

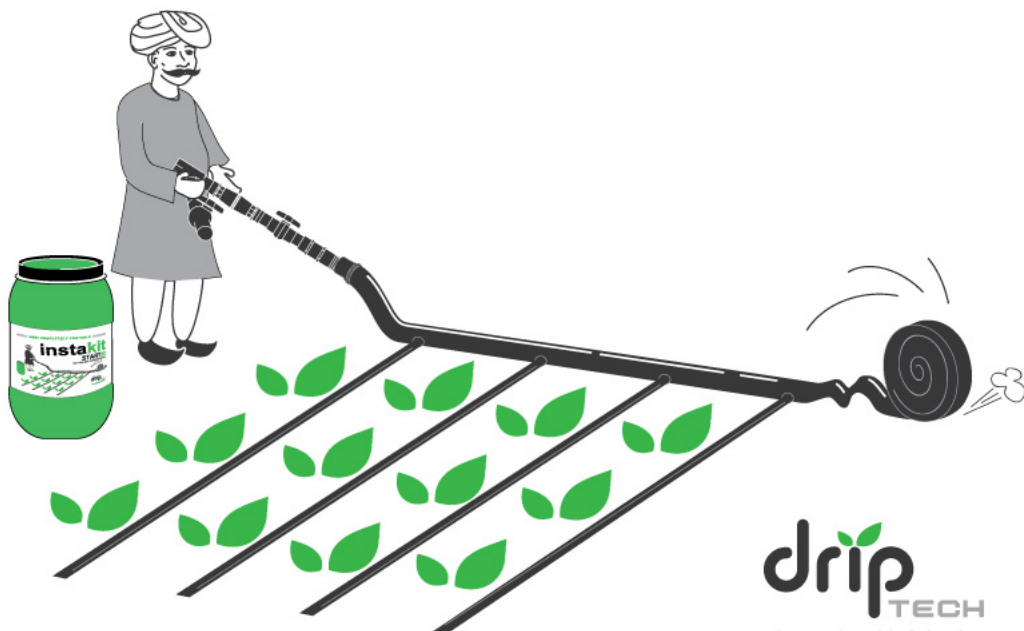
**IMPORTANT !**

Please read this manual before  
proceeding with installation.

