

WAVIN AS+
Product Guide

low noise soil & waste drainage



wavin





Wavin is one of the leading companies in the plastic pipe industry in Turkey. Our company offers a wide range of high-quality pipe and fittings system solutions for building and infrastructure. Our company, which has a history of more than half a century, started production in 1971 in Adana. Pilsa Plastik A.Ş. was purchased by Wavin B.V, the largest European company in its own field in the Netherlands in 2008.

In 2012, all Wavin companies joined the Mexichem family which is South America's giant petrochemicals and raw materials producer. Mexichem announced its new name as ORBIA in 2019. ORBIA, with its new changing business structure, provides professional support to its customers with its products and services in 5 main business lines: Building & Infrastructure, Flour, Datacom, Precision Agriculture and Polymer Solutions. With the new structuring of ORBIA, its main mission is to advance life around the world.

In 2019, with the renewed business structure of ORBIA, building & infrastructure business line was started to represent by WAVIN, a single and strong brand across the globe. WAVIN operates in more than 40 countries around the world in 4 main regions: Europe-Middle East-Africa, Asia-Pacific, Latin America and USA-Canada with 12.000 employees.

Wavin is now a global leader in the supply of plastic pipe systems and solutions for both above and below ground applications in projects around the world. Since the 1950s, we have built an unrivalled reputation for continuous innovation, intelligent problem-solving, dedicated technical support and the highest standards.

Wavin Turkey offers traditional products such as PPR-C clean water, PVC wastewater as well as the innovative products such as Tigris Press-fit systems, SiTech+ low noise pipes, Qickstream siphonic rainwater drainage systems, Q-Bic Plus infiltration systems, Tegra plastic manholes etc. to the sector. Wavin Academy which is the first training centre of the sector was opened in 2014 within our factory in Adana, Tens of thousands of visitors from various levels of the mechanical installation sector have been able to increase their expertise by attending training at Wavin Academy since 2014. Our company provides fast service with Adana, Istanbul, Ankara and Izmir offices, distribution centres located in Istanbul and Adana and wide dealers network. In addition to our sales staff, our expert engineers and technical personnel support our customers for the projects.

To get more information about our company and products, please visit our website www.wavin.com.tr and follow us on our social media accounts.



Technical datasheet



Wavin AS+

Wavin AS+ is a mineral reinforced polypropylene (PP) low noise soil and waste solution. A unique material composition for improved noise performance. Optimal sound reduction is guaranteed due to high density of material. Optimized three layer pipe structure for low noise levels push fit connections with a prelubricated elastomer seal (EPDM) for quick, easy and reliable installation.

Material

Polypropylene, mineral-reinforced.

Physical properties

▷ Density	~ 1,9 g/cm ³
▷ E-Modul	~ 1800 N/mm ²
▷ Linear coefficient of thermal expansion	~ 0,06 mm/mK
▷ Reaction to fire	DIN 4102, B2 and EN13501 D-S3, d0
▷ Temperature	Short-time load by 95°C und 90°C long-term stress

Color

Light grey RAL7035

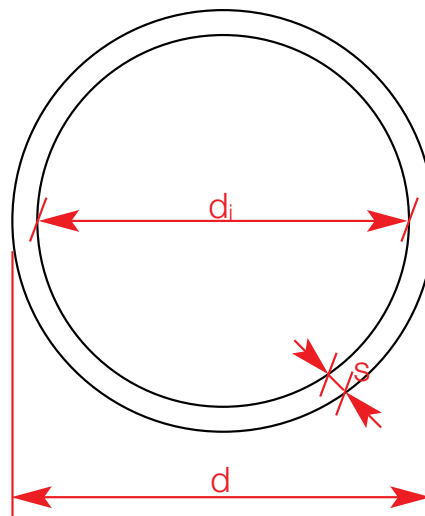
Pipe data

DN	d ¹⁾	d _i ²⁾	s ³⁾
50	50	44	3,0
70	75	68	3,5
90	90	80,8	4,6
100	110	99,4	5,3
125	125	114,4	5,3
150	160	148,8	5,6
200	200	188	6,0

¹⁾ Outside diameter in mm

²⁾ Inside diameter in mm

³⁾ Wall thickness in mm



Marking

Wavin AS+, nominal width, date, certification mark, material, fire class

Example: Wavin AS+, DN100, date, Z.-42.1-569, mineral-reinforced PP Ü DIN 4102, B2

Acoustics

Sound insulation by Wavin AS+

The excellent sound protection properties of Wavin AS+ are primarily attributed to its thick-walled design as well as special molecular structure and the high density of 1.9 g/cm³ of the material. This property enables Wavin AS+ to absorb airborne sound as well as mechanical vibrations.



