

Booster Regulator

VBA Series

How to Order

VBA **40A** - **04** - **04** - **04**

Body size		Pressure increase ratio: Twice
10A	1/4", Knob-operated type	
20A	3/8", Knob-operated type	
40A	1/2", Knob-operated type	
22A	3/8", Air-operated type	
11A ^{Note)}	1/4", Knob-operated type	Pressure increase ratio: 2 to 4 times

Note) Set the pressure increase ratio to 2 or more.

Semi-standard

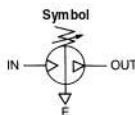
Symbol	Semi-standard
NII	Standard product
Z ^{Note)}	<ul style="list-style-type: none"> ● Pressure unit on the product name label: psi ● Pressure unit on the pressure gauge: MPa and psi

Note) Thread type: NPT, NPTF
Under the new measurement law, the pressure unit of "psi" on the pressure gauges cannot be used in Japan.

Thread type ^{Note)}

Symbol	Thread type
NII	Rc
F	G
N	NPT
T	NPTF

Note) Thread types apply to the IN, OUT, and EXH ports of the VBA1□A and to the IN, OUT, EXH, and gauge ports of the VBA2□A and VBA4□A. The gauge ports of the VBA1□A are Rc thread type regardless of the thread type indication.



VBA10A-02



VBA20A-03

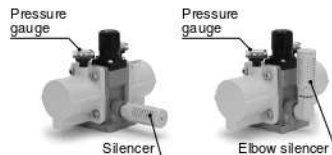


VBA40A-04

Option

Symbol	Option
NII	None
G	Pressure gauge
N	Silencer
S	High-noise reduction silencer ^{Note)}
GN	Pressure gauge, Silencer
GS	Pressure gauge, High-noise reduction silencer ^{Note)}
LN	Elbow silencer ^{Note)}
LS	Elbow high-noise reduction silencer ^{Note)}
GLN	Pressure gauge, Elbow silencer ^{Note)}
GLS	Pressure gauge, Elbow high-noise reduction silencer ^{Note)}

Note) Refer to "Combination of Thread Type and Options."



Port size

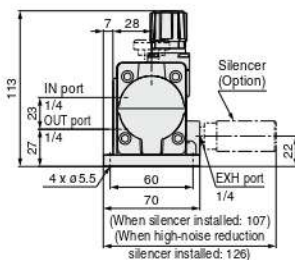
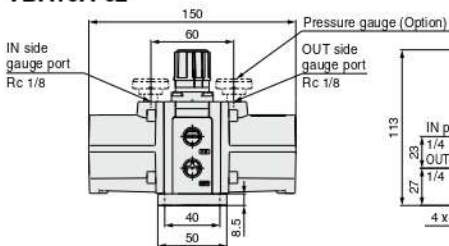
Symbol	Port size	Applicable series
02	1/4	VBA1□A
03	3/8	VBA2□A
04	1/2	VBA4□A

Combination of Thread Type and Options

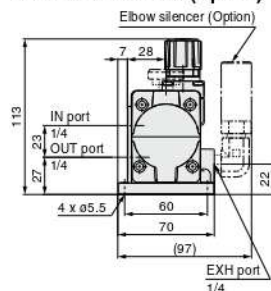
Body size	Thread type	Option										Semi-standard		
		NII	G	N	S	GN	GS	LN	LS	GLN	GLS	NII	-Z	
10A	NII	●	●	●	●	●	●	●	●	●	●	●	●	—
	F	●	●	●	●	●	●	●	●	●	●	●	●	—
	N	●	●	●	—	●	—	—	—	●	—	●	●	●
	T	●	●	●	—	—	—	●	—	—	—	—	●	●
20A	NII	●	●	●	●	●	●	—	—	—	—	—	●	—
	F	●	●	●	●	●	●	—	—	—	—	—	●	—
	N	●	●	●	—	●	—	—	—	●	—	—	●	●
	T	●	●	●	—	—	—	●	—	—	—	—	●	●
40A	NII	●	●	●	●	●	●	—	—	—	—	—	●	—
	F	●	●	●	●	●	●	—	—	—	—	—	●	—
	N	●	●	●	—	●	—	—	—	●	—	—	●	●
	T	●	●	●	—	—	—	●	—	—	—	—	●	●

Dimensions

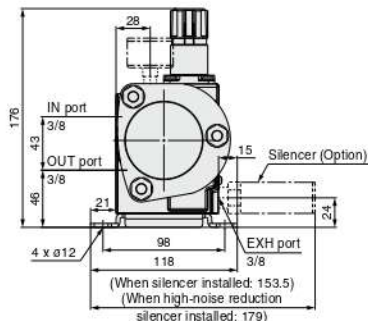
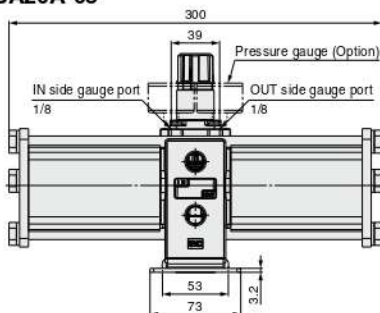
VBA10A-02



