

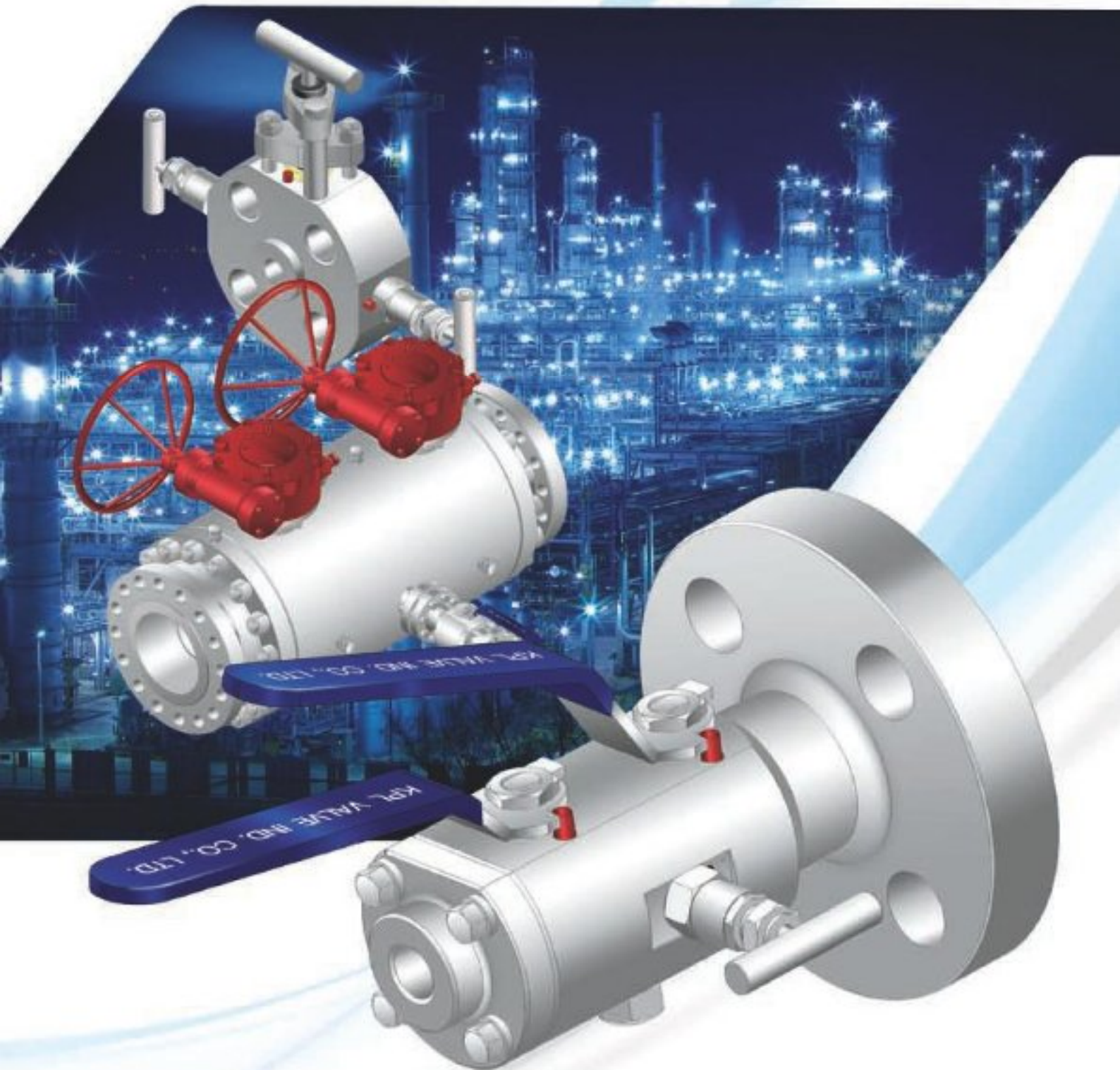


API 607, B3
Licence 7 60 0814



Certified System
DIN 25 200
ISO 9001

KPL Double block and bleed valves



INTRODUCTION

We are very grateful to our valuable customers who have shown a deep attention on to KPL's growth and extended generous supports.

