

FIGURE 10 SERIES SAFETY VALVE

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SIZES 3/4" – 3" PRESSURES to 15 PSIG at 250°F

- Meets ASME Section IV Code for Steam Service
- "HV" National Board Certified
- Low Cost
- High Capacity
- Dependable
- Tight Shutoff
- Sharp Popping and Closing Action
- High Degree of Repeatability
- Unitized Body

### **M**ODELS

● 0010 - Cast Iron Body, Bronze Seats

## APPLICATION DATA

- Industrial Low Pressure Steam Heating Boilers
- Commercial Low Pressure Steam Heating Boilers

## Valve Ratings

Model	Pressure PSIG (bar)	Temperature °F (°C)
All	5 to 15	-20 to 250
	(.3 to 1)	(-29 to 121)

## APPLICABLE CODES

- ASME Section IV "HV" for Low Pressure Steam (when set @ 15 PSI)
- Canadian Registration #0G0591.9C

### **CODE SELECTION CHART**



#### Model -

Position 1, 2, 3 & 4

0010 = Cast Iron Body, Bronze Seats

## Orifice -

Position 5

Ζ

Inlet Size -Position 6 D =  ${}^{3}\!/_{4}$ E = 1 F =  $1^{1}\!/_{4}$ 

 $F = 1\frac{1}{4}$   $G = 1\frac{1}{2}$ H = 2

H = 2  $J = 2^{1}/2$  K = 3

Position 7
A = MPT x FPT

Set Pressure Position 8, 9 & 10
\_\_\_ = Actual Setting



## FIGURE 10 SERIES

### **SPECIFICATION**

The valve shall meet the ASME Section IV Code for low pressure steam service. It shall be "HV" National Board Certified. The valve inlet and outlet shall be one integral casting assuring proper alignment of disc, seat and spindle for smooth action. The valve shall maintain a high degree of repeatability. The valve shall be top guided by a disc guide fitted into the body. The valve shall have an open lever assembly. The valve shall have a non-adjustable blowdown.

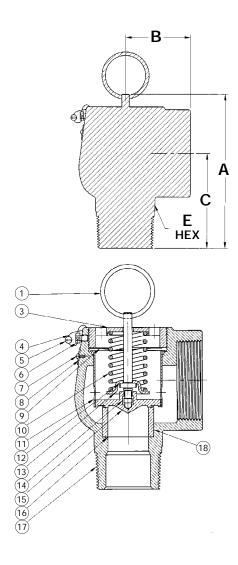
### MATERIALS OF CONSTRUCTION

Ref	Part Name	Material		
1	Pull Ring	SST		
3	Compression Screw	Stl. plated CI ASTM A108/A126		
4	Seal Wire	SST		
5	Seal	Lead		
6	Lock Screw	Brass ASTM B16		
7	Drive Screw	SST		
8	Nameplate	SST		
9	Wave Washer	Plated Steel		
10	Spring	Plated Steel		
11	Disc Guide	Brass/Bronze ASTM B135/B505		
12	Spindle Pin	Plated Steel		
13	Spring Washer	Plated Steel		
14	Spindle	Steel ASTM A108		
15	Disc	Brass/Bronze ASTM B16/B62		
16 Seat		Brass/Bronze ASTM B16/B505		
17	Body	Cast Iron ASTM A126		
18	Sealant	Sealant		

### **DIMENSIONS** inches (mm) **AND WEIGHTS** pounds (kg)

Model	Inlet	Orifice	Outlet	A*	В	С	E Hex	Weight
0010ZDA	3/4	Z	1	35/16	11/2	23/16	11/4	1
	(20)		(25)	(76)	(38)	(56)	(32)	(.4)
0010ZEA	1	Ζ	11/4	4	2	2%	1½	2
	(25)		(32)	(95)	(51)	(67)	(38)	(.9)
0010ZFA	11/4	Z	11/2	5	21/8	3	11//8	3
	(32)		(40)	(108)	(54)	(76)	(48)	(1.4)
0010ZGA	11/2	Z	2	5½	23/16	33/16	2	4
	(40)		(50)	(117)	(56)	(81)	(51)	(1.8)
0010ZHA	2	Z	21/2	611/16	21/8	4	3	8
	(50)		(65)	(156)	(73)	(102)	(76)	(3.6)
0010ZJA	2½	Z	21/2	83/8	3¾	43/8	31/4	14
	(65)		(65)	(194)	(95)	(111)	(83)	(6.3)
0010ZKA	3	Ζ	3	9½	31/8	51/8	4	22
	(80)		(80)	(229)	(98)	(130)	(102)	(10)

<sup>\*</sup> Add 1/4" to "A" dimension to allow for lift.



# SATURATED STEAM CAPACITY CHART—MODEL 0010

ASME Section IV "HV" 90% rated at 33.3% Overpressure\*\* LBS/HR (KGS/HR)

### LBS/HR

Set	Valve & Orifice Area, in <sup>2</sup>							
Pressure	¾ Z 1	1 Z 1¼	1¼ Z 1½	1½ Z 2	2 Z 2½	2½ Z 2½	3 Z 3	
PSIG	0.276	0.49	0.765	1.107	1.961	3.063	4.43	
5*	243	431	673	974	1725	2694	3896	
10*	318	565	883	1277	2263	3534	5112	
15	394	700	1093	1581	2801	4375	6327	

<sup>\*</sup> Pressure settings below 15 PSIG (1.034 barg) are non code.

### KGS/HR

Set	Valve & Orifice Area cm <sup>2</sup>								
Pressure	20 Z 25	25 Z 32	32 Z 40	40 Z 50	50 Z 65	65 Z 65	80 Z 80		
Barg	1.78	3.16	4.94	7.14	12.65	19.76	25.58		
0.4*	255	452	706	1022	1811	2828	4091		
0.7*	321	569	889	1286	2279	3559	5148		
1*	387	686	1072	1551	2747	4291	6205		

Consult Factory for capacities below 5 PSIG



 $<sup>^{\</sup>star\star}$  Pressure settings below 15 PSIG (1 barg) are at 10% overpressure.