



PLASTIC-PUGLIA
Irrigation Systems since 1967 

value for
water



AquaPress® AS-ND

PRESSURE COMPENSATING DRIPLINE WITH FLAT PC AS-ND DRIPPER

■ APPLICATIONS

- Row crops • Vegetables • Flowers
- Open field • Greenhouse • Gardening

■ ADVANTAGES

Pressure compensating (PC) system with a silicone membrane maintains flow rate as operating pressure varies (0,50 ÷ 3,50 bar)

Anti-Siphon (AS) system in subsurface irrigation prevents soil aspiration into the emitter when the system stops

Non-Drain (ND) system prevents dripline emptying by closing the emitter below 0.20 bar. Allows for pulse irrigation thanks to the simultaneous opening of all emitters at a pressure of 0.70 bar

Wide range of thicknesses, flow rates, diameters and spacings for every drip irrigation need

5-year warranty against defects from raw materials (stress-cracking) depending on thickness

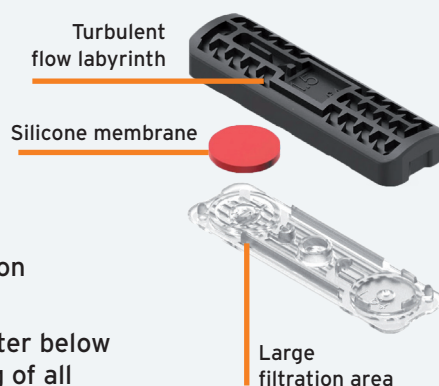
■ TECHNICAL CHARACTERISTICS

Nominal Diameter: 16/20/22/25 mm

Thickness: 15/18/24/36/45 mil (0,38/0,45/0,60/0,90/1,10 mm)

Available nominal flow rates: (1,0 bar):
1,00/1,60/2,40/3,80 l/h

Spacing: 15-150 cm



BLUE STRIPE REGISTERED TRADEMARK

CERTIFIED PRODUCT
 
UNI EN ISO 9261:2010

DIAMETER 16 mm TECHNICAL SPECIFICATIONS

*for a duration of about half an hour with open ends

Internal diameter	Thickness	Min working pressure	Max working pressure	Min washing pressure	Coil length°	Average coil length
16,1 mm	15 mil (0,38 mm)	0,50 bar (AS) 0,70 bar (ND)	1,60 bar	1,80 bar	1200 m	23,0 kg
16,1 mm	18 mil (0,45 mm)		1,80 bar	2,00 bar	800 m	19,0 kg
16,1 mm	24 mil (0,60 mm)		2,00 bar	2,20 bar	600 m	18,5 kg
14,2 mm	36 mil (0,90 mm)		3,00 bar	3,50 bar	400 m	16,0 kg
13,8 mm	45 mil (1,10 mm)		3,50 bar	4,00 bar	400 m	19,3 kg

° Spacing 15 cm: 15 mil= 1000 m

DIAMETER 20 mm TECHNICAL SPECIFICATIONS

*for a duration of about half an hour with open ends

Internal diameter	Thickness	Min working pressure	Max working pressure	Min washing pressure	Coil length	Average coil length
18,2 mm	36 mil (0,90 mm)	0,50 bar (AS) 0,70 bar (ND)	2,50 bar	3,00 bar	300 m	15,1 kg
17,8 mm	45 mil (1,10 mm)		3,00 bar	3,50 bar	300 m	18,2 kg

DIAMETER 22 mm TECHNICAL SPECIFICATIONS

*for a duration of about half an hour with open ends

Internal diameter	Thickness	Min working pressure	Max working pressure	Min washing pressure	Coil length	Average coil length
22,0 mm	15 mil (0,38 mm)	0,50 bar (AS) 0,70 bar (ND)	1,50 bar	1,70 bar	800 m	21,0 kg
22,0 mm	18 mil (0,45 mm)		1,70 bar	1,90 bar	700 m	21,0 kg
22,0 mm	24 mil (0,60 mm)		1,90 bar	2,10 bar	500 m	21,0 kg

