



VALVE AUTOMATION
ISO 9001 CO.

SERIES : G

Accessories



Rotary / Linear Type Pneumatic - Pneumatic Valve Positioner

Catalogue No.
APL / 1049



"aira" Pneumatic-Pneumatic Positioner (3-15 pst / rotary off linear type) are advanced control devices which provide unparalleled stability in difficult environment.

Description

The "aira" APP-1200-R/L series positioners converts a controller output (usually 3 to 15 psig to Linearly/Rotary proportional Travel/Rotational & Pneumatic outputs. The Positioners are based on a force balance design for control applications that requires a high degree of reliability & repeatability at an economical cost. Optional NEMA 4X (IP65/IP66)-explosion proof versions allows for splashdown/explosive atmosphere and outdoor installation.

The "aira" APP-1200-R/L series positioners are used for Linear/Rotary movement with ranges 3-9 and 9-15 psig. control signal, when you select split range. Standard range is 3-15 psig. The positioners can handle the supply pressure upto 100 psig for higher pressure Industrial pneumatic and process control system requirements.

Principle of Operation

The operation of "aira" APP-1200-R/L series positioners is based on a force balanced system. Tension on the feedback spring provides feedback to the positioner which will vary as the actuator shaft rotates with cam. The spring Loading force is applied through the cam shaft & cam to the positioner's instrument signal capsule through the balance beam.

Output from the controller (usually 3-15 Psig) is applied to the diaphragm in the instrument signal capsule serving as a force balance membrane, matching the actuator shaft position to the instrument signal.

Split Ranging

If split ranging is required may be mounted on Linear Actuator/Rotary Actuator as per installation and operational manual.

Mounting

The "aira" APP-1200-R/L FC series positioners may be mounted on Linear Actuator/Rotary Actuator as per installation and operational manual

Field Reversible

To change from direct acting to reverse acting simply reverse the cam and fix it on cam shaft and make sure of the signal SPAN which is printed on the cam and recalibrate for Actuator fully open or close position in case of Pneumatic to Pneumatic.

Features

- Designed block build structure for maintenance and repair
- Precise calibration with simple SPAN and ZERO adjustments
- Simple conversion to Direct Acting or Reverse Acting
- Split range control available by simple adjustments without changing parts
- Simple structure for feedback connection
- Corrosion-resistant aluminium die cast body
- Sensitive response for high performance
- Vibration resistant design
- Stainless Steel Gauge Standard
- A restricted pilot valve orifice kit for small actuators included
- Optional built-in limit switched or 4-20 mA position transmitter for feedback
- Optional directly-mountable positioner
- Proved the reliability through over 5,00,000 times of repeat test & Vibration test.

Integrated Characteristics

- Suitable for Rotary / Linear Actuators.
- Low Air Consumption.
- Corrosion-Resistance Aluminium Diecast Body.
- Simple Conversion to Direct Acting or Reverse Acting.
- Precise Calibration with simple SPAN and Zero Adjustments.
- Suitable for Single/Double acting Actuators.
- Split Ranging.
- Optional Built-in Limit Switches or 4-20mA Position Transmitter for feedback.
- Extremely Vibration Resistance Design.
- Easy Maintenance.

Application

The "aira" APP - 1200 R/E Positioners converts pneumatic/electrical signal to a pneumatic output which can be used to operate the following :

- Valve, Valve-Actuators
- Damper and Louver Actuators
- Air-Cylinders
- Relays
- Clutches
- Web Tensioners and Brakes
- USED IN :**
 - Petrochemical Processing Systems
 - Energy Management
 - Hvac Systems
 - Textile Processing Systems
 - Pharmaceutical Processing System
 - Paper & Pulp Handling Controls

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.

Technical Specification Table

MODEL	Linear		Rotary	
	Single	Double	Single	Double
	APP-1200-L		APP-1200-R	
Input Signal	3~15psi (0.2-1.0 kgf/cm ²) (NOTE 1)			
Supply Air Pressure	100 psi Max. (7.0 kgf/cm ²)			
Standard Stroke	10~80mm (NOTE 2)			
Air Piping Connection	1/4" NPT (F)			
Ambient Temperature	-20 °C to 70 °C			
Pressure Gauge	Stainless Steel			
Explosion-proof Classification	Exia II BT6, Exdm II BT6, Exdm II CT6			
Degree of Protection	IP66			
Pressure Gauge	Stainless Steel 0-2 kg/cm ²			
	0-4 kg/cm ²			
	0-10 kg/cm ²			
Output Characteristics	Linear			
Linearity	Within ± 1.0% F.S.			
Sensitivity	Within 0.2% F.S.			
Hysteresis	Within 0.2% F.S.			
Repeatability	Within ± 0.75% F.S.			
Air Consumption	5.0 LPM (1.4 kg/cm2) Supply			
Flow Capacity	80 LPM (1.4 kg/cm2) Supply			
Material	Alluminium Diecast Body			
Weight	1.8 Kg. (Approx)			

NOTE : 1. 1/2" split range can be adjusted

2. Feedback lever for stroke 80-150mm is available (PPL)

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Rotary / Linear Type Elector - Pneumatic Valve Positioner

Catalogue No.
APL / 1049



"aira" Electro-Pneumatic Positioner (4-20 mA DC, linear and rotary type) are advanced control devices which provide unparalleled stability in difficult environment.

Description

The **"aira"** AEP-1000-R/L series Electro-pneumatic are used as final controlling element for operation of pneumatic Rotary/linear valve actuators in correspondence with an input Signal of 4-20mA DC or split ranges.

The Positioners are based on a force balance design for control application that requires a high degree of reliability and repeatability at an economical cost.

The Positioners can handle the supply pressure up to 100 psig for higher pressure industrial pneumatic and process control system requirements.

Principle of Operation

The operation of **"aira"** AEP-1000-R/L series positioners is based on a force balanced system. Tension on the feedback spring provides feedback to the positioner which will vary as the actuator shaft rotates with cam. The spring Loading force is applied through the cam shaft & cam to the positioner's instrument signal capsule through the balance beam.

Input of 4-20mA DC is applied to the instrument and corresponding output is applied to the control capsule serving as force balance membrane and matching the actuator shaft position to the instrument signal.

Field Reversible

To change from direct acting to reverse acting simply reverse the cam and fix it on cam shaft and make sure of the signal SPAN which is printed on the cam and recalibrate for Actuator fully open or close position in case of Pneumatic to Pneumatic. For Electro-Pneumatic change current signal input leads from positive to negative and change current signal from 4-20 to 20-4 over and above cam reverse and recalibrate the Positioner.

Features

- Designed as block build structure for maintenance and repair
- Precise calibration with simple SPAN and ZERO adjustments
- Simple conversion to Direct Acting or Reverse Acting
- Split range control available by simple adjustments without changing parts
- Simple structure for feedback connection
- Corrosion-resistant aluminium die cast body
- Sensitive response for high performance
- Vibration resistant design
- Stainless Steel Gauge Standard
- A restricted pilot valve orifice kit for small actuators included
- Optional built-in limit switched or 4-20 mA position transmitter for feedback
- Optional directly-mountable positioner
- Proved the reliability through over 5,00,000 times of repeat test & Vibration test.

Mounting

The **"aira"** AEP-1000-R/L series positioners may be mounted on Linear Actuator/Rotary Actuator as per installation and operational manual.

Options Available

- Position Transmitter (4-20mA DC.)
- Two limit Switches.
- Valve, Valve-Actuators
- Damper and Louver Actuators
- Air-Cylinders
- Relays
- Clutches
- Web Tensioners and Brakes

Technical Specification Table

MODEL	Linear		Rotary	
	Single	Double	Single	Double
	AEP-1000-L		AEP-1000-R	
Input Signal	4~20 mA DC (NOTE 1)			
Input Resistance	235±15			
Supply Air Pressure	20~100psi (7.0 kg/cm ²)			
Standard Stroke	10~80mm (NOTE 2)			
Air Piping Connection	¼ NPT (F)			
Conduit Connection	½ NPT (F)			
Explosion-proof Classification	Exia II BT6, Exdm II BT6, Exdm II CT6			
Degree of Protection	IP66			
Ambient Temperature	-20°C to 70°C			
Pressure Gauge	Stainless Steel 0-2 kg/cm2			
	0-4 kg/cm ²			
	0-10 kg/cm ²			
Output Characteristics	Linear / Rotary			
Linearity	Within ± 1.0% F.S.			
Sensitivity	Within 0.2% F.S.			
Hysteresis	Within 0.75% F.S.			
Repeatability	Within ± 0.5% F.S.			
Air Consumption	5.0 LPM (1.4 kg/cm ²) Supply			
Flow Capacity	80 LPM (1.4 kg/cm ²) Supply			
Material	Alluminium Diecast Body			
Weight	2.8 Kg. With a terminal box			

NOTE : 1. 1/2 split range can be adjusted

2. Feedback lever for stroke 80-150mm is available (PPL)

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Integrated Characteristics

- Suitable for Rotary / Linear Actuators.
- Low Air consumption.
- No Air resonance at 5-200Hz.
- Prevents hunting by using Orifice for small size actuator.
- Simple Converting to Direct Acting or reverse Acting.
- Precise Calibration with simple SPAN and Zero Adjustments.
- Suitable for Single/Double acting Actuators.
- Can control 1/2 split range with simple operation without replacing any parts.
- Extremely Vibration Resistance Design.
- Easy Maintenance.
- Corrosion-Resistance Aluminium Diecast Body.

Application

The **"aira"** AEP - 1000 R/E Positioners converts pneumatic/electrical signal to a pneumatic output which can be used to operate the following :

Used In

Petrochemical Processing Systems, Energy Management, HVAC Systems, Textile Processing Systems. Pharmaceutical Processing System, Paper & Pulp Handling Controls.

