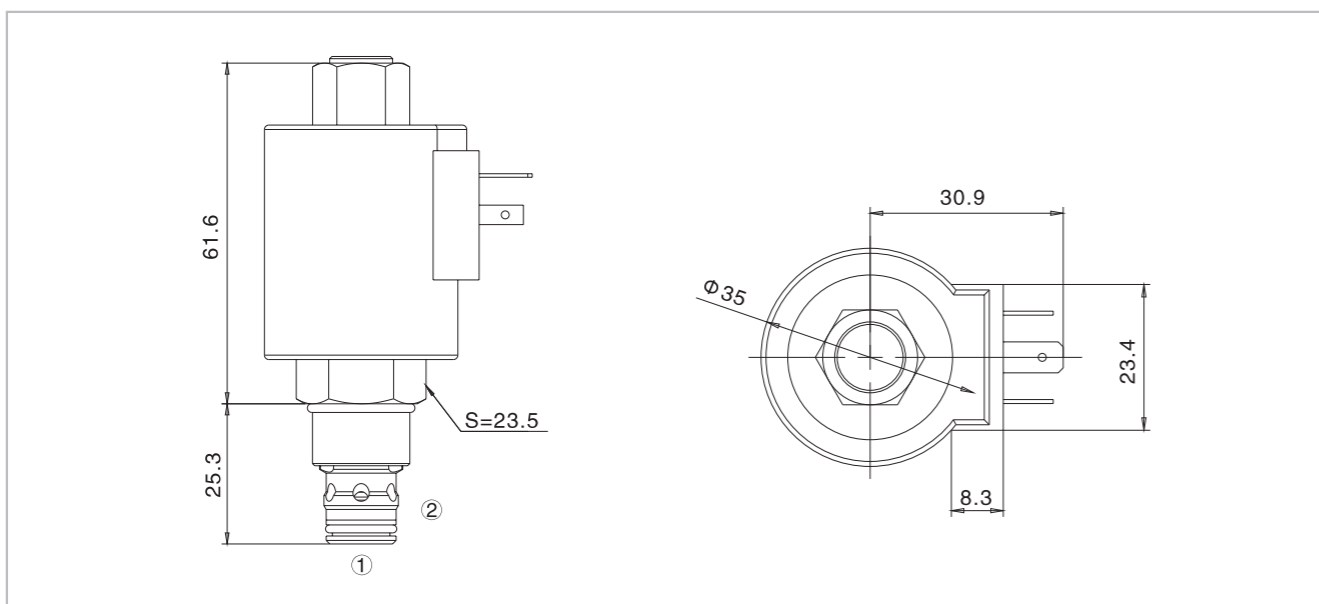
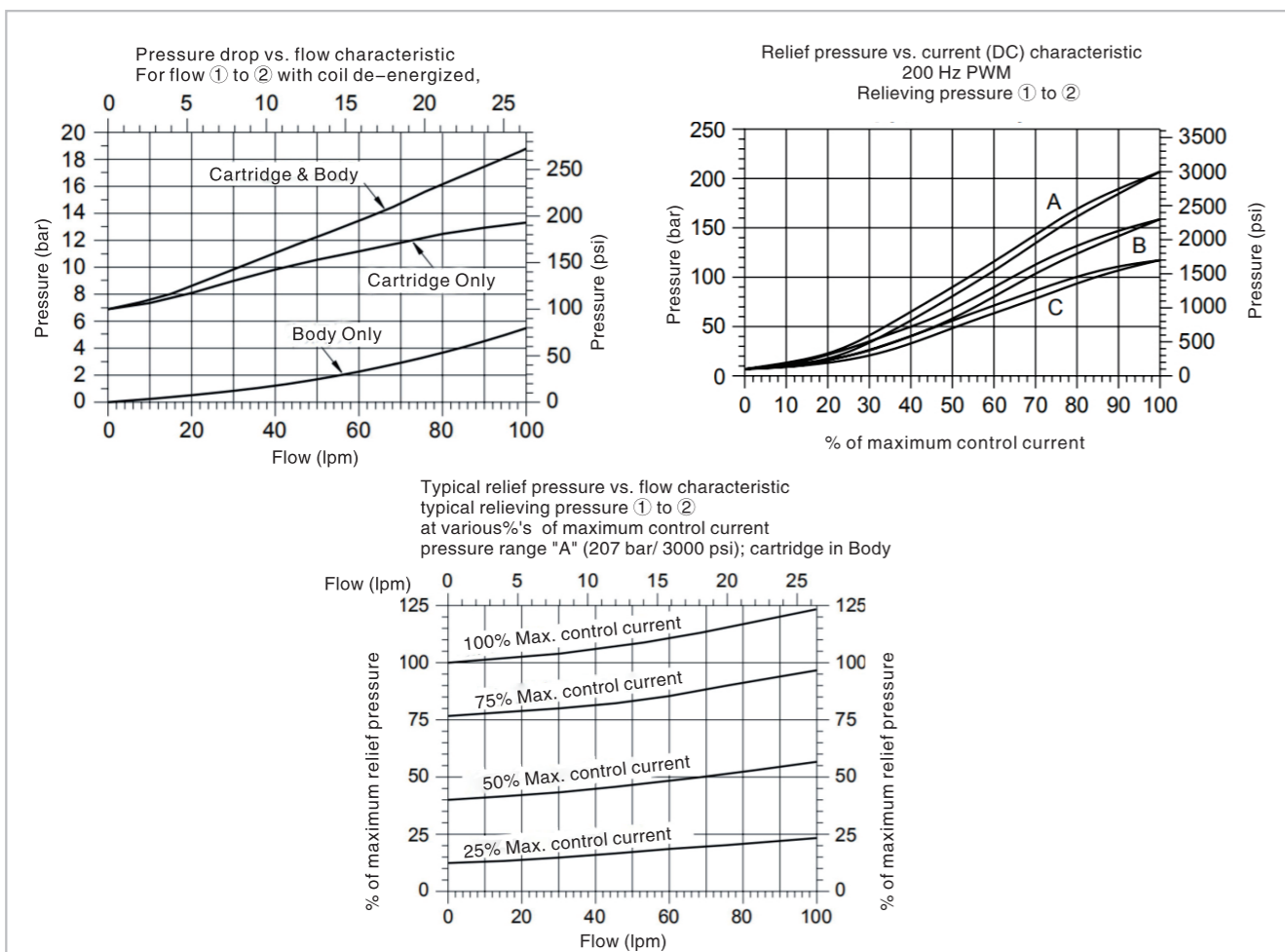


