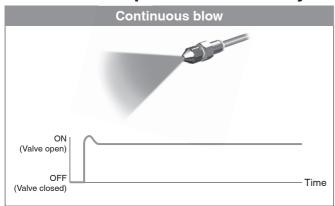
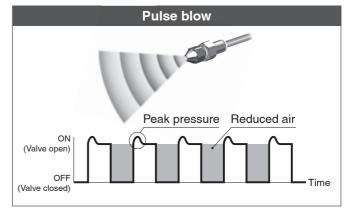
# **Pulse Blow Valve**



# The peak pressure of repeatedly colliding air permits efficient blowing.

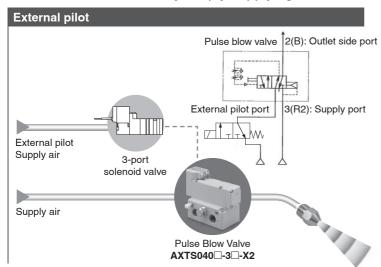
■ Air consumption: Reduced by 50 % or more

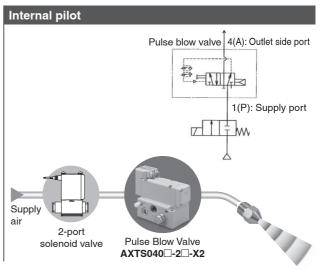




## ■ Control for pulse generation is not required.

Pulse blow can be used by simply supplying air.



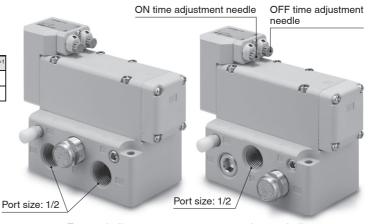


# ■ Long service life (200 million cycles or more)

### ■ Flow rate characteristics

Type of actuation	C [dm <sup>3</sup> /(s·bar)]	b	Cv	Q [l/min (ANR)]*1
External pilot	14	0.18	3.4	3316
Internal pilot	12	0.14	2.9	2782

- \*1 These values have been calculated according to ISO 6358 and indicate the flow rate under standard conditions with an inlet pressure of 0.6 MPa (relative pressure) and a pressure drop of 0.1 MPa.
- ON/OFF time adjustable individually
- Operating pressure range: 0.2 to 1.0 MPa



External pilot

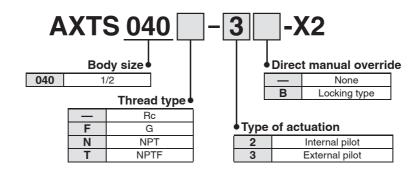
Internal pilot





## *AXTS040* □ - □ □ - *X2*

#### **How to Order**

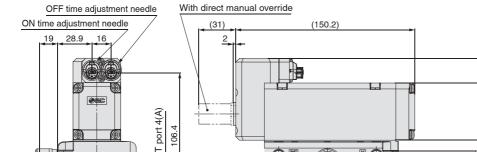


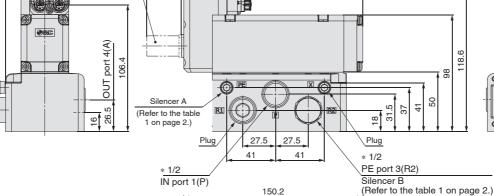
### **Specifications**

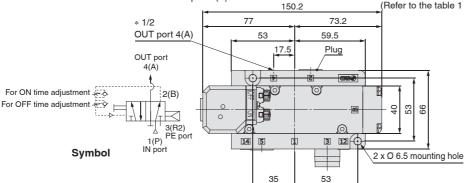
Model		AXTS040□-2□-X2	AXTS040□-3□-X2
Type of actuation		Internal pilot	External pilot
Valve construction		Metal seal	
Fluid		Air	
Operating pressure range		0.2 to 1.0 MPa	0 to 1.0 MPa
External pilot air pressure		_	0.2 to 1.0 MPa*1
Frequency adjustment range		1 to 5 Hz	1 to 8 Hz
Proof pressure		1.5 MPa	
Ambient and fluid temperatures		−10 to 50 °C	
Lubrication		Not required	
Flow rate characteristics (IN port →OUT port)	C [dm³/(s⋅bar)]	12	14
	b	0.14	0.18
	Cv	2.9	3.4
	Q [l/min (ANR)] *2	2782	3316

- \*1 Set the external pilot pressure higher than the operating pressure.
- \*2 These values have been calculated according to ISO 6358 and indicate the flow rate under standard conditions with an inlet pressure of 0.6 MPa (relative pressure) and a pressure drop of 0.1 MPa.









