Гидравлические сепараторы, распределительные коллекторы и реле для тепловых электростанций

Технические характеристики

По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70
Казахстан +(727)345-47-04
Беларусь +(375)257-127-88
Узбекистан +998(71)205-18-59
Киргизия +996(312)96-26-47

эл.почта: tec@nt-rt.ru || сайт: https://tiemme.nt-rt.ru/

05 HYDRAULIC SEPARATORS, DISTRIBUTION MANIFOLDS AND PUMPING STATIONS FOR HEATING SYSTEM

05A Introduction

05B Hydraulic separators and inertial storage

05C Manifolds from heating systems

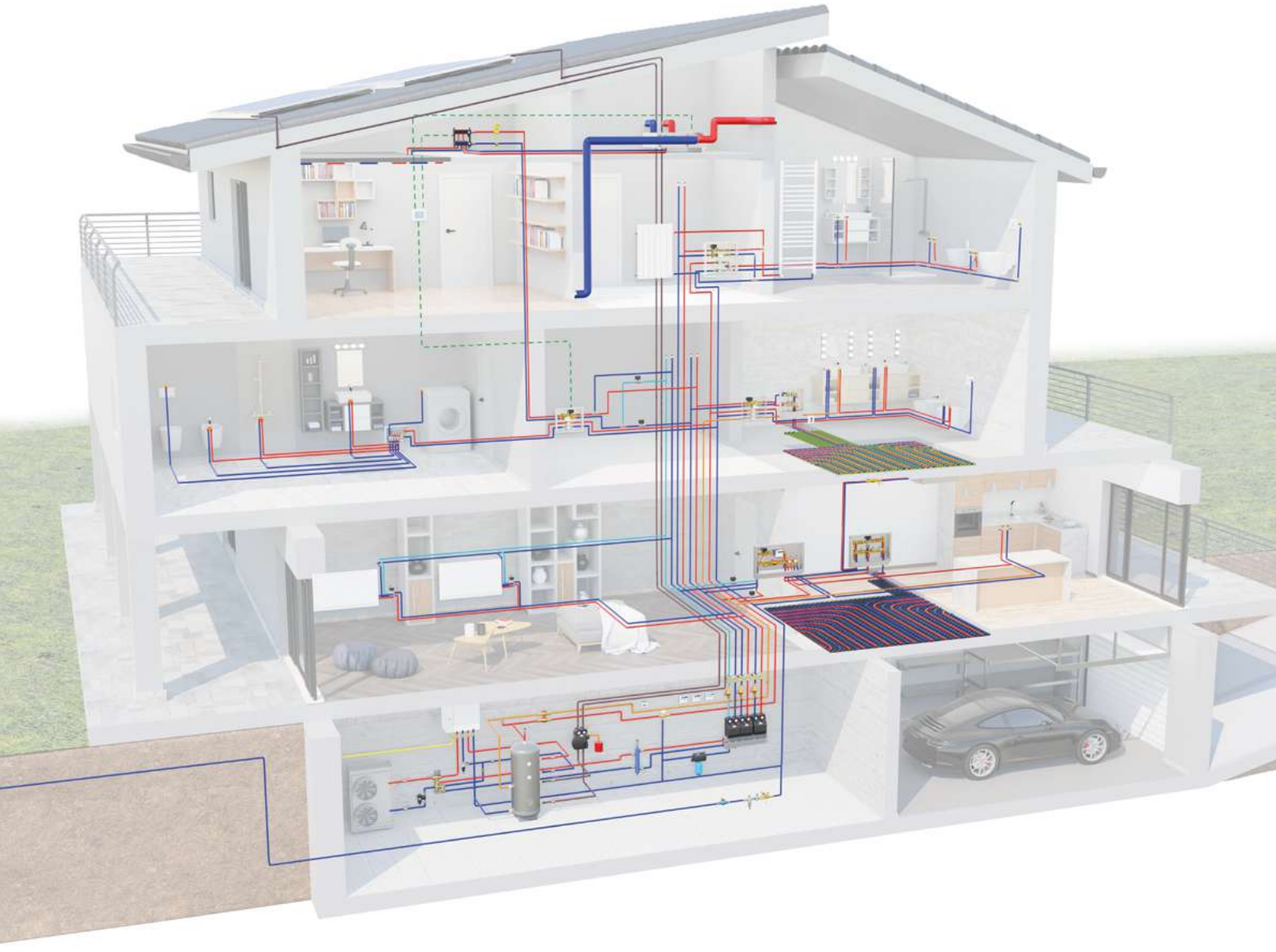
05D Pumping stations and adjustment units

05 A HYDRAULIC POWER UNITS FOR HEATING SYSTEM

A valid solution for the regulation and the distribution of the fluid inside the plant is the use of specific hydraulic mixing units for boiler room - also called heating system - associated with distribution manifolds.

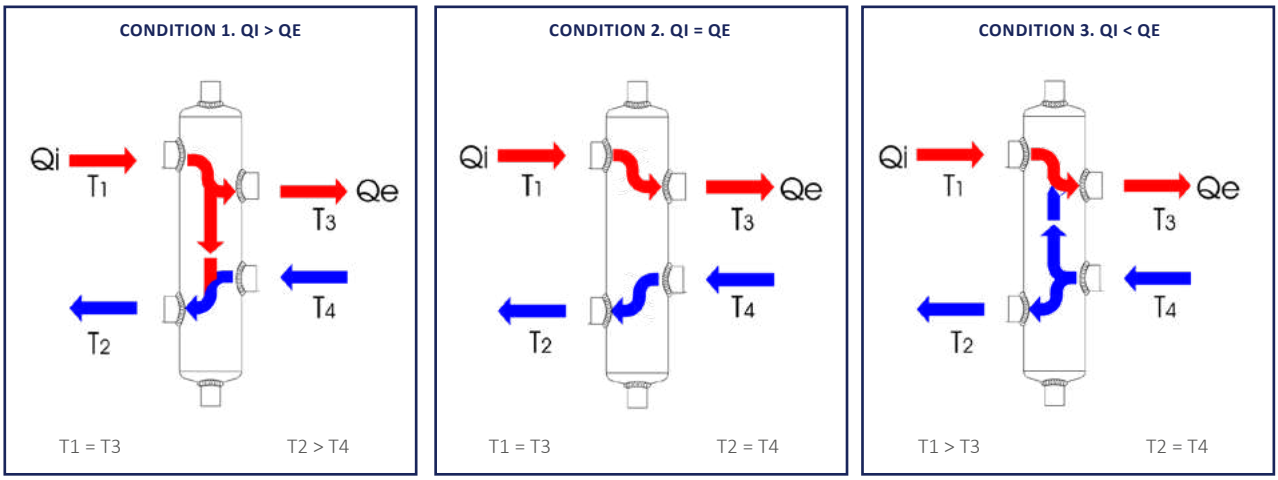
In this chapter you will find a complete proposal for fluid management in the heating system:

- Steel and brass hydraulic separators for the hydraulic separation of the primary generation circuit from the secondary distribution circuit.
- Steel and brass manifolds for connecting the units to the generator;
- Hydraulic pumping stations, fixed point mixing and modulating mixing units



In systems that provide for a booster pump it is recommended to divide the primary circuit from the secondary one through a hydraulic circuit breaker. This can be done by means of a hydraulic separator (for systems with small volume) or by inertial accumulation.
Both are able to separate the two circuits (primary and secondary) as they consist of a zone with reduced pressure drops. Their function is to prevent that between the circuits themselves, due to changes in flow rates and the prevalences generated by circulation pumps, interference and disturbances may arise.
The choice of separator type is mainly influenced by the maximum flow rates in the plant.

CONDITIONS OF OPERATION
If the flow rates in the primary and secondary circuits are identical (condition 2), the hydraulic separator does not perform any function, while if one of the two currents has a flow rate higher than the other (condition 1 - 3), thanks to the hydraulic separator, a part of this flow rate is directed to the other flow, in order to balance the two flows.
This avoids interference between the pumps of the various circuits, improving the circulation of the fluid and ensuring for each single circuit connected to the operation at the design conditions.
The following is a graphical representation of the three hydraulic equilibrium conditions that we can find inside the separator:



where:
Qi = primary circuit flow rate
Qe = secondary circuit flow rate

T1 = Primary circuit delivery temperature
T2 = Primary circuit return temperature

T3 = Secondary circuit delivery temperature
T4 = Secondary circuit return temperature

At the design stage, it is good practice to consider the possible temperature variations that the primary and secondary circuits may undergo due to their mixing inside the separator.

TIEMME INFORMS
Inertial accumulation shall be installed instead of a hydraulic separator in the following cases:

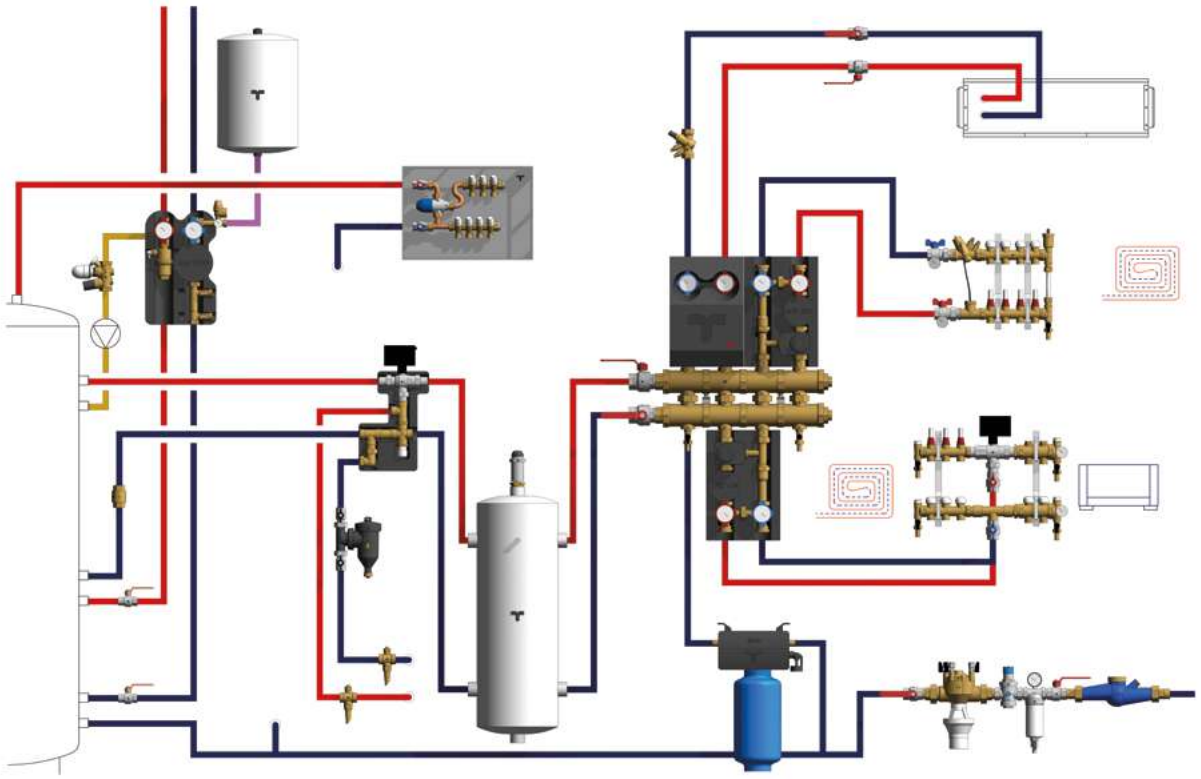
- to ensure the minimum water content (installations consisting mainly of fan coil units and radiators);
- to increase the thermal inertia of the plant in order to obtain a better control in modulation;
- where parallel installation of alternative heat sources to the heat pump is envisaged (e.g. pellet stove);
- to optimise operation during the defrosting process, avoiding cold water entering the system.

In the presence of a hydraulic separator or inertial accumulation it is essential to properly balance the flow rates of the primary and secondary circuits.

For all heat pump operations (heating, cooling, and defrosting) it is essential to ensure the minimum volume of water required, which must be met even in the most unfavourable conditions, that is, with totally or partially closed areas. To ensure a minimum volume of water to the heat pump it is possible to install an inertial accumulation, paying particular attention to its location and its sizing.

Inertial accumulation can be **connected as a hydraulic separator** between the primary and secondary circuits, making the two circuits hydraulically independent. This type of configuration guarantees an energy reserve for the users, therefore a greater inertia to the emission terminals in case of PdC shutdown. Alternatively, it can be **installed in line on the return of the system**, for example in systems without pumping circuit. On ON/OFF machines and on machines with obsolete inverters this arrangement allows to reduce the number of compressor cycles, ensuring less stress to the machine. The minimum return temperature of the water to the generator for the evaporator defrosting operations is guaranteed.

The inertial accumulation **placed on the delivery** plays the same function as a thermal flywheel on the return but, acting as an energy reserve for the emission system, requires more time to complete the phase of commissioning the system.
Finally, it is possible to install the inertial accumulation in the three-pipe version: similar to the version as hydraulic separator, it allows to hydraulically compensate the circuits and at the same time provides an energy tank to serve users. The substantial difference is dictated by the presence of a direct connection from the machine to the users that allows a rapid commissioning.



TIEMME INFORMS
The volume of inertial accumulation depends on the minimum volume of water required by the manufacturer of the PdC to ensure proper operation even in defrosting phases.

This value is influenced by the characteristics of the plant, its extension, and the management mode (presence of the By-pass valve) and must be guaranteed net of the water content of the heat pump and the emission system; In fact, with a 2-way zone regulation, the water content of the emission system is excluded from the total volume of the system when the ambient temperature is reached.

