



TERRAIN SDP

PARTS AND
ACCESSORIES THE PB
PushFit System



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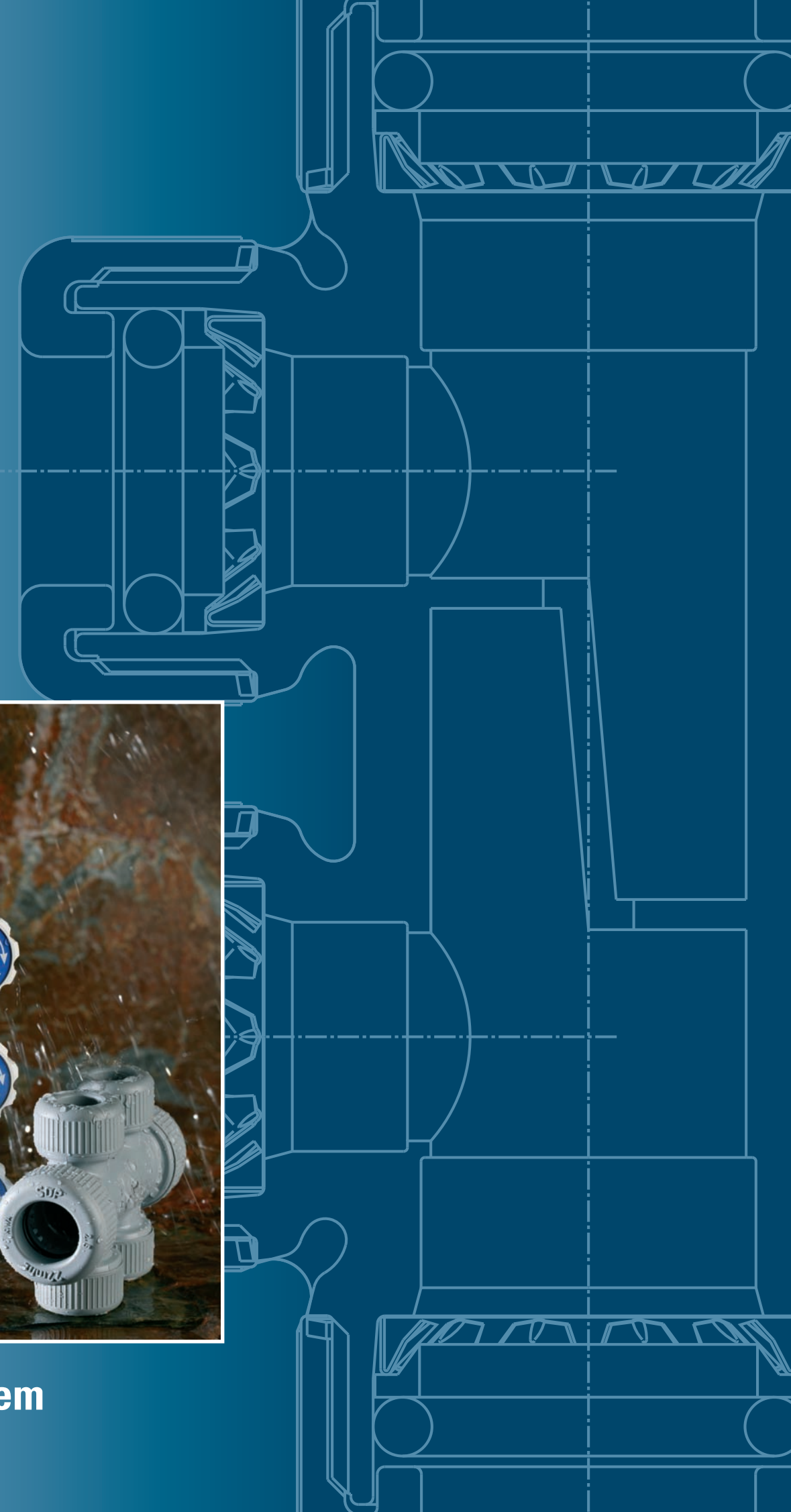
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NUEVA TERRAIN, Spain's market leader in PVC and Polybutene (PB) piping systems, is pleased to present this product range catalogue which has the objective to make work easier to professional installers and consultants, by providing them high quality and save systems. **NUEVA TERRAIN** would like to take this opportunity to thank all those who have shown their confidence in us by using our products, and to reiterate our wish to continue offering top quality and high performance piping systems.



PushFit System





STRAIGHT PIPES

REFERENCE	EXTERIOR DIAMETER mm.	THICKNESS mm.	WEIGHT PIPE grs.	MATERIAL	TOT. L. PIPE mts.
• TFC.003.015	15 (1)	1,7	234	PB	3,00
• TFC.058.015	15 (1)	1,7	452	PB	5,80
• TFC.003.016	16 (1)	1,8	240	PB	3,00
• TFC.058.016	16 (1)	1,8	464	PB	5,80
• TFC.003.020.020	20 (1)	2,3	381	PB	3,00
• TFC.058.020.020	20 (1)	2,3	737	PB	5,80
• TFC.003.022.016	22 (1)	2,0	368	PB	3,00
• TFC.058.022.016	22 (1)	2,0	711	PB	5,80
• TFC.003.025	25 (1)	2,3	480	PB	3,00
• TFC.058.025	25 (1)	2,3	928	PB	5,80
• TFC.003.028.016	28 (3)	2,5	592	PB	3,00
• TFC.058.028.016	28 (3)	2,5	1.144	PB	5,80
• TFC.058.032	32 (3)	2,9	1.508	PB	5,80
• TFC.058.040	40 (3)	3,7	2.378	PB	5,80
• TFC.058.050	50 (3)	4,6	3.654	PB	5,80



Pipes



COIL PIPES (2)

REFERENCE	EXTERIOR DIAMETER mm.	THICKNESS mm.	WEIGHT PIPE grs.	MATERIAL	TOT. L. PIPE mts.
• TFC.100.015	15	1,7	7.833	PB	100,00
• TFC.100.016	16	1,8	8.000	PB	100,00
• TFC.050.020.020	20	2,3	6.355	PB	50,00
• TFC.050.022.016	22	2,0	6.130	PB	50,00
• TFC.036.025	25	2,3	5.760	PB	36,00
• TFC.025.028.016	28	2,5	4.933	PB	25,00

Classification according to classes: ISO 10508: Class 1/10 Bar - Class 2/10 Bar - Class 4/10 Bar - Class 5/8 Bar

- (1) For pipes in lengths, it is allow curves with radius not less than 10 times the external diameter of the pipe.
- (2) For pipes in coils, it is allow curves with radius not less than 8 times the external diameter of the pipe.
For curves opposite to the natural direction of the coil, the radius will have to be 30 times the external diameter of the pipe.
- (3) Para tubería en tramos se puede admitir curvaturas cuyo radio no sea inferior a 15 veces el diámetro exterior del tubo.

- Tuberías certificadas por AENOR, CERTIF y KIWA.
- + Tuberías certificadas por AENOR y CERTIF.



STRAIGHT PIPES

REFERENCE	EXTERIOR DIAMETER mm.	THICKNESS mm.	WEIGHT PIPE grs.	MATERIAL	TOT. L. PIPE mts.
TAO.058.015	15	1,7	480,0	PB	5,8
TAO.058.022.016	16	2,0	720,0	PB	5,8
TAO.058.028.016	20	2,5	1.160,0	PB	5,8



COIL PIPES (2)

REFERENCE	EXTERIOR DIAMETER mm.	THICKNESS mm.	WEIGHT PIPE grs.	MATERIAL	TOT. L. PIPE mts.
TAO.100.015	15	1,7	7.950,0	PB	100
TAO.050.022.016	22	2,0	6.220,0	PB	50
TAO.025.028.016	28	2,5	5.010,0	PB	25

Classification according to classes: ISO 10508: Class 1/10 Bar - Class 2/10 Bar - Class 4/10 Bar - Class 5/8 Bar

The 5-layer Barrier Pipe of TERRAIN SDP

NUEVA TERRAIN's Barrier Pipe is designed for central heating systems and incorporates an oxygen barrier (EVOH) to inhibit oxygen permeation. The Barrier Pipe can also be used for domestic hot and cold water services. The 5 layer pipes assure the perfect function of our PushFit Fittings e.g. tolerances, water tightness, durability and good function of the grab ring.

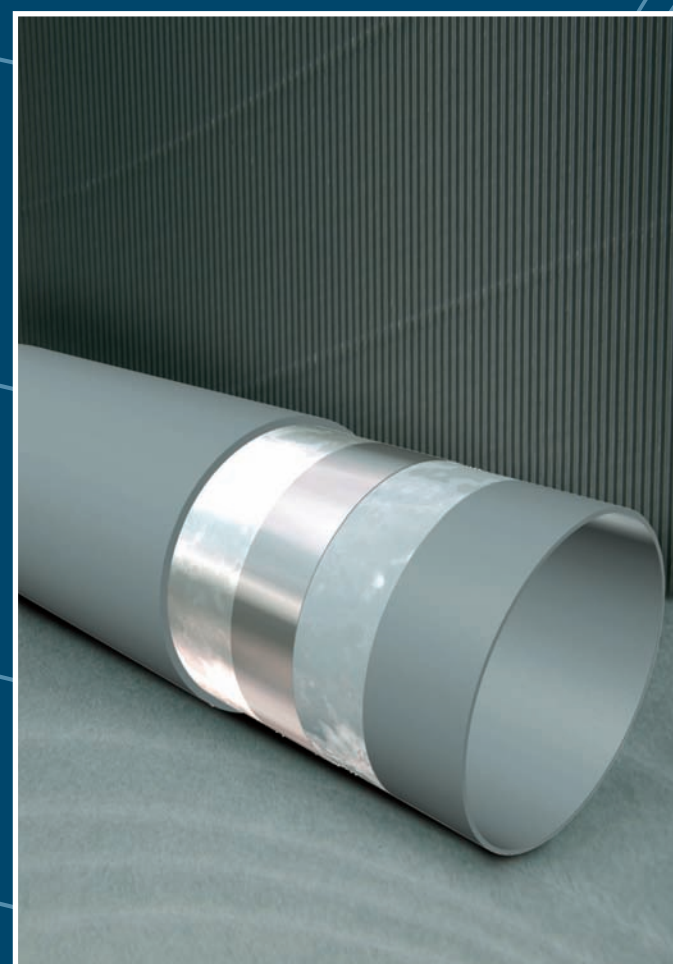
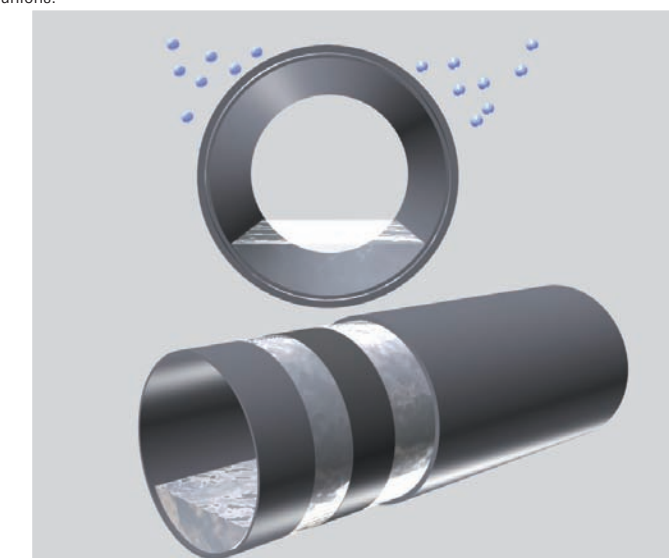
Unlike to other manufacturers, the element that acts as oxygen barrier is made in plastic and not in a metallic material. This EVOH plastic material is placed in the interior part of the pipe wall thickness contributing advantages e.g. higher flexibility and availability for use in our PushFit unions.

The EVAL™ ethylene vinyl alcohol (EVOH) copolymer resins are characterized by their outstanding gas barrier properties and by their excellent processing.

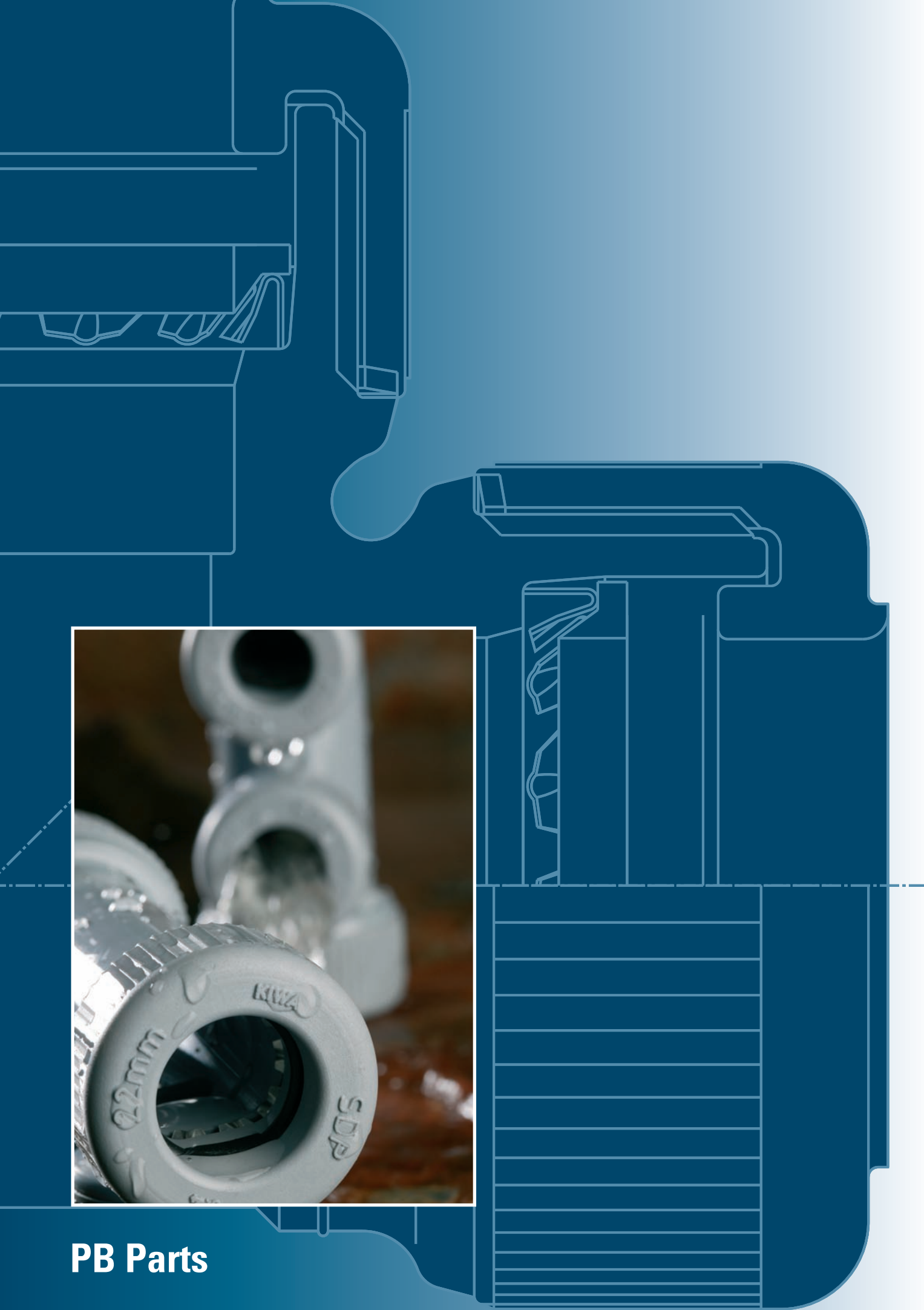
TERRAIN SDP PB plastic pipes coated with an EVAL™ layer are a good alternative to copper pipes and meet the strict building standards for oxygen permeation, such as DIN 4726, which allows a maximum oxygen gas transmission rate of 0.1 g/m³ per day at 40 °C, thereby reducing the effect of corrosion on metal components.

