



## 60 YEARS OF ITALIAN TRADITION

Luxor is an important industrial reality, world wide and European market leader in the production of flexible hoses and components for hydro and thermo-sanitary installations. Luxor has been the expression of the most prestigious made in Italy and the great Italian high technology mechanical workings tradition for fifty years; a quality certified and recognized by the most prestigious International Certification Institutes all over the world.

Our mission is the complete customer satisfaction through a process of continuous technological research in order to make high quality, reliable products, anticipating the market evolutions by innovative partnership with both customers and suppliers. Luxor mission takes

place in its own Research and Development Centre in which new and advanced technologies are constantly analyzed and researched with continuous investments to offer the most innovative and reliable solutions for the international markets at competitive costs, ensuring strict quality controls on each single piece.

Luxor entirely plans and realizes each product, thanks to its decennial know how. The great production strength, a "slender" innovative and advanced industrial organization together with a modern logistic conception, make Luxor able to satisfy every kind of request, even customized, with fast deliveries all over the world.



Luxor is certified ISO 9001:2015 by DEKRA Group certification body

### CERTIFICATION



Please contact our offices for information about technical specifications and certified products or visit the website of the corresponding certification body for the latter.

Please refer to [www.nsf.org](http://www.nsf.org) for a complete list of NSF approved products.  
Please refer to [www.iapmort.org](http://www.iapmort.org) for a complete list of UPC/CUPC approved products.



## 4 / PREASSEMBLED GROUPS

## PUMPING AND MIXING GROUPS



### GM 1197

Adjustable mixing group with fixed point regulating unit with integrated sensor. Suitable for circulators G 1" 1/2 centre distance 130 mm and bracketed manifolds G 1" centre distance 200 mm. Complete with safety thermostat with immersion probe.

CODE	SIZE			
72000310	G 1"	2334	1	8



### GM 1195

Adjustable mixing group with fixed point regulating unit. Suitable for circulators G 1" 1/2 centre distance 130 mm and bracketed manifolds G 1" centre distance 200 mm.

CODE	SIZE			
72000300	G 1"	2184	1	8



### GR 1194

Mixing group suitable for circulators G 1" 1/2 centre distance between 130 mm and 180 mm. Adjustable brackets between 200 mm and 250 mm for steel and brass manifolds. Differential bypass valve with adjustment between 0.2 and 0.7 bar. G 1" manifold connections for use with CP G 3/4 manifolds.

CODE	SIZE			
72000320	G 1"	2703	1	-

## REGULATION SYSTEMS FOR RADIANT PANELS HEATING WITH PUMP GROUP GP 1190

# 20 kW



### TECHNICAL DATA

Maximum working pressure 10 bar  
Maximum differential pressure 1 bar  
Maximum working temperature 120 °C

### TECHNICAL DATA WITH GP 1190

Maximum working pressure 6 bar  
Maximum differential pressure 1 bar  
Maximum working temperature 70 °C  
Temperature range on secondary circuit 20 °C ÷ 65 °C  
Maximum thermal power 20kW with  $\Delta t$  10 °C and temperature on the primary circuit  $\geq 70$  °C

### CONSTRUCTIVE FEATURES

Press-forged parts consist of brass with limited lead content in compliance with the current regulations: CW617N UNI EN 12165:2016. All o-rings are produced in peroxide cured EPDM. Stainless steel components in AISI 316. All components are provided with soft o-rings and do not require any intermediate sealing element (PTFE, hemp, etc.). Side connections W24x19 or G 3/4 EK with 50 mm interaxis.

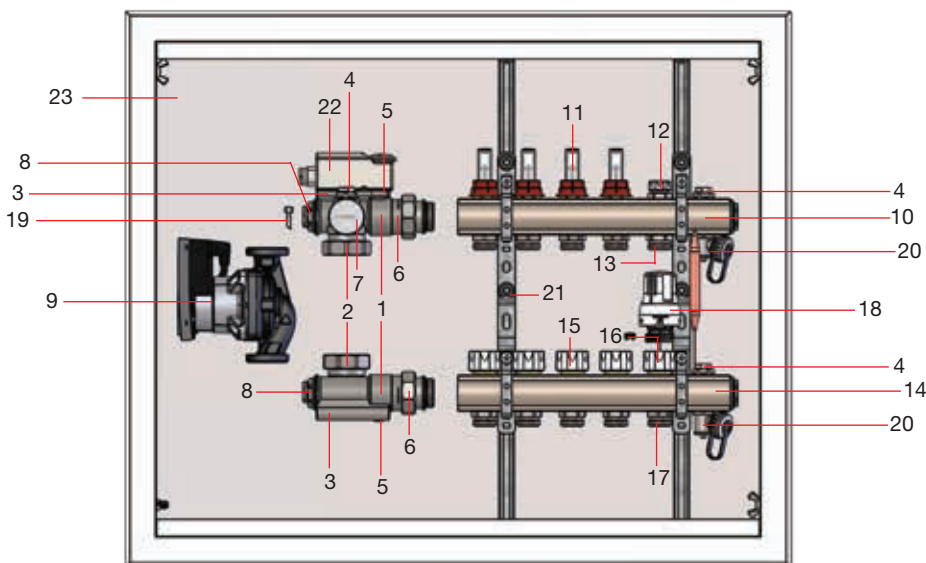
The pump group GP 1190 has a  $\varnothing$  23 mm internal passage.

### APPLICATIONS

The system for fixed point heating has the advantage of being particularly compact and to employ all series components of Luxor manifolds, which are already available on the market, with the only addition of two specific items:

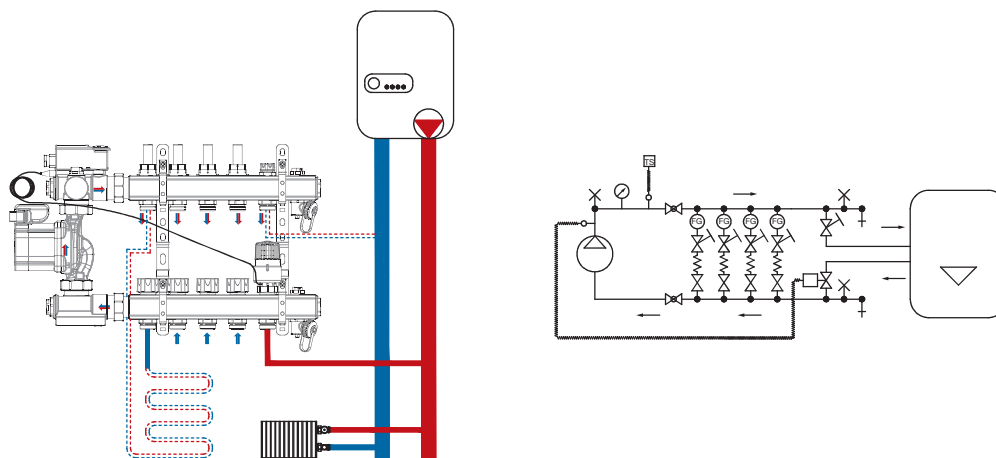
- art. GP 1190;
- art. TT 3051.

This system enables to easily and economically obtain a mixed heating system in households where both high temperature heating bodies (60°C÷70°C) and low temperature radiant panels (20°C÷50°C) are installed.



### COMPONENTS

- |   |  |
|---|--|
| <p>1 Pump group</p> <p>2 Connections to circulation pump with swivel nut G 1"1/2</p> <p>3 Seat for regulation probe of the thermostatic head and arrangement for seat for the safety thermostat sensor.</p> <p>4 Manual air vent valve</p> <p>5 Ball valves for pump interception</p> <p>6 G 1" connections with soft seal</p> <p>7 Thermometer</p> <p>8 G 1/2 female connections for further devices</p> <p>9 Circulation pump with synchronous motor 25/60, interaxis 130mm, energy class A</p> <p>10 Delivery manifold for radiant panels</p> <p>11 Regulators and flow meters, from 0,5l/min to 5l/min. It is possible to open the glass for cleaning while the system is operating</p> | <p>12 Low temperature circuit check valve</p> <p>13 Connection for boiler return</p> <p>14 Radiant panels return manifold</p> <p>15 Valves for electrothermal regulation, with protection caps</p> <p>16 Thermostatic adjustment valve</p> <p>17 Connection to boiler flow</p> <p>18 Thermostatic head with remote sensor</p> <p>19 Spring to fix the remote sensor of the thermostatic head</p> <p>20 Water load/drain tap</p> <p>21 Brackets</p> <p>22 Contact bimetallic safety thermostat</p> <p>23 Cabinet with adjustable ends, RAL 9016 white frame and door.</p> |
|---|--|



HYDRAULIC SCHEME LEGEND

	check valve		water load/drain tap		circulation pump
	ball valve		thermometer		user: radiant panels, radiators etc.
	non-return valve, the arrow indicates the direction of flow		manual air vent device		filter
	safety valve (bypass valve)		automatic air vent device		3-way valve
	check valve, regulation and balancing		flow meter		
	ball check valve regulation and balancing		immersion safety thermostat		
	injection valve with remote sensor		contact safety thermostat		

**FUNCTION**

Fixed point heating systems keep the water in the radiant panels at a constant pre-set temperature by mixing hot water coming from the boiler with the one circulating in the panels. A thermostatic valve with remote sensor measures the temperature and adds hot water to the circuit accordingly, so as to compensate the heat output of the radiant panels. It is advisable to install a security thermostat on the pump inlet valve in order to avoid damages caused by a sudden temperature rise. The intervention of the thermostat must block the functioning of the pump.

The system can be complemented with a bypass valve. In case of excessive differential pressure, the bypass valve releases the exceeding pressure, thus protecting the components and, if thermoelectric heads are employed to intercept the circuits, avoiding noise and wear on the circulation pump. This type of system can supply a max thermal power of 20 kW with a  $\Delta t$  of 10°C and a temperature of  $\geq 70^\circ\text{C}$  on the primary side.

### REGULATION SYSTEMS FOR RADIANT PANELS HEATING WITH PUMP GROUP GP 1190



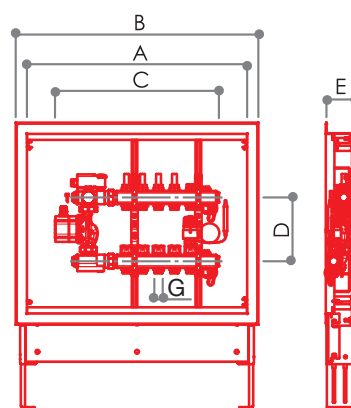
**GP 1190**

G 1" valve with pump connection for mixed heating system, max thermometer temperature 80 °C.

CODE	SIZE			
72000030	G 1"	2107	1	8



Depth 90 mm



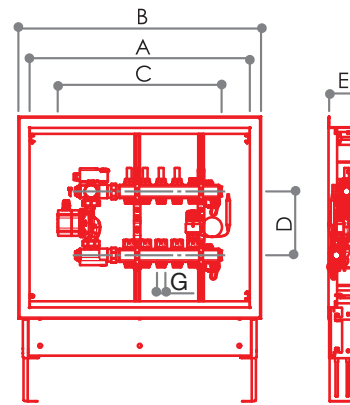
**CCBP 4022**

Fixed point distribution system for low temperature heating (W24x19).

ARTICLE	CODE	SIZE	N. PANEL CONNECTIONS	A	B	C	D	E	F	G	H	L		
CCBP4022/2	17402202N	G 1" x (W24x19)	2	500	560	420	200	90	-	W24x19	-	-	17,312	1
CCBP4022/3	17402203N		3	700	760	470			-		-	19,906	1	
CCBP4022/4	17402204N		4	700	760	520			-		-	20,500	1	
CCBP4022/5	17402205N		5	700	760	570			-		-	21,094	1	
CCBP4022/6	17402206N		6	700	760	620			-		-	21,688	1	
CCBP4022/7	17402207N		7	850	910	670			-		-	24,282	1	
CCBP4022/8	17402208N		8	850	910	720			-		-	24,876	1	
CCBP4022/9	17402209N		9	850	910	770			-		-	25,470	1	
CCBP4022/10	17402210N		10	1000	1060	820			-		-	28,064	1	
CCBP4022/11	17402211N		11	1000	1060	870			-		-	28,658	1	



