PISTON VALVE
FIG. YVN / YVNB / YVMN

GENERAL FEATURES:

- Piston valve in cast iron or cast steel (other materials available on request)
- Connection: flanged PN 16 according to EN 1092-2 (cast iron)
  flanged PN 40 according to EN 1092-1 (cast steel)
  BSP threaded according to DIN EN ISO 228-1 (all materials)
- Temperature range: -10°C ~ 300 °C (cast iron)
  -10°C ~ 400°C (cast steel)

FIGURE

YVN3: Piston valve in cast iron, flanged PN 16, max. DN50
YVNB2: Piston valve in cast iron, flanged PN 16, DN65 ~ DN200
YVMN3: Piston valve in cast iron, BSP threaded, PN 16, max. 2”
YVN6: Piston valve in nodular cast iron, flanged PN 25, max. DN50
YVNB6: Piston valve in nodular cast iron, flanged PN 25, DN65 ~ DN200
YVN8: Piston valve in cast steel, flanged PN 40, max. DN50
YVNB8: Piston valve in cast steel, flanged PN 40, DN65 ~ DN200
YVMN8: Piston valve in cast steel, BSP threaded, PN 63 (max 1”), PN 40 (from 1 1/4”), max. 2”
YVN9: Piston valve in CF8M, flanged PN 40, max. DN50
YVNB9: Piston valve in CF8M, flanged PN 40, DN65 ~ DN200
YVMN9: Piston valve in CF8M, BSP threaded, max. 2”
YVN10: Piston valve in CF8, flanged PN 40, max. DN50
YVNB10: Piston valve in CF8, flanged PN 40, DN65 ~ DN200
YVSN8: Piston valve in cast steel, socket weld, PN 63 (max 1”), PN 40 (from 1 1/4”), max. 2”



