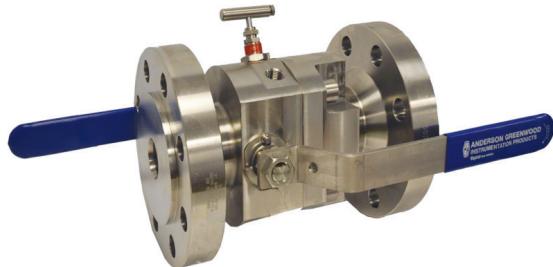


Primary Isolation Valves

Two piece full bore ball isolation in a double block and bleed configuration range for process to instrument primary isolation applications

General Application

Suitable for double block and bleed applications including pressure, level and flow measurement, sampling, chemical seal isolation and injection services. Instruments may be mounted directly to the valve outlet or remotely with gauge lines/impulse pipe work.



TECHNICAL DATA

Materials

CS, 316 SS, Duplex, For other materials consult factory

Seats:

Soft

Connections

Flanged 1" to 2" ANSI to ASME B16.5 (inlet/ outlet)
Threaded 1/2" FNPT (vent)

Pressure (max):

To ASME B16.5
RPTFE seats: 302°F (150°C) max
PEEK seats 428°F (220°C) max

Temperature (min/max):

-70°F to 428°F
(-57°C to 220°C)

Features

- Compact design provides 55% less weight and 60% of envelope size when compared to fabricated arrangement.
- Face-to-face length means no unnecessary change to existing installation when replacing a single isolation valve to ASME B16.10 length for class 600 and above.
- Single body joint means fewer potential leak paths and a safer, more practical arrangement.
- DBB assembly provides up to 65% installation time reduction against some traditional methods with fewer connections necessary.
- Provides security with double isolation barrier on process connection to valve outlet.

DESIGN CODES AS STANDARD

All Keyblok primary isolation valves are designed to comply with the following code requirements:

ASME B16.34

Material wall thickness

ASME B16.5

Flanged dimensions

ASME VIII, DIV 1

Design procedures and materials

ASME B1.20.1

National Pipe Threads

Primary Isolation Valves

Compact Two Piece Primary Isolation Valves

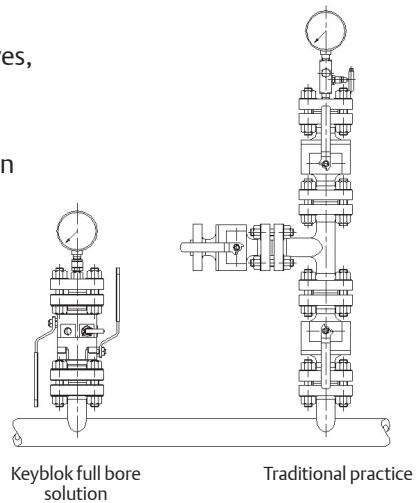
These valves provide an ultimate solution for forged body primary isolation valves, featuring a choice of end connections, body styles and valve technology.

Advantages compared to individual valves

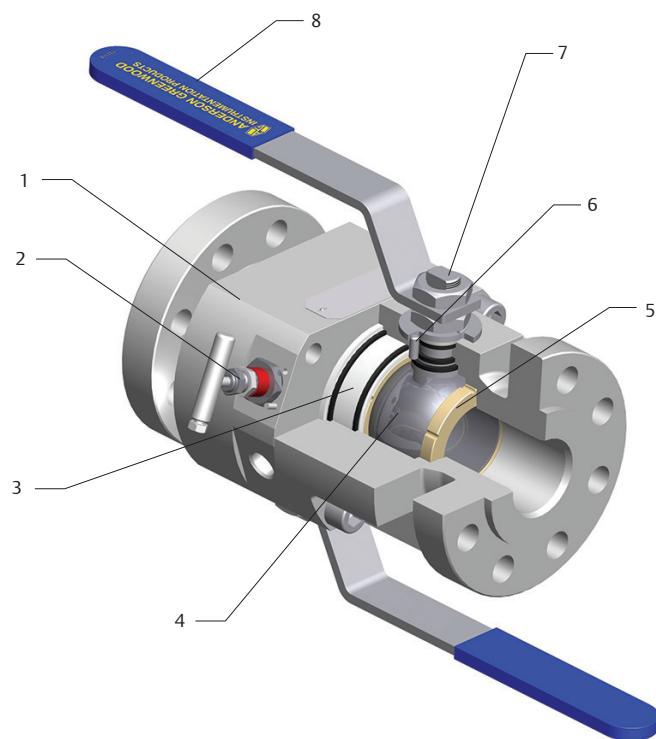
A two piece Keyblok primary isolation valve provides the following advantages when compared to individual isolation valves configured for double block and bleed:

Advantages

- Reduced weight
- Reduced height
- Reduced leakage points
- Reduced effect of system vibration
- Reduced bending moment acting on the vessel branch fitting weld
- Reduced installation cost
- Reduced gaskets and bolting



Specifications



Components

1	Body
2	Vent bonnet
3	Sleeve primary seal
	Sleeve secondary seal
4	Ball
5	Seat
6	Stop pin
7	Stem assembly lock nut
8	Lever handle

Testing

All valves hydrostatically and pneumatically tested in accordance with API 598 as per our standard procedure

Primary Isolation Valves

Materials of Construction

Options available	
Body	Carbon steel (ASTM A105N) LT Carbon steel (ASTM A350 LF2) Stainless steel (ASTM A182 F316) Duplex (ASTM A182 F51)
Trim	316 SS (available for all body materials) Duplex SS UNS S31803 (Duplex F51 body only)
Bolting	ASTM A193 B8M Class 2

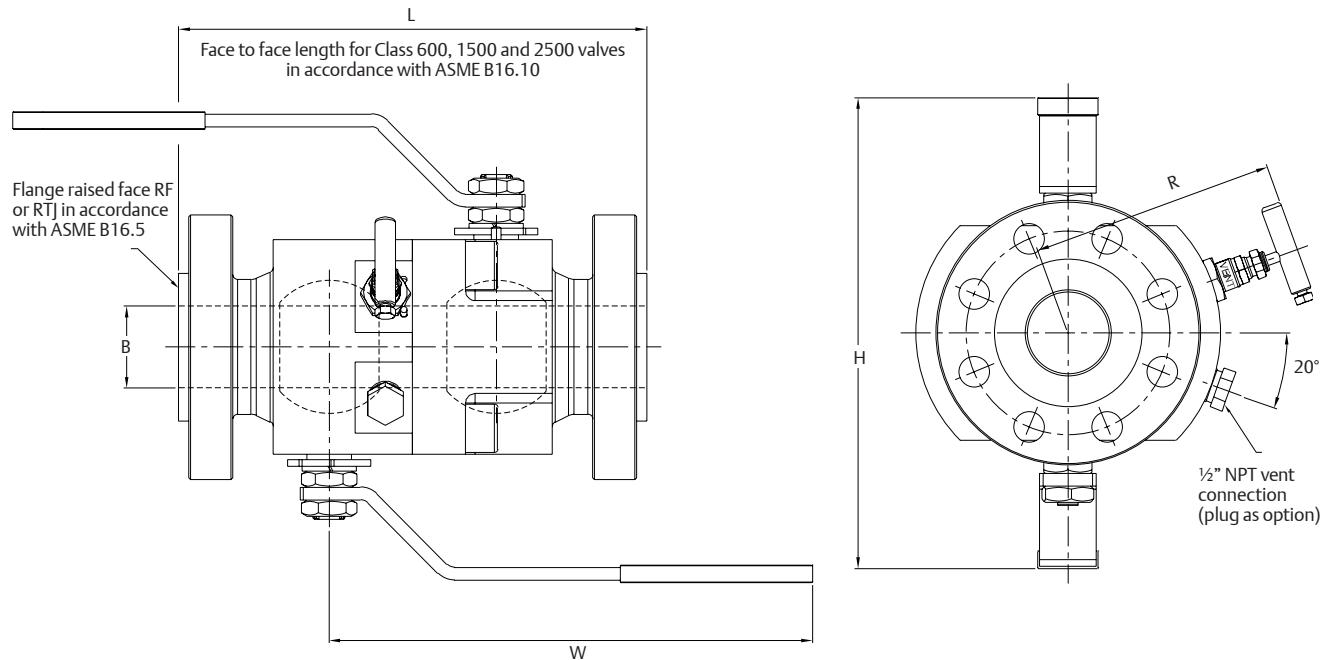
Options

- Compliant to NACE MR-01-75
- Anti-tamper vent (needle valve only)
- Lockable ball valve handles
- Devlon-V® seats (ball valve) available ANSI CL1500 max. - consult factory
- External paint finishes available to international standards or our in-house procedure, with customer specification subject for review.
- Filled PTFE (ANSI class 150/300/600) or PEEK seats (ANSI class 1500/2500)
- Floating ball design
- Self-relieving seats provide cavity relief
- Anti-blow out, one piece stem design
- Anti-static design to ensure electrical continuity between ball and body
- Compliant with Pressure Equipment Directive 97/23/EC Cat II
- Fire-tested design to API 607
- Vent needle/globe type only - graphite stem packing
- Body material certified to EN10204 3.1
- Ball valve vent - consult factory

