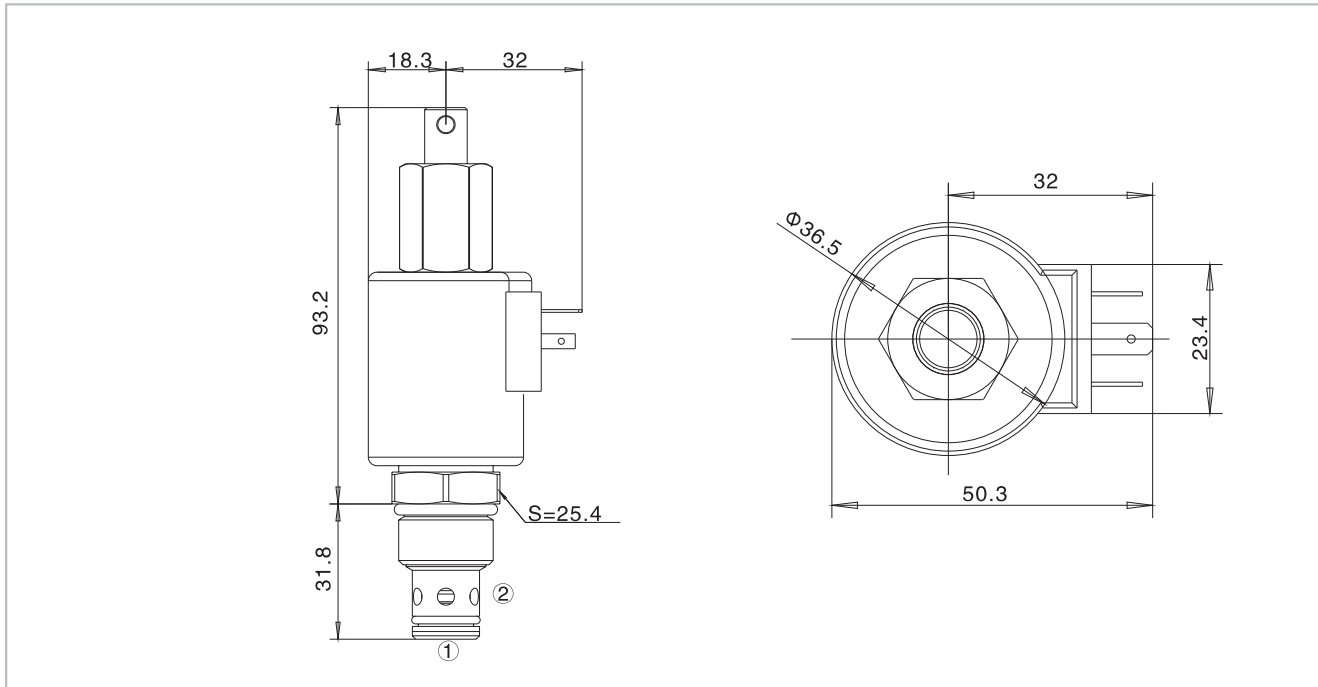
