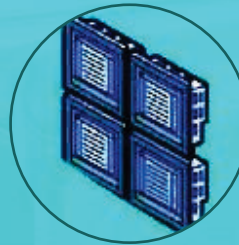




# VALVEAUTOMATIONSYSTEM

## TurnkeyProjectsFor

Biotech,ChemicalPlants,PowerGeneration,  
FluidDistributionNetwork,Wastewatertreatment,  
Petrochemical,Refinery,Breweries,etc...



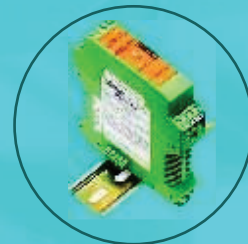
Siren/Procedure



Safety



ValveObject



Input/Output



SCADAScreen



RemoteControlled  
Monitoring



**Canares Automation Pvt. Ltd.**

Plot No.85/0-A, Industrial Suburb,  
Yeshwanthpur, Bengaluru - 560 022.



080 2357 8010 / 2357 8012  
2357 8014 / 2357 8016  
Toll Free : 1800 4258014



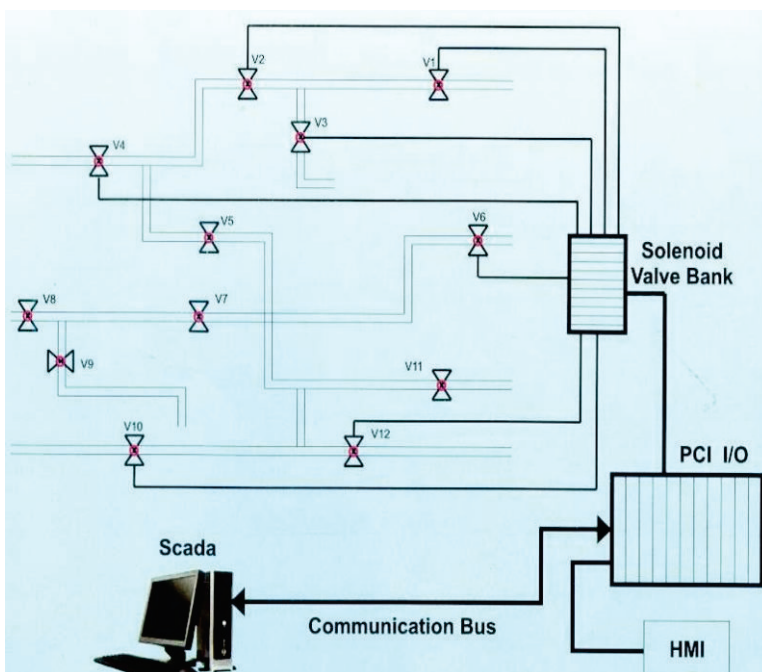
sales@canares.com  
www.quickair.in  
www.canares.com

**PROTORK** is a leading system house for automated valves and flow components for industrial valve control application. For over 10 years we have been providing state of art technology in automation catering to various clients ranging from small equipment manufacturers to giant manufacturing, chemical, food and Pharmaceutical companies. We offer complete valve automation services designed to your specified applications. Full design capabilities are offered including PLC controls and SCADA customization.

## We offer **cost effective** solutions for valve automation like,

Optimum solution of valves to best suit the application.

- Interface of valves to PLC I/O
- Selection of appropriate PLC system & I/O configuration.
- PLC programming as per application requirements.
- HMI interface to PLC system.
- SCADA interface to PLC & Valves through communication bus.



## Our valve automation **package** includes:

Control panel with Mimic, HMI and PLC systems.

- Indication, System status, Valve position, Connectors, visual and audible alarm.
- Valves operation with remote alarm capability.
- Valves with electrical / pneumatic actuators.

System protection, safety and automatic full shutdown on alarms conditions.

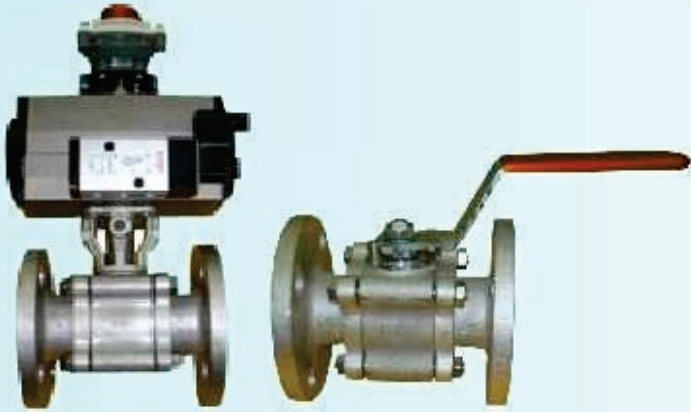
- PLC based valve automation package using reputed brands of PLC's.
- Option of expansion in PLC's I/O and optimization of control and monitoring of devices.
- Streamlined automation packages designed for application, specific control are available for lower initial investment.
- Sensor: System flow, Interval Timer, Valve indication counted provision for high and low level.
- Upgrade to SCADA SYSTEM and replacement of end devices etc.,
- Sequencing and protection, performance display, HMI with system status, suction and discharge override control.
- Detailed I/O, wiring and termination design
- Data modeling and application designing.
- Configuration design document development.

## SCADA **customization** with features like,

Screen development & layout of valves.

