

화성밸브 HS VALVE

배관용 용접형 볼 밸브 FULLY WELDED BALL VALVE

배관용 용접형 플랜지 볼 밸브 FULLY WELDED FLANGE BALL VALVE

매몰 용접형 볼 밸브 UNDERGROUND BALL VALVE

공장 보온 볼 밸브 PRE-INSULATED BALL VALVE



HS VALVE The Leading Valve Manufacturer

COMPANY PROFILE

은탑산업훈장 수훈 (지식경제부 신기술실용화촉진대회)
 동탑산업훈장 수훈 (대한민국가스안전대상)



본사 및 제 1공장



경산 제 2공장



경산 제 3공장

1987~1990

- 1987. 03 화성산업사 설립 Established HS VALVE CO., LTD.
- 1987. 04 주식회사 화성 법인 설립 HS VALVE CO., LTD. incorporated.

1991~2000

- 1997. 11 가스안전촉진대회 대통령상 표창 수상 Received President's Award
- 1999. 03 ISO9001 & API-6D 인증서 획득 Acquired ISO9001, API-6D
- 1999. 09 cUL 인증획득(SA12071-210999) Acquired cUL
- 1999. 10 신기술실용화대회 대통령표창 수상 Received President's Award
- 2000. 02 기술경쟁력 우수기업 지정
- 2000. 03 코스닥증권시장 상장 Listed in KOSDAQ

2001~2010

- 2001. 03 Fire Safety tests(Ball valve) 인증서 획득 Acquired Fire tests for Ball valve - API 607
- 2001. 11 신기술실용화대회 대통령표창 수상 Received President's Award
- 2002. 02 경산진량공단제2공장신축준공 Established 2nd factory
- 2003. 03 조세의 날 경제부총리 표창 Awarded a model taxpayer
- 2003. 06 가스안전촉진대회 가스안전유공자포상 Received A Men of Merit's Award
- 2004. 01 CE인증 획득(CE0036) Acquired CE(CE0036-Tuv Suddeuschland)
- 2006. 05 ISO 9001:2000, ISO/TS 29001 인증서 획득 Acquired ISO 9001:2000, ISO/TS 29001
- 2006. 05 API Specification Q1[Q1-0319] 인증서 획득 Acquired API Spec Q1(Q1-0319)
- 2006. 11 산업자원부 신기술실용화 촉진대회 은탑산업훈장 수훈 Awarded the Order of Industrial Service Merit of Silver Tower

2011~

- 2011. 11 경산 제 3공장 준공 Established 3rd factory
- 2012. 06 위생안전(KC)인증서 획득 볼 밸브외 8건 Acquired KC Certi.
- 2012. 06 ISO 14001:2004[TUV104-01-2216] 인증서 획득 Acquired ISO 14001:2004
- 2013. 05 대한민국가스안전대상 동탑산업훈장수훈 Awarded the Order of Industrial Service Merit of Bronze Tower



GREETING

당사는 1987년 법인 설립 이래 다양한 밸브와 관련 부자재를 생산하여 공급 하고 있습니다. 국내최대 밸브종합 메이커로서 소구경 밸브에서, 대구경 화합, 플랜트용까지 고부가 사업육성, 지속적인 신제품 개발, 품질업그레이드로 세계 최초로 전기절연 볼 밸브 개발 및 특허획득, ISO, API, Fire Test, CE, GOST-R, CU TR, KS, EM 등 세계적인 인증마크를 획득 하였습니다. 항상 무결점 품질을 유지하고자 최선의 노력을 다하고 있으며, ISO-9001:2008, API Q1 & 6D, PED의 요구사항과 고객의 요구사항에 따르며, 최고의 품질로서 고객에게 최고의 신뢰를 주는 것을 품질경영이념으로 정하고, 실천에 옮기도록 노력하고 있습니다. 또한 전사원의 품질경영 의식화, 소비자 요구품질 생산, 전사원의 기술향상이라는 경영이념이래 전사원이 일치단결하여 국제 사회의 수조간인 품질과 가격을 합리적으로 이룩하여 고객의 요구를 충족시킴과 동시에 한국 경제 발전에 이바지할 수 있도록 노력하고 있습니다. Korea TOP 1, Global Marketing, Customer First라는 21C VISION을 설정하고 세계일류밸브 종합메이커로의 도약, 더욱 진일보된 밸브전문회사로 미래를 열어 나아가겠습니다.

화성밸브주식회사

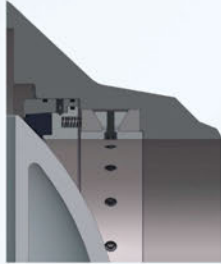
Ever since our foundation in 1987, we have produced and supplied various pipeline valves. As the Korea's largest general valve maker, we have constantly developed new products from small-sized valves to large-sized valves for various chemical, oil & gas and industrial plants and continually invested in a higher value-added business and quality upgrade. As a result, we have acquired varied international certifications such as KS, EM, ISO, API, cUL, GOST-R, CU TR, Fire Test and CE as well as developed and patented non-conductive ball valves for the first time throughout the world. To maintain non-defect quality goods and services is our top priority and we believe it will be achievable through our properly organized quality management system. We also believe that our lofty goal of earning the trust of the customers must be realized with ceaseless efforts into the superior quality of products. For this reason, not only do all employees work in harmony to satisfy our customers by conforming to the requirements of ISO 9001, API Q1 & 6D, PED and the customers, but to provide reasonable quality and price which are the essential element for the member of international society as well as for the contribution to the development of Korea's economies. With a slogan of "Global Marketing and Customer First", we are ready to lead the future of 21 century as a world-class general valve maker and a more advanced specialist of valves.

Won Gyu Chang President

DESIGN CHARACTERISTICS

시트면압조절형 구조(특허사항)

시트와 볼의 접촉 면압을 조절하여 안정적인 품질과 낮은 토크가 가능

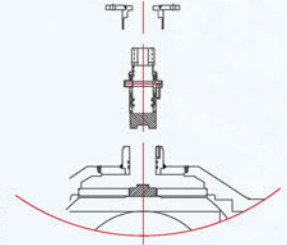


Contact Pressure-adjustable Valve

HS Ball Valves can control the surface contact pressure between seat and ball

유지보수가 가능한 구조

밸브의 교체없이 스템부의 교체 및 유지보수가 가능한 구조

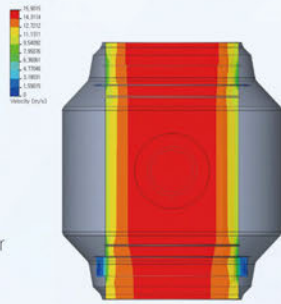


Easy Maintenance

Can replace spindle without dismantling valve body. Just open up spindle part and replace it.

컴퓨터 시뮬레이션에 의한 디자인

유체흐름과 밸브 부품의 강도분석을 컴퓨터 시뮬레이션으로 검증하여 설계

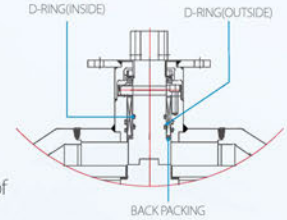


Design by Computer simulation

HS Ball Valves are designed by computer simulation result such as strength, flow simulation

스템부 다중 기밀 구조

스템부에 다중 O-ring을 사용하여 완벽한 기밀 성능을 유지함

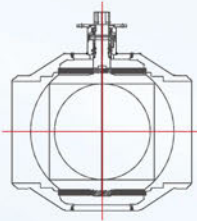


Multiple O-rings in Stem Sealing

Used four O-rings to enhance sealing ability of stem Assures perfect stem sealing

내장형 Trunnion 구조

Low stem trunnion과 달리 plate 타입 내장형으로 외부 돌출부 및 용접부가 없어 안정성이 높고 기밀유지에 유리함

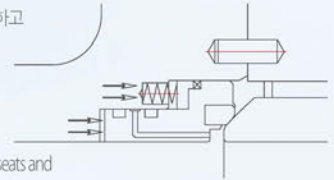


Inner Structure of Trunnion

Improve sealing and torque of handle by inner structure of trunnion built No need to make hole on the body and to weld on the body for outer type of trunnion

Seat Sealing

초저압에서는 스프링에 의해 seat의 기밀을 유지하고 그 이상에서는 유체의 압력을 이용하여 기밀을 유지하도록 설계됨

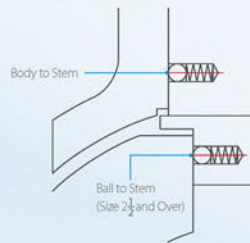


Seat Sealing

With no or very low line pressure, sealing between the seats and ball is achieved by seat springs. With higher line pressure, the line pressure, in conjunction with the spring load, forces the up stream seat ring against the ball, which results in tighter sealing.

