

## Water Feeders – Electronic

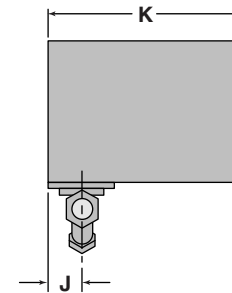
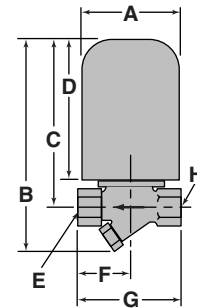
### Series WFE Uni-Match®



- Field-adjustable dwell-feed cycles
- Multi-Color LED status indicator
- Manual feed button
- Hard-stop limit to minimize chances of flooding the boiler
- Compatible with all electronic & mechanical Low Water Cut-Offs
- Includes adapters for connection to 1/2" copper tubing
- Removable strainer (replace after cleaning)
- Maximum water pressure 150 psi (10.5 kg/cm<sup>2</sup>)
- Maximum boiler pressure 15 psi (1 kg/cm<sup>2</sup>)
- Maximum water temperature 120°F (49°C)
- Maximum ambient temperature 100°F (38°C)
- Maximum power consumption (during water feed only)
  - 15 VA at 24 VAC
  - 20 VA at 120 VAC (50 or 60 Hz)



Series WFE



### Dimensions, in. (mm)

A	B	C	D	E NPT	F	G	H NPT	J	K
2 <sup>7</sup> / <sub>8</sub> (73)	6 <sup>1</sup> / <sub>4</sub> (159)	4 <sup>7</sup> / <sub>8</sub> (124)	4 <sup>1</sup> / <sub>4</sub> (108)	3/ <sub>8</sub>	1 <sup>17</sup> / <sub>32</sub> (39)	3 <sup>1</sup> / <sub>16</sub> (78)	3/ <sub>8</sub>	1 <sup>1</sup> / <sub>32</sub> (26)	5 <sup>13</sup> / <sub>16</sub> (148)

### Ordering Information

Model Number	Part Number	Description	Weight lbs. (kg)
WFE-24	169550	Electric Water Feeder, 24V	2.8 (1.3)
WFE-120	169560	Electric Water Feeder, 120V	2.8 (1.3)

## Water Feeders – Electric

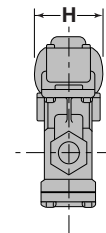
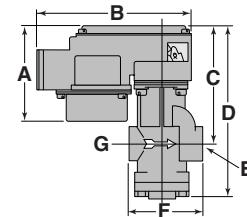
### Series 101-A Electric Water Feeders



- For low pressure steam boilers with **cold water feed**
- Eliminates necessity to manually add water to the boiler
- Can be used with mechanical or electronic low water cut-off controls
- Quick-change replaceable cartridge valve and strainer
- Manual feed button
- Model 101-A features a 120 VAC solenoid
- Model 101-A-24 features a 24 VAC solenoid and a separate 50VA transformer
- Maximum water supply pressure 150 psi (10.5 kg/cm<sup>2</sup>)
- Maximum boiler pressure 25 psi (1.8 kg/cm<sup>2</sup>)
- Maximum inlet water temperature 120°F (49°C)
- Maximum power consumption
  - 40 VA at 24 VAC
  - 40 VA at 120 VAC



Series 101-A



### Flow Data

Pressure Differential psi (kg/cm <sup>2</sup> )		Flow Rate gpm (lpm)	
5	(.4)	1.4	(5.3)
10	(.7)	1.7	(6.4)
20	(1.4)	2.1	(7.9)
40	(2.8)	2.9	(11.0)
60	(4.2)	3.4	(12.9)
80	(5.6)	4.0	(15.1)

### Dimensions, in. (mm)

A	B	C	D	E NPT	F	G NPT	H
4 <sup>1</sup> / <sub>16</sub> (103)	6 <sup>7</sup> / <sub>8</sub> (175)	5 <sup>1</sup> / <sub>8</sub> (130)	7 <sup>9</sup> / <sub>16</sub> (192)	1/2	3 <sup>5</sup> / <sub>16</sub>	1/2	3 (76)

### Ordering Information

Model Number	Part Number	Description	Weight lbs. (kg)
101A	169400	Electric water feeder, 120V	2.8 (1.3)
101A-24V	169500	Electric water feeder, 24V	2.8 (1.3)

## Water Feeders – Mechanical

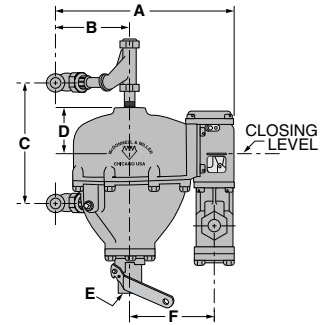
### Series 47/47-2 Mechanical Water Feeders/Low Water Cut-Offs



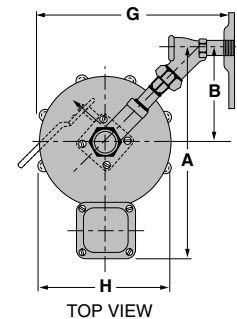
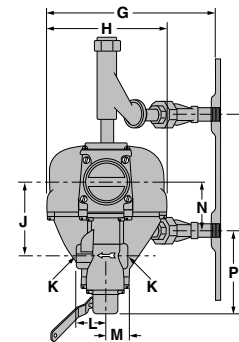
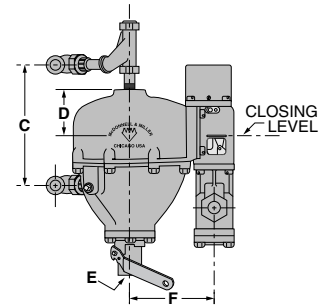
- For steam and hot water boilers with **cold water feed**
- Continuous maintenance of **minimum safe water level**, independent of electrical service
- Proportional feed action
- Quick hook-up fittings provided
- Quick-change replaceable cartridge valve and strainer
- Optional features
  - No. 2 switch
  - Manual reset
- Model 47 can be field upgraded with a No. 2 switch to add low water cut-off function
- Maximum water supply pressure 150 psi (10.5 kg/cm<sup>2</sup>)
- Maximum inlet water temperature 120°F (49°C)
- Maximum boiler pressure 25 psi (1.8 kg/cm<sup>2</sup>)