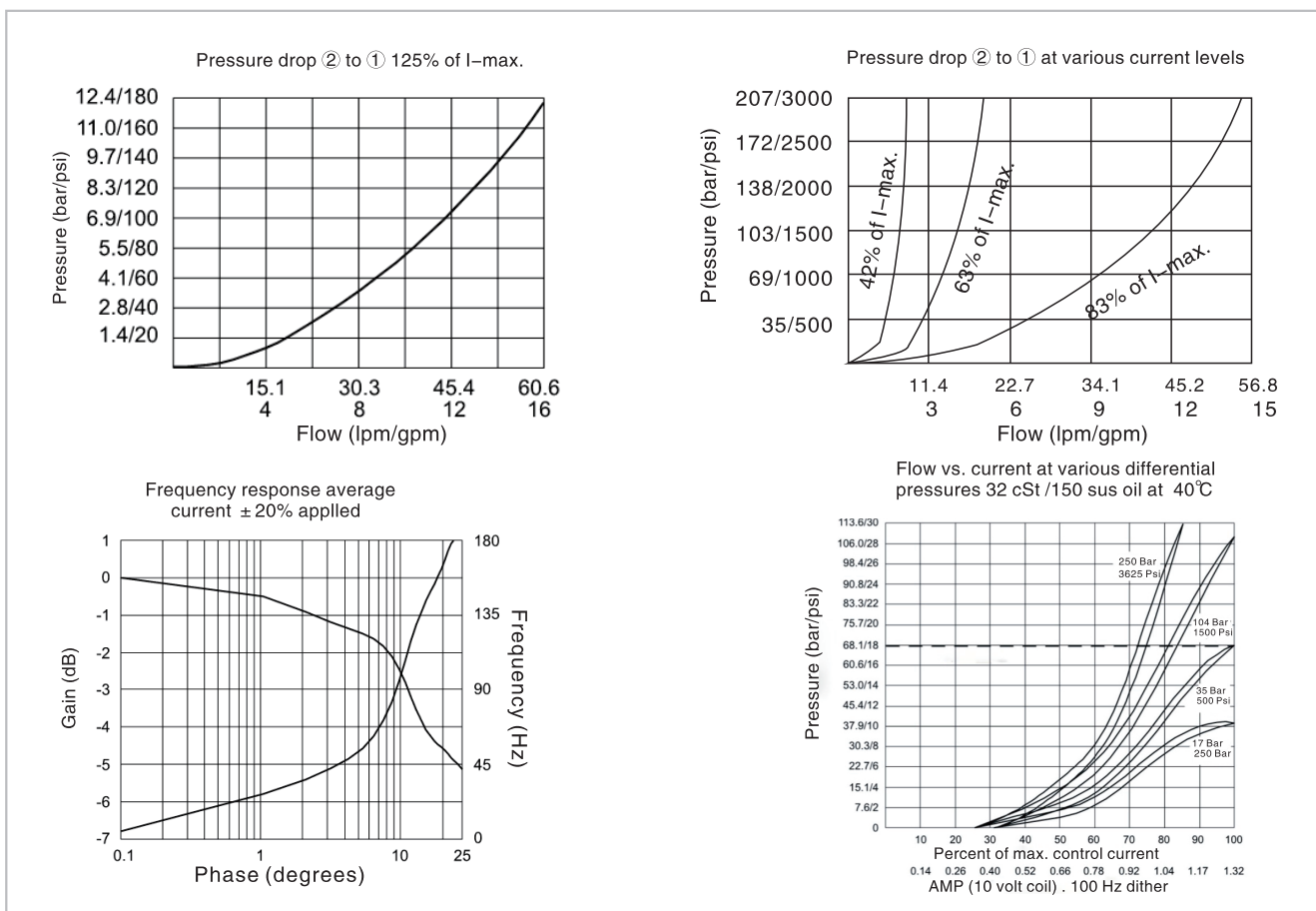


