Turbo Excel Drip line

Superior labyrinth design for exceptional accuracy, clogging resistance and reliability

Turbo Excel Drip line

- Very low CV guarantees accurate performance
- Closer dripper spacing from 15 cm supports successful germination and improved irrigation management
- Longer lateral length and higher accuracy with an excellent dripper exponent

NaanDan by Rivulis

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Turbo Excel - superior labyrinth design for exceptional accuracy, clogging resistance and reliability

Turbo Excel is a thin & medium wall Non-PC flat drip line that features an innovative cascade labyrinth design, setting new standards in clog resistance and ensuring exceptional accuracy and consistent performance..

Turbo Excel incorporates a spacial design to minimize root intrusion and sand suction, while precision laser drilled outlets guarantee uniform and clear openings. The closer dripper spacing from 15 cm supports successful germination and enhanced irrigation management.

With a very low CV ensuring accurate performance, Turbo Excel employs advanced quality-control technology for reliability. Its longer lateral length and higher accuracy, coupled with an excellent dripper exponent, make it a standout choice for precision irrigation.

Turbo Excel is ideal for sugarcane, biofuel crops, vegetables, flowers, and other row crops requiring low discharge and close dripper spacing.

4.0 l/h

2.2 l/h

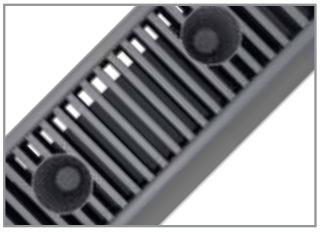
1.6 l/h

1.2 l/h

0.8 l/h

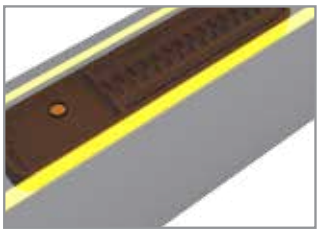
Innovative cascade labyrinth

Three dimensional inlet filter

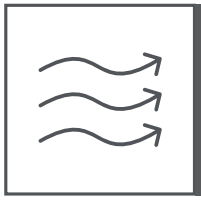


Prevention of sand suction

Laser drilled outlet hole



Technical data



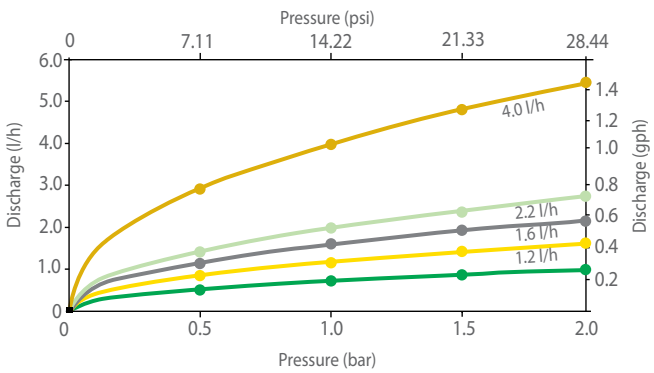
Flow rate:
0.8, 1.2, 1.6, 2.2, 4.0 l/h

Technical data

Nominal diameter	Wall thickness		OD	ID	Max. pressure	KD	Connectors type		Packaging and shipping				
(mm)	(mm)	(mil)	(mm)	(mm)	(bar)		Barb	Tape	Standard coil length (m)	Coils per pallet	Coils per 20 ft. container	Coils per 40 ft. container	Coils per 40 ft. HC container
12	0.33	13	12.46	11.8	1.5	0.22		•	2500	16	360	720	720
12	0.38	15	12.56	11.8	2.0	0.22		•	2000	16	360	720	720
16	0.15	6	16.40	16.1	1.0	0.1		•	3000	16	360	720	720
16	0.20	8	16.48	16.1	1.2	0.1		•	3000	16	360	720	720
16	0.25	10	16.60	16.1	1.4	0.1		•	2250	16	360	720	720
16	0.33	13	16.76	16.1	1.5	0.1		•	1800	16	360	720	720
16	0.38	15	16.86	16.1	1.8	0.1		•	1500	16	360	720	720
22	0.20	8	22.60	22.2	1.0	0.095		•	2000	16	360	720	720
22	0.25	10	22.70	22.2	1.3	0.095		•	1500	16	360	720	720
22	0.33	13	22.86	22.2	1.5	0.095		•	1250	16	360	720	720
22	0.38	15	22.96	22.2	1.8	0.095		•	1000	16	360	720	720

