

LENO™ MSV-O

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

### 1. Easy mounting

Space inside buildings is money. The LENO™ 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 LENO™ can be placed anywhere, e.g. just after an elbow, without influencing its accuracy.

### 2. Easy and accurate measuring

When you measure across a fixed orifice, you ease the commissioning job. A standard balancing valve will have changing  $k_{vs}$ -values. The cone is changing positions, when balancing valves are commissioned, and new presetting in measuring device is required, each time setting is changed on the valve. LENO™ MSV-O has a fixed venturi orifice in the valve body with constant  $k_{vs}$ -value. This feature makes it possible to read flow on the measuring device, without typing in presetting. This feature saves time for commissioning for each valve installed.



### 3. Easy set point locking

A simple tap on the top of the handle is enough to lock the LENO's setting. For more convenience we ship the LENO™ MSV-O with a

green disposable key for unlocking. Simply press the green latch and the valve is unlocked. To make LENO™ tamper-proof a plastic tie-wrap (accessory) can be inserted, making it easily visible when the valve has been tampered with.



### 4. Easy shut-off function

When the LENO™ MSV-O is locked, the valve becomes a ball valve. This feature has several advantages: The valve has zero leakage, opening and closing the valve is much easier because it takes only 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 completely separate. The position of the LENO™ (open or closed) is clearly shown by a red indicator.

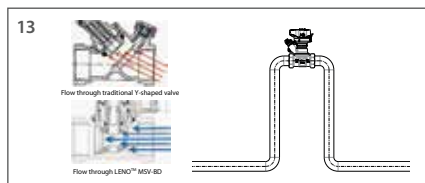
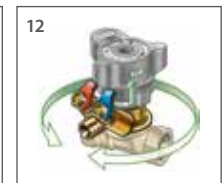
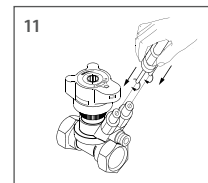
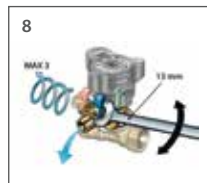
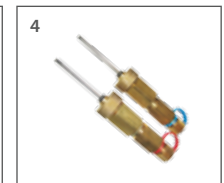
LENO™ MSV-O valve with internal thread

Type	$K_{vs}$ (m <sup>3</sup> /h)	Connnection	Code No.
MSV-O DN 15 LF	0.63	R <sub>p</sub> ½"	003Z4020
MSV-O DN 15	2.8	R <sub>p</sub> ½"	003Z4021
MSV-O DN 20	5.7	R <sub>p</sub> ¾"	003Z4022
MSV-O DN 25	9.7	R <sub>p</sub> 1"	003Z4023
MSV-O DN 32	16.6	R <sub>p</sub> 1¼"	003Z4024
MSV-O DN 40	25.4	R <sub>p</sub> 1½"	003Z4025
MSV-O DN 50	37.9	R <sub>p</sub> 2"	003Z4026



# Choose the right product for you

Features	LENO™ MSV-BD	LENO™ MSV-B	LENO™ MSV-O	LENO™ MSV-S
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 Removeable 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 Opening/closing indicator	●	●	●	



More info at [www.leno.danfoss.com](http://www.leno.danfoss.com)

## It is also possible to buy set solutions

To save you time and simplify logistics, Danfoss has bundled up the perfect match of LENO™ valves in order to propose LENO™ sets.

If that sounds interesting to you, please ask your wholesaler about code numbers listed in the table to the right.

### LENO™ MSV-BD/S set solution

Type	K <sub>vs</sub> (m <sup>3</sup> /h)	Drain flow K <sub>vs</sub> (m <sup>3</sup> /h)	Connection	Code No.
MSV-BD/S DN 15	3.0	0.3	R <sub>p</sub> ½"	003Z4051
MSV-BD/S DN 20	6.0		R <sub>p</sub> ¾"	003Z4052
MSV-BD/S DN 25	9.5		R <sub>p</sub> 1"	003Z4053
MSV-BD/S DN 32	18.0		R <sub>p</sub> 1¼"	003Z4054
MSV-BD/S DN 40	26.0		R <sub>p</sub> 1½"	003Z4055
MSV-BD/S DN 50	40.0		R <sub>p</sub> 2"	003Z4056

All LENO™ valves are made of DZR, corrosion resistant brass.

**Danfoss A/S** · Heating Solutions · Hydronic Balancing & Control · Ulvehavevej 61 · DK-7100 Vejle · Denmark · Telephone +45 7488 8500 · E-mail: [heating@danfoss.com](mailto:heating@danfoss.com) · [www.hbc.danfoss.com](http://www.hbc.danfoss.com)

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.