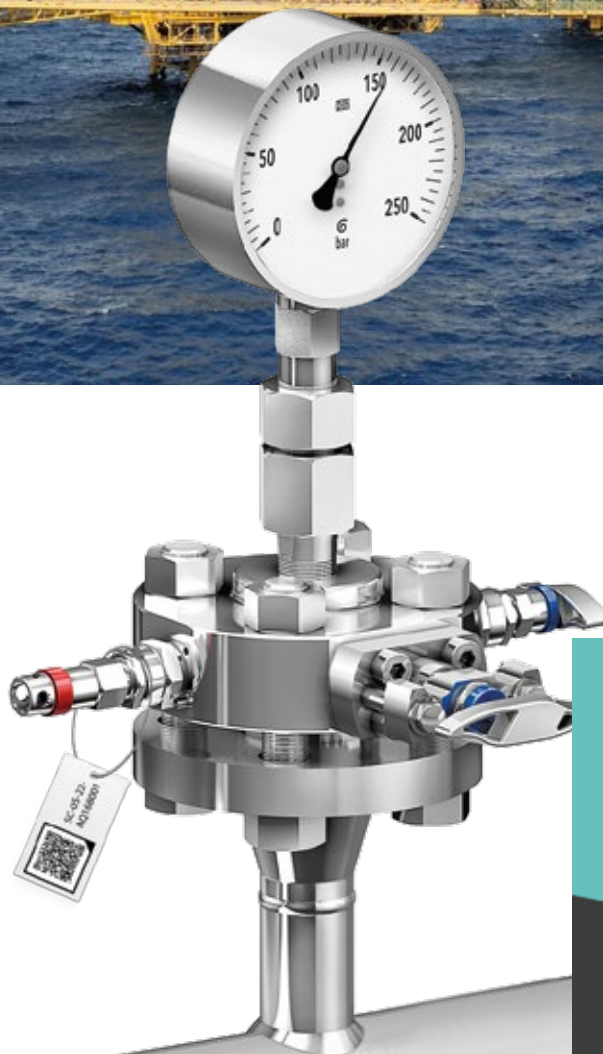


Process to Instrument Valves

Monoflanges and VariAS-Blocks



Digital Product Pass

Digital Product Pass for Valves and Manifolds provides easy access to technical product information. Scan the QR-code (DIN SPEC 91406 compatible) or enter plain text serial number under:



www.qr4v.de

Introduction

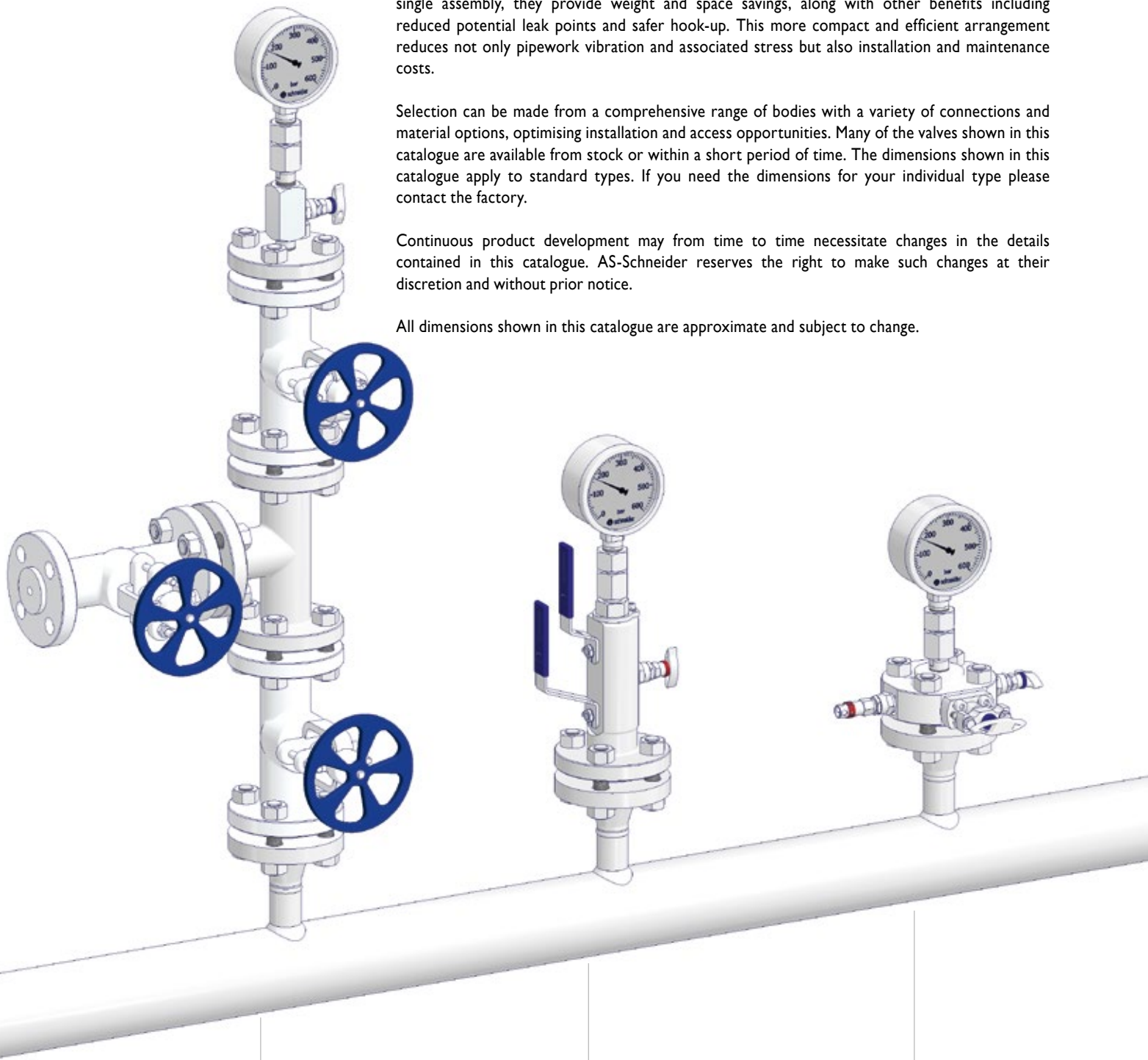
The AS-Schneider Group with its headquarters in Germany is one of the World's Leading Manufacturers of Instrumentation Valves and Manifolds. AS-Schneider offers a large variety of Process to Instrument Valves such as Monoflanges, VariAS-Blocks and Accessories needed for the instrumentation installations globally.

The AS-Schneider Process to Instrument Valves are designed to overcome the problems of traditional assemblies on primary isolation duties. By combining piping and instrument valves in a single assembly, they provide weight and space savings, along with other benefits including reduced potential leak points and safer hook-up. This more compact and efficient arrangement reduces not only pipework vibration and associated stress but also installation and maintenance costs.

Selection can be made from a comprehensive range of bodies with a variety of connections and material options, optimising installation and access opportunities. Many of the valves shown in this catalogue are available from stock or within a short period of time. The dimensions shown in this catalogue apply to standard types. If you need the dimensions for your individual type please contact the factory.

