

MSV - Commissioning Valves

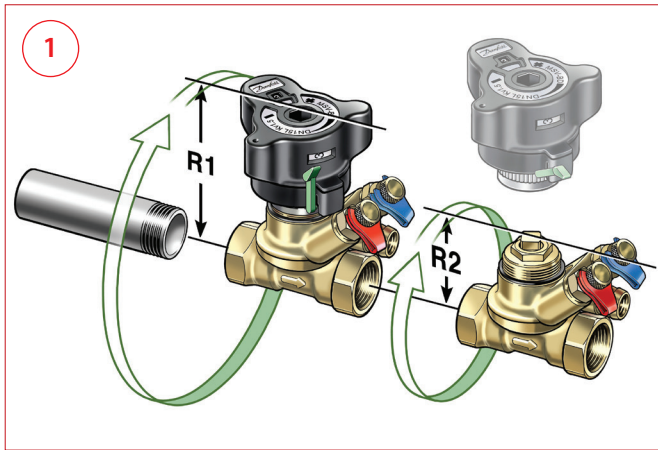
Saving time is easy Just pack **the right tools**

Flexible solution with MSV balancing valves

Life is challenging for all of us. Projects to complete, deadlines to meet, and customers to satisfy. That is why Danfoss asked its engineers to look at a manual commissioning valve and design the best products imaginable. The result is the MSV product range. It offers many possibilities to make your daily job easier and more effective.

360°
working angle

For easy measuring and
draining.



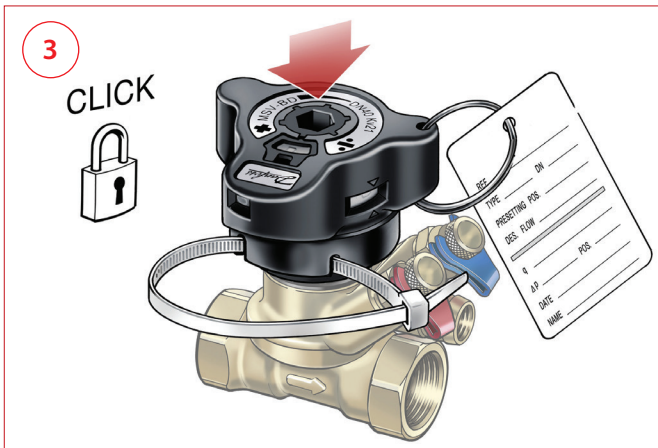
1. Easy mounting (MSV-BD and MSV-O)

Space inside a building is money. The MSV range is very compact and the handle is easy to remove so you need very little room for the installation. Conventional balancing valves need to be mounted in straight pipe to ensure accurate measurement. The MSV range can be placed anywhere, for example just after an elbow, without influencing its accuracy.



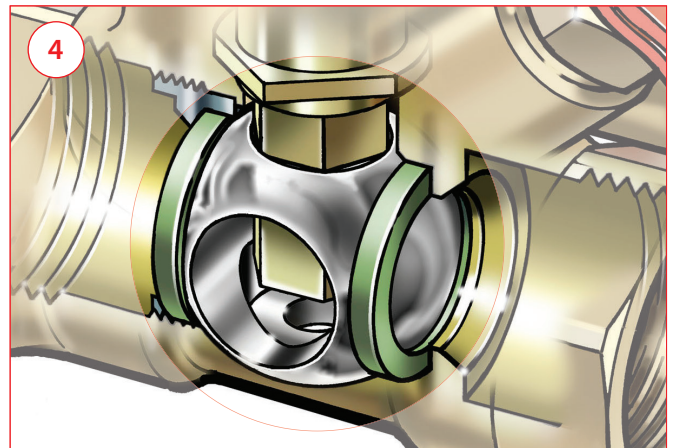
2. Easy and accurate measuring (MSV-BD and MSV-O)

MSV commissioning valves have built-in measuring nipples. The digital scale is also readable from all angles. Furthermore, the precision of the valve is independent of the setting and much more precise than competing solutions. MSV-BD has a measuring station that can be rotated 360°.



3. Easy set point locking (MSV-BD and MSV-O)

A simple tap on top of the handle is enough to lock the MSV's setting. For added convenience MSV valves are shipped with a green removable key for unlocking. Simply press the green latch and the valve is unlocked. The MSV range can be made tamper proof by using a cable tie.



