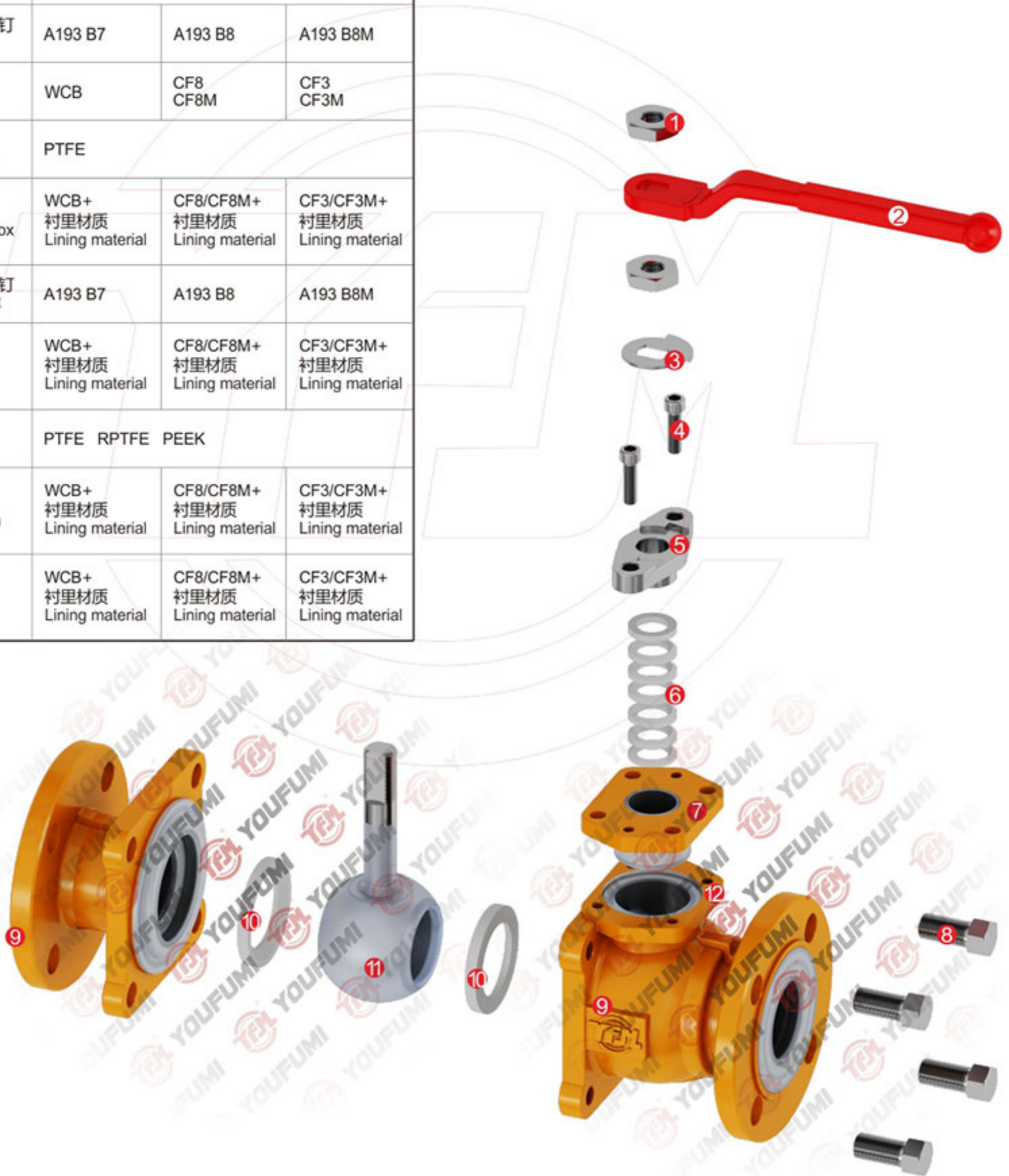


# 衬氟球阀 Lined Ball Valve

## 材料明细表 Material Specification

| 公称通径<br>Nominal Diameter |                       | DN15-DN350                      |                                      |                                      |
|--------------------------|-----------------------|---------------------------------|--------------------------------------|--------------------------------------|
| 公称压力<br>Nominal Pressure |                       | 1.0MPa 1.6MPa 150LB             |                                      |                                      |
| No.                      | 名称<br>Name            | 材料明细<br>Material Lists          |                                      |                                      |
| 1                        | 螺母<br>Nut             | A194 2H                         | A194 8                               | A194 8M                              |
| 2                        | 手柄<br>Lever           | WCB                             | CF8<br>CF8M                          | CF3<br>CF3M                          |
| 3                        | 定位片<br>Locating Plate | 25# SS304                       |                                      |                                      |
| 4                        | 内六角螺钉<br>Screw        | A193 B7                         | A193 B8                              | A193 B8M                             |
| 5                        | 压盖<br>Gland           | WCB                             | CF8<br>CF8M                          | CF3<br>CF3M                          |
| 6                        | 填料<br>Packing         | PTFE                            |                                      |                                      |
| 7                        | 填料函<br>Stuffingbox    | WCB+<br>衬里材质<br>Lining material | CF8/CF8M+<br>衬里材质<br>Lining material | CF3/CF3M+<br>衬里材质<br>Lining material |
| 8                        | 外六角螺钉<br>Body bolt    | A193 B7                         | A193 B8                              | A193 B8M                             |
| 9                        | 阀体<br>Body            | WCB+<br>衬里材质<br>Lining material | CF8/CF8M+<br>衬里材质<br>Lining material | CF3/CF3M+<br>衬里材质<br>Lining material |
| 10                       | 阀座<br>Seat            | PTFE RPTFE PEEK                 |                                      |                                      |
| 11                       | 球、杆<br>Ball/stem      | WCB+<br>衬里材质<br>Lining material | CF8/CF8M+<br>衬里材质<br>Lining material | CF3/CF3M+<br>衬里材质<br>Lining material |
| 12                       | 阀盖<br>Bonnet          | WCB+<br>衬里材质<br>Lining material | CF8/CF8M+<br>衬里材质<br>Lining material | CF3/CF3M+<br>衬里材质<br>Lining material |

