




Uniti Expo Stuttgart 2022





2A Mühendislik enjoys an experience of more than **30** years in **LPG** sector. 2A is one of the biggest manufacturers of LPG/CNG/LNG/H2 dispensers in **TURKEY**. 2A produces multistage LPG pumps for auto gas refuelling stations compatible with the PED directive. All produced equipments have ATEX, OIML and MID certifications. 2A's client portfolio includes major proportion of distributor companies of LPG around the world.



LPG DISPENSER



Products Features

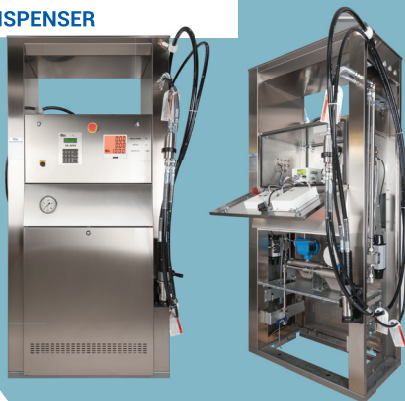
Nominal pipe diameter Inlet/Outlet (DN)	25 mm	
Maximum flow rate (Qmax)	50 (both types) L/Min	
Minimum flow rate (Qmin)	5 L/Min	
Minimum measured quantity	5 L	
Cyclic volume	0,5 L	
Measured liquid	Liquefied petroleum gases	
Liquid density	500 to 650 kg/m³	
Temperature range of liquid	(-10 to 50)°C	
Pressure range of liquid	7 to 25 bar	
Accuracy class	1	
Mechanical class	M1	
Ambient temperature range	(-25 to +55)°C	
Electromagnetic class	E1	
Scale interval for volume indication	0,01	L
(decimal points)	0,01	Price
Capacity of calculator	9999,99	L
	9999,99	Price
	99,99	Unit price

FUEL DISPENSER



Operating	-30 / +80 °C
Relative humidity	95%
Sensitivity	0,5%
Durable case made of galvanized sheet	
Full compatibility with multimedia systems	
Pressurized or suctioned production	
OPW nozzle used	
A design that allows clear visibility	
Simple hydraulic parts. Brody accurate, accurate pulsar, accurate solenoid valve	
Remote intervention to the pump through Internet	
Electronic unit designed with the latest technology	
Electronic front panel supported with visual designs	

CNG DISPENSER



Products Features

Flow range	1 to 77 kg/min (68 to 7550 nm ³ /hr)
Pressure limit	375 bar
Working pressure	250 bar
Meter accuracy	±0,2
Temperature limits	-25/+50

LNG DISPENSER



Pistons	4
Measurement Accuracy	± 0.5%
Cycle Volume	0,5 Liter
Magnetic Coupling	14000 Gauss
Body	GGG40 cast iron
Self cleaning and self washing system.	
Cold stamped shaft and crank.	
1.5 million liters warranty.	
Thanks to EC type approval it can be used in all dispenser which has MID certificate.	
OIML R117 Certified	

HYDROGEN DISPENSER



Products Features

Filling Pressure	35 MPa / 70 MPa
Ambient Temperature	-40~+55 °C
Working Power	220V ± 15%, 50Hz±1Hz;
Hydrogen Filling Machine Type	Double nozzle dual metering three line with pre-cooling hydrogen filling machine
Hydrogen Filling Nozzle	Double nozzle TK16/TK25
Hydrogen Filling Flow Rate	Not less than 3kg/min
Complies with Society of Automotive Engineers (SAE) Standards SAE-TIR-J-2600, SAE-TIR-J-2601, SAE-TIR-J-2719, and SAE-TIR-J-2799	
Complete fill accuracy of 98% with communications	
Credit card payment option with store point-of-sale (POS) interface	
Dispenses hydrogen in 3-5 minutes and temperature control of hydrogen gas to -40°C	
Nominal fill quantity of 1-10 kg per fill for light-duty vehicles	

