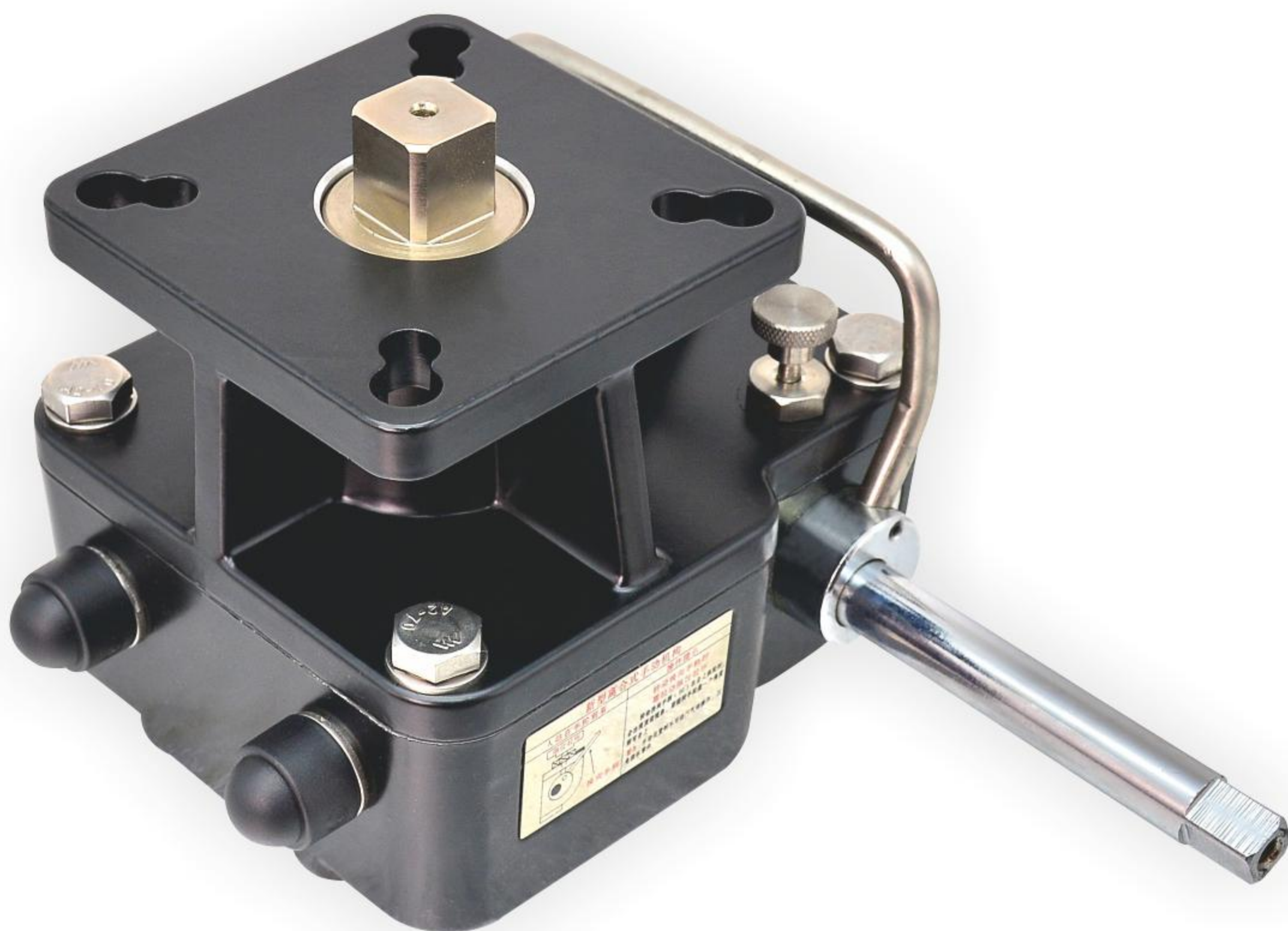
