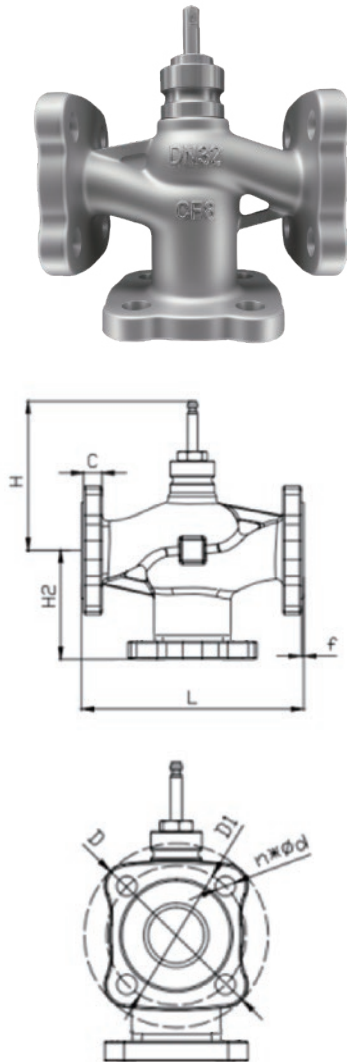


STAINLESS STEEL ELECTRIC THREE-WAY VALVE

■ Fig.6171K



CHARACTERISTIC

- The valve body made of 304 stainless steel using precision casting technology has a long service life.
- Can be installed in conjunction with GSX..., GSV..., series drives.

TECHNICAL SPECIFICATION

Design Standard	IEC 60534
Testing Standard	EN1349
Size	DN15 ~ DN200
Working Pressure	PN16 / PN25
Suitable Medium	Water, Concentration ≤ 50% Ethylene Glycol Solution
Working Temperature	-10°C ~ 150°C
Stroke	DN15 ~ DN100: 20mm, DN125 ~ DN200: 40mm
Flow	4...2700m³/h
Leakage Rate	<0...0.01% of Kvs

MAIN MATERIALS

No.	Part	Material	Specification
1	Body	Stainless Steel	SS304
2	Core	Stainless Steel	--
3	Stem	Stainless Steel	--
4	Sealing	Combination Special Special Sealing	--

DIMENSION

DN	INCH	C mm	L mm	D, mm		D1, mm		n*φd		f mm	H mm	H2 mm
				PN16	PN25	PN16	PN25	PN16	PN25			
15	½"	13	122	95	95	65	65	4*φ14	4*φ14	2	136	66
20	¾"	14	130	105	105	75	75	4*φ14	4*φ14	2	136	70
25	1"	15	140	115	115	85	85	4*φ14	4*φ14	2	137	80
32	1¼"	17	180	140	140	100	100	4*φ18	4*φ18	2	138	92
40	1½"	17	200	150	150	110	110	4*φ18	4*φ18	2	150	101
50	2"	18	230	165	165	125	125	4*φ18	4*φ18	2	154	116
65	2½"	18	290	185	185	145	145	4*φ18	8*φ18	2	205	-
80	3"	18	310	200	200	160	160	8*φ18	8*φ18	2	214	-
100	4"	20	350	220	235	180	190	8*φ18	8*φ22	2	241	-
125	5"	20	400	250	270	210	220	8*φ18	8*φ26	2	270	-
150	6"	22	480	285	300	240	250	8*φ22	8*φ26	2	292	-
200	8"	22	495	340	360	295	310	12*φ22	12*φ26	2	333	-

