



VALVES & ACTUATORS

# COMPACT WELDED BALL VALVES

Welded Body, Floating Ball, Full Bore, Forged Steel, Fire Safety Design,  
Anti-Static Device, Anti Blow Out Stem, Lever Operated, API 608 Design

CAT-E604-21R0

**E604**



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NPS  
1/2-2

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DN  
15-50

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Class  
1500



## E00 SERIES - COMPACT VALVES COMPACT WELDED BALL VALVES

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**API 608**

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**Carbon Steel or  
Stainless Steel**

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**Welded Body**

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**Floating Ball**

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**Anti Static Device**

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**Full Bore**

### Features

Vastas compact valves are the types that can be used as drain vent and by-pass elements. These types of valves are mostly forged steel. The body of valve is constructed by welding of all parts except stem housing. No sealing elements are used which cause leakage through. When required it can be manufactured from special material according to NACE corrosion standards and/or temperature class.

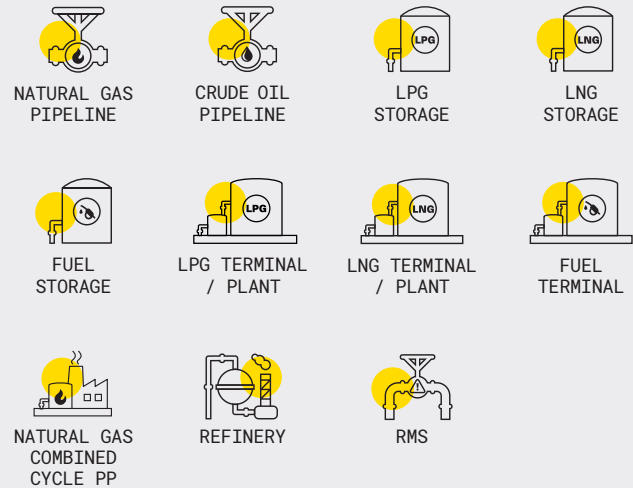
Vastas Compact Ball Valves are produced with steel body and fittings are designed as NPT according to ASME B1.20.1 standard. Welded Compact Ball Valve is ideal for vent, drain, by-pass, take-off applications. It is often used in pipelines for underground positions.

	STANDARDS
Design	API 608 & ISO 17292
End Connection	(ANSI) B1.20.1, B16.11, B36.10, B16.25
End to End	Manufacturer
Test	API 598

## E604 SERIES - COMPACT VALVES



### Project Types



### Applications

Suitable for general application as on/off and isolation valves, not recommended for throttling and/or regulating purposes. They have excellent resistance to earthquake, shocks, vibration, pressure & strokes and can be operated soundly between -29°C to 100°C.

### Pressure Rating

The figures at this table are Vastas figures and they indicate pressure class among other specifications.

See page 9 for figure description.

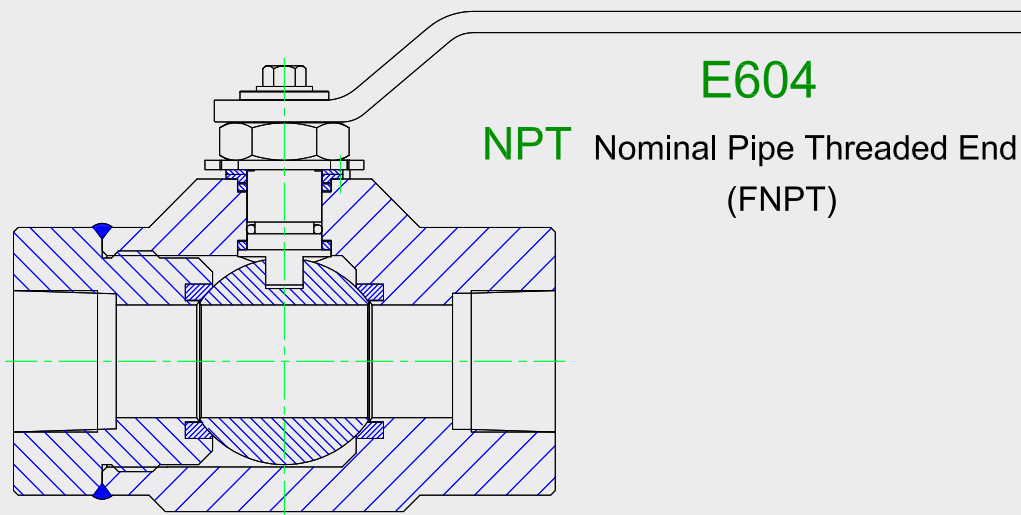
Figure	Size	Class	PRESSURE		
			MPa	Bar	Psig
E604	1/2"-2"	1500	25.5	255	3705

For ASME B16.34 Group 1.1 Material, -29 +38°C

## E6 SERIES - COMPACT VALVES

Figure: 604.14

Class: 1500



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### PSSM (Primary Soft Secondary Metal)

The design that provides primary sealing via thermoplastic materials.

Wide variety of materials; PTFE, RPTFE, PCTFE, PEEK, DEVLON, POM-C etc.

Usage in the several environment due to variety of materials

Bi-Directional

## Quarter Turn

The on-off process of Vastas compact ball valves are provided with Quarter-Turn movement by a lever. That movement provides rapid and easy operation.

