



VASTAS

Conduit Gate Valves

Type "B" SLAB GATE
Type "D" EXPANDING GATE

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6D-0449
600-0043

0036

TÜVRheinland®
CERT
ISO 9001
ISO 14001
BS OHSAS 18001



Vastas Conduit Gate Valves

This type is designed and produced for pipelines. They should be preferred for On-Off services. Emergency Shutdown, Line Break and Remote Control types provide sound operation of the line. Manually operated unless otherwise is indicated. It is used as an isolating valve, pig loading-unloading platforms, pump or compressor & RMS stations, storage and distribution terminals. They are manufactured with a flow cross section equals to pipeline cross section. Operation without decreasing the differential pressure is not recommended. Vastas Conduit Gate Valves are API monogrammed and CE approved. They are sorted for underground and above ground services. All valves have Antistatic Design (ASD) and Fire Safe Design (FSD) features. They may be equipped with different operators depending on the structure of project or may be delivered with bare-stem including connection flange as per ISO-MSS standard.

Application Types

» Emergency Shutdown Valves (ESDV)
» Line Break Valves (LBV)
» Remote & Local Control Valves (RCV)
» Gas Power Supply & Control Valves for Natural Gas Pipelines
» Control Valves with Nitrogen Reservoir for Crude-Oil Pipelines

They may be featured with mixed properties upon request.

Operator (Actuator) Types

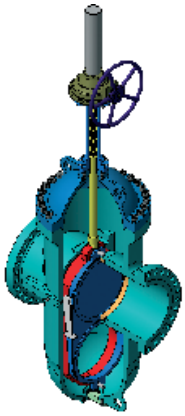
» Gas / Hydraulic Actuators
» N2 / Hydraulic Actuators
» Air / Spring Actuators (Scao, Soac)
» Motor Operators (Rotork, Auma etc.)
» Manual Operators (Handwheel or Gearbox)

Vastas Conduit Gate Valves

API 6D Figure 1

Expanding Gate Valve
Rising Stem OSY
(Vastas figure "D")

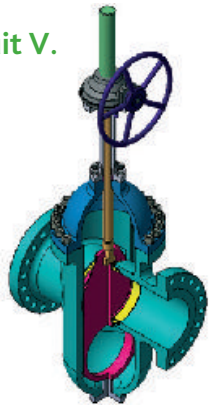
- E51D class 150
- E52D class 300
- E53D class 600
- E54D class 900
- E55D class 1500



API 6D Figure 2

Slab Gate Through Conduit V.
Rising Stem OSY
(Vastas figure "B")

- E51B class 150
- E52B class 300
- E53B class 600
- E54B class 900
- E55B class 1500



Features

Double Block and Bleed (DBB)& Double Isolation and Bleed (DIB)

DBB blocks flow from both valve ends when the valve is in closed position and the cavity between the seating surfaces is vented through a bleed connection. Hence, tightness of both seat faces can be traced. DIB is used only directional without need of relief valve, and only with the valves having secondary soft seat faces. Direction of pressure decrease can be adjusted as required or closed if not necessary.

Design Criteria of ASME B16.34 Standard

Our design complies with the requirements of ASME B16.34 standard. Security coefficient is accepted as 1.4.

Minimum wall thickness recommended by this standard is provided for the minimum flow diameters complying API 6D.

Materials as per ASTM Standard

ASME B16.34 Table 1 - Group 1 applies unless otherwise is indicated. Equivalent or superior materials are used upon customer requirement.

Manufacturing by casting, forging or from plates, bars & tubular materials is available.

Trim Materials Depend on Request
(Combination Type)

1. ENP25V750+PTFE (Primary Soft Seat Type)
2. ENP25V750+FKM (Primary Metal to Metal)
3. 13Cr+13Cr+13Cr (API Trim No.1 Metal to Metal)
4. 316+316+316 (API Trim No.10 Metal to Metal)
5. 13Cr+13Cr TCC+13Cr TCC (Metal to Metal)
6. Different combinations are also provided upon request.
7. Additional emergency sealent lubricant is applicable for all above combinations.

NACE MR0175 / ISO 15156

Corrosion resistance of materials is in conformity with NACE / ISO Level PSL1 is offered as standard, Level PSL2 is provided upon request.

Certificates

» API 6D monogram.
» API 6FA, Type approval certificates.
» WPS-PQR & WPQ certificates available.
» API Q1 & ISO 9001 certificates updated.
» Integrated Corporate Management System complies with requirements of OHSAS 18001 & ISO 14001 standards too.

References for Vastas Conduit Gate Valves

Our conduit gate valves are in use since 1983 and all are continuing to serve. Service and spare part support is offered on 7x24 basis.

Inspection & Test

All tests necessarily required by API 6D, ISO 5208 and API 528 standards are applied. Type approvals are available for:

» Low Emission Test
» Fire Safe Test
» Antistatic Design Test
» Performance Test

Third party supervision for test & inspection is available when indicated by order. Welding procedure is in conformity with ASME code. Procedures for materials acceptance and NDT inspections comply with criteria of MSS SP55 and ANSI B16.34 Annex B-C-D & App.IV, respectively.

Pressure & Temperature

Max operating temperature (MOT) is between -29°C and 100°C as standard. Operating temperatures between -29°C to 425°C are convenient for expanding gate valves without soft seats. Lower limit can be achieved to -73°C by using alternative LCB-LCC materials. Valves with non-maintenance type packings have upper limit of 200°C. Grafoil rings are used for higher temperatures. (Offers up to 593°C operating temperatures are provided upon request.) Standard operating temperatures for Natural Gas & Crude Oil Pipelines are accepted between -29°C to 100°C, which is valid only for metal to metal (MTM).

Maximum Operating Pressure (MOP)

» Up to 20 Bars for valves of API 6D
Class 150 & NPS 12 to NPS 72 in sizes.
» Up to 50 Bars for valves of API 6D
Class 300 & NPS 12 to NPS 48 in sizes.
» Up to 100 Bars for valves of API 6D
Class 600 & NPS 6 to NPS 36 in sizes.
» Up to 150 & 260 Bars for valves of API 6D
Class 900-1500 & NPS 4 to NPS 24 in sizes.

Painting & Coating



Application for all kinds comply to approved procedures.
» For above ground applications, painting layers are as follows:
- First layer of Zinc Rich Primer,
- Second layer of Epoxy paint with 80 to 120µ thickness,
- Top layer of polyurethane paint resistant to ultraviolet light with 40µ thickness.
» For underground applications, polyurethane coatings of 1200µ (Rhino Lining) are provided as standard. Different applications are also available upon customers requirements.

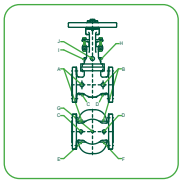
Reliance



Vastas Conduit Gate Valves are safely used in regions of high earthquake risk, at river & road crossings and in residence areas. They are reliable and resistant to stroke shock and vibration. They have high resistance to cracking under high frost risk.

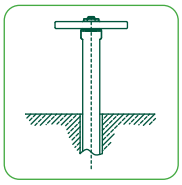
Features

By-Pass, Drain & Vent (Optional)



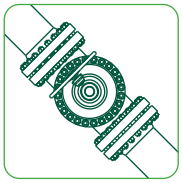
Drain & vent connections are available in all valves, normally closed with a plug or equipped with a drain valve upon request.

Extension (Optional)



Valve operator, drain & vent connection and stem packing are extended as required for underground applications.

Connecting Ends



Dimensions are generally in conformity with ASME B16.5-RF and MSS SP44-RF standards. Different connections are provided as "RJ", "SG" & "LG" when required. Generally RF or RTS upon request. Dimension of welding end connections complies with ASME B16.25. Pups End are provided upon request. Welding ends are also offered when required, which is recommended while maintenance is possible on pipeline without taking the valve out.

Body & Bonnet



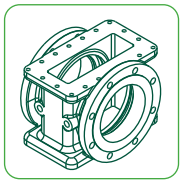
» Body is usually one piece, rigid and symmetric casting, designed as per ASME B16.34 standard with recommended wall thickness using 1,4 coefficient of strenght, and fully complies to API 6D requirements. Vent and relief connections are provided as standard, when otherwise is indicated. By-pass is given upon request.

» FTF and FTE dimensions are in conformity with ASME B16.10 & API 6D standards. Pups End are provided if indicated by order.

» Housings for sealing ring are large and big enough, hence rings are pressure placed for expanding gate type or free floating for slab gate type without any deformation.

Body with double bonnets (Optional)

» Body with double bonnet flanges is manufactured upon special requirement.



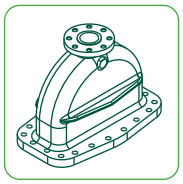
» This is required and recommended for easyness of dismantling the rings from housings for expanding gate type, and for easy maintenance for slab gate type valves.

» Also recommended for welding end valves wich an be maintained and repaired without taking from the line. Double bonnet valves should rather be mounted horizontally for easy access. Necessary space should be kept under lower bonnet otherwise, and supports should be used under flanges.

» Valves can be dismantled and fast inspection & maintenance can be executed or defected parts are renewed during line breaks.

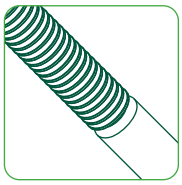
Bonnet

Connected firmly to the body and sealed with SWG (316SS+Grafoil) or NASF (Flat Grafoil Full Confined) gaskets. Connections are fastened with stud bolts and nuts. Vent and relief connections are provided.



