

$$\Delta p_{pipe} = (\lambda_s + \mu \lambda_s) \frac{\rho v^2 L}{2 D}$$

$$P_n = \frac{\gamma R}{\mu} \left[1 - e^{-(\mu k_j / R)} \right] + P_{no} e^{-(\mu k_j / R)}$$

Dome Valve

The RULA Dome Valve is a very versatile Pressure Vessel filling and discharge valve for dry free flowing non-sticking bulk materials. The Dome Valve's unique design allows the dome to cut through material during opening and closing. The dome is driven by a pneumatic actuator. An inflatable seal ensures a perfect closure.

These functions are controlled by a control box with a programmable PLC.

Types Manufactured

RULA manufactures two different types of Dome Valves:

- Valve with Cast Iron Housing and Cast steel dome
- Valve with machined / fabricated Housing

Design Features

- Programmable PLC will give an alarm when the seal does not inflate to its pressure setpoint
- PLC will give an alarm when valve does not reach its open or close position
- The inflatable Seal is protected and out of the material flow stream
- Relatively simple and very robust design with minimal movable parts
- When open the dome moves out of the material flow opening the entire cross section of the valve for material flow

Specifications

Main Valve Body	SG42 / 300WA
Top Flange	SG42 / 300WA
Dome	GS38 / 300WA
Bushes	SG42 / Bronze
Inflatable Gasket / Seal	Silicone
O rings	Viton

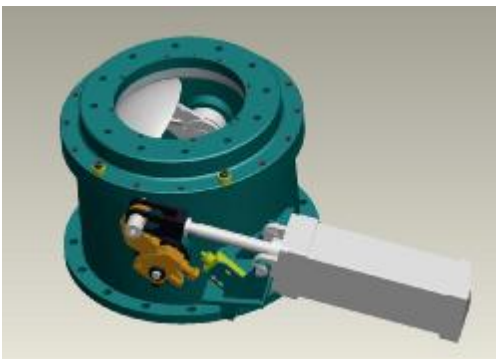
Sizes

- Valves are purpose made in any size and shape to fit plant requirements
- Drilling arrangement to suit plant interface

Operating & Maintenance

- The valves are Operator and Maintenance friendly
- A complete Operating & Maintenance manual is available

▼ Illustrative Dome Valve



Dome Valve fitted with Actuator and PLC Control box ▼

Cast Dome Valve Domes ready for machining ▼



Dome Valve pressure tested and ready for dispatch ▼



Pressure Vessel Dome Valve Application ▼