000 l /500: 5000 l	/V: with basin containment /N: without a basin containment	/EA: dispenser or dispensing unit missing /GE: dispensing unit industrial volumetric /EC: metered dispenser for sale to third parties, MID-certified /EV: Volumetric dispenser for sale to third parties, MID-certified	/SF: single front /SD: single right /SS: single left /DD: double /AX: alternating

*AX: AA= alternating double-face (1 nozzle per side), AS= alternating one-face left, AD= alternating one-face right, AF= alternating one-face front, AB= alternating double double-face (2 nozzle per side)

4.5 Twin series

These tanks with integrated dispensers are designed with a compact width for direct installation on the refueling island.

Dispensers from leading manufacturers can be integrated.

Capacity tank:

- 1350 LITERS
- 2000 LITERS
- 3000 LITERS
- 4000 LITERS
- 5000 LITERS



TECHNICAL SPECIFICATIONS

Support structure	Seamless galvanized FE430B steel				
Walls and roof	Insulated panels with a layer of self-extinguishing polyurethane foam, double-walled, made of pre-painted steel. Color: white. Thickness: 25 mm				
Handling	By forklift, with an empty tank				
Tank material	High-density linear polyethylene or stainless steel (upon request)				
Tank capacity	1350 l	2000 l	3000 l	4000 l	5000 l
Dimensions (*)	0,90x3,74 H1,95 m	0,90x3,74 H1,95 m	1,00x3,89 H2,25 m	1,17x4,08 H2,25 m	1,50x4,08 H2,25 m
Level indicator	Table of Contents (in cm e LITERS)				
Delivery pump	Stainless steel parts that come into contact with the product				
Flow rate	40 ÷ 50 l/min				
Power supply	230 VAC single-phase				
Maximum current (A)	Max 3 KW				
Pump motor power supply	230 VAC 0,74 KW				
Heating	230 VAC 1200 W				
Ventilation	230 VAC 60 W				
Electronics	24 VAC 50 W				
Operating temperature	0°C ÷ +40°C				

AT02/LCU DISPENSER (if equipped)

Dispensing flow rate	2÷40 l/min
Measurement accuracy	± 1.5% (GE version), ± 0.5% (MID EC version)
Electronic header	CPH02
System Integration	Serial or parallel (see options)
Indicator	6-digit, 1-inch-tall LED backlit display
Total liters dispensed	Non-resettable electronic and electromechanical, 7 digits
Dispensing nozzle	Elaflex automatic type ZVA LV for AdBlue® for light-duty vehicles, ZVA HV AdBlue® for heavy-duty vehicles
Dispensing tube	Length: 4 m
Cable reel	Made of AISI 304 stainless steel with EPDM gaskets

(*) If an external dispenser is used, the dimensions of the dispenser must be added to the dimensions of the tank dispenser

