



Ballorex Venturi



Description

The Ballorex Venturi is a range of manual balancing valves used in water-based heating and cooling systems to ensure an evenly distributed flow in zones, branches, risers and terminal units. Applications are typically central, district heating or cooling systems as well as fan coil units in multi-storey and high-rise buildings.

Versions

Dimension	DN15-50 DN65-600
Flow	L(low), S (standard), H (high)

Benefits

- Extensive product range from DN 15 600
- ➤ Constant measuring accuracy tolerances within ±3%
- > Flow verification insensitive to system debris
- One constant Kvm value indicated on valve
- Simultaneous measuring and regulation
- > Fast and easy setting using an Allen key
- > Setting scale precise and easy to read
- No change in setting when isolated and reopened
- Isolation simply done by a quarter turn of the valve handle
- Easy identification of open or isolated position
- No need for straight piping when installed
- Installation directly onto bends, reducers and flexible hoses
 - Installation possible in all positions
- Prefabricated insulation fast and easy to apply
- > Insulation possible before commissioning.







Conception



1-Venturi nozzle 2-Ball for isolation 3-Regulating needle 4-Handle to shut off valve 5-Operation of regulation needle 6-Measuring points for flow meter connection



- 1-Setting wheel 2-Setting scale with memory stop 3-Gearbox 4-Butterfly valve
- 5-Measuring points 6-Venturi nozzle





Materials (DN 15-50)

Body DR Brass CW602N

Ball and needle DR Brass CW602N (chrome plated)

Valve handle Polyamide

Sealings O-rings EPDM/Gaskets PTFE/Test point sealing EPDM

(DN 65-600)

Disc Stainless steel
Shaft Stainless steel
Test points DR Brass CW602N
Valve pipe Carbon steel

Butterfly valve body Cast iron, fully lugged Sealings EPDM and NBR

Specifications

Heating water system

Max. pressure 25 bar

Max. temperature 120°C (135°C with high temperature measuring points)

Min temperature -20°C Press ends 16 bar







Dimensions (DN 15-50)

	DN	L	Н	G	N	В
L	DN 15	94	76	75	140	
	DN 20	100	79	75	144	
	DN 25	112	83	75	150	
	DN 32	130	109	122	208	
	DN 40	140	113	122	213	
Female	DN 50	156	120	122	221	
LL	DN 15	99	76	75	164	
	DN 20	105	79	75	170	
	DN 25	118	83	75	177	
	DN 32	135	109	122	253	
N G	DN 40	149	113	122	253	
Compression	DN 50	167	120	122	265	
	DN 15	94	76	75	140	
	DN 20	155	79	75	144	
	DN 25	167	83	75	150	
	DN 32	195	109	122	208	
N G	DN 40	215	113	122	213	
With flange	DN 50	231	120	122	221	
L	DN 15	94	76	75	140	174
	DN 20	100	79	75	144	174
H	DN 25	112	83	75	150	175
	DN 32	130	109	112	208	228
В	DN 40	140	113	122	213	234
With drain	DN 50	156	120	122	221	238







(DN 65-600)

		DN	L	Н	Р	N
		DN 65	150	285	185	182
		DN 80	160	295	200	249
		DN 100	160	310	220	325
	L	DN 125	180	325	250	341
		DN 150	180	340	285	354
		DN 200	180	430	340	378
	Н	DN 250	180	465	405	411
BB		DN 300	180	535	460	465
		DN 350	241.5	557	520	552
		DN 400	340	666	580	570.5
N	P	DN 450	340	691	640	680
		DN 500	640	751	715	751
		DN 600	476	938	840	878

Product line

Photo	Size	Dimension	Kvs m³/h	Kvm m³/h	Code
	1/2"	DN 15U	0.23	0.163	4350000U-001003
	1/2"	DN 15L	0.63	0.359	4350000L-001003
	1/2"	DN 15S	1.62	0.746	4350000S-001003
	1/2"	DN 15H	2.49	1.56	4350000H-001003
	3/4"	DN 20L	1.43	0.746	4450000L-001003
	3/4"	DN 20S	2.82	1.56	4450000S-001003
	3/4"	DN 20H	5.72	2.95	4450000H-001003
	1"	DN 25S	7.54	2.95	4550000S-001003
	1"	DN 25H	12.1	6.01	4550000H-001003
	11/4"	DN 32H	13.2	6.01	4650000H-001003
Female	1½"	DN 40H	22.0	9.20	4750000H-001003
	2"	DN 50H	36.0	17.1	4850000H-001003
	1/2"	DN 15U	0.23	0.163	4355000U-001003
	1/2"	DN 15L	0.63	0.359	4355000L-001003
	1/2"	DN 15S	1.62	0.746	4355000S-001003
	1/2"	DN 15H	2.49	1.56	4355000H-001003
	3/4"	DN 20L	1.43	0.746	4455000L-001003
1	3/4"	DN 20S	2.82	1.56	4455000S-001003
	3/4"	DN 20H	5.72	2.95	4455000H-001003
	1"	DN 25S	7.54	2.95	4555000S-001003
	1"	DN 25H	12.1	6.01	4555000H-001003
	11/4"	DN 32H	13.2	6.01	4655000H-001003
With drain	1½"	DN 40H	22.0	9.20	4755000H-001003
Willi Uralli	2"	DN 50H	36.0	17.1	4855000H-001003







