



Be
Global
Leader

POWERFLOW

POWERFLOW
Expertise in flow control



GLOBAL LEADER IN FLUID CONTROL

COMPANY INTRODUCTION

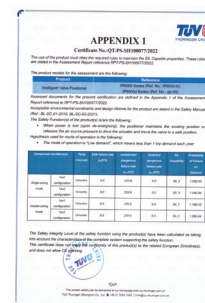
Powerflow Control Co., Ltd. is a national high-tech enterprise, Zhejiang specialized and innovative enterprise, Zhejiang University Institute for Creative Technologies, Ginkgo Valley Investment and other well-known venture capital investment and attention, the company has a complete technical team, the core team is made up of Zhejiang University professors and graduate students. Relying on the strong technical strength of Zhejiang University, the core team has more than 20 years of experience in military project design and engineering practice. The company specializes in developing and providing fluid machinery peripheral control products and solutions, the main products include: fluid machinery (pumps, valves, compressors, etc.) automatic test system, intelligent process control valve, etc. , the company has a large number of independent intellectual property rights, and Zhejiang University cooperation set up a pump valve testing technology R&D Center.

Since 2013, we have produced tens of thousands of positioner and control valve products used in medicine, food and beverage, fine chemicals and other fields, we sincerely hope that our products can bring the best value to our customers.

BRAND ADVANTAGE

>> Reliability is Priority

- Fully certified by SIL3, ATEX, IECEx, 3C, EAC and other authoritative bodies
- TUV-certified quality control, annual defect rate down to 0.1%
- 18-month standard warranty for lower operation and maintenance costs



>> Assured Delivery

- Stable output, 7-10 working days average delivery via mature supply chain
- Multilingual guides and 24/7 remote technical support worldwide



>> Premium Service

- 24-hour after-sales response for timely fault resolution
- Modular design for easy maintenance; customized spare parts offered



>> Trusted Clients

- International Clients**
 - CRANE—Top US mechanical product manufacturer & distributor
 - EMERSON—Global industrial automation & process control giant
 - Fujikin—World-leading fluid control equipment maker
 - NDV—Premium Japanese diaphragm valve producer
 - Parker—Global motion and control technology specialist
 - YOSHITAKE—Japan's third-largest valve manufacturer



Our client portfolio includes: Fortune 500 multinationals, leading domestic pump and valve manufacturers, system integrators, equipment suppliers, professional research institutes, and renowned universities. We welcome your inquiries.



>> Trusted Clients

▪ Printing & Dyeing



Lianfa Textile TECCO
Link Texpro
Saintyear Textile Weixing

▪ Pharmaceutical



Apeloa Huadong Medicine
Conba Kinglai Group
Hengrui Pharma Lukang Pharma



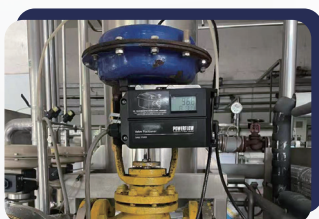
SSY Group Xianju Pharma
Tofflon Yiling
WuXi AppTec Yuanan

▪ Iron & Metallurgy

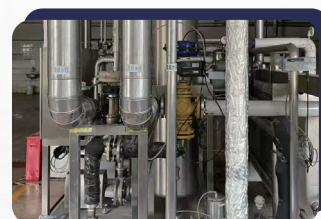


Ansteel Group HBIS Group
Baosteel Group Pangang Group
Hangang Group Shagang Group

