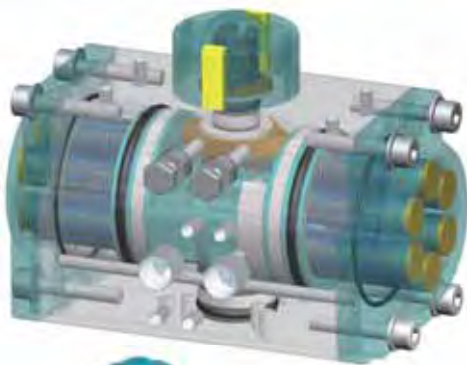


NUTORK[®]

Actuators & Valves



NK系列齿条齿排式气动执行器铝合金、304不锈钢、316不锈钢
NK Series Rack & Pinion Type
Material in Aluminum / 304SS / 316SS Pneumatic Actuator



硬质氧化处理 / Hard Anodized



聚酯烤漆 / Polyester Coated



镀镍处理 / Nickel Coated



陶瓷涂装
Halar Coated



聚四氟乙烯涂装
PTFE Coated



304不锈钢/316不锈钢缸体
304SS / 316SS body actuators



0-180° 气缸
0-180° Actuator

NUTORK CORPORATION

1. 气源压力范围 Pressure Ranges

3 bar(44 psig) to 8 bar(116 psig) double acting 双作动气缸
2.5 bar(36 psig) to 8 bar(116 psig) spring return 单作动气缸

2. 工作温度 Temperature Ranges

*标准(丁腈橡胶)Std.(NBR O-rings): -20°C(-4°F) to +80°C(+176°F)
*低温(氢化丁腈橡胶)Lower Temp. (HNBR O-rings):-40°C(-40°F) to +80°C(+176°F)
*高温(氟橡胶)High Temp. (Viton O-rings): -15°C(+5°F) to +150°C(+300°F)

Note: Special grease is required for low and high temperature service condition.

注意: 特殊润滑油是必须的,对于低温及高温工况条件应用。

3. 宽大的气缸范围 Wide Range Available

The actuator range consists of 17 sizes, with torques from 9Nm(80in.lbs) to 9,337Nm(82,632in.lbs) at 6 bar (87 psig) air supply.
共有17个不同气缸型号,扭矩范围从9Nm到 9,337Nm于6bar气源压力

4. 工作介质 Operating Media

Filtered dry or lubricated air for non-corrosive gas, water or light hydraulic oil. The maximum particle size must not exceed 30 microns.

已过滤干燥或润滑空气,无腐蚀性气体,水,轻质液压油,最大容许颗粒大小不超过30um

5. 行程调节范围 Stroke Adjustment

0°and 90° with standard adjustment $\pm 5^\circ$.
0°及90° $\pm 5^\circ$ 标准调节范围。

6. 润滑 Lubrication

All moving parts are factory lubricated for entire life cycle of actuator.
所有移动零部件皆涂着润滑油以增加气缸操作寿命

7. 构造 Construction

Twin piston rack and pinion actuator design, suitable for indoor and outdoor installation.
两只活塞齿排齿轮式设计,并适用于室内及室外使用

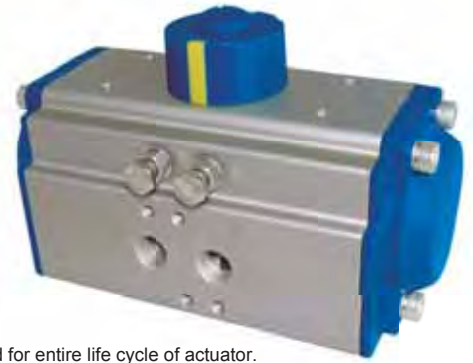
8. 连接方式 Connections

Bottom drilling complies with ISO 5211/DIN 3337 to match valve. Interface for solenoid valve, shaft top end and top drilling for assembling accessories are in accordance with VDI/VDE-3845, NAMUR standard.

气缸底部连接依照ISO5211/DIN3337标准,电磁阀接口及气缸顶部连接依照VDI/VDE - 3845,NAMUR标准。

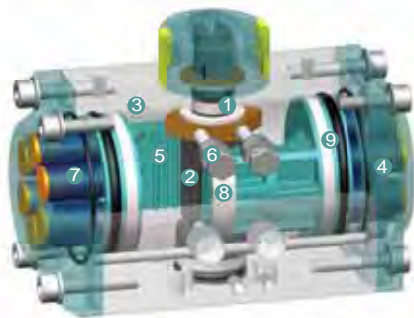
9. 检测 Inspection

Every actuator is hydraulically tested, certified and guaranteed for a minimum of 1 million cycles.
每一只气缸出厂前皆压力测试并标示制造编号及保证动作次数1百万次以上。



气动执行器 - 特性

Pneumatic Actuator - Features



1. 指示器 Indicator

A position indicator with Namur mounting is standard on all NUTORK pneumatic actuators for mounting accessories.

位置指示器及Namur标准于所有NUTORK气动执行器便于安装相关配件。

2. 输出轴 Pinion

The hardened alloy steel pinion is precision ground and Nickel plated (over 15um) in order to reduce friction, provide maximum wear resistance. Full conformance with the newest standards of ISO5211 & DIN3337. The dimensions can be customized and as options, stainless steel and aluminium alloy are also available.

高精度,镀镍硬质合金(15um以上)输出轴提供低摩擦高耐磨的严苛,工况条件,并符合ISO5211及DIN3337标准,可提供客户定制尺寸及不锈钢或硬铝合金材料。

3. 缸体 Actuator Body

The aluminum extrusion is hard anodized(over 30um) to protect against wear and corrosion while reducing piston friction to the absolute minimum. Other options such as Nickel, Ceramic, PTFE, Polyester coated are available.

挤压铝合金缸体采用硬质氧化处理(30um以上),提供抗磨损并最小化活塞与缸体摩擦。亦可提供镀镍处理,PTFE(聚四氟乙烯)涂层及环氧树脂喷涂不同处理。

4. 端盖 End Caps

Epoxy coated(over 80um) die cast aluminum end caps provide maximum resistance against potentially corrosive elements. Other treatments such as Nickel, Ceramic, PTFE, Polyester coated are available.

环氧树脂喷涂处理(80um以上)压铸铝合金端盖提供抗腐蚀性,并可提供电镀处理及PTFE(聚四氟乙烯)涂层不同处理。

5. 活塞 Pistons

The precisely-balanced and hard anodized treatment (over 30um)die cast aluminum pistons are fitted with high quality rings and guides. The twin rack and piston design creates a constant torque output on all actuators.

高精度平衡及硬质氧化处理(30um以上)压铸铝合金活塞配套高质量,密封圈及导向板齿排齿轮式设计提供稳定性扭矩输出。

6. 行程调节 Travel Adjustment

The standard adjustment is $\pm 5^\circ$ in both the open and closed positions through easily accessible external adjustment bolts.

标准行程调节 $\pm 5^\circ$ 开及关位置可轻易经由两只独立外部行程螺栓达成。

7. 高性能弹簧 High Performance Springs

The high tensile steel springs are coated with Epoxy coated for corrosion resistance and longer service. The pre-loaded springs can be safely & rapidly disassembled.

高张力弹簧采用镀锌处理,提供抗腐蚀及较长使用寿命。预紧弹簧提供安全及快速拆卸。

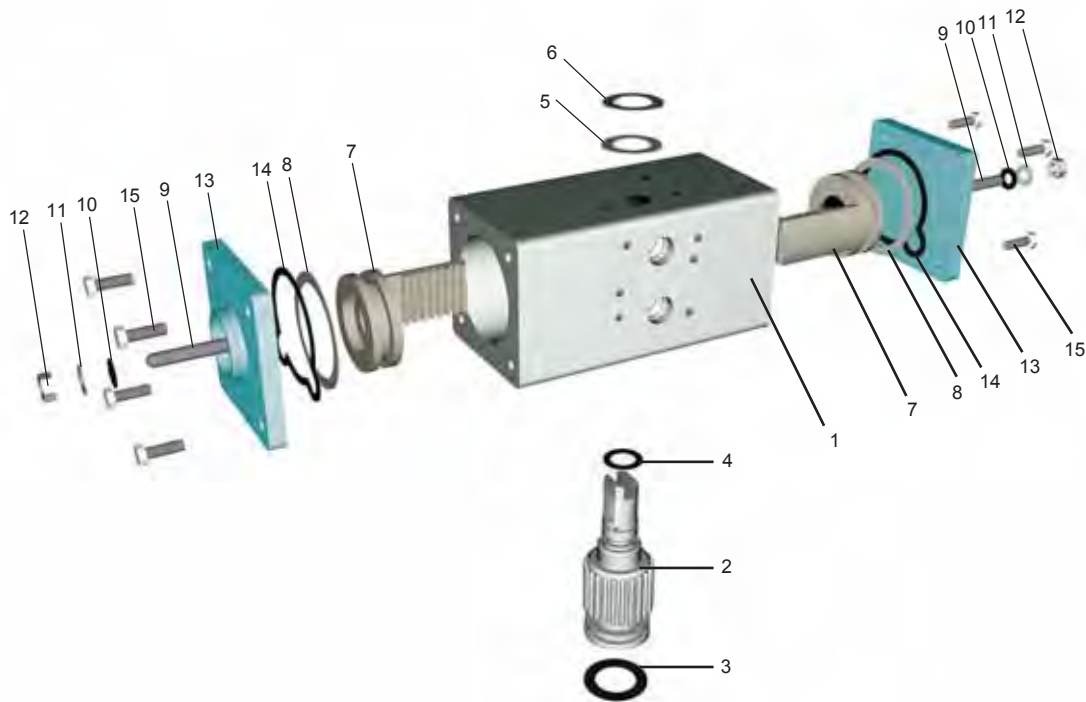
8. 轴承及导向板 Bearings & Guides

The highly durable compound material provides high trust stability with minimum friction and long life.

