SEVENSTAR CS200A
Digital Mass Flow Controller & Meter



Features:

1. Digital/ Analog control mode
2. RS485 available
3. High Accuracy and Fast Response
4. Low Zero Drift and Temperature Coefficient

Specification:

Type	CS200	
Model	A	
Full scale range (N_2)	(0～5,10,20,30,50,100,200,300,500)SCCM (0～1,2,3,5,10,20,30,50)SLM	
Accuracy	±1.0% S.P. (≥35% F.S.); ±0.35% F.S.(＜35% F.S.)	
Linearity	±0.5% F.S.	
Repeatability	±0.2% F.S.	
Response Time	≤ 1sec	
Valve Rest Position	Normally Closed or Normally Open	No Valve
Differential Pressure	(0.05～0.35) Mpa （≤10slm） (0.1～0.35) Mpa（20slm, 30slm） (0.2～0.45) Mpa（50slm）	＜0.02MPa
Temperature Coefficient	Zero: ≤±0.05% F.S./℃ Span: ≤±0.1% F.S.℃(≤30SLM) Span: ≤±0.2% F.S.℃(>30SLM)	
Max Pressure	3MPa	
Zero Drift	＜0.6%F.S. per year without autozero	
Leak integrity	1×10^{-9} atm·cc / sec He（1×10^{-10}Pa·m^3 / sec He）	
Seals Materials	Viton;Neoprene	
Surface Finish (Ra)	25Ra	
Operation Temperature	（5～45）℃	
Communication Interface for input Signal	Digital: RS485 ; DeviceNet™ Analog:(0～5)VDC or (4～20)mA	No
Communication Interface for Output Signal	Digital: RS485(default); DeviceNet™ Analog: (0～5)VDC(default) or (4～20)mA	
Power Supply	±11 ~ ±16 VDC or +11 ~ +28 VDC(400mA)	
Electronic Connector	D sub 9 pins male, D sub 15 pins male, DeviceNet™ male	
Fittings	VCR1/4" M；SwagelokΦ3；SwagelokΦ6； SwagelokΦ10；Swagelok1/4"； Swagelok1/8"	VCR1/4" M；SwagelokΦ6； Swagelok1/4"；W-seal； C-seal
Weight	1kg	0.8kg

Selection Guide:

CS200-[t] [g,g,g] [v] [r,r,r,r] [a] [f,f] [s] [m] [d]

[t] –Type

- [A] Elastomer type

[g,g,g] –Gas

Standard: SEMI52-0302 For example

-[013] N2 -[007] H2

-[000] Mixture Gases (please consult [d] for details)

[v] –_ Type of Valve

- [O] Normally open (unavailable to MFM)
- [C] Normally closed (unavailable to MFM)
- [N] No Valve (available to MFM only)

[r,r,r,r] –Full Scale

- [005C]	5SCCM		
- [010C]	10SCCM	- [001L]	1SLM
- [020C]	20SCCM	- [002L]	2SLM
- [030C]	30SCCM	- [003L]	3SLM
- [050C]	50SCCM	- [005L]	5SLM
- [100C]	100SCCM	- [010L]	10SLM
- [200C]	200SCCM	- [020L]	20SLM
- [300C]	300SCCM	- [030L]	30SLM
- [500C]	500SCCM	- [050L]	50SLM

- [000C] customized Full scale, please consult [d] for details

[a] –Electonic connector

- [R] DB 9 pin - [D] DB15 pin
- [X] DeviceNet™

[f,f] –Fittings

-[AA]	Swagelokφ3mm	-[BB]	Swagelok 1/8" (available to type A only)
-[GG]	Swagelokφ6mm	-[JJ]	Swagelokφ10mm (available to type A only)

-[CC] Swagelok 1/4"

-[MM] VCR 1/4"

-[XX] customized fittings please consult [d] for details

[s] –Seal Materials

-[V] Viton(available to type A, only)

-[N] Neoprene (available to type A, , especially for NH3 only)

[m] –Mounting Position

-[H] Horizontal

-[E] HESD(Horizontal Edge Side Down)

-[U] Vertical Inlet Up

-[D] Vertical Inlet Down

[d] –Description

-[-]：Default Value

The letters on cover and tag：In English

Differential Pressure

CS200-A：(0.05 ~ 0.35) MPa (7.3~50.8 psid) (FLOW≤10SLM)

(0.1 ~ 0.35) MPa (14.5~50.8 psid) (FLOW＞10SLM)

CS200-AXXXN：<0.02MPa (2.9psid)

3 MPa (435.1 psig) Max inlet pressure

(22±2)℃ Calibration temperature

-[S] Customized Requirement

For Example: The letters on cover and tag: in Chinese；Customer Special Full Scale:29SLM；The proportion of mixture gases should be indicated: N2 (60%) + CO2(40%)；Customer Differential Pressure: (0.05 ~ 0.3) MPa；Customer Calibration Temperature: 40℃ and other customized requirements.

Take CS200-A013C500CDGGVHS as the example

CS200 - A 013 C 500C D GG V H S

Model：CS200

Type: Elastomer type

Gas: N_2

Type of Valve: Normally closed

Full range

Electronic connector：DB15

Fittings：Swagelokφ6mm

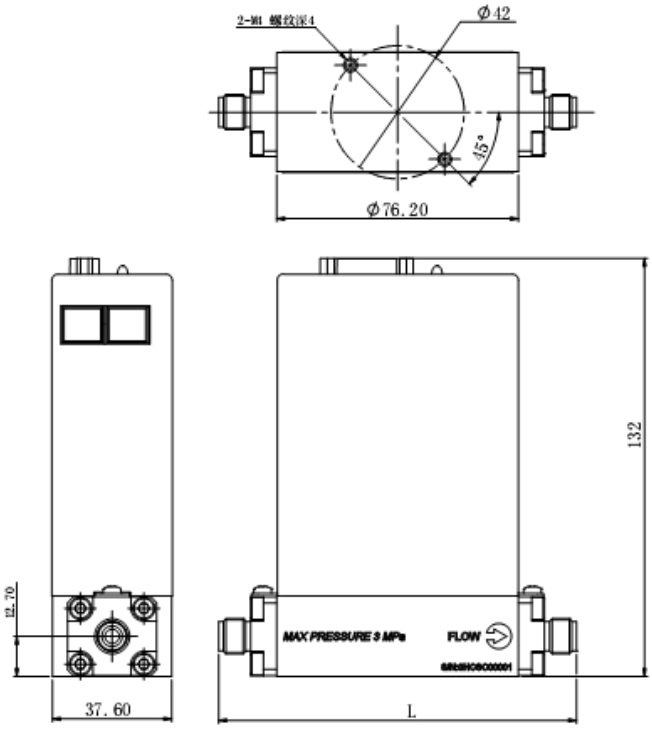
Seal material: Viton

Mounting position

For example

Customized requirement: In Chinese. Differential pressure, (0.3-0.5)MPa, customized fittings, customized calibration temperature, 40℃

Dimensions(mm)：



Type	L
VCR 1/4	124
Swagelok 1/8	112.8
Swagelok 1/4	112.8
Swagelok Φ3	112.8
Swagelok Φ6	112.8
Swagelok Φ10	112.8