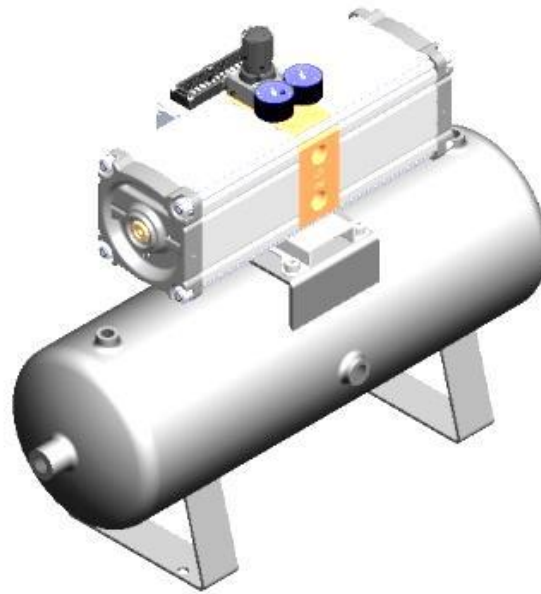


Air Booster module System (ABS SERIES)



Contents

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Introduction

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How to Order / Specifications

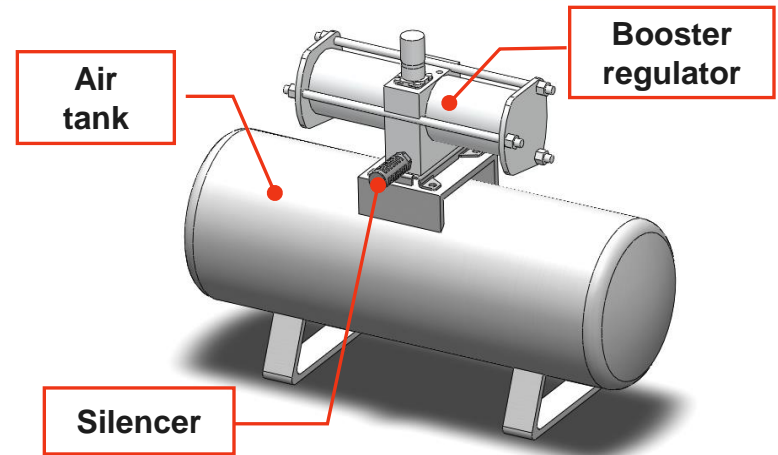
3

Performance / Quality

4

Sales point

1. Introduction of air booster



Increase factory air pressure 2 times!

- » Increase air pressure 2 times in 35 seconds
- » No power supply or wiring needed (eco-friendly)
- » Easy installation
- » Reduced noise of compressing air

1. Introduction of air booster

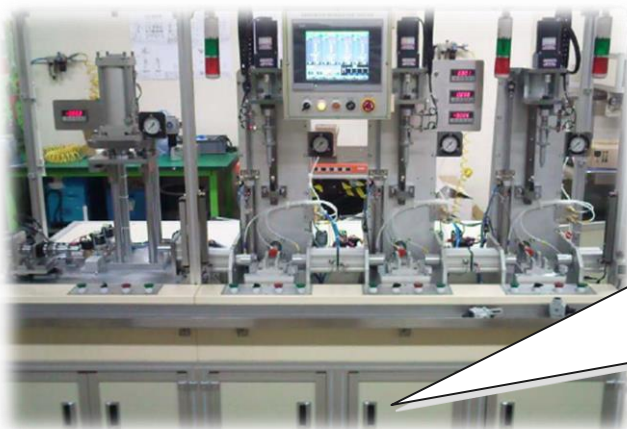
■ Industry field of applied

- ▶ It covers a wide range of industries; factory automation industry, laboratory



■ Application

- ▶ It is used for a kind of component on production line and inspection facility



1. Introduction of air booster

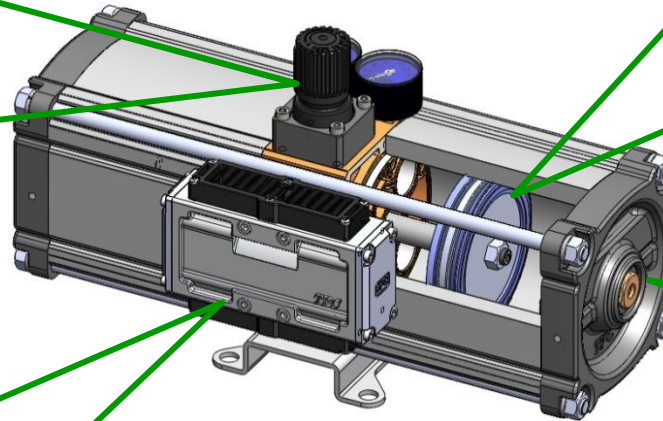
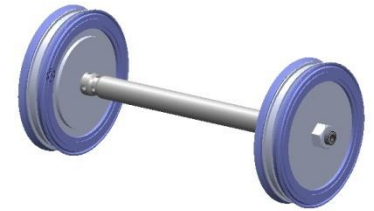