耐用复合材料提供低摩擦,高稳定性及使用寿命

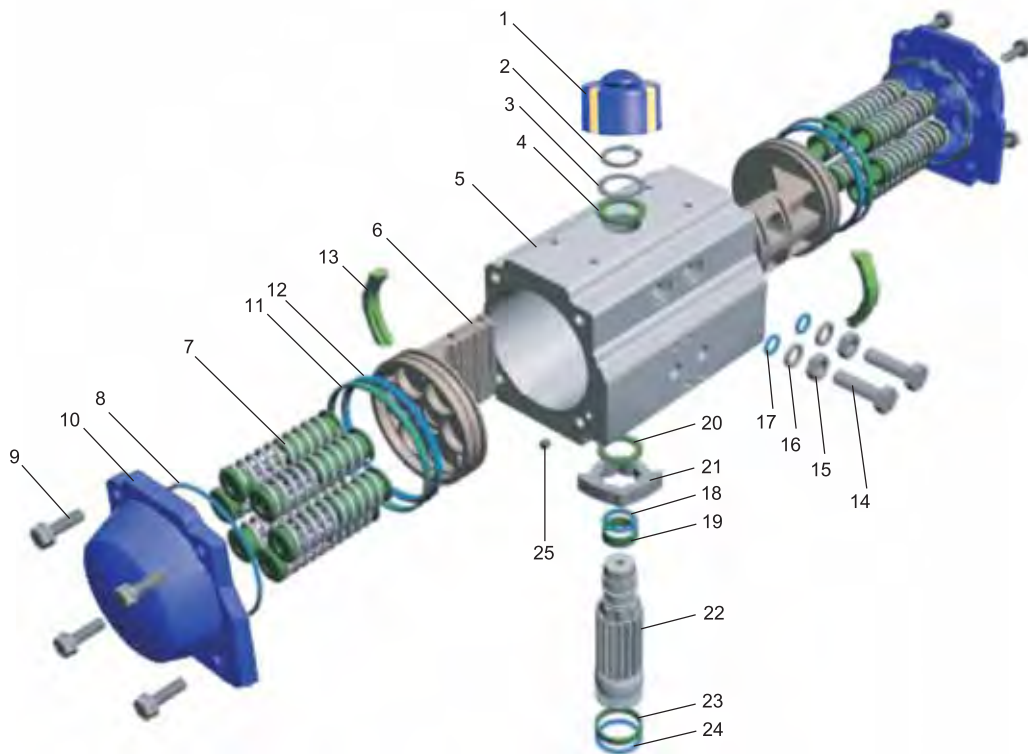
9. 密封 O-Rings

NBR O-rings provide trouble-free operation at standard temperature ranges. Viton and HNBR O-rings are available for high or low temperature applications. 在常温工作条件下使用丁腈橡胶,在高温或低温时采用氟橡胶(Viton)或氢化丁腈橡胶(HNBR)。



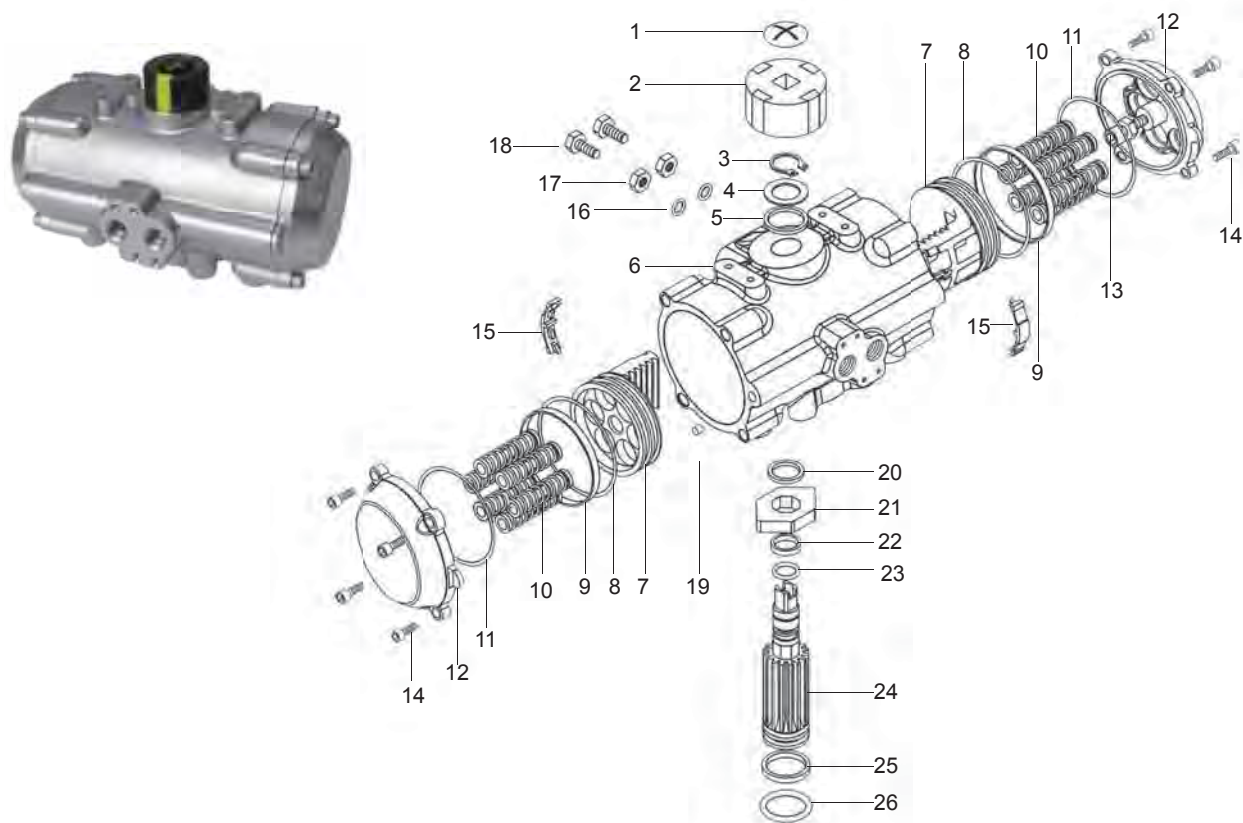
Item (项次)	Description (名称)	Material (材料)	Protection (外层处理)	Q ' ty (数量)	Optional (其他选用材料)
1	Actuator Body/缸体	Extruded Alluminum Alloy/铝型材	Hard Anodized(over 30um) 硬质氧化处理(30um以上)	1	Nickel or PTFE Plated (镀镍或聚四氟乙稀处理)
2	Pinion/齿轮	Alloy Steel/合金钢	Nickel Plated(over 15um) 镀镍处理(15um以上)	1	S.S. or Alu.Alloy (不锈钢或硬质铝合金)
3*	O-Ring(Lower Pinion)/下轴密封圈	NBR/丁腈橡胶		1	Viton / HNBR (氟素橡胶/氢化丁腈橡胶)
4*	O-Ring(Top Pinion)/上轴密封圈	NBR/丁腈橡胶		1	Viton / HNBR (氟素橡胶/氢化丁腈橡胶)
5	Thrust Bearing(Pinion)/轴承	Nylon66/自润复合材料		1	
6	Spring Clip/卡簧	Stainless Steel/不锈钢		1	
7	Piston/活塞	Die Cast Aluminum Alloy/压铸铝	Hard Anodized(over 30um) 硬质氧化处理(30um以上)	2	
8*	Piston Seal/活塞密封圈	NBR/丁腈橡胶		2	Viton / HNBR (氟素橡胶/氢化丁腈橡胶)
9	Stroke Bolt/调节螺栓	Stainless Steel/不锈钢		2	
10*	Stroke Bolt O-Ring/调节螺栓密封圈	NBR/丁腈橡胶		2	Viton / HNBR (氟素橡胶/氢化丁腈橡胶)
11	Stroke Bolt Washer/调节螺栓垫圈	Stainless Steel/不锈钢		2	
12	Stroke Bolt Retaining Nut/调节螺栓螺母	Stainless Steel/不锈钢		2	
13	End Cap/端盖	Die Cast Aluminum/压铸铝	Epoxy Coated(over 80um) 环氧树脂烤漆(80um以上)	2	Nickel or PTFE Plated (镀镍或聚四氟乙稀处理)
14*	End Cap Seals/端盖密封圈	NBR/丁腈橡胶		2	Viton / HNBR (氟素橡胶/氢化丁腈橡胶)
15	End Cap Bolts/端盖螺栓	Stainless Steel/不锈钢		8	