A contribution to sound protection is made by the special product design and system solutions.

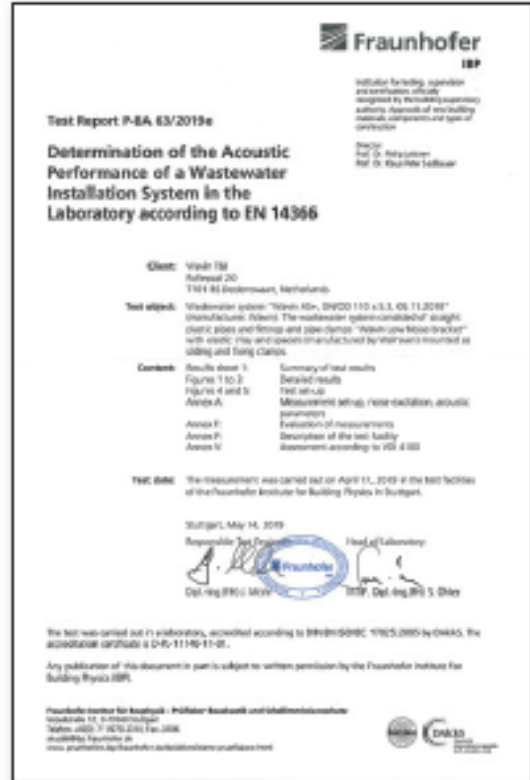
- ▶ Swept branches for minimal flow disturbance in the down pipe.
- ▶ Due to unique system bracket and high structure born sound prevention.



Fig. 1: Double branch.



Fig. 2: Wavin System bracket.



In studies conducted at the Fraunhofer Institut für Bauphysik (Fraunhofer Institute for Building Physics), Stuttgart, Wavin AS+ has proven its excellent sound absorption properties. The tests were performed in a laboratory accredited by the German Accreditation System of Testing (DAP, file no PL-3743.26) according to standard EN ISO/IEC 17025

The measurements in this test were performed following German standard DIN EN14366 and DIN 52 219:1993-07 noise excitation by stationary water flow with 0.5 l/s, 1.0 l/s, 2.0 l/s, 3.0 l/s and 4.0 l/s.

Sound -insulating performance

The excellent sound protection properties of Wavin AS+ are primarily attributed to its thick - walled design as well as special molecular structure and the high density of 1.9 g/cm³ of the material used to make the pipes and fittings. This property enables Wavin AS+ to absorb airborne sound well as structureborne sound.

Studies conducted at the Fraunhofer Inetiut für Bauphyaik (Fraunhofer Inatitute for Building Physics), Stuttgart, on Wavin AS+ attest to its excellent sound absorption properties.

Wavin low noise bracket	Volumetric flow rate*		Meets standard
DIN 4109 (public minimum legal requirement) specification 30dB(A)	14dB (A)	19 dB(A)	✓
VDI 4100 sound insulation level II/III specification 27/24 dB(A)	11 dB(A)	16 dB(A)	✓
Wavin no noise bracket	Volumetric flow rate*		Meets standard
	2 l/s	4 l/s	
DIN 4109 (public minimum legal requirement) specification 30dB(A)	<10 dB(A)	13 dB(A)	✓
VDI 4100 sound insulation level II/III specification 27/24 dB(A)	<10 dB(A)	10 dB(A)	✓
Installation noise level in rear basement (P-BA 63/2020)			

* Installation noise levels based on installation with Wavin system brackets.



