

SRZGO SHZGO

Pilot-Operated
Proportional Pressure
Reducing Valve

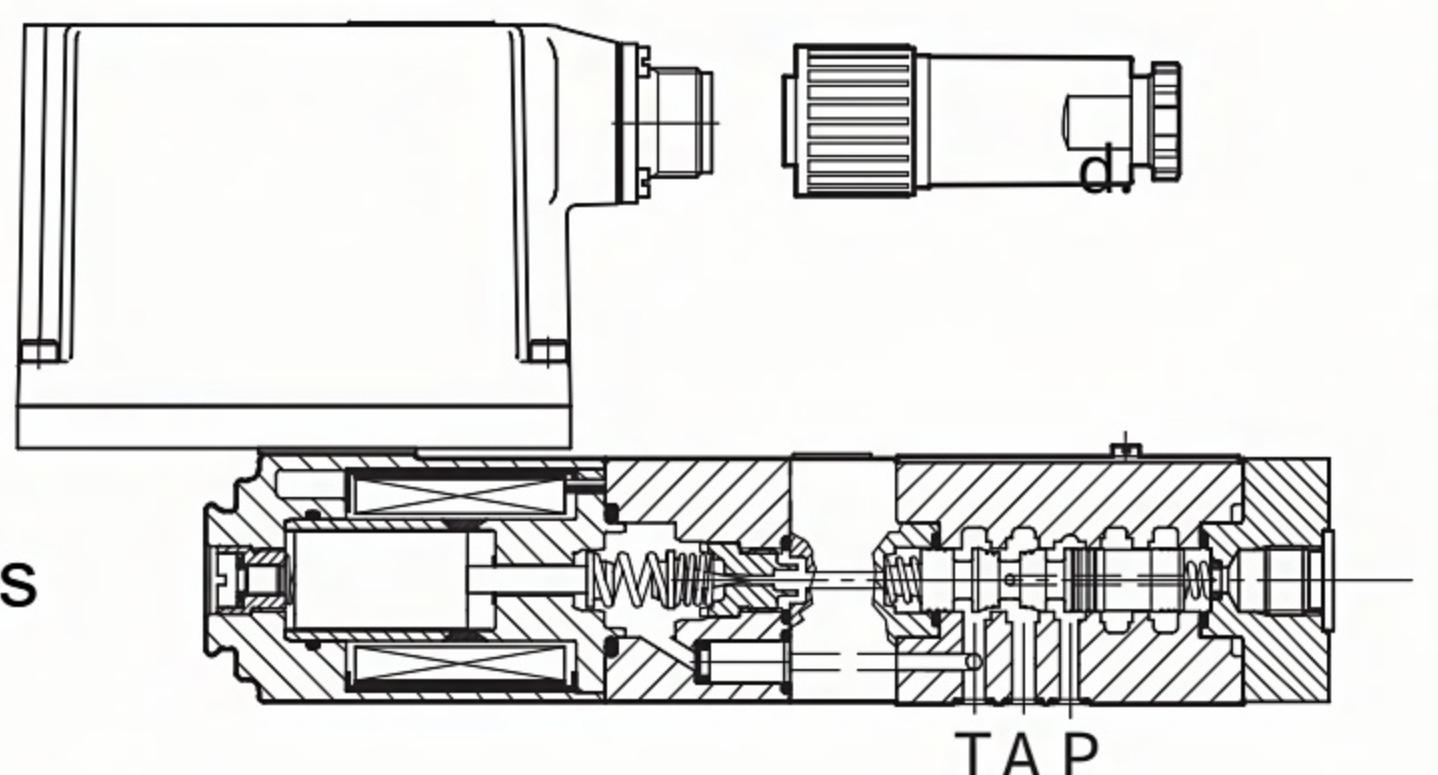
Two installation methods are available:

- R Pattern Mounting H Stacking Type Installation
- Three-Way Pilot-Operated

■ SRZGO-AE

Valve pressure setting is proportional to the input electrical signal.

The valve operates in conjunction with an electronic amplifier, which drives the proportional solenoid. Apply the appropriate drive current to calibrate the valve's setting against the amplifier's input signal.



Int.	ISO4401, size:6	Qmax	100 L/min
Pmax	350 bar		

■ 产品型号

SRZGO - AE - 06 - 033 / 315 / * K4 / *

NG6 Proportional Pressure Reducing Valve
SRZGO=Subplate
Mounting SHZGO=Sandwich Plate
Mounting

A = Open-loop control
AE = Identical to version A, but with an analog integrated electronics amplifier

size
06=size:6

Regulating Port
031 = Acts on port P1, with P as the pressure supply port and T as the return port. (For SHZGO only)
033 = Acts on port A, with P as the pressure supply port and T as the return port. (For SRZGO only)

Pressure Range

100 = 100bar 210 = 210bar
315 = 315bar 350 = 350bar

Synthetic Fluid
WG = Water-Glycol
PE = Phosphate Ester

K4 = With socket, according to DIN 43650-AM2.

The plug-in connector must be ordered separately.