*Note: Recommended spare parts for maintenance. (维修推荐备品)。



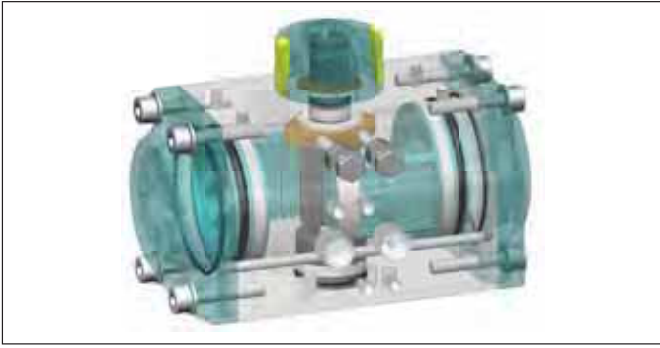
Item (项次)	Description (名称)	Material (材料)	Protection (外层处理)	Q ' ty (数量)	Optional (其他选用材料)
1	Indicator/指示器	Plastic/塑料		1	
2	Spring Clip/卡簧	Stainless Steel/不锈钢		1	
3	Thrust Washer(Pinion)/垫圈	Stainless Steel/不锈钢		1	
4	Thrust Bearing(Pinion)/轴承	Nylon66/自润复合材料		1	
5	Actuator Body/缸体	Extruded Alluminum Alloy/铝型材	Hard Anodized(over 30um) 硬质氧化处理(30um以上)	1	Nickel or PTFE Plated (镀镍或聚四氟乙烯处理)
6	Piston/活塞	Die Cast Aluminum Alloy 压铸铝	Hard Anodized(over 30um) 硬质氧化处理(30um以上)	2	
7	Spring(Cartridge)/弹簧	High Performance Spring Steel/高性能弹簧钢	Epoxy Coated 环氧树脂烤漆	0 - 12	
8*	End Cap Seals/端盖密封圈	NBR/丁腈橡胶		2	Viton / HNBR (氟素橡胶/氢化丁腈橡胶)
9	End Cap Bolts/端盖螺栓	Stainless Steel/不锈钢		8	
10	End Cap/端盖	Die Cast Aluminum/压铸铝	Epoxy Coated(over 80um) 环氧树脂烤漆(80um以上)	2	Nickel or PTFE Plated (镀镍或聚四氟乙烯处理)
11*	Piston Bearing/活塞轴承	Nylon 66/自润复合材料		2	
12*	Piston Seal/活塞密封圈	NBR/丁腈橡胶		2	Viton / HNBR (氟素橡胶/氢化丁腈橡胶)
13*	Piston Guide/活塞导向板	Nylon 66/自润复合材料		2	
14	Stroke Bolt/调节螺栓	Stainless Steel/不锈钢		2	
15	Stroke Bolt Retaining Nut/调节螺栓螺母	Stainless Steel/不锈钢		2	
16	Stroke Bolt Washer/调节螺栓垫圈	Stainless Steel/不锈钢		2	
17*	Stroke Bolt O-Ring/调节螺栓密封圈	NBR/丁腈橡胶		2	Viton / HNBR (氟素橡胶/氢化丁腈橡胶)
18*	O-Ring(Top Pinion)/上轴密封圈	NBR/丁腈橡胶		1	Viton / HNBR (氟素橡胶/氢化丁腈橡胶)
19*	Bearing(Top Pinion)/上轴轴承	Nylon 66/自润复合材料		1	
20*	Thrust Bearing(Pinion)/轴承	Nylon 66/自润复合材料		1	
21	Stroke Cam/定位模块	Stainless Steel/不锈钢		1	
22	Pinion/齿轮	Alloy Steel/合金钢	Nickel Plated(over 15um) 镀镍处理(15um以上)	1	S.S. or Alu.Alloy (不锈钢或硬质铝合金)
23*	Bearing(Lower Pinion)/下轴轴承	Nylon 66/自润复合材料		1	
24*	O-Ring(Lower Pinion)/下轴密封圈	NBR/丁腈橡胶		1	Viton / HNBR (氟素橡胶/氢化丁腈橡胶)
25*	Plug/ 塞头	NBR/丁腈橡胶		2	Viton / HNBR (氟素橡胶/氢化丁腈橡胶)

* Note: Recommended spare parts for maintenance. (维修推荐备品)。



项次 / Item	名称 / Description	材料 / Material	数量 / Qty.	备注 / Remark
1	指示器螺钉 / Indicator Screw	塑料 / Plastic	1	
2	指示器 / Indicator	塑料 / Plastic	1	
3	弹性挡圈 / Snap Ring	不锈钢 / Stainless steel	1	
4	垫片 / Washer	不锈钢 / Stainless steel	1	
5	外垫片 / Outside Washer	工程塑料 / Engineering Plastics	1	
6	缸体 / Body	不锈钢 / Stainless steel	1	
7	活塞 / Piston	不锈钢 / Stainless steel	2	
8	活塞"O"型圈 / Piston O-ring	丁腈橡胶 / NBR	2	Note
9	活塞支承圈 / Piston Bearing	工程塑料 / Engineering Plastics	2	
10	弹簧 / Spring	弹簧钢 / Spring Steel	0-12	
	弹簧左右套 / Spring Retainer(L,R)	尼龙66 / Nylon 66		
	弹簧套连杆 / Retainer Connector	铜 / Brass		
11	端盖"O"型圈 / End-Cap O-ring	丁腈橡胶 / NBR	2	Note
12	端盖 / End-Cap	不锈钢 / Stainless steel	2	
13	限位螺栓 / Stop screw	不锈钢 / Stainless steel	2	
14	端盖紧固螺杆 / End-Cap Stop Screw	不锈钢 / Stainless steel	8	
15	活塞导板 / Guide Piston	尼龙66 / Nylon 66	2	
16	调节螺钉"O"型圈 / O-ring(Adjust screw)	橡胶 / NBR	2	Note
17	调节螺钉螺母 / Nut(Adjust screw)	不锈钢 / Stainless steel	2	
18	调节螺栓 / Adjust screw	不锈钢 / Stainless steel	2	
19	塞头 / Plug	丁腈橡胶 / NBR	2	Note
20	内垫片 / Inside Washer	工程塑料 / Engineering Plastics	1	
21	凸轮 / Cam	不锈钢 / Stainless steel	1	
22	上轴轴承 / Top Bearing	工程塑料 / Engineering Plastics	1	
23	上轴"O"型圈 / Top O-ring	丁腈橡胶 / NBR	1	Note
24	轴 / Pinion	不锈钢 / Stainless steel	1	
25	下轴轴承 / Bottom Bearing	工程塑料 / Engineering Plastics	1	
26	下轴"O"型圈 / Bottom O-ring	丁腈橡胶 / NBR	1	Note

* Note: 选用材料 - 氟橡胶 (Viton) 高温应用, 氟化丁腈橡胶 (HNBR) 低温应用



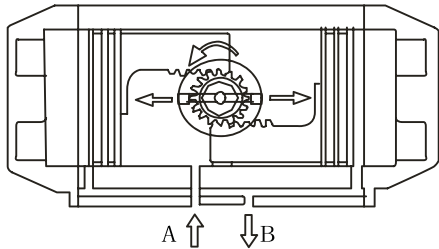
Sizing example of NUTORK double acting actuator:
Valve torque 100Nm plus 20% safety factor= 120Nm. Minimum operating pressure 6bar(87psig). By reading down the 6bar(87 psig) column the figure below 120Nm is 135.0Nm, The model number shown in the left hand column is therefore NKD-092.

NUTORK 双作动气缸选型:

阀门扭矩100Nm加上20%安全系数=120Nm, 最小气源压力6bar (87psig),双作动气缸扭矩表于6bar(87psig)气源压力表中获得不低于120Nm的扭矩为135.0Nm, 并于相对应的最左边栏位,气缸型号为NKD-092.

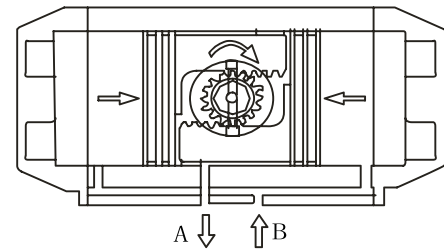
The operating principle of double acting actuator 双作动气缸工作原理

CCW-counter-clockwise 逆时针方向



Air to port A forces the pistons outwards, causing the piston to turn counter-clockwise while air is being exhausted from port B.
压缩空气由A口输入,使左右活塞向相反方向移动,输出轴逆时针方向转动,两活塞侧面的空气由B口排出。

CW-clockwise 顺时针方向

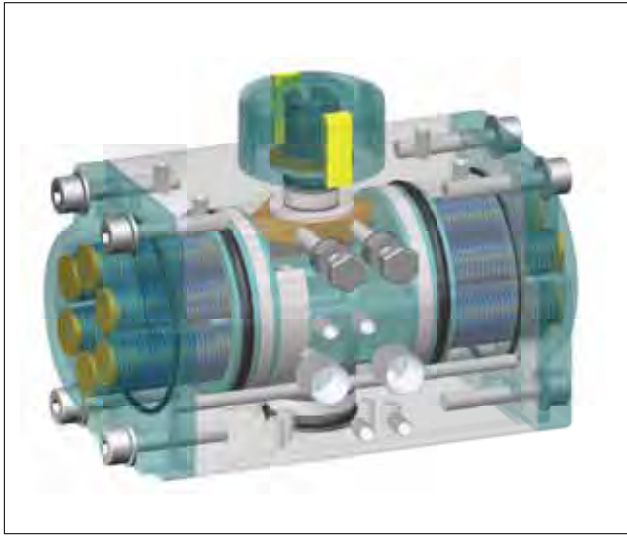


Air to port B forces the pistons inwards, causing the piston to turn clockwise while air is being exhausted from port A.
压缩空气由B口输入,使左右活塞向中心方向移动,输出轴顺时针方向转动,两活塞中间的空气由A口排出。

Torque Table of Double Acting Actuator 双作动气缸输出扭矩

Unit : Nm

Model / 型号	Air Supply Pressure(Bar) / 气源输入压力(Bar)							
	3.0	4.0	4.5	5.0	5.5	6.0	7.0	8.0
Air Output Torque(Nm) / 气源输出扭矩(Nm)								
NKD-032	4.6	6.1	6.9	7.6	8.4	9.2	10.7	12.2
NKD-040	7.0	10.0	11.0	12.0	13.0	14.0	17.0	19.0
NKD-052	12.0	16.0	18.0	20.0	21.9	23.9	27.9	31.9
NKD-063	21.9	29.2	32.8	36.5	40.1	43.8	51.1	58.4
NKD-075	30.1	40.1	45.1	50.2	55.2	60.2	70.2	80.3
NKD-083	47.0	62.7	70.5	78.4	86.2	94.1	109.7	125.4
NKD-092	67.7	90.3	101.6	112.9	124.1	135.4	158.0	180.6
NKD-105	99	132	149	165	182	198	231	265
NKD-125	151	201	226	251	276	301	351	401
NKD-140	257	342	385	428	470	513	599	684
NKD-160	399	532	599	665	732	798	931	1064
NKD-190	638	851	958	1064	1170	1277	1490	1702
NKD-210	798	1064	1197	1330	1463	1596	1862	2128
NKD-240	1154	1539	1731	1924	2116	2309	2693	3078
NKD-270	1755	2339	2632	2924	3217	3509	4094	4679
NKD-300	2289	3052	3434	3815	4197	4578	5341	6104
NKD-350	3427	4570	5141	5712	6283	6854	7997	9139
NKD-400	4884	6512	7326	8140	8954	9768	11396	13024



Sizing example of NUTORK spring return actuator:
Spring to close when air fails (air to open):
Valve torque 60Nm plus 20% safety factor = 72Nm. Minimum operating pressure: 6bar (87psig). The spring return NUTORK actuator selected is NKS-105-12. The NKS-105-12 has the following output torques:

1. air torque 0° (valve close) = 122.5Nm > 72Nm
2. air torque 90° (valve open) = 80.6Nm
3. spring torque 90° (valve open) = 118.1Nm
4. spring torque 0° (valve close) = 75.9Nm > 72Nm

失电或失气时, 阀门关闭 (通气时阀门打开):

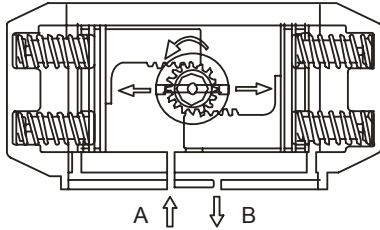
阀门扭矩60Nm加上20%安全系数 = 72Nm. 最小气源压力6bar (87psig).

