







# GLOBE 2 WAY CONTROL VALVES (SERIES 110)

#### TECHNICAL SPECIFICATIONS

: ASME B16.34 DESIGN

BONNET

: 15 to 450 mm (1/2" to 18") VALVE SIZE

: 150 to 2500 ANSI RATING

END CONNECTION: Flanged, Screwed, Buttweld, Socketweld

: Carbon steel, Stainless steel, Monel, Alloy 20, Hastelloy B/C, MATERIAL

Aluminum Bronze, PP, Teflonlined etc. : Standard from - 20°C to 250°C

: Normalizing (Finned) between 250°C to 500°C

Extended Bellow seal

TRIM FORMS Top guided contoured

Splined Micro flow

V- Ported (Balanced / Unbalanced)

Low Noise (Upto four Stage Pressure Reduction

Balanced / Unbalanced)

Stainless steel, Alloy20, Monel, Hastelloy B/C, Stellited TRIM MATERIAL

: Equal Percentage, Linear and Quick Opening FLOW CHAR.

: Class III, IV, V, & VI (FCI-70.2) SEAT LEAKAGE

Standard Leakage Rates

Metal to Metal Seating Class IV-less than 0.01% of rated Cv

Metal to Soft Seating Class VI-Bubble tight (zero Leakage)

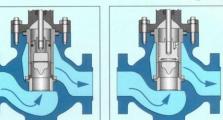
: Grafoil or PTFE Chevron GLAND PACKING : Diaphragm, Piston or Electrical **ACTUATOR TYPE** ACTUATOR ACTION : Direct / Reverse Acting

#### DESIGN AND PERFORMANCE FEATURES

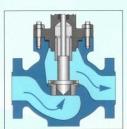
- High flow capacity and rangeability.
- Large Variety of trim design.
- Top opening for easy trim inspection without disturbing insulation or piping
- Positive guiding for correct trim alignment under all operating conditions.
- Tight closing for reliable control even when change in pressure / temperature are sudden and extreme.
- Bellow seals available for positive stem sealing.
- Comprehensively designed and tested to ensure its optimum performance for the tough process parameters specified.
- Wide selection of actuators to meet most system requirements.

#### QUALITY AND PERFORMANCE GUARANTEE

- Full material certification available for all major component parts.
- Full guarantee on design and performance.
- All testing performed to the requirements of ANSI B16.34.



V-PORTED TRIM WITH BALANCED



CONTOURED TRIM



LOW NOISE CAGE GUIDED BALANCED



V-PORTED TRIM WITH UNBALANCED



SPLINED MICRO FLOW TRIM



# GLOBE 3 WAY CONTROL VALVES (SERIES 130)

#### TECHNICAL SPECIFICATIONS

DESIGN : ASME B16.34

BODY FORM : Globe type with Tail piece to provide third port

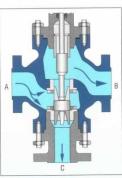
VALVE SIZE : 15 to 300 mm (1/2" to 12")
RATING : 150 to 1500 ANSI
TRIM FORM : Linear, V-Port Skirt Guided

FLOW CHAR. : Linear, On/Off SEAT LEAKAGE : IV, V & VI ( FCI-70.2 )

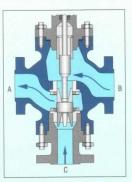
ACTUATOR TYPE : Diaphragm, Piston or Electrical ACTUATOR ACTION : Direct / Reverse Acting

#### DESIGN AND PERFORMANCE FEATURES

- High Flow capacity and rangeability.
- Heavy Duty top guide with additional skirt guiding on the plug.
- Heavy Duty ground and polished stem.
- Wide range of interchangeable trim sizes.
- Bellow seals available for positive stem sealing.
- Comprehensively designed and tested to ensure its optimum performance for the tough process parameters specified.
- Wide selection of actuators to meet most system requirements.
- All testing performed to the requirements of ANSI 16.34.



**DIVERTING SERVICE** 



MIXING SERVICE



# **BUTTERFLY CONTROL VALVES (SERIES 200)**

### TECHNICAL SPECIFICATIONS

DESIGN : Wafer ( Complies to BS:5155 )
VALVE SIZE : 50 to 900 mm ( 2" to 36" )
BODY TYPE : Metal to Metal / Sleeved / Teflon Seated

RATING : 150 ANSI FLOW CHAR. : On-Off/Throttling Seat Leakage Class : II to VI (FCI-70.2)

MATERIAL

Body : Cast Iron, Carbon steel, Stainless

steel etc.

Vane : Stainless steel, ( Other on request )

Body Sleeve : Neoprene, Nitrile, Teflon,

EPDM etc.

