INSTRUCTION MANUAL

LIQUID LEVEL INDICATOR (LLi)

FIKE DOT / TC CONTAINERS USING 3M™ NOVEC™ 1230 FIRE PROTECTION FLUID

UL / ULC LISTINGS
FM APPROVAL

U.S. & Foreign Patents

P/N 06-918 (Rev. 0 / June, 2019)

Fike®

REVISION HISTORY

Original Release Date ..... June, 2019

Revision / Description of Change	Revision Date

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com

While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions. Fike reserves the right to make changes to the product or this document without notice

TABLE OF CONTENTS

FIGURES

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com

While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions. Fike reserves the right to make changes to the product or this document without notice

1.0 GENERAL

1.1 SCOPE

This manual contains specific information about the function and use of Fike's 70-1353 Series, Liquid Level Indicator (LLi). The information contained herein shall be used by Authorized Fike Sales Outlets for the service and maintenance of Fike's fire suppression systems engineered for use with 3M™ Novec™ 1230 Fire Protection Fluid.

1.2 PURPOSE

The NFPA 2001, *Standard for Clean Agent Fire Extinguishing Systems*, requires the agent quantity to be checked in agent storage containers semiannually. This task has traditionally been performed by removing the containers from the system and weighing them.

The purpose of the Fike LLi is to provide a reliable means, other than weighing, to determine the agent quantity in Fike agent storage containers. This feature simplifies the semiannual maintenance procedure by eliminating the need to remove the container(s) from the system and allows uninterrupted fire protection service.

NOTE: The LLi should **NOT** be used in place of scales when initial filling or recharging containers.

1.3 DESCRIPTION

The Fike LLi unit is permanently mounted on the agent storage container and is manually operated without interfering with the operation of the fire protection system.

A magnet-equipped float moves with the liquid level along the unit stem inside the storage container. Level readout is obtained by simply removing the protective cap and pulling out the calibrated indicator tape until magnetic interlock with the float is felt. The indicator tape is held at this point and the level is read where the calibration aligns with the top of the unit mounting. The reading obtained can then be converted to pounds of Novec 1230 fluid through the use of the charts provided. The indicator tape is lowered back into the unit and the protective cap replaced when not in use.

2.0 OPERATION AND USE

2.1 LIMITATIONS

The following conditions will affect the operation of the LLi and its ability to obtain an accurate level reading:

- The LLi will work accurately **only** when the container is in the position for which it is intended to be mounted. For example: upright containers with the discharge valve pointing up. The LLi will **NOT** work with the container lying on its side or where the container is not level.
- The LLi reading will change from an original known reading if any of the following conditions apply:
    1. A change in container storage temperature.
    2. A change in agent weight.
    3. A combination of both temperature and weight change.

NOTE: The conditions listed above are compensated for through the use of the charts and/or formulas contained in this manual.

- The LLi can be used with accurate results at a temperature range of 32°F to 130°F within the minimum / maximum fill range of the container.

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions. Fike reserves the right to make changes to the product or this document without notice

2.2 OBTAINING A READING

The following is a step-by-step procedure recommended by Fike as the appropriate way to obtain a liquid level indicator reading.

Step 1: Obtain the temperature reading within the area of the agent storage container using a thermometer or other temperature measuring device capable of measuring temperature within ±2.5°F. Record the temperature on the inspection tag.

NOTE: The container **MUST** be at a constant temperature for at least 24 hours to allow the agent temperature to stabilize before using the LLi.

Step 2: Remove the protective cap on the LLi and slowly pull out the indicator tape until the magnetic interlock is felt. The tape is read at the point where the indicator tape emerges from the black grommet on the unit. Make a mental note of this reading as it is an approximate reading only.

IMPORTANT NOTE: Pulling on the indicator tape too fast will cause the float to be lifted above the liquid level line giving a false liquid level reading.

Step 3: Quickly PUSH the indicator tape back into the unit after an approximate reading is obtained. This will break the magnetic interlock with the float and the float will return back to the liquid level line.

Step 4: Pull the indicator tape back out of the unit to within one inch or so of the approximate reading obtained in Step 2. At this point, very gradually pull the tape out until the magnetic interlock is felt. If the tape is pulled out too quickly, the float may be pulled partially or completely out of the liquid resulting in an erroneous reading. It is also important that the reading be obtained by pulling the tape out of the unit and not by pushing the tape in.

Step 5: Repeat Steps 3 and 4 until three consistent readings have been obtained. This can now be recorded on the inspection tag and used to determine the agent weight.

2.3 DETERMINING AGENT QUANTITY

Once the level reading has been established, the conversion to pounds of Novec 1230 fluid can be accomplished by the use of the appropriate container chart.

2.3.1 DETERMINATION BY CHARTS

To use the chart, locate the recorded temperature reading at the top of the chart; then follow the column down to the liquid level reading that is closest to the actual LLi reading obtained. Follow the row to the left to determine the corresponding weight of agent. For example, the level reading for a 100 pound container is found to be 10 15/16 inches at a storage temperature of 70°F. Figure 2.3.1-A, page 3, shows the level/weight relationship for a 100 pound container. Locate the 70° column and follow the column down to locate 10 15/16 inch liquid level indicator reading. Follow the line over to the left and the corresponding weight is found to be about 83 pounds. See Figures 2.3.1-A through 2.3.1-F for charts on each container size. See example problem in Section 2.5.

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions. Fike reserves the right to make changes to the product or this document without notice

Agent Weight #	Temperature Reading (± 2.5°F)											
	32	40	50	60	70	80	90	100	110	120	130	
47	3 7/16	3 1/2	3 9/16	3 11/16	3 3/4	3 7/8	3 15/16	4 1/16	4 1/8	4 1/4	4 5/16	Liquid Level Reading (in.)
48	3 5/8	3 11/16	3 3/4	3 7/8	3 15/16	4 1/16	4 3/16	4 1/4	4 3/8	4 7/16	4 9/16	
49	3 13/16	3 7/8	4	4 1/16	4 3/16	4 1/4	4 3/8	4 7/16	4 9/16	4 11/16	4 3/4	
50	4	4 1/16	4 3/16	4 1/4	4 3/8	4 7/16	4 9/16	4 11/16	4 3/4	4 7/8	4 15/16	
51	4 3/16	4 1/4	4 3/8	4 7/16	4 9/16	4 11/16	4 3/4	4 7/8	4 15/16	5 1/16	5 3/16	
52	4 3/8	4 7/16	4 9/16	4 11/16	4 3/4	4 7/8	5	5 1/16	5 3/16	5 1/4	5 3/8	
53	4 9/16	4 11/16	4 3/4	4 7/8	4 15/16	5 1/16	5 3/16	5 1/4	5 3/8	5 1/2	5 9/16	
54	4 3/4	4 7/8	4 15/16	5 1/16	5 3/16	5 1/4	5 3/8	5 1/2	5 9/16	5 11/16	5 13/16	
55	4 15/16	5 1/16	5 1/8	5 1/4	5 3/8	5 1/2	5 9/16	5 11/16	5 13/16	5 7/8	6	
56	5 3/16	5 1/4	5 3/8	5 7/16	5 9/16	5 11/16	5 3/4	5 7/8	6	6 1/8	6 3/16	
57	5 3/8	5 7/16	5 9/16	5 5/8	5 3/4	5 7/8	6	6 1/16	6 3/16	6 5/16	6 7/16	
58	5 9/16	5 5/8	5 3/4	5 7/8	5 15/16	6 1/16	6 3/16	6 5/16	6 3/8	6 1/2	6 5/8	
59	5 3/4	5 13/16	5 15/16	6 1/16	6 3/16	6 1/4	6 3/8	6 1/2	6 5/8	6 11/16	6 13/16	
60	5 15/16	6	6 1/8	6 1/4	6 3/8	6 1/2	6 9/16	6 11/16	6 13/16	6 15/16	7	
61	6 1/8	6 1/4	6 5/16	6 7/16	6 9/16	6 11/16	6 13/16	6 7/8	7	7 1/8	7 1/4	
62	6 5/16	6 7/16	6 1/2	6 5/8	6 3/4	6 7/8	7	7 1/8	7 3/16	7 5/16	7 7/16	
63	6 1/2	6 5/8	6 3/4	6 13/16	6 15/16	7 1/16	7 3/16	7 5/16	7 7/16	7 9/16	7 5/8	
64	6 11/16	6 13/16	6 15/16	7 1/16	7 3/16	7 1/4	7 3/8	7 1/2	7 5/8	7 3/4	7 7/8	
65	6 15/16	7	7 1/8	7 1/4	7 3/8	7 1/2	7 9/16	7 11/16	7 13/16	7 15/16	8 1/16	
66	7 1/8	7 3/16	7 5/16	7 7/16	7 9/16	7 11/16	7 13/16	7 15/16	8	8 1/8	8 1/4	
67	7 5/16	7 3/8	7 1/2	7 5/8	7 3/4	7 7/8	8	8 1/8	8 1/4	8 3/8	8 1/2	
68	7 1/2	7 9/16	7 11/16	7 13/16	7 15/16	8 1/16	8 3/16	8 5/16	8 7/16	8 9/16	8 11/16	
69	7 11/16	7 13/16	7 15/16	8 1/16	8 1/8	8 1/4	8 3/8	8 1/2	8 5/8	8 3/4	8 7/8	
70	7 7/8	8	8 1/8	8 1/4	8 3/8	8 1/2	8 5/8	8 3/4	8 7/8	9	9 1/8	
71	8 1/16	8 3/16	8 5/16	8 7/16	8 9/16	8 11/16	8 13/16	8 15/16	9 1/16	9 3/16	9 5/16	
72	8 1/4	8 3/8	8 1/2	8 5/8	8 3/4	8 7/8	9	9 1/8	9 1/4	9 3/8	9 1/2	

