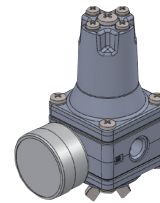


# Pressure Regulator with Air Filter

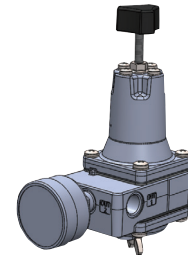
## Model RA1B

### OVERVIEW

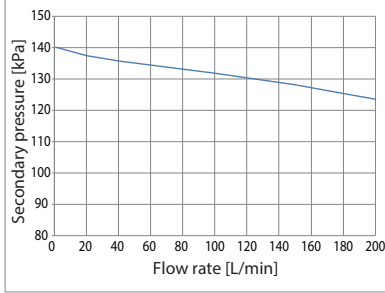
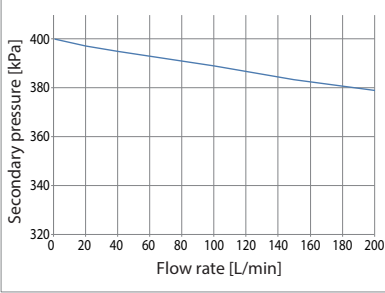
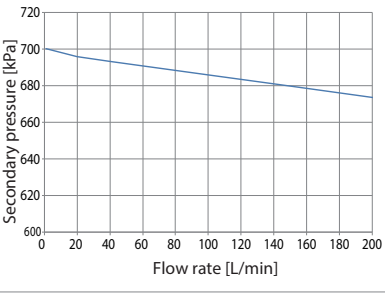
The pressure regulator with air filter supplies air at a constant pressure for instruments and control valves that use air pressure. The model with a variable air pressure handle can be used for manual control of an air pressure cylinder or to set an air pressure signal.



Model RA1B-1

Model RA1B-2/3  
(with handwheel)

### STANDARD SPECIFICATIONS

Model		RA1B-1	RA1B-2	RA1B-3
Primary pressure (kPa)		200 to 1035	Secondary pressure +50 to 1035	Secondary pressure +50 to 1035
Secondary pressure (kPa)		140 ± 4 (fixed)	20 to 400 (variable)	150 to 700 (variable)
Characteristics				
Pressure characteristics	Secondary pressure change (kPa)	Within 10 kPa for primary pressure change of 200 to 700 kPa	Within 8 kPa for primary pressure change of 450 to 850 kPa	Within 8 kPa for primary pressure change of 800 to 1035 kPa
	Flow characteristics	(1) Model RA1B-1 (primary pressure 700 kPa) 	(2) Model RA1B-2 (primary pressure 700 kPa) 	(3) Model RA1B-3 (primary pressure 1000 kPa) 
Air consumption		0.5 L/min [normal] max.		
Material		Filter: 3 μm PVA sponge, or 3 μm stainless steel (option)		
		Case: die-cast aluminum		
		External screws and drain bolt: stainless steel		
Ambient temperature		Standard: -30 to +80 °C Corrosion resistant: -20 to +80 °C		
Vibration characteristics		20 m/s <sup>2</sup> (5–500 Hz) max.		
Air pressure connection port		Primary connection port and secondary connection port: Rc ¼ or ¼ NPT tapered pipe thread Connection port (for RA1B-1): Rc ⅜ tapered pipe thread		
Drain capacity		14 cm <sup>3</sup>		
Weight		0.4 kg: RA1B-1 (without pressure gauge) 0.5 kg: RA1B-2/3 (without pressure gauge)		
Maximum flow rate		200 L/min (secondary pressure drop is 25 kPa max. (for RA1B-3, 30 kPa max.))		

### INSTRUCTIONS FOR PROPER USE

- This product is designed for the general industrial market.
- Be sure to install this product with the drain plug facing downward.