The minimum volume of water can be calculated according to the power of the machine: generally it can be assumed a value of 5÷7 litres per thermal Kw (in any case it is essential to follow the manufacturer's instructions).

ADVANTAGES / STRENGHTS

- Function of separator;
- Function of dirt separator;
- Available with or without insulation;
- Professional deaerator (art. 1896);
- Possibility to transform it into magnetic version by means of accessory 3144MAG (art. 3165 - art. 3165ISOL).

3165
Threaded hydraulic separator

TECHNICAL CHARACTERISTICS
- Body material: Fe 360 epoxy coated steel
- Max working pressure: 10 bar
- Max working temperature: 110°C

Transformable in magnetic version with accessory 3144MAG.

Code	Type	Flow rate	Price €	Unit/Box
316 0006	1”	2,5 (m³/h)		1/1
316 0003	1”1/4	4,0 (m³/h)		1/1
316 0004	1”1/2	6,0 (m³/h)		1/1
316 0005	2”	9,0 (m³/h)		1/1

3165ISOL
Insulated threaded hydraulic separator

TECHNICAL CHARACTERISTICS
- Body material: Fe 360 epoxy coated steel
- Insulation material: PE-X closed cell foam
- Max working pressure: 10 bar
- Max working temperature: 100°C

Transformable in magnetic version with accessory 3144MAG.

Code	Type	Flow rate	Price €	Unit/Box
316 0001	1”	2,5 (m³/h)		1/1
316 0002	1”1/4	4,0 (m³/h)		1/1
316 0008	1”1/2	6,0 (m³/h)		1/1
316 0007	2”	9,0 (m³/h)		1/1

3167ISOL
Insulated flanged hydraulic separator

TECHNICAL CHARACTERISTICS
- Body material: Fe 360 steel
- Insulation material: PPE
- Max working pressure: 10 bar
- Max working temperature: 100°C

Code	Type	Flow rate	Price €	Unit/Box
316 0106	DN50	9 (m³/h)		1/1
316 0107	DN65	20 (m³/h)		1/1
316 0108	DN80	25 (m³/h)		1/1
316 0109	DN100	40 (m³/h)		1/1
316 0110	DN125	65 (m³/h)		1/1
316 0111	DN150	95 (m³/h)		1/1

Equipped with base for floor support

ADVANTAGES / STRENGHTS

- Function of separator
- Function of dirt separator
- Magnetic function
- Available with or without insulation
- Professional deaerator (art. 1896)

3144

Threaded magnetic hydraulic separator

TECHNICAL CHARACTERISTICS

- Body material: Fe 360 epoxy coated steel
- Max working pressure: 10 bar
- Max working temperature: 110°C

Code	Type	Flow rate	Price €	Unit/Box
314 0001	1”	2,5 (m³/h)		1/1
314 0002	1”1/4	4,0 (m³/h)		1/1
314 0003	1”1/2	6,0 (m³/h)		1/1
314 0004	2”	9,0 (m³/h)		1/1

3144ISOL

Insulated threaded magnetic hydraulic separator

TECHNICAL CHARACTERISTICS

- Body material: Fe 360 epoxy coated steel
- Insulation material: PE-X closed cell foam
- Max working pressure: 10 bar
- Max working temperature: 100°C

Code	Type	Flow rate	Price €	Unit/Box
314 0005	1”	2,5 (m³/h)		1/1
314 0006	1”1/4	4,0 (m³/h)		1/1
314 0007	1”1/2	6,0 (m³/h)		1/1
314 0008	2”	9,0 (m³/h)		1/1

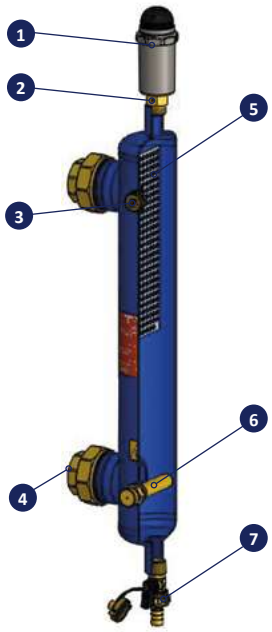
ACCESSORIES AND SPARE PARTS

3144MAG

Well kit with magnet

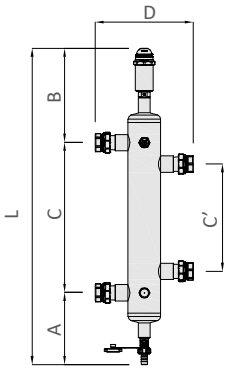
Code	Type	Price €	Unit/Box
316 0105	1/2”		1/25

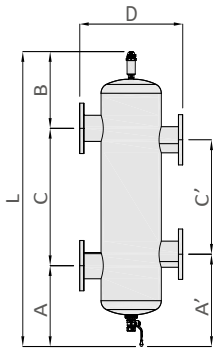
COMPONENT DESCRIPTION



1. **Automatic air vent valve:** eliminates the air in the system.
2. **Cut-off and shut-off valve:** it allows maintenance/replacement of the air vent valve without having to empty the system.
3. **Threaded connection G 1/2" (supplied plugged):**
   (art. 3144 - 3144ISOL – 3165 – 3165ISOL)
   allows the installation of a probe-holder well (art. 9561T) in order to monitor the temperature of the delivery fluid.
4. **Flat seat fittings in 3 pieces:**
   (art. 3144 - 3144ISOL – 3165 – 3165ISOL)
   facilitate the installation of the separator.
5. **Metal mesh:** promotes the separation of impurities and the conveying of air bubbles to the air vent valve located at the upper end of the separator.
6. **Magnet 12.000 Gauss:**
   (art. 3144 - 3144ISOL)
   positioned at the bottom of the device, it allows to increase the filtration efficiency, blocking all ferrous impurities present inside the plant, through the action of the magnetic field.
7. **Loading/unloading valve:** useful both for carrying out the loading operations of the plant and for the elimination of sediments deposited inside the separator.

DIMENSIONS





*Equipped with base for floor support

Art.	Code	Size	A (mm)	A' (mm)	B (mm)	C (mm)	C' (mm)	D (mm)	L (mm)	Volume (litres)
3165	316 0006	G 1" F	165	215	220	350	250	229	735	1,9
	316 0003	G 1"1/4 F	165	215	220	350	250	269	735	2,65
	316 0004	G 1"1/2 F	190	240	245	500	400	320	935	6
	316 0005	G 2" F	190	240	245	650	550	338	1085	11,5
3165ISOL	316 0001	G 1" F	165	215	220	350	250	229	735	1,9
	316 0002	G 1"1/4 F	165	215	220	350	250	269	735	2,65
	316 0008	G 1"1/2 F	190	240	245	500	400	320	935	6
	316 0007	G 2" F	190	240	245	650	550	338	1085	11,5
3144	314 0001	G 1" F	165	215	220	350	250	229	735	1,9
	314 0002	G 1"1/4 F	165	215	220	350	250	269	735	2,65
	314 0003	G 1"1/2 F	190	240	245	500	400	320	935	6
	314 0004	G 2" F	190	240	245	650	550	338	1085	11,5
3144ISOL	314 0005	G 1" F	165	215	220	350	250	229	735	1,9
	314 0006	G 1"1/4 F	165	215	220	350	250	269	735	2,65
	314 0007	G 1"1/2 F	190	240	245	500	400	320	935	6
	314 0008	G 2" F	190	240	245	650	550	338	1085	11,5

Art.	Code	Size	A (mm)	A' (mm)	B (mm)	C (mm)	C' (mm)	D (mm)	L (mm)	Volume (litres)
3167ISOL	316 0106	DN50	340	365	320	320	270	350	980	11
	316 0107	DN65	350	375	335	400	350	400	1085	18
	316 0108	DN80	350	400	335	500	400	500	1185	34
	316 0109	DN100	350	400	335	600	500	520	1285	60
	*316 0110	DN125	575	650	335	750	600	520	1660	68
	*316 0111	DN150	580	655	340	1000	850	600	1920	140

ADVANTAGES / STRENGHTS

- Extremely compact;
- Can be combined with Tiemme brass central manifolds;
- Equipped with insulation system;
- Version available with integrated shut-off valves (art. 7167.

7166

Hydraulic separator with insulation

TECHNICAL CHARACTERISTICS

- Max working temperature: 100 °C
- Max working pressure: 10 bar
- Body and components: Brass CW617N
- Connections and outlets: 1" male thread
- Brackets: Galvanized steel
- Insulation shell: Closed cell expanded cross-linked polyethylene (PEX)
- Centre distance: 125 mm

Code	Section	Flow rate	Price €	Unit/Box
316 0050	1”	2,5 (m³/h)		1/1

7167

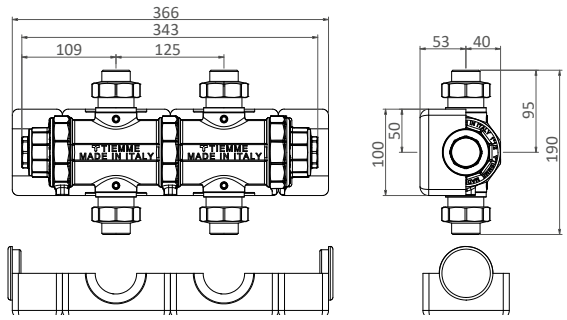
Hydraulic separator with insulation and valves

TECHNICAL CHARACTERISTICS

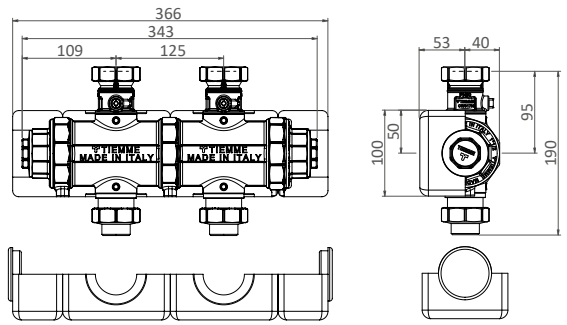
- Max working temperature: 100 °C
- Max working pressure: 10 bar
- Body and components: Brass CW617N
- Connections and outlets: 1" male thread
- Brackets: Galvanized steel
- Insulation shell: Closed cell expanded cross-linked polyethylene (PEX)
- Centre distance: 125 mm

Code	Section	Flow rate	Price €	Unit/Box
316 0065	1”	2,5 (m³/h)		1/1

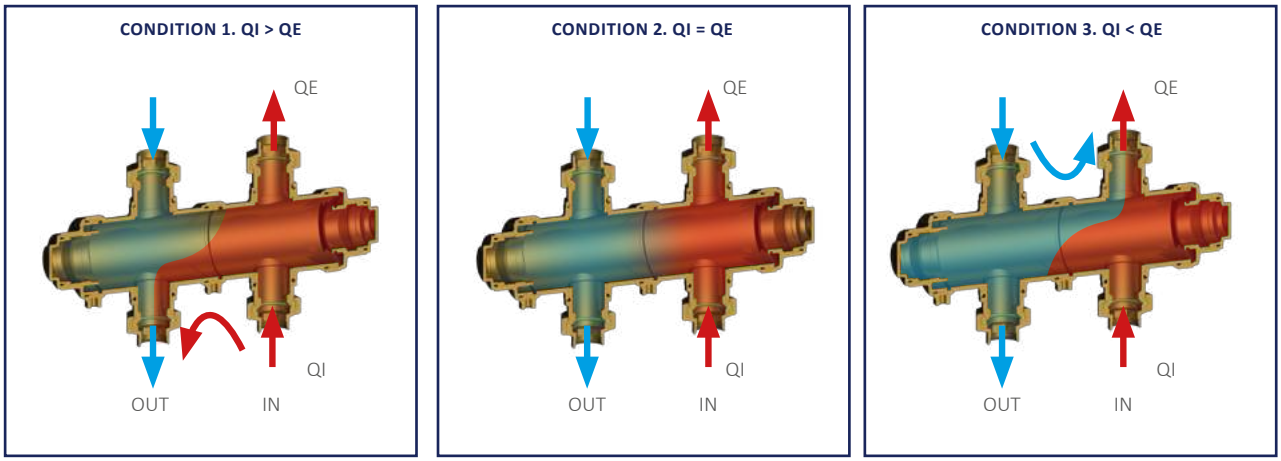
7166 DIMENSIONS



7167 DIMENSIONS

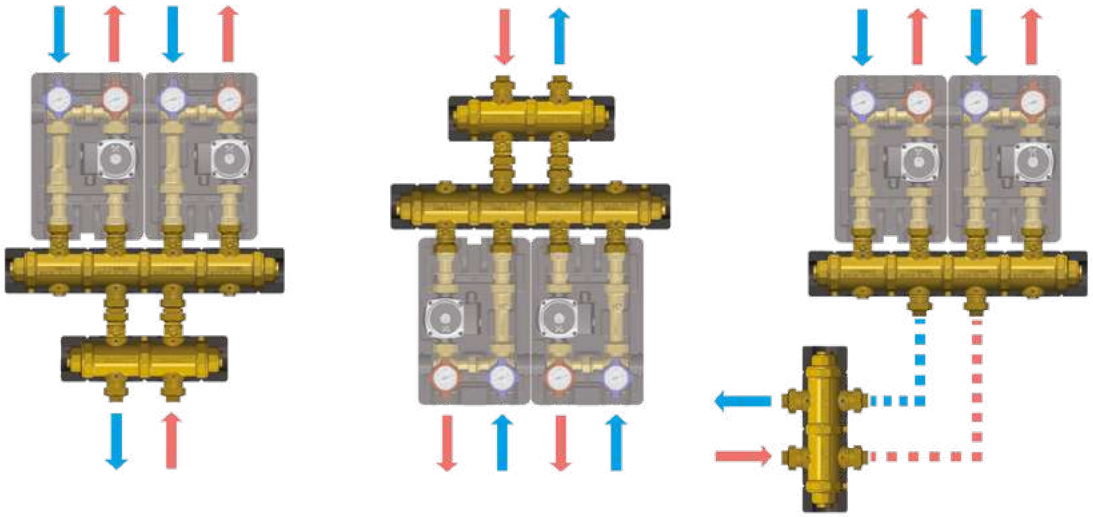


OPERATION



QI: primary circuit flow rate
QE: secondary circuit flow rate

CONFIGURATION EXAMPLES



PRODUCT RANGE

NEW

3168

Inertial accumulation in stainless steel with function of hydraulic separator in combination with systems with heat pump.

