

**VALVES
INSTRUMENTS
FOR PROCESS INDUSTRIES**

SAFETY RELIEF VALVE

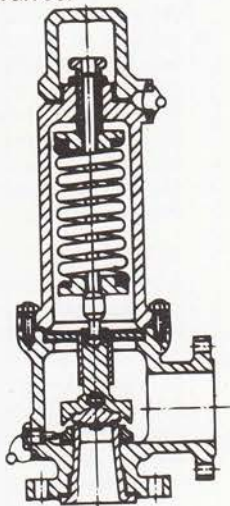
A direct acting Safety Relief Valve intended for gas, vapour, and liquid service. The Valve opens in gas or vapour service as full-lift Safety Valve. In liquid service the Valve will open in proportion to the rise in over pressure and will require a high over pressure to open fully. Depending on construction. ASVIN Safety Relief Valves are referred to as Conventional or Balanced Safety Relief Valves.

ASVIN Safety Valve :

An automatic pressure relieving device actuated by the static pressure upstream of the Valve and characterised by rapid full opening or pop action-Used for gas or vapour service.

ASVIN Relief Valve :

An automatic pressure relieving device actuated by the static pressure upstream of the valve which opens in proportion to the increase in pressure over the opening pressure - Primarily for liquid service.



SIZE : 15 NB - 400 NB

MATERIAL OF CONSTRUCTION

Body	: Carbon Steel / Cast Steel / Cast Iron / Alloy Steel / Stainless Steel / Brass / Bronze Gun Metal etc.,
Nozzle, Disc	: AISI 304 / 316 / Monel / Hastelloy C etc.,
Stem	: AISI 410 / 304 / 316
Spring	: Spring Steel / Stainless Steel / Alloy Steel

TECHNICAL DATA

Operating pressure	: 0 - 5000 PSIG
Operating Temperature	: 0 - 400° C

PROCESS CONNECTION

Flanged	: AISI / BS / DIN / IS / AFNOR
Screwed	: BSP / NPT / BSPT / SW / BW

ACCESSORIES

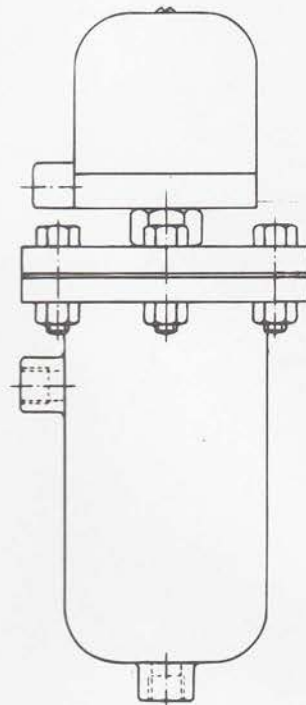
Test Gag
Cap Construction (Screwed / Bolted)
lever (Plain / Packed lever / Open lever)
Steam jacketted body

ORDERING INFORMATION

1. Quantity
2. Inlet and Outlet Size*
3. Process Connection
4. Material of Construction (Special Materials can also be Offered)
5. Set Pressure*
6. Working Pressure*
7. Working Temperature*
8. Service*
9. Required capacity*
10. Type - Open bonnet/Finned bonnet/Dead Weight

*As a Customer service we verify your selection of sizing. Therefore, if this service is desired, you must include these informations.

LEVEL SWITCH



ASVIN Level Switches can be directly mounted on the open or closed vessels and liquid can be known accurately in a particular height and controlled electrically. Liquid level can be controlled between any two or more points. ASVIN Float type level Switches are operating on the principle of magnetic coupling and hence are totally leakproof.

