



DCF-ZM系列

电磁脉冲阀选用说明书

Manual of DCF-ZM Type
Electromagnetic Pulse Valve

技术支持

我们积累了丰富的实践经验，可以为您提供完善的客户服务和技术支持。

一贯秉承为客户减降费用的宗旨，所有方案按现场实际需求而设定。我们相信合适的才是最好的！

协昌恭候您的光临！

Technical support

We have accumulated abundant practical experiences and can provide you with perfect customer service and technical support. We always adhere to the aim of reducing cost for customers and all of our programs are devised in line with the actual requirements on the spot. We believe only the fittest is the best!

Xiechang requests the pleasure of your company!

协昌环保科技

XIECHANG

ENVIRONMENTAL PROTECTION TECHNOLOGY



XIE CHANG
www.xiechang.com

■ 苏州工业园区协昌环保科技有限公司 地址：苏州工业园区跨春路243号 邮编：215122
■ 总机：0512-88180818 市场部：0512-88180700 88180800 传真：0512-88180810
■ 苏州协昌环保科技门市部 地址：苏州市园林路11号 邮编：215000
■ 市场部：0512-67219202 67216899 传真：0512-67212786
■ <http://www.xiechang.com> E-mail: market@xiechang.com

保
淨

北
大
氣
護
人
民

蘇州協昌工業有限公司
沈明



电磁脉冲阀 Electromagnetic pulse valve



- DCF-Y型系列 DCF-Y series
- DCF-Z型系列 DCF-Z series
- DCF-ZM型系列 DCF-ZM series
- DMY-II型系列 DMY-II series
- DMY-III型系列 DMY-III series

电控仪 Electric control cabinet



- SXC-8A 型在线脉冲清灰系列
SXC-8A Online pulse ash remover
- SXC-8B 型离线脉冲清灰系列
SXC-8B Offline pulse ash remover
- SXC-8B-1 气箱脉冲清灰系列
SXC-8B-1 Gas box pulse ash remover
- SXC-8B-D 型大气反吹反吸清灰系列
SXC-8B-D Gas removal by atmospheric
back flushing and washing
- SXC-8P1 型差压清灰控制系列
SXC-8P1 Pressure difference pulse ash remover
- SXC-3 型温度电脑控制仪系列
SXC-3 Computer temperature controller
- SXC-P 型脉冲电脑控制柜系列
SXC-P Computer pulse control cabinet

滤袋 Filter bag



根据用户的要求加工各种形状的如圆形、梯形扁形等异形滤袋和圆形滤筒
Customized shapes such as round, special shapes, e.g., tapered, flat, etc. And round filter cylinder



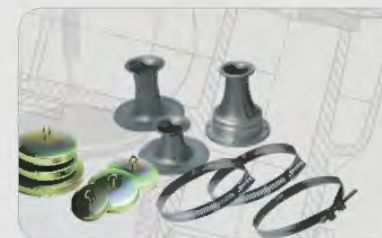
滤袋笼骨 Framework of filter bag

- 种类：笼式、拉簧式笼骨
Type: cage type, draw type
- 形状：圆形、星形、扁形和异形笼骨
Shape: Round, star shape, flat or other special shape
- 安装式：上装式、下装式
Mounting type: upper mounting, lower mounting
- 多节种类：卡箍式、插节式、卡盘式、斜插式
Connection type: slip-collar, sectional type, chuck, oblique insertion
- 表面处理：电镀、环氧树脂、有机硅粉末喷涂
Surface treatment: electroplate, coating with epoxy resin and organic silicon



电磁脉冲阀连接配件 Connection fittings of electromagnetic pulse valve

- 淹没式阀接管连接器：3/4"~3"
Jetting connector of submerged valve
- 角阀箱壁连接器：1"~1 1/2"
Tank wall connector of angle valve
- 角阀专用活接头：1"~1 1/2"
Special movable connector for angle valve



配件 Fittings

- 气动破拱器
Pneumatic blockage remover
- 文氏管
Venturi
- 链条式布袋吊挂装置
Hanging device of chain-type cloth bag
- 吊杆式布袋吊挂装置
Hanging device of suspender type cloth bag
- 卡箍
Clip
- 滤袋座
Filter bag seat
- 环隙引射器
Jet exhaustor with annular space
- 高速引射喷嘴
High-speed jet nozzle

