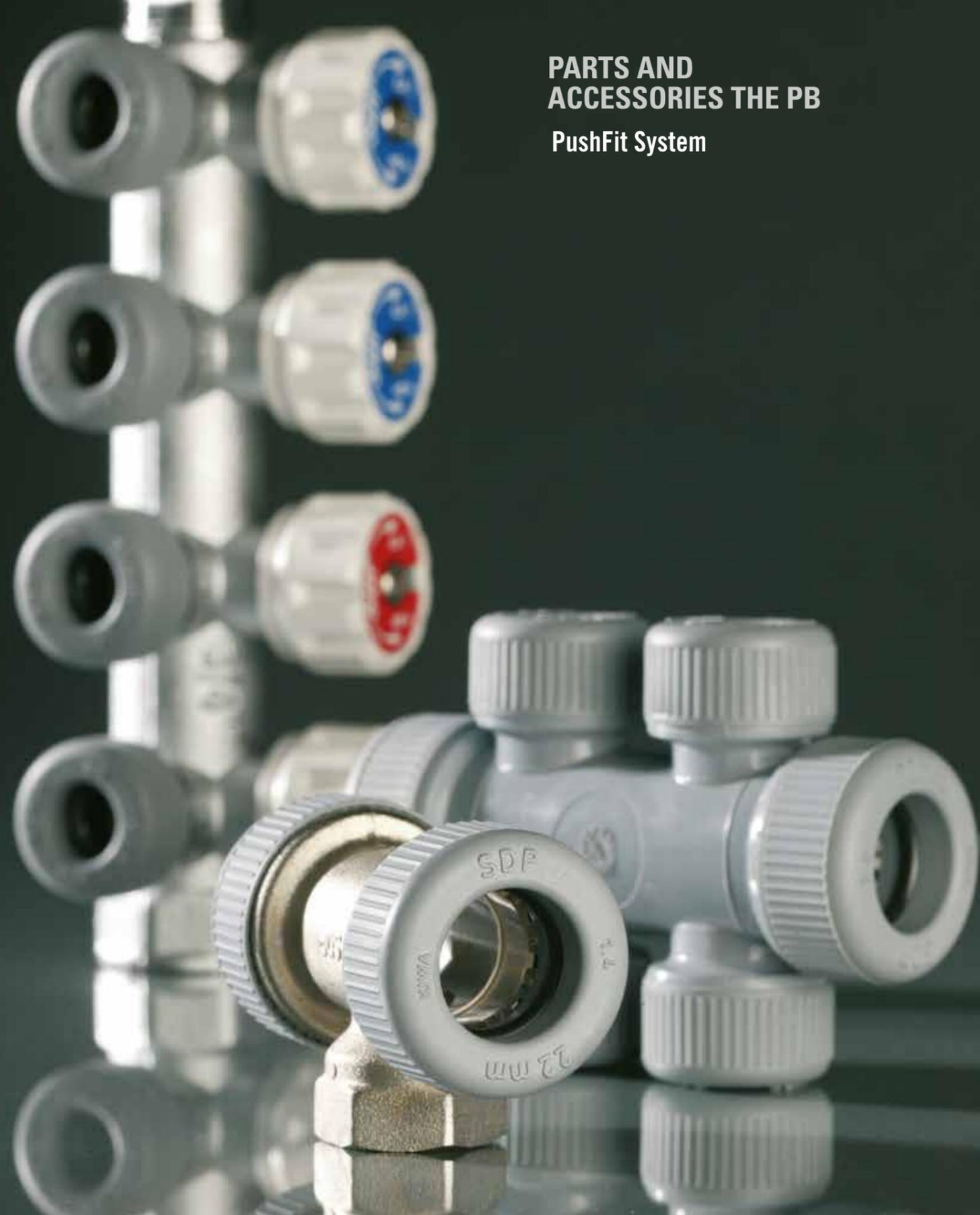




TERRAIN SDP

PARTS AND
ACCESSORIES THE PB
PushFit System



27/2000/MAR 2017/ENI



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NUEVA TERRAIN

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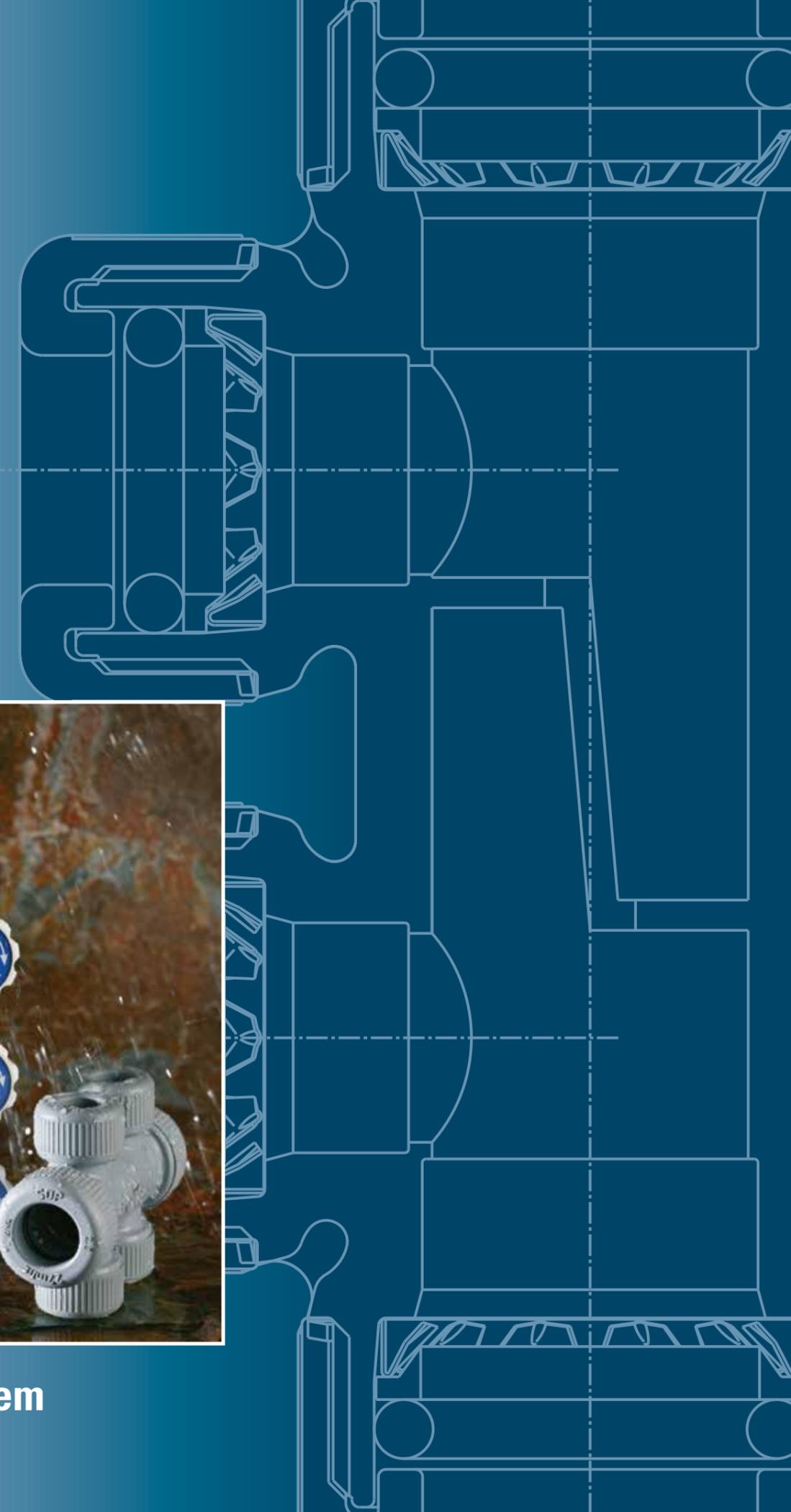
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NUEVA TERRAIN, Spain's market leader in PVC and Polybutene (PB) piping systems, is pleased to present this product range catalogue which has the objective to make work easier to professional installers and consultants, by providing them high quality 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





