

PNEUMATIC DIAPHRAGM & CYLINDER OPERATED CONTROL VALVES

SERIES : D



VALVE AUTOMATION
ISO 9001 CO.



ISO 9001:2008
BUREAU VERITAS
Certification



Angle Type On / Off Control Valve



**VALVE AUTOMATION
ISO 9001 CO.**

Catalogue No.
APL / 1010



"aira"

offers 2/2 Way Single Acting & Double Acting type Pneumatic Actuator Operated Investment Casting Angle Type Control Valve.

Size Range : 1/2" to 4" (Screwed / Flanged)

SRT / SRK Model TYPES

Normally Close	Energised To Open
Normally Open	Energised To Close

ASV / TOF
Model TYPES

DOUBLE ACTING

SINGLE ACTING

Actuator Specification

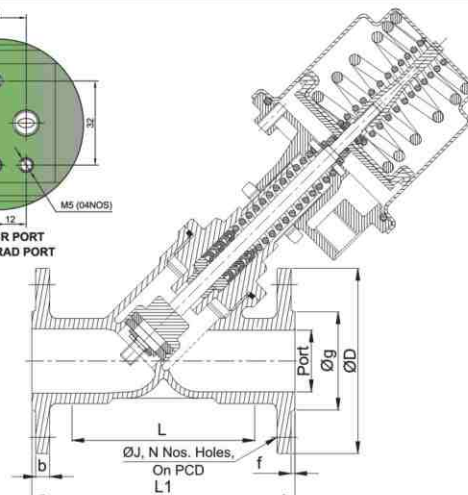
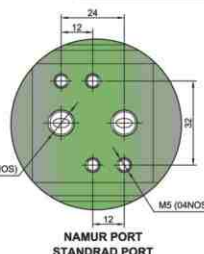
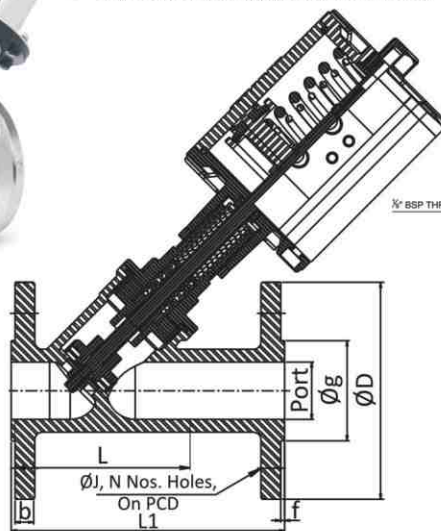
Port Connection	1/4" BSP (NPT On Request)
Operating Pressure	4.5 to 7 BAR (1/2" to 2"), 5 to 7 Bar (2.1/2" to 4")
Operating Cycles	350 to 650 Cycles / Hr.

Valve Specification

Body Test Pressure	24 Bar Maximum
Working Pressure	Upto 10 BAR
Working Temperature	On Steam - Continuous 155 °C, Intermittent 180 °C with Teflon Seating Buna Nitrile 80 °C, EPDM 120 °C, Viton 220 °C
Leakage	As Per ANSI B 16, 16.104 Leakage Class VI Shut off tight / Bubble Tight

Features :

- "Y" Type Construction for ON/OFF application having self - Cleaning features.
- Best choice for speedy and multiple operation.
- Due to Angle shape, easy to mount at congested place.
- Due to Angle seated body, Insensitive to the contaminated fluids.
- Full flow with negligible pressure drop.



Accessories :

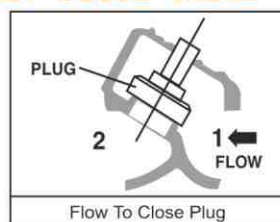
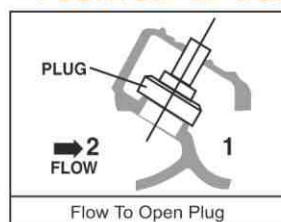
- 3/2 & 5/2 Way Namur Solenoid Valve
- Pilot Valve
- On / Off Type Limit Switch
- Combination (Filter + Regulator)
- Moisture Separator
- Quick Exhaust Valve

Dimensions :

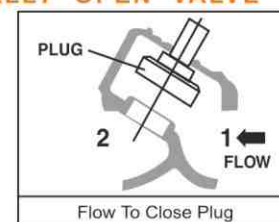
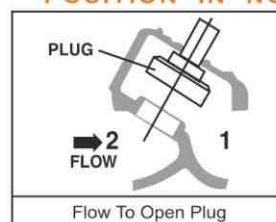
Valve Model	Size		SRT / ASV L	SRK / TOF L1	Port	ØD	b	Øg	f	ØJ	N	PCD	Weight Kgs.	
	Inch	MM											S/E	F/E
SRT/SRK/ASV/TOF - 15	1/2"	15	65	131.40	12.5	88	8	34.9	1.6	15.9	04	60.3	1.760	3.000
SRT/SRK/ASV/TOF - 20	3/4"	20	75	151	19	98	7.5	42.9	1.6	15.9	04	69.9	2.220	3.560
SRT/SRK/ASV/TOF - 25	1"	25	90	160	25	106	7.5	50.8	1.6	15.9	04	79.4	3.000	4.900
SRT/SRK/ASV/TOF - 32	1.1/4"	32	102	184	30	----	----	63.8	1.6	15.9	04	----	7.320	10.240
SRT/SRK/ASV/TOF - 40	1.1/2"	40	125	189	38	125	7.5	73	1.6	15.9	04	98.4	10.440	14.560
SRT/SRK/ASV/TOF - 50	2"	50	151	230	49	150	8	92.10	1.6	19.05	04	120.7	----	----
SRT/SRK/ASV/TOF - 65	2.1/2"	65	195.5	239	64	180	15.9	104.8	1.6	19.05	04	139.7	----	----
SRT/SRK/ASV/TOF - 80	3"	80	195	250	75	190	19	127	1.6	19.05	04	152.4	----	----
SRT/SRK/ASV/TOF - 100	4"	100	314	420	102	230	22.3	157.2	1.6	19.05	08	190.50	----	----

(All Dimensions are in mm)

POSITION IN NORMALLY CLOSE VALVE



POSITION IN NORMALLY OPEN VALVE

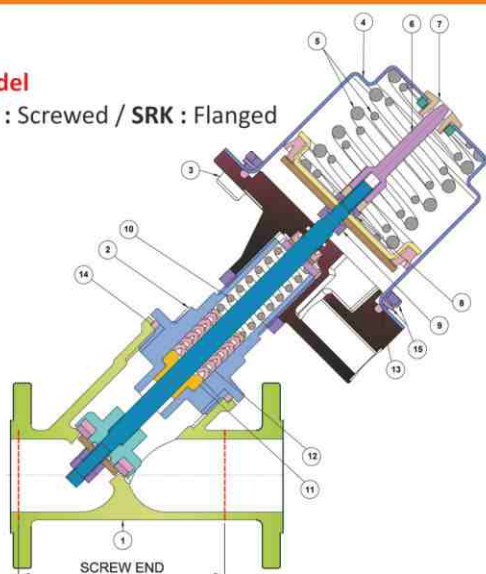


Note : Since, constant worldwide advancement in technology, We keep our rights reserved to make changes time to time in Technical specifications and Dimensions without prior notice.

Pub. on: January, 2015 (Rev.-01)

Model

SRT : Screwed / SRK : Flanged



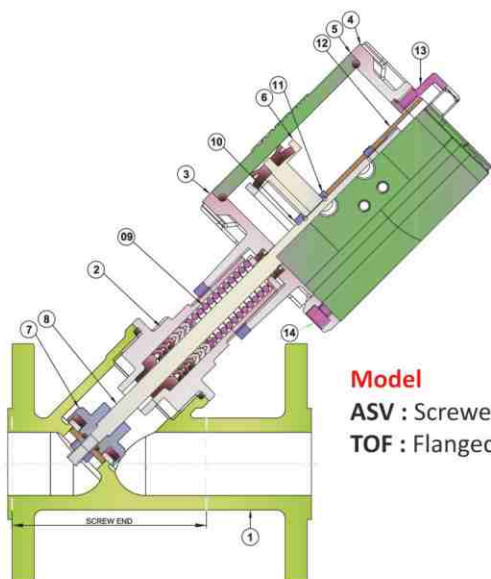
No.	DESCRIPTION	Material	Qty.
1	Body	CF8 / CF8M	01
2	Bonnet	CF8 / CF8M	01
3	Flange	Allu. Alloy	01
4	Cap	S. S. 304	01
5	Piston Spring (R.H.) & (L.H.)	Spring Steel	01
6	Piston Indicator	Nylon	01
7	Piston Indicator Guide & Nut	Nylon	01
8	Piston Collar (Small)	Brass	01
9	Piston Collar (Big)	Brass	01
10	Spring for Bonnet	S. S. 304	01
11	"T" Bush (Guide Bush) Bonnet	PTFE + C	01
12	Bonnet (U-Seal)	PTFE + C	02
13	O-Ring For Flange	NBR	01
14	Teflon for Body (Sealing Gasket)	PTFE	01
15	Piston Cap Hex Bolt & Spring Washer	S. S. 304	06

Double Acting Description

No.	DESCRIPTION	Material	Qty.
1	Body	CF8 / CF8M	01
2	Bonnet	CF8 / CF8M	01
3	Flange Bottom Cover	CF8 / CF8M	01
4	Flange Top Cover	CF8 / CF8M	01
5	Act. Cap	Aluminium	01
6	Piston	Aluminium	01
7	Plug	S. S. 304	01
8	Plug + Piston Shaft	S. S. 304	01
9	Spring For Bonnet	M. S.	01
10	Piston Collar (Big)	Brass	01
11	Piston Collar (Small)	Brass	01
12	Indicator For Piston	Nylon / Alumi.	01
13	Dom Indicator	Nylon	01
14	Socket Head Cap Screw	Std.	08

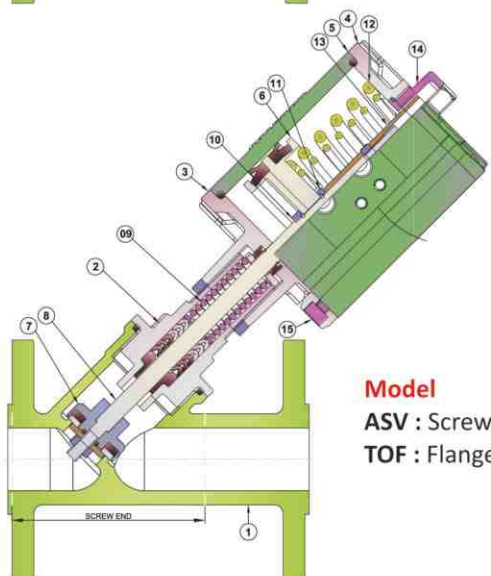
Model

**ASV : Screwed
TOF : Flanged**



Model

**ASV : Screwed
TOF : Flanged**



Single Acting Description

No.	DESCRIPTION	Material	Qty.
01	Body	CF8 / CF8M	01
02	Bonnet	CF8 / CF8M	01
03	Flange Bottom Cover	CF8 / CF8M	01
04	Flange Top Cover	CF8 / CF8M	01
05	Act. Cap	Aluminium	01
06	Piston	Aluminium	01
07	Plug	S. S. 304	01
08	Plug + Piston Shaft	S. S. 304	01
09	Spring For Bonnet	M. S.	01
10	Piston Collar (Big)	Brass	01
11	Piston Collar (Small)	Brass	01
12	Spring For Piston	Spring Steel	01
13	Indicator For Piston	Nylon / Aluminium	01
14	Dom Indicator	Nylon	01
15	Socket Head Cap Screw	STD.	08

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: January, 2015 (Rev.-01)

2/2 Way Pneumatic Single & Double Acting Globe Type On / Off Valve

Catalogue No.
APL / 1084



"aira"

offers 2/2 Way Single & Double Acting Pneumatic Operated Investment Casting Globe Type On / Off Valve.

Size Range : 1/2" to 4" Screwed / Flanged End

Actuator Specification

Port Connection	1/4" BSP (NPT On Request)
Operating Pressure	3.5 To 7 Bar
Operating Cycles	350 to 650 Cycles / Hr.

