

PP Soil & Waste System

ULTRAMAX

AMAX

1.3 PP SOIL & WASTE



EN 1451 Push-Fit PP Pipe and Fittings
Impact-Resistant
B1 Fire Reaction Class, Self-extinguishing



ULTRAMAX Pipe Range Completed by **AMAX** Fittings

ULTRAMAX completed with AMAX fittings range is the push-fit polypropylene complete soil and waste system for civil and industrial waste water drainage.

- ULTRAMAX features:**
- White internal layer
 - Impact-resistant
 - B1 Fire Reaction Class according to DIN4102, Self-extinguishing

Pipe and Fittings available starting from Ø32 up to Ø160. Both Single and Double Socket Pipes available from 0.15 m up to 3 m length.



Fitting marking



- AMAX Brand
- Diameter-Angle
- European standard

Pipe marking:



Impact resistance

ULTRAMAX Pipes are produced with a multilayer technology and without using any mineral material additives. The great elasticity of the pipe allows a strength compression resistance if impact-stressed, without breaks, cracks or functional consequences even at low temperatures. The impact resistance is directly tested along line, at regular intervals, for each production batch.



1)
Compression test of an ULTRAMAX pipe by RED1. During the test the pipe is hit with a 5 kg heavy hammer



2)
After the impact of the ULTRAMAX pipe by RED1, it returns to its original form without cracks or crushing

White Interior

ULTRAMAX presents a perfectly WHITE and uniform interior. This feature is particularly appreciated during video inspection.

The technology used allows an extremely regular raw material extrusion flow, which allows a perfect fusion among different layers.



Self-extinguishing material

ULTRAMAX is completely self-extinguishing and matches Class B1 characteristics according to the DIN 4102 standard.



ULTRAMAX and AMAX Polypropylene System

Pipes and fittings are both made of self extinguishing polypropylene homopolymer.

The raw material performances is certified according to DIN 4102 quality tests, which certify the conformity to the required fire reaction specifications. The System is classified as B1 Fire Reaction class ("hardly flammable building material").

The products performances are certified according to the **EN 1451** standard ("Plastics piping systems for soil and waste discharge (low and high temperature) within the building structure - Polypropylene").

Conditions for use	Fields of application
95 °C is the MAX temperature of waste water conveyed allowed.	for sanitary fittings
	for washing-machines, dishwashers and boilers also extended for waste water (large kitchens, laundry rooms, industrial appliances)
	for corrosive fluids in schools, laboratories and industrial factories. In this case, the chemical resistance at the operating temperature can be derived from the ISO/TR7471344.

The certificates printed on these pages are constantly updated. The updated certificates are available on our website www.aliaxis.it



SKZ Certificate for pipe



SKZ Certificate for fittings

PP - Chemical resistance



Product	Conc. %	Temp. 20 °C	Temp. 60 °C	Product	Conc. %	Temp. 20 °C	Temp. 60 °C
ACETIC ACID	60	S	L	HYDROGEN	100	S	S
ACETIC ACID MONOCHLORIDE	SOL.	S	L	HYDROGEN DIOXIDE	30	S	L
ACETIC ALDEHYDE	33	L	NS	HYDROGEN SULPHIDE	100	S	S
ACETIC ANHYDRIDE	100	L	NS	ISOCTANE	100	L	S
ACETONE	100	S	S	LACTIC ACID	10	S	L
ADIPIC ACID	-	-	-	LACTIC ACID	10~90	L	L
ALLYL ALCOHOL	96	S	S	LEAD TETRAETHYL	100	S	-
ALUMINUM CHLORIDE	SOL. SAT.	S	S	MAGNESIUM SULPHIDE	SOL. SAT.	S	S
ALUMINUM SULPHATE	SOL. SAT.	S	S	MALEIC ACID	SOL. SAT.	S	L
AMMONIA (GAS)	100	S	S	METHYL ALCOHOL	100	S	L
AMMONIA (LIQUID)	100	S	L	METHYL METHACRYLATE	100	NS	NS
AMMONIA (SOLUTION)	SOL. DIL.	S	L	METHYLENE CHLORIDE	100	NS	NS
AMMONIUM CHLORIDE	SOL. SAT.	S	S	MILK		S	S
AMMONIUM FLUORIDE	-	-	-	MINERAL OIL	100	L	L
AMMONIUM NITRATE	SOL. SAT.	S	S	N-HEPTANE	100	L	NS
AMMONIUM SULPHATE	SOL. SAT.	S	S	NICKEL SULPHIDE	SOL. SAT.	S	S
AMYL ACETATE	100	NS	NS	NICOTINIC ACID	CONC.	S	S
AMYL ALCOHOL	100	S	L	NITRIC ACID	<25	L	NS
ANILINE	100	S	L	NITRIC ACID	50	NS	NS
ANILINE	SOL. SAT.	S	L	OLEIC ACID	100	L	L
ANILINE HYDROCHLORIDE	SOL. SAT.	-	-	OLEUM	10% of SO ³	NS	NS
ANTIMONY CHLORIDE	90	S	S	OXALIC ACID	25	S	L
ARSENIC ACID	SOL. DIL.	S	-	OXALIC ACID	SOL. SAT.	L	L
BEER		S	S	OXYGEN	SOL. SAT.	L	L
BENZALDEHYDE	100	S	-	PETROL	80/20	NS	NS
BENZENE	100	NS	NS	PETROLEUM	100	L	NS
BENZOIC ACID	SOL. SAT.	S	L	PHENOL	SOL. SAT.	S	S
BORAX	SOL. SAT.	S	L	PHOSPHINE	100	S	L
BORIC ACID	SOL. DIL.	S	L	PHOSPHOR OXICHLORIDE	100	L	L
BROMINE (LIQUID)	100	NS	NS	PHOSPHORIC ACID	30	S	L
BROMINE ACID	10	S	-	POTASSIUM BICHROMATE	SOL. 20	S	S
BUTADIENE	100	S	S	POTASSIUM BROMIDE	SOL. SAT.	S	S
BUTANE	100	S	-	POTASSIUM CHLORIDE	SOL. SAT.	S	S
BUTYL ACETATE	100	NS	NS	POTASSIUM CHROMATE	40	S	S
BUTYL PHENOL	100	NS	NS	POTASSIUM CYANIDE	SOL.	S	S
BUTYLENE	100	S	L	POTASSIUM FERRICYANIDE	SOL. SAT.	S	S
BUTYRIC ACID	20	S	L	POTASSIUM FERROCYANIDE	SOL. SAT.	S	S
BUTYRIC ACID	98	NS	NS	POTASSIUM HYDROXIDE	SOL.	S	S
CALCIUM CHLORIDE	SOL. SAT.	S	S	POTASSIUM NITRATE	SOL. SAT.	S	L
CALCIUM NITRATE	50	S	S	POTASSIUM PERMANGANATE	20	S	S
CARBON DIOXIDE	100	S	S	POTASSIUM PERSULFATE	SOL. SAT.	S	L
CARBON SULPHIDE	100	S	-	PROPANE (GAS LIQUID)	100	S	-
CARBON TETRACHLORIDE	100	NS	NS	PROPIONIC ACID	50	S	S
CHLORINE (DRY GAS)	100	NS	NS	PYRIDINE	100	NS	NS
CHLORINE (LIQUID)	SOL. SAT.	NS	NS	SEA WATER		S	L
CHLOROSULPHONIC ACID	100	NS	NS	SILVER NITRATE	SOL. SAT.	S	L
CHROMIC ACID	-	-	-	SOAP	SOL.	S	S
CITRIC ACID	SOL. SAT.	S	S	SODIUM BISULPHITE	SOL. SAT.	S	S
COPPER CHLORIDE	SOL. SAT.	S	S	SODIUM CHLORATE	SOL. SAT.	S	S
COPPER FLUORIDE	2	S	S	SODIUM CHLORIDE	SOL. SAT.	S	S
CREOSOL	100	L	NS	SODIUM FERRICYANIDE	SOL. SAT.	S	S
CREOSOL ACID	SOL. SAT.	NS	NS	SODIUM HYDROXIDE	SOL.	S	S
CROTONIC ALDEHYDE	100	NS	NS	SODIUM HYPOCHLORITE	25	L	NS
CYCLOHEXANOL	100	L	NS	SODIUM HYPOCHLORITE	100 (13% CL.)	S	L
CYCLOHEXANONE	100	L	NS	SODIUM SILICATE	SOL.	S	S
DEVELOPING BATH		S	S	SODIUM SULPHITE	SOL. SAT.	S	L
DEXTRENE	SOL. SAT.	-	-	SULPHUR ACID	SOL.	S	S
DIBUTYL PHTHALATE	100	NS	L	SULPHUR ANHYDRIDE	100 (LIQUID)	S	L
DICHLOROETHYLENE	100	NS	NS	SULPHUR ANHYDRIDE	100 (DRY)	L	NS
DIGLYCOLIC ACID	18	S	L	SULPHURIC ACID	40~90	L	L
DIMETHYLAMINE	30	S	-	SULPHURIC ACID	96	NS	NS
ETHYL ACETATE	100	NS	NS	SULPHURIC CHLORIDE	100	NS	NS
ETHYL ALCOHOL	95	S	L	SULPHURYL CHLORIDE	100	NS	NS
ETHYL BENZENE	100	NS	NS	TANNIC ACID	SOL.	S	S
ETHYL ETHER	100	S	-	TARTARIC ACID	SOL.	S	S
ETHYLENE GLYCOL	CONC.	S	S	TETRACHLOROETHENE	100	NS	NS
FLUORINE	100	NS	NS	THIOPHENE	100	L	L
FORMALDEHYDE	SOL. DIL.	S	S	TIN CHLORIDE	SOL. SAT.	S	S
FORMALDEHYDE	40	S	S	TOLUENE	100	NS	NS
FORMIC ACID	1~50	L	NS	TRICHLOROETHYLENE	100	NS	NS
FURFURAL ALCOHOL	100	NS	NS	TURPENTINE (OIL)	100	NS	NS
GLUCOSE	SOL. SAT.	S	L	UREA	10	S	L
GLYCERIN	100	S	S	VASELINE		L	L
GLYCOLIC ACID	30	S	S	VINAGRE		S	S
GOLDEN SYRUP	SOL.	S	L	VINYL ACETATE	100	NS	NS
HYDROBROMIC ACID	50	-	-	WINE		S	S
HYDROCHLORIC ACID	30	L	NS	XYLENE	100	NS	NS
HYDROFLUORIC ACID	60	L	NS	YEAST	SOL.	S	L