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## Floating Ball

Ball moves a little with fluid pressure to provide a reliable positive sealing in the flow direction.

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## Full Bore

Full bore valve design prevents pressure loss.

(ACC. API 608)

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## Fire Safety Design

Vastas compact ball valves are capable of metal to metal sealing in case of fire. (ACC. API 607)

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## Anti-Static Device

The stem has an anti-static design which ensures continuous contact of stem-to-ball and stem-to-body. Spark and electric accumulation are prevented by this design.

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## Coating & Painting

Vastas standard coating application for compact ball valves is 100-150 microns epoxy paint which is resistant to corrosion and moot of chemical and suitable for a wide temperature range. In case of special request other paint systems resistant for high corossive environment, high temprature, various fluids etc. can be applied.

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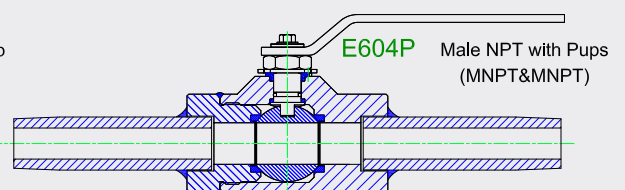
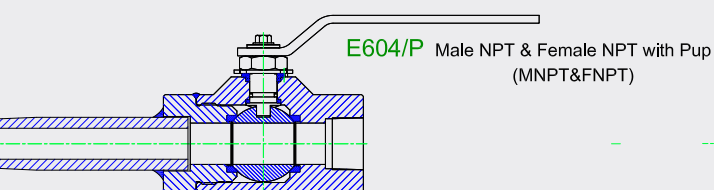
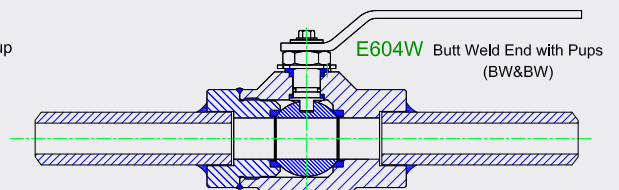
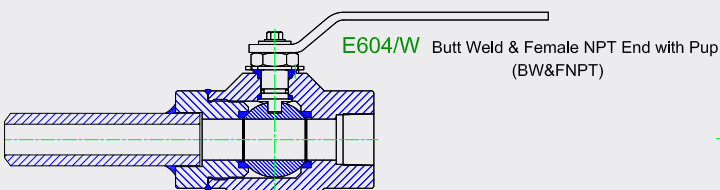
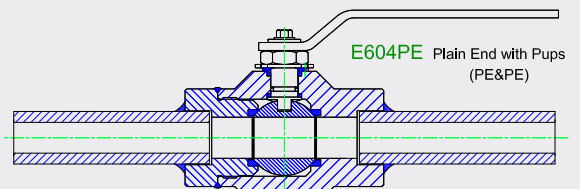
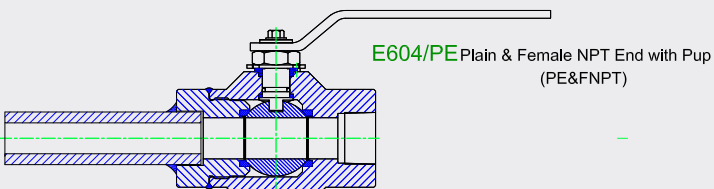
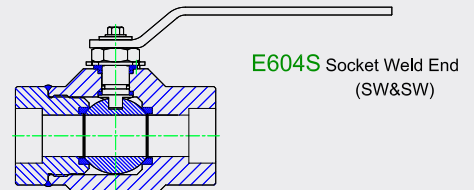
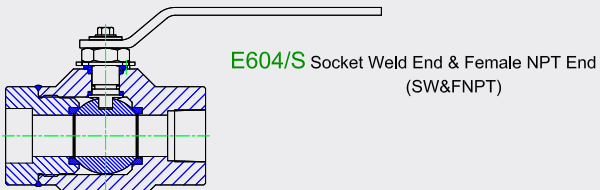
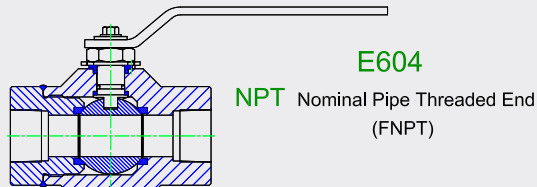
### Important Notice

If you receive this catalog as attachment of Vastas offer, please note that, this catalog includes standard product with standard options. The special requirements will be indicated at the offer and the proforma invoice, together with other supporting documents.

Offered options are supported with additional technical documents.