目录 CONTENTS

企业简介	1-2
Briefing of the enterprise	
DCF-ZM型电磁脉冲阀选用说明	3
Manual of DCF-ZM Type Electromagnetic Pulse Valve	
一、电磁脉冲阀	3-5
Electromagnetic pulse valve	
二、箱壁连接器	5-7
Tank wall connectors	
三、专用活接头	7-8
Special movable connector	
四、电磁脉冲阀与箱壁连接器、喷吹管和分气箱 安装选用说明	9-11
Instruction on electromagnetic pulse valve, tank wall connector, jet pipe and air distribution tank	
编后语	12
Postscript	

DCF-ZM型电磁脉冲阀选用说明

Manual of DCF-ZM Type Electromagnetic Pulse Valve

“协昌”研制的三种常用的ZM型电磁脉冲阀是一种外螺纹连接结构，是在Z型直角电磁脉冲阀基础上改进的品种。

该电磁脉冲阀具有Z型电磁脉冲阀的灵敏度高、排气量大、工作稳定等，同等的性能，同时它与XC-XBD型、XC-XBS型箱壁连接器和XC-HJD (ZM) 型专用活接头配套使用，具有安装、维修方便，使用可靠的特点。

The three types of ZM electromagnetic pulse valve developed by Xiechang is of connection structure with external thread, improved on the basis of Z type electromagnetic pulse right-angle valve.

The electromagnetic pulse valve features the favorable advantages of Z type electromagnetic pulse valve such as high sensitivity, large air displacement and stable performance, etc.; at the same time, it can be matched with XC-XBD, XC-XBS tank wall connector and XC-HJD (ZM) special movable connector, featuring convenient installation, maintenance and reliable performance.

一. 电磁脉冲阀 Electromagnetic pulse valve

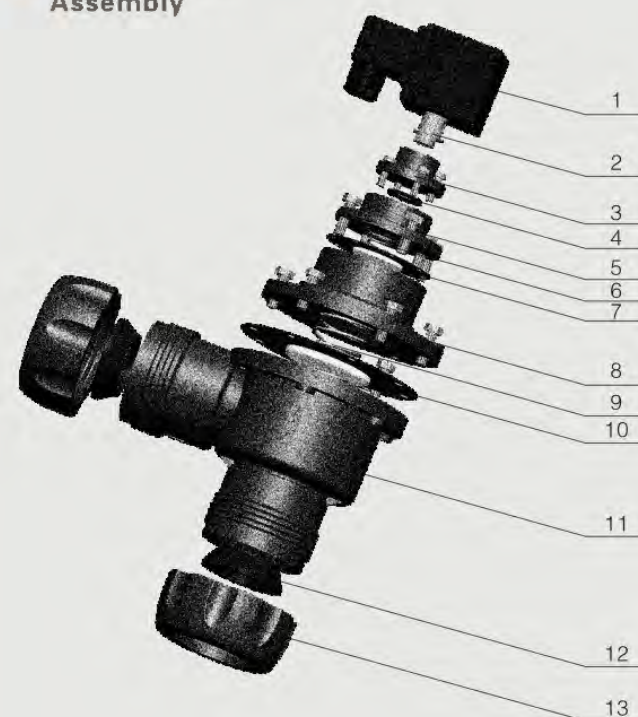
■ 结构特点

脉冲阀的进、排气口，均采用专用螺母(采用铝合金或不锈钢材质)和专用密封圈，在光滑的进、排气管外壁与阀体口端密封，结构简单、操作方便、密封可靠。脉冲阀进气口内结构与定位钢圈安装使用，可防止因惯性冲击而松动，同时可保证准确的安装位置。不锈钢螺母在长时期使用后，仍能保证拆装方便。

■ Structural Characteristics

The air intake and outlet of the pulse valve use special nuts (al alloy or stainless steel) and special seal ring, which is used for sealing of the smooth external wall of the valve air intake, outlet and the valve mouth, featuring simple structure, easy operation and reliable sealing. The inside structure of the valve air intake is installed with locating steel ring to prevent loosening due to inertial impact and at the meantime to ensure accurate installation. Even after long-time use, the nut made of stainless steel gives convenient assembly and disassembly.

