

Irrigation Systems

Pipes For Life

ARILI[®]



PIPELIFE is one of the leading producers of plastic pipe systems in water, energy and industrial applications for the improvement of quality of life. With its headquarters in Vienna, Pipelife is owned by WIENERBERGER AG of Austria. Pipelife's business activities are focused on the innovation, development, manufacturing and distribution of plastic pipe systems. Pipelife provides solutions for the complete water cycle, energy and power distribution, telecommunication networks and industrial applications. Pipelife's network is spread over 26 countries in Europe and USA to serve markets around the globe. Pipelife is among the founding members of TEPPFA (The European Plastic Pipes and Fittings Association).

ARILI PLASTIK is a member of Pipelife Group and benefits from its technical know-how, varied experience, support, outstanding quality and reliability record. Arılı was founded in 1969 originally to produce polyethylene irrigation pipes. Currently, Arılı Plastik as Pipelife Turkey offers a wide product range including PPRC Pipes and Fittings, Glass-Fiber Reinforced Composite PP-R Pipes, PEX Pipes, PP Waste Water Pipes and Fittings, PE Spring Irrigation Pipes and Fittings, PE Flat Drip Irrigation Pipes, PP Twine Yarns and PE Pipes for various applications such as clean water and gas systems.

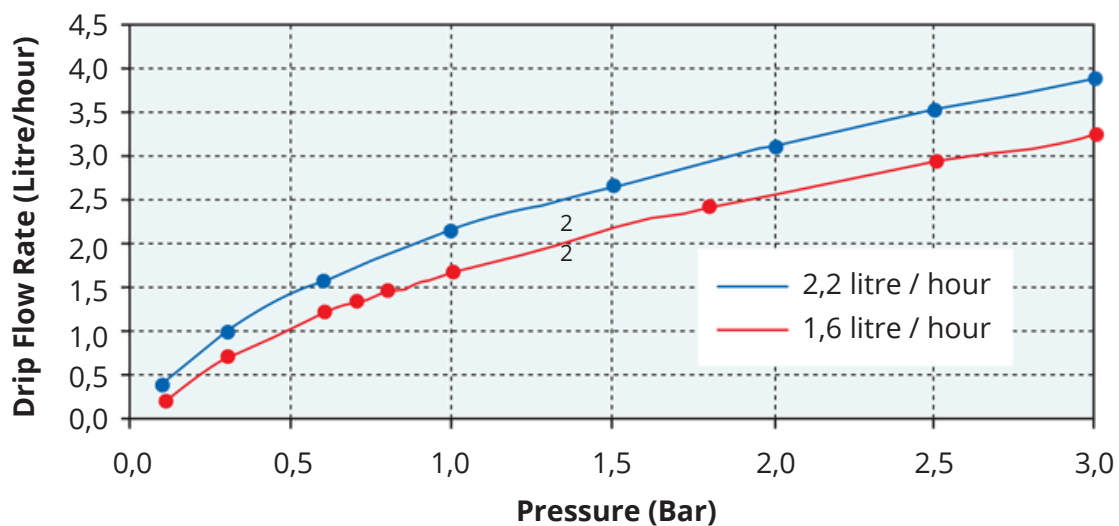


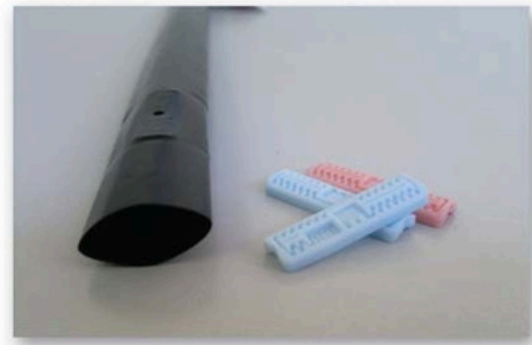
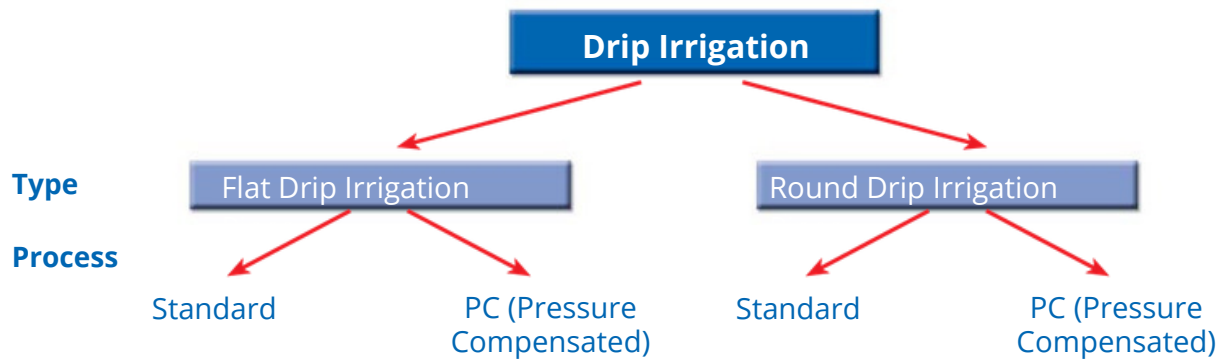


ARILI FLAT TYPE DRIP IRRIGATION PIPES:

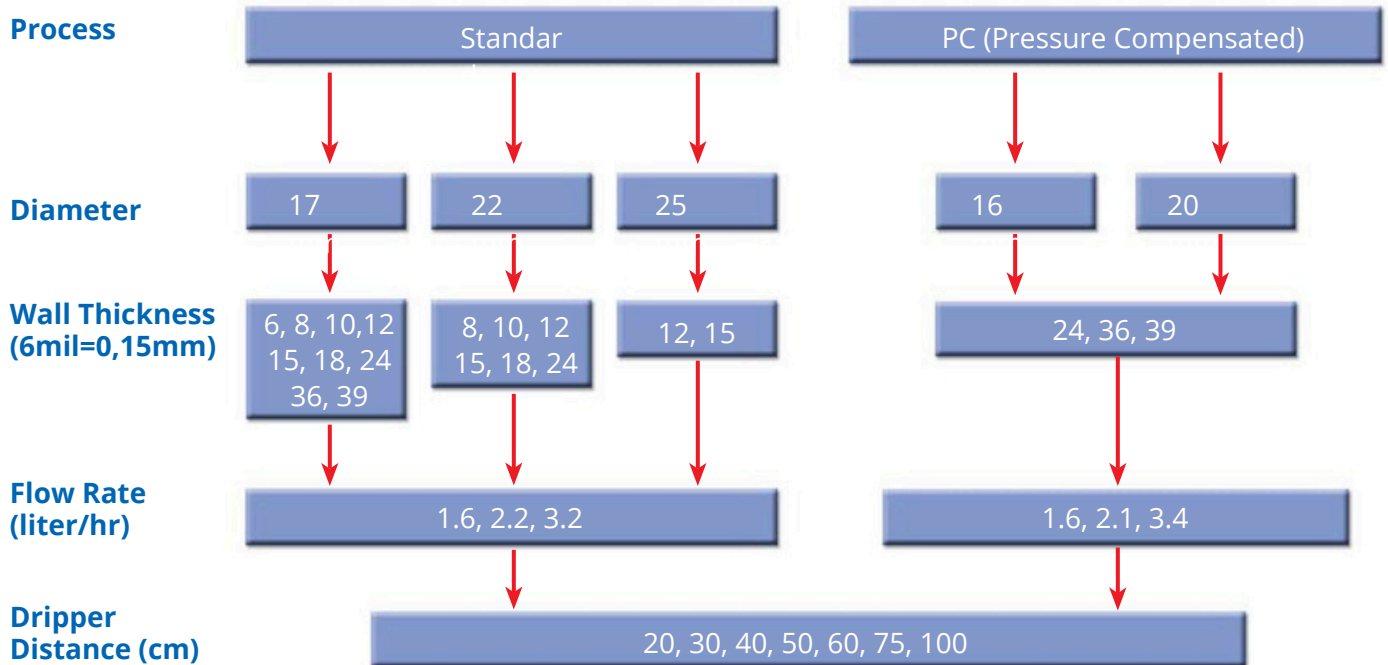
Drip Irrigation supplies the necessary water and soluble nutrients at the time when it is required and the amount needed to the root area of the plant as drips in a controlled way. In drip irrigation method, water is supplied frequently and in low amounts. ARILI Flat Type Drip Irrigation Pipes are produced in lateral diameters 17mm, 22mm and 25mm. They are ideal and economical where planting is in rows as vegetable, field plants, vineyard and fruits. Different dripper distances can be produced according to the space between plants in the same raw. (20-30-40-50-60-75-100 cm)

High uniformity can be obtained with the special design and drippers with latest production technology giving the Coefficient of Variation (Cv) less than 5%. The dripper flow rates are produced as 1,6-2,2 and 3,2 lt/h with wide canals and high blocking resistant. They are produced in different thicknesses in order to supply one year or many years usage (06-08-10-12-15-18-24-36-39 mil). Setting and collecting on the field is very easy.

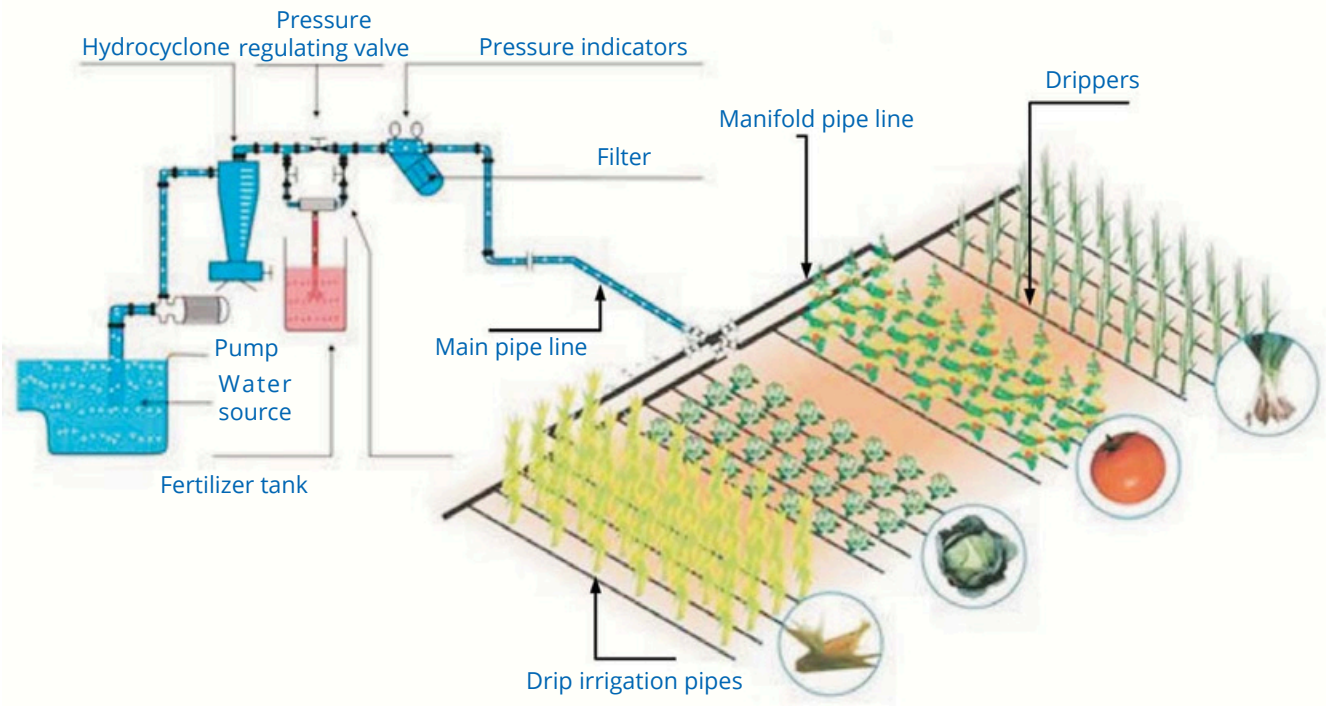




Flat Drip Irrigation Pipes



Elements of Drip Irrigation System



Drip Irrigation System is formed in order by pumping unit, filtering unit, main pipe line, manifold pipe lines, lateral drip pipe lines.

Filtering Unit: In drip irrigation, water should be filtered very well before giving to the system. Otherwise, the drippers will be blocked. This treatment will be done by filtering unit. The pressure and amount of water given to the system will also be checked and soluble nutrients will be given to the water via filter unit.