MATERIAL OF CONSTRUCTION

Float	: AISI 304 / 316
Internal Trim	: AISI 304 / 316
Float Chamber	: Carbon steel / AISI 304 / 316
Switch Housing	: Aluminium

TECHNICAL DATA

Operating Pressure	: 0 - 900 PSIG
Operating Temperature	: 0 - 200° C
Specific gravity	: 0.8 min.
Switch	: Micro acting
Contact Rating	: 2 amps. 240V
Electrical Connection	: 3/4" ET

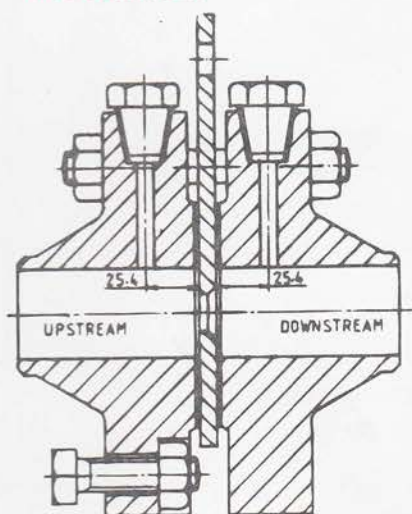
PROCESS CONNECTION

Flanged	: ANSI / BS / DIN / IS
Screwed	: BSP / NPT / BSPT
Type	: Internal Float / External Float

ORDERING INFORMATION

1. Quantity
2. Range
3. Connection
4. Material of construction
5. Working pressure
6. Working temperature
7. Specific gravity
8. Service
9. Type.

ORIFICE PLATE AND ASSEMBLY



FLANGE TAPPING

ASVIN Orifice Plates and Orifice Plate Assemblies are used to find out the flow through the pipe line. ASVIN manufactures three types of Orifice Plates Viz., Concentric Orifice, Eccentric Orifice and Segmental Orifice Plates.

CONCENTRIC ORIFICE PLATES :

A Circular disc having a concentric circular bore with a sharp 90° corner at the inlet face (Upstream Side).

ECCENTRIC ORIFICE PLATE :

A Circular disc having an eccentric circular bore with a sharp 90° corner at the inlet face.

Line Size : 25NB - 600NB

TYPE OF TAPPING

Flange, Corner or D & D/2

MATERIAL OF CONSTRUCTION

Orifice plate material shall be compatible with the flowing fluid.

MATERIALS FOR ORIFICE PLATES :

304 Stainless Steel , 316 Stainless Steel, Monel etc.,

PROCESS CONNECTION

Flanged : ANSI / BS / DIN / IS

ORDERING INFORMATION :

1. Quantity
2. Nominal Pipe Size
3. Flange rating
4. Material of Construction
5. Working Pressure
6. Working Temperature
7. Flow rate
8. Service
9. Type

We calculate Orifice bore diameter as per BS 1042 if all the datas are provided.

LEVEL GAUGE

ASVIN manufactures three types of level gauges viz., Reflex, Transparent and Tubular. ASVIN Level Gauges are assembled with a pair of auto shut off ball check valves.

RELEX LEVEL GAUGE

ASVIN Reflex Level Gauges are assembled with flat glasses with inner surfaces of reflecting prisms. Due to total internal reflection liquid level shows black and vapour portion white. We recommend use of ASVIN Reflex Gauges for colourless liquids and also where observation is required at a distance and on low Pressure boilers.

TRANSPARENT LEVEL GAUGE

ASVIN Transparent Level Gauges are assembled with transparent tempered glasses on both sides of a section to give a through vision of liquid levels. They differ from reflex type. The glasses are plain and arranged at the front and rear of a slotted liquid chamber.

In high temperature application these gauges are recommended to be used with mica shield. Large chamber Level Gauges are recommended for liquids with high viscosity, high rate of bubbling and vapouring liquids.

TUBULAR LEVEL GAUGE

ASVIN Tubular Level gauges are simple in construction and permit viewing from any direction. They are provided with protective rods or tubular guards. We recommend use of **ASVIN** Tubular Level Gauges for low pressure and low temperature applications.

SIZE : As per customer's requirements

MATERIAL OF CONSTRUCTION

Liquid Chamber : Carbon steel / Forged steel / AISI316/ 304/
PVC / PP / Rubber lined / Lead lined