Pipes



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



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) For pipes in lengths, it is allow curves with radius not less than 15 times the external diameter of the pipe.

- Pipes certified by AENOR, CERTIF y KIWA.
- + Pipes certified by 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	22	2,0	720,0	PB	5,8
TAO.058.028.016	28	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.

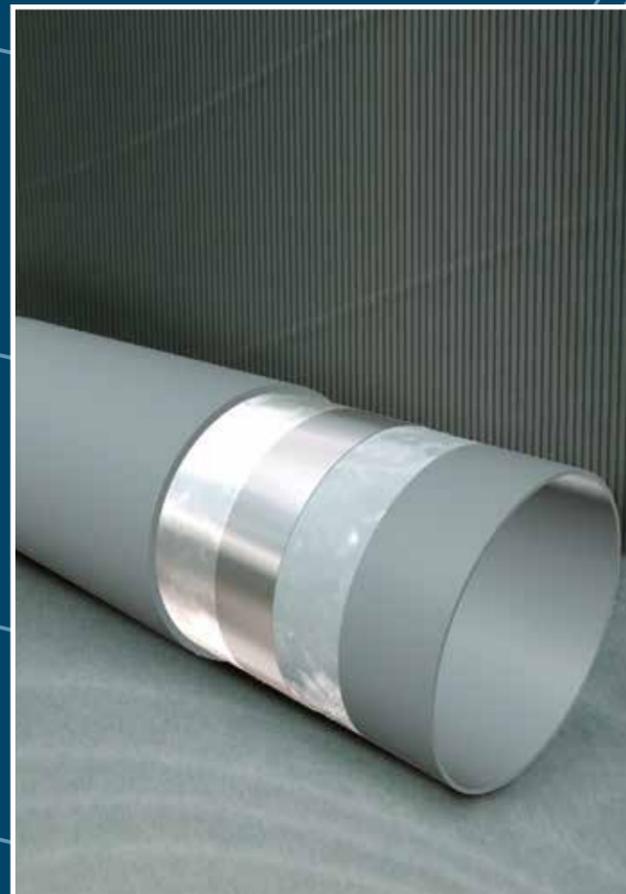
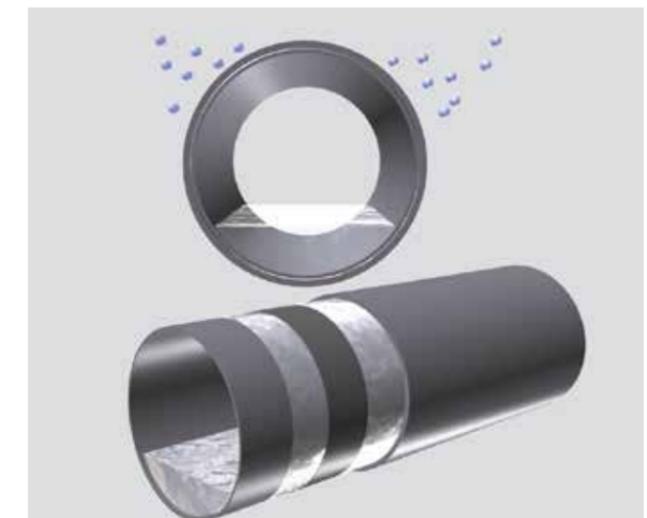
Unlike to other manufacturers, the element that acts as oxygen barrier is made in plastic and not in a metallic material. This EVOH plastic material is placed in the interior part of the pipe wall thickness contributing advantages e.g. higher flexibility and availability for use in our PushFit unions.