Hydrocyclone Filter



Gravel Filter



Plastic Filter

Main Pipe Line

It transmits the water, which is taken from the source and passed from filter unit to manifold pipe lines. Generally HDPE pipes or spring irrigation pipes are used.

Manifold (subsidiary) Pipe Line

It transmits the water from mainline to laterals (drip irrigation pipes). They are also produced by HDPE pipes or spring irrigation pipes may be used as the main pipe lines.



Drip Irrigation Pipe (Lateral) Lines

They are produced specially and drippers are inserted in them at the production. These pipes which have drippers are made of flexible polyethylene. The drippers inside the pipe are situated with a certain distance between each other (20cm, 30cm, 40cm, etc).



Drippers

These are the most critical elements of the system transmitting irrigation water to earth with low pressure and a very low controlled flow rate.

Fittings of Drip Irrigation System

Rubber Gasket

It is needed to connect the lateral drip pipes to manifold pipes.



Outlet Coupling with Mini Valve

It controls the water passing through the drip pipes. It is connected at the beginning of the drip line.



Connector Coupling

It is used to connect the drip pipes.



ARILI PRESSURE COMPENSATED FLAT DRIP IRRIGATION PIPES

ARILI branded drip irrigation pipes are produced in two different diameters as 16 mm and 20 mm. It drips the same amount of water through all of its drippers thanks to its special pressure compensated drippers with wide canals and high turbulence water flows. It can be used safely on ground applications and sloping areas. Dripper is working in safely between 0.5 - 4.3 bar. They can be produced in 24 - 36 - 39 mil thicknesses and 1,6 - 2,1 and 3,4 lt/h flow according to many years usage.

ARILI SUB-SURFACE PRESSURE COMPENSATED FLAT DRIP IRRIGATION PIPES

Sub-surface drip irrigation uses permanently or temporarily buried drip pipe located at or below the plant roots. They are produced in two lateral diameters as 16 mm and 20 mm. It drips the same amount of water through of its drippers in all pressure levels thanks to its special pressure compensated drippers. It can be used safely in sub-surface applications and has anti-siphon mechanism with drippers that prevent root entrance. Dripper is working in safely between 0,5 - 4,3 bar. They can be produced in 24 - 36 - 39 mil thicknesses and 1,6 - 2,1 and 3,4 lt/h flow rates according to many years usage.

TECHNICAL DETAILS OF DRIP IRRIGATION PIPES								
PIPE DIAMETER (MM)	THICKNESS (MIL)	SYSTEM PRESSURE (BAR)	PIPE DIAMETER (MM)		WALL THICKNESS (MM)	MAX. SYSTEM PRESSURE (BAR)	MINIMUM FILTRATION MICRON / MESH	COIL LENGTH (MT)
			INSIDE	OUTSIDE				
17 (MM)	6 MIL	1.0	16.1	16.4	0.15	1.0	130 / 120	2500
	8 MIL	1.0	16.1	16.5	0.20	1.2	130 / 120	2000
	10 MIL	1.0	16.1	16.6	0.25	1.4	130 / 120	1750
	12 MIL	1.0	16.1	16.7	0.30	1.5	130 / 120	1500
	15 MIL	1.0	16.1	16.9	0.37	1.8	130 / 120	1000
	18 MIL	1.0	16.1	17.0	0.45	2.0	130 / 120	1000
	24 MIL	1.0	16.1	17.3	0.60	2.5	130 / 120	500
	36 MIL	1.0	16.1	17.9	0.90	3.0	130 / 120	400
22 (MM)	8 MIL	1.0	22.0	22.4	0.20	1.2	130 / 120	1000
	10 MIL	1.0	22.0	22.5	0.25	1.4	130 / 120	1000
	12 MIL	1.0	22.0	22.6	0.30	1.5	130 / 120	1000
	15 MIL	1.0	22.0	22.7	0.37	1.8	130 / 120	750
	18 MIL	1.0	22.0	22.9	0.45	2.0	130 / 120	750
	24 MIL	1.0	22.0	23.2	0.60	2.5	130 / 120	400
25 (MM)	12 MIL	1.0	25.0	25.6	0.30	1.5	130 / 120	750
	15 MIL	1.0	25.0	25.6	0.37	1.8	130 / 120	750

Ø17 mm ARILI FLAT DRIP IRRIGATION PIPES LATERAL LENGTHS (@ 10% flow difference and 1 bar pressure)

SLOPE (%)	20 cm			30 cm			40 cm			50 cm			60 cm			75 cm			100 cm		
	Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour		
	1.6	2.2	3.2	1.6	2.2	3.2	1.6	2.2	3.2	1.6	2.2	3.2	1.6	2.2	3.2	1.6	2.2	3.2	1.6	2.2	3.2
2	61	56	38	77	60	47	82	71	55	84	72	63	112	82	69	106	93	93	115	100	96
1	72	63	40	104	75	53	108	86	65	120	96	74	144	110	86	154	137	137	162	145	109
0	85	70	45	130	105	60	155	125	75	175	145	85	190	165	100	215	185	185	245	220	136
-1	96	78	50	146	110	65	181	142	80	212	162	98	241	221	114	268	246	246	312	310	168
-2	105	85	55	155	115	70	203	156	90	246	181	108	267	245	126	282	266	266	321	281	197

Ø22 mm ARILI FLAT DRIP IRRIGATION PIPES LATERAL LENGTHS (@ 10% flow difference and 1 bar pressure)

SLOPE (%)	20 cm			30 cm			40 cm			50 cm			60 cm			75 cm			100 cm		
	Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour		
	1.6	2.2	3.2	1.6	2.2	3.2	1.6	2.2	3.2	1.6	2.2	3.2	1.6	2.2	3.2	1.6	2.2	3.2	1.6	2.2	3.2
2	85	81	46	95	93	52	103	100	57	108	105	59	112	110	62	116	114	64	125	121	69
1	111	99	58	135	125	72	151	141	81	166	154	89	175	162	94	189	174	101	204	193	110
0	143	123	73	185	161	96	212	196	113	265	225	135	302	254	153	354	286	176	425	334	208
-1	175	141	87	245	192	120	295	238	146	353	281	174	398	328	200	450	380	229	530	454	272
-2	190	160	96	280	220	137	350	283	174	415	328	185	481	398	235	551	451	281	641	531	311

Ø25 mm ARILI FLAT DRIP IRRIGATION PIPES LATERAL LENGTHS (@ 10% flow difference and 1 bar pressure)