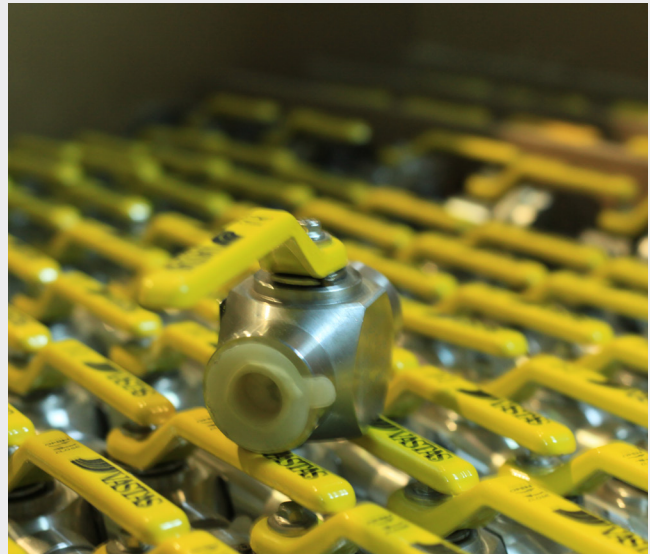
## Optional Requirements

Vastas compact ball valves are available with various end connection type. Your connection options are shown in the following section.



## Licence & Approvals

- PED 2014/68/EU
- Safety Integrity Level (SIL) Certified
- Corrosion Resistance Cert. as per NACE MR 0175
- Conformity to Ex (Atex)



## Certificates

CERTIFICATE NAME	INSTITUTION	CERTIFICATE No
ATEX-Certificate Conformity to Ex	Energy Petroleum Institute	IEP 17 EX 10013
Safety Integrity Level (SIL) Certified	TUV Rheinland	V 473.02/16
ISO 45001:2018	TUV Rheinland	01 133 030066
ISO 14001:2015	TUV Rheinland	01 104 031931
ISO 9001:2015	TUV Rheinland	01 100 032841
Fire Test on Forged Valves	TUV SUD Turkiye	11-B-00422/01
Fugitive Emission Type Test	TUV Austria Turk	17-IS-1433/02
CE-0408	TUV Austria Services GMBH	ZSTS/SWZE/2190
Certificate of Conformity to Turkish Standards	Turkish Standards Instution	001041-TSE-01/01