Figure 2.3.1-A (Part 1)
100 lb. Container (p/n 70-362)

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions.
Fike reserves the right to make changes to the product or this document without notice

Agent Weight #	Temperature Reading (± 2.5°F)											
	32	40	50	60	70	80	90	100	110	120	130	
73	8 7/16	8 9/16	8 11/16	8 13/16	8 15/16	9 1/16	9 3/16	9 5/16	9 7/16	9 9/16	9 11/16	Liquid Level Reading (in.)
74	8 11/16	8 3/4	8 7/8	9	9 1/8	9 1/4	9 7/16	9 9/16	9 11/16	9 13/16	9 15/16	
75	8 7/8	8 15/16	9 1/16	9 1/4	9 3/8	9 1/2	9 5/8	9 3/4	9 7/8	10	10 1/8	
76	9 1/16	9 3/16	9 5/16	9 7/16	9 9/16	9 11/16	9 13/16	9 15/16	10 1/16	10 3/16	10 5/16	
77	9 1/4	9 3/8	9 1/2	9 5/8	9 3/4	9 7/8	10	10 1/8	10 1/4	10 7/16	10 9/16	
78	9 7/16	9 9/16	9 11/16	9 13/16	9 15/16	10 1/16	10 3/16	10 3/8	10 1/2	10 5/8	10 3/4	
79	9 5/8	9 3/4	9 7/8	10	10 1/8	10 5/16	10 7/16	10 9/16	10 11/16	10 13/16	10 15/16	
80	9 13/16	9 15/16	10 1/16	10 3/16	10 3/8	10 1/2	10 5/8	10 3/4	10 7/8	11	11 3/16	
81	10	10 1/8	10 1/4	10 7/16	10 9/16	10 11/16	10 13/16	10 15/16	11 1/16	11 1/4	11 3/8	
82	10 1/4	10 5/16	10 7/16	10 5/8	10 3/4	10 7/8	11	11 3/16	11 5/16	11 7/16	11 9/16	
83	10 7/16	10 1/2	10 11/16	10 13/16	10 15/16	11 1/16	11 1/4	11 3/8	11 1/2	11 5/8	11 3/4	
84	10 5/8	10 3/4	10 7/8	11	11 1/8	11 5/16	11 7/16	11 9/16	11 11/16	11 7/8	12	
85	10 13/16	10 15/16	11 1/16	11 3/16	11 5/16	11 1/2	11 5/8	11 3/4	11 15/16	12 1/16	12 3/16	
86	11	11 1/8	11 1/4	11 3/8	11 9/16	11 11/16	11 13/16	12	12 1/8	12 1/4	12 3/8	
87	11 3/16	11 5/16	11 7/16	11 5/8	11 3/4	11 7/8	12	12 3/16	12 5/16	12 7/16	12 5/8	
88	11 3/8	11 1/2	11 5/8	11 13/16	11 15/16	12 1/16	12 1/4	12 3/8	12 1/2	12 11/16	12 13/16	
89	11 9/16	11 11/16	11 7/8	12	12 1/8	12 5/16	12 7/16	12 9/16	12 3/4	12 7/8	13	
90	11 3/4	11 7/8	12 1/16	12 3/16	12 5/16	12 1/2	12 5/8	12 13/16	12 15/16	13 1/16	13 1/4	
91	12	12 1/16	12 1/4	12 3/8	12 9/16	12 11/16	12 13/16	13	13 1/8	13 5/16	13 7/16	
92	12 3/16	12 5/16	12 7/16	12 9/16	12 3/4	12 7/8	13 1/16	13 3/16	13 5/16	13 1/2	13 5/8	
93	12 3/8	12 1/2	12 5/8	12 13/16	12 15/16	13 1/16	13 1/4	13 3/8	13 9/16	13 11/16	13 7/8	
94	12 9/16	12 11/16	12 13/16	13	13 1/8	13 5/16	13 7/16	13 5/8	13 3/4	13 7/8	14 1/16	
95	12 3/4	12 7/8	13	13 3/16	13 5/16	13 1/2	13 5/8	13 13/16	13 15/16	14 1/8	14 1/4	
96	12 15/16	13 1/16	13 1/4	13 3/8	13 9/16	13 11/16	13 7/8	14	14 1/8	14 5/16	14 7/16	
97	13 1/8	13 1/4	13 7/16	13 9/16	13 3/4	13 7/8	14 1/16	14 3/16	14 3/8	14 1/2	14 11/16	
98	13 5/16	13 7/16	13 5/8	13 3/4	13 15/16	14 1/16	14 1/4	14 7/16	14 9/16	14 3/4	14 7/8	

Figure 2.3.1-A (Part 2)
100 lb. Container (p/n 70-362)

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions.
Fike reserves the right to make changes to the product or this document without notice

Agent Weight #	Temperature Reading (± 2.5°F)											
	32	40	50	60	70	80	90	100	110	120	130	
99	13 1/2	13 11/16	13 13/16	14	14 1/8	14 5/16	14 7/16	14 5/8	14 3/4	14 15/16	15 1/16	Liquid Level Reading (in.)
100	13 3/4	13 7/8	14	14 3/16	14 5/16	14 1/2	14 5/8	14 13/16	15	15 1/8	15 5/16	
101	13 15/16	14 1/16	14 3/16	14 3/8	14 9/16	14 11/16	14 7/8	15	15 3/16	15 5/16	15 1/2	
102	14 1/8	14 1/4	14 3/8	14 9/16	14 3/4	14 7/8	15 1/16	15 3/16	15 3/8	15 9/16	15 11/16	
103	14 5/16	14 7/16	14 5/8	14 3/4	14 15/16	15 1/8	15 1/4	15 7/16	15 9/16	15 3/4	15 15/16	
104	14 1/2	14 5/8	14 13/16	14 15/16	15 1/8	15 5/16	15 7/16	15 5/8	15 13/16	15 15/16	16 1/8	
105	14 11/16	14 13/16	15	15 3/16	15 5/16	15 1/2	15 11/16	15 13/16	16	16 3/16	16 5/16	
106	14 7/8	15	15 3/16	15 3/8	15 1/2	15 11/16	15 7/8	16	16 3/16	16 3/8	16 9/16	
107	15 1/16	15 1/4	15 3/8	15 9/16	15 3/4	15 7/8	16 1/16	16 1/4	16 3/8	16 9/16	16 3/4	
108	15 5/16	15 7/16	15 9/16	15 3/4	15 15/16	16 1/8	16 1/4	16 7/16	16 5/8	16 3/4	16 15/16	

Figure 2.3.1-A (Part 3)
100 lb. Container (p/n 70-362)

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions.
Fike reserves the right to make changes to the product or this document without notice

