



ENGINEERING Inc.

Technical Data

Anti-Flash Valve

Usage

The HBE Anti-Flash Valve Model AFV is provided specifically to eliminate damage to the recirculation valve and bypass piping from flashing and cavitation.

How It Works

The Anti-Flash Valve functions as a variable orifice to assure the pressure of the downstream liquid does not fall below the vapor pressure after exiting the recirculation valve.

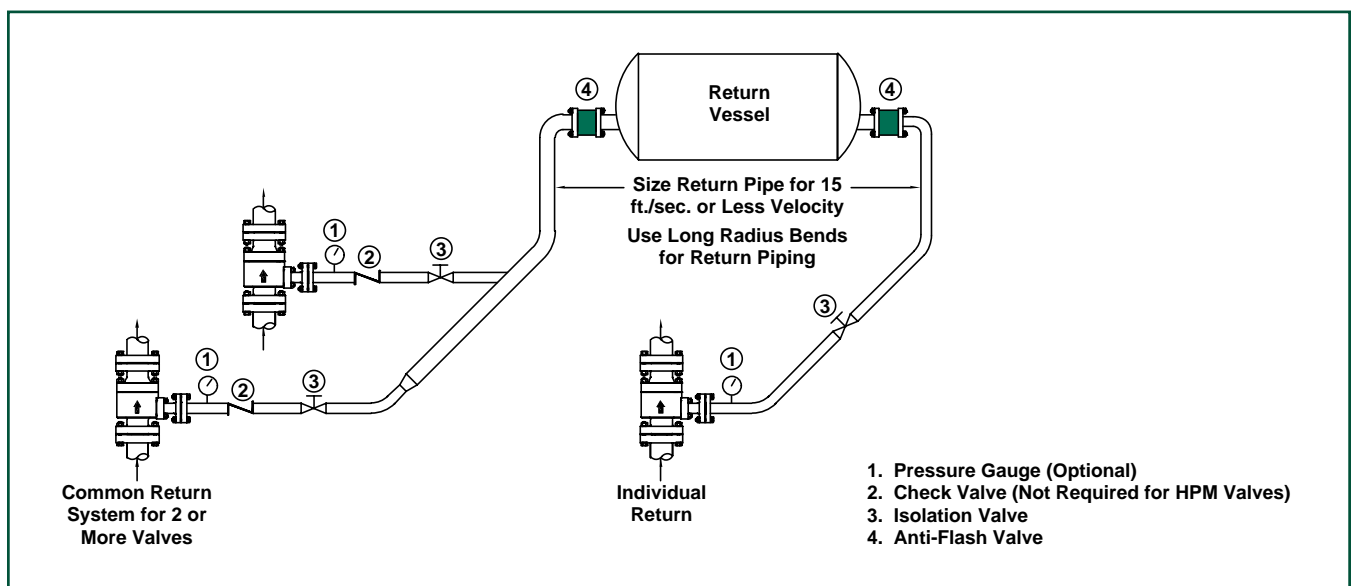
Applications

Applications which require Anti-Flash Valves include boiler feed, condensate, and certain process fluids which bypass to a low or negative pressure vessel. Modulating recirculation valves can run partially open for extended periods of time during low process demands. The Anti-Flash Valve provides back pressure lost from reduced piping friction and assures a flashing/cavitation condition does not occur.

Installation

The Anti-Flash Valve is a wafer design and is installed between flanges of the bypass piping size and ANSI rating. Installed adjacent to the return vessel the Anti-Flash Valve will assure protection of the entire bypass system.