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

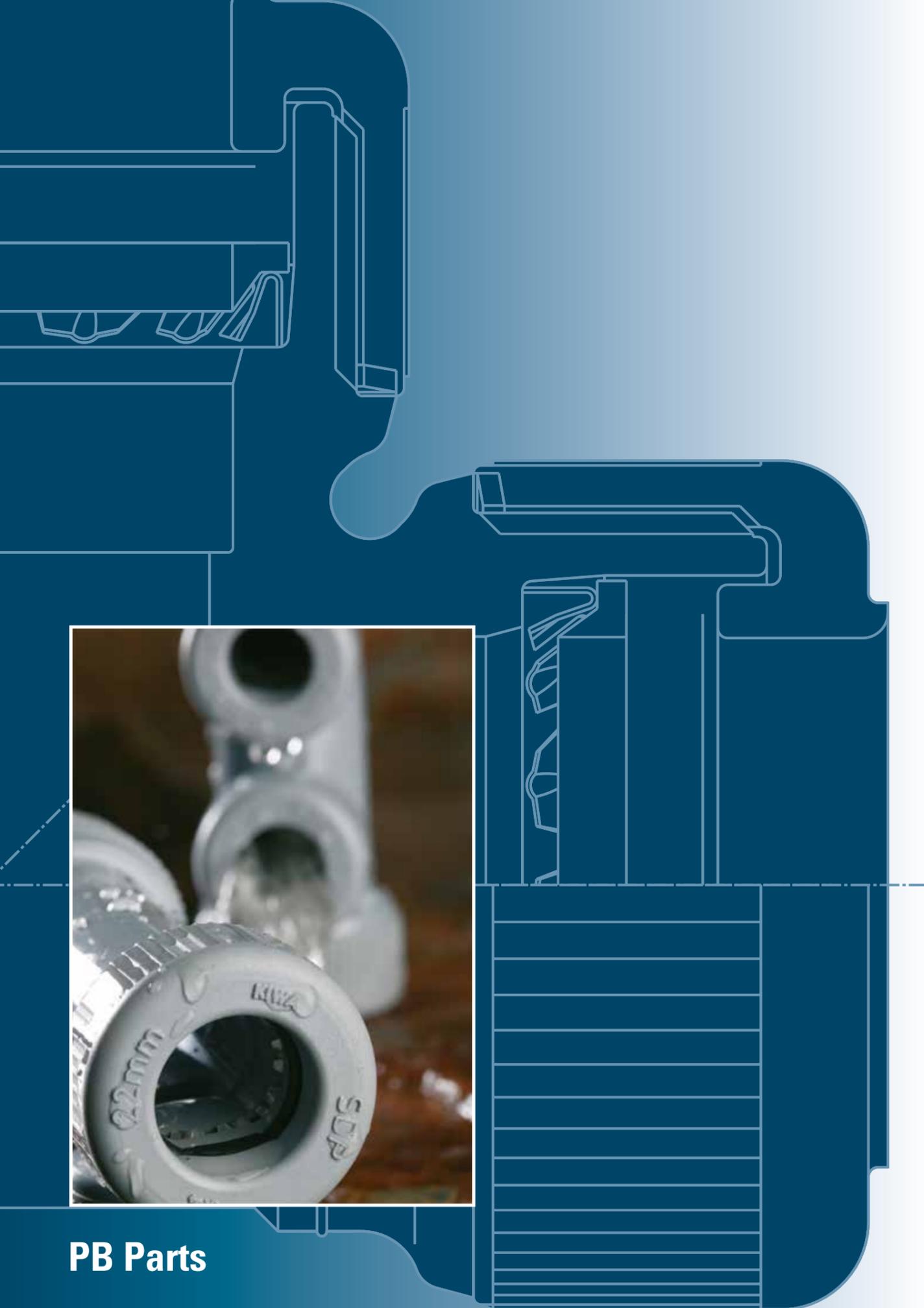
TERRAIN SDP PB plastic pipes coated with an EVAL™ layer are a good alternative to copper pipes and meet the strict building standards for oxygen permeation, such as DIN 4726, which allows a maximum oxygen gas transmission rate of 0.1 g/m³ per day at 40 °C, thereby reducing the effect of corrosion on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

What an EVOH barrier layer offers

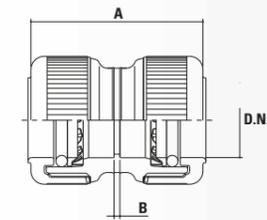
- Prevents oxygen from permeating through the wall of the pipe, which means that rust prevention additives can be avoided.
- Excellent oxygen barrier, even at high temperatures.
- Meets the strictest building standards (e.g. DIN 4726).
- Additional anti-oxidants ensure a long-term thermal stability and 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

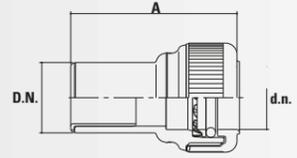


PB Parts



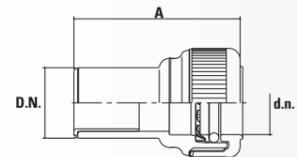
SOCKET UNION

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



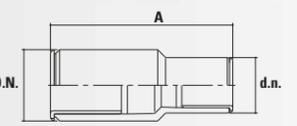
MALE-FEMALE SOCKET REDUCER

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



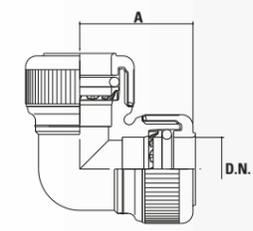
FEMALE - MALE SOCKET REDUCER

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



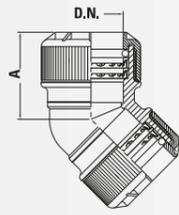
SOCKET REDUCER

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



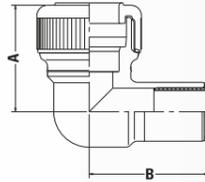
90° ELBOW

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



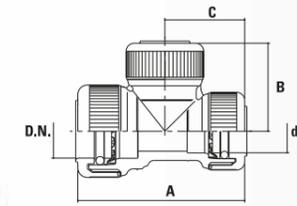
45° ELBOW

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



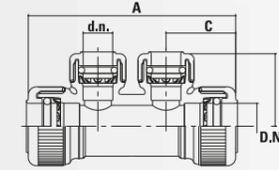
MALE - FEMALE 90° ELBOW

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	22	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



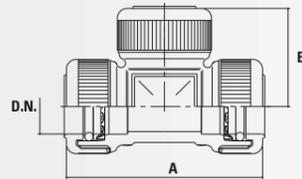
90° END REDUCED TEE

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



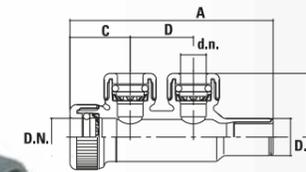
TWO OUTLET MANIFOLD

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



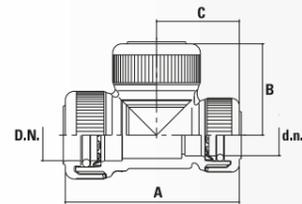
EQUAL TEE

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



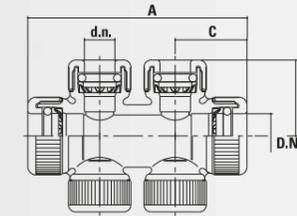
MALE - FEMALE TWO OUTLET MANIFOLD

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	25x15x15x25	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
FC.015.025.020.003	25x20x20x25	99,0	PB	132,7	40,7	41,2	40,0