Rotary / Linear Type Elector - Pneumatic Direct Mount Positioner

Catalogue No.
APL / 2026



"aira" Pneumatic-Pneumatic Positioner (3-15 pst / rotary off linear type) are advanced control devices which provide unparalleled stability in difficult environment.

Electro - Pneumatic Positioner is used for operation of pneumatic Multiple springs diaphragm actuators by means of electrical or control system with an output signal of DC 4 - 20 mA or split ranges

Features

- CE, CIMFR, BIS, ISI, ISO Certified, approved
- It is connected with Diaphragm actuator directly without Air pipe, and can be mounted the Filter Regulator on.
- Sturdy, tubeless and vibration resistant design
- There is no resonance at 5-200Hz.
- The change of RA/DA acting is convenient. It is able to apply to single or double acting actuator.
- It is possible to prevent the hunting with orifice to the small size actuator
- It is economical due to less air consumption.
- It is able to control the ½ split range with simple operation with replacement of parts.



Technical Specifications :

TYPE	AEP - 1500 - L	
ITEM	Rotary Type (can feedback)	
	Single	Double
Input Signal	4~20 mA DC	
Impedance	250±15Ω	
Supply Air	1.4~7kg f/cm ² (20~100psi)	
Stroke	10~150mm	
Air Connection	PT(NPT) 1/4	
Gauge Connection	PT(NPT) 1/8	
Conduit	PF ½ (G1/2)	
Explosion proof	ExdIIBT6, ExdIICT6, ExialIT6	
Protection	IP66	
Ambient temperature	-200C~70°C	
Linearity	± 1% F.S.± F.S.	
Hysteresis	± 1% F.S.	
Sensitivity	± 0.2% F.S.± 0.5% F.S.	
Repeatability	± 0.5%	
Air Consumption	3LMP(Sup=1.4kgf/cm ² , 20psi)	
Flow Capacity	80 LPM (Sup=1.4kgf/cm ² , 20psi)	
Material	Alluminium alloy	
Weight	2.8 Kg.(6.2lb)	

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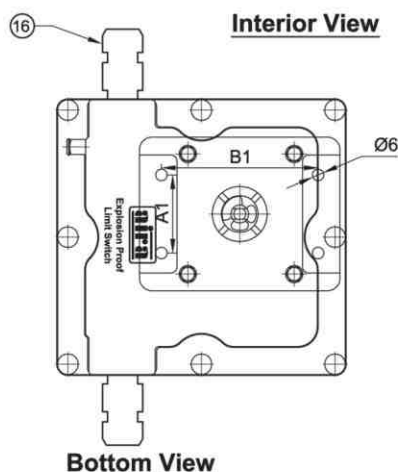
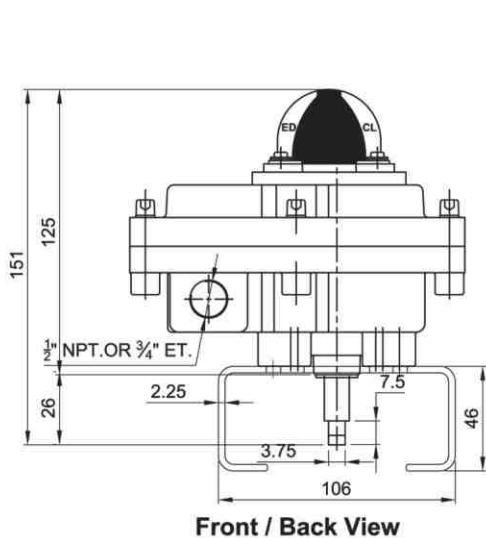
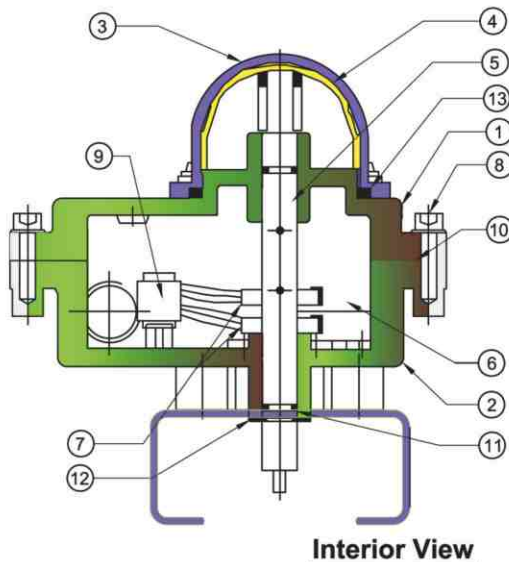
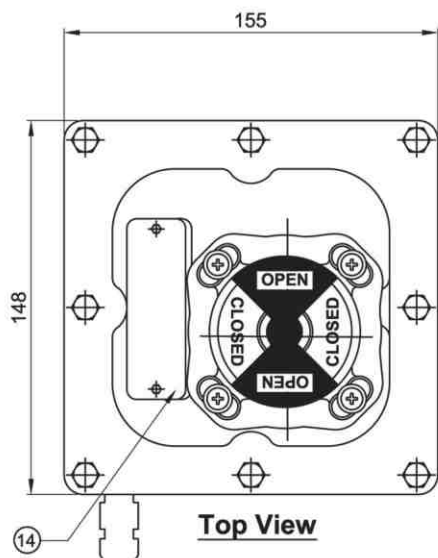


WeatherProof Micro Limit Switch Box with Dom Indicator Type ON/OFF Indicator

Catalogue No.
APL / 2039

Technical Specification

Type	Mechanical Switch X 2		Proximity Sensors P&F Make	
Model	SLSB-WP-01	SLSB-WP-02	SLSB-WP-03	SLSB-WP-04
Switch	Honeywell V15	Honeywell V15	NJ2-V3-N (Upto 8V)	NBB3-V3-Z4 (Upto 10 to 60 VDC)
Type	1 NO + 1 NC	2 NO + 2 NC	----	----
Switch Rating	AC 250V 3A, 125V 5A DC 250V 0.2A, 125V 0.4A, 30V 4A			
Enclosure Protection	IP 67			
Ambient Temp.	-20 °C ~ 80 °C			
Conduit Entry	NPT 1/2" (PT 1/2", PF 1/2, M20, PG 13.5)			
Terminal	8 Points			
Mounting Bracket	Namur VDI / VDE 3845, ISO 5211			
Material	Aluminum Pressure Die Cast			



Sr. No.	Description	Material
1	Enclosure Cover	Aluminium Pressure Die Cast
2	Enclosure Cover	Aluminium Pressure Die Cast
3	Visual Position Indicator Dom	Poly carbonate (Antistatic)
4	Position Indicator	ABS
5	Shaft (Operating Rod)	S. S. 304
6	Switches	STD.
7	Splined Cam	Nylon
8	Allen Head Bolt	S. S. 304
9	Terminal Block	STD.
10	'O' Ring for Cover	NBR
11	'O' Ring for Shaft	NBR
12	Circlip	S. S.
13	'O' Ring for Dom	NBR
14	Name / Warning Plate	Stainless Steel
15	Spring Washer	Stainless Steel
16	Cable Gland	M. S.

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FlampProof Limit Switch Box

Catalogue No.
APL / 2040



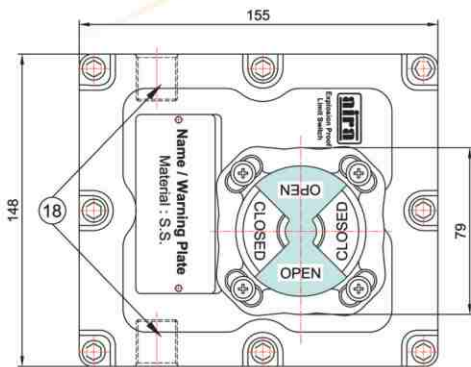
Technical Specification

Type	Mechanical Switch X 2			Proximity Sensors P&F Make	
Model	MLS-FLP-01	MLS-FLP-02	MLS-FLP-03	MLS-FLP-04	MLS-FLP-05
Switch	Honeywell V15	Honeywell V15 (PCB TYPE)	Honeywell V15	NJ2-V3-N (Upto 8 Voltage)	NBB3-V3-Z4 (Upto 10V To 60V DC)
Type	1 NO + 1 NC	1 NO + 1 NC	2 NO + 2 NC	----	----
Switch Rating	AC 250V 3A, 125V 5A DC 250V 0.2A, 125V 0.4A, 30V 4A				
Enclosure Protection	IP 67				
Ambient Temp.	-20 °C ~ 80 °C				
Conduit Entry	NPT 1/2" (PT 1/2, PF 1/2, M20, PG 13.5)				
Terminal	8 Points				
Mounting Bracket	Namur VDI / VDE 3845, ISO 5211				
Material	Aluminum Pressure Die Cast				

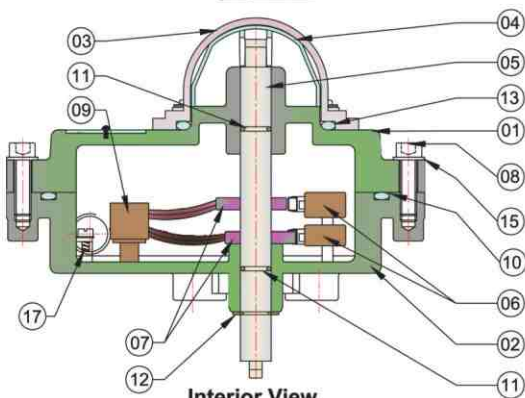
Feature :

- Easy settable colour coded cam
- Serrated cams locked together ensures adjusted setting secured against any vibration
- Special PCB eliminates all wiring from the switch element to the terminals, Protection against short circuit
- All Fasteners in Stainless Steel
- Water, Rain Proof to IP 67
- Additional mounting hole threaded