Depth  
90 mm

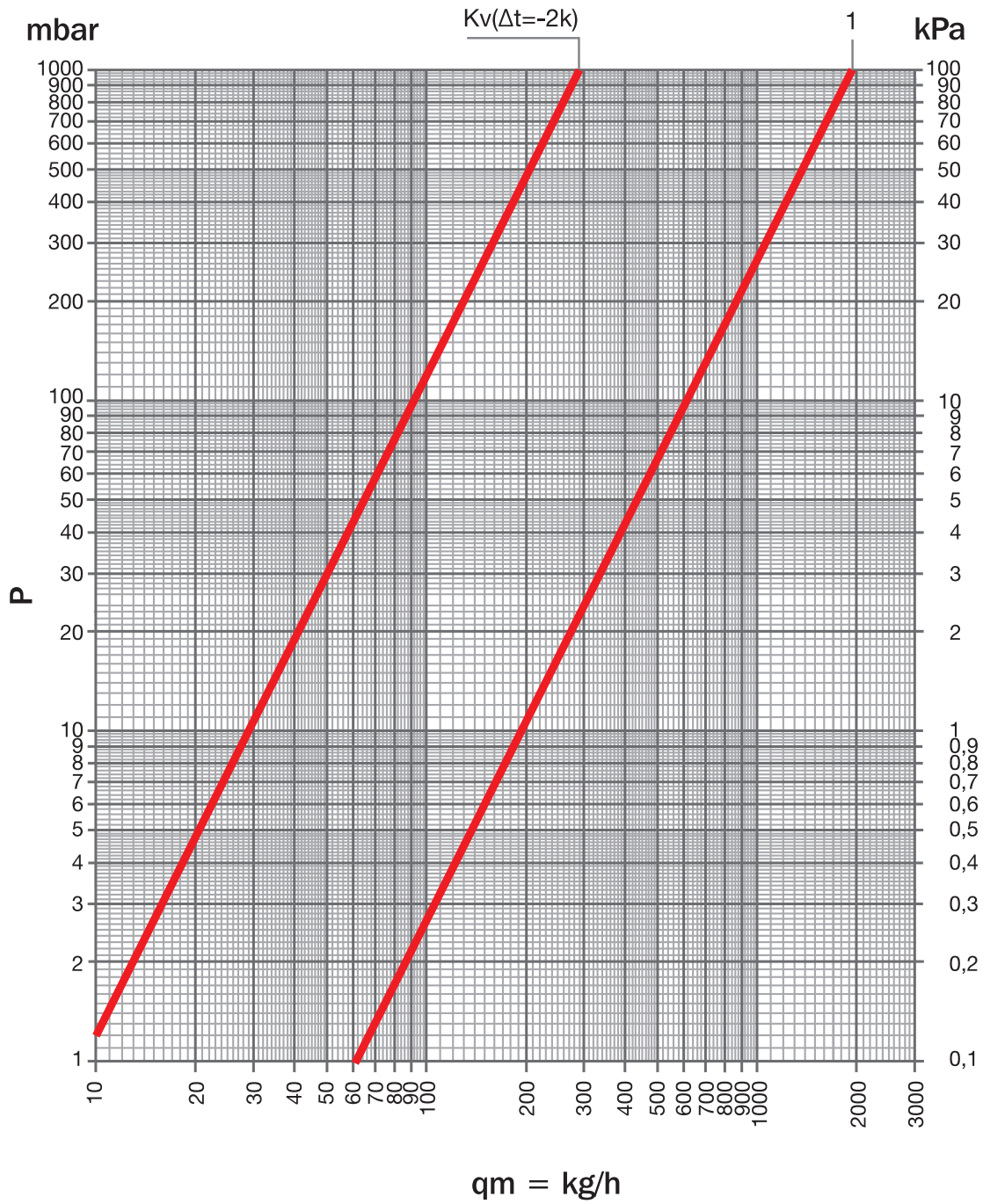


**CCBP 4032**

Fixed point distribution system for low temperature heating G 3/4 EK.

ARTICLE	CODE	SIZE	N. PANEL CONNECTIONS	A	B	C	D	E	F	G	H	L	kg	⇒
CCBP4032/2	17403202N	G 1" x G 3/4 EK	2	500	560	420	200	90	-	G 3/4 EK	-	-	17,312	1
CCBP4032/3	17403203N		3	700	760	470			-		-	19,906	1	
CCBP4032/4	17403204N		4	700	760	520			-		-	20,500	1	
CCBP4032/5	17403205N		5	700	760	570			-		-	21,094	1	
CCBP4032/6	17403206N		6	700	760	620			-		-	21,688	1	
CCBP4032/7	17403207N		7	850	910	670			-		-	24,282	1	
CCBP4032/8	17403208N		8	850	910	720			-		-	24,876	1	
CCBP4032/9	17403209N		9	850	910	770			-		-	25,470	1	
CCBP4032/10	17403210N		10	1000	1060	820			-		-	28,064	1	
CCBP4032/11	17403211N		11	1000	1060	870			-		-	28,658	1	

FLOW RATE CHART



Kv	Kv $\Delta t$ 2 °C	POS
1,92	00,29	1



## REGULATION SYSTEM FOR RADIANT PANELS HEATING WITH PUMP GROUP GP 1190 AND KIT FOR HIGH TEMPERATURE KA 1191



**14 kW**

### TECHNICAL DATA

Maximum working pressure 10 bar  
 Maximum differential pressure 1 bar  
 Maximum working temperature 80 °C

### TECHNICAL DATA SISTEMA CON GP 1190 + KA 1191

Maximum working pressure 6 bar  
 Maximum differential pressure 1 bar  
 Maximum working temperature on primary side 80 °C  
 Maximum working temperature on secondary side 70 °C  
 Temperature range on secondary side 20 °C ÷ 65 °C  
 Maximum thermal power 14 kW with  $\Delta t$  10 °C and temperature on the primary side  $\geq 70$  °C

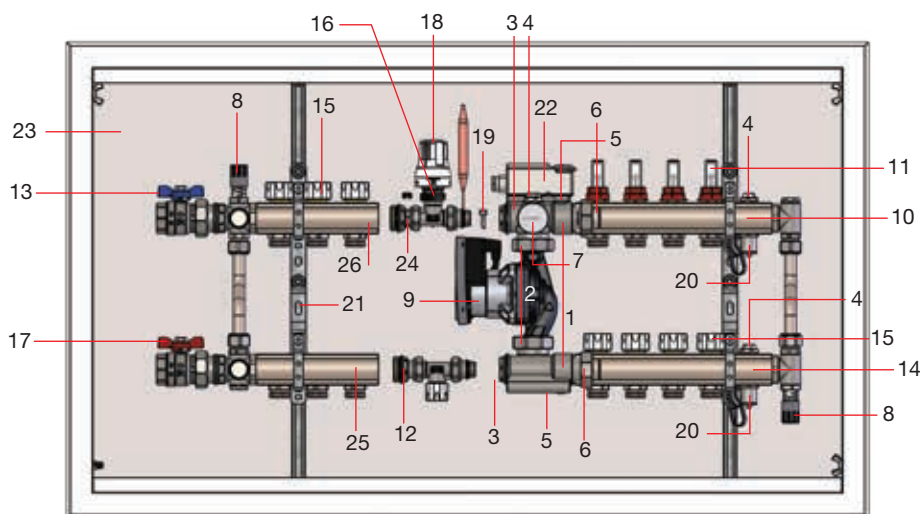
### APPLICATIONS

When combined with pump group GP 1190, the kit for high temperature KA 1191 allows to install a hot water distribution for traditional radiator systems and a water distribution system for radiant panels in one single cabinet.

### CONSTRUCTIVE FEATURES

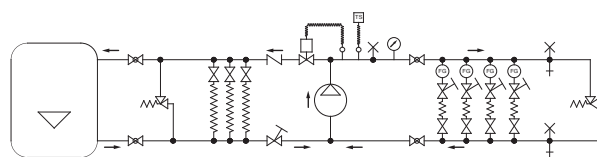
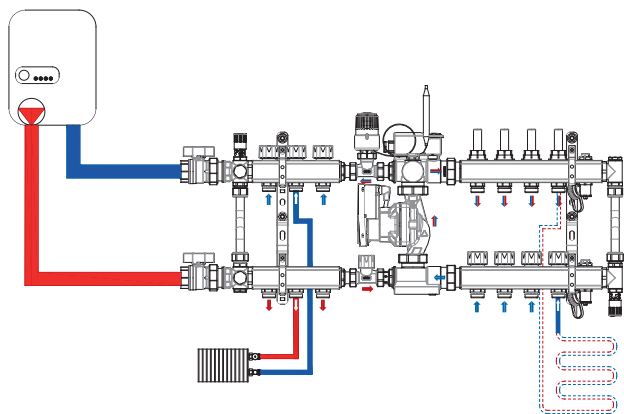
Press-forged parts consist of brass with limited lead content in compliance with the current regulations: CW617N UNI EN 12165:2016. All o-rings are produced in peroxide cured EPDM. Stainless steel components in AISI 316.

All components are provided with soft o-rings and do not require any intermediate sealing element (PTFE, hemp, etc.). Side connections W24x19 or G 3/4 EK with 50 mm interaxis. The pump group GP 1190 has a  $\varnothing$  23 mm internal passage.



### COMPONENTS

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>1 Pump group</li> <li>2 Connections to circulation pump with swivel nut G 1"1/2</li> <li>3 Seat for regulation probe of the thermostatic head</li> <li>4 Manual air vent valve</li> <li>5 Ball valves for pump interception</li> <li>6 G 1" connections with soft seal</li> <li>7 Thermometer</li> <li>8 Differential bypass valve</li> <li>9 Circulation pump with synchronous motor 25/60 interaxis 130 mm, energy class A</li> <li>10 Delivery manifold for radiant panels</li> <li>11 Regulators and flow meters, from 0,5 l/min to 5 l/min. It is possible to open the glass for cleaning while the system is operating</li> <li>12 Low temperature circuit check valve</li> <li>13 Boiler return ball valve</li> </ul> | <ul style="list-style-type: none"> <li>14 Radiant panels return manifold</li> <li>15 Valves for electrothermal regulation, with protection caps</li> <li>16 Thermostatic adjustment valve</li> <li>17 Delivery ball valve from boiler</li> <li>18 Thermostatic head with remote sensor</li> <li>19 Spring to fix the remote sensor of the thermostatic head</li> <li>20 Water load/drain tap</li> <li>21 Brackets</li> <li>22 Contact bimetallic safety thermostat</li> <li>23 Cabinet with adjustable ends, RAL 9016 white frame and door</li> <li>24 Check valve</li> <li>25 Delivery manifold for primary side</li> <li>26 Return manifold from primary circuit</li> </ul> |
|---|---|



HYDRAULIC SCHEME LEGEND

	check valve		water load/drain tap		circulation pump
	ball valve		thermometer		user: radiant panels, radiators etc.
	non-return valve, the arrow indicates the direction of flow		manual air vent device		filter
	safety valve (bypass valve)		automatic air vent device		3-way valve
	check valve, regulation and balancing		flow meter		
	ball check valve regulation and balancing		immersion safety thermostat		
	injection valve with remote sensor		contact safety thermostat		

**FUNCTION**

The hot water coming from the boiler and the primary circuit enters the pump group GP 1190 through the lockshield valve of the kit KA 1191, which regulates the maximum quantity of medium inside the secondary circuit, thus balancing the primary one.

The outflowing water is regulated by the thermostatic adjustment valve. This valve is controlled by a thermostatic head with remote sensor which keeps the delivery water in the radiant panels at a constant pre-set temperature by mixing hot water coming from the boiler with the one circulating in the panels.

The system is complemented with a bypass valve both on the primary and the secondary circuit. In case of excessive differential pressure, the bypass valve releases the exceeding pressure, thus protecting the components and, if thermoelectric heads are employed to intercept the circuits, avoiding noise and wear on the circulation pump.

The intervention of the thermostat must block the functioning of the pump.

This type of system can supply a max thermal power of 14 kW with a  $\Delta t$  of 10°C and a temperature of  $\geq 70$  °C on the primary circuit.

**REGULATION SYSTEM FOR RADIANT PANELS HEATING WITH PUMP GROUP  
GP 1190 AND KIT FOR HIGH TEMPERATURE KA 1191**



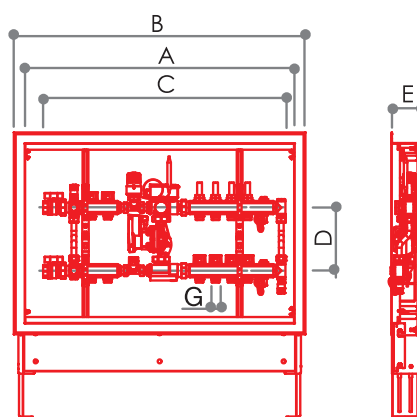
**KA 1191**

Kit for high temperature heating system. To combine with pump set GP 1190.

CODE	SIZE				€
72000040	G 1"	787	1	8	87,29



Depth  
90 mm



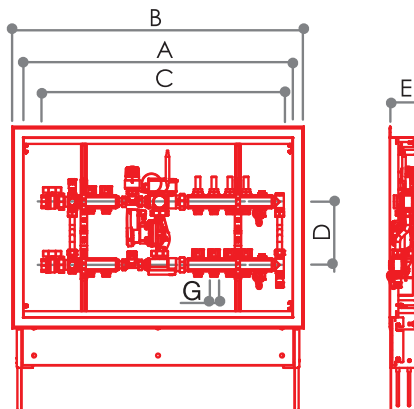
**CCBAP 4024**

Distribution system for low temperature heating + 2 connections for high temperature (W24x19).

ARTICLE	CODE	SIZE	N. PANEL CONNECTIONS	A	B	C	D	E	F	G		
CCBAP4024/2	17402402N	G 1" x (W24x19)	2	850	910	670	200	90		W24x19	24,648	1
CCBAP4024/3	17402403N		3	850	910	720					25,242	1
CCBAP4024/4	17402404N		4	850	910	770					25,836	1
CCBAP4024/5	17402405N		5	1000	1060	820					28,430	1
CCBAP4024/6	17402406N		6	1000	1060	870					29,024	1
CCBAP4024/7	17402407N		7	1000	1060	920					29,618	1
CCBAP4024/8	17402408N		8	1200	1260	970					32,212	1
CCBAP4024/9	17402409N		9	1200	1260	1020					32,806	1
CCBAP4024/10	17402410N		10	1200	1260	1070					33,400	1
CCBAP4024/11	17402411N		11	1200	1260	1120					33,994	1
CCBAP4024/12	17402412N		12	1300	1360	1170					36,588	1



Depth  
90 mm



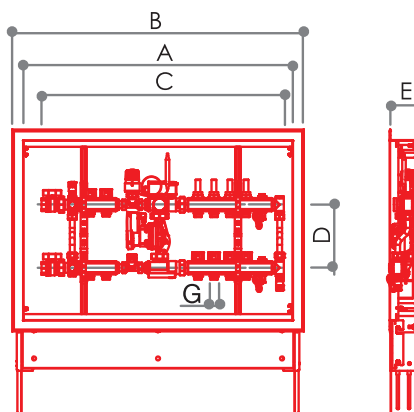
**CCBAP 4023**

Distribution system for low temperature heating + 3 connections for high temperature (W24x19).