YVN



YVNB



YVMN

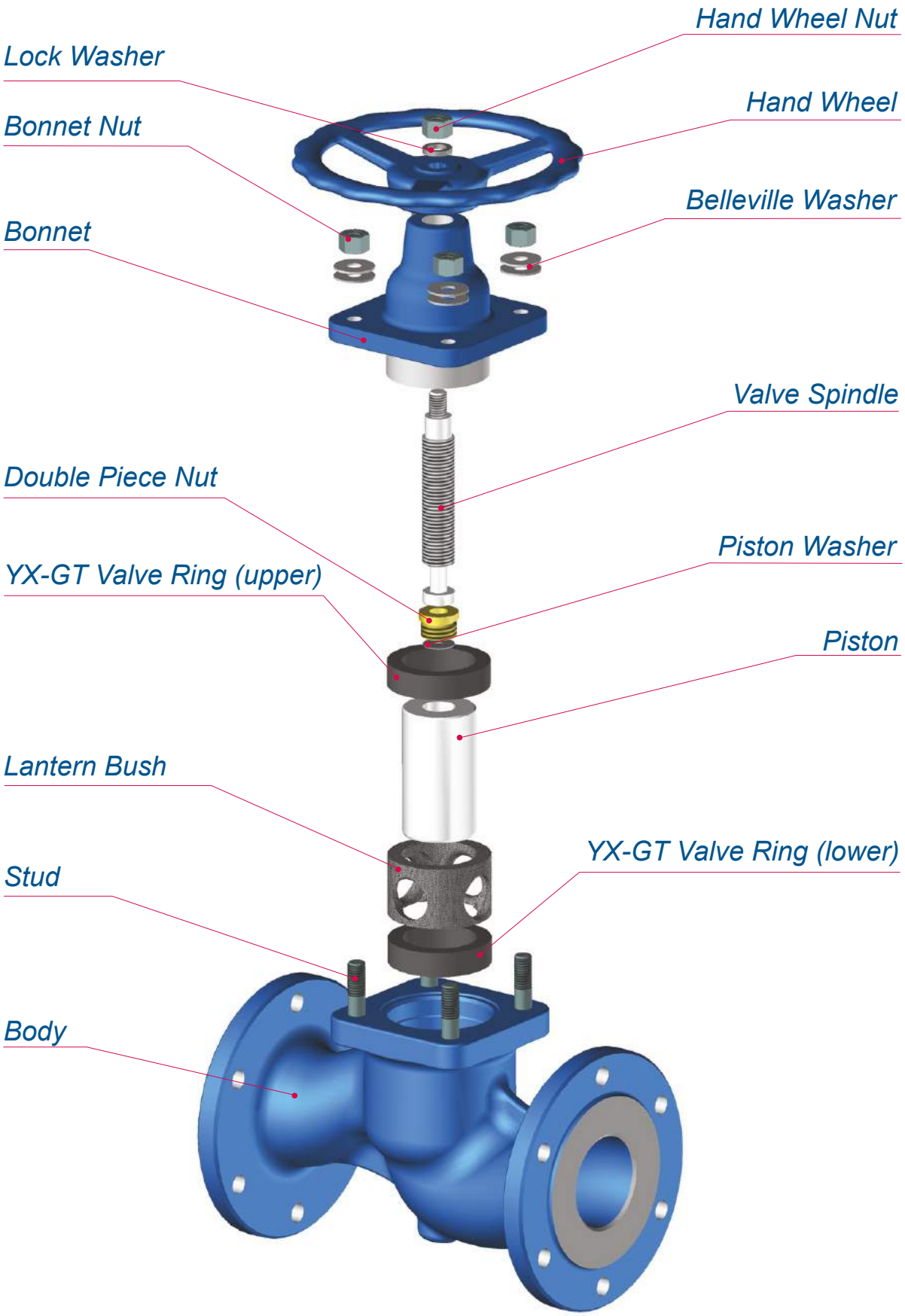


YVSN

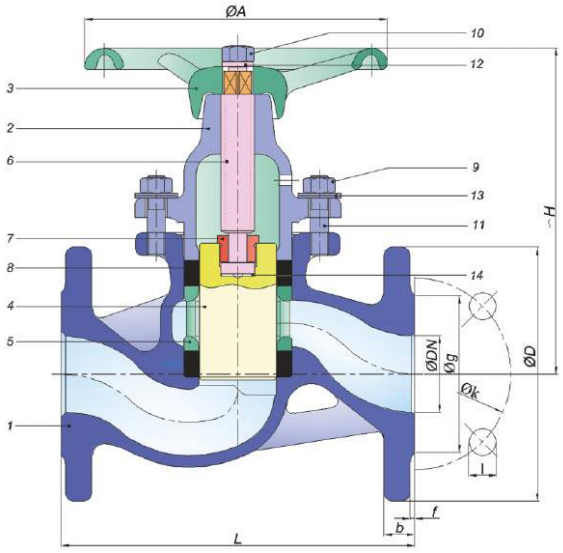
CE

DESIGN STANDARDS	
Flanges	EN 1092-1/ EN 1092-1
Threaded	DIN EN ISO 228-1
Face to face	EN 558-1 Series 1 (flanges) DIN EN 3202-4/M9 (threaded, not 1/4”)
TESTS AND CERTIFICATES	
Quality Assurance	ISO 9001, CE-PED
Fire safe	API 6FA:2008 en ISO 10497:2010 (only cast steel)

Subject to changes



Subject to changes



Fluid types

All kinds of fluids, such as: water, hot water, high temperature hot water, steam, thermal oil, LPG, fuel oil, pressurized air, etc.

Material Type	Cast Iron	Ductile Iron	Cast Steel	Stainless Steel
Size	DN15-50	DN15-50	DN15-50	DN15-50
Pressure Class	PN16	PN25	PN40	PN40
Dimensions	DIN EN 558/1.serie	DIN EN 558/1.serie	DIN EN 558/1.serie	DIN EN 558/1.serie
Assembly	Flanged DIN EN 1092-2	Flanged DIN EN 1092-2	Flanged DIN EN 1092-1	Flanged DIN EN 1092-1
Temperature	-10°C +300 °C	-10°C +350 °C	-10°C * +400°C	-10°C * +400°C
Order Code	YVN3	YVN6	YVN8	On request

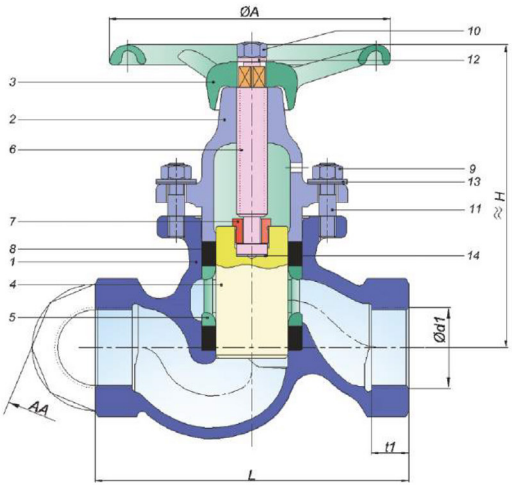
* For temperatures below -10°C, the bolting needs to be in stainless steel

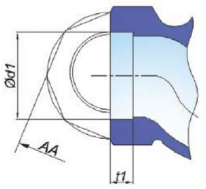
No.	Part Name	Cast Iron	Ductile Iron	Cast Steel	Stainless Steel	Stainless Steel
1	Body	GJL 250	0.7040	1.0619	1.4308	1.4408
2	Upper Bonnet	GJL 250 **	0.7040 **	1.0619 **	1.4308	1.4408
3	Hand Wheel	GJL 200	GJL 200	GJL 200	GJL 200	GJL 200
4	Piston	1.4021	1.4021	1.4021	1.4301	1.4401
5	Lantern Bush	GJL 200 + Phosphate	GJL 200 + Phosphate	GJL 200 + Phosphate	1.4308***	1.4408***
6	Valve Spindle	1.4021/St-42	1.4021/St-42	1.4021/St-42	1.4301	1.4401
7	Double Piece Nut	Ms-58	Ms-58	Ms-58	1.4301	1.4401
8	Valve Ring	Graphite	Graphite	Graphite	Graphite	Graphite
9	Nut	8.8 (galvanized)	8.8 (galvanized)	8.8 (galvanized)	A2-70	A2-70
10	Nut	8.8 (galvanized)	8.8 (galvanized)	8.8 (galvanized)	A2-70	A2-70
11	Stud	8.8 (galvanized)	8.8 (galvanized)	8.8 (galvanized)	A2-70	A2-70
12	Lock Washer	8.8 (galvanized)	8.8 (galvanized)	8.8 (galvanized)	A2-70	A2-70
13	Belleville Washer	50CrV4	50CrV4	50CrV4	A2-70	A2-70
14	Piston Washer	Ms-58	Ms-58	Ms-58	1.4301	1.4301

