

# TECHNICAL DATA SHEET

## IDEAL SPRINKLERS

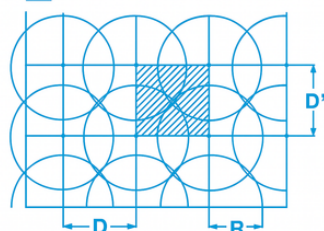




### GUIDE TO USING THE WORK DATA TABLES

<b><i>U</i></b>	<i>∅ of the main nozzle</i>
<b><i>H</i></b>	<i>pressure at the sprinkler</i>
<b><i>Q</i></b>	<i>flow rate</i>
<b><i>R</i></b>	<i>range</i>
<b><i>S</i></b>	<i>irrigated area</i>
<b><i>D</i></b>	<i>distance between sprinklers on the rain wing</i>
<b><i>D'</i></b>	<i>distance between two adjacent rain wings</i>
<b><i>I</i></b>	<i>hourly rainfall intensity</i>
○	<i>data relating to a single sprinkler</i>
△	<i>triangular sprinkler layout</i>
□	<i>square sprinkler layout</i>
▭	<i>rectangular sprinkler layout</i>

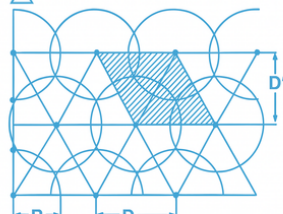
1 □



$D = D' = 1,45 R$

1) This arrangement has the disadvantage of wetting overly large surfaces twice and providing very uneven rainfall intensity

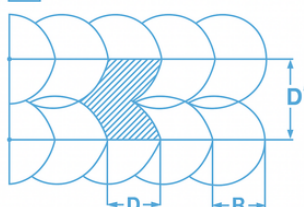
2 △



$D = 1,69 R \quad D' = 1,52 R$

2) This arrangement has the disadvantage of wetting overly large surfaces twice and providing very uneven rainfall intensity

3 □



$D = R \quad D' = 1,78 R$

3) This arrangement is very convenient for mobile systems operating with long- and medium-range sprinklers, as it allows the sprinklers and pipes to be moved onto dry ground



*IDEAL 60: The 'small' model in the series for low power or for fixed systems with medium head. Equipped with an adjustable jet breaker with fixed or intermittent settings, it provides excellent uniformity and gentle rainfall across the entire range, making it particularly suitable for irrigating newly sown land, sprouting crops, vegetables and very delicate plants.*

U Nozzle diameter		H Pressure		R Range		Q Flow rate			○ Data relating to 1 sprinkler		= Square layout		△ Triangular arrangement				
									S Surface area irrigated	I Intensity hourly	D <sub>1</sub> Distance between 2 wings contiguous rain showers	S Surface area irrigated	I Intensity hourly	D Sprinkler distance on the rain wing	D <sub>1</sub> Distance between 2 wings contiguous rain showers	S Surface area irrigated	I Intensity hourly
mm	inch	Kg/cm <sup>2</sup>	lbs/inch	m	feet	l/m in	m <sup>3</sup> /h	G.P.M	m <sup>2</sup>	mm/h	m	m <sup>2</sup>	mm/h	m	m	m <sup>2</sup>	mm/h
14		2	29	23	75	235	14,1	62	1661	8,4	33	1089	13	39	35	1365	10,3
		3	42	26	85	288	17,2	75	2122	8,1			12,5	44	39	1716	10
		4	56	29	95	334	20	88	2640	7,5			11,3	49	44	2156	9,2
		5	71	33	108	373	22,3	98	3419	6,5			10	55	50	2750	8,1
16	.63	2	29	25	82	296	17,7	77	1962	9	36	1296	13,6	42	38	1596	11
		3	42	27	88	362	21,7	95	2289	9,4	39	1521	14,2	45	41	1845	11,7
		4	56	32	104	420	25,2	110	3215	7,8	46	2116	11,9	54	48	2592	9,7
		5	71	36	118	468	28	123	4069	6,8	52	2704	10,3	60	54	3240	8,6
18		3	42	36	118	449	26,9	118	4069	6,6	52	2704	9,9	60	54	32440	8,3
		4	56	38	124	520	31,2	137	4534	6,8			10,3	64	57	3648	8,5
		5	71	40	131	582	34,9	153	5024	6,9			10,3	67	61	4087	8,5
		6	85	43	141	637	38,2	168	5805	6,5			9,9	72	65	4680	8,1
20	.78	3	42	36	118	537	32,2	141	4069	7,9	52	2704	11,9	60	54	3240	9,9
		4	56	40	131	622	37,3	164	5024	7,4	58	3364	11	67	61	4087	9,1
		5	71	44	144	677	40,6	178	6079	6,6	63	3969	10,2	74	66	4884	8,3
		6	85	47	154	762	45,7	201	6936	6,5	68	4624	9,8	79	71	5609	8,1
22		3	42	40	131	606	36,3	159	5024	7,2	58	3364	10,7	67	61	4087	8,8
		4	56	43	141	702	42,1	185	5805	7,2			10,9	72	65	4680	8,9
		5	71	6	150	784	47	206	6644	7			10,7	77	70	5390	8,7
		6	85	48	157	861	51,6	227	7234	7,1			10,8	81	73	5913	8,7
24	15/16	3	42	40	131	688	41,2	181	5024	8,2	58	3364	12,2	67	61	4087	10
		4	56	43	141	796	47,7	209	5805	8,2	62	3844	12,4	72	65	4680	10,1
		5	71	47	154	890	53,4	235	6936	7,6	68	4624	11,5	79	71	5609	9,5
		6	85	50	164	976	58,5	257	7850	7,4	72	5184	11,2	84	76	6384	9,1

