



# KLIMOS

ARMATURA PRZEMYSŁOWA



Członek Polskiej Izby  
Przemysłu Chemicznego

**REF. 702 / 703**

## FIRE SAFE 3 PIECES BALL VALVE PN 100



**Lloyd's  
Register**

PED 97/23/CE



**FIRE SAFE  
API 607**



**Size :** DN 8 to 50 mm  
**Ends :** Threaded BSP or NPT , S.W. or B.W.  
**Min Temperature :** -30°C in SS and -20°C in carbon steel  
**Max Temperature :** + 220°C  
**Max Pressure :** 100 to 140 Bars  
**Specifications :** Antistatic device  
ISO 5211 mounting pad  
Anti blow-out stem  
Fully encapsulated bolts  
Fire safe  
Atex

**Materials :** Carbon steel or Stainless steel

KLIMOS Piotr Chróścik  
Ul. Legionowa 15 lok. 7  
15-281 Białystok  
NIP: 542-158-72-35

tel.: 85 742 01 82  
tel. kom.: 602 12 50 12  
e-mail: [info@klimos.pl](mailto:info@klimos.pl)  
[www.klimos.pl](http://www.klimos.pl)

**SPECIFICATIONS :**

- Full bore
- Anti blow-out stem
- Special gland pack with elastic washer
- Antistatic device from DN8 to 10, double antistatic device (ball between body-stem and ball-stem) from DN15 to 50
- Fire safe according to API 607-4
- Locking device
- Handwheel and stem extension ( optional )
- ISO 5211 mounting pad
- Fully encapsulated bolts
- Pressure class 600 lbs
- On request PEEK seat( optional ) for high temperature

**USE :**

- Chemical and pharmaceutical industries, petrochemical industries, hydraulic installation, compressed air
- Steam : 18 bars maximum with PTFE filled with 25% carbon seat
- Steam : 30 bars maximum with PEEK seat
- Min and max Temperatures Ts : -30°C to + 220°C for stainless steel valve with PTFE filled with 25% carbon seat type **Ref. 703**
- Min and max Temperatures Ts : -20°C to + 220°C for carbon steel valve with PTFE filled with 25% carbon seat type **Ref. 702**
- Min and max Temperatures Ts : -10°C to + 260°C for valve with PEEK seat ( optional )
- Max Pressure Ps : 100 to 140 bars ( see graph )

**FLOW COEFFICIENT Kvs ( M3 / h ) :**

DN	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"
Kvs ( m3/h )	13	13.4	31.3	57.86	94.25	157.9	227.9	414.8

**RANGE :**

- Carbon steel Ref. **702** DN 8 to DN 50
- Stainless steel Ref. **703** DN 8 to DN 50

**ENDS :**

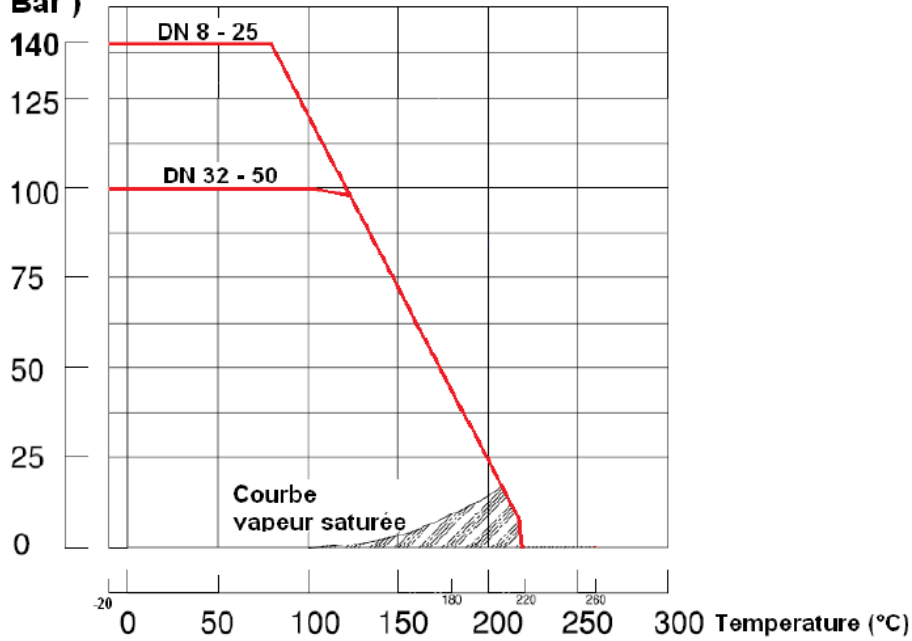
- Female / female threaded BSP
- Female / female threaded NPT
- Welding S.W.
- Welding B.W.

