

3/2-2/2 Way Pneumatic Cylinder Operated Straight Type Mixing And/Or Diverting High Pressure On/Off "3CV" Control Valve

"aira" offers ON/OFF control valve in compact design for mixing and / or diverting three way applications.

Types: 1. Normally "A" Port Close 2. Normally "B" Port Close

Size Range : 1/4" To 4" Screwed / Flanged

Actuator

Technical Specifications :

Body	S/S 304 Pressed
Cover Flange	Aluminium Pressure Die-Cast
Spring	Spring Steel (IS 4454 Gr.II)
Port Connection	1/4" BSP [NPT on request]
Operating Pressure	3.5 To 7 Bar
Position Indicator	Nylon
Operating Cycles	350 To 650 Cycles/Hr
Media	Dry Lubricated Air / Inert Gases Hydint Moisture Separators are advised to use in line

Valve

Size	1/4" To 4" Screwed / Flanged
Body	ASTM A 351 Gr. CF8 / CF8M / CF3M
Trim / Spindle	S.S. AISI 304 / 316 / 316L
Gland Packing	Teflon "V" seals backed by graphite wiper seal [self compensating]
Body Test Pressure	42 Bar Maximum
Working Fluid Press	Refer to table
Operating Temp.	On steam - Continuous 155 °C, Intermittent 180 °C Maximum

Accessories :

3/2 Way Solenoid Valve, Pilot Valve, on/off limit switch, Filter Regulator, Moisture Separator, Quick Exhaust Valve are available on request.

Technical Specification Table

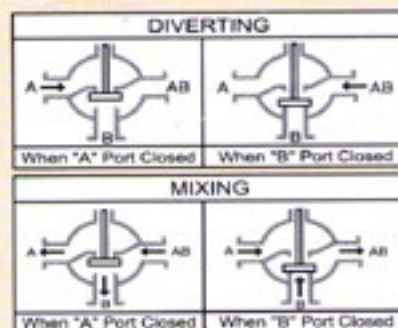
Valve Model	Size Inch	Orifice mm	Max. Op. Press Bar	Flow Factor Kv M3/hr	Actuator Bore mm	Air Consumption Lit./Cycle	Weight (Approx)	
							S/E	F/E
3CV - 15	1/4, 1/2	15	10	3.3	50	0.151	1.760	3.000
3CV - 20	3/4	18	10	4.7	70	0.151	2.220	3.560
3CV - 25	1	23	10	8.5	70	0.162	3.000	4.900
3CV - 40	1 1/4, 1 1/2	36	10	22.5	100	0.309	7.320	10.240
3CV - 50	2	45	7	35	100	0.325	10.440	14.560
3CV - 65	2 1/2	59.5	-	-	120	-	-	-
3CV - 80	3	-	-	-	On Request	-	-	-
3CV - 100	4	-	-	-	On Request	-	-	-

For Any Different Technical Requirement - Available On Request

Dimensions :

(All dimensions are in MM)

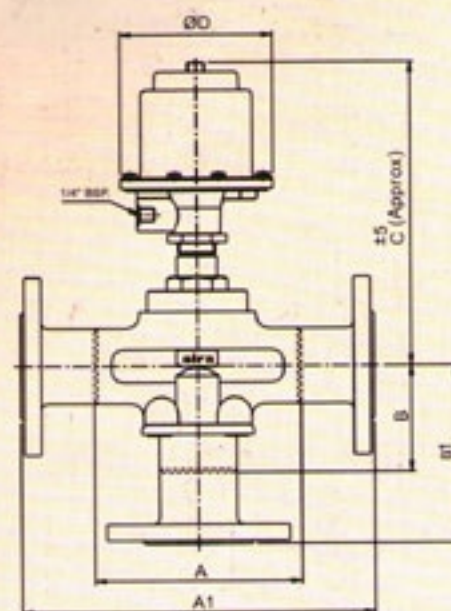
Size (Inch)	Size (MM)	A	A1	B	B1	C	ØD
1/4, 1/2	6, 15	85	151	50	83	185	70
3/4	20	110	185	66	130.5	194	70
1	25	120	189	72	106.5	204	70
1 1/4, 1 1/2	32, 40	150	232	91	32	285	100
2	50	190	283	100	146.5	292	100
2 1/2	65	On Request					
3	80	On Request					
4	100	On Request					



OPERATIONAL & INSTALLATION GUIDELINE

In Normal condition "A" port is closed. In such condition "AB" port is connected to "B" port. When the actuator is energised, the "B" port is closed and "AB" port is connected to "A" port. This way the "Diverting" action AB TO B and AB TO A can be achieved.

