FLOWKS

FLOWKS VALVE INC.

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FLOWKS

How Quality Lasts!

Oil & Gas & Power & Cryogenics

SINGLE BLOCK & BLEED VALVE (SBB)

DOUBLE BLOCK & BLEED VALVE (DBB)

FLOWKS

PRODUCT CONTENTS

ABOUT US

Flowks Valve is a manufacturer specializing in all kinds of industrial valves. After years of experience in supplying valves for distributors and projects, Flowks Valve has been recognized as a skilled and responsible supplier. The reputation relies on our strict inspection procedure from CAD design, material purchasing, machining, assembling, hydraulic & air testing to packing & delivery. Each step is carried out by our experienced and dedicated craftsmen.

We offer various types of valves with different materials, including special materials like Monel, Inconel, duplex, copper, bronze, etc. We follow different standards such as API, ANSI, DIN, BS and JIS.

We are capable of supplying valves with special testings and treatments like radiographic examnation (RT), ultrasonic examnation (UT), liquid penetrant test (LPT), magnetic particle test (MPT), low temperature impact test and PMI. Special coating like FCC and TCC is also avaialble.

Our valves are widely used in different industries. We provide OEM service.

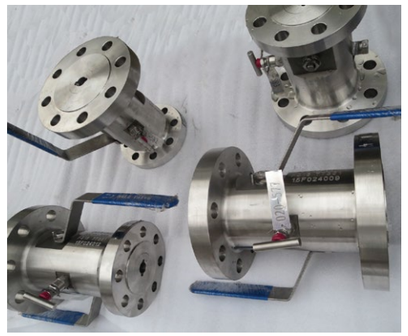
If you find anything interesting, please do not hesitate to contact us.

What you will get is quality products with competitive prices.

Look forward to having a chance to serve your esteemed company.

PHOTOS OF PRODUCTS

FLOWKS



• A smaller unit vs the traditional hook-up, bringing both piping and instrumentation isolation into one unit – this means;

• Less weight, which is significant on the top side of a platform, when you combine all the pressure instrument take-offs.Typical installation it is reduced from 33 kg to 7 kg, a weight reduction of 75%!

• Weight reduction is also an issue when take-off is horizontal, this instils a bending moment and could cause critical fracture of pipeline interface and is generally overcome by adding more stanchions & cussetting to support traditional installation, which adds even more weight.

• Cost reduction – typically 30% saving over traditional installation, which jumps up to 70% in the case of valves made from exotic materials for more exacting processes!

• Cost saving on site – the cost of one factory tested component, as opposed to different piping valves, instrument valves, flanges, connections and flanged seal rings and then the cost to raise purchase orders and expediting department to chase the parts in goods receivable, etc., and then the shipping costs are larger and weightier, specs must all be taken into account, rises in cost can be 30% of the overall cost. Coded welders could be required as well.

