



Kao Lu Enterprise Co., Ltd.

- PROPORTIONAL PRESSURE REGULATOR
- PROPORTIONAL FLOW CONTROL VALVE
- PROPORTIONAL PINCH VALVE

**HIGH
PRESSURE**

**HIGH
SPEED**

**HIGH
RESOLUTION**



✦ Awarded the 2025 German Design Award and Granted a U.S. Patent ✦

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PROPORTIONAL PRESSURE REGULATOR



Low pressure

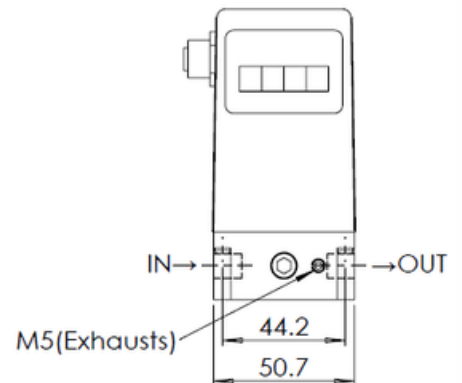
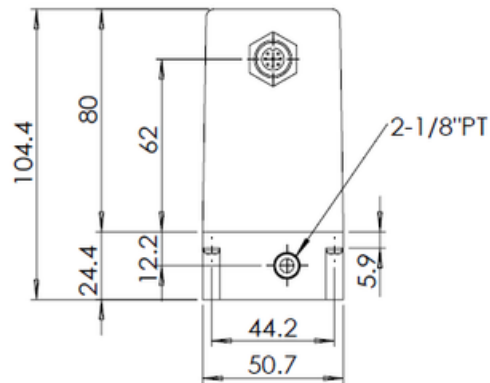
Type	QKL-BIT			QKL-B1N	QKL-B3-AI	QKL-B1H
Output Range	0~2bar	0~4bar	0~8bar	0~7bar	0~7bar	0~8bar
Input Signa	0-10V / 4-20mA / RS485					
Monitor Output	0-10V / 4-20mA / RS485					
Supply	DC24(4W)					
Port Size	PT1/8"			M5*0.8	G1/4"	G1/2"
Flow Rate	4L/min @ 2bar	7L/min @ 4bar	13L/min @ 8bar	12L/min @ 7bar	940L/min @ 8bar	5600L/min @ 8bar
Repeatability	±0.1% F.S.			±0.1% F.S.	±1% F.S.	±0.25% F.S.
Linearity	±0.3% F.S.			±0.5% F.S.	±1% F.S.	±0.3% F.S.
Hysteresis	±0.2% F.S.			±0.5% F.S.	±1% F.S.	±0.25% F.S.
Accuracy	±0.3% F.S.			±0.5% F.S.	±1% F.S.	±0.3% F.S.
Ingress Protection	IP 65					
Electrical Connection	M12 Connector(2m)					
Temp. Range(Operating)	0~ 70 °C (0 ~ 158 °F)					
Weight	420g			210g	440g	1600g

PROPORTIONAL PRESSURE REGULATOR

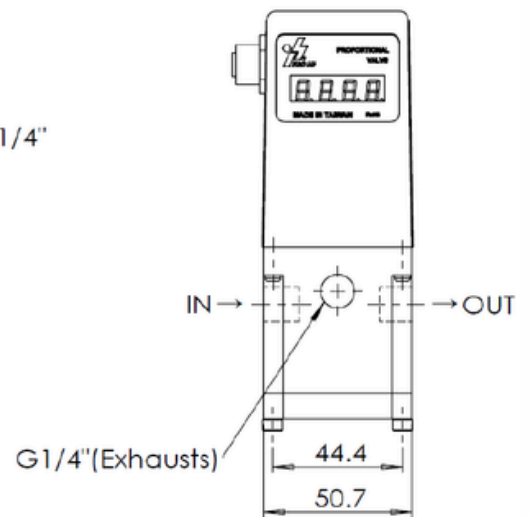
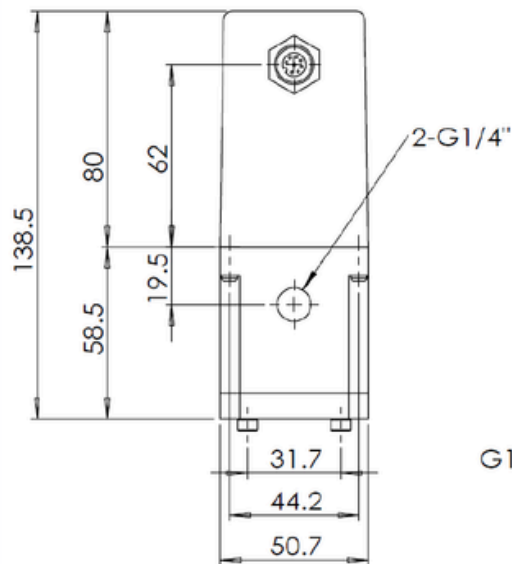
OVERALL DIMENSION



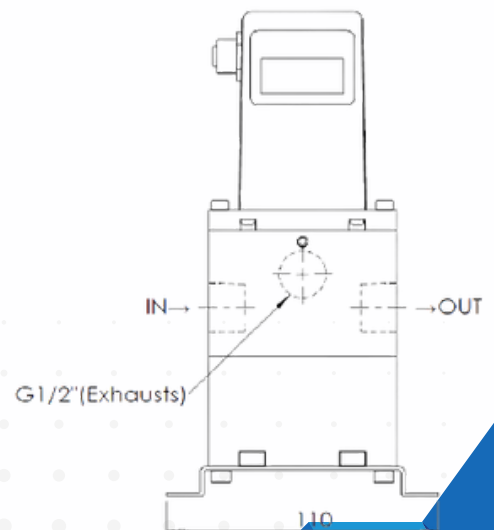
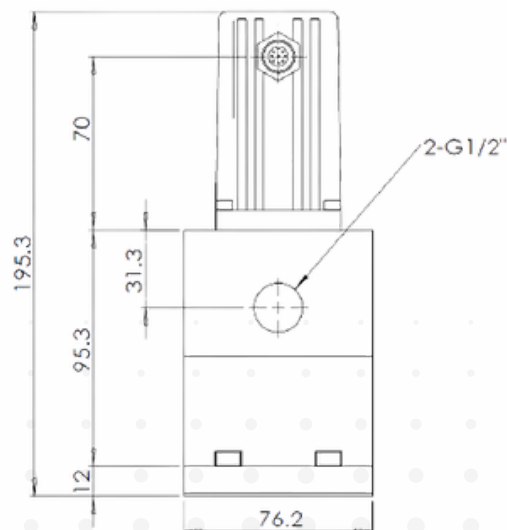
QKL-B1T



QKL-B3-AI



QKL-B1H



PROPORTIONAL PRESSURE REGULATOR



Medium pressure

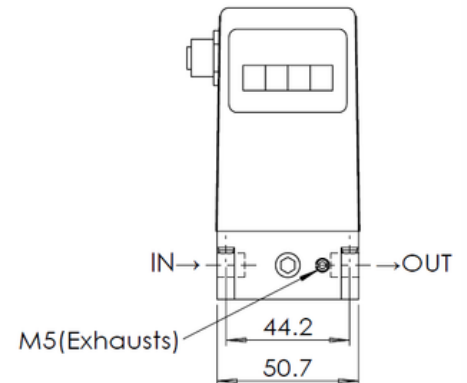
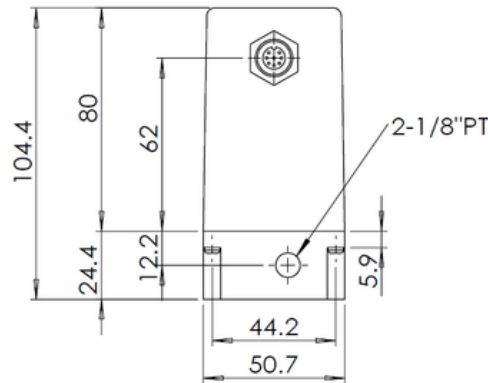
Type	QKL-B1S	QKL-B3H	QKL-B4NR
Output Range	0~30bar	0~30bar	0~30bar
Input Signa	0-10V / 4-20mA / RS485		
Monitor Output	0-10V / 4-20mA / RS485		
Supply	DC24(4W)		DC24(5W)
Port Size	PT 1/8"	G 3/8"	PT 1/8"
Flow Rate	40L/min @ 30bar	6000L/min @ 30bar	200L/min @ 30bar
Repeatability	±0.25% F.S.	±0.25% F.S.	±0.25% F.S.
Linearity	±0.3% F.S.	±0.3% F.S.	±0.25% F.S.
Hysteresis	±0.1% F.S.	±0.3% F.S.	±0.25% F.S.
Accuracy	±0.3% F.S.	±0.3% F.S.	±0.25% F.S.
Ingress Protection	IP 65		
Electrical Connection	M12 Connector(2m)		
Temp. Range(Operating)	0~ 70 °C (0 ~ 158 °F)		
Weight	420 g	750 g	800 g

PROPORTIONAL PRESSURE REGULATOR

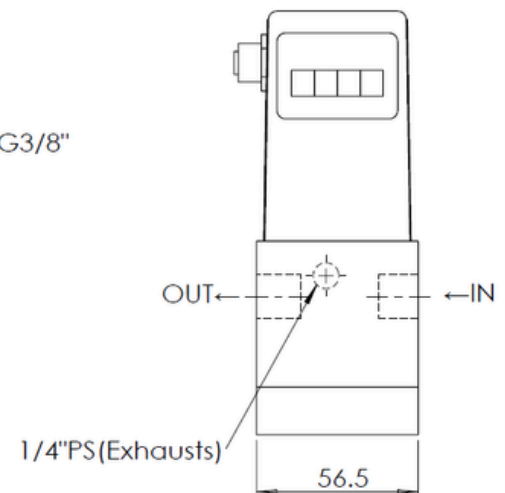
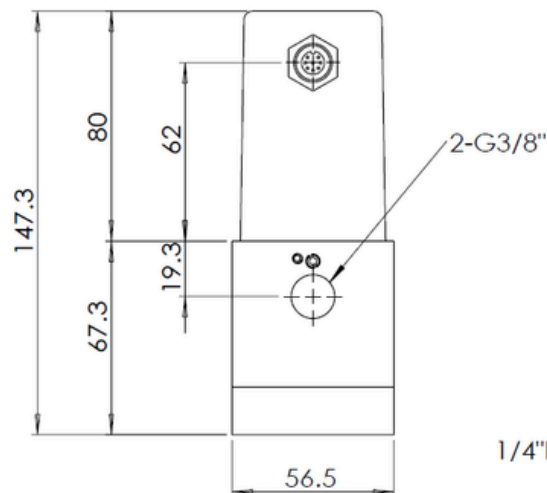
OVERALL DIMENSION



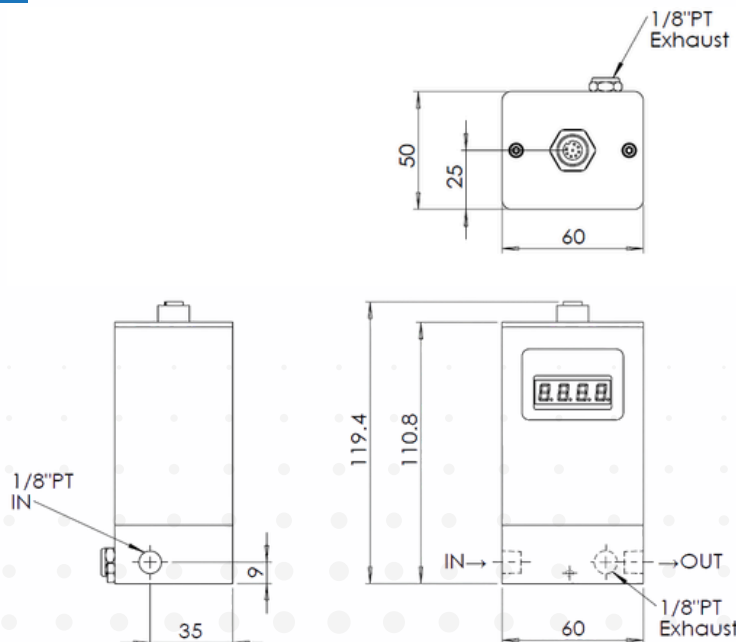
QKL-B1S



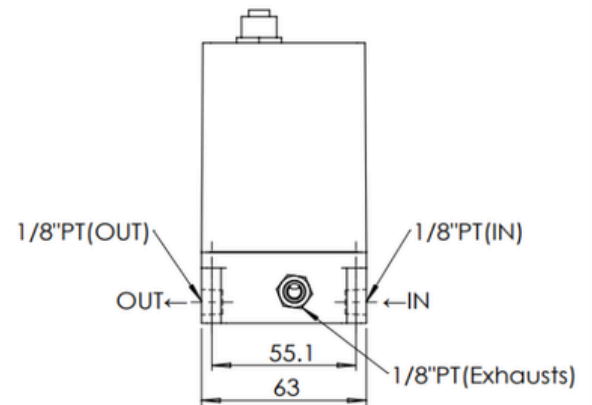
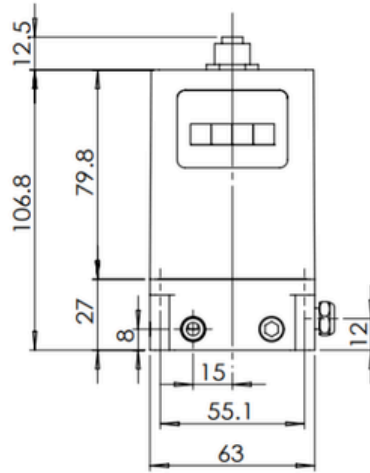
QKL-B3H



QKL-B4NR



PROPORTIONAL PRESSURE REGULATOR



High pressure

Type	QKL-B4H-P60	QKL-B4H-P70
Output Range	0~60bar	0~70bar
Input Signa	0-10V / 4-20mA / RS485	
Monitor Output	0-10V / 4-20mA / RS485	
Supply	DC24(14W)	
Port Size	PT 1/8"	PT 1/8"
Flow Rate	145L / min @ 60bar	170L / min @ 70bar
Repeatability	±0.25% F.S.	±0.25% F.S.
Linearity	±0.25% F.S.	±0.25% F.S.
Hysteresis	±0.25% F.S.	±0.25% F.S.
Accuracy	±0.25% F.S.	±0.25% F.S.
Ingress Protection	IP 65	
Electrical Connection	M12 Connector(2m)	
Temp. Range(Operating)	0~ 70 °C (0 ~ 158 °F)	
Weight	800 g	

