

Shown: PRV-1



## PRV series

These valves regulate system pressure for all subsequent valves, according to the adjusted pressure. Maintains a constant pressure in a secondary circuit. Includes a check valve that prevents pressure drop on secondary side.

### Application

Used when a hydraulic supply with a higher pressure (primary side) must also be used for another circuit with a lower pressure (secondary circuit). PRV-1 can be stack built between VP-series valves.

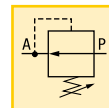
## Precise control of hydraulic pressure

- Stackbuilding with VP series modular valves
- Stackable for multiple pressures on one valve stack assembly
- Tool adjustable knob can be locked
- Precise control of pressure

Pressure: 350 bar

Flow: 7 l/min

- Ⓔ Válv. reguladora de presión
- Ⓕ Valve de pression réglable
- Ⓓ Druckreduzierventil



## Options

VP-series  
Modular  
valves

136 ▶



Pressure  
switches

188 ▶

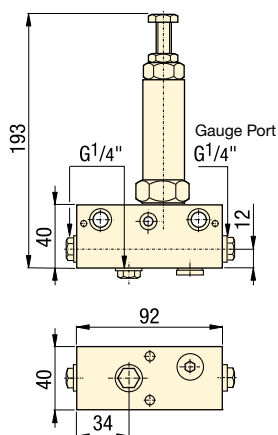


TRK-series  
Tie rod kits

139 ▶



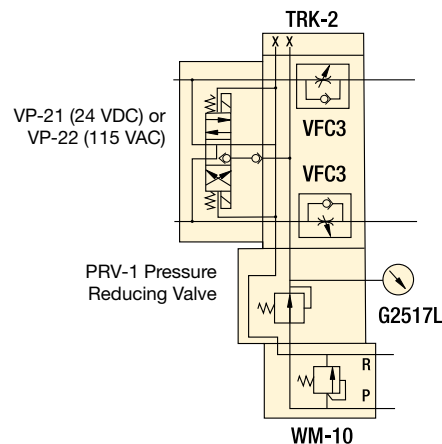
### PRV-1, PRV-5



▼ PRV-1 connected with remote manifold WM-10.



### Valve stacking example



## Product selection

Mounting style	Adjustable pressure range	Maximum pressure	Model number	Oil ports	Maximum oil flow	
	bar	bar		BSP	l/min	kg
VP-series	30 - 300	350	PRV-1	G1/4"	7	1,6
VP-series	75 - 138	350	PRV-5	G1/4"	7	1,6

Pressure: 0 - 350 bar

Flow: 6 - 57 l/min

Voltage: 24 VDC, 110 VAC

- E** Electroválulas
- F** Electro distributeurs
- D** Elektromagnetische Ventile



