

Fluid control experts
CHUANHU VALVE
流体控制专家 - 川沪阀门



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CHUANHU VALVE FACTORY

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气动执行器
PRODUCT GUIDE

川沪阀门
CHUANHU



气动执行器

AT系列新型阀门气动执行器

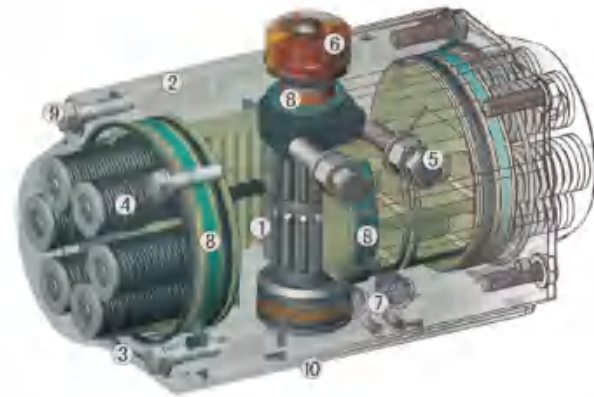
AT新型齿轮齿条式气动执行器由欧德隆公司综合了国内外最新技术,通过CAD三维模型创新优化设计,外形美观紧凑、现代化的造型;并采用实用新型材料、新工艺,使产品的质量、性能更加可靠;多规格选型更经济实惠;产品全面符合最新国际标准技术规范,满足现在和未来的需求。

① 齿轮齿条双活塞对称结构设计,动作快速平稳,精度高,输出功率大,通过简单的改变活塞装配位置可得到反方向旋转。

② 挤压的优质铝合金缸体,经精密加工的内孔和外部表面进行硬质阳极氧化处理(特殊情况下阳极氧化+特氟隆涂层),使用寿命更长,摩擦系数低。

③ 一体式设计,所有的双作用和单作用执行器型号,都具有相同的缸体和端盖,很方便通过加装弹簧或拆除弹簧来改变作用方式。

④ 组合式预符合安全弹簧组,不论在装配过程或使用现场中,都能方便而安全的安装或增减弹簧数量。



⑤ 外部侧面两个单独调节螺钉对于已安装在阀门上的执行器更是精确方便,调节阀开和阀关位置,如需全程调节时则另外在两个端盖处配置较长调节螺钉。

⑥ 多功能位置指示器,现场可视化指示,符合VID/VIE3845、NAMUR标准槽,能安装并输出所有附件,如限位开关盒、电气定位器、位置传感器(倍加福、图尔克)。

⑦ 气源接口符合NAMUR标准,可直接安装NAMUR标准电磁阀。

⑧ 齿条背面的复合材料轴瓦和活塞导向环以及输出轴的轴承等为防止金属对金属的摩擦,并且增加润滑,使其低摩擦、长寿命。

⑨ 所有的紧固件均采用不锈钢材料,长期抗腐蚀。

⑩ 连接部分符合全新国际标准规范ISO5211, DIN3337(F03-F25)使产品安装具有互换性、通用性。

型号编制



气动执行器

New Pneumatic Valve Actuator Of Series AT

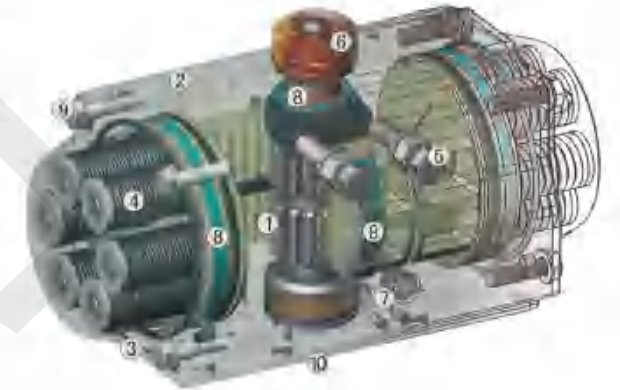
AT the new rack and pinion pneumatic actuator integrated company by the ODELO the latest technology at home and abroad, through the three-dimensional model of innovation and optimization of CAD design, beautiful shape compact, modern styling; and adopt practical new materials, new processes, product quality, more reliable; many more affordable selection of specifications; products fully comply with the latest technical specifications of international standards to meet current and future needs.

① dual piston rack and pinion design of symmetric structures, rapid and smooth movement, high precision, high output power, by simply changing the position of the piston assembly against the direction of rotation available.

② Extrusion of high-quality aluminum alloy cylinder block, by the precision machining of the inner hole and outer surface of hard anodized (anodic oxidation under special circumstances+teflon coating), longer life, low friction coefficient.

③ Integrated design, all the dual role and one role of the actuator models have the same cylinder and end caps, easily removed by installing a spring or spring to change the mode of action.

④ Combined pre-safe spring group, both in the assembly process or use on-site in both convenient and safe to install or change the number of springs.



⑤ External side of two separate adjustment screw has been installed in the valve on the actuator is precisely to facilitate, control valve open and valve closed position, for a full stroke adjustment when the other two cover a longer adjustment screw office configuration.

⑥ Multi-position indicator, on-site visual instructions, consistent with VID/VIE3845, NAMUR standard slot, the output can be installed and all the accessories, such as limit switch box, electric positioner, position sensor(pepperl and fuchs, turck).

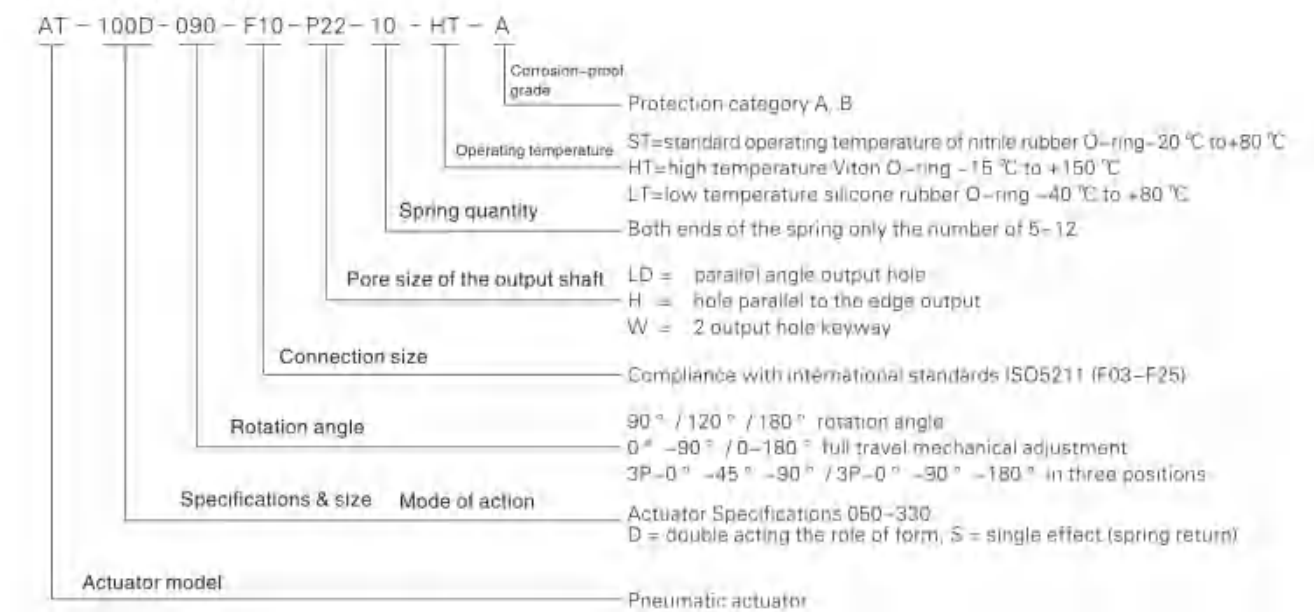
⑦ Interface complies with NAMUR standard gas source can be directly mounted NAMUR standard solenoid valve.

⑧ Rack on the back of the composite bearing and piston guide ring and the output shaft bearings to prevent metal on metal friction and increasing lubrication, so a low friction, long life.

⑨ All fasteners are stainless steel, long-term corrosion resistance.

