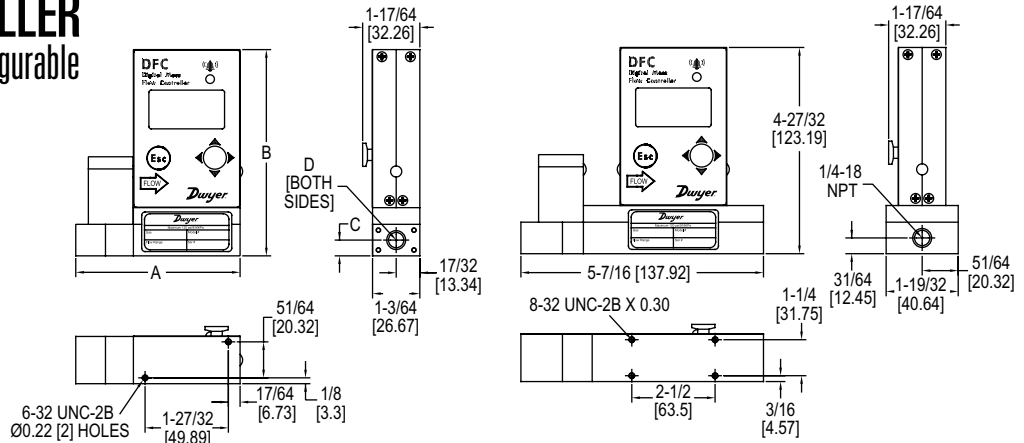




# DIGITAL FLOW CONTROLLER

Multi-Parameter, Multi-Gas, Field-Configurable



Ranges 0.5 mL/min-20L/min (DFC-01/50)

Ranges 21 L/min-100 L/min (DFC-51/56)

Range	A	B	C	D
0.5 mL/min-50 mL/min	3-11/16 [93.47]	4-37/64 [116.33]	11/32 [8.64]	10-32 UNF
51 mL/min-20 L/min	3-21/32 [92.96]	4-13/32 [111.76]	11/32 [8.64]	1/8 NPT

The **Series DFC Digital Flow Controller** combines a straight tube sensor with a restrictor flow element to provide accurate readings and control. Simultaneous displays of mass flow, volumetric flow, pressure and temperature parameters promote applications in a variety of industries.

**FEATURES/BENEFITS**

- Provides fast response rate (<20 ms)
- Supports up to 90 different user selectable gases and gas mixes
- Provides high accuracy and repeatability
- Self-diagnostics through status LED or OLED indication
- Easy configuration/calibration software

**APPLICATIONS**

- Gas flow measurement
- Gas flow control
- Operating pumps and valves
- Process equipment
- Vacuum process
- Scientific and analytical
- Bioreactors and surface depositions

**SPECIFICATIONS**

**Service:** Clean, non-corrosive gases compatible with wetted parts.  
**Wetted Materials:** 316 SS, 416 SS, high temperature polyamide, alumina ceramic, epoxy, silicone, glass, gold. FKM O-rings.  
**Accuracy:** ±(0.5% of reading + 0.2% FS).  
**Repeatability:** ±0.2% FS.  
**Response Time:** 150 ms.  
**Output:** 0-5 VDC, 4-20 mA and 0-10 VDC.  
**Relay Rating:** Programmable solid state relay.  
**Max. Particulate Size:** 20 microns.  
**Temperature Limits:** 14 to 140°F (-10 to 60°C).  
**Power Supply:** 12-26 VDC.  
**Process Connections:** 1/8" compression fitting for flow rates ≤ 10 L/min (-005, -010); 1/4" for ≤ 50 L/min (-050); 3/8" for ≤ 100 L/min (-100).  
**Pressure Limits:** 120 psig (8.27 bar).  
**Leak Integrity:** 1 x 10<sup>-9</sup> sccs of helium.  
**Display:** 2 x 16 character OLED.  
**Weight:** DFC-01/50: 1.40 lbs (0.635 kg); DFC-51/56: 1.66 lbs (0.755 kg).  
**Agency Approvals:** CE.

MODEL CHART									
Example	DFC	-22	010	-V	-A	L	A	2	DFC-22010-V-ALA2
Series	DFC								Digital flow controller
Range*									Il <b>fondoscala</b> è impostabile da zero fino ai valori nei seguenti campi e si hanno le relative cadute di pressione →
Body Size			005 010 050 100						Very low flow Low flow Medium flow High flow
Seal Material				V					Fluoroelastomer
Fittings					A B D				1/8" compression (very low, low) 1/4" compression (medium) 3/8" compression (high)
Display						L			LED display
Output Signal							A		0-5 VDC default (4-20 mA, 0-10 VDC display selectable)
Digital Interface								2 3	RS-232 default (RS-485 display selectable) RS-232 default with Modbus® (RS-485 display selectable), body size 005, 010, 050 RS-232 default with Modbus® (RS-485 display selectable), body size 100
*Consult factory for ranges from 0-0.5 mL/min up to 0-100 L/min.									
Ⓢ Items are subject to Schedule B discounts.									

FULL SCALE MASS FLOW RATE	PRESSURE DROP AT FULL SCALE FLOW (PSID)
0.5 sml/min to 20 sml/min	0.08
0.5 to 50 sml/min	1.0
21 sml/min to 2 sL/min	0.19
51 sml/min to 20 sL/min	1.0 - 20.0
21 sL/min to 50 sL/min	5.0 - 8.5
51 sL/min to 100 sL/min	10.0 - 20.0
250 sL/min	2.5
500 sL/min	6.9
1000 sL/min	15.0

ACCESSORIES	
Model	Description
GFC-110P	110 V power supply
GFC-220PE	220 V power supply
GFC-CBL1	8 ft (2.4 m) cable with 15-pin connector
GFC-CBL3	3 ft (0.9 m) extension cable for LCD readout