

PVC-U Soil & Waste System

REDI

1.2 PVC-U SOIL & WASTE



**EN 1329 Solvent Welded PVC-U Fittings
ME Type
B s2 d0 Fire Reaction Euroclass**


alixis

PVC-U

Soil & Waste System

REDI PVC-U solvent welded fittings are compliant to the EN1329 ("Plastics piping systems for soil and waste discharge, low and high temperature, within the building structure - Unplasticized Polyvinyl Chloride") standard and follows the ME Type French designation, corresponding to the highest level of protection against fire.

The products standard compliance guarantees the respect of the required dimensional tolerances, the designs criteria and the performances for building water drainage applications.

General characteristics of PVC

- Name: Polyvinyl Chloride
- Color: RAL 7037 - Grey
- Operation Temperature Range: 70 °C is the MAX temperature of waste water in permanent conditions. For discontinuous drainage applications as common household appliances discharge, instant peak of 95 °C are allowed.

Mechanical resistance

	Testing method	Unit of measure	Measured value*
Yield point	ISO 527	MPa	53
Tensile strength	ISO 527	MPa	43
Elongation at break	ISO 527	%	150
Modulus of elasticity	ISO 527	MPa	≥ 3,000

Physical properties

	Testing method	Unit of measure	Measured value*
•Average density	ISO 1183	g/cm ³	1.43
•Softening temperature (VICAT)	EN 727	°C	80
•Coefficient of linear thermal expansion		mm/m x °C	0.07
•Thermal conductivity		W/m x °C	0.16
•Surface electrical resistivity		Ω	> 10 ¹²

- Resistance to decay: PVC is completely resistant to decay.
- Biological resistance: algae and bacteria present in the waste water do not have any effect on the PVC pipes.
- The PVC is not affected by rodents.
- Abrasion resistance: the pipes and fittings conforming to EN1329 standard are abrasion-proof.
- Hydraulic roughness: the internal surfaces of the pipes and fittings conforming to EN1329 standard are hydraulically smooth. REDI couplings and fittings are designed to ensure good hydraulic performance. For flow rate calculations on PVC branches, an effective roughness coefficient can be used (k = 0.25 mm).
- For flow rate calculations on PVC branches, an effective roughness coefficient can be used k = 0.25 mm. (See installation guide).
- Chemical resistance: PVC is particularly resistant to chemical attacks and can therefore be used without problems for the drainage of industrial water containing chemical compounds in the pH range between 2 (acid) and 12 (alkaline).

PVC is also one of the few plastic materials that can be joined with solvent socket, which simplifies and speeds up many installation operations.

In the following page, a summarising table contains information obtained from laboratory tests.

Fire Reaction

- Regarding building materials applications, the fire reaction and resistance assessment is a key point to consider during the different designs and project phases. PVC is a fire-proof polymer and shows a better resistant behavior than the other traditional plastic materials.

REDI PVC fittings are certified as B S2 d0 Fire Reaction Euroclass applied to plastic material made soil and waste drainage systems.

"B" letter refers to a fire reaction range starting from A1, A2, B, C, D, E, F where the performances decrease progressively from class A1 (non-flammable, as gres or concrete) to class F (non-classifiable, the most dangerous one). PVC has a very limited contribution to fire.

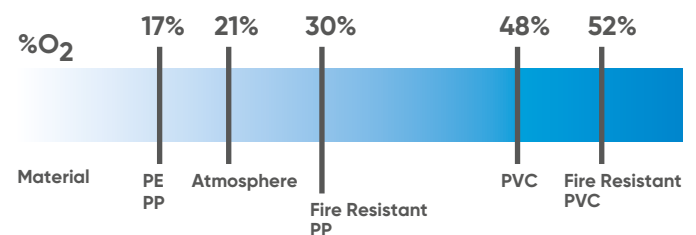
"S2" letter characterizes the release attitude of smoke.

"d0" letter characterizes the release attitude of fire droplets. This kind of event may be able to spread a fire, particularly starting from a floor to another. PVC does not release any droplets.

REDI PVC Fittings also guarantee a minimum expansion capacity equal to 800 times of the wall thickness (800% minimum expansion) when heat stress occurs. This product characteristic enables the pipe or fitting cross-section to be obstructed during the fire event and consequently avoiding the flame spreading.

The oxygen level contained into the different building material formulations may influence their fire attitude during the event.

The higher is the oxygen level, the higher is the material's fire resistance. PVC has the higher level of oxygen compared to the other common used for drainage applications.



PVC – Chemical resistance

Product	Conc. %	Temp. 20 °C	Temp. 60 °C	Product	Conc. %	Temp. 20°	Temp. 60°
ACETIC ACID	60	S	L	HYDROFLUORIC ACID	60	L	NS
ACETIC ACID MONOCHLORIDE	SOL.	S	L	HYDROGEN	100	S	S
ACETIC ALDEHYDE	100	NS	-	HYDROGEN DIOXIDE	30	S	S
ACETIC ANHYDRIDE	100	NS	NS	HYDROGEN SULPHIDE	100	S	S
ACETONE	100	NS	NS	IRON CHLORIDE	SOL. SAT.	S	S
ADIPIC ACID	SOL.SAT.	S	L	LACTIC ACID	10	S	L
ALLYL ALCOHOL	90	L	S	LACTIC ACID	10-90	L	NS
ALUMINUM CHLORIDE	SOL. SAT.	S	S	LEAD ACETATE	SOL. SAT.	S	S
ALUMINUM SULPHATE	SOL. SAT.	S	S	LEAD TETRAETHYL	100	S	-
AMMONIA (AQUEOUS)	100	L	NS	MAGNESIUM CHLORIDE	SOL. SAT.	S	S
AMMONIA (GAS)	100	S	S	MAGNESIUM SULPHIDE	SOL. SAT.	S	S
AMMONIA (SOLUTION)	SOL. DIL.	S	L	MALEIC ACID	SOL. SAT.	S	L
AMMONIUM CHLORIDE	SOL. SAT.	S	S	METHYL ALCOHOL	100	S	L
AMMONIUM FLUORIDE	20	S	L	METHYL METHACRYLATE	100	NS	NS
AMMONIUM NITRATE	SOL. SAT.	S	S	METHYLENE CHLORIDE	100	NS	NS
AMMONIUM SULPHATE	SOL. SAT.	S	S	MILK		S	S
AMYL ACETATE	100	NS	NS	NICKEL SULPHIDE	SOL. SAT.	S	S
AMYL ALCOHOL	100	S	L	NICOTINIC ACID	CONC.	S	S
ANILINE	100	NS	NS	NITRIC ACID	<46	S	L
ANILINE	SOL. SAT.	NS	NS	NITRIC ACID	46-98	NS	NS
ANILINE HYDROCHLORIDE	SOL. SAT.	NS	NS	OILS		S	S
ANTIMONY CHLORIDE	90	S	S	OLEIC ACID	100	S	S
ARSENIC ACID	SOL. DIL.	S	-	OLEUM	10% of SO	NS	NS
BEER		S	S	OXALIC ACID	SOL. DIL.	S	L
BENZALDEHYDE	0,1	NS	NS	OXALIC ACID	SOL. SAT.	S	S
BENZENE	100	NS	NS	OXIGEN	100	S	S
BENZOIC ACID	SOL. SAT.	L	NS	OZONE	100	NS	NS
BORAX	SOL. SAT.	S	L	PERCHLORIC ACID	10	S	L
BORIC ACID	SOL. DIL.	S	L	PERCHLORIC ACID	70	L	NS
BROMINE (LIQUID)	100	NS	NS	PETROL	80/20	NS	NS
BROMINE ACID	10	S	-	PHENOL	90	NS	NS
BUTADIENE	100	S	S	PHOSPHINE	100	S	S
BUTANE	100	S	-	PHOSPHOR TRICHLORIDE	100	NS	-
BUTYL ACETATE	100	NS	NS	PHOSPHORIC ACID	30	S	L
BUTYL PHENOL	100	NS	NS	PICRIC ACID	SOL. SAT.	S	S
BUTYLENE	100	S	L	POTASSIUM BICHROMATE	40	S	S
BUTYRIC ACID	20	S	L	POTASSIUM BROMIDE	SOL. SAT.	S	S
BUTYRIC ACID	98	NS	NS	POTASSIUM CHLORIDE	SOL. SAT.	S	S
CALCIUM CHLORIDE	SOL. SAT.	S	S	POTASSIUM CHROMATE	40	S	S
CALCIUM NITRATE	50	S	S	POTASSIUM CYANIDE	SOL.	S	S
CARBON DIOXIDE	100	S	S	POTASSIUM FERRICYANIDE	SOL. SAT.	S	S
CARBON SULPHIDE	100	NS	NS	POTASSIUM FERROCYANIDE	SOL. SAT.	S	S
CARBON TETRACHLORIDE	100	NS	NS	POTASSIUM HYDROXIDE	SOL.	S	S
CETYL ACID	100	S	S	POTASSIUM NITRATE	SOL. SAT.	S	S
CHLORINE (DRY GAS)	100	L	NS	POTASSIUM PERMANGANATE	20	S	S
CHLORINE (LIQUID)	SOL. SAT.	L	NS	POTASSIUM PERSULFATE	SOL. SAT.	S	L
CHLOROSULPHONIC ACID	100	L	NS	PROPANE (GAS LIQUID)	100	S	-
CHROMIC ACID	1-50	S	L	PYRIDINE	100	NS	-
CITRIC ACID	SOL. SAT.	S	S	SEA WATER		S	L
COPPER CHLORIDE	SOL. SAT.	S	S	SILVER NITRATE	SOL. SAT.	S	L
COPPER FLUORIDE	2	S	S	SOAP	SOL.	S	L
CREOSOL	SOL. SAT.	-	NS	SODIUM BENZOATE	35	S	L
CRESOL ACID	SOL. SAT.	NS	NS	SODIUM BISULPHITE	SOL. SAT.	S	S
CROTONIC ALDEHYDE	100	NS	NS	SODIUM CHLORATE	SOL. SAT.	S	S
CYCLOHEXANOL	100	NS	NS	SODIUM FERRICYANIDE	SOL. SAT.	S	S
CYCLOHEXANONE	100	NS	NS	SODIUM HYDROXIDE	SOL.	S	L
DEVELOPING BATH		S	S	SODIUM HYPOCHLORITE	100 (13% CL.)	S	L
DEXTRINE	SOL. SAT.	S	L	SODIUM SULPHITE	SOL. SAT.	S	L
DICHLOROETHYLENE	100	NS	NS	SUGAR	SOL. SAT.	S	S
DIGLYCOLIC ACID	18	S	L	SULPHUR ACID	SOL.	S	S
DIMETHYLAMMINE	30	S	-	SULPHUR ANHYDRIDE	100 (LIQUID)	L	NS
ETHYL ACETATE	100	NS	NS	SULPHUR ANHYDRIDE	100 (DRY)	L	NS
ETHYL ACRYLATE	100	NS	NS	SULPHURIC ACID	40-90	S	L
ETHYL ALCOHOL	95	S	L	SULPHURIC ACID	96	L	NS
ETHYL ETHER	100	NS	L	TANNIC ACID	SOL.	S	S
ETHYLENE GLYCOL	CONC.	L	L	TARTARIC ACID	SOL.	S	S
FLUOSILICIC ACID	32	S	S	TIN CHLORIDE	SOL. SAT.	S	S
FORMALDEHYDE	SOL.	S	S	TOLUENE	100	NS	NS
FORMALDEHYDE	40	S	S	TRICHLOROETHYLENE	100	NS	NS
FORMIC ACID	1-50	S	L	TRIMETHYL PROPANE	<10	S	L
FURFURAL ALCOHOL	100	NS	NS	UREA	10	S	L
GLUCOSE	SOL. SAT.	S	L	URINE		S	L
GLYCERIN	100	S	S	VINAGRE		S	S
GLYCOLIC ACID	30	S	S	VINYL ACETATE	100	NS	NS
GOLDEN SYRUP	SOL.	S	L	WINE		S	S
HYDRAZINE BENZENE	100	NS	NS	XYLENE	100	NS	NS
HYDRAZINE BENZENE CLORIC	97	NS	NS	YEAST	SOL.	S	L
HYDROBROMIC ACID	50	S	L	ZINC CHLORIDE	SOL. SAT.	S	S
HYDROCHLORIC ACID	>30	S	S				

ts = Without corrosion

L = Limited corrosion

NS = Corrosion

For special applications it is recommended to contact the REDI Technical Department.