**SMC** 

\* The "\*" indicates the thread type of each port. Refer to the "How to Order" section

[mm]

for details.

#### **Dimensions** [mm] **External pilot** With direct manual override OFF time adjustment needle ON time adjustment needle (150.2)28.9 19 **(III)** OUT port 2(B) (118.6) 118.6 106.4 98 20 Silencer A 31.5 4 37 26.5 R1 (Refer to the table 1.) 9 27.5 Plug \* 1/2 External pilot port 5(R1) \* 1/2 IN port 3 (R2) \* 1/2 PE port 1(P) \* Silencer B (Refer to the table 1) 150.2 77 73.2 \* 1/2 OUT port 2(B) 53 59.5 Plug 13.5 OUT port For ON time adjustment 2(B) For OFF time adjustment 9 53 99 X IN port 5(R1) 3(R2) **Symbol** 14 3 12 2 x Ø 6.5 mounting hole 35 $\ast\,$ The " $\ast$ " indicates the thread type of each

Table 1 Silencer part no.

Draduat part pa	Thread tune	Silencer part no.		
Product part no.	Thread type	Silencer A	Silencer B	
AXTS040-□□-X2	Rc	AN10-01	EBKX-L7007-120	
AXTS040F-□□-X2	G	ANTO-UT	EBKX-L7007F-120	
AXTS040N-□□-X2	NPT	AN10-N01	EBKX-L7007N-120	
AXTS040T-□□-X2	NPTF	ANTO-NOT	EDNA-L/00/N-120	

port. Refer to the "How to Order" section

for details.



# AXTS040□-□□-X2 Series Specific Product Precautions

Be sure to read this before handling the products. For safety instructions and 2-port solenoid valve for fluid control precautions, refer to the "Handling Precautions for SMC Products" and the "Operation Manual" on the SMC website: https://www.smc.eu

#### **Precautions**

- This is an air-operated product. If used under conditions where the flow rate is high and there are no pressure drops during operation, there will be no differential pressure inside the valve and it may fail to operate properly as a result.
- The operation frequency fluctuates depending on the operating conditions. Aside from the adjustment needle, the following conditions largely affect the operating frequency. Therefore, if adjustment cannot be made by the needle alone, try making adjustments to the following conditions.

Operation frequency	High	$\leftrightarrow$	Low
■ Inlet side piping diameter ≥ Outlet side piping diameter		e piping diar ne operation	neter has no frequency.
2 Inlet side piping diameter < Outlet side piping diameter	Inlet s Large	side piping dia	<sup>meter</sup> Small
3 Outlet side piping*1	Small	Bore size	Large
Outlet side piping	Long	Length	Short
4 Supply pressure (External pilot pressure)	High	Pressure	Low
<b>5</b> Nozzle	Small	Bore size	Large

- \*1 Blow air may not become pulse air depending on the volume of the downstream. Keep the product close to the nozzle as much as possible.
- The sliding parts of this product are lubricated. Be aware that due to the construction, some lubricant may flow out to the outlet side with the blow air.

#### **Internal Pilot Type**

#### **AXTS040**□-2□-X2

- When an air gun and a pressure regulator are connected to OUT port, the back pressure of the OUT port will be high. Therefore, the product cannot be used.
- When a vacuum ejector and a suction filter are connected to the OUT port, the back pressure of the OUT port will increase due to the clogging of the filter during operation. As this will result in unstable operation, the product cannot be used. Please use the external pilot type, which is generally not affected by back pressure.

#### **External Pilot Type**

#### AXTS040□-3□-X2

- Use an External pilot pressure higher than IN port pressure.
- For the external pilot type, pulse air is only generated while the pilot air is being supplied. The blow is stopped by the return spring when the pilot air is not being supplied. However, due to the metal seal construction, zero air leakage cannot be guaranteed.
- When the product is used in a condition where the OUT port back pressure varies, for example, vacuum ejector and / or suction filter is connected to the OUT port, please consider that the operation frequency will be changed.







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