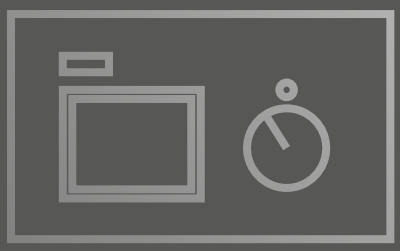
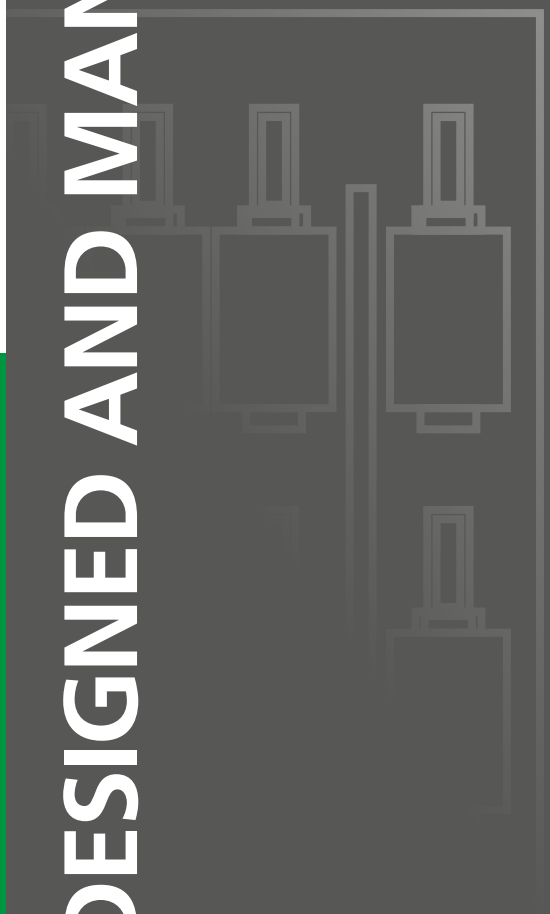
PLEION
The Sun is our Life!

DESIGNED AND MANUFACTORED IN ITALY





INTEGRATED TECHNOLOGIES

FOR HEATING AND COOLING

2025

Ver. 01

www.pleion.it

TABLE OF CONTENTS

TEMPERATURE CONTROL

4 PLEITOUCH / PLEITOUCH CLIMA

FLOOR PANELS

10 PLEIMASTER F1400
12 PLEIMASTER F1400 DUO
13 PLEISLIM
14 PLEIPLATE F1400
15 PLEIXPS
16 DRYFLOOR

CEILING AND WALL PANELS

18 PLEICELING
20 SMART 8

PIPING

24 PLEISTAR
26 PLEITRUST
28 PLEISTAR M
30 PLEIPRO C

MANIFOLDS

34 INTRODUCTION
36 PLEIDYNAMIC 2.0
38 PLEIMIX for PLEIDYNAMIC 2.0
40 PLEITECNO
42 PREMIX for PLEITECNO
44 PLEITECNO MAXI
46 PLEITECNO FC
48 COMBINED MANIFOLD PLEITECNO + PLEITECNO FC

PLEION
The Sun is our Life!

MANIFOLD BOX

52 PLEIBOX

RADIANT SYSTEM ACCESSORIES

58 ACCESSORIES
68 FITTINGS

CIRCULATION PUMPS

72 INTRODUCTION
73 PLEIFORCE DIRECT
74 PLEIFORCE THERMOSTATIC
75 PLEIFORCE CLIMATIC
76 COPLANAR MANIFOLD / HYDRAULIC SEPARATOR

DEHUMIDIFICATION

80 INTRODUCTION
81 PLEIWALL 30 / DUO 30
81 PLEITOP 30-56 AND DUO 30-56
82 PLEIWALL AND PLEITOP ACCESSORIES

VMC - VENTILATION

86 T PLUS 15-25
88 SMART E 50
89 WT 13-22/40-55
90 UD 25-33-45-60
91 WT 22 vp LIGHT - UD 25 vp LIGHT
92 VMC DISTRIBUTION
104 AIR TREATMENT COILS
105 VMC CONTROL
106 START-UP SERVICE

2025 NOVELTIES
RADIANT CATALOG

PLEION COMFORT AND INNOVATION FOR HEATING, COOLING AND VMC!



DRYFLOOR 300

DRYFLOOR 300 PREFORMED PANEL FOR RADIANT SYSTEMS WITHOUT SCREED

VERY LOW THERMAL INERTIA

FULLY SHAPED TO ENSURE MAXIMUM PIPE ADHESION



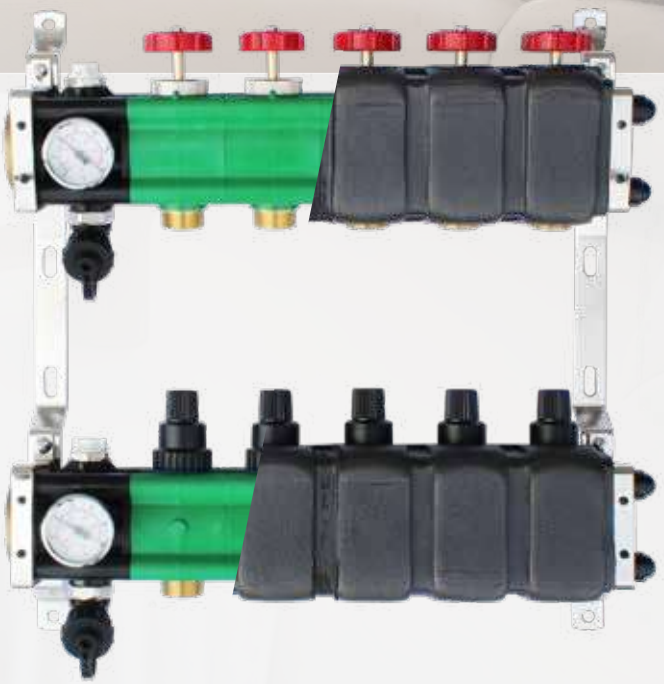
NEW 1" DISTRIBUTION UNITS FROM BOILER ROOM

PLEIFORCE 1"

EFFICIENCY AND CONTROL FOR EVERY TYPE OF SYSTEM

- PLEIFORCE 1" DIRECT
- PLEIFORCE 1" CLIMATIC
- PLEIFORCE 1" THERMOSTATIC

PLEION
The Sun is our Life!



NEW MANIFOLDS FOR HOT, COLD AND FAN COIL SYSTEMS

THE BEST ALLIES FOR YOUR RADIANT SYSTEMS

PLEIDYNAMIC 2.0
PLEITECNO FC
COMBINED MANIFOLD



NEW PLEION VMC RANGE

UD 25 - WT 22

NEW LIGHT VERSION IN STRUCTURE AND PRICE

UD 25 VP LIGHT
WT 22 VP LIGHT

NEW

PleiTouch® PleiTouch® CLIMA

SAVE TIME AND ENERGY WITH STYLE

WITH THE NEW PLEION SMART THERMOSTAT



PLEION
The Sun is our Life!

SIMPLE, COMPLETE AND INTELLIGENT

PLEITOUCH is a bus chrono-thermo-hygrostat, designed to control temperature and humidity of a room. Suitable for managing radiant panel systems for floor, wall or ceiling and fan-coil systems (with 0-10V control). Together with PleiTouch Clima it forms a complete, modular and expandable system for the thermal control of heating and cooling systems.

KEEP EVERYTHING UNDER YOUR CONTROL

- WI-FI CONNECTION
- DEHUMIDIFICATION AND INTEGRATION
- DESIGN MADE IN PLEION
- RADIANT
- HEATING
- 24h/WEEKLY PROGRAMMING
- FAN COIL 0-10
- COOLING
- MODBUS RS 485



SMART CONTROL

NOVELTY

By downloading the application on both Apple and Android devices, it is possible to manage all the thermostats in the house directly from your mobile phone wherever you are.

Main application functions:

- Temperature setting
- Humidity setting
- Time schedule setting
- Device on/off

DISPONIBILE SU Google Play

Download on the App Store

PleiTouch® PleiTouch® CLIMA



PleiTouch®

PLEITOUCH is a bus chrono-thermo-hygrostat, designed to control temperature and humidity of a room. Suitable for managing radiant panel systems (floor, ceiling or wall), fan-coils (also with 0-10V control), or mixed systems, both in heating and summer cooling function.

DIMENSIONS		
Height	Length	Depth
86 mm	96 mm	40 mm

PleiTouch® CLIMA

PLEITOUCH CLIMA is a climate controller capable of managing the supply temperature to the system in heating and cooling mode, through the management of a 3-way mixing valve, both 230V 2-point and 0-10V type, in accordance with UNI EN 1264-3. It is also equipped with internal relays dedicated to circulator consent, summer/winter switching. It includes supply temperature immersion sensor and external temperature sensor as standard.



SMART CONTROL

By downloading the application on Apple or Android devices, it is possible to manage all the thermostats in the house directly from your mobile phone wherever you are: comfortably sitting on the sofa as well as from the office or any other place.
Main application functions:

DISPONIBILE SU Google Play
Download on the App Store

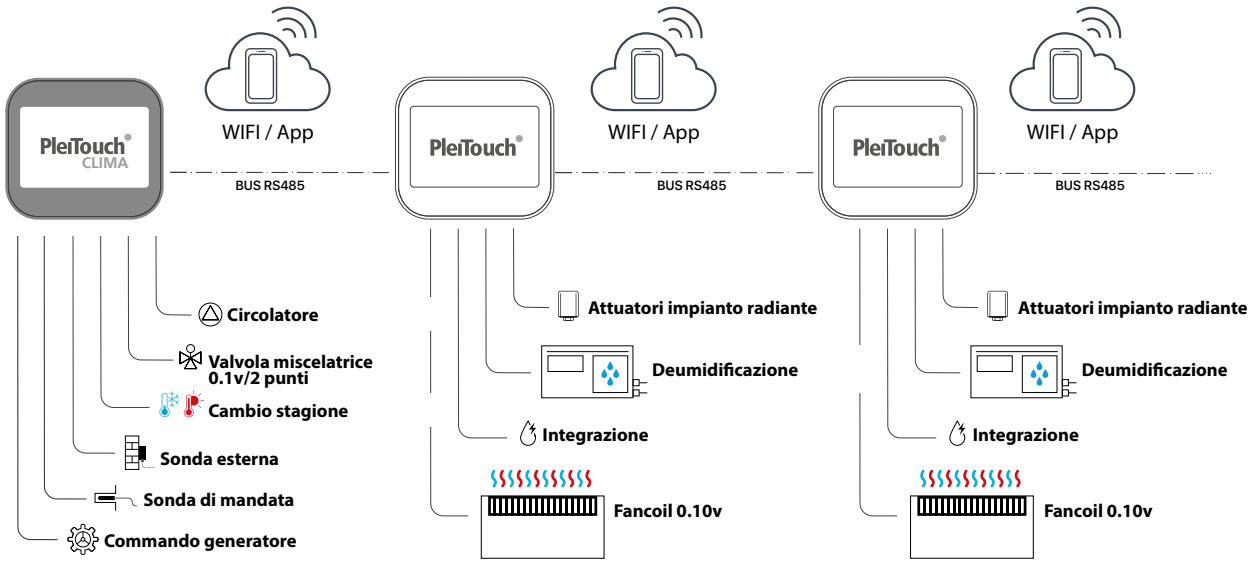
Main application functions:

- **Temperature setting**
- **Humidity setting**
- **Time schedule setting**
- **Device on/off**
- **Summer/winter switching**

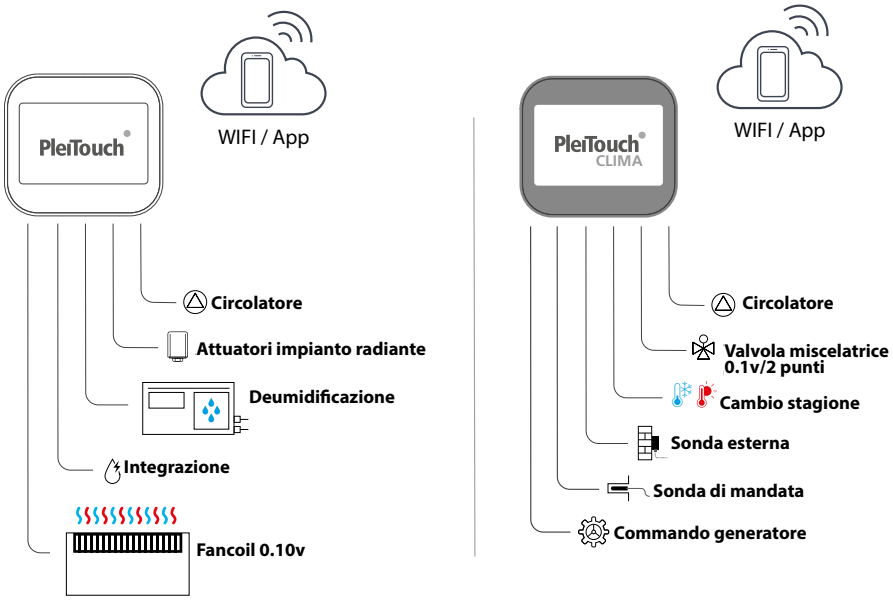
EASY WALL INSTALLATION





PleiTouch• e **PleiTouch•** CLIMA sono gli elementi costitutivi di un sistema di termoregolazione modulare, espandibile a piacere. Dispongono di collegamento MODBUS RS485 mediante il quale comunicano tra loro, andando a formare un unico sistema organico per la gestione del comfort abitativo. Possono inoltre essere interfacciati a sistemi domotici compatibili con lo standard MODBUS RS485. Nulla vieta in ogni caso che sia Pleitouch che Pleitouch clima siano utilizzati anche singolarmente.



DESCRIPTION		CODE
PLEITOUCH	Chrono thermo hygrostat	7081202040
	SMART climate controller with external sensor and supply sensor	7081202041
WALLBOX*	86x86 flush-mounting box	7081202030
503 box adapters*	Adapter for 503 box - WHITE	7081202045
	Adapter for 503 box - BLACK	7081202046

***With the purchase of the adapter, the WallBox is not necessary**

PLEION
The Sun is our Life!



FLOOR PANELS

PLEIMASTER F1400



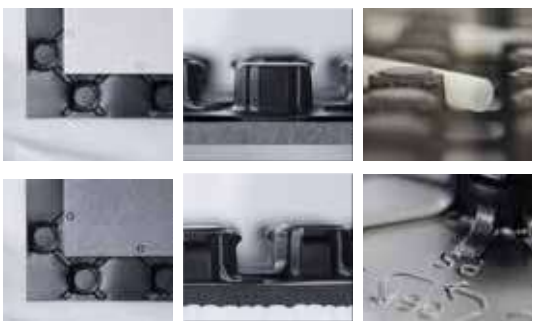
THERMOFORMED PANELS FOR FLOOR RADIANT SYSTEMS EPS 150 / EPS 200, EPS 150 WITH GRAPHITE EPS 150, DOUBLE DENSITY (DUO)

PLEIMASTER s a range of insulating panels, CE marked according to UNI EN 13163. Made of sintered expanded polystyrene, they are covered with semi-rigid thermoformed film thickness 0.6 mm and feature 22 mm thick raised studs, suitable for snap-fitting plastic pipes with diameter from 16 to 17 mm, with installation at 5 cm multiple steps.
Produced with neutral and time-stable materials, resistant to mold, self-extinguishing, CFC-free. The male/female interlocking and the film overlap along the edges makes the PLEIMASTER range panels suitable for combination with both ordinary and self-leveling screeds. All variants are available in various thicknesses, to provide the adequate insulation level required in different situations.

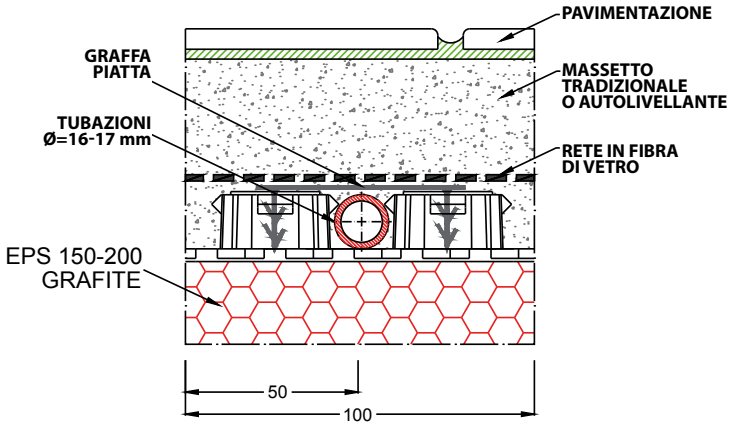
PLEIMASTER F1400	Base version, available in various thicknesses, made in EPS 150.
PLEIMASTER STONE F1400	Made in EPS 200, guarantees superior rigidity and compression resistance, making it suitable for floors subject to high loads.
PLEIMASTER GRAFITE F1400	In EPS 150 with added graphite, allows an even higher level of thermal insulation.
PLEIMASTER DUO F1400	Composed of 2 layers with differentiated density, allows combining thermal and acoustic insulation in a single product (See page 12).

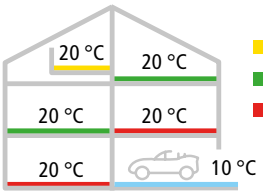
All panels in the PLEIMASTER series are also available in CAM version. CAM version panels have the same characteristics as standard ones, but are made with percentages of recycled raw material in accordance with the "second life plastic" certification regulation.





TECHNICAL DATA	u.m.	PLEIMASTER F1400
Gross panel dimensions (with interlocking)	[mm]	1450x850
Useful panel dimensions	[mm]	1400x800
Useful area	[m²]	1.12
Vapor barrier film, PS-HIPS	[µm]	600
Stud thickness	[mm]	22
Installation steps	-	50 mm and multiples
Compatible pipe diameters	[mm]	from 16 to 17
Fire reaction class EN 13501	-	Euroclass E
Dimensional tolerance thickness dN	[mm]	+/-2
HIPS vapor diffusion resistance UNI EN 12806	-	10,000





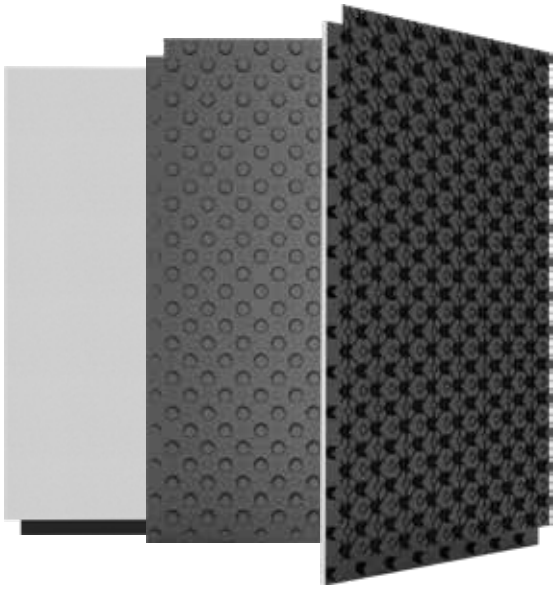
- 20°C - 20°C: R<0.75 m²K/W (mezzanines or special environments)
- 20°C - 20°C: R=0.75 m²K/W (over heated rooms))
- 20°C - 10°C: R=1.25 m²K/W (over ground or unheated rooms)

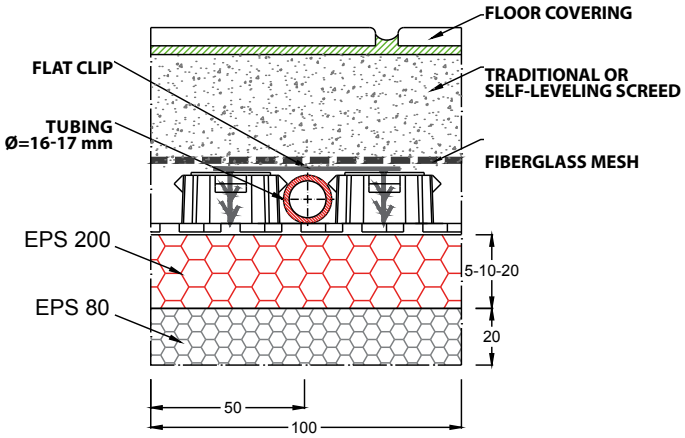
DESCRIPTION	Base Insulation Thickness [mm]	RD (base thickness) UNI-EN1264-3 2021[m²K/W]*	EPS Class	Declared Thermal Conductivity D [W/mK]	Package [m²]	CODE	PANEL WITH CAM CERTIFICATION
PLEIMASTER F1400	20	0,59	150	0,034	17,92	7070202020	7070202020CAM
	26	0,76			14,56	7070202026	7070202026CAM
	43	1,26			10,08	7070202043	7070202043CAM
	50	1,47			8,96	7070202050	7070202050CAM
PLEIMASTER STONE F1400	10	0,30	200	0,033	24,64	7070202010	7070202010CAM
	25	0,76			15,68	7070212025	7070212025CAM
	42	1,27			10,08	7070212042	7070212042CAM
	50	1,47			8,96	7070212050	7070212050CAM
PLEIMASTER GRAPHITE F1400	10	0,33	150	0,030	24,64	7070292010	7070292010CAM
	23	0,77			15,68	7070292023	7070292023CAM
	38	1,26			11,2	7070292038	7070292038CAM

* The UNI EN 1264-3 standard version 2021, which came into force on 01/07/2021, has replaced the 2009 version of the same standard. The 2021 text differs from the previous one as the RD value calculation is performed based on the actual insulating material thickness, without taking into account the presence of raised studs. This means that the same panels, at equal thickness, now have lower values. The product quality has not decreased, the calculation procedure for this value has simply changed.

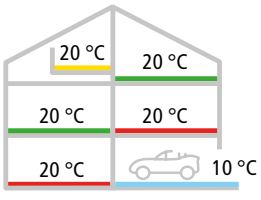
**If CAM certification is required, it must be specified when ordering, using codes with CAM final designation.

PLEIMASTER DUO F1400





PLEIMASTER DUO F1400 PHYSICAL-ACOUSTIC CHARACTERISTICS				
Base Thickness		**25**	**30**	**40**
Dynamic rigidity s' [MN/m³]		≤25	≤20	≤15
Compressibility class for load ≤5 kPa (UNI EN 13163)		CP2	CP2	CP3
Sound pressure level attenuation evaluation index [dB]	Screed [kg/m²]			
	60	24	25	27
	80	26	27	29
	100	27	28	30
	120	28	29	31
	140	29	30	32
	160	30	31	33



R<0,75 m²K/W
(mezzanines or special environments)
R=0,75 m²K/W
(over heated rooms)
R=1,25 m²K/W
(over ground or unheated rooms)

TECHNICAL DATA	u.m.	PLEIMASTER DUO F1400
Gross panel dimensions (with interlocking)	[mm]	1450x850
Useful panel dimensions	[mm]	1400x800
Useful area	[m²]	1,12
Vapor barrier film, PS-HIPS	[µm]	600
Stud thickness	[mm]	22
Installation steps	-	50 mm and multiples
Compatible pipe diameters	[mm]	16-17
Fire reaction class EN 13501	-	Euroclass E
Dimensional tolerance thickness dN	[mm]	+/-2
HIPS vapor diffusion resistance UNI EN 12806	-	10.000
Compression resistance at 10% deformation density 30 layer σ10	[kPa]	200
Compression resistance at 10% deformation density 15 layer σ10	[kPa]	80

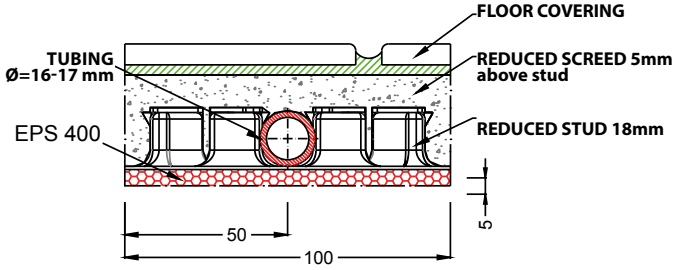
DESCRIPTION	Base Insulation Thickness [mm]	RD (base thickness) UNI-EN1264-3 2021[m²K/W]*	EPS Class	Declared Thermal Conductivity D [W/mK]	Package [m²]	CODE	PANEL WITH CAM CERTIFICATION
PLEIMASTER DUO 1400	**25**	0,74	200/80	0,033/0,036	15,68	7070252025	7070252025CAM
	30	0,88	200/80	0,033/0,036	13,44	7070252030	7070252030CAM
	40	1,18	200/80	0,033/0,036	11,20	7070252040	7070252040CAM

* The UNI EN 1264-3 standard version 2021, which came into force on 01/07/2021, has replaced the 2009 version of the same standard. The 2021 text differs from the previous one as the RD value calculation is performed based on the actual insulating material thickness, without taking into account the presence of raised studs. This means that the same panels, at equal thickness, now have lower values. The product quality has not decreased, the calculation procedure for this value has simply changed.

** If CAM certification is required, it must be specified when ordering, using codes with CAM final designation.

PLEISLIM

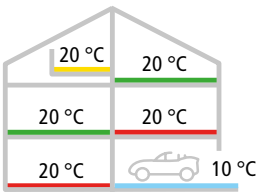




TECHNICAL DATA	u.m.	PLEISLIM
Gross panel dimensions (with interlocking)	[mm]	1450x850
Useful panel dimensions	[mm]	1400x800
Useful area	[m²]	1,12
Vapor barrier film, PS-HIPS	[µm]	650
Base thickness	[mm]	5
Stud thickness	[mm]	18
Installation steps	-	50 mm and multiples
Compatible pipe diameters	[mm]	17
Fire reaction class EN 13501	-	Euroclass E
Dimensional tolerance thickness dN	[mm]	+/-2
HIPS vapor diffusion resistance UNI EN 12806	-	10.000

SPECIFIC STUDDED INSULATING PANEL FOR ULTRA-LOW THICKNESS SYSTEMS

Allows the realization of radiant panel systems with standard size pipes (Ø 17 mm, installation with 5 cm step and multiples) while maintaining the height to only 28 mm. The PLEISLIM panel is made in EPS 400, with high density and resistance, and is covered with 650 mm HIPS film, all to ensure adequate consistency even with ultra-low thickness. Recommended combination with screed made with Knauf NE 425 self-leveling compound.



R<0,75 m²K/W
(mezzanines or special environments)
R=0,75 m²K/W
(over heated rooms)
R=1,25 m²K/W
(over ground or unheated rooms)





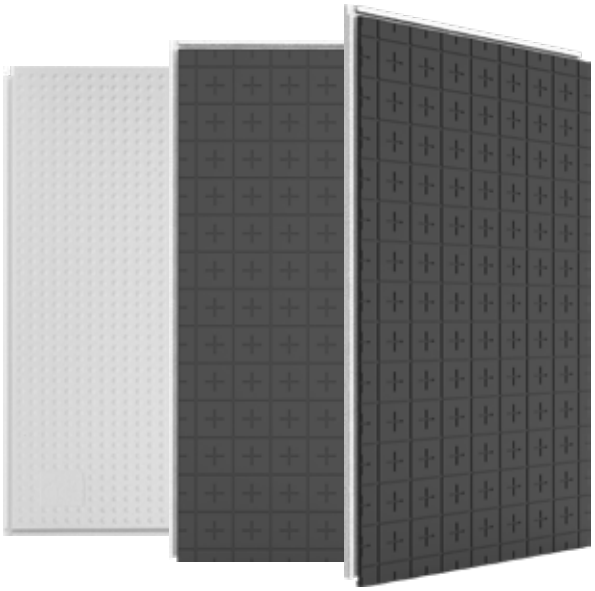
DESCRIPTION	Base Insulation Thickness [mm]	RD (base thickness) UNI-EN1264-3 2021[m²K/W]*	EPS Class	Declared Thermal Conductivity D [W/mK]	Package [m²]	CODE	PANEL WITH CAM CERTIFICATION
PLEISLIM	**5**	0,16	400	0,032	13,44	7070242005	7070242005CAM

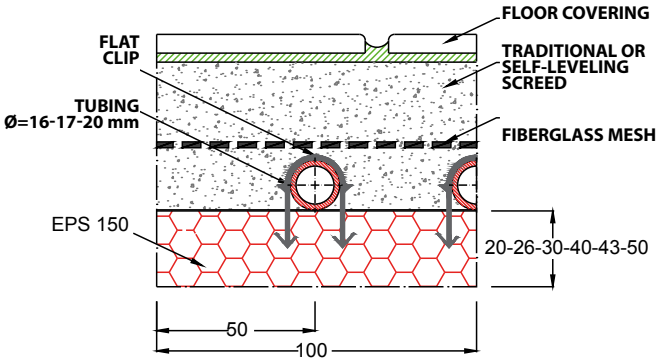
NEW

* The UNI EN 1264-3 standard version 2021, which came into force on 01/07/2021, has replaced the 2009 version of the same standard. The 2021 text differs from the previous one as the RD value calculation is performed based on the actual insulating material thickness, without taking into account the presence of raised studs. This means that the same panels, at equal thickness, now have lower values. The product quality has not decreased, the calculation procedure for this value has simply changed.

** If CAM certification is required, it must be specified when ordering, using codes with CAM final designation.

PLEIPLATE F1400

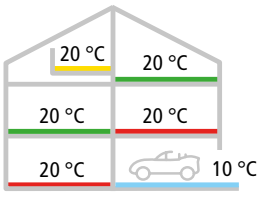




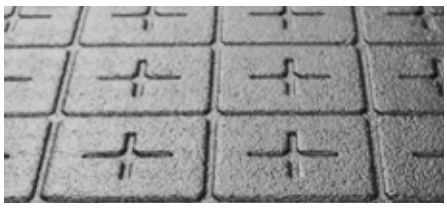
TECHNICAL DATA	u.m.	PLEIPLATE F1400
Gross panel dimensions (with interlocking)	[mm]	1425x825
Useful panel dimensions	[mm]	2400x800
Useful area	[m²]	1,12
Vapor barrier film, PS-HIPS	[µm]	200
Installation steps	-	50mm and multiples
Fire reaction class EN 13501	-	Euroclass E
Dimensional tolerance thickness dN	[mm]	±2
HIPS vapor diffusion resistance UNI EN 12806	-	10.000

SMOOTH PREFORMED EPS 150 PANEL FOR FLOOR RADIANT SYSTEMS

Smooth insulating panel in EPS 150 for floor radiant systems, made of closed-cell expanded polystyrene CE marked according to UNI EN 13163 standard equipped with a rigid PE layer 0.16 mm thick with vapor barrier function. Provided with cross marking on the panel surface with 100 mm installation step for simplified laying of Ø 16 - 20 mm pipes, with male/female side interlocking. Steps and types of pipes can be used in different configurations. Regarding pipe fixing, it is possible to use manual or automatic clips, in this second case installation occurs through the use of the tacker (art. code 7079802100). The system is suitable for environments with irregular perimeter surfaces such as oblique or curved walls, being able to perform free installation of the piping without the constraint of the stud, perfectly following the wall pattern.



R<0,75 m²K/W
(mezzanines or special environments)
R=0,75 m²K/W
(over heated rooms)
R=1,25 m²K/W
(over ground or unheated rooms)



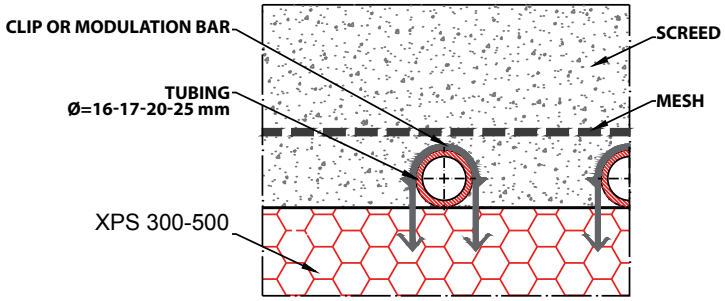


DESCRIPTION	Base Insulation Thickness [mm]	RD (base thickness) UNI-EN1264-3 2021[m²K/W]*	EPS Class	Declared Thermal Conductivity D [W/mK]	Package [m²]	CODE
PLEIPLATE F1400	20	0,59	150	0,034	29,12	7070302020
	26	0,76			22,4	7070302026
	43	1,26			13,44	7070302043

PLEION
The Sun is our Life!

PLEIXPS





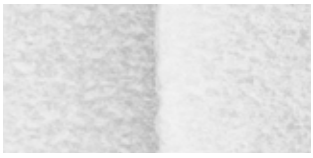
TECHNICAL DATA	u.m.	PLEIXPS
Gross panel dimensions (with interlocking)	[mm]	1250x600
Useful area	[m²]	0,75
Fire reaction class EN 13501	-	Euroclass E

EXTRUDED POLYSTYRENE INSULATING PANEL FOR INDUSTRIAL FLOOR RADIANT SYSTEMS

Extruded polystyrene insulating panel with closed cells XPS for industrial floor radiant systems characterized by high compression levels 300-500 kPa, with CE marking in accordance with UNI EN 13164 standard, with fire reaction in Euroclass E. PLEIXPS panels are all equipped with film and rebate to ensure coupling and protect the panel except for the 20 mm thickness which has no film and rebate.

