

BELLOW SEAL GLOBE VALVE

AL 10-248

Description

Bellow seal globe valve, maintenance-free, designed with external spindle and support guide, thus avoiding the atmospheric emissions of conventional valves. Works with: steam, hot and superheated water, thermal oil, process water, gases, glycol, compressed air, neutral fluids, etc. In accordance with the requirements of Directive 2014/68/EU.

Specifications

- Design and manufacture compliant with EN 13709.
- Distances between flanges compliant with EN 558-1.
- Flanges compliant with EN 1092-1 and EN 1092-2.
- Designed to be environmentally friendly.
- Materials carefully selected for wear, temperature and corrosion resistance.
- Valve free from silicones and asbestos.
- Simple construction.
- Easy installation with mounting possible at any position between 270° and 90°.
- Internal body designed to offer favourable flow profile.
- Long life cycle with high operating efficiency.
- Practically maintenance-free.
- Spindle with opening indicator, locking mechanism, torque limiter and greasing nipple.
- Spindle with external thread which allows higher working temperatures and a longer service life.
- Safety seals with high-quality graphite rings. They guarantee total prevention of atmospheric emissions in the unlikely event of a bellows breakage. This is a requirement of DIN Standard 4754 in thermal fluid installations.
- Removable gasket designed to avoid the transmission of vibration to the valve's spindle.
- Double-walled bellows, robust, welded to the spindle forming a water-tight assembly, next to the seal and disc, without any possibility of rotation so as to avoid breakages. The bellows disc is concave and joined to the bellows. This saves energy and contributes to the area round the valve handle being at a suitable temperature for operator safety.
- Stainless steel bellows welded to the plasma. Airtightness tested with helium, ensuring absolute reliability and long life.
- Reinforced support guide in a bridge design which provides thermal insulation.
- Ergonomic handle with protective cap for the spindle.
- Treated closing surfaces, which are grinded, lapped and burnished in



- order to achieve a degree of leak-tightness that even exceeds that required by EN 12266-1 class A.
- All the valves are rigorously tested and verified.
- All components are numbered, registered and checked. If requested in advance, material, casting, test and efficiency certificates will be enclosed with the valve, and with the instruction manual, in accordance with P.E.D. 2014/68/UE.

Options

- Connection flanges ANSI Class 150 / 300
- Option for manufacturing in other materials for special working conditions (high temperatures, fluids, etc)
- Other connections
- Gasket with regulating cone
- Soft gaskets
- Insulating jackets to prevent radiation losses caused mainly by inclement weather conditions

Pressure / Temperature

PN		PN 16 Nodular iron				PN 40 Cast steel				PN 40 Stainless steel			
Operating conditions	Max. pressure bar	16	16	12,8	9,6	40	40	33,3	23,8	40	40	33,7	27,4
	Max temp. °C	+50	+120	+200	+300	+50	+50	+200	+400	+50	+50	+200	+400
	Min temp. °C			-10				-20				-40	

Ytterligare begränsningar:

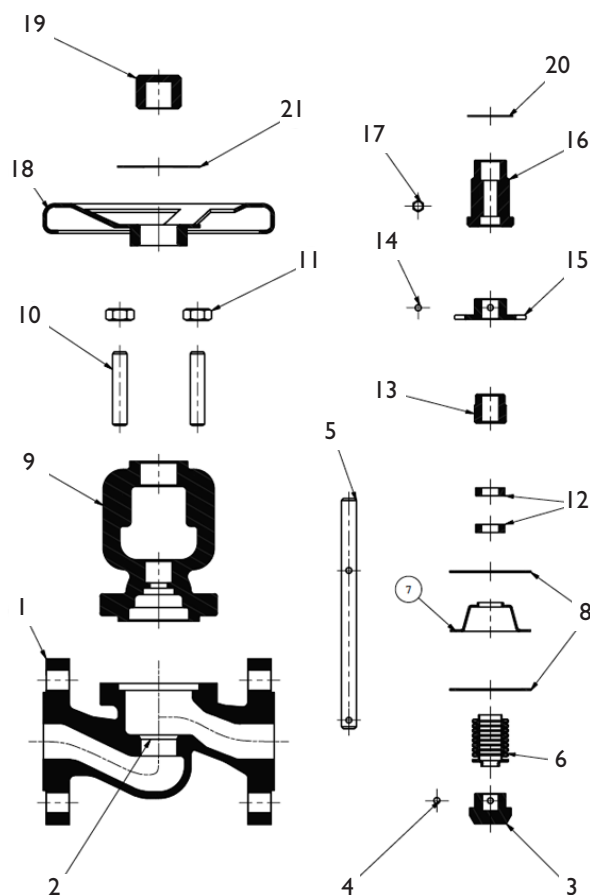
PN 40 DN 125 PMS 33 bar

PN 40 DN 150-300 PMS 21 bar

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Part / Material specification

