

## HY-SP08-20 (Poppet-type, 2-way, Normally Closed)

### Introduction



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

**Operation:**  
When de-energized, the HY-SP08-20 acts as a check valve, allowing flow from ① to ②, while blocking flow from ② to ①. When energized, the cartridge's poppet lifts to open the ② to ① flow path. Flow is proportional to current applied to the coil. Flow varies with manual override.

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

Model	HY-SP08-20
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

Operating pressure	250 Bar (3625 psi)
Minimum operating Dither/ pulse frequency	70 Hz
Minimum operating Dither/ pulse frequency	Up to 22 lpm (5.8 gpm) at 34.5 bar (500 psi)
Hydraulic fluid	Mineral oil, phosphate-ester
Fluids	7.4 To 420 cSt (50 to 2000 sus)
Temperature	-40°C~+140°C, with NBR seals
Cavity	HY08-2, see page H.1.2
Internal leakage	5 Drops/minute max. at 250 bar (3625 psi)
Hysteresis	Less than 5% up to 85% of I-max; Less than 10% above 85% of I-max

### Electrical specification

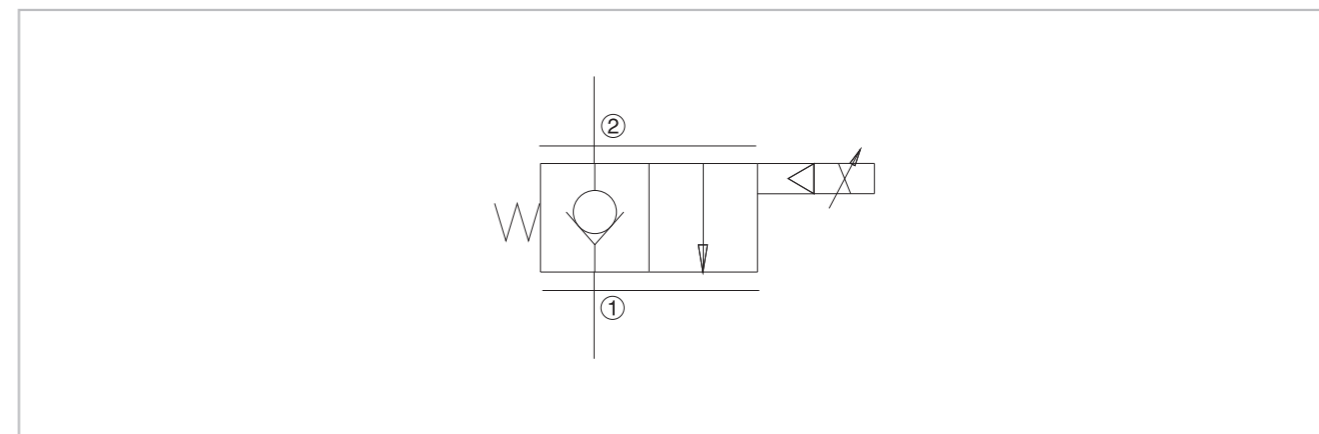
Max. control current	12 VDC coils: 1.0 ± 0.1A; 24 VDC coils: 0.5 ± 0.05A
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## HY-SP08-20 ( Poppet-type, 2-way, Normally Closed )