** 1.4401 for DN15 and DN20
*** Ck22 for DN15 and DN20

DN		Dimensions			Assembly												
mm	inch	L	H	A	D	g	Hole Nr.	k	PN16			PN25			PN40		
									b	f	l	b	f	l	b	f	l
15	1/2”	130	105	100	95	45	4	65	14	2	14	16	2	14	16	2	14
20	3/4”	150	120	120	105	58	4	75	16	2	14	18	2	14	18	2	14
25	1”	160	138	140	115	68	4	85	16	2	14	18	3	14	18	2	14
32	1 1/4”	180	154	160	140	78	4	100	18	2	19	18	3	19	18	2	18
40	1 1/2”	200	186	180	150	88	4	110	18	3	19	18	3	19	18	2	18
50	2”	230	211	200	165	102	4	125	20	3	19	20	3	19	20	2	18

Subject to changes





Fluid types

All kinds of fluids, such as: water, hot water, high temperature hot water, steam, thermal oil, LPG, fuel oil, pressurized air, etc.

Material Type	Cast Iron	Cast Steel	Stainless Steel
Size	DN1/4"-2"	DN1/4"-2"	DN1/4"-2"
Pressure Class	PN16	PN40 DN 11/4"-2" / PN63 DN 1/4"-1"	PN40 DN 11/4"-2" / PN63 DN 1/4"-1"
Dimensions	DIN EN 3202-4/M9 (except DN 1/4")	DIN EN 3202-4/M9 (except DN 1/4")	DIN EN 3202-4/M9 (except DN 1/4")
Assembly	Threaded DIN EN ISO 228-1	Threaded DIN EN ISO 228-1	Threaded DIN EN ISO 228-1
Temperature	-10°C +300 °C	-10°C ** +400 °C	-10°C ** +400 °C
Order Code	YVMN3	YVMN8	On request

* For temperatures below -10°C, the bolting needs to be in stainless steel
** NPT threaded version according to ANSI 2.1 1950 available on demand

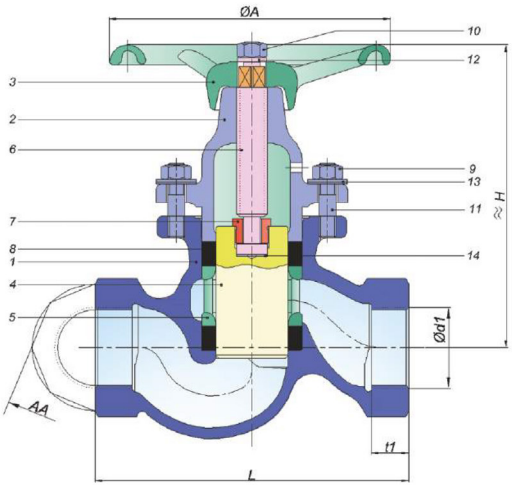
No.	Description	Fonte	Acier coulé	Acier inoxydable	Acier inoxydable
1	Corps	GJL 250	1.0619	1.4308	1.4408
2	Couvercle	GJL 250 ***	1.0619 ***	1.4308	1.4408
3	Volant	GJL 200	GJL 200	GJL 200	GJL 200
4	Piston	1.4021	1.4021	1.4301	1.4401
5	Manchon lanterne	GJL 200 + Phosphate	GJL 200 + Phosphate	1.4308****	1.4408****
6	Tige	1.4021/St-42	1.4021/St-42	1.4301	1.4401
7	Ecrou deux pièces	Ms-58	Ms-58	1.4301	1.4401
8	Bague	Graphite	Graphite	Graphite	Graphite
9	Ecrou	8.8 (galvanisé)	8.8 (galvanisé)	A2-70	A2-70
10	Ecrou	8.8 (galvanisé)	8.8 (galvanisé)	A2-70	A2-70
11	Tirant	8.8 (galvanisé)	8.8 (galvanisé)	A2-70	A2-70
12	Rondelle d'arrêt	8.8 (galvanisé)	8.8 (galvanisé)	A2-70	A2-70
13	Rondelle Belleville	50CrV4	50CrV4	A2-70	A2-70
14	Rondelle piston	Ms-58	Ms-58	1.4301	1.4301

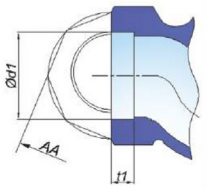
*** 1.4401 for DN15 and DN20
**** Ck22 for DN15 and DN20

DN		Dimensions			Assembly		
mm	inch	L	H	A	d1	t1	AA
6	1/4"	85	105	100	R 1/4"	10.5	32
10	3/8"	85	105	100	R 3/8"	12.5	32
15	1/2"	100	105	100	R 1/2"	15.5	36
20	3/4"	120	120	120	R 3/4"	16	41
25	1"	135	138	140	R 1"	19	50
32	1 1/4"	160	154	160	R 1 1/4"	21	65
40	1 1/2"	185	186	180	R 1 1/2"	21	75
50	2"	220	211	200	R 2"	26	90

Subject to changes

PISTON VALVE
FIG. YVSN





Fluid types

All kinds of fluids, such as: water, hot water, high temperature hot water, steam, thermal oil, LPG, fuel oil, pressurized air, etc.

