

## DISTRIBUTION GROUP WITH MOTORIZED MIXING VALVE

### Description




DN 32

This preassembled pump group is part of the **Barberi® trolli HEATING** line. This distribution group allows the circulation of the thermal fluid, coming from the primary circuit. This group regulates the temperature of the thermal fluid through the work of a motorized mixing valve. The group with thermal regulation is appropriate for heating system in general with delivery temperature regulation based on room temperature or outside temperature (climate control). The group is composed of the pump, shut-off valves supply/return side, mixing valve to be motorized, supply/return side thermometer, check valve anti-recirculation, thermal insulation.



### Product range

Distribution group with mix valve kv 18 reversible	07G	XXX	XX	X
Upper connections G1"1/4F		032		
Without fittings			00	
Fittings with running connection*			01	
Grundfos pump UPM3 Auto L 32-70 180				W
Grundfos pump UPSO 32-65 180				T
▶ Grundfos pump UPML 32-95				F
Without pump				X

\* see fittings  
▶ on request

### Features

Max. and minimum working temperature: **5 °C – 90 °C**

Pump: **Grundfos UPM3 Auto L 32-70 180**  
**Grundfos UPSO 32-65 180**  
**Grundfos UPML 32-95 180 (▶ on request)**

Suitable fluids : **water for heating plants, glycol water(max 30%)**

Connections to circuits: **threaded connections ISO 228/1**

### Materials

Ball valve

- Valve's body: **brass UNI EN 12165 - CW617N**
- Gasket: **PTFE, EPDM, FIBER**

Mixing valve to be motorized

- Body: **brass UNI EN 12165 – CW617N**
- Diverter: **brass UNI EN 12164 – CW614N**
- Gasket: **EPDM**

Pump

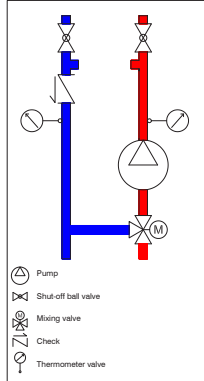
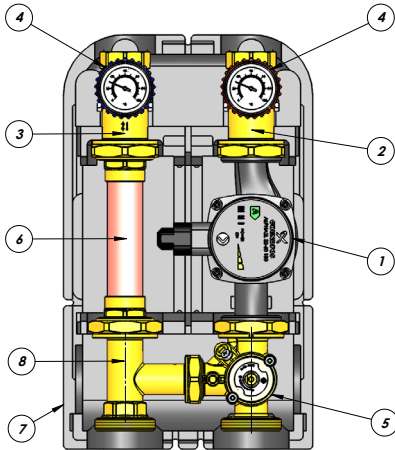
- Pump's body: **cast iron**

Insulation shell

- Insulation's body: **EPP**  
Density: 60 kg/m<sup>3</sup>  
Thermal conductivity 0,039W/mK(20°C)  
Thermal conductivity 0,041W/mK(40°C)