GKS / GKF TYPES

Normally Close	Energised To Open
Normally Open	Energised To Close

AGS / AGF TYPES

Double Acting
Single Acting

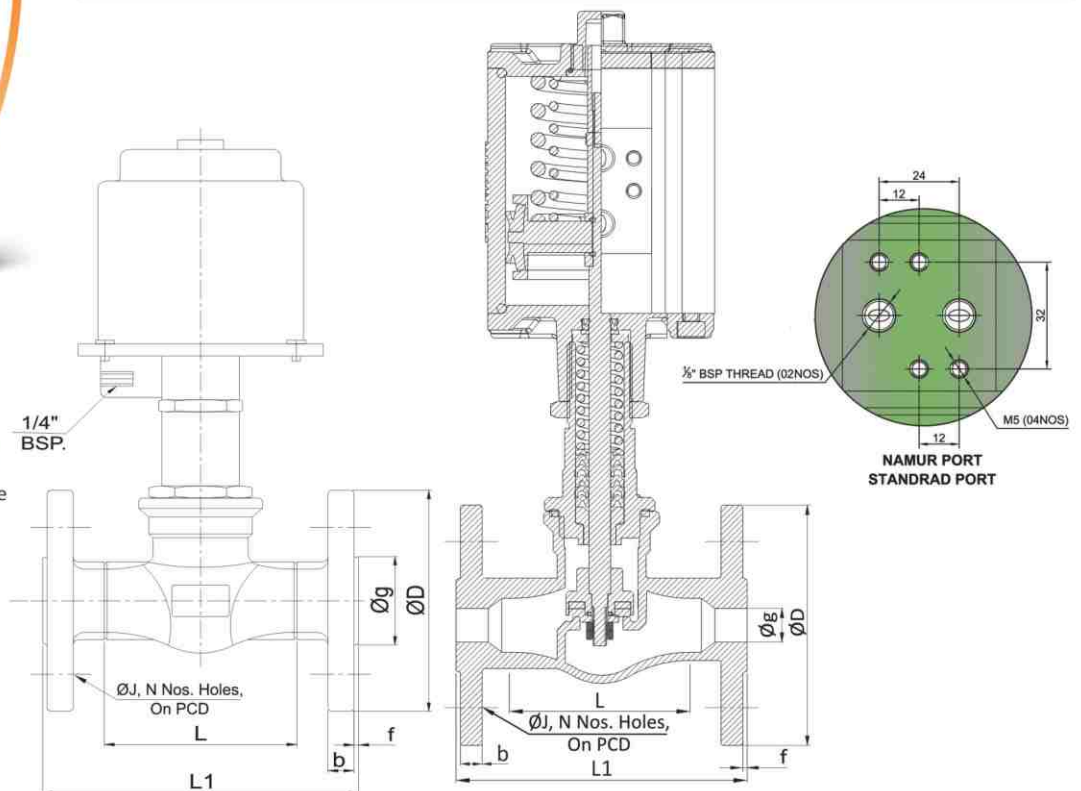
Valve Specification

Body Test Pressure	24 Bar Maximum
Working Pressure	Refer to Table
Working Temperature	On Steam - Continuous 155 °C, Intermittent 180 °C with Teflon Seating Buna Nitrile 80 °C, EPDM 120 °C, Viton 220 °C
Leakage	As Per ANSI B 16.104 - 1976 Teflon Seating Class IV For Other Soft Seating Class VI Drop Tight / Bubble Tight



Accessories :

- 3/2 & 5/2 Way Namur Solenoid Valve
- Pilot Valve
- On / Off Type Limit Switch
- Combination (Filter + Regulator)
- Moisture Separator
- Quick Exhaust Valve



Dimensions :

(All Dimensions are in mm)

Valve Model	Size		S/E L	F/E L1	Port	ØD	b	Øg	f	ØJ	N	PCD	Weight	
	Inch	MM											S/E	F/E
GKS/GKF/AGS/AGF - 15	1/2"	15	65	107.9	12.5	90	8	37.9	2	15.9	04	60.3	1.00	1.82
GKS/GKF/AGS/AGF - 20	3/4"	20	75	117.3	20	100	8.9	42.9	2	15.9	04	69.9	1.40	2.06
GKS/GKF/AGS/AGF - 25	1"	25	85	127	24	110	9.6	50.8	2	15.9	04	79.4	1.74	3.00
GKS/GKF/AGS/AGF - 32	1.1/4"	32	110	139.7	30	115	11.2	63.5	2	15.9	04	88.9	2.12	3.80
GKS/GKF/AGS/AGF - 40	1.1/2"	40	114	165.1	37	125	12.7	73	2	15.9	04	98.4	2.36	4.78
GKS/GKF/AGS/AGF - 50	2"	50	125	177.8	49	150	14.3	92.1	2	19.05	04	120.7	3.00	6.64
GKS/GKF/AGS/AGF - 65	2.1/2"	65	--	190.5	64	180	15.9	104.8	2	19.05	04	139.7	-	-
GKS/GKF/AGS/AGF - 80	3"	80	--	203.2	75	190	17.5	127	2	19.05	04	152.4	-	-
GKS/GKF/AGS/AGF - 100	4"	100	--	228.6	98	230	22.3	157.2	2	19.05	08	190.5	-	-

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: January, 2015 (Rev.-01)

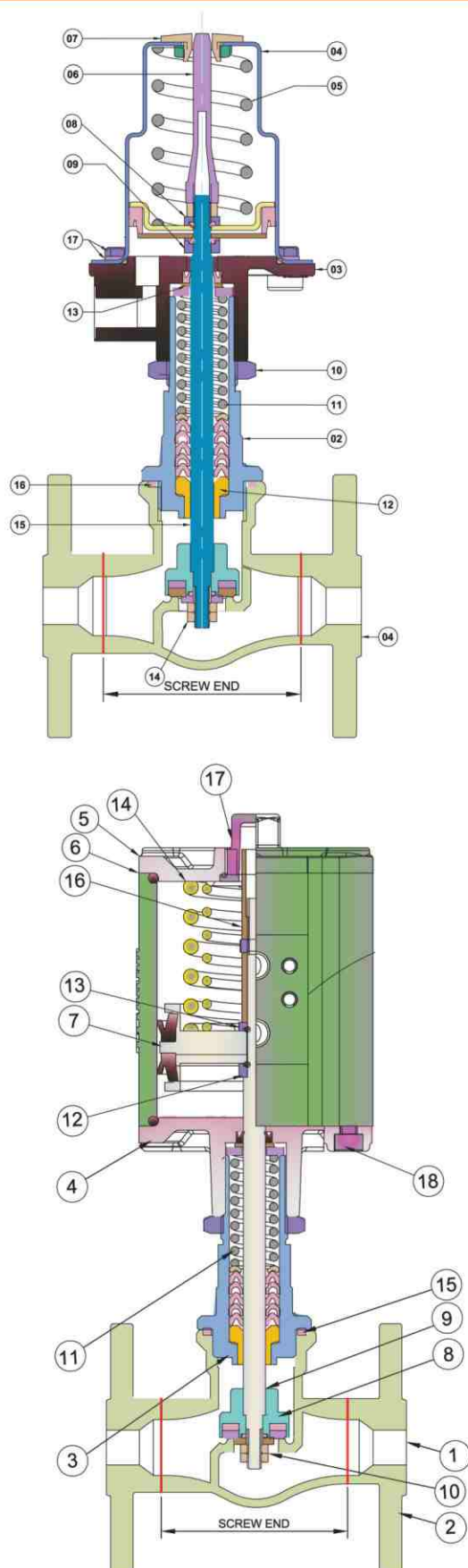
Description

No.	DESCRIPTION	Material	Qty.
1	Body	CF8 / CF8M	01
2	Bonnet	CF8 / CF8M	01
3	Flange	Allu. Alloy	01
4	Cap	S. S. 304	01
5	Piston Spring (RH)	Spring Steel	01
6	Piston Indicator	Nylon	01
7	Piston Indicator Guide & Nut	Nylon	01
8	Piston Collar (Small)	Brass	01
9	Piston Collar (Big)	Brass	01
10	Lock Nut For Flange	M. S.	01
11	Spring For Bonnet	S. S. 304	01
12	"T" Bush (Guide Bush) Bonnet	PTFE + C	01
13	Flange Flat Washer (Small)	NBR	01
14	Lock Nut (Plug)	S. S. 304	01
15	Plug + Shaft	S. S. 304	01
16	Teflon For Body (Sealing Gasket)	PTFE	01
17	Piston Cap Hex Bolt & Spring Washer	S. S. 304	12

Description

No.	DESCRIPTION	Material	Qty.
01	Body	CF8 / CF8M	01
02	F/E End Connector	CF8 / CF8M	01
03	Bonnet	CF8 / CF8M	01
04	Flange Bottom Cover	CF8 / CF8M	01
05	Flange Top Cover	CF8 / CF8M	01
06	Act. Cap	Aluminium	01
07	Piston	Aluminium	01
08	Plug	S. S. 304	01
09	Plug + Piston Shaft	S. S. 304	01
10	Lock Nut For Plug	S. S. 304	01
11	Spring For Bonnet	M. S.	01
12	Piston Collar (Big)	Brass	01
13	Piston Collar (Small)	Brass	01
*14	Spring For Piston	Spring Steel	01
15	Teflon For Body	PTFE	01
16	Indicator For Piston	Nylon / Aluminium	01
17	Dom Indicator	Nylon	01
18	Socket Head Cap Screw	STD.	08

★ These Item (Spring) Not Applicable In Double Acting Actuator



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: January, 2015 (Rev.-01)

2/2 - 3/2 Way Pneumatic Single & Double Acting Straight Type Mixing & Diverting High Pressure Control Valve

"aira"

offers ON/OFF Valve in compact Design for mixing and or diverting three way application.

Size Range : 1/2" to 2.1/2" Screwed / Flanged

3LCS / 3LCF TYPES

Normally Close	Energised To Open
Normally Open	Energised To Close

3ACS / 3ACF TYPES

Double Acting
Single Acting

Actuator Specification

Port Connection	1/4" BSP (NPT On Request)
Operating Pressure	4.5 to 7 BAR (1/2" to 2") 5 to 7 Bar (2.1/2")
Operating Cycles	350 to 650 Cycles / Hr.

Valve Specification

Body Test Pressure	42 Bar Maximum
Working Pressure	Refer to Table
Working Temperature	On Steam - Continuous 155 °C, Intermittent 180 °C with Teflon Seating Buna Nitrile 80 °C, EPDM 120 °C, Viton 220 °C
Leakage	As Steam ANSI B 16.104 - 1976 Teflon Seating Class IV for Other Soft Seating Class VI Drop Tight / Bubble Tight

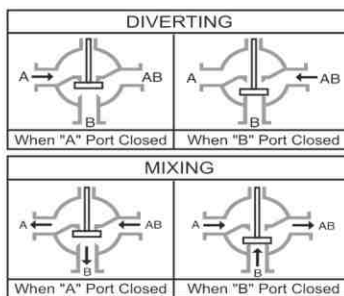
Technical Specification Table

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

For Any Different Technical Requirement - Available On Request

Accessories :

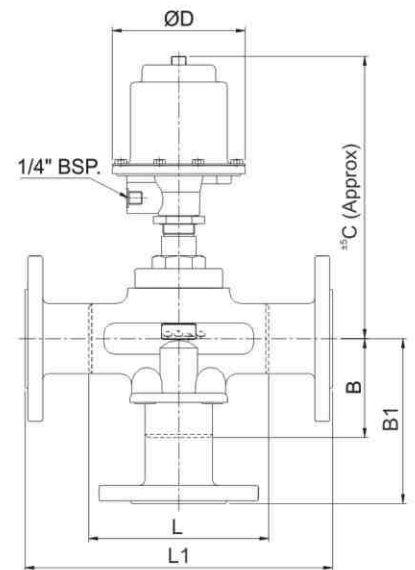
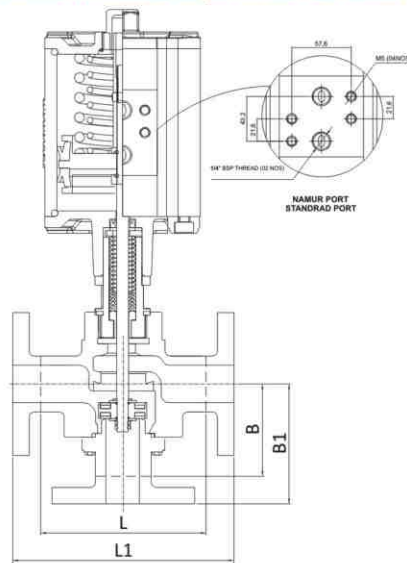
- 3/2 & 5/2 Way Namur Solenoid Valve
- Pilot Valve
- On / Off Type Limit Switch
- Combination (Filter + Regulator)
- Moisture Separator
- Quick Exhaust Valve



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.