KPL VALVE IND. CO., LTD. was established in 1986 and for the past years, we KPL as a specialized company to manufacture valves that were used pipe line and processed plant for instrumentation.

KPL became the leading company for its business productions in Korea with its qualified equipments, manpower and technical capability to design, manufacture and test in spite of young company.

These products are manufactured in our modern facilities where the quality is rigidly control in conformance to all application codes, standards and design criteria demanded by our licensors and clients.

We will do our best to accumulate advanced valve engineering technologies, to reduce production cost and improve quality assurance rules.

We promise that we will meet the needs and expectations of our valuable customers through the valve technology services and products of the highest quality.



CERTIFICATIONS



APPLICATIONS AND INSTALLATIONS

In prior double block and bleed system, 2 blocked(off) the valves and 1 bleed valve should be assembled with Flange or piping screws to pipe tee. The problem is that installation is costly because it needs too many parts and leakage would increase. And the size of the system is big and it needs huge space for the installation and it is vulnerable to vibration.

KPL Double block and bleed valve has been developed to solve these problems. Compactly designed 1-piece or a 2-piece body with 2 blocked(off) valve and 1 bleed valve can replace the existing Double block and bleed system with 1 Double block and bleed valve and it can reduce installation space and time.



Conventional DBB installation

VS

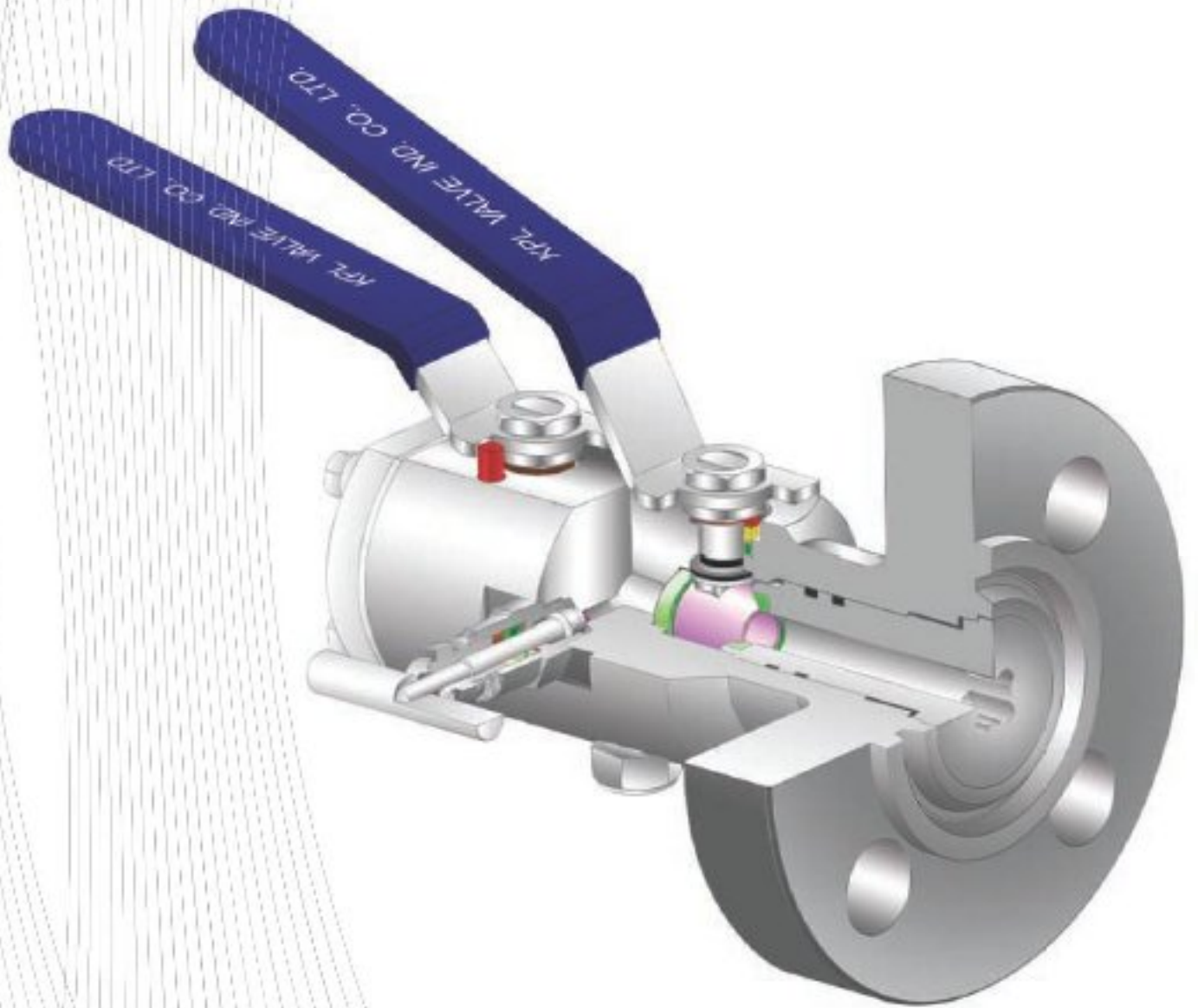


KPL DBB installation

© BENEFITS DURING INSTALLATION OF KPL DOUBLE BLOCK AND BLEED VALVE

- Compact assembly
- Easy installation and maintenance
- Reduced installation cost
- Space and weight saving
- Reduced leakage points
- Reduced effect of system vibration

KPL DOUBLE BLOCK AND BLEED VALVES



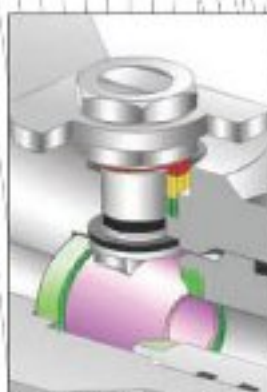
KPL Double block and bleed (DBB) valve is designed and manufactured in conformance with specification of API 6D and ASME B 16.34

KPL DBB valve is available in variety of size (1/2" through 12"), working pressure and configurations. KPL DBB valves are available in full range of materials and options to meet the individual user requirements.

Each and every DBB valve is completely tested before leaving the factory to ensure adherence to customer specifications and proper performance.

◎ BALL VALVE SPECIFICATIONS

- Floating ball design for improved performance smooth, low torque operation.
 - Bubble tight shut off.
- Available to anti static device.
 - Anti blowout stem.
 - Bi-directional design.
- Fire safety to API 607 4th edition.
 - Available to metal seated construction.
- Pressure rating up to 6000 psig [414 bar]