With no noise

▶ <10 dB(A) according to 63/2020

With low noise

▶ <14 dB(A) according to 64/2020

Wavin AS+ product range

		DN 50	DN 70	DN 90	DN 100	DN 125	DN 150	DN 200
Pipe		✓	✓	✓	✓	✓	✓	✓
Double Socket Coupler		✓	✓	✓	✓	✓	✓	✓
Bend		✓	✓	✓	✓	✓	✓	✓
Long bend				✓	✓			
Trap bend		✓						
Trap straight		✓						
Branch		✓	✓	✓	✓	✓	✓	✓
Double branch				✓	✓			
Corner branch				✓	✓			
Parallel branch				✓	✓			
Combination branch					✓			
Shower branch				✓	✓			
Double socket sleeve		✓	✓	✓	✓	✓	✓	✓

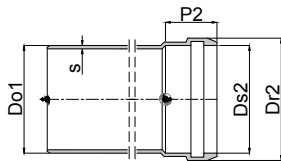
		DN 50	DN 70	DN 90	DN 100	DN 125	DN 150	DN 200
Long socket		✓	✓	✓	✓	✓	✓	✓
Socket Plug		✓	✓	✓	✓	✓	✓	✓
Reducer			✓	✓	✓	✓	✓	✓
Access Pipe		✓	✓	✓	✓	✓	✓	✓
Bracket		✓	✓	✓	✓	✓	✓	✓
Covering Clamp type LKS		✓	✓	✓	✓	✓	✓	✓
Gasket EPDM		✓	✓	✓	✓	✓	✓	✓
Gasket NBR		✓	✓	✓	✓	✓	✓	✓
Gasket rubber for Siphon 1 ½" 53 mm								
Gasket rubber for Siphon 1 ¼" 53 mm								
BM-R90		✓	✓	✓	✓	✓	✓	✓
EPDM Flex coupler for connecting AS with AS+		✓	✓			✓		

Wavin AS+ product range

PIPE

Title

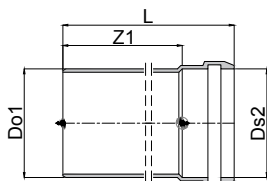
DN	Outerdiameter Do1 = Ds2	Wallthickness s	Length of socket P2
50	50	3,0	46
70	75	3,5	51
90	90	4,6	55
100	110	5,3	59
125	125	5,3	63
150	160	5,6	71
200	200	6,0	86



Wavin AS+ Pipe with socket



Diameter DN	Article Nr.	Do1 mm	L mm	Ds2 mm	Z1 mm	Weight kg/PC
50	3080057	50	198	50	150	0,18
50	3080058	50	298	50	250	0,26
50	3080059	50	546	50	500	0,44
50	3080060	50	1046	50	1000	0,83
50	3080061	50	2046	50	2000	1,61
50	3080062	50	2746	50	2700	2,15
50	3080063	50	3046	50	3000	2,38
70	3080064	75	202	75	150	0,30
70	3080065	75	302	75	250	0,44
70	3080066	75	551	75	500	0,79
70	3080067	75	1051	75	1000	1,49
70	3080068	75	2051	75	2000	2,90
70	3080069	75	2751	75	2700	3,88
70	3080070	75	3051	75	3000	4,30
90	3080071	90	205	90	150	0,47
90	3080072	90	305	90	250	0,69
90	3080073	90	554	90	500	1,25
90	3080074	90	1054	90	1000	2,37
90	3080075	90	2054	90	2000	4,60
90	3080076	90	2754	90	2700	6,16
90	3080077	90	3054	90	3000	6,83
100	3080030	110	209	110	150	0,68
100	3080031	110	309	110	250	1,02
100	3080032	110	559	110	500	1,83
100	3080033	110	1059	110	1000	3,41

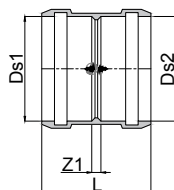




Diameter DN	Article Nr.	Do1 mm	L mm	Ds2 mm	Z1 mm	Weight kg/PC
100	3080034	110	2059	110	2000	6,56
100	3080035	110	2759	110	2700	8,77
100	3080036	110	3059	110	3000	9,72
125	3080037	125	213	125	150	0,79
125	3080038	125	313	125	250	1,16
125	3080039	125	562	125	500	2,09
125	3080040	125	1062	125	1000	3,90
125	3080041	125	2062	125	2000	7,50
125	3080042	125	2762	125	2700	10,03
125	3080043	125	3062	125	3000	11,11
150	3080044	160	221,4	160	150	1,09
150	3080045	160	321,4	160	250	1,09
150	3080046	160	570,2	160	500	2,87
150	3080047	160	1070	160	1000	5,33
150	3080048	160	2070	160	2000	10,27
150	3080049	160	2770	160	2700	13,73
150	3080050	160	3070	160	3000	15,21
200	3080051	200	328	200	250	2,05
200	3080052	200	584	200	500	4,15
200	3080053	200	1084	200	1000	7,49
200	3080054	200	2084	200	2000	14,17
200	3080055	200	2784	200	2700	18,85
200	3080056	200	3084	200	3000	20,86