Continuous product development may from time to time necessitate changes in the details contained in this catalogue. AS-Schneider reserves the right to make such changes at their discretion and without prior notice.

All dimensions shown in this catalogue are approximate and subject to change.



Conventional Solution

VariAS-Block

Monoflange

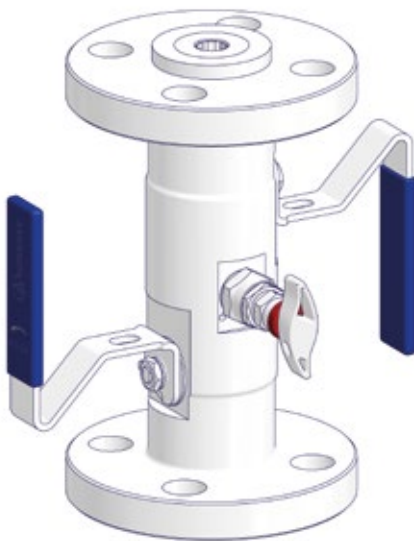
VariAS-Blocks – Double Block & Bleed Types

VariAS-Blocks – Double Block & Bleed Types

The VariAS-Blocks – Double Block & Bleed Types are designed to replace conventional, multiple-valve installations. The VariAS-Blocks are forged, one-piece Double Block & Bleed assemblies for primary isolation of pressure take-offs, where the valve is directly mounted to the vessel or process pipe. Instruments may be directly mounted to the valve outlet or remote mounted with impulse pipe work.

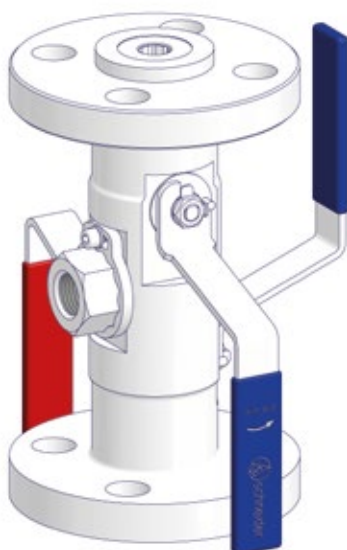
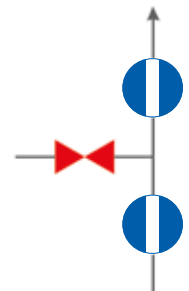
Features two independently operable ball valves for isolation with an intermediate needle valve alternatively ball valve for venting.

Flange x Flange

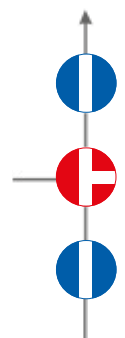
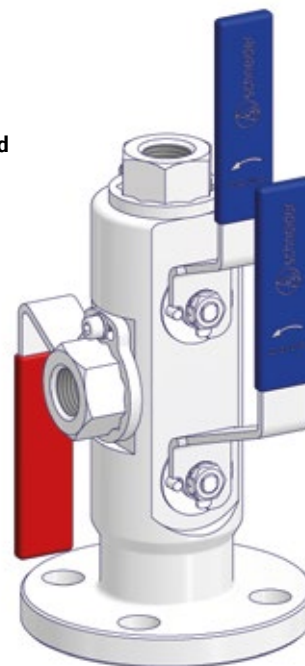


Double Isolate Ball Valve and Single Vent Needle Valve

Flange x Thread



Double Isolate Ball Valve and Single Vent Ball Valve



Body Material Options

Material Group	AS Material Designation	Material No.	Short Name	Equivalent UNS-No.	Material Grade acc. to ASTM	VariAS-Blocks
Carbon Steel	A105				A105	Optional
	LF2				LF2	Optional
Austenitic Stainless Steel	316 quadruple certified*	1.4401	X5CrNiMo17-12-2	S31600	316	Standard
		1.4404	X2CrNiMo17-12-2	S31603	316L	Standard
	6Mo	1.4547	X 1CrNiMoCuN20-18-7	S31254		Standard
Austenitic-Ferritic Stainless Steel	Duplex	1.4462	X2CrNiMoN22-5-3	S31803	F51	Standard
	Superduplex	1.4410	X2CrNiMoN25.7.4	S32750	F53	Standard
		1.4501	X2CrNiMoCuWN25.7.4	S32760	F55	Optional
Nickel Based Alloys	Alloy 400	2.4360	NiCu30Fe	N04400		Standard
	Alloy C-276	2.4819	NiMo 16 Cr 15 W	N10276		Standard
	Alloy 625	2.4856	NiCr22Mo9Nb	N06625		Standard
	Alloy 825	2.4858	NiCr21Mo	N08825		Optional

* Quadruple certified means 316 / 316L / 1.4401 / 1.4404

Standard Features

Ball Bore Size	10 mm (0.39")	14 mm (0.55")	20 mm (0.79")
Needle Valve Bore Size	5 mm (0.197")	5 mm (0.197")	8 mm (0.315")
ASME B16.5 Flange Connections	1/2" to 2"	3/4" to 2"	1" to 3"

- Ball / Needle / Ball Design
- One-Piece Forged Body
- Outlet Connection 1/2 NPT Female or Flange Connection acc. to Process Connection
- Vent Connection 1/2 NPT Female
- Fire Safe Tested acc. to ISO 10497 / API 607 – With Graphite Seals only
- Anti-Static Design
- Anti-Blowout Stems

Sour Gas Service:

Wetted parts according to a.m. material list are supplied as standard according to NACE MR0175/MR0103 and ISO 15156 (latest issue).

Pressure Test:

A shell test and a seat leakage test are performed at 1.5 times the max. allowable (Working) Pressure (PS) acc. to EN 12266-1 – P10, P11 and P12 respectively MSS-SP61 (and complies also with ASME B31.1 and B31.3) at every standard AS-Schneider VariAS-Block → 100% Pressure Tested!

Certification:

Certified Mill Test Report (CMTR) as inspection certificate 3.1 acc. to EN 10 204 for valve body material and pressure test available on request.

The manifolds can be provided by default with a

- CRN Certificate
- EAC Certificate – Manifolds are marked with EAC

Optional Features

- API Flange Connections (up to 689 bar [10,000 psi])
- EN 1092-1 Flange Connections
- Ball / Ball / Ball Design
- Ball / Needle Design
- Ball / Ball Design
- O-Ring and Lip Seal Stem Seal for 14 mm and 20 mm Bore Size
- Metal Seated Ball Valve for 10 mm Bore Size
- Anti-Tamper Head Units
- Swivel Gauge Connectors – See also Accessories on Page 26
- Pressure Tested according to API 598
- Wake Frequency Calculation for Injection or Sampling Applications

Fugitive Emission Application:

For Fugitive Emission Applications AS-Schneider is providing TA-Luft and ISO 15848 solutions. For more details please contact the factory.

Oxygen Service:

On request.

If you don't find your options in this catalogue, please contact the factory.

