Data sheet

Automatic balancing

ASV-D

Description

ASV-D is a partner valve to be used with the dynamic balancing valves ASV-PV/P or AB-PM to control differential pressure in the risers.
ASV-D is a combined presetting and shut-off valve with a range of unique features.
Because of ASV-D's bi-directional functionality the valve can be used inside or outside the control loop.

Features & benefits

- High k_v values for small pressure losses
- Bi-directional valve functionality
- Numeric presetting scale visible from multiple angles
- Easy locking of presetting
- Built-in test plugs for 3 mm needles
- Removable handle for easy mounting
- Shut off function separated from presetting
- Open-closed color indicator

Applications

ASV-D can be used inside or outside the control loop. Configuration outside the control loop allows flow verification, while configuration inside the control loop allows flow limitation. Valve orientation is crucial to ensure hydronic system is functioning correctly.

Partner valve inside the control loop (Fig. 1).
Flow is travelling through the valve, in the same direction as indicated by laser engraved arrow on valve body. This orientation offers flow limitation on the riser; however, part of the controlled pressure range is used by pressure drop on partner valve (Δp_p). It is recommended when flow limitation on each terminal unit is not possible.

Partner valve outside the control loop (Fig. 2).
Flow is travelling through the valve, in the opposite direction as is indicated by laser engraved arrow on valve body. This orientation gives best results since the whole controlled pressure range is available to the riser. Flow limitation is done on each terminal unit in the riser (for example RA-N with presetting on radiator, etc). For correct flow measurement it is necessary to swop test plugs colour indicators. See more in chapter Bi-directional functionality.

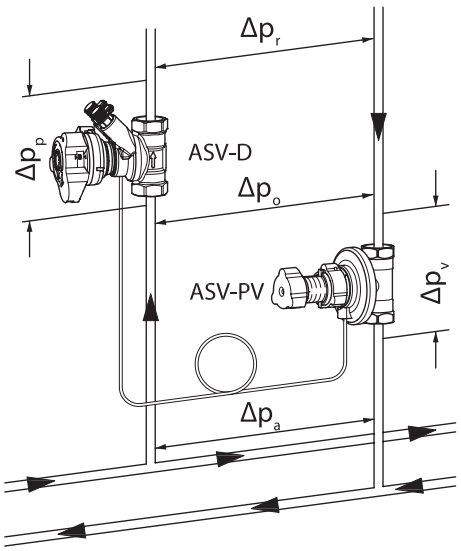


Fig. 1 Setting of ASV-PV = $\Delta p_{riser} + \Delta p_p$

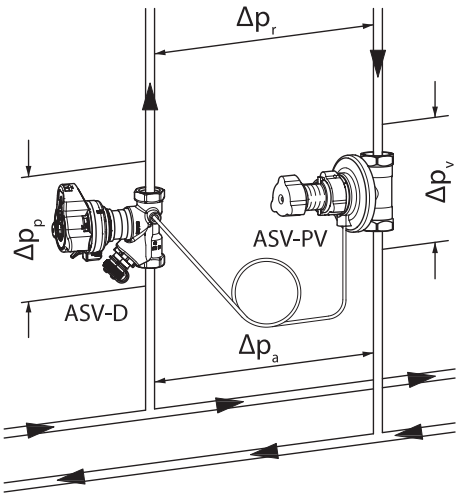


Fig. 2 Setting of ASV-PV = Δp_{riser}

Ordering

Product code numbers

Type	Valve body material	Valve size	Kvs values [m³/h]	Connection types	Code number
ASV-D	CW 617N	DN 15	3.00	Internal thread	003Z7008
ASV-D	CW 617N	DN 20	6.00	Internal thread	003Z7009
ASV-D	CW 617N	DN 25	9.50	Internal thread	003Z7010
ASV-D	CW 617N	DN 32	18.00	Internal thread	003Z7011
ASV-D	CW 617N	DN 40	26.00	Internal thread	003Z7012
ASV-D	CW 617N	DN 50	40.00	Internal thread	003Z7013

NOTE: for whole range of ASV partner valves, spare parts and accessories please refer to ASV-PV data sheet.

Accessories code numbers

Type	Code No.
Operating handle	**003Z4652**
Flow measuring instrument PFM 100 (10 bar)	**003L8260**
Flow measuring instrument PFM 1000 (10 bar)	**003Z8260**
Flow measuring instrument PFM 1000 (20 bar)	**003Z8261**
Identification tag & strips, 10 pcs.	**003Z4660**

Fittings

Comments	to pipe	to valve	Code No.
Tailpiece threaded (1 pcs.)	R ½	DN 15	**003Z0232**
	R ¾	DN 20	**003Z0233**
	R 1	DN 25	**003Z0234**
	R 1 ¼	DN 32	**003Z0235**
	R 1 ½	DN 40	**003Z0273**
	R 2	DN 50 (2 ¼")	**003Z0274**

Functions

Bi-directional functionality

Due to the valve's design it can be installed in the system so that the medium flows through the valve in same direction as is marked on the valve body (Flow arrow), or it can be installed in the system in the opposite direction, to that medium flows trough the valve in the opposite direction to the marking on the valve body. The valve k_v values will remain unchanged, regardless of valve orientation.

Please, scan QR code or click on link to see animation:
https://youtu.be/4zLTNO-jc4Y

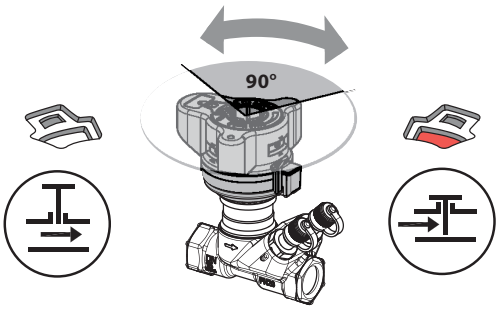
Settings

Shut-Off

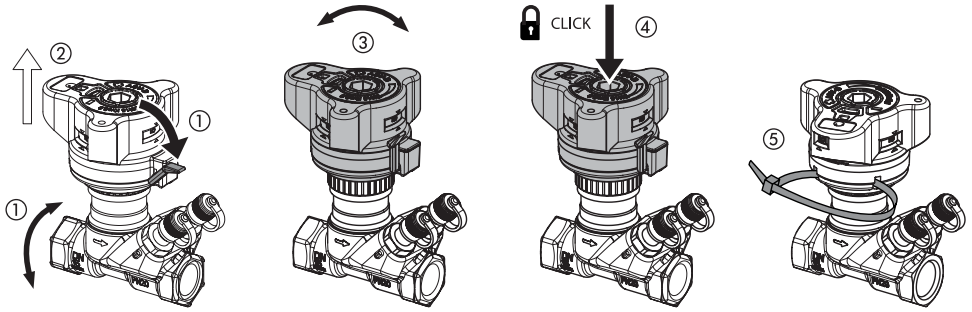
In order to shut-off the valve the handle must be pressed down.