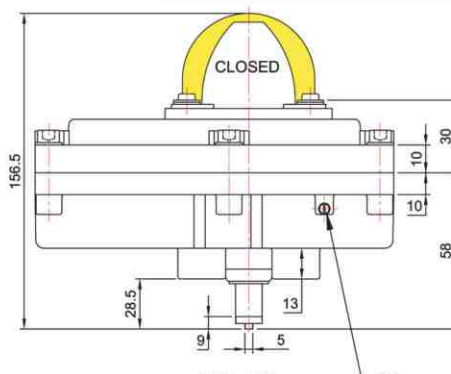
Sr. No.	Description	Material
1	Enclosure Cover	Aluminium Pressure Die Cast
2	Enclosure Housing	Aluminium Pressure Die Cast
3	Position Indicator Dom (External of Enclosure)	Poly carbonate (Antistatic)
4	Position Indicator (External of Enclosure)	ABS (Antistatic)
5	Shaft (Operating Rod)	S. S. 304
6	Switch	Honey Well / Cherry / Omron / Turck / P & F
7	Splined Cam	Cast Aluminium Alloy
8	Allen Head Bolt	M6 X 20 Lenght Stainless Steel
9	Terminal Block	STD.
10	'O' Ring for Cover	NBR
11	'O' Ring for Shaft	NBR
12	Circlip	S. S. Spring Steel
13	'O' Ring for Dom	NBR
14	Name / Warning Plate	Stainless Steel
15	Spring Washer	Stainless Steel
16	Internal Earthing	M4 X 8 L Stainless Steel
17	External Earthing	M4 X 8 L Stainless Steel
18	Cable Entry	M20 - 6H / Optional Entry 1/2" NPT. - 6H



Top View



Interior View



Side View

External Earthing

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FlameProof Micro Limit Switch Box with Stainless Steel 304

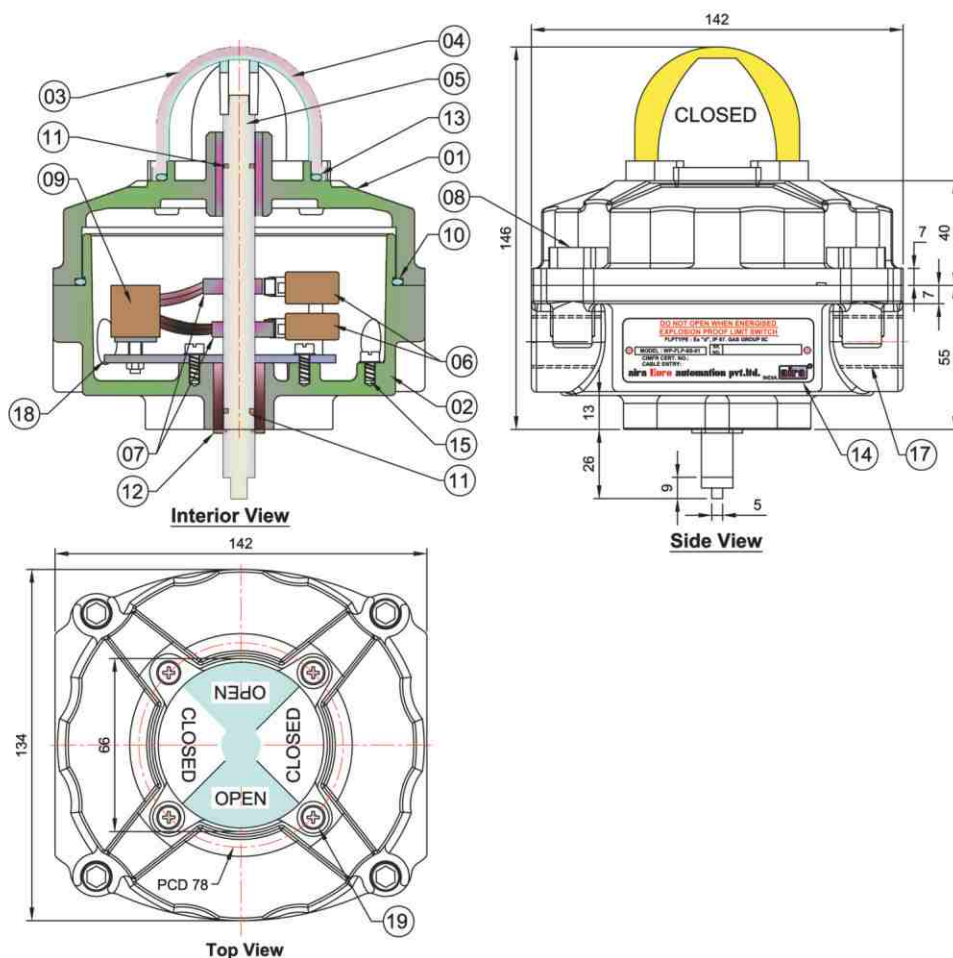
Catalogue No.
APL / 2041

Technical Specification

Type	Mechanical Switch X 2			Proximity Sensors P&F Make	
Model	LS4-FLP-01	LS4-FLP-02	LS4-FLP-03	LS4-FLP-04	LS4-FLP-05
Switch	Honeywell V15	Honeywell V15 (PCB TYPE)	Honeywell V15	NJ2-V3-N (Upto 8 Voltage)	NBB3-V3-Z4 (Upto 10V To 60V DC)
Type	1 NO + 1 NC	1 NO + 1 NC	2 NO + 2 NC	----	----
Switch Rating	AC 250V 3A, 125V 5A DC 250V 0.2A, 125V 0.4A, 30V 4A				
Enclosure Protection	IP 67				
Explosion Proof	Ex d IIC T6				
Ambient Temp.	-20 °C ~ 80 °C				
Conduit Entry	NPT 3/4" (PT 3/4, M20)				
Terminal	8 Points				
Mounting Bracket	Namur VDI / VDE 3845, ISO 5211				
Material	Stainless Steel 304 (Stainless Steel 316 On Request)				

Salient Feature :

- Visual Position Indicator
- 6 Contacts of Terminal Ports
- Compatibility with any rotary motion actuator ISO 5211
- Easy adjustment of cam position
- Dual 1/2" Conduit entries



Sr. No.	Description	Material
1	Enclosure Cover	CF8 / CF8M
2	Enclosure Housing	CF8 / CF8M
3	Visual Position Indicator Dom	Poly carbonate (Antistatic)
4	Position Indicator (External of Enclosure)	ABS (Antistatic)
5	Shaft (Operating Rod)	S. S. 304
6	Switches	Honey Well / Cherry / Omron Turck / P & F
7	Splined Cam	Plastic
8	Hexgon Socket Head Cap Screw	M6 X 20 Length Stainless Steel
9	Terminal Block	STD.
10	'O' Ring for Cover	NBR
11	'O' Ring for Shaft	NBR
12	Circlip	S. S.
13	'O' Ring for Dom	NBR
14	Name / Warning Plate	Stainless Steel
15	Internal Earthing	M4 X 8 L Stainless Steel
16	Cable Entry	M20 - 6H (Optional Entry 1/2", 3/4" NPT, 3/4" ET)
17	Mounting Plate	Bakelight (PCB)
18	Dom Fitting Screw	M4 X 10L Stainless Steel

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WeatherProof Limit Switch Box

Catalogue No.
APL / 2042

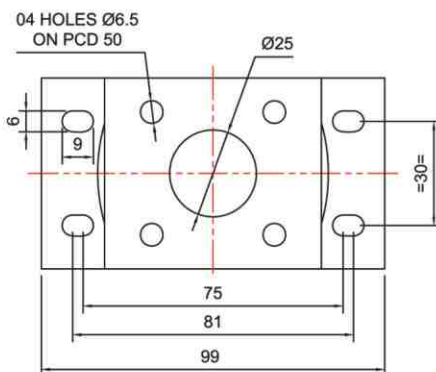
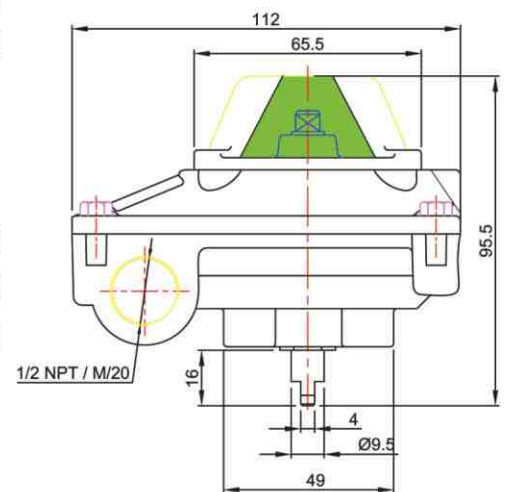
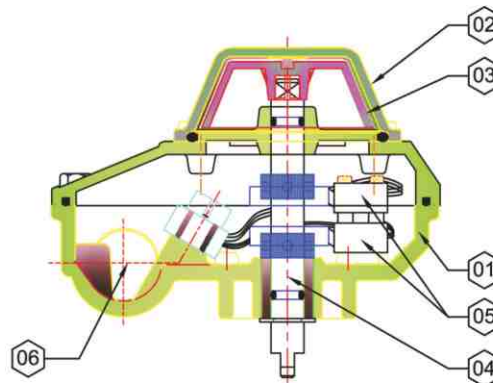
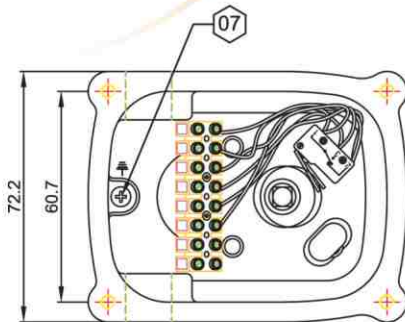


Salient Feature :

- Visual Position Indicator
- 6 Contacts of Terminal Ports
- Compatibility with any rotary motion actuator ISO 5211
- Easy adjustment of cam position
- Dual 1/2" Conduit entries