FITTINGS

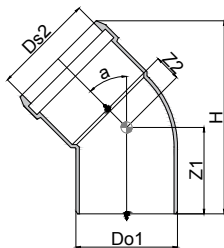
Wavin AS+ Double socket coupler



Diameter DN	Article Nr.	L mm	Ds1 mm	Ds2 mm	Z1 mm	Weight kg/PC
50	3080016	99	50	50	3	0,12
70	3080017	107	75	75	3	0,17
90	3080018	114	90	90	3	0,26
100	3080012	124	110	110	5	0,39
125	3080013	132	125	125	5	0,51
150	3080014	148	160	160	5	0,76
200	3080015	181	200	200	8	1,33



Wavin AS+ Bend > 15°, 30°, 45°, 67°, 87°

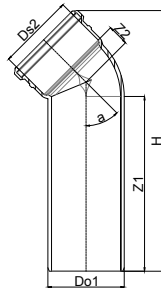


Diam. DN	a	Article Nr.	Do1 mm	Ds2 mm	Z1 mm	Z2 mm	h mm	Weight kg/PC
50	15°	3079965	50	50	53	11	115	0,11
50	30°	3079966	50	50	57	13	122	0,12
50	45°	3079967	50	50	60	18	126	0,12
50	67°	3079968	50	50	68	23	124	0,13
50	87	3079969	50	50	74	32	111	0,15
70	15°	3079970	75	75	59	11	129	0,18
70	30°	3079971	75	75	64	15	141	0,19
70	45°	3079972	75	75	70	21	150	0,22
70	67°	3079973	75	75	79	29	150	0,23
70	87°	3079974	75	75	90	41	141	0,25
90	15°	3079975	90	90	64	15	141	0,30
90	30°	3079976	90	90	70	20	157	0,32
90	45°	3079977	90	90	73	25	167	0,36
90	67°	3079978	90	90	88	37	172	0,39
90	87°	3079979	90	90	101	49	160	0,43
100	15°	3079950	110	110	70	17	157	0,47
100	30°	3079951	110	110	77	20	177	0,52
100	45°	3079952	110	110	85	32	192	0,57
100	67°	3079953	110	110	99	44	197	0,60
100	87°	3079954	110	110	114	61	186	0,69
125	15°	3079955	125	125	75	17	167	0,57
125	30°	3079956	125	125	83	25	191	0,63
125	45°	3079957	125	125	92	34	208	0,63
125	87°	3079958	125	125	126	67	206	0,86
150	15°	3079959	160	160	85	19	189,5	0,85
150	30°	3079960	160	160	96	28	-	0,95
150	45°	3079961	160	160	108	42	-	1,08
150	87°	3079962	160	160	151	84	-	1,38
200	45°	3079963	200	200	132	51	296,2	1,81
200	87°	3079964	200	200	185	42	302,7	2,31



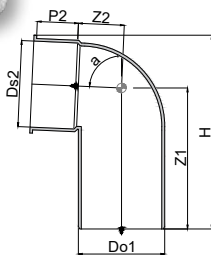
Wavin AS+ Long bend > 45°

Diam. DN	Article Nr.	Do1 mm	Ds2 mm	Z1 mm	h mm	Weight kg/PC
90	3080027	90	90	250	25	0,81
100	3080026	110	110	250	25	1,14



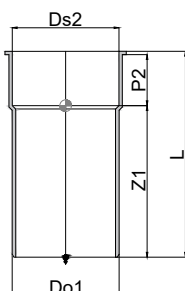
Wavin AS+ Trap

Diam. DN	a	Article Nr.	Do1 mm	Ds2 mm	Z1 mm	Z2 mm	h mm	Weight kg/PC
50	87°	3080101	50	53	79	35	123	0,05



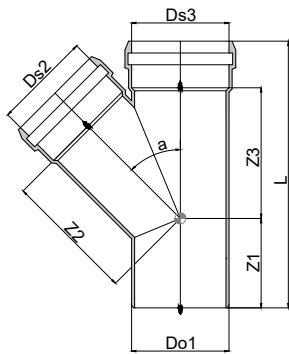
Wavin AS+ Trap straight

Diam. DN	a	Article Nr.	Do1 mm	Ds2 mm	Z1 mm	Z2 mm	h mm	Weight kg/PC
50		3080102	50	53	55	40	120	0,05





