



**RK
CONTROL VALVE
RANGE**



The control valve specialist

The Company

R.K. Control Instruments Pvt. Ltd. was established in Sept. 1969 to manufacture control valves indigenously. In 1982 we entered into technical collaboration with Brown Boveri Kent, Inrol Valves, U.K.

The company is able to supply applications support, product advice and full technical back-up on all aspects of control valves technology. Manufacturing unit has the capability to produce standard valves in addition to the more customised units which have gained RK an enviable reputation for being specialist in control valves.

Quality Assurance

RK consider that quality assurance is a pre-requisite for successful business operation. RK employs personnel who blend skill with enthusiasm to provide a high quality throughput.

Technology

RK utilise computers to produce valve sizing and noise prediction data from customer specifications to ensure that the valve will perform to its designed parameters.

Valves are manufactured using RK's modern production machinery with CNC programme and test facilities.

Design Capability

RK have developed the design capability to provide both standard and special valves to meet customer requirements. Working in conjunction with an experienced application team, valve designs are generated which make the latest technology available to solve difficult on-site problems.

To ensure comprehensive customer service, C.A.D. system has been installed with the design facilities. This provides the user with high quality accurately detailed drawings showing the range of equipment to be provided.



Single Seated Globe Valves – Series 10



Sizes : 1/2" to 16" Higher sizes available on request.

Ratings : ANSI 150 to 2500 (PN 10 to PN 400) Other standards available on request.

Features:

- High flow capacity and high gain.
- High powered actuator, field reversible.
- Streamlined flow passage and excellent flow control rangeability.
- Tight shut off.
- High rangeability using low flow trims.
- Large variety of trim design varying from contoured trim to single stage ported and multiple stage low noise anti cavitation trims.
- Can be supplied with wide range of interchangeable trim sizes
- Characteristics - Equal percentage, Linear and Quick open.
- Leakproof packing are available on request.

Application:

To control large range of process parameters, specially for oil and gas production, power generation, chemical, petrochemical, fertilizer, pharmaceutical, processed food and other process industries.

Double Seated Globe Valves – Series 20/22

Sizes: 1 1/2" to 18" Higher sizes available on request.

Ratings: ANSI 150 to ANSI 600. Other standards available on request.

Features:

- High Flow Capacity.
- Minimum differential plug areas to reduce actuator force requirement.
- Optional anti- cavitation / low noise trim option for high pressure drop application.
- Characteristics - Equal percentage, Linear, Quick open.
- Leakproof packing are available on request.

Heavy duty top and bottom guided construction.

Application:

For high flow and high pressure services.

Angle Valves - Series 70

Sizes: 1/2 " to 6"

Ratings: ANSI 300 to ANSI 2500 (NP 40 to NP 400) Other standards available on request.

Features:

- High flow capacity.
- Tight shut off.
- High rangeability.
- Body proportioned to withstand high pipe stresses without distortion.
- Wide range of interchangeable trim styles and sizes available.
- Adaptability to special duties i.e. venturi outlet, low noise etc.

Application:

Specially for very high pressure drop and also used where the fluids contain solid particles.

Three - Way Valves – Series 30



Sizes: 1/2" to 12". Higher sizes available on request.

Ratings: ANSI 150 to ANSI 600 (NP 10 to NP 100)

Other standards available on request.

Features:

- High Flow Capacity.
- Leakage capability better than ANSI class IV and consistent with normal single seat valve.
- High rangeability.
- Leakproof packing are available on request.
- Valve is used for mixing or diverting services depending on customers requirement.

Application:

For high temperature fluid and particularly for textile industries, to mix or divert fluids.

Bellows Sealed Valves

Available as additional feature to give a leakproof packing in the single seated, double seated and three way valves.

Features:

- Bellows are of stainless steel to withstand high pressure & temperature.
- PTFE bellows available for low pressures and temperature upto 180° C on request.

Applications:

For hazardous and corrosive fluids.



Pipeline Desuperheaters



Sizes : 6" to 24" Pipe.