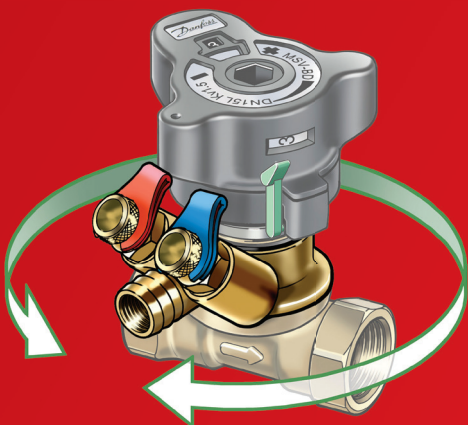
4. Easy shut-off function (MSV-BD and MSV-O)

When the MSV valves are locked, they become a ball valve. This feature has several advantages:

- The valve has zero leakage,
- Opening and closing the valve is much easier because it only takes a quarter turn and
- closing the valve will not influence the setting in any way because the setting mechanism and the shut-off mechanism are separate.
- The position of the valve (open or closed) is clearly shown by a red indicator.

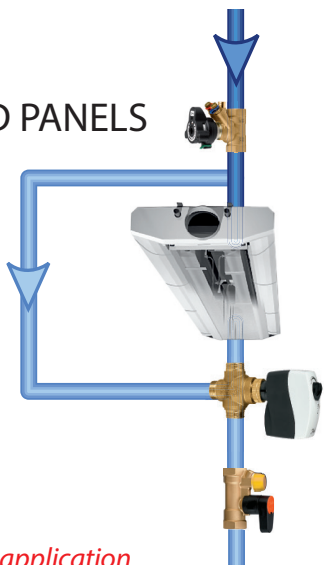
MSV-BD variable orifice valve with internal thread

Type	K _{vS} (m ³ /h)	Connection	Code No.
MSV-BD DN 15 LF	2.5	R _p 1/2"	003Z400000
MSV-BD DN 15	3.0	R _p 1/2"	003Z400100
MSV-BD DN 20	6.0	R _p 3/4"	003Z400200
MSV-BD DN 25	9.5	R _p 1"	003Z400300
MSV-BD DN 32	18	R _p 1 1/4"	003Z400400
MSV-BD DN 40	26	R _p 1 1/2"	003Z400500
MSV-BD DN 50	40	R _p 2"	003Z400600