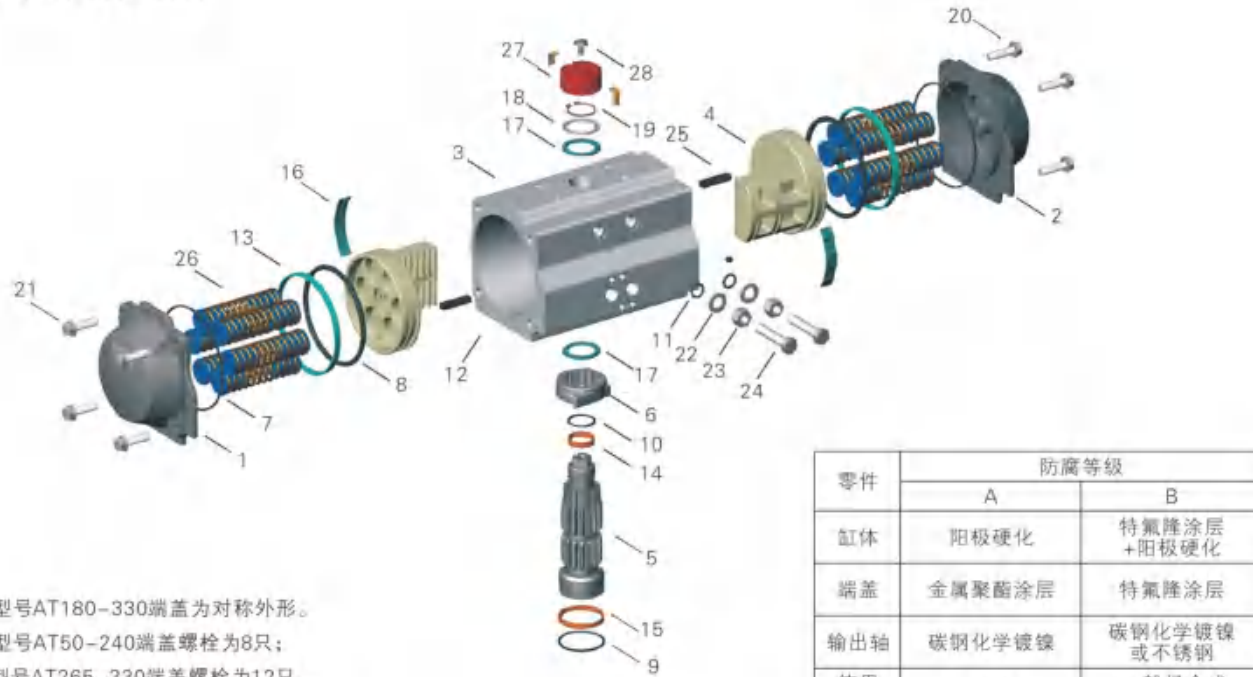
⑩ Connecting part of the new international standard ds consistent with ISO5211, DIN3337(F03-F25) makes products with interchangeable, versatile.

Model preparation



气动执行器

零部件及材料、防腐



(1)型号AT180-330端盖为对称外形。

(2)型号AT50-240端盖螺栓为8只；

型号AT265-330端盖螺栓为12只。

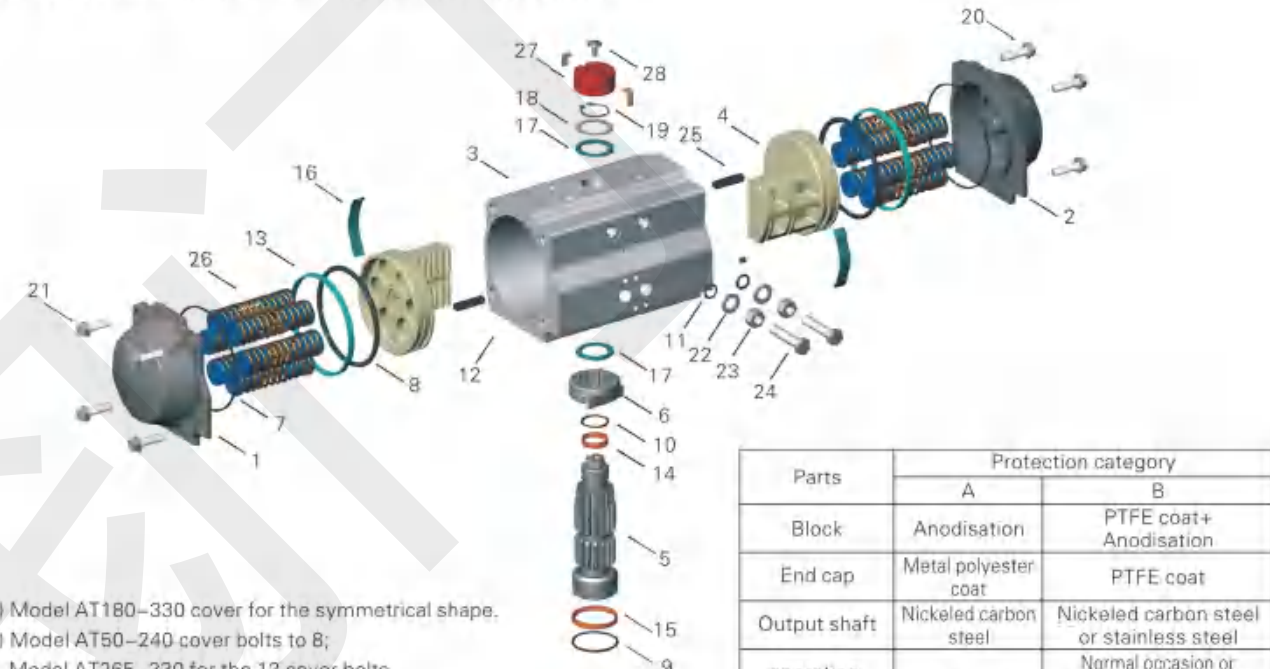
*推荐维修用的零部件，包括在备件包中的零件。

零件	防腐等级	
	A	B
缸体	阳极硬化	特氟隆涂层+阳极硬化
端盖	金属聚酯涂层	特氟隆涂层
输出轴	碳钢化学镀镍	碳钢化学镀镍或不锈钢
使用场合	一般场合	一般场合或低浓度酸性环境

零件号	每台数量	零件名称	标准材料	选用材料
01	1 ⁽¹⁾	左端盖	压铸铝合金	不锈钢
02	1 ⁽¹⁾	右端盖	压铸铝合金	不锈钢
03	1	缸体	挤压铝合金	不锈钢
04	2	活塞	压铸铝合金	----
05	1	输出轴	碳钢	不锈钢
06	1	调节凸轮	不锈钢	----
07*	2	O型圈(端盖)	丁晴橡胶	氟或硅橡胶
08*	2	O型圈(活塞)	丁晴橡胶	氟或硅橡胶
09*	1	O型圈(输出轴底部)	丁晴橡胶	氟或硅橡胶
10*	1	O型圈(输出轴顶部)	丁晴橡胶	氟或硅橡胶
11*	2	O型圈(调节螺栓)	丁晴橡胶	氟或硅橡胶
12*	2	塞头(缸体)	丁晴橡胶	氟或硅橡胶
13*	2	轴承(活塞)	氟碳复合材料	----
14*	1	轴承(输出轴顶部)	尼龙46	----
15*	1	轴承(输出轴底部)	尼龙46	----
16*	1	导向轴承(活塞背面)	尼龙46	----
17*	2	推力轴承(输出轴)	尼龙46	----
18	2	垫片(输出轴)	尼龙46	----
19	1	弹性挡圈	不锈钢	----
20	8/12/16 ⁽²⁾	端盖螺栓	不锈钢	----
21	8/12/16 ⁽²⁾	端盖垫片	不锈钢	----
22	2	垫片	不锈钢	----
23	2	螺帽	不锈钢	----
24	2	调节螺栓	不锈钢	----
25	2	导向块	尼龙66+30%FG	----
26	5-12	弹簧组件	合金弹簧钢	----
27	1	位置指示器	聚丙烯PP+30%GF	----
28	1	螺钉	不锈钢	----

气动执行器

Components, Material and Corrosion Protection



(1) Model AT180-330 cover for the symmetrical shape.

(2) Model AT50-240 cover bolts to 8;

Model AT265-330 for the 12 cover bolts.

* Recommended maintenance, spare parts, including spare parts package.

Parts	Protection category	
	A	B
Block	Anodisation	PTFE coat+Anodisation
End cap	Metal polyester coat	PTFE coat
Output shaft	Nickel carbon steel	Nickel carbon steel or stainless steel
operating environment	Normal occasion	Normal occasion or environment with low concentration of the acidity

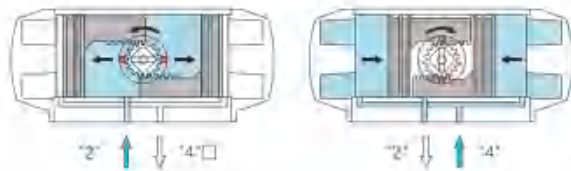
Part NO.	Number for Each type	Name of the parts	Standard Material	Materials Selected
01	1 ⁽¹⁾	Left Cover	Aluminum Die Casting	Stainless steel
02	1 ⁽¹⁾	Right Cover	Aluminum Die Casting	Stainless steel
03	1	Block	Aluminum extrusion	Stainless steel
04	2	Piston	Aluminum Die Casting	----
05	1	Output shaft	Carbon Steel	Stainless steel
06	1	Cam adjustment	Stainless steel	----
07*	2	O-ring (cover)	NBR	Fluorine or silicone rubber
08*	2	O-ring (Piston)	NBR	Fluorine or silicone rubber
09*	1	O-ring (output shaft bottom)	NBR	Fluorine or silicone rubber
10*	1	O-ring (output shaft at the top)	NBR	Fluorine or silicone rubber
11*	2	O-ring (adjusting screw)	NBR	Fluorine or silicone rubber
12*	2	Plug (Cylinder)	NBR	Fluorine or silicone rubber
13*	2	Bearing (Piston)	PVDF composites	----
14*	1	Bearing (output shaft at the top)	Nylon 46	----
15*	1	Bearing (output shaft bottom)	Nylon 46	----
16*	1	Guide bearings (piston back)	Nylon 46	----
17*	2	Thrust bearings (output shaft)	Nylon 46	----
18	2	Gasket (output shaft)	Nylon 46	----
19	1	Flexible ring file	Stainless steel	----
20	8/12/16 ⁽²⁾	Cover bolt	Stainless steel	----
21	8/12/16 ⁽²⁾	Cover Gasket	Stainless steel	----
22	2	Gasket	Stainless steel	----
23	2	Nut	Stainless steel	----
24	2	Adjustment bolt	Stainless steel	----
25	2	Block-oriented	Nylon 66 +30% FG	----
26	5-12	Spring Components	Alloy spring steel	----
27	1	Position indicator	Polypropylene PP +30% GF	----
28	1	Screw	Stainless steel	----

