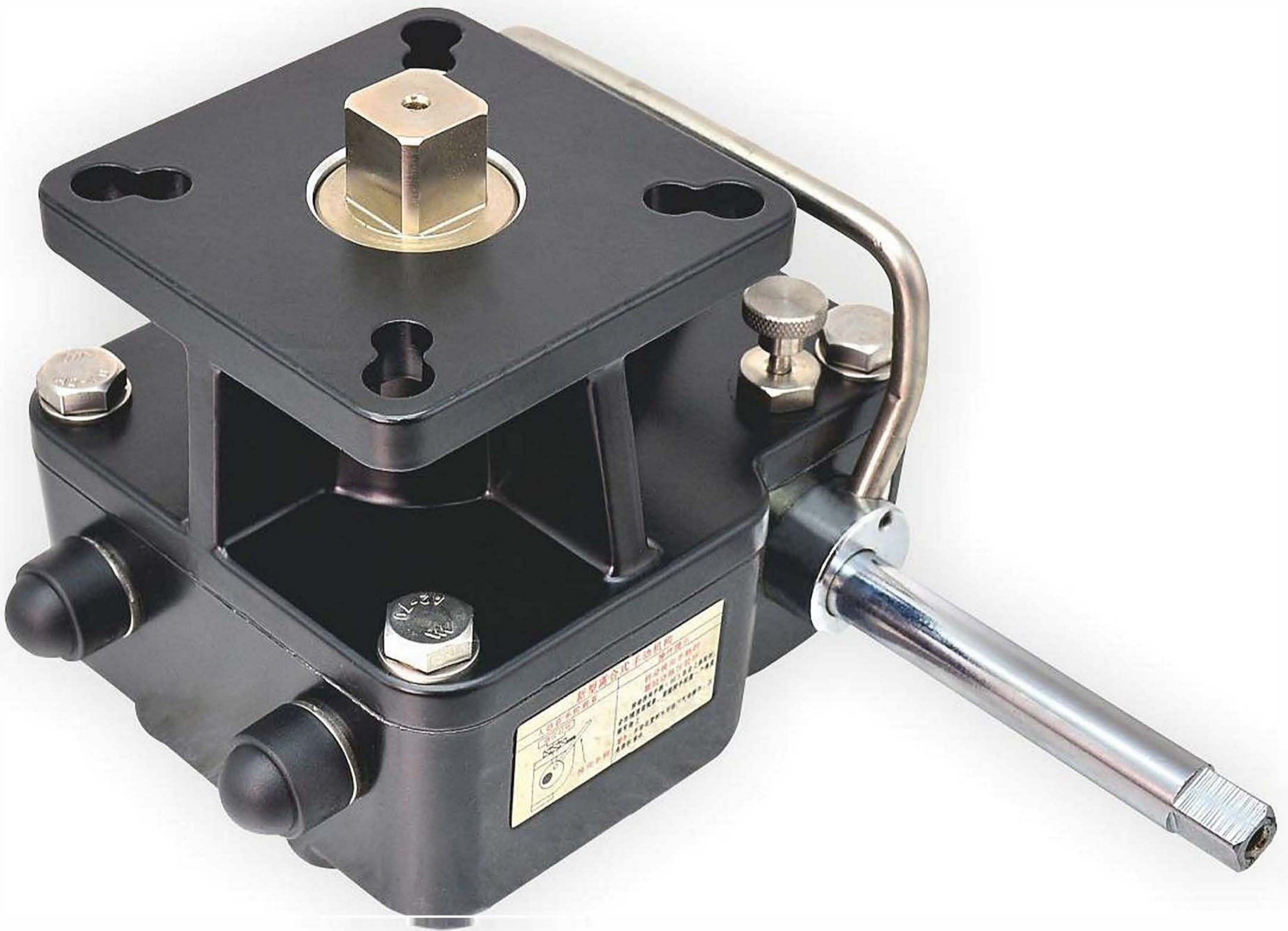


BITEBI®

Gear operators



● Manual Gear Operators

The gear operators are used in petroleum, chemical, pharmaceutical, water treatment, power plants, nuclear power and other places, for 90 degrees open ball valves, butterfly valves, plug valves and other valves supporting the use of the company's supply of valve turbine box can also be used according to customer requirements on the product speed ratio, use temperature, protection level, anti-corrosion level. Adjust customization.

Aluminum Precision casting aluminum alloy box, the operators are painted and any bare metal surfaces are treated to resist corrosion.

