



Solenoid valve catalog model  
DCF\_Y

## Manual of DCF-Y Type Electromagnetic Pulse Valve

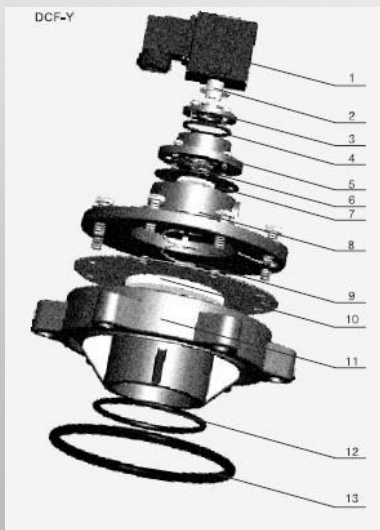
The electromagnetic pulse valve is just the valve in blowing pipeline of dust removal system with pulsed bag deduster. It is controlled by electric control instruments to remove dust with pulse (momentum) method. Combined with XC- GO- Y blowing pipe connector for use. Its operation is reliable. The installation and maintenance are convenient.

### Electromagnetic pulse valve

#### Structural Characteristics

The concealed structure (also called embedded structure) is adopted for the DCF-Y electromagnetic pulse valve developed by Xiechang Company, it is directly installed on air distribution box, so it has better characteristics: lower resistance and less pressure loss, the usage range of air source is expanded, and it is suitable in the site where the pressure of air source is lower.

#### Assembly

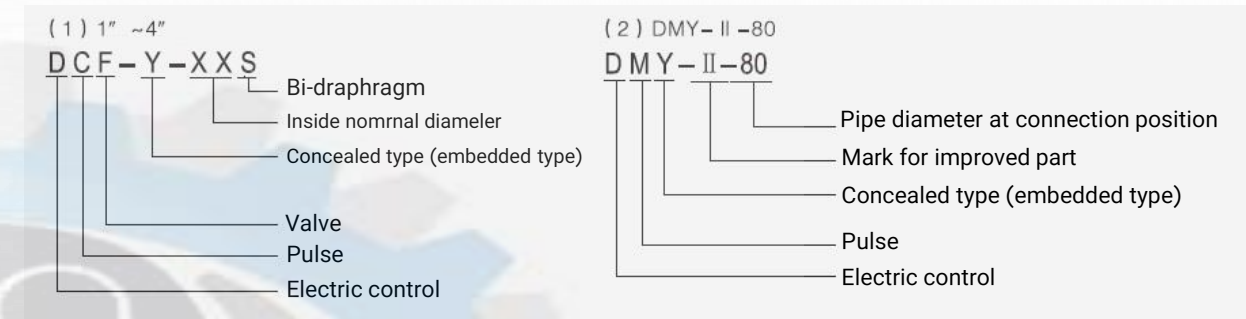


Model	Serial Number	Model	Name
DCF_Y_25 DCF_Y_40S DCF_Y_50S DCF_Y_62S DCF_Y_76S	1		Electromagnetic coil
	2		Armature assembly
	3		Armature clamping plate
	4		Seal ring of clamping plate
	5		Armature valve seat
	6		Small spring
	7		
	8		S bonnet
	9		Big spring
	10		Big diaphragm assembly
	11		Y valve seal
	12		O Sealing ring on Valve-seat spout
	13		O Sealing ring on Valve seat end face

#### Instruction:

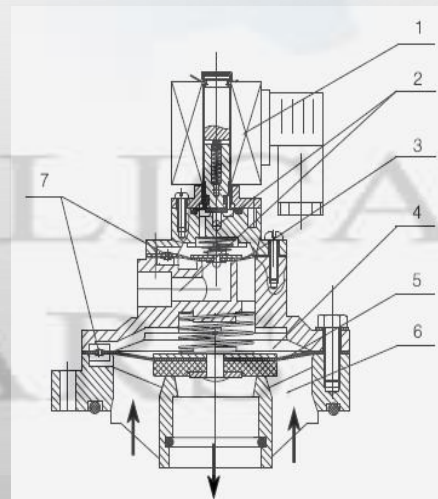
- For DCF-Y-25 valve, the serial numbers 5, 6 and 7 of three assemblies are not set.
- Supply is possible upon your information of assembly name and the corresponding model number of electromagnetic pulse valve.