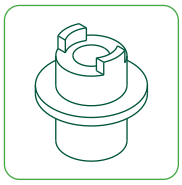
Stem & Packing

Stem



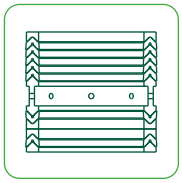
Stem is outside screwed and yoke type. It is preferred due to operational & fire safety and not affected bt thermal extensions movement of the gate is achieved through a T-Shape connection and guided. Intersection of seat faces shall not interfere the motion of gate.

Stem nut



It is made of aliminum bronze with a melting point of 955°C, and has trapezoidal screws.

Packing

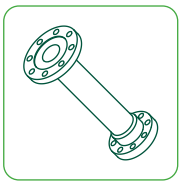


Maintenance is possible on line, while it is none-renewal type wich is re-inforced with sealing lubricant in v-cup shape. There is no need for additional packings, sound tightness is provided by injection of sealing lubricant. Vacuum or pressure shall not affect it's performance, hence called as “none-maintenance” type. Compressible stem packing is available upon request, which has anti-blowout design feature. The stem can't be blown out by line-pressure when the gland assembly is unfastened. Please refer to “Instruction for use” for application.

Operators (Actuators)

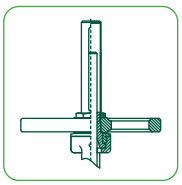
Valves are delivered with proper operators, equipped with emergency shut down or line break actuators, or with bare stem and connection flange as per ISO 5210 or MSS SP102 when required.

Yoke & ISO Flanges



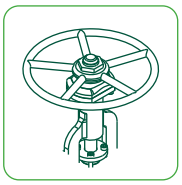
Yoke is designed being as protector of the screws and carrier of stem. Connection flange is suitable for actuator flange dimensions. When required, it is manufactured with dimensions of MSS SP102 standard. It is possible to equip the valve with actuator or gearbox during it's operational life.

Stem Protection & Position Indication



Stem protector makes a shield against water and dust effects providing at the same time an indication of valve position.

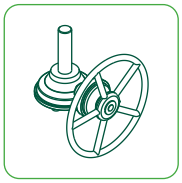
Handwheel



The maximum force manually required at the handwheel or wrench to apply the breakaway torque shall not exceed 360N. Hence, valves are delivered with handwheel or wrench when required torque is equal or lower than 360N which is incidated on datasheets. Otherwise, valves should be ordered together with proper gearbox or actuator. Handwheels are marked with open/close directions.

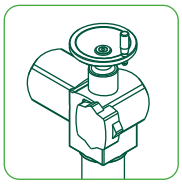
Features

Gear Box



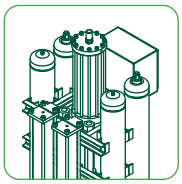
This operator is necessary when the required breakaway torque is more than 360N. Mode of operation should be indicated details by the order. Gearboxes have second input connection where additional reductions are necessary. Input flange is convenient for addition of locking device when required.

Electric Actuators



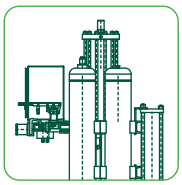
They might be directly equipped on valves or to the place of handwheel of a gearbox on the valve. Local/Remote Control & Monitoring is provided upon request. Generally used for On/Off operations.

Liquid or Gas Actuators

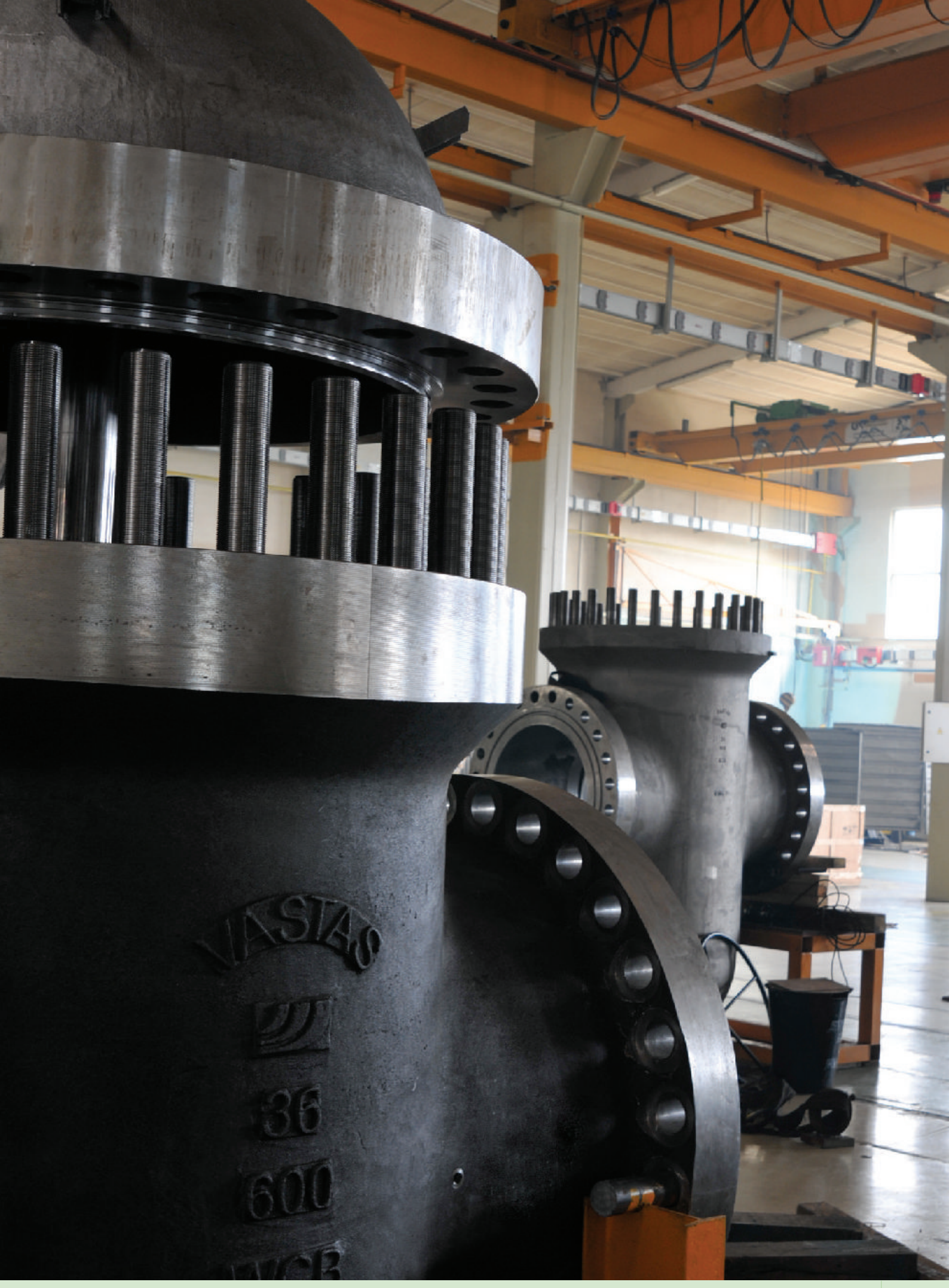


When the line-function of valve is emergency intervention as closing the valve without outsourced energy and opening with remote control, proper actuators are used. Pressure of flowing liquid or gas is used for actuation. When required, line energy is stored in reservoirs enough to actuate 2*4 operations.

Actuators



They are used for emergency cases depending on low and/or high pressure fluctations in line, without outsourced energy. It is not allowed remote opening the valve, but additional devices are used when required. Actuation is achieved by pressure of flowing fluid, which may be stored in reservoirs for actuation of 2*4 operations, if required.


