



FRY·弗瑞亚
Electric Actuator

Electric Valve Actuator



Tianjin Freya Automation Technology Co., Ltd





Sincere World To Create A Better Future



Brief Introduction

Tianjin Freya automation technology Co., Ltd. is located in the central northern industry zone, Xiqing district, Tianjin. It is a professional integrated company in electric actuator value with qualified product design, production assembly, and sales service. There are over 30 experts of this field to lead the technical personnel in our company. It uses advanced machining centers, CNC machine tools, lathes, grinding machines, boring machines and professional testing equipment to ensure that the parameters of each product meet the factory requirements and the appearance of the products is exquisite. The main products are some quarter-turn valve actuator and multi-turn valve electric actuator. The multi-turn valve electric actuator can be equipped with valves such as gate valve, globe valve and flapper valve; some quarter-turn valve electric actuator can be equipped with valves such as butterfly valves, ball valves, ventilation valves and plug valves. Including on-off type, modulating type, explosion-proof type and other control methods. Tianjin Freya Automation Technology Co., Ltd. will accurately grasp the market direction, select advanced transmission mechanism, adopt advanced processing technology, and utilize cutting-edge technical resources to provide users with modern and simple intelligent electric actuators. At the same time, we continue to pursue better pre-sales and after-sales services to meet the needs of our customers.

QUALIFICATION

2019 Tianjin Freya Honour



National Quality Credit AAAAA Brand Enterprises

The certificate of Tianjin city science and technology small and medium enterprises

Tianjin Certified Enterprise Technology Center

Revitalization of the SME Star Enterprise Honorary Certificate for the Equipment Manufacturing Industry

Registration Certificate of Customs Declaration Unit of the People's Republic of China

Tianjin Famous Trademark Certificate

National industrial production permit

High-tech Enterprise Certificate

9000 CERTIFICATION

质量管理体系
认证证书

证书号：17418Q20724ROM

兹 证 明

天津弗瑞亚自动化科技有限公司

统一社会信用代码：911201110937222988

注册地址：天津市西青区中北镇阜锦道 5 号万汇文化广场 16-4-904

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邮编：300380

质量管理体系符合

GB/T19001-2016 idt ISO9001:2015 标准使用条款的要求

该体系认证所覆盖的范围

自动化仪表成套设备、电动阀门、电动执行器、仪器仪表配件的销售

第一次监审

贴标处

第二次监审

贴标处

第三次监审

贴标处

证书有效期内,获证组织须每年至少接受一次监督审核,并加贴合格标识证书方为有效。本证书信息可在国家认证认可监督管理委员会官方网站:www.cnca.gov.cn 查询

中国认可
国际互认
管理体系
MANAGEMENT SYSTEM
CNAS C174-M初次获证日期：2018 年 9 月 6 日 签发日期：2018 年 9 月 6 日 有效日期：2021 年 9 月 5 日
北京市昌平区城北街道鼓楼南街 6 号 2 号楼 707 室 www.hxccc.org 010-57146599

No. 0001133

CE CERTIFICATION

شهادة - 증명서 - Certificat - 證明書 - Сертификат - Certificate

Certificate of Compliance

No. OT150708.TFADS65



Certificate's
Holder:

Tianjin Freya Automation Technology
Co., Ltd.
Huating International Apartment, Zhong Bei Town,
Xiqing District, Tianjin

Certification ECM
Mark:



Product:
Model(s):

Electric actuator
SD, DKJ, Q, Z

Verification to:

Standard:
EN ISO 12100:2010,
EN 60730-2-14:1997+A2:2008,
EN 55014-1:2006+A2:2011

related to CE Directive(s):
2006/42/EC (Machinery)
2014/35/EU (Low Voltage)
2014/30/EU (Electromagnetic Compatibility)

Remark: The product(s) has been verified on a voluntary basis. The product(s) satisfies the requirements of the Certification Mark of ECM, in reference to the above listed Standard(s). The above Certification Mark can be affixed on the product(s) accordingly to the ECM regulation about its release and its use. Regulation can be found at www.entecerma.it.

Whereas the Manufacturer is responsible of the CE certification of the product(s) and not exempted to perform all the necessary activities before placing the product(s) on the market.

The Manufacturer is also responsible to maintain efficient the internal production control to ensure the product(s) are in compliance with the Certification ECM Mark.

