

NUTORK®

Actuators & Valves



CE SIL3 Ex

NTE 系列角行程电动执行器 NTE Series Quarter Turn Electric Actuator



产品具有以下认证：

SIL3认证

低电压指令：2014/35/EU

机械指令：2006/42/EU

电磁指令：2014/30/EU

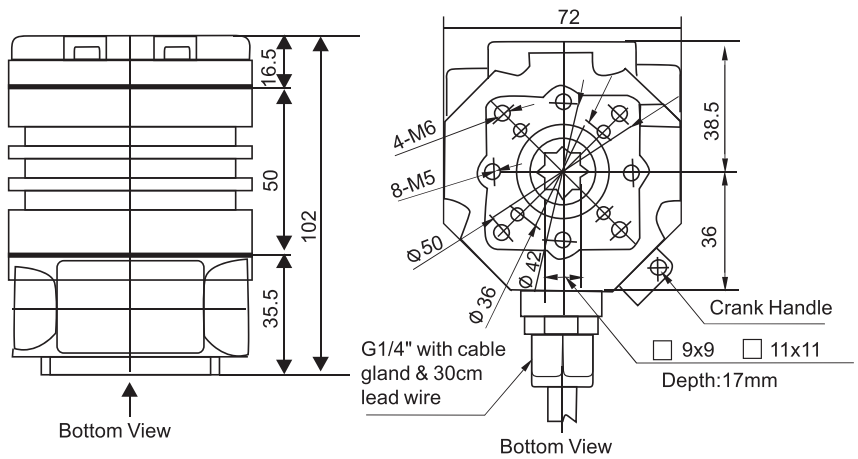
NUTORK CORPORATION



1. Due to characteristics of valve, the electric actuator must be able to provide high start up torque with full load whenever the valve is at open, closed or any other position. NUTORK NTE series electric actuators are designed for such working requirement.
由于阀门的动作特性,电动执行器在阀门的开启、关闭及中间任何位置都具有满负荷的高启动扭矩.同时由于流量开度调节需要,电动执行器必须具有较小的转动惯性. NUTORK NTE系列电动执行器依照上述使用要求而设计.
2. Gear driving unit is made of alloy steel with heat treatment featuring high strength, excellent wear resistance and long term fatigue load impact.
齿轮传动部件采用热处理合金钢材,提供高强度,耐磨性好,可承受长期疲劳负荷冲击.
3. The crank handle is designed as detachable to minimize the dimension of the actuator.
手柄与电动执行器是可分开的,以最小化电动执行器体积.
4. The integral construction of the wormgear and drive shaft provides long term dependable operation with high output torque.
蜗齿轮与传动轴一体化结构提供长期使用操作及高扭矩输出
5. The captive cover bolt prevents bolt from dropping when cover is opened.
防脱落螺栓以防止螺栓自端盖脱落.
6. The stainless steel stroke bolt and cam provide 0 - 90° adjustability.
不锈钢材质行程调整螺栓及定位模块以提供0-90° 行程调整.
7. The tempered glass visual position indicator provides anti-aging, temperature resistance and anti-deformation.
位置指示器镜片采用抗老化,抗高温及抗变形的高强度玻璃.
8. The epoxy encapsulated control servo unit provides heat insulation, moisture and dust proofing, thus suitable for various industrial process requirements.
以环氧树脂密封封装的控制伺服器,提供隔热、防震、防潮、防尘以适用于不同的工业过程控制环境



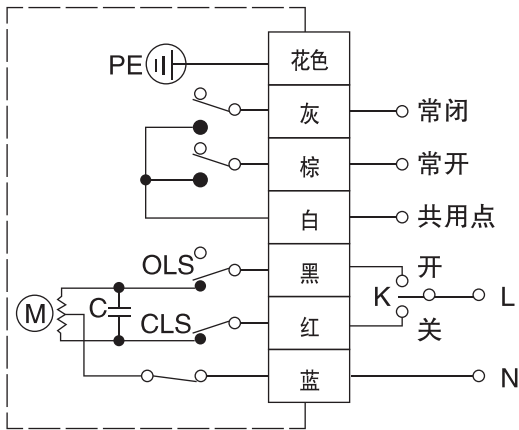
NUTORK™ www.nutork.com **CE**
 Model : NTE-02S Amb Temp : 30°C~60°C
 Power Supply 200VAC Output Torque 18NM
 Rated Current : 0.15A Operation Time : 12S
 Frequency 50/60Hz Enclosure : IP168
 ⚠️ MANUAL OPERATION IS FORBIDDEN WHEN EMERGENCY



