

Low Water Cut-Offs – Mechanical Combination Low Water Cut-Off/Pump Controllers for Steam Boilers

Series 194



Low Water Cut-Off/Pump Controllers

- For commercial, and industrial low or high pressure steam boilers
- Maintains consistent water level regardless of pressure
- For boilers of any steaming capacity
- Water column with integral tappings for gauge glass and tri-cock installations
- No. 5 Switch included
- Magnetic repulsion eliminates need for bellows
- Optional features
 - Manual reset
 - 7B switch proportional 0-135 ohm control to maintain constant boiler water level
- 1 1/4" NPT connections
- Maximum pressure 250 psi (17.6 kg/cm²)
- Ten bolt flange

Electrical Ratings

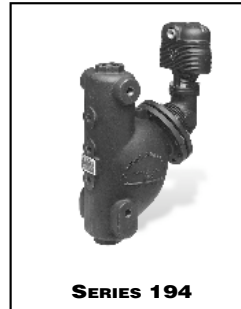
345 VA at 120 or 240 VAC

Dimensions, in. (mm)

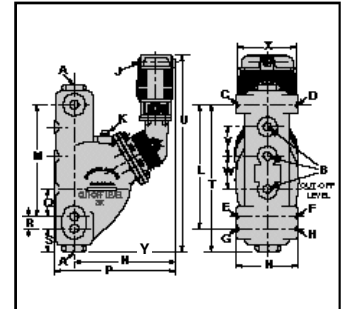
Model	A NPT	B NPT	C NPT	D NPT	E NPT	F NPT	G NPT	H NPT	J NPT	K NPT
194	1 1/4	1/2	1/2	1/2	1/2	1/2	–	–	1/2	3/4
194-A	1 1/4	1/2	1/2	1/2	–	–	1/2	1/2	1/2	3/4
194-B	1 1/4	3/4	3/4	3/4	–	–	3/4	3/4	1/2	3/4

Model	L	M	N	P	Q	R	S
194	–	11 5/8 (295)	6 3/4 (171.4)	13 1/16 (332)	2 13/16 (71)	1 1/4 (32)	2 3/8 (60)
194-A	12 7/8 (327)	–	6 3/4 (171.4)	13 1/16 (332)	2 13/16 (71)	1 1/4 (32)	2 3/8 (60)
194-B	12 7/8 (327)	–	6 3/4 (171.4)	13 1/16 (332)	2 13/16 (71)	1 1/4 (32)	2 3/8 (60)

Model	T	U	V	W	X	Y
194	17 1/4 (438)	20 1/2 (521)	3 (76)	3 (76)	6 (152)	10 13/16 (274)
194-A	17 1/4 (438)	20 1/2 (521)	3 (76)	3 (76)	6 (152)	10 13/16 (274)
194-B	17 1/4 (438)	20 1/2 (521)	3 (76)	3 (76)	6 (152)	10 13/16 (274)