HY-SP10-20 (Poppet-type, 2-way, Normally Closed)

External dimensions



Specification performance



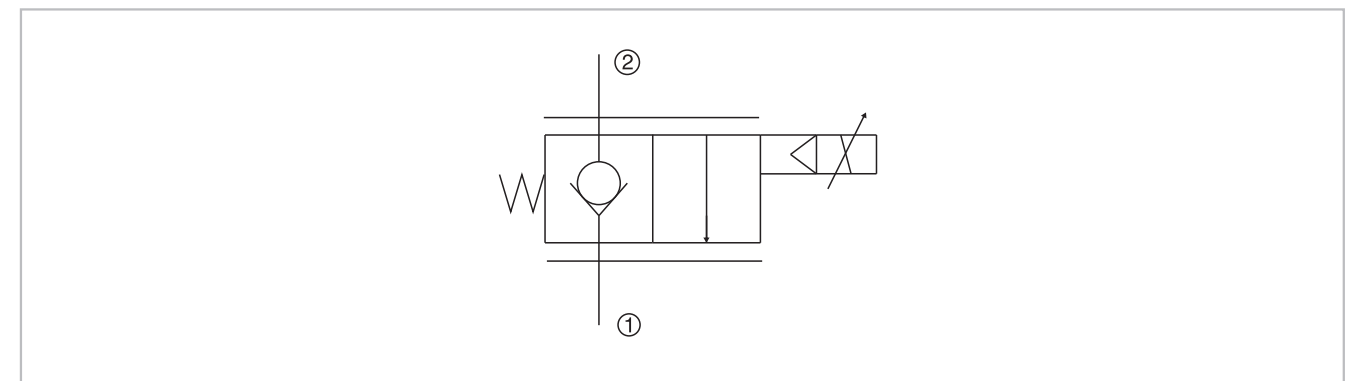
HY-SP12-20 (Proportional, Screw-in Hydraulic Cartridge Valve)