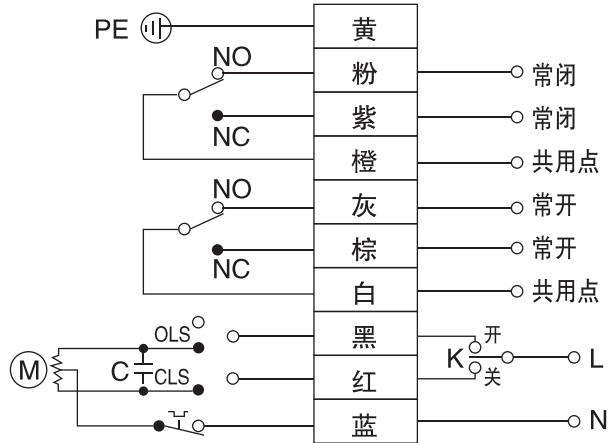
Model 型号	NTE-02S			
Power 电源	220VAC/110VAC/24VAC		24VDC	
Output Torque(Nm/in.lbs) 输出扭矩	18/160	9/80	18/160	9/80
Operation Speed(sec.) 开关速度	15	7	15	7
Power Consumption(W) 消耗功率	6		8	
Rated Current(A) 额定电流	0.15	0.28	0.7	
	0.15	0.3	1.3	
Insulation Resistance 绝缘电阻	100MΩ @500VDC 100MΩ/250VDC(24VAC)		100MΩ @250VDC	
Withstand Voltage 耐压等级	1500VAC@1 Min. 500VAC@1Min.(24VAC)		500VAC@1 Min.	
Thermal Protection 过热保护	standard accessory, built-in, auto-reset type 标准配件, 内建, 自动复归型			
Mounting Direction 安装方位	All directions任意角度			
Ambient Temp. 周围温度	-30 ~ +60°C			
Valve Connection 连接尺寸	ISO5211, □9/11mm x F03/F04/F05			
Dimension(mm) 外型尺寸	72(W) x 75(L) x 120(H)			
Enclosure 防护等级	IP67			
Housing Material 本体材质	Die-casting aluminum alloy压铸铝合金			
Weight(Kg/Lbs) 重量	1.2/2.65			

Wiring Diagram - 接线图

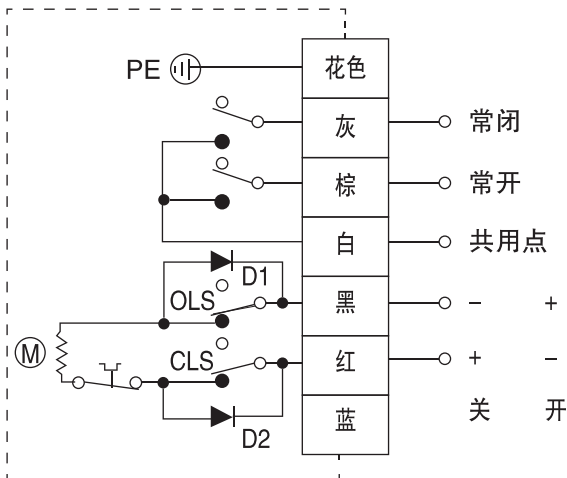
Type B (2 × SPST)



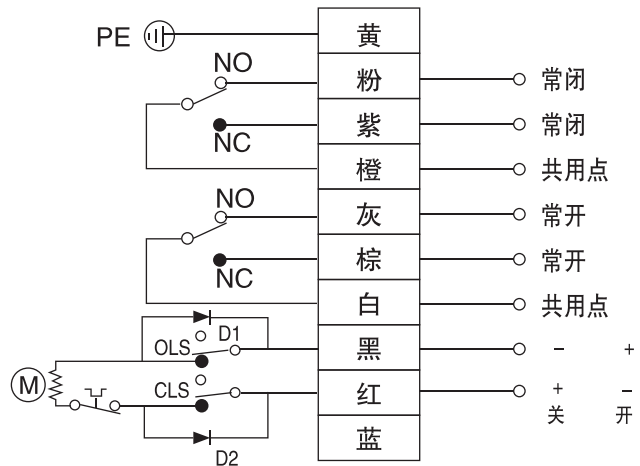
Type B1 (2 × SPDT)