Anti-Static 구조

Stem과 ball, Stem과 Body와의 정전기를 방지하는 Anti-static구조 채택

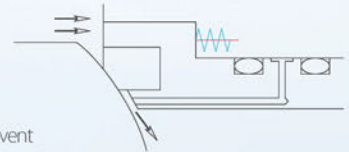


Anti-Static Device

HS Ball Valves have anti-static device which provides contact between stem and ball, and stem and body to eliminate static electricity.

Self Relieving 구조

밸브 공동내에서 이상압 발생시 시트를 통해 압을 해소하도록 설계됨

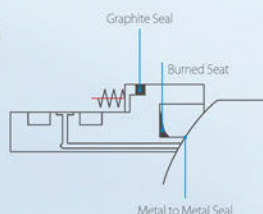


Self Relieving Seat

This standard feature is designed to Prevent excessive pressure buildup within the valve by automatically relieving pressure when body cavity pressure exceeds the spring load on the seats.

Fire Safe Design

시트링이 Second metal seat 역할을 하도록 설계되어 soft seat의 손실에도 누출을 최소화하도록 함

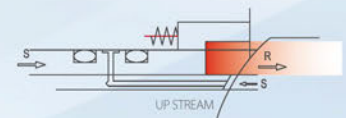


Fire Safe Design

HS Ball Valves can control the surface contact pressure between seat and ball

Double Block 구조

Trunnion 타입은 밸브 전후단에 관계없이 동시에 기밀을 유지하도록 설계됨



Double Block Structure

TF/TR type ball valves employ a sealing principle that facilitates all services requiring double block and bleed integrity.

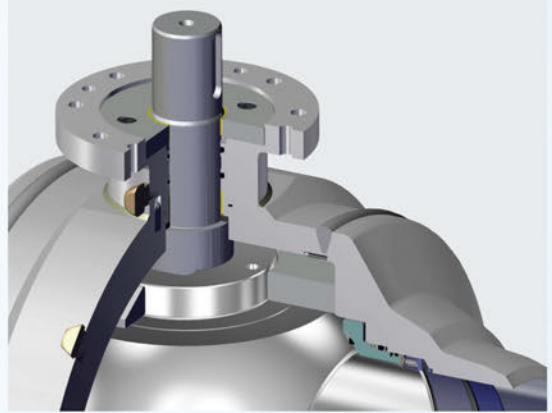
※ 품질 및 성능 향상을 위해 상기 구조는 사전공지 없이 변경 될 수 있습니다. ※ The above structure and materials may be changed without notice.

API 매몰형 볼 밸브: Class 150, 300, 600, 900

API Underground Ball Valve: class 150, 300, 600, 900(PN25~PN160) 2"~48"

MAIN FEATURES

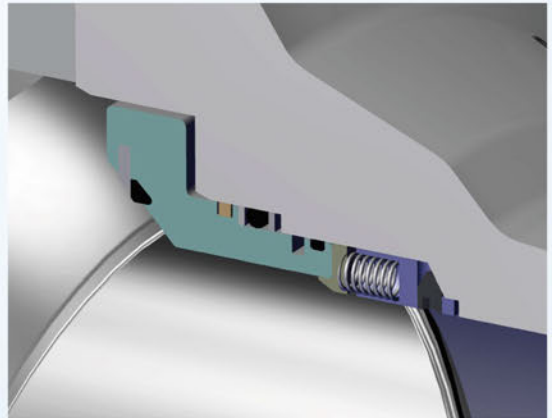
Fully Welded Ball Valve
API 6D , 6FA Features
Full/Reduced Bore Valve
Fire Safety Design
Blow out Proof Design
PMSS(Primary Metal Secondary Soft Seat) Structure
Double Block & Bleed Structure
Double Piston Structure



UNIQUE DESIGN

화성만의 면압조절형 시트 구조 적용으로
용접후 일관된 토크와 기밀성을 보장하는
혁신적인 설계 구조 적용

Seat Contact Pressure-adjustable Valve with
the unique design of HS Valve, adjusting seat contact pressure to ball after body
welding.



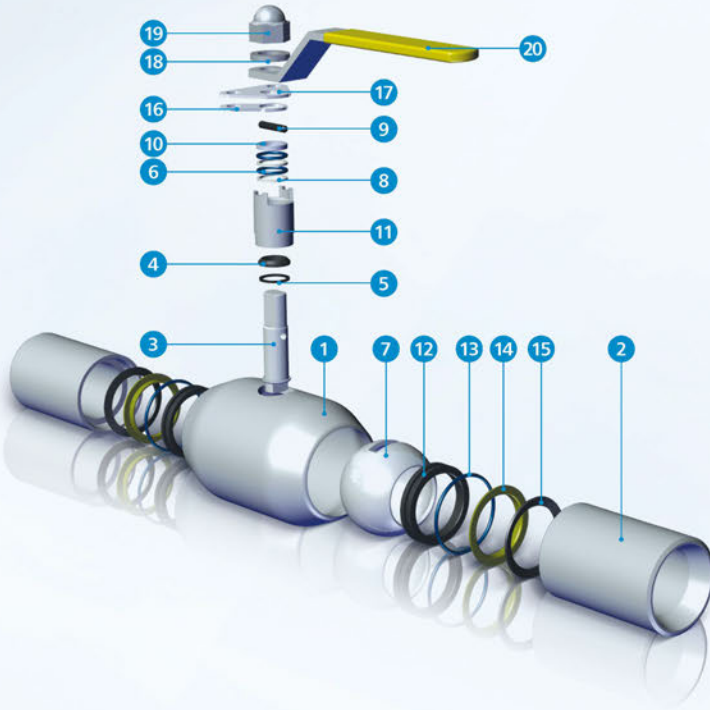
MATERIALS

No.	PART NAME	MATERIAL
1	Body	A105 / A350 LF2 / STS304/STS316
2	Ball	CF8 / 316 / A350LF2+ENP / AISI4140+ENP
3	Stem	STS304 / STS316 / AISI4140 + Cr
4	Seat Ring	A105 / A350 LF2 / AISI 4140 + Cr
5	O-ring	VITON / VITON AED
6	Seat	METAL / RTFE / DEVRON + VITON / VITON LED

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입상용(배관용) 용접형 볼 밸브 구조

The structure and materials of general pipe forming fully welded ball valve



PART NAME

No.	PART NAME	MATERIALS
1	BODY	SPPS 380 / A53Gr.B
2	END PIECE	SPPS 380 / A53Gr.B
3	STEM	STS304
4	BACK UP PACKING	RTFE
5	BACK UP WASHER	SS400
6	O-RING	VITON
7	BALL	STS304 TP
8	BACK UP RING	PTFE
9	SPRING PIN	PUR.
10	SLEEVE	SPP
11	NECK	SPPS 380 / A53Gr.B
12	SEAT	RTFE(PTFE + C25%)
13	SEAT O-RING	VITON
14	SUPPORT RING	SPCC
15	DISK SPRING	STC85
16	BOTTOM GUIDE PLATE	SS400
17	TOP GUIDE PLATE	SS400
18	SPRING WASHER	
19	CAP NUT	
20	HANDLE	

배관용 용접형 플랜지 볼 밸브

Fully welded ball valve with flange end



PART NAME

NO	PART NAME	MATERIAL	No	PART NAME	MATERIAL
1	BODY	SPPS 380 / A53Gr.B	5	STEM	STS304
2	ENDPIECE	SPPS 380 / A53Gr.B	6	FLANGE	SS400 / A105
3	SEAT	PTFE+C25%	7	O-RING	VITON
4	BALL	STS 304 TP	8	SUPPORT RING	SPCC

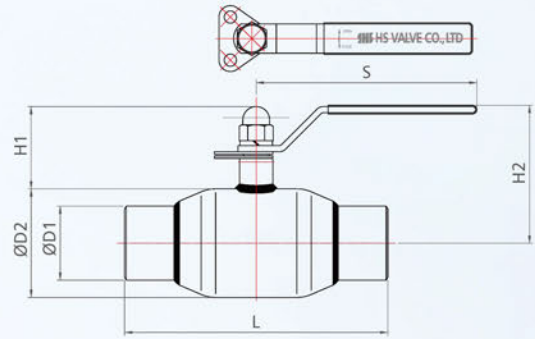
※ 플랜지 및 밸브 면간 치수는 KS, EN, ANSI, GOST 등 규격에 따라 제작됩니다. ※ The dimensions of flange and face to face are upon requested standard(KS, EN, ANSI, GOST, etc.)