气动执行器

双作用式工作原理 Principle of double-acting

当气源压力从气口(2)进入气缸两活塞之间中腔时,使两活塞分离向气缸两端方向移动,两端气腔的空气通过气口(4)排出,同时使两活塞齿条同步带动输出轴(齿轮)逆时针方向旋转。反之气源压力从气口(4)进入气缸两端气腔时,使两活塞向气缸中间方向移动,中间气腔的空气通过气口(2)排出,同时使两活塞齿条同步带动输出轴(齿轮)顺时针方向旋转。(如果把活塞相对反方向安装,输出轴变为反向旋转,即为双作用反转型)。

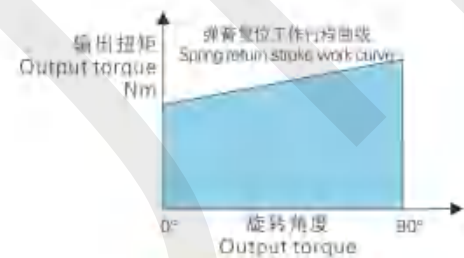
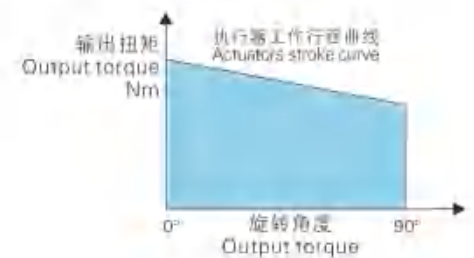
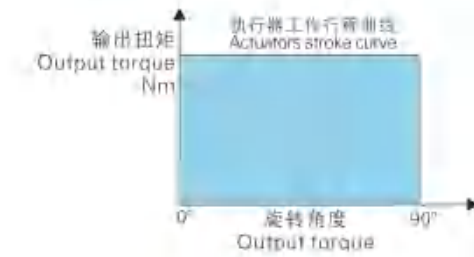
When the air supply pressure from the air intake (2) into the cylinder between the pistons in the chamber, so that the two separation of both ends of the cylinder piston moves, both ends of the air space of air through the air inlet (4) discharge, while allowing two simultaneous drive output shaft piston rack (gear) clockwise turn. Instead air pressure from the air inlet (4) into the cylinder at both ends of gas chamber, so the two piston cylinder moves to the middle of the middle air cavity of air through the air intake (2) discharge, with synchronization when the pistons driving the output shaft rack (gear) rotates clockwise. (such as results relative to the opposite direction to install the piston, the output shaft into the reverse rotation, that is, double for with the anti-transformation).



单作用式工作原理 Principle of single-acting

当气源压力从气口(2)进入气缸两活塞之间中腔时,使两活塞分离向气缸两端方向移动,迫使两端的弹簧压缩,两端气腔的空气通过气口(4)排出,同时使两活塞齿条同步带动输出轴(齿轮)逆时针方向旋转。在气源压力经过电磁阀换向后,气缸的两活塞在弹簧的弹力下向中间方向移动,中间气腔的空气从气口(2)排出,同时使两活塞齿条同步带动输出轴(齿轮)顺时针方向旋转。(如果把活塞相对反方向安装,弹簧复位时输出轴变为反向旋转,即为单作用反转型)。

When the air supply pressure from the air intake (2) into the cylinder between the pistons in the chamber, so that the two separation of both ends of the cylinder piston moves, forcing both ends of the spring compression, both ends gas chamber air through the air inlet (4) discharge, while simultaneously driving the pistons lose rack the axis (gear) counterclockwise rotation. After the gas supply pressure valve for back, two-cylinder piston in the spring will move to the center under the middle air cavity air from the air intake (2) output, while allowing two simultaneous drive output shaft of the piston rack (teeth round) clockwise rotation. (If you installed the opposite direction relative to the piston, spring return into reverse when the output shaft rotation, that is, the role of anti-single-transformation)



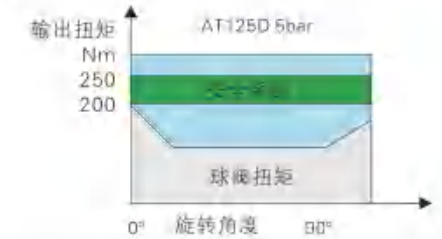
气动执行器

执行器选用

选用气动执行器时,在已确定阀门的扭矩上再增加安全值,水蒸气或非润滑的液体介质增加25%安全值;非润滑的浆料液体介质增加30%安全值;非润滑的干气介质增加40%安全值;非润滑用气体输送的颗粒粉料介质增加60%安全值,对于清洁、低摩擦的润滑介质增加20%安全值(上述安全值为本公司理论推荐,仅供参考)。

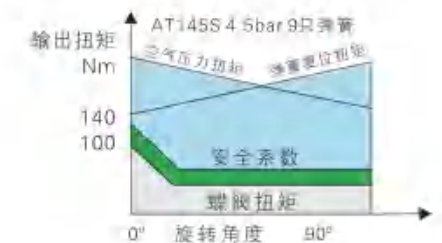
双作用式执行器选用示例

当控制一个需要扭矩200Nm的球阀,气源压力只有5bar,介质为非润滑的水蒸气,考虑到安全因素,增加25%安全值等于250Nm,按双作用输出扭矩表查找气源压力5bar,然后沿该行垂直查找等于或相近的扭矩数据,选277Nm,再沿该行向左查找其型号,选择AT125D型。



单作用式执行器选用示例

当控制一个需要扭矩100Nm的蝶阀,气源压力为4.5bar,介质为非润滑的干燥气体,考虑到安全因素,增加40%安全值等于140Nm,按单作用输出扭矩表查找弹簧复位终点得到相近扭矩148Nm,然后沿该行向左查找气源压力4.5bar的终点扭矩158Nm,必须考虑气源压力扭矩和弹簧复位扭矩相对力平衡,再沿该行向左查找其型号和弹簧数量,选择AT145S型、9只弹簧。



(A) 执行器的动作时间按下列条件测试: (1)行程 (2) 90°行程 (3) 电磁阀4mm口径,流量为Qn400L/min (4)管子内径8mm
(B)中性干净空气 (C)气源压力5.5bar (D)执行器空载
注:在选型测试中一个或多个参数不同,动作时间会发生变化。
(E)单作用重量为10根弹簧计算;需调整增加或减少弹簧数量时按每根弹簧重量非计算增加或减少每一台数量。

执行器有关数据

型号	最大气源压力	旋转角度	操作温度(°C)	行程调节 每1°圈数	气缸直径 φ(mm)	气缸容量(L)		开关时间(秒)(A)		重量(kg)(B)		
						开向	关向	开向	关向	每台	每根弹簧	
AT050	干燥或 润滑的 洁净压 缩空气 8 bar	90° ±4° 或全 行程 0° ~90°	ST(标准) 丁腈橡胶O型圈 -20~+80	1/6	50	0.1	0.2	D0.2	D0.3	D1.1	----	
AT063				1/6	63	0.2	0.3	S0.3	S0.3	S1.2	0.01	
								D0.3	D0.3	D1.6	0.02	
AT075				1/5	75	0.3	0.5	S0.3	S0.4	S3.2	0.03	
								D0.3	D0.4	D2.8	----	
AT088				1/5	88	0.5	0.8	S0.5	S0.6	S4.7	0.06	
								D0.4	D0.5	D4.0	----	
AT100				1/5	100	0.7	1.1	S0.5	S0.6	S4.7	0.06	
								D0.5	D0.6	D5.9	----	
AT115				1/5	115	1.2	1.8	S0.7	S0.9	S6.7	0.07	
								D0.7	D0.8	D8.5	----	
AT125				1/4	125	1.5	2.3	S0.9	S1.1	S10.0	0.13	
								D0.9	D1.1	D10.7	----	
AT145				1/4	145	HT(高温) 氟橡胶O型圈 -15~+150	1.5	2.3	S1.2	S1.4	S12.5	0.16
									D1.2	D1.4	D15.5	----
AT160				1/4	160	3.1	4.9	S1.5	S1.8	S18.3	0.25	
	D1.5	D1.7	D19.5					----				
AT180	1/4	180	4.3	6.9	S1.8	S2.1	S23.3	0.36				
					D2.0	D2.2	D26.7	----				
AT200	1/4	200	5.9	9.5	S2.4	S2.8	S32.8	0.50				
					D2.7	D3.2	D35.6	----				
AT240	1/4	240	10.0	15.2	S3.5	S4.0	S43.6	0.62				
					D3.5	D4.0	D58.2	----				
AT265	1/4	265	14.5	21.4	S4.1	S4.6	S71.0	1.12				
					D4.0	D4.5	D78.8	----				
AT330	1/4	330	25.0	40.0	S4.5	S5.0	S96.5	1.56				
					D6.0	D7.0	D130	----				
						S7.5	S8.5	S163	2.95			

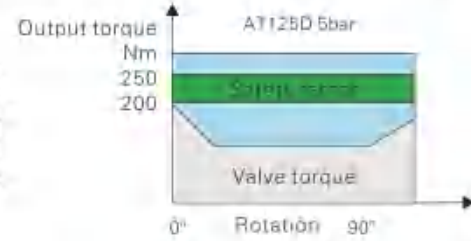
气动执行器

Actuator Selection

When pneumatic actuator used in the torque on the valve have been identified to increase the safety value, water vapor or liquid lubricating medium security value by 25%; non-lubricated slurry liquid medium to increase the security value of 30%; non-lubricated dry gas media to increase the security value of 40%; non-lubricating powder particles with gas delivery medium to increase the security value of 60%; for clean, low-friction lubricating medium to increase the security value of 20% (the theory of the security value of the company recommended, for reference only).