F2569/F3869/F5069 SERIES

Primary Isolation Valves

Dimensions, Inches (mm)

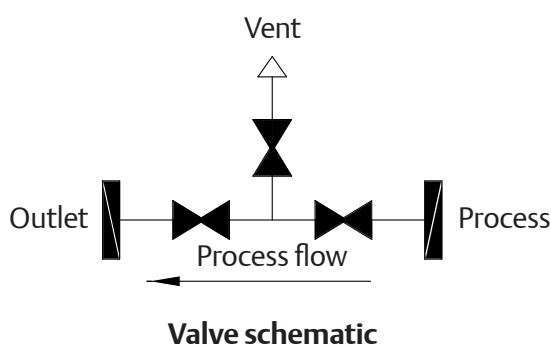
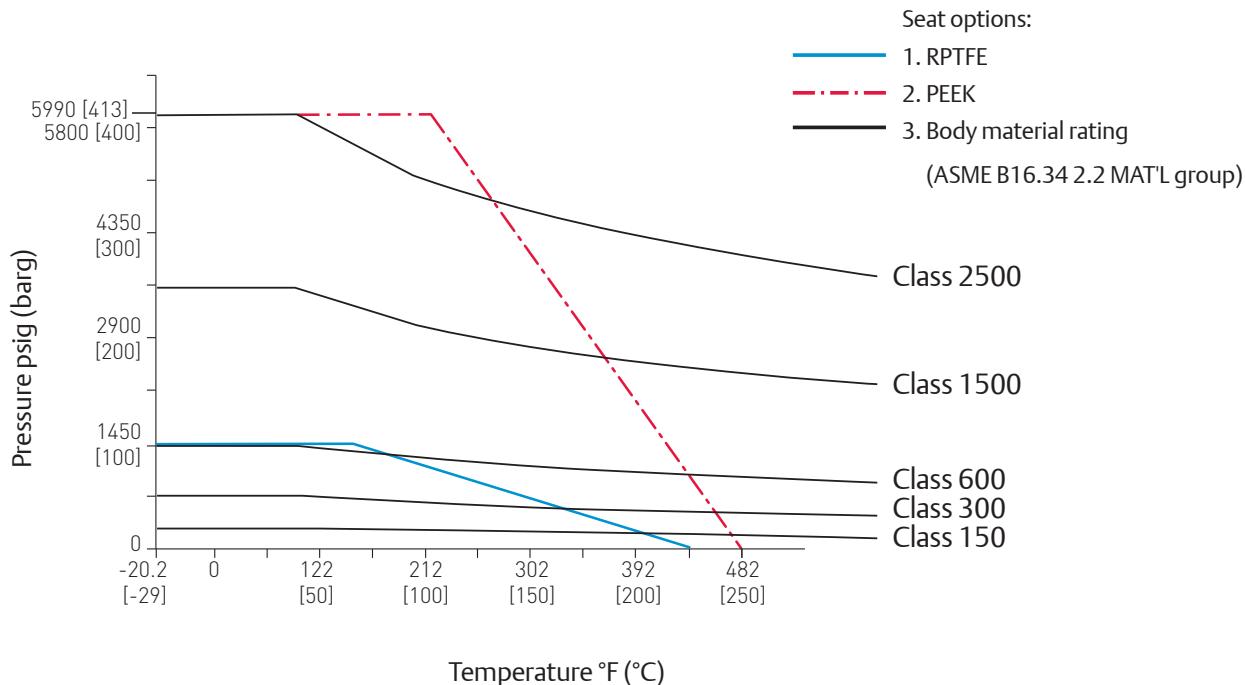