## MODEL SELECTION

### Basic model No.

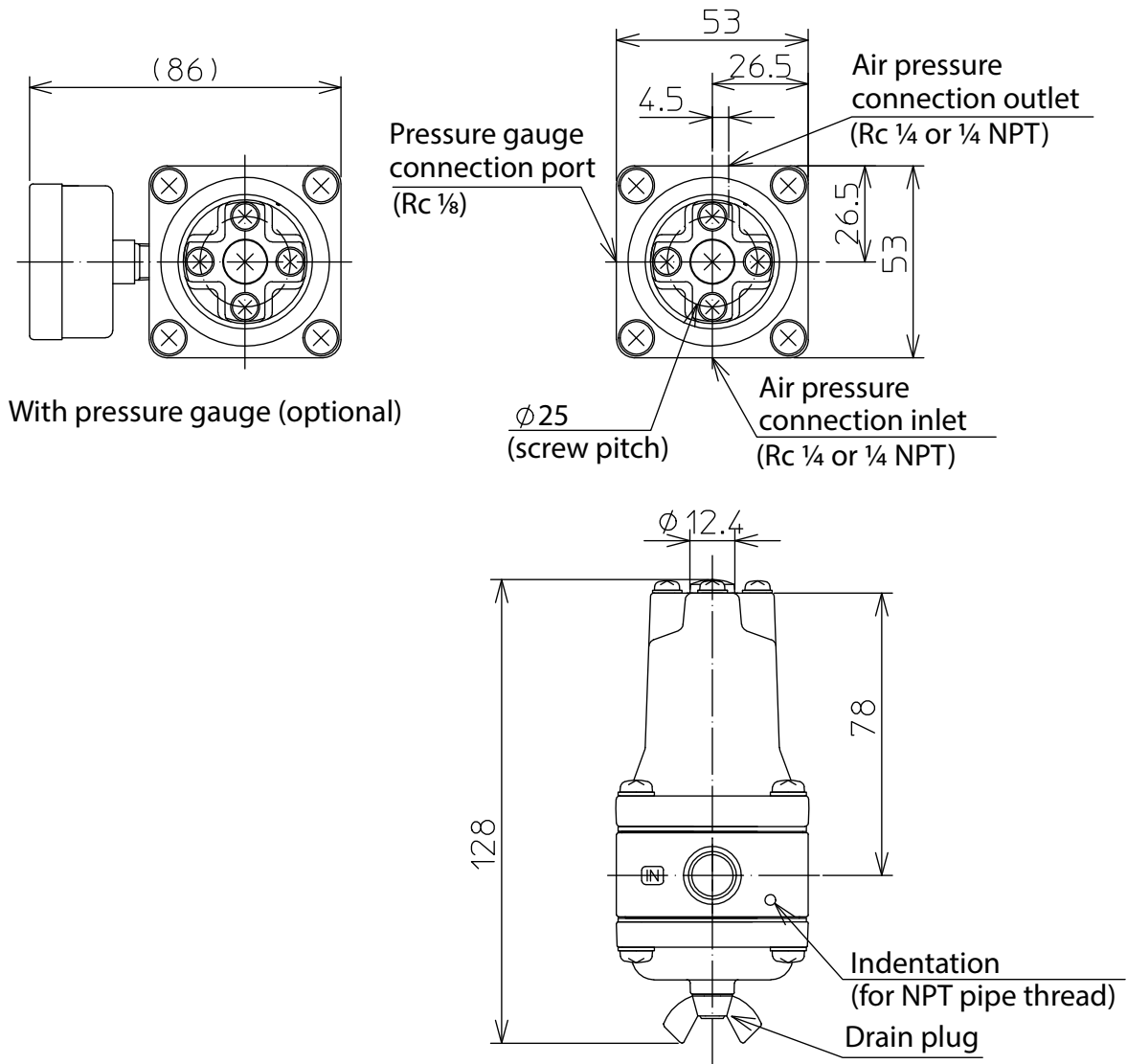
RA1B Pressure regulator with air filter semi-bleed type			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
1. Setting pressure range	Secondary pressure = 140 kPa (fixed)	Pneumatic instrument (Other than Model KDP/KKP)	1	F										
2. Model		Pneumatic Transmitter Model KDP/KKP		P										
		20 ≤ secondary pressure ≤ 400 kPa (variable)	For positioners and control valves	2										X
		400 < secondary pressure ≤ 700 kPa (variable)	For positioners and control valves	3										X
(3) Pipe thread	Rc ¼ (in/out)				R									
	¼ NPT (in/out)				N									
(4) Paint	Standard (baked acrylic finish)					S								
	Corrosion resistant (baked urethane finish)					B								
(5) Environmental specifications (temperature range)	Standard (-30 to +80 °C)					S								
	Corrosion resistant (-20 to +80 °C) [diaphragm, gasket: fluororubber]*1					V								
(6)(7)(8)(9) Filter element	Resin (PVA sponge)							X	X	X	X			
	Stainless steel (SUS316L)							X	F	X	X			
(10) Pressure gauge range	Without pressure gauge											X		
	200 kPa (secondary pressure ≤ 150 kPa)											1		
	400 kPa (150 < secondary pressure ≤ 300 kPa)											2		
	600 kPa (300 < secondary pressure ≤ 450 kPa)											3		
	1000 kPa (450 < secondary pressure ≤ 700 kPa)											4		
(11) Pressure gauge unit	Without pressure gauge											X		
	kgf/cm <sup>2</sup> *2											A		
	psi*2											B		
	bar											C		
	kPa											D		
	MPa											E		

