



## 四川长仪油气集输设备股份有限公司

Sichuan Changyi Oil-gas gathering transportation equipment Co.,Ltd

地址：中国·四川乐山市高新区南新路1089号

电话：

传真

邮编

邮箱

网址

---

Buried MMDFJ61Y type welded throttle stop venting valve is a new generation products which is continuous to improve and develop for oil and natural gas industry needs based on the obtain national patent in 1992 and 1999 by our company. The products are mainly used for venting the gas pipeline device under the emergency or maintenance condition. The products has been put into the market over 20 years, in order to further more meet the needs of different working conditions, from our company continuously improving and developing, the structure of the products getting more and more perfect. At the present, we have launched the fifth-generation multi-function products, which has the functions of throttle, relieving pressure, sealing surface self-cleaning, emptying, stopping and meeting the media in two conditions flowing, suiting for high-temperature, low temperature and sulfur-contained gas and so on. It owns the characteristics such as sealed zero leakage, erosion-resistant, corrosion-resistance, significant emptying effect, the buried part with long using life of professional anti-corrosion and insulation. This can be widely used in petroleum, natural gas, chemical, electric power, metallurgical and other industries.

## 2.1

It applied for media: oil, natural gas, and all kinds of corrosive liquid

medium.

2.2 Pressure Level 600Class 10.0MPa

2.3 DN NPS6" 16" DN150 DN 400

2.4 Use temperature range -46 130 .

2.5 Product technical specifications

API6D ASME B31.8 GB/T12235 GB/T12224

2.6 The standard of the structure and the length

ANSI B16.10 GB/T12221

2.7 Test and inspection standards

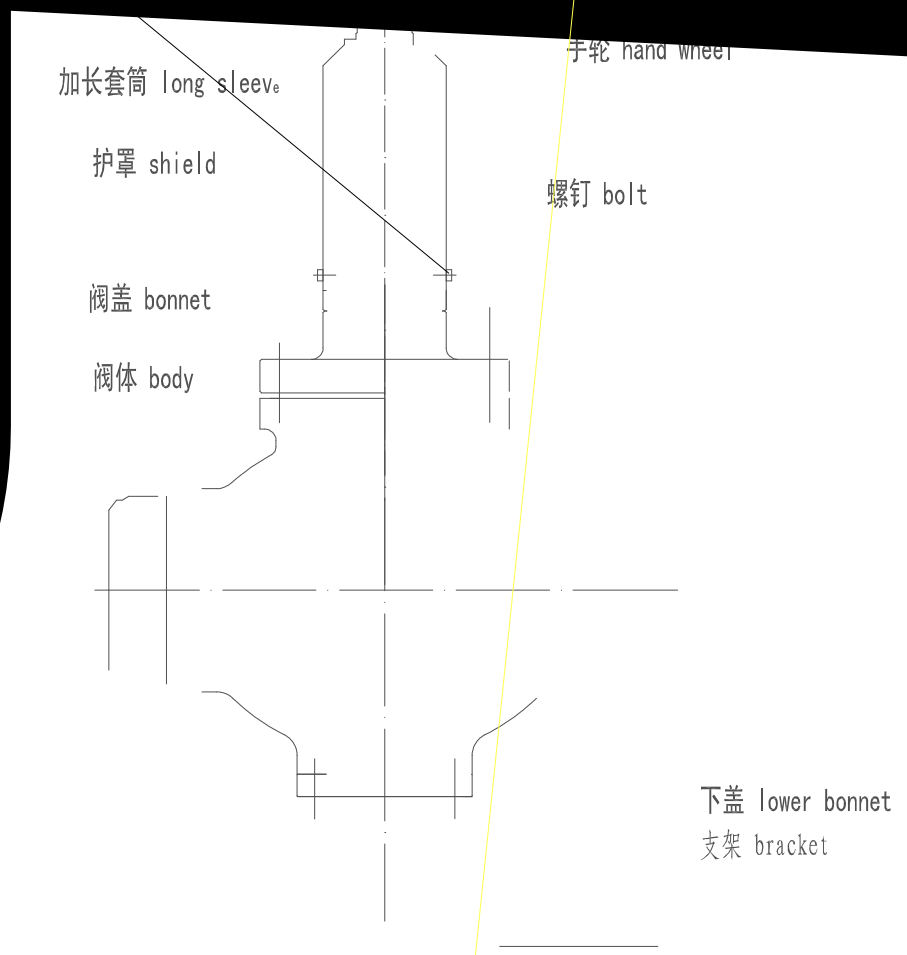
API 598 GB/T13927 JB/T9092

2.8 SY/T 0447

Valves buried part (body and increase pole sleeve, etc.) to processe with anti-corrosion and insulation, according to SY / T 0447 "Buried steel pipeline Epoxy coal tar anticorrosion level technology standards."