选型NKS-105-12 单作动气缸. 输出扭矩如下说明:

1. 气源起点扭矩(0°) = 122.5Nm 大于 72Nm
2. 气源终点扭矩(90°) = 80.6Nm
3. 弹簧起点扭矩(90°) = 118.1Nm
4. 弹簧终点扭矩(0°) = 75.9Nm 大于 72Nm

The operating principle of single acting spring return actuator 单作动气缸工作原理

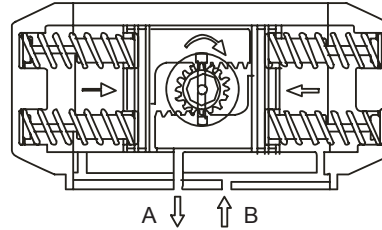
CCW - counter-clockwise 逆时针方向



Air to port A forces the pistons outwards, causing the springs to compress. The pinion turns counter-clockwise while air is being exhausted through port B.

压缩空气由A口输入, 使左右活塞向相反方向移动, 输出轴逆时针方向转动, 两活塞侧面的空气由B口排出。

CW - clockwise 顺时针方向

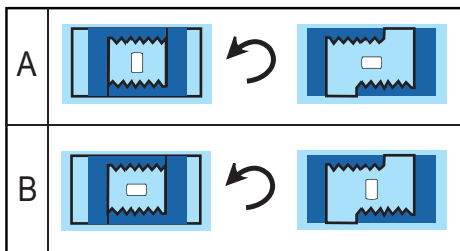


Loss of air pressure through port A allows the stored energy in the springs to force the pistons inwards. The pinion turns clockwise while air is being exhausted through port A.

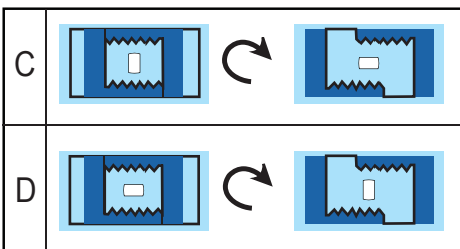
失气或失电时, 由于弹簧的作用使活塞向中心移动, 输出轴顺时针方向转动, 空气由A口排出。

Mounting Variations 不同安装配置方式

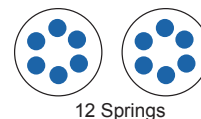
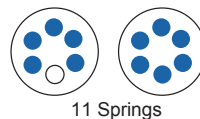
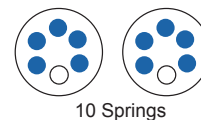
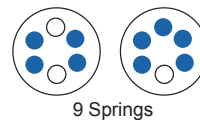
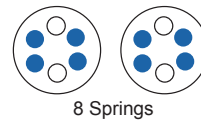
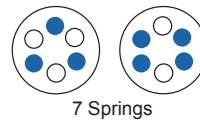
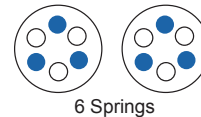
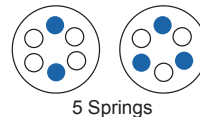
CCW - counter-clockwise 逆时针方向



