Stop valve with bellow seals

Model 248

VYC

EN ASME/ANSI

Stop valve with bellow seals, 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.
Applications in: process industry, shipbuilding, air conditioning systems, thermal oil installations and systems, vacuum installations ... etc.
In accordance with the requirements of the pressure equipment directive 2014/68/EU.

Specifications

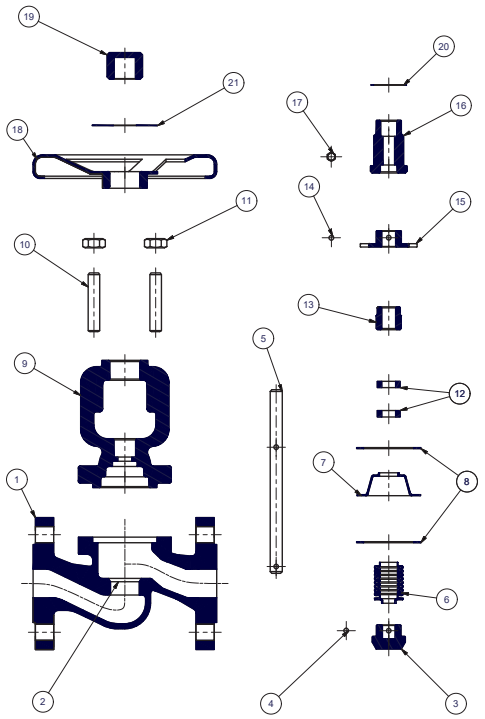
— Design and manufacture compliant with EN 13709.
— Distances between flanges compliant with EN 558 series 1 and ASME B16.10.
— Flanges compliant with EN 1092-1, EN 1092-2 and ASME B16.5.
— Designed to be environmentally friendly.
— Materials carefully selected for wear, temperature and corrosion resistance.
— Valve free from silicones and asbestos.
— Simple construction.
— Easy installation with mounting possible at any position between 270º and 90º.
— 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.
— In accordance with the safety specifications, the valve is an inseparable part of the set. When attaching the valve to any point of opening or closure, external blocking systems must be used, and the handwheel must never be dismantled.
— 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/EU.

IMPORTANT
We recommend, if necessary, the use of thermal and acoustic insulation textile jackets Model 008.
On order:
— Option for manufacturing in other materials for special working conditions (high temperatures, fluids, etc).
— Other connections.
— Gasket with regulating cone.
— Soft gaskets.

Nº PIECE	PIECE	NODULAR IRON	CAST STEEL	ACERO INOXIDABLE
1	Body	Nodular iron (EN-5.3103)	Cast steel (EN-1.0619)	Stainless steel (EN-1.4408)
2	Seat	Stainless steel (EN-1.4021)	Stainless steel (EN-1.4021)	Stainless steel (EN-1.4408)
3	Plug	Stainless steel (EN-1.4021)	Stainless steel (EN-1.4021)	Stainless steel (EN-1.4401) + Stellite nº6
4	Pin	Stainless steel (EN-1.4301)	Stainless steel (EN-1.4301)	Stainless steel (EN-1.4401)
5	Rod	Stainless steel (EN-1.4021)	Stainless steel (EN-1.4021)	Stainless steel (EN-1.4401)
6	Bellow	Stainless steel (EN-1.4301)	Stainless steel (EN-1.4301)	Stainless steel (EN-1.4404)
7	Bellow disc	Stainless steel (EN-1.4301)	Stainless steel (EN-1.4301)	Stainless steel (EN-1.4401)
8	Gasket body	Graphite + Stainless steel (EN-1.4301)	Graphite + Stainless steel (EN-1.4301)	Graphite + Stainless steel (EN-1.4401)
9	Guide support	Nodular iron (EN-5.3103)	Cast steel (EN-1.0619)	Stainless steel (EN-1.4408)
10	Bolt/Screw	Cast steel (EN-1.1191)	Cast steel (EN-1.1191)	Stainless steel (EN-1.4401)
11	Nut	-	Cast steel (EN-1.1141)	Stainless steel (EN-1.4401)
12	Packing	Graphite	Graphite	Graphite
13	Stuffing box	Cast steel (EN-1.1191)	Cast steel (EN-1.1191)	Stainless steel (EN-1.4305)
14	Pin	Cast steel (EN-1.1231)	Cast steel (EN-1.1231)	Stainless steel (EN-1.4301)
15	Removable lock washer	Cast steel (EN-1.0037)	Cast steel (EN-1.0037)	Stainless steel (EN-1.4301)
16	Insert nut	Cast steel (EN-1.1191)	Cast steel (EN-1.1191)	Bras (EN-CW617N)
17	Grease fitting	Bras (EN-CW617N)	Bras (EN-CW617N)	Bras (EN-CW617N)
18	Handwheel	Cast steel (EN-1.0517)	Cast steel (EN-1.0517)	Cast steel (EN-1.0517)
19	Cap	Cast steel (EN-1.1191)	Cast steel (EN-1.1191)	Cast steel (EN-1.1191)
20	Shim ring	Stainless steel (EN-1.4301)	Stainless steel (EN-1.4301)	Stainless steel (EN-1.4301)
21	Plate	Aluminium	Aluminium	Aluminium
	DN	15 to 300 (EN, ANSI)		
	PN	16	40	40
OPERATING CONDITIONS	PRESSURE IN bar	16,00 / 15,50 / 14,70 / 11,20	40,00 / 37,10 / 33,30 / 23,80	40,00 / 40,00 / 33,70 / 27,40
	TEMP.MAX.EN ºC	*RT / 150 / 200 / 350	*RT / 100 / 200 / 400	*RT / 100 / 200 / 400
	TEMP.MIN.EN ºC	-10	-20	-40