■ 电磁脉冲阀组件 Assembly



电磁脉冲阀型号 Model	电磁脉冲阀型号 Model	名称 Name
	序号 Serial number	
	1	电磁线圈 Electromagnetic coil
	2	先导头组件 Armature assembly
	3	先导头压板 Armature clamping plate
	4	压板密封圈 Seal ring of clamping plate
DCF-ZM-20	5	先导头阀座 Armature valve seat
	6	小弹簧 Small spring
DCF-ZM-25	7	通用小膜片组件 Universal-purpose small diaphragm assembly
	8	S阀盖 S bonnet
DCF-ZM-40S	9	大弹簧 Big spring
	10	大膜片组件 Big diaphragm assembly
	11	ZM阀座 ZM valve seat
	12	ZM型阀座密封圈 ZM type valve seat insert
	13	ZM型压紧螺母 ZM type clamp nut

说明:

- DCF-ZM-20和DCF-ZM-25两种阀不设序号5、6、7三种组件。
- 提出组件名称和所属电磁脉冲阀型号可供货。

Instruction:

- DCF-ZM-20 & DCF-ZM-25 Three types of assembly, numbering respectively 5, 6 and 7.
- Supply is possible upon your information of assembly name and the corresponding model number of electromagnetic pulse valve

■ 型号规格 Model Specification

ZM型阀型号 Model	ZM型阀规格 Specification	阀体进、排气口标准尺寸 Standard dimension of air intake and outlet of the valve	
		公称通径 (mm) Inside nominal diameter	连接螺纹 (寸制) Inside nominal diameter (inch)
DCF-ZM-20	3/4"	20	G3/4"
DCF-ZM-25	1"	25	G1"
DCF-ZM-40S	1 1/2"	40	G1 1/2"

■ 型号含义 The meaning of model



■ 技术标准 Technical standards

工作压力: 0.4~0.6MPa
Work pressure: 0.4~0.6MPa
工作介质: 清洁空气
Work medium: clean air
电压: DC24V、(AC220V/50HZ)
Voltage: DC24V、(AC220V/50HZ)
电流: 0.8A(0.05A)
Current: 0.8A(0.05A)
使用环境:
Application environment:
①温度: -10° C~55° C
Temperature: -10° C~55° C
②空气的相对湿度不超过85%
The relative humidity of air not exceeding 85%
膜片寿命: 100万次
Maintenance life of diaphragm: 1 million times

■ 工作原理

电磁脉冲阀由电磁先导头、膜片和阀体组成，膜片后腔的面积大于前腔的面积，气压作用力大，使膜片处在关闭位置。

电控仪输入电信号，使电磁先导头吸合动柱，打开卸荷孔，膜片后腔的压力气体迅速排出，膜片前腔的压力气体将膜片抬起，打开通道，脉冲阀进行喷吹。

电脉冲信号消失，电磁先导头的弹簧使动柱立即复位封闭卸荷孔，膜片后腔气体压力和弹簧作用力使膜片关闭通道，阀停止喷吹。

膜片上的阻尼孔，当先导头动柱抬起气体压力卸荷时，起到阻尼气流的作用，当卸荷孔封闭时，使压力气体迅速充满到后腔，使膜片关闭通道，停止喷吹。

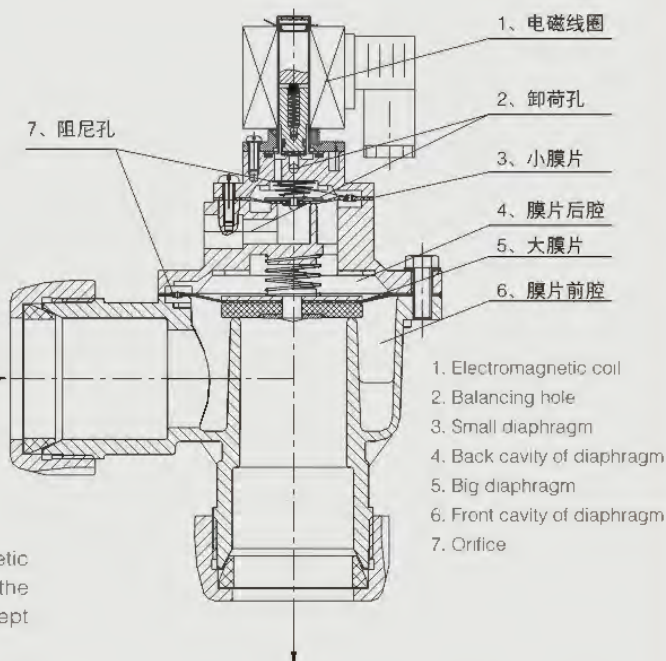
■ Work principle

Electromagnetic pulse valve is composed of electromagnetic pre-head, diaphragm and valve body. The back cavity of the diaphragm is bigger than the front cavity. The diaphragm is kept at the closed position due to the effect of big pressure.

