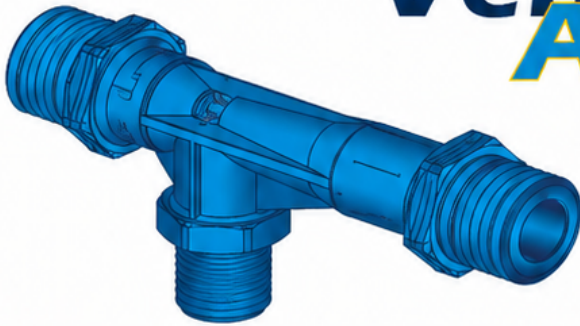


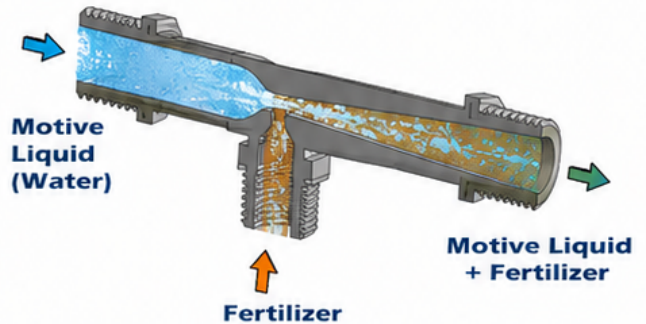
Venturi ALFA

HELIX
HYDRO

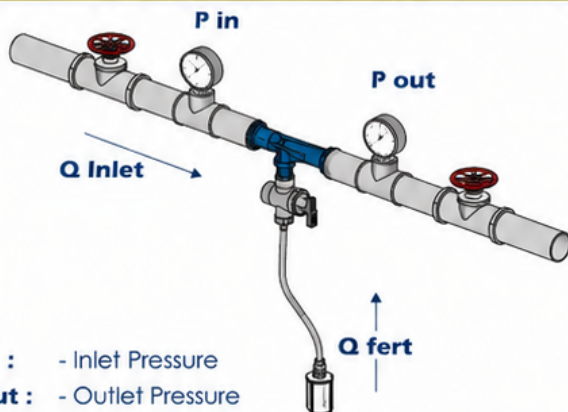


The Venturi ALFA injectors are extensively used for the application of liquid fertilisers and agricultural chemicals into a pressurised irrigation system. The chemically resistant materials of construction makes them ideal for most agricultural chemicals including acids and liquid chlorine. They can also be safely used in many industrial applications.

The injectors use the Venturi tube principle, they have no moving parts and therefore they are virtually maintenance free. They do not require any source of energy, they utilise a minimal amount of differential pressure (P) between the inlet and outlet sides, whilst the flow rate of the injected fluid varies according to each model and the inlet pressure/flow rate.

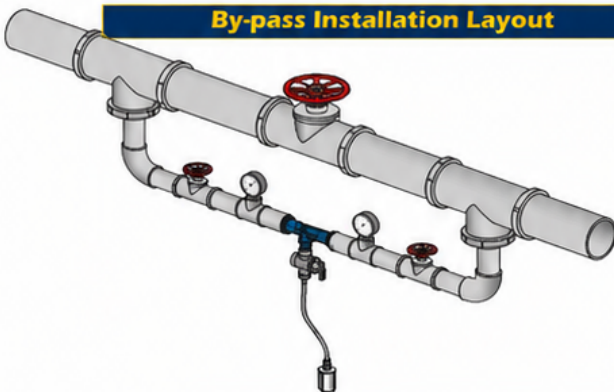


In-line Installation Layout

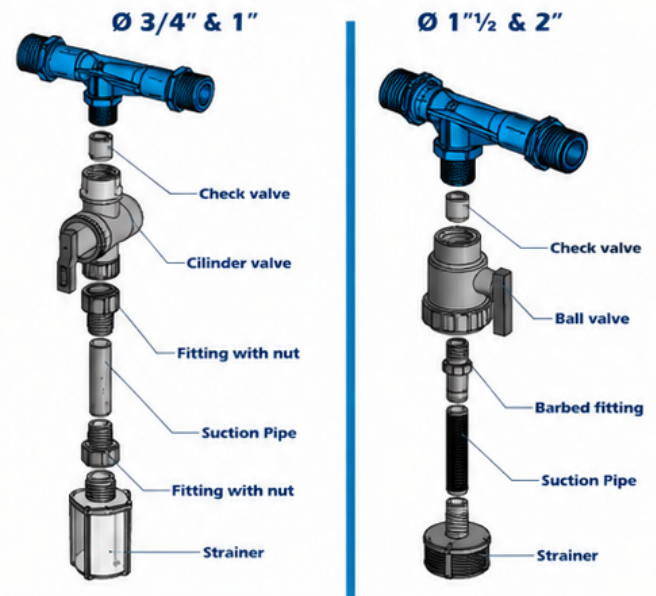


- P in :** - Inlet Pressure
P out : - Outlet Pressure
Q Inlet : - Injector Inlet Water Flow Rate
Q fert : - Fertilizer Injection Flow Rate

