



Tetra Term Aseptic Drink 10				
Sunjuice, UK				
Flowdiagram				
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FLOW DIAGRAM SYMBOLS

Rev	Description	Designer	Appr. By	Date
3	atmospheric pressure added	MBN	MBN	040428

PIPING SYMBOLS

- PROCESS MEDIA, RED
- CLEANING MEDIA, MAGENTA
- SERVICE MEDIA, CYAN
- ELECTRICAL CONTROL, GREEN
- AIR CONTROL, BLUE
- LIQUID CONTROL, ORANGE
- FLEXIBLE HOSE
- PIPE WITH HEATING OR COOLING JACKET
- PIPE WITH HEATING OR COOLING COIL
- CAP ON PIPE END
- UNION
- INSULATED PIPE
- LIMIT OF DELIVERY
- ORIFICE

DENOMINATION

- | | |
|--------|------------------------|
| A | AIR |
| IA | INSTRUMENT AIR |
| SA | SANITARY AIR |
| C | CONDENSATE |
| D | DRAIN |
| S | STEAM |
| W | WATER |
| CW | COOLING WATER |
| HW | HOT WATER |
| IW | ICE WATER |
| SW | SOFTENED WATER |
| TW | TOWER WATER |
| GW | GLYCOL WATER |
| G | GAS |
| --R | RETURN |
| --C | CIRCULATION |
| CIP PR | CLEANING PRESSURE LINE |
| CIP R | CLEANING RETURN LINE |

INSTRUMENTS

- COMMON INSTRUMENT LOCALLY MOUNTED
- COMMON INSTRUMENT PANEL MOUNTED OR SOFT-WARE FUNCTION
- DUMMY

FIRST LETTER

- Measured or initiation variable
- DENSITY
 - FLOWRATE (L/H), MASSFLOW (KG/H) OR VOLUME (L)
 - POSITION
 - LEVEL
 - PRESSURE/VACUUM
 - PRESSURE DIFFERENCE
 - QUALITY*
 - TEMPERATURE
 - WEIGHT
 - FREQUENCY/SPEED

SECOND LETTER

- Display of output function
- CONTROLLING
 - SENSING ELEMENT
 - INDICATING
 - RECORDING
 - SWITCHING
 - TRANSMITTING
 - CONVERTING

THIRD LETTER

- Qualifying letter
- HIGH
 - MEDIUM
 - LOW

*TYPE OF QUALITY

- BRIX
- pH
- CONDUCTIVITY
- TURBIDITY

HYGIENIC VALVES

- ASEPTIC VALVE GENERAL SYMBOL
- MANUAL PLUG COCK 2-WAY
- MANUAL PLUG COCK 3-WAY
- MANUAL SANITARY CONTROL VALVE
- FLOW CONTROL VALVE
- SANITARY MODULATING VALVE
- SANITARY NON-RETURN VALVE
- SANITARY MANUAL VALVE
- SANITARY AUTOMATIC VALVE
- SANITARY MANUAL BUTTERFLY VALVE
- SANITARY AUTOMATIC BUTTERFLY VALVE NORMALLY CLOSED, NC
- SANITARY AUTOMATIC BUTTERFLY VALVE NORMALLY OPEN, NO
- SANITARY MIXPROOF VALVE CLEANING OF SPINDLE AND CHAMBER
- SANITARY MIXPROOF VALVE
- SANITARY MIXPROOF VALVE TANK OUTLET
- ASEPTIC SAMPLING VALVE
- SANITARY SAMPLING VALVE
- AIR BLOW VALVE

NON-HYGIENIC VALVES

- NORMALLY OPEN VALVE WAY
- NORMALLY CLOSED VALVE WAY
- MANUAL SHUT-OFF VALVE
- MANUAL CHANGE-OVER VALVE
- MANUAL CONTROL VALVE
- AIR RELEASE VALVE
- VACUUM RELEASE VALVE
- PRESSURE RELEASE VALVE
- CONSTANT FLOW/PRESSURE VALVE
- NON-RETURN VALVE
- AUTOMATIC SHUT-OFF VALVE
- AUTOMATIC CHANGE-OVER VALVE
- AUTOMATIC MODULATING VALVE 2-WAY
- AUTOMATIC MODULATING VALVE 3-WAY
- SOLENOID VALVE

ACTUATOR FUNCTIONS

- HAND ACTUATOR
- MODULATING ACTUATOR
- ON/OFF ACTUATOR
- SOLENOID ACTUATOR
- ELECTRIC MOTOR
- SPRING
- FLOAT
- TOP UNIT
- FEEDBACK UNIT

PUMPS

- CENTRIFUGAL PUMP
- POSITIVE PUMP
- VACUUM PUMP
- LIQUID RING PUMP
- SCREW PUMP

COMPONENTS

- STEAM TRAP
- FILTER, STRAINER
- SIGHT GLASS
- AGITATOR
- CLEANING DEVICE
- EJECTOR/INJECTOR
- DRAIN/FUNNEL Atmospheric pressure
- EXPANSION VESSEL
- SILENCER
- PLATE HEAT EXCHANGER
- TUBULAR HEAT EXCHANGER
- STATIC MIXER

PSD Flow Diagram Symbols

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