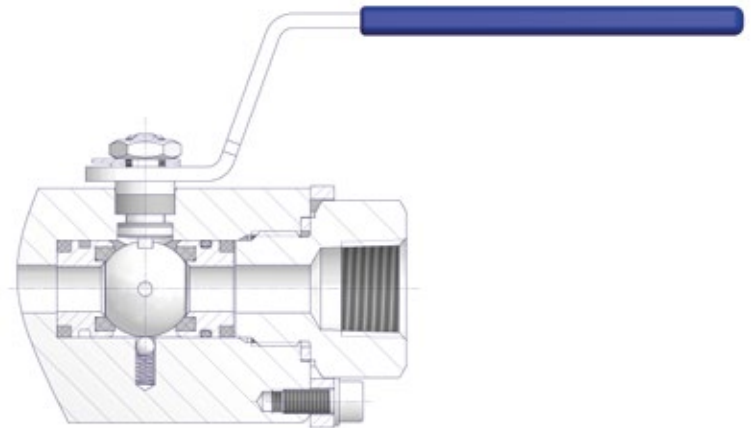
Standard Valve Designs for VariAS-Blocks

Ball Valves – Bore Size 10 mm (0.39")

Standard Design – Stem Seal: Packing

Features

- Floating Ball Design
- Ball Valve Seat: Reinforced PTFE – PEEK optional
- Ball Valve Seats are totally enclosed in seat carrier
- Seat Seals: FKM, RGD resistant O-Ring and Graphite or PTFE
- Stem Seal: Standard Packing in PTFE and Graphite
- Max. allowable (Working) Pressure (PS): 420 bar (6,092 psi)
- Anti-Blowout Stem Design
- Anti-Static Design
- Fire Safe Tested acc. to ISO 10497 / API 607
– With Graphite Seals only
- Positive Stop Pins
- All Non-wetted Parts in 316 Stainless Steel
- Lockable Handle with Color Coded Handle Grip
– Isolate BLUE | Vent RED



Components	Carbon Steel	Stainless Steel	Exotic Alloys					
	Material / Material No.							
Body	A 105 resp. LF2	316 / 316L	Alloy 400	Alloy C-276	Duplex	UNS S32750	Alloy 625	6Mo
Body End Connector								
Ball	316 / 316L	316 / 316L	Alloy 400	Alloy C-276	Duplex	UNS S32750	Alloy 625	6Mo
Stem								
Seat Carrier								
Ball Seat	Reinforced PTFE or PEEK							
Carrier Seals	FKM / Graphite or FKM / PTFE							
Primary Stem Seal	Reinforced PTFE							
Packing	PTFE or Graphite							
Gland	316							
Locking Plate	316							
Handle	316							
Handle Grip	Vinyl							
Stop Pin	A4							

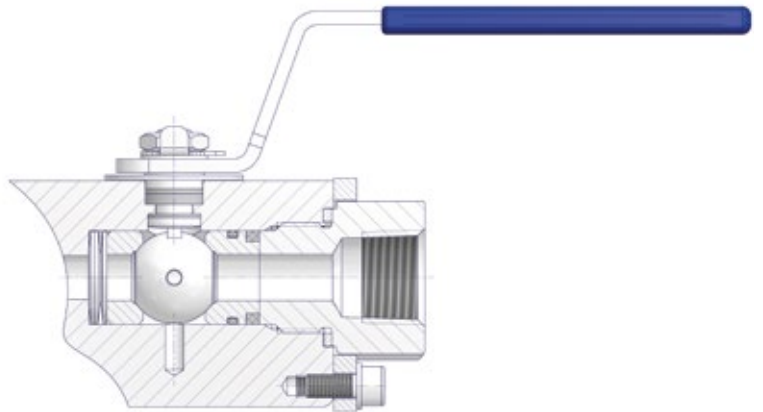
Wetted components listed in **bold**.

Metal Seated Ball Valves – Bore Size 10 mm (0.39")

Standard Design – Stem Seal: Packing

Features

- Floating Ball Design
- Ball and Valve Seats are coated with Hardalloy and Carbide Compounds
- Seat Seals: FKM RGD resistant O-Ring and Graphite
- Stem Seal: Packing in Graphite
- Max. allowable (Working) Pressure (PS): 420 bar (6,092 psi)
- Fully rated up to 200°C (392°F; according to ASME B16.34)
- Spring-loaded Seats to ensure low operating torques and to compensate temperature changes
- Anti-Blowout Stem Design
- Anti-Static Design
- Fire Safe Tested acc. to ISO 10497 / API 607
- Positive Stop Pins
- All Non-wetted Parts in 316 Stainless Steel
- Lockable Handle with Color Coded Handle Grip
 - Isolate BLUE | Vent RED



Components	Carbon Steel	Stainless Steel
	Material / Material No.	
Body	A 105 resp. LF2	316 / 316L
Body End Connector		
Stem	316 / 316L	
Ball	316	
Ball Seat	TCC Coated	
Seat Seals	FKM / Graphite	
Primary Stem Seal	Reinforced PTFE	
Packing	Graphite	
Beleville Springs	Inconel 718	
Gland	316	
Locking Plate	316	
Handle	316	
Handle Grip	Vinyl	
Stop Pin	A4	

Wetted components listed in **bold**.

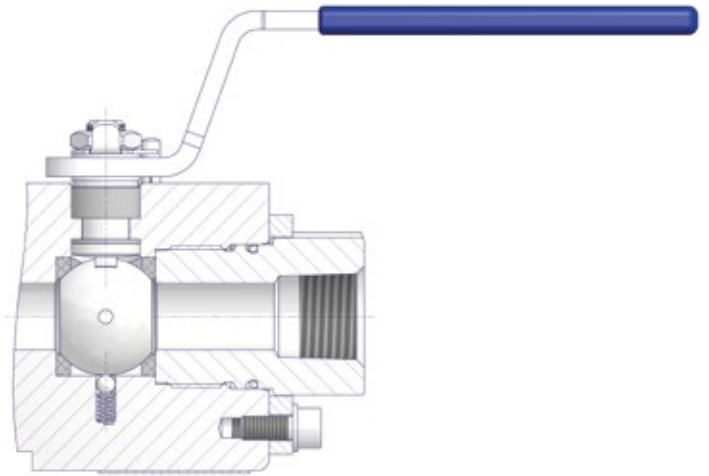
Standard Valve Designs for VariAS-Blocks

Ball Valves – Bore Size 14 mm (0.55") and 20 mm (0.79")

Standard Design – Stem Seal: Packing

Features

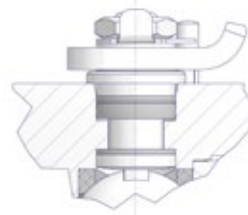
- Floating Ball Design
- Ball Valve Seat: PEEK – Reinforced PTFE optional (with higher operating torque)
- Self Venting Ball Seats
- Stem Seal: Standard Packing in PTFE and Graphite, Lip Seal and FKM O-Ring Stem Seals optional
- Max. allowable (Working) Pressure (PS):
420 bar (6,092 psi) with PEEK Seats and
150 bar (2,175 psi) with Reinforced PTFE Seats
- Metal Sealing between Body and End Connector. Additional O-Ring at the Body End Connector to protect Threads from the Environment.
- Anti-Blowout Stem Design
- Anti-Static Design
- Fire Safe Tested acc. to ISO 10497 / API 607
– With Graphite Seals only
- Positive Stop Pins
- All Non-wetted Parts in 316 Stainless Steel
- Lockable Handle with Color Coded Handle Grip
– Isolate BLUE | Vent RED