Complete with air vent valve and M/F reduction.

Code	Type	Price €	Unit/Box
316 0154	25 Litres		1/1
316 0155	30 Litres		1/1
316 0156	50 Litres		1/1
316 0157	75 Litres		1/1

ACCESSORIES

NEW

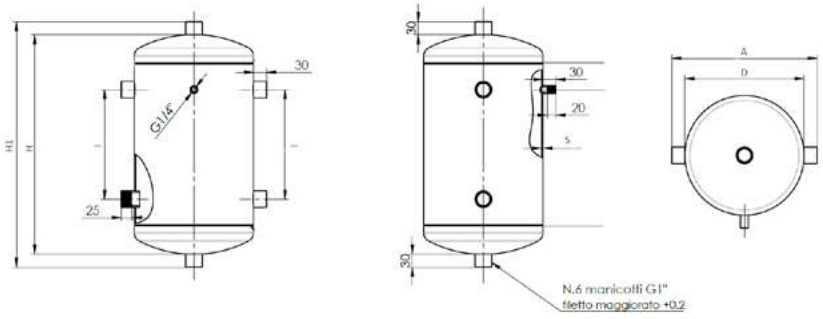
3168ISOLIM

Thermal insulation made with PPE shells minimum thickness 45 mm and density 30 g/l.

Code	Type	Price €	Unit/Box
316 0162	Storage 25 Litres		1/1
316 0163	Storage 30 Litres		1/1
316 0164	Storage 50 Litres		1/1
316 0165	Storage 75 Litres		1/1

DIMENSIONAL CHARACTERISTICS

		Codes			
		316 0154	**316 0155**	**316 0156**	**316 0157**
Total width (A)	mm	333	333	333	333
Tank diameter (D)	mm	273	273	273	273
Height (H)	mm	400 (±5)	500 (±5)	800 (±5)	1250 (±5)
Total connections height (H1)	mm	460 (±5)	560 (±5)	860 (±5)	1310 (±5)
Distance between connections (I)	mm	180	250	500	650
Tank thickness (S)	mm	3	3	3	3
Straight nipples (M)	N°	6	6	6	6
Straight nipples connection threads		G 1"	G 1"	G 1" 1/4	G 1" 1/4
Straight nipples thread length (F)	mm	25	25	20	20
Temperature probe connection		G 1/4"	G 1/4"	G 1/4"	G 1/4"
Weight (without load)	Kg	9,67	11,63	17,81	26,63



TECHNICAL CHARACTERISTICS

		316 0154	**316 0155**	**316 0156**	**316 0157**
Total capacity	Litres	25	30	50	75
Maximum working pressure	Bar	6	6	6	6
Maximum flow rate	m^3/h	3,5	3,5	5,5	5,5
Dispersion	W	22	28	27	32
Working temperatures	°C	-10 ÷ +95			
Maximum percentage of Glycol	%	30			

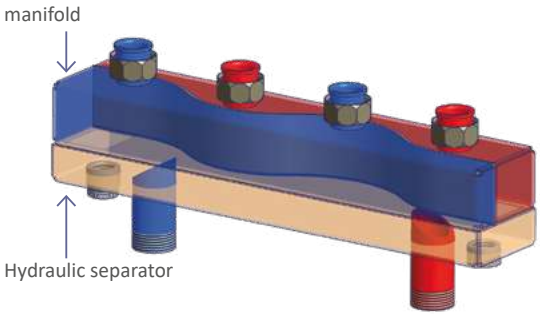
Tiemme offers a series of extremely compact manifolds in steel that can be combined with different pumping stations to meet any plant requirements. Used in heating and/or air conditioning systems allow different thermal adjustments of the various environments with the presence of a single heat generator or refrigeration machine resulting in an easy to install and compact solution. Equipped with an insulating shell and available to power up to 4 or 6 circuits depending on the model chosen, they are characterized by 1"1/2 outlet connections with flat seat and 125mm circuit centre distance. Tiemme offers the choice of a manifold with integrated hydraulic separator, art. 5539X, all to the advantage of the simplicity of installation and the safeguarding of the useful living spaces. Tiemme compact steel manifolds art. 5538X - 5540X - 5539X, are supplied complete with preformed shell insulation to guarantee the perfect thermal insulation both in the use for heating and air conditioning systems.

5539X

Insulated steel hydraulic/ manifold separator and fixing brackets, circuit centre distance 125 mm, connections with flat seat and 1"1/2 cap

Code	Section	Circuits No.	Flow rate	Price €	Unit/ Box
557 0001	80 x 80	2	3,0 (m³/h)		1/1
557 0002	80 x 80	3	3,0 (m³/h)		1/1
557 0003	120 x 120	2	7,0 (m³/h)		1/1
557 0004	120 x 120	3	7,0 (m³/h)		1/1
557 0005	120 x 120	4	7,0 (m³/h)		1/1

5539X **OPERATION**



5538X
5540X

Steel manifold with insulation and fixing brackets, circuit centre distance 125 mm, connections with flat seat and 1"1/2 cap

Code	Section	Circuits No.	Flow rate	Price €	Unit/ Box
557 0006	80 x 60	2	3,0 (m³/h)		1/1
557 0007	80 x 60	3	3,0 (m³/h)		1/1
557 0008	120 x 80	3	6,5 (m³/h)		1/1
557 0009	120 x 80	4	6,5 (m³/h)		1/1
557 0010	120 x 80	5	6,5 (m³/h)		1/1
557 0366	120 x 80	6	6,5 (m³/h)		1/1

5540X

Pair of soundproof and galvanized floor shelves

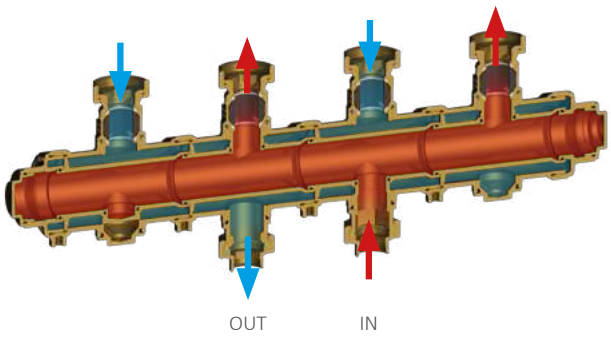
Accessory for section manifold 120x80

Code	Type	Price €	Unit/Box
557 0011	h= 405-600 mm		1/1

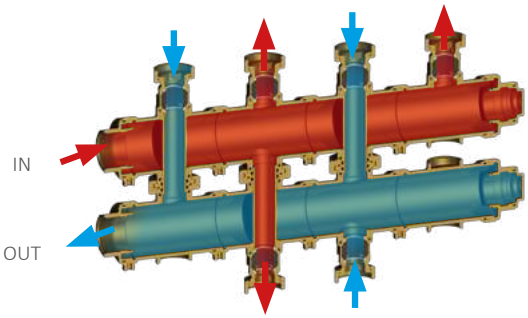
The brass modular manifolds from Tiemme Heating System are the result of an internal project of the company, which wanted to create a unique and extremely versatile component to be proposed to its customers.
H.S. manifolds are used in air conditioning systems where a thermal/cooling operating sector is required in different environments. The heat generator (boiler, fireplace, etc...) or heat pump represent the primary circuit equipped with its own circulator, while on the distribution manifold from H.S. will be installed, depending on the necessary ways, secondary circuits that also have their own circulator. This cohesion, between primary circuit and secondary circuit/s, in the operating conditions, generates abnormal interference, characterized by variations in the flow and prevalence of the individual secondary circuits, as two, or more, circulators can never be installed in line. Therefore, a hydraulic separator must be placed between the primary and secondary circuits (characterized by the presence of the branching manifold) in such a way that the two circuits, primary and secondary, will work separately without generating operating anomalies.

OPERATION

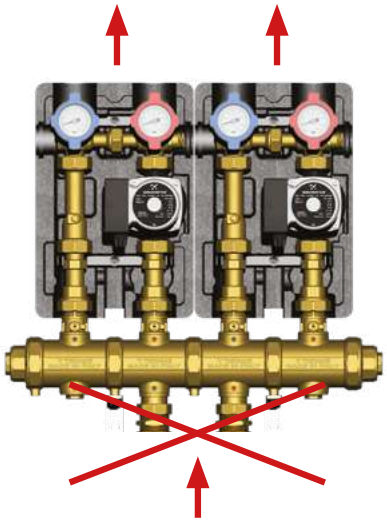
The Tiemme brass manifold comes in two configurations:
Art. 5538G, for a nominal flow of 2.2 m3/h (up to a maximum of 3 m3/h) with a characteristic coaxial shape (pipe in the pipe).



Art. 5540G, for a nominal flow of 6.5 m3/h (up to a maximum of 10 m3/h).

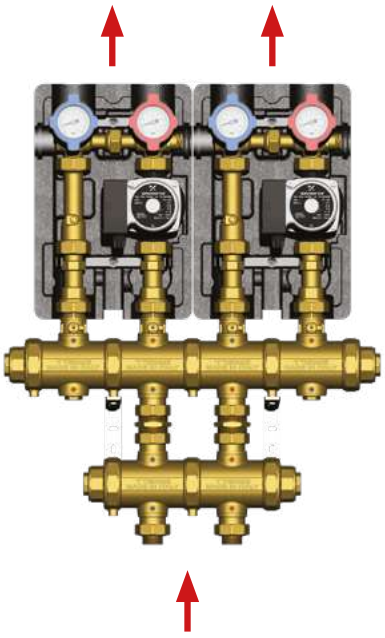


Secondary circuit



Primary circuit
with own circulator

Secondary circuit



Primary circuit
with own circulator

ADVANTAGES / STRENGHTS

Tiemme 5538G and 5540G brass manifolds have been designed to offer countless advantages to the installer including:

Easy installation
Installation is carried out by means of special wall fixing brackets (supplied) on which the collector is firmly anchored by means of screws

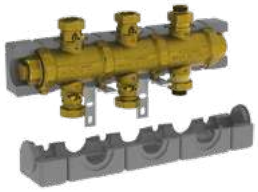
Ball valve
Specially designed to optimize installation and maintenance work on the manifold

Compactness
The possibility to install the pumping stations/mixing units (5535) facing both upwards and downwards to ensure greater compactness and flexibility of configuration

Insulation
The product is equipped with insulation shell for heating and air conditioning

Modularity
The manifold can be assembled in the configurations present in the catalogue or on customer specification

Longevity
The product is entirely made of brass and therefore guarantees a significant improvement of cleaning of the plant reducing the formation of rust. However, an appropriate bactericidal/ fungicidal product should be used

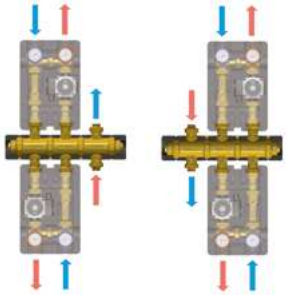


5538G2M3

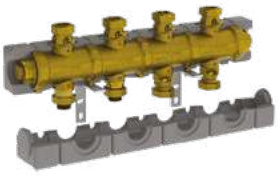
Modular brass manifold for thermal plant complete with ball valves, insulation and fixing brackets. Centre distance 125 mm, flat seat connections and 1"1/2 idle nut

Code	Section	Circuits No.	Flow rate	Price €	Unit/ Box
557 0368	2"1/2	2	2,2 (m³/h)		1/1
557 0483	2" 1/2	2	2,2 (m³/h)		1/1

5538G2M3 CONFIGURATION EXAMPLES



557 0368 557 0483

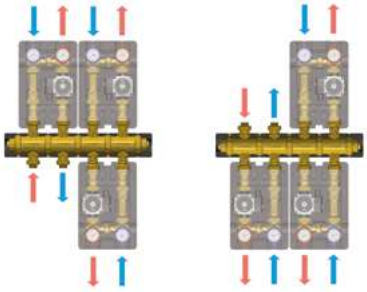


5538G3M4

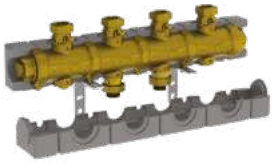
Modular brass manifold for thermal plant complete with ball valves, insulation and fixing brackets. Centre distance 125 mm, flat seat connections and 1"1/2 idle nut

Code	Section	Circuits No.	Flow rate	Price €	Unit/Box
557 0370	2"1/2	3	2,2 (m³/h)		1/1
557 0486	2" 1/2	3	2,2 (m³/h)		1/1

5538G3M4 CONFIGURATION EXAMPLES



557 0370 557 0486

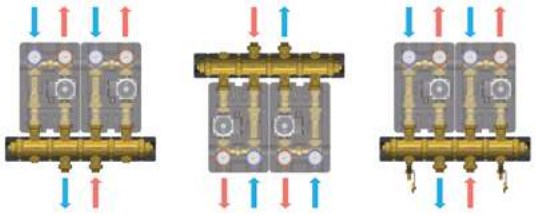


5538G2M4

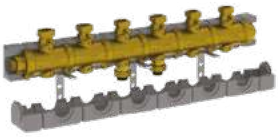
Modular brass manifold for thermal plant complete with ball valves, insulation and fixing brackets. Centre distance 125 mm, flat seat connections and 1"1/2 idle nut