The shut-off function features a ball valve, which only requires a 90 degree turn to shut the valve completely.

An indicator window shows the actual setting:
- red = closed
- white = open



Setting and Locking



The valve has a built-in presetting feature for accurate flow ratings.

Setting the required flow is made in 5 steps:

1. In open position, release the lock using the green lever or a 3 mm Allen key.
2. The handle pops up automatically.
3. The calculated value can now be set.
4. The setting is locked when the handled is pressed to click.
5. Seal - the setting can be protected by using a strip as shown.

K_v-Signal

K_v-signal values are used for non-Danfoss measuring instruments. Danfoss PFM1000 have all data in memory, and the instruments are using this formula:

$$P_{val} = P_{sig}\left(1 + 4 \times \frac{K_{v-sig}}{K_{v-val}}\right)^2$$

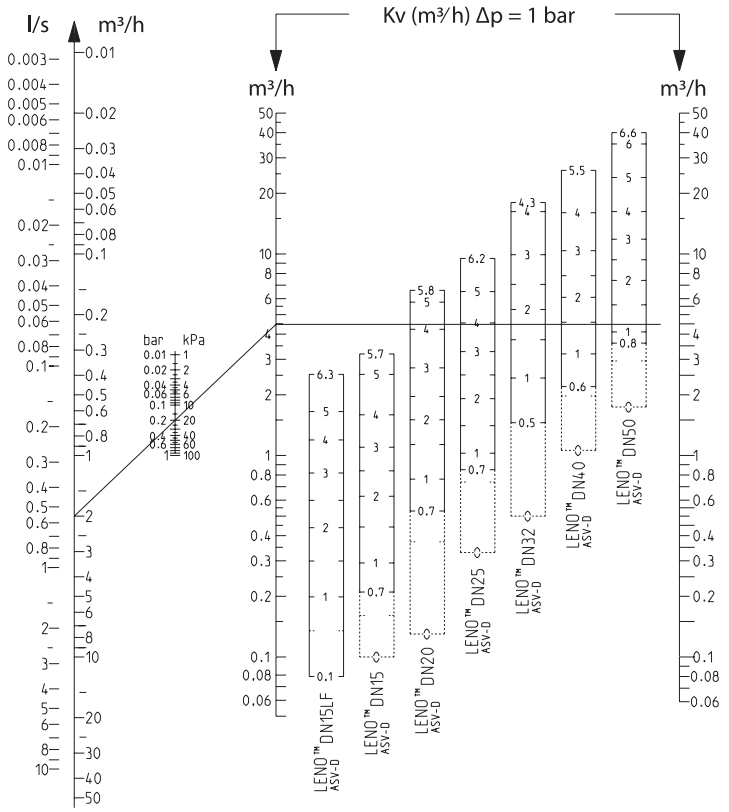
Δp across the measuring nipples ($k_{v\text{-}sig}$) and Δp across the valve ($k_{v\text{-}val}$) is not the same due to turbulence influence for pressure measuring.

K_v-Signal Values

Setting	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50
0.0	0.10	0.12	0.34	0.51	1.05	1.75
0.1	0.11	0.16	0.44	0.73	1.20	2.01
0.2	0.12	0.20	0.53	0.92	1.36	2.25
0.3	0.13	0.26	0.61	1.10	1.55	2.47
0.4	0.14	0.32	0.67	1.26	1.74	2.69
0.5	0.16	0.38	0.73	1.43	1.95	2.91
0.6	0.19	0.45	0.79	1.60	2.17	3.12
0.7	0.21	0.53	0.84	1.78	2.40	3.35
0.8	0.24	0.60	0.90	1.97	2.64	3.58
0.9	0.26	0.67	0.95	2.18	2.88	3.82
1.0	0.29	0.74	1.01	2.39	3.13	4.07
1.1	0.32	0.82	1.08	2.62	3.39	4.33
1.2	0.34	0.89	1.14	2.87	3.64	4.60
1.3	0.37	0.96	1.22	3.12	3.90	4.89
1.4	0.40	1.03	1.29	3.38	4.16	5.18
1.5	0.44	1.09	1.37	3.64	4.43	5.49
1.6	0.47	1.16	1.46	3.92	4.69	5.80
1.7	0.51	1.23	1.55	4.18	4.96	6.13
1.8	0.54	1.30	1.65	4.48	5.24	6.46
1.9	0.58	1.38	1.75	4.76	5.51	6.80
2.0	0.61	1.45	1.85	5.05	5.80	7.14
2.1	0.65	1.53	1.96	5.35	6.08	7.49
2.2	0.69	1.61	2.07	5.65	6.38	7.84
2.3	0.73	1.69	2.18	5.96	6.68	8.19
2.4	0.77	1.78	2.29	6.27	6.99	8.55
2.5	0.80	1.87	2.41	6.60	7.30	8.91
2.6	0.85	1.97	2.53	6.94	7.63	9.27
2.7	0.89	2.07	2.65	7.29	7.98	9.64
2.8	0.93	2.17	2.77	7.67	8.33	10.00
2.9	0.97	2.29	2.89	8.06	8.70	10.37
3.0	1.01	2.40	3.01	8.48	9.08	10.74
3.1	1.04	2.52	3.13	8.92	9.48	11.11
3.2	1.08	2.65	3.25	9.38	9.90	11.49
3.3	1.12	2.78	3.37	9.87	10.33	11.88
3.4	1.16	2.91	3.49	10.38	10.79	12.27
3.5	1.20	3.05	3.62	10.91	11.26	12.67
3.6	1.25	3.19	3.74	11.46	11.74	13.09
3.7	1.30	3.33	3.87	12.02	12.25	13.51
3.8	1.35	3.47	4.00	12.58	12.77	13.95
3.9	1.41	3.61	4.13	13.12	13.30	14.41
4.0	1.47	3.75	4.26	13.64	13.85	14.88
4.1	1.53	3.89	4.39	14.12	14.41	15.38
4.2	1.59	4.02	4.53	14.52	14.98	15.89
4.3	1.66	4.15	4.68	14.84	15.55	16.44
4.4	1.73	4.28	4.82	-	16.13	17.00
4.5	1.81	4.40	4.98	-	16.69	17.59
4.6	1.91	4.52	5.13	-	17.25	18.21
4.7	2.00	4.62	5.29	-	17.80	18.86

