

NitroFlo™ CFNF

COMPACT FLOW SWITCH DATA SHEET



DESCRIPTION

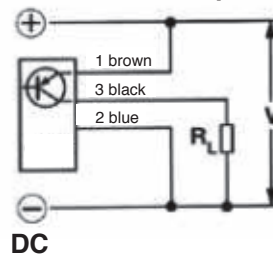
This industrial purpose flow switch is a great choice for monitoring a diverse range of air or gaseous applications. NitroFlo is encapsulated in epoxy resin and operates with NO moving parts. NitroFlo has adjustable span potentiometers, an adjustable set point from 1.5 to 65 feet per second, and LED indication of flow. Typical applications include air conditioning, dust collection systems, ventilation monitoring and energy conservation systems.

FEATURES & BENEFITS

- Compact air flow switch with rugged Stainless Steel construction or plastic Ultradur
- High accuracy with NO moving parts
- Set-Point adjustable between 1.5 fps and 65 fps
- Broadly selected for critical applications
- Solid-state sensor is not damaged by over-ranging flow velocities
- Easy to install

CONNECTION DIAGRAM

PNP-transistor output



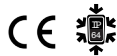
PNC

PNO

PNC: PNP Normally Closed

PNO: PNP Normally Open

SPECIFICATIONS



Service	Compatible Gasses
Switching Range	1.5 to 65 fps (0.5 to 20 mps)
Adjustment Characteristic	Logarithmic to Flow Speed
Pressure	CFNF-U: 15 psi (1 bar) CFNF-S: 150 psi (10 bar)
Accuracy	< 3%
Hysteresis	< 20%
Switching Delay	Approx. 2 sec with chance of flow more than 6.5 fps below or above set point
Temperature Drift	< 0.3% / K
Supply Voltage	24 VDC ± 30%
Switching Current	200 mA max.
Consumption	1.3 W max
Starting Override Time	± 30 sec at 1.5 fps; ± 5 sec at 65 fps
Output	PNP Normally Open (closed with flow) or PNP Normally Closed (open with flow)

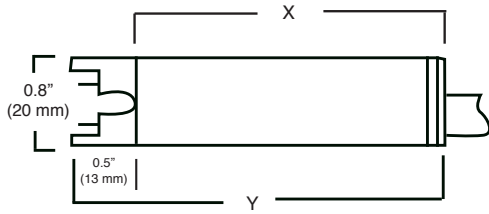
Display	LED, at flow condition ON
Process Temperature	F: -4° to 160° C: -20° to 70°
Ambient Temperature	F: -40° to 160° C: -20° to 70°
Enclosure Rating	NEMA 4 (IP64)
Housing Material	Ultradur (PBTP) or Stainless Steel
Sensor Material	Ceramic with Over Glaze
Weight	CFNF-U: 0.3 lbs (130 g) CFNF-S: 0.4 lbs (200 g) without nut
Approvals	UL 1604/CSA: Class I, Division II *UL approval does not apply to all models.
Cable	
Cable Jacket Material	Oilflex
Cable Length	6.5' (2m)

Note: Please Consult Factory for Special Requirements

DIMENSIONS inches (mm)

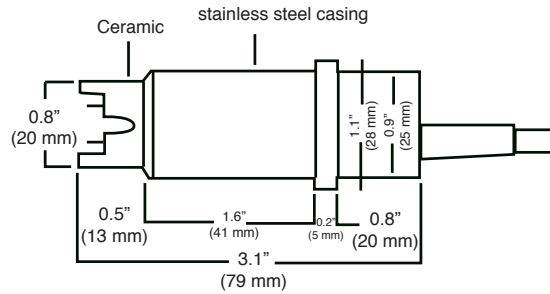
Housing	X	Y
Short	2.6" (65 mm)	3.1" (79 mm)
Long	3" (75 mm)	3.5" (89 mm)

CFNF-U_: Ultradur (PBTP) Housing



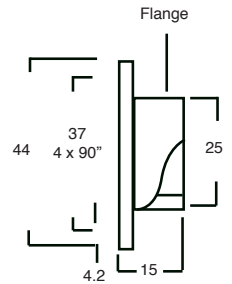
Weight: 130 grams
(0.3 lbs)

CFNF-S_: Stainless Steel Housing
(installation with union nut)



Weight: 200 grams (0.41 lbs) w/o union nut
Union Nut: 127.3 grams (0.3 lbs)

Mounting Flange



standard

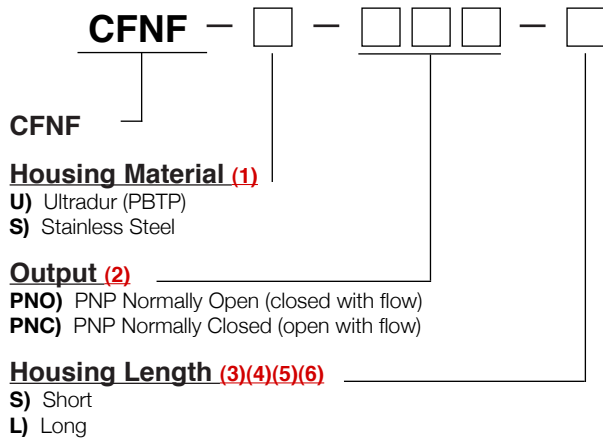
Ordering Information

FLO-CORP MODEL NUMBER BUILDER

For Assistance Call **877.356.5463**

Use the diagram below, working from left to right to construct your FLO-CORP Model Number.
Simply match the category number to the corresponding box number.

Example: CFNF-U-PNO-S NitroFlo™, Ultradur (PBTP) Housing, PNP Normally Open Output, Short Housing



Ordering Notes

- (1) Select the best configuration based on your requirements
- (2) Select the short housing for use with pipe sizes 1/2" to 1" in diameter and the long housing for 2" and up
- (3) Standard relay is PNP NO or NC. For optional NPN NO or NC transistor, please contact factory
- (4) To order the UL approved configuration, please contact factory
- (5) For additional mounting options, please contact factory
- (6) Comes complete with 6.5' (2m) pre-wired cable and manual