Overview

- Product features:
- Standard cavity
 - Driven by proportional solenoid
 - Normally closed 2 way screw-in cartridge
 - High pressure wet-type armature structure
 - Coil type option, easy exchange
 - Offer various connection and voltage
 - Manual override option

Description :
A solenoid-operated, 2-way, normally closed, poppet-type, proportional, screw-in hydraulic cartridge valve, designed for low leakage blocking and load-holding applications.

Hydraulic symbol



Technical parameter (please consult us if your application is out of the rated technical range)

Model	HY-SP12-20
Mounting	Free
Storage temp	-30°C To +120°C
Cavity type	HY12-2, see page H.1.5

HY-SP12-20 (Proportional, Screw-in Hydraulic Cartridge Valve)

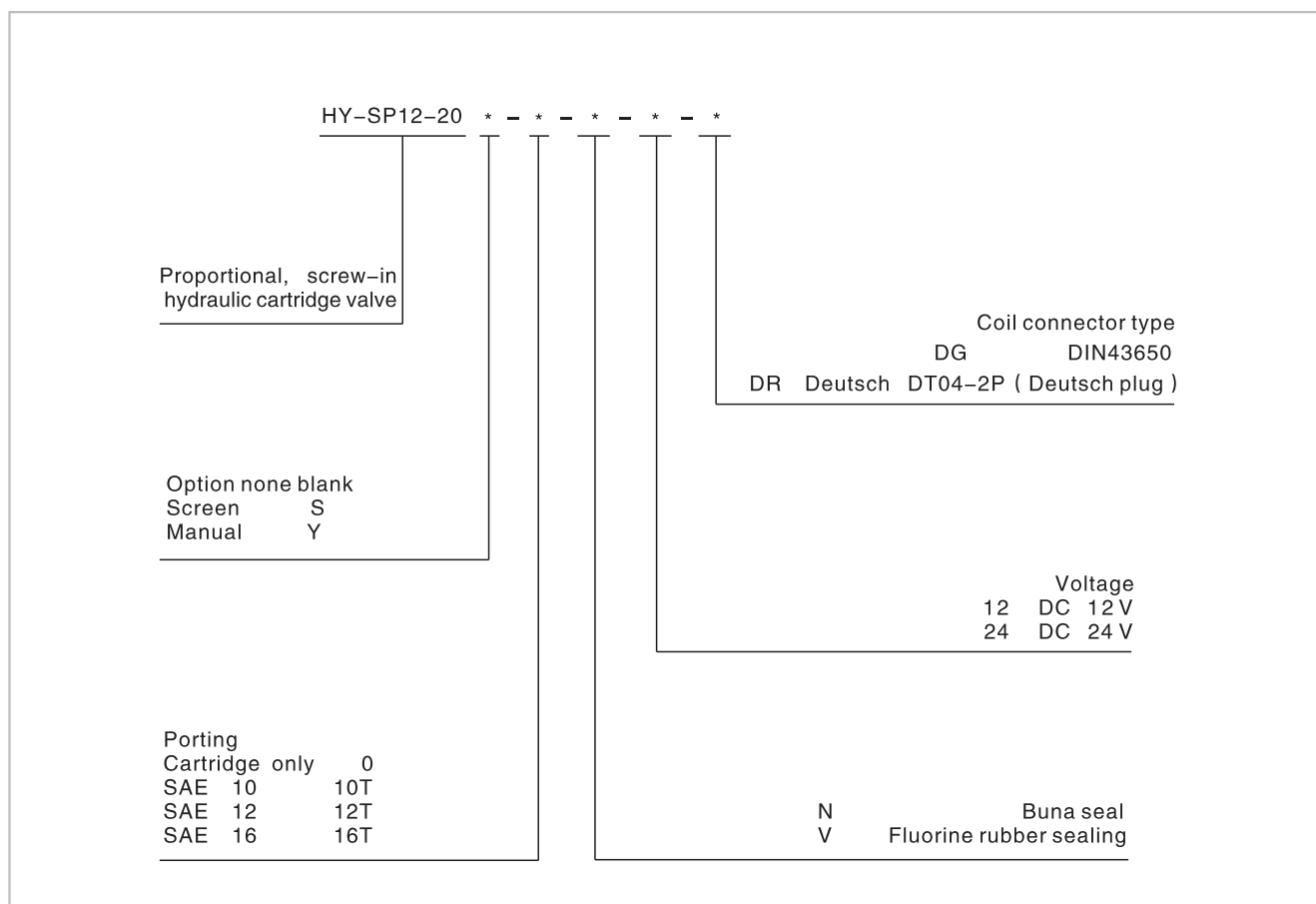
Hydraulic parameter

Max working pressure	25 MPa
Max flow rate	100 L/min (Pressure drop 3.45 MPa)
Inner leakage	5 Drop/min (test under 25 MPa)
Working fluid	Mineral hydraulic oil, phosphate
Viscosity	20~380 mm ² /s
Oil temp	-20°C~+70°C
Minimum fluid cleanliness	Maximum permissible degree of pressure fluid contamination to NAS 1638 to class 9 recommended filter $\beta_{10} \geq 75$.