Wavin AS+ Branch > 45° and 87°



Diam. DN	a	Article Nr.	Do1 mm	L mm	Ds2 mm	Ds3 mm	Z1 mm	Z2 mm	Z3 mm	Weight kg/PC
50/50	45°	3079996	50	171	50	50	60	62	62	0,25
	87°	3079997	50	150	50	50	75	29	29	0,20
70/50	45°	3079998	75	178	50	75	52	82	78	0,34
	87°	3079999	75	158	50	75	78	42	30	0,29
70/70	45°	3080000	75	215	75	75	69	95	95	0,44
	87°	3080001	75	183	75	75	90	45	42	0,34
90/50	45°	3080002	90	185	50	90	55	93	77	0,49
	87°	3080003	90	186	50	90	82	52	30	0,43
90/70	45°	3080004	90	220	75	90	65	106	103	0,61
	87°	3080005	90	191	75	90	93	49	45	0,50
90/90	45°	3080006	90	243	90	90	76	114	114	0,76
	87°*	3080007	90	224	90	90	124	68	48	0,65
100/50	45°	3079982	110	197	50	110	59	106	81	0,69
	87°	3079983	110	178	50	110	85	59	36	0,64
100/70	45°	3079984	110	230	75	110	59	120	114	0,84
	87°	3079985	110	200	75	110	97	59	46	0,70
100/90	45°	3079986	110	249	90	110	69	128	123	0,99
	87°	3079987	110	216	90	110	105	60	55	0,79
100/100	45°	3079981	110	277	111	110	83	138	138	1,22
	87°*	3079980	110	253	110	110	136	77	56	1,061
125/100	45°	3079988	125	291	110	125	81	152	149	1,41
	87°	3079989	125	241	110	125	118	70	63	1,06
125/125	45°	3079990	125	310	125	125	91	158	158	1,61
150/100	45°	3079991	160	304	110	160	71	175	165	1,82
	87°	3079992	160	256	110	160	124	87	65	1,42
150/125	45°	3079993	160	326	125	160	82	184	176	2,03



Diam. DN	a	Article Nr.	Do1 mm	L mm	Ds2 mm	Ds3 mm	Z1 mm	Z2 mm	Z3 mm	Weight kg/PC
150/150	45°	3079994	160	375	160	160	108	200	199	2,52
200/200	45°	3079995	200	460	200	200	128	250	250	4,26

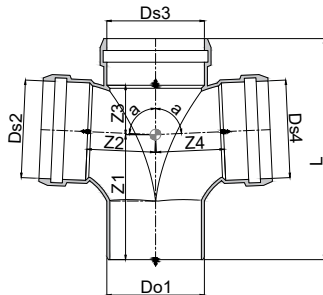
*with internal radius

Wavin AS+ Double branch > 87°



Diam. DN	a	Article Nr.	Do1 mm	L mm	Ds2 mm	Ds3 mm	Ds4 mm	Z1 mm	Z2 mm	Z3 mm	Z4 mm	Weight kg/PC
90/90/90*		3080011	90	224	90	124	68	48	0,82			
100/100/100*		3080010	110	255	110	139	81	60	1,26			

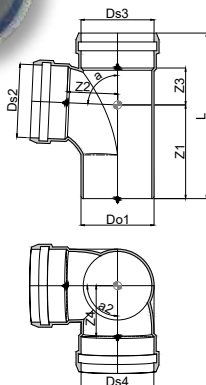
*with internal radius



Wavin AS+ Corner branch > 87°



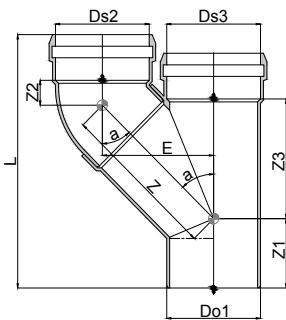
Diam. DN	a	Article Nr.	Do1 mm	L mm	Ds2 mm	Ds3 mm	Ds4 mm	Z1 mm	Z2 mm	Z3 mm	Z4 mm	Weight kg/PC
90/90/90*	87	3080009	90	218	90	111	66	51	51	0,86		
100/100/100	87	3080008	110	251	110	122	139	128	139	1,13		





