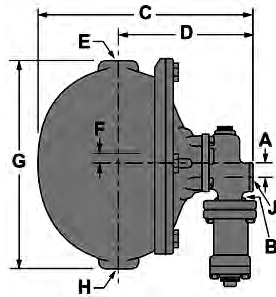


McDonnell-Miller 25A Water Feeder



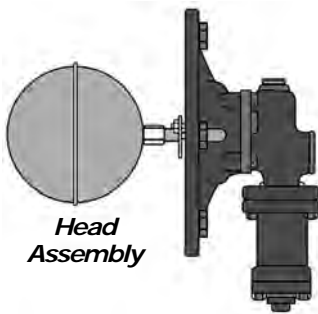
Series 25A



Features of the Model 25A

- Dependable float-operated feeder used to add water to condensate receiving tanks, capable of feeding 12½ gallons of water per minute at 35 psi of water pressure.
- Includes an integral, built-in replaceable strainer. Please replace the strainer every year.
- The maximum water supply pressure is 100 psi. Maximum tank pressure is 35 psig. Maximum water temp., 120° F
- Mounted to the condensate receiver tank with 1" pipe size top and bottom equalizing lines. Feeds water through a separate pipe permitting anti-siphon air gap.
- If you already have the 25A installed, and it's simply time for a replacement, just order the 25A head assembly: simply re-use the existing piped-in bowl, remove the old head assembly, put on the new one — You're done!

Replacement 25A Head Assembly



Head Assembly

Model 25-A-HD

Already have a 25A water feeder installed? Need to replace it?

Don't put in an entire new unit! Simply order a new **head assembly**.

It's easier to install than a complete new unit, and for all functional purposes you make your old unit just like new. Your old bowl (already connected to the equalizing pipes) is most likely in good shape.

So save some time and money — Order a new head assembly.

25A Head Assembly	
Description	Order No.
25A Head Assembly	MI 1040

Dimensions of 25A (inches)

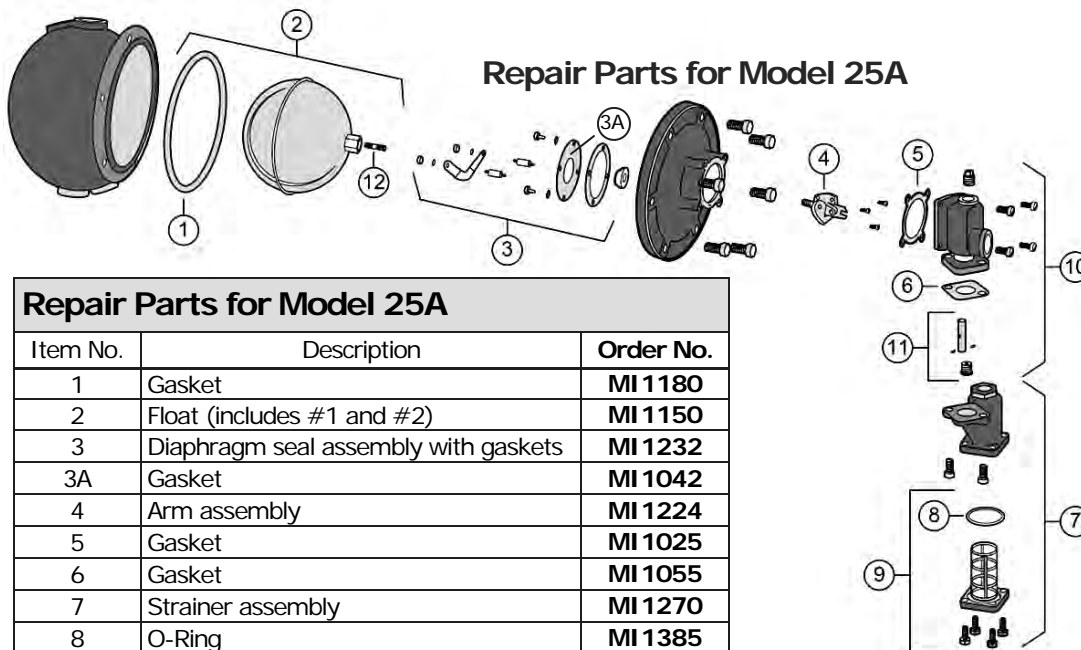
A	B pipe	C	D	E pipe	F	G	H pipe	J pipe
13/16	3/4	12¼	8⅞	1	½	10⅜	1	¾

Model 25A capacity: pounds/hour @ water pressure shown

10psi	20psi	30psi	40psi	50psi	60psi	70psi	80psi	100psi
3,100	4,500	5,600	6,550	7,400	8,150	8,800	9,400	10,200

Complete Model 25A

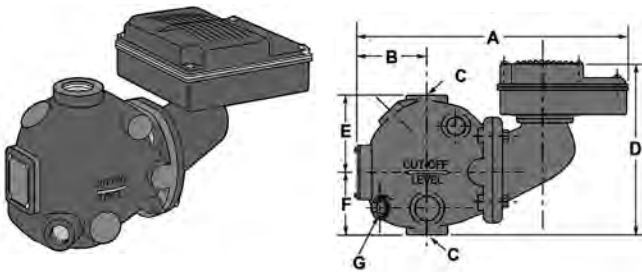
Model No.	Description	Order No.
25A	Make-Up Water Feeder	MH1015



Repair Parts for Model 25A		
Item No.	Description	Order No.
1	Gasket	MI 1180
2	Float (includes #1 and #2)	MI 1150
3	Diaphragm seal assembly with gaskets	MI 1232
3A	Gasket	MI 1042
4	Arm assembly	MI 1224
5	Gasket	MI 1025
6	Gasket	MI 1055
7	Strainer assembly	MI 1270
8	O-Ring	MI 1385
9	Strainer basket (includes bolts and #8)	MI 1220
10	Valve assembly	MI 1225
11	Stem & disc assembly	MI 1230
12	Float rod	MI 1041

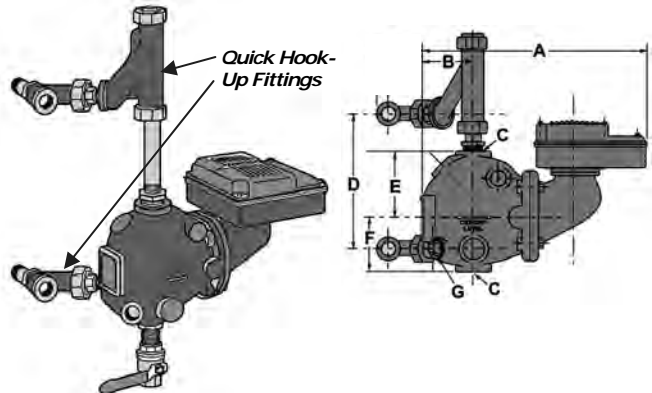
McDonnell-Miller 42 Cut-Off & Pump Controller

No. 42 and 42S



A	B	C pipe	D	E	F	G pipe
12-1/4	2-9/16	1	8-7/8	3-11/16	3-1/8	1/2

No. 42-A and 42A-S



A	B	C pipe	D	E	F	G pipe	
12-1/4	2-9/16	1	7-1/4	16-11/16	2-3/4	3-1/8	1/2

Features of the Model 42, 42A, 42S & 42A-S

■ All models are float-operated pump controllers and low-water cut-offs with either SPST mercury switches (42 and 42-A) or non-mercury "snap switches" (42S and 42-AS) operating at different levels to control the boiler feed pump and cut-off the electrical current to the boiler in the event of a low-water condition. Maximum operating pressure: 50 psi.

