

HNF10-D

PISTON FLOW SWITCHES

Product Applications

Pneumatic-hydraulic, industrial automation / mechanical equipment / air compression industry / refrigeration and air conditioning.



PRINCIPLE CHARACTERISTICS

In-line installation, mechanical flow switches for liquid or gaseous media, robust plastic, aluminium or stainless steel housing available.

Extremely low pressure loss, good repeatability, dirt immunity, complete isolation of mechanical and electronic parts, economical for small flow rates.

With switching scale, the user does not need to set in the field.

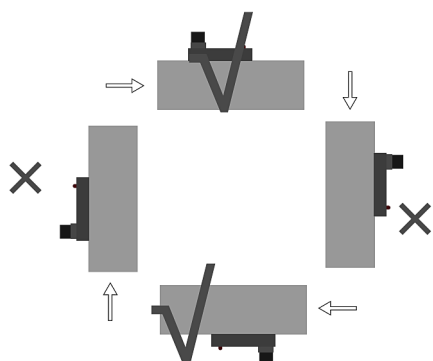
LED indication of switching status, dual switching outputs available.

TECHNICAL PARAMETERS

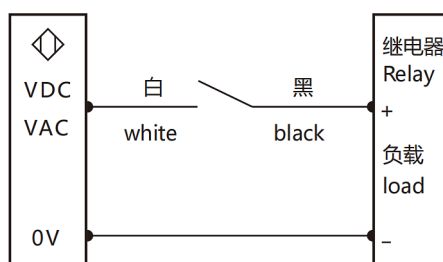
SPORTS EVENT	NUMBERS
Setting range	See parameter table for details
Accuracy	± 5 Total volume range
Hysteresis	Minimum 0.6L/min depending on switching point
Switch Setting Scale	The calibrations are carried out in water, at a temperature of 20° C and in a horizontal installation. Changes in installation position, medium and temperature may have a slight influence on the switching values.

LED display	DC powered LED for switching status, AC without LED
Wiring Method	M12 connector
Output	Reed switch, capacity 24VDC/250VAC, 100mA
Pressure resistance	10bar (plastic), 50bar (aluminium), 100bar (stainless steel)
Average pressure loss	0.3bar (at 25L/min)
Medium temperature	max 90°C
Protection class	IP67
HNF10-D... .P Material	Housing:POM plastic Piston:POM plastic Spring:Stainless steel Seal:NBR
HNF10-D... .L material	Housing:Anodized Aluminium Piston:POM Plastic Spring:Stainless Steel Seal:NBR
HNF10-D... S material	Housing:Stainless Steel Piston:POM Plastic Spring:Stainless Steel Seal:NBR