ARTICLE	CODE	SIZE	N. PANEL CONNECTIONS	A	B	C	D	E	F	G		
CCBAP4023/2	17402302N	G 1" x (W24x19)	2	850	910	720	200	90	-	W24x19	25,218	1
CCBAP4023/3	17402303N		3	850	910	770			-		25,812	1
CCBAP4023/4	17402304N		4	1000	1060	820			-		28,406	1
CCBAP4023/5	17402305N		5	1000	1060	870			-		29,000	1
CCBAP4023/6	17402306N		6	1000	1060	920			-		29,594	1
CCBAP4023/7	17402307N		7	1200	1260	970			-		32,188	1
CCBAP4023/8	17402308N		8	1200	1260	1020			-		32,782	1
CCBAP4023/9	17402309N		9	1200	1260	1070			-		33,376	1
CCBAP4023/10	17402310N		10	1200	1260	1120			-		33,970	1
CCBAP4023/11	17402311N		11	1300	1360	1170			-		36,564	1
CCBAP4023/12	17402312N		12	1300	1360	1220			-		37,158	1



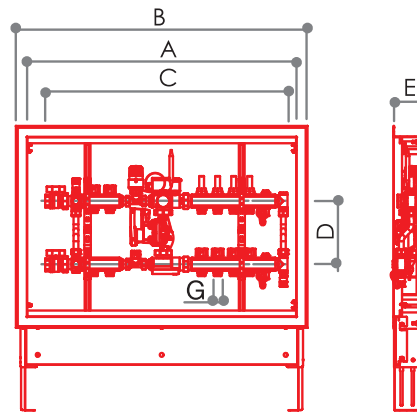
Depth  
90 mm



**CCBAP 4034**

Distribution system for low temperature heating + 2 connections for high temperature (G 3/4 EK).

ARTICLE	CODE	SIZE	N. PANEL CONNECTIONS	A	B	C	D	E	F	G		
CCBAP4034/2	17403402N	G 1" x G 3/4 EK	2	850	910	670	200	90	-	G 3/4 EK	24,648	1
CCBAP4034/3	17403403N		3	850	910	720			-		25,242	1
CCBAP4034/4	17403404N		4	850	910	770			-		25,836	1
CCBAP4034/5	17403405N		5	1000	1060	820			-		28,430	1
CCBAP4034/6	17403406N		6	1000	1060	870			-		29,024	1
CCBAP4034/7	17403407N		7	1000	1060	920			-		29,618	1
CCBAP4034/8	17403408N		8	1200	1260	970			-		32,212	1
CCBAP4034/9	17403409N		9	1200	1260	1020			-		32,806	1
CCBAP4034/10	17403410N		10	1200	1260	1070			-		33,400	1
CCBAP4034/11	17403411N		11	1200	1260	1120			-		33,994	1
CCBAP4034/12	17403412N		12	1300	1360	1170			-		36,588	1

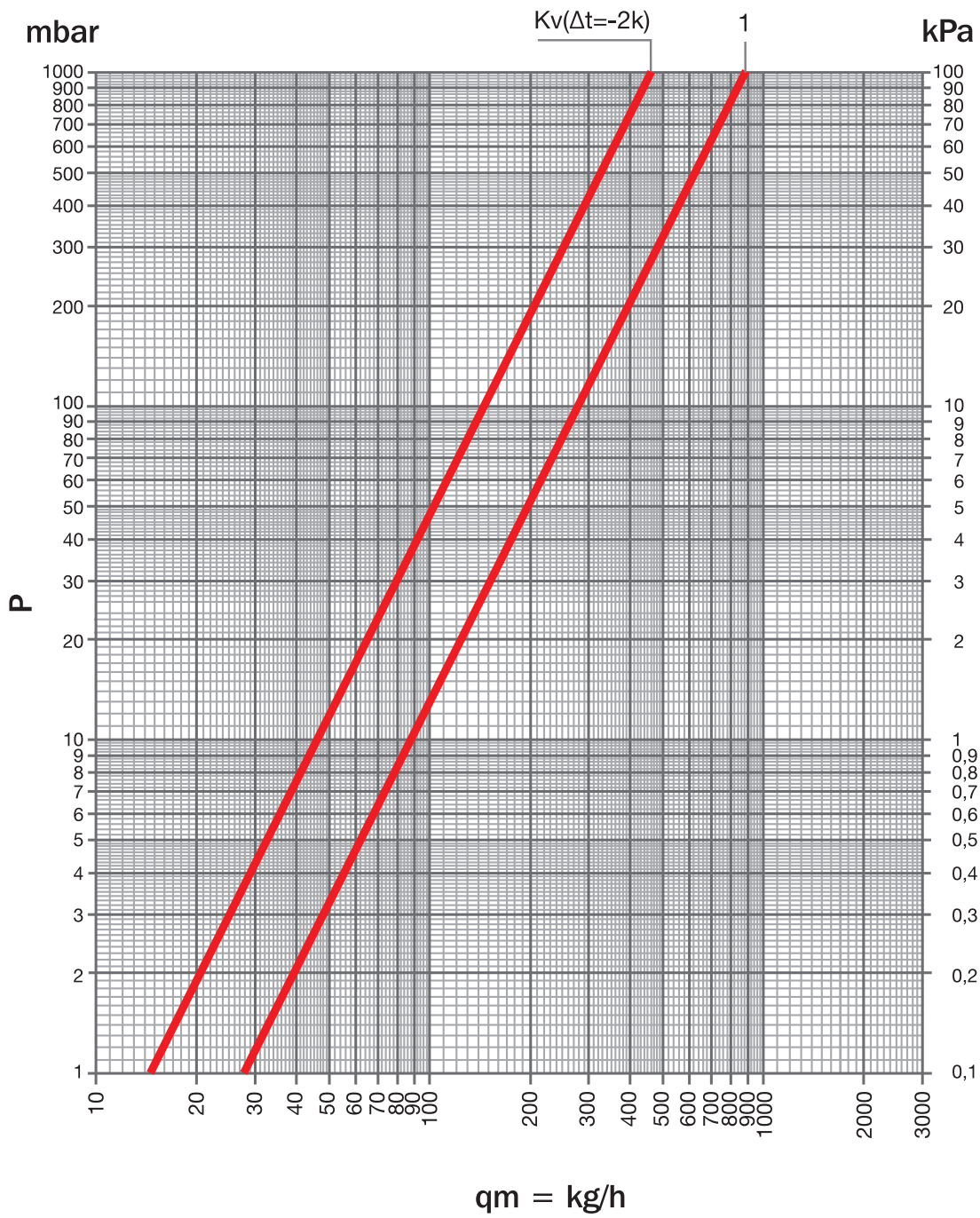


**CCBAP 4033**

Distribution system for low temperature heating + 3 connections for high temperature (G 3/4 EK).

ARTICLE	CODE	SIZE	N. PANEL CONNECTIONS	A	B	C	D	E	F	G		
CCBAP4033/2	17403302N	G 1" x G 3/4 EK	2	850	910	720	200	90	-	-	25,218	1
CCBAP4033/3	17403303N		3	850	910	770			-		25,812	1
CCBAP4033/4	17403304N		4	1000	1060	820			-		28,406	1
CCBAP4033/5	17403305N		5	1000	1060	870			-		29,000	1
CCBAP4033/6	17403306N		6	1000	1060	920			-		29,594	1
CCBAP4033/7	17403307N		7	1200	1260	970			-		32,188	1
CCBAP4033/8	17403308N		8	1200	1260	1020			-		32,782	1
CCBAP4033/9	17403309N		9	1200	1260	1070			-		33,376	1
CCBAP4033/10	17403310N		10	1200	1260	1120			-		33,970	1
CCBAP4033/11	17403311N		11	1300	1360	1170			-		36,564	1
CCBAP4033/12	17403312N		12	1300	1360	1220			-		37,158	1

FLOW RATE CHART



Kv	Kv Δt 2 °C	POS
0.88	0.46	1

## REGULATION SYSTEMS FOR RADIANT PANELS HEATING WITH PUMP GROUP GP 1190 AND KIT FOR HIGH TEMPERATURE FM 750



# 20 kW

### TECHNICAL DATA

Maximum working pressure 6 bar  
 Maximum differential pressure 1 bar  
 Maximum working temperature on primary circuit 80 °C  
 Maximum working temperature on secondary circuit 70 °C  
 Temperature range on secondary circuit 20 °C ÷ 65 °C  
 Max thermal power 20 kW with  $\Delta t$  10 °C  
 and temperature on the primary circuit  $\geq 70$  °C

### CONSTRUCTIVE FEATURES

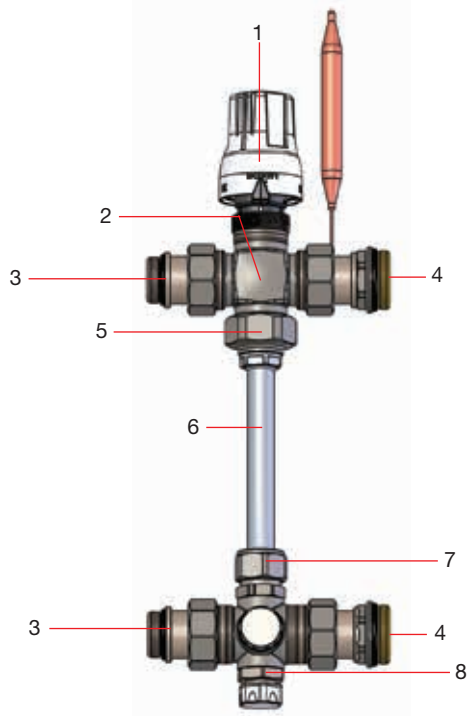
Press-forged parts consist of brass with limited lead content in compliance with the current regulations: CW617N UNI EN 12165:2016. All o-rings are produced in peroxide cured EPDM. Stainless steel components in AISI 316. All components are provided with soft o-rings and do not require any intermediate sealing element (PTFE, hemp, etc.).

### APPLICATIONS

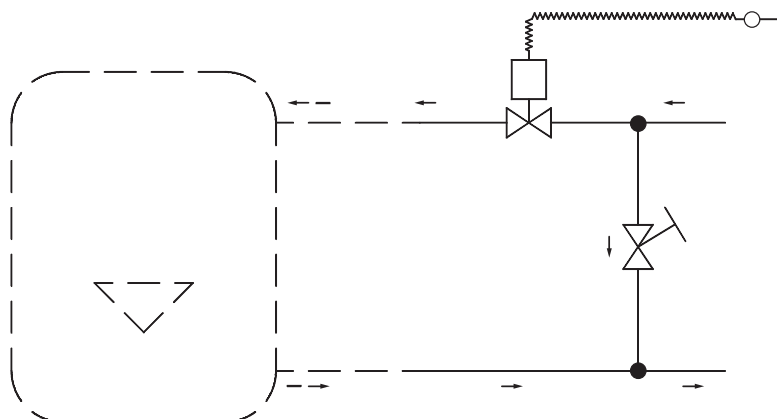
When combined with pump group GP 1190, the kit for high temperature FM 750 allows to install a hot water distribution for traditional radiator systems and a water distribution system for radiant panels in one single cabinet.

### COMPONENTS

- 1 Thermostatic head with remote sensor
- 2 Thermostatic mixing valve with third way in bypass
- 3 G 3/4 fitting with soft seal
- 4 G 1" fitting with soft seal
- 5 Female connection with flat gasket
- 6 Copper pipe for bypass
- 7 Compression fitting
- 8 Balancing valve



### HYDRAULIC SCHEME



**FUNCTION**

The FM 750 system keeps the water in the radiant panels at a constant, pre-set temperature by mixing the hot water coming from the boiler with the one recirculating through the bypass circuit.

A thermostatic valve with remote sensor measures the temperature and adds hot water to the circuit accordingly, so as to compensate the heat output of the radiant panels.

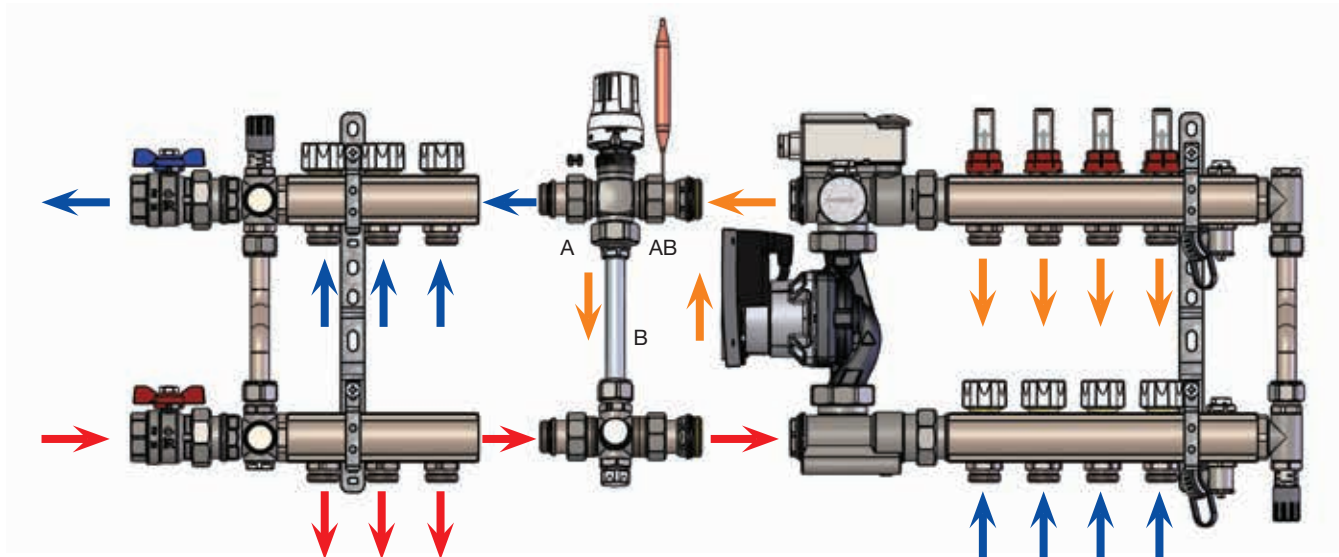
The “Flow Mix” thermostatic mixer consists of a thermostatic mixing valve and a balancing valve. By means of a lockshield, the latter regulates the quantity of water returning from the radiant panels circuit to be sent to the low temperature connection of the mixer.