Technical Specification

Type	Mechanical Switch X 2		Proximity Sensors P&F Make	
Model	MLSB-WP-01		MLSB-WP-02	MLSB-WP-03
Switch	Honeywell ZM		NJ2-V3-N (Upto 8 Voltage)	NBB-V3-Z4 (Upto 10 to 60V DC)
Type	1 NO + 1 NC		----	----
Switch Rating	AC 250V 3A, 125V 5A DC 250V 0.2A, 125V 0.4A, 30V 4A			
Enclosure Protection	IP 67			
Ambient Temp.	-20 °C ~ 80 °C			
Conduit Entry	NPT 1/2" (PT 1/2, PF 1/2, M20, PG 13.5)			
Terminal	8 Points			
Mounting Bracket	Namur VDI / VDE 3845, ISO 5211			
Material	Aluminium Pressure Die Cast			



Sr. No.	Description	Material	Qty.
1	Body	Aluminium Die Cast	1
2	Position Indicator Dom (External of Enclosure)	Poly Carbonate	1
3	Position Indicator (External of Enclosure)	Yellow / Black On / Off Indicator	1
4	Shaft (Operating Rod)	S. S.	1
5	Switch	1 No + 1 NC / 2 Nos. (Honeywell)	2
6	Cable Entry	PVC	2
7	Internal Earthing	Std.	1

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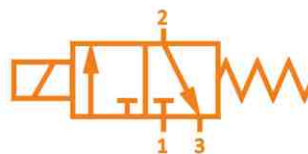
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"AJ Series" 3/2 Way Direct Acting Solenoid Valve

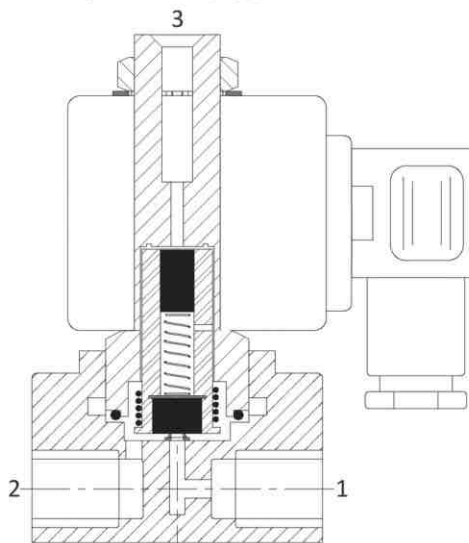
Catalogue No.
APL / 2043

Technical Specification

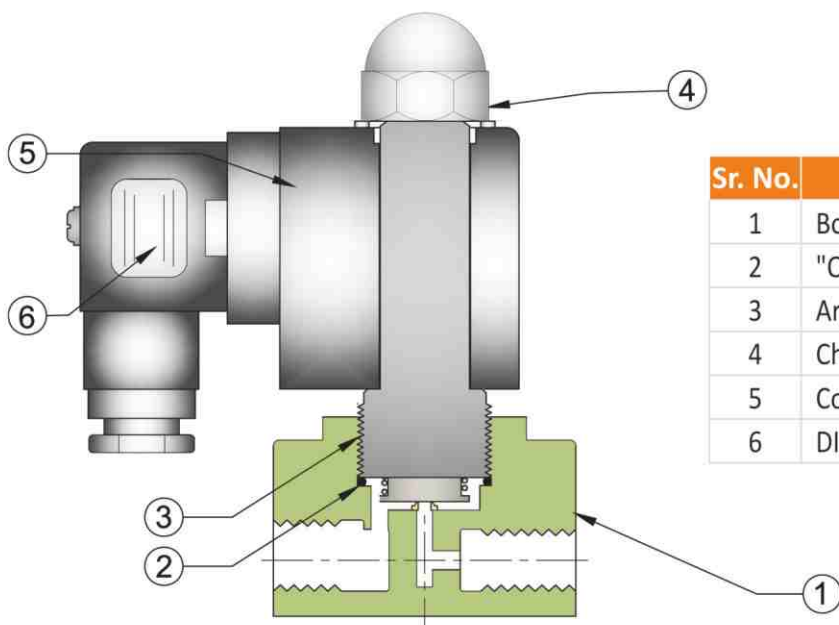
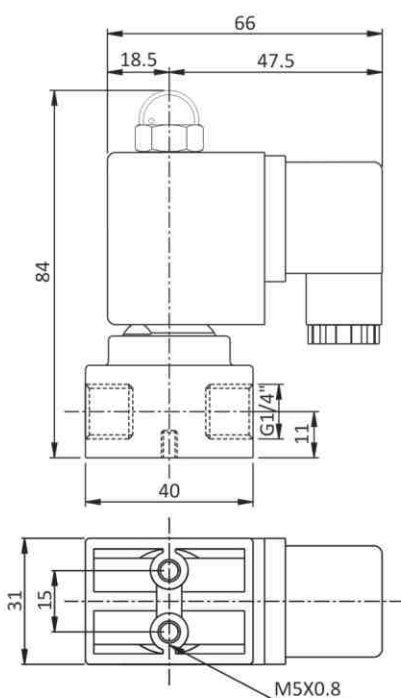
Size	1/4"		
Model	AJDS-08-202	AJDS-09-202	AJDS-10-202
Orifice	2.5 mm	2 mm	1.2 mm
Pressure	7 Kg/cm ²	10 Kg/cm ²	20 Kg/cm ²
Flow	180	140	60
Temperature	Upto 55 °C		
Leakage	Bubble Tight		
Media	Air (Filtered & Lubricated)		
Voltage	24, 48, 110, 230V AC / 12, 24, 48, 110V DC		



NORMALLY CLOSED



1 - Inlet 2 - Outlet 3 - Exhaust



Sr. No.	Description	Material
1	Body	Aluminium Pressure Die Cast
2	"O" - Ring	NBR
3	Armature Assembly	Standard Steel
4	Check Nut	Steel Plated
5	Coil	"F" Class
6	DIN Connector	DIN 43650 A

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3/2 Way Namur Direct Acting Solenoid Valve

Catalogue No.
APL / 2044



"aira"

Offers 3/2 Way Namur Solenoid Valve open and shuts by given electrical single of AC & DC outputs supply air pressure to valve or changes the output port directions.

Technical Specification

Item - Type	NAM-SA-32
Coil Voltage	All Std. Voltage Available
Frequency	50 - 60 Hz
Connection Type	1/4"
Conduit	PF 1/2"
Coil Insulation Grade	Class "F"
Ambient Temp.	Std. -20 °C ~ 70 °C (-4 ~ 158 °F)
Explosion Temp.	-20 °C ~ 50 °C (-4 ~ 122 °F)
Body Material	Aluminium (SS On Request)
Internal Parts	Aluminium / SS
Seals	NBR (Viton On Request)
Working Pressure	Upto 10 BAR

Feature :

- Designed to be Ex d IIC T6 explosion proof grade.
- Easy replacement of coil as both AC and DC type use same enclosure.
- Can test the operation in manual switch without power source.
- High durability as valve body is pneumatic pressure operating type.
- Can be directly mounted on an actuator. (NAMUR Design)
- Ideally Suited for spring return actuator for on / off duty dust cap fitted on exhaust ports.
- Interchangeable of AC and DC Coils
- Manual Over Ride Switch



Weather Proof with DIN Connector



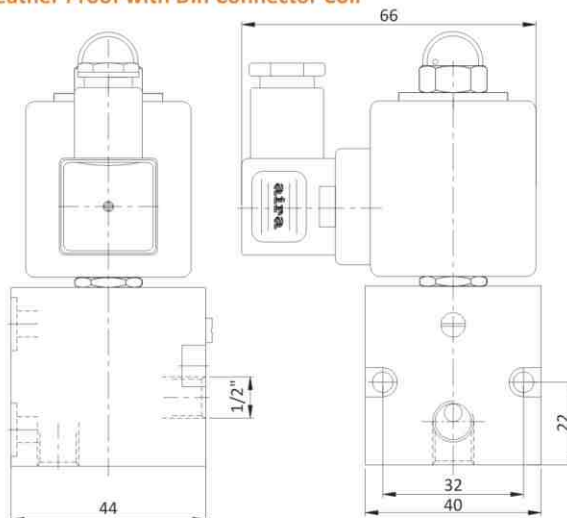
Flame Proof / Explosion Proof Coil with CIMFR Certificate



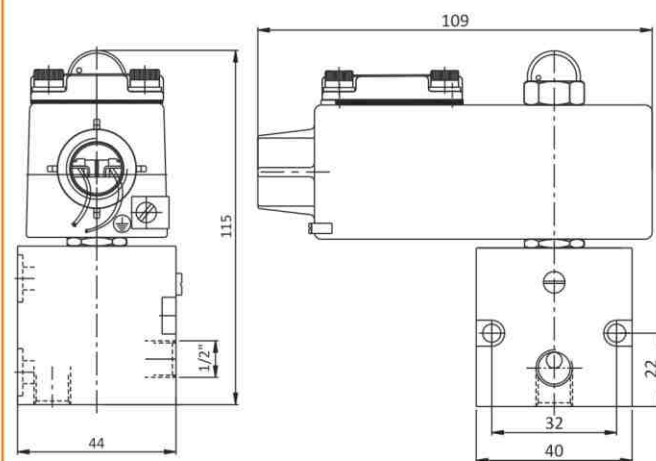
Weather Proof with Terminal Type Junction Box Coil



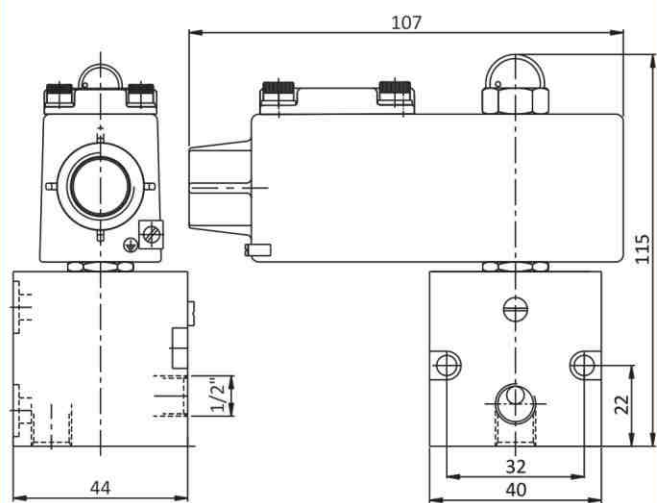
3/2 Namur Direct Acting Solenoid Valve Weather Proof with Din Connector Coil



3/2 Namur Direct Acting Solenoid Valve Flame Proof / Explosion Proof Coil with CIMFR Certificate.