MODEL		248																			
DN		15				20				25				32				40			
NPS		1/2"				3/4"				1"				1 1/4"				1 1/2"			
CONNECTIONS		I - Flanges PN-16 EN 1092-2																			
		II - Flanges PN-40 EN 1092-1																			
		III - Flanges Class 150 lbs ASME / ANSI B16.5																			
		IV - Flanges Class 300 lbs ASME / ANSI B16.5																			
H (PN16, PN40)		192				192				207				207				245			
H (class 150 lbs and 300 lbs)		240				240				256				267				325			
L EN-558 (PN-16, PN40)		130				150				160				180				200			
L ASME B16.10 (class 150 lbs)		108				117				127				140				165			
L ASME B16.10 (class 300 lbs)		152				178				203				216				229			
B		140				140				160				160				180			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
D		95	95	90	95	105	105	100	115	115	115	110	125	140	140	115	135	150	150	125	155
K		65,00	65,00	60,30	66,70	75,00	75,00	69,90	82,60	85,00	85,00	79,40	88,90	100,00	100,00	88,90	98,40	110,00	110,00	98,40	114,30
I		14,00	14,00	15,90	15,90	14,00	14,00	15,90	19,10	14,00	14,00	15,90	19,10	19,00	18,00	15,90	19,10	19,00	18,00	15,90	22,20
b		14,00	16,00	11,20	14,30	16,00	18,00	12,70	15,90	16,00	18,00	14,30	17,50	18,00	18,00	15,90	19,10	19,00	18,00	17,50	20,70
DRILLS Nº		4				4				4				4				4			
WEIGHT IN kgs.	NODULAR IRON	3,80		-		4,40		-		5,60		-		7,10		-		9,10		-	
	CAST STEEL	4,20		4,00	5,00	4,80		6,00	7,00	6,20		8,00	10,00	7,80		12,00	14,00	10,00		16,00	19,00
	STAINLESS STEEL																				
CODE 2005-248.	NODULAR IRON	5026	-	-	-	5346	-	-	-	5106	-	-	-	5146	-	-	-	5126	-	-	-
	CAST STEEL	-	8024	80241	80242	-	8344	83441	83442	-	8104	81041	81042	-	8144	81441	81442	-	8124	81241	81242
	STAINLESS STEEL	-	8022	80221	80222	-	8342	83421	83422	-	8102	81021	81022	-	8142	81421	81422	-	8122	81221	81222

