FLEETFUELLER® SP

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COMPANY PROFILE

DCD were formed in 2009 to provide quality fuelling products, since it's formation it has developed over 20 different types of pumps & dispensers to different business sectors, as well as various fuel management systems, intergrated & stand alone.

In 2016 DCD became the UK & Ireland distributor for DEM. G. SPYRIDES, a worldwide company that manufactures Forecourt ready MID fuel pumps & dispensers which has increased our product range significantly.

In 2018 DCD & DEM. G. SPYRIDES jointly designed & manufatured the new commercial fuel pump the FLEETFUELLER ATEX SP & the ADFUELLER ATEX SP.

FLEETFUELLER®

M.I.D & ATEX PRODUCT RANGE

Fleetfueller Atex SP 45/80/120

Fleetfueller M.I.D 45/80/120

Atex & MID AdBlue Dispenser

M.I.D & ATEX PRODUCT RANGE

M.I.D & Atex Twin Pump

M.I.D & Atex Multi product
Dispenser upto 16 nozzles

VAPOUR RECOVERY STAGE II AVAILABLE ON ALL M.I.D PRODUCTS

FLEETFUELLER®

HEALTH AND SAFETY REGULATIONS

ATEX APPROVED

THIS MANUAL DESCIBES THE INSTALLATION, OPERATION, & MAINTENANCE OF THE FLEETFUELLER SP SERIES FUEL DISPENSERS. FLEETFUELLER SP SERIES FUEL DISPENSERS, COMPLY WITH THE EUROPEAN DIRECTIVES 2014/34/EU (ATEX) & 2014/32/EU (M.I.D) ALONGSIDE OTHER APPLICABLE DIRECTIVES.

The instuctions in this manual must be strictly adhered to for the safe functioning of the equipment. The instructions contain all restrictions and information necessary for correct putting into service and safe operation with the explosion protection in mind. Areas which provide Ex information throughout this manual have been marked with the distinctive community Ex mark

- Markings such as PETROL, HIGHLY FLAMMABLE,NO SMOKING and SWITCH OFF ENGINE should be positioned so that the warnings and instructions are brought to the attention of users immeadiately on their arrival at the dispensing equipment.
- Never run a leaking pump or dispenser.
- Please watch any leakage from pumps. If there is a leakage, Isolate the mains to the pump & call your maintenance company. Always follow the regulations for regarding handling of petrol & Oil, which is published by each oil company.
- Make sure that an adequate functioning fire-extinguisher is at hand and not blocked off.
- Disconnect the incoming mains supply prior to any work on the dispenser or removal of covers
- Physically lock off the supply at the MCB before carrying out any work.
- Be sure to close the emergency Shear valve BEFORE beginning maintenance
- Make sure you know where to turn off the dispenser and submersible pumps in an emergency. Have all leaks or defects repaired immediately.
- Always use the approved method for lifting the dispenser. Never lift by the nozzle boot, sheet metal, etc., otherwise equipment damage or personal injury may occur.
- Regarding Hose protection they should not be left exposed to strong sunlight as it has a strong catalytic effect, not to be left for vehicles to pass over, not to be run over sharp surfaces or Armco, & not to be over tensioned.
- Do not dry run the pump as this may cause damage to the pump, always make sure there is enough fuel in the storage tank.
- Adequate PPE should be used when installing & maintaining the equipment.
- Only spark free tools are permitted in the hazardous area, no electrical tools
- Only use Ex work lights in the hazardous area.
- The use of telecommunications equipment in the hazardous area is strictly prohibited.
- Never lay the pump or dispenser on its back as this may damage the pumping unit.
- When installing on above ground tanks ALWAYS fit a PRV or ACV below the center of the pumping unit

Failure to comply with these regulations may void the warranty on the equipment

The fuel dispenser has been designed and certified to dispense liquid fuels in accordance with EN228 (Unleaded petrol) and EN590 (Diesel)

WARRANTY

ATEX APPROVED

DCD Ltd has its own obligation to repair or replace parts of the equipment that may prove defective during the valid warranty period except for cases such as extraneous factors, willful misconduct or violations in considering the following.

