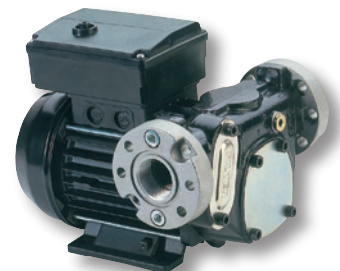




Fuel Transfer Kits  
Fuel Dispensers  
Fuel Pumps  
Oil Pumps  
Accessories

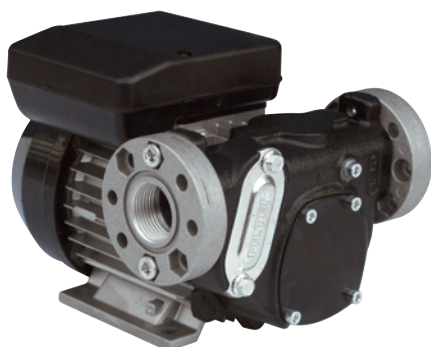


## Content

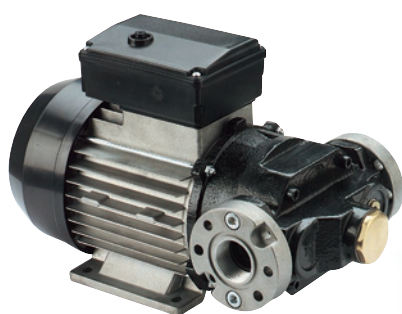
Diesel fuel pumps .....	3 - 5
Fuel transfer kits .....	6
Fuel transfer tank.....	7
Small fuel dispensers .....	8 - 9
Diesel fuel dispensers Self Service.....	10 - 12
Fuelling systems for vegetable oil .....	13
Oil pumps.....	14 - 15
AdBlue® pumps .....	16 - 17
Nozzles.....	18 - 19
Meters.....	20 - 21
Accessories .....	22 - 23

# Diesel Fuel Pumps

AC powered



Panther 56/72



E 80/120



PICO 230 Volt  
(barrel not included with the delivery)

ZUWA diesel fuel pumps – rugged, durable pumps for the refuelling of construction engines, commercial and agricultural vehicles, motor yachts etc. with diesel or biodiesel. Applicable for filling and discharging fuel oil tanks. The pumps operate efficiently and reliably even at low temperatures.  
Capacity: 40 - 100 litres/min.

## Panther 56/72 and E 80/120

- » dry self-priming
- » no priming assistance required
- » integrated bypass valve
- » exclusively on model Panther: integrated filter on the suction side and anti-siphon valve
- » wide range of accessories available

## Barrel Pump PICO New

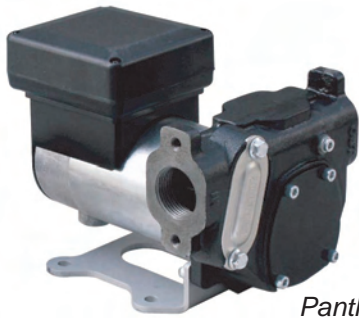
- » barrel connection 2"
- » 4 m hose 3/4"
- » foot valve
- » automatic or manual nozzle
- » 2 m cable with plug
- » optional: digital flow meter K24

AC Powered Pumps									
type	code	kW	Volt	A	rpm (max)	flow rate (max)	pressure bar (max)	connections	weight kg
Panther 56-m	120701	0,35	230	3,0	2800	56 L/min	1,5	1" FPT x 1" FPT	7,4
Panther 56-t	120703	0,5	400	1,3	2800	56 L/min	1,5	1" FPT x 1" FPT	7,4
Panther 72-m	120702	0,5	230	4,2	2800	72 L/min	2,0	1" FPT x 1" FPT	7,9
Panther 72-t	120704	0,5	400	1,6	2800	72 L/min	2,0	1" FPT x 1" FPT	7,9
E 80-m	120607	0,5	230	3,5	1400	75 L/min	1,6	1" FPT x 1" FPT	13
E 80-t	120619	0,5	400	1,6	1400	75 L/min	1,6	1" FPT x 1" FPT	13
E 120-m	120608	0,75	230	5,7	1400	100 L/min	1,7	1" FPT x 1" FPT	15,6
E 120-t	120638	0,75	400	2,2	1400	100 L/min	1,7	1" FPT x 1" FPT	15,6
PICO 230 V	P20200	0,22	230	0,97	n. A.	35/30* L/min	1,0	3/4" MPT x 2" MPT	4,5/5,5*

\* manual/automatic nozzle

# Diesel Fuel Pumps

DC powered



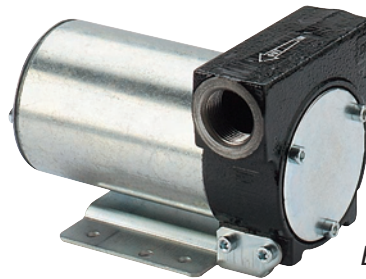
Panther DC

## Panther 56/72, BI 100 and E 2000

- » dry self-priming
- » no priming assistance required
- » integrated bypass valve
- » exclusively on model Panther: integrated filter on the suction side and anti-siphon valve
- » wide range of accessories available



