ADVANCE®

PRODUCT CATALOG

Valves for a multiplicity of requirements

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HICV series

Self-Control Valves

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S-E1604A

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HICV series

Self Control Valves

Export Control

●Export control is aimed at preventing the proliferation of weapons of mass destruction and other sensitive items to countries and regions of security concern or terrorist organizations. Export transactions of goods and technology that have potential weapons of mass destruction (WMD)/ conventional weapons applications are regulated under laws and regulations.

●To ensure safety by maintaining international peace and security, a license may be required from governmental authorities in order to export or provide products or technologies within this catalog. The regulation for export of cargos and technologies is defined by the following four regimes as well as governmental authorities of each country.

Nuclear Suppliers Group (NSG)	Missile Technology Control Regime (MTCR)
Australia Group (AG)	Wassenaar Arrangement (WA)

●Be sure to comply with each country's export control laws and regulations when exporting or providing products or technologies within this catalog.

※Please contact us if you have any questions.

HICV series

Self Control Valve

The HICV series of control valves achieve constant pressure stability on the downstream regardless of pressure fluctuations from the upstream. The downstream pressure is managed by the pilot air pressure supplied to the HICV.

Self Control Valve

HICV-045CBi*-131

■Specifications

Model Code	See Model Selection Table
Orifice Size	ϕ7 Equivalency[mm]
Connection Size	See Model Selection Table
Recommended Flow Range	4: 0.4~2[L/min]H_2O
	5: 1~5[L/min]H_2O
	6: 1~5[L/min]H_2O
	※The adjustable flow range differs according to the downstream restriction.
Applicable Media	DI Water, Corrosive Fluid
Media Pressure	IN: 0~0.5MPa
	OUT: 0~0.5MPa
Media Temperature	10~90℃
Ambient Temperature	0~40℃
Operational Mode	Single Pilot Type
Pneumatic Pressure	0.1~0.3MPa
Wetted Material	Diaphragm: Corrosion-resistant plastic
	Valve Body: Corrosion-resistant plastic

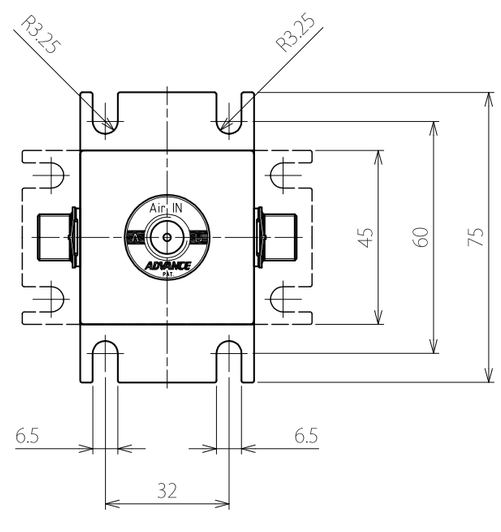
※Specifications are subject to change without notice.

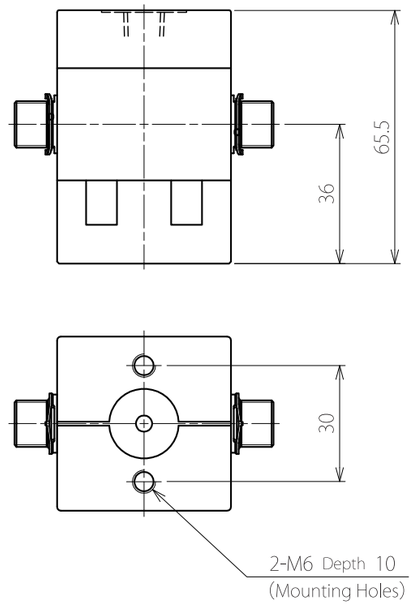
■Model Selection Table

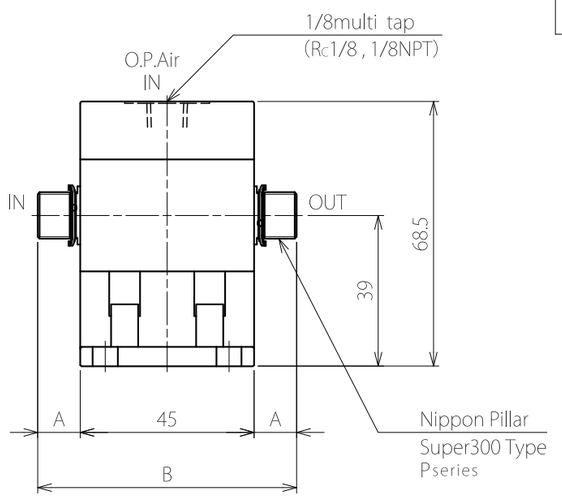
HICV-045CBi*-131

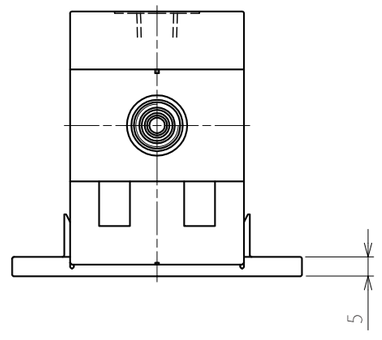
Connection Size
4: (I.D.×O.D.)3.97×6.35[mm]
5: (I.D.×O.D.)6.35×9.53[mm]
6: (I.D.×O.D.)9.53×12.7[mm]

Dimensional Drawing









Model Code	Connection	A	B
HICV-045CBi4-131	3.97×6.35	11	67
HICV-045CBi5-131	6.35×9.53	15	75
HICV-045CBi6-131	9.53×12.7	17.5	80

(unit : mm)

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HICV-045CBi4-131 (Characteristics)

Measurement Method	A fixed orifice with a size of 1.5mm installed on the downstream of test unit.

Fig.1 Outlet Pressure vs Inlet Pressure

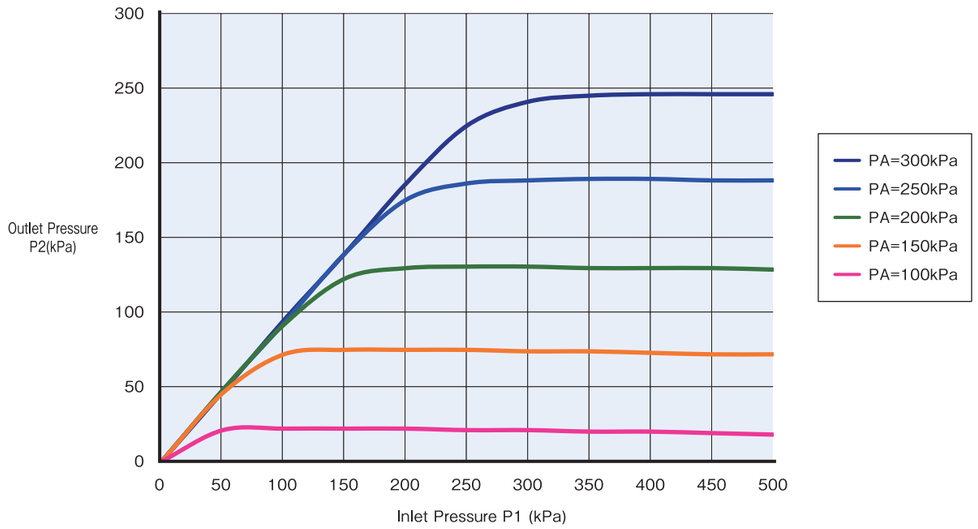
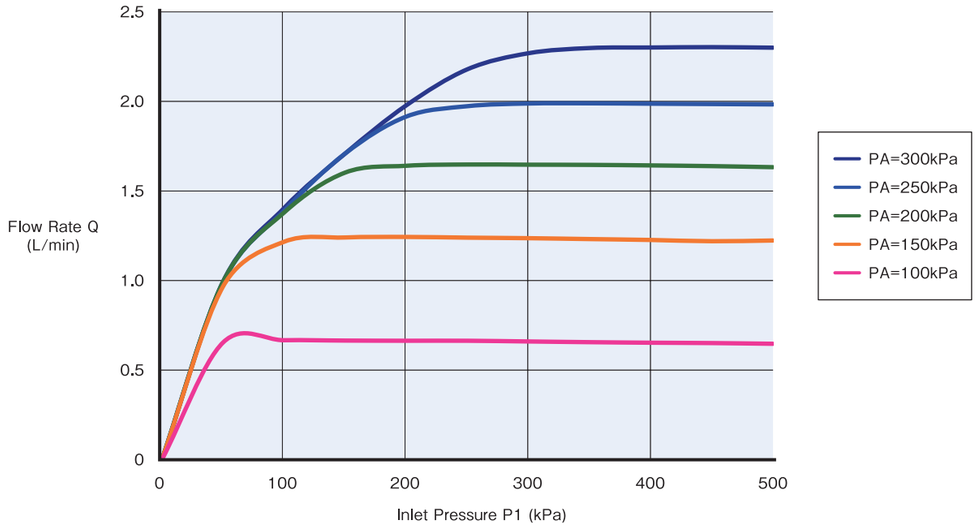


Fig.2 Flow Rate vs Inlet Pressure



Measurement Method	Inlet Pressure P1=500[kPa]

