

Flow switch

For wet sprinkler systems

Model FSFD, with adjustable time delay

WIKA data sheet FL 50.01



Applications

- Detection of the flow in wet sprinkler systems once the sprinkler has been triggered

Special features

- Adjustable time delay mechanism to avoid false alarms during water surges
- Tamper-proof cover prevents unauthorised access to the switch point setting
- IP56/NEMA 4 ingress protection enables the instrument to be used indoors and outdoors
- Two sets of microswitches activate the control panel and the local audible warnings
- Two cable duct openings enable easy connections to terminal blocks



Flow switch, model FSFD

Description

The model FSFD was developed to detect the water flow in wet sprinkler systems once the sprinkler has been triggered. The flow switch is fitted with a pneumatic time delay mechanism that can be set from 0 ... 70 seconds via an adjustment dial to avoid false alarms during water surges.

The tamper-proof screws on the cover prevent unauthorised access to the switch point setting. The robust design, with IP56/NEMA4 ingress protection, is suitable for indoor and outdoor applications. For error-free installation, the direction of flow is indicated on the case and on the saddle.

The model FSFD has two cable duct openings for two sets of SPDT switches (form C) in a fused terminal block, which provides a direct electrical connection to control panels and local audible warnings.

Since the flow switch is designed for pipe sizes from 2 ... 8" in various pipe schedules, it provides a complete solution for construction projects.

The model FSFD has been designed for improved sensitivity and repeatability of the switch point and has UL and FM certifications.

Specifications



Specifications	
Approvals	<ul style="list-style-type: none"> ■ UL 346 ■ FM 1042
Case	Aluminium die-casting (per EN AC-46000)
Sealing	EPDM
Ingress protection	IP56/NEMA 4, suitable for indoor and outdoor applications
Flow rate/sensitivity	4 ... 10 GPM [15 ... 38 LPM]
Operating pressure	268 psi [18.5 bar] ¹⁾
Max. water surge	18 FPS [5.5 m/s]
Operating temperature	0 ... 68 °C [32 ... 154 °F]
Switching function	2 x SPDT (single pole double throw), form C
Electrical rating	<ul style="list-style-type: none"> ■ 10 A, AC 125/250 V ■ 2 A, DC 30 V res.
Electrical connection	Two inputs for ½" conduit
Mounting	<ul style="list-style-type: none"> ■ Horizontal mounting ■ Vertical mounting <p>The arrows on the case and the saddle determine the flow direction.</p>
Regulations	
Installation of sprinkler systems	NFPA-13
Installation of sprinkler systems in one- and two-family dwellings and manufactured homes	NFPA-13D
Installation of sprinkler systems in low-rise residential occupancies	NFPA-13R
National fire alarm and signaling code	NFPA-72
Weight	Approx. 2 ... 3.5 kg [4.4 ... 7.7 lb], depending on pipe size

1) With UL346 the operating pressure is limited to 175 psi [12 bar] for pipe size 8 inch (DN 200).

Compatible pipes

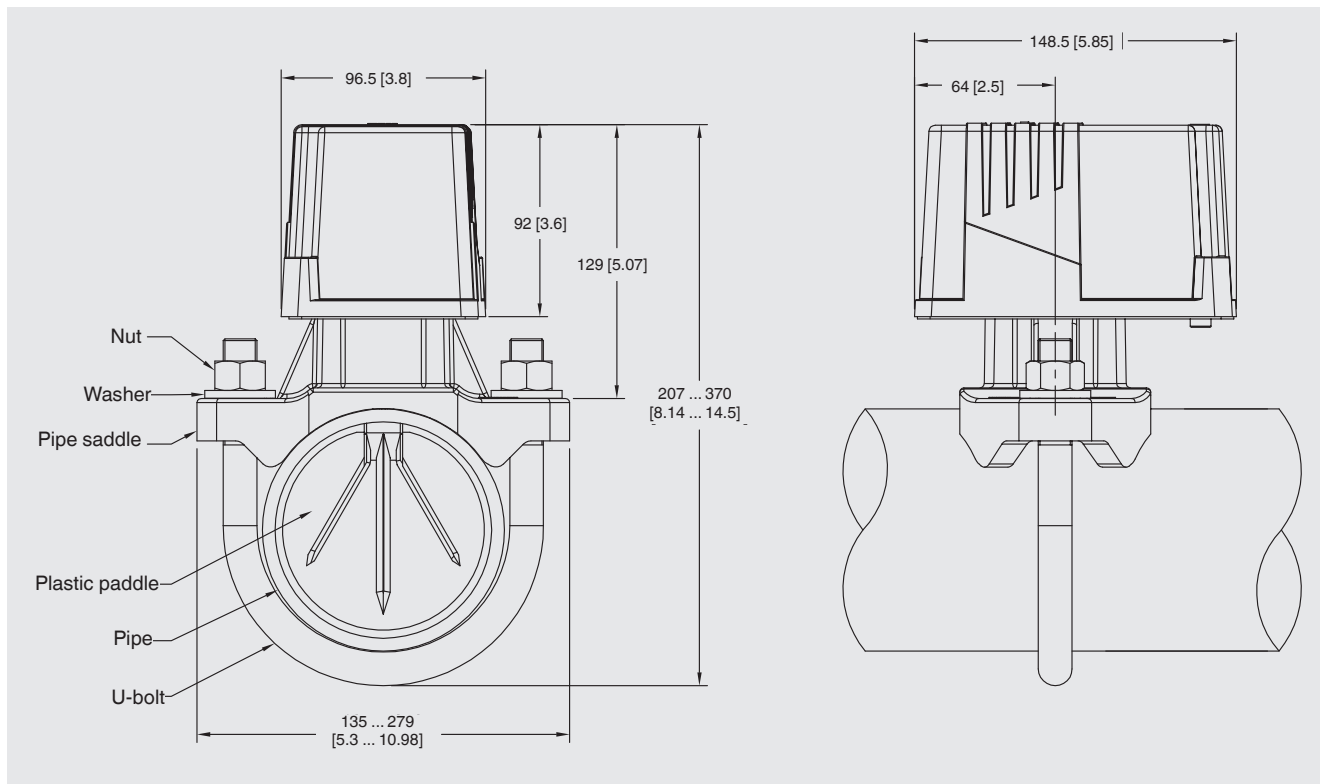
Model	Nominal pipe size		Outer diameter		Wall thickness					
	inch	mm	inch	mm	Light-weight wall		Schedule 10		Schedule 40	
					inch	mm	inch	mm	inch	mm
FSFD 2	2	DN 50	2.37	60.3	0.07	1.65	0.11	2.77	0.15	3.91
FSFD 2.5	2.5	DN 65	2.87	73	0.08	2.13	0.12	3.05	–	–
FSFD 3	3	DN 80	3.5	88.9	0.08	2.11	0.12	3.05	0.22	5.49
FSFD 3.5	3.5	–	4	101.6	-	-	0.12	3.05	0.23	5.74
FSFD 4	4	DN 100	4.5	114.3	0.08	2.13	0.12	3.05	0.24	6.02
FSFD 5	5	–	5.56	141.3	-	-	0.13	3.4	0.26	6.55
FSFD 6	6	DN 150	6.63	168.3	0.12	2.92	0.13	3.4	0.28	7.11
FSFD 8	8	DN 200	8.63	219.1	-	-	0.15	3.76	0.32	8.18

