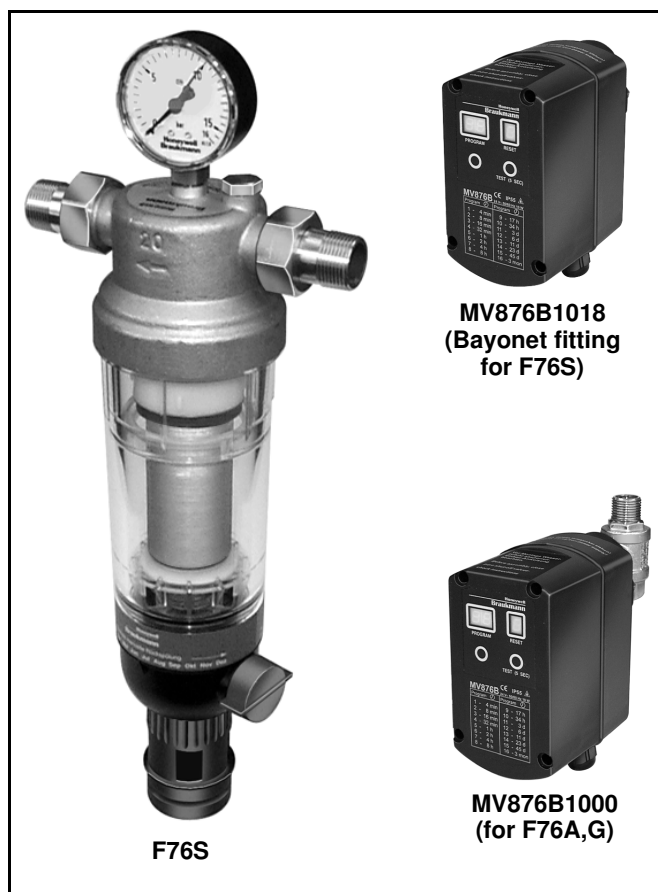


# F76S Water Filters and MV876B Automatic-Backwash Controls

### PRODUCT DATA



F76S

MV876B1018  
(Bayonet fitting  
for F76S)

MV876B1000  
(for F76A,G)

## FEATURES

### F76

- Built-in backwash impeller provides efficient cleaning with supply pressures as low as 22 psi.
- Increased flow capacity on 1/2 in. to 1-1/4 in. models provides lower pressure drop.
- Robust backwash mechanism.
- No shut-off or disassembly is required for cleaning.
- During backwash, the F76S continues to supply filtered water without interruption through a secondary screen.
- Memory ring indicates when the next manual backwash is due.

### MV876

- MV876B1018 bayonet fitting simplifies upgrade to automatic backwash.
- 16 field-selectable backwash intervals (from every four minutes to once every three months) on the MV876B eliminate need for external timer.
- Connections for external control on the MV876B provide for use in automated systems and differential pressure control.
- MV876B can be turned manually to initiate backwash.
- Battery (AA) backup to insure completion of backwash cycle in spite of power loss.

## APPLICATION

The F76S is a high flow capacity water filter used at point-of-entry (POE) to remove sediment and debris from residential or commercial water systems. Used as a prefilter, the F76S protects elements of the water system, including specialized treatment devices such as taste/odor or reverse osmosis (R/O) or other common fixtures and appliances. The flow, filtering capacity, and ease of cleaning make the F76S the ideal filter for the most demanding applications.

The MV876 Automatic-Backwash Control is available as an accessory. This control is fitted to the drain valve and is programmed by the user to automatically perform the backwash function according to the desired interval.

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## SPECIFICATIONS

### F76S:

#### Models:

Water filters with 100 micron screens and hose connections.

F76S1007: 1/2 in. sweat and NPT threaded tailpieces.

F76S1015: 3/4 in. sweat and NPT threaded tailpieces.

F76S1023: 1 in. sweat and NPT threaded tailpieces.

F76S1031: 1-1/4 in. sweat and NPT threaded tailpieces.

F76S1049: 1-1/2 in. NPT threaded tailpieces.

F76S1056: 2 in. NPT threaded tailpieces.

**Dimensions:** See Fig. 1.

#### Materials of Construction:

Body: Brass.

Screen: Stainless Steel.

Internal Construction: Acetal Copolymer.

Seals: NBR.

Ball Valve: Brass with PTFE Seals.

Sump: Engineered Plastic.

NOTE: Bronze sump available.