3/2 Namur Direct Acting Solenoid Valve Weather Proof with Terminal Type Junction Box Coil.



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www.airaindia.com / www.airaeuro.com



3/2 & 5/2 Way Convertible Poppet Type Namur Solenoid Valve

Catalogue No.
APL / 2045

"aira"

Offers 3/2 & 5/2 Way Convertible Poppet Type Namur Solenoid Valve. Opens and shuts by given electrical signals AC or DC, outputs supply air pressure to valve (Actuator) or changes the output port direction.

Technical Specification

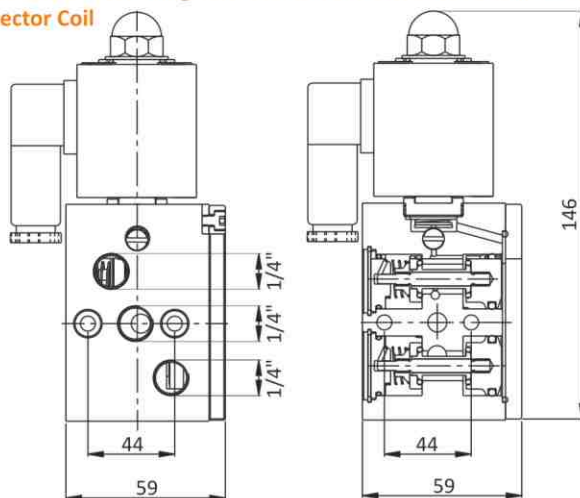
Item - Type	OTX-PPT-32	OTX-PPT-52
Coil Voltage	All Std. Voltage Available	
Frequency	50 - 60 Hz	
Connection Type	1/4"	
Conduit	PF 1/2"	
Coil Insulation Grade	Class "F"	
Ambient Std.	-20 °C ~ 70 °C (-4 ~ 158 °F)	
Temp. Explosion	-20 °C ~ 50 °C (-4 ~ 122 °F)	
Body Material	Aluminium (SS On Request)	
Internal Parts	Aluminium / SS	
Seals	NBR (Viton On Request)	
Working Pressure	Upto 10 BAR	

Feature :

- Designed to be Ex d IIC T6 explosion proof grade.
- Easy replacement of coil as both AC and DC type use same enclosure.
- Can test the operation in manual switch without power source.
- High durability as valve body is pneumatic pressure operating type.
- Can be directly mounted on an actuator. (NAMUR Design)
- Ideally Suited for spring return actuator for on / off duty dust cap fitted on exhaust ports.
- Interchangeable of AC and DC Coils
- Manual Over Ride Switch



3/2 Namur Direct Acting Solenoid Valve Weather Proof with Din Connector Coil



Weather Proof with DIN Connector



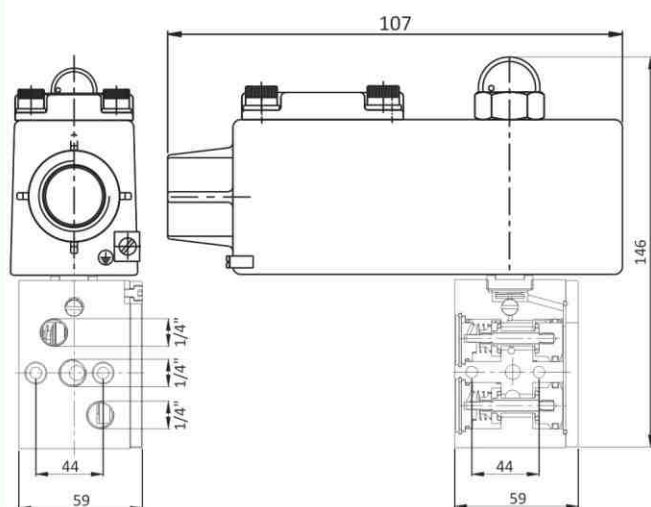
Weather Proof with Terminal Type Junction Box Coil



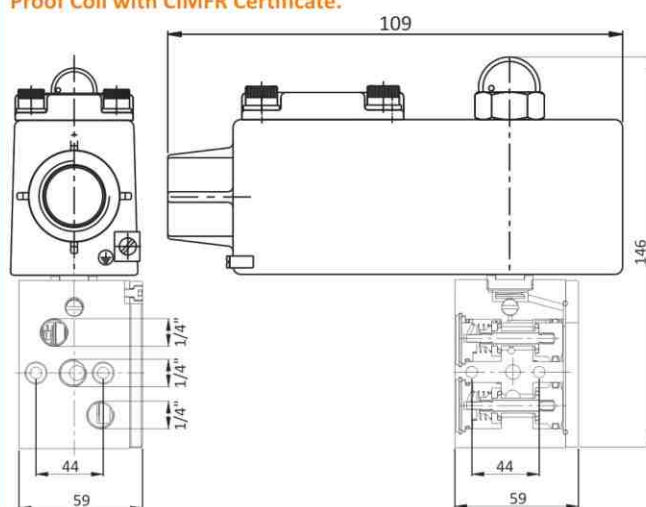
Flame Proof / Explosion Proof Coil with CIMFR Certificate



3/2 Namur Direct Acting Solenoid Valve Weather Proof with Terminal Type Junction Box Coil.



3/2 Namur Direct Acting Solenoid Valve Flame Proof / Explosion Proof Coil with CIMFR Certificate.



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3/2 & 5/2 Way Convertible Spool Type Single & Double Namur Solenoid Valve

Catalogue No.
APL / 2046

"aira"

Offers 3/2 & 5/2 Way Convertible Poppet Type Namur Solenoid Valve. Opens and shuts by given electrical signals AC or DC, outputs supply air pressure to valve (Actuator) or changes the output port direction.

Technical Specification

Item - Type	AMV-NAM-220
Coil Voltage	All Std. Voltage Available
Frequency	50 - 60 Hz
Connection Type	1/4"
Conduit	PF 1/2"
Coil Insulation Grade	Class "F"
Ambient Std.	-20 °C ~ 70 °C (-4 ~ 158 °F)
Temp. Explosion	-20 °C ~ 50 °C (-4 ~ 122 °F)
Body Material	Aluminium (SS On Request)
Internal Parts	Aluminium / SS
Seals	NBR (Viton On Request)
Working Pressure	Upto 10 BAR

Feature :

- Designed to be Ex d IIC T6 explosion proof grade.
- Easy replacement of coil as both AC and DC type use same enclosure.
- Can test the operation in manual switch without power source.
- High durability as valve body is pneumatic pressure operating type.
- Can be directly mounted on an actuator. (NAMUR Design)
- Ideally Suited for spring return actuator for on / off duty dust cap fitted on exhaust ports.
- Interchangeable of AC and DC Coils
- Manual Over Ride Switch



Weather Proof with DIN Connector



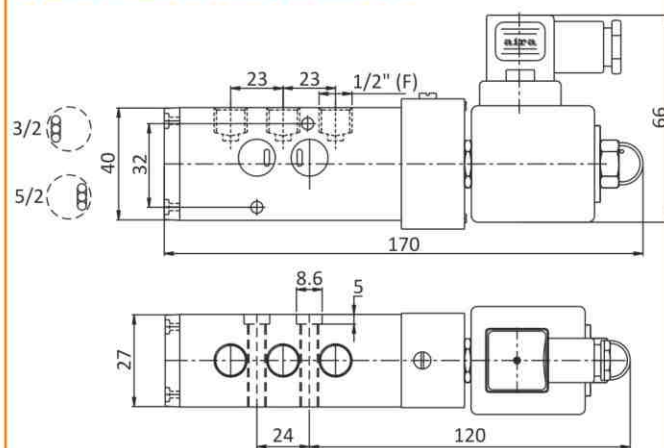
Flame Proof / Explosion Proof Coil with CIMFR Certificate



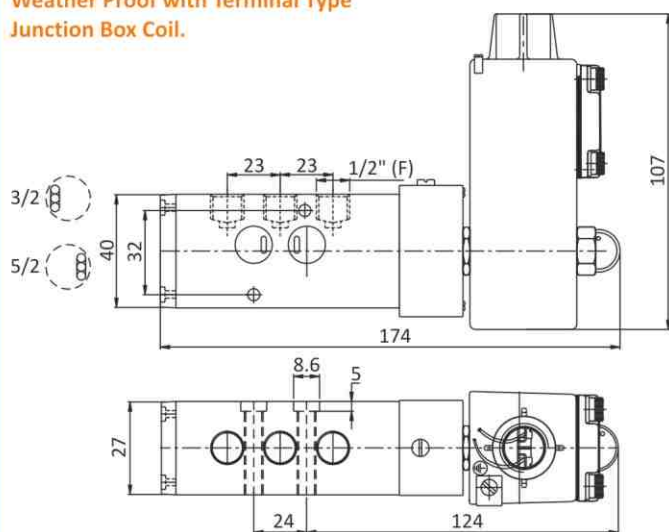
Weather Proof with Terminal Type Junction Box Coil



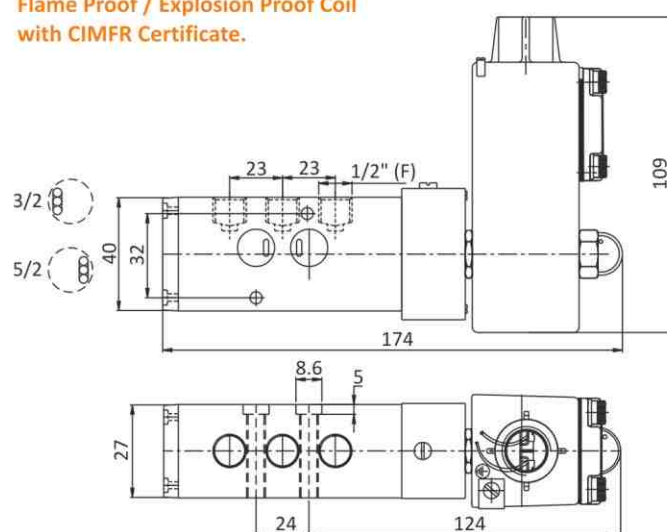
3/2 Namur Direct Acting Solenoid Valve Weather Proof with Din Connector Coil



3/2 Namur Direct Acting Solenoid Valve Weather Proof with Terminal Type Junction Box Coil.