**OPTIONS :**

- SS 304 handwheel **Ref. 9830440-9830475**
- SS 304 stem extension **Ref. 9830471-9830474**
- PEEK gasket kits ( including Grafoil body gasket and packing, PTFE filled 15% glass fiber stem gasket + Grafoil and PEEK seat )  
**Ref. 9804380-9804386**

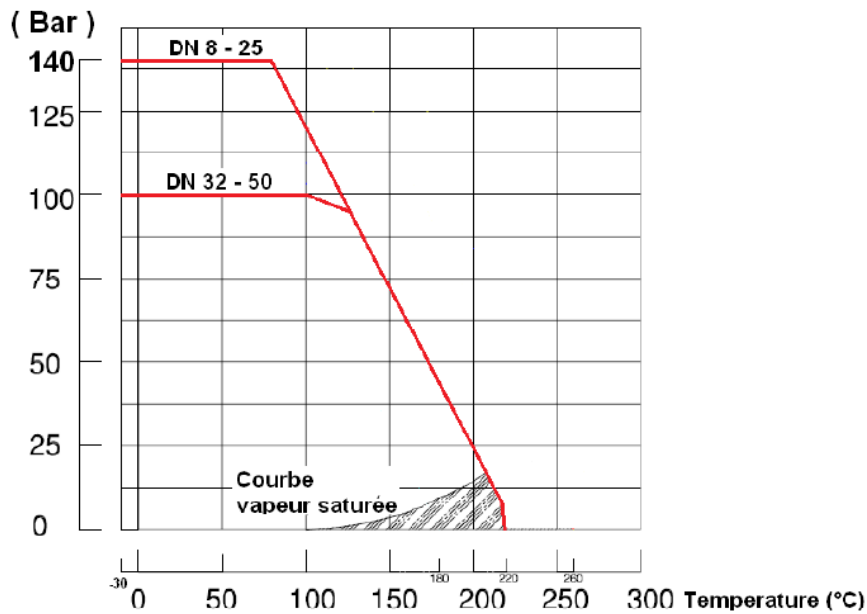
PRESSURE / TEMPERATURE GRAPH FOR CARBON STEEL VALVES REF.702 (WITH PTFE FILLED WITH CARBON SEAT) :

**PRESSURE  
( Bar )**



PRESSURE / TEMPERATURE GRAPH FOR STAINLESS STEEL VALVES REF.703 (WITH PTFE FILLED WITH CARBON SEAT) :