Option:

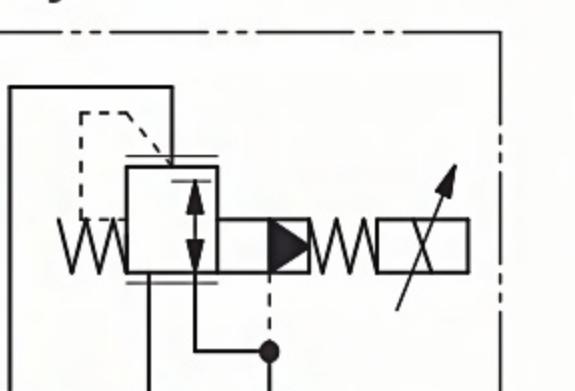
Available for -A type only:
6 = 6 VDC coil, replaces the standard 12 VDC coil.
18 = 18 VDC coil, replaces the standard 12 VDC coil. Available for -AE type only:
I = Current input signal (4 ~ 20 mA)
Q = With Enable signal

► Proportional Valve

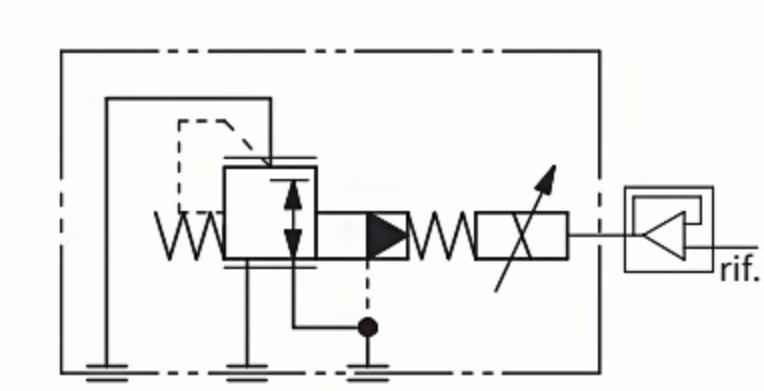
► Proportional Valve

■ Hydraulic Characteristics (at an oil temperature of 50°C with ISO VG 46 mineral oil)

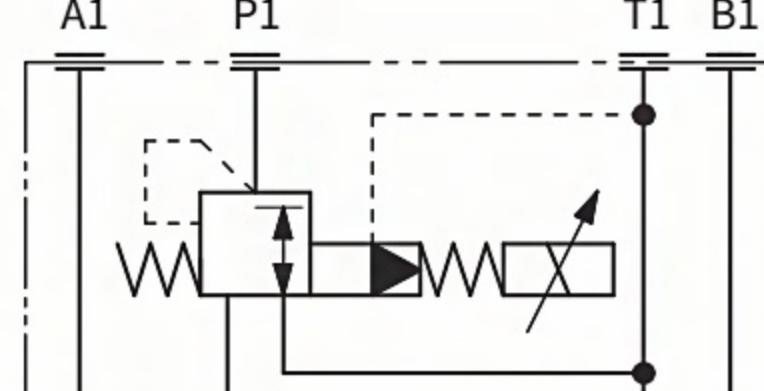
Hydraulic Symbol



SRZGO-A-033



SRZGO-AE-033



SHZGO-A-031

Model Number	SRZGO-A,AE	SHZGO-A
P reg_max (Q=10L/min) [bar]	100	210
P reg_min (Q=10L/min) [bar]	315	350
P P/T_max [bar]	Actual pressure at port 1 or T (equals 3 when divided by 350) P=350bar;T=210bar	
Q reg_min [bar]	2.5	
Q reg_max [l/min]	40	
Response Time (for 0-100% signal change, installation dependent) [ms]	≤50	
Hysteresis [% of P max]	≤2	
Linearity [% of P max]	≤3	
Repeatability [% of P max]	≤2	

The above characteristics are based on the valve being used with a SUNWAY amplifier

■ Options for Type-A Valve

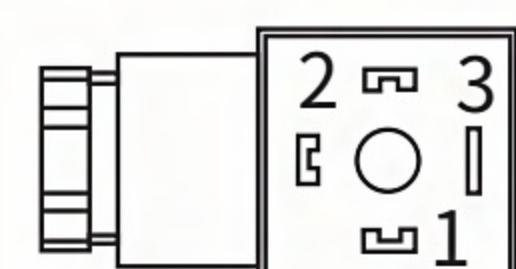
► Option /6: 6V DC coil, replaces the standard 12V DC coil. For use with a 12V DC power supply.

► Option /18: 18V DC coil, replaces the standard 12V DC coil. Applicable when the electronic amplifier is not a SUNWAY brand product.

