



SUMMARY

The Bucket Fill Proportioner – Single / Double is a quality dilution unit that should give trouble free operation if installed and maintained correctly.

The Proportioner provides a safe, controlled and economic method for dilution of chemical into an open container, i.e. bucket, sprayer, sink. It is not suitable for feeding hoses longer than 1 metre, brushes, piped or valved systems.

This simple proportioner requires no electricity and is driven by the water flow; note: the maximum water temperature is 80°C. The unit is self-priming and gives an accurate and adjustable dilution if fed with a consistent water pressure.

The unit has no inbuilt control valves or air gap. The unit must be plumbed in according to the diagram shown.

Please study this information sheet to gain the most benefit from your equipment.



Note: Water Authority regulations state that no chemical dilution equipment may be connected directly to the mains supply. A break in the supply using a type "A" air gap is required.

Holchem guarantee the unit for 12 months from the date of delivery. The guarantee covers material defects, manufacturing defects or incorrect assembly. The guarantee does not cover wear and tear, misuse, use of incompatible chemicals, damage caused by frost or incorrect water supply.

SPECIFICATION

BUCKET FILL PROPORTIONER – SINGLE / DOUBLE

HOLCHEM CODE	SKS02512 SINGLE / SKS02513 DOUBLE
Flow Rate	Approx. 1.25 m ³ /h (20 l/min) variable @ 6 bar (80 psi)
Operating Pressure	Minimum 2 bar (30 psi) Maximum 11 bar (150 psi)
Maximum Water Temperature	80°C
Dilution Rate	0.2% to 10% v/v (Variable in steps dependant on orifice plate)
Dilution Rate - Adjustment	Standard St/St orifice plates (not supplied)
Connections	Inlet ½" BSP male Outlet ½" hosetail
Total Height	13.5 cm single/13.5 cm double
Width	16 cm single/28 cm double
Depth	9 cm single /9 cm double
Weight	2 Kg single/3.5 Kg double
Materials of Construction (water side)	St/St & PVC
Materials of Construction (chemical side)	PVC, EPDM seal ring & 316 St/St
Supplied with:	1 metre braided PVC ½" outlet hose. Chemical pickup tube. Orifice plate seal ring. Wall Fixings - various.
Not supplied with:	Chemical pickup lance & Orifice plate

PRINCIPLE OF OPERATION



Water enters the unit and passes through the inlet nozzle forming a fast moving stream of water. The collector catches this stream of water.

A partial vacuum is created by this flow of water and is used to suck chemical up into the injector.

Restricting the flow of the chemical into the injector controls the injection rate; this is done by using an orifice plate.

SAFETY

1. The equipment should not be used prior to proper installation and commissioning.
2. The equipment should only be used by personnel trained in its use and in the use of the chemicals being dispensed.
3. The equipment should only be adjusted when the unit has been flushed with water and the supply has been isolated from the equipment.
4. Operators must wear suitable personal protective equipment for the chemical being dispensed.
5. Chemicals must never be mixed either prior to or after dilution.
6. The unit must be made safe prior to any maintenance:
 - a. Flush chemical out of equipment by placing chemical pick-up tube in clean water and running the unit.
 - b. Isolate water supply from the equipment.
 - c. If unit has failed and the chemical cannot be flushed then suitable personal protective equipment must be worn for disassembly.