3/2 Namur Direct Acting Solenoid Valve Flame Proof / Explosion Proof Coil with CIMFR Certificate.



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F + R Combination

Catalogue No.
APL / 2047

"aira"

Offers Air filter regulator receives main air pressure and supplies to the desirable level to a positioner or other devices.

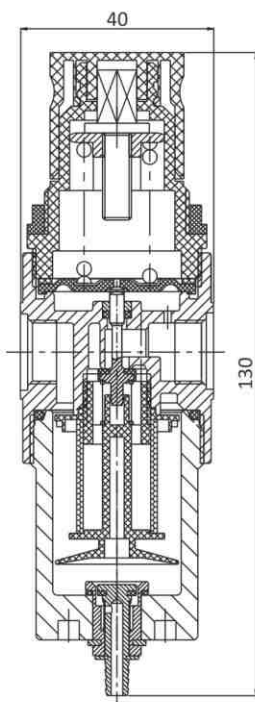
Feature :

- Maintain desirable pressure level, regardless of fluctuation of pressure input.
- Aluminium body increases versatility of the product in different environments.
- 5 micron filter sorts minuteness particles in the air.
- Relief function is available which discharge to atmosphere if the outlet pressure is higher than setting pressure.

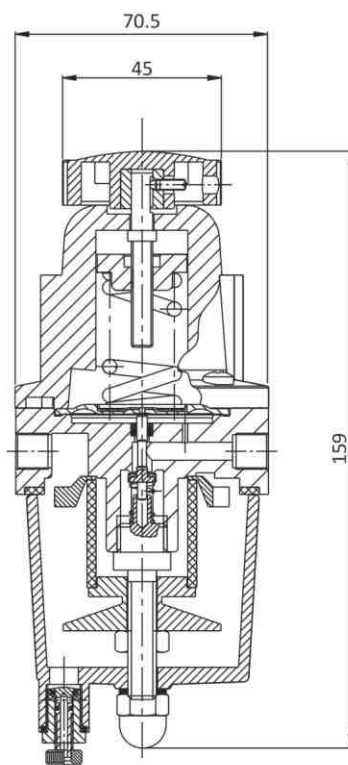
Technical Specification

Item - Model	4FQ	8FQ	FRJ
Air Connection	1/4"		
Max. Supply Pressure	0.5 to 4 Kg/cm ²	0.5 to 8 Kg/cm ²	1 to 9 Kg/cm ²
Gauge Connection	1/8"		
Ambient Temperature	-20° ~ 120° (High Temp.) -40° ~ 120 °C (low Temp.)		
Min Filtering Size	5 Micron		
Material	Aluminium Pressure Die Cast		

(FRJ)



(4FQ / 8FQ)



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Air Volume Booster



"aira"

Offers Volume booster relay VB-01, VB-02, VB-03 used in pneumatic control valve which receives positioners's output single and supply air pressure actuator for reduce response and adjusting time.

Technical Specification

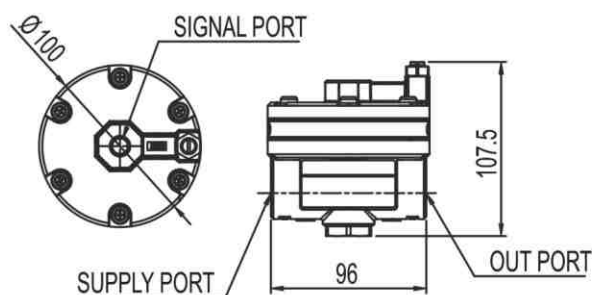
Valve Model	VB - 01	VB - 02	VB - 03
Max. Supply Pressure	Max. 1Mpa (10 Bar)		
Max. Output Pressure	Max. 0.7Mpa (7 Bar)		
In/Output Connection	1 : 1		
Signal Connection	1/4"	1/2"	3/4"
Linearity	1/4"	1/4"	1/4"
Hysteresis	1%		
ambient Temp.	-20 °C ~ 70 °C (St'nd), -20 °C ~ 120 °C (High), -40 °C ~ 70 °C (Low)		
Material	Aluminium Die Cast		Stainless Steel 304 / 316

Features :

- Improves speed of valve movement.
- Improves stability with by-pass controls.
- Reacts to sudden change in supply pressure.
- Fixed dead band due to the seal - to seal type of supply and exhaust pressure.

Function :

- Supplies constant air pressure at the rate of 1 : 1.
- By-passing control enhance safety of control valve.
- Responses to slight changes in input signal, which increases accuracy of output of air pressure to actuator.
- Built-in 100 mesh screen filters dusts in the air.



Single & Double Air Lock Valve

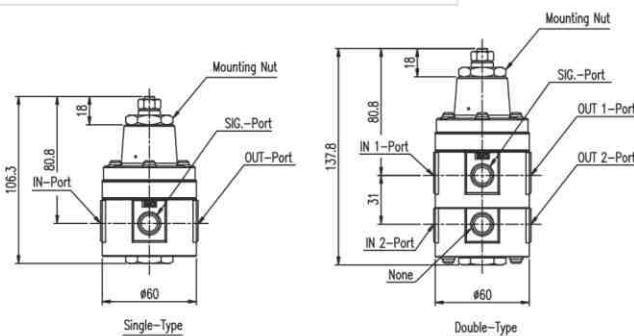


Technical Specification

Model	ALV - 1	ALV - 11	SLV - 1	SLV - 11
Material	Aluminium Die Cast		Stainless Steel 304 / 316	
Max. Supply Pressure	Max. 10.2 Kg/cm ² (142 PSI)			
Max. Single Pressure	Max. 7.1 Kg/cm ² (1000 PSI)			
Setting Pressure Range	1.4-7.1 Kg/cm ² (20 ~ 100 PSI)			
Flow Capacity (Cv)	0.9			
In/Output Port Connection	PT (NPT) 1/4"			
Signal Port Connection	PT (NPT) 1/4"			
Differential Pressure	Below 0.1 Kg/cm ² (1.4 PSI)			
Hysteresis	1%			
ambient Temp.	-20 °C ~ 70 °C			

Features :

- Due to its compact size and light weight, Lock up valve can be installed without bracket.
- It responses to less than 0.1 Kg/ cm^2 Pressure Change/s.
- Epoxy powder coating resists against the corrosion.
- 100 mesh screen filters small dust entering.



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Stainless Steel Triclover End For Hygienic Application

Catalogue No.
APL / 2050

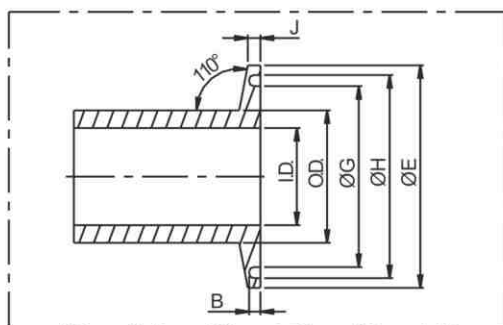
Salient Features

- Guaranteed Surface finish ■ Electro-polishing in valve and the T.C. ends ■ Dimensional Accuracy
- No gaps in joints ■ Easy to disassemble

"Airmax" has inhouse facilities for electro-finishing to the valves and T.C. ends Electro-polishing Treatment, which...

- Improve sanitising results and reduces down time. ■ Maximise passivation and improves corrosion resistance. ■ Redduces friction coeeficient. ■ Offers longer shelf life.

TC END Connector



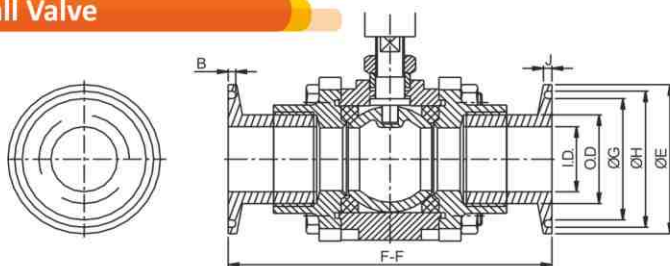
Dimensions :

(All dimensions are in MM)

Valve Size		ØE	ØG	ØH	I.D.	O.D.	J	B
MM	Inch							
15	1/2"	34	25.5	29.5	12.5	18.5	2.8	1.5
20	3/4"	34	25.5	29.5	17	23	2.8	1.5
25	1"	50.5	42	46	24	31	2.8	1.5
40	1.1/2"	50.5	42	46	32	41	2.8	1.5
50	2"	64	55.5	59.5	42.5	52.5	2.8	1.5
65	2.1/2"	77.4	68.6	72.6	60.3	70	2.8	1.5
80	3"	90.9	81.3	85.3	73	83	2.8	1.5



Ball Valve

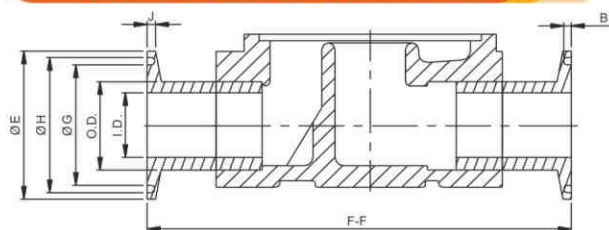


Dimensions :