CW - clockwise 顺时针方向



Spring Arrangement 不同数量弹簧配置方式

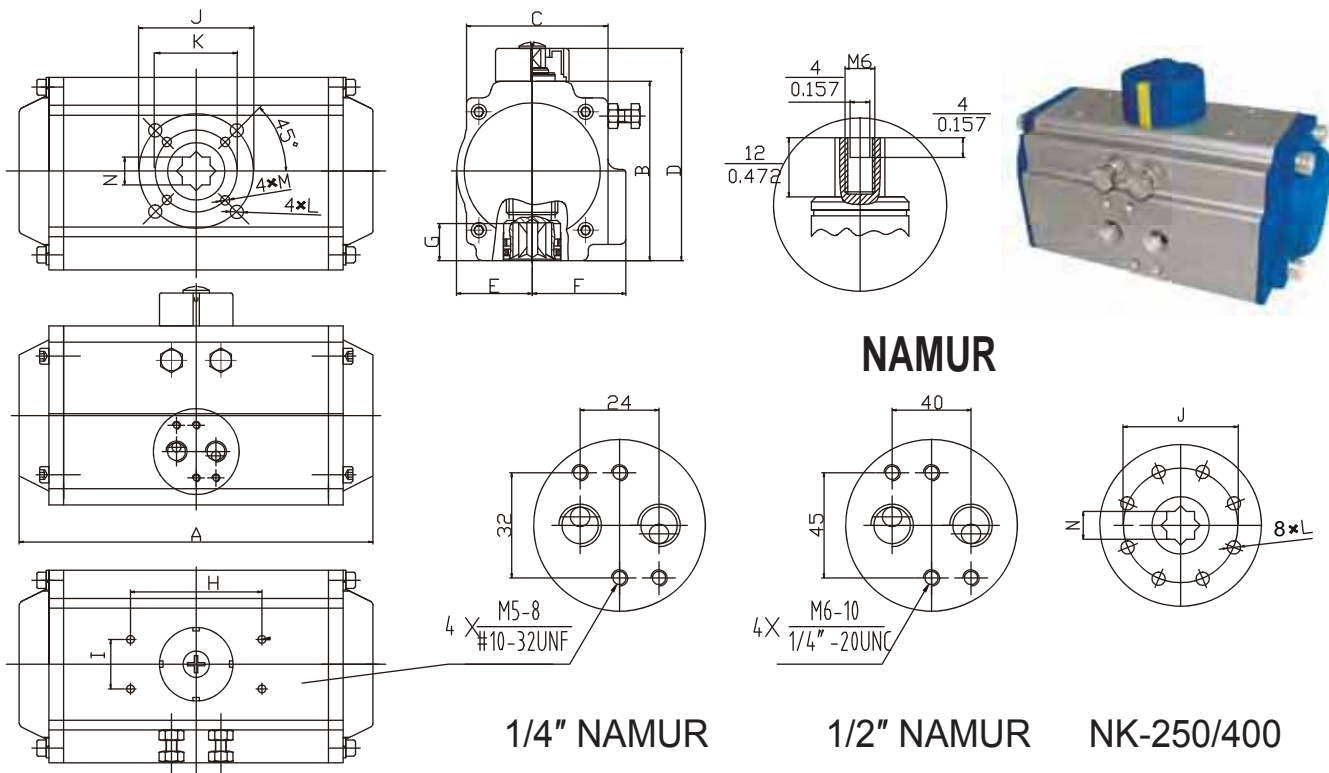


单位Unit:Nm

Model 型号	Spring Set 弹簧 数量	Spring Torque 弹簧输出扭矩 (Nm)		Air Supply Pressure(Bar) / 气源输入压力(Bar)													
				2.5		3.0		4.0		5.0		6.0		7.0		8.0	
				0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°
NKS-052	5	4.3	6.2	5.7	3.8	7.6	5.7	---	---	---	---	---	---	---	---	---	---
	6	5.0	7.4	4.9	2.5	6.9	4.5	10.9	8.5	---	---	---	---	---	---	---	---
	7	5.9	8.6	4.0	1.3	6.0	3.3	9.8	7.3	14.0	10.4	---	---	---	---	---	---
	8	6.7	9.9	---	---	5.2	2.0	9.2	6.0	13.2	9.1	17.2	14.1	---	---	---	---
	9	7.6	11.1	---	---	4.3	0.8	8.3	4.8	12.3	7.9	16.3	12.8	20.3	16.8	---	---
	10	8.5	12.4	---	---	---	---	7.4	3.6	11.5	6.7	15.5	11.6	19.5	15.6	---	---
	11	9.3	13.6	---	---	---	---	6.6	2.3	10.6	5.4	14.6	10.4	18.6	14.3	22.6	18.3
	12	10.2	14.8	---	---	---	---	---	9.7	4.2	13.8	9.1	17.8	12.2	21.8	17.1	
NKS-063	5	6.8	10.4	14.1	7.7	15.0	11.4	22.3	14.9	---	---	---	---	---	---	---	---
	6	8.2	12.5	10.1	5.7	13.6	9.3	20.9	16.6	28.3	23.9	---	---	---	---	---	---
	7	9.6	14.6	8.6	3.6	12.5	7.2	19.5	14.5	26.8	21.9	---	---	---	---	---	---
	8	10.9	16.7	---	---	10.9	5.1	18.2	12.4	25.5	19.8	32.8	27.0	40.1	34.3	---	---
	9	12.3	18.8	---	---	---	---	16.8	10.4	24.1	17.7	31.4	24.9	38.7	32.2	---	---
	10	13.7	20.9	---	---	---	---	11.4	8.2	22.8	15.6	30.0	22.8	37.3	30.1	44.7	37.4
	11	15.0	22.9	---	---	---	---	---	---	21.5	13.5	28.7	20.7	36.0	28.0	43.3	35.3
	12	16.4	25.0	---	---	---	---	---	20.0	11.4	27.3	18.6	34.6	25.9	41.9	33.3	
NKS-075	5	10.5	14.5	14.5	10.6	19.4	15.5	29.5	25.7	---	---	---	---	---	---	---	---
	6	12.7	17.4	12.4	7.6	17.3	12.6	27.4	22.7	37.5	32.8	---	---	---	---	---	---
	7	14.8	20.3	10.4	4.8	15.2	9.7	25.3	19.9	35.4	29.9	---	---	---	---	---	---
	8	16.9	23.2	---	---	13.1	6.8	23.1	16.9	33.3	27.0	43.2	37.0	53.3	47.0	---	---
	9	19.0	26.1	---	---	---	---	21.0	14.1	31.2	24.1	41.1	34.1	51.2	44.2	---	---
	10	21.1	29.0	---	---	---	---	19.0	11.1	28.8	21.2	39.0	31.2	49.1	41.2	59.1	51.2
	11	23.2	31.9	---	---	---	---	---	---	27.0	18.3	37.0	28.3	47.0	38.4	57.0	48.4
	12	25.3	34.7	---	---	---	---	---	24.9	15.4	34.9	25.4	44.9	35.4	54.9	45.4	
NKS-083	5	15.8	23.0	23.7	16.1	31.1	24.0	46.8	37.9	---	---	---	---	---	---	---	---
	6	19.0	27.6	20.1	11.5	28.0	19.3	43.7	35.1	59.4	50.7	---	---	---	---	---	---
	7	22.1	32.2	17.0	6.9	24.8	14.8	40.5	30.5	56.2	46.2	---	---	---	---	---	---
	8	25.3	36.8	---	---	21.7	10.1	37.4	25.8	53.1	41.5	68.8	57.2	84.5	72.9	---	---
	9	28.5	41.4	---	---	---	---	34.2	21.3	49.9	37.0	65.6	52.6	81.2	68.3	---	---
	10	31.6	46.0	---	---	---	---	31.0	16.6	46.7	32.3	62.4	48.0	78.1	63.7	93.8	79.3
	11	34.8	50.6	---	---	---	---	---	---	43.6	27.7	59.3	43.4	75.0	59.1	90.6	74.8
	12	38.0	55.2	---	---	---	---	---	40.4	23.2	56.1	38.9	71.7	54.5	87.4	70.2	
NKS-092	5	23.3	34.4	33.1	22.0	44.2	33.2	66.8	55.9	---	---	---	---	---	---	---	---
	6	28.0	41.2	28.4	15.2	39.6	26.4	62.2	49.0	84.8	71.6	---	---	---	---	---	---
	7	32.7	48.1	23.8	8.2	34.9	19.4	57.5	42.1	80.2	64.7	---	---	---	---	---	---
	8	37.3	55.0	---	---	31.3	12.6	52.9	35.2	75.5	57.9	98.1	80.5	120.7	103.0	---	---
	9	42.0	61.9	---	---	---	---	48.2	28.4	70.9	51.0	93.5	73.6	116.0	96.1	---	---
	10	46.7	68.7	---	---	---	---	43.6	21.5	66.2	44.1	88.8	66.7	111.3	89.2	134.0	111.8
	11	51.4	75.6	---	---	---	---	---	---	61.5	37.2	84.1	59.9	106.6	82.4	129.2	105.0
	12	56.0	82.5	---	---	---	---	---	56.8	30.4	79.4	53.0	101.9	75.5	124.5	98.1	
NKS-105	5	31.6	49.2	51.0	33.4	67.5	49.9	100.6	83.0	---	---	---	---	---	---	---	---
	6	38.0	59.1	44.7	23.5	61.1	40.0	94.2	73.2	127.3	106.2	---	---	---	---	---	---
	7	44.3	68.9	38.4	13.7	54.9	30.3	87.9	63.4	121.0	96.4	---	---	---	---	---	---
	8	50.6	78.7	---	---	48.5	20.4	81.6	53.5	114.7	86.5	147.7	119.6	180.8	152.7	---	---
	9	56.9	88.6	---	---	---	---	75.3	43.7	108.4	76.8	141.5	109.8	174.5	142.9	---	---
	10	63.3	98.4	---	---	---	---	68.9	33.4	102.0	66.5	135.1	99.6	168.2	132.6	201.2	165.7
	11	69.6	108.3	---	---	---	---	---	---	95.7	57.0	128.7	90.1	161.8	123.1	194.8	156.2
	12	75.9	118.1	---	---	---	---	---	89.4	47.5	122.5	80.6	155.5	113.6	188.6	146.7	
NKS-125	5	52	79	73	47	98	72	148	122	---	---	---	---	---	---	---	---
	6	63	94	63	31	88	56	138	107	188	157	---	---	---	---	---	---
	7	73	110	52	15	77	40	127	90	178	141	---	---	---	---	---	---
	8	84	125	---	---	67	25	117	75	167	125	217	176	268	226	---	---
	9	94	141	---	---	---	---	107	59	157	109	207	159	257	210	---	---
	10	105	157	---	---	---	---	96	44	146	94	196	144	247	194	297	245
	11	115	173	---	---	---	---	---	---	136	78	186	128	236	178	286	228
	12	125	188	---	---	---	---	---	125	63	176	113	226	163	276	213	
NKS-140	5	86	129	128	85	171	127	256	213	---	---	---	---	---	---	---	---
	6	103	155	111	59	154	102	239	187	325	273	---	---	---	---	---	---
	7	120	181	94	33	137	76	222	162	308	247	---	---	---	---	---	---
	8	137	206	---	---	120	50	205	136	291	221	376	307	462	392	---	---
	9	155	232	---	---	---	---	187	110	273	196	358	281	444	367	---	---
	10	172	258	---	---	---	---	170	84	256	169	341	255	427	340	512	426
	11	189	284	---	---	---	---	---	---	238	143	324	229	409	314	495	400
	12	206	310	---	---	---	---	---	221	118	307	203	392	289	478	374	

单位Unit:Nm

Model 型号	Spring Set 弹簧 数量	Spring Torque 弹簧输出扭矩 (Nm)		Air Supply Pressure(Bar) / 气源输入压力(Bar)													
				2.5		3.0		4.0		5.0		6.0		7.0		8.0	
				Air Output Torque(Nm) / 气源输出扭矩(Nm)													
		0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°
NKS-160	5	140	208	193	124	259	191	392	324	---	---	---	---	---	---	---	---
	6	168	250	165	83	232	149	365	282	498	415	---	---	---	---	---	---
	7	196	292	137	41	203	107	336	240	469	373	---	---	---	---	---	---
	8	223	333	---	---	176	66	309	199	442	332	575	465	708	598	---	---
	9	251	375	---	---	---	---	280	157	413	290	546	423	679	556	---	---
	10	279	417	---	---	---	---	253	115	386	248	519	381	652	514	785	647
	11	307	458	---	---	---	---	---	---	358	207	491	340	624	473	757	606
12	335	500	---	---	---	---	---	---	330	165	463	298	596	431	729	564	
NKS-190	5	200	309	332	222	438	329	651	542	---	---	---	---	---	---	---	---
	6	240	371	292	161	398	267	611	480	824	693	---	---	---	---	---	---
	7	280	433	252	99	358	205	571	418	784	631	---	---	---	---	---	---
	8	320	495	---	---	318	143	531	356	744	569	957	782	1169	995	---	---
	9	360	557	---	---	---	---	491	295	704	507	917	720	1130	933	---	---
	10	400	618	---	---	---	---	451	233	664	446	877	658	1090	871	1302	1084
	11	440	680	---	---	---	---	---	---	624	384	837	597	1050	809	1263	1022
12	480	742	---	---	---	---	---	---	584	322	797	535	1010	748	1223	960	
NKS-210	5	275	380	390	285	523	418	789	684	---	---	---	---	---	---	---	---
	6	330	456	335	209	468	342	734	608	1000	874	---	---	---	---	---	---
	7	385	532	280	133	413	266	679	532	945	798	---	---	---	---	---	---
	8	440	608	---	---	358	190	624	456	890	722	1156	988	1422	1254	---	---
	9	495	684	---	---	---	---	569	380	835	646	1101	912	1367	1178	---	---
	10	550	760	---	---	---	---	514	304	780	570	1046	836	1312	1102	1578	1368
	11	605	836	---	---	---	---	---	---	725	494	991	760	1257	1026	1523	1292
12	660	912	---	---	---	---	---	---	670	418	936	684	1202	950	1468	1216	
NKS-240	5	410	554	552	409	744	600	1129	985	---	---	---	---	---	---	---	---
	6	490	665	470	297	662	489	1047	874	1432	1259	---	---	---	---	---	---
	7	575	775	388	187	580	379	964	764	1349	1149	---	---	---	---	---	---
	8	656	886	---	---	498	268	883	653	1267	1037	1652	1422	2037	1807	---	---
	9	739	998	---	---	---	---	800	542	1185	926	1569	1311	1954	1696	---	---
	10	821	1108	---	---	---	---	718	431	1103	816	1488	1201	1872	1586	2257	1970
	11	903	1219	---	---	---	---	---	---	1021	705	1406	1090	1791	1471	2176	1859
12	985	1330	---	---	---	---	---	---	939	594	1323	979	1708	1363	2093	1748	
NKS-270	5	560	787	903	675	1195	968	1779	1552	---	---	---	---	---	---	---	---
	6	672	943	790	519	1083	811	1667	1396	2252	1981	---	---	---	---	---	---
	7	783	1101	679	361	972	654	1556	1238	2141	1823	---	---	---	---	---	---
	8	895	1258	---	---	860	479	1444	1081	2029	1666	2614	2252	3199	2836	---	---
	9	1007	1416	---	---	---	---	1332	923	1917	1509	2502	2094	3087	2678	---	---
	10	1119	1572	---	---	---	---	1220	767	1805	1352	2390	1937	2974	2521	3560	3107
	11	1231	1730	---	---	---	---	---	---	1693	1197	2278	1779	2862	2364	3448	2949
12	1342	1887	---	---	---	---	---	---	1582	1037	2167	1623	2751	2207	3336	2792	
NKS-300	5	730	1061	1097	729	---	---	---	---	---	---	---	---	---	---	---	---
	6	876	1273	935	494	1316	875	---	---	---	---	---	---	---	---	---	---
	7	1022	1485	772	258	1153	639	1916	1402	---	---	---	---	---	---	---	---
	8	1168	1697	---	---	991	403	1754	1166	2517	1929	---	---	---	---	---	---
	9	1314	1909	---	---	---	---	1592	930	2355	1693	3118	2456	---	---	---	---
	10	1460	2122	---	---	---	---	1430	695	2193	1458	2956	2221	3719	2984	4482	3747
	11	1606	2334	---	---	---	---	---	---	2030	1222	2793	1985	3556	2748	4319	3511
12	1752	2546	---	---	---	---	---	---	1868	986	2631	1749	3394	2512	4157	3275	
NKS-350	5	1173	1702	1553	964	---	---	---	---	---	---	---	---	---	---	---	---
	6	1408	2043	1292	586	1863	1157	---	---	---	---	---	---	---	---	---	---
	7	1642	2383	1031	208	1602	779	2745	1922	---	---	---	---	---	---	---	---
	8	1877	2724	---	---	1341	401	2484	1544	3626	2686	---	---	---	---	---	---
	9	2112	3064	---	---	---	---	2224	1165	3336	2307	4508	3449	---	---	---	---
	10	2346	3405	---	---	---	---	1963	787	3105	1929	4247	3071	5390	4214	6532	5356
	11	2581	3745	---	---	---	---	---	---	2844	1551	3986	2693	5129	3836	6271	4978
12	2816	4086	---	---	---	---	---	---	2584	1172	3726	2314	4869	3457	6011	4599	
NKS-400	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	7	1837	2880	2028	869	---	---	---	---	---	---	---	---	---	---	---	---
	8	2100	3292	1736	411	2550	1225	---	---	---	---	---	---	---	---	---	---
	9	2362	3703	---	---	2259	768	3887	2396	---	---	---	---	---	---	---	---
	10	2624	4115	---	---	1967	311	3595	1939	5223	3567	---	---	---	---	---	---
	11	2887	4526	---	---	---	---	3303	1482	4931	3110	6559	4738	---	---	---	---
12	3149	4938	---	---	---	---	3012	1025	4640	2653	6268	4281	7895	5908	9523	7536	