SERIES 194



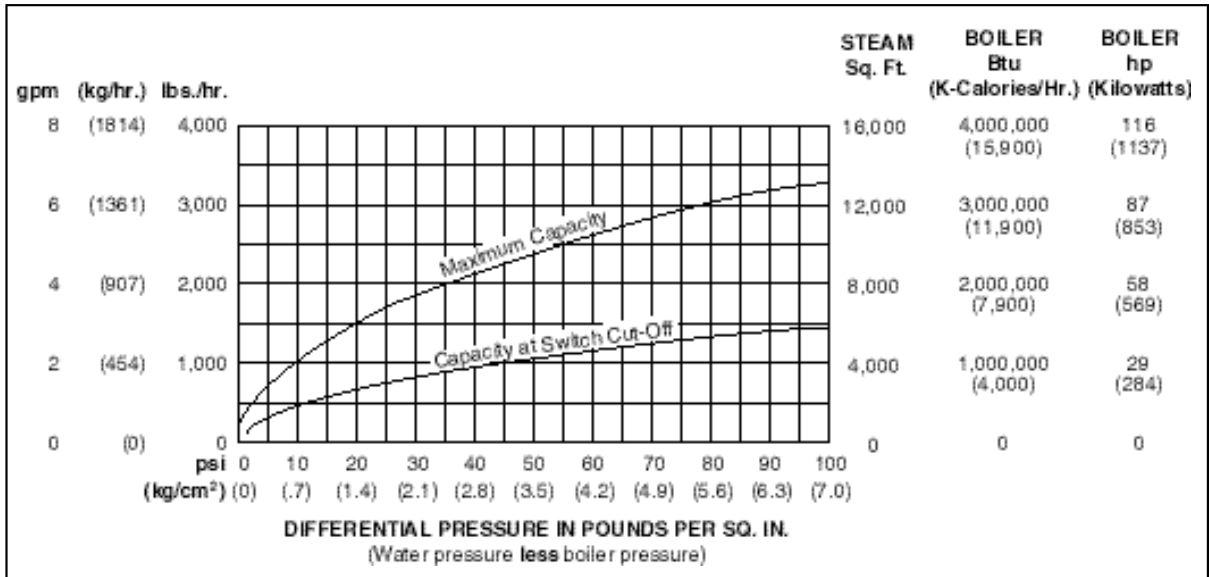
Ordering Information

Model Number	Part Number	Description	Weight lbs. (kg)
194	166600	Combination low water cut-off/pump controller w/Series 5 switch	72.0 (32.7)
194-A	166700	194 w/alternate tappings	72.0 (32.7)
194-A-7B	167100	194-A w/Series 7B switch	72.0 (32.7)
194-M	166900	194 w/manual reset	72.0 (32.7)
194-7B	167200	194 w/Series 7B switch	72.0 (32.7)
194-7BM	167300	194-7B w/manual reset	72.0 (32.7)
194-B	166701	194 w/alternate tappings	72.0 (32.7)

Water Feeders – Mechanical

Series 47 (continued) Mechanical Water Feeders

Capacities



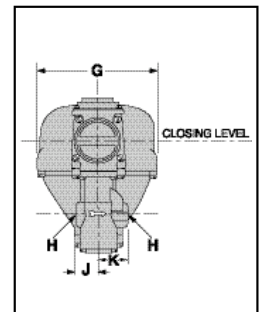
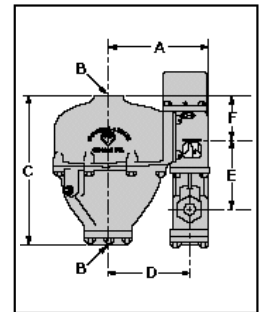
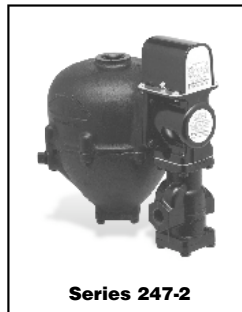
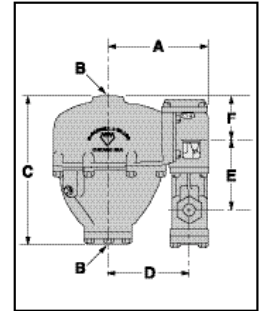
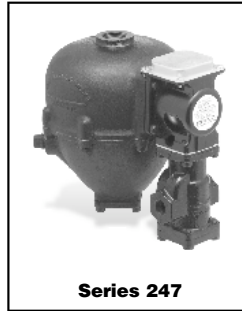
Ordering Information

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/cm²)
- Maximum inlet water temperature 120°F (49°C)
- Maximum vessel pressure 30 psi (2.1 kg/cm²)