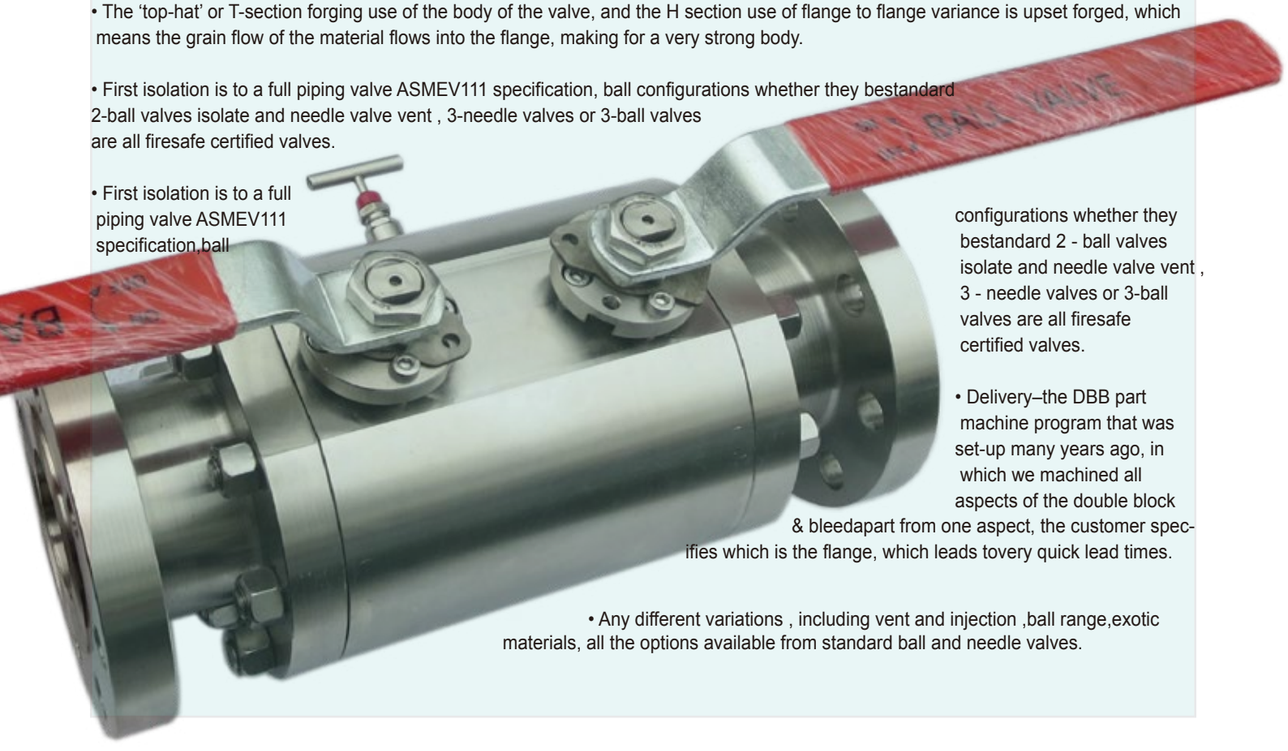
• Safety–including spool pieces the type of valve, i.e. standard 3 -piece valve used in installation may have as many as nine additional leak points.

• Health & safety legislation is moving more and more towards testing at a considerable cost to each one of these joints after installation, cost of which can be excessive.

• Health & Safety –USA and abroad process safety management document OCEA3132, UK Health & Safety Executive application HSG253 which is readily downloadable free, states double block & bleed must be used. All these documents stem from the Piper Alpha disaster over 20 years ago and the P36 disaster in Brazil, both of which indicated double block & bleed as a marked improvement for safety.

• The 'top-hat' or T-section forging use of the body of the valve, and the H section use of flange to flange variance is upset forged, which means the grain flow of the material flows into the flange, making for a very strong body.

• First isolation is to a full piping valve ASMEV111 specification, ball configurations whether they bestandard 2-ball valves isolate and needle valve vent , 3-needle valves or 3-ball valves are all firesafe certified valves.