Fig.3 Outlet Pressure vs Pneumatic Pressure

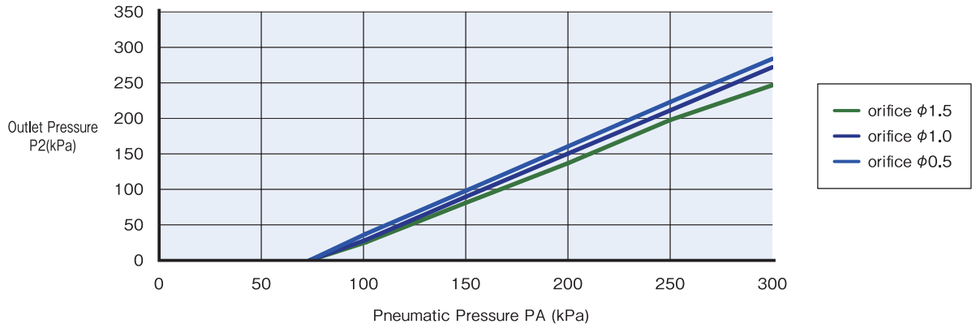


Fig.4 Flow Rate vs Pneumatic Pressure

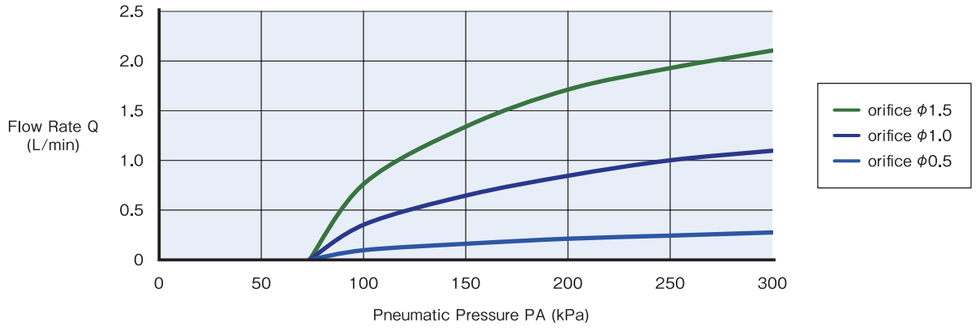
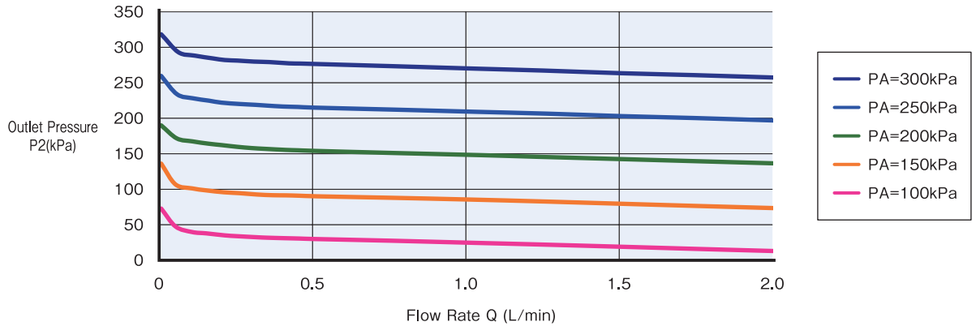


Fig.5 Outlet Pressure vs Flow Rate



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HICV-045CBi5/6-131 (Characteristics)

Measurement Method	A fixed orifice with a size of 2.5mm installed on the downstream of test unit.

Fig.1 Outlet Pressure vs Inlet Pressure

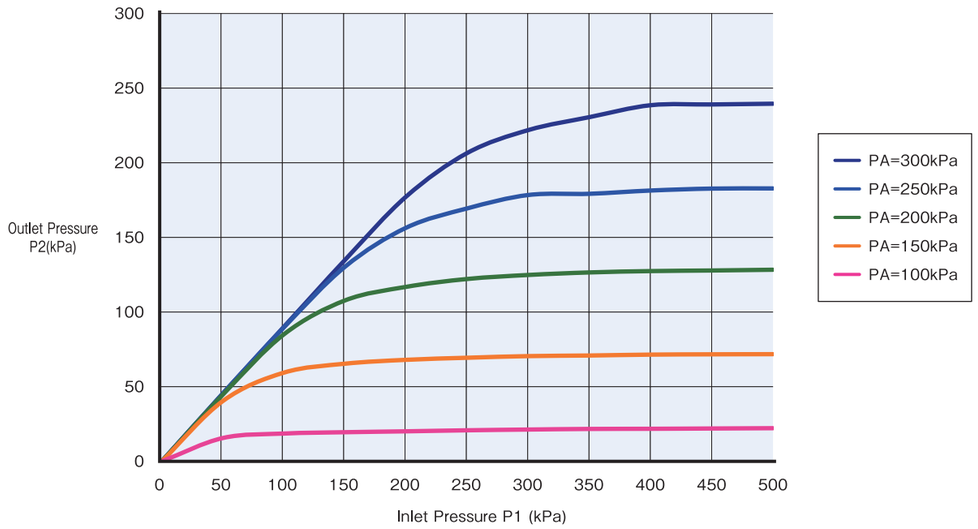
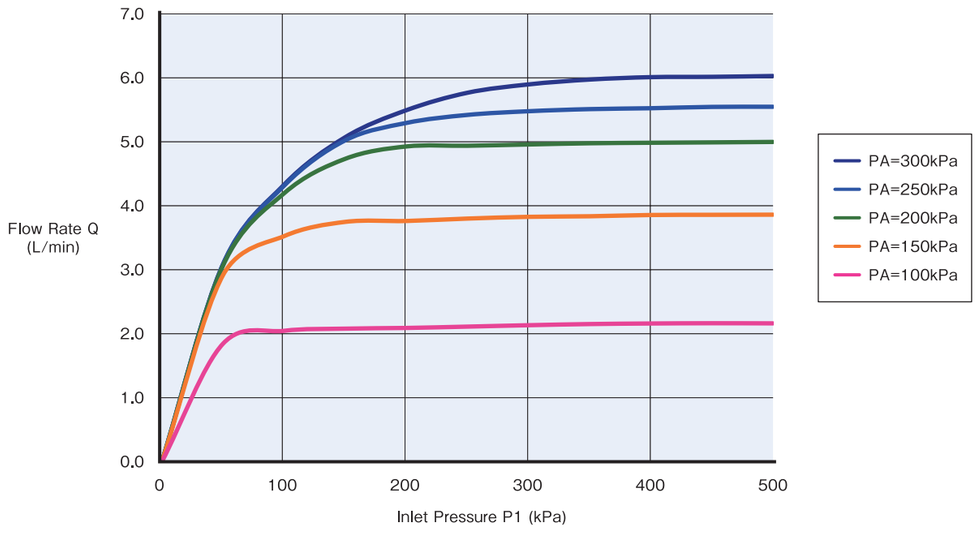


Fig.2 Flow Rate vs Inlet Pressure



Measurement Method	Inlet Pressure P1=500[kPa]

Fig.3 Outlet Pressure vs Pneumatic Pressure

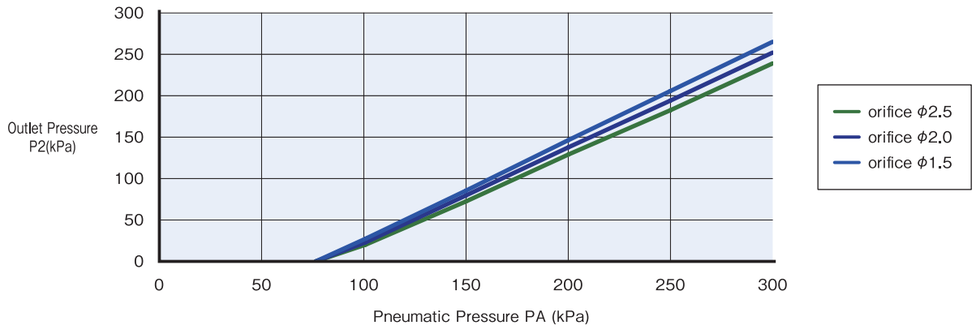


Fig.4 Flow Rate vs Pneumatic Pressure

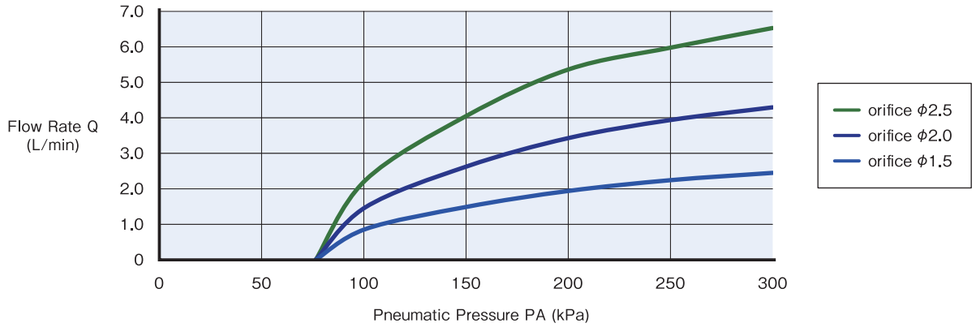
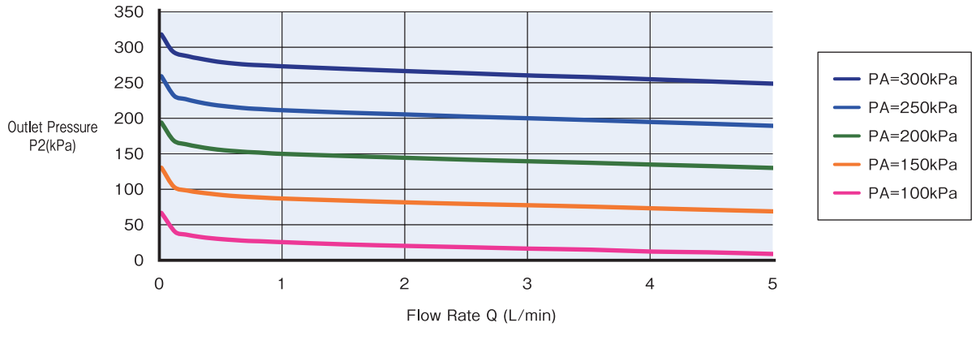