DIAMETER 25 mm TECHNICAL SPECIFICATIONS

*for a duration of about half an hour with open ends

Internal diameter	Thickness	Min working pressure	Max working pressure	Min washing pressure	Coil length	Average coil length
22,8 mm	45 mil (1,10 mm)	0,50 bar (AS) 0,70 bar (ND)	3,50 bar	4,00 bar	200 m	15,3 kg

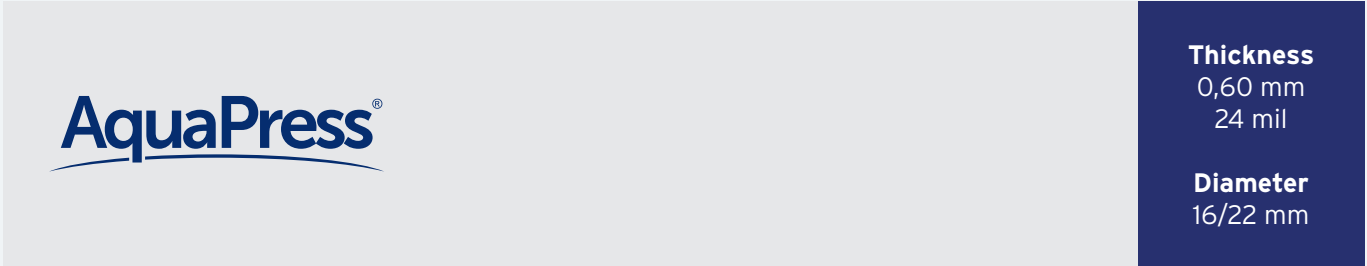
PRESSURE-FLOW RATE RELATION TESTS CARRIED OUT ON 10 MIL THICKNESS WITH WATER AT 20°C

Nominal flow rate l/h	Pressure bar				
	0,50	1,00	2,00	3,00	4,00
1,00	0,94	1,05	1,11	1,14	1,09
1,60	1,62	1,59	1,61	1,60	1,58
2,40	2,52	2,42	2,56	2,59	2,55
3,80	3,20	3,67	3,74	3,90	3,90

DRIPPER FEATURES

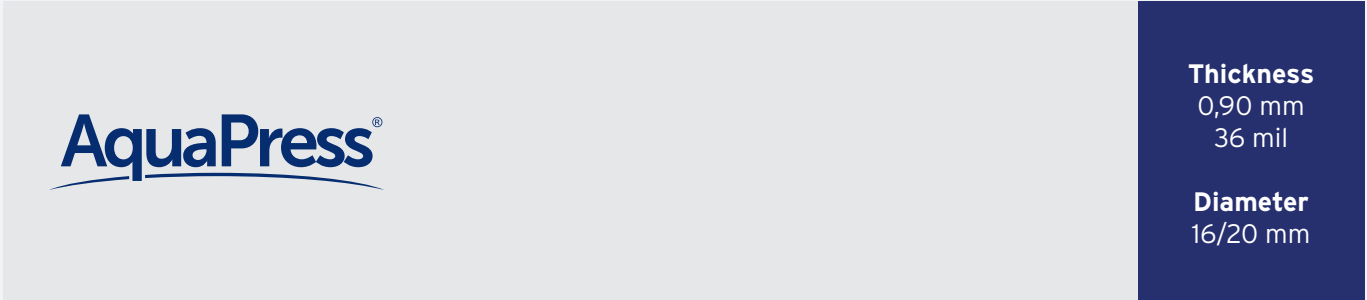
Nominal flow rate l/h	Labyrinth dimensions		Inlet filtering area		Recommended filtration	Flow equation		CV
	Depth mm	Width mm	no. of holes	area mm ²	mesh / micron	k	x	%
1,00	0,76	0,82	7	37,37	150/100	1,00	0,00	<3,9
1,60	0,85	1,06	7	37,37	150/100	1,60	0,00	<3,6
2,40	0,90	1,19	7	37,37	120/130	2,30	0,00	<3,8
3,80	0,90	1,30	7	37,37	120/130	3,60	0,00	<3,9

Also available in **AS-XR** version (16mm/45 mil and 20mm/45 mil) with copper oxide emitter ideal for preventing root intrusion in subsurface irrigation.



