

# Hydraulic Pilot Control Valve

This hydraulic pilot control valve features a compact, segmented design. It is suitable for loaders, bulldozers, and other heavy machinery, offering stable proportional control.



## Overview

### High-Precision Hydraulic Pilot Control

This Hydraulic Pilot Control Valve features a compact, segmented structure designed for flexible combinations and excellent adaptability in heavy machinery. It offers stable proportional control with low hysteresis and a responsive thumb-shaped handle for effortless operation. Engineered for reliability, it includes electromagnetic positioning and customized pressure curves to meet specific multi-way valve matching requirements.

## Key Performance Metrics

### Performance Highlights

**5 MPa**

Max Inlet Pressure

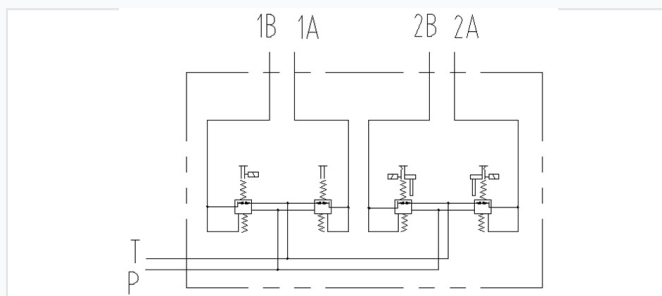
**16 L/min**

Max Control Flow

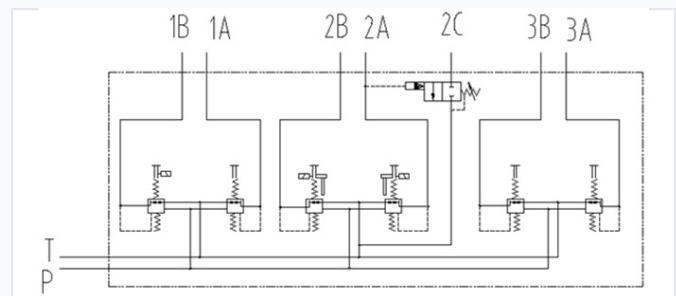
**24 V**

Operating Voltage

## Technical Characteristics



Internal port configuration (A, B, P, T) for a two-section spring-centered valve.

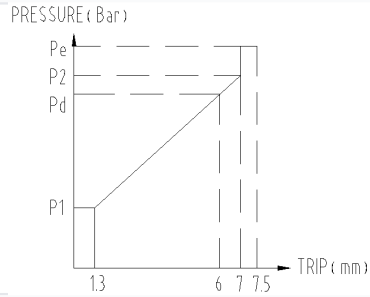


Detailed assembly view including solenoid-operated directional control section.

### Design Features

- Small size and compact segmented structure
- Thumb-shaped handle for ergonomic handling
- Multi-handle linkage for composite operations
- Reliable electromagnetic positioning
- Stable proportional control with wide pressure variation
- Low hysteresis and high responsiveness
- Integrated resistance points to prevent misuse
- Bottom-located oil ports for clean installation

## Technical Parameters



Performance curve showing the relationship between control pressure (Bar) and trip distance (mm).

### Pressure & Flow Specifications

Parameter	Value	Unit
Inlet Pressure	Maximum 5	MPa
Control Flow	Maximum 16	L/min
Return Pressure	Maximum 0.3	MPa
Control Pressure Range	0.4 <sup>1</sup> 1.9	MPa

### Electrical Specifications

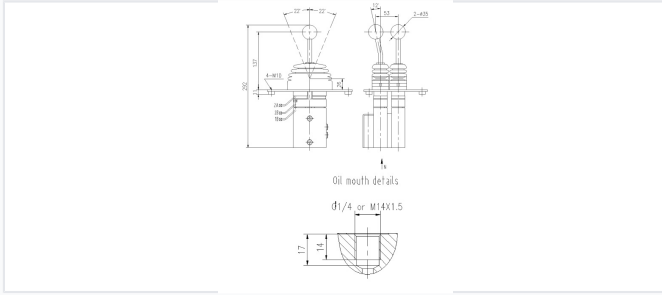
Operating Current	200 <sup>2</sup> 230mA (At normal temperature, 24V)
Rated Suction	230 N

### Operating Conditions

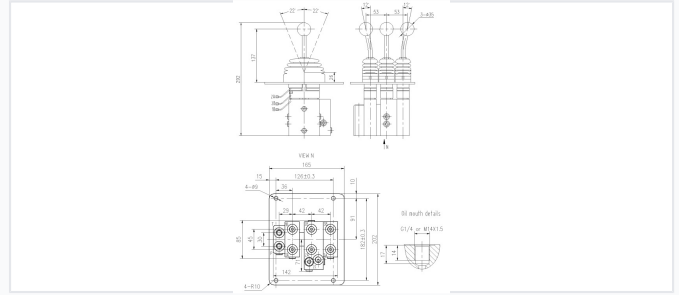
#### Temperature & Fluid Requirements

Condition	Range/Standard
Operating Temperature	-40 to 121 °C
Oil Temperature Range	-20 to 80 °C
Viscosity Range	10 to 380 mm <sup>2</sup> /s
Hydraulic Fluid	Mineral oil (HL, HLP) per DIN 51 524
Oil Cleanliness	Not lower than NAS 1638 level 9

## Physical Dimensions



Dimensional drawing showing lever heights, mounting bolt patterns, and oil mouth details.



Comprehensive technical layout for multi-lever configurations and base mounting specifications.

### Installation Dimensions

- Overall Height: 292mm
- Lever Height: 137mm
- Lever Angles: 12° / 22°
- Mounting: 4-M10 bolts or 4-Ø9 holes
- Oil Port Connections: G1/4 or M14x1.5
- Dual Lever Spacing: 53mm

## Applications

### Main Application Areas

Loader, Bulldozer, Hoisting machinery, Agricultural machinery, Material handling, Garbage compactor, Forestry machinery, Container crane, Drilling rig