What an EVOH barrier layer offers

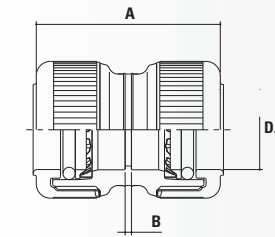
- Prevents oxygen from permeating through the wall of the pipe, which means that rust prevention additives can be avoided.
- Excellent oxygen barrier, even at high temperatures.
- Meets the strictest building standards (e.g. DIN 4726).
- Additional anti-oxidants ensure a long-term thermal stability and an expected service life that exceed 50 years.
- Flexibility: quick and easy to install, easy handling.
- Good alternative to metal, copper and aluminium (Multilayer) pipes.
- High-quality pipes used for heating purposes.
- Additional anti-oxidants in the polymer ensure an excellent oxygen barrier even after prolonged exposure to heat.
- Good abrasion resistance.



Pipes with Oxygen Barrier

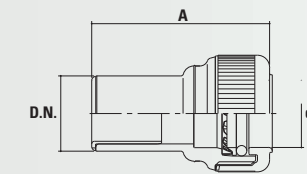


PB Parts



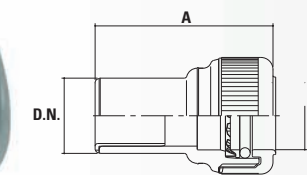
SOCKET UNION

REFERENCE	DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC.001.015	15	27,0	PB	53,5	2,0
FC.001.016	16	27,0	PB	53,5	2,0
FC.001.020	20	35,5	PB	56,0	2,0
FC.001.022	22	40,5	PB	57,5	2,0
FC.001.025	25	53,5	PB	58,5	2,0
FC.001.028	28	71,0	PB	65,5	2,0
FC.001.032	32	96,5	PB	69,0	2,0
FC.001.040	40	336,0	PB	81,0	2,0
FC.001.050	50	465,2	PB	84,0	2,0



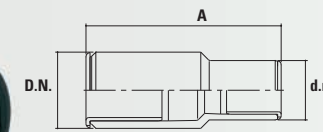
MALE-FEMALE SOCKET REDUCER

REFERENCE	DIAMETER mm.	WEIGHT grs.	MATERIAL	A
FC.002.020.016	20x16	18,50	PB	55,0
FC.002.022	22x15	18,50	PB	51,5
FC.002.022.020	22x20	24,00	PB	59,0
FC.002.025.015	25x15	20,60	PB	59,0
FC.002.025.016	25x16	20,60	PB	59,0
FC.002.025.020	25x20	24,90	PB	57,0
FC.002.025.022	25x22	28,00	PB	59,5
FC.002.028	28x22	29,00	PB	58,5
FC.002.028.025	28x25	37,50	PB	64,5
FC.002.032.025	32x25	27,87	PB	73,7
FC.002.032.028	32x28	54,38	PB	82,5
FC.002.040.025	40x25	92,47	PB	95,0
FC.002.040.032	40x32	79,51	PB	85,0
FC.002.050.025	50x25	46,00	PB	79,0
FC.002.050.032	50x32	109,66	PB	97,4
FC.002.050.040	50x40	225,00	PB	98,0



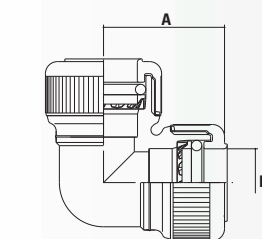
FEMALE - MALE SOCKET REDUCER

REFERENCE	DIAMETER mm.	WEIGHT grs.	MATERIAL	A
FC.002.016.015	16x15	16,5	PB	54,5
FC.002.025	25x22	34,5	PB	60,0
FC.002.025.028	28x25	44,5	PB	64,5



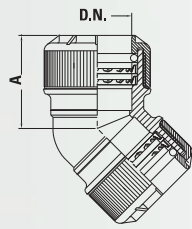
SOCKET REDUCER

REFERENCE	DIAMETER mm.	WEIGHT grs.	MATERIAL	A
FC.003.032.025	32x25	26,0	PB	79,0



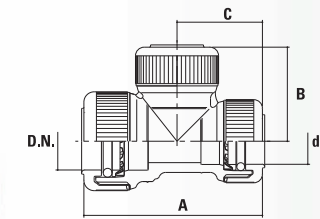
90° ELBOW

REFERENCE	DIAMETER mm.	WEIGHT grs.	MATERIAL	A
FC.005.015	15	29,0	PB	34,0
FC.005.016	16	28,7	PB	35,0
FC.005.020	20	41,6	PB	38,5
FC.005.022	22	46,7	PB	39,5
FC.005.025	25	65,0	PB	45,0
FC.005.028	28	84,5	PB	48,5
FC.005.032	32	120,0	PB	55,5
FC.005.040	40	371,4	PB	61,5
FC.005.050	50	524,6	PB	67,5



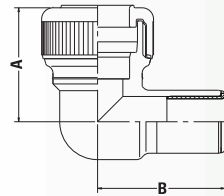
45° ELBOW

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A
FC.005.040.045	40	352,0	PB	55,0
FC.005.050.045	50	470,0	PB	58,0



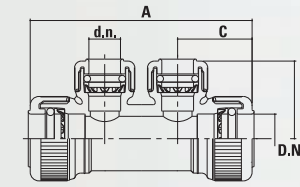
90° END REDUCED TEE

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B	C
FC.014.020.016	20x16x16	47,5	PB	69,0	36,5	33,5
FC.014.022	22x15x15	50,0	PB	69,5	38,0	33,5
FC.014.025.015	25x15x15	58,9	PB	72,0	40,0	33,5
FC.014.025.016	25x16x16	58,6	PB	72,0	40,0	33,5
FC.014.025.020	25x20x20	69,3	PB	78,5	41,5	37,5
FC.014.028.022	28x22x22	83,5	PB	83,0	43,5	38,5



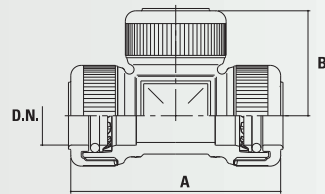
MALE - FEMALE 90° ELBOW

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC.005.015.003	15	20,9	PB	34,2	40,1
FC.005.016.003	16	20,6	PB	34,2	40,1
FC.005.020.003	20	32,8	PB	38,3	46,3
FC.005.022.003	39	36,0	PB	39,3	47,3
FC.005.025.003	25	48,9	PB	45,0	50,5
FC.005.028.003	28	64,5	PB	49,0	56,0
FC.005.032.003	32	95,6	PB	56,5	62,0



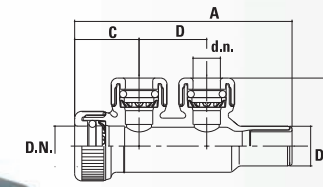
TWO OUTLET MANIFOLD

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B	C
FC.015.022	22x15x15x22	82,0	PB	109,0	37,5	35,5
FC.015.025.015	25x15x15x25	102,5	PB	113,0	40,0	38,0
FC.015.025.016	25x16x16x25	102,5	PB	113,0	40,0	38,0



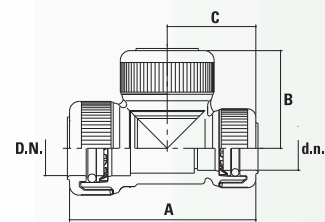
EQUAL TEE

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC.010.015	15	42,0	PB	67,5	34,0
FC.010.016	16	42,0	PB	68,0	34,0
FC.010.020	20	58,5	PB	76,6	38,5
FC.010.022	22	66,0	PB	77,5	39,5
FC.010.025	25	91,0	PB	90,5	45,0
FC.010.028	28	119,0	PB	97,5	48,5
FC.010.032	32	169,9	PB	111,0	55,5
FC.010.040	40	563,7	PB	123,0	61,0
FC.010.050	50	703,0	PB	135,0	67,5



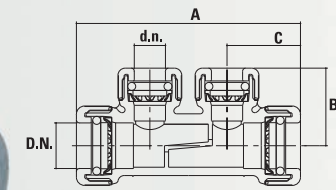
MALE - FEMALE TWO OUTLET MANIFOLD

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B	C	D
FC.015.022.003	22x15x15x22	85,1	PB	120,5	37,5	35,5	37,5
FC.015.025.015.003	25x15x16x25	89,4	PB	123,8	39,9	38,3	37,5
FC.015.025.016.003	25x16x16x25	90,0	PB	123,8	39,9	38,3	37,5



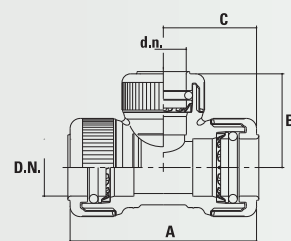
90° END REDUCED TEE

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B	C
FC.012.020.016	20x20x16	54,5	PB	75,0	38,5	38,0
FC.012.022	22x22x15	60,0	PB	77,0	39,5	38,0
FC.012.025.015	25x25x15	80,5	PB	85,0	45,0	39,5
FC.012.025.016	25x25x16	80,5	PB	85,0	45,0	39,5
FC.012.025.020	25x25x20	84,5	PB	86,0	45,0	41,0



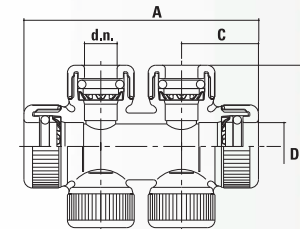
TWO OUTLET MANIFOLD FOR MONOTUBULAR HEATING INSTALLATIONS

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B	C
FC.015.022.002	22x15x15x22	83,0	PB	109,0	37,5	35,5



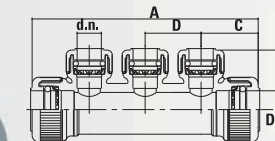
90° END REDUCED TEE

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B	C
FC.013.020.016	20x16x20	52,6	PB	70,5	38,5	35,5
FC.013.022	22x15x22	57,0	PB	71,5	37,5	35,5
FC.013.025.015	25x15x25	74,0	PB	76,5	40,0	38,5
FC.013.025.016	25x16x25	74,0	PB	76,5	40,0	38,5
FC.013.025.020	25x20x25	79,0	PB	82,5	41,5	41,0
FC.013.025.022	25x22x25	83,0	PB	84,5	41,5	42,0
FC.013.028	28x15x28	90,0	PB	81,0	41,5	40,5
FC.013.028.022	28x22x28	101,0	PB	89,0	43,5	44,5
FC.013.032.022	32x22x32	131,5	PB	96,5	46,0	48,0
FC.013.032.025	32x25x32	142,0	PB	101,0	49,0	50,5
FC.013.032.028	32x28x32	152,0	PB	105,5	51,5	52,5
FC.013.040.025	40x25x40	384,0	PB	104,0	55,5	52,5
FC.013.040.032	40x32x40	415,0	PB	112,0	61,0	56,0
FC.013.050.025	50x25x50	493,0	PB	107,0	61,0	53,5
FC.013.050.032	50x32x50	525,0	PB	113,0	67,0	56,5



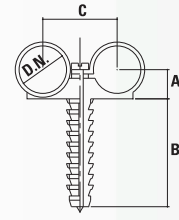
DOUBLE TWO OUTLET MANIFOLD

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B	C
FC.016.022	22x15x15x15x22	108,5	PB	108,5	37,5	35,5



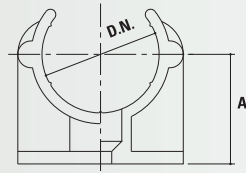
THREE OUTLET MANIFOLD

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B	C	D
FC.017.022	22x15x15x15x22	112,5	PB	146,5	37,5	35,5	37,5
FC.017.025.015	25x15x15x15x25	131,0	PB	151,5	40,0	38,5	37,5
FC.017.025.016	25x16x16x16x25	131,0	PB	151,5	40,0	38,5	37,5



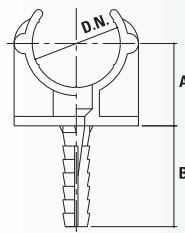
DOUBLE PIPE CLIP WITH BUILT-IN RAWCAP

REFERENCE	DIÁMETRO NOM. D.N.	WEIGHT grs.	MATERIAL	A	B	C
FC.064.022.000	22	108,5	POLYPROP.	12,0	17,0	50,0



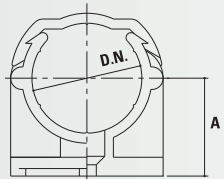
PIPE CLIP

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A
FC.065.015.010	15	2,0	POLYPROP.	18,0
FC.065.020.010	20	3,0	POLYPROP.	20,5
FC.065.022.010	22	3,0	POLYPROP.	21,5
FC.065.025.010	25	4,0	POLYPROP.	24,5
FC.065.028.010	28	5,0	POLYPROP.	26,0
FC2.065.032.010	32	9,0	POLYPROP.	-
FC2.065.040.010	40	10,1	POLYPROP.	-
FC2.065.050.010	50	12,6	POLIPROP	-



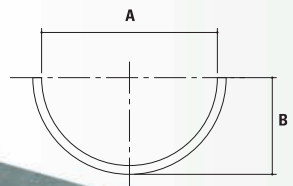
PIPE CLIP WITH BUILT-IN RAWPLUG

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC.065.015.000	15	3,0	POLYPROP.	18,0	30,0
FC.065.020.000	20	4,0	POLYPROP.	20,5	30,0
FC.065.022.000	22	4,0	POLYPROP.	21,5	30,0
FC.065.025.000	25	5,0	POLYPROP.	24,5	30,0
FC.065.028.000	28	7,0	POLYPROP.	26,0	40,0



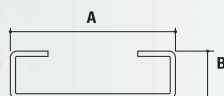
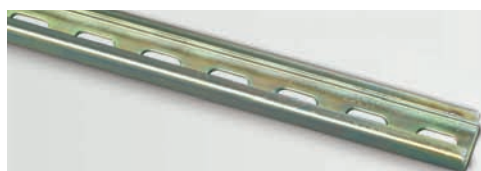
PIPE CLIP WITH LOCK