## The meaning of model



## Technical standards

Work pressure: 0.2-0.6MPa  
Work medium: clean air  
Voltage, DC24V.  
(AC220V/50HZ)  
Current: 0.8A(0.05A)  
Application environment:  
1 Temperature: -10° C-55° C  
2 The relative humidity of air not exceeding 85%  
Maintenance life of diaphragm: 1 million times



#### 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.

1. Electromagnetic coil
2. Balancing hole
3. Small diaphragm
4. Back cavity of diaphragm
5. Big diaphragm
6. Front cavity of diaphragm
7. Orifice



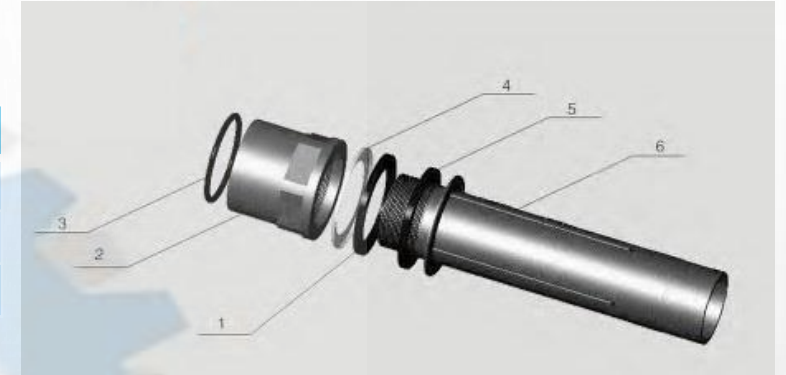
## Blowing-pipeconnector

The blowing-pipe connector is a connecting device to connect concealed type electromagnetic pulse valve, air distribution box and blowing pipe

### Structural Characteristics

Aluminum die-casting and thread connection are adopted for the metal pieces in the structure of the blowing-pipe connector developed by Xiechang Company. Its installation and maintenance is convenient. the operation is reliable, and the past drawbacks of welding distortion and difficult dismounting are avoided.

### Assembly drawings



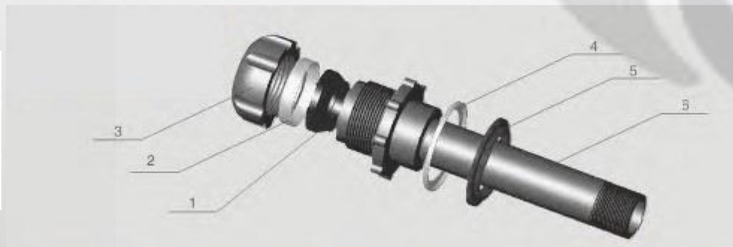
Model	Specification	
	B.S (British Standard)	Nominal
XC_PGQ_Y25	1"	DN25
XC_PGQ_Y40S	1 1/2"	DN40
XC_PGQ_Y50S	2"	DN50
XC_PGQ_Y62S	2 1/2"	DN62
XC_PGQ_Y76S	3"	DN76

Model. Specification

Model	Specification
XC_PGQ_Y50S	2"
XC_PGQ_Y62S	2 1/2"
XC_PGQ_Y76S	3"

