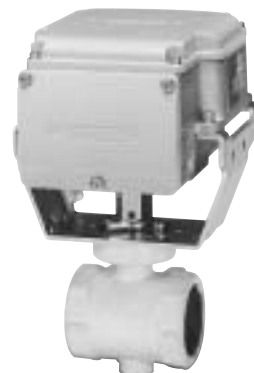


CCM21, CCV20

Actival-FSG Combustion Control Motor and Valve

The CCM21/CCV20 is an integral actuator / electrically driven butterfly valve incorporated with a combustion control motor and valve. The motor uses relay contact input for position proportioning or on-off positioning.

The valve can control the flow of air, city gas, natural gas or LP gas. Since the motor and the valve are directly connected, no linkage adjustment is required.



Specifications

● CCM21 Motor

Model No.	CCM21C1310	CCM21C2310
Control type	Adjustable type for close and open positions	
Rotating angle adjustment (Open - Closed position END switch)	Closed position: 0 to 45°. Open position: 45 to 90°. (Position set at factory: closed position 0°; open position 90°.)	
Power	100Vac, 50/60Hz	200Vac, 50/60Hz
Signal switch	Operating point	Close signal: 1 to 9° outward from closed position Open signal: 1 to 9° inward from opened position
	Electrical rating	250Vac, 5A (resistive load)
Control mode	Proportioning or ON-OFF positioning	
Rotation angle and timing	Angle: 90°. Timing: 30s (50Hz), 25s (60Hz)	
Torque	Rating: 11.8N·m (85% x rated voltage impressed) Maximum: 14.7N·m	
Potentiometer	Normal resistance: 135Ω (integral of 1kΩ potentiometer and 180Ω solid resistor) Maximum impressed voltage: 5Vdc	
Output axis position at factory set	0° (closed valve position)	
Power consumption	7VA	
Ambient temperature	-20 to +60°C	
Ambient humidity	5 to 90% RH	
Protection	Vertical output axis: IP54	
Mounting	Direct mounting on the CCV20 combustion control valve	
Mass	1.6kg	
Accessories	5mm dia. x 14mm (4) hexagon socket bolts for coupling motor and valve	

● CCV20 Valve

Model No.	CCV2020	CCV2025	CCV2032	CCV2040	CCV2050	CCV2065	CCV2080
Connection port	Rc 3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
Flow factor	Cv 5.9	12.4	31.7	45.5	74.1	120.3	174.9
Flow rate	90° at full open 7.3	15.2	38.9	55.8	90.8	147.5	214.3
Nm³/h	0° at full closed 0.5	0.5	0.7	1.0	2.0	3.0	4.0
Applicable pressure	20kPa max.						
Ambient temperature	-10 to +60°C						
Ambient humidity	5 to 90%RH						
Flow temperature	-10 to +60°C						
Type of gas	Air, city gas, natural gas and LP gas						
Valve body material	Cast iron						
Mass (kg)	1.6	1.4	2.0	1.8	2.3	3.0	3.7

Note: Flow conditions of gas are at pressure differential ΔP = 250Pa and air specific gravity of 1.0.

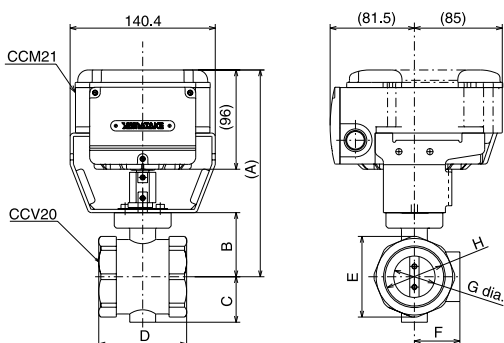
Selection Guide

Model No.	Power supply	Appearance
CCM21C1310	100Vac	
CCM21C2310	200Vac	

Model No.	Pipe connection	Appearance
CCV2020	Rc 3/4"	
CCV2025	Rc 1"	
CCV2032	Rc 1 1/4"	
CCV2040	Rc 1 1/2"	
CCV2050	Rc 2"	
CCV2065	Rc 2 1/2"	
CCV2080	Rc 3"	

Dimensions

(Unit: mm)



Model No.	A	B	C	D	E	F	G	H
CCV2020	187	49	30	75	48	30	16	20A
CCV2025							22	25A
CCV2032	195	57	37	80	64	37	28	32A
CCV2040							32	40A
CCV2050	200	62	40	85	78	44	40	50A
CCV2065	208	70	50		95	55	50	65A
CCV2080	215	77	59	95	110	61	65	80A