- All claims under the this warranty must be made immediatley upon occurrence of defects or failure and in due time otherwise are rendered void
- Any repair undertaken within the valid warranty period MUST be undertaken by DCD trained personnel or by an approved distributor.
- It is within DCD's discretion to replace defective parts and also the use of new or repaired parts.
- The warranty period is from 12months from original invoice or 1,000,000 litres on the totalizer.
- The equipment that is not covered by this warranty include the hanging hardware, filter & belt & is left to the discretion of DCD.
- Any Installation or maintenance carried out by incompetent personnel who install or maintain incorrectly will void the warranty.
- No warranty is made with respect to any damage of the equipment occurred in transit or owing to vehicle collision whilst in final position, power surges, negligence, natural disaster, or misuse.
- No warranty is made with respect to any modification of the equipment or the use of non-Fleetfueller

PARTS

- In the case of false damage of the equipment & non-warranty issues , the cost of the Engineers visit will be made by the customer.
- DCD's only obligation is to replace /repair defective parts within the warranty period.

Any Modification to this equipment may invalidate the equipment certification.

FLEETFUELLER®

FLEETFUELLER SP MARKING

Fuel Dispenser Type M5300

Model / Year

Serial No:

Homologation No 02-252-/2012

Measurement Unit : Litre

Ph / V / Hz

Max Power KW : Max Current A

Ambient Temp : -25 to + 55 C

Liquid Temp :- 10 to 40 C

Accuracy Class : - 0.5

Mechanical Class :- M1

Electromagnetic Environment :- E1

Viscosity class 1=0. 4-1.0 mPas,2=1.1-10 mPas,3=10.1-20mPas

Viscosity Class	Q max L/min	Q min L/min	P max Bar	P min Bar	V min L

II 2 G

Ambient Temp :

Minus 20 To Plus 40C

EN 13617-1

1

2

CE 0359

M
16

126

Atex Certificate No:
Epsilon 06ATEX2003 Issue 4

MID Certificate No:
UK/0126/0116

Nature of Liquid:
Refined Petroleum Products
Max Viscosity 20mPas at 20C

ATEX DIRECTIVE 2014/34/EU

ATEX Directive 2014/34/EU	
	Specific marking of explosion protection
II	Equipment Group
2	Category
G	Type of explosive atmosphere (GAS)
Ambient Temp: -20C to +40C	Climatic operating environment
EPSILON 06ATEX2003 Issue 4	Atex certificate number issued by notified body
EN 13617-1	Applicable European Standard, Harmonized with the Atex Directive
CE 0359	CE marking and number of Notified Body Responsible for quality system
MID Directive 2014/32/EU	
Ambient Temp: -25C to +55C	Climatic operating environment
Liquid Temp: -10C to + 40C	Climatic operating environment of fuel
Accuracy Class: 0.5	Accuracy Classification 0.5: Maximum Permissible error (MPE) Dispenser +/- 0.5% Meter +/- 0.3%

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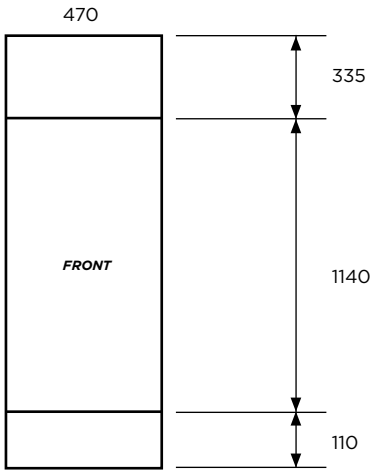
GENERAL SPECIFICATIONS