Product Dimensions

Pipe size	Pressure class (ASME B16.5)	Length L		Bore		Dimension			Seat material	Weight lb (kg)
		RF in (mm)	RTJ in (mm)	B in (mm)	H in (mm)	W in (mm)	R in (mm)			
1"	150	8.5 (216)	8.5 (216)	0.94 (24)	9.84 (250)	11.81 (300)	5.39 (137)	RPTFE	40 (18)	
1"	300	8.5 (216)	8.5 (216)	0.94 (24)	9.84 (250)	11.81 (300)	5.39 (137)	RPTFE	42 (19)	
1"	600	8.5 (216)	8.5 (216)	0.94 (24)	9.84 (250)	11.81 (300)	5.39 (137)	RPTFE	42 (19)	
1"	1500	10.0 (254)	10.0 (254)	0.94 (24)	9.84 (250)	11.81 (300)	5.39 (137)	PEEK	53 (24)	
1"	2500	12.12 (308)	12.12 (308)	0.94 (24)	9.84 (250)	11.81 (300)	5.79 (147)	PEEK	77 (35)	
1½"	150	9.50 (241)	9.5 (241)	1.46 (37)	9.84 (250)	11.81 (300)	5.39 (137)	RPTFE	49 (22)	
1½"	300	9.50 (241)	9.5 (241)	1.46 (37)	9.84 (250)	11.81 (300)	5.39 (137)	RPTFE	53 (24)	
1½"	600	9.50 (241)	9.5 (241)	1.46 (37)	9.84 (250)	11.81 (300)	5.39 (137)	RPTFE	55 (25)	
1½"	1500	12.0 (305)	12.0 (305)	1.46 (37)	11.02 (280)	15.74 (400)	5.79 (147)	PEEK	81 (37)	
1½"	2500	15.12 (384)	15.24 (387)	1.46 (37)	11.02 (280)	15.74 (400)	6.5 (165)	PEEK	128 (58)	
2"	150	11.5 (292)	11.61 (295)	2.01 (51)	11.02 (280)	11.81 (300)	5.79 (147)	RPTFE	77 (35)	
2"	300	11.5 (292)	11.61 (295)	2.01 (51)	11.02 (280)	11.81 (300)	5.79 (147)	RPTFE	79 (36)	
2"	600	11.5 (292)	11.61 (295)	2.01 (51)	11.02 (280)	11.81 (300)	5.79 (147)	RPTFE	84 (38)	
2"	1500	14.5 (368)	14.61 (371)	1.46 (37)	11.02 (280)	15.74 (400)	6.5 (152)	PEEK	106 (48)	
2"	2500	17.75 (451)	17.87 (454)	1.46 (37)	11.02 (280)	15.74 (400)	6.5 (165)	PEEK	154 (70)	

Primary Isolation Valves

Pressure/Temperature Guidelines - Seat Material



F2569/F3869/F5069 SERIES

Primary Isolation Valves

Selection Guide

F2569	V	C	S	
BASIC SERIES		BALL VALVE SEAT MATERIAL	BODY MATERIAL	TRIM MATERIAL
Configuration Ball valve type isolate		Ball valve type		
F2569 Flanged x flanged double block and bleed (1")		V RPTFE	C Carbon steel (A105N)	S 316 SS
F3869 Flanged x flanged double block and bleed (1 1/2")		E PEEK	L LT Carbon steel (A350 LF2)	D Duplex stainless steel UNS S31803
F5069 Flanged x flanged double block and bleed (2")		N Devlon V® (optional, consult factory)	S Stainless steel (A182 F316)	
			D Duplex stainless steel (A182 F51)	
				Standard trim combinations C, L and S Body = S Trim, D body = D Trim

081A				081A				-AL			
STANDARD INLET CONNECTIONS				STANDARD OUTLET CONNECTION				STANDARD OUTLET CONNECTION			
08	1"	1	RF	A- ANSI CL150	08	1"	1	RF	A ANSI CL150	316T	Full 316 SS trim (non-wetted)
12	1 1/2"	3	RTJ	J- ANSI CL300	12	1 1/2"	3	RTJ	J ANSI CL300	AL	Low temperature service (-58°F (-50°C))
16	2"			K- ANSI CL600	16	2"			K ANSI CL600	AT	Anti-tamper vent (needle/globe valve only)
				T- ANSI CL900					T ANSI CL900	CB	Ceramic ball ended stem (needle/globe valve only)
				L- ANSI CL1500					L ANSI CL1500	ST	Stellite ball ended stem (needle/globe valve only)
				M- ANSI CL2500					M ANSI CL2500	IQ(--)	Integral quill (consult factory)
										BVL	Lockable ball valve handles (specify number required (1 or 2))
										PT	PTFE stem packing (needle/globe valve only)
										PV	Plugged vent
										QV	1/4" NPT (f) vent
										SG	(Sour Gas) meets the requirements of NACE MR0175/ ISO 15156-3 (for chloride conditions $\leq 50 \text{ mg/l [ppm]}^*$) and NACE MR0103-2005
										VO	Vent option (please specify compression fittings, if required)
(All ASME B16.5)				(All ASME B16.5)							

NOTES

1. Devlon-V® is a registered trademark of Devol Engineering Ltd.
- * For Sour Gas with chloride $> 50 \text{ mg/l [ppm]}$ consult your sales representative