Cover plate : Carbon Steel / Forged steel / Stainless Steel

Glasses : Tempered borosilicate / Moulded /
Toughened

Bolts & Nuts : High tensile steel / Stainless Steel

Valve - Body : Same as the liquid chamber

- Trim : AISI 304 / 316 or to suit service condition

TECHNICAL DATA

Operating Pressure : 0 - 4000 PSIG & 400 PSIG for
Tubular gauges

Operating Temperature : - 50° C - 450° C

PROCESS CONNECTION

Flanged - ANSI / BS / DIN / IS

Screwed - BSP / BSPT / NPT

ACCESSORIES

Illuminator : Explosion proof or weather proof

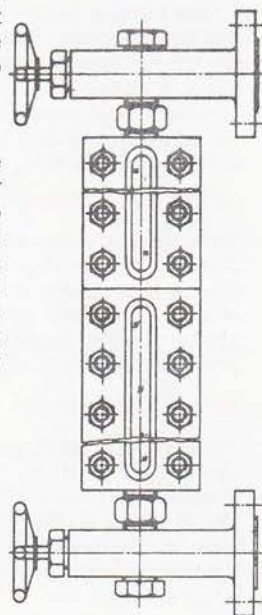
Shield : Mica, Plastic or Frost for low temperature

Valve : Bolted bonnet B1, B2, N1, N2, S1 and S2

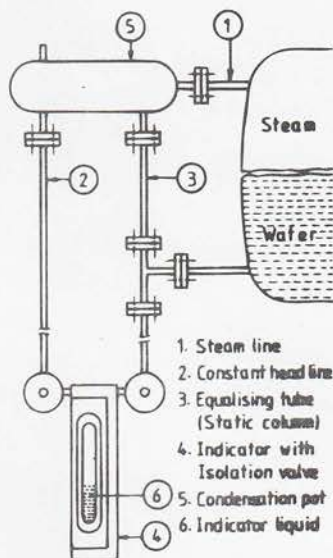
Steam Jacket : Liiquid Chamber and Valve.

ORDERING INFORMATION

1. Quantity
2. Centre to Centre distance
3. Process Connection and Size
4. Material of construction
5. Working pressure
6. Working temperature
7. Services
8. Type.



REMOTE LEVEL INDICATOR



The Problem of indicating the water level in high pressure water boilers, vessels, etc., At the position of stoker is solved in a simple way by ASVIN Remote Water Level Indicators. The transmission is provided by the medium itself without the aid of floats, levers, balances or other mechanical or electrical equipments. ASVIN Remote Indicator therefore operates in the event of power failure also. Every displacement of the Indicator liquid in Indicator instrument corresponds exactly in magnitude to the change in the water level in the boiler or vessel.

MATERIAL OF CONSTRUCTION

As given in Level Gauge

TECHNICAL DATA

Operating Pressure	: 0 - 3000 PSIG
Operating temperature	: 0 - 450° C
Visible Length	: 218mm or 314mm

PROCESS CONNECTION

Flanged	: ANSI / BS / DIN / IS etc.,
Screwed	: BSP / NPT / BSPT / SW / BW

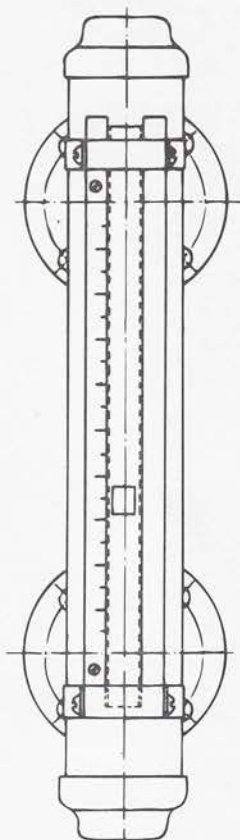
ACCESSORIES

Illuminator	: Weather Proof / Explosion proof, condensing pot, three way connector, Indicating liquid.
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ORDERING INFORMATION

- Centre to Centre
- Connection
- Material of Construction
- Working Pressure
- Working Temperature
- Scale ratio
- Quantity

MAGNETIC LEVEL INDICATOR



ASVIN level Indicators are designed for gaging liquid when Glasses, Gaskets, Threaded connections etc., cannot be tolerated because of corrosion problems, toxic gases, dangerous fluids etc., also for reading interface of similarly coloured Liquids.

SIZE : As per Customer's requirement

MATERIAL OF CONSTRUCTION

Float Chamber	: AISI 304 / 316
Float	: AISI 304 / 316
Frame	: Aluminium

TECHNICAL DATA

Range	: 4500mm. Max
Operating Pressure	: 600 PSIG
Operating Temperature	: 150° C
Specific Gravity	: 0.8 min.