TS = Without corrosion L = Limited corrosion NS = Corrosion

For any special application, please contact the REDI Technical Service beforehand.



Single socket pipe M/F (Self-extinguishing class B1)
Tube M/F (classe d'inflammabilité B1)
Tubo M/H (Autoextinguible class B1)

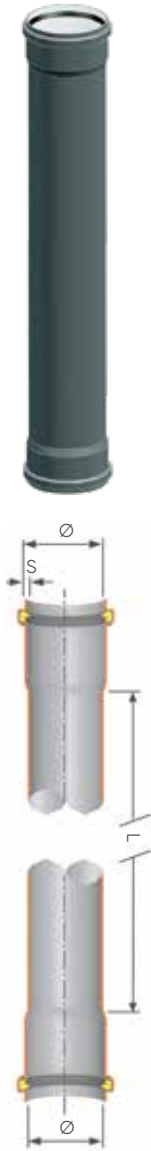
Ø (mm)	x	L (ml.)	S Thick	Reference			Note
32	x	0,25	1,8	ZT232PP	40	1.280	
32	x	0,50	1,8	ZT332PP	10	1.200	
32	x	1,00	1,8	ZT532PP	10	600	
32	x	1,50	1,8	ZT632PP	10	600	
32	x	2,00	1,8	ZT732PP	10	600	
32	x	3,00	1,8	ZT832PP	10	600	
40	x	0,15	1,8	ZT140PP	40	960	
40	x	0,25	1,8	ZT240PP	40	960	
40	x	0,50	1,8	ZT340PP	10	800	
40	x	1,00	1,8	ZT540PP	10	400	
40	x	1,50	1,8	ZT640PP	10	400	
40	x	2,00	1,8	ZT740PP	10	400	
40	x	3,00	1,8	ZT840PP	10	400	
50	x	0,15	1,8	ZT150PP*	20	800	
50	x	0,25	1,8	ZT250PP	20	640	
50	x	0,50	1,8	ZT350PP	10	480	
50	x	1,00	1,8	ZT550PP	10	240	
50	x	1,50	1,8	ZT650PP	10	240	
50	x	2,00	1,8	ZT750PP	10	240	
50	x	3,00	1,8	ZT850PP	10	240	
75	x	0,15	1,9	ZT175PP*	20	480	
75	x	0,25	1,9	ZT275PP	20	320	
75	x	0,50	1,9	ZT375PP	10	240	
75	x	1,00	1,9	ZT575PP	10	180	
75	x	1,50	1,9	ZT675PP	10	180	
75	x	2,00	1,9	ZT775PP	10	180	
75	x	3,00	1,9	ZT875PP	10	180	
90	x	0,15	2,2	ZT190PP	24	384	
90	x	0,25	2,2	ZT290PP	24	288	
90	x	0,50	2,2	ZT390PP	10	240	
90	x	1,00	2,2	ZT590PP	10	120	
90	x	1,50	2,2	ZT690PP	10	120	
90	x	2,00	2,2	ZT790PP	10	120	
90	x	3,00	2,2	ZT890PP	10	120	
110	x	0,15	2,7	ZT111PP	20	320	
110	x	0,25	2,7	ZT211PP	20	160	
110	x	0,50	2,7	ZT311PP	10	160	
110	x	1,00	2,7	ZT511PP	10	80	
110	x	1,50	2,7	ZT611PP	10	80	
110	x	2,00	2,7	ZT711PP	10	80	
110	x	3,00	2,7	ZT811PP	10	80	
125	x	0,25	3,1	ZT212PP*	10	120	
125	x	0,50	3,1	ZT312PP	1	45	
125	x	1,00	3,1	ZT512PP	1	45	
125	x	1,50	3,1	ZT612PP	1	45	
125	x	2,00	3,1	ZT712PP	1	45	
125	x	3,00	3,1	ZT812PP	1	45	
160	x	0,50	3,9	ZT316PP	1	48	
160	x	1,00	3,9	ZT516PP	1	24	
160	x	1,50	3,9	ZT616PP	1	24	
160	x	2,00	3,9	ZT716PP	1	24	
160	x	3,00	3,9	ZT816PP	1	24	