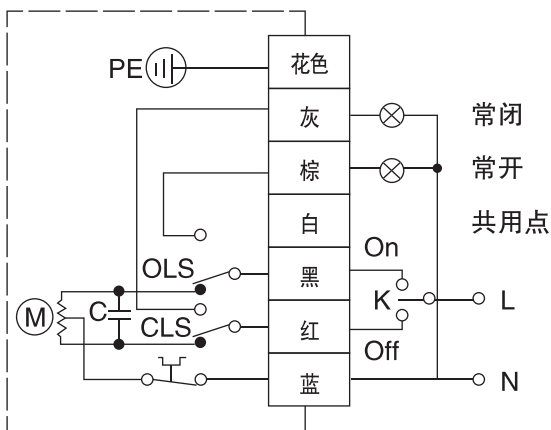
24VDC (2 × SPST)



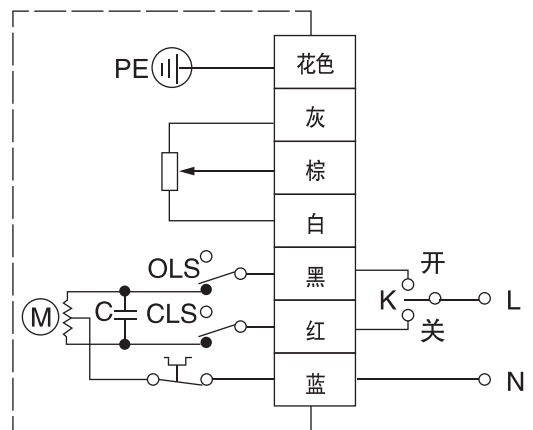
24VDC (2 × SPDT)

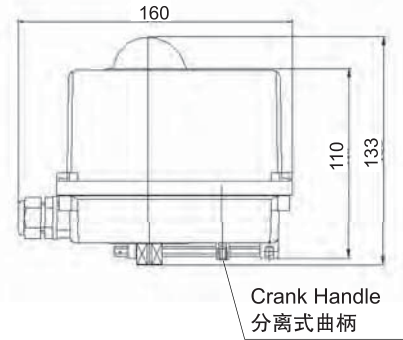
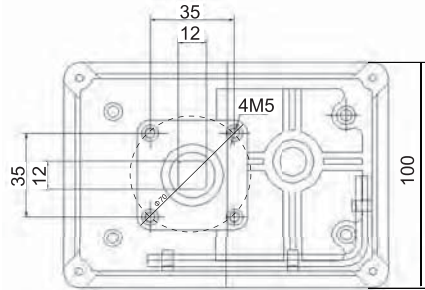