Vastas Figure Description

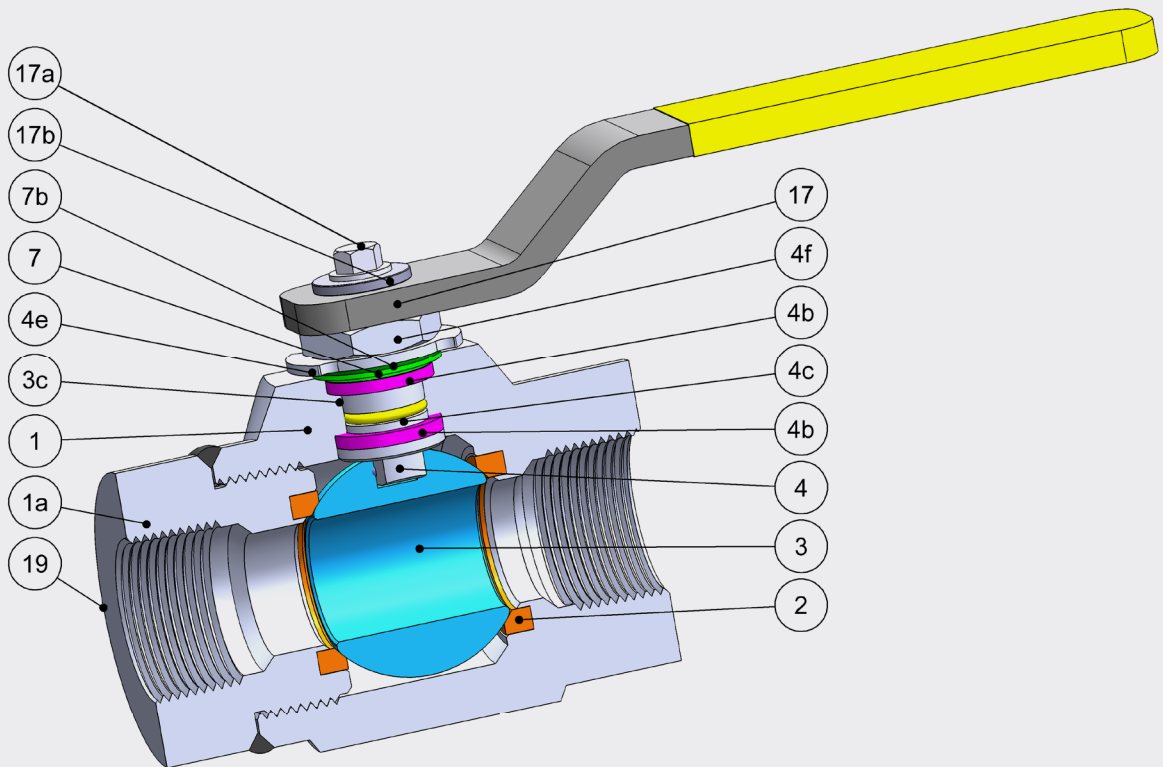
# XXX E6X4 X.XX

<p><b>Size (NPS)</b></p> <p>0.50: 1/2"</p> <p>0.75: 3/4"</p> <p>1.00: 1"</p> <p>1.50: 1 1/2"</p> <p>2.00: 2"</p> <p><b>Valve Fig.</b></p> <p>E604: 1500 Class</p> <p><b>End Type:</b></p> <p>W: Butt Weld</p> <p>S: Socket Weld</p> <p>P: Pup MNPT&amp;MNPT</p> <p>PE: Plain End</p> <p><b>Body Material:</b></p> <p>1: A105/LF2</p> <p>2: AISI304</p> <p>4: AISI316</p> <p><b>Trim Material No:</b></p> <p>4: Stem &amp; Ball SS316, Seat PTFE / POM-C / PEEK / NYLON / PCTFE / RPTFE</p> <p>6: Stem &amp; Ball SS316, Seat FKM / NBR &amp; RPTFE / POM-C</p> <p>7: Stem &amp; Ball SS316, Seat SS316+TCC / CCC / STL</p> <p>8: Stem &amp; Ball SS316, Seat NBR / FKM</p>	
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E6 SERIES - COMPACT VALVES

Figure: 604.14

Class: 1500



Part List For E604.14

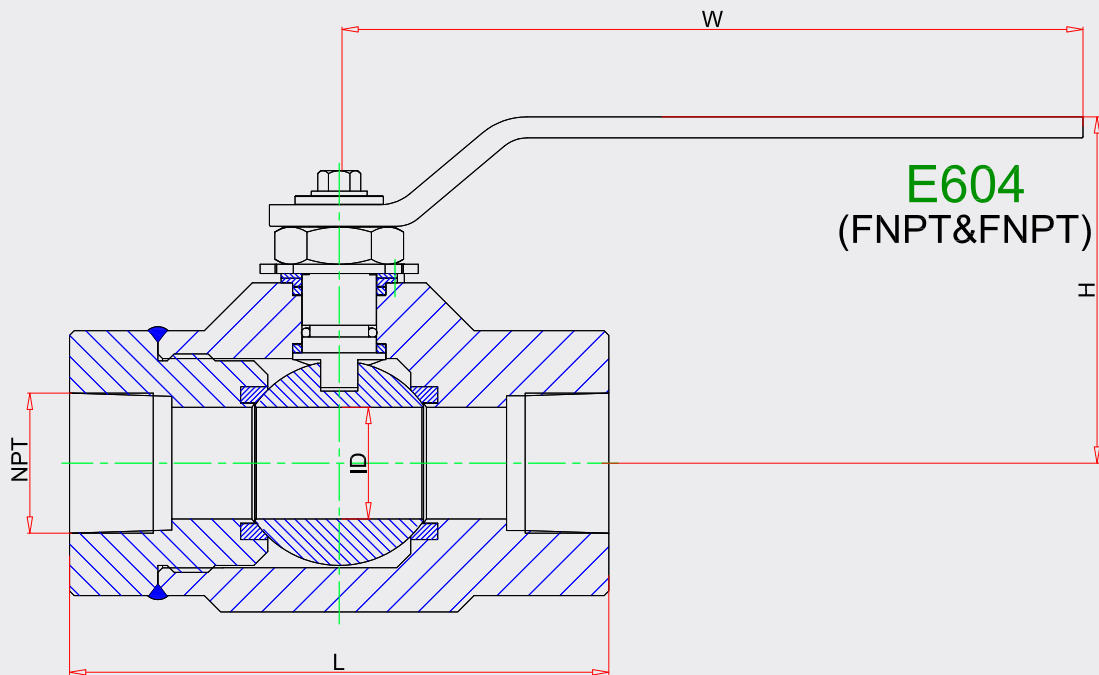
Item	Part Name	Symbol	Material	Item	Part Name	Symbol	Material
1	Body	LF2/ A105	ASTM A350 Gr. LF2 ASTM A105	4c	Stem O-ring	FKM	Fluoro Rubber (Viton-R)
1a	Body Insert	LF2/ A105	ASTM A350 Gr. LF2 ASTM A105	4e	Stopper	304	AISI 304
2	Seat Ring	POM-C	Polyacetal Copolymer	4f	Stem Nut	CS	Carbon Steel + GLV
3	Ball	F316	ASTM A182 Gr. F316	7	Gland	316	ASTM A276-T316
3c	Anti Static Device	302	AISI 302	7b	Gland Washer	POM-C	Polyacetal Copolymer
4	Stem	316	ASTM A276-T316	17	Lever	CS	Carbon Steel + PVC
4b	Stem Washer	POM-C, PTFE, GRF	POM-C, Polytetrafluoroethylene, Graphite	17a	Lever Bolt	A2	DIN A6921 A2
				17b	Lever Washer	304	AISI 304
				19	Paint	Ep	Epoxy

Figure: E604

Class: 1500

STANDARDS

Design	API 602
End Connection	ANSI B1.20.1-FNPT & FNPT
End to End	Manufacturer



Test Pressure

Class	Shell	Closure	Air
1500	383 Barg	80 Barg	6 Barg

Working Pressure (for group 1.1 materials)