CHARACTERISTICS::
- High thermal insulation capacity
- High mechanical compression resistance
- Fire reaction in Euroclass E
- Recyclability and dimensional stability





DESCRIPTION	Base Insulation Thickness [mm]	RD (base thickness) UNI-EN1264-3 2021[m²K/W]*	EPS Class	Declared Thermal Conductivity D [W/mK]	Package [m²]	CODE
PLEIXPS 300	**30**	0,95	300	0,031	10,50	7070412030
	40	1,25		0,032	7,50	7070412040
	50	1,50		0,033	6,00	7070412050
	60	1,80			5,25	7070412060
	80	2,50		0,032	3,75	7070412080
	100	3,00		0,033	3,00	7070412100
PLEIXPS 500	**50**	1,50	500	0,033	6,00	7070413050
	60	1,80			5,25	7070413060
	80	2,50		0,032	3,75	7070413080
	100	3,00		0,033	3,00	7070413100

DRYFLOOR 300



DRYFLOOR 300 PREFORMED PANEL FOR RADIANT SYSTEMS WITHOUT SCREED

The product is made of sintered expanded polystyrene with closed cells to ensure correct thermal insulation in EPS 300 white class and covered through a special bonding system with a 0.2mm thick aluminum layer, fully shaped inside the straight channels of the panel to ensure maximum pipe adhesion to the aluminum. The panel also features return curves and two straight transverse channels to facilitate pipe entry and exit. It is suitable for laying multilayer pipes with Ø 16mm with 100mm installation step for the DRYFLOOR 300 25 - STEP 100 panel and 150mm installation step for the DRYFLOOR 300 25 - STEP 150 panel. The DRYFLOOR 300 panel is CFC-free and CE marked according to UNI EN 13163 standard.

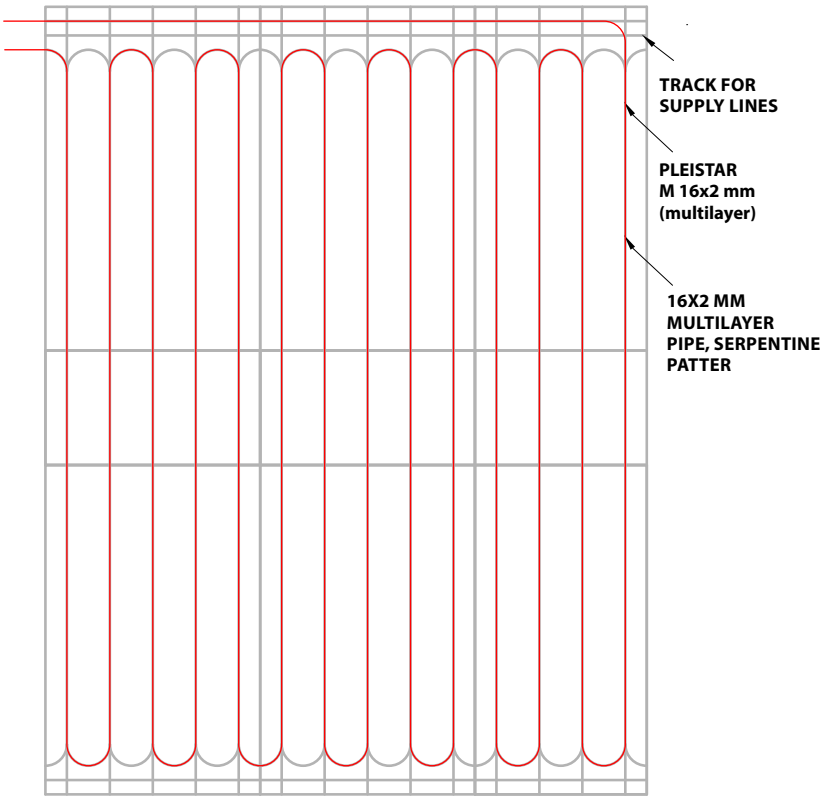
A smooth EPS 300 panel is available for use as infill (near the distribution manifold or in irregular structural areas). This panel must be grooved with a special hot cutter.

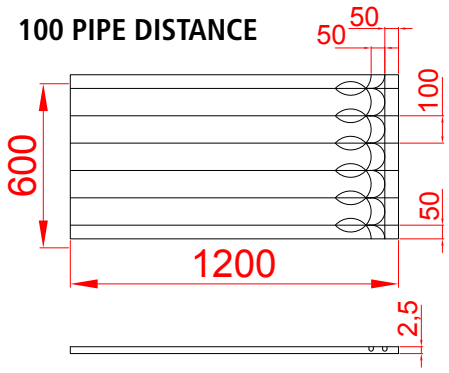


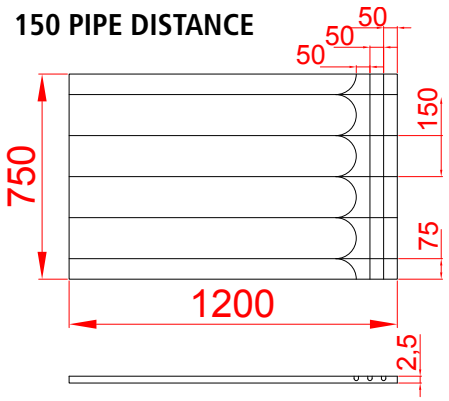


TECHNICAL DATA	u.m.	DRYFLOOR 300 25 - 100 Pipe distance	DRYFLOOR 300 25 - 150 Pipe distance
Dimensions	[mm]	1200x600	1200x750
Height	[mm]	25	
Installation step	[mm]	100	150
Coupled material	-	ALLUMINIO SP. 0,2mm	
Compression resistance with RC at 10%	[kPa]	> 300	
Fire reaction	-	E	
Compatible pipe diameter	[mm]	16	

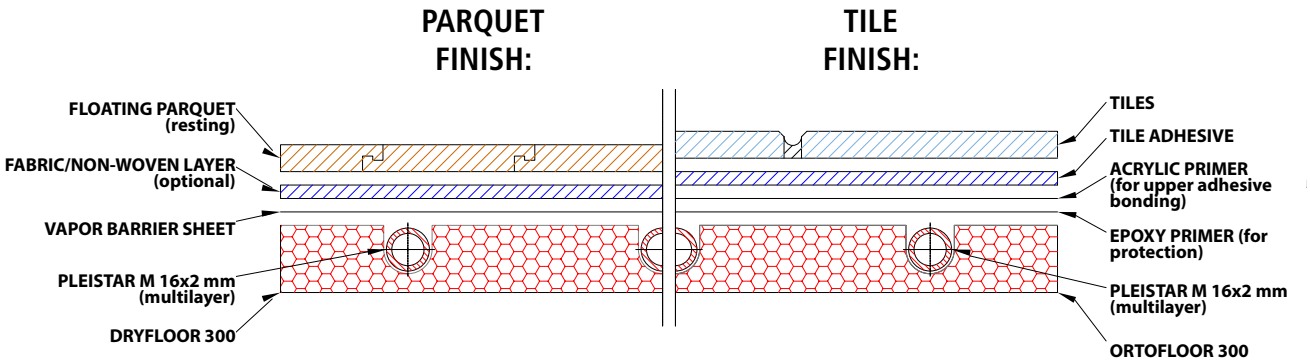
PRODUCT SPECIFICATIONS







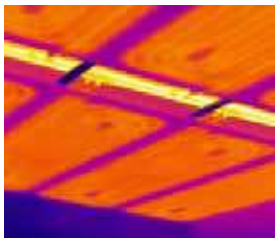
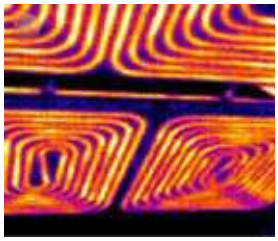
DRYFLOOR 300 STRATIGRAPHY



DESCRIPTION	Base Insulation Thickness [mm]	EPS Class	Declared Thermal Conductivity D [W/mK]	Package [m²]	CODE
DRYFLOOR 300 25 - 100 mm PIPE DISTANCE	**25**	300	0,032	10.8 **m²**	7070436325
DRYFLOOR 300 25 - 150 mm PIPE DISTANCE	**25**	300	0,032	13.5 **m²**	7070926025
SMOOTH PANEL 1x0,5m	**25**	300	0,032	1 **m²**	7070336125
ALUMINUM ADHESIVE TAPE	**-**	-	-	50 mm	7079274000

NEW

PLEICELING



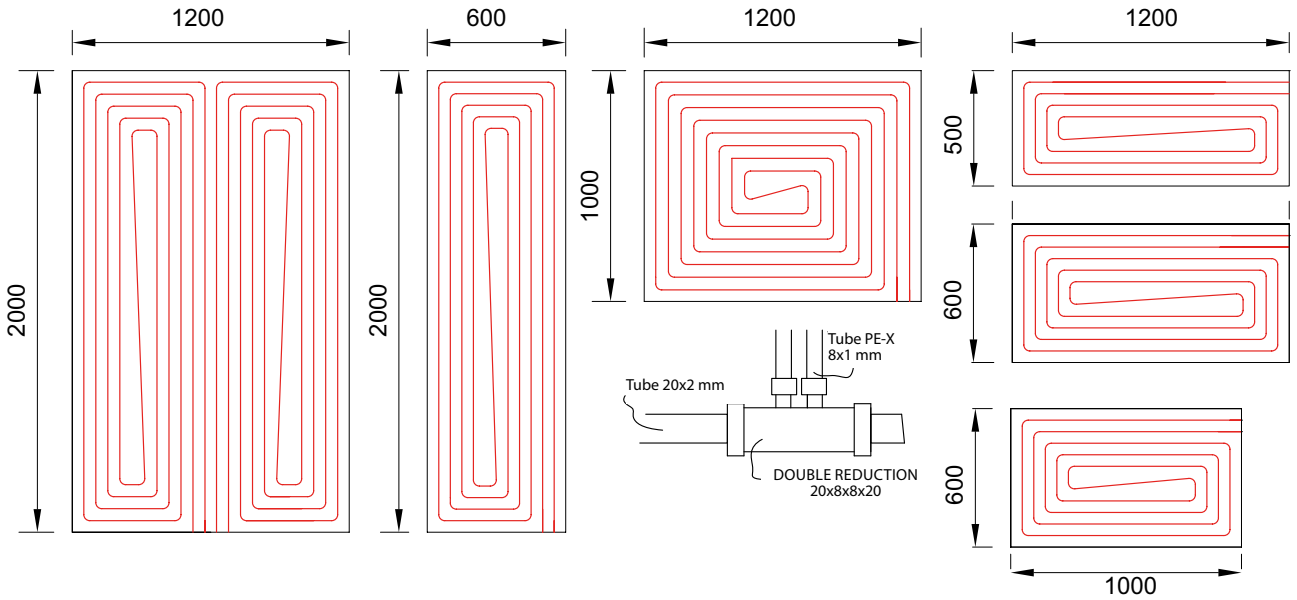
RADIANT PANEL FOR CEILING SYSTEMS, SUITABLE FOR ALL CONSTRUCTION SITES

Radiant module in plasterboard for wall or ceiling suitable for radiant climate control in heating and cooling, with quick coupling connections for the coupling of the external distribution pipe with diameter 20 mm to the internal circuit of each panel equipped with PE-X pipes with diameter 8x1 mm embedded in the plasterboard.
The system consists of an insulating layer 30 mm thick based on EPS 100 class polystyrene, with thermal conductivity of 0.036 W/mK from an emitting plasterboard sheet 15 mm thick with thermal conductivity of 0.25 W/mK with the internal circuitry inserted.

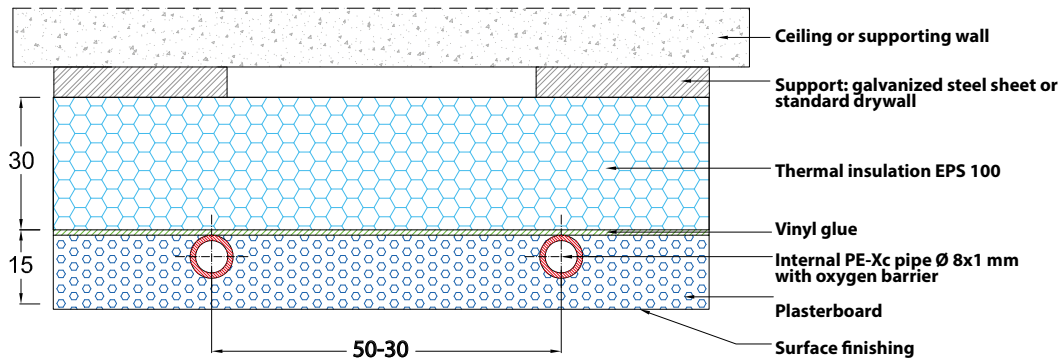
AVAILABLE VERSIONS:

- **STANDARD WITH 5CM STEP**
- **HIGH PERFORMANCE VERSION WITH 3CM STEP**
- **VERSION IN NORMAL OR MOISTURE-RESISTANT PLASTERBOARD (WATER-REPELLENT VERSION)**

DIMENSIONS AND CIRCUITRY



TECHNICAL DATA		PLEICELING 5 - Pipe distance	PLEICELING 3 - Pipe distance
Module thickness	[mm]	45	45
Insulation thickness	[mm]	30	30
Plasterboard thickness	[mm]	15	15
Installation step	[mm]	50	30
Coupling processing	[-]	Use of vinyl glue thickness 0.5 mm	Use of vinyl glue thickness 0.5 mm
Module surface color	[-]	bianco	bianco
Plasterboard thermal conduc-tivity	[W/mK]	0,25	0,25
Insulation thermal conductivi-ty	[W/mK]	0,036	0,036
Maximum pressure	[bar]	4	4
Min/max temperature	[°C]	5/60	5/60
Weight per surface unit	[kg/m²]	14	14
Internal pipe diameter	[mm]	8x1	8x1
Pipe length per single circuit	[m]	12 (6 in case of 600x1000 module)	20 (in case of 600x1000 module)
Pipe pressure drop	[bar]	0.023 (per single 12m circuit)	0.033 (per single 12m circuit)
Circuit water content	[l]	0,4	0,66
Flow rate per m² of emitting surface	[l/h]	20-25	20-25
System classification	[-]	B-s1, d0	B-s1, d0
Heating output T.average wa-ter 42°	W/ m²	99	115
Cooling output T.average wa-ter 42°	W/ m²	73	105

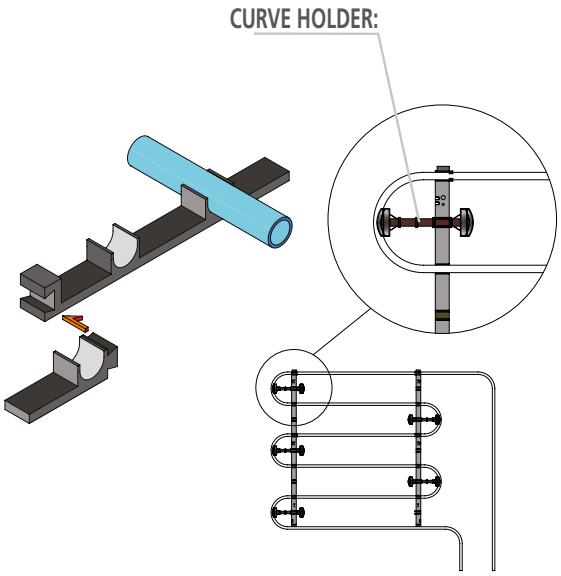


DESCRIPTION	CODE	DESCRIPTION	CODE
PLEICELING 5 cm PIPE DISTANCE- 1,2x2m	7070505030	WATER-REPELLENT VERSION	7070505030U
PLEICELING 5 cm PIPE DISTANCE - 0,6x2m	7070505031		7070505031U
PLEICELING 5 cm PIPE DISTANCE - 1,2x1m	7070505032		7070505032U
PLEICELING 5 cm PIPE DISTANCE - 1,2x0,5m	7070505033		7070505033U
PLEICELING 5 cm PIPE DISTANCE - 1,2x0,6m	7070505034		7070505034U
PLEICELING 5 cm PIPE DISTANCE - 0,6x1m	7070505035		7070505035U
PLEICELING 3 cm PIPE DISTANCE - 1,2x2m	7070515030	WATER-REPELLENT VERSION	7070515030U
PLEICELING 3 cm PIPE DISTANCE - 0,6x2m	7070515031		7070515031U
PLEICELING 3 cm PIPE DISTANCE - 1,2x1m	7070515032		7070515032U
PLEICELING 3 cm PIPE DISTANCE - 1,2x0,5m	7070515033		7070515033U
PLEICELING 3 cm PIPE DISTANCE - 1,2x0,6m	7070515034		7070515034U
PLEICELING 3 cm PIPE DISTANCE - 0,6x1m	7070515035		7070515035U
PASSIVE MODULE - 1,2X2m - No circuit	7070805000		7070805000U

SMART 8



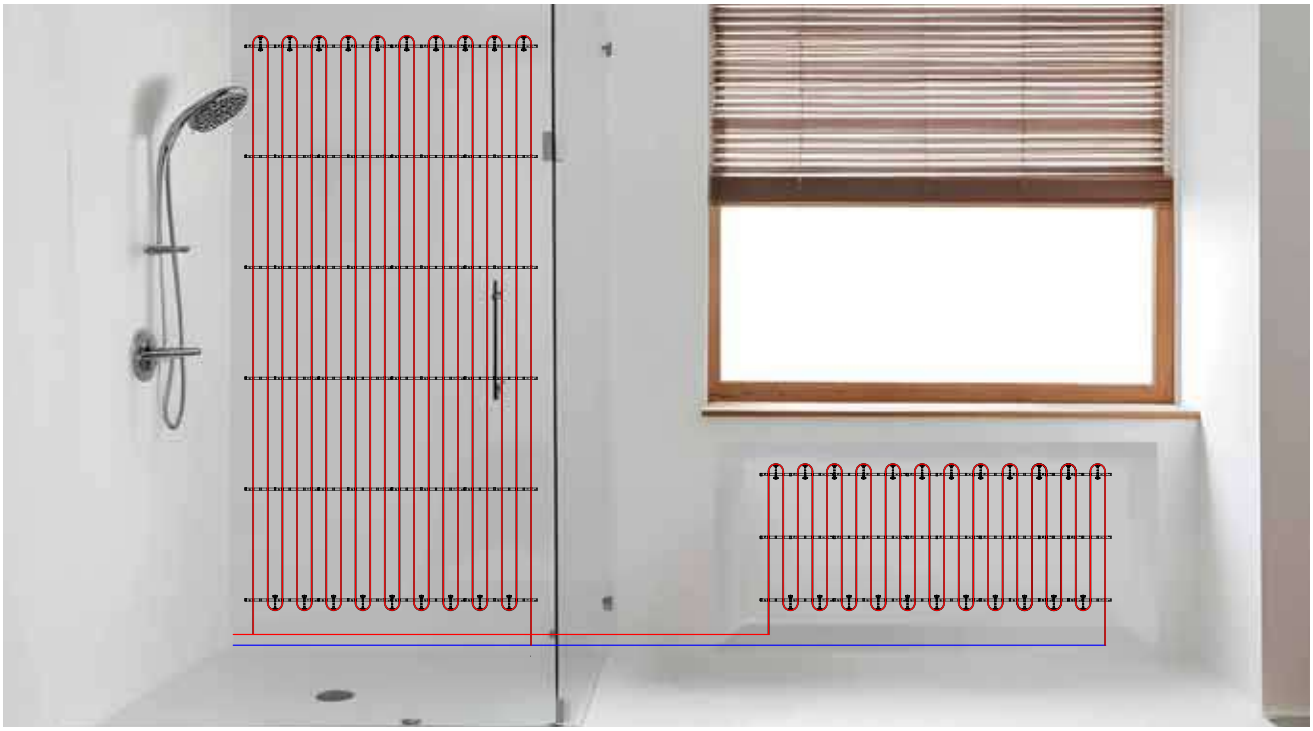




THE LOW-THICKNESS WALL OR CEILING SYSTEM

The system involves on-site assembly of the support structure for 8x1mm PE-Xc diameter piping, 500 mm long guides with 50 mm pipe distance to be fixed through numerous holes to the wall or ceiling. These are designed to fix the piping in addition to being always coupled by interlocking to the curve holder. The overall system thickness is only 11 mm. The SMART 8 system is useful for creating small areas such as bathrooms up to entire systems. The hydraulic connection can be made with the 20x8 mm connection kits available in the catalog (see page 64).

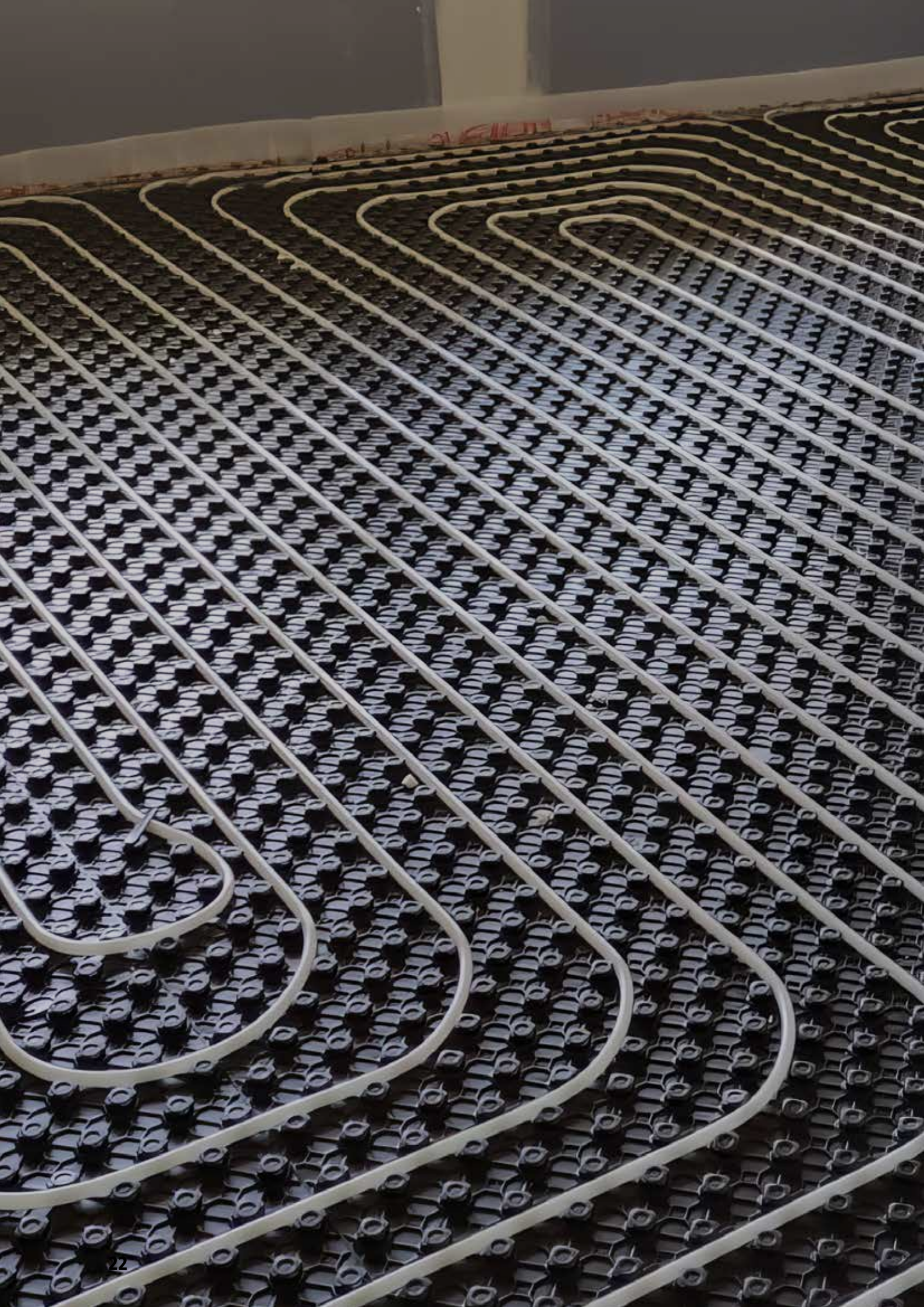
RECOMMENDED USE: The ideal fields of application are niches in poorly insulated walls, shower walls and all those areas where greater comfort is to be ensured.



DESCRIPTION	CODE
CURVE HOLDER FOR Ø 8 MM TUBE - 30 PCS PACK-AGE	7079502000
WALL INSTALLATION GUIDE - Ø 8 MM TUBE	7079502008

PLEION
The Sun is our Life!

NOTE

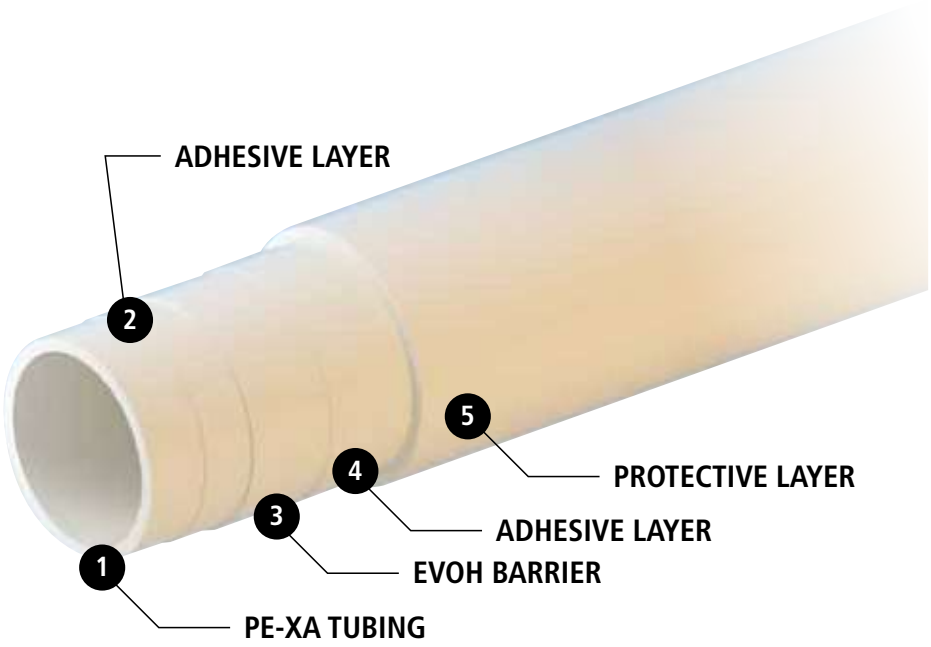


PLEION
The Sun is our Life!



PIPING

PLEISTAR



PE-XA 5 LAYERS

BEST TECHNICAL CHARACTERISTICS AND MAXIMUM FLEXIBILITY

Cross-linked polyethylene pipe with 5 layers specific for radiant heating systems obtained from special HMW-HDPE resins. Cross-linking through peroxides occurs during the processing. The stable bonding of adjacent polymer chains creates a 3D molecular structure that provides high resistance to pressure, corrosion and temperature. Pipe manufactured in compliance with European standards provided in EN ISO 15875 standard and certified by HR 3.2 protocol of SKZ institute. Equipped with EVOH oxygen barrier according to DIN 4726 standard.

WHY CHOOSE PLEISTAR

The polyethylene surface layer effectively protects the EVOH barrier from any impacts and abrasions, ensuring oxygen impermeability characteristics over time. This provides better protection of system elements subject to oxidation and less possibility of fouling. The composite structure of PLEISTAR pipe ensures high degrees of flexibility and therefore greater ease of installation, without modifying the hydraulic and physical characteristics of the pipe.

PROTECTION

The PLEISTAR pipe consists of a compact 5-layer structure:

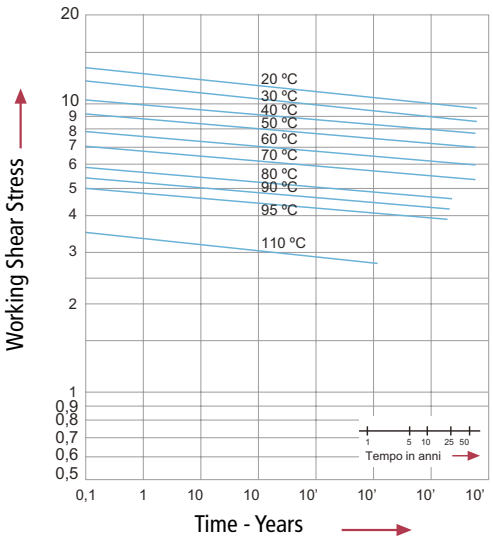
- Inner layer, in PE-Xa, high-density polyethylene cross-linked with peroxide method
- Highly adhesive polymeric material layer
- Intermediate layer, consisting of several tens of microns of EVOH or ethylene-vinyl-alcohol, a copolymer that acts as an oxygen anti-diffusion barrier. This avoids the problem of water oxygenation and consequent oxidation and corrosion of metallic components that make up the system, in addition to the formation of algae and microorganisms
- Highly adhesive polymeric material layer
- Protective polyethylene layer

Süddeutsches Kunststoff-Zentrum
Amtlich anerkannte Prüfanstalt
für Kunststoffe GERMANY
A 154

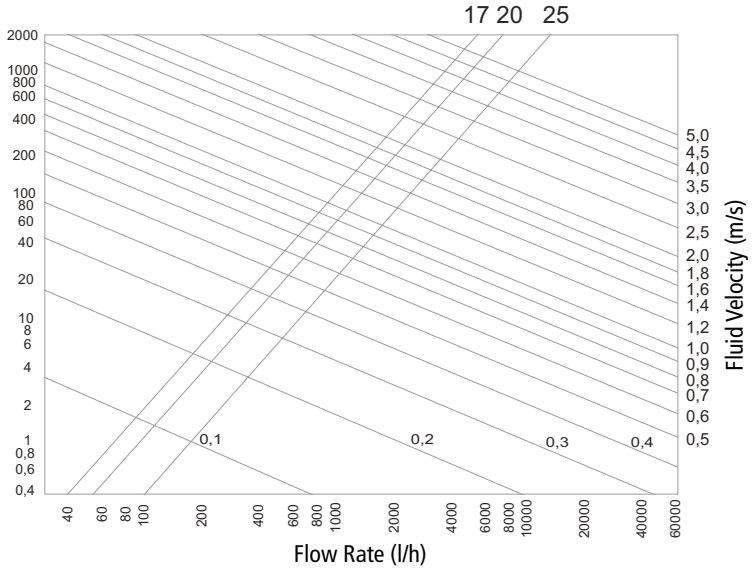
PRESSURE TEST CONDITIONS
PROCEDURE COMPLIANT WITH UNI EN 1264 PART 4:
Before casting the screed, pipes must be subjected to leak testing by means of a water pressure test. The test pressure must be double the operating pressure, with a minimum of 6 bar. The absence of leaks and test pressures must be specified in a test report validated by a qualified technician and accompanied by appropriate photographic documentation. If there is a risk of frost, the test must be performed with appropriate antifreeze products or by conditioning the building. If normal use of the system does not involve the use of antifreeze products, these must be drained and the circuits cleaned with at least 3 water changes. The test must last at least 24h. Pressure drops of less than 0.2 bar are permitted.
This procedure is mandatory for recognition of warranty on product manufacturing defects.