for any other diameter and wall thickness combinations please contact us

Flow Rate vs. Pressure Graph



Flow Rate vs. Pressure Rate

Pressure (bar)	Nominal Flow Rate (l/h)				
	0.8 l/h	1.2 l/ h	1.6 l/h	2.2 l/h	4.0 l/h
	6 - 15 mil	6 - 15 mil	6 - 15 mil	6 - 15 mil	6 - 15 mil
0.50	0.52	0.8	1.1	1.5	2.9
0.70	0.61	1.0	1.2	1.7	3.4
1.00	0.72	1.1	1.5	2.0	4.0
1.20	0.78	1.2	1.6	2.2	4.4
1.50	0.87	1.4	1.8	2.4	4.8
k	0.72	1.14	1.46	2.02	4.02
x	0.47	0.46	0.47	0.47	0.45

k - Emitter flow constant; x - Emitter exponent

Nominal Ø	Wall thickness		Internal Ø	Maximum operating pressure	Roll Length (according to emitter spacing)	Flow rate @ 1 bar	Maximum Drip Line Length | Calculated at maximum Operating Pressure for 10% FV | Slope: 0%									
							Spacing between drippers (cm)									
							15	20	30	40	50	60	70	80	90	100
(mm)	mm	(mil)	(mm)	(bar)	(m)	(l/h)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)
12	0.33	13	11.8	1.5	2500	0.78	56	69	91	112	131	146	164	178	192	207
						1.2	42	52	69	84	98	110	123	134	146	156
						1.53	36	45	60	73	85	96	106	116	126	135
						2.1	29	37	49	60	70	79	88	96	104	111
						4	19	23	31	38	45	50	56	62	67	71
	0.38	15		2	2000	0.78	56	69	91	112	131	146	164	178	192	207
						1.2	42	52	69	84	98	110	123	134	146	156
						1.53	36	45	60	73	85	96	106	116	126	135
						2.1	29	37	49	60	70	79	88	96	104	111
						4	19	23	31	38	45	50	56	62	67	71
16	0.15	6	16.1	1	3000	0.78	185	223	289	349	405	437	482	525	566	605
						1.2	73	91	120	145	171	192	212	232	251	269
						1.53	64	78	104	127	148	166	184	201	217	233
						2.2	52	64	86	104	121	137	151	166	179	191
						4	34	41	55	67	78	88	97	106	114	123
	0.2	8		1.2	3000	0.78	185	223	289	349	405	437	482	525	566	605
						1.2	73	91	120	145	171	192	212	232	251	269
						1.53	64	78	104	127	148	166	184	201	217	233
						2.2	52	64	86	104	121	137	151	166	179	191
						4	34	41	55	67	78	88	97	106	114	123
	0.25	10		1.4	2250	0.78	185	223	289	349	405	437	482	525	566	605
						1.2	73	91	120	145	171	192	212	232	251	269
						1.53	64	78	104	127	148	166	184	201	217	233
						2.2	52	64	86	104	121	137	151	166	179	191
						4	34	41	55	67	78	88	97	106	114	123
	0.33	13		1.5	1800	0.78	185	223	289	349	405	437	482	525	566	605
						1.2	73	91	120	145	171	192	212	232	251	269
						1.53	64	78	104	127	148	166	184	201	217	233
						2.2	52	64	86	104	121	137	151	166	179	191
						4	34	41	55	67	78	88	97	106	114	123
	0.38	15		1.8	1500	0.78	185	223	289	349	405	437	482	525	566	605
						1.2	73	91	120	145	171	192	212	232	251	269
						1.53	64	78	104	127	148	166	184	201	217	233
						2.2	52	64	86	104	121	137	151	166	179	191
						4	34	41	55	67	78	88	97	106	114	123
22	0.2	8	22.2	1	2000	0.78	185	223	289	349	405	437	482	525	566	605
						1.2	140	169	217	265	302	343	379	410	445	475
						1.53	122	145	190	229	265	297	328	357	381	412
						2.2	100	121	157	189	218	245	270	290	317	339
						4	64	78	100	121	140	157	174	189	204	218
	0.25	10		1.3	1500	0.78	185	223	289	349	405	437	482	525	566	605
						1.2	140	169	217	265	302	343	379	410	445	475
						1.53	122	145	190	229	265	297	328	357	381	412
						2.2	100	121	157	189	218	245	270	290	317	339
						4	64	78	100	121	140	157	174	189	204	218
	0.33	13		1.5	1250	0.78	185	223	289	349	405	437	482	525	566	605
						1.2	140	169	217	265	302	343	379	410	445	475
						1.53	122	145	190	229	265	297	328	357	381	412
						2.2	100	121	157	189	218	245	270	290	317	339
						4	64	78	100	121	140	157	174	189	204	218
	0.38	15		1.8	1000	0.78	185	223	289	349	405	437	482	525	566	605
						1.2	140	169	217	265	302	343	379	410	445	475
						1.53	122	145	190	229	265	297	328	357	381	412
						2.2	100	121	157	189	218	245	270	290	317	339
						4	64	78	100	121	140	157	174	189	204	218

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