LPG STORAGE TANKS & OTHER LPG EQUIPMENT

FOR SAFE STORAGE AND DISTRIBUTION OF LPG







COMPANY





We started our business activity in 2006 as sales and developing company in the field of LPG, gradually growing our offer in LPG technologies. In 2011-2012 we built up a new spacious plant for manufacture of LPG storage tanks, with production capacity of 12 000 tanks per year.

Our tanks are manufactured on new and modern machinery (welding machines from Germany, rollers from Switzerland). Thus we achieve manufacturing quality and productivity.

In addition, we offer 100% x-ray of welds by digital radiography (Kodak), which allows digital storage and evidence of radiographic images.

In order to provide complete technological solutions for use of LPG, we represent leading international manufacturers of LPG technologies (Algas-SDI, Corken, Gilbarco Veeder-Root).

We supply our tanks to customers in Western Europe (Germany, Belgium, the Netherlands), Eastern Europe (Russia, Baltic States, Ukraine) and CIS countries.

Our company currently counts 40 employees, whose number is continuously growing.



Our commitment to the quality is supported by the fact that we manufacture in a brand new plant on modern machinery, our staff is good trained and long experienced in the field of LPG. Our tanks are manufactured according to AD Merkblatt 2000 and certified according to the European Pressure Equipment Directive 2014/68/EU (modules B+D, HP 0, outside coating according to DIN 4681-3).

