ANDERSON GREENWOOD SERIES F68/F69 PRIMARY ISOLATION VALVES

Integrally forged, one piece double block and bleed Keyblok assemblies for primary isolation of pressure take-offs, where the valve is mounted directly to the vessel or process pipe

F68

F69

FEATURES

- One-piece forged body combines a compact design with strength and reduced potential leak paths compared to conventional designs.
- Flanged inlet connections available in a choice of sizes and ratings to suit each application.
- Primary isolation and venting ball valves are precision machined and super finished for high performance pressure and temperature ratings. Designed to be fire safe and anti-static.
- Heavy duty needle type globe valve ensures bubble-tight shut-off on venting service.
- Firesafe design to meet API 607, BS6755 Part 2 (optional).

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 and other exotic materials
Seats:	Metal and soft
Connections	
Inlet:	ANSI flanged ½" to 2" API flanged to 2 1/16"
Outlet:	ANSI flanged ½" to 2" API flanged to 2 1/16"
Pressure (max.):	10000 psig (690 barg)
Temperature (max.):	400°F (204°C)

PRODUCT OVERVIEW

Keyblok F68

The F68 features two independently operable ⅜" (10 mm) bore ball valves for isolation service with intermediate ⅜" (10 mm) bore ball valve for venting service.

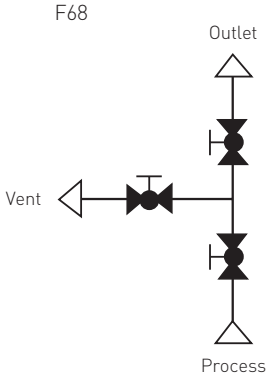
Keyblok F69

The F69 features two independently operable ⅜" (10 mm) bore ball valves for isolation service with an intermediate 0.2 inch (5 mm) bore 'HD' globe style needle valve for venting service.

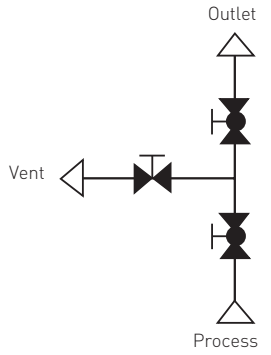
General notes

Standard pressure testing to BS EN 12266-1.
Standard material traceability to EN 10204 3.1 (body only).
Material thickness to ANSI B16.34.

F68



F69



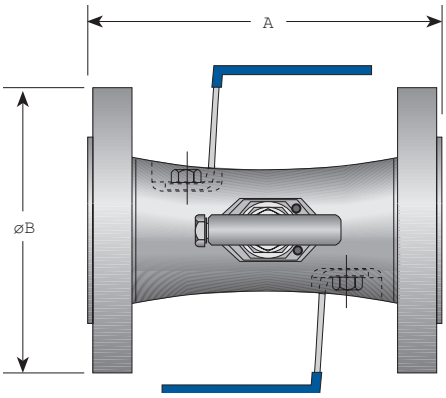
VALVE BODY - MATERIAL CODES

Description	C	L	S	D
Valve body	A105N	A350 LF2	A182 F316	A182 F51

Note: carbon steel valve bodies are zinc plated and passivated as standard.