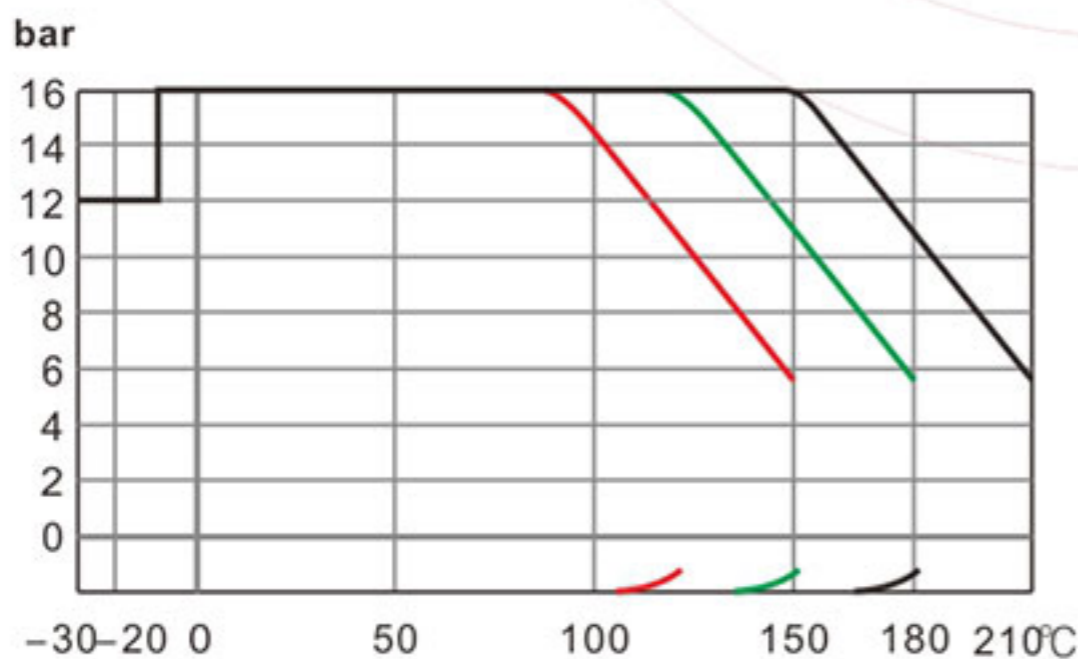


## 技术性能规范 Technical Specification

|   |                               |   |        |                       |
|---|-------------------------------|---|--------|-----------------------|
| 设计标准<br>Design & Manufacture Standard     |                               | HG/T 3704, GB/T 12237   |        | API 6D                |
| 结构长度标准<br>Face-to-face Dimension Standard |                               | HG/T 3704, GB/T 12221   |        | ASME B16.10           |
| 法兰标准<br>Flange Standard                   |                               | HG/T 20592, GB/T 9119   |        | ASME B16.5, JIS B2220 |
| 检验与试验标准<br>Inspection and Test Standard   |                               | GB/T 13927, JB/T 9092   |        | API 598               |
| 公称通径<br>Nominal Diameter                  |                               | DN15~DN350  |        | 1/2"~14"              |
| 公称压力<br>Nominal Pressure                  |                               | 1.0MPa  | 1.6MPa | 150LB                 |