Installation Guide

Installation of the expansion joint in the PVC drainage systems:

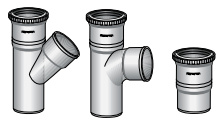
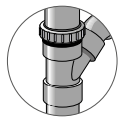
In branches or bends, the most correct technical solution is inserting a horizontal expansion joint (A; B; C) into the piping whenever the section between two fixed points is higher than 2÷3 m, and always when connecting washing-machines, dishwashers and kitchen sinks.

A vertical expansion joint (D) should be inserted onto each level of the vertical columns above the branch that connects to the bend and the toilet bowl. Alternatively, a branch equipped with an expander (E or F) can be used to directly connect to the column.

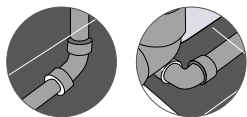
Pict.1



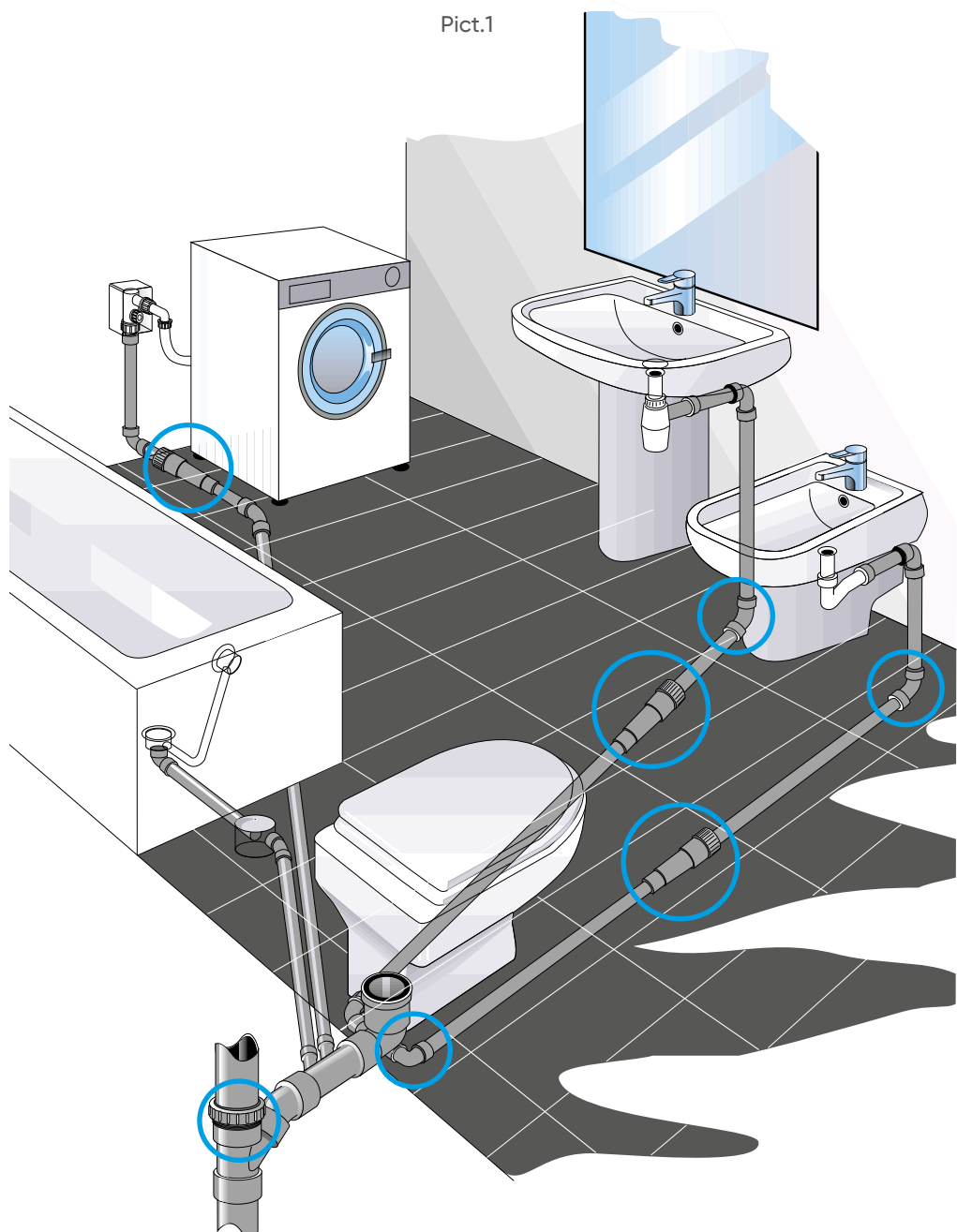
Expansion joint horizontal
•A •B •C



Expansion
•D •E •F



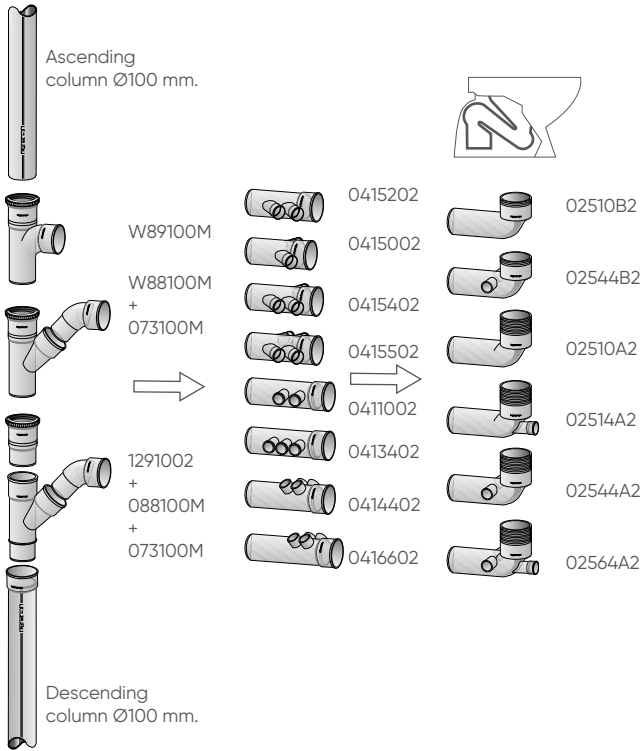
Technical bend



Connection to sanitary fittings:

Vertical connection to the toilet

Pict.2



* = Product with various dimensions, in the Pict. 3 the code of the most widely used type is to be found.

Connecting elements:

Extension for toilet bend.
 EVA Universal Seal with high wear and tear resistance.
 Concentric and eccentric adapters.
 Flat rubber seal with clamping ring.

Pict.3

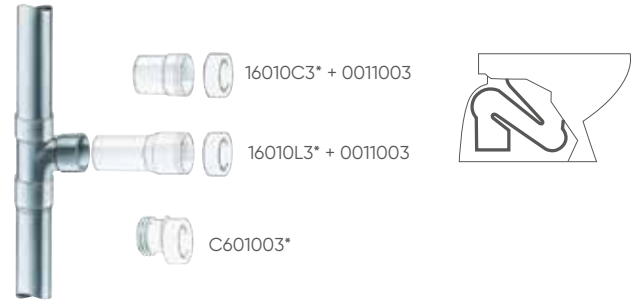


* = Product with various dimensions, in the Pict. the code of the most widely used type is to be found.

Horizontal connection to the toilet (back or suspended)

A both long and short toilet coupling is used on when the same accessories indicated in the figure below can be inserted.

Pict.3

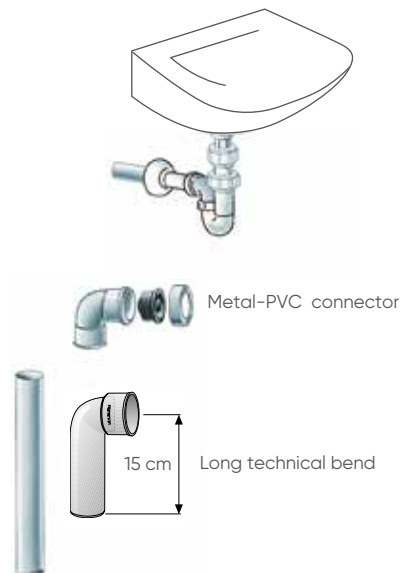


* = Product with various dimensions, in the Pict. the code of the most widely used type is to be found.

Sink/bidet connection

Technical bends: guarantee good water-tightness, maintaining compact sizes against the wall.
 The same product exists also in the technical coupling version. Technical bends with ferrule.
 Extended technical bend.

Pict.4

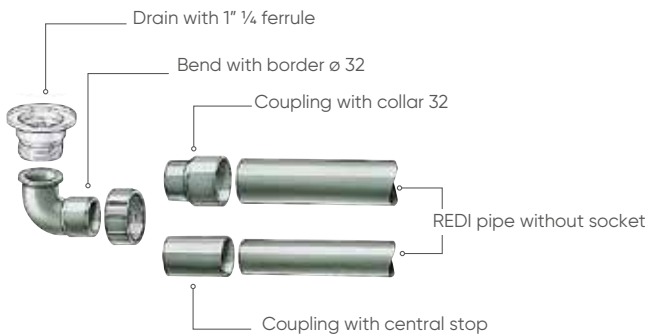


Technical bends with ferrule: guarantee greater stability of the technical seal which bears slight misalignment of the sleeve connection pipe better. This fitting needs a technical self-locking seal shaped accordingly to allow the ferrule to be assembled. This product exists also in the technical coupling version.

Bath and shower connection:

The connection of the bath drains directly to the bend with border Ø32 (026030M) with half a brass ferrule or made from 1" ¼ polypropylene.

Pict.5



Floor trap:

Waterproofing of the surrounding area, in consideration that infiltration may occur between the walls of the trap and the floor covering: for installation refer to the exploded figure below which indicates the positioning of the necessary components:

Tap for floor trap (0661002)

Stainless steel plate (PIAOXNI)

Drain ring for PVC cloth (0201002)

PVC cloth (02; R991202)

Pict.6



Typical problems of the drainage system

The main problems which can affect the drainage system are:

- **CLOGGING** often occurs as a result of an inadequate diameter, that not allowing the regular disposal of sewage, it prevents the correct passage of the liquid which normally makes the internal self-cleaning of the walls: a reduced cross-section prevents disposal whilst an excessive cross-section causes the deposit of sediments that might lead to the gradual shrinking of the section until it is blocked. This phenomenon can also occur due to small slopes, abrupt deviations and inadequate confluence.