F68 AND F69 SERIES FLANGED X FLANGED

Size	Rating	Dimensions, inches (mm)						Weight	
in	lb	A - RF		A - RTJ		B		lb	(kg)
½	150	8.2	(208)	-	-	3.5	(89)	9.5	(4.3)
½	300	8.2	(208)	8.7	(221)	3.8	(96)	11.0	(5.0)
½	600	8.2	(208)	8.7	(221)	3.8	(96)	11.5	(5.2)
½	900/1500	9.6	(243)	10.0	(256)	4.8	(121)	17.4	(7.9)
½	2500	9.6	(243)	10.0	(256)	5.3	(134)	23.8	(10.8)
¾	150	8.2	(208)	-	-	3.9	(99)	10.8	(4.9)
¾	300	8.2	(208)	8.7	(221)	4.6	(118)	13.9	(6.3)
¾	600	8.2	(208)	8.7	(221)	4.6	(118)	14.4	(6.5)
¾	900/1500	9.6	(243)	10.0	(256)	5.1	(130)	20.9	(9.5)
¾	2500	9.6	(243)	10.0	(256)	5.5	(140)	26.5	(12.0)
1	150	7.1	(180)	7.4	(189)	4.3	(108)	10.9	(5.0)
1	300	7.3	(186)	7.7	(196)	4.9	(124)	13.8	(6.3)
1	600	7.8	(199)	7.8	(199)	4.9	(124)	14.4	(6.5)
1	900/1500	8.7	(221)	8.7	(221)	5.9	(150)	24.7	(11.2)
1	2500	9.2	(234)	9.2	(234)	6.3	(159)	31.6	(14.3)
1½	150	7.3	(186)	7.7	(196)	5.0	(127)	14.2	(6.4)
1½	300	7.6	(192)	8.0	(202)	6.1	(156)	20.1	(9.1)
1½	600	8.2	(208)	8.2	(208)	6.1	(156)	22.3	(10.1)
1½	900/1500	8.9	(227)	8.9	(227)	7.0	(178)	35.2	(16.0)
1½	2500	10.0	(253)	10.0	(256)	8.0	(203)	61.3	(27.8)
2	150	7.4	(189)	7.8	(199)	6.0	(153)	21.8	(9.9)
2	300	7.7	(196)	8.2	(208)	6.5	(165)	26.2	(11.9)
2	600	8.5	(215)	8.6	(218)	6.5	(165)	29.6	(13.4)
2	900/1500	9.4	(240)	9.6	(243)	8.5	(216)	60.0	(27.2)
2	2500	10.4	(265)	10.6	(268)	9.3	(235)	88.2	(40.0)