※ 품질 및 성능 향상을 위해 상기 구조는 사전공지 없이 변경 될 수 있습니다. ※ The above structure and materials may be changed without notice.

입상용 용접형 볼 밸브: 파이프 성형 방식, 10K / 20K

General pipe forming fully welded ball valve : Class 150,300(PN16~PN63)

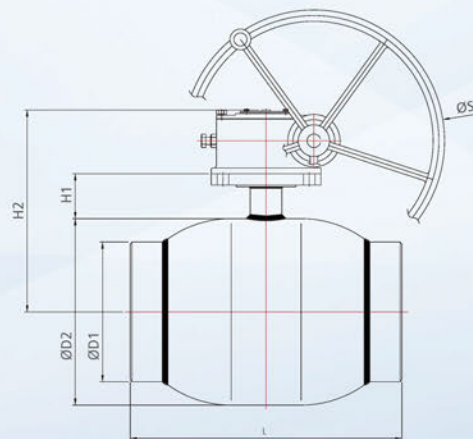
- FOR LEVER** 완전 용접형 볼 밸브: 산업용, 가스 배관용, 지역난방등의 온수용에 사용 가능
 (가스용은 가스안전공사 검인품임, Locking Device 기본 사양)
 For industry, gas pipeline and district heating
 Approved valve by Korea Gas Safety Corporation
 Locking device is standard.



DIMENSIONS

DIAMETER	D1*	D2	L		H1		H2	S
			General	ASME	General	보온용		
32	42.7	60.5	300	178	58	83	92	154
40	48.6	76.3	300	190	67	97	107	181
50	60.5	88.9	300	216	67	97	113	181
65	76.3	108	300	241	68	99	146	240
80	89.1	127	300	282	68	99	156	240
100	114.3	159	325	305	76	112	180	320
125	139.8	194	325	325	76	112	198	320
150	165.2	219	350	403	137	187	237	407
200	216.3	273	400	419	137	187	265	407

FOR GEAR OR ACTUATOR



DIMENSIONS

DIAMETER	D1	D2	L		H1		H2	S
			150	ASME	General	보온용		
150	165.2	219	350	403	72	122	285	400
200	216.3	273	400	419	72	122	312	400
250	267.4	356	520	457	86	146	386	500
300	318.5	426	610	502	86	146	421	500

* D1 치수는 KS, ANSI, GOST 등 주문에 따라 변경 가능합니다. * Other D1 dimensions are available upon request.

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배관용 용접형 볼 밸브(Full Bore): 단조, 주조바디, 10Kgf/cm²~100Kgf/cm²

Full bore fully welded ball valve(casting or forged body) : Class 150, 300, 600(PN16~PN100)

주요특징

- ▶ 완전 용접형 볼 밸브
- ▶ 배관과 동일한 Full Bore 적용
- ▶ 단조, 주조 바디 사용
- ▶ Solid 또는 Cavity Ball 사용
- ▶ 이중 터치 시트 적용으로 완벽한 기밀성 유지
- ▶ 가스안전공사 검인품임

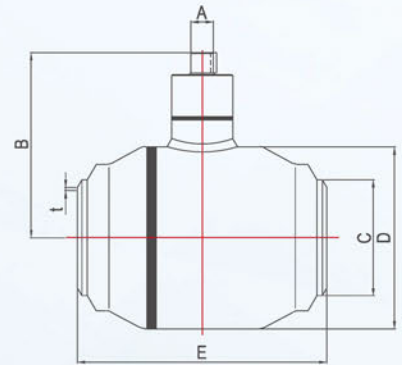
MAIN FEATURES

- ▶ Fully Welded Ball Valve
- ▶ Full Bore Valve
- ▶ Forged or Casting Body
- ▶ Straight(Solid or Cavity) ball
- ▶ Applied double touch seats, perfect sealing
- ▶ Approved Valve By Korea Gas Safety Corporation

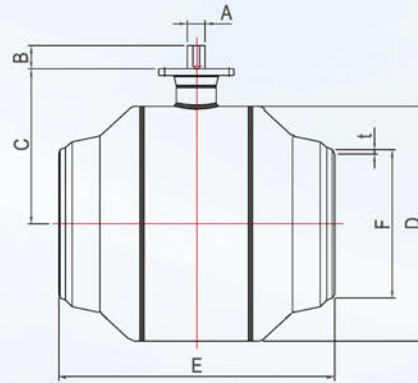
FOR LEVER

DIMENSIONS

DIAMETER	ΦA	B	ΦC*	ΦD	E	t*	Opeator
50	22	146	60.5	106	186	3.8	LEVER
65	22	157	76.3	127	206	5.2	LEVER
80	22	167	89.1	152	228	5.5	LEVER
100	22	182	114.3	180	246	6	LEVER
125	34	227	139.8	220	278	6.6	LEVER
150	34	241	165.2	263	330	7.1	LEVER



FOR GEAR OR ACTUATOR



DIMENSIONS

DIAMETER	ΦA	B	C	ΦD	E	ΦF*	t*
200	34	26	245	338	395	216.3	8.2
250	45	49	338	424	474	267.4	9.3
300	45	49	368.5	496	532	318.5	10.3
350	45	49	394	554	580	355.6	11.1
400	60	60	471.5	624	666	406.4	12.7
450	60	60	501	706	840	457.2	14.3
500	60	60	533	783	896	508	15.1
600	60	60	612.5	952	1050	609.6	17.5
700	100	127	776	1136	1346	711.2	8.7
800	100	127	855	1300	1524	812.8	9.5
900	100	127	915	1430	1727	914.4	10.3
1000	120	162	1021	1598	1900	1016	11.1
1200	120	162	1167	1895	2100	1219.2	11.9
1400	160	193	1332	2150	2150	1422.4	13.1

* ΦC, ΦF, t 치수는 KS, ANSI, GOST 등 주문에 따라 변경 가능합니다. * Other ΦC, ΦF, t dimensions are available upon request.

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배관용 용접형 볼 밸브(Reduced Bore): 단조, 주조바디, 10Kgf/cm²~100Kgf/cm² Reduced bore fully welded ball valve(casting or forged body): Class 150, 300, 600(PN16 ~ PN100)

주요특징

- ▶ 완전 용접형 볼 밸브
- ▶ Reduced Bore 적용
- ▶ 단조, 주조 바디 사용
- ▶ 이중 터치 시트 적용으로 완벽한 기밀성 유지
- ▶ 유체 : Gas, water, oil

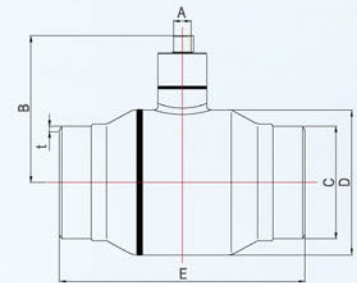
MAIN FEATURES

- ▶ Fully Welded Ball Valve
- ▶ Regular(reduced) Bore Valve
- ▶ Forged or Casting Body
- ▶ Applied double touch seats, perfect sealing
- ▶ Fluid : Gas, Water, Oil, etc.