TIFICAT			CERTIFICATE	CERTIFICATE	CERTIFICATE	() () ()
5	Kedatec s.r.o.		Evidence number 06.141.818	Evidence number 06.412.662	Gan G	CERTIFICATE
•	Areál ZZN, 1 • 25764 ZDISLAVICE Tschechische Republik	CERTIFICATE	en BC revision of the type (3 module) according to \$723/BC directive implemented by the Act No. 22/1097 Col., as amended, and government decree	on EC revision of the type (8 module) according to 97/23/EC directive implemented by the Act No. 22/19/ET Coll, as amended, and government decree No. 25/2023 Coll, as amended.	Evidence number 08.421.991	CERTIFICATE
9	8		Availed to the conducer	Awarded to the producer:	on appraisal of quality system (module D) according to 07/23/EC, as amended, directive inclemented by the Act No. 22/1997 Coll., as amended, and	Certification Body Management System No. 3053
AC AC	Das Unternehmen erhält mit dem Zwittikat Nr. 16/02 80283-001 ert-		KADATECAZA	KADATEC ALC	government deoree No. 26/2003 Coll , as amended	TÜV SÜD Ceech s.r.o.
8	sprachand dam dazugehörendem Untersustkungsberühlt das Recht, asin nachfolgand beschriebenes Produkt mit dem abgebildeten Prüfzeichen	The company	E Vieching 6	Viechiegy 6	Awarded to the producer.	certifies that
E	der Zariftdorungsolalle zu kannzoichnen.	KADATEC s.r.o.	CZ - 257 26 Divilion	CZ - 257 26 Divisor	KADATECAZA	•
		Vilochlapy 6	ID-No.: CZ 27449530	ID-No.: CZ 27449530	CZ - 297 26 Vierbiew 6	KADATEC
		CZ – 257 25 Divisiov	For Pressure Equipment	For Pressure Equipment	ID-No: 27449530	
•		has been audited according to	Name Overaround Tank N128-1801	Name Underground Tank P125-1001		KADATEC s.r.o.
5	- <u>tuv</u> -	AD 2000-Merkblatt HP 0 and EN ISO 3834-2	Type name: N125	Type name: P128	The approisal of quality system was done for the scope of products:	Viechiapy 6 CZ = 207 20 Division
× ×	2	The rempary has proved to dispose of the pranequisities for the manufac- hum of research an information	Modification: 2700 L drawing No. 592 Kind: Vessel according to 6 1, art. 2, letter al. point 1 of	Mudification: 4800 L. drawing No. 872 Kind: Vessel according to § 1, art. 2, inter al. point 1 of	pressure tanks for LPG	ident. No.: 27660530
8	÷.	Pressure Equipment Directive \$7/23/EC	government decree No. 28/2003 Coll., as amended, including pressure and addry equipment	poversmeet decree No. 25/2003 Coll., as amended,	This is to partify that the quality system meets the requirements of	Manufacturing site: Kedetec s.r. o., Areili ZZN,
T di	Anforderungen:	independently to this confirmation the procedures apportaining to the	Destuction place KADATTC & co	Destudies class KADATECALO	The European Parliament and European Council Directive 97(2)/00.	Primyslová zóna, 257 64 Zdiatavice
ü	Des Produit Underbeschichtung als Kongeloneschutz für orbiteite	chosen modules have to be coserved.	Anali 22%, Prómysiová zóna, C2 - 257 64 Zdalavice Mex almentia 15.6 bar Volame 2700.1	Anali 229, Prümyalová zóna, C2 - 257 64 Zdialavice Max, aliovable 15,5 ker Volume: 4800 L	as amended module D	has established and applies
•	Drucktehater aus Stark für Föranggas bei entgedecke Auftellungi erfölt die Aufterbrungen nach dem aufschreeboeren förendent	The company the follows permitting manufacturing and inspection is considerore			Implemented by the Act No.22/1997 Coll., as amended, and government decree	a Quality Management System for
		with the current technical standards,	Max./min allowable 40/-29*C Fluid: LPG	Max, / min abovable 497-2010 Fluid: LPG	No. 26/2023 Coll, as amended.	 design, development, manufacturing, sales and assembly of LPG and LNG storage tanks, road tankers, containers
	Prüfungen pemäß MUC-KSP-A-1023 erfülk.	 contribute a quality system which guarantees that manufacturing and inspection of the products stated in our report are in conformity with the 	This is in welly, that the above named how of the scenario environment meets the	This is to certify that the above named long of the pressure environment meets the	Details on findings of the appraisal are stated within the Audt Report of Evidence	and filling stations menufacture of trailers and semiintellars on LPG LNG
146	PrelikBeschriftung	technical rules and standards.	requirements of	requirements of	No.: 08.428.887 of 11.08.2016, which is an integral part hereof.	 vehicle conversion to LPG/CNG - assembly, service,
85		 employs qualified supervisory and inspection personnel. 	The European Parliament and European Council Directive \$7/23/EC	The European Parliament and European Council Directive \$7/23/EC	The present certificate has been issued for the purpose of EC Declaration of	repair, inspectice and testing
	Applitution des Beschichtungespielens "KLPOTECT 560 Tark- baschichtung" der Finna Personer Gedelt.	The scope of the audit is detailed in our Report No. 5401301316 / 600.011.005	Implemented by the Act No 22/1997 Coll, as amended, and government decree	Implemented by the Act No. 22/1997 Coll., as amended, and government decree	pressure equipment contormity issue. The equipment has the above-described specification and is being marked with the CE mark together with the	measuring equipment and clapensers for LPGILNG
•	Attemptiv komen weitere Beschählungssysteme vorwendet werden.		 No. 26/2000 Coll, as amended. 	No. 26/2003 Coll., as amended.	identification number of the notified person as it is shown below.	An audit was performed, Report No. 68,707,454
2	talla dia Eignung nach dem zurückpiszigenen Stansteid DN 458113	The certificate expires in May 2018.	The present certificate has been issued for the purpose of Declaration of product conformity issue. The product conforms to the above-described technical	The present certificate has been issued for the purpose of Decianation of product confurnity issue. The product confurms to the above-described technical	€ 1017	Proof has been furnished that the requirements
5	(Mai 1980) halfgeween worden in:	Warloh, June 42 rd , 2010		dredive.	3	according to
=	Dieses Zwiffort ist collip bis Februar 2018	THY BIT industria familia (Intelli	Details on appraisal and a list of important parts of the technical documentation are stated within the Assessment report No. 05.135.135, which is an integral part	Details on appraisal and a list of important parts of the technical documentation	The present certificate is valid up to 17.09.2018	ČSN EN ISO 9001:2009
	Die Fortigungeliberweitnung erfeigt mindeetens einmalijahrton.		are stated within the Assessment report No. 26.139.136, which is an integral part	are stated within the Assessment report Na. 08.171.480, which is an integral part	This inequape service of the certificate is a transition of a Ceach affinial version No. 65.421.901 issued on 17.09.2015, which is descried the only one application the event	are fulfilled. The certificate is valid until 99.03.2019
5	• •	(m) 1.468	Conditions related to certificate validity period and the rules of the certificate discusse	Conditions related to certificate validity period and the rules of the certificate disprised	effegul Eliquites and was private on 17.09.2015.	Certificate Registration No. 08.797.231
•	Manufase, den 06. Februar 2010	(K Sava)	are stated on the second page of the certificate.	are stated on the second page of the certificate.	In Process dated 17.08.2015	
	TUV SID Instatic Service GridH	Notified Body, User No. 2020	(Parting)	(See Lange)	In Program, dated 17/08/2018	
5	Institut für Kynnikkelle	T2V500 Industrie Sankar Smith, Department Human and Hading Technikov Kindensistenen 18 (D.8388 Burech	in Progue, dated 2212-12-13	In Praces, dated 2013-01-04		
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LPG STORAGE TANKS

We manufacture LPG storage tanks in overground and underground versions. Our tanks meet the requirements of European Pressure Equipment Directive 2014/68/EU. The tanks are **CE 1017** marked.