BI 100

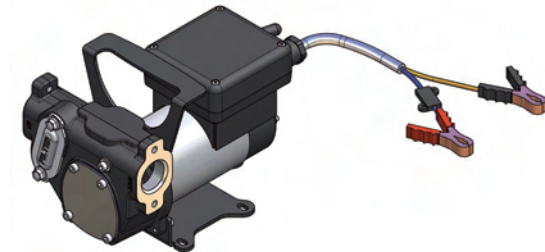


E 2000



## CARRY 2000

- » pump E 2000 with handle
- » on/off-switch
- » battery cable



## CARRY Panther

- » pump Panther DC with handle
- » on/off-switch
- » battery cable

## DC Powered Pumps

type	code	kW	Volt	A	rpm (max)	flow rate (max)	pressure bar (max)	connections	weight kg
E 2000-12	120628	0,14	12	22	2800	40 L/min	1,0	¾" FPT x ¾" FPT	3,5
E 2000-24	120630	0,16	24	13	2800	43 L/min	1,0	¾" FPT x ¾" FPT	3,5
BI 100-12	120708	0,24	12	35	2000	85 L/min	1,2	1" FPT x 1" FPT	9,9
BI 100-24	120707	0,24	24	22	2000	85 L/min	1,2	1" FPT x 1" FPT	9,9
Panther 56 DC	120701DC	0,6	12	35	2900	56 L/min	1,5	1" FPT x 1" FPT	7,5
Panther 72 DC	120702DC	0,6	24	25	3500	70 L/min	2,0	1" FPT x 1" FPT	7,5
Carry 2000 12 V	120670	0,14	12	22	2800	40 L/min	1,0	¾" FPT x ¾" FPT	4,2
Carry 2000 24 V	120671	0,16	24	13	2800	43 L/min	1,0	¾" FPT x ¾" FPT	4,2
Carry Panther 12 V	120672	0,6	12	35	2900	56 L/min	1,5	1" FPT x 1" FPT	9,1
Carry Panther 24 V	120673	0,6	24	25	3500	70 L/min	2,0	1" FPT x 1" FPT	9,1

# Diesel Fuel Pumps

DC powered



## Battery Kit

- » pump Carry 2000 or alternatively Panther DC
- » on/off-switch
- » battery cable
- » manual nozzle
- » 4 m oil resistant rubber hose, ¾" male thread, Ø 19 mm, with swivel connector and suction filter



UNISTAR 2000-B\*

## Multi Purpose Barrel Pump for Battery Drive

- » dry self-priming impeller pump 12 or 24 Volt
- » for diesel fuel, oils and more liquids
- » three pin plug
- » on/off-switch with thermal motor protection
- » ultra light: only 3.1 kg
- » optional: barrel connection 2"



PICO 12/24 Volt\*

## Barrel Pump PICO for Battery Drive New

- » barrel connection 2"
- » 4 m hose ¾"
- » foot valve
- » automatic or manual nozzle
- » 3 m cable with battery clips
- » optional: digital flow meter K24

\* barrel and battery not included with the delivery

DC Powered Pumps									
type	code	kW	Volt	A	rpm (max)	flow rate (max)	pressure bar (max)	connections	weight kg
battery kit Carry 2000 12 V	120631	0,14	12	22	2800	40 L/min	1,0	¾" FPT x ¾" FPT	7,5
battery kit Carry 2000 24 V	120632	0,16	24	13	2800	43 L/min	1,0	¾" FPT x ¾" FPT	7,5
battery kit Panther 12 V	120705	0,6	12	35	2900	56 L/min	1,5	1" FTP x 1" FTP	10,8
battery kit Panther 24 V	120706	0,6	24	25	3500	70 L/min	2,0	1" FTP x 1" FTP	10,8
UNISTAR 2000-B	11217111312	0,1 0,2	12 24	7,3 8,3	670 1500	15 L/min 33 L/min	2,5	1" MPT x 1" MPT	3,1
PICO 12 V	P20204	0,1	12	9,2	n. A.	30/25* L/min	1,0	¾" MPT x 2" FPT	4,5/5,5*
PICO 24 V	P20208	0,1	24	5,6	n. A.	30/25* L/min	1,0	¾" MPT x 2" FPT	4,5/5,5*

\* manual/automatic nozzle

# Fuel Transfer Kits



E 56F/Z



E 72-BS/Z



E 2000-F



E 56-BS

ZUWA fuel transfer kits – complete, ready to mount systems to be fastened either to a wall or a tank.

## Features

- » pump with on/off-switch and cable with plug (only 230 Volt)
- » types E56 and E72 with anti-siphon valve
- » available with or without mechanical meter
- » automatic nozzle - optional with type approval
- » delivery hose 4 metre, reinforced oil resistant rubber, Ø 19 or 25 mm, ¾" or 1" male thread
- » suction kit: 1.5 m oil resistant spiral hose, Ø 25 mm, 1" male thread with foot valve
- » nozzle holder (except for E56-BS and E72-BS)

### Fuel Transfer Kits for Wall Fastening with Meter on Plate

type	code	pump	flow rate pump (max)	Volt
E 56-BS/Z	120713	Panther 56	56 L/min	230
E 72-BS/Z	120639	Panther 72	72 L/min	230
E 2000-BS/Z	120634	E 2000	40 L/min	12
E 2000-BS/Z	120633	E 2000	43 L/min	24

### Fuel Transfer Kits for Tanks with 2" Barrel Connection and Meter

type	code	pump	flow rate pump (max)	Volt
E 56-F/Z	120709	Panther 56	56 L/min	230
E 72-F/Z	120660	Panther 72	72 L/min	230
E 2000-F/Z	120674	E 2000	40 L/min	12
E 2000-F/Z	120675	E 2000	43 L/min	24

### Fuel Transfer Kits without Meter (Types -F with 2" Barrel Connection)

type	code	pump	flow rate pump (max)	Volt
E 56-BS	120711	Panther 56	56 L/min	230
E 72-BS	120659	Panther 72	72 L/min	230
E 56-F	120714	Panther 56	56 L/min	230
E 2000-F	120676	E 2000	40 L/min	12
E 2000-F	120677	E 2000	43 L/min	24

Nozzles with type approval for all types of fuel transfer units on option.

# Fuel Transfer Tank



Quick installation unit consisting of tank, suction kit, pump and hose. Ideal as private filling station or on construction sites.