HTEM

*upon request



Double socket pipe F/F

Tube F/F - Tubo H/H

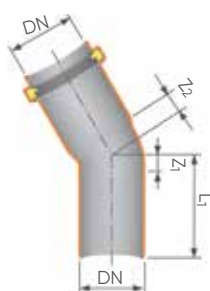




Ø (mm)	x	L (ml.)	S Thick	Reference			Note
32	x	0,5	1,8	ZT333PP	10	1.200	
32	x	1	1,8	ZT533PP	10	600	
32	x	1,5	1,8	ZT633PP	10	600	
32	x	2	1,8	ZT733PP	10	600	
32	x	3	1,8	ZT833PP	10	600	
40	x	0,5	1,8	ZT343PP	10	600	
40	x	1	1,8	ZT543PP	10	1.000	
40	x	1,5	1,8	ZT643PP	10	500	
40	x	2	1,8	ZT743PP	10	500	
40	x	3	1,8	ZT843PP	10	500	
50	x	0,5	1,8	ZT353PP	10	500	
50	x	1	1,8	ZT553PP	10	720	
50	x	1,5	1,8	ZT653PP	10	360	
50	x	2	1,8	ZT753PP	10	360	
50	x	3	1,8	ZT853PP	10	360	
75	x	0,5	1,9	ZT373PP	10	360	
75	x	1	1,9	ZT573PP	10	240	
75	x	1,5	1,9	ZT673PP	10	180	
75	x	2	1,9	ZT773PP	10	180	
75	x	3	1,9	ZT873PP	10	180	
90	x	0,5	2,2	ZT393PP	10	180	
90	x	1	2,2	ZT593PP	10	240	
90	x	1,5	2,2	ZT693PP	10	120	
90	x	2	2,2	ZT793PP	10	120	
90	x	3	2,2	ZT893PP	10	120	
110	x	0,5	2,7	ZT321PP	10	120	
110	x	1	2,7	ZT521PP	10	160	
110	x	1,5	2,7	ZT621PP	10	80	
110	x	2	2,7	ZT721PP	10	80	
110	x	3	2,7	ZT821PP	10	80	
125	x	0,5	3,1	ZT322PP	1	80	
125	x	1	3,1	ZT522PP	1	45	
125	x	1,5	3,1	ZT622PP	1	45	
125	x	2	3,1	ZT722PP	1	45	
125	x	3	3,1	ZT822PP	1	45	
160	x	0,5	3,9	ZT326PP	1	48	
160	x	1	3,9	ZT526PP	1	24	
160	x	2	3,9	ZT726PP	1	24	
160	x	3	3,9	ZT826PP	1	24	

**Bend 15° M/F****Coude 15° M/F - Codo 15° M/H**

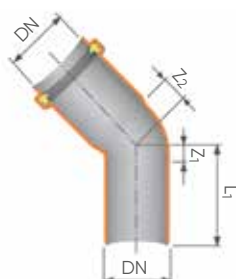
DN (mm)	Reference			Z1 (mm)	Z2 (mm)	L1 (mm)	Note
32	Z1032PP	40	5.120	6	5	49	
40	Z1040PP	25	3.200	5	8	66	
50	Z1050PP	30	1.920	5	9	67,5	
75	Z1075PP	25	800	7	11	73	
90	Z1090PP	20	640	-	-	-	
110	Z1011PP	10	320	9	14	85	
125	Z1012PP	20	160	10	15	92	
160	Z1016PP	10	80	13	19	113	



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Bend 30° M/F**Coude 30° M/F - Codo 30° M/H**

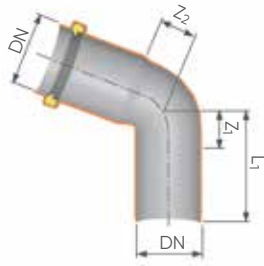
DN (mm)	Reference			Z1 (mm)	Z2 (mm)	L1 (mm)	Note
32	Z1132PP	40	5.120	6	7	52	
40	Z1140PP	25	3.200	7	11	69	
50	Z1150PP	30	1.920	9	12	71	
75	Z1175PP	25	800	12	15	78	
90	Z1190PP	15	480	-	-	-	
110	Z1111PP	10	320	17	21	92	
125	Z1112PP	20	160	19	23	100	
160	Z1116PP	10	80	24	30	123	

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**Bend 45° M/F****Coude 45° M/F - Codo 45° M/H**

DN (mm)	Reference			Z1 (mm)	Z2 (mm)	L1 (mm)	Note
32	Z1232PP	40	5.120	8	10	55	
40	Z1240PP	20	2.560	10	14	72	
50	Z1250PP	30	1.920	12	16	74,5	
75	Z1275PP	20	640	18	21	83	
90	Z1290PP	30	480	-	-	-	
110	Z1211PP	20	320	25	29	101	
125	Z1212PP	20	160	28	33	110	
160	Z1216PP	5	80	36	42	136	

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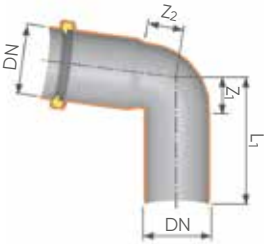


Bend 67°30' M/F

Coude 67°30' M/F - Codo 67°30' M/H



DN (mm)	Reference			Z1 (mm)	Z2 (mm)	L1 (mm)	Note
32	Z1332PP	30	3.840	13	15	60	
40	Z1340PP	20	2.560	16	20	78	
50	Z1350PP	25	1.600	20	23	81,5	
75	Z1375PP	20	640	28	31	93	
90	Z1390PP	30	480	-	-	-	
110	Z1311PP	10	160	40	44	116	

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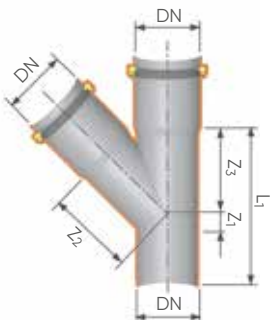


Bend 87°30' M/F

Coude 87°30' M/F - Codo 87°30' M/H



DN (mm)	Reference			Z1 (mm)	Z2 (mm)	L1 (mm)	Note
32	Z1432PP	30	3.840	14	16	62	
40	Z1440PP	20	2.560	23	26	85	
50	Z1450PP	25	1.600	28	31	90	
75	Z1475PP	20	640	40	43	105	
90	Z1490PP	25	400	-	-	-	
110	Z1411PP	15	240	57	61	133	
125	Z1412PP	20	160	65	70	147	
160	Z1416PP	10	80	83	89	183	

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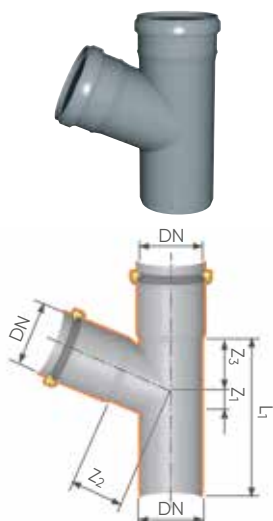