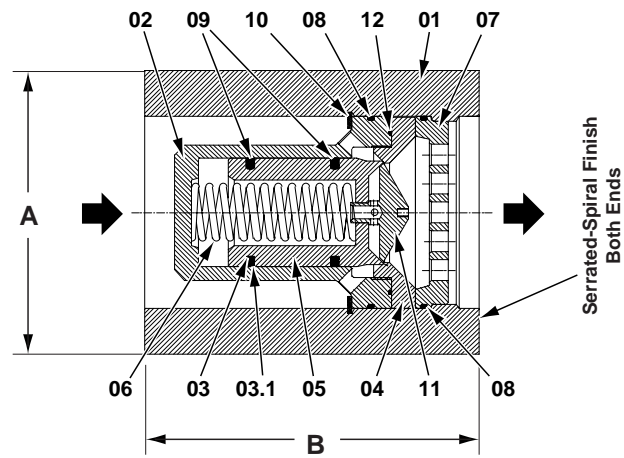
Typical Installation



Materials of Construction and Dimensions

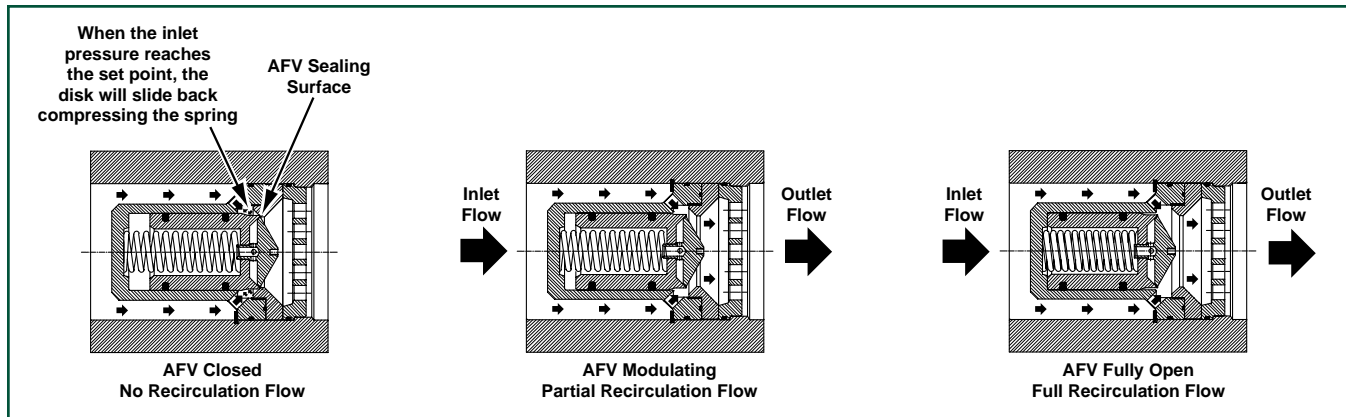
Pos.	Qty.	Description	Material
01	1	Body	A105 Carbon Steel
02	1	Guide Bushing	416 Stainless Steel
03	1	O-Ring	(Application Dependent)
03.1	1	Glyd-Ring	Filled PTFE
04	1	Seat Bushing	416 Stainless Steel
05	1	Disk	416 Stainless Steel
06	1	Spring	302 Stainless Steel
07	1	Flow Straightener	431 Stainless Steel
08	1	O-Ring	(Application Dependent)
09	1	Wear Ring	Filled PTFE
10	1	Snap Ring	300 Series Stainless Steel
11	1	Insert	316 Stainless Steel
12	1	O-Ring	(Application Dependent)

Dimensions (mm)		
AFV Size	A In. (mm)	B In. (mm)
2	3.62 (91.95)	4 (101.6)
3	5.00 (127)	6 (152.4)
4	6.19 (157.2)	6 (152.4)
6	8.5 (215.9)	10 (254)