Seat pressure ratings

Class 150

PTFE or R PTFE seated
Max. working pressure : 20 Bar

Class 300

PTFE or R PTFE seated
Max. working pressure : 51 Bar

Class 600

PTFE or R PTFE seated
Max. working pressure : 103 Bar

Class 800

PTFE or R PTFE seated
Max. working pressure : 126 Bar

Class 900

Nylon or Devlon seated
Max. working pressure : 155 Bar

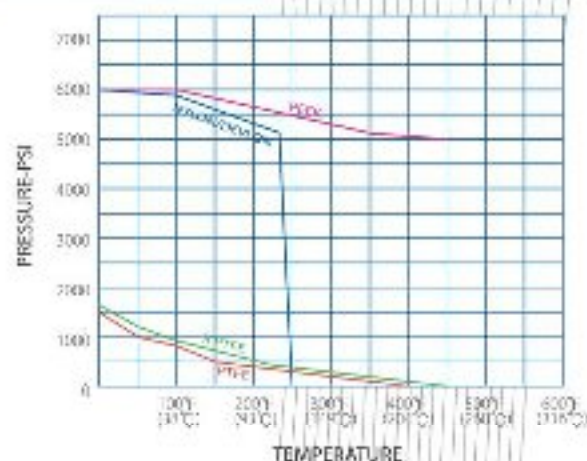
Class 1500

Nylon or Devlon seated
Max. working pressure : 255 Bar

Class 2500

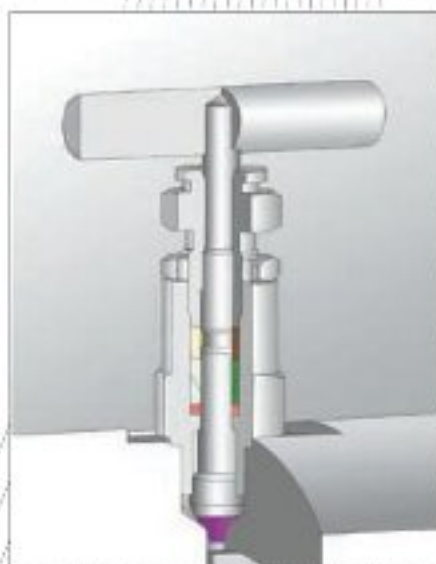
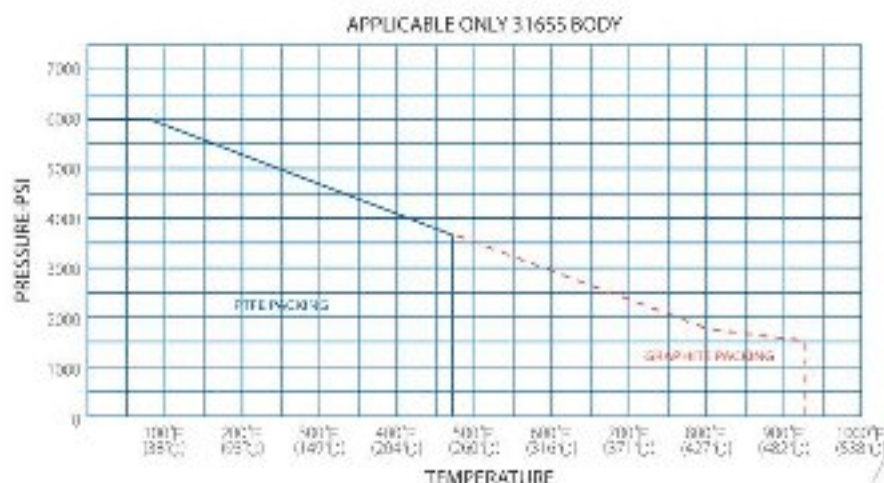
PEEK seated
Max. working pressure : 425 Bar

Ball valve seat pressure/temperature chart



◎ NEEDLE GLOBE VALVE SPECIFICATIONS

Needle globe valve pressure/temperature chart

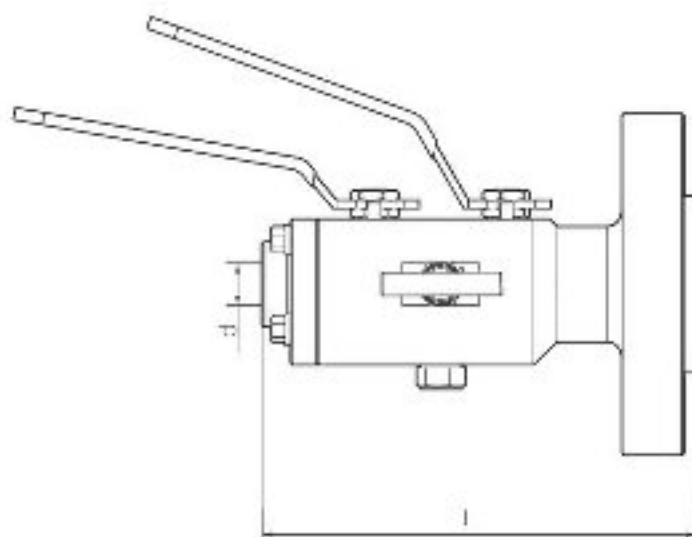


- Heavy duty needle type globe valve in designed to ensuring bubble tight.
 - Non-rotating stem tip.
 - PTFE or Graphite packing.
- Rolled stem operating threads prevent galling.
- Backseat design.
 - Available to outside screw and yoke (OS&Y) type globe valve.
 - Fire safety to API 607 4th edition.
 - Pressure rating up to 6000 psig [414 bar]

