

ZONE-LUX® FLOW SWITCH TESTER

Automated flow switch tester for stationary fire protection systems



The ZONE-LUX® is an advanced, automated flow switch tester specifically designed for use in wet sprinkler systems within stationary fire protection installations. It ensures reliable flow detection and testing of sprinkler lines to assist in rapid fire detection and response.

Key Features:

Efficient Testing: Testing can be conducted quickly by a single operator across all sprinkler units within the system. The entire process is automated, saving time and resources, while the system remains fully functional during the test.

Corrosion Prevention: Unlike manual testing methods, the ZONE-LUX® requires no additio-

ADVANTAGES

- » Time-saving and cost-efficient
- » 16 bar operating pressure
- » Precise monitoring and testing without disrupting the system's operational readiness
- » Easy installation through pre-wired and addressable options

nal water during the test, reducing the risk of corrosion in the sprinkler lines and extending the lifespan of the system.

Remote Testing: Tests can be initiated remotely via key switch or fire alarm control panel (FACP), allowing for seamless and resource-efficient operation from a central location.

Advanced Monitoring: Built-in resistance monitoring adds an extra layer of security by detecting and reporting short circuits, wire breaks, and tampering, ensuring the system remains fully operational and secure.

Addressable connection via an Apollo module is offered.



TECHNICAL DATA

System

Operating pressure	Max. 16 bar (232 psi)
Temperature range	4 °C ... 50 °C (39 °F ... 122 °F)
Certificates	FM PR464050 VdS G 422034

Main pipe

Installation length	450 mm (17.7 in)
Connection	Grooved

Pump

Pressure limit	16 bar (232 psi)
Protection class	IP42
Input voltage (nominal)	220 ... 240 V AC (optional 120 V AC)
Frequency range AC	50 ... 60 Hz
Power (max.)	245 W
Flow rate (max.)	115 l/min (30.4 USgpm)
Connection	1 ½"
Weight	5 kg (11 lbs)
Lift height (max.)	8 m (26.3 ft)

Flow switch

Type	Potter VSR-EU (optional VSR-F)
Protection class	IP54
Flow sensitivity	30 ... 57 l/min (7.9 ... 15.1 USgpm)
Pressure loss	2"/DN 50 ... 4"/DN 100: ≤0.2 bar at 5 m/s (2.9 psi at 16.4 ft/s) 6"/DN 150 ... 8"/DN 200: ≤0.07 bar at 5 m/s (1.0 psi at 16.4 ft)
Contact ratings	Two SPDT devices (Form C) 10.0 A at 125/250 V AC 2.0 A at 30 V DC resistive 10 mA at 24 V DC

DIMENSIONS AND WEIGHTS

Nominal diameter	Ø (mm / in)	A (mm / in)	B (mm / in)	C (mm / in)	D (mm / in)	Weight (kg / lbs)
2"/DN 50	60.3 (2.4)	245 (9.8)	52 (2.1)	145 (5.7)	116 (4.6)	9.75 (21.5)
2½"/DN 65	76.1 (3.0)	258 (10.2)	60 (2.4)	155 (6.1)	124 (4.9)	9.95 (21.9)
3"/DN 80	88.9 (3.5)	259 (10.2)	71 (2.8)	165 (6.5)	130 (5.1)	10.95 (24.1)
4"/DN 100	114.3 (4.5)	272 (10.7)	84 (3.3)	170 (6.7)	140 (5.5)	11.65 (25.7)
5"/DN 125	139.7 (5.5)	285 (11.2)	97 (3.8)	185 (7.3)	155 (6.1)	
6"/DN 150	168.3 (6.6)	299 (11.8)	111 (4.4)	200 (7.8)	168 (6.6)	15.00 (33.1)
8"/DN 200	219.1 (8.6)	325 (12.8)	137 (5.4)	235 (9.3)	195 (7.7)	22.55 (49.7)

