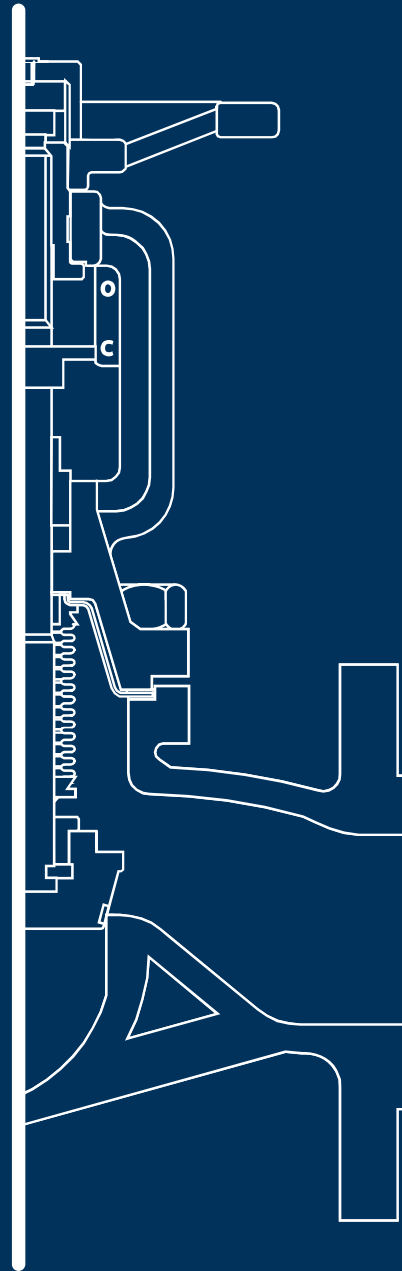




FLUIDOINDUSTRIALE
ENGINEERING & INDUSTRIAL SUPPLIES



BVALVE®

Manufacturing range

BVALVE®

Bellows sealed valves
DIN PN16-PN25

Competitor advantages of BVALVE bellows sealed valves

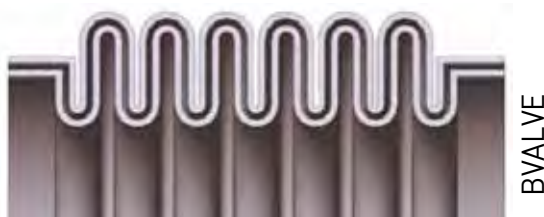
DIN bellows sealed valves have become highly popular in steam and thermal oil markets due to the mass consumption the industry demand has generated.

Unfortunately, this increase in demand has led to a massive manufacturing of these valves at very low prices. This situation has caused a drastic reduction in quality performance and therefore missing this valve's main target, being a maintenance free stop valve.

BVALVE however has avoided reducing our quality standards while maintaining our bellow sealed valves at highly competitive prices.

FEATURES	BVALVE	OTHERS
Non ejectable stem	YES	NO
Metal back seated tightness in opened position	YES	NO
360° free rotation disc	YES	On request
Bearings on the wheel for easy valve operation	YES	NO
Stroke limiter	YES	On request
Wide thread stem that prevents the valve from blocking	YES	NO
Tongued body and bonnet	YES	NO

Multi Layer Bellows



- Double, triple and quadruple layer bellows depending on the size of the valve.
- Bellows designed to support 10,000 operation cycles.
- Bellows are welded to the stem and not to the disc, preventing the transmission of vibrations to the bellows, and therefore extending the life of the bellows.

- Just one bellow layer, which means a lower resistance to breakage.
- Bellows designed to support less than 10,000 operation cycles.
- Bellows are welded to the disc, which transmits the vibrations to the bellows, decreasing their lives.

Stem dimensions



DN	H (mm) BVALVE	H (mm) Competitors
15	215	205
20	220	205
25	232	210
32	240	210
40	260	225
50	270	230
65	330	245
80	340	265
100	390	365
125	425	395
150	500	425
200	615	550
250	780	720



Why BVALVE Bellows sealed valves are the best in the market?

BVALVE launches its own bellows sealed valves, having improved all elements design, and therefore making this valve the best choice in the market.

High quality bellows
Made in Germany

Standard 360° free rotation
and conical plug (A)

ZERO
LEAKAGE!

No ejectable
stem (B)

Tongued and grooved
body and bonnet (C)

Plug and seat
hardfaced (D)





Features of high quality bellows sealed valves

BVALVE Bellows Sealed Globe Valves have flanges acc. to EN 1092-2, face to face as per EN 558-1 and ACME stem screw thread and grounded shaft. Some of Bvalve's premium features are multiply layer bellows with long service life made of stainless steel, minimum life cycle of bellows as per MSS SP-117, metal back seat, safety stuffing box packing made of pure graphite, graphite + stainless steel gasket housed in a tongue and grooved flange, seat ring hard faced, conical disc and 360° rotating plug made of stainless steel + HARD FACED.