Series 47



Series 47-2



### Electrical Ratings

Voltage	Motor Switch Rating (Amperes)		Pilot Duty
	Full Load	Locked Rotor	
120 VAC	10.2	61.2	125 VA at 120 or 240 VAC 60 Hz
240 VAC	5.1	30.6	

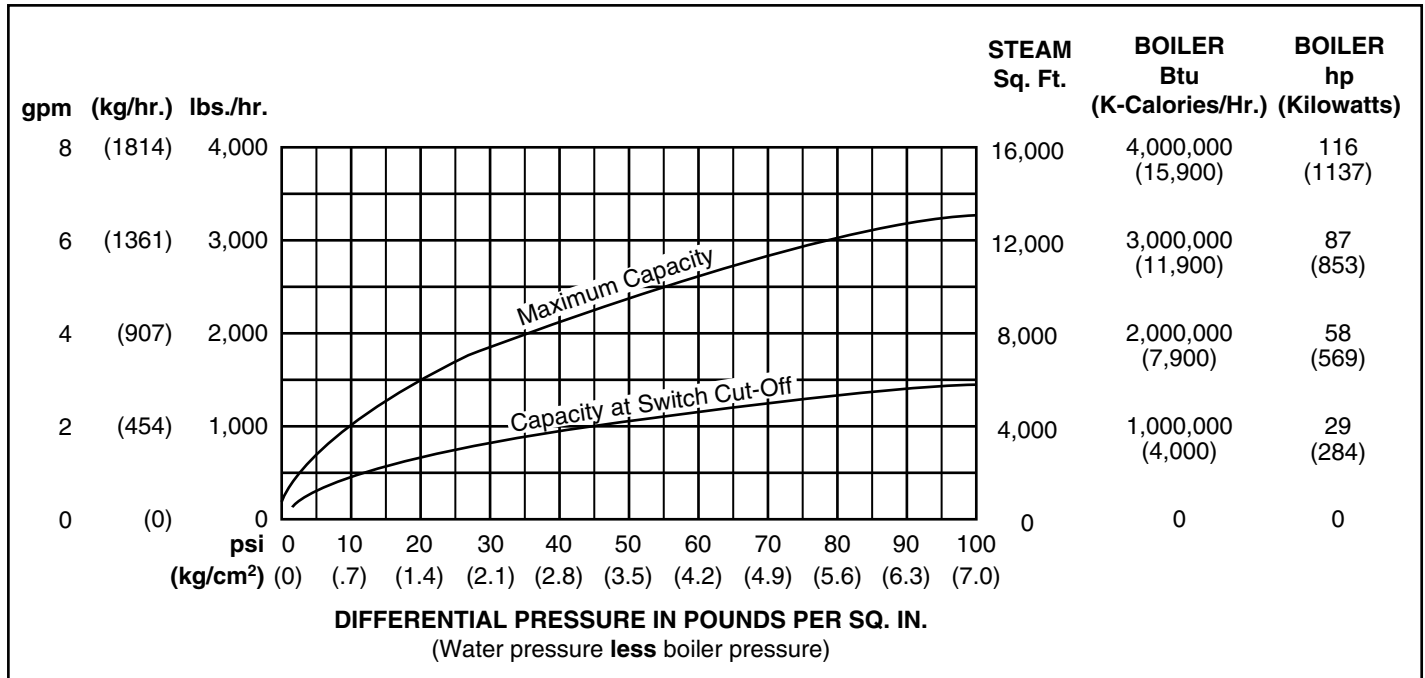
### Dimensions, in. (mm)

A	B	C	D	E	F	G
11 <sup>7</sup> / <sub>8</sub> (302)	5 <sup>1</sup> / <sub>4</sub> (133)	7 <sup>3</sup> / <sub>8</sub> (187) min. 14 (356) max.	2 <sup>5</sup> / <sub>8</sub> (67)	NPT 3/4	5 <sup>1</sup> / <sub>8</sub> (130)	10 <sup>5</sup> / <sub>8</sub> (270)
H	J	K	L	M	N	P
7 <sup>5</sup> / <sub>16</sub> (186)	4 <sup>5</sup> / <sub>8</sub> (117)	NPT 1/2	1 <sup>29</sup> / <sub>32</sub> (58.4)	1 <sup>13</sup> / <sub>32</sub> (35.7)	3 (76)	5 <sup>5</sup> / <sub>16</sub> (135)

## Water Feeders – Mechanical

### Series 47 (continued) Mechanical Water Feeders

#### Capacities



#### Ordering Information

Model Number	Part Number	Description	Weight lbs. (kg)
47	132700	Mechanical water feeder	27.5 (12.5)
47-2	132800	47 w/No. 2 switch	28.5 (13.0)
47-2-M	132900	47-2 w/manual reset	28.5 (13.0)
47-X	133400	47 w/o quick hook-up fittings	25.0 (11.4)
47-2X	176212	47-2 w/o quick hook-up fittings	26.0 (11.8)

## Water Feeders – Mechanical

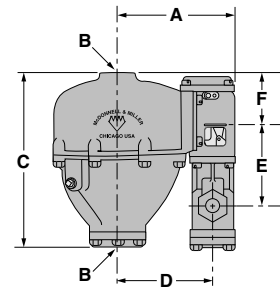
### Series 247/247-2 Mechanical Water Feeders/Low Water Cut-Offs



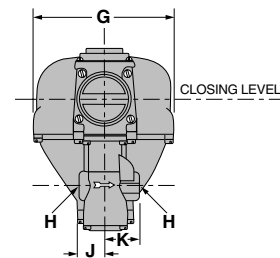
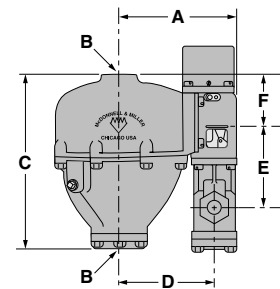
- For steam and hot water boilers with **cold water feed**
- Continuous maintenance of **minimum safe water level**, independent of electrical service
- Proportional feed action
- Quick-change replaceable cartridge valve and strainer
- Quiet, durable operation
- Isolated feed valve minimizes lime and scale build-up
- Optional features
  - No. 2 switch
  - Manual reset
- Model 247 can be field upgraded with a No. 2 switch to add low water cut-off function
- Maximum water supply pressure 150 psi (10.5 kg/cm<sup>2</sup>)
- Maximum inlet water temperature 120°F (49°C)
- Maximum vessel pressure 30 psi (2.1 kg/cm<sup>2</sup>)