Optional Design – Stem Seal: Lip Seal

Features

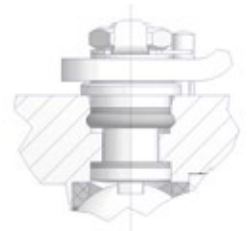
- Spring Energized PTFE Seal, Spring Material Inconel X-750
- Reinforced PTFE Backup Ring
- Max. allowable (Working) Pressure (PS):
420 bar (6,092 psi) with PEEK Seats and
150 bar (2,175 psi) with RPTFE Seats



Optional Design – Stem Seal: FKM O-Ring

Features

- FKM RGD resistant O-Ring for Stem Seal
- Reinforced PTFE Backup Ring
- Max. allowable (Working) Pressure (PS):
420 bar (6,092 psi) with PEEK Seats and
150 bar (2,175 psi) with RPTFE Seats



Standard Valve Designs for VariAS-Blocks

Ball Valves – Bore Size 14 mm (0.55") and 20 mm (0.79")

Materials of Construction

Components	Carbon Steel	Stainless Steel	Exotic Alloys					
	Material / Material No.							
Body	A 105 resp. LF2	316 / 316L	Alloy 400	Alloy C-276	Duplex	UNS S32750	Alloy 625	6Mo
Body End Connector								
Ball	316 / 316L							
Stem	316 / 316L							
Ball Seat	Reinforced PTFE or PEEK							
Primary Stem Seal	Reinforced PTFE							
Packing	PTFE or Graphite							
O-Ring	FKM							
Gland	316							
Locking Plate	316							
Handle	316							
Handle Grip	Vinyl							
Stop Pin	A4							

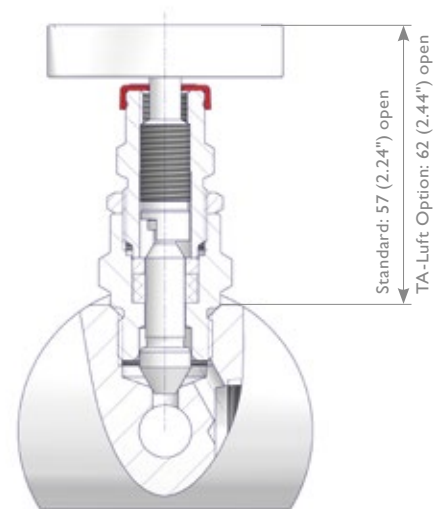
Wetted components listed in bold.

Standard Needle Valves

Screwed Bonnet – Needle Seal: Packing

Features

- Integral Valve Seat – Metal to metal seated
- Non-rotating Needle
- External Stem Thread – Packing below stem threads.
Stem Threads are protected from process media (non-wetted).
- Stem with Cold Rolled Threads
- Blow-out Proof Needle
- Back Seat – Metal to metal secondary needle seal
- Lock Pin – Eliminates unauthorized removal of the bonnet
- Color Coded Dust Cap for operating thread protection (see page 6)
- Needle Seal: Standard Packing in PTFE and Graphite
- Max. allowable (Working) Pressure (PS): 420 bar (6,092 psi)
- Anti-Tamper Valve Head Options and Stainless Steel Handwheel available (see Page 9)
- Materials of Construction (see Page 6)
- All Non-wetted Parts in 316 Stainless Steel



Fugitive Emission Application Designs for VariAS-Blocks

Valves acc. to ISO 15848

We can offer the full range of our VariAS-Block Series tested and certified according to ISO 15848-1. These valves are designed to reduce fugitive emissions for environmental protection.

Standard Features

- Optimized Needle / Stem Seal
- Special Treated Gland for Long Service Life
- Glands adapted to Stem Seal
- Tested and applicable for use up to 200°C (392°F)
- Production Test according to ISO 15848-2 available on request

YOUR BENEFITS:

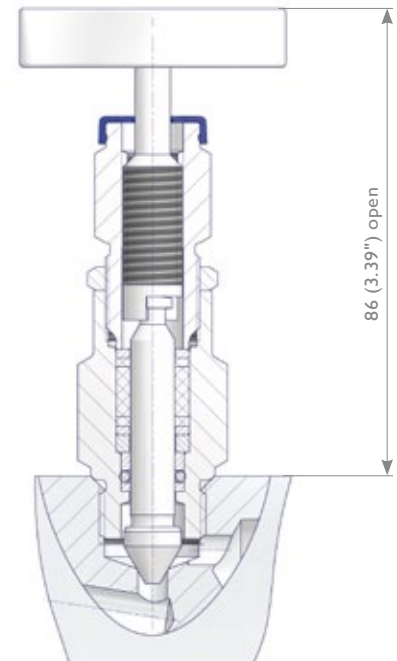
- ✓ Reliability due to Type Testing and Certification by third party inspection.
- ✓ Several Stem Seals meet the requirement of ISO 15848-1, Edition 2006. These are more stringent than these of the current Edition 2015.
- ✓ Also Needle Valves are tested and certified according to ISO 15848-1.
- ✓ Graphite Packed VariAS-Blocks according to ISO 15848-1 meet also the requirements for Fire Safe according to ISO10497 / API 607.
- ✓ ISO 15848-1 Valves also comply with the requirements of TA Luft 2002.

Needle Valves acc. to ISO 15848

Screwed Bonnet – Type 1 O-Ring Needle Seal + Graphite Packing
Type 3 PTFE Packing

Features

- Integral Valve Seat – Metal to metal seated
- Non-rotating Needle
- External Stem Thread – Packing below stem threads. Stem threads are protected from process media (non-wetted).
- Stem with Cold Rolled Threads
- Blow-out Proof Needle
- Back Seat – Metal to metal secondary needle seal
- Lock Pin – Eliminates unauthorized removal of the bonnet
- Color Coded Dust Cap for operating thread protection (see page 6)
- Needle Seal:
 - Standard Packing in PTFE or Graphite plus FKM O-Ring Needle Seal – RGD resistant (RGD = Rapid Gas Decompression)
- Max. allowable (Working) Pressure (PS): 420 bar (6,092 psi)
- Anti-Tamper Valve Head Options available on request
- All Non-wetted Parts in 316 Stainless Steel
- Types also comply with the requirements of TA-Luft 2002



Fugitive Emission Application Designs for VariAS-Blocks

ISO FE Performance Data

Tightness Class for VariAS-Blocks at Room Temperature (RT) (-29°C to 40°C [-20°F to 104°F]) Double Block & Bleed (Ball / Needle / Ball)

Ball Seat	Packing Ball Valve	Packing Needle Valve	Tightness Class		
			C01 205 Cycles*	C02 1,500 Cycles	C03 2,500 Cycles
Reinforced PTFE	PTFE	PTFE / Reinforced PTFE	Class A	Class A	Class B
	Graphite	Graphite + FKM O-Ring		Class B	
PEEK	PTFE	PTFE / Reinforced PTFE		Class A	Class B
	Graphite	Graphite + FKM O-Ring		Class B	
Reinforced PTFE	Lip Seal	Graphite + FKM O-Ring		Class A	
PEEK					
Reinforced PTFE	O-Ring				
PEEK					
Metal Seated	Graphite	Graphite + FKM O-Ring		Class B	

* Several Stem Seals meet the requirement of ISO 15848-1, Edition 2006. These are more stringent than these of the current Edition 2015:
 – Tightness values are reduced from Edition 2006 to 2015 by the factor of 10.
 – Numbers of cycles are reduced from 500 to 205.

