

# ZH

## 多回转型阀门手动装置 ZH Series Multi-turn manual gear actuator



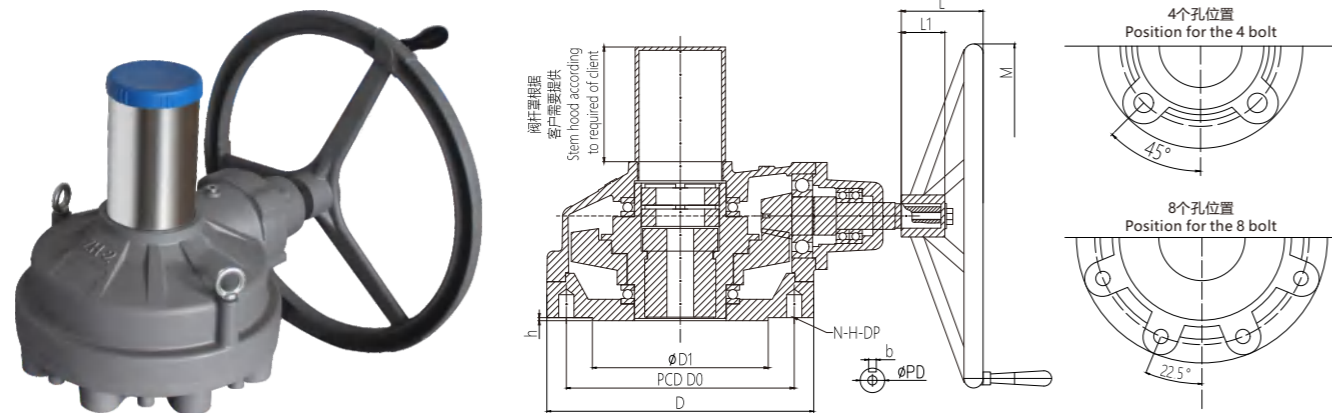
# ZH

## 多回转型阀门手动装置 ZH Series Multi-turn manual gear actuator



ZH 系列多回转型齿轮箱采用弧齿锥齿轮具有高安全，高品质的优点。测试证明ZH系列与传统伞齿轮箱相比具有更高的传动效率，承载能力更强，扭矩更大，运行更平稳等特点。Zh系列密封性能高，防水防油漏性能好。该系列手轮和轴套可拆卸，便于定制加工以符合各种工况要求。ZH系列有手动和电动两种操作方式，法兰符合 ISO 5210标准。

This bevel gearbox can be installed directly on the gate valves, butterfly valves, plug valves, globe valves and other valves. By using spiral bevel gears and thrust ball bearing, this series actuator can run smoothly, and has high output torque, low noise and high efficiency. It can avoid from water in and grease out. Protection grade is IP65. For special environment can be done IP68 and immersion. Handwheel and stem cover can be customized. For different valves and requirement, there are single stage gearboxes with input flange, two stage gearboxes with input flange, two stage manual gearboxes and so on.



| 型号Model | ZH-00 | ZH-0 | ZH-01 | ZH-1 | ZH-02 | ZH-2 | ZH-03 | ZH-3 | ZH-3-1S | ZH-4 | ZH-4-1S |
|---------|-------|------|-------|------|-------|------|-------|------|---------|------|---------|
|---------|-------|------|-------|------|-------|------|-------|------|---------|------|---------|

### 技术参数 TECHNICAL-PARAMETERS

|   |      |      |      |      |      |      |      |      |         |       |         |
|---|------|------|------|------|------|------|------|------|---------|-------|---------|
| 速比 Ratio                                  | 4:1  | 4:1  | 4:1  | 4:1  | 6:1  | 6:1  | 6:1  | 6:1  | 35.94:1 | 6:1   | 35.94:1 |
| 最大扭矩 Max-torque Nm                        | 500  | 850  | 1350 | 1700 | 2960 | 3870 | 4320 | 4750 | 7800    | 5620  | 9000    |
| 最大阀杆直径 Max-stem dia. mm<br>铜螺母 Copper-nut | Ø 30 | Ø 43 | Ø 48 | Ø 56 | Ø 60 | Ø 70 | Ø 80 | Ø 92 | Ø 92    | Ø 100 | Ø 100   |