▪ Food & Beverage



Cheerday Beer CR Beer
Chi Forest Danish Crown
COFCO JDB Group



LDC Pepsi-Cola
Master Kong Wusu Beer
Orion Yanjing Beer

▪ Chemical



Firmenich SQ Group
Juhua Sunresin
Sinoma LBS Transfar

▪ Valve



Chuangyi Neway
Hopeway Wuzhong
Lenor YSMETER

▪ Petroleum & Petrochemical



CNPC Sinopec Group
Daqing Hanguang Binhai PC
Lushenfa Chem Zhejiang PC

▪ Power



China Datang Group
CNNC 404 Lufeng NPP
DEC Tuoketuo Power

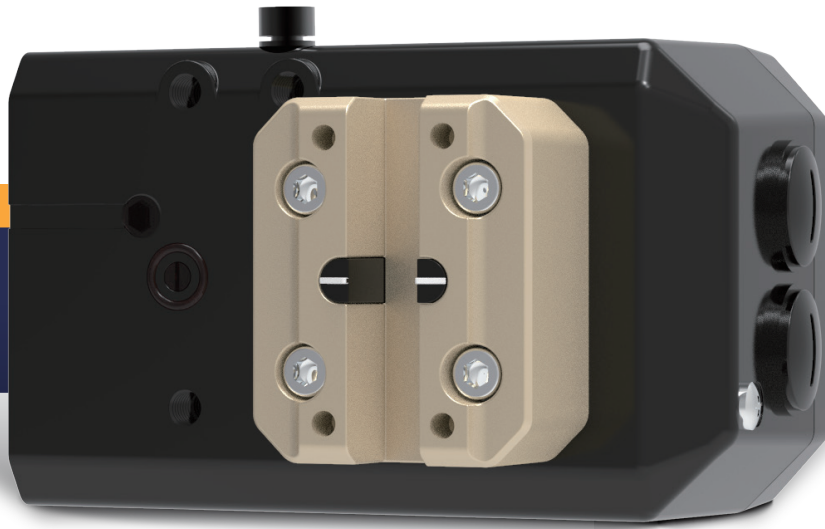
▪ Other Industries



Bloomage Biotech DEC
Canature HuaYu Haier Smart Home
Chenguang Group Hailu Heavy Industry



Rehm Thermal Tiankang Group
SINOSICO Tianli
Terrence Weifu Group



IP7000 Intelligent Valve Positioner



Ex ia
Explosion Proof



Piezo Valves
from Germany

IP7000 intelligent electro-pneumatic valve positioner is mounted on pneumatic control valves. It's used to control air intake and exhaust of the pneumatic actuators to drive the valve position to the set point by calculating both data from 4-20mA DC signal and feedback position.



Normal
Rotary Version



Normal
Linear Version

Technical data

Material	Aluminum	Pneumatical Connection	NPT1/4(default) G1/4
Set-point Signal	4-20mA DC	Supply Pressure	0.14-0.7MPa
Min.operating Current	3.8mA	Flow	• Intake 2 bar 4.8 Nm³/h 4 bar 8.0 Nm³/h 6 bar 11.2 Nm³/h
Stroke Range	Linear Stroke: 10-25mm 25-38mm 38-50mm 50-110mm		• Exhaust(fail-freeze) 2 bar 6.6 Nm³/h 4 bar 11.1 Nm³/h 6 bar 15.6 Nm³/h
	Rotary Stroke: 80-100°		• Exhaust(fail-safe) 2 bar 5.9 Nm³/h 4 bar 9.8 Nm³/h 6 bar 13.7 Nm³/h
Ambient Temperature	Normal Version for Non-explosion- proof: -20°C~+80°C	Steady State Air Consumption	≤0.4L/min
	Low Temperature for Non-explosion-proof: -40°C~+80°C		
	Ex ia Default Type: -20°C~+80°C(T4/T ₂₀₀ 135°C) -20°C~+40°C(T6/T ₂₀₀ 85°C)		
	Ex ia Low Temperature Type: -40°C~+80°C(T4/T ₂₀₀ 135°C) -40°C~+40°C(T6/T ₂₀₀ 85°C)		
Electrical Connection	NPT1/2(default) M20×1.5	Protection Class	IP69
		Explosion-proof Class	Ex ia II C T4/T6 Ga Ex ia IIIC T ₂₀₀ 135°C/T ₂₀₀ 85°C Da

Selection and ordering data

L	Linear Stroke											Stroke Type	
R	Rotary Stroke												
IP7000	L	S	S	Single-acting								Actuator Type	
			D	Double-acting									
			n	Non Explosion								Explosion Signs	
				i	Ex ia II C T4/T6 Ga								
					Ex ia IIIC T ₂₀₀ 135°C/T ₂₀₀ 85°C Da								
			0	No								Feedback Signal	
				1	Yes								
			0	No								HART	
				1	Yes								
			0	No								Mounting Bracket	
1	Linear Bracket												
2	Rotary Bracket												
0	No								Pressure Gauge				
	1	Yes											
S	Safe								Power Off State				
	F	Freeze											
N	-20°C								Minimum Ambient Temperature				
	L	-40°C											



IP6000 Intelligent Valve Positioner



TUV SIL3
Certification



Ex ia
Explosion Proof



Piezo Valves
from Germany

IP6000 intelligent electro-pneumatic valve positioner is mounted on pneumatic control valves. It's used to control air intake and exhaust of the pneumatic actuators to drive the valve position to the set point by calculating both data from 4-20mA DC signal and feedback position.