■ The Snap-Switch models replaced the "hazardous material" Mercury models — discontinued effective 04/07/2007.

■ The 42A and 42A-S have the same features as the 42 and 42S but are fitted with "Quick Hook-Up" fittings for installation directly into the gauge glass tappings.

Electrical Ratings

Ampere ratings for the pump and the cut-off circuits

Motor Duty	120VAC	240VAC	120VDC	240VDC
Full Load	7.4	3.7	2.4	1.2
Locked Rotor	44.4	22.2	24.0	12.0

Pilot duty service: 345VA, 120 and 240VAC

Ampere rating for alarm service

120VAC	240VAC	120VDC	240VDC
1	1/2	1/2	1/4

Replacement Guide for Old 42 Series

Model No.	Description
42	Low-water cut-off/pump control
42-A	Same as above w/Quick Hook-Up
42-N	Like 42 with gauge glass tappings

Complete Snap-Switch Models 42S, 42A-S

Model No.	Description	Order No.
42S	Mercury Free cut-off/pump control	MH1022
42-AS	Same as above w/Quick Hook-Up	MH1023
42S-N	Like 42S with gauge glass tappings	MH1023A

Repair Parts for No. 42, 42A and 42S, 42A-S

*All Mercury models and their "Mercury" repair parts have been discontinued effective April 7, 2007 due to their hazardous material designation.

*Mercury switches

To repair your old, discontinued Mercury switching models:
Order the **MI 1066** (42S-HD) Head Assembly.

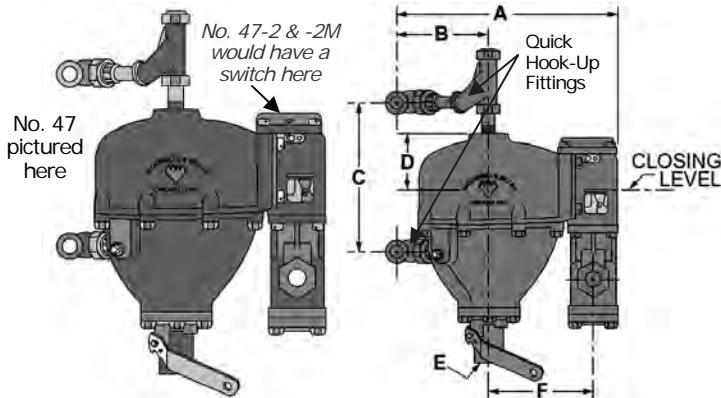
42S Head Assembly

Repair Parts for 42 Series

Item	Description	Order No.
1	2-wire "Mercury" pump switch	No longer available
2	2-wire "Mercury" burner switch "Snap-Switch" for 42S, 42-AS	MI 1375C
3	Head gasket	MI 1170
4	Quick hook-up (includes 5, 6 & 7)	MI 1195
5	Quick hook-up, upper	MI 1373
6	Quick hook-up, lower	MI 1372
7	Black "Y" assembly	MI 1371
42S-HD Head Assembly		MI 1066

McDonnell-Miller 47 Water Feeders & Cut-Offs

No. 47, 47-2 and 47-2M



No. 2 Automatic and 2M Manual Switch

Supplied as standard equipment on the 47-2 (No. 2 automatic reset switch) and the 47-2M (No. 2M manual reset switch).



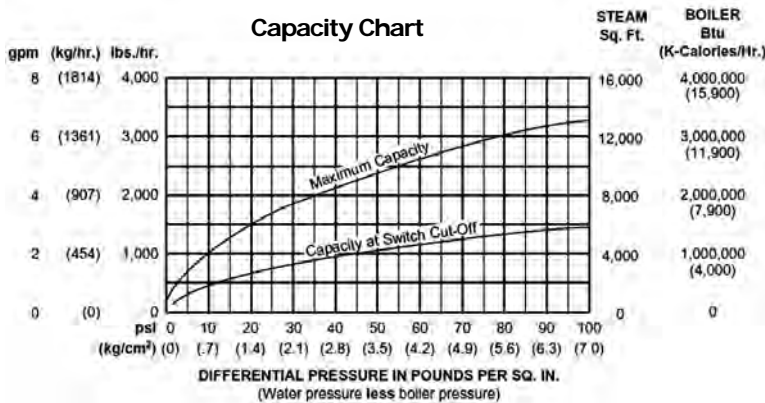
Dimensions of 47 Series (inches)

A	B	C	D	E pipe	F
11-7/8	5-1/4	7 3/8 to 14 max	2-5/8	3/4	5-1/8

Electrical Ratings, Ampere ratings

Motor Duty	120VAC	240VAC
Full Load	10.2	5.1
Locked rotor	61.2	30.6
Pilot duty service: 345VA, 120 and 240VAC		

Capacity Chart



Features of 47, 47-2 and 47-2M

- Used for both steam and hot water boilers with a cold water feed.
- Provides continuous maintenance of safe boiler water level mechanically, independent of electrical service.
- No. 2 switch provides automatic reset after a low-water condition; No. 2M switch requires manual reset.
- Maximum water supply pressure, 150 psi; maximum operating pressure, 25 psi.
- Maximum inlet water temp., 120° F.
- Quick hook-up fittings connect to gauge glass tappings.