| 试验压力<br>Test Pressure                     | 壳体试压<br>Shell Test            | 1.5MPa  | 1.5MPa | 1.5MPa                |
|   | 高压密封<br>High Pressure Sealing | 1.1MPa  | 1.1MPa | 1.1MPa                |
|   | 低压密封<br>Low Pressure Sealing  | 0.6MPa  | 0.6MPa | 0.6MPa                |
| 适用温度<br>Temperature Range                 |                               | PFA: -29°C~200°C PTFE: -29°C~180°C FEP: -29°C~150°C GXPO: -10°C~80°C  |        |                       |
| 适用介质<br>Applicable Medium                 |                               | 盐酸、硝酸、氢氟酸、液氯、硫酸、王水等强腐蚀性介质<br>Strong corrosive medium i.e. hydrochloric acid, Nitric acid, Hydrofluoric acid, Liquid chlorine, Sulfuric Acid and Aqua regia etc. |        |                       |

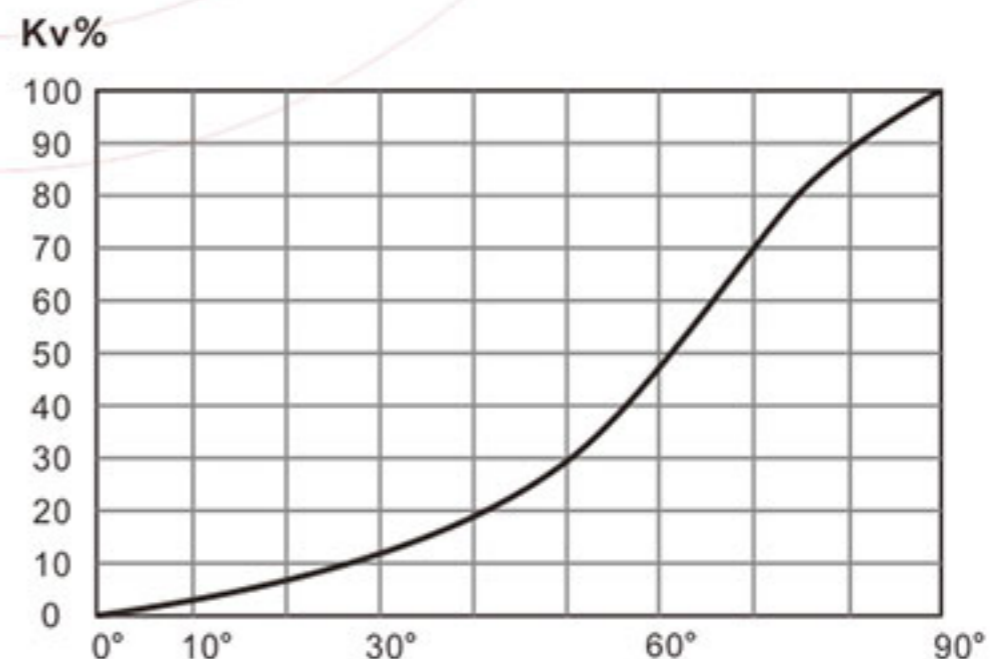
特注: 衬氟阀门壳体试压和密封按照上表测试, 测试标准仅参考通用阀门标准。高压力特殊情况协商处理。  
Note: Test standard refers general valve standard, high pressure should be customized for processing.

