

**POLIRAN**

**Drip-Line  
with Flat Dripper**



**100% Virgin Raw Material**

## The Special Functions

- **Pressure Compensating**

Inside each of these drippers, there is a special silicone diaphragm that regulates the output flow rate quickly and precisely, maintaining a constant size and number of water droplets. This function creates a small number of large-sized droplets under low pressure and a large number of small-sized droplets under high pressure.

- **Non-Drain**

This mechanism stops the water flow at a pressure of 0.2 to 0.3 bar. Therefore, preventing pipe drainage between two irrigation cycles and allowing the next irrigation operation to be conducted simultaneously along the laterals. The Non-Drain property ensures uniform and precise distribution of water, fertilizer, and nutrients, enabling their optimal use in greenhouses and pulse irrigation (precision irrigation) conditions.

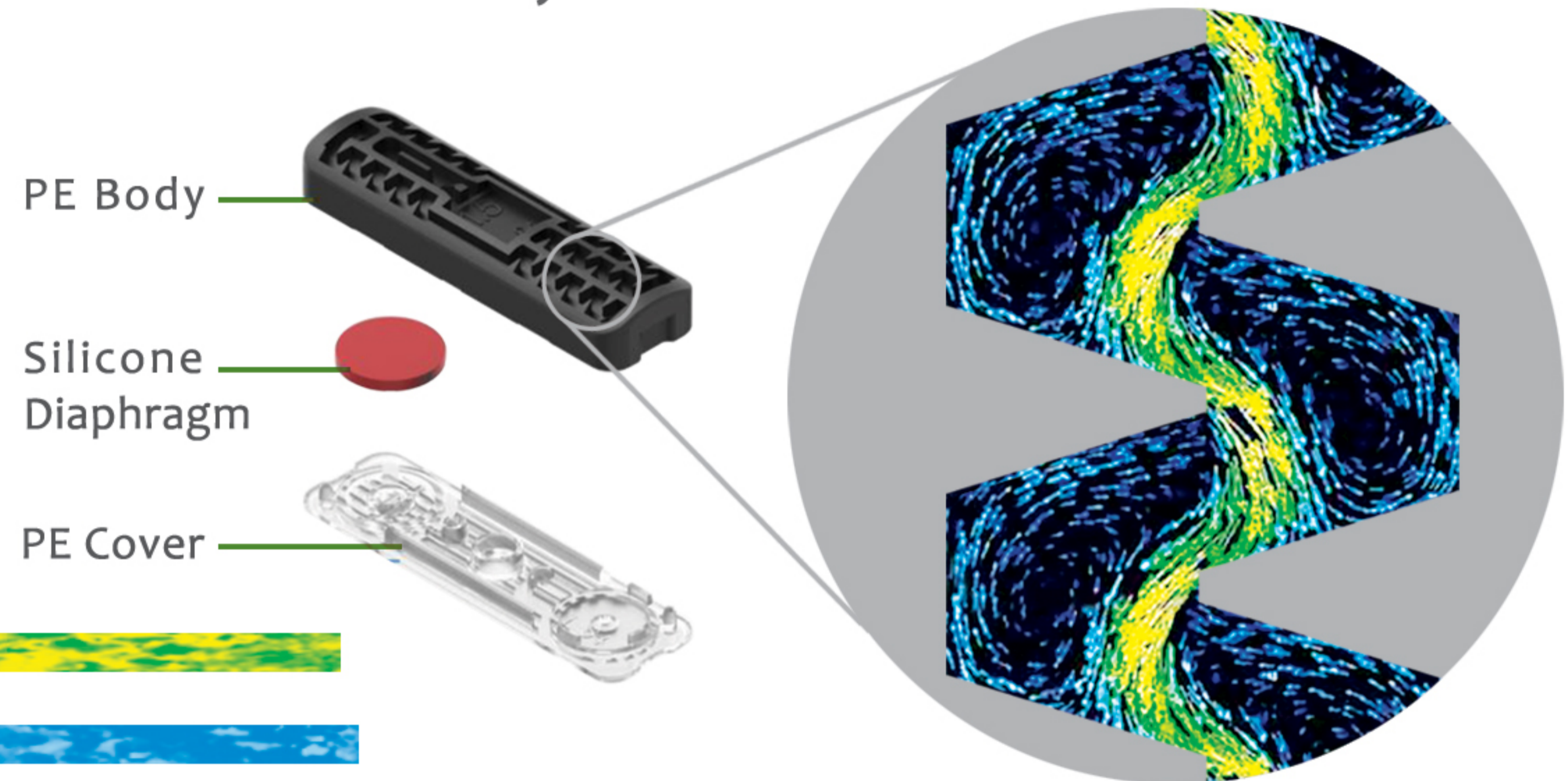
- **Anti-Siphon**

The Anti-Siphon system prevents the suction of contaminations and soil particles into the pipe when the pump is turned off. This feature ensures maximum protection against clogging of the drippers and makes it possible to be used in subsurface irrigation.

- **Self-Cleaning**

The unique design of the labyrinths creates two continuously turbulent flows.