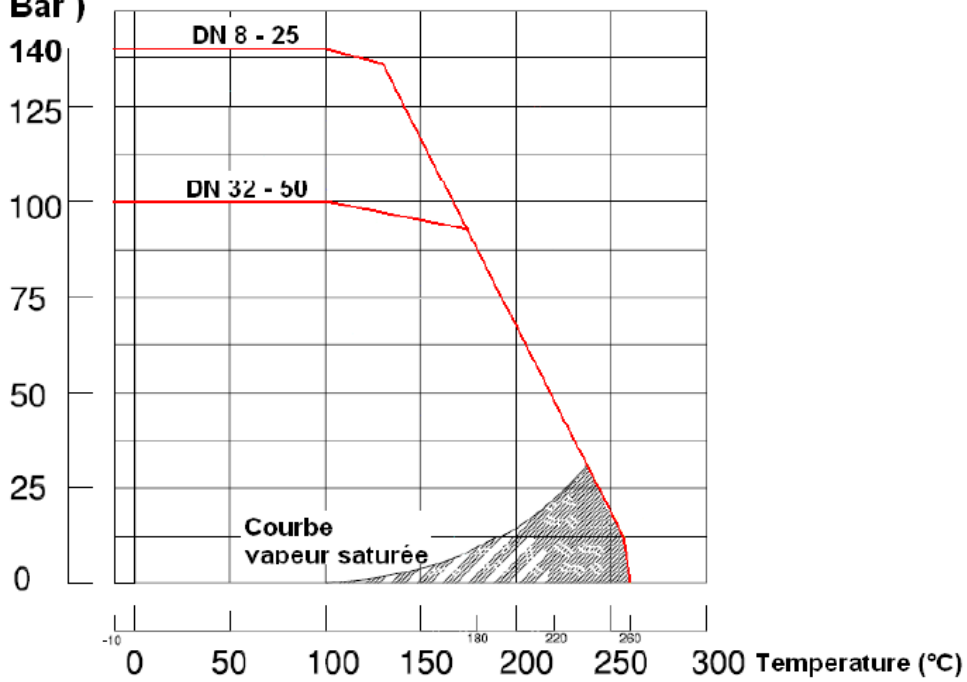
**PRESSURE**



PRESSURE / TEMPERATURE GRAPH FOR CARBON STEEL VALVES REF.702 WITH OPTIONAL PEEK SEAT :