FLANGE TO SCREW DOUBLE BLOCK AND BLEED VALVES - 2 BALL 1 NEEDLE PATTERN

FEATURES & BENEFITS

- Integral flange
- 2 ball 1 needle pattern
- 1/2" PT or NPT threaded female outlet
- ANSI B 16.5 flanged inlet connections
- 1/2" NPT threaded bleed connection
- 14mm ball valve bore
- Floating ball design
- Pressure ratings : class 150 to class 2500
- Available to Fire safe to API 607
- Available to NACE MR-01-75
- Flanged connections according to ASME B 16.5 RF and RTJ



MATERIALS

316, 316L, 304, 304L, A105, LF2.
Titanium, monel, incol625, C95800
and other special materials are available
to customer spec.

TYPICAL APPLICATIONS

- Double block and bleed applications
- Primary isolation
- Chemical injection
- Sampling
- Flow measurement

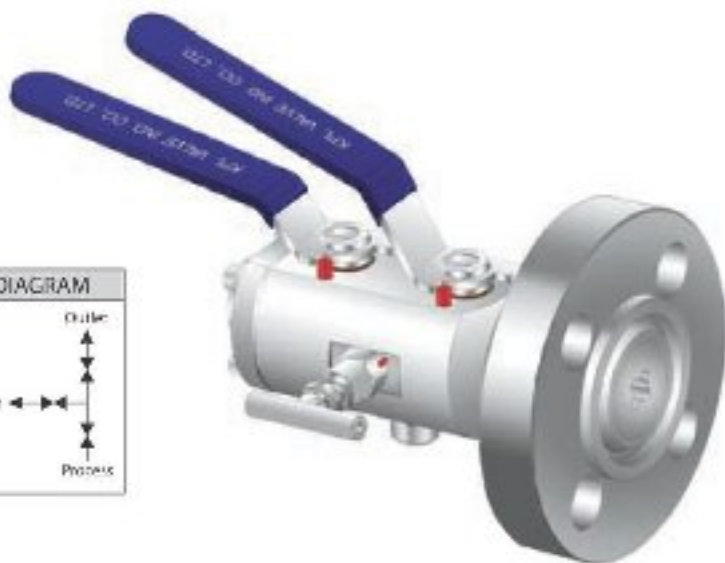
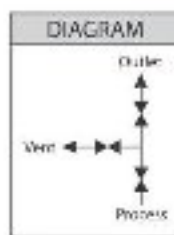
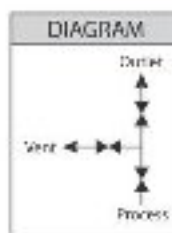
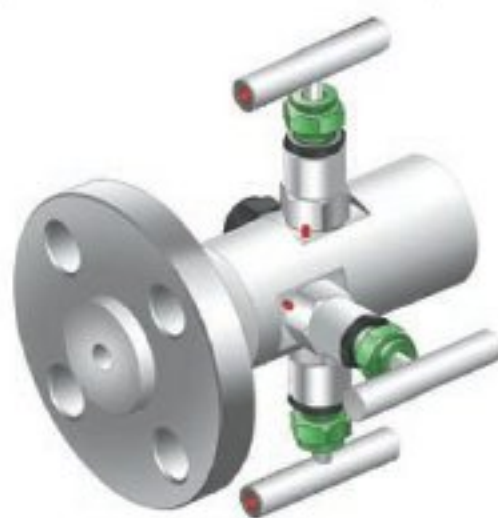
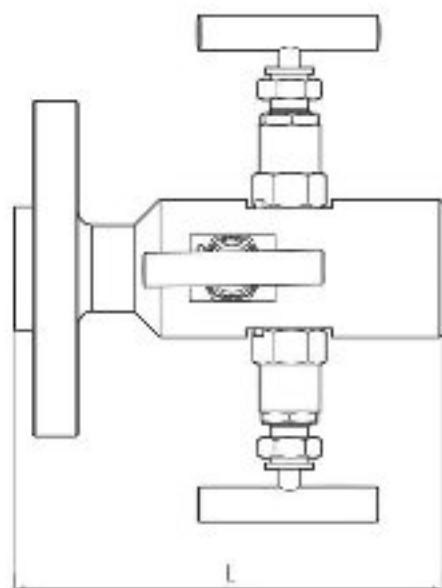