VASTAS
21
36
600

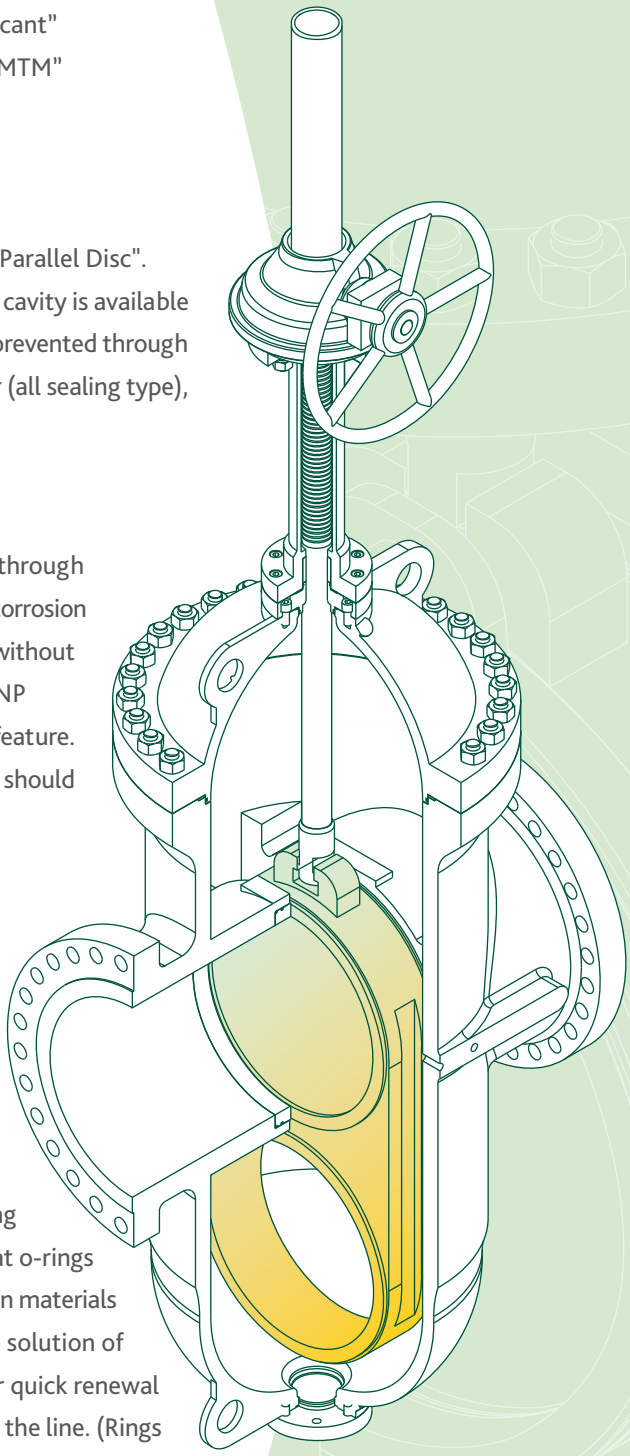
Slab Gate "B" type Conduit Valves

6D-0449
600-0043

Parallel Gate & Floating Seatrings

Sealing type:

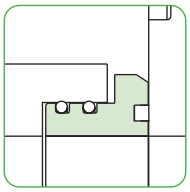
PSSM "Primer soft seat, seconder metal to metal (MTM), emergency sealent lubricant"
PMSS "Primer MTM, seconder soft seat, emergency sealent lubricant"
TSSM "Tripleseat, primer soft - sealent - soft, secondary double MTM"
TMSM "Tripleseat, primer mtm - sealent - MTM"
Fire safe, -29 C° to 100 C°



Slab Gate

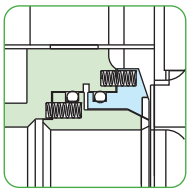
API 6D defines this type as "Slab-Gate", but it may be called as "Parallel Disc". Seat faces are protected at open/close positions. Bleeding of body cavity is available wich allows monitoring of tight shut off. Over pressure on rings is prevented through body guides. Sort of seat faces are ENP25V750 (Only PSSM), 13Cr (all sealing type), 316, CoCr-A (Stellite), Monel or TCC.

Seatring



Positive intersection of seat faces is provided through floating feature. Body seat guide is resistant to corrosion and facilitates the movement of o-rings inside without any deformation. By means of its complete ENP coating. TFE supports for o-rings is an optional feature. DBB or DIB for open/close optional self relief system. (Relief valve should be preferred instead of self-relief)

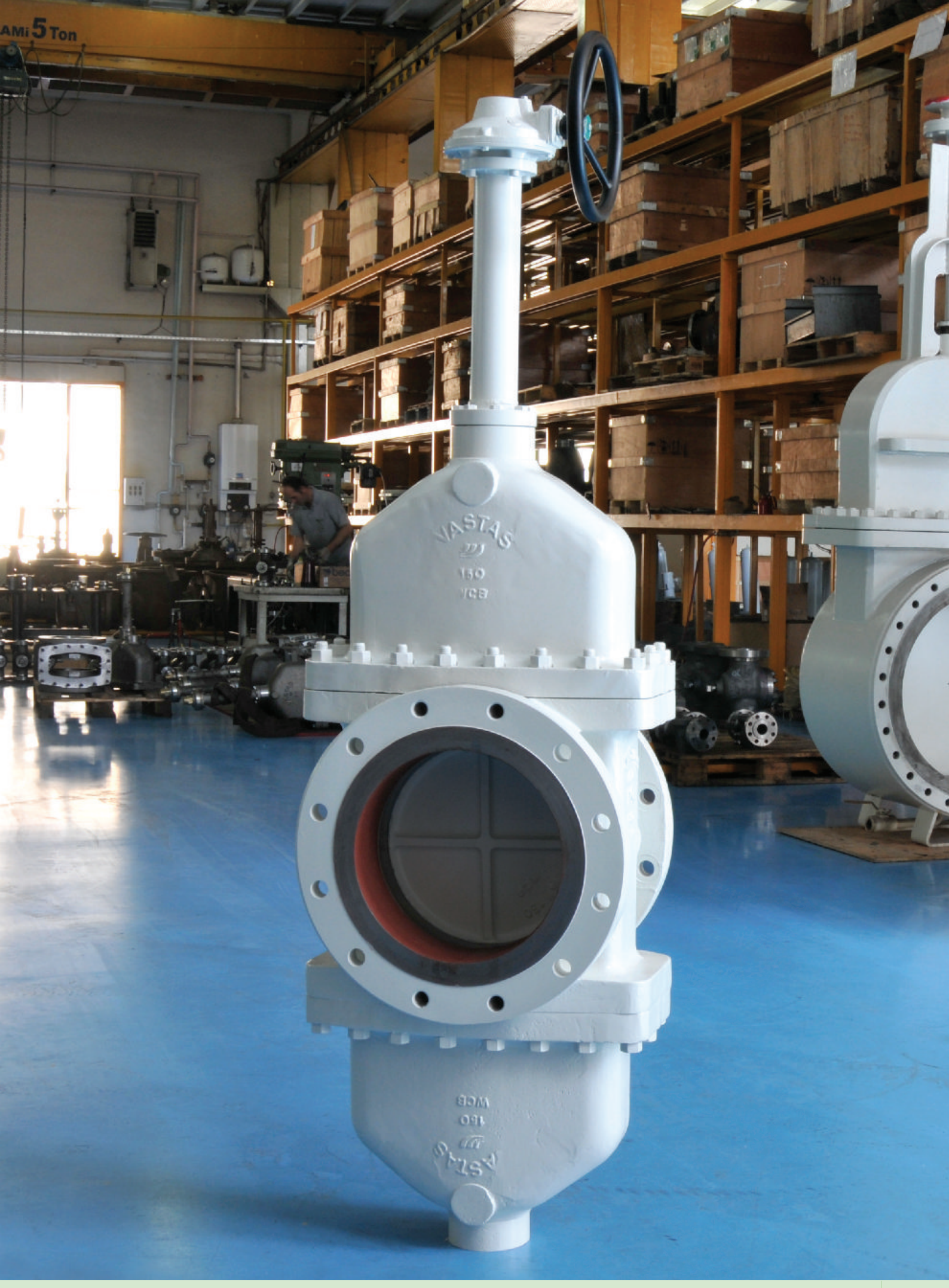
"TRIPLESEAT®" Seatring (For 20" & larger sizes)



1. Internal Ring "Lubring". (Adequate for tightness on its own) **2.** External Ring "Seatring". (Pressure sealed individually) **3.** Double ring cavity full with sealent. (A sealing interface is established with lubricant between the rings as in the lubricated plug valves) **4.** Maintenance is achieved by function of "Seatflushing®". During periodic maintenance on live pipeline, slightly overpressure on seat o-rings than the line pressure a flow in to the line is created by which foreign materials placed in seat cavities are moved in to the line. This is the unique solution of periodic maintenance on live pipeline. Its design is convenient for quick renewal after draining the fluid and pressure without taking the valve from the line. (Rings without o-rings or places in its cavity with welded bellows can not be renewed unless the valve is taken out of the line.

Cartridge for Gate (Optional for only 20" & smaller sizes)

It guides the seat faces and prevents clogging of the body cavity with solid particles.