-29 +38°C	+100°C Max
255.3 Barg	233 Barg

Dimensions & Weight

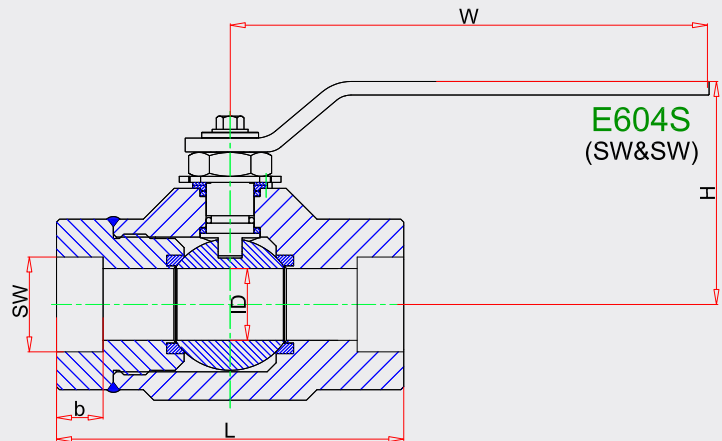
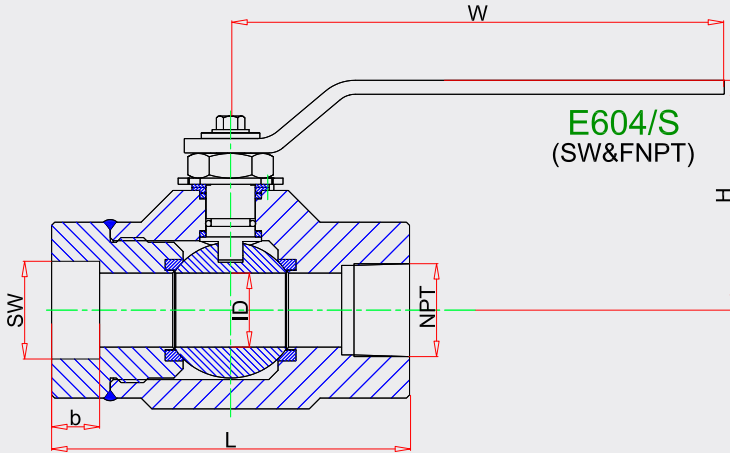
NPS	ID	L	H	W	Weight
inch	mm	mm	mm	mm	kg
1/2	11	88	58	130	1.2
3/4	17	100	63	130	1.5
1	24	118	74	160	2.6
1 1/2	37	140	96	215	5.6
2	49	165	123	240	11.1

**Figure: E604/S & E604S**

**Class: 1500**

**STANDARDS**

<b>Design</b>	API 608 & ISO 17292
<b>End Connection</b>	E604/S : ANSI B16.11-SW&ANSI B1.20.1-FNPT E604S : ANSI B16.11-SW&SW
<b>End to End</b>	Manufacturer



**Test Pressure**

Class	Shell	Closure	Air
1500	383 Barg	80 Barg	6 Barg

**Working Pressure (for group 1.1 materials)**

-29 +38°C	+100°C Max
255.3 Barg	233 Barg

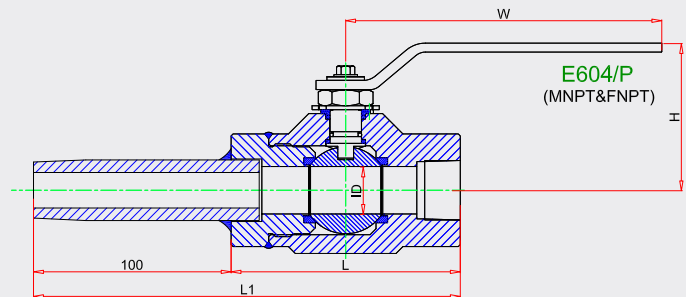
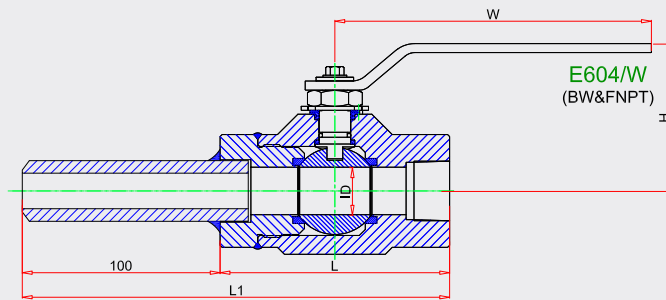
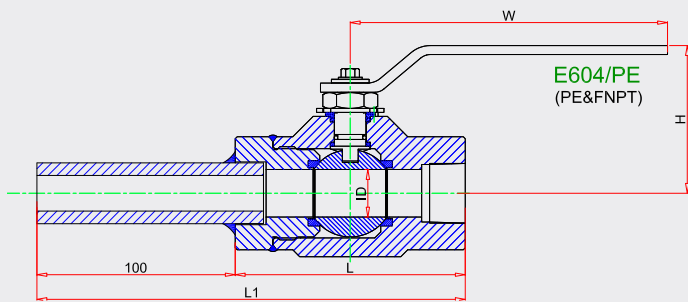
**Dimensions & Weight**

NPS	ID	SW	b	L	H	W	Weight
inch	mm	mm	mm	mm	mm	mm	kg
1/2	11	Ø22	9.5	88	58	130	1.2
3/4	17	Ø27.5	12.5	100	63	130	1.5
1	24	Ø34	12.5	118	74	160	2.6
1 1/2	37	Ø49	12.5	140	96	215	5.6
2	49	Ø61.5	16	165	123	240	11.1