Fig.5 Outlet Pressure vs Flow Rate



Self Control Valve

HICV-065CBi6-131P

■Specifications

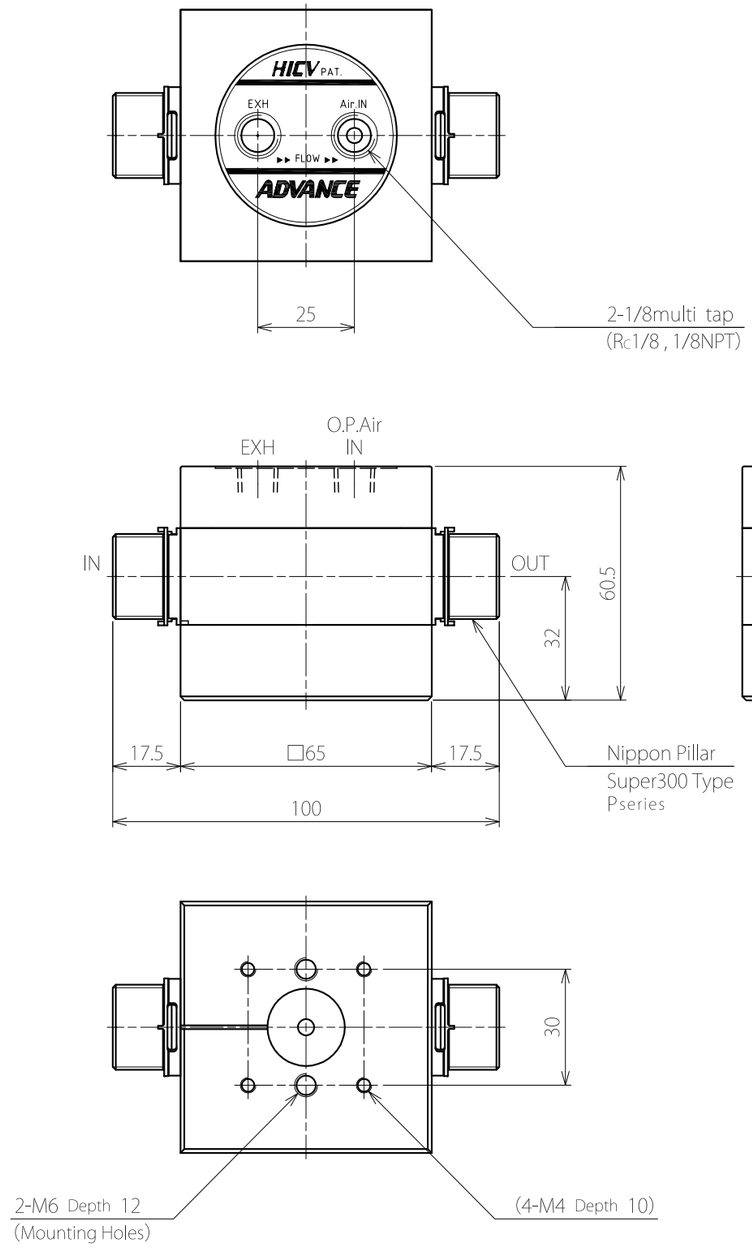
Model Code	HICV-065CBi6-131P
Orifice Size	φ9.6 Equivalency[mm]
Connection Size	(I.D.×O.D.)9.53×12.7[mm]
Recommended Flow Range	2～10[L/min]H_2O ※The adjustable flow range differs according to the downstream restriction.
Applicable Media	DI Water, Corrosive Fluid
Media Pressure	IN: 0～0.5MPa
	OUT: 0～0.5MPa
Media Temperature	10～90℃
Ambient Temperature	0～40℃
Operational Mode	Single Pilot Type
Pneumatic Pressure	0.1～0.3MPa
Wetted Material	Diaphragm: Corrosion-resistant plastic
	Valve Body: Corrosion-resistant plastic
	Seat Stem: Corrosion-resistant plastic
	Stay: Corrosion-resistant plastic

※Specifications are subject to change without notice.

■Model Number

HICV-065CBi6-131P

Dimensional Drawing



(unit : mm)

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HICV-065CBi6-131P(Characteristics)

Measurement Method	A fixed orifice with a size of 4.0mm installed on the downstream of test unit.

Fig.1 Outlet Pressure vs Inlet Pressure

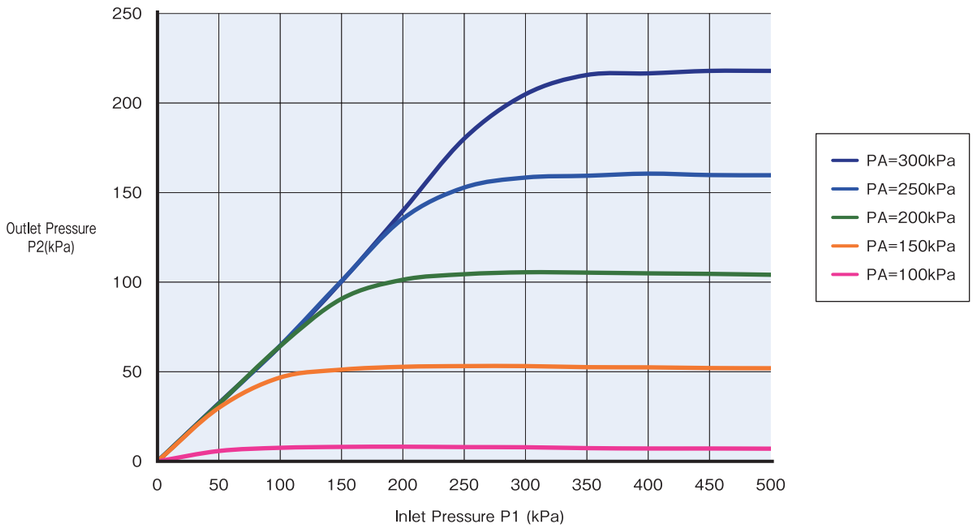
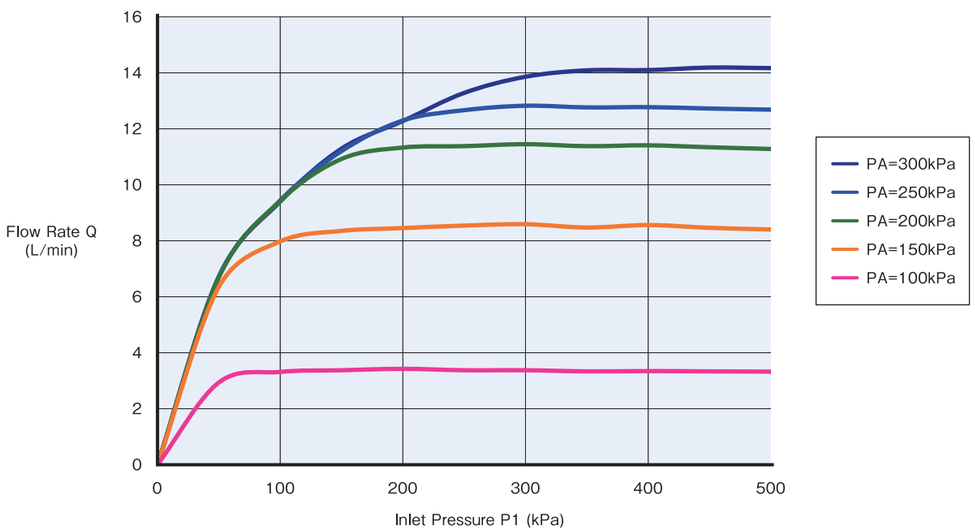


Fig.2 Flow Rate vs Inlet Pressure



Measurement Method	Inlet Pressure P1=500[kPa]

Fig.3 Outlet Pressure vs Pneumatic Pressure

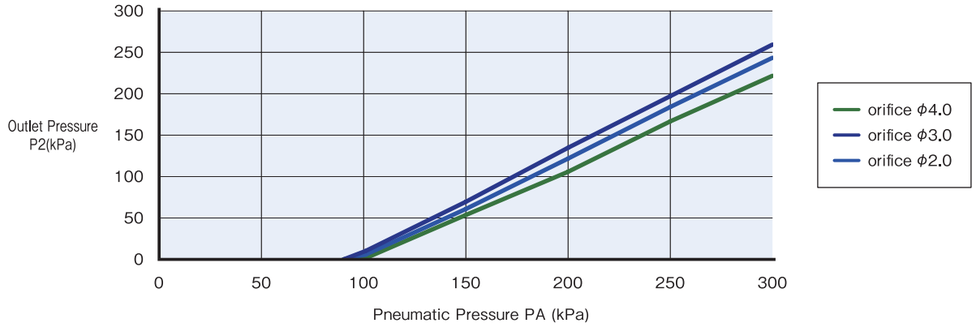


Fig.4 Flow Rate vs Pneumatic Pressure

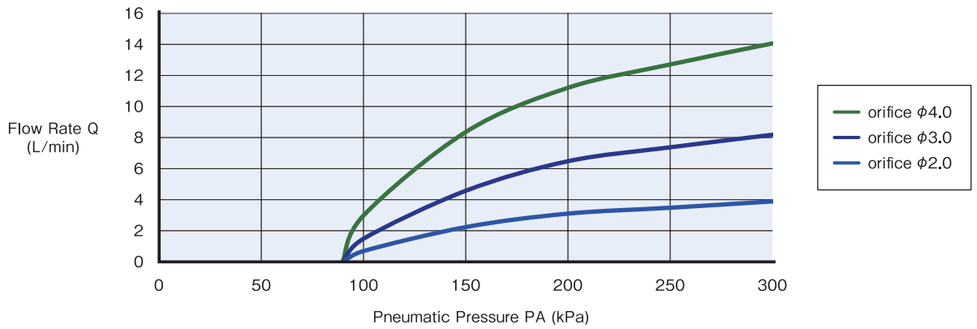
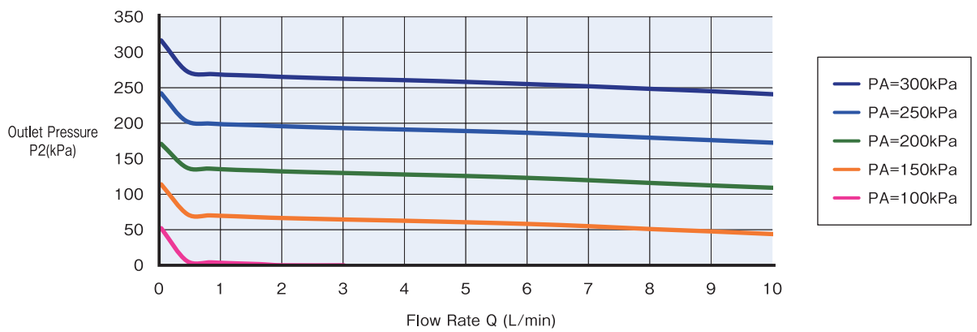


Fig.5 Outlet Pressure vs Flow Rate



Self Control Valve

HICV-090CBi*-131P

■Specifications

Model Code	See Model Selection Table
Orifice Size	φ12 Equivalency[mm]
Connection Size	See Model Selection Table
Recommended Flow Range	5～20[L/min]H_2O ※The adjustable flow range differs according to the downstream restriction.
Applicable Media	DI Water, Corrosive Fluid
Media Pressure	IN: 0～0.5MPa
	OUT: 0～0.5MPa
Media Temperature	10～90℃
Ambient Temperature	0～40℃
Operational Mode	Single Pilot Type
Pneumatic Pressure	0.1～0.3MPa
Wetted Material	Diaphragm: Corrosion-resistant plastic
	Valve Body: Corrosion-resistant plastic
	Seat Stem: Corrosion-resistant plastic
	Stay: Corrosion-resistant plastic

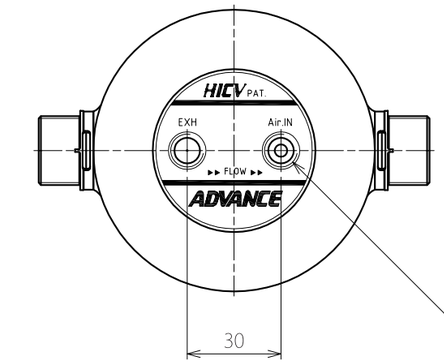
※Specifications are subject to change without notice.