Robust and ergonomic hand wheel

ACME Thick thread stem

TA-LUFT Packing

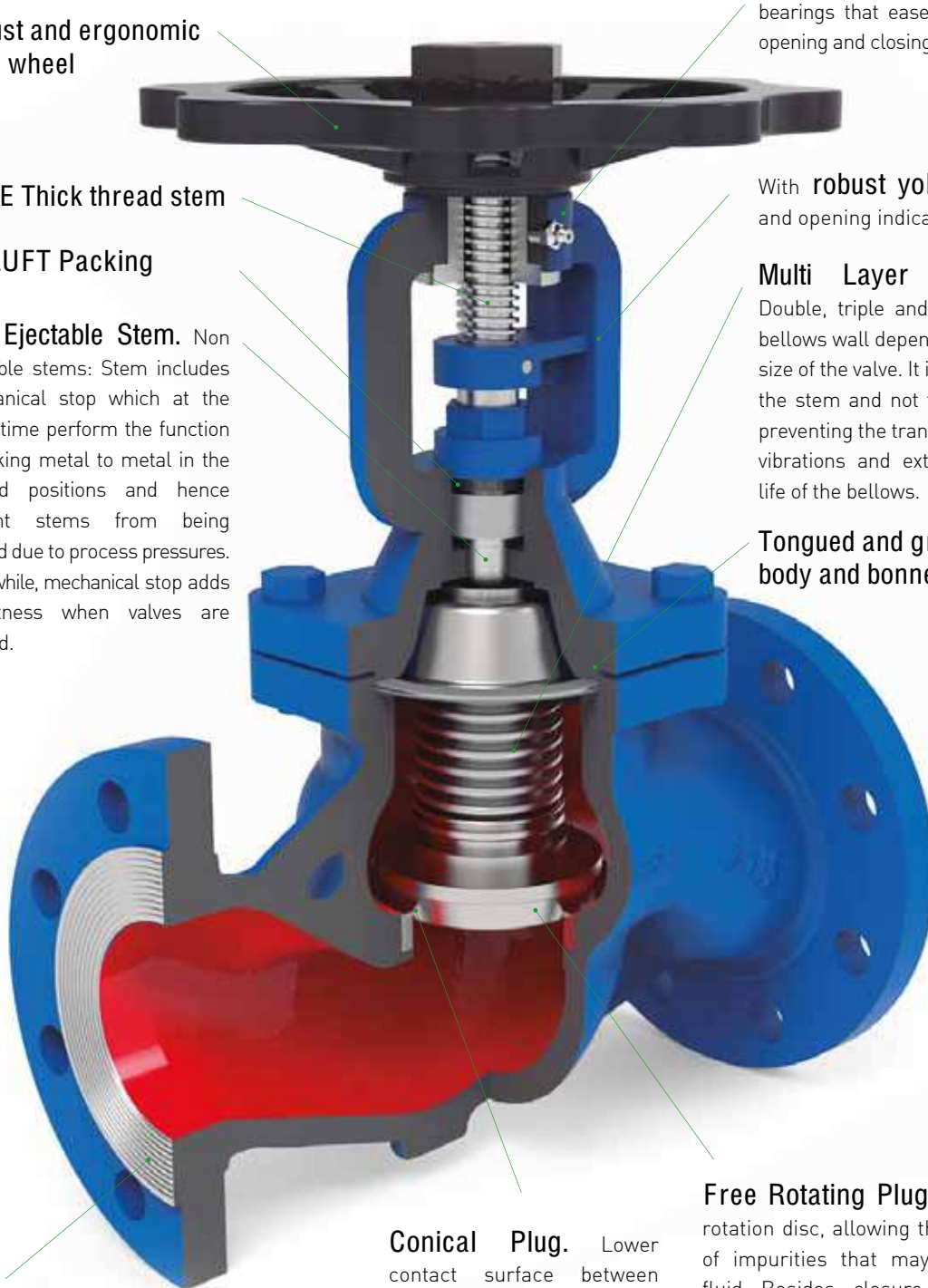
Non Ejectable Stem. Non ejectable stems: Stem includes mechanical stop which at the same time perform the function of locking metal to metal in the opened positions and hence prevent stems from being ejected due to process pressures. Meanwhile, mechanical stop adds robustness when valves are opened.

Lubricator and anti-friction bearings that eases the valve opening and closing.

With **robust yoke** design and opening indicator

Multi Layer Bellows
Double, triple and quadruple bellows wall depending on the size of the valve. It is welded to the stem and not to the disc, preventing the transmission of vibrations and extending the life of the bellows.

Tongued and grooved body and bonnet



Flange faces with thin machining acc. EN 1092, high quality cast iron and nodular cast iron, EN 10204 3.1 certificate available.

Conical Plug. Lower contact surface between plug and seat enhances a tighter closure.

Free Rotating Plug. 360° free rotation disc, allowing the cleaning of impurities that may carry the fluid. Besides, closure surface is different in every cycle and at the same time, it does not transmit the vibrations to the valve stem.