Our storage tanks can be used for domestic heating purposes, for LPG automotive filling and industrial applications. Our company has 4 special trucks for delivery of storage tanks, three of them are equipped with hydraulic manipulator. Our fleet is specially designed to have the maximum loading capacity.



500 - 125 000 liters Standard D 1250 / 2000 mm. Other diameters on enquiry 15,6 bar (other pressures possible) min. 22,3 bar Standard -20/+40 °C (other temperatures possible) Liquefied gas DIN 51622 / EN 589 AD-Merkblatt 2000 European Pressure Equipment Directive 2014/68/EU, modules B/G + D







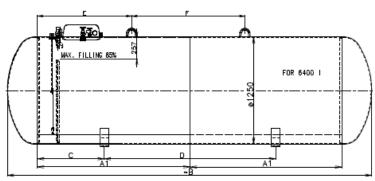






LPG STORAGE TANKS — OVERGROUND

Ø 1250mm



NJIMBER A

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1

1

1

2

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120

812

710

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1600

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2000

2700

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2×2900

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960

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2050

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2750

453

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1320

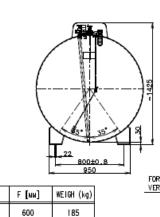
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2600

3000

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180

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423

470

640

755

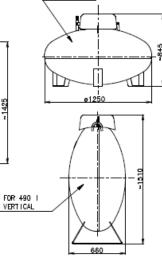
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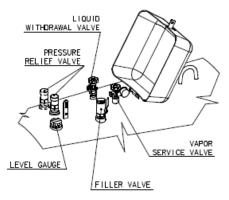
1350

1500

1705



FOR 490 I HORIZONTAL



Materials

SIZE[litre]

490 HORIZONTAL

990

1600

2100

2700

3600

4800

6400

7000

9100

10000

11200

490 VERTICAL

A1 [NN]

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890

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1780

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А2 [ии]

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1250

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Welded joints Surface finish Valves Bottom: thickness 5,7mm, S355J2+N AD/W1; P355N according to DIN 28013 Plate: thickness 5,1mm, S355J2+N AD/W1; P355N according to EN 10025

Evaluation AD-HP0

Sand blasted 3.2 and polyurethane painting \geq 0,120mm, RAL 9010 or RAL 6019

REGO / SRG / OMECA standard pressure equipment (manual handle-off filler valve, service valve, liquid service valve, 1-2 external relief valves, float gauge)



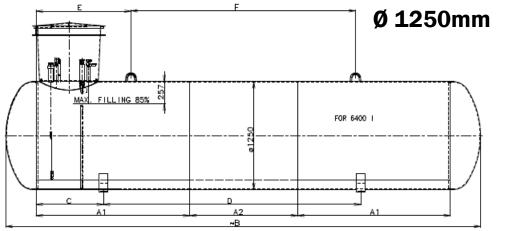


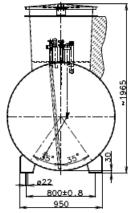


Multivalve REGO or OMECA combines double back check filler valve, vapour equalizing valve with excess flow, pressure relief valve, service shut-off valve, Junior level gauge and pressure gauge. Additionally installed is liquid service valve.



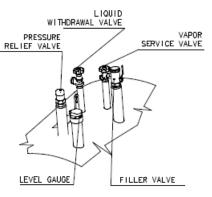
LPG STORAGE TANKS - UNDERGROUND





SIZE[litre]	А1 [ии]	A2 [NN]	NUMBER A	В [ИМ]	С [NN]	D [wv]	E [NW]	F[ww]	WEIGH (kg)	
2100	1260	-	1	~1960	90	1080	230	1710	433	-
2700	1780	-	1	~2480	90	1600	960	-	480	
4800	1780	-	2	~4250	780	2000	1100	1320	765	
6400	1780	1250	3	~5500	1060	2700	1100	2600	980	
7000	1780	-	3	~6020	1310	2700	1300	2600	1130	
9100	1780	-	4	~7790	5 1 5	2×2900	2050	3000	1360	
10000	1780	1250	5	~8520	1130	2x2900	2200	3400	1510	
11200	1780	-	5	~9560	1530	2×2900	2750	3300	1715	