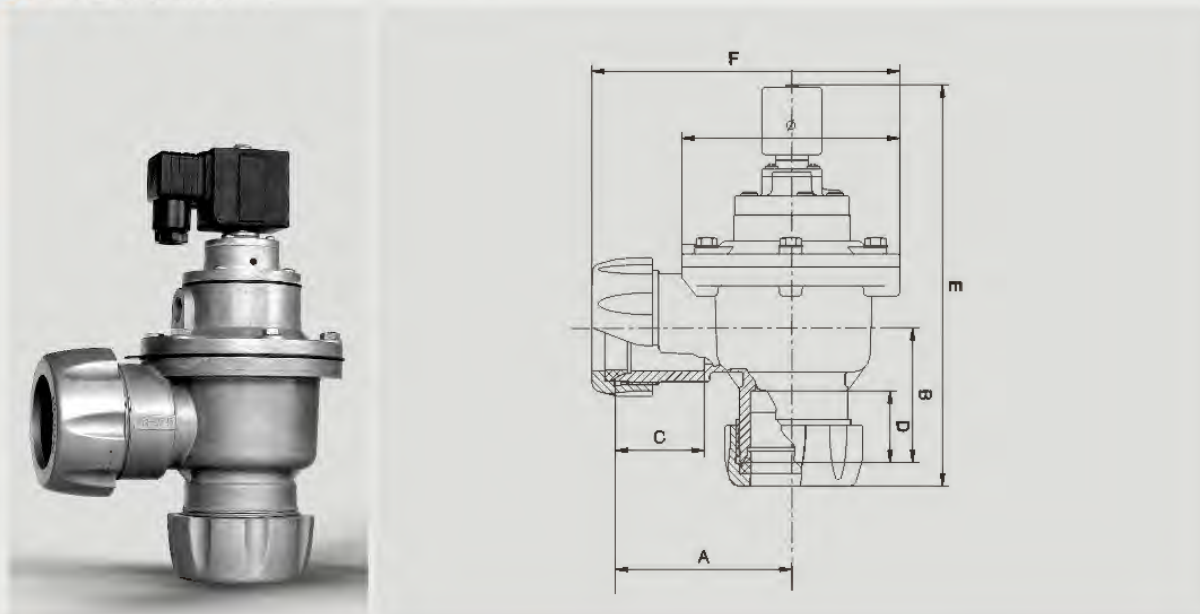
Electric control cabinet inputs electronic signal so that the electromagnetic armature attracts the moving bar. Unclose the balancing hole to release the pressure gas in the back cavity of the diaphragm quickly; the pressure gas in the front cavity holds up the diaphragm to open the passage and the pulse valve starts blowing.

The signal disappears and the spring of the armature works immediately to resume the moving bar so as to close the balancing hole. The pressure gas in the back cavity of the diaphragm and the spring work together to close the passage and the valve stops blowing.

The orifice in the diaphragm functions to damp the airflow when the moving bar of the armature holds up for balancing and to transit the air to the back cavity as soon as the balancing hole is shut to close the passage and stop blowing.



■ 组件图示和外形尺寸 Drawing and dimension



电磁脉冲阀型号 Model	连接通气管外径 (mm) Outer diameter of gas connecting tube	尺寸 Dimension (mm)						
		A	B	C	D	E	F	φ
DCF-ZM-20	φ 26.6	67	45	26	26	162	118	80
DCF-ZM-25	φ 33.5	78	70	32	38	192	139	96
DCF-ZM-40S	φ 48.0	103	78	51	42	236	170	112

■ 电磁阀与配套件明细表 Electromagnetic Valve and Accessories List

电磁脉冲阀型号、规格 Model、Specification	专用活接头型号、规格 Model and specification of movable special connectors	箱壁连接器型号、规格 Model and specification of tank wall connectors	
DCF-ZM-20	XC-HJD (ZM) -20	XC-XBD-20	单螺纹结构 Single-thread structure
DCF-ZM-25	XC-HJD (ZM) -25	XC-XBD-25	
DCF-ZM-40S	XC-HJD (ZM) -40	XC-XBD-40	
DCF-ZM-20	XC-HJD (ZM) -20	XC-XBS-20	双螺纹结构 Double-thread structure
DCF-ZM-25	XC-HJD (ZM) -25	XC-XBS-25	
DCF-ZM-40S	XC-HJD (ZM) -40	XC-XBS-40	