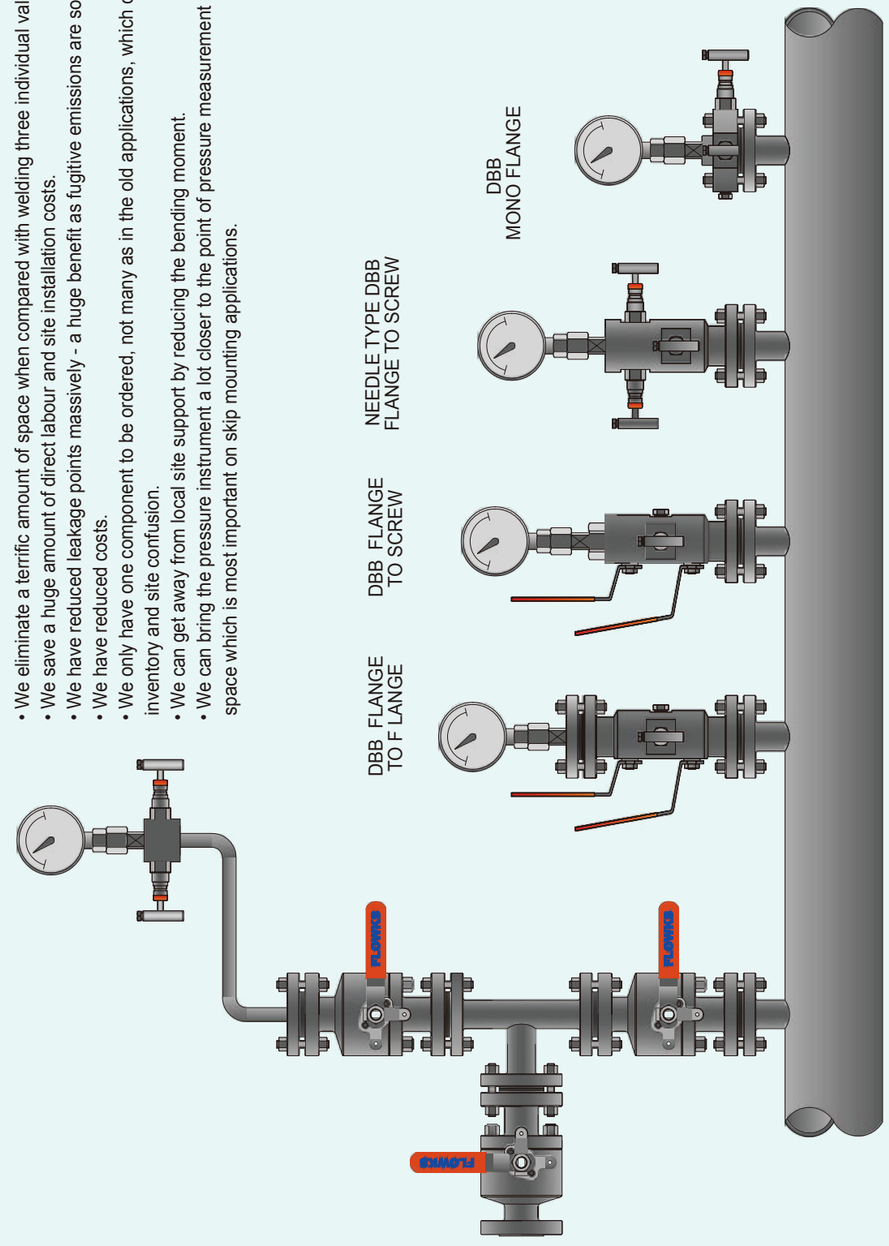
• First isolation is to a full piping valve ASMEV111 specification,ball configurations whether they bestandard 2 - ball valves isolate and needle valve vent , 3 - needle valves or 3-ball valves are all firesafe certified valves.

• Delivery–the DBB part machine program that was set-up many years ago, in which we machined all aspects of the double block & bleedapart from one aspect, the customer specifies which is the flange, which leads tovery quick lead times.

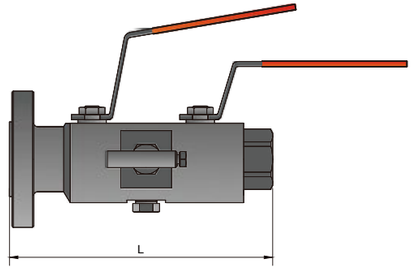
• Any different variations , including vent and injection ,ball range,exotic materials, all the options available from standard ball and needle valves.

DOUBLE BLOCK & BLEED VALVE SOLUTIONS

• We eliminate a terrific amount of space when compared with welding three individual valves together.
• We save a huge amount of direct labour and site installation costs.
• We have reduced leakage points massively - a huge benefit as fugitive emissions are so important.
• We have reduced costs.
• We only have one component to be ordered, not many as in the old applications, which can save on inventory and site confusion.
• We can get away from local site support by reducing the bending moment.
• We can bring the pressure instrument a lot closer to the point of pressure measurement thus saving space which is most important on skip mounting applications.



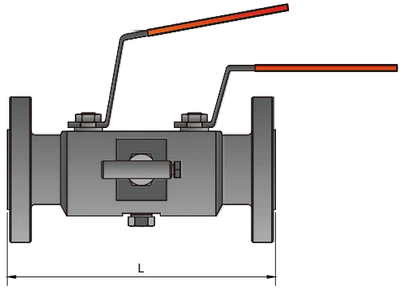
FLANGE TO SCREW INTEGRAL DBB



Machined from a single piece ‘grain flow controlled’ forging. This valve features two in-line ball pattern primary and secondary isolating valves with a heavy duty needle valve vent, offering ‘through to process’ rodding in bore sizes from 10mm to 20mm (0.4” to 0.8”).