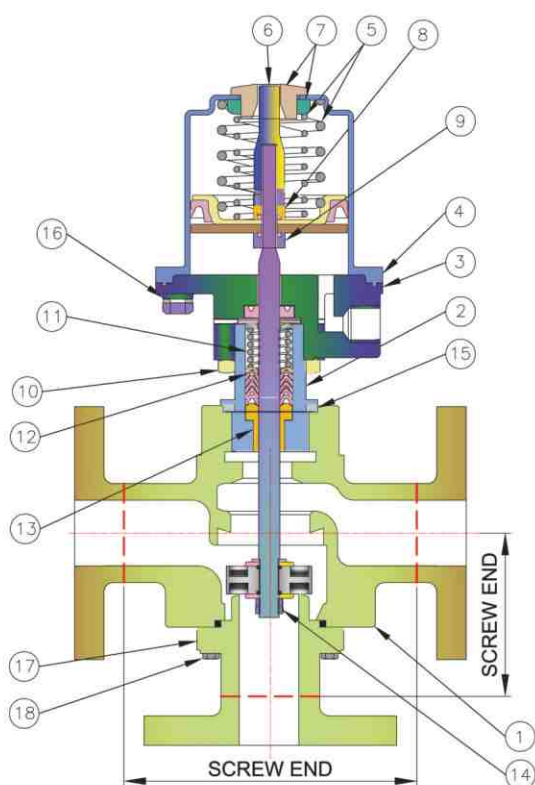
Dimensions :

(All Dimensions are in mm)

Valve Model	Size		3CVS L	3CVF L1	B	B1	C	ØD
	Inch	MM						
3CVS / 3CVF / 3ACS / 3ACF - 15	1/2"	15	85	151	50	83	185	102
3CVS / 3CVF / 3ACS / 3ACF - 20	3/4"	20	110	185	66	130.5	194	102
3CVS / 3CVF / 3ACS / 3ACF - 25	1"	25	120	189	72	106.5	204	102
3CVS / 3CVF / 3ACS / 3ACF - 40	1.1/2"	40	150	232	91	132	285	134
3CVS / 3CVF / 3ACS / 3ACF - 50	2"	50	190	283	100	146.5	292	164
3CVS / 3CVF / 3ACS / 3ACF - 65	2.1/2"	65	243	On Req.	108	On Req.	On Req.	164

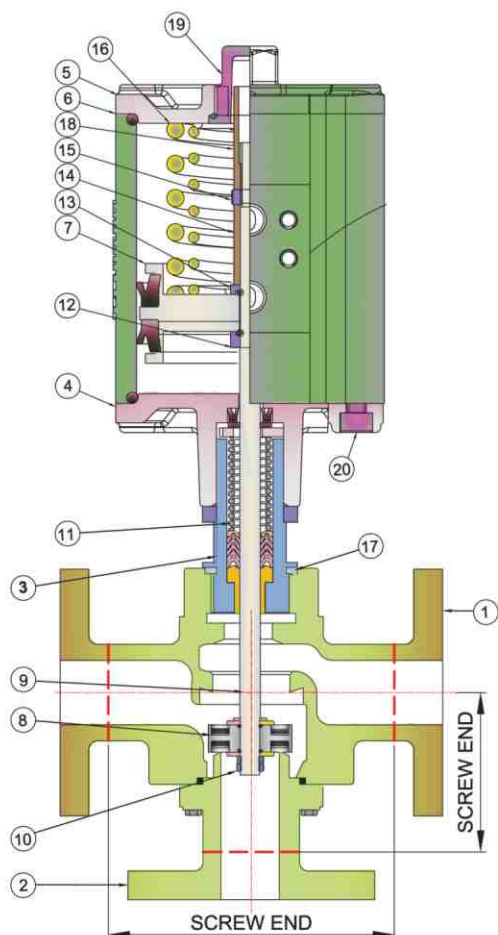
Note : Since, constant worldwide advancement in technology, We keep our rights reserved to make changes time to time in Technical specifications and Dimensions without prior notice.

Pub. on: January, 2015 (Rev.-01)



Description

No.	DESCRIPTION	Material	Qty.
01	Body	CF8 / CF8M	01
02	Bonnet	CF8 / CF8M	01
03	Flange	CF8 / CF8M / Alu.	01
04	Cap	S. S. 304	01
05	Piston Spring (RH)&(LH)	Spring Steel	01
06	Piston Indicator	Nylon	01
07	Piston Indicator Guide Nut	Nylon	01
08	Piston Collar (Small)	Brass	01
09	Piston Collar (Big)	Brass	01
10	Lock Nut For Flange	M. S.	01
11	Spring For Bonnet	S. S. 304	01
12	Bonnet V - Seal	PTFE	03
13	"T" Bush (Guide Bush) Bonnet	PTFE + C	01
14	Lock Nut (Plug)	S. S. 304	02
15	Teflon For Body (Sealing Gasket)	PTFE	01
16	Piston Cap Hex Bolt & Spring Washer	S. S. 304	06
17	Connector	CF8 / CF8M	01
18	Connector Hex Bolt & Spring Washer	S. S. 304	04



Description

No.	DESCRIPTION	Material	Qty.
01	Body	CF8 / CF8M	01
02	F/E End Connector	CF8 / CF8M	01
03	Bonnet	CF8 / CF8M	01
04	Flange Bottom Cover	CF8 / CF8M	01
05	Flange Top Cover	CF8 / CF8M	01
06	Act. Cap	Aluminium	01
07	Piston	Aluminium	01
08	Plug	S. S. 304	01
09	Plug + Piston Shaft	S. S. 304	01
10	Lock Nut For Plug	S. S. 304	01
11	Spring For Bonnet	M. S.	01
12	Piston Collar (Big)	Brass	01
13	Piston Collar (Small)	Brass	01
14	Piston Long Collar	S. S. / Alu.	01
15	Piston Collar Lock Nut	S. S. 304	01
★16	Spring For Piston	Spring Steel	01
17	Teflon For Body	PTFE	01
18	Indicator For Piston	Nylon / Aluminium	01
19	Dom Indicator	Nylon	01
20	Socket Head Cap Screw	STD.	08

★ These Item (Spring) Not Applicable In Double Acting Actuator

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: January, 2015 (Rev.-01)

2/2 - 3/2 Way Pneumatic Single & Double Acting Straight Type Mixing & Diverting Medium Pressure Control Valve

Catalogue No.
APL / 1011



"aira"

offers ON/OFF Control Valve in compact Design for mixing and or diverting three way application

Size Range : 1/2" to 4" Screwed / Flanged

Actuator Specification

Port Connection	1/4" BSP (NPT On Request)
Operating Pressure	4.5 to 7 BAR (1/2" to 2"), 5 to 7 Bar (2.1/2" to 4")
Operating Cycles	350 to 650 Cycles / Hr.

3LCS / 3LCF TYPES

Normally Close	Energised To Open
Normally Open	Energised To Close

3ACS / 3ACF TYPES

Double Acting
Single Acting

Technical Specification Table

Size		Orifice	Max. Oper.	Flow Factor	Actuator	Air Consumption
Inch	MM	mm	Press. Bar	Kv M3/hr	Bore mm	Lit./ Cycle
1/4"	6	14	10	3.3	50	0.151
1/2"	15	14	10	3.3	50	0.151
3/4"	20	15	10	4.7	50	0.151
1"	25	22	10	8.5	70	0.172
1.1/4"	32	28	10	22.5	70	0.172
1.1/2"	40	36	10	22.5	70	0.172
2"	50	45	7	35	70	0.309
2.1/2"	65	60	-	-	100	0.329
3"	80	60	-	-	120	-
4"	100	78	-	-	120	-

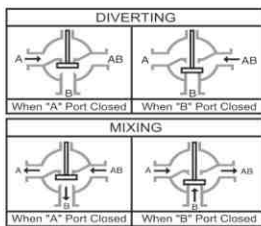
Accessories :

- 3/2 & 5/2 Way Namur Solenoid Valve
- Pilot Valve
- On / Off Type Limit Switch
- Combination (Filter + Regulator)
- Moisture Separator
- Quick Exhaust Valve

Valve Specification

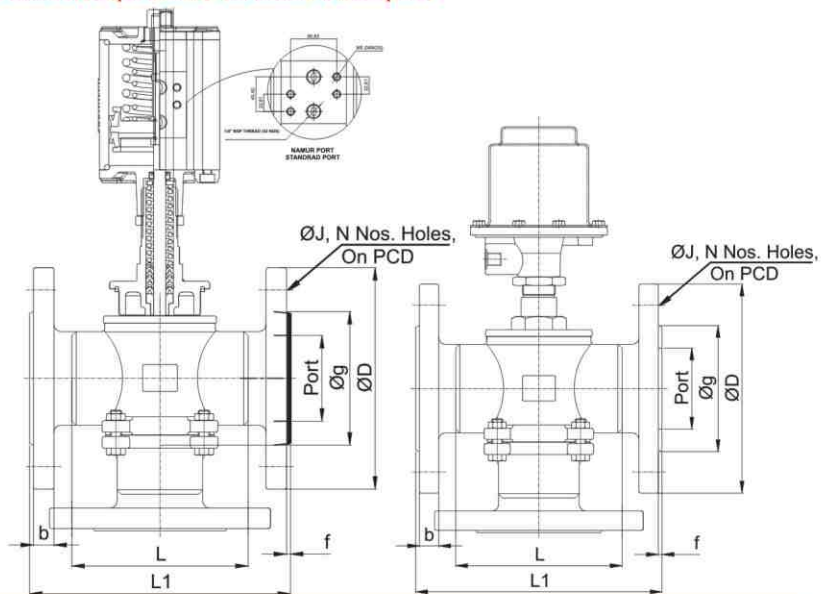
Body Test Pressure	16 Bar Maximum
Working Pressure	Refer to Table
Working Temperature	On Steam - Continuous 155 °C, Intermittent 180 °C with Teflon Seating Buna Nitrile 80 °C, EPDM 120 °C, Viton 220 °C
Leakage	As Steam ANSI B 16.104 - 1976 Teflon Seating Class IV for Other Soft Seating Class VI Drop Tight / Bubble Tight

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 A B can be achieved.