■ 结构特点

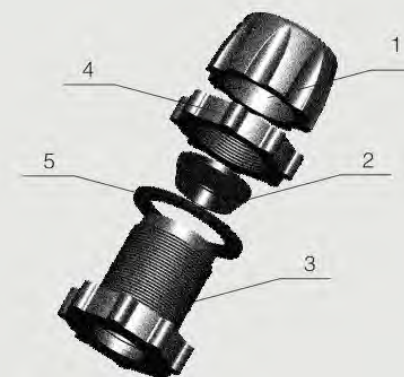
箱壁连接器分单头螺母压紧 (XBD型) 和双头螺母压紧 (XBS型) 两种结构形式。XBD型箱壁连接器, 喷吹管可穿过箱壁连接器与脉冲阀排气口连接, 单螺母压紧密封圈连接密封。XBS型箱壁连接器, 喷吹管插入箱壁连接器内侧一端, 通气管插入箱壁连接器外侧一端, 两端由螺母压紧密封圈连接密封。箱壁连接器与ZM型直角电磁脉冲阀和XC-HJD (ZM) 型专用活接头配套, 使用可靠, 安装维修方便。

■ Structural Characteristics

There are two structural types of tank wall connectors, single end nut (XBD type) and double end nut (XBS). For XBD type, the jet pipe can connect with the valve intake through tank wall connector and be sealed by single nut clamp seal ring. For XBS type tank wall connector, the blowing pipe is inserted into the inside end of tank wall connector and the air pipe is connected to the outside end of tank wall connector. Both ends are sealed with nut clamp seal ring. Tank wall connector is matched with ZM type right-angle electromagnetic pulse valve XC-HJD (ZM) type special movable connector, featuring reliable performance and convenient installation and maintenance.

■ 组件图示 Assembly drawings

□XBD型



□XBS型



序号 Serial number	组件名称 Assembly name	电磁阀脉冲阀型号 Model	组件型号 Assembly Model		注 Note:
			XBD型箱壁连接器	XBS型箱壁连接器	
1	阀座压紧螺母 Valve seat clamp nut	DCF-ZM-20	XC-XBD-20-2	XC-XBS-20-2	
		DCF-ZM-25	XC-XBD-25-2	XC-XBS-25-2	
		DCF-ZM-40S	XC-XBD-40-2	XC-XBS-40-2	
2	阀座密封圈 Valve seat insert	DCF-ZM-20	XC-XBD-20-3	XC-XBS-20-3	
		DCF-ZM-25	XC-XBD-25-3	XC-XBS-25-3	
		DCF-ZM-40S	XC-XBD-40-3	XC-XBS-40-3	
3	箱壁连接器本体 Tank wall connector body	DCF-ZM-20	XC-XBD-20.1	XC-XBS-20.1	
		DCF-ZM-25	XC-XBD-25.1	XC-XBS-25.1	
		DCF-ZM-40S	XC-XBD-40.1	XC-XBS-40.1	
4	箱壁压紧螺母 Tank wall clamp nut	DCF-ZM-20	XC-XBD-20.2	XC-XBS-20.2	
		DCF-ZM-25	XC-XBD-25.2	XC-XBS-25.2	
		DCF-ZM-40S	XC-XBD-40.2	XC-XBS-40.2	
5	箱壁密封垫 Tank wall gasket	DCF-ZM-20	XC-XBD-20.3	XC-XBS-20.3	
		DCF-ZM-25	XC-XBD-25.3	XC-XBS-25.3	
		DCF-ZM-40S	XC-XBD-40.3	XC-XBS-40.3	

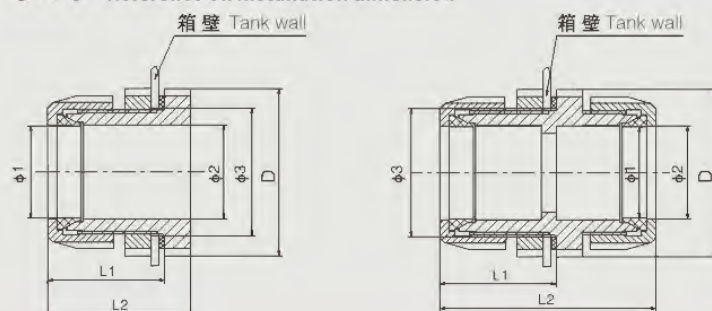
二. 箱壁连接器

“协昌”研制的除尘器的箱壁连接器产品, 避免了压力气管以焊接或螺栓连接通过除尘器箱壁, 使操作简单, 密封可靠, 安装、维修, 方便。

Tank wall connectors

The tank wall connector series of ash remover developed by Xiechang eliminates the necessity to connect the pressure pipe to the tank wall by means of welding or bolt-connection, which enables easy operation, reliable sealing as well as convenient installation and maintenance.