AT06821

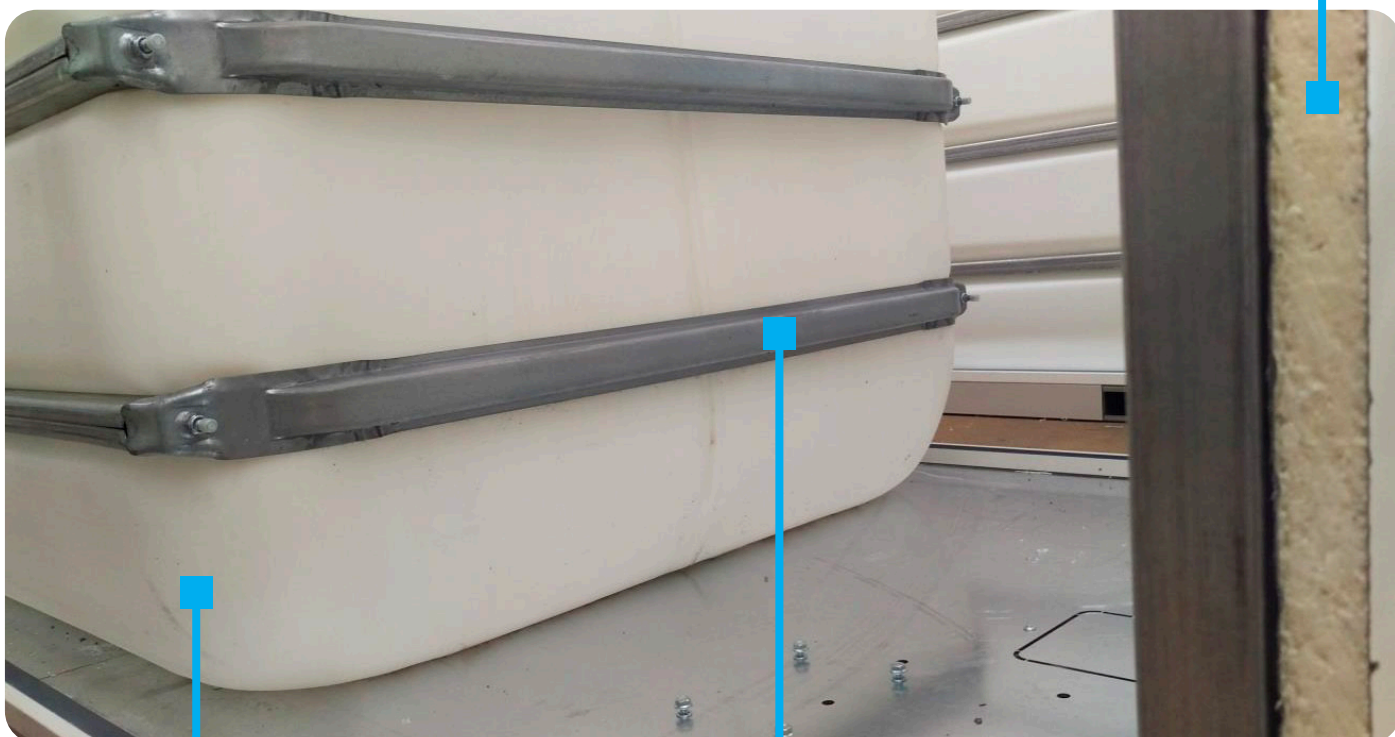
Capacity	Basin of cont.	Dispenser	Refuelable vehicles	Dispenser type	Installation
/135: 1350 l /200: 2000 l /300: 3000 l /400: 4000 l /500: 5000 l	/V: YES /N: NO	/A2: Assytech AT02LC /A1: Assytech AT15 /H1: Wayne Helix 1000 /H2: Wayne Helix 6000 /OC: Tatsuno Ocean /SE: Tatsuno Shark Economy /SJ: Tatsuno Shark Junior /Q1: Tokheim Quantum 110 /Q5: Tokheim Quantum 510 /QM: Tokheim Quantum 510M /G1: Gilbarco SK700-2 /G2: Gilbarco SK700-2 car/lorry	/A: car /C: truck /E: car/truck	/S: single /D: double /A: alternating	/P: preparation for dispenser /M: mounted dispenser supplied by Assytech /C: mounted dispenser provided by the customer

5 KEY FEATURES

5.1 Tank

Made of heavy-gauge polyethylene in compliance with ISO 22241-3 standards. Equipped with metal reinforcements where required.

INSULATED SIDE WALLS
25 MM THICK
SELF-EXTINGUISHING POLYURETHANE



POLYETHYLENE TANK
COMPLIES WITH ISO 22241-3
DIBt Z-40.21-241 CERTIFICATE

METAL REINFORCING STRAPS
FOR THE SHUTTLE VERSION



ISOLATED BASE
20 MM THICK
POLYESTER PANELS
WITH ANTI-CONDENSATION FOAM

5.2 Transportation

Can be moved using a forklift.