Note: The above mentioned table is only valid for Double Block & Bleed Valves (Ball / Needle / Ball). For other types please contact the factory.

Tightness Class for VariAS-Blocks at 200°C (RT to 200°C [-RT to 392°F]) Double Block & Bleed (Ball / Needle / Ball)

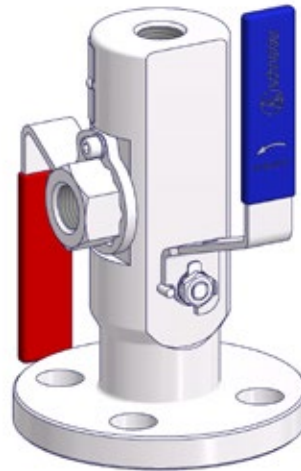
Ball Seat	Packing Ball Valve	Packing Needle Valve	Tightness Class			
			C01 205 Cycles*	C02 1,500 Cycles	C03 2,500 Cycles	
Reinforced PTFE	PTFE	PTFE / Reinforced PTFE	Class B		On request	
	Graphite	Graphite + FKM O-Ring		Class B		
PEEK	PTFE	PTFE / Reinforced PTFE				
	Graphite	Graphite + FKM O-Ring		Class B		
Reinforced PTFE	Lip Seal	Graphite + FKM O-Ring				
PEEK						
Reinforced PTFE	O-Ring					
PEEK						
Metal Seated	Graphite	Graphite + FKM O-Ring		Class B		

* Several Stem Seals meet the requirement of ISO 15848-1, Edition 2006. These are more stringent than these of the current Edition 2015:
 – Tightness values are reduced from Edition 2006 to 2015 by the factor of 10.
 – Numbers of cycles are reduced from 500 to 205.

Note: The above mentioned table is only valid for Double Block & Bleed Valves (Ball / Needle / Ball). For other types please contact the factory.

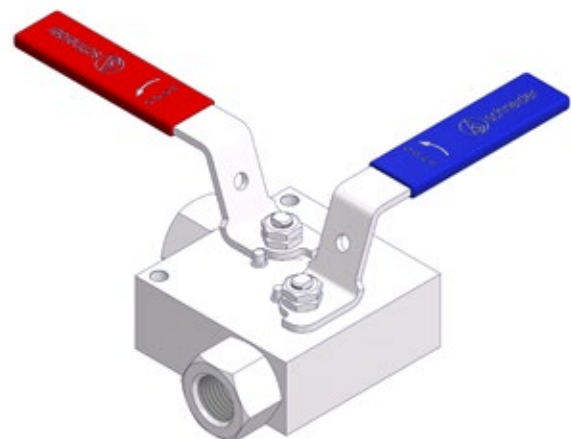
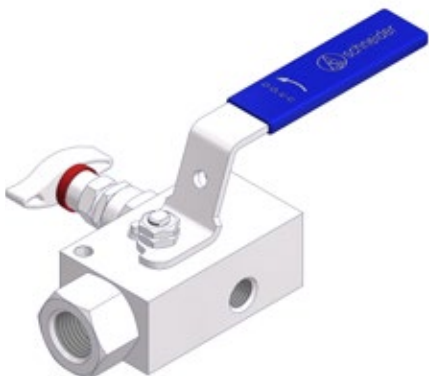
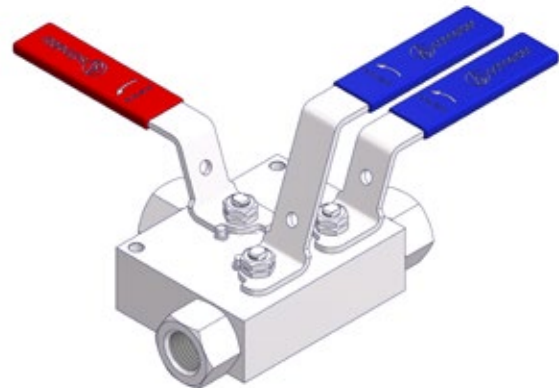
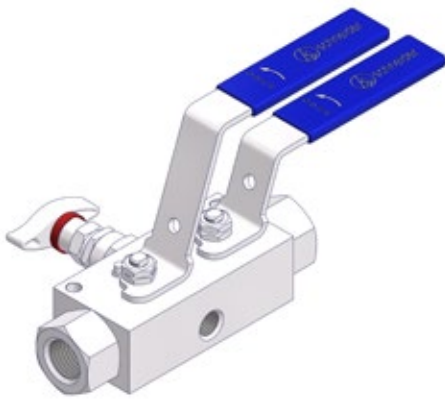
VariAS-Block Options and Related Types

Block & Bleed Types



Note: Flange x Flange Types are not illustrated.

Ball Valve Manifolds (see catalog AS-1901)



VariAS-Block for Injection and Sampling Applications

VariAS-Block for Injection and Sampling Applications

All options and configurations shown within the standard VariAS-Block Range can be offered by the addition of a customized injection probe respectively sampling probe which extends from the pipe flange into the process stream. The probe is designed as a one piece solution with a fine-turned surface to optimize the wake frequency behavior and provide utmost stability. The probe lengths must be specified by the customer. The probe O.D. is 25 mm. Wake frequency calculation and support collar on request.

VariAS-Block for Sampling Applications

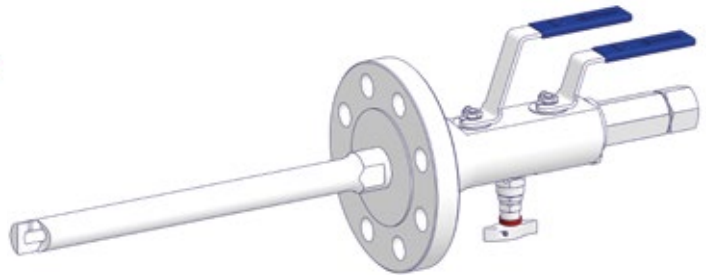
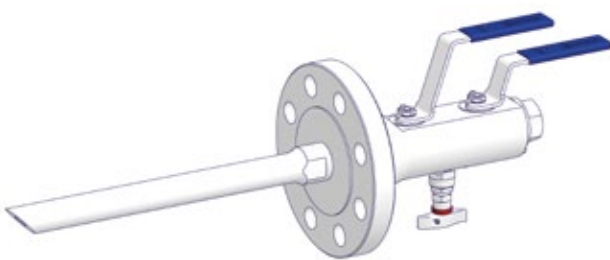
Option 1

This design has been developed to remove a sample directly from the process stream at full system pressure.