**DISTRIBUTION GROUP WITH MOTORIZED MIXING VALVE**

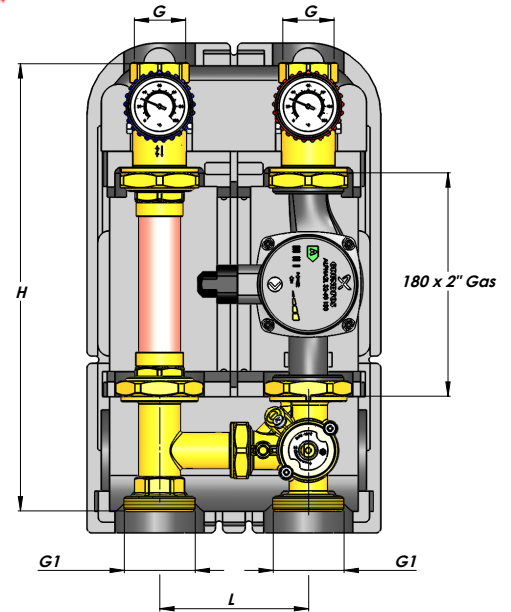
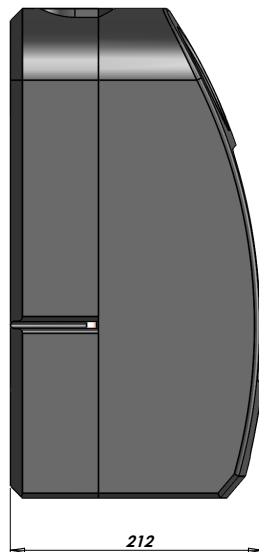
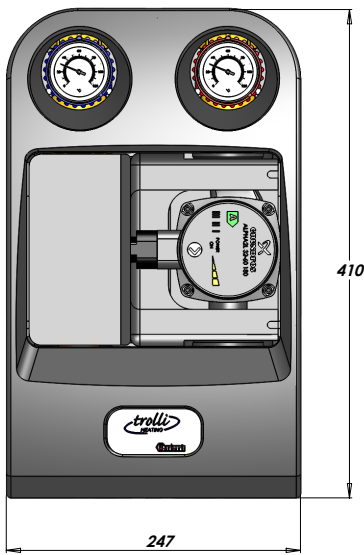
**Components**



		art. 07G-DN32
1	Pump	Grundfos Grundfos UPM3 Auto L 32-70 180
		Grundfos Pump UPSO 32-65 180
		▶ Grundfos Pump UPML 32-95 180
2	Shut-off ball valve	
3	Shut-off ball valve with check valve	
4	Thermometer	
5	Mixing valve to motorize	
6	Extension	
7	Insulation shell	
8	T joint	

▶ on request

**Dimensions**



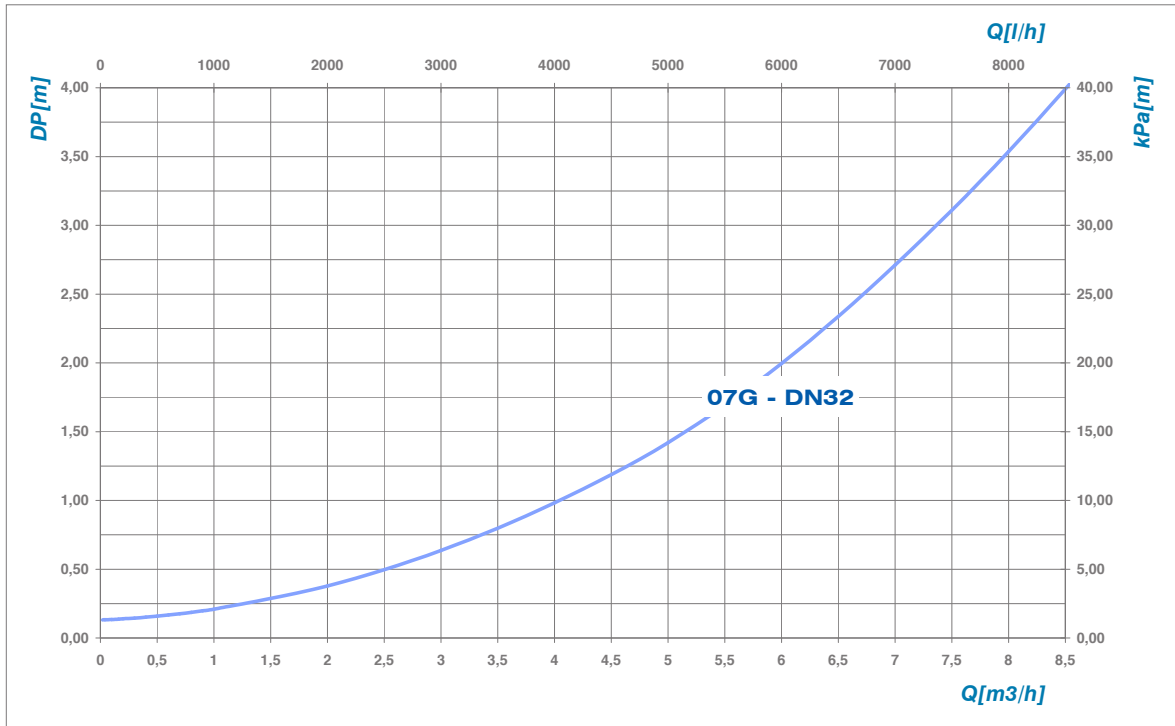
Code	P [bar]	G	G1	L	H	Pump	Weight	N. P/B	N. P/C
07G 032 00X	10	G 1"1/4 F	G 2" M	125	375	without Pump	4555	-	1
07G 032 00W	10	G 1"1/4 F	G 2" M	125	375	Grundfos UPM3 Auto L 32-70 180	6630	-	1
07G 032 00T	10	G 1"1/4 F	G 2" M	125	375	Grundfos UPSO 32-65 180	6955	-	1
▶ 07G 032 00F	10	G 1"1/4 F	G 2" M	125	375	Grundfos UPML 32-95	7455	-	1