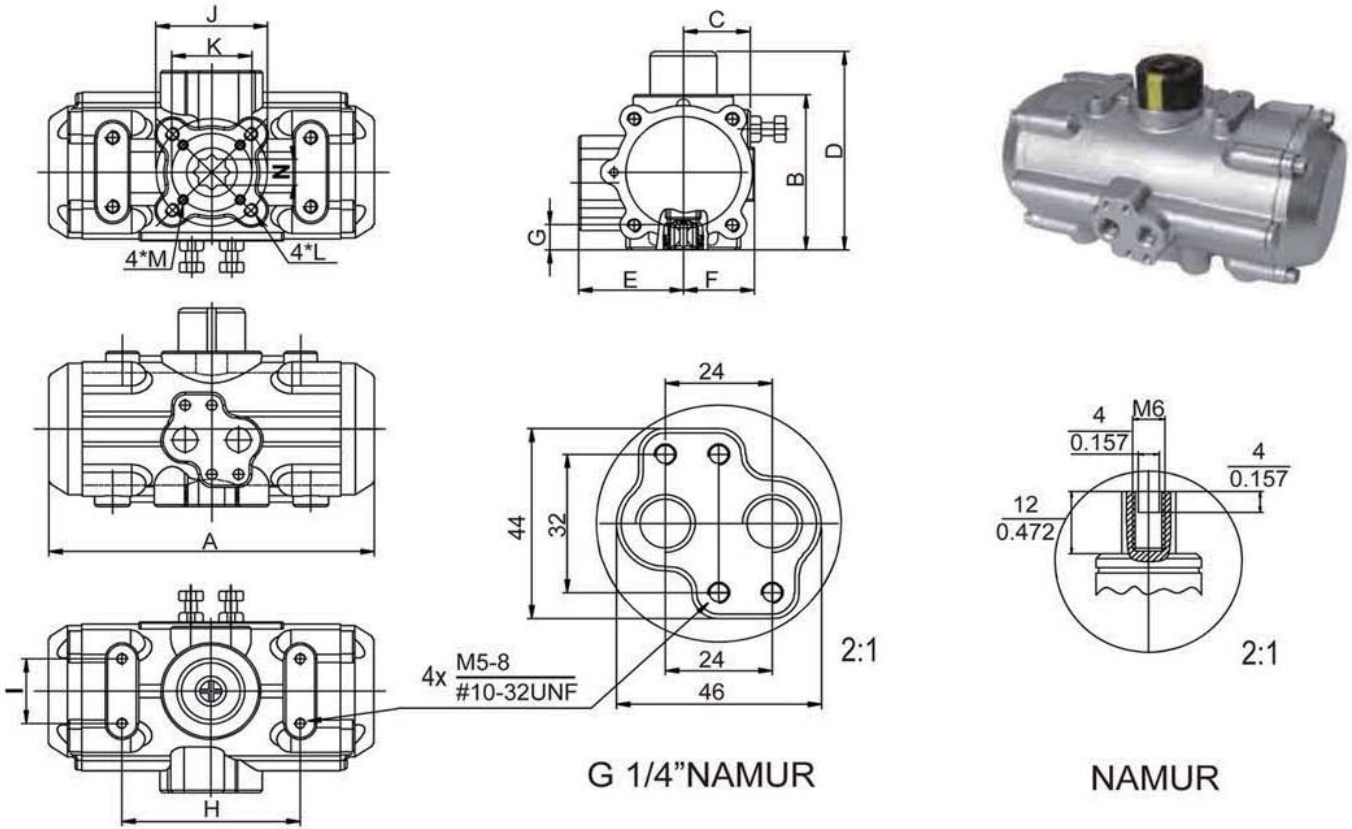


Dimension Table 尺寸表

单位Unit: $\frac{mm}{inch}$

型号 Model	A	B	C	D	E	F	G	H	I	N	J	K	L	M	Air Connection 气源接口
NK-032	110	45	45	65	22.5	22.5	11	50	25	9	F03	---	M5*8	---	1/8"
	4.33	1.77	1.77	2.65	0.89	0.89	0.89	1.97	0.98	0.35		#10-24UNF	---		
NK-040	122	60	52	80	28.5	36.5	14	80	30	11	F05	F03	M6*10	M5*8	1/4"
	4.80	2.36	2.05	3.15	1.12	1.44	0.55	3.15	1.18	0.43		1/4"-20UNC	#10-24UNF		
NK-052	146	72	60	92	26	41.5	14	80	30	11	F05	F03	M6*10	M5*8	1/8" or 1/4"(std)
	5.74	2.83	2.36	3.62	1.02	16.33	0.55	3.15	1.18	0.43		1/4"-20UNC	#10-24UNF		
NK-063	169	88	69.5	108	33.5	47	17	80	30	14	F07	F05	M8*13	M6*10	1/8" or 1/4"(std)
	6.65	3.46	27.36	2.25	1.31	1.85	0.66	3.15	1.18	0.55		5/16"-20UNC	1/4"-20UNC		
NK-075	186	100	78	120	39	53	17	80	30	14	F07	F05	M8*13	M6*10	1/8" or 1/4"(std)
	7.32	3.93	3.07	4.72	1.53	2.08	0.66	3.15	1.18	0.55		5/16"-20UNC	1/4"-20UNC		
NK-083	210	109	86	129	40	57	20	80	30	17	F07	F05	M8*13	M6*10	1/8" or 1/4"(std)
	8.26	4.29	3.38	5.07	1.57	2.24	0.79	3.15	1.18	0.67		5/16"-20UNC	1/4"-20UNC		
NK-092	264	117	90.5	137	44.5	58.5	20	80	30	17	F07	F05	M8*13	M6*10	1/8" or 1/4"(std)
	10.39	4.6	3.56	5.39	1.75	2.3	0.79	3.15	1.18	0.67		5/16"-20UNC	1/4"-20UNC		
NK-105	272	133	104	153	52	64	26	80	30	22	F10	F07	M10*16	M8*13	1/4"
	10.7	5.23	4.09	6.02	2.04	2.51	1.02	3.15	1.18	0.87		3/8"-20UNC	5/16"-20UNC		
NK-125	302	155	120	185	60	74.5	25	130	30	22	F10	F07	M10*16	M8*13	1/4"
	11.88	6.1	4.72	7.28	2.36	2.93	0.98	5.11	1.18	0.87		3/8"-20UNC	5/16"-20UNC		
NK-140	398	172	125	202	65	77	30	130	30	27	F12	F10	M12*20	M10*16	1/4"
	15.66	6.77	4.92	7.95	2.55	3.03	1.18	5.11	1.18	1.06		1/2"-20UNC	3/8"-20UNC		
NK-160	456	197	142	227	74	87	30	130	30	27	F12	F10	M12*20	M10*16	1/4"
	17.95	7.75	5.59	8.93	2.91	3.42	1.18	5.11	1.18	1.06		1/2"-20UNC	3/8"-20UNC		
NK-190	534	230	172	260	86	103	40	130	30	36	F14	---	M16*23	---	1/4"
	21.02	9.05	6.77	10.23	3.38	4.05	1.57	5.11	1.18	1.42		5/8"-20UNC	---		
NK-210	536	255	194	285	97	113	43	130	30	36	F14	---	M16*23	---	1/4"
	21.1	10.03	7.63	1.12	3.81	4.44	1.69	5.11	1.18	1.42		5/8"-20UNC	---		
NK-240	612	290	230	320	115	130	50	130	30	46	F16	---	M20*25	---	1/4" or 3/8"(std)
	24.09	11.41	9.05	12.59	4.52	5.11	1.97	5.11	1.18	1.81		3/4"-20UNC	---		
NK-270	718	330	252	360	126	147	50	130	30	46	F16	---	M20*25	---	1/2"
	28.26	12.99	9.92	14.17	4.96	5.78	1.97	5.11	1.18	1.81		3/4"-20UNC	---		
NK-300	784	354	335	384	162	173	50	130	30	46	F16	---	M20*25	---	1/2"
	30.86	13.93	13.2	15.11	6.37	6.8	1.97	5.11	1.18	1.81		3/4"-20UNC	---		
NK-350	845	410	385	440	190	195	50	130	30	46	F25	F16	8*M16*25	M20*25	1/2"
	33.26	16.14	15.15	17.32	7.48	7.67	1.97	5.11	1.18	1.81		5/8"-20UNC	3/4"-20UNC		
NK-400	956	466	520	496	260	260	60	130	30	55	F25	F16	8*M16*25	M20*25	1/2"
	37.63	18.34	20.47	19.52	10.23	10.23	2.36	5.11	1.18	2.16		5/8"-20UNC	3/4"-20UNC		

* Dimensions for reference only, subject to change.