LPG MASTER METER



Dimensions (without wackage)	43x45x75 cm
Net weight	39 kg
Dimensions (with package)	60x75x100 cm @pallet
Gross weight	49 kg
Nozzle	All Type Nozzles
Meter	LPG PRD Meter Prima / LPG Massflow Meter
Electronic Head	One Single Electronic Head
Estimated Production Time	6 - 8 working weeks

LPG HYDRAULIC GROUP



Products Features

Nominal pipe diameter Inlet/Outlet (DN)	25 mm
Maximum flow rate (Qmax)	50 (both types) L/Min
Minimum flow rate (Qmin)	5 L/Min
Minimum measured quantity	5 L
Cyclic volume	0,5 L
Measured liquid	Liquefied petroleum gases
Liquid density	500 to 650 kg/m ³
Temperature range of liquid	(-10 to 50)°C
Pressure range of liquid	7 to 25 bar
Accuracy class	1
Mechanical class	M1
Ambient temperature range	(-25 to +55)°C

COMBO HYDRAULIC GROUP



Nominal pipe diameter Inlet/Outlet (DN)	25 mm
Maximum flow rate (Qmax)	50 (both types) L/Min
Minimum flow rate (Qmin)	5 L/Min
Minimum measured quantity	5 L
Cyclic volume	0,5 L
Measured liquid	Liquefied petroleum gases
Liquid density	500 to 650 kg/m ³
Temperature range of liquid	(-10 to 50)°C
Pressure range of liquid	7 to 25 bar
Accuracy class	1
Mechanical class	M1
Ambient temperature range	(-25 to +55)°C

CNG COMPRESSORS



Products Features

A Series

Power	37-110 kw
Inlet Pressure	0,5-100 bar
Capacity	100-1900 Sm ³ /h

ZB Series

Power	Up to 250 kw
Inlet Pressure	0,5-100 bar
Capacity	300-4000 Sm ³ /h

Hydraulic

Power	15-55 kw
Inlet Pressure	30-250 bar
Capacity	85-3000 Sm ³ /h

1B Series

Power	Up to 110 kw
Inlet Pressure	20-200 bar
Capacity	545-3750 Sm ³ /h

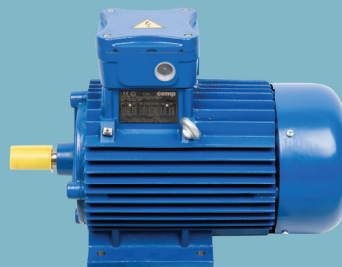
4B Series

Power	200-600 kw
Inlet Pressure	1-100 bar
Capacity	600-9800 Sm ³ /h

W Series

Power	55-200 kw
Inlet Pressure	0,5-70 bar
Capacity	200-3650 Sm ³ /h

EXPROOF MOTOR



Voltage	230/400 V
Frequency	50 Hz
Rated power	4 kw
Mounting type	B3
Type of protection	II2G Ex db IIB
Temperature class	T4 Gb
IP	IP55
Max. Ambient temp.	+40 °C
Cooling type	IC411
Efficiency	IE3
Insulation class	CLF
Temperature rise	DT80K

LPG PUMPS (6 - 8 Stages)



Products Features

3000 Series

	6 Stage	8 Stage
Inlet	2 1/2"	2 1/2"
Outlet	1 1/4"	1 1/4"
Pump Capacity	90-100 lt/min	100-120 lt/min
Pump Capacity	5,4-6 m³/h	6-7,2 m³/h
Exproof motor power	4 kw	4 kw

5000 Series

	6 Stage	8 Stage
Inlet	4"	4"
Outlet	2"	2"
Pump Capacity	400 lt/min	450 lt/min
Pump Capacity	24 m³/h	27 m³/h
Exproof motor power	18,5 kw	22 kw