Branch 45° M/F

Culotte 45° M/F - Derivación 45° M/H

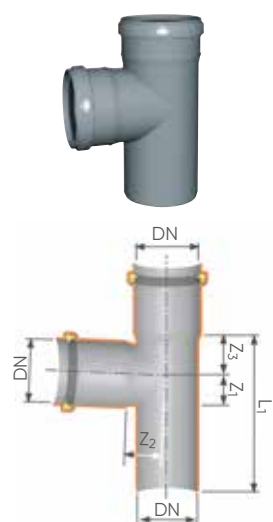
DN (mm)	Reference			Z1 (mm)	Z2 (mm)	Z3 (mm)	L1 (mm)	Note
32	Z3032PP	60	1.920	9	40	40	95	
40	Z3040PP	20	1.280	10	49	49	121	
50	Z3050PP	25	800	12	61	61	135	
75	Z3075PP	20	320	18	91	91	174	
90	Z3090PP	20	240	-	-	-	-	
110	Z3011PP	20	160	25	134	134	234	
125	Z3012PP	10	80	28	152	115	266	
160	Z3016PP	4	32	36	194	194	380	

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**Branch 67°30' M/F****Culotte 67°30' M/F - Derivación 67°30' M/H**

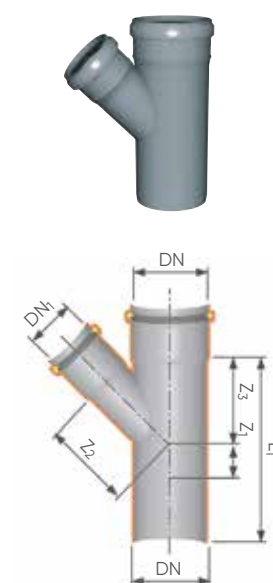
DN (mm)	Reference			Z1 (mm)	Z2 (mm)	Z3 (mm)	L1 (mm)	Note
32	Z3132PP	20	1.920	-	-	-	-	
40	Z3140PP	20	1.280	16	33	33	121	
50	Z3150PP	25	800	12	61	61	135	
75	Z3175PP	20	320	26	59	59	152	
110	Z3111PP	5	80	40	86	86	201	

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**Branch 87°30' M/F****Culotte 87°30' M/F - Derivación 87°30' M/H**

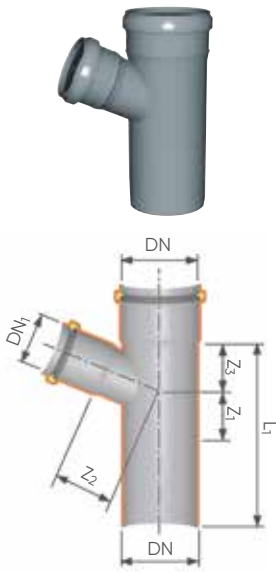
DN (mm)	Reference			Z1 (mm)	Z2 (mm)	Z3 (mm)	L1 (mm)	Note
32	Z3232PP	30	1.920	10	23	23	85	
40	Z3240PP	45	1.440	23	25	25	109	
50	Z3250PP	30	960	28	30	30	119	
75	Z3275PP	20	320	40	43	43	148	
90	Z3290PP	20	160	-	-	-	-	
110	Z3211PP	20	160	57	62	62	194	
125	Z3212PP	15	120	67	70	70	266	
160	Z3216PP	10	40	83	89	89	380	

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**Reduced branch 45° M/F****Culotte et embranchement 45° M/F
Derivación reducida 45° M/H**

DN/DN1 (mm)	Reference			Z1 (mm)	Z2 (mm)	Z3 (mm)	L1 (mm)	Note
40/32	Z3340PP	20	1.040	-	-	-	-	
50/40	Z3350PP	30	960	5	56	54	121	
75/40	Z3475PP	35	560	-	74	67	125	
75/50	Z3375PP	25	400	-	79	74	139	
90/40	Z3590PP	20	240	-	-	-	-	
90/50	Z3490PP	25	300	-	-	-	-	
90/75	Z3390PP	20	240	-	-	-	-	
110/40	Z3511PP	20	160	0	86	68	128	
110/50	Z3411PP	20	240	-	104	91	149	
110/75	Z3311PP	10	160	1	116	109	185	
110/90	Z3310PP	10	80	-	-	-	-	
125/110	Z3312PP	10	80	18	144	141	243	
160/110	Z3416PP	8	64	1	168	159	265	
160/125	Z3316PP	10	40	12	176	169	280	

HTEA

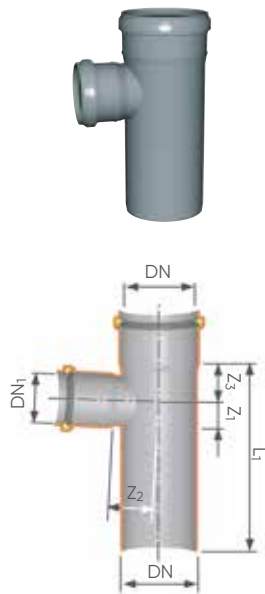


Reduced branch 67°30' M/F
Culotte et embranchement 67°30' M/F
Derivación reducida 67°30' M/H

DN/DN1 (mm)	Reference			Z1 (mm)	Z2 (mm)	Z3 (mm)	L1 (mm)	Note
40/32	Z3640PP*	20	1.920	-	-	-	-	
50/40	Z3650PP*	20	640	14	39	35	111	
75/50	Z3675PP	10	240	14	54	46	115	
110/40	Z3811PP	20	240	-	69	49	110	Fabricated
110/50	Z3711PP	5	160	8	73	54	135	
110/75	Z3611PP	20	160	22	73	67	163	

HTEA

*upon request

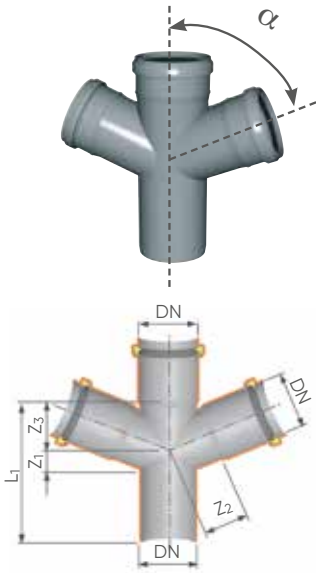


Reduced branch 87°30' M/F
Culotte et embranchement 87°30' M/F
Derivación reducida 87°30' M/H

DN/DN1 (mm)	Reference			Z1 (mm)	Z2 (mm)	Z3 (mm)	L1 (mm)	Note
40/32	Z3940PP	20	1.040	-	-	-	-	
50/40	Z3950PP*	35	1.120	23	30	25	109	
75/50	Z3975PP*	10	320					
90/40	Z4190PP	20	320	-	-	-	-	
90/50	Z4090PP	20	240	-	-	-	-	
90/75	Z3990PP	20	160	-	-	-	-	
110/40	Z4111PP	20	160	-	60	32	110	
110/50	Z4011PP	20	160	28	60	32	133	
110/75	Z3911PP	20	160	40	60	45	160	
110/90	Z3910PP	20	160	-	-	-	-	Fabricated
125/110	Z3912PP	10	80	58	69	63	204	
160/110	Z4016PP	10	60	58	86	64	237	
160/125	Z3916PP	10	60	66	87	71	280	