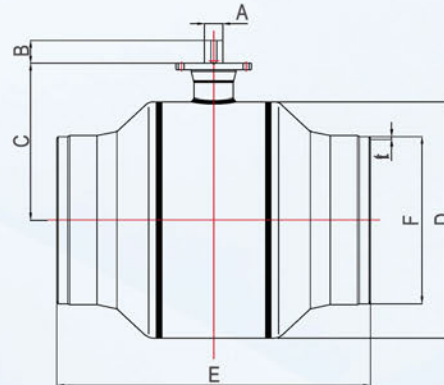
FOR LEVER

DIMENSIONS

DIAMETER	ΦA	B	ΦC*	ΦD	E	t*	Operator
50	22	146	60.5	106	186	3.8	LEVER
65	22	157	76.3	106	241	5.2	LEVER
80	22	167	89.1	127	282	5.5	LEVER
100	22	182	114.3	152	305	6	LEVER
125	22	100A	139.8	180	305	6.6	LEVER
150	34	227	165.2	220	403	7.1	LEVER



FOR GEAR OR ACTUATOR



DIMENSIONS

DIAMETER	ΦA	B	C	ΦD	E	ΦF*	t*
200	34	26	215	263	419	216.3	8.2
250	34	26	245	338	457	267.4	9.3
300	45	49	338	424	550	318.5	10.3
350	45	49	368.5	496	580	355.6	11.1
400	45	49	394	554	666	406.4	12.7
450	45	49	394	554	730	457.2	14.3
500	60	60	471.5	624	896	508	15.1
550	60	60	501	706	970	558.8	15.9
600	60	60	533	783	1050	609.6	9.5
650	60	60	612.5	952	1240	660.4	9.5
700	70	119	618	952	1346	711.2	8.7
800	100	127	776	1136	1524	812.8	9.5
900	100	127	855	1300	1727	914.4	10.3
1000	100	127	915	1430	1900	1016	11.1
1100	120	162	1021	1598	2000	1117.6	11.1
1200	120	162	1021	1598	2100	1219.2	11.9
1400	120	162	1167	1895	2150	1422.4	13.1

* ΦF, t 치수는 KS, ANSI, GOST 등 주문에 따라 변경 가능합니다. * Other ΦF, t dimensions are available upon request.

※ 품질 및 성능 향상을 위해 상기 치수는 사전공지 없이 변경 될 수 있습니다. ※ The above dimensions may be changed without notice.

배관용 용접형 볼 밸브(Full Bore): 단조, 주조바디, 10Kgf/cm²~100Kgf/cm²

Full bore fully welded ball valve(casting or forged body) : Class 150, 300, 600(PN16~PN100)

주요특징

- ▶ 완전 용접형 볼 밸브
- ▶ 배관과 동일한 Full Bore 적용
- ▶ 단조, 주조 바디 사용
- ▶ Solid 또는 Cavity Ball 사용
- ▶ 이중 터치 시트 적용으로 완벽한 기밀성 유지
- ▶ 가스안전공사 검인품임

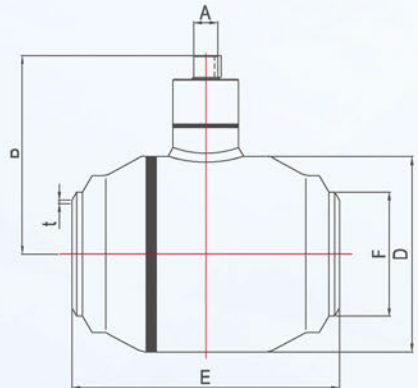
MAIN FEATURES

- ▶ Fully Welded Ball Valve
- ▶ Full Bore Valve
- ▶ Forged or Casting Body
- ▶ Solid or Cavity ball
- ▶ Applied double touch seats, perfect sealing
- ▶ Approved Valve By Korea Gas Safety Corporation

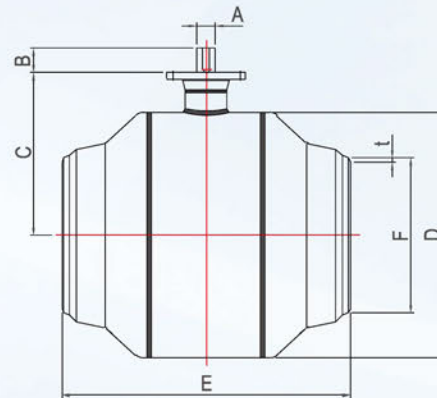
FOR LEVER

DIMENSIONS

DIAMETER	ΦA	B	ΦD	E	ΦF*	t*	Opeator
50	22	146	106	186	60.5	3.8	LEVER
65	22	157	127	206	76.3	5.2	LEVER
80	22	167	152	228	89.1	5.5	LEVER
100	22	182	180	246	114.3	6	LEVER
125	34	227	220	278	139.8	6.6	LEVER
150	34	241	263	330	165.2	7.1	LEVER



FOR GEAR OR ACTUATOR



DIMENSIONS

DIAMETER	ΦA	B	C	ΦD	E	ΦF*	t*
200	34	26	245	338	395	216.3	8.2
250	45	49	338	424	474	267.4	9.3
300	45	49	368.5	496	532	318.5	10.3
350	45	49	394	554	580	355.6	11.1
400	60	60	471.5	624	666	406.4	12.7
450	60	60	501	706	840	457.2	14.3
500	60	60	533	783	896	508	15.1
600	60	60	612.5	952	1050	609.6	17.5
700	100	127	776	1136	1346	711.2	8.7
800	100	127	855	1300	1524	812.8	9.5
900	100	127	915	1430	1727	914.4	10.3
1000	120	162	1021	1598	1900	1016	11.1
1200	120	162	1167	1895	2100	1219.2	11.9
1400	160	193	1332	2150	2150	1422.4	13.1

* ΦC, ΦF, t 치수는 KS, ANSI, GOST 등 주문에 따라 변경 가능합니다. * Other ΦC, ΦF, t dimensions are available upon request.

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배관용 용접형 볼 밸브(Reduced Bore): 단조, 주조바디, 10Kgf/cm²~100Kgf/cm² Reduced bore fully welded ball valve(casting or forged body) : Class 150, 300, 600(PN16~PN100)

주요특징

- ▶ 완전 용접형 볼 밸브
- ▶ Reduced Bore 적용
- ▶ 단조, 주조 바디 사용
- ▶ 이중 터치 시트 적용으로 완벽한 기밀성 유지
- ▶ 유체 : Gas, water, oil

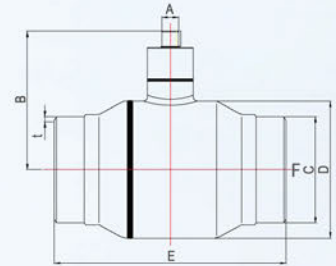
MAIN FEATURES

- ▶ Fully Welded Ball Valve
- ▶ Regular(reduced) Bore Valve
- ▶ Forged or Casting Body
- ▶ Applied double touch seats, perfect sealing
- ▶ Fluid : Gas, Water, Oil, etc.

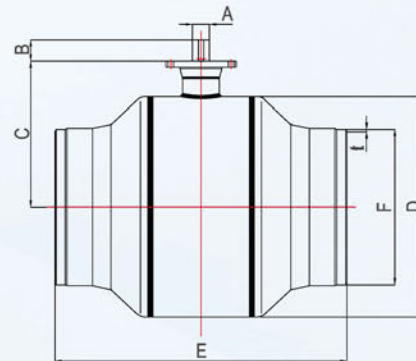
FOR LEVER

DIMENSIONS

DIAMETER	ΦA	B	ΦD	E	ΦF*	t*	Operator
50	22	146	106	186	186	3.8	LEVER
65	22	157	106	241	241	5.2	LEVER
80	22	167	127	282	282	5.5	LEVER
100	22	182	152	305	305	6	LEVER
125	22	100A	180	305	305	6.6	LEVER
150	34	227	220	403	403	7.1	LEVER



FOR GEAR OR ACTUATOR



DIMENSIONS

DIAMETER	ΦA	B	C	ΦD	E	ΦF*	t*
200	34	26	215	263	419	216.3	8.2
250	34	26	245	338	457	267.4	9.3
300	45	49	338	424	550	318.5	10.3
350	45	49	368.5	496	580	355.6	11.1
400	45	49	394	554	666	406.4	12.7
450	45	49	394	554	730	457.2	14.3
500	60	60	471.5	624	896	508	15.1
550	60	60	501	706	970	558.8	15.9
600	60	60	533	783	1050	609.6	9.5
650	60	60	612.5	952	1240	660.4	9.5
700	70	119	618	952	1346	711.2	8.7
800	100	127	776	1136	1524	812.8	9.5
900	100	127	855	1300	1727	914.4	10.3
1000	100	127	915	1430	1900	1016	11.1
1100	120	162	1021	1598	2000	1117.6	11.1
1200	120	162	1021	1598	2100	1219.2	11.9
1400	120	162	1167	1895	2150	1422.4	13.1