# instakit

## START20

HALF ACRE DRIP IRRIGATION SYSTEM



**drip**TECH  
best value drip irrigation



**INSTAKIT START20** is a 1/2 acre completely portable kit.

**What is the meaning of Start20?** Start20 refers to starting drip irrigation on 20 'Gunta' or ½ acre of land.



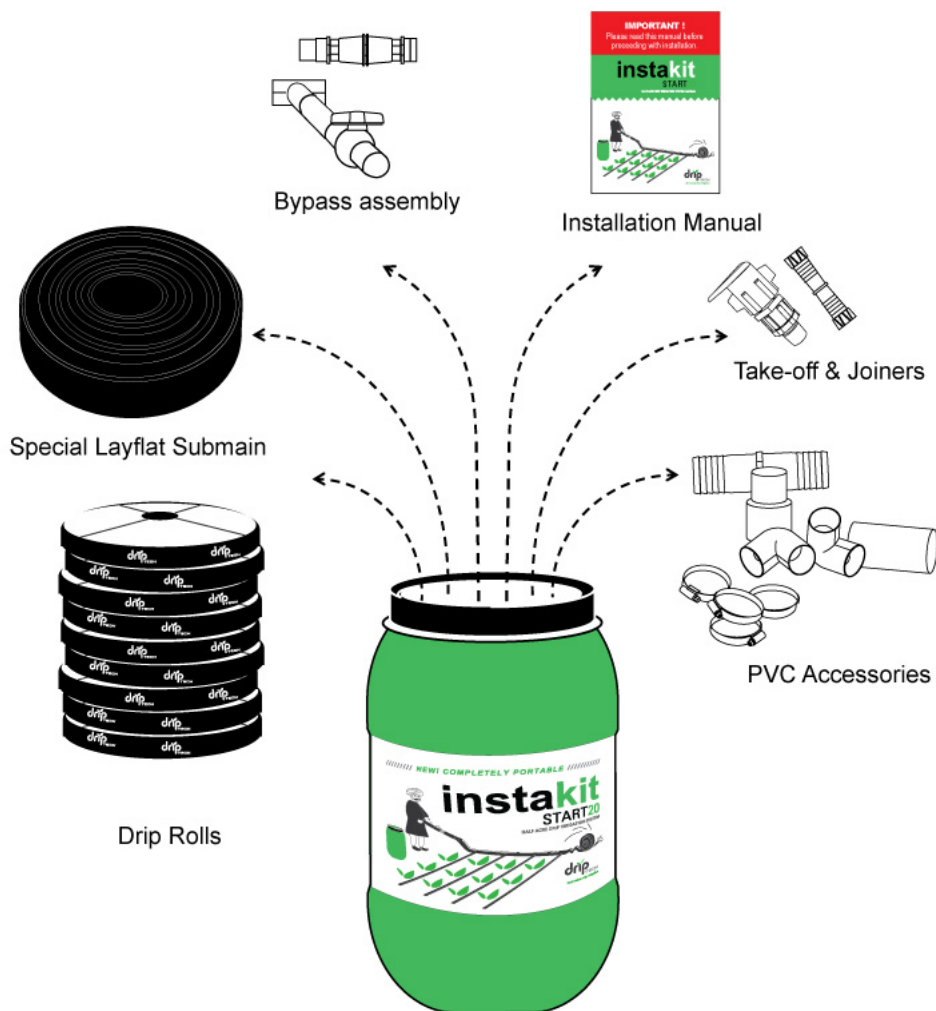


**Congratulations on your purchase of the Start20!**

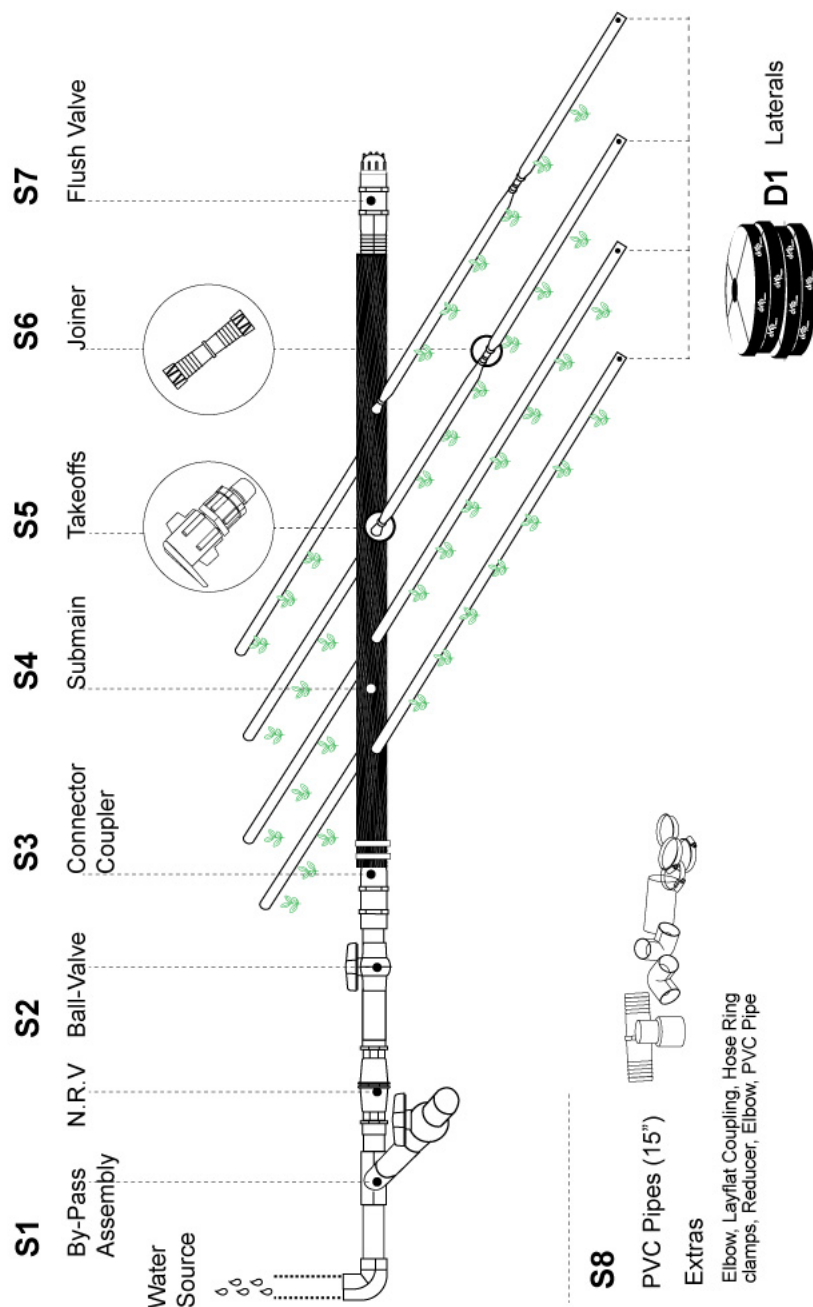
Read the Installation Manual thoroughly to understand how to install the system.