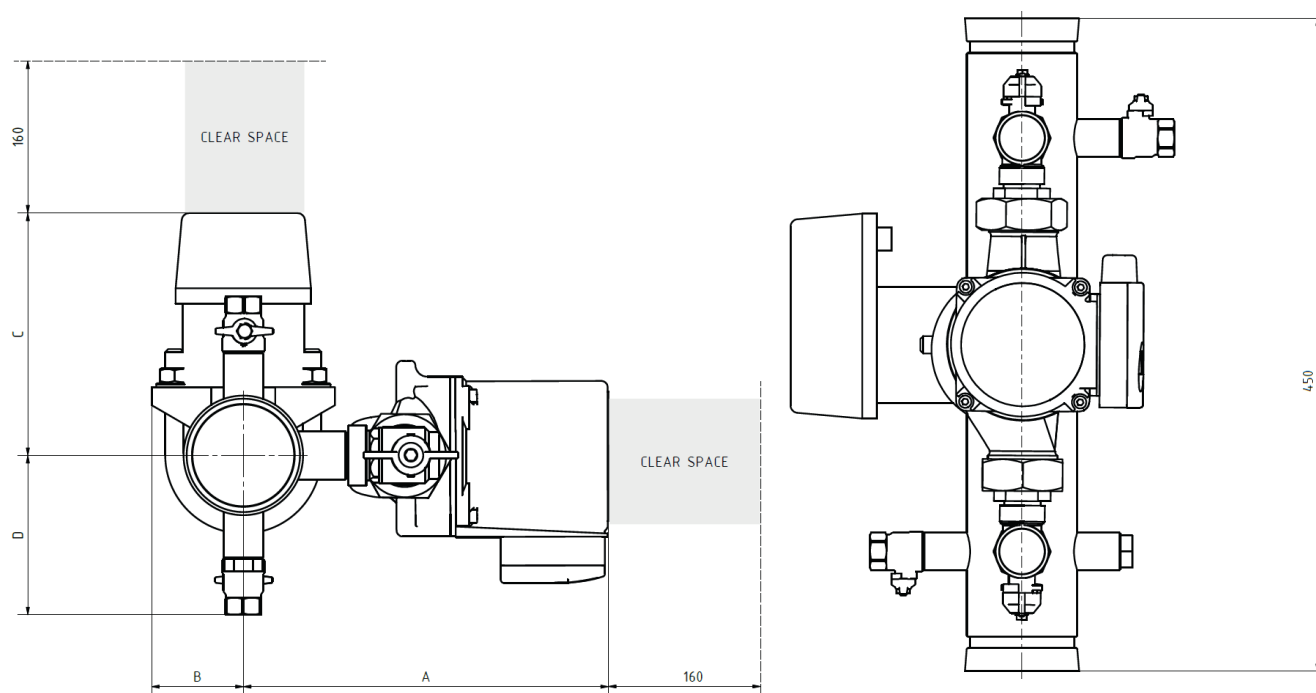


Fig. 1: Zone-Lux® Dimensions (mm)

ORIENTATION

The Zone-Lux® can be installed in either a horizontal or vertical orientation. The flow direction arrow on the main pipe of the Zone-Lux® must align with the flow direction of the sprinkler system.

Horizontal mounting

In horizontal orientation, the flow switch must face upwards. It must not be installed sideways or below the pipe.



Fig. 2: Zone-Lux® correct orientation

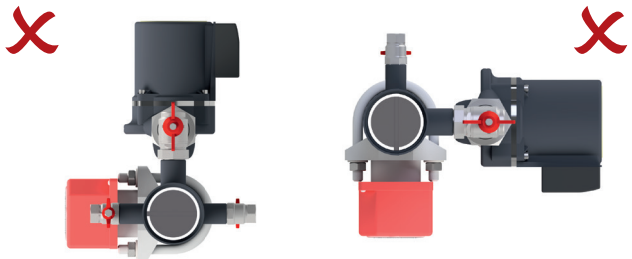


Fig. 3: Zone-Lux® wrong orientation

Vertical mounting

With left-hand and right-hand model variants, the Zone-Lux® can also be installed in tight spaces along walls.

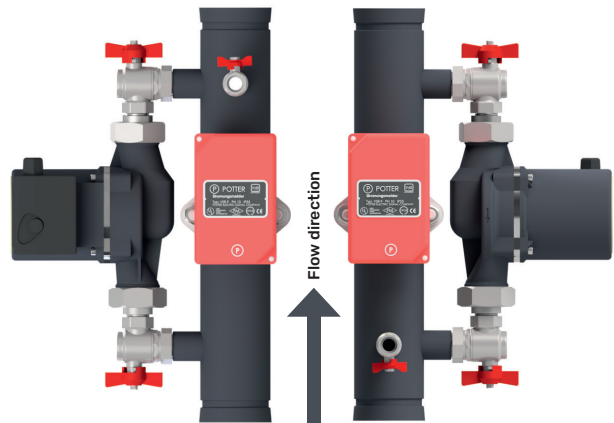


Fig. 4: Zone-Lux® possible vertical orientation: Pump in flow direction left

Fig. 5: Zone-Lux® possible vertical orientation: Pump in flow direction right



ZONE-LUX® VARIANTS*

Nominal diameter	Pump flow direction	Order code	Nominal diameter	Pump flow direction	Order code
2"/DN 50 (Ø 60.3 mm / 2.4 in)	Left	ZLB1-EL	5"/DN 125 (Ø 139.7 mm / 5.5 in)	Left	-
	Right	ZLB1-ER		Right	-
2½"/DN 65 (Ø 76.1 mm / 2.9 in)	Left	ZLB1-FL	6"/DN 150 (Ø 168.3 mm / 6.6 in)	Left	ZLB1-KL
	Right	ZLB1-FR		Right	ZLB1-KR
2½"/DN 65 (Ø 73.0 mm / 3.0 in)	Left	ZLB1-UL	6"/DN 150 (Ø 165.1 mm / 6.5 in)	Left	ZLB1-XL
	Right	ZLB1-UR		Right	ZLB1-XR
3"/DN 80 (Ø 88.9 mm / 3.5 in)	Left	ZLB1-GL	8"/DN 200 (Ø 219.1 mm / 8.6 in)	Left	ZLB1-LL
	Right	ZLB1-GR		Right	ZLB1-LR
4"/DN 100 (Ø 114.3 mm / 4.5 in)	Left	ZLB1-HL			
	Right	ZLB1-HR			

**Available in Base, Apollo and Direct Connection configurations*

ACCESSORIES AND REPLACEMENT PARTS

Product	Order code
Apollo module addressable (with pipe mounting kit)	ZB-ZLA0
Apollo module addressable pre-wired (mounted on pipe)	ZB-ZLA0-P
Direct control (junction box with pipe mounting kit)	ZB-ZLD0
Direct control pre-wired (junction box mounted on pipe)	ZB-ZLD0-P
Key switch for direct control	ZB-ZLK0
Key switch for direct control Single	ZB-ZLKV0
Key switch for direct control Group	ZB-ZLKG0
Replacement pump	ET-ZL-001