Dimension Table 尺寸表

型号	A	B	C	D	E	F	G	H	I	N	J	K	L	M	气源接口
NKSS-45	128	64	28	84	44	30	14	80	30	11	F05	F03	M6×10	M5×7.5	G1/4"
	5.04	2.52	1.10	3.31	1.73	1.18	0.55	3.15	1.18	0.43			1/4"-20UNC	#10-24UNF	
NKSS-52	146	72	30	92	47	32	14	80	30	11	F05	F03	M6×10	M5×7.5	G1/4"
	5.75	2.83	1.18	3.62	1.85	1.26	0.55	3.15	1.18	0.43			1/4"-20UNC	#10-24UNF	
NKSS-63	173	88	36	108	54	38	18	80	30	14	F07	F05	M8×13	M6×10	G1/4"
	6.81	3.46	1.42	4.25	2.13	1.50	0.71	3.15	1.18	0.55			5/16"-18UNC	1/4"-20UNC	
NKSS-75	184	100	44	119.5	61.5	39	17	80	30	14	F07	F05	M8×13	M6×10	G1/4"
	7.24	3.94	1.73	4.70	2.42	1.54	0.67	3.15	1.18	0.55			5/16"-18UNC	1/4"-20UNC	
NKSS-83	211	108	48	128	65.5	48	21	80	30	17	F07	F05	M8×13	M6×12	G1/4"
	8.31	4.25	1.89	5.04	2.58	1.89	0.83	3.15	1.18	0.67			5/16"-18UNC	1/4"-20UNC	
NKSS-105	270	133	50	153	77	60	26	80	30	22	F10	F07	M10×16	M8×13	G1/4"
	10.63	5.24	1.97	6.02	3.03	2.36	1.02	3.15	1.18	0.87			3/8"-16UNC	5/16"-18UNC	
NKSS-125	302	155	58	175	87	69.5	27.5	80	30	22	F10	F07	M10×16	M8×13	G1/4"
	11.89	6.10	2.28	6.89	3.43	2.74	1.08	3.15	1.18	0.87			3/8"-16UNC	5/16"-18UNC	
NKSS-140	394	172	69	192	95.5	77	32	80	30	27	F12	F10	M12×20	M10×16	G1/4"
	15.51	6.77	2.72	7.56	3.76	3.03	1.26	3.15	1.18	1.06			1/2"-12UNC	3/8"-16UNC	
NKSS-160	456	198	75	218	106	87	34	80	30	27	F12	F10	M12×20	M10×16	G1/4"
	17.95	7.80	2.95	8.58	4.17	3.43	1.34	3.15	1.18	1.06			1/2"-12UNC	3/8"-16UNC	
NKSS-190	528	230	86	260	131	120	40	130	30	36	F14	---	M16×24		G1/4"
	20.79	9.06	3.39	10.24	5.16	4.72	1.57	5.12	1.18	1.42			5/8"-11UNC		
NKSS-210	532	255	101	285	140	125	40	130	30	36	F14	---	M16×24		G1/4"
	20.94	10.04	3.98	11.22	5.51	4.92	1.57	5.12	1.18	1.42			5/8"-11UNC		
NKSS-240	608	292	115	322	160	135	50	130	30	46	F16	---	M20×25		G1/4"
	23.94	11.50	4.53	12.68	6.30	5.31	1.97	5.12	1.18	1.81			3/4"-20UNC		
NKSS-270	714	331	126	361	180	175	49	130	30	46	F16	---	M20×25		G1/2"
	28.11	13.03	4.96	14.21	7.09	6.89	1.93	5.12	1.18	1.81			3/4"-20UNC		
NKSS-300	783	354	165	384	194	184	60	130	30	46	F16	---	M20×25		G1/2"
	30.83	13.94	6.50	15.12	7.64	7.24	2.36	5.12	1.18	1.81			3/4"-20UNC		
NKSS-400	940	464	200	491	220	225	60	130	30	55	F16	F25	M16×24	M20×25	G1/2"
	37.01	18.27	7.87	19.33	8.66	8.86	2.36	5.12	1.18	2.17			5/8"-11UNC	3/4"-20UNC	

* Dimensions for reference only, subject to change. (上述尺寸仅供参考 本公司保留改变权力)。

Air Consumption 空气消耗量 – Air Volume Opening & Closing 气缸开向容积及关向容积

Unit(单位):L

型号 (Model)	Air Volume@opening 开向容积(liter)	Air Volume@closing 关向容积(liter)	型号 (Model)	Air Volume@opening 开向容积(liter)	Air Volume@closing 关向容积(liter)
NK-32	0.03	0.04	NK-160	3.7	3.2
NK-40	0.08	0.11	NK-190	5.9	5.4
NK-52	0.12	0.16	NK-210	7.5	7.5
NK-63	0.21	0.23	NK-240	11	9
NK-75	0.3	0.34	NK-270	17	14
NK-83	0.43	0.47	NK-300	19.1	28.2
NK-92	0.64	0.73	NK-350	27.7	44.1
NK-105	0.95	0.88	NK-400	42.8	62.1
NK-125	1.6	1.4			
NK-140	2.5	2.2			

Air consumption rest with Air supply. Air volume and Action cycle times, expressions 空气消耗量取决于空气输入量和动作次数

$L/Min = \text{Air volume}(\text{Air volume Opening} + \text{Air Volume Closing}) \times [(\text{Air Supply}(\text{Kpa}) + 101.3) / 101.3] \times \text{Action cycle time}(/min)$

$L/Min = \text{空气容积}(\text{气缸开向容积} + \text{气缸关向容积}) \times [(\text{输入气源}(\text{Kpa}) + 101.3) / 101.3] \times \text{动作次数}(/min)$

Weight 重量(kg)

Model(型号)	NK-32	NK-40	NK-52	NK-63	NK-75	NK-83	NK-92	NK-105	NK-125	NK-140	NK-160	NK-190	NK-210	NK-240	NK-270	NK-300	NK-350	NK-400
DA双作用	0.47	1.0	1.38	2.03	2.7	3.13	4.6	6.77	8.9	13.25	20.14	31.3	46.8	67.28	96.9	108	146.7	220.5
SR单作用	---	---	1.45	2.05	2.9	3.6	5.22	6.85	10.11	15.55	24	35.25	54.8	80.2	118	135.6	188.1	283.5

Operation Time 操作时间 (Second)

Unit(单位):S

	NK-32	NK-40	NK-52	NK-63	NK-75	NK-83	NK-92	NK-105	NK-125	NK-140	NK-160	NK-190	NK-210	NK-240	NK-270	NK-300	NK-350	NK-400
DA(0°-90°)	0.3	0.5	0.6	0.66	0.72	0.83	1	1.35	2.4	2.5	3.93	4.55	5.5	8.4	10.9	5	6.2	7.5
DA(90°-0°)	0.4	0.5	0.53	0.58	0.64	0.73	0.86	1.3	1.79	2.1	2.6	3.45	4.35	8.33	8.53	6	7.2	8.5
SR6(0°-90°)	---	---	2.46	2.54	2.62	2.71	2.89	3.14	4.24	4.4	4.74	5.75	8.25	16.2	17.6			
SR6(90°-0°)	---	---	0.48	0.56	0.64	0.73	0.86	0.91	1.2	1.35	1.77	3.7	4.8	5.14	6.28			
SR7(0°-90°)	---	---	2.48	2.56	2.64	2.73	2.91	3.16	4.26	4.4	4.76	5.77	8.4	16.4	17.8			
SR7(90°-0°)	---	---	0.46	0.54	0.62	0.71	0.84	0.89	1.18	1.33	1.75	3.5	4.6	5.12	6.26			
SR8(0°-90°)	---	---	2.5	2.58	2.66	2.75	2.93	3.18	4.28	4.62	4.78	5.75	8.42	16.42	17.6			
SR8(90°-0°)	---	---	0.44	0.52	0.6	0.69	0.82	0.87	1.16	1.31	1.73	3.48	4.58	5.1	6.24			
SR9(0°-90°)	---	---	2.52	2.6	2.68	2.77	2.95	3.2	4.3	4.64	4.8	5.77	8.44	16.44	17.8			
SR9(90°-0°)	---	---	0.42	0.5	0.58	0.67	0.8	0.85	1.14	1.29	1.71	3.46	4.56	4.9	6.2			
SR10(0°-90°)	---	---	2.54	2.62	2.7	2.79	2.97	3.22	4.32	4.66	4.82	5.79	8.46	16.6	18			
SR10(90°-0°)	---	---	0.4	0.48	0.56	0.65	0.78	0.83	1.12	1.27	1.69	3.44	4.54	4.98	6.18			
SR11(0°-90°)	---	---	2.56	2.64	2.72	2.81	2.99	3.24	4.34	4.68	4.82	5.8	8.48	16.8	18.2			
SR11(90°-0°)	---	---	0.38	0.46	0.54	0.63	0.76	0.81	1.1	1.25	1.67	3.42	4.52	4.86	6.16			
SR12(0°-90°)	---	---	2.58	2.66	2.74	2.83	3.01	3.26	4.36	4.68	4.84	5.83	8.5	17	18.4			
SR12(90°-0°)	---	---	0.36	0.44	0.52	0.61	0.74	0.79	1.08	1.22	1.65	3.4	4.5	4.84	6.14			

请联系Nutork

Order Information 订购选型

Actuator Body Material 缸体材质	Model 型号	Spring Set 弹簧数量	Seals 密封圈	Options 选用气缸型式
	NK-032	Blank 空白(双作用气缸)		
	NK-040			
铝合金气缸	NK-052	Blank (Double Acting Actuator)		
NKD 双作用气缸 (Double Acting Actuator)	NK-063			
NKS 单作用气缸(Spring Return Actuator)	NK-075	05		
	NK-083	06		
	NK-092	07	标准Standard: NBR(丁腈橡胶)	
316SS不锈钢气缸	NK-105	08		0-120° 气缸
NKD-S6 双作用气缸(Double Acting Actuator)	NK-125	09	高温HT:Viton(氟橡胶)	(0-120° Operation)
NKS-S6 单作用气缸 (Spring Return Actuator)	NK-140	10		0-180° 气缸
	NK-160	11	低温LT: HNBR(氢化丁腈橡胶)	(0-180° Operation)
	NK-190	12		
304SS不锈钢气缸	NK-210			
NKD-S4 双作用气缸(Double Acting Actuator)	NK-240			
NKS-S4 单作用气缸(Spring Return Actuator)	NK-270			
	NK-300			
	NK-350			
	NK-400			