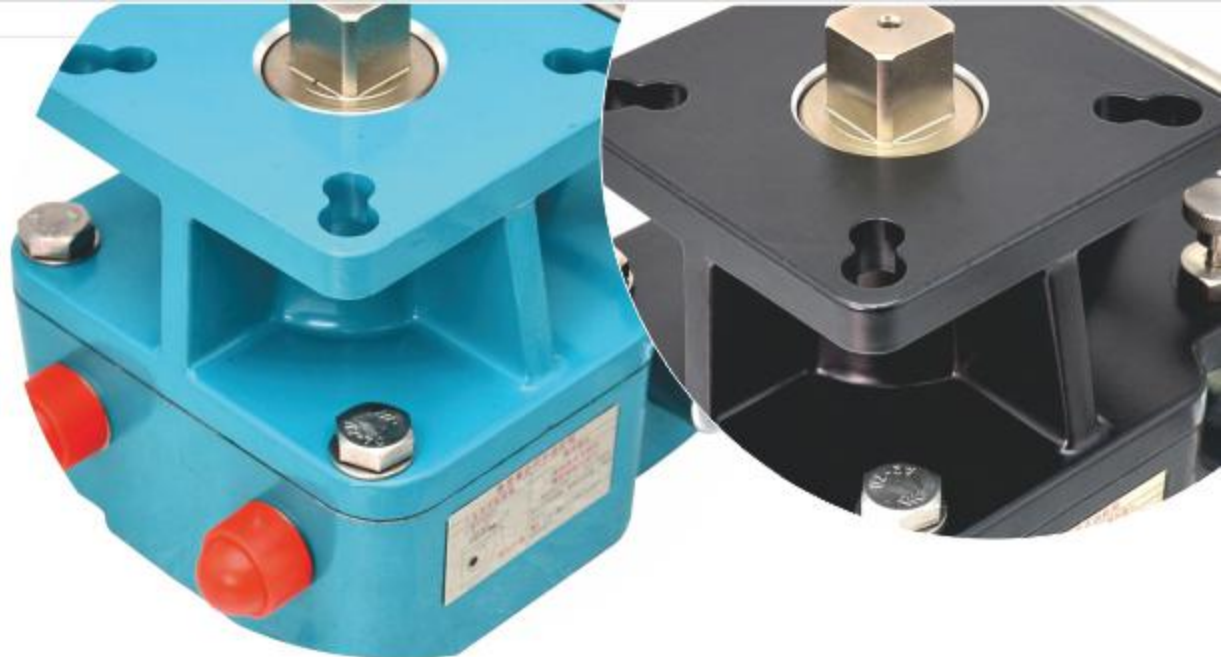


