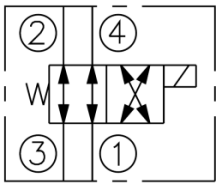
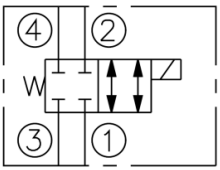
电磁换向阀
Solenoid Directional valve

SV10-4X 系列
美制插孔—276bar
SV10-4X Valve Series
U.S. Cartridge — 276 bar

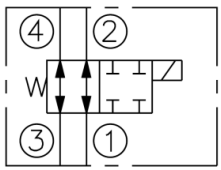
原理图 Symbol



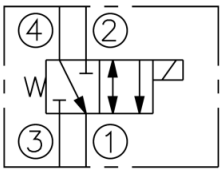
SV10-40
207 Bar (3000 psi)



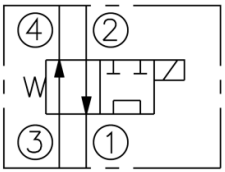
SV10-41
207 Bar (3000 psi)



SV10-42
207 Bar (3000 psi)



SV10-43
207 Bar (3000 psi)



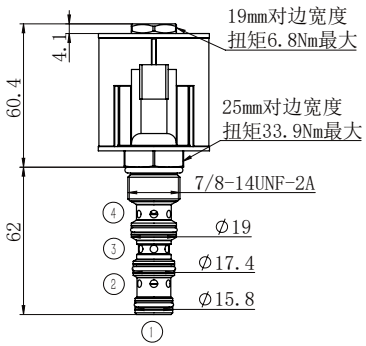
SV10-44
207 Bar (3000 psi)

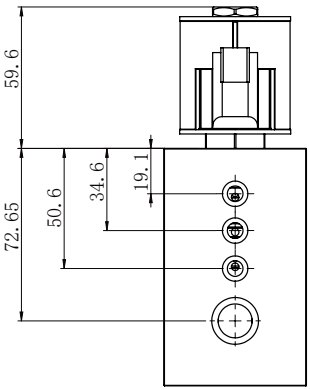
描述 Description

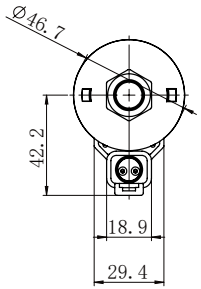
SV10-4X: 二位四通电磁换向滑阀
4-Way,2-Position Solenoid-Operated Directional Spool Valve

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

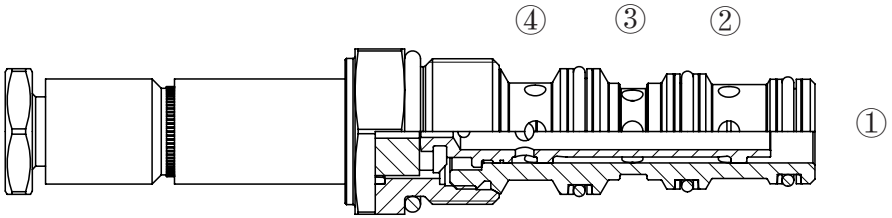
· 滑阀经过热处理硬化并经过精密加工，保证更低的內泄漏及更长的使用寿命。外部零件外表面都是经过镀锌镍处理和防腐蚀处理。所有零部件均采用高强度钢材制造。结构紧凑、体积小。
· 额定电磁线圈适合连续工作。
· 可选线圈电压、插头。
· 可以对所有油口完全加压。
· 插件电压可互换。
· 可选 IP69K 防水 E 型线圈。
· 工业通用阀孔。

· 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

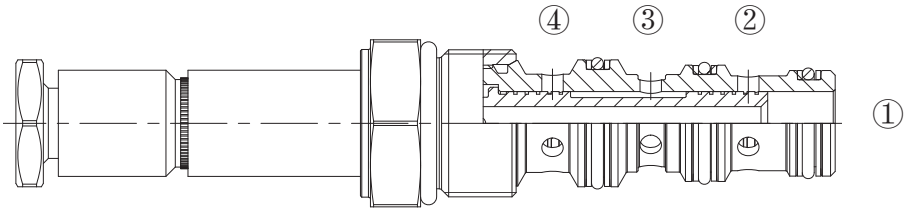
工作压力 **Pressure rating**	207bar
最大工作压力 **Maximum operating pressure**	276 bar
最大流量 **Maximum flow**	23l/min
最大内泄漏量 **Maximum internal leakage**	82 cc /min @207bar工作压力 82 cc /min @ 207bar pressure rating
线圈额定负载 **Coil rated load**	可在85%~115%的额定电压范围内连续工作 Work continuously in the rated voltage range of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

