

Clean Room Regulator Manifold Type

Oil-free specification

INA-48-14-M02
INA-48-14-M04

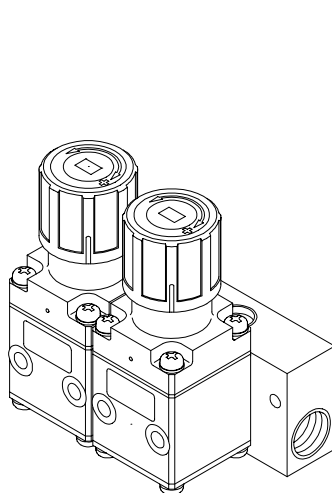
SMC CORPORATION
1-16-4 Shimbashi, Minato-ku
Tokyo 105-0004, JAPAN
URL: <http://www.smcworld.com>

Application: Used for semiconductor manufacturing device (stepper), pressure regulation for air bearing and air-blow.

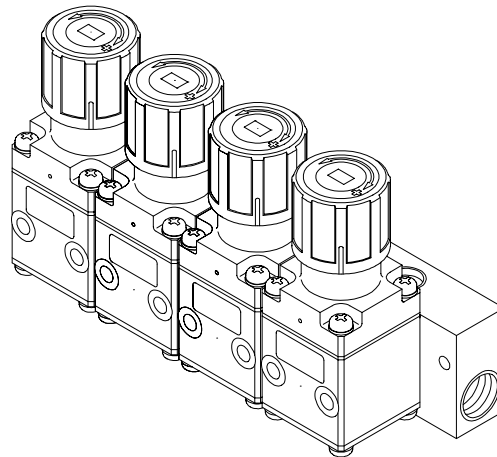
Feature 1: Oil-free specification

- 1) Component assembly without using grease
- 2) All wetted parts are given an ultrasonic (degreasing) cleaning using HCFC141b (alternative freon)

Feature 2: Manifold type (Number of stations: 2 stations, 4 stations)



INA-48-14-M02



INA-48-14-M04

Feature 3: Integrated production in clean room

- 1) Cleaning in Class 10000 atmosphere, and assembly, inspection and sealed double packing in Class 100 atmosphere

Feature 4: Wetted parts material

Body	SUS316
Stem guide	PTFE
Diaphragm assembly	FPM (Wetted parts material: SUS316)
Manifold base	SUS304

Specifications

Fluid	Air, N ₂
Proof pressure	1.5MPa
Maximum operating pressure	1.0MPa
Regulating pressure range	0.05 to 0.7MPa
Ambient and fluid temperature	5 to 60°C
Construction	Non-relieving
Oil-free	Without using grease, wetted part by degreasing

How to Order

Manifold model number (*1) **INA-48-14-M02**

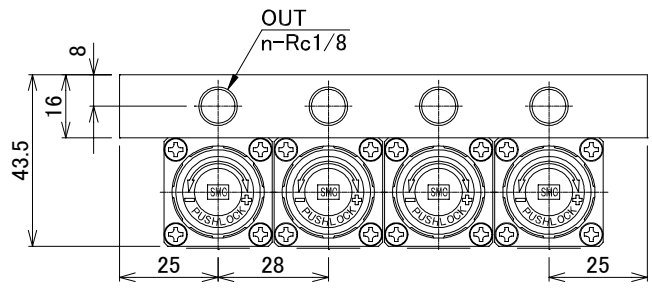
Number of stations	
02	2 stations
04	4 stations

Regulator model number (*2) **INA-48-14-00**

- *1) Designated No. of regulators (INA-48-14-00) are mounted on a manifold before shipping.
- *2) Regulator cannot be used independently. Be sure to mount on a dedicated manifold base for use.

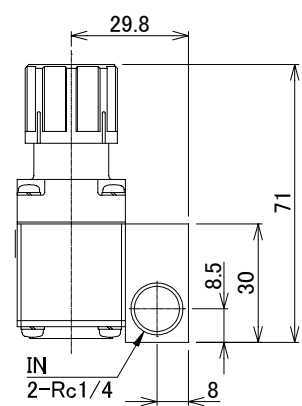
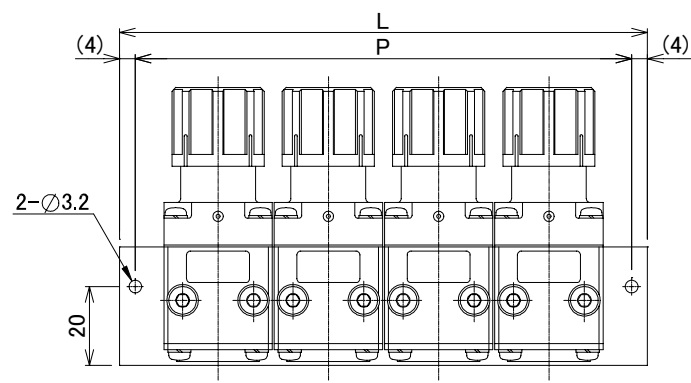
Dimensions: mm