Type A



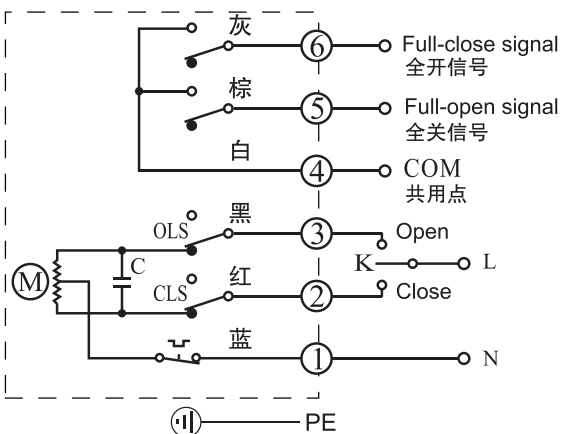
Type C



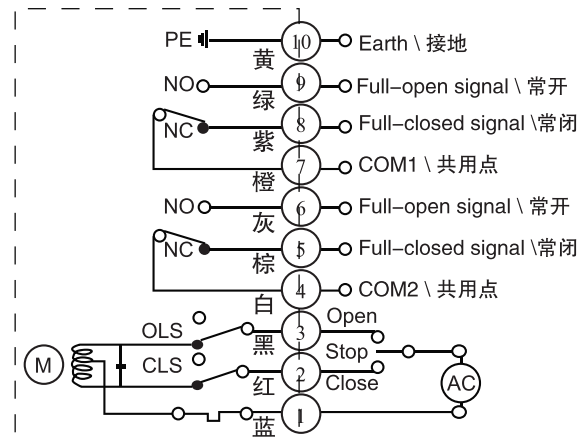


Model \ 型号	NTE-02L		
Power \ 电源	24VAC	110VAC	220VAC
Output Torque \ 输出扭矩	25Nm(222in.lbs)		
Operation Speed(sec.) \ 开关速度	10 sec.		
Power Consumption(W) \ 消耗功率	20W	18W	18W
Rated Current(A) \ 额定电流	1.1	0.2	0.1
Insulation Resistance \ 绝缘电阻	100MΩ@500VDC		
Withstand Voltage \ 耐压等级	1500VAC @ 1 min		
Thermal Protection \ 过热保护	Standard accessory, built-in, auto-reset type 标准配件, 内建, 自动复归型		
Mounting Direction \ 安装方位	All Direction任意角度		
Ambient Temperature \ 周围温度	-30°C ~ +60°C		
Valve Connection \ 连接尺寸	12x12mm square drive shaft x F05		
Dimension(LxWxH),mm \ 外形尺寸	160(L)x100(W)x133(H)mm		
Enclosure \ 防护等级	IP65		
Housing Material \ 本体材质	ABS		
Weight \ 重量(Kg)	1.4Kg		

Wiring Diagram \ 接线图



Type: B



Type: B1

技术参数 Technical Data

Model型号	NTE-03	NTE-05	NTE-10	NTE-20	NTE-40	NTE-60	NTE-100	NTE-160	NTE-200	NTE-300	NTE-400	NTE-600
Output Torque(Nm) 输出扭矩	30	15/30/50	50/60/ 100	80/100/ 150/200	150/250/ 300/400	600	300/800/ 1000	1600	2000	3000	4000	6000
开关速度 Operational Speed (Sec.)@0-90°/50Hz	20	10/20/30	15/20/30	9/15/ 20/30	9/15/ 20/30	30	15/30/50	88	100	60	100	150
Operational Angels(Max.) 最大行程角度	0-360°	0-360°	0-90°	0-90°	0-90°	0-90°	0-90°	0-90°	0-90°	0-90°	0-90°	0-90°
Valve Conn./ISO5211 阀门连接/ISO5211	◇9/11-F03/F05 or ◇14-F05/F07		◇14/17- F05/F07	◇17/22- F07/F10	◇17/22/27-F07/F10			◇22/27-F10/F12 or ◇36-F14/F16		◇27/36- F12/14/16		Bare Shaft
Power-(Watts) 电机功率	DC motor	20	20	40	40	90	90
	AC motor	10	10	23	40	90	90	100	100	100	200	200
	24VDC	2	2	2.4	3.8	8.0	9.5	9.0
Rated Current-(A) 额定电流(50HZ)	110VAC	0.48	0.48	0.64	0.9	2	2.06	2.2	2.2	2.2	3.9	4.10
	220VAC	0.24	0.24	0.32	0.48	0.92	0.95	1.20	1.20	1.20	1.90	2.10
	380VAC	0.15	0.15	0.19	0.25	0.45	0.46	0.48	0.48	0.48	0.90	0.90
Weight-(Kg) 重量	2.2	2.2	4	7	7.8	7.8	11.2	11.8	11.8	20	31	31
Duty Cycle(On/Off Type) 电机工作制式(开关型)	S2: 50%~60min											
Duty Cycle(Modulating Type) 电机工作制式(调节型)	S4: 40%,~1200 Start/Hour											
Power Supply 电源	1.Phase:110/220VAC±10%@50/60Hz, 3Phase/380/440VAC±10%@50/60Hz, 12VDC.24VDC/VAC 单相:110/220VAC±10%@50/60Hz, 三相/380/440VAC±10%@50/60Hz, 12VDC.24VDC/VAC											
Thermal protector 过热保护	standard accessory, built-in, auto-reset type 标准配件: 内置, 自动复位											
Anti-Vibration 震动测试	XYZ 10g, 0.2~34Hz, 10min.											
Ambient Humidity 周围相对湿度	90%RH Max. (non-condensing)											
Ambient Temperature 周围温度	-30°C ~ +60°C											
Enclosure Rating 防护等级	IP67(标准型), IP68(选用)											
Mounting Direction 安装方位	All Directions 任意角度安装											
Electrical Conduit 电气接口	M20×1.5 with cable gland for standard type(2×M20×1.5 with cable gland for modulating type) M20×1.5 防水电缆接头, 标准型(两只M20×1.5 防水电缆接头, 调节型)											
Manual Operation 手动操作	Detachable crank handle(standard accessory) 标准配件: 可分离式曲柄											
Stopper 定位方式	In operation:limit switches at fuu&closed position;Manual operation:mechanical stopper 自动方式: 限位开关于全开及全关位置. 手动方式: 定为模块											
Housing Material 本体材质	Die-casting aluminum alloy 压铸铝合金											
Various Option 选项功能	1. Type A standard type 标准型											
	2. Type B additional limit switches (2 ×SPST) 两只独立限位开关											
	3. Type C potentiometer unit (1KΩ or 5KΩ) 带电位器 (1KΩ or 5KΩ)											
	4. Type D potentiometer unit (1KΩ or 5KΩ)with additional limit switches (2 units) 带电位器 (1KΩ or 5KΩ)及两只独立限位开关											
	5. Type E modulating controller (input signal:4-20mA or 1-5VDC,output signal:4-20mA) 调节型 (伺服控制器-输入信号:20mA 或 1-5VDC, 输出信号: 4-20mA)											
	6. Type F current position transmitter (output signal:4-20mA) 位置发送器(输出信号: 4-20mA)											
	7. Space heater 除湿加热器											
	8. Torque switches(2 units) 两只扭矩开关											
	9. Various voltages (110/220/380VAC&24VDC,the other voltage is available upon request) 不同电压选项(110/220/380VAC&24VDC,其他电压可接受订购)											