工作原理 How it works



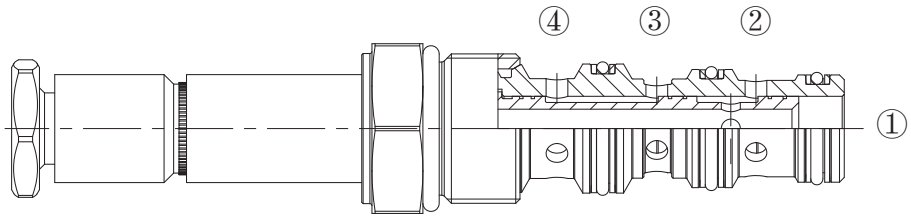
断电时, SV10-40 允许油液从③流向②, 以及从④流向①。通电后, 阀芯受到电磁力的作用而移动, 油液从③流向④, 以及从②流向①。

When de-energized, the SV10-40 allows flow from ③ to port ② , as well as from port ④ to port ① . When energized, the spool shifts to open port ③ to port ④ and port ② to port ① .



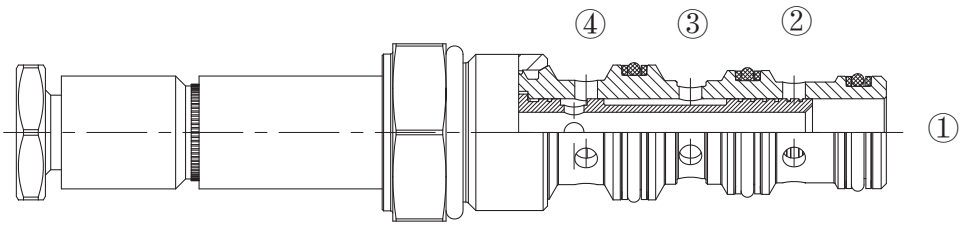
断电时, SV10-41 截止油液流向所有油口。通电后, 阀芯移动, 接通③ 流向④, 以及②流向①。

When de-energized, the SV10-41 blocks flow to all ports. When energized, the spool shifts to open flow between port ③ and ④ , as well as from port ② to port ① .



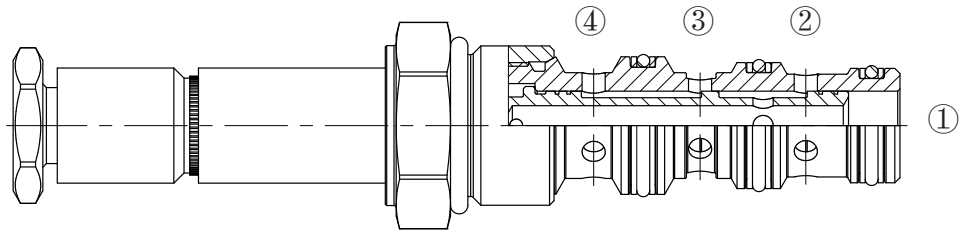
断电时, SV10-42 允许油液从③流向④, 以及从②流向①。通电后, 阀芯受到电磁力的作用而移动, 在所有油口截止油液流动。

When de-energized, the SV10-42 allows flow from ③ to port ④ , as well as from port ② to port ① . When energized, the spool shifts to block all ports.



断电时, SV10-43 允许油液从④流向①, 而截止③ 和② 。通电后, 阀芯受到电磁力的作用而移动, 油液从③流向④ , 而截止②和① 。

When de-energized, the SV10-43 allows flow from ④ to port ① , as well as from port ③ to port ② . When energized, the spool shifts to open port ③ to port ④ , but port ① and port ② are closed.

