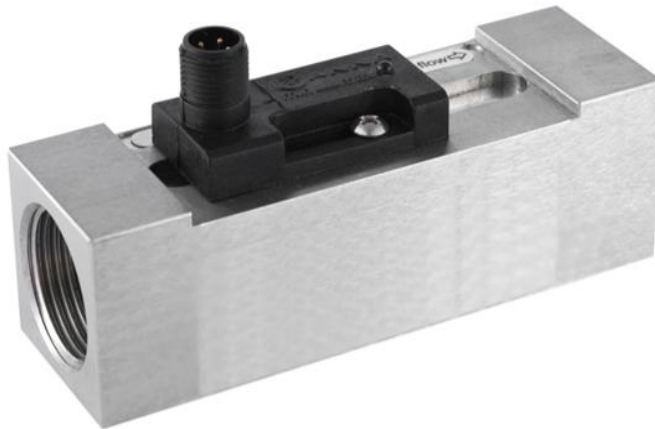


Datasheet

Piton Flow Switch F10

Introduction

F10 equips with a piston which responds to the flow rate in a pipe. With increasing or decreasing of the flow rate, the movement of the piston actuates a hermetically sealed reed switch, and triggers the specified action.



Characteristics

1/4" ... 1" / DN08 ... DN25

Repeatability 5%

Applicable to liquid or gas

LED for switch state

Housing material: aluminum or stainless steel

Less pressure drop

Applications

Inline mount for small pipelines

Hydraulic and lubrication system

Cooling system

Compressed air

Air conditioning industry

Machine manufacturing

Specifications

Measurable flow range	See below for details
Repeatability	5%
Hysteresis	Depend on the set point, Min. 0.132gal/min (0.5L/min)
Calibration	Calibrated with water at 68°F(20°C); Horizontally mounting Mounting position, medium and temperature will affect the calibration slightly
Power supply	24VDC
LED	LED for switch state
Electrical connection	M12 x 1
Output	Reed switch (24VDC, 1A)
Pressure rating	725psi / 50 bar (Aluminum housing) 1450psi / 100 bar (stainless steel housing)
Average pressuer loss	4.35psi @ 6.6 gal/min 0.3 bar @ 25L/min
Medium temperature	Max. 194°F / 90°C
Protection class	IP65
Material	Housing: Stainless steel or Aluminum Piston: POM plastic Spring: stainless steel Sealing: NBR

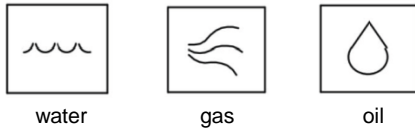
Set point range

Part Code	G / NPT Thread	Set Point Range		Max. allowed Flow rate gal/min (L/min)	Pressure Rating	
		gal/min set point (reset point)	L/min set point (reset point)		Aluminum psi (bar)	Stainless steel psi (bar)
R1	1/4"	0.16(0.026)...1.85(1.72)	0.6(0.1)...7(6.5)	10.5 (40)	725 (50)	1450 (100)
R2	3/8"	0.16(0.026)...1.85(1.72)	0.6(0.1)...7(6.5)	10.5 (40)	725 (50)	1450 (100)
R3	1/2"	0.16(0.026)...1.85(1.72)	0.6(0.1)...7(6.5)	10.5 (40)	725 (50)	1450 (100)
R4	3/4"	0.16(0.026)...1.85(1.72)	0.6(0.1)...7(6.5)	10.5 (40)	725 (50)	1450 (100)
R5	1"	0.16(0.026)...1.85(1.72)	0.6(0.1)...7(6.5)	10.5 (40)	725 (50)	1450 (100)
R6	1/4"	0.26(0.13)...3.3(2.9)	1(0.5)...12.5(11)	10.5 (40)	725 (50)	1450 (100)
R7	3/8"	0.26(0.13)...3.3(2.9)	1(0.5)...12.5(11)	10.5 (40)	725 (50)	1450 (100)
R8	1/2"	0.26(0.13)...3.3(2.9)	1(0.5)...12.5(11)	10.5 (40)	725 (50)	1450 (100)
R9	3/4"	0.26(0.13)...3.3(2.9)	1(0.5)...12.5(11)	10.5 (40)	725 (50)	1450 (100)
R10	1"	0.26(0.13)...3.3(2.9)	1(0.5)...12.5(11)	10.5 (40)	725 (50)	1450 (100)
R11	1/2"	0.53(0.21)...6.3(5.8)	2(0.8)...24(22)	10.5 (40)	725 (50)	1450 (100)
R12	3/4"	0.53(0.21)...6.3(5.8)	2(0.8)...24(22)	10.5 (40)	725 (50)	1450 (100)
R13	1"	0.53(0.21)...6.3(5.8)	2(0.8)...24(22)	16 (60)	725 (50)	1450 (100)
R14	3/4"	7.1(5.5)...18.5(17.4)	27(21)...70(66)	26 (100)	725 (50)	1450 (100)
R15	1"	7.1(5.5)...18.5(17.4)	27(21)...70(66)	26 (100)	725 (50)	1450 (100)

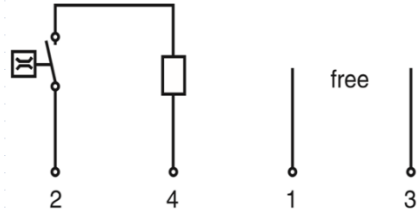
* Above data is obtained with water at 68°F(20°C) for lower limit monitoring.