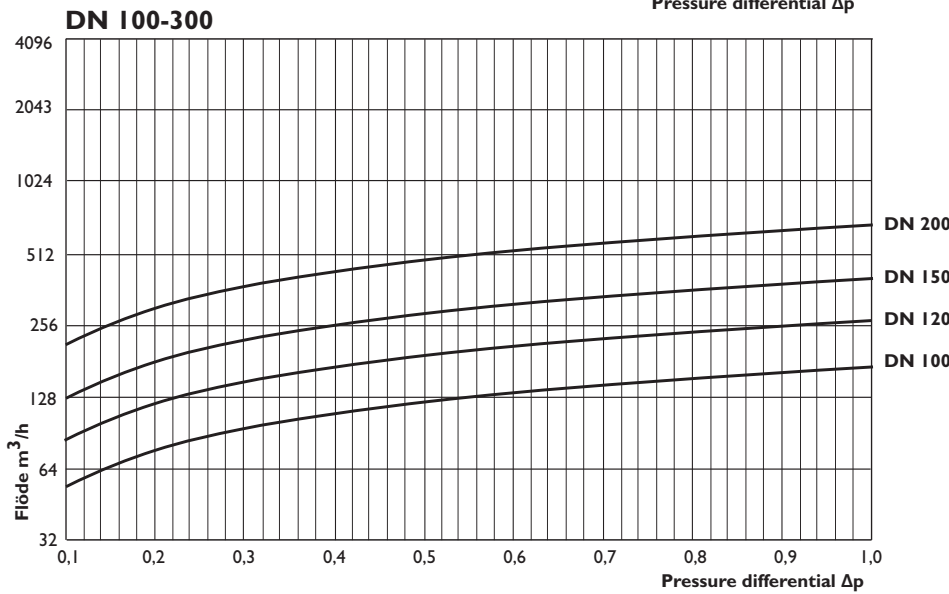
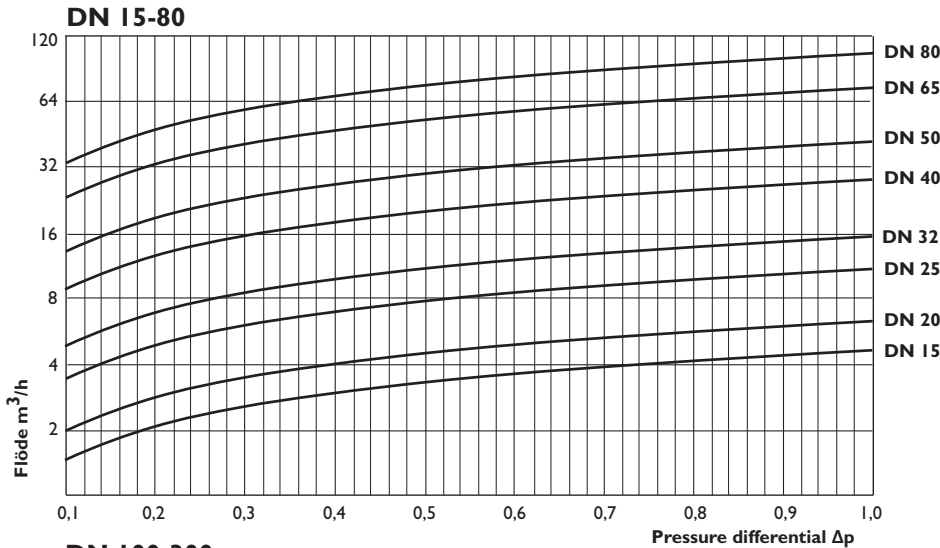