STAINLESS STEEL FLANGED ELECTRIC THREE-WAY VALVE

■ Fig.6171K

VALVE BODY MODEL SUMMARY

DN	INCH	Kvs	Stroke mm	Standard Driver Model	Maximum Closing Pressure Difference ΔP_s , Mpa
15	½"	4	20	GSX Series	≤0.80
20	¾"	5	20	GSX Series	≤0.80
25	1"	7.5	20	GSX Series	≤0.80
32	1 ¼"	10	20	GSX Series	≤0.80
40	1 ½"	12	20	GSX Series	≤1.60
50	2"	31	20	GSX Series	≤0.60
65	2 ½"	49	20	GSX Series	≤0.45
80	3"	78	20	GSX Series	≤0.45
100	4"	124	20	GSX Series	≤0.20
125	5"	200	40	GSV Series	≤0.15
150	6"	300	40	GSV Series	≤0.10
200	8"	450	40	GSV Series	≤0.13

Note: Maximum closing pressure difference ΔP_s : The maximum water pressure difference that can be closed when the valve body is matched with the driver.

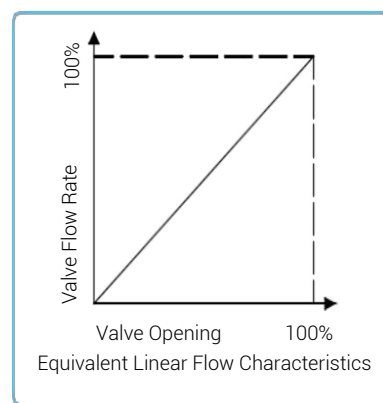
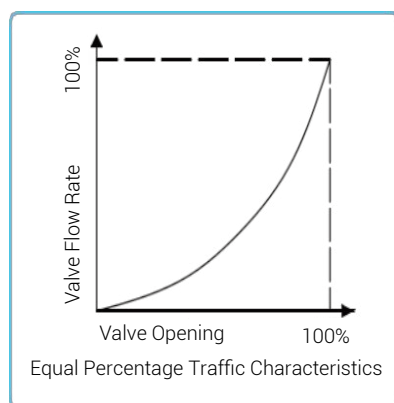
$$Kvs = \frac{V}{\sqrt{\frac{\Delta P}{100}}}$$

ΔP : Differential pressure when the valve is fully open (Unit: kPa)

V: Rated flow at differential pressure ΔP (Unit: m³/h)

Kvs: Flow coefficient of the control valve when fully open, with a pressure difference of 100kPa across the valve and a fluid density of 1g/cm³.

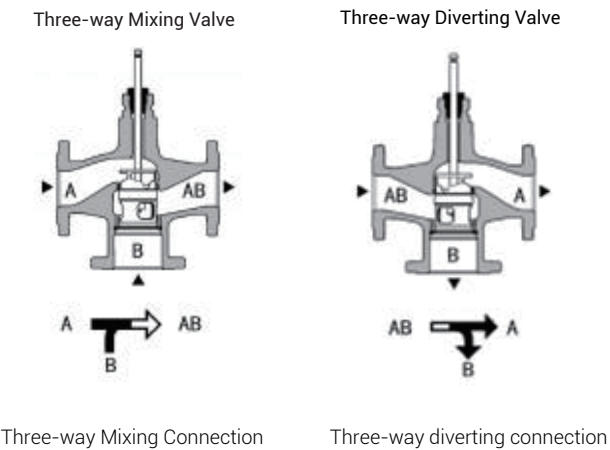
FLOW CHARACTERISTICS



STAINLESS STEEL FLANGED ELECTRIC THREE-WAY VALVE

■ Fig.6171K

SCHEMATIC DIAGRAM OF MEDIUM FLOW DIRECTION



MEDIA FLOW RELATIONSHIP

Connection method/caliber State	DN15 ~ DN25	DN32 ~ DN200
Flow Direction	A, B→AB	AB→A, B
When The Valve Stem Extends	Flow A decreases, Flow B increases	Flow A increases, Flow B decreases
When Tthe Valve Stem Retracts	Flow A increases, Flow B decreases	Flow A decreases, Flow B increases