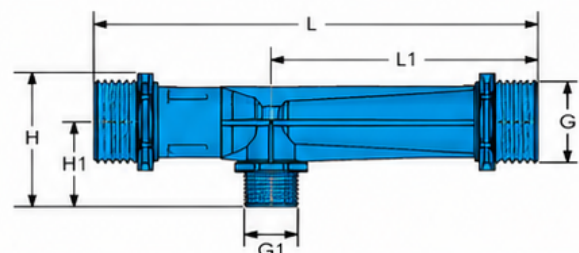
By-pass Installation Layout



Kit as Supplied



Dimensions



Cat. No.	G	G1	L	L1	H	H1
VENT 20	3/4"	1/2"	139	89	63	48
VENT 25	1"	1/2"	168	94	66	48
VENT 40	1 1/2"	3/4"	278	166	74	49
VENT 50	2"	1"	300	180	95	60

Helix Hydro, 23 Sir Laurence Drive Seaford Vic. 3198 Ph: 03 9580 2122

Injector Performance Table

P in P out		Ø 3/4"		Ø 1"		Ø 1" 1/2		Ø 2"		P in P out		Ø 3/4"		Ø 1"		Ø 1" 1/2		Ø 2"	
(bar)	(bar)	Q inlet (l/min)	Q fert (Lt/h)	Q inlet (l/min)	Q fert (Lt/h)	Q inlet (l/min)	Q fert (Lt/h)	Q inlet (l/min)	Q fert (Lt/h)	(bar)	(bar)	Q inlet (l/min)	Q fert (Lt/h)	Q inlet (l/min)	Q fert (Lt/h)	Q inlet (l/min)	Q fert (Lt/h)	Q inlet (l/min)	Q fert (Lt/h)
0,5	0	10	145	48	529	63	800	172	2640	6	0	33	86	120	500	203	1200	510	2640
0,75	0	13	193	55	540	82	1000	205	2640		1	33	86	120	500	203	1200	510	2640
1	0	15	174	59	550	95	1200	240	2640		2	33	86	120	500	202	1150	505	2640
	0,25	15	150	59	550	86	800	238	2640		3,5	33	86	120	500	202	1150	500	2000
	0,5	15	138	55	375	86	800	235	2640		3,75	33	86	120	500	202	1150	490	1250
1,5	0	18	144	67	540	111	1200	280	2640	4	33	86	120	500	199	960	490	800	
	0,5	18	144	67	540	111	1200	278	2640	4,25	33	83	119	480	197	670			
	0,75	18	130	62	480	106	945	265	2100	4,5	33	55	119	480	196	330			
	1	18	80	62	300	100	480	250	1058	4,75	33		118	340					
2	0	21	130	75	530	124	1200	315	2640	6,5	0	34	81	124	500	210	1200	530	2640
	0,5	21	130	75	530	124	1200	315	2640		1	34	81	124	500	210	1200	530	2640
	0,75	21	130	75	530	124	1200	315	2640		2	34	81	124	500	210	1200	530	2640
	1	21	126	75	530	124	1150	310	2640		3	34	81	124	500	209	1150	520	2640
	1,25	21	126	72	400	124	750	300	2100		3,25	34	81	124	500	209	1150	515	2200
2,5	0	23	118	82	530	136	1200	335	2640	3,75	34	81	124	500	209	1150	515	2050	
	0,5	23	118	82	530	136	1200	335	2640	4	34	81	124	500	209	1150	515	1900	
	0,75	23	118	82	530	136	1150	335	2640	4,25	34	81	124	500	209	1150	515	1650	
	1	23	118	82	530	136	1150	335	2640	4,5	34	81	124	500	209	1120			
	1,25	23	118	81	480	136	1150	330	2640	4,75	34	55	124	500	205	830			
3	0	25	110	88	520	148	1200	375	2640	7	0	36	81	129	500	217	1150	550	2640
	1	25	110	88	520	148	1200	370	2640		3	36	81	129	500	217	1150	545	2640
	1,25	25	110	88	470	148	1150	370	2640		4	36	81	129	500	217	1150	545	2640
	1,5	25	110	88	470	148	1150	370	2640		4,5	36	80	129	500	217	1150	545	2640
	1,75	25	110	88	470	147	1120	360	2200		4,75	36	78	129	500	214	970	540	2050
3,5	0	26	105	95	520	159	1200	405	2640	5	36	78	129	500	212	650	530	1200	
	1	26	105	95	520	159	1200	405	2640	5,25	36	65	127	400	210	315			
	1,5	26	105	95	520	159	1150	405	2640	5,5			126	280					
	2	26	105	95	520	159	1150	400	2640	5,75			124	150					
	2,25	26	101	93	430	153	840	390	1780	6									
4	0	28	100	100	520	168	1200	430	2640	7,5	0	37	80	133	500	225	1150	545	2640
	1	28	100	100	520	168	1200	430	2640		3	37	80	133	500	225	1150	545	2640
	2	28	100	100	520	168	1200	420	2640		4	37	80	133	500	225	1150	545	2640
	2,25	28	100	100	520	166	1150	420	2570		4,5	37	80	133	500	225	1150	545	2640
	2,5	28	98	100	520	165	1000	420	2570		4,75	37	80	133	500	225	1150	545	2150
4,5	0	29	96	106	500	178	1200	440	2640	5	37	80	133	500	223	1100	545	1800	