Regulator manifold (Model number: INA-48-14-M**)



Dimensions: mm

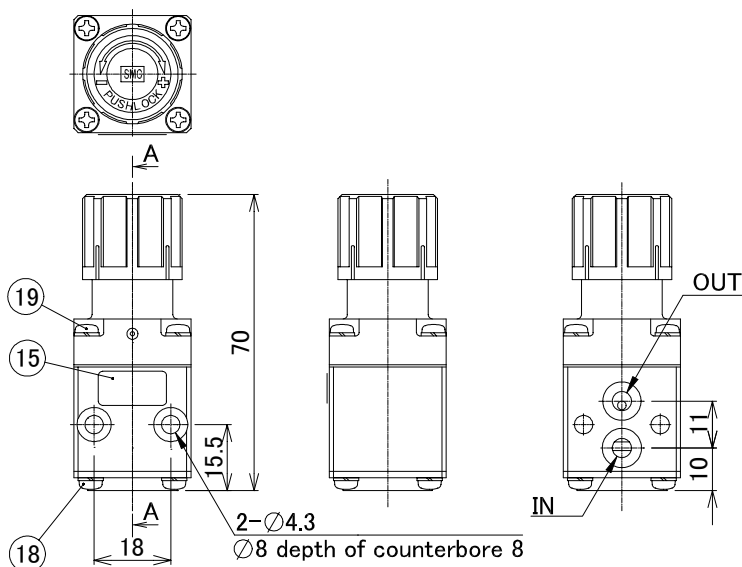
Model number	Stations n	P	L	Manifold base number
INA-48-14-M02	2	70	78	INA-48-3-102
INA-48-14-M04	4	126	134	INA-48-3-104



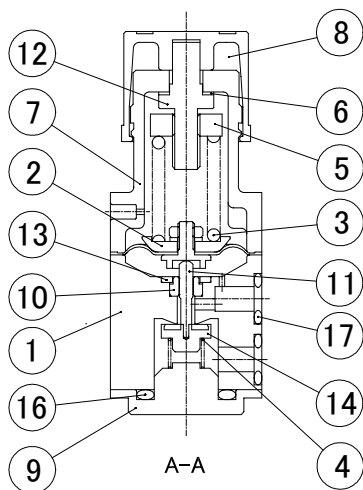
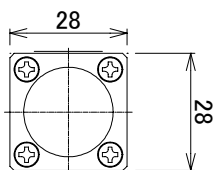
- *3) One hexagonal socket plug and manifold regulator are shipped in a same package.
- *4) Mount regulator on base with O-ring and hexagon socket head cap screw attached to the regulator.

Dimensions: mm

Regulator (number: INA-48-14-00)



*5) Components 17 and 20 are shipped together with regulator in a same package.



Component Parts

No.	Description	Material	Qty.	Note
1	Body	SUS316	1	—
2	Diaphragm assembly	FPM	1	Wetted parts material SUS316
3	Adjusting spring	SWPB	1	Zinc chromate
4	Valve spring	SUS316	1	—
5	Adjusting spring holder	S15C	1	Special electroless nickel plated
6	Seal	PTFE	1	—
7	Bonnet	POM	1	—
8	Knob	POM	1	—
9	Cap	SUS316	1	—
10	Stem guide	PTFE	1	—
11	Stem	SUS316	1	—
12	Adjusting screw	SS41	1	Electroless nickel plated
13	Spacer	SUS316	1	—
14	Valve	SUS316	1	Rubber lining FPM
15	Label	PET	1	Full part number indicated
16	O-ring	FPM	1	JIS B 2401 P14
17	O-ring	FPM	2	JIS B 2401 P6
18	Machine screw with spring washer	SUS304	4	M3 × 6
19	Machine screw with spring washer	SUS304	4	M3 × 12
20	Machine bolt with spring washer	SUS304	2	M4 × 25

Note: Pressure gauge should be mounted on piping.



To ensure the safest possible operation of this product, please be sure to read thoroughly the "Safety Instructions" in our "Best Pneumatics" (general catalog) before use.