General Specifications		
Fuel dispenser Dimensions	Twin	L:640mm, W:510mm, H:1450mm
	Single	L:470mm, W:490mm, H:1475mm
Material of Construction	Chassis	Galv Steel according to EN10142
	Panels	Galv Steel (EN10142) & powder coated
Flowrate	Standard Capacity	Qmax :45 & 70 Litres/minute
	High Capacity	Qmax :80 & 120 Litres/minute
Flowrate range		Minimum ratio of Qmax :Qmin= 10:1
Ambient temperature range	ATEX Directive 2014/34/EU	Minus 20 to plus 40
	MID 2014/32/EU	Minus 25 to plus 55
Maximum Pressure		3.5 Bar
Accuracy Class		0.5
MPE of fuel dispenser as a measuring system (Accuracy)		+/- 0.5%
Mechanical environment class		M1
Electromagnetic environment class		E1
ATEX certificate number		EPSILON 06ATEX2003 Issue 4 EPSILON INTERTEK
MID Certificate number		UK/0126/0116 (NMO)

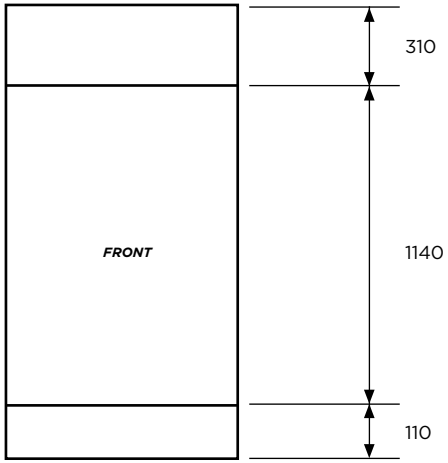
ATEX APPROVED

PUMP DIMENSIONS

SINGLE PUMP (470 X 1585 X 490)
DEPTH 490



DOUBLE PUMP (640 X 1560 X 510)
DEPTH 510



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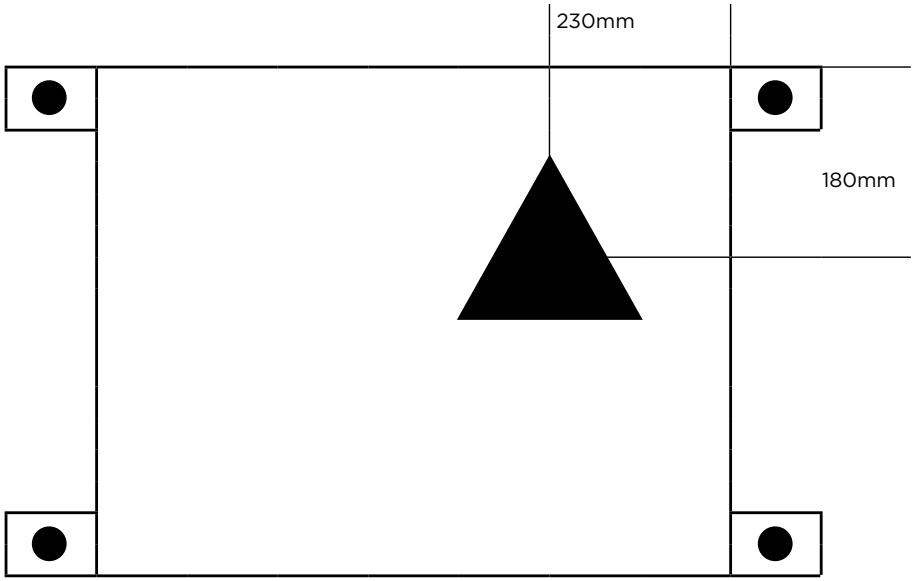
INCOMING PIPEWORK



Height from floor to Tri Flex is 280mm Without plinth height to Tri Flex is 170mm