PROPORTIONAL PRESSURE REGULATOR



High Speed

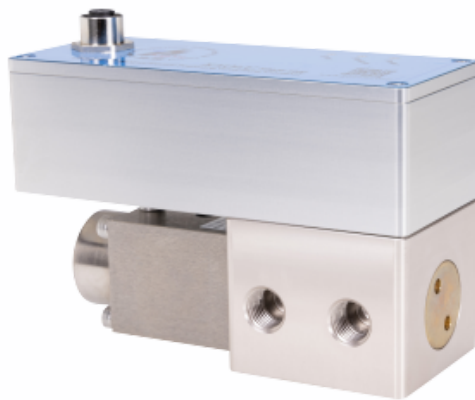
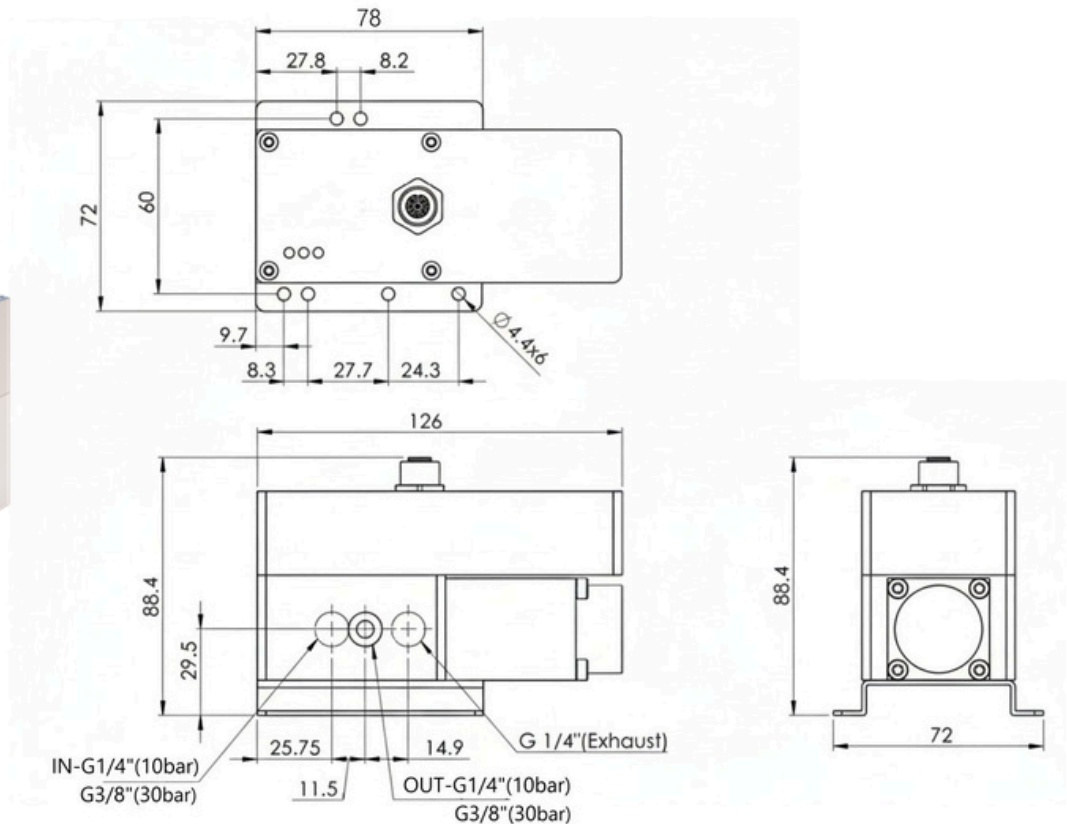
Type	QKL-HS0		QKL-HS1	QKL-HS2	QKL-HS4	QKL-HS5
Output Range (bar)	0~10	0~30/ 0~50	0~2/0~5/0~10/0~20 0~30/0~35/0~50	0~2/0~5/0~10/0~20/0~30 0~35/0~50/0~70/0~100	0~50	0~50
Input Signa	0-10V / 4-20mA / RS485					
Monitor Output	0-10V / 4-20mA / RS485					
Supply	DC24V ±10% (≤40W)				DC24V ±10% (≤20W)	
Port Size	G1/4"	G3/8"	PT 1/4"	PT 1/2"	G 1"	G 1 1/2"
Flow Rate (L / min)	1600 @10bar	6000 @30bar	4,800 @30 bar	11,000 @30 bar	70,000 @40bar	200,000 @40bar
Repeatability	<0.1% F.S.				<0.5% F.S.	
Linearity	<0.1% F.S.				<0.5% F.S.	
Hysteresis	<0.1% F.S.				<0.5% F.S.	
Accuracy	<0.1% F.S.				<0.5% F.S.	
Ingress Protection	IP 54				IP 40	
Electrical Connection	M12 Connector(2m)					
Temp. Range(Operating)	0~ 60 °C (0 ~ 140 °F)				0~ 50 °C(0 ~ 122 °F)	
Weight	1 kg		1.2 kg	2 kg	6 kg	15 kg

PROPORTIONAL PRESSURE REGULATOR

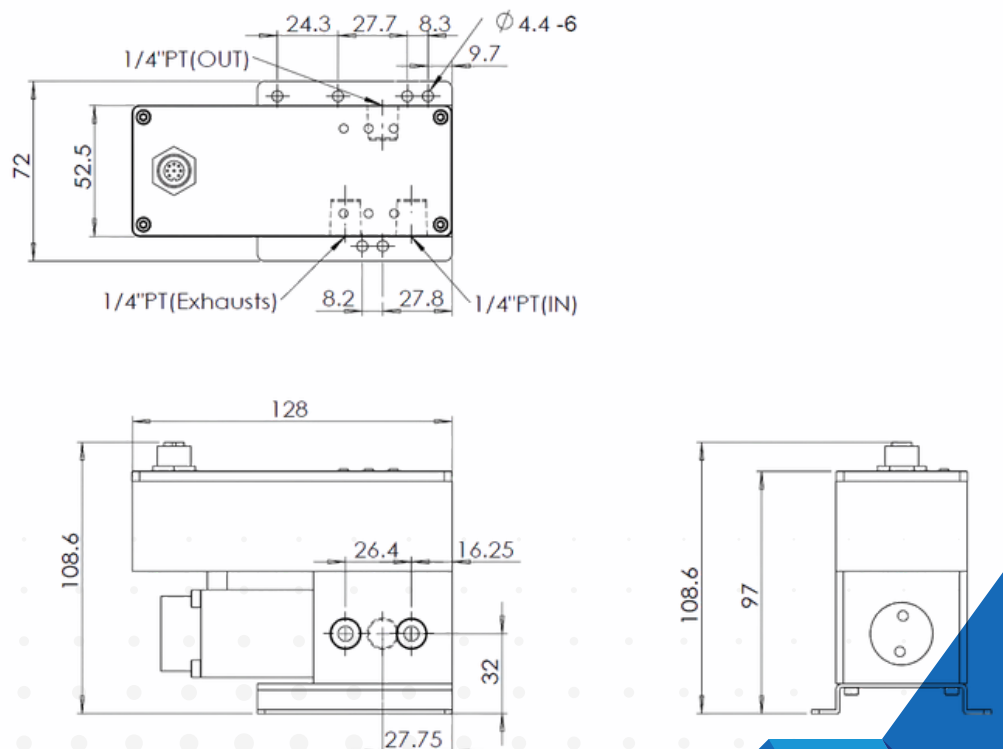
OVERALL DIMENSION



QKL-HS0



QKL-HS1

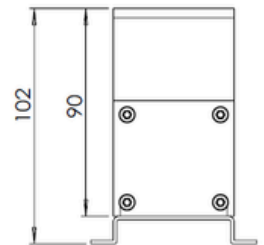
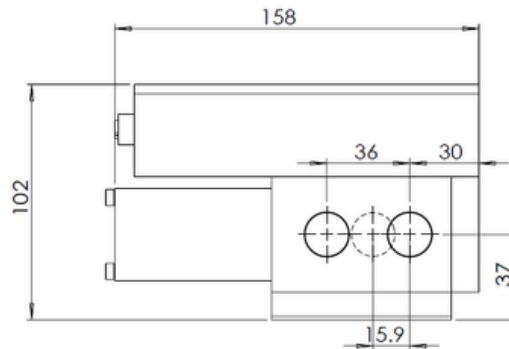
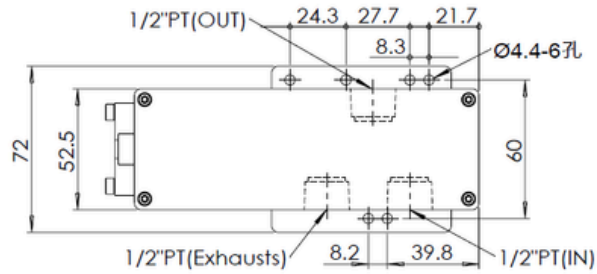


PROPORTIONAL PRESSURE REGULATOR

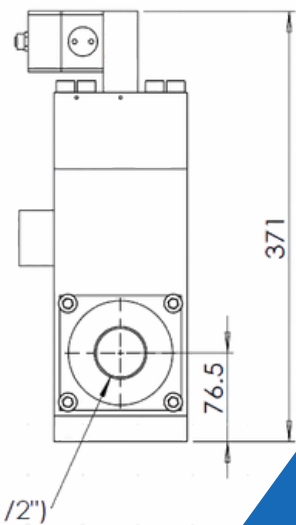
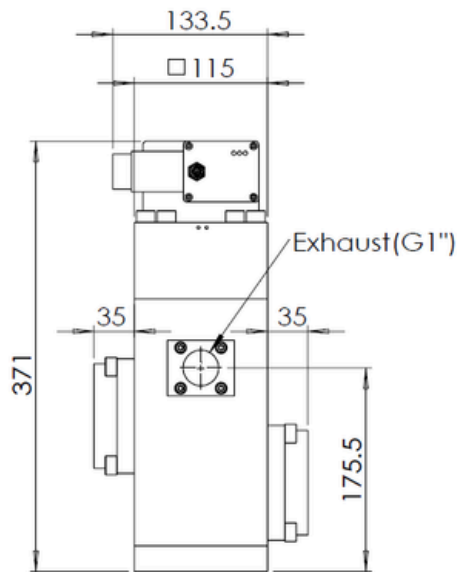
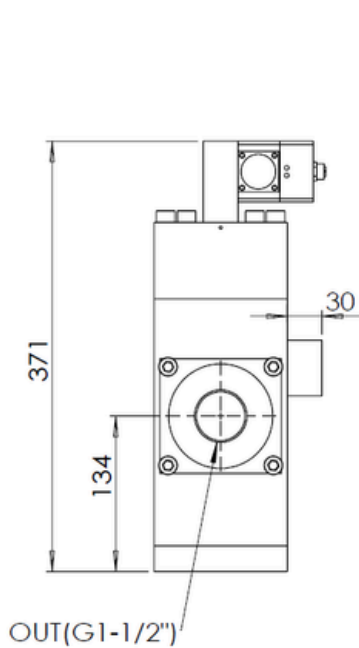
OVERALL DIMENSION



QKL-HS2

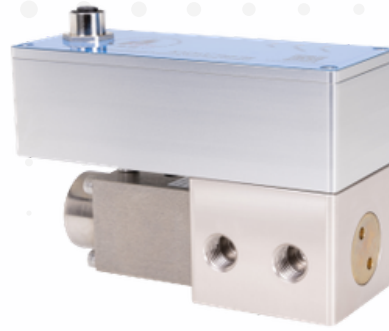


QKL-HS5



PROPORTIONAL PRESSURE REGULATOR

Vacuum

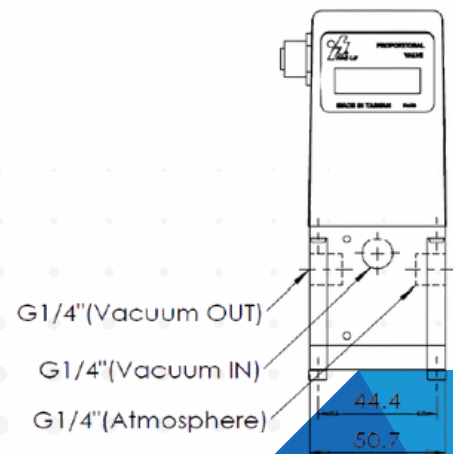
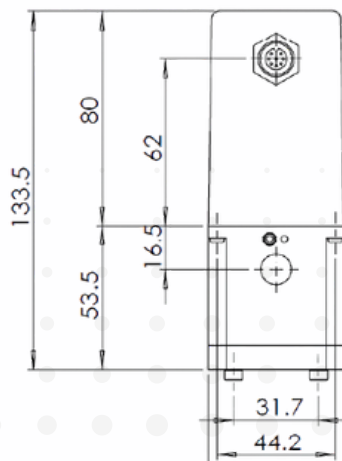


Type	QKL-B3V	QKL-HSIV	QKL-HS2V	QKL-B4HV
Output Range	0~ -101 kPa	-101~0 kPa / -101~100kPa / -101~600 kPa		-100~0 kPa / -101~600 kPa / -101~900 kPa
Input Signa	0-10V / 4-20mA	0-10V / 4-20mA / RS485		0-10V / 4-20mA / RS485
Monitor Output	0-10V / 4-20mA	0-10V / 4-20mA / RS485		0-10V / 4-20mA / RS485
Supply	DC24(≤4W)	DC24V(≤40W)		DC24V(≤14W)
Port Size	G1/4"	PT 1/4"	PT 1/2"	PT 1/8"
Flow Rate	250(close to 0 kPa)~ 600(close to -101 kPa)	500 NL/min @1 bar	900 NL/min @1 bar	90 L/min @1bar
Repeatability	±0.3% F.S.	±0.1% F.S.	±0.1% F.S.	±0.25% F.S.
Linearity	±0.3% F.S.	±0.1% F.S.	±0.1% F.S.	±0.25% F.S.
Hysteresis	±0.25% F.S.	±0.1% F.S.	±0.1% F.S.	±0.25% F.S.
Accuracy	±0.3% F.S.	±0.1% F.S.	±0.1% F.S.	±0.25% F.S.
Ingress Protection	IP 65	IP 54	IP 54	IP 65
Electrical Connection	M12 Connector(2m)			
Temp. Range(Operating)	0~ 70 °C	0~ 60 °C	0~ 50 °C	-196 ~ 70 °C
Weight	550 g	1.2 kg	2 kg	800g

