



FIGURE 31 CAST IRON SERIES

FIGURE 31 / 41 CAST IRON SERIES

SIZES 1 1/2" – 6"
PRESSURES to 250 PSIG at 406°F

- Meets ASME Section I & VIII Code for Steam, Air & Non-hazardous Gas Service
- "V" or "UV" National Board Certified
- Dual Ring Control See page 12
- Heavy Duty Construction
- Flanged or Threaded Connections
- SS Trim Design Available
- Heavy Duty Open Lever Assembly

OPTIONS

- SS Trim
- BSP Connections
- Test Reports Available

MODELS

- 0031 - ASME Section I Steam, Bronze Trim
- 0041 - ASME Section VIII Steam, Bronze Trim
- 041A - ASME Section VIII Air, Bronze Trim
- 0032 - SS Base & Disc on 0031
- 0042 - SS Base & Disc on 0041
- 042A - SS Base & Disc on 041A

APPLICABLE CODES

- ASME Section I "V" for Steam
- ASME Section VIII "UV" for Steam/Air/Gas
- API 527
- Canadian Registration # 0G0591.9C

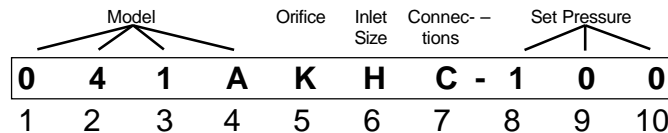
APPLICATION DATA

- Steam Boilers
- Pressure Reducing Stations
- Unfired Steam Pressure Vessels & Lines
- Air compressors, Cookers, Receivers
- Pneumatic Systems
- OEM Equipment

VALVE RATINGS *See Capacity Charts beginning on page 21*

Model	Pressure PSIG (bar)	Temperature °F (°C)
All	10 to 250 (.7 to 17.2)	-20 to 406 (-29 to 208)

CODE SELECTION CHART



Model -
Position 1, 2, 3 & 4
0031 = ASME Section I Steam, Bronze Trim
0041 = ASME Section VIII Steam, Bronze Trim
041A = ASME Section VIII Air, Bronze Trim
0032 = SS Base & Disc on 0031
0042 = SS Base & Disc on 0041
042A = SS Base & Disc on 041A

Orifice -
Position 5
J
K
L
M
N
P
Q
R

Inlet Size -
Position 6
G = 1 1/2
H = 2
J = 2 1/2
K = 3
M = 4
P = 6

Connections -
Position 7
B = FPT x FPT
C = 250# x FPT
D = 250# x 125#
Z = Other

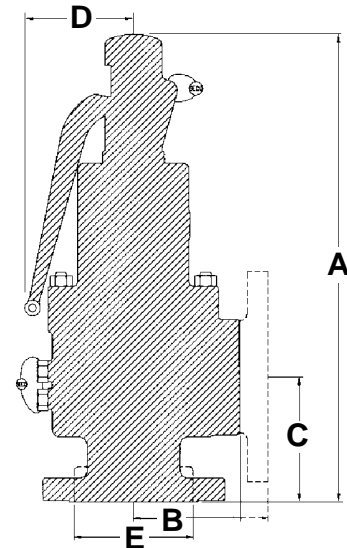
Set Pressure -
Position 8, 9 & 10
____ = Actual Setting
LAS - Loosely Assembled†

†Spence Certified Assemblers Only
(use 0031 or 0032 only)

FIGURE 31 / 41 CAST IRON SERIES

SPECIFICATION

The valve shall meet the ASME Section I or VIII Code for steam, air and gas services. It shall be "V" or "UV" National Board Certified. The valve shall have dual blowdown ring to allow better adjustment of the pop and blowdown. The valve shall be top guided and shall have a semi nozzle for optimum flow performance. The valve shall have an open lever assembly. The valve shall meet the API 527 leakage standard requiring bubble tight shutoff up to 90% of set pressure.



0031, 0041, 041A
0032, 0042, 042A

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

Model	Inlet	Orifice	Outlet	A	B	C	D ⁽¹⁾	E	Weight
****JGB	1½" FPT (40)	J	2½" FPT (65)	15¾ (384.2)	3½ (88.9)	4¼ (108)	3 (76.2)	3¼ (82.6)	29 (13.2)
****JGC	1½" 250# (40)	J	2½" FPT (65)	15¾ (384.2)	3½ (88.9)	4¼ (108)	3 (76.2)	—	36 (16.3)
****JHC	2" 250# (50)	J	3" FPT (80)	15¾ (400.1)	4 (101.6)	45/8 (117.5)	3½ (88.9)	—	42 (19.1)
****KHB	2" FPT (50)	K	3" FPT (80)	15¾ (400.1)	4 (101.6)	4¾ (117.5)	3½ (88.9)	3¾ (92.1)	36 (16.3)
****KHC	2" 250# (50)	K	3" FPT (80)	15¾ (400.1)	4 (101.6)	4¾ (117.5)	3½ (88.9)	—	42 (19.1)
****KJC	2½" 250# (65)	K	3" FPT (80)	15¾ (400.1)	4 (101.6)	4¾ (120.7)	3½ (88.9)	—	45 (20.4)
****LJB	2½" FPT (65)	L	4" FPT (100)	23 ⁽²⁾ (584.2)	5½ (130.2)	5½ (139.7)	6 (152.4)	4½ (114.3)	97 (44.0)
****LJC	2½" 250# (65)	L	4" FPT (100)	23 ⁽²⁾ (584.2)	5½ (130.2)	5½ (139.7)	6 (152.4)	—	105 (47.6)
****KKC	3" 250# (80)	K	3" FPT (80)	15¾ (400.1)	4 (101.6)	5 (127)	3½ (88.9)	—	48 (21.8)
****LKC	3" 250# (80)	L	4" FPT (100)	23 ⁽²⁾ (584.2)	5½ (130.2)	5½ (139.7)	6 (152.4)	—	107 (48.5)
****MKB	3" FPT (80)	M	4" FPT (100)	23¾ ⁽²⁾ (587.4)	5½ (130.2)	55/8 (142.9)	6 (152.4)	4½ (114.3)	99 (44.9)
****MKC	3" 250# (80)	M	4" FPT (100)	23 ⁽²⁾ (584.2)	5½ (130.2)	5½ (139.7)	6 (152.4)	—	107 (48.5)
****NMD	4" 250# (100)	N	6" 125# (150)	29½ ⁽²⁾ (749.3)	7¼ (184.2)	6¾ (171.5)	6 (152.4)	—	215 (97.5)
****PMD	4" 250# (100)	P	6" 125# (150)	29½ ⁽²⁾ (749.3)	7¼ (184.2)	6¾ (171.5)	6 (152.4)	—	215 (97.5)
****QPD ⁽²⁾	6" 250# (150)	Q	8" 125# (200)	39½ ⁽²⁾ (1003.3)	10 (254)	9¼ (235)	10½ (266.7)	—	605 (274.4)
****RPD ⁽²⁾	6" 250# (150)	R	8" 125# (200)	39½ ⁽²⁾ (1003.3)	10 (254)	9¼ (235)	10½ (266.7)	—	605 (274.4)