Series 247



Series 247-2



### Electrical Ratings

Voltage	Motor Switch Rating (Amperes)		Pilot Duty
	Full Load	Locked Rotor	
120 VAC	10.2	61.2	125 VA at 120 or 240 VAC 60 Hz
240 VAC	5.1	30.6	

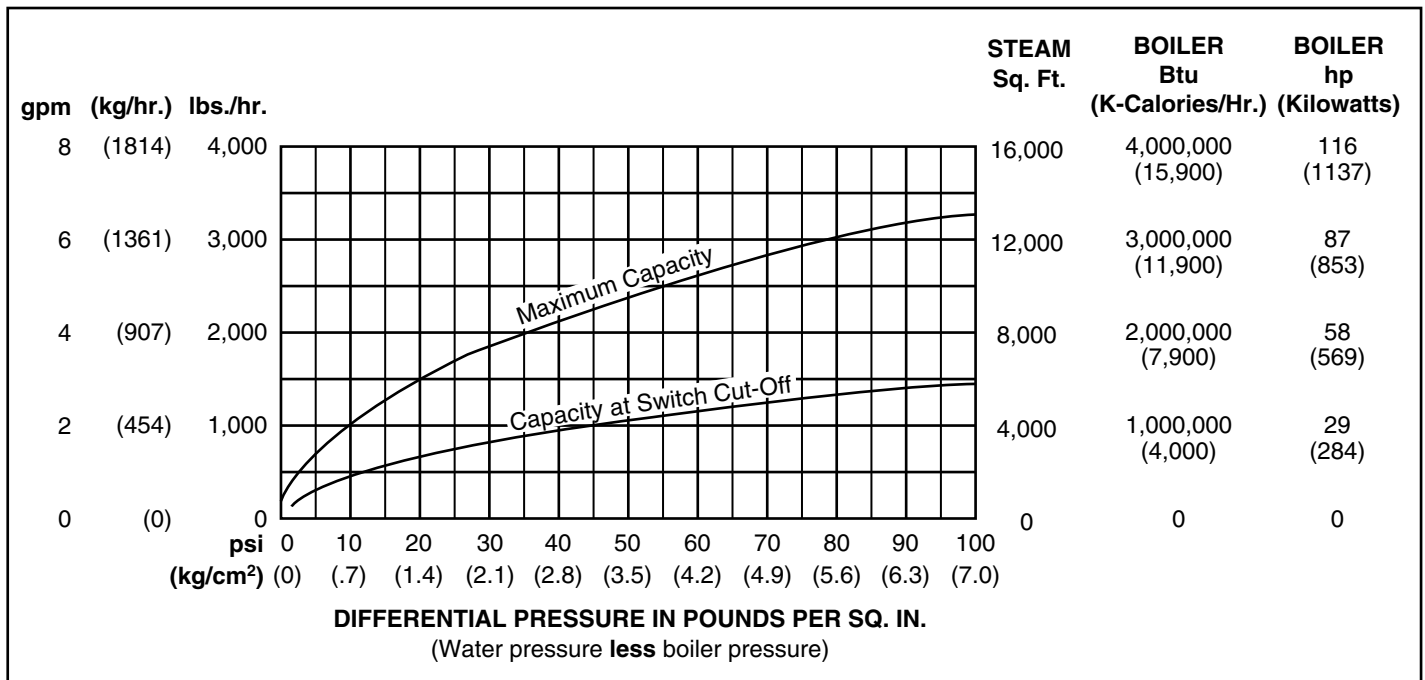
### Dimensions, in. (mm)

A	B NPT	C	D	E	F	G	H NPT	J	K
6½ (165)	1	9⅛ (232)	5⅛ (130)	4⅝ (117)	2⅝ (67)	7⅝ (186)	½	1⅜ (35.7)	1⅔ (48.4)

## Water Feeders – Mechanical

### Series 247 (continued) Mechanical Water Feeders

#### Capacities



#### Ordering Information

Model Number	Part Number	Description	Weight lbs. (kg)
247	133700	Mechanical water feeder	22.0 (10.0)
247-2	133800	247 w/No. 2 switch	22.5 (10.2)
247-2-M	133900	247-2 w/manual reset	22.5 (10.2)

Boiler Controls

## Water Feeders – Mechanical

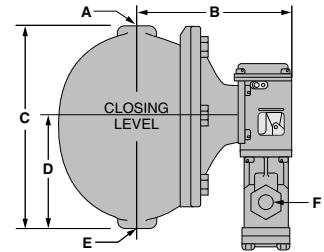
### Series 51/51-2 Mechanical Water Feeders/Low Water Cut-Offs



- For low pressure steam and hot water boilers larger than 5,000 sq. ft. (465m<sup>2</sup>) capacity with **cold water feed**
- Quick-change replaceable cartridge valve and strainer
- Optional features
  - No. 2 switch
  - Manual reset
  - Float block
- Proportional feed action
- Model 51 can be field upgraded with a No. 2 switch to add low water cut-off function
- Maximum water supply pressure 150 psi (10.5 kg/cm<sup>2</sup>)
- Maximum inlet water temperature 120°F (49°C)
- Maximum vessel pressure 35 psi (2.5 kg/cm<sup>2</sup>)



Series 51

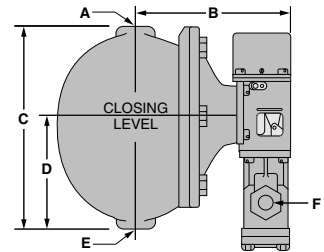


### Electrical Ratings

Voltage	Motor Switch Rating (Amperes)		Pilot Duty
	Full Load	Locked Rotor	
120 VAC	10.2	61.2	125 VA at 120 or 240 VAC 60 Hz
240 VAC	5.1	30.6	



