



Flow controller with integrated control valve

Flow controller with integrated control valves are primarily applied in center air conditioning auto-control and heating systems.

Features and benefits



- Adopt straight stroke proportional type actuators, flow output characteristic: equal-percentage flow/equal-linear flow (by setting switches S2, S3 on the actuators).
- Dynamic equilibrium introduces design project of bellows balance.
- Actuator input signal: 0~10VDC, 2~10VDC, 0~20mA, 4~20mA (by setting switched S2, S3 on the actuators) .
- Actuator output signal: 0~10VDC, 2~10VDC, 0~20mA, 4~20mA (by setting switched S2, S3 on the actuators) .
- High valve shutoff differential pressure, small leakage rate.
- Matched with “Kvs remote adjuster”, can realize adjustment of Kvs value of valve(set range:40%~100%), Kvs value remote adjuster type: TKVS-1.
- Actuator standard collocation with manual device and power switch.
- Cast steel valve body, surface anti-rust process and fine appearance.

Valve technical parameters

DN [mm]	Caliber [in.]	PN	Kvs value [m ³ /h]	Flow rating when differential pressure is 0.2 bar [m ³ /h]	Max. temperature resistance of medium []	Weight of valve & actuator [kg]
25	1"	16/25	8	4	150	21
32	1 1/4"	16/25	12.5	7	150	23
40	1 1/2"	16/25	20	11	150	25
50	2"	16/25	32	17	150	28
65	2 1/2"	16/25	50	28	150	35
80	3"	16/25	80	40	150	43
100	4"	16/25	125	63	150	63
125	5"	16/25	160	80	150	80
150	6"	16/25	200	100	150	95
200	8"	16/25	260	130	150	155

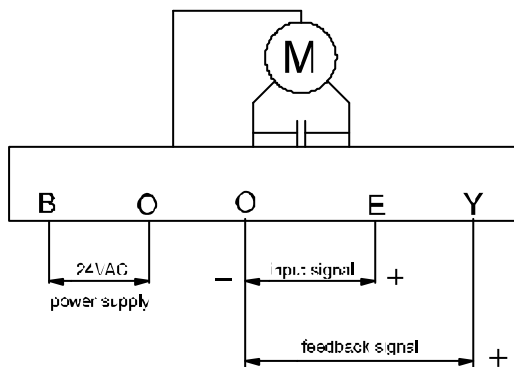
Note: material: cast steel valve body, stainless steel valve seat and stainless steel valve stem.

Actuator technical parameters

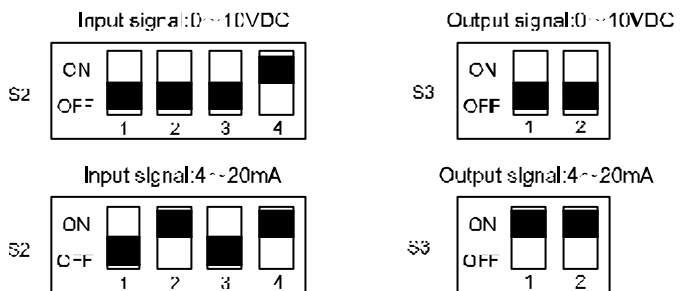
DN [mm]	Caliber [in.]	Type (Valve body+actuator)	Actuator output force [N]	Shutoff differential pressure [MPa]
25	1"	TPF25-2VGC-1000XS	1000	0.50
32	1 1/4"	TPF32-2VGC-1000XS	1000	0.45
40	1 1/2"	TPF40-2VGC-1000XS	1000	0.40
50	2"	TPF50-2VGC-1000XS	1000	0.35
65	2 1/2"	TPF65-2VGC-3000XS	3000	0.60
80	3"	TPF80-2VGC-3000XS	3000	0.50
100	4"	TPF100-2VGC-3000XS	3000	0.35
125	5"	TPF125-2VGC-3000XS	3000	0.50
150	6"	TPF150-2VGC-3000XS	3000	0.40
200	8"	TPF200-2VGC-6500XS	6500	0.40

- Actuator input signal: 0~10V, 2~10V, 0~20mA, 4~20mA
- Actuator output signal: 0~10V, 2~10V, 0~20mA, 4~20mA
- Actuator power: 24VAC (DN200 valve collocated with 220VAC power actuator)

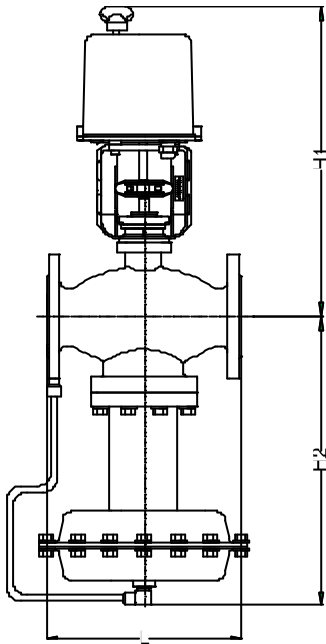
Actuator wiring drawing



Setting



Dimensional drawing



Dimensional table

DN [mm]	Caliber [in.]	H2 [mm]	H2 [mm]	L [mm]
32	1 1/4"	390	345	180
40	1 1/2"	395	355	200
50	2"	410	365	230
65	2 1/2"	425	430	290
80	3"	450	435	310
100	4"	465	490	350
125	5"	485	525	400
150	6"	505	555	480
200	8"	650	655	600