## Pump Features

- » self-priming vane pump
- » flow rate up to 70 L/min
- » 100 µ filter in the pump housing (not in combination with pump E 2000)
- » high precision mechanical meter K33
- » automatic nozzle (optional with type approval)
- » 4 m high quality oil-resistant discharge hose
- » nozzle holder
- » Panther 56 and 72: anti-siphon valve



*limit indicator*

## Tank Features

- » nominal capacity approx. 990 litres
- » dimensions L x W x H: 1140 x 730 x 1640 mm
- » tank level control
- » double wall construction (steel panes + PE-DH plastics)
- » visual leak detector
- » suction kit with metal tube, swing check valve, filter and hose for pump connection
- » storage approval

optional:

- » filling and venting neck
- » limit indicator
- » unlimited ADR transport approval

## Fuel Transfer Tanks

type	code	pump	flow rate pump (max)	Volt
fuel transfer tank E 56-BS/Z	120820	Panther 56	56 L/min	230
fuel transfer tank E 72-BS/Z	120821	Panther 72	72 L/min	230
fuel transfer tank E 2000-BS/Z	120822	E 2000	40 L/min	12
fuel transfer tank E 2000-BS/Z	120823	E 2000	43 L/min	24

# Small Diesel Fuel Dispensers

with mechanical meter

Compact, economic fuel dispensers for private and business (not for resale) use, rugged, durable design. For wall, tank or pedestal mounting.

## Features

- » dry self-priming vane pump alternatively for 230,12 or 24 Volt
- » built-in bypass valve and anti-siphon valve
- » integrated filter on the suction side of the pump
- » automatic nozzle - optional with type approval
- » nozzle holder with pump start/stop lever
- » mechanical flow meter with high precision and clearly legible display
- » suction kit: 1.5 metre oil resistant spiral hose, Ø 25 mm, 1" external thread with foot valve (not available in combination with pedestal)
- » high quality oil resistant delivery hose, 4 metre, Ø 19 or 25 mm, ¾" or 1" male thread with swivel connection
- » sheet steel housing with anticorrosion treatment

optional:

- » 2" connection for tank mounting on suction side
- » pedestal



*fuel dispenser 56*



*coupling tank mount version*



*fuel dispenser 70*

## Small Diesel Fuel Dispensers with Mechanical Meter

type	code	kW	Volt	flow rate (max)	weight kg
fuel dispenser 56	120600	0,35	230	56 L/min	21
fuel dispenser 56, 12 V	120599	0,30	12	56 L/min	21
fuel dispenser 70, 24 V	120598	0,42	24	70 L/min	21
fuel dispenser 70	120610	0,50	230	72 L/min	25
pedestal blue	12061050	-	-	-	18
pedestal red	12060050	-	-	-	18



# Small Diesel Fuel Dispensers

with electronic meter



fuel dispenser 70 MC50



Compact and sturdy fuel dispenser with data management system for private and business (not for re-sale) use. Easy installation. Wall, tank or pedestal mounting. Optional PC interface.

## Features

- » dry self-priming vane pump for 230, 12 and 24 Volt
- » built-in bypass valve and anti-siphon valve
- » integrated filter on the suction side of the pump
- » automatic nozzle - optional with type approval
- » nozzle holder with pump start/stop lever
- » digital flow meter K600, precision  $\pm 0,5 \%$
- » suction kit: 1.5 metre oil resistant spiral hose,  $\varnothing 25$  mm, 1" external thread with foot valve (not available in combination with pedestal)
- » delivery hose 4 metre,  $\varnothing 25$  mm, 1" male thread with swivel connection

optional:

- » pedestal



magnetic key



key reader

## Tank Data Management System

- » digital display for dispense volume and operating instructions
- » access control and data management for up to 50 users with access code (PIN) and/or magnetic key
- » dispense volume can be preset, pump stops automatically when reaching required volume
- » local memory up to 200 performed dispensing operations (dispense volume, date, time, user and optional kilometres, vehicle registration number)

optional:

- » data management software for administration and analysis on PC
- » connection and data transfer via magnetic key (manager key) and/or serial interface RS 485
- » magnetic key for access control

## Small Diesel Fuel Dispensers with Electronic Meter

type	code	pump	flow rate (max)	number of users	magnetic key	weight kg
fuel dispenser 70 MC50	120612	Panther 72	72 L/min	50	optional	25
pedestal black	P12708	-	-	-	-	18
magnetic key set for serial interface	P12709		1 manager key, 10 user key, PC reader, PC software			
magnetic key set for USB connection	P14144		1 manager key, 10 user key, PC reader, PC software			

# Diesel Fuel Dispensers Self Service

with electronic meter

Fuel dispenser Self Service: modern, slender design for quick and convenient refuelling. Available as stand alone or tank mounted version. Optional PC connection.



*Self Service FM  
up to 120 users*



*Self Service MC  
up to 80 users*

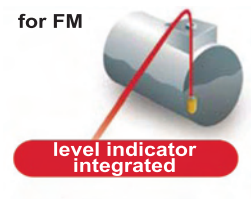


*tank versions*

## Features

- » dry self-priming vane pump 230 Volt
- » integrated pressure regulation valve (bypass)
- » protective filter on the suction side
- » automatic nozzle - optional with type approval
- » nozzle holder with lever for automatic pump start/stop
- » electronic flow meter K600
- » delivery hose 4 metre, Ø 25 mm, 1" male thread with swivel connection
- » water separation filter
- » thermal printer for fuelling slip
- » tank level control
- » lockable front door allows for easy access for maintenance and service

for FM



# Diesel Fuel Dispensers Self Service

with electronic meter



## Tank Data Management System

- » digital display for dispense volume and operating instructions
- » access control and data management for up to 120 users with access code (PIN) and/or magnetic key
- » dispense volume can be preset, pump stops automatically when preset volume is dispensed
- » local memory up to 250 fillings (dispense volume, date, time, user and optional kilometres, vehicle registration number)

optional:

- » data management software for administration and analysis on PC
- » connection and data transfer via magnetic key (manager key) and/or serial interface RS 485
- » magnetic key for access control



key reader



magnetic key



PC interface

## Diesel Fuel Dispensers with Electronic Flow Meter

type	code	pump	flow rate L/min (max)	number of users	water filter	magnetic key	printer	tank level indication
Self Service 70 FM	120801	Panther 72	72	120	yes	optional	yes	yes
Self Service 70 FM tank	120801 Tank	Panther 72	72	120	optional	optional	yes	yes
Self Service 100 FM	120806	E 120	100	120	yes	optional	yes	yes
Self Service 100 FM tank	120806 Tank	E 120	100	120	optional	optional	yes	yes
Self Service 70 MC F	120803	Panther 72	72	80	yes	optional	-	-
Self Service 70 MC tank	120803 Tank	Panther 72	72	80	optional	optional	-	-
Self Service 100 MC F	120808	E 120	100	80	yes	optional	-	-
Self Service 100 MC tank	120808 Tank	E 120	100	80	optional	optional	-	-
magnetic key set for serial interface	P12709	1 manager key, 10 user key, PC reader, PC software						
magnetic key set for USB connection	P14144	1 manager key, 10 user key, PC reader, PC software						
external water filter	PF13125	for Self Service 70 tank version						
external water filter	PF13126	for Self Service 100 tank version						

# Diesel Fuel Dispensers Self Service

with mechanical meter

Fuel dispenser Self Service: modern, slender design for quick and convenient refuelling. Available as stand alone or tank mounted version.

## Features

- » integrated pressure regulation valve (bypass)
- » protective filter on the suction side
- » automatic nozzle - optional with type approval
- » nozzle holder with lever for automatic pump start/stop
- » delivery hose 4 metre, Ø 25 mm, 1" male thread with swivel connection
- » lockable front door allows for easy access for maintenance and service



Self Service K44



### Mechanical Flow Meter K44

precision  $\pm 1\%$

subtotal dispense volume indicator 4-digit (resettable)

total dispense volume indicator 7-digit (not resettable)



tank version



## Diesel Fuel Dispensers with Mechanical Flow Meter

type	code	pump	flow rate (max)	weight kg
Self Service 70 K44	120805	Panther 72	72 L/min	67
Self Service 70 K44 Tank	120805 Tank	Panther 72	72 L/min	57
Self Service 100 K44	120810	E 120	100 L/min	75
Self Service 100 K44 Tank	120810 Tank	E 120	100 L/min	65

# Fuel Systems for Vegetable Oil

Fuel systems and fuel dispensers with high capacity pumps and a wide range of accessories, especially adapted to the high viscosity of vegetable oil. Auto stop nozzles are available for all models on option.



## Fuel Unit for Vegetable Oil

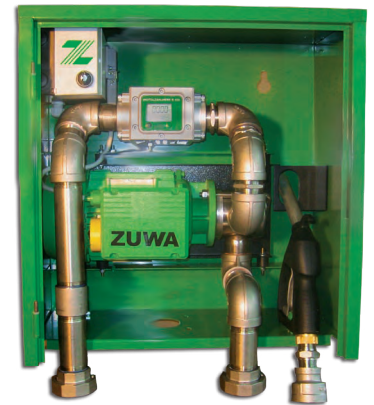
Small and compact for wall mounting or optionally with pedestal. Equipped alternatively with side channel pump or impeller pump (both stainless steel), hoses, nozzle and digital flow meter.

## Fuel Unit for Vegetable Oil in Steel Locker

Robust steel locker with large door. 5 metres delivery hose, nozzle and digital flow meter are included.

Available in various versions:

- » with stainless steel impeller pump NIROSTAR or with vane pump Viscomat 90
- » with or without magnetic key for access control
- » power supply 230 or 400 Volt



## Fuel Unit for Vegetable Oil Self Service 70 MC

Fuel dispenser with access control and tank data management system. Magnetic key and software to analyse data on PC are available. (See fuel dispenser Self Service 70 MC, page 11)

Nozzle and nozzle holder with automatic on/off switch.

Lockable front door allows for easy access for maintenance and service.

## Fuel Units for Vegetable Oil

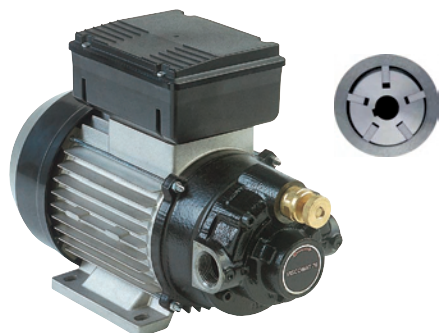
type	code	Volt	flow rate (max)*	pressure bar (max)
fuel unit for vegetable oil EP 40 NIRO	180037	230	75 L/min	2,2
fuel unit for vegetable oil EP 40 NIRO	180038	400	75 L/min	2,2
fuel unit for vegetable oil NIROSTAR 2000-D	19002199	230	75 L/min	3
fuel unit for vegetable oil NIROSTAR 2000-D	19002196	400	75 L/min	3
fuel unit for vegetable oil in steel locker NIROSTAR**	19003191	230	75 L/min	3
fuel unit for vegetable oil in steel locker NIROSTAR**	19003190	400	75 L/min	3
fuel unit for vegetable oil in steel locker VISCOMAT 90**	19003195	230	60 L/min	5
fuel unit for vegetable oil in steel locker VISCOMAT 90**	19003194	400	60 L/min	5
fuel unit for vegetable oil Self Service 70 MC NIROSTAR	19002198	230	75 L/min	3
fuel unit for vegetable oil Self Service 70 MC NIROSTAR	19002197	400	75 L/min	3
fuel unit for vegetable oil Self Service 70 MC VISCOMAT	19002210	230	60 L/min	5
fuel unit for vegetable oil Self Service 70 MC VISCOMAT	19002200	400	60 L/min	5

\* at 20°C

\*\* optional with magnetic key set (10 keys included with delivery)

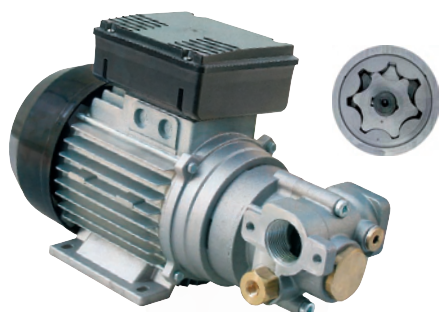
# Oil Pumps

Vane, gear and impeller pumps for oils with all grades of viscosity. Also available with pressure switch for automatic pump start and stop.



