Midco

EST. 1949

SLEEK

SECURE

ACCURATE

CUSTOMISABLE

Pantone

Fuel Dispensing Units

SUREFILL

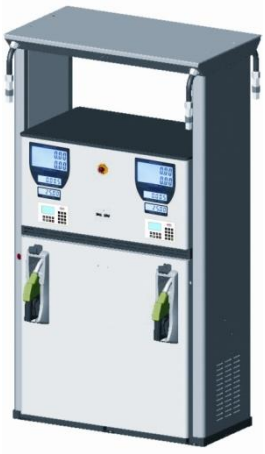
2.1 GENERAL LAYOUT :

11XX Short

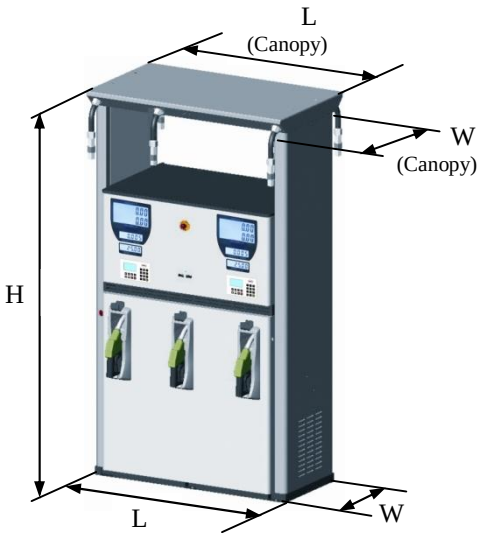
11XX Tall

12XX & 22XX Short

12XX & 22XX Tall



24XX Tall



36XX Tall

48XX Tall

The above drawings are for dimensional reference only and do not refer to the model supplied.

2.2 DIMENSIONS :

Dispenser Model	Dispenser Type	Structure Type	Nozzle Position	Overall Dimension (in mm)				
				L	W	H	L Canopy	W Canopy
11XX	Suction/Submersible	Short	Island	600	468	1665	758	504
	Suction/Submersible	Tall	Island	600	468	2100/2180	758	504
	Suction/Submersible	Tall Wide	Island	842	468	2100/2180	1000	504
12XX	Suction/Submersible	Short	Island	842	468	1665	1000	504
	Suction/Submersible	Tall	Island	842	468	2100/2180	1000	504
22XX	Suction/Submersible	Short	Island	842	468	1665	1000	504
	Suction/Submersible	Short	Lane	842	468	1665	868	634
	Suction/Submersible	Tall	Island	842	468	2100/2180	1000	504
	Suction/Submersible	Tall	Lane	842	468	2100/2180	868	634
24XX	Suction/Submersible	Tall	Lane	970	650	2100/2180	996	688
	Suction/Submersible		Lane	1200	650	2100/2180	1226	688
36XX	Submersible	Tall	Lane	1200	650	2100/2180	1226	688
	Suction/Submersible		Lane	1320	650	2100/2180	1346	688
48XX	Submersible	Tall	Lane	1200	650	2100/2180	1226	688
	Suction/Submersible		Lane	1320	650	2100/2180	1346	688

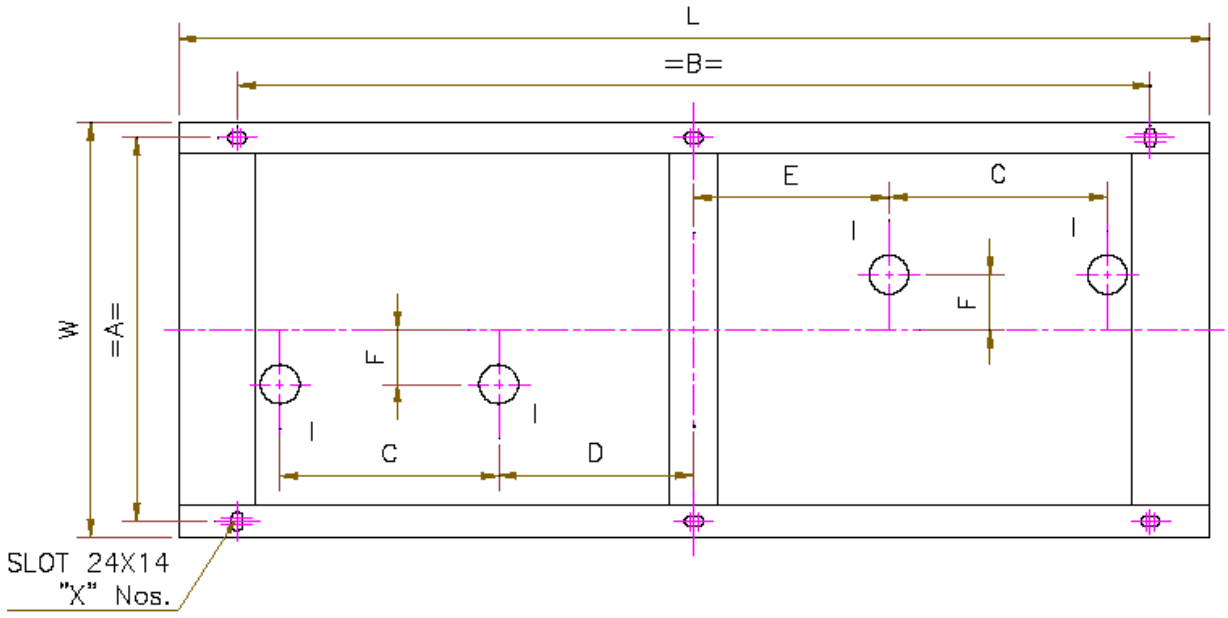
2.3 GENERAL SPECIFICATIONS OF SUREFILL SERIES DISPENSING UNIT:

SPECIFICATION	DESCRIPTION
Configurations :	1 Product, 1 Nozzle, 1 Fueling Position up to 4 Products, 8 Nozzles, 4 Fueling Positions (Simultaneous).
Suction*:	Pumping Unit - Internal rotary gear, self-priming, positive displacement type with inbuilt bypass valve, suction and discharge strainers and inbuilt air separator.
	Motor - 110V or 230V (single phase) / 415V (three phase), 50/60 Hz, flameproof, continuous duty with inbuilt thermal protection.
	Flow Rate - Standard duty – 30-40 LPM Heavy duty - 70-80 LPM
	** Suction depends on fuel product quality and suction conditions*
Measurement :	Meter - Positive displacement 2 piston meter with provision of electronic calibration, measuring accuracy of +/- 0.25% and maximum working pressure of 3.5 Kg/cm².
	Pulser - 10 ml incremental count within flame proof enclosure.
Totaliser :	Electro Mechanical - 7 digits.
	Electronic - Amount - 16 digits. Volume - 14 digits.
User Interface :	Display - Amount - 8 digits, 1.5" height. Volume - 8 digits, 1.5" height. Rate - 6 digits, 1" height. 160°+ viewing angle.
	Key pad - 20 Keys with 4 programmable preset keys.
	Key pad display – Graphical, 20 character X 8 line display.
Communication Port :	RS 485 Serial Interface for Automation/Point of Sale.

Operating Environment :	Ambient temperature: - 40°C to + 55°C.
	Relative humidity: 5% to 95%.
	Security - Encrypted communications, multi tier password levels (user defined) for accessing system parameters.
	Self diagnostics - Error codes for fault conditions are displayed for quick diagnostics. Handy tool tips for resolving errors are annunciated on the keypad display.
Hanging Hardware :	Nozzle - Automatic, pressure/non pressure sensitive. Standard Duty - 19 mm (0.75") inlet connection. Heavy Duty - 25 mm (1") inlet connection.
	Hose - Steel braided hard wall hose. Standard Duty – 19 mm bore x 4 metres long (0.75" bore x 157" long). Heavy Duty - 25 mm bore x 4 metres long (1" bore x 157" long).
Approvals :	CE ATEX, MID, OIML. Local safety and metrological approvals will be available on application.
Optional Accessories :	Printer RS 232 port for built in printer connectivity. 4th Display for product density - 4 digits, 1" height. Large combined display for amount and volume. Stainless steel panels. Sight flow indicator. Hose protection sleeve. Breakaway coupling. Product specific coloured hose and nozzle scuff guard. Hose mast for short version of mono and dual models.

Above given specifications are subject to change without prior notice.

SUREFILL-48XX



5.2 DIMENSIONS FOR FOUNDATION PLAN:

Dispenser Model	Dispenser Type	Base Dimension for Foundation Plan								
		A	B	C	D	E	F	L	W	X
11XX	Suction	370	460	NA	NA	145	20	600	410	4
	Submersible	370	460	NA	NA	145	21	600	410	4
12XX	Suction	370	710	NA	NA	24	20	842	410	4
	Submersible	370	710	NA	NA	0	70	842	410	4
22XX	Suction	370	710	NA	266	266	20	842	410	4
	Submersible	370	710	NA	120	120	35	842	410	4
24XX	Suction	490	820	NA	335	335	65	970	530	4
	Submersible	490	820	NA	190	190	70	970	530	4
24XX	Suction	490	1050	NA	450	450	65	1200	530	6
	Submersible	490	1050	NA	305	305	70	1200	530	6
36XX	Suction	490	1050	280	170	450	70	1200	530	6
	Submersible	490	1050	280	190	470	70	1200	530	6
36XX	Suction	490	1170	305	230	510	70	1320	530	6
	Submersible	490	1170	280	250	530	70	1320	530	6
48XX	Suction	490	1170	305	230	230	70	1320	530	6
	Submersible	490	1170	280	250	250	70	1320	530	6

All dimensions are in mm. Above given dimensions are subject to change without prior notice.