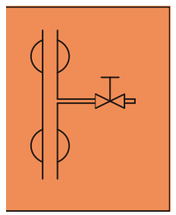
This all forged manifold comprises two in-line ball primary and secondary isolating valves with a heavy duty needle valve vent. Offering through to process rodding in bore sizes from 10mm to 14mm (0.4” to 0.55”).

FLANGE TO FLANGE INTEGRAL DBB



■ SIZE & BORE

BORE:0.4"(10mm) SIZE:1/2"~2"(DN15-50) CLASS:150LB-2500LB	BORE:0.4"(14mm) SIZE:3/4"~2"(DN15-50) CLASS:150LB-2500LB	BORE:0.4"(20mm) SIZE:1"~2"(DN15-50) CLASS:150LB-2500LB
Outlet:1/2" NPT female standard Outlet:1/2" flange standard Vent : 1/2"NPT female standard	Outlet:3/4" NPT female standard Outlet:3/4" flange standard Vent : 1/2"NPT female standard	Outlet:1" NPT female standard Outlet:1" flange standard Vent : 1/2"NPT female standard



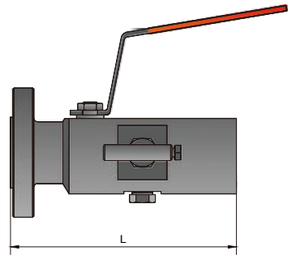
■ STANDARD

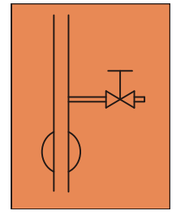
Design & Manufacture ACC to API 6D/608.
Temperature & Pressure ACC to ANSI B16.34.
Face to Face Dimension ACC to ANSI B16.10.
End Dimension ACC to ANSI B16.5.
Test & Inspection ACC to API 598.
FIRESAFE ACC to API 6FA.
NACE MR0175.

■ Material list

Body:	A105N	A182 LF2	A182 F316	A182 F51	B148 C95800	B564 NO6625
Ball:	A182 F316	A182 F316	A182 F316	A182 F51	B148 C95800	B564 NO6625
Stem:	A182 F51	A182 F51	A182 F51	A182 F51	Monel k500	B564 NO6625
Seat:	PTFE / RPTFE / PEEK					
Handles:	SS201 / SS304 / SS316					
Bonnet:	A105N	A182 LF2	A182 F316	A182 F51	B148 C95800	B564 NO6625
O-ring:	FKM(Viton-AED) TFE/P(AFLAS) FFKM					
Parking:	PTFE / Graphite					

SINGLE BLOCK & BLEED FLANGE TO SCREW INTEGRAL SBB

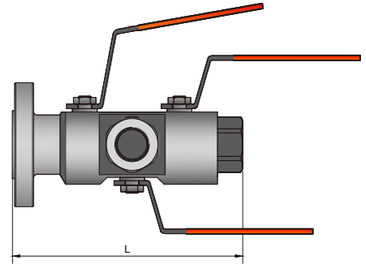




■ STANDARD

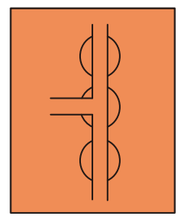
Design & Manufacture ACC to API 6D/608.
Temperature & Pressure ACC to ANSI B16.34.
Face to Face Dimension ACC to ANSI B16.10.
End Dimension ACC to ANSI B16.5.
Test & Inspection ACC to API 598.
FIRESAFE ACC to API 6FA.
NACE MR0175.

THREE WAY BALL VENT FLANGE TO SCREW INTEGRAL DBB



■ SIZE & BORE

BORE:0.4"(10mm) SIZE:1/2"~2"(DN15-50) CLASS:150LB-2500LB	BORE:0.4"(14mm) SIZE:3/4"~2"(DN15-50) CLASS:150LB-2500LB	BORE:0.4"(20mm) SIZE:1"~2"(DN15-50) CLASS:150LB-2500LB
Outlet:1/2" NPT female standard Outlet:1/2" flange standard Vent : 1/2"NPT female standard	Outlet:3/4" NPT female standard Outlet:3/4" flange standard Vent : 1/2"NPT female standard	Outlet:1" NPT female standard Outlet:1" flange standard Vent : 1/2"NPT female standard



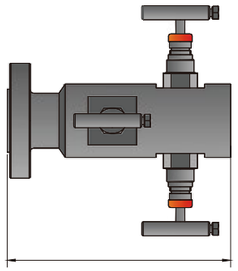
Machined from a single piece ‘grain flow controlled’ forging. This valve features two in-line ball pattern primary and secondary isolating valves with a heavy duty needle valve vent, offering ‘through to process’ rodding in bore sizes from 10mm to 20mm (0.4” to 0.8”).