### 连接尺寸 CONNECTION-SIZE

|                  |        |          |          |          |          |          |          |          |          |          |          |
|------------------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 法兰号 Flange       | F14    | F16      | F25      | F25      | F30      | F30      | F35      | F35      | F35      | F35      | F35      |
| 法兰外圆 (D)         | 175    | 210      | 300      | 300      | 350      | 350      | 415      | 415      | 415      | 415      | 415      |
| 连接孔中心 PCD        | D0     | 140      | 165      | 254      | 254      | 298      | 298      | 356      | 356      | 356      | 356      |
|                  | N-H-DP | 4-M16-24 | 4-M20-30 | 8-M16-24 | 8-M16-24 | 8-M20-30 | 8-M20-30 | 8-M30-45 | 8-M30-45 | 8-M30-45 | 8-M30-45 |
| 凸面 Convex (D1xh) | 100X3  | 130X3    | 200X4    | 200X4    | 230X4    | 230X4    | 260X5    | 260X5    | 260X5    | 260X5    | 260X5    |

### 手轮尺寸 HANDWHEEL

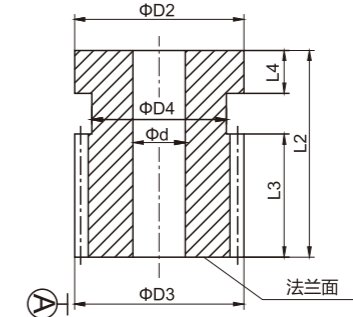
|               |         |     |     |      |      |      |      |      |      |      |      |
|---------------|---------|-----|-----|------|------|------|------|------|------|------|------|
| L             | 65      | 65  | 85  | 85   | 95   | 95   | 95   | 95   | 95   | 95   | 95   |
| 手轮 hand wheel | PD      | 25  | 25  | 32   | 32   | 32   | 38   | 38   | 32   | 38   | 32   |
|               | (b) key | 8X7 | 8X7 | 10X8 | 10X8 | 10X8 | 12X8 | 12X8 | 10X8 | 12X8 | 10X8 |
|               | L1      | 40  | 40  | 50   | 50   | 55   | 55   | 55   | 55   | 55   | 55   |
|               | M       | 300 | 350 | 450  | 450  | 520  | 600  | 600  | 600  | 900  | 600  |

### BA阀杆螺母外形尺寸

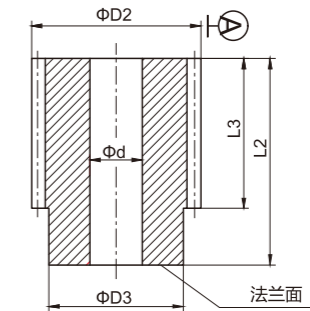
用户可根据该图选择加工阀杆螺母极限尺寸，加工内孔d时，注意与基准A的同轴度。阀杆螺母材质有H62, H94, D-2, ASTM A536 65-45-12等，用户可以根据需求选择。

### BA stem nut dimension

User could machining the limit stem nut hole according to this drawing. When you machining hole d, please pay attention to coaxality with reference A. Stem nut material: brass H62, bronze H94, ductile iron, D-2 and so on. you can choose it depends on your demand.



此图型号有  
This chart types are:  
ZH-000  
ZH-00  
ZH-0  
ZH-01  
ZH-1  
ZH-02  
ZH-2



此图型号有  
This chart types are:  
ZH-03  
ZH-3  
ZH-3-1S  
ZH-4  
ZH-4-1S

| 型号<br>尺寸 | ZH-00 | ZH-0 | ZH-01 | ZH-1 | ZH-02 | ZH-2 | ZH-03 | ZH-3 | ZH-3-1S | ZH-4 | ZH-4-1S |
|----------|-------|------|-------|------|-------|------|-------|------|---------|------|---------|
| D3       | 57    | 67   | 70    | 74   | 84    | 93   | 98    | 110  | 110     | 128  | 128     |
| D2       | 57    | 68   | 74    | 78   | 88    | 98   | 111   | 123  | 123     | 141  | 141     |
| L4       | 15    | 18   | 20    | 23   | 20    | 20   |       |      |         |      |         |
| L3       | 35    | 39   | 40    | 47   | 56    | 74   | 91    | 99   | 99      | 99   | 99      |
| L2       | 60    | 67   | 70    | 80   | 88    | 106  | 112   | 140  | 140     | 155  | 155     |
| D4       | 44.5  | 61.5 | 63    | 67   | 75.5  | 84.5 |       |      |         |      |         |