# INSTAKIT START20

## BARREL CONTENTS

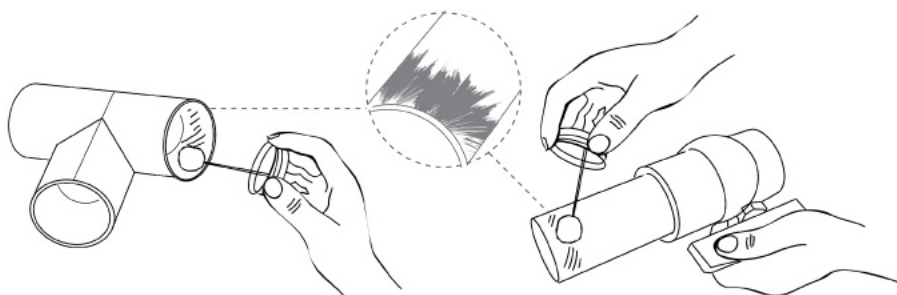


# ENGINEERING DRAWING



## Glueing Action used in Kit Assembly

GLUEING SYMBOL >>

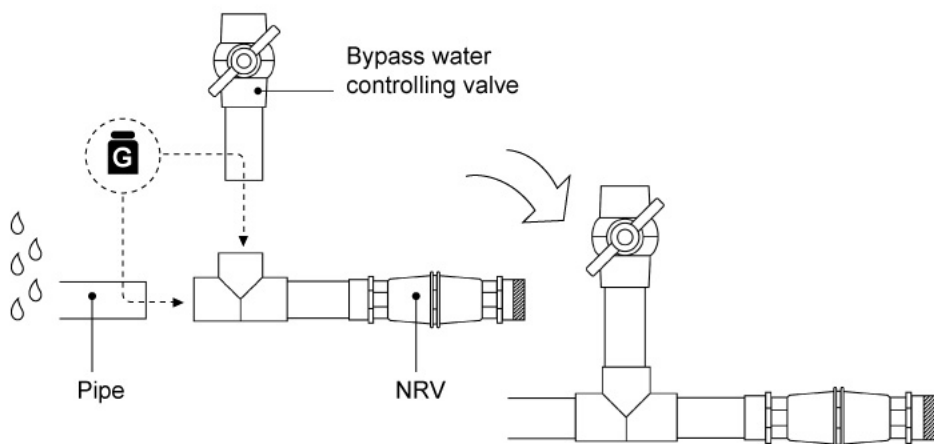


Apply glue on the inner surface of the part that will take the insertion. Ensure thick & consistent glue application

Apply glue on the outer surface of the part that will be inserted. Hold the parts for two seconds after insertion to let the glue dry.