This all forged manifold comprises two in-line ball primary and secondary isolating valves with a heavy duty needle valve vent. Offering through to process rodding in bore sizes from 10mm to 14mm (0.4” to 0.55”).

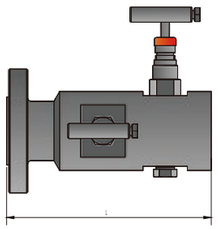
■ Material list

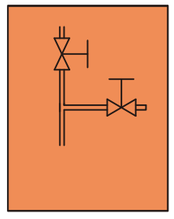
Body:	A105N	A182 LF2	A182 F316	A182 F51	B148 C95800	B564 NO6625
Ball:	A182 F316	A182 F316	A182 F316	A182 F51	B148 C95800	B564 NO6625
Stem:	A182 F51	A182 F51	A182 F51	A182 F51	Monel k500	B564 NO6625
Seat:	PTFE / RPTFE / PEEK					
Handles:	SS201 / SS304 / SS316					
Bonnet:	A105N	A182 LF2	A182 F316	A182 F51	B148 C95800	B564 NO6625
O-ring:	FKM(Viton-AED) TFE/P(AFLAS) FFKM					
Parking:	PTFE / Graphite					

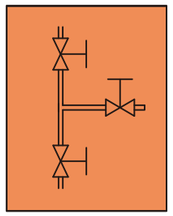
NEEDLE TYPE FLANGE TO SCREW INTEGRAL DBB



NEEDLE TYPE FLANGE TO SCREW INTEGRAL SBB







■ STANDARD

Design & Manufacture ACC to API 6D/608.
Temperature & Pressure ACC to ANSI B16.34.
Face to Face Dimension ACC to ANSI B16.10.
End Dimension ACC to ANSI B16.5.
Test & Inspection ACC to API 598.
FIRESAFE ACC to API 6FA.
NACE MR0175.

■ SIZE & BORE

BORE:0.4"(10mm) SIZE:1/2"~2"(DN15-50) CLASS:150LB-2500LB	BORE:0.4"(14mm) SIZE:3/4"~2"(DN15-50) CLASS:150LB-2500LB	BORE:0.4"(20mm) SIZE:1"~2"(DN15-50) CLASS:150LB-2500LB
Outlet:1/2" NPT female standard Outlet:1/2" flange standard Vent : 1/2"NPT female standard	Outlet:3/4" NPT female standard Outlet:3/4" flange standard Vent : 1/2"NPT female standard	Outlet:1" NPT female standard Outlet:1" flange standard Vent : 1/2"NPT female standard

Machined from a single piece 'grain flow controlled' forging. This valve features primary and secondary valve & vent with heavy duty needle valves, offering 5.4mm (0.23") bores and metal seated valves.

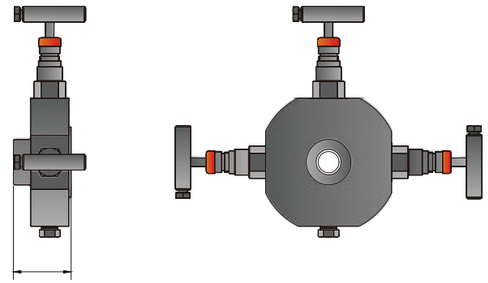
This all forged manifold comprises three heavy duty needle valves. Offering 5.4mm (0.23") bores and metal seated valves.

Valves have three heavy duty metal seated needle valves with 5.4mm (0.23") bores.