5.3 Leak containment



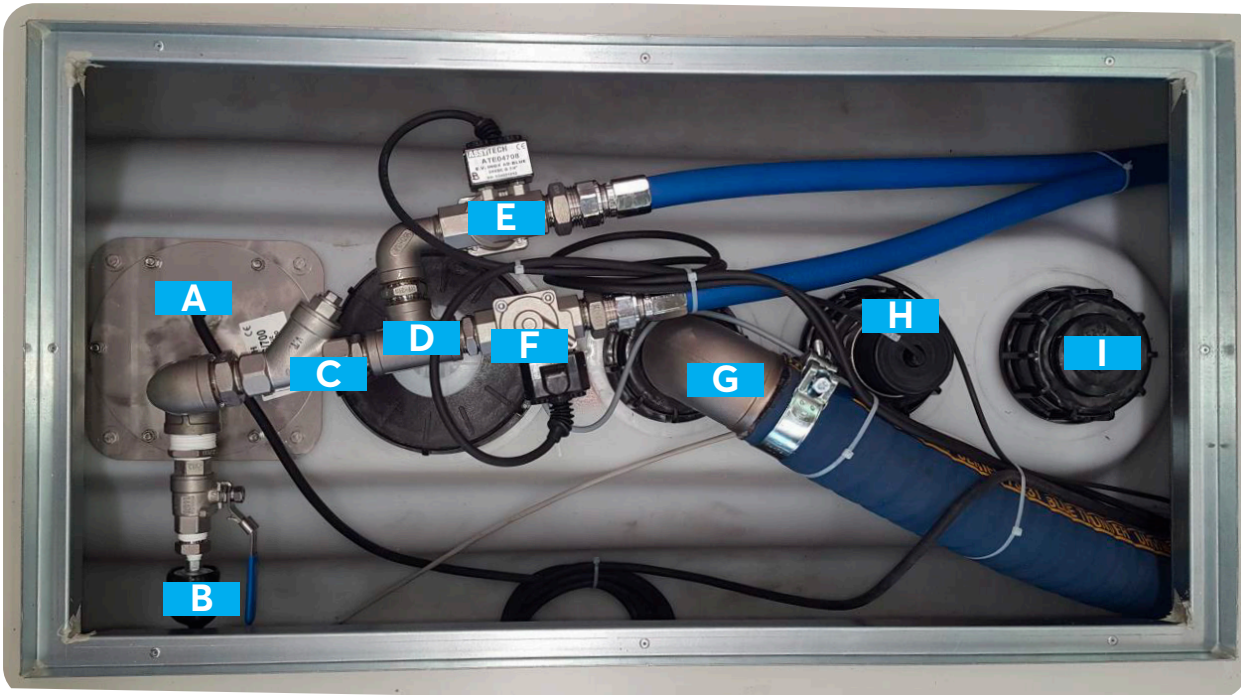
SENSOR

OVERFLOW WITH AN ALARM SET
AT 90% OF THE TANK'S CAPACITY

LEAK COLLECTION TRAY
(optional)

**ELECTRONIC LEAK
DETECTOR**
(optional)

5.4 Main components



RIF. DESCRIPTION

- A Submersible pump for aggressive fluids
- B Liquid pressure sensor
- C Stainless steel inlet filter
- D Air inlet filter and vent valve
- E Preset and anti-siphon valve (side A)
- F Preset and anti-siphon valve (side B)
- G Lower loading point
- H Magnetostrictive level sensor with stainless steel body and float
- I Upper loading point

AIR FILTER AND VENT VALVE

Plus FPO intake vent valves with filters to prevent contamination of the AUS 32 in the tank during vehicle refueling.



QUICK-RELEASE

A 2-inch quick-connect fitting located at the bottom of the tank. It prevents product spillage during filling.



SUBMERSIBLE PUMP

Special pump compatible with the AUS32, made from materials compatible with the dispensed product, supplied with a check valve, mounting bracket, and support tube-all made of stainless steel.

MOUNTING BRACKET

PUMP SUBMERSIBLE FOR CORROSIVE FLUIDS



REINFORCED BRACKET FOR INSTALLATION SUBMERSIBLE PUMP

VALVE CHECK VALVE

VENTILATION FORCED

Forced ventilation with Plus FPO pollen filter, airflow rate 100 m³/h.



HEATING

Forced-air heater
1.2 kW, complete with temperature
controller and safety thermostat



DOOR FOR LOW TEMPERATURES (optional)

Door for temperatures below -20°C.



AIR CONDITIONER (optional)

