

POWERFUL SOLUTIONS. GLOBAL FORCE.

# **Instruction Sheet**

# PRV-8. PRV-9 PRESSURE REDUCING VALVES PRVM-2 MANIFOLD

#### L3062 Rev. A 05/11

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Repair Parts Sheets for this product are available from the Enerpac web site at www.enerpac.com, or from your nearest Authorized Enerpac Service Center or Enerpac Sales office.

# 1.0 IMPORTANT RECEIVING INSTRUCTIONS

Visually inspect all components for shipping damage. Shipping damage is not covered by warranty. If shipping damage is found, notify carrier at once. The carrier is responsible for all repair and replacement costs resulting from damage in shipment.

# SAFETY FIRST

# 2.0 SAFETY ISSUES





Read all instructions. warnings and cautions carefully. Follow safety precautions to

avoid personal injury or property damage during system operation. Enerpac cannot responsible for damage or injury resulting from unsafe product use, lack of maintenance or incorrect product and/or system operation. Contact Enerpac when in doubt as to the safety precautions and operations. If you have never been trained on high-pressure hydraulic safety, consult your distribution or service center for a free Enerpac Hydraulic safety course.

Failure to comply with the following cautions and warnings could cause equipment damage and personal injury.

A CAUTION is used to indicate correct operating or maintenance procedures and practices to prevent damage to, or destruction of equipment or other property.

A WARNING indicates a potential danger that requires correct procedures or practices to avoid personal injury.

A **DANGER** is only used when your action or lack of action may cause serious injury or even death.



WARNING: Wear proper personal protective gear when operating hydraulic equipment.



**DANGER:** To avoid personal injury keep hands and feet away from cylinder and workpiece

during operation.



**WARNING:** Do not exceed equipment Overloading ratings. causes equipment failure and possible

personal injury. The pressure reducing valve is designed for a maximum operating pressure of 350 bar [5000 psi]. Do not use the valve in circuits where higher pressures are present.



DANGER: Never set the relief valve to a higher pressure than the maximum rated pressure of the pump. Higher settings may result in equipment damage and/ or personal injury. Do not remove relief valve.

WARNING: The system operating pressure must not exceed the pressure rating of the lowest rated component in the system. Install pressure gauges in the system to monitor operating pressure. It is your window to what is happening in the system.



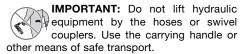
**CAUTION:** Avoid damaging hydraulic hose. Avoid sharp bends and kinks when routing hydraulic hoses. Using a

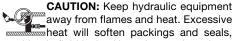
bent or kinked hose will cause severe backpressure. Sharp bends and kinks will internally damage the hose leading to premature hose failure.



Do not drop heavy objects on hose. A sharp impact may cause internal damage to hose wire strands. Applying

pressure to a damaged hose may cause it to rupture.





resulting in fluid leaks. Heat also weakens hose packings. For optimum materials and performance do not expose equipment to temperatures of 65°C [150°F] or higher. Protect hoses and cylinders from weld spatter.



**DANGER:** Do not handle pressurized hoses. Escaping oil under pressure can penetrate the skin, causing

serious injury. If oil is injected under the skin, see a doctor immediately.

WARNING: Only use hydraulic cylinders in a coupled system. Never use a cylinder with unconnected couplers. If the cylinder becomes extremely overloaded. components can fail catastrophically causing severe personal injury.



**ENERPAC IMPORTANT:** Hydraulic equipment must only be serviced by a qualified hydraulic technician. For repair service, contact the Authorized ENERPAC

Service Center in your area. To protect your warranty, use only ENERPAC oil.

to fit properly and withstand high loads.



**WARNING:** Immediately replace worn or damaged parts with genuine ENERPAC parts. Standard grade parts will break causing personal injury and property damage. ENERPAC parts are designed

# 4.0 PRV-8 AND PRV-9 PRESSURE REDUCING VALVES

The PRV-8 and PRV-9 remote mount pressure reducing valves can be used with fittings and tubing or can be manifold mounted. The valve section is normally open, and closes when the cylinder pressure downstream of the valve reaches the customer adjusted pressure settina.