## Options

D03 Manifolds  
MB-series

144 ▶

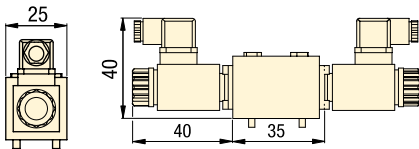


Fittings

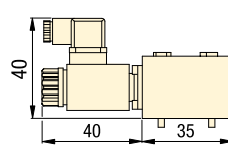
194 ▶



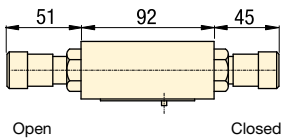
### VP03-11, 12, 21, 22



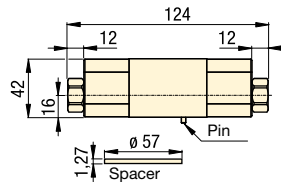
### VP03-51, 52



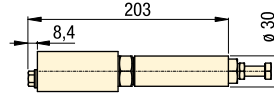
### VFC-4



### VD2P



### PRV-6, PRV-7



## Product selection

Valve flow path	Solenoid voltage 50/60 Hz	Model number	Hydraulic symbol	Pressure range	Maximum oil flow
				bar	l/min
4/3 closed center	24 VDC	VP03-11		0-350	19
4/3 closed center	110 VAC	VP03-12		0-350	19
4/3 float center	24 VDC	VP03-21		0-350	19
4/3 float center	110 VAC	VP03-22		0-350	19
4-way / 2-position	24 VDC	VP03-51		0-250	15
	110 VAC	VP03-52		0-250	15
Dual flow control	-	VFC-4		0-350	38
Dual pilot operated check valve	-	VD2P		0-350	57
Pressure reducing valve	-	PRV-6		30-300	12
	-	PRV-7		5-138	6

Shown: VP03



### VP03-series

VP03 valves are zero leakage, solenoid operated poppet valves.

### Application

Used to control the advance and retract of single acting and double acting cylinders.



### Important

VP03 series valves are zero leakage and can be used with pressure shut down electric pumps and air driven Turbo II pumps.

■ VP03-11 valve on PASG-3002SB Turbo pump.



Shown: VEX-11 valve



## VE-series

Spool style solenoid valves and control modules are used in circuits that do not require zero leakage.

### Application

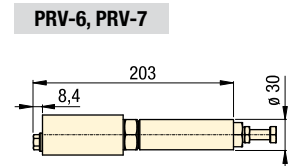
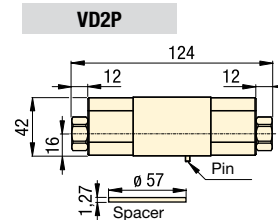
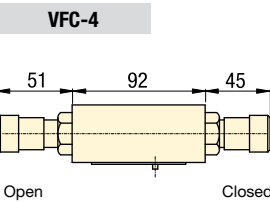
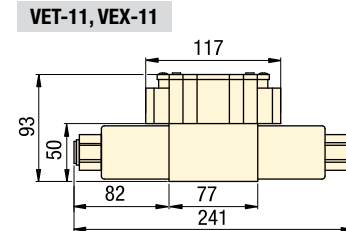
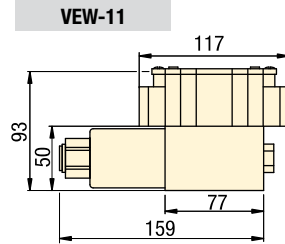
Used to control the advance and retract of single acting and double acting cylinders. The dual check valve can be used to lock pressure in a group of cylinders. The dual flow control offers independent control of cylinder advance and retract speeds. The pressure reducing valve sets a circuit pressure lower than the main pump pressure.

■ VEX-11 valve on ZW5020HG-FT21 pump.



## D03 Direction Valve and accessories

- D03 mounting pattern
- Directional valves
- Pilot operated check valve
- Dual flow control
- Pressure reducing valve



## Product selection

Valve flow path	Solenoid voltage 50/60 Hz	Model number	Hydraulic symbol	Pressure range	Pressure drop	Maximum oil flow
				bar	bar	l/min
4 way, 2 position	24 VDC 1,32 Amps	<b>VEW-11</b>		0-350	9	2,1
4/3 closed center	24 VDC 1,32 Amps	<b>VET-11</b>		0-350	10	2,1
4/3 float center	24 VDC 1,32 Amps	<b>VEX-11</b>		0-350	12	2,1
Dual flow control	-	<b>VFC-4</b>		0-350	-	2,6
Dual pilot operated check valve	-	<b>VD2P</b>		0-350	14	4,0
Pressure reducing valve	-	<b>PRV-6</b>		30-3000	-	0,8
		<b>PRV-7</b>		5-138		

Pressure: 0 - 350 bar

Flow: 0,8 - 4,0 l/min

Voltage: 24 VDC

- E** Electroválulas
- F** Electro distributeurs
- D** Elektromagnetische Ventile

## Options

D03 Manifolds MB-series

144 ▶



Fittings

194 ▶

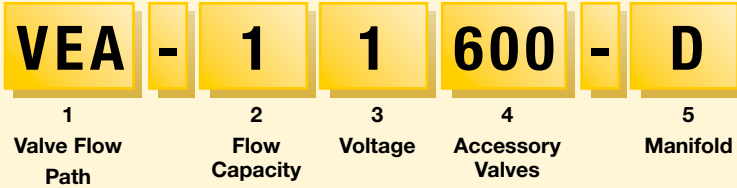


## Important

To hold the pressure in a clamping circuit, use the VEX11 valve with the VD2P check module. Do not use D03 spool valves with pressure shutdown pumps.