**PRESSURE**

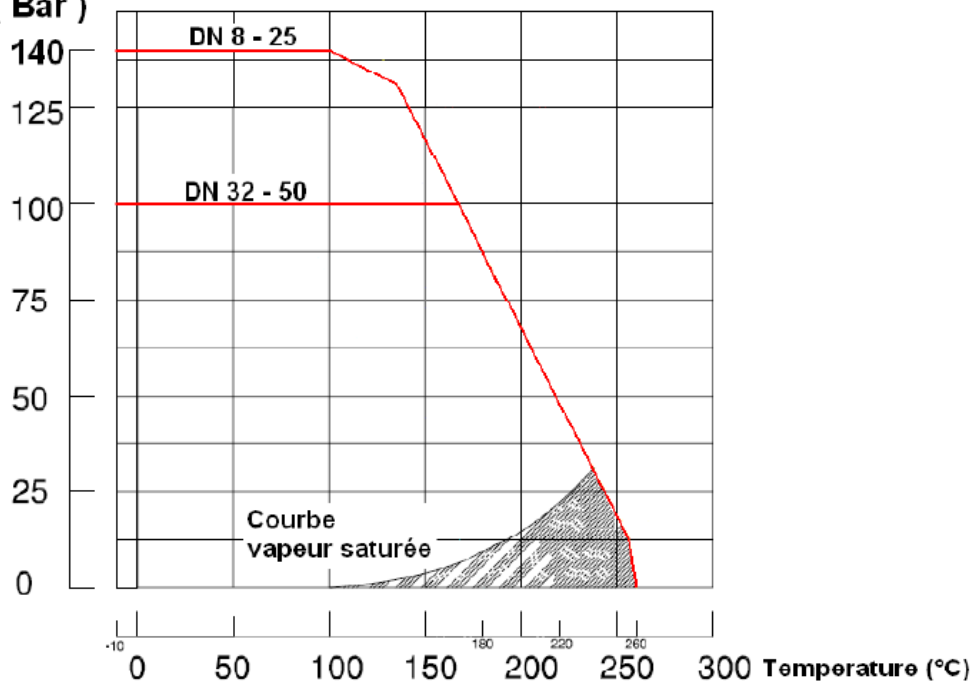
**( Bar )**

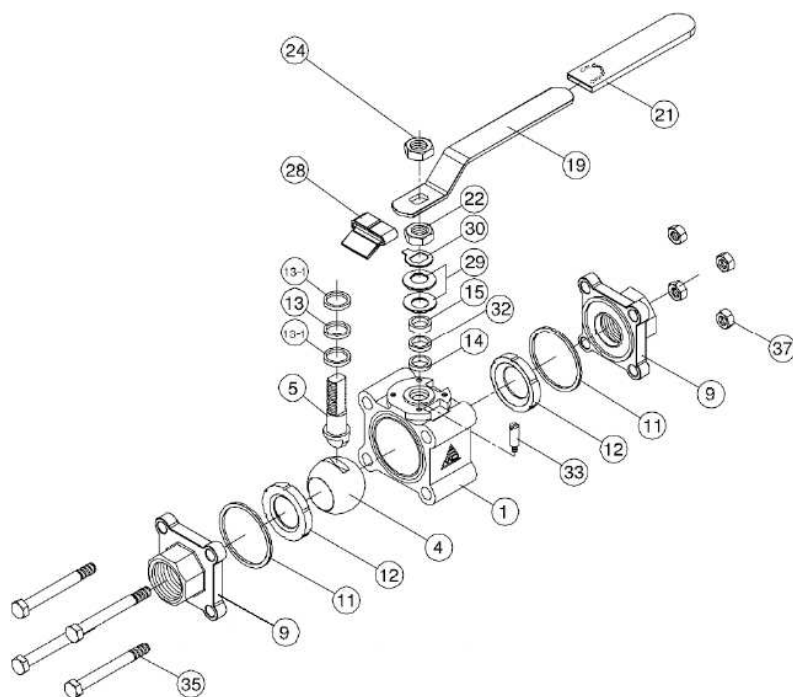


PRESSURE / TEMPERATURE GRAPH FOR STAINLESS STEEL VALVES REF.703 WITH OPTIONAL PEEK SEAT :