(All Dimensions are in mm)

Valve Size		ØE	ØG	ØH	I.D.	O.D.	J	F-F	B
MM	Inch								
15	1/2"	34	25.5	29.5	12.5	18.5	2.8	81	1.5
20	3/4"	34	25.5	29.5	17	23	2.8	86.7	1.5
25	1"	50.5	42	46	24	31	2.8	88.5	1.5
40	1.1/2"	50.5	42	46	32	41	2.8	106.5	1.5
50	2"	64	55.5	59.5	42.5	52.5	2.8	134.6	1.5
65	2.1/2"	77.4	68.6	72.6	60.3	70	2.8	187	1.5
80	3"	90.9	81.3	85.5	73	83	2.8	187	1.5

ISD / GSD / STEAM Solenoid Valve



Dimensions :

(All Dimensions are in mm)

Valve Size		ØE	ØG	ØH	I.D.	O.D.	J	F-F	B
MM	Inch								
15	1/2"	34	25.5	29.5	12.5	18.5	2.8	95	1.5
20	3/4"	34	25.5	29.5	17	23	2.8	110	1.5
25	1"	50.5	42	46	24	31	2.8	125	1.5
40	1.1/2"	50.5	42	46	32	41	2.8	150	1.5
50	2"	64	55.5	59.5	42.5	52.5	2.8	165	1.5

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Conversion Factors

The following table gives conversions of Imperial and discontinued Metric units in to preferred SI units and others acceptable units. For most practical the approximate conversion will prove adequate but for more critical use the second set of conversion factors should be used.

Form Old Unit	To SI Unit	Approximate conversion	Accuracy	Conversion for greater accuracy
Pressure				
lbf/in ² (psig)	bar	x7 then ÷ 100	1.5%	÷ 14.5
lbf/in ² (psig)	N/m ²	x7000	1.5%	x6895
lbf/in ² (psig)	kilopascal (kpa)	x7	1.5%	x6.9
lbf/in ² (psig)	megapascal (Mpa)	x7 then ÷ 1000	1.5%	x6.9 then ÷ 1000
KGf/cm ² or kp/cm ²	bar	x1	2.0%	x0.98
KGf/cm ² or kp/cm ²	N/m ²	x100000	2.0%	x98070
KGf/cm ² or kp/cm ²	kilopascal (kpa)	x100	2.0%	x98
KGf/cm ² or kp/cm ²	megapascal (Mpa)	÷ 10	2.0%	x0.98
Atmosphere (Standard)	bar	x1	1.3%	x1.013
Atmosphere (Standard)	N/m ²	x100000	1.3%	x101300
Atmosphere (Standard)	kilopascal (kpa)	x100	1.3%	x101.3
Atmosphere (Standard)	megapascal (Mpa)	÷ 10	1.3%	x0.101
Inches Water Gauge (in H ₂ O)	millibar (mbar)	x10 then ÷ 4	0.6%	x2.49
Millimeters Water Gauge (mm H ₂ O)	millibar (mbar)	x10	2.0%	x0.098
Millimeters of Mercury (mm Hg)	millibar (mbar)	x9 then ÷ 7	0.04%	x1.33
Torr	millibar (mbar)	x9 then ÷ 7	0.04%	x1.33
Tons/in ²	bar	x1000 then ÷ 7	7.5%	x154
Tons/ft ²	bar	x1	1.5%	X1.07
*Also known as a 'technical' atmosphere				
Flow				
Cubic feet per minute (cfm)	Cubic Decimeters/second (dm ³ /s)	÷ 2	5.9%	x4.472
Cubic feet per minute (cfm)	Cubic meters/second (m ³ /s)	÷ 2 then 1000	5.9%	x0.472 then ÷ 1000
Cubic feet per hour	Cubic decimeters/second (dm ³ /s)	x8 then 1000	1.7%	x7.9 then ÷ 1000
Litres/minute (L/m)	Cubic decimeters/second (dm ³ /s)	x2 then 100	20%	÷ 60
Cubic metres/hour (m ³ /h)	Cubic decimeters/second (dm ³ /s)	÷ 4	10%	x0.28
*The litre is equal to 1 cubic decimetre (dm ³) within 28 parts per million and for ÷ most practical purpose can be considered to be the same. For more precise work, increase the volume in litres by 1 part in 36000 to find the volume in dm ³ .				
Force (Weight)				
Pound - force (lbf)	newtone (N)	x4	10%	x9 then ÷ 2
Kilopound (kp)	newtone (N)	x10	2%	x9.8
Torque				
Pound - force foot (lbf ft)	newtone-metre (N m)	x3 then ÷ 2	10%	x1.36
Pound - force inches (lbf ft)	newtone-metre (N m)	÷ 10%	11%	x0.11
Length				
Inch (in)	millimetres (mm)	÷ 4 then x100	1.6%	x25.4
Foot (ft)	meter (m)	÷ 3 then x10	1.6%	x0.305
Yard (yd)	meter (m)	x1	9%	x12 then ÷ 13
n/16 inch	millimeters (mm)	'n'x3 then ÷ 2	5.5%	x1.6
n/1000 inch	millimeters (mm)	'n' ÷ 4 then ÷ 10	1.6%	x0.0254
Mile (mi)	kilometer (km)	x1.5	6.8%	x1.609
Mass				
Pound (lb)	kilogramme (mm)	÷ 2	10%	x0.45
Pound (lb)	gramme (g)	x1000 then ÷ 2	10%	x454
Ounce (oz)	gramme (g)	x30	6%	x28.4
Long Ton (UK)	Tonne (t)	x1	1.6%	x1.02
Short Ton (USA)	tonne (t)	x9 then ÷ 10	0.8%	x0.91
Power				
Horsepower (hp)	watt (W)	x3 then ÷ 4 then x1000	0.6%	x746
Horsepower (hp)	kilowatt (kw)	x3 then ÷ 4	0.6%	x0.746
Energy, Work				
Foot-pound-force (ft.lbf)	Joule (J)	x9 then ÷ 7	5.5%	x1.35
Kilogramme-force metres (kgf. m)	Joule (J)	x10	1.3%	x9.807
Britis thermal unit (Btu)	Joule (J)	x1000	5.5%	x1055
Volume				
Gallon (UK) (gal)	litre (L)	x5	10%	x4.54
Gallon (UK) (gal)	litre (L)	x4	5.7%	x3.79
Pint (UK) (pt)	litre (L)	x6 then ÷ 10	5.6%	x0.57
Pint (USA) (pt)	litre (L)	÷ 2	5.7%	x0.47
Fluid ounce (UK) (fl oz)	Cubic centimetre (cm ³)	x30	5.6%	x28.4
Fluid ounce (UK) (fl oz)	Cubic centimeter (cm ³)	x30	1.4%	x29.6
Temperature				
Fahrenheit (°F)	Celsius (°C)	÷ 32 then ÷ 2	10% between 0°F and 400°F	+40 then x 5 then ÷ 9 then ÷ 40 then

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Material Selection & Properties Chart

Chemical And Physical Properties Of Material Used

STANDARD			GENERAL NAME	CHEMICAL PROPERTIES (%) - Max. unless Specified										PHYSICAL PROPERTIES			
AMERICAN	GRADE	INDIAN	GRADE		C	Mn	P	S	Si	Cr	Ni	Mo	Cu	V	T.S.Mpa	Y.S.Mpa	ELONGATION%
ASTM-A216	CIB	I.S.-210	FG-200	CAST IRON	3.50	0.60 TO 0.90	0.400	0.080	1.20 TO 1.80	0.15	-	-	0.10	-	200	230	-
ASTM-A536	60-40-18	I.S.-1865	SG-60	S.G.IRON	3.00	0.70 TO 1.50	0.080	-	1.00 TO 2.80	1.00 TO 2.50	18.0 TO 22.0	-	-	-	600	370	2
ASTM-A216	WCB	I.S.-2856	GR-2	CARBON STEEL	0.30	1.00	0.04	0.045	0.60	0.50	0.50	0.20	0.30	0.30	485-655	250	22
ASTM-A351	CF8	I.S.-7806	GR-3	S.S.304	0.08	1.50	0.04	0.04	2.00	18.00 TO 21.00	8.00 TO 21.00	0.50	-	-	485	205	35
ASTM-A351	CF8M	I.S.-7806	GR-3	S.S.316	0.08	1.50	0.04	0.04	1.50	18.00 TO 21.00	9.00 TO 21.00	2.00 TO 3.00	-	-	485	205	30
ASTM-A217	WC6	I.S.-3038	GR-4	CAST ALLOY STEEL	-	-	-	-	-	1.00	0.40	0.50	-	-	480	280	17

Valve Body Materials

Rating	General Name	Specifications & Grade
ANSI B16.5 Class 150 PN-10	Cast Iron	ASTM A 126 Gr. CIB I.S. 210 Gr. F.G. 200, DIN, 0.6025 (GG.25)
ANSI B16.5 Class 300 PN-16	Stainless Steel	ASTM A 351 Gr. CF8, I.S. 7806 Gr. 3 DIN, 1.4410 (G-X10CRNIMO 189)
ANSI B16.5 300 PN-25	SG Iron	ASTM A 536 Gr. 60-40-18, Class, I.S. 1865 Gr. S.G. 600/3 DIN 0.7043 (GGG-40-3)
ANSI B16.5 Class 150, 300, 600	Cast Iron	ASTM A 216 Gr. WCB, I.S. 2856 DIN 1.0619 (GS-C25)
ANSI B16.5 Class 150, 300, 600	Stainless Steel	ASTM A 351 Gr. CF8M, I.S. 7806 Gr.3 DIN 1.4410 (G-X 5CRNIMO 189)
PN-16, PN-40	Cast Alloy Steel	ASTM A 217 Gr. WCB, I.S. - 3038 Gr-4 DIN 1.7357 (GS-17 CRMO.55)