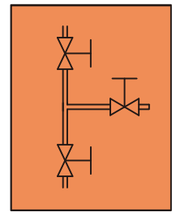
■ Material list

Body:	A105N	A182 LF2	A182 F316	A182 F51	B148 C95800	B564 NO6625
Ball:	A182 F316	A182 F316	A182 F316	A182 F51	B148 C95800	B564 NO6625
Stem:	A182 F51	A182 F51	A182 F51	A182 F51	Monel k500	B564 NO6625
Seat:	PTFE / RPTFE / PEEK					
Handles:	SS201 / SS304 / SS316					
Bonnet:	A105N	A182 LF2	A182 F316	A182 F51	B148 C95800	B564 NO6625
O-ring:	FKM(Viton-AED) TFE/P(AFLAS) FFKM					
Parking:	PTFE / Graphite					

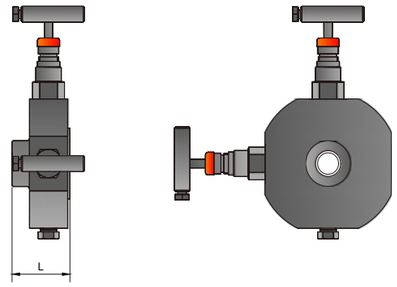
SINGLE BLOCK &BLEED FLNGE TO SCREW INTEGRAL SBB

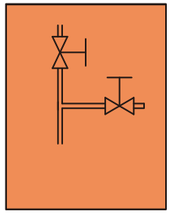


Gauge block monoflange valves work in conjunction with a pre-installed primary isolate valve. They provide very compact instrument Double Block and Bleed valving. This range is also available in a single block and Double Block and Bleed configuration's.



THREE WAY BALL VENT FLNGE TO SCREW INTEGRAL DBB



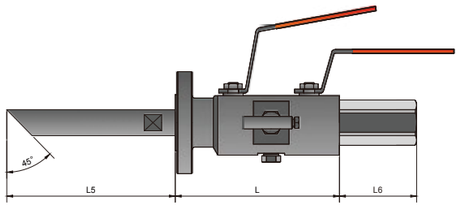


- Block and bleed configuration has multi gauge ports for orientation of valve on horizonta land vertical pipelines.
- Gauge block monoflange valves to be used in conjunction with primary isolate.
- Use standard or heavy duty needle valves , for different pressures.
- Valves designed to connect to ASME B16.5 flanges.
- Block, Block and Bleed,Double Block and Bleed options.
- Weight, space and hook - up time saving.
- Leak paths greatly reduced.

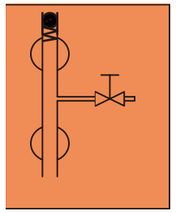
■ Material list

Body:	A105N	A182 LF2	A182 F316	A182 F51	B148 C95800	B564 NO6625
Ball:	A182 F316	A182 F316	A182 F316	A182 F51	B148 C95800	B564 NO6625
Stem:	A182 F51	A182 F51	A182 F51	A182 F51	Monel k500	B564 NO6625
Seat:	PTFE / RPTFE / PEEK					
Handles:	SS201 / SS304 / SS316					
Bonnet:	A105N	A182 LF2	A182 F316	A182 F51	B148 C95800	B564 NO6625
O-ring:	FKM(Viton-AED) TFE/P(AFLAS) FFKM					
Parking:	PTFE / Graphite					

NEEDLE TYPE FLANGE TO SCREW INTEGRAL DBB

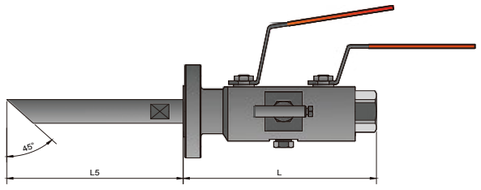


Injection of chemicals and other media onto the process stream can be accomplished with this valve design. The valve inlet houses a one way check valve which opens for injection and goes normally closed to eliminate process fluid outflow. The orientation of the injection nozzle is fixed at the assembly stage and can be specified to suit the application.
The flanged body forging is machined to ANSI B16.5 flange dimensions and incorporates two isolating valves and a bleed needle valve. The injection probe extends from the flange connection into the centre of the process stream for the correct positioning of the injection media. Injection valves can be provided with either a single flange connection and screwed connection or double flange connections.
The N Type double block and bleed with injection facility is also available.