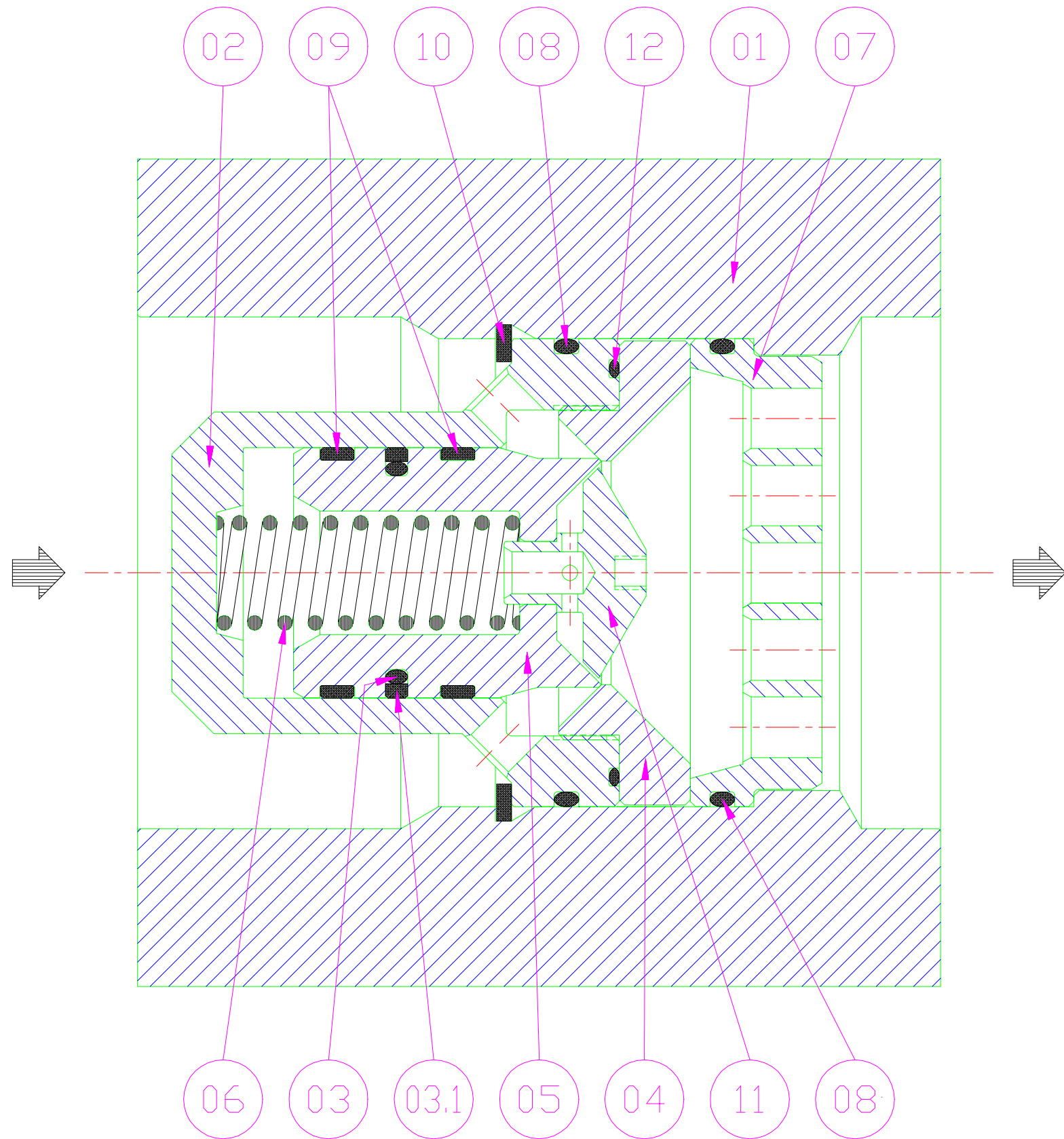
HBE Anti-Flash Valve

How the Anti-Flash Valve Works



ENGINEERING Inc.

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Pos.	Description
01	Body
02	Guide Bushing
03	O-Ring
03.1	Glyd-Ring
04	Seat Bushing
05	Disk
06	Spring
07	Flow Straightener
08	O-Ring
09	Wear Ring
10	Snap Ring
11	Insert
12	O-Ring

NOTES :
ALL RIGHTS RESERVED

TOLERANCE
UNLESS NOTED
 XXX ±1
 XX ±0.5
 X ±0.25
 X.X ±0.1
 ∠ ±1/2°
 √ 125RMS

AFV ASSEMBLY

HBE INTERNATIONAL Ltd.

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DATE 03/08/04	SCALE	DWG. NO.
DWN. JAP	CHK.	SYMBOL NO.
MATERIAL		