This certificate can be checked for validity at www.entecerma.it

Date of issue 08 July 2015

Expiry date 07 July 2020

Chief Manager
Tim Mahan

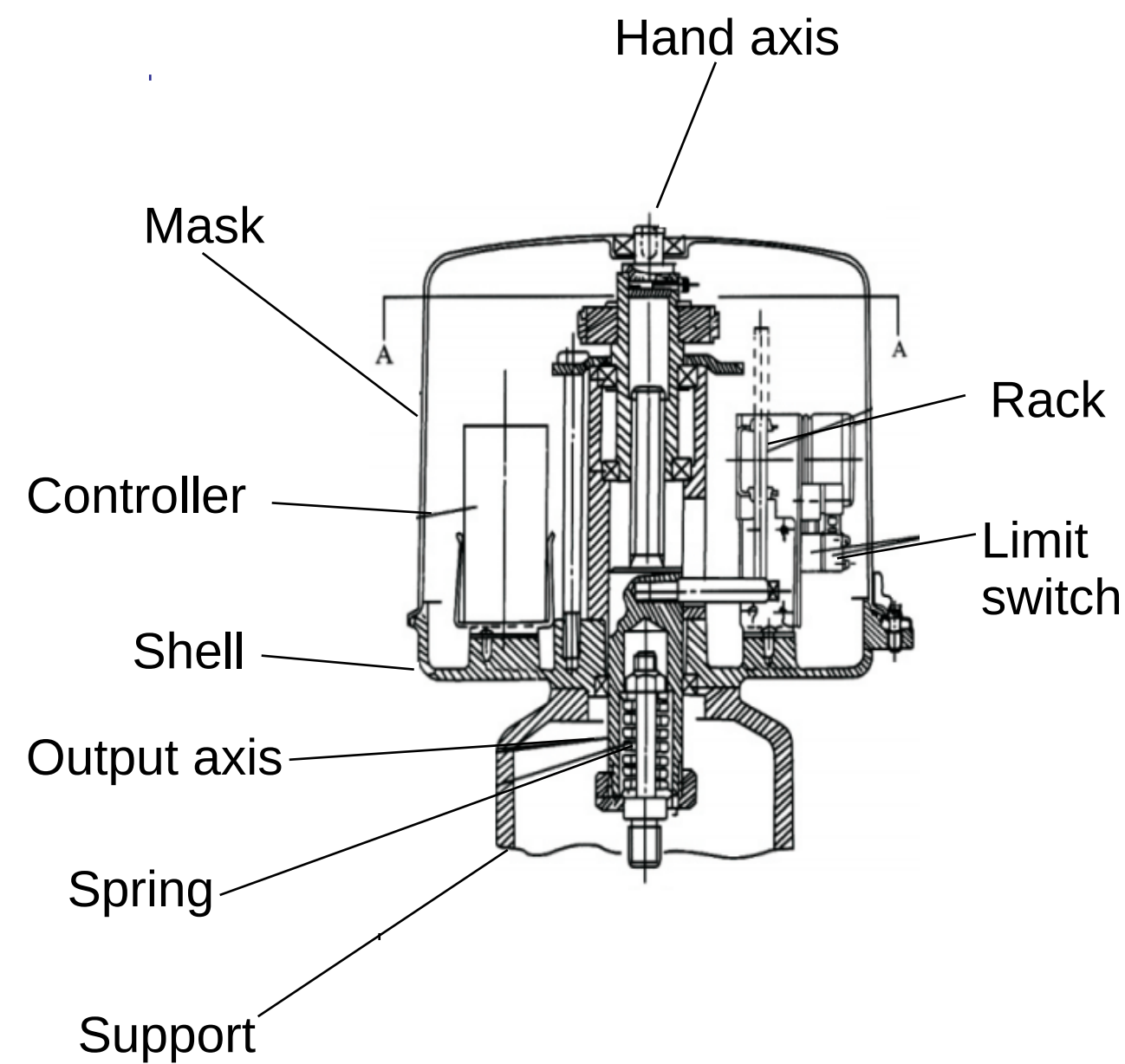
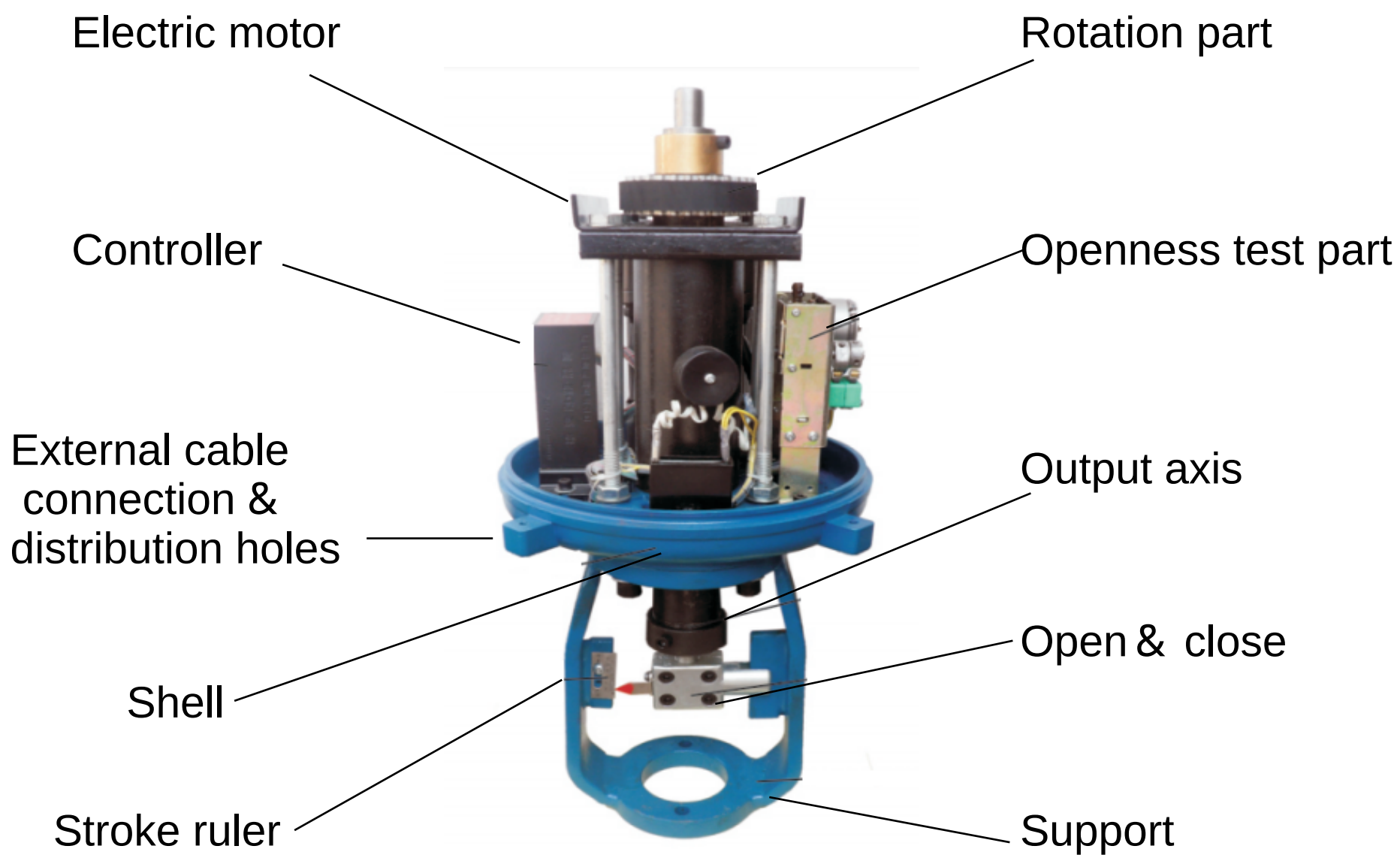
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Viola Miller



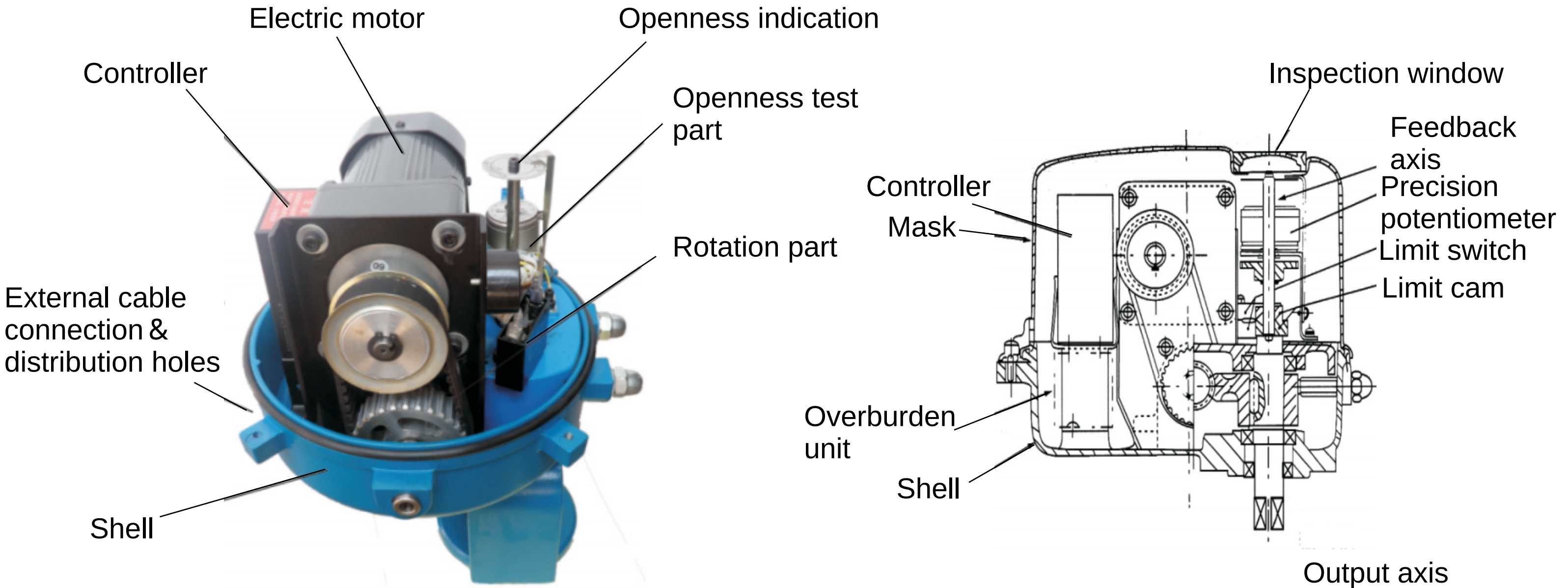
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Linear travel actuator



Angular travel electric actuator

Product Summary

1.381 and 341 Series Electrical Actuator Products

381L(R)SAs series linear(angular) travel electronic actuator is a new type of actuator that is powered by AC220V single-phase AC power (or other powers), receives the control signals (DC4-20mA or DC1-5V) from self-regulator and realizes pre-set right angle (angular displacement) motion functions. When it is used as actuation unit for control valves, the product possesses various motion conversion functions required for control valves and valve openness signal feedback and manual functions. It integrates mechanic and electrical components and features servo amplification, operation status indication and position self-locking functions etc. and characterized by advantages of high universality, stable and reliable performance, high control precision, quick response and convenient installation and maintenance etc. It is widely used in power generation, metallurgic, petrochemical, light industry and environment protection sections. The product protection grade is IP65.