Setting	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50
4.7	2.00	4.62	5.29	-	17.80	18.86
4.8	2.08	4.72	5.46	-	18.32	19.54
4.9	2.16	4.82	5.64	-	18.80	20.24
5.0	2.23	4.90	5.81	-	19.25	20.97
5.1	2.30	4.97	6.00	-	19.65	21.73
5.2	2.36	5.04	6.19	-	19.98	22.51
5.3	2.41	5.09	6.38	-	20.24	23.30
5.4	2.46	5.14	6.57	-	20.41	24.12
5.5	2.50	5.18	6.77	-	20.48	24.94
5.6	2.54	5.21	6.96	-	-	25.76
5.7	2.57	5.24	7.15	-	-	26.58
5.8	-	5.27	7.34	-	-	27.38
5.9	-	-	7.52	-	-	28.16
6.0	-	-	7.69	-	-	28.90
6.1	-	-	7.85	-	-	29.59
6.2	-	-	7.98	-	-	30.21
6.3	-	-	8.09	-	-	30.74
6.4	-	-	8.17	-	-	31.17
6.5	-	-	8.22	-	-	31.47
6.6	-	-	-	-	-	31.61

K_v-Signal



Correction Factors

Temp. (°C)	Correction factors, ethylene glycol / propylene glycol percentage (max. 30 %)						
	25	30	40	50	60	65	100
-40.0	[1]	[1]	[1]	[1]	0.89	0.88	[1]
-17.8	[1]	[1]	0.93	0.91	0.90	0.89	0.86
4.4	0.95	0.95	0.93	0.92	0.91	0.90	0.87
26.6	0.96	0.95	0.94	0.93	0.92	0.91	0.88
48.9	0.97	0.96	0.95	0.94	0.93	0.92	0.90
71.1	0.98	0.98	0.96	0.95	0.94	0.94	0.95
93.3	1.00	0.99	0.97	0.96	0.95	0.95	0.92
115.6	[2]	[2]	[2]	[2]	[2]	[2]	0.94

[1] Below freezing point

[2] Above boiling point

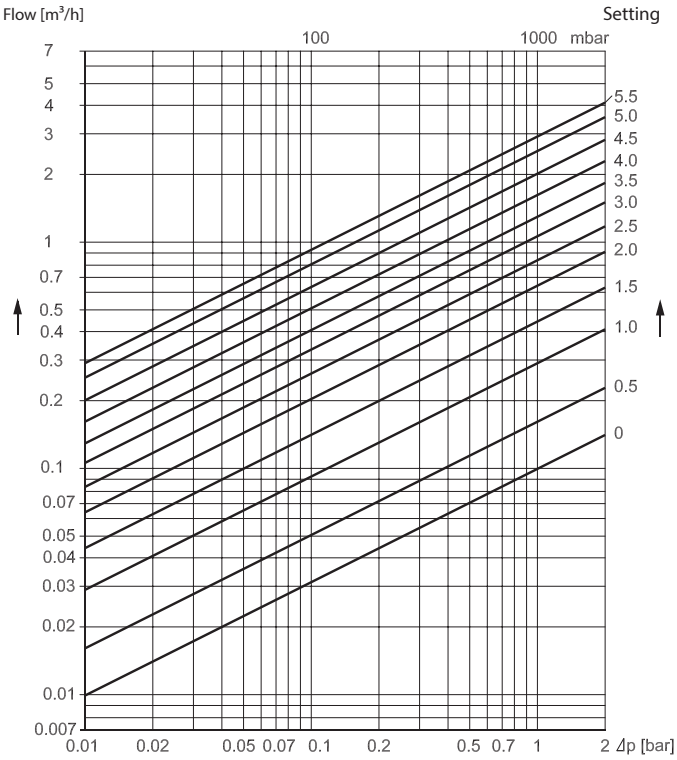
Example:

Flow needed = 30 m^3/h

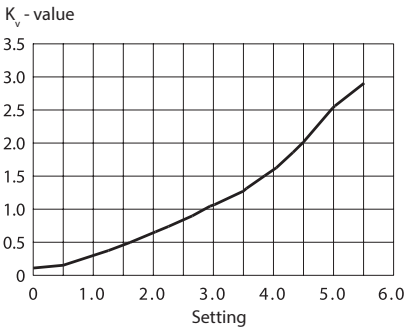
Flow after correction: 30 x 0.95 = 28 m^3/h