No	Part	Nodular iron	Cast steel	Stainless steel
1	Body	Nodular iron EN-5.3103	Cast steel EN-I.0619	Stainless steel EN-I.4408
2	Seat	Stainless steel EN-I.4021	Stainless steel EN-I.4021	Stainless steel EN-I.4408)
3	Plug	Stainless steel EN-I.4021	Stainless steel EN-I.4021	Stainless steel EN-I.4401 + Stellite n°6
4	Pin	Stainless steel EN-I.4301	Stainless steel EN-I.4301	Stainless steel EN-I.4401
5	Rod	Stainless steel EN-I.4021	Stainless steel EN-I.4021	Stainless steel EN-I.4401
6	Bellow	Stainless steel EN-I.4301	Stainless steel EN-I.4301	Stainless steel EN-I.4004
7	Bellow disc	Stainless steel EN-I.4301	Stainless steel EN-I.4301	Stainless steel EN-I.4401
8	Gasket body	Graphite + Stainless steel EN-I.4301	Graphite + Stainless steel EN-I.4301	Graphite + Stainless steel EN-I.4301
9	Guide support	Nodular iron EN-5.3103	Cast steel EN-I.0619	Stainless steel EN-I.4408
10	Bolt / screw	Cast steel EN-I.1191	Cast steel EN-I.1191	Stainless steel EN-I.4401
11	Nut	-	Cast steel EN-I.1141	Stainless steel EN-I.4401
12	Packing	Graphite	Graphite	Graphite
13	Stuffing box	Cast steel EN-I.1191	Cast steel EN-I.1191	Stainless steel EN-I.4305
14	Pin	Cast steel EN-I.1231	Cast steel EN-I.1231	Stainless steel EN-I.4301
15	Removable lock washer	Cast steel EN-I.0037	Cast steel EN-I.0037	Stainless steel EN-I.4301
16	Insert nut	Cast steel EN-I.1191	Cast steel EN-I.1191	Brass EN-CW617N
17	Grease fitting	Brass EN-CW617N	Brass EN-CW617N	Brass EN-CW617N
18	Handwheel	Cast steel EN-I.0517	Cast steel EN-I.0517	Cast steel EN-I.0517
19	Cap	Cast steel EN-I.1191	Cast steel EN-I.1191	Cast steel EN-I.1191
20	Shim ring	Stainless steel EN-I.4301	Stainless steel EN-I.4301	Stainless steel EN-I.4301
21	Plate	Aluminium	Aluminium	Aluminium

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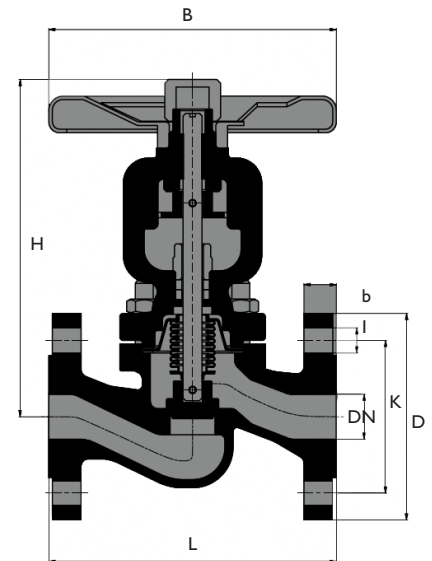
Flow diagram



Kvs-value

EN 60534-2-3
Water at 20°C

DN	Kvs m ³ /h $\Delta p = 1 \text{ bar}$
15	4,70
20	6,80
25	11,40
32	16,30
40	29,00
50	13,50
65	74,00
80	109,00
100	172,00
125	277,00
150	408,00
200	708,00



Dimensions

DN	15	20	25	32	40	50	65	80	100	125	150	200														
H	192	192	207	207	245	253	295	328	385	427	480	672														
L	130	150	160	180	200	230	290	310	350	400	480	600														
B	140	140	160	160	180	200	220	250	300	350	400	450														
PN	16	40	16	40	16	40	16	40	16	40	16	40														
D	95	95	105	105	115	115	140	140	150	150	165	165	185	185	200	200	220	235	250	270	285	300	340	375		
K	65	65	75	75	85	85	100	100	110	110	125	125	145	145	160	160	180	190	210	220	240	250	295	320		
I	14	14	14	14	14	14	18	18	18	18	18	18	18	18	18	18	20	20	22	22	22	26	26	30		
b	16	16	18	18	18	18	18	18	18	18	20	20	20	22	20	24	20	24	22	26	22	28	22	34		
Drills N°	4	4	4	4	4	4	4	8	8	8	8	12														
Weight kg	Nodular iron	3,8	4,4	5,6	7,1	9,1	11,8	20,8	27	39,1	54,6	61,9	78,7	85,1	157	164										
	Cast steel	4,2	4,8	6,2	7,8	10	13	22,8	29,7	43	60	68	86,5	93,5	172	180										
	Stainless steel	4,2	4,8	6,2	7,8	10	13	22,8	29,7	43	60	68	86,5	93,5	172	180										
Code 2005- 248	Nodular iron	5026	-	5346	-	5106	-	5146	-	5126	-	5206	-	5226	-	5306	-	5406	-	5506	-	5606	-	5806	-	
	Cast steel	-	8024	-	8344	-	8104	-	8144	-	8124	-	8204	-	8224	-	8304	-	8404	-	8504	-	8604	-	8804	-
	Stainless steel	-	8022	-	8342	-	8102	-	8142	-	8122	-	8202	-	8222	-	8302	-	8402	-	8502	-	8602	-	8802	-



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