### Model instruction

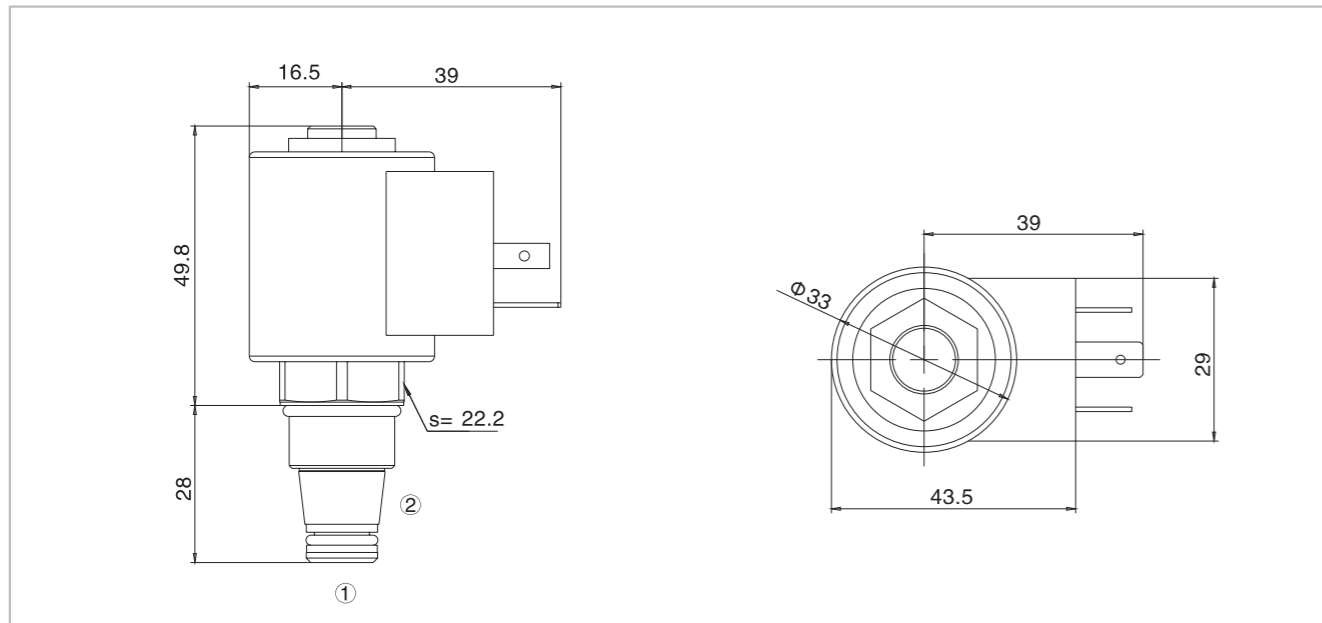
<p>HY-SP08-20 - * - * * * *</p> <p>Poppet-type, 2-Way, Normally closed</p> <p>Option None blank Manual override M</p> <p>Porting 0 Cartridge only 4T SAE 6T SAE6 8T SAE8 2B 1/4 in. BSP* 3B 3/8 in. BSP*</p>	<p>Std. coil termination (VDC) DG DIN 43650 ER Deutsch DT04-2P</p> <p>Voltage 0 Less coil 12 12 VDC 24 24 VDC</p> <p>Seals N NBR Seals V FPM Seals</p>
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### Code symbol