Flow Diagrams, DN 15

LENO™ ASV-D DN 15



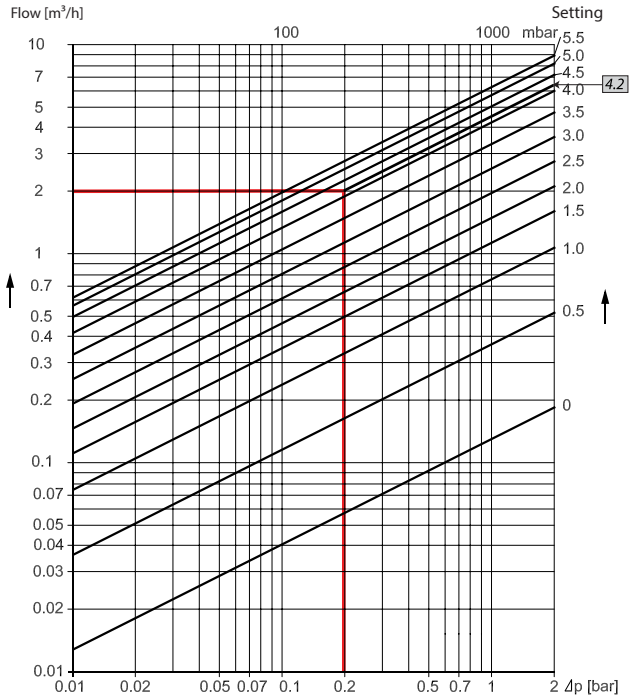
Flow characteristics



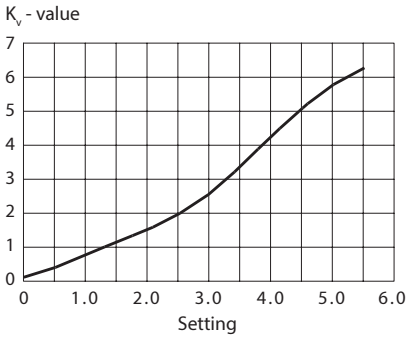
Setting	k_v-value	Setting	k_v-value	Setting	k_v-value
0.0	0.11	**1.9**	0.59	**3.9**	1.52
0.1	0.12	**2.0**	0.63	**4.0**	1.59
0.2	0.13	**2.1**	0.67	**4.1**	1.66
0.3	0.14	**2.2**	0.71	**4.2**	1.74
0.4	0.16	**2.3**	0.75	**4.3**	1.82
0.5	0.19	**2.4**	0.80	**4.4**	1.91
0.6	0.20	**2.5**	0.84	**4.5**	2.00
0.7	0.21	**2.6**	0.88	**4.6**	2.12
0.8	0.24	**2.7**	0.93	**4.7**	2.23
0.9	0.27	**2.8**	0.97	**4.8**	2.33
0.10	0.29	**2.9**	1.02	**4.9**	2.43
1.1	0.32	**3.0**	1.06	**5.0**	2.53
1.2	0.35	**3.1**	1.10	**5.1**	2.61
1.3	0.38	**3.2**	1.14	**5.2**	2.70
1.4	0.41	**3.3**	1.19	**5.3**	2.77
1.5	0.44	**3.4**	1.23	**5.4**	2.84
1.6	0.48	**3.5**	1.28	**5.5**	2.90
1.7	0.51	**3.6**	1.34	**5.6**	2.95
1.8	0.55	**3.7**	1.40	**5.7**	3.00

Flow Diagrams, DN 20

LENO™ ASV-D DN 20



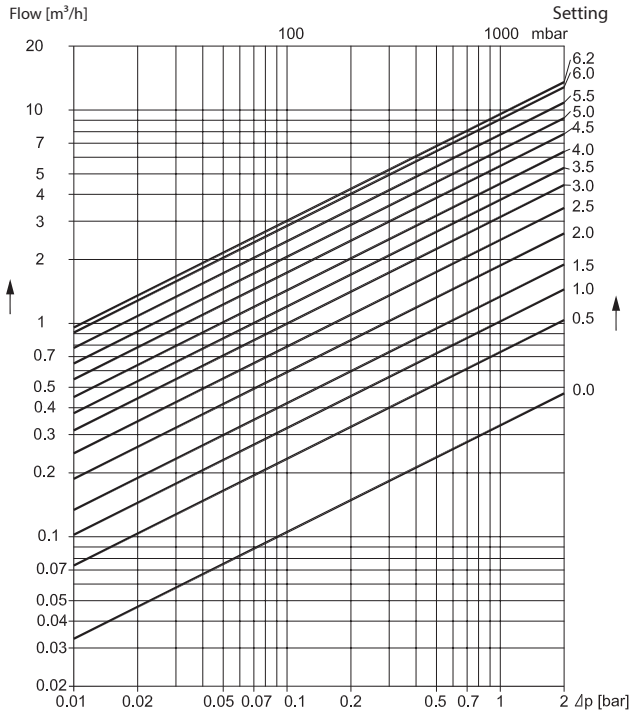
Flow characteristics



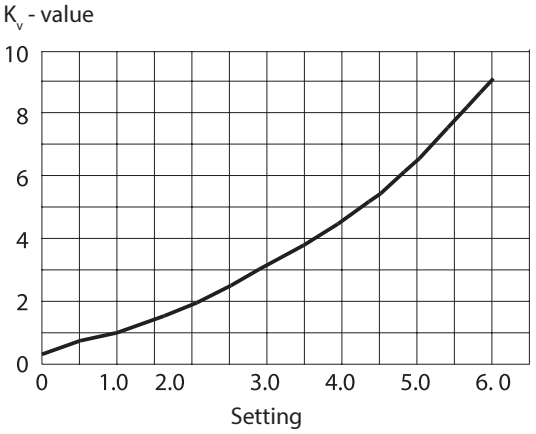
Setting	k_v-value	Setting	k_v-value	Setting	k_v-value
0.0	0.13	**2.0**	1.50	**4.0**	4.23
0.1	0.15	**2.1**	1.59	**4.1**	4.40
0.2	0.19	**2.2**	1.67	**4.2**	4.58
0.3	0.24	**2.3**	1.76	**4.3**	4.75
0.4	0.30	**2.4**	1.86	**4.4**	4.91
0.5	0.37	**2.5**	1.96	**4.5**	5.07
0.6	0.45	**2.6**	2.07	**4.6**	5.22
0.7	0.53	**2.7**	2.19	**4.7**	5.37
0.8	0.61	**2.8**	2.31	**4.8**	5.51
0.9	0.68	**2.9**	2.44	**4.9**	5.64
0.10	0.76	**3.0**	2.58	**5.0**	5.77
1.1	0.84	**3.1**	2.72	**5.1**	5.88
1.2	0.92	**3.2**	2.87	**5.2**	5.99
1.3	0.99	**3.3**	3.03	**5.3**	6.09
1.4	1.06	**3.4**	3.19	**5.4**	6.19
1.5	1.13	**3.5**	3.36	**5.5**	6.29
1.6	1.21	**3.6**	3.53	**5.6**	6.39
1.7	1.28	**3.7**	3.70	**5.7**	6.49
1.8	1.35	**3.8**	3.87	**5.8**	6.60
1.9	1.43	**3.9**	4.05		