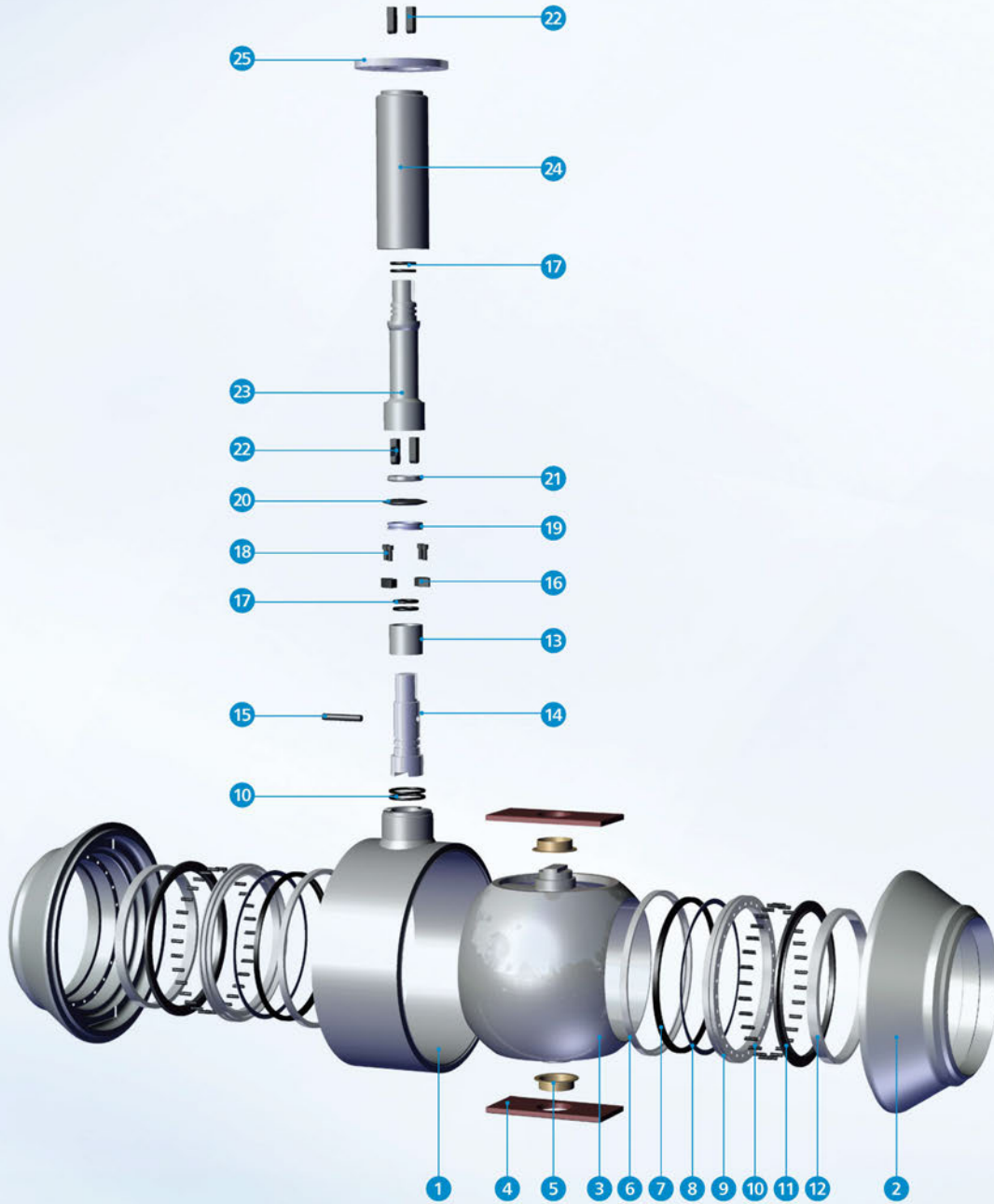
* ΦF, t 치수는 KS, ANSI, GOST 등 주문에 따라 변경 가능합니다. * Other ΦF, t dimensions are available upon request.

※ 품질 및 성능 향상을 위해 상기 치수는 사전공지 없이 변경 될 수 있습니다. ※ The above dimensions may be changed without notice.

매물형 볼 밸브(단조(Forged Body), Full Bore)

Underground Ball Valve for gas with forged body

STRUCTURES AND MATERIALS



PART NAME

NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL
1	Main Body	A105	10	Seat Spring	STS304	18	Bolt	SCM440
2	Body Cap	A105	11	Support Ring	A105	19	Thrust Bearing	PUR.
3	Ball	A351-CF8	12	Sleeve	SPPS380	20	Disk Spring	S70CM
4	Bracket	SS400	13	Gland	A105	21	Lock Nut/Washer	PUR.
5	DU Bush	SPCC+PTFE	14	Ball Spindle	STS304	22	Key	SM45C
6	Seat Cap	A105	15	Stopper Pin	SM45C	23	Extension Spindle	STS304+SPPS 380
7	Seat	RTFE	16	Stop Key	SM45C	24	Extension Stem	A105+SPP
8	Seat Pad	VITON	17	Gland O-ring	VITON	25	Top Flange	SS400
9	Seat Ring	A105						

※ 품질 및 성능 향상을 위해 상기 구조는 사전공지 없이 변경 될 수 있습니다. ※ The above dimensions may be changed without notice.

단조 매몰형 볼 밸브(Gas용): 10K / 20K

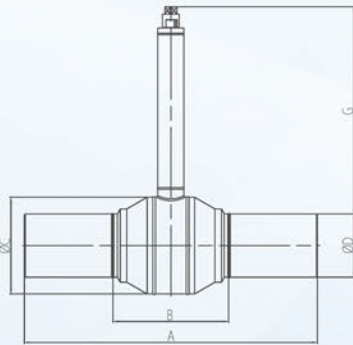
Underground Ball Valve for gas with forged body : class 150, 300, 600, PN16 ~ PN100

주요특징

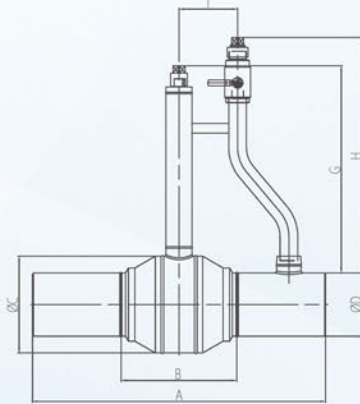
- ▶ 완전 용접형 볼 밸브
- ▶ 배관과 동일한 Full Bore 적용
- ▶ 단조 바디 사용
- ▶ Solid 또는 Cavity Ball 사용
- ▶ 이중 터치 시트 적용으로 완벽한 기밀성 유지
- ▶ 가스안전공사 검인품임

MAIN FEATURES

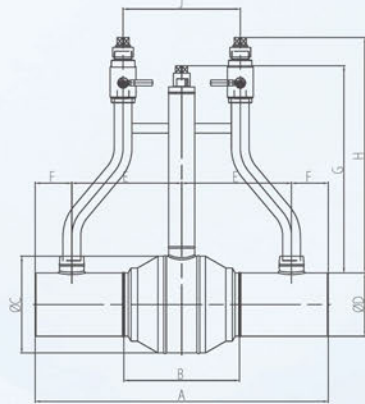
- ▶ Fully Welded Ball Valve
- ▶ Full Bore Valve
- ▶ Forged Body
- ▶ Straight (Solid or Cavity) ball
- ▶ Applied double touch seats, perfect sealing
- ▶ Approved Valve By Korea Gas Safety Corporation



No Purge Valve



One Purge Valve



Two Purge Valve

DIMENSIONS

DIAMETER	A	B	C(Ø)	D(Ø)	E	F	G		H	I	Operator
							Standard	OPTION			
50	1000	186	102	61	300	200	744		750	150	Handle
65	1000	206	125	76	300	200	747		750	150	
80	1000	228	146	89	300	200	751		750	150	
100	1000	246	179	114	300	200	753		770	150	
125	1000	278	213	140	337	163	694		759	187	
150	1000	330	263	165	300	200	697		801	200	
200	1000	395	330	216	300	200	704	300~2500	801	200	Lever
250	1200	474	432	267	403	197	652		801	243	
300	1200	532	491	319	403	197	656		801	243	
350	1200	580	550	356	403	197	663		801	243	
400	1200	666	610	406	403	197	668	801	243		
450	1600	840	700	457	600	200	675	840	275		
500	1600	896	775	508	600	200	682	840	275		
600	1600	1050	946	610	600	200	711	840	275		