Ratings :

- ANSI 150- 600 Condensate Connection: 1. 1/ 2", Stub Flange: 3"
- ANSI 900 -1500 Condensate Connection: 2", Stub Flange: 4"

Features:

- High rangeability variable area spray unit.
- Accurate and repeatable control of fluid temperature.
- High spray water pressure capability.
- Tight shut off.
- Wide range of available nozzle sizes.
- Erosion resistant materials of construction.
- Ease of installation.
- Low maintenance

Application:

R K Pipeline Desuperheater Systems provide a convenient method of reducing superheated steam or other vapours to temperatures approaching saturation, generally applicable to Power and Sugar Industry. The dispersed droplets from spray nozzle absorb heat from the superheated vapour and evaporate almost immediately thereby reducing the temperature of vapour.

Butterfly Valves - Series 80



Sizes: 2 " to 30"

Ratings: ANSI 125 to ANSI 300.

Features:

- Wafer style connection.
- Concentric design as standard, offset design for special applications.
- Metal to metal or Sleeved type construction.
- Choice of various elastomers or PTFE sleeves.
- Tight shut off with elastomers sleeves.
- Minimum obstruction for flowing media.
- High flow capacity.
- Simple & Light construction.

Application:

Steel, Sugar and Textile Industries and specially for fluid containing slurry particle. Used for no-off as well as control applications.

Ball Valves - Series 90

Sizes: 1/2 " to 8"

Ratings: ANSI 150 to ANSI 300

Features:

- Tight shut off.
- Minimum obstruction for the flowing media.
- High flow capacity.
- 'O' Ball 'V' Notch construction available.

Application:

Used in paper, Pulp and textile industries.



Pressure Reducing Valves - Series 60



SELF ACTUATING TYPE

Sizes : 1/2 " to 8 "

Ratings : ANSI 150 to ANSI 300

Features:

- Self actuating type, does not require any auxiliary energy.
- Used for long trouble free service.
- Valve Disc is reversible and can be changed quickly for renewed life. Pressure balanced design, any fluctuations in the inlet pressures has negligible effect on the regulated pressure.

Application:

Used in fertilizers, chemical and pharmaceutical plant etc. and other process industries commonly used for burner fuel oil pressure regulation.

Power Cylinder



Bore Sizes: 2" to 12"

Stroke : Upto 20" standard. Higher sizes on request.

Specifications:

- Maximum working pressure: 150 Psig
- Maximum working temperature: 80° C

Air Consumption: 1.0 SCFM

Control Pressure Connection: 1/4" NPI (F)

Features:

- Higher strokes.
- Stayput action.

Application:

To operate dampers and Butterfly valves, used for control Of ID and FD fans in boilers.

Procon Diaphragm Valves

Sizes : 1/2" to 14" .

Ratings : ANSI 150

Features:

- Casting standardized to IS 210 FG grade cast Iron.
- Better sealing and longer diaphragm life with the help of weir design.
- Stronger bonnet design to take care of higher thrust and support to the diaphragm.
- Diaphragm construction design with exclusively reinforced fabric.
- Fail safe assembly on auto valves totally protects process -operation in the event of electrical power or air supply failure.
- Available in various linings to handle different- fluids.

Application:

For water treatment plant, caustic soda plant, chemical plants, fertilizers, specially for corrosive fluid.



Actuators



Piston Actuator



Actuator with Side Mounted Hand wheel



Actuator with Top Mounted Hand wheel



Spring & Diaphragm Actuator

Size : 38 to 300 sq. inch

Features :

- Higher Power
- Fast Response
- Low hysteresis
- Field reversible (except model 38E)
- Flexibility in selection of springs
- Manual override optional - Top Mounted or Side Mounted

ACCESSORIES

Valve Positioner

Specifications:

Input Signal 3 to 15 psig or
0.2 - 1.0 kgf/cm²g as standard, split range available on
request.

Stroke Range: 3/8" to 3", 3" to 4".

Action: Direct / Reverse

Accuracy: With 1% of Valve Stroke

Features:

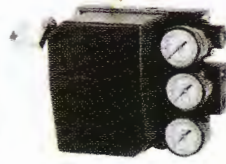
- Minimizes the effect of stem frictional force,
- Fast response,
- Higher accuracy.
- Higher stability.