*Accurate to ±1/8".

**** Use appropriate Model Number.

⁽¹⁾ Add 50% to D Dimension when lever is pulled out to manually operate valve.

⁽²⁾ Dimensions are current as of printing, consult factory for updated dimensions as they may change.

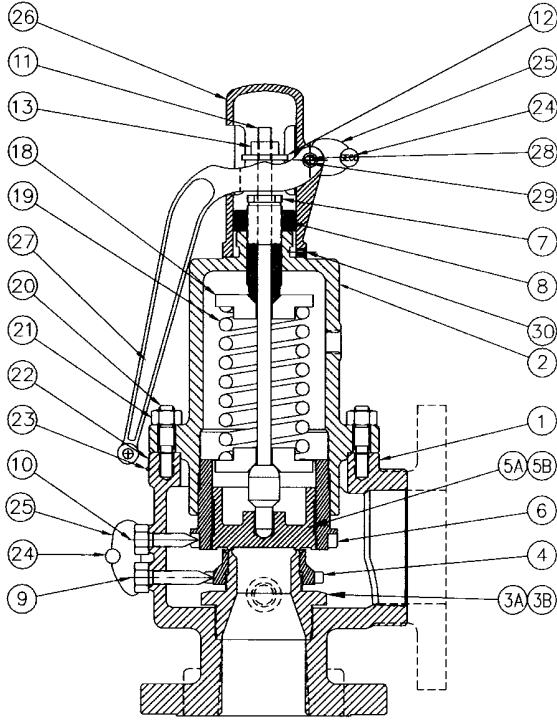
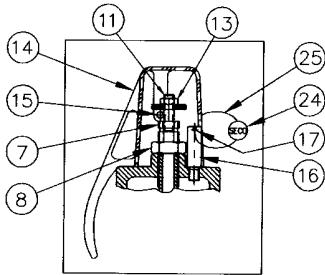


FIGURE 31 CAST IRON SERIES



CAP & LEVER CONFIGURATION
FOR J & K ORIFICES

FIGURE 31 / 41 CAST IRON SERIES

MATERIALS OF CONSTRUCTION

Ref	Part Name	Material
1	Body	Cast Iron ASTM A126-B
2	Bonnet	Cast Iron ASTM A126-B
3A	Nozzle - Bronze	Brass or Bronze ASTM B16 or B62
3B	Nozzle - SST	SST ASME SA351, CF8M or ASME SA479, S31600
4	Nozzle Ring	Bronze ASTM B584-C84400
5A	Disc - Bronze	Brass or Bronze ASTM B16 or B62
5B	Disc - SST	SST ASTM A479, S31600
6	Guide Ring	ASTM B584-C84400
7	Adjusting Bolt	Brass ASTM B16
8	Adjusting Bolt Locknut	Steel, Zinc Plated
9	Nozzle Ring Set Screw	Brass ASTM B16
10	Guide Ring Set Screw	Brass ASTM B16
11	Spindle	Steel ASTM A108 Grade 1212
12	Spindle Nut	Steel ASTM A108 Grade 1212
13	Spindle Nut Locknut	Steel, Zinc Plated
14	Lifting Cap	Zinc Alloy Zamac #3
15	Lifting Cap Pins	Steel, Zinc Plated AISI 1020
16	Pivot Post	Steel AISI 1020
17	Post Pin	Steel, Zinc Plated AISI 1070
18	Spring Washer	Steel AISI 1212
19	Spring	Steel Zinc Plated
20	Stud	Steel, Chrome-Moly ASTM A193 B7
21	Stud Nut	Steel, Chrome-Moly ASTM A194 2H
22	Nameplate	SST AISI 304
23	Nameplate Screws	SST Commercial 18-8
24	Lead Seal	Lead
25	Seal Wire	SST AISI 304
26	Lifting Cap	Cast Iron A126-B*
27	Lifting Lever	Cast Iron ASTM A126-B
28	Clevis Pin	Steel, Zinc Plated
29	Cotter Pin	Steel
30	Liftpin Lockscrew	Steel

*Ductile Iron for 4" and above.
ASTM A395 Grade 60-40-18