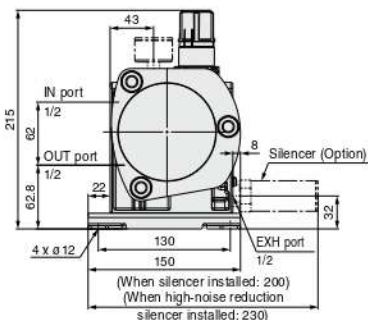
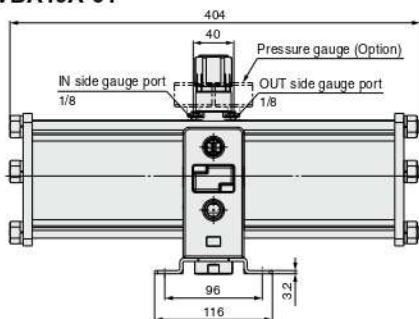
With elbow silencer (Option)



VBA20A-03



VBA40A-04



Standard Specifications

Model	VBA10A-02	VBA20A-03	VBA40A-04
Fluid	Compressed air		
Pressure increase ratio	Twice		
Pressure adjustment mechanism	Knob-operated with relief mechanism ^{Note 2)}		
Max. flow rate ^{Note 3)} (L/min (ANR))	230	1000	1900
Set pressure range (MPa)	0.2 to 2.0		0.2 to 1.0
Supply pressure range (MPa)	0.1 to 1.0		
Proof pressure (MPa)	3	1.5	
Port size (Rc) (IN/OUT/EXH: 3 locations)	1/4	3/8	1/2
Pressure gauge port size (Rc) (IN/OUT: 2 locations)	1/8		
Tank connection port (with plug) ^{Note 5)}	1/4	3/8	1/2
Ambient and fluid temperature (°C)	2 to 50(No freezing)		
Installation	Horizontal		
Lubrication	Grease(Non-lube)		
Weight (kg)	0.84	3.9	8.6

Note 1) Be sure to secure an air supply capacity of the minimum operating pressure (0.1 MPa) or more.

Note 2) If the OUT pressure is higher than the set pressure by the knob, excess pressure is exhausted from the back of the knob.

Note 3) Flow rate at IN=OUT= 0.5 MPa. The pressure varies depending on the operating conditions. Refer to "Flow Rate Characteristics" on pages 1012 and 1013.

Note 4) Set the pressure increase ratio to 2 or more.

Note 5) The tank connection port cannot be used for applications other than the connection with VBAT.

Options/Part No.

Pressure Gauge, Silencer (When thread type is Rc or G.)

Description	Model	VBA10A-02	VBA20A-03	VBA40A-04
		VBA10A-F02	VBA20A-F03	VBA40A-F04
Pressure gauge	G	G27-20-01	G36-10-01	
Silencer	N	AN20-02	AN30-03	AN40-04
High-noise reduction silencer	S	ANA1-02	ANA1-03	ANA1-04
Elbow for silencer	L	KT-VBA10A-18	—	—

Note 1) In the case of options GN, two pressure gauges and one silencer are included in the same container as accessories.

Note 2) KT-VBA22A-7 is a pressure gauge with fitting. (Please order two units when using with IN and OUT.)

Pressure Gauge, Silencer (When thread type is NPT or NPTF.)

Description	Model	VBA10A-N02*	VBA20A-N03*	VBA40A-N04*
		VBA10A-T02* *: when "-Z"	VBA20A-T03* *: when "-Z"	VBA40A-T04* *: when "-Z"
Pressure gauge *: when Nil	G	G27-20-01	G36-10-N01	
Pressure gauge *: when "-Z" ^{Note 4)}		G27-P20-01-X30	G36-P10-N01-X30	
Silencer	N	AN20-N02	AN30-N03	AN40-N04
High-noise reduction silencer	S	—	ANA1-N03	ANA1-N04
Elbow for silencer	L	KT-VBA10A-18N	—	—

Note 1) In the case of options GN, two pressure gauges and one silencer are included in the same container as accessories.

Note 2) KT-VBA22A-7N, KT-VBA22A-8N are pressure gauges with fittings. (Please order two units when using with IN and OUT.)

Note 3) Under the new measurement law, the pressure unit of "psi" on the pressure gauges cannot be used in Japan.

Note 4) Pressure unit on the pressure gauge: MPa and psi