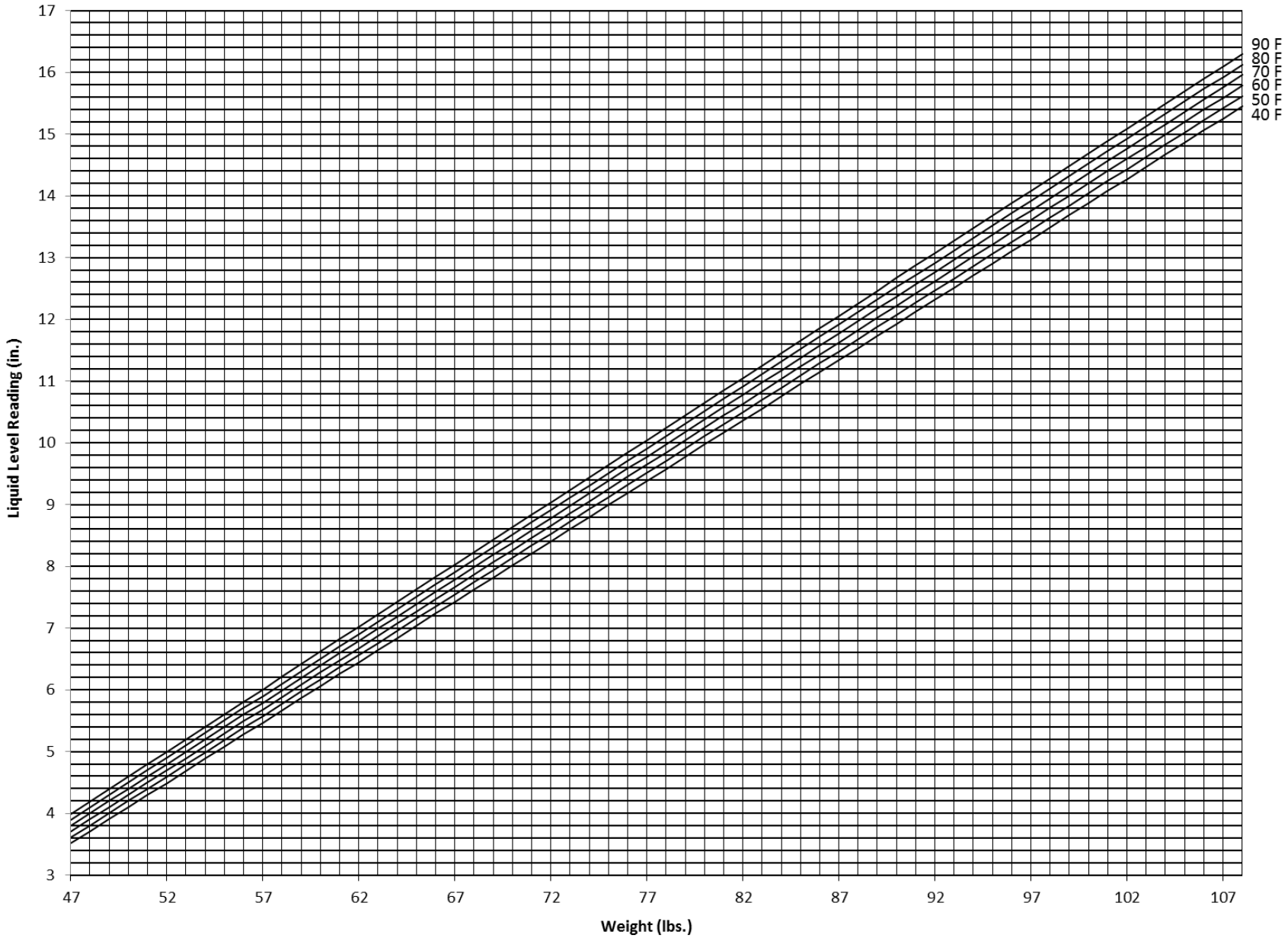

Figure 2.3.1-A
100 lb. Container (p/n 70-362)

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions.
Fike reserves the right to make changes to the product or this document without notice

Agent Weight #	Temperature Reading (± 2.5°F)											
	32	40	50	60	70	80	90	100	110	120	130	
65	2 5/8	2 5/8	2 11/16	2 3/4	2 13/16	2 13/16	2 7/8	2 15/16	3	3 1/16	3 1/16	Liquid Level Reading (in.)
70	2 7/8	2 15/16	2 15/16	3	3 1/16	3 1/8	3 3/16	3 1/4	3 5/16	3 5/16	3 3/8	
75	3 1/8	3 3/16	3 1/4	3 5/16	3 3/8	3 7/16	3 1/2	3 1/2	3 9/16	3 5/8	3 11/16	
80	3 7/16	3 1/2	3 9/16	3 9/16	3 5/8	3 11/16	3 3/4	3 13/16	3 7/8	3 15/16	4	
85	3 11/16	3 3/4	3 13/16	3 7/8	3 15/16	4	4 1/16	4 1/8	4 3/16	4 1/4	4 5/16	
90	4	4 1/16	4 1/8	4 3/16	4 1/4	4 5/16	4 3/8	4 7/16	4 1/2	4 9/16	4 5/8	
95	4 1/4	4 5/16	4 3/8	4 7/16	4 1/2	4 9/16	4 5/8	4 11/16	4 3/4	4 13/16	4 7/8	
100	4 9/16	4 5/8	4 11/16	4 3/4	4 13/16	4 7/8	4 15/16	5	5 1/16	5 1/8	5 3/16	
105	4 13/16	4 7/8	4 15/16	5	5 1/16	5 3/16	5 1/4	5 5/16	5 3/8	5 7/16	5 1/2	
110	5 1/8	5 3/16	5 1/4	5 5/16	5 3/8	5 7/16	5 1/2	5 9/16	5 11/16	5 3/4	5 13/16	
115	5 3/8	5 7/16	5 1/2	5 9/16	5 11/16	5 3/4	5 13/16	5 7/8	5 15/16	6 1/16	6 1/8	
120	5 11/16	5 3/4	5 13/16	5 7/8	5 15/16	6	6 1/8	6 3/16	6 1/4	6 5/16	6 7/16	
125	5 15/16	6	6 1/16	6 3/16	6 1/4	6 5/16	6 3/8	6 1/2	6 9/16	6 5/8	6 11/16	
130	6 1/4	6 5/16	6 3/8	6 7/16	6 9/16	6 5/8	6 11/16	6 3/4	6 7/8	6 15/16	7	
135	6 1/2	6 9/16	6 5/8	6 3/4	6 13/16	6 7/8	7	7 1/16	7 1/8	7 1/4	7 5/16	
140	6 13/16	6 7/8	6 15/16	7	7 1/8	7 3/16	7 1/4	7 3/8	7 7/16	7 9/16	7 5/8	
145	7 1/16	7 1/8	7 1/4	7 5/16	7 3/8	7 1/2	7 9/16	7 11/16	7 3/4	7 13/16	7 15/16	
150	7 3/8	7 7/16	7 1/2	7 5/8	7 11/16	7 3/4	7 7/8	7 15/16	8 1/16	8 1/8	8 1/4	

Figure 2.3.1-B
150 lb. Container (p/n 70-363)

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions.
Fike reserves the right to make changes to the product or this document without notice

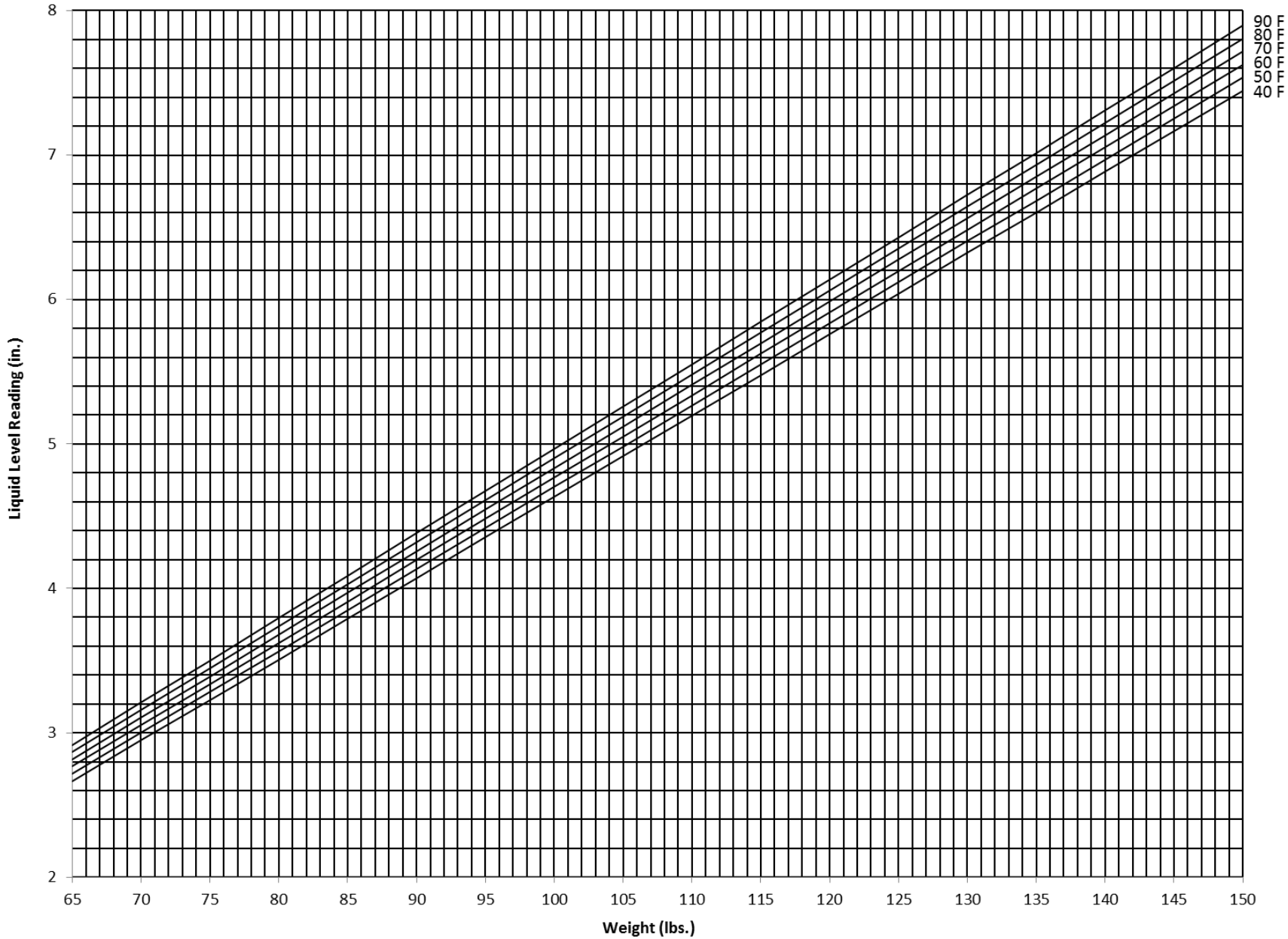

Figure 2.3.1-B
150 lb. Container (p/n 70-363)

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions.
Fike reserves the right to make changes to the product or this document without notice

