

OPERATION MANUAL VBAT-M8A

AIR TANK
VBAT20A*-RV-Q
VBAT38A*-RV-Q

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Thank you for choosing this SMC product. This operation manual provides all essential items to ensure its optimum performance and longer lifespan. Please read it before starting to use it. Keep this manual properly and read it again when any inconvenience occurs. Please refer to the latest catalogue, drawings and maintenance manual.

Operation Precaution

- Check and confirm product specification. Before any operation to ensure safe and optimum. Operating the product out of specifications may cause failure of product or accident.
- Applicable regulation for air tank varies with countries. Please ensure national standard compliance before operation.

Design Precaution

! WARNING

(1)Operating pressure

- Apply required pressure. When the pressure is likely to exceed max. operating pressure, protective measure should be introduced.
- Especially, if the tank is used individually, use pressure switch or safety valve to prevent surge of pressure.

(2)Connection

- Connect filter or a mist separator to the tank outlet. Dust might flow to the outlet as the inner surface of air tank is not treated.
- Booster regulator VBA can be used with in the combination as shown in the table below.

		Booster regulator			
		VBA2*00	VBA4*00	VBA2*A	VBA4*A
Air tank	VBAT20A*-RV-Q	○	○	○	○
	VBAT38A*-RV-Q	○	○	○	○

Selection

! CAUTION

- Avoid repeating sudden charge to and discharge from the air tank.
- Charging (air tank temp. increases) and discharging (air tank temp. decreases) may make the temperature of the air tank exceed the temperature range.
- Keep operating condition within specifications.
- Please follow the selecting method of Booster regulator in the catalogue when connecting with Booster regulator.

Installation

! CAUTION

(1)Accessories

- Accessories are fixed at foot of the tank with tie. Once removed, be aware of missing of parts.

(2)Installation

- Install the tank away from people. As tank keeps air inside, it will be dangerous if the air flows out by any chance.
- Do not set the tank at a place with a moving part and vibration. If the tank is installation in such a place cannot be avoided inform us of it.
- Please refer to the selection “Air tank and Booster regulator Assembly” to assemble them together.
- For mounting on the floor, use 4 holes at φ13 to secure either by bolts (M10) or anchor bolts (accessories).

(3)Piping

- Flexible piping should be employed to avoid moment and vibration applied to the socket of the tank.

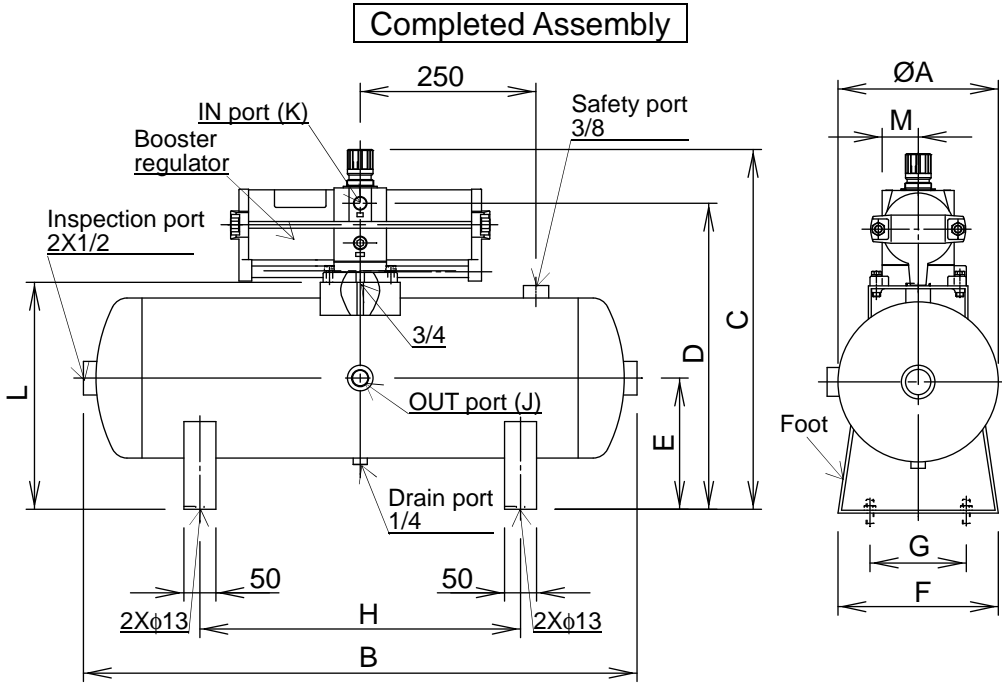
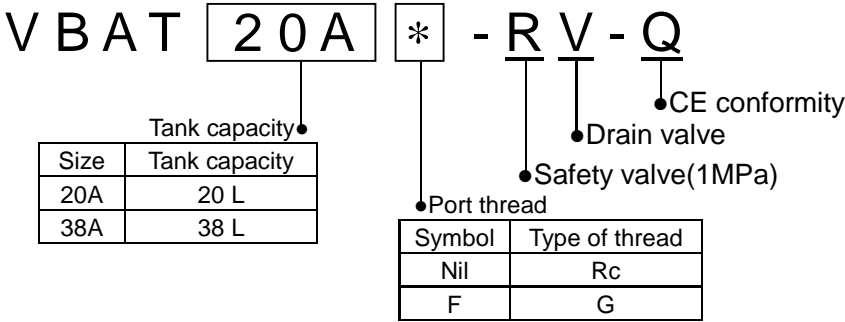
Specifications