#### Inlet Pressure:

Minimum: 22 psi (with unrestricted backwash discharge).

Maximum:

Plastic Sump: 232 psi.

Bronze Sump: 400 psi.

NOTE: Pressures above 200 psi require an inlet pressure gauge with a range wider than the standard.

**Differential:** Maximum Recommended: 42 psi.

**Operating Pressure Drop:** Maximum Recommended: 3 psi (with clean screen).

#### Temperature (maximum):

Plastic Sump: 104°F (40°C).

Bronze Sump: 158°F (70°C).

**Pipe Sizes (in in.):** 1/2, 3/4, 1, 1-1/4, 1-1/2, and 2.

**Connections:** Union on inlet and outlet: External NPT threaded or sweat.

**Capacity:** See Table 1.

#### Screen Sizes:

Shipped with Device: 100 microns.

Available Kits: 20, 50, and 200 microns.

NOTE: 20 microns = 900 mesh (approximate).  
50 microns = 350 mesh (approximate).  
100 microns = 175 mesh (approximate).  
200 microns = 70 mesh (approximate).

## MV876 Automatic-Backwash Controls:

#### Models:

MV876B1000: Valve with 24 Vac motor and timer replaces ball valve drain port for automatic backwash at preprogrammed intervals. 24V transformer not included. For use with F76A,G Filters *only*.

MV876B1018: Bayonet mounted shaft of 24 Vac motor and timer replaces ball valve manual control for automatic backwash at preprogrammed intervals. 24V transformer not included. For use with F76S Filters *only*.

#### Specifications:

Power: 4 VA.

Current: 170 mA.

Voltage: 24 Vac.

Cycle time: 20 seconds (approximate).

Timer: Variable. See Table 2.

#### Accessories (for F76S *only* except where noted):

0900747 Sump O Ring Kit (10 O rings) for 1/2 to 1-1/4 in. F76S.

0900748 Sump O Ring Kit (10 O rings) for 1-1/2 to 2 in. F76S.

0901444 Gasket Package (10 gaskets) for any 1/2 in. and 3/4 in. F76.

0901445 Gasket Package (10 gaskets) for any 1 in. F76.

0901446 Gasket Package (10 gaskets) for any 1-1/4 in. F76.

0901447 Gasket Package (10 gaskets) for any 1-1/2 in. F76.

0901448 Gasket Package (10 gaskets) for any 2 in. F76.

AF11S-1A Screen insert (100 microns) for 1/2 to 1-1/4 in. F76S.

AF11S-112A Screen insert (100 microns) for 1-1/2 to 2 in. F76S.

AF11S-1B Screen insert (20 microns) for 1/2 to 1-1/4 in. F76S.

AF11S-112B Screen insert (20 microns) for 1-1/2 to 2 in. F76S.

AF11S-1C Screen insert (50 microns) for 1/2 to 1-1/4 in. F76S.

## ORDERING INFORMATION

When purchasing replacement and modernization products from your TRADELINE® wholesaler or distributor, refer to the TRADELINE® Catalog or price sheets for complete ordering number.

If you have additional questions, need further information, or would like to comment on our products or services, please write or phone:

1. Your local Home and Building Control Sales Office (check white pages of your phone directory).
2. Home and Building Control Customer Logistics  
Honeywell Inc., 1885 Douglas Drive North  
Minneapolis, Minnesota 55422-4386 (612) 951-1000

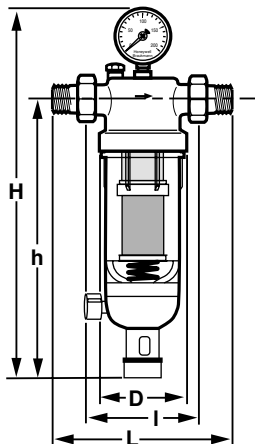
In Canada—Honeywell Limited/Honeywell Limitée, 155 Gordon Baker Road, North York, Ontario M2H 3N7.

International Sales and Service Offices in all principal cities of the world. Manufacturing in Australia, Canada, Finland, France, Germany, Japan, Mexico, Netherlands, Spain, Taiwan, United Kingdom, U.S.A.