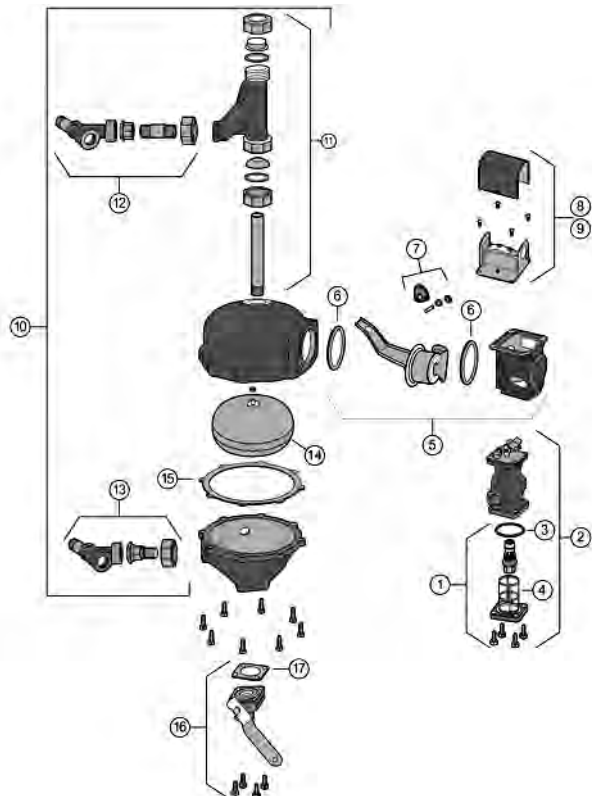
Complete Models 47, 47-2, 47-2M

Model No.	Description	Order No.
47	Feeder only, no low water cut-off	MH1025
47-2	Feeder & cut-off, automatic reset	MH1030
47-2M	Feeder & cut-off, manual reset	MH1024

Repair Parts for Models 47, 47-2, 47-2M

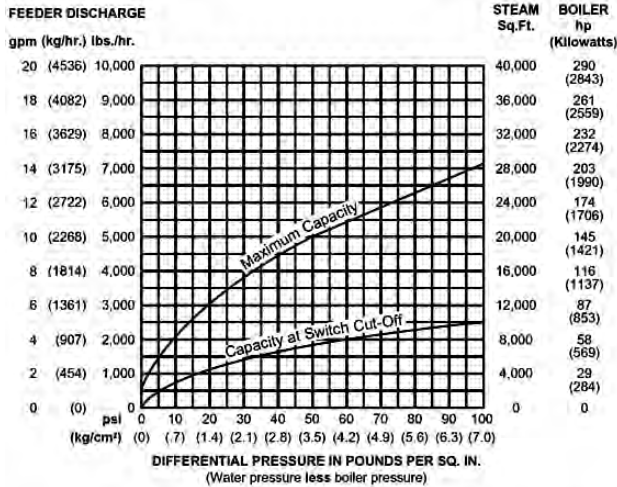
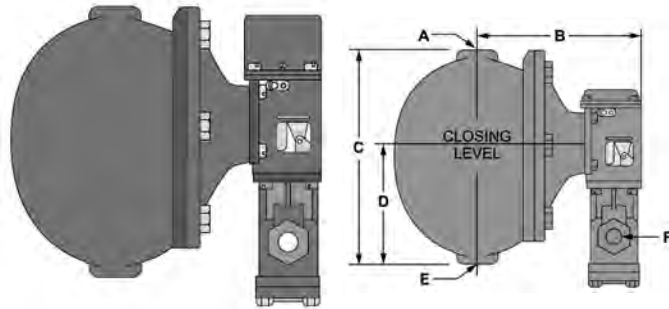
Item	Description	Order No.
1	Cartridge and strainer kit	MI 1262
2	Complete valve, cartridge & strainer	MI 1260
3	O-Ring	MI 1385
4	Strainer assembly with bolts & O-ring	MI 1345
5	Complete bellows assembly	MI 1250
6	Gasket	MI 1050
7	Cam assembly	MI 1175
8	No. 2 automatic reset switch	MI 1005
9	No. 2M manual reset switch	MI 1006
10	Complete Quick Hook-Up (#9, 10 & 11)	MI 1200
11	Black "Y" assembly	MI 1371
12	Upper Quick Hook-Up fittings	MI 1373
13	Lower Quick Hook-Up fitting	MI 1372
14	Float	MI 1235
15	Gasket	MI 1045
16	Blow-down valve	MI 1015
17	Gasket for blow-down valve	MI 1060

Repair Parts for 47, 47-2 & 47-2M



McDonnell-Miller 51 Water Feeder & Cut-Off

No. 51, 51-2 and 51-2M (51-2 shown below)



Features of the Models 51, 51-2 and 51-2M

- For low pressure steam and hot water boilers larger than 5,000 sq. ft. capacity with **cold water feed**.
- No. 2 (automatic reset) and 2M switch (manual reset) add the low water cut-off function to the series 51
- Max. operating pressure, 35 psi; Max. water supply, 150 psi; Max. inlet water temperature, 120° F.

Repair Parts for 51 Series		
Item	Description	Order No.
1	No. 2 switch, automatic reset	MI 1005
2	No. 2M switch, manual reset	MI 1006
3	* New Style Float (also order MI1265A)	MI 1275A
4	Gasket	MI 1180
5	Gasket	MI 1050
6	Cam assembly	MI 1175
7	* New style Bellows Assembly (also order the MI1275 float)	MI 1265A
8	Valve & strainer kit	MI 1280
9	Cartridge strainer kit	MI 1282
10	O-Ring	MI 1385
11	Strainer basket with O-Ring	MI 1345
51-HD Head Assembly, no switch		MI 1075
51-2HD Head Assembly, #2 auto reset		MI 1080
51-2MHD Head Assembly, #2 manual reset		MI 1082

No. 2 Automatic and 2M Manual Switch

Supplied as standard equipment on the 51-2 (No. 2 automatic reset switch) and the 51-2M (No. 2M manual reset switch). Has high voltage terminals for low water cut-off and low water alarm.



Dimensions of 51-2 Series (inches)

A pipe	B	C	D	E pipe	F pipe
1	8	10-3/8	5-3/4	1	3/4

Electrical Ratings

Ampere ratings for the pump and the cut-off circuits

Motor Duty	120VAC	240VAC	120VDC	240VDC
Full Load	7.4	3.7	2.4	1.2
Locked rotor	44.4	22.2	24.0	12.0

Pilot duty service: 345VA, 120 and 240VAC

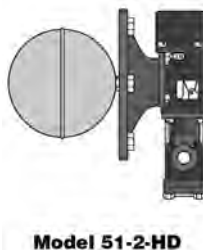
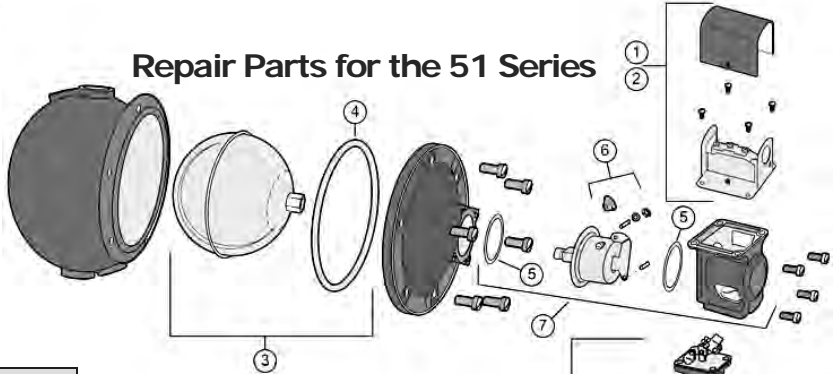
Ampere rating for low-water alarm service

120VAC	240VAC	120VDC	240VDC
1	1/2	1/2	1/4

Complete 51, 51-2 and 51-2M

Model No.	Description	Order No.
51	Water feeder only, no switch	MH1033
51-2	Water feeder & cut-off, automatic reset	MH1035
51-2M	Water feeder & cut-off, manual reset	MH1036

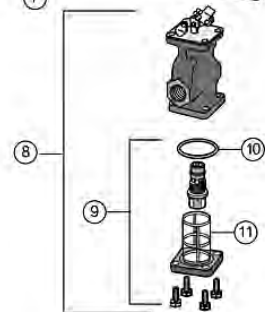
Repair Parts for the 51 Series



HEAD ASSEMBLY

Easily repair your boiler control with a **head assembly** — All the operating parts pre-assembled and easily installed. Note: The 51-HD is without #2 switch.