■ 安装参考尺寸 Reference on installation dimension



电磁脉冲阀规格 Specification	连接气管外径 Outer diameter of connection air pipe	XBD型箱壁连接器			XBD type tank wall connector			XBS型箱壁连接器			XBS type tank wall connector			D
		L1	L2	φ1	φ2	φ3	L1	L2	φ1	φ2	φ3			
DN20	φ 26.6	60.5	74.5	26	28	43	60.5	110	26	28	43	65		
DN25	φ 33.5	62.4	76.4	33	35	55	62.4	113.8	33	35	55	77		
DN40	φ 48	62.2	76.2	47	50	67	62.2	111.4	47	50	67	89		

注: 尺寸以毫米计。φ3 指箱壁孔。

Note: dimension in mm; φ3 refers to tank wall hole.

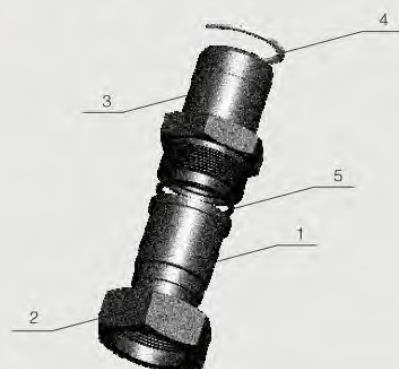
■ 箱壁连接器与配套组件明细表 Tank wall connector and accessory list

箱壁连接器名称 Name of tank wall connector	箱壁连接器型号 Model of tank wall connector	ZM型电磁脉冲阀型号 Model of ZM type electromagnetic pulse valve	专用活接头型号 Model of special movable connector	注 Note:
单螺纹箱壁连接器 Single-thread tank wall connector	XC-XBD-20	DCF-ZM-20	XC-HJD (ZM) -20	
	XC-XBD-25	DCF-ZM-25	XC-HJD (ZM) -25	
	XC-XBD-40	DCF-ZM-40S	XC-HJD (ZM) -40	
双螺纹箱壁连接器 Double-thread tank wall connector	XC-XBS-20	DCF-ZM-20	XC-HJD (ZM) -20	
	XC-XBS-25	DCF-ZM-25	XC-HJD (ZM) -25	
	XC-XBS-40	DCF-ZM-40S	XC-HJD (ZM) -40	

三、专用活接头 Special movable connector

为了安装和维修方便, 电磁脉冲阀与分气箱连接, “协昌” 采用HJD (ZM) 型专用活接头。专用活接头与电磁脉冲阀连接部位设定位钢圈, 可防止电磁脉冲阀在脉冲喷吹时, 因惯性冲击而松动, 并能保证电磁脉冲阀安装位置的一致性, 使电磁脉冲阀安装、维修方便, 使用可靠。

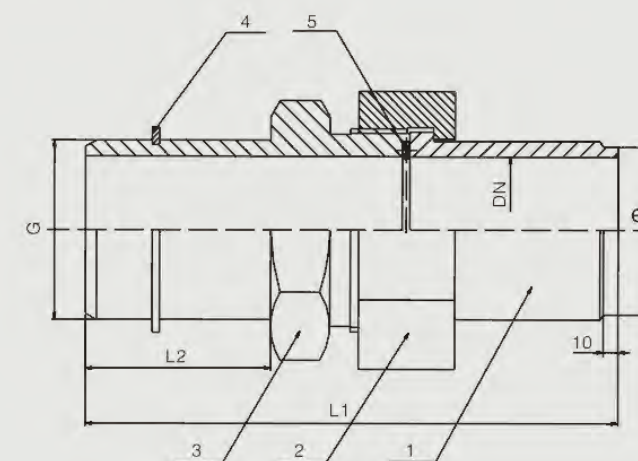
■ 组件图示 Assembly drawings



In order to facilitate installation and maintenance, special movable connector HJD (ZM) is used by Xiechang to connect electromagnetic pulse valve with air distribution tank. A locating steel ring is installed at the connection of the connector and the pulse valve to prevent loosening of electromagnetic pulse valve under the inertial impact during pulse jetting process and to guarantee the accuracy of the installation position of electromagnetic pulse valve so as to make it easy for installation and maintenance and ensure reliable performance.