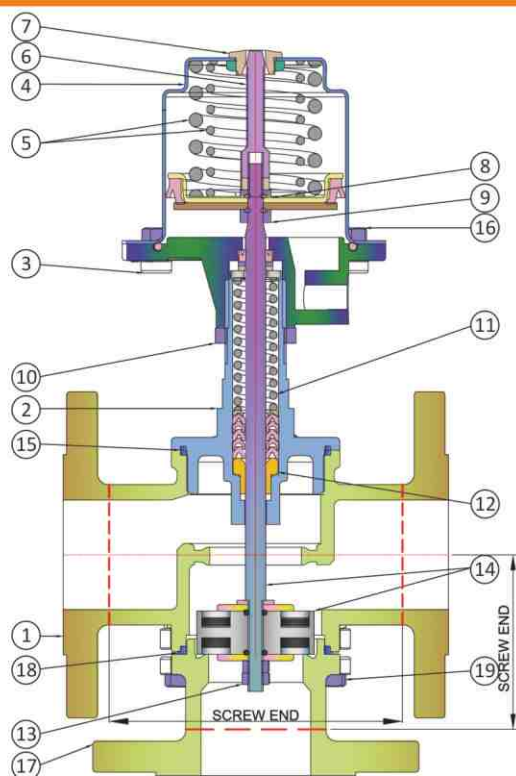
Dimensions :

(All Dimensions are in mm)

Valve Model	Size		3LCS L	3LCF L1	Port	ØD	b	Øg	f	ØJ	N	PCD	Weight (Approx.)	
	Inch	MM											S/E	F/E
3LCS/3LCF/3ALCS/3ALCF - 15	1/2"	15	70.5	108	12.5	90	8	34.9	2	15.9	4	60.3	1.240	2.750
3LCS/3LCF/3ALCS/3ALCF - 20	3/4"	20	85.5	117.3	17	100	8.9	42.9	2	15.9	4	69.9	1.280	3.000
3LCS/3LCF/3ALCS/3ALCF - 25	1"	25	90.5	127	24	110	9.6	50.8	2	15.9	4	79.4	2.000	4.000
3LCS/3LCF/3ALCS/3ALCF - 32	1.1/4"	32	98.5	139.7	30	115	11.2	63.5	2	15.9	4	88.9	2.640	9.000
3LCS/3LCF/3ALCS/3ALCF - 40	1.1/2"	40	115	165.1	37	125	12.7	73	2	15.9	4	98.4	3.000	9.000
3LCS/3LCF/3ALCS/3ALCF - 50	2"	50	120	177.8	49	150	14.3	92.1	2	19.05	4	120.7	3.620	13.500
3LCS/3LCF/3ALCS/3ALCF - 65	2.1/2"	65	148	213	64	180	15.9	104.8	2	19.05	4	139.7	9.060	17.260
3LCS/3LCF/3ALCS/3ALCF - 80	3"	80	177	230	75	190	17.5	127	2	19.05	4	152.4	11.440	20.460

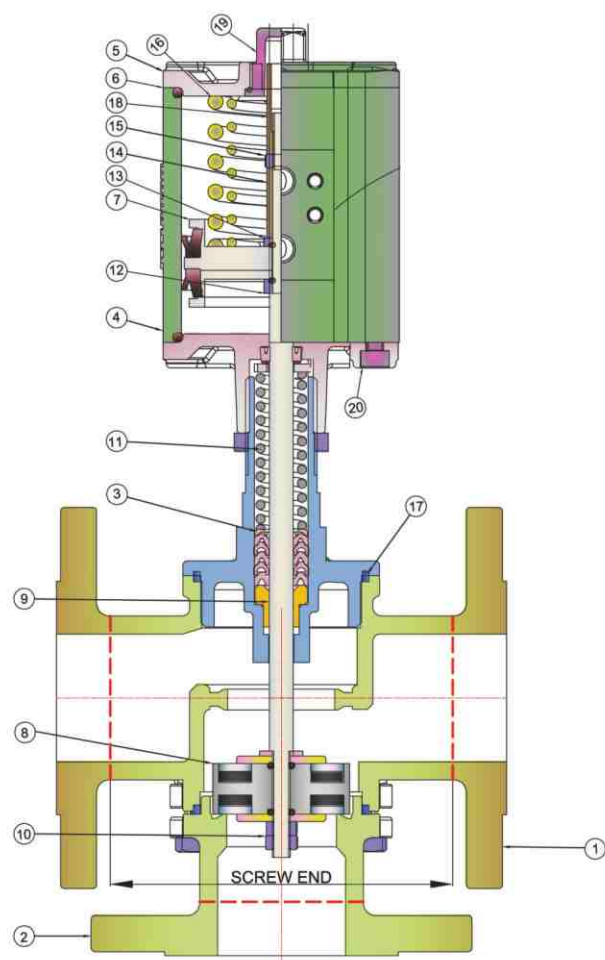
Note : Since, constant worldwide advancement in technology, We keep our rights reserved to make changes time to time in Technical specifications and Dimensions without prior notice.

Pub. on: January, 2015 (Rev.-01)



Description

No.	DESCRIPTION	Material	Qty.
1	Body	CF8 / CF8M	01
2	Bonnet	CF8 / CF8M	01
3	Flange	CF8 / Alu.	01
4	Cap	S. S. 304	01
5	Piston Spring (RH) & (LH)	Spring Steel	01
6	Piston Indicator	Nylon	01
7	Piston Indicator Guide & Nut	Nylon	01
8	Piston Collar (Small)	Brass	01
9	Piston Collar (Big)	Brass	01
10	Lock Nut For Flange	M. S.	01
11	Spring For Bonnet	S. S. 304	01
12	"T" Bush (Guide Bush) Bonnet	PTFE + C	01
13	Lock Nut (Plug)	S. S. 304	01
14	Plug + Shaft	S. S. 304	01
15	Teflon For Body (Sealing Gasket)	PTFE	01
16	Piston Cap Hex Bolt & Spring Washer	S. S. 304	06
17	Connector	CF8 / CF8M	01
18	Teflon For Connector (Sealing Gasket)	CF8 / CF8M	01
19	Piston Cap Hex Bolt & Spring Washer	S. S. 304	04



Description

No.	DESCRIPTION	Material	Qty.
1	Body	CF8 / CF8M	01
2	F/E End Connector	CF8 / CF8M	01
3	Bonnet	CF8 / CF8M	01
4	Flange Bottom Cover	CF8 / CF8M	01
5	Flange Top Cover	CF8 / CF8M	01
6	Act. Cap	Aluminium	01
7	Piston	Aluminium	01
8	Plug	S. S. 304	01
9	Plug + Piston Shaft	S. S. 304	01
10	Lock Nut For Plug	S. S. 304	01
11	Spring For Bonnet	M. S.	01
12	Piston Collar (Big)	Brass	01
13	Piston Collar (Small)	Brass	01
14	Piston Long Collar	S. S. / Alu.	01
15	Piston Collar Lock Nut	S. S. 304	01
16	Spring for Piston	Spring Steel	01
17	Teflon for Body	PTFE	01
18	Indicator For Piston	Nylon / Alu.	01
19	Dom Indicator	Nylon	01
20	Socket Head Cap Screw	STD.	08

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: January, 2015 (Rev.-01)

Pneumatic Cylinder Operated Pharma Diaphragm Valve T. C. End

Catalogue No.
APL / 2035



"aira"

offers Pneumatic Cylinder Operated Investment Casted Diaphragm valve For Your Bio Pharma.

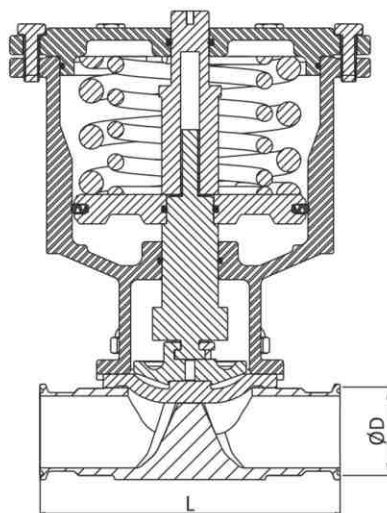
Size Range : 1/2" to 3"

Features :

- The Diaphragm provides the body seal as well as the seat seal. There are no paths the outside environment an as such the valve is suitable for aseptic processes.
- As the valve is closed a pressure pad which supports the diaphragm moves towards the sealing face on the body. As the pressure plate moves the diaphragm flexes and is forced down onto the seal area in the center of the body thus closing off the flow path through the body.
- The inter - relationship of body to the pressure plate prevent over compression of the diaphragm.
- The valve can be actuated either manually or pneumatically and controlled by control tops and solenoid valves.

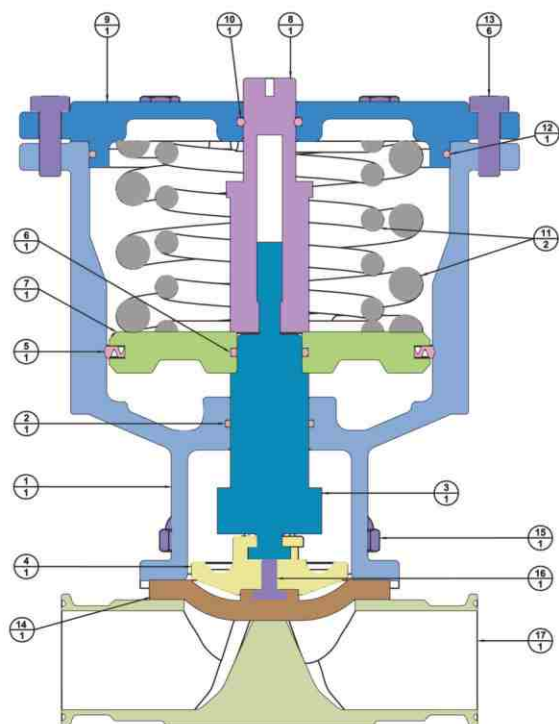
Application :

- Diaphragm valves, manually or pneumatically operated, and specially design for use on hygienic and aseptic process in the pharmaceutical industries.
- The valves is excellent for flow control as well as for Open / Close duties.



Dimensions : (All Dimensions are in mm)

Valve Model	Size		L	ØD
	Inch	MM		
PDV - T - 15	1/2"	15	108	34
PDV - T - 20	3/4"	20	117	34
PDV - T - 25	1"	25	127	50.5
PDV - T - 32	1.1/4"	32	146	50.5
PDV - T - 40	1.1/2"	40	159	50.5
PDV - T - 50	2"	50	190	64
PDV - T - 65	2.1/2"	65	216	91
PDV - T - 80	3"	80	254	106



No.	DESCRIPTION	Material	Qty.
1	Body	CF8 / CF8M / CF3M	01
2	Body O - Ring	NBR	01
3	Stem Top	Aluminium	01
4	Compressor	S. S.	01
5	Piston	Aluminium	01
6	Piston O - Ring	NBR	01
7	V - Seal	NBR	01
8	Stem Bottom	Aluminium	01
9	Cover	CF8 / CF8M	01
10	Cover O - Ring	NBR	01
11	Spring	S. S.	02
12	Body Cover O - Ring	NBR	01
13	Hex Bolt	S. S. 304	06
14	Diaphragm	NBR	01
15	Cap Nut	S. S. 304	04
16	Bolt For Diaphragm	S. S. 304	01
17	PDV Body	CF8 / CF8M	01

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: January, 2015 (Rev.-01)



www.airaindia.com / www.airaeuro.com



PNEUMATIC DIAPHRAGM OPERATED Rubber Lined Diaphragm Valve

Catalogue No.
APL / 2036



"aira"

Offers Pneumatic Operated Rubber Lined Diaphragm Valve For Waste & Water Treatment Plants, Filtration Plants, Chlorination Plants, etc....

Size Range : 1/2" to 8" Flanged

Design Features :

- The Diaphragm Valve is essentially a simple pinch clamp, closed by pressing a flexible diaphragm against transverse weir, when fully closed, the diaphragm seats against the weir providing a leak tight closure.
- The diaphragm valves are recommended for handling sticky and viscous fluids, slurries and highly corrosive and hazardous and other hard to handle mediums or where tight closure is prime factor, It is the most ideal valve to handle fluids that require high purity and should remain free from contamination.
- The diaphragm valve is simple pinch type valve and of low pressure type because of large area of diaphragm and is extensively used for both on/off and throttling service and finds its application in Water treatment plants, Filtration plants, Chlorination Plants etc.....

Specification

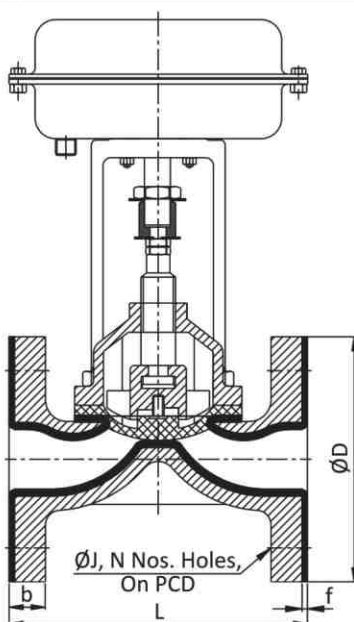
Valve Design	Confirm to BS - 5156 (Series "S")
Body Type Valve Size	Weir (Lined)
End Connection	15mm to 200mm (1/2" to 8")
Body Material	Cast Iron, Cast Steel, S.S. 304, S. S. 316 etc...
Lining Material	Ebonite, EPDM, Glass, PFA etc...
Lining Hardness	Ebonite - 95° ±5 Shore A / D 62 Glasslining
Lining Thickness	15 to 65mm Valve -3.0mm, 80 to 100mm -3.5mm, 125mm to 150mm -4.0, 200 -5.0mm
Body Diaphragm	Neoprene, Teflon Backed with Neoprene, Butyl, Viton, EPDM, Hyplon, Nitrile
Leakage Rate	As per ANSI B 16.104 Class VI (100% Leak Tight)
Temperature	-30 °C to 80 °C
Flow Characteristics	On / Off, Throttling
Testing Standard	BS 6755 - Part I
Actuator Type	Diaphragm Cylinder or Piston (Upto 50 mm)
Actuator Action	Direct / Reverse Acting, Normally Open (Air to Close) Normally Open (Air to Open)
Air Supply	20 - 65 PSIG (1.4 to 4.5 Kg/cm ²)
Accessories	Top mounted Handwheel, Limit Switches, Proximity Switches, Air Set, Valve Positioner, Air Lock Valve etc....

