



A **New** dimension in **Control Valve** technology



an ISO 9001 : 2000 Certified Company

Darling Muesco (India) Pvt. Ltd.
Joint Venture with
Anchor/Darling Valve Co.-USA
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Our Growth

With the increase in Global opportunities , we concentrate on our efficient & sustained R&D and investments in right areas at the right proportions. We forge into future with appropriate investment in capital equipment, market development, new business processes and other key drivers of productivity.

Our Manufacturing units

We are located in Ahmedabad, Western part of India. We have adequate sized, 16,000 sq. ft. of built up two manufacturing units, side by side and almost 7,500 sq. ft. of administration area in a plot of 50,000 sq. ft. with highly sophisticated infrastructure and technology, we have skilled and trained sales personnel who could understand the insights of the various markets, both domestic and global.

Our Quality control

All our products are being tested on the various Test Benches that are applicable, depending on the Final use. They are tested for Flow Rate, Valve Function and on other required parameters.

Our Collaborators

Muesco Inc., Houston, USA. for Self Acting Automatic Control Valve.

Anchor Darling Valve Co., Penn. USA. for Pneumatic Control Valve.

Our Beginning

Darling Muesco (I) Pvt. Ltd., floated in 1987, with a Joint Venture & Technical Collaboration of Muesco, Inc. Houston, U.S.A. and Anchor/ Darling Valve Company, now known as Flowserve Inc. Pennsylvania, USA .

We design and manufacture high precision Control Valves, Pressure Regulating Valves & Safety Relief Valves to international standard and cater to the demanding customers across the country & world. Our products process system and quality are ISO 9001 Certified. The investment in quality is justified by more then 2000 satisfied customers.

Our Motto

To provide latest technology in products manufactured by us at affordable price, with reliable quality, good service back up and within acceptable delivery period.

Our Philosophy

"QUALITY FROM THE BEGINNING"

Our Vision

"Pursuing goals with integrity, commitment and passion". We abide by the law of change.

Our Clients Network World Wide



Our Representative

- Delhi • Mumbai • Kolkata • Chennai
- Bangalore • Hyderabad • Ahmedabad
- Surat • Baroda • Pune • Nagpur
- Rourkela • Visakhapatnam • Trivendrum

Whom We Serve



AIRCRAFT FUELING VALVES



Digital Control Valve

Multi Stage Set-Stop Valve, F-2113-40R (Y-Pattern), F-113-40R (Globe)

This is an electrically actuated, hydraulically operated multi-function control valve.

Used extensively in loading terminal automation systems in refineries and storage tanks of petroleum products for effective and accurate filling of tankers and railway wagons. It has two solenoid valves, receiving signal from batch controllers to position the valve for low flow/medium flow / high flow conditions as programmed.

Size : 25NB - 400NB

Deluge Valve

UL Listed Deluge Valves Models F100D-A are manufactured with Dry Trim (Pneumatic Actuated) and Wet Trim (Hydraulically Actuated). Both options are available with Electrical Trim Solenoid Actuated (Model F100 D-B). All trims are factory piped on the Valve itself. It also has Manual Station as Test Trim, Manual Override and Drain Line. The valve opens on demand to provide water flow to the fire protection sprinkler systems. Pilot system can be hydraulically, pneumatically or manually operated. Opening of the Valve is by electrical signal to solenoid valve/loss of control pressure. The Pilot and Diaphragm design has many advantages as:

- Quick response/fast opening
 - Low friction
 - High flow capacity
 - Minimum maintenance
- Imported Diaphragm & Patented Quad Seal Ring for zero leakage.

Size : 50NB - 400NB



Pressure Reducing Valve

F 115 (Globe) / F 1115 (Angle Pattern)

- Automatically reduces a higher inlet pressure to a constant lower outlet pressure.
- The valve consists of a main valve and a Fig. 15 pressure reducing control pilot. Slight changes in downstream pressure acts on topside of control diaphragm causing main Valve to counteract pressure changes and hold a constant outlet pressure.
- The regulator will reduce the upstream pressure to a constant downstream pressure regardless of the change in flow rates/or inlet pressure. The pilot is a Normally - Open valve that senses the downstream pressure.
- Spring Range : Standard : 20-175 psig. Optional : 5-35 psig.