序号 Serial number	组件名称 Assembly name	组件型号 Assembly Model	
		专用活接头型号 Model of special movable connector	组件型号 Assembly Model
1	活接头进气连接管 Intake connection pipe of movable connector	XC-HJD- (ZM) -40	XC-HJD- (Z) -40-1
		XC-HJD- (ZM) -25	XC-HJD- (Z) -25-1
		XC-HJD- (ZM) -20	XC-HJD- (Z) -20-1
2	活接头压紧螺母 Clamp nut of movable connector	XC-HJD- (ZM) -40	XC-HJD- (Z) -40-2
		XC-HJD- (ZM) -25	XC-HJD- (Z) -25-2
		XC-HJD- (ZM) -20	XC-HJD- (Z) -20-2
3	活接头排气连接管 Outtake connection pipe of movable connector	XC-HJD- (ZM) -40	XC-HJD- (ZM) -40-3
		XC-HJD- (ZM) -25	XC-HJD- (ZM) -25-3
		XC-HJD- (ZM) -20	XC-HJD- (ZM) -20-3
4	定位钢圈 Locating steel ring	XC-HJD- (ZM) -40	XC-ZM-GQ-40
		XC-HJD- (ZM) -25	XC-ZM-GQ-25
		XC-HJD- (ZM) -20	XC-ZM-GQ-20
5	O形密封圈 O-shaped seal ring	XC-HJD- (ZM) -40	GB/T3452.1-1992(40X3.55-G)
		XC-HJD- (ZM) -25	GB/T3452.1-1992(25X3.55-G)
		XC-HJD- (ZM) -20	GB/T3452.1-1992(20X3.55-G)

■ 外形安装尺寸 Installation dimension



专用活接头型号 Model of special movable connector	相配电磁阀型号 Model of matching electromagnetic valve	L1	L2	G	DN	φ
XC-HJD (ZM) -40	DCF-ZM-40S	143	50	G1½"	40	45
XC-HJD (ZM) -25	DCF-ZM-25	143	50	G1"	25	30
XC-HJD (ZM) -20	DCF-ZM-20	143	50	G¾"	20	25

四、电磁脉冲阀与箱壁连接器、喷吹管和分气箱安装选用说明

Instruction on electromagnetic pulse valve, tank wall connector, jet pipe and air distribution tank

“协昌”研制的DCF-ZM型电磁脉冲阀使用，备有H-D、H-S和Z-S三种安装形式，只要配套选用合理，可使安装、维修方便，使用可靠。

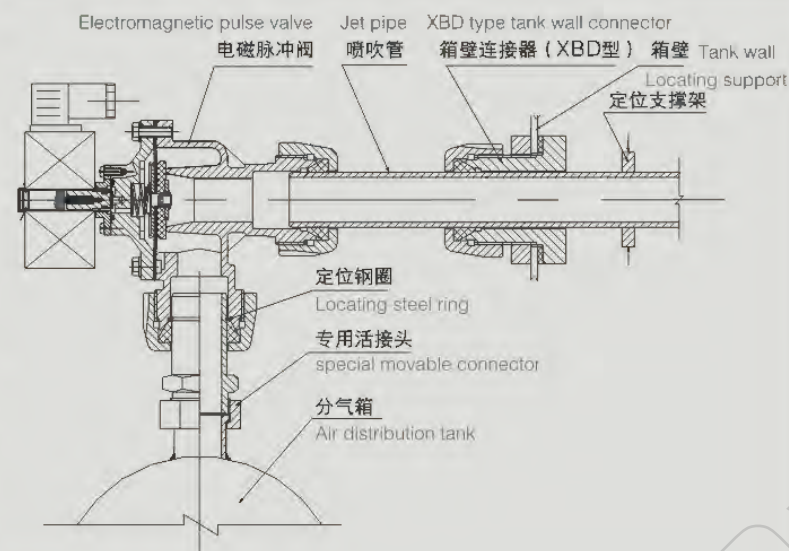
DCF-ZM type electromagnetic pulse valve developed by Xiechang has three installation modes, H-D, H-S and Z-S; Convenient installation, maintenance and performance can be achieved by reasonable selection and combination.

