



FUJIKURA COMPOSITES

"RS.M/S" series

Stepping motor driven super precision regulator.

High sensitivity air pressure control of 0.1% F. S. sensitivity is possible !

■ Features

- High precision air regulating by sensibility 0.1%F.S., hysteresis $\pm 0.1\%$ F.S.]
- Excellent especially in relief characteristics, pressure characteristics, flow characteristics
- Minimum relief pressure (relief sensibility) is 0.03kPa,0.004psi(theoretical value).
- No readjustment of regulated pressure required even after long "down-time".
- RS.M/S keeps the setup pressure for a long term accurately after a setup. Almost no pressure drop after setup.
- Five-phase stepping motor drive enables users slightly change the setup pressure by 1 step driving. Further, micro-step driving achieves high pressure resolution by 0.1kPa,0.01psi or less.
- It keeps setup regulated pressure even in case of sudden electricity outage.



■ Specification

		RS · M/S-4-2	RS · M/S-8-2
Working fluid		Clean compressed air	
Set pressure range	Mpa[psi]	0.014~0.42 [2.0~6.09]	0.014~0.84 [2.0~121.8]
Supply pressure range	MPa[psi]	1.MAX.[145.0]	
Resolution capability	kPa[psi]	1 or less (Full steps) [0.1]	
Minimum relief pressure	KPa[psi]	0.03 (theoretical) [0.004]	
Relief flow rate	ℓ /min[scfm]	130 [4.6] (at set pressure 0.2MPa [29psi9])	
Air consumption	ℓ /min[scfm]	3.7 or less[0.13]	
Operating temperature	℃[°F]	5 ~ 50 [41 ~ 122] (no condensation)	
Stepping motor	Motor model	Sanyo Electric Co., Ltd. 103H5505-7040	
	Number of phase	5-phase excitation	
	Primary step angle	0.72°	
	Excitation system	5	
	Current rating A/phase	0.75	
	Wire wound resistance	1.45	
Pipe port	Rc	1/4	
Gauge port	Rc	1/4	
Weight	kg[pound]	0.76 [1.7]	



■ Driver list

Mode name	Step angle selection	Signal input specification
PMM-MD-53030-10	Full step ~ Micro step (Max 250 splits)	Photocoupler input
PMM-MD-53031-10	Full step ~ Micro step (Max 250 splits)	CMOS input
PMM-MD-53130-10	Full step / Half step	Photocoupler input
PMM-MD-53131-10	Full step / Half step	CMOS input

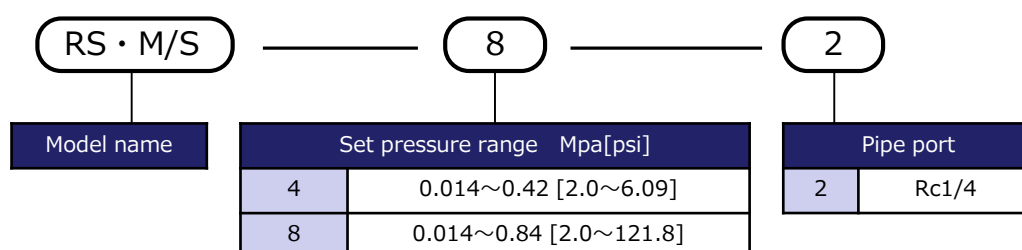
■ Connector list

Driver model	Application	Model name	Company
PMM-MD-53030-10	Input / output signals	Applicable housing : 5051-10	Molex
	CN1A	Applicable contact : 2759PBGL	
	DC power supply	Applicable housing : 5051-04	
	CN2	Applicable contact : 5159PBTL	
	Stepping motor	Applicable housing : 5051-05	
	Driver : CN3	Applicable contact : 5159PBTL	
PMM-MD-53031-10	Input / output signals	Applicable housing : 5051-12	
	CN1A	Applicable contact : 2759PBGL	
	DC power supply	Applicable housing : 5051-04	
	CN2	Applicable contact : 5159PBTL	
	Stepping motor	Applicable housing : 5051-05	
	Driver : CN3	Applicable contact : 5159PBTL	
PMM-MD-53130-10	Input / output signals DC power supply	Applicable housing : 5051-12	
PMM-MD-53131-10	CN1A	Applicable contact : 2759PBGL	

■ Applications

-RS.M/S is suitable for applications requiring high-resolution pressure control of 0.1 kPa or less.

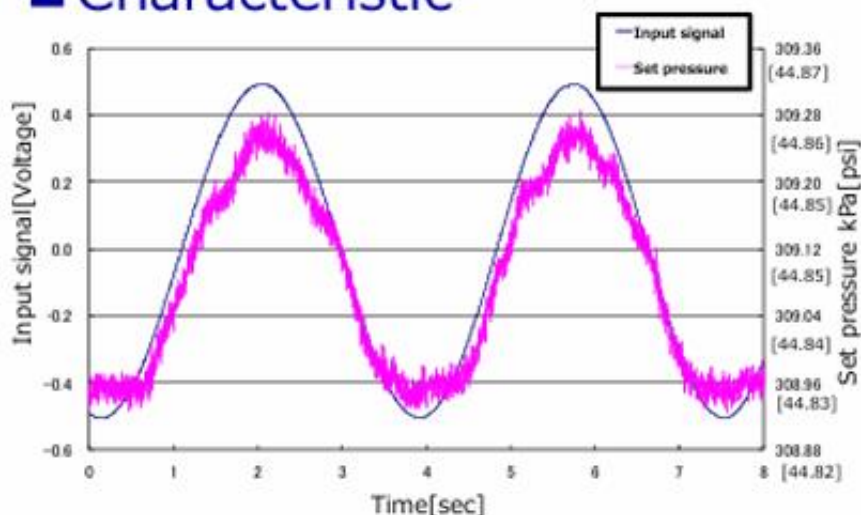
■ Model designation



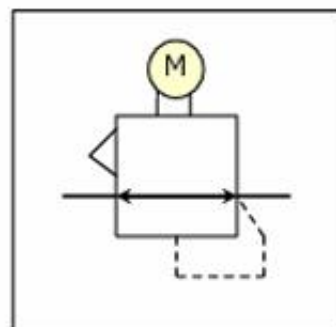


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■ Characteristic



■ JIS code



■ Size