It is advisable to install a safety thermostat on the pump inlet valve, so as to avoid possible damage caused by a sudden temperature rise.

The intervention of the thermostat must block the functioning of the pump.

This type of system can supply a maximum thermal power of 20 kW with a  $\Delta t$  of 10°C and a temperature of  $\geq 70^\circ\text{C}$  on the primary circuit.

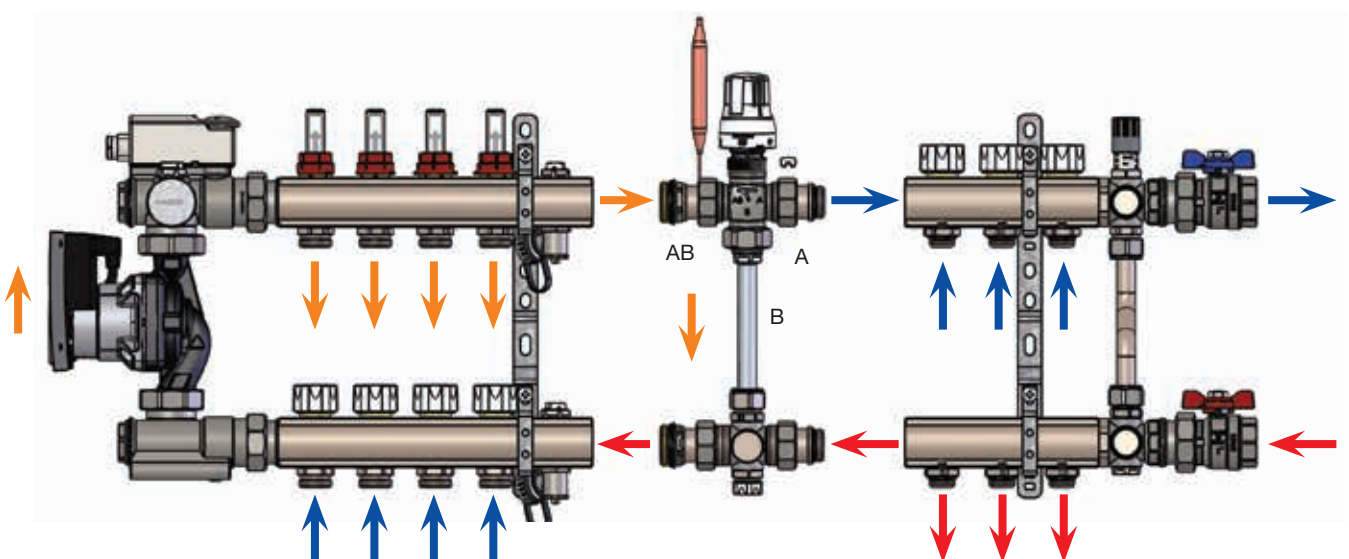
The “Flow Mix” can be installed both on the left or right side of the Pump Group GP 1190.



**IN THE FIRST CASE**

- The mixing valve AB way must be connected to the end part of the pump;
- The A way must be connected to the manifold of the high temperature zone;

- The B way is the bypass;
- The probe of the thermostatic head must be inserted in the top part of the pump group before installing the **Flow Mix**.



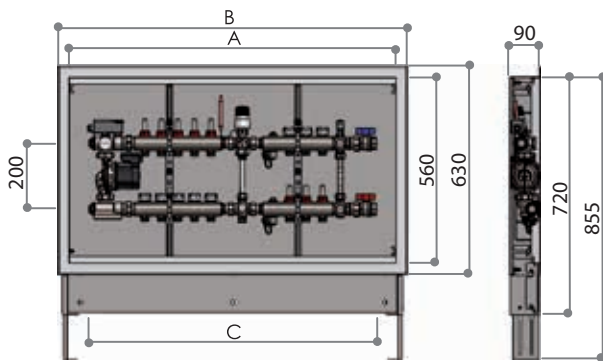
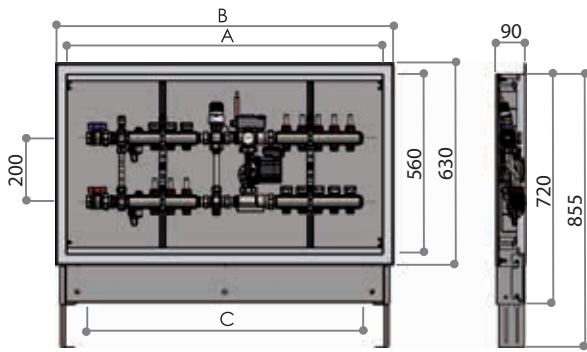
**IN THE SECOND CASE**

- The mixing valve AB must be connected to the end part of the inlet manifold of the low temperature zone;
- The A way must be connected to the return manifold of the high temperature zone;

- The B way is the bypass;
- The probe of the thermostatic head must be inserted in the top part of the pump group before installing the **Flow Mix**.



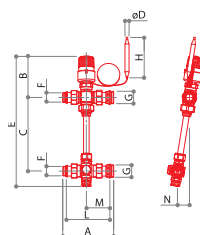
### DIMENSIONAL DRAWING



N. PANEL CONNECTIONS	A	B	C
<b>WITH 2 WAYS FOR HIGH TEMPERATURE</b>			
2	910	850	670
3	910	850	720
4	910	850	770
5	1060	1000	820
6	1060	1000	870
7	1060	1000	920
8	1260	1200	970
9	1260	1200	1020
10	1260	1200	1070
11	1260	1200	1120
12	1360	1300	1170
<b>WITH 3 WAYS FOR HIGH TEMPERATURE</b>			
2	910	850	720
3	910	850	770
4	1060	1000	820
5	1060	1000	870
6	1060	1000	920
7	1260	1200	970
8	1260	1200	1020
9	1260	1200	1070
10	1260	1200	1120
11	1360	1300	1170
12	1360	1300	1220

N. PANEL CONNECTIONS	A	B	C
<b>WITH 2 WAYS FOR HIGH TEMPERATURE</b>			
2	910	850	670
3	910	850	720
4	910	850	770
5	1060	1000	820
6	1060	1000	870
7	1060	1000	920
8	1260	1200	970
9	1260	1200	1020
10	1260	1200	1070
11	1260	1200	1120
12	1360	1300	1170
<b>WITH 3 WAYS FOR HIGH TEMPERATURE</b>			
2	910	850	720
3	910	850	770
4	1060	1000	820
5	1060	1000	870
6	1060	1000	920
7	1260	1200	970
8	1260	1200	1020
9	1260	1200	1070
10	1260	1200	1120
11	1360	1300	1170
12	1360	1300	1220

### REGULATION SYSTEMS FOR RADIANT PANELS HEATING WITH PUMP GROUP GP 1190 AND KIT FOR HIGH TEMPERATURE

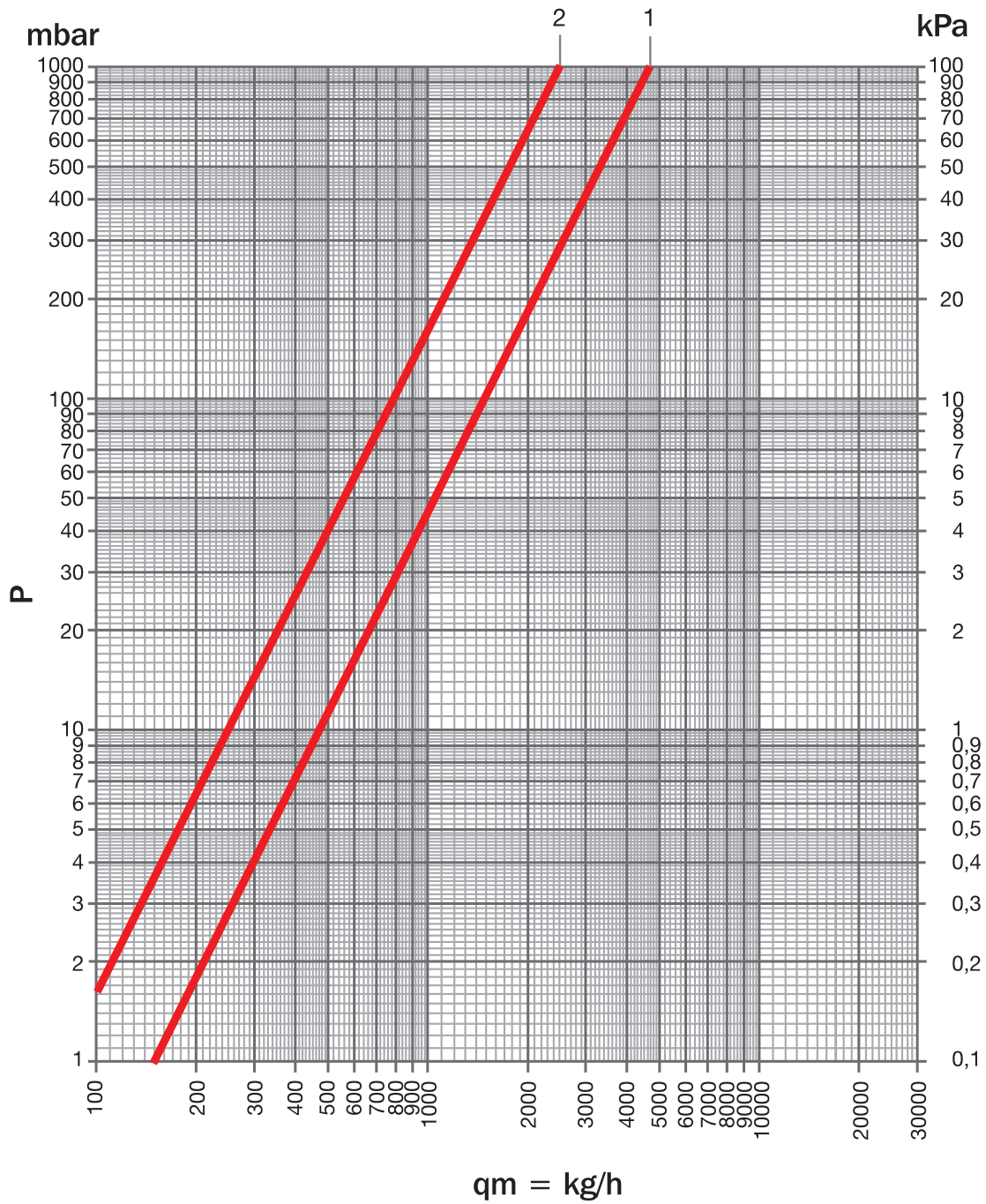


#### FM 750

Flow mix kit with bypass for mixed heating systems.

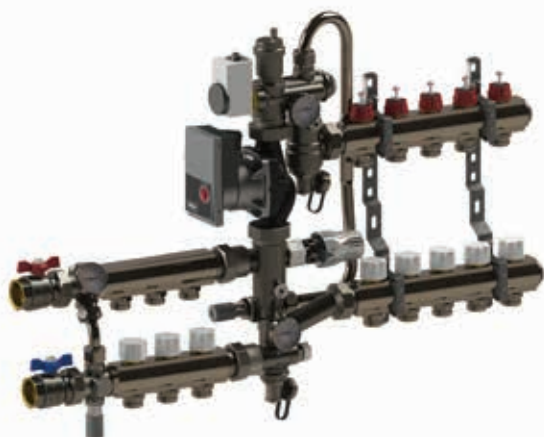
CODE	SIZE	A	B	C	D	E	F	G	H	L	M	N			
68763602	G 1"	138	115	200	11	365	G 3/4	G 1"	110	118	64	32	1442	1	8

### FLOW RATE CHART



Kv	Kv $\Delta t$ 2 °C		POS
4.70	0.36	A - AB way	1
2.50	-	B - AB way always open	2

## REGULATION SYSTEMS FOR RADIANT PANELS HEATING WITH MIXING GROUP GM 1192



# 20 kW

### TECHNICAL DATA

Maximum working pressure 6 bar  
 Maximum differential pressure 1 bar  
 Regulation range on the bypass  $0.2 \div 0.7$  bar  
 Maximum working temperature on primary circuit  $80\text{ }^{\circ}\text{C}$   
 Maximum working temperature on secondary circuit  $70\text{ }^{\circ}\text{C}$   
 Temperature range on secondary circuit  $20\text{ }^{\circ}\text{C} \div 65\text{ }^{\circ}\text{C}$   
 Maximum thermal power 20 kW with  $\Delta t 10\text{ }^{\circ}\text{C}$   
 and temperature on the primary circuit  $\geq 70\text{ }^{\circ}\text{C}$

### CONSTRUCTIVE FEATURES

Press-forged parts consist of brass with limited lead content in compliance with the current regulations: CW617N UNI EN 12165:2016. All o-rings are produced in peroxide cured EPDM. Stainless steel components in AISI 316.