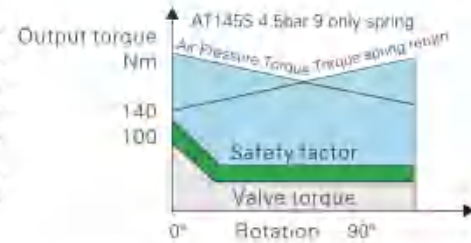
Use double-acting actuator example

When control of a need for torque 200Nm of ball valve, gas supply pressure is only 5bar, medium non-lubricated steam, taking into account the safety factor, increase the security value is equal to 25% of 250 Nm, the output torque of the table by double-acting pressure gas source to find 5bar, then along the vertical column is equal to or similar to find the torque data, select 277 Nm, and then along the line to the left to find the model, select AT125D type.



One example of the role of actuator selection

When control of a need for torque 100Nm of butterfly valves, air supply pressure 4.5bar, medium non-lubricated dry gas, taking into account the safety factor, increase the security value is equal to 40% of 140Nm, the role of the output torque by a single table to find the end spring return have similar torque 148Nm, and then along the line to the left to find the end of air supply pressure 4.5bar torque of 158Nm, must consider the supply pressure torque and spring return torque of the relative balance of power, and then along the line to the left to find the model and spring number, select AT145S type, nine springs.



(A) movement time actuator test the following conditions: (1) at room temperature (2) 90° travel (3) 4mm diameter solenoid valves, flow Qn400L/min (4) tube diameter 8mm
(B) neutral clean air (5) air supply pressure 5.5bar (7) No-load actuators
Note: in the field test one or more parameters are different, the movement time to change.
(B) the role of the weight of a single calculation for the 10 spring; need to increase or decrease the quantity of springs per root weight to calculate the spring to increase or decrease each number.

Actuator information

型号 Model	Maximum air supply pressure	Rotation	Operating temperature (°C)	Stroke (mm)	Cylinder diameter φ (mm)	Cylinder capacity (l) open to the commissioner to	Switching time (seconds) (A) open to the commissioner to	Weight (kg) (B) Each spring each
AT050	Clean dry or lubricated compressed air 8 bar	90° ± 4° or full stroke 0° - 90°	ST (standard) nitrile rubber O-ring -20~+80	1/6	50	0.1 0.2	D0.2 D0.3	D1.1
AT063							S0.3 S0.3	S1.2 0.01
AT075					75	0.3 0.5	D0.3 D0.4	D2.8
AT088							S0.4 S0.5	S3.2 0.03
AT100					100	0.7 1.1	D0.4 D0.5	D4.0
AT115							S0.5 S0.6	S4.7 0.06
AT125					125	1.5 2.3	D0.5 D0.6	D5.9
AT145							S0.7 S0.9	S6.7 0.07
AT160					160	3.1 4.9	D0.7 D0.8	D8.5
AT180							S0.9 S1.1	S10.0 0.13
AT200					200	5.9 9.5	D0.9 D1.1	D10.7
AT240							S1.2 S1.4	S12.5 0.16
AT265	265	14.5 21.4	D1.2 D1.4	D15.5				
AT330			S1.5 S1.8	S18.3 0.25				
	160	3.1 4.9	D1.5 D1.7	D19.5				
			S1.8 S2.1	S23.3 0.36				
	180	4.3 6.9	D2.0 D2.2	D26.7				
			S2.4 S2.8	S32.8 0.50				
	200	5.9 9.5	D2.7 D3.2	D35.6				
			S3.5 S4.0	S43.6 0.62				
	240	10.0 15.2	D3.5 D4.0	D58.2				
			S4.1 S4.6	S71.0 1.12				
	265	14.5 21.4	D4.0 D4.5	D78.8				
			S4.5 S5.0	S96.5 1.56				
	330	25.0 40.0	D6.0 D7.0	D130				
			S7.5 S8.5	S163 2.95				

气动执行器

双作用式输出扭矩 Double acting torque (Nm)

执行器型号 Actuator Model	2.5bar	3.0bar	3.5bar	4.0bar	4.5bar	5.0bar	5.5bar	6.0bar	7.0bar	8.0bar
AT032D	3.6	4.3	5	5.7	6.4	7.3	8	8.7	10	11.6
AT050D	8.3	10.0	11.6	13.3	15.0	16.6	18.3	19.9	23.3	26.6
AT063D	14.7	17.6	20.5	23.5	26.4	29.3	32.2	35.2	41.0	46.9
AT075D	29.1	34.9	40.7	46.5	52.3	58.2	64.0	69.8	81.4	93.0
AT088D	45.7	54.9	64.0	73.2	82.3	91.5	101	110	128	146
AT100D	66.5	79.7	93.0	106	120	133	146	160	186	213
AT115D	107	129	150	172	193	215	236	258	301	344
AT125D	138	166	194	221	249	277	304	332	387	443
AT145D	217	261	304	348	391	434	478	521	608	695
AT160D	283	340	397	453	510	567	623	680	793	907
AT180D	383	459	536	612	689	765	842	918	1071	1224
AT200D	531	638	744	850	956	1063	1169	1275	1488	1700
AT240D	935	1122	1309	1496	1683	1870	2057	2244	2618	2992
AT265D	1347	1617	1886	2156	2425	2695	2964	3234	3772	4311
AT330D	2350	2821	3291	3761	4231	4701	5171	5641	6581	7521

单作用式输出扭矩(弹簧复位) Single-action output torque (spring return) (Nm)

执行器型号 Actuator Model	弹簧数量 Spring quantity	空气压力扭矩 Air Pressure Torque																								弹簧复位扭矩 Spring return torque
		2.5bar		3.0bar		3.5bar		4.0bar		4.5bar		5.0bar		5.5bar		6.0bar		7.0bar		8.0bar						
开始	结束	开始	结束	开始	结束	开始	结束	开始	结束	开始	结束	开始	结束	开始	结束	开始	结束	开始	结束	开始	结束	开始	结束			
AT050S	05	3.4	3.4	4.1	4.1	4.8	4.8	5.5	5.5	6.2	6.2	6.9	6.9	7.6	7.6	8.3	8.3	9.0	9.0	9.7	9.7	10.4	10.4			
	06	4.2	4.2	5.0	5.0	5.8	5.8	6.6	6.6	7.4	7.4	8.2	8.2	9.0	9.0	9.8	9.8	10.6	10.6	11.4	11.4	12.2	12.2			
	07			5.2	5.2	6.0	6.0	6.8	6.8	7.6	7.6	8.4	8.4	9.2	9.2	10.0	10.0	10.8	10.8	11.6	11.6	12.4	12.4			
	08					6.2	6.2	7.0	7.0	7.8	7.8	8.6	8.6	9.4	9.4	10.2	10.2	11.0	11.0	11.8	11.8	12.6	12.6			
	09							7.2	7.2	8.0	8.0	8.8	8.8	9.6	9.6	10.4	10.4	11.2	11.2	12.0	12.0	12.8	12.8			
	10								8.2	8.2	9.0	9.0	9.8	9.8	10.6	10.6	11.4	11.4	12.2	12.2	13.0	13.0	13.8	13.8		
	11										9.2	9.2	10.0	10.0	10.8	10.8	11.6	11.6	12.4	12.4	13.2	13.2	14.0	14.0		
	12												10.2	10.2	11.0	11.0	11.8	11.8	12.6	12.6	13.4	13.4	14.2	14.2		
	05	5.1	6.2	7.2	8.3	9.3	10.4	11.5	12.5	13.6	14.6	15.7	16.7	17.8	18.8	19.9	20.9	21.9	22.9	23.9	24.9	25.9	26.9			
	06	6	7.4	8.8	10.2	11.6	13.0	14.4	15.8	17.2	18.6	20.0	21.4	22.8	24.2	25.6	27.0	28.4	29.8	31.2	32.6	34.0	35.4			
	07			8.2	9.7	11.2	12.7	14.2	15.7	17.2	18.7	20.2	21.7	23.2	24.7	26.2	27.7	29.2	30.7	32.2	33.7	35.2	36.7			
	08					11.5	13.1	14.7	16.3	17.9	19.5	21.1	22.7	24.3	25.9	27.5	29.1	30.7	32.3	33.9	35.5	37.1	38.7			
09							13.4	15.1	16.8	18.5	20.2	21.9	23.6	25.3	27.0	28.7	30.4	32.1	33.8	35.5	37.2	38.9				
10										15.3	17.1	18.9	20.7	22.5	24.3	26.1	27.9	29.7	31.5	33.3	35.1	36.9				
11												17.1	19.0	21.0	22.9	24.8	26.7	28.6	30.5	32.4	34.3	36.2				
12														18.9	20.9	22.9	24.9	26.9	28.9	30.9	32.9	34.9				
05	18	11.7	23.8	17.6	29.6	23.4	35.4	29.2	41.2	35	47.1	40.8														
06	15.8	8.3	21.8	14.1	27.4	19.9	33.2	26.7	39	31.3	44.6	37.3	50.7	43.2												
07			19.4	10.6	25.2	16.9	31	22.3	36.8	28.1	42.6	33.9	48.4	39.7	54.3	45.5										
08					23	13	28.8	18.8	34.6	24.6	40.4	30.4	46.2	36.2	52	42	63.7	53.7								
09							26.6	16.3	32.4	21.1	38.2	27	44	32.8	49.8	39.6	55.5	50.2	73.1	61.8	31.1	19.9				
10									30.2	17.2	36	23.8	41.8	29.3	47.6	35.1	53.2	45.7	70.9	58.4	34.6	22.1				
11											33.8	20	39.6	26.8	45.4	31.7	57	43.3	66.7	54.9	38.1	24.2				
12													37.4	22.4	43.2	28.2	54.8	39.8	66.4	51.4	41.5	26.5				
05	37.4	16.8	36.5	26	45.7	35.1	54.8	44.3	63.9	53.4	73.1	62.6														
06	32.7	11.1	32.9	20.2	42	29.3	51.1	38.5	60.3	47.6	69.4	56.8	78.6	65.8												
07			29.2	14.4	38.3	23.6	47.5	32.7	56.6	41.9	65.7	51	74.9	60.1	84	69.3										
08					34.6	17.5	43.8	26.8	52.9	36.1	62.1	45.3	71.2	54.4	80.4	63.5	96.6	81.6								
09							40.1	21.2	49.3	30.3	58.4	39.5	67.5	46.6	76.7	57.7	95	76	113	94.1	62	34				
10									45.8	24.6	54.7	33.7	63.9	42.8	73	52	91.3	70.2	110	89.5	57.8	36.7				
11									51.3	27.9	60.2	37	69.3	46.2	87.6	64.5	106	82.8	106	82.8	63.5	40.4				
12											56.9	31.3	65.7	39.4	84	69.7	102	77	102	77	69.3	44				
05	41.1	27	54.4	40.3	67.7	53.6	81	66.8	94.2	80.1	108	93.4														
06	36.1	18.1	43.3	32.4	62.6	45.7	75.9	58.9	89.2	72.3	103	85.5	116	96.8												
07			44.3	24.5	57.6	37.8	70.8	51.1	84.1	64.3	97.4	77.5	111	90.9	124	104										
08					52.5	29.9	66.5	43.2	79.1	56.5	92.3	69.7	106	82	119	96.3	146	123								
09							60.7	35.3	74	48.6	87.3	61.9	101	75.1	114	88.4	140	115	167	142	71	45.5				
10									68.9	40.7	92.2	54	95.5	67.3	109	80.5	135	107	162	134	78.8	50.6				
11											77.8	46.1	98.5	59.4	104	72.2	130	99	167	126	86.7	55.6				
12													85.4	51.5	98.7	64.8	125	92	152	119	84.6	60.7				
05	63.3	41.8	67.8	63.3	109	84.7	131	106	152	128	174	149														
06	58.1	28.7	79.6	50.1	101	71.6	123	93.1	144	115	165	136	187	156												
07			71.3	37	92.8	58.5	114	80	136	101																