GLAND PACKING: PTFE V Ring upto 180°C

Grafoil upto 400°C

ACTUATOR TYPE: Diaphragm, Piston, Rotary or

Electrical

#### DESIGN AND PERFORMANCE FEATURES

- Compact design, low cost and maintenance free.
   Very high Cv to size ratio.
   Reliable smooth operation with assured product quality.
- Bubble tight shut off (leakage Class-VI).
   Rangeability of 33: I in the control range, OFF-SET (Teflon seated) / Center Disc
- Flow characteristic throttling for modulating duty. Suitable for vacuum service at very low absolute pressure.



# V-NOTCH BALL CONTROL VALVES (SERIES 300)



#### TECHNICAL SPECIFICATIONS

DESIGN : Complies to BS:5351
VALVE SIZE : 15 to 200 mm ( 1/2" to 8" )
BODY TYPE : V-Notch / Full bore conventional
RATING : 150 ANSI

FLOW CHAR. : Throttling / On-Off

Body : Carbon Steel, Stainless Steel etc.
Ball : Stainless Steel

Seal : Teflon, Viton
TEMPERATURE : 180°C with PTFE Seal
250°C with Viton Seal

ACTUATOR TYPE : Diaphragm, Piston or Rotary



#### DESIGN AND PERFORMANCE FEATURES

• Full bore straight through construction turbulence free flow with wide rangeability.

MATERIAL

- High Cv to body size ratio.
- · Tight shut off leakage class VI.
- Suitable for control action with carefully contoured V-notch resulting in a nearly equal % characteristic
- Ball machined to fine finish hard-chrome plated and mirror polished to increase ball seal life.
- · Preventing dust & dirt out of the working mechanism.
- Reliable operation and ideal for abrasive slurries or solids.

# DIAPHRAGM CONTROL VALVES (SERIES 400)



#### TECHNICAL SPECIFICATIONS

DESIGN : Complies to BS:5156

BODY TYPE : Weir

VALVE SIZE : 15 mm to 200 mm (1/2" to 8")

END CONNECTION: 125 ANSI

FLOW CHAR. : On-Off / Throttling

BODY MATERIAL : Cast Iron, Carbon Steel (other on request)

LINING MATERIAL : Ebonite, Neoprene, Teflon, EPDM, FRP, Glass etc.
LINING THICKNESS : 15 to 65mm Valve-3mm, 80 & 100mm Valve-3.5mm,

125 & 150mm Valve-4.0mm, 200mm Valve-5mm

Teflon coating thickness- 800 microns

Glass lining-1.5mm

BODY DIAPHRAGM: Neoprene, Teflon Backed with Neoprene, Butyl,

Nitrile, Hypalon, Viton, EPDM
ACTUATOR TYPE : Diaphragm, Piston or Electrical
ACTUATOR ACTION : Direct / Reverse acting



- It is a simple diaphragm valve and of low pressure type because of the larger area of diaphragm exposed to line pressure.
- Perfect sealing and longer diaphragm life due to weir design.
   Valves are self cleaning with no pocket, recess, corner, grooves or sharp edges.





# FLUSH BOTTOM VALVES (SERIES 500)

#### TECHNICAL SPECIFICATIONS

DESIGN : Complies to Pneucon's Specifications

SIZE : 25 to 200 mm (1" to 8") RATING : 150/300 ANSI

#### DESIGN AND PERFORMANCE FEATURES

- · High flow capacity.
- Best suited for drainage system.
- Tight closing for reliable shut off even after change in pressure / temperature are sudden and extreme.
- · Wide selection of actuators to meet most system requirements.



### PRESSURE REGULATING VALVES

#### TECHNICAL SPECIFICATIONS

TYPE : Downstream Regulation (Series 600)

Upstream Regulation (Series 700)

SIZE : 15 to 200 mm (1/2" to 8")

RATING : 150/300 ANSI, Higher on request

#### DESIGN AND PERFORMANCE FEATURES

- High flow capacity.
- Disc is reversible and can be changed quickly or for the renewed life.
- Pressure reducing is of the balanced design and any fluctuations in the inlet pressure has negligible effect on the regulated pressure.
- · Compact design with minimum number of moving parts.
- Builtin safety against accidental high pressures.



# **DESUPERHEATER (SERIES 800)**

The evolutionary series 800 Desuperheater i.e. Varitrol variable spray nozzles unit can be used in many application to efficiently reduce the superheated steam or other vapours to temperature approaching saturation.

The superheated vapour is passed through a section of pipe into which is fitted a spray nozzle that produces dispersed droplets from a supply of pressurized condensate.

These finely atomized particles promote almost immediate evaporation. The required heat being absorbed from the superheated vapour, thus reducing the temperature.

#### TECHNICAL SPECIFICATIONS

DESIGN : ASME B16.34
VALVE SIZE : 1.1/2" & 2"
RATING : 150 to 1500 ANSI
NOZZLE SIZE : Cv - 0.25 to 9.00
RANGEABILITY : Maximum 45 to 1

: 38mm

VALVE TRAVEL

