

DV1050Ex 机动车燃油加油机双流量电磁阀使用说明书

User's manual for DV1050Ex Dual- flow solenoid valve for fuel Machine

安装前请认真阅读此说明书, 确认电磁阀的使用环境及供电电源电压等是否与要求相符。

Please read carefully this instruction before installing the solenoid valve to make sure that the operating environment and power supply for the valve are consistent with requirements.

电磁阀的安装及维护, 必须由具备相应资格的专业人员按照使用说明进行操作。

The installation and maintenance must be handled by the qualified operator according to the instruction.

1、概述 General introduction:

DV1050Ex 双流量电磁阀 IEC60079-0:2017, IEC60079-18:2017 标准, 符合欧盟 2014/34/EU 指令和英国法律法规 SI 2016 第 1107 条关于用于潜在爆炸性气体环境中的设备和保护系统, 且通过 IECEx 认证。该电磁阀适用于电脑加油机中两种大小流量的控制, 达到快速高效及所加油料的精确计量, 适用于汽油、柴油、煤油等介质。产品的适用大气条件范围: 压力 80kPa~110kPa, 标准氧含量体积比为 21% 的空气。

DV1050Ex solenoid valve is an electric device that complies with standards (IEC60079-0:2017, IEC60079-18:2017), the requirements of European Union Directive 2014/34/EU(ATEX), and UK regulation SI 2016 No. 1107 on equipment and protective systems intended for use in potentially explosive atmospheres, and carries an internationally recognized IECEx certification. It is applicable to the computerized fueling dispenser to control the high flow and low flow in attaining a quick and efficient fueling with an accurate metering. The media can be petrol, diesel, Kerosene etc.. The suitable atmosphere used should be with the pressure range of 80kPa ~ 110kPa, with standard oxygen content of air: 21% .

2、技术参数 Technical data:

额定工作电压 Nominal working voltage:	AC230V±10%;DC24V
额定功率 Nominal power:	2x5.5W(AC230V);2x6.8W(DC24V)
电阻 Resistance:	3.6KΩ±10%(AC230V);85Ω±10%(DC24V) @25℃
环境温度 Ambient temperature:	-40℃≤Ta≤55℃
工作压力 Pressure range:	0.035Mpa~ 0.35Mpa
流量 Flow:	≥40L/min(Max flow)

3、认证标记: 线圈铭牌上有下列相关标记

Marks on certificate: the following marks shall be on the coil:

型号 Model: DV1050Ex

组别 Class: 

Ec 认证 EC type examination certificate:	CML 19ATEX5480X CML 21UKEX5220X IECEX CML20.0154X
防护方式 Prevention mode :	Ex mb IIC T4 Gb
温度等级 Temperature class:	T4
环境温度 Ambient temperature:	-40°C ≤ Ta ≤ 55°C

4、安装说明 Installation instruction:

为使电磁阀处于最佳工作状态，安装时请把电磁先导头垂直于水平面向上。

Install the pilot valve upward vertically to ensure best working condition of the valve.

建议在本阀前加装合适过滤网，安装时保证管道内部清洁干净。

We suggest to place a proper filter net before install the valve to ensure the valve work perfectly, please be sure that the pipelines are clean when proceed the installation.

安装时注意阀体流向标志必须与燃油流向一致，凡因方向错误，本阀件将不起作用。

Please pay attention to the flow direction marked on valve body of which should be same with the fuels direction. In case of any error caused by wrong direction, the valve will not work.

线圈正常工作前必须与铁芯组和电磁阀阀体配套完整，旋紧安装螺帽，阀体通过金属管道连接加油机，阀体与加油机必须保证良好的等电位连接，阀体到加油机总接地排间接地电阻小于 0.1 欧姆。

The coil should be completely connected to the iron core group and the solenoid valve before it works, screw the install but tightly, the valve body connected to the dispenser through the metal pipelines, the solenoid valve and dispenser should be well equipotential connected, the resistance between the valve and the ground terminal of oil dispenser is less than 0.1ohm.

电源电缆的延长线须配具有相应额定参数的隔爆型或增安型接线盒，不得在电缆上施加外力。

The extension wire of the power cable should be equipped with explosion-isolation or safety junction box with relative nominal parameters, extra foreign force should not be applied on the cable.

在电磁阀线圈供电线路上必须串接额定电压为 250V，额定电流为 100mA (用于 AC230V 线圈) 或 500mA (用于 DC24V 线圈)，分断能力为 1500A 的熔断器。

A fuse with rated voltage 250V and rated current 100mA(used for AC230V coil) or 500mA(used for DC24V coil), it's breaking capacity shall be 1500A.

维修及保养时必须先切断电源电压并卸去管道内介质压力方可操作，不得带电及在未卸去管道内介质压力的状态下工作。

Please cut off the power supply and release the media pressure inside of pipeline before conducting maintenance.

为防止静电影响，除尘时，电磁阀线圈外表面必须用湿布擦拭。

Wipe off the dust on the surface of the valve coil with wet cloth when dedusting for avoiding static electricity.

电磁阀使用时需要一定的防护，防止外力冲击及强烈光照，必须安装在加油机外壳内使用。

Certain protection is required when use the solenoid valve, and it should be used and installed in the outer housing of the fuel dispenser to avoid exogenous impact and intense light.