## VISCOMAT 70/90

Self-priming vane pumps with specially designed blades for the transfer of oils and lubricants. The adjustable bypass valve provides flow regulation (except for Viscomat 90-m). Excellent suction capacity and low-noise operation.



## VISCOMAT 200/230/350

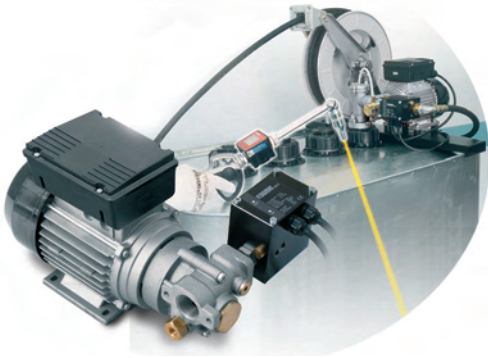
Gear pumps with excellent suction capacity and an internal profile maintaining constant flow at high pressure. Integrated bypass and venting valve. Pump can be mounted horizontally or vertically.



## VISCOMAT DC 12/24 V

Gear pump with DC motor and battery connection for oil transfer or to draw off oil. For any mobile application.

Oil Pumps							
type	code	kW	Volt	flow rate (max)	pressure bar (max)	connections	weight kg
Viscomat 70-m	120609	0,75	230	25 L/min	6	¾" FPT x ¾" FPT	14,1
Viscomat 70-t	120606	0,75	400	25 L/min	6	¾" FPT x ¾" FPT	14,1
Viscomat 90-m	1206070	1,6	230	50 L/min	5	1" FPT x 1" FPT	14,1
Viscomat 90-t	1206069	2	400	50 L/min	5	1" FPT x 1" FPT	14,1
Viscomat 200-m	1206092	0,75	230	9 L/min	12	1" FPT x 1" FPT	9
Viscomat 200-t	1206096	0,75	400	9 L/min	12	1" FPT x 1" FPT	9
Viscomat 230-m	1206091	0,75	230	14 L/min	12	1" FPT x 1" FPT	12,5
Viscomat 230-t	1206095	0,75	400	14 L/min	12	1" FPT x 1" FPT	12,5
Viscomat 350-m	1206093	0,75	230	9 L/min	25	1" FPT x 1" FPT	12,5
Viscomat 350-t	1206094	0,75	400	9 L/min	25	1" FPT x 1" FPT	12,5
Viscomat DC 12V	1206097	0,15	12	4 L/min	5	½" FPT x ½" FPT	3
Viscomat DC 24V	1206098	0,15	24	4 L/min	5	½" FPT x ½" FPT	3



## VISCOMAT with Pressure Switch

The pressure switch automatically starts the pump when the nozzle opens and switches it off when maximum pressure is reached.

### Oil Pumps VISCOMAT with Pressure Switch

type	code	kW	Volt	flow rate (max)	pressure bar (max)	weight kg
Viscomat 200 with pressure switch	120645	0,55	230	9 L/min	12	12
Viscomat 230 with pressure switch	120651	0,75	230	14 L/min	16	15
Viscomat 350 with pressure switch	120647	0,75	230	9 L/min	25	15



## Oil Transfer Kit

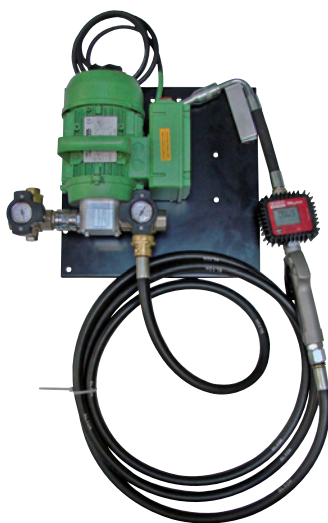
Oil pump VISCOMAT 70, plate mounted for wall fastening.

### Features:

- » protective filter on the inlet side
- » 1,5 m oil resistant suction hose, Ø 19 mm, ¾" male thread
- » 4 m oil resistant delivery hose, Ø 13 mm, ½" male thread
- » nozzle for oils provided with electronic flow meter K400
- » nozzle holder and hose carrier

(Art-Nr. 120644 with 230 Volt)

(Art-Nr. 120646 with 400 Volt)



## Impeller Pumps UNISTAR 2000-A/B

### for oils and diesel fuel

Dry self-priming ZUWA impeller pumps are capable of draining tanks nearly completely. The flexible impeller allows to pass suspended solids with the liquid and is ideal for pumping waste oil.

## CHP Oil Change Unit Stationary New rapid and convenient motor oil change in CHP units

### Features:

- » pump UNISTAR 2000-A, flow rate with oil max. 15 L/min
- » nozzle with electronic flow meter
- » 2 x 3 m suction hose, 2 x 4 m delivery hose
- » 2 multifunctional valves

(code 11138136322-BHKW)

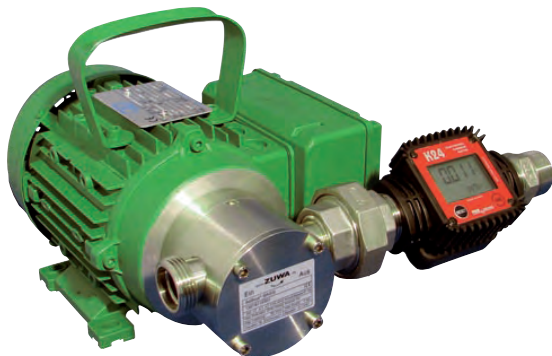
For further information about function and features please ask for our detailed brochure.