HTEA

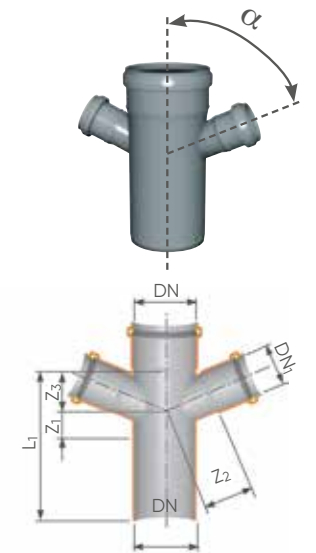
*upon request



Double branch M/F
Culotte double M/F - Derivación doble M/H

DN (mm)	α	Reference			Z1 (mm)	Z2 (mm)	Z3 (mm)	L1 (mm)	Note
50	67°30'	Z4250PP*	10	640	20	41	41	124	
75	67°30'	Z4275PP	20	240	28	59	59	153	
90	87°30'	Z4511PP	8	96	-	-	-	-	
110	45°	Z4611PP	10	80	-	-	-	-	
110	67°30'	Z4211PP	5	80	40	86	86	201	
110	87°30'	Z4311PP	10	80	-	-	-	-	

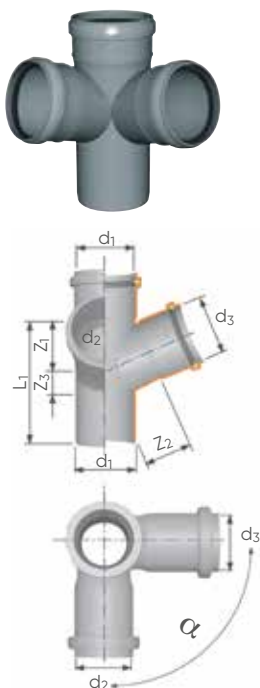
HTDA
 *upon request



Reduced double branch M/F
Embranchement double M/F
Derivación doble reducida M/H

DN/DN1/DN1 (mm)	α	Reference			Z1 (mm)	Z2 (mm)	Z3 (mm)	L1 (mm)	Note
90/40/40	45°	Z4540PP	20	240	19	87	79	120	
90/50/50	45°	Z4550PP	20	240	-	-	-	-	
110/40/40	45°	Z4650PP	20	160	10	96	-	153	
110/50/50	45°	Z4675PP	10	120	10	92	-	153	
110/50/50	67°30'	Z4711PP	10	160	-	-	-	-	
125/110/110	45°	Z4712PP	10	80	-	-	-	-	Fabricated

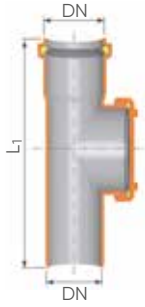
HTDA



Double corner branch M/F
Embranchement double d'équerre M/F
Doble derivación escuadra M/H



d1 (mm)	d2 (mm)	d3 (mm)	α	Reference			Z1 (mm)	Z2 (mm)	Z3 (mm)	L1 (mm)	Note
110	110	110	67°30'	Z4811PP	10	80	40	86	86	202	
110	110	110	87°30'	Z4950PP	10	80	40	86	86	202	Fabricated

HTED

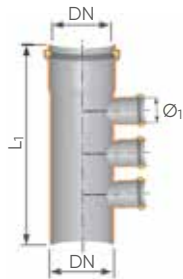


Access pipe M/F

Té de visite M/F - Te M/H con boca de registro



DN (mm)	Reference			L1 (mm)	Note
50	Z7050PP	30	960	146	
75	Z7075PP	10	320	192	
90	Z7090PP	20	240	-	
110	Z7011PP	5	160	228	
125	Z7012PP	15	120	236	
160	Z7016PP	10	80	303	

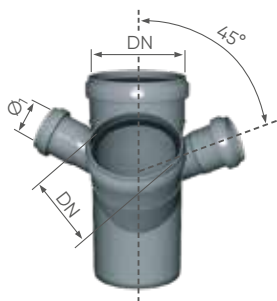
HTRE



Multiple branch M/F

Culotte multiple M/F - Derivación múltiple M/H

DN (mm)	Ø1 (mm)	Connection	Reference			L1 (mm)	Note
110	40	2	Z6942PP	20	160	330	Fabricated
110	40	3	Z6943PP	20	160	330	Fabricated





Multiple branch 45° M/F

Culotte multiple 45° M/F - Derivación múltiple 45° M/H

DN (mm)	Ø1 (mm)	Reference			Note
110	40	Z3044PP*	10	80	Fabricated



*upon request

**Repair / Slip coupler F/F****Manchon coulissant F/F - Manguito deslizante H/H**

DN (mm)	Reference			L1 (mm)	Note
32	Z6132PP	40	5.120	88	
40	Z6140PP	40	2.560	108	
50	Z6150PP	25	1.600	105	
75	Z6175PP	20	640	144,5	
90	Z6190PP	20	640	120	
110	Z6111PP	5	320	129,5	
125	Z6112PP	20	240	166,5	
160	Z6116PP	10	120	167,5	



HTU

**Coupler with central stop F/F****Manchon avec butée F/F - Manguito con tope H/H**

DN (mm)	Reference			L1 (mm)	L2 (mm)	Note
32	Z6332PP	40	5.120	88	1,2	
40	Z6340PP	40	2.560	108	1,2	
50	Z6350PP	25	1.600	105	1,2	
75	Z6375PP	20	640	144,5	1,5	
90	Z6390PP	20	640	120	-	
110	Z6311PP	12	384	126	1,5	
125	Z6312PP	20	240	166,5	2,7	
160	Z6316PP	10	80	181	3,0	

HTMM

**Socket M/F****Manchon d'adaptation M/F - Manguito adaptador M/H**

DN (mm)	Reference			L1 (mm)	L2 (mm)	Note
40	Z6540PP	25	1.600	116	163	
50	Z6550PP	40	1.280	116	165	
75	Z6575PP	35	560	122	253	
90	Z6490PP	20	240	-	-	
110	Z6511PP	20	240	124	257	
125	Z6512PP	20	160	145	221	

HTLL



Reducer M/F

Réduction M/F - Reducción M/H

d1 (mm)	d2 (mm)	Reference			L1 (mm)	L2 (mm)	Note
40	32	Z5540PP	50	3.200	-	-	
50	40	Z5550PP	60	1.920	9	103	
75	50	Z5775PP	20	1.280	-	-	

HTRR



Inside reducer M/F

Réduction incorporée M/F - Reductor interior M/H

d1 (mm)	d2 (mm)	Reference			L1 (mm)	Note
32	40	Z5440PP	10	6.400	66	
40	50	Z5450PP	10	3.840	55	

HTV

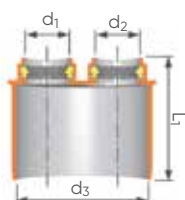


Reducer plugs M/F

Tampon de réduction M/F - Tapón reductor M/H

d1 (mm)	d2 (mm)	Reference			L1 (mm)	Note
50	75	Z5575PP	20	1.040	-	
40	90	Z5630PP	20	1.040	-	
50	90	Z5190PP	20	1.280	-	
40	110	Z5640PP	20	640	90	
50	110	Z5650PP	20	640	90	
75	110	Z5675PP	30	960	90	
90	110	Z5690PP	20	640	-	