氟材料压力温度曲线  
Pressure-Temperature Curve



真空 Vacuum: 0.1mbar  
备注 Note: — PFA — PTFE — FEP

流量特性图  
Flow Characteristic



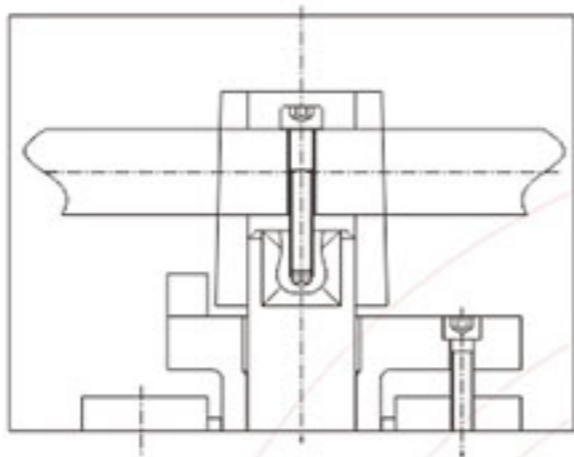
阀位角度 Valve Position Angle  
1Cv=1.167Kv

专利号 Patent No.: ZL201420018107.4



### 产品特性 Product Description

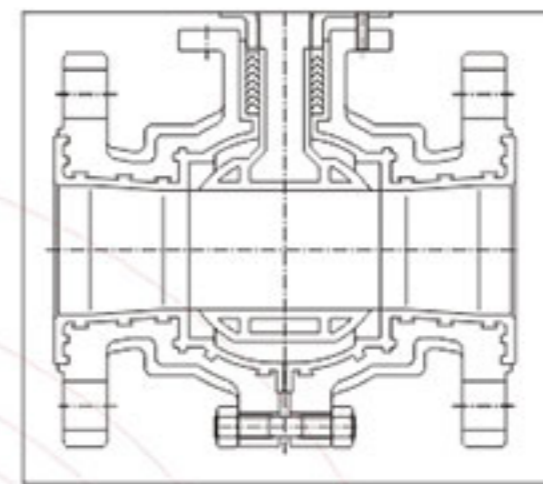
固定手柄设计  
New handle design



手柄座与操作杆采用分体和固定结构, 根据使用可调整操作杆长度再加上操作杆固定设计防止脱落, 且结构美观。手柄座与定位采用整体铸造成型设计, 摆脱传统的分体设计, 便于安装和调整定位。

Handle designed to be movable from the operating rod, which can be adjusted to lengthen the rod. Or handle can be fixed on the operating rod to prevent from falling off. Handle seat and locating plate adopt the integral casting molding design, to get rid of traditional fission design, is more convenient for installation and positioning adjustment.

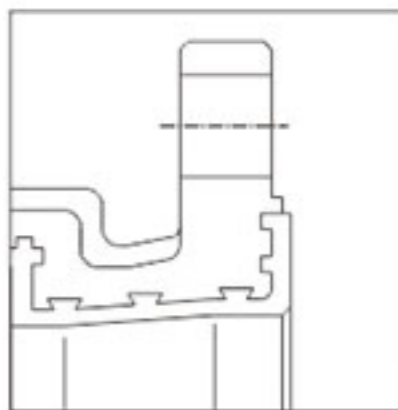
扭矩轻便于开关  
Lower torque



密封副结构采用中线密封, 使左右两边的密封力均匀, 摆脱了传统的设计结构、避免受力点全部作用在阀体上, 球密封时不会发生左右位移, 从而减轻扭矩。

Because of midsplit body, the force on seat can be balanced on left and right side, to avoid uneven stress on body and displacement of ball. The ball is contact with a much smaller surface (seat rings). Consequently the operating torque is much lower, reducing costs, space and weight saving.

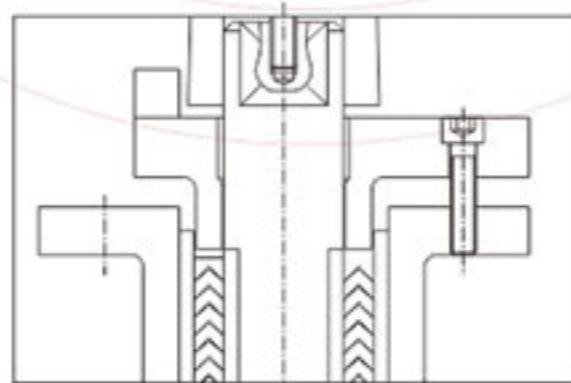
承受管道介质正负压  
For vacuum service



金属阀门内腔加工燕尾槽, 增强阀体与氟塑料的附着力, 确保阀门在微负压和全真空的工况下使用。

Processing dovetail groove in metal body in which lining locked to resists shrinkage, collapse and blow-out, to strengthen the adhesion between body and liner, ensuring the valve operated in the condition of slight negative pressure and full vacuum.