SLOPE (%)	20 cm			30 cm			40 cm			50 cm			60 cm			75 cm			100 cm		
	Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour		
	1.6	2.2	3.2	1.6	2.2	3.2	1.6	2.2	3.2	1.6	2.2	3.2	1.6	2.2	3.2	1.6	2.2	3.2	1.6	2.2	3.2
2	93	89	66	99	96	70	103	102	73	106	103	75	108	105	76	110	112	78	121	114	85
1	124	118	88	148	136	104	174	158	123	192	174	136	202	184	143	207	191	146	228	215	161
0	172	150	121	226	196	160	272	236	192	316	272	223	352	307	248	394	340	278	455	396	321
-1	216	188	152	304	307	215	384	321	271	463	387	327	548	454	387	638	524	450	785	623	554
-2	274	216	193	378	311	267	466	389	324	560	460	388	660	540	450	760	620	500	910	730	590

TECHNICAL DETAILS OF PRESSURE COMPENSATED DRIP IRRIGATION PIPES								
PIPE DIAMETER (MM)	THICKNESS (MIL)	SYSTEM PRESSURE (BAR)	PIPE DIAMETER (MM)		WALL THICKNESS (MM)	MAX. SYSTEM PRESSURE (BAR)	MINIMUM FILTRATION MICRON / MESH	COIL LENGTH (MT)
			INSIDE	OUTSIDE				
16 (MM)	24 MIL	1.0	14.1	15.3	0.6	2.5	130 / 120	400
	36 MIL	1.0	14.1	15.9	0.9	3.0	130 / 120	400
	39 MIL	1.0	14.1	16.1	1.0	3.2	130 / 120	400
20 (MM)	24 MIL	1.0	17.5	18.7	0.6	2.5	130 / 120	400
	36 MIL	1.0	17.5	19.3	0.9	3.0	130 / 120	400
	39 MIL	1.0	17.5	19.5	1.0	3.2	130 / 120	400

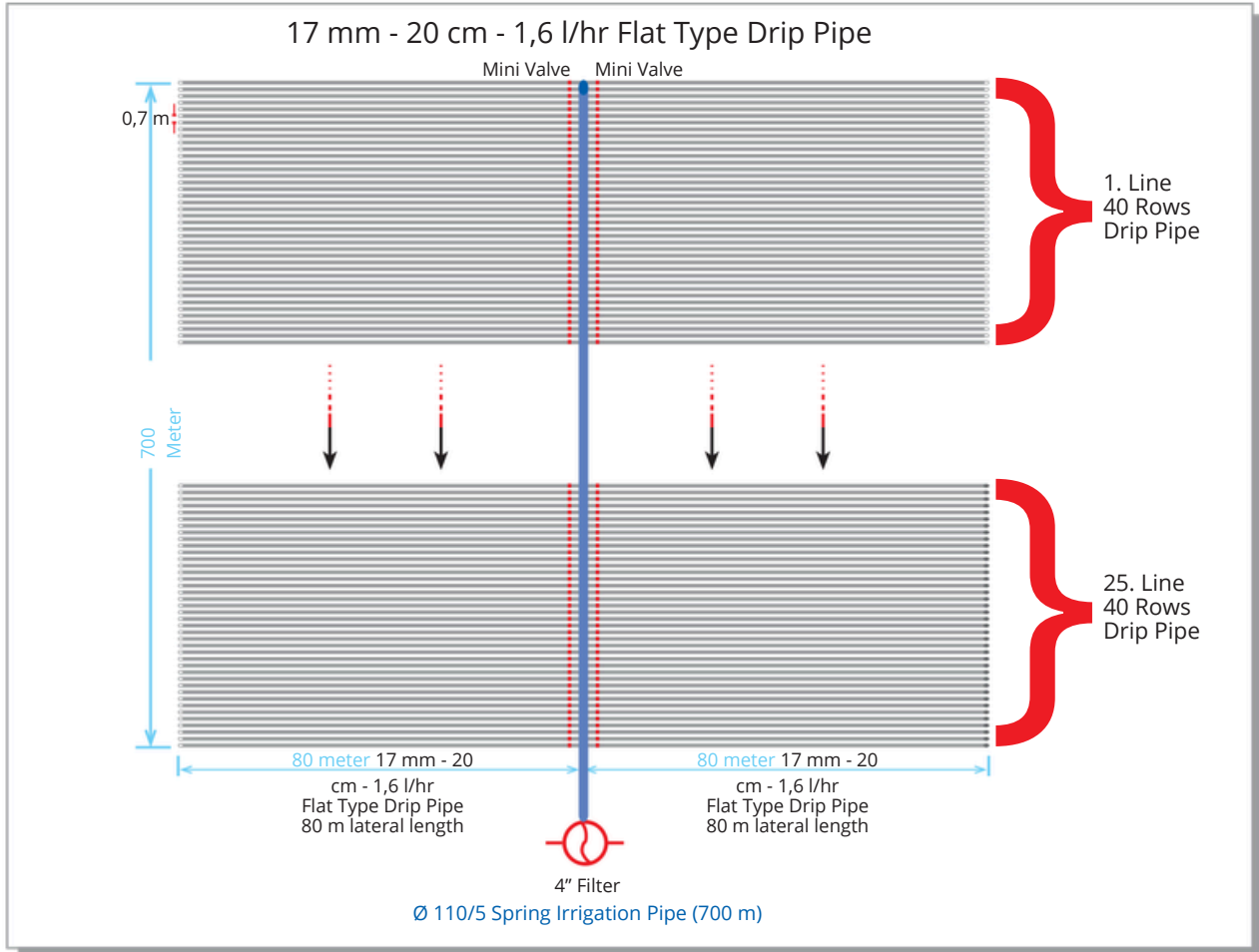
Ø16mm ARILI SUB-SURFACE PRESSURE COMPENSATED FLAT DRIP IRRIGATION PIPES LATERAL LENGTHS (@ 10% flow difference and 1 bar pressure)																				
20cm			30cm			40cm			50cm			60cm			75cm			100 cm		
Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour		
1.6	2.1	3.4	1.6	2.1	3.4	1.6	2.1	3.4	1.6	2.1	3.4	1.6	2.1	3.4	1.6	2.1	3.4	1.6	2.1	3.4
98	88	56	137	125	84	174	158	103	207	188	124	238	212	141	266	238	157	345	305	206