PROCESS CONNECTION

Flanged : ANSI / BS / DIN / IS

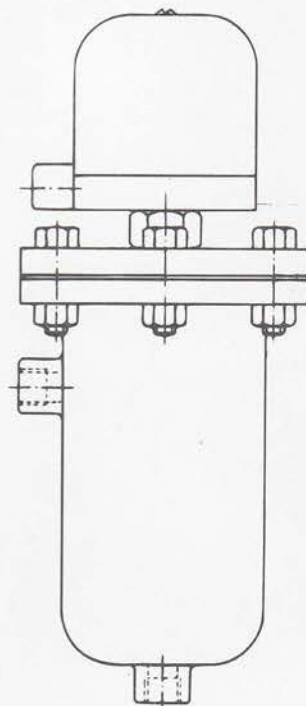
ACCESSORIES

Scale & Limit Switch
Type : Top & Bottom / side mounting

ORDERING INFORMATION

- Quantity
- Centre to Centre
- Range
- Connection
- Material of construction
- Working pressure
- Working temperature
- Specific gravity
- Service
- Type

LEVEL SWITCH



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Float Chamber	: Carbon steel / AISI 304 / 316
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TECHNICAL DATA

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Operating Temperature	: 0 - 200° C
Specific gravity	: 0.8 min.
Switch	: Micro acting
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Electrical Connection	: 3/4" ET

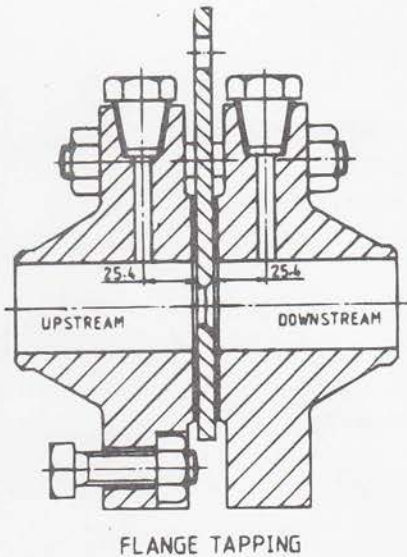
PROCESS CONNECTION

Flanged	: ANSI / BS / DIN / IS
Screwed	: BSP / NPT / BSPT
Type	: Internal Float / External Float

ORDERING INFORMATION

- Quantity
- Range
- Connection
- Material of construction
- Working pressure
- Working temperature
- Specific gravity
- Service
- Type

ORIFICE PLATE AND ASSEMBLY



FLANGE TAPPING

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A Circular disc having a concentric circular bore with a sharp 90° corner at the inlet face (Upstream Side).

ECCENTRIC ORIFICE PLATE :

A Circular disc having an eccentric circular bore with a sharp 90° corner at the inlet face.

Line Size : 25NB - 600NB

TYPE OF TAPPING

Flange, Corner or D & D/2

MATERIAL OF CONSTRUCTION

Orifice plate material shall be compatible with the flowing fluid.

MATERIALS FOR ORIFICE PLATES :

304 Stainless Steel, 316 Stainless Steel, Monel etc.,

PROCESS CONNECTION

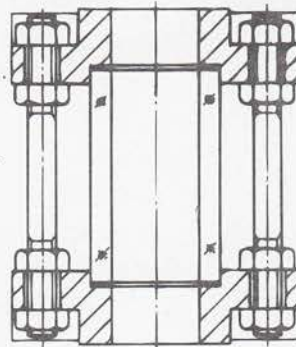
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ORDERING INFORMATION :

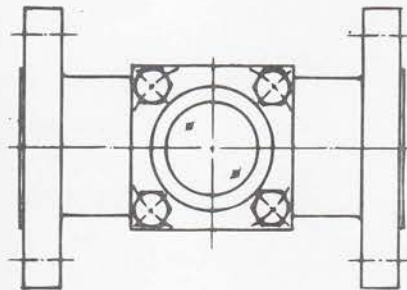
- Quantity
- Nominal Pipe Size
- Flange rating
- Material of Construction
- Working Pressure
- Working Temperature
- Flow rate
- Service
- Type

We calculate Orifice bore diameter as per BS 1042 if all the datas are provided.