 Custom build your modular valves

▼ This is how a Solenoid Modular Valve Model Number is built up:



**1 Modular valve code**

- A = 4/3 Open center
- B = 4/3 Closed center
- C = 4/3 Tandem center
- D = 4/3 Float center
- E = 4/2 Crossover offset
- F = 3/3 Tandem center
- G = 3/3 Closed center
- H = 2/2 Normally closed
- K = 2/2 Normally open
- M = 4/2 Float offset
- P = 3/2 Normally open

**2 Oil flow capacity**

- 1 = 15 l/min

**3 Solenoid voltage**


- 1 = 24 VDC, 50 / 60 Hz
- 2 = 230 V, 1 ph, 50 Hz
- 5 = 115 V, 1 ph, 60 Hz
- 6 = 230 V, 1 ph, 60 Hz

**4 Accessory valves**

- 000 = No accessory valves
- 100 = VS-11 Relief valve only
- 150 = VS-11 Relief valve and VS-51 3-way pilot operated check valve VEF/VEG only
- 160 = VS-11 Relief valve and VS-61 4-way pilot operated check valve VEA/VEB/VEC/VED only
- 500 = VS-51 3-way pilot operated check valve VEF/VEG only
- 600 = VS-61 4-way pilot operated check valve VEA/VEB/VEC/VED only

**5 Manifold**

- A = No manifold
- B = Remote mounted manifold
- D = Pump mounted manifold VEA/VEC/VEF only

 **Example**

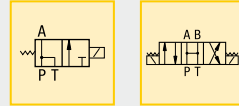
The **VEA-11600-D** is a modular valve with a 4-way, 3-position open center flowpath, 24 VDC, and an integrated pilot-operated check valve, for mounting on an Enerpac pump. Bolt Kit **BK-2** is included.

Pressure: 0 - 700 bar

Flow: 15 l/min max.

Voltage: 24, 115, 230 V

- E** Válvulas de control
- F** Electro distributeurs
- D** Wegesitzventile



 **Options**

**Gauges and accessories**

 190 ▶

**Fittings**

 194 ▶

**Accessory Valves and Bolt Kits**

Use **VS-11** relief valve to add system pressure control to VE-series valves.

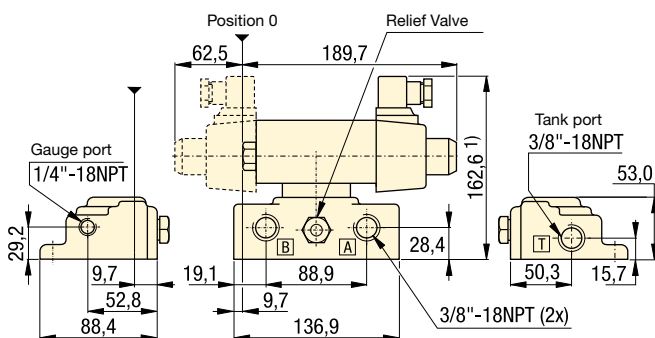
Use **VS-51** 3-way pilot operated check valve to convert 3-way VE-valve into load-holding valve.

Use **VS-61** 4-way pilot operated check valve to convert 4-way VE-valve into load-holding valve.