Ø20mm ARILI SUB-SURFACE PRESSURE COMPENSATED FLAT DRIP IRRIGATION PIPES LATERAL LENGTHS (@ 10% flow difference and 1 bar pressure)																				
20cm			30cm			40cm			50cm			60cm			75cm			100 cm		
Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour		
1.6	2.1	3.4	1.6	2.1	3.4	1.6	2.1	3.4	1.6	2.1	3.4	1.6	2.1	3.4	1.6	2.1	3.4	1.6	2.1	3.4
122	105	69	169	146	96	211	184	119	249	214	141	284	246	160	318	276	179	409	354	229

Ø16mm ARILI ABOVE-SURFACE PRESSURE COMPENSATED FLAT DRIP IRRIGATION PIPES LATERAL LENGTHS (@ 10% flow difference and 1 bar pressure)																				
20cm			30cm			40cm			50cm			60cm			75cm			100 cm		
Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour		
1.6	2.1	3.4	1.6	2.1	3.4	1.6	2.1	3.4	1.6	2.1	3.4	1.6	2.1	3.4	1.6	2.1	3.4	1.6	2.1	3.4
98	88	56	137	125	84	174	158	103	207	188	124	238	212	141	266	238	157	345	305	206

Ø20mm ARILI ABOVE-SURFACE PRESSURE COMPENSATED FLAT DRIP IRRIGATION PIPES LATERAL LENGTHS (@ 10% flow difference and 1 bar pressure)																				
20cm			30cm			40cm			50cm			60cm			75cm			100 cm		
Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour			Flow/Liter/Hour		
1.6	2.1	3.4	1.6	169	2.1	1.6	2.1	3.4	1.6	2.1	3.4	1.6	2.1	3.4	1.6	2.1	3.4	1.6	2.1	3.4
122	105	69	146	3.4	96	211	184	119	249	214	141	284	246	160	318	276	179	409	354	229

DRIP IRRIGATION SYSTEM SAMPLE 1					
PIPE TYPE	FLAT	DRIP PIPE DIAMETER	17 mm	MAINLINE PIPE	110 mm
SYSTEM TYPE	MINI VALVE	DRIPPER FLOW RATE	1,6 l/hr	DIAMETER DRIPPER	20 cm



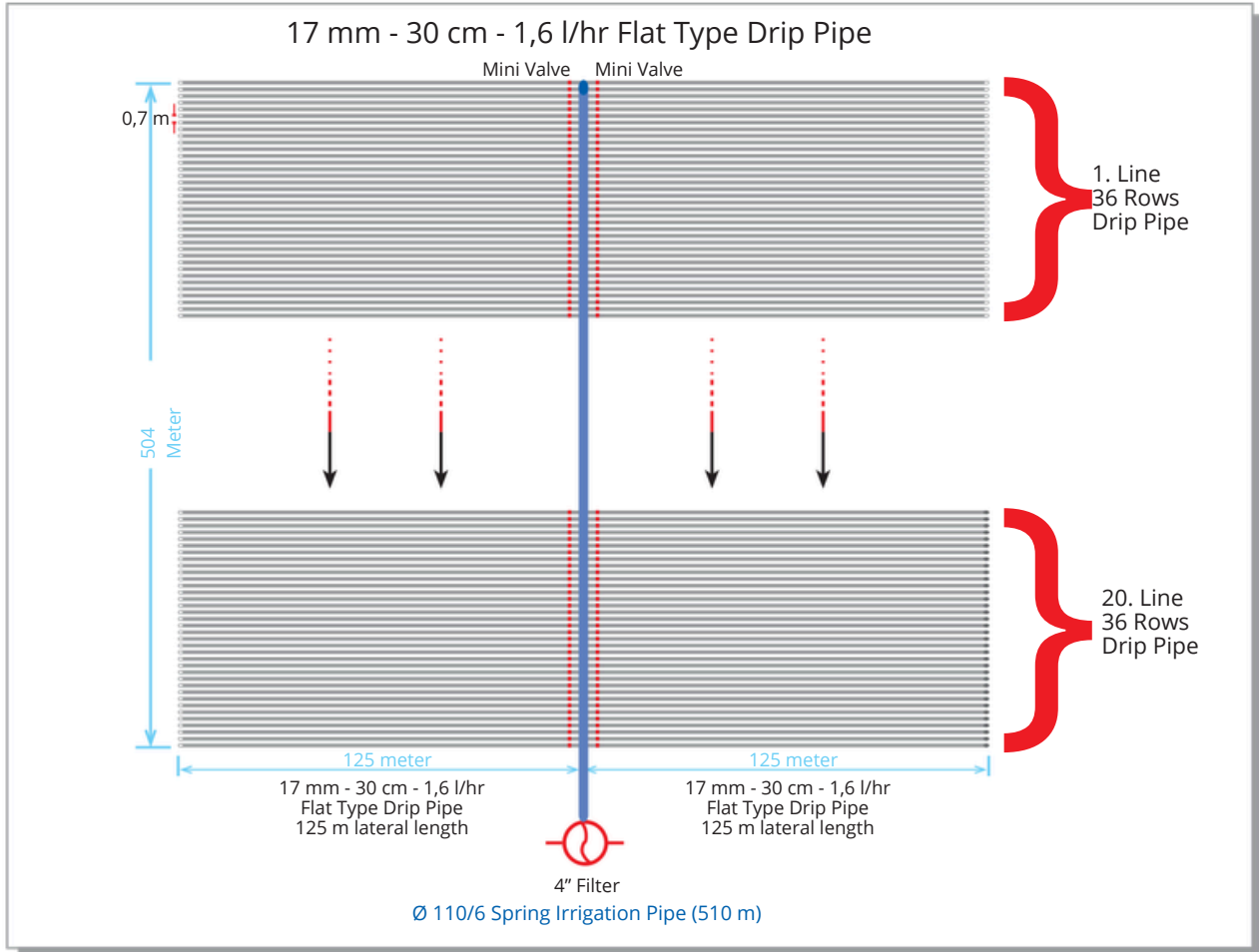
SYSTEM PARAMETERS OF DRIP IRRIGATION PIPE ACCORDING TO WALL THICKNESS

DRIPPER FLOW RATE (l/hr)	DRIPPER DISTANCE (cm)	DRIP PIPE WALL THICKNESS (mil)	SYSTEM PIPE LENGTH (meter)
1.6	20	6	160.000
1.6	20	8	160.000
1.6	20	10	160.000
1.6	20	12	160.000
1.6	20	15	160.000
1.6	20	18	160.000