Material Type	Cast Steel	Stainless Steel
Size	DN1/4"-2"	DN1/4"-2"
Pressure Class	PN40 DN 11/4"-2" / PN63 DN 1/4"-1"	PN40 DN 11/4"-2" / PN63 DN 1/4"-1"
Dimensions	DIN EN 3202-4/M9 (Except DN 1/4")	DIN EN 3202-4/M9 (Except DN 1/4")
Assembly	Socketed according to DIN EN 12760*	Socketed according to DIN EN 12760*
Temperature	-10°C ** +400 °C	-10°C ** +400 °C
Order Code	YVSN8	On request

* For temperatures below -10°C, the bolting needs to be in stainless steel

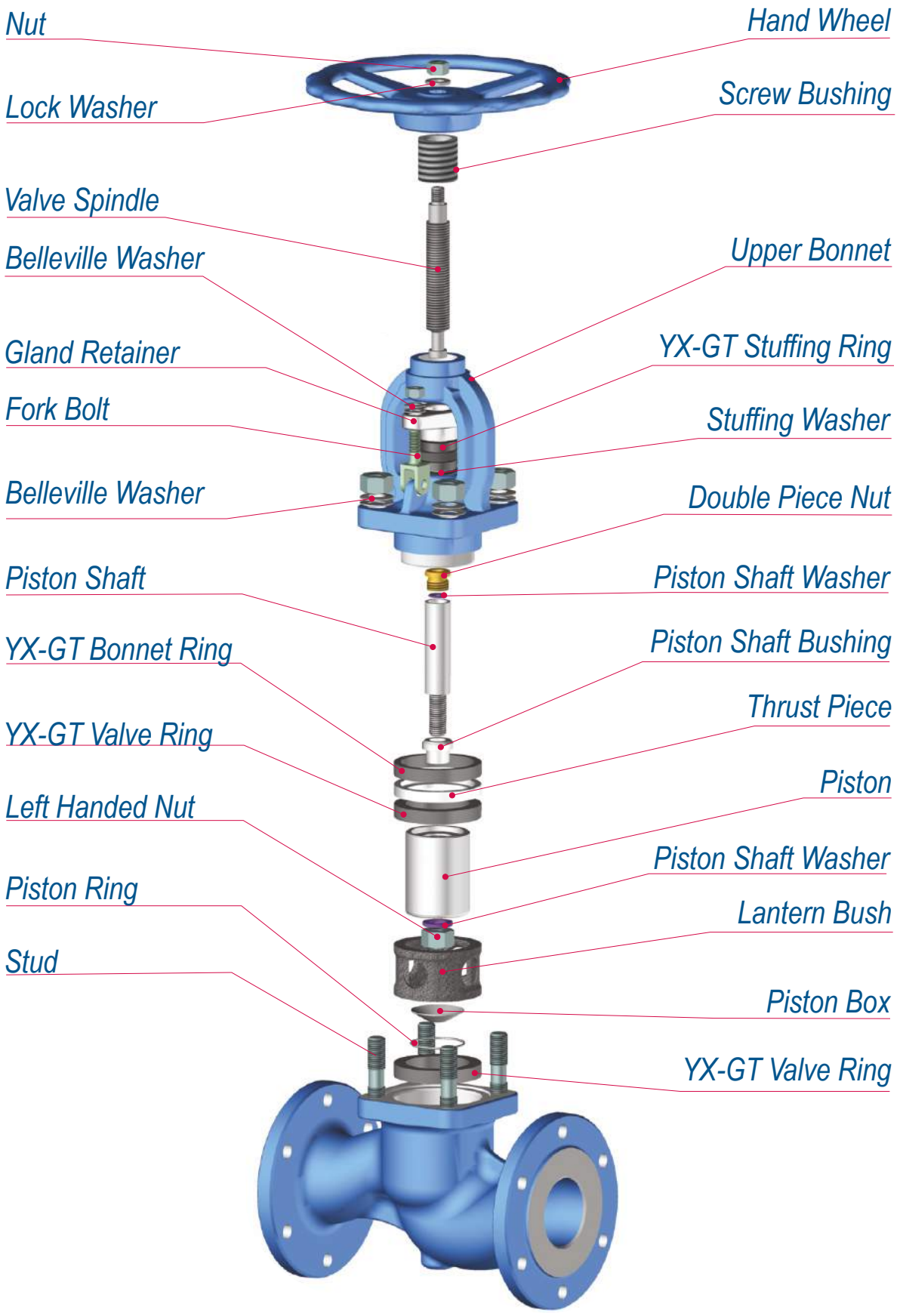
P.No	Part Name	Cast Steel	Stainless Steel	Stainless Steel
1	Body	1.0619	1.4308	1.4408
2	Upper Bonnet	1.0619 ***	1.4308	1.4408
3	Hand Wheel	GJL 200	GJL 200	GJL 200
4	Piston	1.4021	1.4301	1.4401
5	Lantern Bush	GJL 200 + Phosphate	1.4308****	1.4408****
6	Valve Spindle	1.4021/St-42	1.4301	1.4401
7	Double Piece Nut	Ms-58	1.4301	1.4401
8	Valve Ring	Graphite	Graphite	Graphite
9	Nut	8.8 (galvanized)	A2-70	A2-70
10	Nut	8.8 (galvanized)	A2-70	A2-70
11	Stud	8.8 (galvanized)	A2-70	A2-70
12	Lock Washer	8.8 (galvanized)	A2-70	A2-70
13	Belleville Washer	50CrV4	A2-70	A2-70
14	Piston Washer	Ms-58	1.4301	1.4301