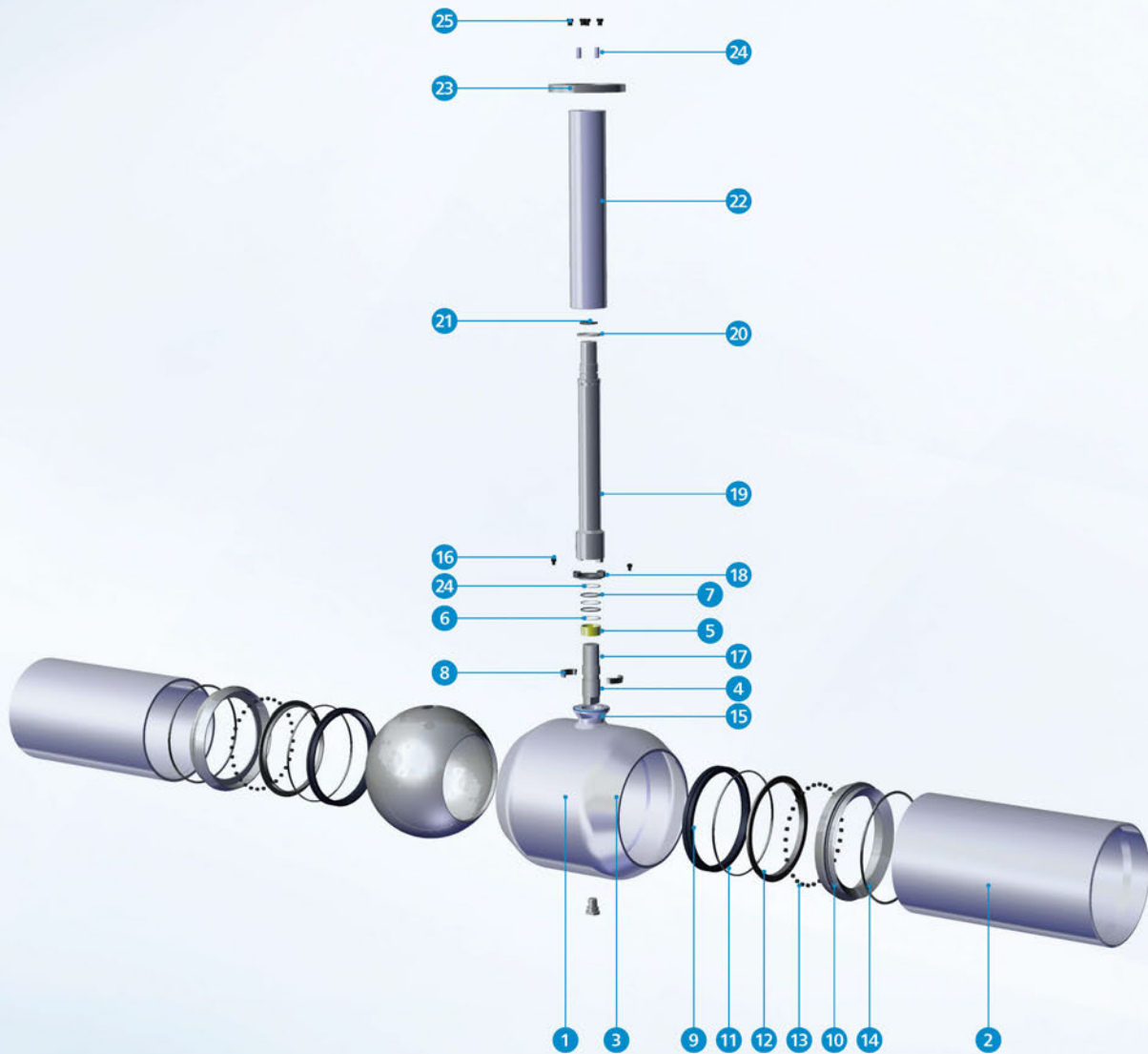
* D(Ø) 치수는 주문에 따라 변경 가능합니다. * Other D(Φ) dimensions are available upon request.

※ 품질 및 성능 향상을 위해 상기 치수는 사전공지 없이 변경 될 수 있습니다. ※ The above dimensions may be changed without notice.

파이프 성형 매몰형 볼 밸브(Pipe forming, Reduced Bore)

Pipeforming underground Ball Valve for gas : class 150, 300, PN16~PN40

STRUCTURES AND MATERIALS



PART NAME

NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL
1	Body	SPPS380	10	Seat Ring	SM20C	19	Extension Spindle	STS304+SPPS 380
2	End Piece	SPPS380	11	Seat O-ring	Viton	20	Stem Back Packing	PTFE
3	Ball	STS304TP	12	Support Ring	SPCC	21	Stem O-ring	Viton
4	Ball Spindle	STS304	13	Seat Spring	SPS8	22	Extension Stem	SM20C+SPP
5	DU Bearing	SPCE	14	Seat Ring O-ring	Viton	23	Stem Flange	SS400
6	Back Packing	PTFE	15	Dome	SM20C	24	Pin	SS400
7	Spindle O-ring	Viton	16	Bolt	SCM440	25	Bolt	SCM440
8	Backup Guide Ring	GCD 450	17	Key	SM45C			
9	Seat	RTFE	18	Gland	SS400			

※ 품질 및 성능 향상을 위해 상기 구조는 사전공지 없이 변경 될 수 있습니다. ※ The above structure and materials may be changed without notice.

파이프 성형 매몰형 볼 밸브(Gas용): 10K / 20K

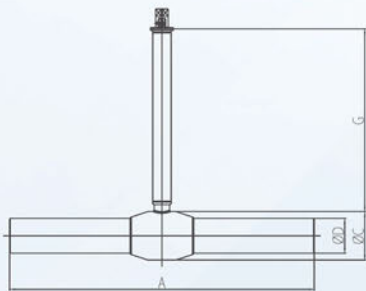
Pipeforming underground Ball Valve for gas : class 150, 300, PN16~PN40

주요특징

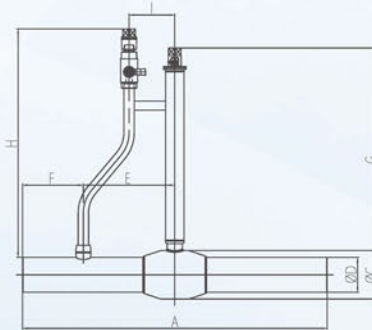
- ▶ 완전 용접형 볼 밸브
- ▶ Reduced Bore 적용
- ▶ Pipe Forming Body
- ▶ Hollow Ball 사용
- ▶ 가스안전공사 검인품임

MAIN FEATURES

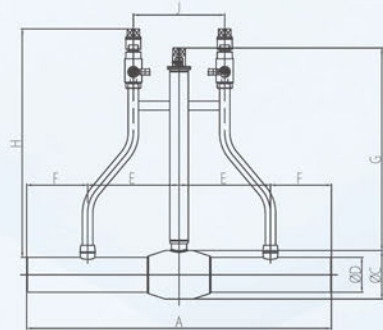
- ▶ Fully Welded Ball Valve
- ▶ Reduced Bore Valve
- ▶ Pipe Forming Body
- ▶ Hollow ball
- ▶ Approved Valve By Korea Gas Safety Corporation



No Purge Valve



One Purge Valve



Two Purge Valve

DIMENSIONS

DIAMETER	A	C(Ø)	D(Ø)*	E	F	G		H	I	J
						Standard	OPTION			
50	1000	89	60.5	300	200	665		750	150	300
65	1000	108	76.3	300	200	665		750	150	300
80	1000	127	89.1	300	200	665		750	150	300
100	1000	159	114.3	300	200	665		770	150	300
125	1000	194	139.8	337	163	665	300~2500	759	187	373
150	1000	219	165.2	300	200	650		801	200	400
200	1000	275	216.3	300	200	704		801	200	400
250	1200	357	267.4	403	197	808		801	243	486
300	1200	427	318.5	403	197	808		801	243	486

* D(Ø) 치수는 주문에 따라 변경 가능합니다. * Other D(Ø) dimensions are available upon request.