Weight (grams) - N. P/B: number of pieces in box, plastic bag - N. P/C: number of pieces in carton  
▶ on request

DISTRIBUTION GROUP WITH MOTORIZED MIXING VALVE

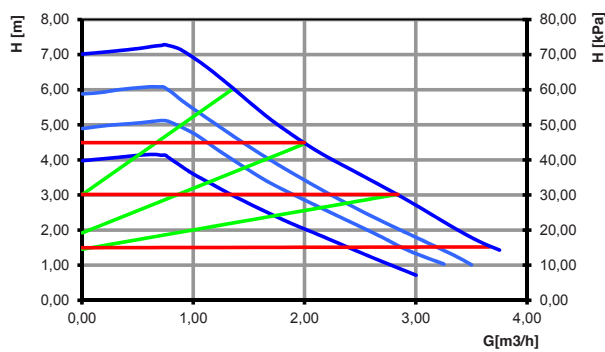
Diagrams

Pressure drop of distribution group with mixing valve



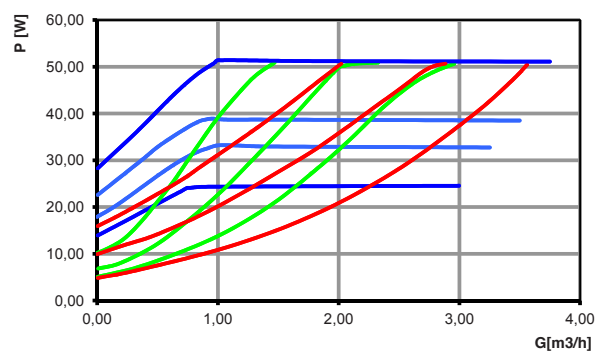
Head and power consumption of the pumps

Head of Grundfos pump UPM3 AUTO L 32-70 180



Vci: Constant speed  
DPpi: Proportional pressure  
DPci: Constant pressure

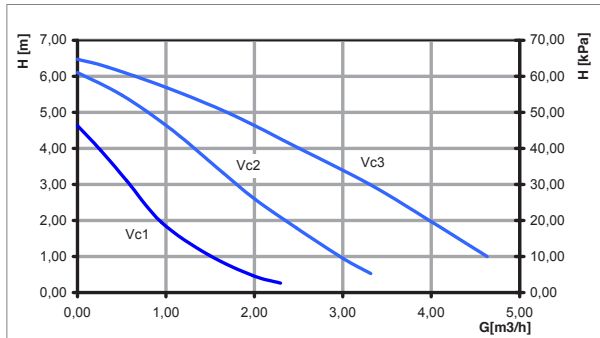
Power of Grundfos pump UPM3 AUTO L 32-70 180