OTHER ITEMS THAT COMPLETE THE SYSTEM

Ø 110 mm / 5 Meter Spring Irrigation Pipe	700	Meter
Ø 17 mm Rubber Gasket	2.800	Pieces
Ø 17 mm Outlet Coupling with Mini	2.800	Pieces
Ø 17 mm Connector Coupling	100	Pieces
Ø 110 mm Spring Irrigation End Cap	1	Pieces
4" Plastic Mesh Filter	1	Pieces
Ø 110 mm Spring Irrigation Rubber Gasket	140	Pieces

DRIP IRRIGATION SYSTEM SAMPLE 2					
PIPE TYPE	FLAT	DRIP PIPE DIAMETER	17 mm	MAINLINE PIPE	110 mm
SYSTEM TYPE	MINI VALVE	DRIPPER FLOW RATE	1,6 l/hr	DIAMETER DRIPPER	30 cm



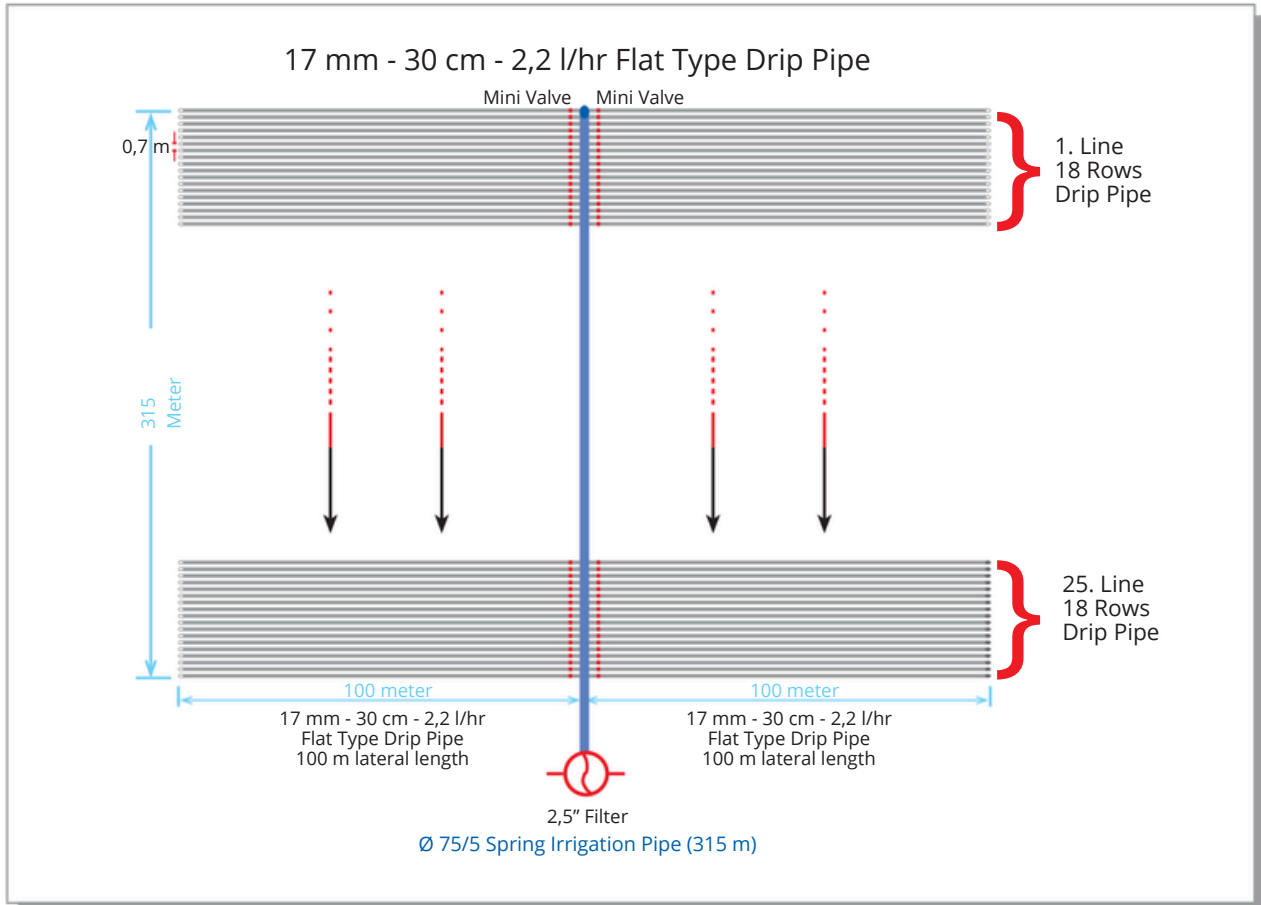
SYSTEM PARAMETERS OF DRIP IRRIGATION PIPE ACCORDING TO WALL THICKNESS

DRIPPER FLOW RATE (l/hr)	DRIPPER DISTANCE (cm)	DRIP PIPE WALL THICKNESS (mil)	SYSTEM PIPE LENGTH (meter)
1.6	30	6	180.000
1.6	30	8	180.000
1.6	30	10	180.000
1.6	30	12	180.000
1.6	30	15	180.000
1.6	30	18	180.000

OTHER ITEMS THAT COMPLETE THE SYSTEM

Ø 110 mm / 6 Meter Spring Irrigation Pipe	510	Meter
Ø 17 mm Rubber Gasket	1.400	Pieces
Ø 17 mm Outlet Coupling with Mini Valve	1.400	Pieces
Ø 17 mm Connector Coupling	100	Pieces
Ø 110 mm Spring Irrigation End Cap	1	Pieces
4" Plastic Mesh Filter	1	Pieces
Ø 110 mm Spring Irrigation Rubber Gasket	102	Pieces

DRIP IRRIGATION SYSTEM SAMPLE 3					
PIPE TYPE	FLAT	DRIP PIPE DIAMETER	17 mm	MAINLINE PIPE	75
SYSTEM TYPE	MINI VALVE	DRIPPER FLOW RATE	2,2 l/hr	DIAMETER DRIPPER	mm