AMURSON CONTROL

铝合金手轮机构





● 离合器手动机构说明书Manual manual of clutch

公司产品应用于石油，化工，医药，水处理，电厂，核电等场所， 用于 90° 开启的球阀，蝶阀，旋塞阀等阀门配套使用，我公司所供应的阀门涡轮箱还可以根据客户要求对产品的速比，使用温度，防护等级，防腐 等级进行调整定制。公司立足国内，面向国际市场，客户主要来自国外知名阀门企业，中东、欧美等国家。

The company's products 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. The company is based on domestic and international markets, Customers mainly come from famous foreign valve enterprises, Middle East, Europe and America.

● 产品主要用途Main uses of products

本手动机构与气动执行器装配联合使用，用于 90° 开启的蝶阀、球阀等实现手动或气动驱动。
The manual mechanism is combined with the pneumatic actuator assembly to realize manual or pneumatic drive for butterfly valves, ball valves, etc. which are opened at 90° degrees.

● 特点 Characteristic

- 1.体积小.重量轻.设计合理.样式新颖

2.产品系列化，输出扭矩与气动装置.各种阀门匹配。

3.涡轮连接内孔有相隔 90° 的两个键槽，以使用户根据需要选择装置同阀门的相对位置。

4.提起限位拉环，旋转偏心装置 90° 限位销自动限位，实现气动，反之实现手动。

5.产品出厂时，装有专用润滑脂，与阀装配后，整体密封.防尘.防水.防护等级IP65，IP67，IP68 可选。
- 1.It is small in size, light in weight and reasonable in design.

2.Products are serialized and output torque is matched with pneumatic devices.

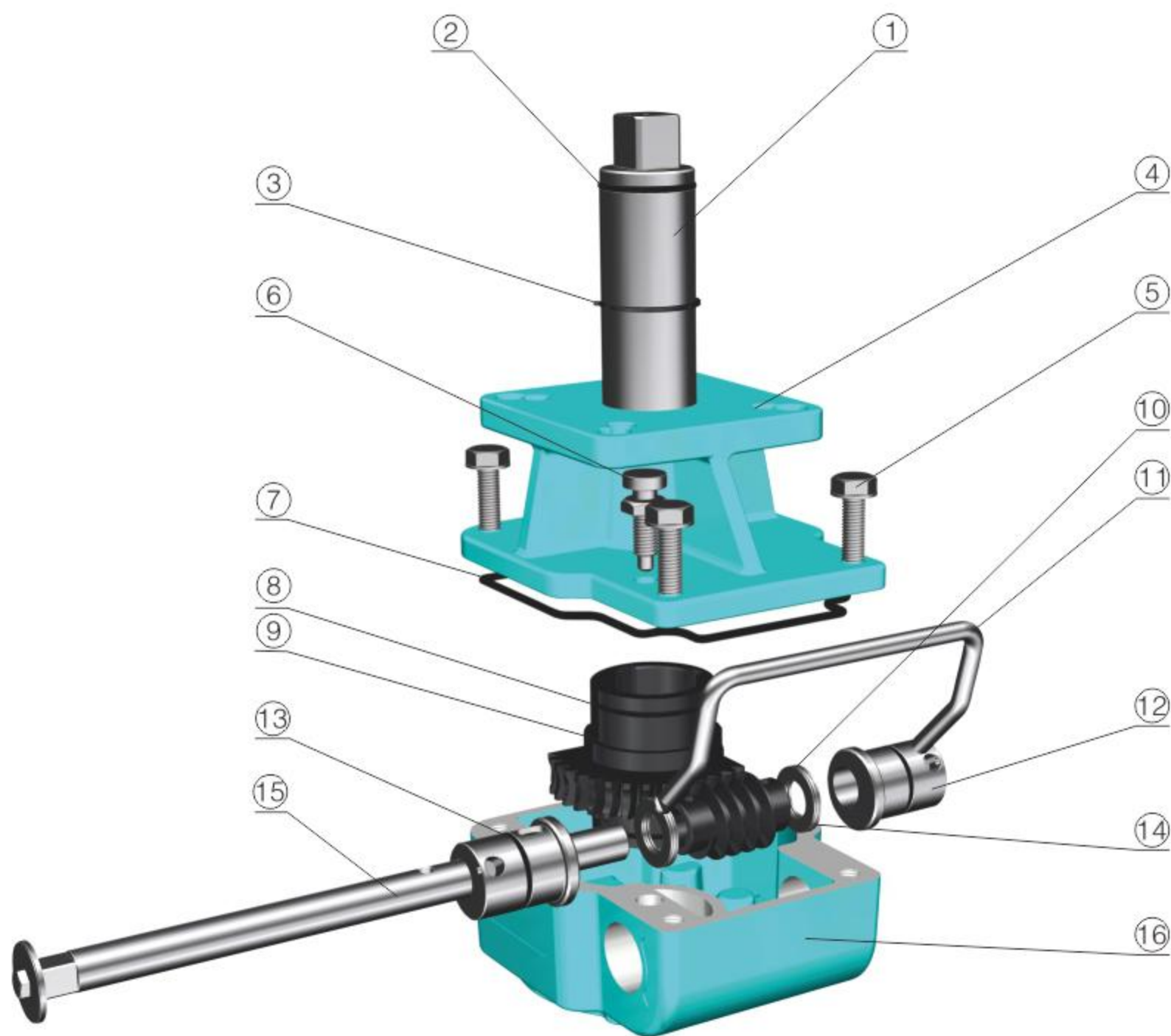
3.Turbine connection holes have two keyways 90° degrees apart so that users can choose the relative position of the device with the valve according to their needs.