Code	Section	Circuits No.	Flow rate	Price €	Unit/ Box
557 0369	2"1/2	2	2,2 (m³/h)		1/1
557 0484	2" 1/2	2	2,2 (m³/h)		1/1
557 0485	2" 1/2	2	2,2 (m³/h)		1/1

5538G2M4 CONFIGURATION EXAMPLES



557 0369 557 0484 557 0485

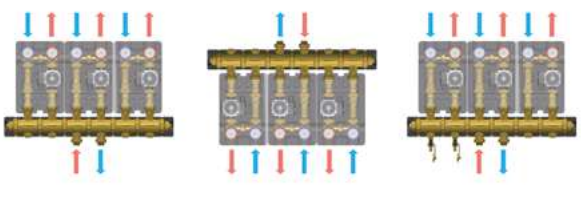


5538G3M6

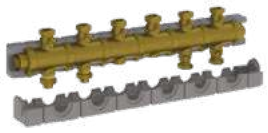
Modular brass manifold for thermal plant complete with ball valves, insulation and fixing brackets. Centre distance 125 mm, flat seat connections and 1"1/2 idle nut

Code	Section	Circuits No.	Flow rate	Price €	Unit/Box
557 0371	2"1/2	3	2,2 (m³/h)		1/1
557 0487	2" 1/2	3	2,2 (m³/h)		1/1
557 0488	2" 1/2	3	2,2 (m³/h)		1/1

5538G3M6 CONFIGURATION EXAMPLES



557 0371 557 0487 557 0488

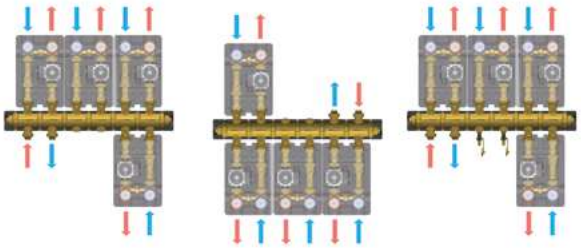


5538G4M6

Modular brass manifold for thermal plant complete with ball valves, insulation and fixing brackets. Centre distance 125 mm, flat seat connections and 1"1/2 idle nut

Code	Section	Circuits No.	Flow rate	Price €	Unit/Box
557 0477	2"1/2	4	2,2 (m³/h)		1/1
557 0478	2" 1/2	4	2,2 (m³/h)		1/1
557 0479	2" 1/2	4	2,2 (m³/h)		1/1

5538G4M6 CONFIGURATION EXAMPLES



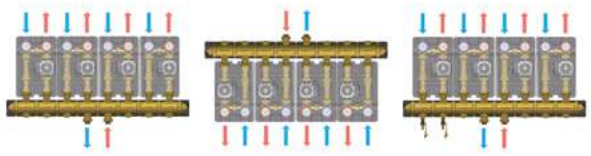
557 0477 557 0478 557 0479

5538G4M8

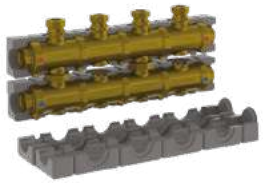
Modular brass manifold for thermal plant complete with ball valves, insulation and fixing brackets. Centre distance 125 mm, flat seat connections and 1"1/2 idle nut

Code	Section	Circuits No.	Flow rate	Price €	Unit/ Box
557 0480	2"1/2	4	2,2 (m³/h)		1/1
557 0481	2" 1/2	4	2,2 (m³/h)		1/1
557 0482	2" 1/2	4	2,2 (m³/h)		1/1

5538G4M8 CONFIGURATION EXAMPLES



557 0480 557 0481 557 0482

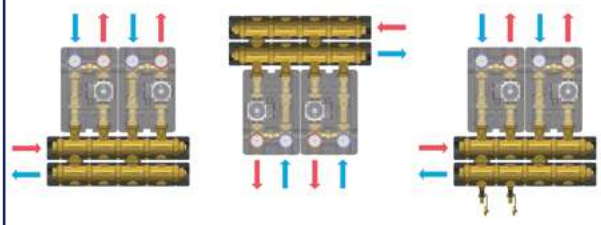


5540G2M4

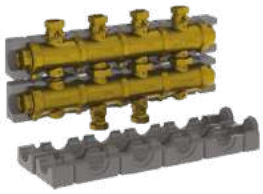
Modular brass manifold for thermal plant complete with ball valves, insulation and fixing brackets. Centre distance 125 mm, flat seat connections and 1"1/2 idle nut

Code	Section	Circuits No.	Flow rate	Price €	Unit/ Box
557 0372	2"1/2	2	6,5 (m³/h)		1/1
557 0489	2"1/2	2	6,5 (m³/h)		1/1
557 0490	2"1/2	2	6,5 (m³/h)		1/1

5540G2M4 CONFIGURATION EXAMPLES



557 0372 557 0489 557 0490

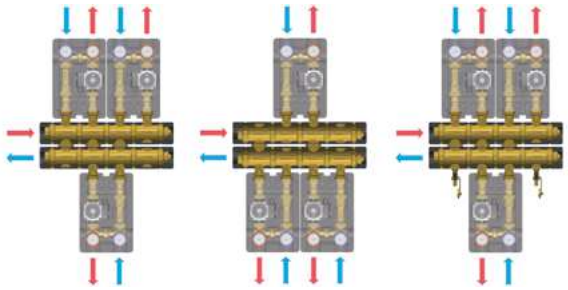


5540G3M4

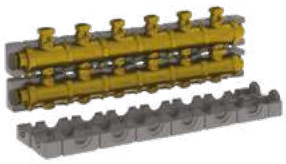
Modular brass manifold for thermal plant complete with ball valves, insulation and fixing brackets. Centre distance 125 mm, flat seat connections and 1"1/2 idle nut

Code	Section	Circuits No.	Flow rate	Price €	Unit/Box
557 0373	2"1/2	3	6,5 (m³/h)		1/1
557 0491	2"1/2	3	6,5 (m³/h)		1/1
557 0492	2"1/2	3	6,5 (m³/h)		1/1

5540G3M4 CONFIGURATION EXAMPLES



557 0373 557 0491 557 0492

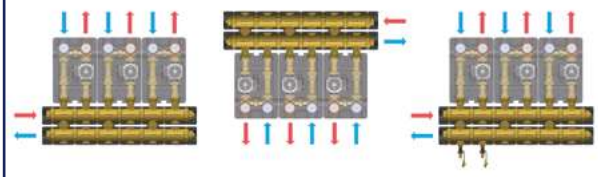


5540G3M6

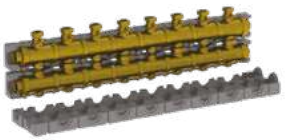
Modular brass manifold for thermal plant complete with ball valves, insulation and fixing brackets. Centre distance 125 mm, flat seat connections and 1"1/2 idle nut

Code	Section	Circuits No.	Flow rate	Price €	Unit/Box
557 0374	2"1/2	3	6,5 (m³/h)		1/1
557 0493	2"1/2	3	6,5 (m³/h)		1/1
557 0494	2"1/2	3	6,5 (m³/h)		1/1

5540G3M6 CONFIGURATION EXAMPLES



557 0374 557 0493 557 0494

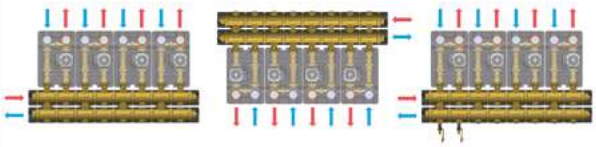


5540G4M8

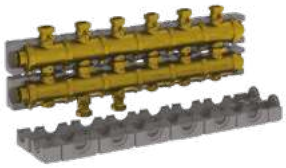
Modular brass manifold for thermal plant complete with ball valves, insulation and fixing brackets. Centre distance 125 mm, flat seat connections and 1"1/2 idle nut

Code	Section	Circuits No.	Flow rate	Price €	Unit/Box
557 0376	2"1/2	4	6,5 (m³/h)		1/1
557 0497	2"1/2	4	6,5 (m³/h)		1/1
557 0498	2"1/2	4	6,5 (m³/h)		1/1

5540G4M8 CONFIGURATION EXAMPLES



557 0376 557 0497 557 0498

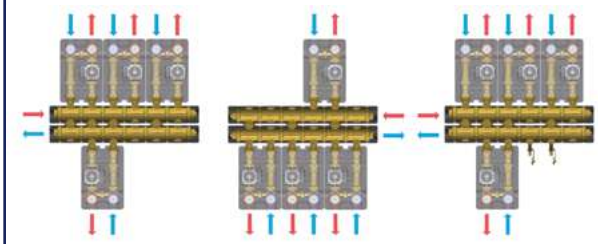


5540G4M6

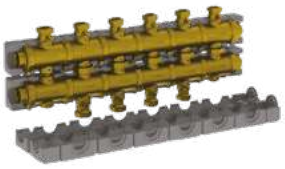
Modular brass manifold for thermal plant complete with ball valves, insulation and fixing brackets. Centre distance 125 mm, flat seat connections and 1"1/2 idle nut

Code	Section	Circuits No.	Flow rate	Price €	Unit/Box
557 0375	2"1/2	4	6,5 (m³/h)		1/1
557 0495	2"1/2	4	6,5 (m³/h)		1/1
557 0496	2"1/2	4	6,5 (m³/h)		1/1

5540G4M6 CONFIGURATION EXAMPLES



557 0375 557 0495 557 0496

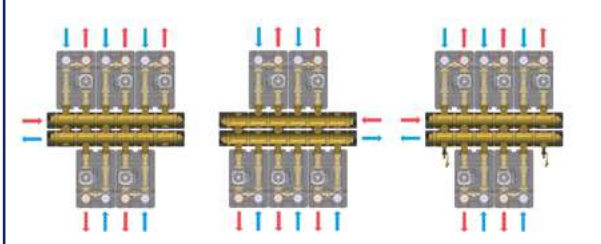


5540G5M6

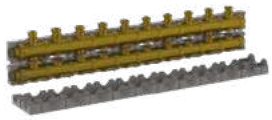
Modular brass manifold for thermal plant complete with ball valves, insulation and fixing brackets. Centre distance 125 mm, flat seat connections and 1"1/2 idle nut

Code	Section	Circuits No.	Flow rate	Price €	Unit/Box
557 0377	2"1/2	5	6,5 (m³/h)		1/1
557 0499	2"1/2	5	6,5 (m³/h)		1/1
557 0500	2"1/2	5	6,5 (m³/h)		1/1

5540G5M6 CONFIGURATION EXAMPLES



557 0377 557 0499 557 0500

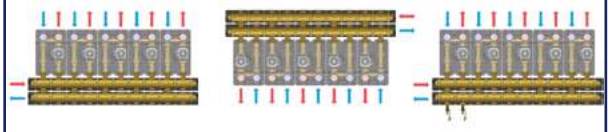


5540G5M10

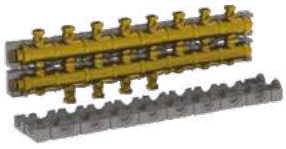
Modular brass manifold for thermal plant complete with ball valves, insulation and fixing brackets. Centre distance 125 mm, flat seat connections and 1"1/2 idle nut

Code	Section	Circuits No.	Flow rate	Price €	Unit/ Box
557 0476	2"1/2	5	6,5 (m³/h)		1/1
557 0501	2"1/2	5	6,5 (m³/h)		1/1
557 0502	2"1/2	5	6,5 (m³/h)		1/1

5540G5M10 CONFIGURATION EXAMPLES



557 0476 557 0501 557 0502

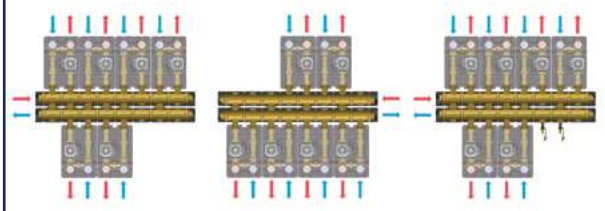


5540G6M8

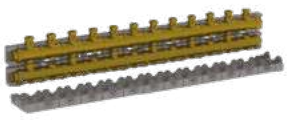
Modular brass manifold for thermal plant complete with ball valves, insulation and fixing brackets. Centre distance 125 mm, flat seat connections and 1"1/2 idle nut

Code	Section	Circuits No.	Flow rate	Price €	Unit/Box
557 0378	2"1/2	6	6,5 (m³/h)		1/1
557 0503	2"1/2	6	6,5 (m³/h)		1/1
557 0504	2"1/2	6	6,5 (m³/h)		1/1

5540G6M8 CONFIGURATION EXAMPLES



557 0378 557 0503 557 0504

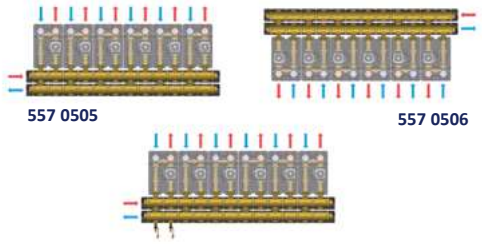


5540G6M12

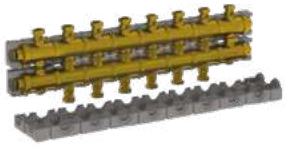
Modular brass manifold for thermal plant complete with ball valves, insulation and fixing brackets. Centre distance 125 mm, flat seat connections and 1"1/2 idle nut