Model 51-2-HD



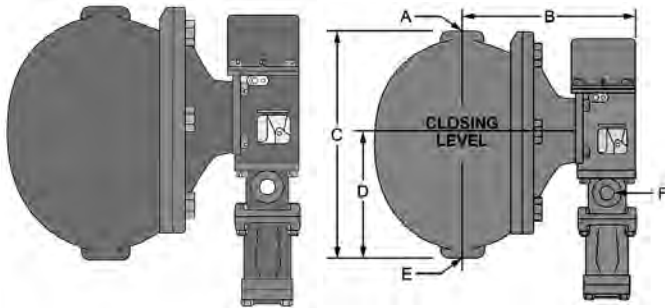
Old style bellows

* **NOTE: Order a Float and Bellows Assembly** if your current bellows assembly looks like the one shown to the right. A design change does not allow the new float to fit on the old style bellows.



McDonnell-Miller 51S Water Feeder & Cut-Off

No. 51S, 51S-2 and 51S-2M (51S-2 shown below)



No. 2 Automatic and 2M Manual Switch

Supplied as standard equipment on the 51S-2 (No. 2 automatic reset switch) and the 51S-2M (No. 2M manual reset switch). See the No. 51-2 for the electrical ratings of these switches. The model 51S is a water feeder only.



Dimensions of 51S-2 Series (inches)

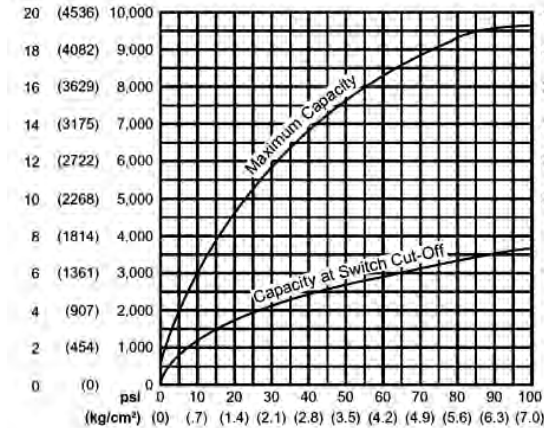
A pipe	B	C	D	E pipe	F pipe
1	8-1/8	10-3/8	5-3/4	1	3/4

Features of the Models 51S, 51S-2 and 51S-2M

- For low pressure steam and hot water boilers up to 35,000 sq. ft. capacity with **cold water feed**.
- The largest feeding capacity of all McDonnell feeders.
- No. 2 (automatic reset) and 2M switch (manual reset) add the low water cut-off function to the series 51S-2 and 51S-2M, or add a cut-off function to the 51S
- Maximum operating pressure, 35 psi.
- Max. water supply pressure, 150 psi
- Max. inlet water temperature, 120° F.

FEEDER DISCHARGE

gpm (Kg/hr.) lbs./hr.



STEAM Sq.Ft. BOILER hp (Kilowatt)

40,000	290 (2843)
36,000	261 (2559)
32,000	232 (2274)
28,000	203 (1990)
24,000	174 (1706)
20,000	145 (1421)
16,000	116 (1137)
12,000	87 (853)
8,000	58 (569)
4,000	29 (284)
0	0

DIFFERENTIAL PRESSURE IN POUNDS PER SQ. IN. (Water pressure less boiler pressure)

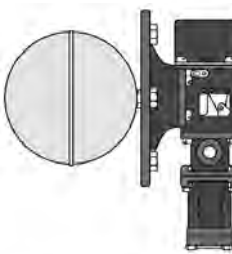
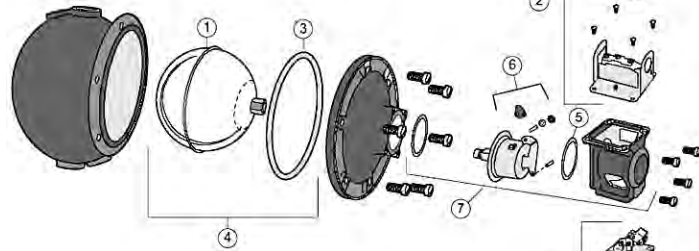
Complete 51S, 51S-2 and 51S-2M

Model No.	Description	Order No.
51S	Water feeder only	MH1040
51S-2	Water feeder & cut-off, automatic reset	MH1042
51S-2M	Water feeder & cut-off, manual reset	MH1043

Repair Parts for 51S Series

Item	Description	Order No.
1	No. 2 switch, automatic reset	MI 1005
2	No. 2M switch, manual reset	MI 1006
3	*New style Float (also order MI1265A)	MI 1275A
4	Gasket	MI 1180
5	Gasket	MI 1050
6	Cam assembly	MI 1175
7	*New style Bellows bracket assembly (also order MI1275A)	MI 1265A
8	Valve assembly	MI 1285
9	Valve seat	MI 1088
10	Strainer assembly	MI 1269
11	Gasket	MI 1055
12	O-Ring	MI 1385
13	Strainer basket & O-Ring	MI 1240
51S Head Assembly no switch		MI 1085
51S-2 Head Assembly auto reset		MI 1087
51S-2M Head Assembly manual reset		MI 1083

Repair Parts for the 51S series



For a quick, easy and complete repair, order the **Head Assembly**.

See the adjoining repair parts table.

Model 51-S-2-HD

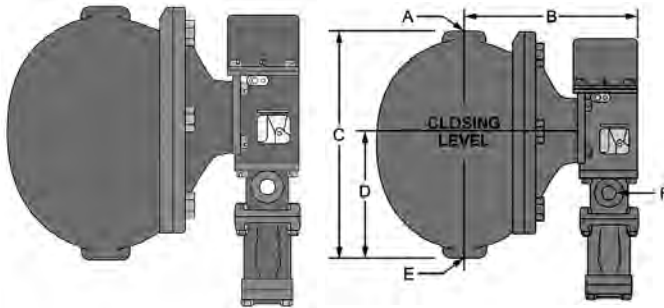
*** NOTE:** Order a **Float and Bellows Assembly** if your current bellows assembly looks like the one shown to the right. A design change does not allow the new components to fit on old ones.