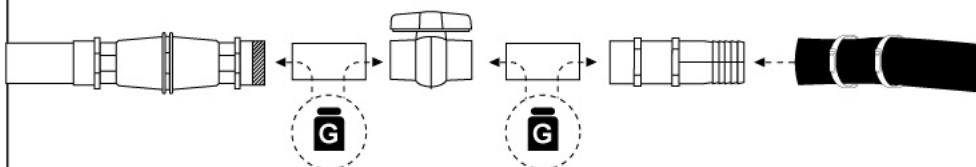
## S1: Bypass Module Assembly

Used to control the water pressure; N.R.V. used to restrict back flow of water.



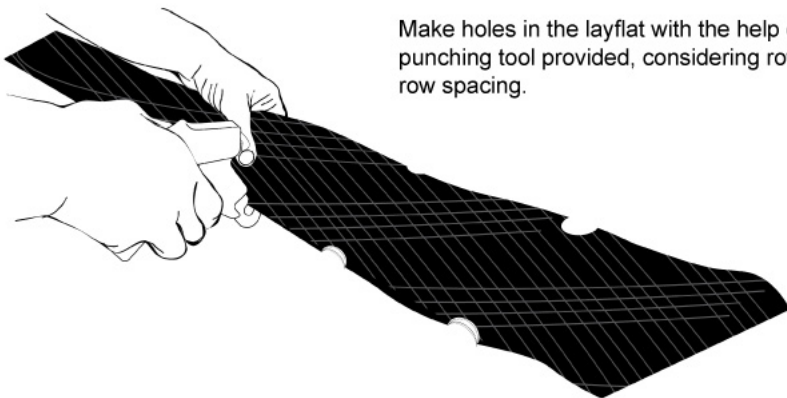
## Installation of S2: Ball Valve with S3:Connector

Connect Bypass Assembly Unit with Ball Valve and Layflat with the help of connector coupler, PVC pipe and ring clamps.

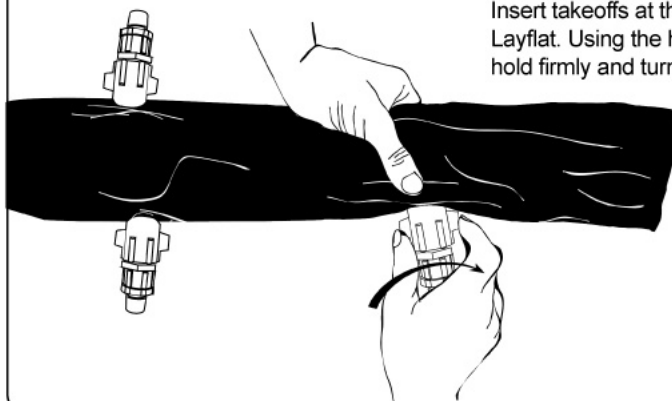


## Installation of S4:Layflat & S5:Takeoffs

Make holes in the layflat with the help of punching tool provided, considering row to row spacing.



Insert takeoffs at the holes made in the Layflat. Using the hook, insert the takeoff, hold firmly and turn clockwise for tightening





## Installation of D1: Laterals and S6: Joiner

Open lateral bundle, connect laterals to the takeoffs and unroll to the field end.

Tie the laterals to the wooden peg inserted firmly in to ground at the end of field, insuring holes in the lateral facing down.