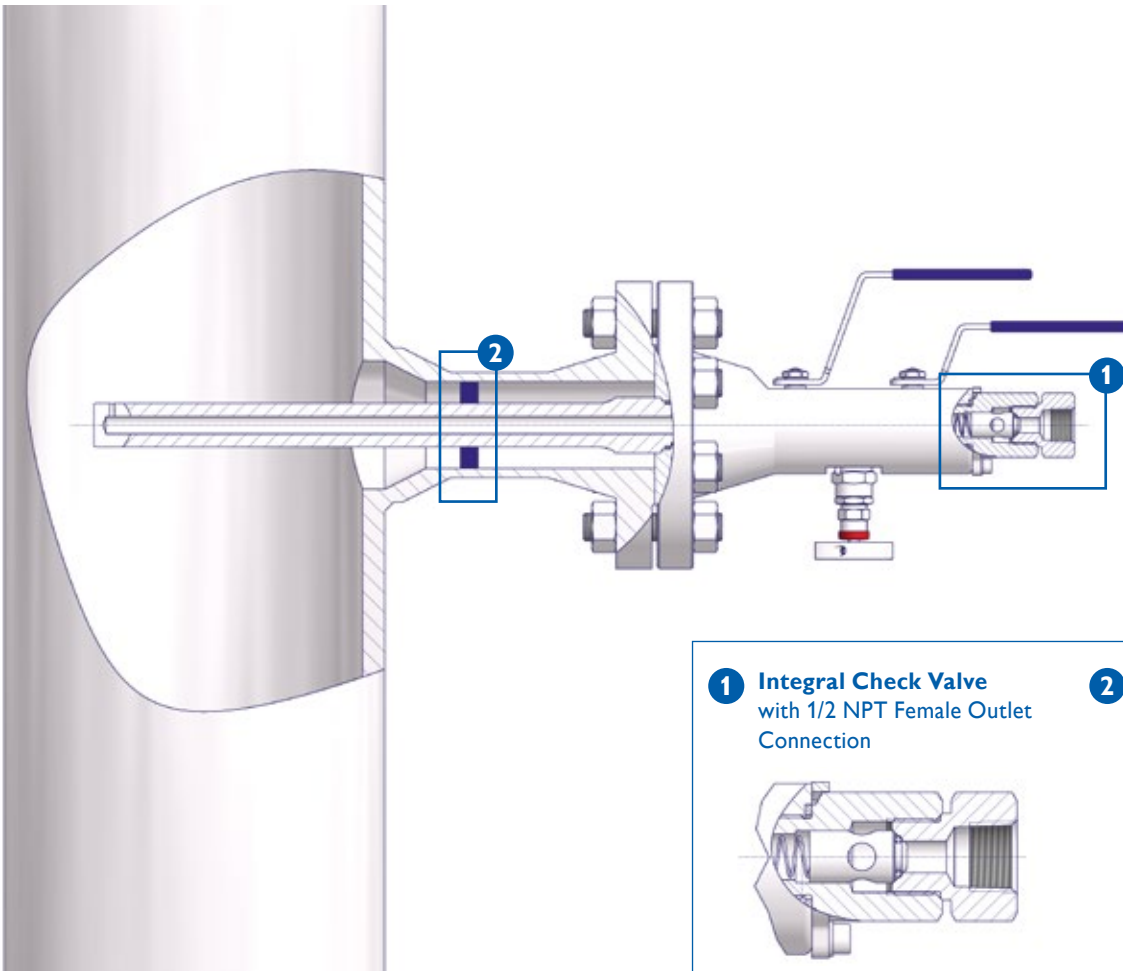
VariAS-Block for Injection Applications

Option V

This design has been developed to inject directly into the process stream at full system pressure. The integral check valve eliminates the risk of back flow out of the process stream during the injection. Available on both flanged and threaded connections.