ACTUATOR APPLICATION

■ Fig.GSX/GSV

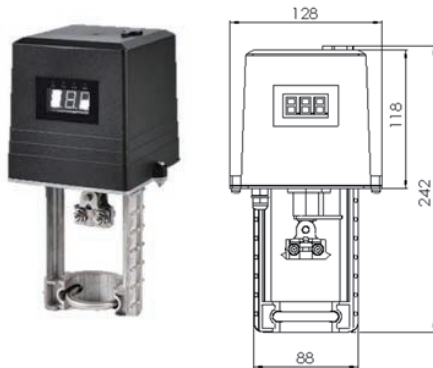


Fig.GSX

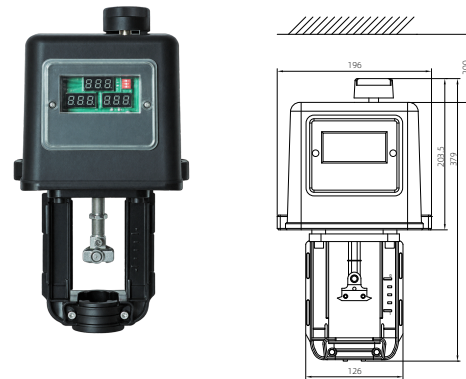


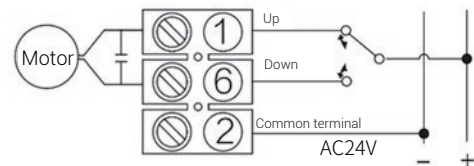
Fig.GSV

TECHNICAL PARAMETERS

NO.	ACTUATOR MODEL	GSX11	GSX16	GSX31	GSV11	GSV16	GSV31
1	Specification	DN15 ~ DN100			DN125 ~ DN200		
2	Action / Control	Incremental Control Switch Type	Proportional Regulating Type	Incremental Control Switch Type	Incremental Control Switch Type	Proportional Regulating Type	Incremental Control Switch Type
3	Supply Voltage	24V AC 50/60Hz		220V AC 50/60Hz		24V AC 50/60Hz	
4	Acting Force	1500N	1500N	1500N	2800N	2800N	2800N
5	Control Signal	Incremental signal	0 ~ 10V or 4 ~	Incremental signal	Incremental signal	0 ~ 10V or 4 ~	Incremental signal
6	Feedback Signal	-	0 ~ 10V or 4 ~ 20mA	-	-	0 ~ 10V or 4 ~ 20mA	-
7	Power Consumption	6VA	6VA	6VA	10VA	12VA	10VA
8	Operating Speed	0.12mm/s			0.23mm/s		
9	Max. Stroke	24mm			42mm		
10	Max. Relative Humidity	10% ~ 95%RH, non-crystallizing			10% ~ 95%RH, non-crystallizing		
11	Working Temp.	-10°C ~ 55°C			-10°C ~ 55°C		
12	Weight	1.6Kg			4.6Kg		

◆ Wiring Diagram (GSX11)

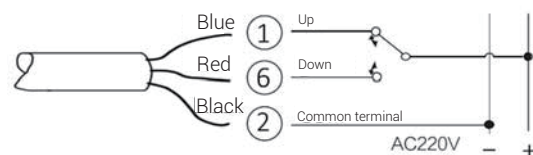
Dip switch status
Motor forward rotation
Valve closes upward



◆ Wiring Diagram (GSX31)

30cm 3-core cable

Dip switch status
Motor forward rotation
Valve closes upward



◆ Wiring Diagram (GSX16)

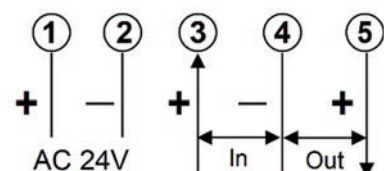


LED1



K1

EXAMPLE:
Dip switch status
0-10V control signal
Motor forward rotation
Valve closes upward



Manual Self-Calibration:
Press the K1 key for 5 seconds until LED1 flashes three times, then release.
Press the actuator key again to complete one operating cycle.