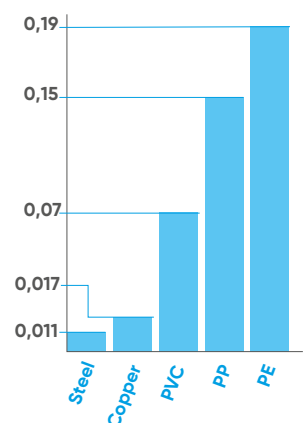
- **SMELL EMISSION** is another problem strictly linked to the ventilation system: the descent of sewage can cause the leakage of gases conveyed through the drain pipes of the lower floors or the emptying by suction of the drain pipes located upstream. The misplacement of the vent can cause the emission of odours into the environment: this must be at least 2 ml. above the ground floor of high houses, at least 20 cm above the roof cover and always 1 ml. above the architrave of the nearest window.

- **LINEAR EXPANSION** is a problem which affects all plastic and metal systems, depending on the coefficient of linear thermal expansion that is a given characteristic of each material. In order to assess the elongation of each single system section, the thermal expansions of different materials are compared in graph A. It is clear that, as concerns the effects of thermal expansion containment, PVC is the least subjected to changes of size which are in the range of:

- 0.07 mm each 1 ml. of pipe
- for 1 °C of heat gradient

4 ml. piping installed at 0 °C that reaches the temperature of 42 °C, is subject to an elongation of around 12 mm (e.g. upright column). However, in the case of a kitchen drain where boiling water is poured (around 90 C° for the thermal expansion which occurs inside the sink pipe) in a room temperature pipe (20 °C) on a 3 ml. length of tube it will increase in length by around 15 mm.

Pict.7



Graph A
Linear thermal expansion expressed in mm. x m. x °C

Example of expansion calculation:

T = max operating temperature (e.g. 90°C)

T1 = mounting temperature or minimum operating temperature if below (e.g 20°C)

0,07 = linear thermal expansion of PVC expressed in mm x m x °C (Pict. 7)

L = length of the section in question (e.g. 3 linear metres)

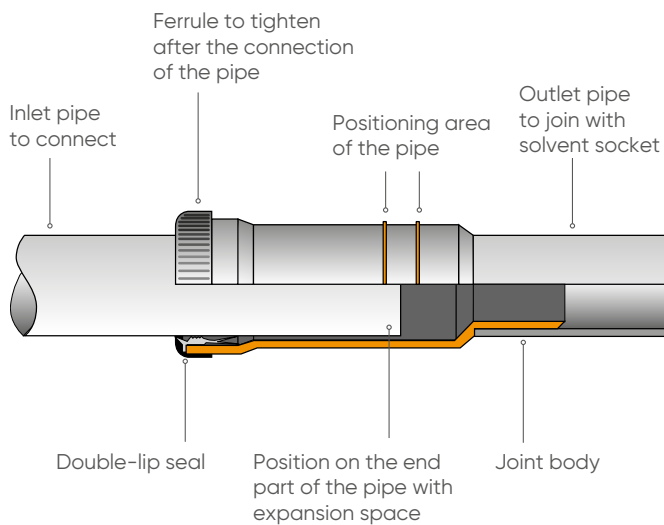
$$(T - T1) \times 0.07 \times L$$

specifically in the case under examination: (90-20) x 0.07 x 3 = 15 mm

The following general rules can be gathered from the example shown below:

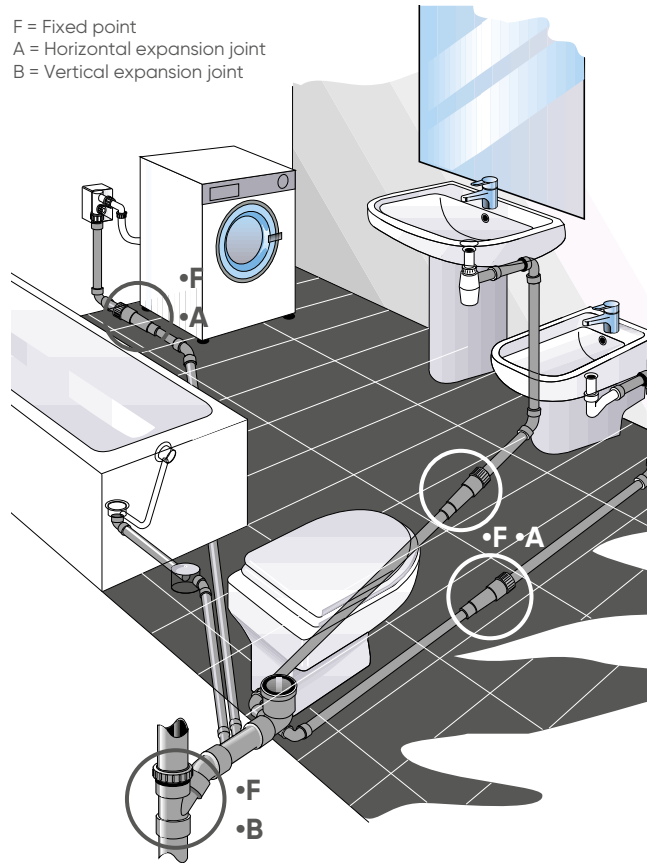
- 1) In branches or bends (Pict. 9) the most correct solution is inserting a horizontal expansion joint into the piping (Pict. 8) whenever the section between two fixed points F (Pict. 9) exceeds $2 \div 3$ metres and always when connecting washing-machines and dishwashers (branches subjected to continuous discharge of hot water).

Pict.8



Pict.9

F = Fixed point
A = Horizontal expansion joint
B = Vertical expansion joint



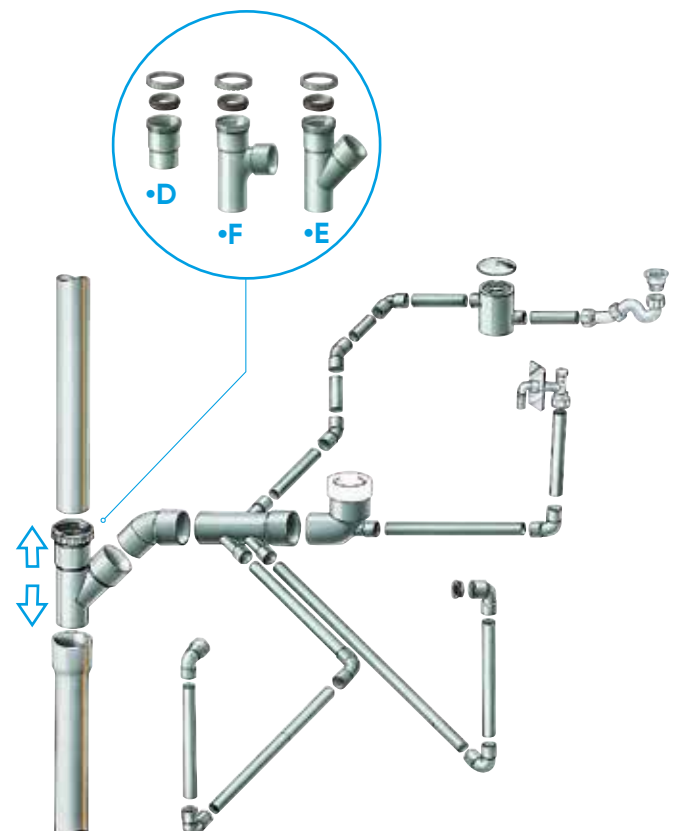
Pict.10

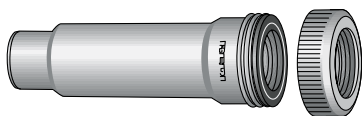
Vertical expansion-joint and insertion according to the mounting diagram

- 2) A vertical expansion joint should be inserted on each level (every $3 \div 4$ metres) of the upright columns above the branch which receives the bend and the toilet bowl. Alternatively, a branch equipped with an expander can be used for direct connection to the column (Pict. 10).

- 3) During the installation of the expansion joint, the following requirements must be observed:

- a) after having treated the joint seal with REDI greaser, apply also the grease to the pipe and insert it into the relative slot. Before tightening the locking ring nut, feed the pipe until it has its end part in the field marked out by two lines, superimposed on the joint body (Pict. 9).
- c) install the pipe placed behind the wall without immersing it in the cement, using for the filling of the section fine grained-stabilised material in order to allow for any adjustment caused by expansion.





Expansion joint horizontal M/F
Manchon de dilatation horizontal M/F
Manguito de dilatación horizontal M/H

DN (mm)	Reference			Type
32	1290302	5	1.920	A (see Picture 9)
40	1290402	5	1.440	B (see Picture 9)
50	1290502	5	960	C (see Picture 9)
63	MLH00NI	32	768	
75	MPH00NI*	20	-	
80	MRH00NI	35	420	
100	MTH00NI	20	240	
110	MVH00NI	20	240	
125	MXH00NI	16	192	
160	MZH00NI	18	144	

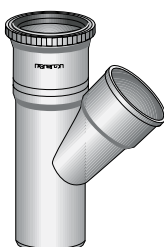
*upon request



Expansion joint vertical M/F
Manchon de dilatation vertical M/F
Manguito de dilatación vertical M/H

DN (mm)	Reference			Type
100	1291002*	10	240	D (see Picture 10)

*upon request



Expansion branch 45° M/F
Culotte de dilatation 45° M/F
Derivación de dilatación 45° M/H

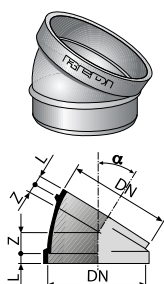
DN (mm)	Reference			Type
100	W88100M*	20	-	E (see Picture 10)

*upon request



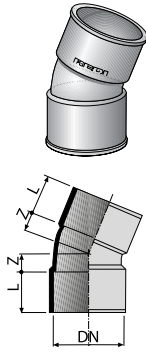
Expansion joint vertical M/F
Manchon de dilatation vertical M/F
Manguito de dilatación vertical M/H

DN (mm)	Reference			Type
100	1291002	10	240	D (see Picture 10)



Segment Bend 15°/30° M/F
Secteur de coude 15°/30° M/F
Sector de codo 15°/30° M/H

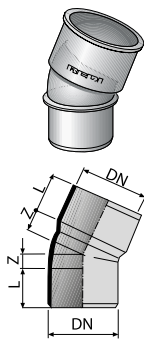
DN (mm)	Reference			L (mm)	Z (mm)	α	Note
100	017100M	40	960	20	9	15°	
100	018100M	40	960	20	16	30°	



Bend Double Socket 22°30' F/F Coude 22°30' F/F - Codo 22°30' H/H

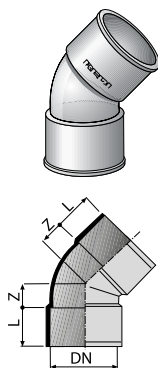
DN (mm)	Reference			L (mm)	Z (mm)	Note
32	028030M*	100	5.200	23	5,5	
40	028040M	60	3.120	27	6,5	
50	028050M	40	2.080	32	7,5	
100	028100M	12	288	56	20	