Old style bellows



McDonnell-Miller 53 Water Feeder & Cut-Off

No. 53, 53-2 and 53-2M (53-2 and 2-M shown below)



No. 2 Automatic and 2M Manual Switch

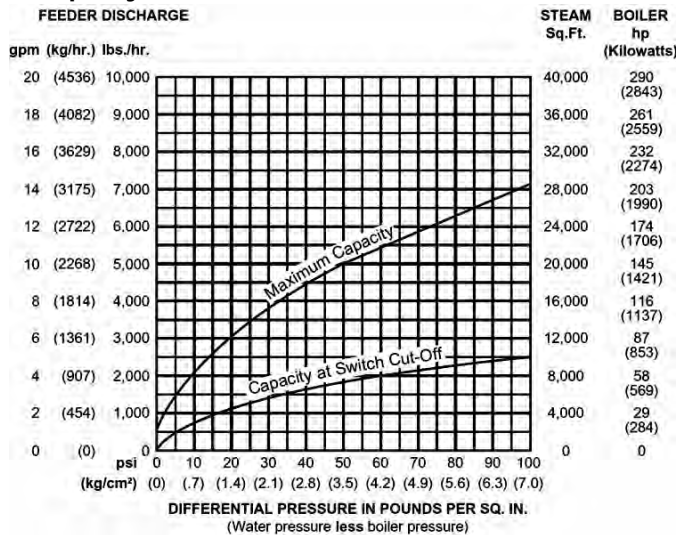
Supplied as standard equipment on the 53-2 (No. 2 automatic reset switch) and the 53-2M (No. 2M manual reset switch). The model 53 is a water feeder only. See No. 51-2 page for the electrical ratings of these switches.



Dimensions of 53 Series (inches)

A pipe	B	C	D	E pipe	F pipe
1	8-1/8	10-3/8	5-3/4	1	3/4

Capacity Chart



Features of the Models 53, 53-2 and 53-2M

- For higher pressure steam and hot water boilers up to 5,000 sq. ft. capacity and 75 psi with cold water feed.
- Proportional feed action
- No. 2 (automatic reset) and 2M switch (manual reset) add the low water cut-off function to the series 53-2 and -2M, or add a cut-off function to the 53
- Maximum operating pressure, 75 psi; Max. water supply pressure, 150 psi; Max. inlet water temperature, 120° F.

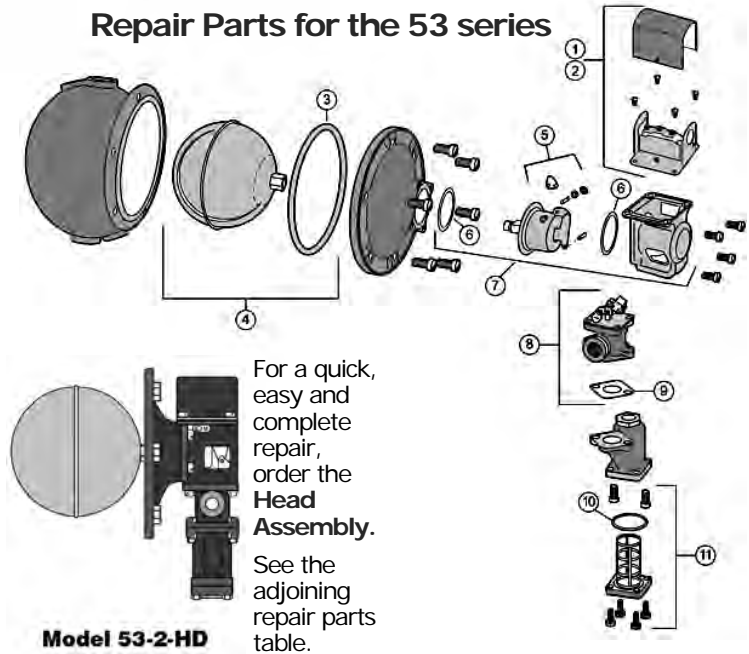
Complete 53, 53-2 and 53-2M

Model No.	Description	Order No.
53	Water feeder only	MH1045
53-2	Water feeder & cut-off, automatic reset	MH1047
53-2M	Water feeder & cut-off, manual reset	MH1048

Repair Parts for 53 Series

Item	Description	Order No.
1	No. 2 switch, automatic reset	MI 1005
2	No. 2M switch, manual reset	MI 1006
3	Gasket	MI 1180
4	Float	MI 1277
5	Cam assembly	MI 1175
6	Gasket	MI 1050
7	* <i>New Style</i> Bellows assembly	MI 1293A
8	Valve assembly	MI 1294
9	Gasket	MI 1055
10	O-Ring	MI 1385
11	Strainer Basket	MI 1240
53 Head Assembly, water feeder only		MI 1090
53-2 Head Assembly, auto reset		MI 1093
53-2M Head Assembly, manual reset		MI 1093A

Repair Parts for the 53 series



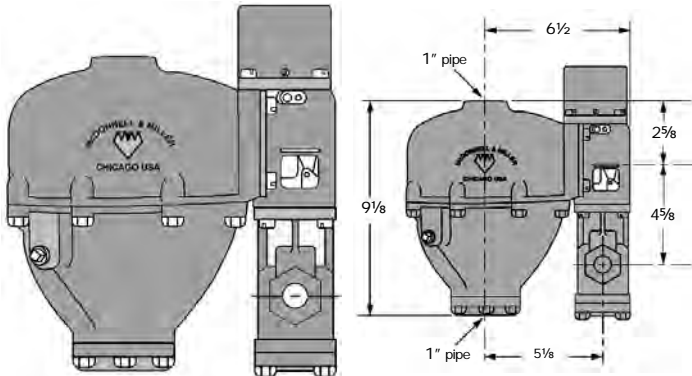
* **NOTE: Order a Float and Bellows Assembly** if your current bellows assembly looks like the one shown to the right. A design change does not allow the new components to fit on old ones.

Old style bellows



McDonnell-Miller 247 Feeder & Feeder Cut-Off

No. 247-2 Boiler Water Feeder & Feeder Cut-Off



No. 2 Automatic and 2M Manual Switch

Supplied as standard equipment on the 247-2 (No. 2 automatic reset switch) and the 247-2M (No. 2M manual reset switch). Can also be purchased separately to add a burner cut-off function to a 247 water feeder. Has high voltage terminals for low water cut-off and low water alarm.