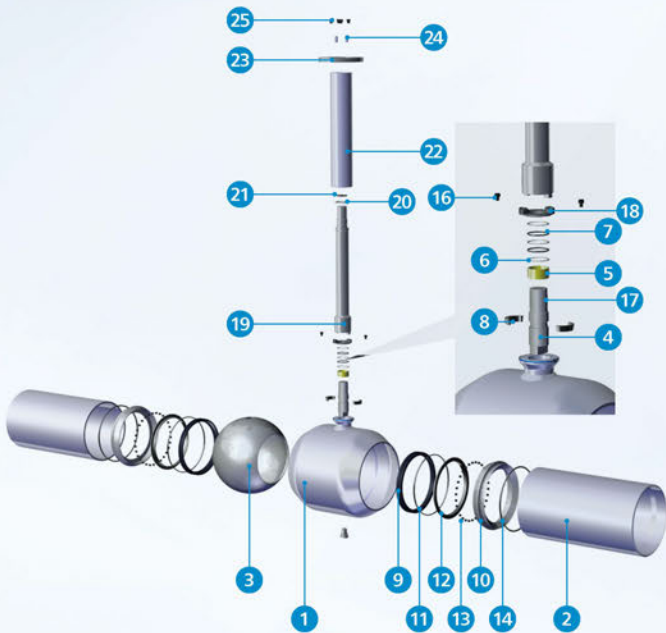
※ 품질 및 성능 향상을 위해 상기 치수는 사전공지 없이 변경 될 수 있습니다. ※ The above dimensions may be changed without notice.

공장 보온 볼 밸브(16bar, 25bar)

Pre-insulated Ball Valve : class 150, 300 (PN16 ~ PN63)

STRUCTURES AND MATERIALS

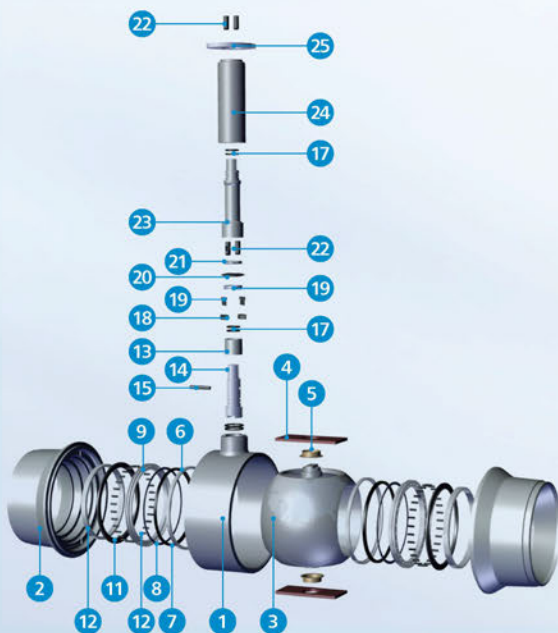
50A~300A(DN 50~300)



PART NAME

NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL
1	Body	SPPS380	14	Seat Ring O-ring	Viton
2	End Piece	SPPS380	15	Dome	SM20C
3	Ball	STS304TP	16	Bolt	SCM440
4	Ball Spindle	STS304	17	Key	SM45C
5	DU Bearing	SPCE	18	Gland	SS400
6	Back Packing	PTFE	19	Extension Spindle	STS304+SPPS 380
7	Spindle O-ring	Viton	20	Stem Back Packing	PTFE
8	Backup Guide Ring	GCD 450	21	Stem O-ring	Viton
9	Seat	RTFE	22	Extension Stem	STS304/304TP
10	Seat Ring	SM20C	23	Stem Flange	SS400
11	Seat O-ring	Viton	24	Pin	SS400
12	Support Ring	SPCC	25	Bolt	SCM440
13	Seat Spring	SPS8			

350A ~ 850A(DN350~850)



PART NAME

NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL
1	Main Body	A105	14	Ball Spindle	STS304
2	Body Cap	A105/WCB	15	Stopper Pin	SM45C
3	Ball	A351-CF8	16	Stop Key	SM45C
4	Bracket	SS400	17	Gland O-ring	VITON
5	DU Bush	SPCC+PTFE	18	Blot	SCM440
6	Seat Cap	A108	19	Thrust Bearing	PUR.
7	Seat	RTFE	20	Disk Spring	S70CM
8	Seat Pad	VITON	21	Lock Nut/Washer	PUR.
9	Seat Ring	A105	22	Key	SM45C
10	Seat Spring	STS304/Inconel	23	Extension Spindle	STS304+SPPS 380
11	Support Ring	A105	24	Extension Stem	A105+STS304TP
12	Sleeve	SPPS380	25	Top Flange	SS400
13	Gland	A105			

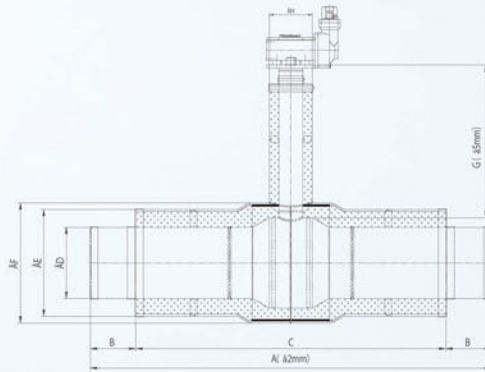
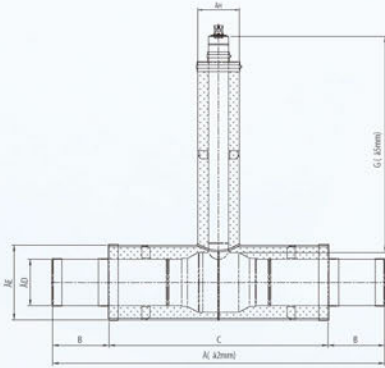
※ 품질 및 성능 향상을 위해 상기 구조는 사전공지 없이 변경 될 수 있습니다. ※ The above structure and materials may be changed without notice.

공장 보온 볼 밸브(Pre-insulated Ball Valve)

Operating Temperature: -20°C ~ 200 °C

Pressure: 10K, 20K, class 150, 300, 지역난방용(for district heating)16bar, 25bar

○ 지역난방(District Heating) 16bar(Class150)



DIMENSIONS

DIAMETER	A		B	C		ØD*	ØE	G*	ØH	Operator
	No Vent	Vent		No Vent	Vent					
20	1000	N/A	170	660	N/A	27.2	90	350/600	90	Lever
25	1000	N/A	170	660	N/A	34	90	350/600	90	
32	1000	N/A	170	660	N/A	42.7	110	350/600	110	
40	1000	N/A	170	660	N/A	48.6	110	350/600	110	
50	1000	N/A	170	660	N/A	60.5	125	350/600	110	
65	1000	N/A	170	660	N/A	76.3	140	350/600	125	
80	1000	N/A	170	660	N/A	89.1	160	350/600	125	
100	1000	N/A	170	660	N/A	114.3	200	350/600	125	
125	1000	N/A	170	660	N/A	139.8	225	350/600	125	
150	1300	1300	170	960	960	165.2	250	350/600	160	
200	1300	1300	170	960	960	216.3	315	350/600	160	
250	1500	1500	170	1160	1160	267.4	400	350/600	160	
300	1500	1500	170	1160	1160	318.5	450	350/600	200	
350	1700	1700	170	1360	1360	355.6	500	350/600	200	
400	1700	1700	170	1360	1360	406.4	560	350/600	200	
450	1800	1800	170	1460	1460	457.2	630	350/600	225	
500	1800	1900	170	1460	1560	508	710	350/600	225	
550	1800	2000	170	1460	1660	558.8	710	350/600	225	
600	1900	2100	170	1560	1760	609.6	800	350/600	225	
650	1900	1900	170	1560	1560	660.4	850	350/600	250	
700	2000	2000	170	1660	1660	711.2	900	350/600	250	
750	2000	2350	170	1660	1960	762	950	350/600	315	

* ØD 치수는 주문에 따라 변경 가능합니다. * Other ØD dimensions are available upon request.

※ 품질 및 성능 향상을 위해 상기 치수는 사전공지 없이 변경 될 수 있습니다. ※ The above dimensions may be changed without notice.