TECHNICAL DATA	U.M.	STANDARD	REQUIREMENTS	PLEISTAR
Cross-linking degree	%	ISO 10147	70	> 75
Thermal conductivity (at 60°C)	W/mK	DIN 4725		0.35 ÷ 0.38
Thermal stability (at 110°C)	h	AS 2492 - DIN 16892	8,760	> 10,000
Thermal aging (at 160°C)	%	ATEC	After 100 hours, at least 50% of elongation compared to virgin material	After 100 hours, at least 90% of elongation compared to virgin material
Linear expansion (at 20°C)	m/m/K			$1,4 \times 10^{-4}$
Linear expansion (at 100°C)				$2,05 \times 10^{-4}$
Weather resistance	N/mm^2	ISO 14531-1 Annex 1	a) Thermal stability b) Hydro-static resistance at 95°C c) Elongation and break	Compliant
Breaking load (at 20°C)		DIN 53455	19	26
Breaking load (at 100°C)				13
Moisture ab-sorption (at 20°C)	gm/m^3	-	0,01	< 0,01
Oxygen permeabi-lity (at 40°C)	(giorno)	DIN 4725		< 0,033
Oxygen permeabi-lity (at 80°C)			< 0,01	0,02
Operating tempe-rature range	°C	-		-140 ÷ +100
Maximum opera-ting pressure	bar	-		10 (class 4)

REGRESSION DIAGRAM

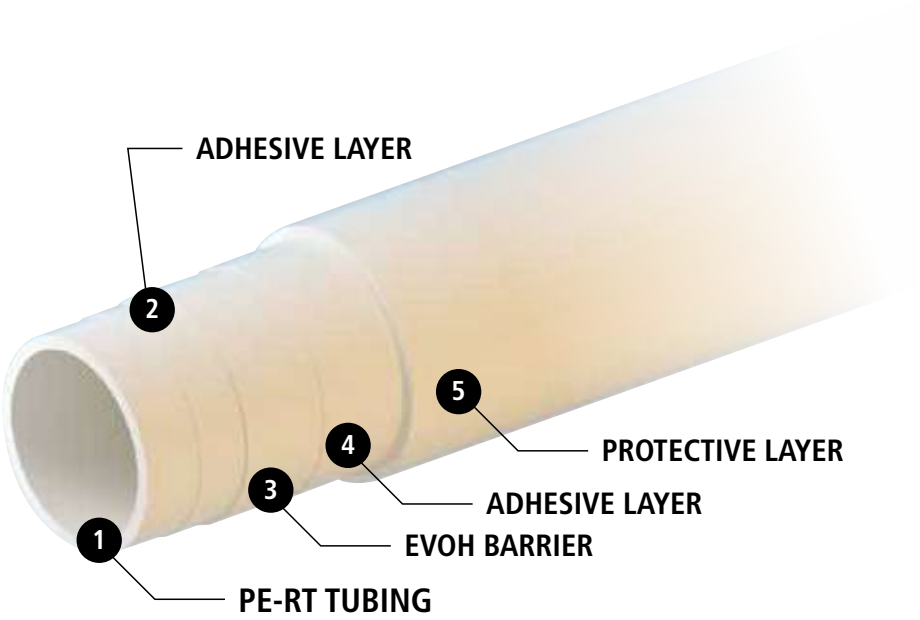


PRESSURE DROP CHARTS



DESCRIPTION	PACKAGE (m)	CODE
TUBO PLEISTAR PE-Xa 5 strati 17x2 mm	200 m	7071201720
TUBO PLEISTAR PE-Xa 5 strati 17x2 mm	500 m	7071201750
TUBO PLEISTAR PE-Xa 5 strati 20x2 mm	150 m	7071202015
TUBO PLEISTAR PE-Xa 5 strati 20x2 mm	300 m	7071202030
TUBO PLEISTAR PE-Xa 5 strati 25x2,3 mm	360 m	7071202536

PLEITRUST



PE-RT 3-5 LAYERS

RELIABLE AND COMPETITIVE

High thermal resistance polyethylene pipe for radiant heating systems. Pipe manufactured in compliance with EN ISO 22391 standard certified by SKZ institute. Equipped with EVOH oxygen barrier according to DIN 4726 standard.

WHY CHOOSE PLEITRUST

Easy and fast installation thanks to extreme lightness and flexibility. Very low internal roughness, with reduced pressure drops. High degree of flexibility even at low temperatures.

PROTECTION

PLEITRUST pipe consists of a compact 5-layer structure:

- Inner layer in PE-RT, polyethylene with increased thermal resistance, non-cross-linked with smooth inner surface
- Highly adhesive polymeric material layer
- Layer consisting of several tens of microns of EVOH or ethylene-vinyl-alcohol, a copolymer that acts as an oxygen anti-diffusion barrier. This avoids the problem of water oxygenation and consequent oxidation and corrosion of metallic components that make up the system
- Highly adhesive polymeric material layer
- Outer layer in PE-Xb, high-density polyethylene cross-linked with silane cross-linking method

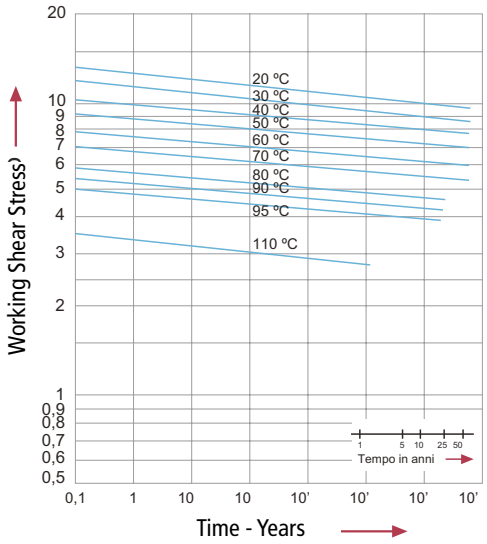
PRESSURE TEST CONDITIONS
PROCEDURE COMPLIANT WITH UNI EN 1264 PART 4:

Süddeutsches Kunststoff-Zentrum
Amtlich anerkannte Prüfanstalt
für Kunststoffe GERMANY
A 154

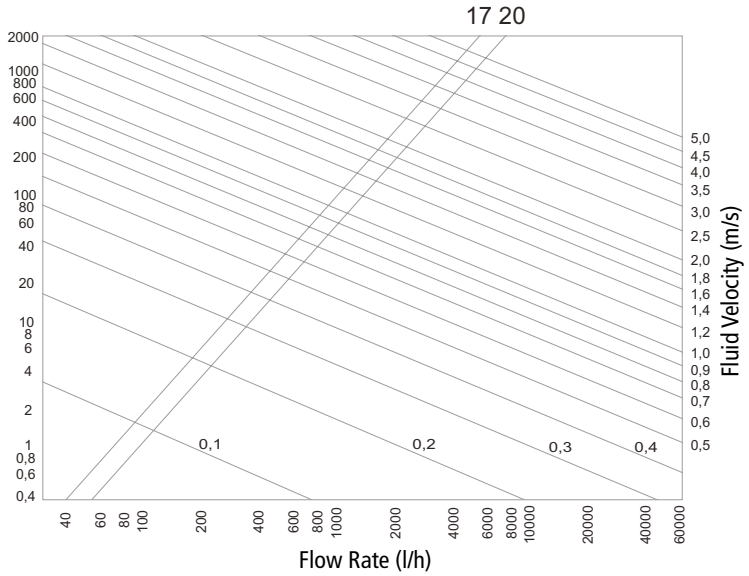
Before casting the screed, pipes must be subjected to leak testing by means of a water pressure test. The test pressure must be double the operating pressure, with a minimum of 6 bar. The absence of leaks and test pressures must be specified in a test report validated by a qualified technician and accompanied by appropriate photographic documentation. If there is a risk of frost, the test must be performed with appropriate antifreeze products or by conditioning the building. If normal use of the system does not involve the use of antifreeze products, these must be drained and the circuits cleaned with at least 3 water changes. The test must last at least 24h. Pressure drops of less than 0.2 bar are permitted.
This procedure is mandatory for recognition of warranty on product manufacturing defects.

TECHNICAL DATA	U.M.	STANDARD	PLEITRUST
Thermal conductivity (at 60°C)	W/mK	DIN 52612-1	0,4
Linear expansion (from 20°C to 70°C)	m/m/K	DIN 53752	1,95 x 10-4
Breaking load	N/mm^2	ISO 527-2	16,5
Oxygen permeability (at 40°C)	gm/m^3 (giorno)	DIN 4725 ISO 17455	< 0,1
Maximum operating temperature	°C	-	+70
Maximum operating pressure	bar	-	6 (17x2 mm class 4) 10 (20x2 mm class 4)

REGRESSION DIAGRAM

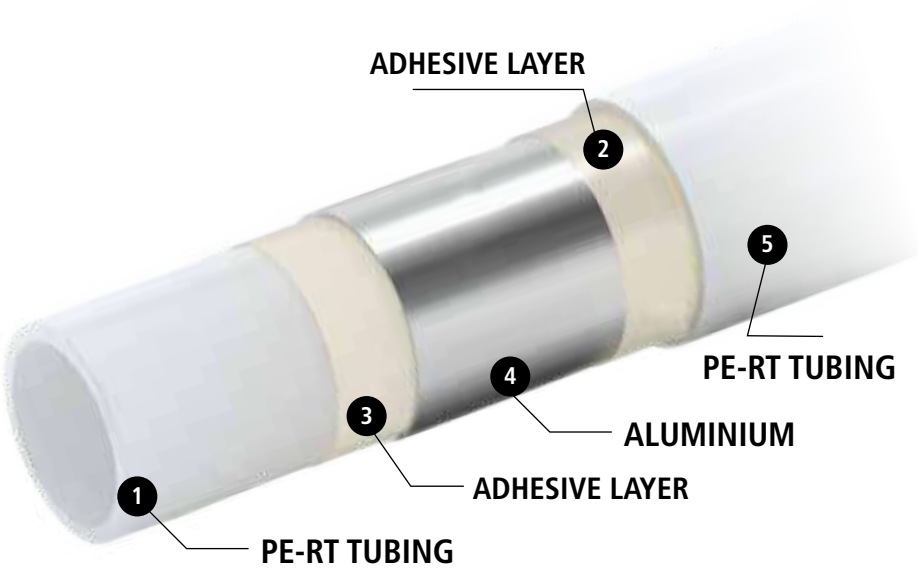


PRESSURE DROP CHARTS



DESCRIPTION	PACKAGE (m)	CODE
PLEITRUST PE-RT 17x2 TUBE (3 layers)	200	7071301720
PLEITRUST PE-RT 17x2 TUBE (3 layers)	500	7071301750
PLEITRUST PE-RT 20x2 TUBE (5 layers)	150	7071402015
PLEITRUST PE-RT 20x2 TUBE (5 layers)	300	7071402030

PLEISTAR M





IN ROTOLO

PE-XB – AL – PE-XB

THE PIPE FOR ALL USES

Multilayer pipe made by extrusion of a high-density polyethylene pipe cross-linked through PE-Xb – Al – PE-Xb chemical process.

WHY CHOOSE PLEISTAR M

PLEISTAR M pipe guarantees thanks to its mechanical characteristics excellent workability on site and long system duration under the action of temperatures and pressures involved. The different material layers are joined thanks to adhesives specifically designed to guarantee the finished product a homogeneous structure with high characteristics of mechanical resistance to temperatures and pressures.

PROTECTION

PLEISTAR M pipe consists of a compact 5-layer structure:

- Inner layer in PE-Xb, high-density polyethylene cross-linked with silane cross-linking method
- Highly adhesive polymeric material layer
- Layer consisting of an aluminum sheet shaped cylindrically on the inner layer in plastic material welded head-to-head on the entire junction generatrix
- Highly adhesive polymeric material layer
- Outer layer in PE-Xb, high-density polyethylene cross-linked with silane cross-linking method

PRESSURE TEST CONDITIONS
PROCEDURE COMPLIANT WITH UNI EN 1264 PART 4:

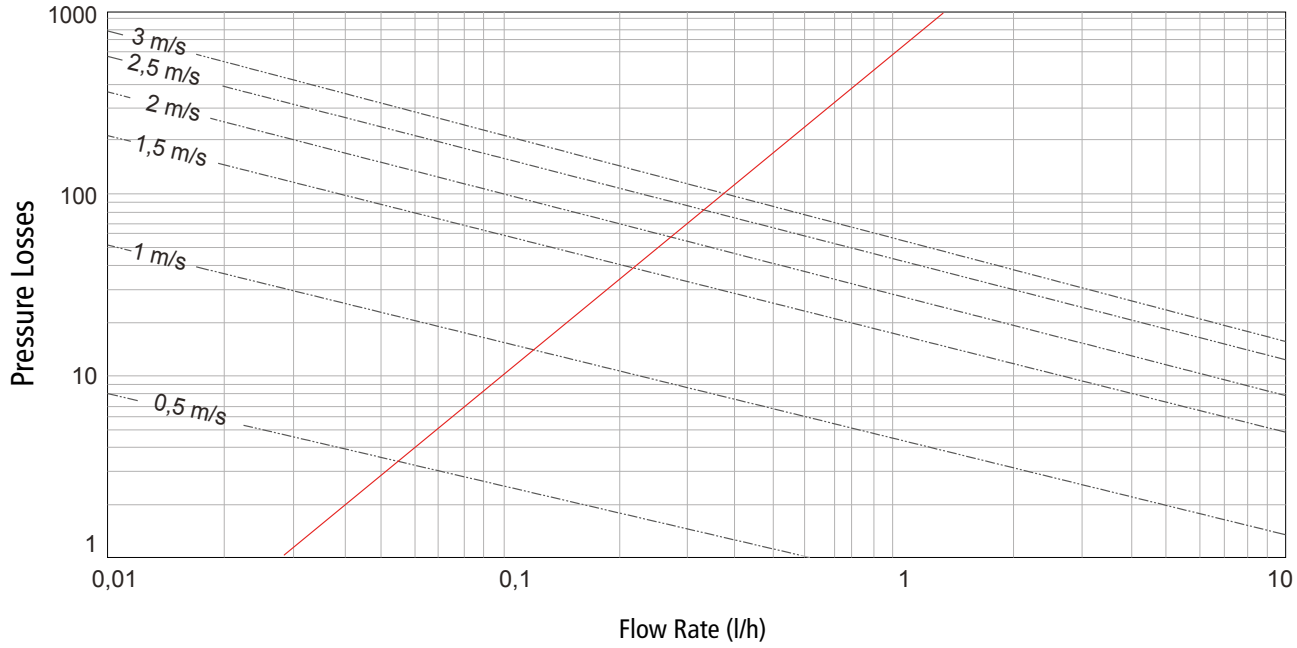
Süddeutsches Kunststoff-Zentrum
Amtlich anerkannte Prüfanstalt
für Kunststoffe GERMANY
A 154

Before casting the screed, pipes must be subjected to leak testing by means of a water pressure test. The test pressure must be double the operating pressure, with a minimum of 6 bar. The absence of leaks and test pressures must be specified in a test report validated by a qualified technician and accompanied by appropriate photographic documentation. If there is a risk of frost, the test must be performed with appropriate antifreeze products or by conditioning the building. If normal use of the system does not involve the use of antifreeze products, these must be drained and the circuits cleaned with at least 3 water changes. The test must last at least 24h. Pressure drops of less than 0.2 bar are permitted.
This procedure is mandatory for recognition of warranty on product manufacturing defects.

28

TECHNICAL DATA	U.M.	PLEISTAR M
Maximum temperature	°C	95
Maximum pressure	Bar	10
External diameter	mm	16
Internal diameter	mm	12
Weight per linear meter	kg/m	0,09
Water flow rate	l/s	0,072
Oxygen permeability	mg/l	0,0
Thermal expansion coefficient	mm/m°C	0,026
Thermal conductivity	W/m°C	0,043
Internal roughness coefficient	mm	0,007

PRESSURE DROP DIAGRAM

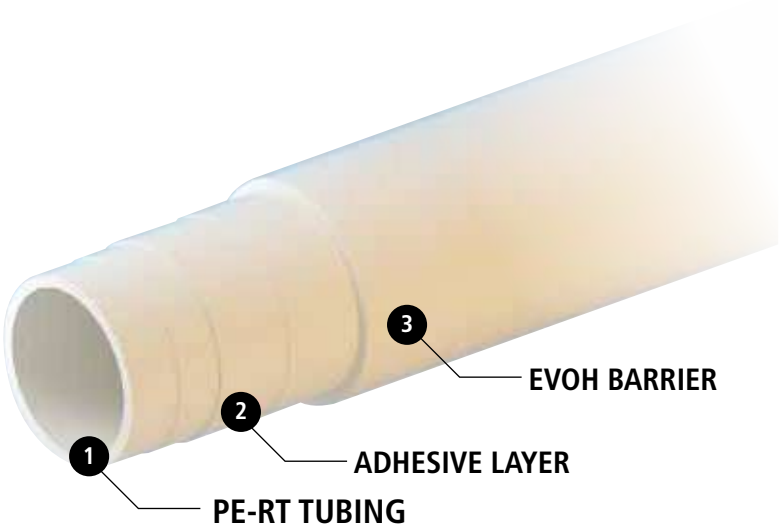


DESCRIPTION	PACKAGE (m)	CODE
PLEISTAR M PE-Xb-AL-PE-Xb Tube 16x2 mm	200	7091991620
PLEISTAR M PE-Xb-AL-PE-Xb Tube 16x2mm	500	7091991650
PLEISTAR M PE-Xb-AL-PE-Xb Tube 20x2mm preisolate	50	7071502005

PLEIPRO C



IN ROTOLO



PE-XC 3 STRATI

- THE PIPE FOR RADIANT SURFACE SYSTEMS

High-density polyethylene cross-linked pipe obtained with the cross-linking system according to method C "β electron rays" with classification in PE-Xc group. Product compliant with EN ISO 15875-2 standard and DIN 4726 standard regarding prescriptions on oxygen impermeability of EVOH barrier and minimum bending radii of pipes. Tests that guarantee the aforementioned compliance are regularly performed at SKZ laboratories. The use of PEX-c 8 pipe finds its perfect application in low-thickness floor radiant heating systems or for radiant wall-ceiling applications.

WHY CHOOSE PLEIPRO C

The EVOH barrier ensures oxygen impermeability characteristics over time. The composite structure of PLEIPRO C pipe guarantees high degrees of flexibility and therefore greater ease of installation, without modifying the hydraulic and physical characteristics of the pipe.

PROTECTION

The PLEIPRO pipe consists of a compact 3-layer structure:

- Inner layer made in PE-Xc, with an externally smooth surface
- Intermediate layer composed of a very thin layer of highly adhesive polymeric material that keeps the two PE-Xc and EVOH layers united
- Layer consisting of several tens of microns of EVOH or ethylene-vinyl-alcohol, a copolymer that acts as an oxygen anti-diffusion barrier. This avoids the problem of water oxygenation and consequent oxidation and corrosion of metallic components that make up the system

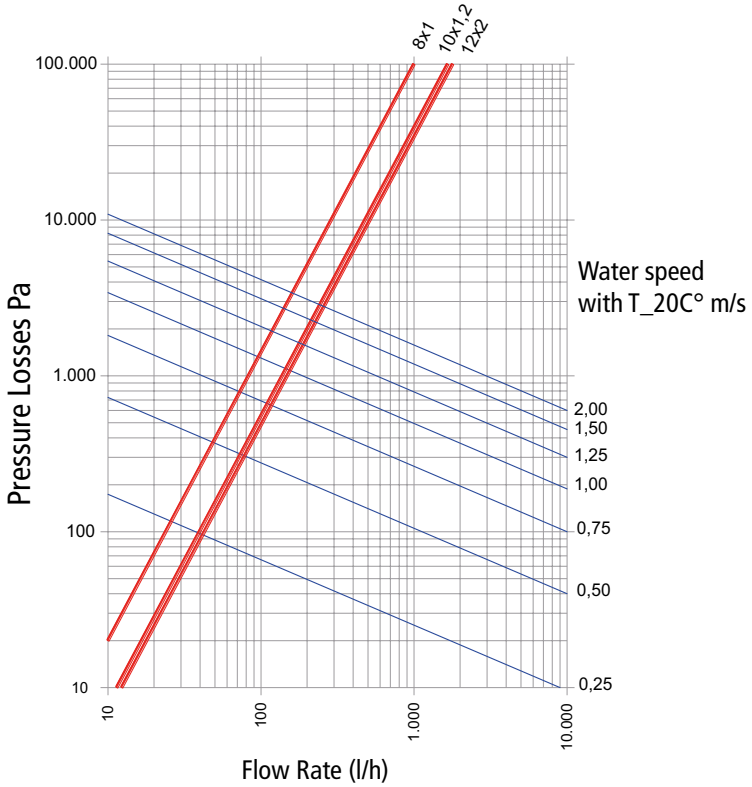
PRESSURE TEST CONDITIONS
PROCEDURE COMPLIANT WITH UNI EN 1264 PART 4:

Süddeutsches Kunststoff-Zentrum
Amtlich anerkannte Prüfanstalt
für Kunststoffe GERMANY
A 154

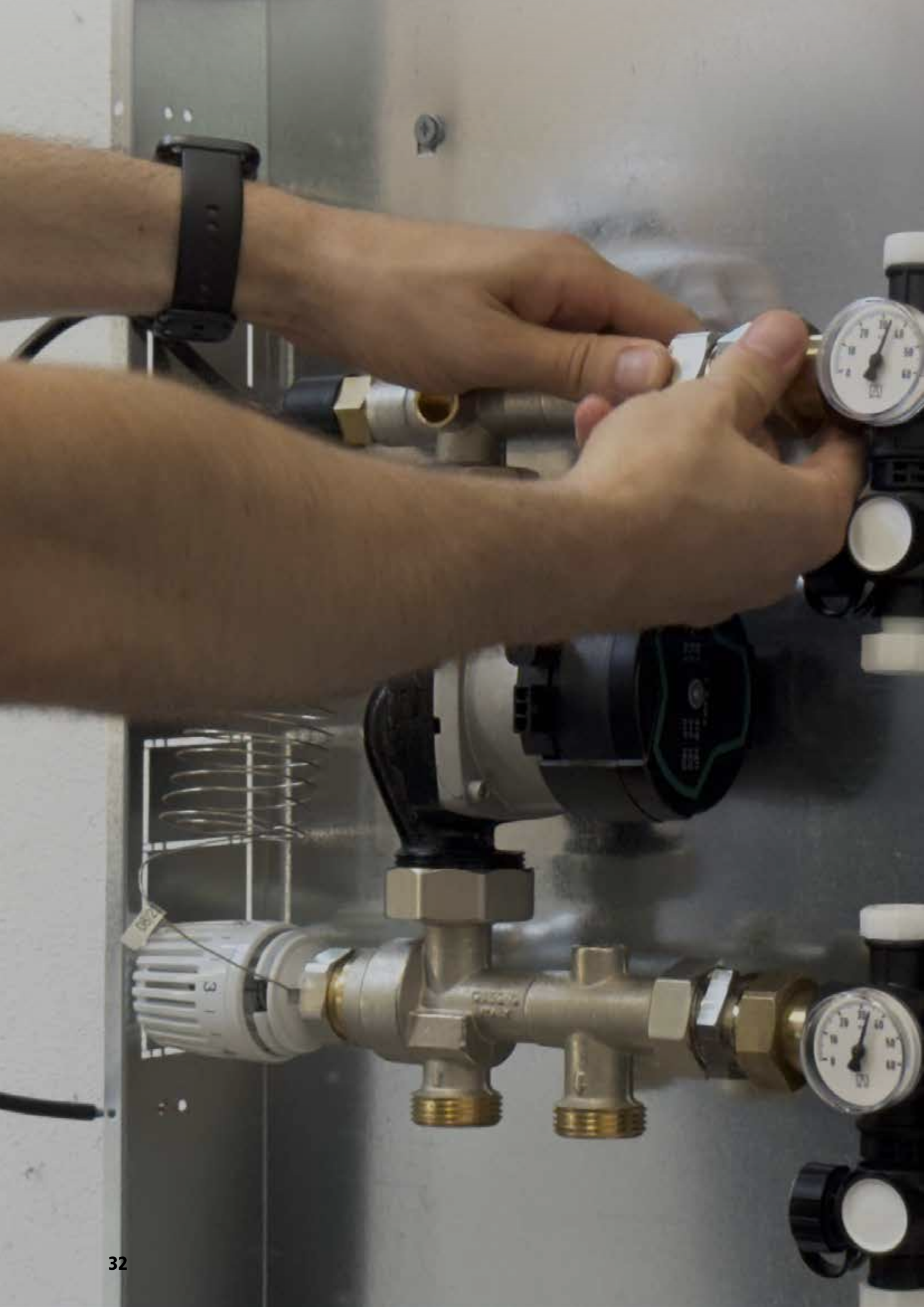
Before casting the screed, pipes must be subjected to leak testing by means of a water pressure test. The test pressure must be double the operating pressure, with a minimum of 6 bar. The absence of leaks and test pressures must be specified in a test report validated by a qualified technician and accompanied by appropriate photographic documentation. If there is a risk of frost, the test must be performed with appropriate antifreeze products or by conditioning the building. If normal use of the system does not involve the use of antifreeze products, these must be drained and the circuits cleaned with at least 3 water changes. The test must last at least 24h. Pressure drops of less than 0.2 bar are permitted.
This procedure is mandatory for recognition of warranty on product manufacturing defects.

TECHNICAL DATA	U.M.	PLEIPRO C 8X1
External diameter	(mm)	8
Internal diameter (mm)	(mm)	6
Water velocity	(m/s)	from diagram
Water volume per meter of pipe	(litri/metro)	0,028
Maximum operating pressure	(bar)	10
Weight per meter of pipe	(kg/m)	0,023
Volumetric mass (density) at 23°C	(kg/m³)	946
Operating range	(°C)	from +5°C a +100°C
Pipe roughness (Ra according to DIN EN ISO 4287)	(Ra secondo DIN EN ISO 4287)	1
Thermal conductivity	(W/mK)	0,41
Thermal expansion coefficient	(mm/m°C)	0,15
Oxygen permeability at 40°C DIN 4726	(g/m³d)	≤0,1
Oxygen permeability at 40°C ISO 17455	(mg/m²d)	≤0,32
Cross-linking degree (EN ISO 15875 - 2)	(%)	>60
Modulus of elasticity	(Mpa)	>600
Internal tensions over length (EN ISO 15875-2)	(%)	≤03
Minimum allowable bending radius (DIN 4726)		5*de
Elongation at break	(%)	500

PRESSURE DROP DIAGRAM



DESCRIPTION	PACKAGE (m)	CODE
PLEIPRO C 8x1 tube - 3 layers	**100**	7071600810



PLEION
The Sun is our Life!



MANIFOLDS

MANIFOLDS INTRODUCTION



PLEIDYNAMIC 2.0

PAGE: 36

1" manifold up to 15 circuits



PLEIMIX

PAGINA: 38

Cabinet unit for PLEIDYNAMIC 2.0 manifold



PLEIBOX

PAGINA: 52

Mounting in PLEIBOX P80 H630 cabinet





PLEITECNO 1" ¼

PAGE: 40

1" ¼ manifold specific for cooling systems



PREMIX

PAGINA: 42

CABINET UNIT FOR PLEITECNO 1" ¼ MANIFOLD



PLEIBOX

PAGINA: 52

Mounting in PLEIBOX P110 H700 cabinet



PLEITECNO MAXI 1" ½

PAGE: 44

1" ½ manifold designed for industrial applications



PLEIBOX

PAGINA: 52

Mounting in PLEIBOX P110 H700 cabinet



PLEITECNO FC

PAGE: 46

1" ¼ insulated manifold, specific for fan coils



PLEIBOX

PAGINA: 52

Mounting in PLEIBOX P110 H700 cabinet



PLEITECNO ⇋ PLEITECNO FC

PAGE: 48

Combination of PLEITECNO and PLEITECNO FC manifolds



PLEIBOX

PAGINA: 52

Mounting in PLEIBOX P110 H700 cabinet

PLEIDYNAMIC 2.0



INNOVATIVE MANIFOLD IN THERMOPLASTIC MATERIAL AND BRASS, MODULAR, WITH WIDE INTERNAL DIAMETER, WITH 1" HEADER FROM 2 TO 15 CIRCUITS, MOUNTING IN PLEIBOX P80 H630 CABINET

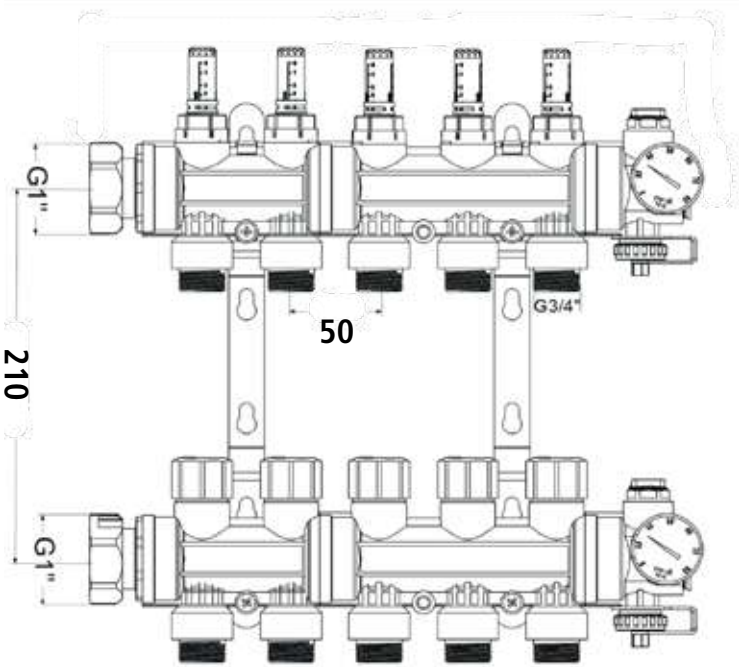
Manifold specifically designed for radiant systems for heating and cooling environments. Composed of 2 and 3 circuit modules to ensure maximum flexibility; connection between various modules is guaranteed by a patented double seal system with safety locking system.

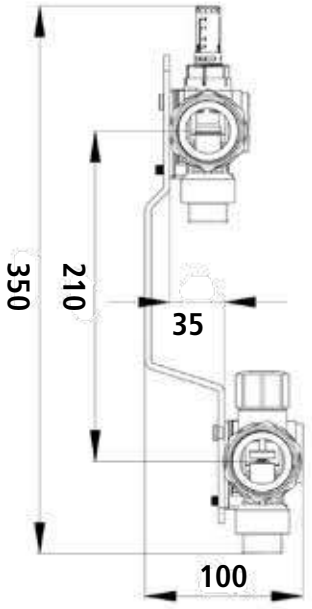
Compatible with PLEIBOX P80 H630 series cabinets and numerous available accessories such as the fixed point boost and mixing unit PLEIMIX directly connectable to the manifold and installable in PLEIBOX P110 H700 cabinet.

CHARACTERISTICS:
- Digital thermometer
- Innovative charging system, developed in a single component
- Headers complete with manual air vent valves
- Supply modules with regulating flow meters
- Return modules prepared for use of electrothermal actuators M30x1.5
- Bracket for cabinet or direct wall mounting

THE ACCESSORIES FOR THIS PRODUCT ARE AVAILABLE FROM PAGE 62

DIMENSIONS





SPECIFICATION	
Supply circuit	Girello 1" F
Branch circuits	¾" Eurocono M
Module spacing	50 mm
Number of circuits	2 - 15
Operating Temp./Press. - maximum	60°C - 6 bar 90°C - 3 bar
Regulating flow meter scale	1 - 3,5 l/min
Supply/return valve flow coefficient	0,75 m³/h

NEW

PRICE LIST			QUICK BOX GUIDE	
DESCRIPTION	WIDTH (mm)	CODE	PLEIBOX	BOX CODE
PLEIDYNAMIC 2+2 CIRCUITS	195	7072165002	**P80 - H630 - L400**	7073464140
PLEIDYNAMIC 3+3 CIRCUITS	245	7072165003	**P80 - H630 - L600**	7073464160
PLEIDYNAMIC 4+4 CIRCUITS	295	7072165004		
PLEIDYNAMIC 5+5 CIRCUITS	345	7072165005		
PLEIDYNAMIC 6+6 CIRCUITS	395	7072165006		
PLEIDYNAMIC 7+7 CIRCUITS	445	7072165007	**P80 - H630 - L850**	7073464185
PLEIDYNAMIC 8+8 CIRCUITS	495	7072165008		
PLEIDYNAMIC 9+9 CIRCUITS	545	7072165009		
PLEIDYNAMIC 10+10 CIRCUITS	595	7072165010		
PLEIDYNAMIC 11+11 CIRCUITS	645	7072165011		
PLEIDYNAMIC 12+12 CIRCUITS	695	7072165012	**P80 - H630 - L1000**	7073464110
PLEIDYNAMIC 13+13 CIRCUITS	745	7072165013		
PLEIDYNAMIC 14+14 CIRCUITS	795	7072165014		
PLEIDYNAMIC 15+15 CIRCUITS	845	7072165015	**P80 - H630 - L1200**	7073464112

PLEIMIX FOR PLEIDYNAMIC 2.0



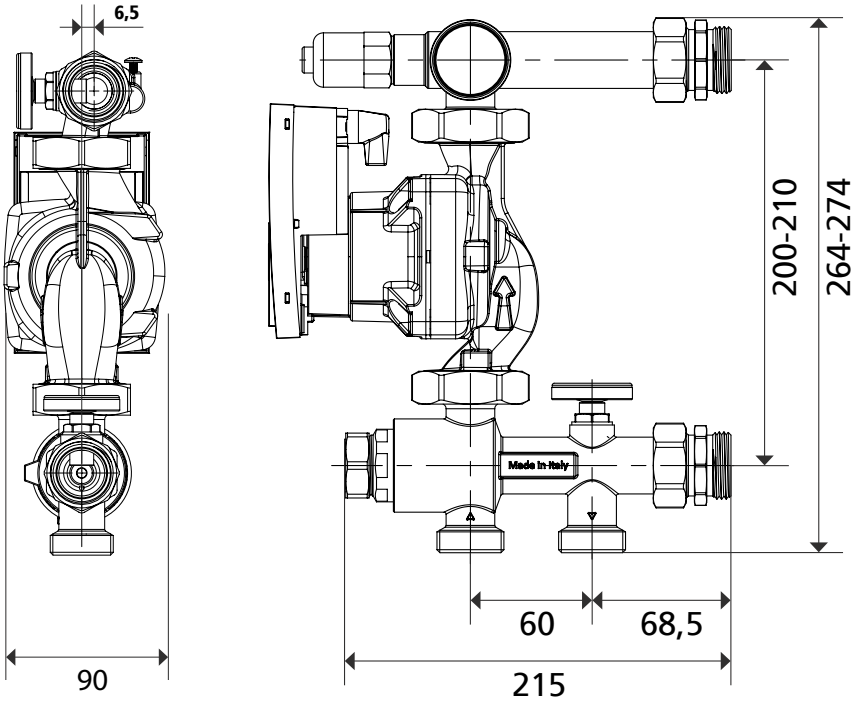
COMPACT SOLUTION FOR EASY INSTALLATION, MANAGEMENT AND REGULATION OF THE MANIFOLD, MOUNTING IN PLEIBOX P110 H700 CABINET

The PLEIMIX regulation unit is used for radiant panel heating and cooling solutions and installed directly in the cabinet on the distribution manifold thanks to its reduced dimensions, with depth less than 90 mm.