HTV



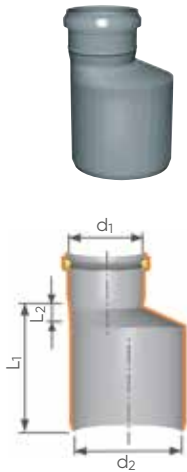
Double reducer plugs M/F

Tampon de réduction double M/F

Tapón reductor doble M/H

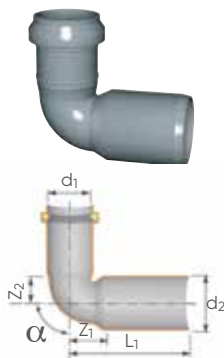
d1 (mm)	d2 (mm)	d3 (mm)	Reference			L1 (mm)	Note
32	40	110	Z5634PP	20	1.280	-	
40	40	110	Z5641PP	20	480	-	

HTV

**Invert reducer M/F****Réduction excentrée M/F - Reducción excéntrica M/H**

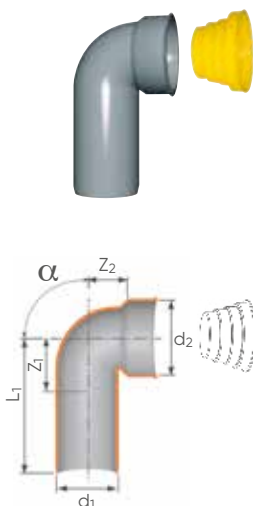
d1 (mm)	d2 (mm)	Reference			L2 (mm)	L1 (mm)	Note
32	40	Z5040PP	20	2.800	-	-	
32	50	Z5150PP	20	1.400	12	73	
40	50	Z5050PP	20	1.280	12	73	
40	75	Z5175PP	20	1.280	26	91	
40	90	Z5290PP	20	640	--		
40	110	Z5110PP	20	640	-	-	
50	75	Z5075PP	20	1.280	20	86	
50	110	Z5111PP	15	480	40	115	
75	90	Z5090PP	20	640	-	-	
75	110	Z5011PP	15	480	26	101	
110	125	Z5012PP	20	320	15	101	
110	160	Z5116PP	20	240	34	137	
125	160	Z5016PP	20	240	27	130	

HTR

**Reducing bend M/F****Coude de réduction M/F - Codo reductor M/H**

d1 (mm)	d2 (mm)	Reference			Z1 (mm)	Z2 (mm)	L1 (mm)	α	Note
40	50	Z2650PP	20	1.280	36	26	83	87°30'	

HTBR

**Technical bend M/F (with protection plug)****Coude M/F (avec tampon de protection)****Codo técnico M/H (con tapa protectora)**

D

d1 (mm)	d2 (mm)	Reference			Z1 (mm)	Z2 (mm)	L1 (mm)	α	Note
50	32	Z2910PP*	20	1.040	-	-	-	-	
40	40	Z2918PP	45	2.880	26	20	89	90°	
40	50	Z2916PP	35	2.240	31	25	89	90°	
50	50	Z2915PP	35	1.120	31	25	94	90°	
50	60	Z2917PP	35	1.120	31	25	94	90°	

*Female rail with gasket / Queue femelle à joint / Compatible con Junta de goma

HTSW



Gasket

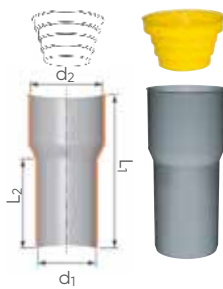
Joint - Junta de goma

D

d1 (mm)	d2 (mm)	Reference			Note
40	20÷26	6820400	50	1.000	
40	26÷32	6820401	50	12.000	
50	20÷26	6820502	50	6.000	
50	26÷32	6820500	50	6.000	
50	40	6820501	50	6.000	
60	32	ZMG32PP*	20	12.000	
60	50	ZMG51PP*	20	500	

1" = 26mm. 1 1/4" = 32 mm. 1 1/2" = 40 mm.

*upon request



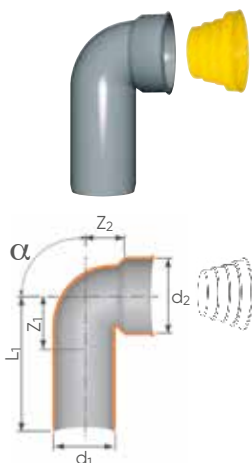
Technical Coupling M/F (with protection plug)

Manchon pour raccordements multi-matériaux M/F (avec tampon de protection)

Manguito técnico M/H (con tapa protectora)

d1 (mm)	d2 (mm)	Reference			L1 (mm)	L2 (mm)	Note
32	46	Z6810PP	20	1.040	79	50	
40	46	Z6811PP	25	1.600	93	63	

HTS



Technical bend M/F (with protection plug)

Coude M/F (avec tampon de protection)

Codo técnico M/H (con tapa protectora)

d1 (mm)	d2 (mm)	Reference			Z1 (mm)	Z2 (mm)	L1 (mm)	α	Note
32	46	Z2911PP	50	3.200	16	24	70	90°	
40	46	Z2912PP	35	2.240	17	27	76	90°	
50	46	Z2913PP	30	1.920	21	31	80	90°	

Long version / Version longue / Versión larga

40	46	Z2920PP	50	1.600	88	27	140	90°	
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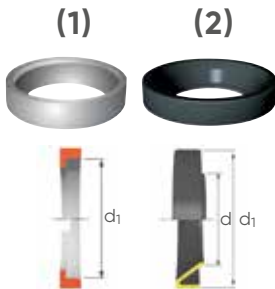
HTSW



Gasket Joint - Junta de goma

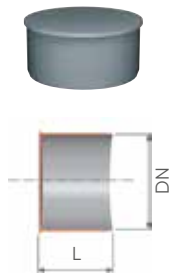
d1 Ext. (mm)	d2 Int. (mm)	d3 (mm)	Reference			L1 (mm)	Note
46	1" - 1 1/4"	20÷32	ZMG11PP	50	6.000	26	(1)
46	1" 1/2"	40	ZMG12PP	50	12.000	26	(2)

HTGM



Gasket Joint - Junta

d1 (mm)	d WC	Reference			Note
116	-	ZAB11PP	20	1.280	(1) PP White <i>PP blanc</i>
116	94÷104	ZGW12PP	10	4.160	(2) Rubber <i>Caoutchouc</i>



Socket plug Bouchon de fermeture - Tapón

DN (mm)	Reference			L (mm)	Note
32	Z7132PP	20	7.680	39	
40	Z7140PP	10	7.680	39	
50	Z7150PP	20	5.120	39	
75	Z7175PP	20	2.560	39	
90	Z7190PP	30	1.920	-	
110	Z7111PP	20	1.280	46	
125	Z7112PP	20	640	50	
160	Z7116PP	10	320	58	



Rosette Rosace - Plafón

d1 (mm)	d2 (mm)	Reference			h (mm)	Colour
90	-	0480903	20	1.620	-	White
100	137	0481003*	20	1.620	30	White
110	162	0481103	50	1.200	35	White