■ Type A Valve Power Plug Wiring (DIN Standard)

Solenoid Power Plug

Pin	Signal Description
1	Power
2	Power
3	Ground



■ Standard 7-Pin Main Plug Electrical Connections

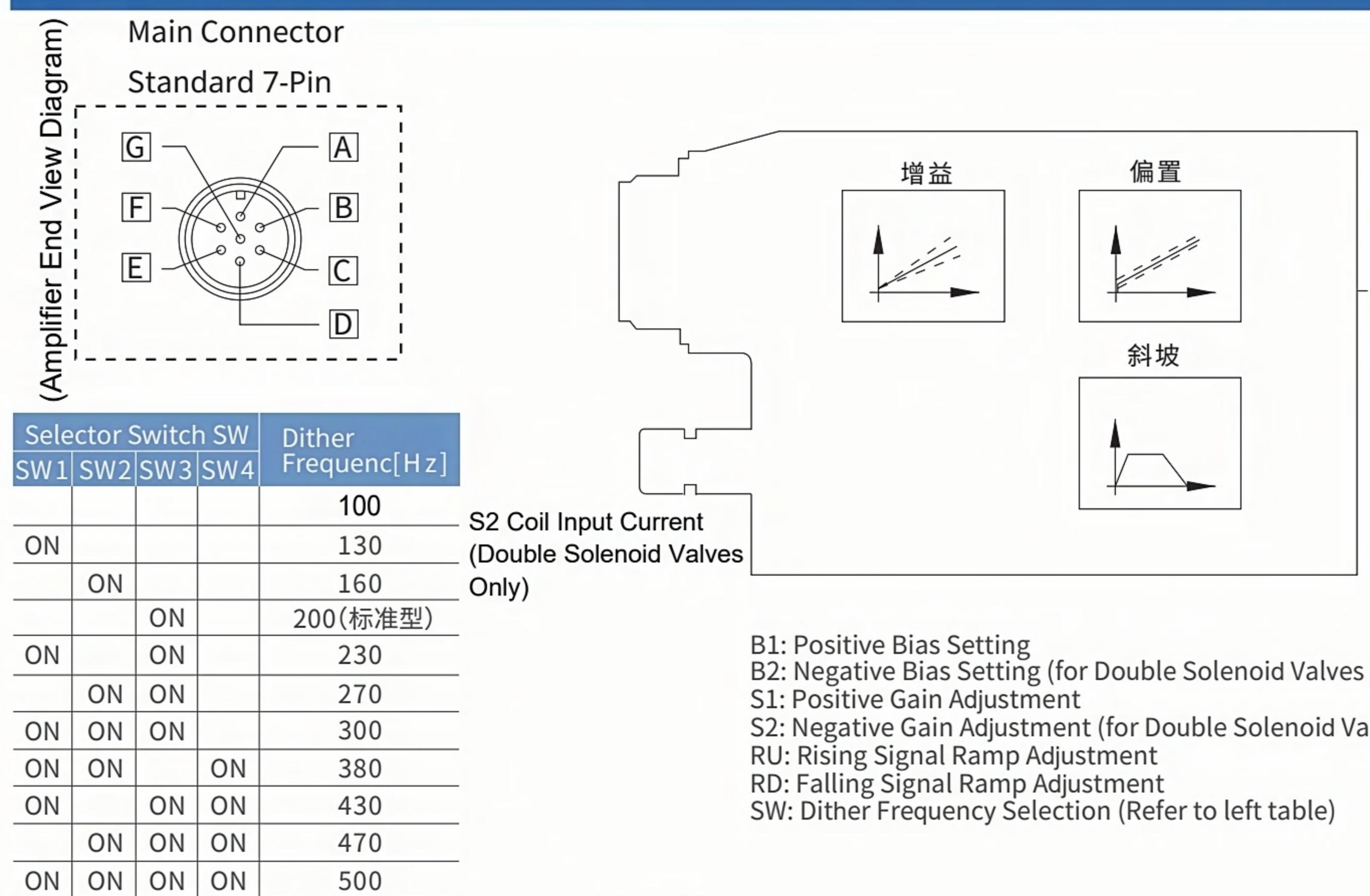
Pin	Signal Type	Technical Description	Note(s)
A	V+ Power	+24V DC for Power Output Stage and Signal Logic	Input - Power Signal
B	V0 Power	Power & Logic Return (0V DC)	Ground - Power Signal
C ⁽¹⁾	AGND	GND_MON_0	Ground - Analog Signal
	Enable Signal	Enable with 24V DC or Enable-Stop Signal with 0V DC. /Q option applicable.	Input - Switch Signal
D	Input Signal+	Maximum Range: ±10 VDC /I Option Signal 4-20mA	Input - Analog Signal
E	Input Signal-	Default for Single Solenoid Valves: 0 to +10 VDC Default for Double Solenoid Valves: ±10 VDC	
F	Monitor Signal	Monitored Analog Output: ±5 VDC max.; scaled at 1 V per 1 A.	Output - Analog Signal
G	Ground	Internally connected to the amplifier housing	

Notes: (1) With /Q Option: Pin C serves as the Enable Signal. Without this option, it is connected to AGND (Analog Ground). The reference ground for the monitor signal is Pin B.

Start-up Delay: The minimum time required from applying 24V DC power to the electronic amplifier until the valve begins operation is between 60 ms and 160 ms. During this interval, the current to the valve coil is 0 A.

