

Bolz-Summix®

Ball Segment Valve



Markets

- Pharmaceuticals
- Chemicals
- Food
- Dairy
- Cosmetics
- Minerals
- Metals
- Others

Applications

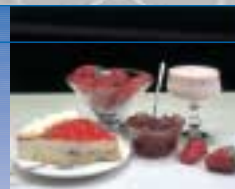
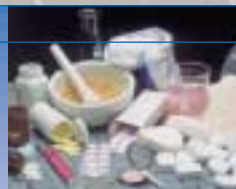
- Conical mixers & dryers
- Horizontal mixers & dryers
- Liquid stirring equipment
- Product transport pipes
- Process charge & discharge
- CIP systems
- Reactor inlets & outlets
- Etc.



www.bolz-summix.com



summix®
MEMBER OF THE MPE GROUP



Bolz-Summix® - member of the MPE Group

MPE GROUP

The Multi Processing Equipment GROUP is the holding company of 5 international operating companies with the focus on development, production and sales of high quality components and installations of processing equipment and systems.

MPE GROUP companies are:

- Bolz-Summix Solids mixing & drying systems
- Jongia Stirring & mixing equipment
- Van Meurs Bag-in-box filling systems
- Techno-G Solids handling & processing
- Terlet Process systems & equipment

MPE GROUP product range

The product range varies from: single valves, conical screw mixers and vacuum dryers, scraped surface heat exchangers, liquid and powder mixers, vacuum transport systems, aseptic filling, containment filling & weighing, CIP systems, vacuumizing and gassing installations, up to entire processing lines and engineering projects for the powder and liquid industry.

ISO 9001

MPE GROUP is an ISO 9001 certified company.

International standards

All our products can be manufactured to various standards, i.e. Pressure Equipment Directive (PED), ASME, TÜV, Stoomwezen, U-stamp, etc.

Ball Segment Valve

The valve to meet the demands of the future

This special valve has been developed by Bolz-Summix to meet the unique process requirements of vacuum drying and pressurized process vessels. From experience gained in the field, it is now being supplied as a stand alone component for a far broader range of applications. The valve seats are machined to very fine tolerances and this combined with special bearings provides an excellent vacuum tight seal. The standard execution utilizes PTFE seals, and also inflatable seal designs are available to meet the demands of individual processes and products.

Characteristics of the Bolz-Summix Ball Segment Valve

- Unobstructed full bore discharge
- No dead areas
- GMP-conform and sanitary design
- Shaft bearings outside product area
- Excellent vacuum tight properties
- Pressure applications up to 4 barg (60 Psig) or more
- Different sealing options available both in material and design
- Temperature range up to 150°C (302°F)
- Long operating life
- Low maintenance

Unobstructed full bore discharge

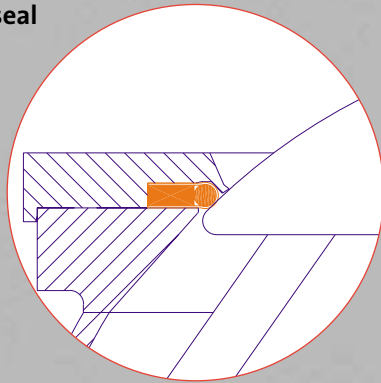
Due to its totally unobstructed full bore design, the half ball segment valve, requires only a 90° turn to move the seal face from the fully closed to the fully open position, which is entirely out of the product stream, i.e. at the side of the housing.



Seal solutions

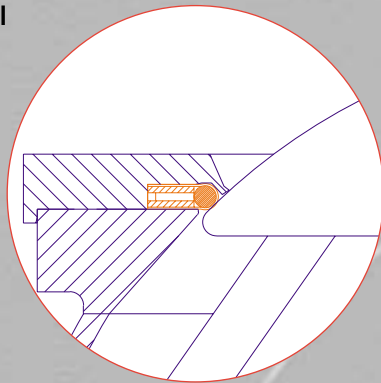
Standard PTFE envelope seal

The standard seal is a white PTFE envelope, with an internal neoprene spacer, which is suitable for the majority of applications, where the product is free flowing and does not exceed 120 °C/250° F. This seal is dust tight.



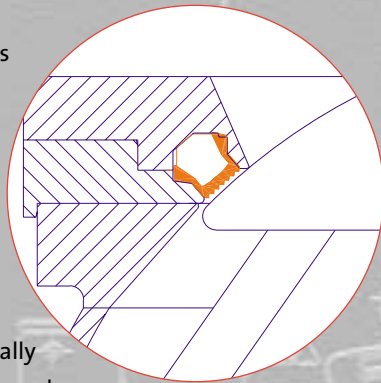
Liquid tight envelope seal

For liquid tight applications and vacuum dryer applications the PTFE envelope seal is modified. When the ball segment is in its closed position the seal will be pressurized against the surface of the ball segment.