(1)Specifications

- This air tank is CE marked and complies with simple pressure vessels directive.

Model	VBAT20A*-RV-Q	VBAT38A*-RV-Q
Max. operating pressure	10bar (1MPa)	
Material	SS400	
Tank capacity	20 L	38 L
Temp. range	0~75 °C	
Tank mass	14 kg	21 kg
OUT Port Rc, G	1/2	3/4
Paint	Outer surface : Silver baking Inner Surface : Rust-proof	

(2)How to order



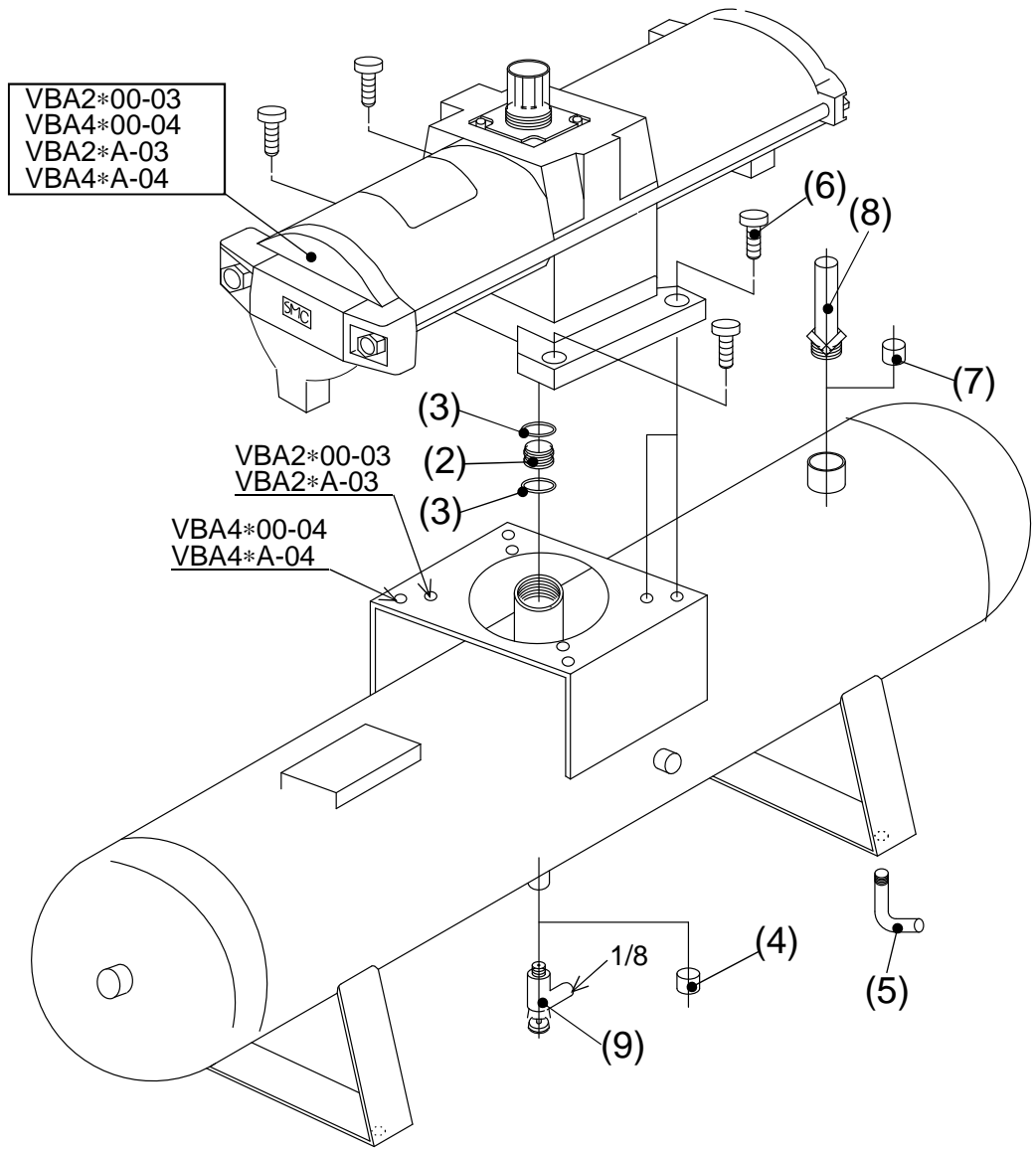
Tank type	Booster regulator	φA	B	C	D	E	F	G	H	J	K	L	M
VBAT 20A	VBA2100	206	696	475	394	180	200	100	400	1/2	3/8	305	39
	VBA2200			432									
	VBA4100			512	430						1/2		56
	VBA4200			472							3/8		39
	VBA20A			481	394								
	VBA22A			444									
	VBA40A			520	430						1/2		56
VBAT 38A	VBA42A	256	846	477		205	250	150	500	3/4		355	
	VBA2100			525	444						3/8		39
	VBA2200			482									
	VBA4100			562	480						1/2		56
	VBA4200			522							3/8		39
	VBA20A			531	444								
	VBA22A			494									
	VBA40A			570	480						1/2		56
	VBA42A			527									