Installation

The valve should be installed preferably in a straight run of the pipe, a few diameters away from the bends. The preferred position is with actuator vertically above of below the valve body. It may also be installed in a horizontal or angled position provide the diaphragm actuator is supported. Necessary clearance should be provide above the actuator to permit removal for servicing or for inspection of the valve internal. The supply pressure to the actuator be either 35 PSIG or as per rating indicated on the name plate. for control application, positioner mounted are piped and adjusted at the factor.

Final Check

After the valve has been installed, Check the operations for full stroke travel as indicated on the name plate. Check for air leaks in air line connection. open and close the valve two of three times to ensure proper operation. Before commissioning the process flow, It would be advisable to use conical filter or other temporary devices to avoid damage to the rubber lining or body diaphragm as the fluid is likely to carry foreign solid material during testing or commissioning of the plant. This care is particularly important with neoprene or other soft elastomer lining. Special care has to be exercised with glass lining construction. It is generally not desirable to use excessive air pressure to the actuator than specified as it would reduce the life of the body diaphragm and also caused undue force on the actuator diaphragm.



Dimensions : (All Dimensions are in mm)

Valve Model	Size		L	t	ØD	b	ØJ	N	PCD
	Inch	MM							
RLPDV-F-15	1/2"	15	108	3	90	10	15.9	4	60.3
RLPDV-F-20	3/4"	20	117	3	100	10.9	15.9	4	69.9
RLPDV-F-25	1"	25	127	3	110	11.6	15.9	4	79.4
RLPDV-F-32	1.1/4"	32	146	3	115	13.2	15.9	4	88.9
RLPDV-F-40	1.1/2"	40	159	3	125	14.7	15.9	4	98.4
RLPDV-F-50	2"	50	190	3	150	16.3	19.05	4	120.7
RLPDV-F-65	2.1/2"	65	216	3	180	17.9	19.05	4	139.7
RLPDV-F-80	3"	80	254	3	190	19.5	19.05	4	152.4
RLPDV-F-100	4"	100	305	3	230	24.3	19.05	8	190.5
RLPDV-F-125	5"	125	356	3	225	24.3	22.2	8	215.9
RLPDV-F-150	6"	150	406	3	280	25.9	22.2	8	241.3
RLPDV-F-200	8"	200	521	3	345	29	22.2	8	298.5

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: January, 2015 (Rev.-01)

2/2 - 3/2 Way Pneumatic Cylinder Operated Control Valve

Catalogue No.
APL / 2037



"aira"

offers 3/2 - 2/2 way pneumatic Cylinder operated precise Regulating design control valve for Steam & Water Upto 200 °C

Size Range : 1/2" to 4" Flanged

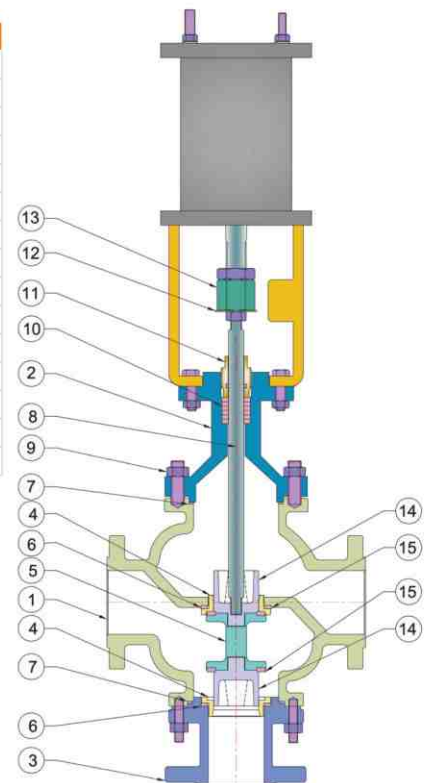
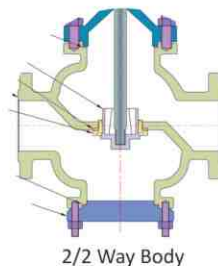
Valve Specification

Type Of Valve	Globe Type 2/2 Way - 3/2 Way
Trim / Plug	S. S. 304
Working Pressure	7 Kg/cm ²
Working Temperature	Upto 220 °C Max.
Plug Design	On - Off Type
Testing Code	FCI 70.2
End Connection	ASME B16.5
Leakage Class	Class VI
Type Of Bonnet	STD

Actuator Specification

Type	Single Acting Cylinder
Barrel	Aluminium
Shaft	EN 8 Hard Chrome Plated
Seals	Buna - N
End Cover	Cast Iron
Working Pressure	4.5 Kg/cm ²

No.	DESCRIPTION	Material
1	Body	WCB
2	Bonnet	WCB
3	Tail Piece / Cover Plate	WCB
4	Seat Ring	S. S. 304
5	T. S. Guide	S. S. 304
6	Seat Gasket	S. S. 304 Spiral Wound
7	Body Gasket	S. S. 304 Spiral Wound
8	Stem	S. S. 304
9	Stud + Nut	ASTM A 193 / B7-2H
10	Stem Packing	Wire Braided Graphite
11	Gland + Nut	S. S. 304
12	Travel Indicator	S. S. 202
13	Connecting Nut	S. S. 304
14	T. S. Plug	S. S. 304
15	Seat	CFT



Dimensions :

(All Dimensions are in mm)

Valve Model	Size		L	D1	D2	D3	b	f	X	Z-B
	Inch	MM								
PLC - 15	1/2"	15	184	60.3	34.9	90	8	2	145	4-15.9
PLC - 20	3/4"	20	184	69.9	42.9	100	8.9	2	145	4-15.9
PLC - 25	1"	25	184	79.4	50.8	110	9.6	2	145	4-15.9
PLC - 32	1.1/4"	32	222	88.9	63.5	115	11.2	2	160	4-15.9
PLC - 40	1.1/2"	40	222	98.4	73	125	12.7	2	160	4-15.9
PLC - 50	2"	50	254	120.7	92.1	150	14.3	2	180	4-19.05
PLC - 65	2.1/2"	65	276	139.7	104.8	180	15.9	2	205	4-19.05
PLC - 80	3"	80	298	152.4	127	190	17.5	2	205	4-19.05
PLC - 100	4"	100	352	190.5	157.2	230	22.3	2	240	8-19.05

* "X" Dimension only 3/2 Way 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: January, 2015 (Rev.-01)



www.airaindia.com / www.airaeuro.com



2/2 - 3/2 Way Pneumatic Cylinder Operated Control Valve

Catalogue No.
APL / 2038

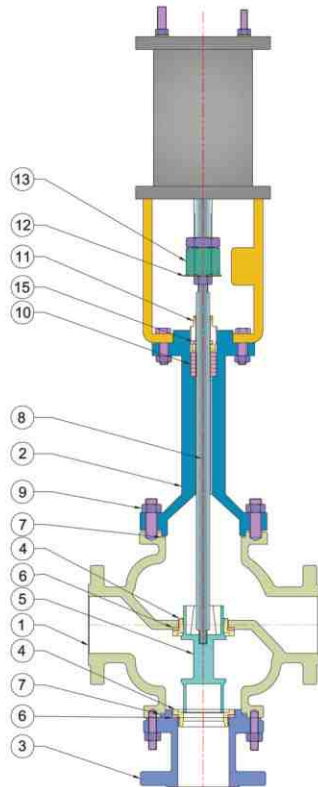


"aira"

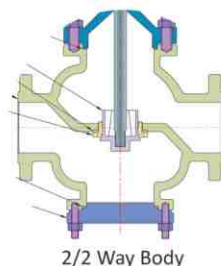
offers 3/2 - 2/2 way pneumatic Cylinder operated control valve for thermic fluid & High Temperature Application Upto 450 °C

Size Range : 1/2" to 4" Flanged

Valve Specification		Actuator Specification	
Type Of Valve	Globe Type 2 Way / 3 Way	Type	Single Acting Cylinder
Body / Bonnet	ASTM A 216 Gr. WCB	Barrel	Aluminium
Trim / Plug	S. S. 304	Shaft	EN 8 Hard Chrome Plated
Working Pressure	7 Kg/cm ²	Seals	Buna - N
Working Temperature	Upto 450 °C Max.	End Cover	Cast Iron
Plug Design	On - Off Type	Working Pressure	4.5 Kg/cm ²
Testing Code	FCI 70.2		
End Connection	ASME B 16.5		
Leakage Class	Class IV		
Type Of Bonnet	Cooling Finned Bonnet		



No.	DESCRIPTION	Material
1	Body	WCB
2	Bonnet	WCB
3	Tail Piece / Cover Plate	WCB
4	Seat Ring	S. S. 304
5	Plug	S. S. 304
6	Seat Gasket	S. S. 304 Spiral Wound
7	Body Gasket	S. S. 304 Spiral Wound
8	Stem	S. S. 304
9	Stud + Nut	ASTM A 193 / B7-2H
10	Stem Packing	Wire Braided Graphite
11	Gland Nut	S. S. 304
12	Travel Indicator	S. S. 202
13	Connector Nut	S. S. 304

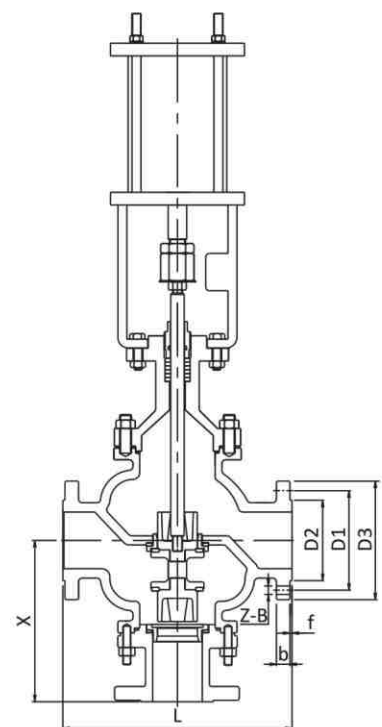


Dimensions :		(All Dimensions are in mm)								
Valve Model	Size		L	D1	D2	D3	b	f	*X	Z-B
	Inch	MM								
PHC - 15	1/2"	15	184	60.3	34.9	90	8	2	145	4-15.9
PHC - 20	3/4"	20	184	69.9	42.9	100	8.9	2	145	4-15.9
PHC - 25	1"	25	184	79.4	50.8	110	9.6	2	145	4-15.9
PHC - 32	1.1/4"	32	200	88.9	63.5	115	11.2	2	160	4-15.9
PHC - 40	1.1/2"	40	222	98.4	73	125	12.7	2	160	4-15.9
PHC - 50	2"	50	254	120.7	92.1	150	14.3	2	180	4-19.05
PHC - 65	2.1/2"	65	276	139.7	104.8	180	15.9	2	205	4-19.05
PHC - 80	3"	80	298	152.4	127	190	17.5	2	205	4-19.05
PHC - 100	4"	100	352	190.5	157.2	230	22.3	2	240	8-19.05

* "X" Dimension only 3/2 Way 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: January, 2015 (Rev.-01)



2/2 - 3/2 Way Pneumatic Diaphragm Operated On / Off Control Valve Low Temperature