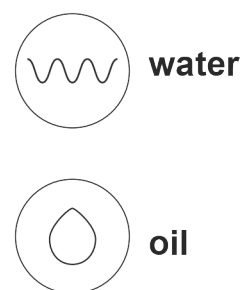
Installation Diagram



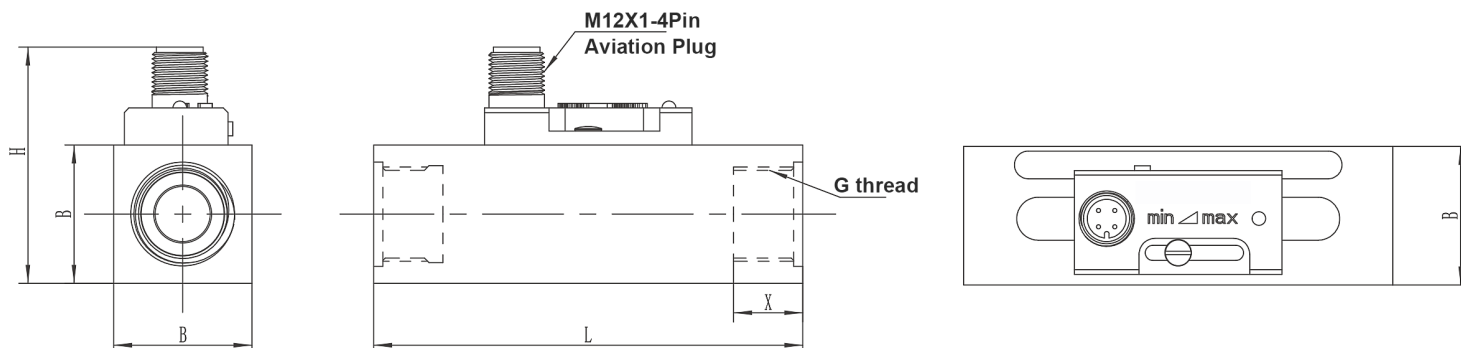
Wiring Diagram



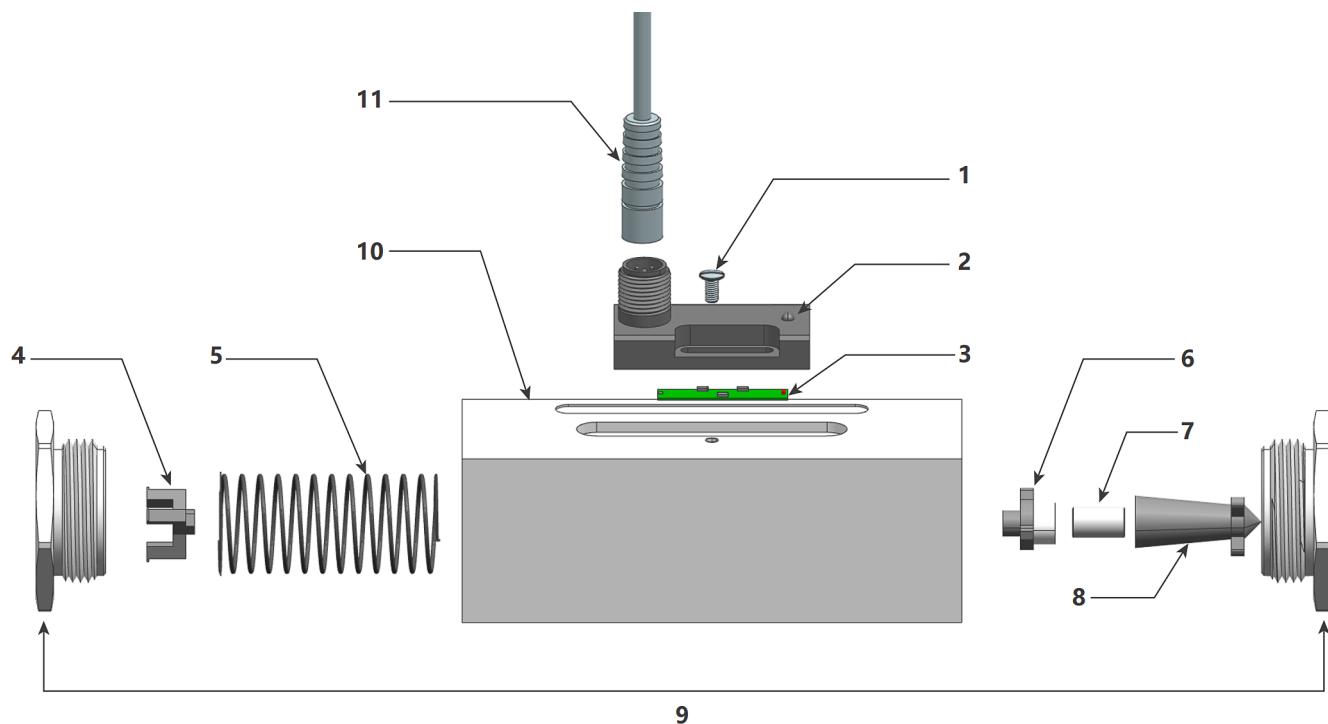
Applicable medium



PRODUCT SIZE(MM)



DECOMPOSITION CHART



- ①** Set screw **②** Switch housing **③** Switch unit **④** Spring Support
⑤ Spring **⑥** Piston cover **⑦** Magnet **⑧** Piston front cover
⑨ Process Connection **⑩** Switch body **⑪** Aircraft Cable

PARAMETER TABLE

Model number	Pressure (bar)	Maximum flow rate L/min(water)	Adjustable range L/min(water)	G (mm)	L (mm)	H (mm)	B (mm)	X (mm)	Weight (kg)
HNF10-D-G3/4K...L(S)008	50	40	0.6(0.3)...8(7)	G3/4	109	54	34	15	0.23(0.65)
HNF10-D-G1K...L(S)008	50	40	0.6 (0.3)...8(7)	G1	109	56	40	15	0.32(0.82)
HNF10-D-G1/4K...L(S)015	50	40	1(0.5)...15(13)	G1/4	93	52	30	12	0.22(0.53)
HNF10-D-G3/8K...L(S)015	50	40	1(0.5)...15(13)	G3/8	93	52	30	12	0.20(0.51)
HNF10-D-G1/2K...L(S)015	50	40	1(0.5)...15(13)	G1/2	93	52	30	12	0.18(0.48)
HNF10-D-G3/4K...L(S)015	50	40	1(0.5)...15(13)	G3/4	109	54	34	15	0.23(0.65)
HNF10-D-G1K...L(S)015	50	40	1(0.5)...15(13)	G1	109	56	40	15	0.32(0.82)
HNF10-D-G1/2K...L(S)025	50	40	2(0.8)...25(25)	G1/2	93	52	30	12	0.18(0.48)
HNF10-D-G3/4K...L(S)025	50	40	2(0.8)...25(25)	G3/4	109	54	35	15	0.23(0.65)
HNF10-D-G1K...L(S)025	50	40	2(0.8)...25(25)	G1	109	56	40	15	0.32(0.82)
HNF10-D-G3/4K...L(S)070	50	100	27(21)...70(66)	G3/4	115	62	40	15	0.23(0.65)
HNF10-D-G1K...L(S)070	50	100	27(21)...70(66)	G1	115	62	40	15	0.32(0.82)

HNF10-D PISTON FLOW SWITCH SELECTION CHART

MODEL	SPECS	PARAMETER
HNF10-D		Piston Flow Switches
Process threaded connections	G14	Threaded connection G1/4 female thread
	G38	Threaded connection G3/8 female thread
	G12	Threaded connection G1/2 female thread
	G34	Threaded connection G3/4 female thread
	G1	Threaded connector G1 female thread
Supply Voltage	DC	power supply 24V±20% DC (2-wire NO switch)
	AC	power supply 230V±15%AC (2-wire NO switch)
Shell material	P	Plastic shell
	L	Anodised aluminium housing
	S	Stainless steel housing
Setting range	007	0.3...7L/min
	008	0.6...8L/min
	015	1...15L/min
	025	2....25L/min
	040	5...40L/min
	070	27...70L/min
Electrical Accessories	M	M12 connector
	Z	Direct Wire Attachment
Signal output	1	1 switching point output
	2	2 switching point outputs

Remarks:

1. When ordering, please specify the direction of media flow, the type of media, pipe diameter and expectations, we can help you to complete the setting in the factory.
2. If it is a gas medium, please specify the pressure (gauge pressure/absolute pressure), temperature and type of medium.
3. Special threaded connections and flow rate settings can be customised.