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PATENT PENDING

## Monolink fan coil valve connection unit



#### Monolink Terminal units connection system

Cimberio **Monolink** is an innovative and ultra compact valve arrangement that minimize the time and space required to connect system terminal units to distribution pipe. All the components required for flushing and commissioning the system can be combined in a single assembly what will fit in the tightest corners.

Cimberio **Monolink** assembly incorporates an isolation valve with integral strainer, a drain point, an inbuilt special bypass valve and balancing valve, static or dynamic. Thanks to the isolation valve fitted on the flow side, it is possible to clean and service the strainer without having to drain down the whole system.

Only four connections are required and, because the connections are simple union joints, the whole assembly can be adjusted on site for maximum convenience and easy accessibility in the space available.

cim733/788NC

In every hydronic system for heating or cooling there are terminal units of different style, such as fan coils, air handlers, radiant ceiling to heat or cool spaces in the building. For accurate functioning of the system each terminal unit need to be isolated, strained, vented and balanced.

Assembling different values to achieve these features could be rather complicated, due to the large number of components and couplings used to create the connection.

The same procedure is requested for all the terminal units existing in the system.

It is evident that such operations could take hundreds of working hours, involve high labour costs and lead to risks for possible joints leakages. None the less it require high logistic organization to make sure each valve and fitting for the connection are available on site.

Cimberio **Monolink** is a preassembled factory tested valve arrangement, which gathers in a unique item all the components needed for terminal end unit, such as strainer, bypass valve, balancing valve and drain cock, with no need of assembly on site.

Main features of the Monolink:

- 100% manufactured in Italy
- Nominal pressure PN 25
- Factory preassembled
- Each single unit factory tested
- Compact construction
- Designed to provide flexible configuration of the system (use of either manual or automatic balancing valves).
- Adaptable for a wide range of pipes materials
- Easy installation
- Integral union joint for easier installation
- Minimal pressure drop
- Full bore ball valve for easier flushing
- Several accessories available to add higher performance
- 5 years warranty

#### **Innovative approach**

#### Number of connections: 6

Installation	LABOUR TIME COST	LOW
Leakage risk		LOW



#### **Traditional approach** Number of connections: 22





#### Monolink - Operation Flushing and chemical cleaning

**Monolinik** contains all the features required to flush the system in accordance with Bsria Application Guide AG 1/2001 Pre-Commission Cleaning of Pipework Systems.

The flushing procedure should be agreed in advance with the appointed pre-commission cleaning specialist.

For most situations, it is envisaged that flushing will take place in three stages. **Stage 1** will be a flush and, where appropriate, chemical clean of the main

system with terminal unit isolated as shown in picture below.

Please note that strainer basket must be removed before commencing the stage 1 flush.

**Stage 2** and **stage 3** will take place after the main system has been cleaned and chemically treated. Clean water from the system will be forward flushed through the units, then reverse flushed in order to dislodge any material trapped in the terminal unit or control valve.

**Stage 4** after flushing and chemical cleaning Cimberio **Monolinik** is ready for commissioning and operation in standard position.



## • Stage 1 bypass operation: flushing of main system

By pass valve: opened Isolating valve: closed Striner flushing valve: closed Balancing valve: closed



## • Stage 2 forward flush operation: forward flushing

By pass valve: closed Isolating valve: opened Striner flushing valve: closed Balancing valve: opened

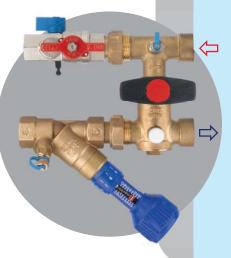
#### • Stage 3 reverse flush operation: reverse flushing

By pass valve: closed Isolating valve: closed Striner flushing valve: opened Balancing valve: opened



## • Stage 4 standard balancing operation: valve commissioning

By pass valve: closed Isolating valve: opened Striner flushing valve: closed Balancing valve: opened (to be commissioned)