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A
FC.065.015	15	5,3	POLYPROP.	19,0
FC.065.020	20	6,7	POLYPROP.	22,0
FC.065.022	22	6,8	POLYPROP.	23,0
FC.065.025	25	7,3	POLYPROP.	24,5
FC.065.028	28	9,7	POLYPROP.	26,0
FC.065.032	32	9,3	POLYPROP.	28,0
FC.065.040	40	13,0	POLYPROP.	-
FC.065.050	50	18,4	POLYPROP.	-



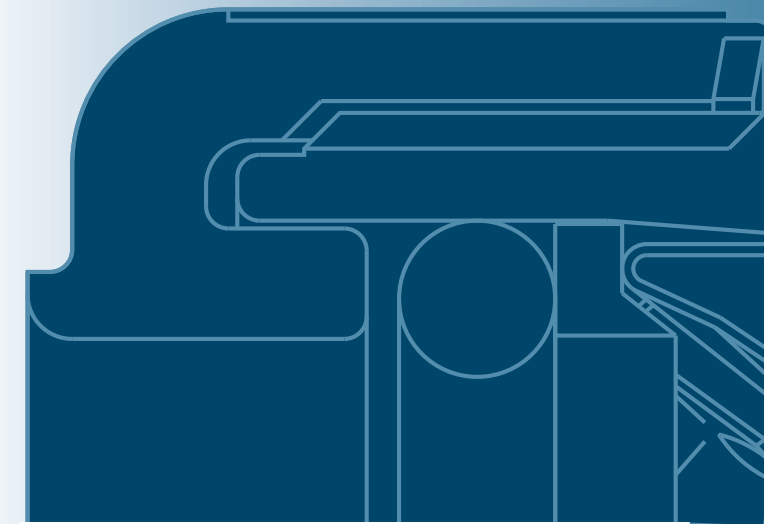
CONTINUOS METALLIC BRACKET FOR PIPE

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC.077.020	20x2000	520,0	STEEL	24,0	11,0
FC.077.025	25x2000	630,0	STEEL	29,0	18,0
FC.077.032	32x2000	720,0	STEEL	34,0	17,0
FC.077.040	40x2000	830,0	STEEL	42,0	21,0
FC.077.050	50x2000	1000,0	STEEL	52,0	26,0

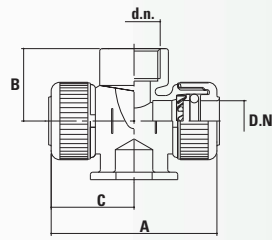


CLIP RAIL

REFERENCE	DIMENSIONS	WEIGHT grs.	MATERIAL	A	B
FC.065.003	20x40x2000	620,0	STEEL	20,0	10,0

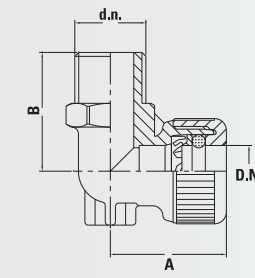


Transition Parts



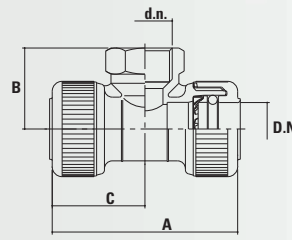
90° FEMALE SOCKET ADAPTER TEE

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B	C
FC.008.015	15x1/2"x15	213,0	BRASS	68,5	29,0	34,0
FC.008.016	16x1/2"x16	213,0	BRASS	68,5	29,0	34,0



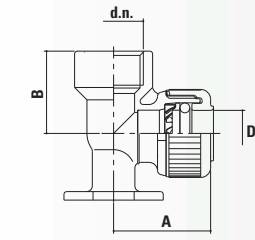
90° MALE SOCKET ADAPTER ELBOW

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC.026.015.003	15x1/2"	113,0	BRASS	35,0	35,0
FC.026.022.003	22x3/4"	162,6	BRASS	36,0	45,0



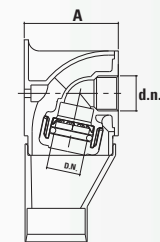
90° FEMALE SOCKET ADAPTER TEE

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B	C
FC.009.015	15x1/2"x15	145,0	BRASS	68,5	31,0	34,0
FC.009.016	16x1/2"x16	140,0	BRASS	68,5	31,0	34,0
FC.009.020	20x1/2"x20	172,5	BRASS	71,0	31,0	35,5
FC.009.022	22x1/2"x22	191,1	BRASS	72,5	30,5	36,5
FC.009.025	25x1/2"x25	256,0	BRASS	76,0	30,5	38,0



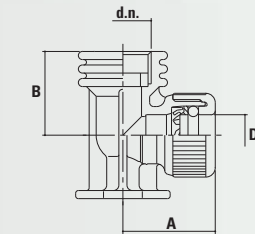
90° FEMALE SOCKET ADAPTER ELBOW

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC.028.015	15x1/2"	146,3	BRASS	34,0	29,0
FC.028.016	16x1/2"	155,4	BRASS	34,0	29,0
FC.028.020	20x1/2"	163,4	BRASS	35,5	29,0
FC.028.022	22x1/2"	181,0	BRASS	36,0	29,0
FC.028.025	25x1/2"	213,8	BRASS	39,0	29,0



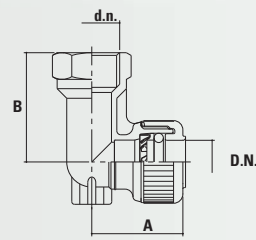
METALLIC ELBOW FOR SERVICEABLE INSTALLATIONS

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A
FC.024.015	15x1/2"	261,0	BRASS	53,5
FC.024.016	16x1/2"	239,9	BRASS	53,5
FC.024.020	20x1/2"	340,5	BRASS	56,5



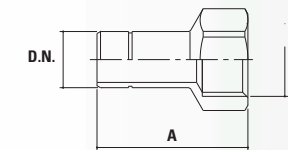
HIGH-TECH SOCKET 90° PLASTIC ELBOW

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC.028.015.00P	15x1/2"	38,00	TECHNICAL POLYMER	34,0	31,0
FC.028.022.00P	22x1/2"	48,42	TECHNICAL POLYMER	38,0	31,0



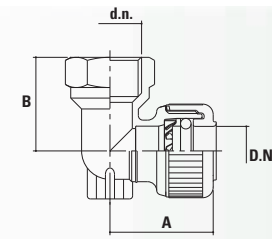
90° PROLONGED FEMALE SOCKET ADAPTER ELBOW

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC.025.015	15x1/2"	129,0	BRASS	34,0	41,0
FC.025.016	16x1/2"	133,0	BRASS	34,0	41,0



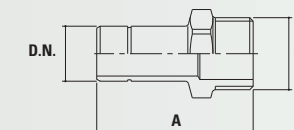
MALE-FEMALE METALLIC STRAIGHT CONNECTOR

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A
FC.030.015	15x1/2"	55,0	BRASS	48,0
FC.030.016	16x1/2"	51,0	BRASS	48,0
FC.030.020	20x1/2"	58,0	BRASS	49,0
FC.030.022	22x3/4"	65,0	BRASS	49,5
FC.030.025	25x3/4"	81,0	BRASS	44,5
FC.030.028	28x1"	110,0	BRASS	51,5
FC.030.032.010	32x1"	147,5	BRASS	53,5



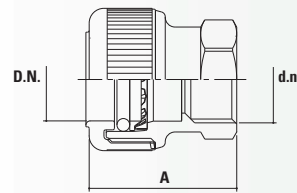
90° FEMALE SOCKET ADAPTER ELBOW

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC.026.015	15x1/2"	107,0	BRASS	34,0	31,0
FC.026.016	16x1/2"	120,0	BRASS	34,0	31,0
FC.026.020	20x1/2"	126,0	BRASS	35,5	36,0
FC.026.020.3/4	20x3/4"	142,4	BRASS	38,3	36,0
FC.026.022	22x1/2"	133,5	BRASS	36,5	36,0
FC.026.022.3/4	22x3/4"	156,0	BRASS	40,5	36,0
FC.026.025	25x3/4"	201,5	BRASS	42,0	36,0
FC.026.025.1/2	25x1/2"	254,7	BRASS	36,6	36,0
FC.026.028	28x1"	254,7	BRASS	48,5	39,0
FC.026.032	32x1"	328,6	BRASS	54,0	41,0



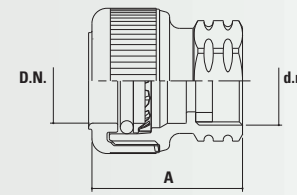
MALE METALLIC STRAIGHT CONNECTOR

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A
FC.031.015	15x1/2"	52,0	BRASS	50,0
FC.031.016	16x1/2"	50,0	BRASS	50,0
FC.031.020	20x1/2"	54,0	BRASS	51,0
FC.031.022	22x3/4"	80,0	BRASS	53,0
FC.031.025	25x3/4"	120,0	BRASS	57,5
FC.031.028	28x1"	196,0	BRASS	66,5
FC.031.032.010	32x1"	214,0	BRASS	68,5



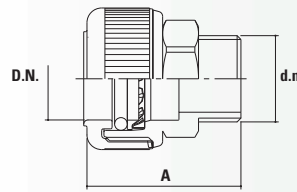
FEMALE METALLIC STRAIGHT CONNECTOR

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A
FC.033.015	15x1/2"	79,3	BRASS	42,0
FC.033.016	16x1/2"	78,7	BRASS	42,0
FC.033.020	20x1/2"	92,5	BRASS	41,5
FC.033.022	22x3/4"	117,7	BRASS	44,0
FC.033.025	25x3/4"	144,2	BRASS	45,0
FC.033.028	28x1"	194,1	BRASS	50,5
FC.033.032	32x1 1/4"	321,0	BRASS	56,5
FC.033.032.010	32x1"	-	BRASS	51,5



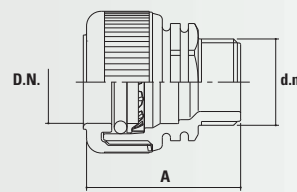
FEMALE HIGH-TECH PLASTIC STRAIGHT CONNECTOR

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A
FC.033.015.OOP	15x1/2"	10,0	TECHNICAL POLYMER	42,0
FC.033.016.OOP	16x1/2"	10,2	TECHNICAL POLYMER	42,0
FC.033.020.OOP	20x1/2"	31,2	TECHNICAL POLYMER	42,0
FC.033.022.OOP	22x3/4"	31,5	TECHNICAL POLYMER	44,0
FC.033.025.OOP	25x3/4"	38,0	TECHNICAL POLYMER	45,0
FC.033.028.OOP	28x1"	50,5	TECHNICAL POLYMER	50,5



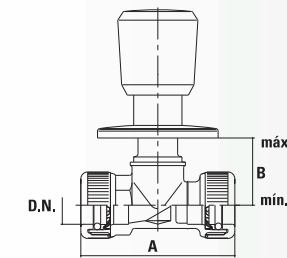
MALE-FEMALE METALLIC STRAIGHT CONNECTOR

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A
FC.035.015	15x1/2"	85,0	BRASS	39,5
FC.035.016	16x1/2"	85,0	BRASS	39,5
FC.035.020	20x1/2"	90,0	BRASS	42,0
FC.035.022	22x3/4"	120,0	BRASS	44,0
FC.035.025	25x3/4"	144,0	BRASS	47,0
FC.035.028	28x1"	204,0	BRASS	55,5
FC.035.032	32x1 1/4"	362,0	BRASS	63,5
FC.035.032.010	32x1"	236,0	BRASS	60,5
FC.035.040	40x1 1/4"	451,0	BRASS	66,0
FC.035.050	50x1 1/2"	584,0	BRASS	67,0



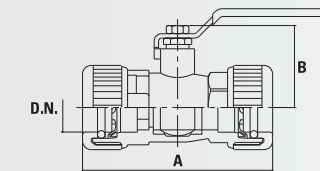
MALE-FEMALE HIGH-TECH PLASTIC STRAIGHT CONNECTOR

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A
FC.035.015.OOP	15x1/2"	18,0	TECHNICAL POLYMER	39,5
FC.035.016.OOP	16x1/2"	19,0	TECHNICAL POLYMER	39,5
FC.035.020.OOP	20x1/2"	28,0	TECHNICAL POLYMER	41,0
FC.035.022.OOP	22x3/4"	31,0	TECHNICAL POLYMER	44,0
FC.035.025.OOP	25x3/4"	37,0	TECHNICAL POLYMER	47,0
FC.035.028.OOP	28x1"	52,0	TECHNICAL POLYMER	55,5



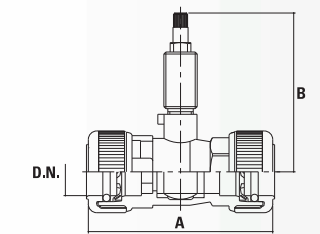
METALLIC STOPCOCK

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B máx.	B Min.
FC.038.015.000	15	573,0	BRASS	82,0	47,5	19,0
FC.038.016.000	16	563,0	BRASS	82,0	47,5	19,0
FC.038.020.000	20	473,1	BRASS	89,5	51,0	26,0
FC.038.022.000	22	508,0	BRASS	89,5	51,0	26,0



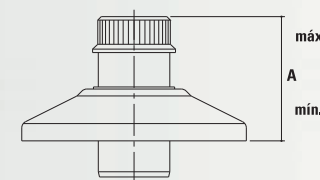
BALL VALVE

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC.049.015	15	288,5	BRASS	85,5	38,0
FC.049.016	16	288,5	BRASS	85,5	38,0
FC.049.020	20	319,8	BRASS	88,5	41,0
FC.049.022	22	328,0	BRASS	86,5	40,0
FC.049.025	25	452,6	BRASS	100,0	43,0
FC.049.028	28	510,4	BRASS	104,5	43,0
FC.049.032	32	790,4	BRASS	-	-
FC.049.040	40	1.220,0	BRASS	-	-
FC.049.050	50	1.538,0	BRASS	-	-



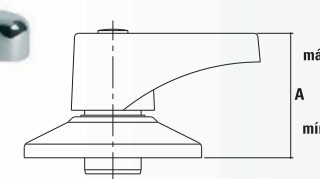
BALL VALVE CASING

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC.057.015.010	15	313,8	BRASS	82,0	80,0
FC.057.016.010	16	304,4	BRASS	85,5	80,0
FC.057.020.010	20	339,8	BRASS	-	-
FC.057.022.010	22	346,0	BRASS	87,0	81,0
FC.057.025.010	25	463,6	BRASS	98,0	84,0
FC.057.028.010	28	535,4	BRASS	105,0	84,0
FC.057.032.010	32	786,4	BRASS	113,0	91,0



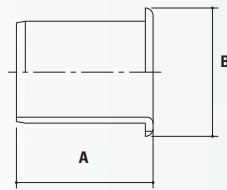
CROSSHEAD AND FINIAL FOR VALVE

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A Max.	A Min.
FC.057.025.028	15,16,22,25,28 y 32	68,0	BRASS	54,0	25,5