### Impeller Pump UNISTAR

type	code	kW	Volt	flow rate (max)	pressure bar (max)	connections	weight kg
UNISTAR/V 2000-A	110121M	0,37	230	30 L/min	3	¾" MPT x ¾" MPT	9,5
UNISTAR/V 2000-B	110131M	0,55	230	60 L/min	3	1" MPT x 1" MPT	10

# AdBlue® Fuelling Systems

AdBlue® is a solution of water and urea used for catalytic converters of diesel engines of commercial vehicles. In the SCR technology AdBlue® is applied for exhaust gas treatment reducing toxic nitrogen oxides in the exhaust gases.



*AdBlue BASIS  
with flow meter K24*



*AdBlue® KOMPAKT  
with flow meter TURBINOX*

## AdBlue® BASIS/ KOMPAKT

- » dry self-priming and easy to maintain
- » pump body made of high quality stainless steel
- » flow rate with urea: max. 45 L/min
- » high precision digital flow meter



## AdBlue® TOP

Complete AdBlue® transfer kit, particularly suitable for IBC and smaller containers.

- » available either with powerful impeller or centrifugal pump
- » digital flow meter TURBINOX
- » suction hose with quick coupling
- » 4 metres delivery hose
- » automatic or manual nozzle
- » nozzle holder with drop collector

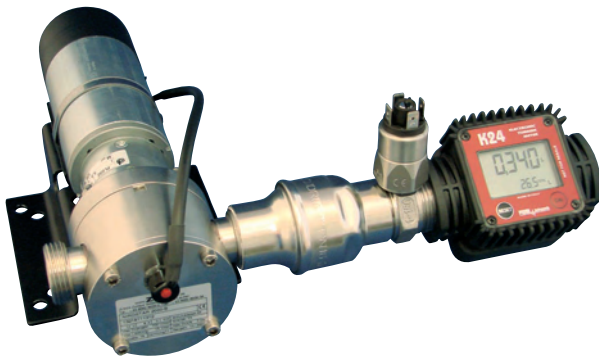
## Fuelling Systems for AdBlue®

type	code	Volt	flow rate (max)	pressure bar (max)
AdBlue® BASIS (with flow meter)	81598	230/400	45 L/min	4
AdBlue® KOMPAKT (with flow meter)	81595	230/400	45 L/min	4
AdBlue® TOP 1 (with flow meter, automatic nozzle)	81596	230/400	45 L/min	4
AdBlue® TOP 2 (with flow meter, automatic nozzle)	81597	230	40 L/min	5
AdBlue® TOP 2 (without flow meter, automatic nozzle)	81599	230	40 L/min	5



# AdBlue® Pumps

pumps and accessories



**New** AdBlue® pump for battery drive with flow meter, pressure switch and dry run protection

## AdBlue® Pumps

- » dry self-priming and easy to maintain
- » pump body made of high quality stainless steel
- » flow rate with urea: max. 45 L/min
- » ultra light

optional:

- » high precision digital flow meter K24
- » pressure switch for automatic On/Off
- » dry run protection

## Pumps for AdBlue®

type	code	Volt	flow rate (max)	pressure bar (max)
AdBlue® pump AC	13218116331	230	45 L/min	4
AdBlue® pump DC	13218111312	12/24	12/25 L/min	3

AdBlue® nozzle manual



AdBlue® nozzle automatic



## Nozzles for AdBlue®

type	code	flow rate (max)	connections
nozzle for AdBlue® manual	131120	80 L/min	3/4"
nozzle for AdBlue® automatic	131029	70 L/min	3/4"



### Flow Meter TURBINOX

- » precision: ±1%
- » housing stainless steel
- » user friendly calibration
- » digital display (subtotal 5-digit, total 8-digit)



### Flow Meter K 24

- » precision ±1%
- » housing: synthetic
- » pivoted digital display (subtotal 5-digit, total 6-digit)
- » battery charge indicator

## Flow Meters for AdBlue®

type	code	flow rate (max)	pressure bar (max)	connections	weight kg	dimensions mm
K24	131817	5 - 100 L/min	20	1" MPT x 1" FPT	0,4	225x100x100
TURBINOX	131811	4 - 40 L/min	30	1" FPT	1,5	n/a

# Nozzles

for diesel fuel and vegetable oil

## Manual Nozzles

- » with swivel connection
- » low flow loss
- » types 120 and 150 with aluminium housing



manual  
plastics



manual 120



manual 150

## Automatic Nozzles

- » swivel connection
- » stops fuelling process automatically when tank is full
- » rubber jacket – convenient handling also in low temperatures (not available for nozzle 280)

auto stop nozzles  
also available  
for vegetable oil



automatic 60



automatic 80/120



automatic 280

## Nozzles for Diesel and Biodiesel with Swivel Connection

type	code	flow rate (max)	connections
manual nozzle plastics	131041	80 L/min	1" female
manual nozzle 120	131016	120 L/min	1" female
manual nozzle 150	131080	150 L/min	1" female
automatic nozzle 60	131033	60 L/min	1" female
automatic nozzle 70 with type approval	131033G	70 L/min	1" female
automatic nozzle 80	131069	80 L/min	1" female
automatic nozzle 120	131070	120 L/min	1" female
automatic nozzle 120 with type approval	131070G	120 L/min	1" female
automatic nozzle 280	1310250	280 L/min	1 ½" female

## Nozzles for Vegetable Oil with Swivel Connection

type	code	flow rate (max)	connections
nozzle automatic - passenger car (not shown)	131030	60 L/min	1" female
nozzle automatic - commercial vehicle (not shown)	131130	80 L/min	1" female