Series 51-2



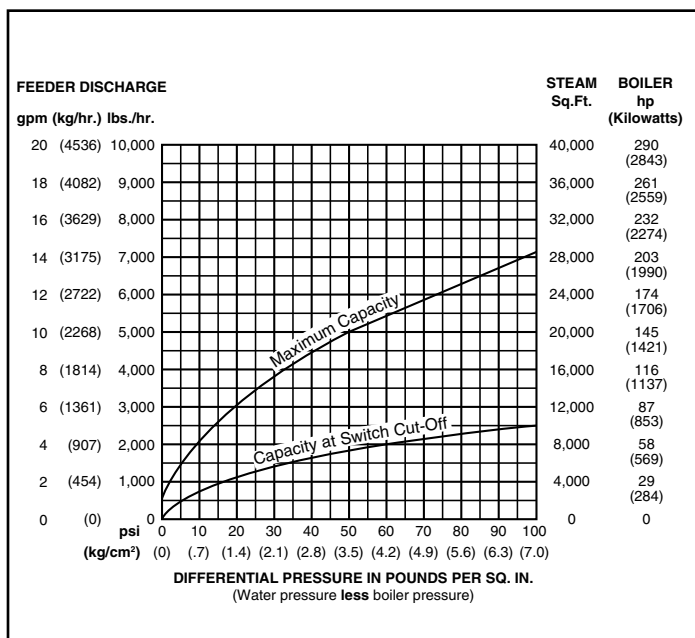
### Dimensions, in. (mm)

A	B	C	D	E	F
NPT				NPT	NPT
1	8 (203)	10 <sup>3</sup> / <sub>8</sub> (264)	5 <sup>3</sup> / <sub>4</sub> (146)	1	<sup>3</sup> / <sub>4</sub>

### Ordering Information

Model Number	Part Number	Description	Weight lbs. (kg)
51	134700	Mechanical water feeder	35.3 (16.0)
51-B	134800	51 w/float block	38.5 (17.5)
51-B-2	135400	51-B w/Series 2 switch	38.3 (17.4)
51-B-2-M	135500	51-B-2 w/manual reset	38.3 (17.4)
51-2	135000	51 w/Series 2 switch	35.8 (16.2)
51-2-M	135200	51-2 w/manual reset	35.7 (16.2)

### Capacities



## Water Feeders – Mechanical

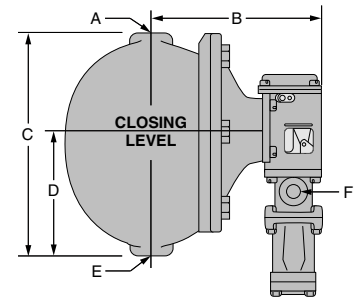
### Series 51-S/51-S-2 Mechanical Water Feeders/Low Water Cut-Offs



- For high capacity [up to 35,000 sq. ft. (3250m<sup>2</sup>)] low pressure steam and hot water boilers with **cold water feed**
- Optional features
  - No. 2 switch
  - Manual reset
  - Float block
- Proportional feed action
- Maximum water supply pressure 100 psi (7 kg/cm<sup>2</sup>)
- Maximum inlet water temperature 120°F (49°C)
- Maximum vessel pressure 35 psi (2.5 kg/cm<sup>2</sup>)



Series 51-S

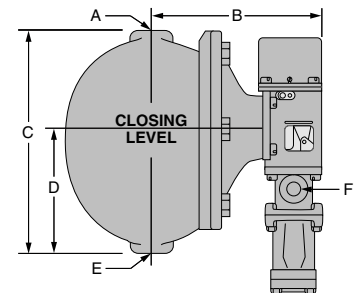


### Electrical Ratings

Voltage	Motor Switch Rating (Amperes)		Pilot Duty
	Full Load	Locked Rotor	
120 VAC	10.2	61.2	125 VA at 120 or 240 VAC 60 Hz
240 VAC	5.1	30.6	



Series 51-S-2



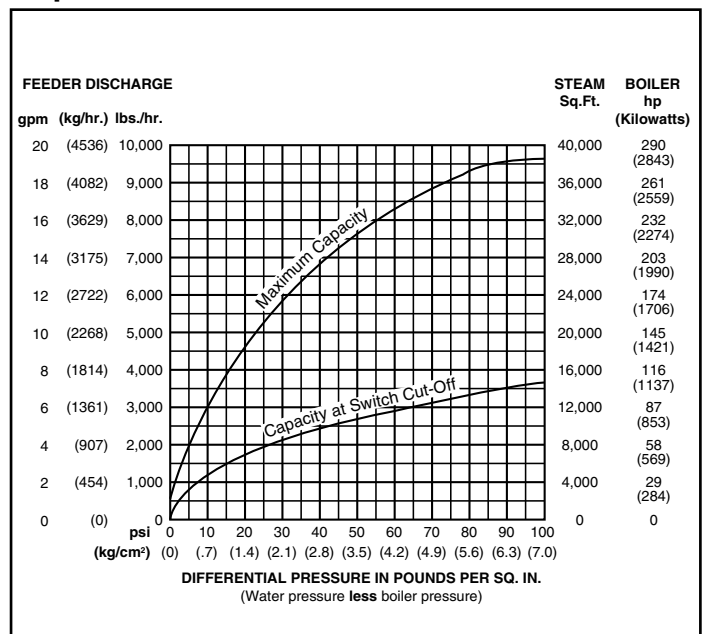
### Dimensions, in. (mm)

A	B	C	D	E	F
NPT				NPT	NPT
1	8 <sup>1</sup> / <sub>8</sub> (203)	10 <sup>3</sup> / <sub>8</sub> (264)	5 <sup>3</sup> / <sub>4</sub> (146)	1	<sup>3</sup> / <sub>4</sub>

### Ordering Information

Model Number	Part Number	Description	Weight lbs. (kg)
51-S	135600	Mechanical water feeder	36.5 (16.6)
51-S-2	135900	51-S w/No. 2 switch	37.3 (16.9)
51-S-2-M	136000	51-S-2 w/manual reset	37.3 (16.9)
51-SB	135700	51-S w/float block	41.8 (19.0)
51-SB-2	136300	51-SB w/No. 2 switch	41.8 (19.0)
51-SB-2-M	136100	51-SB-2 w/manual reset	43.7 (19.8)