4000 Series

	6 Stage	8 Stage
Inlet	3"	3"
Outlet	1 1/4"	1 1/4"
Pump Capacity	220 lt/min	230 lt/min
Pump Capacity	13,2 m³/h	13,8 m³/h
Exproof motor power	5,5 kw	7,5 kw

6000 Series

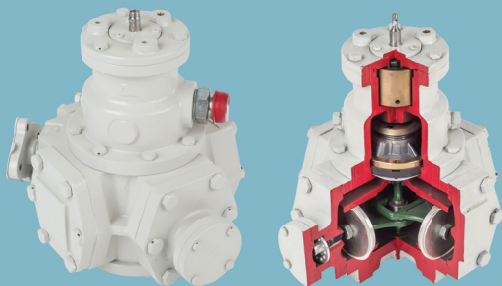
	6 Stage	8 Stage
Inlet	4"	4"
Outlet	2 1/2"	2 1/2"
Pump Capacity	750 lt/min	800 lt/min
Pump Capacity	45 m³/h	48 m³/h
Exproof motor power	30 kw	37 kw

BRC KITS



	Sequent Comfort	Sequent Platinum	BRC Maestro
Cylinders	≤4	≤4	≤4
LPG ECU connector	FCI 32 Pin	FCI 32 Pin	FCI 56 Pin
Gas ECU body material	Aluminium-Plastic	Aluminium-Plastic	Aluminium
Gas shut-off solenoid valve	2	2	2
Reducer Coolant inlet outlet elbows	Plastic	Plastic	Brass
Internal petrol injectors emulation	(√)	(√)	(√)
	Resistive	Resistive	Resistive
Gas pressure input integrated on rail	X	(√)	(√)
Gas temp. input integrated on rail	X	(√)	(√)
Water temperature sensor on reducer	(√)	(√)	(√)
N lambda oxygen input	1	1	1
RPM signal	(√)	(√)	(√)
MAP sensor	LPG/Only calibration CNG/Included	LPG/Only calibration CNG/Included	Kit without
Communication with OBD (K and CAN)	X	(√)	(√)
Sequential fuel switch over	(√)	(√)	(√)
Injectors type	Gemini	IN03 MY09	IN03 MY09
Gas level indicator	Switch	Switch	Switch

LPG METER



Products Features

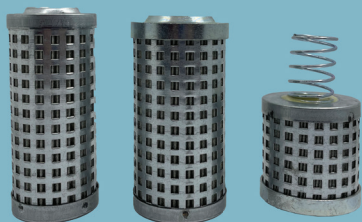
Pistons	4
Measurement Accuracy	± 0.5%
Cycle Volume	0,5 Liter
Magnetic Coupling	14000 Gaus
Body	GGG40 cast iron
Self cleaning and self washing system.	
Cold stamped shaft and crank.	
1.5 million liters warranty.	
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OIML R117 Certified	

LPG NOZZLE



Size	19,9x23,1x6 (cm)
Connection Dimensions	1" BSPP End
Temperature	-45+55 °C
Working Pressure	25 bar
Test Pressure	37,5 bar
Sealing	Polymer and Elastomer O-ring
Components	MS58 Brass Metal, 6013 Al, Chrome, Nickel
Product Weight	1650 gr
Usage	LPG systems

LPG FILTERS



Products Features

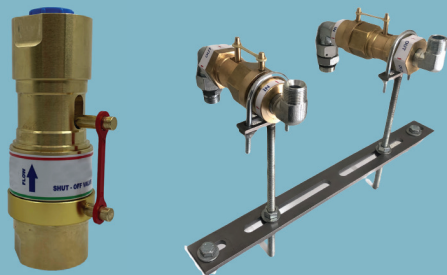
Size	(1) 13,2x5,6 (cm)
	(2) 12,7x6,5 (cm)
	(3) 11x6,2 (cm)
Temperature	-45+55 °C
Working Pressure	25 bar
Test Pressure	37,5 bar
Sealing	Polymer and Elastomer O-ring
Filter Paper	5 micron
Components	Perforated steel, Spring, Filter Paper, Glue
Product Weight	(1) 190, (2) 310, (3) 280 (gr)
Usage	LPG Dispensers

