# FIRE-CIDE® SERIES HEAT ACTUATED SHUTOFF VALVE



### **ROTARY SHAFT DESIGN**

FIRE-CIDE® series valves are globe-type valves, operated by a manual external lever. Lifting action is transmitted from the lever directly to the valve stem and piston through the "rotary shaft". This mechanical advantage allows the valve to operate at higher pressures and allows for a stronger return spring to assure reliable, fail-safe operation compared to "direct lift" or "direct acting" valves. Closing speed, for fail closed valves, is not significantly affected by fluid viscosity, line pressure or pressure drop across valve. The slight arc of motion (15-30°) of the valve rotary shaft provides much longer maintenance-free life of the rotary shaft seal compared to reciprocating-stem packing glands.

### **BUILT FOR SAFETY**

OSHA requires a heat actuated valve on each withdrawal line from indoor tanks containing flammable or combustible fluids. The FIRE-CIDE® series valves conform to and exceed the requirements of OSHA para. 1910.1016 (b) (4) (iv) (c). These valves can also be placed on outdoor flammable liquid lines as a sensible safety precaution. They can be tripped manually and instantly by pulling a release pin for periodic testing or manual operation.

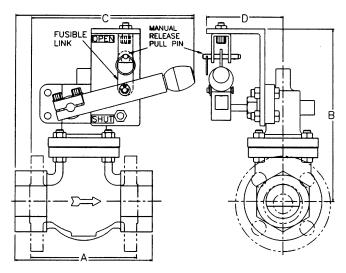
ALL VALVES **FACTORY MUTUAL SYSTEM** APPROVED FOR EMERGENCY SHUT-OFF

## FIRE-CIDE® SERIES HIGHLIGHTS

- Fire safe rated
- Steel heavy-walled body for high pressure
- Corrosion resistant, stainless steel inner parts
- Manual operation provision for periodic testing
- Full diameter internal valve port for high C<sub>V</sub>'s
- ANSI Class threaded or RF flanged ends
- Zero pressure and flow required for closing

- No diaphragms or needle sized orifices to clog
- Viscous and dirty fluids can be handled efficiently
- Standard fluid temperature range: -50° to 550°F
- MSS SP-61 seat leakage rated
- Quick acting, two position; fails closed @ link rating
- All fusible links are UL Listed
- Inherently safe

## FIRE-CIDE® 2800 SERIES DIMENSIONS



All dimensions (inches), weights (pounds) and  $C_V$ 's listed are approximate and are for estimating purposes only. All flanges are drilled to ANSI B16.5. Valve is shown in the mechanically latched open position; it trips closed upon melting of the link or removal of pin. Valve bodies can be rotated 90°, 180° or 270° to accommodate flow direction. Larger sizes and alternate end connections are available. Please consult factory for further details.

SIZE CONNECTIONS				MAX. OPENING DIFF. PRESS. (psi)						DIMENSIONS				
Suffix	Pipe/ Port	Ends	$C_V$	Direc	ct (D)	Pilo	t (P) Teflon	Semi-Di	rect (S)	Net Wt.	A (in.)	B (in.)	C (in.)	D (in.)
05	(in.)	FNPT	3	Metal 300	300	Metal 720	300	Metal N/A	N/A	(lbs.) 12	4	5	7	4 <sup>3</sup> / <sub>8</sub>
05	1/ <sub>2</sub>	150FL	3	275	275	275	275	N/A	N/A	13	4 <sup>1</sup> / <sub>4</sub>	5	7	4 /8 4 <sup>3</sup> /8
05	1/ <sub>2</sub>	300FL	3	300	300	720	300	N/A	N/A	15	5 <sup>1</sup> / <sub>2</sub>	5	7	4 /8 4 <sup>3</sup> /8
08	3/4	FNPT	6.8	250	250	720	270	720	270	14	31/2	6	7	4 1/8
08	3/ <sub>4</sub>	150FL	6.8	250	250	275	270	275	270	16	4 <sup>7</sup> / <sub>8</sub>	6	7	4 /8 4 <sup>3</sup> /8
08	3/ <sub>4</sub>	300FL	6.8	250	250	720	270	720	270	20	7		7	4 /8 4 <sup>3</sup> /8
10	1	FNPT	10	200	200	720	240	720	240	16	4	6 7	7	
10			10							20	ļ	7	7	4 <sup>3</sup> / <sub>8</sub>
	1	150FL		200	200	275	240	275	240		5½	ļ		4 <sup>3</sup> / <sub>8</sub>
10	1	300FL	10	200	200	720	240	720	240	25	5½	7	7	4 <sup>3</sup> / <sub>8</sub>
15	1½	FNPT	22.5	150	150	720	170	720	170	21	7	8	8	4 <sup>3</sup> / <sub>16</sub>
15	1½	150FL	22.5	150	150	275	170	275	170	26	6½	9	8	4 <sup>3</sup> / <sub>16</sub>
15	1½	300FL	22.5	150	150	720	170	720	170	40	71/2	12	12	4 <sup>3</sup> / <sub>16</sub>
20	2	FNPT	40	150	150	400	220	400	220	34	103/4	8	10	41/2
20	2	150FL	40	150	150	275	220	275	220	39	10	9	10	4 <sup>1</sup> / <sub>2</sub>
20	2	300FL	46	150	150	720	220	720	220	50	10½	10	12	41/2
30	3	150FL	90	100	100	275	150	275	150	97	9 <sup>7</sup> / <sub>8</sub>	9	11	41½
30	3	300FL	96	100	100	720	150	300	150	112	113/4	11	12	41½
40	4	150FL	160	60	60	275	115	275	115	115	113/4	10	11	41½
40	4	300FL	160	60	60	720	115	300	115	125	14	13	14	41/2

\*PRESSURES - The above suffixes represent the maximum inlet differential pressure (psi) the valves can be opened against. Because the line pressure and flow are above the seat, tending to close the valve, all valves will shut and hold closed at emergency pressures greatly exceeding those figures shown. The maximum pressures are limited by ANSI B16.5/B16.34.