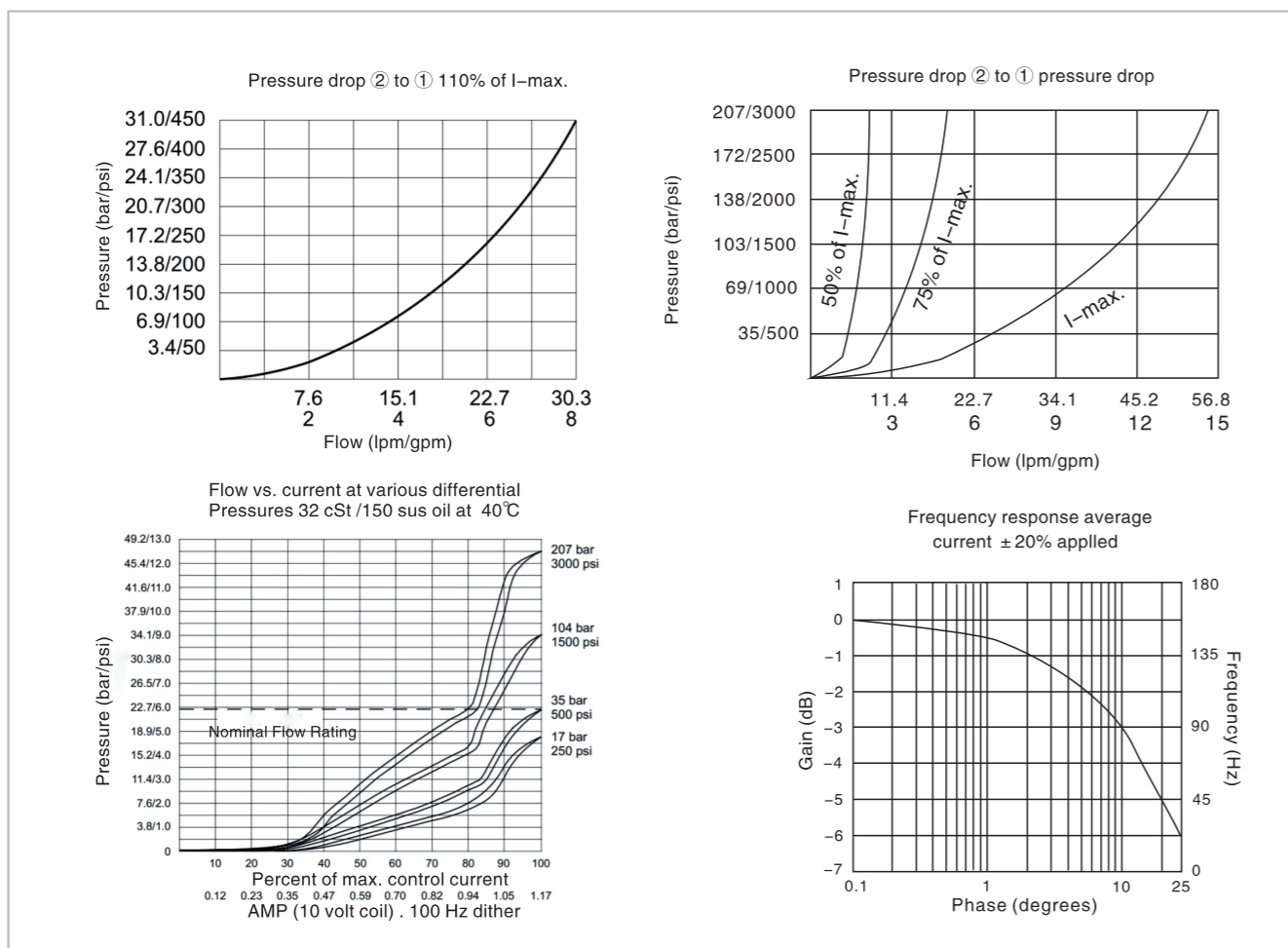


## HY-SP08-20 (Poppet-type, 2-way, Normally Closed)

### External dimensions



### Specification performance



## HY-SP08-21 (Poppet-type, 2-way, Normally Open)

### Introduction



**Description:**  
A solenoid-operated, 2-way, normally open, poppet-type, proportional, screw-in hydraulic cartridge valve for low-leakage load-holding applications, and for starting or stopping a load or a pump system.

**Operation:**  
When de-energized, the HY-SP08-21 allows flow from ② to ①. When the valve is partially energized, the valve begins to throttle the flow from ② to ①. When fully energized, the poppet closes on the seat, blocking flow from ② to ①. Flow from ① to ② will occur when hydraulic pressure exceeds the solenoid force.

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

Model	HY-SP08-21
Installation position	Unlimited
Storage temperature (°C)	-20°C To +55°C
Ambient temperature (°C)	-20°C To +50°C

### Hydraulic specification

Operating pressure	207 Bar (3000 psi)
Flow	0 To 22.7 Lpm (0 to 6 gpm)
Minimum operating Dither/ pulse frequency	70 Hz
Hydraulic fluid	Mineral oil, phosphate-ester
Fluids	7.4~420 cSt ( 50~2000 sus )
Temperature	-40°C~+140°C, With NBR seals
Cavity	HY08-2, see page H.1.2
Internal leakage	5 Drops/minute max. at 207 bar (3000 psi)

### Electrical specification

Max. control current	12 VDC coils: 1.0 ± 0.1A; 24 VDC coils: 0.5 ± 0.05A
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