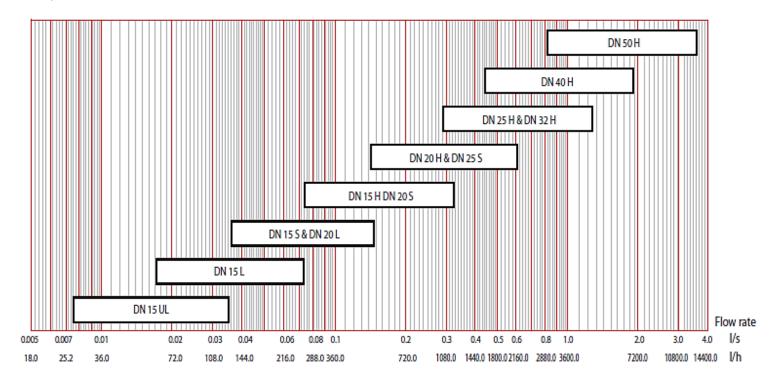
	4 /0!!	DNIAGUI	0.00	0.400	405040011004000
	1/2"	DN 15UL	0.23	0.163	4350100U-001063
	1/2"	DN 15L	0.63	0.359	4350100L-001063
	1/2"	DN 15S	1.62	0.746	4350100S-001063
	1/2"	DN 15H	2.49	1.56	4350100H-001063
Piloto	3/4"	DN 20L	1.43	0.746	4450100L-001063
A The same of the	3/4"	DN 20S	2.82	1.56	4450100S-001063
	3/4"	DN 20H	5.72	2.95	4450100H-001063
	1"	DN 25S	7.54	2.95	4550100S-001063
	1"	DN 25H	12.1	6.01	4550100H-001063
	11⁄4"	DN 32H	13.2	6.01	4650100H-001063
Compression	1½"	DN 40H	22.0	9.20	4750100H-001063
	2"	DN 50H	36.0	17.1	4850100H-001063
	1/2"	DN 15U	0.23	0.163	4353000U-001685
	1/2"	DN 15L	0.63	0.359	4353000L-001685
	1/2"	DN 15S	1.62	0.746	4353000S-001685
	1/2"	DN 15H	2.49	1.56	4353000H-001685
	3/4"	DN 20L	1.43	0.746	4453000L-001685
0~0	3/4"	DN 20S	2.82	1.56	4453000S-001685
	3/4"	DN 20H	5.72	2.95	4453000H-001685
	1"	DN 25S	7.54	2.95	4553000S-001685
	1"	DN 25H	12.1	6.01	4553000H-001685
	11⁄4"	DN 32H	13.2	6.01	4653000H-001685
With flange	1½"	DN 40H	22.0	9.20	4753000H-001685
· · · · · · · · · · · · · · · · · · ·	2"	DN 50H	36.0	17.1	4853000H-001685
	21/2"	DN 65	78.2	37.4	3937000-680009
	3"	DN 80	169	72.9	3937600-680009
	4"	DN 100	360	129	3938200-680009
60	5"	DN 125	502	190	3938800-680009
	6"	DN 150	1010	348	3939400-680009
	8"	DN 200	1910	586	3940000-680009
11	10"	DN 250	2540	861	3940600-680009
0	12"	DN 300	4850	1513	3941200-680009
	14"	DN 350	*	2620	3941800-680009
7.9	16"	DN 400	*	3370	3942400-680009
	18"	DN 450	*	4170	3943000-621009
	20"	DN 500	*	5040	3943600-621009
	24"	DN 600	*	6920	3944200-621009







Quick selection chart

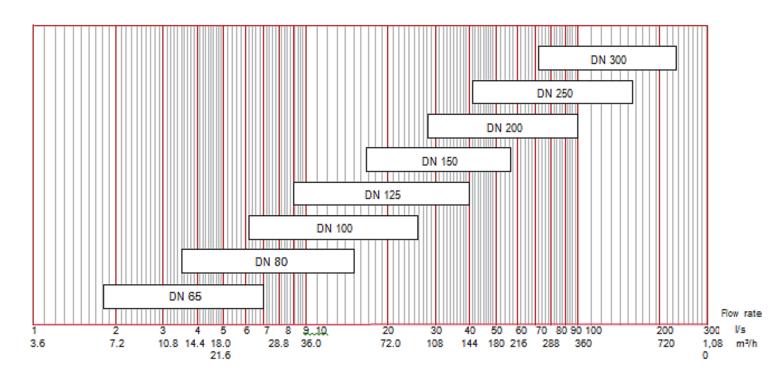


Flov	v range	Kvs m³/h	Dimension	
l/s	l/h		Difficitsion	
0.0076-0.035	27-126	0.23	DN 15UL	
0.0172-0.074	62-266	0.63	DN 15L	
0.036-0.148	130-530	1.62	DN 15S	
0.074-0.325	267-1170	2.49	DN 15H	
0.036-0.148	130-530	1.43	DN 20L	
0.074-0.325	267-1170	2.82	DN 20S	
0.142-0.603	511-2170	5.72	DN 20H	
0.142-0.603	511-2170	7.54	DN 25S	
0.29-1.25	1040-4500	12.1	DN 25H	
0.29-1.25	1040-4500	13.2	DN 32H	
0.44-1.88	1580-6760	22.0	DN 40H	
0.82-3.51	2950-12630	36.0	DN 50H	









Flow range		Kvs m³/h	Dimension
l/s	m³/h		Dilliension
1.80-7.00	6.48-25.2	78.2	DN 65
3.50-15.0	12.6-54.0	169	DN 80
6.20-26.0	22.3-93.6	360	DN 100
9.00-40.0	32.4-144	502	DN 125
16.8-57.0	60.5-205	1010	DN 150
28.0-100	101-360	1910	DN 200
41.0-157	148-565	2540	DN 250
72.0-226	259-814	4850	DN 300
126-304	454-1093	*	DN 350
162-394	583-1420	*	DN 400
201-493	723-1780	*	DN 450
242-602	873-2170	*	DN 500
333-846	1200-3040	*	DN 600

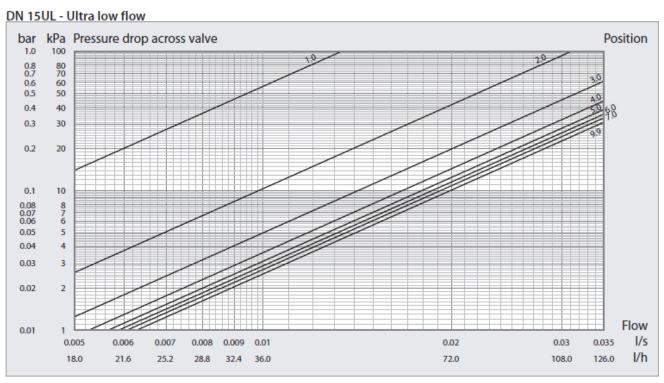


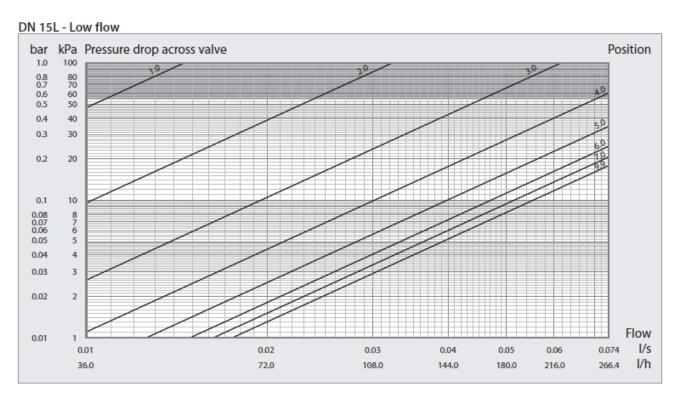




DN 15-Flow diagram

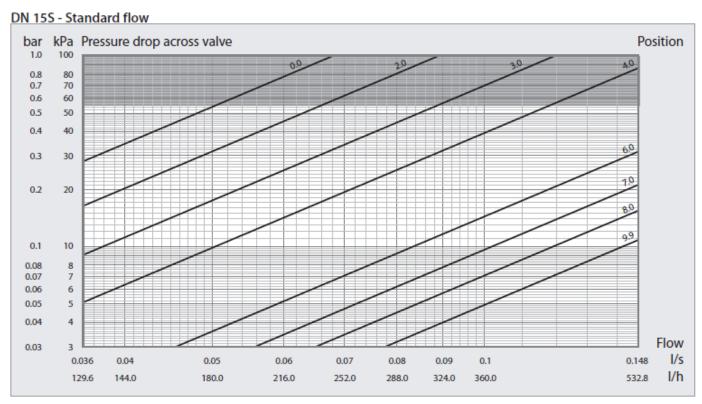
The black continuous graph lines determine the total pressure drop across the valve at a specific handle scale setting and flow rate. The graph is used during a hydronic system design to specify the setting of the valve.