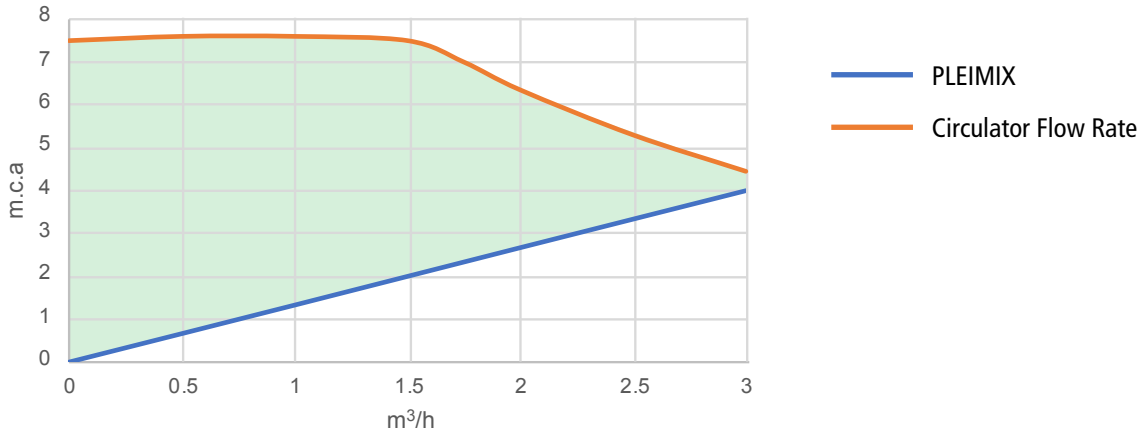
It performs the function of maintaining the fluid temperature set by means of a 3-way mixing valve that can be combined with a thermostatic or electronic control. The circulation pump allows fluid circulation in the pipes and a safety thermostat limits the maximum temperature to 55°C (as required by UNI EN 1264 standard) by switching off the circulator to lower the fluid temperature below the maximum allowed temperature. The regulation unit is assembled to the manifold by means of swivel fittings so that it can be easily removed later for maintenance or other needs.

Installation of the BY-PASS for PLEIMIX is recommended in the version without high temperature connections (code 7072996000) or with high temperature connections (code 7072996100) for recirculation of the supply circuit.

THE ACCESSORIES FOR THIS PRODUCT ARE AVAILABLE FROM PAGE 63



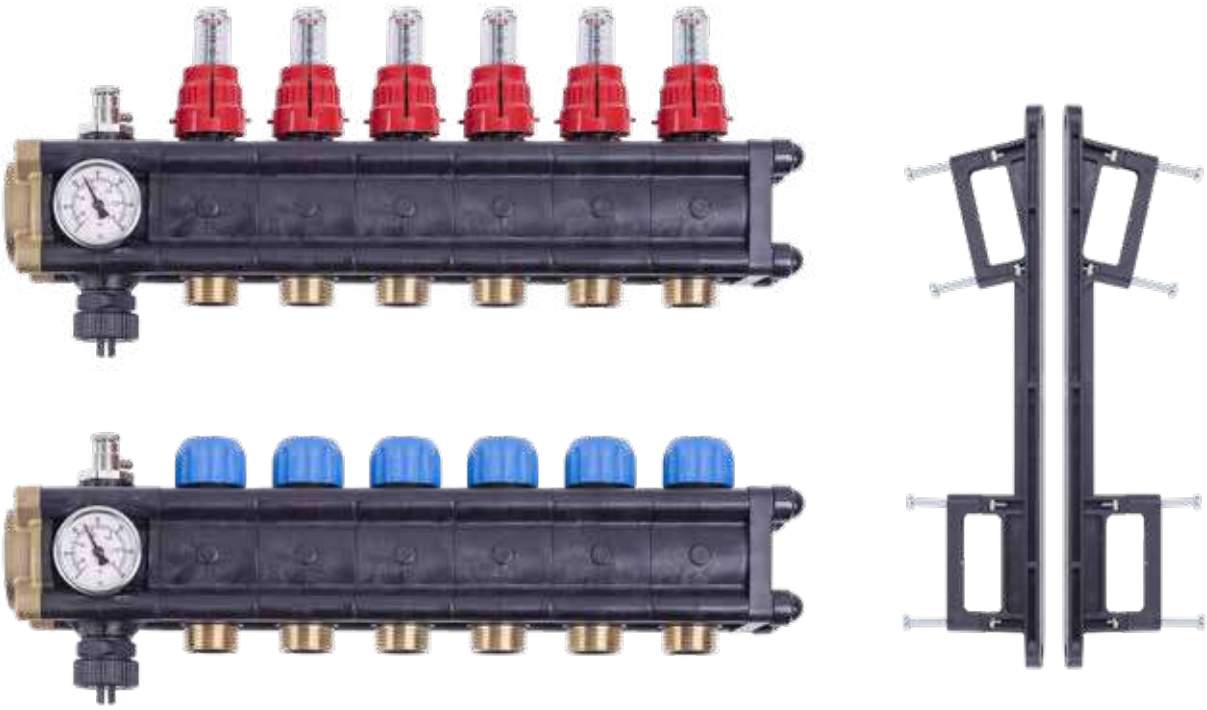
FLOW RATE AND PRESSURE DROP PLEIMIX



PRICE LIST		QUICK BOX GUIDE	
PLEIDYNAMIC 2.0	PLEIDYNAMIC + PLEIMIX WIDTH [mm]	PLEIBOX	BOX CODE
2+2 CIRCUITS	455	P110 H700 - L 850	7073564285
3+3 CIRCUITS	505		
4+4 CIRCUITS	555		
5+5 CIRCUITS	605		
6+6 CIRCUITS	655		
7+7 CIRCUITS	705	P110 H700 - L 1000	7073564210
8+8 CIRCUITS	755		
9+9 CIRCUITS	805		
10+10 CIRCUITS	855	P110 H700 - L 1200	7073564212
11+11 CIRCUITS	905		
12+12 CIRCUITS	955		
13+13 CIRCUITS	1005		
14+14 CIRCUITS	1055		
15+15 CIRCUITS	1105		

DESCRIPTION	CODE
PLEIMIX FOR PLEIDYNAMIC 2.0	7074563025

PLEITECNO 1"¼



FOR HOT AND COLD RADIANT SYSTEMS HIGH PERFORMANCE FROM 2 TO 16 CIRCUITS, MOUNTING IN PLEIBOX P110 H700 CABINET

Modular manifold in high-tech thermoplastic material for radiant heating and cooling systems with 1"¼ F connections and ¾"M Euroconus branches.

The material composing the modules is a polyamide reinforced with 50% glass fiber capable of giving the manifold mechanical characteristics similar to light alloys, but with significantly superior resistance to atmospheric agents.

Specific for radiant cooling systems due to its anti-condensation characteristic, suitable for use with pipes up to 20x2 mm. The manifold is distinguished by its low pressure drops given by the particular internal geometry of the modules, guaranteeing any operating condition without any resonance at high flow rates and low temperature differences; resistance to limestone deposits and therefore to any type of corrosion.

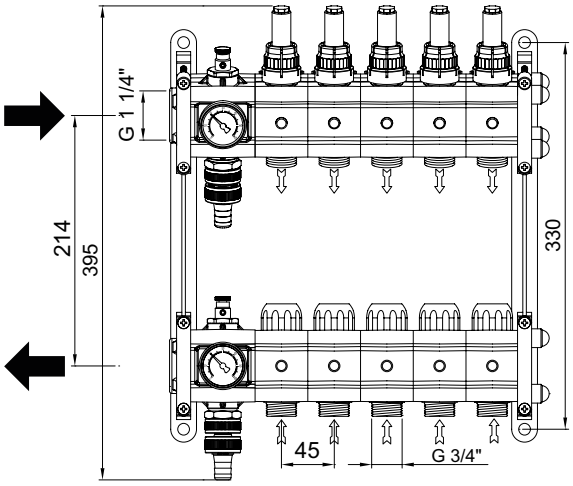
The manifold is complete with:
- Headers equipped with manual air vents and filling-draining taps
- Supply modules equipped with regulating flow meters with graduated scale 0.5÷5 l/min, with total closure function and possibility to replace-clean the transparent part
- Return modules for connecting electrothermal actuators M30X1.5
- Thermometers, brackets for cabinet mounting or directly to the wall

The headers, supply-return modules and terminals that make up the manifold are joined with threaded bars inserted in the 4 holes of each element. The tightening of the nuts placed on the terminal is carried out with a torque wrench to guarantee homogeneity of tightness and stability between the parts.

Insulation kit available on request to reduce thermal losses as well as eliminate condensation formation during system operation in cooling mode in case of low supply temperatures.

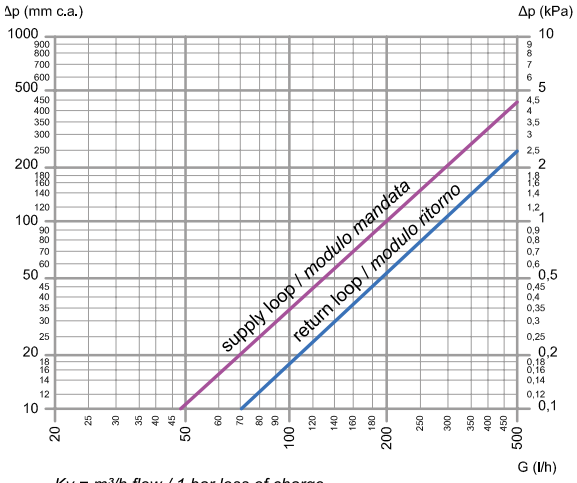
THE ACCESSORIES FOR THIS PRODUCT ARE AVAILABLE FROM PAGE 64

DIMENSIONS



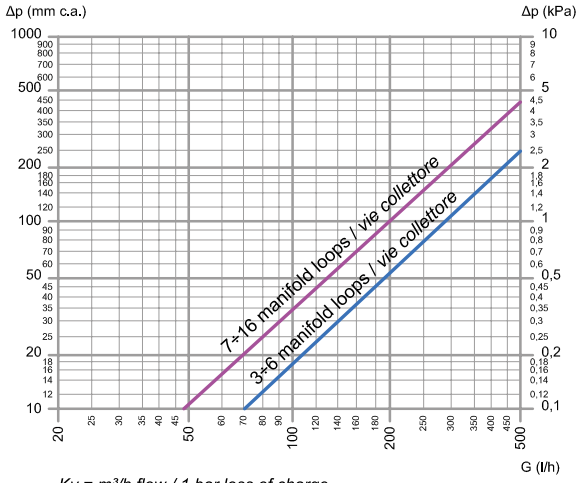
SPECIFICATION	
Supply circuit	1" ¼ F
Branch circuits	¾" Eurocono M
Module spacing	45 mm
Number of circuits	2 - 16
Minimum-maximum operating temperature and pressure	6 bar
	da 4°C a 70°C
Regulating flow meter scale	0,5 - 5 l/min
kvs supply-return (fully open) from 3 to 6 circuits	20 m³/h
kvs supply-return (fully open) from 7 to 15 circuits	16 m³/h

PRESSURE DROP DIAGRAMS



Kv = m³/h flow / 1 bar loss of charge
Kv = portata in m³/h per una perdita di carico di 1 bar

	Kv
supply loop totally open - *modulo mandata tutto aperto*	2
return loop totally open - *modulo ritorno tutto aperto*	2,9



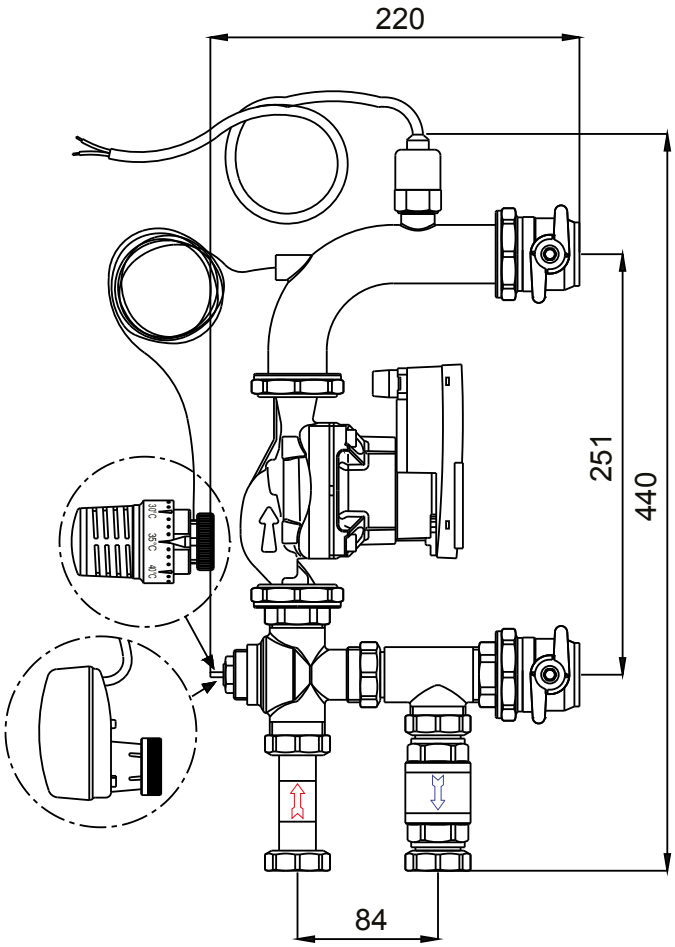
Kv = m³/h flow / 1 bar loss of charge
Kv = portata in m³/h per una perdita di carico di 1 bar

	Kv
3÷6 manifold loops totally open - *vie collettore totalmente aperte*	20
7÷16 manifold loops totally open - *vie collettore totalmente aperte*	16

PRICE LIST			QUICK BOX GUIDE	
DESCRIPTION	**WIDTH (mm)**	**CODE**	**PLEIBOX**	**BOX CODE**
PLEITECNO 2+2 CIRCUITS	195	7072214002	**P110 H700 - L 600**	7073564260
PLEITECNO 3+3 CIRCUITS	240	7072214003		
PLEITECNO 4+4 CIRCUITS	285	7072214004		
PLEITECNO 5+5 CIRCUITS	330	7072214005		
PLEITECNO 6+6 CIRCUITS	375	7072214006		
PLEITECNO 7+7 CIRCUITS	420	7072214007	**P110 H700 - L 850**	7073564285
PLEITECNO 8+8 CIRCUITS	465	7072214008		
PLEITECNO 9+9 CIRCUITS	510	7072214009		
PLEITECNO 10+10 CIRCUITS	555	7072214010		
PLEITECNO 11+11 CIRCUITS	600	7072214011		
PLEITECNO 12+12 CIRCUITS	645	7072214012		
PLEITECNO 13+13 CIRCUITS	690	7072214013	**P110 H700 - L 1000**	7073564210
PLEITECNO 14+14 CIRCUITS	735	7072214014		
PLEITECNO 15+15 CIRCUITS	780	7072214015		
PLEITECNO 16+16 CIRCUITS	825	7072214016	**P110 H700 - L 1200**	7073564212

PREMIX FOR PLEITECNO 1" ¼





COMPACT MIXING UNIT FOR RADIANT PANEL HEATING AND COOLING SOLUTIONS, MOUNTING IN PLEIBOX P110 H700 CABINET

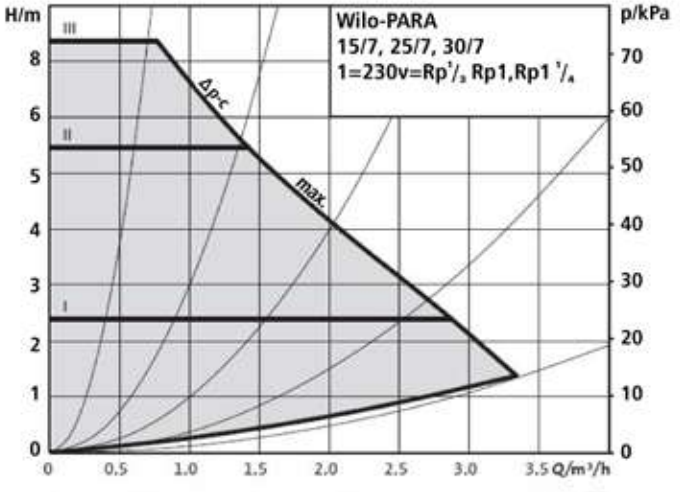
Mixing through thermostatic actuator, for fixed point regulation in heating-only systems, or through electronic actuator to be combined with a control system for climate regulation.

The boost and mixing unit is complete with:
• Circulator, with differentiated function of constant variable pressure and venting, useful during system start-up phases
• Safety thermostat, which limits the maximum supply temperature to 55°C, to be connected in series to the circulator, so as to switch it off when necessary

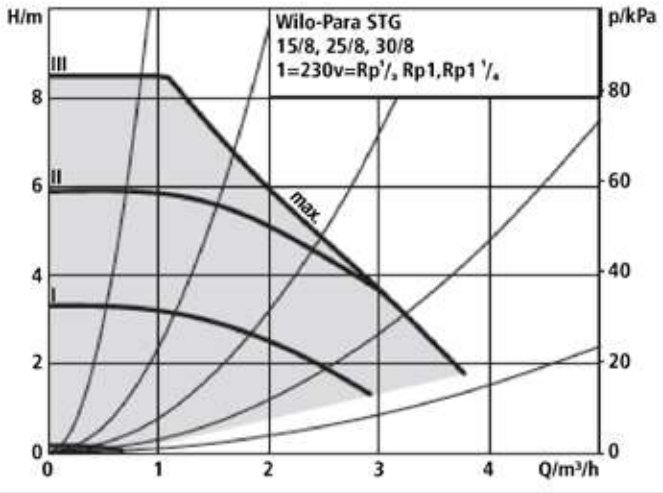
Installation of the By-pass in the version with or without high temperature connections is recommended for recirculation of the supply circuit.

THE ACCESSORIES FOR THIS PRODUCT ARE AVAILABLE FROM PAGE 64

STANDARD CIRCULATOR PERFORMANCE	
Model	YONOS PARA RS 25/7
Maximum head	7,7 m
Maximum flow rate	3,5 m³/h
Pump spacing	130 mm
Speed	700 - 4700 rpm
Power consumption	8,2 - 50 W
Current	0,07 - 0,43 A



ENHANCED CIRCULATOR PERFORMANCE	
Model	YONOS PARA RS 25/8
Maximum head	8,4 m
Maximum flow rate	4 m³/h
Pump spacing	130 mm
Speed	500 - 4800 rpm
Power consumption	10 - 75 W
Current	0,03 - 0,66 A



PRICE LIST		QUICK BOX GUIDE	
PLEITECNO	**PREMIX + PLEITECNO WIDTH [mm]**	**PLEIBOX**	**BOX CODE**
2+2 CIRCUITS	L 505	**P110 H700 L 850**	7073564285
3+3 CIRCUITS	L 550		
4+4 CIRCUITS	L 595		
5+5 CIRCUITS	L 640		
6+6 CIRCUITS	L 685	**P110 H700 L 1000**	7073564210
7+7 CIRCUITS	L 730		
8+8 CIRCUITS	L 775		
9+9 CIRCUITS	L 820	**P110 H700 L 1200**	7073564212
10+10 CIRCUITS	L 865		
11+11 CIRCUITS	L 910		
12+12 CIRCUITS	L 955		
13+13 CIRCUITS	L 1000		
14+14 CIRCUITS	L 1045		
15+15 CIRCUITS	L 1090		
16+16 CIRCUITS	L 1135		

DESCRIPTION	CODE
PREMIX FOR PLEITECNO	7072214500
PREMIX FOR PLEITECNO WITH UPSIZED CIRCULATOR 25-80	7072214501

DESIGNED FOR INDUSTRIAL APPLICATIONS

PLEITECNO MAXI 1" ½



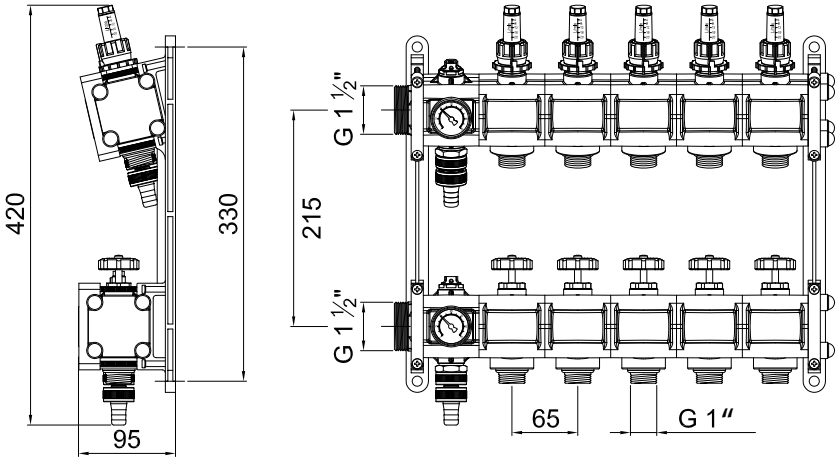
HIGH PERFORMANCE MANIFOLD - FROM 2 TO 16 CIRCUITS, MOUNTING IN PLEIBOX P110 H700 CABINET

Modular manifold for industrial radiant systems for heating and cooling, in technopolymer, pre-assembled, characterized by 1"½ supply circuit connections and 1"M Euroconus branches. Supply equipped with flow meter scale 4-20 l/min and return equipped with manual control without provision for using electrothermal actuators.

The PLEITECNO MAXI manifold is complete with supply-return modules, manual air vents, thermometers, terminals, filling-draining valve and brackets for wall or cabinet anchoring. The headers, modules and terminals are the main parts of the manifold joined by means of 4 threaded bars and sealing elements.

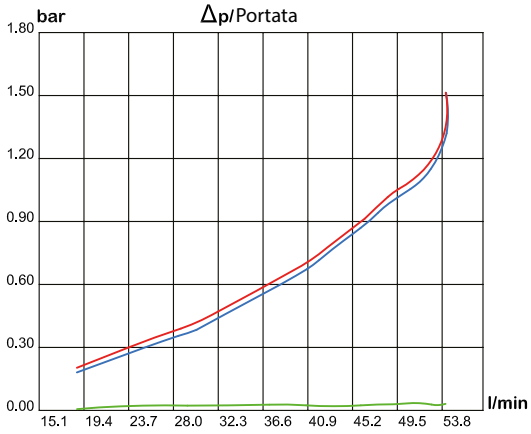
THE MANIFOLD IS DISTINGUISHED BY:
- Low pressure drops due to the internal geometry of the modules
- Resistance to limestone deposits and therefore to any type of corrosion
- High modularity to be adapted to all uses; economically advantageous compared to traditional solutions

DIMENSIONS



SPECIFICATION	
Supply circuit	1"½
Branch circuits	1"
Module spacing	65 mm
Number of circuits	2 - 17
Operating temperature and pressure (maximum)	from 4°C a 70°C
	6 (8) bar
Regulating flow meter scale	4-20 l/min

PRESSURE DROP DIAGRAMS



Pressure Data Summary

Starting Pressure	0,10 bar
End Pressure	1,50 bar
P1 Pressure	1,80 bar
Water temperature	26,99 °C
Ø Component Interior	20,00 mm

Pressure Drop (bar)			Component Flow Rate		Component Water Velocity (m/s)
MEASURED	SYSTEM	COMPONENT	(l/min)	(kg/min)	
0,203	0,001	0,201	18,63	18,57	0,99

PRICE LIST			QUICK BOX GUIDE	
DESCRIPTION	WIDTH (mm)	CODE	PLEIBOX	CODE
PLEITECNO MAXI 2+2	240	7072414002	**P110 H700 - L 600**	7073564260
PLEITECNO MAXI 3+3	305	7072414003		
PLEITECNO MAXI 4+4	370	7072414004		
PLEITECNO MAXI 5+5	435	7072414005	**P110 H700 - L 850**	7073564285
PLEITECNO MAXI 6+6	500	7072414006		
PLEITECNO MAXI 7+7	565	7072414007		
PLEITECNO MAXI 8+8	630	7072414008		
PLEITECNO MAXI 9+9	695	7072414009	**P110 H700 - L 1000**	7073564210
PLEITECNO MAXI 10+10	760	7072414010		
PLEITECNO MAXI 11+11	825	7072414011	**P110 H700 - L 1200**	7073564212
PLEITECNO MAXI 12+12	890	7072414012		
PLEITECNO MAXI 13+13	955	7072414013		
PLEITECNO MAXI 14+14	1020	7072414014		
PLEITECNO MAXI 15+15	1085	7072414015		
PLEITECNO MAXI 16+16	1150	7072414016		

ATTENTION: 1" BRANCHES FOR 25 X 2.3 PIPE

DESIGNED FOR FAN COIL SYSTEMS

PLEITECNO FC



INSULATED MANIFOLD FOR FAN COIL SYSTEMS, MOUNTING IN PLEIBOX P110 H700 CABINET

PLEITECNO FC is the new manifold designed to connect fan coil systems, unique in its kind thanks to its low internal pressure drops. It features ¾" euroconus connections and 1¼" headers.

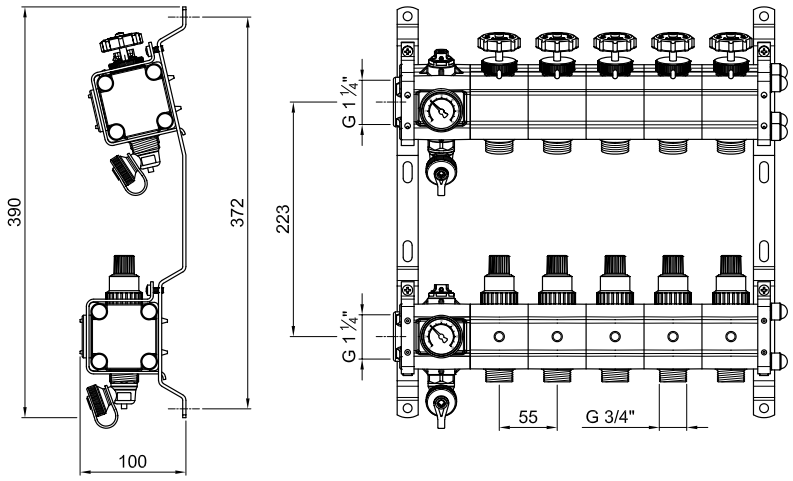
Supply modules include manual shut-off valves, while returns are equipped with thermostatic valve seats. The manifold is supplied with appropriate insulation kit.

PLEITECNO FC IS COMPOSED OF:

- A supply manifold complete with manual shut-off valves, air vent valve, drain tap and thermometer
- A return manifold complete with shut-off valves (prepared for actuators equipped with special ring nut with 30 x 1.5 mm thread), air vent valve, drain tap and thermometer
- Metal brackets for cabinet and/or wall housing

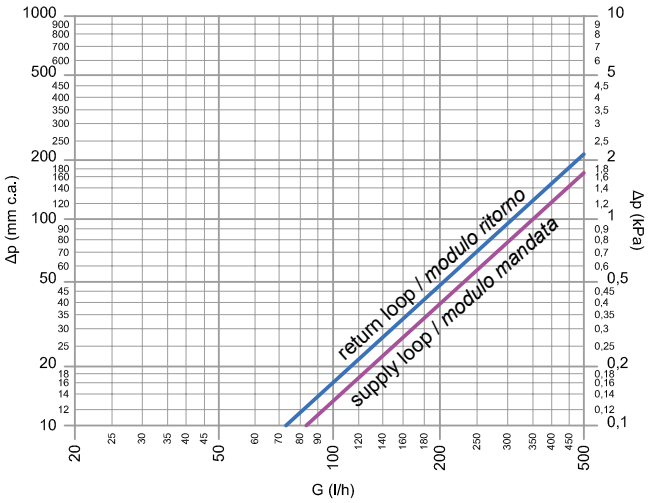
PLEION
The Sun is our Life!

DIMENSIONS

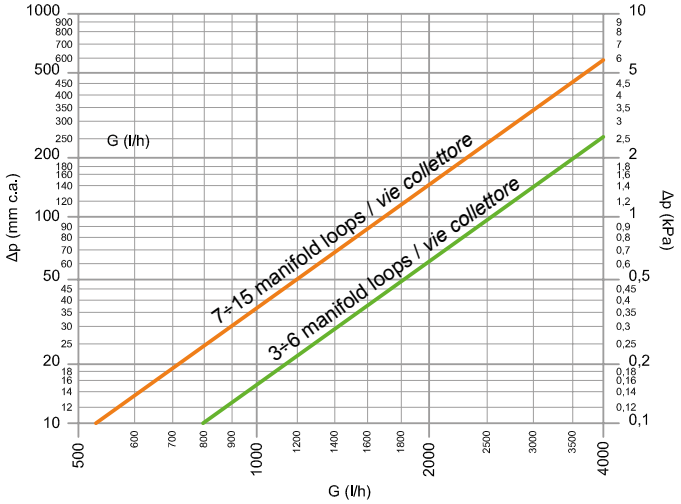


SPECIFICATION	
Max glycol percentage	50%
Standard operating pressure	1,5÷2,5 bar
Maximum operating pressure	6 bar
Test pressure	8 bar
Temperature range	2÷70 °C
Main connections	1 1/4" F
Branches	3/4" M Eurocono
Branch spacing	55 mm

PRESSURE DROP DIAGRAMS



Kv = portata in m³/h per una perdita di carico di 1 bar	Kv
modulo mandata tutto aperto	3,5
modulo ritorno tutto aperto	3,1



Kv = portata in m³/h per una perdita di carico di 1 bar	Kv
3÷6 vie collettore totalmente aperte	25,5
7÷15 vie collettore totalmente aperte	17

NEW

PRICE LIST			QUICK BOX GUIDE	
DESCRIPTION	WIDTH (mm)	CODE	CASSETTA	BOX CODE
PLEITECNO FC 2+2	210	7072913802	P110 H700 - L 600	7073564260
PLEITECNO FC 3+3	265	7072913803		
PLEITECNO FC 4+4	320	7072913804		
PLEITECNO FC 5+5	375	7072913805		
PLEITECNO FC 6+6	430	7072913806	P110 H700 - L 850	7073564285
PLEITECNO FC 7+7	485	7072913807		
PLEITECNO FC 8+8	540	7072913808		
PLEITECNO FC 9+9	595	7072913809		
PLEITECNO FC 10+10	650	7072913810		
PLEITECNO FC 11+11	705	7072913811	P110 H700 - L 1000	7073564210
PLEITECNO FC 12+12	760	7072913812		

COMBINED MANIFOLD
PLEITECNO ⇋ PLEITECNO FC



COMBINATION OF PLEITECNO AND PLEITECNO FC MANIFOLDS MOUNTED IN PLEIBOX P110 H700 ENCLOSURE

Combined manifold in thermoplastic material, allowing the connection of a radiant system and a fan coil system to a single manifold.

The two opposing and independent supply lines allow simultaneous control of the fluid temperatures in a differentiated manner. It is equipped with its own insulation to protect external elements from possible condensation. Supply manifold complete with flow meters (radiant side) and high-flow valves (fan coil side), automatic air vent valve, thermometer, and swivel drain valve on both supply lines.

- Return manifold prepared for electrothermal actuator control for both the radiant and fan coil sides.
- Head units with 1 1/4" connections according to ISO 228.
- Branches 3/4" Eurocone.
- Mounting brackets.