BV25061 | PN16 EN 1092-2

Cast Iron EN-JL 1040

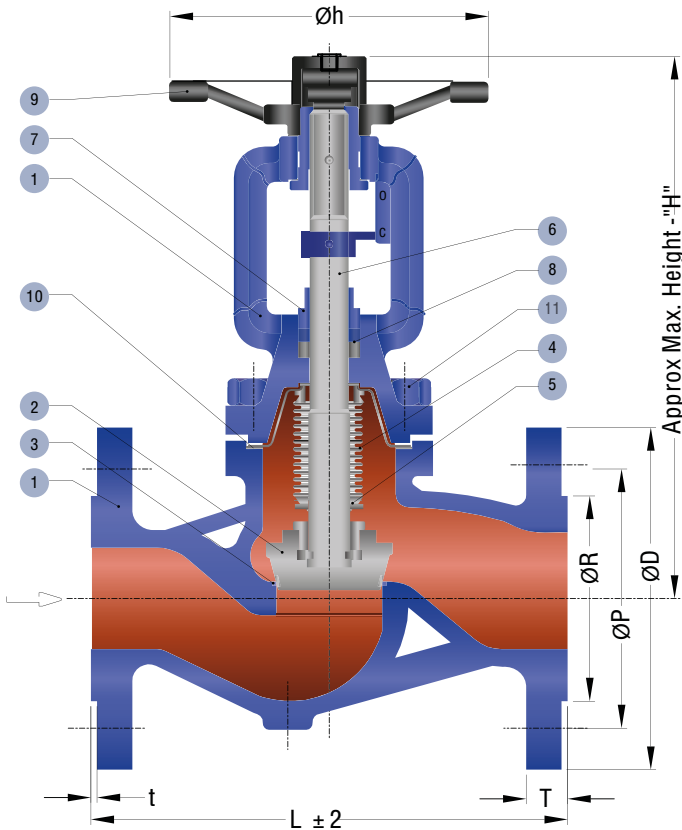
Temperature min. -10°C

Temperature max. +300°C



Testing pressure in bar

Hydro	Body	24
	Seat	18
Air	Seat	07



N°	COMPONENT	MATERIALS
1	Body & Bonnet	EN-JL 1040 Cast Iron
2	Plug	St. Steel 1.4021 + Hard Faced 13% Cr
3	Seat	ASTM - A105 + Hard Faced 13% Cr
4	Bellow	St. Steel 1.4541 / AISI-321
5	Bellow collar	St. Steel 1.4541
6	Stem	St. Steel 1.4006
7	Gland	St. Steel 1.4021
8	Packing	Pure Graphite
9	Hand Wheel	EN-GJS-400-18-LT Nodular
10	Bonnet Gasket	Graphite + Stainless steel
11	Bolt & Nuts	Carbon Steel Gr.10.9

ZERO LEAKAGE
DIN: Rate A acc.EN12266-1

Face to face dimensions acc. to EN558-1
Flanges acc. to EN 1092-2 form B

DN	PN	ØD (outer flange diameter)	ØP (Bolt circle)	ØR	T (FGL.THK)	t	NO.OF HOLE / Ø	L (Face to face)	Øh	STROKE	H (closed)	Weight (Kg)
15	16	95	65	46	14	2	4/Ø14	130	150	4	215	4,80
20	16	105	75	56	16	2	4/Ø14	150	150	5	220	5,16
25	16	115	85	65	16	3	4/Ø14	160	150	6,5	232	5,98
32	16	140	100	76	18	3	4/Ø19	180	150	8	240	7,80
40	16	150	110	84	18	3	4/Ø19	200	200	10	260	11,20
50	16	165	125	99	20	3	4/Ø19	230	200	13	270	13,60
65	16	185	145	118	20	3	4/Ø19	290	250	16,5	330	22,90
80	16	200	160	132	22	3	8/Ø19	310	250	20	340	27,40
100	16	220	180	156	24	3	8/Ø19	350	300	25	390	40,30
125	16	250	210	184	26	3	8/Ø19	400	350	32	425	67,20
150	16	285	240	211	26	3	8/Ø23	480	400	38	500	89,20
200	16	340	295	266	30	3	12/Ø23	600	450	51	615	143,50
250	16	405	355	319	32	3	12/Ø28	730	500	63	780	241,00
300	16	460	410	370	32	4	12/Ø28	850	600	75	970	435,00

all dimensions in mm.

WORKING CONDITIONS					
Temperature °C	-10/120	150	200	250	300
Pressure Bar	16	14,4	12,8	11,2	9,6