In Normal condition "B" port is closed. In such condition "A" port is connected to "AB" port. When the actuator is energised, the "A" port is closed and "B" port is connected to "AB" port. This way the "Mixing" action A TO AB and B TO AB can be achieved.



3/2-2/2 Way Pneumatic Cylinder Operated Straight Type Mixing And/Or Diverting "3LCV" Medium Pressure On/Off Control Valve

"aira" offers ON/OFF control valve in compact design for mixing and / or diverting three way applications.

Types: 1. Normally "A" Port Close 2. Normally "B" Port Close

Size Range : 1/4" To 4" Screwed / Flanged

Actuator

Technical Specifications :

Body	S/S 304 Pressed
Cover Flange	Aluminium Pressure Die-Cast
Spring	Spring Steel (IS 4454 Gr. II)
Port Connection	1/4" BSP [NPT on request]
Operating Pressure	3.5 To 7 Bar
Position Indicator	Nylon
Operating Cycles	350 To 650 Cycles/Hr
Media	Dry Lubricated Air / Inert Gases Hydint Moisture Separators are advised to use in line

Valve

Size	1/4" To 4" Screwed / Flanged
Body	ASTM A351 Gr. CF8 / CF8M / CF3M
Trim / Spindle	S.S. AISI 304 / 316 / 316L
Gland Packing	Teflon 'V' seals backed by graphite wiper seal [self compensating]
Body Test Pressure	16 Bar Maximum
Working Fluid Press	Refer to table
Operating Temp.	On steam - Continuous 155 °C, Intermittent 180 °C Maximum

Accessories :

3/2 Way Solenoid Valve, Pilot Valve, on/off limit switch, Filter Regulator, Moisture Separator, Quick Exhaust Valve are available on request.

Technical Specification Table

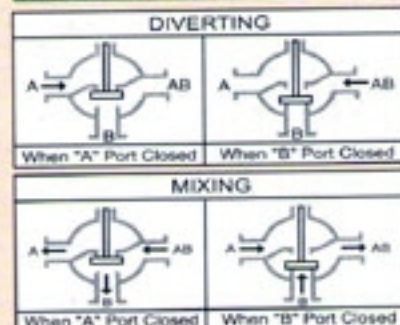
Valve Model	Size inch	Orifice mm	Max. Op. Press Bar	Flow Factor Kv M3/hr	Actuator Bore mm	Air Consumption Lit./Cycle	Weight (Approx)	
							S/E	F/E
3LCS / 3CF - 15	1/4, 1/2	15	10	3.3	50	0.151	1.500	2.750
3LCS / 3CF - 20	3/4	18	10	4.7	50	0.151	2.200	3.000
3LCS / 3CF - 25	1	23	10	8.5	70	0.172	2.500	4.000
3LCS / 3CF - 40	1 1/4, 1 1/2	36	10	22.5	70	0.172	2.500	9.000
3LCS / 3CF - 50	2	45	7	35	70	0.309	9.000	13.500
3LCS / 3CF - 65	2 1/2	59.5	-	-	100	0.329	-	-
3LCS / 3CF - 80	3	-	-	-	120	-	-	-
3LCS / 3CF - 100	4	-	-	-	120	-	-	-

For Any Different Technical Requirement - Available On Request

(All dimensions are in MM)

Dimensions :

Valve Model	Size (Inch)	Size (MM)	L	L1	A	A1	ØE	Pneu. Cylinder ID ØD
3LCS / 3CF - 15	1/4, 1/2	6, 15	70.5	108	50	69	75.5	50
3LCS / 3CF - 20	3/4	20	85.5	117.3	58	73.5	75.5	50
3LCS / 3CF - 25	1	25	90.5	127	60.5	78.5	102	70
3LCS / 3CF - 32	1 1/4	32	98.5	139.7	64	85	102	70
3LCS / 3CF - 40	1 1/2	40	115	165	72.5	97.5	102	70
3LCS / 3CF - 50	2	50	120	178	75	104	102	70
3LCS / 3CF - 65	2 1/2	65	148	210	113	144	134.5	100
3LCS / 3CF - 80	3	80	177	225.5	116	140	164	120
3LCS / 3CF - 100	4	100	190	251	131.5	162	164	120



OPERATIONAL & INSTALLATION GUIDELINE

In Normal condition "A" port is closed. In such condition "AB" port is connected to "B" port. When the actuator is energised, the "B" port is closed and "AB" port is connected to "A" port. This way the "Diverting" action AB TO B and AB TO A can be achieved.

In Normal condition "B" port is closed. In such condition "A" port is connected to "AB" port. When the actuator is energised, the "A" port is closed and "B" port is connected to "AB" port. This way the "Mixing" action A TO AB and B TO AB can be achieved.

