ENGINEERING TOMORROW Danfoss

## Saving time is easy – just pack the right tools

LENO<sup>™</sup> MSV-BD Rotating measuring/ drain station

LENO <sup>™</sup> MSV-BD valve with internal thread							
Туре	K <sub>vs</sub> (m <sup>3</sup> /h)	Connection	Code No.				
MSV-BD DN 15 LF	2.5	R <sub>p</sub> 1/2"	003Z4000				
MSV-BD DN 15	3.0	R <sub>p</sub> 1/2"	003Z4001				
MSV-BD DN 20	6.0	R <sub>p</sub> ¾"	003Z4002				
MSV-BD DN 25	9.5	R <sub>p</sub> 1"	003Z4003				
MSV-BD DN 32	18.0	R <sub>p</sub> 1¼"	003Z4004				
MSV-BD DN 40	26.0	R <sub>p</sub> 1½"	003Z4005				
MSV-BD DN 50	40.0	R <sub>p</sub> 2"	003Z4006				

#### LENO<sup>™</sup> MSV-BD valve with external thread

Туре	K <sub>vs</sub> (m³/h)	Connection	Code No.			
MSV-BD DN 15 LF	2.5	G ¾ A*	003Z4100			
MSV-BD DN 15	3.0	G ¾ A*	003Z4101			
MSV-BD DN 20	6.0	G 1 A	003Z4102			
All LENO <sup>™</sup> valves are made of DZR, corrosion resistant brass.						

\* Eurocone DIN V 3838.

LENO<sup>™</sup> MSV-B <u>Standard</u> valve

#### LENO<sup>™</sup> MSV-B valve with internal thread

Туре	K <sub>vs</sub> (m³/h)	Connection	Code No.
MSV-B DN 15 LF	2.5	R <sub>p</sub> 1/2"	003Z4030
MSV-B DN 15	3.0	R <sub>p</sub> 1/2"	003Z4031
MSV-B DN 20	6.0	R <sub>p</sub> 3/4"	003Z4032
MSV-B DN 25	9.5	R <sub>p</sub> 1"	003Z4033
MSV-B DN 32	18.0	R <sub>p</sub> 11/4"	003Z4034
MSV-B DN 40	26.0	R <sub>p</sub> 1½"	003Z4035
MSV-B DN 50	40.0	R <sub>p</sub> 2"	003Z4036

### LENO<sup>™</sup> MSV-B valve with external thread

Туре	K <sub>vs</sub> (m³/h)	Connection	Code No.		
MSV-B DN 15 LF	2.5	G ¾ A*	003Z4131		
MSV-B DN 15	3.0	G ¾ A*	003Z4130		
All LENO <sup>™</sup> valves are made of DZR, corrosion resistant brass.					

\* Eurocone DIN V 3838

#### LENO<sup>™</sup> MSV-O valve with internal thread K<sub>es</sub> (m<sup>3</sup>/h) Conne de No Туре MSV-B DN 15 I F R<sub>p</sub> ½ 00374020 LENO<sup>™</sup> MSV-O R<sub>p</sub> 1/2" MSV-B DN 15 2.8 00374021 Venturi orifice MSV-B DN 20 5.7 R<sub>p</sub> 34" 003Z4022 R<sub>p</sub> 1" MSV-B DN 25 9.7 003Z4023 R<sub>p</sub> 1¼" MSV-B DN 32 16.6 00374024 MSV-B DN 40 25.4 R<sub>p</sub> 1½" 003Z4025 MSV-B DN 50 37.9 003Z4026 R<sub>p</sub> 2"



 $k_{vs}$  valve =>  $k_{vs}$  accross the cone  $k_{vs}$  orifice =>  $k_{vs}$  accross the valve  $k_{vs}$  => includes orifice and cone

	LENO <sup>™</sup> MSV-S valve with internal thread				
	Туре	K <sub>vs</sub> (m³/h)	Drain flow K <sub>vs</sub> (m <sup>3</sup> /h)	Connection	Code No.
LENO <sup>™</sup> MSV-S Partner valve/ High quality ball valve	MSV-S DN 15	3.0	0.3	R <sub>p</sub> ½"	003Z4011
	MSV-S DN 20	6.0		R <sub>p</sub> 3⁄4"	003Z4012
	MSV-S DN 25	9.5		R <sub>p</sub> 1"	003Z4013
	MSV-S DN 32	18.0		R <sub>p</sub> 1¼"	003Z4014
	MSV-S DN 40	26.0		R <sub>p</sub> 1½"	003Z4015
	MSV-S DN 50	40.0		R <sub>p</sub> 2"	003Z4016

G 1"

Code No

003Z4111

003Z4112

### LENO<sup>™</sup> MSV-S valve with external thread Type $K_{vs}(m^3/h)$ $\frac{Drain flow}{K_{vs}(m^3/h)}$ Connect MSV-S DN 15 3.0 G 34<sup>∞</sup>\*

All LENO<sup>™</sup> valves are made of DZR, corrosion resistant brass. \* Eurocone DIN V 3838.

6.0

MSV-S DN 20

0.3







# 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.

LENO <sup>™</sup> MSV-BD/S set solution						
Туре	K <sub>VS</sub> (m³/h)	Drain flow Kvs (m3/h)	Connection	Code No.		
MSV-BD/S DN 15	3.0		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	0.2	R <sub>p</sub> 1"	003Z4053		
MSV-BD/S DN 32	18.0	0.3	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		



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# Choose the right MSV product for you

Fea	tures	BD	В	0	S
1	Balancing/commissioning	٠	٠	٠	
2	Presetting	•	•	٠	
3	Fixed orifice			•	
4	Measuring nipples can be mounted under pressure	٠	•	٠	
5	Digital scale visible from more sides	٠	٠	٠	
6	Shut-off function (ball valve)	٠	٠	٠	٠
7	Draining/filling	•			•
8	Draining/filling on both sides of the valve	•			
9	Removeable handle	•	٠	٠	•
10	Allen key for ball valve	٠	٠	٠	
11	Parallel measuring nipples	٠	٠	٠	
12	360° rotating measuring station (drain cock and measuring nipples)	٠			
13	Not affected by turbulence	•	٠	٠	•
14	Opening/closing indicator	٠	٠	٠	

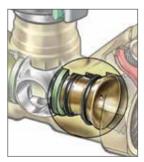


# Fixed orificed

When you measure across a fixed orifice, you ease the commissioning job. A standard balancing valve will have changing  $k_{x}$ -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<sup>TM</sup> MSV-O has a fixed venturi orifice in the valve body with constant  $k_{ve}$ -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.





- 1 Easy mounting
- <sup>(2)</sup> Easy and accurate measuring
- 3 Easy set point locking
- <sup>(4)</sup> Easy shut-off function
- (5) Easy and practical draining

### More info at www.leno.danfoss.com