BV25064 | PN16 EN 1092-2

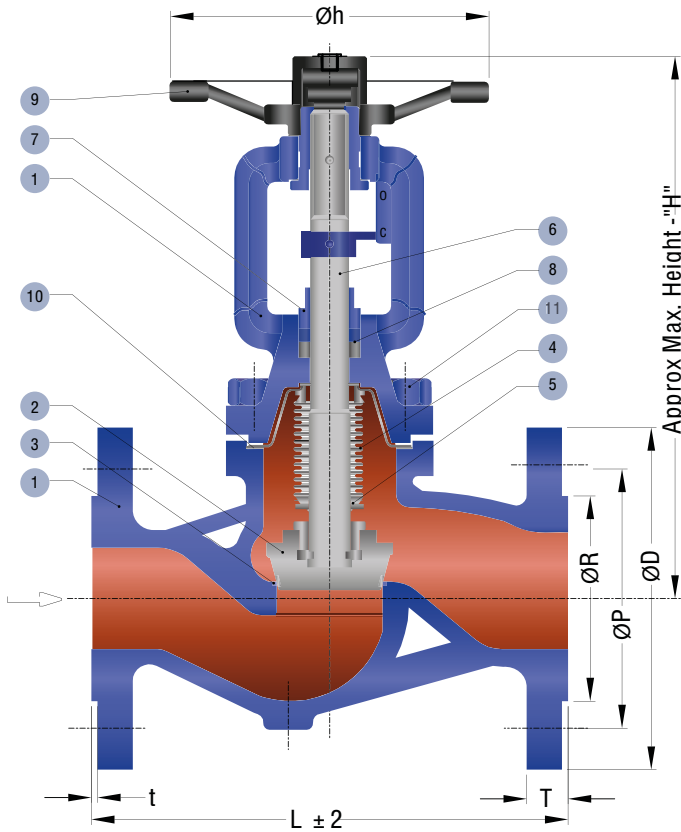
Nodular Cast Iron EN-GJS-400-18-LT

Temperature min. -10°C
Temperature max. +350°C



Testing pressure in bar

Hydro	Body	24
	Seat	18
Air	Seat	07



Nº	COMPONENT	MATERIALS
1	Body & Bonnet	EN-GJS-400-18-LT Nodular Cast Iron
2	Plug	St. Steel 1.4021 + Hard Faced 13% Cr
3	Seat	ASTM - A105 + Hard Faced 13% Cr
4	Bellow	St. Steel 1.4541 / AISI-321
5	Bellow collar	St. Steel 1.4541
6	Stem	St. Steel 1.4006
7	Gland	St. Steel 1.4021
8	Packing	Pure Graphite
9	Hand Wheel	EN-GJS-400-18-LT Nodular
10	Bonnet Gasket	Graphite + Stainless steel
11	Bolt & Nuts	Carbon Steel Gr.10.9

ZERO LEAKAGE
DIN: Rate A acc. EN12266-1

Face to face dimensions acc. to EN558-1
Flanges acc. to EN 1092-2 form B

DN	PN	ØD (outer flange diameter)	ØP (Bolt circle)	ØR	T (FGL.THK)	t	NO.OF HOLE / Ø	L (Face to face)	Øh	STROKE	H (closed)	Weight (Kg)
15	16	95	65	46	14	2	4/Ø14	130	150	4	215	4,08
20	16	105	75	56	16	2	4/Ø14	150	150	5	220	5,16
25	16	115	85	65	16	3	4/Ø14	160	150	6.5	230	8,98
32	16	140	100	76	18	3	4/Ø19	180	150	8	235	7,80
40	16	150	110	84	18	3	4/Ø19	200	200	10	255	11,20
50	16	165	125	99	20	3	4/Ø19	230	200	13	265	13,06
65	16	185	145	118	20	3	4/Ø19	290	250	16,5	325	22,90
80	16	200	160	132	22	3	8/Ø19	310	250	20	335	27,40
100	16	220	180	156	24	3	8/Ø19	350	300	25	385	40,30
125	16	250	210	184	26	3	8/Ø19	400	350	32	427	67,20
150	16	285	240	211	26	3	8/Ø23	480	400	38	485	89,20
200	16	340	295	266	30	3	12/Ø23	600	450	51	615	143,50
250	16	400	355	319	22	3	12/Ø28	730	500	64	780	241,0
300	16	455	410	370	24,5	4	12/Ø28	850	600	76	970	410,00

all dimensions in mm.

WORKING CONDITIONS						
Temperature °C	-10/120	150	200	250	300	350
Pressure Bar	16	15,5	14,7	13,9	12,8	11,2