*upon request



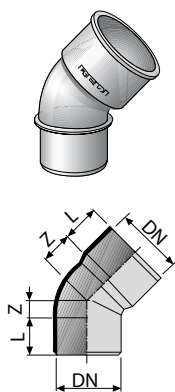
Bend 22°30' M/F Coude 22°30' M/F - Codo 22°30' M/H

DN (mm)	Reference			L (mm)	Z (mm)	Note
32	078030M	100	5.200	23	5,5	
40	078040M	150	3.600	27	6,5	
50	078050M	40	2.080	32	7,5	
100	078100M	12	288	56	20	



Bend Double Socket 45° F/F Coude 45° F/F - Codo 45° H/H

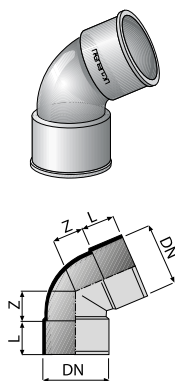
DN (mm)	Reference			L (mm)	Z (mm)	Note
32	023030M	100	5.200	23	11	
40	023040M	140	3.360	27	13	
50	023050M	80	1.920	32	17	
63	023060M	45	1.080	39	22	
75	023070M	25	600	44,5	25	
80	023080M	20	480	47	26,5	
100	023100M	40	320	53	33	
110	023110M	30	240	56	38	
125	023120M	20	160	61	41	
140	023140M	15	120	61	47	
160	023160M	10	80	72	50	
200	023200M	5	40	85	65	
250	0232502	1	27	101	79	
315	0233002	1	14	116	100	



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

DN (mm)	Reference			L (mm)	Z (mm)	Note
32	073030M	100	5.200	23	11	
40	073040M	150	3.600	27	13	
50	073050M	80	1.920	32	17	
63	070060M	50	1.200	39	22	
75	073070M	25	600	44,5	25	
80	073080M	25	600	47	26,5	
100	073100M	40	320	53	33	
110	073110M	8	192	56	38	
125	073120M	20	160	61	41	
140	0121402	20	160	61	47	
160	0701602	15	120	72	50	
200	0702002	5	40	85	65	
250	0122502	1	50	101	79	
315	0123002	1	16	116	100	
400	0124002	1	7	155	125	
500	0125002*	1	4	150	160	

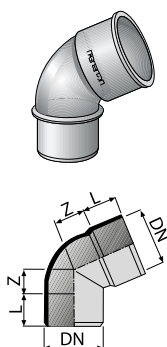
*upon request



Bend Double Socket 67°30' F/F
Coude 67°30' F/F - Codo 67°30' H/H

DN (mm)	Reference			L (mm)	Z (mm)	Note
32	027030M*	50	4.050	23	18	
40	027040M*	50	2.600	27	21	
50	027050M*	60	1.440	32	27	
100	027100M*	30	240	57	53	

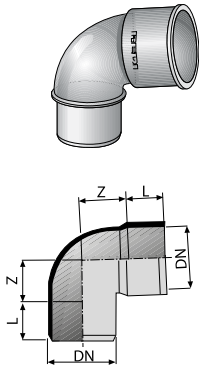
*upon request





Bend 67°30' M/F
Coude 67°30' M/F - Codo 67°30' M/H

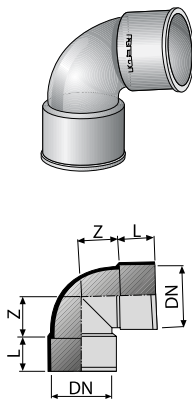
DN (mm)	Reference			L (mm)	Z (mm)	Note
32	072030M	50	4.050	23	18	
40	072040M	50	2.600	27	21	
50	072050M*	60	1.440	32	27	
100	072100M	30	240	57	53	
125	013120M*	18	144	64	58	



*upon request

**Bend 87°30' M/F****CoUDE 87°30' M/F - Codo 87°30' M/H**

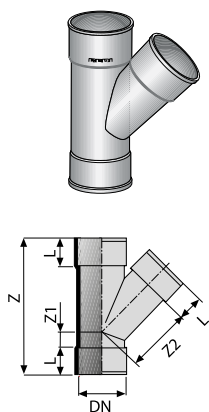
DN (mm)	Reference			L (mm)	Z (mm)	Note
32	074030M	80	4.160	23	25	
40	074040M	100	2.400	27	31	
50	074050M	50	1.200	32	39	
63	071060M	35	840	39	48	
75	074070M	20	480	44,5	58	
80	074080M	15	360	47	61	
100	074100M	30	240	57	77	
110	0711102	25	200	61	65	
125	074120M	15	120	60	101	
140	0141402	12	96	61	83	
160	074160M	8	64	60	124	
200	074200M	5	40	60	153	
250	0142502	1	22	103	155	
315	0143002	1	10	120	192	
400	0144002	1	6	155	245	
* 110	074110M	20	160	62	87	

* Long radius / Grand rayon / Gran radio

**Bend Double Socket 87°30' F/F****CoUDE 87°30' F/F - Codo 87°30' H/H F/F**

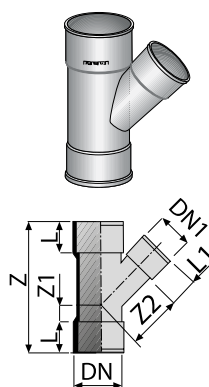
DN (mm)	Reference			L (mm)	Z (mm)	Note
32	024030M	80	4.160	23	25	
40	024040M	100	2.400	27	31	
50	024050M	50	1.200	32	39	
63	024060M	30	720	39	48	
75	024070M	18	432	44,5	58	
80	024080M	15	360	47	61	
100	024100M	25	200	57	77	
110	0241302	25	200	61	65	
125	024120M	15	120	60	101	
140	E24140M	10	80	61	83	
160	024160M	8	64	60	124	
200	024200M	4	32	60	153	
250	0242502	1	20	103	155	
315	0243002	1	10	120	192	
* 110	024110M	18	144	62	245	

* Long radius / Grand rayon / Gran radio



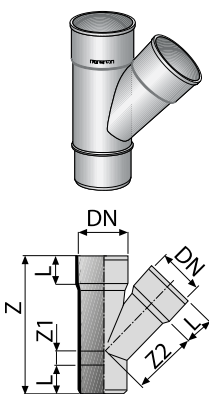
Branch Triple Socket 45° F/F
Culotte 45° F/F - Derivación 45° H/H

DN (mm)	Reference			L (mm)	Z (mm)	Z1 (mm)	Z2 (mm)	Note
32	044030M	100	2.400	23	98	11	41	
40	044040M	60	1.440	27	118	13	51	
50	044050M	30	720	32	144	17	63	
63	044060M	15	360	39	180	21	81	
75	044070M	10	240	44,5	207	25	93	
80	044080M	10	240	47	224	27	103	
100	044100M	20	160	57	271	33	124	
110	044110M	10	80	60,5	296	37	138	
125	E44120M	10	80	61	319	41	156	
140	E44140M	8	64	60	334	32	176	
160	044160M	4	32	65	387	45	203	
200	1442002	1	22	86	483	45	250	
250	1442502	1	11	103	609	57	315	
315	1443002	1	5	115	725	73	380	



Unequal branch triple socket 45° F/F
Culotte et embranchement 45° F/F
Derivación reducida 45° H/H

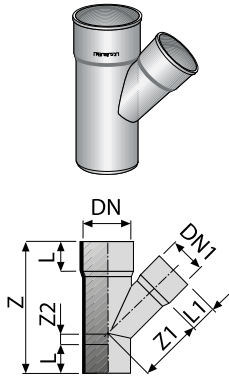
DN (mm)	DN1 (mm)	Reference			L (mm)	Z (mm)	Z1 (mm)	Z2 (mm)	Note
40	32	BH244NI	10	1.920	27	106	7	46	



Branch 45° M/F
Culotte 45° M/F - Derivación 45° M/H

DN (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Z1 (mm)	Z2 (mm)	Note
32	088030M	50	2.600	23	-	98	11	41	
40	088040M	60	1.440	27	-	118	13	51	
50	088050M	30	720	32	-	144	17	63	
63	088060M	20	480	39	-	180	21	81	
75	088070M	10	240	44,5	-	207	25	93	
80	088080M*	8	192	47	-	224	27	103	
100	088100M	20	160	57	-	271	33	124	
110	088110M	15	120	60,5	-	296	37	138	
125	080120M	10	80	61	-	319	41	156	
140	0301402	8	64	60	-	334	32	176	
160	0301602	5	40	65	-	387	45	203	
200	0302002	1	22	86	-	483	45	250	
250	0302502	1	12	103	-	609	57	315	
315	0303002	1	5	115	-	725	73	380	

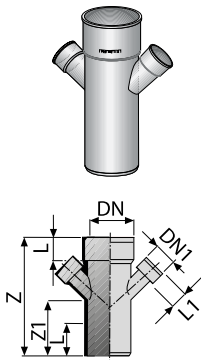
*upon request



Unequal Branch 45° M/F
Culotte 45° M/F - Derivación reducida 45° M/H

DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Z1 (mm)	Z2 (mm)	Note
75	50	031270M	20	480	45	40	180	87	8	
100	40	083100M	10	240	53	36	180	100	15	
100	50	083300M	10	240	53	40	193	104	8	
100	63	083500M*	10	240	56	38	208	107	3	
110	50	031310M	10	240	55	40	206	15	114	
110	75	031510M	20	160	59	45	237	1	122	
125	100	031720M	12	96	70	62	294	145	14	
125	110	031920M*	10	80	62	56	298	19	150	
160	110	0311602	1	72	72	55	325	2	175	
160	125	0313602	6	48	74	62	346	12	182	
200	110	0313502	1	48	86	56	360	17	200	
200	125	0313702*	1	40	86	60	380	7	210	
200	160	0312002	1	30	86	74	430	18	230	
250	160	0314002	1	20	103	72	482	3	260	

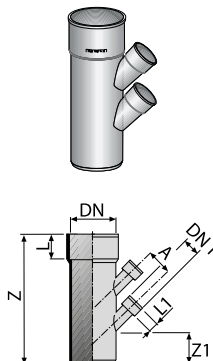
*upon request



Reduced multibranch 45° M/F
Culotte multiple 45° M/F - Derivación múltiple reducida 45° M/H

DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Z1 (mm)	Note
100	40	0415002*	10	180	57	27	273	145	

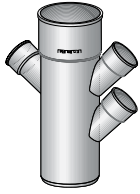
*upon request



Reduced multibranch 45° M/F
Culotte multiple 45° M/F - Derivación múltiple reducida 45° M/H

DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Z1 (mm)	A (mm)	Note
100	40	0415202*	10	190	57	27	273	67	55	

*upon request

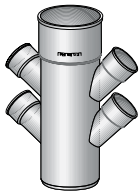
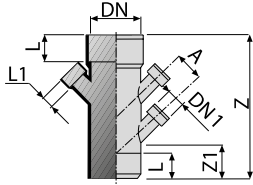


Reduced multibranch 45° M/F

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

DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Z1 (mm)	A (mm)	Note
100	40	0415402*	10	160	57	27	273	67	55	