SERVICES REQUIRED

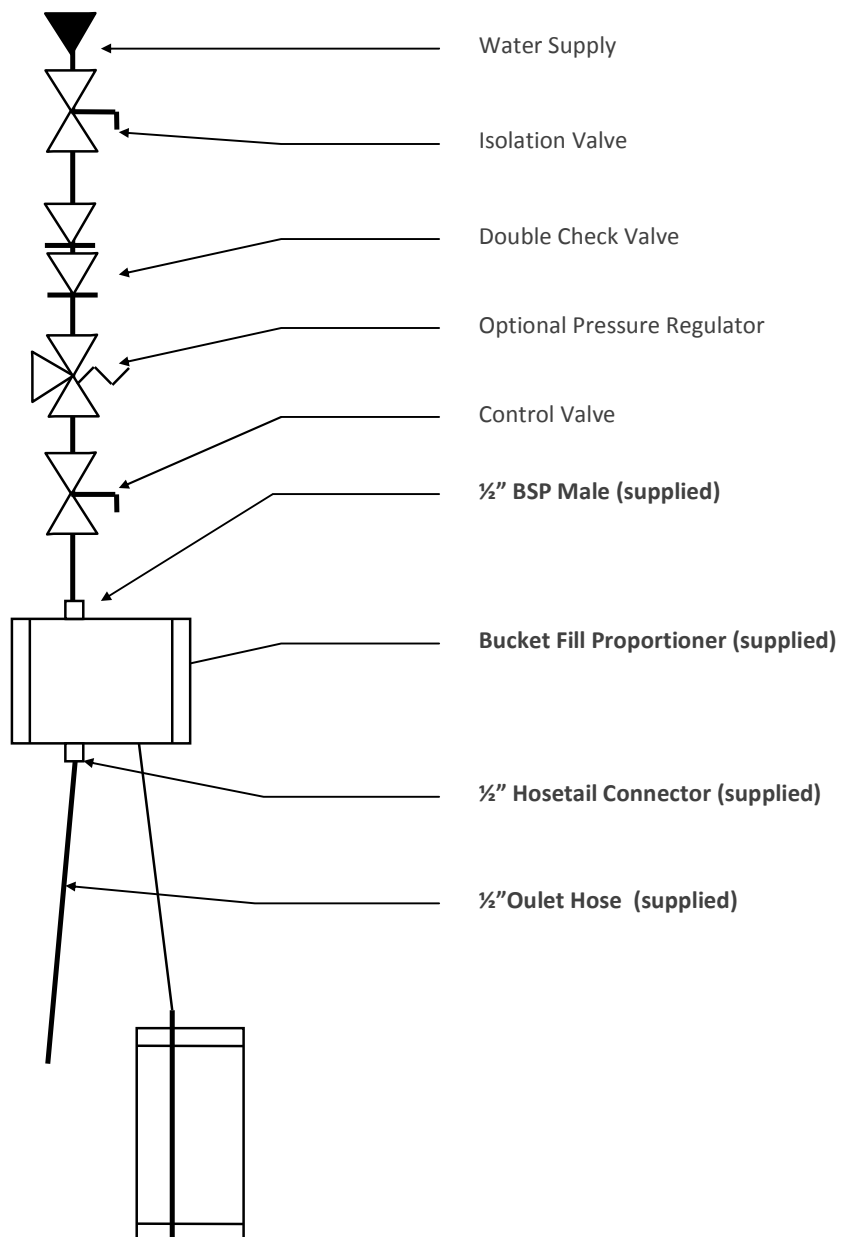
1. Isolated water supply with double check valve and control valve (pressure regulator is optional).
2. Water pressure, flow and temperature requirements given in equipment specification.





INSTALLATION.

1. Water Authority regulations state that no chemical dilution equipment may be connected directly to the mains supply. A break in the supply using a type "A" air gap is required.
2. A double check valve should be fitted on the inlet side of the unit to prevent possible siphoning / backflow of product through the unit.
3. All parts of injector must be above maximum liquid level of the neat chemical product.
4. The compatibility of the materials of construction of the dosing unit and the chemical must be checked.
5. If the line pressure is above the rated pressure then a protection device such as a pressure regulator must be fitted.





INSTALLATION \ COMMISSIONING

1. Remove St/St cover from Proportioner.
2. Connect the water supply to the male ½" bsp thread at the top of the unit.
3. Fix proportioner to wall using holes in bracket and suitable fixings.
4. Remove plastic chemical injection nut/hosetail.
5. Fit St/St orifice plate in rubber seal.
6. Insert orifice plate and rubber seal into nut/hosetail and screw together. Only hand tight.
7. Turn on the water and check for leaks.
8. Immerse the pick up tube in the chemical to be injected.
9. Open the valve fully and the unit will self-prime.
10. Refit St/St cover.
11. The flow rate of the unit can be increased by gradually opening out the cone shaped nozzle in the venturi with a drill.

ADJUSTING STRENGTH.

1. Place chemical pick up tube in clean water and turn on Proportioner until all chemical flushed from system.
2. Turn off water supply.
3. Remove St/St cover from Proportioner.
4. Remove plastic chemical injection nut/hosetail.
5. Change St/St orifice plate in rubber seal.
6. Insert orifice plate and rubber seal into nut/hosetail and screw together. Only hand tight.
7. Check strength and readjust if required (steps 1 to 6).
8. Refit St/St cover.

MAINTENANCE

1. No routine maintenance required.
2. Recommend chemical suction tube and orifice rubber seal be replaced annually or when showing signs of wear.