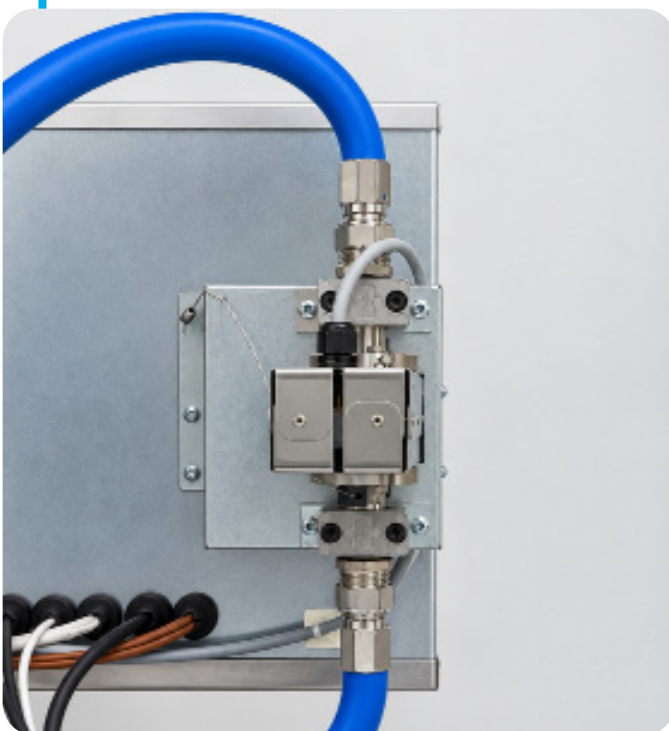
A refrigeration system designed for tropical climates, specifically tailored for this type of application, featuring an environmentally friendly gas compressor that complies with current regulations.



5.5 Main hydraulic components

MID VOLUMETRIC METER

Electronic meter with no moving parts. Components in contact with the fluid are made of stainless steel. It can operate for years without requiring maintenance.



HOSE REEL DELIVERY

The hose reel, with fluid-contact parts made of stainless steel, can hold hoses up to 6 meters in length. All parts in contact with the liquid are made of stainless steel compatible with the dispensed additive.



5.6 Dispensing nozzle

Elaflex ZVA AdBlue® LV and HV nozzle with automatic overflow shut-off, safety ball valve, and check valve; 3 speed settings; for refueling heavy-duty vehicles with AUS 32 Urea ISO 22241-3-1 solution (Diesel Exhaust Fluid DEF / AUS 32 / ARLA 32).

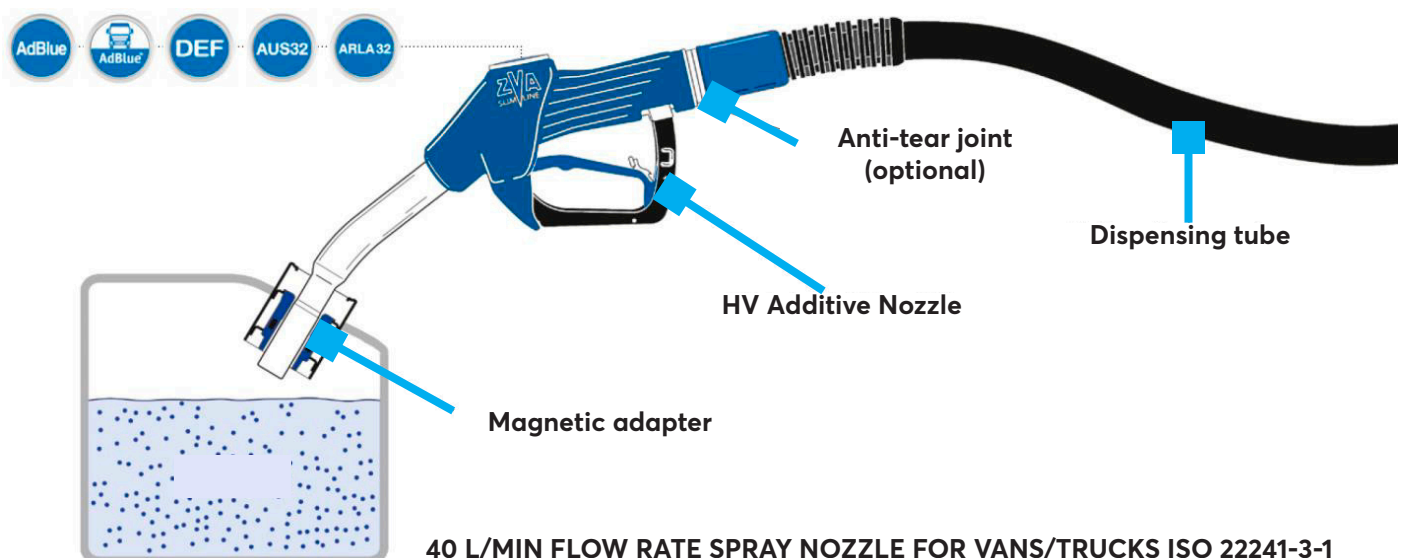
Car wash nozzle (LV)

Flow rate up to 10 l/min, operating pressure 0.5–3.5 bar, minimum pump output 20 l/min.