*upon request

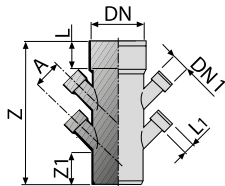


Reduced multibranch 45° M/F

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

DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Z1 (mm)	A (mm)	Note
100	40	0415502*	20	-	57	27	273	65	55	

*upon request

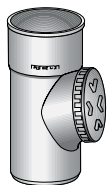
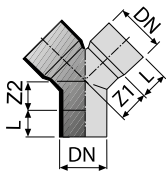


Double bend 45° M/F

Coude double 45° M/F - Codo doble 45° M/H

DN (mm)	Reference			L (mm)	Z1 (mm)	Z2 (mm)	Note
100	0421002*	10	180	64	56	28	

*upon request

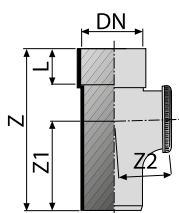


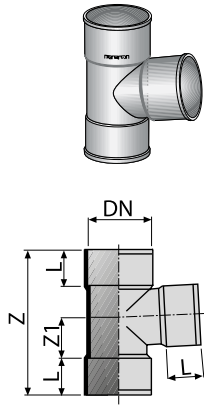
Access pipe M/F

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

DN (mm)	Reference			Z (mm)	Z1 (mm)	Z2 (mm)	Note
100	182100M*	20	160	90	243	134	
110	182110M*	20	160	95	246	119	
160	1821602	1	75	110	333	164	
315	1403002*	1	8	240	611	310	



*upon request

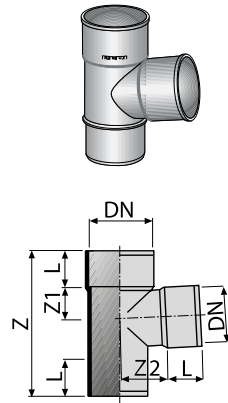




Branch triple socket 87°30' F/F



Culotte 87°30' F/F - Derivación 87°30' H/H

DN (mm)	Reference			L (mm)	Z (mm)	Z1 (mm)	Note
32	045030M	50	2.600	23	88	25	
40	045040M	70	1.680	27	106	31	
50	045050M	40	960	32	129	39	
75	045070M	15	360	44	185	58	
80	045080M	10	240	47	195	61	
100	045100M	20	160	57	243	77	
110	045110M	13	104	62	268	87	
125	E45120M	10	80	60	283	100	
160	045160M	5	40	74	335	95	
200	1452002	1	28	86	410	120	
250	1452502	1	15	103	510	152	
315	1453002	1	8	115	620	185	

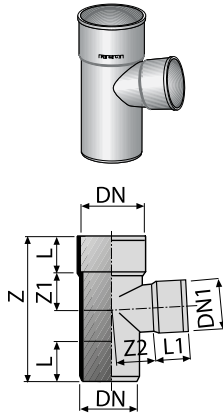


Branch 87°30' M/F

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

DN (mm)	Reference			L (mm)	Z (mm)	Z1 (mm)	Z2 (mm)	Note
32	089030M*	50	2.600	23	88	17	25	
40	089040M	70	1.680	27	106	21	31	
50	089050M	40	960	32	129	26	39	
63	0810602	20	480	46	160	42	42	
75	089070M	12	288	44	185	39	58	
80	089080M	15	360	47	195	40	61	
100	089100M	20	160	56	227	44	64	
110	089110M	12	96	62	268	57	87	
125	081120M	12	96	62	275	70	70	
140	0341402	8	64	62	260	70	78	
160	0811602	6	48	74	333	95	95	
200	0342002	3	24	86	410	120	120	
250	0342502	1	18	103	510	152	152	
315	0343002	1	8	115	620	185	185	

*upon request

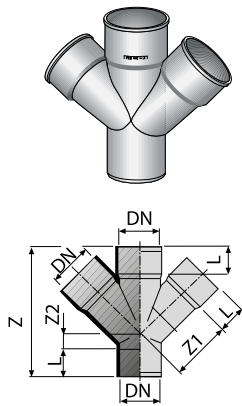


Unequal branch 87°30' M/F

Culotte 87°30' M/F - Derivación reducida 87°30' M/H

DN (mm)	DN1 (mm)	Reference			L (mm)	Z (mm)	Z1 (mm)	Z2 (mm)	Note
75	50	035270M	20	480	45	168	40	52	
100	40	0841002	8	192	53	36	170	44	
100	50	0843002*	10	240	53	40	174	44	
100	63	0845002*	10	240	53	41	175	44	
110	50	035310M	10	240	59	198	50	71	
110	75	035710M	8	192	59	210	50	71	
200	160	0352002*	1	40	86	380	110	132	

*upon request



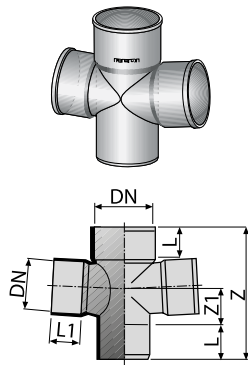
Double branch 45° M/F

Culotte double parallèle 45° M/F

Derivación doble plana 45° M/H

DN (mm)	Reference			L (mm)	Z (mm)	Z1 (mm)	Z2 (mm)	Note
50	0360502	50	550	40	168	69	19	
75	036070M	8	192	45	221	102	29	
100	0361002*	5	100	53	264	125	30	
110	0361102	1	96	58	289	141	32	
125	0361202	1	60	64	316	157	31	
160	0361602	1	30	72	412	201	67	

*upon request



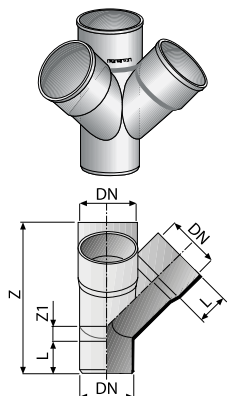
Double branch 87°30' M/F

Culotte double parallèle 87°30' M/F

Derivación doble plana 87°30' M/H

DN (mm)	Reference			L (mm)	Z (mm)	Z1 (mm)	Z2 (mm)	Note
75	038070M	25	200	45	221	102	29	
100	0381002*	5	105	53	264	125	30	
110	0381102	1	120	58	289	141	32	

*upon request

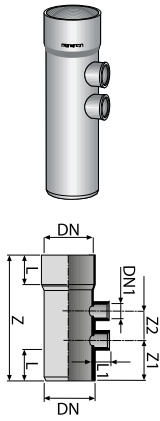


Double corner branch 45° M/F

Culotte double d'équerre 45° M/F

Doble derivación escuadra 45° M/H

DN (mm)	Reference			L (mm)	Z (mm)	Z1 (mm)	Note
100	U391002	5	70	50	271	40	

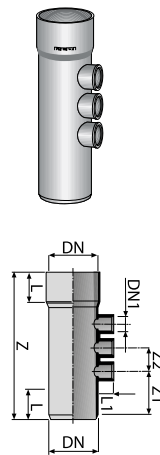


Multibranch 87°30' M/F

Culotte multiple 87°30' M/F - Derivación múltiple 87°30' M/H

DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Z1 (mm)	Z2 (mm)	Note
100	40	0413302*	1	248	40	-	-	-	-	
110	50	0411102	5	120	68	42	330	110	100	

*upon request

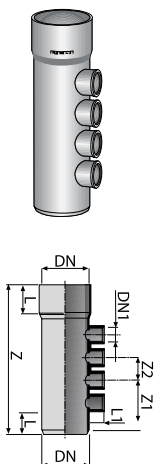


Multibranch 87°30' M/F

Culotte multiple 87°30' M/F - Derivación múltiple 87°30' M/H

DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Z1 (mm)	Z2 (mm)	Note
100	40	0413402*	1	224	56	26	330	180	52	

*upon request

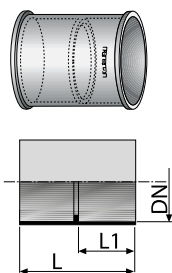


Multibranch 87°30' M/F

Culotte multiple 87°30' M/F - Derivación múltiple 87°30' M/H



DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Z1 (mm)	Z2 (mm)	Note
100	40	0414702*	1	140	-	-	450	-	-	

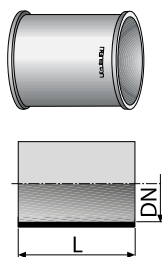
*upon request



Coupler with central stop F/F



Manchon avec butée F/F - Manguito de unión con tope H/H

DN (mm)	Reference			L (mm)	L1 (mm)	Note
32	063030M	100	8.100	49	23	
40	063040M	50	4.050	57	27	
50	063050M	40	2.080	67	32	
63	063060M	20	1.040	81	39	
75	063070M	20	1.040	92	44,5	
80	063080M	20	1.040	97	47	
100	063100M	60	480	116	57	
110	063110M	12	288	125	61	
125	063120M	35	280	138	67,5	
160	0631602	18	144	172	84	
200	0632002	8	64	217	106	
250	0632502	1	36	252	123	
315	0633002	1	20	296	145	

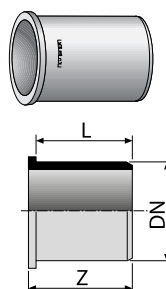


Slip coupler

Manchon coulissant - Manguito deslizante



DN (mm)	Reference			L (mm)	Note
32	061030M*	100	8.100	49	
40	061040M*	50	4.050	57	
50	061050M*	40	2.080	67	
100	061100M	16	384	116	
125	061120M	35	280	138	
160	0611602	18	144	172	
200	0612002	8	64	217	
250	0612502	1	36	252	
315	0613002	1	20	296	

*upon request

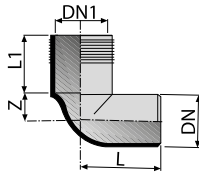
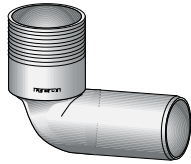


Coupler with collar

Douille d'évacuation - Acoplamiento con valona

Ø ghiera	DN (mm)	Reference			L (mm)	Z (mm)	Note
1" 1/4	32	062320M*	100	8.100	39,5	42	
1" 1/2	40	062400M	100	8.100	39,5	42	

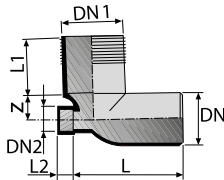
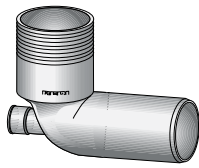
*upon request



Long WC bend

Coude WC haut - Manguito inodoro acodado largo

DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Note
100	116	02510A2	25	200	127	113	48	



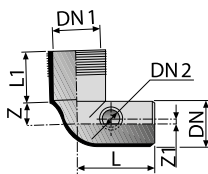
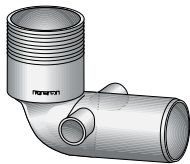
Long WC bend with frontal inlet

Coude WC haut avec 1 entrée frontale

Manguito inodoro acodado largo 1 toma frontal

DN (mm)	DN1 (mm)	DN2 (mm)	Reference			L (mm)	L1 (mm)	L2 (mm)	Z (mm)	Note
100	116	40	02514A2*	25	200	175	225	27	48	