JOINER

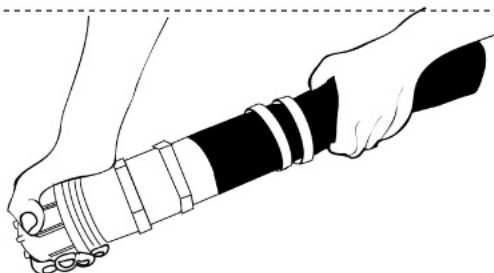
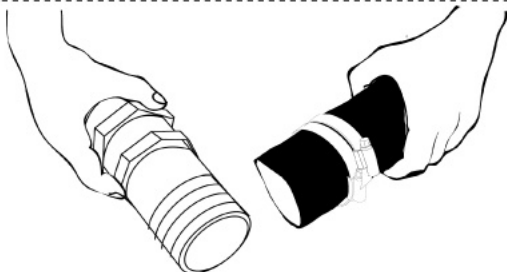
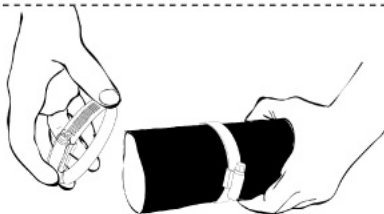
1 ft.



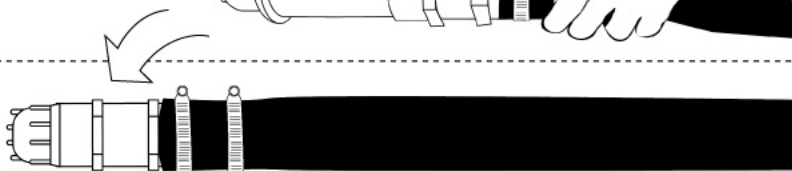
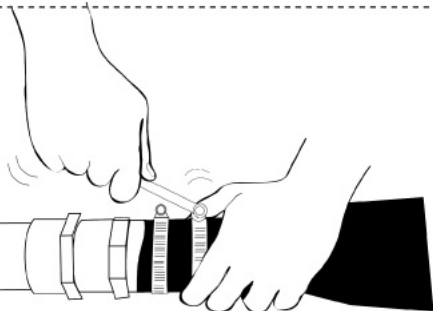
## Connecting end of S4: Layflat S7: Flush valve

One may need a hacksaw blade to cut the PVC pipe & pair of secateurs for cutting layflat and laterals

Insert the Hose ring clamps onto the layflat before inserting the flush valve



Connect the lay flat to the flush valve with the help of ring clamps at the end of sub main.



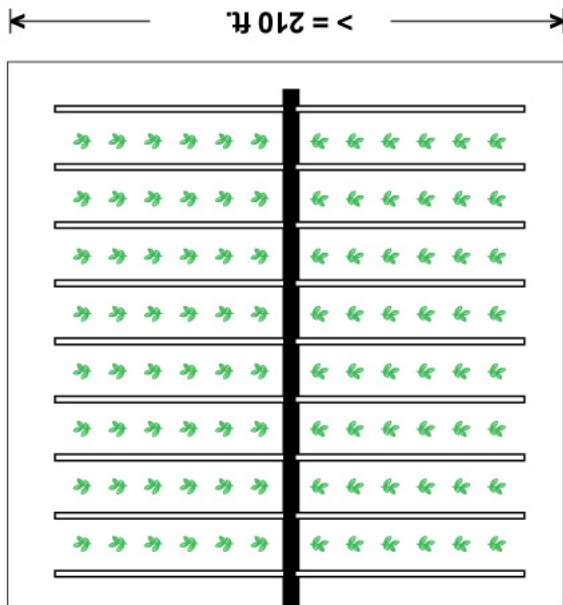
## Positioning the layflat / submain in the field

Arrange the position of the layflat to suit the particular field conditions as shown here.