Electrical Ratings, Ampere ratings

Motor Duty	120VAC	240VAC
Full Load	10.2	5.1
Locked rotor	61.2	30.6
Pilot duty service: 345VA, 120 and 240VAC		

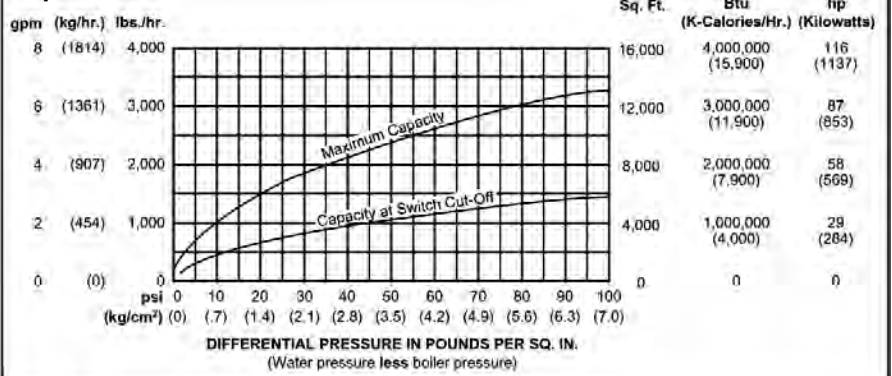
Complete 247 Series

Model	Description	Order No.
247	Water feeder less switch	MH1110
247-2	Water feeder with automatic No. 2 switch	MH1111
247-2M	Water feeder with manual reset 2M switch	MH1111A

Features of the Series 247

- For steam and hot water boilers with a cold water feed.
- Continual maintenance of minimum safe water level.
- No. 2 (automatic reset) and 2M switch (manual reset) add the low water cut-off function to the 247.
- Maximum operating pressure, 30 psi
- Max. water supply pressure, 150 psi

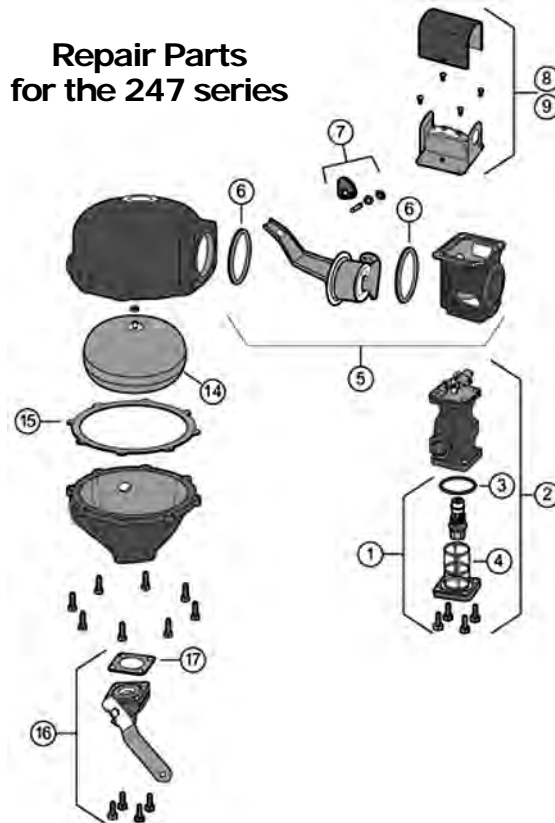
Capacities for 247



Repair Parts for 247 Series

Part No.	Description	Order No.
1	Cartridge and strainer kit	MI 1262
2	Valve, cartridge and strainer kit	MI 1260
3	O-Ring	MI 1385
4	Strainer Assembly	MI 1345
5	Bellows bracket assembly	MI 1255
6	Gaskets (2) for bracket assembly	MI 1050
7	Cam assembly	MI 1175
8	No. 2 Automatic Re-Set Switch	MI 1005
9	No. 2M Manual Re-Set Switch	MI 1006
14	Float (includes gasket #15)	MI 1235
15	Gasket for Bowl	MI 1045
16	Complete blow-down valve	MI 1015
17	Blow-down valve gasket	MI 1060

Repair Parts for the 247 series



McDonnell-Miller 551-S Make-Up Water Feeder



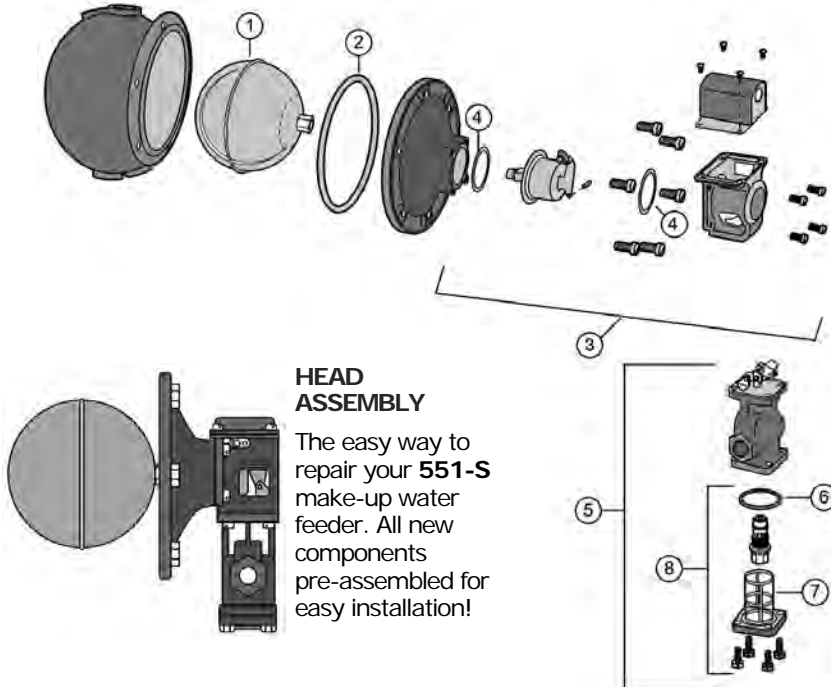
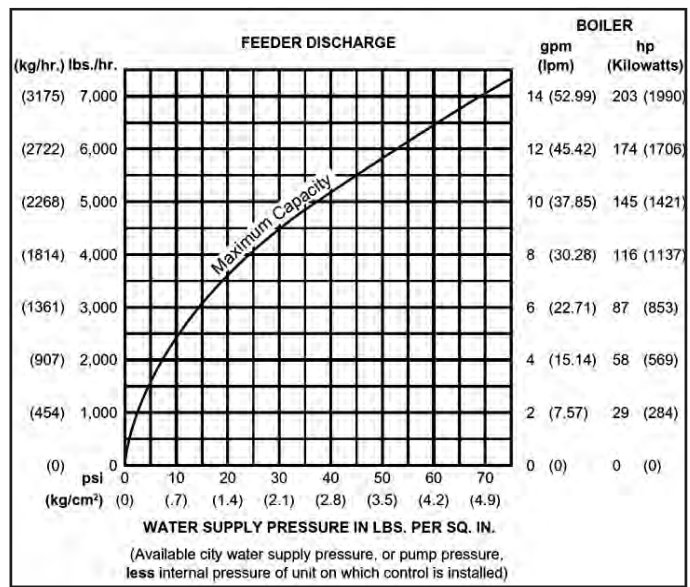
Features

The **551-S float-operated feeder** is designed for use where heated water is added to steam separators, receivers, tanks or other vessels.