Agent Weight #	Temperature Reading (± 2.5°F)											
	32	40	50	60	70	80	90	100	110	120	130	
90	2 3/16	2 3/16	2 1/4	2 5/16	2 3/8	2 3/8	2 7/16	2 1/2	2 9/16	2 5/8	2 5/8	Liquid Level Reading (in.)
95	2 7/16	2 1/2	2 9/16	2 5/8	2 5/8	2 11/16	2 3/4	2 13/16	2 7/8	2 7/8	2 15/16	
100	2 3/4	2 13/16	2 13/16	2 7/8	2 15/16	3	3 1/16	3 1/8	3 1/8	3 3/16	3 1/4	
105	3 1/16	3 1/16	3 1/8	3 3/16	3 1/4	3 5/16	3 3/8	3 3/8	3 7/16	3 1/2	3 9/16	
110	3 5/16	3 3/8	3 7/16	3 1/2	3 1/2	3 9/16	3 5/8	3 11/16	3 3/4	3 13/16	3 7/8	
115	3 5/8	3 5/8	3 11/16	3 3/4	3 13/16	3 7/8	3 15/16	4	4 1/16	4 1/8	4 3/16	
120	3 7/8	3 15/16	4	4 1/16	4 1/8	4 3/16	4 1/4	4 5/16	4 3/8	4 7/16	4 1/2	
125	4 3/16	4 1/4	4 5/16	4 3/8	4 7/16	4 1/2	4 9/16	4 5/8	4 11/16	4 11/16	4 3/4	
130	4 7/16	4 1/2	4 9/16	4 5/8	4 11/16	4 3/4	4 13/16	4 7/8	4 15/16	5	5 1/16	
135	4 3/4	4 13/16	4 7/8	4 15/16	5	5 1/16	5 1/8	5 3/16	5 1/4	5 5/16	5 3/8	
140	5 1/16	5 1/8	5 3/16	5 1/4	5 5/16	5 3/8	5 7/16	5 1/2	5 9/16	5 5/8	5 11/16	
145	5 5/16	5 3/8	5 7/16	5 1/2	5 9/16	5 11/16	5 3/4	5 13/16	5 7/8	5 15/16	6	
150	5 5/8	5 11/16	5 3/4	5 13/16	5 7/8	5 15/16	6	6 1/8	6 3/16	6 1/4	6 5/16	
155	5 7/8	5 15/16	6 1/16	6 1/8	6 3/16	6 1/4	6 5/16	6 3/8	6 7/16	6 9/16	6 5/8	
160	6 3/16	6 1/4	6 5/16	6 3/8	6 1/2	6 9/16	6 5/8	6 11/16	6 3/4	6 13/16	6 15/16	
165	6 1/2	6 9/16	6 5/8	6 11/16	6 3/4	6 13/16	6 15/16	7	7 1/16	7 1/8	7 1/4	
170	6 3/4	6 13/16	6 7/8	7	7 1/16	7 1/8	7 3/16	7 5/16	7 3/8	7 7/16	7 1/2	
175	7 1/16	7 1/8	7 3/16	7 1/4	7 3/8	7 7/16	7 1/2	7 9/16	7 11/16	7 3/4	7 13/16	
180	7 5/16	7 3/8	7 1/2	7 9/16	7 5/8	7 3/4	7 13/16	7 7/8	8	8 1/16	8 1/8	
185	7 5/8	7 11/16	7 3/4	7 7/8	7 15/16	8	8 1/8	8 3/16	8 1/4	8 3/8	8 7/16	
190	7 15/16	8	8 1/16	8 1/8	8 1/4	8 5/16	8 3/8	8 1/2	8 9/16	8 11/16	8 3/4	
195	8 3/16	8 1/4	8 3/8	8 7/16	8 1/2	8 5/8	8 11/16	8 13/16	8 7/8	8 15/16	9 1/16	
200	8 1/2	8 9/16	8 5/8	8 3/4	8 13/16	8 15/16	9	9 1/16	9 3/16	9 1/4	9 3/8	
205	8 3/4	8 7/8	8 15/16	9	9 1/8	9 3/16	9 5/16	9 3/8	9 1/2	9 9/16	9 11/16	
210	9 1/16	9 1/8	9 1/4	9 5/16	9 7/16	9 1/2	9 5/8	9 11/16	9 13/16	9 7/8	9 15/16	
215	9 3/8	9 7/16	9 1/2	9 5/8	9 11/16	9 13/16	9 7/8	10	10 1/16	10 3/16	10 1/4	
220	9 5/8	9 11/16	9 13/16	9 7/8	10	10 1/8	10 3/16	10 5/16	10 3/8	10 1/2	10 9/16	

Figure 2.3.1-C
215 lb. Container (p/n 70-364)

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions.
Fike reserves the right to make changes to the product or this document without notice

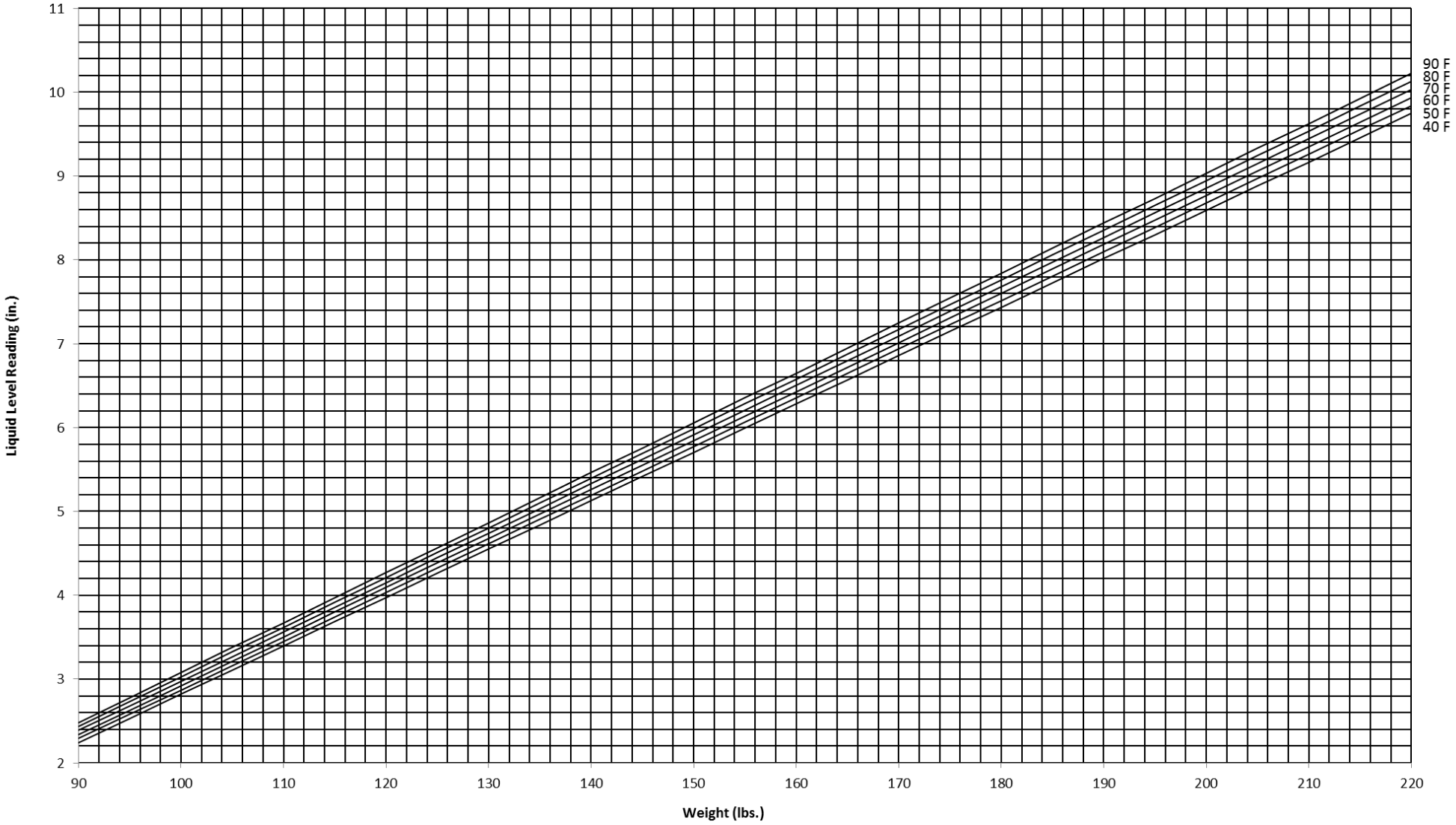

Figure 2.3.1-C
215 lb. Container (p/n 70-364)

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions.
Fike reserves the right to make changes to the product or this document without notice