*** 1.4401 for DN15 and DN20
**** Ck22 for DN15 and DN20

DN	Dimensions			Assembly	
	L	H	A	d1	t1
6	85	105	100	14.2	10
10	85	105	100	17.6	10
15	100	105	100	22	10
20	120	120	120	27.5	13
25	135	138	140	34.5	13
32	160	154	160	43	13
40	185	186	180	49	13
50	220	211	200	61.5	16

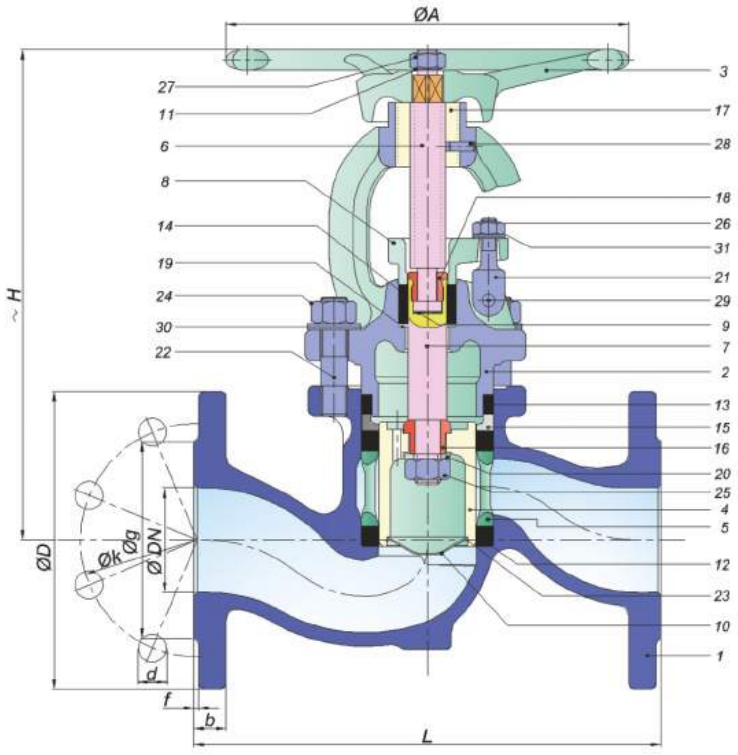
Subject to changes

BALANCED PISTON VALVE
FIG. YVNB



Subject to changes

BALANCED PISTON VALVE
FIG. YVNB



Material Type	Cast Iron	Ductile Iron	Cast Steel	Stainless Steel
Size	DN65-200	DN65-200	DN65-200	DN65-200
Pressure Class	PN16	PN25	PN40	PN40
Dimensions	DIN EN 558/1.serie	DIN EN 558/1.serie	DIN EN 558/1.serie	DIN EN 558/1.serie
Assembly	Flanged DIN EN 1092-2	Flanged DIN EN 1092-2	Flanged DIN EN 1092-1	Flanged DIN EN 1092-1
Temperature	-10°C +300 °C	-10°C +350 °C	-10°C* +400°C	-10°C* +400°C
Order Code	YVNB2	YVNB6	YVNB8	On request

* For temperatures below -10°C, the bolting needs to be in stainless steel

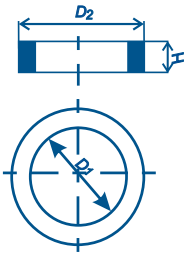
DN		Dimensions			Assembly																			
					PN16							PN25							PN40						
mm	inch	L	H	A	D	b	g	Hole Nr.	d	k	f	D	b	g	Hole Nr.	d	k	f	D	b	g	Hole Nr.	d	k	f
65	2 1/2"	290	306	250	185	20	122	4	19	145	3	185	20	118	8	19	145	3	185	22	122	8	18	145	2
80	3"	310	327	250	200	22	138	8	19	160	3	200	22	132	8	19	160	3	200	24	138	8	18	160	2
100	4"	350	374	280	220	24	158	8	19	180	3	235	24	156	8	23	190	3	235	24	162	8	22	190	2
125	5"	400	447	320	250	26	188	8	19	210	3	270	26	184	8	28	220	3	270	26	188	8	26	220	2
150	6"	480	477	360	285	26	212	8	23	240	3	300	26	211	8	28	250	3	300	28	218	8	26	250	2
200	8"	600	561	400	340	30	268	12	23	295	3	360	30	274	12	28	310	3	375	34	285	12	30	320	2