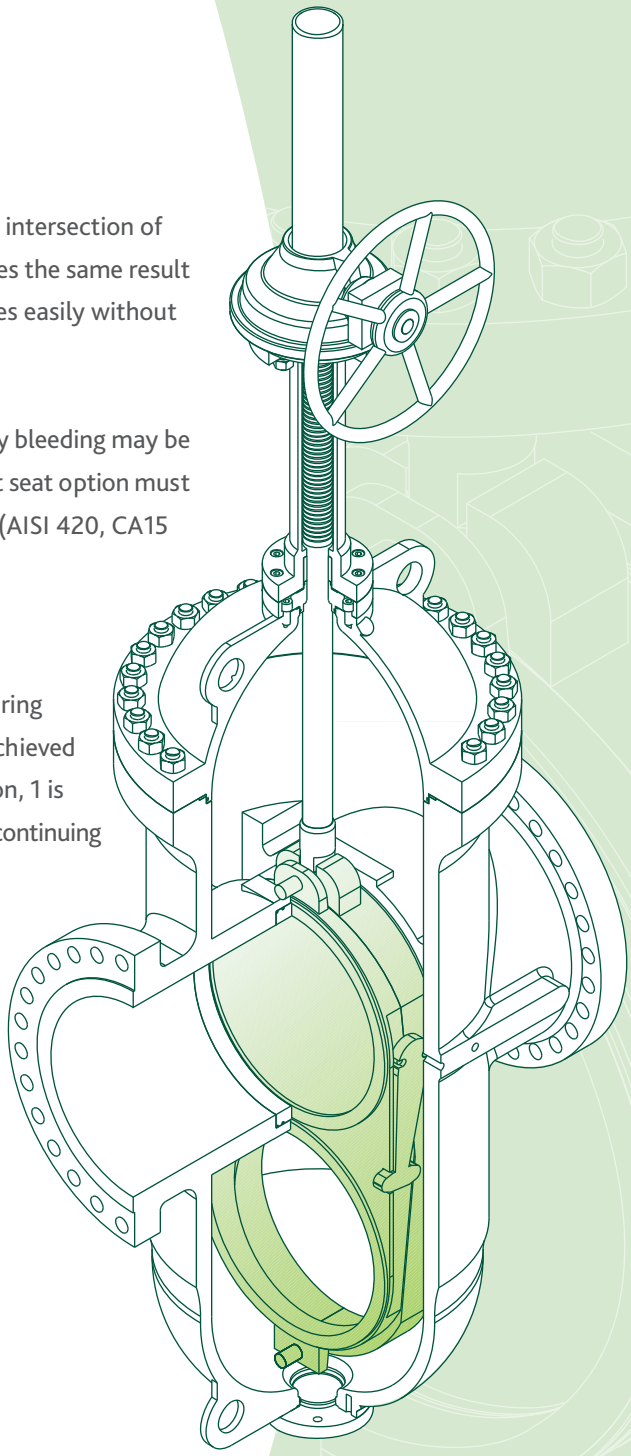

5 Ton
VASTAS
150
WCB

Expanding Gate “D” type Conduit Valves

6D-0449
600-0043

Double Wedge & Parallel Expansion Gate, Solid Seatring

Expansion Wedge at On-Off Position
All Metal to Metal, Optional Soft Seat & Sealent Lubricant
Fire safe, -29 C° to 425 C°

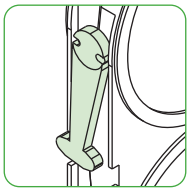


Double Expansion Gate

It is defined as “Expansion Gate” by API 6D, and provide positive intersection of seat faces by expanding on open/close positions. This feature gives the same result as created by wedge gates. Intersection or seperation of seat faces easily without being far away from each other is an advantage.

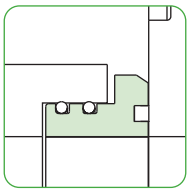
Seat ring faces are protected for open/close positions. Body cavity bleeding may be hard if convenient compression during closing is not provided. Soft seat option must be preferred when DBB feature is required. Gate materials; 13Cr (AISI 420, CA15 integral faces), CoCr-A (Stellite) or TCC.

Stopper & Guide Arm



Device prevents expansion of double gates during running, the heads of stoppers are free when achieved open or close positions, allowing the expansion, 1 is stop being at the end of it's stroke and only 2 is continuing to secure tight interface.

Seatring

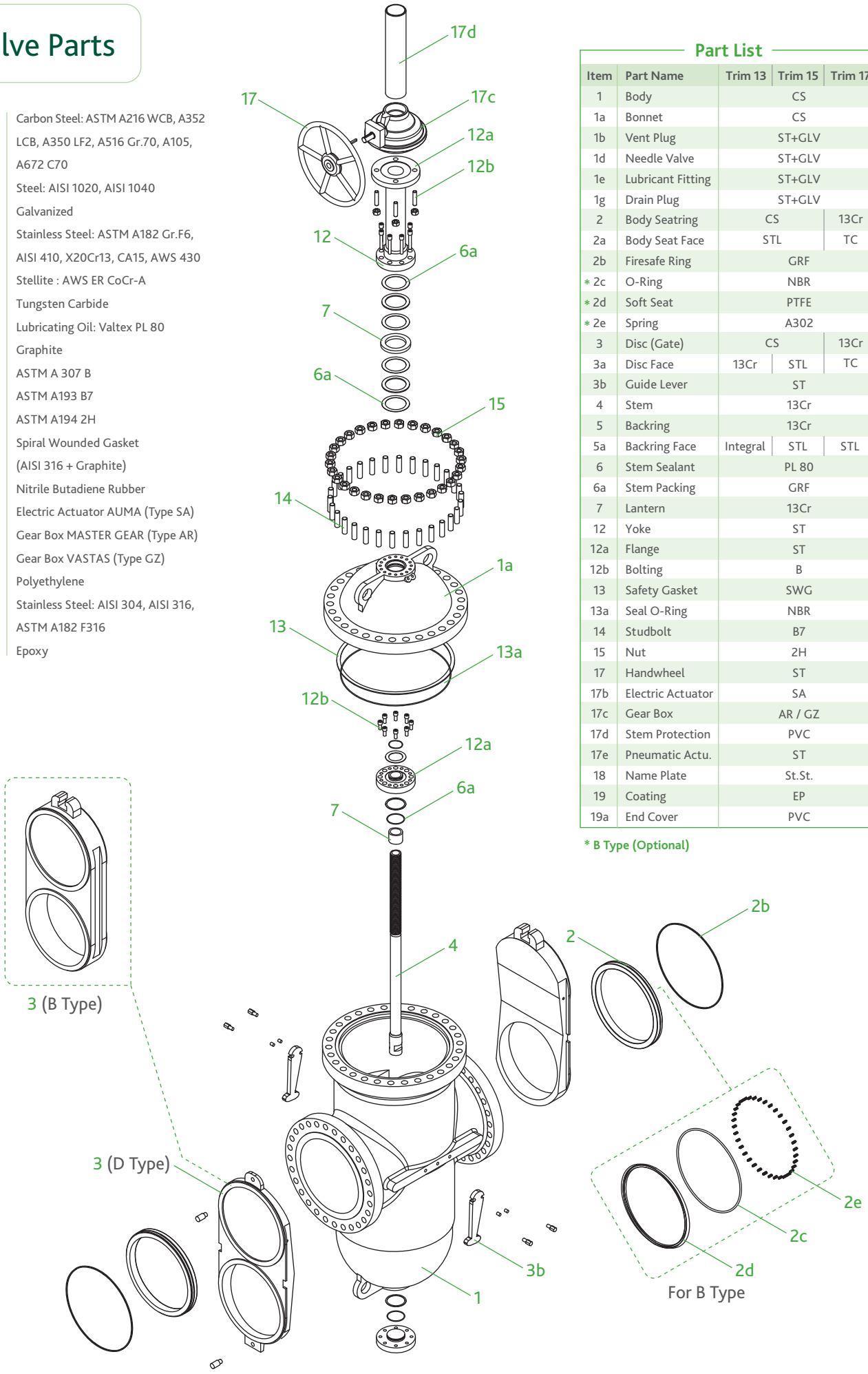


Both seatrings are placed with pressure in housings. Expanding gate provide positive tightness depending on closing pressure. Ring materials: 13Cr (SS410-CA15 integral) or CoCr-A (Stellite), TCC optional.



Valve Parts

CS	Carbon Steel: ASTM A216 WCB, A352 LCB, A350 LF2, A516 Gr.70, A105, A672 C70
ST	Steel: AISI 1020, AISI 1040
GLV	Galvanized
13Cr	Stainless Steel: ASTM A182 Gr.F6, AISI 410, X20Cr13, CA15, AWS 430
STL	Stellite : AWS ER CoCr-A
TC	Tungsten Carbide
PL 80	Lubricating Oil: Valtex PL 80
GRF	Graphite
B	ASTM A 307 B
B7	ASTM A193 B7
2H	ASTM A194 2H
SWG	Spiral Wounded Gasket (AISI 316 + Graphite)
NBR	Nitrile Butadiene Rubber
SA	Electric Actuator AUMA (Type SA)
AR	Gear Box MASTER GEAR (Type AR)
GZ	Gear Box VASTAS (Type GZ)
PVC	Polyethylene
St.St.	Stainless Steel: AISI 304, AISI 316, ASTM A182 F316
EP	Epoxy



Part List

Item	Part Name	Trim 13	Trim 15	Trim 17
1	Body	CS		
1a	Bonnet	CS		
1b	Vent Plug	ST+GLV		
1d	Needle Valve	ST+GLV		
1e	Lubricant Fitting	ST+GLV		
1g	Drain Plug	ST+GLV		
2	Body Seatring	CS		13Cr
2a	Body Seat Face	STL		TC
2b	Firesafe Ring	GRF		
* 2c	O-Ring	NBR		
* 2d	Soft Seat	PTFE		
* 2e	Spring	A302		
3	Disc (Gate)	CS		13Cr
3a	Disc Face	13Cr	STL	TC
3b	Guide Lever	ST		
4	Stem	13Cr		
5	Backring	13Cr		
5a	Backring Face	Integral	STL	STL
6	Stem Sealant	PL 80		
6a	Stem Packing	GRF		
7	Lantern	13Cr		
12	Yoke	ST		
12a	Flange	ST		
12b	Bolting	B		
13	Safety Gasket	SWG		
13a	Seal O-Ring	NBR		
14	Studbolt	B7		
15	Nut	2H		
17	Handwheel	ST		
17b	Electric Actuator	SA		
17c	Gear Box	AR / GZ		
17d	Stem Protection	PVC		
17e	Pneumatic Actu.	ST		
18	Name Plate	St.St.		
19	Coating	EP		
19a	End Cover	PVC		

* B Type (Optional)


VASTAS
30"
150
CARBON STEEL
VASTAS
30"
150

Datasheet | E51 — Conduit Gate Valve

- Bolted Bonnet
- Outside Screwed & Yoke
- Rising Stem

NPS **2-48** | DN **50-1200**

PN **20** | Class **150**

Note: Incase of order, API Valve Datasheet and Vastas's drawing are submitted and customer's approval is required.