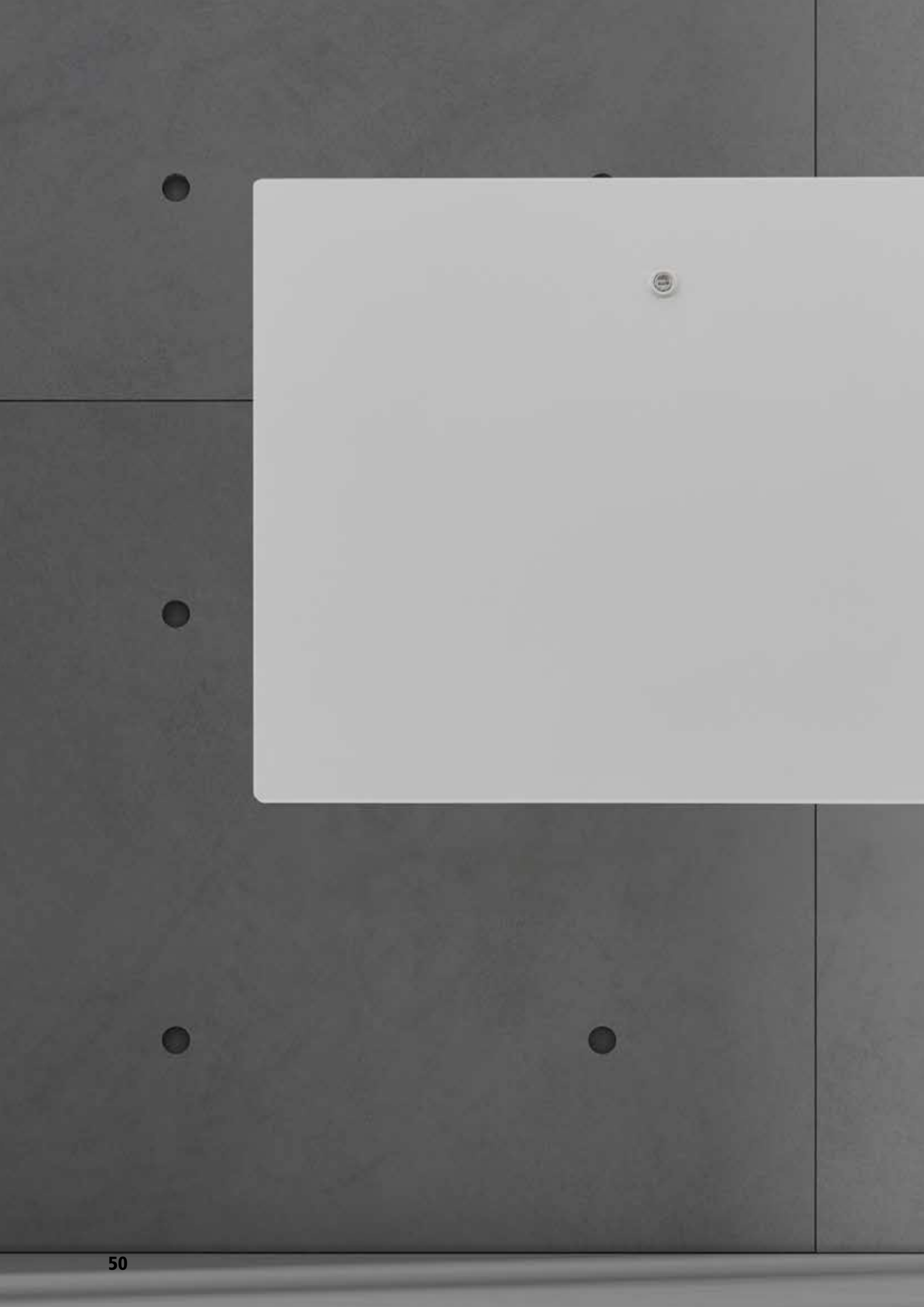
NEW

PRICE LIST		QUICK BOX GUIDE	
DESCRIPTION	CODE	CASSETTA	BOX CODE
KIT 2+2 VIE PER FANCOIL*	7078263802	**P110 H700 - L 1200**	7073564212
KIT 3+3 VIE PER FANCOIL*	7078263803		
KIT 4+4 VIE PER FANCOIL*	7078263804		

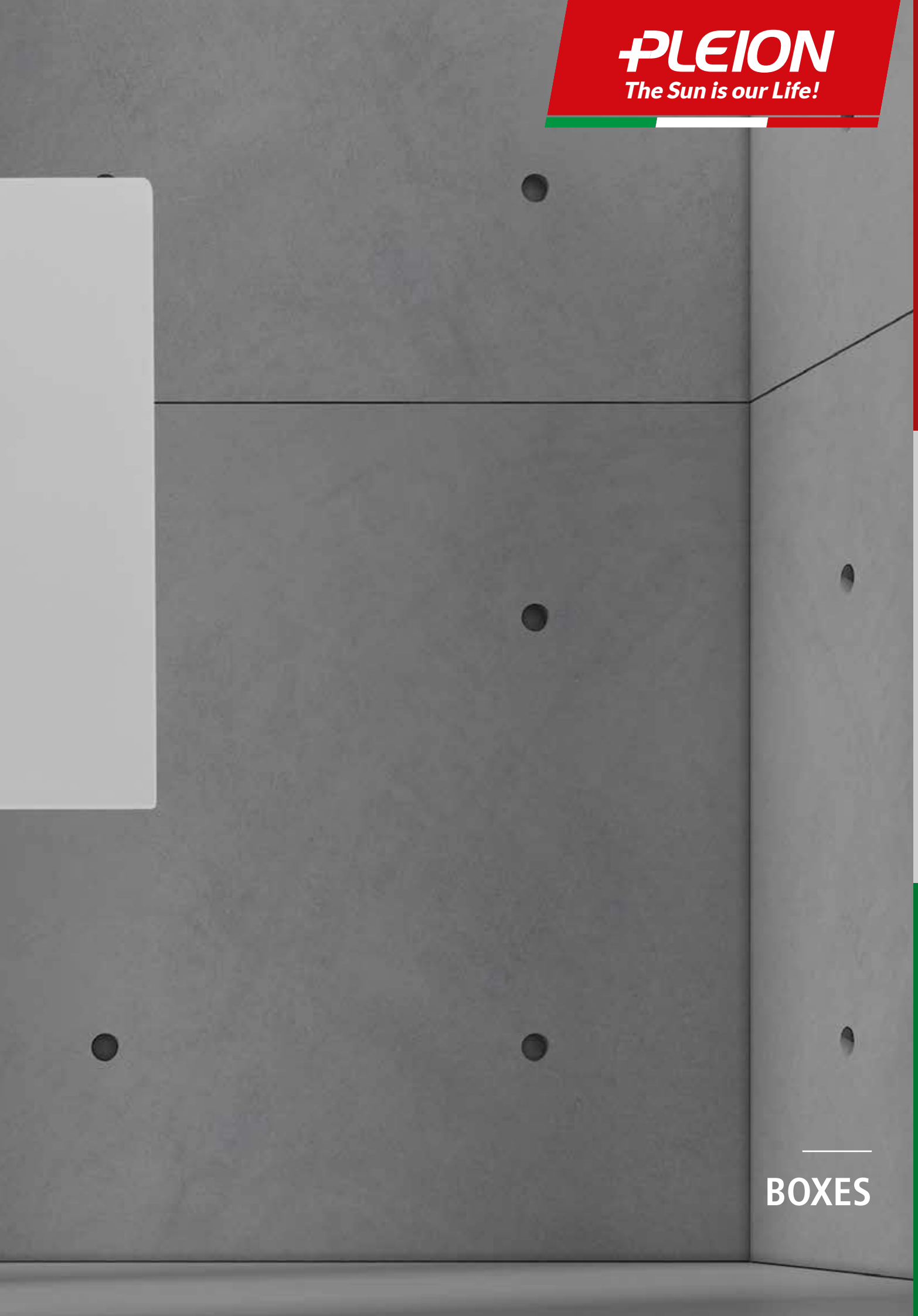
***CODES TO INCLUDE IN THE ORDER IN ADDITION TO THE PLEITECNO MANIFOLD**

PLEION
The Sun is our Life!

NOTE



PLEION
The Sun is our Life!



BOXES

PLEIBOX P80 H630 / P110 H700



FLUSH-MOUNT BOXES

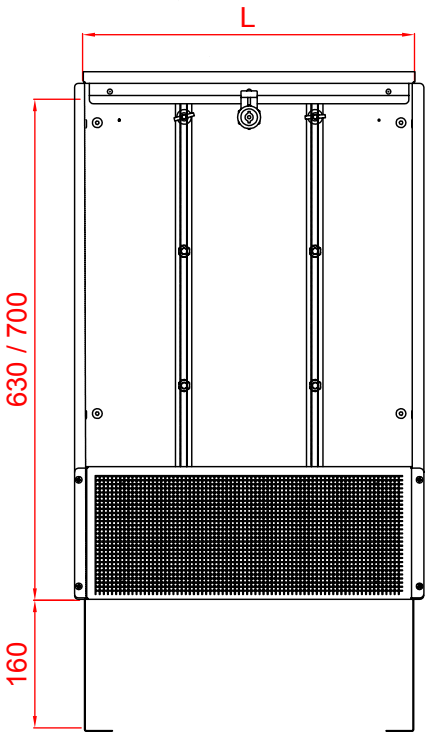
Robust and reliable metal box, complete with fiberglass mesh fixed on the rear bottom and on the front pipe passage strip. Pre-cut sides to simplify pipe passage. Telescopic feet adjustable in height up to 180 mm. Quick and easy pipe passage strip to insert with four self-tapping screws. Complete with 2 universal guides for fixing manifold brackets.

The frame is made of 8/10 hot-dip galvanized steel sheet. The frame and cover are made of galvanized steel and painted with RAL9016 epoxy-polyester powders. Complete with four M6 screws for depth adjustment through internal threading that allows the frame to distance itself from the box by 50mm. They are supplied in protective plastic bags. Cover is complete with a white plastic handle.

P80 H630
Depth of 80mm, height of 630mm and width up to 1200mm. Suitable for 1" manifolds.

P110 H700
Depth of 110mm, height of 700mm and width up to 1200mm. Suitable for 1"¼ manifolds and manifolds complete with boost and mixing units.

DIMENSIONS



DESCRIPTION	CODE
PLEIBOX P80 H630 - L 400	7073464140
PLEIBOX P80 H630 - L 600	7073464160
PLEIBOX P80 H630 - L 850	7073464185
PLEIBOX P80 H630 - L 1000	7073464110
PLEIBOX P80 H630 - L 1200	7073464112
PLEIBOX P110 H700 - L 600	7073564260
PLEIBOX P110 H700 - L 850	7073564285
PLEIBOX P110 H700 - L 1000	7073564210
PLEIBOX P110 H700 - L 1200	7073564212

PLEION
The Sun is our Life!

PLEIBOX DESIGN P80 H550 / P120 H700

NEW



BOX WITH TELESCOPIC STRUCTURE WITHOUT FRAME, HIGH QUALITY, MADE IN ITALY

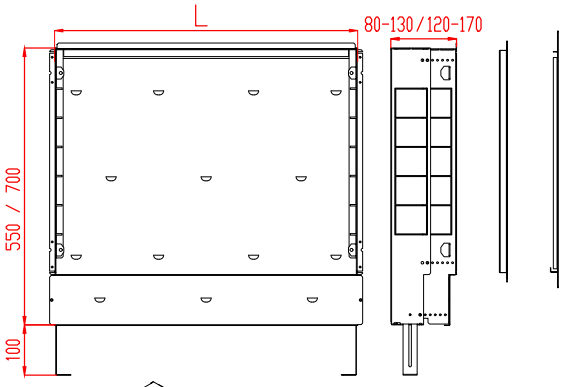
Unique characteristics of this model:

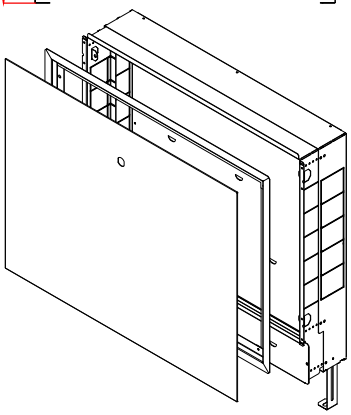
- Galvanized steel cover with rounded edges, without frames
- Aluminum frame disappearing under the front cover
- Box base with rounded edges
- Boxes extendable in depth and height
- Telescopic structure that allows extending the box with 80mm depth up to 130mm, and extending the box with 120mm depth up to 170mm; it is possible to extend the various depths by an additional 15mm through cover adjustment with the screws supplied.

The boxes have adjustable feet that allow height extension up to 100mm.

The cover is fixed to the frame (disappearing) at the bottom through metal pins, while in the upper part with metal block screwdriver slot, thus ensuring perfect and secure anchoring

DIMENSIONS

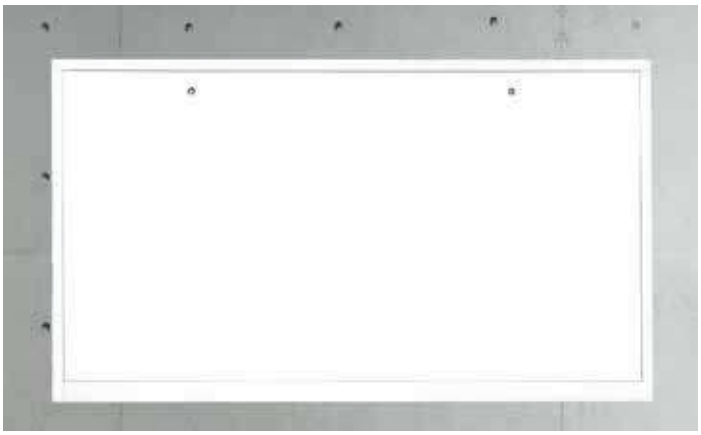


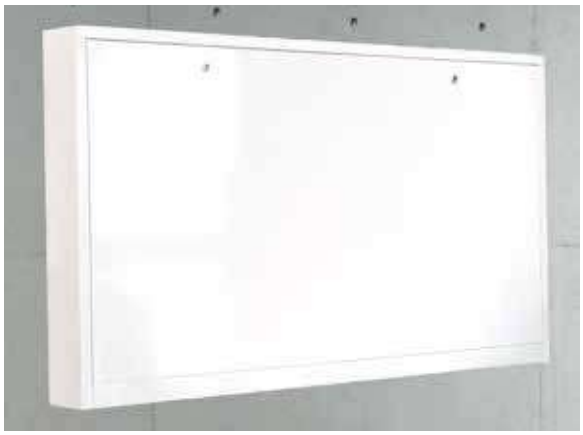


NEW

DESCRIPTION	CODE
PLEIBOX DESIGN P80 H550 - L600	7073467060
PLEIBOX DESIGN P80 H550 - L1000	7073467010
PLEIBOX DESIGN P120 H700 - L850	7073567285
PLEIBOX DESIGN P120 H700 - L1200	7073567212

PLEIBOX OUTDOOR P140 H800





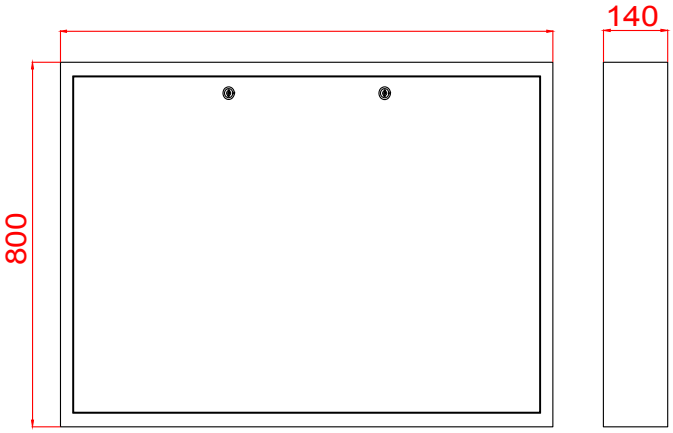
OUTDOOR BOXES

Robust outdoor metal box, ideal for industrial buildings.

The frame and cover are made of 8/10 galvanized steel and painted with RAL9016 epoxy-polyester powders. This box has an open bottom so that it can be installed even after the manifold. Cover is complete with a white plastic handle.

Depth of 140mm, height of 800mm and width up to 1400mm. Suitable for 1"½ manifolds.

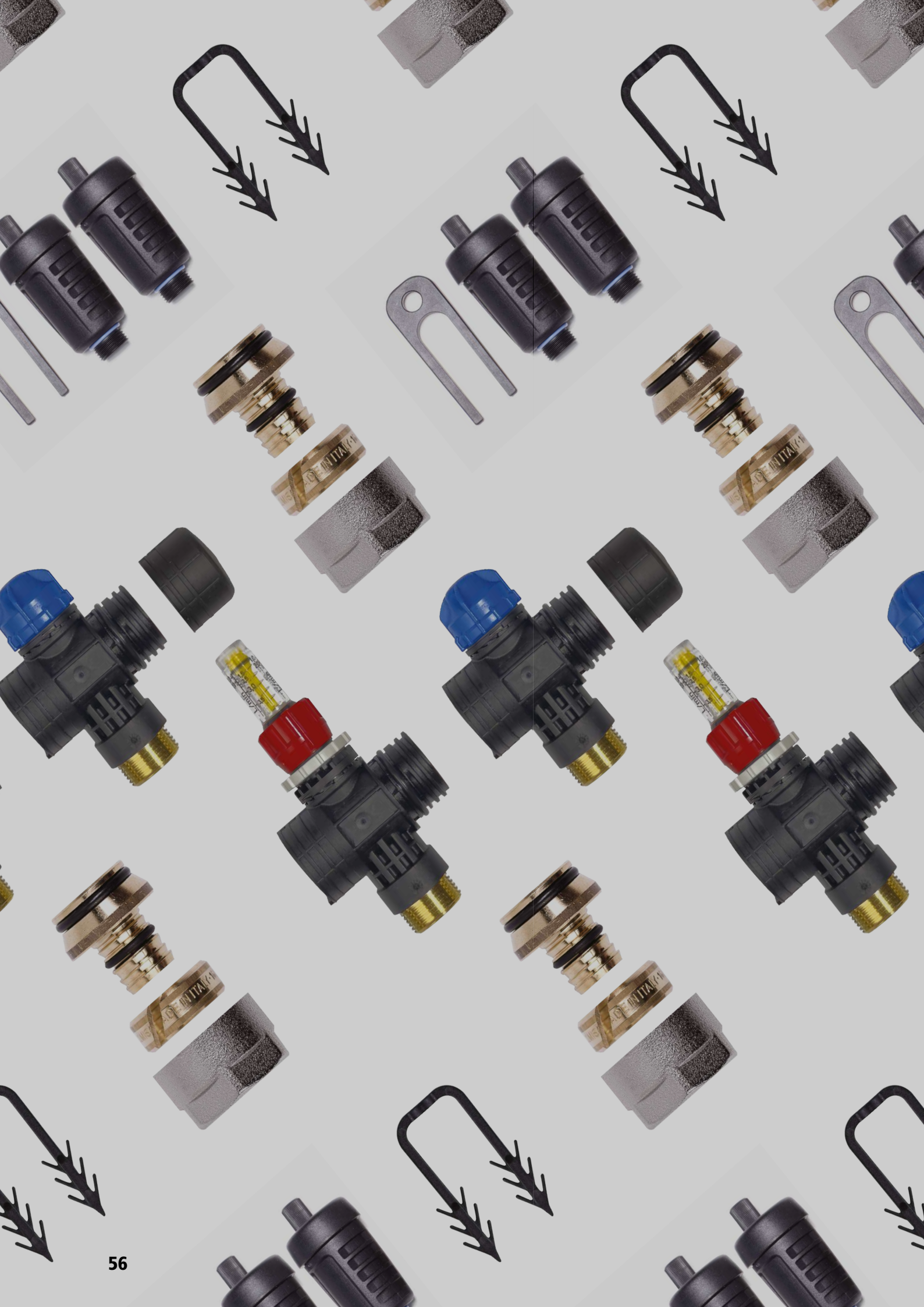
DIMENSIONS



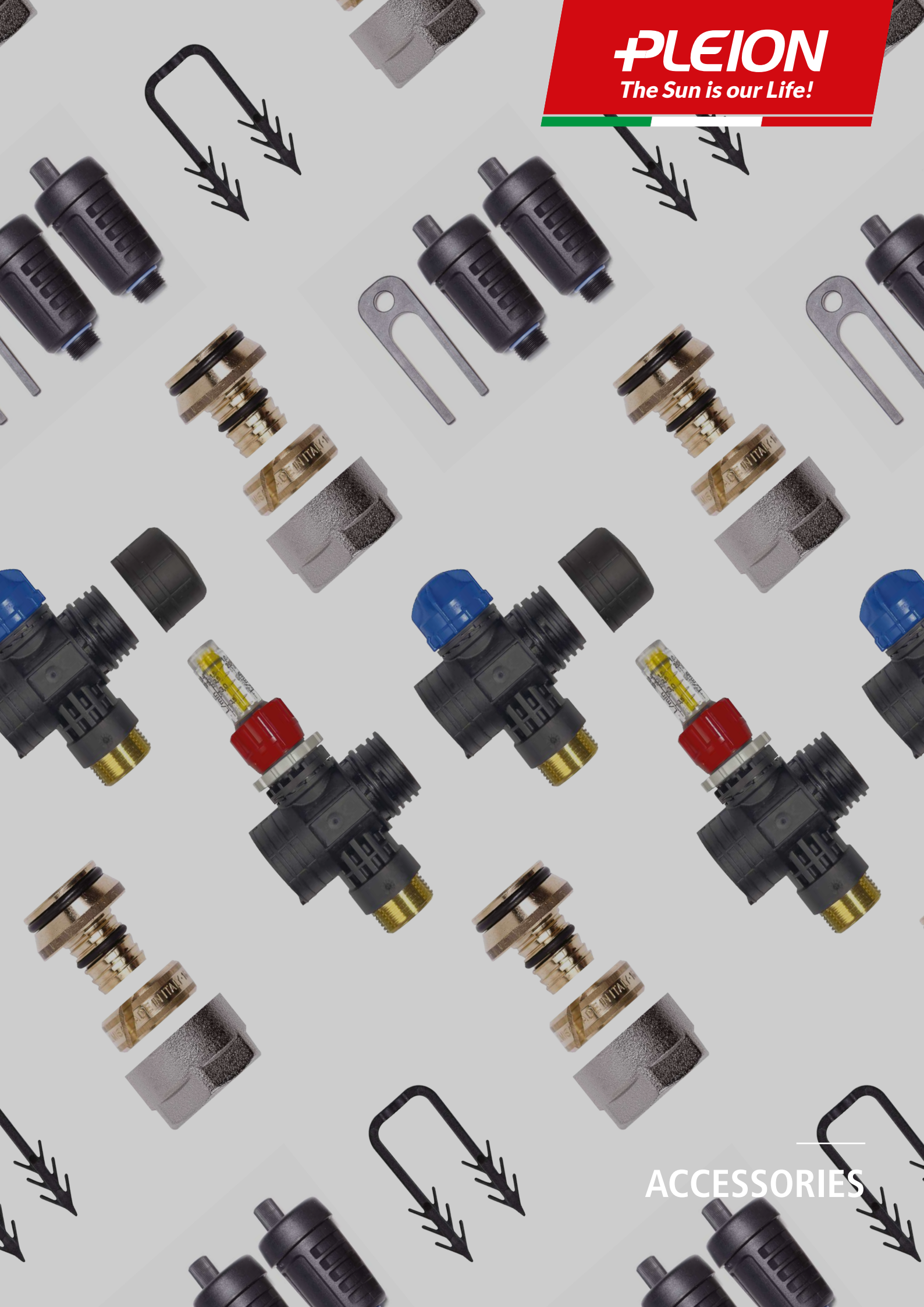
DESCRIPTION	CODE
PLEIBOX OUTDOOR P140 H800 - L800	7073964380
PLEIBOX OUTDOOR P140 H800 - L1000	7073964310
PLEIBOX OUTDOOR P140 H800 - L1200	7073964312
PLEIBOX OUTDOOR P140 H800 - L1400	7073964314

PLEION
The Sun is our Life!

NOTE



PLEION
The Sun is our Life!



ACCESSORIES

PANEL ACCESSORIES



FLEXIBLE THERMAL-ACOUSTIC INSULATION SHEATH

Chemical-elasticized expanded polyethylene sheath with closed cells, available in rolls to facilitate installation, to be used in combination with all PLEION radiant panels to further increase the acoustic performance of the floor "package".

CHARACTERISTICS	Test Method	Value
Density (kg/m³)	(kg/m³)	30
Thermal conductivity coefficient (W/mK)	(W/mK)	0,035-0,039
Footfall sound insulation ΔLw (dB)	(dB)	da 20 a 25
Footfall sound insulation L'n,w on site (dB)	(dB)	da 56 a 59
Dynamic rigidity (MN/m³)	(MN/m³)	42

DESCRIPTION	PACKAGE	CODE
Thermal-acoustic insulation sheath 10 mm	65 m²	7070356310



VAPOR BARRIER SHEET

Multi-layer low-density polyethylene vapor barrier sheet, to be positioned under the radiant system panel to eliminate vapor rise. Available in 250 m² rolls.

DESCRIPTION	PACKAGE	CODE
Polyethylene sheet th. 0.22	250 m²	7078551110



CIVIL AND INDUSTRIAL PERIMETER TAPE

Specific perimeter strip for radiant systems to be positioned along the entire perimeter of the system installation environment. It has the function of compensating for any settling of the screed. Made of expanded polystyrene with closed cells, lightweight, waterproof, rot-proof and resistant to mold and with high resistance to chemical aggregations and alkaline reactions of cement products. Combined with a partially adhesive band to improve its application on the perimeter structure such as walls and pillars, provided with 200 mm PLEION branded nylon band to be folded over the panels, to prevent infiltration of cement screed under the system during casting.

Civil perimeter tape dimensions: th. 6 mm, h 150 mm, l 50 m

Industrial perimeter tape dimensions: th. 10 mm, h 250 mm, l 50 m

Property	Test Method	Civil Perimeter Ta-pe	Industrial Perimeter Tape
Density (kg/m³)	interno	22-25	23-25
Conductivity coefficient	UNI EN 12667	0,035-0,039 W/mK	0,039
Compression stress at 10% de-forma-tion	UNI EN 826	13,002 kPa	13,002 kPa
Operating temperature	interno	da -20°c a + 70°C	da -20°c a + 70°C

DESCRIPTION	PACKAGE	CODE
Civil adhesive perimeter tape H 150	50 m	7078101050
Industrial adhesive perimeter tape H 250	50 m	7078201050

TUBING ACCESSORIES



FOR MULTILAYER PIPES



FOR POLYETHYLENE PIPES

BRASS COMPRESSION FITTING KIT FOR MULTILAYER OR POLYETHYLENE PIPES

3-unit compression adapter for connections between manifold and multilayer or polyethylene pipes. Composed of nickel-plated brass nut with ¾" F Euroconus thread, brass gripping ring for sealing on ¾" M Euroconus connection (1" for PE-X 25x2.3mm).

DESCRIPTION	CODE
Compression fitting kit for multilayer pipe 16x2	7074201016
Compression fitting kit for multilayer pipe 20x2	7074201020
Compression fitting kit for PE-X pipe 17x2	7074101017
Compression fitting kit for PE-X pipe 20x2	7074101020
PE-X connection group 1"x 25x2.3 mm for PLEITECNO MAXI	7074202026
ADAPTER KIT 3/4-26X3	7079123802



PIPE GUIDE CURVES

90° curve in black polyamide, specific for vertical support of cold pipe near the distribution manifold and protection from possible impacts.

DESCRIPTION	CODE
Pipe guide curve for Ø 16 - 18 mm	7079302017
Pipe guide curve for Ø 20 - 22mm	7079302020
Pipe guide curve for Ø 25 - 28 mm	7079302025



MANUAL FLAT FIXING CLIP

Black polypropylene flat clip for manual use, for better pipe fixing near inversion curves to expanded polystyrene insulating panels equipped with raised studs for pipe laying. Also to be used for fixing fiberglass mesh. One clip is recommended every 5-10 m of linear pipe while near the curve according to common sense standards. Dimensions: l 75 mm; h 28 mm.

DESCRIPTION	PACKAGE	CODE
Manual flat fixing clip	100 pz	7079202075



MANUAL CLIP

Molded polyethylene clip for manual use, for better pipe fixing near inversion curves to smooth expanded polystyrene insulating panels. Also to be used for fixing modulation bars for industrial type systems.

Available in versions:

- **H39 min panel thickness 20 mm - diam. up to 20 mm**
- **H45 min panel thickness 25 mm - diam. up to 20 mm**
- **H50 min panel thickness 30 mm - diam. up to 20 mm**

DESCRIPTION	PACKAGE	CODE
Manual fixing clip H39	200 pz	7079222039
Manual fixing clip H45	200 pz	7079222045
Manual fixing clip H50	200 pz	7079212050

TUBING ACCESSORIES



AUTOMATIC CLIP

Molded polyethylene clip for AUTOMATIC use thanks to the installation system with special clip-fixing tool CODE 7079802100. Used for better pipe fixing near inversion curves to smooth expanded polystyrene insulating panels. The clips are supplied in strips of 30 pcs each. A "special version" called STRONG CLIP is available for all insulators covered with aluminum foil, guaranteeing perfect penetration and seal.
Available in versions:

- H39 min panel thickness 20 mm and diam. up to 20 mm
- H42 min panel thickness 25 mm and diam. up to 20 mm
- H45 min panel thickness 30 mm and diam. up to 20 mm

DESCRIPTION	PACKAGE	CODE
Automatic fixing clip H39	30 pz	7079242039
STRONG automatic fixing clip H42	30 pz	7079242042
Automatic fixing clip H45	30 pz	7079242045



MODULATION BAR

Reinforced polyamide modulation bar equipped with holes used to fix it through clips to the smooth insulating panel or directly through the clip already present.
Available in versions:

- diam. 16 - 17 mm, step 50 mm. Dimensions: l 1000 mm, h 28 mm, p 40 mm
- diam. 17 - 25 mm, step 100 mm. Dimensions: l 1000 mm, h 28 mm, p 40 mm
- diam. 20 mm. Dimensions: l 1000 mm, h 30 mm, p 50 mm with fixing clip

DESCRIPTION	CODE
Modulation bar pipe Ø 17 step 50	7079502017
Modulation bar pipe Ø 17 - 25 step 100	7079502025
Modulation bar pipe Ø 20 step 50	7079502120



MANUAL CLIP

Pipe fastening clip for manual cup fixing of Ø 17 – 20 mm pipe to welded mesh. Equipped with feet to lift the mesh from the subfloor base. Available in versions:

- wire 3 - diam. 17 mm
- wire 5 - diam. 20 mm
- wire 5 - diam. 25 mm

DESCRIPTION	PACKAGE	CODE
Manual mesh clip wire Ø 3 pipe Ø 17	200 pz	7079242317
Manual mesh clip wire Ø 5-5.5 pipe Ø 20	100 pz	7079242520
Manual mesh clip wire Ø 5-5.5 pipe Ø 25	100 pz	7079242525



AUTOMATIC CLIP

Pipe fastening clip for automatic anchoring thanks to the clip fixing tool CODE 7079802200, for anchoring Ø 14 - 20 mm pipe to Ø 3 mm wire welded mesh. Equipped with feet to lift the mesh from the subfloor base.

DESCRIPTION	PACKAGE	CODE
Automatic mesh clip wire Ø 3 pipe Ø 14-20	50 pz	7079252317



PIPE FASTENER FOR INDUSTRIAL MESH

Element for fixing tubing with maximum diameter 25 mm to industrial mesh wire 10 mm.

DESCRIPTION	CODE
Industrial mesh pipe fastener – Ø 25 mm - Wire Ø 10 mm	7079502725



SPACER FOR DOUBLE MESH – INDUSTRIAL SYSTEMS

Double mesh spacer for anchoring welded mesh in concrete pours, ensures lifting of 30 mm and optimal distance between the two meshes of 55 mm and pipes.

DESCRIPTION	CODE
Spacer for double welded mesh	7079502895



CLIP FIXING TOOL

Tool used for automatic anchoring of automatic clips CODE 7079242039 / 7079242042 / 7079242045 to smooth expanded polystyrene panels with and without aluminum coating.

CLIP FIXING TOOL

Tool used for automatic anchoring of clips CODE 7079252317 for Ø14 - 20 mm pipe to Ø 3 mm wire welded mesh.

DESCRIPTION	CODE
Clip fixing tool	7079802100
Mesh clip fixing tool	7079802200



REEL UNWINDER

Pipe unwinder to be used to facilitate on-site pipe installation. Possibility of working with both small and large reels. Built in tropicalized steel, equipped with ball bearings to ensure optimal rotation with 5-spoke base. Adjustable according to reel dimensions. Supplied for assembly. Dismountable to facilitate transport and reduce bulk.

DESCRIPTION	CODE
Reel unwinder	7079602000



DOUBLE STRAIGHT FITTING

Double straight fitting 2x¾"M to be coupled to the compression fitting kit for pipe repair. Made of nickel-plated brass.

DESCRIPTION	CODE
Double straight fitting	7074301010



INSULATING SHEATH FOR PIPES

Extruded polyethylene tube to be used for thermal protection of pipes in the first section of connection to the floor radiant system manifold Ø 18-20, or as thermal protection for supply pipes of the radiant ceiling-wall system Ø 8-20.

Technical characteristics: operating temperature from -45°C to +95°C, specific weight 30-35 kg/m³, thermal conductivity coefficient (EN 12667:2001 at +40°C β=0.035 W/mK), excellent vapor permeability μ=10,000, fire behavior (class BL-s1 d0).

DESCRIPTION	CODE
Insulating sheath for pipes Ø8 – th 6	7078801008
Insulating sheath for pipes Ø18 – th 6	7078801018
Insulating sheath for pipes Ø20 – th 10	7078801420

MANIFOLD ACCESSORIES



BALL VALVE PAIR

Pair of ball valves for flow interception to the manifold when necessary.

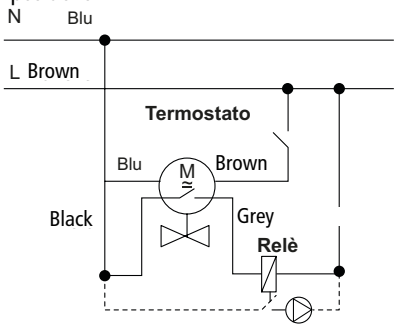
DESCRIPTION	CODE
Ball valve pair 1"	7075103025
Ball valve pair 1"¼	7075103032
Ball valve pair 1"½ F-F	7075106025



22CX ACTUATOR

USE: 4-wire electrothermal actuator with auxiliary microswitch, used to control on-off thermal-cooling emission of the system manifold through an electrical signal transmitted by a thermostat or system controller.