Normal
Rotary Version



Normal
Linear Version



Remote
Rotary Version



Remote
Linear Version



Separate
Version



IP6000(Ex ia)
Installation & Commissioning
Video



IP6000(Ex ia) Separate Version
Installation & Commissioning
Video

Technical data

Material	Aluminum/Stainless Steel
Set-point Signal	4-20mA DC
Min.operating Current	3.8mA
Stroke Range	Linear Stroke: 10-100mm Rotary Stroke: 30-100° Separate Version: 5~50mm
Ambient Temperature	Normal Version for Non-explosion- proof: -20°C~+80°C Low Temperature for Non-explosion-proof: -40°C~+80°C Ex ia Default Type: -20°C~+80°C(T4/T ₂₀₀ 135°C) -20°C~+40°C(T6/T ₂₀₀ 85°C) Ex ia Low Temperature Type: -40°C~+80°C(T4/T ₂₀₀ 135°C) -40°C~+40°C(T6/T ₂₀₀ 85°C)
Electrical Connection	NPT1/2(default) M20×1.5
Pneumatical Connection	NPT1/4(default) G1/4

Basic Error	≤ 0.5%
Hysteresis Error	≤ 0.5%
Supply Pressure	0.14-0.7MPa
Flow	- Intake 2 bar 4.8 Nm³/h 4 bar 8.0 Nm³/h 6 bar 11.2 Nm³/h - Exhaust(fail-freeze) 2 bar 6.6 Nm³/h 4 bar 11.1 Nm³/h 6 bar 15.6 Nm³/h - Exhaust(fail-safe) 2 bar 5.9 Nm³/h 4 bar 9.8 Nm³/h 6 bar 13.7 Nm³/h
Steady State Air Consumption	≤0.4L/min
Protection Class	IP69K
Explosion-proof Class	Ex ia I Ma(Only for Stainless Steel Version) Ex ia II C T4/T6 Ga Ex ia IIIC T ₂₀₀ 135°C/T ₂₀₀ 85°C Da

Selection and ordering data

L Normal Linear FL Remote Linear R Normal Rotary FR Remote Rotary S Separate *										Stroke Type
			S Single-acting D Double-acting							Actuator Type
						n No Explosion i Ex ia II C T4/T6 Ga Ex ia IIIC T ₂₀₀ 135°C/T ₂₀₀ 85°C Da k Ex ia I Ma				Explosion Signs
						0 No 1 Yes				Feedback Signal
						0 No 1 Yes				HART
						0 No 1 Linear Bracket 2 Rotary Bracket				Mounting Bracket
						0 No 1 Yes				Pressure Gauge
						S Safe F Freeze				Power Off State
						N -20°C L -40°C				Minimum Ambient Temperature
IP6000	L	S	n	0	0	0	0	S	N	

Remarks: In Stroke type options, the option S(Separate) marked with * does not support Lowest ambient temperature option L(-40°C).



IP6000d Intelligent Valve Positioner



TUV SIL3
Certification



Ex d
Explosion Proof



Piezo Valves
from Germany

IP6000d intelligent electro-pneumatic valve positioner is mounted on pneumatic control valves. It's used to control air intake and exhaust of the pneumatic actuators to drive the valve position to the set point by calculating both data from 4-20mA DC signal and feedback position.