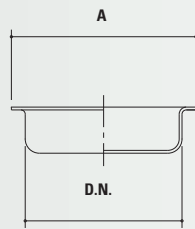
LEVEL HANDLE AND FINIAL FOR VALVE

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A Max.	A Min.
FC.058.025.028	15,16,22,25,28 y 32	86,0	BRASS	56,0	42,5



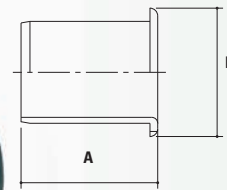
PB END CAP

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A
FC.041.032	32	-	PB	-
FC.041.040	40	-	PB	-
FC.041.050	50	-	PB	-



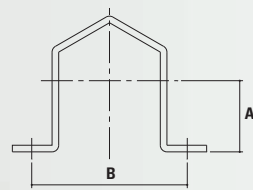
END CAP

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A
FC.040.015	15	1,0	STAINLESS STEEL	19,0
FC.040.016	16	2,0	STAINLESS STEEL	20,0
FC.040.020	20	2,0	STAINLESS STEEL	23,5
FC.040.022	22	2,0	STAINLESS STEEL	26,0
FC.040.025	25	3,0	STAINLESS STEEL	29,0
FC.040.028	28	3,0	STAINLESS STEEL	32,0



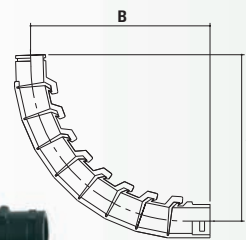
PLASTIC SUPPORT SLEEVE

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC.060.015.00P	15	1,0	TECHNICAL POLYMER	22	14,50
FC.060.016.00P	16	1,0	TECHNICAL POLYMER	22	15,50
FC.060.020.00P	20	2,0	TECHNICAL POLYMER	23	19,50
FC.060.022.016.00P	22	2,0	TECHNICAL POLYMER	23	21,50
FC.060.025.00P	25	2,0	TECHNICAL POLYMER	23	24,50
FC.060.028.00P	28	3,0	TECHNICAL POLYMER	26	27,50
FC.060.032.00P	32	6,0	TECHNICAL POLYMER	32	31,50
FC.060.040.00P	40	10,0	TECHNICAL POLYMER	40	39,50
FC.060.050.00P	50	20,0	TECHNICAL POLYMER	59	49,50



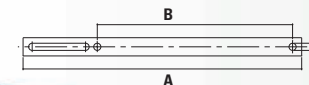
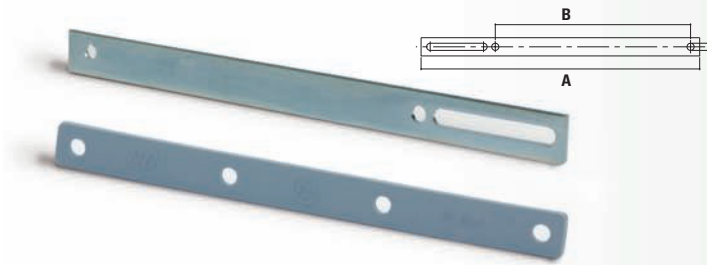
STOPCOCK CLIP

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC.066.015	15	14,0	GALVANISED STEEL	18,0	42,0
FC.066.022	22	16,0	GALVANISED STEEL	22,0	47,0
FC.066.025	25	12,0	GALVANISED STEEL	22,4	48,0
FC.066.028	28	12,0	GALVANISED STEEL	23,9	48,5
FC.066.032	32	14,0	GALVANISED STEEL	26,3	57,0
FC.066.040	40	22,0	GALVANISED STEEL	32,0	61,5
FC.066.050	50	26,0	GALVANISED STEEL	36,5	71,5



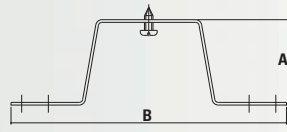
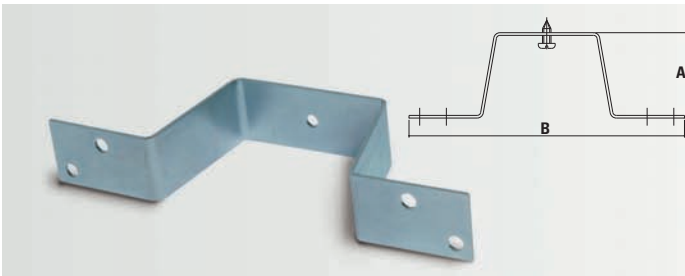
ARTICULATED CURVE FOR HEATING INSTALLATIONS

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC.076.015	15 y 16	28,0	-	56	60,5



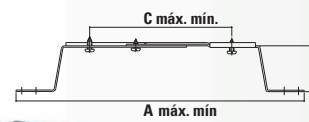
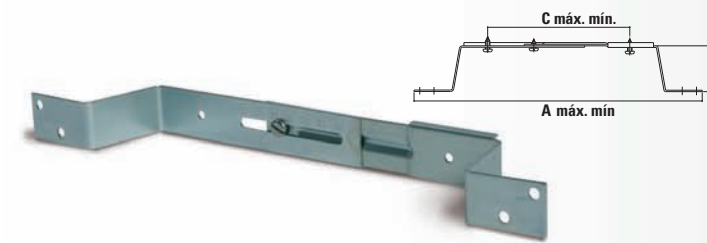
BRASS ELBOW SEPARATOR

REFERENCE	MATERIAL	WEIGHT grs.	A Max.	B Max.	B Min.	C Max.
FC.080	STAINLESS STEEL	214	200	200	150	5,5
FC.080.00P	PB	17	164	150	50	5,5



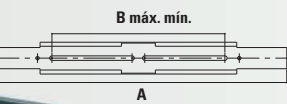
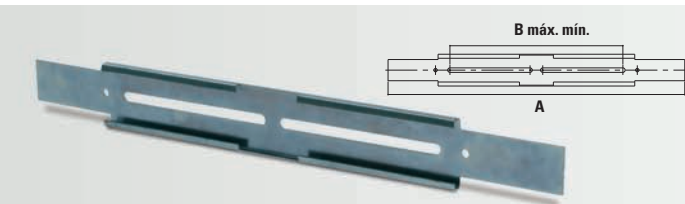
SINGLE BRACKET FOR SERVICEABLE INSTALLATIONS

REFERENCE	MATERIAL	WEIGHT grs.	A Max.	A Min.	B Max.
FC.081	GALVANISED STEEL	68	157	-	48



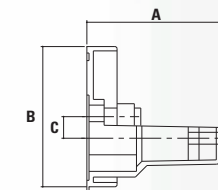
DOUBLE BRACKET FOR SERVICEABLE INSTALLATIONS

REFERENCE	MATERIAL	WEIGHT grs.	A Max.	A Min.	B Max.	B Min.	C Max.
FC.082	GALVANISED STEEL	139	345	285	48	-	-



SUPPORT GUIDE

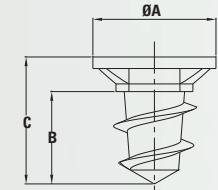
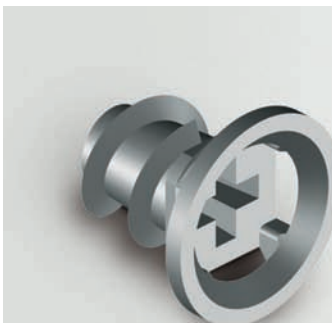
REFERENCE	MATERIAL	WEIGHT grs.	A Max.	A Min.	B Max.	B Min.	C Max.
FC.083	GALVANISED STEEL	116	350	-	204	-	-



SUPPORT FOR BRASS ELBOWS IN PLASTERBOARD INSTALLATIONS

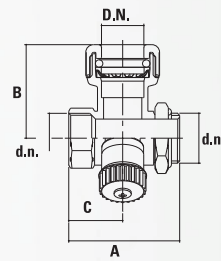
REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B	C
FC.084	15,16,20 y 22	32,0	POLYPROP.	62,0	65,0	10,0
FC.085	15,16,20 y 22	35,7	POLYPROP.	62,0	65,0	10,0

Nota: The metallic elbow is not included.



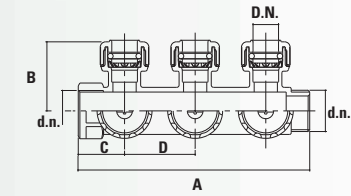
BRACKET TO BE USED IN PLASTERBOARD INSTALLATIONS

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B	C
FC.086	-	-	-	16	12	16,5



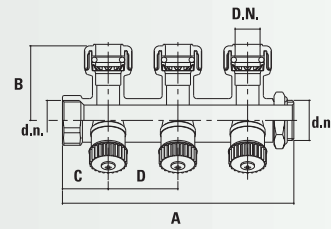
ONE OUTLET METALLIC MANIFOLD

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B	C	D
FC.313.034.022	3/4"x3/4"x22	289,5	BRASS	65,0	49,0	29,0	



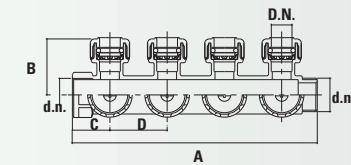
90° THREE OUTLET METALLIC MANIFOLD

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B	C	D
FC.217.034.015	3/4"x3/4"x15x15x15	786,8	BRASS	154,0	44,0	32,0	45,0
FC.217.034.016	3/4"x3/4"x16x16x16	786,6	BRASS	154,0	44,0	32,0	45,0



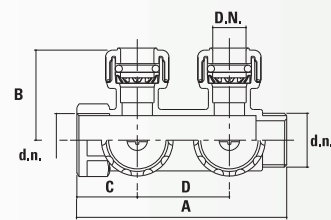
THREE OUTLET METALLIC MANIFOLD

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B	C	D
FC.317.034.015	3/4"x3/4"x15x15x15	627,8	BRASS	151,0	47,0	29,0	45,0
FC.317.034.016	3/4"x3/4"x16x16x16	627,6	BRASS	151,0	47,0	29,0	45,0



90° FOUR OUTLET METALLIC MANIFOLD

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B	C	D
FC.218.034.015	3/4"x3/4"x15x15x15x15	1.035,2	BRASS	197,0	44,0	32,0	45,0
FC.218.034.016	3/4"x3/4"x16x16x16x16	1.034,8	BRASS	197,0	44,0	32,0	45,0



90° TWO OUTLET METALLIC MANIFOLD

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B	C	D
FC.215.034.015	3/4"x3/4"x15x15	534,5	BRASS	109,0	44,0	32,0	45,0
FC.215.034.016	3/4"x3/4"x16x16	534,4	BRASS	109,0	44,0	32,0	45,0



BOX FOR PLUMBING AND HEATING MANIFOLDS (WITH ONE SUPPORT)

REFERENCE	DIMENSIONS	WEIGHT grs.	MATERIAL	A	B
FC.119.320.300	320x300	927,0	PLASTIC	320,0	300,0
FC.119.460.300	460x300	1254,0	PLASTIC	460,0	300,0

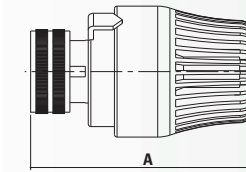


BOX FOR PLUMBING AND HEATING MANIFOLDS (WITH TWO SUPPORTS)

REFERENCE	DIMENSIONS	WEIGHT grs.	MATERIAL	A	B
FC.219.480.250	480x250	1220,0	PLASTIC	480,0	250,0

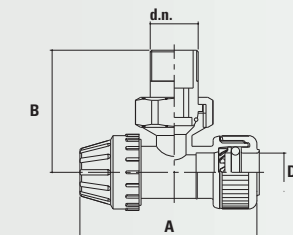


Fittings for Radiator Heating



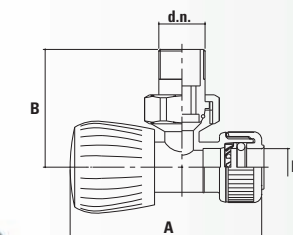
TERMOSTATIC HEAD

REFERENCE	WEIGHT grs.	MATERIAL	A	B
FC 190.000	99,0	-	89	-



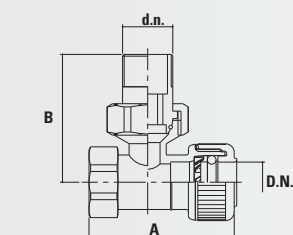
ANGLE VALVE (CAN BE FITTED WITH TERMOSTATIC HEAD)

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC 190.015.012	15x1/2"	250,1	BRASS	75	53
FC 190.016.012	16x1/2"	251,0	BRASS	75	53



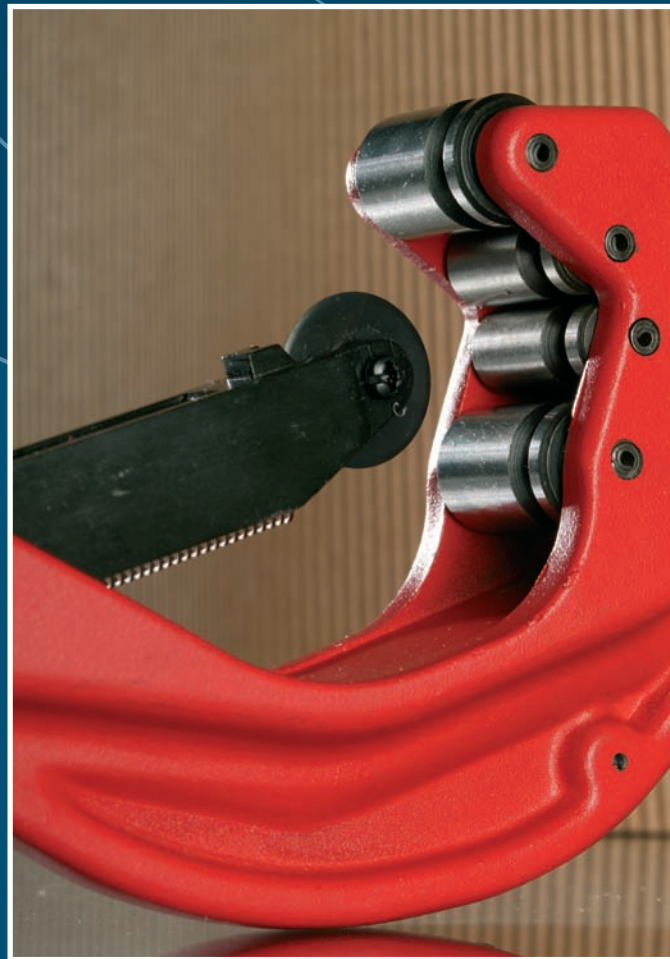
ANGLE VALVE

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC 191.015.012	15x1/2"	223,0	BRASS	85	52
FC 191.016.012	16x1/2"	223,0	BRASS	85	52