Working Pressure

-29+38 °C	**20 Bar**
+100 °C	**18 Bar**

Test Pressure

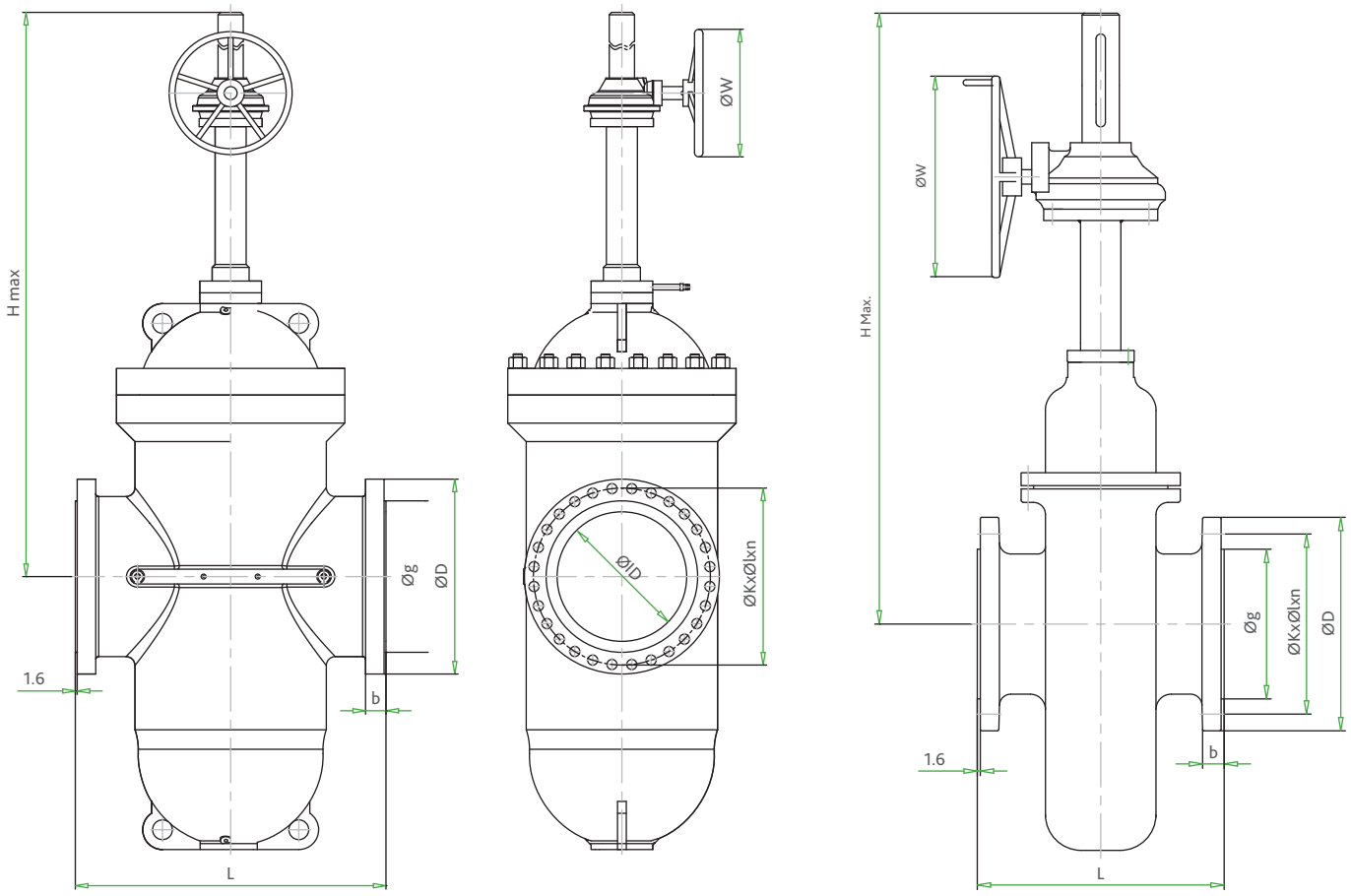
Shell & Backseat	**30 Bar**
Closure	**22 Bar**
Air	**6 Bar**

Design Standard

API 6D & ISO 14313

Dimensions & Weight

NPS	DN	ID	Area	Kv	ØD	b	Øg	ØK	Øl	n	Bolt			L	H max.	ØW	Stem		
inc.	mm	mm	cm2	m3/h	mm	mm	mm	mm	mm	no	inch	mm	Torque Nm	mm	mm	mm	mm	S.Acme	turn no
2	50	49	19	326	153	16	92	121	19	4	5/8	M16	105	178	370	210	19	6	17
3	80	74	43	816	191	19	127	152	19	4	5/8	M16	105	203	450	235	22	6	23
4	100	100	79	1.540	229	24	157	191	19	8	5/8	M16	105	229	550	265	26	5	25
6	150	150	177	3.720	280	26	216	241	22	8	3/4	M20	200	267	780	310	29	5	34
8	200	201	317	6.800	345	29	270	299	22	8	3/4	M20	200	292	975	360	32	5	44
10	250	252	499	11.950	405	30	324	362	26	12	7/8	M24	320	330	1275	410	35	4	47
12	300	303	721	18.600	485	32	381	432	26	12	7/8	M24	320	356	1425	460	38	4	54
14	350	334	876	23.500	535	35	413	476	29	12	1	M27	480	381	1620	460	45	4	60
16	400	385	1.164	30.900	600	37	470	540	29	16	1	M27	480	406	1800	610	45	4	70
18	450	436	1.492	40.900	635	40	533	578	33	16	1 1/8	M30	700	432	2100	610	51	4	78
20	500	487	1.862	49.300	700	43	584	635	33	20	1 1/8	M30	700	457	2230	730	51	4	86
24	600	589	2.723	78.000	815	48	692	749	36	20	1 1/4	M33	950	508	2600	730	57	3	80
30	750	735	4.241	122.000	985	54	857	914	36	28	1 1/4	M33	950	610	3200	730	57	3	95
32	800	779	4.764	141.000	1060	57	914	978	42	28	1 1/2	M39	1600	711	3350	730	64	3	102
36	900	874	5.996	178.500	1170	61	1022	1086	42	32	1 1/2	M39	1600	711	3700	730	64	3	115
40	7000	976	7.478	225.500	1290	64	1124	1200	42	36	1 1/2	M39	1600	762	4000	730	64	3	129
42	1050	1020	8.167	252.000	1345	67	1194	1257	42	36	1 1/2	M39	1600	762	4250	730	64	3	135
46	1150	1120	9.847	301.500	1455	69	1295	1365	42	40	1 1/2	M39	1600	762	4550	730	76	3	146
48	1200	1166	10.673	326.000	1510	70	1359	1422	42	44	1 3/4	M45	2600	762	5100	730	76	3	150



Dimensions & Weight

Double hand force for ON/OFF operation at Different (DP) Pressures				Wt	Thrust				Torque				NPS
5 bar N	10 bar N	15 bar N	20 bar N	Kg	5 bar kN	10 bar kN	15 bar kN	20 bar kN	5 bar Nm	10 bar Nm	15 bar Nm	20 bar Nm	inc.
2	5	7	9	25	0,2	0,5	0,7	1,0	0,5	0,9	1,4	1,9	2
5	10	16	21	49	0,6	1,1	1,7	2,2	1,2	2,4	3,7	4,9	3
8	16	25	33	70	1,0	2,0	3,0	4,0	2,2	4,3	6,5	8,7	4
18	35	53	71	101	2,2	4,5	6,7	8,9	5,5	11	16	22	6
30	60	90	121	181	4,0	7,9	12	16	11	22	33	43	8
45	91	136	182	266	6,2	12	19	25	19	37	56	75	10
64	127	191	255	353	8,9	18	27	36	29	59	88	117	12
94	188	282	376	514	12	24	37	49	43	86	130	173	14
92	185	277	370	734	16	32	48	64	56	113	169	226	16
135	270	405	540	932	20	40	60	80	82	165	247	330	18
139	279	418	557	1.000	25	50	75	99	102	203	305	407	20
227	455	682	909	1.678	36	72	107	143	166	332	498	664	24
355	711	1.066	1.421	3.220	56	112	168	224	259	519	778	1037	30
452	904	1.355	1.807	3.836	64	127	191	254	330	660	989	1319	32
572	1.144	1.715	2.287	4.179	80	161	241	322	417	835	1252	1670	36
726	1.438	2.192	2.877	4.932	95	185	288	375	530	1050	1600	2100	40
901	1.802	2.703	3.604	5.754	110	219	329	438	658	1316	1973	2631	42
1.030	2.062	3.062	4.041	6.302	125	245	375	495	752	1505	2235	2950	46
1.177	2.354	3.531	4.708	6.905	143	286	429	572	859	1718	2578	3437	48

Datasheet | E52 — Conduit Gate Valve

- Bolted Bonnet
- Outside Screwed & Yoke
- Rising Stem

NPS **2-48** | DN **50-1200**

PN **50** | Class **300**

Note: Incase of order, API Valve Datasheet and Vastas's drawing are submitted and customer's approval is required.