The data in the table refer to sprinklers operating in calm air and with the jet breaker in the minimum interference position



*IDEAL 80: High-flow sprinkler for high and medium pressures with long range. Equipped with an adjustable jet breaker and fixed or intermittent interference, which allows for better jet atomisation. Therefore, it is very suitable for vegetables and very delicate crops. Circular and sector rotation at constant speed with easy-to-use sector adjustment, allowing quick installation and easy adjustment of the desired irrigation arc.*

U Nozzle diameter		H Pressure		R Range		Q Flow rate			○ Data relating to 1 sprinkler		= Square layout		△ Triangular arrangement				
									S Surface area irrigated	I Intensity hourly	D <sub>1</sub> Distance between 2 wings contiguous rain showers	S Surface area irrigated	I Intensity hourly	D Sprinkler distance on the rain wing	D <sub>1</sub> Distance between 2 wings contiguous rain showers	S Surface area irrigated	I Intensity hourly
mm	inch	Kg/cm <sup>2</sup>	lbs/inch	m	feet	l/m in	m <sup>3</sup> /h	G.P.M	m <sup>2</sup>	mm/h	m	m <sup>2</sup>	mm/h	m	m	m <sup>2</sup>	mm/h
22	0,86	4	56	45	147	701	42	184	6358	6.6	80	3600	11.6	76	68	5168	8.1
		4,5	66	46	150	744	44.6	196	6644	6.7			11.8	77	68	5236	8.5
		5	70	48	157	784	47	206	7234	6.4			11.5	81	73	5913	7.9
		6	85	50	164	861	51.6	227	7850	6.5			11.6	84	76	6384	8
24	0,9375	4	56	47	154	819	49.1	216	6936	7	80	3750	13	79	71	5609	8.7
		4,5	66	48	157	869	52.1	229	7234	7.2	85	4080	12.7	81	73	5913	8.8
		5	70	50	164	915	54.9	241	7850	6.9	89	4450	12.3	84	76	6384	8.6
		6	85	52	170	1004	60.2	264	8490	7	92	4784	12.5	87	79	6873	8.7
26	1	4	56	49	160	943	56.5	248	7539	7.4	87	4263	13.2	82	74	6068	9.3
		5	70	51	167	1054	52.2	273	8167	7.6			13.5	86	77	6622	9.4
		6	85	53	173	1155	69.3	304	8820	7.8			13.9	89	80	7120	9.7
		7	100	55	180	1246	74.7	328	9498	7.8			13.8	93	83	7719	9.6
28	1,1	4	56	48	157	1079	64.7	284	7234	8.9	85	4080	15.8	81	73	5913	10.9
		5	70	52	170	1205	72.3	318	8490	8.5	92	4784	15.1	87	79	6873	10.5
		6	85	54	172	1322	79.3	348	9156	8.6	96	5184	15.2	91	82	7492	10.6
		7	100	56	183	1426	85.5	376	9847	8.6	99	5544	15.4	94	85	7990	10.7
30	1,1875	4	56	52	170	1209	72.5	319	8490	8.5	92	4784	15.1	87	79	6873	10.5
		5	70	53	173	1351	81	356	8820	9.1			16.2	89	80	7120	11.3
		6	85	54	177	1481	88.8	390	9156	9.6			17.1	91	82	7462	11.9
		7	100	56	183	1598	95.8	421	9847	9.7			17.2	94	85	7990	11.9
32	1,25	5	70	54	177	1420	85.2	374	9156	9.3	96	5184	16.4	91	82	7462	11.4
		6	85	56	183	1560	93.6	411	9847	9.5	99	5544	16.8	94	85	7990	11.7
		7	100	60	196	1650	99	435	11304	8.7	106	6360	15.5	101	91	9191	10.7
		8	115	63	206	1782	107	470	12462	8.5	112	7056	15.1	106	95	10070	10.6