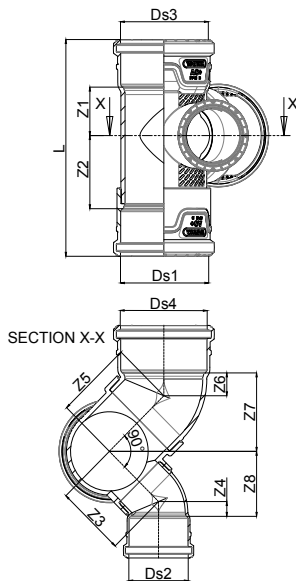
Wavin AS+ Paralell branch

Diam. DN	Article Nr.	Do1 mm	L mm	Ds2 Ds3 mm	Z mm	Z1 mm	Z2 mm	Z3 mm	E mm	Weight kg/PC
90/90	3080029	90	260	90	151	74	25	118	105	0,68
100/100	3080028	110	303	110	186	87	32	145	130	1,14



Wavin AS+ Combi Branch

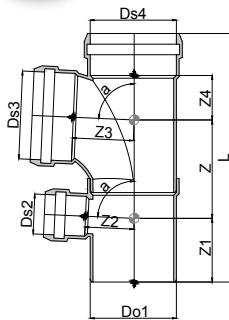
Diam. DN	Article Nr.	Ds1 Ds3 mm	Ds4 mm	Ds2 mm	Z1 mm	Z2 mm	Z3 mm	Z4 mm	Z5 mm	Weight kg/PC
100/100/70	3080109	110	110	75	60	89	103	11	110	1,63





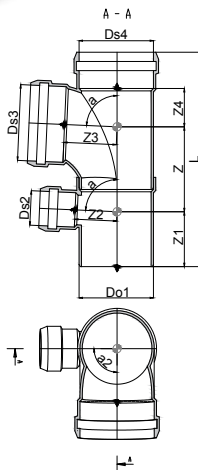
Wavin AS+ Showerdouble branch > 87°

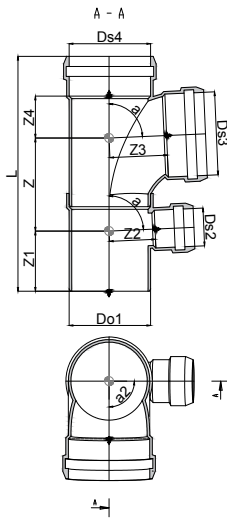
Diam. DN	Article Nr.	Do1 mm	L mm	Ds2 mm	Ds3 mm Ds4 mm	Z mm	Z1 mm	Z2 mm	Z3 mm	Weight kg/PC
90/90/50	3080098	90	296	50	90	114	82	51	68	1,11
90/90/70	3080111	90	296	75	90	114	82	51	68	1,18
100/100/50	3080095	110	330	50	110	126	87	59	81	1,78
100/100/70	3080110	110	330	75	110	126	87	59	81	1,83



Wavin AS+ Showerdouble branch > 87° > left

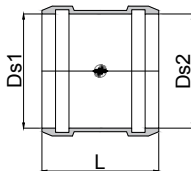
Diam. DN	Article Nr.	Do1 mm	L mm	Ds2 mm	Ds3 mm Ds4 mm	Z mm	Z1 mm	Z2 mm	Z3 mm	Weight kg/PC
90/90/50	3080099	90	296	50	90	114	82	51	68	1,11
100/100/50	3080096	110	330	50	110	126	87	59	81	1,78





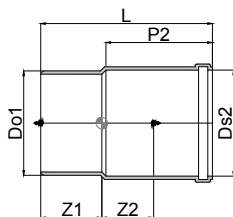
Wavin AS+ Showerdouble branch > 87° > right

Diam. DN	Article Nr.	Do1 mm	L mm	Ds2 mm	Ds3 Ds4 mm	Z mm	Z1 mm	Z2 mm	Z3 mm	Weight kg/PC
90/90/50	3080100	90	296	50	90	114	82	51	68	1,11
100/100/50	3080097	110	330	50	110	126	87	59	81	1,78



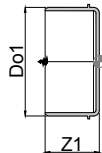
Wavin AS+ Repair coupler

Diam. DN	Article Nr.	L mm	Ds1 mm	Ds2 mm	Weight kg/PC
50	3080092	99	50	50	0,12
70	3080093	107	75	75	0,17
90	3080094	114	90	90	0,26
100	3080088	124	110	110	0,39
125	3080089	132	125	125	0,51
150	3080090	148	160	160	0,76
200	3080091	181	200	200	1,22