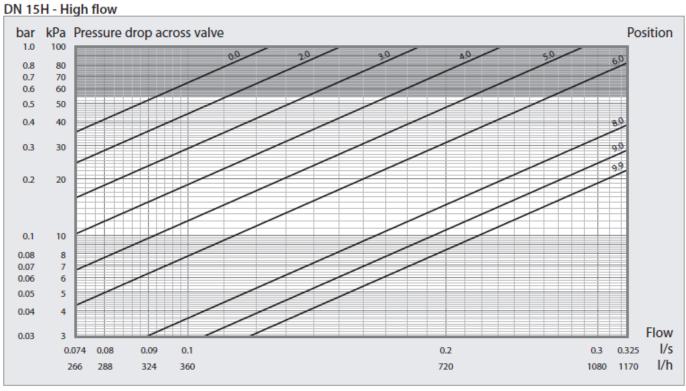










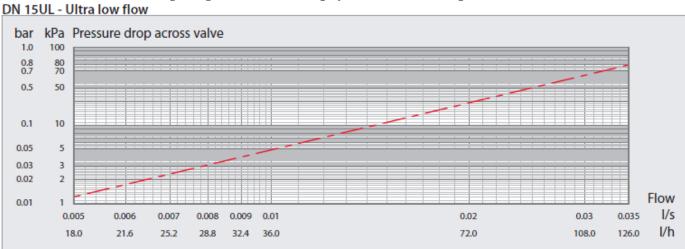


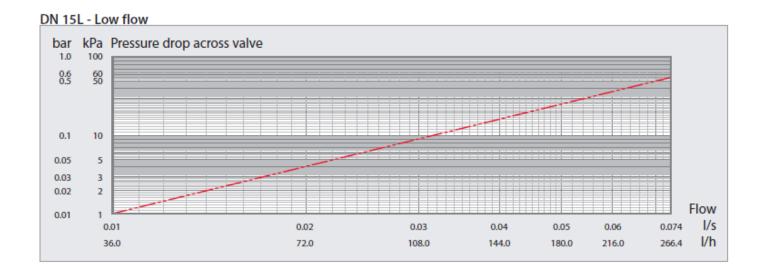






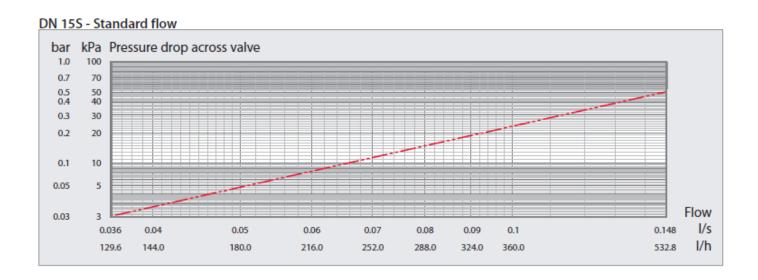
DN 15-Measuring signal diagrams

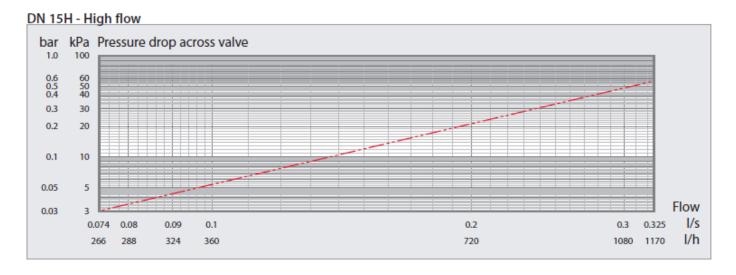












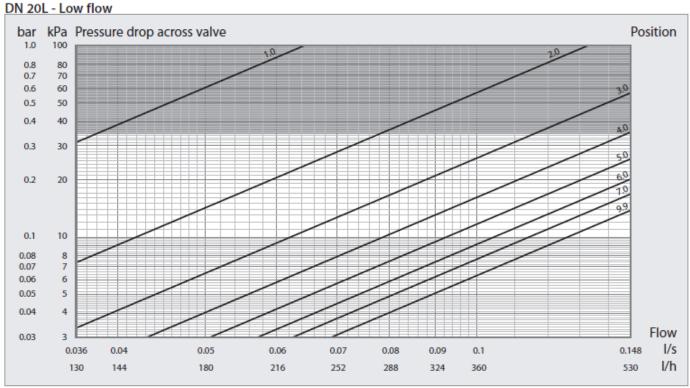




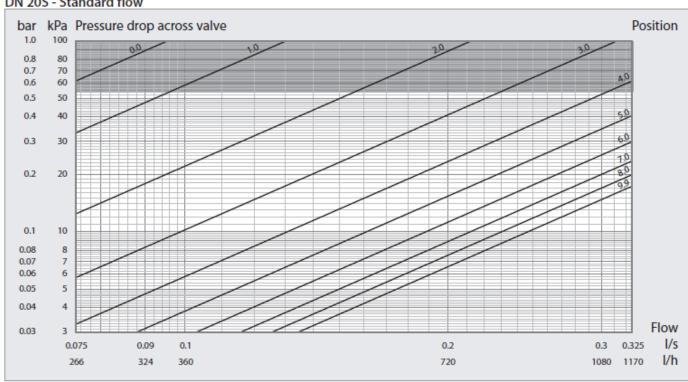


DN 20-Flow diagrams

The black continuous graph lines determine the total pressure drop across the valve at a specific handle scale setting and flow rate. The graph is used during a hydronic system design to specify the setting of the valve.