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	

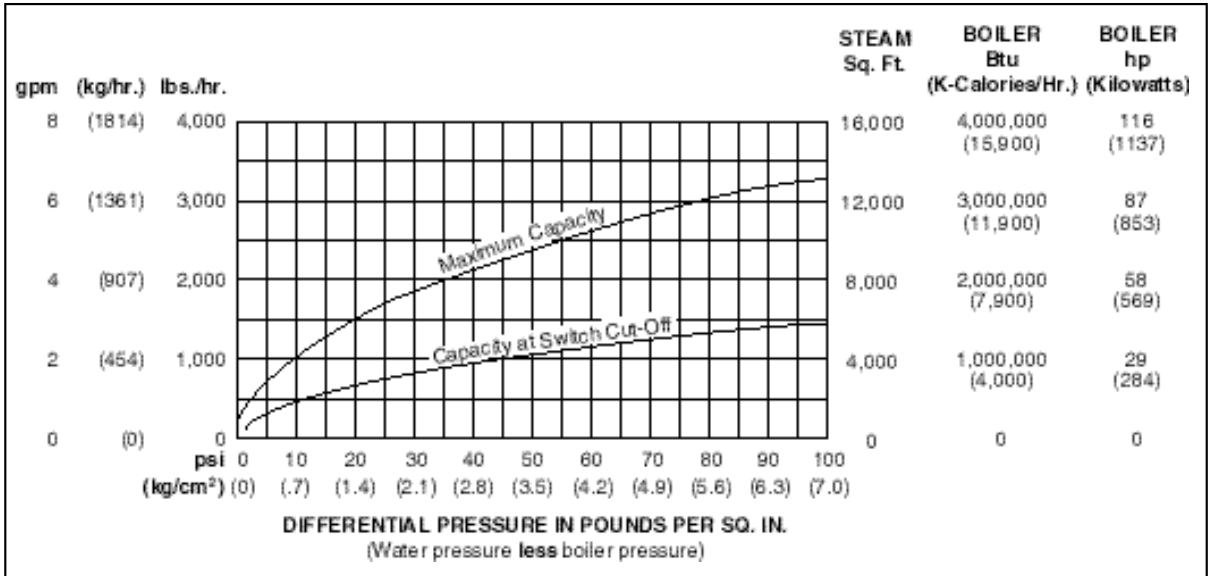
Dimensions, in. (mm)

A	B NPT	C	D	E	F	G	H NPT	J	K
6½ (165)	1	9⅞ (232)	5⅞ (130)	4⅝ (117)	2⅝ (67)	7⅝ (186)	½	1⅓ (35.7)	1⅔ (48.4)

Water Feeders – Mechanical

Series 247 (continued) Mechanical Water Feeders

Capacities

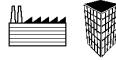


Ordering Information

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)

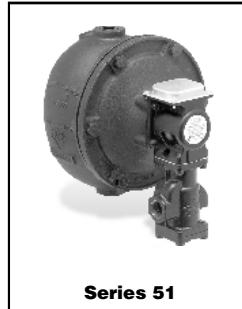
Water Feeders – Mechanical

Series 51/51-2

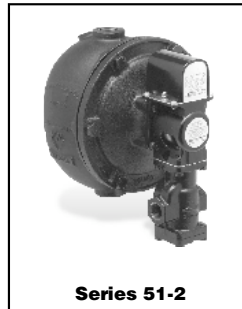
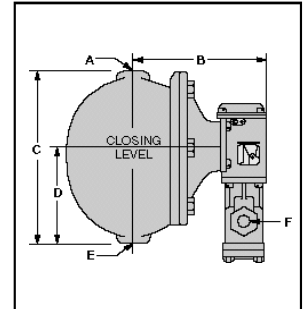


Mechanical Water Feeders/Low Water Cut-Offs

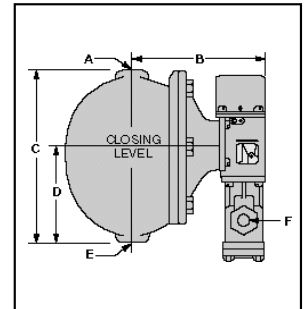
- For low pressure steam and hot water boilers larger than 5,000 sq. ft. (465m²) capacity with **cold water feed**
- Quick-change replaceable cartridge valve and strainer
- Optional features
 - No. 2 switch
 - Manual reset
 - Float block
- Proportional feed action
- Model 51 can be field upgraded with a No. 2 switch to add low water cut-off function
- Maximum water supply pressure 150 psi (10.5 kg/cm²)
- Maximum inlet water temperature 120°F (49°C)
- Maximum vessel pressure 35 psi (2.5 kg/cm²)



Series 51



Series 51-2



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 (203)	10 $\frac{3}{8}$ (264)	5 $\frac{3}{4}$ (146)	1	$\frac{3}{4}$

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