OPERATION: The actuator is equipped with a transparent window that allows checking the actuator status "red = valve closed; black = valve open". The actuator can be mounted in all vertical-horizontal positions.



BOOSTER PUMP INSTALLED IN C.T.O. BOX

TECHNICAL DATA	VALUES
Action	ON/OFF LINEAR MOVEMENT
Power supply	230 Vac/DC (+10%-15%)-50/60Hz
Steady state power consumption	2.5 W
Final opening (nc) or closing (na) time (power on)	3 min
Maximum actuator stroke	305 mm
Valve stroke	3.6 mm (+ 0.4)
Protection degree and class	IP 54 - EN60529 II
Auxiliary micro (4 Pole model)	Max. 700 mA - 250 V (a.c.)
Valve connection	M30x1.5 threaded ring nut

DESCRIPTION	CODE
Electrothermal actuator 22CX - 230V	7080112110

PLEIDYNAMIC 2.0 ACCESSORIES



PLEIDYNAMIC 2.0 2+2 CIRCUITS ADDITIONAL MODULE

Additional module for pleidynamic 2.0: 2+2 circuit supply and return modules to optimize and/or modify the number of manifold circuits. Complete with o-rings.

DESCRIPTION	CODE
PLEIDYNAMIC 2.0 2+2 CIRCUITS ADDITIONAL MODULE	7078266500



AUTOMATIC AIR VENT FOR PLEIDYNAMIC 2.0

Automatic air vent valve in thermoplastic material for pleidynamic 2.0 manifold, useful for optimizing system operation during circuit filling phase.

DESCRIPTION	CODE
AUTOMATIC AIR VENT FOR PLEIDYNAMIC 2.0	7078266501

PLEIMIX ACCESSORIES FOR PLEIDYNAMIC 2.0



BY-PASS FOR PLEIMIX

By-pass for primary circuit. Primary supply circuit connections 1"M spacing 60mm. Secondary side connections 1"F with swivel nuts.

DESCRIPTION	COD
BY-PASS FOR PLEIMIX	7072996000



BY-PASS AT FOR PLEIMIX

By-pass for primary circuit with connections for "HIGH TEMPERATURE CONNECTION KIT". Primary supply circuit connections 1"M spacing 60mm. Secondary side connections 1"F with swivel nuts. Side connections for high temperature connection kit ¾"M.

DESCRIPTION	COD
BY-PASS AT FOR PLEIMIX	7072996100



HIGH TEMPERATURE CONNECTION KIT

Complete kit in surface nickel-plated brass with 2 or 3 high temperature circuits to connect to BY-PASS AT FOR PLEIDYNAMIC 2.0, for supply to direct high temperature circuit. Connection ¾" threading, connection spacing 50 mm, connection threading ¾". Dimensions: H 90 mm P 35 mm.

DESCRIPTION	COD
2+2 AT KIT FOR PLEIMIX	7072996200
3+3 AT KIT FOR PLEIMIX	7072996300



PLEIMIX BALL VALVE PAIR

Primary side connections F 1" ISO228. Secondary side connections F 1" ISO228. Complete with flat gasket for unit assembly.

DESCRIPTION	COD
PLEIMIX BALL VALVE PAIR	7078276303



INSULATION FOR PLEIMIX

Kit for insulation of the "PLEIMIX" mixing unit.

DESCRIPTION	COD
INSULATION FOR PLEIMIX	7078276301



THERMOSTATIC CONTROL FOR PLEIMIX

Thermostatic actuator for pleimix: thermostatic control for fixed point regulation, for heating-only systems.

DESCRIPTION	COD
THERMOSTATIC CONTROL FOR PLEIMIX	7078276300



ELECTRONIC SERVOMOTOR FOR PLEIMIX

Electronic servomotor for pleimix: electronic servomotor available with 230V power supply and 3-point control or with 24V power supply and 0-10V control. For heating and cooling systems to be combined with a climate control unit (PleiTouch Clima on page 6 / item code 7081202041).

DESCRIPTION	COD
230V SERVOMOTOR FOR PLEIMIX	7078276304
S24V SERVOMOTOR FOR PLEIMIX	7078276305

PLEITECNO ACCESSORIES

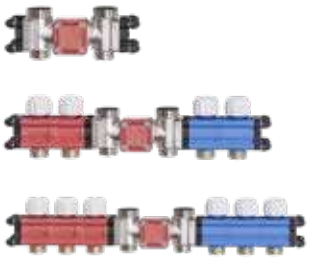


3/4" PRESSURE GAUGE KIT 0-6 BAR - FOR PRESSURE TESTING - FOR PLEITECNO

Pressure gauge with 3/4" connection, suitable for connecting to the loading module of Pleitecno series manifolds, to check during system start-up that there are no pressure leaks.

DESCRIPTION	CODE
3/4" Pressure Gauge Kit 0-6 BAR - For Pressure Testing	7079263800

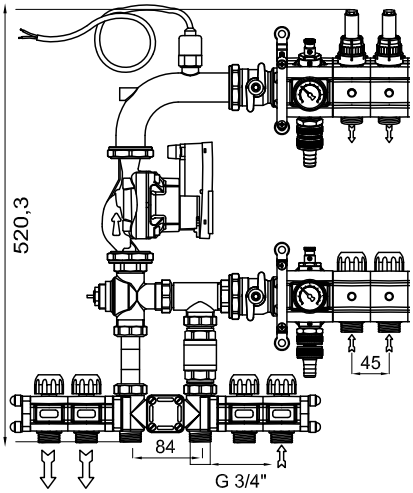
PREMIX ACCESSORIES FOR PLEITECNO



BY-PASS WITH OR WITHOUT HIGH-TEMPERATURE PATHS

It allows a relief of the primary circuit flow when the PREMIX system's mixing valve closes completely. It can be supplied in a simple version or combined with 2 or 3 high-temperature outlets, typically used to supply towel warmers in bathrooms.





DESCRIPTION	COD
BY-PASS KIT WITHOUT HIGH-TEMPERATURE PATHS	7072214600
BY-PASS KIT WITH 2+2 HIGH-TEMPERATURE PATHS	7072214700
BY-PASS KIT WITH 3+3 HIGH-TEMPERATURE PATHS	7072214800



THERMOSTATIC ACTUATOR FOR MIXING VALVE

Thermostatic control with contact probe, used for regulating the 1"M 3-way valve of the PREMIX PLEITECNO. Adjustment range: 20–50°C.

DESCRIPTION	COD
THERMOSTATIC ACTUATOR FOR 3-WAY MIXING VALVE	7072994010



ELECTRIC ACTUATOR FOR MIXING VALVE

Electronic actuator with a three-point control signal (230 V) or 0–10 V proportional signal (24 V). Connects to the 1"M 3-way valve in the PREMIX PLEITECNO unit using an M30x1.5 threaded coupling. Operating status can be checked via LED. Pre-wired power cable included.

PERFORMANCE		
24 V	**230 V**	**230 V**
Supply Voltage	50/60 Hz - 24 Vac ±15%	50/60 Hz - 230 Vac ±15%
Control Signal	0–10 Vdc	230 V
Power Consumption	2.5 VA – 1.5 W (apparent – active)	6.5 VA – 2.2 W (apparent – active)
Protection	IP43	IP43
Stem Travel	3.2 mm (factory) – 4.3 – 5.5 mm	max 6.3 mm
Running Time	8 seconds	13 seconds
Status Indication	BI-COLOR LED GREEN/RED	GREEN LED

DESCRIPTION	COD
230 V ELECTRIC ACTUATOR	7072994040
24 V ELECTRIC ACTUATOR	7072994030

SCREEN ACCESSORIES



FIBERGLASS MESH

Fiberglass mesh appreciated for resisting cement alkalinity and gypsum anhydride. To be laid over the panel following pipe installation. Position the mesh to avoid floating in the screed, if necessary it is recommended to use flat clips normally used for fixing pipes to the panel for its fixing. Ideal for cement screed reinforcement, even low thickness. Dimensions: 1x50 m roll.

CHARACTERISTICS	
Average longitudinal resistance	23,5 kN/m
Mesh opening	40x40 mm
Weight	130 g/m²

DESCRIPTION	PACKAGE	CODE
Fiberglass mesh 40x40 mm	50 m²	7079101050



EXPANSION JOINT

For civil use, made of closed-cell polyethylene with density 50 kg/m³, equipped with lower adhesive bar. Red color. **Dimensions: th 6 mm; h 90 mm; l 2000 mm.**

DESCRIPTION	PACKAGE	CODE
Civil expansion joint	2 m	7078301002



FB 18 FIBERS - MONOFILAMENT POLYPROPYLENE SYNTHETIC FIBERS

Synthetic fibers for concrete produced in the form of polypropylene microfilament, designed to drastically reduce the formation of plastic shrinkage cracks in concrete. Used as secondary reinforcement to increase durability and improve concrete shrinkage phenomena on: screeds and substrates, slabs, slabs, pavements for civil and residential construction.

CHARACTERISTICS. Crimped surface, excellent adhesion to the mix with increased tensile strength; they disperse very quickly and are distributed uniformly in the concrete mass; they constitute three-dimensional reinforcement.

During concrete setting, they oppose plastic shrinkage cracking thanks to their tensile strength, reduce permeability and avoid inconveniences arising from formwork removal. Resistance of concrete in place to impacts, freeze-thaw cycles. (They do not constitute structural reinforcement of concrete). Their use allows eliminating the anti-crack reinforcement mesh in pavements.

USE: They are incorporated into concrete without modifying mixing time or water dosage. They can be added directly to the concrete mixer, taking care to mix for 5 minutes starting from their introduction. DOSAGE: One dose bag (0.600 kg or 0.910 kg) per m³ of concrete.

DESCRIPTION	COD
FB 18 FIBERS - 600gr	7079414018



FLUIDIZING ADDITIVE FOR SCREED

Guarantees excellent workability and fluidity of the concrete mix, reducing water use, allowing to obtain a compact screed, perfectly adherent to the floor radiant system, and with good thermal conductivity. Thanks to reduced water use, it reduces the shrinkage phenomenon and the possibility of cracking. Dosage: 0.8 – 1.2% on cement weight.

DESCRIPTION	COD
SCREED ADDITIVE 10 KG	7079404010
SCREED ADDITIVE 25 KG	7079404025

SYSTEM ACCESSORIES



CORROSION INHIBITOR WITH BACTERICIDE

Protective filming corrosion inhibitor for thermal systems, compatible with metals and plastic materials commonly used in thermo-hydraulic systems. Forms a protective film on system walls, protecting them. It also counteracts algae formation, frequent in low temperature systems. Dosage: 1 to 2% on system water content.

DESCRIPTION	COD
CORROSION INHIBITOR WITH BACTERICIDE 1 Lt	7079704001
CORROSION INHIBITOR WITH BACTERICIDE 5 Lt	7079704005
CORROSION INHIBITOR WITH BACTERICIDE 25 Lt	7079704025



DEGASSER FOR HEATING SYSTEMS

The degasser is used to continuously eliminate air contained in hydraulic circuits on heating or air conditioning systems. To be installed with piping in horizontal position, complete with insulation to avoid unwanted heat losses. Available from ¾" to 1"½ size with insulation. Installation is recommended on the suction side of the system circulator or upstream of the coplanar distribution manifold.

DESCRIPTION	CODE
System degasser ¾"	7075506020
System degasser 1"	7075506025
System degasser 1" ¼	7075506032
System degasser 1" ½	7075506040



ZONE VALVE

Zone valves operated by an electric motor capable of making the valve assume two operating positions depending on whether the motor is activated or not (opening/closing). The valves are equipped with an external lever for manual positioning of the shutter in central position. Built with body, cover, ball carrier pin in brass, return spring in stainless steel and motor cover in ABS. They can be used during winter/summer switching.

DESCRIPTION	CODE
Zone valve ¾" - 3 way	7075204334

CEILING-MOUNTED SYSTEM ACCESSORIES



PERIMETER TAPE CEILING-WALL

White closed-cell, high-density, chemically cross-linked expanded polyethylene strip, roll length 110 m, height 130 mm, thickness 3 mm. Used as a perimeter support for wall and ceiling radiant systems for heating and cooling, it enhances thermal and acoustic perimeter insulation while providing the drywall installer with a stable support base, which, once trimmed with a cutter, serves as a foundation for plaster or filling compound.

CHARACTERISTIC	Value
Density (Kg/m^3)	50
Thickness (mm)	3
Acoustic insulation	20 dB
Thermal conductivity	0,039 W/mK a 10°C

DESCRIPTION	PACKAGE	CODE
Perimeter tape for ceiling-wall junction	50 m	7078601350



ANTI-VIBRATION SPACER

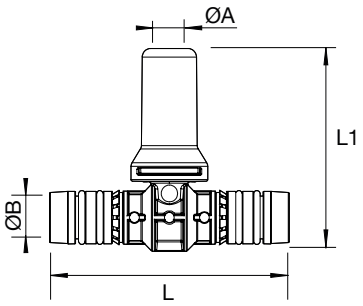
Spacer for ceiling or wall radiant systems. Designed as an anti-vibration element to be placed between each plasterboard module and the traditional metal profiles used for such applications. Thickness 9 mm, dimensions 50x98 mm, equipped with a permanent adhesive layer.

DESCRIPTION	CODE
ANTI-VIBRATION SPACER	7078701350

TRANSPARENT QUICK COUPLINGS



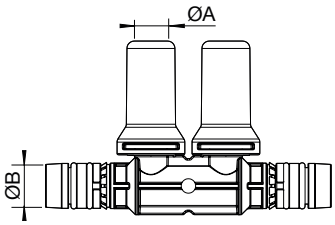
Complete range of quick-connect fittings and adapters for the installation of wall and ceiling radiant systems. Hydraulic seal ensured by double O-ring. The fittings are compatible with Ø 20x2 mm and Ø 8x1 mm pipes, both PE-X and multilayer. Extremely simple and fast to use, without tools or templates: the transparent material always allows verification of full insertion.



SINGLE INLINE REDUCER

DIMENSIONS			
ØA	ØB	L	L1
8x1	20x2	73	60

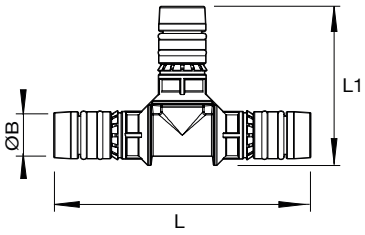
DESCRIPTION	COD
CONNECTOR 20X8X20 tee UNIVERSAL	7074414120



DOUBLE STRAIGHT-LINE REDUCER

DIMENSIONS			
ØA	ØB	L	L1
8x1	20x2	99	100

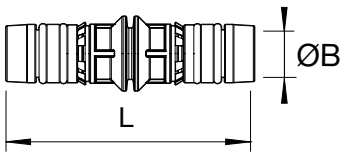
DESCRIPTION	COD
DOUBLE STRAIGHT-LINE CONNECTOR 20X88X20 UNIVERSAL	7074504120



T-SHAPED CONNECTOR

DIMENSIONS			
ØA	ØB	L	L1
-	20x2	73	53

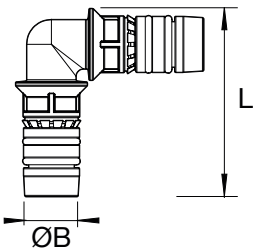
DESCRIPTION	COD
T-SHAPED CONNECTOR 20X20X20 UNIVERSAL	7074104120



STRAIGHT CONNECTOR 20X20 / 8X8

DIMENSIONS			
ØA	ØB	L	L1
-	20x2	67	-
-	8x1	67	-

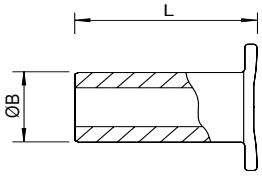
DESCRIPTION	COD
STRAIGHT CONNECTOR 20X20 UNIVERSAL	7074204120
STRAIGHT CONNECTOR 8X8 UNIVERSAL	7074204108



ELBOW CONNECTOR 20X20

DIMENSIONS			
ØA	ØB	L	L1
-	20x2	52	-

DESCRIPTION	COD
ELBOW CONNECTOR 20X20 UNIVERSAL	7074304120



BLIND END CAP

DIMENSIONS			
ØA	ØB	L	L1
-	20x2	45	-
-	8x1	35	-

DESCRIPTION	COD
END CAP 20X2	7074024020
END CAP 8x1	7074024080



PLEION
The Sun is our Life!



DISTRIBUTION UNITS

DISTRIBUTION UNITS

PLEIFORCE 1"

PAGE 73 - 74 - 75



DIRECT
Kvs 23

Direct hydraulic pumping unit from the heating plant, without mixing, for radiant systems



THERMOSTATIC
Kvs 7,5

Mixed hydraulic pumping unit from the heating plant, with a thermostatic mixing valve, suitable for radiant systems used exclusively for heating



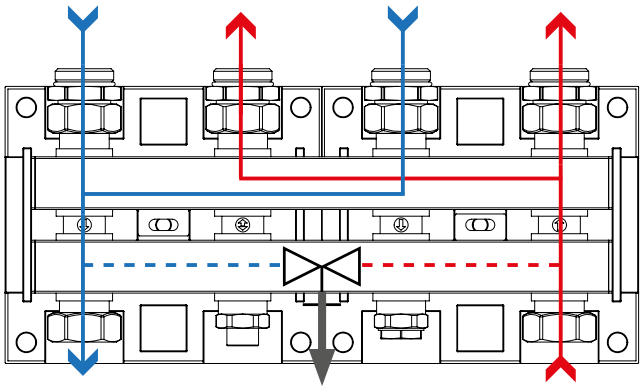
CLIMATIC
Kvs 10

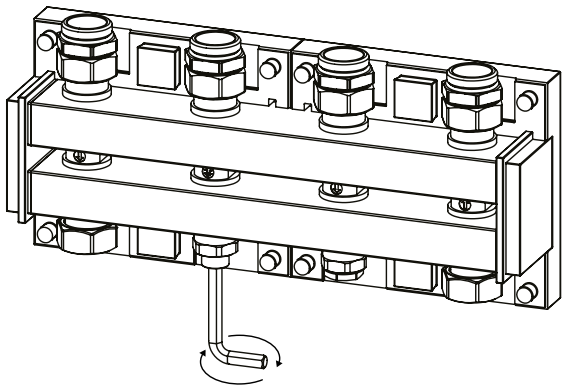
Mixed hydraulic pumping units from the heating plant, with an electronically controlled mixing valve, suitable for radiant systems used for both heating and cooling.

COPLANAR SEPARATOR/MANIFOLD

PAGE 76

COPLANAR MANIFOLD AND **ALL-IN-ONE SEPARATOR**





THE SEPARATOR CAN BE ADJUSTED OR BYPASSED BY OPERATING THE SEPARATOR PLUG WITH AN 8 MM ALLEN KEY.

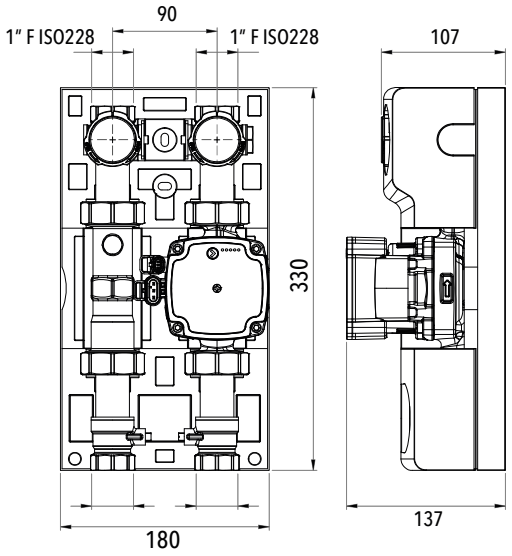
Adjustable bypass in two positions:
Position 1: Bypass "closed" - functions as a coplanar manifold
Position 2: Bypass "open" - functions as a hydraulic separator

PLEION
The Sun is our Life!

PLEIFORCE 1" DIRECT



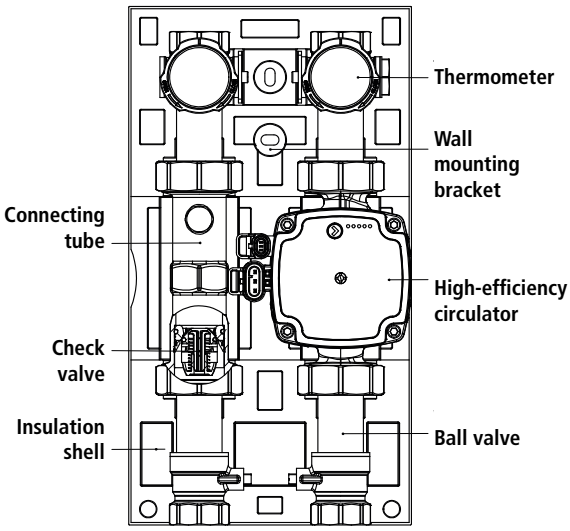




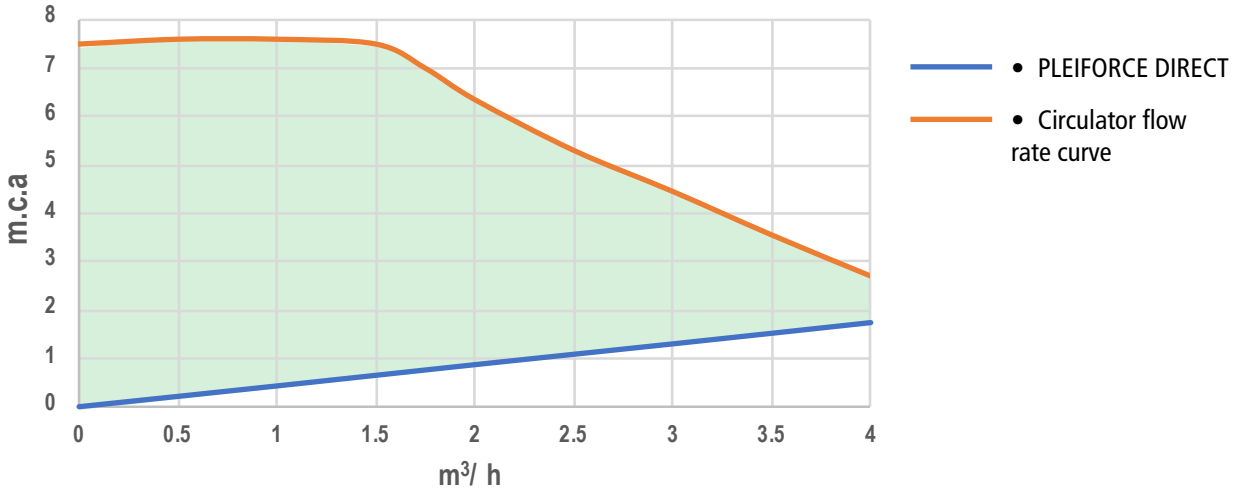
Direct distribution unit from boiler room (without mixing valve) in brass complete with circulator.

CHARACTERISTICS:

- **EPP insulation shell**
- **Wall mounting bracket included**
- **Ball valves for interception with thermometers**
- **High efficiency circulator**
- **Reversible supply from right to left**
- **Reduced size**



PLEIFORCE 1" DIRETTO
PRESSURE DROP CHART

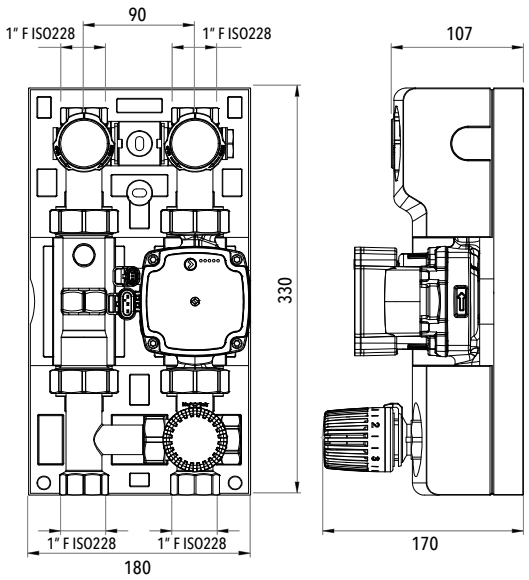


DESCRIPTION	N. CIRCUITS RADIANT SYSTEM (INDICATIVE)	CODE
PLEIFORCE 1" DIRECT	30	7074163025

PLEIFORCE 1" THERMOSTATIC



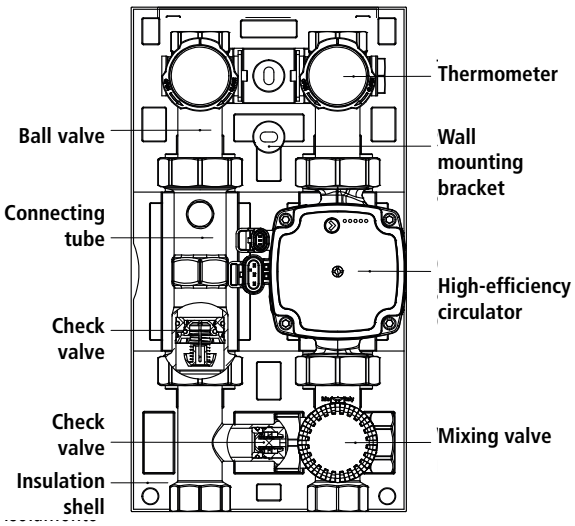




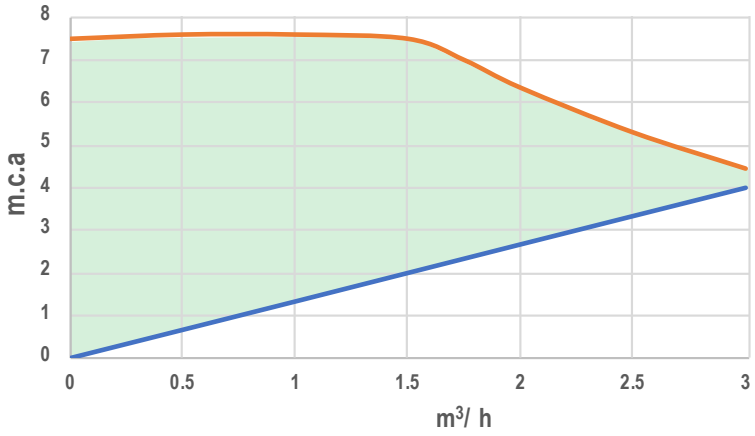
Distribution unit from boiler room complete with 3-way mixing valve operated by thermostatic control, suitable for fixed point regulation of low temperature heating systems.

CHARACTERISTICS:

- **EPP insulation shell**
- **Mixing valve with thermostatic control**
- **Wall mounting bracket included**
- **Ball valves for interception with thermometers**
- **High efficiency circulator**
- **Reversible supply from right to left**
- **Reduced size**



PLEIFORCE 1" THERMOSTATIC PRESSURE DROP CHART



PLEIFORCE THERMOSTATIC

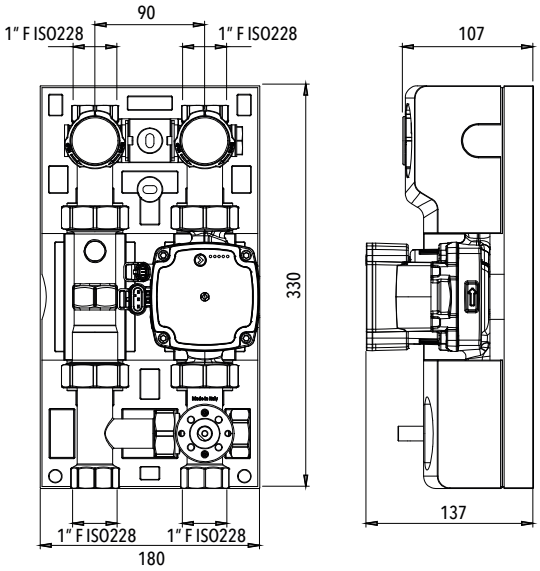
Circulator flow rate curve

DESCRIPTION	N. CIRCUITS RADIANT SYSTEM (INDICATIVE)	CODE
PLEIFORCE 1" THERMOSTATIC	25	7074163125

PLEIFORCE 1" CLIMATIC



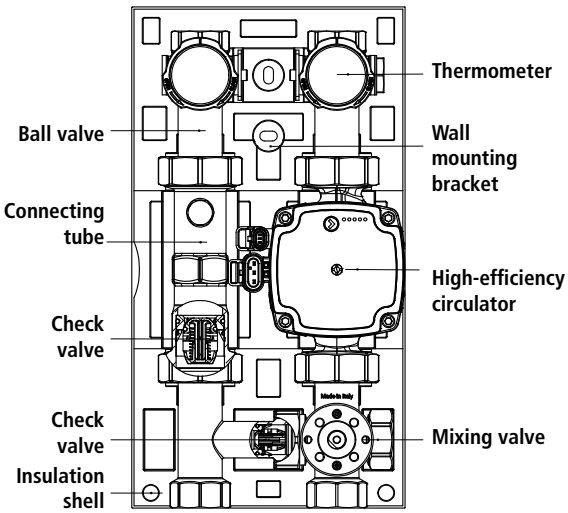




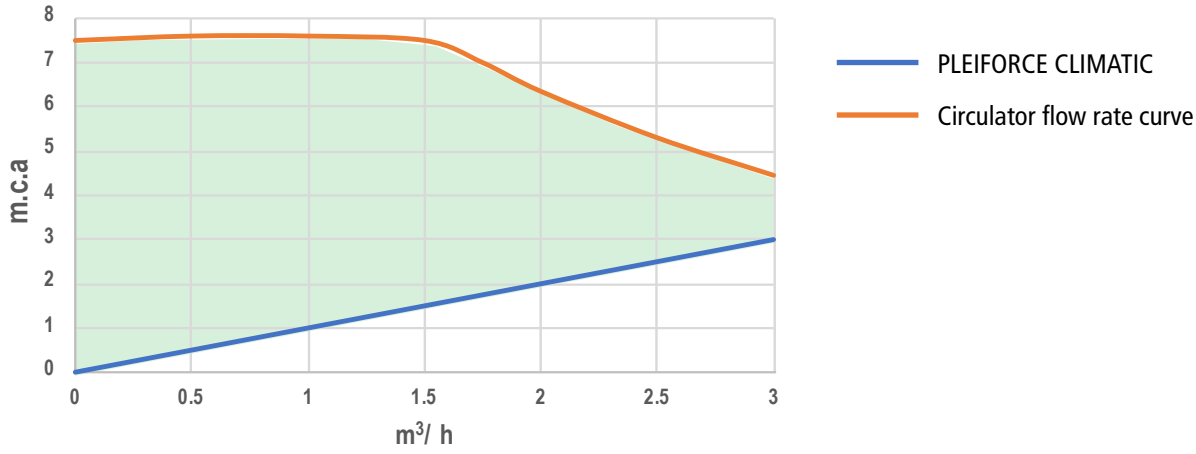
Distribution unit from boiler room complete with rotary mixing valve operated by 3-point servomotors (230V servomotor power supply) or with 0-10V control (24V servomotor power supply). Thanks to low pressure drops, it is ideal for radiant heating and cooling systems.

CHARACTERISTICS:

- **EPP insulation shell**
- **Rotary mixing valve**
- **Wall mounting bracket included**
- **Ball valves for interception with thermometers**
- **High efficiency circulator**
- **Reversible supply from right to left**
- **Reduced size**



PLEIFORCE 1" CLIMATICO
PERDITE DI CARICO



DESCRIPTION	N. CIRCUITS RADIANT SYSTEM (indiCATIVE)	CODE
PLEIFORCE 1" CLIMATIC - 230V 3-point Actuator	25	7074163325
PLEIFORCE 1" CLIMATIC - 24V 0-10 Actuator	25	7074163425

COPLANAR MANIFOLD

2-CIRCUIT COPLANAR SEPARATOR



Coplanar manifolds with integrated hydraulic separator adjustable and excludable 1". Made of stainless steel. Primary side connections F 1" with swivel nuts and M 1" connections with swivel fittings on secondary side.