Subject to changes

Materials

No.	Part Name	Cast Iron	Ductile Iron	Cast Steel	Stainless steel	Stainless steel
1	Body	GJL 250	0.7040	1.0619	1.4308	1.4408
2	Upper Bonnet	GJL 250	0.7040	1.0619	1.4308	1.4408
3	Hand Wheel	GJL 250	GJL 250	GJL 250	GJL 250	GJL 250
4	Piston	1.4086	1.4086	1.4086	1.4308	1.4408
5	Lantern Bush	GJL200 + Phosphate	GJL200 + Phosphate	GJL200 + Phosphate	1.4308	1.4408
6	Valve Spindle	St-42	St-42	St-42	1.4301	1.4401
7	Piston Shaft	1.4021	1.4021	1.4021	1.4301	1.4401
8	Gland Retainer	0.7040	0.7040	0.7040	1.4308	1.4408
9	Piston Shaft Washer	1.4301	1.4301	1.4301	1.4301	1.4301
10	Nose cone	1.4301	1.4301	1.4301	1.4301	1.4401
11	Lock Washer	55Si7	55Si7	55Si7	A2-70	A2-70
12	Valve Ring	Graphite	Graphite	Graphite	Graphite	Graphite
13	Bonnet Ring	Graphite	Graphite	Graphite	Graphite	Graphite
14	Stuffing Ring	Graphite	Graphite	Graphite	Graphite	Graphite
15	Thrust Piece	GJL200 + Phosphate	GJL200 + Phosphate	GJL200 + Phosphate	1.4308	1.4408
16	Piston Shaft Bushing	1.4021	1.4021	1.4021	1.4301	1.4401
17	Screw Bushing	Ms-58	Ms-58	Ms-58	Ms-58	Ms-58
18	Double Piece Nut	Ms-58	Ms-58	Ms-58	1.4301	1.4301
19	Stuffing Washer	St-37+Gal.	St-37+Gal.	St-37+Gal.	1.4301	1.4401
20	Piston Washer	Ms-58	Ms-58	Ms-58	1.4301	1.4401
21	Fork Bolt	St-42	St-42	St-42	1.4301	1.4401
22	Stud	8.8+Gal.	8.8+Gal.	8.8+Gal.	A2-70	A2-70
23	Piston Ring	1.4301	1.4301	1.4301	1.4301	1.4301
24	Nut	8.8+Gal.	8.8+Gal.	8.8+Gal.	A2-70	A2-70
25	Left Hand Nut	A2-70	A2-70	A2-70	A2-70	A2-70
26	Nut M10	8.8+Gal.	8.8+Gal.	8.8+Gal.	A2-70	A2-70
27	Nut	8.8+Gal.	8.8+Gal.	8.8+Gal.	A2-70	A2-70
28	Pin 6x15	St-42+Gal.	St-42+Gal.	St-42+Gal.	A2-70	A2-70
29	Slotted pin 8x22	8.8	8.8	8.8	1.4301	1.4301
30	Belleville Washer	50CrV4	50CrV4	50CrV4	A2-70	A2-70
31	Belleville Washer (20/10.2x11)	50CrV4	50CrV4	50CrV4	A2-70	A2-70

Subject to changes



Sealing set YAKSETSEAL

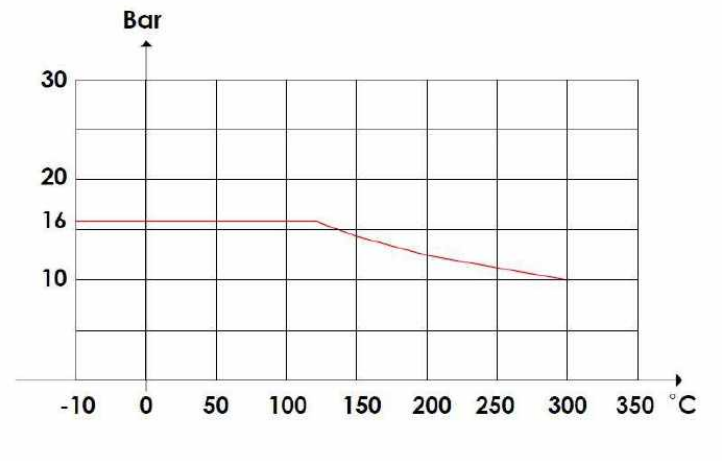
YVN / YVMN					
DN	**Item No.**	**Used Areas**	**D2 (Outer Diameter)**	**D1 (Inner Diameter)**	**H (Height)**
DN15 / 1/2”	8	Sealing Ring (2 pcs.)	23.5	15	8
DN20 / 3/4”	8	Sealing Ring (2 pcs.)	30	20	9.3
DN25 / 1”	8	Sealing Ring (2 pcs.)	38	25	10.6
DN32 / 1/4”	8	Sealing Ring (2 pcs.)	45	30	14.6
DN40 / 1 1/2”	8	Sealing Ring (2 pcs.)	58	40	14,6
DN50 / 2”	8	Sealing Ring (2 pcs.)	70	50	16
YVNB					
DN	**Item No.**	**Used Areas**	**D2 (Outer Diameter)**	**D1 (Inner Diameter)**	**H (Height)**
DN65	12	Bonnet Ring (1 pc.)	82	69	10
	13	Sealing Ring (2 pcs.)	82	60	13,3
	14	Stuffing Box Ring (3 pcs.)	36	24	8
DN80	12	Bonnet Ring (1 pc.)	94	80	10
	13	Sealing Ring (2 pcs.)	94	70	14.6
	14	Stuffing Box Ring (3 pcs.)	36	24	8
DN100	12	Bonnet Ring (1 pc.)	112	100	11
	13	Sealing Ring (2 pcs.)	112	90	14.6
	14	Stuffing Box Ring (3 pcs.)	46	30	10
DN125	12	Bonnet Ring (1 pc.)	135	121	13
	13	Sealing Ring (2 pcs.)	135	110	16
	14	Stuffing Box Ring (3 pcs.)	46	30	10
DN150	12	Bonnet Ring (1 pc.)	155	141	13
	13	Sealing Ring (2 pcs.)	155	130	17,3
	14	Stuffing Box Ring (3 pcs.)	46	30	10
DN200	12	Bonnet Ring (1 pc.)	200	184	15
	13	Sealing Ring (2 pcs.)	200	170	18.6
	14	Stuffing Box Ring (3 pcs.)	46	30	10