The data in the table refer to sprinklers operating in calm air and with the jet breaker in the minimum interference position.



*IDEAL 100: The most versatile high-capacity sprinkler for high pressures and long ranges, both fixed on pumps and on a lightweight 4-foot stand for hand transport. Circular and sector rotation at constant speed with easy-to-use sector adjustment, allowing quick installation and easy adjustment of the desired irrigation arc.*

U Nozzle diameter		H Pressure		R Range		Q Flow rate			○ Data relating to 1 sprinkler		= Square layout		△ Triangular arrangement				
									S Surface area irrigated	I Intensity hourly	D <sub>1</sub> Distance between 2 wings contiguous rain showers	S Surface area irrigated	I Intensity hourly	D Sprinkler distance on the rain wing	D <sub>1</sub> Distance between 2 wings contiguous rain showers	S Surface area irrigated	I Intensity hourly
mm	inch	Kg/cm <sup>2</sup>	lbs/inch	m	feet	l/m in	m <sup>3</sup> /h	G.P.M	m <sup>2</sup>	mm/h	m	m <sup>2</sup>	mm/h	m	m	m <sup>2</sup>	mm/h
		4	56	48	157	1136	68.7	299	7234	9.4	885	4080	16.6	81	73	5973	
		5	70	50	164	1269	76.1	334	7850	9.6			17	84	76	6384	
		6	85	52	170	1391	83.4	366	8490	9.8			17.4	87	79	6873	
		7	100	54	177	1501	90	396	9156	9.8			17.3	91	82	7462	
30	1.1875	4	56	50	164	1286	77.1	339	7850	9.8	89	4450	17.3	84	76	6384	12
		5	70	53	173	1437	86.2	379	8820	9.7	94	4982	17.3	89	80	7120	12.1
		6	85	58	190	1575	94.5	415	10562	8.9	103	5974	15.8	98	88	8624	10.9
		7	100	62	203	1700	102	448	12070	8.4	110	6820	14.9	104	94	9776	10.4
		5	70	54	177	1613	96.7	425	9156	10.5	96	5184	18.6	91	82	7462	
		6	85	61	200	1767	106	466	11683	9			16	103	92	6476	
		7	100	67	219	1906	114	501	14095	8			14.3	113	101	11413	
		8	113	75	246	2040	122	536	17662	6.9			12.2	126	114	14364	
34	1.34375	5	70	60	196	1796	107	470	11304	9.4	106	6360	16.8	101	91	9191	11.6
		6	85	63	206	1968	118	519	12462	9.4	112	7065	16.7	106	95	10070	11.7
		7	100	66	216	2123	127	558	13677	9.2	117	7722	16.4	111	100	11100	11.4
		8	113	69	226	2273	136	598	14949	9	122	8418	16.1	116	104	12064	11.2
		6	85	67	219	2165	130	572	14095	9.2	119	7973	16.3	113	101	11413	
		7	100	70	229	2335	140	616	15386	9			16.1	118	106	12508	
		8	113	73	239	2500	150	660	16733	8.9			15.9	123	111	13653	
		9	128	75	246	2651	159	699	17662	9			15.9	126	114	14364	
38	1.5	6	85	71	232	2389	143	629	15828	9	126	8496	16.8	120	107	12840	11.1
		7	100	74	242	2577	154	677	17194	8.9	131	9694	15.8	125	112	14000	11.1
		8	113	77	252	2759	165	726	18617	8.8	137	10540	15.6	130	117	15210	10.8
		9	128	79	259	2926	175	770	19596	8.9	140	11060	15.8	133	120	15960	10.9
		6	85	74	242	2622	157	690	17194	9.1	131	9694	16.1	125	112	14000	
		7	100	77	252	2829	169	743	18617	9			16	130	117	15210	
		8	113	79	262	3020	181	796	20096	9			15.9	135	121	16335	
		9	128	82	269	3212	192	844	21113	9			16.1	138	124	17112	

The data in the table refer to sprinklers operating in calm air and with the jet breaker in the minimum interference position.



