

Waterflow Detectors, Vane Type

Waterflow detectors installed in sprinkler systems provide an electrical alarm when a flow of water from the system equals or exceeds that of a single sprinkler. They can be used with either open or closed signaling circuits.

They may consist of a flexible vane which projects into the waterway or a pressure-sensing device. For the flexible vane type, water movement deflects the vane, and the motion is transmitted to an alarm-actuating switch after a predetermined time delay. The time delay is accomplished by the use of an instantly recycling retard.

Unless otherwise noted in the listing, the flexible vane type is to be used with pipe having an inside diameter which corresponds to Schedule 40 pipe for sizes up to and including 6 in. (152 mm) or Schedule 30 pipe for sizes 8 and 10 in. (203 and 254 mm).

Waterflow detectors should not be specified for those systems where the time duration of a pressure fluctuation is greater than the retard time. Instantly recycling retards will not transmit an electrical alarm until the time duration of the pressure fluctuation or waterflow past the vane of the flow detector has exceeded the predetermined time setting of 30-60 seconds. Unless otherwise noted in the listing, these detectors have 175 psi (1205 kPa) rated working pressure.

Model WFD

Model WFD-XX 2 through 8 in. NPS as indicated in Table below. 2 through 4 in. NPS have a 450 psi (3105 kPa) rated working pressure. 6 and 8 in. NPS have a 400 psi (2760 kPa) rated working pressure.
Two snap switches and pneumatic retard.

2 through 6 in. NPS sizes rated for Schedules 10 and 40.

8 in. NPS size rated for 0.188 in wall, Schedules 10 and 30 pipe.

Product Specification

| Model No | Valve Size | |
|--------------|------------|-------|
| | in | (mm) |
| WFD20E(P) | N/A | (60) |
| WFD25E (P) | N/A | (76) |
| WFD30E | N/A | (89) |
| WFD30E-2E(P) | N/A | (89) |
| WFD40E(P) | N/A | (114) |
| WFD60E(P) | N/A | (165) |
| WFD80E(P) | N/A | (219) |
| WFD20 | 2 | (50) |
| WFD25 | 2 1/2 | (65) |
| WFD30 | 3 | (80) |
| WFD30-2 | 3 | (80) |
| WFD35 | 3 1/2 | (90) |
| WFD40 | 4 | (100) |
| WFD50 | 5 | (125) |
| WFD60 | 6 | (150) |
| WFD80 | 8 | (200) |
| WFD20† Ω | 2 | (50) |
| WFD25† Ω | 2 1/2 | (65) |
| WFD30† | 3 | (80) |
| WFD30-2† Ω | 3 | (80) |
| WFD35† | 3 1/2 | (90) |
| WFD40† Ω | 4 | (100) |

| | | |
|------------|-------|-------|
| WFD50† | 5 | (125) |
| WFD60‡ | 6 | (150) |
| WFD80§ | 8 | (200) |
| WFD20-EXP† | 2 | (50) |
| WFD25-EXP† | 2 1/2 | (65) |
| WFD30-EXP† | 3 | (80) |
| WFD30-2EXP | 3 | (80) |
| WFD35-EXP† | 3 1/2 | (90) |
| WFD40-EXP† | 4 | (100) |
| WFD50-EXP† | 5 | (125) |
| WFD60-EXP‡ | 6 | (150) |
| WFD80-EXP§ | 8 | (200) |

*Suitable for use in BS 1387 medium and heavy pipe, DIN 2448 and 2458 pipe. 2 through 4 in. NPS have a 450 psi (3105 kPa) rated working pressure. 6 and 8 in. NPS have a 400 psi (2760 kPa) rated working pressure. Two snap switches and pneumatic retard.

*Suitable for use in Schedule 40 pipe. Two snap switches and pneumatic retard. Two snap switches and pneumatic retard.

†Also for use with Schedule 10 pipe.

‡Also for use with pipe having a wall thickness of 0.134 in. (3 mm).

§Also for use with pipe having a wall thickness of 0.188 in. (5 mm).

Ω Also for use with Schedule 7 pipe.

Model WFD.2 through 5 in. NPS, for use with Schedule 10 or Schedule 7 (per table below) pipe; 6 in. NPS, for use with pipe having a wall thickness of 0.134 in. (3 mm); 8 in. NPS, for use with pipe having a wall thickness of 0.188 in. (5 mm). 450 psi (3105kPa) rated working pressure. 2 through 5 in. NPS have a 450 psi (3105 kPa) rated working pressure. 6 and 8 in. NPS have a 400 psi (2760 kPa) rated working pressure. Model WFD has two snap switches and pneumatic retard. Contacts rated for 7 A at 125 V ac, 0.25 A at 24 Vdc.

Model WFDXX-EXP2 through 8 in. NPS as indicated in table below. These models are suitable for use in hazardous locations: Class I, Groups B, C, D Division 1, Class II, Groups E, F, G, Division 1, and Class III, Division 1 NEMA 4 enclosure. 2 through 5 in. NPS have a 450 psi (3105 kPa) rated working pressure. 6 and 8 in. NPS have a 400 psi (2760 kPa) rated working pressure. Two snap switches and pneumatic retard. Contacts rated for 10 A, at 125/250 V ac, 2.5 A, 24 V dc.

Models WFD20A, 25A, 30A, 40A, 50A, 60A, 80A for Canadian distribution have factory installed cover tamper switch rated for 5 A at 125/250 V ac, 2.5 A at 24 V dc.

Model 546-7000. Cover tamper switch available for Models WFD20, 25, 30, 35, 40, 50, 60, 80 rated for 5 A at 125/250 V ac, 2.5 A at 24 V dc.

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|-------------------------------------|---|
| Company Name: | System Sensor Div of Honeywell |
| Company Address: | 3825 Ohio Ave, Saint Charles, Illinois 60174, USA |
| Company Website: | http://systemsensor.com |
| New/Updated Product Listing: | No |
| Listing Country: | United States of America |
| Certification Type: | FM Approved |
| Class of Work: | 1043-Waterflow Tester (vane type) |