Piston & stem set YAKSETPISTON

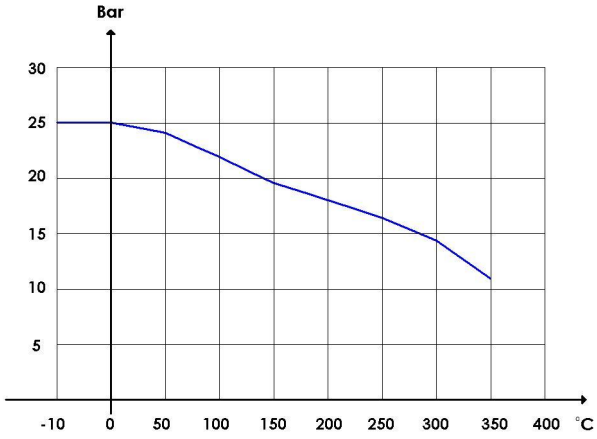
YVN / YVMN										
Part name										
	Piston	**Spindle**	**Piston Shaft**	**Piston Shaft Washer**	**Nose cone**	**Piston Shaft Bushing**	**Double Piece Nut**	**Piston Washer**	**Piston Ring**	**Left Hand Nut**
Item No.	4	6	-	-	-	-	7	14	-	-
Quantity	1	1	-	-	-	-	1	1	-	-
YVNB										
Item No.	4	6	7	9	10	16	18	20	23	25
Quantity	1	1	1	1	1	1	1	1	1	1

Subject to changes

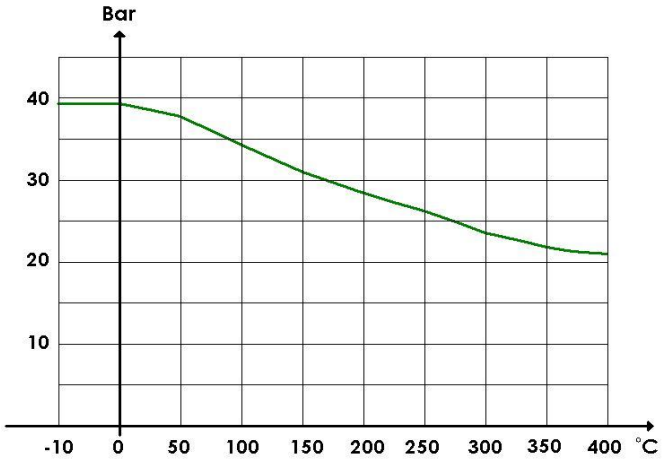
P/T Type YVN3 / YVNB2 PN16 (GJL-250)



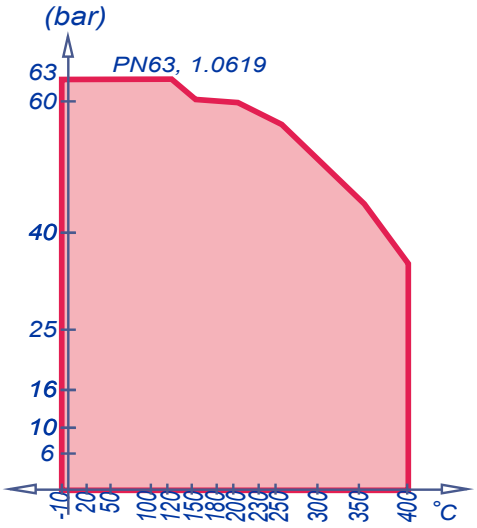
P/T Type YVN6 / YVNB6 PN25 (0.7040)



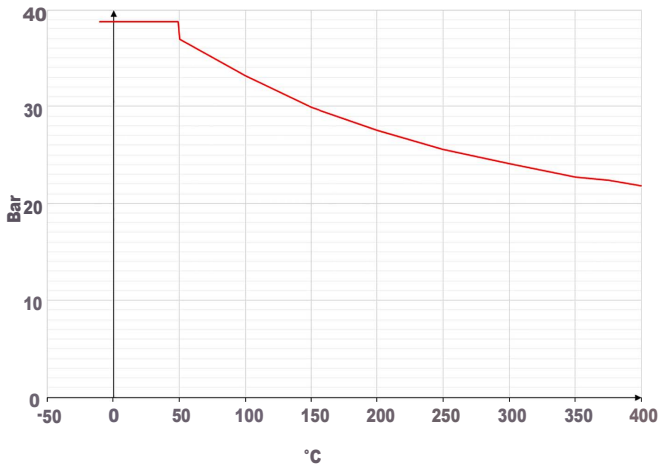
P/T Type YVN8 / YVNB8 / YVMN8/YVSN8 (1.1/4" ~ 2") PN40 (1.0619)



