



Tylan[®] FC2925/FM3925 Mass Flow Controllers and Flowmeters

Low cost mass flow controllers that provides reliable measurement and control
up to 1000 slpm



Process Values

Mykrolis's Tylan FC2925 mass flow controllers accurately and reliably measure and control the mass flow rate of gases up to 1000 slm (2100 scfh) of nitrogen equivalents. Tylan FC3925 mass flow meters operate over the same flow range and at pressures up to 500 psig.

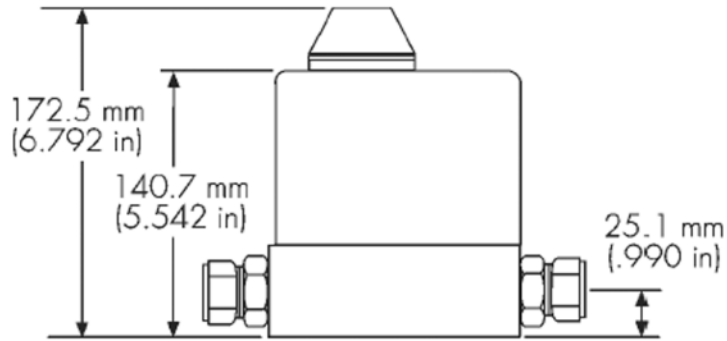
Product Features

- Thermal gas flow sensor
- Superior Bypass design to operate under laminar flow conditions
- Pilot operated control valve
- PID on-board control
- Temperature Compensation

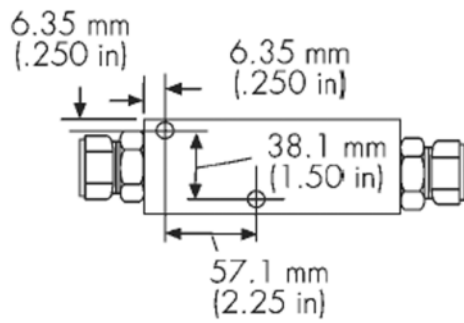
Product Benefits

- Can be mounted in any position without requiring zero adjustment.
- Assures accuracy over the entire range of mass flow control.
- Completely compatible with reactive and corrosive materials.
- Quick response to setpoint command.
- Maintains tight control in varying temperatures

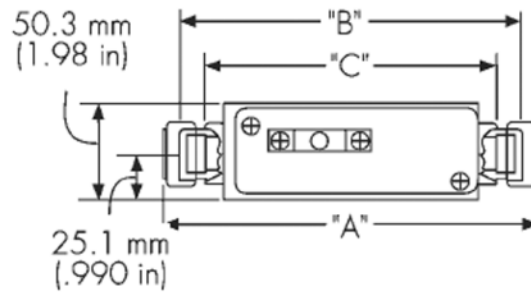
Tylan FC2925/FM3925 MFCs and Flowmeters - Dimensions



Front View



Bottom View



Top View

CODE	FITTING & SIZE	"A" DIM	"B" DIM Base Body Length	"C" DIM Inside Figure
8S	1/2" Swagelok®	201.3 mm [7.925"]	181.2 mm [7.135"]	155.6 mm [6.125"]
12S	3/4" Swagelok	201.3 mm [7.925"]		153.3 mm [6.035"]
8V	1/2" VCR®	-	192.4 mm [7.575"]	-
12V	3/4" VCR	-	206.9 mm [8.145"]	-

Tylan FC2925/FM3925 MFCs and Flowmeters - Ordering Information

Performance

Full Scale (N2 equivalent)	200, 300, 500, 1000 slpm
Turndown Ratio	20:1 (10:1 on H ₂ and He)
Step Response Time (0 to 100%)	< 5 sec (dependent on step response and conditions)
Accuracy	± 2% full scale (up to 30 slm) ± 3% of full scale (up to 1000 slm)
Linearity	± 1%
Repeatability	± 0.5% full scale
Pressure Coefficient	0.00001% per bar, 0.007% per psi (typical)
Temperature Coefficient	0.01% per °C (zero and span)
Attitude Sensitivity	< 0.25% @ 90° C without autozero

Mechanical

Wetted Material	316 stainless steel, 446 stainless steel, AM-350 stainless steel
Elastomers Available	Viton® fluoroelastomer, Kalrez® perfluoroelastomer
Leak Integrity	1 x 10 ⁻⁹ atm-cc per sec (He) inboard
Fittings	1/2", 3/4" Swagelok® or VCR®
Weight	2.5 Kg (5.5 lbs.)

Electrical

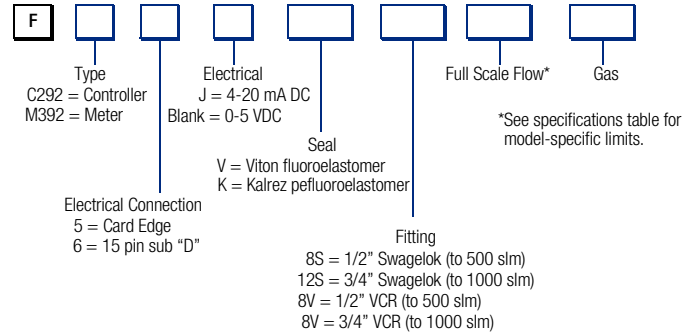
Power	FC2925/2926: 110 mA FM3925/3926: 35 mA
Supply Voltage	± 15 VDC nominal (± 12 VDC to ± 18 VDC)
Supply Current	FC2925/2926: 110 mA FM3925/3926: 35 mA

Environmental

Operating Temperature	5 - 50° C (ambient and gas)
Humidity	0 - 95% relative humidity, non-condensing
Maximum Operating Pressure	FC2925/2926: 150 psig (500 psig proof) FM3925/3926: 500 psig (1500 psig proof)
Differential Pressure	FC2925/2926: 200 - 300 slm (30-60 psid) FC2925/2926: 301 - 1000 slm (40-80 psid) FM3925/3926: 5 psid max.
Environmental Pressure	100 Torr minimum

Note: In accordance with SEMI Standard E12-91, Standard Temperature is 0° C and Standard Pressure is 760 mm Hg (14.7 psia).

Ordering Information



Electrical Connection	Card Edge	15-Pin "D"
Case Ground	1	14
Common	2	9
0-5 VDC Output	3	2
+15 VDC	4	5
Zener Test (-5.0 VDC)	6	N/A
Control 0-5 VDC	A	8
Common	B	1
Common	C	10
Valve Test (Override)	D	12
- 15 VDC	F	6
AZ Inhibit	J	3
AZ Store	K	N/A
Valve Off	L	15
+5 VDC Ref	N/A	11
Input 4-20 mA	N/A	7
Output 4-20 mA	N/A	4

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