



DUAL PUMP PROTECTION VALVE (DPV)

DUAL's Pump Protection Valve has been designed and manufactured to provide protection against excessive fluid temperature rise, within the pump housing. Low flow conditions can cause flashing, cavitation, vibration, bearing failure and damage to mechanical seals and pump housing.

The DPV valve is fitted to the suction side of the pump. The valve can also be used to control or limit the pressure in a pipeline or vessel.



FEATURES

- Cost effective
- Uses no external power
- Installation simplicity
- Light weight body
- Flushing port
- Flanged connection
- Long ball life due to ball rotation
- Full port opening
- No sticking

PRODUCT SPECIFICATION

BODY:	Carbon Steel; SG Iron or Stainless Steel body type
BALL:	Urethane or Stainless Steel
SIZE RANGE:	40mm; 50mm; 80mm & 100mm
PRESSURE RATING:	0 - 100 Bar
FLANGE CONNECTION:	To suit Pump and Pipe line
VALVE INTERNALS:	304 Stainless Steel Body Seat; Carbon Steel or Stainless Steel Ball Controller, Tensioner and Flushing Port, Helical Spring Coated Spring
OPERATING TEMPERATURE:	80°C

MINING APPLICATION



OPERATION

The Pump Protection Valve uses the simplest design; a Urethane ball and a compressed helical spring to seal the valve. As the pressure in the pump builds up passed the manufactures designed pressure rating, the ball is pushed upwards allowing fluid or steam to discharge through the bypass line of the valve. As pressure decreases back to normal levels, the ball will reseal, hence protecting the pump against damage and an explosion causing bodily harm and even death.

INSTALLATIONS

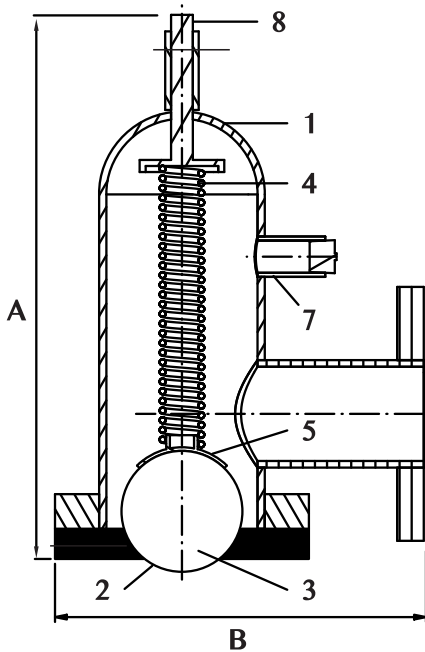
- Direct drive centrifugal pumps
- Slurry pumps
- Horizontal or vertical pumps
- Fitted to suction side of the pump
- Pipe lines

APPLICATIONS

- Mining and mineral processing
- Power generation
- Sand and gravel
- Chemical and soda ash
- Sewage
- Pulp and paper
- Environmental and Effluent
- Water



DIMENSIONS AND SPECIFICATIONS



Blowoff
Outlet
Flange to
Suit
Customer's
Requirements

Flange drilling to suit
Customer's requirements

	PART	DESCRIPTION
1	Body	Carbon Steel / SG Iron/ Stainless Steel
2	Body Seat	304 Stainless Steel
3	Ball	Urethane/ Stainless Steel
4	Spring	Helical Spring Coated
5	Ball Controller	Carbon Steel / Stainless Steel
6	Paint	Epoxy Powder coated/ Rilsan Lined or painted to customer specification
7	Flushing Port	Carbon Steel / Stainless Steel
8	Tensioner	Carbon Steel / Stainless Steel

VALVE SIZE (mm)	A	B	WEIGHT (kg)
40	430	270	20
50	430	270	20
80	430	270	300
100	430	270	400

Dimensions and weights are for guidance only - detailed dimension drawings available on request. All dimensions are in millimeters, unless stated.