

INSTRUMENTATION BALL VALVE



Introduction:-

AK Industries range of Ball Valves are designed for use in hazardous and corrosive environment. All Ball Valves are precisely machined, designer durability and maximum efficiency to provide high quality and low cost.

Features:-

- Two way on off, 3 or 4 way switching models.
- Blow-Out Proof Bottom Loaded stem.
- Low operating torque with SS lever/Fenolic handle.
- Full or reduced Bore for Perfect Flow.
- Floting ball design for positive seating.
- Working Pressure from 1000 PSI to 6000 PSI.
- With PTFE seat.

Construction:-

SS-316, SS-304, Carbon Steel, Brass and Monel Material in different type of end connection include Male/Female thread NPT, BSP, BSPT and Single or Double Tube Fittings ends.

Application:-

Process Control, Instrumentation.

INSTRUMENTATION NEEDLE VALVE



Introduction:-

The Sophisticated and costly instrument used in complex plants need to be installed according to certain carefully laid down safeguards using selected and reliable accessories.

Most of the instrument valves produced without any adherence to the rigid codes of the instrumentation industry are unsafe to high pressure use. These Valves cheaply produced have common deficiencies: Their seal just an 'O' ring Spindle cannot take wear.

Leakage due to galling at the tip Spindle Which rotates on closure is prone to galling Normally threads are in contact with process media.

AKI Needle Valve are specially designed to eliminate all the above deficiencies and produced under rigid quality control from basic raw material stage. Valves are precise machining on modern machinery to provide high quality and low cost, to meet the exacting standards of our valuable customers.

Features:-

- All **AKI** Instrument valve including those used with instrument Air Feed Headers are produced for working pressure 6000 PSI.
- Stem design with no turning action on closure thus preventing galling.
- Threads Protected from process media.
- Forged or Bar Stock Construction in straight or angle pattern with panel mounting type.
- Screwed bonnet, union bonnet and integral body bonnet construction, Valves.
- Metal to metal or stellite and non rotating tip stem for high pressure, Teflon seal for positive repetitive shut off for low density gases and non lubricating fluids.
- Special Teflon as grafoil packing for leak proof joint at various temperature.

Construction:-

Generally fabricated from forged / barstock material in high grade stainless steel, carbon steel, brass and monel materials in variety of end connection.

ALL NPT threads to ANSI B2.1

ALL BSP Parallel threads to BS 2779

ALL BSP taper threads to BS 21

Socket Weld design optional

CHECK VALVE



Introduction:-

AKI Check Valves are specially designed & manufactured for flow control of fluids and gases in corrosive & hazardous environment. These valves are used in Process control, instrumentation and flow control applications.

Valves are precision machined with designer durability and maximum efficiency to provide high quality and low cost alternatives in fluid and gaseous control systems of different applications, to meet the exact standards of our customers growing demands.

Features:-

Available in High Grade Stainless Steel, Bass materials

Variety of end connections includes Male / Female threaded NPT, BSP, BSPT, ISO, DIN and JIS tapered pipe ends.

100% factory tested for both crack & reseal

Complete Heat Traceability

Construction:-

SS 304, SS 316

TOGGLE VALVE



Introduction:-

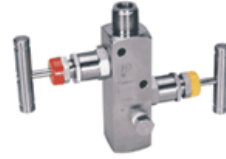
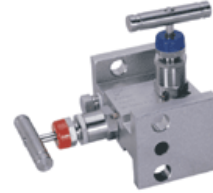
AKI TOGGLE VALVE are precision-machined valves are available in 1/8- and 1/4-inch sizes in both brass and stainless steel. Toggle valves are ideal for applications where instant on-off control is necessary. Toggle valves are rated to 200 psig. The Toggle valves with dual seats provide leak-tight bi-directional sealing.

FEATURES:-

Stainless Steel and Brass Construction
Panel Mountable
Quick On/Off Service
Straight and Angle Patterns Available
Sizes: 1/8" & 1/4"
Pressure - 0 to 10kg/cm²

Construction:-

SS 304, SS 316 , Brass C.P

2 WAY MANIFOLD VALVE**'R' type****'RM' type****'T' type****'H' type****Introduction:-**

AKI 2 WAY manifolds are designed for connecting system impulse line & transmitters. These manifold consist of two valve configuration which allows for easy isolation, calibration, block and bleed for gauges, pressure switches and static pressure transmitting instruments. These manifolds are rugged in construction to withstand high pressures and temperatures. The manifolds are rated for pressures as high as 6000 PSI at 200 o F or 4000 PSI at 500 o F. with PTFE Packing. For a Higher Temperatures Grafoil Packing is used. These valve manifolds combine the functions of a tee, calibration valve, isolation valve and all tubing and fittings into a single compact unit thus reducing number of fittings and space required for installation

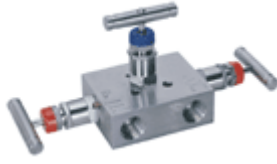
Features:-

- One Piece Barstock Forged Body for high strength and fully safety.
- Bonnet lock prevents accidents disassembly.
- Stem threads rolled and hard plated provides maximum service life.
- Two Part Stem tip, stellite and hardened provides excellent flow control and ensures bubble-tight shutt off.
- Non Rotating Vee / Ball Tip design: Which forms a bearing joint with the stem eliminates rotation between plug & seat at closure. This prevents scoring and galling up the valve seat and ensure long life in repetitive shutt off service.
- Packing below stem threads prevents stem lubrication washout and isolate threads from system fluids.
- Hard seat designed to reduce packing friction giving very low torque operation.
- Packing material – PTFE / Ccrafoil

Construction:-

SS-316, SS-304, Carbon steel, Monel & Inconel.