BV25063 | PN25 EN 1092-2

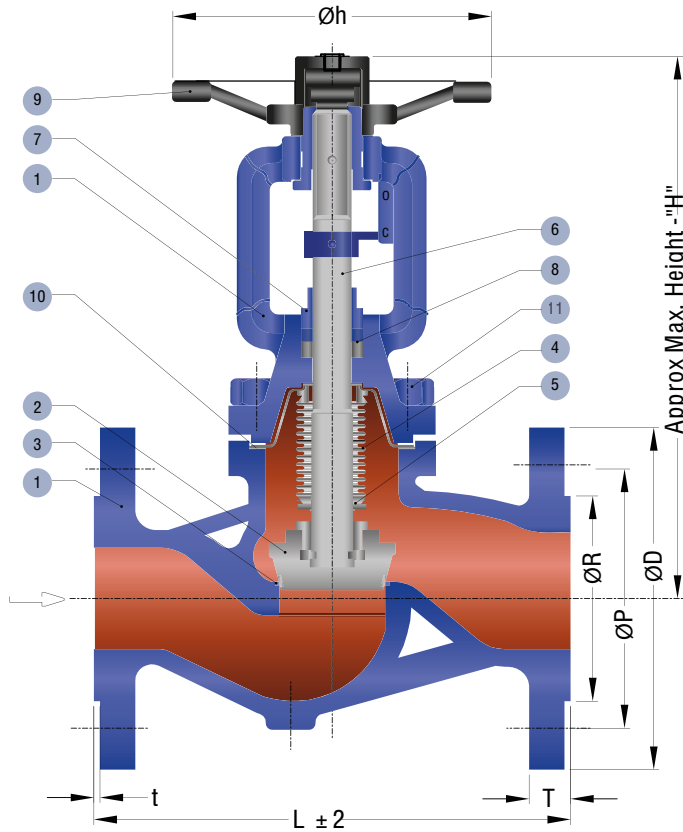
Nodular Cast Iron EN-GJS-400-18-LT

Temperature min. -10°C
Temperature max. +350°C



Testing pressure in bar

Hydro	Body	37,5
	Seat	27,5
Air	Seat	07



N°	COMPONENT	MATERIALS
1	Body & Bonnet	EN-GJS-400-18-LT Nodular Cast Iron
2	Plug	St. Steel 1.4021 + Hard Faced 13% Cr
3	Seat	ASTM - A105 + Hard Faced 13% Cr
4	Bellow	St. Steel 1.4541 / AISI-321
5	Bellow collar	St. Steel 1.4541
6	Stem	St. Steel 1.4006
7	Gland	St. Steel 1.4021
8	Packing	Pure Graphite
9	Hand Wheel	EN-GJS-400-18-LT Nodular
10	Bonnet Gasket	Graphite + Stainless steel
11	Bolt & Nuts	Carbon Steel Gr.10.9

ZERO LEAKAGE
DIN: Rate A acc. EN12266-1

Face to face dimensions acc. to EN558-1
Flanges acc. to EN 1092-2 form B

DN	PN	ØD (outer flange diameter)	ØP (Bolt circle)	ØR	T (FGL.THK)	t	NO.OF HOLE / Ø	L (Face to face)	Øh	STROKE	H (closed)	Weight (Kg)
15	25	95	65	46	16	2	4/Ø14	130	150	4	215	5,00
20	25	105	75	56	18	2	4/Ø14	150	150	5	220	5,50
25	25	115	85	65	19	3	4/Ø14	160	150	6.5	230	6,40
32	25	140	100	76	19	3	4/Ø19	180	150	8	235	8,30
40	25	150	110	84	19	3	4/Ø19	200	200	10	260	14,20
50	25	165	125	99	20	3	4/Ø19	230	200	13	265	14,14
65	25	185	145	118	22	3	8/Ø19	290	250	16,5	325	24,80
80	25	200	160	132	24	3	8/Ø19	310	250	20	355	27,90
100	25	235	190	156	24	3	8/Ø23	350	300	25	410	42,20
125	25	270	220	184	26	3	8/Ø28	400	350	32	450	67,00
150	25	300	250	211	28	3	8/Ø28	480	400	38	525	91,00
200	25	360	310	274	34	3	12/Ø28	600	450	51	645	147,00

all dimensions in mm.

WORKING CONDITIONS						
Temperature °C	-10/120	150	200	250	300	350
Pressure Bar	25	24,3	23	21,8	20	17,5

BVALVE®

Bellows sealed valves
DIN PN40

PN40 DIN Bellows Sealed Valves

Straight type bellows sealed globe valves for demanding applications can be supplied in carbon steel 1.0619 / WCB and stainless steel 1.4408 / CF8M, both with flanged or buttweld ends.



BV25066

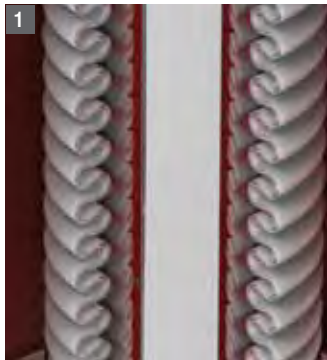


BV25065

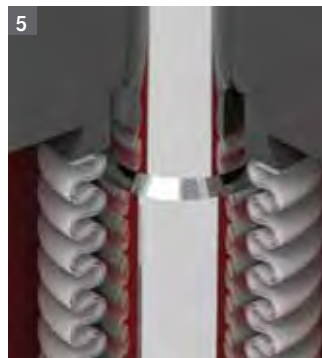


Six reasons why our valve is better

FEATURES



1. Completely welded multiple layer stainless steel bellows are secured against torque and designed to last for 30,000 operations. These provide higher safety and avoid leakage in case of broken packing.
2. Standard 360° free rotation and conical plug provides a tighter closure while maintaining seat clean from shards. Both seat and plug are made out of hardened chromium steel 1.4021 or armored with stellite.
3. TA-LUFT certified full size safety gland packing made of pure graphite together with our bellows, provide a fully reliable 0 leakage unit. Can also be supplied in PTFE if requested for chemical applications.