Flow Diagrams, DN 25

LENO™ ASV-D DN 25



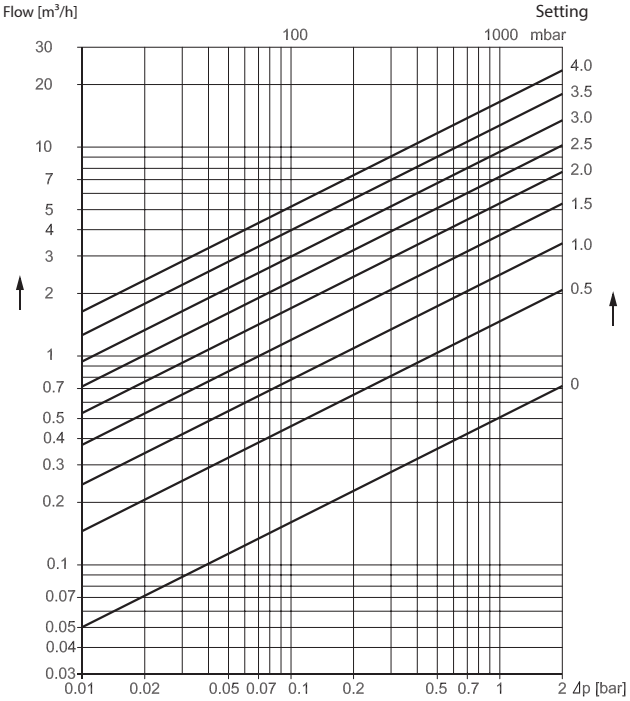
Flow characteristics



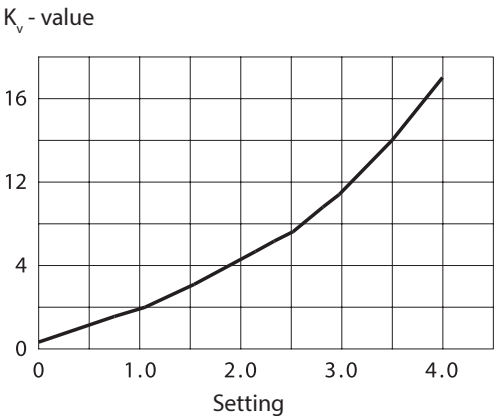
Setting	k_v-value	Setting	k_v-value	Setting	k_v-value
0.0	0.33	**2.2**	2.15	**4.4**	5.23
0.1	0.44	**2.3**	2.26	**4.5**	5.42
0.2	0.53	**2.4**	2.39	**4.6**	5.62
0.3	0.61	**2.5**	2.51	**4.7**	5.83
0.4	0.68	**2.6**	2.64	**4.8**	6.05
0.5	0.74	**2.7**	2.76	**4.9**	6.27
0.6	0.79	**2.8**	2.89	**5.0**	6.51
0.7	0.85	**2.9**	3.02	**5.1**	6.75
0.8	0.91	**3.0**	3.15	**5.2**	7.00
0.9	0.96	**3.1**	3.28	**5.3**	7.26
0.10	1.03	**3.2**	3.41	**5.4**	7.53
1.1	1.09	**3.3**	3.54	**5.5**	7.80
1.2	1.16	**3.4**	3.68	**5.6**	8.06
1.3	1.24	**3.5**	3.81	**5.7**	8.33
1.4	1.32	**3.6**	3.95	**5.8**	8.59
1.5	1.41	**3.7**	4.09	**5.9**	8.84
1.6	1.50	**3.8**	4.24	**6.0**	9.08
1.7	1.60	**3.9**	4.39	**6.1**	9.30
1.8	1.70	**4.0**	4.55	**6.2**	9.50
1.9	1.80	**4.1**	4.71		
2.0	1.91	**4.2**	4.88		
2.1	2.03	**4.3**	5.05		

Flow Diagrams, DN 32

LENO™ ASV-D DN 32



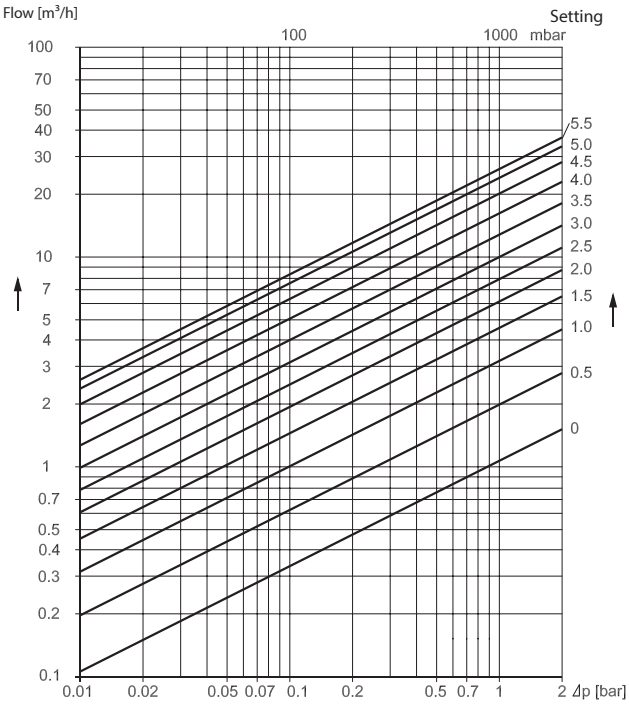
Flow characteristics



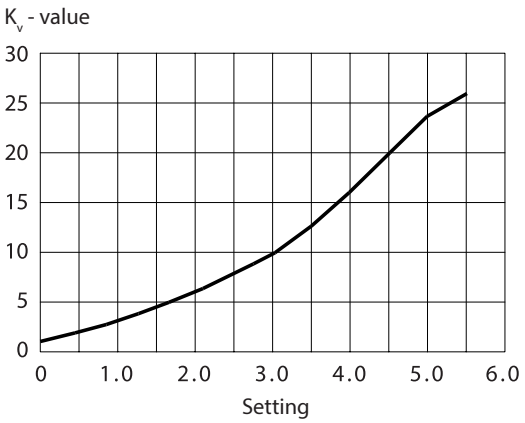
Setting	k_v-value	Setting	k_v-value	Setting	k_v-value
0.0	0.50	**1.5**	3.75	**3.0**	9.35
0.1	0.75	**1.6**	4.05	**3.1**	9.92
0.2	0.95	**1.7**	4.36	**3.2**	10.52
0.3	1.13	**1.8**	4.67	**3.3**	11.16
0.4	1.29	**1.9**	4.98	**3.4**	11.85
0.5	1.45	**2.0**	5.30	**3.5**	12.51
0.6	1.62	**2.1**	5.63	**3.6**	13.23
0.7	1.80	**2.2**	5.97	**3.7**	13.98
0.8	1.99	**2.3**	6.32	**3.8**	14.74
0.9	2.20	**2.4**	6.68	**3.9**	15.49
0.10	2.42	**2.5**	7.06	**4.0**	16.23
1.1	2.66	**2.6**	7.46	**4.1**	16.91
1.2	2.92	**2.7**	7.89	**4.2**	17.51
1.3	3.19	**2.8**	8.34	**4.3**	18.00
1.4	3.47	**2.9**	8.83		