SIGHT FLOW INDICATOR



FULL VIEW TYPE



DOUBLE WINDOW TYPE

ASVIN Sight Flow Indicators are designed to suit every applications in the process industry. They are built to provide instantaneous indication of a liquid flowing through a pipe line.

MATERIAL OF CONSTRUCTION

Body : Carbon Steel / Cast Steel / Cast Iron / AISI 304 / 316 / Brass

Cover Plate : Carbon Steel / Stainless Steel

Glass : Toughened Borosilicate / Moulded

Bolts & Nuts : High tensile steel

TECHNICAL DATA

Operating Pressure : 0 - 3000 PSIG

Operating Temperature : 0 - 200° C

PROCESS CONNECTION

Flanged - ANSI / BS / DIN / IS

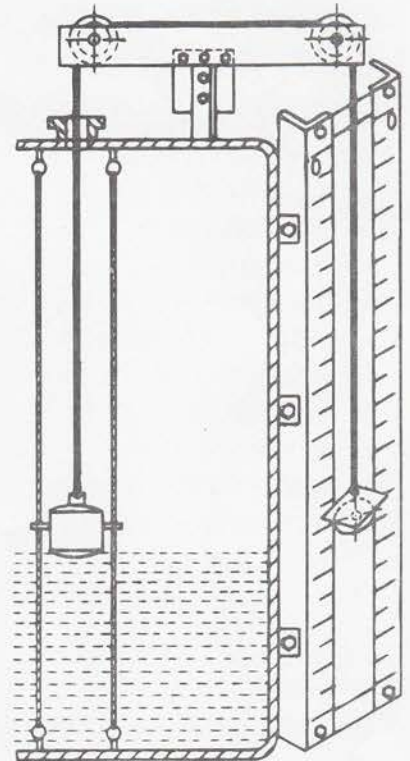
Screwed - BSP / NPT / BSPT / SW / BW

Type : Full View / Flapper / Rotating Wheel / Angle / Drip tube

ORDERING INFORMATION

- Quantity
- Size
- Connection
- Material of Construction
- Working pressure
- Service
- Type

FLOAT & CHORD LEVEL INDICATOR



Archimedes Principle states that a body immersed in a fluid is buoyed up by a force equal to the weight of the fluid displaced.

If an object immersed in a fluid lighter than the fluid displaced, it will rise and float. Figure above shows a guided float in its normal position with its centre of gravity on the same vertical line and above the centre of buoyancy. When the level increases, the float is pushed upwards and the pointer which is moved freely on scale, will come down with its self weight and show the readings. When level comes down float will pull the pointer upwards. Two pulleys are provided to change the direction with less friction. Guide ropes are provided to avoid free movement of float. Tension springs are provided to absorb sudden vibration.

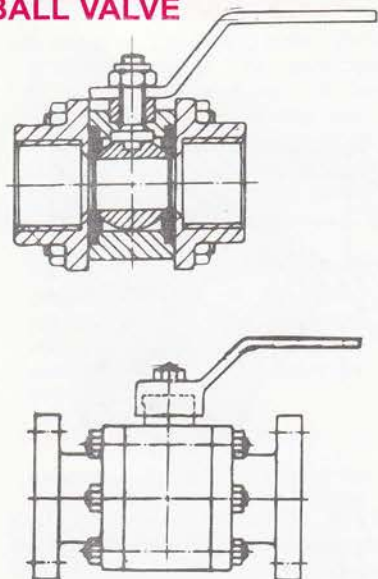
APPLICATION

Open tank, Closed tank, Storage tank, Underground sumps.

ORDERING INFORMATION

- Material of Construction
- Fluid Density
- Height of tank
- Type of tank
- Scale Marking details.

BALL VALVE



ASVIN Ball Valves are quick opening, needing only a quarter turn from full open to full close. ASVIN Ball Valves are non-sticking and provide tight closure. ASVIN Ball Valves also exhibit a negligible pressure drop because of their smooth, full opening port. These valves are easy to repair and maintenance costs are low. ASVIN Ball Valves are used for handling industrial fluid system with advantages of full bore, turbulence-free flow with wide range. These valves are for the free flow of system involving slurries, semi-solids or media causing crystallisation or encrustation.