Size : 25NB - 400NB



Slug Control Valve

F 122-R

Filter Separator Control Valve with Float Pilot

- The valve is installed on Filter Separator along with complete Float Operated Control System (F 65-8) to monitor and control the water level in the Separator.
- In the event, water level rises above certain level, the Slug Control Valve (Fueling Valve) will close automatically and Water Drain Valve will open allowing the Water to Drain.
- Once the water level drops to safe level the Fueling Valve opens allowing the Fueling to start and Drain Valve closes.
- Entire system is foolproof for Aircraft Fueling.
- All major Indian Airports such as: Mumbai, Delhi, Kolkata, Hyderabad, Chennai and many Air Force bases are equipped with our such system.

Size : 50NB - 400NB

Slow Acting Check Valve

F 118-3R

- Non return function, closes automatically in case of reversal flow.
- The valve allows flow when inlet pressure is higher than outlet pressure.
- In case of reverse flow, the valve closes within appropriate time to ensure it does not generate any surge / water hammer.
 - Ideal for Air craft fuelling application.
- Valve opens and closes at controlled (adjustable) speed to ensure smooth flow.

Size : 50NB - 400NB



Auto Re-circulation / Refueller Valve

F 116-AR (Globe) / F 1116-AR (Angle Pattern)

- Auto Re-circulation on a Refueller to control the pumping pressure of Air Crafts.
- Solenoid Override or Pneumatic Override to safeguard the system. This can be operated remotely to re-circulate full flow.
- When installed in Main line, it prevents upstream pressure dropping below preset value.
- When installed on a By-Pass line, it controls main line pressure by relieving excess pressure in By-Pass/sump.
- Ideal for pump by pass to protect the downstream equipments.
- Relief pilot (F16) is normally closed due to spring tension.
- With increase in upstream pressure above set value, Pilot (F-16) opens which makes Main Valve to open fully.
- Spring Range: Standard: 20-200 psig. Optional: 5-30 psig.

Size : 25NB - 400NB





Pneumatic Control Valve

Darling Muesco Globe type Control Valves are available for any control application. Built to take the punishment imparted by many processes, including extreme pressure drops, the valve is backed by the most respected name in the valve industry.

Size	25NB - 400NB
Rating	Class 150, 300, 600, 900 & 1500
End Connection	Flanged, Buttweld & Socketweld
Material	Cast Steel, Stainless Steel, Alloy Steel, Hastalloy, etc.

Standard Models

- 70-29-1 (Single Seated, Globe, Unbalanced Design) Top guided**
Most widely used valve, for all major Fluids, Working conditions & Applications. Very easy to maintain.
- 70-28-2 (Single Seated, Globe, Balanced Design) Cage Guided**
Excellent valve for Liquid, Air & Clean Gases. Has very high stability and better response.
- 70-14-2 (Single Seated, Globe) Top & Bottom guided**
Suitable for High working pressure & High pressure Drop.
- 70-11-2 (Double Seated Globe) Top & Bottom guided**
Used for High Flow Capacity (Cv Value) & High Pressure Differential such as Boiler feed Water, etc.
- 70-15-3 (3 Way Mixing & Diverting) Skirt & Top Guided**
Used for Thermic Fluid, Steam, Cooling Water, etc. where excess amount of fluid has to be by-passed.

- All models available with Direct and Reverse Acting Actuators.
- Standard accessories such as Pneumatic Positioners, Electro/Pneumatic Positioners, Manual Override etc. are available.

Motorized Control Valve

Compact Model Electrical Actuator directly mounted on Control Valve. Features available are inbuilt positioners, position transmitters, limit switches, potentiometer, hand wheel assembly, weather proof / explosion proof enclosure, etc. Actuators available for Single phase / Three-phase current supply.

Size	25NB - 300NB
Rating	Class 150, 300 & 600
Input signal	4 - 20 mA
Output Signal	4 - 20 mA
Material	Carbon Steel, Stainless Steel and Alloy Steel.