**The maximum length of suction line for an underground tank is 10' static lift & 60' horizontal piping at 1 1/2" pipe

SAFETY PRECAUTIONS

- Know how to turn off power to the dispenser and submersible pumps in an emergency.
- Inspect regularly, all external fuel carrying components such as hoses, nozzles, breakaways, etc.., for damage or leaks.
- Inspect regularly , the dispensers housing parts for damage or leaks.
- Have all leaks or defects repaired immediately.
- Test the Emergency (Shut off Valve), by opening and closing several times, at least once per year.
- Use of automatic safety nozzles prevents overfilling tanks & avoids spilling fuel.
- Avoid tipping the nozzle downward spilling excess fuel.
- Sufficient lighting must be provided to allow safe use of dispensers.
- A clearly visible and identifiable Station Emergency Stop MUST be local to the dispenser to isolate the dispenser in the event of an emergency.
- Stow hoses correctly to prevent accidents.
- Care should be taken to prevent fuel spillage. If spillage occurs , clean up immeadiatley or report to site official.
- Do not run the pump with the covers removed.
- Know the hazardous zone area around the Pump
- Fuel & vapours can damage your health.

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MAINTENANCE

STRAINER & FILTER

If slow delivery is accompanied by an inrease in noise from the pump, this usually indicates one or more of the filters are blocked causing the pump to be starved of fuel.

1. Replace any canister filter , and check any filter in the suction line including the PRV filter before moving on to the pump filter.
2. Place a container below the suction strainer cap to catch escaping liquid and any trapped sediment.
3. Remove the four screws, securing the strainer cap (13mm spanner) & withdraw the cap C/W filter element
4. Exercising care, clean away any sediment that may have collected inside the strainer.
5. Thoroughly wash the strainer element in gasoline and use clean low pressure air , to remove dust.
6. Check the gasket and, if it is serviceable , re-install it together with the strainer cap and filter element.
7. Test the dispenser for satisfactory operation , checking for leaks around the strainer cap.
8. If the process of cleaning the strainer element and canister filter do not improve the flow rate, inspect the installation for obstructions.

ADJUSTMENTS TO THE PUMPING UNIT T75

There are 3 adjustments which may be performed on the suction pumping unit, they are the bypass pressure, The pulley wheel size & the V belt tension.

ADJUSTING THE BYPASS PRESSURE

To adjust the bypass pressure use the following procedure:

1. Install a pressure gauge in the pumping unit at the priming port.
2. Remove the protective cap from the bypass
3. Turn the pump on so the motor is running & the nozzle is closed.
4. Turn the bypass adjustment screw, clockwise to increase the pressure & counter-clockwise to lower the pressure.
5. Once the correct pressure is reached, remove the gauge & replace the bypass adjustment cover.

ADJUSTING THE BELT

In order to adjust the belt perform the following proceedure:

1. Loosen the Nut which is located on the motor mounting plate.
2. Tighten or loosen the 8mm bolt using an 13mm socket or spanner to obtain the correct tension of the belt
3. The correct tension will allow movement of around 15mm in the centre of the belt.
4. Re-tighten the motor mounting plate nut

CALIBRATION

PLEASE NOTE THAT ONLY TRAINED ENGINEERS SHOULD PERFORM CALIBRATION CALIBRATION REQUIRES THE FLEETFUELLER CALIBRATOR BOX WHICH PLUGS ON TO J6 ON THE PCB, THIS IS ISSUED TO TRAINED ENGINEERS

1. Plug the Fleetfueller calibrator box on to J6 on the PCB
2. Press and hold the Calibration button for 5 seconds and release, this will display the current Calibration Factor
3. Press and hold the calibration button for 20 seconds,when the display shows ‘Cal’, release the button.
4. Press the Calibration button once more & the display will now read ‘StArt’
5. Lift the nozzle & dispense 20 litres into the flask until it reaches the zero value line.
6. Replace Nozzle after fuelling & press the Calibration button one final time.