## HY-TS10-26 (Proportional Relief Valve)

### External dimensions



### Specification performance



## HY-TS10-27 (Proportional Pilot-operated Relief Valve)

### Introduction



**Description:**  
A screw-in, cartridge-style, pilot-operated, hydraulic pressure relief valve, which can be infinitely adjusted across a prescribed range using a variable electric input. Pressure output is inversely proportional to DC current input. This valve is intended for use as a pressure limiting device in demanding applications.

**Operation:**  
The TS10-27 blocks flow from ① to ② until sufficient pressure is present at ? to open the valve by overcoming the preset induced spring force. With no current applied, the valve will relieve at ① 50psi of the spring maximum. Applying current to the coil reduces the induced spring force thereby reducing the valve setting. The regulated pressure is inversely proportional to the input electrical current.  
**Note:** This valve is ideal for hydraulic fan drive applications. Please contact the manufactory for more information about electronic controller for fan drive applications.

### Technical specification (for application beyond these parameters, please contact with us)

Model	HY-TS10-27
Installation position	When possible, the valve should be mounted below the reservoir oil level. This will maintain oil in the armature preventing trapped air instability. If this is not feasible, mount the valve horizontally for best results.
Storage temperature (°C)	-20°C To +55°C
Ambient temperature (°C)	-20°C To +50°C

### Hydraulic specification

Max. operating pressure	241 Bar(3500 psi)
Minimum operating dither/ pulse frequency	75.7 Lpm ( 20 gpm), DP=14.8 bar(215 psi ) cartridge only, ① to ②, coil energized
Flow path	Free flow: ① to ② coil energized; Relieving: ① to ② coil de-energized
Max. pilot flow	0.76 Lpm (0.2 gpm)
Hysteresis	Less than 3%
Hydraulic fluid	Mineral oil, phosphate-ester
Fluids	7.4~420 cSt (50~2000 sus)
Temperature	-40°C~+120°C (-40~250°F) , With NBR seals
Cavity	HY10-2, see page H.1.3

### Electrical specification

Max. control current	12 VDC coils:1.10A; 24 VDC coils:0.55A
Relief pressure range (from zero to max. control current)	A:207-10.3 bar (3000-150 psi); B:138-10.3 bar (2000-150 psi); C: 69-10.3 bar (1000-150 psi)

# HY-TS10-27 (Proportional Pilot-operated Relief Valve)

## Model instruction

HY-TS10-27 - \* - \* - \* - \* - \*

Proportional pilot-operated Relief valve

Maximum operating pressure  
 A 207 bar (3000psi)  
 B 138 bar (2000psi)  
 C 69 bar (1000psi)