### Capacities



Boiler Controls



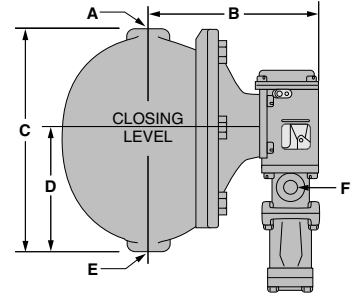
## Water Feeders – Mechanical

### Series 53/53-2 Mechanical Water Feeders/Low Water Cut-Offs

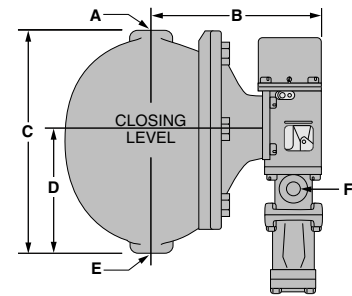
- For low pressure steam and hot water boilers larger than 5,000 sq. ft. (465m<sup>2</sup>) with hot or cold water feed
- Optional features
  - No. 2 switch
  - Manual reset
  - Float block
- Proportional feed action
- Model 53 can be field upgraded with a No. 2 switch to add low water cut-off function
- Maximum water supply pressure 150 psi (10.5 kg/cm<sup>2</sup>)
- Maximum inlet water temperature 120°F (49°C)
- Maximum vessel pressure 75 psi (5.3 kg/cm<sup>2</sup>)



Series 53



Series 53-2



### Electrical Ratings

Voltage	Motor Switch Rating (Amperes)		Pilot Duty
	Full Load	Locked Rotor	
120 VAC	10.2	61.2	125 VA at 120 or 240 VAC 60 Hz
240 VAC	5.1	30.6	

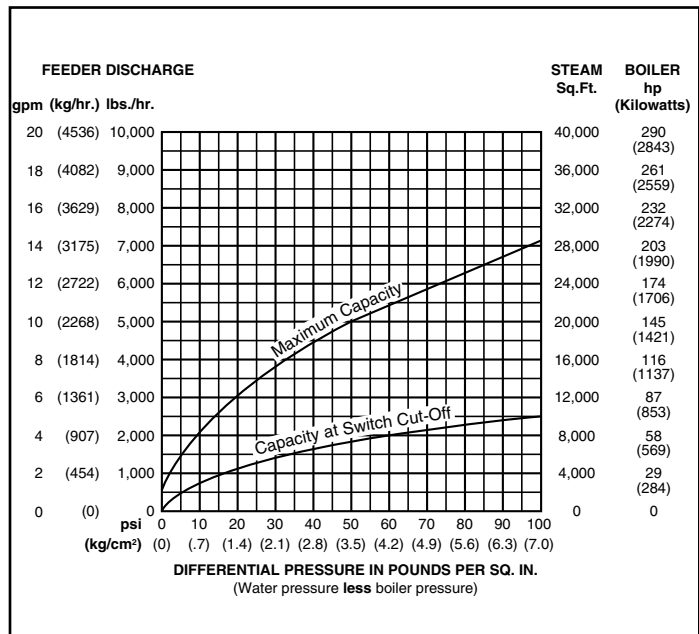
### Dimensions, in. (mm)

A	B	C	D	E	F
NPT				NPT	NPT
1	8 <sup>1</sup> / <sub>8</sub> (206)	10 <sup>3</sup> / <sub>8</sub> (264)	5 <sup>3</sup> / <sub>4</sub> (146)	1	<sup>3</sup> / <sub>4</sub>

### Ordering Information

Model Number	Part Number	Description	Weight lbs. (kg)
53	136900	Mechanical water feeder	38.0 (17.2)
53-B	137400	53 w/float block	42.0 (19.0)
53-B-2	137500	53-B w/No. 2 switch	42.0 (19.0)
53-B-2-M	137600	53-B w/No. 2 switch & manual reset	42.0 (19.0)
53-2	137100	53 w/No. 2 switch	38.5 (17.5)
53-2-M	137200	53-2 w/manual reset	38.5 (17.5)

### Capacities



## Make-Up Water Feeders

In boiler feed systems with higher pressures, a make-up feeder is usually provided on the condensate receiver. It adds water to the receiver when necessary so there is always an adequate supply for boiler demand.

McDonnell & Miller Make-up feeders provide large feeding capacity. Unless otherwise stated, valves and seats are of stainless steel and protected by a large integral strainer. Positive alignment of the valve is assured by cam & roller, straight thrust action. These feeders can be used for many other liquid control applications such as:

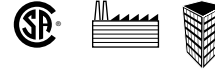
- Pharmaceutical
- Laboratory
- Industrial
- Distillation equipment
- Receiver tanks
- Evaporative coolers
- Humidifiers
- Aquariums
- Steam baths
- Wet and dry hygrometers

### Water Feeding Capacity lbs./hr. (kg/hr.)

Model Number	City Water Supply Pressure with 3/4" NPT Pipe and No Tank Pressure, 0 psi (kg/cm <sup>2</sup> )								
	10 (.7)	20 (1.4)	30 (2.1)	40 (2.8)	50 (3.5)	60 (4.1)	70 (4.8)	80 (5.5)	90 (6.2)
25-A	3100 (1406)	4500 (2041)	5600 (2540)	6550 (2971)	7400 (3357)	8150 (3697)	8800 (3992)	9400 (4264)	10200 (4627)
21 & 221	4100 (1860)	6000 (2722)	7500 (3402)	8600 (3901)	9600 (4355)	10500 (4763)	11300 (5126)	12000 (5443)	13200 (5988)
847	1000 (454)	1500 (680)	1800 (816)	2100 (953)	2400 (1089)	2600 (1179)	2800 (1270)	3000 (1361)	3300 (1497)
851	2000 (907)	3000 (1361)	3700 (1678)	4300 (1850)	4800 (2177)	—	—	—	—
851-S	3000 (1361)	4000 (1814)	5000 (2268)	6200 (2812)	—	—	—	—	—
551-S	2500 (1134)	3600 (1633)	4500 (2041)	5200 (2359)	5800 (2631)	6500 (2948)	7000 (3175)	7600 (3447)	8800 (3992)