■ Regulator

Set pressure by adjusting a handle

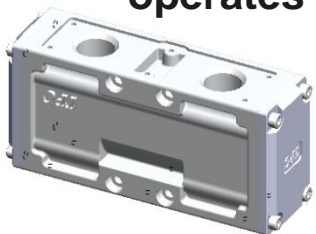
■ Piston

Increases air pressure 2 times by moving back and forth



■ Switching valve

5 port air operated valve operates a piston



■ Sensing valve

Operated by the piston, and it operates the switching valve



2. How to order

1) Booster regulator

ABS **100** - **10** **U** **G40-10**

Bore size

100	Ø100
63	Ø63 (Under developing)

Set pressure range

10	1.0 Mpa
16	1.6 Mpa

Port size

Blank	Rc(PT)
U	NPT

Gauge



Blank	None
G40-10	External diameter Ø40 Pressure range 0~1.0 Mpa
G40-25	External diameter Ø40 Pressure range 0~2.5 Mpa
G27-10	External diameter Ø27 Pressure range 0~1.0 Mpa
G27-25	External diameter Ø27 Pressure range 0~2.5 Mpa

2. How to order

2) Air tank

ABST **10** - **A** - **D**

Capacity

10	10 liter
20	20 liter
38	38 liter

Material

A	Aluminum
S	Stainless Steel

Drain valve

Blank	None
D	Drain valve



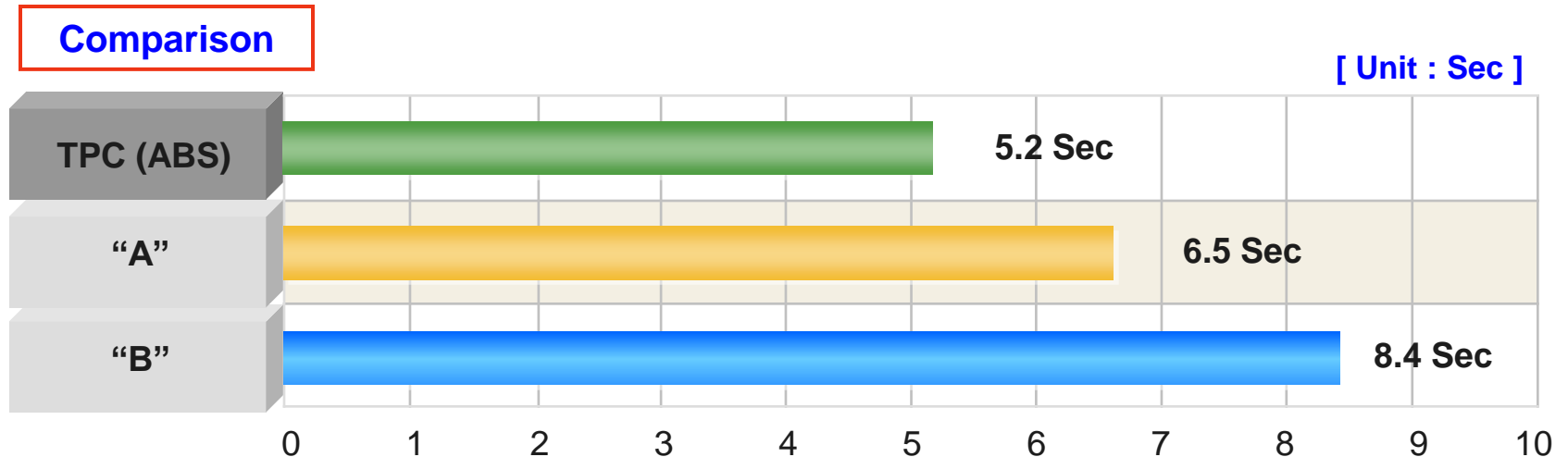
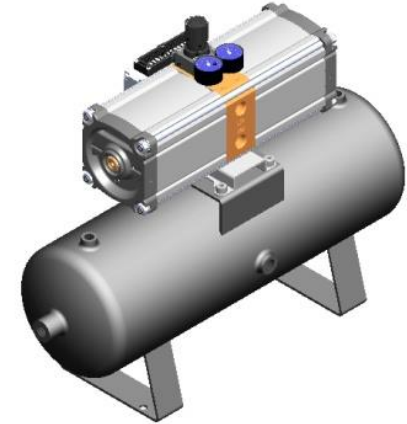
2. Specifications