■Model Selection Table

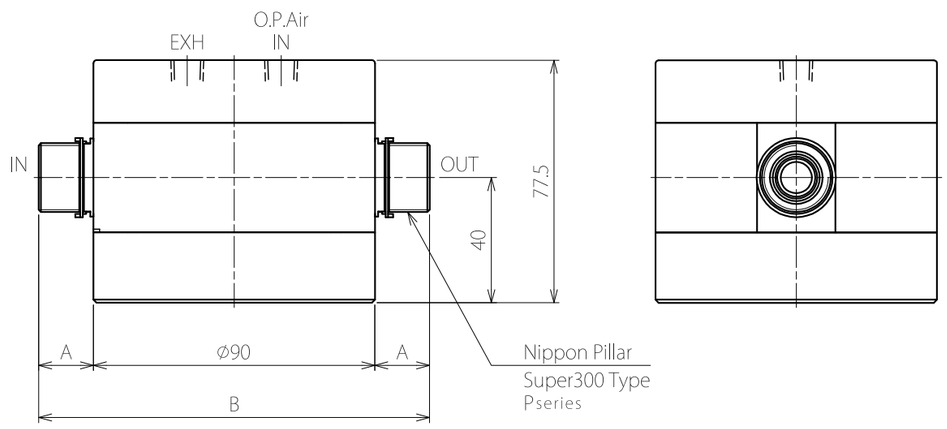
HICV-090CBi*-131P

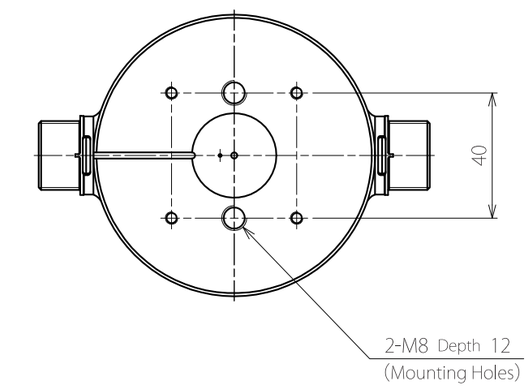
Connection Size
6: (I.D.×O.D.)9.53×12.7[mm]
7: (I.D.×O.D.)15.88×19.05[mm]

Dimensional Drawing



Model Code	Connection	A	B
HICV-090CBi6-131P	9.53×12.7	17.5	125
HICV-090CBi7-131P	15.88×19.05	22	134





(unit : mm)

HICV-090CBi6-131P(Characteristics)

Measurement Method	A fixed orifice with a size of 5.0mm installed on the downstream of test unit.

Fig.1 Outlet Pressure vs Inlet Pressure

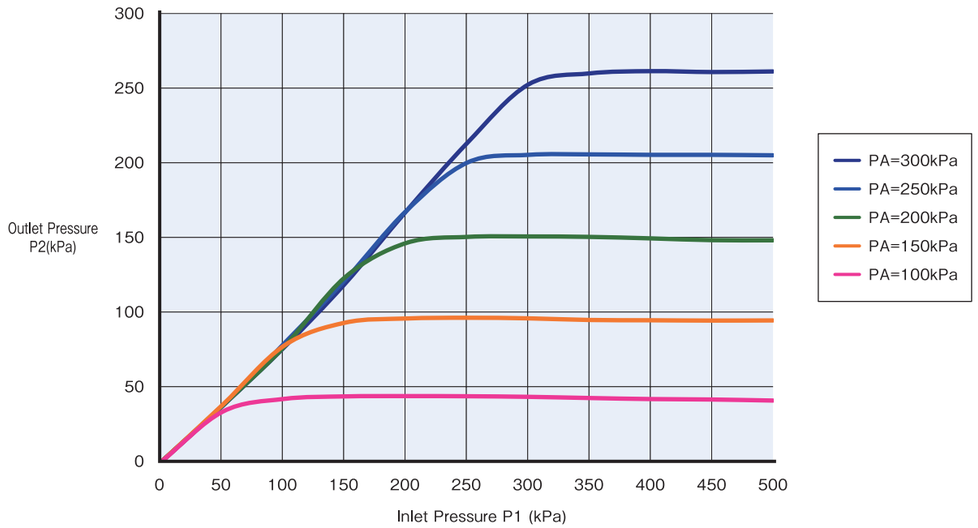
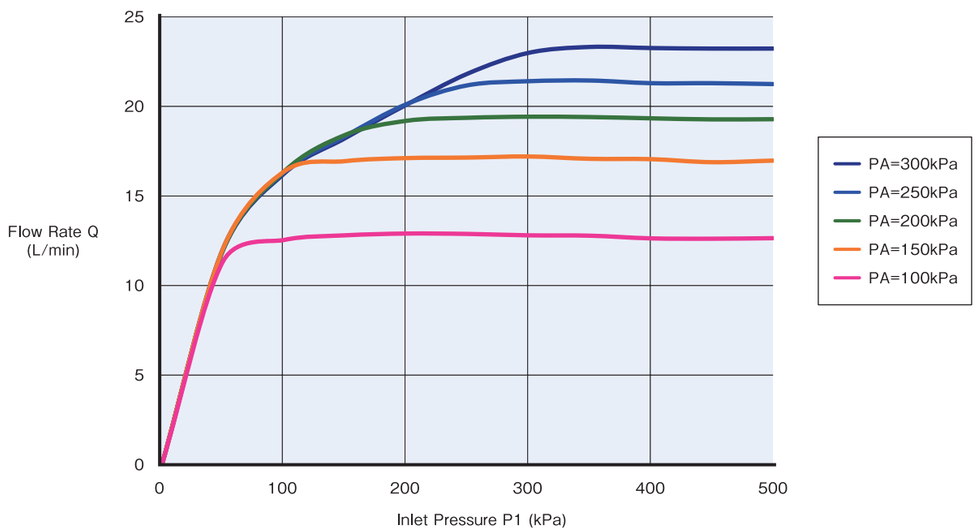


Fig.2 Flow Rate vs Inlet Pressure



Measurement Method	Inlet Pressure P1=500[kPa]

Fig.3 Outlet Pressure vs Pneumatic Pressure

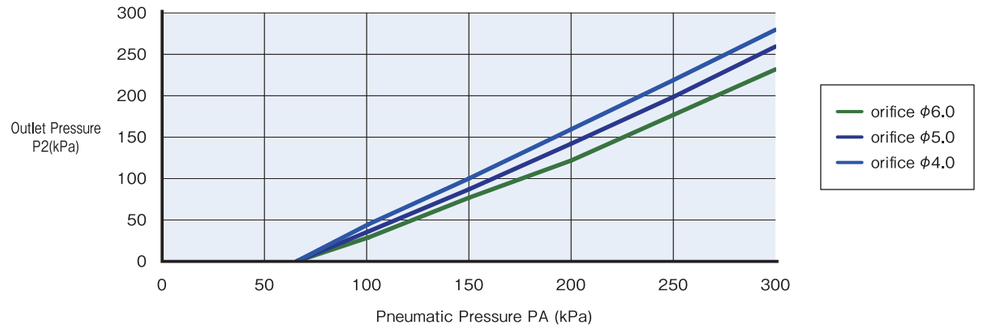


Fig.4 Flow Rate vs Pneumatic Pressure

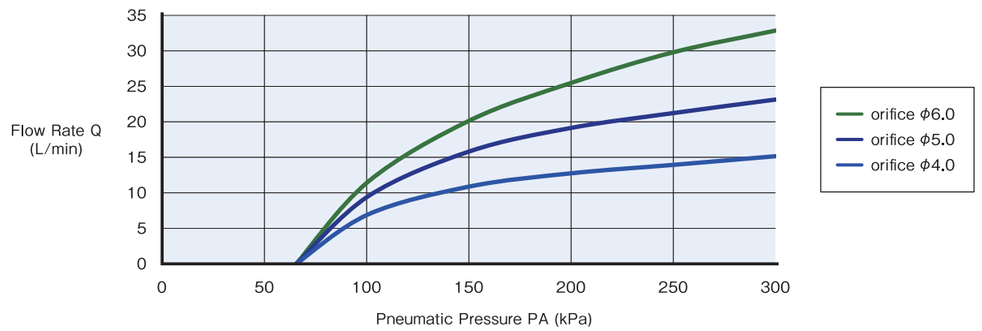
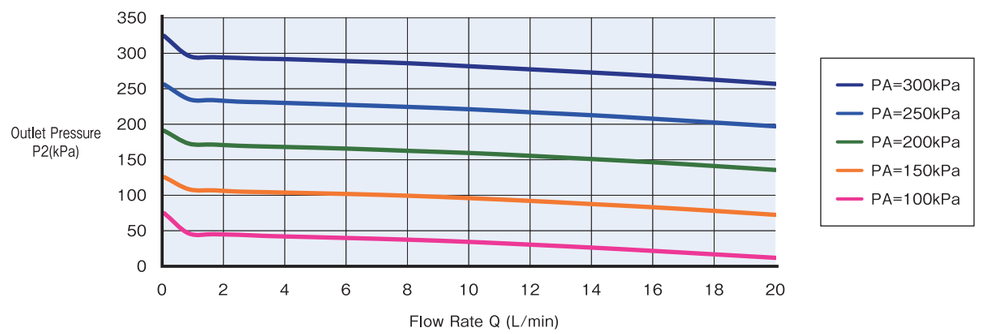


Fig.5 Outlet Pressure vs Flow Rate



HICV-090CBi7-131P(Characteristics)

Measurement Method	A fixed orifice with a size of 6.0mm installed on the downstream of test unit.