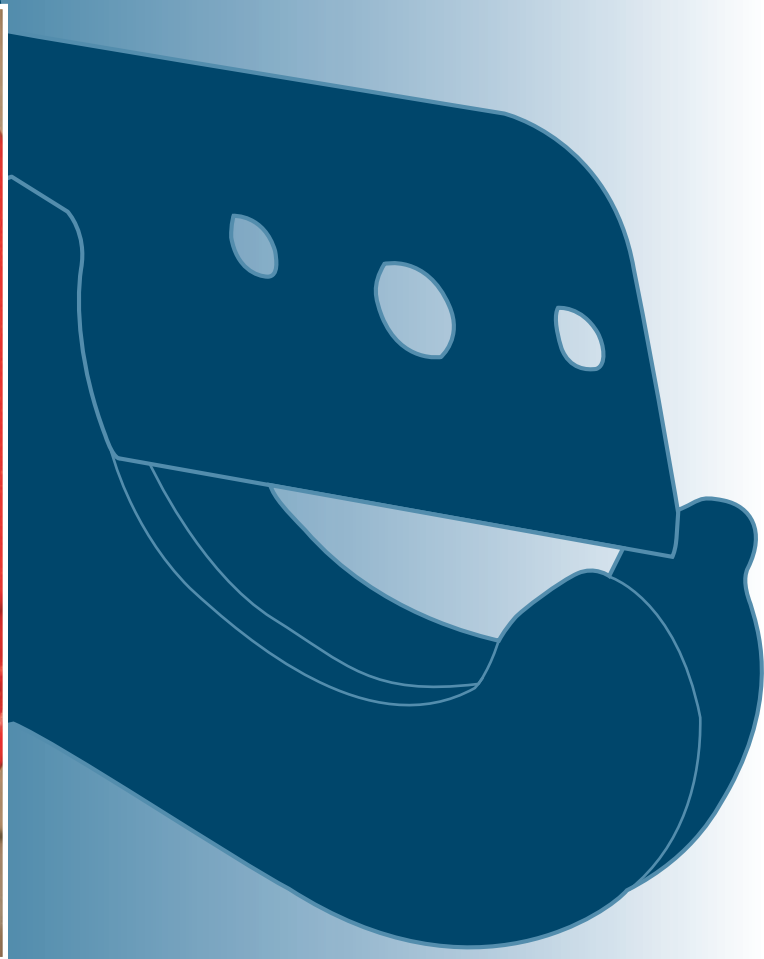


ANGLE TAP

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC 192.015.012	15x1/2"	187,0	BRASS	57	52
FC 192.016.012	16x1/2"	187,0	BRASS	57	52



Tools



MARKING PIPE

REFERENCE	DIAMETER	WEIGHT grs.	MATERIAL
FC.070	15 a 32	23,4	PLASTIC



PIPE CUTTER (Ø TO 28 mm.)

REFERENCE	DIAMETER	WEIGHT grs.	MATERIAL
FC.073	0 a 28	110	PLASTIC



PIPE CUTTER (Ø TO 28 mm.)

REFERENCE	DIAMETER	WEIGHT grs.	MATERIAL
FC.074	0 a 28	294	METALLIC



PIPE CUTTER (Ø TO 125 mm.)

REFERENCE	DIAMETER	WEIGHT grs.	MATERIAL
FC.078.006.067	Ø 6 a 63	800	METALLIC
FC.078.050.127	Ø 50 a 125	1.630	METALLIC



SILICONE LUBRICANT (no toxic)

REFERENCE	CONTAINS	WEIGHT grs.
S.255.030	30	-
S.255	50	61



Spares and Accesories for PB Parts

GRAB RING

REFERENCE	DESCRIPTION
FC.045.015	Grab ring Ø 15 and Ø 16
FC.045.020	Grab ring Ø 20
FC.045.022	Grab ring Ø 22
FC.045.025	Grab ring Ø 25
FC.045.028	Grab ring Ø 28
FC.045.032	Grab ring Ø 32
FC.045.040	Grab ring Ø 40
FC.045.050	Grab ring Ø 50

NUT FOR PB FITTINGS

REFERENCE	DESCRIPTION
FC.046.015	Nut for "PB" fittings Ø 15
FC.046.016	Nut for "PB" fittings Ø 16
FC.046.020	Nut for "PB" fittings Ø 20
FC.046.022	Nut for "PB" fittings Ø 22
FC.046.025	Nut for "PB" fittings Ø 25
FC.046.028	Nut for "PB" fittings Ø 28
FC.046.032	Nut for "PB" fittings Ø 32
FC.046.040	Nut for "PB" fittings Ø 40
FC.046.050	Nut for "PB" fittings Ø 50

RUBBER-RING

REFERENCE	DESCRIPTION
FC.050.015	Rubber ring Ø 15
FC.050.016	Rubber ring Ø 16
FC.050.020	Rubber ring Ø 20
FC.050.022	Rubber ring Ø 22
FC.050.025	Rubber ring Ø 25
FC.050.028	Rubber ring Ø 28
FC.050.032	Rubber ring Ø 32
FC.050.040	Rubber ring Ø 40
FC.050.050	Rubber ring Ø 50

SPARE RING

REFERENCE	DESCRIPTION
FC.055.015	Spare ring Ø 15 y Ø 16
FC.055.020	Spare ring Ø 20
FC.055.022	Spare ring Ø 22
FC.055.025	Spare ring Ø 25
FC.055.028	Spare ring Ø 28
FC.055.032	Spare ring Ø 32
FC.055.040	Spare ring Ø 40
FC.055.050	Spare ring Ø 50

SUPPORT FOR MANIFOLD BOX

REFERENCE	DESCRIPTION
FC.219.480.250.002	Support for manifolds (1juego)

HANDLE FOR METALLIC STOPCOCK

REFERENCE	DESCRIPTION
FC.038.015.018	Combined frame Ø 15 y Ø 16
FC.038.022.018	Combined frame Ø 20 y Ø 22

CROSSHEAD-ROSETTE ASSEMBLY

REFERENCE	DESCRIPTION
FC.038.015.022	Crosshead and finial Ø15,Ø16,Ø20, y Ø22. Square screw.
FC.038.015.083	Crosshead and finial Ø15,Ø16,Ø20, y Ø22. Fluted screw.

THREADED SPINDLE EXTENSION

REFERENCE	DESCRIPTION
FC.057.058.001	Threaded spindle extension for Ref. FC.057 y FC.054

SCREWS

REFERENCE	DESCRIPTION
FC8.409.048.002	Screw for double support
FC8.413.048.002	Screw for single and double support
FC8.425.042.001	Screw for serviceable elbow
FC8.506	Screw for separator

FELT - TI PEN

REFERENCE	DESCRIPTION
FC4.071	Felt-ti pen



VERY IMPORTANT:

It is ESSENTIAL that the pipe is introduced up to the own mark on the pipe, or up to the mechanical preprinted one, in order to be sure that the assembly is correctly carried out.

1 Cut the pipe



Use only a pipe cutter to cut the pipe. Never use a hacksaw. To ensure a clean, square cut, rotate the pipe whilst maintaining pressure on the cutter until the pipe is severed.

2 Insert a support sleeve into the pipe end



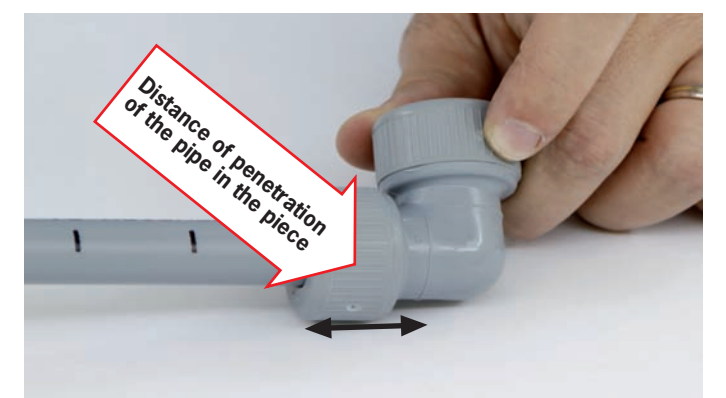
Insert a support sleeve into the pipe end. DO NOT FORGET this step, as otherwise it might come out of the fitting.

3 Lubricate



The outside of the pipe or the inside of the fitting (specially the grab ring) shall be lightly cleaned and lubricated in order to facilitate the insertion of the pipe into the fitting.

4 Introduce the pipe



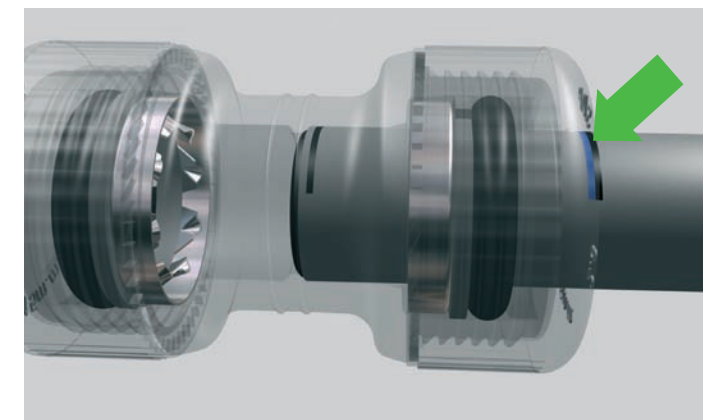
Push the pipe firmly into the fitting until the end reaches the line marked by the felt-tip pen. Thus, with a quick look we check that it is properly joined.

Note: Make sure that the pipe is completely introduced into the fitting, up to the mark of the felt-tip pen.

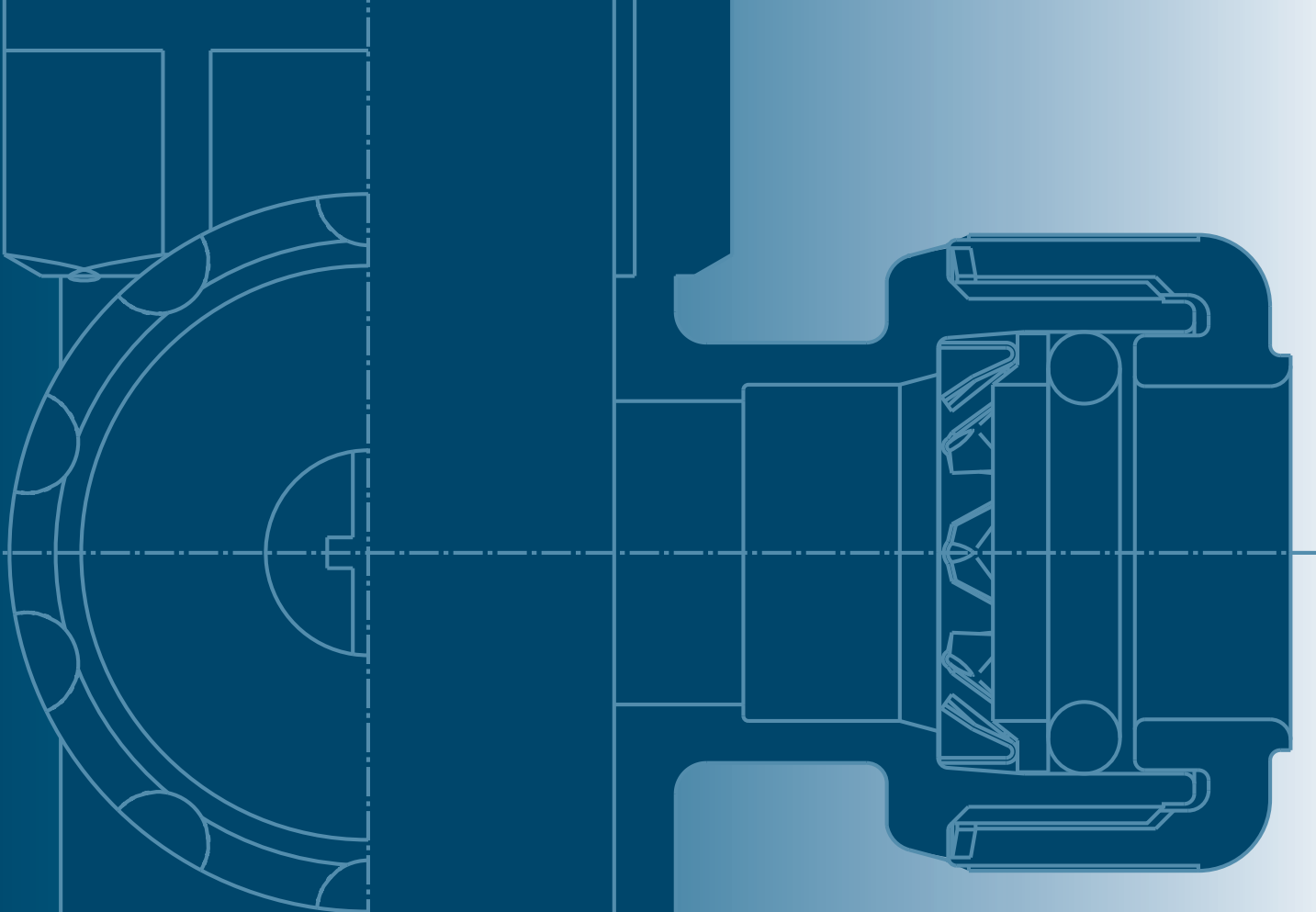
5 Wrong



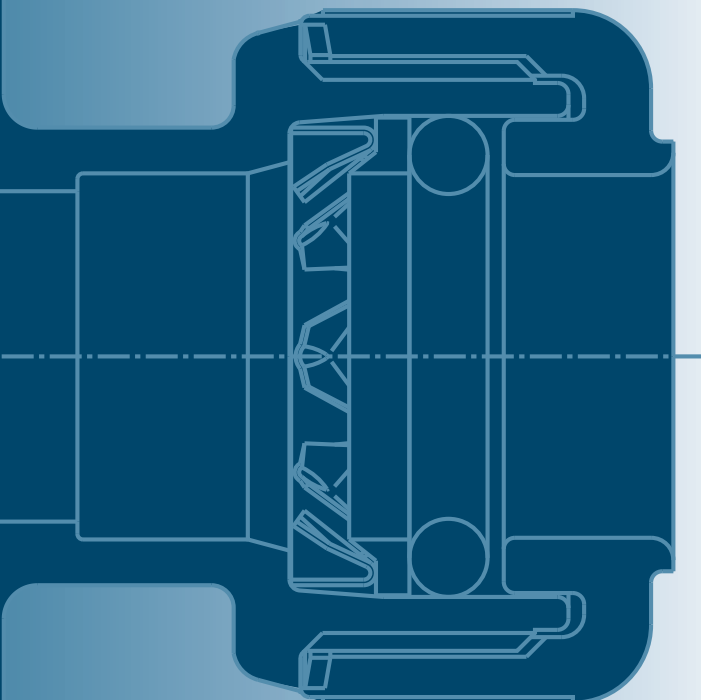
6 Right



The Assembly



Characteristics



APPLICATION FIELDS

TERRAIN SDP system is focused basically to plumbing and heating installations in:

- Housing, hotels, residences, schools, etc.
- Piping installations in caravans
- Shipping industry
- Refrigerated installations, fridges, refrigerated counters.
- ..
- Industrial installations
- Installations for chemicals (see table for resistance to chemical agents)
- Piping systems for liquid food
- Piping systems for liquidized pastes,

As well as all other piping systems where it is needed maximum disinfection conditions and hygiene, maximum security, speed and assembling flexibility.

