

SFC1480 Series

◆ Features

SFC1480F Series is a basic series of compact digital Mass Flow Controllers.

1. Outstanding control characteristics achieved even at very low flow rates.

(Minimum control flow rate : F.S. 1SCCM)

2. Very low differential pressure service of less than 10 Torr is available.

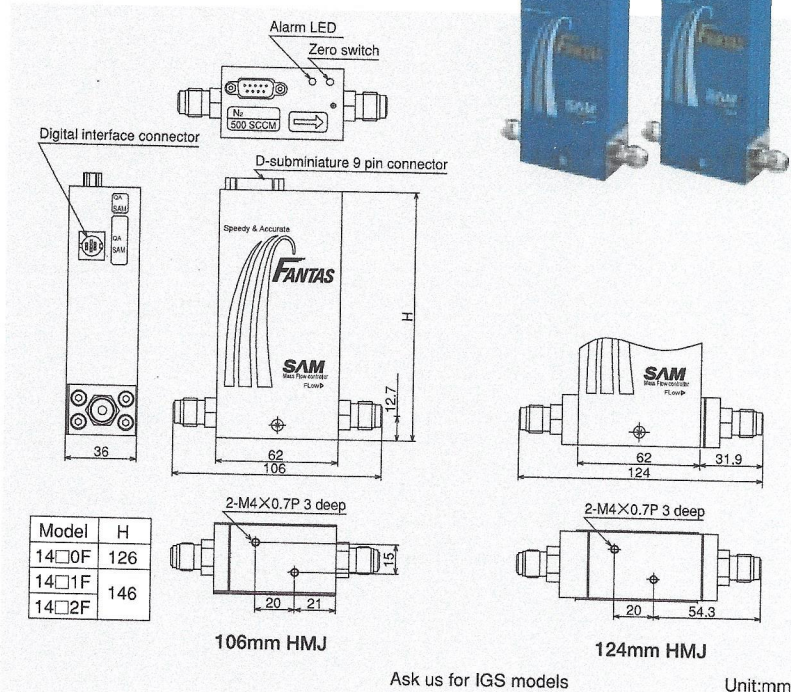
(1) The sensor tube of large ID achieved both the minimized pressure drop and high sensitivity.

(2) Simple valve structure allows high Cv value reserve despite compact dimensions.

3. A wealth of data resources available

Large amounts of data are available to allow the selection of the optimum mass flow controllers according to service gas type, operation pressure and temperature conditions and necessary.

◆ Dimensions



◆ Product specifications ※1

Item		Specifications						
Model		Low flow model	Conventional models			Low differential pressure models		
		SFC1460F※2	SFC1480F	SFC1481F	SFC1482F	SFC1470F	SFC1471F	SFC1472F
Standard full scale flow rate (N2 equivalent)		1/2/3/5/ 10 SCCM	10/20/30/50/ 100/200/300 500 SCCM 1/2/3/5 SLM	10 SLM	20 SLM	To be decided subject to agreement with customer on specified gas, pressure conditions, etc		
Valve operation		Normally closed	Normally closed / Normally open					
Operation pressure	Inlet	0.05—0.3MPa (Gauge)			0.1—0.3MPa (Gauge)	Less than 1.3×10 ⁻³ MPa is also acceptable (Subject to consultation)		
	Outlet	Vacuum-atmospheric pressure						
Flow control range		2—100% of full scale						
Accuracy		±0.5% of full scale						
Response time		Less than 2.0 sec to full scale(within±2%)	Less than 1 sec to full scale (within ±2%) Less than 1.5 sec to any set-point (within ±2%)					
Proof pressure		1.0MPa (Gauge)						
Temperature	Operation	5—50℃						
	Accuracy guaranteed	15—35℃						
	Baking	80℃						
Leak integrity	Metal seal	Less than 1×10 ⁻¹¹ Pa・m ³ /s(He)						
	Rubber seal	Less than 1×10 ⁻⁸ Pa・m ³ /s(He)						
Principle materials	Valve seat		SUS316L					
	Diaphragm		YET101 (Ni-Co alloy)					
	Sensor		SUS316L, Ni-brazing ※3					
	Seal	Metal	Metal O-ring (SUS316L/Ni-plated) ※3					
Rubber		PTFE, Viton O-ring						
Set-point input		0.1—5VDC (absolute maximum rating ±15VDC)						
Flow signal output		0—5VDC (max: +15VDC, min: -15VDC)						
Power supply		+15VDC (±4%) 100mA (max120mA)						
		-15VDC (±4%) 100mA (max120mA)						
Finish of gas wetted area		Special electropolishing ※4						
Connection		D-Subminiature (9 pin)						
Fittings		1/4"HMJ (UJR) male ※5						

※1 These specifications are for reference only.

※1 These specifications can be guaranteed in Hitachi Metals' standard measurement condition. They may not be guaranteed in other measurement condition.

※2 Contact us for applicable gases of SFC1460F series.

※3 Ni free models are also available. (except SFC14□2F)

※4 Standard surface finishing for rubber seal models is machine-finish.

※5 Contact us for other fittings.