MOUNTING NOTE: All 2800 Series valves must be mounted in an upright position (as shown above). Valve bodies are to be mounted in a horizontal pipeline. For mounting in vertical pipeline or any other pipeline orientation, please consult the factory.

### **EXPANDED OFFERING/ADDITIONAL OPTIONS**

The 2800 series is a basic offering of the FM approved FIRE-CIDE® valves. In addition to all the features of the 2800 series, the 1700/1800 series is an expanded offering of our heat actuated fusible link shutoff valves including sizes from 1/4" to 8" will full port construction. The 1700/1800 series also offers additional options such as linkage covers, position indication switches, and buttweld or socketweld end connections. Materials for this series include Bronze, Naval Bronze, Alloy 20, Monel, and Hastelloy. For additional information and a catalog bulletin, please contact the factory.

## FIRE-CIDE® 2800 SERIES ORDERING CODE

	C /	lass	s /	ize	Lin	nk	Fail Position	Disc	Piston	Material	ANS	CL	Shaft Seal Mat'l
	2	8	2	0	Н	2	С	M	Р	S	1	F	Т
_	1	2	3	4	5	6	7	8	9	10	11	12	13

Class - Position 1 & 2 28 Valve Size - Position 3 & 4  $05 = \frac{1}{2}$  $08 = \frac{3}{4}$ 10 = 115 = 1½ 20 = 230 = 340 = 4

NOTE: Fusible links are UL approved. Threaded ends are available in  $\frac{1}{2}$ " to 2" only.

Link - Position 5 & 6 H1 = 135°F H2 = 165°F H3 = 212°F
H4 = 286°F H5 = 386°F
Fail Position - Position 7 C = Normally Closed
Disc - Position 8  M = Metal <sup>1</sup> T = Teflon®
Piston - Position 9 P = Pilot Operated D = Direct Operated S = Semi-direct <sup>2</sup>

Material - Position 10 S = Stainless Steel 316 CF8M C = Carbon Steel WCB ANSI CL - Position 11 & 12 1F = 150 Flanged 3F = 300 Flanged  $3T = 300 \text{ FNPT}^3$ Shaft Seal Mat'l - Position 13 T = Teflon® M = Metal

- 1. Valve standard offering
- 2. Liquid only
- 3. 1/2" to 2" only

### **EXAMPLE**: 2820H2CMPS1FT

2820	H2	С	MP	S	1F	Т
1,2,3,4	5,6	7	8,9	10	11,12	13

2820: 2-Way "FM" Approved safety shutoff, rotary shaft type Fire-Cide® Valve Horizontal pipe mounting; upright actuator 2" pipe size, 2" port; Cv = approx. 40

H2: 165°F fusible link

C: Fail Close, held openwith the link

M: Metal (Regrinding) valve disc

P: Pilot assisted operation

S: Stainless steel valve body and inner parts

1F: ANSI Class 150 RF flanged ends

T: Teflon® rotary shaft seal

- 1. Valve standard offering
- 2. Liquid only3. 1/2" to 2" valve size only
- 4. Valve standard offering up to 425°F

# N-OFF

## 2800 Series Fire-Cide® Valve Specification Form

Laurence Product, Fusible Link

LESLIE CONTROLS, INC.  A division of CIR©R International, Inc.  12501 Telecom Drive · Tampa, Florida 33637 (813) 978-1000 · FAX: (813)-978-0984  CONTROL VALVE SPEC SHEET  I have (or anticipate) a red	Project/Job Unit/Customer P.O./LCO File # Item Contract MFR Serial# quirement for a Fire Safety Shut Off valve as follo	DwgService						
QuantityPipe Size								
Fluid Handled		Spec. Grav						
Viscosity	Concentration F	Free of Solids?						
Max Inlet Pressure	Min/Max Fluid	I Temp						
Flow Rate	Max Allowable Pressure	e Drop						
Temperature Rating of Fu	sible Link Desired							
Body Mat'l	Inner Parts	Valve Disc						
☐ Screwed Ends ☐ Fla	nged 150 🗖 Flanged 300 🗖 Other							
☐ Horizontal Pipe Mount	ing	☐ Down Flow						
☐ Position Switch to Indicate- ☐ Valve Open ☐ Valve Closed ☐ SPDT ☐ DPDT								
Other Description								
☐ Please send copies of an applicable dimension drawing.								
☐ Please send additional copies of Laurence On-Off Valves Handbook.								

QUESTIONS? CALL LESLIE CONTROLS @ (813) 978-1000 PLEASE FAX COMPLETED FORM TO: (813) 977-0174