Working Pressure

-29+38 °C	**51 Bar**
+100 °C	**40 Bar**

Test Pressure

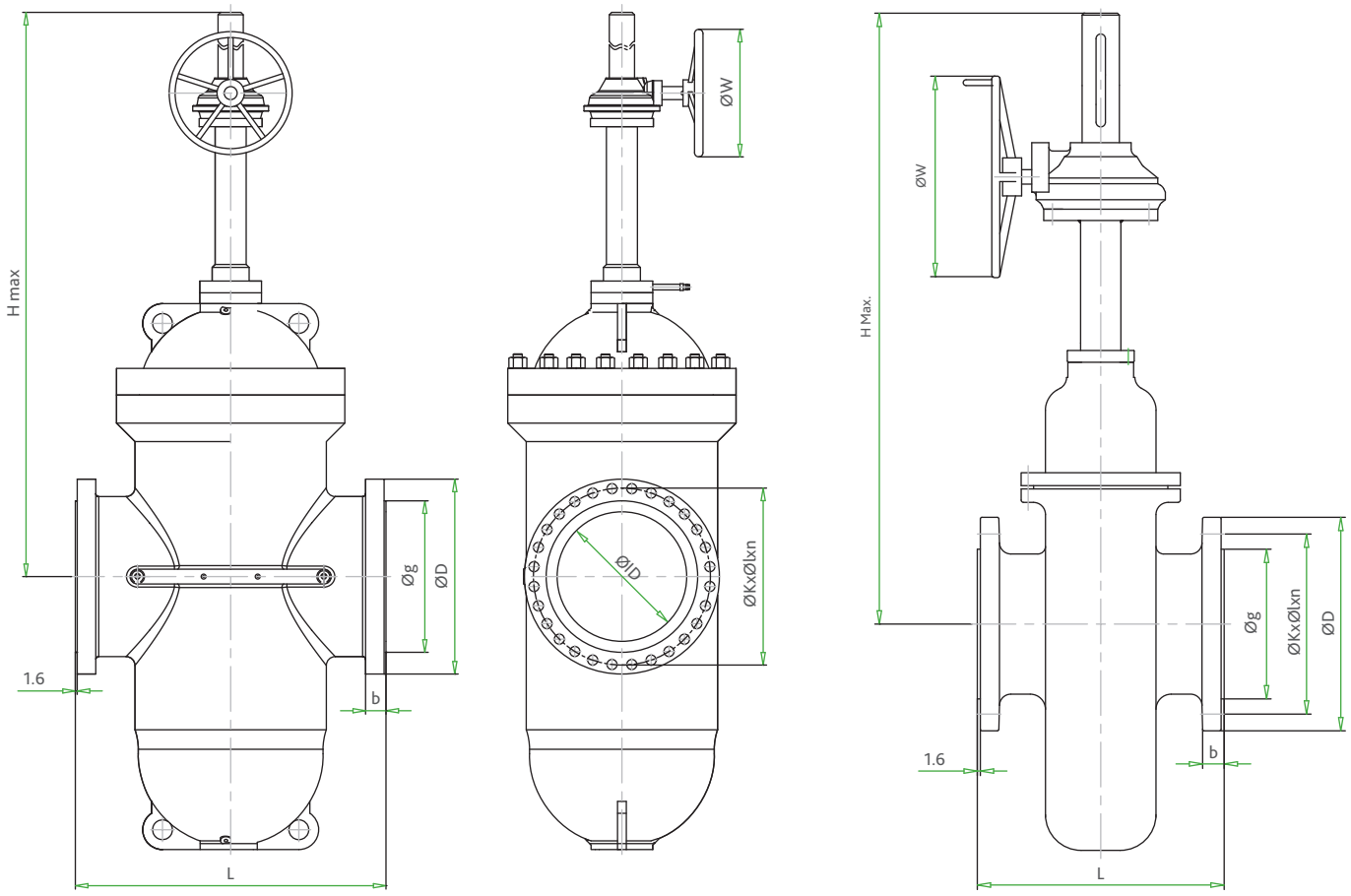
Shell & Backseat	**77 Bar**
Closure	**56 Bar**
Air	**6 Bar**

Design Standard

API 6D & ISO 14313

Dimensions & Weight

NPS	DN	ID	Area	Kv	ØD	b	Øg	ØK	Øl	n	Bolt			L	H max.	ØW	Stem		
inc.	mm	mm	cm2	m3/h	mm	mm	mm	mm	mm	no	inch	mm	Torque Nm	mm	mm	mm	mm	S.Acme	turn no
2	50	49	19	326	165	23	92	127	19	8	5/8	M16	105	216	385	210	19	6	18
3	80	74	43	816	210	29	127	168	22	8	3/4	M20	200	283	515	245	22	6	24
4	100	100	79	1.540	254	32	157	200	22	8	3/4	M20	200	305	630	265	26	5	26
6	150	150	177	3.720	318	37	216	270	22	12	3/4	M20	200	403	840	265	32	5	36
8	200	201	317	6.800	381	41	270	330	26	12	7/8	M24	320	419	1140	360	35	4	37
10	250	252	499	11.950	445	48	324	387	29	16	1	M27	480	457	1240	410	38	4	49
12	300	303	721	18.600	521	51	381	451	32	16	1 1/8	M30	700	502	1540	460	45	4	57
14	350	334	876	23.500	585	54	413	514	32	20	1 1/8	M30	700	762	1665	610	45	4	65
16	400	385	1.164	30.900	648	57	470	572	35	20	1 1/4	M33	950	838	1860	610	51	4	72
18	450	436	1.492	40.900	711	61	534	629	35	24	1 1/4	M33	950	914	2145	730	51	4	81
20	500	487	1.862	49.300	775	64	584	686	35	24	1 1/4	M33	950	991	2405	730	57	3	68
24	600	589	2.723	78.000	915	70	692	813	41	24	1 1/2	M39	1600	1143	2785	730	64	3	80
30	750	735	4.241	122.000	1090	78	857	997	48	28	1 3/4	M45	2600	1397	3400	730	64	3	98
32	800	779	4.764	141.000	1150	82	914	1054	51	28	1 7/8	M48	3100	1524	3550	730	76	3	104
36	900	874	5.996	178.500	1270	88	1022	1168	54	32	2	M52	4000	1727	3900	730	76	3	116
40	7000	976	7.478	225.500	1240	92	1086	1156	44	32	2	M52	4000	1850	5200	730	76	3	121
42	1050	1020	8.167	252.000	1290	94	1137	1206	44	32	1 5/8	M42	2000	1911	7700	730	88	3	135
46	1150	1120	9.847	301.500	1415	100	1245	1321	51	32	1 7/8	M48	3100	2050	8250	730	88	3	141
48	1200	1166	10.673	326.000	1465	102	1308	1372	51	32	1 7/8	M48	3100	2050	9100	730	88	3	153



Dimensions & Weight

Double hand force for ON/OFF operation at Different (DP) Pressures				Wt	Thrust				Torque				NPS
20 bar N	30 bar N	40 bar N	50 bar N	Kg	20 bar kN	30 bar kN	40 bar kN	50 bar kN	20 bar Nm	30 bar Nm	40 bar Nm	50 bar Nm	inc.
9	14	18	23	38	1	1	2	2	2	3	4	5	2
20	30	40	50	66	2	3	4	6	5	7	10	12	3
33	49	65	82	110	4	6	8	10	9	13	17	22	4
83	124	166	207	236	9	13	18	22	22	33	44	55	6
121	181	241	301	310	16	24	32	40	43	65	87	108	8
182	273	364	455	575	25	37	50	62	75	112	149	186	10
255	382	509	637	788	36	54	72	89	117	176	234	293	12
283	425	566	708	1.011	49	73	97	122	173	259	346	432	14
370	555	740	925	1.315	64	95	127	159	226	338	451	564	16
451	677	903	1.128	1.850	80	121	161	201	330	494	659	824	18
557	836	1.115	1.393	2.288	99	149	199	248	407	610	814	1.017	20
909	1.364	1.819	2.274	2.795	143	215	286	358	664	996	1.328	1.660	24
1.421	2.132	2.842	3.553	5.001	224	335	447	559	1.037	1.556	2.075	2.593	30
1.807	2.711	3.614	4.518	6.165	254	382	509	636	1.319	1.979	2.638	3.298	32
2.287	3.431	4.574	5.718	7.672	322	483	644	805	1.670	2.504	3.339	4.174	36
2.892	4.116	5.758	7.359	8.905	371	545	752	915	2.111	3.005	4.203	5.372	40
3.604	5.407	7.209	9.011	10.549	438	657	876	1.095	2.631	3.947	5.262	6.578	42
4.127	6.274	8.670	10.258	11.234	492	753	998	1.212	3.013	4.580	6.329	7.488	46
4.708	7.062	9.416	11.770	12.467	572	858	1.145	1.431	3.437	5.155	6.873	8.592	48

Datasheet | E53 — Conduit Gate Valve

- Bolted Bonnet
- Outside Screwed & Yoke
- Rising Stem

NPS 2-36 | DN 50-900

PN 110 | Class 600

Note: Incase of order, API Valve Datasheet and Vastas's drawing are submitted and customer's approval is required.

