

ZNC-HS-Piston Flow Switch

User Manual





Product Description

Online installation mechanical flow switch, suitable for liquid or gas media. Available with robust plastic, aluminum, or stainless steel housing. Features minimal pressure loss, excellent repeatability, and anti-fouling capability. The mechanical and electronic parts are completely isolated, making it ideal for small-flow economical applications. Equipped with a switch-setting scale, no on-site adjustment is required. LED indicates switch status, with optional dual switch outputs. Suitable for both gas and liquid. Widely used in industrial automation, machinery, air compression, refrigeration, and HVAC systems.

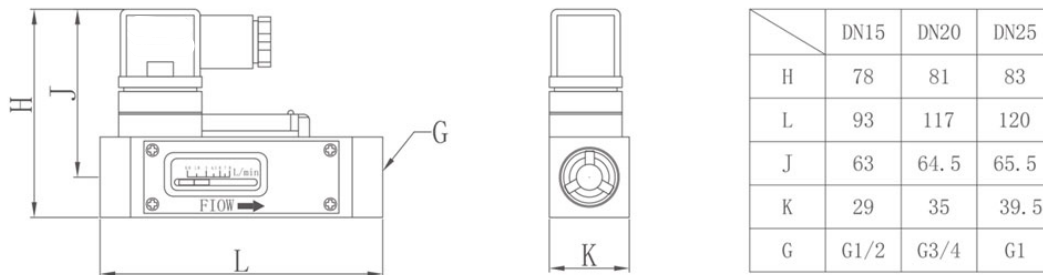
Technical Data

Technical Data	Specification
Set Range	See parameter table
Accuracy	±5% of full scale
Hysteresis	Depends on switch; minimum 0.5 L/min
Switch Setting Scale	Calibrated with water at 20°C, horizontal installation. Position, medium, and temperature changes may slightly affect switch value
LED Display	DC: LED indicates switch status; AC: no LED
Connection	Plug-in connector
Output	Reed switch, 24 VDC / 250 VAC, 100 mA
Pressure Resistance	50 bar (aluminum), 100 bar (stainless steel)
Average Pressure Loss	0.3 bar (at 25 L/min)
Medium Temperature	Max. 90°C
Protection Rating	IP65

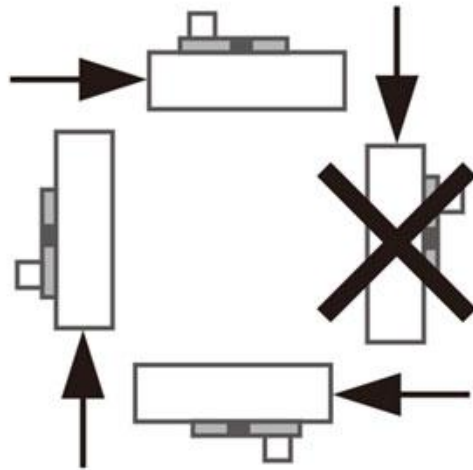
Material Options

Model	Housing	Piston	Spring	Seal
ZNC-HS100GS	POM plastic	POM plastic / stainless steel	Stainless steel	NBR
ZNC-HS100GL	Anodized aluminum	POM plastic / stainless steel	Stainless steel	NBR
ZNC-HS100GB	Stainless steel	POM plastic / stainless steel	Stainless steel	NBR

Dimensions(mm)



Installation Notes



Note: The installation position may affect the switch value.

Applicable Medium



Water



Oil



Gas

**Parameter Table**

Material	Model	Pressure (bar)	Max Flow L/min (Water)	Adjustable Range L/min (Water)	G (mm)	Weight (kg)
Anodized Aluminum (Stainless Steel)	ZNC-HS600-008···L(B)010	50	40	0.6 (0.1) – 8 (7)	G1/4	0.22 (0.53)
	ZNC-HS600-010···L(B)010	50	40	0.6 (0.1) – 8 (7)	G3/8	0.20 (0.51)
	ZNC-HS600-015···L(B)010	50	40	0.6 (0.1) – 8 (7)	G1/2	0.18 (0.48)
	ZNC-HS600-020···L(B)010	50	40	0.6 (0.1) – 8 (7)	G3/4	0.23 (0.65)
	ZNC-HS600-025···L(B)010	50	60	0.6 (0.1) – 8 (7)	G1	0.32 (0.85)
	ZNC-HS600-008···L(B)015	50	40	1 (0.5) – 15 (13)	G1/4	0.22 (0.53)
	ZNC-HS600-010···L(B)015	50	40	1 (0.5) – 15 (13)	G3/8	0.20 (0.51)
	ZNC-HS600-015···L(B)015	50	40	1 (0.5) – 15 (13)	G1/2	0.18 (0.48)
	ZNC-HS600-020···L(B)015	50	40	1 (0.5) – 15 (13)	G3/4	0.23 (0.65)
	ZNC-HS600-025···L(B)015	50	40	1 (0.5) – 15 (13)	G1	0.32 (0.82)
	ZNC-HS600-015···L(B)028	50	40	2 (0.8) – 28 (25)	G1/2	0.18 (0.48)
	ZNC-HS600-020···L(B)028	50	60	2 (0.8) – 28 (25)	G3/4	0.23 (0.65)
	ZNC-HS600-025···L(B)028	50	60	2 (0.8) – 28 (25)	G1	0.32 (0.82)
	ZNC-HS600-020···L(B)070	50	100	27 (21) – 70 (66)	G3/4	0.23 (0.65)
	ZNC-HS600-025···L(B)070	50	100	27 (21) – 70 (66)	G1	0.32 (0.82)

Note:

1. The values in parentheses indicate the reset point, while the values outside parentheses indicate the actuation point. For low-flow alarms (monitoring flow too low), refer to the reset point values. For high-flow alarms (monitoring flow too high), also refer to the reset point values.
2. The above parameters are based on the switch being installed vertically on a horizontal pipeline and tested with water at 20°C.

Attachment – Connector



External Thread Connection



Hose Connection

Note: Material options include anodized aluminum, stainless steel, and POM plastic.

Selection Table

Series	Flow Range	Connection	Power Supply	Housing Material	Switch Output	Special
ZNC-HS	008: 0.6–8 L/min 015: 1–15 L/min 028: 2–28 L/min 070: 27–70 L/min	G: Internal thread W: External thread R: Hose connection F: Flange connection	D: DC 24V ±20%A: AC 230V ±15%	S: Plastic L: Anodized aluminum T: Bronze alloy B: Stainless steel	C1: 1 switch point C2: 2 switch points	/HT: High temperature (up to 280°C)
Connector Type	800: Hirschmann plug	600: Aviation plug	–	–	–	–
Thread Size	008: G1/4010: G3/8015: G1/2020: G3/4025: G1032: G1 1/4	–	–	–	–	–

Note:

When placing an order, please specify the medium flow direction, type of medium, pipe diameter, and desired set value. We can complete the setting for you at the factory. For pipelines larger than DN25, a special order is required. Please provide the necessary parameters and requirements when ordering.