**PRESSURE**

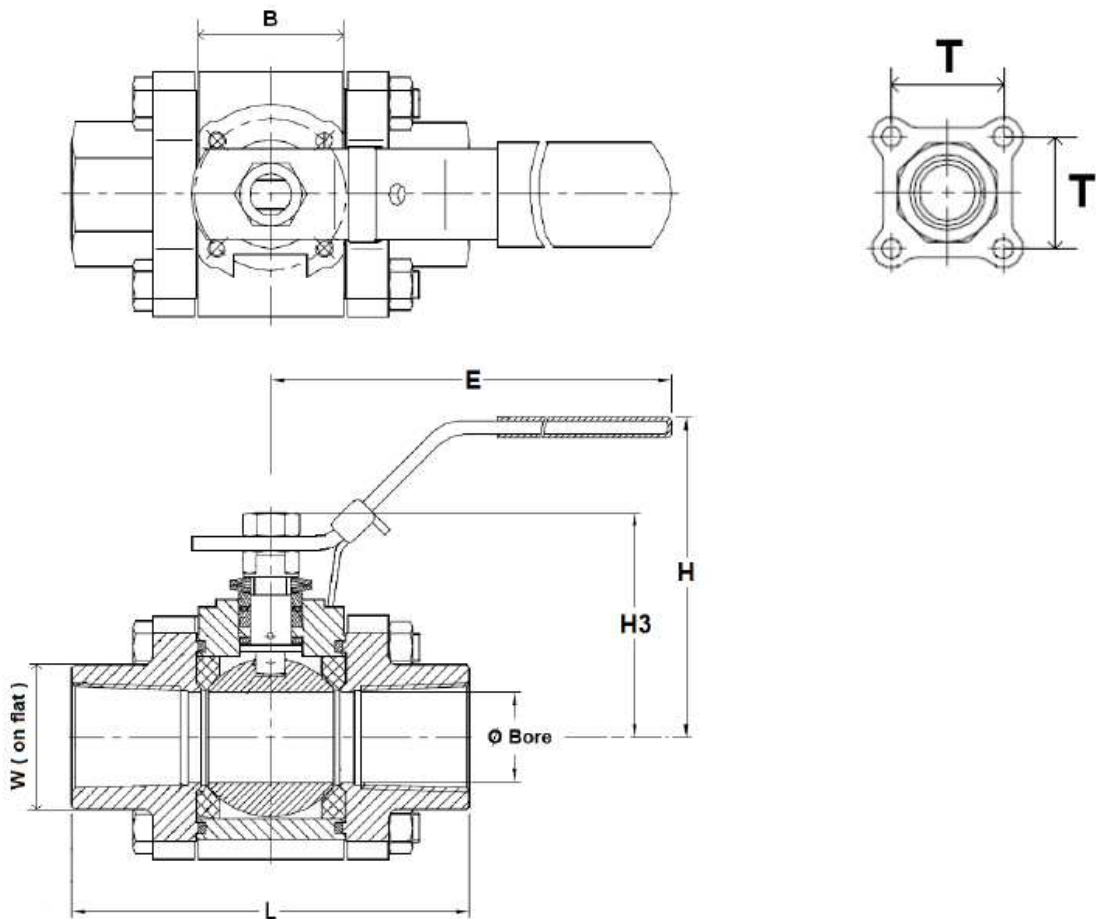
**( Bar )**



**MATERIALS :**

Item	Designation	Materials 702	Materials 703
1	Body	ASTM A216 WCB	ASTM A351 CF8M
4	Ball	ASTM A351 CF8M	
5	Stem	SS 316	
9	Ends	ASTM A216 WCB	ASTM A351 CF8M
11*	Body gasket	Graphite	
12*	Seat	PTFE filled with 25% carbon	
13*	Thrust washer	Graphite	
13-1*	Thrust washer	PTFE with 15% Grafoil	
14	Packing	Graphite	
15	Gland bush	SS 304	
19	Handle	SS 304	
21	Handle cover	Plastic	
22	Packing nut	SS 304	
24	Handle nut	SS 304	
28	Locking device	SS 304	
29	Elastic washer	SS 301	
30	Tab washer	SS 304	
32*	Packing follower	PTFE with 15% Grafoil	
33	Stop pin	SS 304	
35	Body bolt	SS 304	
37	Bolt nut	SS 304	