Note: The part numbers are represented as the following: Type-Model-Spring Set-Seals-Options

注: 订购选型依照下列编号顺序: 气缸造型-型号-弹簧数量-密封圈材料-选用气缸型式

IEC/ATEX/FM/CSA Approved 防爆认证



3/2 & 5/2 way in-line & Namur Mounted Solenoid Valve. 3/2及5/2管接式/板接式电磁阀

1. Spool valve structure 滑杆式结构
 2. Static seal design 静密封设计
 3. Material in aluminum alloy & 316SS 铝合金及316不锈钢阀体
 4. Encapsulated coil in NASS coil 本安防爆NASS线圈
 5. EExdIICT6 coil enclosure in aluminum alloy & 316SS. EExdIICT6隔爆线圈, 铝合金及316SS
- Approved by ATEX & NEPSI. ATEX及NEPSI认证

NEPSI Approved 防爆认证



Rotary & Linear Type E/P Positioner

1. The optional output signal: mechanical switch & 4-20mADC feedback
可选择的输出信号：机械式开关, 4-20mADC电流反馈信号
2. The optional accessories: air filter regulator or dome type indicator(only in IP66, rotary type)
可选配件：空气过滤调压阀或圆顶型指示器（只用于IP66, 角行程型号）
3. Enclosure in IP66, EExdIIBT6 & EExdIICT6(Approved by NEPSI)
可提供IP66, EExdIIBT6及EExdIICT6隔爆（NEPSI认证）

ATEX / NEPSI Approved 防爆认证



316SS

30M/24hrs tested by the third party
由第三方在30M/24hrs条件下测试

Position Monitoring Switchbox 限位开关

1. Sensor Type开关类型: Mechanical Type(2,3 or 4 x SPDT, DPDT)
机械式(2,3或4只单极双头, 双极双头开关)
Proximity Type(Autonics, P+F, Truck...)
接近式(内置奥托尼克斯, 倍加福, 图克等品牌开关)
2. The optional output signal: 4-20mADC or 0-5K/10K ohm potentiometer
可提供4-20mADC电流输出或0-5/10K Ohm电位计输出
3. Housing material in aluminum alloy or 316SS 可提供铝合金或者316不锈钢壳体。
4. Enclosure in IP67, EExdIIBT6 & EExdIICT6 (Approved by ATEX & NEPSI)
可提供IP67, EExdIIBT6及EExdIICT6隔爆（ATEX & NEPSI认证）。
5. IP68 enclosure tested in 30M / 24HOURS
IP68在30M/24hrs下测试



Manual Override (Declutchable Wormgear Operator) MO 离合式手动操作器

1. Cast Iron/Aluminum Alloy 铸铁/铝合金本体:
The output torque: 300/ 700/ 1,200/ 2,000/ 3,100Nm
输出扭矩：300/700/1,200/2,000/3,100Nm
2. Ductile Iron Body 球墨铸铁本体:
The output torque: 12,000/ 18,000/ 25,000/ 32,000/ 70,000Nm
输出扭矩：12,000/18,000/25,000/32,000/ 70,000Nm
The actuator & valve connection complies with ISO5211 standard
执行器和阀门连接方式符合ISO5211标准



316SS

Air Filter Regulator 空气过滤减压阀

1. 5um filtration & high flow capacity
过滤精度5um颗粒&高流量
2. Panel Mounting is optional
可选盘面安装
3. 1/4" vented spring case is optional
可选1/4"排气弹簧盒
4. Housing material in aluminum alloy & 316SS
可提供铝合金及316不锈钢壳体

Butterfly Valves 蝶阀



Center-Line Soft-Seated Butterfly Valve 中心线型软密封蝶阀

1. Wafer/Lug Valve 对夹/多耳式阀体:
Dimensions 口径: 2 ~ 56
Pressure Rating 压力等级: PN10-16/ANSI125-150LB/JIS10-16K
2. Double Flanged Valve 双法兰阀体:
Dimensions 口径: 2 ~ 48
Pressure Rating 压力等级: PN10-16/ANSI125-150LB
3. Wafer/Lug Valve (PTFE/PFA Lined)
对夹/多耳式阀体 (PTFE/ PFA内衬):
Dimensions 口径: 2 ~ 24
Pressure Rating 压力等级: PN10-16/ANSI125-150LB
Operation: Hand-Lever, Wormgear Operator, Pneumatic and Hydraulic Actuators, Electric Actuators.
操作方式: 手柄操作, 涡轮箱操作气缸/液压缸, 电动执行器

三偏心双向硬密封蝶阀

Triple Offset Bi-Directional Metal Seat Butterfly Valve
(Bubble Tight, Replaceable Disc Ring & Valve Seat)
(无气泡紧密关闭, 可更换的阀板密封环和阀座)

高性能双偏心蝶阀

High Performance Double Eccentric Butterfly Valve



Triple Offset Metal-Seated Butterfly Valve 三偏心硬密封蝶阀

Wafer/Lug/Double Flanged/Butt Weld Type
对夹式/多耳式/双法兰/对焊式阀体:

1. Dimensions 口径: 2 ~ 80
Pressure Rating 压力等级: PN10-25/ANSI150-300LB
2. Dimensions 口径: 3 ~ 24
Pressure Rating 压力等级: PN40-100/ANSI600-1500LB
Operation: Wormgear Manual Override Pneumatic and Hydraulic Actuators, Electric Actuators.
操作方式: 手动齿轮箱, 气缸, 液压缸, 电动执行器

High Performance Double Eccentric Butterfly Valve 高性能双偏心蝶阀

Wafer/Lug/Double Flanged/Butt Weld Type
对夹式/多耳式 / 双法兰/对焊式阀体:

1. Dimensions 口径: 2 ~ 24
Pressure Rating 压力等级: PN10-25/ANSI150-300LB

Ball Valve 球阀



Ball Valve(Floating Ball) 球阀(浮动球结构)

1. Dimensions 口径: 1/4 - 4 ,1000WOG/2000WOG, Full Port, thread /Butt Weld/Socket Weld / Tube End Connection.
全流量, 内螺纹/对焊/承插焊/卡套式连接
2. Dimensions 口径: 1/2 - 8
3. Pressure Rating 压力等级: PN10-PN40 / ANSI150-300LB / JIS10-20K
Operation: Wormgear Manual Override, Pneumatic and Hydraulic Actuators, Electric Actuators.
操作方式: 手动齿轮箱, 气缸, 液压缸, 电动执行器

Plastic Ball Valve & Butterfly Valve 塑料球阀 & 蝶阀



Dual Plate Check Valve 双瓣式止回阀

Retainerless Type Metal Seat
无塞头式硬密封阀座



Full Liner Rubber Seat
全衬软密封阀座

1. Double Union Ball Valve (Pressure Rating: 150PSI) 双边由任球阀 (工作压力: 150PSI)

Dimensions 口径: 1/2 ~4

Body/Ball/Stem Material: UPVC, CPVC, PVDF, PP, ABS

阀体/球体/阀杆材料: UPVC, CPVC, PVDF, PP, ABS

Seal: PTFE

阀座: PTFE

O-Rings: EPDM, FPM

O型圈: EPDM, FPM

End Type: Treaded/Socket/Flanged

接口类型: 直装式牙口/承插焊/法兰

2. Wafer Type Butterfly Valve 对夹式蝶阀

Dimensions 口径: 2 ~24

Body Material: UPVC, CPVC, PVDF, PP

阀体材料: UPVC, CPVC, PVDF, PP

Disc Material: CPVC, PVDF, PP

阀板材料: CPVC, PVDF, PP

Stem Material: 410SS, 304SS, 316SS

阀杆材料: 410SS, 304SS, 316SS

Seat Material: EPDM, FPM

阀座材料: EPDM, FPM

O-Rings: EPDM, FPM

O型圈: EPDM, FPM

1. Full Liner & Rubber Seat 全衬/半衬软密封阀座:

Dimensions 口径: 1-1/2 ~80 ,

Pressure Rating 压力等级: PN10- PN40/

ANSI125- 150LB / JIS10-20K

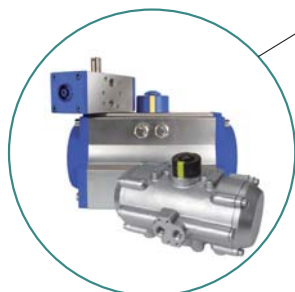
2. Metal Seat (Retainerless Type) 硬密封阀座 (无塞头式):

2-1) DN40- DN1000, ANSI150LB

2-2) DN40- DN600, ANSI300LB

2-3) DN40- DN300, ANSI600LB~2500LB

NUTORK CORP. 为一专业生产,气动执行器,电动执行器,气动执行器各式配套产品(各式机械式/感应式限位开关(回讯器),离合式手动操作器,定位器,电磁阀)。



NK系列齿条齿排式气动执行器
通过ATEX认证/SIL3认证
最大输出扭矩: 9340Nm@6bar



NSF系列拔叉式气缸&液压缸
通过ATEX认证/SIL3认证
最大输出扭矩: 226195Nm@6bar



NTQ系列角行程电动执行器
IP67/IP68(30M@24hrs)
最大输出扭矩: 6000Nm
通过SIL3/IP68/MD/LVD/EMC认证



NTE系列角行程电动执行器
IP67/IP68(30M@24hrs)
最大输出扭矩: 6000Nm



限位开关(专利设计)
IP67/68(50M@72hrs)
防护等级: EExdIIBT6(ATEX认证)
EExdIICT6(ATEX认证)



电磁阀 3/2常闭&5/2位,
O型圈静态密封设计
铝合金&316SS阀体
IP67/EExdIICT6(ATEX认证)



空气过滤调压阀/气控阀
铝合金镀乙烯涂装&316SS材质
气源接口: 1/4"~1"



离合式手轮操作器
铝合金&铸铁&球磨铸铁本体
最大输出扭矩: 70000Nm



球阀(浮动球结构), 可提供不同压力等级,连接类型及操作方式



中心线型软密封蝶阀/高性能双偏心蝶阀/高性能三偏心硬密封蝶阀
可提供不同压力等级,连接类型及操作方式