Fig.1 Outlet Pressure vs Inlet Pressure

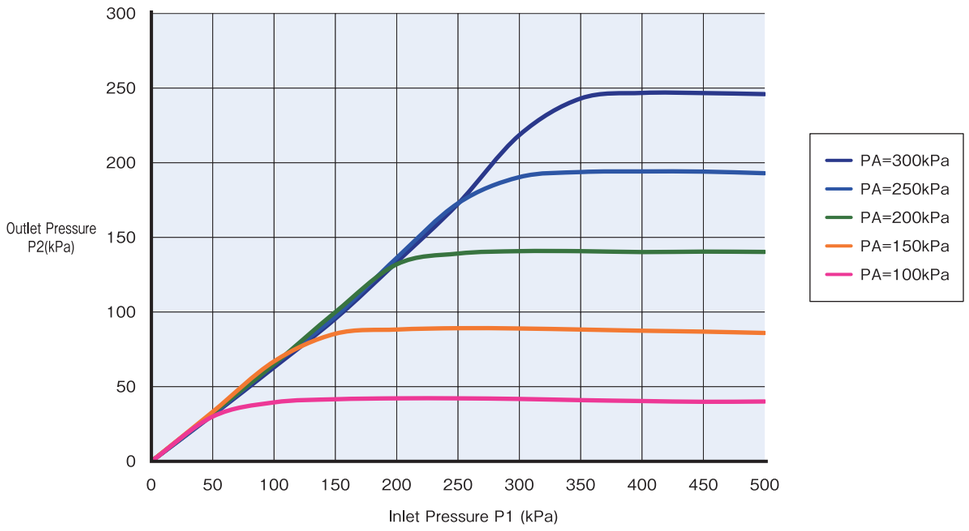
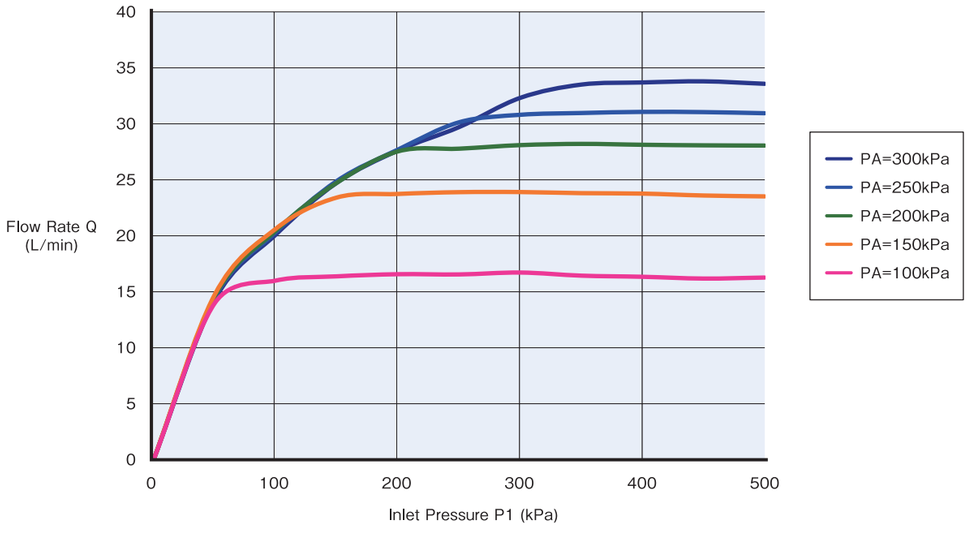


Fig.2 Flow Rate vs Inlet Pressure



Measurement Method	Inlet Pressure P1=500[kPa]

Fig.3 Outlet Pressure vs Pneumatic Pressure

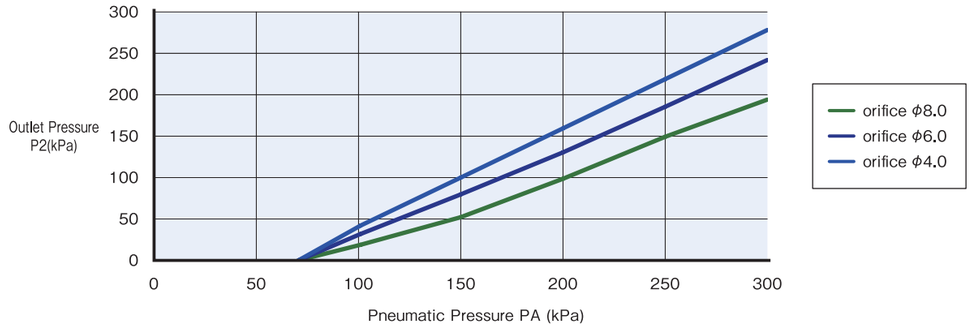


Fig.4 Flow Rate vs Pneumatic Pressure

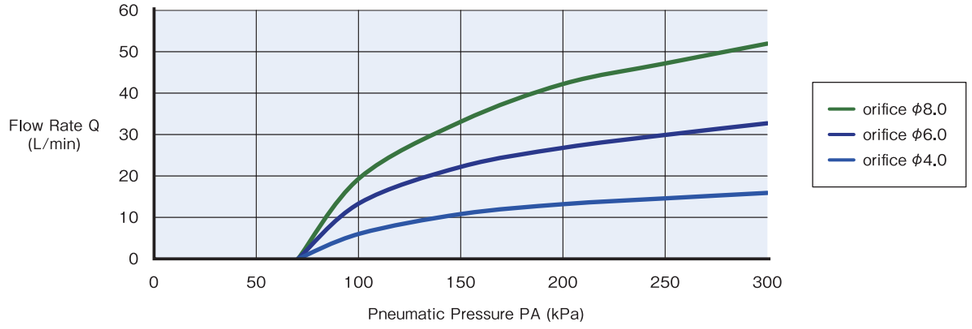
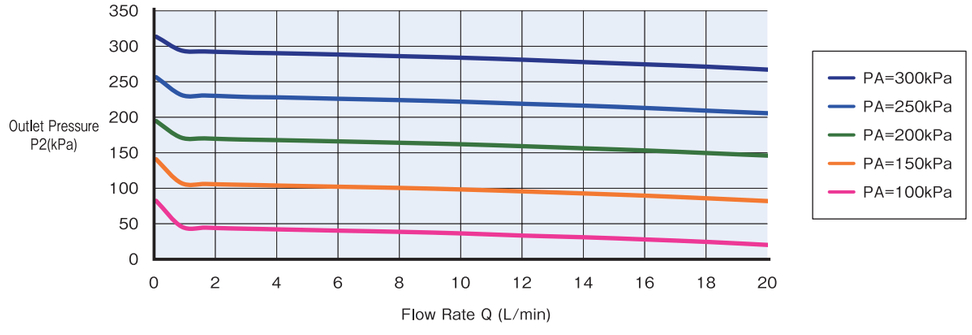


Fig.5 Outlet Pressure vs Flow Rate



Self Control Valve

HICV-110CBi*-131P

■Specifications

Model Code	See Model Selection Table
Orifice Size	ϕ18.9 Equivalency[mm]
Connection Size	See Model Selection Table
Recommended Flow Range	10～30[L/min]H_2O ※The adjustable flow range differs according to the downstream restriction.
Applicable Media	DI Water, Corrosive Fluid
Media Pressure	IN: 0～0.5MPa
	OUT: 0～0.5MPa
Media Temperature	10～90℃
Ambient Temperature	0～40℃
Operational Mode	Single Pilot Type
Pneumatic Pressure	0.1～0.3MPa
Wetted Material	Diaphragm: Corrosion-resistant plastic
	Valve Body: Corrosion-resistant plastic
	Seat Stem: Corrosion-resistant plastic
	Stay: Corrosion-resistant plastic

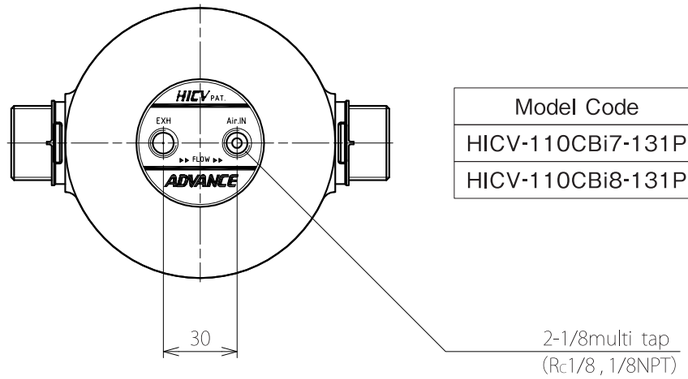
※Specifications are subject to change without notice.

■Model Selection Table

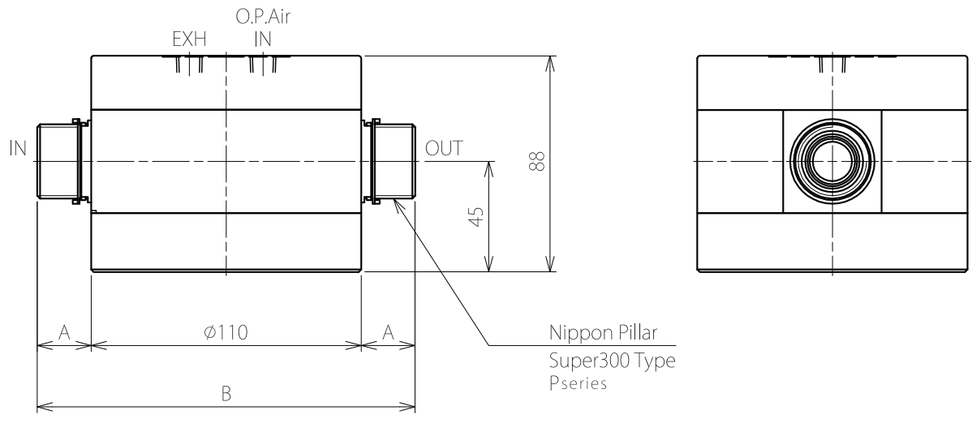
HICV-110CBi*-131P

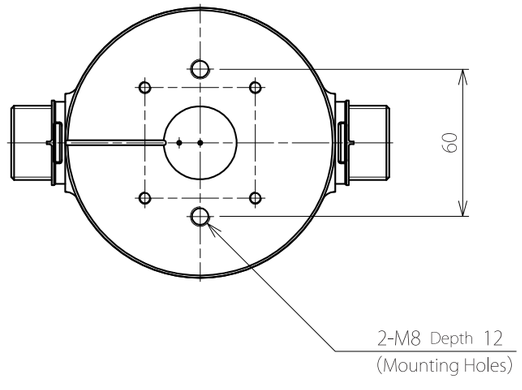
Connection Size
7: (I.D.×O.D.)15.88×19.05[mm]
8: (I.D.×O.D.)22.23×25.4[mm]

Dimensional Drawing



Model Code	Connection	A	B
HICV-110CBi7-131P	15.88×19.05	22	154
HICV-110CBi8-131P	22.23×25.4	27	164





(unit : mm)

S-E1604A

HICV-110CBi7-131P(Characteristics)

Measurement Method	A fixed orifice with a size of 6.0mm installed on the downstream of test unit.