LPG BREAKAWAY



Size	11,55x6,6 (cm) - 25cm Wire
Connection Dimensions	3/4" NPT
Temperature	-45+55 °C
Detached Strenght	180-200 Newton
Working Pressure	25 bar
Test Pressure	37,5 bar
Sealing	Polymer and Elastomer O-ring
Components	MS58 Brass Metal, 6013 Al, SS316 Stainless
Product Weight	1375 gr
Usage	LPG systems

LPG SHUT - OFF VALVE



Products Features

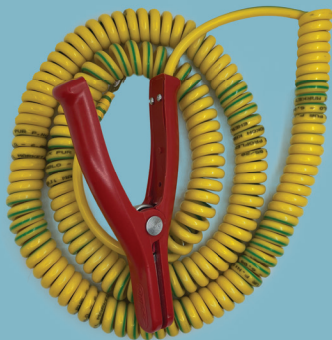
Size	15x7,7 (cm)
Connection Dimensions	¾" NPT
Temperature	-45+55 °C
Break Off Temp.	120 °C
Working Pressure	25 bar
Test Pressure	37,5 bar
Sealing	Polymer and Elastomer O-ring MS58 Brass Metal, Steel Spring,
Components	6013 Al
Product Weight	1900 gr
Usage	LPG systems

HOSE GUIDE



Size	16,5x16,5x25 (cm)
Connection Dimensions	M10 Dowels
Temperature	-45+55 °C
Components	Otomat, St37 Steel, PPRC
Product Weight	3790 gr
Usage	LPG Dispensers

SPIRAL GROUNDING WIRE



Products Features

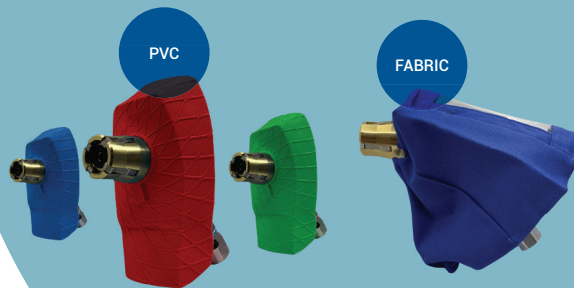
Size	(1) 16,5x16,5x25 (cm)
Connection Dimensions	7 (mm)
Temperature	-45+55 °C
Transmitter	Annealed Class 5 Copper - 6 mm ²
Current Draw	150 Amper
Wire Diameter	7 (mm)
Spiral Diameter	24 (mm)
Wire Lenght	10 mt
Spiral Lenght	120 (cm)
Components	Polvurethane (PUR), Copper, PVC
Product Weight	700 gr
Usage	Grounding Systems

GROUNDING CLAMP



Size	10,8x17 (cm)
Connection Dimensions	8 (mm)
Temperature	-45+55 °C
Current Draw	150 Amper
Components	%100 ABS, Nickelic copper, Spring
Product Weight	130 gr
Usage	Grounding Systems

LPG NOZZLE COVER



Products Features

PVC

Size	18x15 (cm)
Temperature	-45 + 55 °C
Components	Special Polyvinyl Chloride Resin
Special Feature	Antistatic
Product Weight	120 gr
Usage	LPG Nozzles

FABRIC

Size	19x16 (cm)
Temperature	-45 + 55 °C
Components	Special Fabric, Transparent PVC
Special Feature	-
Product Weight	60 gr
Usage	LPG Nozzles

KNEE PAD



Size	18x22 (cm)
Connection	Velcro Clamp, With Buckle
Components	PVC, Fabric
Product Weight	240 gr