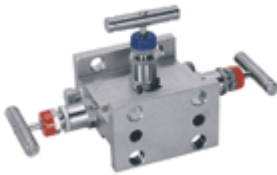
3 WAY MANIFOLD VALVE



'R' type



'T' type



'H' type

Introduction:-

AKI 3 way manifolds pipe to pipe (R), pipe to flange (T) and flange to flange (H) designed for connecting system impulse lines & transmitters. These manifolds consist of 1/2" NPT(F), pipe to flange or flange to flange connections on 54mm (2 1/8") centers, and of one equalizer valve, two block valves and 2 nos 1/4" NPT(F) purge (VENT) connections. These manifolds are rugged in construction to withstand high pressures and temperatures. The manifolds are rated for pressures as high as 6000 PSI at 200 o F or 4000 PSI at 500 o F. with PTFE Packing. For a Higher Temperatures Grafoil Packing is used

Features:-

- One Piece Barstock Forged Body for high strength and fully safety.
- Bonnet lock prevents accidents disassembly.
- Stem threads rolled and hard plated provides maximum service life.
- Two Part Stem tip, stellite and hardened provides excellent flow control and ensures bubble-tight shut off.
- Non Rotating Vee / Ball Tip design: Which forms a bearing joint with the stem eliminates rotation between plug & seat at closure. This prevents scoring and galling up the valve seat and ensure long life in repetitive shut off service.
- Packing below stem threads prevents stem lubrication washout and isolate threads from system fluids.
- Hard seat designed to reduce packing friction giving very low torque operation.
- Packing material – PTFE / Grafoil

Construction:-

SS-316, SS-304, Carbon steel, Monel & Inconel.

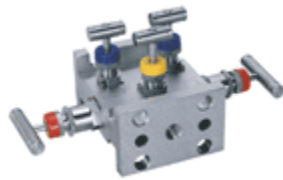
5 WAY MANIFOLD VALVE



'R' type



'T' type



'H' type

Introduction:-

AKI 5 WAY manifolds pipe to pipe (R), pipe to flange (T) and flange to flange (H) designed for connecting system impulse lines & transmitters. These manifolds consist of 1/2" NPT(F), pipe to flange or flange to flange connections on 54mm (2 1/8") centers, and of one equaliser valve, two block valves, one Bleed Valve and 2 nos 1/4" NPT(F) purge (VENT) connections.

These manifolds are rugged in construction to withstand high pressures and temperatures. The manifolds are rated for pressures as high as 6000 psi at 200 o F or 4000 psi at 500 o F. with PTFE Packing. For a Higher Temperatures Grafoil Packing is used.

Features:-

- One Piece Barstock Forged Body for high strength and fully safety.
- Bonnet lock prevents accidents disassembly.
- Stem threads rolled and hard plated provides maximum service life.
- Two Part Stem tip, stellite and hardened provides excellent flow control and ensures bubble-tight shutt off.
- Non Rotating Vee / Ball Tip design: Which forms a bearing joint with the stem eliminates rotation between plug & seat at closure. This prevents scoring and galling up the valve seat and ensure long life in repetitive shutt off service.
- Packing below stem threads prevents stem lubrication washout and isolate threads from system fluids.
- Hard seat designed to reduce packing friction giving very low torque operation.
- Packing material – PTFE / Ccrafoil

Construction:-

SS-316, SS-304, Carbon steel, Monel & Inconel.

GAS SAMPLING VALVE/PORT VALVE



Gas Sampling Valve:-

With the increase in demand for gas chromatography AKI has developed Gas Sampling valves which is also called as port valve for various applications in Gas Chromatography such as By pass, Flow-diverter, Sample-injection, Column-switching etc. These can be given from 3 port to 10 ports as per the requirement.

With respect to the application port valve can be selected accordingly

PORT VALVE – 3 PORT CONNECTION

PORT VALVE – 4 PORT CONNECTION

PORT VALVE – 6 PORT CONNECTION

PORT VALVE – 10 PORT CONNECTION

PORT VALVE – 12 PORT CONNECTION

Connection:-

1/16, 1/8"

Material :-

SS 316 , SS 304

FINE CONTROL VALVE



INTRODUCTION

WITH THE INCREASE IN DEMAND FOR ANALYTICA PRODUCT AND INSTRUMENTATION, AKI HAS DEVELOPED FINE CONTROL VALVE WITH GREAT PRECISION AND ACCURACY. FINE CONTROL VALVE HAS GREAT CAPABILITY TO DELIVER THE FLOW AT PRESSURE UPTO 10 KG/CM². IT ALLOWS TO DELIVER AND CONTROL THE FINEST FLOW. IT HAS ALUMINUM KNOB HANDLE WHICH PROVIDES SMOOTH CONTROL AND OPERATING.

SIZES :-

1/4" (SUITABLE FOR 1/4 TUBING/ 1/4 MALE AND 1/4 FEMALE CONNECTIONS)

1/8" (SUITABLE FOR 1/8 TUBING/ 1/8 MALE AND 1/8 FEMALE CONNECTIONS)

FEATURES :-

PRESSURE – 0 TO 10KG /CM²

PANEL MOUNTABLE

DESIGN:-

ANGLE TYPE – AS SHOW IN ABOVE IMAGE , FLOW CONTROL VALVE CAN BE MADE IN ANGLE TYPE

STRAIGHT TYPE – FLOW CONTROL VALVE CAN BE MADE IN STRAIGHT DESIGN AT 180 DEGREE.