The display will either read ‘good’ or ‘Error’

7. Hold the calibration button down for 5 seconds & release & the new Calibration Factor will be displayed

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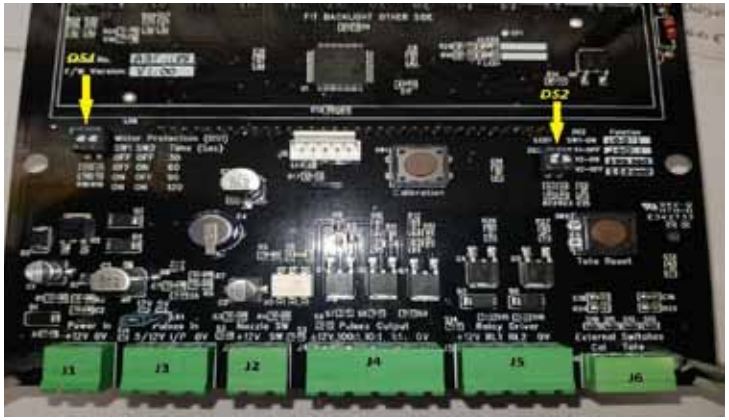
ELECTRONICS



NEW FEATURES OF THE FLEETFUELLER ELECTRONICS

- On start up the display will give the current version of software.
- The display will alternate between the last fuelling & the current totalizer reading when idle.
- The nozzle switch is 12v max which operates on current sensing.
- When the nozzle is lifted all of the 8’s will show all segments working before releasing the pump.
- When the pump is in use the blue backlight will remain on & the red LED on the SSR will be on.
- The motor protection is pre-set on the board to 30 seconds from not seeing a pulse, & can be altered by using DS1 to change between 30s, 60s, 90s, 120s
- The encoders supply voltage can be changed from 5v to 12V by adjusting LK1
- The incoming pulses can be set to either 100:1 or 200:1 by using SW1 on DS2
- The flashing red LED at the top of the PCB is to inform that the system is healthy & the supply is good.
- The incoming supply on J1 is 12vdc & rated at 2.5A, this incoming supply is diode protected so no damage will occur if the supply is incorrectly wired. (J1)
- Pulses out for fuel management systems are 100:1 and 10:1 with a 1:1 for a remote totalizer (J4)
- There are two relay drivers from J5 on the board, RL1 is for the pump SSR coil, & RL2 is for a Service totalizer output which is activated after a set amount of litres, this is pre-set using SW2 on DS2 selecting either 250,000 litres or 500,000 litres, this can either switch on a service lamp on the front of the pump or link to a GSM for automated messaging.
- There are 3 totalizers in the PCB’s memory, 1. a Running totalizer up to 1 million litres for batch counting, 2. Service totalizer pre-set to either 250,000 or 500,000 litres, 3. A lifetime totalizer which can’t be reset
- When the power is lost the LCD will display ‘power fail’
- All the connections are plug & play for ease of use & maintenance.

INCOMING CABLES

THE MAXIMUM POWER CONSUMPTION IS 4A FOR A SINGLE MOTOR UNIT & 10A FOR A TWIN MOTOR UNIT. WE RECOMMEND THAT THE SUPPLY IS BACKED UP BY AN RCD AND THE CORRECT MOTOR RATED MCB IS USED.

Do Not use Domestic breakers as they cannot cope with the start current of the motor
We strongly recommend that you have local isolation near to the pump in case of emergency, & all wiring is carried out to current regulations by a competent Electrician.

JUNCTION BOX CONNECTIONS	INCOMING CABLE
Live	Incoming supply (Live)
Neutral	Incoming supply (Neutral)
LV	Motor control (ov)
LV	Motor control (ov switch)
ov	Pulser common
10	10:1 pulse output
100	100:1 pulse output (standard)
1	1:1 pulse output (remote tote)

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TROUBLESHOOTING

THE MOTOR STARTS BUT THE PUMP DOES NOT DELIVER FUEL

1. The fuel supply is below the suction line
2. The vent pipe is plugged on the storage tank
3. The strainer / filter is blocked
4. The bypass valve is not seated properly
5. The V -belt is loose or broken
6. There is an obstruction in the atmospheric float valve
7. The pump is out of prime
8. The suction line is leaking
9. The intake line, foot valve, ACV, or PRV has an obstruction
10. The suction line is on the bottom of the tank
11. The control valve has an obstruction
12. The nozzle is faulty
13. Two pumps are connected to one suction line

