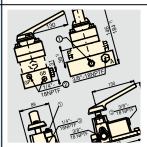
Directional Control Valves Section Overview

ENERPAC hydraulic valves are available in a wide variety of models and configurations.

Whatever your requirements… directional control, flow control, or pressure control… you can be sure that Enerpac has the correct valve to match your application exactly.

Designed and manufactured for safe operation up to 700 bar, the range of Enerpac valves allows for direct pump mounting, remote mounting, manual or solenoid actuation, and in-line installation, giving you flexible solutions to control your hydraulic system.



Valve Type	Series		Page
Pump Mounted Manual and Solenoid Directional Control Valves	VM VE		114 ▶
Remote Mounted Manual Directional Control Valves Valve Dimensions	VC		116 ▶
Valve Dimensions	VM VE VC		117 ▶



Pressure and Flow Control Valves

For more hydraulic system control with pressure relief valves, shut-off valves, check valves and sequence valves see our “System Components”.

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Valving Help

See Basic System Set-Up and Valve Information in our ‘Yellow Pages’

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▼ Shown from left to right: **VM32, VE33, VM33, VM43L**



Reliable Control of Single and Double-Acting Cylinders and Tools

- **Advance/Retract and Advance/Hold/Retract operation of single-acting and double-acting cylinders and tools**
- **Manual or solenoid operation**
- **Pump mounting will retrofit on most Enerpac pumps**
- **Available "locking" option on VM Series valves for load-holding applications**
- **Standard "locking" feature on VE Series 3-position valves**
- **User adjustable relief valve allows the operator to easily set the working pressure.**

Valve Operation	Used with Cylinder	Valve Type	
Manual	Single-acting	3-Way, 2-Position	
Manual	Single-acting	3-Way, 3-Position, Tandem Center	
Manual	Double-acting	4-Way, 3-Position, Tandem Center	
Manual	Single-acting	3-Way, 3-Position, Tandem Center, Locking	
Manual	Double-acting	4-Way, 3-Position, Tandem Center, Locking	
Solenoid 24 VDC	Single-acting	3-Way, 2-Position	
Solenoid 24 VDC	Single-acting	3-Way, 2-Position, Dump	
Solenoid 24 VDC	Single-acting	3-Way, 3-Position, Tandem Center	
Solenoid 24 VDC	Double-acting	4-Way, 3-Position, Tandem Center	

For remote valve information, see page 116.

▼ *ZE-Series electric pump, with VM43 directional valve coupled to a A-65 distribution manifold with V-82 needle valves to operate double-acting jacks in a lifting job.*



Pump Mounted Directional Control Valves

Adjustable relief valve

All valves feature several gauge ports for "system", A port and B port pressure monitoring. User adjustable relief valves are included on all models to allow the operator to easily set the optimum working pressure for each application.

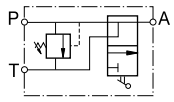
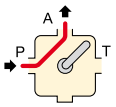
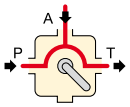
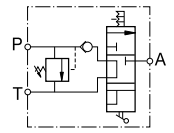
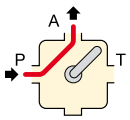
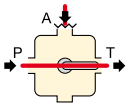
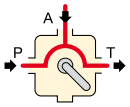
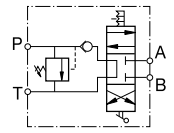
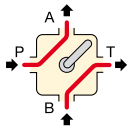
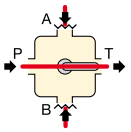
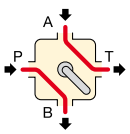
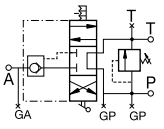
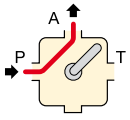
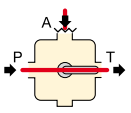
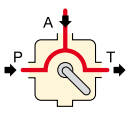
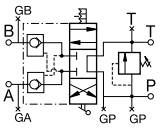
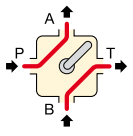
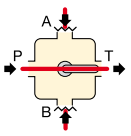
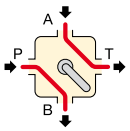
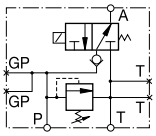
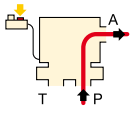
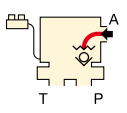
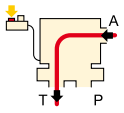
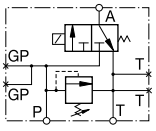
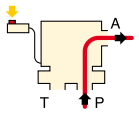
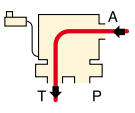
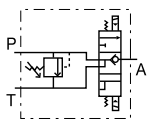
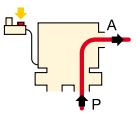
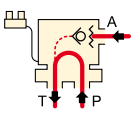
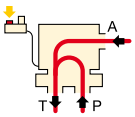
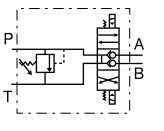
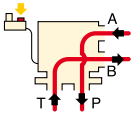
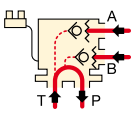
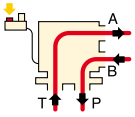
VM33 and VE43 valves include "System Check" feature, for more precise pressure holding and improved system control.
The VM33 has improved porting which provides faster cylinder retraction while motor is running.