- Valve status & indications with animations.
- Alarm screens & Alarm login
- Remote/ Local control & monitoring.
- Data acquisition and history data logging
- Report generation
- Communications to third party devices.

## Ball Valves



### Size Range:

<b>#800</b>	: 1/4" to 4"
End connections	: Screwed, socket welded, but welded, KF flanged, Flanged #150
Type	: 3 piece
<b>#150</b>	: 1/2" to 10"
End connections	: ANSI RF #150
Type	: single piece & 2 piece
<b>#300</b>	: 1/2" to 10"
End connections	: ANSI RF #300
Type	: single piece & 2 piece
<b>Temp.</b>	: -20°C to 300°C
Pressure	: For #800 Upto 80 bar, For #150 upto 16 bar & #300 upto 30 bar

Material of Construction: Carbon steel, Ss304, SS316, & Special alloys.

Special Constructions: Fire safe to API 607 and diverters, 3 way valves, Fullbore Ball valves.

Seats: PTFE, NRG, PEAK, PCTFE, Delrin

## Butterfly Valves

Type	: Wafer type butterfly valve
Pressure Rating	: PN10

### Working Conditions:

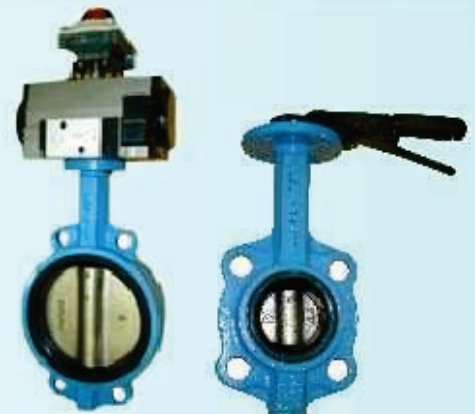
Temp	: -10°C to +110°C
Pressure	: 10 bar at ambient temperature.
Vacuum	: 10 <sup>-2</sup> torr at 90°C

### Material of Construction:

Body	: Cast iron, Epoxy Coated, Color- Blue(RAL5012) other color are optional.
Stem	: SS410 (std), SS316, SS304, are optional
Disc	: Ductile iron nickel plated (std), SS316, Ss304 optional
Seat	: Replaceable EPDM (std) NBR, Viton & PTFE optional.

### Design:

- ? Face to Face dimension as per API-609, ISO5752
- ? Connection standard, ASME B16.1, ANSI #150 (std) BS table E/D & BS 4504 are optional.



## Limit Switch box with Optical Indicator:



This device is particularly suitable for monitoring the position of each valve, even at long distances.

It is manufactured according to VDI/VDE 3845 standards. It can contain two signalling limit switches either mechanical "SPDT", or proximity ones.

- ? Spring loaded Cam Operation
- ? Sensing elements like Micro Switches SPDT
- ? Proximity Sensors
- ? Enclosure in Weather proof or Exproof Gr.IIC
- ? NAMUR mounting as standard
- ? Special versions on request



## Pneumatic Positioner



Pneumatic positioner is particularly suitable for proportional working of both DA and SR actuators

This positioner is connected with the actuator by means of NAMUR pad available on the output shaft on the positioner.

Supply	: Dry instrument air 2 to 7 bar.
Regulating signal pressure	: from 3 to 15 psi
Protection	: IP 55
Sensitivity	: <0,5% of the range
Working temp.	: from -20°C to +80°C

Electro pneumatic Positioner output 4-20 mA  
Position feedback transmitter also available.  
ATEX version available on request

## Valve Manifolds

Nominal Flow	: 400 l/min
Protection Class	: IP 50 (encapsulated D-subplug)
Electrical Connection	: Multi-pin + 6 field bus protocols
Application Level	: Modular bus solutions
VTS concept	: Subbase principle
Switching Time	: 12 ms to 22 ms
Working Pressure Range	: 3-8 bar (internal pilot)

Maximum 12 plates either 12 5/2 valves or 24 3/2 valves, 5/2 and 3/2 plates are interchangeable. LED display, manual override.



## Pneumatic Actuator



Body	: Extruded Aluminium (2 piston) Cast Aluminium AL356-T6 (4 piston)
Piston	: AL356/380
Piston Oring	: Buna N, Viton, EPDM
Spring	: Spring Steel
End Cover	: AL356/380
Pinion	: Steel

### Working Conditions:

Temp	: 0-90°C
Pressure	: 0-8 bar
Torque	: 4 piston double acting upto 1950* NM. Spring return, upto 690* NM 2 piston double acting upto 3000* NM. Spring return, upto 1060* NM

\* Torque selected at 6 bar air pressure.

## Electrical Actuators

Actuator On-Off; working angle	: 90°
Maximum torque	: 5 to 1960 Nm.
Supply voltage	: 230 Vac (+-10%) 50/60 Hz 1Ph
Insulation resistance	: 100 M / 500 Vdc
Tension insulation	: 1500 Vac/1 minute

Motor with Class E insulation  
Working temperature from -25°C to +55°C (for use in temperatures below 0°C, We suggest anti-condensate elements)  
Protection according to NEMA 4, 4X rules (IP65)  
Graduated visual position indicator  
Detachable lever for manual operation  
Electric connections with screw terminals  
Locking of supply cables by means of cable presses.