NTE系列电动执行器不同功能

1. 带GREEN/RED LED圆顶指示器



2. 带力矩开关,只适用于NTE-10~NTE-60



3. 带侧装手轮



4. 带现场就地控制单元, 24VDC不适用

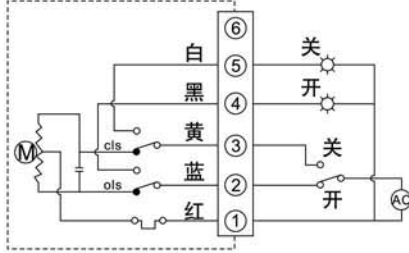


5. 带外挂接线盒, 只适用于NTE-05~NTE-200



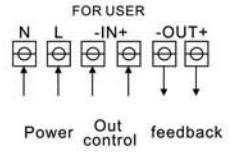
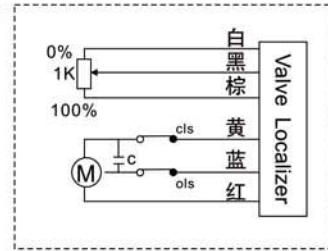
Type A: Standard Type

Output Signal/输出信号:
2xSPST(NO) with
line power switch
2个SPST (NO)
有源信号



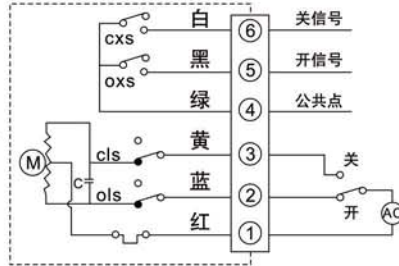
Type E: Modulating Control/调节性

Input Signal/输入信号:
4-20mAC or 0-5VDC
Output Signal/
输出信号:
4-20mADC



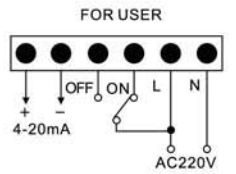
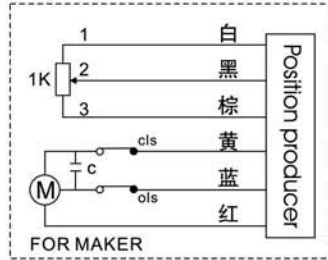
Type B: 2xSPST(NO)/2个

