

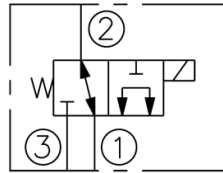


# 电磁换向阀 Solenoid Directional valve

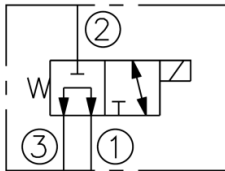
SV10-3X 系列  
美制插孔—276bar  
SV10-3X Valve Series  
U.S. Cartridge — 276 bar



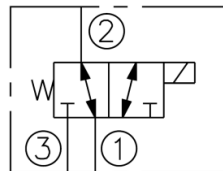
## 原理图 Symbol



SV10-31  
207 Bar (3000 psi)



SV10-33  
207 Bar (3000 psi)



SV10-34  
207 Bar (3000 psi)



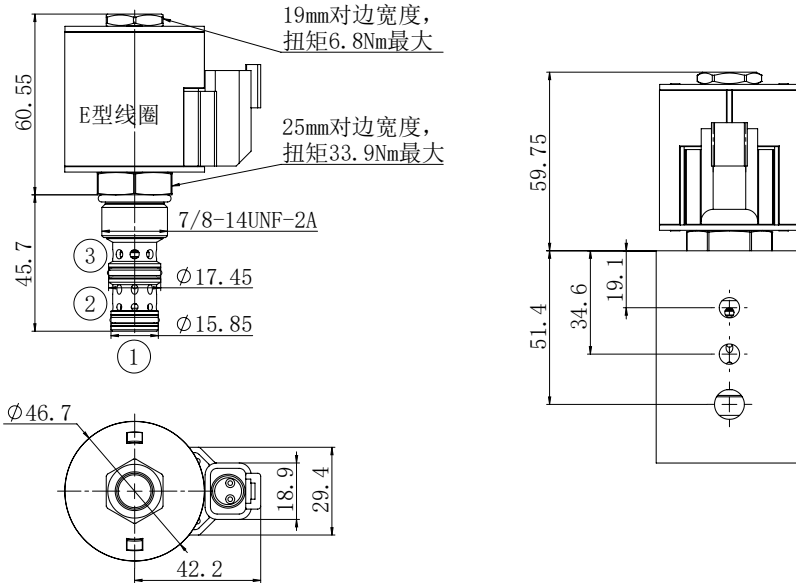
## 描述 Description

SV10-4X: 二位三通电磁换向滑阀  
3-Way,2-Position Solenoid-Operated Directional Spool Valve

直动滑阀式螺纹插装电磁换向阀。  
A Cartridge-style Direct-acting Spool-type Solenoid Directional Valve



## 尺寸图 Dimensions



## 技术特性 Technical Features

· 滑阀经过热处理硬化并经过精密加工，保证更低的内泄漏及更长的使用寿命。外部零件外表面都是经过镀锌镍处理和防腐蚀处理。所有零部件均采用高强度钢材制造。结构紧凑、体积小。

- 额定电磁线圈适合连续工作。
- 可选线圈电压、插头。
- 可以对所有油口完全加压。
- 插件电压可互换。
- 可选 IP69K 防水 E 型线圈。
- 工业通用阀孔。

· Poppet is hardened and ground to guarantee minimal wear and to extend service life. All external surfaces are zinc plated and corrosion-proof. All valve parts are made of high strength steel. Compact size.

- Continuous-duty rated coil.
- Optional coil voltages and terminations.
- All ports may be fully pressurized.
- Unitized, molded coil design.
- Optional waterproof E-Coils rated up to IP69K.
- Industry-common cavity.

