

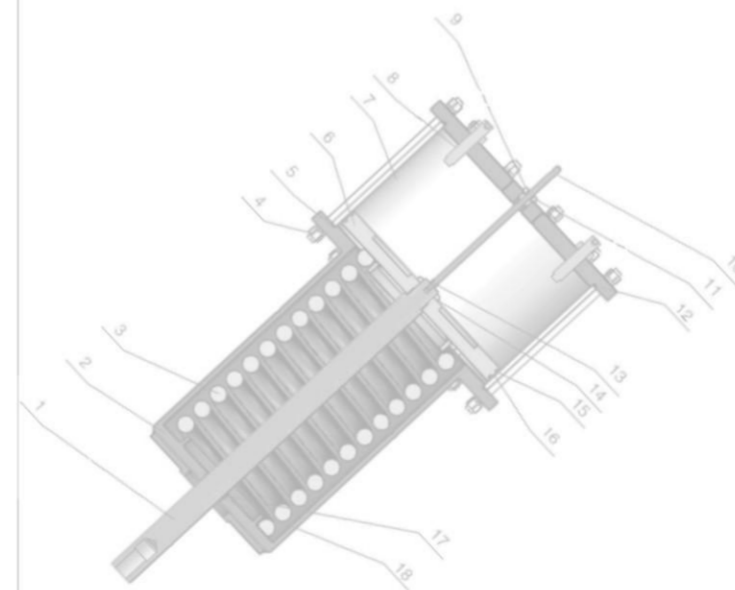
浙江中德自控科技股份有限公司

Zhejiang Zhongde Automatic Control Science And Technology Joint Stock Co., Ltd.

ZSZ气动直行程执行器

ZSZ Linear Pneumatic Actuator

通过了ISO9001质量体系认证
通过API6D/609产品认证
通过API6FA/607防火认证
通过国家特种设备制造许可“压力管道元件”TS认证
通过CE安全认证
通过HSE认证
通过SIL 产品功能安全认证
通过ISO 15846逸散性认证
中国著名品牌



浙江中德自控科技股份有限公司

Zhejiang Zhongde Automatic Control Science And Technology Joint Stock Co., Ltd.

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企业概述

浙江中德自控科技股份有限公司(原中德机械集团有限公司)是集研发、生产、销售、服务于一体的专业控制阀制造商。自1992年创立以来,中德致力于发展切断阀专业领域技术,使我们始终处在国内切断阀领域的技术领先地位。在我们二十多年的发展历程中,中德人专业、聚焦、坚持不懈来打造切断阀品牌,其中气/电/液/动高性能蝶阀、高性能球阀、高温耐磨球阀、高温蝶阀、快速切断闸阀等产品广泛应用于石油、化工、天然气、煤化工等高端领域,并获得了众多用户朋友的高度信任。

中德集团现已拥有专业阀门研究中心和一流的生产平台,并通过了ISO9001:质量体系认证,美国石油学会API6D/609产品认证、API6FA/607防火认证,特种设备压力管道制造许可“TS认证”。是中国石化、中石油、中海油、中化、神华、煤化工等领域的一级供应商。先后被评为“中国著名品牌”,“省级星火示范企业”,“国家高新技术企业”,“省明星企业”,连续五年被工行评为“AAA信用企业”。

“客户的满意我们视之为生命”为此中德在国内建立了十二个直销和服务网络,在服务市场的广度和深度上都具有独创性。我们能满足您的需求,我们给您提供“安全、可靠、省心”产品的同时,我们的产品价值永远大于产品价格。无论您在那里,我们具有丰富经验和专业知识的团队都能给您提供“认真、负责、快速”的优质服务。我们坚守“一个电话,一天内到达,一次性成功”的服务承诺。

“以人为本,以德兴业”是中德企业文化的核心,是中德人做人做事的标准,中德人将以“以诚会友,以德待友”来衬托我们过硬的产品质量和一流的服务。中德人厚积薄发,再立潮头,全力打造国家高端切断阀先进制造企业,致力于加快我国切断阀的国产化应用进程,以更好地实现顾客满意度的最大化,中德愿与您精诚合作,共创美好的明天!



BRIEF INTRODUCTION

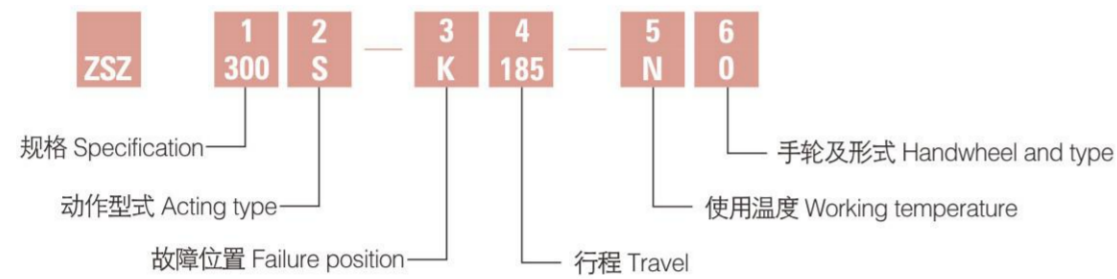
Zhejiang Zhongde Automatic Control Technology Co., Ltd. (formerly known as Zhongde Machinery Group Co., Ltd.) is a professional control valve manufacturer integrating research, development, production, sale and service. Since its establishment in 1992, Zhongde has been devoted to developing specialized technologies of shut-off valves, keeping us always at the leading position in Chinese shut-off valve industry. During more than twenty years of development, Zhongde personnel are building the brand of shut-off valves with specialization, concentration and perseverance. The products such as high performance butterfly valves, high performance ball valves, high temperature anti-wear ball valves, high temperature butterfly valves and quick shut-off gate valves with pneumatic, electric and electro-hydraulic driving are widely applied in petroleum, chemical industry, natural gas, coal chemical industry and other high-end fields, receiving deep trust from users.