Catalogue No.
APL / 1086



"aira"

offers 3/2 - 2/2 way pneumatic diaphragm operated on/off 220 °C Control Valve

Size Range : 1/2" to 6" Flanged

Valve Specification

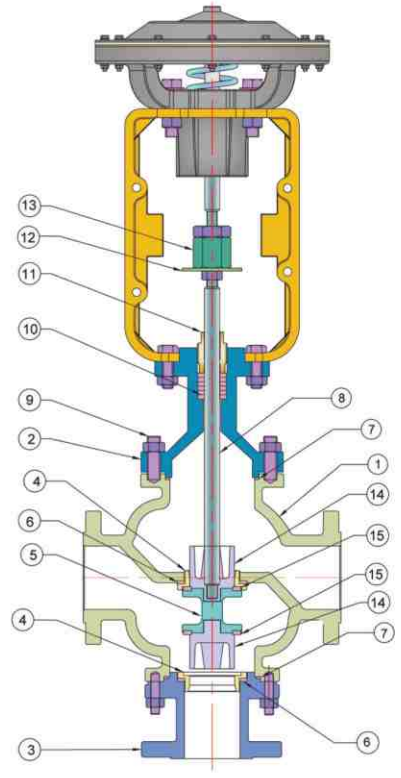
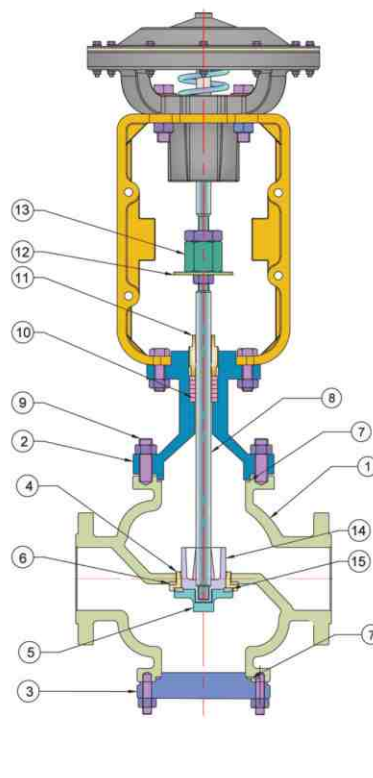
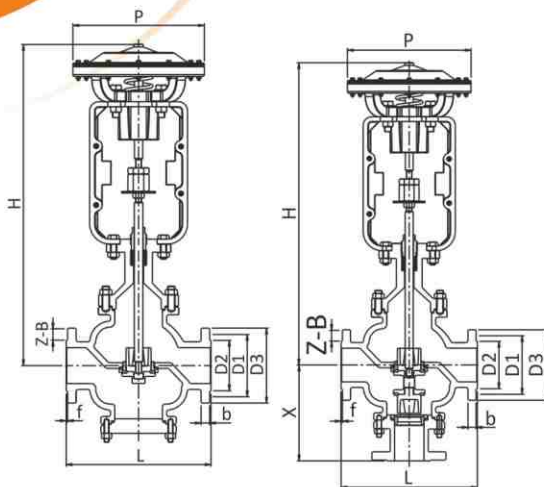
Trim Design	Quick Opening
Characteristic	ON - OFF
End Connection	Flanged end ASME B 16.5 CL 150 (300 / 600 Available On Request)
Pressure Rating	7 Kg/cm ²
Temperature	Upto 220 °C Max.
Leakage	ASME B16.104 CL IV for Metal to Metal Seating / FCI 70.2

Diaphragm Actuator Specification

Actuator	Diaphragm Type Single Acting
Working Pressure	2.5 to 3.5 Kg/cm ²

Salient Feature :

- Excellent for On / Off Application
- Long Lasting Diaphragm material
- Easy maintenance
- Economy Price
- High Temperature 220 °C



Dimensions :

(All Dimensions are in mm)

Valve Model	Size		H	P	L	D1	D2	D3	b	f	Z-B	X
	Inch	MM										
PKL - 15	1/2"	15	520	222	184	60.3	34.9	90	8	2	4-15.9	145
PKL - 20	3/4"	20	520	222	184	69.9	42.9	100	8.9	2	4-15.9	145
PKL - 25	1"	25	520	222	184	79.4	50.8	110	9.6	2	4-15.9	145
PKL - 32	1.1/4"	32	520	222	200	88.9	63.5	115	11.2	2	4-15.9	160
PKL - 40	1.1/2"	40	520	222	222	98.4	73	125	12.7	2	4-15.9	160
PKL - 50	2"	50	560	222	254	120.7	92.1	150	14.3	2	4-19.05	180
PKL - 65	2.1/2"	65	677	296	276	139.7	104.8	180	15.9	2	4-19.05	205
PKL - 80	3"	80	677	296	298	152.4	127	190	17.5	2	4-19.05	205
PKL - 100	4"	100	680	296	352	190.5	157.2	230	22.3	2	8-19.05	240
PKL - 150	6"	150	680	296	451	241.3	215.9	280	23.9	2	8-22-2	320

No.	DESCRIPTION	Material
1	Body	WCB / CF8 / CF8M
2	Bonnet	WCB / CF8 / CF8M
3	Tail Piece / Body Cover	WCB / CF8 / CF8M
4	Seat Ring	S. S. 304
5	T. S. Guide	S. S. 304
6	Seat Gasket	S. S. 304 Spiral Wound
7	Body Gasket	S. S. 304 Spiral Wound
8	Stem	S. S. 304
9	Stud + Nut	ASTM A193 / B7-2H
10	Stem Packing	Wire Braided Graphite
11	Gland Nut	S. S. 304
12	Travel Indicator	S. S. 302
13	Connecting Nut	S. S. 304
14	T. S. Plug	S. S. 304
15	Teflon	CFT

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: January, 2015 (Rev.-01)



www.airaindia.com / www.airaeuro.com



2/2 - 3/2 Way Pneumatic Diaphragm Operated On / Off Control Valve High Temperature

Catalogue No.
APL / 1085



"aira"

offers 3/2 - 2/2 way pneumatic diaphragm operated on/off 450 °C Valve for
thermic fluid & High Temperature Application

Size Range : 1/2" to 6" Flanged

Valve Specification

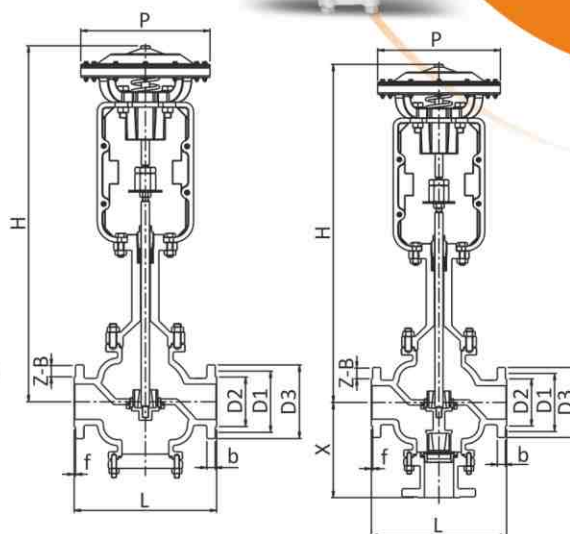
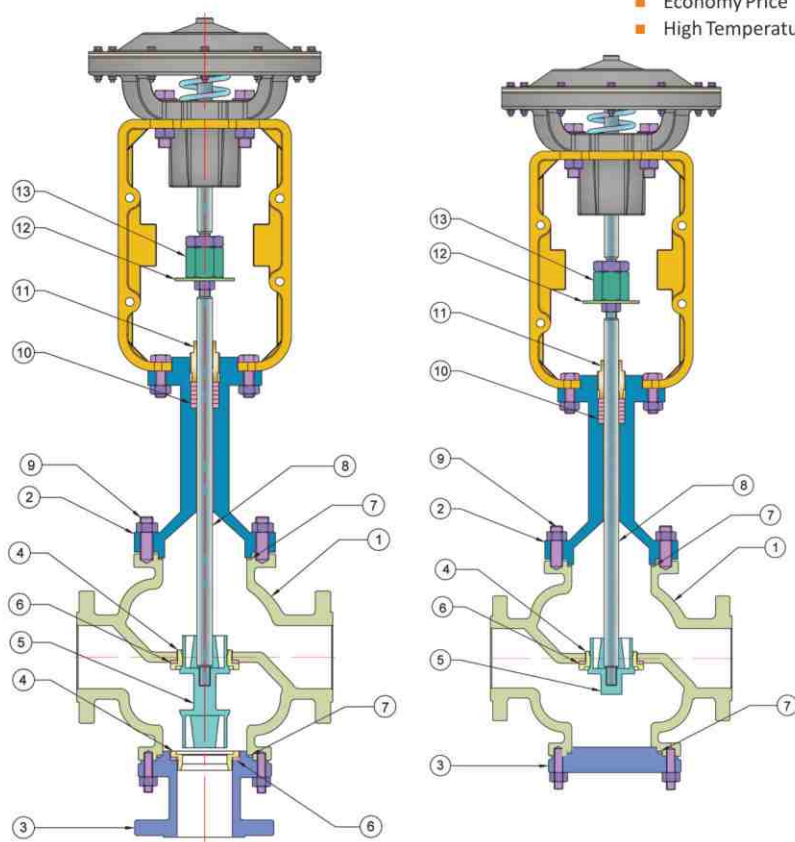
Trim Design	Quick Opening
Characteristic	ON - OFF
End Connection	Flanged end ASME B 16.5 CL 150 (300 / 600 Available On Request)
Pressure Rating	7 Kg/cm ²
Temperature	Upto 450 °C Max.
Leakage	ASME B16.104 CL IV for Metal to Metal Seating / FCI 70.2
Type Of Bonnet	Cooling Finned

Diaphragm Actuator Specification

Actuator	Diaphragm Type Single Acting
Working Pressure	2.5 to 3.5 Kg/cm ²

Salient Features :

- Excellent for On / Off Application
- Long Lasting Diaphragm material
- Easy maintenance
- Economy Price
- High Temperature 450 °C



No.	DESCRIPTION	Material
1	Body	WCB / CF8 / CF8M
2	Bonnet	WCB / CF8 / CF8M
3	Tail Piece / Body Cover	WCB / CF8 / CF8M
4	Seat Ring	S. S. 304
5	T. S. Guide	S. S. 304
6	Seat Gasket	S. S. 304 Spiral Wound
7	Body Gasket	S. S. 304 Spiral Wound
8	Stem	S. S. 304
9	Stud + Nut	ASTM A193 / B7-2H
10	Stem Packing	Wire Braided Graphite
11	Gland Nut	S. S. 304
12	Travel Indicator	S. S. 302
13	Connecting Nut	S. S. 304
14	T. S. Plug	S. S. 304
15	Teflon	CFT
16	Stem Seal	Viton

Dimensions :

(All Dimensions are in mm)

Valve Model	Size		H	L	P	D1	D2	D3	b	f	X	Z-B
	Inch	MM										
PKH - 15	1/2"	15	620	184	222	60.3	34.9	90	8	2	145	4-15.9
PKH - 20	3/4"	20	620	184	222	69.9	42.9	100	8.9	2	145	4-15.9
PKH - 25	1"	25	620	184	222	79.4	50.8	110	9.6	2	145	4-15.9
PKH - 32	1.1/4"	32	620	200	222	88.9	63.5	115	11.2	2	160	4-15.9
PKH - 40	1.1/2"	40	620	222	222	98.4	73	125	12.7	2	160	4-15.9
PKH - 50	2"	50	660	254	222	120.7	92.1	150	14.3	2	180	4-19.05
PKH - 65	2.1/2"	65	800	276	296	139.7	104.8	180	15.9	2	205	4-19.05
PKH - 80	3"	80	800	298	296	152.4	127	190	17.5	2	205	4-19.05
PKH - 100	4"	100	840	352	296	190.5	157.2	230	22.3	2	240	8-19.05
PKH - 150	6"	150	990	451	296	241.3	215.9	280	23.9	2	320	8-22.2

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: January, 2015 (Rev.-01)

2/2 - 3/2 Way Pneumatic Diaphragm Operated Thermic Fluid Control Valve Upto 450 °C



"aira"

offers 3/2 - 2/2 way pneumatic diaphragm operated precise Regulating design on/off valve for thermic fluid & High Temperature Application