Flow Diagrams, DN 40

LENO™ ASV-D DN 40



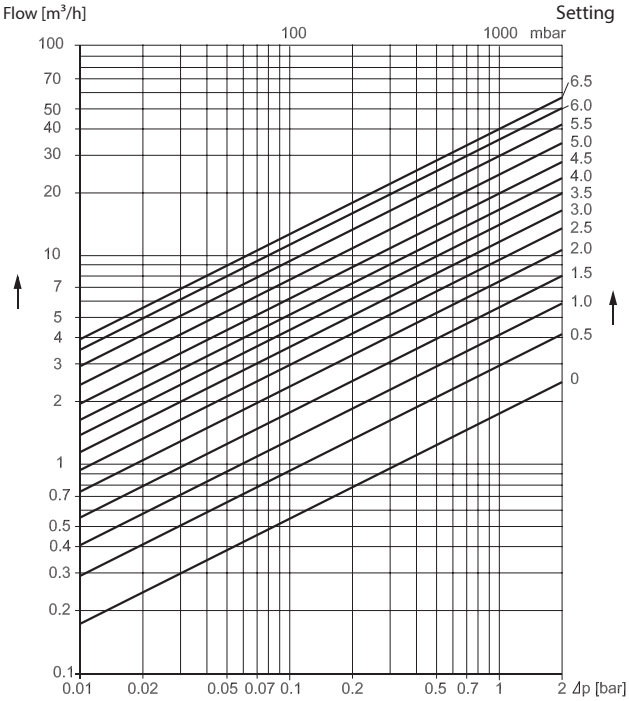
Flow characteristics



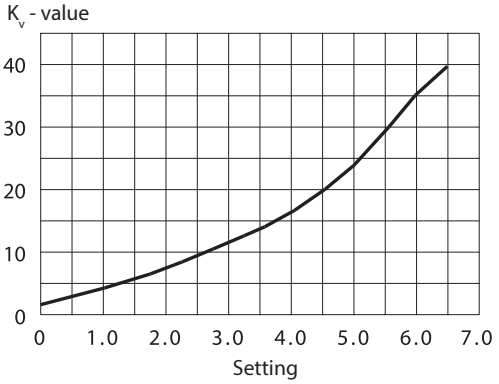
Setting	k_v-value	Setting	k_v-value	Setting	k_v-value
0.0	1.06	**1.9**	5.78	**3.8**	14.56
0.1	1.21	**2.0**	6.09	**3.9**	15.28
0.2	1.38	**2.1**	6.41	**4.0**	16.02
0.3	1.56	**2.2**	6.74	**4.1**	16.79
0.4	1.76	**2.3**	7.09	**4.2**	17.57
0.5	1.97	**2.4**	7.44	**4.3**	18.38
0.6	2.20	**2.5**	7.80	**4.4**	19.19
0.7	2.43	**2.6**	8.18	**4.5**	20.02
0.8	2.68	**2.7**	8.58	**4.6**	20.82
0.9	2.93	**2.8**	9.00	**4.7**	21.61
1.0	3.19	**2.9**	9.44	**4.8**	22.38
1.1	3.46	**3.0**	9.90	**4.9**	23.12
1.2	3.73	**3.1**	10.38	**5.0**	23.81
1.3	4.01	**3.2**	10.89	**5.1**	24.44
1.4	4.29	**3.3**	11.43	**5.2**	25.00
1.5	4.58	**3.4**	12.00	**5.3**	25.46
1.6	4.87	**3.5**	12.60	**5.4**	25.80
1.7	5.17	**3.6**	13.22	**5.5**	26.00
1.8	5.47	**3.7**	13.88		

Flow Diagrams, DN 50

LENO™ ASV-D DN 50



Flow characteristics



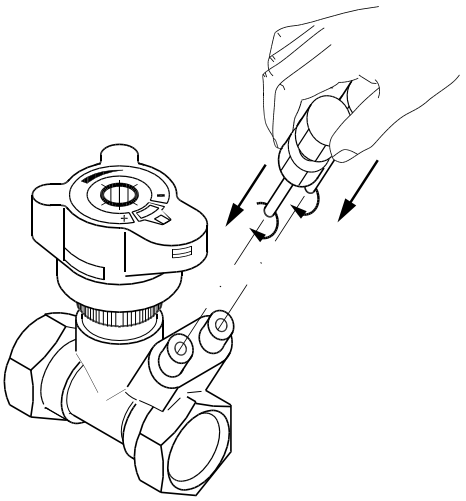
Setting	k_v-value	Setting	k_v-value	Setting	k_v-value
0.0	1.74	**2.4**	8.96	**4.8**	22.08
0.1	2.03	**2.5**	9.36	**4.9**	23.00
0.2	2.28	**2.6**	9.76	**5.0**	23.96
0.3	2.51	**2.7**	10.17	**5.1**	24.96
0.4	2.73	**2.8**	10.58	**5.2**	26.00
0.5	2.95	**2.9**	10.99	**5.3**	27.07
0.6	3.16	**3.0**	11.41	**5.4**	28.17
0.7	3.38	**3.1**	11.84	**5.5**	29.30
0.8	3.61	**3.2**	12.27	**5.6**	30.44
0.9	3.85	**3.3**	12.71	**5.7**	31.64
1.0	4.10	**3.4**	13.16	**5.8**	32.83
1.1	4.37	**3.5**	13.62	**5.9**	34.01
1.2	4.65	**3.6**	14.10	**6.0**	35.14
1.3	4.95	**3.7**	14.60	**6.1**	36.23
1.4	5.26	**3.8**	15.12	**6.2**	37.24
1.5	5.59	**3.9**	15.66	**6.3**	38.14
1.6	5.93	**4.0**	16.23	**6.4**	38.93
1.7	6.28	**4.1**	16.84	**6.5**	39.56
1.8	6.64	**4.2**	17.47	**6.6**	40.00
1.9	7.01	**4.3**	18.14		
2.0	7.39	**4.4**	18.84		
2.1	7.78	**4.5**	19.59		
2.2	8.17	**4.6**	20.38		
2.3	8.56	**4.7**	21.21		