341L(R)SAs series linear(angular)travel switch electric actuator is powered by AC220V single phase AC power. The control signal applies positive and negative switchover signals. The valve feedback is done by high-performance conductive electrical plastic electrical potentiometer . The actuator features simple cable connection, stable and reliable performance and convenient installation and maintenance etc. The product protection grade is IP65.

Product Summary

This series actuator has following characteristics :

- 1.1 The actuator is equipped with servo system (no additional servo amplifier is needed) and can operate with connection of DC4-20mA or (DC1-5V) signal and AC220V single phase power only. The wiring terminal is built in and the wiring pin is simple and convenient.
- 1.2 The controller, a key component of actuator, applies the most advanced mixed integrated circuit and is cast in resin sealing. It is in a box shape with small volume and high reliability.
- 1.3 The feedback of driving volume is detected by high-performance conductive electrical plastic potentiometer within a resolution of max. 0.4%.
- 1.4 It possesses self-diagnosis function. The indication lamp on the control will annunciate indication signal immediately when any failure occurs.
- 1.5 when interrupted signal can be set with status selection switch, the valve core is in full open, fully closed or self locking status.
- 1.6 Positive or negative actions can be set with status selection switch.
- 1.7 The input signal can be set as DC4-20mA or DC1-5V with status selection switch.
- 1.8 Operation zero point (start point) and stroke (terminal) can be adjusted simply and easily.
- 1.9 It can ensure valve core self-locking when electrical power is interrupted abruptly
- 1.10 Synchronized belt transmission is applied to effectively reduce noise.
- 1.11 The time-delay protection function can enable status self locking at nominal negative load, activate protection immediately, operate in reversed direction and cancel time delay protection when any failure occurs.

Product Summary

2. Main Technical Parameters

2.1 Electrical power: standard specifications:AC220V $\pm$ 10%, 50HZ (tailor-made type:24V, 110V,380V)

2.2 Electrical consumption power (at nominal negative load)

Specification type A actuator 50W

Specification type B actuator 150W

Specification type C actuator 220W

Specification type D actuator 300W

2.3 Input signal: DC4-20mA or DC1-5V(other signal such as 0-10mA etc. can be tailor made)

2.4 Output signal:DC4-20mA negative load resistance below 500 Ω (other signals such as 0-10mA etc. can be tailor made)

2.5 Control precision: basic error $< \pm 1\%$;regress difference $< 1\%$; dead zones1% (can be adjust o 0.4%)

2.6 Operation stroke adjustment range: zero point: $\pm 25\%$ stroke:20%~100%

2.7 External wiringInput and output signals are transmitted with shielded cables. No cable shall be used for both electrical power and signal transmission.

	Common type (S type) actuator
Electrical power cable	3 core S=1.5mm ²
Signal cable	4 core S=1.5mm ²
Cable connection inlet	2-PF (G1/2")

2.8 Ambient conditions

Ambient conditions	Common type (S type) actuator
Ambient temperature	Heater with no space-10°C~60°C
	Heater with space-35°C~60°C
Relative humidity	95% Below
Ambient gas	No corrosive gas
Mechanic vibration	1.5g Below

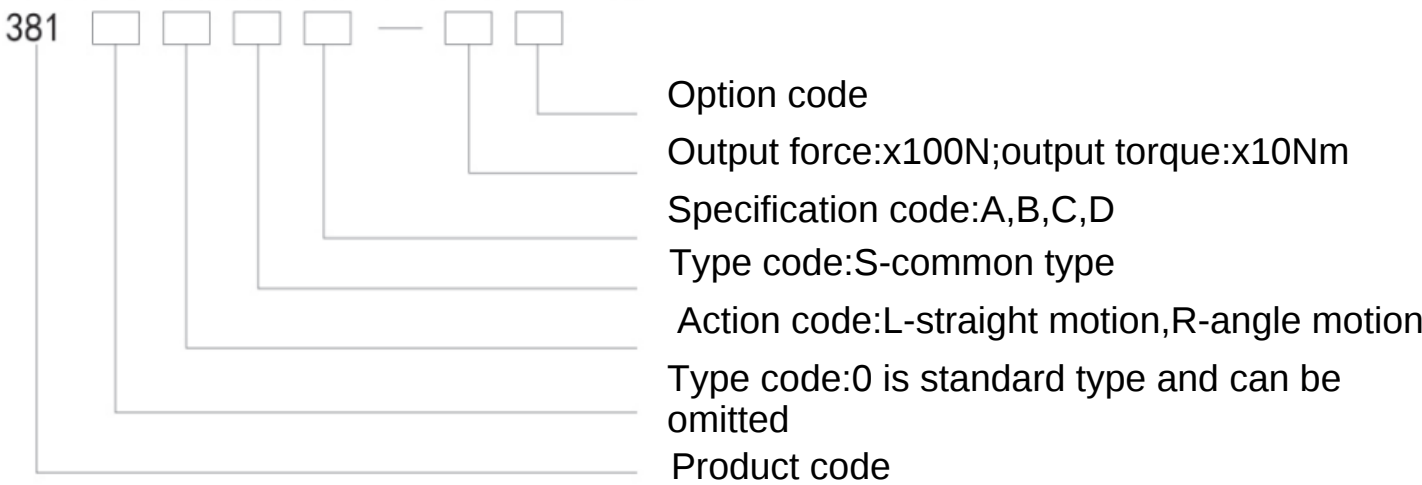
2.9 Protection grade: IP65

2.10 Overload protection: either actuator type A or B can be selected. Actuator type C is in standard specifications.

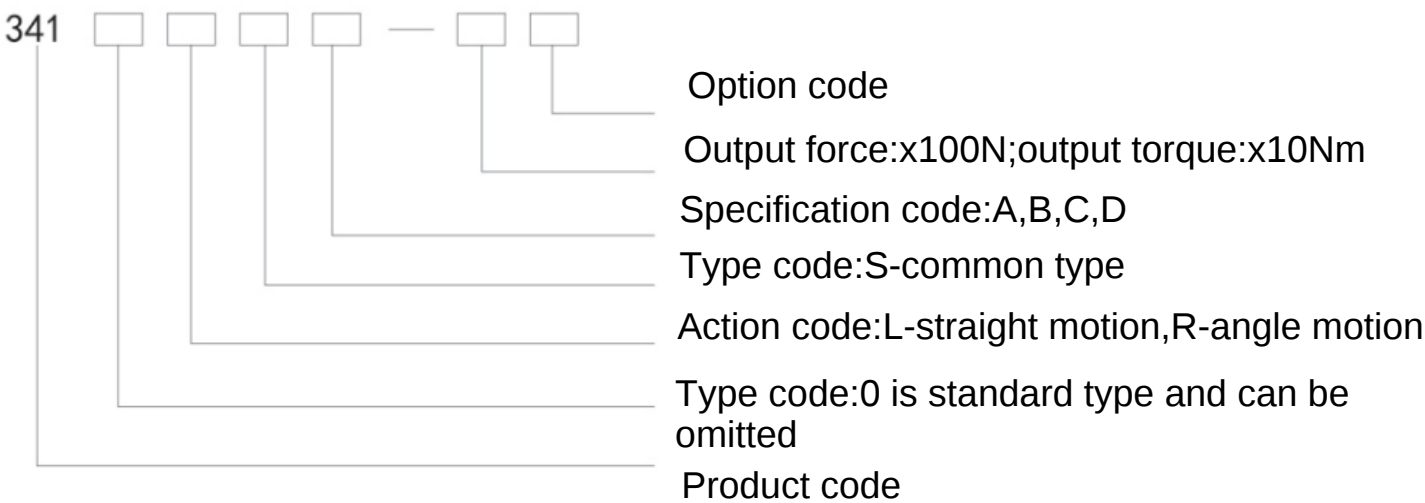
Product Summary

3.Product type and Specification

The type definition for electronic type electric actuator



The type definition for electronic type electric actuator



Products Introduced

381/341LXA/LSA Type linear travel electric actuator



381/341LXA-08/20
Flameproof enclosure
electric actuator

381/341LSA-08/20
Common type
electric actuator

381LSA- series linear travel electronic actuator is a new type of actuator that is powered by AC220V single-phase AC power, receives the control signal (DC4-20mA or DC1-5V) from sell-regulator and realizes pre-set linear motion functions. It possesses various motion conversion functions required for control valves and valve position openness signals. Flameproof enclosure is 381LXA- and product explosion-proof type is Exd IIBT4.