—Specialized Integrated Solutions for Electro-Hydraulic Servo Systems

■ Type AE Valve (Integrated Analog Electronic Amplifier): Main Functions and Electrical Connections



The dither frequency is preset to 200 Hz at the factory.
It can be adjusted by contacting the SUNWAY Technical Department.

■ Main Characteristics

Installation Position	Any position
Mounting Surface Roughness	Roughness 0.4Ra, Flatness 0.01/100 (ISO 1101)
Ambient Temperature	-A Type: -20°C to +70°C; -AE Type: -20°C to +60°C
Suitable Fluids	Hydraulic oils per DIN 51524-535; other media types, see product model
Recommended Viscosity	15~100 mm²/S at 40°C (ISO VG15-100)
Fluid Filtration Rating	ISO 18/15 standard, recommend inlet filter 10µm with $\beta_{0.7} \geq 75$
Fluid Temperature	Standard seal: -20°C to 60°C; IP65 seal: -20°C to 80°C
Coil Resistance R at 20°C	12VDC standard coil: 3~3.3Ω; 6VDC coil: 2~2.2Ω; 18VDC coil: 13~13.4Ω
Maximum Solenoid Coil Current	12VDC standard coil: 2.4A; 6VDC coil: 3A; 18VDC coil: 1A
Maximum Power Consumption	-A Type: 30W; -AE Type: 50W
Protection Degree (CEI EN-60529)	-A Type: IP65; -AE Type: IP67
Duty Factor	Continuous operation (ED=100%)

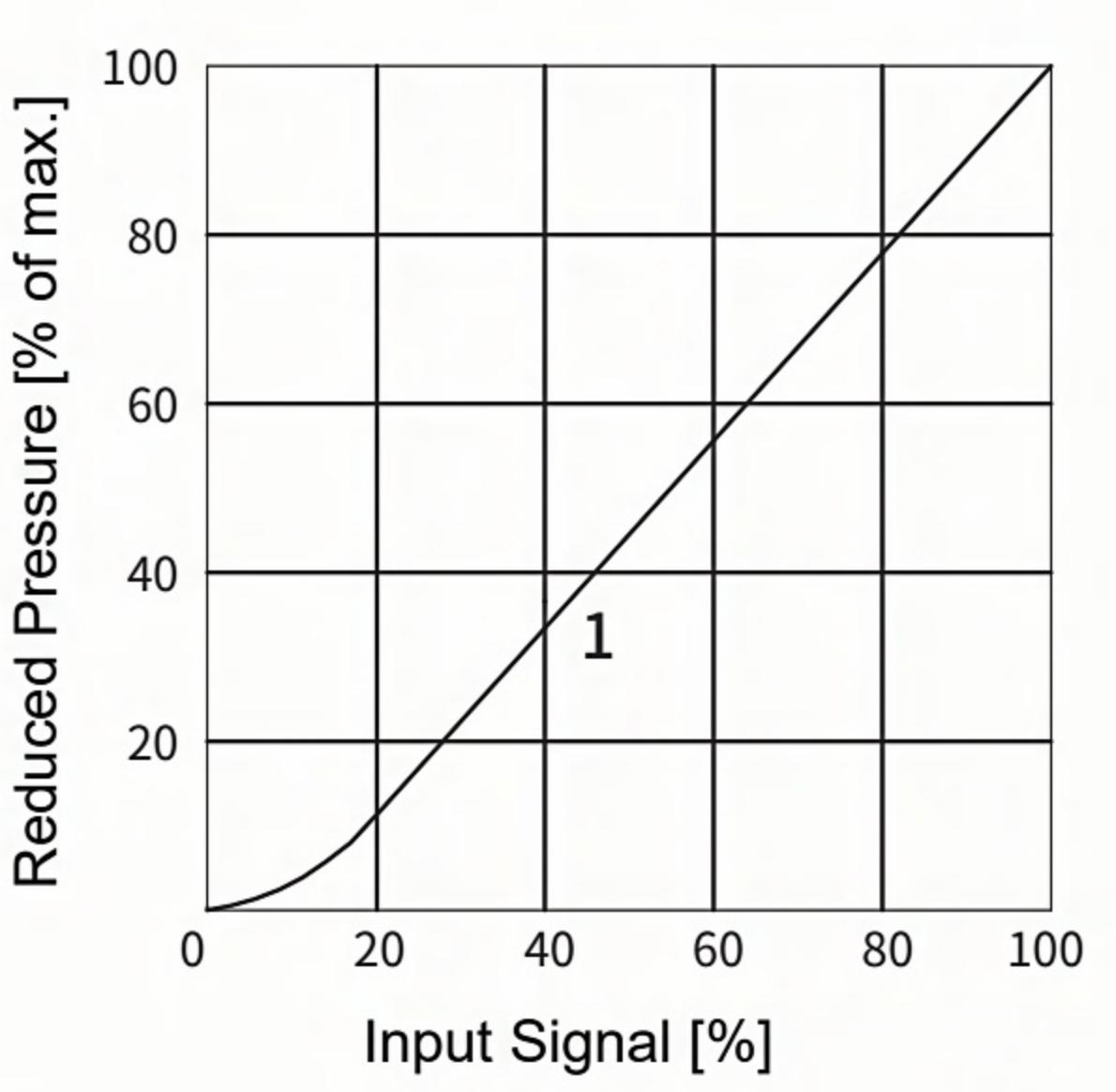
■ Performance Curves (Based on ISO VG 46 standard mineral oil at 50°C)