OVERALL DIMENSION

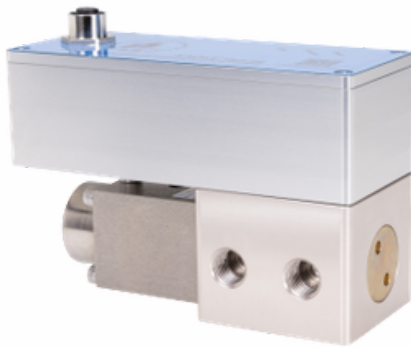


QKL-B3V

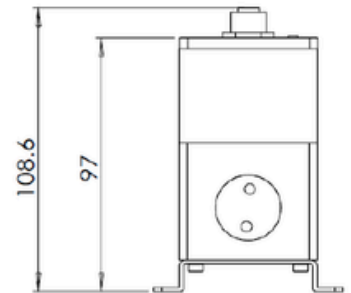
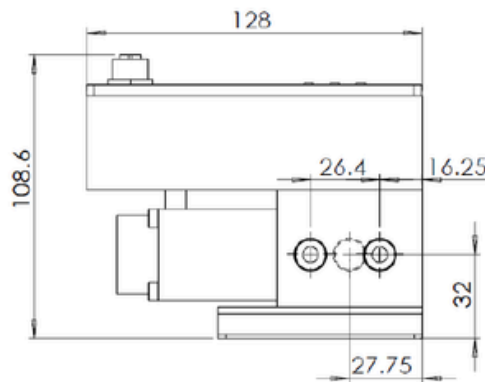
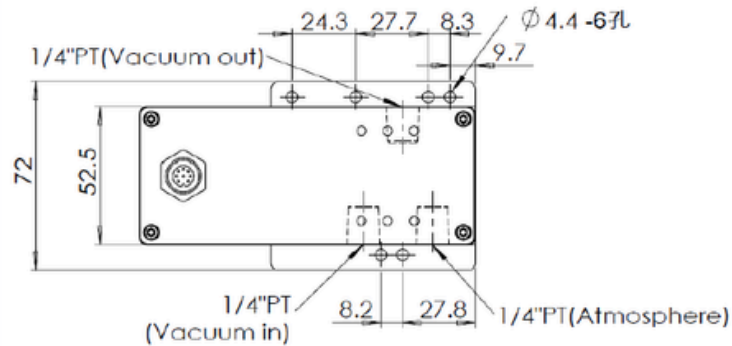


PROPORTIONAL PRESSURE REGULATOR

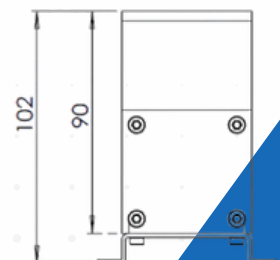
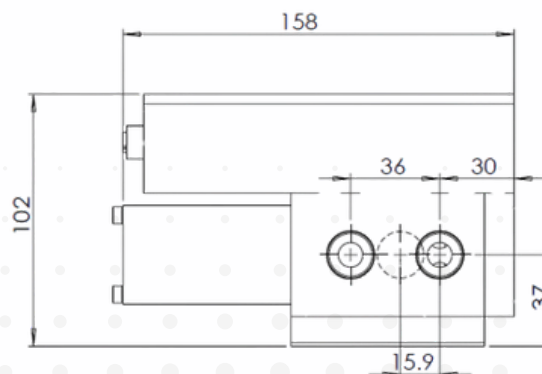
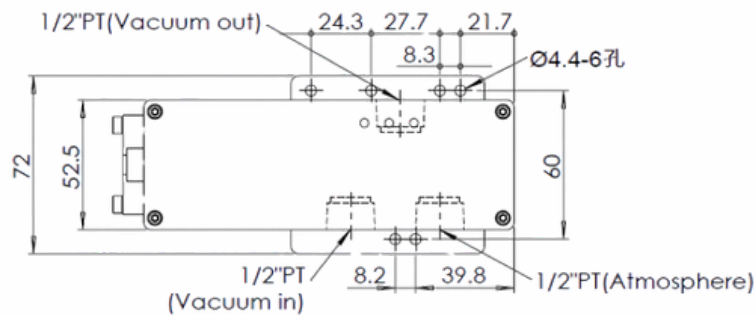
OVERALL DIMENSION



QKL-HS1V



QKL-HS2V



PROPORTIONAL PRESSURE REGULATOR

Ultra High Resolution

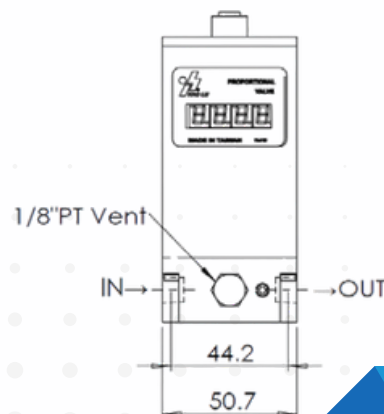
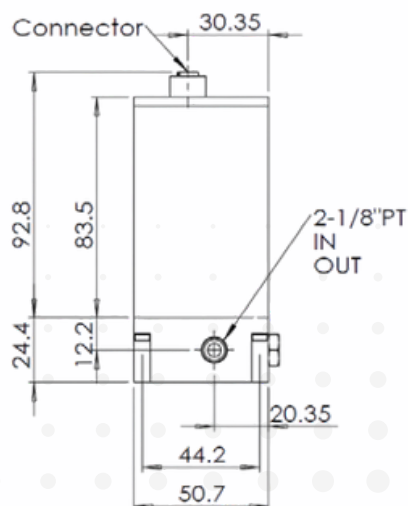


Type	QKL-B1TR	QKL-B4HR
Output Range	0~2bar / 0~5bar / 0~10bar	0~2bar / 0~5bar / 0~10bar
Input Signa	0-10V / 4-20mA / RS485	
Monitor Output	0-10V / 4-20mA / RS485	
Supply	DC24V (≤3W)	DC24V (≤5W)
Port Size	PT1/8"	PT1/8"
Flow Rate	2.5L/min@1bar (orifice:0.45mm)	3L/min@1bar(orifice:0.5mm) 120L/min@1bar(orifice:3.0mm)
Repeatability	±0.02% F.S.	±0.01%F.S.
Resolution(max)	±0.005% F.S.	±0.01% F.S.
Hysteresis	±0.1% F.S.	±0.1%F.S.
Accuracy	±0.1% F.S.	±0.1% F.S.
Ingress Protection	IP 65	
Electrical Connection	M12 Connector(2m)	
Temp. Range(Operating)	0~ 70 °C (0 ~ 158 °F)	

OVERALL DIMENSION



QKL-B1TR

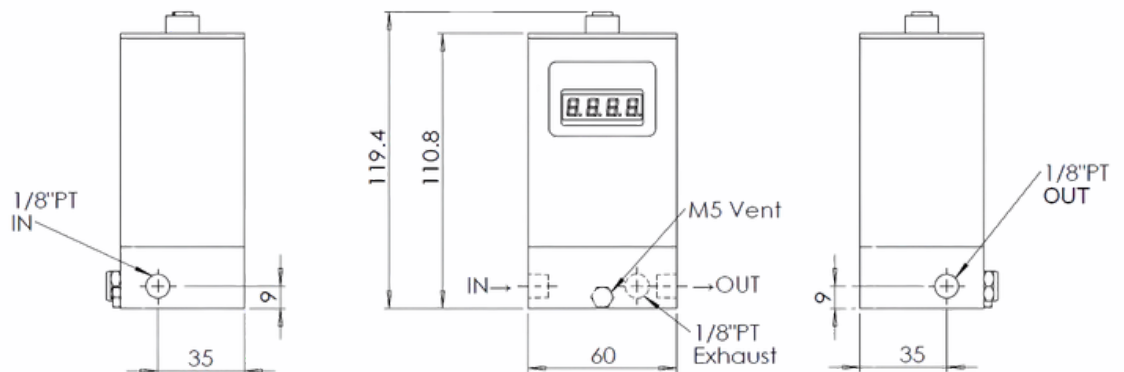
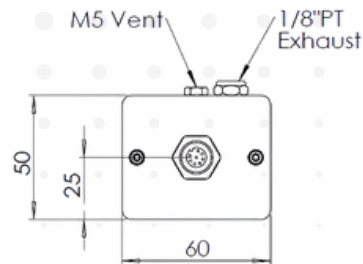


PROPORTIONAL PRESSURE REGULATOR

OVERALL DIMENSION



QKL-B4HR

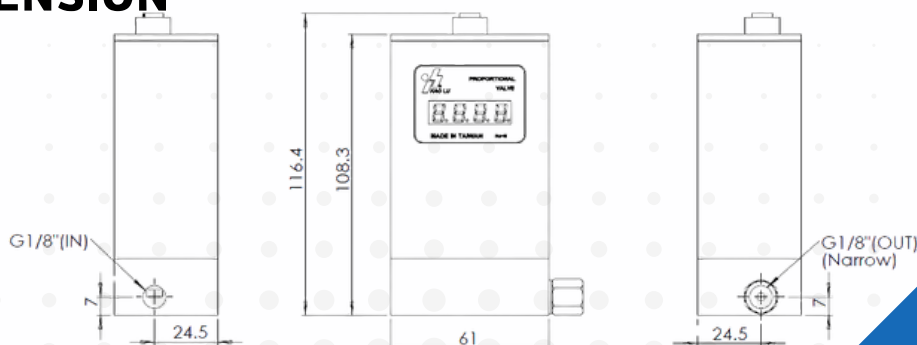


Pressure-Controlled Flow Controller(non-relief)



Type	QKL-B1HF		
Output Range	2 bar(29psi)	5 bar(72psi)	10 bar(145psi)
Input Signa	0-10V / 4-20mA / RS485		
Port Size	G1/8"		
Flow Rate	2mL~77L/min 3L/min @ 1bar (orifice: 0.5mm) 60L/min@1bar(orifice: 3.0mm)		
Ruby orifice selection (without built-in bleed)	0.2 / 0.3 / 0.4 / 0.5 / 0.6 mm		
Repeatability	±0.05% F.S		
Resolution(max)	±0.03% F.S.		
Hysteresis	±0.1% F.S.		
Accuracy	±0.1% F.S.		

OVERALL DIMENSION



STEAM, WATER PROPORTIONAL PRESSURE REGULATOR



Type	Proportional Pressure Regulator		
Model	QKL-BIT	QKL-BIS	QKL-B4H
Input Signal	4-20mA / 0-10V / RS485		
Output Range	0~8 bar	0~30 bar	0~70 bar
Monitor Output	1-5V / 0-10V / 4-20mA		
Power Supply	DC24V(≤4W)	DC24V(≤4W)	DC24V(≤14W)
Type	Volume Booster		
Model	PR121L	1P0R2	120P2
Medium	Air、Gas、Water、Oil、Steam...etc		
*Port	G1/2	G3/4"、1"	G1"1/2、2"
Output Range	5~50 Bar	0~15、1~50	0~15、1~50
CV(CEI EN 60534-2)	2.99 m3/h	9.8 m3/hr	25 m3/hr
* If you need a port below 1/2" , please contact our sales.			

PRECISION AIR VOLUME BOOSTER



****Control accuracy up to 0.01 psi****

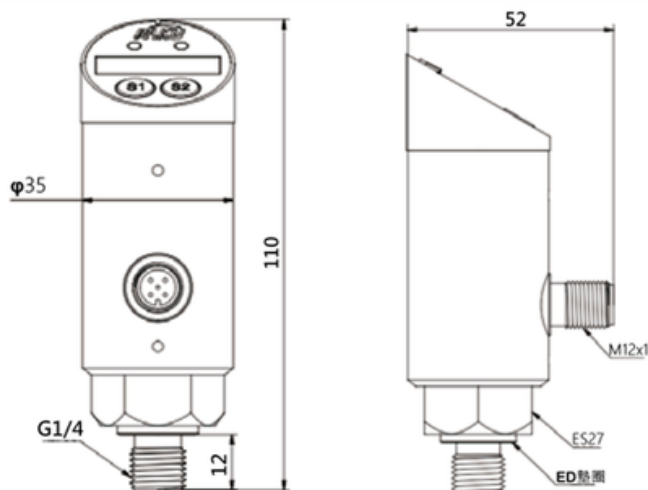
Model	600-CA	600-BFU	6100-EA	6500-FA	RHF-16-EPO
Output Ratio	1:1	3:1	1:1	1:1	1:1
Port	NPT 3/8"	NPT 1/4"	NPT 3/4"	NPT 1"	BSP 2"
Max. Supply Pressure(psi)	250	250	250	250	435
Max. Signal Pressure(psi)	150	150	150	150	250
Max. Output Pressure(psi)	150	50	150	150	250
Max. Flow(L/min)	910	910	4200	9600	53800
Exhaust capacity(L/min)	425	425	2264	4245	N/A

ELECTRONIC DIGITAL PRESSURE SWITCH



KL-DPS 系列			
Pressure Range	12/35/50 Bar	Power Consumption	Max. 30mA, 24Vdc Power Supply
Output Type	NPN	S1.S2 Output Current	<500mA Response Time <10ms
Switch Sccuracy	$\leq \pm 0.5\%$ F.S.	Current Output Accuracy	$\leq \pm 0.5\%$ F.S.
Linearity	$\leq 0.5\%$ F.S.	Output Signal	4...20mA
RA	$\leq 0.5K$ Ohm	Stability(Drift/annual)	$\leq \pm 0.3\%$ F.S.
Fluid Temp.	-20...85°C	Ambient Temp.	-20...80°C
Power Supply	12...30Vdc	Port Size	G1/4" M
Wiring Protection	Reverse Polarity / Overload / Short Circuit Protection	Protection	IP56
Body Material	Stainless Steel 304	Wet Material	Stainless steel 304