Model explanation	MDFJ 6 1 Y — 600Class
MD	Buried type
FJ	Buried throttle stop venting valve
6	Welded
1	Direct connection structure
Y	Hard alloy seal
600Class	Pressure Level

Installation dimensions and structural details, see Figure 1



H2	1700	1680	1750
H3	215	366	453
H4	150	150	200
A	150	290	380
B1	250	360	400
B2	210	310	350
B3	20	24	24
C	550	750	800
mm			
<p>In the table 1, the numerical size of the unit is mm.  The size of the takeover of A and order the unit over suitable size.</p>			

O

Spool hard seal pressed tightly on the end of the seat to form a rigid seal deputy, and at the same time the rubber O-ring closely pasted to the bottom surface of the spool to form a second soft sealing deputy. The hard and soft double sealed deputy guarantee non-leakage of gas medium.

When the valve is under the opening condition, the bottom of the spool leaves the end of the valve seat, the bottom surface is also near the edge of spool sets slotted department, the out diameter and the sets of the spool form a seal deputy, then the media has no directly relief, to play the role of relieving pressure.

Moving up of the spool, when emptying high-speed fluid directly scour the bottom of erosion finale after alleviating and the window flow formed slotted department between the spool end spool sets, as the spool sets window face is the throttle face, the high-pressure gas main channel scouring expenditure, the bottom surface of the spool generate eddy current due to media flow changes, slowed the scour on the spool bottom from the media, thus the valve seat seal Department deputy can avoid direct scouring from the media at the lower part of slotting.

When the spool moving to the top of spool sets slotted area, the emptying is in the middle and late period , the pressure is reducing, the fluid in the valves meet smaller resistance, so that to shorter emptying time and the increase the emptying effect .

“ ”

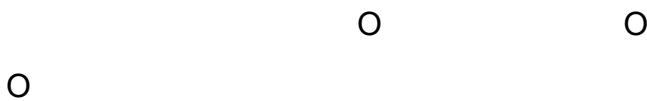
The spool and the seat have hard and soft seals, which can meet the requirement of high-pressure gas and liquid media “zero leakage”.

: Additional pressure-relief shaft is added inside the valve, the pressure-relief shaft work together with the movement of the spool synchronously while discharging. Alleviate the shaft with the valve seat cavity formation of the first-class cutting expenditure; Spool valve core and forming the second-class sets reduce expenditure. Antihypertensive two functions to cut expenditure and improve the quality of soft-sealed deputy working conditions, slowed the medium on the sealing surface erosion, Chase drive ensure that the pressure to cut expenditure as high as emptying valve

seal.

Alleviate the finale so that the initial venting of high pressure differential force of valve sets from the window cut expenditure transferred to the Department relief valve seat tie with a grand finale, overcome the high pressure in the media as emptying the initial moment of soft seat sealing the vacuum suction deputy, it is not easy dragged delinking can meet the special working conditions under the pros and media mobile.

: Two throttles reduce pressure, greatly reducing the evacuation of pressure. Spool has a balance hole, changed the spool by the imbalance, so that when the valve small vibration, low noise.



: Spool has two O-rings with a storage tank for residue and the O-ring at the bottom of the storage tank makes the spool to move up and down in the bolt-sleeve so as to automatically clean the residue.

Spool with balance hole and slag storage slot, hoist torque small, open flexible and light.



Packed in a sealed set up between the O-ring PTFE packing and cross-role, we do not guarantee that stem leakage and extend the life of stem.

Part name	Material
Valve body and Bonnet	ASTMA352/LCB LCC; ASTMA216/WCB WCC

Needle base	2Cr13                      Stellite 2Cr13 trim overlay welding Stellite alloy
Stem	2Cr13
Soft seal	O Low-temperature rubber O-ring
Padding	PTFE
Stem nut	Aldary
Handwheel	20 Steel
Shields	Q235-A
Long sleeve	20 Steel
Welding ring	ASTM A350/LF2
bolt	ASTM A193 B7/35CrMoA
nut	ASTM A194 2H/35 30CrMo
The rest of the internal parts	Stainless steel

#### 7.1.1

Emptying valve is closed valves, used in emergency empty and other closed working conditions.

#### 7.1.2

Emptying valve can be installed indoor and outdoor, media flows in one direction. When installing the valve should pay attention to the flow direction of medium on the valve body, medium flow arrow logo on the valve should be consistent with flow direction of pipeline medium.