Code	Section	Circuits No.	Flow rate	Price €	Unit/Box
557 0505	2"1/2	6	6,5 (m³/h)		1/1
557 0506	2"1/2	6	6,5 (m³/h)		1/1
557 0507	2"1/2	6	6,5 (m³/h)		1/1

5540G6M12 CONFIGURATION EXAMPLES



557 0505 557 0506 557 0507

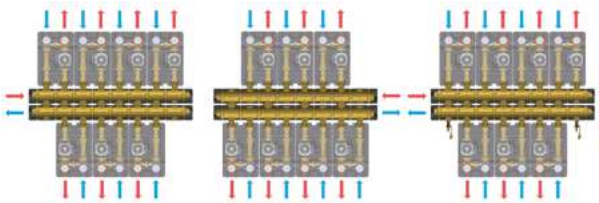


5540G7M8

Modular brass manifold for thermal plant complete with ball valves, insulation and fixing brackets. Centre distance 125 mm, flat seat connections and 1"1/2 idle nut

Code	Section	Circuits No.	Flow rate	Price €	Unit/Box
557 0508	2"1/2	7	6,5 (m³/h)		1/1
557 0509	2"1/2	7	6,5 (m³/h)		1/1
557 0510	2"1/2	7	6,5 (m³/h)		1/1

5540G7M8 CONFIGURATION EXAMPLES



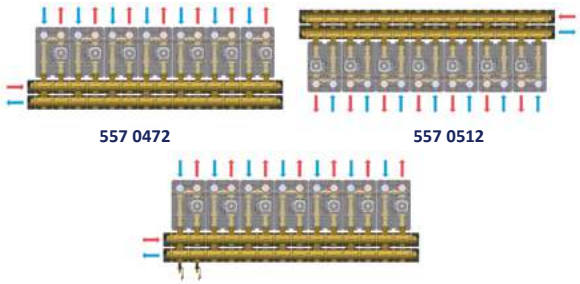
557 0508 557 0509 557 0510

5540G7M14

Modular brass manifold for thermal plant complete with ball valves, insulation and fixing brackets. Centre distance 125 mm, flat seat connections and 1"1/2 idle nut

Code	Section	Circuits No.	Flow rate	Price €	Unit/Box
557 0472	2"1/2	7	6,5 (m³/h)		1/1
557 0511	2"1/2	7	6,5 (m³/h)		1/1
557 0512	2"1/2	7	6,5 (m³/h)		1/1

5540G7M14 CONFIGURATION EXAMPLES



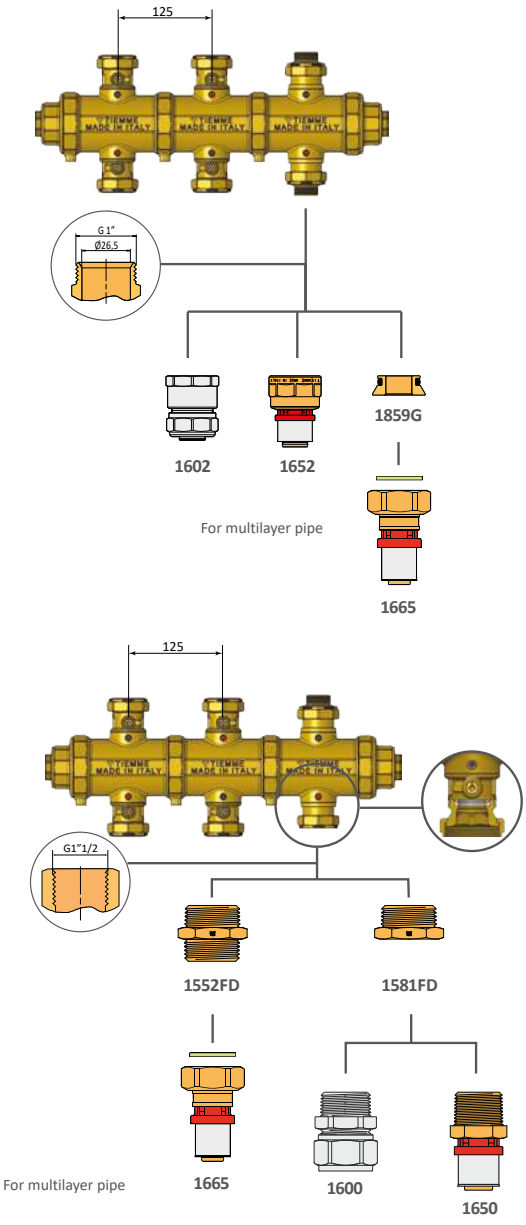
557 0472

557 0512

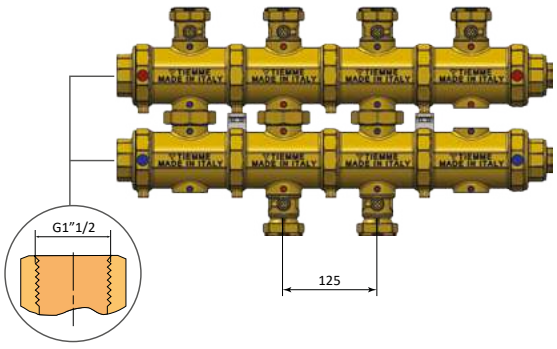
557 0511

IMPORTANT
It is possible to create specific configurations based on CUSTOMER NEEDS

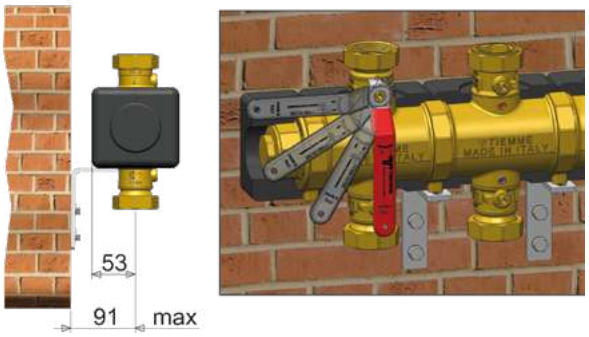
5538G - 5540G GUIDE TO CONNECTIONS



5540G GUIDE TO CONNECTIONS

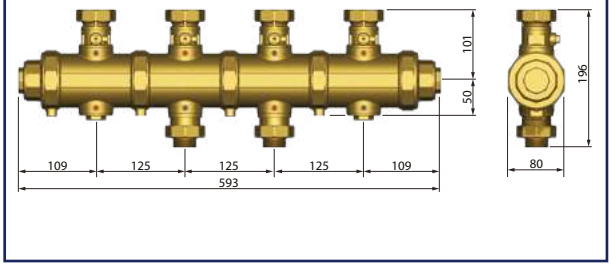


5538G - 5540G INSTALLATION

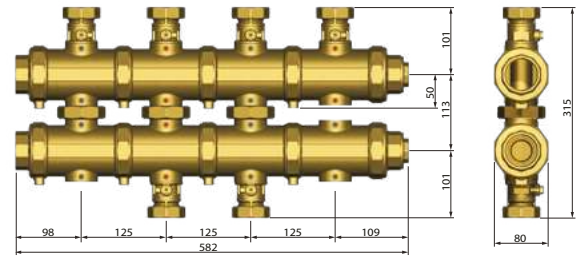


The wall installation is quick and easy thanks to the adjustable bracket to be fixed to the wall and to the manifold by screws. The seats for the screws were made directly on the manifold.
With the ball valve directly installed on the manifold, it is possible to carry out maintenance operations by interrupting only the line concerned without stopping the remaining system that will remain in operation.

5538G DIMENSIONS



5540G DIMENSIONS



1602
Straight female fitting for multilayer pipe

Code	Type	Price €	Unit/Box
160 0112	25 x 2,5 - 1"		5/50
160 0029	26 x 3,0 - 1"		5/100
160 0039	32 x 3,0 - 1"		5/50

1652
Straight female fitting for multilayer pipe

Code	Type	Price €	Unit/Box
165 0268	25 x 2,5 - 1"		5/25
165 0053	26 x 3,0 - 1"		5/25
165 0050	32 x 3,0 - 1"		5/25

1665
Straight fitting with loose nut and flat gasket for multilayer pipe

Code	Type	Price €	Unit/Box
165 0233	25 x 2,5 - 1"		2/50
165 0071	26 x 3,0 - 1"		2/50
165 0134	32 x 3,0 - 1"		2/100
165 0239	40 x 3,5 - 1"1/2		1/25

Install with 1859
Install with 1552FD

1859
Adapter to transform 1"G connection into flat stop

Code	Type	Price €	Unit/Box
144 0234	1"G		10/300

1552FD
Male thread nipple with flat seat

Code	Type	Price €	Unit/Box
471 0086	1"1/2 x 1"1/2		2/30

1881
M/F reduction with O-ring for manifolds

Code	Type	Price €	Unit/Box
195 0066	1" 1/2 x 3/4"		5/70

1828Z
Bracket plus screws for manifolds from heating system

Code	Type	Price €	Unit/Box
179 0323	unica		1/25

2095R
Flat red plastic coated lever

Code	Type	Price €	Unit/Box
209 0069	unica		1/10

2121CP
ISO 228 male/female ball valve with aluminium lever for manifolds and FLAT GASKET

Code	Type	Price €	Unit/Box
	red lever		
212 0122	1"1/2		3/12
	black lever		
212 0124	1"1/2		3/12

The pumping station DN25 art. 5535G performs the function of powering the high temperature circuits of the heating systems, directly from the out points of a manifold, without changing the temperature of the inlet fluid. Through the two thermometers it is possible to control the instantaneous temperature of supply and return. On the return branch is inserted a check valve that avoids the self-circulation of the fluid when the circulator is switched off. To underline the possibility of equipping the group with optional components such as differential by-pass (art. 5535DIFF) and/or safety countertoped thermostat (art. 2075KIT03).

1. Delivery ball valve with thermometer
2. Circulation pump (if any)
3. Delivery
4. Return
5. Insulation in EPP
6. Fixing brackets
7. Check valve
8. Return branch
9. Return ball valve with thermometer

PRODUCT RANGE

5535G
Pumping station

TECHNICAL CHARACTERISTICS

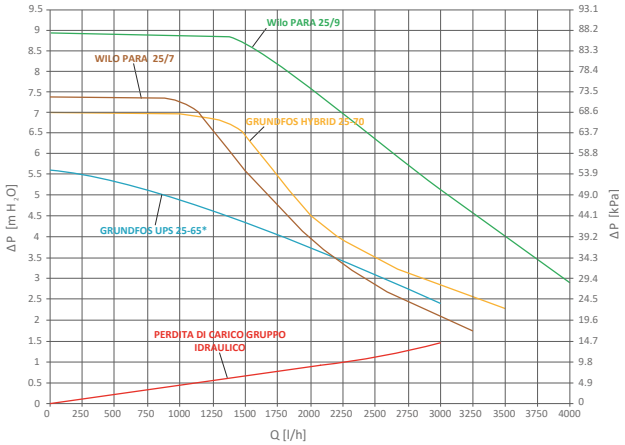
- Body material: Brass CW 617 N
- Gaskets material: EPDM
- Insulating shell material: EPP
- Dimension: DN25 (1'')
- Connections centre distance 125 mm:
  - Inlet: 1"1/2 male flat stop
  - Outlet: 1"1/2 male flat stop
- Working max P: 8 bar
- Working max T: 110°C

Code	Type	Price €	Unit/Box
316 0017	Without circulating pump		1/1
316 0043	Wilo PARA 25/7		1/1
316 0042	UPM3 HYBRID 25/70		1/1
316 0090	Wilo PARA 25/9		1/1
316 0018	Grundfos UPS 25-65		1/1

ErP READY

Available for non-EU countries

CIRCULATORY HYDRAULIC HEAD PRESSURE DROP DIAGRAM



The mixing unit DN25 art. 5535GPF performs the function of powering the low temperature circuits of radiant heating systems, directly from the out points of a manifold, changing the inlet fluid temperature to the project value (function guaranteed by the mixing valve controlled by a thermostatic head). Through the two thermometers it is possible to control the instantaneous temperature of supply and return. On the return branch is inserted a check valve that avoids the self-circulation of the fluid when the circulator is switched off. The mixing unit is also supplied complete with a Safety thermostat in contact (intervention temperature 55 °C) to safeguard the plant. The group can be equipped with optional components such as differential bypass (art. 5535DIFF).