To install accessory valves to stack build modular valves use bolt kits:

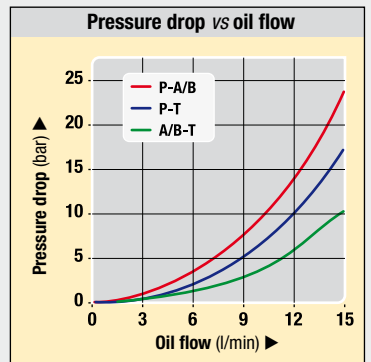
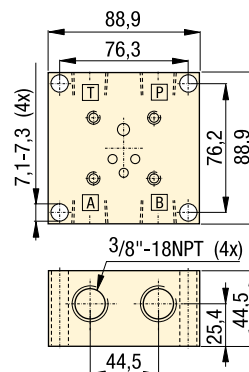
- BK-2** for 1 VS valve;
- BK-3** for 2 VS valves.

**VE series Modular Valve Pump Mounted**



<sup>1)</sup> add 47 mm for each Accessory Valve.  
Note: BK-1 Bolt Kit is included with each modular valve.

**Modular Valve Remote Mounted**





# Accessory valves *Application & selection*

Shown: HV-1000A, V-17, V-10, V-12, V-152



## Accessory valves

Enerpac accessory valves are available in a wide variety and many configurations to control hydraulic pressure or oil flow. These valves are used in conjunction with other valves and system components to provide full automation and control.

### Application

Accessory valves are used to automate clamp cycles, prevent pressure loss and provide additional operator and component safety.

## Your hydraulic control solution

- Regulate oil flow or system pressure
- All valves feature NPT or SAE porting to insure against leakage at rated pressure
- Can easily be installed in any system
- All valves are painted, coated or plated for corrosion resistance.

## Product selection

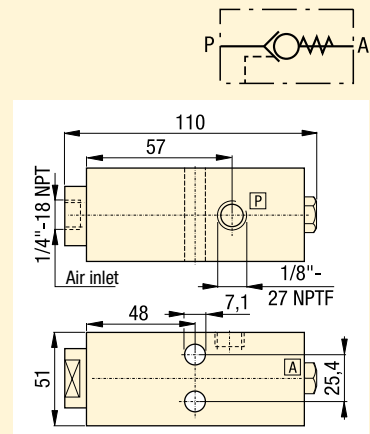
Valve type	Maximum pressure bar	Model number	Oil ports
Holding valve, air pilot	200	<b>HV-1000A</b>	1/8" NPTF
Holding valve, modular	200	<b>MHV-1</b>	1/8" NPTF
Pressure limiting valve	200	<b>PLV-40013B</b>	1/8" NPTF
Manual shut-off valve	350	<b>V-12</b>	SAE #4
Auto-damper valve	700	<b>V-10</b>	1/2" NPTF
Safety check valve	700	<b>V-17</b>	3/8" NPTF
Pressure relief valve	700	<b>V-152</b>	3/8" NPTF

## Product specification

### HV-1000A

#### Air pilot holding valve

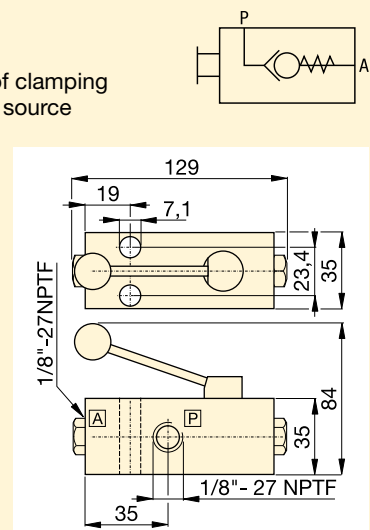
- Holds fluid under pressure offering independent control of different branches of the same fixture
- Valve can control the pilot air and the booster in sequence
- Max. oil flow 5 l/min
- Works with the VA-42 four-way air valve and a booster.