*upon request



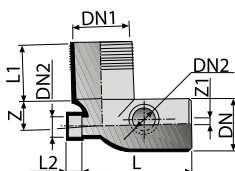
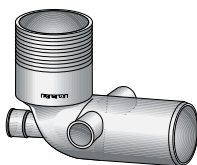
Long WC bend with 2 side-inlets

Coude WC haut avec 2 entrées laterales

Manguito inodoro acodado largo 2 tomas laterales

DN (mm)	DN1 (mm)	DN2 (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Z1 (mm)	Note
100	116	40	02544A2*	15	120	175	113	48	10	
100	116	50	02555A2*	15	120	175	113	48	10	

*upon request



Long WC bend with 3 side-inlets

Coude WC haut avec 3 entrées laterales

Manguito inodoro acodado largo 3 tomas auxiliares

DN (mm)	DN1 (mm)	DN2 (mm)	Reference			L (mm)	L1 (mm)	L2 (mm)	Z (mm)	Z1 (mm)
100	116	40	02564A2*	15	120	225	113	27	48	10

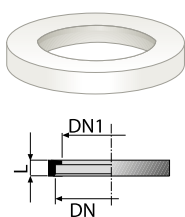
*upon request



WC snap cap

Bague de sertissage WC - Anillo de inserción inodoro

DN (mm)	DN1 (mm)	Reference			L (mm)	Colour
126	116,5	0201302	100	2.000	25	Grey
126	116,5	0201303	100	2.000	25	White

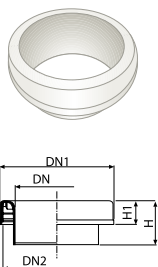


Gasket for WC bends and connectors

Joint pour coudes et manchons WC avec anneau de blocage

Junta para manguitos inodoro con anillo de bloqueo

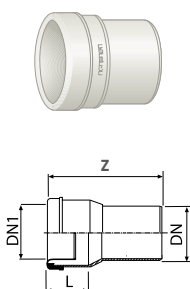
DN (mm)	Reference			L (mm)	Colour
70	7810003	1	800	21,5	White



Gasket WC

Joint WC - Junta inodoro

DN (mm)	DN1 (mm)	DN2 (mm)	Reference			H (mm)	H1 (mm)	Colour
94	130	120,5	0011003	25	2.000	50,5	27	White

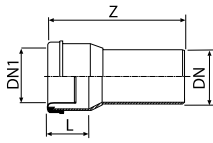
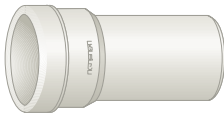


Straight WC connector

Sortie WC droite - Manguito inodoro corto

DN (mm)	DN1 (mm)	Ref.			L (mm)	Z (mm)	Colour	Note
100	95÷105	16010C3*	40	320	80	162	White	
110	95÷105	16031C3*	40	320	80	162	White	
100	-	06010C3*	1	310	80	162	White	without gasket/sans joint/sin junta
110	-	06031C3*	1	310	80	162	White	without gasket/sans joint/sin junta

*upon request

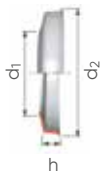


Long straight WC connector

Sortie WC droite longue - Manguito inodoro largo

DN (mm)	DN1 (mm)	Ref.			Z (mm)	Colour	Note
100	95÷105	16010L3	25	200	250	White	
110	95÷105	16031L3*	20	160	250	White	
100	-	06010L3	1	230	250	White	without gasket/sans joint/sin junta
110	-	06031L3*	1	-	250	White	without gasket/sans joint/sin junta

*upon request

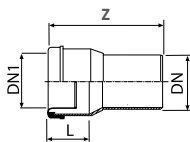


Rosette for WC connector

Rosace pour sortie WC - Plafón para salida inodoro

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

*upon request

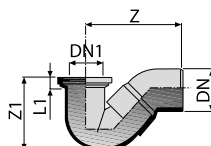
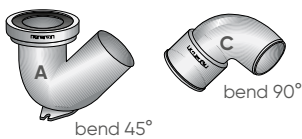
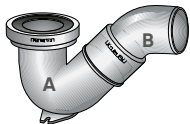


Extension for WC bend

Manchette pour coude WC - Extensión para manguito inodoro

DN (mm)	DN1 (mm)	Reference			L (mm)	Z (mm)	Colour	Note
116	95÷105	1601103	10	240	50	135	White	
116	-	0601103*	10	240	50	135	White	without gasket/sans joint/sin junta

*upon request

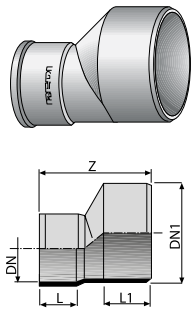


Low backed gully with bend

Siphon pour siège à la turque - Sifón placa turca

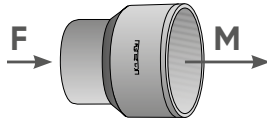
DN (mm)	DN1 (mm)	Reference			L (mm)	Z (mm)	Z (mm)	Type
110	95÷135	1771402	15	120	33	280	214	A
100	95÷135	17710A2*	10	80	33	280	214	A + B
110	95÷135	17714A2*	10	80	33	200	214	A + B
110	95÷135	17714C2*	10	80	33	310	214	A + C

*upon request

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

DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Note
32	50	091050M	150	3.600	23	32	75	
40	50	091250M	110	2.640	27	32	71	
40	63	0900602	70	1.680	36	50	116	
40	100	090480M*	30	720	36	58	142	
50	63	090260M	50	1.200	40	50	114	
50	75	051070M	50	1.200	40	48	115	
50	80	090080M	40	960	40	53	128	
50	100	090100M	30	720	40	62	148	
50	110	051110M	50	400	40	70	173	
63	80	0902802	50	800	43	53	122	
63	100	0903002*	30	720	43	61	142	
75	110	0513102	25	450	-	-	-	
80	100	090500M	20	480	46	61	135	
100	125	090120M	45	360	57	61	134	
100	140	E511002	30	240	-	-	-	
100	160	E511302	30	240	-	-	-	
100	200	E511502	15	120	-	-	-	
110	125	051320M	35	280	56	69	148	
110	160	0511602	30	240	56	82	180	
125	160	0513602	30	240	62	82	180	
125	200	0512002	15	120	62	100	221	
125	250	0534202	10	80	62	90	159	
140	160	0515602	30	240	60	81	166	
140	200	E512202*	4	96	-	-	-	
160	200	0514002	15	120	74	100	211	
160	250	0514602	6	48	74	90	172	
160	315	0534802	5	40	74	93	174	
200	250	0512502	5	60	86	134	265	
200	315	0513302	4	32	86	145	318	
250	315	0513002	1	32	103	144	307	
315	400	0519202	1	18	118	156	363	

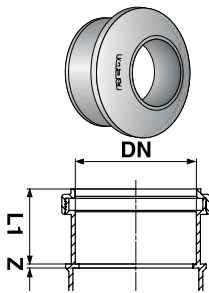
*upon request



Conic reducer F/M

Réduction conique F/M - Reducción doble H/M

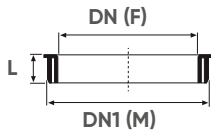
DN (F) / DN (M) (mm)	Reference			Note
63/75	0530702	50	-	
63/110	0503102	25	500	
100/110	0533102	25	500	



Inside reducer M/M

Réduction incorporée M/M - Tapón de reducción H/H

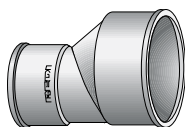
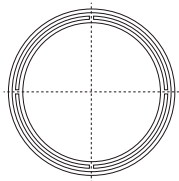
DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Note
32	40	054040M	150	7.800	22	26	33	
32	50	054050M	80	4.160	22	31	42	
40	50	054250M	80	4.160	26	31	39	



Concentric reducer M/F

Réduction concentrique M/F - Reducción concéntrica M/H

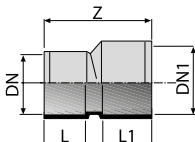
DN (mm)	DN1 (mm)	Reference			L (mm)	Note
110	125	0209202	35	1.820	22	



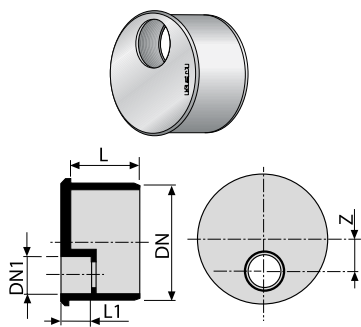
Invert reducer double socket F/F

Réduction excentrée F/F - Ampliación excéntrica H/H

DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Note
32	50	092050M	150	3.600	23	32	75	
40	50	092250M*	130	3.120	27	32	71	



*upon request

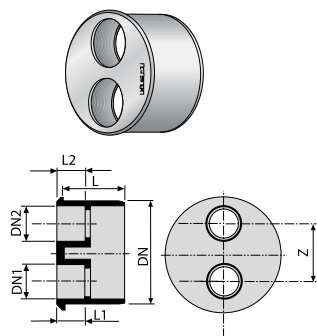


Reducing plug M/F

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

DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Note
63	32	054070M	40	3.240	-	-	-	
63	40	054060M	40	3.240	38	27	3	
63	50	054090M*	40	3.240				
80	40	054080M*	25	2.025	47	27	11,5	
80	50	054850M	25	2.025	-	-	-	
100	32	R6000NI	10	1.920	-	-	-	
100	40	054100M	20	1.040	56	26	28	
100	50	054200M	20	1.040	56	31	23	
100	63	054300M	20	1.040	56	38	16	
100	80	054400M	20	1.040	56	47	8	
110	40	054910M	35	840	60	27	32	
110	50	054920M	35	840	60	32	27	
110	63	054970M	35	840	60	38	20	
110	75	054930M	35	840	60	44,5	14,5	
110	80	054940M	35	840	60	47	12	
110	100	054990M	35	840	60	57	0	
125	40	054120M*	30	720	-	-	-	
125	50	054130M*	30	720	-	-	-	
125	80	X4440NI	25	-	-	-	-	
125	100	054150M	10	520	-	-	-	
125	110	054160M	10	520	-	-	-	

*upon request

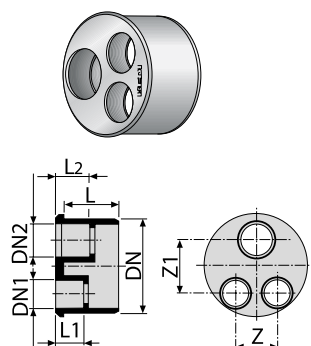


Reducing plug M/F

Tampon de reducción M/F - Tapón reductor doble M/H

DN (mm)	DN1 (mm)	DN2 (mm)	Reference			L (mm)	L1 (mm)	L2 (mm)	Z (mm)	Note
100	40	32	054600M*	20	1.040	56	26	22	60	
100	40	40	054700M	20	1.040	56	26	26	56	
100	50	40	054800M	20	1.040	56	31	26	51	
110	40	40	054950M	35	840	60	27	27	95	
110	50	40	054960M*	35	840	60	32	27	90	

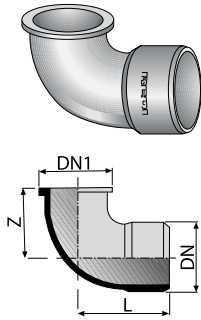
*upon request



Reducing plug M/F

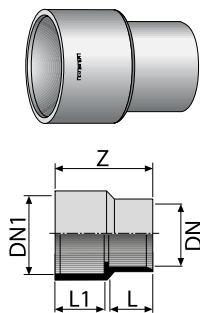
Tampon de reducción M/F - Tapón reductor triple M/H