Pressure Adjustment Characteristics

Measured at a flow rate $Q = 10 \text{ L/min}$

1 = SRZGO-A, SRZGO-AE, SHZGO-A

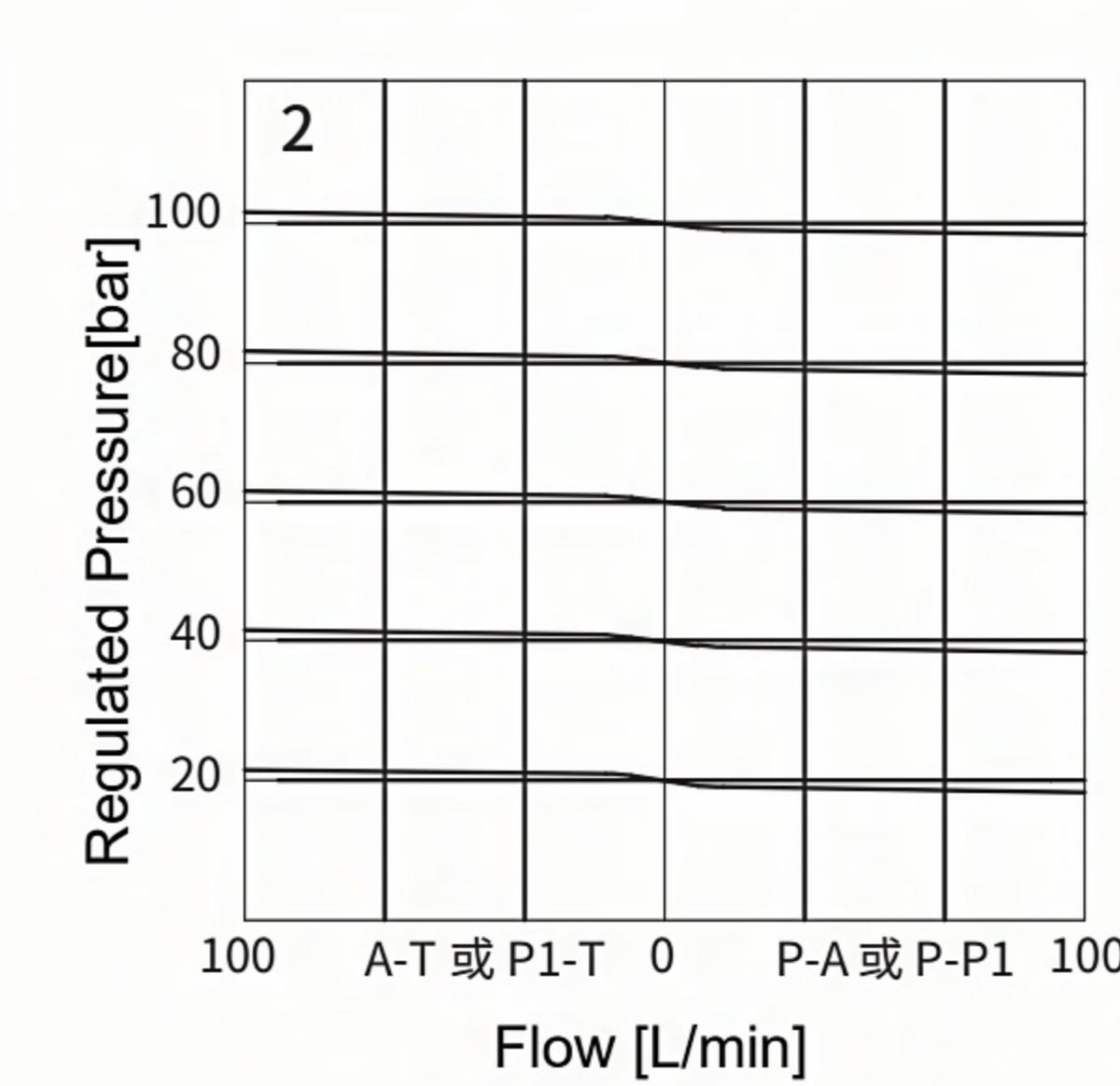
For Type -A and -AE valves, the back pressure at port T influences the actual adjustment characteristics.