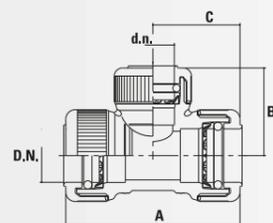
90° END REDUCED TEE

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



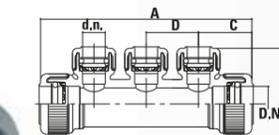
DOUBLE TWO OUTLET MANIFOLD

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



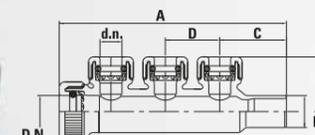
90° END REDUCED TEE

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



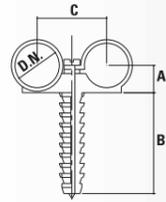
THREE OUTLET MANIFOLD

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



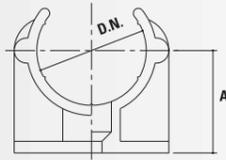
THREE OUTLET MANIFOLD MALE-FEMALE

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B	C	D
FC.017.022.003	22x15x15x15x22	96,7	PB	156,7	37,7	46,0	37,5



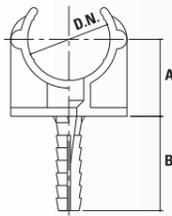
DOUBLE PIPE CLIP WITH BUILT-IN RAWCAP

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



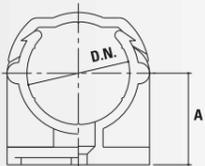
PIPE CLIP

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	POLYPROP.	-



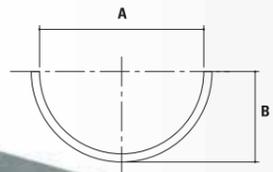
PIPE CLIP WITH BUILT-IN RAWPLUG

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.	-



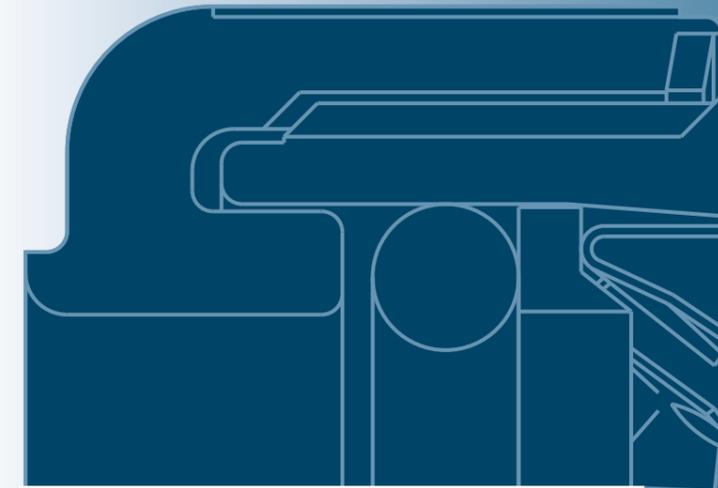
CONTINUOUS METALLIC BRACKET FOR PIPE

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

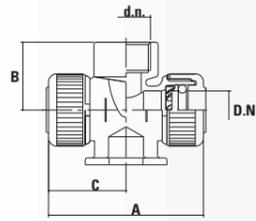


CLIP RAIL

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

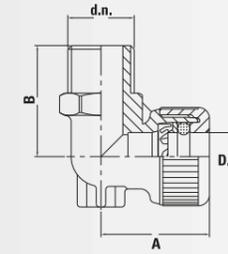


Transition Parts



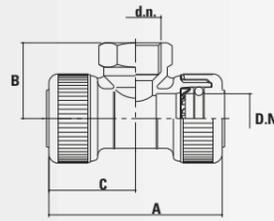
90° FEMALE SOCKET ADAPTER TEE

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



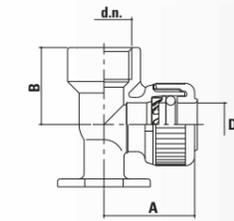
90° MALE SOCKET ADAPTER ELBOW

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC.026.015.003	15x1/2"	113,0	LATÓN	35,0	35,0
FC.026.016.003	16x1/2"	112,0	LATÓN	35,0	35,0
FC.026.022.003	22x3/4"	162,6	LATÓN	36,0	45,0



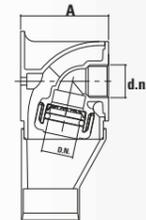
90° FEMALE SOCKET ADAPTER TEE

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



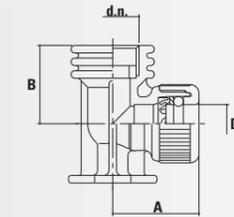
90° FEMALE SOCKET ADAPTER ELBOW

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



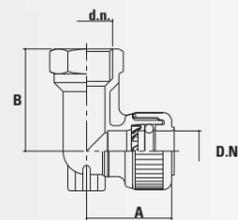
METALLIC ELBOW FOR SERVICEABLE INSTALLATIONS

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



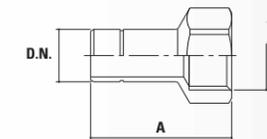
HIGH-TECH SOCKET 90° PLASTIC ELBOW

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC.028.015.00P	15x1/2"	38,00	TECHNICAL POLYMER	34,0	31,0
FC.028.016.00P	16x1/2"	-	TECHNICAL POLYMER	34,0	31,0
FC.028.022.00P	22x1/2"	48,42	TECHNICAL POLYMER	38,0	31,0



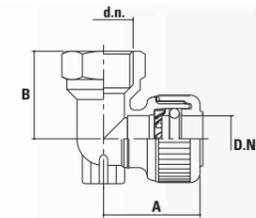
90° PROLONGED FEMALE SOCKET ADAPTER ELBOW

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



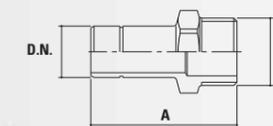
MALE-FEMALE METALLIC STRAIGHT CONNECTOR

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A
FC.030.015	15x1/2"	55,0	LATÓN	48,0
FC.030.016	16x1/2"	51,0	LATÓN	48,0
FC.030.020	20x1/2"	58,0	LATÓN	49,0
FC.030.022	22x3/4"	65,0	LATÓN	49,5
FC.030.025	25x3/4"	81,0	LATÓN	44,5
FC.030.025.1/2	25x1/2"	56,0	LATÓN	39,5
FC.030.028	28x1"	110,0	LATÓN	51,5
FC.030.032.010	32x1"	147,5	LATÓN	53,5