## Nozzles for Oils

- » with automatic anti-drip valve
- » alternatively with flexible or rigid end fitting
- » preadjustment of charge with meter K500



nozzle for oils  
rigid

nozzle for oils  
flexible



**New**

nozzle with K40  
flexible



nozzle with K400  
flexible



nozzle with K 500  
flexible



**New**

nozzle with K600  
flexible

## Nozzles for Oils and Lubricants with Automatic Anti-drip Valve

type	code	flow rate	connections
nozzle rigid	131803	--	½" female
nozzle flexible	131804	--	½" female
nozzle with mechanic flow meter K40, rigid (not shown)	131818	1 - 30 L/min	½" female
nozzle with mechanic flow meter K40, flexible	131819	1 - 30 L/min	½" female
nozzle with digital flow meter K400, rigid (not shown)	131802	1 - 30 L/min	½" female
nozzle with digital flow meter K400, flexible	131801	1 - 30 L/min	½" female
nozzle with digital flow meter K500 *, flexible	131807	1 - 30 L/min	½" female
nozzle with digital flow meter K600, rigid (not shown)	131820	6 - 60 L/min	1" female
nozzle with digital flow meter K600, flexible	131821	6 - 60 L/min	1" female

\* required charge can be preadjusted

# Flow Meters

mechanical and electronic

## Mechanical Flow Meters K33 / K44

for diesel and oils

**K33:** 3-digit subtotal and 6-digit total dispense volume indicator

**K44:** 4-digit subtotal- and 7-digit total dispense volume indicator

» precision  $\pm 1\%$

» low flow loss



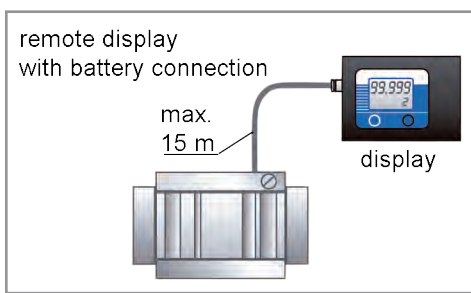
K33



K44

## Mechanical Flow Meters

type	code	flow rate L/min	pressure bar (max)	connections	weight kg	dimensions mm
K33	131072	10 - 100	10	1" female	2	180x180x170
K44	131806	10 - 100	10	1" female	2	180x180x170



## Pulsar Flow Meters

for diesel and oils

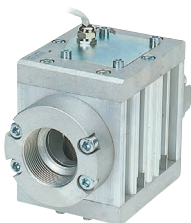
Counters for connecting with an external receiver, with or without remote indicator

The K900 includes remote indication and cable connection.



New

K200



K600



K700



K900



## Remote Display

Teleindication for a distance up to 15 metres when combined with a counter. Works with battery or conventional power supply.

## Pulsar Flow Meters

type	code	flow rate L/min	pressure bar (max)	connections	weight kg	dimensions mm
K200	131823	0,1 - 2,5	30	¼" female	0,5	65x100x130
K400 (not shown)	131824	1 - 30	70	½" female	0,5	800x80x75
K600/3	P472000	10 - 100	30	1" female	2,6	200x120x140
K600/4	P473000	15 - 150	20	1 ½ " female	3,2	200x120x140
K700	P498000	25 - 250	20	2" female	5,5	345x175x255
K900	P499020	50 - 500	20	3" female	12	400x290x200
remote display	P495010	-	-	-	-	-



K24 with pivoted display

## K24 *New*

for diesel, biodiesel and heat transfer medium

- » pivoted digital display with 5-digit subtotal and 6-digit total dispense volume indicator
- » high precision  $\pm 1\%$
- » housing: plastics
- » flow rate: max. 120 L/min
- » operating pressure: max. 20 bar
- » connection 1", NW 25
- » battery charge indicator



## K200 *New*

for diesel, biodiesel and oils

- » digital display with 5-digit subtotal and 8-digit total dispense volume indicator
- » precision  $\pm 0,5\%$
- » housing: aluminium
- » low flow loss



## K400

for oils and lubricants

- » digital display with 5-digit subtotal and 8-digit total dispense volume indicator
- » precision  $\pm 0,5\%$
- » housing: aluminium
- » low flow loss
- » balance valve for pressure reduction



## TURBINOX

for diesel and AdBlue®

- » digital display with 5-digit subtotal and 8-digit total dispense volume indicator
- » precision  $\pm 1\%$
- » housing stainless steel
- » user friendly calibration



## K600

for diesel and biodiesel  
K600/3 also for oils

- » digital display with 5-digit subtotal and 8-digit total dispense volume indicator
- » precision  $\pm 0,5\%$
- » housing: aluminium
- » low flow loss
- » integrated filter in the suction line
- » low battery indicator
- » calibratable