● The main purpose of the product

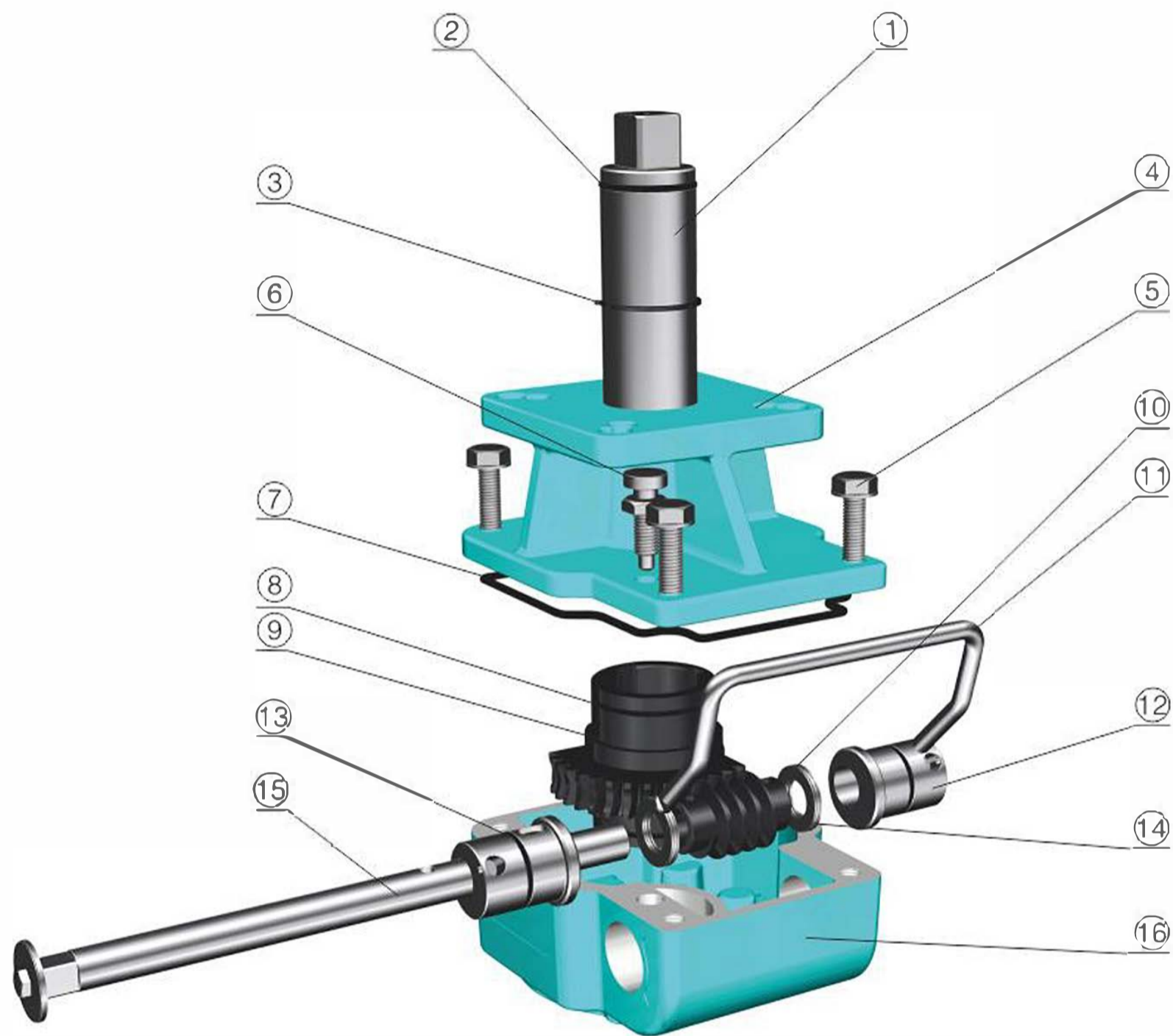
The manual gear operators combined with the pneumatic actuator assembly to realize manual or pneumatic drive for butterfly valves, ball valves, etc. which are opened at 90° degrees.

● Features

1. Small size, light weight;
2. Product series, output torque matches with pneumatic devices and various valves.
3. The inner hole of the turbine connection has two key grooves separated by 90°, and the user can choose the relative position of the device and the valve according to the needs.
4. Lift the limit pull ring, rotate the 90° limit pin of the eccentric device to automatically limit the position, realize pneumatic, otherwise realize manual.
5. The product has lubricating grease after assembly and tested. After being assembled with the valve, it is integrally sealed, dustproof, waterproof, and the protection grades are IP65, IP67, and IP68 optional.