Fig.1 Outlet Pressure vs Inlet Pressure

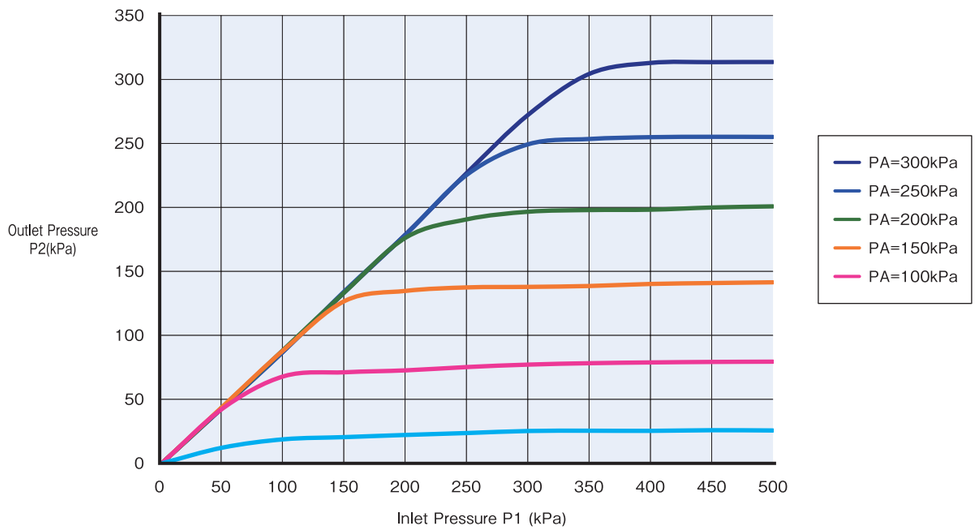
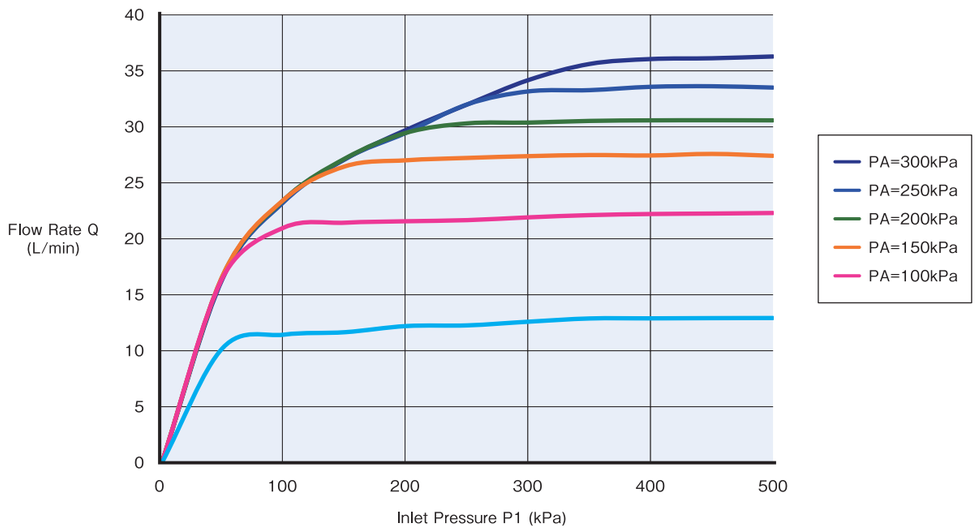


Fig.2 Flow Rate vs Inlet Pressure



Measurement Method	Inlet Pressure P1=500[kPa]

Fig.3 Outlet Pressure vs Pneumatic Pressure

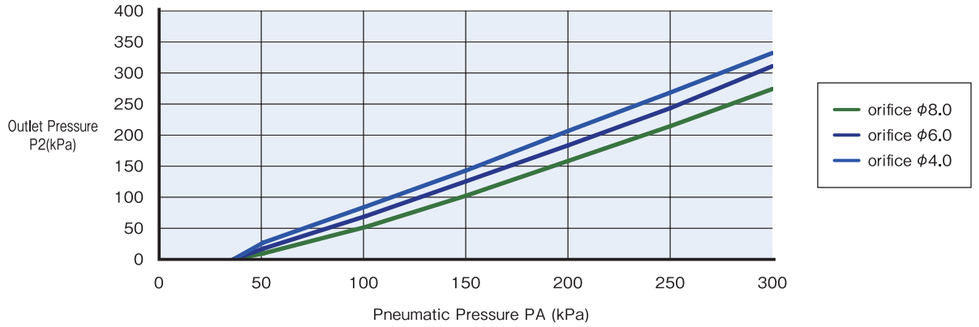


Fig.4 Flow Rate vs Pneumatic Pressure

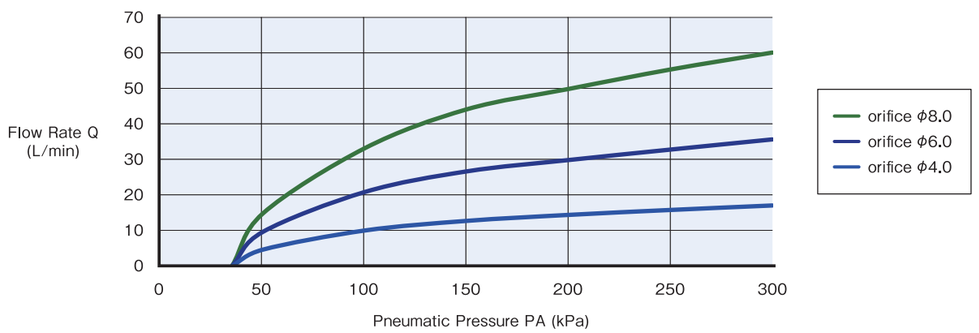
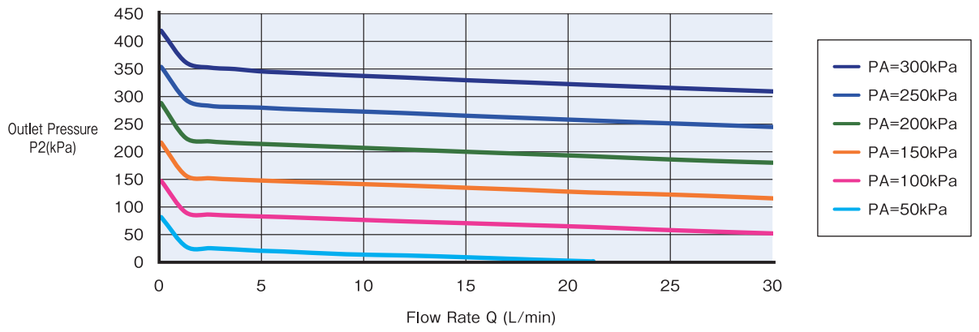


Fig.5 Outlet Pressure vs Flow Rate



HICV-110CBi8-131P(Characteristics)

Measurement Method	A fixed orifice with a size of 6.0mm installed on the downstream of test unit.

Fig.1 Outlet Pressure vs Inlet Pressure

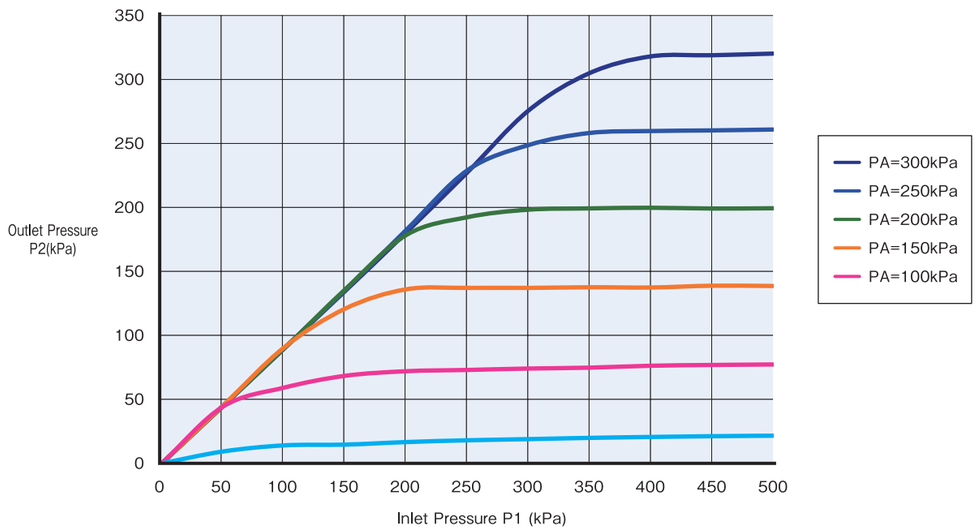
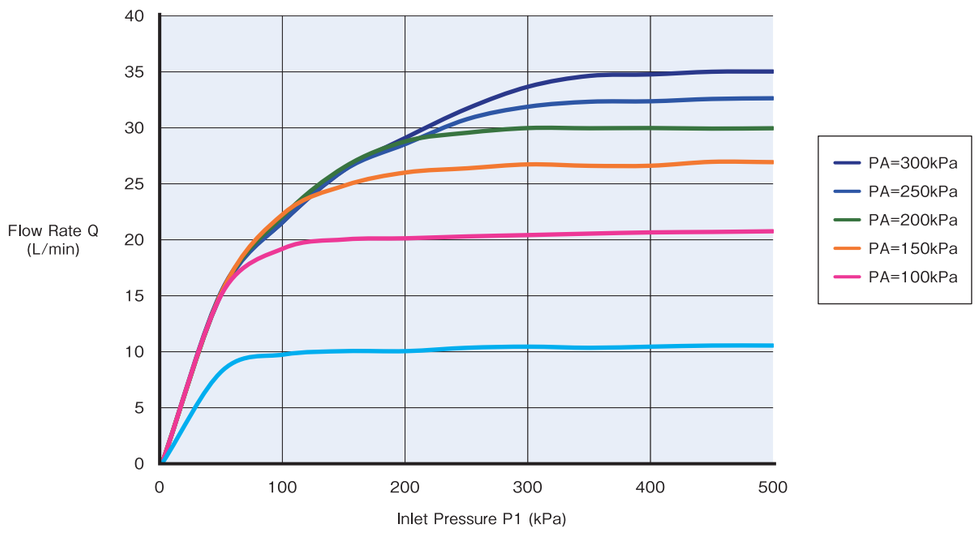


