

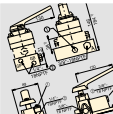


Directional Control Valves

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 |  | 122 ▶ |
| Remote Mounted Manual Directional Control Valves | VC |  | 124 ▶ |
| Valve Dimensions | VM VE VC |  | 125 ▶ |



Pressure & 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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Pump Mounted Directional Control Valves

VM VE Series



Maximum Flow Capacity:

17 l/min

Maximum Operating Pressure:

700 bar

| Model Number | Hydraulic Symbol | Schematic Flowpath | | | (kg) |
|--------------|------------------|--------------------|---------|---------|------|
| | | Advance | Neutral | Retract | |
| VM22 | | | | | 2,5 |
| VM32 | | | | | 2,5 |
| VM33 | | | | | 3,0 |
| VM33VAC | | | | | 3,5 |
| VM43 | | | | | 3,1 |
| VM33L | | | | | 4,8 |
| VM43L | | | | | 4,9 |
| VE32 | | | | | 3,9 |
| VE32D | | | | | 3,9 |
| VE33VAC | | | | | 10,0 |
| VE33 | | | | | 9,3 |
| VE43 | | | | | 9,3 |



Assisted Return Pumps with Venturi Valve Technology

To improve productivity and plunger retraction, Enerpac offers valve configurations designed to accelerate your cylinder retraction speeds, ZU4 and ZE-Series pumps feature **Venturi Valve Technology** to facilitate the faster return of single-acting gravity and spring return cylinders.

See valve type in ZU4 and ZE-pump ordering matrix on pages 100 and 106.

Venturi Valve Retrofit Kits

For field installation on existing ZU4, ZE and ZA-Series pumps, Retrofit Kits are available for manual and solenoid operated valves.

| For valve model | For valve operation | Retrofit Kit Model Nr. |
|-----------------|---------------------|------------------------|
| VM33, VM33L | Manual | VM33RVK |
| VE33 | Solenoid | VUV5 |



Spring Centred Valve Kits

VM and VC-Series manual 3-position valves can be easily converted into spring centred valves. With these retro-fit kits the handle will automatically move into the neutral valve position when released.

| For valve model | Model Number |
|--------------------------|------------------|
| VM33, VM43 | VMC3343K |
| VM33L, VM43L | VMC3343KL |
| VC3, VC15, VC4, VC20 | VMC34K |
| VC3L, VC15L, VC4L, VC20L | VMC34KL |

Pump Mounted Directional Control Valves

VM VE Series



Maximum Flow Capacity:

17 l/min

Maximum Operating Pressure:

700 bar

| Model Number | Hydraulic Symbol | Schematic Flowpath | | | (kg) |
|--------------|------------------|--------------------|---------|---------|------|
| | | Advance | Neutral | Retract | |
| VM22 | | | | | 2,5 |
| VM32 | | | | | 2,5 |
| VM33 | | | | | 3,0 |
| VM33VAC | | | | | 3,5 |
| VM43 | | | | | 3,1 |
| VM33L | | | | | 4,8 |
| VM43L | | | | | 4,9 |
| VE32 | | | | | 3,9 |
| VE32D | | | | | 3,9 |
| VE33VAC | | | | | 10,0 |
| VE33 | | | | | 9,3 |
| VE43 | | | | | 9,3 |



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| VM33L, VM43L | VMC3343KL |
| VC3, VC15, VC4, VC20 | VMC34K |
| VC3L, VC15L, VC4L, VC20L | VMC34KL |

Remote Manual Directional Control Valves

ENERPAC

▼ Shown from left to right: VC20, VC4L




Remote Control of Single and Double-Acting Cylinders and Tools



Locking Valves

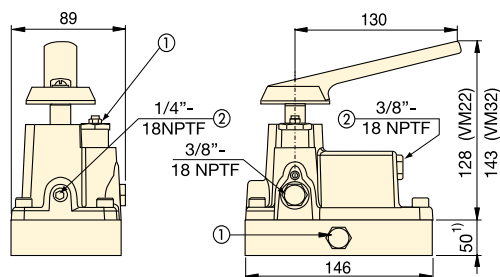
For applications that require positive load holding, VC-Series valves are available with a pilot-operated check valve. This option provides hydraulic locking of the load until the valve is shifted into the retract position.