First flow is between adjacent teeth, and the other flow is between teeth in one row and the adjacent rows. It guarantees maximum self-cleaning and anti-clogging functions.



Fast central flow

Cyclone turbulence, self-cleaning flow



16 mm

Available in different flow rates and favorite spacing on request



20 mm

Available in different flow rates and favorite spacing on request

## POLIRAN DRIP-LINE WITH PC / AS / ND FLAT DRIPPER

This Product is the latest generation of drip-lines, specially designed for drip irrigation. It has been introduced to the market after cylindrical drippers. This dripper is the most advanced dripper in the world at the moment. The advanced technology for producing this specific type of drip lines is currently exclusive to a few countries in the world.

It has a diaphragm that adjusts the size and number of droplets within a wide range of pressure variations, ensuring a constant and uniform water supply. It's an anti-siphon dripper that means it prevents creating any type of suction so dust and soils particles cannot enter the pipe anyway. It is also a non-drain dripper. The water stops flowing through the drippers when the pressure drops to 0.2- 0.3 bar as a result, the driplines remain full of water during irrigation intervals. It's unique and precise labyrinth design creates two turbulent flows, ensuring maximum self-cleaning and high clog resistance. It can be used both on surface and subsurface irrigation systems.

### Features

- Pressure compensating (PC), maintaining consistent flow rates of droplet dispensers across a wide range of pressure variations, such as, steep slopes, and long laterals
- Anti-Siphon (AS), preventing the entry of dust and soil particles into the drippers during suction events in pipelines, such as pump shutdown
- Non-Drain (ND), preventing water discharge between two irrigations enhances excellent uniformity of water emission along the laterals, leading to increased yield
- subsurface application
- The maximum self-cleaning ability is achieved due to the creation of turbulent dual flows in the drippers
- Different thickness and favorite spacing available on request in size 16 and 20 mm
- The production of drippers with different and non-uniform spacing on a single roll is possible (can be produced on request with unequal spacing)
- The capability to be used long laterals so main and sub-main pipeline will be required
- The utilization of the best and highest quality raw materials ensures precise and long-term functionality
- Resistant to acids and chemicals used in agriculture
- UV resistant
- Suitable for orchards, greenhouses, and perennial row crops

### Specification

Nominal Diameter	(mm)	16	20
Flow Rate	(l/h)	2.4, 4	
Wall Thickness	(mm)	0.6 - 1.2	
Pressure Range	(bar)	0.8 - 3.5	
Operating Pressure Range	(bar)	0.3 - 0.5	
Closing Pressure	(bar)	0.2 - 0.3	
Recommended Filtration		150 mesh ( 100 micron )	



Maximum recommended POLIRAN drip-line length on flat terrain

Nominal Diameter (mm)	Internal Diameter (mm)	Wall Thickness (mm)	Flow Rate l/h	Dripper Spacing ( cm )														Pressure bar
				10	15	20	25	30	33	40	50	60	75	80	90	100		
16	14.2	0.9	2.4	35	50	64	77	89	96	112	135	155	181	190	208	225	1.5	
				50	72	92	110	129	138	164	194	222	263	276	302	325	3	
			4	23	34	44	53	61	66	77	92	105	124	130	142	153	1.5	
				33	48	63	75	87	95	111	132	152	180	188	204	227	3	
	14	1	2.4	34	49	63	75	87	94	110	132	152	176	185	202	219	1.5	
				49	71	90	107	126	134	160	190	217	257	270	295	318	3	
			4	22	33	43	52	59	64	75	90	102	122	126	138	149	1.5	
				32	48	62	73	86	93	109	129	149	175	183	199	221	3	
	13.8	1.1	2.4	33	48	61	73	85	92	107	129	148	172	180	196	213	1.5	
				48	70	88	105	123	131	156	185	212	251	264	288	310	3	
			4	21	32	42	50	57	62	73	87	99	119	123	134	145	1.5	
				31	47	60	71	84	90	106	125	145	171	179	194	216	3	
	13.6	1.2	2.4	32	47	60	71	83	89	104	126	145	168	176	191	208	1.5	
				47	69	86	103	120	128	153	181	207	245	257	280	302	3	
			4	20	31	41	49	55	60	71	85	96	116	119	130	141	1.5	
				30	46	59	69	82	87	104	123	142	167	175	189	210	3	
	20	17.8	1.1	2.4	58	82	102	122	141	152	175	207	235	277	288	312	338	1.5
					82	117	148	178	204	220	254	300	342	402	420	457	495	3
				4	39	56	69	84	97	105	122	143	163	191	200	218	235	1.5
					57	81	101	122	139	150	173	205	234	276	290	314	338	3
17.6		1.2	2.4	57	80	100	119	138	148	171	203	229	271	281	304	330	1.5	
				80	115	145	175	200	216	249	294	335	394	411	448	485	3	
			4	38	55	67	82	95	103	120	140	161	187	196	214	231	1.5	
				56	80	99	120	136	147	169	201	229	272	285	308	333	3	