**SIZE THREADED TYPES ( in mm ) :**

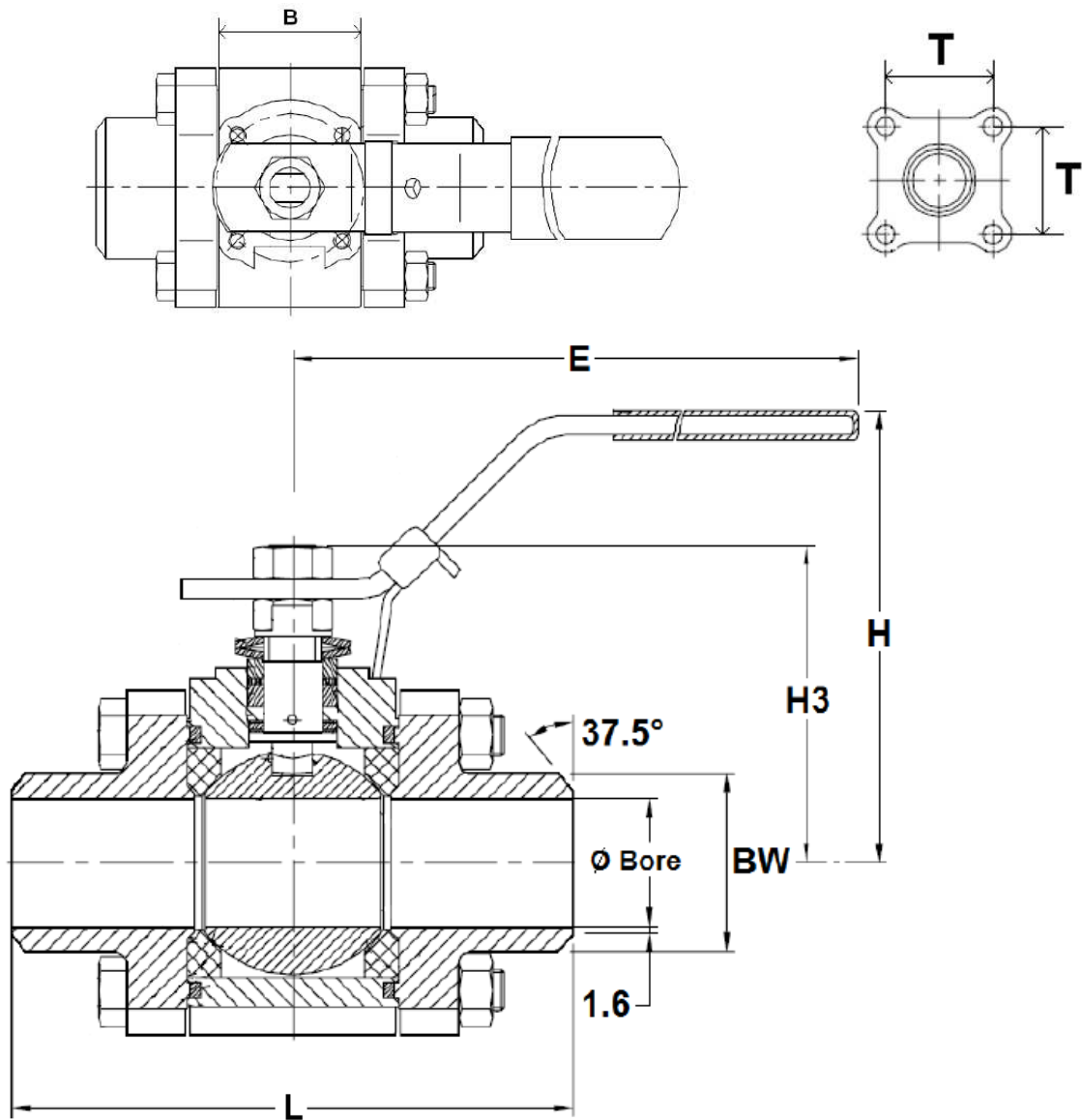


Ref.	DN	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"
7020 / 7030 Threaded	Ø Bore	10	10	15	20	25	32	38	50
	L	64,8	64,8	72,5	85,4	105,3	111	127,3	145
	B	19,6	19,6	24	31	40,7	47,7	55,6	70
	E	134	134	134	134	170	170	207	215
	H	64	64	72	77	83	88	104	133
	H3	37,2	37,2	45,1	51,4	61,2	64,2	79	99,4
	T	32	32	39	45	50	58	68	82
	W ( on flat )	29,5	29,5	30	36	44,5	54	60	73,2
	Weight ( Kg )	0,70	0,70	0,85	1,37	2	2,78	4,08	6,80

**KLIMOS Piotr Chróścik**  
 Ul. Legionowa 15 lok. 7  
 15-281 Białystok  
 NIP: 542-158-72-35

tel.: 85 742 01 82  
 tel. kom.: 602 12 50 12  
 e-mail: [info@klimos.pl](mailto:info@klimos.pl)  
[www.klimos.pl](http://www.klimos.pl)