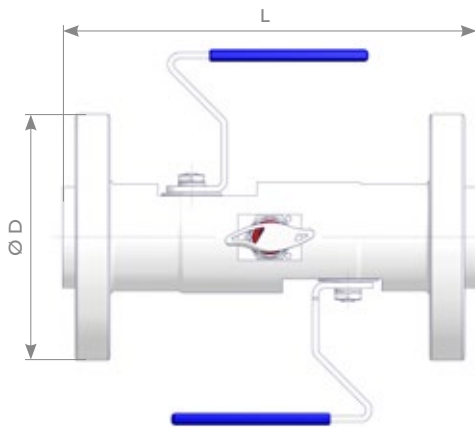


Installed Injection VariAS-Block incl. Check Valve



VariAS-Blocks I Weights and Dimensions

VariAS-Blocks – Weights and Dimensions

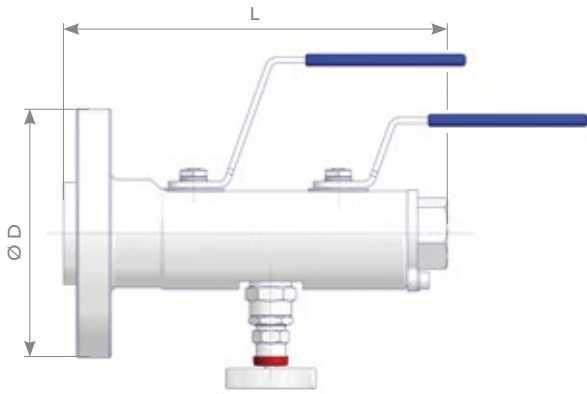


Flange x Flange

Flange Size (in)	Flange Class	Ø D (mm)	Bore Size 10 mm (0.39")			Bore Size 14 mm (0.55")			Bore Size 20 mm (0.79")		
			L (mm)		Approx. Weight (kg)	L (mm)		Approx. Weight (kg)	L (mm)		Approx. Weight (kg)
			Flange Facing RF	RTJ		Flange Facing RF	RTJ		Flange Facing RF	RTJ	
1/2	150	88.9	199.2		3						
	300	95.3	199.2	207.2	4						
	600	95.3	208.8	207.2	4						
	900 / 1,500	120.6	208.8	208.8	6						
	2,500	133.4	208.8	208.8	8						
3/4	150	98.6	199.2		4	210.0		5			
	300	117.3	199.2	208.8	5	210.0	242.0	7			
	600	117.3	208.8	208.8	5	242.0	242.0	7			
	900 / 1,500	130.0	208.8	208.8	7	280.0	280.0	10			
	2,500	139.7	240.8	240.8	10	280.0	280.0	12			
1	150	108.0	199.2	208.8	5	210.0	210.0	6	200.0		7
	300	124.0	199.2	208.8	6	210.0	242.0	7	200.0	200.0	9
	600	124.0	208.8	208.8	6	242.0	242.0	8	200.0	200.0	9
	900 / 1,500	149.3	240.8	240.8	10	280.0	280.0	12	287.0	287.0	14
	2,500	158.8	240.8	240.8	14	280.0	280.0	15	287.0	287.0	17
1 1/2	150	127.0	199.2	208.8	6	210.0	210.0	8	200.0	200.0	10
	300	155.4	231.2	240.8	9	242.0	242.0	11	200.0	200.0	12
	600	155.4	240.8	240.8	10	242.0	242.0	12	237.0	237.0	13
	900 / 1,500	177.8	240.8	240.8	16	242.0	242.0	16	237.0	237.0	18
	2,500	203.2	265.8	268.8	27	280.0	280.0	26	287.0	287.0	29
2	150	152.4	231.2	240.8	9	242.0	242.0	11	200.0	200.0	12
	300	165.1	231.2	243.8	12	242.0	242.0	12	200.0	200.0	14
	600	165.1	240.8	243.8	13	242.0	242.0	14	200.0	200.0	14
	900 / 1,500	215.9	265.8	268.8	28	280.0	280.0	27	237.0	237.0	27
	2,500	235.0	265.8	268.8	40	280.0	280.0	37	287.0	287.0	39
2 1/2	150	177.8							200.0	200.0	16
	300	190.5							200.0	200.0	18
	600	190.5							237.0	237.0	20
	900 / 1,500	244.5							287.0	287.0	38
	2,500	266.7							381.0	386.0	58
3	150	190.5							200.0	200.0	18
	300	209.5							200.0	200.0	22
	600	209.5							237.0	237.0	25
	900	241.3							287.0	287.0	37
	1,500	266.7							335.0	335.0	52
	2,500	304.8							401.0	406.0	85

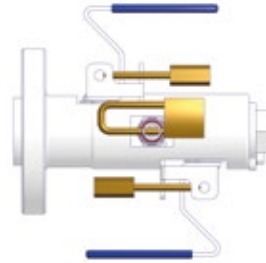
VariAS-Blocks I Weights and Dimensions

VariAS-Blocks – Weights and Dimensions



Lockable Valves – Option W

All Valves with Option W (Lockable Valves) have Secondary Isolation Valve on opposite side of Primary Isolation Valve.

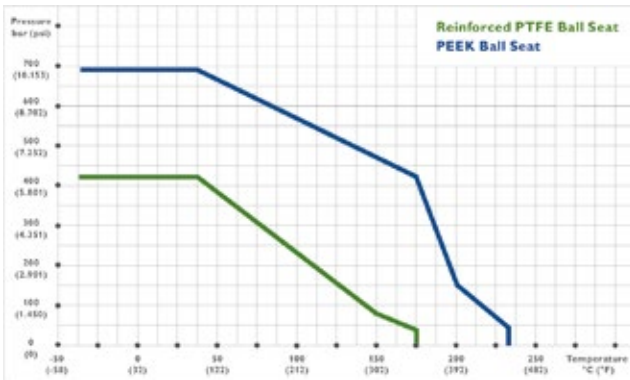


Flange x Thread

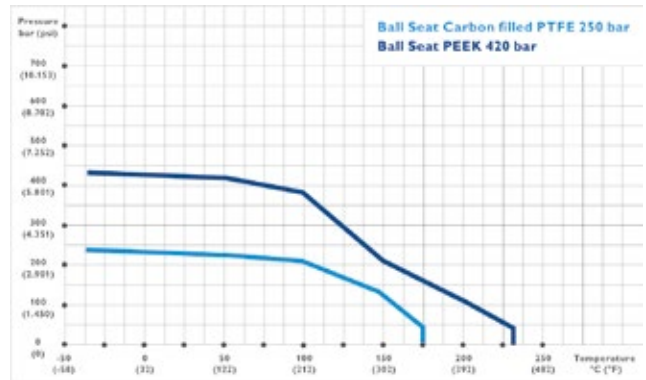
Flange Size (in)	Flange Class	Ø D (mm)	Bore Size 10 mm (0.39")			Bore Size 14 mm (0.55")			Bore Size 20 mm (0.79")		
			L (mm)		Approx. Weight (kg)	L (mm)		Approx. Weight (kg)	L (mm)		Approx. Weight (kg)
			Flange Facing RF	RTJ		Flange Facing RF	RTJ		Flange Facing RF	RTJ	
1/2	150	88.9	187.2		3						
	300	95.3	187.2	191.2	3						
	600	95.3	192.0	191.2	3						
	900 / 1,500	120.6	192.0	192.0	4						
	2,500	133.4	192.0	192.0	5						
3/4	150	98.6	187.2		3	192.5		5			
	300	117.3	187.2	192.0	4	192.5	208.5	5			
	600	117.3	192.0	192.0	4	208.5	208.5	6			
	900 / 1,500	130.0	192.0	192.0	5	227.5	227.5	7			
	2,500	139.7	208.0	208.0	6	227.5	227.5	8			
1	150	108.0	192.0	192.0	4	192.5	192.5	5	207.0		8
	300	124.0	192.0	192.0	4	192.5	208.5	6	207.0	207.0	8
	600	124.0	192.0	192.0	4	208.5	208.5	6	207.0	207.0	8
	900 / 1,500	149.3	208.0	208.0	6	227.5	227.5	8	242.0	242.0	11
	2,500	158.8	208.0	208.0	8	227.5	227.5	10	242.0	242.0	12
1 1/2	150	127.0	192.0	192.0	5	192.5	192.5	6	207.0	207.0	9
	300	155.4	208.0	208.0	6	208.5	208.5	8	207.0	207.0	10
	600	155.4	208.0	208.0	7	208.5	208.5	8	223.0	223.0	10
	900 / 1,500	177.8	208.0	208.0	9	208.5	208.5	10	223.0	223.0	13
	2,500	203.2	224.0	224.0	15	227.5	227.5	15	242.0	242.0	18
2	150	152.4	208.0	208.0	6	208.5	208.5	8	207.0	207.0	10
	300	165.1	209.5	209.5	7	208.5	208.5	8	207.0	207.0	11
	600	165.1	209.5	209.5	8	208.5	208.5	9	207.0	207.0	11
	900 / 1,500	215.9	224.0	224.0	15	227.5	227.5	16	223.0	223.0	17
	2,500	235.0	224.0	224.0	21	227.5	227.5	21	242.0	242.0	23
2 1/2	150	177.8							207.0	207.0	12
	300	190.5							207.0	207.0	13
	600	190.5							207.0	207.0	13
	900 / 1,500	244.5							242.0	242.0	23
	2,500	266.7							284.0	284.0	32
3	150	190.5							207.0	207.0	13
	300	209.5							207.0	207.0	15
	600	209.5							223.0	223.0	17
	900	241.3							242.0	242.0	20
	1,500	266.7							242.0	242.0	28
	2,500	304.8							284.0	284.0	45

Pressure Ratings, Codes and Specifications for VariAS-Blocks

Pressure-Temperature Rating – Soft Seated Ball Valve 10 mm (0.39") Bore Size



Pressure-Temperature Rating – Soft Seated Ball Valve 14 mm (0.55") Bore Size and 20 mm (0.79") Bore Size