Inflatable seal

For more demanding process conditions or products various inflatable seal materials are available. In its closed position, the seal automatically inflates against the surface of the ball segment. Prior to opening, the seal automatically deflates and retracts in to the valve body. Clear of the product flow path, seal wear is minimized and the seal integrity maintained.



The unique designed inflatable seal is available in the following materials:

- EPDM
- Viton
- Perlast® (Perfluoroelastomer)
- Chemraz
- Kalrez® 4079, 6221 or 6230
- Zalak® 220 SP

Special features

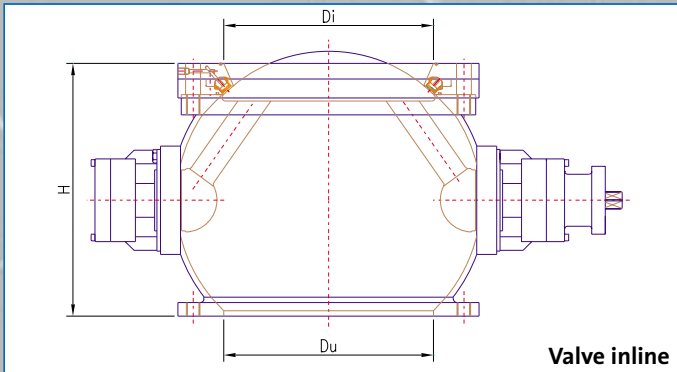
- Materials of construction – Hastelloy C22, Alloy C276, Titanium, Werkstoff 1.4539, or others.
- Surface coatings, i.e. PFA or PTFE for sticky or corrosive products.
- Stainless steel inlet ring positioned on top of the valve, with sintered insert for: introducing gasses like nitrogen, steam or liquids to inert the vessel, fluidize, dedust, granulate or aid discharge of bridging products.
- Internal CIP spray balls, either static or retractable.
- Water cooled or heated ball segment and body.
- High temperature applications.
- Proximity switches to indicate valve open and closed.
- Accumulator for shutting safety, in the event of an air failure.
- Electro-pneumatic positioning devices to control product flow.
- Pneumatic actuator makes to meet a customers site standard.
- Sizes up to 450mm (18”).



Standard specification

- Valve size:** 150 – 350 mm (6” – 14”)
- Flanges:** According to DIN, ANSI (tapped) or tri-clamp execution
- Material:** Cast-Stainless steel AISI 316
- Seals:** PTFE envelope
- Temperature:** -20 - 120 °C (-4°F - 248°F)
- Pressure:** F.V. to 4 barg (60 Psig)





DIN 2576 PN10

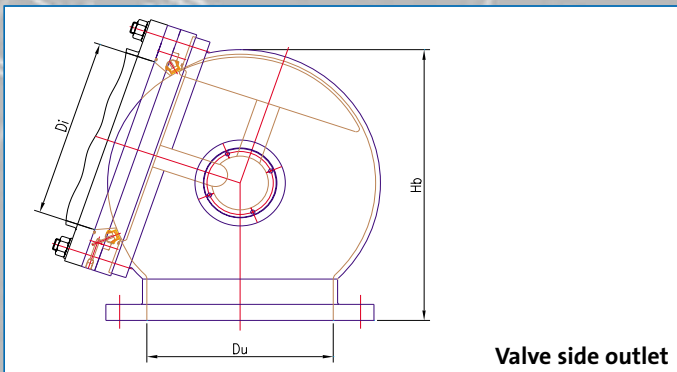
MODEL	H	Di/Du
VI 100	200	102
VI 150	227	154
VI 200	294	203
VI 250	324	254
VI 300	360	300
VI 350	432	350

ANSI B16.5 150#

MODEL	H	Di/Du
VI 4	7.8"	4"
VI 6	8.9"	6"
VI 8	11.6"	8"
VI 10	12.8"	10"
VI 12	14.2"	12"
VI 14	17.0"	14"

Model Code

VI-100/P S - None	
Valve	VI = Valve inline VS = Valve side outlet configuration
Inlet size:	100-450 mm (4" - 18")
Outlet size:	100-450 mm (4" - 18") None = same as inlet size
Type of operation	P = electro-pneumatic actuator M = manual operated O = other special request
Seal configuration	S = standard envelope PTFE seal L = liquid tight pressurized PTFE seal I = inflatable
Material	None = standard AISI 316L



DIN 2576 PN 10

MODEL	Hb	Di/Du
VS 200	367	203
VS 200-250	413	203/254
VS 250	413	254
VS 250-300	458	254/300
VS 300	458	300
VS 300-350	503	300/350

ANSI B16.5 150#

MODEL	Hb	Di/Du
VS 8	14.4"	8"
VS 8-10	16.2"	8"/10"
VS 10	16.2"	10"
VS 10-12	18.0"	10"/12"
VS 12	18.0"	12"
VS 12-14	20.0"	12"/14"

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