DN (mm)	DN1 (mm)	DN2 (mm)	Reference			L (mm)	L1 (mm)	L2 (mm)	Z (mm)	Z1 (mm)	Note
110	40	40	054980M	35	840	60	27	27	56	48	

**Bend with collar 87°30'****Coude à collet 87°30' - Codo con valona 87°30'**

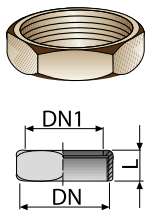
DN (mm)	DN1 (mm)	Reference			L (mm)	Z (mm)	Note
1" 1/4 32	38	026030M*	100	5.200	43	33	
1" 1/2 40	44,5	026040M	150	3.600	55	42	

*upon request

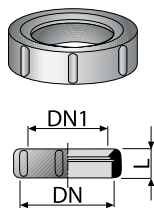
**Coupler with collar F/F****Manchon à collet F/F - Manguito con collar H/H**

DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Note
32	40	060320M*	50	4.050	22,5	26,5	51	

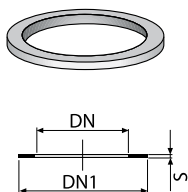
*upon request

**Brass nut****Écrou laiton - Tuerca latón**

DN (mm)	DN1 (mm)	Reference			L (mm)	Note
1" 1/4 35	35	C661400	5	16.200	15	
1" 1/2 40	40	C661200	5	12.150	15	

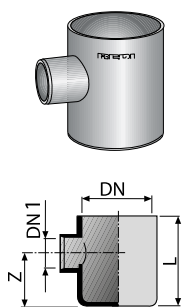
**PP nut****Écrou en PP - Tuerca en PP**

DN (mm)	DN1 (mm)	Reference			L (mm)	Note
1" 1/2 42	42	B661202	1	10.400	20	



Gasket
Joint plat - Junta plana

DN (mm)	DN1 (mm)	Reference			S (mm)	Note
1" 1/4	39	B821400	1	-	2,5	
1" 1/2	44	B821200	1	-	2,5	

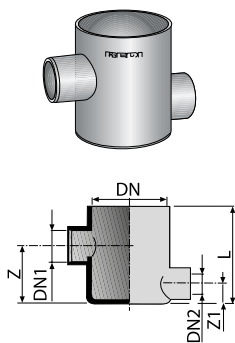


Floor gully
Collecteur - Colector 1 salida

DN (mm)	DN1 (mm)	Reference			L (mm)	Z (mm)	Note
100	40*	0961002*	20	480	120	74	

* Outlet Ø 40 Female / Sortie Ø 40 Femelle

*upon request



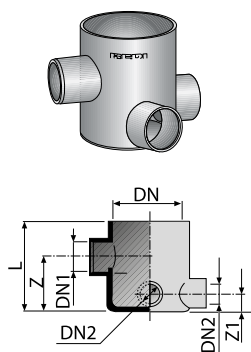
Floor gully
Collecteur - Colector 2 salidas

DN (mm)	DN1 (mm)	DN2 (mm)	Reference			L (mm)	Z (mm)	Z1 (mm)	Note
100	40/50*	40	0971022*	20	480	120	74	25	

* Outlet Ø 40 Female - Outlet Ø 50 Male

* Sortie Ø 40 Femelle - Sortie Ø 50 Male

*upon request



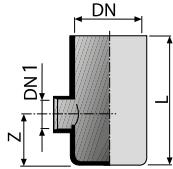
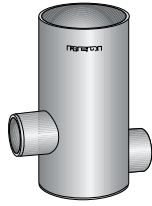
Floor gully
Collecteur - Colector 3 salidas

DN (mm)	DN1 (mm)	DN2 (mm)	Reference			L (mm)	Z (mm)	Z1 (mm)	Note
100	40/50*	40	0971042*	40	320	120	74	25	
100	50	40	0941042*	40	320	120	80	25	

* Outlet Ø 40 Female - Outlet Ø 50 Male

* Sortie Ø 40 Femelle - Sortie Ø 50 Male

*upon request



High floor gully - 2 outlets

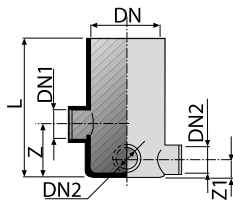
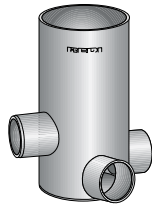
Collecteur haut - 2 sorties - Colector alto 2 salidas

DN (mm)	DN1 (mm)	DN2 (mm)	Reference			L (mm)	Z (mm)	Z1 (mm)	Note
100	40/50*	40	0951022*	10	240	200	74	25	

* Outlet Ø 40 Female - Outlet Ø 50 Male

* Sortie Ø 40 Femelle - Sortie Ø 50 Male

*upon request



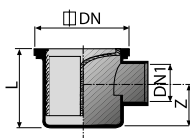
High floor gully - 3 outlets

Collecteur haut - 3 sorties - Colector alto 3 salidas

DN (mm)	DN1 (mm)	DN2 (mm)	Reference			L (mm)	Z (mm)	Z1 (mm)	Note
100	40/50**	40	0981042*	22	176	200	74	25	
100	50	40	0951042*	25	200	200	80	25	

** Outlet Ø 40 Female - Outlet Ø 50 Male / Sortie Ø 40 Femelle - Sortie Ø 50 Male

*upon request



PVC trapped floor drain (horizontal outlet)

Siphon de cour PVC (sortie horizontale)

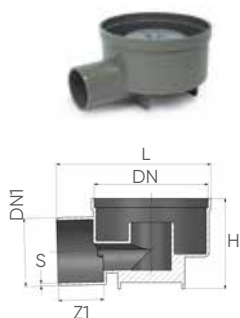
Sumidero sifónico, salida horizontal hembra de PVC

DN (mm)	DN1 (mm)	Reference			L (mm)	Z (mm)	Note
100	40 external / 32 internal	0210304	16	832	82	45	
100	40 internal	0210404	16	832	82	45	



Floor gully
Collecteur grand débit - Colector

DN (mm)	DN1 (mm)	DN2 (mm)	DN3 (mm)	Reference			Note
160	110	75	110	0961602	10	80	
F/Sk	M/Sp	F/Sk	F/SK				



Trapped balcony outlet
Siphonnette de balcon - Terminal bote sifónico para terraza

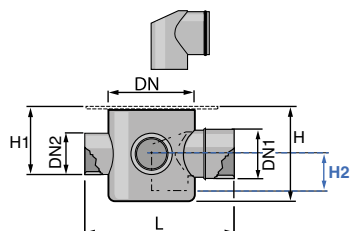
DN (mm)	DN1 (mm)	Reference			L (mm)	H (mm)	Z1 (mm)	S (mm)	Note
125	50	19935F2	15	360	169	88	40	3	
125	75	19937F2	15	360	169	100	50	3	



Floor trap with Multi-inlets
Siphon parquet - Terminal bote sifónico entradas múltiples

Ø (mm)	DN (mm)	DN1 (mm)	DN2 (mm)	Reference			L (mm)	H (mm)	H1 (mm)	H2 (mm)	Version
150	125	75*	50**	1961202	20	160	237,5	137,5	92	50	High / Haute / Alto
150	125	75*	50**	19613B2	24	192	237,5	107,5	82	35	Low / Baisse / Corto

Connections: * 1 spigot outlet DN 75 mm. ** 3 female blank inlets DN 50 mm.
 Connections: * 1 sortie male DN 75 mm. ** 3 entres femelle DN 50 mm.



Water seal 50 mm in compliance with UNI EN1253

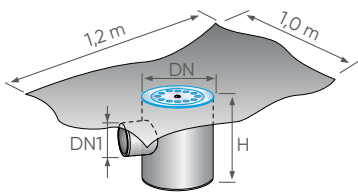
PVC insulating membrane

Membrane d'étanchéité - Lámina de PVC, impermeabilizante



DN (mm)	Reference			Note
1500 x 1500 x 0,8 mm	J022087	1	36	1 single sheet

Material: PVC plasticized - Colour: Grey - Use: waterproofing sheet



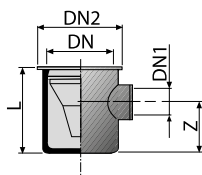
Floor gully with PVC membrane

Collecteur avec membrane d'étanchéité

Colector con lámina impermeabilizante

DN (mm)	DN1 (mm)	Reference			H (mm)	Note
100	40	1960402*	1	64	120	

*upon request



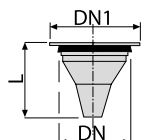
Floor trap with inox grid and funnel

Siphonette avec grille inox et entonnoir

Sifón con rejilla de acero inox y embudo

DN (mm)	DN1 (mm)	DN2 (mm)	Reference			L (mm)	Z (mm)	Note
100	40/50*	125	1961002	15	360	121	74	

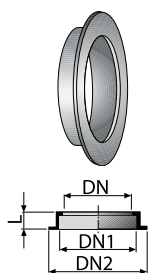
* Male outlet / Sortie male



Inox grid with funnel

Grille inox avec entonnoir - Rejilla de acero inox y embudo

DN (mm)	DN1 (mm)	Reference			L (mm)	Note
100	125	1993302	1	720	106	



Locking ring for PVC membrane

Anneau de blocage de la membrane d'étanchéité

Anillo de bloqueo de la junta de estanqueidad

DN (mm)	DN1 (mm)	DN2 (mm)	Reference			L (mm)	Note
100	107	145	0201002*	20	2.000	20	

*upon request

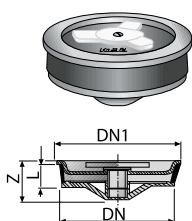


Protection cap for floor gully

Plaque de protection pour collecteur

Tapón de protección bote sifónico

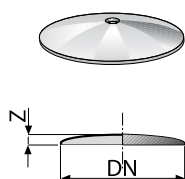
DN (mm)	Reference			Note
100	T651000	20	2.000	Made of plastics



Plug for floor gully

Bouchon pour collecteur - Tapa expansión para colector

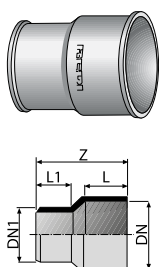
DN (mm)	DN1 (mm)	Reference			L (mm)	Z (mm)	Note
100	106	0661002	20	1.620	20	35	



Stainless steel plate

Plaque de protection inox - Tapa de acero inoxidable

DN (mm)	Reference			Z (mm)	Note
135	PIAOXNI	20	26400	5	

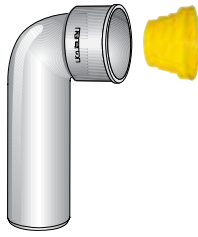


Technical coupling M/F

Manchon technique M/F - Manguito técnico M/H

DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Note
40	50	0930302*	50	2.600	22,5	31	55,5	F/F
40	32	0930402	50	4.050	26,5	22,5	57,5	M/F
50	40	0930502	50	2.600	31,5	26,5	67,5	M/F

*upon request



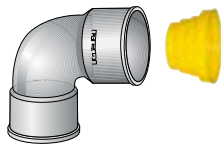
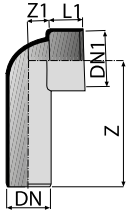
Technical bend long version M/F