Robot operated Pressure Control Valve

Model - RB70142 (IBR Approved)
This design of Pressure Regulating Valve is according to latest development and highly in demand for accurate downstream pressure control. This is an ideal replacement of self regulating PRV where high flow & high accuracy are required.

Sizes	40NB - 200NB
End Connection	Flanged
Material	Carbon Steel & Alloy Steel
Outlet Pressure Range	1.5 to 14kg/cm ² (MAX)



Safety Relief Valve : SVC-500

(IBR Approved)

Open Bonnet, Conventional Design, Open Cap with Lever. Designed as per API 526/API 520 and also as per ASME Section VIII. Ideally suitable for Steam Service. Set pressure varies from 0.7 kg/cm² to 110 kg/cm². More than 5000 valves installed on boilers across the country.

Valve Size	25 x 50NB to 250 x 350NB
Rating	BS 10 Table H, Class 150 to Class 900
Orifice Size	G(20.0 mm) to V(181.0mm)
End Connection	Flanged
Material	Carbon Steel, Stainless Steel & Alloy Steel

Safety Relief Valve : SVE-520

Similar to SVC-500, but with closed Bonnet & Closed Cap. Also available with Packed Lever, Bellow Sealed and Soft Seat for critical services. Valve size, orifice and rating same as SVC-500.

Valve Size	25 x 50NB to 250 x 350NB
Orifice Size	G(20.0 mm) to V(181.0mm)
Flanged End	Upto Class 600 Stellite Disc & Nozzle.
Material	Carbon Steel, Stainless Steel & Alloy Steel



Safety Relief Valve : T-100

Small Sized Flanged End Relief Valve
Ideal for Pipe Line and Small Reactors in Pharma Industries.

Valve Size	15 x 25NB, 20 x 25NB & 25 x 40NB 40 x 50NB & 50 x 50NB
Rating	Class 150 to Class 1500
Material	Cast Steel & Stainless Steel-Investment Cast
End Connection	Flanged End.
Orifice	7mm, 10mm, 12mm & 16mm



Thermal Relief Valve : T-110

Extensively used in large Pipe Lines, Small Reactors/Vessels to release pressure generated by thermal expansion.

Sizes	15 x 25NB, 20 x 25NB & 25 x 40NB 40 x 50NB & 50 x 50NB
Rating	Suitable for Working Pressure upto 200 bar
Material	Forged Steel & Investment Cast Stainless Steel
End Connection	Screwed & Socket Weld
Orifice	7mm, 10mm, 12mm & 16mm





Pressure Reducing Valve - Steam Service

PRV-1001 (IBR Approved)

Self Acting, Pilot & Piston operated Pressure Reducing Valves are most popular for pressure reduction of STEAM in all types of Industries. The Valve operates on Spring Balance principle.

The Downstream pressure is sensed below stainless steel diaphragm which is balanced by the spring tension. Increasing spring tension, increases outlet pressure and vice versa. The Valve has additional external Sense Line provision also, which improves performance and accuracy of outlet pressure.

Sizes	15NB - 200NB
Rating	BS10 Table H, Class 150 & 300
End Connection	Flanged, Screwed
Material	Carbon Steel & Alloy Steel

Nitrogen Blanketing Valve Gas Pressure Regulators : F-166HP

Type F-166HP Regulators are Self Actuated - Spring & Diaphragm operated for precise control of Gas pressure for maximum combustion efficiency in commercial gas installation. The Regulators maintain the outlet pressure steadily irrespective of varying inlet pressure in the pipeline. These high capacity regulators are used for Air, Nitrogen, Natural Gas, Hydrogen and many other Industrial Gases.

Sizes	15NB to 150NB
Rating	Class 150 & 300
Maximum inlet pressure	20 kg/cm ²
Minimum outlet pressure	50 mm WC
Material	Carbon Steel & Stainless Steel



Pilot Operated Pressure Reducing Valve for Gas & Air : F-217

Series F-217 Regulators are Pilot operated for control of gas & air pressure. In single stage, pressure reduction can be achieved very precisely up to 1/10th of the inlet pressure. Pilot operated Regulator gives very precise downstream pressure and very low fluctuation. They are extensively used as active and monitor control in series for Natural Gas Pressure Reducing System. Valve has very high flow Capacity and very precise regulation with the help of Pilot.