*upon request

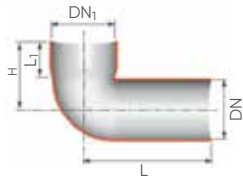


WC bend M/F

Coude WC M/F - Manguito inodoro acodado M/H

DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	h (mm)	Colour
110	116	Z2290PP	10	160	215	40	85	White

HTSB



WC bend with 2 side-inlets M/F

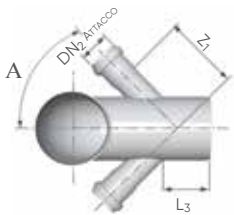
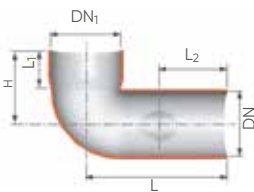
Coude WC avec 2 entrées latérales M/F

Manguito inodoro acodado 2 tomas auxiliares M/H

Type	DN (mm)	DN1 (mm)	DN2 (mm)	Reference			L (mm)	L1 (mm)	L2 (mm)	L3 (mm)	h (mm)	Z1 (mm)	α	Colour
SX	110	116	50	Z2450PP	10	120	215	95	40	125	85	110	45°	White

DX	110	116	50	Z2405PP	10	80	215	95	40	125	85	110	45°	White
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HTSB



WC bend with 1 side-inlets left/right M/F

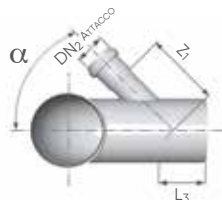
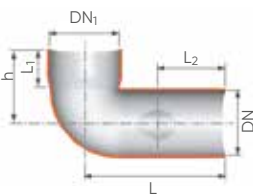
Coude WC avec 1 entrées latérales gauche/droite M/F

Manguito inodoro acodado 1 toma auxiliar derecha/izquierda M/H

DN (mm)	DN1 (mm)	DN2 (mm)	Reference			L (mm)	L1 (mm)	L2 (mm)	L3 (mm)	h (mm)	Z1 (mm)	α	Colour
110	116	40	Z2444PP*	10	80	215	100	45	130	85	110	45°	White
110	116	50	Z2455PP*	10	80	215	100	45	130	85	110	45°	White

HTSB

*upon request

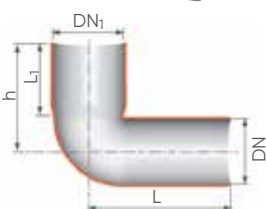


Long WC bend M/F

Coude WC haut M/F - Manguito inodoro acodado largo M/H

DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	h (mm)	Colour
110	116	Z2511PP	15	120	215	140	185	White

HTSB



Long WC bend with 1 side inlet left/right M/F

Coude WC haut avec 1 entrée latérale gauche/droite M/F

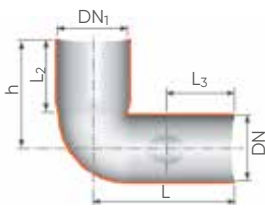
Manguito inodoro acodado largo 1 toma auxiliar derecha/izquierda M/H



SX



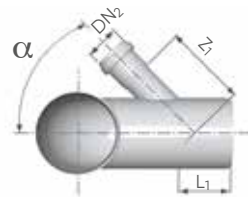
DX



Mod	DN (mm)	DN1 (mm)	DN2 (mm)	Reference			L (mm)	L1 (mm)	L2 (mm)	L3 (mm)	h (mm)	Z1 (mm)	α	Colour
SX	110	116	40	Z2540PP	20	160	-	100	140	130	185	110	45°	White
SX	110	116	50	Z2550PP	10	80	-	100	140	130	185	110	45°	White

DX	110	116	40	Z2504PP	10	80	215	100	140	125	185	110	45°	White
DX	110	116	50	Z2505PP	10	80	215	100	140	125	185	110	45°	White

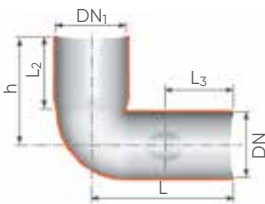
HTSB



Long WC bend with 2 side-inlets M/F

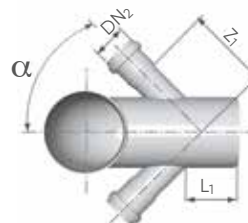
Coude WC haut avec 2 entrées latérales M/F

Manguito inodoro acodado largo 2 tomas auxiliares M/H



DN (mm)	DN1 (mm)	DN2 (mm)	Reference			L (mm)	L1 (mm)	L2 (mm)	L3 (mm)	h (mm)	Z1 (mm)	α	Colour
110	116	40	Z2544PP	10	80	215	100	140	125	185	120	45°	White
110	116	50	Z2555PP	20	80	215	100	140	125	185	120	45°	White

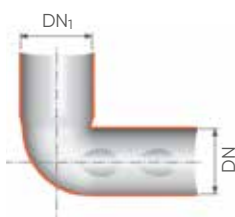
HTSB



Long WC bend with 4 side-inlets M/F

Coude WC haut avec 4 entrées latérales M/F

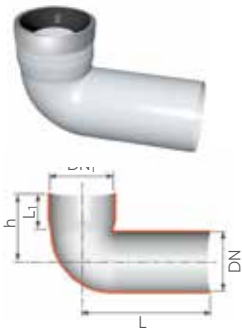
Manguito inodoro acodado largo 4 tomas auxiliares M/H



DN (mm)	DN1 (mm)	DN2 (mm)	Reference			Colour
110	116	40	Z2566PP	10	80	White

HTSB



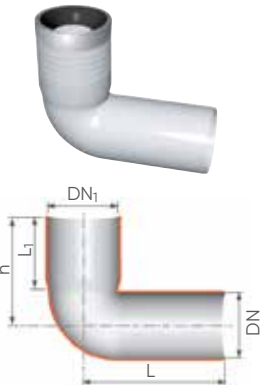


WC bend Ø90 M/F

WC long Ø90 M/F - Manguito inodoro Ø90 M/H

DN (mm)	DN1 (mm)	Reference			h (mm)	Colour
90	116	Z2090PP	10	160	85	White

HTSB



Long WC bend Ø90 M/F

Coude WC haut Ø90 M/F

Manguito inodoro acodado largo Ø90 M/H

DN (mm)	DN1 (mm)	Reference			h (mm)	Colour
90	116	Z2190PP	15	120	185	White

HTSB



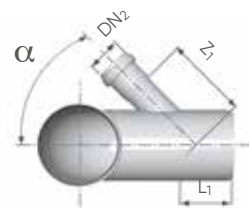
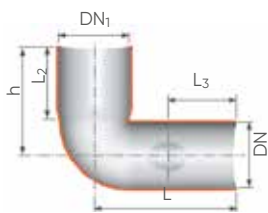
Long WC bend Ø90 with 1 side-inlet left/right M/F

Coude WC haut Ø90 avec 1 entrée latérale gauche/droite M/F

Manguito inodoro acodado largo Ø90, 1 toma auxiliar derecha / izquierda M/H

Type	DN (mm)	DN1 (mm)	DN2 (mm)	Reference			α	h (mm)	Colour
SX	90	116	40	Z2140PP	10	80	45°	185	White
SX	90	116	50	Z2150PP	10	80	45°	185	White
DX	90	116	40	Z2104PP	10	80	45°	185	White
DX	90	116	50	Z2105PP	10	80	45°	185	White