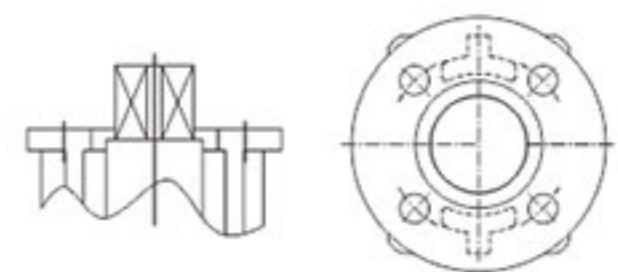
减少泄漏点的设计  
Design of less leakage point



阀体本体采用填料函设计替代之前的分体结构, 减少泄露点。

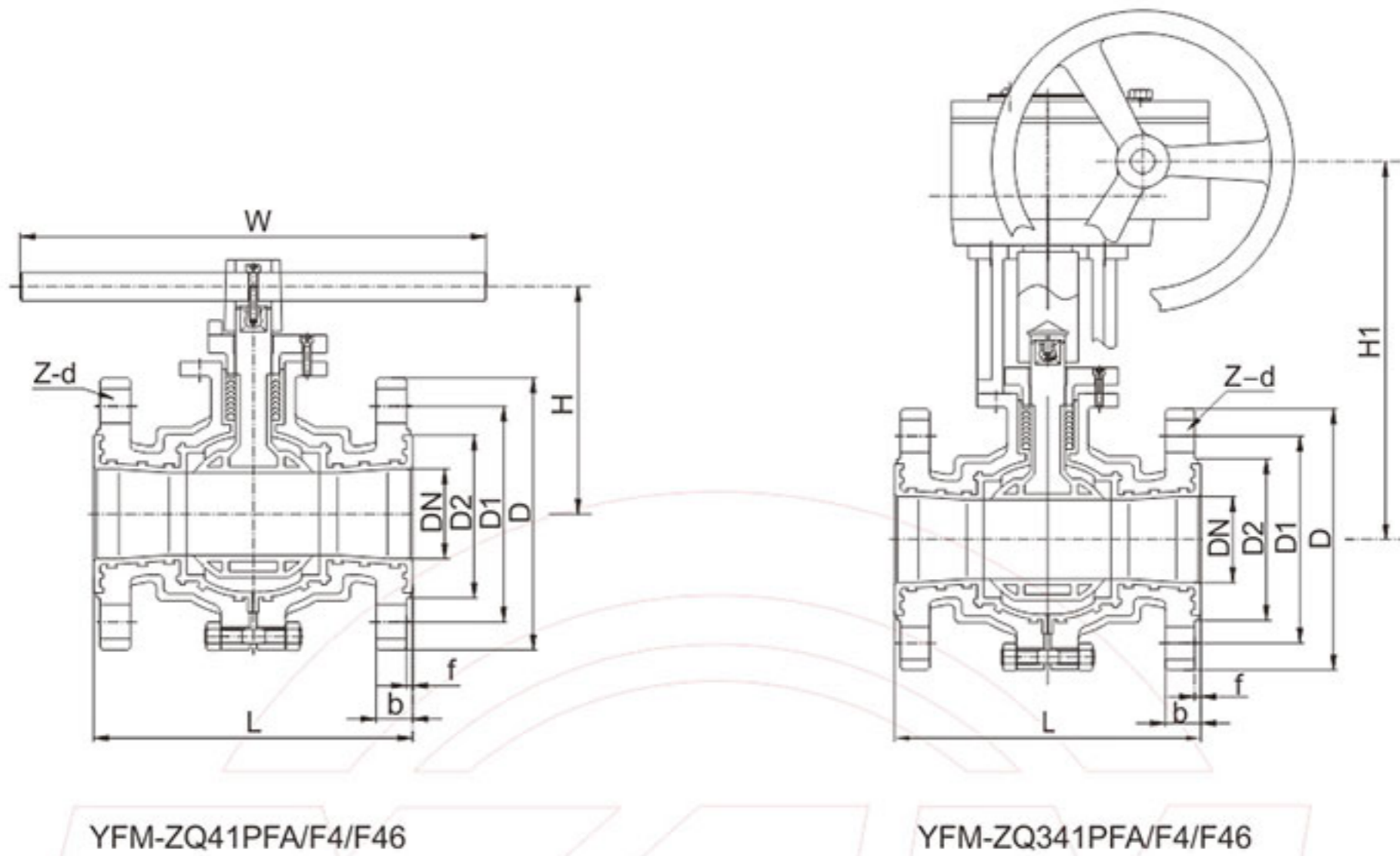
Valve body takes design of stuffing box to replace the fission structure to reduce the leakage point.