Characteristics:
- EPP insulation shell
- Adjustable and excludable hydraulic separator based on requirements
- Stainless steel body
- Wall mounting bracket included
- Swivel fittings and reduced size

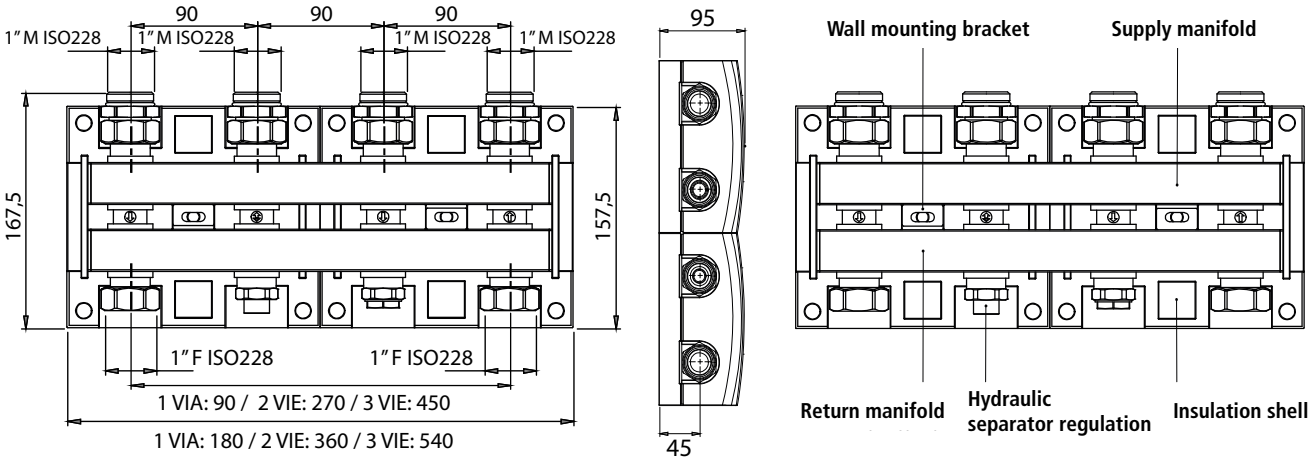
3-CIRCUIT COPLANAR SEPARATOR



4-CIRCUIT COPLANAR SEPARATOR



TECHNICAL DIAGRAM



DESCRIPTION	CODE
COPLANAR MANIFOLD - SEPARATOR 1" 2 Zones	7074463225
COPLANAR MANIFOLD - SEPARATOR 1" 3 Zones	7074463325
COPLANAR MANIFOLD - SEPARATOR 1" 4 Zones	7074463425

HYDRAULIC SEPARATOR



1" hydraulic separator necessary to separate primary and secondary circuits. Made of stainless steel. Primary side connections F 1" with swivel nuts and M 1" connections with swivel fittings on secondary side.

Characteristics:
- EPP insulation shell
- Stainless steel body
- Swivel fittings
- Reduced size

DESCRIPTION	CODE
HYDRAULIC SEPARATOR 1"	7074263125

ACCESSORIES
PLEIFORCE



CONTACT SAFETY THERMOSTAT
Contact safety thermostat compatible with the entire PLEIFORCE line. Unipolar bimetallic thermostat for switching off the heating system circulation pump in case the supply temperature reaches the limit value. Regulation range 30-90°C. Differential 8±3 K adjustable. IP20. Contacts 16 (2.5°) / 250 V AC.

DESCRIPTION	CODE
CONTACT SAFETY THERMOSTAT	7085805000



PLEION
The Sun is our Life!



DEHUMIDIFICATION

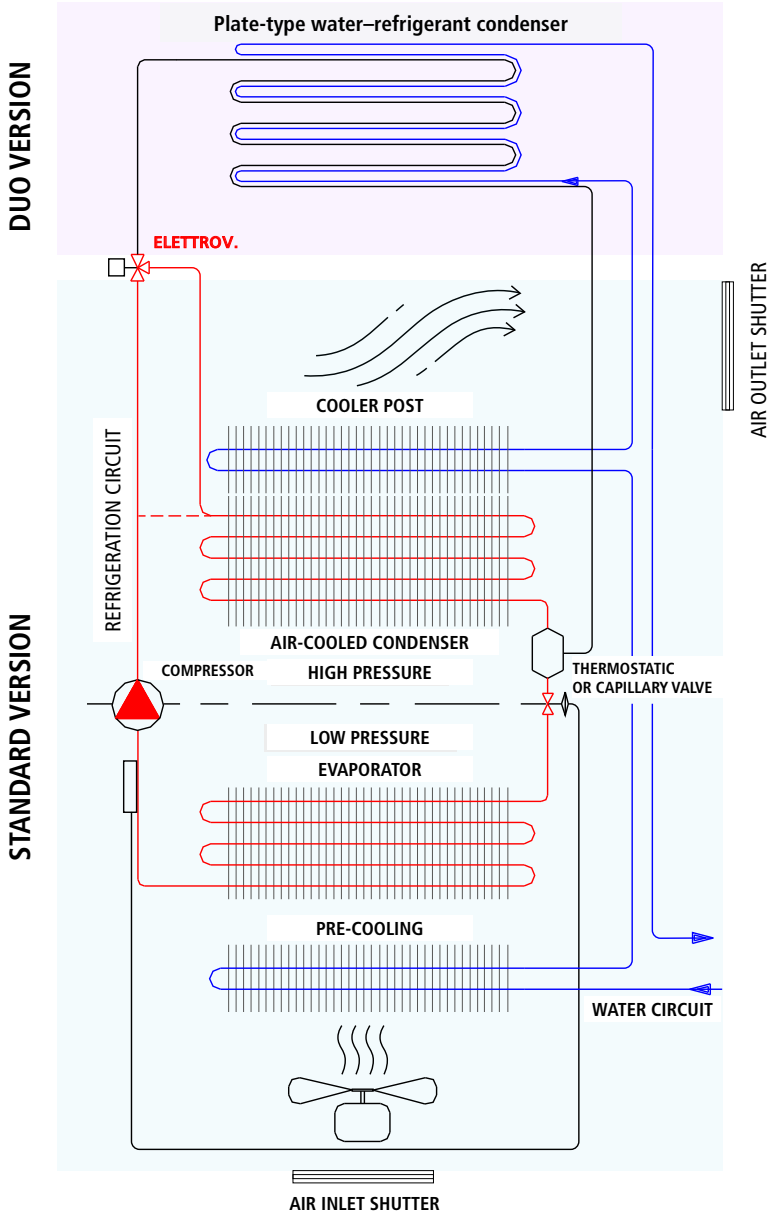
INTRODUCTION DEHUMIDIFICATION

Pleion dehumidifiers are used for humidity control where a radiant panel cooling system is present. The PLEIWALL and PLEITOP series dehumidifiers in the STANDARD version have pre and post cooling coils, they are isothermal dehumidifiers, meaning they dehumidify without affecting the temperature of the treated air.

WHY CHOOSE PLEION DEHUMIDIFIERS:

- Particularly quiet units
- Feature hot-dip galvanized steel housing with removable panels
- Hermetic reciprocating compressor with thermal protection device and acoustic insulation, mounted on anti-vibration joints
- Refrigeration circuit composed of evaporator and condenser in copper tubes and aluminum fins with 2.8mm pitch
- Low-noise centrifugal fan in thermoplastic material equipped with 144mm diameter impeller
- Air filter in synthetic material, washable and easily replaceable
- Microprocessor that performs defrost control, manages compressor delay and alarms
- All dehumidifiers undergo refrigeration circuit leak tests, electrical discharge tests and functional testing

The DUO version of Pleion dehumidifiers features a double heat exchanger, one refrigerant-water and one refrigerant-air, therefore it can function both as an isothermal dehumidifier and as an air conditioner, thus ensuring optimal temperature control as well.



PLEIWALL 30/DUO 30





TECHNICAL DATA	UM	PLEIWALL 30	PLEIWALL DUO 30
Dimensions HxLxP	mm	696 x 692 x 200	
Humidity removed	l/24h	34	34
Cooling capacity	W	---	1600
Nominal power consumption	W	380	380
Maximum current consumption	A	2,8	2,8
Air flow rate	m³/h	300	300
Refrigerant		R134a	R134a
Water flow rate	l/h	175	175
Pressure drop	bar	0,26	0,26
Sound pressure	dB(A)	38	38
Operating temperature range	°C	10-33	10-33
Operating humidity range	%	45-98	45-98
Weight	kg	42	42

Wall-mounted high-performance dehumidifier, in isothermal version or in "DUO" version with double heat exchanger to provide thermal energy input in cooling. Available in a single 300m³/h size. To be controlled with appropriate control unit (PleiTouch on page 6 code 7081202040). Can be combined with: counter-frame made of galvanized sheet metal to be inserted preventively in the building structure (grille for pleiwall); white lacquered wood front panel for closing the counter-frame (grille for pleiwall).

DESCRIPTION	CODE
PLEIWALL 30 DEHUMIDIFIER*	7091501125
PLEIWALL DUO 30 DEHUMIDIFIER*	7091502125

***ACCESSORIES ON FOLLOWING PAGE**

PLEITOP 30-56/DUO 30-56



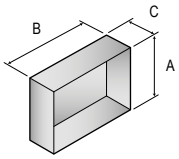
TECHNICAL DATA	UM	PLEITOP			
		30	DUO 30	56	DUO 56
Dimensions H x L x P	mm	260 x 652 x 740		309 x 858 x 708	
Humidity removed	l/24h	33		64	
Cooling capacity	W	---	1600	---	3000
Nominal power consumption	W	380		780	
Maximum current consumption	A	2,8		4,9	
Water flow rate	l/h	175		360	
Pressure drop	bar	0,13		0,16	
Air flow rate	m³/h	300		560	
Refrigerant	-	R134a			
Sound pressure	dB(A)	38		40	
Operating temperature range	°C	10-33			
Operating humidity range	%	45-98			
Weight	kg	42		50	

Wall-mounted high-performance dehumidifier, in isothermal version or in "DUO" version with double heat exchanger to provide thermal energy input in cooling. Available in a single 300m³/h size. To be controlled with appropriate control unit (PleiTouch on page 6 code 7081202040). Can be combined with: counter-frame made of galvanized sheet metal to be inserted preventively in the building structure (grille for pleiwall); white lacquered wood front panel for closing the counter-frame (grille for pleiwall).

DESCRIPTION	CODE
PLEITOP 30 DEHUMIDIFIER*	7091501025
PLEITOP DUO 30 DEHUMIDIFIER*	7091502025
PLEITOP 56 DEHUMIDIFIER*	7091501050
PLEITOP DUO 56 DEHUMIDIFIER*	7091502050

***ACCESSORIES ON FOLLOWING PAGE**

ACCESSOIRES
PLEIWALL E PLEITOP

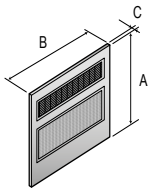


COUNTER-FRAME FOR PLEIWALL 30 AND DUO 30

Counter-frame compatible with Pleiwall 30 - Duo 30 dehumidifiers, to be installed on wall, will serve both as preparation and as structure to which the dehumidifier will be fixed, made of galvanized sheet metal.

A	B	C
718	732	208

DESCRIPTION	CODE
COUNTER-FRAME FOR PLEIWALL 30 AND DUO 30	7093500010

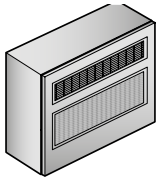


SUPPLY AND RETURN GRILLE FOR PLEIWALL 30 AND DUO 30

White lacquered wood front panel to be used for closing the counter-frame compatible with Pleiwall 30 - Duo 30 dehumidifiers.

A	B	C
830	830	17

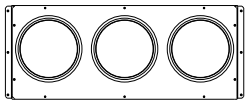
DESCRIPTION	CODE
GRILLE FOR PLEIWALL 30 AND DUO 30	7093500020



LACQUERED WOOD CABINET FOR PLEIWALL 30 AND DUO 30

White lacquered wood cabinet for wall installation (not flush-mounted) of PLEIWALL 30 AND DUO 30 dehumidifiers. The cabinet is complete with supply and return grille.

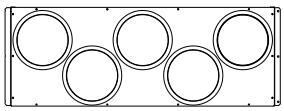
DESCRIPTION	CODE
LACQUERED WOOD CABINET FOR PLEIWALL 30 AND DUO 30	7098136001



PLEITOP 30 SUPPLY PLENUM - 3 D160 CONNECTIONS

Plenum compatible with Pleitop 30 - Duo 30 suspended ceiling dehumidifiers, designed for supply air distribution through two or three 160mm diameter pipes.

DESCRIPTION	CODE
SUPPLY PLENUM FOR PLEITOP 30 AND DUO 30 - 2 or 3 D160 connections	7097502316



PLEITOP 56 SUPPLY PLENUM - 5 D160 CONNECTIONS

Plenum compatible with Pleitop 56 - Duo 56 suspended ceiling dehumidifiers, designed for supply air distribution through four or five 160mm diameter pipes.

DESCRIPTION	CODE
SUPPLY PLENUM FOR PLEITOP 56 AND DUO 56 - 4 or 5 D160 connections	7097504516

PLEION
The Sun is our Life!

NOTE




VMC

T PLUS 15-25



HIGH EFFICIENCY HEAT RECOVERY, VERSION WITH DEHUMIDIFICATION - ENERGY CLASS B (all versions)

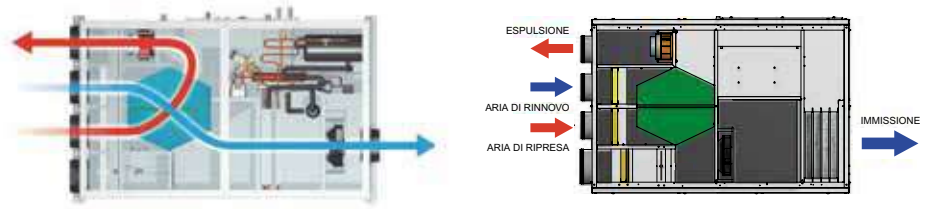
The T PLUS heat recovery unit is a bidirectional ventilation unit designed to ensure dehumidification and air renewal in residential environments with very high energy efficiency, in combination with radiant heating-cooling systems. Double-flow dehumidification allows the "also recirculation" dehumidification function of the air contained in the building volumes. The relative humidity sensor integrated in the unit allows the machine to automatically activate dehumidification otherwise manageable through a clean contact connectable to the external sensor of the thermal control system.

TECHNICAL CHARACTERISTICS OF THE HEAT RECOVERY UNIT:

- Available in two sizes: 150-300 m³/h respectively in ventilation-dehumidification for size 15 and 250-500 m³/h for size 25
- Installable on ceiling and floor
- Radial fans with backward curved blades, EC motors with electronic speed control (20-100%)
- Available with enthalpy "H" heat exchanger with latent heat recovery in addition to sensible
- External self-supporting structure, laterally made with double 22 mm thick sandwich paneling with thermo-acoustic insulation
- Refrigeration circuit with compressor (R134a)
- Filters (EN 779), for extraction air with G4, F7 low pressure drop for renewal air and finally G4 filter for recirculation air
- Remote panel for settings, alarm signaling with display supplied with the machine

OPERATING MODES

WINTER CONDITION: air change with heat recovery.

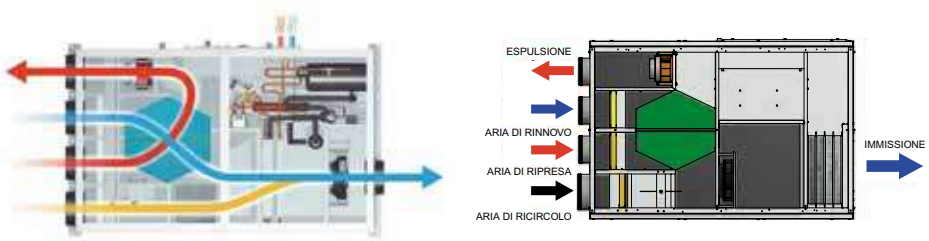


In the absence of dehumidification, the machine only handles VMC, extracting stale air from service rooms and introducing external air treated through the F7 filter and introduced into noble rooms; the integrated R.H. sensor detects the average concentration in the environment, and acts on the fan speed.

In the configuration with CO2 sensor, the control system automatically regulates the amount of renewal air (and extraction) based on the average CO2 concentration in the environment, thus avoiding an intake of external air in quantities higher than necessary. The CO2 value is a parameter that can be modified by the installer.

OPERATING MODE

SUMMER CONDITION: air change with heat recovery plus partial recirculation plus dehumidification.

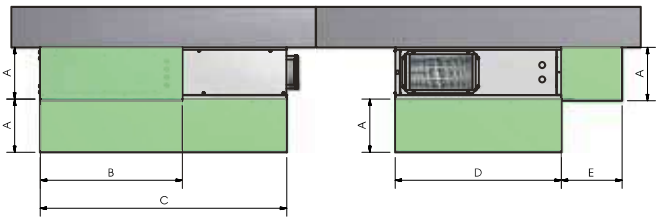


Air change with recovery, partial recirculation and dehumidification. Unit combined with radiant cooling where condensation problem occurs. If the humidity level is too high to avoid condensation, it is not possible to continue cooling. Activation of the dehumidification function can be managed through the integrated R.H. sensor or externally by radiant system controller (clean contact) or in home automation MOD-BUS.

PERFORMANCE DATA															
MODEL	Internal air conditions			External air conditions			Water					Water flow rate			
	m (m³/h)	T (°C)	U.R. (%)	m (m³/h)	T (°C)	U.R. (%)	m (l/h)	Ti (°C)	Tu (°C)	ΔT=Ti-Tu (°C)	P KPa	P_battery (W)	P_comp (W)	P_tot (W)	Condensate (l/24h)
T PLUS 15	150	26	55	150	33	55	200	15	19	4,4	4	990	988	1978	26,8
								18	21,2	3,2		730	987	1717	20,7
								21	23,4	2,4		560	1017	1577	17,3
T PLUS 25	250	26	55	250	33	55	350	15	19,8	4,8	3	1950	1542	3492	46
								18	21,9	3,9		1610	1607	3217	33,1
								21	23,9	2,9		1190	1608	2798	30
T PLUS 15 IDRO	150	26	55	150	33	55	200	7	16,3	9,3	8	1970	-	1970	26,3
							300		14,8	7,9	17	2370	-	2370	33,8
							400		13,9	6,9	28	2610	-	2610	38,3
T PLUS 25 IDRO	250	26	55	250	33	55	350	7	15,3	8,3	5	3360	-	3360	44,8
							525		13,7	6,7	11	4110	-	4110	57,9
							700		12,6	5,6	18	4530	-	4530	66,4

TECHNICAL DATA		U.M.	T PLUS 15 / H	T PLUS 25 / H
Fan (ex-tract.-supply)	Power	(W)	43-85	85-170
	Supply	(V,Hz,f)	230,50/60,1	230,50/60,1
	Imax	(A)	0,32-0,75	0,75-1,65
	Insul. class	(IP)	IP44-54	IP54-54
Compressor	Supply	(V,Hz,f)	230,50/60,1	230,50/60,1
	Imax	(A)	2,1	4,9
Unit	Supply	(V,Hz,f)	230,50,1	230,50,1
	Imax	(A)	3,5	7,5
Weight		(kg)	85/88	100/103
VALUES ACCORDING TO REGULATION (EU) N. 1253/2014				
Maximum flow rate		(m³/h)	155/151	266/270
Reference flow rate		(m³/h)	119/108	191/191
Reference pressure		(Pa)	50	50

DIMENSIONS



Unity	A	B	C	D	E
T PLUS 15	260	700	1220	820	300
T PLUS 25	330	700	1220	960	300

MINIMUM MAINTENANCE SPACES

DESCRIPTION	CODE	DESCRIPTION	CODE
T PLUS 15	7091302030	**ENTHALPY VERSION**	7091302230
T PLUS 25	7091302050		7091302250
T PLUS 15 IDRO	7091302130		7091302330
T PLUS 25 IDRO	7091302150		7091302350

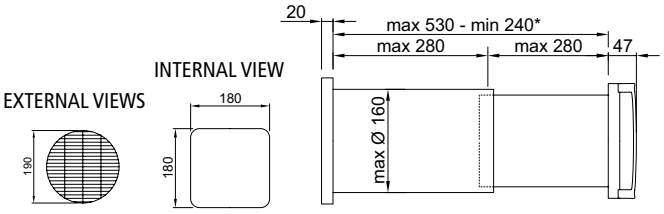
CODE DESCRIPTION LEGEND:

- T PLUS: VMC and dehumidification with refrigeration circuit

- T PLUS HYDRO: VMC water supply coil without refrigeration circuit

SMART E 50





SMART E 50 DECENTRALIZED CONTROLLED MECHANICAL VENTILATION ELECTRONIC UNIT

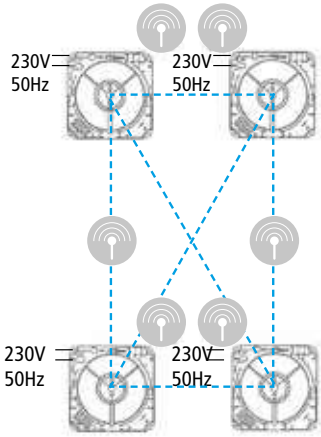
The air flow exiting the environment transfers heat to the regenerative ceramic heat exchanger, which accumulates it and returns it to the incoming flow during cycle inversion, introducing new external air that is heated or cooled into the environment, minimizing the energy requirement related to air change.

The system consists of one or more ventilation units (up to 17 total, one of which with "master" function), which operate in coordinated mode through wireless radio frequency connection.

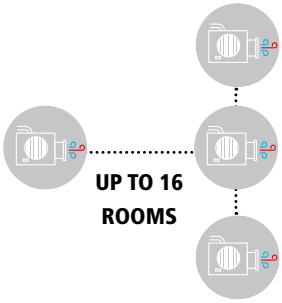
In automatic operating mode, the Master unit manages its operation by processing incoming environmental data such as temperature sensor, humidity and light sensor:

- The external temperature sensor on MASTER unit allows optimizing the recovery cycle duration based on external and internal temperature
- Relative humidity sensor on MASTER and SLAVE unit allows autonomously activating according to zones, the automatic extraction function at maximum speed in intervals of 2-12 minutes hourly. In night mode the function is disabled; the humidity threshold is modifiable
- Light sensor on MASTER and SLAVE unit allows activating silent mode during night hours

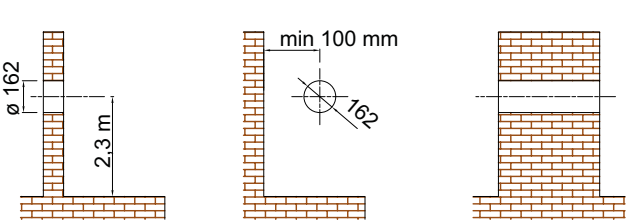
ELECTRICAL CONNECTIONS







INSTALLATION POSSIBILITIES



DESCRIPTION	CODE
SMART E 50 M (with remote control)	7091402325
SMART E 50 S	7091402425
DESCRIPTION	
AESTHETIC EXTERNAL GRILLE FOR SMART E 50	7091403425
WALL FIXING TEMPLATE	7091403025
DUCTING FOR CORNER INSTALLATION	7091413025
PPR 160 DUCT PREPARATION - L=1000 MM	7090541016

WT 13-22/40-55

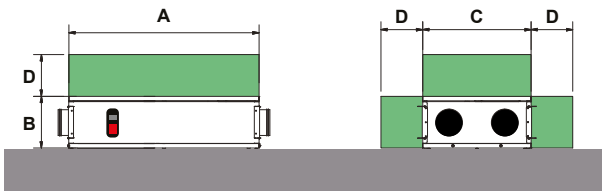


DESCRIPTION

- D. 125 mm connections for WT13 and D. 160 for WT22-40-55
- Energy class A
- Self-supporting structure in sandwich panels insulated with injected polyu rethane foam, th. 22 mm (acoustic and thermal insulation); external structure and internal parts in Zinc-Magnesium ZM 310 sheet metal
- Condensate collection tray with side drain for evacuation
- High efficiency counter-current aluminum static heat exchanger (Eurovent)
- Automatic heat exchanger defrosting (through anti-freeze strategy)
- Total by-pass for automatic free-cooling
- Backward curved blade fans, single-phase EC motors with electronic speed control
- Dirty filter warning managed by hour counter
- Maintenance: from above (floor installation), from below (suspended ceiling)
- Q.E. on board, for facilitated maintenance
- 4 sizes with reference air flow rate of 140, 210, 400 and 550 m³/h

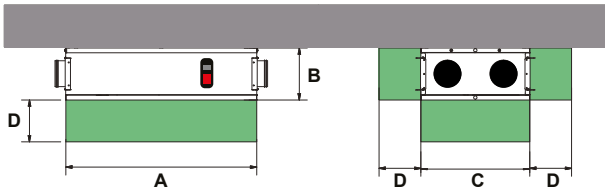
	WT 13	WT22	WT40	WT55
Power consumption [W]	HORIZONTAL POSITIONING ONLY			
Max current [A]	2 x 27	2 x 50	2 x 85	2 x 170
Max flow rate [m³/h]	0,6	0,8	1,6	3,5
Reference flow rate at 100 Pa [m³/h]	180	250	450	580
Connection diameter [mm]	140	210	400	550
DIAMETRO CONNESSIONI [mm]	125	160	160	160

WT 13-22
FLOOR INSTALLATION



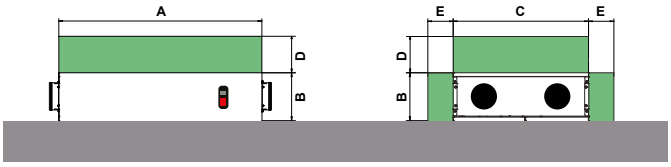
MINIMUM SPACE FOR ROUTINE MAINTENANCE

CEILING INSTALLATION



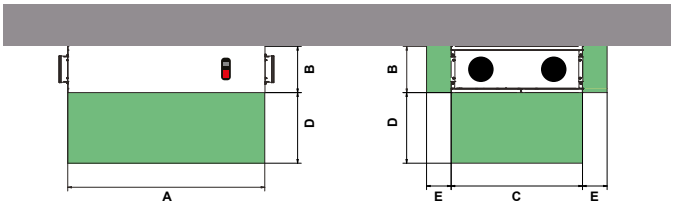
Unità	A [mm]	B [mm]	C [mm]	D [mm]
WT 13	912	248	520	200
WT 22	1234	248	580	200

WT 40-55
FLOOR INSTALLATION



MINIMUM SPACE FOR ROUTINE MAINTENANCE

CEILING INSTALLATION



Unità	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
WT 40	1200	282	800	430	150
WT 55	1200	282	800	430	150

DESCRIPTION	ENERGY CLASS	CODE	DESCRIPTION	CODE
WT13 VP	A	7091422026	ENTHALPY VERSION	7092361213
WT22 VP	A	7091422044		7092361222
WT40 VP	A	7092261240		7092361240
WT55 VP	A	7092261255		7092361255

UD 25-33-45-60



HIGH EFFICIENCY HEAT RECOVERY WALL UNIT

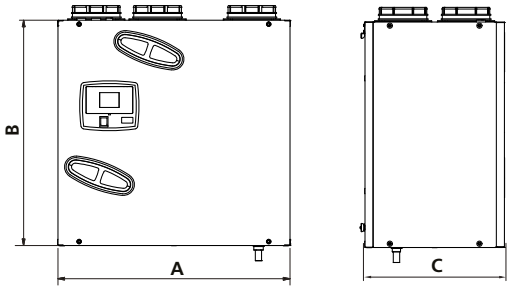
Individual VMC for single dwelling (villa or semi-detached) for VERTICAL wall installation. Available in 4 sizes with reference flow rates of 230, 320, 450, 600 m³/h. The unit is ready to use with electrical panel and control pre-wired on board. Free heating/cooling function, high efficiency counter-current heat exchanger in polypropylene, variable speed fans, electronic defrost control.

AVAILABLE IN ENTHALPY VERSION

The "H" versions are equipped with an ENTHALPY HEAT EXCHANGER made of polymer membrane, without any transmission of vapors and odors. Thanks to water vapor recovery, no condensate drain is required. The H version humidifies the supply air in winter and removes humidity on return, adapting perfectly to COLD CLIMATES characterized by high humidity.

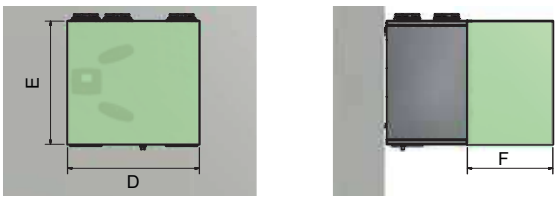
TECHNICAL SPECIFICATIONS	UD 25	UD 33	UD 45	UD 60
WALL POSITIONING	A PARETE			
Power consumption [W]	2x50	2x85	2x170	2x170
Max current [A]	1,1	1,6	3,5	3,5
Max flow rate [m³/h]	260	350	450	600
Reference flow rate at 100 Pa [m³/h]	230	320	450	600
Connection diameter [mm]	150	150	150	160

DIMENSIONS



Unità	A [mm]	B [mm]	C [mm]
UD 25	700	680	425
UD 33	767	718	500
UD 45	767	718	500
UD 60	800	800	663

WALL INSTALLATION



Unità	D [mm]	E [mm]	F [mm]
UD 25	700	680	400
UD 33	770	720	500
UD 45	770	720	500
UD 60	800	800	600

SPAZI MINIMI PER MANUTENZIONE ORDINARIA

DESCRIPTION	ENERGY CLASS	CODE	DESCRIPTION	CODE
UD 25	A	7092261225	ENTHALPY VERSION	7092361225
UD 33	A	7091422032		7091422532
UD 45	A	7091422045		7091422545
UD 60	A	7092261260		7092361260

PLEION
The Sun is our Life!

UD 25 VP LIGHT - WT 22 VP LIGHT

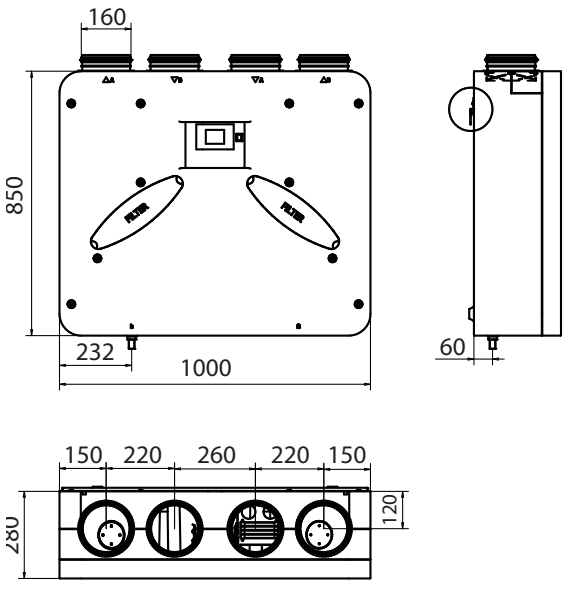




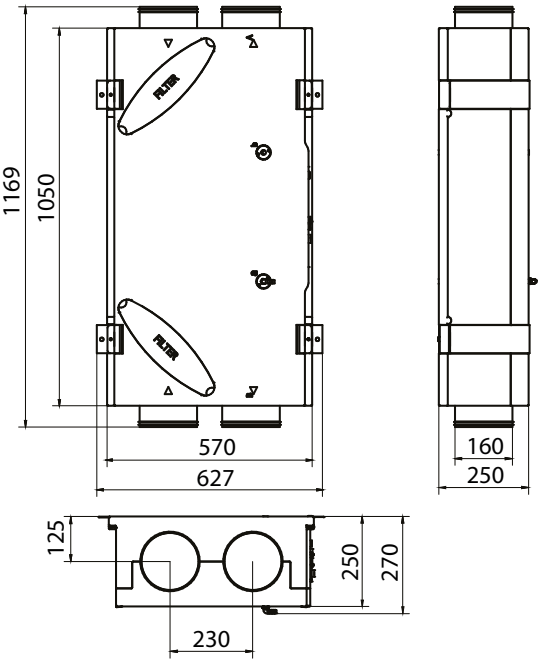
ALL THE CHARACTERISTICS OF PREMIUM MACHINES IN A PPE LOAD-BEARING STRUCTURE

- WT version for floor or suspended ceiling machine installation
- UD version for wall machine installation
- Energy class "A" for both machines with supplied control unit
- High efficiency counter-current aluminum static heat exchanger (Eurovent)
- EC fans with electronic control
- By-pass for automatic free-cooling

UD 25 VP LIGHT
DIMENSIONS



WT 22 VP LIGHT
DIMENSIONS



DESCRIPTION	CODE
UD 25 VP LIGHT	7092461225
WT 22 VP LIGHT	7092461222

NEW

DISTRIBUZIONE VMC

Dehumidification and ventilation distribution accessories cassettes collectors piping wall and ceiling panels floor panels thermo-regulation vmc dehumidification and ventilation distribution accessories cassettes collectors piping wall and ceiling panels floor panels thermoregulation



EXTERNAL WALL TERMINALS

External wall terminals for protection and external finishing of air extraction and return pipes from outside.

DESCRIPTION	CODE
WALL MOUNTING TERMINAL - UNPAINTED - Ø 150	7097601315
WALL MOUNTING TERMINAL - UNPAINTED - Ø 160	7097601415



INSULATED FLEXIBLE PIPES

Insulated flexible pipes used for connecting machines with outside and to various distribution plenums.

DESCRIPTION	PACKAGE	CODE
INSULATED FLEXIBLE PIPE Ø 150	10 m	7097511015
INSULATED FLEXIBLE PIPE Ø 160	10 m	7097511016
INSULATED FLEXIBLE PIPE Ø 125	10 m	7097511012



FITTINGS FOR INSULATED FLEXIBLE PIPES

Fittings for joining insulated flexible pipes in various diameters.

DESCRIPTION	CODE
FITTING Ø 125M - 125M	7097301012
FITTING Ø 150M - 150M	7097301015
FITTING Ø 160M - 160M	7097301016



REDUCERS FOR INSULATED FLEXIBLE PIPES

Reducers for connecting insulated flexible pipes with different diameters.

DESCRIPTION	CODE
REDUCER Ø125M - 150F	7097301025
REDUCER Ø160M -150F	7097301065



TEE FITTING FOR INSULATED FLEXIBLE PIPES

DESCRIPTION	CODE
FITTING A T Ø 150	7097601215



RIGID PPE DUCTS

Insulated rigid PPE pipes used for connecting machines with outside and to various distribution plenums.