气动执行器

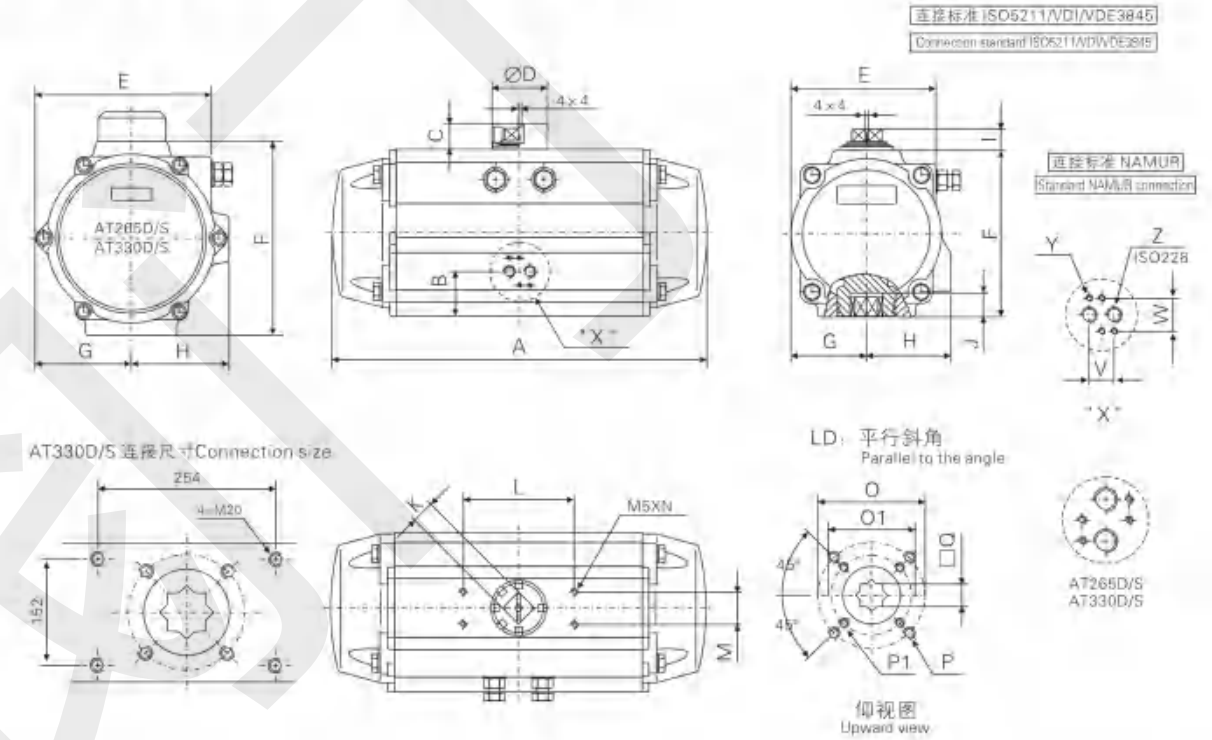
单作用式输出扭矩 Single-action output torque (Nm)