Pressure/Flow Characteristics

Measured by varying the input signal at a flow rate of $Q = 10 \text{ L/min}$

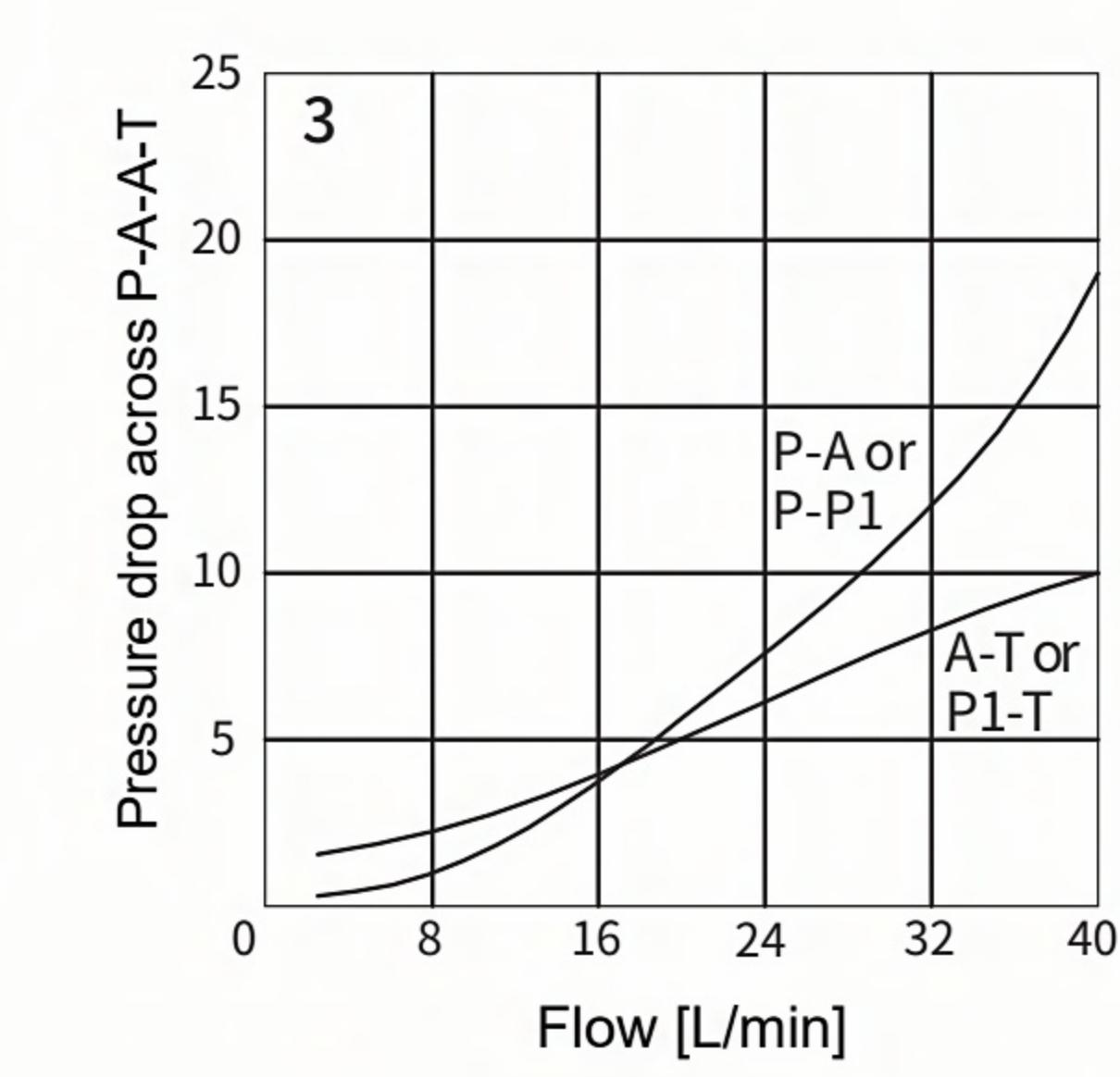
2 = SRZGO-A, SRZGO-AE



Pressure Drop/Flow Characteristics

At "0" input signal

3 = SRZGO-A; SRZGO-AE; SHZGO-A



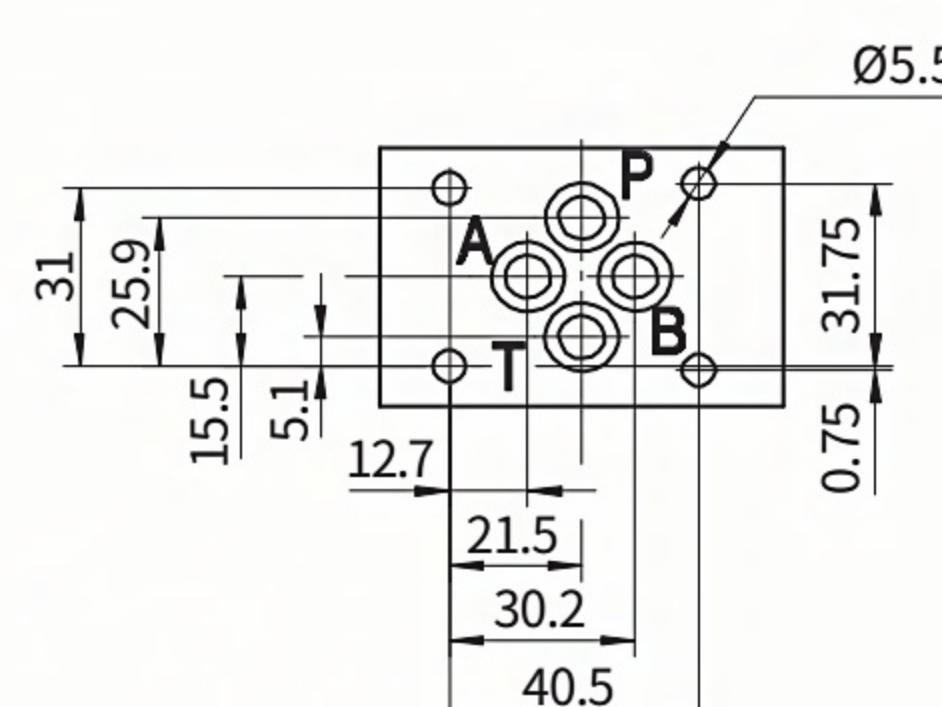