PVCi: Power consumption at constant speed  
PDPpi: Power consumption at proportional pressure  
PDPci: Power consumption at constant pressure

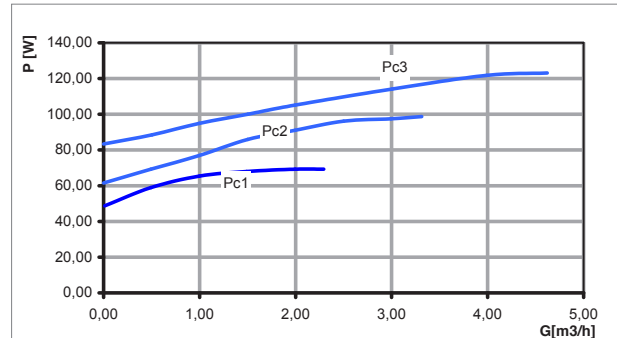
## DISTRIBUTION GROUP WITH MOTORIZED MIXING VALVE

Head of Grundfos pump UPSO 32-65 180



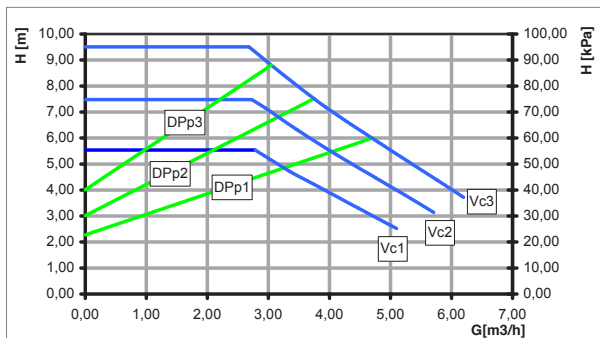
Vci: Constant speed

Power of Grundfos pump UPSO 32-65 180



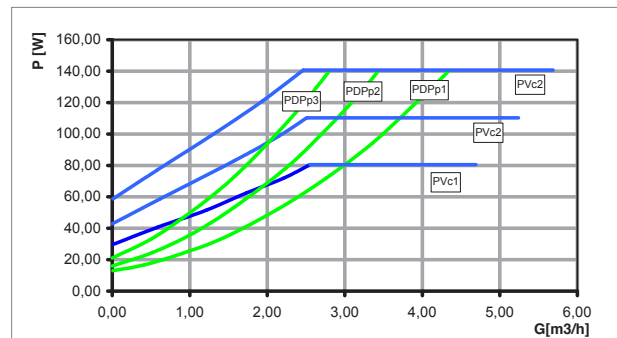
PVci: Power consumption at constant speed

Head of Grundfos pump UPML 32-95 180



Vci: Constant speed  
DPpi: Proportional pressure  
DPci: Constant pressure

Power of Grundfos pump UPML 32-95 180



PVci: Power consumption at constant speed  
PDPpi: Power consumption at proportional pressure  
PDPci: Power consumption at constant pressure

### Specifications

The specification's text refers to a specific article reference. Each version of the product obliges the engineer to modify the specification's text

#### Art.Ref 07G 032 00X

The distribution unit with mixing valve to motorize with 2" G male connections with plane gaskets on primary circuit and 1"1/4G female on the secondary circuit. Distance between connections of delivery and return:125mm. Height of delivery and return side: 375mm. Dimensions of the group with shell: 247, 410, 212,(width, height, depth). The group is composed of: shut-off ball valves of secondary circuit in delivery and return, check valve on return side, KV18 mixing valve, delivery and return thermometer with scale 0-120°C. Without pump. Shell in EPP black colour 60 kg/m3. Maximum temperature of the thermal fluid 90°C. Maximum working pressure of thermal fluid 10bar.