PROTECTION BARRIER



Products Features

Bottom Plate	280x280x15 (cm)
Pipe	750Lx139x4 (mm) 5"
Cap	SCH20, 139x3 (mm)
Triangle Support	60x60x15 (mm)
Rope	Q16mm Steel Rope
Connection	M18x15 mm Rod + Epoxy
Total Weight	20 kg
Dye	Primer + Static Acrylic Wet Paint
Color	White, Red and others
Materials	Welded Pipe
Typers	Welded (with steel rope), Weldless

WHEN AND WHERE



Messe Stuttgart, Messeplatz 1, 70629 Stuttgart

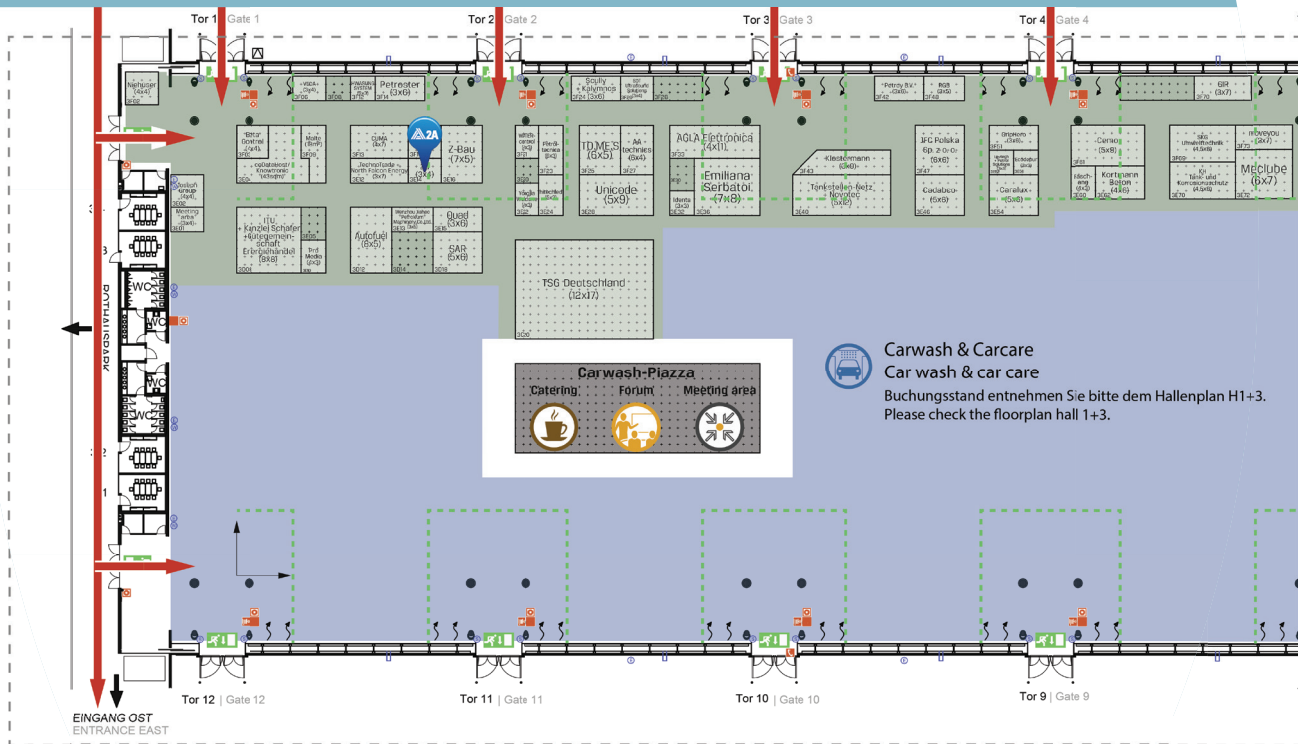
Opening times for trade visitors

Tuesday	17 May, 2022	9.30 to 18.00
Wednesday	18 May, 2022	9.30 to 18.00
Thursday	19 May, 2022	9.30 to 18.00

STUTTGART METRO MAP



S-Bahn-Liniennetz
Stuttgart





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