SIZE : 6 NB - 300 NB

MATERIAL OF CONSTRUCTION

Body : Carbon Steel / Cast Steel / Forged Steel / Cast Iron / Stainless Steel 304 / 316 / Alloy Steel

Ball : AISI 304 / 316

Trim : AISI 304 / 316

Seat : Teflon / Buna 'N'

TECHNICAL DATA

Operating Pressure : 0 - 1000 PSIG

Operating Temperature : 0 - 250°C

PROCESS CONNECTION

Flanged - ANSI / BS / DIN / IS

Screwed - BSP / NPT / BSPT / SW / BW

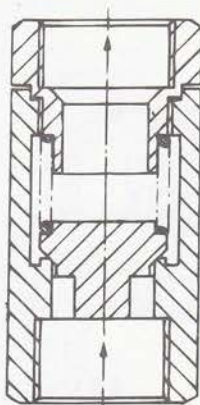
Type : Reduced bore / Full bore

CONSTRUCTION : Single Piece / Three Piece

ORDERING INFORMATION

1. Quantity 2. Size 3. Connection
4. Material of construction 5. Test pressure 6. Maximum temperature 7. Service 8. Type 9. Construction

NON - RETURN VALVE



SPRING ACTUATED

The versatile design offers a variety of models including spring actuated, piston type, solid plug, ball check., ASVIN spring actuated Non-return valve can be used both horizontal and Vertical line. ASVIN Non-return valves are most suitable for use on the feed system and permit of flow in one direction, closing automatically against any sudden back flow. The carefully designed and accurately finished guide arrangements ensures perfect alignment of the valve. The flow path is streamlined and designed for minimum flow resistance, thereby friction and pressure loss is reduced. ASVIN Non Return Valves are provided with a uniform metal thickness to ensure larger factor of safety.

SIZE : 15 NB - 300 NB

MATERIAL OF CONSTRUCTION

Body : Cast iron, Cast Steel, Carbon Steel, Stainless Steel, Alloy Steel, Monel, Inconel, Hastelloy C.

Spring : Spring Steel, Stainless Steel, Tungstensteel.

TECHNICAL DATA

Operating Pressure : 0 - 3000 PSIG

Operating Temperature : 0 - 300°C

Specification : BS 1868

Testing : BS 5146

PROCESS CONNECTION

Flanged - ANSI / BS / DIN / IS

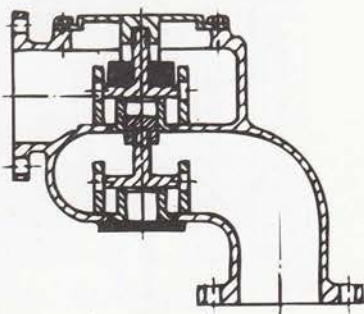
Screwed - BSP / NPT / BSPT

(both Male / Female)

ORDERING INFORMATION

1. Quantity 2. Size 3. Connection
4. Material of construction 5. Service
6. Working pressure 7. Working Temperature 8. Type

BREATHER VALVE



ASVIN Breather valves have been designed to provide emergency venting requirements in storage tanks, pressure vessels and blow down lines. These are available in two versions. Dead weight pallet for both pressure and vacuum side and Spring loaded type. Spring loading is given for higher pressure setting. All the ASVIN Breather Valves are provided with protecting screens at vacuum side. ASVIN vacuum relief valve is also available with dead weight pallet type or spring loaded type depending on the vacuum setting. ASVIN pressure vent is also available for lower pressure setting. Flame arresters can also be supplied along with Breather Valve.

SIZE: 25 NB - 300 NB

MATERIAL OF CONSTRUCTION

Body : CI, CS, WCB,
Aluminium, SS 304,
SS 316 or other materials
to suit the service

Pallets : Aluminium, SS 304,
SS 316, Teflon

Standard : API 2000

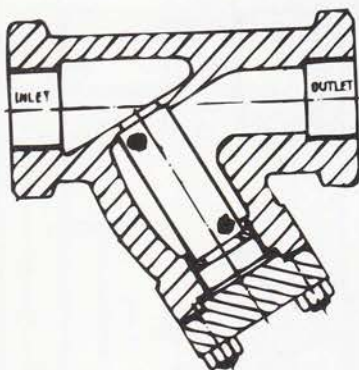
TECHNICAL DATA

Min. Pressure Setting : 25mm H₂O
Min. Vacuum Setting : 25mm H₂O

ORDERING INFORMATION

1. Settings (Both pressure and Vacuum)
2. Flow capacity
3. Vapour handled
4. Material
5. Working pressure
6. Connection and flange standard
7. Required accessories.