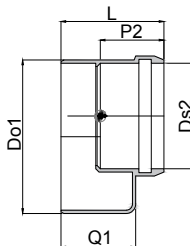
Wavin AS+ Long socket

Diam. DN	Article Nr.	Do1 mm	L mm	Ds2 mm	P2 mm	Z1 mm	Z2 mm	Weight kg/PC
50	3080023	50	184	50	105	57	60	0,18
70	3080024	75	199	75	129	62	66	0,27
90	3080025	90	202	90	125	66	92	0,42
100	3080019	110	219	110	137	69	88	0,66
125	3080020	125	237	125	148	74	79	0,81
150	3080021	160	264	160	164	85	123	1,18
200	3080022	200	425	200	184	199	130	3,20



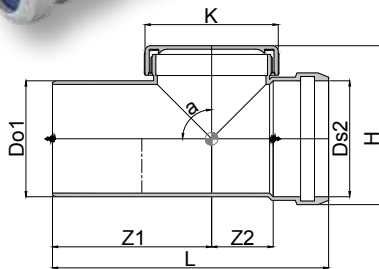
Wavin AS+ End cap

Diam. DN	Article Nr.	Do1 mm	Z1 mm	Weight kg/PC
50	3080106	50	51	0,06
70	3080107	75	55	0,12
90	3080108	90	60	0,19
100	3080103	110	65	0,29
125	3080104	125	68	0,36
150	3080105	160	76	0,57
200	3081792	200	128	1,03



Wavin AS+ Reducer

Diam. DN	Article Nr.	Do1 mm	L mm	Ds2 mm	P2 mm	Q1 mm	Weight kg/PC
70/50	3080085	75	79	50	48	68	0,15
90/50	3080086	90	86	50	19	72	0,22
90/70	3080087	90	85	75	52	72	0,19
100/50	3080078	110	90	50	53	79	0,36
100/70	3080079	110	90	75	57	79	0,33
100/90	3080080	110	91	90	61	78	0,33
125/100	3080081	125	99	110	59		0,37
150/100	3080082	160	114	110	59	98	0,69
150/125	3080083	160	114	125	63	98	0,72
200/150	3080084	200	130	160	24	114	1,02

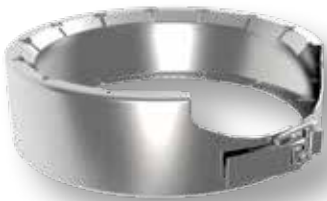


Wavin AS+ Access Piece

Diam. DN	a	Article Nr.	Do1 mm	L mm	Ds2 mm	Z1 mm	Z2 mm	K mm	H mm
50		3079917	50	164	50	82	37	65	84
70		3079918	75	200	75	97	53	93	111
90		3079949	90	228	90	114	62	111	131
100		3079913	110	258	110	129	72	130	156
125		3079914	125	259	125	127	71	130	174
150		3079915	160	271	160	135	68	130	213
200		3079916	200	425	200	180	165	141	269

ACCESSORIES

Wavin AS+ LKS-Clamp



Diam. DN	Article Nr.
50	4065138
70	4065139
90	4065140
100	4065141
125	4065142
150	4065143
200	4065144

Gasket > EPDM



Diam. DN	Article Nr.
50	4065145
70	4065186
90	4065187
100	4065188
125	4065189
150	4065190
200	4065191



Gasket > NBR

Diam. DN	Article Nr.
50	4065192
70	4065193
90	4065194
100	4025566
125	4025567
150	4025568
200	4025569



Wavin system bracket

Diam. DN	Article Nr.
50	4066449
70	4066450
90	4066451
100	4066452
125	4066453
150	4066454
200	4066455



Rubber for traps

Diam. DN	Article Nr.
53 – 1¼"	4024657
53 – 1½"	4024658



Firecollar BM-R90

Diam. DN	Article Nr.
32	4059802
40	4026101
50	4026102
63	4026103
75	4026104
90	4026405
110	4026106
125	4026107
140	4026108
160	4026109
180	4026110
200	4026111



EPDM Flex coupler for connecting AS with AS+

Diam. DN	Article Nr.
58-50	4066491
78-75	4066492
135-125	4066493

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To Advance Life Around the World.



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