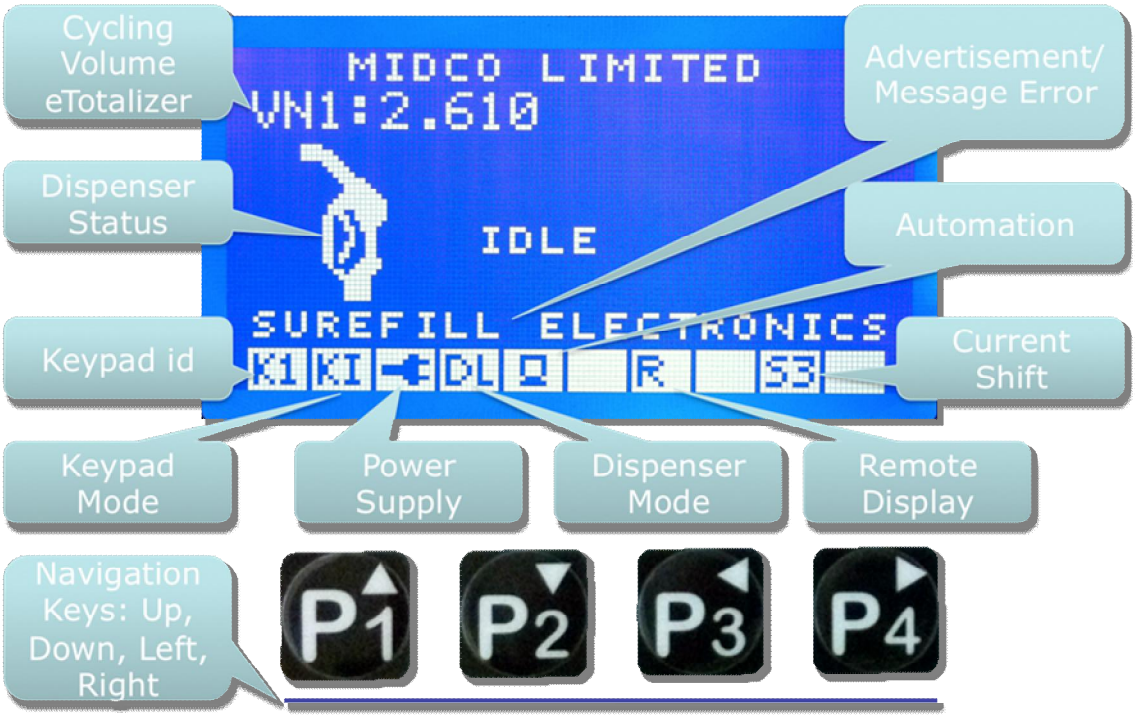
1.2 SCREENS OF MAIN DISPLAY:

CONFIGURATION MODE OF DISPENSER

CALIBRATION MODE OF DISPENSER

DELIVERY MODE OF DISPENSER

1.3 USER INTERFACE CONSOLE (UIC) DISPLAY:



USER INTERFACE DISPLAY CONVENTIONS		
Cycling Volume eTotalizer	:	VN1 to VNn (n stands for total number of nozzles)
Dispenser Status	:	Idle, Calling, Authorized, Fuelling, Suspend and Sale complete
Keypad ID	:	K1- Keypad 1 K2- Keypad 2 K3 -Keypad 3 K4- Keypad 4
Keypad Mode	:	KB -Keypad blocked KI - Keypad idle
Navigation Keys	:	Page up (^) Page down (v) Page left (<) Page right (>)
Power Supply	:	AC mains /battery
Dispenser Mode	:	Delivery (DL) Configuration (CF) Calibration (CL) Calibration + Configuration (CC)
Remote Display	:	Provision present/absent
Current Shift	:	S1 – Shift 1 S2 – Shift 2 S3 – Shift 3 S4 – Shift 4
Password Mode	:	**- Masked Character 12 – Numeric Value AB - Upper Case ab - Lower Case

1.5 USER INTERFACE CONSOLE (UIC):

The SureFill Series DU is equipped with a user interface console (UIC). The UIC consists of keypad and LCD display.

The keypad consists of 20 keys that include numeric, alpha numeric and functional keys and is utilized for accessing functions, setting parameters and providing inputs to the DU.

The LCD display is 20 characters X 8 lines in configuration and is used to display the state of the DU, various parameters, volume totaliser, errors, advertising banner etc. Please refer to sub-section 2.3 for an elaborate view of the user interface console (UIC).

11.1 OPERATION:

A prominent push switch is provided on each side of the DU for emergency stop. This switch is to be used in case of any emergency requiring to stop the complete operation of the DU. If any one emergency switch is pressed the DU will stop operations completely.

Once pressed, the emergency switch will have to be manually reset by turning the knob in the direction or by pulling the knob as indicated on the emergency switch. After resetting of the emergency switch the DU will re boot and park in idle state for normal operation.

Push to stop, turn to re set emergency switch

Push to stop, pull to re set emergency switch

11.2 CONDITIONS FOR USE OF EMERGENCY SWITCH:

1. Product over flow or leakage observed during normal operations
2. In the event of natural calamities
3. DU is dislodged by collision
4. Motor remains ON for more than 90 seconds after dispensing is over
5. Leakage or malfunctioning of nozzle is observed
6. Fuelling hose gets disconnected due to accident
7. Any other situation which is potentially hazardous

Check functioning of emergency switch once a week.

Before re setting of emergency switch ensure that normal conditions are restored and suitable for safe operation of DU.