STRAINER



ASVIN Strainer gives effective protection of pipeline systems against damage from foreign matter in flow stream. ASVIN pipeline Strainers are recommended for use before the inlet of Control Valves and Steam Traps when excessive dirt conditions are encountered. They are designed to reduce resistance to flow to a minimum and have low pressure drop due to large free flow area through Strainer Elements. ASVIN Strainers are compact and easy to maintain. The material for the Strainer body is equal to material specified for the Valves in the same service. The screen material generally should be the same as the Valve trim.

TECHNICAL DATA

Type : Y type, T type, Basket,
Duplex system, Conical, Jacketted
Size : 6 NB - 600 NB
Screen : upto 500 Mesh
Working Pressure : upto 165 kg/cm²
Max. Temperature : 450 °C

PROCESS CONNECTION

Flanged - ANSI / BS / DIN / IS
Screwed - BSP / NPT / BSPT /
SW / BW

MATERIAL OF CONSTRUCTION

Body : Cast Iron, Cast Steel, Gun
Metal, Stainless Steel,
Fabricated Steel
Mesh : Stainless Steel, Brass,
Bronze, Monel, Nickel.

ORDERING INFORMATION

1. Size
2. Process Connection and Standard
3. Material
4. Service
5. Dirt Condition
6. Mesh Details
7. Type
8. Working Pressure
9. Temperature

ASVIN - Range of Products

VALVES

- ☛ SAFETY / PRESSURE RELIEF VALVES
- ☛ PRESSURE REDUCING VALVES / STATION
- ☛ PRESSURE CUM VACUUM RELIEF VALVES
- ☛ BREATHER VALVES
- ☛ EXCESS FLOW VALVES
- ☛ UNDERGROUND SAFETY VALVES FOR WATER TANK / WATER FLOW CANAL AS PER BS - 4558 : 1983
- ☛ NON-RETURN VALVES
- ☛ BALL VALVES
- ☛ DIAPHRAGM VALVES
- ☛ NEEDLE VALVES / MANIFOLDS / THROTTLING VALVES
- ☛ FLUSH BOTTOM VALVES

TANK EQUIPMENTS

- ☛ TANK BLANKETTING VALVES
- ☛ EMERGENCY PRESSURE RELIEF VALVES (Air Vent)
- ☛ GAUGE HATCHES (Lock Down / Spring Loaded)
- ☛ VACUUM BREAKERS

INSTRUMENTS

- ☛ LEVEL GAUGES (Tubular / Reflex / Transparent)
- ☛ LEVEL INDICATORS (Magnetic / Float & Chord)
- ☛ ORIFICE ASSEMBLIES / FLOW NOZZLES / VENTURIES
- ☛ MANOMETERS
- ☛ LEVEL SWITCHES
- ☛ THERMOWELLS
- ☛ CONDENSING POTS
- ☛ CONSTANT HEAD CHAMBERS
- ☛ AIR / MOISTURE SEPERATORS

PIPE LINE EQUIPMENTS

- ☛ STEAM TRAPS
- ☛ STRAINERS ('T' / 'Y' / Basket / Simplex / Duplex type)
- ☛ FLAME / DETONATION ARRESTERS
- ☛ SIGHT GLASSES
(Full View / Double Window / Flapper / Rotating Wheel)
- ☛ RUPTURE DISC

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ASIAN INDUSTRIAL VALVES AND INSTRUMENTS



B-17, Industrial Area,
Mogappair East,
Chennai-600 037.
India.

www.asianindustrialvalves.com

Phone: 044 -2653 1137, 1689, 3519
Mktg. : 044 -2501 9240, 6517 2940
Fax : +91 -44 - 26530906, 1926
E-mail: asvin@md2.vsnl.net.in
asianvalves@eth.net