PRECAUTIONS

TERRAIN SDP system: pipes and accessories in(PB) Polibutylene does not conduct electricity. So it cannot be used for connections to earth or connections to other electric systems. Maintain the pipes far from direct heating sources such as electric heaters, etc.

TERRAIN SDP pipes are flexible; they cannot be used to support or to hang accessories. (see our assembling manual)

SOUND LEVEL PRODUCED BY THE INSTALLATION

TERRAIN SDP piping systems are made of (PB) Polibutylene, which is a material that compared with metal, copper or iron,

can be considered as an acoustic insulator. This characteristic of the system reduces in the housing noises and vibrations caused by: taps, retention valves, motor-pumps, etc., which causes lots of problems and which are very difficult to avoid. The low degree of noise transmission makes TERRAIN SDP ideal for installations where the water speed is higher than the speed watched for metallic installations, due to the fact that the noise transmission problem to the environmental media is fully reduced, being possible in some cases using pipes with a smaller diameter with the same working results.

WATER HAMMER EFFECT

In hydraulic installations, there can occur over occasional pressures, due to the quick lock of certain valves or tap. This circumstances receives the name of water hammer effect.

In the installation project, when it is know the characteristics of the different valves, regulation items and projected locks, there have to prevent and eliminate the possible water hammer effects which might occur.

Nevertheless, TERRAIN SDP system due to its elasticity, can absorb and eliminate water hammer effects, which usually can occur in plumbing and heating installations IN this type of installations there might occur due to water hammer effects over pressures up to 20 bars. Test made indicate that TERRAIN SDP can resist occasional pressures over 36 bars at a temperature of 20°C.



LUBRICANT

To ensure the best result, we recommend to use exclusively the non toxic lubricant produced by NUEVA TERRAIN. This will make the assembling of TERRAIN SDP system easier and ensures a smooth connection without problems.

DO NOT USE LUBRICANTS WHICH MIGHT AFFECT THE SYSTEM COMPONENTS, OR HUMAN!.

ESTABILITY TO ULTRA VIOLET RAYS

Polybutilene (PB) pipes and accessories from TERRAIN SDP system are produced with protection against ultra violets rays. When the material is used outside, the material should be protected accordingly.

It is recommended not to store the material outside for long time to the direct sun shine.

TOXICITY

The Kiwa Certification, guarantees among other things, an exigent and exhaustive toxicological control of the components. Kiwa certification implies ATA citification (Attest Toxicological Aspects), which controls the strict migration requirements of the water department from the building and environmental Dutch Ministry.

NUEVA TERRAIN has the safest combination against the possible water contamination when transported. Here bellow we show some of TERRAIN SDP characteristics which makes the system unique for its application in the hydro sanitary installations for plumbing, heating and cooling applicattions in houses, hospitals, hotels, school, etc.

- Non toxic.
- It doesn't permit the proliferation of micro biologic organisms.
- No corrosion
 - No scale build up.
 - The installation does not need to be regularly renewed with chemical products which might present a contamination risk.
 - When installing or assembling there is not used any strange product such as: soldering, soldering liquids, paint strippers, hemp, etc., which might pollute the water.
- Silone lubricant used by TERRAIN SDO system is not toxic.



Certificates

Nº 001/00234562 Nº 001/003002 Nº 002/00400
 Nº 001/00234563 Nº 001/003003 Nº 002/00400
 Nº 001/00234564 Nº 001/003004 Nº 002/00400
 Nº 001/00234565 Nº 001/003005 Nº 002/00400
 Nº 001/00234566 Nº 001/003006 Nº 002/00400
 Nº 001/00234567 Nº 001/003007 Nº 002/00400
 Nº 001/00234568 Nº 001/003008 Nº 002/00401
 Nº 001/00234569 Nº 001/003009 Nº 002/00401
 Nº 001/00234570 Nº 001/003010 Nº 002/00401
 Nº 001/00234571 Nº 001/003011 Nº 002/00401
 Nº 001/00234572 Nº 001/003012 Nº 002/00401
 Nº 001/00234573 Nº 001/003013 Nº 002/00401
 Nº 001/00234574 Nº 001/003014 Nº 002/00401
 Nº 001/00234575 Nº 001/003015 Nº 002/00401
 00234576 Nº 001/003016 Nº 002/00401
 00234577 Nº 001/003017 Nº 002/00401
 00234578 Nº 001/003018 Nº 002/00402
 00234579 Nº 001/003019 Nº 002/00402
 00234580 Nº 001/003020 Nº 002/00402
 00234581 Nº 001/003021 Nº 002/00402
 00234582 Nº 001/003022 Nº 002/00402
 00234583 Nº 001/003023 Nº 002/00402
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 00234585 Nº 001/003025 Nº 002/00402
 00234586 Nº 001/003026 Nº 002/00402
 00234587 Nº 001/003027 Nº 002/00402
 Nº 001/00234588 Nº 001/003028 Nº 002/00403
 Nº 001/00234589 Nº 001/003029 Nº 002/00403
 Nº 001/00234590 Nº 001/003030 Nº 002/00403
 Nº 001/00234591 Nº 001/003031 Nº 002/00403



La Asociación Española de Normalización y Certificación (AENOR) certifica que el producto The Spanish Association for Standardisation and Certification (AENOR) certifies that the product

TUBOS DE POLIBUTILENO (PB) PARA INSTALACIONES DE AGUA A PRESIÓN FRÍA Y CALIENTE POLYBUTYLENE (PB) PIPES FOR HOT AND COLD WATER INSTALLATIONS

MARCA COMERCIAL: SDP TRADEMARK:

Table with 4 columns: SERIE, DIÁMETROS (mm), CLASE DE APLICACIÓN / PRESIÓN DE DISEÑO (bar), OPACIDAD. Rows include diameters 16, 20-22, 28-32, 40-50, 63-75, 90-110.

suministrado por supplied by

NUEVA TERRAIN, S.L. CL. PADULETA, 2 01195 VITORIA (Alava - ESPAÑA)

y elaborado en and manufactured in

PI JUNDIZ "E" - CL. PADULETA, 2 01195 VITORIA (Alava - ESPAÑA)

es conforme con complies with

UNE-EN ISO 15876-1:2004 UNE-EN ISO 15876-2:2004

Para conceder este Certificado, AENOR ha ensayado el producto y ha comprobado el sistema de la calidad aplicado para su elaboración.

In order to grant this Certificate, AENOR has tested the product and has verified the quality system used in its manufacture.

Fecha de concesión: 2008-04-03 First issued on:

Fecha de caducidad: 2011-01-19 Expires on:

El Director General de AENOR General Manager

Este certificado anula y sustituye al certificado 001/004458, de fecha 2008-02-04. This certificate supersedes certificate 001/004458, dated 2008-02-04.

AENOR - Gónova, 6 - 28004 MADRID - Teléfono 914 32 60 00 - Telefax 913 10 46 83



La Asociación Española de Normalización y Certificación (AENOR) certifica que el producto The Spanish Association for Standardisation and Certification (AENOR) certifies that the product

TUBOS DE POLIBUTILENO (PB) PARA INSTALACIONES DE AGUA A PRESIÓN FRÍA Y CALIENTE POLYBUTYLENE (PB) PIPES FOR HOT AND COLD WATER INSTALLATIONS

MARCA COMERCIAL: SDP TRADEMARK:

Table with 4 columns: SERIE, DIÁMETROS (mm), CLASE DE APLICACIÓN / PRESIÓN DE DISEÑO (bar), OPACIDAD. Rows include diameters 15, 22-25.

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y elaborado en and manufactured in

PI EL SEQUERO, AV DEL RÍO EBRO, S/N 26509 LOGROÑO (La Rioja - ESPAÑA)

es conforme con complies with

UNE-EN ISO 15876-1:2004 UNE-EN ISO 15876-2:2004

Para conceder este Certificado, AENOR ha ensayado el producto y ha comprobado el sistema de la calidad aplicado para su elaboración.

In order to grant this Certificate, AENOR has tested the product and has verified the quality system used in its manufacture.

Fecha de concesión: 2006-01-03 First issued on:

Fecha de renovación: 2010-04-20 Renewed on:

Fecha de caducidad: 2015-04-20 Expires on:

El Director General de AENOR General Manager

Este certificado anula y sustituye al certificado 001/003587, de fecha 2006-01-03. This certificate supersedes certificate 001/003587, dated 2006-01-03.

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Entidad acreditada por ENAC (C-PR002.01) Body accredited by ENAC (C-PR002.01)



MARCA COMERCIAL: SDP TRADEMARK:

Table with 7 columns: REFERENCIA, FIGURA, DIÁMETROS (mm), CLASE DE APLICACIÓN / PRESIÓN DE DISEÑO (bar), OPACIDAD, TIPO DE UNIÓN, MATERIAL. Rows include various fittings like Codo a 90°, Te bocas iguales, Te reducida, etc.

Este certificado anula y sustituye al certificado 001/003308, de fecha 2008-01-03. This certificate supersedes certificate 001/003308, dated 2008-01-03.

This certificate supersedes certificate 001/003308, dated 2008-01-03. The partial reproduction of this document is not permitted.

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La Asociación Española de Normalización y Certificación (AENOR) certifica que el producto The Spanish Association for Standardisation and Certification (AENOR) certifies that the product

SISTEMA DE CANALIZACIÓN EN MATERIALES PLÁSTICOS PARA INSTALACIONES DE AGUA CALIENTE Y FRÍA. POLIBUTILENO (PB)

PLASTICS PIPING SYSTEM FOR HOT AND COLD WATER INSTALLATIONS. POLYBUTYLENE (PB)

detallado en la(s) página(s) siguiente(s), detailed in the following page(s),

suministrado por supplied by

NUEVA TERRAIN, S.L. CL. PADULETA, 2 01195 VITORIA (Alava - ESPAÑA)

y elaborado en and manufactured in

PI JUNDIZ "E" - CL. PADULETA, 2 01195 VITORIA (Alava - ESPAÑA)

es conforme con complies with

UNE-EN ISO 15876-1:2004 UNE-EN ISO 15876-5:2004

Para conceder este Certificado, AENOR ha ensayado el producto y ha comprobado el sistema de la calidad aplicado para su elaboración.

In order to grant this Certificate, AENOR has tested the product and has verified the quality system used in its manufacture.

Fecha de concesión: 2009-12-03 First issued on:

Fecha de caducidad: 2014-12-03 Expires on:

El Director General de AENOR General Manager

Este certificado anula y sustituye al certificado 001/004461, de fecha 2008-04-03. This certificate supersedes certificate 001/004461, dated 2008-04-03.

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ACCESORIOS PARA TUBOS DE POLIBUTILENO (PB) PARA INSTALACIONES DE AGUA CALIENTE Y FRÍA

FITTINGS FOR POLYBUTYLENE (PB) PIPES FOR HOT AND COLD WATER INSTALLATIONS

detallado en la(s) página(s) siguiente(s), detailed in the following page(s),

suministrado por supplied by

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y elaborado en and manufactured in

PI JUNDIZ "E" - CL. PADULETA, 2 01195 VITORIA (Alava - ESPAÑA)

es conforme con complies with

UNE-EN ISO 15876-1:2004 UNE-EN ISO 15876-3:2004

Para conceder este Certificado, AENOR ha ensayado el producto y ha comprobado el sistema de la calidad aplicado para su elaboración.

In order to grant this Certificate, AENOR has tested the product and has verified the quality system used in its manufacture.

Fecha de concesión: 2008-04-03 First issued on:

Fecha de caducidad: 2011-01-03 Expires on:

El Director General de AENOR General Manager

Este certificado anula y sustituye al certificado 001/003308, de fecha 2006-01-03. This certificate supersedes certificate 001/003308, dated 2006-01-03.

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MARCA COMERCIAL: SDP TRADEMARK:

Table with 7 columns: REFERENCIA, FIGURA, DIÁMETROS (mm), CLASE DE APLICACIÓN / PRESIÓN DE DISEÑO (bar), OPACIDAD, TIPO DE UNIÓN, MATERIAL. Rows include various fittings like Colector, Te reducida, Manguito, etc.

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DESCRIPCIÓN DEL SISTEMA:

MARCA COMERCIAL (Trademark): SISTEMA SDP TIPO DE UNIÓN (Type of joint): Mecánica / Termofusión CLASE DE APLICACIÓN/PRESIÓN DE DISEÑO (bar): 1/10 ; 2/10 ; 4/10 ; 5/8 (Application class/Design Pressure (bar))

SYSTEM DESCRIPTION:

Table with 4 columns: COMPONENTE DEL SISTEMA, DIÁMETROS (mm), MATERIAL, REFERENCIAS. Rows include various components like Colector, Codo a 90°, etc.

Este certificado anula y sustituye al certificado 001/003308, de fecha 2008-04-03. This certificate supersedes certificate 001/003308, dated 2008-04-03.

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DESCRIPCIÓN DEL SISTEMA:

MARCA COMERCIAL (Trademark): SISTEMA SDP TIPO DE UNIÓN (Type of joint): Mecánica / Termofusión CLASE DE APLICACIÓN/PRESIÓN DE DISEÑO (bar): 1/10 ; 2/10 ; 4/10 ; 5/8 (Application class/Design Pressure (bar))

SYSTEM DESCRIPTION:

Table with 4 columns: COMPONENTE DEL SISTEMA, DIÁMETROS (mm), MATERIAL, REFERENCIAS. Rows include various components like Te bocas iguales, Te reducida, etc.

Este certificado anula y sustituye al certificado 001/004461, de fecha 2008-04-03. This certificate supersedes certificate 001/004461, dated 2008-04-03.

