Junior™

Product certified according to ISO 9261

NORMAL COEXTRUDED DRIPLINE

JUNIOR™, the result of Irritec research, is the technological answer to the new requirements of the drip irrigation market. It is versatile, reliable and unexpensive.
JUNIOR™ consists of a polyethylene pipe with an incorporated dripper manufactured by a coextrusion process.
JUNIOR™ offers excellent resistance to the thermal and mechanical stresses, which do not alter its performance. The most important innovation is the dripper that controls the flow-rate. The technology applied to design and production allowed to obtain a dripper with excellent hydraulic characteristics permitting to reach longer branch lengths, with high emission uniformity performance.

Characteristics and advantages

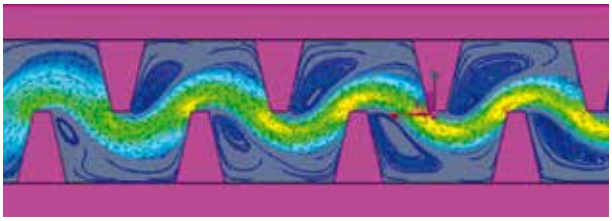
• The dripper is only 32 mm long and generates minimum pressure losses allowing longer run lengths;
• The dripper's inlet filter reduces clogging possibilities when water quality is poor;
• The labyrinth of the turbulent flow dripper , designed to guarantee emission uniformity, allows minimum flow variations when varying working pressure;
• The drip points of the dripper allow a quick and easy installation without checking the emission point position and secure pipe emptying at the end of the irrigation cycle.

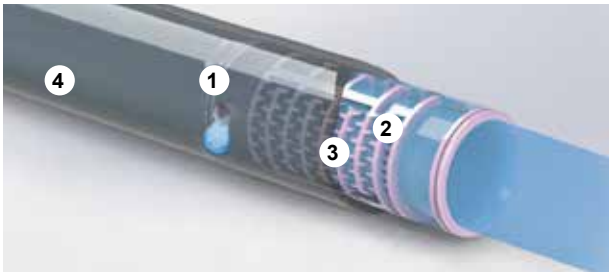
Applications

Tree crops and orchards | Vineyards | Olive groves | Greenhouse soil agriculture | Nurseries | Hedges, treeds and flowerbeds

It can be used on flat land or with minimal slope.

Turbulent flow labyrinth





1 - Exit holes

2 - Inlet filter
with large filter surface

3 - Turbulent flow labyrinth
with low sensitivity to pressure

4 - Polyethylene pipe

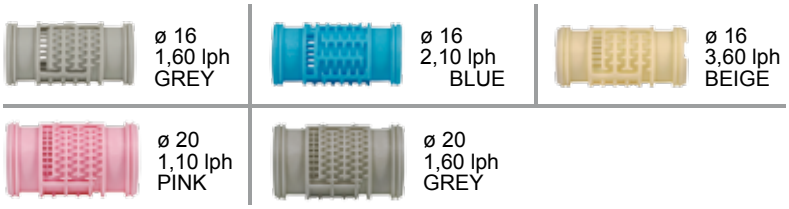
PE-pipe characteristics

Nominal ø	Inside ø	Price list ref.	Outside ø	Wall thickness		Max. working pressure		Kd
mm	**mm**	**-**	**mm**	**mil**	**mm**	**bar**	**psi**	**-**
16	13,8	FAJA25	15,0	25	0,60	2,0	29	0,25
		FAJA35	15,6	35	0,90	3,0	43	
		FAJA44	16,0	44	1,10	4,0	58	
20	17,7	FAJB35	19,5	35	0,90	3,0	43	0,15
		FAJB47	20,1	47	1,20	4,0	58	

Dripper characteristics

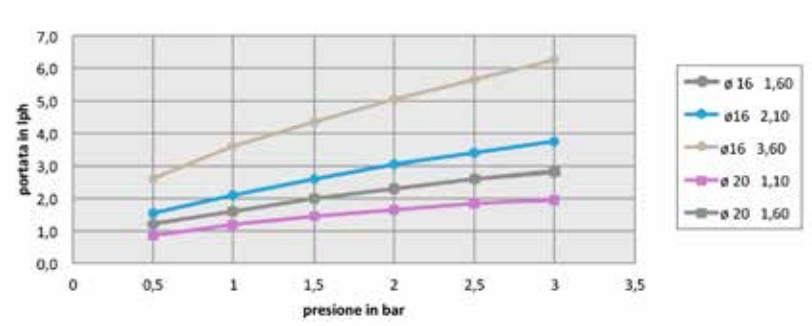
Nominal ø	Nominal flow-rate	Labyrinth dimensions in mm			Inlet filter		Flow equation		Recommended filtration	CV
mm	lph a 1,0 bar	Depth	Width	Lenght	Area mm²	No.of holes	k	x	mesh	%
16	1,60	0,85	0,8	94	4,3	5	0,57	0,46	155	≤ 3
	2,10	0,9	0,9	70	12	20	0,66	0,50	120	≤ 3
	3,60	1,25	1,2	94	6,3	5	1,13	0,50	120	≤ 3
20	1,10	0,9	0,7	120	10,0	16	0,36	0,48	155	≤ 3
	1,60	0,9	0,8	110	6,0	7	0,57	0,46	155	≤ 3

Available flow-rates



Pressure - Flow Rate Ratio, according to thickness of the piping (mil)

Nominal ø	Nominal flow-rate	Wall thickness	Pressure (bar)					
mm	lph	mil	0,5	1	1,5	2	2,5	3
16	1,60	35	1,21	1,61	1,98	2,29	2,57	2,81
		44	1,15	1,52	1,92	2,22	2,50	2,72
	2,10	35	1,53	2,08	2,58	3,03	3,41	3,73
		44	1,42	1,98	2,47	2,95	3,30	3,63
	3,60	35	2,61	3,57	4,35	5,06	5,66	6,22
		44	2,55	3,51	4,27	4,92	5,50	6,05
20	1,10	35	0,84	1,19	1,43	1,63	1,82	1,94
		47	0,77	1,09	1,34	1,52	1,69	1,8
	1,60	35	1,21	1,61	1,98	2,30	2,58	2,82
		47	1,14	1,51	1,90	2,21	2,49	2,71



Recommended lengths in meters, according to E.U.

JUNIOR 16 mm										
Flow-rate lph	E.U.%	Spacing (cm)								
		20	30	40	50	60	75	100	125	150
1,60	90	82	108	131	152	171	198	239	276	310
	85	102	134	162	187	211	244	294	340	382
2,10	90	69	91	110	128	144	166	200	231	260
	85	86	112	136	158	178	206	248	286	322
3,60	90	49	64	78	90	101	117	141	163	184
	85	60	79	96	111	125	145	175	202	227

JUNIOR 20 mm										
Flow-rate lph	E.U.%	Spacing (cm)								
		20	30	40	50	60	75	100	125	150
1,10	90	163	214	258	298	336	388	467	540	607
	85	201	264	319	369	415	480	578	667	750
1,60	90	130	170	205	237	267	308	371	425	477
	85	160	209	253	292	329	380	458	524	589

E.U.= emission uniformity
• Inlet pressure = 1,0 bar *• Slope=0*