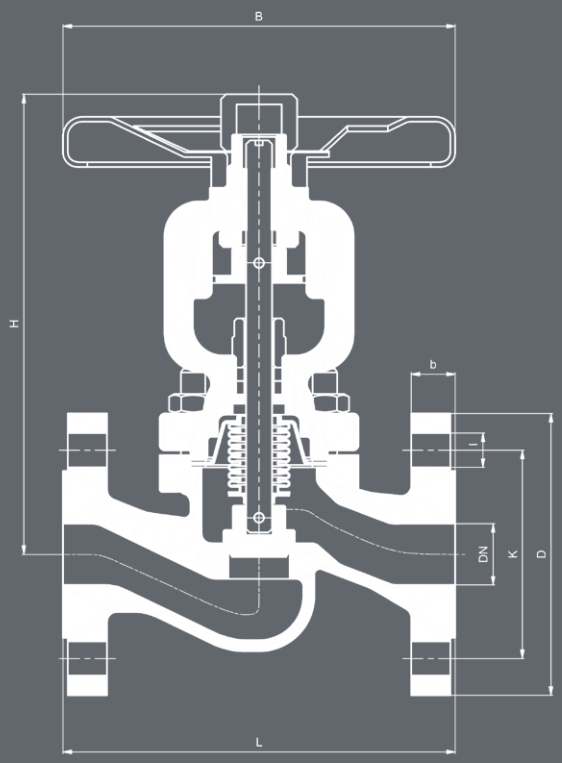
* Casting
** Forging



*Room Temperature (-10 ºC to 50 ºC).

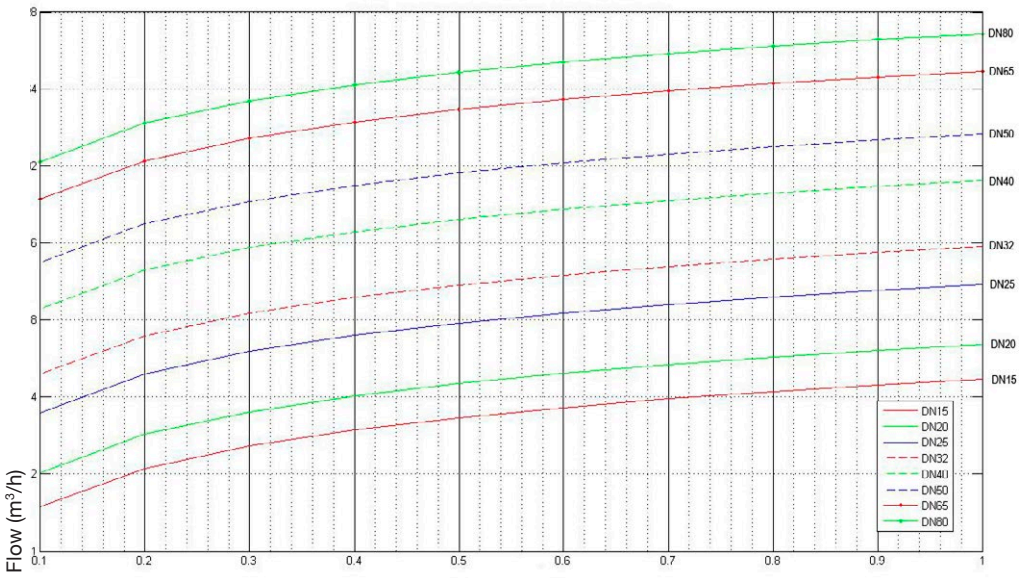
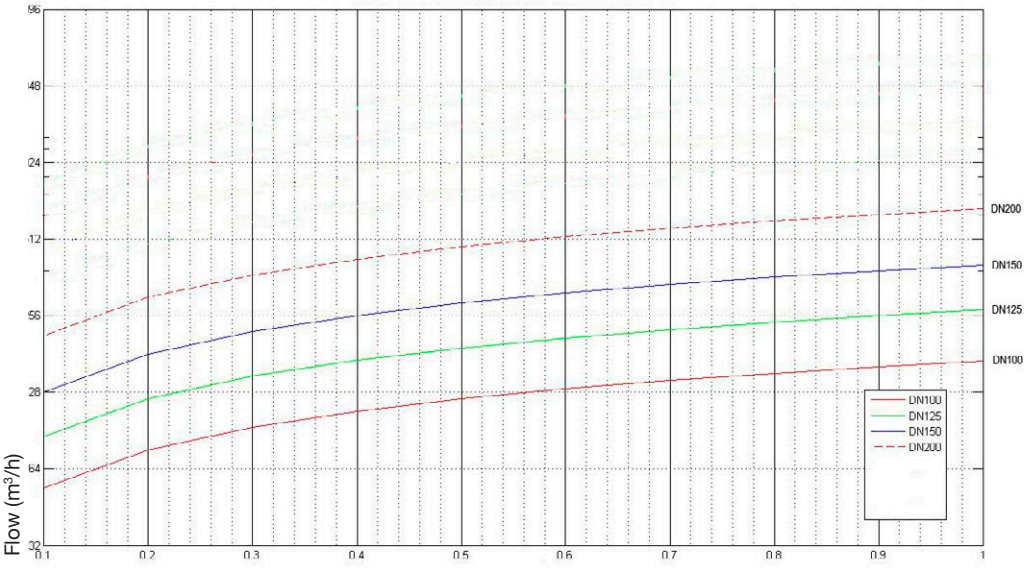
ADDITIONAL RESTRICTIONS:
PN-40 DN-125 PMS-33 bar
PN-40 DN-150 to 300 PMS-21 bar