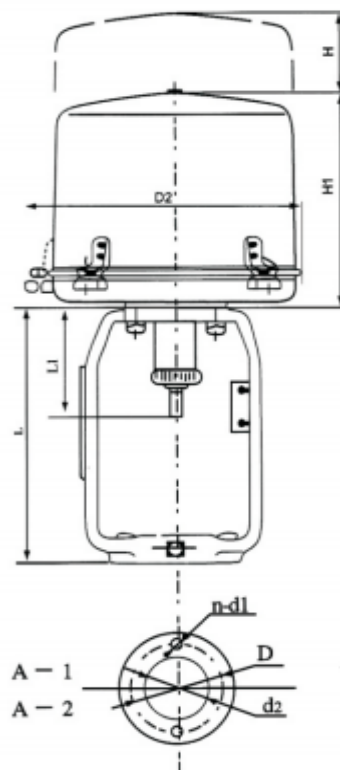
341 type is linear travel switch electric actuator that is powered by AC 220V single-phase AC power. The control signal applies positive and negative contact signals.

Table of type and specification

型号规格 Model and specification	381/341LSA-08 381/341LXA-08		381/341LSA-20 381/341LXA-20	
输出力 Output force	800N		2000N	
工作速度 Operation speed	4. 2mm/ s		2. 1mm/ s	
标准行程 Standard Trip	10mm		16mm	
配套阀通径 Supporting valve channel bore	DN3/4	DN20	DN20	DN50
配套支架代号 Accessory support code	A-1	A-2	A-2	

External shape installation parameter table

型 号 Model	外围D2 Exterior	高度H1 Height	顶部开盖预留空间H Preserved space for top cover	重量 Weight
381/341LSA	Φ260mm	200mm	≥170mm	13Kg
381/341LXA	Φ280mm	240mm	≥200mm	25Kg



Support connection size(mm)

支架代号 Support code	L	L1	D	n-d1	d2	阀杆长度 Valve rod length	阀杆螺纹 Valve rod screw thread
A-2	173	78	Φ80	2-Φ10	Φ60	95	M8

381/341LXB/LSB Type linear travel electric actuator



381/341LXB-30/50
Flameproof enclosure
electric actuator



381/341LSB-30/50
Common type
electric actuator

381LSB- series linear travel electronic actuator is a new type of actuator that is powered by AC220V single-phase AC power, receives the control signal (DC4-20mA or DC1-5V) from sell -regulator and realizes pre-set linear motion functions. It possesses various motion conversion functions required for control valves and valve position openness signals Flameproof enclosure is 381LXB- and product explosion -proof type is Exd II BT4.

341 type is linear travel switch electric actuator that is powered by AC 220V single-phase AC power. The control signal applies positive and negative contact signals.

Products Introduced

Table of type and specification

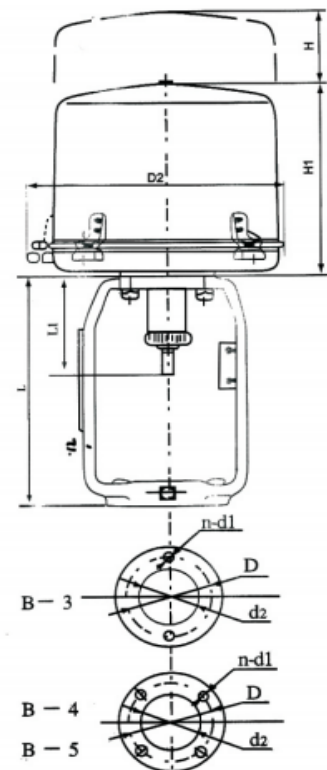
型号规格 Model and specification	381/341LSB-30 381/341LXB-30		381/341LSB-50 381/341LXB-50		
输出力 Output force	3000N		5000N		
工作速度 Operation speed	3.5mm/s		1.7mm/s		
标准行程 Standard Trip	25mm		40mm		
配套阀通径 Supporting valve channel bore	DN25~50	DN65~100	DN25~50	DN65~100	DN125~150
配套支架代号 Accessory support code	B-3	B-4	B-3	B-4	B-5

External shape installation parameter table

型 号 Model	外围D2 Exterior	高度H1 Height	顶部开盖预留空间H Preserved space for top cover	重量 Weight
381/341LSB	Φ290mm	283mm	≥250mm	23.5Kg
381/341LXB	Φ315mm	330mm	≥280mm	37Kg

Support connection size(mm)

支架代号 Support code	L	L1	D	n-d1	d2	阀杆长度 Valve rod length	阀杆螺纹 Valve rod screw thread
B-3	215	125	Φ80	2-Φ10	Φ60	90	M8
B-4	255	125	Φ105	4-Φ12	Φ80	130	M12X1.25
B-5	267	125	Φ118	4-Φ14	Φ95	142	M16X1.5



381/341LXC/LSC Type linear travel electric actuator



381/341LXC-65/99/160
Flameproof enclosure
electric actuator

381/341LSC-65/99/160
common type
electric actuator

381LSC- series linear travel electronic actuator is a new type of actuator that is powered by AC220V single-phase AC power, receives the control signal (DC4-20mA or DC1-5V) from self-regulator and realizes pre-set linear motion functions. It possesses various motion conversion functions required for control valves and valve position openness signals.

Flameproof enclosure is 381LXC- and product explosion-proof type is Exd IIBT4.

341 type is linear travel switch electric actuator that is powered by AC 220V single-phase AC power. The control signal applies positive and negative contact signals.

Table of type and specification

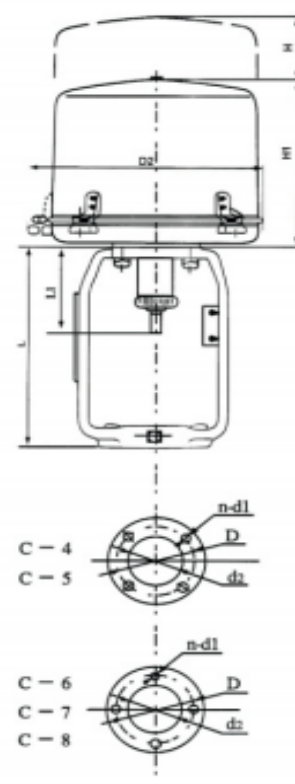
型号规格 Model and specification	381/341LSC-65 381/341LXC-65		381/341LSC-99 381/341LXC-99		381/341LSC-160 381/341LXC-160	
输出力 Output force	6500N		10000N		16000N	
工作速度 Operation speed	2.8mm/s		2.0mm/s		1.0mm/s	
标准行程 Standard Trip	60mm		100mm		100mm	
配套阀通径 Supporting valve channel bore	DN65~100	DN125~200	DN125~200	DN250~300	DN125~200	DN250~300
配套支架代号 Accessory support code	C-4	C-5	C-5	C-6	C-5	C-6