ACTUATOR APPLICATION

■ Fig.GSX/GSV

Dip Switch Schematic Diagram

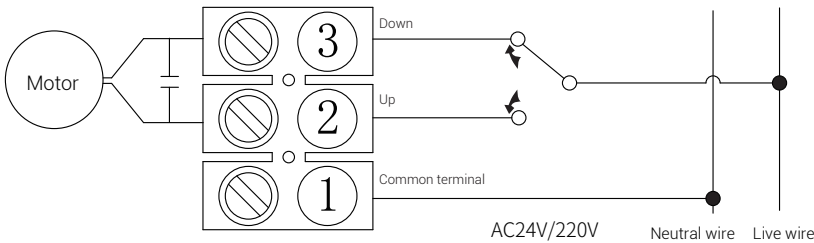


RF: Motor Forward Rotation
RR: Motor Reverse Rotation

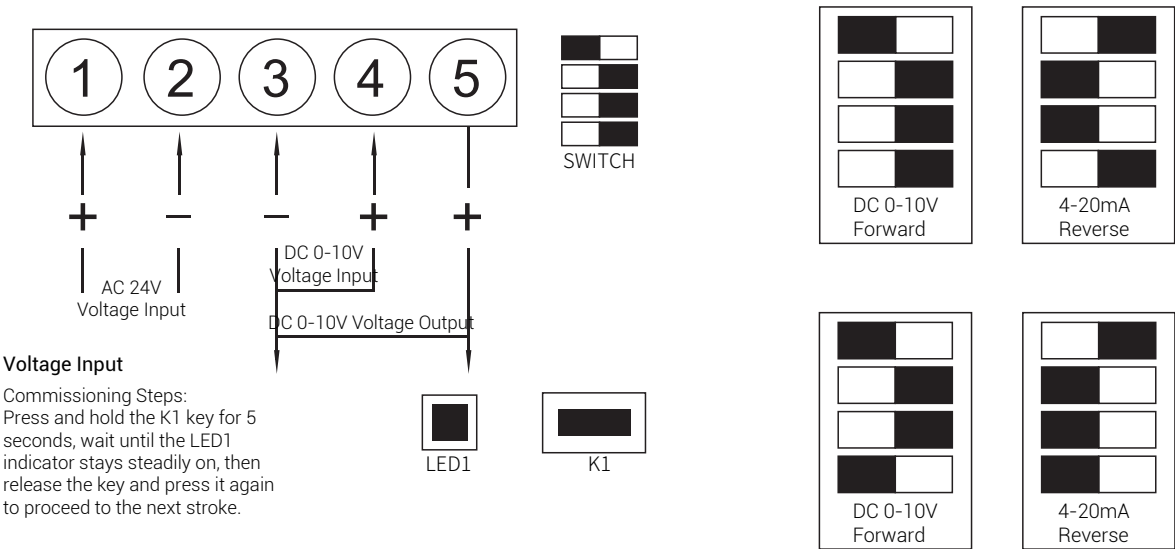
The black box indicates the position of the dip switch.
Note: All settings must be completed before power-on.
Changing settings after power is on may cause control errors.

NO.	FUNCTION	OFF	ON
1.	Signal Input	Voltage (V)	Current (mA)
2.	Signal Feedback	Current(mA)	Voltage (V)
3.	Signal Input and Output Range		
	Current Model	4~20 (mA)	0~20 (mA)
	Voltage Model	2~10 (V)	0~10 (V)
4.	Motor Rotation	Reverse	Forward

◆ Wiring Diagram - Switch Type (GSV11/GSV31)



◆ Wiring Diagram - Proportional Control Type (GSV16)



Voltage Input
Commissioning Steps:
Press and hold the K1 key for 5 seconds, wait until the LED1 indicator stays steadily on, then release the key and press it again to proceed to the next stroke.