공장 보온 볼 밸브(Pre-insulated Ball Valve)

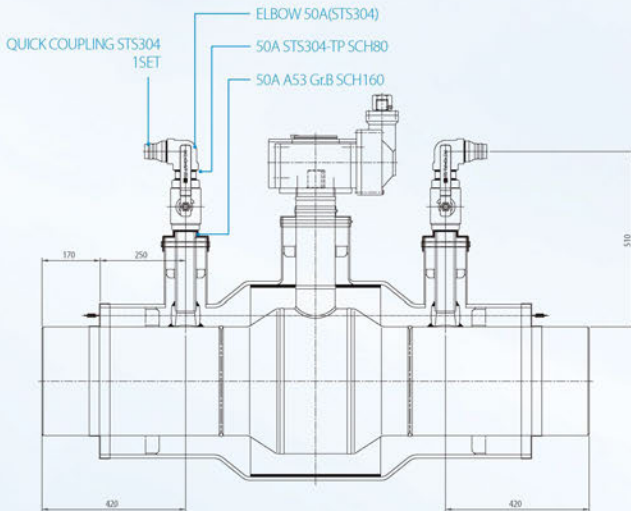
지역난방(District Heating) 25bar(Class300) Dimension Table

DIMENSIONS

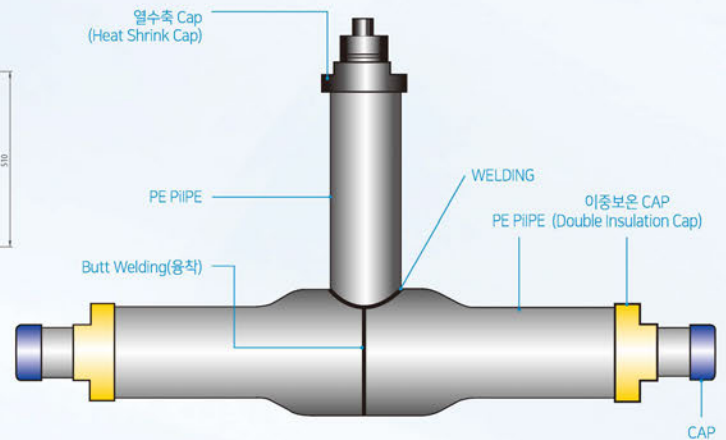
DIAMETER	A	B	C	ØD*	ØE	ØE	ØE	G	ØH
600	2200	170	1860	609.6	800	1074	350/600	250	Full Bore
650	2200	170	1860	660.4	850	1074	350/600	250	Reduced Bore
700	2250	170	1910	711.2	900	1300	350/600	400	Full Bore
750	2250	170	1910	762	950	1300	350/600	400	Reduced Bore
800	2250	170	1910	812.8	1000	1450	350/600	406	Full Bore
850	2250	170	1910	863.6	1100	1450	350/600	406	Reduced Bore

* ØD 치수는 주문에 따라 변경 가능합니다. * Other ØD dimensions are available upon request.

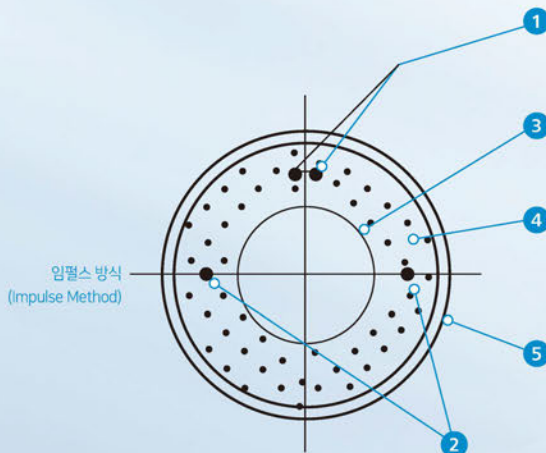
○ Airvent Type 구조 및 치수 (Structure and Dimensions of Airvent Type)



○ 보온사양(Specification of Insulating)



○ 누수감지선 사양(Specification of leak detection wire)



DESCRIPTION OF PARTS

No.	PART NAME	MATERIAL
1	누수감지선 (Leak Detection Wire)	Sensor wire(Ni-cr) Rerun wire(CuTinned)
2	나동선(Copper Wire)	CU (KS C 3101)
3	STEL PIPE	SPPS380 (KS D 3562)
4	POLYURETANE FOAM	POL YOL, MDI
5	PE PIPE(HDPE)	고밀도 폴리에틸렌 복합수지 (High Density Polyethylene)

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퍼지 밸브(Gas용): 10K / 20K

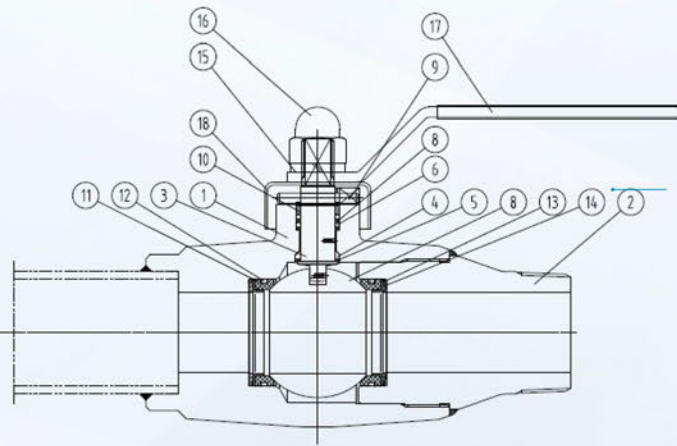
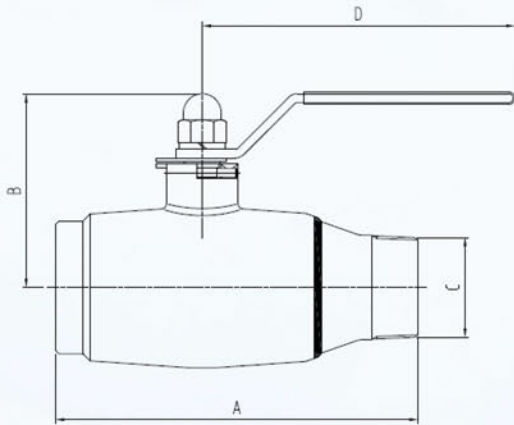
Ball Valve for Purge : class 150, 300, 600(PN16~100)

주요특징

- ▶ 완전 용접형 볼 밸브
- ▶ Reduced Bore 적용
- ▶ 단조 바디
- ▶ Anti-static Device(50A)
- ▶ PT Screw End
- ▶ 가스안전공사 검인품임

MAIN FEATURES

- ▶ Fully Welded Ball Valve
- ▶ Reduced Bore Valve
- ▶ Forged Body
- ▶ Anti-static Device(DN50)
- ▶ PT or NPT Screw End
- ▶ Approved Valve By Korea Gas Safety Corporation



PART NAME

NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL	NO.	PART NAME	MATERIAL
1	Body	A105	7	Ball	STS304	13	Support Ring	SPCC
2	Body Cap	A105	8	Back up Ring	PTFE	14	Disk Spring	STC85
3	Ball Spindle	STS304TP	9	Spring Pin	PUR	15	Spring Washer	PUR
4	Back up Packing	RTFE	10	Sleeve	SPP	16	Cap Nut	STS304
5	Back up Washer	SPCC/SS400	11	Seat	RTFE	17	Handle	SS400
6	Spindle O-ring	Viton	12	Seat O-ring	VITON	18	Cap	SS400

DIMENSIONS

DIAMETER	적용 매물형 밸브(Applied Valve)	A	B	C(PT TAP)	D
25A	125A 이상	142	74	PT(NPT) 1"	A105
50A	150A 이상	210	112	PT(NPT) 2"	Viton

※품질 및 성능향상을 위해 상기구조 및 치수는 사전 공지없이 변경될 수 있습니다. ※ The above structures and dimensions may be changed without notice.

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29, Paldal-ro 2-gil, Seo-gu, Daegu, Korea(Zipcode: 41701)
T +82-53-353-5789 F +82-53-352-1179

2공장 (FACTORY II)

경상북도 경산시 진량읍 공단 8로 222
222, Gongdan 8-ro, Jillyang-eup, Gyeongsan-si,
Gyeongsangbuk-do, Korea(Zipcode: 38461)
T +82-53-857-5789 F +82-53-857-5784

3공장 (FACTORY III)

경상북도 경산시 진량읍 다문로 138
138, Damun-ro, Jillyang-eup, Gyeongsan-si,
Gyeongsangbuk-do, Korea(Zipcode: 38459)
T +82-53-854-5780 F +82-53-854-5784

서울본부 (SEOUL OFFICE)

서울특별시 금천구 시흥대로 175 (시흥동)
175, Siheung-daero, Geumcheon-gu,
Seoul, Korea(Zipcode: 08636)
T +82-2-895-5353 F +82-2-895-5352

광주사무소 (KWANGJU OFFICE)

T +82-62-946-2247 F +82-62-946-2249

E-mail master@hsvalve.com
www.hsvalve.co.kr / www.hsvalve.com

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