\*1. If the selection for (5) is "V," select "XFX" for filter elements (6)(7)(8)(9).

\*2. For use overseas only. Cannot be used in Japan.

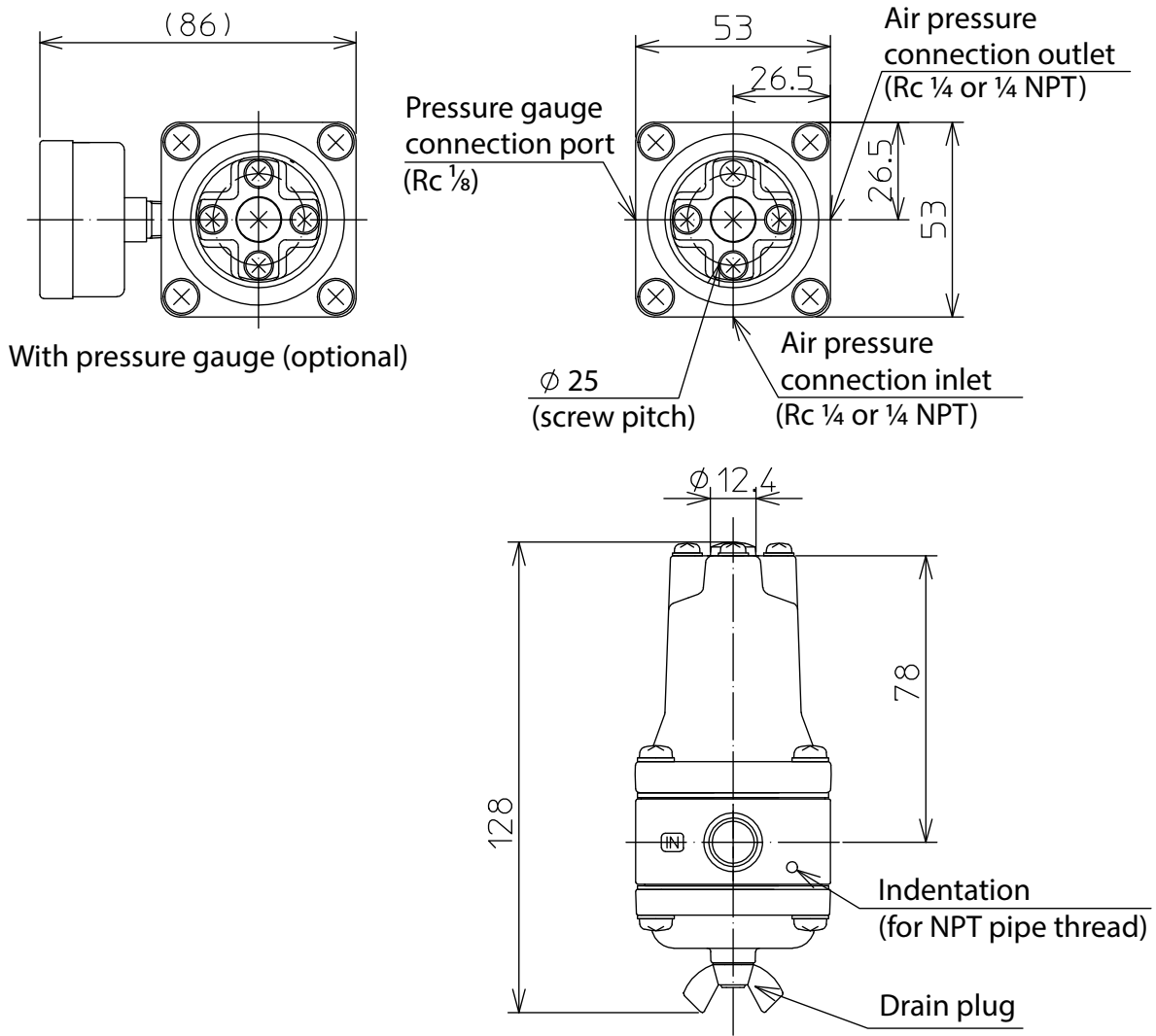
**DIMENSIONS****RA1B-1F**

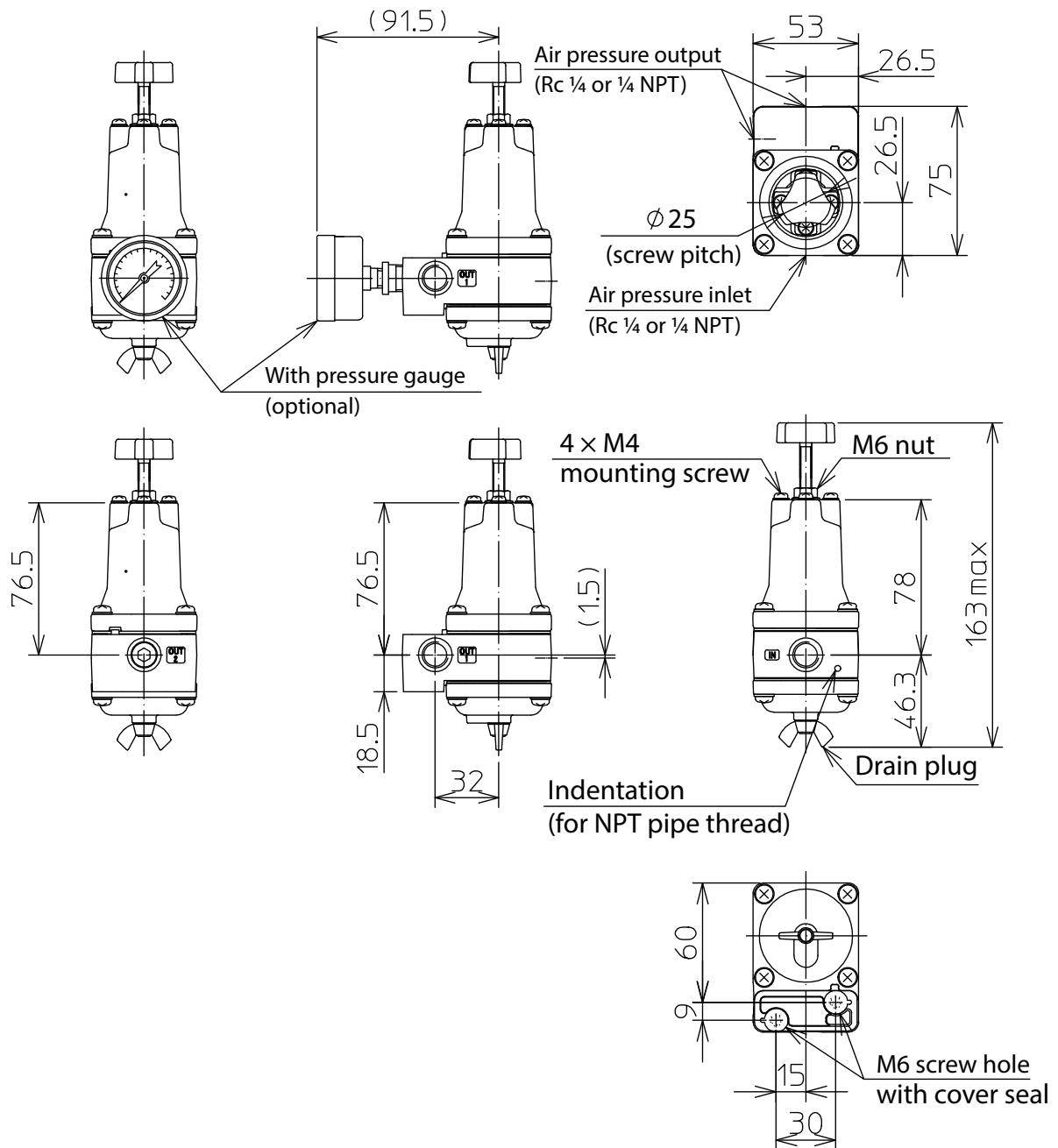
Unit: mm



RA1B-1P

Unit: mm





MEMO

MEMO

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The logo for Azbil Corporation, featuring the word "azbil" in a bold, lowercase, sans-serif font.

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