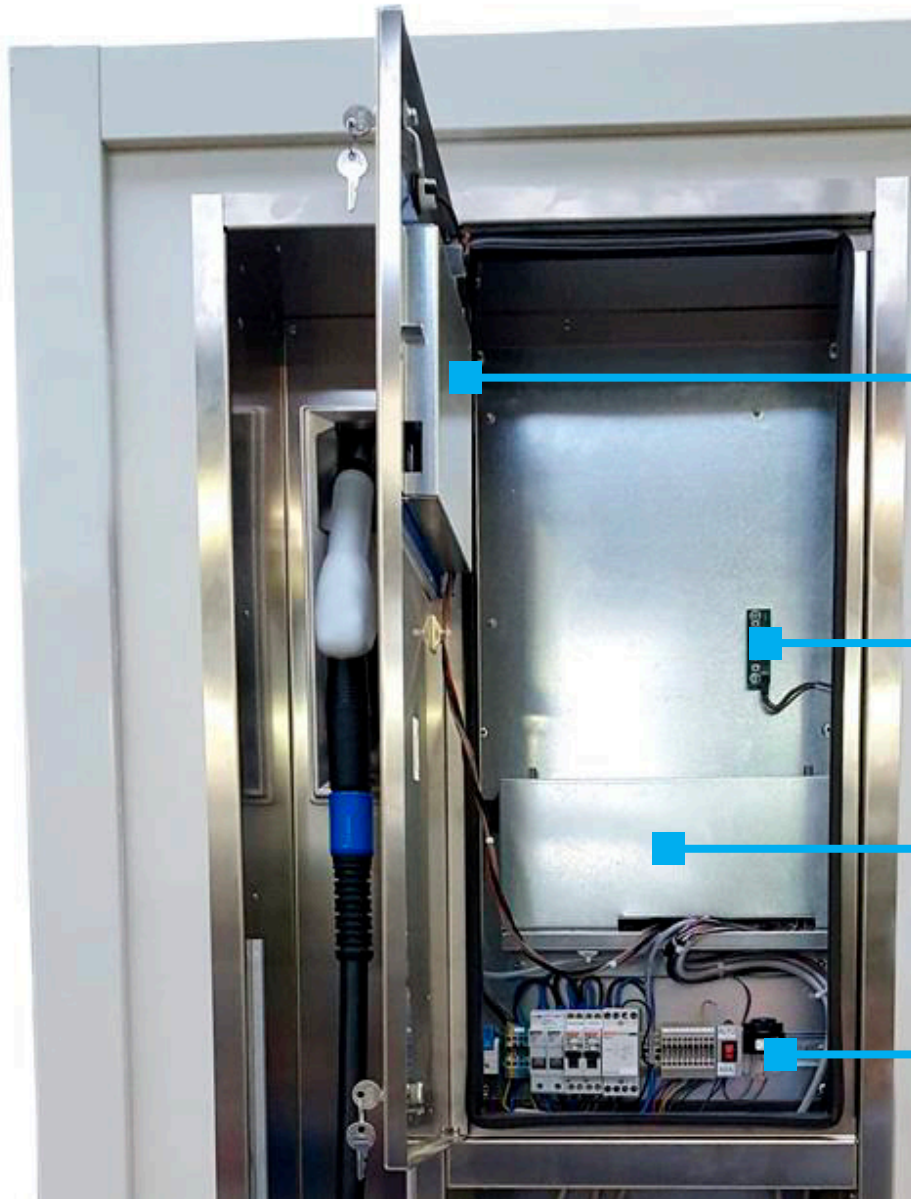
Fuel nozzle for vans/trucks (HV)

Flow rate up to 40 l/min, operating pressure 0.5–3.5 bar, minimum pump output 50 l/min. To prevent refueling errors, dispensing is only possible in combination with standard-compliant magnetic adapters such as the Elafix 40, which are integrated into the fuel filler neck of AUS 32 vehicle tanks.



5.7 Electrical and electronic components

The system includes circuit breakers for the pump and auxiliary equipment.