Application:

Accurate positioning of the control valve



Model : VP



Model : VP 5

Volume Booster

Specifications:

Supply / Output Connection: 1/4", 1/2 or 3/4 " NPT (F)

Signal Connection : 1/4" NPT (F)

Maximum Supply Pressure: 150 psig -

Pressure Ratio : 1 : 1

Features:

- Quick response,
- Greater stability.
- Aluminium or Stainless Steel Material option.

Application:

To reduce the response time, particularly of large actuator



Model : 1000



Model : 3000

Air Lock Relay

Specifications:

Air supply Maximum 7 kg /cm²g (100 psig).

End connection:

1/4" NPT (F)

Material:

Aluminium or Stainless Steel Option.

Features:

In built manual relief valve is provided if the control valve has manual handwheel.
This exhausts the diaphragm chamber when the handwheel is operated to avoid
damage to the actuator diaphragm.

Application:

To achieve stayput condition, on supply failure.



Air Filter Pressure Regulator

Specifications:

Inlet Pressure:

Upto 10kg/cm² (150 psig)

Outlet Pressure:

0 to 120 psig with spring ranges of 0 to 30 psig,
0 to 60 psig and 0 to 120 psig

End Connections:

Inlet/outlet/Gauge: 1/4" NPT (F)

Filter Element:

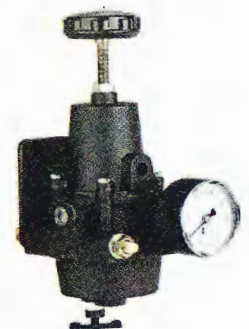
ABS plastic, 25 microns and 5 microns option

Features:

- Higher capacity and lower droop
- Soft seat construction in both the pressure reducing and relief sections
- Aluminum and stainless steel material option.



Model : RK 1



Model : RK 3

Partial List of Customers

- ▶ AARTI INDUSTRIES LTD.
- ▶ ACC CEMENT
- ▶ AMBUJA CEMENT
- ▶ ASIAN PAINTS INDIA LTD.
- ▶ BASF INDIA LTD.
- ▶ BAYER INDIA LTD.
- ▶ BHARAT HEAVY ELECTRICALS LTD.
- ▶ CADBURY INDIA LTD.
- ▶ CADILA PHARMACEUTICALS
- ▶ CHENNAI PETROLEUM CORPORATION
- ▶ COLGATE PALMOLIVE (I) LTD.
- ▶ DEEPAK FERTILISER & PETROCHEMICALS LTD.
- ▶ GLAXO INDIA LTD.
- ▶ GODREJ CONSUMER PRODUCTS LTD.
- ▶ GUJARAT ALKALIES & CHEMICALS LTD.
- ▶ GUJARAT AMBUJA CEMENTS
- ▶ GUJARAT FLUOROCEMICALS LTD.
- ▶ HINDUSTAN PETROLEUM CORP LTD.
- ▶ HINDUSTAN UNILEVER LTD.
- ▶ INDIAN OIL CORP LTD.
- ▶ INDIAN PETROCHEMICALS LTD.
- ▶ IPCA LABORATORIES LTD.
- ▶ ISPAT INDUSTRIES LTD.
- ▶ JINDAL STEEL
- ▶ LLOYDS STEEL INDUSTRIES
- ▶ MUKAND LTD.
- ▶ NUCLEAR POWER CORPORATION
- ▶ OIL & NATURAL GAS CORPORATION
- ▶ RALLIS INDIA LTD.
- ▶ RANBAXY LABORATORIES LTD.
- ▶ RASHTRIYA CHEMICALS & FERTILIZERS LTD.
- ▶ TATA CHEMICALS LTD.
- ▶ TATA IRON & STEEL COMPANY
- ▶ UNITED PHOSPHORUS LTD.

Partial List of Consultants

- ▶ AVANT-GARDE ENGINEERS & CONSULTANTS (P) LTD.
- ▶ PROJECTS & DEVELOPMENT INDIA LTD.
- ▶ MITCON CONSULTANCY SERVICES LTD.
- ▶ TOYO ENGINEERING INDIA LTD
- ▶ MECON LTD.
- ▶ JACOBS ENGINEERING
- ▶ UHDE INDIA LTD.
- ▶ TECHNIMONT ICB

The Company's Policy is one of continuous improvement and the right is reserved to modify the specifications contained herein without notice



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