4. Stainless steel cam profiled bonnet gasket coated with pure graphite, mounted in tongue and grooved bonnet flanges reinforces operating safety in case of leakage. Can also be supplied in PTFE if requested for chemical applications.
5. Metal back seat has two features: Mechanical limitation for open position while guaranteeing a zero leakage in case of broken bellows.
6. Oversized wheel for easy handling .Position Indicator allows user to know in which opening / closing stage is the valve without having to operate it.

BV25065

Application (Carbon steel):

Powerstations, thermal oil processes, gas industry, processing technology, vapour facilities, recycling plants, vacuum installations, etc.

Medium (Carbon steel):

Medium and high pressure steam, superheated steam, gases, thermal oil, overheated water and gases, etc.

BV25066

Application (Stainless steel):

Recycling plants, chemical industry, process water installations, process with aggressive media

Medium (Stainless steel):

Process water, aggressive media, corrosive and toxic fluids, ethylene dioxide, H₂SO₄, etc.

BV25065 | PN40 EN 1092-1

Carbon steel WCB (1.0619)

Temperature min. -10°C

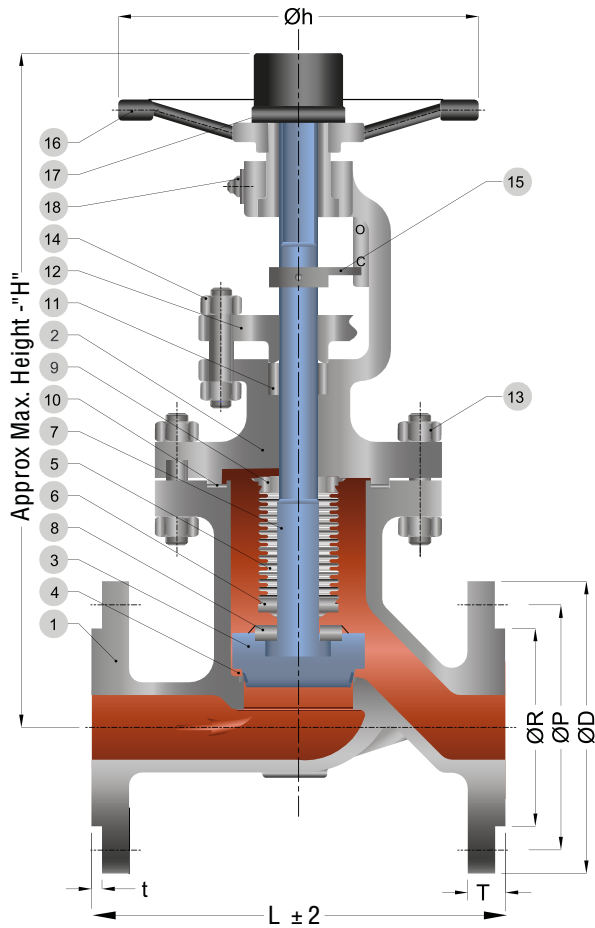
(For temp. up to -60°C consult the manufacturer)

Temperature max. +400°C



Testing pressure in bar

Hydro	Body	60
	Seat	44
Air	Seat	07



Nº	COMPONENT	MATERIALS
1	Body	1.0619 / ASTM - A 216 Gr.WCB
2	Bonnet	1.0619 / ASTM - A 216 Gr.WCB
3	Plug	ASTM - A 217 Gr.CA15 + 13% Cr. OVERLAY
4	Integral seat	ASTM - A 216 Gr.WCB (1.0619) + 13% Cr. OVERLAY
5	Bellow	AISI - 321
6	Bellow collar	ASTM - A 276 TYPE 316
7	Stem	ASTM - A 276 TYPE 410
8	Collar ring	ASTM - A 276 TYPE 410
9	Top collar	ASTM - A 276 TYPE 316
10	Gasket	SPW - SS 304 + GRAPHITE
11	Packing	GRAPHITE
12	Gland bush /Flange	1.0619 / ASTM - A 216 Gr.WCB
13	Fastener	ASTM - A 193 Gr.B7 / A 194 Gr.2H
14	Gland stud & nut	ASTM - A 193 Gr.B7 / A 194 Gr.2H
15	Guide plate/Indicator	CARBON STEEL
16	Hand wheel	MILD STEEL / NODULAR CAST IRON
17	Hand wheelNut/cap	CARBON STEEL
18	Grease nipple	CARBON STEEL

ZERO LEAKAGE
DIN: Rate A acc.EN12266-1
 Face to face acc. to EN558-1
 Flanges acc. to EN 1092-1 form B

DN	PN	ØD (outer flange diameter)	ØP (Bolt circle)	ØR	T (FGL.THK)	t	NO.OF HOLE / Ø	L (Face to face)	Øh	STROKE	H (closed)	Weight (Kg)
15	40	95	65	45	16	2	4/Ø14	130	172	4	264	8.5
20	40	105	75	58	18	2	4/Ø14	150	172	5	270	9.5
25	40	115	85	68	18	2	4/Ø14	160	172	7	300	11.5
32	40	140	100	78	18	2	4/Ø18	180	172	8	305	17.0
40	40	150	110	88	18	3	4/Ø18	200	200	10	330	19.0
50	40	165	125	102	20	3	4/Ø18	230	200	13	360	21.5
65	40	185	145	122	22	3	8/Ø18	290	250	16	430	33.5
80	40	200	160	138	24	3	8/Ø18	310	300	19	460	45.0
100	40	235	190	162	24	3	8/Ø22	350	300	25	550	61.5
125	40	270	220	188	26	3	8/Ø26	400	350	32	615	102.0
150	40	300	250	218	28	3	8/Ø26	480	400	38	690	122.0
200	40	375	320	285	34	3	12/Ø30	600	450	50	820	222.0
250	40	450	385	345	38	3	12/Ø33	730	500	70	1.010	362.0
300	40	515	450	410	42	4	16/Ø33	850	600	80	1.230	533.0

all dimensions in mm.

