

FLOWX Three Position Actuator



Introduction

Three-position style FLOWX actuator is special kind of actuator with 3 positions (0°、45°、90° or 0°、90°、180°). The middle position can be reached by mechanical movement of two auxiliary pistons and can be adjusted. For example, the 90° actuator can have middle positions of 20° 、 30° 、 50° 、 70° .

Working Principle

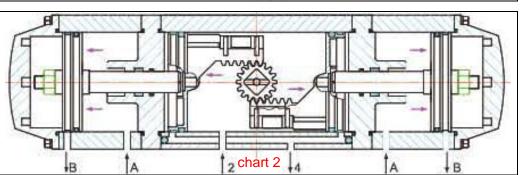
1. Fully Closed Position

From chart 1 we can see that this position is obtained when air is supplied to port 4 and port 2 is in the state of exhaust air.

B A 2 chart 1 4 A B

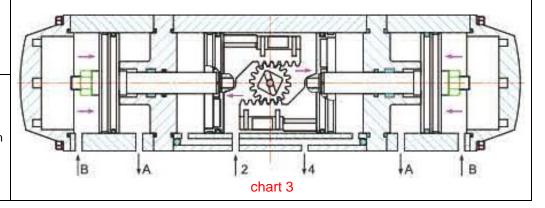
2. Fully Open Position

From chart 2 we can see that this position is obtained when air is supplied to port 2 and port A, meantime, port 4 and port Bare in the state of exhaust air.



3. Midway Position

From chart 3 we can see that this position is obtained when air is supplied to port 2 and port B, meantime, port 4 and port A are in the state of exhaust air. In fact that the midway position is achieved by a mechanical stop of movement on the two auxiliary pistons.



Valve Specifications

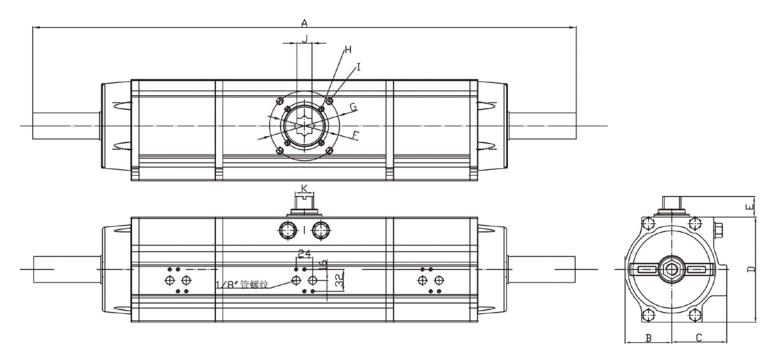
- Air interface and top mounting size is in conform to standard of VDI/VDE3845 NAMUR.
- Bottom hole size is in conform to 1505211. DIN3337
- Constructional style: 3 sections
- Travellength:90°、120°、180°
- Action style: Single and Double
- Start and ending position:±5°
- Lockable at anywhere
- Temperature range: NT(-20℃~+80℃): NBR

LT(-40 $^{\circ}$ C~+80 $^{\circ}$ C): Silicon rubber HT(-15 $^{\circ}$ C~+150 $^{\circ}$ C): Fluorous rubber

- Max pressure: 10bar
- Cylinder Material: Alloy Aluminum, anodizing
- Output axle: 45# electroplate
- Piston material: alloy alumimum anodizing
- Assembliable with: Ball valve, Butterfly valve, Rotary valve.



Dimensions



Model	ISO5211	Α	В	С	D	Е	F	G	Н	I	J	K
63	F05-F07	378	36	45	81	20	50	70	M6*8	M8*12	14	11
75	F05-F07	468	42	45	97	20	50	70	M6*8	M8*12	17	17
88	F05-F07	537	48	59	109	20	50	70	M6*8	M8*12	17	17
100	F07-F10	566	55	68	121.5	20	70	102	M8*8	M10*14	17	17
115	F07-F10	731	64	73	142	30	70	102	M8*12	M10*14	22	27
125	F07-F10	791	68	80	153.5	30	70	102	M8*12	M10*14	22	27
145	F10-F12	898	78.5	90	179	30	102	125	M10*15	M12*18	27	27
160	F10-F12	986	98	100	192	30	102	125	M10*15	M12*18	27	27
180	F14	1050	102	102	222	30	1	140	-	M16*25	36	36
200	F14	1101	112	112	244	30	-	140	-	M16*25	36	36

Installable Accessories

- 1. Solenoid Valve
- 2. Limit Switch
- 3. Positioned
- 4. Lock-up Valve
- 5. Pneumatic Valve
- 6. Air-filler regulator
- 7. Valve Position Transmitter
- 8. Clutch