schenckprocess

Plug or Blade (PV/BV) Diverter Valve

- **Completely enclosed and weathertight – can be used inside or outside**
- **Available in both 30 degree and 45 degree angles with port to port rotation of 135 or 150 degrees**
- **Featuring machined housings with Teflon packing gland seals, bronze shaft bushings and flanged 150 lb drilling inlet and outlet connections**
- **Valves are available in aluminum or stainless steel construction**

Application
PV/BV diverter valves are designed for pellet handling applications at temperatures of 250 °F maximum and line pressures up to 15 psi.

Equipment
Major Components BV30 Models (80-120)
- Cast aluminum (363-T5) or 304 (CF8) stainless steel housing, plug and end plates
- Aluminum parts hard anodized, .001” thk., spec. AMS-2468
- Ports flanged to mate 150# ANSI drilling
- Teflon packing gland shaft seals

Major Components PV30 Models (20-60)
- Cast aluminum (363-T5) or 304 (CF8) stainless steel housing, plug and end plates
- Aluminum parts hard anodized, .001” thk., spec. AMS-2468
- Teflon O-ring seal between the end plate and plug periphery
- Ports flanged to mate 150# ANSI drilling
- Shaft seals: Double lip (20-60 PV30)

For larger 30° sizes 80-120 see our PST Diverter Valve.

Major Components PV/BV45 Models (30-180)
- Cast aluminum (356-T6) or 304 (CF8) stainless steel housing, plug and end plates
- Aluminum parts hard anodized, .001” thk., spec. AMS-2468
- Ports flanged to mate 150# ANSI drilling
- Teflon packing gland shaft seals
- Bronze shaft bushings

Operating principles
The Plug Valve model incorporates an internal plug and the Blade Valve model incorporates an internal blade to direct the flow of material and air through the valve housing. The internal plug or blade is rotated either 150° (30) or 135° (45) forward or backwards in the housing; this permits either diverted or straight-through material flow. The plug or blade is supported by shaft bearings or bushings in the two end plates.

The plug or blade is positioned either by a double-acting rack and pinion pneumatic actuator or by a manual handle. The pneumatic or manual actuator is fastened directly to the shaft of the plug or blade. Plug/blade position is indicated by a position switch on pneumatic models, and a visual indicator on manual models.

The housing is rendered leak-tight by plug periphery O-ring seals on PV models and packing gland shaft seals on BV models.