执行器 型号 Actuator Model	弹簧 数量 Spring Quantity	空气压力扭矩 Air Pressure Torque																								弹簧复位扭矩 Spring Return Torque
		2.5bar		3.0bar		3.5bar		4.0bar		4.5bar		5.0bar		5.5bar		6.0bar		7.0bar		8.0bar						
		0° 开始 Start	90° 结束 End	0° 开始 Start	90° 结束 End	0° 开始 Start	90° 结束 End	0° 开始 Start	90° 结束 End	0° 开始 Start	90° 结束 End	0° 开始 Start	90° 结束 End	0° 开始 Start	90° 结束 End	0° 开始 Start	90° 结束 End	0° 开始 Start	90° 结束 End	0° 开始 Start	90° 结束 End					
AT125S	05	35.9	65.9	114	84	141	111	169	139	197	167	224	194									82.5	52.9			
	06	75.4	99.4	103	67	131	95	158	122	186	150	216	178	241	205							38.9	62.9			
	07			92.6	50.6	120	78	148	106	176	134	203	161	231	189	259	217					115	73.4			
	08					110	62	137	89.4	165	117	193	145	221	173	248	200	304	256				122	83.9		
	09							127	72.9	155	101	182	128	210	156	238	184	293	239	348	294		148	94.4		
	10									144	84	172	112	200	140	227	167	293	223	338	278		165	109		
	11													161	95.3	189	133	217	151	272	206	327	261	181	116	
	12													179	107	206	134	262	190	317	246		199	126		
	AT145S	05	135	85.2	178	132	222	175	265	219	309	262	352	305									129	82.3		
		06	199	62.4	162	106	205	149	248	193	282	236	326	280	379	323							156	98.7		
		07			146	80.1	189	124	252	167	276	210	319	264	363	297	406	341					181	115		
		08					173	97.7	216	141	259	185	303	228	346	272	390	316	477	402				206	132	
09								200	115	243	159	286	202	380	246	373	289	460	376	547	452		232	149		
10										227	133	270	177	313	220	367	263	444	350	531	437		258	165		
11														254	151	297	194	340	238	427	324	514	411	284	181	
12														280	168	324	212	411	299	496	386		310	197		
AT160S		05	171	117	228	174	285	231	341	287	398	344	455	401									185	112		
		06	149	84	206	141	262	197	319	254	376	311	432	367	489	424							199	135		
		07			183	108	240	164	296	221	363	276	410	334	466	391	523	438					233	157		
		08					217	131	274	188	331	244	387	301	444	358	501	414	514	528				266	179	
	09							252	154	308	211	365	268	422	324	478	381	592	494	705	606		299	202		
	10									286	176	342	285	399	291	456	348	569	461	682	575		312	224		
	11													320	201	372	288	433	316	547	428	660	541	365	247	
	12													354	225	411	281	524	395	629	508		399	269		
	AT180S	05	225	146	301	222	378	299	454	375	531	452	607	528									227	158		
		06	193	95.3	270	175	348	291	423	328	489	404	576	481	652	557							284	190		
		07			238	127	315	204	391	280	468	357	544	433	621	510	697	586					332	221		
		08					283	157	358	233	436	310	512	386	588	463	665	539	818	682				379	258	
09								328	186	404	262	481	339	557	415	634	492	787	645	940	798		426	284		
10										375	215	449	291	526	368	602	444	755	597	906	750		474	318		
11														418	244	494	320	571	397	724	550	877	703	521	347	
12														463	273	539	350	692	503	845	656		569	379		
AT200S		05	319	216	425	323	532	428	638	535	744	641	850	748									315	212		
		06	277	153	393	260	489	366	595	472	702	578	808	685	914	781							378	255		
		07			340	197	447	303	553	409	669	515	765	622	872	728	978	834					441	297		
		08					404	240	510	346	617	452	723	559	829	665	935	771	1149	984				504	340	
	09							468	263	574	389	680	496	787	602	893	708	1105	921	1318	1133		567	382		
	10									532	326	638	433	744	539	850	645	1063	858	1275	1070		630	425		
	11													595	370	702	476	808	582	1020	795	1233	1007	693	467	
	12													659	413	766	519	878	732	1191	944		756	510		
	AT240S	05	501	319	598	508	875	693	1062	880	1248	1067	1436	1254									618	434		
		06	414	198	601	363	788	570	975	757	1162	844	1349	1131	1536	1318							740	521		
		07			514	259	701	446	898	623	1075	820	1262	1007	1449	1184	1636	1281					863	608		
		08					614	323	801	510	988	697	1175	884	1362	1071	1549	1258	1923	1632				986	685	
09								714	387	881	574	1088	781	1275	948	1463	1135	1837	1509	2211	1883		1109	782		
10										815	451	1002	638	1189	825	1376	1012	1750	1389	2124	1760		1231	869		
11														915	514	1182	701	1289	888	1663	1262	2037	1636	1356	955	
12														1015	578	1202	765	1376	1139	1950	1512		1479	1042		
AT265S		05	780	585	1050	834	1319	1104	1689	1373	1858	1643	2128	1912									763	567		
		06	667	408	936	678	1206	947	1475	1217	1745	1486	2014	1746	2284	2025							939	680		
		07			823	521	1092	791	1362	1080	1631	1330	1901	1599	2170	1869	2440	2138					1096	784		
		08					979	634	1243	804	1518	1173	1797	1443	2057	1712	2326	1981	2865	2520				1252	907	
	09							1135	742	1406	1017	1674	1286	1943	1566	2213	1825	2752	2364	3291	2903		1409	1021		
	10									1291	880	1563	1130	1830	1399	2100	1688	2638	2207	3177	2746		1563	1134		
	11													1447	973	1717	1242	1986	1512	2525	2051	3064	2590	1722	1247	
	12													1603	1086	1879	1365	2112	1694	2951	2433		1878	1361		
	AT330S	05	1333	1017	1609	1487	2273	1957	2743	2427	3214	2897	3684	3267									1334	1013		
		06	1130	750	1600	1290	2070	1690	2540	2151	3010	2631	3480	3101	3950	3571							1800	1221		
		07			1398	964	1886	1424	2337	1894	2807	2364	3277	2834	3747	3304	4217	3774					1861	1424		
		08					1663	1157	2133	1627	2603	2097	3073	2567	3843	3037	4013	3508	4954	4448				2134	1628	
09								1930	1380	2480	1831	2670	2301	3340	2771	3810	3241	4750	4181	5690	5121		2400	1831		
10										2195	1584	2666	2034	3135	2504	3807	2974	4547	3914	5487	4854		2667	2035		
11														2463	1767	2943	2207	4343	3644	5283	4588		2934	2234		
12														2729	1971	3208	2441	4140	3381	6080	4321		3200	2442		

空气压力扭矩下列加黑部份为推荐数值，和弹簧复位扭矩的数值及弹簧数量相对应。
The following additional air pressure torque values recommended by the black majority, and spring return torque values and the corresponding number of spring.

气动执行器

外形及连接尺寸 Dimensions and Connection (mm)

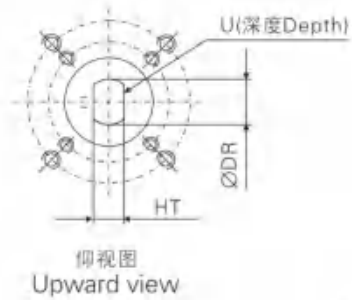


型号 Model	AT050	AT063	AT075	AT088	AT100	AT115	AT125	AT145	AT160	AT180	AT200	AT240	AT265	AT330
D/S														
ISO flange	F04	F05	F05-07	F05-07	F07-10	F07-10	F07-10	F10-12	F10-12	F12	F14	F16	F16	F16
A	140.5	158.5	210.5	247.5	268.5	315	345	408.5	437.5	487	543	633	728	876
B	26.5	30	30.5	32.5	37.5	42.5	45</							

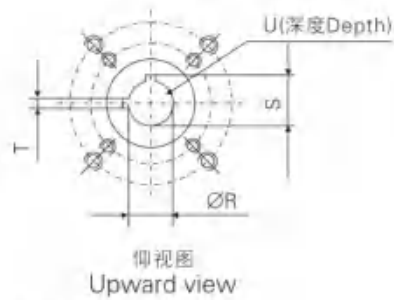
气动执行器

输出孔连接尺寸 (定制) Hole connecting the output size (custom) (mm)

H: 平行对边 Parallel to the edge



W: 二个键槽 2keyway



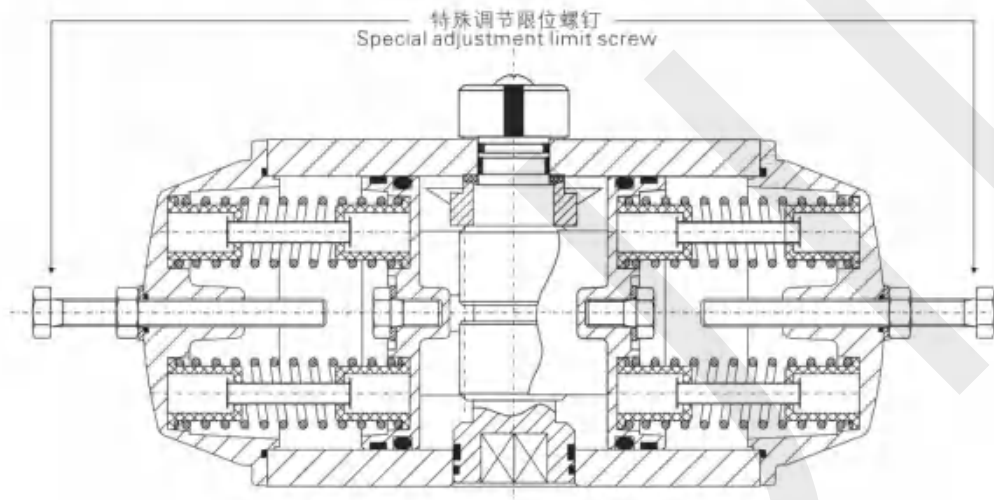
注: 可根据客户尺寸规格定制制造
Note: Custom sizes can be manufactured according to customer

型号 Model	AT050	AT063	AT075	AT088	AT100	AT115	AT125	AT145	AT160	AT180	AT200	AT240	AT265	AT330
	D/S													
φR	12.7	12.7	12.7	15.88	19.05	22.23	22.23	28.58	28.58	31.75	31.75	33.34	38.1	41.28
S	14.2	14.2	14.2	18.4	21.6	24.8	24.8	32.1	32.1	35.3	35.3	37.4	42.4	45.3
T	3	3	5	5	5	5	5	8	8	8	8	10	10	12
U	32	32	32	32	32	45	45	45	45	45	45	51	51	65
φDR	13	13	13	16.1	19.2	22.4	22.4	28.8	28.8	32	32	33.6	38.4	41.5
HT	10	10	10	12	14	17	17	22	22	24	24	27	27	32

全行程调节限位执行器 Full stroke adjustment limit actuator

新型气动执行器在两端提供特殊调节限位螺钉, 客户可根据需要调节 $0^{\circ} - 90^{\circ}$ 、 $0^{\circ} - 120^{\circ}$ 或 $0^{\circ} - 180^{\circ}$ 范围内任意角度, 在所有系列执行器上都可进行全行程调节。

New pneumatic actuator to provide special regulation limit at both ends of the screw, the customer can be adjusted according to $0^{\circ} - 90^{\circ}$, $0^{\circ} - 120^{\circ}$ or $0^{\circ} - 180^{\circ}$ range of any angle, in all series actuators can be carried out on Full stroke adjustment.