OVERALL DIMENSION



PROPORTIONAL FLOW CONTROL VALVE

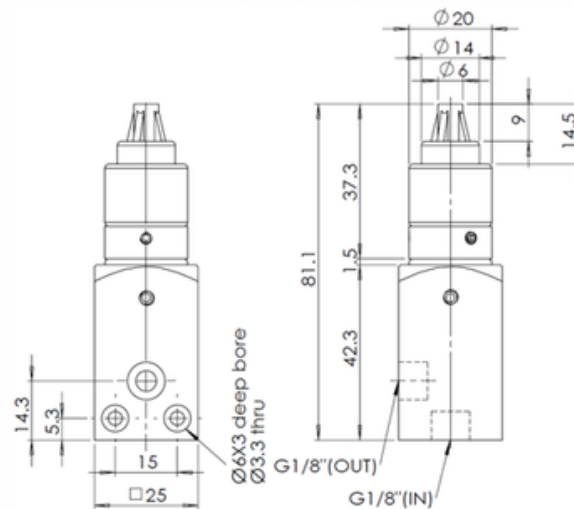
MEDIUM:COMPATIBLE GASES, OIL、 LIQUIDS AND VACUUM



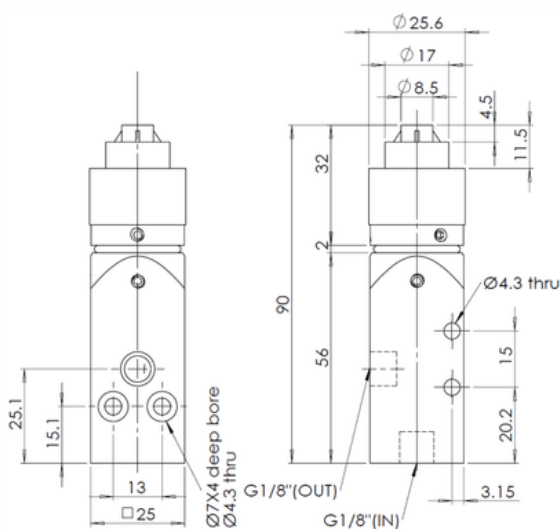
Model	FC-10	FC-20	FC-120	FC-300	FC-1000	FC-1500	FC-2000	FC-3000
Valve Type	2-Way Proportional Needle valves							
Port Size	G 1/8"				G 3/8"		PT 1/2"	
Medium	Vacuum, Compatible gases, oil, water and liquids							
Pressure Range	-1~7 bar				-1~6 bar	-1~3 bar	-1~15 bar	-1~20 bar
Flow Range of air(L/min)	0~35 @ 6bar	0~65 @ 6bar	0~230 @ 6bar	0~400 @ 6bar	0~1200 @ 5bar	0~1200 @ 3 bar	0~2600 @ 7 bar	0~5000 @10bar
Flow Range of water(L/min)	0~1 @ 6bar	0~1 @ 6bar	0~4 @ 6bar	0~8 @ 6bar	0~28 @ 5bar	0~35 @ 3 bar	0~50 @ 7bar	0~94 @10bar
Repeatability	±0.1% F.S.							
Flow Resolution of air(L/min)	0.1 @ 3bar	0.1 @ 3bar	0.1~0.2 @ 3bar	0.3 @ 3bar	0.3~0.5 @ 3bar	1~2 @ 3bar	1~2 @ 3bar	1~2 @ 3bar
Flow Resolution of water(L/min)	0.003 @ 3bar	0.003 @ 3bar	0.003~0.005 @ 3bar	0.008 @ 3bar	0.008~0.014 @ 3bar	0.027~0.055 @ 3bar	0.027~0.055 @ 3bar	0.027~0.055 @ 3bar
Temp. Range	-20 ~84° C							
Full stroke time	1.5 sec	1.5 sec	2 sec	2 sec	2.5 sec	2.5 sec	2.5 sec	5 sec
Body material	Stainless steel	Aluminum, Stainless steel or Peek	Aluminum	Aluminum, Stainless steel or Peek	Aluminum	Aluminum or Stainless steel	Aluminum or Peek	Aluminum or Stainless steel
Seals	Body- Aluminum : All VITON or VITON+EPDM Body- Stainless steel or Peek : All FFKM or FFKM+EPDM ----- ** For vacuum or water, it is recommended to choose EPDM.							
Ingress Protection	IP 52							

PROPORTIONAL FLOW CONTROL VALVE

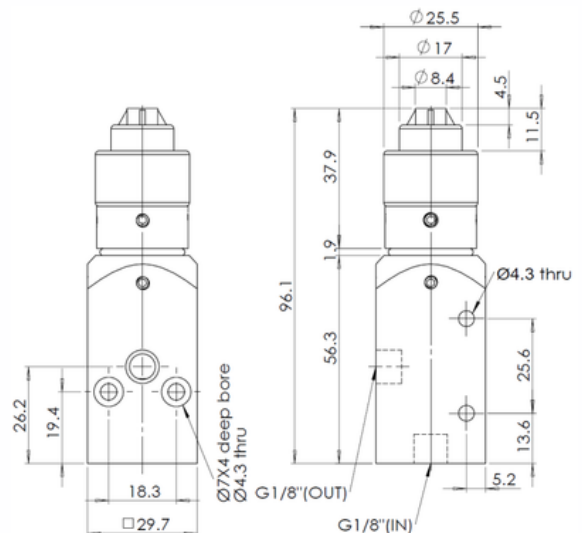
OVERALL DIMENSION



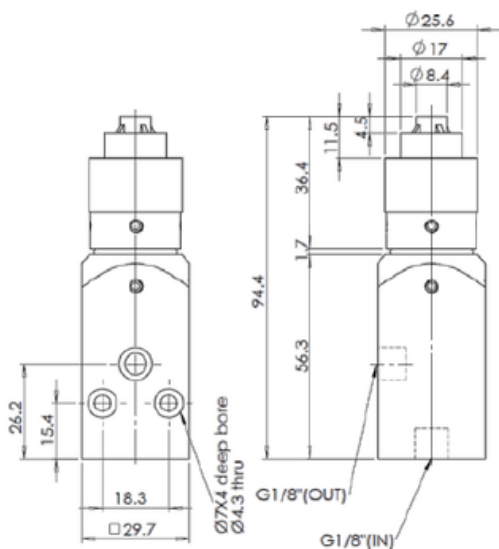
FC-10 Stainless Steel / FC-20 Aluminum. Stainless Steel