External shape installation parameter table

型 号 Model	外围D2 Exterior	高度H1 Height	顶部开盖预留空间H Preserved space for top cover	重量 Weight
381/341LSC	Φ370mm	420mm	≥370mm	55Kg
381/341LXC	Φ373mm	460mm	≥400mm	65Kg

Support connection size(mm)

支架代号 Support code	L	L1	D	n-d1	d2	阀杆长度 Valve rod length	阀杆螺纹 Valve rod screw thread
C-4	285	175	Φ105	4-Φ12	Φ80	110	M12×1.25
C-5	310	175	Φ118	4-Φ14	Φ95	135	M16×1.5
C-6	345	175	Φ130	4-Φ18	Φ100	170	M20×1.5
C-7	410	270	Φ118	4-Φ14	Φ95	140	M20×1.5
C-8	440	270	Φ130	4-Φ18	Φ100	170	M20×1.5



381/341RXB/RSB Type angular travel electric actuator



381/341RXB-10/20
Flameproof enclosure
electric actuator

381/341RSB-10/20
Common type
electric actuator

381RSB- series angular travel electronic actuator is a new type of actuator that is powered by AC220V single-phase AC power, receives the control signal (DC4-20mA or DC1-5V) from self-regulator and realizes pre-set angular motion functions. It possesses various motion conversion functions required for control valves and valve position openness signals.

Flameproof enclosure is 381RXB- and product explosion-proof type is Exd II BT4. 341 type is angular travel switch electric actuator that is powered by AC 220V single-phase AC power. The control signal applies positive and negative contact signals.

Table of type and specification

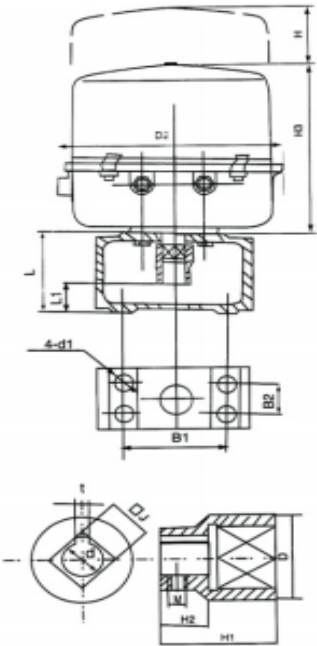
型号规格 Model and specification	381/341RSB-10 381/341RXB-10	381/341RSB-20 381/341RXB-20
输出力矩 Output torque	100Nm	200Nm
动作时间 Motion time	18s/90 ⁰	36s/90 ⁰
最大转角 Max. rotation angle	90 ⁰	90 ⁰
配蝶阀通径 Accessory butterfly valve diameter	125~200	250~350
配套支架代号 Accessory support code	RB2	RB3

External shape installation parameter table

型 号 Model	外围D2 Exterior	高度H3 Height	顶部开盖预留空间H Preserved space for top cover	重量 Weight
381/341RSB	Φ253mm	230mm	≥155mm	17Kg
381/341RXB	Φ315mm	285mm	≥175mm	30Kg

Support connection size(mm)

支架代号 Support code	L	L1	B1	B2	D	d1	d	H1	H2	t	□J
RB2	168	62	110	34	Φ41	Φ12	Φ18	60	35	6	21
RB3	174	70	130	40	Φ43	Φ14	Φ24	60	35	6	21



381/341RXC/RSC Type angular travel electric actuator



381/341RXC-30/50/60/80
Flameproof enclosure
electric actuator

381/341RSC-30/5060/80
Common type
electric actuator

381RSC- series angular travel electronic actuator is a new type of actuator that is powered by AC220V single-phase AC power, receives the control signal (DC4-20mA or DC1-5V) from sell-regulator and realizes pre-set angular motion functions. It possesses various motion conversion functions required for control valves and valve position openness signals. Flameproof enclosure is 381RXC- and product explosion-proof type is Exd II BT4. 341 type is angular travel switch electric actuator that is powered by AC 220V single-phase AC power. The control signal applies positive and negative contact signals.

Table of type and specification

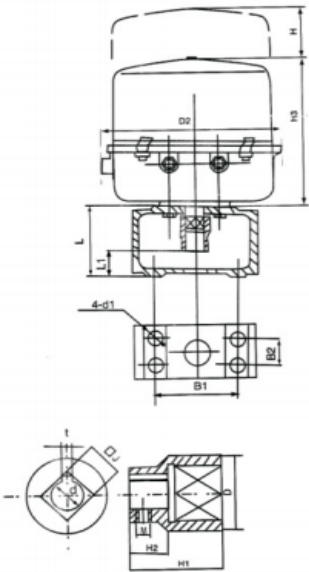
型号规格 Model and specification	381/341RSC-30 381/341RXC-30		381/341RSC-50 381/341RXC-50		381/341RSC-60 381/341RXC-60	381/341RSC-80 381/341RXC-80
输出力矩 Output torque	300Nm		500Nm		600Nm	800Nm
动作时间 Motion time	24s/90 ⁰		42s/90 ⁰		48s/90 ⁰	68s/90 ⁰
最大转角 Max. rotation angle	90 ⁰		90 ⁰		90 ⁰	90 ⁰
配蝶阀通径 Accessory butterfly valve diameter	DN250~300	DN400~500	DN250~300	DN400~500	DN400~500	DN600~1000
配套支架代号 Accessory support code	RC3	RC4	RC4	RC4	RC4	RC4

External shape installation parameter table

型 号 Model	外围D2 Exterior	高度H3 Height	顶部开盖预留空间H Preserved space for top cover	重量 Weight
381/341RSC	Φ370mm	285mm	≥165mm	45Kg
381/341RXC	Φ373mm	330mm	≥215mm	55Kg

Support connection size(mm)

支架代号 Support code	L	L1	B1	B2	D	d1	d	H1	H2	t	□J
RC3	190	70	130	40	Φ63	Φ14	Φ24	78	35	6	32
RC4	203	78	150	60	Φ63	Φ18	Φ30	78	35	8	32



381/341RSD Type angular travel electric actuator



381/341RSD-100/150/200/250/400
common type electric actuator

381RSD- series angular travel electric actuator is a new type of actuator that is powered by AC220V single-phase AC power, receives the control signal (DC4-20mA or DC1-5V) from sell-regulator and realizes pre-set angular motion functions. It possesses various motion conversion functions required for control valves and valve position openness signals. 341 type is angular travel switch electric actuator that is powered by AC 220V single-phase AC power. The control signal applies positive and negative contact signals.

Table of type and specification

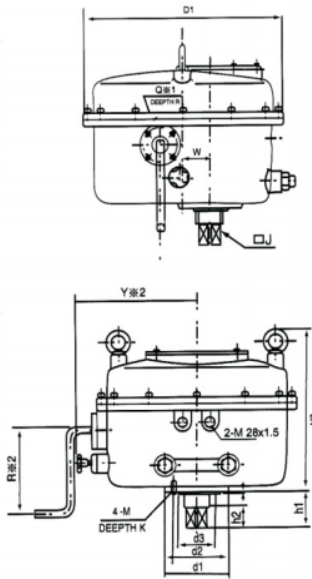
型号规格 Model and specification	381/341 RSD-100	381/341 RSD-150	381/341 RSD-200	381/341 RSD-250	381/341 RSD-400	381/341 RSD-600
输出力矩 Output torque	1000Nm	1500Nm	2000Nm	2500Nm	4000Nm	6000Nm
动作时间 Motion time	30s/90°	38s/90°	46s/90°	60s/90°	82s/90°	100s/90°
最大转角 Max. rotation angle	90°	90°	90°	90°	90°	90°
配蝶阀通径 Accessory butterfly valve diameter	DN500~1400	DN500~1400	DN500~1400	DN1400~1600	DN1600~1800	DN1800~2000
配套支架代号 Accessory support code	RD5	RD5	RD5	RD5	RD5	RD5