All components are provided with soft o-rings and do not require any intermediate sealing element (PTFE, hemp, etc.). Side connections W24x19 or G 3/4 EK with 50 mm interaxis. The pump group GM 1192 as a  $\varnothing 23$  mm internal passage.

### APPLICATIONS

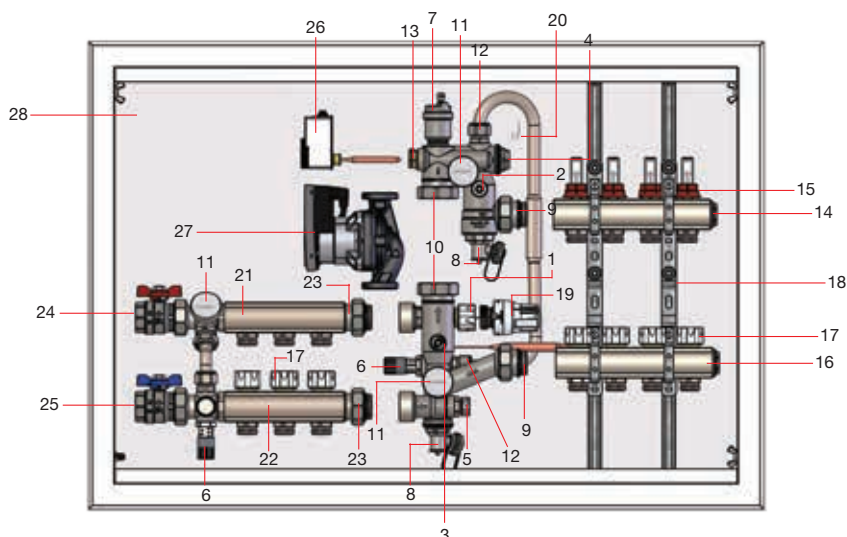
The mixing group GM 1192 is a regulation group which combines a number of components in a single device able to maintain a pre-set temperature in the radiant panels circuit of mixed heating systems. The temperature in the panels is kept constant by a regulating valve which mixes hot water coming from the boiler with the low temperature one circulating in the panels. The GM 1192 can be connected directly to Luxor manifolds for radiant panels by means of a G 1" male fitting

with soft seal. This makes the GM 1192 particularly convenient, since it can be kept in stock as a modular component.

Moreover, the GM 1192 makes mixed heating systems extremely flexible, since the regulation group can be adjusted to meet the future requirements of the secondary circuit. It is therefore possible to expand the radiant panels system simply by adding outlets, without temperature or pressure issues downstream of the group.

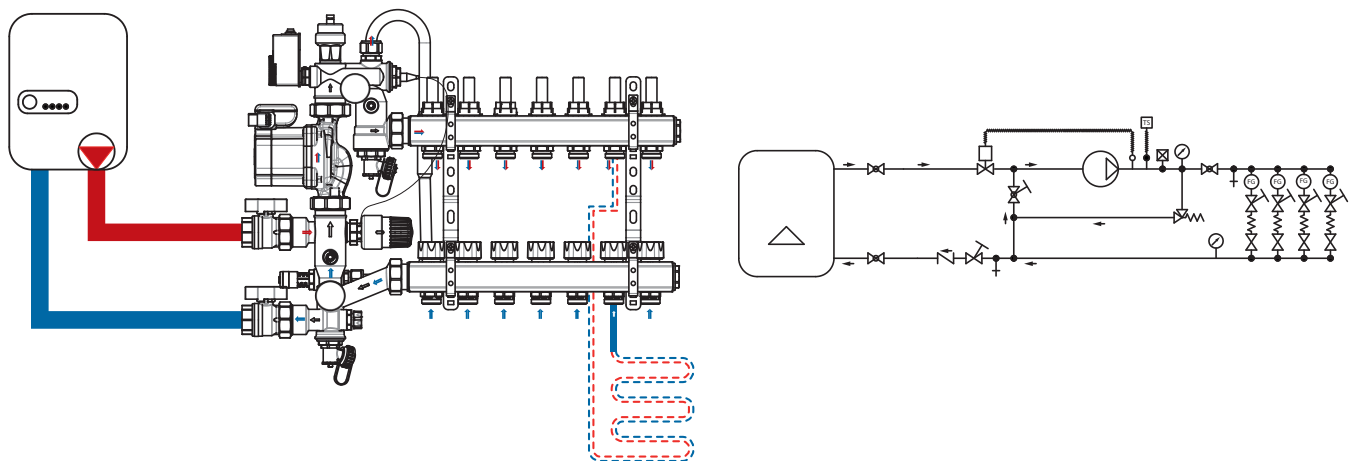
The GM 1192 can be set both to increase the heating capacity and to balance pressure drops.

Finally, thanks to its great regulation capacity, the GM 1192 allows to make the secondary circuit independent from the primary in case of replacement of important parts of the system, for example when a new boiler with a different operating principle is installed. By means of the bypass circuit, the circulation pump can keep on operating at design conditions. This type of system can supply a max thermal power of 20 kW with a temperature of the primary circuit of  $\geq 70\text{ }^{\circ}\text{C}$ .



### COMPONENTS

- 1 Regulating valve.  
With piston-like screw; fits both thermostatic heads for fixed points and 0-10 Volt thermoelectric heads.
- 2 Pump shut-off valve.  
Allows for interception in case of maintenance and replacement of the circulation pump without draining the system.
- 3 Ball valve for pump interception and balancing of the secondary circuit.  
Allows to intercept the pump and balance pressure drops in the radiant panels secondary circuit and those caused by regulating valve "1" in the primary circuit. The regulation group GM 1192 is supplied with a balancing valve set  $K_v=7$  for applications up to 11 Kw/h, if a higher capacity is required, set the valve to a lower  $K_v$ .
- 4 Probe seat.
- 5 Low temperature circuit shut-off valve.  
Only set at first start-up to adjust the pressure drop of the water coming from the secondary circuit. To separate the primary and the secondary circuit for maintenance on the primary, the lockshield must be fully closed. A non-return valve inside the seat prevents the water in the primary circuit from heating up the mixing group when the pump is off and the thermostatic head is closed. This valve should usually be completely open.
- 6 Differential bypass valve.  
Bypass valves are essential in all distribution systems with 2-way zone valves or heating bodies with adjustment valves, which enable, under certain circumstances, to bypass a circuit.  
The recirculation guaranteed by the valve prevents the pump from working under improper conditions, thus avoiding imbalances among circuits operating in parallel and noise caused by the increased speed of the medium flowing through the adjustment devices.
- 7 Automatic air vent valve (1/2 connections).  
Operates during the loading phase by discharging the air out of the group.
- 8 Load / drain taps with adjustable 3/4 connection and safety cap.
- 9 Three-pieces G 1" union fitting with soft sealing art. CR 498.
- 10 G 1" 1/2 adapters to connect the circulation pump.
- 11 Thermometers, measurement range 0°C to 80°C.  
Allow to check water temperature in the delivery and return manifolds of the radiant panels in the secondary circuit.
- 12 Union fittings for bypass pipe.
- 13 Safety thermostat seat.
- 14 Delivery manifold (radiant panels).
- 15 Regulators and flow meters, capacity 0.5 l/m to 5 l/m.  
The glass can be removed for cleaning while the system is operating.
- 16 Return manifold (radiant panels).
- 17 Valves for electrothermal regulation, with protection caps.
- 18 Brackets.
- 19 Thermostatic head with remote sensor.
- 20 Spring to fix the remote sensor to the thermostatic head.
- 21 Delivery manifold (primary circuit).
- 22 Return manifold (primary circuit).
- 23 Three-pieces G 1" union fitting with soft sealing.
- 24 Delivery ball valve (boiler).
- 25 Return ball valve (boiler).
- 26 Contact safety thermostat.
- 27 Circulation pump with 25/60 synchronous motor, interaxis 130 mm, energy class A.  
25/60 wheelbase 130 mm energy class A.
- 28 Cabinet with adjustable ends, RAL 9016 white frame and door.



HYDRAULIC SCHEME LEGEND

	check valve		water load/drain tap		circulation pump
	ball valve		thermometer		user: radiant panels, radiators etc.
	non-return valve, the arrow indicates the direction of flow		manual air vent device		filter
	safety valve (bypass valve)		automatic air vent device		3-way valve
	check valve, regulation and balancing		flow meter		
	ball check valve regulation and balancing		immersion safety thermostat		
	injection valve with remote sensor		contact safety thermostat		

**FUNCTION**

Fixed point heating systems keep the water in the radiant panels at a constant pre-set temperature by mixing hot water coming from the boiler with the one circulating in the panels. A thermostatic valve with remote sensor measures the temperature and adds hot water to the circuit accordingly, so as to compensate the heat output of the radiant panels. It is advisable to install a security thermostat on the pump inlet valve in order to avoid damages caused by a sudden temperature rise. The intervention of the thermostat must block the functioning of the pump.

The system can be complemented with a bypass valve. In case of excessive differential pressure, the bypass valve releases the exceeding pressure, thus protecting the components and, if thermoelectric heads are employed to intercept the circuits, avoiding noise and wear on the circulation pump. This type of system can supply a max thermal power of 20 kW with a  $\Delta t$  of 10°C and a temperature of  $\geq 70^\circ\text{C}$  on the primary side.

## REGULATION SYSTEMS FOR RADIANT PANELS HEATING WITH MIXING GROUP GM 1192



### GM 1192

Fixed point regulation group for floor heating systems, with connection for pump with thermostatic head.

CODE	SIZE			
72000050	CD G 1" x 130 mm	4580	-	1
72000050X	CX G 1" X 130 mm	4744	-	1
72000055	CD G 1" x 180 mm	4610	-	1



### GM 1193

Regulation group for floor heating systems, with pump connection.

CODE	SIZE			
72000052	G 1" x 130 mm	4434	-	1
72000057	G 1" x 180 mm	4464	-	1



### CB 1200

Insulation for regulation group GM 1192, with 130 mm pump connection.

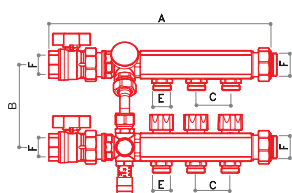
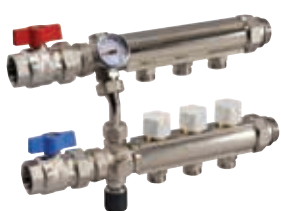
CODE	SIZE			
72000060	-	192	2	-



### CB 1205

Insulation for manifolds CD series, for 12 ways.

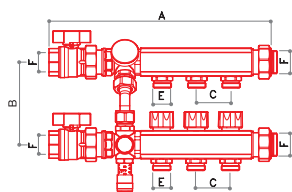
CODE	SIZE			
72000064	CD G 1"	156	-	6
72000066	CX G 1"	149	-	6
72000065	CD G 1"1/4	180	-	6



### CD 4071

Kit for high temperature for mixing group art. GM 1192.

CODE	ARTICLE	SIZE	A	B	C	D	E	F	G	H			
17407102N	CD4071/2	G 1" x (W24x19)	275	120	25	-	W24x19	G 1"	-	-	3490	1	-
17407103N	CD4071/3		325	120	25	-	W24x19	G 1"	-	-	4050	1	-
17407104N	CD4071/4		375	120	25	-	W24x19	G 1"	-	-	4610	1	-

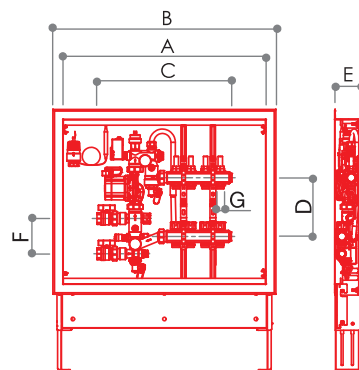
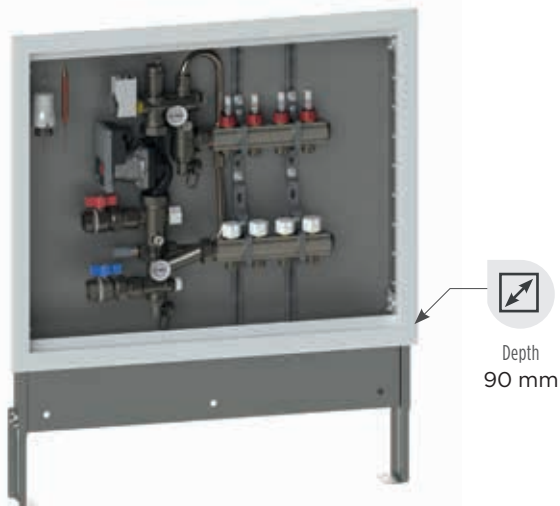


### CD 4072

Kit for high temperature for mixing group art. GM 1192.