TABLE 1 - FLANGE TO SCREW/DBB VALVE

Rating	150				300				600				900/1500				2500			
	L(RF)	L(RTJ)	d	Approx. Weight(kg)	L(RF)	L(RTJ)	d	Approx. Weight(kg)	L(RF)	L(RTJ)	d	Approx. Weight(kg)	L(RF)	L(RTJ)	d	Approx. Weight(kg)	L(RF)	L(RTJ)	d	Approx. Weight(kg)
1/2"	156	-	14	3.5	154	163	14	3.9	164	183	14	3.9	212	212	14	6.6	229	226	12	11.0
3/4"	160	-	14	3.9	166	171	14	4.3	166	171	14	4.3	212	212	14	9.1	222	222	12	13.5
1"	164	169	14	4.3	175	180	14	4.9	175	180	14	5.1	221	221	14	10.5	228	228	12	21.0
1-1/4"	168	173	14	5.1	179	183	14	5.7	179	183	14	5.9	224	224	14	11.5	231	231	12	23.0
1-1/2"	173	178	14	6.2	185	190	14	6.9	185	190	14	7.1	227	227	14	12.3	240	240	12	27.5
2"	175	183	14	7.3	187	195	14	8.0	187	195	14	8.2	230	232	14	18.0	242	242	12	42.3

FLANGE TO SCREW DOUBLE BLOCK AND BLEED VALVES - 3 NEEDLE PATTERN



◎ FEATURES & BENEFITS

- Integral flange
- 3 needle pattern
- 1/2" PT or NPT threaded female outlet
- ANSI B 16.5 flanged inlet connections
- 1/2" NPT threaded bleed connection
- Pressure ratings: class 150 to class 2500
 - Available to Fire safe to API 607
 - Available to NACE MR-01-75
- Flanged connections according to ASME B 16.5 RF and RTJ

◎ MATERIALS

316, 316L, 304, 304L, A105, LF2.
Titanium, monel, inconel625, C95800 and other special materials are available to customer spec.

◎ TYPICAL APPLICATIONS

- Double block and bleed applications
 - Primary isolation
 - Chemical injection
 - Sampling
- Flow measurement

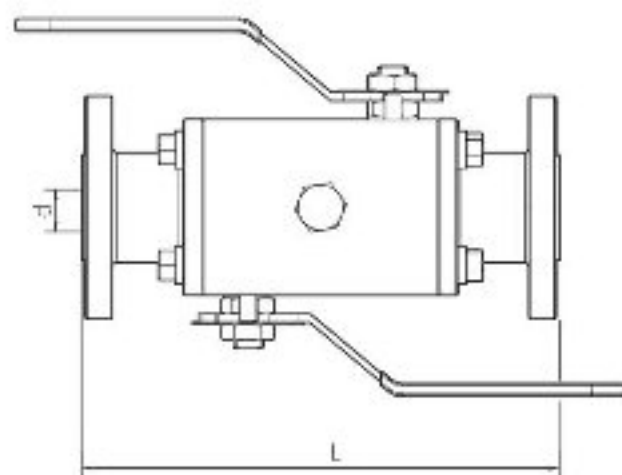
TABLE 2 - FLANGE TO SCREW(3 NEEDLE PATTERN) DBB VALVE