VM VE Series



Flow Capacity:
17 l/min

Maximum Operating Pressure:
700 bar

Model Number	Hydraulic Symbol	Schematic Flowpath			(kg)
		Advance	Hold	Retract	
VM32					2,5
VM33					3,0
VM43					3,1
VM33L					4,8
VM43L					4,9
VE32					3,9
VE32D					3,9
VE33					9,3
VE43					9,3

See page 117 for valve dimensions.



Fittings

For additional fittings see the fitting page of the System Components section in this catalogue.

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Locking Valves

For applications that require positive load holding, VM-Series valves (except VM32 valve) are available with a pilot-operated check valve. This option provides hydraulic locking of the load until the valve is shifted into the retract position.



Pendants for VE-Series Solenoid Valves

When ordering Enerpac VE-Series solenoid valves, the pendant must be ordered separately for *Z-Class*. Pendant connection to be plugged into electric box of pump.

To be used with solenoid valves:	Pendant Model Nr.
VE32D	ZCP-1
VE32, VE33, VE43	ZCP-3

Page: 95

▼ Shown from left to right: **VC-20, VC-4L**



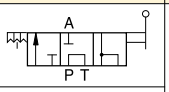
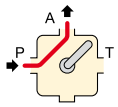
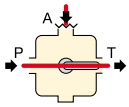
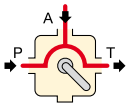
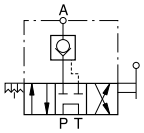
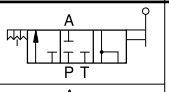
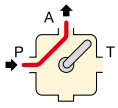
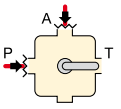
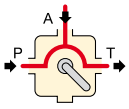
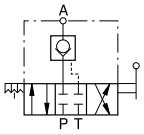
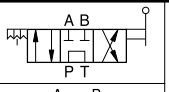
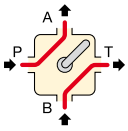
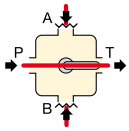
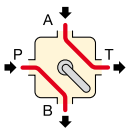
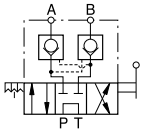
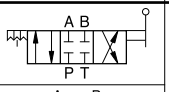
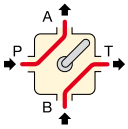
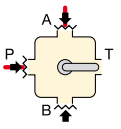
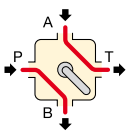
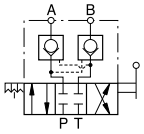
Remote Control of Single and Double-Acting Cylinders and Tools



Locking Valves

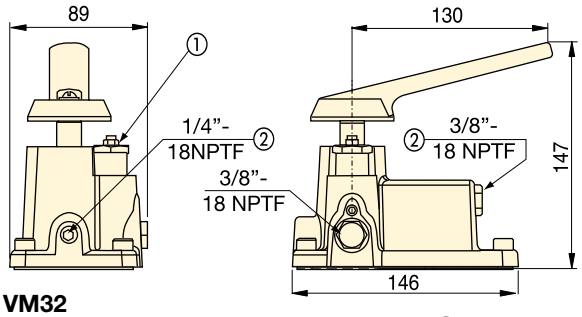
For applications that require positive load holding, VC-Series valves are available with a pilot-operated check valve. This option provides hydraulic locking of the load until the valve is shifted into the retract position.