Ex db
Rotary Type



Ex db
Linear Type



Ex db
Separate Type



IP6000(Ex d)
Installation & Commissioning
Video

Technical data

Material	Aluminum/Stainless Steel	Supply Pressure	0.14-0.7MPa
Set-point Signal	4-20mA DC	Flow	• Intake 2 bar 3.8 Nm³/h 4 bar 6.4 Nm³/h 6 bar 9.0 Nm³/h
Min.operating Current	3.8mA		• Exhaust(fail-freeze) 2 bar 5.3 Nm³/h 4 bar 8.9 Nm³/h 6 bar 12.5 Nm³/h
Stroke Range	Linear Stroke: 10-100mm Rotary Stroke: 30-100° Separate Version: 5~25mm		• Exhaust(fail-safe) 2 bar 4.7 Nm³/h 4 bar 7.8 Nm³/h 6 bar 11.0 Nm³/h
Ambient Temperature	Normal Version: -20°C~+60°C Low Temperature Version: -40°C~+60°C		
Basic Error	≤ 0.5%		
Hysteresis Error	≤ 0.5%		
Electrical Connection	NPT1/2(default) M20×1.5	Steady State Air Consumption	≤0.4L/min
Pneumatical Connection	NPT1/4(default) G1/4	Protection Class	IP69K
		Explosion-proof Class	Ex db I Mb(Only for Stainless Steel Version) Ex db II C T6 Gb Ex tb IIIC T85°C Db

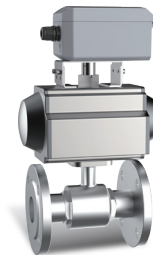
Selection and ordering data

L	Linear Stroke									Stroke Type							
R	Rotary Stroke																
IP6000d	L	S	n	0	0	0	0	S	N	S Single-acting D Double-acting	Actuator Type						
										d Ex db II C T6 Gb Ex tb IIIC 85°C Db k Ex db I Mb	Explosion Signs						
											0 No 1 Yes	Feedback Signal					
												0 No 1 Yes	HART				
													0 No 1 Linear Bracket 2 Rotary Bracket	Mounting Bracket			
														0 No 1 Yes	Pressure Gauge		
															S Safe F Freeze	Power Off State	
																N -20°C L -40°C	Minimum Ambient Temperature



IP5500 Intelligent Valve Positioner

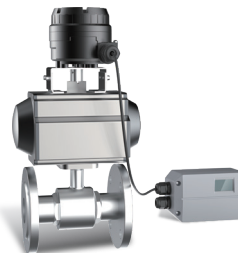
IP5500 intelligent electro-pneumatic valve positioner is mounted on pneumatic control valves. It's used to control air intake and exhaust of the pneumatic actuators to drive the valve position to the set point by calculating both data from 4-20mA DC signal and feedback position.



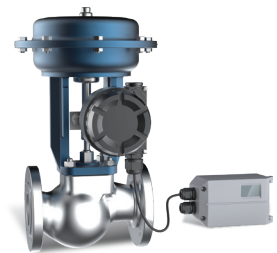
Normal
Rotary Version



Normal
Linear Version



Remote
Rotary Version



Remote
Linear Version

Technical data

Material	Aluminum
Set-point Signal	4-20mA DC
Power Supply	24V DC $\pm$ 10%
Stroke Range	Linear Stroke: 10-100mm Rotary Stroke: 30-100°
Gas Source Requirement	Air quality meets ISO 8573-1 standard Solid Particle Size and Density: Class 3 Dew Point: Class 3 Oil Content: Class 3
Ambient Temperature	0°C~50°C
Supply Pressure	0.14-0.7MPa

Flow	75L/min(Sup=0.14MPa)
Vibration Resistance	0.15mm, 10Hz-60Hz, 20 Cycle/Axis 20m/s ² , 60Hz-500Hz, 20 Cycle/Axis Recommended Range for Control Valve ≤ 20 m/s ² , No Resonance Peak
Basic Error	≤ 0.5%
Hysteresis Error	≤ 0.5%
Protection Class	IP67
Electrical Connection	NPT1/2(default) M20×1.5
Pneumatical Connection	NPT1/4(default) G1/4

Selection and ordering data

Stroke Type	
L	Normal Linear
FL	Remote Linear
R	Normal Rotary
FR	Remote Rotary

Actuator Type	
S	Single-acting
D	Double-acting

Feedback Signal	
0	No
1	Yes

Mounting Bracket	
0	No
1	Linear Bracket
2	Rotary Bracket

Pressure Gauge	
0	No
1	Yes

Power Off State	
S	Safe
F	Freeze

IP5500	L	S	0	0	0	S
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1880S Intelligent Electropneumatic Valve Positioner



Compact
Design



OLED
Display



Easy to
Start-up

1880S series intelligent valve positioner is compact designed controller for integral pneumatic control valves, particularly suitable for angle seat valves and diaphragm valves. The product is easy to operate and has rich software functions. It can easily be operated via the OLED display and keypad. The positioner adjusts the valve position quickly and accurately through detecting the position sensor signal.