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COMPATIBILITY CHART

CHEMICALS	A 126 CIB CAST IRON	A 126 WCB CARBON STEEL	A 351 CF8 SS304	A 351 CF8M SS316	A 217 WC6 CAST ALLOY STEEL	POLY PROPYLENE	CHEMICALS	A 126 CIB CAST IRON	A 126 WCB CARBON STEEL	A 351 CF8 SS304	A 351 CF8M SS316	A 217 WC6 CAST ALLOY STEEL	POLY PROPYLENE
ACETIC ACID	N	N	C	C	Y	Y	HYDROGEN SULFIDE	N	N	Y	Y	Y	Y
ACETALDEHYDE	Y	Y	Y	Y	-	Y	INDOFORM	-	N	Y	Y	-	N
ACETONE	Y	Y	Y	Y	Y	Y	KEROSENE	-	Y	Y	Y	-	Y
AMMONIA	Y	Y	Y	Y	Y	Y	LACTIC ACID	-	N	Y	Y	-	Y
AMMONIUM HYDROXIDE	-	N	Y	Y	-	Y	LITHIUM	-	C	Y	Y	-	N
AMMONIUM NITRATE	N	Y	Y	Y	Y	Y	MAGNESIUM HYDROXIDE	Y	Y	Y	Y	Y	Y
ASPHALT	Y	Y	Y	Y	Y	Y	MAGNESIUM SULFATE	-	C	Y	C	-	Y
BEER	C	C	Y	Y	Y	Y	METHYL CHLORIDE	-	N	Y	C	-	-
BENZENE (BENZOL)	Y	Y	Y	Y	Y	N	MILK	N	N	Y	Y	Y	N
BORIC ACID	N	N	Y	Y	Y	Y	MERCURY	Y	Y	Y	Y	Y	Y
BUTTER MILK	-	N	Y	Y	-	N	METHANOL	Y	Y	Y	Y	Y	Y
CARBONIC ACID	C	C	C	C	-	N	NATURAL GAS	Y	Y	Y	Y	Y	Y
CARBON DIOXIDE	Y	Y	Y	Y	Y	Y	NITRIC ACID	N	N	Y	C	N	Y
(DRY & WET)							OLEIC ACID	N	N	Y	Y	Y	Y
CHLORINE (DRY)	-	Y	Y	C	C	N	OXYGEN	Y	Y	Y	Y	Y	N
CHLOROFORM	-	Y	Y	Y	-	N	PARAFFIN	-	Y	Y	Y	-	C
COALTAR	Y	C	Y	Y	Y	N	PETROLEUM OILS	Y	Y	Y	Y	Y	N
COTTONSEED OIL	-	Y	C	Y	-	Y	POTASSIUM CHLORIDE	C	C	Y	Y	-	Y
COPPER NITRATE	Y	N	Y	C	Y	Y	PHOSPHORIC ACID	N	N	Y	Y	-	Y
ETHANE	Y	Y	Y	Y	Y	N	PICRIC ACID	N	N	Y	Y	-	Y
ETHER	C	C	Y	Y	Y	N	POTASSIUM HYDROXIDE	C	C	Y	Y	-	Y
ETHYLENE	Y	Y	Y	Y	Y	N	PROPANE GAS	Y	Y	Y	Y	Y	C
ETHYLCHLORIDE	N	N	Y	Y	-	N	SILVER NITRATE	N	N	Y	Y	C	Y
FISH OIL	-	C	C	Y	Y	N	SOAP	-	C	C	C	-	Y
FORMALDEHYDE	C	C	Y	C	-	Y	SODIUM ACETATE	Y	Y	C	Y	Y	Y
FUEL OIL	-	C	Y	Y	Y	N	SODIUM CARBONATE	Y	Y	Y	Y	Y	Y
FURFURAL	Y	Y	C	Y	C	N	SODIUM CYANIDE	-	C	C	C	-	Y
FORMIC ACID	N	N	Y	Y	C	C	SODIUM HYDROXIDE	Y	Y	Y	Y	Y	Y
FRUIT JUICES	-	C	Y	Y	-	N	SODIUM NITRATE	-	C	Y	Y	-	Y
GASOLINE (REFINED)	Y	Y	Y	Y	Y	N	SULFUR	Y	Y	Y	Y	Y	N
GLUCOSE	Y	Y	Y	Y	Y	Y	STEAM	-	Y	Y	Y	-	N
GLYCERINE	-	C	N	Y	-	Y	SULFUR DIOXIDE	Y	C	Y	Y	Y	Y
HYDROFLUORIC ACID	N	C	Y	C	C	Y	TAR	Y	Y	Y	Y	Y	N
HYDROGEN GAS	Y	Y	C	Y	Y	Y	TURPENTINE	C	C	Y	Y	Y	N
HYDROGEN FLUORIDE	-	C	C	C	-	N	VEGETABLE OIL	-	N	C	C	-	C
HYDROGEN PEROXIDE	Y	N	Y	Y	-	C	WATER	-	Y	Y	Y	-	Y
							WHISKEY AND WINES	N	N	Y	Y	Y	Y
							ZINC SULFATE	N	N	Y	Y	Y	Y

Y - Can be used

C - Try with caution

N - Not recommended

The Table above are purely recommendation only. We do not guarantee the Performance.

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.

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Temperature Table For Saturated Steam Under Gauge Pressure

Pressure (bar)	Temp (°C)	Pressure (bar)	Temp (°C)
0.5	111	6	165
1	120	7	170
1.5	127	8	175
2	134	9	180
2.5	139	10	184
3	144	11	188
3	148	12	191
4	152	13	195
4.5	155	14	198
5	159	15	200

Plug and Seat Materials

Plug Type		Valve Seat	Plug and Plug Spindle
Parabolic	Equal percentage linear	S.S.AISI-304 S.S.AISI-316 I.S 6603 DIN.-1.4308	S.S.AISI-304 S.S.AISI-316 I.S 6603 DIN.-1.4308
Flat	On-off	S.S.AISI-304 S.S.AISI-316 I.S 6603 DIN.-1.4308	S.S.AISI-304 S.S.AISI-316 I.S 6603 DIN.-1.4308
Three-way	Linear, On-Off	S.S.AISI-304 S.S.AISI-316 I.S 6603 DIN.-1.4308	S.S.AISI-304 S.S.AISI-316 I.S 6603 DIN.-1.4308

Rating	Valve Body Material	Maximum									
ANSI B 16.5		120°C	200°C	250°C	300°C	350°C	400°C	425°C	450°C	475°C	500°C
Class 150	Cast Iron	16	13	11	10						
300 PN-10 PN-16	Stainless Steel	16	13	11	10						
Class 300 PN-25	S.G. Iron	25	20	18	16	12					
Class	Cast Steel	40	35	32	28	24	21				
150 300 600	Stainless Steel	40	35	32	28						
PN-16 PN-40	Cast Alloy Steel	40	40	40	40	38	36	35	34	33	29

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Applications

Duty : 1. Stopping & Starting flow. 2. Moderate Throttling. 3. Flow Diversion.

Caution : These valves are not recommended for Flow Control purposes.

Service : 1. Gases. 2. Liquids. 3. Non-Abrasive slurries. 4. Vacuum. 5. Cryogenic.

Installation

Please adhere to the below mentioned instructions prior and during installation

1. Check to ensure that the i) Size ii) Pressure Rating iii) Material of construction iv) End connection are suitable for the service condition of your application.
2. Remove all end protectors and covers provided, except those provided on the Handles and Levers.
3. Blow air to clean any grit and dirt which may have entered the valve during storage. Caution: Non compliance will result in damage to the critical components in the valve.
4. Pipeline strainers should be provided upstream to prevent any abrasive particles from entering the valve and damaging the seat.
5. Do not subject the valve to line distortion stress by ensuring that flat flanges and pipeline are square and true. The pipes should be properly supported to prevent line buckling under the weight of the valve (especially in larger size valves).
6. All the PTFE soft seats should be removed prior to welding any valve onto the pipeline. Proper re-fitment should be carried out at site by competent engineers. Caution : Heat generated by welding may damage PTFE. (This point is not valid in Fire-Tested valves).
7. Slag splatter should be removed from the pipeline. Extreme Caution : Slag splatter is extremely detrimental to the critical components of the valve, and is the chief cause for failure of valves on new pipelines.
8. Although all valves are tested prior to despatch, it is possible that some minor adjustments are required, especially in the Gland, when the valve is on stream.

Maintenance

Regular maintenance is the most efficient means of ensuring continued operational efficiency. Regular scheduled inspections of all valves is essential, especially those valves which are operated occasionally, such as isolation and emergency valves. Caution : We will not be responsible for any jamming and dis-satisfactory performance of our valves due to extended periods of disuse.

1. All gland packing should be checked to see if pressure seal is being maintained, replace/add where necessary.
2. All discs/balls/seatings should be examined to ascertain the exact extent of wear and damage. If necessary, either replace on site or refer to our Service Department.
3. Cover and flange gaskets should be inspected and replaced where necessary.
4. Handles/Levers should be re-aligned, and care should be taken to ensure that the valve closes fully.
5. All nuts/bolts should be appropriately tightened and the condition of the threads on them should be checked.
6. All soft components should be replaced routinely, and compulsorily after 2000 operations.

Trouble Shooting & Remedies To Common Problems

PROBLEM	REMEDY
Leakage from Gland/Bonnet	Appropriate tightening of Gland Nuts/ / Bolts and Stem Nuts. Alternatively : Replace Gland Packing.
Leakage from Seat	Appropriate tightening of Body Bolts / Nuts. Alternatively : Replace Seat / Ball Seal.
Leakage from Connector Seal	Appropriate tightening of Body Bolts / Nuts. Alternatively : Replace Connector Seal.

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