When pressure in the incoming side drops below that of the cylinder side, reverse flow is allowed, enabling clamped cylinders to unclamp. Pressure adjustment is through an adjustment screw. Adjustment is clockwise to increase the pressure setting and counterclockwise to reduce the pressure setting. A locknut is provided to secure the setting.

A 1/8"-27 NPT port on the manifold body allows the mounting of a gauge to read the cylinder pressure past the valve section.

Refer to figures 1 and 2 for additional information.



WARNING: Maximum allowable system pressure for the PRV-8 and PRV-9 valves is 350 bar [5000 PSI].

Do not exceed this pressure rating.

## 5.0 PRVM-2 MANIFOLD

The PRVM-2 manifold is included as part of the PRV-8 and PRV-9 pressure reducing valves.

If desired, the PRVM-2 manifold may also be purchased separately.

- Assembling a PRVM-2 manifold and a PRV-3T valve module will create a PRV-8 pressure reducing valve.
- Assembling a PRVM-2 manifold and a PRV-4T valve module will create a PRV-9 pressure reducing valve.

Refer to figures 3 and 4 for additional information.

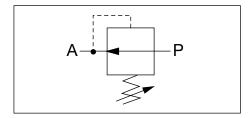


Figure 1, PRV-8 and PRV-9 Valve Function

PRV-8 and PRV-9 PRESSURE REDUCING VALVE SPECIFICATIONS	
Fluid Temperature Range	-13°-176°F [-25°-80°C]
Viscosity Range	150-165 S.U.S. [15-250 cSt]
Hydraulic Oil	HLP 23 ISO 3448-1975
Flow Rate	427 Cu.in/min [7,0 I/min] max
Maximum Operating Pressure	5,000 psi [350 bar] {35 MPa}
Adjustment Range (PRV-8)	435-4,350 psi [30-300 bar] {3-30 MPa}
Adjustment Range (PRV-9)	70-2000 psi [5-138 bar] {5-13.8 MPa}
Weight	2.85 lbs [1,3 kg]

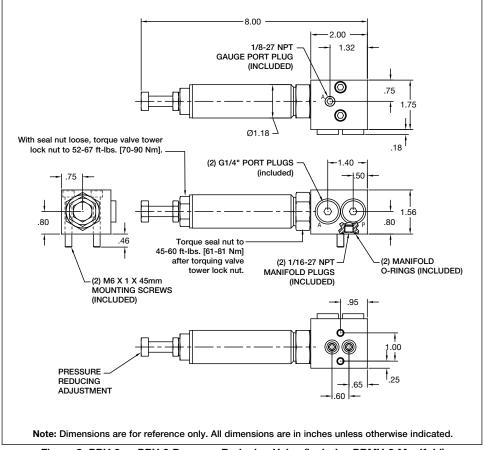


Figure 2, PRV-8 or PRV-9 Pressure Reducing Valve (includes PRMV-2 Manifold)

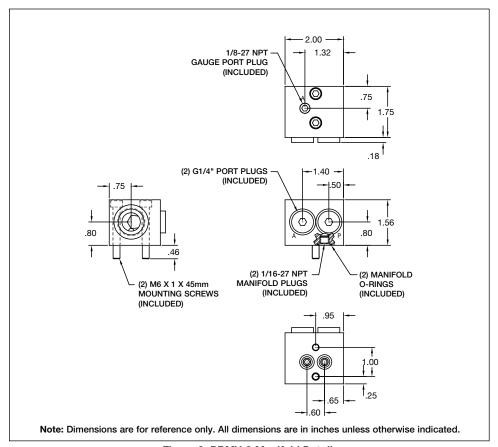


Figure 3, PRMV-2 Manifold Details

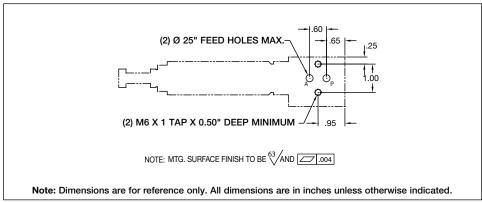


Figure 4, Manifold Mounting Pattern

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