

# MACK VALVES



## CRYOGENIC & LNG STAINLESS STEEL RANGE

BROCHURE



ISO9002 Lic No 7981  
Standards Australia

# SUPERIOR QUALITY YOU CAN DEPEND ON

## High & Full Lift Safety/Relief - 76 Series



High Lift AS1271 valves can be manufactured in Stainless Steel size range 15 to 150mm. Service cryogenic. BSPT, NPT, ANSI 150, ANSI 300

Full Lift ASME Nozzle valves can be manufactured in Stainless Steel size range 15 to 200mm. BSPT, NPT, ANSI 150, ANSI 300

## St St Cryogenic Ball Valve - 5 Series



Design - Unidirectional extended stem valve with pressure relief hole in upstream side of ball. Strong construction in stainless steel with automation top pad and locking option.

Ends NPT  
Temperature rating -150°C to 150°C

## St St Cryogenic Ball Valve - 57 Series



Design Two piece ball valve. Full bore up to 50mm. Pressure relief hole in upstream side of ball.

Seating PTFE seats and seals  
Construction Stainless steel 316 & CF8M  
Sizes 15 to 200mm  
Ends Flanged ANSI 150, ANSI 300, or screwed ends  
Service Cryogenic  
Temperature rating -196°C to 150°C  
Pressure rating Dependent on valve size and ends

## St St Fire Safe Ball Valve - 5 Series



Fire safe cryogenic ball valves suitable for LNG applications (-196°C). Full bore, split body design with extension. Lever and gearbox operated or actuated. Socket weld, butt weld and flanged connections available. API 607 (4 edition) certified.

Design BS 5351, Split body, Full Bore, Floating Ball, Lever Operated, Cryogenic Extension.  
Seating Graphite reinforced PTFE  
Construction 316 Stainless Steel  
Sizes 15 to 200mm  
Ends Buttweld, Socket weld or Screwed NPT or flanged ANSI  
Service Fire safe tested to API 607/4 & BS 6755/2  
Pressure Rating ANSI 150, ANSI 300 & 800lb

## Stainers - 67 Series



A range of Y-type strainers specifically for cryogenic systems. Large 100 mesh basket ensures minimum pressure drop through the strainer Suitable for oxygen service

Design Y type  
Seating Integral  
Construction Stainless steel 316 & CF8M  
Sizes 15 to 350mm  
End BSPT, NPT, ANSI 150, ANSI 300  
Service Cryogenic & Gas  
Temperature Rating -196°C to 150°  
Pressure Rating Dependent on ends. Screwed 42 bar, ANSI 150, ANSI 300

## Stainless Steel Check Valve - 35 Series



Piston type with PTFE disc ensures repeatable drip tight shut off. Full bore flow properties for low pressure drop. Suitable for vertical and other difficult applications.

Design Bolted bonnet, screwed bonnet  
Seating Hard or Soft PTFE seat  
Construction Stainless steel 316 & CF8M  
Sizes 8mm to 80mm  
Ends Socket weld, BSPT, NPT, ANSI 150, ANSI 300  
Service LNG  
Temperature rating -196°C to 150°C  
Pressure rating PN50 15mm to 50mm. PN25 65mm & 80mm



# MACK VALVES STAINLESS STEEL RANGE

Mack Valves manufactures and distributes a comprehensive range of industrial valves for the control of pressure and flow of gases and fluids. For over 65 years Mack Valves has proven itself by producing reliable, dependable, safe & strongly constructed valves. Mack Valves maximise plant efficiencies and minimise maintenance costs by providing long life and reliable service.

Mack valves are manufactured to internationally recognised standards and provide safe and reliable handling of industrial gases and cryogenic liquids.

Mack valves are used internationally by gas producers in separation facilities and in the on-site storage of gases. Mack Valves services most of the major company's involved in the

manufacture, transport and use of cryogenic liquids, and the OEM's involved in the design and construction of cryogenic tanks and transport equipment.