### Assembly drawings

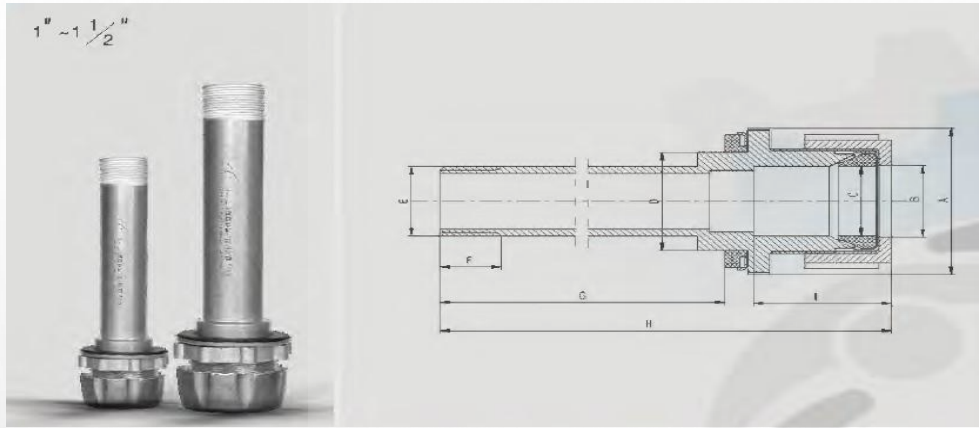
Model	Specification
XC_PGQ_Y25	1"
XC_PGQ_Y40S	1 1/2"



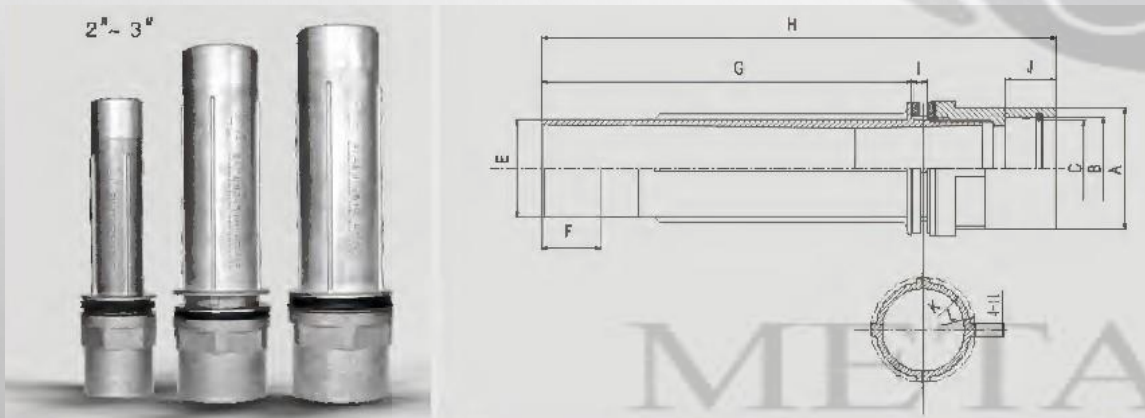
Serial Number	Assembly name	Model	Model of related assembly
1	Seal ring	XC_PGQ_Y25_1	XC_PGQY-25
		XC_PGQ_Y40S_1	XC_PGQ_Y40S
2	Cup Gasket	XC_PGQ_Y25_2	XC_PGQY-25
		XC_PGQ_Y40S_2	XC_PGQ_Y40S
3	Compression nut	XC_PGQ_Y25_3	XC_PGQY-25
		XC_PGQ_Y40S_3	XC_PGQ_Y40S
4	Cup Gasket	XC_PGQ_Y25_4	XC_PGQY-25
		XC_PGQ_Y40S_4	XC_PGQ_Y40S
5	Seal ring	XC_PGQ_Y25_5	XC_PGQY-25
		XC_PGQ_Y40S_5	XC_PGQ_Y40S
6	Jet Pipe	XC_PGQ_Y25_6	XC_PGQY-25
		XC_PGQ_Y40S_6	XC_PGQ_Y40S

Serial number	Assembly name	Model	Model of related assembly
1	External sealing ring	XC_PGQ_Y50S_1	XC_PGQ_Y50S
		XC_PGQ_Y62S_1	XC_PGQ_Y62S
		XC_PGQ_Y76S_1	XC_PGQ_Y76S
2		XC_PGQ_Y50S_2	XC_PGQ_Y50S
		XC_PGQ_Y62S_2	XC_PGQ_Y62S
		XC_PGQ_Y76S_2	XC_PGQ_Y76S
3	O-shaped seal ring	XC_PGQ_Y50S_3	XC_PGQ_Y50S
		XC_PGQ_Y62S_3	XC_PGQ_Y62S
		XC_PGQ_Y76S_3	XC_PGQ_Y76S
4		XC_PGQ_Y50S_4	XC_PGQ_Y50S
		XC_PGQ_Y62S_4	XC_PGQ_Y62S
		XC_PGQ_Y76S_4	XC_PGQ_Y76S
5	Internal sealing ring	XC_PGQ_Y50S_5	XC_PGQ_Y50S
		XC_PGQ_Y62S_5	XC_PGQ_Y62S
		XC_PGQ_Y76S_5	XC_PGQ_Y76S
6	JP1 ope	XC_PGQ_Y50S_6	XC_PGQ_Y50S
		XC_PGQ_Y62S_6	XC_PGQ_Y62S
		XC_PGQ_Y76S_6	XC_PGQ_Y76S