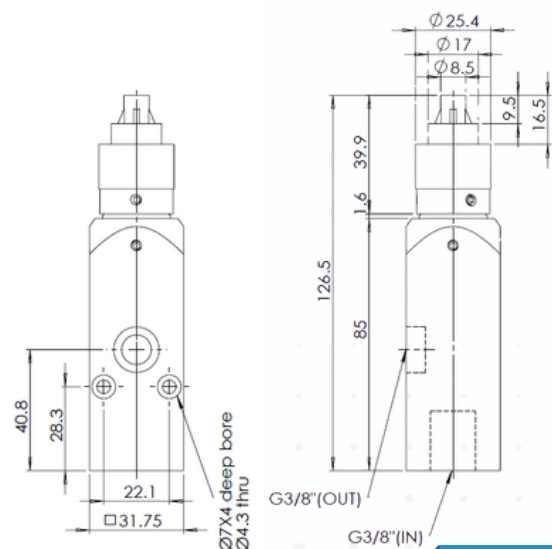
FC-120 Aluminum



FC-300 Aluminum



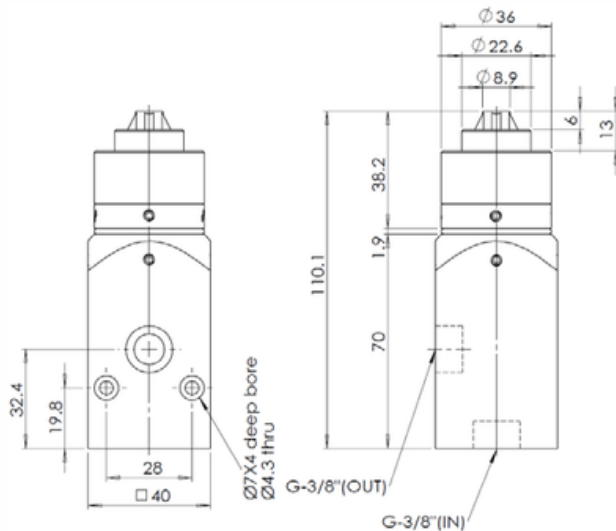
FC-300 Stainless Steel



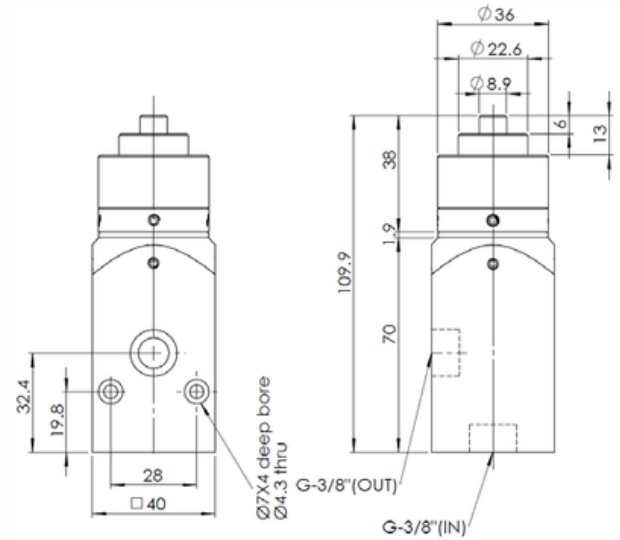
FC-1000 Aluminum

PROPORTIONAL FLOW CONTROL VALVE

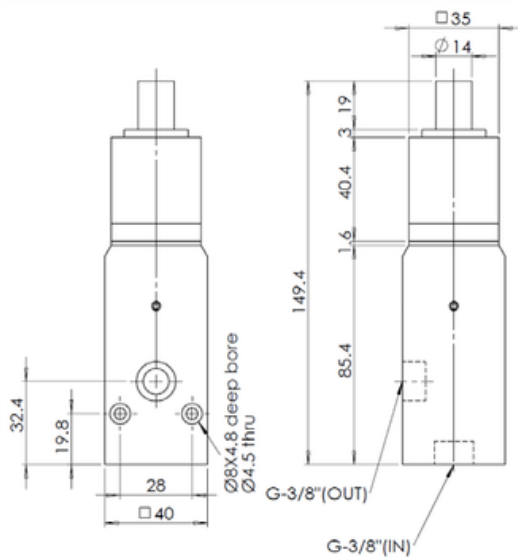
OVERALL DIMENSION



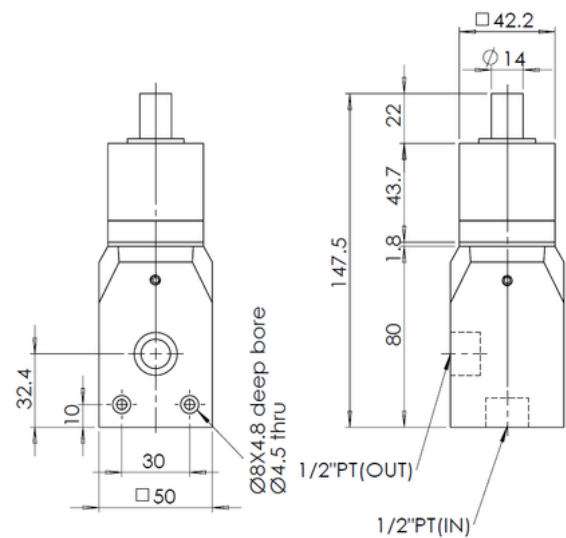
FC-1500 Aluminum



FC-1500 Stainless Steel



FC-2000 Aluminum



FC-3000 Aluminum/Stainless Steel

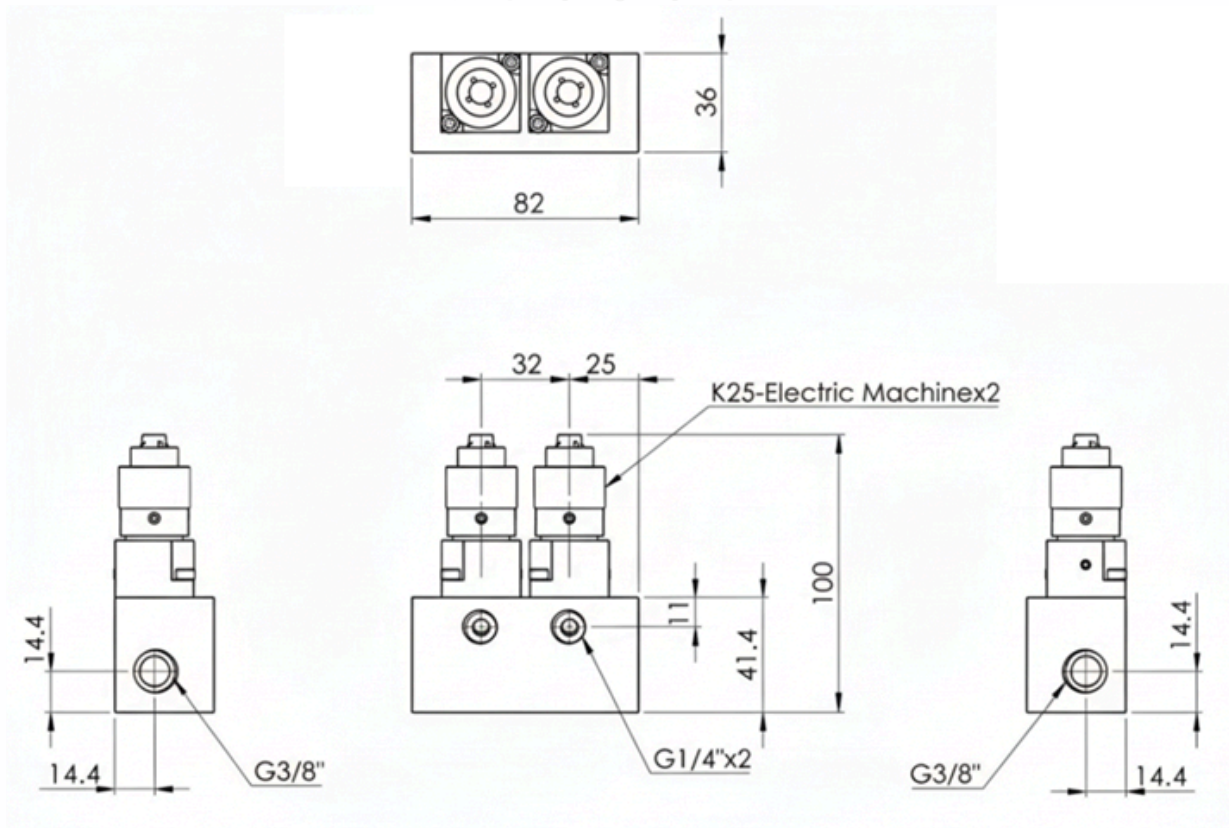
PROPORTIONAL FLOW CONTROL VALVE



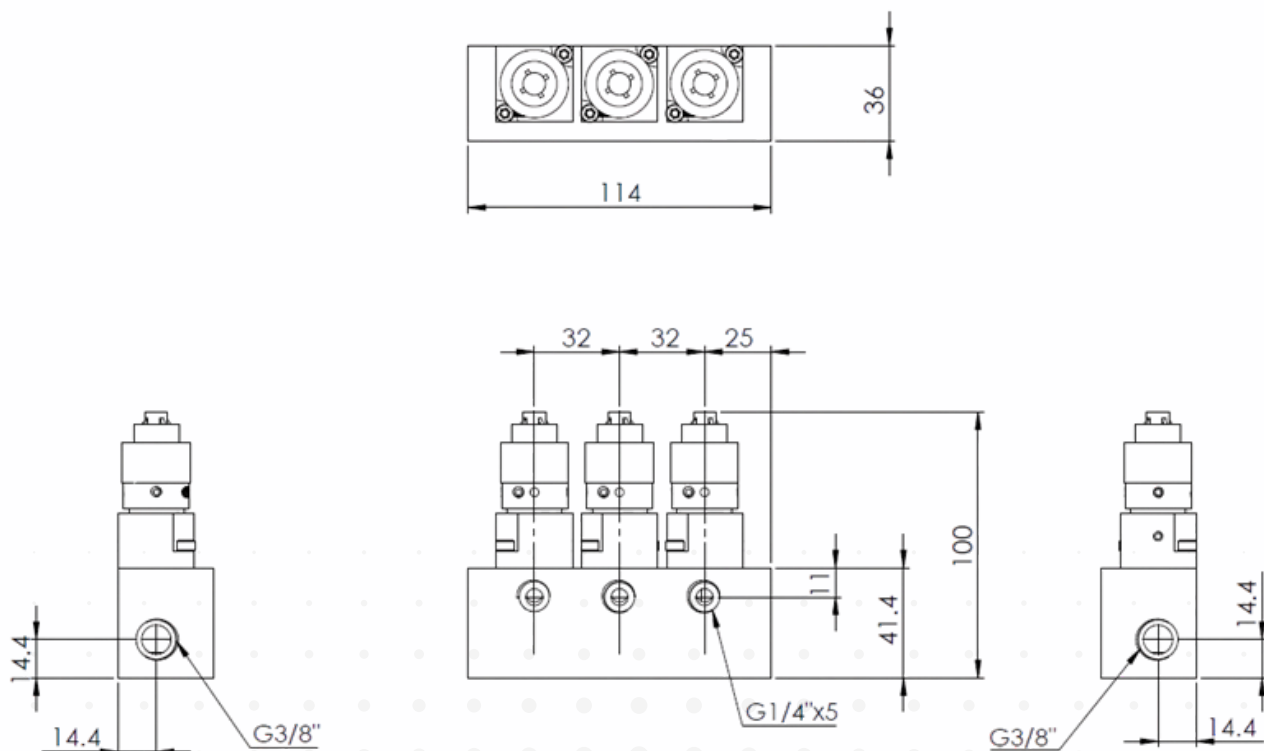
Model	FC300-MM2	FC300-MM3	FC300-MM5
Valve Type	2-Way Proportional Needle valves		
Port Size	Inlet : G3/8" ; Outlet : G 1/4"		
Medium	Vacuum, Compatible gases, oil, water and liquids		
Pressure Range	-1~7 bar		
Flow Range of air	0~400L/min@6bar		
Flow Range of water	0~8L/min@6bar		
Repeatability	±0.1% F.S.		
Flow Resolution of air(L/min)	0.3 L/min@3bar		
Flow Resolution of water(L/min)	0.008L/min@3bar		
Temp. Range	-20 ~84° C		
Full stroke time	2 sec		
Body material	Aluminum		
Seals	Body- Aluminum : All VITON or VITON+EPDM ----- ** For vacuum or water, it is recommended to choose EPDM.		
Ingress Protection	IP 52		

PROPORTIONAL FLOW CONTROL VALVE

OVERALL DIMENSION



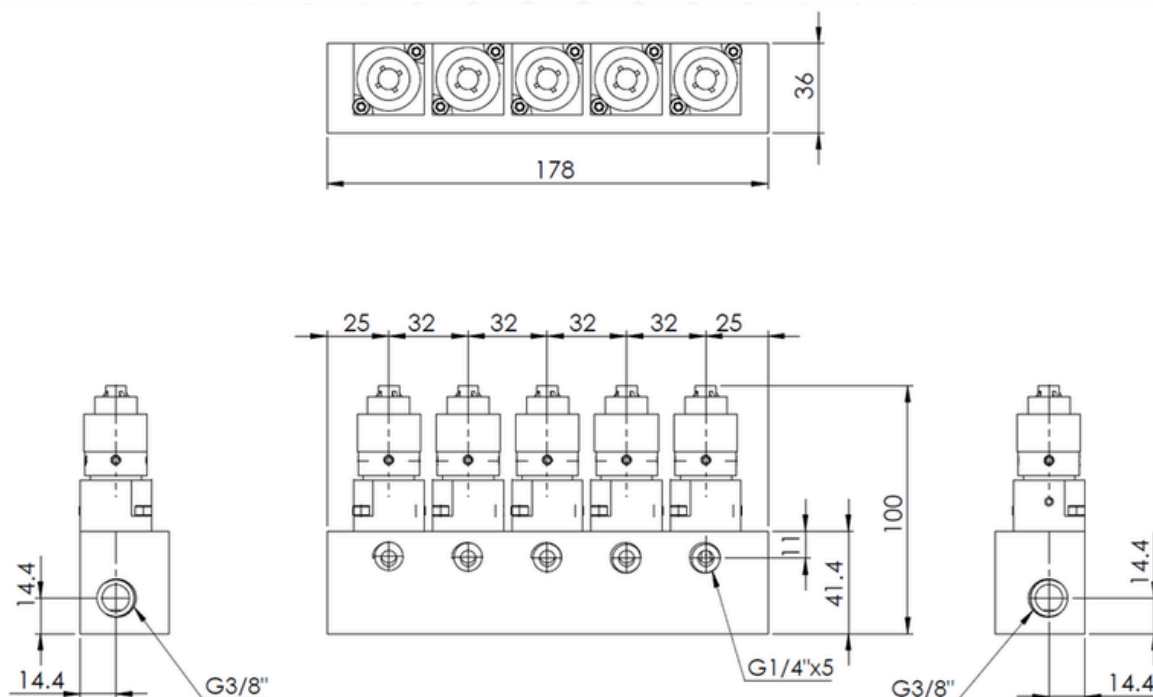
FC300-MM2



FC300-MM3

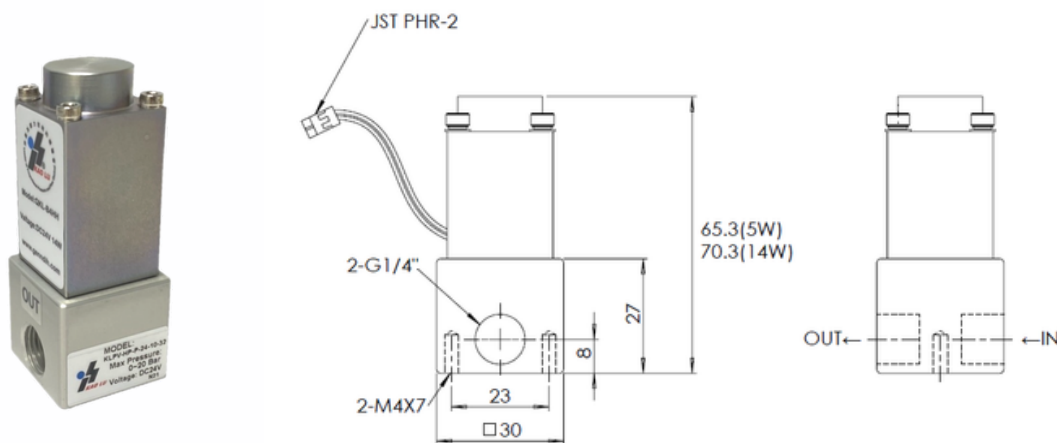
PROPORTIONAL FLOW CONTROL VALVE

OVERALL DIMENSION



FC300-MM5

PROPORTIONAL SOLENOID VALVE



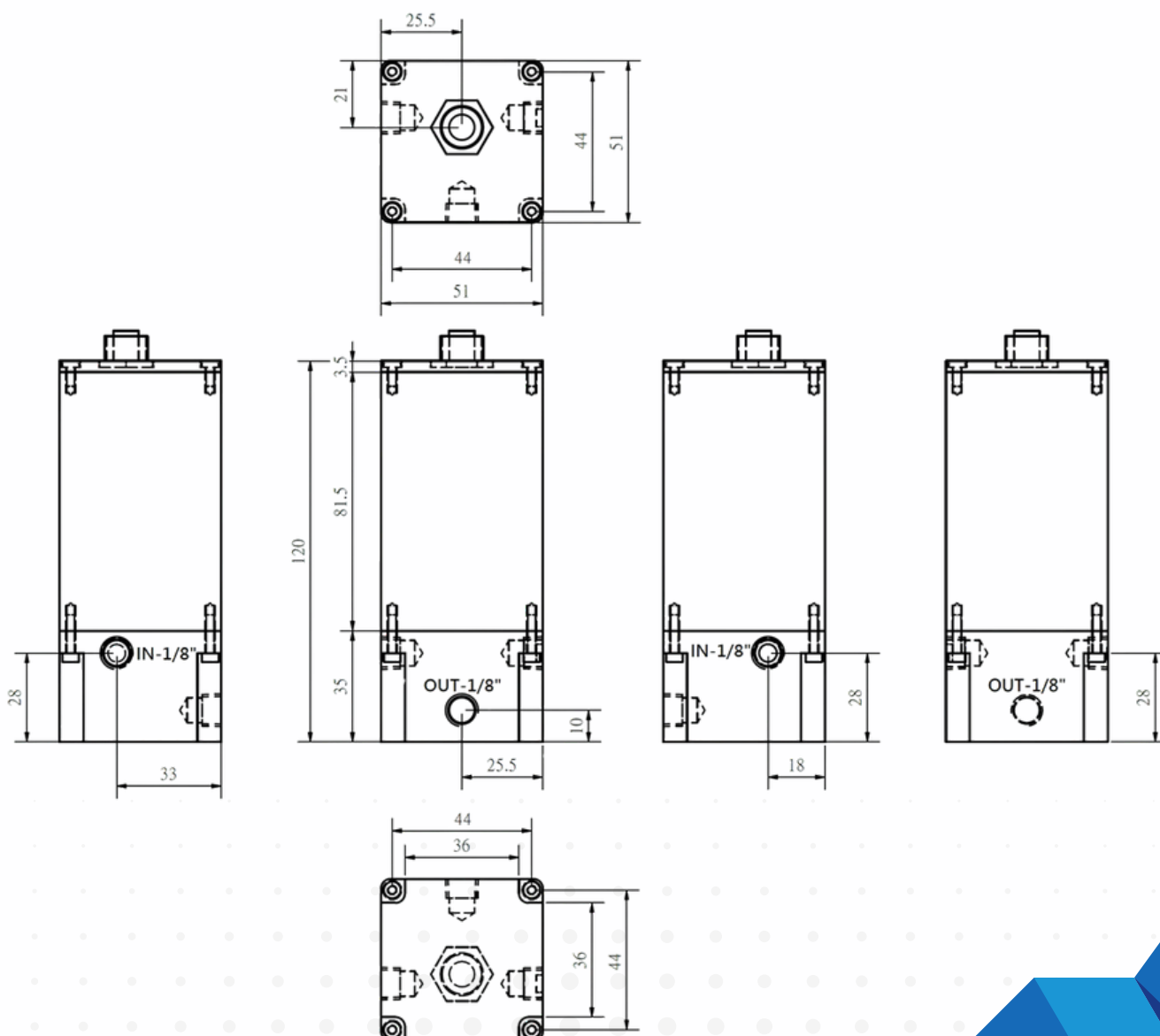
Model	KLPV-HP	Valve Type	2-Way Normally Closed
Port Size	G1/4"	Electrical Connection	Flying Wire Leads
Pressure Range	0~35 bar	Voltage Range	24 VDC
Flow Range	0~310L/min @3 bar (air)	Power Consumption	5 or 14 watts
Seal	Viton	Orifice Size(mm)	1、1.5、2、3、3.5
Wetted Materials	Cold rolled stainless steel w/ electroless nickel plating, brass and 304 stainless steel	Temp. Range	-196 to 50°C
Maximum Hysteresis		10-15% of full current(varies with max flow)	

PROPORTIONAL FLOW CONTROL VALVE



Model	FC300-SG		
Valve Type	2-Way Proportional Needle valves		
Medium	Vacuum, Compatible gases, oil, water and liquids		
Pressure Range	-1~7bar	Repeatability	±0.1% F.S.
Flow Range of Air	0~400L/min@6bar	Flow Range of Water	0~8L/min@6bar
Flow Resolution of Air	0.3 L/min@3bar	Flow Resolution of Water	0.008L/min@3bar
Port Size	G 1/8"	Full Stroke Time	2 sec
Body Material	Aluminum	Seals	FKM or FKM+EPDM
Temp. Range	-20 ~84° C	Ingress Protection	IP 65

OVERALL DIMENSION



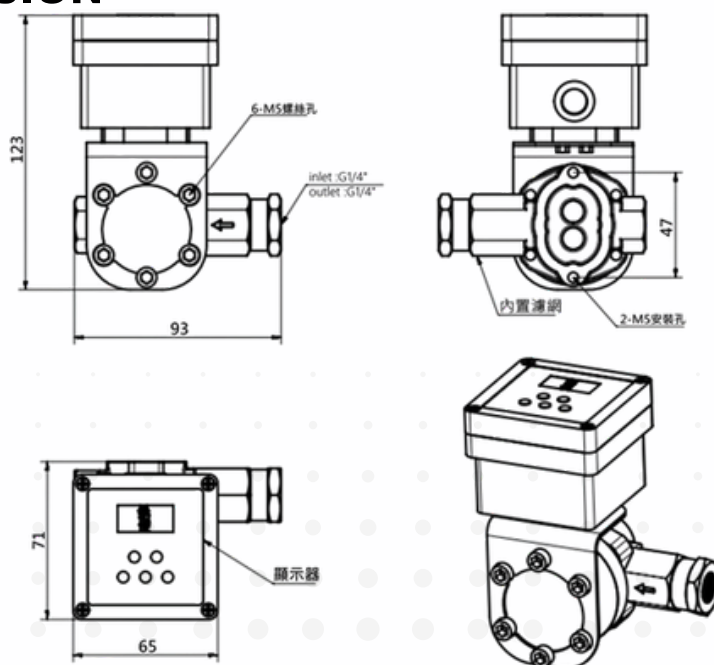
HIGH-PRECISION CORROSION-RESISTANT GEAR FLOW METER



Type	ESPL50	ESPL500	ESPL1700	ESPL4600
Flow Range	15-900 mL/min	150-9000 mL/min	500-30000 mL/min	1300-83000 mL/min
Pulse Frequency	0.25 mL/p	2.5 mL/p	8.5 mL/p	23 mL/p
Port Size	G1/4"	G1/4"	G1/2"	G1"
Work Pressure	200 bar	200 bar	50 bar	50 bar
Accuracy	*0.5% F.S.			
Temp.	-40~80℃			
Medium	Water, oil products, food-grade lubricants, chemical agents, cosmetics, fertilizers, ink, pharmaceutical ingredients, coatings, petroleum products, automotive fluids, adhesives, polyurethane, electrolytes, and various additives and other types of high-viscosity(800,000 cP) media.			
Output Signal	4-20mA			
Supply	5-24VDC			
Body Material	Stainless Steel			
Gear Material	PPS			
For ESPL1700: Water fluid Accuracy: 1% of reading within turndown ratio of 1: 10 (3000-30000) 0.5% F.S outside turndown ratio (500-3000).				