Agent Weight #	Temperature Reading (± 2.5°F)											
	32	40	50	60	70	80	90	100	110	120	130	
160	1 13/16	1 13/16	1 7/8	1 15/16	2	2 1/16	2 1/8	2 3/16	2 1/4	2 1/4	2 5/16	Liquid Level Reading (in.)
163	2	2	2 1/16	2 1/8	2 3/16	2 1/4	2 5/16	2 3/8	2 7/16	2 1/2	2 1/2	
165	2 1/16	2 1/8	2 3/16	2 1/4	2 5/16	2 3/8	2 7/16	2 1/2	2 9/16	2 5/8	2 5/8	
170	2 3/8	2 7/16	2 1/2	2 9/16	2 5/8	2 11/16	2 3/4	2 13/16	2 7/8	2 15/16	3	
175	2 11/16	2 11/16	2 3/4	2 13/16	2 15/16	3	3 1/16	3 1/8	3 3/16	3 1/4	3 5/16	
180	2 15/16	3	3 1/16	3 1/8	3 3/16	3 1/4	3 3/8	3 7/16	3 1/2	3 9/16	3 5/8	
185	3 1/4	3 5/16	3 3/8	3 7/16	3 1/2	3 9/16	3 11/16	3 3/4	3 13/16	3 7/8	3 15/16	
190	3 1/2	3 9/16	3 11/16	3 3/4	3 13/16	3 7/8	3 15/16	4 1/16	4 1/8	4 3/16	4 1/4	
195	3 13/16	3 7/8	3 15/16	4 1/16	4 1/8	4 3/16	4 1/4	4 3/8	4 7/16	4 1/2	4 5/8	
200	4 1/8	4 3/16	4 1/4	4 5/16	4 7/16	4 1/2	4 9/16	4 11/16	4 3/4	4 13/16	4 15/16	
205	4 3/8	4 7/16	4 9/16	4 5/8	4 11/16	4 13/16	4 7/8	5	5 1/16	5 1/8	5 1/4	
210	4 11/16	4 3/4	4 13/16	4 15/16	5	5 1/8	5 3/16	5 5/16	5 3/8	5 1/2	5 9/16	
215	4 15/16	5 1/16	5 1/8	5 1/4	5 5/16	5 7/16	5 1/2	5 5/8	5 11/16	5 13/16	5 7/8	
220	5 1/4	5 5/16	5 7/16	5 1/2	5 5/8	5 3/4	5 13/16	5 15/16	6	6 1/8	6 3/16	
225	5 9/16	5 5/8	5 3/4	5 13/16	5 15/16	6	6 1/8	6 1/4	6 5/16	6 7/16	6 9/16	
230	5 13/16	5 15/16	6	6 1/8	6 1/4	6 5/16	6 7/16	6 9/16	6 5/8	6 3/4	6 7/8	
235	6 1/8	6 3/16	6 5/16	6 7/16	6 1/2	6 5/8	6 3/4	6 7/8	6 15/16	7 1/16	7 3/16	
240	6 3/8	6 1/2	6 5/8	6 11/16	6 13/16	6 15/16	7 1/16	7 3/16	7 1/4	7 3/8	7 1/2	
245	6 11/16	6 13/16	6 7/8	7	7 1/8	7 1/4	7 3/8	7 1/2	7 5/8	7 11/16	7 13/16	
250	7	7 1/16	7 3/16	7 5/16	7 7/16	7 9/16	7 11/16	7 13/16	7 15/16	8	8 1/8	
255	7 1/4	7 3/8	7 1/2	7 5/8	7 3/4	7 7/8	8	8 1/8	8 1/4	8 3/8	8 1/2	
260	7 9/16	7 5/8	7 3/4	7 15/16	8 1/16	8 3/16	8 5/16	8 7/16	8 9/16	8 11/16	8 13/16	
265	7 13/16	7 15/16	8 1/16	8 3/16	8 5/16	8 7/16	8 5/8	8 3/4	8 7/8	9	9 1/8	
270	8 1/8	8 1/4	8 3/8	8 1/2	8 5/8	8 3/4	8 7/8	9 1/16	9 3/16	9 5/16	9 7/16	

Figure 2.3.1-D (Part 1)
375 lb. Container (p/n 70-365)

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions.
Fike reserves the right to make changes to the product or this document without notice

Agent Weight #	Temperature Reading (± 2.5°F)											
	32	40	50	60	70	80	90	100	110	120	130	
275	8 7/16	8 1/2	8 11/16	8 13/16	8 15/16	9 1/16	9 3/16	9 3/8	9 1/2	9 5/8	9 3/4	Liquid Level Reading (in.)
280	8 11/16	8 13/16	8 15/16	9 1/8	9 1/4	9 3/8	9 1/2	9 11/16	9 13/16	9 15/16	10 1/16	
285	9	9 1/8	9 1/4	9 3/8	9 9/16	9 11/16	9 13/16	10	10 1/8	10 1/4	10 7/16	
290	9 1/4	9 3/8	9 9/16	9 11/16	9 13/16	10	10 1/8	10 5/16	10 7/16	10 9/16	10 3/4	
295	9 9/16	9 11/16	9 13/16	10	10 1/8	10 5/16	10 7/16	10 5/8	10 3/4	10 7/8	11 1/16	
300	9 7/8	10	10 1/8	10 5/16	10 7/16	10 5/8	10 3/4	10 15/16	11 1/16	11 1/4	11 3/8	
305	10 1/8	10 1/4	10 7/16	10 9/16	10 3/4	10 15/16	11 1/16	11 1/4	11 3/8	11 9/16	11 11/16	
310	10 7/16	10 9/16	10 3/4	10 7/8	11 1/16	11 3/16	11 3/8	11 9/16	11 11/16	11 7/8	12	
315	10 11/16	10 7/8	11	11 3/16	11 3/8	11 1/2	11 11/16	11 7/8	12	12 3/16	12 3/8	
320	11	11 1/8	11 5/16	11 1/2	11 5/8	11 13/16	12	12 3/16	12 5/16	12 1/2	12 11/16	
325	11 5/16	11 7/16	11 5/8	11 3/4	11 15/16	12 1/8	12 5/16	12 1/2	12 5/8	12 13/16	13	
330	11 9/16	11 3/4	11 7/8	12 1/16	12 1/4	12 7/16	12 5/8	12 13/16	12 15/16	13 1/8	13 5/16	
335	11 7/8	12	12 3/16	12 3/8	12 9/16	12 3/4	12 15/16	13 1/8	13 5/16	13 7/16	13 5/8	
340	12 3/16	12 5/16	12 1/2	12 11/16	12 7/8	13 1/16	13 1/4	13 7/16	13 5/8	13 13/16	13 15/16	
345	12 7/16	12 5/8	12 13/16	13	13 3/16	13 3/8	13 9/16	13 3/4	13 15/16	14 1/8	14 5/16	
350	12 3/4	12 7/8	13 1/16	13 1/4	13 7/16	13 5/8	13 7/8	14 1/16	14 1/4	14 7/16	14 5/8	
355	13	13 3/16	13 3/8	13 9/16	13 3/4	13 15/16	14 1/8	14 3/8	14 9/16	14 3/4	14 15/16	
360	13 5/16	13 7/16	13 11/16	13 7/8	14 1/16	14 1/4	14 7/16	14 11/16	14 7/8	15 1/16	15 1/4	
365	13 5/8	13 3/4	13 15/16	14 3/16	14 3/8	14 9/16	14 3/4	15	15 3/16	15 3/8	15 9/16	
370	13 7/8	14 1/16	14 1/4	14 7/16	14 11/16	14 7/8	15 1/16	15 5/16	15 1/2	15 11/16	15 7/8	
375	14 3/16	14 5/16	14 9/16	14 3/4	15	15 3/16	15 3/8	15 5/8	15 13/16	16	16 1/4	
378	14 3/8	14 1/2	14 3/4	14 15/16	15 1/8	15 3/8	15 9/16	15 13/16	16	16 3/16	16 7/16	
380	14 7/16	14 5/8	14 13/16	15 1/16	15 1/4	15 1/2	15 11/16	15 15/16	16 1/8	16 5/16	16 9/16	

Figure 2.3.1-D (Part 2)
375 lb. Container (p/n 70-365)

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions.
Fike reserves the right to make changes to the product or this document without notice