Size Range : 1/2" to 12" Flanged End

Valve Specification

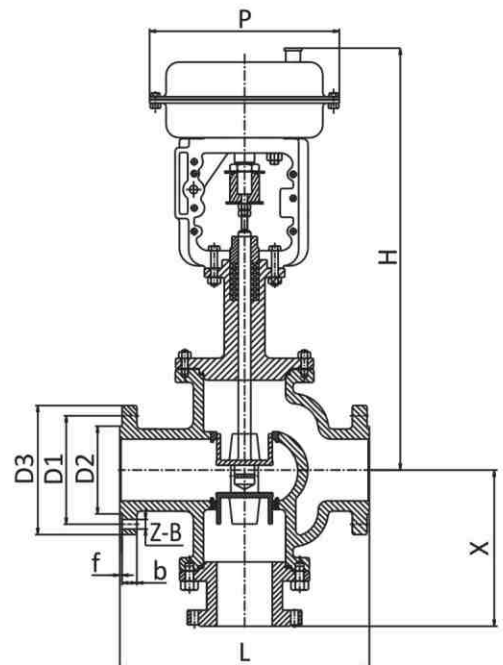
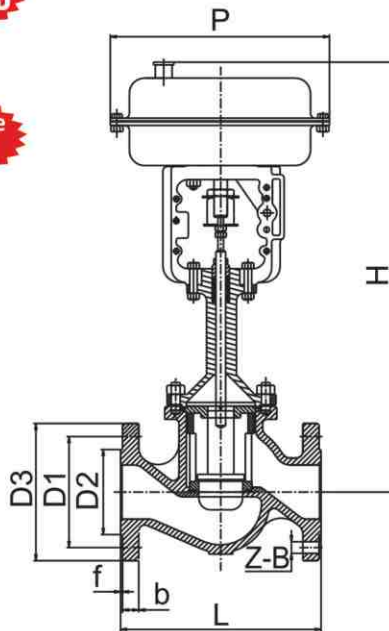
Trim Design	Contoured parabolic / Cage Guided / Pressure Balanced
Characteristic	Liner / Equal Percentage / ON - OFF (Quick Opening)
End Connection	Flanged end ASME B 16.5 CL 150 (300 / 600 Available On Request)
Pressure Rating	ASME B 16.5 CL 150 / 300 / 600
Temperature	Upto 450 °C Max.
Leakage	ASME B16.104 CL IV for Metal to Metal Seating

Salient Feature :

- Precise Regulation with High flow capacity
- Large type of trim Top Operating designs for various duty conditions
- In line Repairable Design for easy maintenance
- Tight closure even in extreme operating conditions
- Multi action type Actuator (Direct / Reverse acting)
- Wide Range of actuators to meet different application

**IBR
APPROVED**

**High Pressure
On Request.**



Accessories :

- 3/2 Way Solenoid Valve in all Standard Coil Voltage (Flame Proof Solenoid Coil - on request))
- Pneumatic & Electro-Pneumatic valve positioner
- Manual Over - ride (Clutch Type)
- Limit Switch for On / Off Indication at Panel board
- Filter + Regulator Combination with Pressure Gauge
- Air Lock Valve

Dimensions :

(All Dimensions are in mm)

Valve Model	Size		H	P	150#							300#								
	Inch	MM			L	D1	D2	D3	b	f	Z-B	L	D1	D2	D3	b	f	Z-B	X	
CND - 15	1/2"	15	490	288	184	60.3	34.9	90	8	2	4-15.9	190	66.7	34.9	95	12.7	2	4-15.9	145	
CND - 20	3/4"	20	495	288	184	69.9	42.9	100	8.9	2	4-15.9	194	82.6	42.9	115	14.3	2	4-19.05	145	
CND - 25	1"	25	590	288	184	79.4	50.8	110	9.6	2	4-15.9	197	88.9	50.8	125	15.9	2	4-19.05	145	
CND - 32	1.1/4"	32	595	288	200	88.9	63.5	115	11.2	2	4-15.9	235	98.4	63.5	135	17.5	2	4-19.05	160	
CND - 40	1.1/2"	40	600	288	222	98.4	73	125	12.7	2	4-15.9	235	114.3	73	155	19.1	2	4-22.2	160	
CND - 50	2"	50	605	288	254	120.7	92.1	150	14.3	2	4-19.05	267	127	92.1	165	20.7	2	8-19.05	180	
CND - 65	2.1/2"	65	750	376	276	139.7	104.8	180	15.9	2	4-19.05	292	149.2	104.8	190	23.9	2	8-22.2	205	
CND - 80	3"	80	790	376	298	152.4	127	190	17.5	2	4-19.05	317	168.3	127	210	27	2	8-22.2	205	
CND - 100	4"	100	810	376	352	190.5	157.2	230	22.3	2	8-19.05	368	200	157.2	255	30.2	2	8-22.2	240	
CND - 150	6"	150	990	475	451	241.3	215.9	280	23.9	2	8-22.2	473	269.9	215.9	320	35	2	12-22.2	320	
CND - 200	8"	200	1050	594	543	298.5	269.9	345	27	2	8-22.2	568	330.2	269.9	380	39.7	2	12-25.4	385	
CND - 250	10"	250	---	---	673	362	323.8	405	28.6	2	12-25.4	708	387.4	323.8	445	46.1	2	16-28.6	440	
CND - 300	12"	300	---	---	737	431.8	381	485	30.2	2	12.25.4	775	450.8	381	520	49.3	2	16-31.75	On Req.	

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: January, 2015 (Rev.-01)

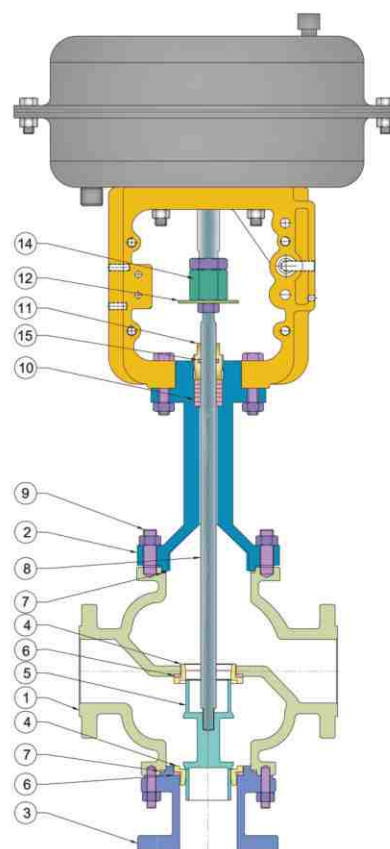
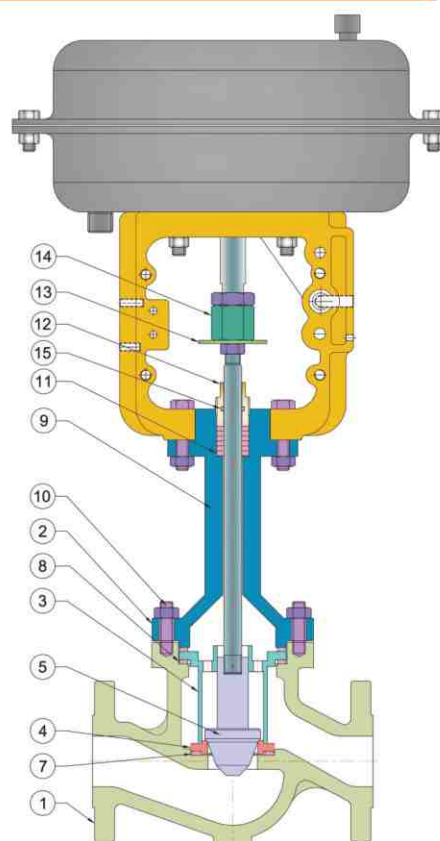


www.airaindia.com / www.airaeuro.com



No.	2 Way DESCRIPTION	Material
1	Body	WCB / CF8 / CF8M
2	Bonnet	WCB / CF8 / CF8M
3	Cage	WCB / CF8 / CF8M
4	Seat Ring	S. S. 304
5	Plug	S. S. 304
6	Heat Transfer Fins	M. S.
7	Seat Gasket	S. S. 304 Spiral Wound
8	Body Gasket	S. S. 304 Spiral Wound
9	Stem	S. S. 304
10	Stud + Nut	ASTM A 193 / BH - 2H
11	Stem Packing	Wire Braided Graphite
12	Gland Nut	S. S. 304
13	Travel Indicator	S. S. 202
14	Connecting Nut	S. S. 304

No.	3 Way DESCRIPTION	Material
1	Body	WCB / CF8 / CF8M
2	Bonnet	WCB / CF8 / CF8M
3	Tail Piece	WCB / CF8 / CF8M
4	Seat Ring	S. S. 304
5	Plug	S. S. 304
6	Seat Gasket	S. S. 304 Spiral Wound
7	Body Gasket	S. S. 304 Spiral Wound
8	Stem	S. S. 304
9	Stud + Nut	ASTM A 193 / B7 - 2H
10	Stem Packing	Wire Braided Graphite
11	Gland Nut	S. S. 304
12	Travel Indicator	S. S. 202
13	Heat Transfer Fins	M. S.
14	Connecting Nut	S. S. 304



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: January, 2015 (Rev.-01)

2/2 - 3/2 Way Pneumatic Diaphragm Operated Low Temperature Control Valve Upto 220 °C

"aira"

offers 3/2 - 2/2 way pneumatic diaphragm operated precise Regulating design on/off valve for thermic fluid & Low Temperature Application

Size Range : 1/2" to 12" Flanged End

Valve Specification

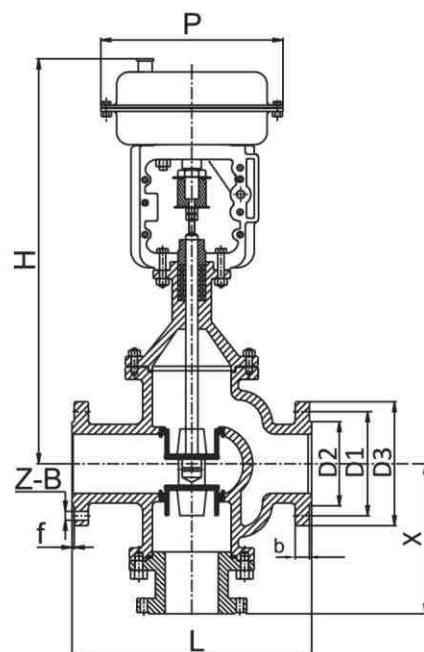
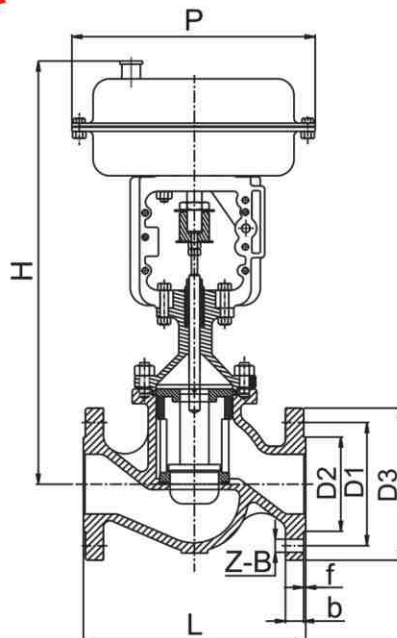
Trim Design	Contoured Paraboi / Cage Guided / Pressure Balanced
Characteristic	Liner / Equal Percentage / ON - OFF (Quick Opening)
End Connection	Flanged end ASME B 16.5 CL 150 (300 / 600 Available On Request)
Pressure Rating	ASME B 16.5 CL 150 / 300 / 600
Temperature	Upto 450 °C Max.
Leakage	ASME B16.104 V to VI

Salient Feature :

- Precise Regulation with High flow capacity
- Large type of trim Top Operating designs for various duty conditions
- In line Repairable Design for easy maintenance
- Tight closure even in extreme operating conditions
- Multi action type Actuator (Direct / Reverse acting)
- Wide Range of actuators to meet different application

**IBR
APPROVED**

High Pressure
On Request.