CODE	ARTICLE	SIZE	A	B	C	D	E	F	G	H			
17407202N	CD4072/2	G 1" x G 3/4 EK	275	120	25	-	G 3/4 EK	G 1"	-	-	3534	1	-
17407203N	CD4072/3		325	120	25	-	G 3/4 EK	G 1"	-	-	4116	1	-
17407204N	CD4072/4		375	120	25	-	G 3/4 EK	G 1"	-	-	4698	1	-

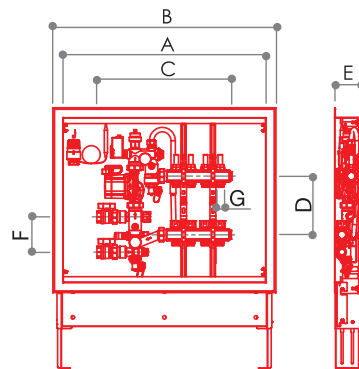
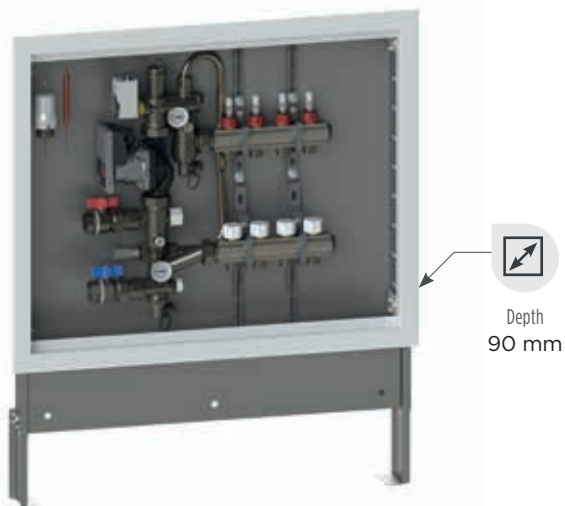
PREASSEMBLED GROUPS



**CCBP 4026**

Fixed point heating system for low temperature (W24x19).

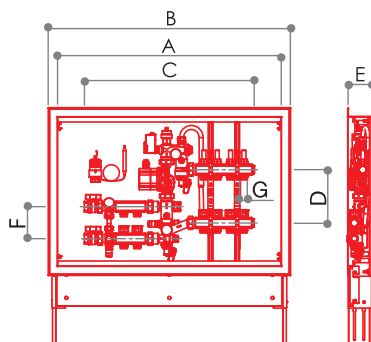
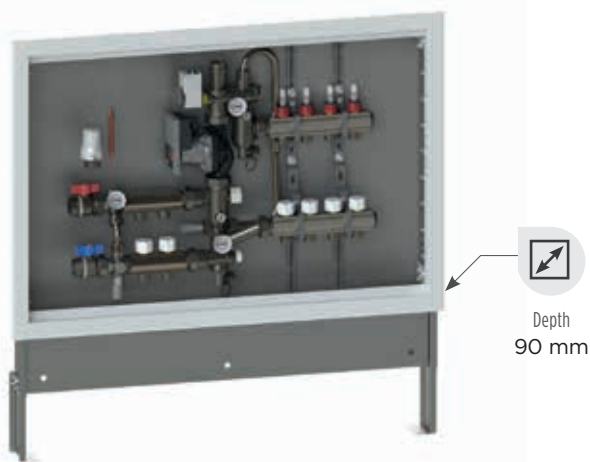
ARTICLE	CODE	SIZE	N. PANEL CONNECTIONS	A	B	C	D	E	F	G	H	L	kg	📦
CCBP4026/2	17402602N	G 1" x (W24x19)	2	500	560	360	200	90	120	W24x19	-	-	19,218	1
CCBP4026/3	17402603N		3	700	760	410					-	-	21,812	1
CCBP4026/4	17402604N		4	700	760	460					-	-	22,406	1
CCBP4026/5	17402605N		5	700	760	510					-	-	23,00	1
CCBP4026/6	17402606N		6	700	760	560					-	-	23,594	1
CCBP4026/7	17402607N		7	850	910	610					-	-	26,188	1
CCBP4026/8	17402608N		8	850	910	660					-	-	26,782	1
CCBP4026/9	17402609N		9	850	910	710					-	-	27,376	1
CCBP4026/10	17402610N		10	1000	1060	760					-	-	29,970	1
CCBP4026/11	17402611N		11	1000	1060	810					-	-	30,564	1
CCBP4026/12	17402612N		12	1000	1060	860					-	-	31,158	1
CCBP4026/13	17402613N		13	1200	1260	910					-	-	33,758	1



**CCBP 4036**

Fixed point heating system for low temperature G 3/4 EK.

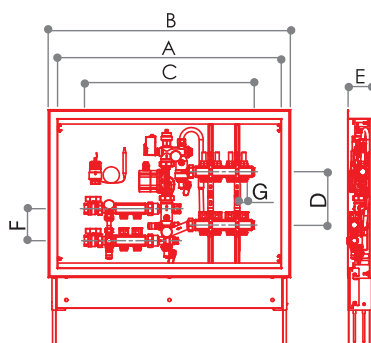
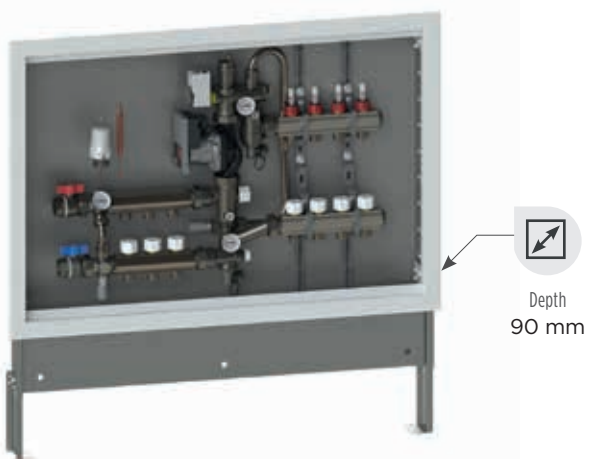
ARTICLE	CODE	SIZE	N. PANEL CONNECTIONS	A	B	C	D	E	F	G	H	L	kg	📦
CCBP4036/2	17403602N	G 1" x G 3/4 EK	2	500	560	360	200	90	120	G 3/4 EK	-	-	19,218	1
CCBP4036/3	17403603N		3	700	760	410					-	-	21,812	1
CCBP4036/4	17403604N		4	700	760	460					-	-	22,406	1
CCBP4036/5	17403605N		5	700	760	510					-	-	23,000	1
CCBP4036/6	17403606N		6	700	760	560					-	-	23,594	1
CCBP4036/7	17403607N		7	850	910	610					-	-	26,188	1
CCBP4036/8	17403608N		8	850	910	660					-	-	26,782	1
CCBP4036/9	17403609N		9	850	910	710					-	-	27,376	1
CCBP4036/10	17403610N		10	1000	1060	760					-	-	29,970	1
CCBP4036/11	17403611N		11	1000	1060	810					-	-	30,564	1
CCBP4036/12	17403612N		12	1000	1060	860					-	-	31,158	1
CCBP4036/13	17403613N		13	1200	1260	910					-	-	33,758	1



**CCBAP 4025**

Low temperature distribution system  
+ 2 connections for high temperature (W24x19).

ARTICLE	CODE	SIZE	N. PANEL CONNECTIONS	A	B	C	D	E	F	G	H	L	kg	⊞
CCBAP4025/2	17402502N	G 1" x (W24x19)	2	700	760	540	200	90	120	W24x19	-	-	23,648	1
CCBAP4025/3	17402503N		3	700	760	590					-	-	24,242	1
CCBAP4025/4	17402504N		4	850	910	640					-	-	26,836	1
CCBAP4025/5	17402505N		5	850	910	690					-	-	27,430	1
CCBAP4025/6	17402506N		6	850	910	740					-	-	28,024	1
CCBAP4025/7	17402507N		7	1000	1060	790					-	-	30,618	1
CCBAP4025/8	17402508N		8	1000	1060	840					-	-	31,212	1
CCBAP4025/9	17402509N		9	1000	1060	890					-	-	31,806	1
CCBAP4025/10	17402510N		10	1200	1260	940					-	-	34,400	1
CCBAP4025/11	17402511N		11	1200	1260	990					-	-	34,994	1
CCBAP4025/12	17402512N		12	1200	1260	1040					-	-	35,588	1
CCBAP4025/13	17402513N		13	1200	1260	1090					-	-	36,182	1

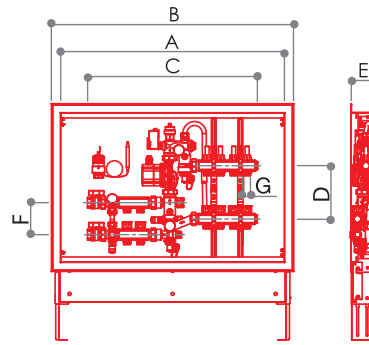


**CCBAP 4027**

Low temperature distribution system  
+ 3 connections for high temperature (W24x19).

ARTICLE	CODE	SIZE	N. PANEL CONNECTIONS	A	B	C	D	E	F	G	H	L	kg	⊞
CCBAP4027/2	17402702N	G 1" x (W24x19)	2	700	760	590	200	90	120	W24x19	-	-	24,218	1
CCBAP4027/3	17402703N		3	850	910	640					-	-	26,812	1
CCBAP4027/4	17402704N		4	850	910	690					-	-	27,406	1
CCBAP4027/5	17402705N		5	850	910	740					-	-	28,000	1
CCBAP4027/6	17402706N		6	1000	1060	790					-	-	30,594	1
CCBAP4027/7	17402707N		7	1000	1060	840					-	-	31,188	1
CCBAP4027/8	17402708N		8	1000	1060	890					-	-	31,782	1
CCBAP4027/9	17402709N		9	1200	1260	940					-	-	34,376	1
CCBAP4027/10	17402710N		10	1200	1260	990					-	-	34,970	1
CCBAP4027/11	17402711N		11	1200	1260	1040					-	-	35,564	1
CCBAP4027/12	17402712N		12	1200	1260	1090					-	-	36,158	1
CCBAP4027/13	17402713N		13	1300	1360	1140					-	-	38,752	1

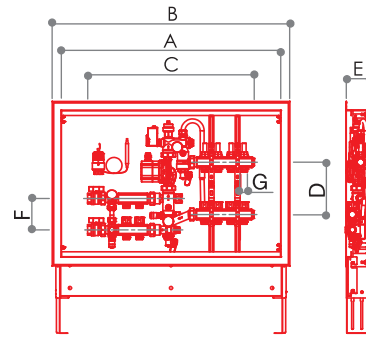




**CCBAP 4079**

Low temperature distribution system  
+ 4 connections for high temperature  
(W24x19).

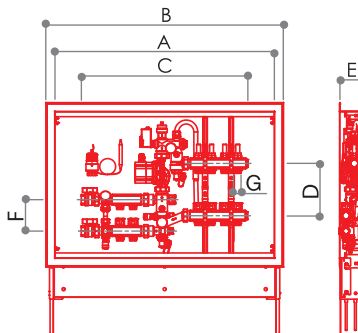
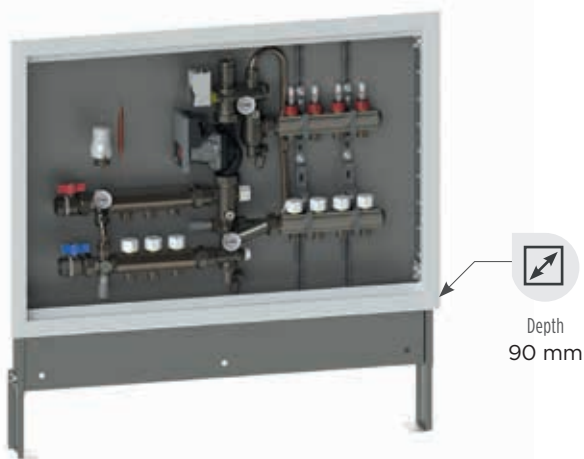
ARTICLE	CODE	SIZE	N. PANEL CONNECTIONS	A	B	C	D	E	F	G	H	L	kg	box
CCBAP4079/2	17407902N	G 1" x (W24x19)	2	850	910	640	200	90	120	W24x19	-	-	24,788	1
CCBAP4079/3	17407903N		3	850	910	690					-	-	27,382	1
CCBAP4079/4	17407904N		4	850	910	740					-	-	27,976	1
CCBAP4079/5	17407905N		5	1000	1060	790					-	-	28,570	1
CCBAP4079/6	17407906N		6	1000	1060	840					-	-	31,164	1
CCBAP4079/7	17407907N		7	1000	1060	890					-	-	31,758	1
CCBAP4079/8	17407908N		8	1200	1260	940					-	-	32,352	1
CCBAP4079/9	17407909N		9	1200	1260	990					-	-	34,946	1
CCBAP4079/10	17407910N		10	1200	1260	1040					-	-	35,540	1
CCBAP4079/11	17407911N		11	1200	1260	1090					-	-	36,134	1
CCBAP4079/12	17407912N		12	1300	1360	1140					-	-	36,728	1
CCBAP4079/13	17407913N		13	1300	1360	1190					-	-	39,322	1



**CCBAP 4035**

Low temperature distribution system  
+ 2 connections for high temperature  
G 3/4 EK.