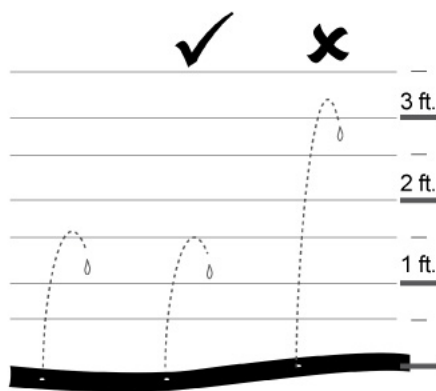


### WATER SOURCE:

Pipe coming from  
well/ borewell/ canal



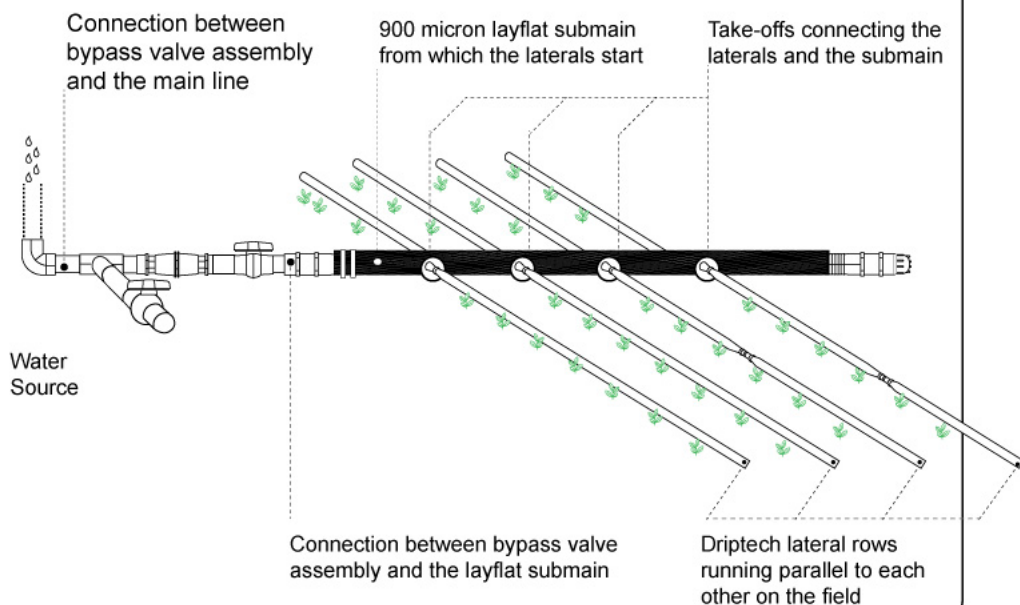
## Test run & pressure adjustment:



1. Field Check - For testing, place one of the laterals in the field facing up. Adjust the bypass to maintain water jet coming from hole not more than 1.5ft height. Then check the field for any leakages & fix if any.

## Procedure to shift Instakit Start20 from one plot to another after installation.

The following components will be on the field after installation on a plot:



## Removing connections on first plot:

1. Untie the laterals from the end stakes at the end of the lateral row.
2. Roll up each lateral row using the end stake twig/stick and place the rolled up coil beside the layflat submain.
3. Disconnect the laterals from the take-offs.
4. Disconnect the bypass assembly from the layflat submain by using spanner and loosening the screws that hold the layflat connector-coupler in place.
5. Start at the flush valve location and roll up the layflat submain along with take-offs carefully.
6. Disconnect the bypass assembly from the main line by cutting the 2 inch PVC pipe connecting the bypass valve to the main line.
7. The lateral rolls, submain roll and bypass assembly are ready for shifting. They can be stored in the Start20 barrel and shifted to another plot.

## Installing Start20 on the next plot:

1. Connect the bypass assembly to the main line using PVC solvent.
2. Connect layflat submain to the bypass assembly using layflat connector-coupler.
3. Roll out the layflat submain with take-offs across the length or width of the field, depending on orientation.
4. Connect individual lateral rolls to take-offs which are already connected to the layflat submain.
5. Roll-out individual lateral rolls and stake every lateral row at the end.



## Frequently Asked Questions

### 1. What is the life of the system?

The START20 system has an expected life of at least 4 years.

- 125 micron drip lateral life expectancy is 2 yrs.
- 200 micron drip lateral life expectancy is 4 yrs.

### 2. What is the use of NRV?

The NRV – Non Return Valve restricts backward water flow from the system towards the water source when the system is shut off. It also keeps the layflat from being displaced and restricts soil particles from being sucked into lateral holes.

### 3. What is the maximum operating pressure and how can one measure it?

The maximum operating pressure for START20 is 1Kg/cm<sup>2</sup> at filter. See field check given previously.