1. Safety thermostat
2. Delivery ball valve with thermometer
3. Probe well with nipple
4. Circulation pump (if any)
5. 3-way mixing valve with thermostatic head
6. Delivery
7. Return
8. Insulation in EPP
9. Fixing brackets
10. Check valve
11. Return branch
12. Return ball valve with thermometer

PRODUCT RANGE

5535GPF
Fixed point mixing unit

TECHNICAL CHARACTERISTICS

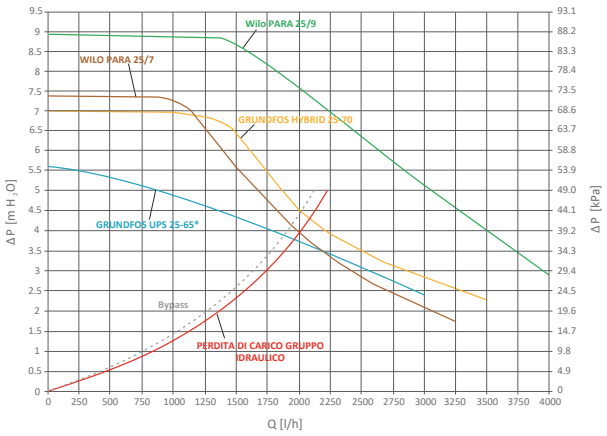
- Body material: Brass CW 617 N
- Gaskets material: EPDM
- Insulating shell material: EPP
- Dimension: DN25 (1'')
- Connections centre distance 125 mm:
  - Inlet: 1"1/2 male flat stop
  - Outlet: 1"1/2 male flat stop
- Working max P: 8 bar
- Working max T: 110°C
- Temperature regulation: 20÷50°C
- Safety thermostat: 55°C

Code	Type	Price €	Unit/Box
316 0020	Without circulating pump		1/1
316 0046	Wilo PARA 25/7		1/1
316 0045	Grundfos UPM3 HYBRID 25/70		1/1
316 0091	Wilo PARA 25/9		1/1
316 0021	Grundfos UPS 25-65		1/1

ErP READY

Available for non-EU countries

CIRCULATORY HYDRAULIC HEAD PRESSURE DROP DIAGRAM



The mixing unit DN25 art. 5535G3P performs the function of feeding the circuits of the heating systems, directly from the out points of a manifold, modifying the temperature of the fluid in input to the project value (function guaranteed by the mixing valve controlled by a 3-point servo motor). Through the two thermometers it is possible to control the instantaneous temperature of supply and return. On the return branch is inserted a check valve that prevents self-circulation of the fluid when the circulator is switched off. To underline the possibility of equipping the group with optional components such as differential by-pass (art. 5535DIFF) and/or safety thermostat (art. 2075KIT03).

1. Delivery ball valve with thermometer
2. Well for Ø 6 mm probe with nipple
3. Circulation pump (if any)
4. 3-way mixing valve with servo motor
5. Delivery
6. Return
7. Insulation in EPP
8. Fixing brackets
9. Check valve
10. Return branch
11. Return ball valve with thermometer

PRODUCT RANGE

5535G3P
Mixing unit with servo motor

TECHNICAL CHARACTERISTICS

- Body material: Brass CW 617 N
- Gaskets material: EPDM
- Insulating shell material: EPP
- Dimension: DN25 (1'')
- Connections centre distance 125 mm:
  - Inlet: 1"1/2 male flat stop
  - Outlet: 1"1/2 male flat stop
- Working max P: 8 bar
- Working max T: 110°C

SERVOMOTOR

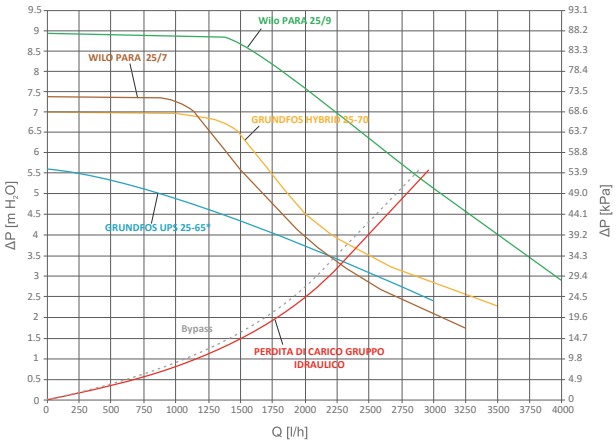
- Power supply: 230 Vac SPDT control (3 points)
- Rotation Time: 120 sec (90° angle)
- Nominal torque: 7 Nm

Code	Type	Price €	Unit/Box
316 0023	Without circulating pump		1/1
316 0049	Wilo PARA 25/7		1/1
316 0048	Grundfos UPM3 HYBRID 25/70		1/1
316 0092	Wilo PARA 25/9		1/1
316 0024	Grundfos UPS 25-65		1/1

ErP READY

Available for non-EU countries

CIRCULATORY HYDRAULIC HEAD PRESSURE DROP DIAGRAM



The pumping station DN25 art. 5536G is the variant of the pumping station 5535G dedicated to the construction of cooling systems. To achieve this, the pumping station has been equipped with EPP insulation, which reduces the risk of condensation on metal surfaces. The pumping station performs the function of feeding the circuits of the heating/cooling systems, directly from the out points of a manifold, without changing the inlet fluid temperature. Through the two thermometers it is possible to control the instantaneous temperature of supply and return. On the return branch is inserted a check valve that avoids the self-circulation of the fluid when the circulator is switched off. To underline the possibility of equipping the group with optional components such as differential by-pass (art. 5535DIFF) and/or safety thermostat (art. 2075KIT03).

1. Delivery ball valve with thermometer
2. Circulation pump (if any)
3. Delivery
4. Return
5. Insulation in Pex foam
6. Fixing brackets
7. Check valve
8. Return branch
9. Return ball valve with thermometer

PRODUCT RANGE

5536G

Pumping station with insulation for cooling

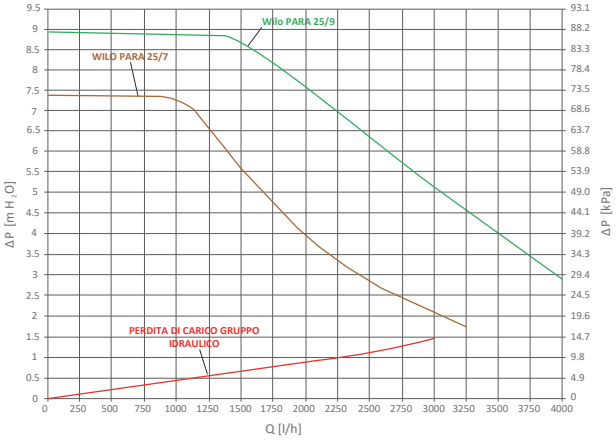
TECHNICAL CHARACTERISTICS

- Body material: Brass CW 617 N
- Gaskets material: EPDM
- Insulating shell material: PE-X closed cell foam
- Dimension: DN25 (1")
- Connections centre distance 125 mm:
  - Inlet: 1"1/2 male flat stop
  - Outlet: 1"1/2 male flat stop
- Working max P: 8 bar
- Working max T: 110°C

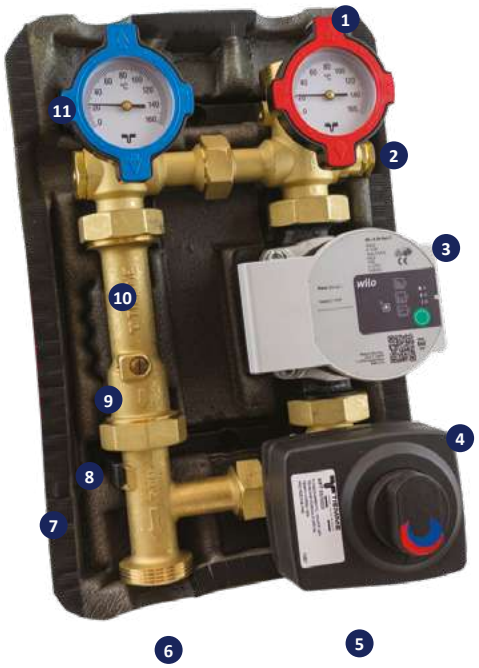
Code	Type	Price €	Unit/Box
557 0383	Without circulating pump		1/1
557 0386	Wilo PARA 25/7		1/1
557 0559	Wilo PARA 25/9		1/1

ErP READY

CIRCULATORY HYDRAULIC HEAD PRESSURE DROP DIAGRAM



The mixing unit DN25 art. 5536GS is the variant of the unit 5535G3P dedicated to the construction of cooling systems. To achieve this, the pumping station has been equipped with EPP insulation, which reduces the risk of condensation on metal surfaces. The group performs the function of feeding the circuits of the heating/cooling systems, directly from the out points of a manifold, modifying the temperature of the fluid in input to the project value (function guaranteed by the mixing valve controlled by a servo motor). Through the two thermometers it is possible to control the instantaneous temperature of supply and return. On the return branch is inserted a check valve that avoids the self-circulation of the fluid when the circulator is switched off. To underline the possibility of equipping the group with optional components such as differential by-pass (art. 5535DIFF) and/or safety thermostat (art. 2075KIT03).



1. Delivery ball valve with thermometer
2. Well for Ø 6 mm probe with nipple
3. Circulation pump (if any)
4. 3-way mixing valve with servo motor
5. Delivery
6. Return
7. Insulation in PEX foam
8. Fixing brackets
9. Check valve
10. Return branch
11. Return ball valve with thermometer

PRODUCT RANGE

5536GS

Mixing unit with servo motor and cooling insulation

TECHNICAL CHARACTERISTICS

- Body material: Brass CW 617 N
- Gaskets material: EPDM
- Insulating shell material: PE-X closed cell foam
- Dimension: DN25 (1")
- Connections centre distance 125 mm:
  - Inlet: 1"1/2 male flat stop
  - Outlet: 1"1/2 male flat stop
- Working max P: 8 bar
- Working max T: 110°C

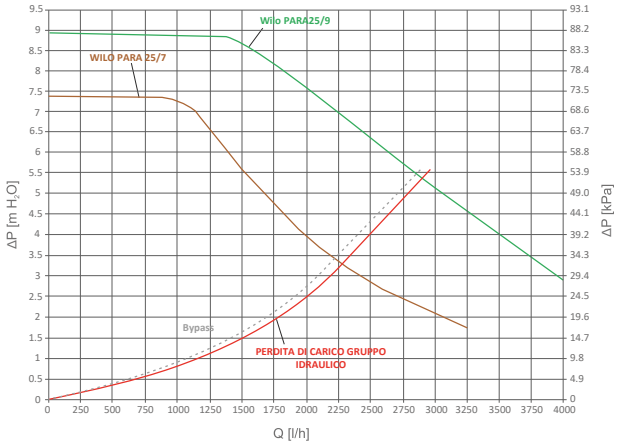
SERVOMOTOR

- Power supply: 24 Vac (0-10vdc control)
- Rotation Time: 120 sec (90° angle)
- Nominal torque: 7 Nm

Code	Type	Price €	Unit/Box
557 0388	Without circulating pump		1/1
557 0391	Wilo PARA 25/7		1/1
557 0560	Wilo PARA 25/9		1/1

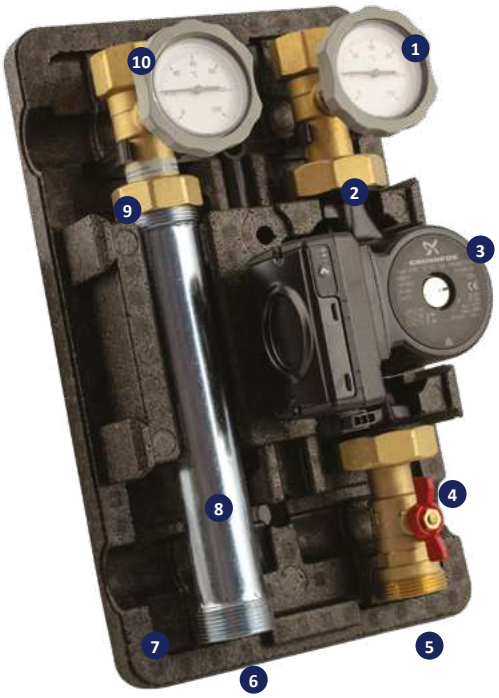
ErP READY

CIRCULATORY HYDRAULIC HEAD PRESSURE DROP DIAGRAM



DIRECT HEATING/COOLING PUMPING STATION

The pumping station DN32 art. 5534G performs the function of feeding the circuits of the heating/ cooling systems, directly from the out points of a manifold, without changing the temperature of the inlet fluid. Through the two thermometers it is possible to control the instantaneous temperature of supply and return. On the return branch is inserted a check valve that avoids the self-circulation of the fluid when the circulator is switched off.



1. Delivery ball valve with thermometer
2. Check valve
3. Circulation pump (if any)
4. Pump connection valve
5. Delivery
6. Return
7. Insulation
8. Return branch
9. Check valve
10. Return ball valve with thermometer

PRODUCT RANGE

5534G
Pumping station

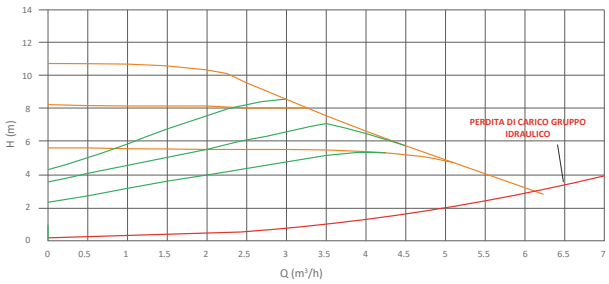
TECHNICAL CHARACTERISTICS

- Body material: Brass CW 617 N
- Gaskets material: EPDM
- Insulating shell material: EPP
- Dimension: DN32 (1"1/4)
- Connections centre distance 125 mm:
  - Inlet: 1"1/2 male flat stop
  - Outlet: 1"1/4 femmina
- Working max P: 8 bar
- Working max T: 110°C

Code	Type	Price €	Unit/Box
316 0093	Without circulating pump		1/1
316 0095	Grundfos UPML 32-105 AUTO		1/1

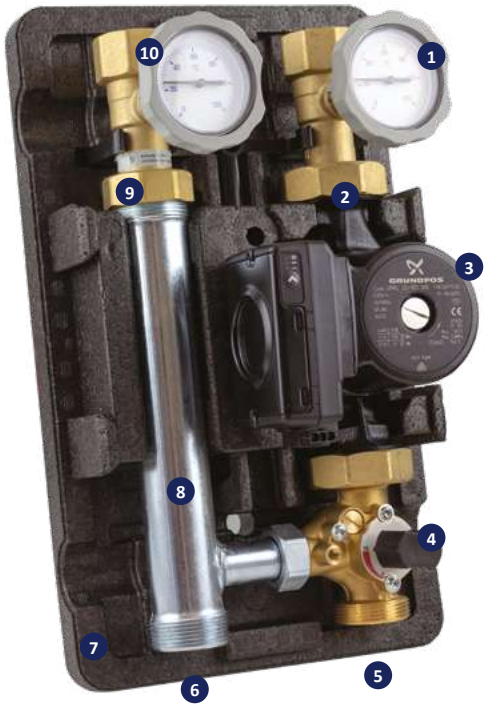
ErP READY

CIRCULATORY HYDRAULIC HEAD PRESSURE DROP DIAGRAM



Operation at constant flow
Operation at variable flow
Pumping station pressure drop

The mixing unit DN32 art. 5534G3P performs the function of feeding the circuits of the heating/cooling systems, directly from the out points of a manifold, changing the temperature of the incoming fluid to the project value (function guaranteed by the mixing valve controlled by a servo motor - accessory art. 9562SERV to be purchased separately). Through the two thermometers it is possible to control the instantaneous temperature of supply and return. On the return branch is inserted a check valve that avoids the self-circulation of the fluid when the circulator is switched off.