Air tank and Booster regulator Assembly

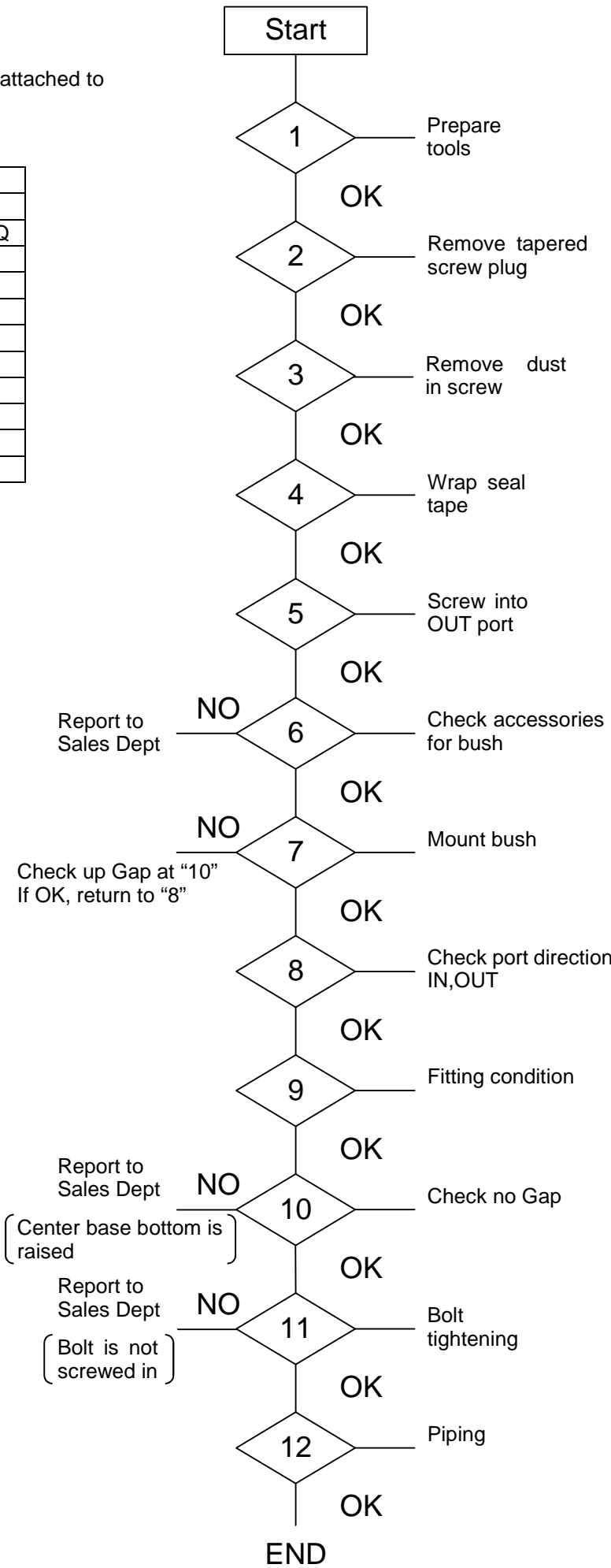
(1)Connecting with Booster regulator

- Parts to connect the Booster regulator and the Air tank are included in the accessories attached to air tank foot.
- Prepare all necessary connecting tools before assembly.

VBAT20A*/38A*-RV-Q					
No.	Description	Material	Qty	Part No.	
1	Air tank	SS	1	VBAT20A*-1-Q/VBAT38A*-1-Q	
2	Bush	BRASS	1	VBAT20A-2	Accessory
3	O-ring	HNBR	2	AS568-021	Accessory
4	Hexagon socket head plug	SUS	1	R1/4	Accessory
5	Anchor bolts	SS	4	M12X70L	Accessory
6	Hexagon socket head bolts	SCM	4	M10X30	Accessory
7	Hexagon socket head plug	SS	1	R3/8	Accessory
8	Safety valve	BRASS/FKM	1	VBAT-R	Accessory
9	Drain valve	BRASS	1	VBAT-V1	Accessory
2~7	Accessory kit	-	1	VBAT20A-Y-2	