4.Lifting the limit pulling ring, rotating the eccentric device 90° degree limit pin automatic limit, to achieve pneumatic, otherwise to achieve manual.

5.Product factory, equipped with special grease, and valve assembly, the overall seal, dust-proof, waterproof, protection grade IP65, IP67, IP68 optional.

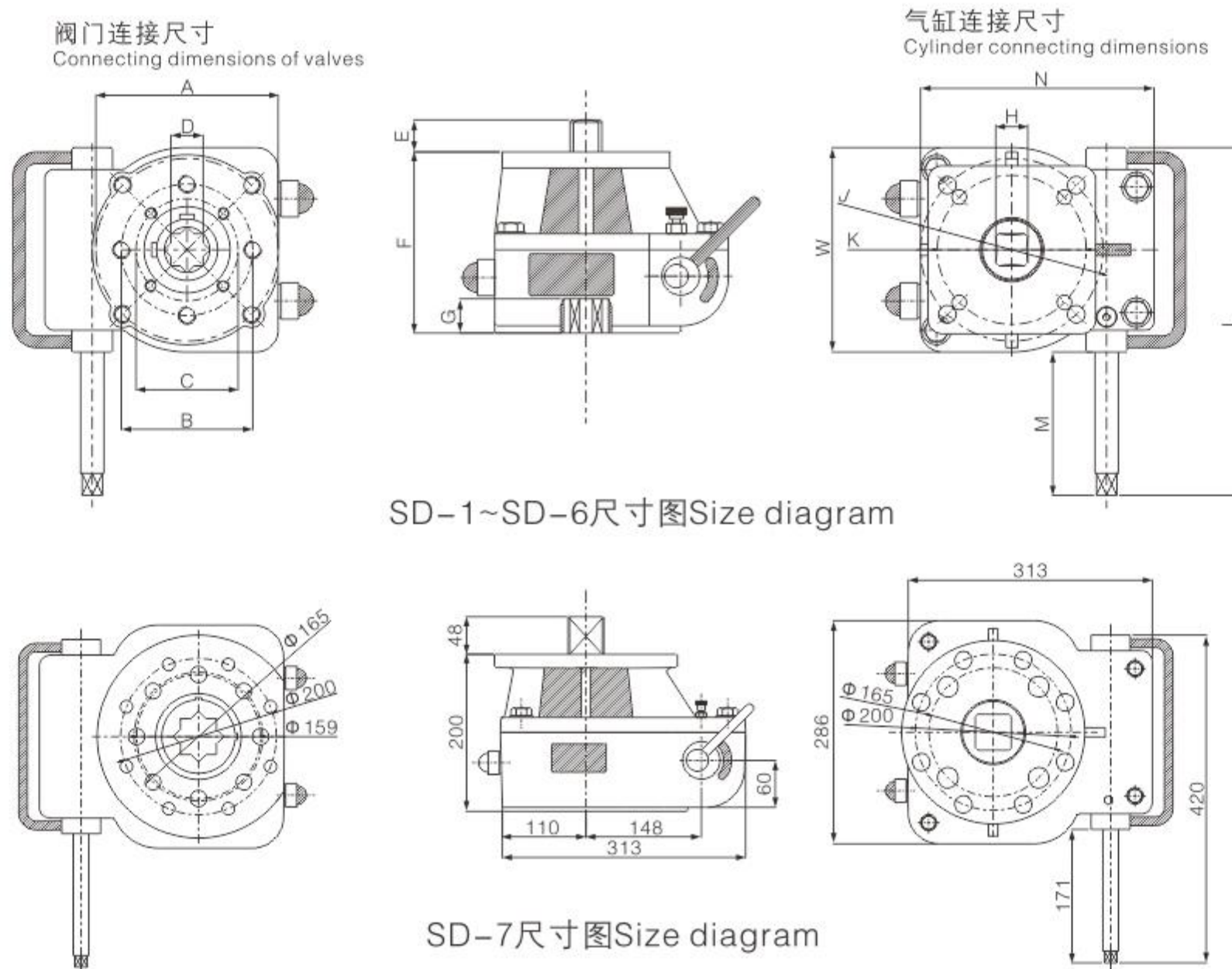
● SD系列气动阀门手操机构技术参数
Technical parameters of SD series pneumatic valves manual operation mechanism