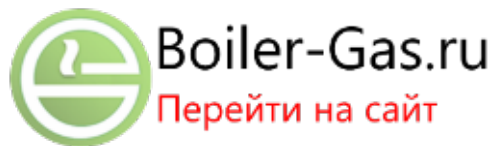
#### Art.Ref 07G 032 00E

The distribution unit with mixing valve to motorize with 2" G male connections with plane gaskets on primary circuit and 1"1/4G female on the secondary circuit. Distance between connections of delivery and return:125mm. Height of delivery and return side: 375mm. Dimensions of the group with shell: 247, 410, 212,(width, height, depth). The group is composed of: shut-off ball valves of secondary circuit in delivery and return, check valve on return side, KV18 mixing valve, delivery and return thermometer with scale 0-120°C. High efficiency pump(EUP ready) Grundfos UPM3 AUTO L 32-70 180, power supply 230V (50Hz). Shell in EPP black colour 60 kg/m3. Maximum temperature of the thermal fluid 90°C. Maximum working pressure of thermal fluid 10bar.

## DISTRIBUTION GROUP WITH MOTORIZED MIXING VALVE

### Art.Ref 07G 032 00T

The distribution unit with mixing valve to motorize with 2" G male connections with plane gaskets on primary circuit and 1 1/4" female on the secondary circuit. Distance between connections of delivery and return: 125mm. Height of delivery and return side: 375mm. Dimensions of the group with shell: 247, 410, 212, (width, height, depth). The group is composed of: shut-off ball valves of secondary circuit in delivery and return, check valve on return side, KV18 mixing valve, delivery and return thermometer with scale 0-120°C. Pump with 3 constant speeds Grundfos UPS 32-65 180, power supply 230V (50Hz). Shell in EPP black colour 60 kg/m<sup>3</sup>. Maximum temperature of the thermal fluid 90°C. Maximum working pressure of thermal fluid 10bar.



### Accessories

#### Art. 38D

Monobloc with pump connection (ball valve + thermometer) - thermometer 0-120°C - red handle



Max working temperature: 95°C

code	size	handle colour	P [bar]
▶ 38D 032 000	G 1 1/4 F - G 2" fitt.	red	10

▶ on request

#### Art. 50D

Ball valve with pump connection with possibility of thermometer integration



Max working temperature: 95°C

code	size	P [bar]
▶ 50D M50 000 R	G 2" fitt. - G 2" M	10

▶ on request

#### Art. 37D

Monobloc with pump connection (ball valve + thermometer + check valve) - thermometer 0-120°C - blue handle



Max working temperature: 95°C

code	size	handle colour	P [bar]
▶ 37D 032 000	G 1 1/4 F - G 2" fitt.	blue	10

▶ on request

#### Art. 45D

T joint

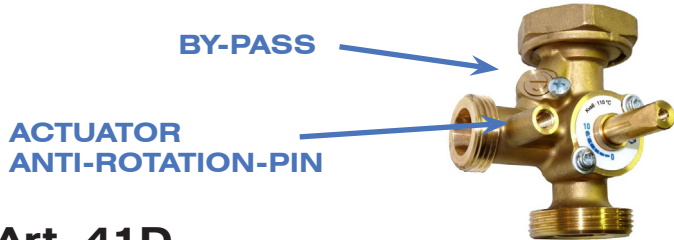


Max working temperature: 140°C

code	size	P [bar]
▶ 45D 050 000	G 2" fitt. - G 2" M - G 1 1/4 fitt.	10

▶ on request

## DISTRIBUTION GROUP WITH MOTORIZED MIXING VALVE



### Art. 41D

3-ways mixing valve with by-pass - pump connection - distribution manifold connection

Max working temperature: 90 °C

code	size	KV	P [bar]
▶ 41D 050 000 G	G 2" M - G 2" fitt. - G 1"1/4 M	18	10

▶ on request

### Art. 40D

Extensions

Max working temperature: 140 °C



code	size	distanza attacchi [mm]	P [bar]
▶ 40D 050 000	G 2" M	280	10
▶ 40D 050 000 2	G 2" M	180	10

▶ on request

### Art. 440-I

Handle and screw kit to manually set mixing valve



code
440 015 0111

### Art. 44D

2 fittings with flat gasket



Max working temperature: 90 °C

code	size	P [bar]
44D 032 000	G 1"1/4 F - G 2" F	10

### Art. 42D

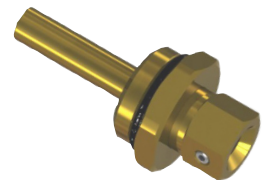
Bracket for wall mounting of the group, including screws and dowels.