- **Advance/Hold/Retract operation for use with single-acting or double-acting cylinders and tools.**

Valve Operation	Used with Cylinder	Valve Type	Model Number	Hydraulic Symbol	Schematic Flowpath			(kg)
					Advance	Hold	Retract	
Manual	Single-Acting	3-Way, 3-Position, Tandem Center	**VC-3**					2,9
Manual	Single-Acting	3-Way, 3-Position, Tandem Center, Locking	**VC-3L**					4,7
Manual	Single-Acting	3-Way, 3-Position, Closed Center	**VC-15**					2,9
Manual	Single-Acting	3-Way, 3-Position, Closed Center, Locking	**VC-15L**					4,7
Manual	Double-Acting	4-Way, 3-Position, Tandem Center	**VC-4**					2,9
Manual	Double-Acting	4-Way, 3-Position, Tandem Center, Locking	**VC-4L**					4,7
Manual	Double-Acting	4-Way, 3-Position, Closed Center	**VC-20**					2,9
Manual	Double-Acting	4-Way, 3-Position, Closed Center, Locking	**VC-20L**					4,7

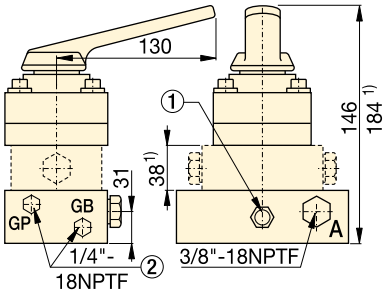
Return line kit included with remote valves

Pump Mounted Directional Control Valves

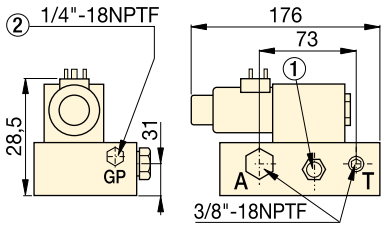


VM32

① User Adjustable Relief Valve
② Auxiliary Port

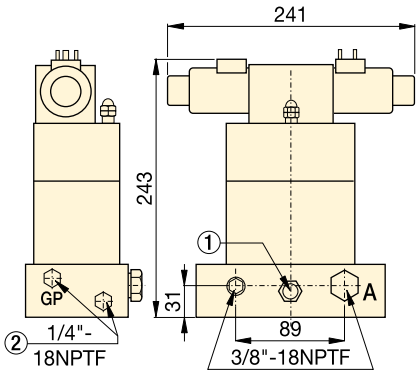


VM33, VM33L, VM43, VM43L

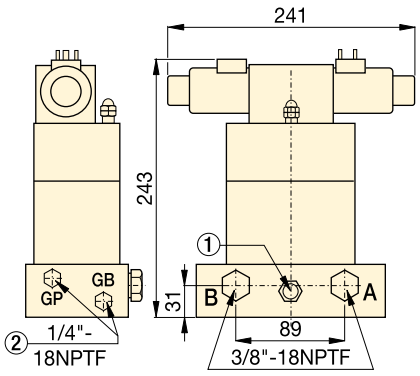


VE32D

[1] VM33L and VM43L only

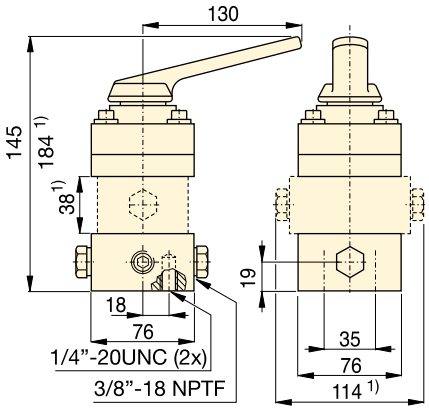


VE33



VE43

Remote Manual Directional Control Valves



VC-3, VC-3L, VC-15, VC-15L
VC-4, VC-4L, VC-20, VC-20L

[1] VC-3L, VC-15L, VC-4L and VC-20L only

VM
VE
VC
Series



Flow Capacity:
17 l/min

Maximum Operating Pressure:
700 bar



Gauges

Minimize the risk of overloading and ensure long, dependable service from your equipment. Refer to the System Components Section for a full range of gauges.

Page: 128



Fittings

For additional fittings see the fitting page of the System Components section in this catalogue.

Page: 125

Valving Help

See Basic System Set-Up and Valve Information in our 'Yellow Pages'

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