External shape installation parameter table

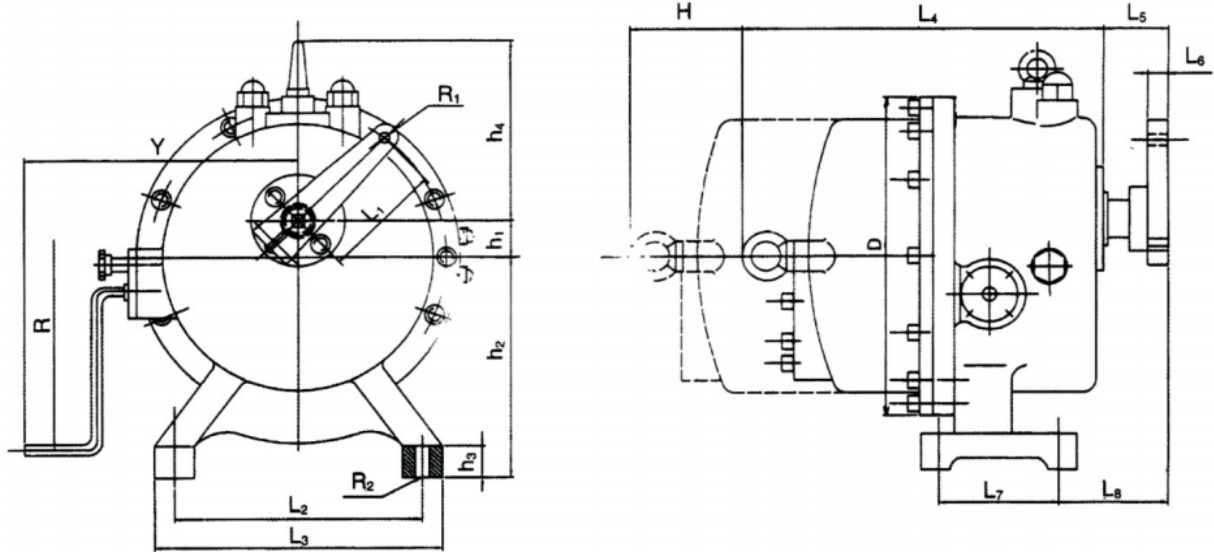
型 号 Model	外围D2 Exterior	高度H1 Height	顶部开盖预留空间H Preserved space for top cover	重量 Weight
381/341RSD	Φ 470mm	390mm	≥120mm	195Kg

Support connection size(mm)

支架代号 Support code	L	L1	连接法兰 内径	连接法兰 内径	D	d1	d	H1	H2	t	□J
RD5	170	25	Φ 100	Φ 215	Φ 82	Φ 20	Φ 38	100	45	10	41

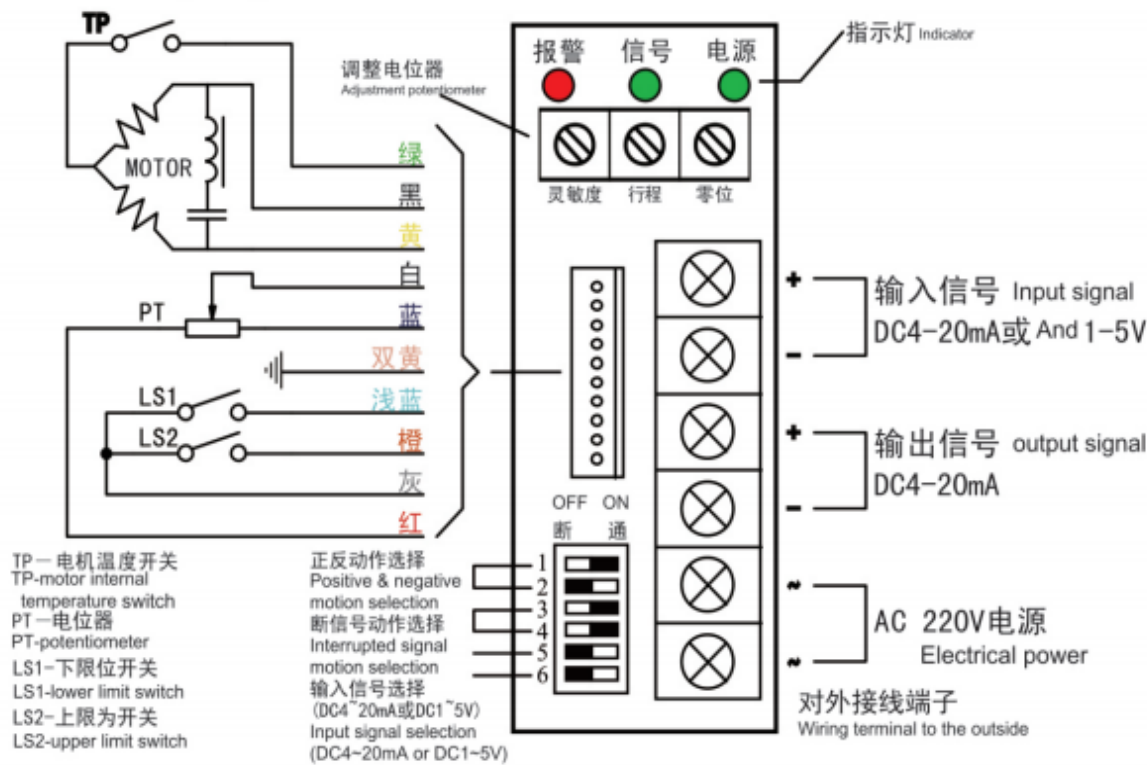


型 号 Model	h1	h2	h3	h4	Y	L1	L2	L3	L4	L5	L6	L7	L8	R	R1	R2	H	D	重 量 Weight
381RSD	65	305	45	230	415	170	390	450	390	85	25	180	121	Φ400	Φ20	4-Φ18	120	470	195Kg