Model	ABS100
Fluid	Compressed air
Pressure increase ratio	Twice
Supply pressure range	0.1 to 1.0 MPa
Set pressure range	0.2 to 1.0 / 0.2 to 1.6 MPa
Proof pressure	1.5 MPa
Pressure characteristics	± 0.04 MPa
Charge characteristics	Under 35 sec
Noise	Under 80 dB
Port size (IN, OUT) (RcPT)	1/2
Port size for pressure gauge (RcPT)	1/8
Ambient and fluid temperature	0~50 °C
Lubrication	Non-lube

3. Performance / Quality

■ Charge time

- **5.2sec** required to charge tank(20L) pressure from 5 to 10 Bar (2 times)
- 20% improved than competitor “A”
- 40% improved than competitor “B”



3. Performance / Quality

■ Noise

- With silencer : Max. **71dB**
 - Charge pressure from 5 to 10 Bar
 - Background noise 42 ~ 45dB



[unit : dB]

Maker	Without silencer	With silencer	Remark
TPC	91.3 ~ 91.6	66.5 ~ 71.1	
Competitor A		67.3 ~ 73.6	

3. Performance / Quality

■ Piston packing comparison

- Competitor “A” applies PSD PISTON packing with short life span
- TPC applies U-PISTON packing (urethane)
 - Compared to “A” booster, a life span is increased significantly



- Two way packing has shorter life span
- NBR packing gets easily worn down under high speed operation

[Competitor “A”]



- Urethane packing gives longer life span
- Improved performance under low pressure operation
- Improved leakage under low pressure operation by one way packing

[TPC]

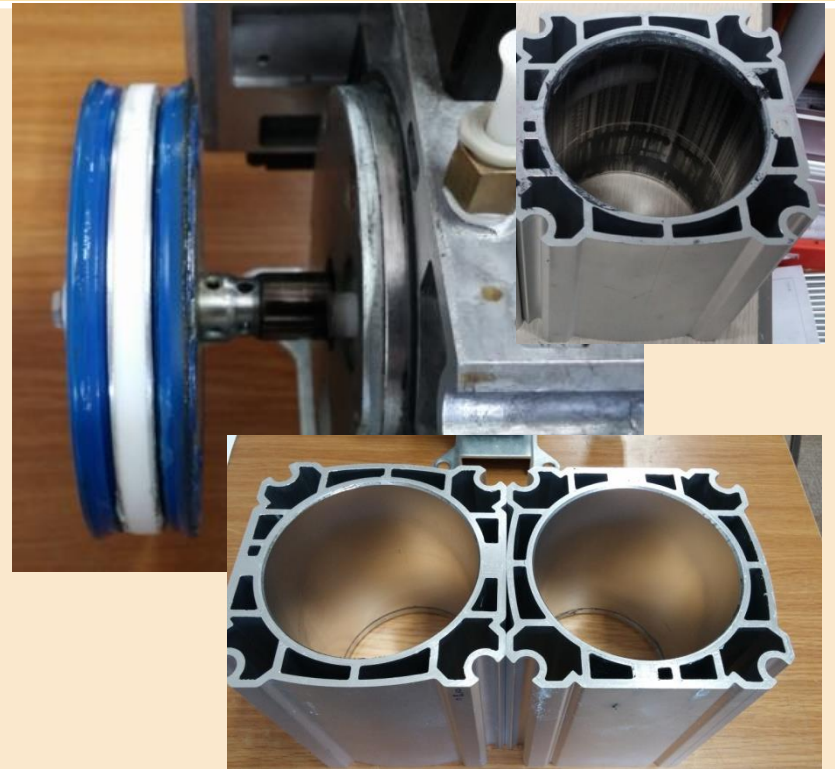
3. Performance / Quality

■ Piston packing comparison

After 4 million cycles operated of Competitor "A"



After 9 million cycles operated of TPC booster



► U piston packing has only little abrasion after 9 million cycles of operation

4. Sales point

Urethane piston packing has longer life span than others

4 outlet ports on switching valve makes moisture easily emitted

Dust proof by built in mesh at P port

Easy maintenance by outer installation of core parts

4. Sales point

■ Dimensions

	TPC	Competitor "A"	Competitor "B"	Remark
Length (L)	397.4	404	357	
Width (W)	186	150	244	
Height (H)	227.3	221	244	
Weight (kg)	10.1	8.5	13	