OVERALL DIMENSION

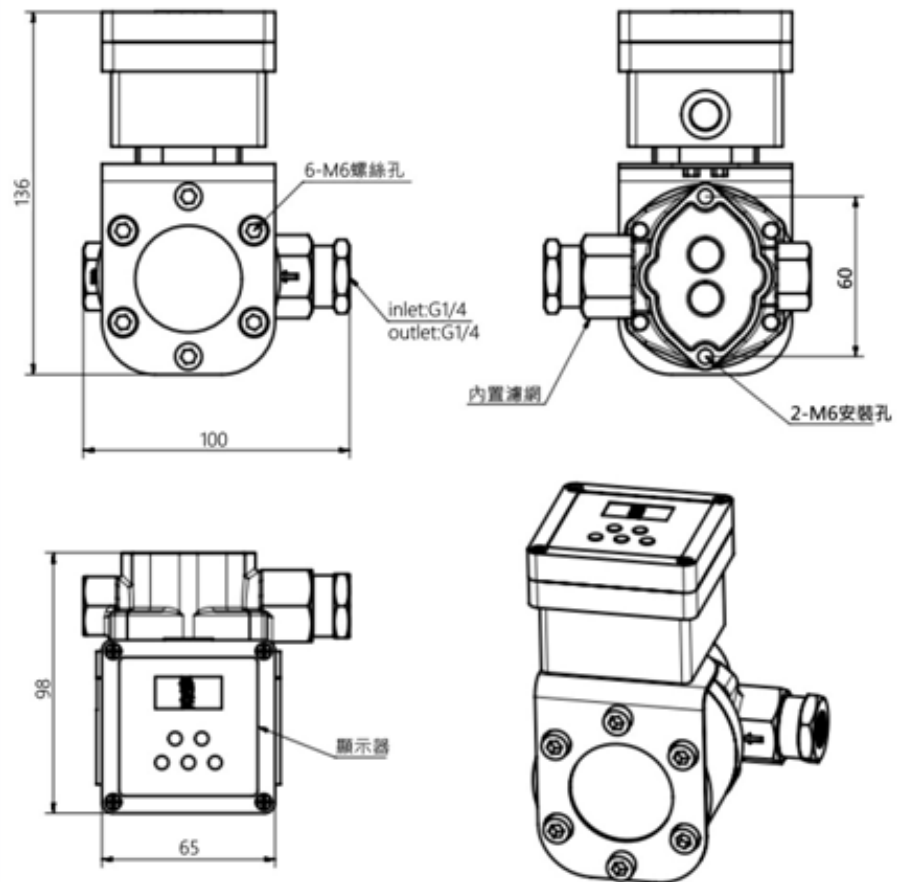
ESPL50



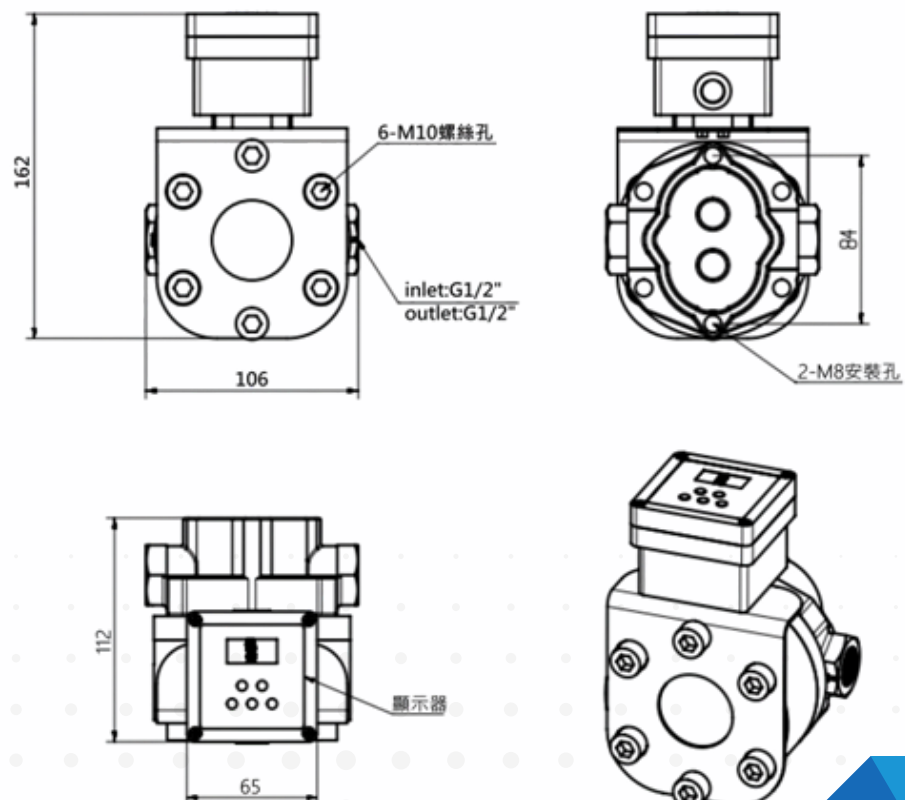
HIGH-PRECISION CORROSION-RESISTANT GEAR FLOW METER

OVERALL DIMENSION

ESPL500



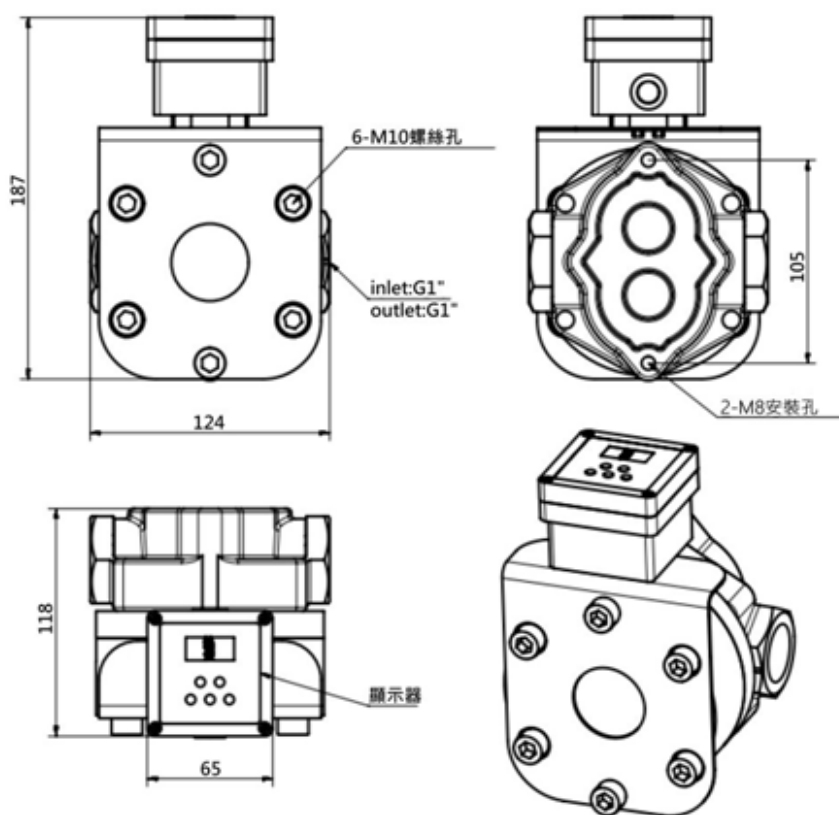
ESPL1700



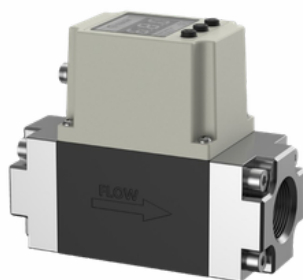
HIGH-PRECISION CORROSION-RESISTANT GEAR FLOW METER

OVERALL DIMENSION

ESPL4600



DIGITAL FLOW SENSOR FOR WATER



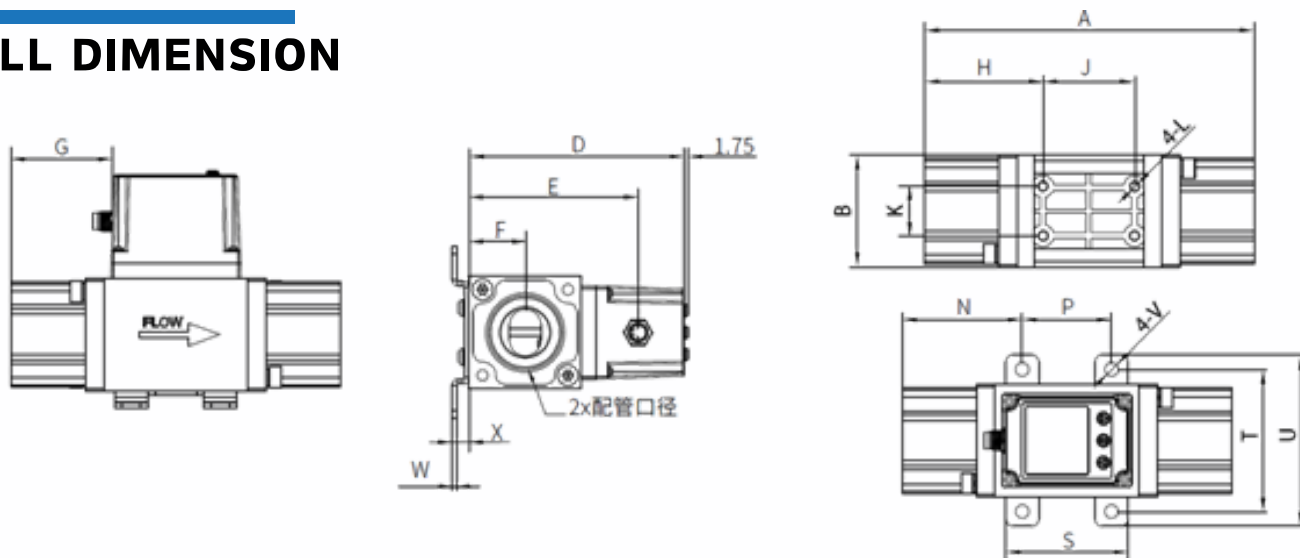
Series KLFMW				
Type	KLFMW 4	KLFMW 16	KLFMW 40	KLFMW 100
Port Size	G3/8"	G3/8"	G1/2"	G1"
Medium	Water, Ethylene Glycol Aqueous Solution (Viscosity Below 3 cP)			
Detection Method	Karman vortex street type			
Rate Flow Range	0.5~4 L/min	2~16 L/min	5~40 L/min	10~100 L/min
Set Flow Range	0.35~5.50 L/min	1.70~22.0 L/min	3.5~55.0 L/min	7~140 L/min
Minimum Setting Unit	0.01	0.01	0.1	1
Using Pressure Range	0~1 MPa			
Max. Pressure	1.5 MPa			

DIGITAL FLOW SENSOR FOR WATER

Series KLFMW

Model	KLFMW 4	KLFMW 16	KLFMW 40	KLFMW 100
Power Supply	DC12~24V±10%			
Current Consumption	≤50mA			
Accuracy	Display value: ±3% F.S. / Analog output: ±3% F.S.			
Repeat Accuracy	±2% F.S.			
Temperature Characteristics	±5% F.S.(25℃)			
Response Time	0.5S / 1S / 2S			
Protection Level	IP 65			
Voltage Resistance	AC1000V (1 minute between lead and plastic housing)			
Insulation Resistance	50 MΩ or more (DC500V, between lead and plastic housing)			
Temperature Range	During operation: 0~50℃ (no condensation and no freezing)			
Humidity Range	During operation and storage: 35~85% R.H. (no condensation and no freezing)			
Material of fluid contact part	SUS304、FKM、PBT+30%GF/PPS+40%GF、AL/POM/PVDF/PPS			

OVERALL DIMENSION



Series	Port Size	A	B	D	E	F	G	H	I	J	K	Mounting Bracket Size							
												N	P	S	T	U	V	W	X
KLFMW 4	G3/8	81	38	74	55.2	19	13.8	25.5	30	16	2.2	24	33	45	47.9	58	4.5	1.5	1.8
KLFMW 16	G3/8	89	38	74	55.2	19	17.8	29.5	30	16	2.2	28	33	45	47.9	58	4.5	1.5	1.8
KLFMW 40	G1/2	109	38	74	55.2	19	27.8	39.5	30	16	2.2	38	33	45	47.9	58	4.5	1.5	1.8
KLFMW100	G1"	135	46	88	69.2	23	40.8	48.5	38	20	3.5	49.3	36.5	50	58	70	5.5	2	7