■ 安装图示

Drawing for installation

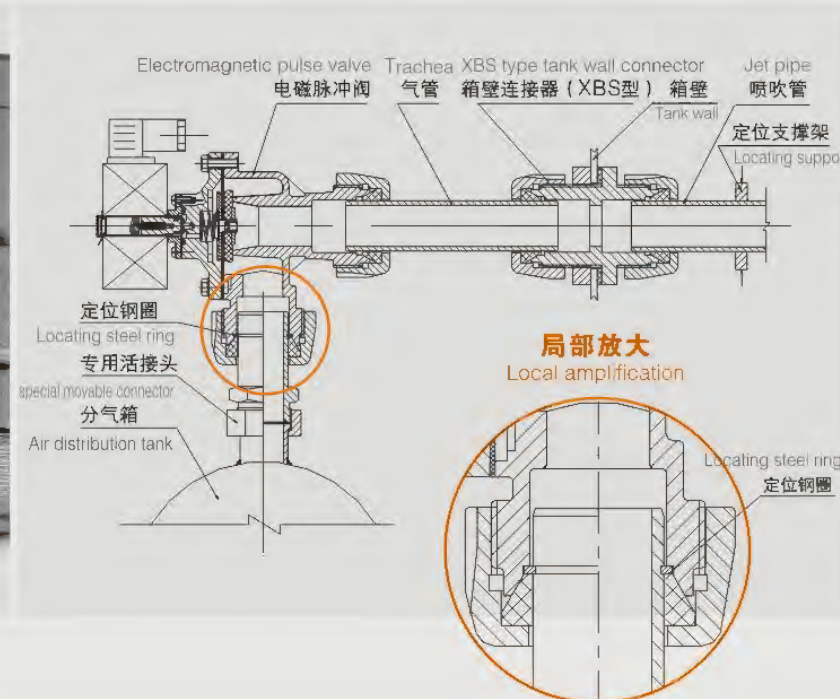
H-D安装形式

H-D Installation mode

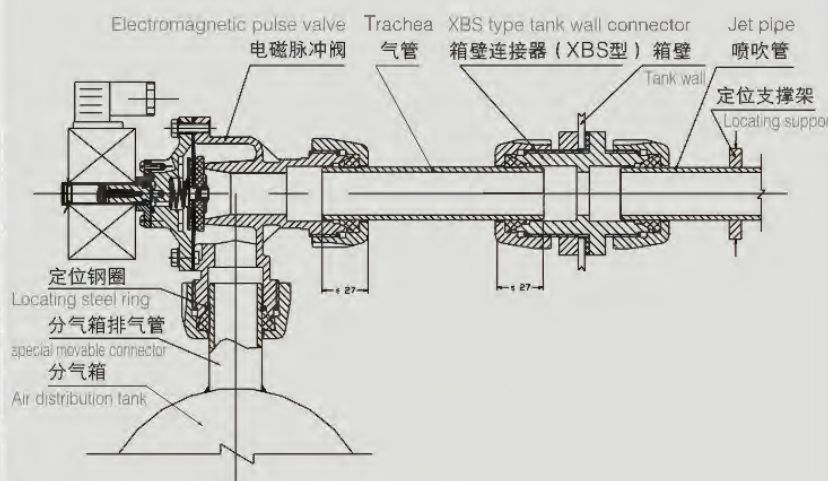


H-S安装形式

H-s Installation mode



Z-S安装形式 Z-S Installation mode

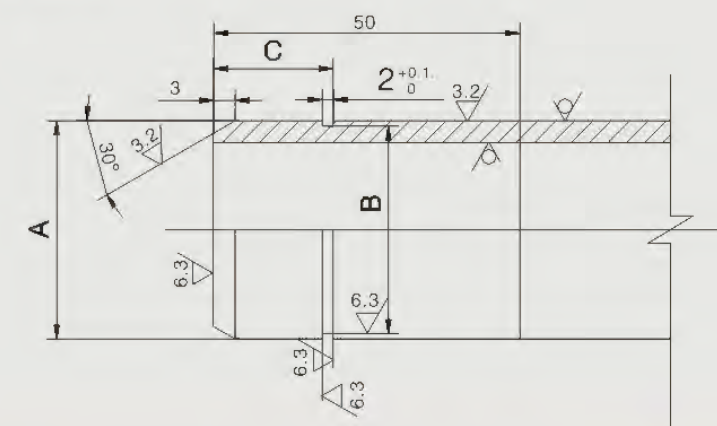


■ 气箱排气管(与脉冲阀连接部位)参考尺寸 Dimension of air tank exhaust (connected to pulse valve)

采用Z-S安装形式时，电磁脉冲阀与分气箱连接管，可安图示要求制作。

For Z-S installation, electromagnetic pulse valve and air distribution tank connection pipe can be produced according to the drawing requirement.

图示



排气管规格 Exhauster specification	A	B	C
DN40	φ 48	φ 46	20
DN25	φ 33.5	φ 31	20
Dn20	φ 26.6	φ 25	15