Electric parameter

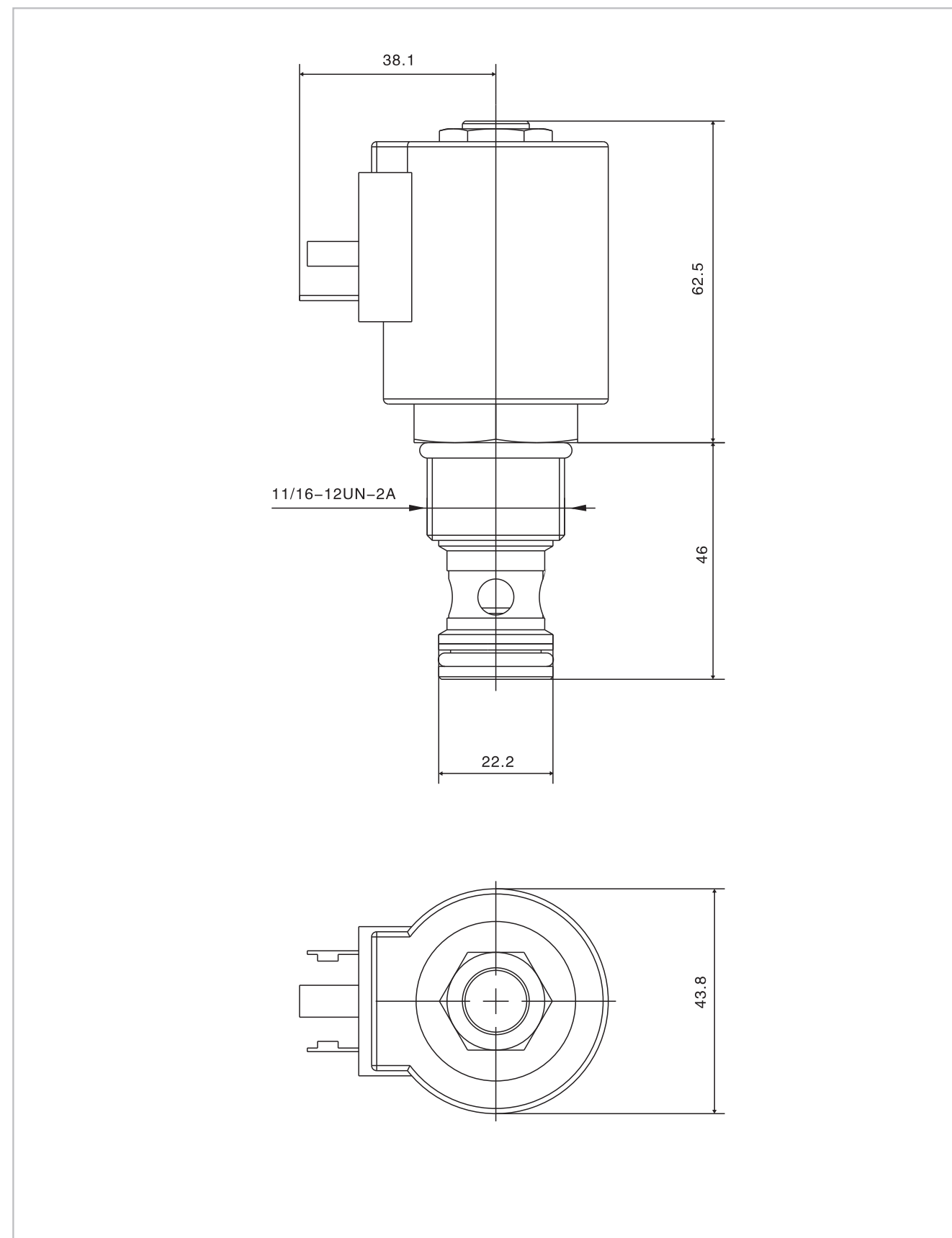
Supply voltage	12 VDC, 24 VDC
Min PWM frequency(dither)	70 Hz
Hysteresis with PWM	Within 5%
Relative duty cycle	100%
Protection class as per DIN 40 050	IP65