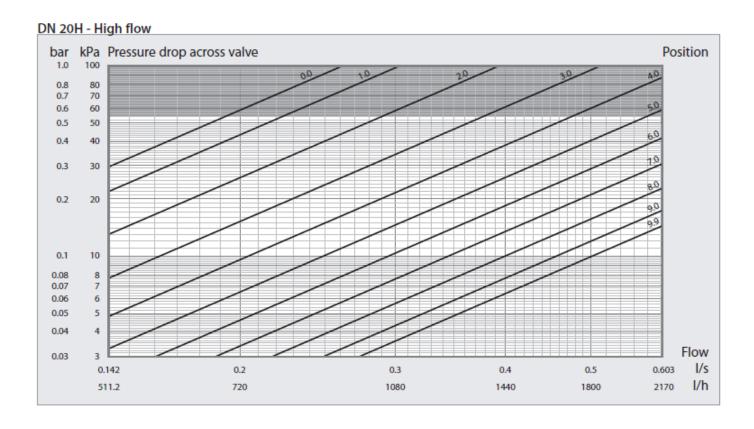


DN 20S - Standard flow

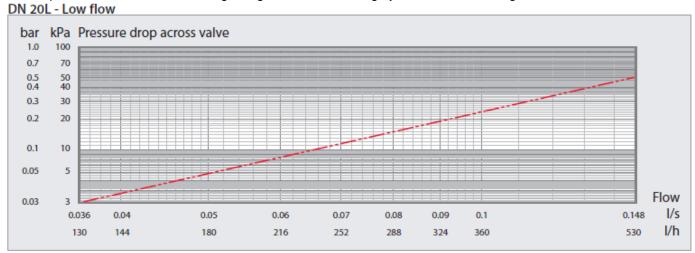






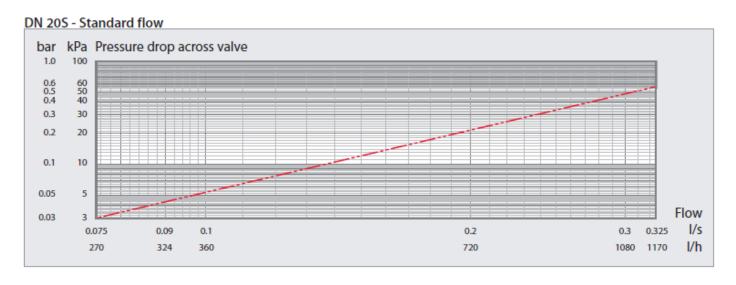


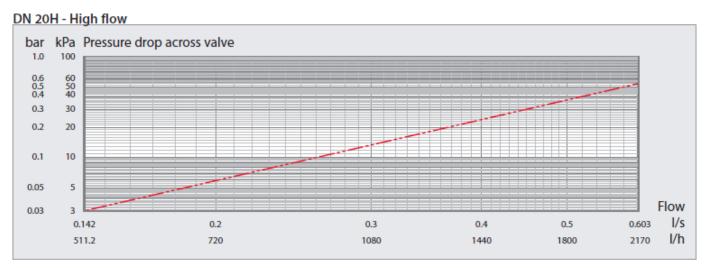
DN 20-Measuring signal diagrams











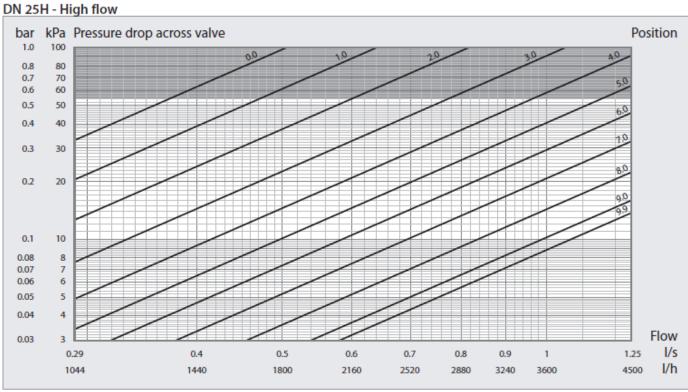




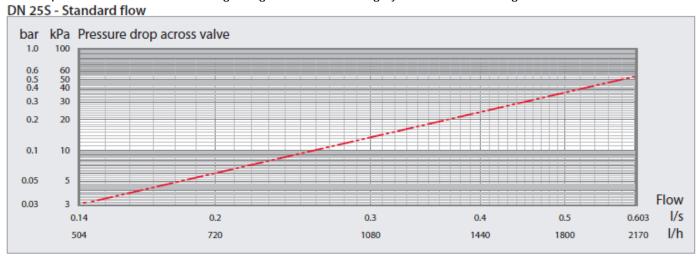


DN 25-Flow diagrams

The black continuous graph lines determine the total pressure drop across the valve at a specific handle scale setting and flow rate. The graph is used during a hydronic system design to specify the setting of the valve.



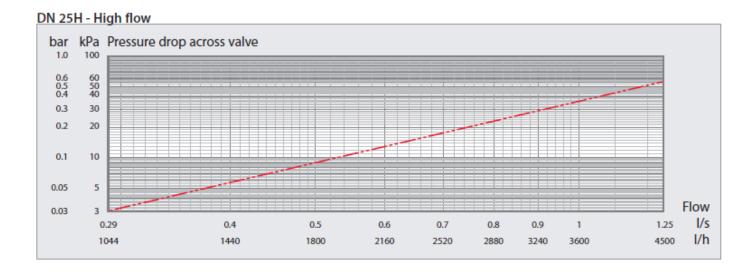
DN 25-Measuring signal diagrams











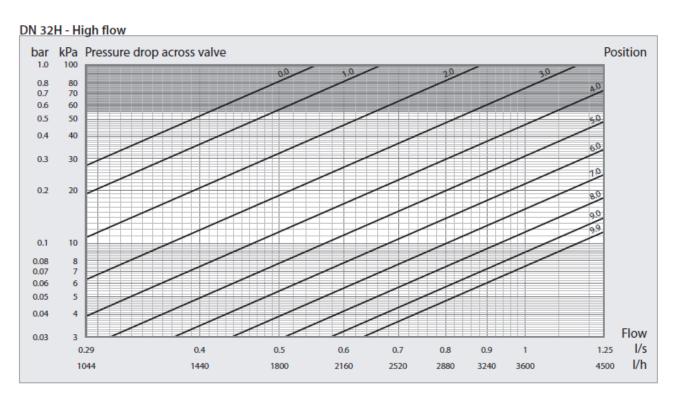




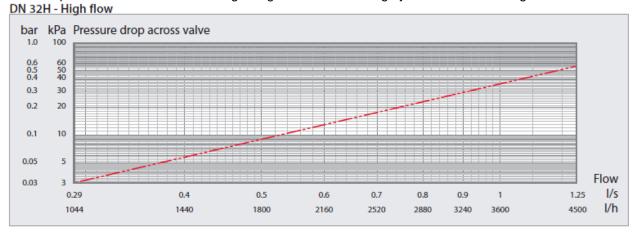


DN 32-Flow diagram

The black continuous graph lines determine the total pressure drop across the valve at a specific handle scale setting and flow rate. The graph is used during a hydronic system design to specify the setting of the valve.