- Advance/Hold/Retract operation for use with single-acting or double-acting cylinders and tools
- Return line kit included with remote valves.

| 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 | VC3 | | | | | 2,9 |
| Manual | Single-Acting | 3-Way, 3-Position, Tandem Center, Locking | VC3L | | | | | 4,7 |
| Manual | Single-Acting | 3-Way, 3-Position, Closed Center | VC15 | | | | | 2,9 |
| Manual | Single-Acting | 3-Way, 3-Position, Closed Center, Locking | VC15L | | | | | 4,7 |
| Manual | Double-Acting | 4-Way, 3-Position, Tandem Center | VC4 | | | | | 2,9 |
| Manual | Double-Acting | 4-Way, 3-Position, Tandem Center, Locking | VC4L | | | | | 4,7 |
| Manual | Double-Acting | 4-Way, 3-Position, Closed Center | VC20 | | | | | 2,9 |
| Manual | Double-Acting | 4-Way, 3-Position, Closed Center, Locking | VC20L | | | | | 4,7 |

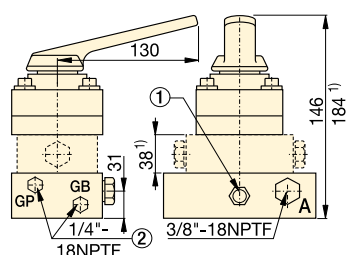
Directional Control Valves Dimensions

Pump Mounted Directional Control Valves



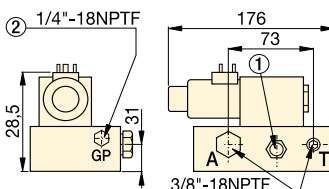
VM22, VM32

¹⁾ VM22 only

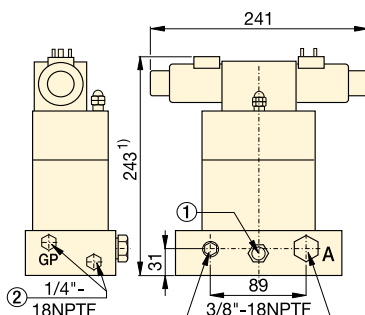


VM33, VM33L, VM33VAC, VM43, VM43L

¹⁾ VM33VAC, VM33L and VM43L only

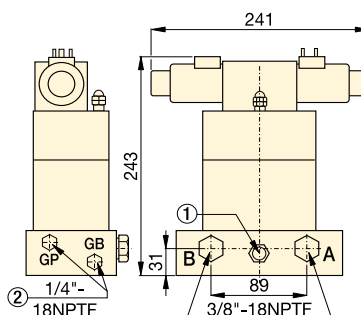


VE32D



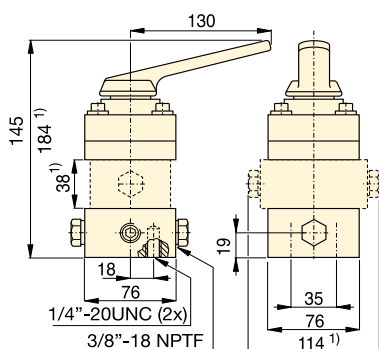
VE33, VE33VAC

¹⁾ VE33VAC is 38 mm higher: 281 mm



VE43

Remote Manual Directional Control Valves



VC3, VC3L, VC15, VC15L
VC4, VC4L, VC20, VC20L

¹⁾ VC3L, VC15L, VC4L and VC20L only

VM VE VC Series



Maximum Flow Capacity:

17 l/min

Maximum Operating Pressure:

700 bar



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| VM33L, VM43L | VMC3343KL |
| VC3, VC15, VC4, VC20 | VMC34K |
| VC3L, VC15L, VC4L, VC20L | VMC34KL |



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.

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Fittings

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

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Valving Help

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