Inlet check valve with two in-line ball pattern primary and secondary isolating valves with a heavy duty needle valve vent. D type DBB pattern.

NEEDLE TYPE FLANGE TO SCREW INTEGRAL SBB



Sampling the process stream can be accomplished with this valve design, where a sample can be taken even at full system pressure directly from the process line. The product allows double isolation from process for safety. The orientation of the sample nozzle is fixed at the assembly stage and can be specified to suit the application.

The flanged body drop forging is machined to ANSI B16.5 flange dimensions with the forged body section incorporating two isolation valves and one bleed valve. A custom designed sampling probe extends from the flange connection into the process media for correct removal of the sample. If projections into the process line cannot be allowed the valve can be supplied without a probe. Sampling valves can be provided with either a single flange connection and screwed connection or double flange connections.

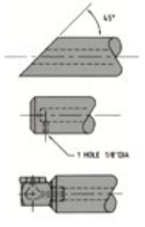
PROBE LENGTH:
This length is manufactured to suit customer requirements for the correct positioning of the injection orifice, up to a maximum length of 24". The position of the injection orifice can also be rotated at assembly to suit orientation relative to the valve handles.

PROBE MATERIALS:
The standard material is 316 stainless steel but other materials can be used to suit customer requirements.

INJECTION NOZZLES:
The standard orifice is a 0.125" (3mm) diameter hole but other arrangements can be accommodated including swirl pattern spray nozzles to improve dispersion of the media.

CHECK VALVE:
This poppet type spring return valve has a Viton soft seat, and offers bore sizes of 10mm (CV2.0) or 12mm (CV4.6) or 16mm (CV7.2). Alternatively flange to flange styles of 6mm (CV2.0) max or 10mm (CV2.0) (maximum temperature 120℃) can be furnished. For Methanol injection specify FFKM 'O' ring material for check valve seat.

NOZZLE TECHNICAL INFORMATION

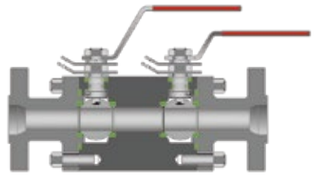


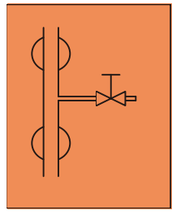
SAMPLE NOZZLE

INJECTION NOZZLE

INJECTION SWIRL PATTERN NOZZLE

FLANGE TO FLANGE 3PC FULL BORE DBB





■ STANDARD

Design & Manufacture ACC to API 6D/608.
Temperature & Pressure ACC to ANSI B16.34.
Face to Face Dimension ACC to ANSI B16.10.
End Dimension ACC to ANSI B16.5.
Test & Inspection ACC to API 598.
FIRESAFE ACC to API 6FA.
NACE MR0175.

FLANGE TO FLANGE SHORT PATTERN INTEGRAL DBB

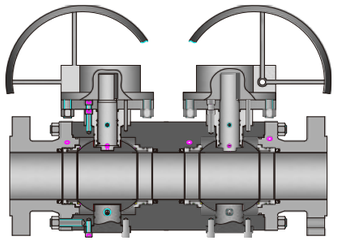
■ SIZE & BORE

BORE:0.4"(10mm) SIZE:1/2"~2"(DN15-50) CLASS:150LB-2500LB	BORE:0.4"(14mm) SIZE:3/4"~2"(DN15-50) CLASS:150LB-2500LB	BORE:0.4"(20mm) SIZE:1"~2"(DN15-50) CLASS:150LB-2500LB
Outlet:1/2" NPT female standard Outlet:1/2" flange standard Vent : 1/2"NPT female standard	Outlet:3/4" NPT female standard Outlet:3/4" flange standard Vent : 1/2"NPT female standard	Outlet:1" NPT female standard Outlet:1" flange standard Vent : 1/2"NPT female standard