Output Signal
/输出信号:
1xSPST(NO)
micro-switch each at
open & close position.
开/关位置各有一个
SPST微动开关



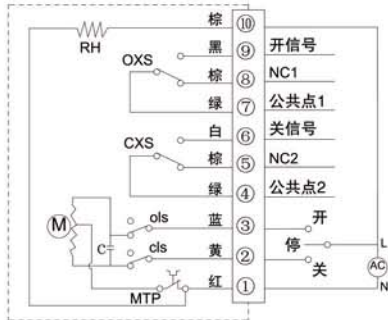
Type F: R/I Converter/带位置发送器

Output Signal/
输出信号:
4-20mADC



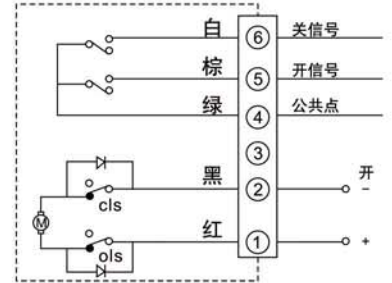
Type B1: 2xSPDT(NO/NC)

Output Signal/
输出信号:
1xSPDT(NC/NO)
micro-switch each at
open & close position
开/关位置各有一个
SPDT微动开关



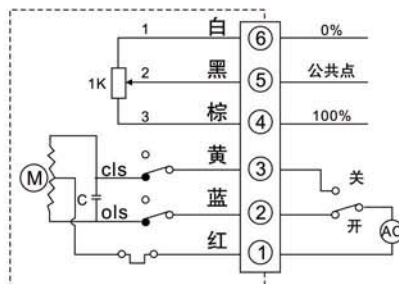
DC Motor with 2xSPST(NO)/2个SPST (NO) 直流控制

Output Signal/
输出信号:
1xSPST(NO)
micro-switch each at
open & close position.
开/关位置各有一个
SPST微动开关



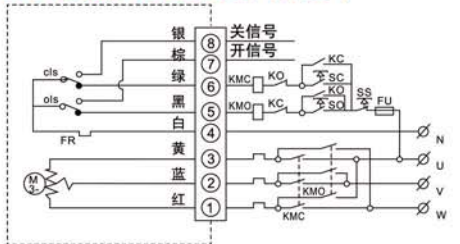
Type C: Potentiometer/电位器

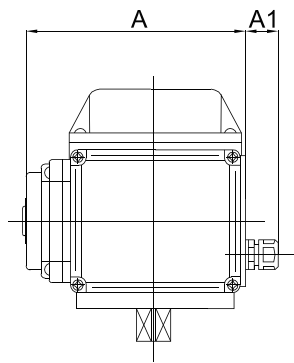
Output Signal/
输出信号:
0-500Ω or 0-1000Ω



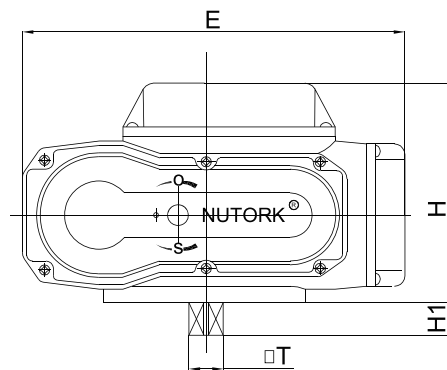
3 Phase, 380/415/440VAC Motor with 2xSPST(NO) 三相, 交流380/415/440V电机, 2个SPST (NO)

Output Signal/
输出信号:
1xSPST(NO)
micro-switch each at
open & close position.
开/关位置各有一个
SPST微动开关