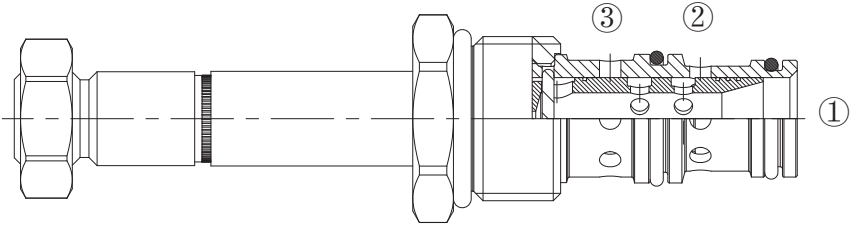


## 技术参数表 Technical Data

|  |  |
|--|--|
| 工作压力<br>Pressure rating                      | 207bar   |
| 最大工作压力<br>Maximum operating pressure         | 276 bar  |
| 最大流量<br>Maximum flow                         | SV10-31/34: 23l/min<br>SV10-33: 18.9l/min  |
| 最大内泄漏量<br>Maximum internal leakage           | 82 cc /min @207bar工作压力<br>82 cc /min @ 207bar pressure rating                      |
| 线圈额定负载<br>Coil rated load                    | 可在85%~115%的额定电压范围内连续工作<br>Work continuously in the rated voltage range of 85%-115% |
| 最小吸合电压<br>Minimum operate voltage            | 207bar时为额定值的85%<br>85% of rated value at 207bar                                    |
| 20°C时的线圈初始电流<br>Coil initial current at 20°C | E型线圈: 12VDC时为1.7A; 24VDC时为0.85A<br>E-coil: 1.7A at 12VDC; 0.85A at 24VDC           |
| 外露零件表面处理要求<br>External component treatment   | Zn/Fe - standard<br>Zn/Ni  |
| 安装方向<br>Orientation                          | 无限制<br>No restrictions   |
| 重量<br>Weight                                 | 0.18kg   |
| 适用油温范围<br>Oil Temperature Range              | -40° C to 100° C   |
| 适用工作介质<br>Fluids                             | 矿物油或具有润滑性的合成油液 Mineral - based or synthetics with lubricating properties           |
| 工作介质粘度范围<br>Viscosities                      | 7,4 to 420 cSt   |
| 测试液压油型号<br>Oil testing condition             | ISO VG 46 cSt  |
| 过滤要求<br>Filtration                           | 20/18/15 ISO 4406 (maximum filtration admitted)                                    |
| 插孔<br>Cavity                                 | VC10-3   |

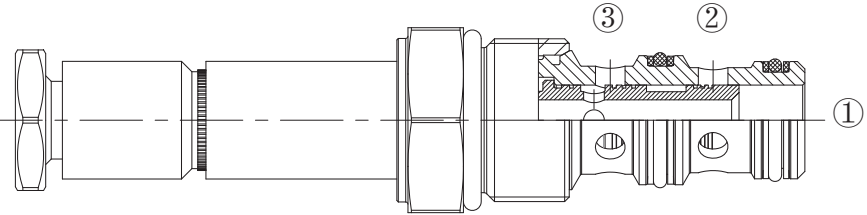


## 工作原理 How it works



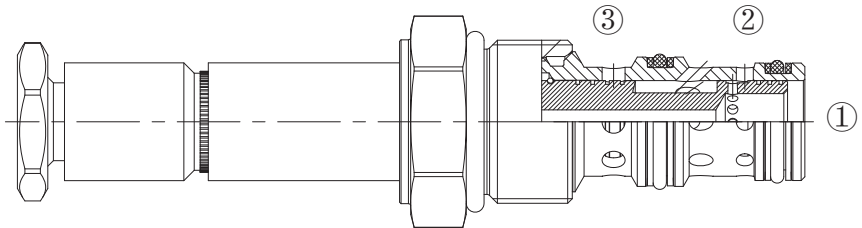
断电时, SV10-31 允许油液从②流向①, 在③处截止。通电后, 阀芯受到电磁力的作用而移动, 油液从①流向③, 在②处截止。

When de-energized, the SV10-31 allows flow from ② to port ①, blocks port ③. When energized, the spool shifts to open port ① to port ③, but block port ②.



断电时, SV10-33 允许油液从③流向①, 在②处截止。通电后, 阀芯移动, 接通①流向②, 在③处截止。

When de-energized, the SV10-33 allows flow from ③ to port ①, blocks port ②. When energized, the spool shifts to open flow between port ① and ②, but block port ③.



断电时, SV10-34 允许油液从②流向①, 在③处截止。通电后, 阀芯移动, 接通②流向③, 在①处截止。

When de-energized, the SV10-34 allows flow from ② to port ①, blocks port ③. When energized, the spool shifts to open port ② to port ③, but block port ①.