手动机构型号 Manual mechanism type	AT 双作用(DA) AT Double action(DA)	AT 单作用(SR) AT Spring return(SR)	速比 Speed ratio	输出扭矩 Output torque
SD-1	DA52-92	SR52-83	26:1	180
SD-2	DA105-125	SR92-105	28:1	320
SD-3	DA125-145	SR115-125	38:1	680
SD-4	DA160-190	SR145-160	54:1	1200
SD-5	DA210-240	SR190-210	80:1	2100
SD-6	DA240-270	SR210-240	78:1	3000
SD-7	DA270-300	SR240-270	98:1	3800



●主要零部件材料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



● SD 系列气动阀门手操机构连接尺寸表
SD series pneumatic valve handheld mechanism connection size table

规格型号 Specification model	SD-01	SD-02	SD-03	SD-04	SD-05	SD-06	SD-7
A	F07	F10	F12	F14	F16	F16	F16
B	Φ57	Φ70	Φ89	Φ108	Φ108	Φ159	Φ159
C	F05	F07	F07/F10	F10/F12	F14	F14	Φ200
D	14*14	17*17	22*22	27*27	36*36	46*46	46*46
E	15	19	22	28	38	48	48
F	105	110	130	165	185	200	200
G	20	22	28	32	40	50	50
H	14*14	17*17	22*22	27*27	36*36	46*46	46*46
N	115	135	160	200	244	282	313
W	89.5	125	136	187.5	220	251	286
J	F07	F10	F12	F14	F16	F16	F16
K	F05	F07	F10	F10/F12	F14	/	Φ200
L	180	220	257	330	370	400	420
M	71	92.3	113	147.8	148	158	171
手轮外径 Hand wheel outer diameter	Φ180	Φ200	Φ280	Φ320	Φ400	Φ500	Φ600
参考重量(kg) Reference weight(kg)	3	4.5	7	13.7	22	30	38

产品集锦Product collection



铝合金蜗轮

Worm gear of aluminum alloy



LSD系列阀门蜗轮箱

LSD series valve worm gear box

● 产品简介Product introduction

LSD系列阀门手动装置采用蜗轮蜗杆传动副，在蜗杆两端安装了高性能推动滚针轴承，结构紧凑。同时，保证了正反转过程中对推力的要求。承受扭矩大，机械效率高，体积小，操作方便，具有可靠的自锁性。

LSD series valve manual device adopts worm gear and worm drive pair, and high performance needle roller bearing is installed at both ends of the worm, with compact structure. At the same time, the requirement of thrust in the process of positive inversion is ensured. Large torque, high mechanical efficiency, small size, easy operation and reliable self locking.