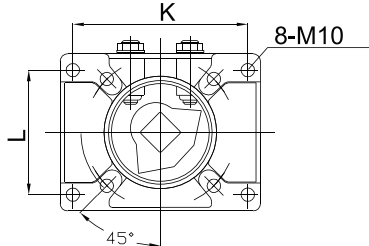




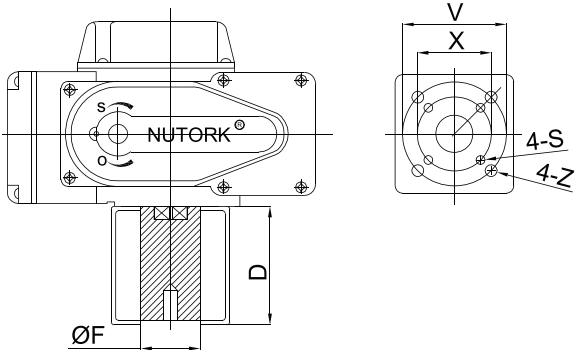
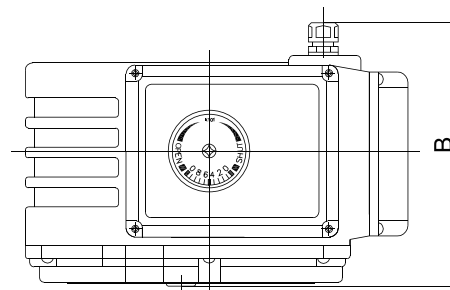
Bare Shaft 光轴



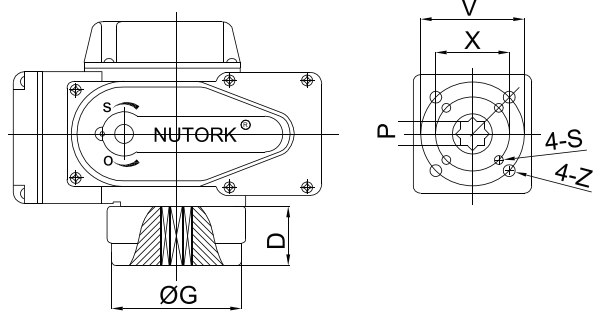
Bare Shaft 光轴



Bare Shaft 光轴



Bracket + Coupler 支架连接杆

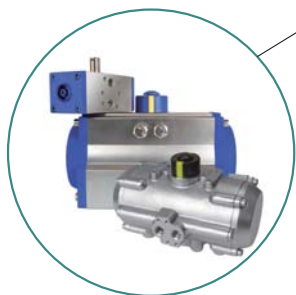


ISO5211

MM

Model	A	A1	E	H	H1	T	K	L	B	X	V	◇P	S	Z	ØG	ØF	D
NTE-03	115	22	160	103	12	12*12	68	60	138	36	50	9/11/14	4-M5	4-M6	70	28	依照阀门尺寸
NTE-05	115	22	160	103	12	12*12	68	60	138	36	50	9/11/14	4-M5	4-M6	70	28	
NTE-10	123	22	208	124	19	15*15	82	70	105	50	70	9/11/14	4-M6	4-M8	90	35	
NTE-20	148	22	258	148	22	23*23	118	84	178	70	102	14/17	4-M8	4-M10	125	48	
NTE-40	148	22	258	148	22	23*23	118	84	178	70	102	17/22	4-M8	4-M10	125	48	
NTE-60	148	22	258	148	22	23*23	118	84	178	70	102	17/22	4-M8	4-M10	125	48	
NTE-100	156	27.5	280	159	25	30*30	148	84	187	102	125	22/27	—	4-M10	135	65	
NTE-160	156	27.5	280	159	25	30*30	148	84	187	102	125	22/27	—	4-M10	135	65	
NTE-200	156	27.5	280	159	25	30*30	148	84	187	140	165	36	—	4-M16	175	65	
NTE-300	234	22	325	165	30	36*36	148	116	257	140	165	27/36	—	4-M16	—	—	
NTE-400	266	—	439	179	48	52*52	180	180	266	159	254	52	—	4-M18	—	—	
NTE-600	266	—	439	179	48	52*52	180	180	266	159	254	52	—	4-M18	—	—	

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



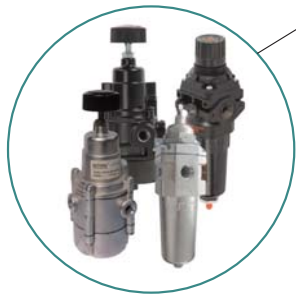
NTE系列角行程电动执行器
IP67/IP68(30M@24hrs)
最大输出扭矩: 6000Nm



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