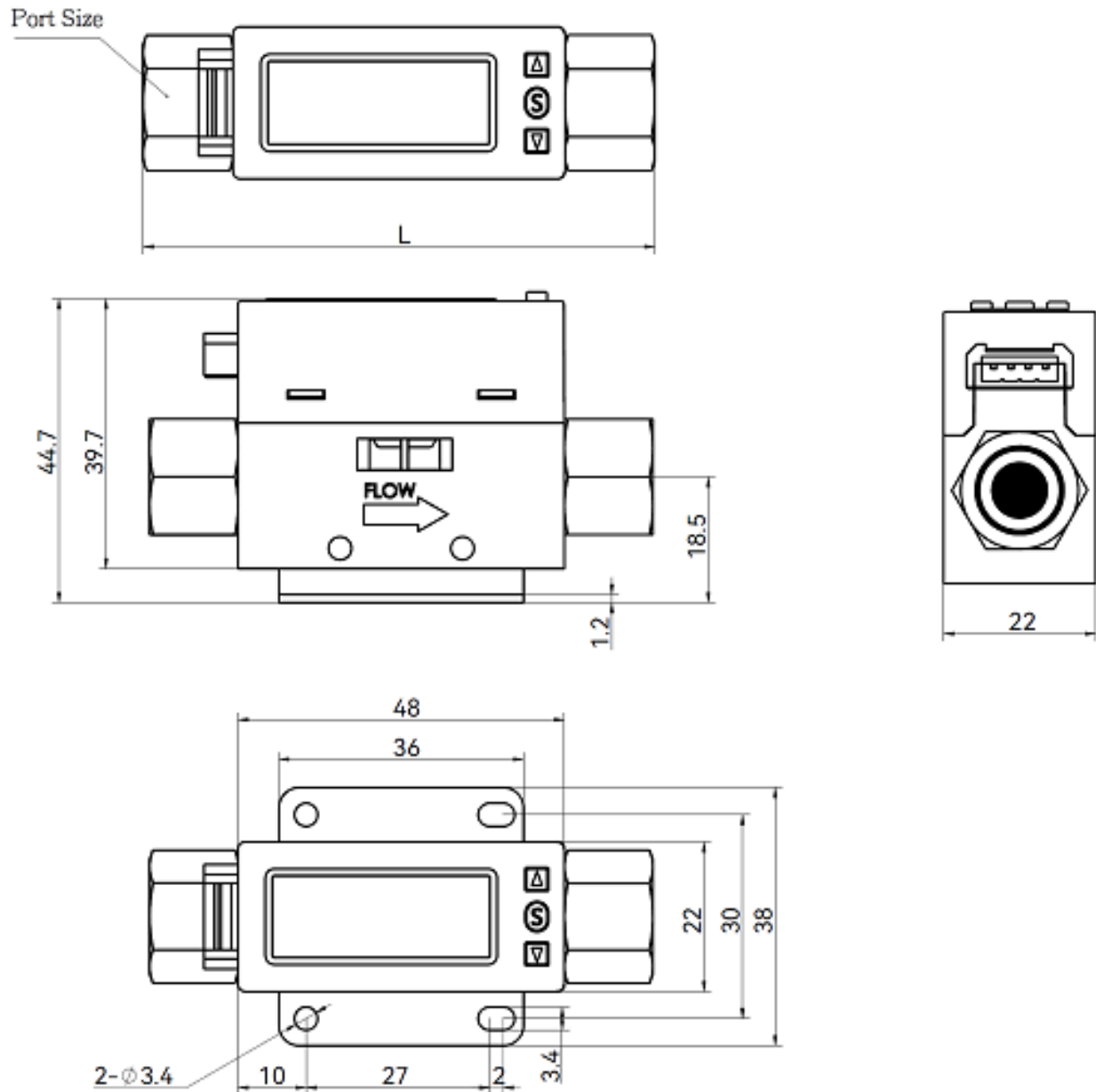
DIGITAL MASS FLOW SENSOR



Series KLFMA								
Type			KLFMA 0125	KLFMA 01100	KLFMA 01200	KLFMA 02500	KLFMA 021000	KLFMA 022000
Port Size			G1/8"	G1/4"	G1/4"	G1/2"	G1/2"	G3/4"
Fluid	Medium		Dry air, N ₂ , CO ₂ , Ar			Dry air, N ₂		
Flow	Flow Range (L/min)	Air,N2	0.2~25	1~100	2~200	5~500	10~1000	20~2000
		CO ₂	0.2~12.5	1~50	2~100	—	—	—
	Setting Flow Range	Instantaneous Flow	0.1 L/min		1 L/min		1 L/min	
		Cumulative Flow	1 L/min			10 L/min		
	Accumulated Pulse Output (L/pulse)			0.1	1	1	10	10
Pressure	Pressure Range		-0.1~0.75 MPa			0~0.8 MPa		
	Max. Pressure		1.0 MPa					
Electrical	Supply Power		DC12~24V±10%					
	Current Consumption		≤35mA			≤55mA		
Accuracy	Display Accuracy		±3% F.S. ±1 digit					
	Analog Output Accuracy		±3% F.S.					
	Repeat Accuracy		±1% F.S. ±1 digit (±2% F.S. ±1 digit when digital filter 0.05s is selected)					
	Temperature		±5% F.S. ±1 digit (0~50C: 25°C reference)					
Response Time			50ms±40%					
Environ-mental Resist-ance	Protection level		IP 40					
	Voltage Resistance		AC1000V (1 minute between lead and plastic housing)					
	Insulation Resistance		50 MΩ or more (DC500V, between lead and plastic housing)					
	Temperature Range		Action: 0~50°C, Storage: -10~60°C (no condensation, no freezing)					
	Humidity Range		● Action, storage: 35-85%RH (no condensation, no freezing)					

DIGITAL MASS FLOW SENSOR

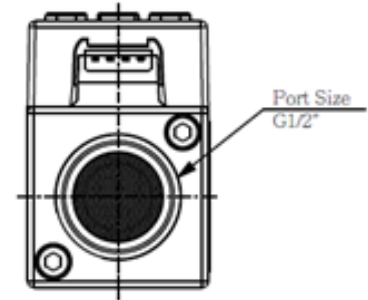
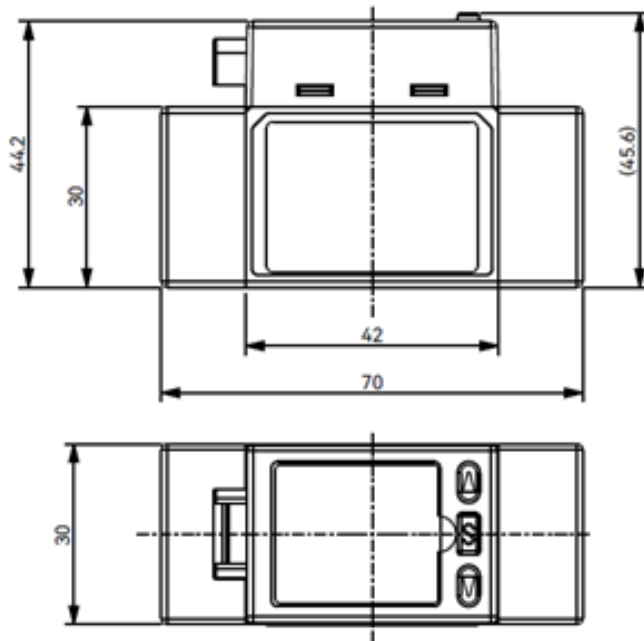
OVERALL DIMENSION



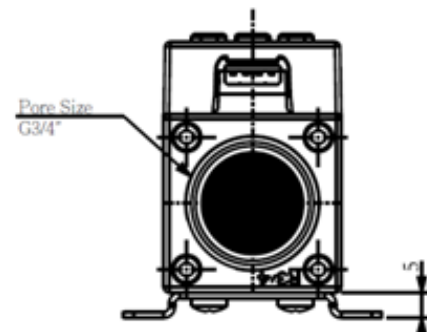
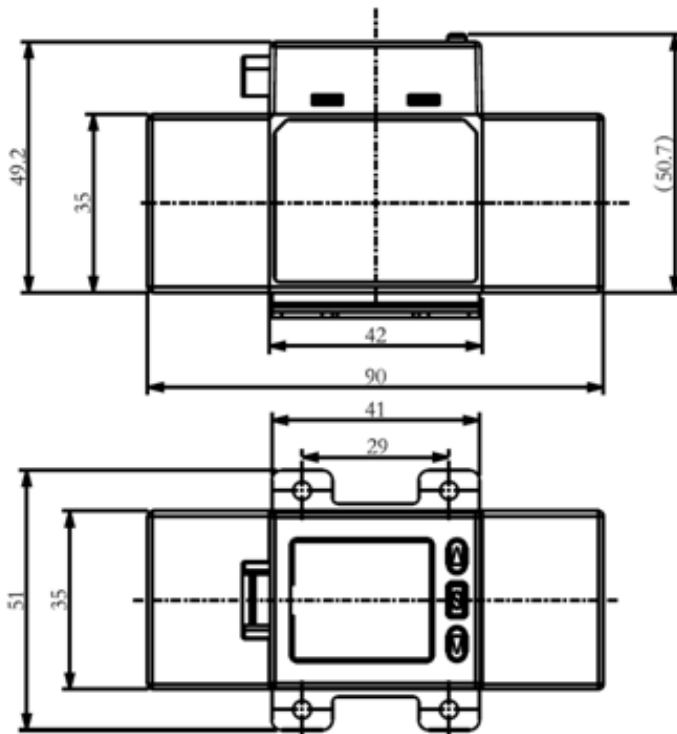
Series	L	Port Size
KLFMA0125	66	G1/8
KLFMA01100	74	G1/4
KLFMA01200	74	G1/4

DIGITAL MASS FLOW SENSOR

OVERALL DIMENSION



KLFMA02500 、 KLFMA021000



KLFMA022000

PINCH VALVE

PPV PROPORTIONAL PINCH VALVE



Series	PPV-02/04/06/08	PPV-93x
Recommended Tubing Durometer	50-80 Shore A	50-80 Shore A
Media Pressure Maximum	5.2bar	6bar
Power Consumption	1.95w (hold); 4.5-5.2w (full speed)	2.05 w (hold); 4.3-7.0w (full speed)
Supply Voltage	24V	24V
Max Pinch Force	up to 30 kgF	up to 50 kgF
Tube O.D	φ2、φ4、φ6、φ8 mm	φ6~φ35 mm

CPV CYLINDER PINCH VALVE



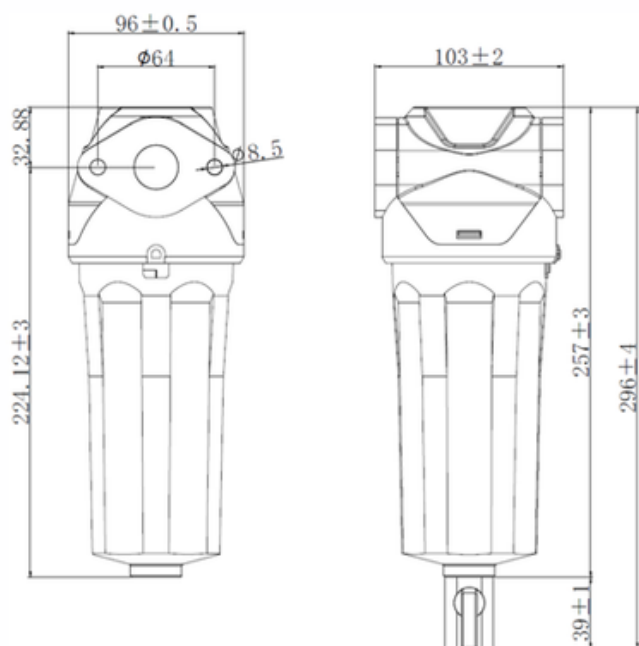
Model	Minimum Thickness(mm)	Tubing I.D (mm)	Tubing O.D (mm)	Material	Durometer (Shore A)	Maximum Pressure
CPV-930-64	1.6	3.2	6.4	Pharma 80	80	6 bar
				PU	70-80	
				PVC	60-70	
CPV-931-80	1.2	5.6	8	PU	70-80	6 bar
				PVC	60-70	
CPV-932-95	1.6	6.4	9.5	Pharma 80	80	6 bar
				PVC	60-70	
CPV-933-12	1.6	9.5	12.7	Pharma 50	50	6 bar
				PVC	70-85	
CPV-934-15	3.2	9.52	15.87	Silicon, Braid Reinforced	65	6 bar
CPV-934-19	3.2	12.7	19.1	Silicon, Braid Reinforced	65	6 bar
CPV-934-20	3.8	12.7	20.3	Silicon, Braid Reinforced	65	6 bar
CPV-935-25	3.2	15.9	25.4	Silicon, Braid Reinforced	60-65	6 bar
CPV-935-28	4.5	19	28	Silicon, Braid Reinforced	60-65	6 bar
CPV-936-35	4.8	25.4	35	PVC	60	6 bar

HIGH PRESSURE FILTER

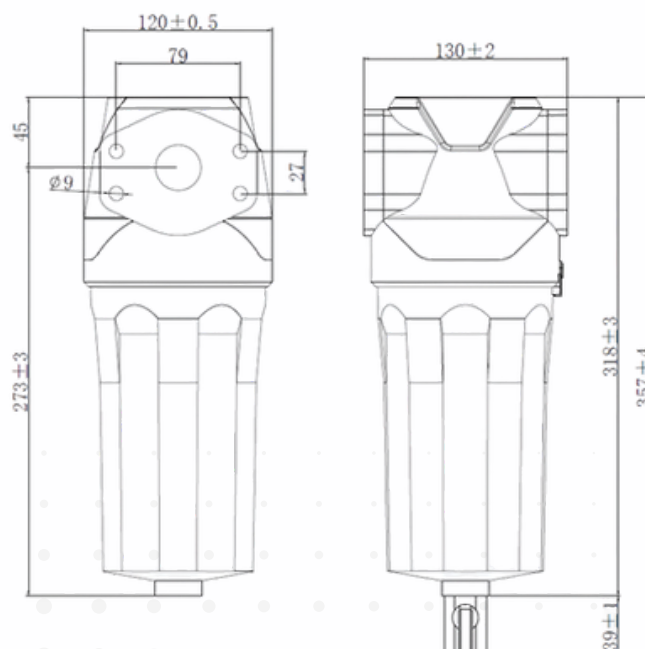


Model	KL-020T	KL-030T
Operating Fluid	Air	
Port Size	G3/4"	G1"
Max. Flow (L/min)	2500	4000
Filter Element	0.01 μ m	0.01 μ m
Max. Working Pressure	40 Bar	
Ambient Temperature	1.5~80°C (No freezing)	
Drain	Manual	
Body	Die Cast Aluminum	
Element	Polypropylene	

OVERALL DIMENSION



KL-020T



KL-030T

HIGH PRESSURE FILTER



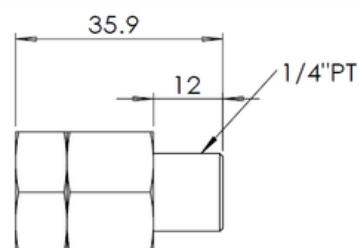
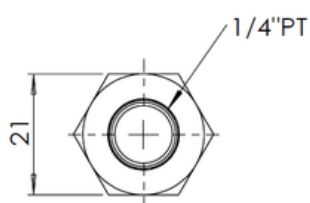
Model	KL-SS-015
Operating Fluid	Compressed Air
Port Size	1/2"
Filter Element	5 μm
Max. Working Pressure	200 Bar
Ambient Temperature	-20~60°C (No freezing)
Drain	Manual
Body	Stainless Steel