● 产品特点Product features

- 1.精密铸造铝合金箱体
- 2.多种规格可选
- 3.性能可靠的推力滚针轴承
- 4.有保护的高强度钢制输入轴
- 5.行程：0-90° (±5° 可调)
- 6.结构坚固紧凑
- 7.内置润滑脂提高使用寿命
- 8.可调机械限位
- 9.良好的密封

1. precision casting aluminum alloy box
2. specifications are optional.
3. reliable thrust roller bearing
4. high strength steel input shaft with protection.
5. stroke: 0-90° (±5° degrees adjustable)
6. solid and compact structure
7. built in grease to improve service life.
8. adjustable mechanical limit.
9. good seal

● 产品应用Product application

LSD系列阀门蜗轮箱是一款90° 回转的蜗轮蜗杆减速机构，提供多种手轮型号可供客户选择，适用于球阀，蝶阀等90° 回转式阀门，也可以用于流程挡板和电厂风门等场合。

LSD Series Valve Worm Gear Box is a 90° rotation worm gear reducer, providing a variety of handwheel models for customers to choose, suitable for ball valves, butterfly valves and other 90 degree rotation valves, can also be used in the flow baffle and power plant air gate and other occasions.

● 工作环境Work environment

LSD系列角行程蜗轮箱适用于多种气候地区多种特殊温度地区的工业现场，有可靠的操作稳定性和长期的免维修保证。同时，我们力求使我们的减速机可以适应各种恶劣的环境和提升更高的稳定性。

● 防水等级：LSD系列减速机符合EN 60529标准规定的IP67密封防护等级

● 工作温度：LSD系列蜗轮箱的标准温度-30℃至+120℃ (-22°F至+250°F)

● 喷漆颜色：LSD系列蜗轮箱的标准表层喷漆颜色为黑色和红色(也可按客户要求定制)

LSD series angular stroke worm gearbox is suitable for industrial site in various climatic regions and special temperatures. It has reliable operation stability and long-term maintenance-free guarantee. At the same time, we strive to make our gearbox can adapt to a variety of harsh environments and improve stability.

Waterproof grade: LSD series reduction gearbox meets the IP67 sealing protection level stipulated by EN 60529 standard.

Working temperature: the standard temperature of LSD series worm gear box is -30°C to +120°C (-22°F to +250°F).

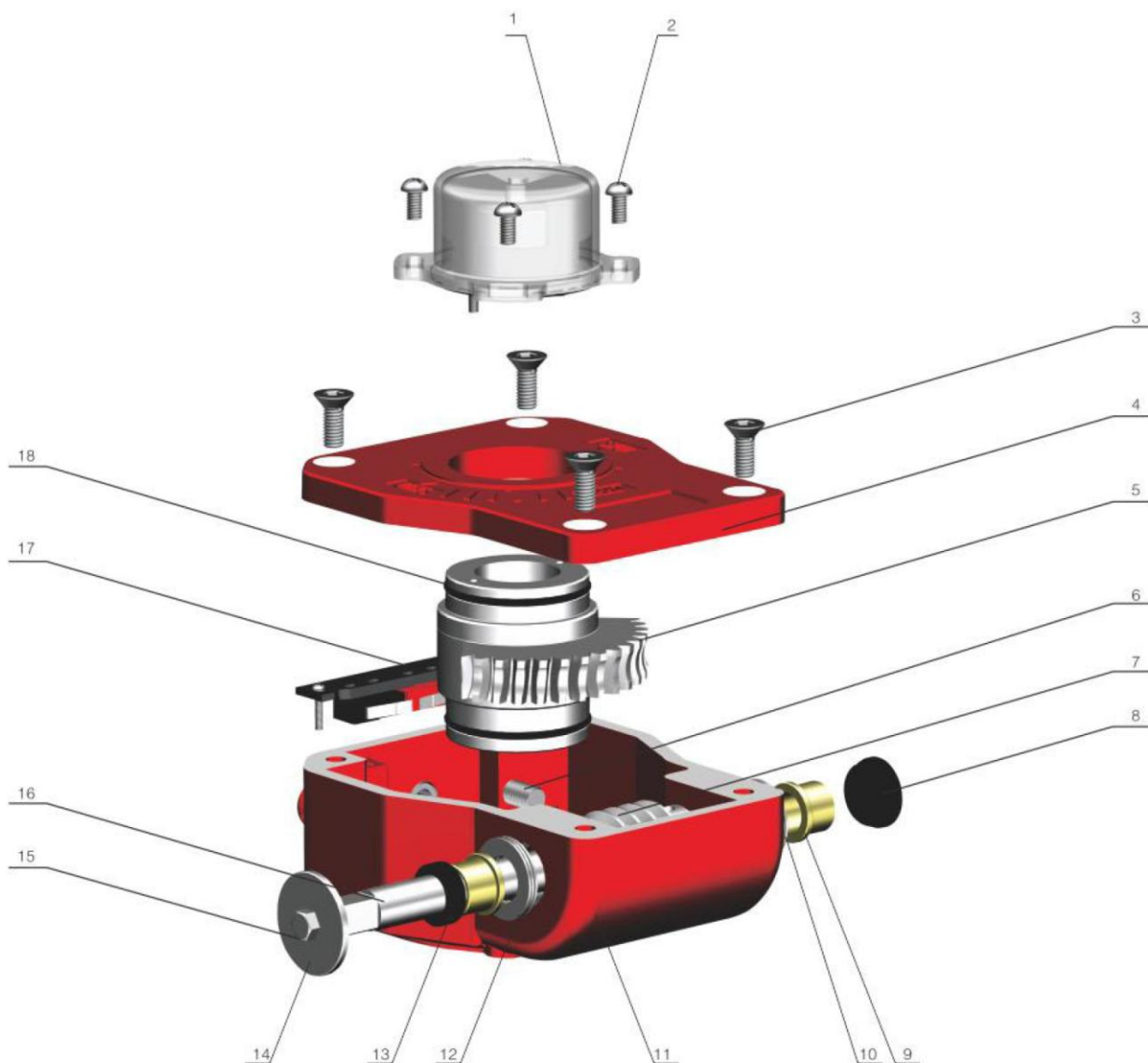
Spray paint color: LSD series worm gear box standard surface paint color is black and red (also can be customized according to customer requirements)