DN 32-Measuring signal diagram



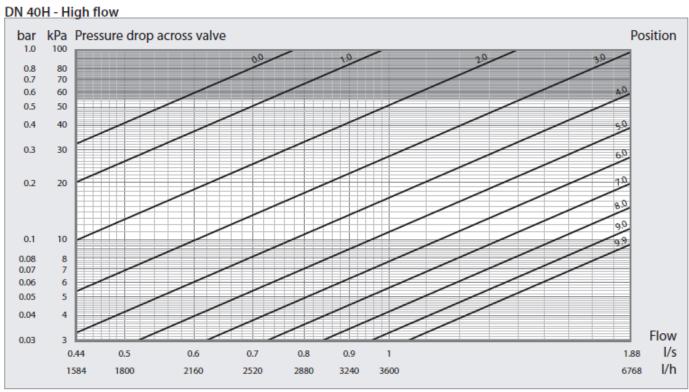




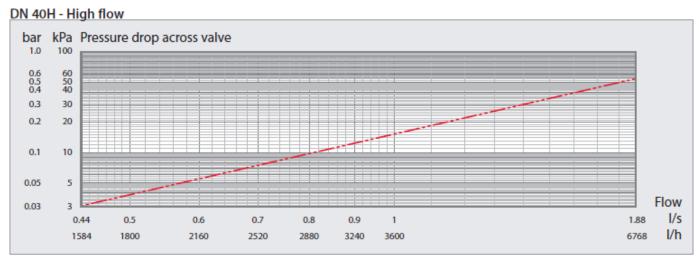


DN 40-Flow diagram

The black continuous graph lines determine the total pressure drop across the valve at a specific handle scale setting and flow rate. The graph is used during a hydronic system design to specify the setting of the valve.



DN 40-Measuring signal diagram

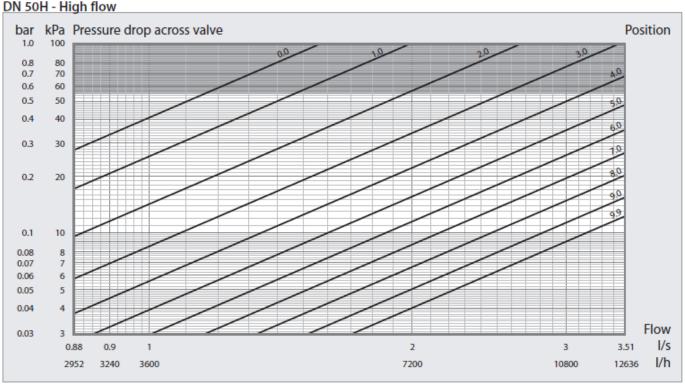




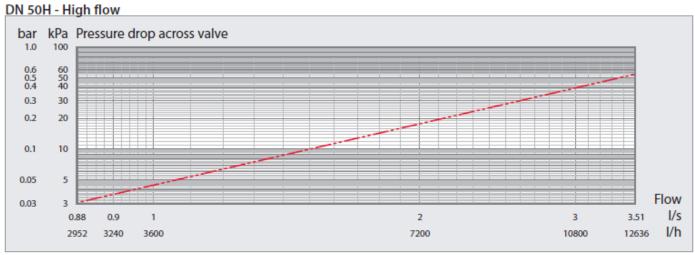


DN 50-Flow diagram

The black continuous graph lines determine the total pressure drop across the valve at a specific handle scale setting and flow rate. The lines are used during hydronic system design to specify the valve setting.



DN 50-Measuring signal diagram



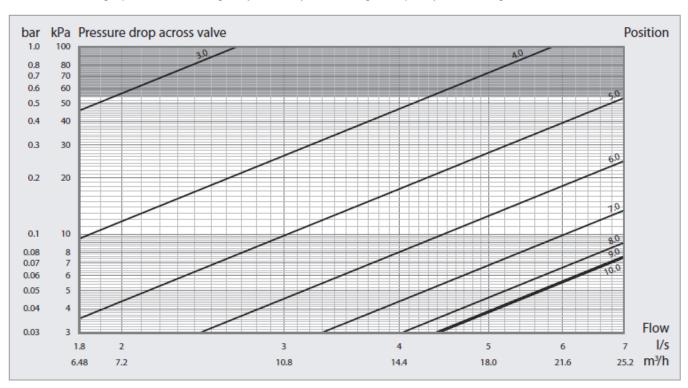




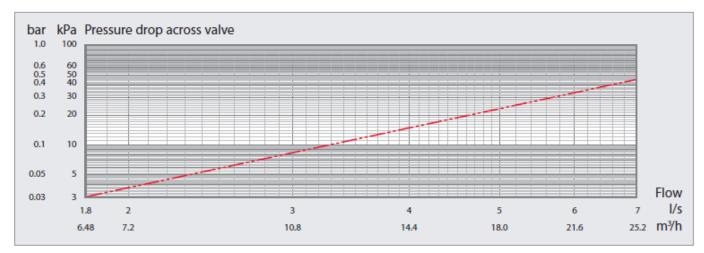


DN 65 flange/flange-Flow diagram

The black continuous graph lines determine the total pressure drop across the valve at a specific handle scale setting and flow rate. The graph is used during a hydronic system design to specify the setting of the valve.



DN 65 flange/flange-Measuring signal diagram



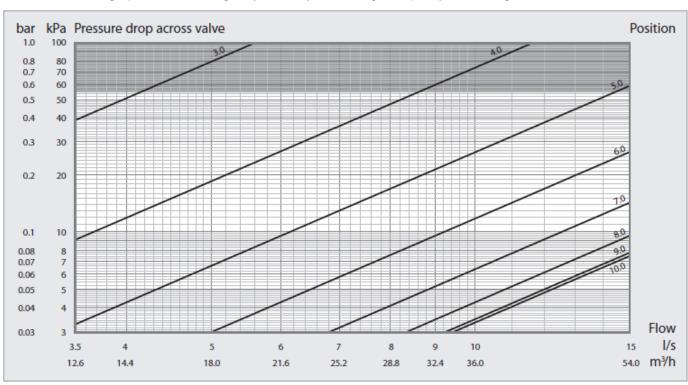




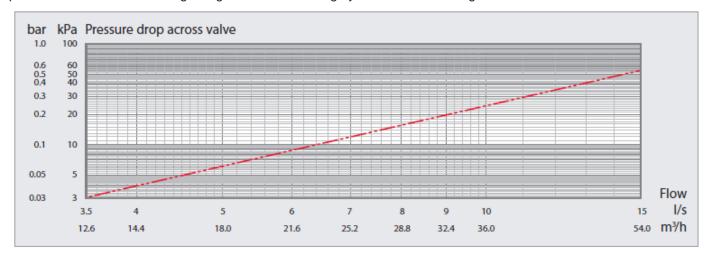


DN 80 flange/flange-Flow diagram

The black continuous graph lines determine the total pressure drop across the valve at a specific handle scale setting and flow rate. The graph is used during a hydronic system design to specify the setting of the valve