## Water Feeders – Make-Up

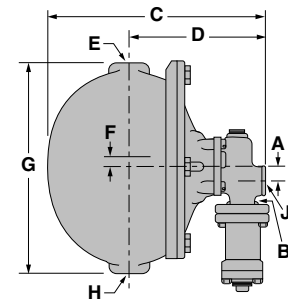
### Series 25-A Make-Up Water Feeder



- For boiler receiver tanks
- Float operated
- Proportional feed action
- Soft seat provides positive seal
- Seal between float chamber and valve chamber is not a positive seal
- Maximum water supply pressure 100 psi (7 kg/cm<sup>2</sup>)
- Maximum inlet water temperature 120°F (49°C)
- Maximum vessel pressure 35 psi (2.5 kg/cm<sup>2</sup>)



Series 25-A



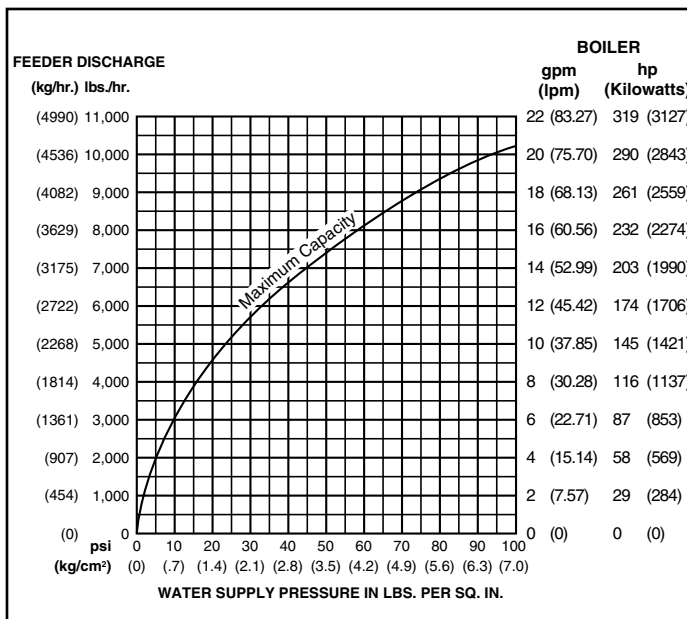
### Dimensions, in. (mm)

A	B NPT	C	D	E NPT	F	G	H NPT	J NPT
1 <sup>3</sup> / <sub>16</sub> (21)	3/4	12 <sup>1</sup> / <sub>4</sub> (311)	8 <sup>1</sup> / <sub>8</sub> (206)	1	1/2 (12.7)	10 <sup>3</sup> / <sub>8</sub> (264)	1	3/4

### Ordering Information

Model Number	Part Number	Description	Weight lbs. (kg)
25-A	126800	Make-up water feeder	37.5 (17)
25-AB	126900	25-A w/float block	41.8 (19)

### Capacities



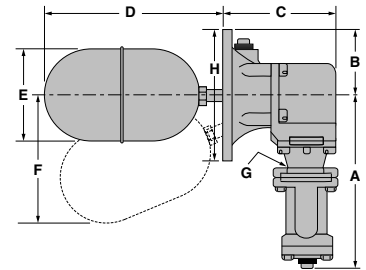
## Water Feeders – Make-Up

### Series 21 Make-Up Water Feeder

- For boiler receiver tanks
- Direct mounting eliminates need for equalizing connections
- Proportional feed action
- Mounting Flange – six  $\frac{7}{16}$ " (11.1mm) bolt holes on a  $5\frac{3}{4}$ " (146mm) bolt circle
- Soft seat provides positive seal
- Maximum water supply pressure 150 psi (10.5 kg/cm<sup>2</sup>)
- Maximum inlet water temperature 120°F (49°C)
- Maximum vessel pressure 35 psi (2.5 kg/cm<sup>2</sup>)



Series 21



### Dimensions, in. (mm)

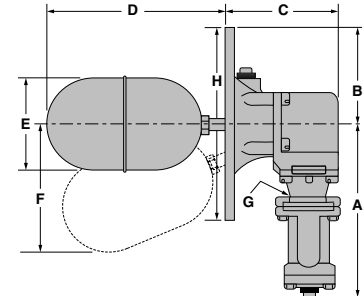
A	B	C	D	E	F	G NPT	H
8½ (216)	3⅝ (84)	5⅝ (143)	8⅓/16 (224)	4¾ (121)	6¼ (159)	¾	7⅝ (186)

### Series 221 Make-Up Water Feeder

- For boiler receiver tanks
- Direct mounting eliminates need for equalizing connections
- Proportional feed action
- Mounting Flange – six  $\frac{17}{32}$ " (13.5mm) bolt holes on a  $8\frac{1}{2}$ " (216mm) bolt circle
- Soft seat provides positive seal
- Maximum water supply pressure 150 psi (10.5 kg/cm<sup>2</sup>)
- Maximum inlet water temperature 120°F (49°C)
- Maximum vessel pressure 35 psi (2.5 kg/cm<sup>2</sup>)



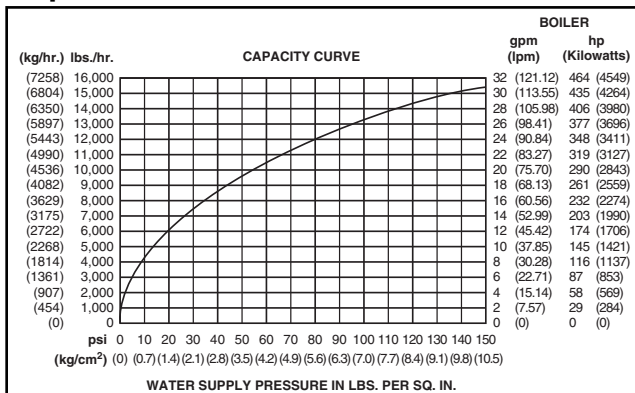
Series 221



### Dimensions, in. (mm)

A	B	C	D	E	F	G NPT	H
8½ (216)	4⅞ (124)	5⅝ (143)	8⅓/16 (224)	4¾ (121)	6¼ (159)	¾ (20)	9½ (241)