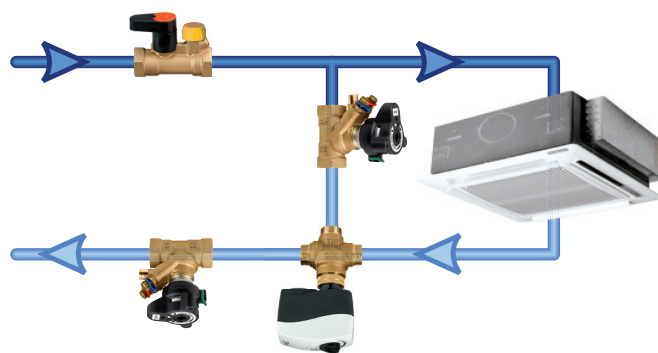


Designed with you in mind

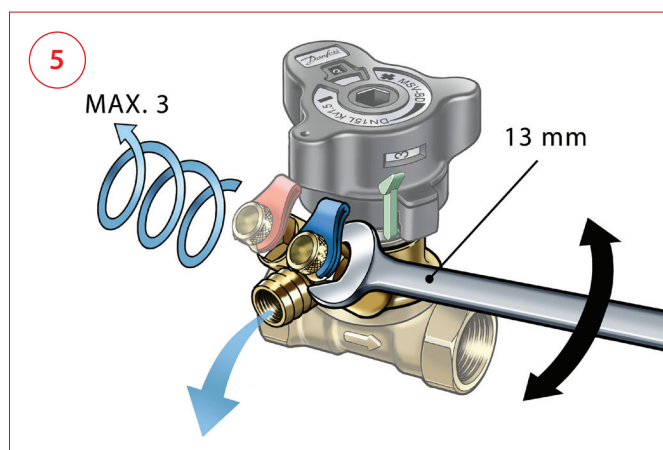
CHILLED PANELS



Chilled beam application

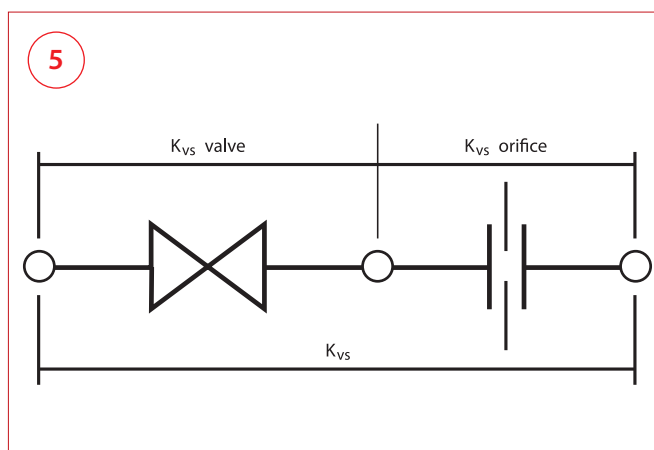


Fan coil unit application



5. Easy and practical draining (MSV-BD only)

The MSV-BD commissioning valve has a built-in drain tap. To drain, you can turn one of the measuring nipples with a 13mm spanner. When the valve is closed, you can even select which side of the valve to drain by selecting the appropriate measuring nipple, saving the expense of mounting additional drain taps.

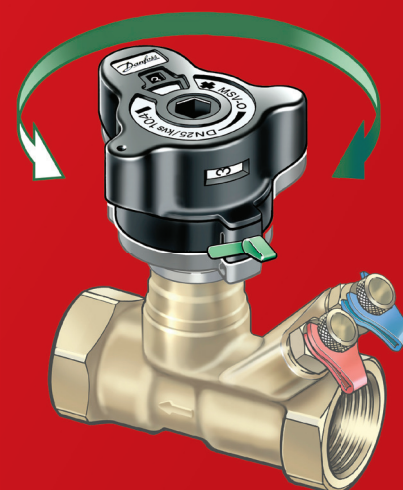


6. Fixed venturi orifice (MSV-O only)

MSV-O makes commissioning easier thanks to the fixed venturi orifice. A standard balancing valve will change the kvs-value. MSV-O has a fixed venturi orifice in the valve body with a constant kvs-value. This feature makes it possible to read the flow on the measuring device without selecting a presetting, thus making commissioning each valve quicker and easier.

MSV-O fixed orifice valve with internal thread

Type	K _{vs} (m ³ /h)	Connection	Code No.
MSV-O DN 15 LF	2.5	R _p 1/2"	003Z402000
MSV-O DN 15	3.0	R _p 1/2"	003Z402100
MSV-O DN 20	6.0	R _p 3/4"	003Z402200
MSV-O DN 25	9.5	R _p 1"	003Z402300
MSV-O DN 32	18	R _p 1 1/4"	003Z402400
MSV-O DN 40	26	R _p 1 1/2"	003Z402500
MSV-O DN 50	40	R _p 2"	003Z402600



Features		MSV-BD	MSV-O
1	Balancing/commissioning	•	•
2	Presetting	•	•
3	Fixed orifice		•
4	Measuring nipples can be mounted under pressure	•	•
5	Digital scale visible from more sides	•	•
6	Shut-off function (ball valve)	•	•
7	Draining/filling	•	•
8	Draining/filling on both sides of the valve	•	
9	Removable handle	•	•
10	Allen key for ball valve	•	•
11	Parallel measuring nipples	•	•
12	360° rotating measuring station (drain cock and measuring nipples)	•	
13	Not affected by turbulence	•	•
14	Open/closed indicator	•	•

Accessories

Type	Code Number
Standard measuring nipples, 2 pcs	003Z466200
Extended measuring nipples, 60mm, 2 pcs	003Z465700
Operating handle	003Z465200
Drain cock, 1/2"	003Z409600
Drain cock, 3/4"	003Z409700
Flow measuring instrument PFM 100	003L826000
Flow measuring instrument PFM 5000, PN10	003L833100
Flow measuring instrument PFM 5000 Multi Source, PN10	003L833300
Identification tag and strips, 10 pcs	003Z466000
Insulation cap, DN15	003Z478100
Insulation cap, DN20	003Z478200
Insulation cap, DN25	003Z478300
Insulation cap, DN32	003Z478400
Insulation cap, DN40	003Z478500
Insulation cap, DN50	003Z478600

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