**DISPLAY
COUNTER
6-6-6 DIGITS 1"**

PROGRAMMING KEYBOARD

**HEADER
ELECTRONIC
CPH02 MID**

**ELECTRICAL COMPONENTS
AND PROTECTIVE DEVICES**

**OVERVOLTAGE PROTECTION
WITH SURGE ARRESTOR
(OPTIONAL)**



5.8 Product level sensor

A magnetostrictive probe for measuring the level of stored product with an accuracy of better than one millimeter, made of stainless steel compatible with the dispensed product.



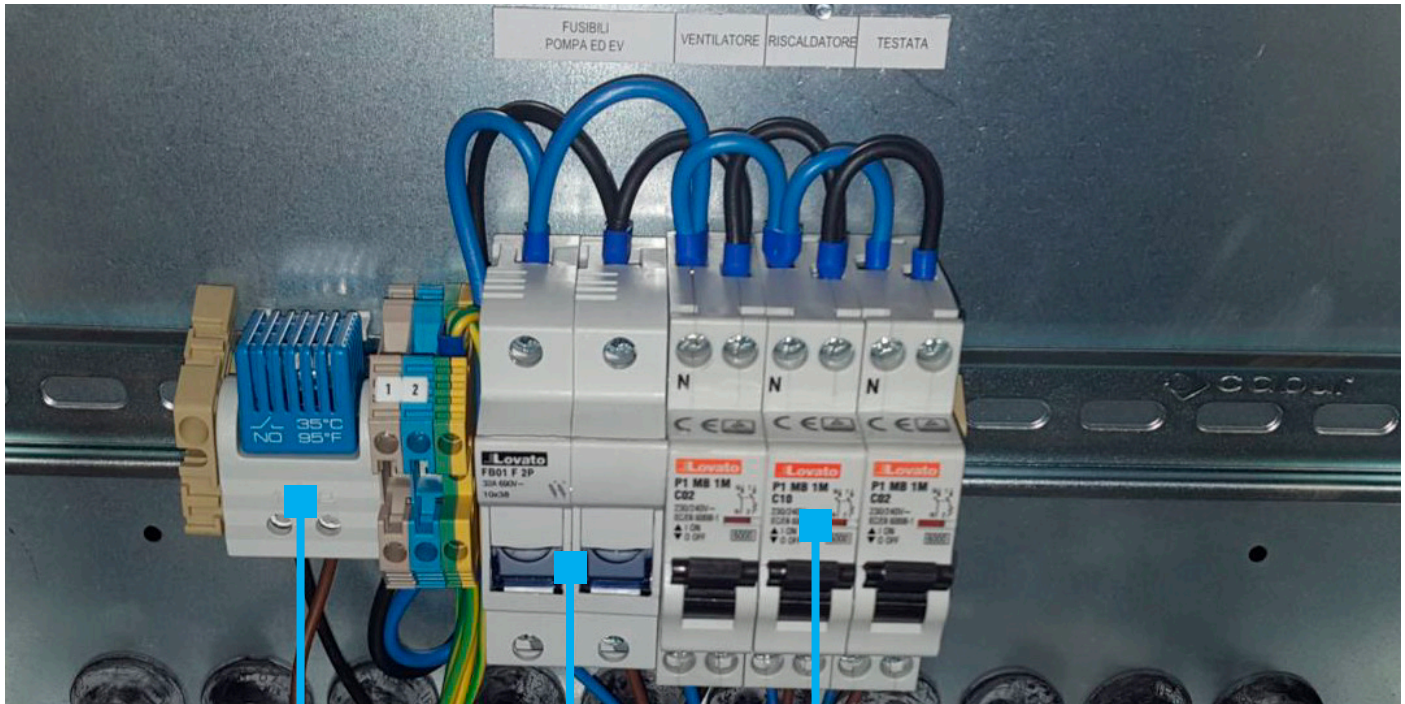
**LEVEL SENSOR
MAGNETOSTRICTIVE**



**PROBE HOUSING
FOR LEVEL MEASUREMENT**

5.9 Electrical connections

Circuit breakers for protecting all electrical components installed inside the enclosure



**THERMOSTAT
FOR VENTILATION**

**FUSES
FOR MOTOR
PROTECTION**

**CIRCUIT BREAKERS
FOR AUXILIARY CIRCUIT PROTECTION**

5.10 User interface

The indicator light signals when the storage tank is nearly full, when refilling is required, and when an alarm condition occurs.

In addition to displaying dispensing data, the electronic control unit's display shows the volume of liquid in the tank.