● Technical parameters

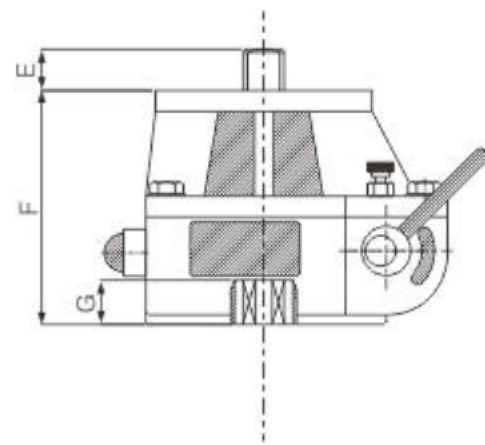
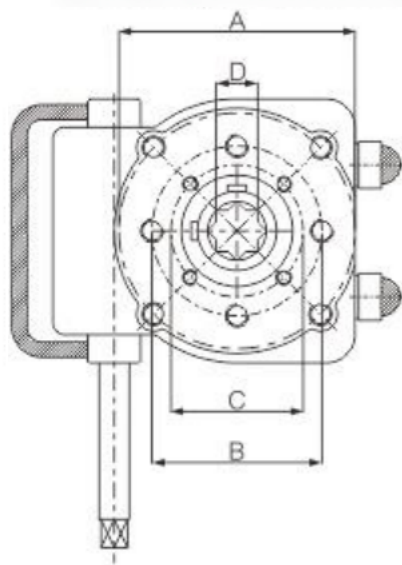
| Gear operator type | Adapt double acting type | Adapt single acting type | Speed ratio | Output torque |
|--------------------|--------------------------|--------------------------|-------------|---------------|
| SD-1 | DA52-92 | SR52-75 | 26:1 | 180 |
| SD-2 | DA105 | SR83-92 | 28:1 | 320 |
| SD-3 | DA125-140 | SR105-125 | 38:1 | 680 |
| SD-4 | DA160-190 | SR40-160 | 54:1 | 1200 |
| SD-5 | DA210-240 | SR190-210 | 80:1 | 2100 |
| SD-6 | DA240-270 | SR240 | 78:1 | 3000 |
| SD-7 | DA300 | SR270 | 98:1 | 3800 |



● Main components and materials

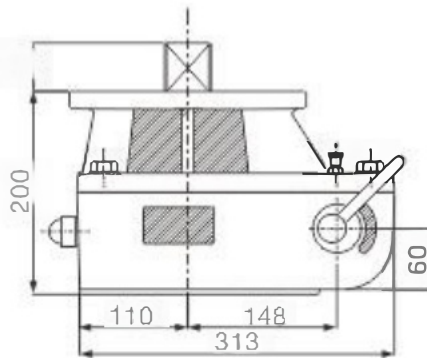
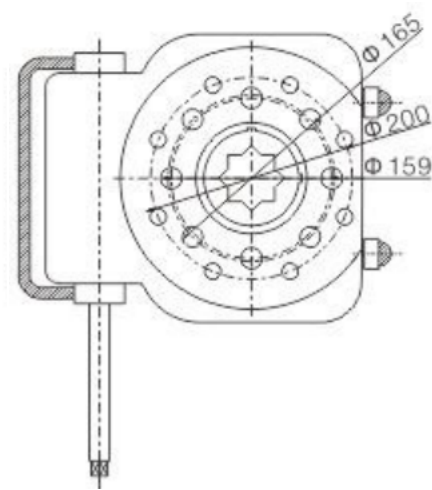
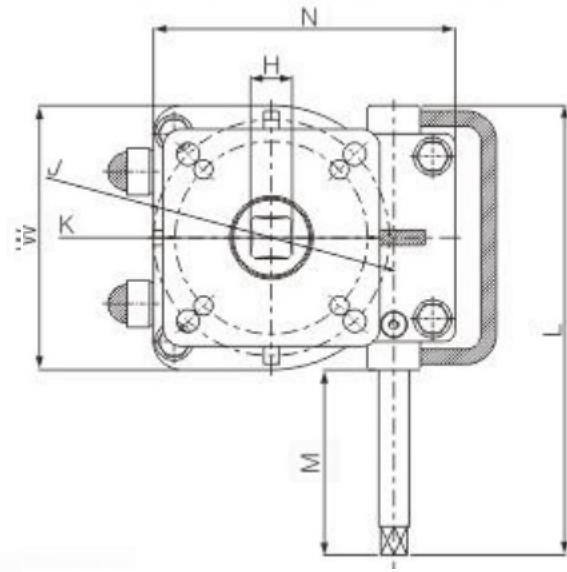
| 序号 No. | 名称 Name | 材料 Material Science | 序号 No. | 名称 Name | 材料 Material Science |
|-----------|------------------------|----------------------------------|-----------|-------------------------|---------------------------------------|
| 1 | 传动主轴 Drive spindle | 合金钢 Alloy steel | 9 | 蜗轮 Worm gear | 球墨铸铁 Spheroidal graphite cast iron |
| 2 | 密封圈 Seal ring | 丁腈橡胶 Nitrile rubber | 10 | 平面轴承 Plane bearing | 合金钢 Alloy steel |
| 3 | 卡簧 Reed spring | 不锈钢(304) Stainless steel(304) | 11 | 手柄 Handle | 不锈钢(304) Stainless steel(304) |
| 4 | 上盖 Upper cover | 铝合金 Aluminium alloy | 12 | 偏心套 Eccentric sleeve | 合金钢 Alloy steel |
| 5 | 紧固件 A fastening | 不锈钢(304) Stainless steel(304) | 13 | 密封圈 Seal ring | 丁腈橡胶 Nitrile rubber |
| 6 | 定位销 Positioning pin | 合金钢 Alloy steel | 14 | 蜗杆 Worm | 合金钢 Alloy steel |
| 7 | 密封圈 Seal ring | 丁腈橡胶 Nitrile rubber | 15 | 传动杆 Transmission rod | 合金钢 Alloy steel |
| 8 | 密封圈 Seal ring | 丁腈橡胶 Nitrile rubber | 16 | 箱体 Box | 铝合金 Aluminium alloy |