▶ Proportional Valve

▶ Proportional Valve

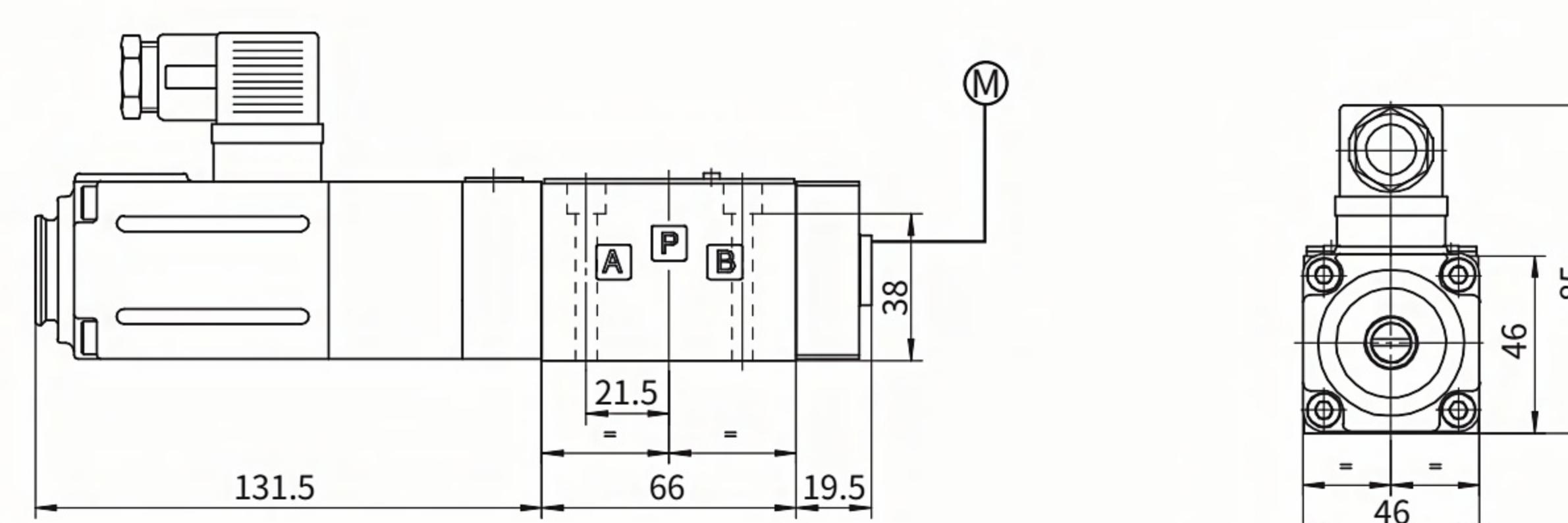
■ Installation Dimensions (Unit: MM)

ISO 4401:2000
Mounting interface to standard 4401-03-02-0-05

Fastening bolts: 4 x M5X50 hex socket head bolts, strength grade 12.9
Fastening torque = 8 Nm
Ports P, A, B, T: Ø = 5 mm