● 与阀门连接Connect with valve

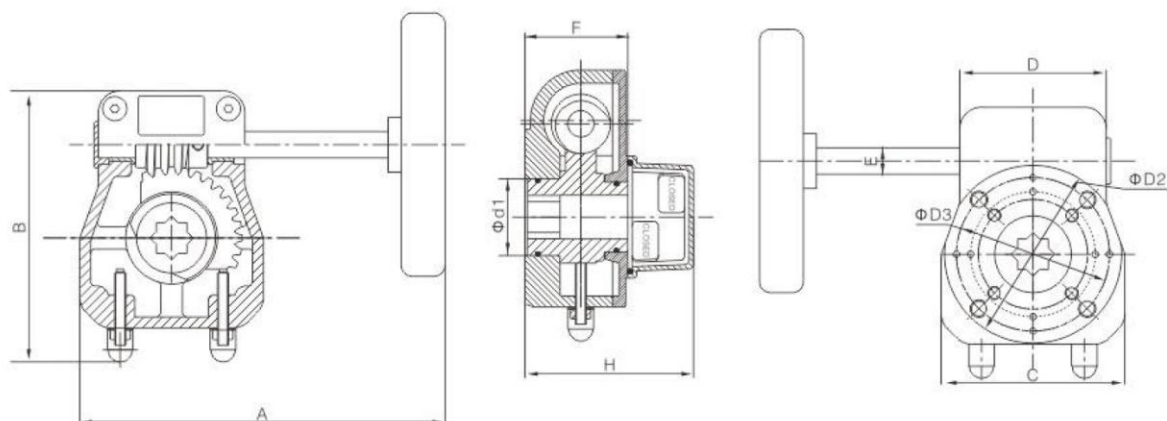
LSD系列阀门蜗轮箱与阀门的连接采用法兰连接方式，连接法兰尺寸符合EN ISO 5210或DIN 3210的规定，也可根据客户要求定制。

LSD series valve worm gear box and valve connection using flange connection mode, connection flange size conforms to EN ISO 5210 or DIN 3210 requirements, can also be customized according to customer requirements.