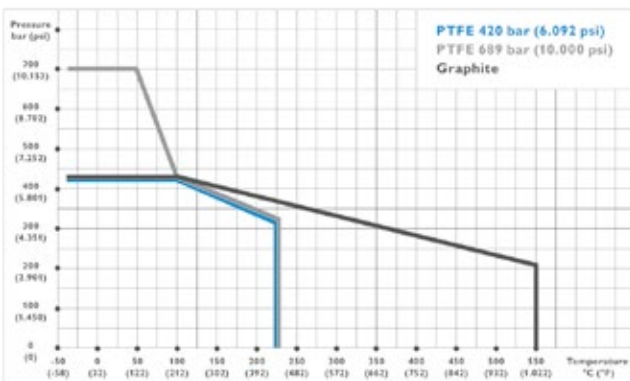
Pressure-Temperature Rating – Metal Seated Ball Valve (10 mm [0.39"] Bore Size)

The Valve is fully rated according to ASME B16.34 up to 200°C (392°F).

Pressure-Temperature Rating – Fugitive Emission Option according to ISO 15848-1

The above mentioned Pressure-Temperature Ratings are limited to max. 200°C (392°F) and 420 bar (6,092 psi).

Pressure-Temperature Rating – Needle Valve



Note: All above mentioned Pressure-Temperature Ratings represent the max. allowable (Working) Pressure (PS). Note that these can be derated by the flange size or body material.

Pressure-Temperature Ratings are based on the standard material 316 stainless steel.

Other materials as shown on page 17, 18 and 21 might have different Pressure-Temperature Ratings.



Packing adjustment may be required during the service life of the valves.



Valves that have not been cycled for a period of time may have a higher initial actuation torque.

Manufactured according to the following Codes and Specifications

- ASME B31.3 Process Piping Specification for Pipeline Valves
- ASME B16.34 Valves – Flanged, Threaded and Welding End
- ASME B16.5 Pipe Flanges and Flanged Fittings
- NACE MR0175/ ISO 15156 Petroleum and Natural Gas Industries – Materials for use in H₂S-containing Environments in Oil and Gas Production
- API 598 Valve Inspection and Testing
- ISO 5208 Industrial Valves – Pressure Testing of Metallic Valves
- API 607/ ISO 10497 Fire Test for Soft-Seated Quarter Turn Valves Testing of Valves. Fire Type-testing Requirements
- MSS SP-25 Standard Marking System for Valves, Fittings, Flanges, and Unions
- MSS SP-61 Pressure Testing of Valves
- MSS SP-99 Instrument Valves

VariAS-Blocks | Ordering Information

Ordering Information

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
		D	B	2	-	N	G	C	L	N	4	-	S	C	
VariAS-Blocks															
Block & Bleed															
DD	10 mm (0.39") Bore Ball Valve (Ball / Ball)														
DE	10 mm (0.39") Bore Ball Valve (Ball / Needle)														
Double Block & Bleed															
DA	10 mm (0.39") Bore Ball Valve (Ball / Ball / Ball)														
DB	10 mm (0.39") Bore Ball Valve (Ball / Needle / Ball)														
D2	14 mm (0.55") Bore Ball Valve (Ball / Needle / Ball) ≥ Flange Size 3/4"														
DK	20 mm (0.79") Bore Ball Valve (Ball / Needle / Ball) ≥ Flange Size 1"														
Seals – Standard Valve Design								Seals – Fugitive Emission Application Design							
Packing/Body Seals				Ball Seat				Packing/Body Seals				Ball Seat			
1	PTFE			Reinforced PTFE*1				D	Graphite			Reinforced PTFE*1			
2	Graphite			Reinforced PTFE*1				E	PTFE			Reinforced PTFE*1			
3	PTFE			PEEK*1				F	PTFE			PEEK*1			
4	Graphite			PEEK*1				G	Graphite			PEEK*1			
								H	Lip Seal + Graphite			Reinforced PTFE*2			
								I	Lip Seal + Graphite			PEEK*2			
								J	O-Ring + Graphite			Reinforced PTFE*2			
								K	O-Ring + Graphite			PEEK*2			
								M	Graphite			Metal Seated*3			
Process Connection															
ASME Flange Size															
NA	1/2" RF		NJ	1" RTJ		NR	2 1/2" RF								
NC	1/2" RTJ		NK	1 1/2" RF		NT	2 1/2" RTJ								
ND	3/4" RF		NM	1 1/2" RTJ		NU	3" RF								
NF	3/4" RTJ		NN	2" RF		NW	3" RTJ								
NG	1" RF		NQ	2" RTJ											
Process Connection (continued)															
ASME Flange Class															
A	150		D	900*4											
B	300		E	1,500											
C	600		F	2,500											
Outlet Connection															
ASME Flange Size								Thread							
NA	1/2" RF		NJ	1" RTJ		NR	2 1/2" RF		LG	Female G (EN837-1)					
NC	1/2" RTJ		NK	1 1/2" RF		NT	2 1/2" RTJ		JN	Male NPT					
ND	3/4" RF		NM	1 1/2" RTJ		NU	3" RF		LN	Female NPT					
NF	3/4" RTJ		NN	2" RF		NW	3" RTJ								
NG	1" RF		NQ	2" RTJ											
Outlet Connection (continued)															
ASME Flange Class								Thread Size							
A	150		D	900*4					4	1/2"					
B	300		E	1,500					6	3/4"					
C	600		F	2,500					8	1"					
Body Material															
C	A105		L	A350 LF2		V	Alloy 625 UNS N06625								
F	Duplex UNS S31803		M	Alloy 400 UNS N04400		D	Super Duplex UNS S32750								
H	Alloy C-276 UNS N10276		S	1.4401 / 1.4404 / 316 / 316L		B	6Mo UNS S31254								
Vent Connection															
C	1/4 NPT Female		E	1/2 NPT Female											
D	1/4 NPT Female plugged		F	1/2 NPT Female plugged											
Options															
1	Sampling Probe (starting from 1 1/2" Flange Size)														
Q	Needle Valve: Stainless Steel Handwheel and Locking Plate Design														
R	Needle Valve: Stainless Steel Handwheel and Locking Plate Design incl. Padlock														
V	Injection Probe incl. Check Valve (starting from 1 1/2" Flange Size) – Available for 3/8" Bore Ball Valve only														
W	All Valves lockable incl. Padlock														
	Note: Flange x Thread Design – Position of Secondary Isolation Valve on opposite side of Primary Isolation Valve														

*1 Available for Ø 10, Ø 14 and Ø 20.

*2 Available for Ø 14 and Ø 20.

*3 Available for Ø 10 only.

*4 Relevant for Flange Sizes ≥ 3" only. For Flange Sizes 1/2" to 2 1/2" Class 1,500 (Code E) to be used.

Wetted Parts according to above mentioned material list are supplied according to NACE MR0175/MR0103 and ISO 15156 (latest issue).

Note: Not every configuration which can be created in the ordering information is feasible / available.