Working Pressure

-29+38 °C	102 Bar
+100 °C	80 Bar

Test Pressure

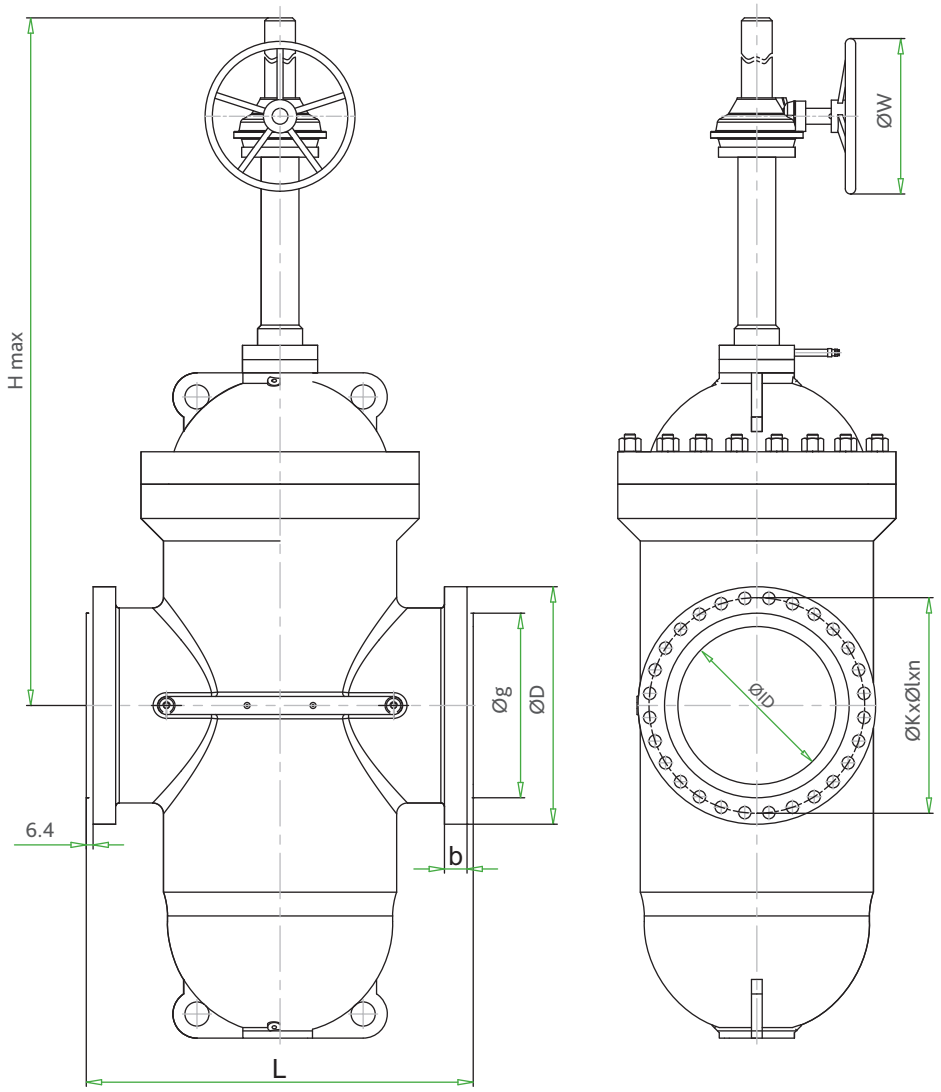
Shell & Backseat	153 Bar
Closure	112 Bar
Air	6 Bar

Design Standard

API 6D & ISO 14313

Dimensions & Weight

NPS	DN	ID	Area	Kv	ØD	b	Øg	ØK	Øl	n	Bolt			L	H max.	ØW	Stem		
inc.	mm	mm	cm2	m3/h	mm	mm	mm	mm	mm	no	inch	mm	Torque Nm	mm	mm	mm	mm	S.Acme	turn no
2	50	49	19	326	165	26	92	127	19	8	5/8	M16	105	292	420	210	19	6	18
3	80	74	43	816	210	32	127	168	23	8	3/4	M20	200	356	510	265	26	5	21
4	100	100	79	1.540	273	38	157	216	26	8	7/8	M24	320	432	620	310	29	5	26
6	150	150	177	3.720	356	48	216	292	29	12	1	M27	480	559	745	460	38	4	31
8	200	201	317	6.800	419	56	270	349	32	12	1 1/8	M30	700	660	994	610	45	4	40
10	250	252	499	11.950	508	64	324	432	35	16	1 1/4	M33	950	787	1255	730	51	4	50
12	300	303	721	18.600	559	67	381	489	35	20	1 1/4	M33	950	838	1615	730	51	4	58
14	350	334	876	23.500	603	70	413	527	38	20	1 3/8	M36	950	889	1750	730	57	3	50
16	400	385	1.164	30.900	686	76	470	603	41	20	1 1/2	M39	1600	991	1915	730	64	3	56
18	450	436	1.492	40.900	743	83	534	654	45	20	1 5/8	M42	2000	1092	2250	730	64	3	60
20	500	487	1.862	49.300	813	89	584	724	45	24	1 5/8	M42	2000	1194	2400	730	76	3	68
24	600	589	2.723	78.000	940	102	692	838	51	24	1 7/8	M48	3100	1397	2925	730	80	3	85
30	750	735	4.241	122.000	1130	114	857	1022	54	28	2	M52	3800	1651	3650	730	90	3	107
36	900	874	5.996	178.500	1314	124	1022	1194	67	28	2 1/2	M64	7500	2083	4325	730	110	3	127



Dimensions & Weight

Double hand force for ON/OFF operation at Different (DP) Pressures				Wt	Thrust				Torque				NPS
40 bar N	60 bar N	80 bar N	100 bar N	Kg	40 bar kN	60 bar kN	80 bar kN	100 bar kN	40 bar Nm	60 bar Nm	80 bar Nm	100 bar Nm	inc.
18	27	36	45	37	2	3	4	5	4	6	8	9	2
37	55	74	92	79	4	7	9	11	10	15	20	24	3
56	84	112	140	123	8	12	16	20	17	26	35	43	4
96	143	191	239	250	18	27	36	45	44	66	88	110	6
142	213	285	356	360	32	48	64	79	87	130	174	217	8
204	306	409	511	618	50	75	99	124	149	224	298	373	10
321	481	642	802	1.157	72	107	143	179	234	351	469	586	12
473	710	947	1.183	1.576	97	146	195	243	346	518	691	864	14
618	927	1.236	1.545	1.816	127	191	254	318	451	677	903	1.128	16
903	1.354	1.806	2.257	2.877	161	241	322	402	659	989	1.318	1.648	18
1.115	1.672	2.229	2.786	3.343	199	298	397	497	814	1.220	1.627	2.034	20
1.819	2.728	3.638	4.547	5.700	286	429	572	715	1.328	1.992	2.656	3.320	24
2.842	4.263	5.684	7.105	9.548	447	671	894	1.118	2.075	3.112	4.149	5.187	30
4.574	6.861	9.148	11.435	16.500	644	966	1.288	1.610	3.339	5.009	6.678	8.348	36

Certificates



Certificate of Authority to use the Official API Monogram

License Number: 6D-0449 ORIGINAL

The American Petroleum Institute hereby grants to:

VASTAS VALF ARMATUR SANAYI TICARET A.S.
Organize Sanayi Bolgesi
Cerkezkoy
Tekirdag
Turkey

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and **API Spec 6D** and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogra
certificate number: **6D-0449**

The American Petroleum Institute reserves the right to revoke this author
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The scope of this license includes the following products: Gat
Check Valves

QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: SEPTEMBER 16, 2008
Expiration Date: SEPTEMBER 16, 2011

To verify the authenticity of this license, go to www.api.org/compositelist

American Petroleum Institute



CERTIFICAT ◆ CERTIFICADO ◆ СЕРТИФИКАТ ◆ CERTIFICATE

TÜV CERT

TÜV SÜD Industrie Service

CERTIFICATE

The Certification Body of
TÜV SÜD Industrie Service GmbH
(a Pressure Equipment Directive Notified Body)

certifies that

Vastaş Valf Armatür Sanayi Tic. A.Ş.
Organize Sanayi Bölgesi, Sabancı Cad.
Çerkezköy-Tekirdağ, Türkiye

has implemented, operates and maintains a quality assurance system as described in the Pressure Equipment Directive (97/23/EC) Annex III, Module H/H1

for the scope of

Design, Development and Sales of Valves above DN 25: Gate, Globe, Ball, Check, Plug, Butterfly and Strainers
Pressure Air Vessels: for Shut-Off and Gas Over Hydraulic Actuator Systems

Evidence that the quality assurance system satisfies the PED requirements is documented in the Assessment Report 09-B-000095.

d to provide the pressure equipment the assessed quality assurance system ied Body Identification Number:

0036

7-09

Notified Body No.: 0036
Member of
CONFEDERATION EUROPÉENNE
CEOC
D-Certification Body · 68167 Mannheim · Germany



Energy & Process

CERTIFICATE OF INSPECTION

Description of the Supply / Subject of inspection :

Scope of the BV Survey:

This supply complies with the following applicable document (s) :