Presettings
Measuring

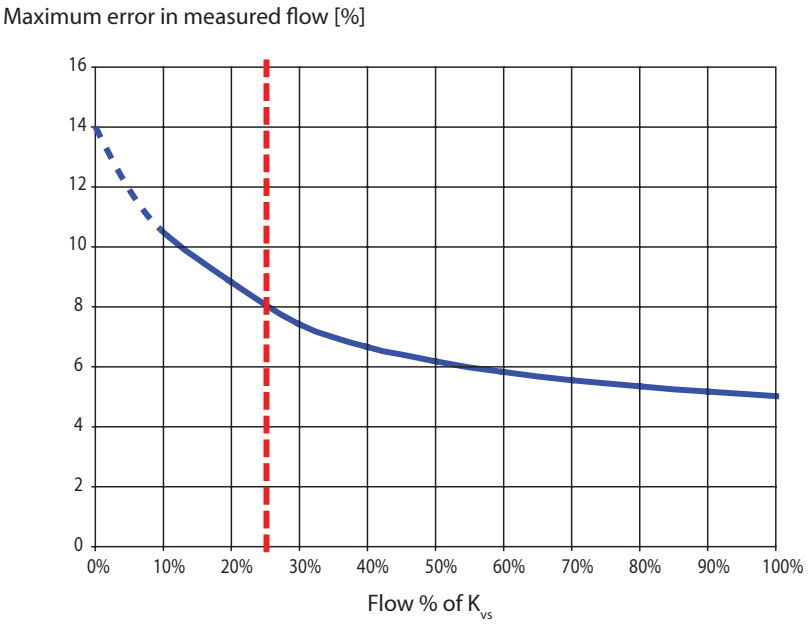
The flow through the LENO™ ASV-D valve can be measured using Danfoss PFM 1000 or other brands of measuring instruments. The LENO™ ASV-D valve is supplied with two measuring nipples for 3 mm needles.
Procedure for flow measuring:

1. Select flow measuring
2. Select valve brand
3. Select valve type and dimension
4. Enter presetting
5. Connect valve and instrument
6. Calibrate static pressure
7. Measure the flow

Danfoss recommends using Danfoss Test needles in order to achieve best measuring results and avoid damages to the test plugs.



Measuring Accuracy



The red line indicates 25% of max. flow.
According to BS7350:1990 flow rates must be within following values:
± 18 % at 25 % open position
± 10 % at fully open position

LENO™ ASV-D is very accurate, due to the separate functions for presetting and shut-off.

Valve Size and Presetting

Example:
Given
Max. pipe flow Q = 2 m³/h Δp_r *= 15 kPa*
Δp_a *= 45 kPa* Δp_m *= 10 kPa*
$\Delta p_i = \Delta p_a - \Delta p_r - \Delta p_m$
$\Delta p_i = 45 - 15 - 10 = 20$ *kPa*

Correct valve size and presetting is found in flow diagramme (chapter K_v*-Signal).*

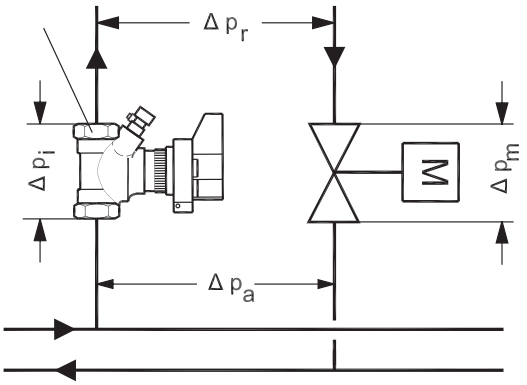
Q= 2.0 m³/h and Δp_i *= 20 kPa*

Under the subchapter Flow Diagrams, intersect guides and presetting is found to be 4.2 (DN 20 valve).

Setting can be also calculated from the formula:

$$K_v = \frac{Q[m^3/h]}{\sqrt{P_i[bar]}} = \frac{2.0}{\sqrt{0.2}} = 4.5 m^3/h$$

ASV-D



Δp_i Pressure drop across LENO™ ASV-D valve
Δp_m Pressure drop across valve
Δp_r Necessary pressure for the riser
Δp_a Available pressure for the riser

Product details

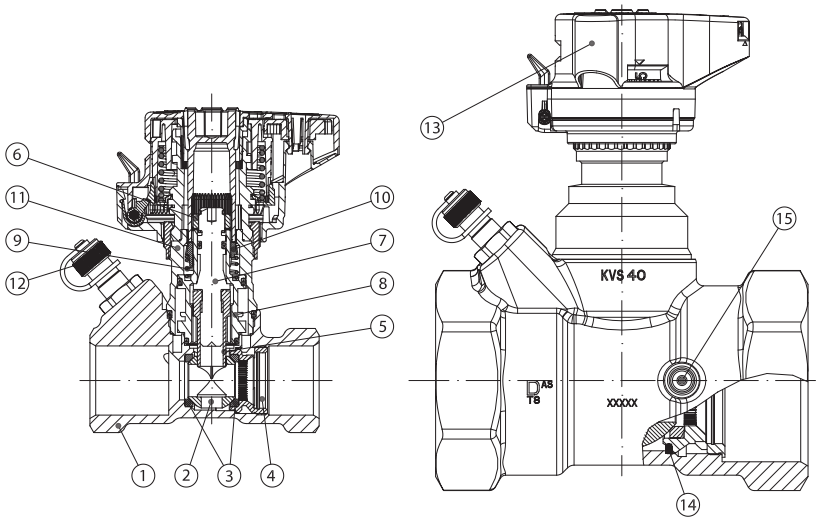
General data

Technical Data

Max. static working pressure	20 bar
Static test pressure	30 bar
Max. differential pressure across valve	2.5 bar (250 kPa)
Max. flow temperature	120 °C
Min. temperature	-20°C
Cooling liquids	Ethylene glycol / propylene glycol and HYCOOL (max. 30 %)