Rating Flange size	150			300			600			900/1500			2500		
	L(RF)	L(RTJ)	Approx Weight(kg)	L(RF)	L(RTJ)	Approx Weight(kg)	L(RF)	L(RTJ)	Approx Weight(kg)	L(RF)	L(RTJ)	Approx Weight(kg)	L(RF)	L(RTJ)	Approx Weight(kg)
1/2"	135	-	2.5	135	140	2.6	145	145	3.3	160	160	5.2	170	170	6.3
3/4"	135	-	3.2	135	140	3.4	150	150	3.9	165	160	6.0	180	180	7.0
1"	135	140	3.8	135	140	3.9	153	153	4.5	168	160	7.3	183	183	9.5
1-1/4"	155	160	4.3	155	160	4.5	160	160	5.4	175	175	9.2	188	188	13.8
1-1/2"	160	165	4.8	160	165	5.0	170	170	7.0	185	185	10.2	190	190	15.3
2"	160	168	7.0	160	168	7.2	174	177	8.3	185	187	12.3	193	195	21.3

FLANGE TO FLANGE DOUBLE BLOCK AND BLEED VALVES - 2 BALL 1 NEEDLE PATTERN

FEATURES & BENEFITS

- 3-piece construction
- 2 ball 1 needle pattern
- ANSI B 16.5 Flanged connections
- 1/2" NPT threaded bleed connection
- Floating or trunnion ball design
- 10mm to 50mm ball valve bore
- Pressure rating : class 150 to class 2500
- Available to Fire safe to API 607
- Available to NACE MR-01-75
- Flanged connections according to ASME B 16.5 RF and RTJ



MATERIALS

316, B16L, 304, 304L, A105, LF2.
Titanium, monel, incol625, C95800 and other special materials are available to customer spec.

TYPICAL APPLICATIONS

- Double block and bleed applications
- Primary isolation
- Sampling
- Venting

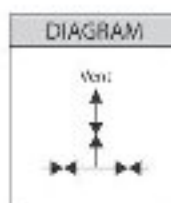


TABLE 3 - FLANGE TO FLANGE DBB VALVE

Rating	150				300				600				900/1500				2500			
	L(RF)	L(RTJ)	d	Approx Weight(kg)	L(RF)	L(RTJ)	d	Approx Weight(kg)	L(RF)	L(RTJ)	d	Approx Weight(kg)	L(RF)	L(RTJ)	d	Approx Weight(kg)	L(RF)	L(RTJ)	d	Approx Weight(kg)
1/2"	174	-	11	4.4	186	194	11	4.7	211	209	11	7.5	240	240	11	9.0	340	340	9	19.0
	175	-	14	5.2	190	195	14	5.6	215	215	14	8.0	245	245	14	12.2	345	345	12	24.9
3/4"	183	-	14	5.8	197	205	14	6.3	234	234	14	8.9	267	267	14	13.7	355	355	12	27.2
	205	-	20	9.2	215	224	20	10.2	252	252	20	12.9	288	288	20	17.3	363	363	16	30.8
1"	211	220	20	9.8	215	224	20	11.5	278	278	20	13.5	312	312	20	20.6	398	398	16	36.2
	234	243	25	13.7	236	245	25	14.7	286	286	25	17.0	324	324	25	24.6	408	408	22	47.0
1-1/4"	241	250	25	15.3	248	247	25	16.0	293	293	25	19.3	349	349	25	27.0	449	449	22	55.0
	245	254	32	17.8	256	265	32	18.3	308	308	32	25.0	356	356	32	32.0	516	516	26	82.3
1-1/2"	254	267	32	18.3	269	278	32	21.0	320	320	32	28.3	384	384	32	45.2	554	554	26	85.6
	290	300	38	21.5	294	303	38	26.1	328	328	38	31.0	477	477	38	78.0	563	563	32	105.2
2"	295	309	38	25.5	303	315	38	27.5	379	379	38	38.5	540	543	38	96.8	630	630	32	125.0
	319	331	50	38.7	330	343	50	42.3	395	395	50	52.3	553	556	48	112.0	685	685	42	145.6