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Rua José Afonso, 9 E - 2810-237 Almada - Portugal
Tel. 351. 21 258 69 40 - Fax 351. 21 258 69 59

Licença para o uso da Marca Produto Certificado



Licença nº **TMP - 004/2006** Data: 2006-06-05
Licence n° **TMP - 004/2006** Date: 2006-06-05

Nome e morada do titular da licença: Nueva Terrain S.L.
C/ Paduleta, 2
01015 Vitoria - España
Name and address of the licensee:

Nome e morada do fabricante: Nueva Terrain S.L.
C/ Paduleta, 2
01015 Vitoria - España
Manufacturer's name and address:

Produto: Tubos em polibutileno (PB) para instalações de água quente e fria
Product: Polybutylene (PB) pipes for hot and cold water installations

Referências: Em anexo / In annex
Type references:

Marca(s) comercial(is): SDP
Trademark(s):

Características técnicas: Em anexo / In annex
Technical characteristics:

Este produto foi ensalado e está em conformidade com (norma): EN ISO 15876-1:2003
This product has been tested and is in conformity with (standard): EN ISO 15876-2:2003

Relatórios de ensaios nº(s) / emitidos por: LMP-0484/2005, LMP-1329/2004 / CEIS, P-03/15 Body Cote
As show in test report(s) ref. issued by: MATLAB 214F / WRC-NSF Ltd

Informação adicional (se existir):
Additional information (if any):

Esta licença é válida até: 2011-06-04
This licence is valid until:
e substitui a licença nº:
and supersedes the licence no:

Francisco Barroca
Director Geral / General Manager

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Licença para o uso da Marca Produto Certificado



Licença nº **TMP - 005/2006** Data: 2006-06-05
Licence n° **TMP - 005/2006** Date: 2006-06-05

Nome e morada do titular da licença: Nueva Terrain S.L.
C/ Paduleta, 2
01015 Vitoria - España
Name and address of the licensee:

Nome e morada do fabricante: Nueva Terrain S.L.
C/ Paduleta, 2
01015 Vitoria - España
Manufacturer's name and address:

Produto: Acessórios em polibutileno (PB) para instalações de água quente e fria
Product: Polybutylene (PB) fittings for hot and cold water installations

Referências: Em anexo / In annex
Type references:

Marca(s) comercial(is): SDP
Trademark(s):

Características técnicas: Em anexo / In annex
Technical characteristics:

Este produto foi ensalado e está em conformidade com (norma): EN ISO 15876-1:2003
This product has been tested and is in conformity with (standard): EN ISO 15876-3:2003

Relatórios de ensaios nº(s) / emitidos por: LMP-0073/2005 / CEIS, P-03/15 / Bodycote,
As show in test report(s) ref. issued by: MATLAB 205F, MATLAB 210F, MATLAB 212F, MATLAB 213F, MATLAB 215F / WRC-NSF Ltd

Informação adicional (se existir):
Additional information (if any):

Esta licença é válida até: 2011-06-04
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Director Geral / General Manager

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Page	2	Number	K24320/02	Replaces	K24320/01
		Issued	2004-10-01	Dated	2004-03-01

PB pipes

PRODUCT SPECIFICATION

General

Pipes of PB for the transport of cold and hot drinking water according evaluation guideline BRL-K 536 Part C.

Specification

The diameters and thicknesses of the pipes belonging to this product certification are given in the table below

Nominal outside diameter in mm	Wall thickness in mm
15	1,7
16	1,8
20	2,3
22	2,0
22	2,4
25	2,3
28	2,5
32	2,9

Toxicological requirements

Approval:

This product is approved on the basis of the requirements set in the "Regulating material in chemicalin ledingswatervoorziening" ("Regulation Materials and Chemicals for Drinking Water Supplies"; published in the Staatscourant).
ATA criteria:
The ATA product certification is based on two main criteria. It should permanently comply with:
• The product recipe approved during the assessment procedure. The recipe is laid down in the for confidentiality reasons undisclosed appendix 1A to the certification agreement K24320. This recipe is not to be changed without prior approval by Kiwa according to the Kiwa-ATA approval procedure;
• Specific ATA-product requirements, laid down in appendix 1A to the certification agreement K24320. For confidentiality reasons this appendix 1A is not public.

Logistics

Production and assembly of the system is recorded in the appendix(es) with the certification agreement.

Color: grey

APPLICATION AND USE

The products are intended to be used for the construction of household installations for the transport of cold and heated drinking water according to a temperature profile of class 2 of ISO 10508 and an allowable working pressure of maximum 10 bar.



Partner for progress

Number	K24321/02	Replaces	K24321/01
Issued	2007-10-01	Dated	2004-03-01

Product certificate PB fittings

Based on pre-certification tests as well as periodic inspections by Kiwa, the products referred to in this certificate and marked with the Kiwa-mark as indicated under 'marking', manufactured by

Nueva Terrain, S.L.

may, on delivery, be relied upon to comply with the Kiwa evaluation guideline BRL-K 536 part C "Plastics piping systems of PB, intended for the transport of cold and heated drinking water".

Kiwa N.V.

ing. B. Meekma
Director
Certification and Inspection

This certificate is issued in accordance with the Kiwa Regulations for Product Certification and consists of 3 pages.

Kiwa N.V.
Certification and Inspection
St W. Churchilllaan 273
P.O. Box 70
2280 AB Rijswijk
The Netherlands
Telephone +31 70 41 44 400
Telefax +31 70 41 44 420
Internet www.kiwa.nl



Production Location 1
Nueva Terrain, S.L.
Paduleta 2
Apartado 444
01195 Vitoria
2609 Arribal
La Rioja (Spain)
Telephone +34 941 486178
Telefax +34 941 486800

Production Location 2
Nueva Terrain, S.L.
Avenida Rio Ebro, s/n
El Sequero Industrial Park
26009 Arribal
La Rioja (Spain)
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Telefax +34 941 486800



Rua José Afonso, 9 E - 2810-237 Almada - Portugal
Tel. 351. 21 258 69 40 - Fax 351. 21 258 69 59

Licença para o uso da Marca Produto Certificado



Licença nº **TMP - 006/2006** Data: 2006-06-07
Licence n° **TMP - 006/2006** Date: 2006-06-07

Nome e morada do titular da licença: Nueva Terrain S.L.
C/ Paduleta, 2
01015 Vitoria - España
Name and address of the licensee:

Nome e morada do fabricante: Nueva Terrain S.L.
C/ Paduleta, 2
01015 Vitoria - España
Manufacturer's name and address:

Produto: Sistemas de tubagem em polibutileno (PB) para instalações de água quente e fria /
Product: Polybutylene plastic piping systems for hot and cold water installations

Referências: De acordo com as licenças CERTIF / According CERTIF licences:
Type references: Tubos / Pipes - TMP - 004/2006
Acessórios / Fittings - TMP - 005/2006

Marca(s) comercial(is): SDP
Trademark(s):

Características técnicas: Tubos - licença nº / licence n° TMP - 004/2006
Technical characteristics: Acessórios - licença / licence n° TMP - 005/2006

Este produto foi ensalado e está em conformidade com (norma): EN ISO 15876-1:2003
This product has been tested and is in conformity with (standard): EN ISO 15876-5:2003

Relatórios de ensaios nº(s) / emitidos por: LMP - 0073/2005 / CEIS, P-03/15 / Bodycote, 18614 XXIV / Toraja
As show in test report(s) ref. issued by:

Informação adicional (se existir):
Additional information (if any):

Esta licença é válida até: 2011-06-06
This licence is valid until:
e substitui a licença nº:
and supersedes the licence no:

Francisco Barroca
Director Geral / General Manager

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Partner for progress

Number	K24320/02	Replaces	K24320/01
Issued	2007-10-01	Dated	2004-03-01

Product certificate PB pipes

Based on pre-certification tests as well as periodic inspections by Kiwa, the products referred to in this Technical approval-with-product certificate and marked with the Kiwa-mark as indicated under 'Marking', manufactured by

Nueva terrain, S.L.

may, on delivery, be relied upon to comply with the Kiwa evaluation guideline BRL-K 536 Part C "Plastics piping systems of PB for the transport of cold and hot drinking water".

Kiwa N.V.

ing. B. Meekma
Director
Certification and Inspection

This certificate is issued in accordance with the Kiwa-Regulations for Product Certification and consists of 3 pages.

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Telephone +34 941 486178
Telefax +34 941 486800

Page	3	Number	K24320/02	Replaces	K24320/01
		Issued	2004-10-01	Dated	2004-03-01

PB pipes

MARKING

The pipes are marked with the Kiwa-mark.

The products are marked with the following compulsory indications:

The PB pipes are provided with the following marks:

- Kiwa (or Kiwa®) wordmark), Class 2, 10 bar;
- manufacturer's name, system name, trade name, logo or the certification number of the system certificate.
- material identification: PB;
- nominal outside diameter and nominal wall thickness in mm;
- production code.

The realization of the marks is as follows: clear and indelible, at intervals of not more than 2 m.

Method of marking: indelible imprint.

RECOMMENDATIONS FOR CUSTOMERS:

1. Check at the time of delivery whether:
 - 1.1 the producer has delivery in accordance with the agreement;
 - 1.2 the mark and the marking method are correct;
 - 1.3 the products show no visible defects as a result of transport etc.
2. If you should reject a product on the basis of the above, please contact:
 - 2.1 Nueva Terrain, S.L. and, if necessary,
 - 2.2 Kiwa N.V.
3. Consult the producer's processing guidelines for the proper storage and transport methods.
4. Check whether this certificate is still valid by consulting www.kiwa.nl

Page	2	Number	K24321/02	Replaces	K24321/01
		Issued	2007-10-01	Dated	2004-03-01

PB fittings

PRODUCT SPECIFICATION

General

Fittings of PB intended for the transport of cold and heated drinking water according to BRL-K 536, part C.

Detailed specification

The diameters and wall thicknesses indicated in the table below, belong to this product certificate.

Nominal outside diameter in mm	Wall thickness in mm
15	1,7
16	1,8
20	2,3
22	2,0
22	2,4
25	2,3
28	2,5
32	2,9

Toxicological requirements

Approval:

This product is approved on the basis of the requirements set in the "Regulating material in chemicalin ledingswatervoorziening" ("Regulation Materials and Chemicals for Drinking Water Supplies"; published in the Staatscourant).

ATA criteria:

The ATA product certification is based on two main criteria. It should permanently comply with:
• The product recipe approved during the assessment procedure. The recipe is laid down in the for confidentiality reasons undisclosed appendix 1A to the certification agreement K24321. This recipe is not to be changed without prior approval by Kiwa according to the Kiwa-ATA approval procedure;
• Specific ATA-product requirements, laid down in appendix 1A to the certification agreement K24321. For confidentiality reasons this appendix 1A is not public.

Logistics

Production and assembly of the system are laid down in the annex(es) of the product certification agreement(s).

The fittings make use of an insert system.

Colour: grey.

APPLICATION AND USE

The products are intended to be used for the construction of household installations for the transport of cold and heated drinking water according to a temperature profile of class 2 of ISO 10508 and an allowable working pressure of maximum 10 bar.

MARKING

The products are marked with the Kiwa-mark.

The fittings are provided with at least the following marks:

- manufacturer's name, trade name or logo;
- nominal outside diameter in mm of the connecting pipe;
- production code.

The smallest packaging unit of the fittings are provided with at least the following information:

- Kiwa (or Kiwa®) mark;
- manufacturer's name, trade name, system name, logo or certificate number of the accompanying technical approval (system) certificate, in accordance with the marking of the connecting pipe;
- nominal outside diameter in mm of the connecting pipe;
- material identification in case the fitting body is made of plastics.

PB fittings

The realization of the marks is as follows: durable and indelible on each fitting/packaging

RECOMMENDATIONS FOR CUSTOMERS

- Check at the time of delivery whether:
 - the producer has delivery in accordance with the agreement;
 - the mark and the marking method are correct;
 - the products show no visible defects as a result of transport etc.
- If you should reject a product on the basis of the above, please contact:
 - Nueva Terrain, S.L. and, if necessary,
 - Kiwa N.V.
- Consult the producer's processing guidelines for the proper storage and transport methods.
- Check whether this certificate is still valid by consulting www.kiwa.nl

**Technical approval-with-product certificate
PB piping system**

Based on pre-certification tests as well as periodic inspections by Kiwa, the products referred to in this certificate and marked with the Kiwa-mark as indicated under 'marking', manufactured by

Nueva Terrain, S.L.

may, on delivery, be relied upon to comply with the Kiwa evaluation guideline BRL-K536/03, part C "Plastics piping systems of PB, intended for the transport of cold and heated drinking water".

Kiwa N.V.

B. Meekma

ing. B. Meekma
Director
Certification and Inspection

This certificate is issued in accordance with the Kiwa Regulations for Product Certification and consists of 3 pages.

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Company
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Production Location
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El Sequero Industrial Park
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La Rioja (Spain)
Telephone +34 941 486178
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product certificate

PB 5-layer pipes

Based on pre-certification tests as well as periodic inspections by Kiwa, the products referred to in this certificate and marked with the Kiwa-mark as indicated under 'Marking', certified by

Nueva Terrain S.L.

may, on delivery, be relied upon to comply with the Kiwa evaluation guideline BRL-K 536 part C "Plastics piping systems of PB, intended for the transport of hot and cold drinking water".

B. Meekma

Bouke Meekma
Director Kiwa N.V.

This certificate is issued in accordance with the Kiwa-Regulations for Product Certification.

This certificate consists of 3 pages.
Publication of the certificate is allowed.

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www.kiwa.nl

Company
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Padileta 2
Apartado 444
01195 Vitoria
Spain
Telephone +34 945290030
Telefax +34 945290024



PB 5-layer pipes

PRODUCT SPECIFICATION

General
Pipes of 5-layer PBEVCHPB intended for the transport of hot and cold drinking water according to BRL-K 536, part C.

Detailed specification
The diameters and wall thicknesses indicated in the table below, belong to this product certificate.

Nominal outside diameter in mm	Wall thickness in mm
15	1,7
20	2,0
25	2,5

Colour: Grey

Toxicological requirements

Approval:

This product is approved on the basis of the requirements set in the "Regeling materialen en chemicaliën leidingwatervoorziening" ("Regulation Materials and Chemicals for Drinking Water Supplies", published in the Staatscourant).

ATA criteria:

- The ATA product certification is based on two main criteria. It should permanently comply with:
- The product recipe approved during the assessment procedure. The recipe is laid down in the for confidentiality reasons undisclosed appendix 1A to the certification agreement K52316. This recipe is not to be changed without prior approval by Kiwa according to the Kiwa-ATA approval procedure;
 - Specific ATA-product requirements, laid down in appendix 1A to the certification agreement K52316. For confidentiality reasons this appendix 1A is not public.

Logistics

Production and assembly of the system are laid down in the annex(es) of the product certification agreement(s).

APPLICATION AND USE

The products are intended to be used for the construction of household installations for the transport of cold and heated drinking water according to a temperature profile of class 2 of ISO 10508 and an allowable working pressure of maximum 10 bar.

PB piping system

PRODUCT SPECIFICATION

Plastics piping systems of PB intended for the transport of cold and heated drinking water according to BRL-K536/03, part C.

Toxicological requirements
The pipes and fittings used in this system are approved on the basis of the requirements set in the "Regeling materialen en chemicaliën leidingwatervoorziening" ("Regulation Materials and Chemicals for Drinking Water Supplies", published in the Staatscourant). The ATA-criteria are recorded in the respective product certificates.

The piping system exists of the following parts:
- pipes;
- mechanical fittings (PB).

Detailed specification
The diameters and wall thicknesses indicated in the table below, belong to this technical approval-with-product certificate.

Nominal outside diameter in mm	Wall thickness in mm
15	1,7
16	1,8
20	2,3
22	2,0
22	2,4
25	2,3
25	2,5
32	2,9

Use is made of PB insert fittings.

Colour: grey.