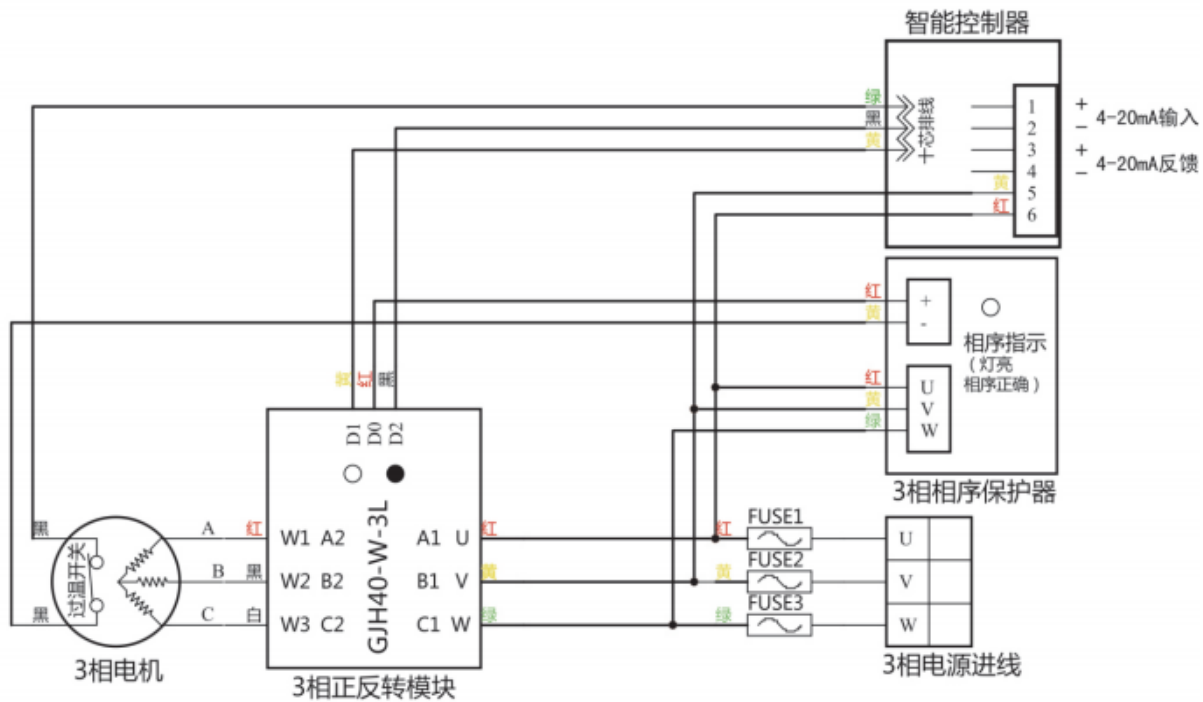


Installation dimension for 381RSD type actuator

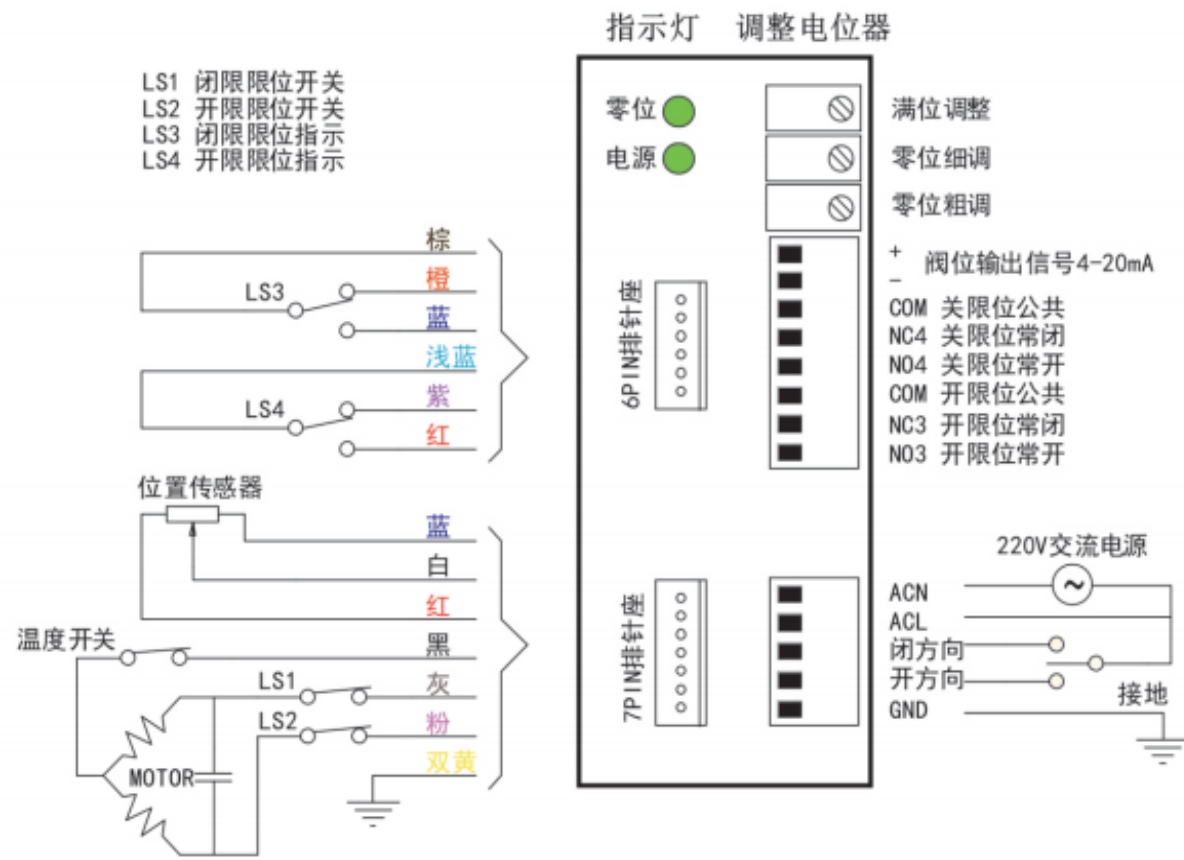
4.Internal Wiring Diagram of Actuator



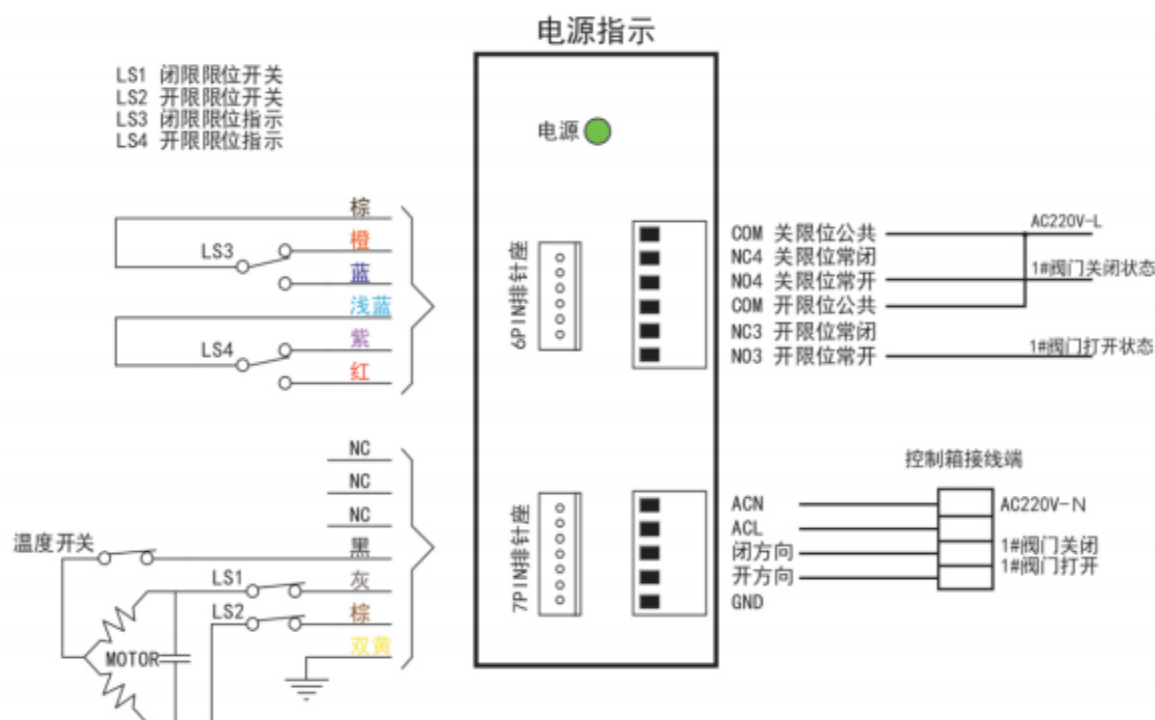
380V electronic wiring diagram type A (common negative)



341 Switched wiring schematic(4-20mA feedback).



341 Switch wiring schematic(contact feedback)



5.Installation of Linear travel Actuator

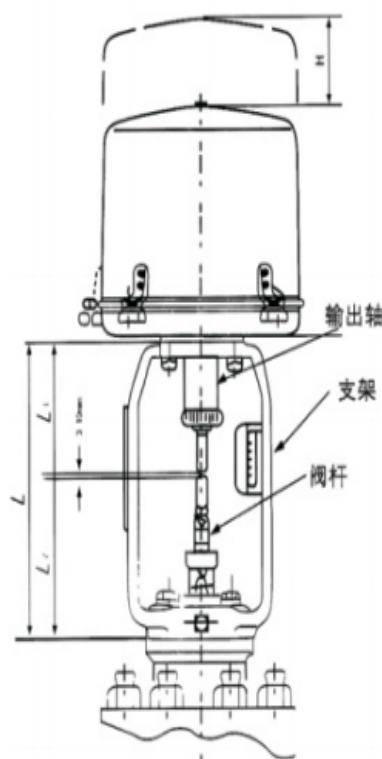


Diagram6.