SRZGO-A



Weight: 2.7kg

Catalog
Proportional Valve

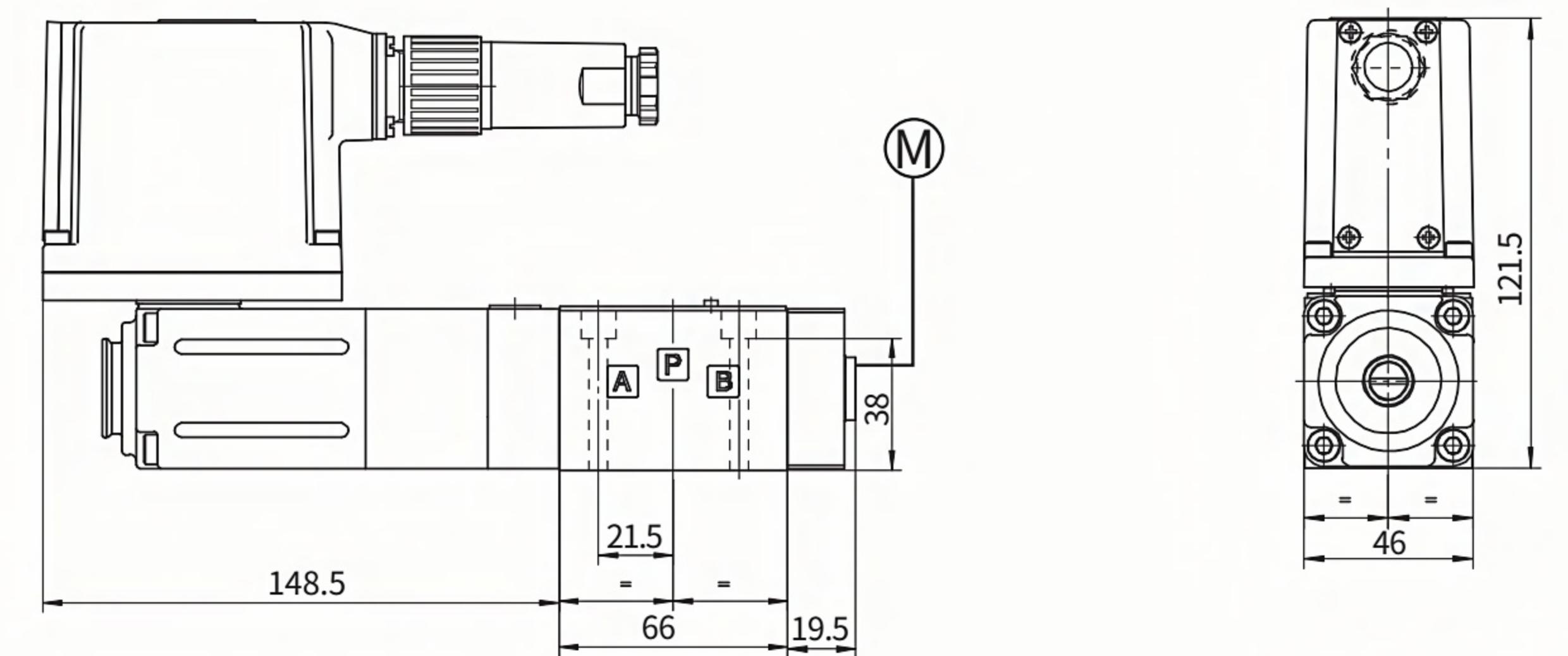
Standard Valve

Threaded Cartridge Valve

Two-Way Cartridge Valve

Electrical Control

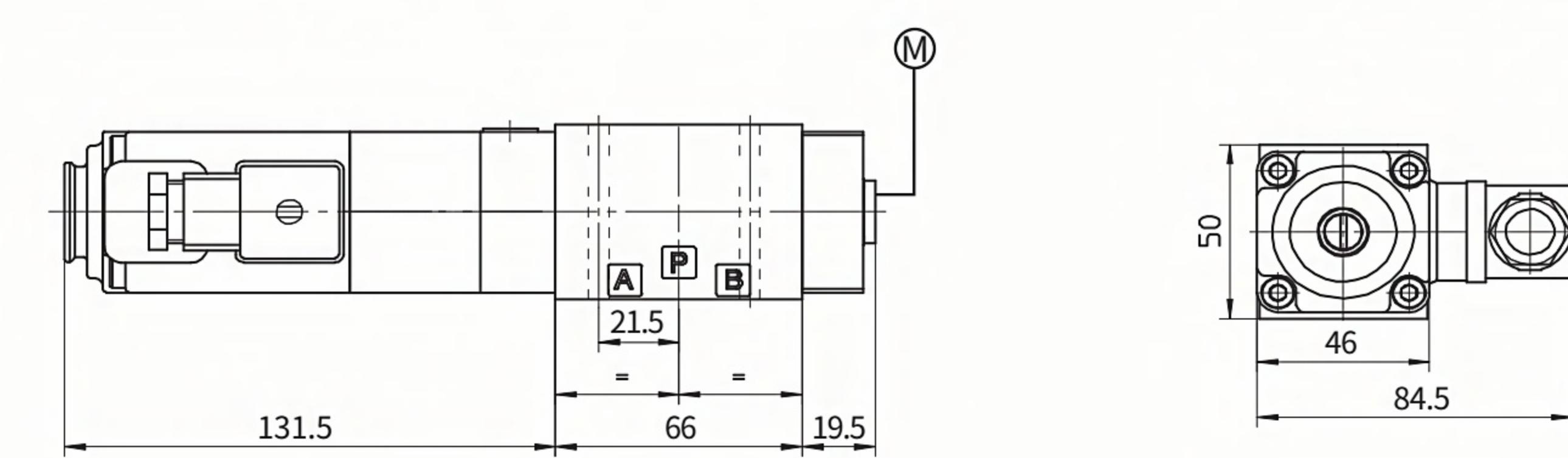
SRZGO-AE



Ⓜ Gauge Port G 1/4"

Weight: 3.2kg

SHZGO-A



Ⓜ: Gauge Port G 1/4"

Weight: 3.8kg