Date of issuance : 26.04.2009
Date of last inspection : 26.04.2009

Location of inspection : VASTAS FACTORY



ZERTIFIKAT ◆ CERTIFICATE ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

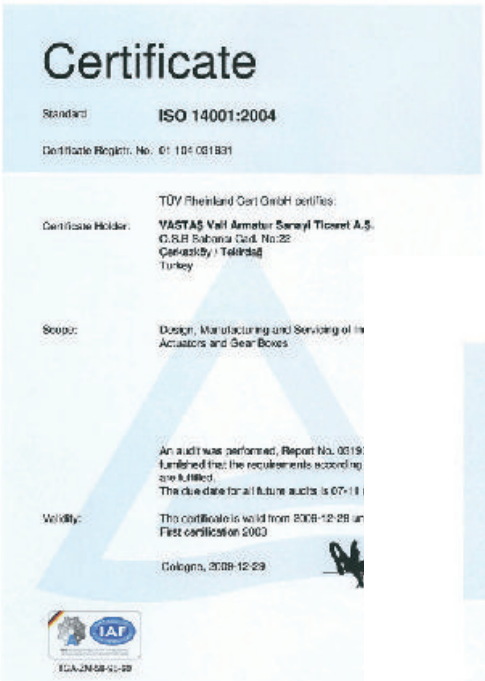
TÜV SÜD Industrie Service

Type Conformance Certificate
Tip Uygunluk Sertifikası

User / Kullanıcı	:	GENERAL / Genel
Project No. / Proje No.	:	10-B-00400
Manufacturer / Imalatçı	:	VASTAS VALF ARMATÜR SANAYİ TİCARET A.Ş. Çerkezköy / TEKİRDAĞ / TURKEY (TURKEY)
Product Desc.	:	Double Eccentric Gate Valves
Type / Figure / Tip / Figür	:	Double Block & Bleed / ESSO
Manufacturing Year / Imalat Yılı	:	2010
Calibration Range / Kalibrasyon Aralığı	:	2" (DN50) to 50" (DN500) Class 150 (PN20) to 600 (PN100)
Related Design Standard / Dizayn Standardı	:	API 6D, ISO 14313, ASME B16.34
Reference Standards / Referans Standartlar	:	ASME B16.5, ASME B16.47, ASME B16.10, ISO 7005-1, ISO 12474, ASNT SNT TC 1A, EN 10204, MSS SP 44, ASME SEC V, EN 473
Related Test Standard / Test Standardı	:	API 6D, API 598, ISO 6208

Test & Inspection Date / Test ve Muayene Tarihi : 14.05.2010 - 16.09.2010
Test & Inspection Place / Test ve Muayene Yeri : Çerkezköy / Tekirdağ / TURKEY
Test & Inspection Result / Test ve Muayene Sonucu : Satisfactory / Uygun bulunmuştur

CEOC



Certificate

Standard ISO 14001:2004

Certificate Registr. No. 01 104 031831

TÜV Rheinland Cert GmbH certifies:

Certificate Holder: VASTAŞ Valf Armatur Sanayi Ticaret A.Ş.
O.S.B Sabanci Cad. No:22
Çerkezköy / Tekirdağ
Turkey

Scope: Design, Manufacturing and Servicing of In
Actuators and Gear Boxes

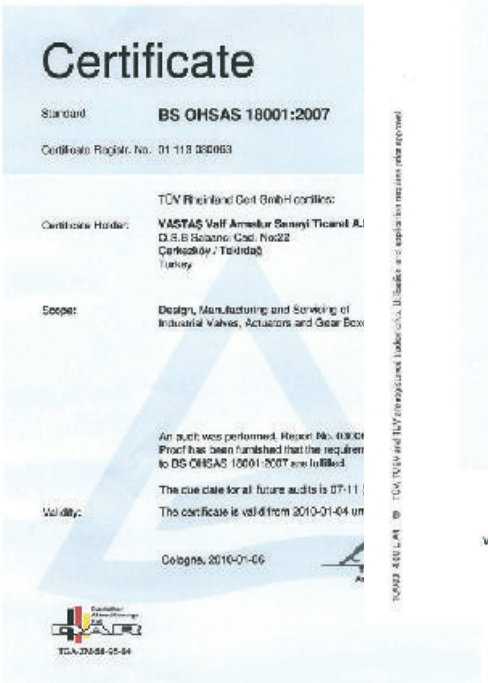
An audit was performed, Report No. 0319
furnished that the requirements according
are fulfilled.
The due date for all future audits is 07-11

Validity: The certificate is valid from 2009-12-28 un
First certification 2003

Cologne, 2009-12-29

TGA-ZM-58-01-99

www.tuv.com



Certificate

Standard BS OHSAS 18001:2007

Certificate Registr. No. 01 118 030063

TÜV Rheinland Cert GmbH certifies:

Certificate Holder: VASTAŞ Valf Armatur Sanayi Ticaret A.
O.S.B Sabanci Cad. No:22
Çerkezköy / Tekirdağ
Turkey

Scope: Design, Manufacturing and Servicing of
Industrial Valves, Actuators and Gear Box

An audit was performed, Report No. 03003
Proof has been furnished that the requiren
to BS OHSAS 18001:2007 are fulfilled.

The due date for all future audits is 07-11

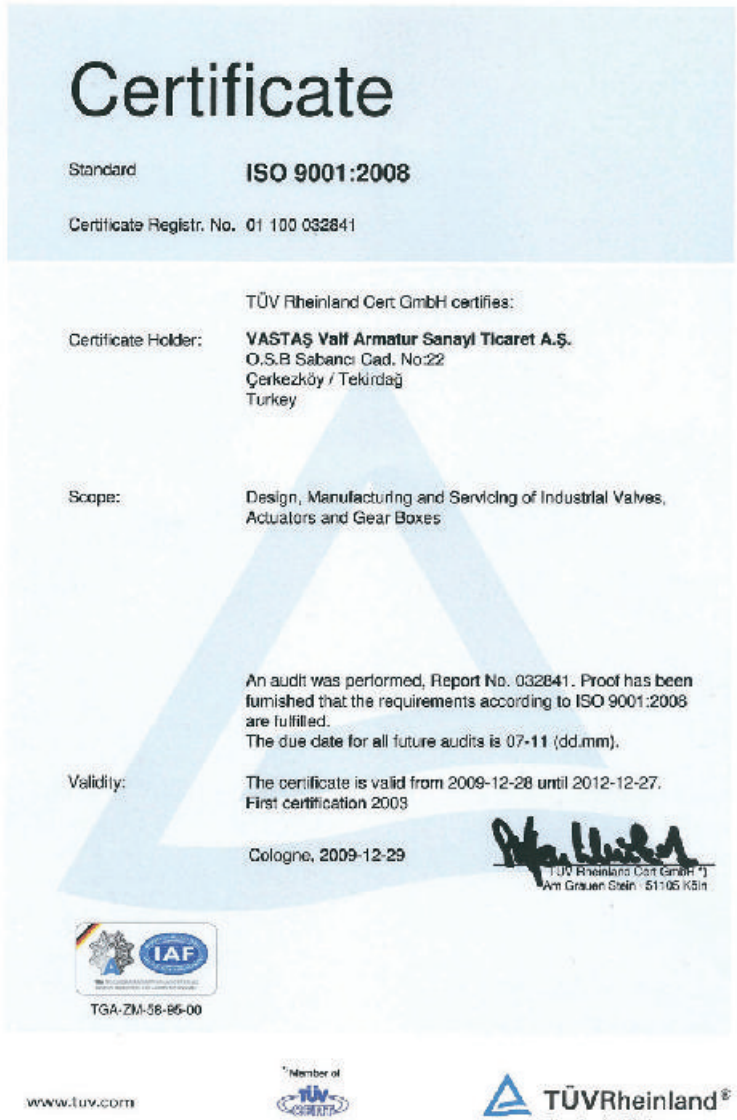
Validity: The certificate is valid from 2010-01-04 un

Cologne, 2010-01-06

TGA-ZM-58-05-04

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Precisely Right.



Certificate

Standard ISO 9001:2008

Certificate Registr. No. 01 100 032841

TÜV Rheinland Cert GmbH certifies:

Certificate Holder: VASTAŞ Valf Armatur Sanayi Ticaret A.Ş.
O.S.B Sabanci Cad. No:22
Çerkezköy / Tekirdağ
Turkey

Scope: Design, Manufacturing and Servicing of Industrial Valves, Actuators and Gear Boxes

An audit was performed, Report No. 032841. Proof has been furnished that the requirements according to ISO 9001:2008 are fulfilled.
The due date for all future audits is 07-11 (dd.mm).

Validity: The certificate is valid from 2009-12-28 until 2012-12-27.
First certification 2003

Cologne, 2009-12-29

TÜV Rheinland Cert GmbH *)
Am Grauen Stein · 51105 Köln

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MAIN PLANT
Organize Sanayi Bolgesi Sabanci Cad. No:22 Cerkezkoy 59500 TEKIRDAG / TURKEY
Tel: (+90 282) 758 36 50 | Fax: (+90 282) 758 36 59

ISTANBUL OFFICE
Perpa Ticaret Merkezi B/Blok Kat 13 No:2365 Okmeydani 34384 ISTANBUL / TURKEY
Tel: (+90 212) 222 42 71 - 221 59 97 - 221 39 81 | Faks: (+90 212) 222 63 59

Web
http://www.vastas.com

Email
vastas@vastas.com