Design

1. Valve house
2. Ball
3. Ball seat
4. Suppert screw
5. Throttle
6. Spindle head
7. Spindle
8. Shut off bush
9. Spring
10. Rotation lock
11. Top
12. Measuring nipple
13. Handle
14. Gasket for support screw
15. Impulse connection

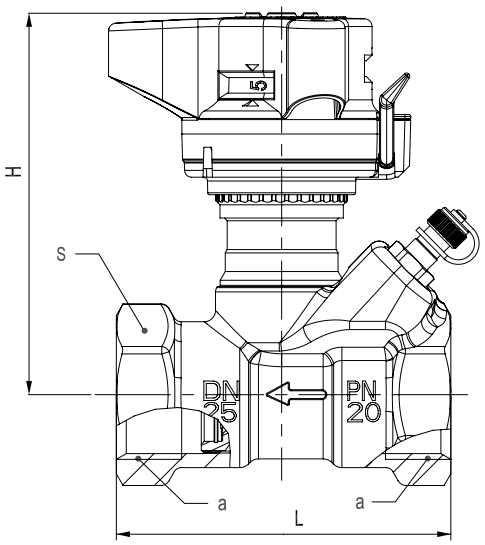


Materials

Materials and parts in contact with water

Valve body	Brass - CW617N
O-rings	EPDM
Ball	Brass/chromium plated
Ball sealing	Teflon
Test plugs	DZR brass

Dimensions



Size (DN)	Connections a (Internal ISO 228/1)	L (mm)	H (mm)	S (mm)
15	G ½	76	92	27
20	G ¾	80	95	32
25	G 1	86	98	41
32	G 1 ¼	102	121	50
40	G 1 ½	102	125	55
50	G 2	130	129	67

Installation

Fitting

Before fitting the valve the installer must ensure that the pipe system is clean.
The valve can be turned 360 degrees (if threaded pipe is used).

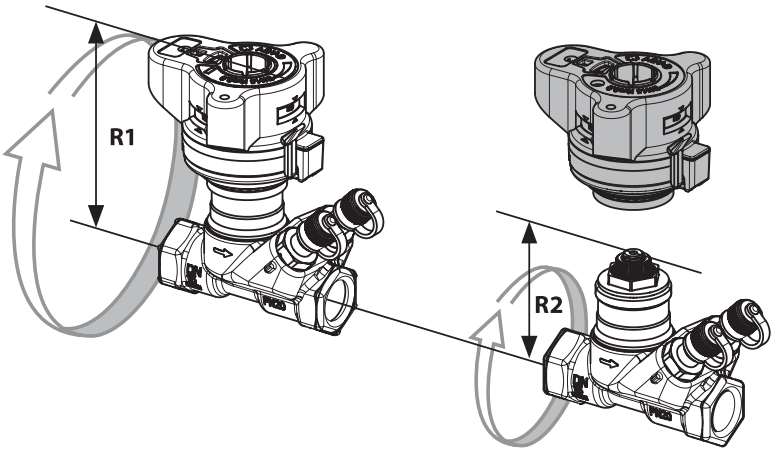
DN	R1/R2 (mm)
15	92/57
20	95/60
25	98/63
32	121/86
40	125/90
50	129/94

Removal of the handle

1. Set the handle at 0/0.
2. Release the setting lock (green).
3. Unscrew the union nut.

Calibration of the handle

Before refitting, ensure that the handle setting is 0/0.



Certificates, declarations and approvals

The list contains all certificates, declarations, and approvals for this product type. Individual code number may have some or all of these approvals, and certain local approvals may not appear on the list.

When you click on the link you will be directed to the latest version of the 'Declaration of Conformity'. Products developed and sold before this date of issue conform to the directives/standards in force at the time of their sale.

Approval type	Title	Certification body	Approval topic
Manufacturer's Declaration	Danfoss MD BF20072023-en01.01	Danfoss	Pressure, PED, EU RoHS
UA Declaration	Danfoss UA 2023-01-23 MTC ASV RA FH RAX PL03 PL28	Danfoss	Pressure, PED
Export Control Declaration	Automatic balancing and Pressure independent control valves	Danfoss	

Tender text

Features	LENO™ ASV-D
Balancing/Commissioning	•
Presetting	•
Fixed orifice	
Self sealing test plugs	•
Digital visible scale from more sides	•
Shut off function (ball valve)	•
Draining/filling	
Draining/filling on both sides of the valve	
Removable handle	•
Closing indicator	•
Allen key for ball valve	•
Parallel test plugs	•
360° rotating measuring station (drain cock and measuring nipples)	

Presetting values are visible on top of the valve and from all sides. Presetting is locked by pressing down the handle. When locked, the shut off function can be used without changing the presetting.
The handle is released with the green key or with a 3 mm Allen key. To prevent unintended changes of the presetting, the handle can be sealed by using a strip.

The valve features impulse tube connection. The valve is bi-directional, and can be installed inside or outside the control loop. In factory orientation the valve is installed inside control loop.
LENO™ ASV-D has a leakage rate A according to BS 7350 : 1990, the ball valve is 100% tight.

There are no requirements for inlet and outlet conditions.

The LENO™ ASV-D measuring accuracy is 10% up to 25% of max. setting. Accuracy is according to BS 7350 : 1990.
Measuring instruments must be equipped with 3mm measuring needles. Danfoss recommends using Danfoss PFM100 or Danfoss PFM1000.

Valve sizes..... DN 15 – DN 50
Pressure class..... PN20
Static test pressure..... 30 bar
Working temperature..... -20 °C to 120 °C
Working area..... 10-100 % of the k_{vs}-value

The valve body is made of CW617N brass.
The ball is made of chromium plated brass.
O-rings are made of EPDM rubber.

Contact details

Online support

Danfoss offers a wide range of support along with our products, including digital information, software, mobile apps and expert guidance. See the possibilities below.

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