0,60 mm
24 mil

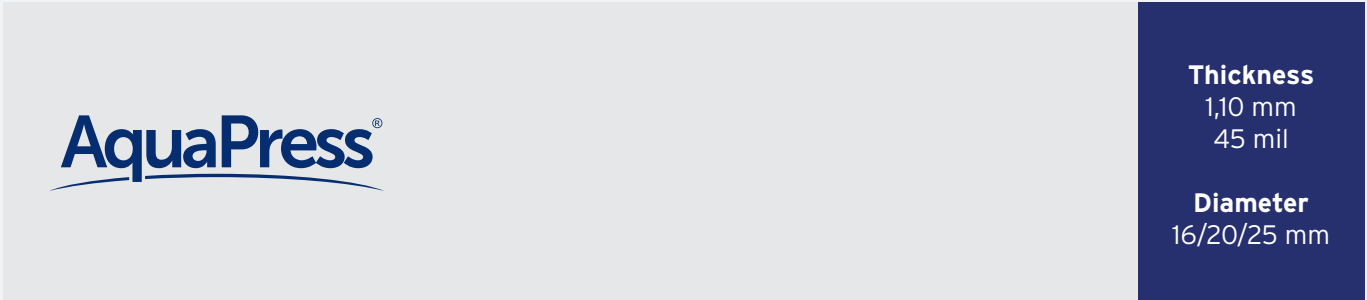
16/22 mm



0,90 mm
36 mil

16/20 mm

Ideal for sub-surface irrigation and long-cycle crops



1,10 mm
45 mil

16/20/25 mm

Suitable for sub-surface irrigation across a wide range of long-term agricultural crops

■ **PACKAGING** PALLET HEIGHT: 13 cm

Diameter	Thickness	Reel size	Pallet size	Reels per pallet	Reels per container			
mm	mil	cm	cm	pz.	20 ft	40 ft	40 ft HC	Truck
16	15	ø 57,5 h 27,0	115x115x148	20	320 (28+4)	640 (28+4)	720 (32+4)	792 (32+4)
	18		115x115x229	28+4				
	24		115x115x256	32+4				
22	15	ø 57,5 h 27,0	115x115x148	20	320 (28+4)	640 (28+4)	720 (32+4)	792 (32+4)
	18		115x115x229	28+4				
	24		115x115x256	32+4				

PACKAGING

Diameter	Thickness	Reel size	Reels per pallet	Reels per container			
mm	mil	cm	pz.	20 ft	40 ft	40 ft HC	Truck
16	36	ø 80,0 h 31,0	BULK	155	315	360	408
	45						
22	36						
	45						
25	45						

■ **16 mm / 15-18-24 mil** RECOMMENDED LATERAL LENGTH (m) RELATED TO EMISSION UNIFORMITY (EU%) ON FLAT GROUND

Nominal Flow Rate l/h	Emission Uniformity %	Spacing cm						
		20	30	40	50	60	75	100
1,00	1,0	164	212	266	316	362	427	525
	2,0	196	244	306	363	416	491	604
	3,0	221	269	338	401	460	542	668
	4,0	242	290	364	433	497	586	721
1,60	1,0	101	149	187	223	255	301	371
	2,0	128	176	221	263	302	356	439
	3,0	166	214	269	320	367	434	535
	4,0	194	242	304	362	416	491	606