- The float chamber is sealed from the valve assembly through the use of two Monel bellows.
- Construction provides an air gap between the receiver tank or vessel and the available water supply.
- Mounts directly onto the receiver
- Maximum water supply pressure @ 150 psi
- Maximum water supply pressure @ 25 psi

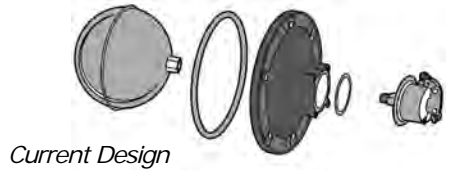
Complete 551-S		
Model	Description	Order No.
551-S	Make-up water feeder	MH1113A

Repair Parts for 551 Series		
Part No.	Description	Order No.
*1	Float & Gasket - <i>Repair Note</i>	MI 1275A
2	Gasket	MI 1180
*3	Bellows Bracket Assembly - <i>Repair Note</i>	MI 1293D
4	Gasket	MI 1050
5	Complete Valve with Strainer	MI 1373C
6	O-Ring for strainer	MI 1385
7	Strainer Basket, includes #6	MI 1345
8	Cartridge & Strainer kit	MI 1282
551-S-HD, Head Assembly		MI 1152

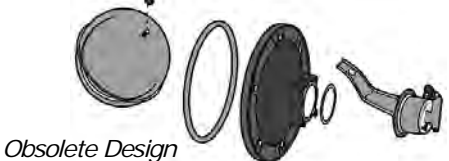


*REPAIR NOTE:

One time replacement of both the float and bellows is required when replacing bellows or float assemblies with date codes before April 1999 and after February 2005.



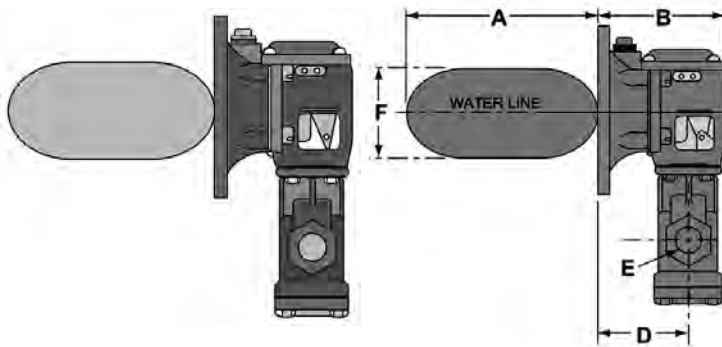
April 1999 or Before
February 2005 and After



May 1999 through
January 2005

McDonnell-Miller 847 Make-Up Water Feeders

No. 847 Make-Up Water Feeder

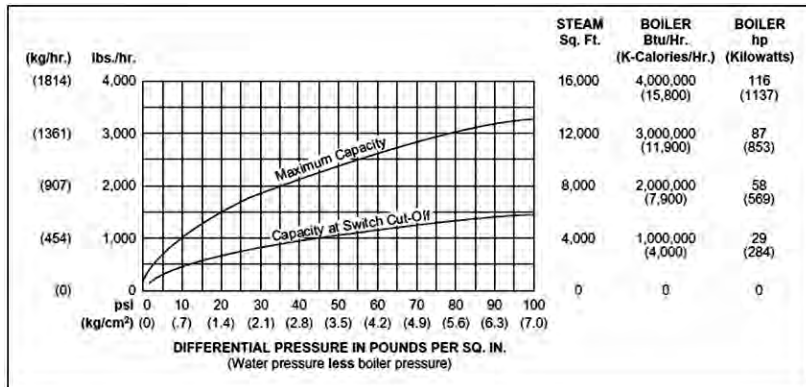


The No. 847 make-up water feeder mounts directly on the tank receiver via a mounting flange with 6-bolt holes on a 5 3/4" bolt circle. No equalizing connections needed. It feeds water through a separate line, permitting anti-siphon air gap in the discharge to the receiver.

FEATURES:

- Mounts directly on receiver tanks
- Mounting flange with 6-bolt holes on a 5 3/4" bolt circle
- Optional models with No. 2 switch and alternate valve orientation
- Maximum water supply pressure, 150 psi
- Maximum inlet water temperature, 120° F
- Maximum receiver pressure for tight closure of the feed valve, 25 psi

Capacities for 847



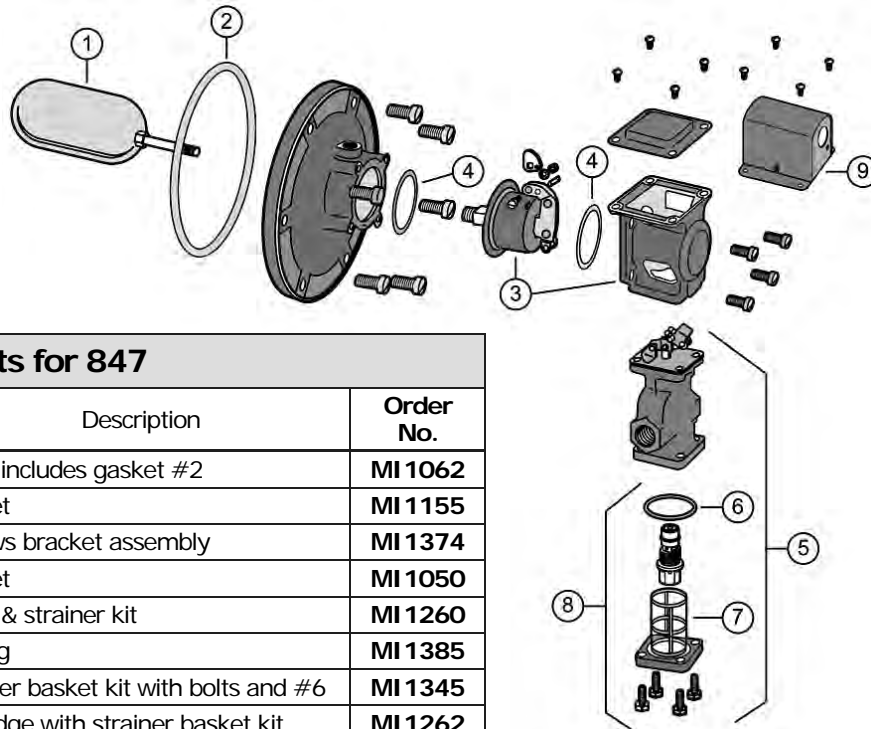
Dimensions of 847 (inches)

A	B	C	D	E	F
7-5/16	4-15/16	4-5/8	3-9/16	1/2	3-7/16

847 Low Water Cut-Off

Model No.	Description	Order No.
847	Make-up water feeder	MH1122
847-C	847 with alternate valve orientation	MH1122A
847-C-2	847-C with No. 2 switch	MH1122B