序号 No.	名称 Name	材料 Material Science	序号 No.	名称 Name	材料 Material Science
1	透明指示盖 Transparent indicator cover	PC聚碳树脂 PC Polycarbon resin	10	平面轴承 Plane bearing	合金钢 Alloy steel
2	螺丝 Screw	304	11	壳体 Housing	ADC12
3	螺丝 Screw	304	12	平面轴承 Plane bearing	合金钢 Alloy steel
4	盖子 cover	ADC12	13	骨架油封 Skeleton oil seal	橡胶 Rubber
5	蜗轮 Worm gear	QT450	14	垫片 Shim	304
6	调节螺丝 Regulating screw	304	15	螺丝 Screw	304
7	齿条 Rack	45#钢 45# steel	16	轴 Axis	45#钢 45# steel
8	闷盖 Stuffy cover	丁腈橡胶 Butadiene-acrylonitrile rubber	17	限位开关 Limit switch	
9	轴套 Axle sleeve	酮基PZ2175 Ketone based PZ2175	18	O型圈 O type ring	丁腈橡胶 Butadiene-acrylonitrile rubber



●主要零部件材料Main components and materials

	LSD-01	LSD-02	LSD-03	LSD-04
标准输出法兰型号 Standard output flange type	F05/F07	F07	F07/F10/F12	F10/F14
可选输出法兰型号 Optional output flange type				F12
法兰外圆ΦD2 Flange outer diameter D2	81	92	125	140
标准连接孔中心ΦD3 Standard connection hole center D3	50/70	70(89备用)	70/102/125	102/140(125可选)
螺纹孔规格 Specification of thread hole	4-M6/4-M8	4-M8	4-M8/4-M10/4-M12	4-M12/4-M16
(天津蝶阀)十字连接孔中心Φ (Tianjin butterfly valve) center of cross connection hole	57/70(二选一)	70	89	108
标准轴孔Φ Standard axis Φ	12.8/15.9	19.1	22.2/28.6	31.8
标准轴孔□ Standard axis □	11x11/14x14	14x14/17x17	22x22	27x27
Φd1	35	42	55	70
输出扭矩 Nm Output torque Nm	180	320	680	1200
约重(kg) Approximate weight (kg)	1.3	1.85	3.9	6.8
手轮直径(mm) Hand wheel diameter (mm)	120	160	250	300
A	165	185	250	300
B	127	142	190	220
C	84	102	140	164
D	66	79	112	120
E	12	12	16	20
F	47	52	68	71
H	73	78	108	111

注：1.可选法兰型号螺纹孔中心距及螺纹孔数目符合ISO 5211标准。

2.可选轴孔Φd 对应键宽bx榫槽深T如无特殊说明采用GB/T1095 2003加工。

3.手轮直径根据客户对输出力矩要求及操作人员实际输入力矩情况选配，如无特殊说明一律按本表手轮直径配置。

4.静态安全系数为1.5。

*手轮直径按下式确定：Ds=2*M/Q 式中：Ds-手轮直径(mm) M-输入力矩(N·mm) Q-作用于手轮上的圆周力(N).API 6D 标准规定标准值为360N。

Note: 1. optional flange type thread hole center distance and number of threaded holes meet ISO 5211 standard.

2. optional shaft hole D, key width BX hub depth T if there is no special description GB/T1095 - 2003 processing.

3. Handwheel diameters are selected according to the customer's requirements for output torque and the actual input torque of the operator. If there is no special specification, the handwheel diameters are all arranged according to this table.

4. the static safety factor is 1.5.

* hand wheel diameter press type: Ds=2*M/Q

In formula: Ds - handwheel diameter (mm) M - input torque (N. mm) Q - circumferential force (N) acting on the handwheel, the standard value of API 6D is 360N.