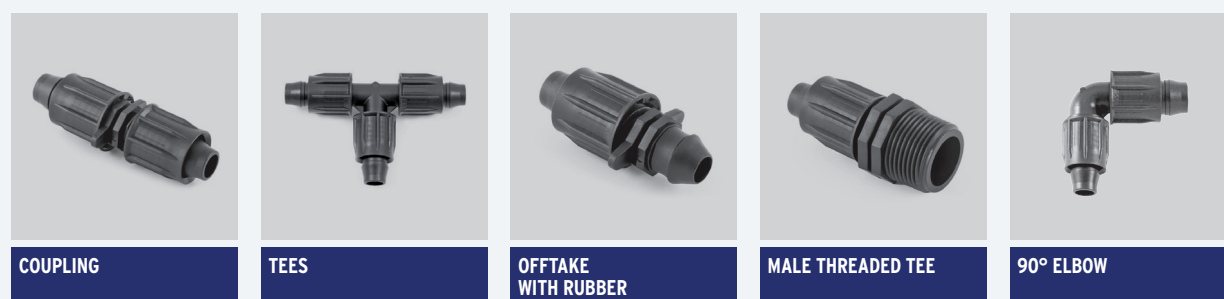
Nominal Flow Rate l/h	Emission Uniformity %	Spacing cm						
		20	30	40	50	60	75	100
2,40	1,0	64	112	141	168	193	227	280
	2,0	85	133	167	199	228	269	332
	3,0	113	161	203	241	277	327	403
	4,0	134	182	229	273	313	371	457
3,80	1,0	33	81	101	121	139	164	201
	2,0	50	95	120	143	164	193	238
	3,0	67	115	145	173	199	235	290
	4,0	82	130	164	196	225	266	328

■ **16 mm / 36-45 mil** RECOMMENDED LATERAL LENGTH (m) RELATED TO EMISSION UNIFORMITY (EU%) ON FLAT GROUND

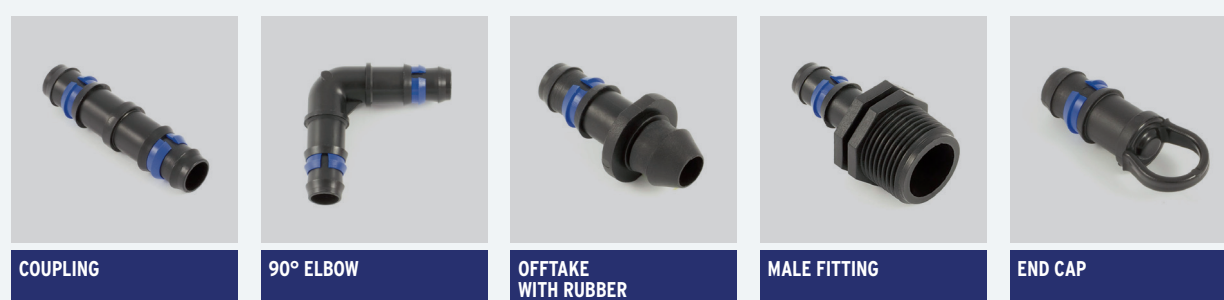
Nominal Flow Rate l/h	Emission Uniformity %	Spacing cm						
		20	30	40	50	60	75	100
1,00	1,0	119	167	208	246	281	332	406
	2,0	143	191	239	283	324	381	468
	3,0	180	228	285	338	386	455	558
	4,0	217	265	331	393	448	529	648
1,60	1,0	77	125	157	186	213	251	309
	2,0	100	148	186	220	252	297	365
	3,0	132	180	226	268	307	362	445
	4,0	156	204	256	304	348	410	505

Nominal Flow Rate l/h	Emission Uniformity %	Spacing cm						
		20	30	40	50	60	75	100
2,40	1,0	46	94	118	141	161	190	233
	2,0	64	112	140	166	190	224	276
	3,0	88	136	170	202	232	273	336
	4,0	105	153	192	229	262	309	380
3,80	1,0	20	68	85	101	116	137	167
	2,0	32	80	100	119	137	161	198
	3,0	49	97	122	145	166	196	241
	4,0	62	110	138	164	188	222	273