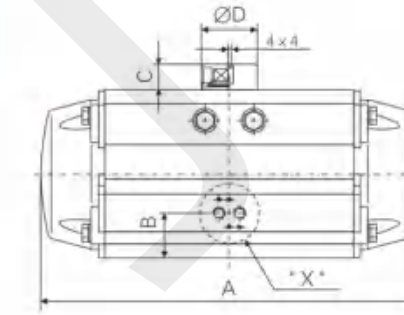
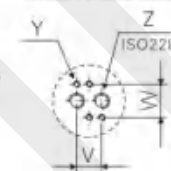


气动执行器

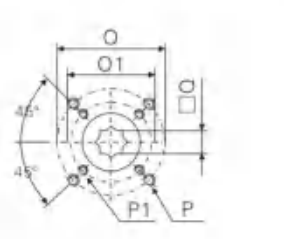
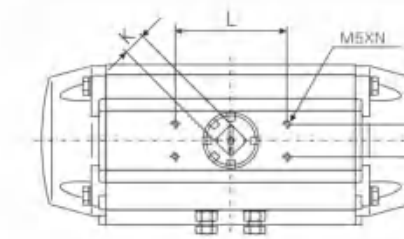
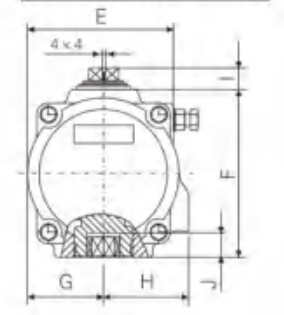
120° / 180° 行程执行器的外形及连接尺寸 (双作用)
120° / 180° Stroke actuator and Connection Dimensions (double acting)



连接标准 NAMUR
Standard NAMUR connector



连接标准 ISO5211/VDI/VDE3845
Connection standard ISO5211/VDI/VDE3845



- 1、根据需要可提供其他型号规格执行器。 1, according to specifications required to provide other types of actuator.
- 2、可提供不同行程的执行器, 如 $140^{\circ} / 160^{\circ}$ 行程等。 2, provides various trip actuator, such as $140^{\circ} / 160^{\circ}$ itineraries.

型号 Model	AT050	AT063	AT075	AT088	AT100	AT115	AT125	AT145	AT160	AT180	AT200	AT240	AT265	AT330
	D/S													
ISO flange	-	F05	F05-7	-	F07-10	-	F07-10	-	F10-12	-	F14	-	-	-
A(120°)	-	183	243	-	309	-	397	-	504	-	622	-	-	-
A(180°)	-	225	305	-	385	-	498	-	630	-	775	-	-	-
B	-	30	30.5	-	37.5	-	45	-	52	-	62.5	-	-	-
C	-	20	20	-	20	-	30	-	30	-	50	-	-	-
φD	-	40	40	-	40	-	56	-	65	-	80	-	-	-
E	-	72	84.5	-	111	-	136	-	169	-	213	-	-	-
F	-	85	102	-	127	-	157	-	196	-	245	-	-	-
G	-	36	42.5	-	56	-	69.5	-	88	-	110	-	-	-
H	-	47	52	-	67	-	82	-	99	-	112	-	-	-
I	-	14.5	14.5	-	14.5	-	24.5	-	24.5	-	44.5	-	-	-
Jmin	-	16	16	-	19	-	24	-	29	-	38	-	-	-
K	-	11	17	-	17	-	27	-	27	-	36	-	-	-
L	-	80	80	-	80	-	80	-	80	-	130	-	-	-
M	-	30	30	-	30	-	30	-	30	-	30	-	-	-
N	-	8	8	-	8	-	8	-	8	-	8	-	-	-
φO1	-	50	50	-	70	-	70	-	102	-	140	-	-	-
φO	-	-	70	-	102	-	102	-	125	-	-	-	-	-
P1	-	4-M6	4-M6	-	4-M8	-	4-M8	-	4-M10	-	4-M16	-	-	-
P	-	-	4-M8	-	4-M10	-	4-M10	-	4-M12	-	-	-	-	-
□Q	-	14	14	-	17	-	22	-	27	-	36	-	-	-
φR	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S	-	-	-	-	-	-	-	-	-	-	-	-	-	-
T	-	-	-	-	-	-	-	-	-	-	-	-	-	-
U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
V	-	24	24	-	24	-	24	-	24	-	24	-	-	-
W	-	32	32	-	32	-	32	-	32	-	32	-	-	-
Y	-	M5×8	M5×8	-	M5×8	-	M5×8	-	M5×8	-	M5×8	-	-	-
Z	-	1/8"	1/8"	-	1/4"	-	1/4"	-	1/4"	-	1/4"	-	-	-

气动执行器

三位置气动执行器

三位置气动执行器有二种型号 $0^{\circ}-45^{\circ}-90^{\circ}$ 和 $0^{\circ}-90^{\circ}-180^{\circ}$ ，在气口“2”进气后活塞向两端运动被两端设计有辅助活塞产生机械限制来实现中间位置的，可直接利用外面两端调节螺栓很容易调节中间位置角度，如 20° 、 30° 、 50° 、 75° 和 95° 、 120° 、 130° 、 150° 、 175° 等。

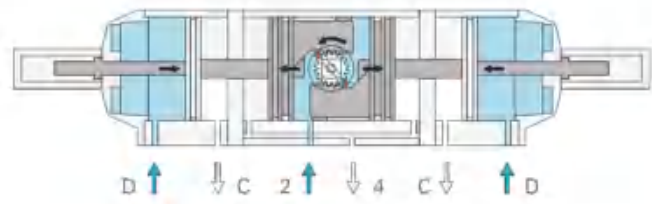


工作原理

三位置气动执行器的操作需要设计一套电磁阀控制回路系统来完成操作，其控制原理如下：

Operating principles:

Three position pneumatic actuator operation requires the design of a solenoid valve control loop system to complete the operation, the control principle as follows:

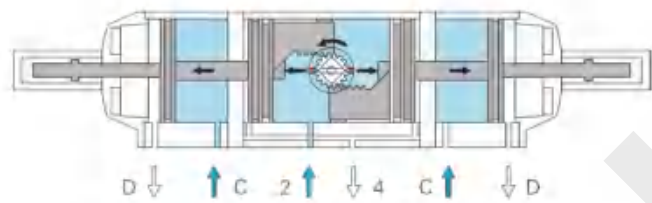


位置1 (中间位置)

气源压力同时进入2口和D口，空气从4口和C口排出，2口作为内部活塞移动，D口是通过辅助活塞推杆限制内部活塞定位在预定的中间位置。

Position 1 (middle)

Air pressure at the same time and D into the two port, air from the exhaust port 4 and C, 2 as an internal piston, D mouth is by putting restrictions on secondary piston within the piston located in the middle of booking.

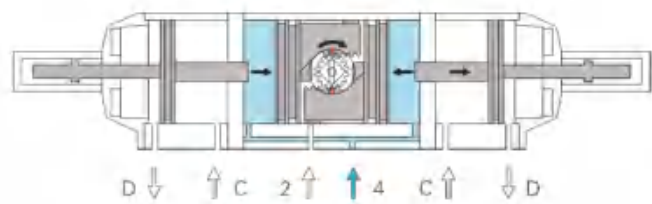


位置2 (全开位置)

气源压力同时进入2口和C口，空气从4口和D口排出，2口的内部活塞继续移动，C口为解除辅助活塞推杆限制定位，使内部活塞顺利到达全开位置。

Position 2 (open position)

Air pressure at the same time into two and the C port, air from the discharge port 4, and D, two of the internal piston to move, C auxiliary port for the lifting of restrictions on putting the piston position to reach the fully open position within the piston smoothly.



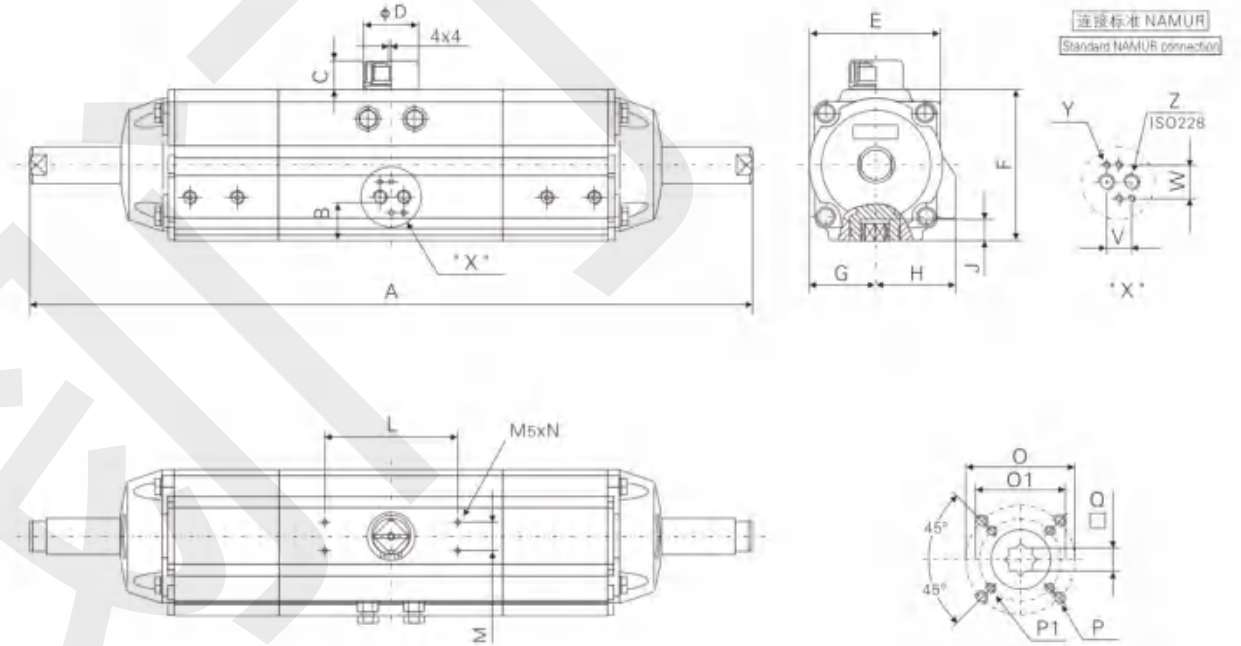
位置3 (全关位置)

气源压力进入4口，空气从2口排出，内部活塞向中间方向移动到全关位置。可提供 $0^{\circ}-45^{\circ}-90^{\circ}$ 弹簧回位型号规格，在断气断电时（或气源故障），通过弹簧迫使内部活塞回位到全关位置。

Position 3 (fully closed position)

Air pressure into four, the air discharged from the two, the internal piston moves to the middle reach the fully closed position. provides $0^{\circ}-45^{\circ}-90^{\circ}$ spring return position type specification, when somebody stops breathing power (or gas source failure), an internal piston back by spring force to the fully closed position.