WORKING CONDITIONS							
Temperature °C	-10/120	150	200	250	300	350	400
Pressure Bar	40	35,2	33,3	30,4	27,6	25,7	23,8

BV25066 PN40 EN 1092-1

Stainless Steel CF8M (1.4408)

Temperature min. -60°C

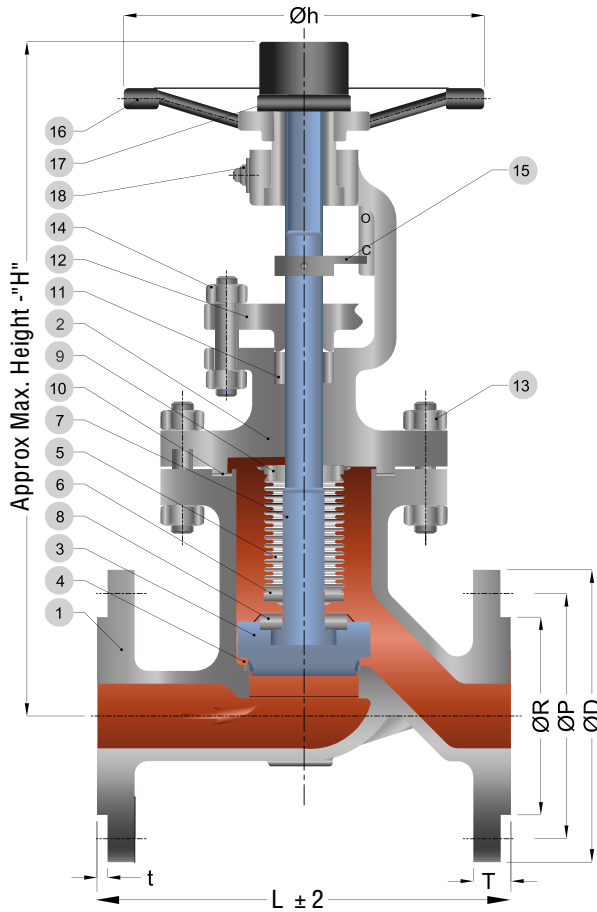
(For temp. up to -200°C consult the manufacturer)

Temperature max. +400°C



Testing pressure in bar

Hydro	Body	60
	Seat	44
Air	Seat	07



N°	COMPONENT	MATERIALS
1	Body	1.4408 / ASTM - A 351 Gr.CF8M
2	Bonnet	1.4408 / ASTM - A 351 Gr.CF8M
3	Plug	1.4408 / ASTM - A 351 Gr.CF8M + Stellite Gr.6
4	Integral seat	1.4408 / ASTM - A 351 Gr.CF8M + Stellite Gr.21
5	Bellow	1.4571 / AISI - 316Ti
6	Bellow collar	1.4401 / ASTM - A 276 TYPE 316
7	Stem	1.4401 / ASTM - A 276 TYPE 316
8	Collar ring	1.4401 / ASTM - A 276 TYPE 316
9	Top collar	1.4401 / ASTM - A 276 TYPE 316
10	Gasket	SPW - SS 316 + GRAPHITE
11	Packing	GRAPHITE
12	Gland bush / Flange	1.4408 / ASTM - A 351 Gr.CF8M
13	Fastener	ASTM - A193 Gr.B8M / A194 Gr.8M
14	Gland stud & nut	ASTM - A193 Gr.B8M / A194 Gr.8M
15	Guide plate/Indicator	1.4408 / ASTM - A 351 Gr.CF8M
16	Hand wheel	MILD STEEL / NODULAR CAST IRON
17	Hand wheel Nut/cap	1.4401 / AISI - 316
18	Grease nipple	1.4401 / AISI - 316