	1	29	96	106	500	178	1200	440	2640	5,25	37	80	133	500	220	790	545	1300	
	2	29	96	106	500	178	1200	435	2570	5,5	37	77	133	500	219	525	545	800	
	2,5	29	96	106	500	177	1150	435	2100	5,75	37	55	131	400	218	277			
	2,75	29	94	106	500	172	800	435	800	6			131	380					
5	0	31	92	110	500	186	1200	475	2640	8	0	38	78	137	500	231	1150	242	945
	1	31	92	110	500	186	1200	470	2640		3	38	78	137	500	231	1150	241	690
	2	31	92	110	500	186	1200	470	2640		4	38	78	137	500	231	1150	239	440
	3	31	92	110	500	186	1150	470	2640		5	38	78	137	500	231	1150	237	210
	3,25	31	91	110	500	181	900	465	1780		5,25	38	78	137	500	231	1150		
5,5	0	32	87	115	500	195	1200	500	2640	5,5	38	78	137	500	228	960			
	1	32	87	115	500	195	1200	490	2640	5,75	38	75	137	500	227	700			
	2	32	87	115	500	195	1200	490	2640	6	38	67	137	500	206	740			
	3	32	87	115	500	194	1150	490	2400	6,25			135	400					
	3,25	32	87	115	500	194	1150	490	2400	6,5			135	340					
6	0	33	86	120	500	203	1200	510	2640	8,5	0	39	76	141	490	238	1150		
	1	33	86	120	500	203	1200	510	2640		4	39	76	141	490	238	1150		
	2	33	86	120	500	202	1150	505	2640		5,5	39	76	141	490	238	1150		
	3,5	33	86	120	500	202	1150	500	2000		5,75	39	76	141	490	237	1120		
	3,75	33	86	120	500	202	1150	490	1250		6	39	76	141	490	237	1120		
7	0	34	81	124	500	210	1200	530	2640	9	0	40	75	145	490	244	1150		
	1	34	81	124	500	210	1200	530	2640		4	40	75	145	490	244	1150		
	2	34	81	124	500	210	1200	530	2640		5	40	75	145	490	244	1150		
	3	34	81	124	500	209	1150	520	2640		6	40	75	145	490	244	1150		
	3,25	34	81	124	500	209	1150	515	2200		6,25	40	75	145	490				
7,5	0	36	81	129	500	217	1150	550	2640	9,5	0	40	75	145	490				
	1	36	81	129	500	217	1150	545	2640		4	40	75	145	490				
	2	36	81	129	500	217	1150	545	2640		5	40	75	145	490				
	3	36	81	129	500	217	1150	545	2640		6	40	75	145	490				
	3,25	36	81	129	500	217	1150	545	2640		6,25	40	75	145	490				
8	0	37	80	133	500	225	1150	545	2640	10	0	40	75	145	490				
	1	37	80	133	500	225	1150	545	2640		4	40	75	145	490				
	2	37	80	133	500	225	1150	545	2640		5	40	75	145	490				
	3	37	80	133	500	225	1150	545	2640		6	40	75	145	490				
	3,25	37	80	133	500	225	1150	545	2640		6,25	40	75	145	490				
8,5	0	38	78	137	500	231	1150	242	945	10,5	0	40	75	145	490				
	1	38	78	137	500	231	1150	241	690		4	40	75	145	490				
	2	38	78	137	500	231	1150	239	440		5	40	75	145	490				
	3	38	78	137	500	231	1150	237	210		6	40	75	145	490				
	3,25	38	78	137	500	231	1150	237	210		6,25	40	75	145	490				
9	0	39	76	141	490	238	1150			11	0	40	75	145	490				
	1	39	76	141	490	238	1150				4	40	75	145	490				
	2	39	76	141	490	238	1150				5	40	75	145	490				
	3	39	76	141	490	237	1120				6	40	75	145	490				
	3,25	39	76	141	490	237	1120				6,25	40	75	145	490				
9,5	0	40	75	145	490	244	1150			11,5	0	40	75	145	490				
	1	40	75	145	490	244	1150				4	40	75	145	490				
	2	40	75	145	490	244	1150				5	40	75	145	490				
	3	40	75	145	490	244	1150				6	40	75	145	490				
	3,25	40	75	145	490	244	1150				6,25	40	75	145	490				
10	0	40	75	145	490	244	1150			12	0	40	75	145	490				
	1	40	75	145	490	244	1150				4	40	75	145	490				
	2	40	75	145	490	244	1150				5	40	75	145	490				
	3	40	75	14															

Tests carried out at 20° ± 2°C using water thermostabilize at 20° ± 2°C as suction liquid.