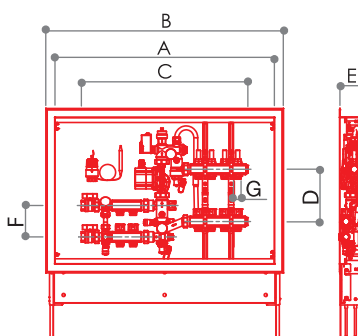
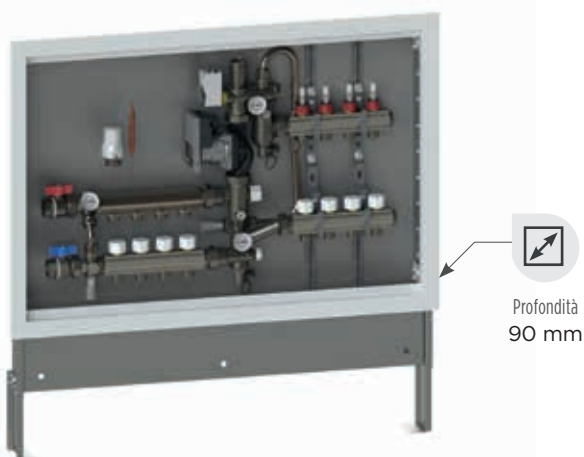
ARTICLE	CODE	SIZE	N. PANEL CONNECTIONS	A	B	C	D	E	F	G	H	L	kg	box
CCBAP4035/2	17403502N	G 1" x G 3/4 EK	2	700	760	540	200	90	120	G 3/4 EK	-	-	23,648	1
CCBAP4035/3	17403503N		3	700	760	590					-	-	24,242	1
CCBAP4035/4	17403504N		4	850	910	640					-	-	26,836	1
CCBAP4035/5	17403505N		5	850	910	690					-	-	27,430	1
CCBAP4035/6	17403506N		6	850	910	740					-	-	28,024	1
CCBAP4035/7	17403507N		7	1000	1060	790					-	-	30,618	1
CCBAP4035/8	17403508N		8	1000	1060	840					-	-	31,212	1
CCBAP4035/9	17403509N		9	1000	1060	890					-	-	31,806	1
CCBAP4035/10	17403510N		10	1200	1260	940					-	-	34,400	1
CCBAP4035/11	17403511N		11	1200	1260	990					-	-	34,994	1
CCBAP4035/12	17403512N		12	1200	1260	1040					-	-	35,588	1
CCBAP4035/13	17403513N		13	1200	1260	1090					-	-	36,182	1



**CCBAP 4037**

Low temperature distribution system  
+ 3 connections for high temperature  
G 3/4 EK.

ARTICLE	CODE	SIZE	N. PANEL CONNECTIONS	A	B	C	D	E	F	G	H	L	kg	⇒
CCBAP4037/2	17403702N	G 1" x G 3/4 EK	2	700	760	590	200	90	120	G 3/4 EK	-	-	24,218	1
CCBAP4037/3	17403703N		3	850	910	640					-	-	26,812	1
CCBAP4037/4	17403704N		4	850	910	690					-	-	27,406	1
CCBAP4037/5	17403705N		5	850	910	740					-	-	28,000	1
CCBAP4037/6	17403706N		6	1000	1060	790					-	-	30,594	1
CCBAP4037/7	17403707N		7	1000	1060	840					-	-	31,188	1
CCBAP4037/8	17403708N		8	1000	1060	890					-	-	31,782	1
CCBAP4037/9	17403709N		9	1200	1260	940					-	-	34,376	1
CCBAP4037/10	17403710N		10	1200	1260	990					-	-	34,970	1
CCBAP4037/11	17403711N		11	1200	1260	1040					-	-	35,564	1
CCBAP4037/12	17403712N		12	1200	1260	1090					-	-	36,158	1
CCBAP4037/13	17403713N		13	1300	1360	1140					-	-	38,752	1



**CCBAP 4080**

Low temperature distribution system  
+ 4 connections for high temperature  
G 3/4 EK.

ARTICLE	CODE	SIZE	N. PANEL CONNECTIONS	A	B	C	D	E	F	G	H	L	kg	⇒
CCBAP4080/2	17408002N	G 1" x G 3/4 EK	2	850	910	640	200	90	120	G 3/4 EK	-	-	24,788	1
CCBAP4080/3	17408003N		3	850	910	690					-	-	27,382	1
CCBAP4080/4	17408004N		4	850	910	740					-	-	27,976	1
CCBAP4080/5	17408005N		5	1000	1060	790					-	-	28,570	1
CCBAP4080/6	17408006N		6	1000	1060	840					-	-	31,164	1
CCBAP4080/7	17408007N		7	1000	1060	890					-	-	31,758	1
CCBAP4080/8	17408008N		8	1200	1260	940					-	-	32,352	1
CCBAP4080/9	17408009N		9	1200	1260	990					-	-	34,946	1
CCBAP4080/10	17408010N		10	1200	1260	1040					-	-	35,540	1
CCBAP4080/11	17408011N		11	1200	1260	1090					-	-	36,134	1
CCBAP4080/12	17408012N		12	1300	1360	1140					-	-	36,728	1
CCBAP4080/13	17408013N		13	1300	1360	1190					-	-	39,322	1

## SOLAR PUMP GROUP



### TECHNICAL DATA

Maximum continuous working temperature 130°C  
 Flow restrictor range 0.5 ÷ 15 l/min  
 Thermometer range 0 ÷ 160 °C  
 Relief valve set pressure 6 bar  
 Pressure gauge range 0 ÷ 16 bar  
 Working medium water and glycol (max 50%)

### TECHNICAL DATA OF THE CIRCULATOR

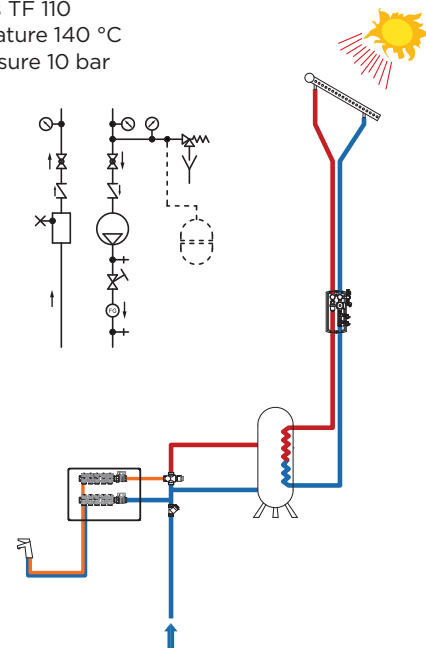
Grundfos Solar Model 15-65 130  
 Connection 1" M with flat sealing  
 Interaxis 130 mm  
 Temperature class TF 110  
 Max peak temperature 140 °C  
 Max working pressure 10 bar

### CONSTRUCTIVE FEATURES

Press-forged parts consist of brass with limited lead content in compliance with the current regulations: CW617N UNI EN 12165:2016.

All o-rings are produced in peroxide cured EPDM. Gaskets are in carbon/graphite filled PTFE G415 and the insulation shells in black PPE (40 kg/m<sup>3</sup>).

All components are provided with soft o-rings and do not require any intermediate sealing element (PTFE, hemp, etc.).



### HYDRAULIC SCHEME LEGEND

	check valve		water load/drain tap		circulation pump
	ball valve		thermometer		user: radiant panels, radiators etc.
	non-return valve, the arrow indicates the direction of flow		manual air vent device		filter
	safety valve (bypass valve)		automatic air vent device		3-way valve
	check valve, regulation and balancing		flow meter		
	ball check valve regulation and balancing		immersion safety thermostat		
	injection valve with remote sensor		contact safety thermostat		

### FUNCTION

The solar pump groups use the solar thermal energy and transfer this to a fluid heat carrier which then releases it to the water necessary for the system.

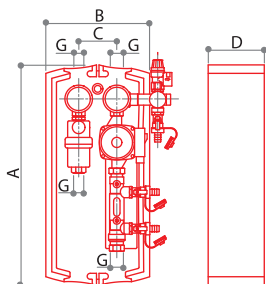
The groups are supplied with a pump which circulates the fluid inside the system. All the components of the system are produced in materials suitable to support the high temperatu-

re reached by the system.

The groups are also equipped with interception valve for the pump, loading and unloading valves, safety valves, flow-meter and protection cover.

The air separator/eliminator is only in model GSP 1180.

SOLAR PUMP GROUP

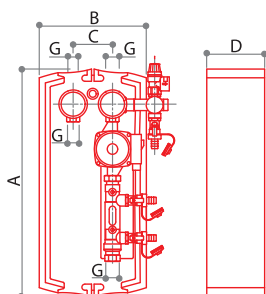


**CSP 1180**

Solar pump group complete with shut-off valves with built-in thermometers, deaerator, load/drain taps, check valves, 6 bar relief valve, insulation and flow meter with range 0,5 to 15 l/min.

**Max working temperature 130 °C.**

CODE	SIZE	A	B	C	D	E	F	G	H	L			
72000010	G 3/4	440	250	125	115	-	-	G 3/4	-	-	5028	1	-



**CSP 1182**

Solar pump group complete with shut-off valves with built-in thermometers, load/drain taps, check valves, 6 bar relief valve, insulation and flow meter with range 0,5 to 15 l/min.

**Max working temperature 130 °C.**

CODE	SIZE	A	B	C	D	E	F	G	H	L			
72000012	G 3/4	440	250	125	115	-	-	G 3/4	-	-	4478	1	-



**CE 1370**

Digital differential control unit for solar heating systems.

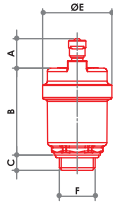
CODE	SIZE			
69011470	-	530	1	-



**AC 1180**

Accessories for the connection between the solar pump groups and the expansion tank, complete with bidirectional check valve and bracket for wall fixing.

CODE	SIZE			
68559880	G 3/4	1116	1	-



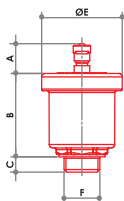
**VS 604/S**

Automatic air vent valve 200°C - 10 bar.



Testing 100%

CODE	SIZE	A	B	C	D	E	F	G	H	L			
67791017	G 3/8	17	50	9	-	40	G 3/8	-	-	-	138	10	100
67791021	G 1/2	17	50	9	-	40	G 1/2	-	-	-	138	10	100



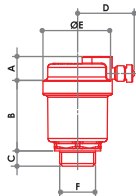
**VS 601/S**

Automatic air vent valve medium. 200°C - 10 bar.



Testing 100%

CODE	SIZE	A	B	C	D	E	F	G	H	L			
67790817	G 3/8	17	50	9	-	46	G 3/8	-	-	-	154	10	100
67790821	G 1/2	17	50	9	-	46	G 1/2	-	-	-	154	10	100
67790827	G 3/4	17	50	9	-	46	G 3/4	-	-	-	154	10	100



**VS 603/S**

Automatic air vent valve with lateral purge 200°C - 10 bar.

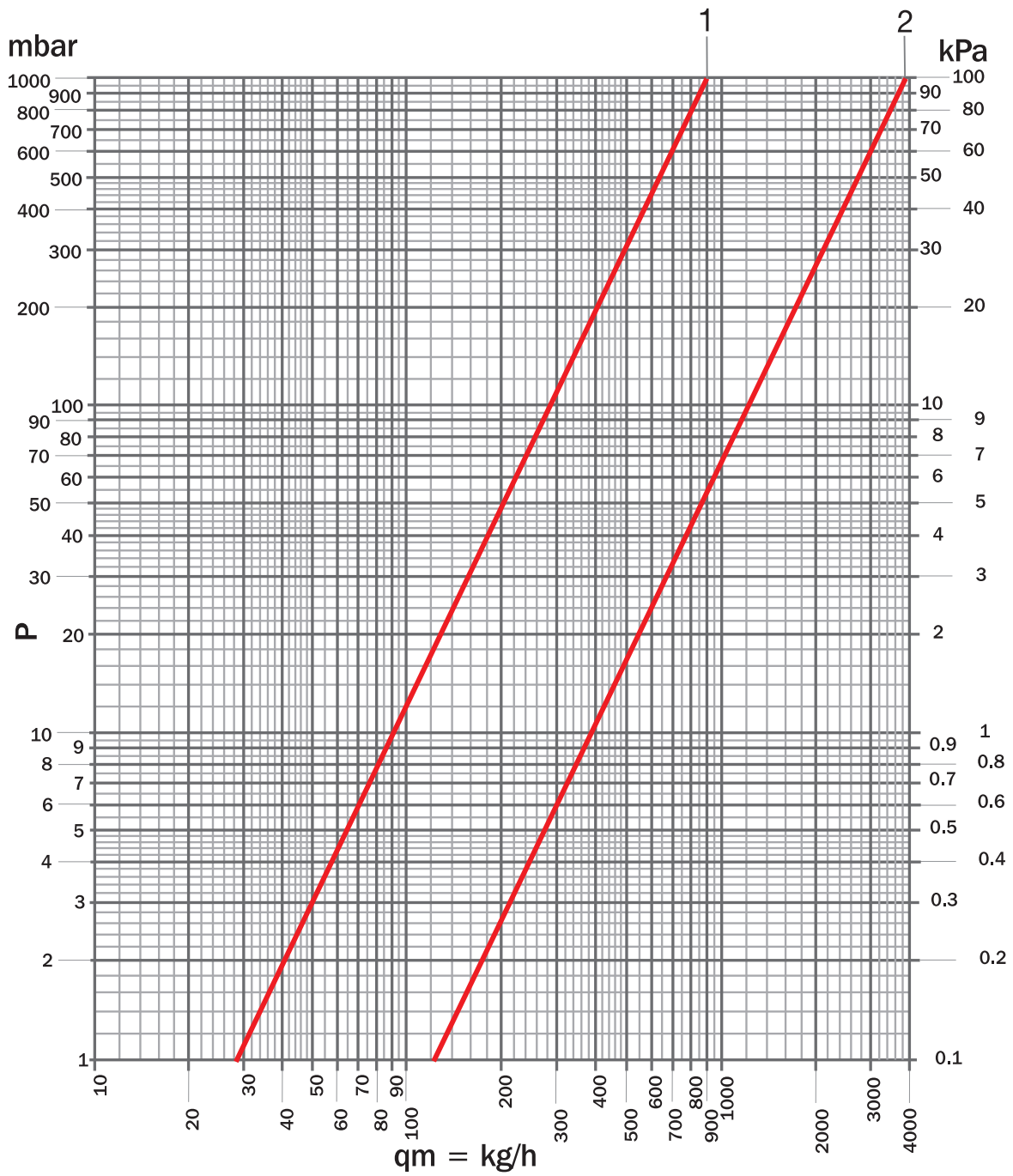


Testing 100%

CODE	SIZE	A	B	C	D	E	F	G	H	L			
67790917	G 3/8	14	41	9	34	40	G 3/8	-	-	-	160	10	100
67790921	G 1/2	14	41	9	34	40	G 1/2	-	-	-	160	10	100