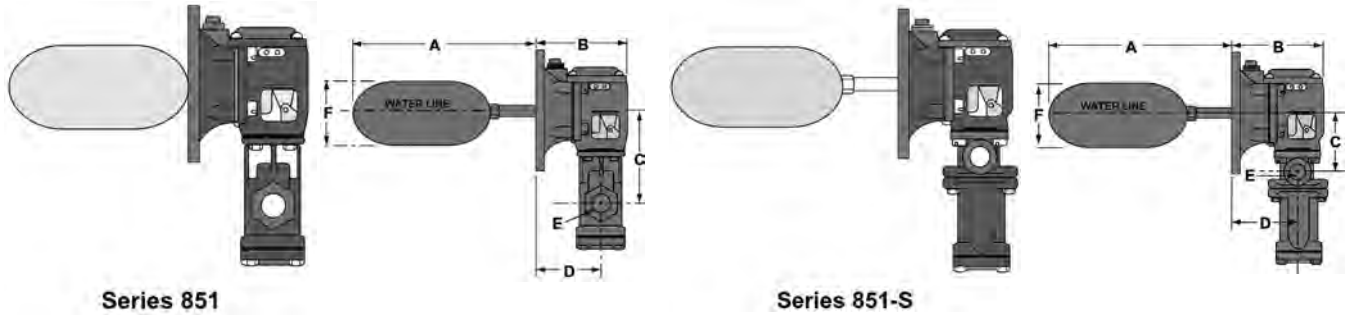
Model 847 Repair Parts



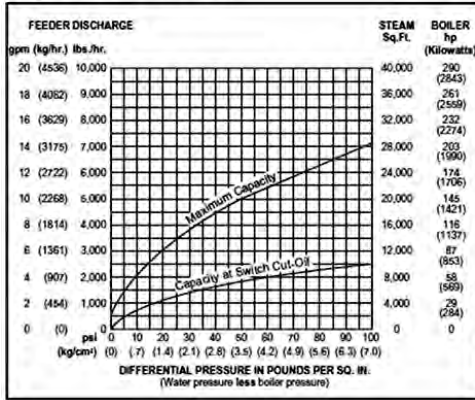
Repair Parts for 847

Part No.	Description	Order No.
1	Float, includes gasket #2	MI 1062
2	Gasket	MI 1155
3	Bellows bracket assembly	MI 1374
4	Gasket	MI 1050
5	Valve & strainer kit	MI 1260
6	O-Ring	MI 1385
7	Strainer basket kit with bolts and #6	MI 1345
8	Cartridge with strainer basket kit	MI 1262
9	No. 2 switch	MI 1005

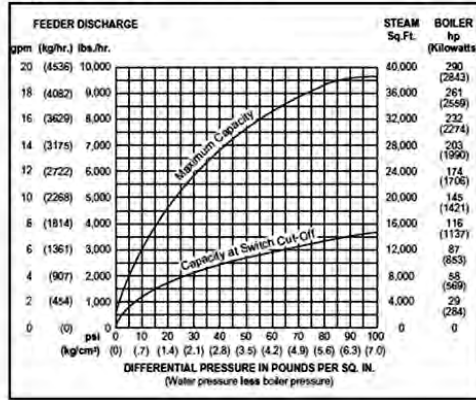
McDonnell-Miller 851 and 851-S Make-Up Water Feeders



Capacities – Model 851



Capacities – Model 851-S

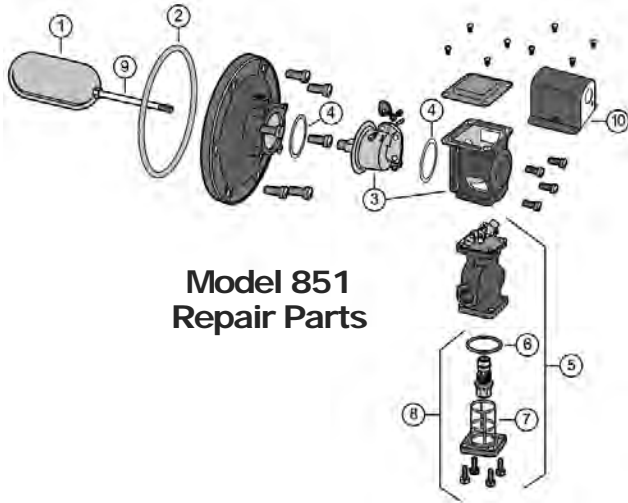


DIMENSIONS (inches)

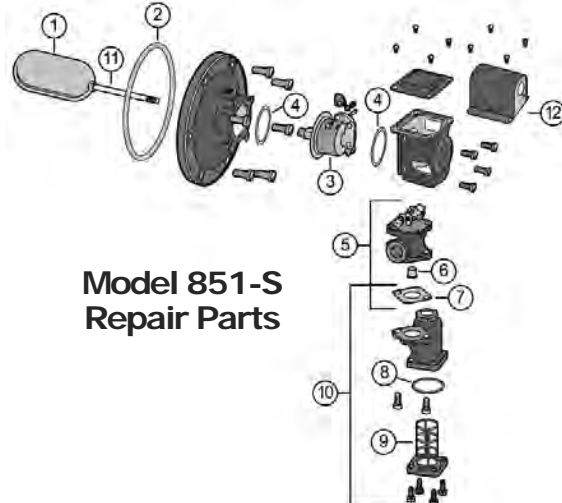
Model	A	B	C	D	E	F
851	11 3/4	4 7/8	4 5/8	3 1/2	3/4	3 1/2
851S						

851 and 851-S Make-Up Water Feeder

Model No.	Description	Order No.
851	Standard water feeder, No. 2 Switch	MH1123
851-S	With No. 2 Switch & extended water level range float rod	MH1123A



Model 851 Repair Parts



Model 851-S Repair Parts

Part No.	851 Repair Parts	Order No.
1	Float and gasket	MI 1062
2	Gasket	MI 1155
3	Bellows bracket assembly	MI 1374A
4	Gasket	MI 1050
5	Valve & strainer/cartridge kit	MI 1280
6	O-Ring	MI 1385
7	Strainer basket (includes #6 and bolts)	MI 1345
8	Cartridge & strainer kit	MI 1282
9	Float rod	MI 1156
10	No. 2 switch, automatic reset	MI 1005

Part No.	851-S Repair Parts	Order No.
1	Float and gasket	MI 1062
2	Gasket	MI 1155
3	Bellows bracket assembly (includes #4)	MI 1374A
4	Gasket	MI 1050
5	Valve assembly	MI 1285
6	Valve seat	MI 1088
7	Gasket	MI 1055
8	O-Ring	MI 1385
9	Strainer basket (includes #8 and bolts)	MI 1240
10	Strainer assembly	MI 1269
11	Float rod	MI 1157
12	No. 2 Switch, automatic reset	MI 1005