**Figure: E604PE - E604/W - E604/P**  
**Class: 1500**

**STANDARDS**

<b>Design</b>	API 608 & ISO 17292
<b>End Connection</b>	E604/PE : ANSI B36.10-PE & ANSI B1.20.1-FNPT
	E604/W : ANSI B16.25-BW & ANSI B1.20.1-FNPT
	E604P : ANSI B1.20.1-MNPT & FNPT
<b>End to End</b>	Manufacturer



**Test Pressure**

Class	Shell	Closure	Air
1500	383 Barg	80 Barg	6 Barg

**Working Pressure (for group 1.1 materials)**

-29 +38°C	+100°C Max
255.3 Barg	233 Barg

**Dimensions & Weight**

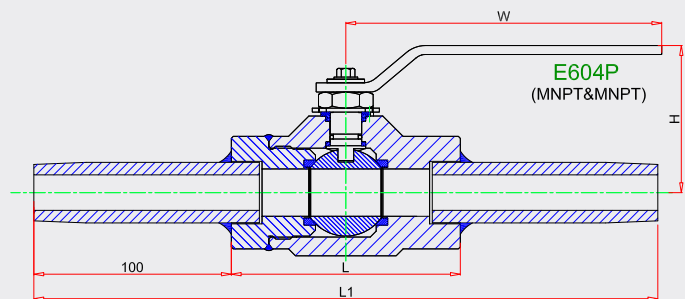
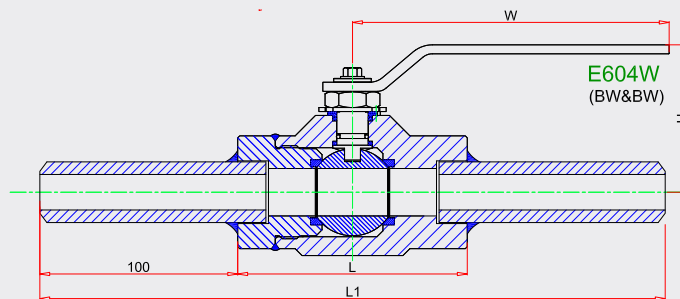
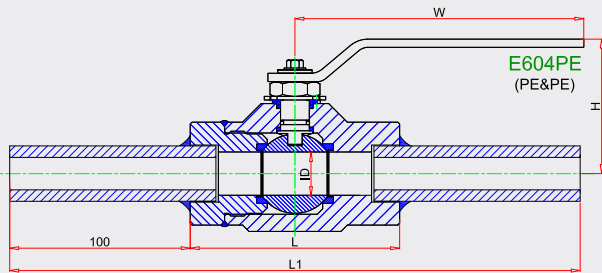
NPS	ID	L	L1	H	W	Weight
inch	mm	mm	mm	mm	mm	kg
1/2	11	88	188	58	130	1.3
3/4	17	100	200	63	130	1.6
1	24	118	218	74	160	3
1 1/2	37	140	240	96	215	6.1
2	49	165	265	123	240	11.5

## Figure: E604PE - E604W - E604P

Class: 1500

### STANDARDS

<b>Design</b>	API 608 & ISO 17292
<b>End Connection</b>	E604PE: ANSI B36.10-PE & PE E604W : ANSI B16.25-BW & BW E604P : ANSI B1.20.1-MNPT & MNPT
<b>End to End</b>	Manufacturer



### Test Pressure

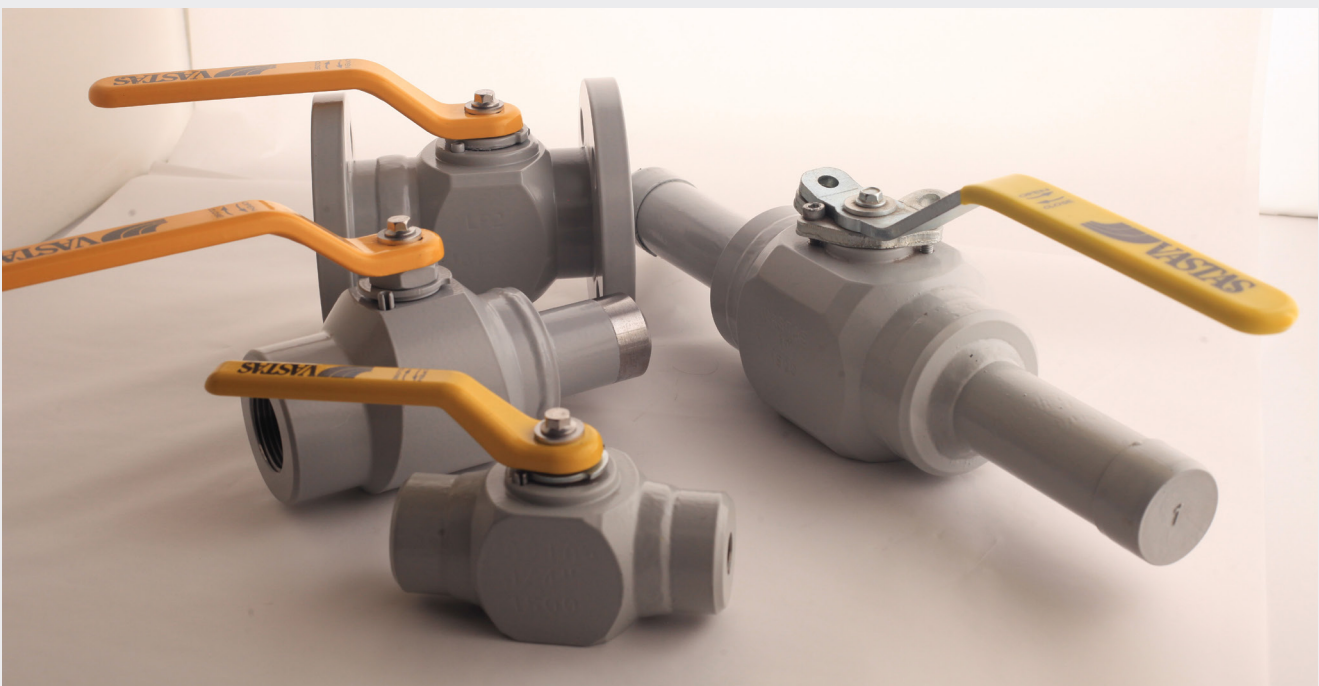
Class	Shell	Closure	Air
1500	383 Barg	80 Barg	6 Barg