DESCRIPTION	PACKAGE	CODE
PPE DUCT Ø150	1 m	7097541015
PPE DUCT Ø160	1 m	7097541016



BENDS FOR RIGID PPE DUCTS

DESCRIPTION	CODE
PPE 90° BEND - Ø 150	7097601115
PPE 90° BEND - Ø 160	7097601116



CONNECTIONS FOR RIGID PPE DUCTS
Connections for joining rigid PPE pipes in various diameters.

DESCRIPTION	CODE
PPE CONNECTION ELEMENT - Ø 150	7097601015
PPE CONNECTION ELEMENT - Ø 160	7097601016

ALVEOLAR SILENCERS



ALVEOLAR SILENCERS
High-efficiency alveolar silencers in various diameters.

DESCRIPTION	CODE
ALVEOLAR SILENCER Ø 125 M-F galvanized sheet	7097351012
ALVEOLAR SILENCER Ø 150 M-F galvanized sheet	7097351015
ALVEOLAR SILENCER Ø 160 M-F galvanized sheet	7097351016

PLENUMS DEDICATED TO RESPECTIVE MACHINES



INSULATED PLENUM FOR T-PLUS 15
Plenum for supply air distribution. For T PLUS 15.
The Plenum has 8 pre-punched connections.

DESCRIPTION	CODE
INSULATED SUPPLY PLENUM T PLUS 15 - 8 CONN.	7097101108



INSULATED PLENUM FOR T PLUS 15
Plenum for supply air distribution. For T PLUS 15.
The Plenum has 12 pre-punched connections.

DESCRIPTION	CODE
INSULATED SUPPLY PLENUM T PLUS 15 - 12 CONN.	7097101112



INSULATED PLENUM FOR T-PLUS 25
Plenum for recirculation air distribution. For T PLUS 25.
The Plenum has 9 pre-punched connections.

DESCRIPTION	CODE
INSULATED RECIRCULATION PLENUM T PLUS 25 - 9 CONNEC-TIONS	7097101209



INSULATED PLENUM FOR T PLUS 25
PLENUM for supply air distribution. For T PLUS 25. The PLENUM features 2 connections for D.160 piping.

DESCRIPTION	CODE
SUPPLY PLENUM TPLUS 25 - 2X Ø 160	7079275300



INSULATED PLENUM FOR WT-22-40-55
Plenum for supply air distribution. For WT 22, 40, 55. The Plenum features 10 pre-punched outlets.

DESCRIPTION	CODE
INSULATED SUPPLY PLENUM WT 22-40-55 10 CONN. - 324X201X292	7097101010

UNIVERSAL PLENUMS



UNIVERSAL PLENUM D.150
Plenum suitable for supply and return air distribution. For D.150 connections. The Plenum features 8 pre-punched outlets.

DESCRIPTION	CODE
INSULATED SUPPLY/RETURN PLENUM - D.150 8 CONN - 310x150x200	7097101308



UNIVERSAL PLENUM D.150
Plenum suitable for supply and return air distribution. For D.150 connections. The Plenum features 11 pre-punched outlets.

DESCRIPTION	CODE
INSULATED SUPPLY/RETURN PLENUM - D.150 11 CONN. - 430x150x200	7097101311



UNIVERSAL PLENUM D.150
Plenum suitable for supply and return air distribution. For D.150 connections. The Plenum features 14 pre-punched outlets.

DESCRIPTION	CODE
INSULATED SUPPLY-RETURN PLENUM - Ø 150 14 CONN. - 560x150x200	7097101314



UNIVERSAL PLENUM D.150
Plenum suitable for supply and return air distribution. For D.150 connections. The Plenum features 17 pre-punched outlets.

DESCRIPTION	CODE
INSULATED SUPPLY-RETURN PLENUM - Ø 150 17 CONN. - 680x150x200	7097101317



UNIVERSAL PLENUM D.150 FOR OVAL PIPING
Plenum suitable for supply and return air distribution. For D.150 connections. The Plenum features 17 pre-punched outlets for oval piping.

DESCRIPTION	CODE
INSULATED SUPPLY-RETURN GALVANIZED PLENUM D.150 - 11 OVAL CONNECTIONS	7097101411



UNIVERSAL PLENUM D.150 FOR OVAL PIPING
Plenum suitable for supply and return air distribution. For D.150 connections. The Plenum features 17 pre-punched outlets for oval piping.

DESCRIPTION	CODE
INSULATED SUPPLY-RETURN GALVANIZED PLENUM D.150 - 17 OVAL CONNECTIONS	7097101417

DOUBLE SECTION PLENUM



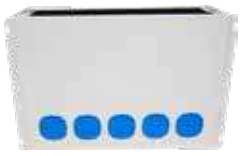
UPPER SECTION PLENUM IN PPE
Plenum for D.150 or D.160 connections (with reducer and fitting). To be combined with lower sections.

DESCRIPTION	CODE
UPPER SECTION PLENUM WITH DEFLECTOR - CONN. Ø 150/180 - 633X233X207	7097201000



SEZIONE INFERIORE PLENUM IN PPE
Da abbinare alla sezione superiore in PPE.
Il Plenum presenta 12 pretranciati. Versione standard bassa.

DESCRIPTION	CODE
PLENUM SEZ. INF. BASSO CON SMORZAT. 12 ATT. - 603X271X207	7097201112



LOWER SECTION PLENUM IN PPE
To be combined with upper section in PPE.
The Plenum features 12 pre-punched outlets. Standard low version.

DESCRIPTION	CODE
LOW LOWER SECTION PLENUM WITH DAMPER 12 CONN. - 603X271X207	7097201212



LOWER SECTION PLENUM IN PPE FOR OVAL PIPING
To be combined with upper section in PPE. The Plenum features 14 pre-punched outlets for oval piping. Standard low version.

DESCRIPTION	CODE
LOW LOWER SECTION PLENUM 14 OVAL CONN. - DIM. 600x209x271	7097201114

TUBAZIONI E RELATIVI ACCESSORI



LINEAR PLENUM-PIPING CONNECTIONS
Linear connections complete with gaskets for connecting D.90 and D.75 piping to Plenums.

DESCRIPTION	CODE
LINEAR PLENUM CONNECTION WITH GASKET – Ø 90/76	7097401097
LINEAR PLENUM CONNECTION WITH GASKET – Ø 75/63	7097401076



90° PLENUM-PIPING CONNECTIONS
Connections with 90° curve complete with gaskets for connecting D.90 and D.75 piping to Plenums.

DESCRIPTION	CODE
90° PLENUM CONNECTION WITH GASKET – Ø 90/76	7097401197
90° PLENUM CONNECTION WITH GASKET – Ø 75/63	7097401176



LINEAR PLENUM-OVAL PIPING CONNECTION
Linear connection complete with gaskets for connecting oval piping to Plenums.

DESCRIPTION	CODE
LINEAR PLENUM CONNECTION WITH GASKET - OVAL	7097401051



BLUE-COLORED SEMI-RIGID AIR DUCTS
Available in D.90 and D.75.

DESCRIPTION	PACKAGE	CODE
SEMI-RIGID SUPPLY AIR DUCT Ø 90/76 - BLUE COL-OR	50 m	7097501097
SEMI-RIGID SUPPLY AIR DUCT Ø 75/63 - BLUE COL-OR	50 m	7097501076



RED-COLORED SEMI-RIGID AIR DUCTS
Available in D.90 and D.75.

DESCRIPTION	PACKAGE	CODE
SEMI-RIGID RETURN AIR DUCT Ø 90/76 - RED COL-OR	50 m	7097511097
SEMI-RIGID RETURN AIR DUCT Ø 75/63 - RED COL-OR	50 m	7097511076



RED-COLORED OVAL SEMI-RIGID AIR DUCT

DESCRIPTION	PACKAGE	CODE
OVAL SEMI-RIGID DUCT 52X132 - RETURN AIR RED COLOR	20 m	7097531051



BLUE-COLORED OVAL SEMI-RIGID AIR DUCT

DESCRIPTION	PACKAGE	CODE
OVAL SEMI-RIGID DUCT 52X132 - SUPPLY AIR BLUE COLOR	20 m	7097521051



LINEAR SLEEVES FOR SEMI-RIGID PIPING JUNCTION
Sleeves complete with gaskets for linear connection of D.90 and D.75 semi-rigid piping.

DESCRIPTION	PACKAGE	CODE
JUNCTION SLEEVE 2 DUCTS "GASKETS" Ø.90/76	1 m	7097601097
JUNCTION SLEEVE 2 DUCTS "GASKETS" Ø.75/63	1 m	7097601076



90° SLEEVES FOR SEMI-RIGID PIPING JUNCTION
Sleeves complete with gaskets for 90° connection of D.90 and D.75 semi-rigid piping.

DESCRIPTION	PACKAGE	CODE
90° CURVE DUCT "GASKETS" Ø.90/76	1 pz	7097601197
90° CURVE DUCT "GASKETS" Ø.75/63	1 pz	7097601176



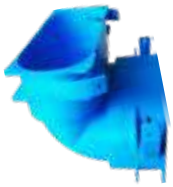
LINEAR SLEEVE FOR OVAL PIPING JUNCTION
Sleeve complete with gaskets for linear connection of oval piping.

DESCRIPTION	PACKAGE	CODE
LINEAR CONNECTION OVAL DUCTS "GAS-KETS"	1 pz	7097601051



90° "HORIZONTAL" SLEEVE FOR OVAL PIPING JUNCTION
Sleeve complete with gaskets for 90° "horizontal" connection of oval piping.

DESCRIPTION	PACKAGE	CODE
90° HORIZONTAL CURVE OVAL DUCTS "GAS-KETS"	1 pz	7097601351



90° "VERTICAL" SLEEVE FOR OVAL PIPING JUNCTION

Sleeve complete with gaskets for 90° "vertical" connection of oval piping.

DESCRIPTION	PACKAGE	CODE
90° VERTICAL CURVE OVAL DUCTS "2 GAS-KETS"	1 pz	7097601151



SUPPORTS FOR SEMI-RIGID PIPING BENDING

Supports for bending semi-rigid piping D.90 and D.75.

DESCRIPTION	PACKAGE	CODE
90° BENDING SUPPORT Ø 90/76	1 pz	7097521097
90° BENDING SUPPORT Ø 75/65	1 pz	7097521076



FLOOR AND CEILING BRACKETS FOR SEMI-RIGID PIPING

Brackets for fixing semi-rigid piping D.90 and D.75 to floor or ceiling.

DESCRIPTION	PACKAGE	CODE
FLOOR - CEILING BRACKET Ø 90/76	12 pz	7097521197
FLOOR - CEILING BRACKET Ø 75/63	12 pz	7097521176



ADAPTER BETWEEN CIRCULAR AND OVAL DUCT

Adapter for connecting a D.90 circular semi-rigid piping with an oval piping.

DESCRIPTION	PACKAGE	CODE
ADAPTER BETWEEN CIRCULAR DUCT Ø 90/76 AND OVAL DUCT	1 pz	7097601397



SEMI-RIGID DUCT CROSSING

To be used to reduce the thickness occupied by the crossing of 2 semi-rigid ducts D.90.

DESCRIPTION	PACKAGE	CODE
DUCT CROSSING Ø 90/76	1 pz	7097341097



DIAMETER REDUCTION DIAPHRAGM

Diaphragm for reducing the diameter of circular piping. Useful for balancing flow rates.

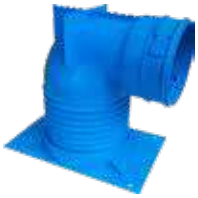
DESCRIPTION	PACKAGE	CODE
DIAMETER REDUCTION DIAPH-RAGM	6 Pz	7097311000



DIAMETER REDUCTION DIAPHRAGM FOR OVAL PIPING
Diaphragm for reducing the diameter of oval piping. Useful for balancing flow rates.

DESCRIPTION	PACKAGE	CODE
DIAMETER REDUCTION DIAPHRAGM FOR OVAL DUCT	1 Pz	7097311100

TERMINALS FOR CIRCULAR GRILLES



90° TERMINAL FOR CIRCULAR GRILLES
90° terminal for single D.90 piping, to be combined with a circular grille.

DESCRIPTION	CODE
90° TERMINAL FOR VENTILATION VALVE - REG. PLATE – Ø 90/76	7097701197



90° TERMINAL FOR CIRCULAR GRILLES
90° terminal for double or single D.75 piping, to be combined with a circular grille.

DESCRIPTION	CODE
90° TERMINAL FOR VENTILATION VALVE - REG. PLATE - Ø 75/63	7097701176



LINEAR TERMINAL FOR CIRCULAR GRILLES
Linear terminal for single D.90 piping, to be combined with a circular grille.

DESCRIPTION	CODE
LINEAR TERMINAL FOR VENTILATION VALVE - REG. PLATE - Ø 90/76	7097701097



LINEAR TERMINAL FOR CIRCULAR GRILLES
Linear terminal for double or single D.75 piping, to be combined with a circular grille.

DESCRIPTION	CODE
LINEAR TERMINAL FOR VENTILATION VALVE - REG. PLATE - Ø 75/63	7097701076



90° TERMINAL FOR CIRCULAR GRILLES OVAL PIPING
90° terminal for single oval piping, to be combined with a circular grille.

DESCRIPTION	CODE
90° TERMINAL FOR VENTILATION VALVE – OVAL DUCT - REG. PLA-TE	7097701151



MODULAR EXTENSION
Modular extension to increase the length of terminals for circular grilles, to be used in case of insulated and/or particularly thick slabs.

DESCRIPTION	CODE
MODULAR EXTENSION	7097321000



FIXED EXTENSION
Fixed length extension to increase the length of terminals for circular grilles, to be used in case of insulated and/or particularly thick slabs.

DESCRIPTION	CODE
FIXED EXTENSION FOR TERMI-NALS	7097321100

CIRCULAR GRILLES



CIRCULAR GRILLE
4-way circular grille with fixed fins, to be combined with terminals for circular grilles. Recommended air flow rate: 50 M³/H.

DESCRIPTION	CODE
VENTILATION VALVE - 4-WAY FIXED FINS – Ø 115 – 75 M³/H	7097801000



CIRCULAR GRILLE
Rotating circular grille with fixed fins, to be combined with terminals for circular grilles. Recommended air flow rate: 50 M³/H.

DESCRIPTION	CODE
VENTILATION VALVE - ROTATING. 360° ADJUSTABLE SEGMENTS - Ø 120 – 75 M³/H	7097801136



CIRCULAR GRILLE
Cone-type circular grille, to be combined with terminals for circular grilles. Recommended air flow rate: 50 M³/H.

DESCRIPTION	COD
VENTILATION VALVE - CONE TYPE Ø 120 – 50 M³/H RETURN – 75 M³/H SUPPLY	7097801236



CIRCULAR GRILLE
Disc-type circular grille, to be combined with terminals for circular grilles.
Recommended air flow rate: 50 M³/H.

DESCRIPTION	CODE
VENTILATION VALVE - DISC TYPE Ø 120 - 50 M³/H RETURN – 75 M³/H SUPPLY	7097801336



CIRCULAR GRILLE
Disc-type circular grille, to be combined with terminals for circular grilles.
Recommended air flow rate: 50 M³/H.

DESCRIPTION	CODE
CIRCULAR GRILLE Ø 120- SLOTTED – WHITE PAINTED STEEL – 30 M³/H	7097801436

PLENUM FOR RECTANGULAR GRILLES



INSULATED PLENUM FOR RECTANGULAR GRILLES
Plenum for room wall or ceiling with 5 pre-punched outlets. For air flow rates up to 50mc/h. To be combined with rectangular grilles 260x155mm.

DESCRIPTION	CODE
INSULATED PLENUM FOR RECT. GRILLE – 5 PRE-PUNCHED - 232X127X141	7097101000



INSULATED PLENUM FOR RECTANGULAR GRILLES
Plenum for room wall or ceiling with 9 pre-punched outlets. For air flow rates up to 100mc/h. To be combined with rectangular grilles 370x155mm.

DESCRIPTION	CODE
INSULATED PLENUM FOR RECT. GRILLE – 9 PRE-PUNCHED - 342X127X141	7097101001



INSULATED PLENUM FOR RECTANGULAR GRILLES
Plenum for room wall or ceiling with 12 pre-punched outlets. For air flow rates up to 150mc/h. To be combined with rectangular grilles 480x155mm.

DESCRIPTION	CODE
INSULATED PLENUM FOR RECT. GRILLE – 12 PRE-PUNCHED - 452X127X141	7097101002



INSULATED PLENUMS FOR RECTANGULAR GRILLES
Plenum for room wall or ceiling with side connection for single D.75 or D.90 piping. Does not require fittings for connection with piping. For air flow rates up to 50mc/h. To be combined with rectangular grilles.

DESCRIPTION	CODE
INSULATED PLENUM - SIDE CONN. Ø 75 – DUCT Ø 90/76 - 232X127X100	7097101397
INSULATED PLENUM - SIDE CONN. Ø 60 –DUCT Ø 75/63 - 232X127X85	7097101376



INSULATED PLENUM FOR RECTANGULAR GRILLES OVAL PIPING
Plenum for room wall or ceiling with 2 pre-punched outlets for oval piping. For air flow rates up to 50mc/h. To be combined with rectangular grilles 260x155mm.

DESCRIPTION	CODE
INSULATED PLENUM FOR RECT. GRILLE - 2 OVAL CONNECTIONS - 232X127X135	7097101100

RECTANGULAR GRILLES



SLOTTED RECTANGULAR GRILLE
SLOTTED RECTANGULAR GRILLE TO BE COMBINED WITH INSULATED PLENUMS FOR RECTANGULAR GRILLES. RECOMMENDED AIR FLOW RATE: 50 M³/H.

DESCRIPTION	CODE
RECT. GRILLE 260X155MM - SLOTTED – WHITE PAINTED STEEL – 70 M³/H	7097801400



PERFORATED RECTANGULAR GRILLE
Perforated rectangular grille to be combined with insulated plenums for rectangular grilles. Recommended air flow rate: 50 M³/H.

DESCRIPTION	CODE
RECT. GRILLE 260X155 - PERFORATED – WHITE PAINTED STEEL - 70 M³/H	7097801401



SLOTTED RECTANGULAR GRILLE
Slotted rectangular grille to be combined with insulated plenums for rectangular grilles. Recommended air flow rate: 100 M³/H.

DESCRIPTION	CODE
RECT. GRILLE 370X155 - SLOTTED – WHITE PAINTED STEEL	7097801402



SLOTTED RECTANGULAR GRILLE
Slotted rectangular grille to be combined with insulated plenums for rectangular grilles. Recommended air flow rate: 150 M³/H.

DESCRIPTION	CODE
RECT. GRILLE 480X155 - SLOTTED – WHITE PAINTED STEEL	7097801403

DEDICATED PLENUM AND GRILLE



INSULATED PLENUM FOR OVAL PIPING
Wall plenum for single or double oval piping.
For air flow rates up to 100mc/h. Complete with rectangular grille.

DESCRIPTION	CODE
WALL PLENUM OVAL DUCT - WITH GRILLE	7097101051



INSULATED PLENUM FOR OVAL PIPING
Floor plenum for single or double oval piping. For air flow rates up to 100mc/h. Complete with rectangular grille.

DESCRIPTION	CODE
FLOOR PLENUM OVAL DUCT - WITH GRILLE	7097101151



INSULATED PLENUM FOR SLOT DIFFUSER
Insulated plenum for air diffusion in rooms with 2 pre-punched outlets. To be combined with linear slot diffuser (CODE.7097801570).

DESCRIPTION	COD
INSULATED PLENUM LINEAR SLOT DIFFUSION - 450x140x95	7097101500



LINEAR SLOT DIFFUSER
Linear diffuser for insulated plenum for slot diffuser. Recommended air flow rate: 50 M^3/H.

DESCRIPTION	CODE
LINEAR SLOT DIFFUSER – ANODIZED ALUMINUM - UP TO 70M^3/H - 450X58X48	7097801570

MACHINE ACCESSORIES



CONDENSATE TRAP
Condensate trap to be combined with VMC machines.

DESCRIPTION	PACKAGE	CODE
CONDENSATE TRAP	1 Pz	7091302000



LOWERED CONDENSATE TRAP
Lowered condensate trap to be combined with VMC machines.

DESCRIPTION	PACKAGE	CODE
LOWERED TRAP WITH SIDE DRAIN	1 Pz	7091302001

AIR
TREATMENT BATTERIES

The following batteries are applicable to treatment machines.



BFC1 - 2 150 - 160
WATER COOLING-HEATING BATTERY

To be positioned before the supply plenum to achieve the desired comfort condition in the room.
Warning: VP control is required for battery control.

CHARACTERISTICS				
	BFC1 150	BFC1 160	BFC2 150	BFC2 160
Cold water inlet (°C)	7-12			
Nipple (mm)	150	160	150	160
Water circuit collector diam.	½"			
Dimensions (mm)	404x355x215		461x275x355	
No. of rows	4		5	
Fin pitch (mm)	3		2,5	
Volume (dm³)	1		2	
MATERIALS				
Tubes	CCopper			
Fins	Aluminum			
Frame	Galvanized iron			

DESCRIPTION	CODE
BFC1 150 hot cold battery	**7096101215**
BFC1 160 hot cold battery	**7096101216**
BFC2 150 hot cold battery	**7096101315**
BFC2 160 hot cold battery	**7096101316**



BE 500 150-160
ELECTRIC HEATING BATTERY

To be positioned before the supply plenum to achieve the desired comfort condition in the room. Complete with: 55°C automatic reset thermal protector, terminal block, 70°C manual reset thermal protector, cable gland, safety pressure switch, solid state relay, temperature probe. Warning: VP control is required for battery control.

CHARACTERISTICS		
	BE500 150	BE500 160
Nipple (mm)	150	160
No. phases	1	
Voltage (V)	230	
Power (W)	500	
No. stages	1	

DESCRIPTION	CODE
BE 500 Ø 150 Electric battery	**7096101615**
BE 500 Ø 160 Electric battery	**7096101616**

VMC REGULATION



PLEIEVO-VP CONTROL PANEL

The Pleievo-VP panel is suitable for controlling air treatment machines (VMC) with heat recovery equipped with 3-speed fans (electronic or inverter controlled). The controller allows all functions of the Pleibasic control, plus:

- Supply and return air flow unbalancing (for electronic or inverter fans)
- Maximum speed limitation
- Automatic speed selection when combined with CO_2/VOC, RH sensors, constant pressure/flow kit or with 0-10 V remote signal
- Recirculation damper management
- Through 3 external clean contacts it's possible to activate functions: booster (fans at maximum speed), PIR (presence detector) and fan start/stop
- Humidity function: maximum speed if MAX RH value is reached in the room
- Fire function: total room air extraction with zero supply flow
- Defrost management with function to prevent frost formation in the heat exchanger (Pre-heating) and supply air treatment, Set Point (Post-Heating/Cooling)
- Post-heating management according to supply or return temperature, according to electric heater (ON-OFF/Proportional) or hot/cold water battery or hot or cold only proportionally for available solenoid valve with 3-point or 0-10 V control
- Separate management in case water-fed batteries or electric resistance are combined in the machine
- Detailed alarm cause display plus possibility to receive it remotely (general alarm or clogged filters)
- Hot/cold air post-treatment activation in season change and By-Pass
- Remote fan ignition according to set-point humidity value
- Weekly chronological programming

DESCRIPTION	CODE
PLEIEVO VP TOUCH CONTROL PAN-EL	7095201110



Sonda di CO_2 / VOC



Sonda di CO_2

SENSOR

To be used only with machines equipped with high-efficiency EC fans. Possibility to work at maximum/minimum set point and therefore at maximum/minimum fan speed, while outside these two "limit: 20-100%" conditions the fans vary their speed proportionally.



Sonda di CO_2 a canale



Sonda di umidità

DESCRIPTION	CODE
CO_2/VOC wall sen-sor	7081546000
CO_2 wall sensor	7081556000
CO_2 duct sensor	7081566000
RH duct sensor	7081576000

STARTUP SERVICE

The first startup service is performed, by appointment, by a Pleion Technical Assistance Center (TAC).

WHAT DOES IT **INCLUDE?**

- **Verification** of hydraulic connections
- **Verification** of electrical wiring
- **Filling o**f the solar circuit, **venting and pressurization**
- **Setting** of the control unit
- **Verification** of expansion vessel pre-charge
- **Verification** of correct functioning of the system components

WHEN IS IT **FREE?**

The service is covered by PLEION EXCLUSIVELY for the following families of solar systems:



ULTRAFRESH 401
ULTRADUO 401



ECO COMPACT
ECO COMPACT HPS



ECO FRESH



ECO DUO



SPAZIO



THERMA 430

WHEN IS IT **PAID?**

A. The service is paid for all systems excluded from the families indicated above.

B. The service can be purchased separately (see table below) with the order of at least one Pleion product (e.g., solar controller); it can therefore also be used where the system includes components from other brands.

CODE	SERVICE	NON-DISCOUNTABLE RATE	NOTES
AC01	Telephone startup of solar controller - NEW 2023	40,00 €	By appointment at https://pleion.it/it/avviamento-centralina
AS05	Startup of solar system up to 5 collectors	100,00 €	Including filling, venting, pressurization of the solar circuit
AS10	Startup of solar system from 6 to 10 collectors	180,00 €	
AS20	Startup of solar system from 11 to 20 collectors	300,00 €	
AS21	Startup of additional collector from the 21st onwards	12,00 €	
ASAN1	Startup of single SAN module	70,00 €	All SAN F models
ASANC	Startup of cascade SAN modules system	120,00 €	Regardless of the number of modules connected in cascade
AR01	Radiant system 1 collector	100,00 €	-
AR02	Radiant system collectors after the first	75,00 €	-

N.B. During system startup, the presence of the electrical and hydraulic installer is strongly recommended.

SOME EXAMPLES:

In the case of a system with 25 collectors, the offer will include:
n. 1 x AS20 Startup of solar system from 11 to 20 collectors €300.00
n. 5 x AS21 Startup of additional collector from the 21st onwards €12.00 each, total €60.00
In the case of a radiant system with 3 collectors, the offer will include:
n. 1 x AR01 Radiant system 1 collector €100.00
n. 2 x AR02 Radiant system collectors after the first, €75.00 each, total €150.00.

The PLEION first startup service does not include the installation of hydraulic or electrical connections unless previously agreed with the PLEION reference personnel. PLEION will be responsible for verifying the correct operation of its components present in the system; components such as heat generators, loading units and more, not supplied by PLEION, can however be verified on request as far as possible.

ACTIVATE YOUR WARRANTY ONLINE!

Pleion offers the consumer (buyer/user) a 5-year Conventional Warranty free of charge.

Please be informed that the Warranty Conditions for the products can be consulted on https://pleion.it/it/condizioni-garanzia/. We recommend contacting our local partner directly for further details and specific conditions.

PLEION
The Sun is our Life!

NOTE

NOTE

SALES CONDITIONS

1. APPLICATION
The following General Sales Conditions apply to all Sales Contracts in force between the seller (hereinafter also referred to as Pleion Spa) and the purchaser (hereinafter also referred to as Customer). These conditions are considered to be fully accepted and approved by the Customer when the order is placed.

2. ORDERS
The descriptions, photographs, characteristics, and prices contained in the Pleion Spa catalogue and in other Pleion Spa documentation are for informational purposes only. Pleion Spa reserves the right to change all or part of the aforementioned information and the related products at any time and without prior notice. Customer orders will be considered definitively placed, subject to requests for changes or cancellations made by the Customer within 24 hours of being received by Pleion Spa.

3. PRICES
The sales prices are those indicated in the sales documentation, unless updated to those currently in force on the date of delivery. Prices are ex-office Pleion S.p.a. for products packaged according to standard internal procedures, are net of additional transport charges and other expenses related to the processing of the order and are exclusive of VAT.

4. DELIVERIES
The terms of delivery are indicative and in no case may constitute a motive for cancellation of all or part of the order placed by the Customer. In no case is Pleion Spa responsible for reimbursement of direct or indirect damages due to delivery delays or total or partial interruption of the supply.

5. TRANSPORT
If, at the time of delivery, the customer or person receiving the goods on their behalf discovers a defect or deficiency in the packaging or in the goods received, he or she must make a written notice on the shipper's transport slip and, at the same time, notify Pleion Spa in writing. Any damages or losses related to the transported goods are the Customer's responsibility as it is travelling at the Customer's risk, even if sold postage paid, unless otherwise agreed in writing.

6. CLAIMS
The Customer must submit any complaints to Pleion S.p.a. within eight days of the arrival of the goods. The customer, who has made complaints or brought disputes is under no circumstances entitled to delay or suspend payments for supplies to Pleion S.p.a.

Notwithstanding the provisions of article 134 of the Consumer Code, the non-consumer Buyer may exercise the right of recourse against the Seller, under penalty of forfeiture, only within two years of delivery of the Products to the same non-consumer Buyer.
Without prejudice to the rights provided for by consumer law, the Seller guarantees the quality of the Products for a certain period after delivery, excluding those defects that may occur due to transport, improper use or inadequate storage or maintenance of the Products. Any claim relating to defects or faults concerning the Products must be sent to the Seller by registered letter with return receipt or certified e-mail strictly within eight days of delivery in the case of obvious defects and within eight days of discovery in the case of hidden defects, in any case within 1 year of delivery, under penalty of forfeiture. Returns will not be accepted unless previously authorised in writing by the Seller; the latter will examine the returns to verify that the defect exists and is attributable to its own responsibility and only in this case will it replace and/or repair the Products recognised as defective. Any other warranty, even by law, must be considered excluded and replaced by these Terms and Conditions.

7. PAYMENT
All payments must be made, in the agreed currency, at the domicile of Pleion S.p.a. In the event of deferred payment, failure to comply with a deadline will result in forfeiture of the deadline itself,the immediate payability of the entire remaining amount and the application of default interests to the extent imposed by law. Payments are due within the agreed deadlines even in the event of delays in the delivery of the goods, total or partial failures and losses during the transportation and/or storage phases. This also applies when the Customer does not collect the goods made available to them by Pleion S.p.a.

8. RETENTION OF OWNERSHIP
The goods are sold subject to retention of ownership Italian Civil Code Art. 1523 et seq) and therefore remain the property of Pleion Spa until full payment of the price.

9. TERMINATION AND/OR SUSPENSION OF ORDERS
Pleion Spa has the right to suspend further deliveries in the event of the following:
- failure to comply in all or in part of even one of these sales conditions;
- change in the Customer's company and/or its commercial capabilities.

10. RESPONSIBILITY
Pleion Spa will not be responsible for damages or injuries to animals or people resulting from products being installed properly or contrary to the indications in the technical manuals/instructions provided to the Customer.

11. FORCE MAJEURE CLAUSE
The performance terms written in our offers/acceptances are not binding on Pleion Spa and are automatically suspended in the event of strikes, fires, floods, and other force majeure causes.

12. NOTICE IN ACCORDANCE WITH ART. 13 OF ITALIAN LEGISLATIVE DECREE No. 196 OF 30 JUNE 2003
CODE FOR THE PROTECTION OF PERSONAL DATA

12.1. The personal data collected by Pleion Spa may be processed either in written form or by electronic means for legal and contractual requirements, any future promotional initiatives, through sending electronic and/or paper communications as well as to carry out market research and surveys.
12.2. Personal data may be communicated to credit institutions, credit collection agencies, credit insurance companies, commercial information companies, consultants and professionals, our network of agents and external technical assistants, factoring companies, purchasing groups, and companies to which Pleion Spa has requested or will request the creation of the promotional initiatives and or market research and surveys mentioned above.
12.3. Pursuant to Art. 7 of Italian Legislative Decree no. 196 of 30 June 2003, the customer has the right to obtain the following at any time: the updating, rectification or, when interested, the integration of the data; the erasure, the transformation in anonymous form or the blocking of data processed in violation of the law, including data for which conservation is unnecessary with regards to the purposes for which the data has been collected or subsequently handled; confirmation that the operations referred to above have been brought to the attention, including with regard to their content, of those to whom data have been communicated or disclosed, except in cases where it is impossible to fulfil this obligation or where the obligation leads to the use of resources manifestly disproportionate to the right protected.
12.4. Pursuant to Art. 7 of Italian Legislative Decree no. 196 of 30 June 2003, you have the right to oppose the processing of your personal data, in whole or in part, even if pertinent to the purpose for collection.
12.5. The Data Controller is Pleion Spa, the Privacy Officer, Pleion Spa, and their representatives are authorised to become knowledgeable of the data.

13. ITALIAN LAW AND COURT OF JURISDICTION
These general sales conditions and subsequent future contractual and supply relationships are governed by Italian law. The Court of Verona has jurisdiction over any dispute related or connected to these general sales conditions and subsequent future contractual and supply relationships, with Pleion Spa having the right to start proceedings in the court in the buyer's jurisdiction.

The Buyer _____ Pleion spa _____

The Buyer declares to expressly approve, pursuant to art. 1341 and 1342 of the Italian Civil Code, the following vexatious clauses: art. 6 complaints (time and form of the complaint – waiver of the recourse action) – art. 13 (Italian law and jurisdiction).

The Buyer _____

PLEION

The Sun is our Life!

PLEION Spa - Via Venezia, 11 - Cerea (VR)
Tel. +39 0442 320295 - **info@pleion.it**

www.pleion.it