Fig.2 Flow Rate vs Inlet Pressure



Measurement Method	Inlet Pressure P1=500[kPa]

Fig.3 Outlet Pressure vs Pneumatic Pressure

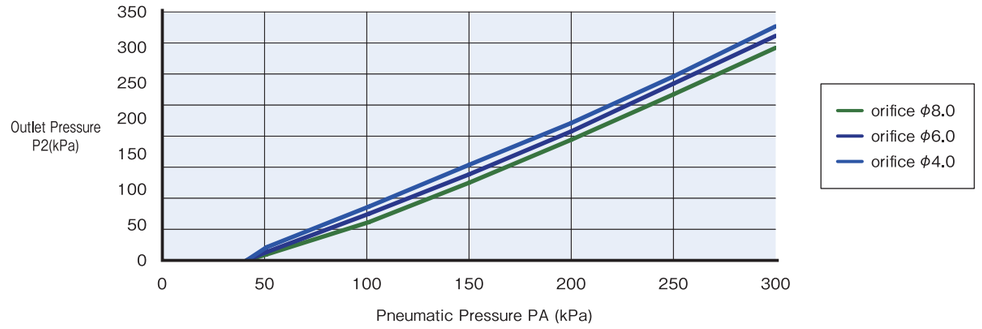


Fig.4 Flow Rate vs Pneumatic Pressure

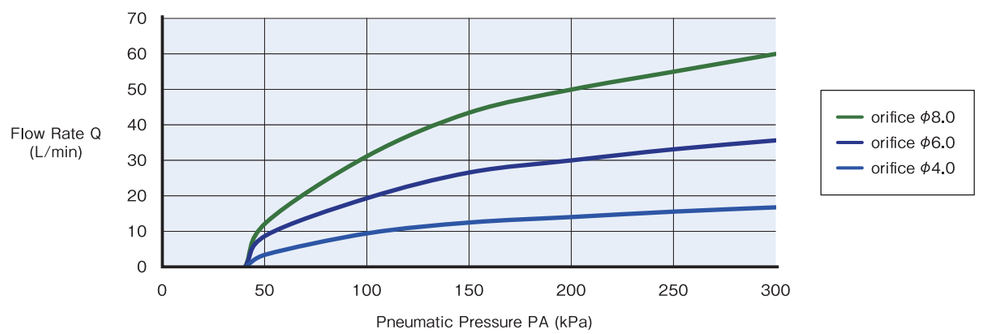
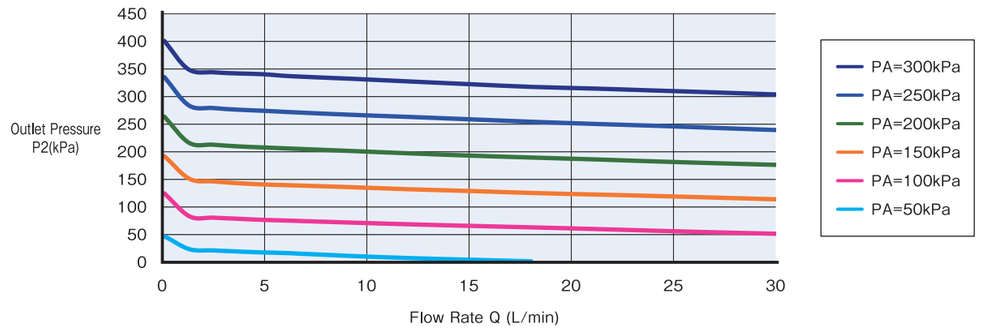


Fig.5 Outlet Pressure vs Flow Rate



Self Control Valve

HICV-130CBi*-131P

■Specifications

Model Code	See Model Selection Table
Orifice Size	ϕ24.5 Equivalency[mm]
Connection Size	See Model Selection Table
Recommended Flow Range	10～45[L/min]H_2O ※The adjustable flow range differs according to the downstream restriction.
Applicable Media	DI Water, Corrosive Fluid
Media Pressure	IN: 0～0.5MPa
	OUT: 0～0.5MPa
Media Temperature	10～90℃
Ambient Temperature	0～40℃
Operational Mode	Single Pilot Type
Pneumatic Pressure	0.1～0.3MPa
Wetted Material	Diaphragm: Corrosion-resistant plastic
	Valve Body: Corrosion-resistant plastic
	Seat Stem: Corrosion-resistant plastic
	Stay: Corrosion-resistant plastic

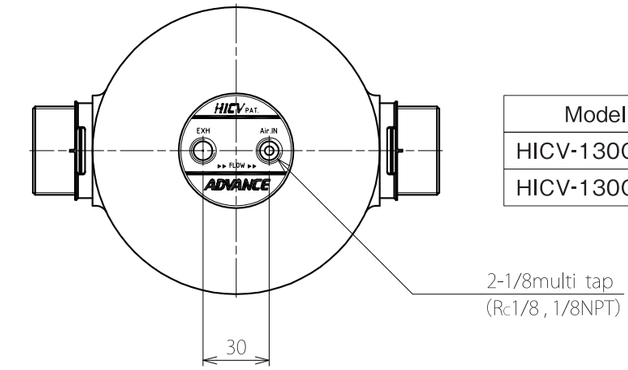
※Specifications are subject to change without notice.

■Model Selection Table

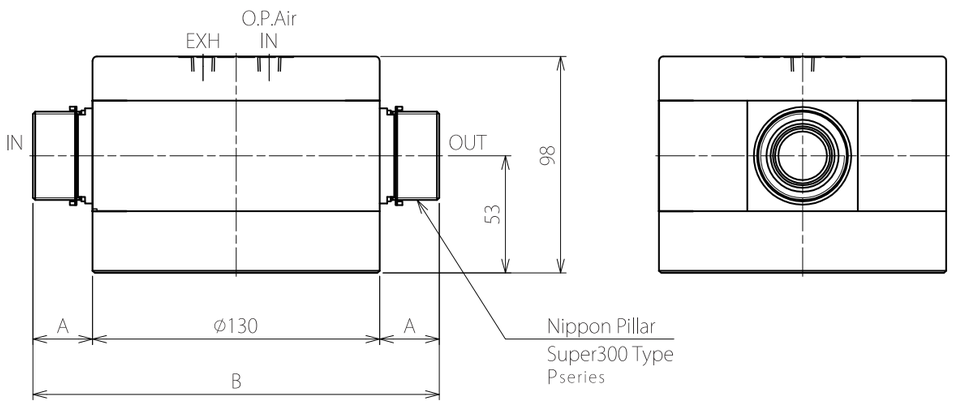
HICV-130CBi*-131P

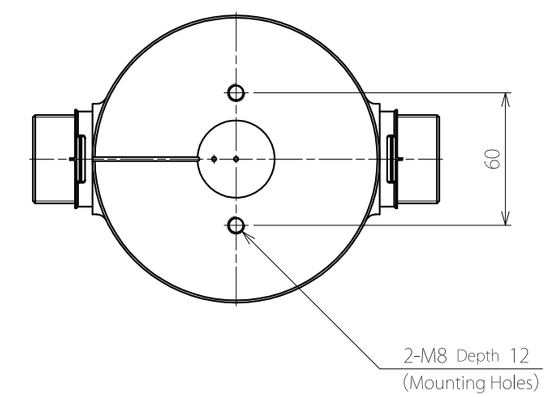
Connection Size
7: (I.D.×O.D.)15.88×19.05[mm]
8: (I.D.×O.D.)22.23×25.4[mm]

Dimensional Drawing



Model Code	Connection	A	B
HICV-130CBi7-131P	15.88×19.05	22	174
HICV-130CBi8-131P	22.23×25.4	27	184





(unit : mm)

S-E1604A

HICV-130CBi7-131P(Characteristics)

Measurement Method	A fixed orifice with a size of 8.0mm installed on the downstream of test unit.

Fig.1 Outlet Pressure vs Inlet Pressure

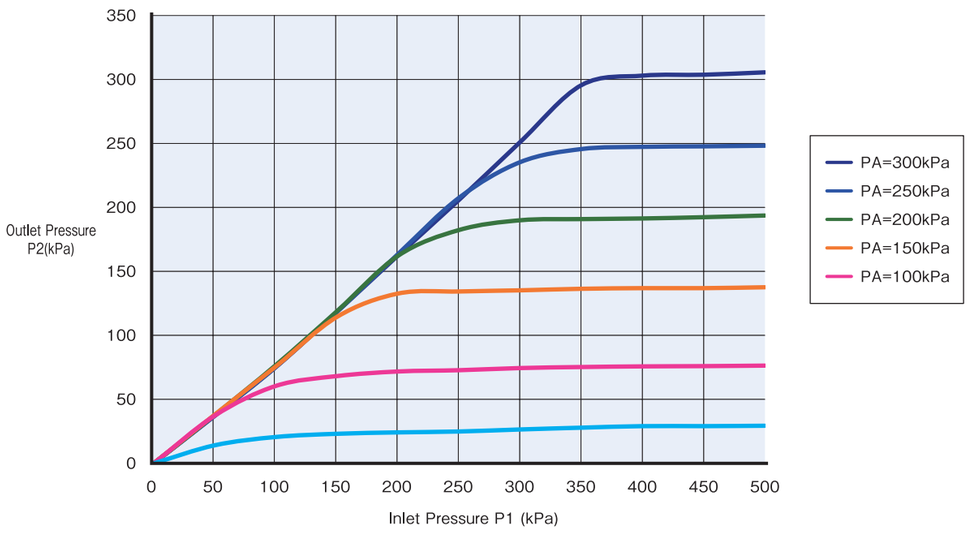
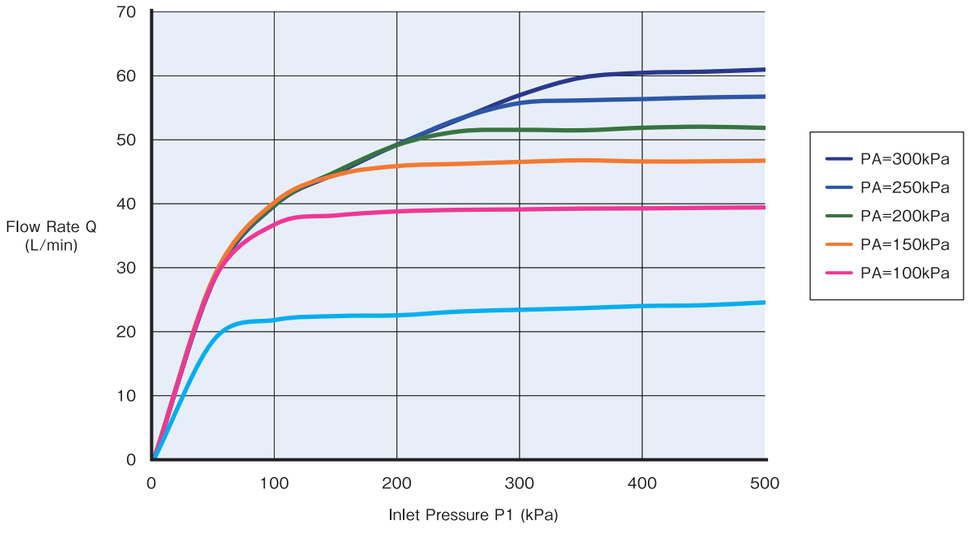


