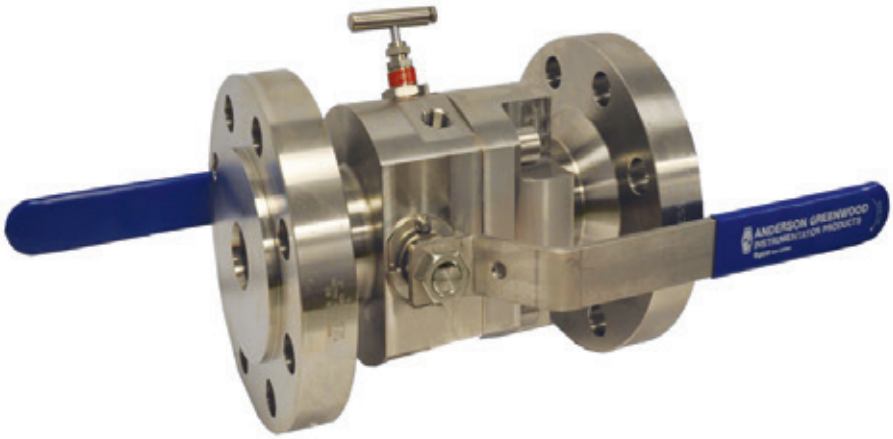
ANDERSON GREENWOOD PRIMARY ISOLATION VALVES

KEYBLOK F2569/F3869/F5069 DOUBLE BLOCK AND BLEED ISOLATION VALVE

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



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.

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, SS, Duplex. For other materials consult factory
Seats:	Soft
Connections:	Flanged 1" to 2" ANSI to ASME B16.5 (inlet / outlet) Threaded ½" FNPT (vent)
Pressure:	To ASME B16.5 RPTFE seats: 302°F (150°C) max. PEEK seats: 428°F (220°C) max.
Temperature range:	-70 to 428°F (-57 to 220°C)

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	Flange dimensions
• ASME VIII, DIV 1	Design procedures and materials
• ASME B1.20.1	National Pipe Threads

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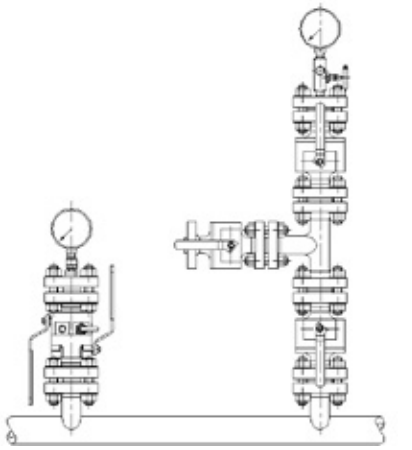
Compact two piece primary isolation valves
These valves provide an ultimate solution for forged body primary isolation valves, featuring a choice of end connections, body styles and valve technology.

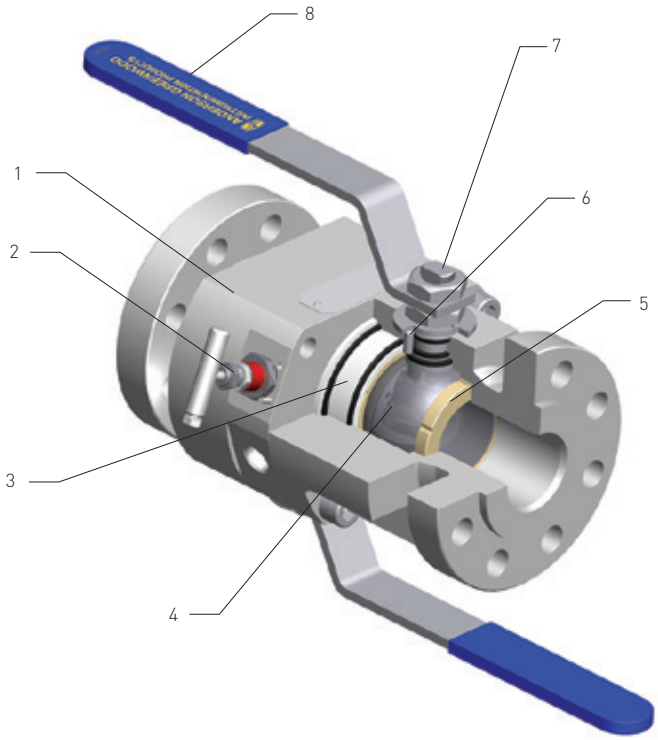
Advantages compared to individual valves
A two piece Keyblok primary isolation valve provides the following advantages when compared to individual isolation valves configured for double block and bleed:

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



Keyblok full bore solution | Traditional practice

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

Materials of construction

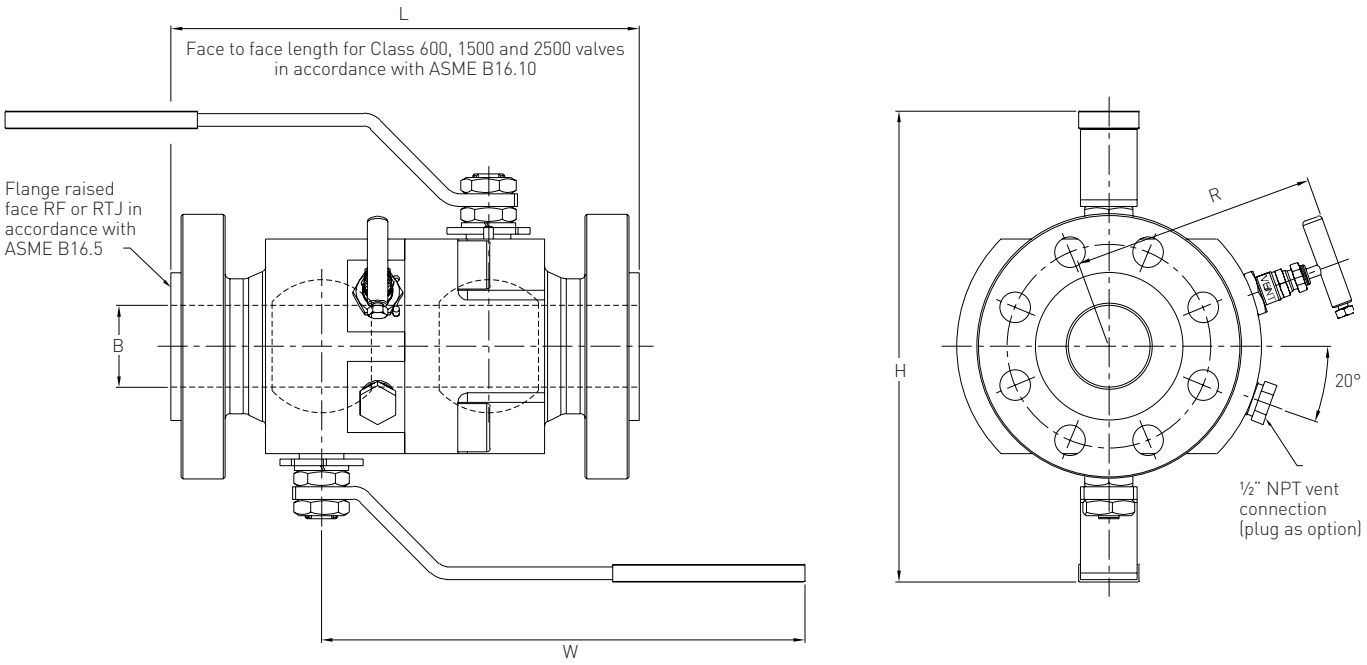
Body: Carbon steel (ASTM A105N)
LT Carbon steel (ASTM A350 LF2)
Stainless steel (ASTM A182 F316)
Duplex (ASTM A182 F51)

Trim: 316SS (available for all body materials)
Duplex 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