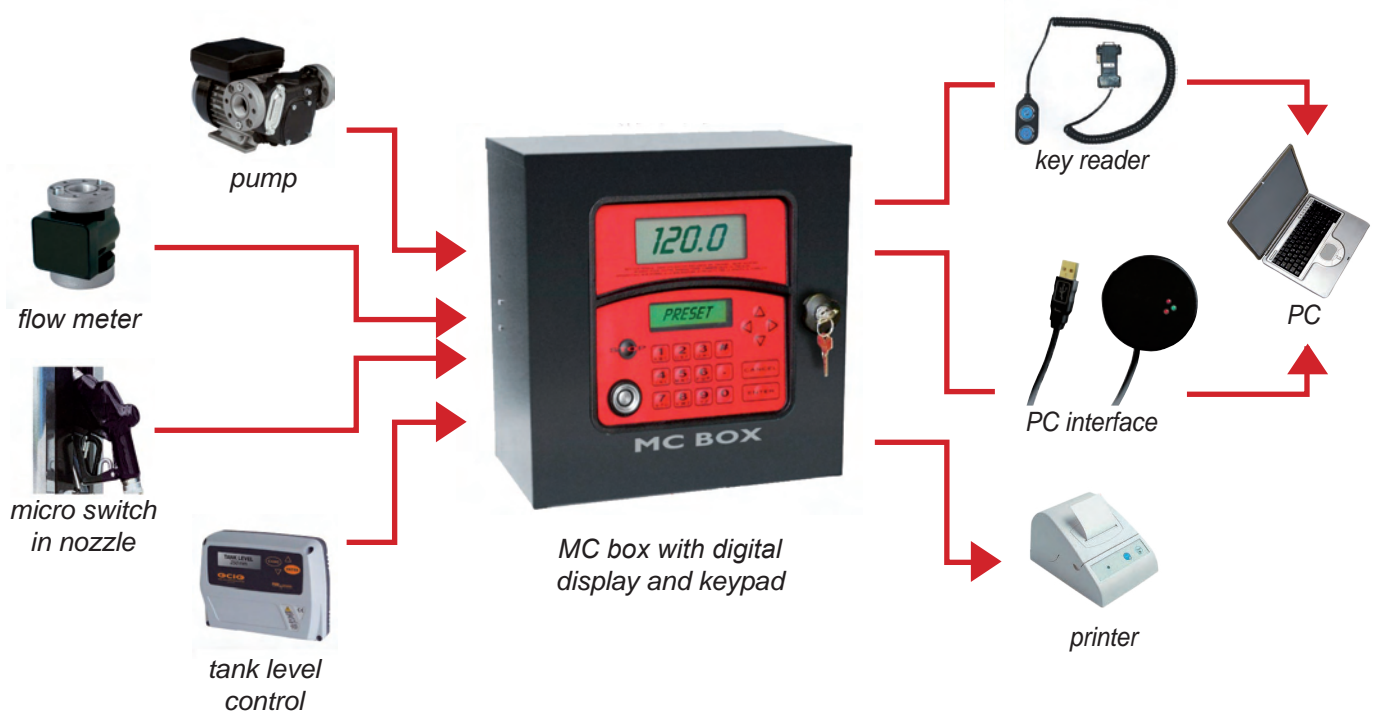


## Electronic Flow Meters with Integrated Display

type	code	flow rate L/min	pressure bar	connections	weight kg	dimensions mm
K24	131815	5 - 120	20	1" MPT x 1" FPT	0,4	225x100x100
K200	131822	0,1 - 2,5	550	1/8" female	0,6	310x170x55
K400	131801Z	1 - 30	70	1/2" female	0,5	80x80x75
K600/3	131805	10 - 100	30	1" female	1,6	200x120x140
K600/4	131809	15 - 150	20	1 1/2" female	3,2	200x120x140
K900 (not shown)	499020	50 - 500	20	3" female	12	400x290x200
TURBINOX	131811	4 - 40	30	1" female	1,5	--

# Accessories

## MC box and tank level control



### MC Box – Control System for Multiple Fuel Units

Logging and administration of tank data via PC and printer

- » digital display for dispense volume and operating instructions
- » administration of up to 80 users
- » access control via PIN-code or magnetic key
- » preadjustable charge
- » local memory for up to 250 performed dispensing operations (dispense volume, date, time, user and optional kilometres, vehicle registration number)
- » connection to tank level control
- » administration of the micro switch connected to the nozzle holder
- » data transfer to PC via key reader oder specific transfer cable (RS Converter, for a distance of up to 1000 m) via USB interface

(code P572000)

### Tank level control

Permanent high precision display of tank content. The unit consists of a control device with system integrated software and a 10 metre hose.

Optional PC connection, easy to configure.

#### Adjustments:

- » filling level alarm (min/max)
- » level indication (height, volume in various measures, per cent)
- » calibration

(code 131808)

#### Extended remote control

Filling level control can be expanded with a remote control system sending out alarm signals or the current filling level via SMS or e-mail. Up to eight tanks can be controlled.



## Hoses for Diesel Fuel and Oil

All hoses come with swivel connector.

### Filling hose: reinforced, oil resistant rubber up to max. 10 bar pressure

- ½" hose, NW 13, sold per metre (code 30077)
- ¾" hose, NW 19, sold per metre (code 30074)
- 1" hose, NW 25, sold per metre (code 30075)
- 1½" hose, NW 38, sold per metre (code 30086)
- ¾" filling hose kit, Ø 19 mm, 4 metres with crimped fittings 1" male thread (code 131012) \*
- 1" filling hose kit, Ø 25 mm, 4 metres with crimped fittings 1" male thread (code 131064) \*

### Spiral reinforced suction hose, oil resistant plastics

- 1" hose, NW 25, sold per metre (code 30095)
- 1" suction hose kit, Ø 25 mm, 1.5 metres with check valve and suction filter (code 131014) \*

\* available equally in any required length



filling hose kit



suction hose kit

## Accessory Kits for Diesel Fuel Pumps

All kits come with suction hose, filter, check valve, nozzle and filling hose.

- kit with automatic nozzle 60 and filling hose ¾" (code 131090)
- kit with manual nozzle 120 and filling hose ¾" (code 131091)
- kit with automatic nozzle 80 and filling hose 1" (code 131105)



### Tank-Adaptor

two parts for easy connection of pump and tank  
pressure side: 1" male thread  
tank side: 2" male thread  
(code 131080N)



### Line Filter

for fuel and oil pumps  
connection: 1" female thread  
(code 12060501)



### Swivel Connector

for oil and fuel dispensing nozzles

- 1" x ¾" male thread (code 131103)
- 1" x 1" male thread (code 131099)



### Cartridge Filter for Oil

10µ, max. 100 L/min, 1" female thread  
(code 12060502)

### Cartridge for Oil (not shown)

10µ, max. 100 L/min, 1" female thread  
(code P9359)



### Check Valve

with suction filter and hose tail

- ½" female thread (code 131025)
- ¾" female thread (code 131026)
- 1" female thread (code 131027)



### Water Separating Filter

30µ, max. 65 L/min, 1" female thread  
(code P11698)

### Cartridge (not shown)

(code P11567)



## **ZUWA-Zumpe GmbH**

**Franz-Fuchs-Straße 13 - 17 • D-83410 Laufen  
Fon: +49 8682 8934-0 • Fax: +49 8682 8934-34  
E-mail: [info@zuwa.de](mailto:info@zuwa.de) • Internet: [www.zuwa.de](http://www.zuwa.de)**

© 12/2008 ZUWA