### 4. What can I do if I require more layflat and takeoffs?

One can purchase required loose layflat and takeoffs from the distributor or dealer from where they purchased START20.

### 5. What warranty is offered?

A 1 year manufacturer warranty is applicable for the InstaKit.

Please call our customer care for more details at +91-839-090-5859.

### 6. What can I do if I want to install it on more than ½ acre?

For adjacent fields, one can purchase loose layflat, takeoffs, connecting couplers, ring clamps, lateral rolls etc depending upon the area & shape, to connect to the START20. But one has to ensure filter is placed at water source. For more than 1 additional acre, contact us for further input.

### 7. What maintenance does the system require?

Every 2 weeks:

- Flush the submain by opening the flush valve and allowing water to flow till clean water comes out.
- Flush laterals by opening the ends and draining water till clean water comes out

## Component List

	COMPONENTS / SUB-ASSEMBLIES	DIMENSION / SPECS	QTY	U.O.
	Plastic Drum		1	Drum
S1	<b>Bypass Module</b>			
	Tee	63mm	1	pc
	PP Ball Valve - pasting fitting	63mm	1	pcs
	Spring Non Return Valve (NRV)	50mm	1	pc
	MTA	63mm	2	pcs
	PVC Pipe - 4kg	63mm - 15" long	1	pc
	PVC Pipe - 4kg	63mm - 6" long	2	pcs
S2	<b>Ball valve</b>			
	PP Ball Valve - pasting fitting	63mm	1	pcs
	PVC Pipe - 4kg	63mm - 6" long	2	pcs
S3	<b>Connector coupler</b>			
	PP Threaded Hose Nipple Collar	65 X 50	1	pcs
	FTA	63mm	1	pcs
	Hose Ring Clamps	2"	2	pcs
	Closed socket wrench	number 7	1	pc
S4	<b>Layflat submain module</b>			
	Unpunched Layflat Pipe	2.5"	31	m
S5	<b>Layflat takeoffs</b>			
	Layflat takeoffs		55	pcs
	Layflat Punching Tool (17mm)		1	Pc
	O-ring	ID =21mm, OD =28.5mm	55	pcs
S6	<b>Joiners</b>			
	Joiners		10	pcs
S7	<b>Flush Valve Sub-Assembly</b>			
	Flush Valve	63mm	1	pcs
	PP Threaded Hose Nipple Collar	65 X 50	1	pcs
	FTA	63mm	1	pcs
	Hose Ring Clamps	2"	2	pcs
	PVC Pipe -4kg	63mm - 1.5" long	1	pc
S8	<b>PVC to connect subassemblies</b>			
	PVC Pipe - 4kg	63mm - 15" long	2	pcs
	PVC Solvent	100ml	1	Bottle
	<b>Extra PVC Components &amp; Connecting PVC pieces</b>			
	Elbow	63mm	1	pc
	Layflat Coupling	65mm	1	pc
	Hose Ring clamps	63mm	4	pc
	Reducer	75mm - 63 mm	1	pc
	Elbow	75mm	1	pc
	PVC Pipe - 4kg	75mm - 6" long	1	pc
	PVC Pipe - 4kg	63mm - 6" long	2	pcs
D1	<b>Laterals</b>			
	Driptape, 200 micron, laser-punched, UV stabilized - OR -	16mm lateral with 30/45/60/75 cm punch spacing	9	Rolls
	Driptape, 125 micron, laser-punched, UV stabilized	16mm lateral with 30/45/60/75 cm punch spacing	6	Rolls



## What you can do with your Start 20 barrel

1. The barrel can store up to 120 litres of water or any other non-corrosive liquid.
2. The barrel, when dry, can be used to shift the Instakit Start20 material and components from one plot to another.
3. It can be used as a gravity tank for very small garden irrigation systems up to 1000 sq. ft.
4. It can be used for any household material storage.
5. The barrel can be used to create a water-soluble fertilizer mixture which can be fed to the venturi.



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