

# Transmission Valve Body with Solenoid

This transmission valve body is equipped with a solenoid valve, providing integrated electro-hydraulic control. The control valve is designed for excellent efficiency and reliable gear shifting.



## Product Overview

### Integrated Electro-Hydraulic Control

This transmission valve body is a compact, highly integrated component engineered for precise control of hydraulic fluid flow within heavy-duty transmissions. Designed for loaders, graders, and other engineering machinery, it provides smooth and stable gear shifting through 4x4 gear shift and boost pressure control. The robust construction and efficient design ensure high operational comfort and reliable performance in demanding environments.

## Key Performance Metrics

### Performance Highlights

**120 L/min**

Nominal Flow

**51.5 kg**

Weight

**8.5 W**

Consumed Power

## Technical Parameters

### Applications

- Loader
- Grader
- Other engineering machinery

### Parameters

Nominal Flow (L/min)	120
Gear pressure (MPa)	2.2-2.5
Differential pressure of each gear (MPa)	±0.1
Pressure swing (MPa)	±0.1
Gear pressure boost time (s)	0.8-1.8
Solenoid valve rated voltage (V)	DC24V
Rated current (A)	0.35 (measured at rated voltage, 25 °C temperature)
Consumed power (W)	8.5
Insulation grade	H
Hydraulic fluid	Mineral oil (HL, HLP) in accordance with DIN 51 524
Viscosity range (mm <sup>2</sup> /s)	10-300
Fluid temperature range (°C)	-30-120
Fluid cleanliness	Not lower than GB/T 14039-93 level 10/16 or NAS 1638 level 10
Weight (kg)	51.5

Detailed view of the transmission valve body showcasing core mechanical architecture and technical integration points.

## Operating Specifications

Parameter	Value
Gear Pressure	2.2-2.5 MPa
Pressure Swing	±0.1 MPa
Gear Pressure Boost Time	0.8-1.8 s
Solenoid Voltage	DC24V
Rated Current	0.35 A
Insulation Grade	H

## Application & Compatibility

Machinery Compatibility

Loader, Grader, Engineering Machinery

## Fluid Requirements

### Hydraulic Fluid Standards

- Fluid Type: Mineral oil (HL, HLP) per DIN 51 524
- Viscosity Range: 10-380 mm<sup>2</sup>/s
- Temperature Range: -20 to 120 °C
- Cleanliness Level: GB/T 14039-93 19/16 or NAS 1638 level 10