Reference on installation dimension



Model	Specification	A	B	C	D	E	F	G	H	I
XC_PGQ_Y25	1"	Φ77	Φ35	Φ33	Φ48	G1"	25	175	235	47
XC_PGQ_Y405	1 1/2"	Φ99	Φ50	Φ47	Φ60	G1 1/2"	30	234	300	54



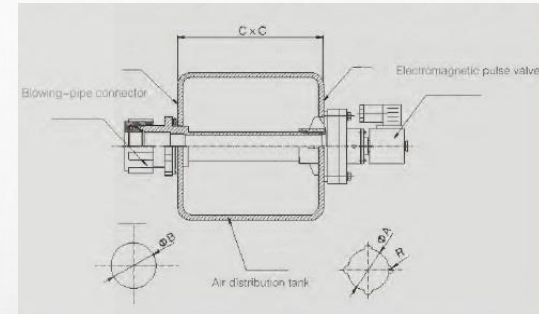
Model	Specification	A	B	C	E	F	G	H	I	J	K	L
XC_PGQ_Y50S	2"	82.5	Φ64	Φ58	Φ60	45	230	345	12	40	Φ60	Φ66
XC_PGQ_Y62S	1 1/2"	95	Φ79.5	Φ74	Φ75	45	289	400	12	40	Φ75	Φ82
XC_PGQ_Y76S	3"	108	Φ94	Φ87.5	Φ59	45	290	405	12	40	Φ89	Φ95

Description for installation and selection of electromagnetic pulse valve, air distribution box and blowing-pipe connector

For the DCF-Y concealed type electromagnetic pulse valve developed by Xtechang Company, there are two structures and live sizes of special blowing pipe connectors based on valve size for use in combination with air distribution box, its operation is reliable, the installation and maintenance are convenient.

Drawing for installation

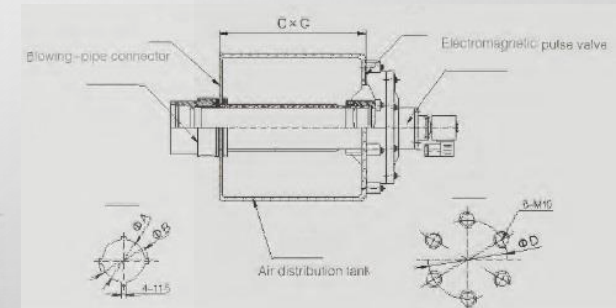
Model	Specification
XC_PGQ_Y25	1"
XC_PGQ_Y405	1 1/2"



Model	Electromagnetic pulse valve Model	Air distribution tank -A		Air distribution tank -B	Air distribution tank -C
		ΦA	R	ΦB	
XC_PGQ_Y25	DCF_Y_25	60	3.5	50	180
XC_PGQ_Y405	DCF_Y_405	74	4	62	240

Drawing for installation

Model	Specification
XC_PGQ_Y50S	2"
XC_PGQ_Y62S	2 1/2"
XC_PGQ_Y76S	3"



Model	Electromagnetic pulse valve Model	Air distribution tank -A	Air distribution tank -B		Air distribution tank -C
		ΦU	ΦA	ΦB	
XC_PGQ_Y50S	DCF_Y_50S	180	60.5	66.5	240
XC_PGQ_Y62S	DCF_Y_62S	208	75.5	82.5	300
XC_PGQ_Y76S	DCF_Y_76S	227	89.5	95.5	300