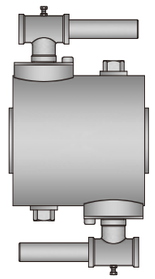
■ Material list

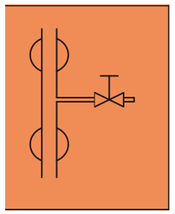
Body:	A105N	A182 LF2	A182 F316	A182 F51	B148 C95800	B564 NO6625
Ball:	A182 F316	A182 F316	A182 F316	A182 F51	B148 C95800	B564 NO6625
Stem:	A182 F51	A182 F51	A182 F51	A182 F51	Monel k500	B564 NO6625
Seat:	PTFE / RPTFE / PEEK					
Handles:	SS201 / SS304 / SS316					
Bonnet:	A105N	A182 LF2	A182 F316	A182 F51	B148 C95800	B564 NO6625
O-ring:	FKM(Viton-AED) TFE/P(AFLAS) FFKM					
Parking:	PTFE / Graphite					

3PC TRUNNION MOUNTED FLANGE TO FLANGE DBB



SHORT PATTERN FLANGE TO FLANGE INTEGRAL SBB





Standards

Design & Manufacture ACC to API 6D/608.
Temperature & Pressure ACC to ANSI B16.34.
Face to Face Dimension ACC to ANSI B16.10.
End Dimension ACC to ANSI B16.5.
Test & Inspection ACC to API 598.
FIRESAFE ACC to API 6FA.
NACE MR0175.

Design description:

Size:2"-24"
Class:1500~2500Lb
Trunnion mounted ball, full & reduced bore
Anti- static device
Blowout proof stem
Fire safe design
Emergency sealant injection (6" & larger)
One piece/three piece structure
Screwed flange hole for short pattern
ISO 5211 mounting pad.

Machined from one piece or three piece "grain flow controlled" forging. This valve features two in-line ball pattern primary and secondary isolating valves with a heavy duty needle valve vent, offering "through to process" rodding in bore sizes from 15 mm to 600 mm (1/2" incto to 24" inch).

Material list

Body:	A105N	A182 LF2	A182 F316	A182 F51	B148 C95800	B564 NO6625
Ball:	A182 F316	A182 F316	A182 F316	A182 F51	B148 C95800	B564 NO6625
Stem:	A182 F51	A182 F51	A182 F51	A182 F51	Monel k500	B564 NO6625
Seat:	PTFE / RPTFE / PEEK					
Handles:	SS201 / SS304 / SS316					
Bonnet:	A105N	A182 LF2	A182 F316	A182 F51	B148 C95800	B564 NO6625
O-ring:	FKM(Viton-AED) TFE/P(AFLAS) FFKM					
Parking:	PTFE / Graphite					

BORE			Needle Type 5mm			Flange & NPT 10mm			Flange & NPT 14mm			Flange & NPT 20mm		
SIZE	CLASS	RF/RTJ FLANGE TYPE	inch	mm	kg	inch	mm	kg	inch	mm	kg	inch	mm	kg
1/2"	150	Y / N												
	300	Y / Y												
	600	Y / Y												
	1500	Y / Y												
	2500	Y / Y												
3/4"	150	Y / N												
	300	Y / Y												
	600	Y / Y												
	1500	Y / Y												
	2500	Y / Y												
1"	150	Y / Y												
	300	Y / Y												
	600	Y / Y												
	1500	Y / Y												
	2500	Y / Y												
1-1/2"	150	Y / Y												
	300	Y / Y												
	600	Y / Y												
	1500	Y / Y												
	2500	Y / Y												
2"	150	Y / Y												
	300	Y / Y												
	600	Y / Y												
	1500	Y / Y												
	2500	Y / Y												

BORE			5mm			9mm			13mm			19mm		
SIZE	CLASS	RF/RTJ FLANGE TYPE	inch	mm	kg	inch	mm	kg	inch	mm	kg	inch	mm	kg
1/2"	150	Y / N												
	300	Y / Y												
	600	Y / Y												
	1500	Y / Y												
	2500	Y / Y												
3/4"	150	Y / N												
	300	Y / Y												
	600	Y / Y												
	1500	Y / Y												
	2500	Y / Y												
1"	150	Y / Y												
	300	Y / Y												
	600	Y / Y												
	1500	Y / Y												
	2500	Y / Y												
1-1/2"	150	Y / Y												
	300	Y / Y												
	600	Y / Y												
	1500	Y / Y												
	2500	Y / Y												
2"	150	Y / Y												
	300	Y / Y												
	600	Y / Y												
	1500	Y / Y												
	2500	Y / Y												