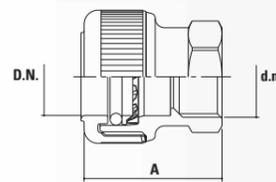
90° FEMALE SOCKET ADAPTER ELBOW

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



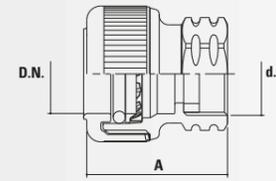
MALE METALLIC STRAIGHT CONNECTOR

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



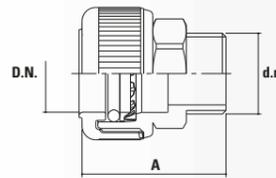
FEMALE METALLIC STRAIGHT CONNECTOR

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
FC.033.040	40x1 1/4"	454,0	BRASS	64,7
FC.033.050	50x1 1/2"	583,0	BRASS	68,4



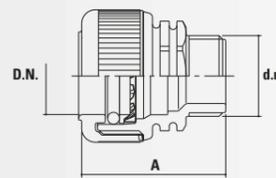
FEMALE HIGH-TECH PLASTIC STRAIGHT CONNECTOR

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



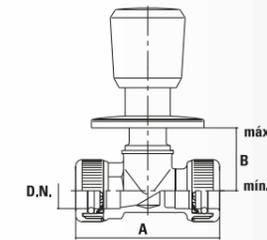
MALE-FEMALE METALLIC STRAIGHT CONNECTOR

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



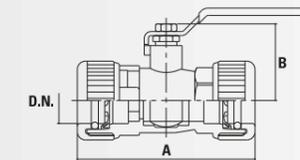
MALE-FEMALE HIGH-TECH PLASTIC STRAIGHT CONNECTOR

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



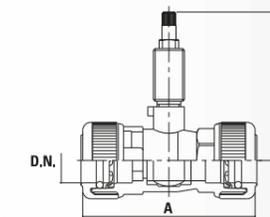
CONCEALED METALLIC ISOLATING VALVE

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B máx.	B Mín.
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



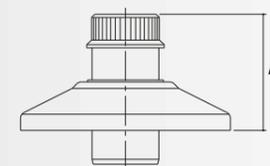
BALL VALVE

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	-	-



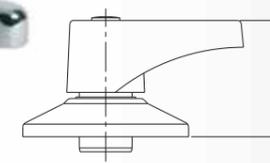
CONCEALED METALLIC ISOLATING BALL VALVE

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



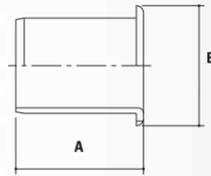
CROSSHEAD AND FINIAL FOR VALVE

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A Máx.	A Mín.
FC.057.025.028	15,16,20,22,25,28 & 32	68,0	BRASS	54,0	25,5



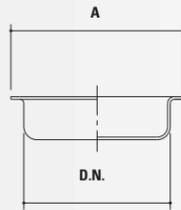
LEVEL HANDLE AND FINIAL FOR VALVE

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A Máx.	A Mín.
FC.058.025.028	15,16,20,22,25,28 & 32	86,0	BRASS	56,0	42,5



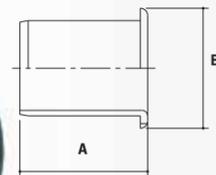
PB END CAP

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



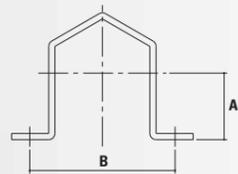
END CAP

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



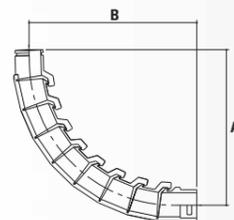
PLASTIC SUPPORT SLEEVE

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



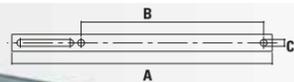
STOPCOCK CLIP

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



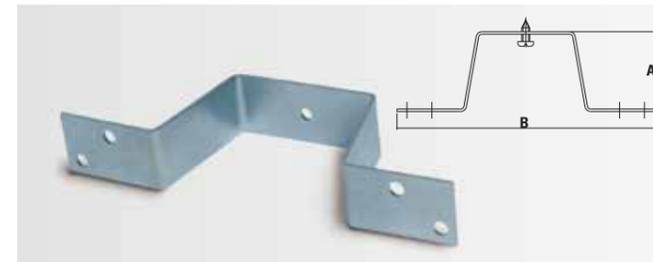
ARTICULATED CURVE FOR HEATING INSTALLATIONS

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



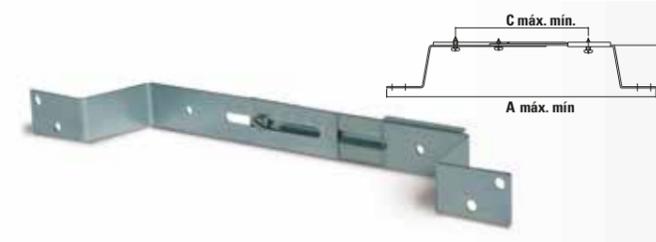
BRASS ELBOW SEPARATOR

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



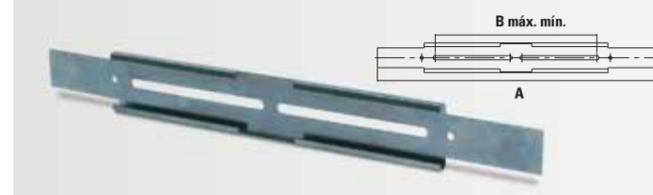
SINGLE BRACKET FOR SERVICEABLE INSTALLATIONS

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



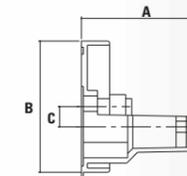
DOUBLE BRACKET FOR SERVICEABLE INSTALLATIONS

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	15,16,20,22 & 25	32,0	POLYPROP.	62,0	65,0	10,0
FC.085	15,16,20,22 & 25	35,7	POLYPROP.	62,0	65,0	10,0

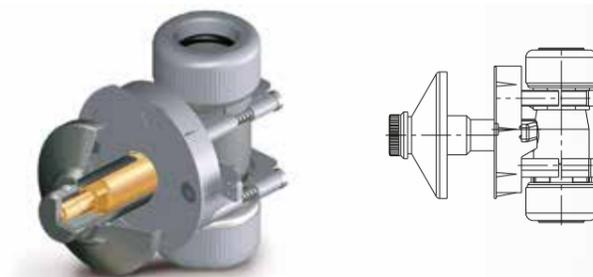
Note: The metallic elbow (FC.026.0xx) is not included within the fitting.
Please ask for our special Technical data sheet



ANCHOR TO BE USED IN PLASTERBOARD INSTALLATIONS WITH PLASTIC CABLE TIE TO FIX THE PB PIPES

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

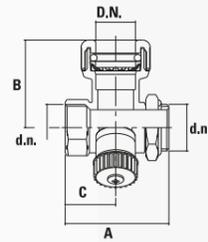
Please ask for our special Technical data sheet



SUPPORT FOR BALL VALVE IN PLASTERBOARD INSTALLATIONS

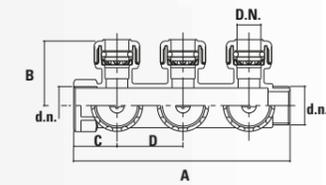
REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL
FC.087	15,16,20,22,25 & 28	-	POLYPROP.