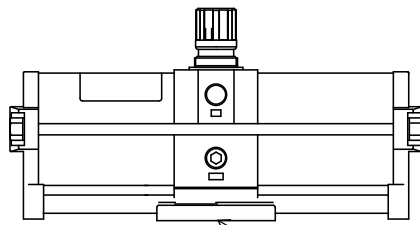


(2)Booster regulator assembling procedure



<1> Hexagonal spanner : 8 nominal (VBA2*)

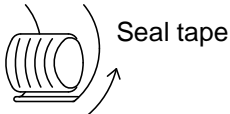
Hexagonal spanner : 8, 10 nominal (VBA4*)



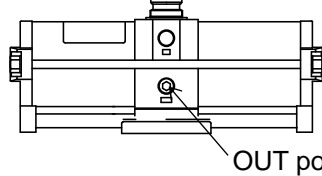
<2>Tools : Hexagonal spanner
8 nominal (VBA2*)
10 nominal (VBA4*)

<3> Remove dust of screw

<4> Hexagonal tapered screw plug



<5>



Torque : 22~24Nm (VBA2*)
28~30Nm(VBA4*)

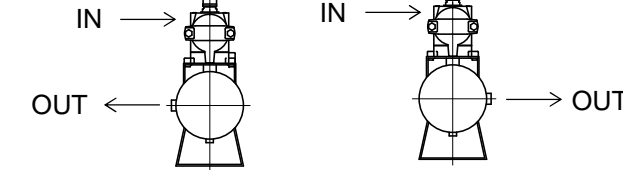
<6>

O-ring Accessory set

<7>

Bush Fit slowly to socket
Tank

<8>



<9>

Bottom center of booster regulator Fit slowly
Tank

<10>

Booster regulator
* No Gap
Accessory
M10 set screw ... 4
M10 washer
Torque 24Nm
* (There is small play diagonally)

<11>

Tighten diagonally
Top view
Tools : Hexagonal spanner
8 nominal (VBA2*, 4*)