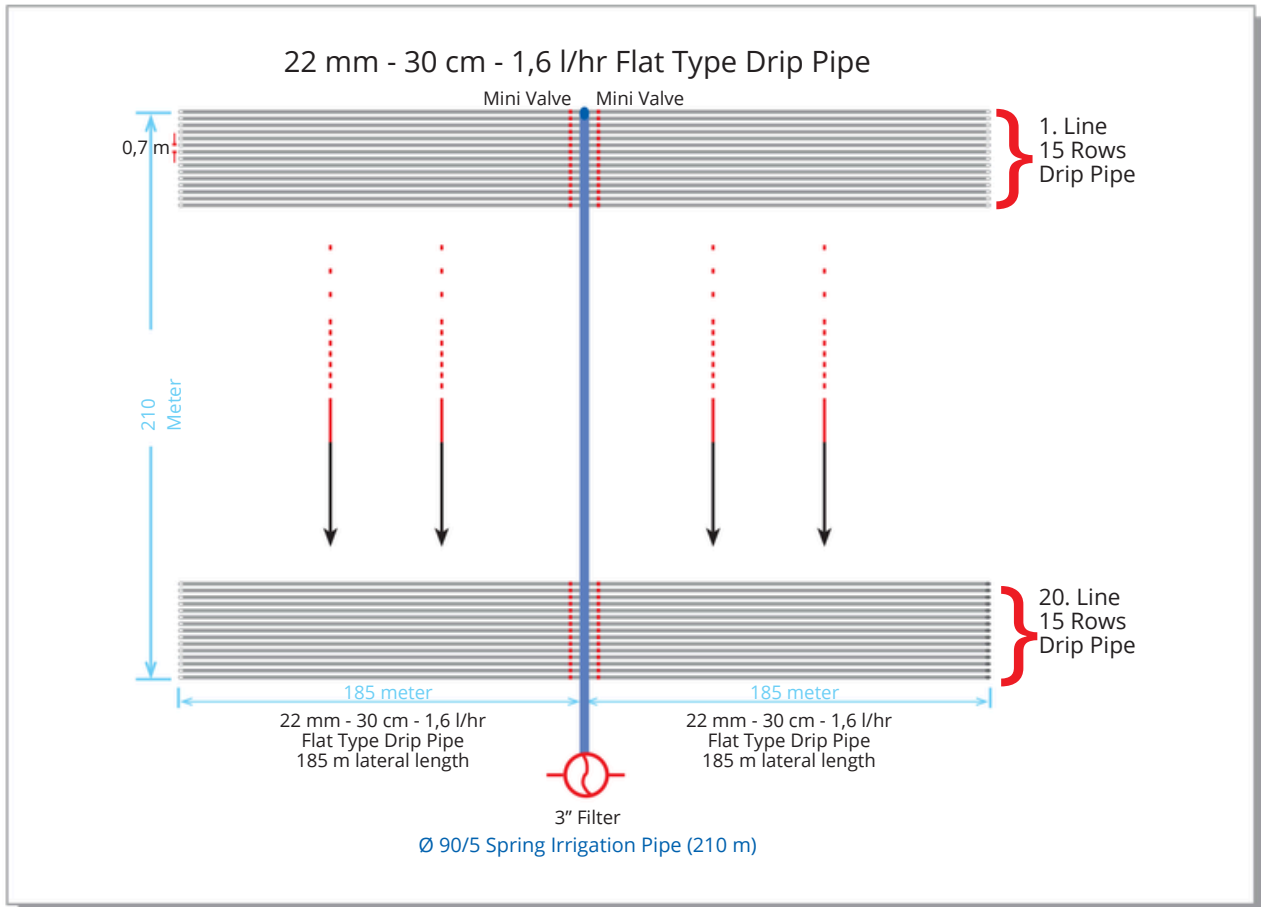
SYSTEM PARAMETERS OF DRIP IRRIGATION PIPE ACCORDING TO WALL THICKNESS

DRIPPER FLOW RATE (l/hr)	DRIPPER DISTANCE (cm)	DRIP PIPE WALL THICKNESS (mil)	SYSTEM PIPE LENGTH (meter)
2.2	30	6	90.000
2.2	30	8	90.000
2.2	30	10	90.000
2.2	30	12	90.000
2.2	30	15	90.000
2.2	30	18	90.000

OTHER ITEMS THAT COMPLETE THE SYSTEM

Ø 75 mm / 5 Meter Spring Irrigation Pipe	315	Meter
Ø 17 mm Rubber Gasket	1.400	Pieces
Ø 17 mm Outlet Coupling with Mini Valve	1.400	Pieces
Ø 17 mm Connector Coupling	100	Pieces
Ø 75 mm Spring Irrigation End Cap	1	Pieces
2,5" Plastic Mesh Filter	1	Pieces
Ø 75 mm Spring Irrigation Rubber Gasket	63	Pieces

DRIP IRRIGATION SYSTEM SAMPLE 4					
PIPE TYPE	FLAT	DRIP PIPE DIAMETER	22 mm	MAINLINE PIPE	90 mm
SYSTEM TYPE	MINI VALVE	DRIPPER FLOW RATE	1,6 l/hr	DIAMETER DRIPPER	30 cm



SYSTEM PARAMETERS OF DRIP IRRIGATION PIPE ACCORDING TO WALL THICKNESS

DRIPPER FLOW RATE (l/hr)	DRIPPER DISTANCE (cm)	DRIP PIPE WALL THICKNESS (mil)	SYSTEM PIPE LENGTH (meter)
1.6	30	8	111.000
1.6	30	10	111.000
1.6	30	12	111.000

OTHER ITEMS THAT COMPLETE THE SYSTEM		
Ø 90 mm / 5 Meter Spring Irrigation Pipe	210	Meter
Ø 22 mm Rubber Gasket	1.000	Pieces
Ø 22 mm Outlet Coupling with Mini Valve	1.000	Pieces
Ø 22 mm Connector Coupling Ø 90 mm	50	Pieces
Spring Irrigation End Cap	1	Pieces
3" Plastic Mesh Filter	1	Pieces
Ø 90 mm Spring Irrigation Rubber Gasket	42	Pieces

IRRIGATION SYSTEMS:

ARILI Quick Coupling Spring Irrigation System pipes are produced from HDPE in 5mt and 6mt lengths. Pipes and fittings are designed not to have any leakage even under low operating pressures. Our spring irrigation system has a long service life for tough conditions in all topographies. There are two coupling methods in ARILI Quick Coupling Spring Irrigation System.