**Accessories (continued):**

AF11S-112C Screen insert (50 microns) for 1-1/2 to 2 in. F76S.  
 AF11S-1D Screen insert (200 microns) for 1/2 to 1-1/4 in. F76S.  
 AF11S-112D Screen insert (200 microns) for 1-1/2 to 2 in. F76S.  
 KF11S-1A Clear Plastic Filter Sump Kit for 1/2 to 1-1/4 in. F76S.  
 KF11S-112A Clear Plastic Filter Sump Kit for 1-1/2 to 2 in. F76S.  
 FT09RS-1A Bronze Filter Sump Kit for 1/2 to 1-1/4 in. F76S.  
 FT09RS-112A Bronze Filter Sump Kit for 1-1/2 to 2 in. F76S.  
 KH11S-1A Ball Valve Assembly for 1/2 to 2 in. F76S.  
 M76K-200 Pressure Gauge, 200 psi maximum.  
 M76K-400 Pressure Gauge, 400 psi maximum.  
 U76S5007 Sweat Tailpiece for any 1/2 in. F76.  
 U76S5015 Sweat Tailpiece for any 3/4 in. F76.  
 U76S5023 Sweat Tailpiece for any 1 in. F76.

U76S5031 Sweat Tailpiece for any 1-1/4 in. F76.  
 U76S5039 Sweat Tailpiece for any 1-1/2 in. F76.  
 U76S5047 Sweat Tailpiece for any 2 in. F76.  
 U76T1004 Threaded Tailpiece for any 1/2 in. F76.  
 U76T1014 Threaded Tailpiece for any 3/4 in. F76.  
 U76T1022 Threaded Tailpiece for any 1 in. F76.  
 U76T1030 Threaded Tailpiece for any 1-1/4 in. F76.  
 U76T1038 Threaded Tailpiece for any 1-1/2 in. F76.  
 U76T1046 Threaded Tailpiece for any 2 in. F76.  
 ZR10K-1 Sump Wrench for any 1 in. or 1-1/4 in. F76.  
 ZR10K-112 Sump Wrench for any 1-1/2 in. or 2 in. F76.  
 ZR10K-12 Sump Wrench for 1/2 in. and 3/4 in. F76A,G.  
 ZR10K-34 Sump Wrench for 1/2 in. and 3/4 in. F76S.



SIZE	L <sup>①</sup>	I <sup>①</sup>	D <sup>①</sup>	H <sup>①</sup>	h <sup>①</sup>	WEIGHT <sup>②</sup>
1/2 INCH	6-11/16 (170)	4-5/16 (110)	3-13/16 (97)	17-11/16 (449)	13-13/16 (350)	6.4 (2.9)
3/4 INCH	7 (178)	4-5/16 (110)	3-13/16 (97)	17-11/16 (449)	13-13/16 (350)	6.4 (2.9)
1 INCH	8-1/4 (209)	5-1/8 (130)	3-13/16 (97)	17-7/8 (453)	13-13/16 (350)	6.8 (3.1)
1-1/4 INCH	8-3/4 (222)	5-1/8 (130)	3-13/16 (97)	17-7/8 (453)	13-13/16 (350)	7.3 (3.3)
1-1/2 INCH	9-11/16 (246)	5-15/16 (150)	4-3/4 (119)	20-15/16 (532)	16-7/16 (417)	8.8 (4.0)
2 INCH	10-1/2 (267)	5-15/16 (150)	4-3/4 (119)	20-15/16 (532)	16-7/16 (417)	10.6 (4.8)

① DIMENSIONS IN INCHES AND (MILLIMETERS).

② WEIGHT IN POUNDS AND (KILOGRAMS).

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**Fig. 1. F76S Dimensions.**

**Table 1. Capacity in Gallons Per Minute (gpm).**

Pressure Drop (psi) Across Filter	Pipe Size (in.)					
	1/2	3/4	1	1-1/4	1-1/2	2
1	8	11	18	20	26	30
2	12	16	25	28	36	42
3	14	19	31	35	44	51
4	16	22	36	40	51	59
5	18	25	40	45	57	66
15	32	43	70	78	99	114
Flow Volume for 15 sec backwash at 60 psi inlet						
—	3.2	3.2	4.0	4.0	4.7	4.7

NOTE: C<sub>v</sub> is equal to capacity at 1 psi pressure drop.

**Table 2. MV876B Timer Selections.**

Program Value	Backwash Interval
1	4 minutes
2	8 minutes
3	16 minutes
4	32 minutes
5	1 hour
6	2 hours
7	4 hours
8	8 hours
9	17 hours
10	34 hours
11	3 days
12	6 days
13	11 days
14	23 days
15	45 days
16	3 months