PRODUCT INFORMATION BUCKET FILL PROPORTIONER

SINGLE OR DOUBLE VENTURI PROPORTIONER

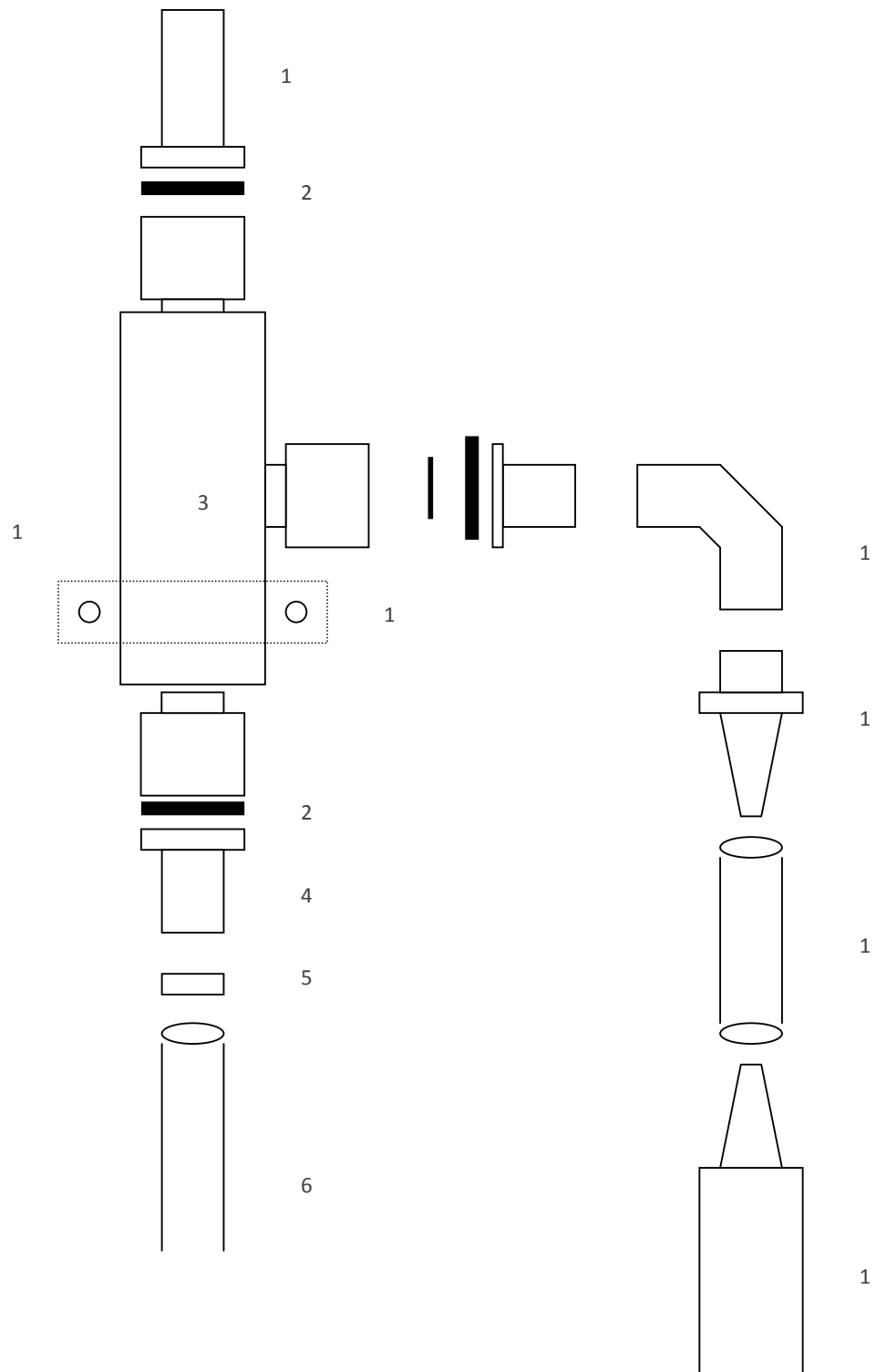
TROUBLE SHOOTING

FAULT	DIAGNOSIS	REMEDY
No flow of water when control valve opened	No water supply	Check water supply Check all valves or solenoids
	Blocked proportioner	Remove proportioner from supply & clear away blockage gently
Water flowing back into chemical	Outlet hose too long	Shorten to 1 metre maximum
	Outlet valved	Remove valve
	Outlet hose kinked	Replace with new
No suction of chemical <u>or</u> Low chemical strength	No flow of water	See above
	Low water pressure	Investigate supply
	No outlet hose	Refit outlet hose
	Blocked suction tube or chemical spear	Clean out and refit
	Air leak on chemical inlet	Check orifice plate & rubber seal in place Check tightness of nut/hosetail Check chemical suction tube for holes
	Outlet hose kinked	Replace with new





PARTS DRAWING (1 OF 1)





PARTS LIST

HOLCHEM SKS CODE	REF	SUPPLIER CODE	DESCRIPTION
02512/01	1	HBF001	Inlet Adaptor
02512/02	2	HBF002	Sealing Washer
02512/03	10	J75136	Elbow
02512/04	3	H8F004	P20 PVC Pump
02512/05	4	HBF005	Delivery Hose tail
02512/06	5	HBF006	O Clip
02512/07	6	HBF007	Outlet Hose
02512/08	7	HBF008	EPDM Seal
02512/09	8	HBF009	Sealing Washer
02512/10	9	HBF010	Adaptor
02512/11	11	HBF011	Non Return Valve Hose tail
02512/12	12	HBF012	Chemical Pick Up Hose
02512/13	13	HBF013	Filter
02512/14	14	HBF014	Single Front Cover (not illustrated)
02513/15	15	HBF015	Double Front Cover (not illustrated)
02512/16	16	HBF016	Single Base Plate (not illustrated)
02513/17	17	HBF017	Double Base Plate (not illustrated)
02512/18	18	HBF018	Stauff Clamp
02512/19	19	HBF019	Stauff Clamp Screws

Note. Parts with either no SKS number or description have not been purchased before but can be obtained by quoting the relevant part number on the drawings.