Note: The ball valve (FC.057.0xx.010) is not included within the fitting.
Please ask for our special Technical data sheet



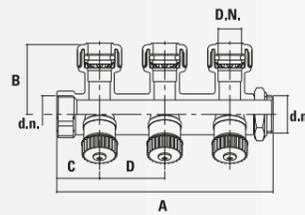
ONE OUTLET METALLIC MANIFOLD

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	



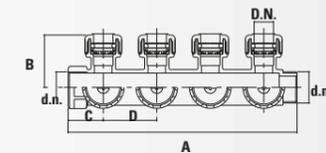
90° THREE OUTLET METALLIC MANIFOLD

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



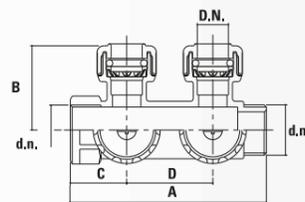
THREE OUTLET METALLIC MANIFOLD

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



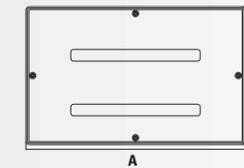
90° FOUR OUTLET METALLIC MANIFOLD

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



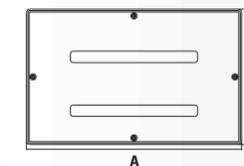
90° TWO OUTLET METALLIC MANIFOLD

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

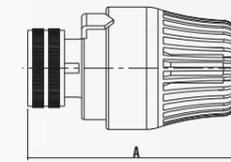


BOX FOR PLUMBING AND HEATING MANIFOLDS (WITH TWO SUPPORTS)

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

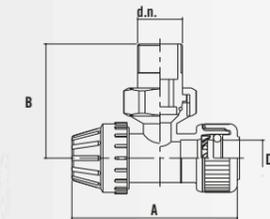


Fittings for Radiator Heating



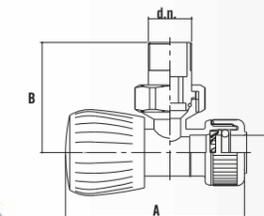
TERMOSTATIC HEAD

REFERENCE	WEIGHT grs.	MATERIAL	A	B
FC 190.000	99,0	-	89	-
FC 190.001	99,0	-	89	-



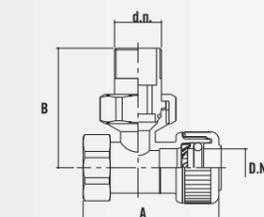
ANGLE VALVE (CAN BE FITTED WITH THERMOSTATIC HEAD)

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



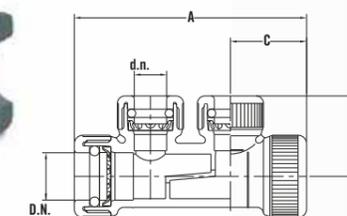
ANGLE VALVE

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.	MATERIAL	A	B
FC 191.015.112	15x1/2"	223,0	BRASS	85	52
FC 191.016.112	16x1/2"	223,0	BRASS	85	52



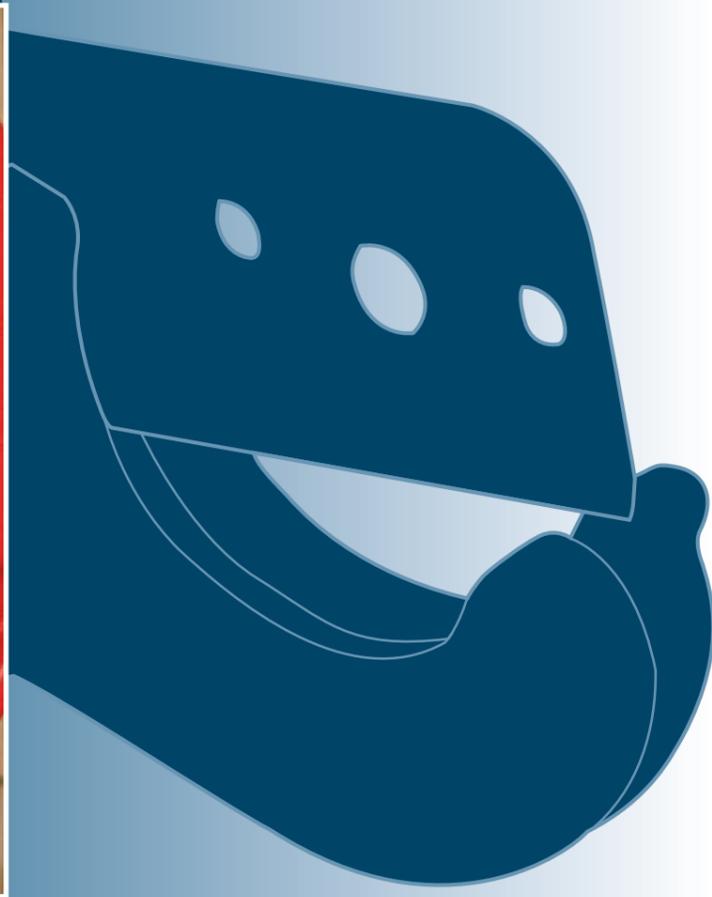
ANGLE TAP

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs..	MATERIAL	A	B
FC 192.015.112	15x1/2"	187,0	BRASS	57	52
FC 192.016.112	16x1/2"	187,0	BRASS	57	52



TOW OUTLET MANIFOLD FOR MONOTUBULAR HEATING INSTALLATIONS

REFERENCE	NOMINAL DIAMETER mm.	WEIGHT grs.s.	MATERIAL	A	B	C
FC.015.022.002	22x15x15x22	83,00	PB	109,0	37,5	35,5



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 (1 juego)

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.