### Working Pressure (for group 1.1 materials)

-29 +38°C	+100°C Max
255.3 Barg	233 Barg

### Dimensions & Weight

NPS	ID	L	L1	H	W	Weight
inch	mm	mm	mm	mm	mm	kg
1/2	11	88	288	58	130	1.5
3/4	17	100	300	63	130	1.85
1	24	118	318	74	160	3.2
1 1/2	37	140	340	96	215	6.4
2	49	165	365	123	240	11.8



**REFERENCE PROJECTS, E604**


Celikler Jeothermal	VEGA	Geothermal Water	Turkey	1 1/2"	2015
OPET Marmara Terminal	OPET	Fuel Oil Storage	Turkey	3/4"	2016
GEX 1200 - 1 x 10.7 MW Kemaliye Geothermal Power Plant Group 3	Enerjeo Kemaliye Enerji Uretim	Geothermal Water	Turkey	1"	2016
Aksagaz - RSM - A	Aksagaz	Natural Gas Transportation	Turkey	1"	2016
Sirnak DGBH	BOTAS	Natural Gas Transportation	Turkey	1"	2016
Trans Anatolian Natural Gas Pipeline (TANAP)	TANAP Project Company	Natural Gas Transportation	Turkey	1"	2016
Domestic Gas Distribution	Fluxys	Natural Gas Transportation	Belgium	1/2" - 1"	2017
1800 MW ALBA PS5 Kombine Cevrim Guc Santrali	Aluminium Bahrain B.S.C(ALBA)	Power Plant	Bahrain	1/2" - 1"	2017
Natural Gas Metering System	MECI	NG-Measure & Compression	France	1/2"	2018
Aliaga Oil Storage Terminal Expansion Project	SOCAR	R Refinery	Turkey	3/4"x1/2" - 2"	2018

**E604 REFERENCE, CLIENT LIST**

- Agdas, Turkey
- Aksagaz, Turkey
- ALBA, Bahrain
- Baskentgaz, Turkey
- Beygaz, Turkey
- BOTAS, Turkey
- Bulgartransgaz, Bulgaria
- Bursagaz-Baskentgaz, Turkey
- Cimtas, Turkey
- Cinigaz, Turkey
- Diyardgaz, Turkey
- Enerjeo Kemaliye Enerji Uretim, Turkey
- Enerya, Turkey
- Fiogaz, Turkey
- Fluxys, Belgium
- Gastrans, Serbia
- Karadeniz Enerji, Turkey
- Lesico Process Piping, Israel
- MECI, France
- Mimas Engineering, Turkey



Kutahya Tuncbilek Take-of Valve Group	BOTAS	PL Pipeline	Turkey	1/2"	2018
Tupras Izmit Refinery	Tupras	Crude Oil Refining	Turkey	3/4"	2018
STEG/SIDI BOUZID	STEG	Natural Gas Transportation	Tunusia	1/2" - 1"	2019
Rimon Energy Prinir Factory	Rimon Energy	OTHER	Israel	1/2"	2019
Kardam Compressor Station	Bulgartransgaz	RMS Regulating Metering Station	Bulgaria	1/2" - 1"	2019
30" Dia.X125 KMs Loopline Project(From SMS Sindh University to MVA Pakland	Sui Southern Gas Company Limited(SSGC)	PL Pipeline	Pakistan	1"	2019
Ankara City Natural Gas Distribution Projects	Baskentgaz	Natural Gas Transportation	Turkey	1/2"	2020
Indonesia Aroma Kopi	PT Pertamina Gas	Natural Gas Transportation	Indonesia	3/4" - 1"	2020
Transmission Gas Pipeline (Interconnector) Border of Bulgaria - Border of Hungary	Gastrans D.O.O Novi Sad	Natural Gas Transportation	Serbia	1"	2020
The Gas Processing Plant	SOCAR	Natural Gas Transportation	AZERBAIJAN	1/2"	2020