**SIZE WELDING B.W. TYPES ( in mm ) :**

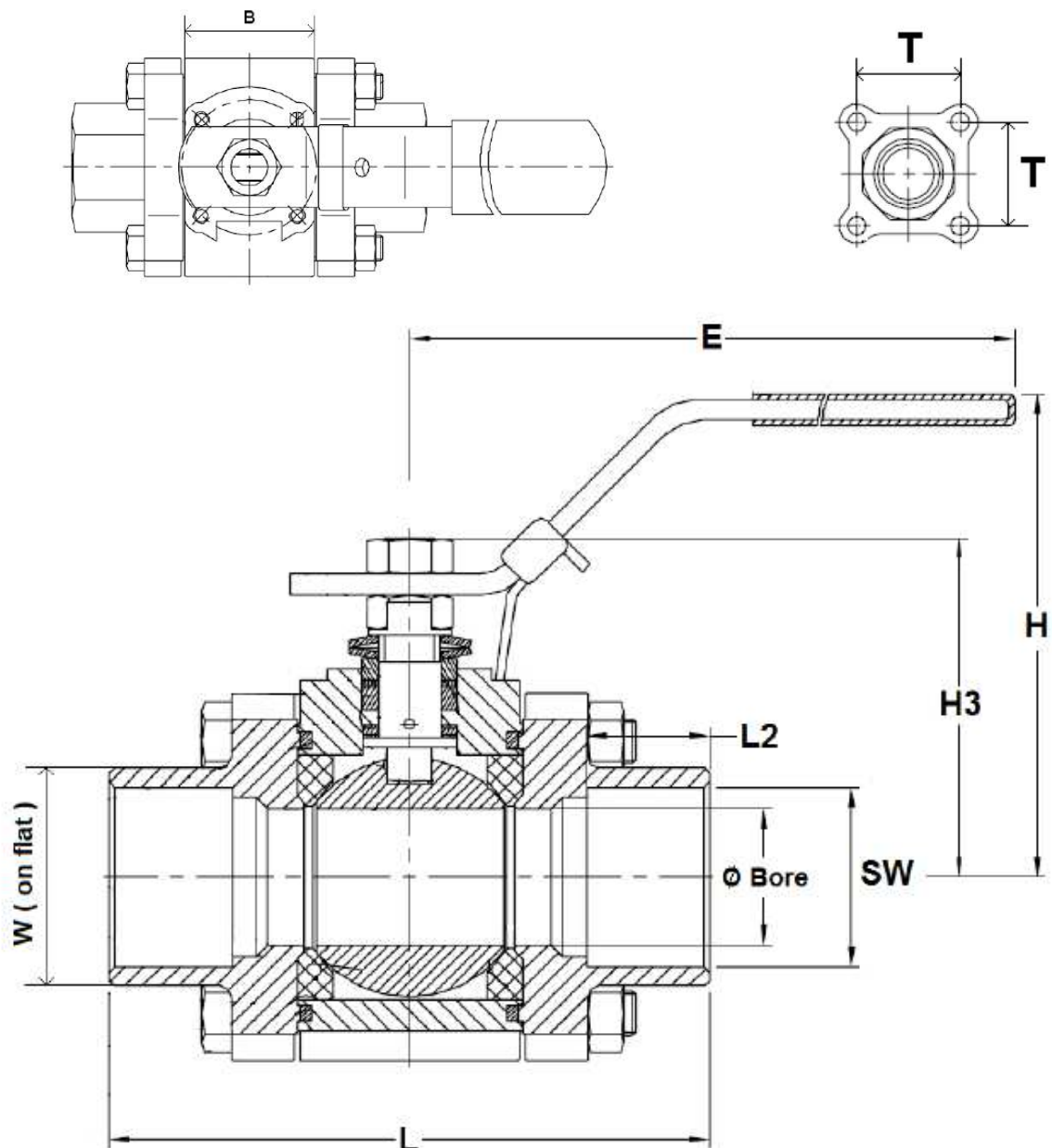


Ref.	DN	8	10	15	20	25	32	40	50
7021 / 7031 Butt Welding	Ø Bore	9,24	10	15	20	25	32	38	50
	L	64,8	64,8	75	90	110	115	130	145
	B	19,6	19,6	24	31	40,7	47,7	55,6	70
	E	134	134	134	134	170	170	207	215
	H	64	64	72	77	83	88	104	133
	H3	37,2	37,2	45,1	51,4	61,2	64,2	79	99,4
	T	32	32	39	45	50	58	68	82
	Ø BW	13,7	17,5	21,7	27,2	34	42,7	48,6	60,5
	Weight ( Kg )	0,63	0,64	0,81	1,30	1,97	2,70	4,08	6,60

KLIMOS Piotr Chróścik  
 Ul. Legionowa 15 lok. 7  
 15-281 Białystok  
 NIP: 542-158-72-35

tel.: 85 742 01 82  
 tel. kom.: 602 12 50 12  
 e-mail: info@klimos.pl  
 www.klimos.pl

**SIZE WELDING S.W. TYPES ( in mm ) :**



Ref.	DN	8	10	15	20	25	32	40	50
7022 / 7032 Socket Weld.	Ø Bore	10	10	15	20	25	32	38	50
	L	64,8	64,8	72,5	85,4	105,3	111	127,3	145
	B	19,6	19,6	24	31	40,7	47,7	55,6	70
	L2	10	10	10	13	13	13	13	16
	E	134	134	134	134	170	170	207	215
	H	64	64	72	77	83	88	104	133
	H3	37,2	37,2	45,1	51,4	61,2	64,2	79	99,4
	T	32	32	39	45	50	58	68	82
	W ( on flat )	29,5	29,5	30	36	44,5	54	60	73,2
	Ø SW	14,3	17,6	21,9	27,3	33,9	42,8	48,9	61,3
Weight ( Kg )	0,71	0,69	0,83	1,40	2	2,78	4,08	6,80	

**KLIMOS Piotr Chróścik**  
 Ul. Legionowa 15 lok. 7  
 15-281 Białystok  
 NIP: 542-158-72-35

tel.: 85 742 01 82  
 tel. kom.: 602 12 50 12  
 e-mail: info@klimos.pl  
 www.klimos.pl



**STANDARDS :**

- Fabrication according to ISO 9001 : 2008
- DIRECTIVE 97/23/CE : CE N° 0038  
Risk category III module H
- Construction according to EN 12516-1 Class 600
- Designing according to ASME B16.34
- Tests according to EN12266-1, rate A
- Fire safe according to API 607 4th
- Threaded cylindrical BSPP ends according to ISO 228-1
- Threaded NPT ends according to ANSI B1.20.1
- ISO 5211 mounting pad
- ATEX Group II Category 2 G/2D Zone 1 & 21 Zone 2 & 22 ( optional marking )