5.1 The protection hood has to be removed for actuator wire distribution, adjustment, inspection and maintenance etc, so there must be some gap .reserved on top of actuator (see Diagram 6).

5.2 The actuator shall be positioned upright as much as possible for installation and reversed installation downward shall be prevented to avoid any difficulty to inspection and maintenance.

5.3 After the actuator is connected to the contro valve through the support frame and when the output axis is connected to the valve rod with on/ off nut, there must be a gap of 3-10 mm between the lower end of output axis and upper end of valve rod.2t03 support frames can be provided for actuator of each specification to connect the actuator with national standard control valve. However, the output force of actuator shall be verified to see if it reaches the max. force to open or close the valve.

6.Installation of Angular travel Actuator

6.1 The protection hood has to be removed for actuator wire distribution, adjustment, inspection and maintenance etc., so there must be some gap reserved on top of actuator(see Diagram 7).

6.2 See Diagram 15,16 and following table for the connection and dimension of crank installation on the base.

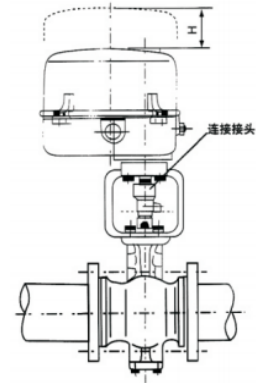


Diagram 7

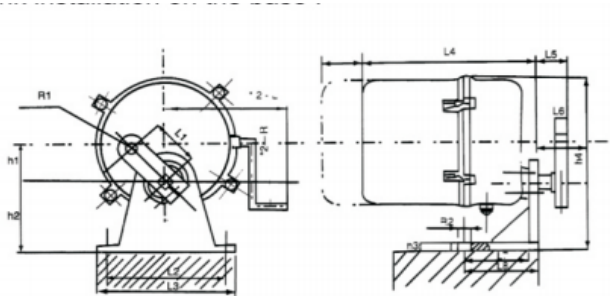


Diagram 15
Installation dimension of 381RSA
and 381RSB actuator

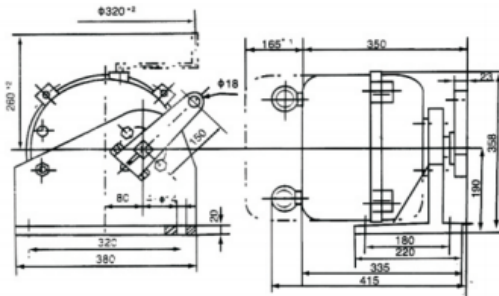


Diagram16
Installation dimension of
381RSC actuator

Note:1.is the dimension required for protection hood removal.
2.is the dimension required for manual operation.

规格 Specification	h1	h2	h3	h4	L1	L2	L3	L4	L5	L6	L7	L8	R1	R2	★1	★2-L	★2-R
A	56	120	15	289	100	220	250	200	50	21	100	130	Φ16	4-Φ13	135	200	Φ160
B	68	140	15	316	120	220	250	240	50	21	100	130	Φ16	4-Φ13	155	225	Φ320

7.DFQA-6000 Series Intelligent Standby Operation Unit

- Double-screen (double light beam) display
- Fully computerized digital automatic adjustment and calibration
- Fully open internal parameter setting
- Multi-signal input selection
- Auto/manual interference free switchover
- Multi-control and output mode selection
- Valve position ratio or upper/lower limit and alarm



7.1.Function Characteristics

- Standby operation unit for DCS and single-loop adjuster, which receives specified valve position input signal from DCS or adjuster and outputs specific analog valve position output signal. Then, servo-amplifier drives the actuation mechanism.
- Automatically trace input value and control output (analog amount). When the instrument is in automatic operation mode, the specified valve position input and output are linked straight forward to realize the automatic control by DCS or adjuster on valve.
- When the instrument is in manual operation status, its function equals to an operation unit. The valve position can be controlled directly with the pushbuttons on the instrument panel to realize manual/auto interference free switchover. The switchover between auto/manual mode of the instrument is bidirectional and interference free.
- Valve ratio or upper/lower limit function and valve position alarm can be set.
- Failure self-diagnosis function is available.

7.2. Technical Parameters

- Power: 220VAC or 24VDC
- Specified valve position input and output: 0-10mA or 4-20mA or 0-5V or 1-5V common
- Valve position feedback input and output: 0-10mA or 4-20mA or 0-5V or 1-5V common
- Manual/auto status output: relay contact 220VAC/3A or 24VDC/3A
- Alarm status output: relay contact 220VAC/3A or 24VDC/3A



Electric control valve



Electric control valve



Electric control valve



Electric control valve



Electric control valve



Electric control
valve

9.Supporting Application of Common Series Control Valve

Type description	Characteristics	Supporting actuator
ZDLJM、ZDLJP compact electric control valve	Features of small volume, light weight, big flow and high adjustment precision etc.	381 / 341 Linear travel
ZDLJP and ZDLN electronic electric single/double seat control valve	The valve core of adjustment mechanism is guided on top. The single-seat type is suitable for the applications with strict leakage control, low pressure difference across the valve, certain viscosity and fiber medium. The double-seat adjustment mechanism features small unbalanced force, big pressure allowance and big throughput and is suitable for the applications with less strict leakage requirement.	381 / 341 Linear travel
ZDLM Electronic Electric sleeve Control Valve	The adjustment mechanism applies balanced valve plug structure and features good plug stability, no vibration, low noise, low sensitivity to temperature and big allowance for pressure difference. It is suitable for the applications with big flow and less strict leakage requirement.	381 / 341 Linear travel
ZDLQ/X Electronic Electric Three-Way Control Valve	It operates in two modes, i.e., combined flow and split flow and is widely used in some applications since it can substitute two two-way valves and one three-exchangers and simple recipe formulation.	381 / 341 Linear travel
ZDR/LW-6B/K Electronic Electric Butterfly Control Valve	The adjustment mechanism features high precision, high speed, soft sealed structure and firm tightness. The valve is in simple structure and can be easily manufactured with big bore size, low resistance coefficient and big throughput. It is especially suitable for the applications requiring big bore size and big flow.	381 / 341 Angular travel
ZDRWXF4-1 0BK	It consists of teflon liner or rubber liner butterfly valve and electronic electric actuation mechanism. It is a highly corrosive resistant, highly sealed high performance butterfly valve, featuring simple structure, compactness, self-cleaning and big throughput etc. The product is suitable for the applications with big flow, low pressure difference, strongly corrosive medium and strict sealing requirement.	381 / 341 Angular travel
ZDRV Electronic Electric V Shape Ball Valve	A V shape notch is made on the valve core that rotates against the valve base creating a shearing force to cut fiber material and prevent clogging. The valve features big flow, high adjustment precision and good sealing etc. and is specially suitable for the adjustment of sludge, fibrous medium and suspension medium containing fine particles.	381 / 341 Angular travel
ZDRO Electronic Electric O-Shape Ball Valve	It is a special kind of 90-degree rotation cut-off control valve and features firm tightness, big throughput, compact structure, light weight and convenient maintenance etc. The product is specially suitable for fibrous and particle containing medium and widely used in the automatic control for gas, liquid and steam pipelines.	381 / 341 Angular travel
ZDRF Electronic Electric Eccentric Rotation Control Valve	The valve features compact structure, convenient operation, high adjustment precision, big flow and high tightness etc. and is widely used in the automatic adjustment and remote control on the production processes of chemical, petroleum, metallurgic and power generation industries etc.	381 / 341 Angular travel



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