Evaluation AD-HP0



Materials

Bottom: thickness 5,7mm, S355J2+N AD/W1; P355N according to DIN 28013 Plate: thickness 5,1mm, S355J2+N AD/W1; P355N according to EN 10025

Sand blasted 3.2 and epoxy anticorrosive coating 1000µm, according to DIN 4681/3, ISO test 25kV

REGO / SRG / OMECA standard pressure equipment, adjustable stainless steel hood Ø800mm, H550-650mm

Welded joints

Surface finish

Fittings



We offer underground tanks with adjustable plasticstainless steel or all-stainless steel hood \emptyset 800mm. The hoods are adjustable in height H550-650mm, which is perfect for uneven terrain, and are lockable at 110°.



KADATEC

AUTOGAS COMPACT FILLING UNIT – OVERVIEW



We offer 3 versions of autogas compact filling unit:

- * with submersible pump Red Jacket in shaft
- * with submersible pump Red Jacket <u>without shaft</u>
- * with external pump Corken and Siemens motor

All versions are possible in overground or underground execution. Standardly we offer units of D1250mm, further D1600mm and D2000mm on customer request.

The units are equipped with:

- * KADATEC dispenser—stainless steel execution, very accurate measurement (0,2%) on principle of the mass flow meter, remote data monitoring, or
- * Dispenser of any manufacturer, classic volume measurement.

The unit complies with European requirements: PED (modules B/G + D), ATEX.

Implementation of compact filling units is an ideal solution to complement the fuel station with LPG fueling technology.

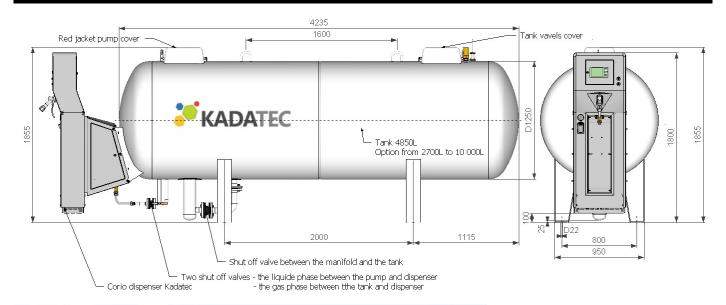
UNITS ARE DELIVERED FULLY ASSEMBLED.

Pump protection *Differpress 14* protects the Red Jacket pump against the dry running, continuously measures and displays the pressure in the pipeline behind the pump.



Volume tank D1250mm	4 850 I	7 000 I	10 000 I		
Max. filling capacity	2 145 kg	2 975 kg	4 420 kg		
Max. working pressure		1,56 MPa			
Max. differential pressure		0,92 MPa			
Max. flow	50 I/min				
Dispensing accuracy		±0,2 %			
Operating temperature	Standard -20/+40 °C or -40/+40 °C				
Electrical connection	$3x230/400V AC \pm 15\%$, 50 Hz / 2,2 kW				
Approvals	EC certificates FTZU 12 ATEX 0080X (Ex II 2G IIA T3) and TCM $141/13$ -5084				

AUTOGAS FILLING UNIT WITH RED JACKET PUMP IN SHAFT

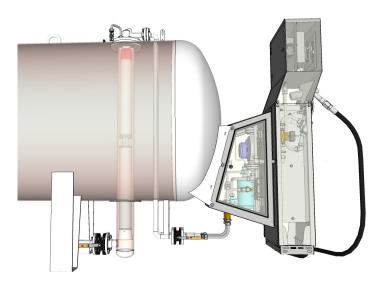




Autogas compact filling unit is an elegant and cost-effective solution, where dispenser and pump are directly mounted on the tank, without supporting frame.

Submersible pump Red Jacket is placed in a protective shaft directly in the tank.

- + With KADATEC dispenser the measurement is performed through mass flow meter with its own temperature compensation, measurement accuracy of 0,2% and accurate information about density and composition of gas.
- + Pump servicing is done without empting the tank: in the shaft the ball valve is closed and the pump can be replaced safely.
- + Pump protection *Differpress 14* protects the Red Jacket pump against the dry running, continuously measures and displays the pressure in the pipeline behind the pump.
- + KADATEC dispenser *Corio* is specially designed for autogas filling units.