Coûde technique long M/F - Codo técnico M/H

DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Note
40	50	074540M*	5	1.200	33	150	17	

With protection plug / Avec bouchon de protection / Con tapa protectora

*upon request

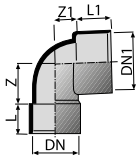


Technical bend F/F

Coûde technique F/F - Codo técnico H/H

DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Z1 (mm)	Note
32	40	024230M	130	3.120	23	28	29	14	
40	50	024240M	70	1.680	26	33	-	17	

With protection plug / Avec bouchon de protection / Con tapa protectora



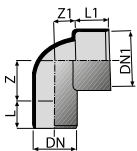
Technical bend M/F

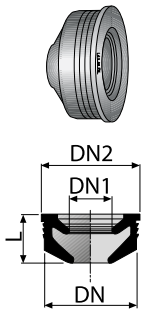
Coûde technique M/F - Codo técnico M/H

DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	Z (mm)	Z1 (mm)	Note
32	40	074230M*	80	1.920	23	28	29	14	
32	50	074530M*	80	1.920	26	33	36	17	
40	50	074240M*	80	1.920	-	-	-	-	

With protection plug / Avec bouchon de protection / Con tapa protectora

*upon request



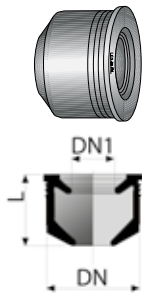


Gasket

Joint - Junta de goma

DN (mm)	DN1 (mm)	DN2 (mm)	Reference			L (mm)	Note
32	1"	37	6820300	50	24.000	13	
40	1"	46,5	6820400	50	1.000	18	
40	1" 1/4	46,5	6820401	50	12.000	18	
50	1"	55	6820502	50	6.000	19	
50	1" 1/4	56	6820500	50	6.000	19	
50	1" 1/2	55	6820501	50	6.000	19	

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

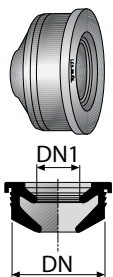


Long Gasket

Joint long - Junta de goma larga

DN (mm)	DN1 (mm)	Reference			L (mm)	Note
50	1"	68255LU	50	6.000	33	
50	1" 1/4	68265LU	50	6.000	33	
50	1" 1/2	68260LU	50	6.000	33	

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



Technical gasket with nut (for bends and couplers)

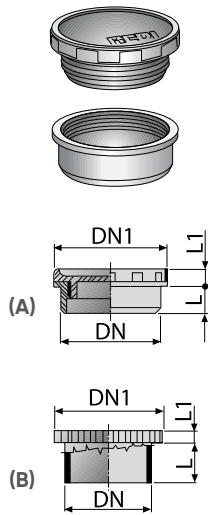
Joint technique avec écrou (pour coudes et manchons)

Junta técnica con tuerca (para codos y manguitos)

DN (mm)	DN1 (mm)	Reference			Note
37	1"	6823200*	1	4.200	
45	1" 1/4	6824404*	50	14.400	

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

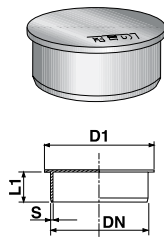
*upon request



Access plug M

Tampon de visite M - Tapón de inspección M

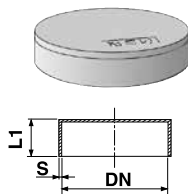
DN (mm)	DN1 (mm)	Reference			L (mm)	L1 (mm)	Note
32	39	065320M	50	20.250	15	8,5	(A) With gasket / Avec joint / Con junta
40	47	065400M	50	12.150	15	8,5	(A) With gasket / Avec joint / Con junta
50	57	065500M	25	8.100	15	8,5	(A) With gasket / Avec joint / Con junta
63	78	065060M	90	2.160	38	17	(B)
75	97	065070M	20	1.040	44	17	(B)
80	97	065080M	50	1.200	47	17	(B)
90	-	0650902	30	720	52	-	(B)
100	116	065100M	30	960	56	20	(B)
110	-	0651102	70	560	62	22	(B)
125	-	0651202	50	400	60	20	(B)
160	-	1651602	30	240	60	20	(B)
200	-	1652002	15	120	80	22	(B)
250	-	1652502	10	100	90	17	(B)
315	-	1653002	6	48	93	21	(B)



Socket plug M

Bouchon de fermeture M - Tapón ciego M

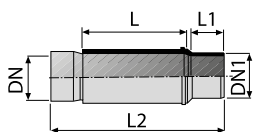
DN (mm)	DN1 (mm)	Reference			L (mm)	S (mm)	Note
40	45	0660402	50	12.000	18	2,5	
50	55	0660502	50	8.400	20	2,5	
100	104	0669902	45	1.080	15	-	
110	126	0661102	150	1.200	38	3,2	
125	142	0661202	100	800	42	3,2	
160	180	0661602	55	440	49	4,0	
200	223	0662002	25	200	59	4,9	
250	282	0662502	1	114	90	6,2	
315	350	0663002	1	67	93	7,7	
400	440	06640M2	1	50	95	9,8	



Female cap F

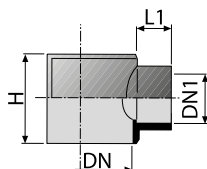
Bouchon femelle F - Tapón hembra H

DN (mm)	Reference			L1 (mm)	S (mm)	Note
110	06613F2	30	1.560	32	2,0	
125	06615F2	20	1.040	32	2,5	
160	06617F2	30	720	35	2,7	
200	06621F2	60	480	35	2,9	
250	06628F2	30	240	40	3,5	
315	06634F2	15	120	52	4,0	
400	06640F2	1	50	52	4,0	



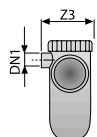
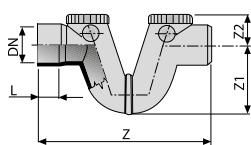
Repairing coupler (orange colour)
Manchon de réparation (couleur orange)
Manguito de reparación (color naranja)

DN (mm)	DN1 (mm)	Reference Orange Ral 2003			L (mm)	L1 (mm)	L2 (mm)	Note
50	-	1790509	10	-	-	-	-	
63	-	1790609	5	-	150	50	-	
80	-	1790809	5	-	168	56	-	
100	94	1791009	5	150	240	76	324	
125	118	1791209	5	100	240	76	324	



Clip
Selle - Injerto clip

DN (mm)	DN1 (mm)	Reference			H (mm)	L1 (mm)	Note
100 - 110 - 115	32	043050M	20	1.040	80	25	
100 - 110 - 115	40	043100M	20	1.040	80	27	
100 - 110 - 115	50	043300M	20	1.040	80	32	



Siphon O-O (with blank outlets for ventilation Ø40)
Siphon O-O (avec piquage pour ventilation Ø40)
Sifón en línea (con conexión para ventilación Ø40)

DN (mm)	DN1 (mm)	Reference Orange Ral 2003			L (mm)	Z (mm)	Z1 (mm)	Z2 (mm)	Z3 (mm)	Note
140	40	1751409	1	24	-	-	-	-	-	
160	50	1751609	1	18	-	-	-	-	-	
200	50	1752009	1	9	-	-	-	-	-	

RAL 2003: orange colour / couleur orange / color naranja

How to use the solvent cement welding socket couplers



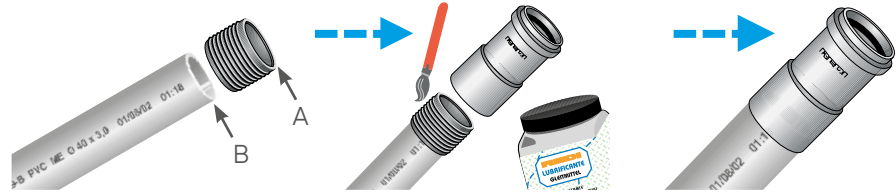
Apply the solvent cement lengthwise on the previously cleaned pipe end.

Apply the solvent cement inside the coupler's spigot end

Fit the socket coupler without turning it until it stops against pipe end.

How to use the push-fit socket couplers

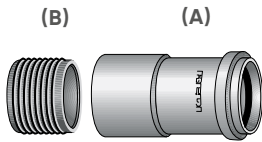
Cut the pipe into the required length. If necessary, deburr pipe end with a chamferer.



Fit the corrugated gasket onto the pipe end as shown in the picture (the sealing edge A to be in contact with pipe's front section B).

Apply a thin layer of lubricant onto the corrugated gasket.

Fit the socket coupler without turning it until it stops against pipe end.

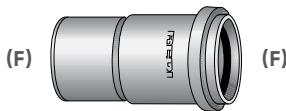


Socketter coupler - push-fit version F/F

Manchon avec joint F/F

Manguito de conexión push-fit con junta H/H

DN (mm)	Reference			Note
(A) 40	063228M	50	2.600	
(A) 50	063238M	35	1.820	

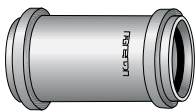


Socketter coupler - solvent welding version F/F

Manchon à coller F/F

Manguito de conexión push-fit encolar H/H

DN (mm)	Reference			Note
40	063338M	10	2.600	
50	063348M	40	2.080	

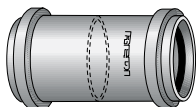


Slip coupler with 2 gaskets F

Manchon coulissant avec 2 joints F

Manguito deslizante H, con junta labiada H

DN (mm)	Reference			Note
40	061445M	10	1.920	



Coupler with central stop with 2 gaskets F/F

Manchon avec butée avec 2 joints F/F

Manguito con tope H/H, con junta labiada

DN (mm)	Reference			Note
40	063445M	40	2.080	
50	063455M	50	1.200	



PVC



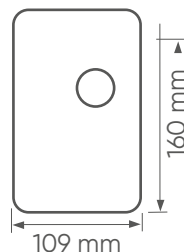
PE

CUBO REDI
Syphon for washing-machine

Siphon machine à laver

Sifón sencillo para empotrar, toma lavadora

DN (mm)	Reference			Note
40	1999903	8	416	for PVC pipes
40/50	199PE03	6	312	for PE pipes



CUBO REDI
NEW Cover plate in stainless steel 160x109 mm



Inspection Syphon for washing-machine

Siphon machine à laver

Sifón sencillo para empotrar, toma lavadora



DN (mm)	Reference			Note
1" 1/2-40	19999S3	1	780	for PVC pipes

Packed in plastic bag



PE Syphon for washing-machine



Siphon machine à laver - Sifón máquina lavadora

DN (mm)	Reference			Note
40/50	C13PEAI	15	-	for PE pipes



Adaptor with Air Admittance Valve



Sortie avec anti-vide - Válvula aireación, toma lavadora

DN (mm)	Reference			Note
40	C130403	1	1.280	



Solvent cement THF free



Colle sans THF - Adhesivo sin THF

Pack. type	Content (ml)	Reference			Note
Tube	125	COLLA12	30	1920	
Jar	250	COLLA25	24	1296	With brush / Avec pinceau
Jar	500	COLLA50	16	768	With brush / Avec pinceau
Jar	1.000	COLLA00	8	432	With brush / Avec pinceau



Cleaner

Détergent - Limpiador

Pack. type	Content (ml)	Reference			Note
Can	1 litre	6721100	8	384	