Angle Seat
Control Valve



Diaphragm
Control Valve



1880S
Installation & Commissioning
Video

Technical data

Material	Polycarbonate(PC) Silicone Rubber(SI) Polyamide(PA6-GF30)	Pneumatic Connection	Plug-in Hose Connector G1/4 (Internal Φ6mm)
Set-point Signal	0/4-20mA	Electrical Connection	M12 3-pins B-coded (Cable ø 4-6mm) M12 4-pins D-coded (Cable ø 4-6mm)
Power Supply	24V DC ± 10%	Air Flow Rate	17L/min(Input Pressure of 0.6MPa)
Gas Source Requirement	Neutral Gases, Air DIN ISO 8573-1 Solid Particle Size and Density: Class 3 Dew Point: Class 3 Oil Content: Class 3	Stroke Range	Linear Stroke: 5-25mm
Ambient Temperature	0°C~60°C	Installation	Tends to be Installed at the Top of the Actuator, Connected to the Actuator via Screws
Supply Pressure	3~7 bar (Specific Values Depending on the Actuator)	Protection Class	IP67
		Power Consumption	< 5W

Selection and ordering data

N	No Feedback Signal		
Y	4-20mA Feedback Signal		Feedback Signal
		T1 G1/4 T2 M16 * 1 T3 M22 * 1.5 T4 M26 * 1.5	Thread Type

Remark:

The product is only used for single-acting line stroke actuator. Fail-safe when power-off. It is suggested to match the actuator of 40-100 mm internal gas chamber diameter.



1600 Intelligent Electropneumatic Valve Positioner

1600 Position controller / 1601 Process controller



Compact Stainless
Steel Design



LCD with
Backlight



Rich Additional
Software Functions



Electrical
Waterproof Connectors



Easy to
Start-up

1600 series intelligent valve positioner is compact designed controller for integral pneumatic control valves, particularly suitable for angle seat valves and diaphragm valves. The product is easy to operate and has rich software functions. It can easily be operated via the LCD and keypad. The positioner adjusts the valve position quickly and accurately through detecting the position sensor signal.



Angle Seat
Control Valve



Diaphragm
Control Valve



1600
Installation & Commissioning
Video

Technical data

Material	Polycarbonate(PC) Silicone Rubber(SI) Polyamide(PA6-GF30) Stainless Steel(304)	Supply Pressure	3~7 bar (Specific Values Depending on the Actuator)
Set-point Signal	0/4-20mA or 0-5/10V	Pneumatic Connection	Plug-in Hose Connector G1/4 (Internal Φ6mm)
Power Supply	24V DC ±10%	Air Flow Rate	17L/min(Input Pressure of 0.6MPa) 95L/min(Input Pressure of 0.6MPa, Only Single-acting)
Gas Source Requirement	Neutral Gases, Air DIN ISO 8573-1 Solid Particle Size and Density: Class 3 Dew Point: Class 3 Oil Content: Class 3	Stroke Range	Linear Stroke: 5-50mm Rotary Stroke: 90°
Ambient Temperature	0°C~60°C	Installation	Tends to be Installed at the Top of the Actuator, Connected to the Actuator via Screws
Electrical Connection	M12 3-pins B-coded (Cable ø 4-6mm) M12 4-pins D-coded (Cable ø 4-6mm) M12 5-pins A-coded(cable ø 4-6mm)	Protection Class	IP67
		Power Consumption	< 5W

Selection and ordering data

1600 Without Process Control Function 1601 With Process Control Function	Product Series					
	N No Feedback Signal Y 4-20mA Feedback Signal	Feedback Signal				
		S Single-acting D Double-acting	Actuator Type			
			S2 Linear: 5-25mm S3 Linear: 25-50mm S4 Rotary: 90°	Valve Max Stroke		
				Q1 17L/min Q2 95L/min	Air Flow Rate	
					T1 G1/4 T2 M16 * 1 T3 M22 * 1.5 T4 M26 * 1.5	Thread Type
					S Safe F Freeze	Power Off State
1600	N	S	S2	Q1	T1	S

Remark:

In the air flow rate option, code Q1 is suggested to match the actuator of 40-100 mm internal gas chamber diameter, code Q2 is suggested to match the actuator of 125-160 mm internal gas chamber diameter. Code Q2 is only used for single-acting actuator, and only in Freeze state when power-off. The air flow rates for code Q1 and Q2 are under the condition of 0.6MPa input pressure.