Accessories :

- 3/2 Way Solenoid Valve in all Standard Coil Voltage (Flame Proof Solenoid Coil - on request)
- Pneumatic & Electro-Pneumatic valve positioner
- Manual Over - ride (Clutch Type)
- Limit Switch for On / Off Indication at Panel board
- Filter + Regulator Combination with Pressure Gauge
- Air Lock Valve

Dimensions :

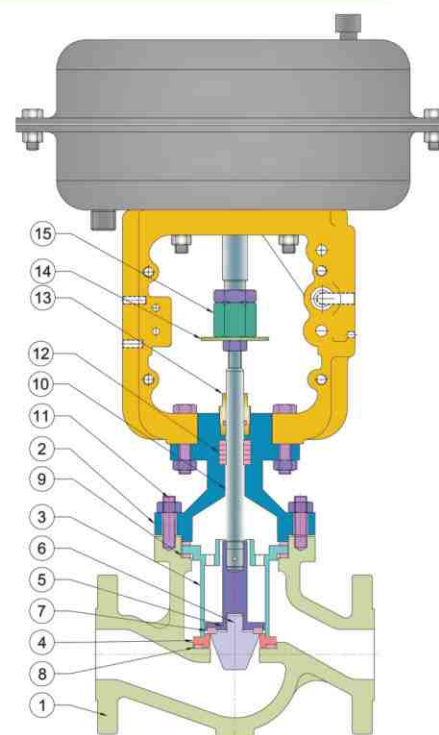
(All Dimensions are in mm)

Valve Model	Size		H	P	150#							300#							
	Inch	MM			L	D1	D2	D3	b	f	Z-B	L	D1	D2	D3	b	f	Z-B	X
CKD - 15	1/2"	15	425	288	184	60.3	34.9	90	8	2	4-15.9	190	66.7	34.9	95	12.7	2	4-15.9	145
CKD - 20	3/4"	20	430	288	184	69.9	42.9	100	8.9	2	4-15.9	194	82.6	42.9	115	14.3	2	4-19.05	145
CKD - 25	1"	25	455	288	184	79.4	50.8	110	9.6	2	4-15.9	197	88.9	50.8	125	15.9	2	4-19.05	145
CKD - 32	1.1/4"	32	460	288	200	88.9	63.5	115	11.2	2	4-15.9	235	98.4	63.5	135	17.5	2	4-19.05	160
CKD - 40	1.1/2"	40	470	288	222	98.4	73	125	12.7	2	4-15.9	235	114.3	73	155	19.1	2	4-22.2	160
CKD - 50	2"	50	485	288	254	120.7	92.1	150	14.3	2	4-19.05	267	127	92.1	165	20.7	2	8-19.05	180
CKD - 65	2.1/2"	65	620	376	276	139.7	104.8	180	15.9	2	4-19.05	292	149.2	104.8	190	23.9	2	8-22.2	205
CKD - 80	3"	80	630	376	298	152.4	127	190	17.5	2	4-19.05	317	168.3	127	210	27	2	8-22.2	205
CKD - 100	4"	100	700	376	352	190.5	157.2	230	22.3	2	8-19.05	368	200	157.2	255	30.2	2	8-22.2	240
CKD - 150	6"	150	815	475	451	241.3	215.9	280	23.9	2	8-22.2	473	269.9	215.9	320	35	2	12-22.2	320
CKD - 200	8"	200	875	594	543	298.5	269.9	345	27	2	8-22.2	568	330.2	269.9	380	39.7	2	12-25.4	385
CKD - 250	10"	250	---	---	673	362	323.8	405	28.6	2	12-25.4	708	387.4	323.8	445	46.1	2	16-28.6	440
CKD - 300	12"	300	---	---	737	431.8	381	485	30.2	2	12-25.4	775	450.8	381	520	49.3	2	16-31.75	On Req.

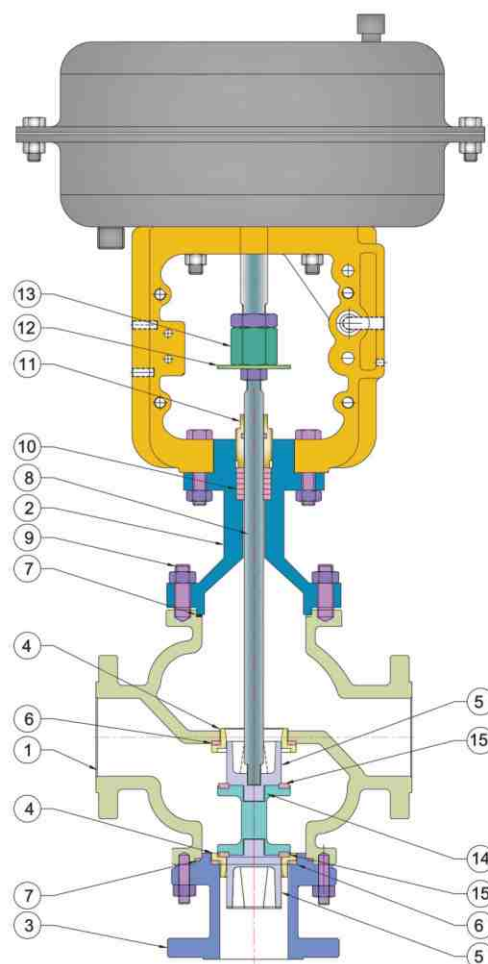
Note : Since, constant worldwide advancement in technology, We keep our rights reserved to make changes time to time in Technical specifications and Dimensions without prior notice.

Pub. on: January, 2015 (Rev.-01)

No.	2 Way DESCRIPTION	Material
1	Body	WCB / CF8 / CF8M
2	Bonnet	WCB / CF8 / CF8M
3	Cage	WCB / CF8 / CF8M
4	Seat Ring	S. S. 304
5	T. S. Guide	S. S. 304
6	T. S. Plug	S. S. 304
7	Teflon	CFT
8	Seat Gasket	S. S. 304 Spiral Wound
9	Body Gasket	S. S. 304 Spiral Wound
10	Stem	S. S. 304
11	Stud + Nut	ASTM A 193 / B7 - 2H
12	Stem Packing	Wire Braided Graphite
13	Gland Nut	S. S. 304
14	Travel Indicator	S. S. 202
15	Connecting Nut	S. S. 304



No.	3 Way DESCRIPTION	Material
1	Body	WCB / CF8 / CF8M
2	Bonnet	WCB / CF8 / CF8M
3	Tail Piece	WCB / CF8 / CF8M
4	Seat Ring	S. S. 304
5	Plug	S. S. 304
6	Seat Gasket	S. S. 304 Spiral Wound
7	Body Gasket	S. S. 304 Spiral Wound
8	Stem	S. S. 304
9	Stud + Nut	ASTM A 193 / B7 - 2H
10	Stem Packing	Wire Braided Graphite
11	Gland Nut	S. S. 304
12	Travel Indicator	S. S. 202
13	Connecting Nut	S. S. 304
14	T. S. Guide	CF8
15	Seat	CFT / PTFE



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.

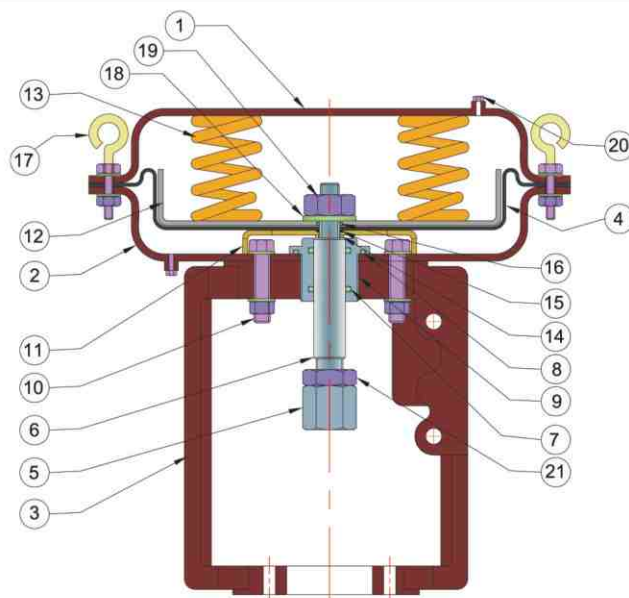
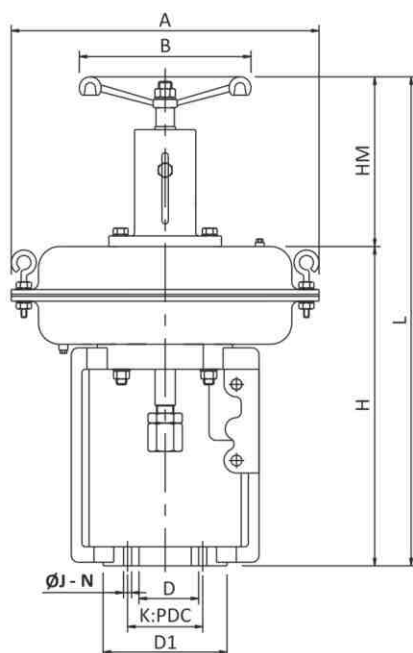
Pub. on: January, 2015 (Rev.-01)

Pneumatic Diaphragm Actuator

Actuator Specification

Inlet Air Supply	2.5 to 4 Kg/cm ²
Stem Movement	Linear
Actuator Action	Air to Open / Air to Close
Air Fail Position	Closed / Open

Type	Diaphragm Area	Spring	Maximum Stroke (mm)	Air Pressure (Bar)	Max Thrust (N)	Volume (Ltrs / Stroke)
DA - CND - 02	Direct	4 ~ 8	24 - 30	2.4 ~ 4	5200	1.77
	Reverse			0	920	
DA - CND - 03	Direct	3 ~ 6	38 - 45	2.4 ~ 4	7800	4.18
	Reverse			0	720	
DA - CND - 04	Direct	4 ~ 8	55 - 65	2.4 ~ 4	11000	8.93
	Reverse			0	3840	
DA - CND - 05	Direct	1	65 - 90	2.4 ~ 4	On Request	On Request
	Reverse			0		
DA - CND - 06	Direct	3 ~ 6	100 - 120	2.4 ~ 4	15000	27.07
	Reverse			0	5000	



Technical Peremeter of Actuators

Valve Model	Size								Valve Size
	D	D1	ØJ - N	K:PDC	H	HM	A	B	
DA - CND - 02	60	105	9 - 4	80	300	----	288	----	DN15 - DN50
DA - CND - 03	80	135	12 - 4	105	415	----	376	----	DN65 - DN100
DA - CND - 04	95	158	12 - 4	120	510	----	475	----	DN125 - DN150
DA - CND - 05	90	177	14 - 4	140	850	----	620	----	DN200 - DN300
DA - CND - 06	100	197	14 - 8	140	710	----	594	----	DN200 - DN300
MO-DA - CND - 02	60	105	9 - 4	80	----	230	288	300	DN15 - DN50
MO-DA - CND - 03	80	135	12 - 4	105	----	270	376	300	DN65 - DN100
MO-DA - CND - 04	95	158	12 - 4	120	----	310	475	400	DN125 - DN150
MO-DA - CND - 06	100	197	14 - 8	140	----	310	594	595	DN200 - DN300

No.	DESCRIPTION	Material
1	Top Cover	M. S.
2	Bottom Cover	M. S.
3	Yoke	S. G. Iron
4	Diaphragm	Nitrile Rubber
5	Connecting Nut	S. S. 304
6	Stem	S. S. 304
7	Stem Seal	Viton
8	Seal For Bearing Bush	Viton
9	Bearing Bush	Aluminium
10	Bolt, Nut For Yoke	M. S.
11	Pressure Plate	M. S.
12	Spring Plate	M. S.
13	Spring	Spring Steel
14	'O' - Ring	Viton
15	'O' - Ring	Viton
16	'O' - Ring	Viton
17	Lifting Hook Nut, Washer	M. S.
18	Spring Washer	S. S.
19	Stem Lock Nut	S. S.
20	Exhaust	Plastic
21	Check Nut	S. S. 304

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: January, 2015 (Rev.-01)



Mfg. & Mkt by :

aira Euroautomation pvt. ltd.

ISO 9001:2008 Certified Co.

Ahmedabad-382 405, INDIA

www.airaindia.com / www.airaeuro.com



Available At :



Tel. +1.713.592.0869
info@valvact.com
www.valvact.com