ISO 5211平台设计  
ISO 5211 platform design



球阀高平台可采用 ISO 5211设计, 便于气动电动执行机构安装、结构美观。

This new type ball valve with high platform fully compliance with ISO 5211 standard, allowing use of standard mounting kits. Nice appearance and tight configuration.



HG/T 20592 PN10/PN16

单位Unit:mm

| DN  | L   | D   | D1  | D2  | Z-d  | f   | b  | W   | H   | H1  |
|-----|-----|-----|-----|-----|------|-----|----|-----|-----|-----|
| 15  | 132 | 95  | 65  | 45  | 4-14 | 2.5 | 16 | 120 | 100 | -   |
| 20  | 142 | 105 | 75  | 55  | 4-14 | 2.5 | 18 | 120 | 105 | -   |
| 25  | 150 | 115 | 85  | 65  | 4-14 | 3   | 19 | 160 | 110 | -   |
| 32  | 165 | 140 | 100 | 78  | 4-18 | 3   | 19 | 160 | 130 | -   |
| 40  | 180 | 150 | 110 | 85  | 4-18 | 3.5 | 19 | 250 | 135 | -   |
| 50  | 200 | 165 | 125 | 100 | 4-18 | 3.5 | 19 | 250 | 145 | -   |
| 65  | 220 | 185 | 145 | 120 | 4-18 | 3.5 | 20 | 300 | 155 | -   |
| 80  | 250 | 200 | 160 | 135 | 8-18 | 3.5 | 21 | 340 | 210 | 340 |
| 100 | 280 | 220 | 180 | 155 | 8-18 | 4   | 23 | 370 | 235 | 360 |
| 125 | 320 | 250 | 210 | 185 | 8-18 | 4   | 25 | 425 | 255 | 405 |
| 150 | 360 | 285 | 240 | 210 | 8-22 | 4   | 25 | 475 | 285 | 425 |

ASME B16.5 Class150

| NPS   | L   | D   | D1    | D2  | Z-d  | f   | b    | W   | H   | H1  |
|-------|-----|-----|-------|-----|------|-----|------|-----|-----|-----|
| 1/2   | 110 | 90  | 60.5  | 35  | 4-16 | 2.5 | 12.5 | 120 | 100 | -   |
| 3/4   | 117 | 100 | 70.0  | 43  | 4-16 | 2.5 | 14   | 120 | 105 | -   |
| 1     | 127 | 110 | 79.5  | 51  | 4-16 | 3   | 16   | 160 | 110 | -   |
| 1 1/4 | 140 | 115 | 89.0  | 64  | 4-16 | 3   | 17   | 160 | 130 | -   |
| 1 1/2 | 165 | 125 | 98.5  | 73  | 4-16 | 3.5 | 19.5 | 250 | 135 | -   |
| 2     | 178 | 152 | 120.5 | 92  | 4-19 | 3.5 | 21   | 250 | 145 | -   |
| 2 1/2 | 190 | 180 | 139.5 | 105 | 4-19 | 3.5 | 24   | 300 | 155 | -   |
| 3     | 203 | 190 | 152.5 | 127 | 4-19 | 3.5 | 26   | 340 | 210 | 340 |
| 4     | 229 | 230 | 190.5 | 157 | 8-19 | 4   | 27.5 | 370 | 235 | 360 |
| 5     | 254 | 255 | 216.0 | 186 | 8-23 | 4   | 27.5 | 425 | 255 | 405 |
| 6     | 267 | 280 | 241.5 | 216 | 8-23 | 4   | 28   | 475 | 285 | 425 |

注：更多尺寸，请联系有氟密工程师。