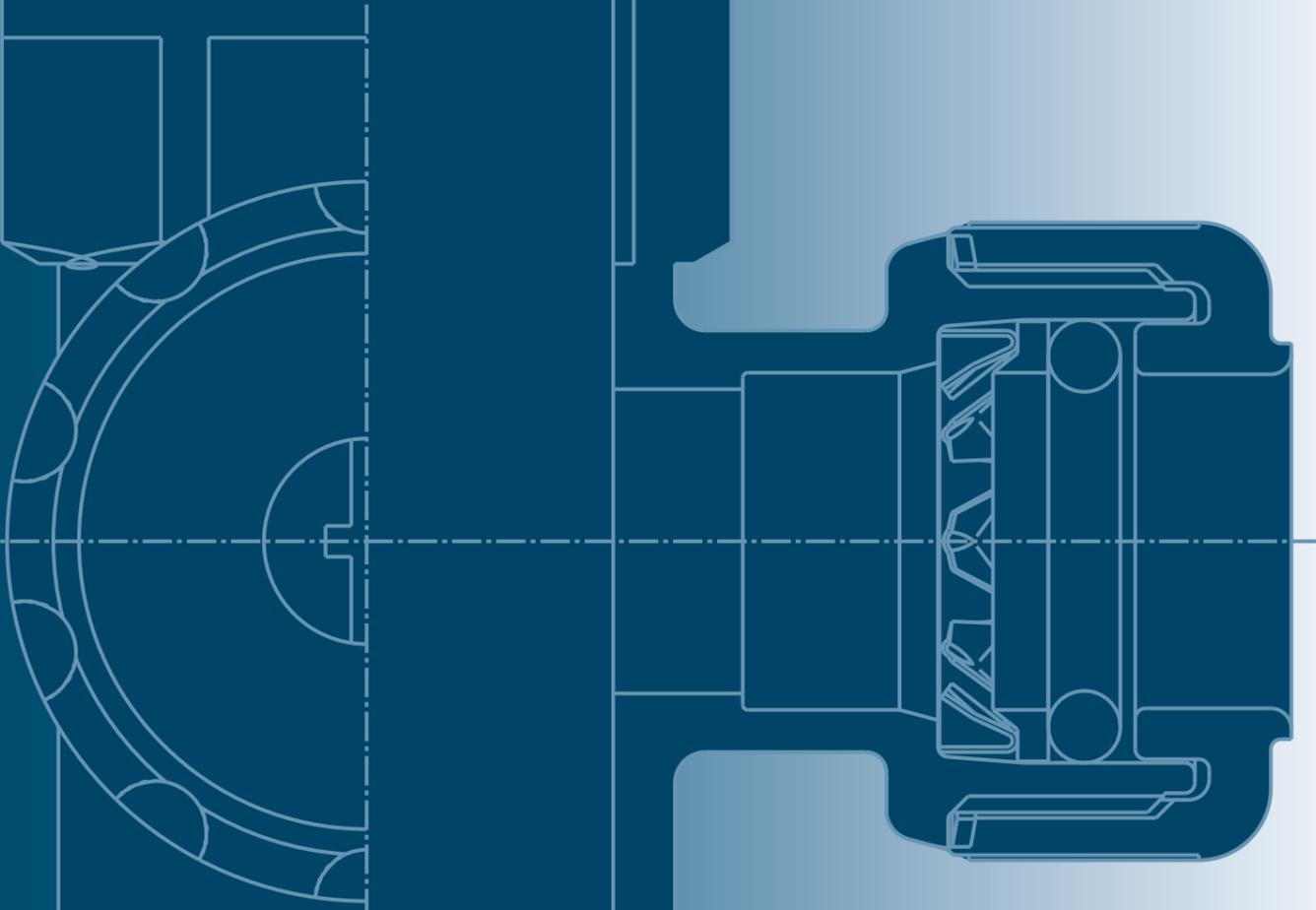
5 Wrong



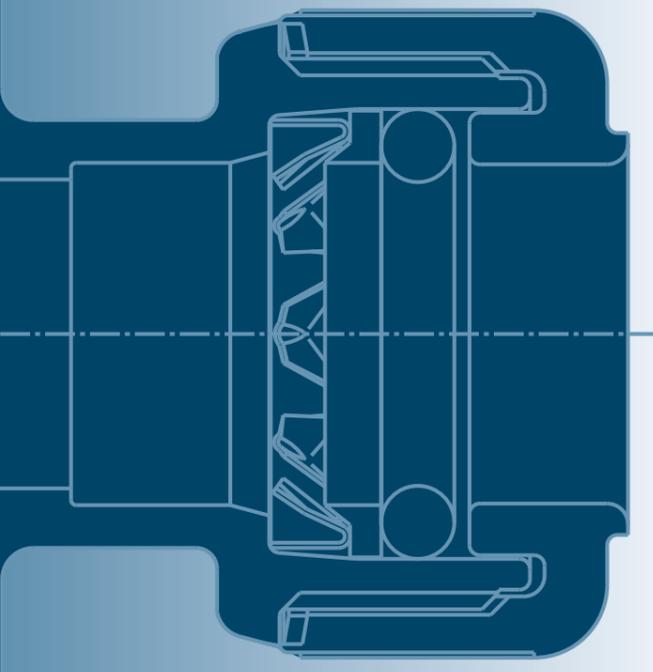
6 Right



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 known 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!.

Polybutylene (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.

ESTABILITY TO ULTRA VIOLET RAYS

TOXICITY

The Kiwa Certification, guarantees among other things, an exigent and exhaustive toxicological control of the components. Kiwa certification implies ATA certification (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 below 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 applications 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.

Explanation of the main qualities of PB as a material for plumbing and heating systems:

FEATURES	APPLICATION	POLYBUTYLENE
Density	Lower weight: facilitates handling, decreases the cost and reduces the environmental impact of its manufacturing process.	Plastic systems in general benefit from its lightness compared to metal.
Thermal conductivity	It reduces heat loss and the possibility of condensation on the cold side.	Again it is a typical characteristic of plastic systems, where PB has the lowest value.
Thermal expansion	The expansion of plastic materials due to temperature changes is greater than that of metal: It must be taken into account for their compensation.	Although PB has a lower expansion than other plastic materials, these expansions must always be taken into account.
Elastic modulus	The much lower rigidity of the piping (lower elastic modulus) facilitates its usability in construction, and reduces the generation of stress linked the functioning of the installations: water hammer, fixed points and expansion, etc.	It is the most elastic material of all those used for this application, and therefore it is the most manageable and generates the lowest stress.
Resistance to pressure and temperature	The main characteristic that defines a piping system is its resistance to temperature and pressure. This information is characterised in the regression curves of the material, the DNA of the pipe.	Polybutylene is the material with the best pressure resistance according to the temperature. This leads to lower thicknesses for the same required resistance, or a better resistance for the same thickness.
Creep resistance	The creep represents the deformity of the material over the course of time under constant load. It is fundamental in compression joints to ensure the dimensional stability of the pipe.	PB has minimum creep, preserving its dimensions under constant load.
Speed of sound	As the material is very elastic, the transmission of sound and therefore noise through the physical medium made up of the piping network is far lower than that of other materials.	It is the material that best insulates against noise transmission.
Expansion stress	The low elastic modulus of the material means that the stress generated by the expansion between fixed points of the installation is much smaller.	PB does not cause problems in installations due to expansion stresses.
Water hammer	The pressure peaks caused by instantaneous shut-offs of fluid flow are sources of problems in rigid piping systems.	PB is excellent at absorbing the stress associated with water hammer in installations.
Sustainability	Sustainable construction requires systems manufactured with a lower consumption of resources.	Polybutylene is the system that consumes less resources in its manufacture and causes less harm to the environment.

Comparison of properties between different plastic materials

FEATURES	PB	PP-R	PEX	CPVC
Resistance to temperature and pressure	****	**	***	**
Flexibility	****	**	***	*
Creep resistance	****	***	**	
Impact resistance	****	**	***	*
Thermal stress in installations	****	**	***	*
Sustainability of the system	****	***	***	***
Speed of the joint small Øs	****	*	***	**
Availability of joint with large Øs	****	****	**	***

- **** Excellent
- *** Good
- ** Average
- * Poor



Characteristics of the pipe for push-fit joints of Nueva Terrain system

Pipe classification according to UNE EN 15876		Class 2 (70°C, 10 bar, 50 years, C 1.5)								
(old NP in bar)		27,2 bar					21,8 bar			
Piping series		4					5			
SOR		9					11			
External pipe diameter	mm	15	16	20	22	25	28	32	40	50
Wall thickness	mm	1,7	1,8	2,3	2,0	2,3	2,5	2,9	3,7	4,6
Internal pipe diameter	mm	11,6	12,4	15,4	18,0	20,4	23,0	26,2	32,6	40,8

Working pressures for each application class and material, according to the product standards

APPLICATION	CLASS	PB	PEX	PP-R	PE-RT I	PP-RTC	PVC-C
Domestic hot water at 60°	Clase 1	10	6	6	6	6	8
Domestic hot water at 70°	Clase 2	10	6	4	4	6	8
Heating at low temperature	Clase 4	10	8	6	6	6	-
Heating at high temperature	Clase 5	8	6	-	4	4	-

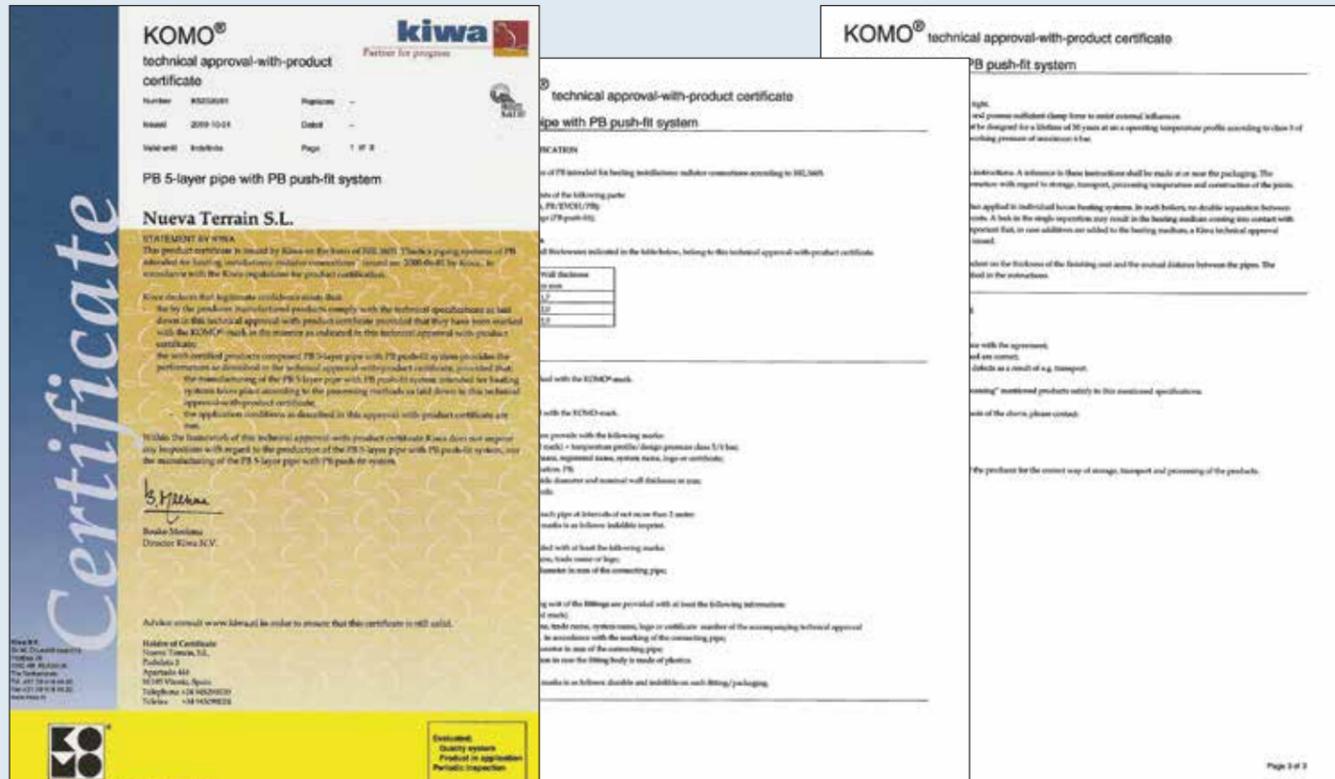
* Pressures in bar.

* Categories 4 and 5 are not applicable for PVC-C.



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
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 Nº 001/00234589 Nº 001/003029 Nº 002/00403
 Nº 001/00234590 Nº 001/003030 Nº 002/00403



GUARANTEE

Our guarantee solely and exclusively covers the replacement of the defective material or part once the client has carried out the tests required by the regulations and the defect has been reviewed and accepted by our technical department. Any incorrect handling or use other than that for the purpose for which it was designed automatically voids the guarantee.

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We reserve the right to make any type of modification to the design and dimensions in our products without prior notice.

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