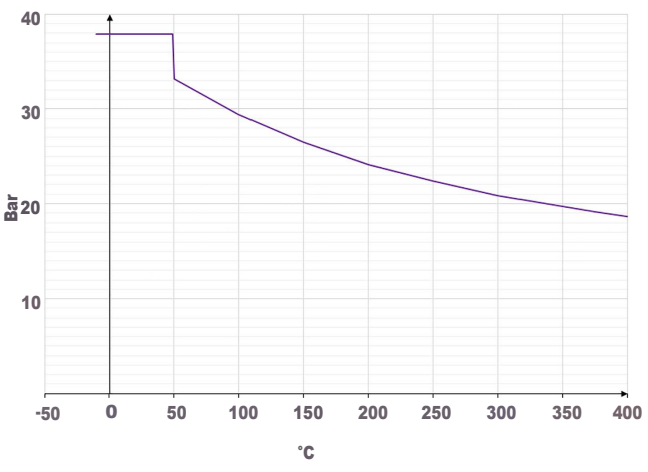
P/T Type YVMN8/YVSN8 (1/2" ~ 1") PN63 (1.0619)



P/T Type YVN9 / YVNB9 PN40 (CF8M / 1.4408)

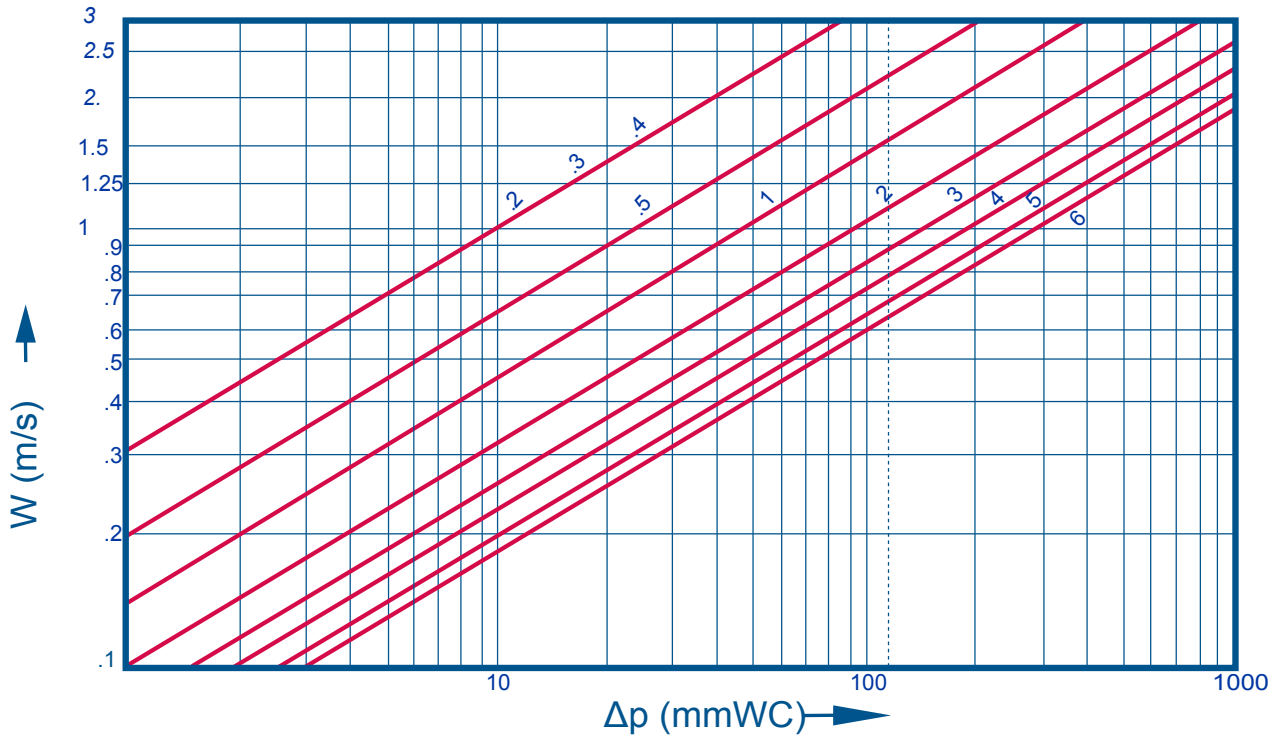


P/T Type YVN10 PN40 (CF8 / 1.4308)



Subject to changes

Pressure drop



Valve body material and color

Body	Bonnet	Colour of body
cast iron	cast iron	Grey
ductile iron	ductile iron	Green
cast steel	cast steel	Blue
stainless steel	stainless steel	Polished, pickled

Weights

Weights (Kg)							
DN	Cast iron		Ductile iron	Cast steel		Stainless steel	
	Flanged	Threaded	Flanged	Flanged	Threaded	Flanged	Threaded
10	-	1,69	-	-	1,69	-	-
15	2,66	1,69	2,85	3,12	1,69	3,13	1,69
20	4	2,33	4,28	4,53	2,45	4,53	2,45
25	5,21	3,58	5,57	6,29	3,8	6,29	3,8
32	8,57	5,82	8,68	9,51	6,5	9,51	6,5
40	11,24	8,9	11,42	12,33	9,48	12,33	9,48
50	15,4	11,8	15,69	17,33	13,6	17,33	13,6
65	24,15	-	24	28,31	-	28,31	-
80	33,25	-	34	38,31	-	38,31	-
100	45,31	-	46	50,5	-	50,5	-
125	69,6	-	71	82	-	82	-
150	94,6	-	95,62	113	-	113	-
200	156,7	-	157,5	194	-	194	-

Subject to changes

Kv values

DN	ξ	Kv
15	4	4,5
20	4	8
25	4	12,5
32	4	20,5
40	4	32
50	4	50
65	6	69
80	6	104
100	6	163
125	7,2	233
150	7,2	335
200	7,5	582

Subject to changes