HTSB



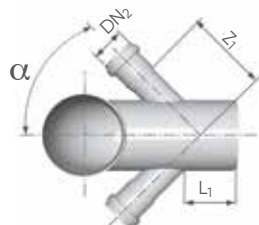
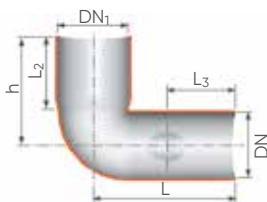
Long WC bend Ø90 with 2 side-inlets M/F

Coude WC haut Ø90 avec 2 entrées latérales M/F

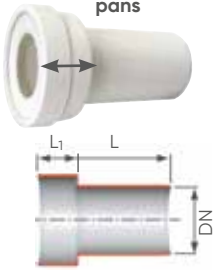
Manguito inodoro acodado largo Ø90, 2 tomas auxiliares M/H

DN (mm)	DN1 (mm)	DN2 (mm)	Reference			α	h (mm)	Colour
90	116	40	Z2144PP	10	80	45°	185	White
90	116	50	Z2155PP	10	80	45°	185	White

HTSB



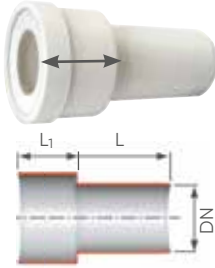
Ideal for suspended pans



WC connector Ø90 with gasket, short socket
Manchon WC Ø90 avec joint, emboiture courte
Manguito inodoro Ø90 corto, con junta

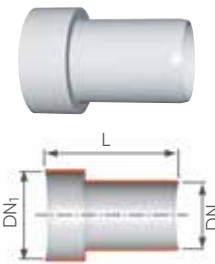
DN (mm)	Reference			L (mm)	L1 (mm)	Colour
90	16009B3	12	288	190	40	White

WC connector Ø90 with gasket, long socket
Manchon WC Ø90 avec joint - emboiture longue
Manguito inodoro Ø90 largo, con junta



DN (mm)	Reference			L (mm)	L1 (mm)	Colour
90	16009LB	30	240	240	80	White

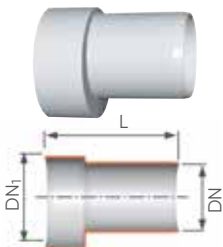
WC connector with gasket
Manchon WC avec joint - Manguito inodoro acodado con junta



DN (mm)	DN1 (mm)	Reference			L (mm)	Colour	Note
110	116	X121503	25	160	230	White colour	
110	116	Z2711PP	15	120	390	White colour	Long

HTSK

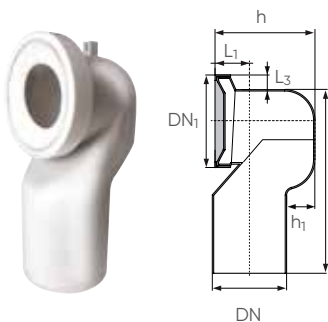
Eccentric WC connector with gasket included
Manchon WC avec joint - sortie droite excentrée
Manguito inodoro excéntrico acodado con junta



DN (mm)	DN1 (mm)	Reference			L (mm)	Colour
110	116	X121504	10	240	160	White

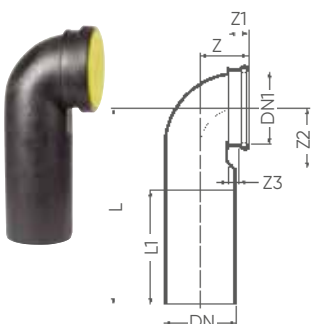
HTSK

Horizontal WC Bend with gasket
Pipe WC avec joint
Manguito inodoro acodado horizontal con junta



DN (mm)	Reference			L (mm)	L1 (mm)	L2 (mm)	h (mm)	h1 (mm)	Colour
90	Z2525PP	12	144	278	48	22	148	40	White
110	Z2523PP	12	144	272	51	22	148	42	White

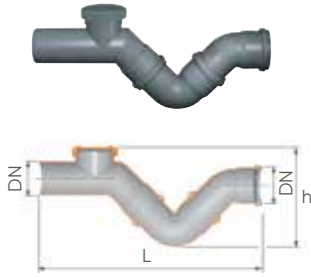
Vertical WC Bend (PE)
Coûde WC vertical (PE)
Manguito acodado para conexión de inodoro al suelo (PE)



DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Z1 (mm)	Z2 (mm)	Z3 (mm)	Colour
90	90	K2530PE	10	160	225	120	76	34	83	17	Black
110	90	K2531PE	10	160	225	120	76	34	95	17	Black

Adjustable trap interceptors

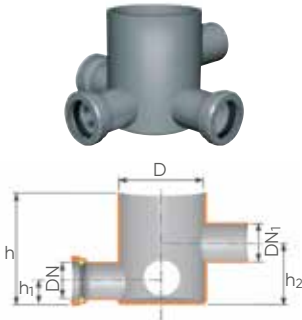
Siphon réglable - Sifón ajustable



DN (mm)	Reference			h (mm)	l (mm)	Note
50	Z7850PP	10	320	144	356	
75	Z7875PP	10	120	220	480	
90	Z7890PP	10	80	-	-	
110	Z7811PP	10	80	230	521	
125	Z7812PP	5	40	250	610	
160	Z7816PP	1	-	-	-	

Low trapped floor gully

Siphonnette basse - Bote sifónico, bajo

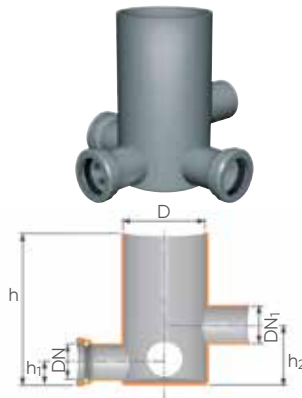


D (mm)	DN (3 inlets)	DN1 (1 outlet)	Reference			L (mm)	h1 (mm)	h2 (mm)	Note
100	40	40	Z9411PP	10	160	120	30	80	
100	40	50	Z9711PP	10	160	120	30	80	

HTSB

High trapped floor gully

Siphonnette haute - Bote sifónico, alto



D (mm)	DN (3 inlets)	DN1 (1 outlet)	Reference			L (mm)	h1 (mm)	h2 (mm)	Note
100	40	40	Z9511PP	20	160	200	30	80	
100	40	50	Z9811PP	20	160	200	30	80	

HTSB

Inox grid with trap

Grille inox avec siphon - Rejilla con sifón en acero inox



DN (mm)	DN1 (mm)	Reference			h (mm)	Note
100	128	Z7470PP	20	800	96	

Protection cap for floor gully

Bouchon de protection pour collecteur

Tapón de protección bote sifónico

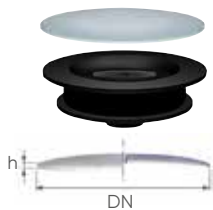


DN (mm)	Reference			Note
100	T651000	50	2.000	

Plug for floor gully with stainless steel plate

Bouchon pour collecteur avec tournette en acier inox

Tapa en acero inoxidable para bote sifónico



DN (mm)	Reference			h (mm)	Note
100	Z7450PP	20	1.040	3	