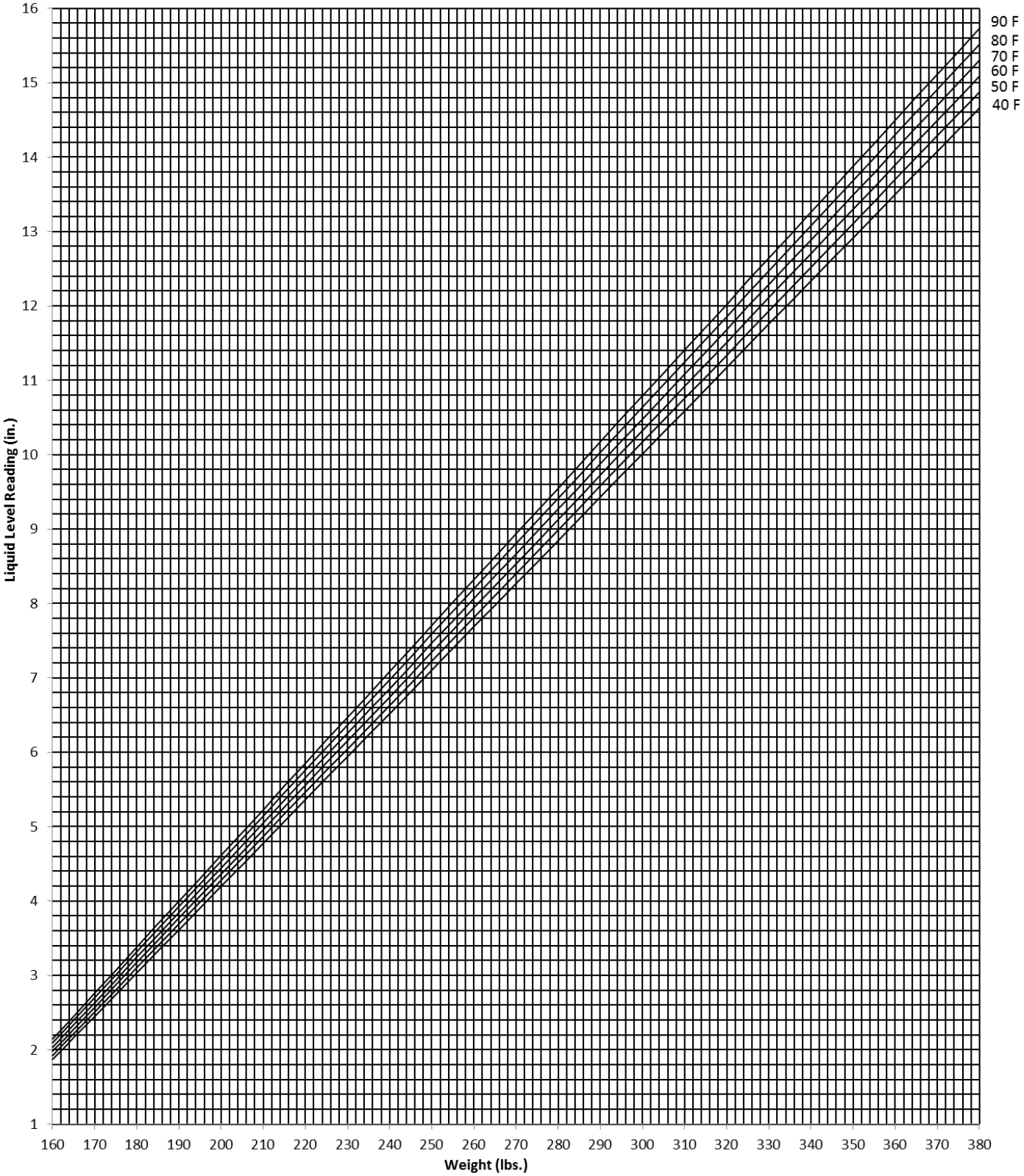

Figure 2.3.1-D
375 lb. Container (p/n 70-365)

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions. Fike reserves the right to make changes to the product or this document without notice

Agent Weight #	Temperature Reading (± 2.5°F)											
	32	40	50	60	70	80	90	100	110	120	130	
280	7 7/8	7 15/16	8 1/16	8 3/16	8 5/16	8 7/16	8 1/2	8 5/8	8 3/4	8 7/8	9	Liquid Level Reading (in.)
290	8 1/4	8 3/8	8 1/2	8 5/8	8 11/16	8 13/16	8 15/16	9 1/16	9 3/16	9 5/16	9 7/16	
300	8 11/16	8 3/4	8 7/8	9	9 1/8	9 1/4	9 3/8	9 1/2	9 5/8	9 3/4	9 7/8	
310	9 1/16	9 3/16	9 5/16	9 7/16	9 9/16	9 11/16	9 13/16	9 15/16	10 1/16	10 3/16	10 5/16	
320	9 1/2	9 9/16	9 11/16	9 13/16	9 15/16	10 1/8	10 1/4	10 3/8	10 1/2	10 5/8	10 3/4	
330	9 7/8	10	10 1/8	10 1/4	10 3/8	10 1/2	10 5/8	10 13/16	10 15/16	11 1/16	11 3/16	
340	10 1/4	10 3/8	10 1/2	10 11/16	10 13/16	10 15/16	11 1/16	11 3/16	11 3/8	11 1/2	11 5/8	
350	10 11/16	10 13/16	10 15/16	11 1/16	11 3/16	11 3/8	11 1/2	11 5/8	11 3/4	11 15/16	12 1/16	
360	11 1/16	11 3/16	11 5/16	11 1/2	11 5/8	11 3/4	11 15/16	12 1/16	12 3/16	12 3/8	12 1/2	
370	11 1/2	11 5/8	11 3/4	11 7/8	12 1/16	12 3/16	12 3/8	12 1/2	12 5/8	12 13/16	12 15/16	
380	11 7/8	12	12 3/16	12 5/16	12 7/16	12 5/8	12 3/4	12 15/16	13 1/16	13 1/4	13 3/8	
390	12 5/16	12 7/16	12 9/16	12 3/4	12 7/8	13 1/16	13 3/16	13 3/8	13 1/2	13 11/16	13 13/16	
400	12 11/16	12 13/16	13	13 1/8	13 5/16	13 7/16	13 5/8	13 3/4	13 15/16	14 1/8	14 1/4	
410	13 1/16	13 1/4	13 3/8	13 9/16	13 11/16	13 7/8	14 1/16	14 3/16	14 3/8	14 9/16	14 11/16	
420	13 1/2	13 5/8	13 13/16	13 15/16	14 1/8	14 5/16	14 7/16	14 5/8	14 13/16	15	15 1/8	
430	13 7/8	14	14 3/16	14 3/8	14 9/16	14 3/4	14 7/8	15 1/16	15 1/4	15 7/16	15 9/16	
440	14 5/16	14 7/16	14 5/8	14 13/16	14 15/16	15 1/8	15 5/16	15 1/2	15 11/16	15 13/16	16	
450	14 11/16	14 13/16	15	15 3/16	15 3/8	15 9/16	15 3/4	15 15/16	16 1/8	16 1/4	16 7/16	
460	15 1/8	15 1/4	15 7/16	15 5/8	15 13/16	16	16 3/16	16 3/8	16 1/2	16 11/16	16 7/8	
470	15 1/2	15 5/8	15 13/16	16	16 3/16	16 3/8	16 9/16	16 3/4	16 15/16	17 1/8	17 5/16	
480	15 7/8	16 1/16	16 1/4	16 7/16	16 5/8	16 13/16	17	17 3/16	17 3/8	17 9/16	17 3/4	

Figure 2.3.1-E (Part 1)
650 lb. Container (p/n 70-366)

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions. Fike reserves the right to make changes to the product or this document without notice

Agent Weight #	Temperature Reading (± 2.5°F)											
	32	40	50	60	70	80	90	100	110	120	130	
490	16 5/16	16 7/16	16 5/8	16 7/8	17 1/16	17 1/4	17 7/16	17 5/8	17 13/16	18	18 3/16	Liquid Level Reading (in.)
500	16 11/16	16 7/8	17 1/16	17 1/4	17 7/16	17 11/16	17 7/8	18 1/16	18 1/4	18 7/16	18 5/8	
510	17 1/8	17 1/4	17 1/2	17 11/16	17 7/8	18 1/16	18 5/16	18 1/2	18 11/16	18 7/8	19 1/8	
520	17 1/2	17 11/16	17 7/8	18 1/16	18 5/16	18 1/2	18 11/16	18 15/16	19 1/8	19 5/16	19 9/16	
530	17 15/16	18 1/16	18 5/16	18 1/2	18 11/16	18 15/16	19 1/8	19 5/16	19 9/16	19 3/4	20	
540	18 5/16	18 1/2	18 11/16	18 15/16	19 1/8	19 5/16	19 9/16	19 3/4	20	20 3/16	20 7/16	
550	18 11/16	18 7/8	19 1/8	19 5/16	19 9/16	19 3/4	20	20 3/16	20 7/16	20 5/8	20 7/8	
560	19 1/8	19 5/16	19 1/2	19 3/4	19 15/16	20 3/16	20 3/8	20 5/8	20 7/8	21 1/16	21 5/16	
570	19 1/2	19 11/16	19 15/16	20 1/8	20 3/8	20 5/8	20 13/16	21 1/16	21 1/4	21 1/2	21 3/4	
580	19 15/16	20 1/8	20 5/16	20 9/16	20 13/16	21	21 1/4	21 1/2	21 11/16	21 15/16	22 3/16	
590	20 5/16	20 1/2	20 3/4	21	21 3/16	21 7/16	21 11/16	21 15/16	22 1/8	22 3/8	22 5/8	
600	20 3/4	20 15/16	21 1/8	21 3/8	21 5/8	21 7/8	22 1/8	22 5/16	22 9/16	22 13/16	23 1/16	
610	21 1/8	21 5/16	21 9/16	21 13/16	22 1/16	22 5/16	22 1/2	22 3/4	23	23 1/4	23 1/2	
620	21 1/2	21 3/4	21 15/16	22 3/16	22 7/16	22 11/16	22 15/16	23 3/16	23 7/16	23 11/16	23 15/16	
630	21 15/16	22 1/8	22 3/8	22 5/8	22 7/8	23 1/8	23 3/8	23 5/8	23 7/8	24 1/8	24 3/8	
640	22 5/16	22 1/2	22 13/16	23 1/16	23 5/16	23 9/16	23 13/16	24 1/16	24 5/16	24 9/16	24 13/16	
650	22 3/4	22 15/16	23 3/16	23 7/16	23 11/16	23 15/16	24 1/4	24 1/2	24 3/4	25	25 1/4	
660	23 1/8	23 5/16	23 5/8	23 7/8	24 1/8	24 3/8	24 5/8	24 7/8	25 3/16	25 7/16	25 11/16	

Figure 2.3.1-E (Part 2)
650 lb. Container (p/n 70-366)

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions. Fike reserves the right to make changes to the product or this document without notice

Figure 2.3.1-E
650 lb. Container (p/n 70-366)

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions. Fike reserves the right to make changes to the product or this document without notice