APPLICATION AND USE

The products are intended to be used for the construction of household installations for the transport of cold and heated drinking water according to a temperature profile of class 2 of ISO 10508 and an allowable working pressure of maximum 10 bar.

PB piping system

MARKING

The system parts are marked with the KIWA-mark.

Pipes:

The pipes are marked with the Kiwa-mark.

- The PEX pipes are provided with the following marks:
- Kiwa (or Kiwa word mark) + temperature profile/design pressure class 2/10 bar;
 - manufacturer's name, registered name, system name, logo or certificate;
 - material identification; PEX;
 - the nominal outside diameter and nominal wall thickness in mm;
 - the production code.

Place of the mark: on each pipe at intervals of not more than 2 meter.

The realization of the marks is as follows: indelible imprint.

- The fittings are provided with at least the following marks:
- manufacturer's name, trade name or logo;
 - nominal outside diameter in mm of the connecting pipe;
 - production code.

The smallest packaging unit of the fittings are provided with at least the following information:

- Kiwa (or Kiwa word mark)
- manufacturer's name, trade name, system name, logo or certificate number of the accompanying technical approval (system) certificate, in accordance with the marking of the connecting pipe;
- nominal outside diameter in mm of the connecting pipe;
- material identification in case the fitting body is made of plastics.

The realization of the marks is as follows: durable and indelible on each fitting/packaging.

RECOMMENDATIONS FOR CUSTOMERS

- Check at the time of delivery whether:
 - the delivery is in accordance with the agreement;
 - the mark and the marking method are correct;
 - the products show no visible defects as a result of e.g. transport
- If you should reject a product on the basis of the above, please contact:
 - Nueva Terrain, S.L. and, if necessary,
 - Kiwa N.V.
- Consult the manufacturer's processing guidelines for the proper methods for storage and transport.
- Check whether this certificate is still valid by consulting our internet-site www.kiwa.nl.

PB 5-layer pipes

MARKING

The products are marked with the Kiwa-mark.

- The minimum required marking on the pipe shall be:
- Kiwa (or Kiwa word mark) + class 2 bar 10
 - the manufacturer's name, trade name, system name or certificate number of accompanying technical approval (system) certificate;
 - material identification of the built up of the pipe; (PB 5-layer pipe)
 - nominal outside diameter and nominal wall thickness of the pipe in mm;
 - production code.

The realization of the marks is as follows: durable and indelible at intervals of not more than 2 m.

RECOMMENDATIONS FOR CUSTOMERS:

- Check at the time of delivery whether:
 - the producer has delivery in accordance with the agreement;
 - the mark and the marking method are correct;
 - the products show no visible defects as a result of transport etc.
- If you should reject a product on the basis of the above, please contact:
 - Nueva Terrain S.L. and, if necessary,
 - Kiwa N.V.
- Consult the producer's processing guidelines for the proper storage and transport methods.
- Check whether this certificate is still valid by consulting www.kiwa.nl

technical approval-with-product certificate

PB 5-layer pipe with PB push-fit system

Based on pre-certification tests as well as periodic inspections by Kiwa, the products referred to in this certificate and marked with the Kiwa-mark as indicated under 'Marking', manufactured by

Nueva Terrain S.L.

may, on delivery, be relied upon to comply with the Kiwa audit guideline K536 part C "Plastic Piping Systems of PB, for the transport of hot and cold drinking water" dd 05-12-2003.

B. Meekma

Bouke Meekma
Director Kiwa N.V.

This certificate is issued in accordance with the Kiwa-Regulations for Product Certification.

This certificate consists of 3 pages.
Publication of the certificate is allowed.

Kiwa N.V.
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Telephone +34 945290030
Telefax +34 945290024

Certificate

Page	2	Number	K52317/01	Replaces	--
		Issued	2009-10-01	Dated	--
		Valid until	n.a.		

PB 5-layer pipe with PB push-fit system

PRODUCT SPECIFICATION

Plastics piping systems of PB intended for the transport of cold and heated drinking water according to BRL-K536/03, part C.

The piping system exists of the following parts:

- Pipes (PB 5-layer pipe, PB/EVCH/PB);
- mechanical fittings (PB);

Detailed specification

The diameters and wall thicknesses indicated in the table below, belong to this technical approval-with-product certificate.

Nominal outside diameter in mm	Wall thickness in mm
15	1,7
22	2,0
28	2,5

Colour: Grey

Toxicological requirements

The pipes and fittings used in this system are approved on the basis of the requirements set in the "Regeling materialen aan chemische leidingwatervoorziening" ("Regulation Materials and Chemicals for Drinking Water Supplies", published in the Staatscourant). The ATA-criteria are recorded in the respective product certificates.

Logistics

Production and assembly of the system are laid down in the annex of the technical approval-with-product certification agreement.

APPLICATION AND USE

The products are intended to be used for the construction of household installations for the transport of cold and heated drinking water according to a temperature profile of class 2 of ISO 10508 and an allowable working pressure of maximum 10 bar.

Page	3	Number	K52317/01	Replaces	--
		Issued	2009-10-01	Dated	--
		Valid until	n.a.		

PB 5-layer pipe with PB push-fit system

MARKING

The system parts are marked with the Kiwa-mark.

Pipes:

The pipes are marked with the Kiwa-mark.

The PB 5-layer pipes are provided with the following marks:

- Kiwa (or word mark) + temperature profile/design pressure class 2/10 bar;
- manufacturer's name, registered name, system name, logo or certificate;
- material identification: (PB 5-layer pipe);
- the nominal outside diameter and nominal wall thickness in mm;
- the production code.

Place of the mark: on each pipe at intervals of not more than 2 meter.

The realization of the marks is as follows: indelible imprint.

The fittings are provided with at least the following marks:

- manufacturer's name, trade name or logo;
- nominal outside diameter in mm of the connecting pipe;
- production code.

The smallest packaging unit of the fittings are provided with at least the following information:

- Kiwa (or Kiwa word mark)
- manufacturer's name, trade name, system name, logo or certificate number of the accompanying technical approval (system) certificate, in accordance with the marking of the connecting pipe;
- nominal outside diameter in mm of the connecting pipe;
- material identification in case the fitting body is made of plastics.

The realization of the marks is as follows: durable and indelible on each fitting/packaging.

RECOMMENDATIONS FOR CUSTOMERS:

- Check at the time of delivery whether:
 - the producer has delivery in accordance with the agreement;
 - the mark and the marking method are correct;
 - the products show no visible defects as a result of transport etc.
- If you should reject a product on the basis of the above, please contact:
 - Nueva Terrain S.L. and, if necessary,
 - Kiwa N.V.
- Consult the producer's processing guidelines for the proper storage and transport methods.
- Check whether this certificate is still valid by consulting www.kiwa.nl

KOMO® product certificate



Number	K52319/01	Replaces	--
Issued	2009-10-01	Dated	--
Valid until	Indefinite	Page	1 of 2

PB 5-layer pipe

Nueva Terrain S.L.

STATEMENT BY KIWA

This product certificate is issued on the basis of BRL5605 "Plastics piping systems of PB intended for heating installations: radiator connections" issued on 2008-06-01 by Kiwa, in accordance with the Kiwa Regulations for Product Certification.

Kiwa declares that legitimate confidence exists that the by the producer manufactured PB 5-layer pipe comply with the technical specifications as laid down in this product certificate, provided that PB 5-layer pipe have been marked with the KOMO®-mark in the manner as indicated in this product certificate.

B. Meekma

Bouke Meekma
Director Kiwa N.V.

Advice: consult www.kiwa.nl in order to ensure that this certificate is still valid.

Kiwa N.V.
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Holder of Certificate
Nueva Terrain, S.L.
Pavilón 2
Apartado 444
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Evaluated in:
quality system
product
Periodic inspection

KOMO® product certificate

PB 5-layer pipe

PRODUCT SPECIFICATION

General
Pipes of PB (PB/EVCH/PB) according evaluation guideline BRL5605.

Specification

The diameters and thicknesses of the pipes belonging to this product certification are given in the table below

Nominal outside diameter in mm	Wall thickness in mm
15	1,7
22	2,0
28	2,5

APPLICATION AND USE

The products are intended to be used for piping systems for heating systems: radiator connections, with an operating temperature profile according to class 5 of ISO 10508 and an allowable working pressure of maximum 6 bar.

MARKING

The products are marked with the KOMO®-mark.

The implementation of the marks is as follows:

Pipes

Marking

The minimum required marking on the pipe shall be:

- KOMO (or KOMO® word mark) + class 5/6 bar
- the manufacturer's name, trade name, system name or certificate number of accompanying technical approval (system) certificate;
- material identification of the build up of the pipe; (PB 5-layer pipe)
- nominal outside diameter and nominal wall thickness of the pipe in mm;
- production code.

The realization of the marks is as follows: durable and indelible at intervals of not more than 2 m.

RECOMMENDATIONS FOR THE USERS

Check at the time of delivery whether:

- the products are in accordance with the agreement;
- the mark and marking method are correct;
- the products show no visible defects as a result of transport etc..

If you should reject a product on the basis of the above, please contact:

- Nueva Terrain S.L. and, if necessary;
- Kiwa N.V.

Check whether this certificate is still valid by consulting the Kiwa website: www.kiwa.nl



Maatgevoerd voor de bouw.

Page 2 of 2

KOMO® product certificate



Number	K52318/01	Replaces	--
Issued	2009-10-01	Dated	--
Valid until	Indefinite	Page	1 of 2

Fittings

Nueva Terrain S.L.

STATEMENT BY KIWA

This product certificate is issued on the basis of BRL5605 "Plastics piping systems of PB intended for heating installations: radiator connections" issued on 2008-06-01 by Kiwa, in accordance with the Kiwa Regulations for Product Certification.

Kiwa declares that legitimate confidence exists that the by the producer manufactured PB 5-layer pipe comply with the technical specifications as laid down in this product certificate, provided that PB 5-layer pipe have been marked with the KOMO®-mark in the manner as indicated in this product certificate.

B. Meekma

Bouke Meekma
Director Kiwa N.V.

Advice: consult www.kiwa.nl in order to ensure that this certificate is still valid.

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KOMO® product certificate

fittings

PRODUCT SPECIFICATION

General
fittings according evaluation guideline BRL5605.

Specification

The diameters and thicknesses of the pipes belonging to this product certification are given in the table below

Nominal outside diameter in mm	Wall thickness in mm
15	1,7
22	2,0
28	2,5

APPLICATION AND USE

The products are intended to be used for piping systems for heating systems: radiator connections, with an operating temperature profile according to class 5 of ISO 10508 and an allowable working pressure of maximum 6 bar.

MARKING

The products are marked with the KOMO®-mark.

The implementation of the marks is as follows:

The minimum required marking on the fittings shall be:

- KO (if not possible KOMO only on the smallest packaging)
- the manufacturer's name, trade name, system name or certificate number of the accompanying technical approval (system) certificate;
- nominal outside diameter of the corresponding pipe;
- production code.

The minimum required marking on the smallest packaging unit of the fittings shall be:

- KOMO® (or KOMO® word mark);
- the manufacturer's name or trade name, certificate number of the certified piping system in which they are certified;
- material identification of the fitting body;
- nominal outside diameter and nominal wall thickness of the corresponding pipe in mm;

The realization of the marks is as follows: durable and indelible on every fitting/ packaging.

RECOMMENDATIONS FOR THE USERS

Check at the time of delivery whether:

- the products are in accordance with the agreement;
- the mark and marking method are correct;
- the products show no visible defects as a result of transport etc..

If you should reject a product on the basis of the above, please contact:

- Nueva Terrain S.L. and, if necessary;
- Kiwa N.V.

Check whether this certificate is still valid by consulting the Kiwa website: www.kiwa.nl



Maatgevoerd voor de bouw.

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KOMO® technical approval-with-product certificate



Number	K52320/01	Replaces	--
Issued	2009-10-01	Dated	--
Valid until	Indefinite	Page	1 of 3

PB 5-layer pipe with PB push-fit system

Nueva Terrain S.L.

STATEMENT BY KIWA

This product certificate is issued by Kiwa on the basis of BRL5605 "Plastics piping systems of PB intended for heating installations: radiator connections" issued on 2008-06-01 by Kiwa, in accordance with the Kiwa regulations for product certification.

Kiwa declares that legitimate confidence exists that:

- the by the producer manufactured products comply with the technical specifications as laid down in this technical approval-with-product certificate provided that they have been marked with the KOMO®-mark in the manner as indicated in this technical approval-with-product certificate;
- the with certified products composed PB 5-layer pipe with PB push-fit system provides the performances as described in the technical approval-with-product certificate, provided that:
 - the manufacturing of the PB 5-layer pipe with PB push-fit system intended for heating systems takes place according to the processing methods as laid down in this technical approval-with-product certificate;
 - the application conditions as described in this approval-with-product certificate are met.

Within the framework of this technical approval-with-product certificate Kiwa does not impose any inspections with regard to the production of the PB 5-layer pipe with PB push-fit system, nor the manufacturing of the PB 5-layer pipe with PB push-fit system.

B. Meekma

Bouke Meekma
Director Kiwa N.V.

Advice: consult www.kiwa.nl in order to ensure that this certificate is still valid.

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Evaluated in:
Quality system
Product in application
Periodic inspection

KOMO® technical approval-with-product certificate

PB 5-layer pipe with PB push-fit system

TECHNICAL SPECIFICATION

Plastics piping systems of PB intended for heating installations: radiator connections according to BRL5605.

The piping system exists of the following parts:

- Pipes (PB 5-layer, PB/EVCH/PB);
- mechanical fittings (PB-push-fit);

Detailed specification

The diameters and wall thicknesses indicated in the table below, belong to this technical approval-with-product certificate.

Nominal outside diameter in mm	Wall thickness in mm
15	1,7
22	2,0
28	2,5

Colour: Grey

Marking

The products are marked with the KOMO®-mark.

Pipes:

The pipes are marked with the KOMO®-mark.

The PB 5-layer pipes are provided with the following marks:

- KOMO (or word mark) + temperature profile/design pressure class 5/6 bar;
- manufacturer's name, registered name, system name, logo or certificate;
- material identification: PB;
- the nominal outside diameter and nominal wall thickness in mm;
- the production code.

Place of the mark: on each pipe at intervals of not more than 2 meter.

The realization of the marks is as follows: indelible imprint.

The fittings are provided with at least the following marks:

- manufacturer's name, trade name or logo;
- nominal outside diameter in mm of the connecting pipe;
- production code.

The smallest packaging unit of the fittings are provided with at least the following information:

- KOMO (or KO word mark)
- manufacturer's name, trade name, system name, logo or certificate number of the accompanying technical approval (system) certificate, in accordance with the marking of the connecting pipe;
- nominal outside diameter in mm of the connecting pipe;
- material identification in case the fitting body is made of plastics.

The realization of the marks is as follows: durable and indelible on each fitting/packaging.



Maatgevoerd voor de bouw.

Page 2 of 3

Certificate

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Evaluated in:
quality system
product
Periodic inspection