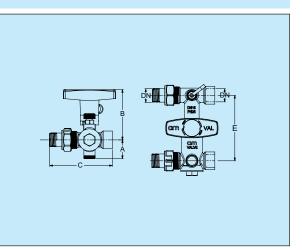


#### Monolink - Technical tables Technical data

- Max working pressure: 25 bar
- Max fluid temperature: 150° (non boiling)
- Min fluid temperature: -20° (non freezing)

## **cim** 731

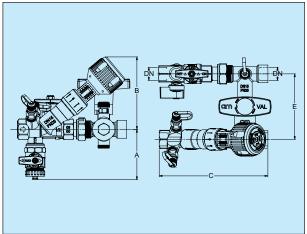
	Cim 731						
DNxDN	Grms.	ø	A	в	с	E	
1/2"x1/2"	790	15	28,5	77	96	100	
3/4"x3/4"	1170	20	32,5	81,5	119	100	
<b>1"×1"</b>	1850	25	32,5	85,5	143	100	



## **cim** 733/747



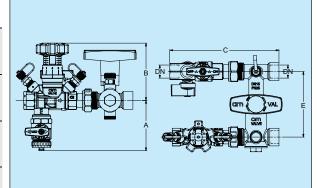
	Cim 733/747						
DNxDN	Grms.	ø	A	В	с	E	
1/2"x1/2"	2060	15	77	110	129	100	
3/4"x3/4"	2820	20	81	128,5	200	100	
1"x]"	4055	25	91	138	241	100	



## **cim** 733/787



	Cim 733/787						
DNxDN	Grms.	ø	A	в	с	E	
1/2"x1/2"	1750	15	77	87,5	129	100	
3/4"x3/4"	2280	20	81	89,5	200	100	
1"×1"	3450	25	91	91,5	241	100	

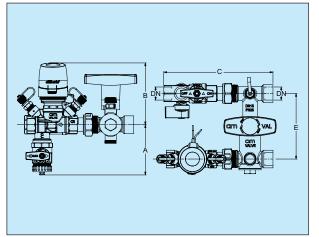




## cim 733/788NC

9	DNxDN	Grms.
100 - CO	1/2"x1/2"	1810
	3/4"x3/4"	2345
<b>X</b>	1"×1"	3525

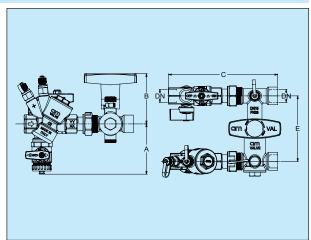
	Cim 733/788NC							
DNxDN	Grms.	ø	A	в	с	E		
/2"x1/2"	1810	15	77	95	129	100		
/4"x3/4"	2345	20	81	97	200	100		
1"x1"	3525	25	91	99	241	100		



## **cim** 733/790



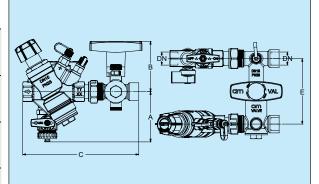
	Cim 733/790					
DNxDN	Grms.	ø	А	в	с	E
1/2"x1/2"	1870	15	77	77	129	100
3/4"x3/4"	2370	20	81	82	200	100
1"×1"	3530	25	91	86	241	100



## **cim** 733/796



	Cim 733/796						
DNxDN	Grms.	ø	A	в	с	E	
1/2"x1/2"	2250	15	77	80	180	100	
3/4"x3/4"	2750	20	81	82	220	100	
<b>]″×]″</b>	3880	25	91	86	241	100	



#### **Monolink - Accessories**



Stainless steel flexible hose (length and connection fittings on request)



cim 726 electronic

commissioning instrument

**cim**723

binder points

cim A921 extended handle



cim A921T extended handle with temperature gauge



cimdronic

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