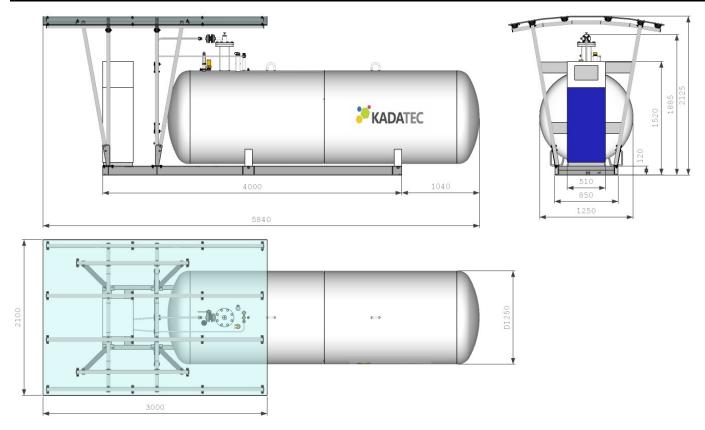


Components:

- Storage tank in overground or underground execution, D1250mm (alternative: D1600mm / D2000mm)
- * Red Jacket submersible pump type *Premier LPG300V17-21*, placed in a shaft, with inner bypass, with pump protection *Differpress 14*
- LPG dispenser KADATEC Corio or Corio duo, with a Coriolis mass flow meter LPGmass (dispensing accuracy ±0.2%). As alternative we offer dispensers of any other manufacturer it requires frame mounting.
- * LPG monitoring system, informing about gas level in the tank.
- Piping, polycarbonate shelter (in case of frame mounting).



AUTOGAS FILLING UNIT WITH RED JACKET WITHOUT SHAFT



Autogas filling unit with submersible pump Red Jacket without shaft, with dispenser of any manufacturer, is the cheapest option of the unit. The pump is placed directly in the tank, and for the pump servicing the tank must be emptied.

Components:

- * Storage tank in overground or underground execution, D1250mm (alternative: D1600mm / D2000mm)
- * Red Jacket submersible pump type Premier LPG300V17-21, placed in a shaft, with inner bypass, with pump protection Differpress 14
- * LPG dispenser KADATEC *Corio* or *Corio duo*, with a Coriolis mass flow meter *LPGmass* (dispensing accuracy ±0.2%) or one-hose dispenser of any other manufacturer –it requires frame mounting.
- * Piping, polycarbonate shelter (in case of frame mounting).

LPG DISPENSER CORIO / CORIO DUO



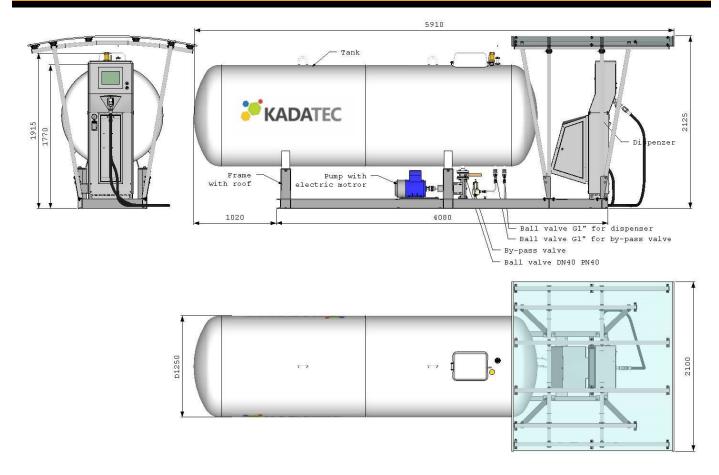
Specially developed design for use on autogas filling units. The key element of the dispenser is a mass flow meter with its own temperature compensation, which exactly measures dispensed amount on the principle of Coriolis force. Data from the flow meter is then processed by measuring unit, which transmits it to the fuel station terminal.

The dispenser is certified according to the European Directive 2004/22/EC and ATEX Directive 94/9/EC.

Standard functions of dispenser Corio / Corio duo:

- * Volume or Price electronic setting
 - ATC automatic temperature compensation.
 - Auto stop at 100% automatic dispensing stop by full car tank.
- Monitoring system continuous electronic monitoring of the situation with an acoustic / visual warning.
- Possibility of self-service via GSM mobile operator (payment via mobile phone, NTF technology).