FLOW COEFFICIENT EN 60534-2-3 Water at 20ºC	
DN	Kvs m3/h Δp= 1 bar
15	4,70
20	6,80
25	11,40
32	16,30
40	29,00
50	43,50
65	74,00
80	109,00
100	172,00
125	277,00
150	408,00
200	708,00



248																											
50				65				80				100				125				150				200			
2"				2 1/2"				3"				4"				5"				6"				8"			
I - Flanges PN-16 EN 1092-2																											
II - Flanges PN-40 EN 1092-1																											
III - Flanges Class 150 lbs ASME / ANSI B16.5																											
IV - Flanges Class 300 lbs ASME / ANSI B16.5																											
253				295				328				385				427				480				672			
*315/**348				330				380				405				455				513				683			
230				290				310				350				400				480				600			
203				216				241				292				356				406				495			
267				292				318				356				400				444				559			
200				220				250				300				350				400				450			
I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
165	165	150	165	185	185	180	190	200	200	190	210	220	235	230	255	250	270	255	280	285	300	280	320	340	375	345	380
125,00	125,00	120,70	127,00	145,00	145,00	139,70	149,20	160,00	160,00	152,40	168,30	180,00	190,00	190,50	200,00	210,00	220,00	215,90	235,00	240,00	250,00	241,30	269,90	295,00	320,00	298,50	330,20
19,00	18,00	19,10	19,10	19,00	18,00	19,10	22,20	19,00	18,00	19,10	22,20	19,00	22,00	19,10	22,20	19,00	26,00	22,20	22,20	23,00	26,00	22,20	22,20	23,00	30,00	22,20	26,00
19,00	20,00	19,10	22,30	19,00	22,00	22,30	25,40	19,00	24,00	23,90	28,60	19,00	24,00	23,90	31,80	19,00	26,00	23,90	35,00	19,00	28,00	25,40	36,60	20,00	34,00	28,60	41,70
4			8	4	8	4	8	8		4	8	8				8				8			12	12		8	12
11,80		-		20,80		-		27,00		-		39,10		-		54,60	61,90	-		78,70	85,10	-		157,00	164,30	-	
13,00		21,00	26,00	22,80		29,00	38,00	29,70		35,00	51,00	43,00		58,00	76,00	60,00	68,00	78,00	125,00	86,50	93,50	104,00	173,00	172,50	180,50	162,00	297,00
5206	-	-	-	5226	-	-	-	5306	-	-	-	5406	-	-	-	5506	-	-	-	5606	-	-	-	5806	-	-	-
-	8204	82041	82042	-	8224	82241	82242	-	8304	83041	83042	-	8404	84041	84042	-	8504	85041	85042	-	8604	86041	86042	-	8804	88041	88042
-	8202	82021	82022	-	8222	82221	82222	-	8302	83021	83022	-	8402	84021	84022	-	8502	85021	85022	-	8602	86021	86022	-	8802	88021	88022

Flow diagram



Flow diagram