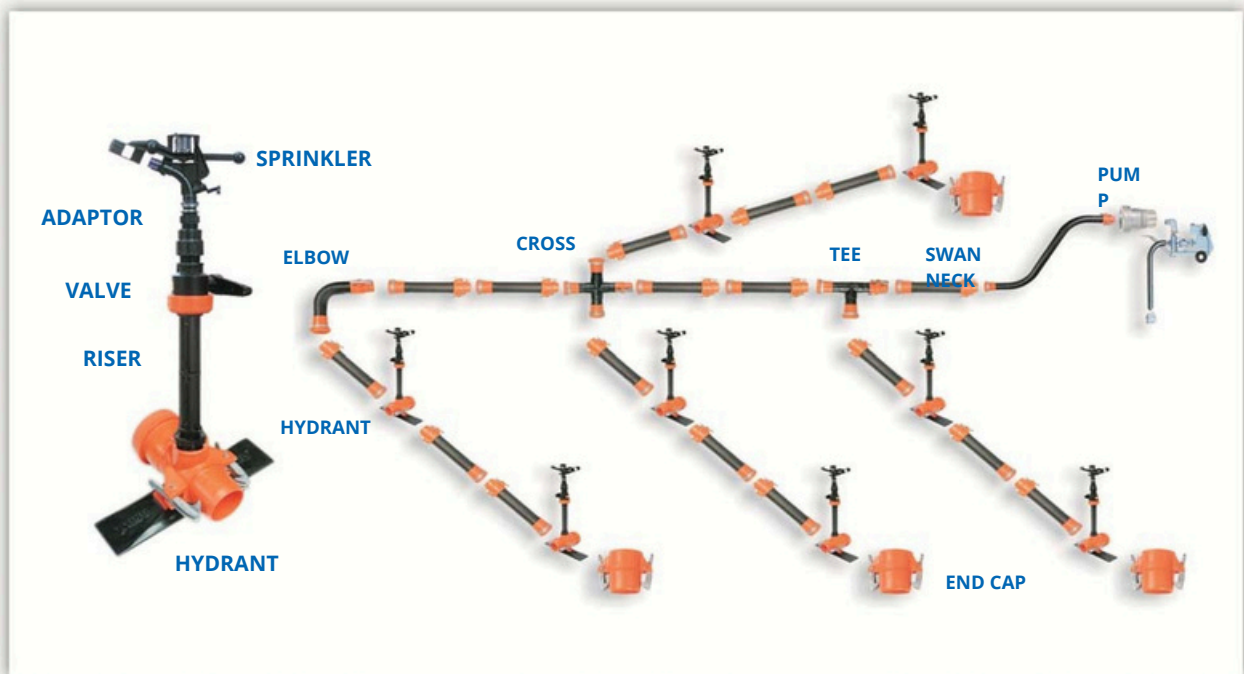
ARILI Clamp Type Spring Irrigation System:

This patented system is produced from diameters Ø75mm, Ø90mm, Ø110mm, Ø125mm, Ø140mm and Ø160mm.



ARILI Latch Type Spring Irrigation System:



The latest system design enables easy handling and connection in the field. It is very famous for its durability, performance and being very practical. Latch type pipes are produced in diameters Ø50mm, Ø63mm, Ø75mm, Ø90mm, Ø110mm, Ø125mm, Ø140mm, Ø160mm and 200mm. Most of the farmers prefer this system because of its functionality and durability.

























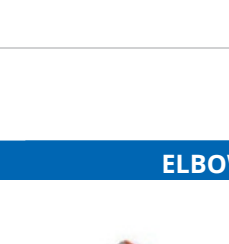
PE IRRIGATION PIPES 5 Meter

	Diameter Ø (mm)
	50
	63
	75
	90
	110
	125
	140
	160
	200



















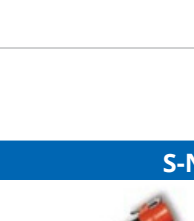


PE IRRIGATION PIPES 6 Meter

	Diameter Ø (mm)
	50
	63
	75
	90
	110
	125
	140
	160
	200









CROSS

	Diameter Ø (mm)
	63/63
	75/63
	75/75
	90/75
	90/90
	110/75
	110/90
	110/110
	125/75
	125/90
	125/110
	125/125
	140/75
	140/90
	140/110
	140/125
	140/140
	160/75
	160/90
	160/110
	160/125
	160/140
	160/160







TEE

	Diameter Ø (mm)
	63/63
	75/63
	75/75
	90/75
	90/90
	110/75
	110/90
	110/110
	125/75
	125/90
	125/110
	125/125
	140/75
	140/90
	140/110
	140/125
	140/140
	160/75
	160/90
	160/110
	160/125
	160/140
	160/160
	200 / 160
	200 / 200

ELBOW

	Diameter Ø (mm)
	63
	75
	90
	110
	125
	140
	160
	200

S-NECK

	Diameter Ø (mm)
	75
	90
	110
	125
	140
	160

LATCH COUPLING (Female &



Diameter
Ø (mm)

- 50
- 63
- 75
- 90
- 110
- 125
- 140
- 160
- 200

END CAP



Diameter
r Ø
(mm)

- 50
- 63
- 75
- 90
- 110
- 125
- 140
- 160

HYDRANT (WITH ADAPTER)



Diameter Ø
(mm)

- 50
- 63
- 75
- 90
- 110

REDUCER



Diameter
Ø (mm)

- 75/50
- 75/63
- 90/75
- 110/75
- 110/90
- 125/75
- 125/90
- 125/110
- 140/75
- 140/90
- 140/110
- 140/125
- 160/75
- 160/90
- 160/110
- 160/125
- 160/140
- 200/160

RUBBER GASKET



Diameter
Ø (mm)

- 50
- 63
- 75
- 90
- 110
- 125
- 140
- 160
- 200

METAL WATER LINE BALL



Diameter
r Ø
(mm)

- 63
- 75
- 90
- 11
- 0

MOTOPUMP CONNECTORS



Diameter
Ø (mm)

- 75
- 90-3'
- 90-4'
- 110
- 125
- 140
- 160
- 200

PLASTIC WATER LINE BALL



Diameter Ø
(mm)

- 75
- 90
- 11
- 0

RISER



Diameter
r Ø
(mm)

- 32/25
- 32/50
- 32/60
- 32/100

VALVE





Diameter Ø
(mm)


- 3
- 2



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