DN 80 flange/flange-Measuring signal diagram



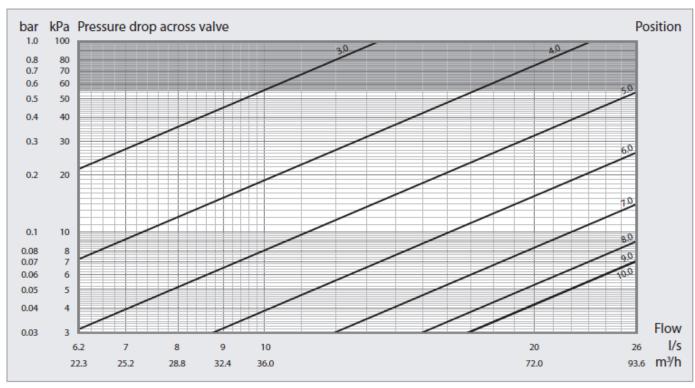




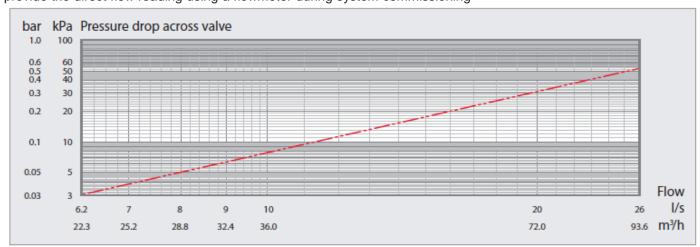


DN 100 flange/flange-Flow diagram

The black continuous graph lines determine the total pressure drop across the valve at a specific handle scale setting and flow rate. The graph is used during a hydronic system design to specify the setting of the valve



DN 100 flange/flange-Measuring signal diagram



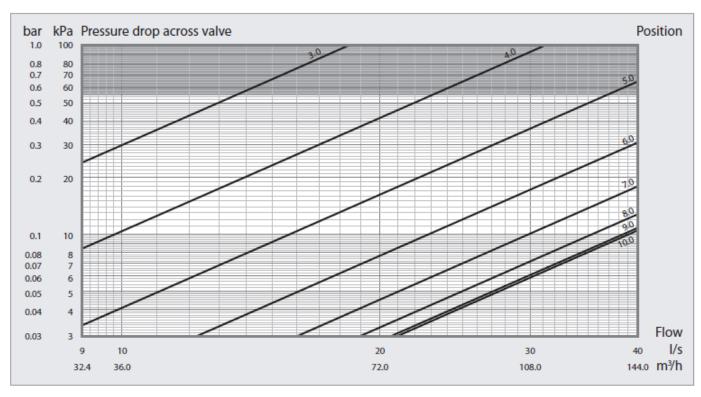




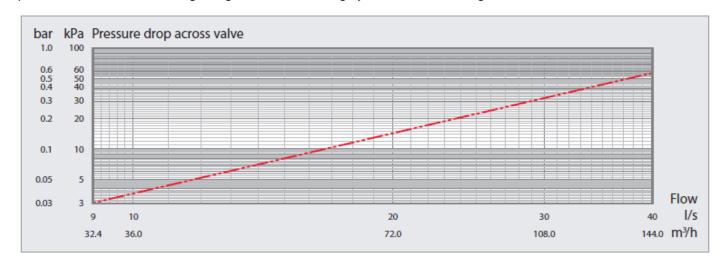


DN 125 flange/flange-Flow diagram

The black continuous graph lines determine the total pressure drop across the valve at a specific handle scale setting and flow rate. The graph is used during a hydronic system design to specify the setting of the valve



DN 125 flange/flange-Measuring signal diagram



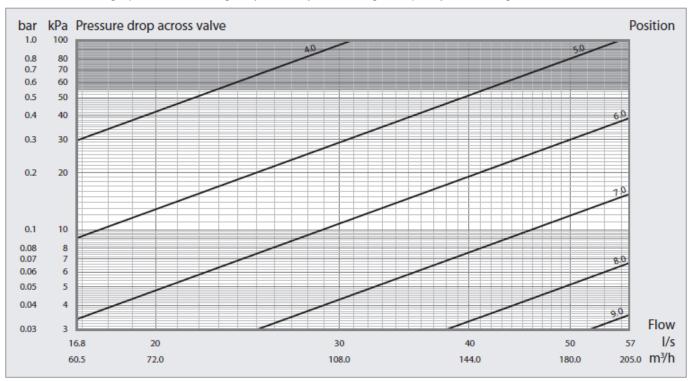




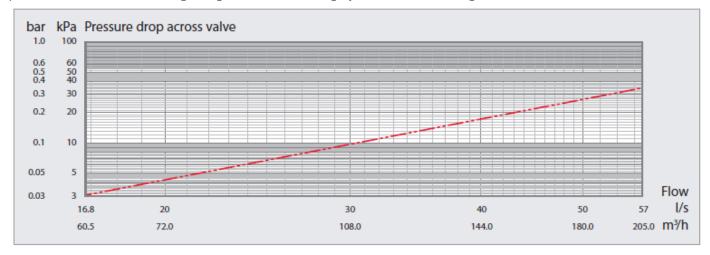


DN 150 flange/flange-Flow diagram

The black continuous graph lines determine the total pressure drop across the valve at a specific handle scale setting and flow rate. The graph is used during a hydronic system design to specify the setting of the valve



DN 150 flange/flange-Measuring signal diagram



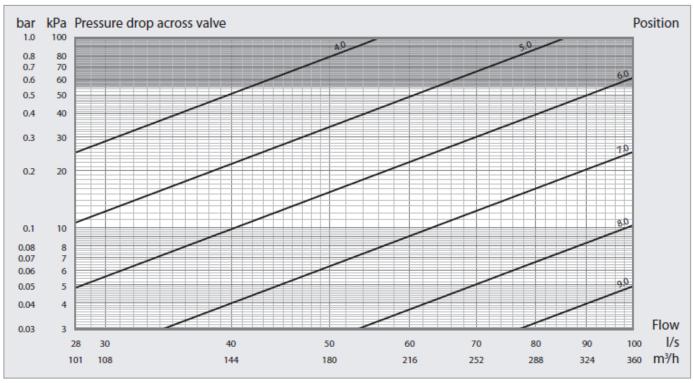




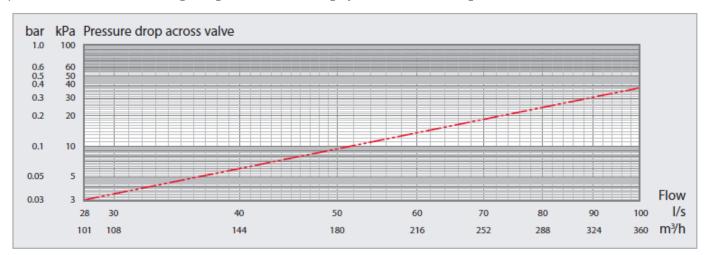


DN 200 flange/flange-Flow diagram

The black continuous graph lines determine the total pressure drop across the valve at a specific handle scale setting and flow rate. The graph is used during a hydronic system design to specify the setting of the valve.