电磁阀被用在有腐蚀性物质的场合时，用户必须采取相应的预防措施，以免电磁阀受到腐蚀，所采取的预防措施不能危及电磁阀的安全。

(腐蚀性物质：各种能腐蚀金属或聚合物的酸和气体。预防措施：建立定期检查制度。根据腐蚀性物质的化学特性建立防止方法。)

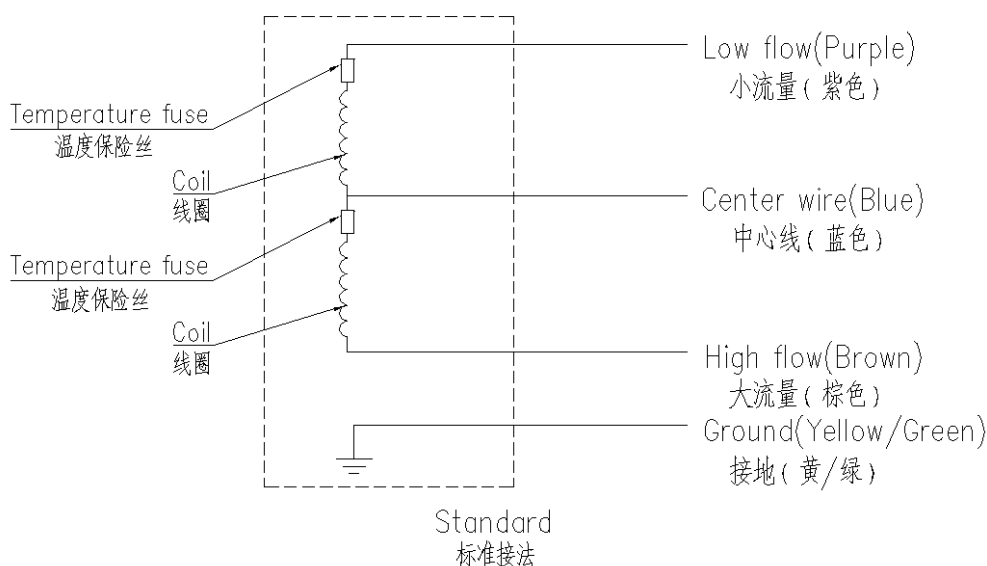
If the solenoid valve is to be used in the places with corrosion material, certain precautions should be taken to prevent the valve being corroded, meantime, the precaution taken can not endanger the safety of the valve.

(corrosion material: acid gas which may corrode the metal or polymer.

Precaution: set up periodic checking system, and also prevention method should be set up according to the chemical characters of the corrosion material.)

5、接线示意图 Wiring drawing:

请按以下方法接线 Please follow the below drawing when wiring



6、维护保养 Maintenance:

设立对产品进行周期性检查的机制。

Set up periodic checking system.

需要在有授权人员的指导下进行维修。

Maintenance should be conducted by qualified person.

用户不能自行对线圈进行拆装，修复。

Disassembling or repairing the coil by users is prohibited.

7、常见故障及排除 Common failures and exclusion

S/No. 序号	Item 项目	Problems 表现或原因	Judge method 判定方法	Method to solve the problem 解决方法
1	Coil burned out 线圈故障	No fuel flow out when the valve is energized, and the outside appearance of the coil is abnormal. 通电后电磁阀不出油或线圈外形异常。	The inner mandrel has no magnetic suction after the coil is energized. 线圈通电后内置芯棒无电磁吸力。	Change 更换线圈
2	Strange noise 异音	After energized, the valve can work properly, but strange noise is existing. 通电后工作正常但有交流噪声。		Clean the pilot valve, screw the nut tightly. 清洗先导阀，拧紧螺帽。
3	Outer leakage 外泄漏			Fasten the bolt, or change the leaking component. 紧固螺钉或更换泄漏元件。
4	Internal leakage 内泄漏	The valve can't close after de-energized. 电磁阀断电后不能关闭。	After reset flow has been reached, the fuel gun is opening, flow is still existing. 预置定量到达后，油枪开启仍有流量显现。	Change the diaphragm, or clean the valve parts. 膜片更换或清洗阀件。
5	Slow action 动作迟缓	Slow reaction after energized. 通电后反应迟缓。		Clean the valve parts and pilot valve. 清洗阀件及先导阀。
6	No action of the auxiliary valve 无副阀作用	Wrong connection of low and high flow of the coil, the orifice of the diaphragm is blocked, the main valve and pilot valve are not tightly closed. 线圈大小流量接反，膜片小孔堵塞，主阀先导阀关闭不严。	No low flow existing. 预置加油无小流量体现。	Correct the wiring, clean the valve parts or diaphragm. 确认接线方式清洗阀件或膜片。
7	Low flow of the main valve or no fuel flow out 主阀流量小或不出油	The diaphragm doesn't not open in whole stroke, the main and pilot valve doesn't open in whole stroke or no stroke. 膜片无全程开启，主阀先导阀无全程开启或无行程。		Clean or change the main valve and pilot valve, ensure whole stroke, clean the channel of the valve cover. 清洗或更换主阀先导阀，保证全行程，清洗阀盖通道。

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