#### 7.1.3

The Installation location should ensure the enough room for maintenance, inspection, and operation.

#### 7.1.4

Pay attention to protecting the connecting surface parts of the valve flange do not be bumped, scratched and ensure the connection reliable and sealed when installing.



#### 7.1.5

When cleaning pipeline and testing pressure, the emptying valve should be closed to preventing dirt impurities damaging sealing surface.

#### 7.1.6

Excluding the water after the air pressure test through scan lines should clean the bigger pipeline debris (such as wood, wood, gloves, rubber, etc.) by other approach at first, impurities and dirt can not be too big by emptying valve.

#### 7.1.7

When debugging the valve, firstly should slowly anti-clockwise the switch hands to reach the maximum valve distance, and then clockwise rotate the hand wheel to reach the minimize valve distance, to ensure whether the switch is flexible and the seal is reliable.

#### 7.1.8

/

Emptying valve of our company has a balanced spool hole, hoist torque is small and operation is lightweight and flexible. We advice not use the afterburner valve rod to avoid excessive force damaging valve pieces when operating the valve. If the valve is in the case of close lax, mainly because of adhesion impurities on spool and valve seat sealing surface or soft seal was scratched .when in this condition, the valve should be opened to inspect, cleanse or cleaning or replace the soft sealing surface

#### 7.1.9

Special working conditions required to reverse use, the reverse pressure should be less than positive pressure, if the reverse pressure is too high it should be back and then reverse operation. Pay attention that during the reverse operation should open the valve slowly to preventing negative pressure damaging the soft ring.

### 7.2.1

Do not stack the valve in the open air before the valve is still in the box.

### 7.2.2

O

Pay attention to the soft seal and the O-ring between the valve body and the seat is damaged or not when demoliting to inspecte, if it is, must be replaced.

### 7.2.3

In case of leakage when using the valves, can rotate handwheel sluicegate consecutive times and use the media purge spool valve sealing surface to ensure the sealing surface clean, and then put into use.

### 7.2.4

O

If there is still inner leakage after purge, cut off the gas source, loose nut fastening the demolition of the superstructure, pull out the overall assembly spool, and then check whether there is any impurities adhesion on the spool valve sealing surface and wether valves soft block O-ring seal damage,or request cleaning or replacement timely.

In order not to damage or lower quality of the valve in the custody. Storage requirements of the valve as follows:

Do not damage the packing (material) when lifting or carrying the valve, custody should be kept in storage room, storage warehouse should be moisture-proof to maintain valve clean and dry. Relative humidity  $\leq 70\%$  (can not be increased dehumidification equipment), room temperature should be maintained at 0 to 50 . If place valves outdoor provisional, must cover them with linoleum or thatch cloth like rain-proof and dust-proof facilities to avoid direct exposure.

#### 8.1.2

The custody of the valve should be kept in good order, do not in chaos or huddle, do not stack too high, arranged neatly by category in the warehouse, it is better to separate it from ground with wooden planks. To preventing the valve not butting bad, do not let flange sealing surface contact with the ground, these unnecessary losses ,for example, the result of improper storage and handling, hand-round injury, stem touch askew, loss or loose nut between hand wheel and stem, should be avoided.

#### 8.1.3

For the entered valve, it is necessary to check if there is the rain, dirt or damage during the transport process, to check the outer painting surface of the valve and clean, then deposited. Check whether the outer painting surface is off every six months and repair it depending on the circumstances.

#### 8.1.4

3

After valve warehousing, in and out flange sealing surface should be protected by coating regular long-acting anti-rust oil ,it is recommended coating every three months or six months according to the conditions under the custody of the actual situation; in and out of the valve should use protective

covers sealed to preventing dirt entering.

#### 7.1.5 O

Random accessories such as soft rubber O-ring seals, PTFE gaskets and should be sealed in plastic bags stored in the shelves after packaging (cabinet), should be moisture-proof, dust-proof and identify clearly.

#### 7.1.6

All the materials of the valve are stainless steel, can not be impacted by environmental climate.

O

Check valve seal packing, the valve used fluoroelastomers and PTFE O-ring seal overlapping circles. Check out before carrying out of warehouses, it can be reloaded if necessary. When re-fill pressed, it is necessary to rotate the stem at the same time in order to maintain the around uniform and not too much death, tightening screw cap with uniform forcefully pressed, not tilted.

#### 9.1

Valve design pressure, the pressure of work DN connecting size;

#### 9.2

The use of media and composition of material requirements;

#### 9.3 Operating temperature;

#### 9.4 Other special requirements.