* Red in brackets is for reset point.

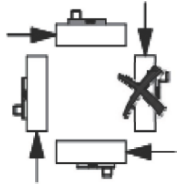
Applicable medium



Wiring

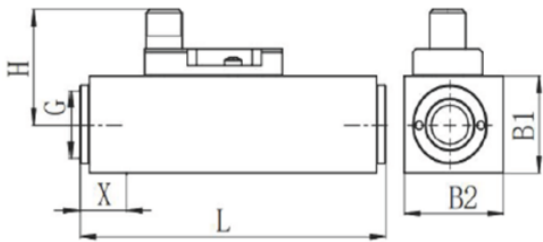


Mounting

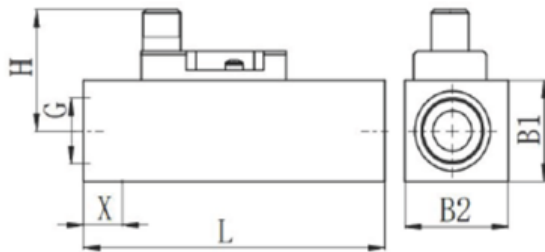


PIN	Cable color	Description
1	Brown	-
2	White	24VDC
3	Blue	-
4	Black	Load (signal output)

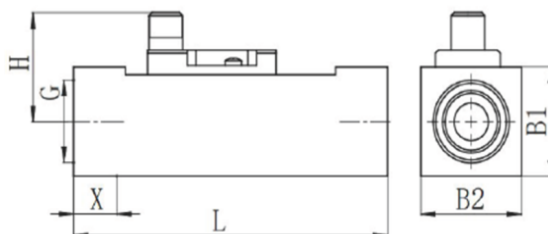
Dimension in mm



1/4" and 3/8"



1/2"



3/4" and 1"

Part Code	Thread G / NPT	L (mm)	H (mm)	B1 (mm)	B2 (mm)	X (mm)
R1	1/4"	99	36	30	32	12
R2	3/8"	99	36	30	32	12
R3	1/2"	93	36	30	32	12
R4	3/4"	109	36	35	35	15
R5	1"	109	36	40	40	15
R6	1/4"	99	36	30	32	12
R7	3/8"	99	36	30	32	12
R8	1/2"	93	36	30	32	12
R9	3/4"	109	36	35	32	15
R10	1"	109	36	40	40	15
R11	1/2"	93	36	30	32	12
R12	3/4"	109	36	35	35	15
R13	1"	109	36	40	40	15
R14	3/4"	121	36	35	35	15
R15	1"	115	36	40	40	15

Order Code

Example: F10-R5ANFLQ

1. Model

F10- Piston flow switch

2. Part code

R1	1/4"	0.6...7 L/min (0.16...1.85 gal/min)
R2	3/8"	0.6...7 L/min (0.16...1.85 gal/min)
R3	1/2"	0.6...7 L/min (0.16...1.85 gal/min)
R4	3/4"	0.6...7 L/min (0.16...1.85 gal/min)
R5	1"	0.6...7 L/min (0.16...1.85 gal/min)
R6	1/4"	1...12.5 L/min (0.26...3.3 gal/min)
R7	3/8"	1...12.5 L/min (0.26...3.3 gal/min)
R8	1/2"	1...12.5 L/min (0.26...3.3 gal/min)
R9	3/4"	1...12.5 L/min (0.26...3.3 gal/min)
R10	1"	1...12.5 L/min (0.26...3.3 gal/min)
R11	1/2"	2...24 L/min (0.53...6.3 gal/min)
R12	3/4"	2...24 L/min (0.53...6.3 gal/min)
R13	1"	2...24 L/min (0.53...6.3 gal/min)
R14	3/4"	27...70 L/min (7.1...18.5 gal/min)
R15	1"	27...70 L/min (7.1...18.5 gal/min)

3. Housing material

A	Aluminum
K	Stainless steel

4. Connection

GF	G female thread
NF	NPT female thread
S	Other connection on request

5. Indicator

N	No LED indicator
L	LED indicator for switch state

6. Electrical connection

Q	M12 x 1
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Note:

1. Please let us know the flow direction, medium type and the desired set point when ordering, we will have the setting done in our factory.
2. For viscous medium, please let us know the medium type, temperature and viscosity.
3. For gas, please let us know the medium type, temperature and pressure (gauge / absolute).

Accessory - power/signal cable with socket

1. Connecting cable with socket

ET02- 2-pin M12 x 1 connecting cable with socket

2. Material

PU Material: PUR

3. Length

02	6.5ft / 2m (default)
05	16.5ft / 5m

4. Type

R	Regular cable
S	Shielded cable

5. Connector

G	Straight socket
W	Angled socket



Accessory - wirable plug

1. Wirable plug

ST05 5-pin M12 x 1 wirable plug