Agent Weight #	Temperature Reading (± 2.5°F)											
	32	40	50	60	70	80	90	100	110	120	130	
440	3 5/16	3 7/16	3 5/8	3 13/16	3 15/16	4 1/8	4 5/16	4 1/2	4 11/16	4 13/16	5	Liquid Level Reading (in.)
450	3 11/16	3 13/16	4	4 3/16	4 3/8	4 9/16	4 3/4	4 15/16	5 1/8	5 1/4	5 7/16	
460	4 1/8	4 1/4	4 7/16	4 5/8	4 13/16	5	5 3/16	5 3/8	5 1/2	5 11/16	5 7/8	
470	4 1/2	4 5/8	4 13/16	5	5 3/16	5 3/8	5 9/16	5 3/4	5 15/16	6 1/8	6 5/16	
480	4 7/8	5 1/16	5 1/4	5 7/16	5 5/8	5 13/16	6	6 3/16	6 3/8	6 9/16	6 3/4	
490	5 5/16	5 7/16	5 5/8	5 7/8	6 1/16	6 1/4	6 7/16	6 5/8	6 13/16	7	7 3/16	
500	5 11/16	5 7/8	6 1/16	6 1/4	6 7/16	6 11/16	6 7/8	7 1/16	7 1/4	7 7/16	7 5/8	
510	6 1/8	6 1/4	6 1/2	6 11/16	6 7/8	7 1/16	7 5/16	7 1/2	7 11/16	7 7/8	8 1/8	
520	6 1/2	6 11/16	6 7/8	7 1/16	7 5/16	7 1/2	7 11/16	7 15/16	8 1/8	8 5/16	8 9/16	
530	6 15/16	7 1/16	7 5/16	7 1/2	7 11/16	7 15/16	8 1/8	8 5/16	8 9/16	8 3/4	9	
540	7 5/16	7 1/2	7 11/16	7 15/16	8 1/8	8 5/16	8 9/16	8 3/4	9	9 3/16	9 7/16	
550	7 11/16	7 7/8	8 1/8	8 5/16	8 9/16	8 3/4	9	9 3/16	9 7/16	9 5/8	9 7/8	
560	8 1/8	8 5/16	8 1/2	8 3/4	8 15/16	9 3/16	9 3/8	9 5/8	9 7/8	10 1/16	10 5/16	
570	8 1/2	8 11/16	8 15/16	9 1/8	9 3/8	9 5/8	9 13/16	10 1/16	10 1/4	10 1/2	10 3/4	
580	8 15/16	9 1/8	9 5/16	9 9/16	9 13/16	10	10 1/4	10 1/2	10 11/16	10 15/16	11 3/16	
590	9 5/16	9 1/2	9 3/4	10	10 3/16	10 7/16	10 11/16	10 15/16	11 1/8	11 3/8	11 5/8	
600	9 3/4	9 15/16	10 1/8	10 3/8	10 5/8	10 7/8	11 1/8	11 5/16	11 9/16	11 13/16	12 1/16	
610	10 1/8	10 5/16	10 9/16	10 13/16	11 1/16	11 5/16	11 1/2	11 3/4	12	12 1/4	12 1/2	
620	10 1/2	10 3/4	10 15/16	11 3/16	11 7/16	11 11/16	11 15/16	12 3/16	12 7/16	12 11/16	12 15/16	
630	10 15/16	11 1/8	11 3/8	11 5/8	11 7/8	12 1/8	12 3/8	12 5/8	12 7/8	13 1/8	13 3/8	

Figure 2.3.1-F (Part 1)
1000 lb. Container (p/n 70-367)

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions. Fike reserves the right to make changes to the product or this document without notice

Agent Weight #	Temperature Reading (± 2.5°F)											
	32	40	50	60	70	80	90	100	110	120	130	
640	11 5/16	11 1/2	11 13/16	12 1/16	12 5/16	12 9/16	12 13/16	13 1/16	13 5/16	13 9/16	13 13/16	Liquid Level Reading (in.)
650	11 3/4	11 15/16	12 3/16	12 7/16	12 11/16	12 15/16	13 1/4	13 1/2	13 3/4	14	14 1/4	
660	12 1/8	12 5/16	12 5/8	12 7/8	13 1/8	13 3/8	13 5/8	13 7/8	14 3/16	14 7/16	14 11/16	
670	12 9/16	12 3/4	13	13 1/4	13 9/16	13 13/16	14 1/16	14 5/16	14 5/8	14 7/8	15 1/8	
680	12 15/16	13 1/8	13 7/16	13 11/16	13 15/16	14 1/4	14 1/2	14 3/4	15	15 5/16	15 9/16	
690	13 5/16	13 9/16	13 13/16	14 1/8	14 3/8	14 5/8	14 15/16	15 3/16	15 7/16	15 3/4	16	
700	13 3/4	13 15/16	14 1/4	14 1/2	14 13/16	15 1/16	15 5/16	15 5/8	15 7/8	16 3/16	16 7/16	
710	14 1/8	14 3/8	14 5/8	14 15/16	15 3/16	15 1/2	15 3/4	16 1/16	16 5/16	16 5/8	16 7/8	
720	14 9/16	14 3/4	15 1/16	15 5/16	15 5/8	15 7/8	16 3/16	16 1/2	16 3/4	17 1/16	17 5/16	
730	14 15/16	15 3/16	15 7/16	15 3/4	16 1/16	16 5/16	16 5/8	16 7/8	17 3/16	17 1/2	17 3/4	
740	15 3/8	15 9/16	15 7/8	16 3/16	16 7/16	16 3/4	17 1/16	17 5/16	17 5/8	17 15/16	18 3/16	
750	15 3/4	16	16 1/4	16 9/16	16 7/8	17 3/16	17 7/16	17 3/4	18 1/16	18 3/8	18 5/8	
760	16 1/8	16 3/8	16 11/16	17	17 5/16	17 9/16	17 7/8	18 3/16	18 1/2	18 13/16	19 1/16	
770	16 9/16	16 13/16	17 1/8	17 3/8	17 11/16	18	18 5/16	18 5/8	18 15/16	19 1/4	19 1/2	
780	16 15/16	17 3/16	17 1/2	17 13/16	18 1/8	18 7/16	18 3/4	19 1/16	19 3/8	19 5/8	19 15/16	
790	17 3/8	17 5/8	17 15/16	18 1/4	18 9/16	18 7/8	19 3/16	19 7/16	19 3/4	20 1/16	20 3/8	
800	17 3/4	18	18 5/16	18 5/8	18 15/16	19 1/4	19 9/16	19 7/8	20 3/16	20 1/2	20 13/16	
810	18 1/8	18 7/16	18 3/4	19 1/16	19 3/8	19 11/16	20	20 5/16	20 5/8	20 15/16	21 5/16	
820	18 9/16	18 13/16	19 1/8	19 7/16	19 13/16	20 1/8	20 7/16	20 3/4	21 1/16	21 3/8	21 3/4	
830	18 15/16	19 1/4	19 9/16	19 7/8	20 3/16	20 1/2	20 7/8	21 3/16	21 1/2	21 13/16	22 3/16	
840	19 3/8	19 5/8	19 15/16	20 5/16	20 5/8	20 15/16	21 1/4	21 5/8	21 15/16	22 1/4	22 5/8	

Figure 2.3.1-F (Part 2)
1000 lb. Container (p/n 70-367)

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions. Fike reserves the right to make changes to the product or this document without notice

Agent Weight #	Temperature Reading (± 2.5°F)											
	32	40	50	60	70	80	90	100	110	120	130	
850	19 3/4	20	20 3/8	20 11/16	21 1/16	21 3/8	21 11/16	22 1/16	22 3/8	22 11/16	23 1/16	Liquid Level Reading (in.)
860	20 3/16	20 7/16	20 3/4	21 1/8	21 7/16	21 13/16	22 1/8	22 7/16	22 13/16	23 1/8	23 1/2	
870	20 9/16	20 13/16	21 3/16	21 1/2	21 7/8	22 3/16	22 9/16	22 7/8	23 1/4	23 9/16	23 15/16	
880	20 15/16	21 1/4	21 9/16	21 15/16	22 5/16	22 5/8	23	23 5/16	23 11/16	24	24 3/8	
890	21 3/8	21 5/8	22	22 3/8	22 11/16	23 1/16	23 3/8	23 3/4	24 1/8	24 7/16	24 13/16	
900	21 3/4	22 1/16	22 7/16	22 3/4	23 1/8	23 7/16	23 13/16	24 3/16	24 1/2	24 7/8	25 1/4	
910	22 3/16	22 7/16	22 13/16	23 3/16	23 1/2	23 7/8	24 1/4	24 5/8	24 15/16	25 5/16	25 11/16	
920	22 9/16	22 7/8	23 1/4	23 9/16	23 15/16	24 5/16	24 11/16	25 1/16	25 3/8	25 3/4	26 1/8	
930	23	23 1/4	23 5/8	24	24 3/8	24 3/4	25 1/8	25 7/16	25 13/16	26 3/16	26 9/16	
940	23 3/8	23 11/16	24 1/16	24 7/16	24 3/4	25 1/8	25 1/2	25 7/8	26 1/4	26 5/8	27	
950	23 3/4	24 1/16	24 7/16	24 13/16	25 3/16	25 9/16	25 15/16	26 5/16	26 11/16	27 1/16	27 7/16	
960	24 3/16	24 1/2	24 7/8	25 1/4	25 5/8	26	26 3/8	26 3/4	27 1/8	27 1/2	27 7/8	
970	24 9/16	24 7/8	25 1/4	25 5/8	26	26 7/16	26 13/16	27 3/16	27 9/16	27 15/16	28 5/16	
980	25	25 5/16	25 11/16	26 1/16	26 7/16	26 13/16	27 3/16	27 5/8	28	28 3/8	28 3/4	
990	25 3/8	25 11/16	26 1/16	26 1/2	26 7/8	27 1/4	27 5/8	28	28 7/16	28 13/16	29 3/16	
1000	25 13/16	26 1/8	26 1/2	26 7/8	27 1/4	27 11/16	28 1/16	28 7/16	28 7/8	29 1/4	29 5/8	
1010	26 3/16	26 1/2	26 7/8	27 5/16	27 11/16	28 1/16	28 1/2	28 7/8	29 1/4	29 11/16	30 1/16	
1020	26 9/16	26 15/16	27 5/16	27 11/16	28 1/8	28 1/2	28 15/16	29 5/16	29 11/16	30 1/8	30 1/2	
1030	27	27 5/16	27 11/16	28 1/8	28 1/2	28 15/16	29 5/16	29 3/4	30 1/8	30 9/16	30 15/16	
1040	27 3/8	27 3/4	28 1/8	28 9/16	28 15/16	29 3/8	29 3/4	30 3/16	30 9/16	31	31 3/8	
1050	27 13/16	28 1/8	28 9/16	28 15/16	29 3/8	29 3/4	30 3/16	30 5/8	31	31 7/16	31 13/16	