Valve connection dimension drawing

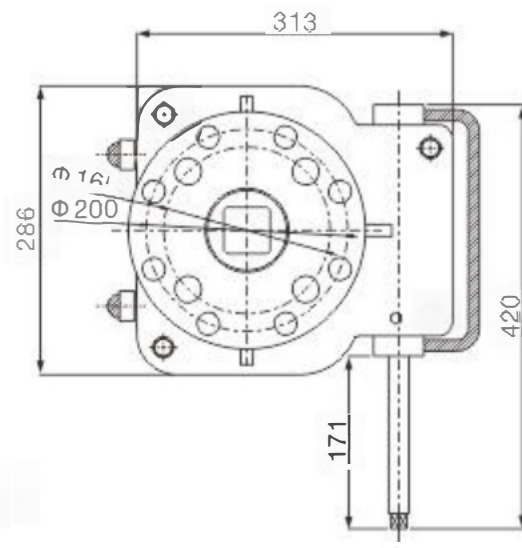


SD-1~SD-6 Dimension

Actuator connection dimension drawing



SD7 Dimension



● SD series pneumatic valve manual gear operator connection dimension table

| Type | SD-01 | SD-02 | SD-03 | SD-04 | SD-05 | SD-06 | SD-7 |
|---------------------|-------|-------|---------|---------|-----------|-----------|-----------|
| A | F07 | F10 | F12 | F14 | F14 | F16 | F16 |
| B | Φ57 | Φ70 | Φ89 | Φ108 | Φ108 (定制) | Φ159 (定制) | Φ159 (定制) |
| C | F05 | F07 | F07/F10 | F10/F12 | | | |
| D | 14*14 | 17*17 | 22*22 | 27*27 | 36*36 | 46*46 | 46*46 |
| E | 16 | 18 | 22 | 30 | 40 | 50 | 51 |
| F | 105 | 113 | 130 | 165 | 177 | 199 | 200 |
| G | 22 | 22 | 28 | 32 | 45 | 53 | 53 |
| H | 14*14 | 17*17 | 22*22 | 27*27 | 36*36 | 46*46 | 46*46 |
| N | 115 | 135 | 160 | 200 | 244 | 280 | 315 |
| W | 89.5 | 125 | 140 | 87 | 220 | 250 | 286 |
| J | F07 | F10 | F12 | F14 | F16 | F16 | F16 |
| K | F05 | F07 | F07/F10 | F10/F12 | F14 | | |
| L | 180 | 220 | 247 | 330 | 370 | 398 | 420 |
| M | 71 | 91 | 103 | 147.8 | 150 | 158 | 171 |
| Hand wheel diameter | Φ180 | Φ200 | Φ280 | Φ320 | Φ400 | Φ500 | Φ600 |
| weight (kg) | 3 | 4.5 | 7 | 13.7 | 20 | 30 | 38 |

Our Products