FITTINGS FOR DRIPLINE WITH NUT 16 and 20 mm



FITTINGS FOR DRIPLINE BARBED WITH RING 16 and 20 mm



■ **20 mm / 36-45 mil** RECOMMENDED LATERAL LENGTH (m) RELATED TO EMISSION UNIFORMITY (EU%) ON FLAT GROUND

Nominal Flow Rate l/h	Emission Uniformity %	Spacing cm						
		20	30	40	50	60	75	100
1,00	1,0	200	248	313	372	427	504	621
	2,0	247	295	359	427	490	579	714
	3,0	291	339	427	508	584	690	851
	4,0	335	383	495	589	678	799	988
1,60	1,0	132	180	227	270	311	367	453
	2,0	164	212	268	319	367	434	536
	3,0	210	258	326	388	447	529	653
	4,0	244	292	368	440	506	599	740

Nominal Flow Rate l/h	Emission Uniformity %	Spacing cm						
		20	30	40	50	60	75	100
2,40	1,0	88	136	171	204	235	278	343
	2,0	112	160	202	241	277	328	405
	3,0	146	194	245	293	337	399	493
	4,0	172	220	277	331	381	451	558
3,80	1,0	49	97	123	147	169	199	246
	2,0	67	115	145	178	199	236	291
	3,0	91	139	176	210	242	287	354
	4,0	109	157	199	238	274	324	401

■ **22 mm / 15-18-24 mil** RECOMMENDED LATERAL LENGTH (m) RELATED TO EMISSION UNIFORMITY (EU%) ON FLAT GROUND

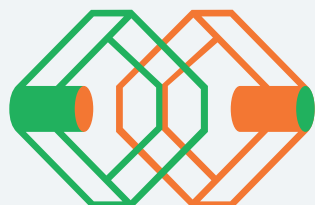
Nominal Flow Rate l/h	Emission Uniformity %	Spacing cm						
		20	30	40	50	60	75	100
1,00	1,0	299	347	439	525	604	716	887
	2,0	350	398	504	603	695	824	1020
	3,0	391	439	556	665	767	909	1127
	4,0	432	480	608	727	839	994	1230
1,60	1,0	195	243	308	369	425	505	626
	2,0	239	287	364	436	503	597	740
	3,0	301	349	442	530	611	726	901
	4,0	346	394	500	599	692	822	1021

Nominal Flow Rate l/h	Emission Uniformity %	Spacing cm						
		20	30	40	50	60	75	100
2,40	1,0	136	184	233	279	322	382	473
	2,0	168	216	274	329	379	451	559
	3,0	215	263	333	399	461	548	680
	4,0	248	396	376	451	521	620	769
3,80	1,0	83	131	167	200	230	274	340
	2,0	107	155	197	236	272	323	401
	3,0	140	188	239	286	331	393	488
	4,0	164	212	270	324	374	444	552

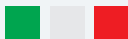
■ **25 mm / 45 mil** RECOMMENDED LATERAL LENGTH (m) RELATED TO EMISSION UNIFORMITY (EU%) ON FLAT GROUND

Nominal Flow Rate l/h	Emission Uniformity %	Spacing cm						
		20	30	40	50	60	75	100
1,00	1,0	300	348	440	526	607	719	890
	2,0	351	399	506	604	696	826	1023
	3,0	426	474	601	719	829	983	1219
	4,0	501	549	696	834	962	1140	1415
1,60	1,0	205	253	320	384	442	525	651
	2,0	250	298	379	453	523	621	770
	3,0	315	363	460	551	635	755	937
	4,0	362	410	520	623	720	855	1062

Nominal Flow Rate l/h	Emission Uniformity %	Spacing cm						
		20	30	40	50	60	75	100
2,40	1,0	143	191	242	290	335	397	492
	2,0	177	225	285	342	394	469	581
	3,0	226	274	346	415	479	570	707
	4,0	260	308	391	469	542	645	800
3,80	1,0	88	136	174	208	239	285	354
	2,0	113	161	205	245	283	336	417
	3,0	148	196	249	297	344	409	508
	4,0	172	220	281	337	389	462	574



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