Order model



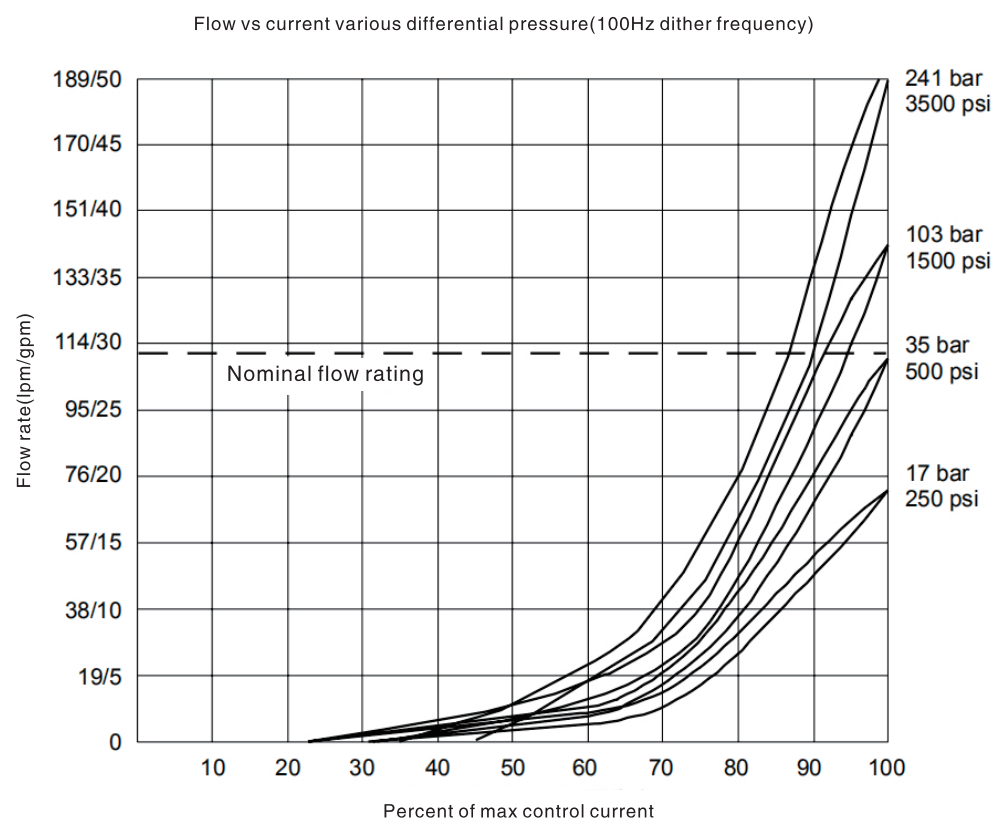
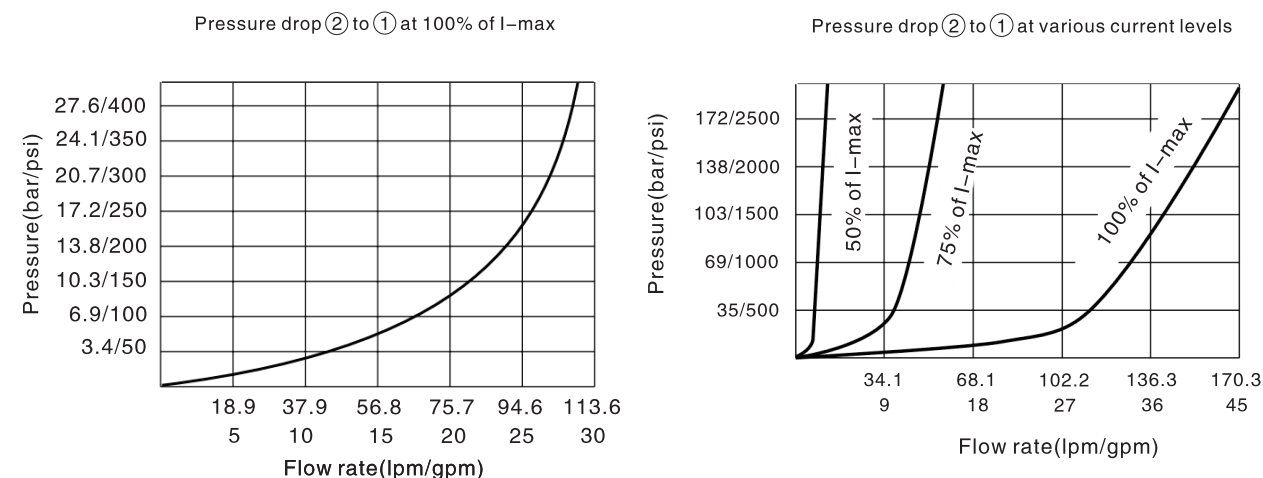
HY-SP12-20 (Proportional, Screw-in Hydraulic Cartridge Valve)

External dimension



HY-SP12-20 (Proportional, Screw-in Hydraulic Cartridge Valve)

Specification performance(mineral oil HLP46 temperature measured at 40°C ± 5°C)



HY-TS08-27 (Proportional 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 proportional to DC current input. This valve is intended for use as a pressure limiting device in demanding applications.

Operation:
The TS08-27 blocks flow from ① to ② until sufficient pressure is present at ① to open the valve by overcoming the preset induced spring force. With no current applied, the valve will relieve at ± 50 psi 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-TS08-27
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)
Rated flow	19 Lpm/5gpm; DP=7.8 bar(113.3psi) ± 10%, 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%
Pressure rise	A:40 psi/gpm;B:50 psi/gpm;C:28 psi/gpm
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	HY08-2, see page H.1.2

Electrical specification

Max. control current	12 VDC coils:1.2A; 24 VDC coils:0.6A
Relief pressure range (from zero to max. control current)	Minimum pressure is factory-adjusted. Range a:207-4.1bar (3000-60psi); Range b:138-4.1bar (2000-60psi)