### Capacities



### Ordering Information

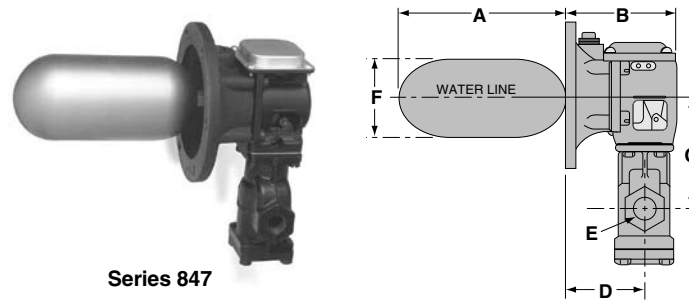
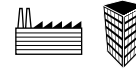
Model Number	Part Number	Description	Weight lbs. (kg)
21	126400	Make-up water feeder	15.3 (6.9)
221	126600	Make-up water feeder	21.3 (9.7)

Boiler Controls

## Water Feeders – Make-Up

### Series 847 Make-Up Water Feeder

- For receiver tanks in commercial or industrial applications
- Mounts directly on the receiver, eliminating need for equalizing connections
- Quick-change replaceable cartridge valve and strainer
- Proportional feed action
- Mounting Flange – six  $\frac{7}{16}$ " (11.1mm) bolt holes on a  $5\frac{3}{4}$ " (146mm) bolt circle
- Optional features
  - No. 2 switch
  - Alternate valve orientation
- Maximum supply pressure 150 psi (10.5 kg/cm<sup>2</sup>)
- Maximum inlet water temperature 120°F (49°C)
- Maximum receiver pressure 25 psi (1.8 kg/cm<sup>2</sup>)



Boiler Controls

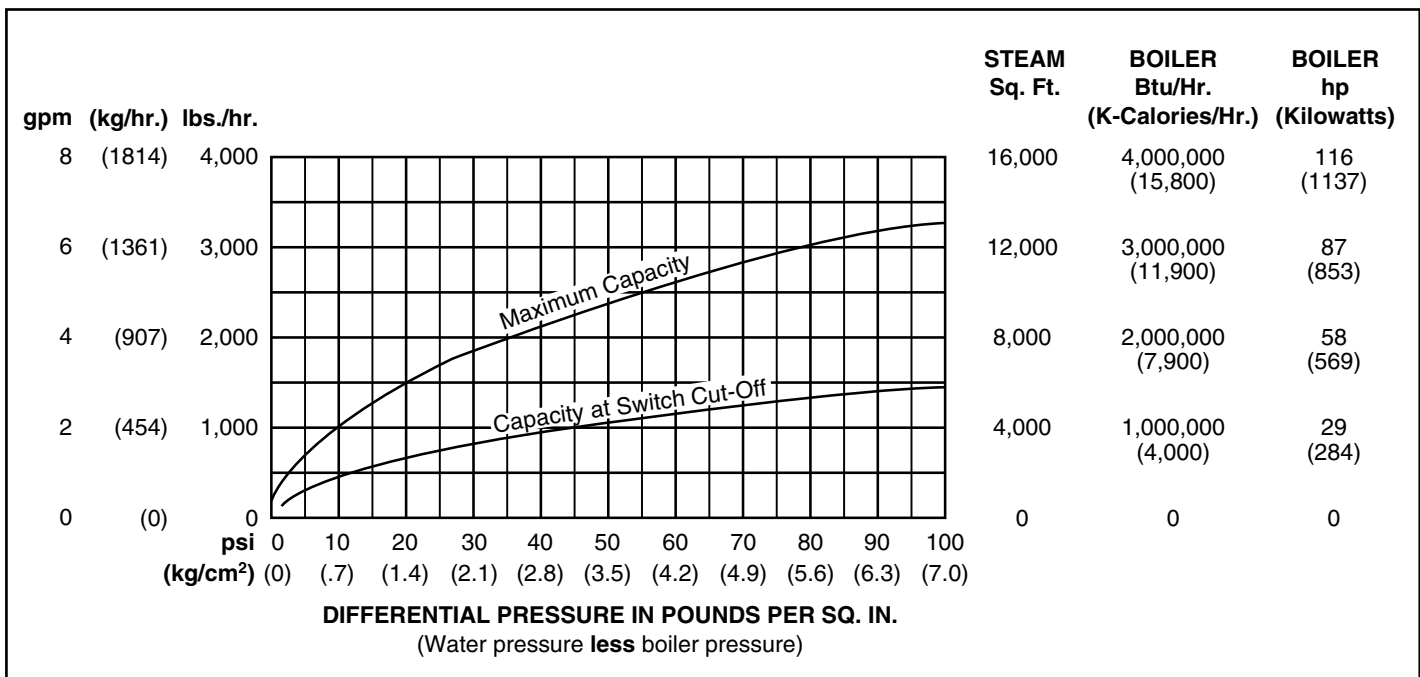
### Dimensions, in. (mm)

A	B	C	D	E NPT	F
$7\frac{5}{16}$ (186)	$4\frac{15}{16}$ (125)	$4\frac{5}{8}$ (117)	$3\frac{9}{16}$ (90)	$\frac{1}{2}$	$3\frac{7}{16}$ (87)

### Ordering Information

Model Number	Part Number	Description	Weight lbs. (kg)
847	134300	Make-up water feeder	11 (5.0)
847-C	134350	847 w/alternate valve orientation	12 (5.4)
847-C-2	134400	847-C w/No. 2 switch	12 (5.4)

### Capacities



## Water Feeders – Make-Up

### Series 851 Make-Up Water Feeder

- For receiver tanks in commercial or industrial applications
- Mounts directly on the receiver, eliminating need for equalizing connections
- Quick-change replaceable cartridge valve and strainer
- Proportional feed action
- Mounting Flange – six 7/16" (11.1mm) bolt holes on a 5 3/4" (146mm) bolt circle
- Maximum water supply pressure 150 psi (10.5 kg/cm<sup>2</sup>)
- Maximum inlet water temperature 120°F (49°C)
- Maximum receiver pressure 35 psi (2.5 kg/cm<sup>2</sup>)

