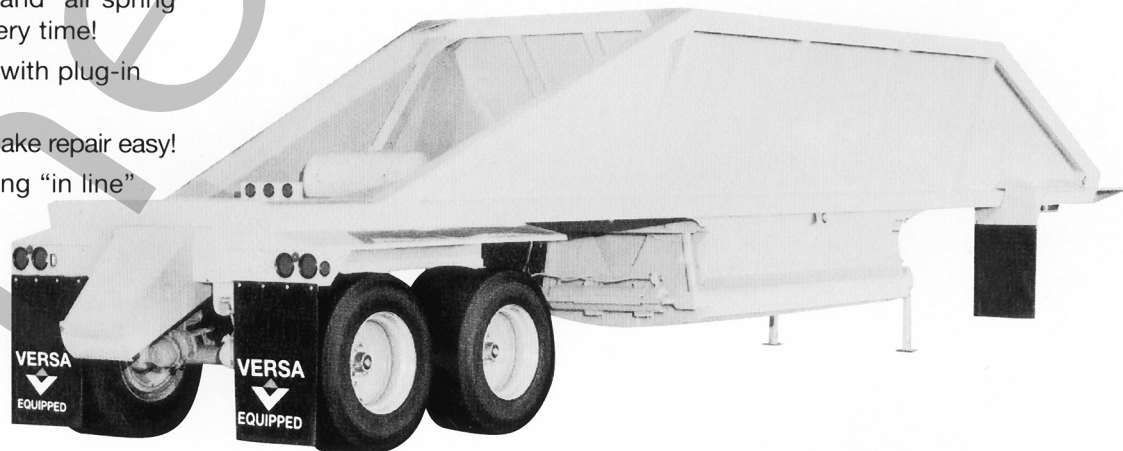
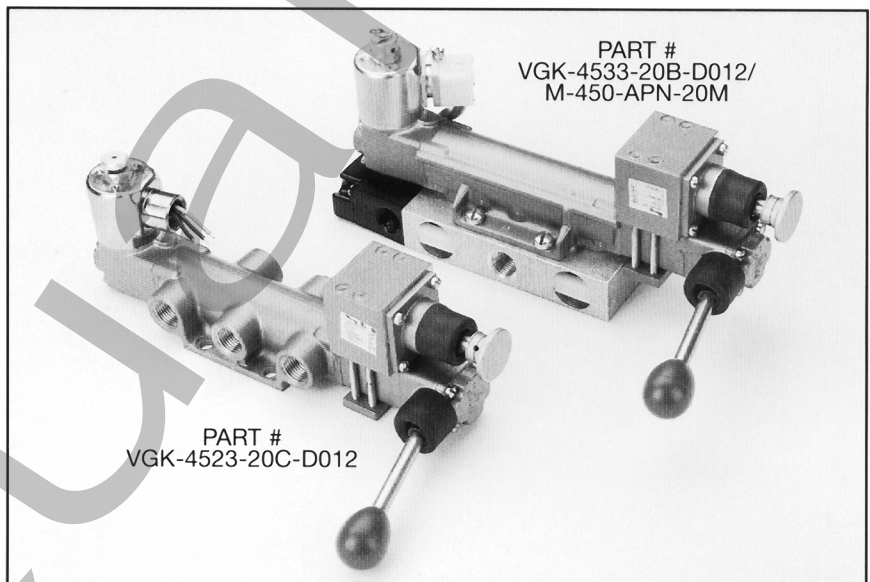




# Trouble Free Series "V" Bottom Dump Control Valves

*Trouble free for years despite exposure to heat, cold, dirt and vibration. Used as a "bottom dump" valve for hopper control on bottom dump trailers or railroad coal cars.*

- Standard "Bottom Dump" operation provides both 2 position solenoid control and 3 position manual control in one valve.
- 1/2 inch npt full flow construction.
- Bubble-tight seals provide leak free service for "creep free" hopper control.
- Withstands impact with thick walled forged brass construction.
- Prevents contamination from dirt and sand with Versa proven dust proof option keeping solenoid and main valve free from clogging.
- Solenoid actuators utilize "solenoid-pilot" design, no coil burn-out due to valve hang up.
- Main spring is "air spring," no mechanical spring to break or fail.
- Use of "solenoid-pilot" and "air spring" assure positive shift every time!
- Quick removal of valve with plug-in solenoid option.
- Standard 'O' ring seals make repair easy!
- Economical space saving "in line" version available.
- 100% factory tested at ISO 9001 certified facility.
- Supported by established worldwide distributor network.



**GENERAL SPECIFICATIONS**

Function: 4-way, 2 & 3 position

Type: Solenoid operated, air spring return, 2 position valve,  
or Lever operated, 2 or 3 position valve

Media: Air

Pressure: 50 to 175 psi

Flow, Cv: 4.0

Voltage: 12 DC

Power: 9.4 watts

Duty: Continuous duty coil

Connections: 1/2" npt air ports  
1/2" npt electrical conduit, solenoid leads are not polarity dependent

Material: Body: Brass  
Seals: Nitrile  
Coil: Epoxy molded  
Solenoid enclosure: Carbon steel, chromate coated

Operation: Mode One - Solenoid Application (2 position only)  
To pressurize port 'B', and exhaust port 'A,' electrically energize the solenoid (the energized solenoid also pressurizes the air spring section of the valve). Maintained contact is required. To pressurize port 'A' and exhaust port 'B,' de-energize the solenoid. The air spring will return the plunger (the air spring section will remain pressurized). The valve will remain in this position until the solenoid is either energized again or valve is manually re-positioned.

Mode Two - Lever Application (2 or 3 position)  
To manually operate this valve, the solenoid must be electrically de-energized and the air spring section de-pressurize by depressing the palm button (this button is spring loaded and will reset itself). To pressurize port 'B' and exhaust port 'A,' move the hand lever toward the valve body. To pressurize port 'A' and exhaust port 'B,' move the hand lever away from the valve body. To block all valve ports, move the lever midway between the two pressured positions noted above. The valve will remain in any one of the set 3 positions until either the lever is manually re-positioned or solenoid is energized.

**Part Numbers**

Valve	VGK-4523-20C-D012	VGK-4533-20B-D012	M-450-APN-20M
Description	Side Ported Valve	Manifold Mounted Valve	Manifold for -20B
Body Assembly	SA-4523-71-20C	SA-4533-71-20A	N/A
Seal Kit	V-4512-KP-20B	V-4512-KP-20B	N/A
Lever/Air Spring Assembly	SA-4322-75-20C	SA-4322-75-20B	N/A
Lever Kit	VY-4302-24D	VY-4302-24D	N/A
Solenoid Assembly	SA-4322-84-20C-D012	SA-4322-84-20A-D012	N/A
Solenoid Kit	E-3198-34-14-D012	E-3198-34-P-D012	N/A
Coil	P-1002-02-D012	P-1002-90P-D012	N/A
Junction Box Kit	N/A	N/A	P-1002-95L-20M

For dimensional information and additional details on service kits, please consult factory.