Approvals

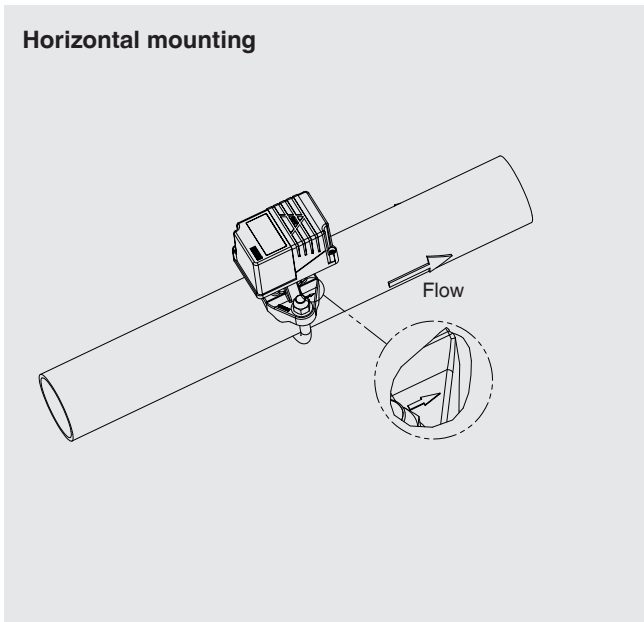
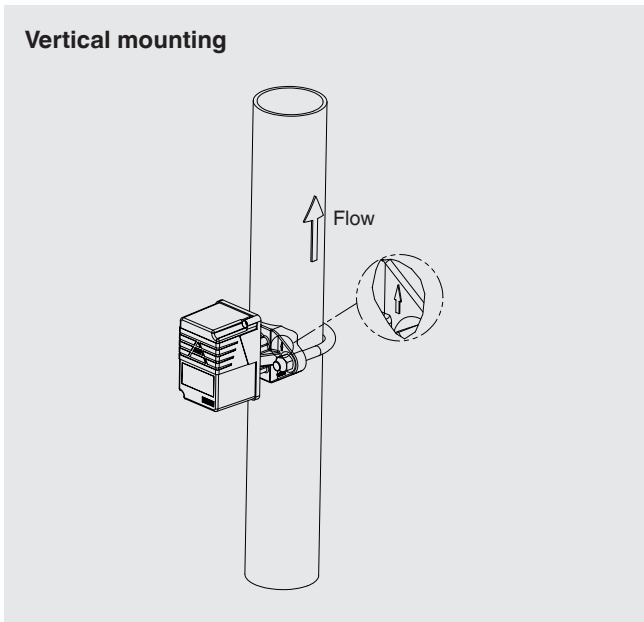
Logo	Description	Region
	UL Safety (e.g. electr. safety, overpressure, ...)	USA
	FM Hazardous areas	USA

→ For approvals and certificates, see website

Dimensions in mm [in]



Mounting



Ordering information

Nominal pipe size		Model	Order number
inch	mm		
2	DN 50	FSFD 2	83792488
2.5	DN 65	FSFD 2.5	83792489
3	DN 80	FSFD 3	83792490
3.5	–	FSFD 3.5	83792491
4	DN 100	FSFD 4	83792492
5	–	FSFD 5	83792493
6	DN 150	FSFD 6	83792494
8	DN 200	FSFD 8	83792495

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