Figure 2.3.1-F (Part 3)
1000 lb. Container (p/n 70-367)

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions. Fike reserves the right to make changes to the product or this document without notice

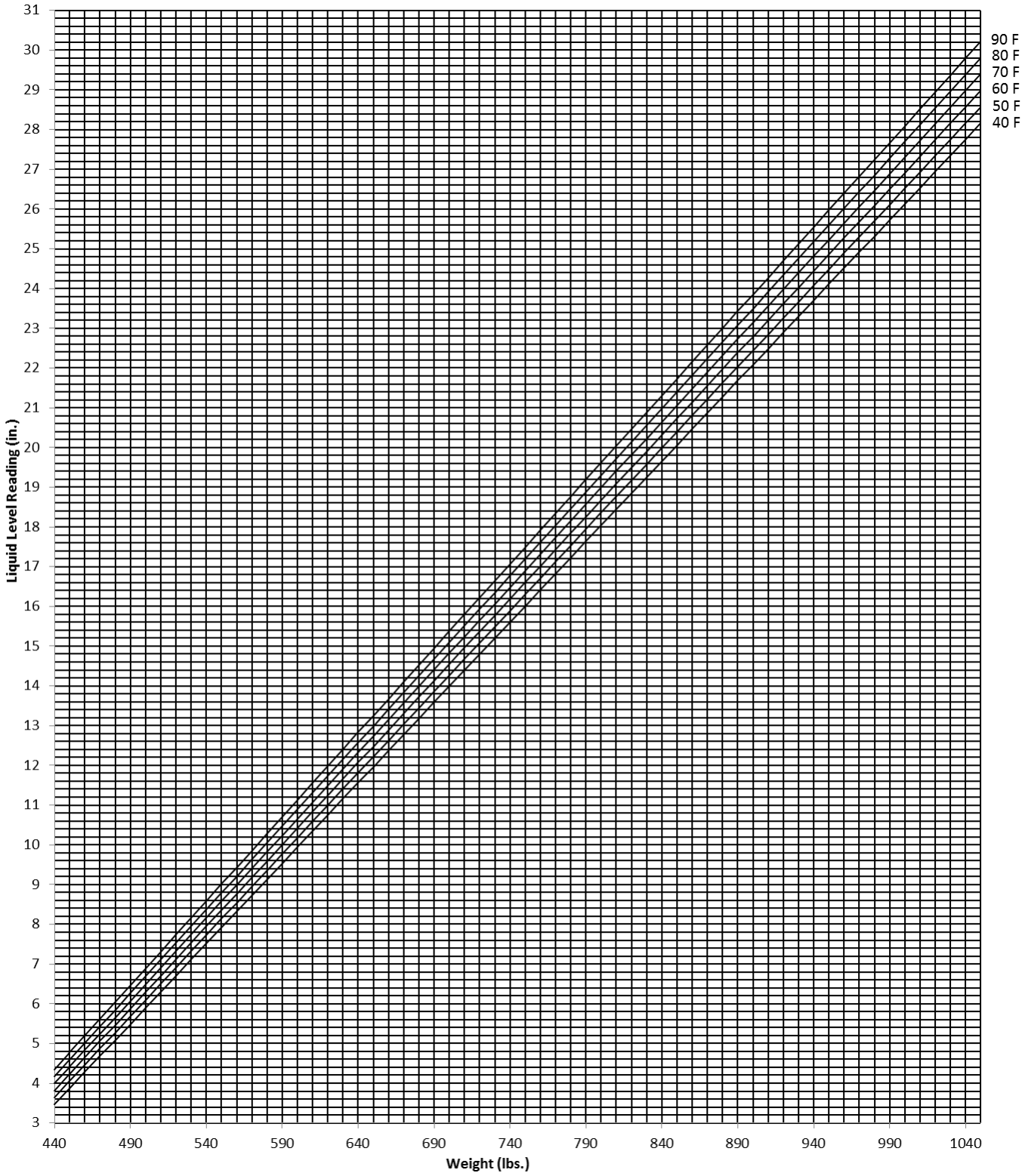

Figure 2.3.1-F
1000 lb. Container (p/n 70-367)

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions. Fike reserves the right to make changes to the product or this document without notice

2.3.2 MAXIMUM ALLOWABLE LOSS

The maximum weight loss allowed by NFPA 2001 is 5% of agent weight marked on the container label. To determine the maximum weight loss allowed on a container, simply multiply the original fill weight by .05, e.g., a container having an original fill weight of 80 pounds would have a maximum allowable weight loss of 4 pounds (i.e. 80 x 0.05 = 4 pounds). If the actual weight loss exceeds this value, the container **must** be recharged or replaced.

2.4 INSPECTION TAG

An inspection tag is attached to the LLi unit. This should be filled out at each maintenance interval. This information is useful in keeping track of the container's maintenance history. Figure 2.4 shows the inspection tag, which should be filled out after each inspection.

AGENT WEIGHT INSPECTION RECORD

Fike® Protection Systems

AUTHORIZED SERVICE BY: _____

CONTAINER P/N _____ TARE WEIGHT _____ AGENT WEIGHT _____

DATE	BY	COMPLETE IF USING LLi			COMPLETE IF WEIGHING			AGENT WEIGHT SHORTAGE	DISPOSITION
		TEMP	LEVEL READING	AGENT WEIGHT	GROSS WEIGHT	TARE WEIGHT	AGENT WEIGHT		

FIGURE 2.4

2.5 EXAMPLE PROBLEM

The following is a simple step-by-step example of a container weight check procedure.

Step 1: The thermometer or temperature indicating device is placed near the container to be checked.

Step 2: While waiting for the temperature indicator to stabilize, the container label is checked and found to be a 70-364 series container (215 pound capacity) with an original fill weight of 156 pounds.

Step 3: The level reading is obtained using the procedure outlined in Section 2.2 of this manual. The level reading is found to be 4-13/16 inches. This value is recorded on the inspection tag.

Step 4: The temperature indicator has now stabilized and found to be at 73°F. This value is recorded on the inspection tag.

Step 5: Using the chart (Figure 2.3.1-B page 9), locate the temperature at the top of the chart that is closest to the recorded temperature reading, rounding up or down; then follow the column down to the liquid level reading that is closest to the actual LLi reading obtained in Step 3. In this example 70°F is used.

Step 6: Follow the row to the left to determine the agent weight. The corresponding weight at this point is approximately 130 pounds. This value is recorded on the inspection tag.

Step 7: The maximum allowable loss is computed as follows: 156 pounds x 0.05 = 7.8 pounds maximum.

Step 8: The actual weight loss is computed as follows: original fill weight - current fill weight = pounds loss
156 - 130 = 26 pound loss

This value is recorded on the inspection tag.

Step 9: The actual weight loss is greater than the 5% maximum allowable weight loss; therefore, the container needs to be recharged. Record the container disposition on the inspection tag.

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com

While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions. Fike reserves the right to make changes to the product or this document without notice

TABLE A.1
DECIMAL EQUIVALENTS CHART

Fraction (in.)	Decimal (in.)
1/32	0.03125
1/16	0.0625
3/32	0.09375
1/8	0.125
5/32	0.15625
3/16	0.1875
7/32	0.21875
1/4	0.250
9/32	0.28125
5/16	0.3125
11/32	0.34375
3/8	0.375
13/32	0.40625
7/16	0.4375
15/32	0.46875
½	0.500
17/32	0.53125
9/16	0.5625
19/32	0.59375
5/8	0.625
21/32	0.65625
11/16	0.6875
23/32	0.71875
3/4	0.750
25/32	0.78125
13/16	0.8125
27/32	0.84375
7/8	0.875
29/32	0.90625
15/16	0.9375
31/32	0.96875

Fike®, 704 SW 10th Street, P.O. Box 610, Blue Springs, Missouri 64013-0610 U.S.A. ● Tel: (816) 229-3405 ● www.fike.com
While every precaution has been taken during the preparation of this document to ensure the accuracy of its content, Fike assumes no responsibility for errors or omissions. Fike reserves the right to make changes to the product or this document without notice

Fike®