

Catalogue No.

APL / 1011

**3/2 - 2/2 Way Pneumatic Cylinder Operated
Straight Type Mixing And / 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 : 1/2" To 4" Screwed / Flanged

Actuator Technical Specifications :

Body	S.S. AISI 304 (deep drawn)
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	Naylon
Operating Cycles	350 To 650 Cycles / Hr.
Media	Dry Lubricated Air / Inert Gases Hydrant Moisture Separators are advised to use in line
Piston Packing	Buna Nitrile

Valve

Size	1/2" to 4" Screwed / Flanged
Body & Bonnet	ASTM A351 Gr. CF8 / CF8M / CF3M
Stem Packing	Self Adjusting, Spring Loaded Teflon Packing
Trim / Spindle	Stainless Steel 304 / 316 / 316L
Seat	Soft Seated Teflon backed by EPDM. Optional - VITON / EPDM, Buna Nitrile
Gland Packing	Teflon "V" seals backed by graphite wiper seal (self compensating)
Body Test Pressure	42 Bar Maximum
Working Fluid Press.	Refer to table
Leakage	As per ANSI B 16.104 - 1976 Teflon seating Class IV For Other Soft Seating Class VI Drop Tight / Bubble Tight
Working Temp.	On Steam - Continuous 155°C, Intermittent 180°C., with Teflon seating, Buna Nitrile 80°C, EPDM 135°C., VITON 180°C.



Technical Specification Table

Valve Model	Valve Size		Orifice mm	Max. Op. Press Bar	Flow Factor Kv M3/hr	Actuator Bore mm	Air Consumption Lit./Cycle	Weight (Approx.)	
	MM	Inch						S/E	F/E
3CV - 15	15	1/2"	15	10	3.3	70	0.151	1.760	3.000
3CV - 20	20	3/4"	18	10	4.7	70	0.151	2.220	3.560
3CV - 25	25	1"	23	10	8.5	70	0.162	3.000	4.900
3CV - 40	40	1.1/2"	36	10	22.5	100	0.309	7.320	10.240
3CV - 50	50	2"	45	-	35	100	0.325	10.440	14.560
3CV - 65	65	2.1/2"	59.5	-	-	120	-	-	-
3CV - 80	80	3"	-	-	-	-	-	-	-
3CV - 100	100	4"	-	-	-	-	-	-	-

For Any Different Technical Requirement - Available On Request

Dimensions :

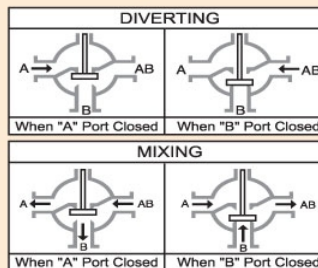
(All Dimensions are in mm)

Valve Model	Valve Size		A	A1	B	B1	C	ED
	MM	Inch						
3CV - 15	15	1/2"	85	151	50	83	185	102
3CV - 20	20	3/4"	110	185	66	130.5	194	102
3CV - 25	25	1"	120	189	72	106.5	204	102
3CV - 40	40	1.1/2"	150	232	91	132	285	134
3CV - 50	50	2"	190	283	100	146.5	292	134
3CV - 65	65	2.1/2"	243	On Req.	108	On Request	On Request	164
3CV - 80	80	3"	-	-	-	-	-	-
3CV - 100	100	4"	-	-	-	-	-	-

OPERATIONAL & INSTALLATION GUIDELINE

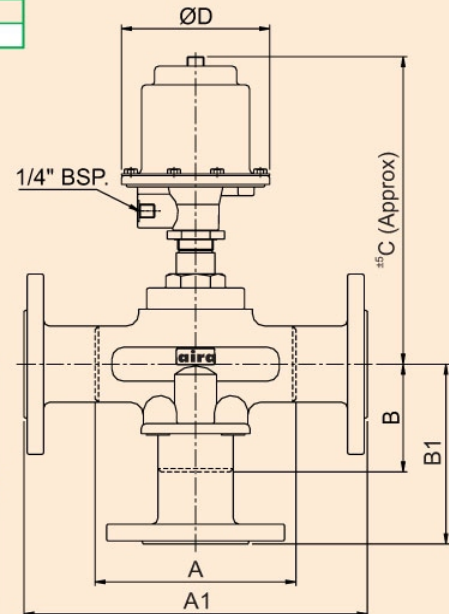
In Normal condition "A" port is closed. In such condition "AB" port is connected to "B" port. When the actuator is energised, the "B" port is closed and "AB" port is connected to "A" port. This way the "Diverting" action AB TO B and AB TO A can be achieved.

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.



Accessories :

- ▶▶ 3/2 Way Solenoid Valve
- ▶▶ Pilot Valve
- ▶▶ On/Off type limit switch
- ▶▶ Combination (Filter + Regulator)
- ▶▶ Moisture Separator
- ▶▶ Quick Exhaust Valve



Note : Since, constant worldwide advancement in technology, we keep our rights reserved to make changes time to time in Technical specifications and Dimensions without prior notice.
Pub. on: June, 2011 (Rev.-08)