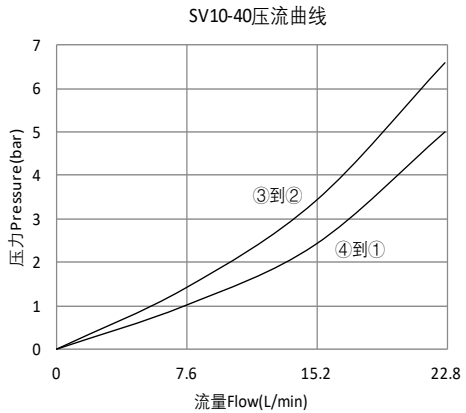


断电时, SV10-44 允许油液从③流向④, 以及从②流向①。通电后, 阀芯受到电磁力的作用而移动, 油液从③流向①, 而截止④和②。

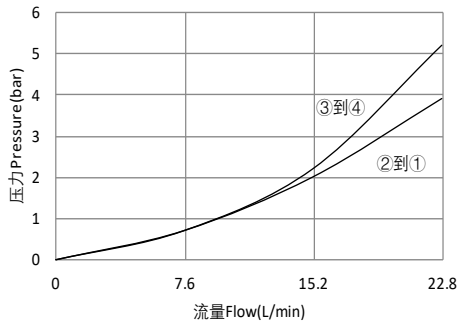
When de-energized, the SV10-44 allows flow from ③ to port ④ , as well as from port ② to port ① . When energized, the spool shifts to open port ③ to port ① , but port ④ and port ② are closed.

性能曲线 Performance

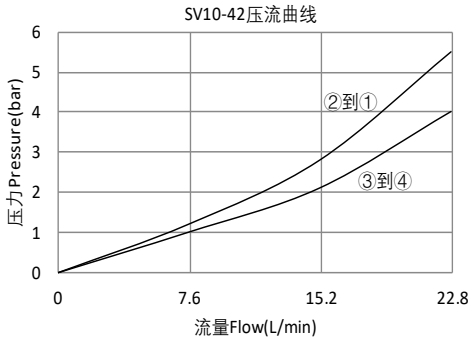
测试条件 Test condition
45℃时 46cSt 的油液
46cSt oil at 45℃



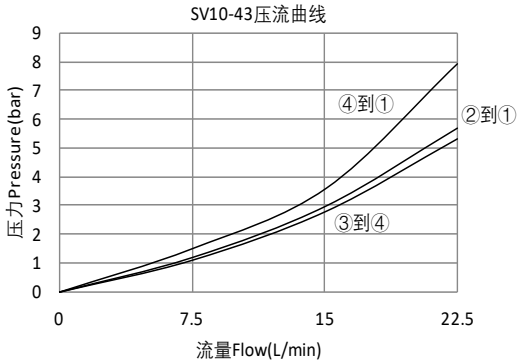
SV10-41压流曲线



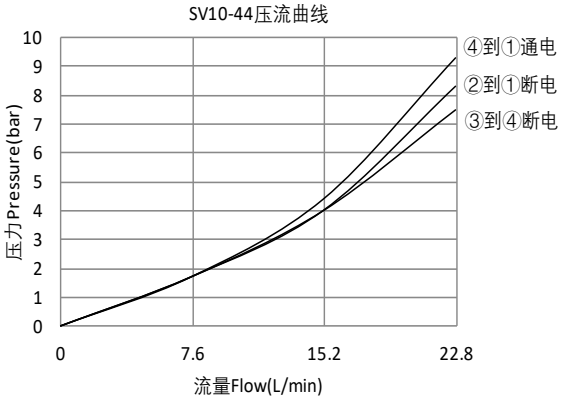
SV10-42压流曲线



SV10-43压流曲线



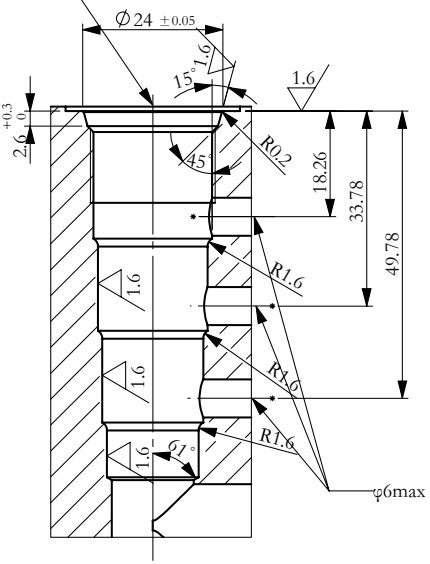
SV10-44压流曲线



插孔图 Cavity

VC10-4

○30.2（孔口平面直径）x0.8（深度）#
○15.92/15.88（直径）x63.5（深度）*
○17.53/17.48（直径）x53.98（深度）*
○19.1/19.05（直径）x38.1（深度）*
○20.68/20.57（直径）x22.1（深度）*
○7/8-14UNF-2Bx15.88（深度）*



可以同时使用一种成型刀具加工上述阀孔
（除先导钻孔和交叉钻孔外）
○-这些直径的同轴度要小于0.05；并且孔口平面垂直度要小于0.025.
*-深度由孔口平面确定。
#-除非在加工图纸上另行表明，未指明的公差为±0.12.