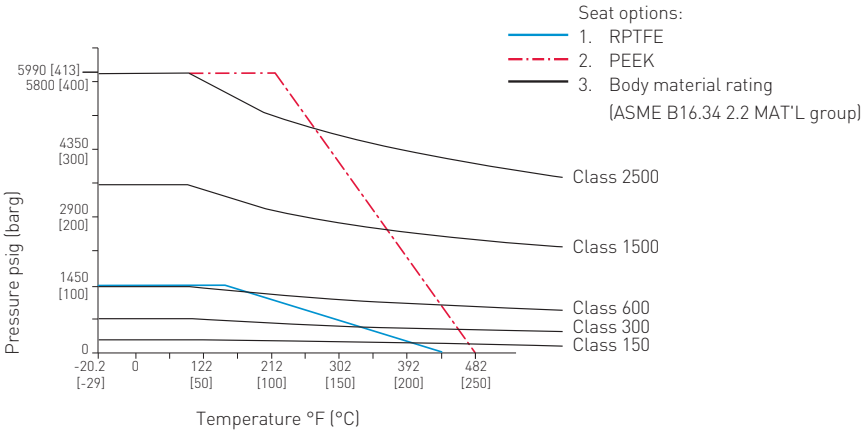
DIMENSIONS, INCHES (mm)

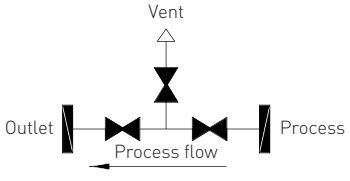


PRODUCT DIMENSIONS

Pipe size	Pressure class (ASME B16.5)	Length L RF in	RF (mm)	Length L RTJ in	RTJ (mm)	Bore B in	B (mm)	Dimension H in	H (mm)	W in	W (mm)	R in	R (mm)	Seat material	Weight lb	Weight (kg)
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)

PRESSURE/TEMPERATURE GUIDELINES - SEAT MATERIAL





Valve schematic

SELECTION GUIDE

Example:								**F2569**	**V**	**C**	**S**	**081A**	**081A**	**-AL**
Configuration														
Ball valve type isolate														
F2569	Flanged x flanged double block and bleed (1")													
F3869	Flanged x flanged double block and bleed (1 ½")													
F5069	Flanged x flanged double block and bleed (2")													
Ball valve seat material														
Ball valve type														
V	RPTFE													
E	PEEK													
N	Devlon-V® (optional consult factory)													
Body material														
C	Carbon steel (A105N)			**S**	Stainless steel (A182 F316)									
L	LT Carbon steel (A350 LF2)			**D**	Duplex stainless steel (A182 F51)									
Trim material														
S	SS 316			Standard trim combinations										
D	Duplex stainless steel UNS S31803			C, L and S Body = S Trim, D Body = D Trim										
Standard inlet connection														
08	1"	**1**	RF	**A**	ANSI CL150	**T**	ANSI CL900	(All ASME B16.5)						
12	1½"	**3**	RTJ	**J**	ANSI CL300	**L**	ANSI CL1500							
16	2"			**K**	ANSI CL600	**M**	ANSI CL2500							
Standard outlet connection														
08	1"	**1**	RF	**A**	ANSI CL150	**T**	ANSI CL900	(All ASME B16.5)						
12	1½"	**3**	RTJ	**J**	ANSI CL300	**L**	ANSI CL1500							
16	2"			**K**	ANSI CL600	**M**	ANSI CL2500							

Special options

-316T	Full 316 SS trim (non-wetted)
-AL	Low temperature service (-58°F (-50°C))
-AT	Anti-tamper vent (needle/globe valve only)
-CB	Ceramic ball ended stem (needle/globe valve only)
-ST	Stellite ball ended stem (needle/globe valve only)
-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	¼" NPT (f) vent
-SG	(Sour Gas) meets the requirements of NACE MR0175/ISO 15156-3 (for chloride conditions ≤ 50 mg/l [ppm]*) and NACE MR0103-2005
-VO	Vent option (please specify compression fittings, if required)

* For Sour Gas with chloride > 50 mg/l [ppm] consult your sales representative

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