DN 200 flange/flange-Measuring signal diagram

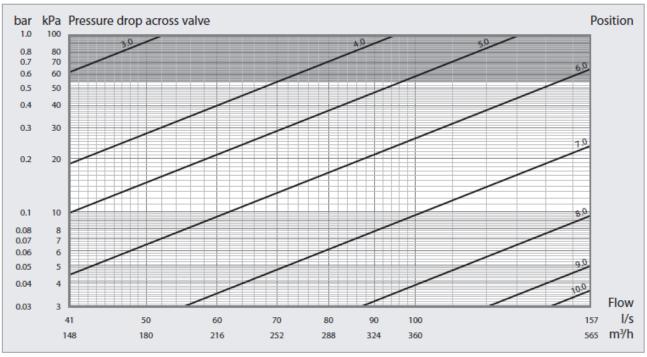




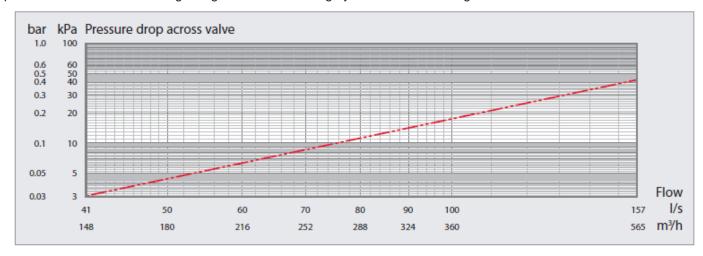


DN 250 flange/flange-Flow diagram

The black continuous graph lines determine the total pressure drop across the valve at a specific handle scale setting and flow rate. The graph is used during a hydronic system design to specify the setting of the valve



DN 250 flange/flange-Measuring signal diagram



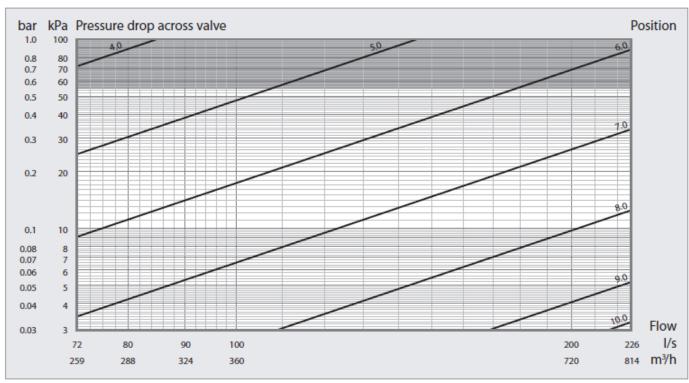




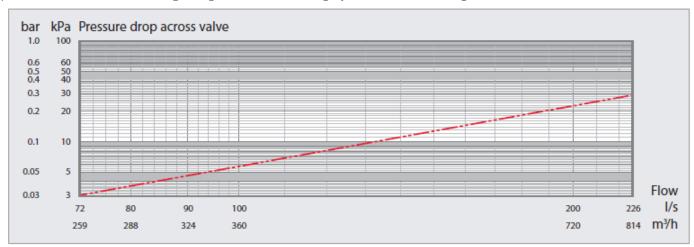


DN 300 flange/flange-Flow diagram

The black continuous graph lines determine the total pressure drop across the valve at a specific handle scale setting and flow rate. The graph is used during a hydronic system design to specify the setting of the valve



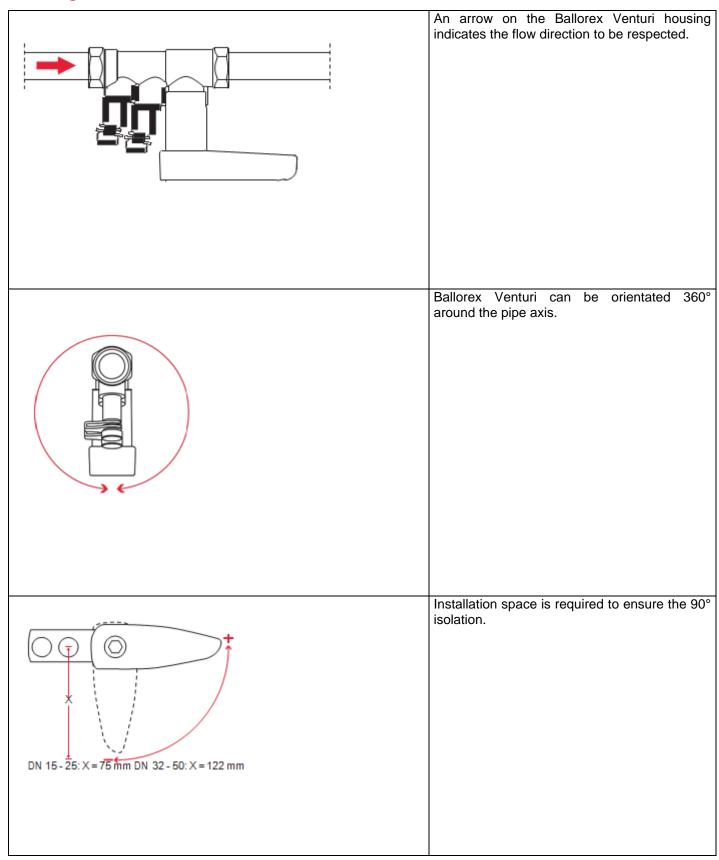
DN 300 flange/flange-Measuring signal diagram