1. Delivery ball valve with thermometer
2. Check valve
3. Circulation pump (if any)
4. Mixing valve (optional servo motor)
5. Delivery
6. Return
7. Insulation
8. Return branch
9. Check valve
10. Return ball valve with thermometer

PRODUCT RANGE

5534G3P

Mixing unit for servo motor (not included)

TECHNICAL CHARACTERISTICS

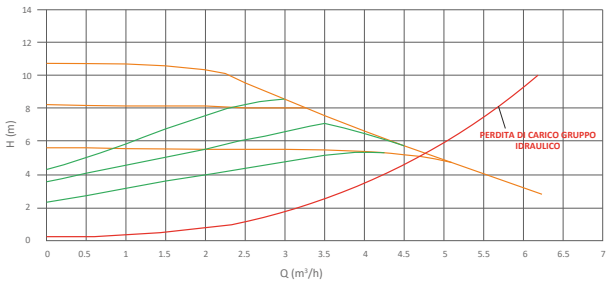
- Body material: Brass CW 617 N
- Gaskets material: EPDM
- Insulating shell material: EPP
- Dimension: DN 32
- Connections centre distance 125 mm:
  - Inlet: 1"1/2 male flat stop
  - Outlet: 1"1/4 femmina
- Working max P: 8 bar
- Working max T: 110°C

To be combined with the 9562SERV servo motor

Code	Type	Price €	Unit/Box
316 0097	Without circulating pump		1/1
316 0099	Grundfos UPML 32-105 AUTO		1/1

ErP READY

CIRCULATORY HYDRAULIC HEAD PRESSURE DROP DIAGRAM



Operation at constant flow
Operation at variable flow
Pumping station pressure drop

5535DIFF

Differential By-pass with 50-400 mbar adjustment. Connection M25x1,5. (Can be used on all hydraulic power units)

Code	Type	Price €	Unit/Box
316 0029	50-400 mbar		1/50

2075KIT03

Safety countertoped thermostat, including cable with straight connector

Code	Type	Price €	Unit/Box
557 0024	55 °C		1/1

3880GPF

Mixing valve for fixed point adjustment

To be combined with the thermostatic kit 9561KIT02

Code	Type	Price €	Unit/Box
316 0030	-		1/4

9561KIT02

Nipple + well + 20-50 °C thermostatic head kit with remote probe. Attack M30x1.5

For use with fixed point mixing unit 5535GPF

Code	Type	Price €	Unit/Box
450 0150	20-50 °C		1/10

NEW

3670PSA

"Y" fitting for temperature probe (dry mounting)

Code	Type	Price €	Unit/Box
651 0356	1" 1/4		4/16
651 0887	1" 1/2		3/12

3880GSM

Sector mixing valve for servo motor control (not supplied)

To be combined with servo motor 9562SERV

Code	Type	Price €	Unit/Box
316 0031	-		1/4

9562SERV

Servo motor complete with kit for connection to the mixing valve 3880GSM

TECHNICAL CHARACTERISTICS

- Body material: PA FV Self-extinguishing
- Rotation Time: 120 sec.
- Angle of rotation: 90°
- Nominal torque: 7 Nm
- Degree of protection: IP 40
- Power supply:
  - 230 Vac SPDT (3 points)
  - 24 Vac SPDT (3 points)
  - 24 Vac (0 - 10 Vdc)

Code	Type	Price €	Unit/Box
557 0023	230 Vac SPDT (3 points)		1/8
557 0306	24 Vac SPDT (3 points)		1/8
557 0307	24 Vac 0-10 Vdc		1/8

4745MANOP

Knob with immersion thermometer for hydraulic power units

Code	Type	Price €	Unit/Box
470 0183	Blu		10/40
470 0184	Rossa		10/40

5537KIT

Nipple + well kit for Ø 6 mm probe. M25x1.5 connection

For use with mixing unit with servo motor 5535G3P

Code	Type	Price €	Unit/Box
557 0022	-		1/25

1665

Straight fitting with loose nut and flat gasket for multilayer pipe

Code	Type	Price €	Unit/Box
165 0240	32 x 3,0 - 1"1/2		1/50
165 0239	40 x 3,5 - 1"1/2		1/25

1557SET

Brass pump female fitting kit with flat seat

Kit includes: 2 tangs, 2 rotating nuts, 2 gaskets

Code	Type	Dado folle	Price €	Unit/Box
150 0355	1"	1"1/2		1/20

3890PW2

Wilo PARA high efficiency circulation pump 25/7 130 mm centre distance

HIGH EFFICIENCY PUMP

Code	Type	Price €	Unit/Box
450 0358	Wilo PARA 25/7		1/1

3890PW5

Wilo PARA 25/9 high efficiency circulation pump 130 mm centre distance. 1'1/2 connection on cast iron body

HIGH EFFICIENCY PUMP

Code	Type	Price €	Unit/Box
450 0557	Wilo PARA 25/9		1/1

3890PV

Grundfos UPM3 HYBRID 25/70 high efficiency circulation pump 130 mm centre distance. 1"1/2 connection on cast iron body

HIGH EFFICIENCY PUMP

Code	Type	Price €	Unit/Box
450 0091	Grundfos UPM3 HYBRID 25/70		1/1

3890P

Grundfos UPS 25-55 3 speeds circulation pump 130 mm centre distance. 1"1/2 connection on cast iron body

Code	Type	Price €	Unit/Box
450 0033	Grundfos UPS 25-55		1/1

Available for non-EU countries

3890PU

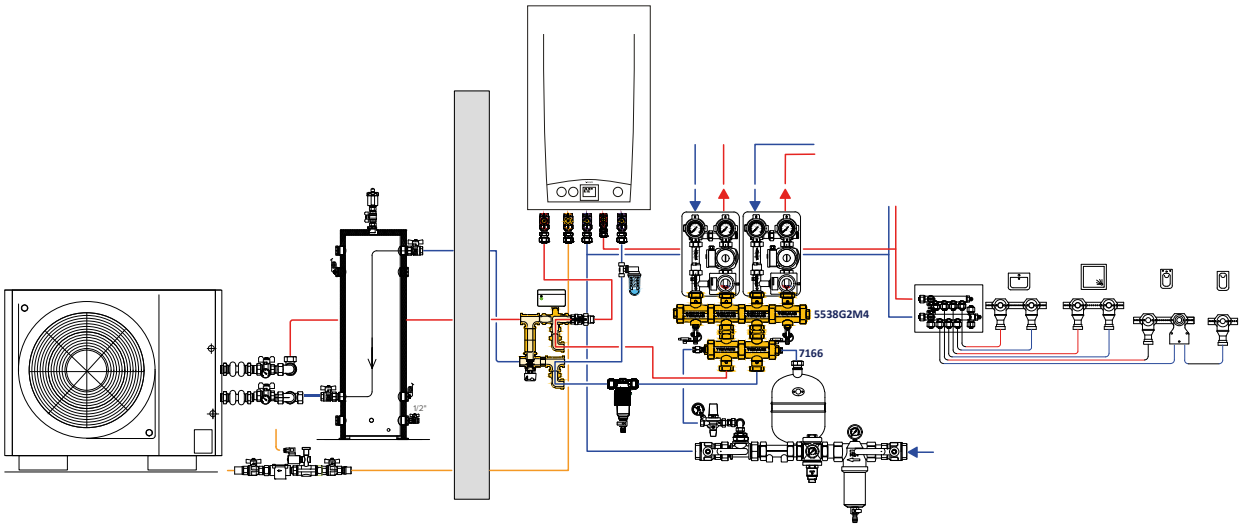
High efficiency circulation pump. Connections from 2" 180 mm centre distance

HIGH EFFICIENCY PUMP

Code	Type	Price €	Unit/Box
450 0637	Grundfos UPML 32-105		1/1

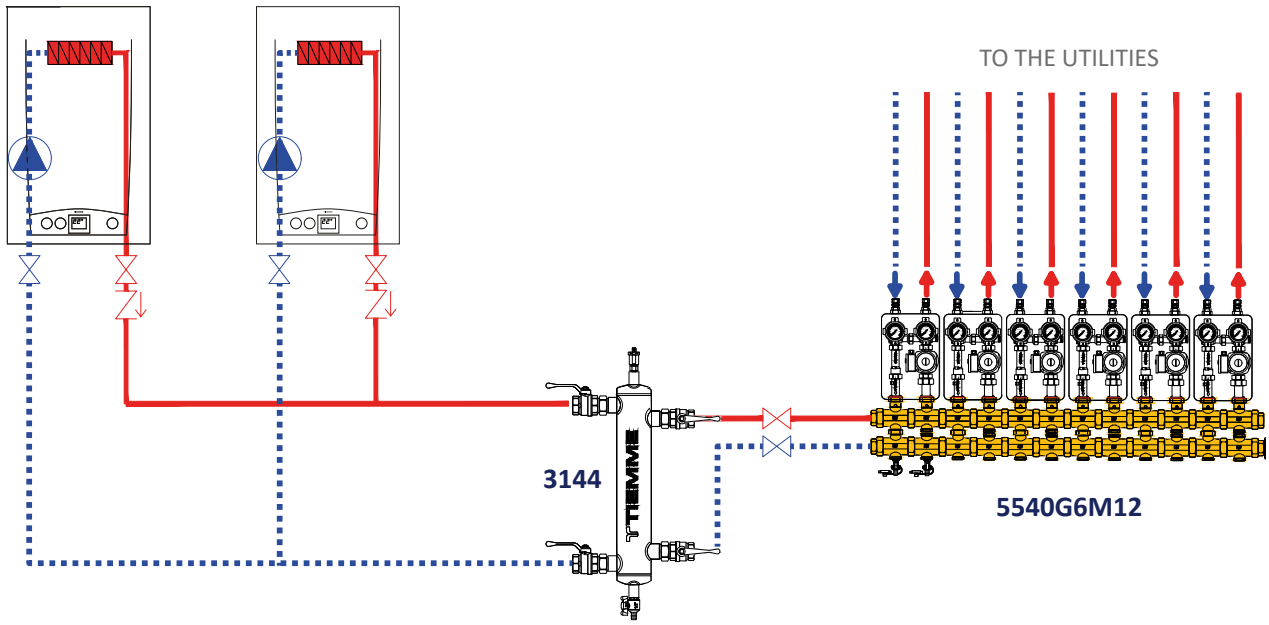
SINGLE FAMILY SYSTEM

Single family heating and cooling radiant system with boiler and heat pump. Tiemme manifold in brass art. 5538G2M4 with Tiemme hydraulic separator **art. 7166**.



MULTI-FAMILY SYSTEM

Multi-family system with thermal generators in cascade. Tiemme brass manifold **art. 5540G6M12 a**nd Tiemme hydraulics separator **art. 3144** complete with drain tap and actuator.

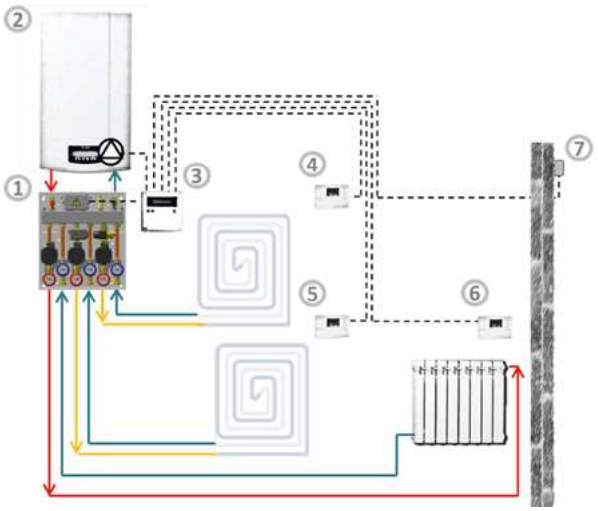


Tiemme multi-zone distribution modules are able to ensure the right flow of carrier fluid and adequate hydraulic head in all heating/cooling systems that need an additional performance compared to the boiler circulator.
The compact dimensions allow the module to be installed close to the 24 kW wall boilers.
With the mixed zone (fixed or motorized point) it is also possible to manage and modify the delivery temperature of the heating zones with respect to the generator delivery temperature.

The hydraulic separator integrated in the module ensures the hydraulic disconnection of the generator from the heating zones, making them hydraulically independent.