Fig.2 Flow Rate vs Inlet Pressure



Measurement Method	Inlet Pressure P1=500[kPa]

Fig.3 Outlet Pressure vs Pneumatic Pressure

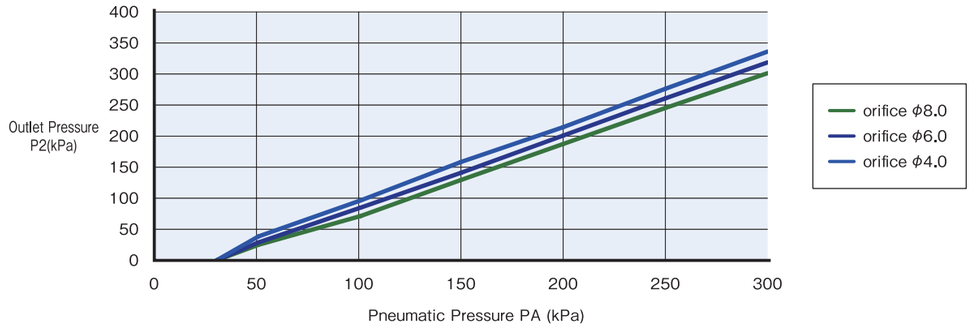


Fig.4 Flow Rate vs Pneumatic Pressure

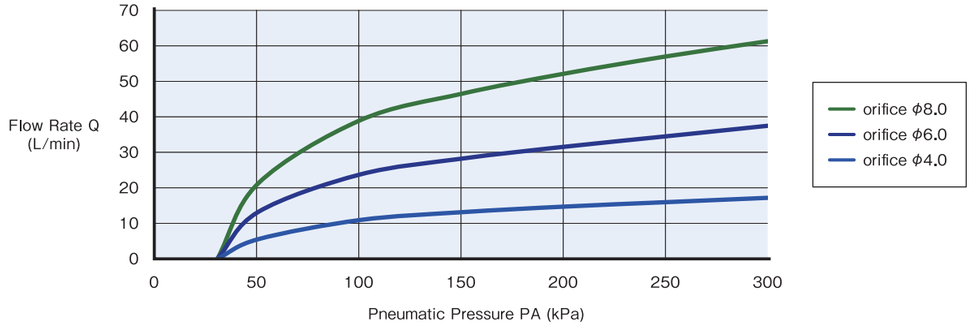
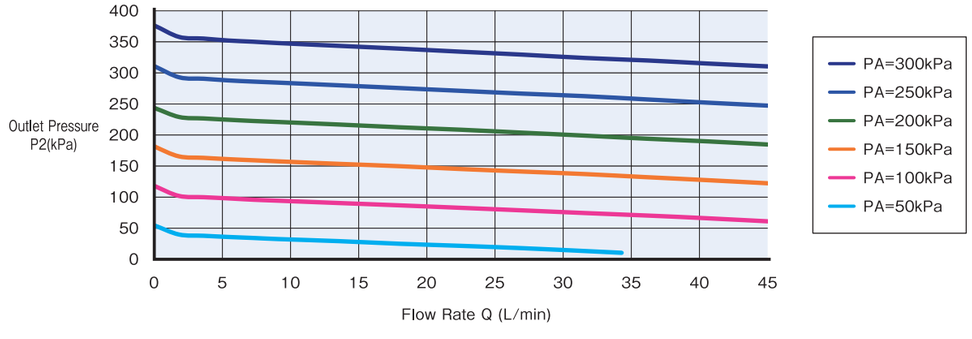


Fig.5 Outlet Pressure vs Flow Rate



HICV-130CBi8-131P(Characteristics)

Measurement Method	A fixed orifice with a size of 8.0mm installed on the downstream of test unit.

Fig.1 Outlet Pressure vs Inlet Pressure

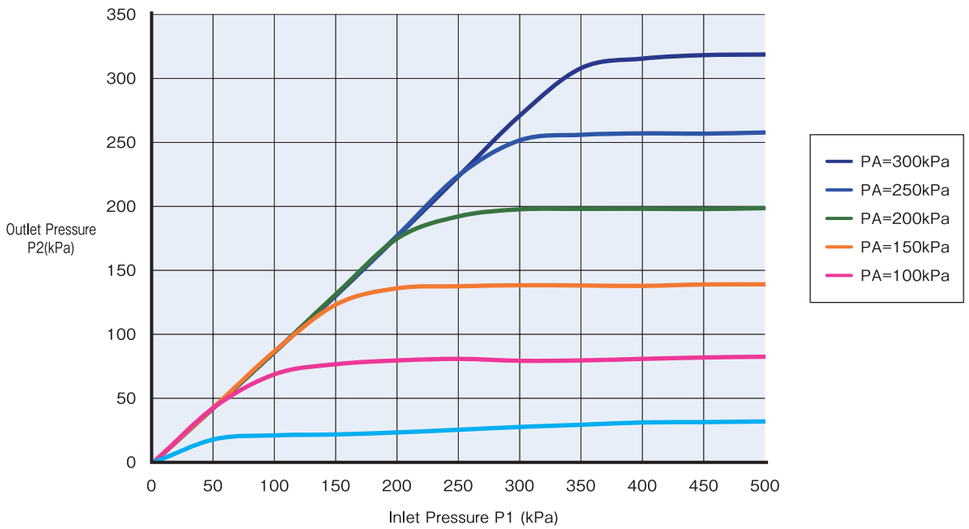
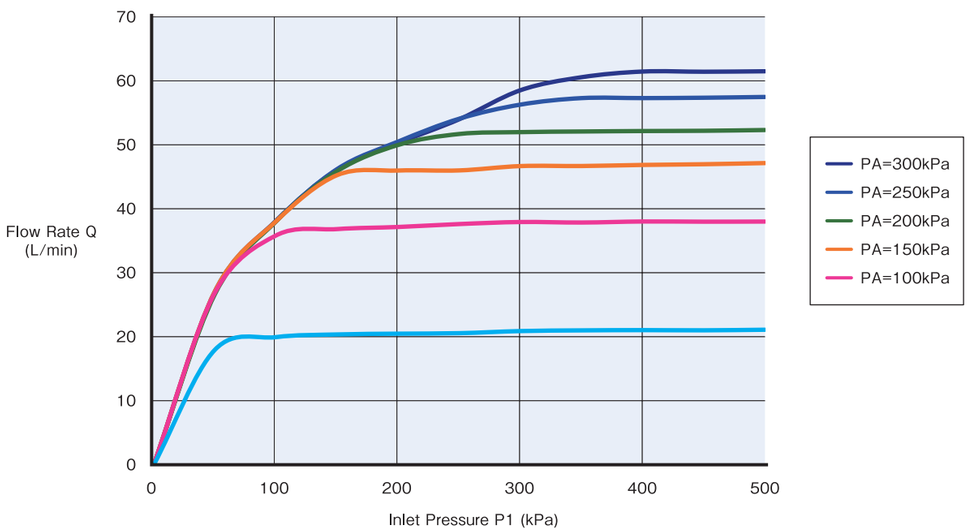


Fig.2 Flow Rate vs Inlet Pressure



Measurement Method	Inlet Pressure P1=500[kPa]

Fig.3 Outlet Pressure vs Pneumatic Pressure

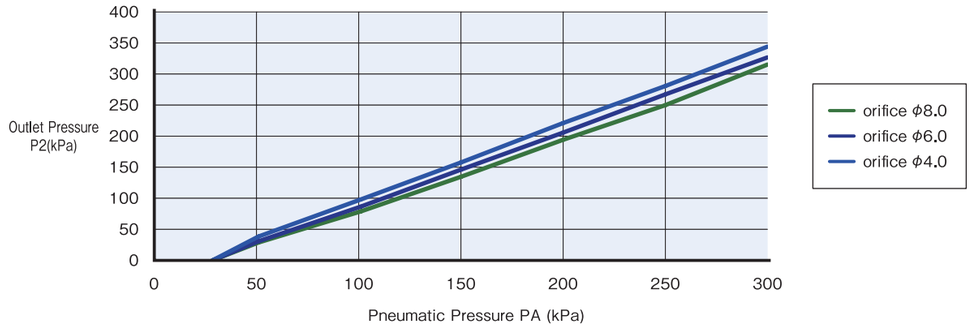


Fig.4 Flow Rate vs Pneumatic Pressure

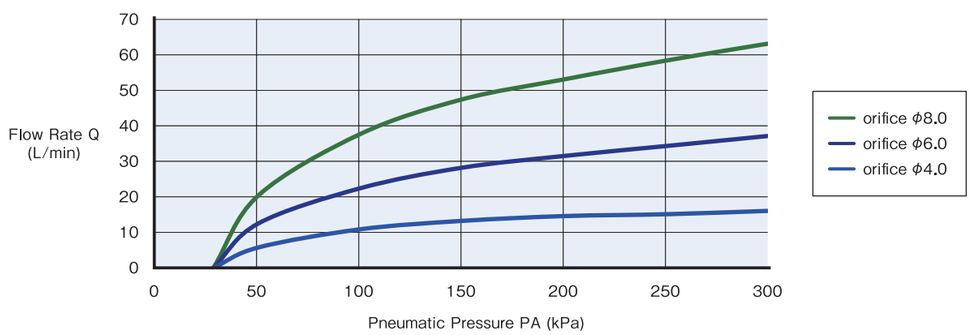


Fig.5 Outlet Pressure vs Flow Rate