In the valve max stroke option, AT actuator range for code S4 is AT50~AT125. For other actuator models, please consult our company. It is no need to select the thread type option for code S4.

Power off state for single-acting option is Safe by default.

1500 Intelligent Electropneumatic Valve Positioner



Electrical Waterproof
Connectors



LED
Display



Easy to
Start-up

1500 series intelligent valve positioner is compact designed controller for integral pneumatic control valves, particularly suitable for angle seat valves and diaphragm valves. The product is easy to operate. It can easily be operated via the keypad. The positioner adjusts the valve position quickly and accurately through detecting the position sensor signal.



Angle Seat
Control Valve



Diaphragm
Control Valve



1500
Installation & Commissioning
Video

Technical data

Material	Polycarbonate(PC) Silicone Rubber(SI) Polyamide(PA6-GF30)	Pneumatic Connection	Plug-in Hose Connector G1/4 (Internal Φ6mm)
Set-point Signal	4-20mA	Electrical Connection	M12 3-pins B-coded (Cable ø 4-6mm) M12 4-pins D-coded (Cable ø 4-6mm)
Power Supply	24V DC ±10%	Supply Pressure	3~7 bar (Specific Values Depending on the Actuator)
Gas Source Requirement	Neutral Gases, Air DIN ISO 8573-1 Solid Particle Size and Density: Class 3 Dew Point: Class 3 Oil Content: Class 3	Air Flow Rate	17L/min(Input Pressure of 0.6MPa) 95L/min(Input Pressure of 0.6MPa, Only Single-acting)
Ambient Temperature	0°C~60°C	Stroke Range	Linear Stroke: 5-50mm Rotary Stroke: 90°
Protection Class	IP67	Installation	Tends to be Installed at the Top of the Actuator, Connected to the Actuator via Screws
Power Consumption	< 5W		

Selection and ordering data

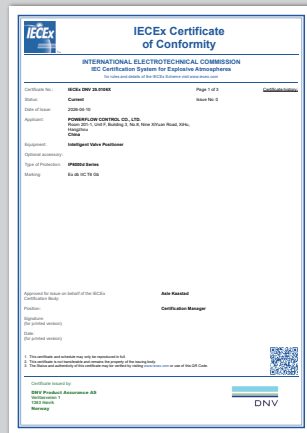
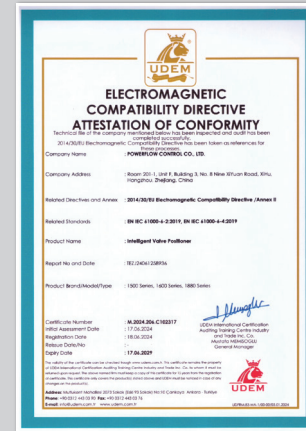
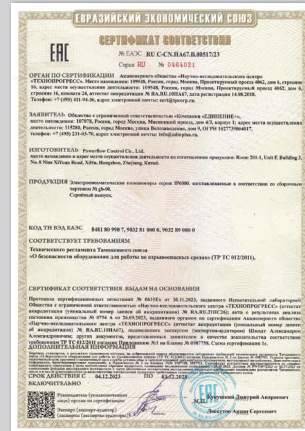
N No Feedback Signal Y 4-20mA Feedback Signal							Feedback Signal
		S Single-acting D Double-acting					Actuator Type
			S2 Linear: 5-25mm S3 Linear: 25-50mm S4 Rotary: 90°				Valve Max Stroke
				Q1 17L/min Q2 95L/min			Air Flow Rate
					T1 G1/4 T2 M16 * 1 T3 M22 * 1.5 T4 M26 * 1.5		Thread Type
						S Safe F Freeze	Power Off State
1500	N	S	S2	Q1	T1	S	

Remark:

In the air flow rate option, code Q1 is suggested to match the actuator of 40-100 mm internal gas chamber diameter, code Q2 is suggested to match the actuator of 125-160 mm internal gas chamber diameter. Code Q2 is only used for single-acting actuator, and only in Freeze state when power-off. The air flow rates for code Q1 and Q2 are under the condition of 0.6MPa input pressure.

In the valve max stroke option, AT actuator range for code S4 is AT50~AT125. For other actuator models, please consult our company. It is no need to select the thread type option for code S4.

Power off state for single-acting option is Safe by default.





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POWERFLOW
Expertise in flow control