*IDEAL 120: High-capacity sprinkler for high pressure and long range, to be permanently installed on a pump with a power consumption of over 100HP. Circular and sector rotation at constant speed with easy-to-use sector adjustment, allowing quick installation and easy adjustment of the desired irrigation arc.*

U Nozzle diameter		H Pressure		R Range		Q Flow rate			○ Data relating to 1 sprinkler		□ Square layout			△ Triangular arrangement			
									S Surface area irrigated	I Intensity hourly	D <sub>1</sub> Distance between 2 wings contiguous rain showers	S Surface area irrigated	I Intensity hourly	D Sprinkler distance on the rain wing	D <sub>1</sub> Distance between 2 wings contiguous rain showers	S Surface area irrigated	I Intensity hourly
mm	inch	Kg/cm <sup>2</sup>	lbs/inch	m	feet	l/m in	m <sup>3</sup> /h	G.P.M	m <sup>2</sup>	mm/h	m	m <sup>2</sup>	mm/h	m	m	m <sup>2</sup>	mm/h
34	1.34	6	85	65	213	1996	119	523	13266	8.9	115	7475	15.9	109	98	10682	11.1
		7	100	70	229	2153	129	567	15386	8.3			14.8	118	106	12508	10.3
		8	113	75	246	1305	138	607	17662	7.8			13.8	126	114	14364	9.6
		9	128	78	256	2445	146	642	19103	7.6			13.5	131	118	15458	9.4
36	1.42	6	85	66	216	2217	133	585	13677	9.7	117	7722	17.2	111	100	11100	11.9
		7	100	71	233	2392	143	629	15828	9	126	8946	15.9	120	108	12960	11
		8	113	77	252	2560	153	673	18617	8.2	137	10549	14.5	130	117	15210	10
		9	128	79	259	2715	163	717	19596	8.3	140	11060	14.7	133	120	15960	10.2
38	1.50	6	85	68	223	2447	146	642	14519	10	121	8228	11.7	115	103	11845	12.3
		7	100	73	239	2640	158	695	16733	9.4			16.6	123	111	13653	11.5
		8	113	78	256	2826	169	749	19103	8.8			15.7	131	118	15458	10.9
		9	128	81	265	2997	179	787	20601	8.6			15.3	136	123	16728	10.7
40	1.57	7	100	75	246	2899	174	765	17662	9.8	133	9975	17.4	126	114	14364	12.1
		8	113	80	262	3103	186	818	20096	9.2	142	11360	16.3	135	121	16335	11.3
		9	128	83	272	3291	197	866	21631	9.1	147	12201	16.1	140	126	17640	11.1
		10	142	85	278	3471	208	915	22686	9.1	151	12831	16.2	143	129	18447	11.2
42	1.65	7	100	76	249	3164	189	831	18136	18136	135	10260	18.4	128	115	14720	12.8
		8	113	81	265	3386	208	893	20601	20601			17.4	136	123	16728	12.1
		9	128	84	275	3591	215	946	22155	22155			17.1	142	127	18669	11.5
		10	142	86	282	3788	227	998	23223	23223			17.2	145	130	18850	12
44	1.73	7	100	77	252	3439	206	906	18617	18617	137	10549	19.5	130	117	15210	13.5
		8	113	82	269	3681	220	968	21113	21113	146	11972	18.3	138	124	17112	12.8
		9	128	85	278	3903	234	1029	22686	22686	151	12835	18.2	143	129	18447	12.6
		10	142	87	285	4117	247	1086	23766	23766	154	13398	18.4	147	132	19404	12.7
46	1.81	7	100	78	256	3723	223	981	19103	19103	138	10764	20.7	131	118	15458	14.4
		8	113	83	272	3985	239	1051	21631	21631			19.5	140	126	17640	13.5
		9	128	86	282	4226	253	1113	23223	23223			19.2	145	130	18850	13.4
		10	142	88	288	4458	267	1174	24316	24316			19.4	148	133	19684	13.5

The data in the table refer to sprinklers operating in calm air and with the jet breaker in the minimum interference position.