EXAMPLES OF INSTALLATION

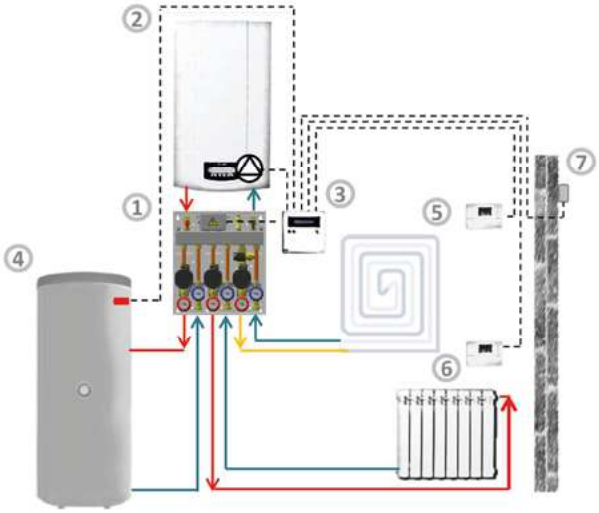
Heating system with 3 zones:
- 1 direct zone managed in high temperature for the supply of radiators;
- 2 mixed zones managed at low temperature for the supply of radiant systems.



KEY:

1. Module Art. 5584 (with 1 direct circuit + 2 circuits with mixer and servo motor)
2. Gas generator with integrated circulator
3. Control group
4. Low temperature heating circuit
5. Low temperature heating circuit
6. High temperature heating circuit
7. External probe for thermoregulation

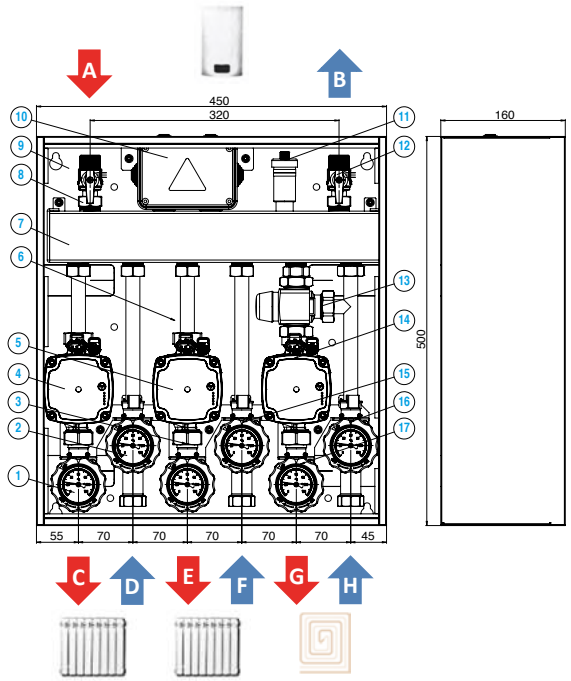
Heating system with 3 zones:
- 1 direct zone managed in high temperature for the supply of radiators;
- 1 direct zone managed in high temperature for the supply of sanitary storage tank;
- 1 mixed zone managed at low temperature for the supply of radiant systems.



KEY:

1. Module Art. 5583 (with 2 direct circuits + 1 circuit with fixed point mixer)
2. Gas generator with integrated circulator
3. Control group
4. Integration circuit for sanitary storage
5. Low temperature heating circuit
6. High temperature heating circuit
7. External probe for thermoregulation

COMPONENT DESCRIPTION / DIMENSIONAL CHARACTERISTICS



KEY:

A. Generator delivery
B. Generator return
C. Zone 1 delivery
D. Zone 1 return
E. Zone 2 delivery
F. Zone 2 return
G. Zone 3 delivery
H. Zone 3 return

1. Zone 1 delivery tap
2. Zone 1 return tap
3. Zone 2 delivery tap
4. Zone 1 circulator
5. Zone 2 circulator
6. -
7. Hydraulic separator
8. Generator delivery tap
9. Metal box
10. Electric support box
11. Automatic air vent
12. Generator return tap
13. Zone 3 mixing valve
14. Zone 3 circulating pump
15. Zone 2 return tap
16. Zone 3 delivery tap
17. Zone 3 return tap

PRODUCT RANGE

NEW

5582ISOL

Box distribution module with direct circuits, insulated

TECHNICAL CHARACTERISTICS

- Dimension: DN 20
- Connections:
  - Generator: 3/4" M - centre distance 320 mm
  - Heating: 3/4" F - centre distance 70 mm
- Working max P: 10 bar
- Working max T: 95°C
- Circulating pump: Grundfos UPM3 Hybrid 15-70 Erp ready

Code	Type	Price €	Unit/Box
316 0133	2 Direct zones		1/1

NEW

5582

Distribution module in box with direct circuits

TECHNICAL CHARACTERISTICS

- Dimension: DN 20
- Connections:
  - Generator: 3/4" M - centre distance 320 mm
  - Heating: 3/4" F - centre distance 70 mm
- Working max P: 10 bar
- Working max T: 95°C
- Circulating pump: Grundfos UPM3 Hybrid 15-70 Erp ready

Code	Type	Price €	Unit/Box
316 0134	3 Direct zones		1/1

NEW

5583

Distribution module in box with fixed point mixers

TECHNICAL CHARACTERISTICS

- Dimension: DN 20
- Connections:
  - Generator: 3/4" M - centre distance 320 mm
  - Heating: 3/4" F - centre distance 70 mm
- Working max P: 10 bar
- Working max T: 95°C
- Circulating pump: Grundfos UPM3 Hybrid 15-70 Erp ready
- Temperature control range: 20÷55 °C

Code	Type	Price €	Unit/Box
316 0135	1 Direct Zone + 1 Fixed Point Mixed Zone		1/1
316 0136	2 Direct zones + 1 Fixed Point Mixed Zone		1/1
316 0137	1 Direct Zone + 2 Fixed point mixed zones		1/1
316 0149	2 Fixed point mixed zones		1/1

NEW

5584ISOL

Box distribution module with mixers and servo motors, insulated

TECHNICAL CHARACTERISTICS

- Dimension: DN 20
- Connections:
  - Generator: 3/4" M - centre distance 320 mm
  - Heating: 3/4" F - centre distance 70 mm
- Working max P: 10 bar
- Working max T: 95°C
- Circulating pump: Grundfos UPM3 Hybrid 15-70 Erp ready
- Motorized mixing valve: 230 Vac - 3 points

Code	Type	Price €	Unit/Box
316 0138	1 Direct Zone + n° 1 Zona miscelata motorizzata		1/1
316 0139	2 Direct zones + n° 1 Zona miscelata motorizzata		1/1

NEW

5584

Box distribution module with mixers and servomotors

TECHNICAL CHARACTERISTICS

- Dimension: DN 20
- Connections:
  - Generator: 3/4" M - centre distance 320 mm
  - Heating: 3/4" F - centre distance 70 mm
- Working max P: 10 bar
- Working max T: 95°C
- Circulating pump: Grundfos UPM3 Hybrid 15-70 Erp ready
- Motorized mixing valve: 230 Vac - 3 points

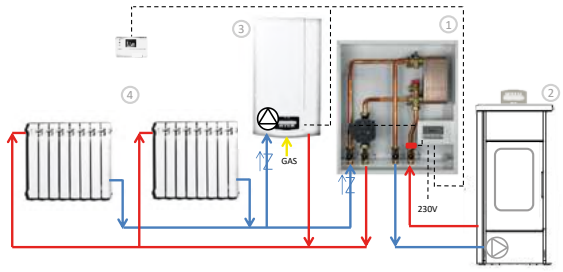
Code	Type	Price €	Unit/Box
316 0140	1 Direct Zone + 2 Motorized mixed zones		1/1

Tiemme biomass circulation and separation hydraulic power units allow to combine generators powered by different fuels, such as gas and biomass generators, on the same heating circuit.
Tiemme modules, in addition to the hydraulic management of the heating circuit, comply with the requirements of the ISPESL 18/09/2006 circular and provide hydraulic performance at the highest levels.

The presence of a heat exchanger interposed between the two generators constitutes a hydraulic break between the respective thermal energy carrier fluid and therefore it is considered not to proceed to the sum of the potential.

EXAMPLES OF INSTALLATION

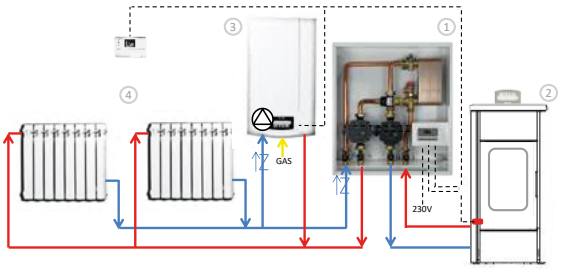
Heating system with two generators, one of which is solid fuel with circulator and separator module system.



KEY:

1. Module Art. 5585 / 5585A
2. Biomass generator with integrated circulator
3. Gas generator for integration
4. Heating circuit

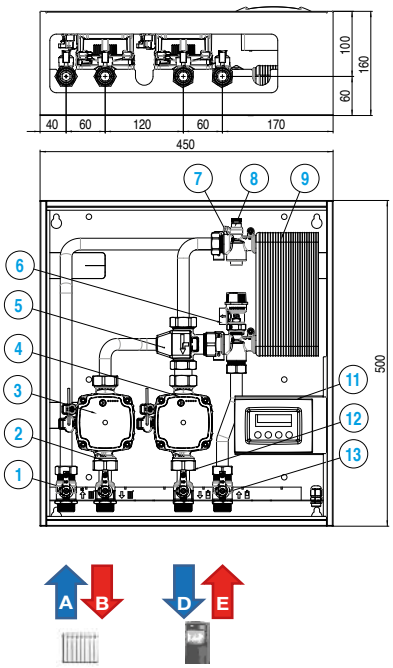
Heating system with two generators, of which one with solid fuel without circulator and separator module system.



KEY:

1. Module Art. 5585C / 5585AC
2. Biomass generator without circulator
3. Gas generator for integration
4. Heating circuit

COMPONENT DESCRIPTION / DIMENSIONAL CHARACTERISTICS



KEY:

A. Return from heating
B. Delivery from heating
D. Return to the generator
E. Delivery to the generator

1. Return heating/non return tap
2. Heating delivery tap
3. Heating circulator
4. Generator circulator (present in the modules art. 5585C and 5585AC)
5. Thermostatic anti-condensation valve (present in the modules art. 5585A and 5585AC)
6. Safety valve for heating
7. Heating air vent
8. Generator air vent
9. Plate exchanger
10. Generator delivery probe
11. Centralina di controllo
12. Generator return tap
13. Generator delivery tap

TIEMME INFORMS

THERMAL SYSTEMS WITH ADDITIONAL GENERATOR - CIRCULAR ISPESL OF 18/09/2006:
The ISPESL of 18/09/2006 circular, on structured thermal installations with two heat generators, one of which powered by solid fuel and the other with different fuel, precises: in the case where the primary thermal energy carrier fluid of two generators enters the thermal storage tank without any dividing elements, the sum of the potentials is considered and therefore, if the value of 35 kW is exceeded, the plant will not only fall under the obligation provided for by UNI 7129 but will have to refer to MD 08/11/19 with regard to fire prevention, taking into account the mentioned regulatory updates. The presence of a heat exchanger interposed between the two generators constitutes a hydraulic break between the respective thermal energy carrier fluids and therefore it is considered not to proceed to the sum of the potential.

PRODUCT RANGE

NEW

5585
Circulation and biomass plant management unit with plate heat exchanger

TECHNICAL CHARACTERISTICS
- Dimension: DN 20
- Connections:
  - Primary circuit: 3/4" M
  - Heating circuit: 3/4" M
  - Centre distance: 60 mm
- Working max P: 10 bar
- Working max T: 95°C
- Circulating pump: Grundfos UPM3 Hybrid 15-70 Erp ready

Code	Type	Price €	Unit/Box
316 0141	-		1/1

NEW

5585A
Circulation and biomass plant management unit with plate heat exchanger.
With anti-condensation valve

TECHNICAL CHARACTERISTICS
- Dimension: DN 20
- Connections:
  - Primary circuit: 3/4" M
  - Heating circuit: 3/4" M
  - Centre distance: 60 mm
- Working max P: 10 bar
- Working max T: 95°C
- Circulating pump: Grundfos UPM3 Hybrid 15-70 Erp ready
- Anti-condensation valve: 60 °C

Code	Type	Price €	Unit/Box
316 0142	-		1/1

NEW

5585C
Circulation and biomass plant management unit with plate heat exchanger.
With primary circulating pump

TECHNICAL CHARACTERISTICS
- Dimension: DN 20
- Connections:
  - Primary circuit: 3/4" M
  - Heating circuit: 3/4" M
  - Centre distance: 60 mm
- Working max P: 10 bar
- Working max T: 95°C
- Circulating pump: Grundfos UPM3 Hybrid 15-70 Erp ready

Code	Type	Price €	Unit/Box
316 0143	-		1/1

NEW

5585AC
Circulation and biomass plant management unit with plate heat exchanger. With anti-condensation valve and primary circulating pump

TECHNICAL CHARACTERISTICS
- Dimension: DN 20
- Connections:
  - Primary circuit: 3/4" M
  - Heating circuit: 3/4" M
  - Centre distance: 60 mm
- Working max P: 10 bar
- Working max T: 95°C
- Circulating pump: Grundfos UPM3 Hybrid 15-70 Erp ready
- Anti-condensation valve: 60 °C

Code	Type	Price €	Unit/Box
316 0144	-		1/1

По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70
Казахстан +(727)345-47-04
Беларусь +(375)257-127-88
Узбекистан +998(71)205-18-59
Киргизия +996(312)96-26-47

эл.почта: tec@nt-rt.ru || сайт: https://tiemme.nt-rt.ru/