### FLOW RATE CHART

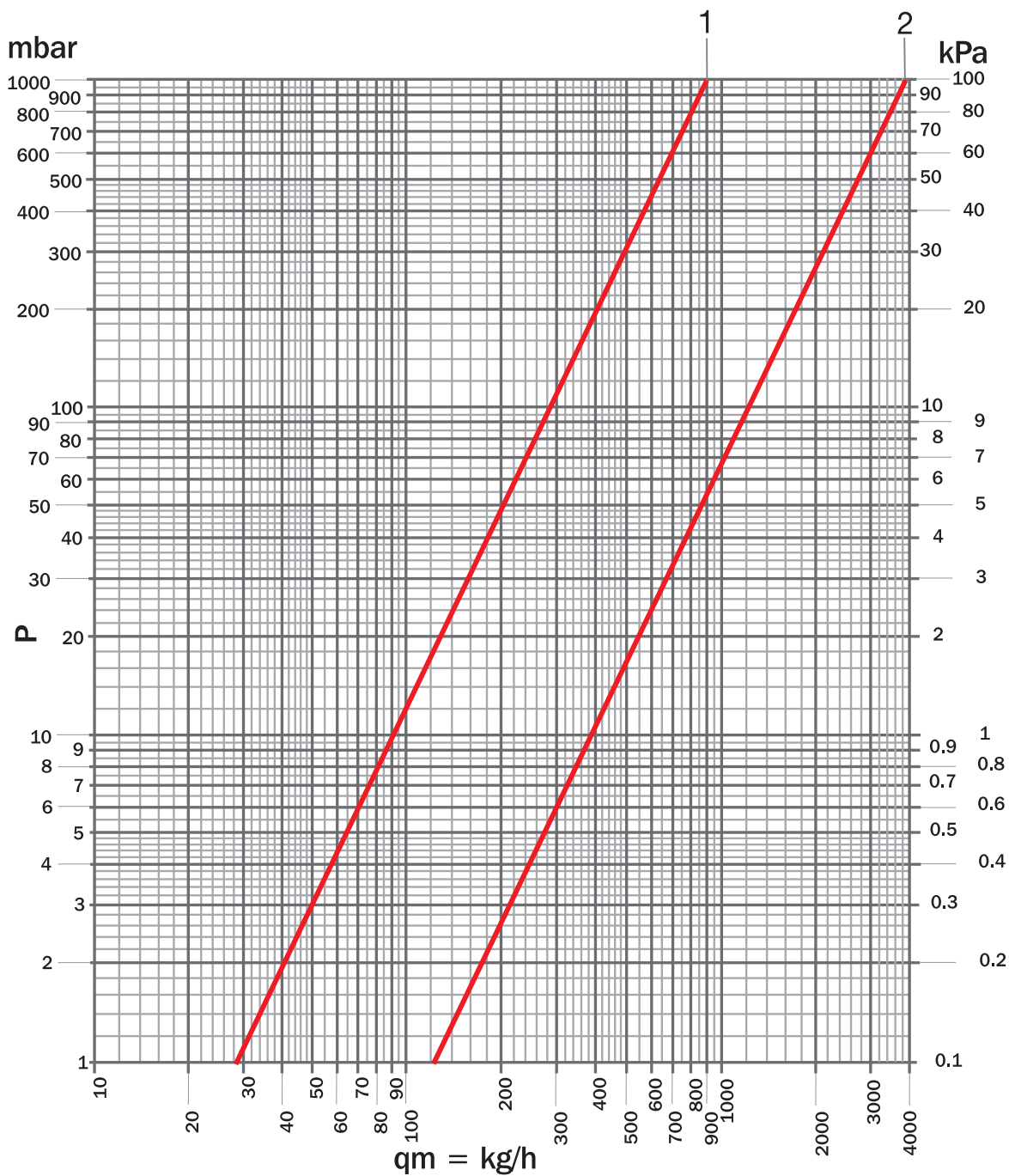
#### REGULATING VALVE WITH THERMOSTATIC HEAD



Kvs	REGULATION	POS
0,9	$\Delta T=2$ K	1
3,88	QM MAX	2

### FLOW RATE CHART

#### SHUT-OFF VALVE



Kvs	REGULATION	POS
0,09	01/2	1
0,27	1	2
0,76	1+1/2	3
0,98	2	4
1,20	2+1/2	5
1,46	3	6
1,70	3+1/2	7
1,93	4	8
2,19	4+1/2	9
2,47	5	10
2,75	5+1/2	11
3,01	all open	12

## GENERAL CONDITIONS OF SALE

**1 PREMISES - 1.1** The present conditions of sale apply to all supplies of Luxor Spa Products (hereafter "Luxor"). Any general conditions, and in particular the conditions of purchase of the Buyer (hereafter "Customer"), unless expressly accepted in writing by Luxor, shall not bind the latter nor exempt the Customer from the application of the present General Conditions (hereafter GSC)

**2. ORDERS - 2.1** The Purchase Orders (referred to as 'Orders') are an irrevocable purchase proposal. By placing an Order, customers fully accept the present General Conditions of Sale.

**2.2** Orders are considered accepted only after Luxor confirms them in writing. The Order confirmation and/or Invoice issued by Luxor will be considered as confirmation.

**2.3** Any changes to the Order requested by the Customer after the sending of the Order Confirmation will only be valid and enforceable after written acceptance by Luxor. Cancellation or modification of Orders without the prior written consent of Luxor, will give Luxor the right to act to obtain reimbursement of the costs incurred, without prejudice to the right to compensation for greater damages.

**3 PRICES - 3.1** Luxor products will be invoiced based on the current price list at the time the order is accepted. Prices do not include VAT or any other taxes.

**3.2** Prices listed in sales catalogues/lists are merely indicative and may be subject to change due to production cost increases. In such cases, Luxor will inform the purchaser of the price increase and provide the reasons.

**4 DELIVERY TERMS - 4.1** The supplies in each individual Order will be delivered within the stated terms in the Order Confirmation.

**4.2** Luxor will not be held responsible for delays in delivery that are not caused by Luxor, such as delays by third parties, including suppliers and sub-suppliers, shippers, and causes of force majeure that result in total or partial inactivity of the plants. In the cases mentioned above, the Customer cannot refuse delivery of the goods, even if it is only partial, nor can they use a delay in delivery as a reason to terminate the contract or claim damages.

**5 SHIPMENTS - 5.1** The products will be delivered to the 'Assigned Port' (Incoterms 2020 EXW), with transport costs and risks borne by the buyer, unless otherwise agreed.

**5.2** Even in the case of agreed delivery in "Free Port" (Incoterms 2020 DDP) with costs borne by Luxor, the goods will still travel at the buyer's risk. Regardless of the delivery terms agreed upon by the parties, the risks will pass to the buyer at the latest with delivery to the first carrier.

**5.3** The transfer of ownership of the goods is suspended until the full price has been paid, but this does not affect the transfer of risk to the purchaser.

**5.4** If special packaging is required, an additional charge as indicated in the price list or order confirmation will be added to the invoice.

**6 PAYMENTS - 6.1** Payments are due as per the terms and manner specified in the order confirmation and/or invoice.

**6.2** Unless otherwise expressly agreed, payments must be made to the bank details mentioned in the sales invoice. For payments made from abroad via bank transfer, the OUR option must be selected to ensure that Luxor receives the net amount on the invoice after deducting bank charges and expenses. Luxor does not authorize any third parties, including agents and representatives, to collect money on its behalf.

**6.3** The Customer is not permitted to suspend or delay payments, even in the event of claims or complaints of defects, and must adhere to the agreed terms.

**6.4** In case of payment interruption or suspension, the Customer will be considered in default. Luxor reserves the right to charge expenses and interest as per Art. 5 and 6 of D.Lgs n. 192/2012, without prejudice to the right to terminate the contract. Delayed payment may also result in Luxor excluding the guarantee for the entire period of delay.

**6.5** If the Customer fails to adhere to the agreed payment terms, or interrupts or suspends payment, Luxor reserves the right to suspend any ongoing supplies and/or make the execution of the current order conditional on the payment of the outstanding debt. Luxor may also withdraw from any further contracts with the Customer and cancel any previously granted favourable conditions, such as discounts or free gifts.

**6.6** The Customer is not permitted to offset any claims they may have against Luxor with debts they owe to Luxor, unless formally authorised by Luxor

**7 EXPRESS TERMINATION CLAUSE - 7.1** Luxor may terminate the contract immediately if the Customer is undergoing bankruptcy or liquidation proceedings, as well as in the event that the Customer is subject to execution proceedings and/or protests and the economic conditions suggest the purchaser is insolvent.

**8 WARRANTY - 8.1** Luxor guarantees the conformity of the products supplied, free from defects that could make them unsuitable for their intended use. The guarantee may be invoked if the defect is due to

manufacturing errors or defects in raw materials that are the responsibility of Luxor.

**8.2** Unless otherwise expressly agreed, the guarantee lasts for one (1) year from the date of delivery. The Customer must make a written complaint within eight (8) days from delivery in the case of apparent defects, or, in the case of hidden defects, from the time of discovery and in any event not later than twelve (12) months from delivery.

**8.3** In the event of non-conforming products, Luxor may, at its discretion, provide the Buyer with replacement products of the same type and quantity free of charge ex works, after verifying the returned products. Any return must always be previously agreed and authorised by Luxor. The goods in question must be returned 'carriage paid' along with a note explaining the reason for the return within 30 days of Luxor's approval. Failure to do so will result in the authorization becoming invalid.

**8.4** If Luxor does not recognize the defective products upon verification, it will invoice those sent as replacements. If Luxor does not recognize the defective products upon verification, they will invoice the replacements. If Luxor is unable to replace defective products, they may issue a credit note to the customer for the value of the defective products. This does not imply any responsibility on Luxor for direct, indirect, or consequential damages resulting from or connected to the defects or faults of the products.

**8.5** It is important to note that this guarantee does not cover instances where the product has been installed, used or maintained in a manner that is contrary to the instructions and warnings provided in the installation, use, and maintenance manuals that were included with the product. Additionally, any installation or repair work should only be carried out by qualified personnel.

**8.6** The guarantee will not apply if the Purchaser breaches their contractual obligations.

**8.7** This warranty is the only warranty and replaces any other written, oral or implied warranties. By accepting these General Terms and Conditions, the Purchaser expressly waives any right of recourse arising from the sale and/or installation of the Products to a non-professional consumer.

**9. RESERVATION OF PROPERTY 9.1** The sale of Luxor S.p. A's Products is carried out under reservation of ownership. Therefore the products will remain the property of Luxor S.p.A. until the full payment of the price by the buyer.

**10 TRANSFER OF THE CONTRACT 10.1** It is forbidden to transfer the Contract and/or any interest, right and obligation connected to it to third parties without specific written approval by Luxor.

**11 PRIVACY - 11.1** The Customer confirms that they have read the information regarding the processing of their personal data, as required by Articles 13 and 14 of Regulation (EU) 2016/679 (GDPR) as amended. The information can be found at <https://luxor.it/privacy-policy>. By accepting these GTC, the Customer consents to the processing of their personal data.

**11.2** Luxor will process the personal data provided by the Customer, including through external parties, to fulfil legal obligations and carry out administrative and commercial tasks related to the contractual relationship.

**12 APPLICABLE LAW AND COURT OF JURISDICTION - 12.1** Contract is governed by Italian law. Anything not expressly governed by these GVCs shall be governed by the rules on sale provided for in articles 1470 et seq. of the Italian Civil Code.

**12.2** The Parties expressly exclude the application of the Vienna Convention on Contracts for the International Sale of Goods. Any disputes related to the Contract, including those regarding its validity, interpretation, execution, and termination, must be referred exclusively to the Court of Brescia.

**12.3** Luxor reserves the right to take legal action at the competent court of the Customer's location to recover any outstanding debts. The local law will apply in this case.

**13 FINAL CLAUSES - 13.1** The possible nullity and/or ineffectiveness of one or more provisions of these GTC shall not affect the validity of the Contract as a whole.

**13.2** Any amendment to the Contract shall be valid only if made in writing and signed by authorised representatives of both Parties.

The customer acknowledges that they are not a 'consumer' and therefore the provisions of law relating to relations between entrepreneurs and consumers do not apply. The customer declares that they have paid particular attention to the following clauses: Introduction (1.1), Orders (2.1-2.3), Prices (3.2), Delivery Terms (4.1-4.2), Shipping (5.1-5.3), and 6. The following sections require approval: Payments (6.2 - 6.3 - 6.4 - 6.5 - 6.6); 7 Express Termination Clause (7.1); 8 Warranty (8.1 - 8.2 - 8.3 - 8.4 - 8.5 - 8.6 - 8.7); 9. Retention of Title (9.1); 10. Applicable Law and Jurisdiction (12.1 - 12.2 - 12.3); 13 Final Clauses (13.1 - 13.2), and they are to be specifically approved.

These general terms and conditions are published on LUXOR'S website (<https://luxor.it/>) where they may be consulted, thereby taking full and proper cognisance thereof, pursuant to and for the purposes of Articles 1341 and 1342 of the Civil Code.