A series of error codes allows you to identify the faulty component in the event of a malfunction.

The preset keypad allows you to set the liters or equivalent amount of product to be dispensed; you can also view the totals in liters and in dollars.



LEVEL SENSOR HOUSING

ELECTROMECHANICAL TOTALIZER

CONTOMETRIC DISPLAY

6 ACCESSORIES



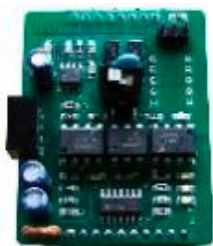
ROLL BAR

Code: ATO03509



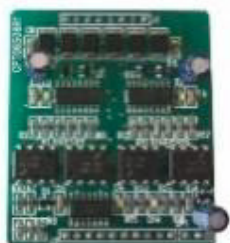
RS232 REMOTE DATA CONNECTION

Code: AT06406



DATA CPT/MODBUS REMOTE CONNECTION

Code: AT06606



DATA /C. LOOP N. PIGNONE REMOTE CONNECTION

Code: AT06506



GILBARCO DATA/LOOP REMOTE CONNECTION

Code: AT29506



IFSF-LON REMOTE DATA CONNECTION

Code: AT13521

7 OPTIONS



2" F QUICK CONNECTOR TODO

Comes with a dust cap

Code: AT12406



WATERPROOF LEVEL SENSOR FOR ADDITIVES

Length 150, 175, 200 cm

Code: AT08919/WP/1/XXXX



HIGH-LEVEL ALARM KIT

High-end alarm kit with visual and audible alarms and a silence button

Code: ATO16817



HIGH-END ALARM KIT

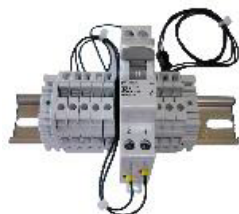
With thermistor and socket

Code: ATO12421



KIT FOR PREDETERMINING THE DISPENSED PRODUCT VERSION

VERSION	SIDE	CODE
SINGLE	ONE-FACE	AT32506/S/M
SINGLE	DOUBLE-FACE	AT32506/S/B
DOUBLE	ONE-FACE	AT32506/D/M
DOUBLE	DOUBLE-FACE	AT32506/D/B



100-PULSE/LITER KIT

For parallel connection to management systems. Includes a CPU expansion module.

Code: ATO16817



ADBLUE METER RETROFIT KIT

It is used to replace the old, discontinued AdBlue meter with a new model, adapting it to the existing dispensers.

Code: AT004817



SPILL CONTAINMENT TRAY FOR TANKS

Prevents product spillage in the event of accidental leakage.

Compact Tank Basin

Code: AT004918/X*

Tank pan for LC and Shuttle

Code: AT004818/XX*

(*) X and XX = tank capacity

X=2 (2000 L); X=3 (3000 L); X=5 (5000 L); X=11 (11600 L); XX=05 (500 L); XX=10 (1000 L); XX=1 (1350 L); XX=3 (3000 L); XX=4 (4000 L); XX=5 (5000 L); XX=11 (11600 L)



LIQUID PRESENCE DETECTION SENSOR

Sensor designed to be used with the containment basin for tanks. When connected to the dispenser's electronic control unit, it alerts the operator to any accidental leaks from the main tank.

Code: AT09119



INTERIOR HEATER

1.2 kW internal heater for dispensing at ambient temperatures below 0 °C. Comes complete with accessories.

Code: AT001117



LOW-TEMPERATURE DOOR

Door for dispensing at ambient temperatures below -20 °C.

Code: ATO08619



AIR CONDITIONER

Refrigeration system for tropical climates with an eco-friendly gas compressor.

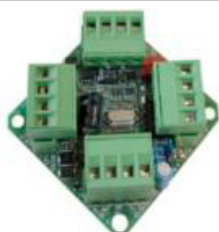
Code: AT11119



RS485 / 4-20 mA REPLICATOR

A 4–20 mA signal converter that, when connected to the RS-485 bus of the additive level sensors, generates a 4–20 mA signal proportional to the tank level. Designed for connection to telemetry devices.

Code: AT10208/K



RS485 / RS485 SPLITTER

RS485 splitter for duplicating the digital signal from the level sensor. Designed for connection to existing level controllers with an RS485 bus.

Code: AT08208/K



www.assytech.it