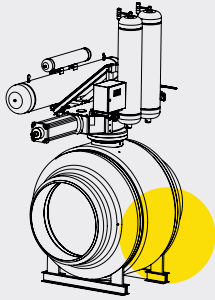
- Nesma - Havatek, Saudi Arabia
- Nesma - Havatek, Turkey
- OPET, Turkey
- Palmet Engineering, Turkey
- Petoil Petrol, Turkey
- PT Pertamina Gas, Indonesia
- Rades, Tunusia

- Reka Energi, Turkey
- Rimon Energy, Israel
- SOCAR, Azerbaijan
- SOCAR, England
- SOCAR, Turkey
- STEG, Tunusia
- Sui Southern Gas Company, Pakistan

- Torunlar, Turley
- Troya, Turkey
- TUPRAS, Turkey
- VEGA, Turkey

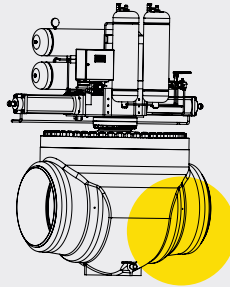
# PRODUCT RANGE

Main Product Range are Ball Valves, Gate Valves, Check Valves, Globe Valves, Plug Valves, Hydraulic Actuators & Pneumatic Actuators.



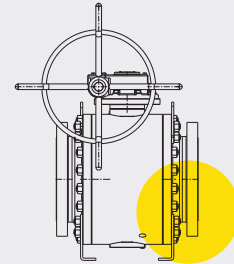
**FULL WELDED BALL VALVES**

API 6D monogrammed  
Safety Integrity Level (SIL) Certified,  
ATEX, PED



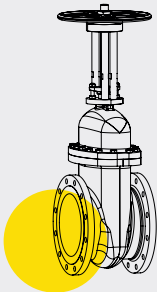
**TOP ENTRY BALL VALVE**

API 6D monogrammed  
Safety Integrity Level (SIL) Certified,  
ATEX, PED



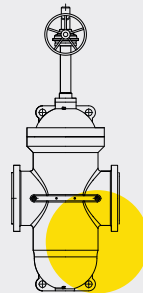
**SPLIT BODY BALL VALVES**

API 6D monogrammed  
Safety Integrity Level (SIL) Certified,  
ATEX, PED



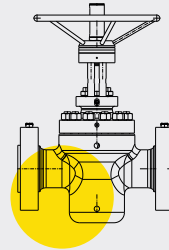
**WEDGE GATE VALVES**

API 600 monogrammed  
Safety Integrity Level (SIL) Certified,  
ATEX, PED



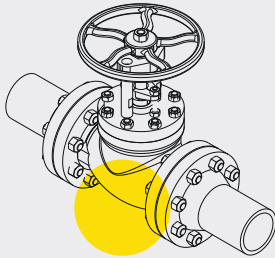
**CONDUIT GATE VALVES**

API 6D monogrammed  
Safety Integrity Level (SIL) Certified,  
ATEX, PED



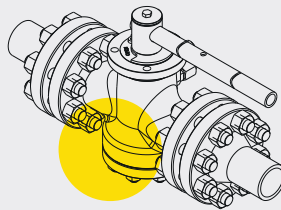
**API 6A GATE VALVES**

API 6A monogrammed  
Safety Integrity Level (SIL) Certified,  
ATEX, PED



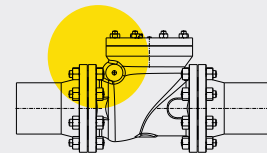
**GLOBE VALVES**

BS 1873 / API 623  
Safety Integrity Level (SIL) Certified,  
ATEX, PED



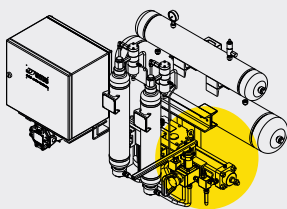
**PLUG VALVES**

API 6D monogrammed  
ATEX, PED



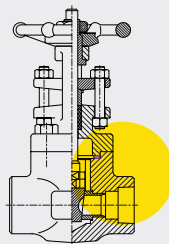
**CHECK VALVES**

API 6D monogrammed  
ATEX, PED



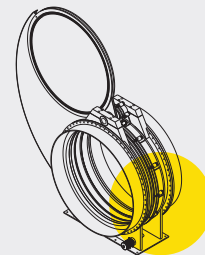
**HYDRAULIC & PNEUMATIC ACTUATORS**

ASME U-Stamp, Safety Integrity  
Level (SIL) Certified, ATEX, PED



**COMPACT FORGED VALVES**

API 6D / API 602 / API 608/ BS 5352  
/ISO 17292  
Safety Integrity Level (SIL) Certified,  
(E604 & E60T)



**TAILOR MADE**

As a designing and manufacturing  
company we are not limited with the  
product range, we offer tailor made  
valve and actuator solutions as well.





**VASTAŞ VALF ARMATÖR SANAYİ TİCARET A.Ş.**

**Manufacturing Plant & Office**

Organize Sanayi Bölgesi 2. Cad. No:22

Cerkezkoy 59500

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F:+90 282 758 36 59

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F: +90 212 222 63 59