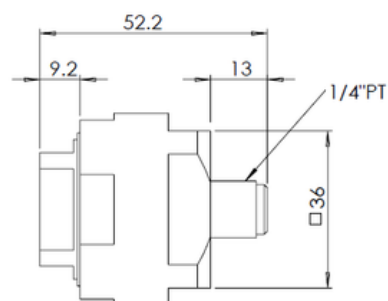
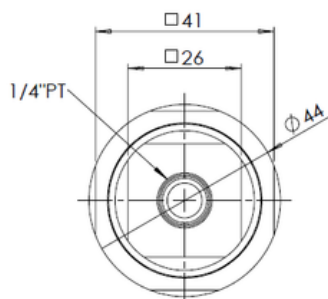
Model	KL-FT02-S	KL-FT02-L	KL-FT03-G	KL-FT04-S	KL-FT04-L
Port Size	PT 1/4”	PT 1/4”	PT 3/8”	PT 1/2”、 G1/2”	PT 1/2”
Operating Fluid	Compatible gases				
Filtering Element	20μm	40μm			
Max . Input Pressure	30 bar	100 bar			
Temperature Range	0-80 °C				

OVERALL DIMENSION

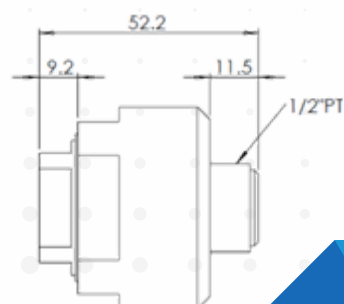
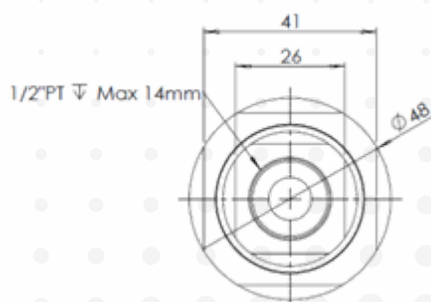
KL-FT02-S



KL-FT02-L



KL-FT04-L

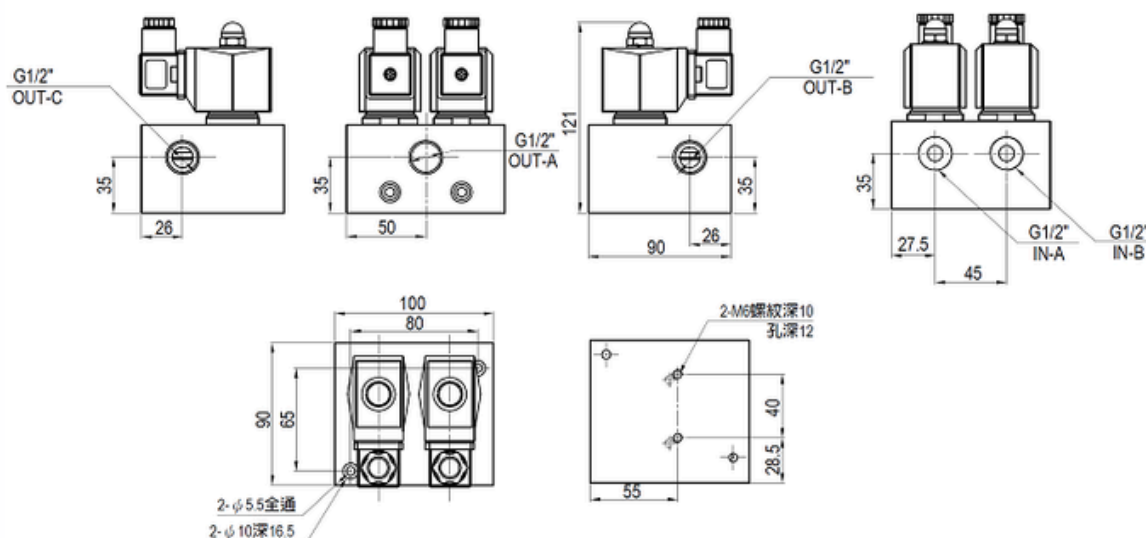


DIRECT-OPERATED SOLENOID VALVE BLOCK

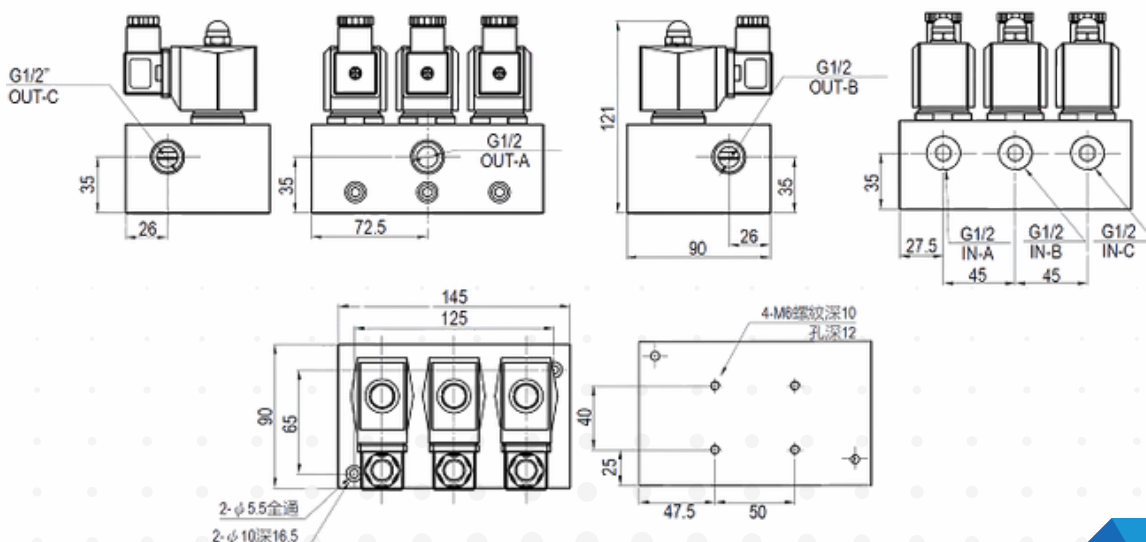


Model	KLSV-2/1-10-24-AL	KLSV-3/1-10-24-AL
Manifold Stations	2-station	3-station
Port Size	G 1/2"	
Orifice	10 mm	
Voltage	DC 24	
Working Pressure	0~35 Bar	
Body Material	Aluminum	
Seals	VITON	
Medium	Inert gas or Oxygen	

OVERALL DIMENSION



KLSV-2/1-10-24-AL



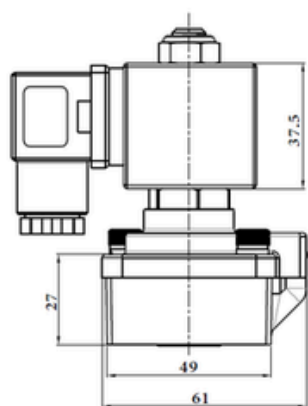
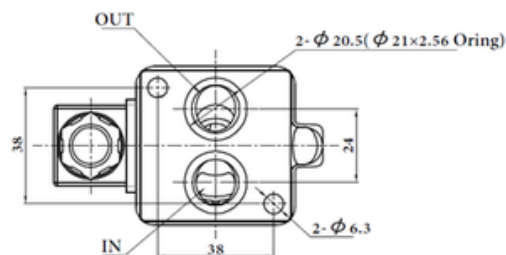
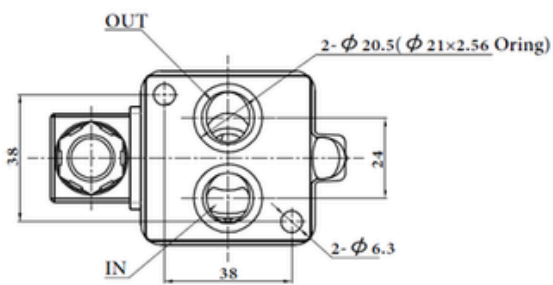
KLSV-3/1-10-24-AL

CARTRIDGE TYPE ON/OFF SOLENOID VALVE

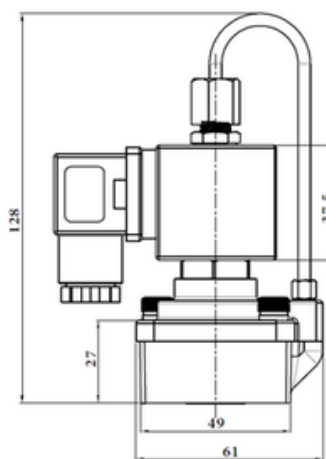
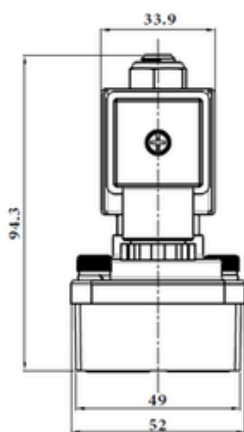


Model	SVM1-14V	SVM2-14V
Function	Normally Closed	Normally Open
Orifice	14 mm	
Working Pressure	0~40 Bar	
Body Material	Brass	
Ambient Temperature	-10~50°C	
Medium Temperature	-10~50°C	
Seals	VITON	
Diaphragm Material	PUR	

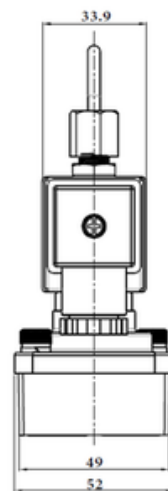
OVERALL DIMENSION



SVM1-14V



SVM2-14V

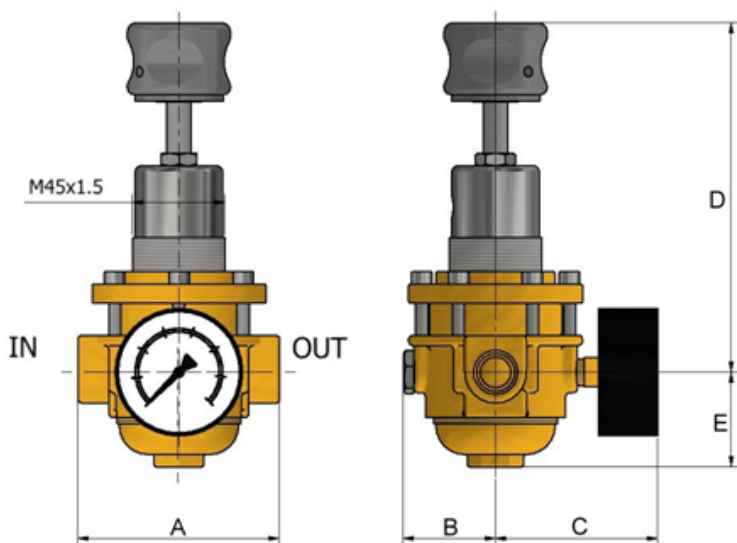


MEDIUM PRESSURE REGULATOR IN BRASS

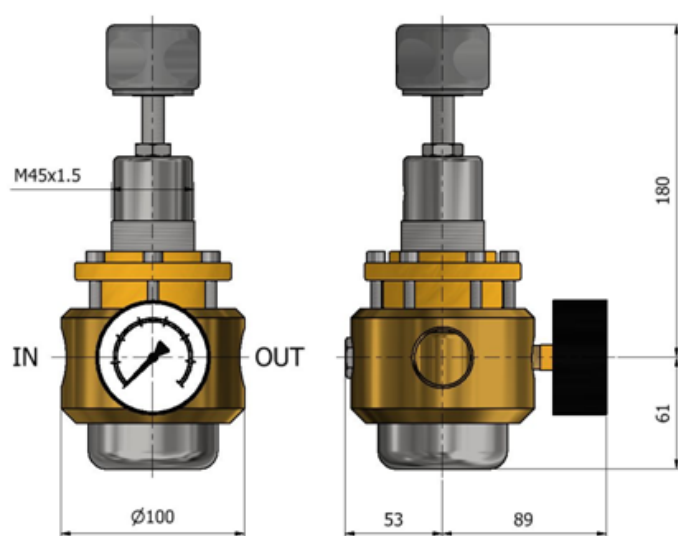


Model	MPR60-14	MPR60-12	MPR60-34	MPR60-10
Max. Inlet Pressure	60 bar			
Output Pressure Range	0.2~3bar / 0.5~8bar / 1.5~15bar / 2~30bar / 3~50bar			
Port Size	G1/4" -F	G1/2" -F	G3/4" -F	G1" -F
Gauge Connections	G1/4" -F			
KV(CEI EN 60534-2)	3.2 m ³ /h		8.5 m ³ /h	
Material	Body: Brass / Inner parts: Brass			
Temperature	20°C~80°C			
Fluids	Gases、Liquids			
Weight	4.3kg		4.3kg	

OVERALL DIMENSION



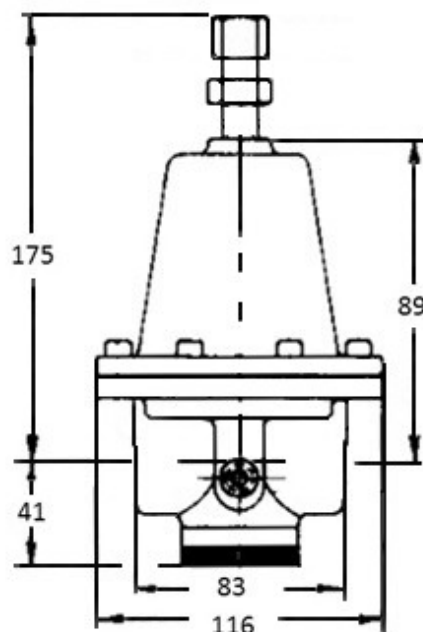
MPR60-14/MPR60-12



MPR60-34/MPR60-10

Type	A	B	C	D	E
Diaphragm	98	45	79	152	46
Piston	98	45	79	170	46

MEDIUM PRESSURE REGULATOR IN BRASS



Model	PP-1"
Max. Inlet Pressure	40 bar
Output Pressure Range	0~30bar
Port Size	G1" -F
Flow	7,830 L/min ($p_1 = 8 \text{ bar}$、$p_2 = 6 \text{ bar}$、$\Delta p = 1 \text{ bar}$)
Material	Body: Brass / Internal parts: Brass
Fluids	Compressed Air, Neutral Gases, Non-toxic Gases
Medium Temperature	20°C~80°C
Operating Temperature	-10°C~90°C