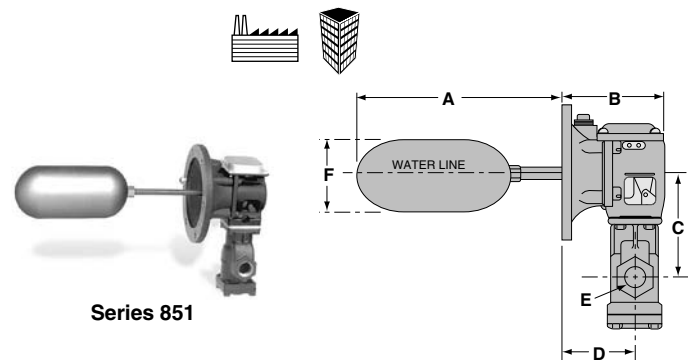
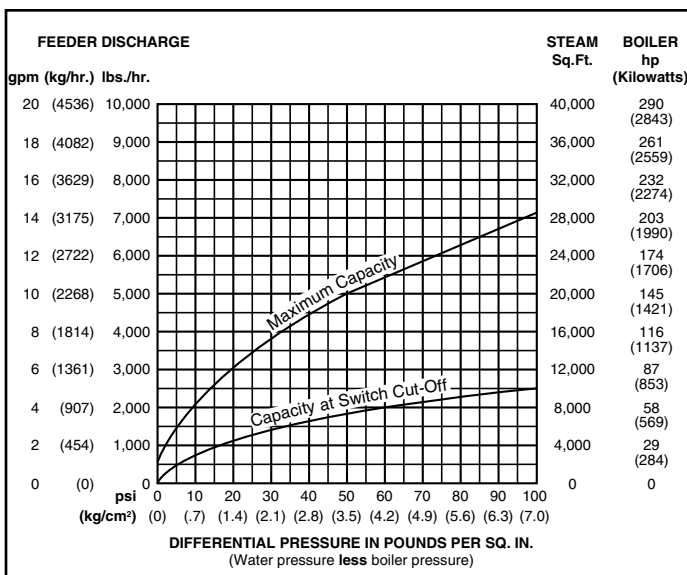
### Model 851-S Make-Up Water Feeder

- Extended float and rod assembly
- Wider operating range
- Maximum water supply pressure 100 psi (7 kg/cm<sup>2</sup>)
- Maximum inlet water temperature 120°F (49°C)
- Maximum receiver pressure 35 psi (2.5 kg/cm<sup>2</sup>)

### Ordering Information

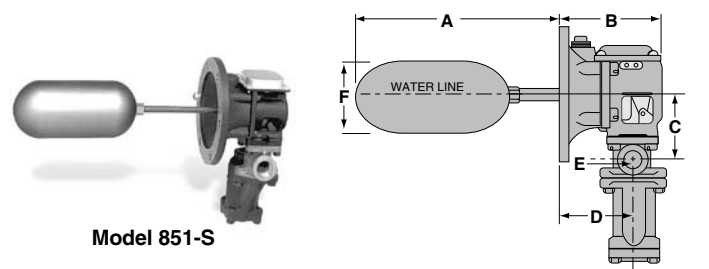
Model Number	Part Number	Description	Weight lbs. (kg)
851	136700	Make-up water feeder	14 (6.4)
851-S	136800	851 w/extended float & rod assy.	16 (7.3)

### Capacities – Model 851



### Dimensions, in. (mm)

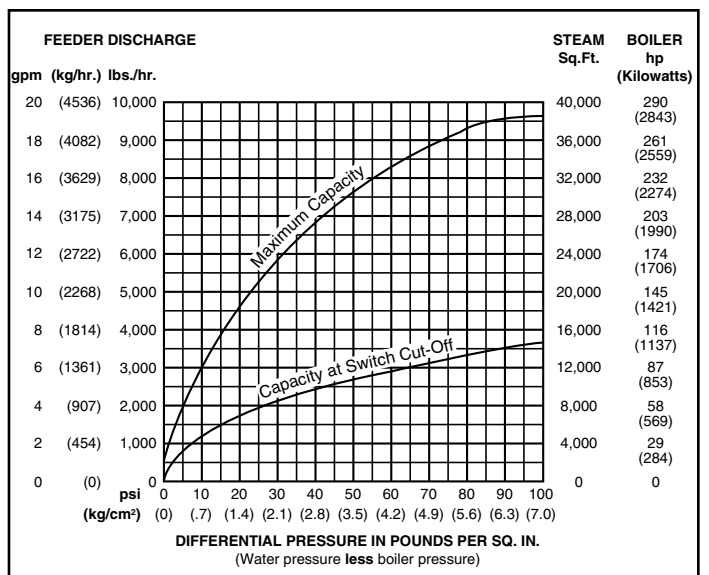
A	B	C	D	E NPT	F
11 3/4 (298)	4 15/16 (125)	4 5/8 (117)	3 9/16 (90)	3/4	3 7/16 (87)



### Dimensions, in. (mm)

A	B	C	D	E NPT	F
12 3/4 (324)	4 15/16 (125)	3 3/16 (81)	3 9/16 (90)	3/4	3 7/16 (87)

### Capacities – Model 851-S



## Water Feeders – Make-Up

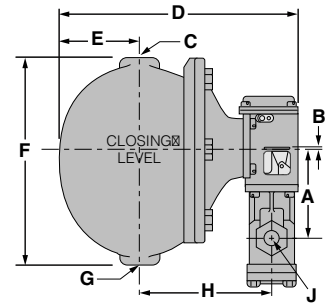
### Series 551-S Make-Up Water Feeder



- For applications where water is added to steam separators, receivers, tanks, or other vessels
- Proportional feed action
- Quick-change replaceable cartridge valve and strainer
- Optional features
  - Float Block
- Maximum water supply pressure 75 psi (5.3 kg/cm<sup>2</sup>)
- Maximum inlet water temperature 120°F (49°C)
- Maximum vessel pressure 25 psi (1.8 kg/cm<sup>2</sup>)



551-S



### Dimensions, in. (mm)

A	B	C NPT	D	E	F	G NPT	H	J NPT
4 <sup>5</sup> / <sub>8</sub> (117)	1 <sup>8</sup> / <sub>8</sub> (3.2)	1	12 <sup>1</sup> / <sub>4</sub> (311)	4 <sup>1</sup> / <sub>8</sub> (105)	10 <sup>3</sup> / <sub>8</sub> (264)	1	6 <sup>11</sup> / <sub>16</sub> (170)	3 <sup>4</sup> / <sub>4</sub>

### Ordering Information

Model Number	Part Number	Description	Weight lbs. (kg)
551-S	136400	Make-up water feeder	35.8 (16.2)
551-SB	136500	551-S w/float block	35.8 (16.2)

### Capacities