Mack Valves offers –

- Strongly engineered precision cryogenic & LNG valves
- Manufacture to internationally recognised standards
- Stringent clean room control
- Express delivery, with common valve sizes available ex-stock
- Certification and traceability
- Customisation options. Products can be supplied in materials to suit various applications and pressures including bronze, stainless steel, monel, etc

## Cryogenic St St Globe Valve - 127 Series



Design	Bolted bonnet, 300mm extension
Seating	PCTFE disc & integral seat
Construction	Stainless steel 316 & CF8M
Sizes	15, 25, 40, 50, 65, 80mm
Ends	Socket weld, BSPT, NPT
Service	Cryogenic (including Oxygen)
Temperature rating	-196°C to 150°C
Pressure rating	PN50 15mm to 50mm PN25 65mm & 80mm

## LNG St St Globe Valve - 127 Series



Design	Bolted bonnet, 300mm extension
Seating	Hard seat
Construction	Stainless steel 316 & CF8M
Sizes	15, 25, 40, 50, 65, 80mm
Ends	Socket weld, BSPT, NPT
Service	LNG
Temperature rating	-196°C to 150°C
Pressure rating	PN50 15mm to 50mm PN25 65mm & 80mm

## Class 800 St St Globe Valve - 122 Series



Design	Bolted bonnet, 300mm extension
Seating	Hard or soft PCTFE seat
Construction	Stainless steel 316 & CF8M
Sizes	15, 25, 40, 50, 65, 80mm
Ends	Flanged ANSI 150, ANSI 300, ANSI 600
Service	Cryogenic
Temperature rating	-196°C to 150°C
Pressure rating	Class 800 or determined by class of flange

## Disc Valve - 16 Series



Design	Bolted bonnet, outside screw & yoke
Seating	Glass filled PTFE
Construction	Stainless steel 316 & CF8M
Sizes	65 to 300mm
Ends	ANSI 150 & ANSI 300
Service	Cryogenic & Gas
Temperature Rating	-196°C to 150°C
Pressure Rating	Dependent on ends. ANSI 150, ANSI 300

## Safety Valve - 76 Series



Safety valves come complete with valve easing gear.	
Design	High lift
Seating	Hard or Soft PTFE seat
Construction	Stainless steel 316 & CF8M
Sizes	15, 20, 25, 32, 40, 50mm
Ends	BSPT, NPT
Service	Cryogenic / LNG
Temperature rating	Dependent on materials used
Pressure rating	Dependent on valve size

## Relief Valve - 7 Series



Relief valves available with sealed screwed covers suitable for hazardous products	
Design	High lift
Seating	Hard or Soft PTFE seat
Construction	Stainless steel 316 & CF8M
Sizes	15, 20, 25, 32, 40, 50mm
Ends	BSPT, NPT
Service	Cryogenic / LNG
Temperature rating	Dependent on materials used
Pressure rating	Dependent on valve size



### Pressure Build Valve - 77 Series



#### Low pressure build valve

Pressure build valve  
Features include alloy diaphragm, removable inbuilt strainer & PTFE sealing disc.  
Screwed series  
Stainless steel spring  
Max pressure 25 bar

#### High pressure build valve

Features alloy diaphragm, PTFE sealing disc & stainless steel spring  
Screwed series  
Max pressure 60 bar

### Pressure Reducing Valve - 79 Series



Design - Pilot operated gas valve. Features include PTFE or stainless steel sealing disc and pilot, stainless steel spring and valve members, robust piston style design.

Seating	PTFE or stainless steel sealing
Construction	Stainless steel 316
Sizes	Screwed series 15, 20, 25, 32, 40, 50mm
	Flanged series 15, 20, 40, 50, 65, 80, 100, 150, 200mm
Service	Gas
Temperature Rating	0 to 200°C
Pressure Rating	Dependent on flanging. Screwed 42 bar, ANSI 150 19.6 bar, ANSI 300 49.6 bar

We recommend that pressure reducing valves and direct acting valves are installed inverted for cryogenic application to allow spring chamber condensate draining.

### 3-Way Diverting Valve - 10 Series



Design	3-way diverting valve for isolating safety valves on cryogenic storage vessels. Standard single entry – dual single exit
Seating	PTFE
Construction	Stainless steel 316
Size	Screwed 15, 20, 25, 40, 50mm
Flanged	15, 20, 25, 40, 50, 65, 80, 100mm
Service	Cryogenic & Gas
Temperature Rating	-196°C to 150°C
Pressure Rating	Dependent on flanging. Screwed 42 bar, ANSI 150 19.6 bar, ANSI 300 49.6 bar

### 4-Way Ball Diverting Valve - 51 Series



Design	4-way diverting valve for isolating safety valves on cryogenic storage vessels
Seating	PCTFE
Construction	Stainless steel 316 & CF8M
Size	25mm Inlet : 15mm or 20mm Outlet 40mm Inlet : 25mm or 20mm Outlet
Ends	BSPT, NPT
Service	Cryogenic & Gas
Temperature Rating	-196°C to 150°C
Pressure rating	42 bar

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