Holes diameter: 8mm  
Holes distance: 90mm

code	Distanza tubature[mm]
▶ 42D 032 Z00 I	125

▶ on request



### ▶ Art. P28-I4/P28-I4V

Probe holder fitting - seal on fitting

Max working temperature: 95 °C  
140°C (P2801500014V)

Probe diameter: 6 mm

code	size	P [bar]
▶ P28 015 000 I4	1/2"	16
▶ P28 015 000 I4V	1/2"	16

▶ on request

## DISTRIBUTION GROUP WITH MOTORIZED MIXING VALVE

### Art. 43D

Distribution groups insulation

Material: EPP



code	size [mm]
<b>43D</b> 032 000	247 x 410 x 212mm

### Art. 11D-120

Axial thermometer

Range di size: 0-120 °C



code	size
<b>11D</b> 015 000 120	Ø 50 mm

### Art. M03

Compact actuator for mixing valves, running angle 90°, for 3points and on/off setting. Comes complete with blocking screw, mixing valve adaptors, anti-rotation pin, 1,5m integrated cable.

Torque: 10 Nm  
Running time: 60 s, 120 s  
Power supply: 230 V , 24 V  
Frequency: 50 H



code	V	control	Running time [s]	N° poles	Torque [Nm]
<b>M03</b> 0101DAB	230 V	3 pt.	120	3	10

### Art. P27T

Actuator for mixing valves, running angle 90°, with integrated probe and temperature setting device. Comes complete with blocking screw, mixing valve adaptors, anti-rotation pin, NTC probe (1m cable), probe's carrying bracers fitting, integrated European electrical wire connection, 2m integrated cable). (Capitolo 2)

Torque: 10 Nm  
Running time: 135 s  
Power supply: 230 V  
Frequency: 50 Hz



code	V	control	Running time [s]	N° poles	Torque [Nm]
<b>P27</b> 230010T	230 V	3 pt.	135	2	10

## DISTRIBUTION GROUP WITH MOTORIZED MIXING VALVE

### Art. M04

Actuator for mixing valves, running angle 90°, for proportional setting. Comes complete with blocking screw, mixing valve adaptor, anti-rotation pin, 1,95m integrated cable.

Running time: 60 s, 90 s, 120 s  
Power supply: 230 V  
Frequency: 50 Hz  
Control: 0(2)-10V  
Feedback: 0-10V/0-40mA



code	V	control	Running time [s]	N° poles	Torque [Nm]
<b>M040103MAB</b>	230 V	0(2) - 10 V	60 - 90 - 120	3	5

### Art. 23A.DN32

Grundfos Pump UPM3 AUTO L 32-70 180 with high efficiency without auto-adapt (EEI < 0.23 in accordance with EuP directive).

Max working temperature: 110 °C

code	size	connection distance [mm]	max head [m]	P [bar]
<b>23A 050 070 BC</b>	G 2" M	180	7	10



### Art. 05A

Grundfos Pump UPSO 32-65 with 3 constant speed (Extra UE)

Max working temperature: 110 °C

code	size	connection distance [mm]	max head [m]	P [bar]
<b>05A 050 065 B</b>	G 2" M	180	6,5	10



### Art. 18A

Grundfos Pump UPML 32-95 with high efficiency (EEI < 0.23 in accordance with EuP directive). With 2 m cable and rapid connector

Max working temperature: 110 °C

code	size	connection distance [mm]	max head [m]	P [bar]
<b>18A 050 095 B</b>	G 1 1/2" M	180	6,5	10