THE PUMP RUNS BUT DELIVERY IS SLOW

1. The fuel supply level is critical
2. The vent pipe is partially obstructed
3. The bypass valve is not seated properly
4. The V belt is loose
5. The voltage is too low
6. A rotor blade is damaged
7. The motor is defective
8. Slow leak in the suction line
9. The intake line, foot valve, ACV or PRV has a partial obstruction
10. The Control valve is patially obstructed
11. The hose has been flattened

THE MOTOR WILL NOT RUN

1. Check the incoming supply, RCD, MCB, Powersupply Fuse, Isolators
2. The Motor is defective

THE DELIVERY IS INACCURATE

1. The control valve is not seating right
2. There is an obstruction in the air eliminator tube
3. The pump needs calibrating

THERE IS FUEL COMING OUT THE AIR SEPERATOR TUBE

1. The float is stuck in a closed position.
2. The fuel is checked below the center of the pumping unit (ACV on top of aboveground tank)
3. Plastic insert has become dislodged (this happens to pumps lay down horizontaly)

DISPLAY JUMPS WHEN PUMP IS TURNED ON_

1. Control valve is not seated properly
2. Faulty expansion relief valve
3. Internal gaskets are leaking
4. Nozzle is worn

AUTOMATED MESSAGING

FleetFueller Modem

THE FLEETFUELLER MODEM CAN BE INSTALLED TO ANY OF THE FLEETFUELLER PUMPS & COLLECTS INFORMATION & MESSAGING FROM UP TO 4 PUMPS.

It's main functions are to automate the servicing based on throughput & to give totalizer reports on a daily or weekly basis. If you had 4 pumps on an island, simply install 1 modem which plugs onto the pump display board. this modem will send a spreadsheet automatically to an email address of your choosing, showing the current & previous totalizer reading with the throughput within that period, this can be to used reconcile fuel figures against Fuel management systems & Tank gauging.

It will also send an email when the pump has reached its service totalizer making the maintenance completely automated.

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SPARES & CONSUMABLES

ZVA 2 FOR PETROL AND DIESEL 55LPM
ZVA-SL2

1" HOSE SAFETY BREAK
BOC-1

ZVA 25 FOR PETROL AND DIESEL 120LPM
ZVA-25

STEELFLEX FUEL HOSE
HSE1-(LENGTH IN METERS)

ZVA SLIMLINE SAFETY BREAK
SSB16

HOSE REEL
DCD-550

WATER & PARTICLE CANISTER FILTER
FTPW70-10-GPI

FLEETFUELLER PUMP FILTER
VPFLT-M

MOTOR PULLEY BELT
SPA-(LENGTH)

ADBLUE PEDESTAL COMPLETE WITH LCD

DEF HYBRID NOZZLE ADNOZ-60H

IBC KIT

TEC1 SINGLE PUMP FUEL MANAGEMENT
FF - TEC1

NEW BUNDED STORAGE TANKS UPTO 100,000 LTRS

ECLIPSE FUEL MANAGEMENT TERMINAL
ECL

OIL SPILL KIT 240
0174/7

FLEETFUELLER®

SPARES & CONSUMABLES

NOTES

FLEETFUELLER®

NOTES

REGISTER YOUR PRODUCT

REGISTER YOUR PRODUCT TO TAKE FULL ADVANTAGE OF THE FLEETFUELLER ® PRODUCT RANGE & TRADE DISCOUNT ON CONSUMABLES.

Simply email sales@dcddirect to register your product or arrange a service visit.

Please enter your company details and the pump information which can be found on the side of the pump.

Company Name.....

Contact Name .....

Contact Email Address .....

Contact Phone Number.....

Product Name .....

Serial Number.....

Pump Speed.....

Also indicate if you require details of service contract details & pricing when the 12 month warranty period expires.

DCD DIRECT

DCD DIRECT
Units 9 & 10
Strawberry Lane Ind. Est.
Willenhall
WV13 3RS UK

tel +44 (0) 1902 605405
fax +44 (0) 1902 634669
email sales@dcddirect.co.uk
www.dcddirect.co.uk