ZERO LEAKAGE

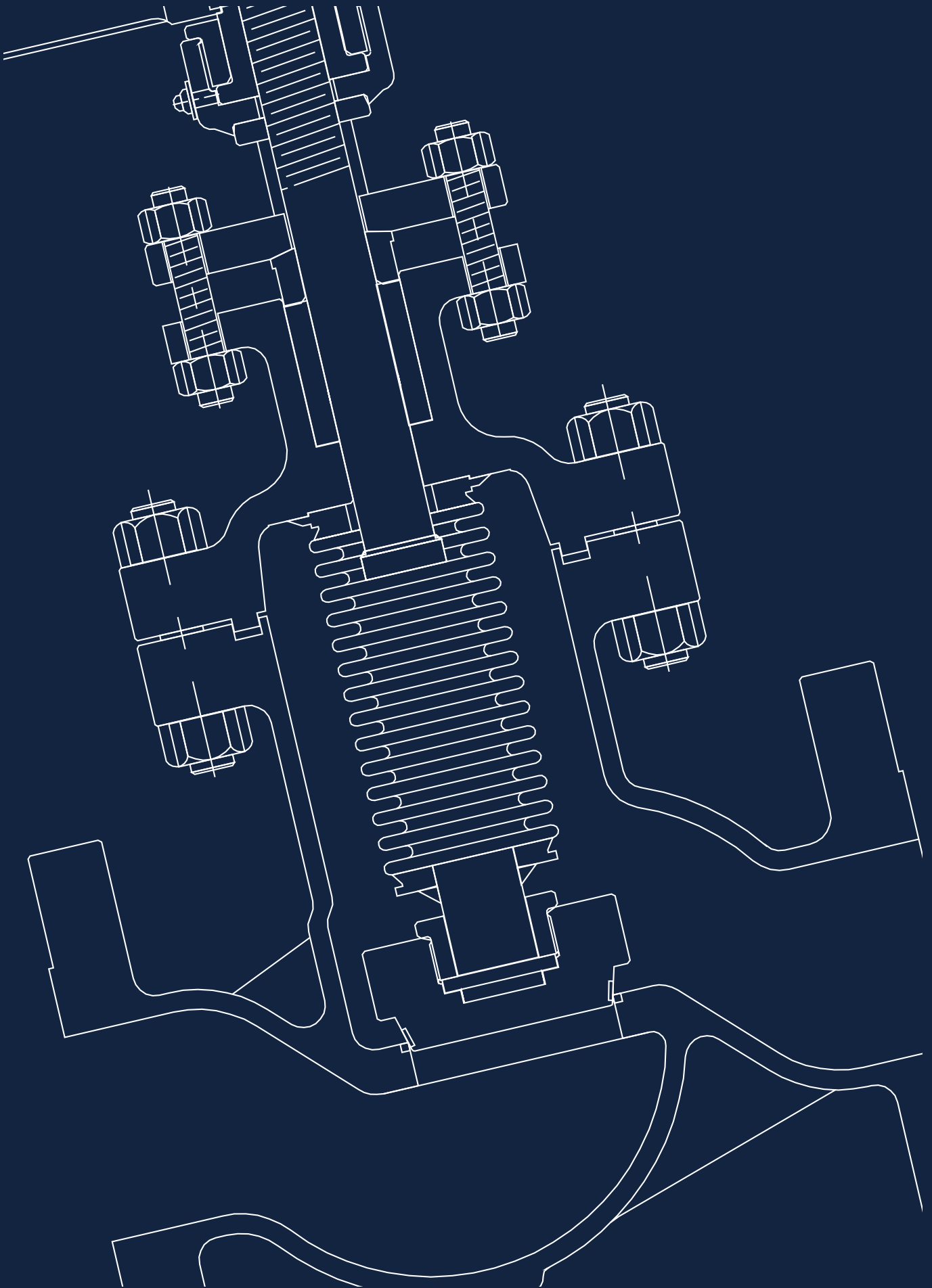
DIN: Rate A acc.EN12266-1

Face to face acc. to EN558-1
Flanges acc. to EN 1092-1 form B

DN	PN	ØD (outer flange diameter)	ØP (Bolt circle)	ØR	T (FGL.THK)	t	NO.OF HOLE / Ø	L (Face to face)	Øh	STROKE	H (closed)	Weight (Kg)
15	40	95	65	45	16	2	4/Ø14	130	172	4	264	8.5
20	40	105	75	58	18	2	4/Ø14	150	172	5	270	9.5
25	40	115	85	68	18	2	4/Ø14	160	172	7	300	11.5
32	40	140	100	78	18	2	4/Ø18	180	172	8	305	17.0
40	40	150	110	88	18	3	4/Ø18	200	200	10	330	19.0
50	40	165	125	102	20	3	4/Ø18	230	200	13	360	21.5
65	40	185	145	122	22	3	8/Ø18	290	250	16	430	33.5
80	40	200	160	138	24	3	8/Ø18	310	300	19	460	45.0
100	40	235	190	162	24	3	8/Ø22	350	300	25	550	61.5
125	40	270	220	188	26	3	8/Ø26	400	350	32	615	102.0
150	40	300	250	218	28	3	8/Ø26	480	400	38	690	122.0
200	40	375	320	285	34	3	12/Ø30	600	450	50	820	222.0
250	40	450	385	345	38	3	12/Ø33	730	500	70	1.010	362.0
300	40	515	450	410	42	4	16/Ø33	850	600	80	1.230	533.0

all dimensions in mm.

WORKING CONDITIONS									
Temperature °C	-60/-10	-10/150	150	200	250	300	350	400	
Pressure Bar	40	40	36,3	33,7	31,8	29,7	28,5	27,4	





FLUIDOINDUSTRIALE
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