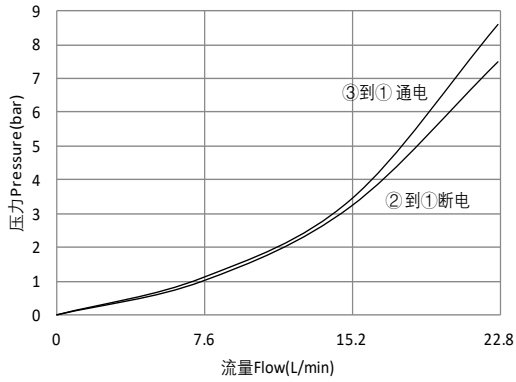
性能曲线 Performance

测试条件 Test condition

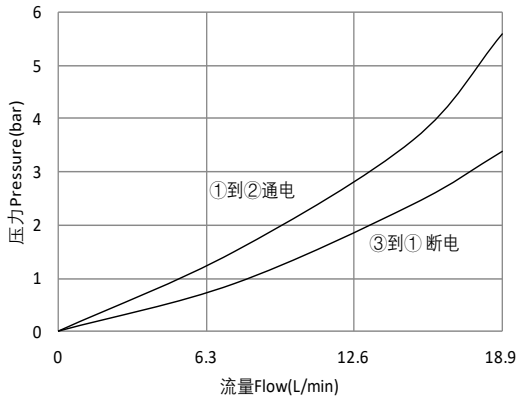
45°C时 46cSt 的油液

46cSt oil at 45°C

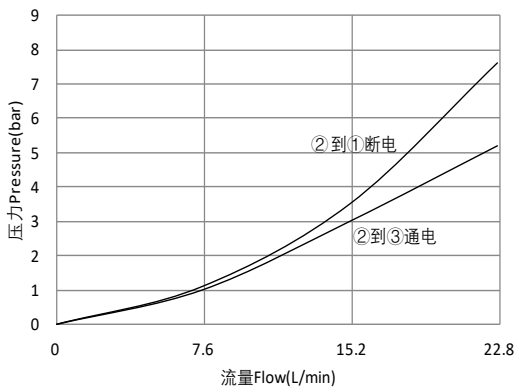
SV10-31压流曲线



SV10-33压流曲线

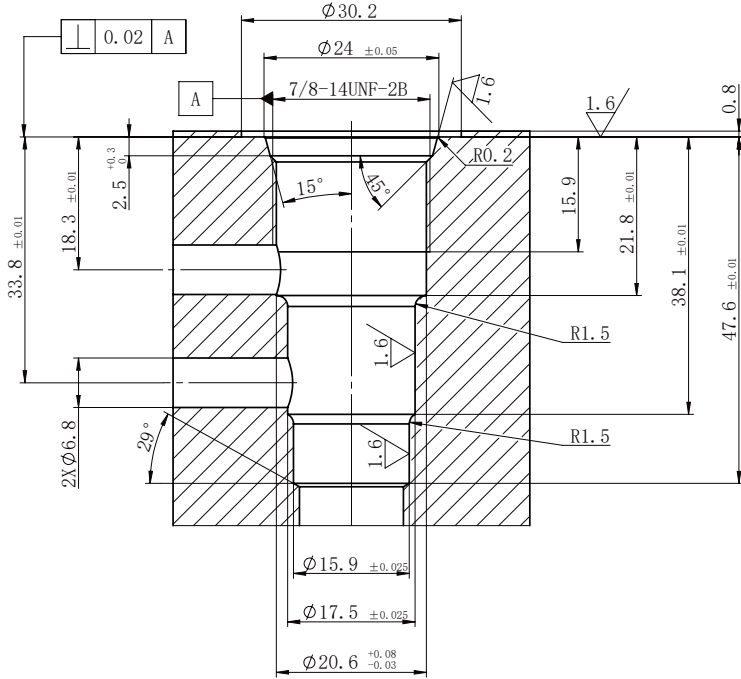


SV10-34压流曲线



## ① 插孔图 Cavity

VC10-3



## 📋 订货编号 Ordering code

SV10 - 3X - \*\*

阀系列编号  
Valve basic code

机能符号 Symbol

31

33

34

线圈选型 Coils Options

| 线圈型号<br>Coils model | 电压值<br>Voltage (V) |
|---------------------|--------------------|
| 01                  | 12                 |
| 02                  | 20                 |
| 03                  | 24                 |