### MHV-1

#### Modular holding valve

- Allows separate operation of clamping fixtures with a single power source
- Ideal for applications when fluid feed lines are impractical. If system pressure is interrupted, the MHV-1 will hold the pressure beyond the valve.
- Max. oil flow 5 l/min
- To release system pressure, rotate valve handle in either direction 90° to release and retract system pressure.



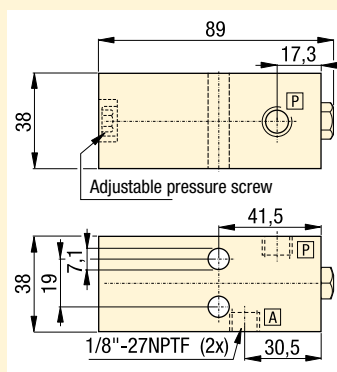
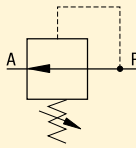
■ V-17 Safety check valve installed on a fixture.



**PLV-40013B**

**Pressure limiting valve**

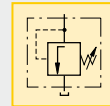
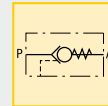
- Allows precise control of pressures reaching specific clamps
- When pressure build-up reaches a preset level, the valve closes, stabilizing pressure to that section of the fixture
- Pressure adjustment between 14-103 bar
- Max. oil flow 5 l/min.



Pressure: 0 - 700 bar

Flow: 5 - 30 l/min max.

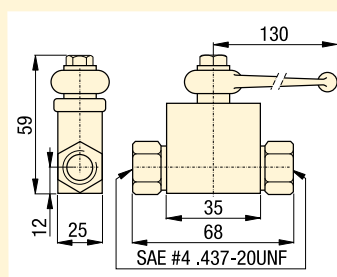
- E** Válvulas de control
- F** Valves de contrôle
- D** Regelventile



**V-12**

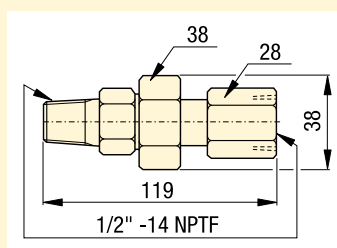
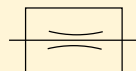
**Manual shut-off valve**

- Ball type valve can be used for the master system shut-off or for isolating separate circuits on a fixture
- Viton seals standard
- Straight through design for easy system plumbing and installation
- Fully open allows high flow return of oil
- Max. oil flow 12 l/min.



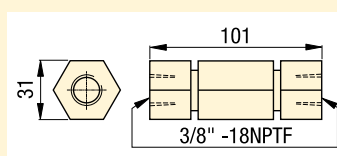
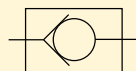
**V-10 Auto-damper valve**

- To protect gauge during high cycle applications
- Creates a flow resistance when load is released suddenly
- No adjustments are necessary
- Fits directly into GA-series gauge adaptor.



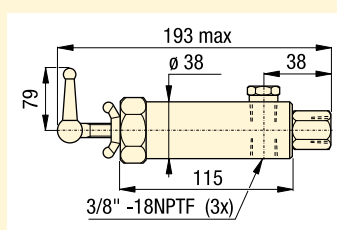
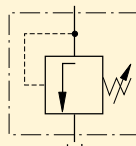
**V-17 Safety check valve**

- Ruggedly built to resist shock and operate with low pressure drop
- Closes smoothly without pounding
- Max. oil flow 30 l/min.



**V-152 Pressure relief valve**

- Limits pressure developed by the pump in hydraulic circuit, thus limiting the force imposed on other components
- 55-700 bar adjustment range; ± 3% repeatability
- Valve opens whenever preset pressure is reached. To increase pressure setting, turn handle clockwise
- Max. oil flow 30 l/min
- Includes 1 meter return line hose kit.



**Options**

**VA-42**  
Air valve

158 ▶



**Gauges and adaptors**

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**Hoses and couplers**

192 ▶



**Fittings**

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**Important**

**Valving help**  
See Basic System Set-up and Valve information in our "Yellow Pages".

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