Std. coil termination (VDC)  
 DG DIN 43650  
 ER Deutsch DT04-2P

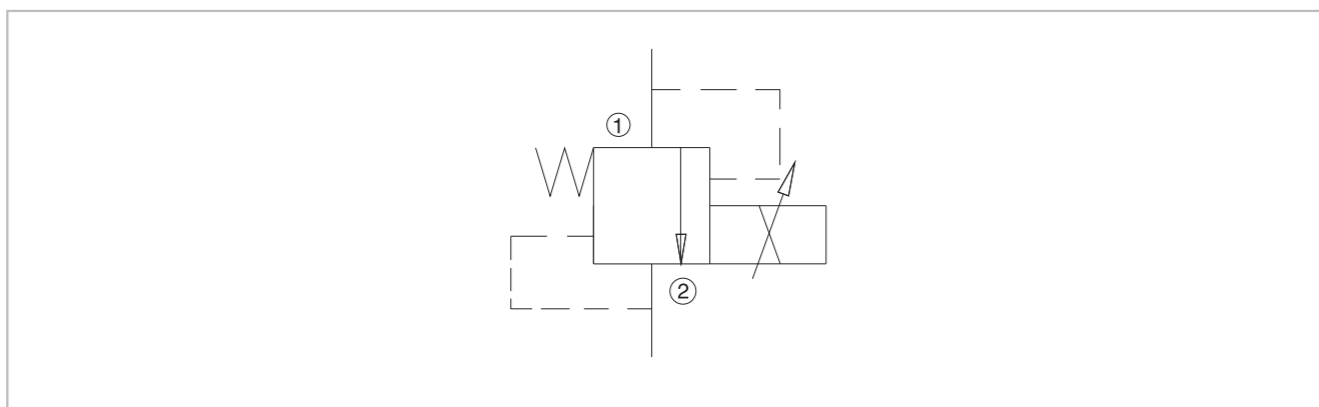
	Voltage
0	Less coil
12	12 VDC
24	24 VDC

Porting

0	Cartridge only
6T	SAE6
8T	SAE8
3B	3/8 in. BSP*
4B	1/2 in. BSP*

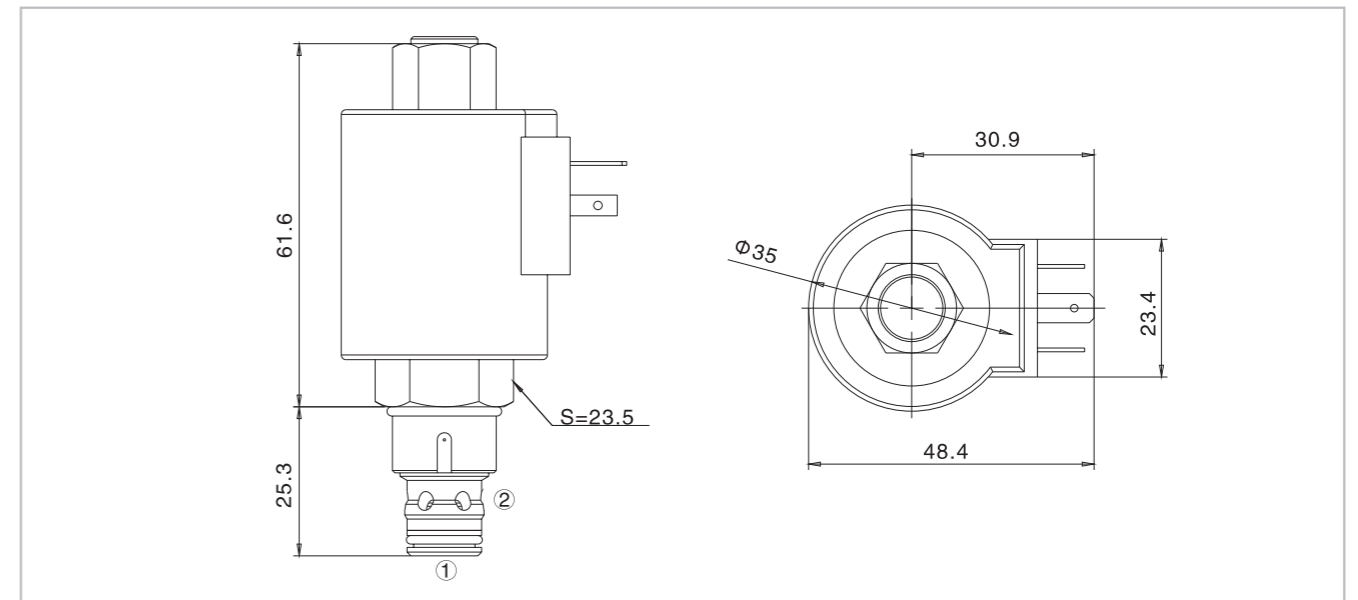
	Seals
N	NBR Seals
V	FPM Seals

## Code symbol



# HY-TS10-27 (Proportional Pilot-operated Relief Valve)

## External dimensions



## Specification performance