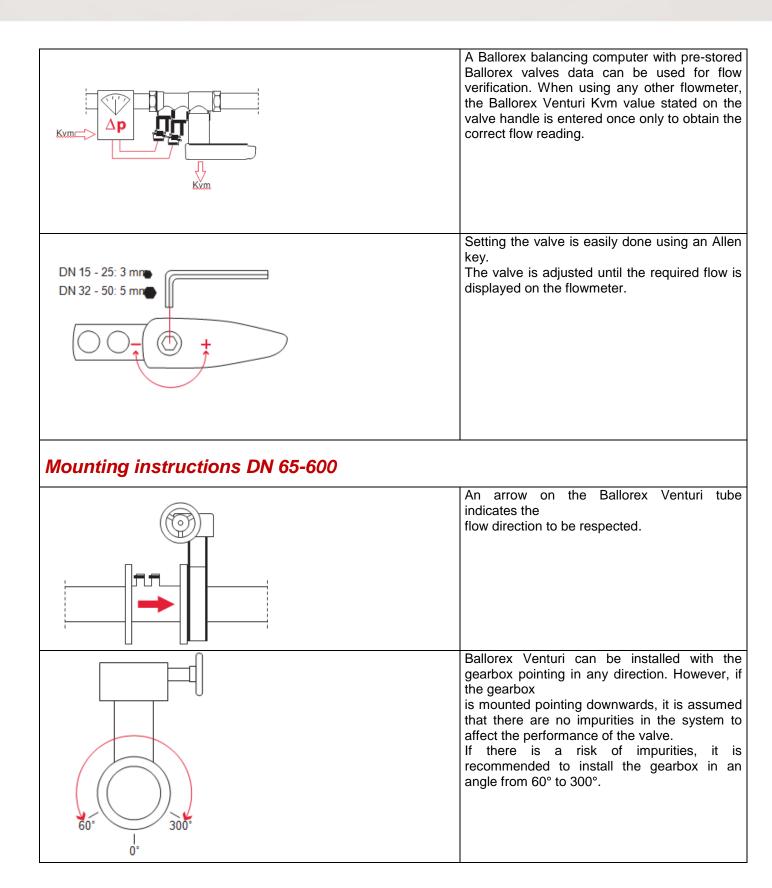
Mounting instructions DN 15 - 50



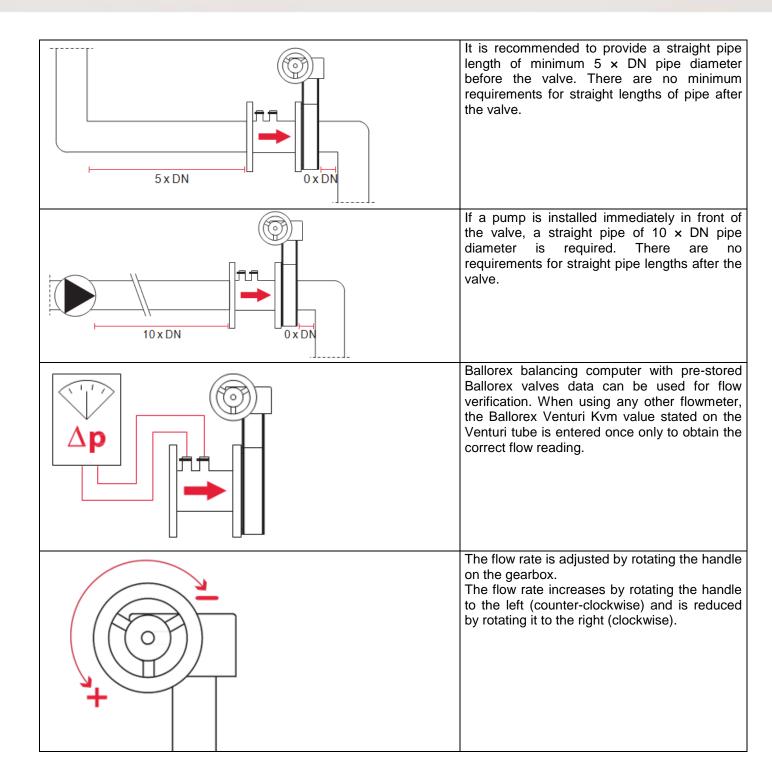


0 x DN 0 x DN	0 x DN straight piping is required. The Ballorex Venturi can be mounted directly onto bends, reducers, flexible pipes etc.
5 x DN	5 x DN straight piping is required when the valve is mounted directly after the system pump.
	Loose hemps must not hang into the pipe.
	Deburring of pipe ends is required to prevent system clogging















Accessories

Photo	Designation	Dimensions	Codes
	Ballorex Venturi insulation jacket	DN 15	96M0240-000005
	Dallorex Verituri irisulation jacket	DN 15	96M0279-000005
		DN 20	96M0241-000005
		DN 20	96M0280-000005
		DN 15	96M0240-000005
	Insulation jacket for Ballorex Venturi with drain	DN 32	96M0243-000005
CONTRACTOR DE DE	(can also be used for Ballorex Venturi without	DN 32	96M0282-000005
	drain)	DN 40	96M0244-000005
		DN 40	96M0283-000005
		DN 50	96M0245-000005
		DN 50	96M0284-000005
	Measuring point for high temperature medium - up to 135°C (installed in the P/T port of the Ballorex Venturi)	M14 × 1 / quick coupling	43500032-000003
		15 mm × 1/2" 18 mm × 1/2"	83504006-000003 83504007-000003
-		15 mm × 3/4"	84504006-000003
		18 mm × 3/4"	84504007-000003
	Pre-sealed press adaptors (2 pcs), max. 16 bar	22 mm × 3/4"	84504008-000003
		28 mm × 1"	85504006-000003
		35 mm × 11/4"	86504006-000003
		42 mm × 11/2"	87504006-000003
		54 mm × 2"	88504006-000003
A	High capacity drain valve (Kvs = 4,5 m ³ /h)1/2"	DN 15	43500200-001003
	female/female threaded connection for	DN 20	44500200-001003
	installation in a system pipe	DN 25	45500200-001003
**	Combi Drain Maxi with measuring point	R 1/4" / G 3/4"	41550025-000003
	Butterfly valve for Ballorex Venturi Kvs: 148 m³/h	DN 65	3937310-080009
	Butterfly valve for Ballorex Venturi Kvs: 237 m³/h	DN 80	3937910-080009
	Butterfly valve for Ballorex Venturi Kvs: 603m³/h	DN 100	3938510-080009
	Butterfly valve for Ballorex Venturi Kvs: 888 m³/h	DN 125	3939110-080009
	Butterfly valve for Ballorex Venturi Kvs: 2340 m³/h	DN 150	3939710-080009
	Butterfly valve for Ballorex Venturi Kvs: 2850m³/h	DN 200	3940210-080009
	Butterfly valve for Ballorex Venturi Kvs: 4550 m³/h	DN 250	3940810-080009
	Butterfly valve for Ballorex Venturi Kvs: 7760 m³/h	DN 300	3941410-080009