AUTOGAS FILLING UNIT ON FRAME WITH CORKEN PUMP





Components:

- Storage tank in overground or underground execution, D1250mm (alternative: D1600mm / D2000mm);
- * External pump Corken FD075 or FD150, with bypass;
- * LPG dispenser KADATEC *Corio* or *Corio duo*, with a Coriolis mass flow meter *LPGmass* (dispensing accuracy ±0.2%) or one-hose dispenser of any other manufacturer —it requires frame mounting.
- * Explosion-proof three-phase asynchronous low-voltage motor Siemens series AOM, 3/4kW or 5,5kW, ex proof design ExdIIB+H2T4Gb;
- * Frame, piping, polycarbonate shelter.

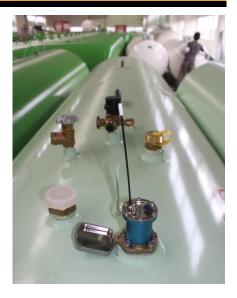


MONITORING SYSTEM FOR LPG STORAGE TANKS

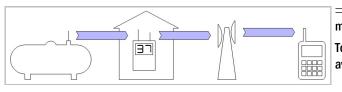
The monitoring system is designed for remote monitoring of gas level in LPG tank. Information is transmitted by means of radio data from the tank to a remote place.

Transmitter environment Receiver environment Transmission frequency Transmitter power supply Receiver power supply Basic range Sending of information Certificates

Ex-zone usual 433 MHz Internal lithium battery (min. 5 years of operation) AC adapter 100 meters (may be extended) every 1 min. CE, ATEX <Ex> II 2G Ex ia IIA T4 Gb



 \Rightarrow **BASIC VERSION:** transmission of information about the amount of gas. Information displayed it on the LCD of the receiver as % value of the tank volume.



רב

 \Rightarrow **GSM VERSION:** the receiver additionally has an implemented GSM modem, which allows the user to check the gas level with his mobile phone. To manage multiple tanks and large systems there is a special software available.

SENDER KTX01 performs digital reading from the level gauge. It is compatible with all types of level gauges. Measurement accuracy is the same as by the mechanic indicator installed on the tank. Sender ensures following functions:

- * Indication of the gas level in the tank and radio data transmission
- Monitoring of cathodic protection
- Measurement of ambient temperature and internal battery
- Energy generation from an outside source 1.2 V (cath. protection, solar cell, battery)
- + Robust waterproof construction
- + Ultra-low power consumption

RECEIVER KRX01 with LCD display serves to receive the signal from one or more transmitters KTX01. If the user needs to transmit information by means of SMS, the device is equipped with a GSM modem.



TRANSMITTER-RECEIVER KRT01 is used to extend the range or to transmit data under difficult conditions. The device does not require any operating or maintenance. The device is powered by solar cell.

CATHODIC PROTECTION FOR LPG UNDERGROUND TANKS

Active cathodic anticorrosive protection serves to guarantee functional safety and extension of lifetime of steel equipment stored in water or in earth. It is especially suitable for underground LPG storage tanks.

Cathodic protection set includes:

- Galvanic anode (2,0 kg or 4,0 kg net) of magnesium alloy pre-packaged in cotton bag, filled with backfill. Amount of anodes depending on size of steel construction (S1, S2 or S4).
- * Connecting box, which connects galvanic anodes with protected construction and which further enables to conduct check measurements.
- Connecting cable (length ca. 6m) links connecting box with protected construction.

Prüfdose	
für Kathodenschutz	
Checkbox	
cathodic protection	

Code	Set	Recommended usage
S1	1x anode 2,0kg, 1x 6m cable, connecting box	LPG tank <2700I
S1-0	1x anode 2,0kg, 1x 6m cable	LPG tank <2700I
S2	2x anode 2,0kg, 2x 6m cable, connecting box	LPG tank 2700I - 4800I
S 4	4x anode 2,0kg, 4x 6m cable, connecting box	LPG tank >4800I



LARGE STORAGE TANKS UP TO 125M³





Capacities	up to 125 000 liters
Outer diameters	2500 / 2800 mm
Operating pressure	15,6 bar (other pressures possible)
Test pressure	min. 22,3 bar
Operating temperature	-20/+40°C or -40/+40°C (other temperatures possible)
Medium	Liquefied gas DIN 51622 / EN 589
Manufacturing standard	AD-Merkblatt 2000
Regulation compliance	European Pressure Equipment Directive 2014/68/EU, modules G + D





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