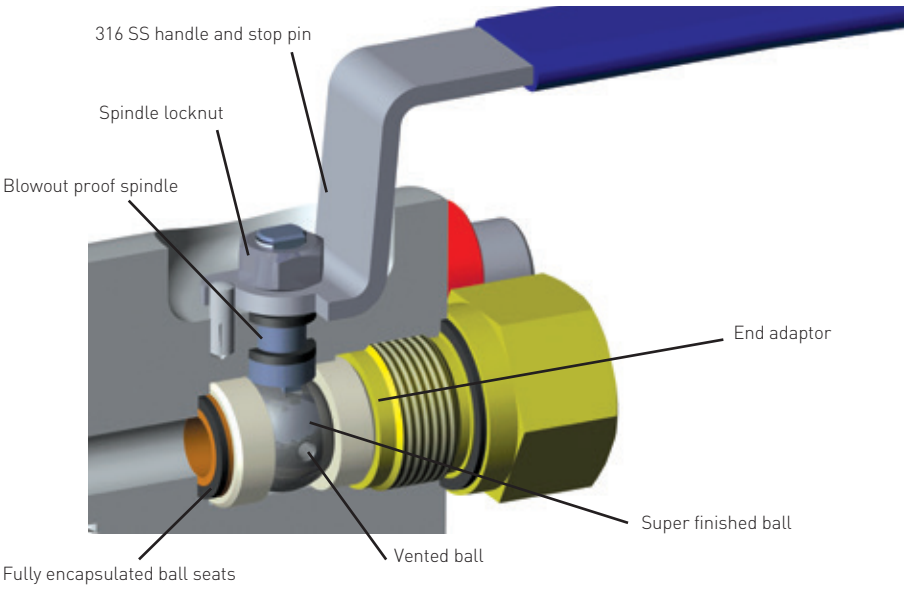
NOTE

1. Metric calculations:
   mm = in x 25.4
   kg = lb x 0.4536

QUARTER TURN BALL VALVES

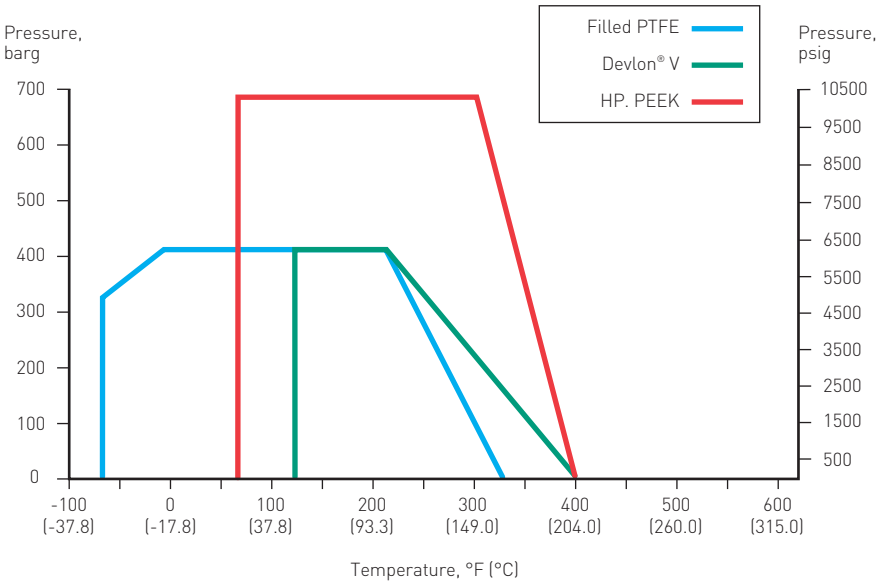
Unidirectional quarter-turn ball valves have a straight through, roddable ⅜" (10 mm) bore. Their super-finished ball provides low operating torque and long life and is vented to provide upstream cavity relief. They offer a choice of filled PTFE, Devlon V® or PEEK ball seats which are fully-supported to minimize seal extrusion and allow high working pressures, with end adaptor threads being fully isolated from the process by primary and secondary static seals. Each valve features a blowout-proof one piece stem with a vibration-resistant locking nut and a strong, corrosion-resistant stainless steel handle and stop pin as standard.

- Pressure rating: up to 10000 psig (680 barg).
- Temperature rating: -70.6°F to 400°F (-57°C to 204°C).



PRESSURE AND TEMPERATURE RATINGS

KEYBLOK



BALL VALVE COMPONENTS - TRIM CODES

Item	Description	S	D
1	Handle/stop pin	316 SS	316 SS
2	Stem seal (2 off)	Graphite	Graphite
3	Ball seat	PTFE, Devlon® or PEEK	PTFE, Devlon® or PEEK
4	Housing static seal	Graphite	Graphite
5	Seat housing	A276-316	A276-31803
6	Ball	A479-316	A479-31803
7	Primary static seal	Graphite	Graphite
8	Secondary static seal	Graphite	Graphite
9	Locknut	316 SS	316 SS
10	Spindle	A479-316	A479-31803