Size	50NB to 200NB
Rating	Class 150 & 300
Material	Carbon Steel & Stainless Steel



De-superheater

Various Designs and Types of De-Superheaters are offered for different requirements to reduce Steam temperature from Superheated to Saturated Steam:

- Variable Spray De-Superheater - VSD - 110.
- De-Superheater Mechanically Atomised - DMA.
- Ventury Type De-Superheater - V - 105.

Based on process parameters, suitable De-Superheater is offered with complete instrumentation package.



Pressure Reducing Station for Steam

(with IBR approval and certification)

Complete assembled unit of pressure reducing station, sized and selected based on Customer's requirement of Flow Rate, Pressure, Temperature, etc. PRV is of Self Regulating type Model PRV 1001, generally for low-pressure duty. Recommended PRV for high-pressure duty and higher turn down ratio (up to 40:1) is Robotrol operated Control Valve - Model: RB 70142.

Size	25NB X 50NB to 250NB X 350NB
Pressure Range	150 psig - 450 psig.
Pressure Rating	Class 150, 300, 600, BS 10 Table H, etc.
Material	Cast Steel and Alloy Steel



Pressure Reducing Station for Gas

Complete assembled unit of pressure reducing station, sized and selected for controlling pressure in Natural Gas, Nitrogen, Hydrogen, LPG, Air, etc. Each PRS is sized and manufactured based on customers process parameters such as Flow Rate, Inlet Pressure, Outlet Pressure, other Safety requirements such as Safety Shut-off Valve with Over Pressure and Under Pressure setting, Diaphragm Operated Relief Valve, Flame arrester etc. can be incorporated as required. Active and Monitor Regulators with by-pass line is also possible. The unit gives excellent Downstream Control of Pressure with full safety.

Sizes	25NB - 150NB
Inlet Pressure	10kg/cm ² to 200kg/cm ²
Minimum Outlet Pressure	50mm WC
Material	Cast Steel, Alloy Steel and Stainless Steel

Gas Metering Skids

Complete natural gas pressure regulating & metering skids are being supplied with gas filters, Isolation Valve, Meters, Safety Shut-off Valve & Regulating Valve. Ideal for individual industrial units and as a stand alone unit. Compact, efficient and easy to maintain.



Pneumatic Actuated Ball Valve

Ball Valves designed and manufactured conforming to BS 5351. These Valves are available in Single piece, Two-piece and Three-piece construction. Also available Fire Safe Design Ball Valves as per API 607 standard, with Fire Safe Approval. Valve supplied complete with appropriate size of Single Acting / Double Acting Rack & Pinion type actuator with all standard accessories such as positioner, Sol. Valve, Electro / Pneumatic Positioner, Limit Switches etc. Also available with single phase, Electric Actuators.

Sizes	25NB to 200NB
Rating	Class 150, 300 and 600
End connection	Flanged
Material	Cast Steel & Stainless Steel

Pneumatic Actuated Butterfly Valve

Slimseal Butterfly Valves designed and manufactured conforming to BS 5155/API 609 are best suitable for 100% tight shut-off duty. Soft Seated Butterfly Valves are offered complete with Pneumatic/Electric Actuator, Electro/Pneumatic positioners for Automation. Also available in double Off-Set Disc Design as per AWWA-C-504. Tested for Helium Leak Test for BARC

Sizes	50NB to 400NB
End connection	Wafer, suitable for mounting between Flanges.
Material	Cast iron, Cast Steel and Stainless Steel
Liner/Seat	Nitrile, EPDM, Viton, Silicon, etc.



Pneumatic Cylinder operated Knife Gate Valve

Knife Gate Valves, designed and manufactured conforming to MSS SP 81 are suitable for on-off duty. These Valves find application in paper & pulp industry, Ash handling in power plants and powder conveying. Valve supplied with all required accessories.

Sizes	50NB to 500NB
Rating	Class 150 & Equivalent
End connection	Wafer, suitable for mounting between two Flanges.
Material	Cast Iron, Cast Steel and Stainless Steel