气动执行器



外形及连接尺寸 Dimensions and Connection

型号 Model	A	B	C	ϕd	E	F	G	H	J	L	M	N	O1	O	P1	P	Q	V	W	Y	Z	
	$0^{\circ}-45^{\circ}-90^{\circ}$ $0^{\circ}-90^{\circ}-180^{\circ}$																					
AT063	390	440	30	20	40	72	85	36	47	16	80	30	8	50	-	4-M6	-	14	24	32	M5x8	1/8"
AT075	480	570	30.5	20	40	84.5	102	42.5	52	16	80	30	8	50	70	4-M6	4-M8	14	24	32	M5x8	1/8"
AT100	600	710	37.5	20	40	111	127	56	67	19	80	30	8	70	102	4-M8	4-M10	17	24	32	M5x8	1/4"
AT125	720	910	45	30	56	136	157	69.5	82	24	80	30	8	70	102	4-M8	4-M10	22	24	32	M5x8	1/4"
AT160	915	1130	52	30	65	169	196	88	99	29	80	30	8	102	125	4-M10	4-M12	27	24	32	M5x8	1/4"
AT200	1155	1400	62.5	50	80	213	245	110	112	38	130	30	8	140	-	4-M16	-	36	24	32	M5x8	1/4"

双作用式输出扭矩(Nm) Double-acting type output torque (Nm)

执行器型号 Actuator Model	2.5bar	3.0bar	3.5bar	4.0bar	4.5bar	5.0bar	5.5bar	6.0bar	7.0bar	8.0bar
AT063D	14.7	17.6	20.5	23.5	26.4	29.3	32.2	35.2	41.0	46.9
AT075D	29.1	34.9	40.7	46.5	52.3	58.2	64.0	69.8	81.4	93.0
AT100D	66.5	79.7	93.0	106	120	133	146	160	186	213
AT125D	138	166	194	221	249	277	304	332	387	443
AT160D	283	340	397	453	510	567	623	680	793	907
AT200D	531	638	744	850	956	1063	1169	1275	1488	1700

气动执行器

0° -45° -90° 型单作用式输出扭矩 (弹簧复位) (Nm)
0° -45° -90° single-action output torque (spring return) (Nm)

执行器 型号 Actuator Model	弹簧 数量 Spring no.	空气压力扭矩 All Pressure Torque																								弹簧复位 扭矩	
		2.5bar		3.0bar		3.5bar		4.0bar		4.5bar		5.0bar		5.5bar		6.0bar		7.0bar		8.0bar		0°	90°				
		开始	结束	开始	结束	开始	结束	开始	结束	开始	结束	开始	结束	开始	结束	开始	结束	开始	结束	开始	结束	开始	结束	开始	结束		
AT063S	05	9.1	6.2	12	9.1	15	12	17.9	15	20.8	17.9	23.7	20.8									8.5	5.9				
	06	8	4.5	10.9	7.4	13.8	10.3	16.8	13.3	19.7	16.2	22.6	19.1	25.6	22.1							10.2	6.7				
	07			9.8	5.7			15.7	11.8	18.6	14.5	21.5	17.4	24.6	20.4	27.4	23.3					11.8	7.8				
	08					11.6	7			14.6	9.9	17.5	12.8	20.4	15.8	23.3	18.7	26.3	21.6	32.1	27.5		13.5	8.9			
	09							13.4	8.2			15.4	11.1	19.3	14.1	22.2	17	25.2	19.9	31	25.8	36.9	31.6	15.2	10		
	10									15.3	9.4			18.2	12.4	21.1	15.3	24.1	18.2	29.9	24.1	35.8	29.9	16.9	11.1		
	11											17.1	10.7			20	13.6	22.9	16.5	28.8	22.4	34.7	28.2	18.6	12.2		
12													18.9	11.9	21.8	14.8	27.7	20.7	33.5	26.6	40.3	33.3	20.3	13.3			
AT075S	05	16	11.7	23.8	17.6	29.6	23.4	36.4	29.2	41.2	36	47.1	40.8									17.3	11.1				
	06	15.8	8.3	21.6	14.1	27.4	19.9	33.2	25.7	39	31.5	44.8	37.3	50.7	43.2							20.8	13.3				
	07			19.4	10.6	25.2	16.4	31	22.3	36.8	28.1	42.6	33.9	48.4	39.7	54.3	45.5					24.2	15.5				
	08					23	13	28.8	18.8	34.6	24.6	40.4	30.4	46.2	36.2	52	42	63.7	53.7			27.7	17.7				
	09							26.6	15.3	32.4	21.1	38.2	27	44	32.8	49.8	38.6	61.5	50.2	73.1	61.8	31.1	19.9				
	10									30.2	17.7	36	23.5	41.8	29.3	47.6	35.1	59.2	46.7	70.9	58.4	34.6	22.1				
	11											33.8	20	39.6	25.8	45.4	31.7	57	43.3	68.7	54.9	38.1	24.3				
12													37.4	22.4	43.2	28.2	54.8	39.8	66.4	51.4	41.5	26.5					
AT100S	05	41.1	27	54.4	40.3	67.7	53.8	81	66.8	94.2	80.1	108	93.4									39.4	25.3				
	06	36.1	19.1	49.3	32.4	62.6	45.7	75.9	58.9	89.2	72.2	103	85.5	116	98.8							47.3	30.4				
	07			44.3	24.5	57.6	37.8	70.8	51.1	84.1	64.3	97.4	77.6	111	90.9	124	104					55.2	35.4				
	08					52.5	29.9	65.8	43.2	79.1	56.5	92.3	69.7	106	83	119	96.3	146	123			63.1	40.5				
	09							60.7	35.3	74	48.6	87.3	61.9	101	75.1	114	88.4	140	115	167	142	71	45.5				
	10									68.9	40.7	82.2	54	95.5	67.3	109	80.5	135	107	182	134	78.8	50.6				
	11											77.2	46.1	90.5	59.4	104	72.7	130	99	157	126	86.7	55.6				
12													85.4	51.5	98.7	64.8	125	92	152	118	94.6	60.7					
AT125S	05	85.9	55.9	114	84	141	111	169	139	197	167	224	194									82.5	52.5				
	06	75.4	39.4	103	67	131	95	158	122	186	150	214	178	241	205							98.9	62.9				
	07			92.6	50.6	120	78	148	106	176	134	203	161	231	189	259	217					115	73.4				
	08					110	62	137	89.4	165	117	193	145	221	173	248	200	304	266			132	83.9				
	09							127	72.9	155	101	182	128	210	156	238	184	293	239	348	294	148	94.4				
	10									144	84	172	112	200	140	227	167	283	223	338	278	165	105				
	11											161	95.3	189	123	217	151	272	206	327	261	181	115				
12													179	107	206	134	262	190	317	245	198	126					
AT160S	05	171	117	228	174	285	231	341	287	398	344	455	401									166	112				
	06	149	84	206	141	262	197	319	254	376	311	432	367	489	424							199	135				
	07			183	108	240	164	296	221	353	278	410	334	466	391	523	448					233	157				
	08					217	121	274	188	331	244	387	301	444	358	501	414	614	528			266	179				
	09							252	154	308	211	365	268	422	324	478	381	592	494	705	608	299	202				
	10									286	178	343	235	399	291	456	348	569	461	683	575	332	224				
	11											320	201	377	258	433	315	547	428	660	541	365	247				
12													354	225	411	281	524	395	638	508	399	263					
AT200S	05	319	216	425	323	532	429	638	535	744	641	860	748									315	212				
	06	277	153	383	280	489	385	595	472	702	578	808	685	914	791							378	255				
	07			340	197	447	303	553	409	659	515	765	622	872	728	978	834					441	297				
	08					404	240	510	346	617	452	723	558	829	665	935	771	1148	984			504	340				
	09							468	283	574	389	680	496	787	602	893	708	1105	921	1318	1133	567	382				
	10									532	326	638	433	744	539	850	645	1063	858	1275	1070	630	425				
	11											595	370	702	476	808	582	1020	795	1233	1007	693	467				
12													659	413	766	519	978	732	1181	944	756	510					

□ 空气压力扭矩下列加黑部份为推荐数值, 和弹簧复位扭矩的数值及弹簧数量相对应。
□ The following additional air pressure torque values recommended by the black majority, and spring return torque values and the corresponding number of spring.

气动执行器

可符合符合VID/VIE3845、NAMUR
标准的电磁阀
It's applicable for the solenoid valve that is in line
with VID/VIE3845 and NAMUR standards.



可符合符合VID/VIE3845、NAMUR
标准的限位开关
It's applicable for the limit switch that is in line
with VID/VIE3845 and NAMUR standards.



可符合符合VID/VIE3845
标准的定位器
It's applicable for the valve positioner that is in line
with VID/VIE3845 standard.



可配手操离合器
It's applicable for the manual clutch.



气动球阀
Pneumatic ball valve

气动蝶阀
Pneumatic butterfly valve