STANDARD TRIM COMBINATIONS

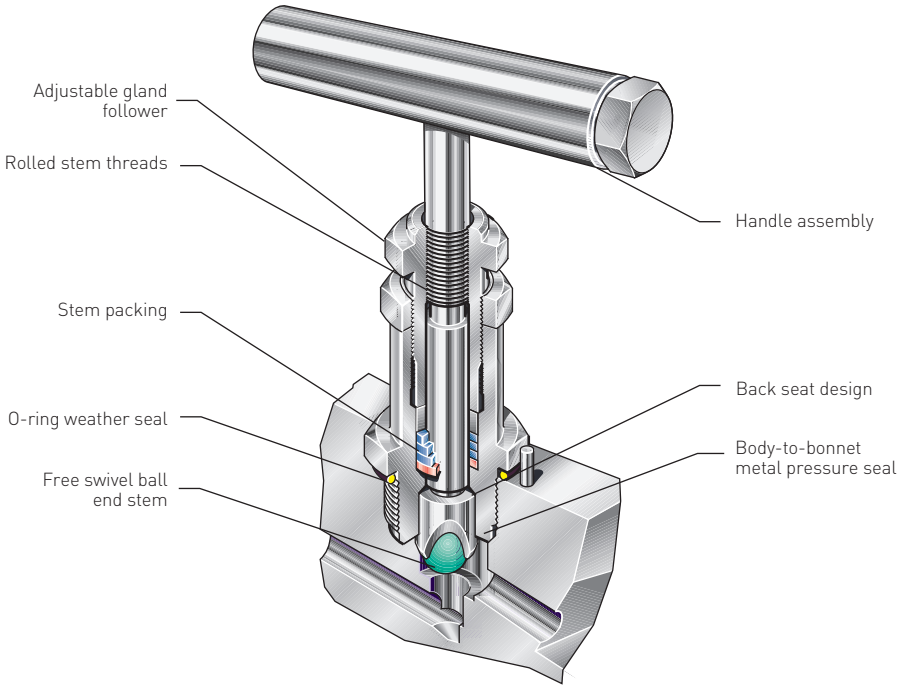
Body	Trim
C	S
L	S
S	S
D	D

NOTE

1. Devlon V® is a registered trademark of Devol Engineering Ltd.

'HD' NEEDLE-TYPE GLOBE VALVE

The HD needle-type globe valve has a rotating stem with a free-swivel ball-end seat for repetitive bubble-tight shut-off and rolled threads for low operating torque, located above the spindle packing and isolated from the process. The stem is sealed with either graphite or PTFE rings and a backseat design provides secondary stem sealing and prevents stem blowout. A body-to-bonnet metal pressure seal below the threads prevents corrosion and ensures the bonnet threads are in loaded compression for additional strength and an O-ring weather seal protects bonnet retention threads from harsh environments. An adjustable gland follower allows easy access to adjust the packing gland and the valve features a T-bar handle with locking bolt to secure it firmly on the stem.



'HD' NEEDLE TYPE GLOBE VALVE COMPONENTS - TRIM CODES

Item	Description	S	D
1	Gland follower	Austenitic SS	A276-31803
2	Stem	A479-316	A47931803
3	Locknut	Austenitic SS	Austenitic SS
4	Stem packing	PTFE or graphite	PTFE or graphite
5	O-ring weather seal	Buna-N Nitrile	Buna-N Nitrile
6	Ball (stem tip)	316 SS	Ceramic
7	Bonnet locking pin	Austenitic SS	Austenitic SS
8	Handle assembly	Austenitic SS	Austenitic SS

SELECTION GUIDE

Example:	F68	V	S	S	061L	061L	QV

Manifold type

Ball valve type

F68	Flanged x flanged double block and bleed
F69	Flanged x flanged double block and bleed

Ball valve seat material

V	Filled PTFE
N	Devlon V®
E	PEEK

Body material

C	A105N	**S**	A182 F316
L	A350 LF2	**D**	A182 F51

Trim material

S	SS 316	**Standard trim combinations**	
D	Duplex UNS S31803	C, L and S Body = S Trim, D Body = D Trim	

Inlet connection

04	½"	**1**	RF	**A**	150 lb (ANSI B16.5)
06	¾"	**3**	RTJ	**J**	300 lb (ANSI B16.5)
08	1"	**4**	BX	**K**	600 lb (ANSI B16.5)
12	1½"	**5**	RX	**T**	900 lb (ANSI B16.5)
16	2"	**6**	R	**L**	1500 lb (ANSI B16.5)
17	1 13/16"	**8**	Hub	**M**	2500 lb (ANSI B16.5)
18	2 1/16"			**N**	5000 lb (API 6A)
24	3"			**P**	10000 lb (API 6A)
				V	3000 lb (API 6A)

Outlet connection

04	½"	**1**	RF	**A**	150 lb (ANSI B16.5)
06	¾"	**3**	RTJ	**J**	300 lb (ANSI B16.5)
08	1"	**4**	BX	**K**	600 lb (ANSI B16.5)
12	1½"	**5**	RX	**T**	900 lb (ANSI B16.5)
16	2"	**6**	R	**L**	1500 lb (ANSI B16.5)
17	1 13/16"	**8**	Hub	**M**	2500 lb (ANSI B16.5)
18	2 1/16"			**N**	5000 lb (API 6A)
24	3"			**P**	10000 lb (API 6A)
				V	3000 lb (API 6A)

Options

ICV	Integral check valve (injection)	**LAT**	Lockable tamper-proof bonnet
IQ(- - -)	Integral quill (required length)	**PD**	Padlock for - LAT
PV	Plugged vent	**QV**	¼" NPT (f) vent
BVL	Lockable ball valve handles (specify number required)	**SS**	Full 316 SS trim
AT	Anti-tamper vent (needle valve only)	**VO**	Vent option (please specify compression fittings, if required)
SG	NACE MR0175 latest revision	**CB**	Ceramic ball tip (needle valve only)
PT	PTFE Packed needle valve (F69 only)	**ST**	Stellite ball tip (needle valve only)