Now Zhongde Group has set up the professional valve research and development center and first-class production platforms. It has successively obtained the ISO9001: quality system certification, API6D/609 product certification, API6FA/607 fire safety certification and special equipment (pressure pipes) manufacturing license TS certification. It is a first-tier supplier of SINOPEC, CNPC, CNOOC, CHEMCHINA, Shenhua Group, coal chemical industry and other fields. It has been successively awarded such honors as "China Famous Brand", "Spark Model Enterprise in Zhejiang Province", "National High-tech Enterprise", "Star Enterprise in Zhejiang Province", and has been approved as a "Class AAA Creditable Enterprise" by the Industrial and Commercial Bank of China for five years in succession.

"Customer satisfaction is regarded as our life". For this, Zhongde has established 12 sales and service networks, which are creative both in breadth and depth of serving the markets. We can meet your demands. We will provide you with safe, reliable and trustworthy products and the value of our products is much higher than their price. Wherever you are, our team will offer serious, responsible, fast and high quality services to you with their rich experience and professional knowledge. We always keep our service promise of "one telephone, arrival within one day and success in one step".

"Human oriented, booming business by morals" is the core idea of Zhongde Enterprise, and the standard followed by Zhongde personnel in conducting themselves and handling affairs. Zhongde personnel will offer high product quality and top-ranking services with the attitude of "meeting friends with sincerity, treating friends with morals". Accumulating profoundly and working ceaselessly and unremittingly, Zhongde personnel are making all efforts to create an advanced manufacturing enterprise of high-end shut-off valves in China, accelerate the process of localization of shut-off valves and realize maximized customer satisfaction. Zhongde hopes to cooperate with you faithfully and create a brilliant future together!

产品规格型号说明 Product Specification And Model Description



1. 规格 ② Specification

代号(单缸) Code (single cylinder)	尺寸 Size	代号(双缸) Code (double cylinder)	尺寸 Size
160	160 mm	162	160 mm × 2
200	200 mm	202	200 mm × 2
250	250 mm	252	250 mm × 2
300	300 mm	302	300 mm × 2
350	350 mm	352	350 mm × 2
400	400 mm	402	400 mm × 2
450	450 mm	452	450 mm × 2
500	500 mm	502	500 mm × 2
550	550 mm	552	550 mm × 2
600	600 mm	602	600 mm × 2
700	700 mm	702	700 mm × 2
800	800 mm	802	800 mm × 2
900	900 mm	902	900 mm × 2
.....

2. 动作型式 Acting type

代号 Code	说明 Description
S	单作用 Single acting
D	双作用 Double acting

3. 故障位置 ① Failure position

代号 Code	说明 Description
K	故障关位FC(弹簧关) Fail to close FC (spring off)
B	故障开位FO(弹簧开) Fail to open FO (spring on)

注: ①— 双作用无此代号。
②— 规格和行程可根据用户要求定制。
Note: ①— No code for double acting.
②— Specifications and itinerary can be customized according to customer requirements.

4. 行程 ② Travel

代号 Code	说明 Description
70	70 mm
110	110 mm
130	130 mm
155	155 mm
185	185 mm
235	235 mm
290	290 mm
340	340 mm
400	400 mm
450	450mm
500	500mm
550	550mm
650	650mm
.....

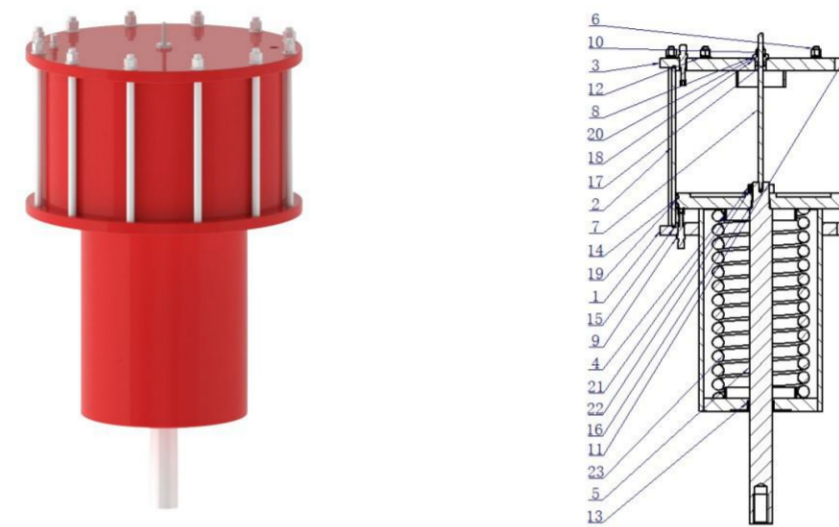
5. 使用温度 Working temperature

代号 Code	说明 Description
N	标准型 Standard type: -20~+80°C
L	低温型 Low temperature type: -40~+80°C
H	高温型 High temperature type: -20~+150°C

6. 手轮及形式 Handwheel type

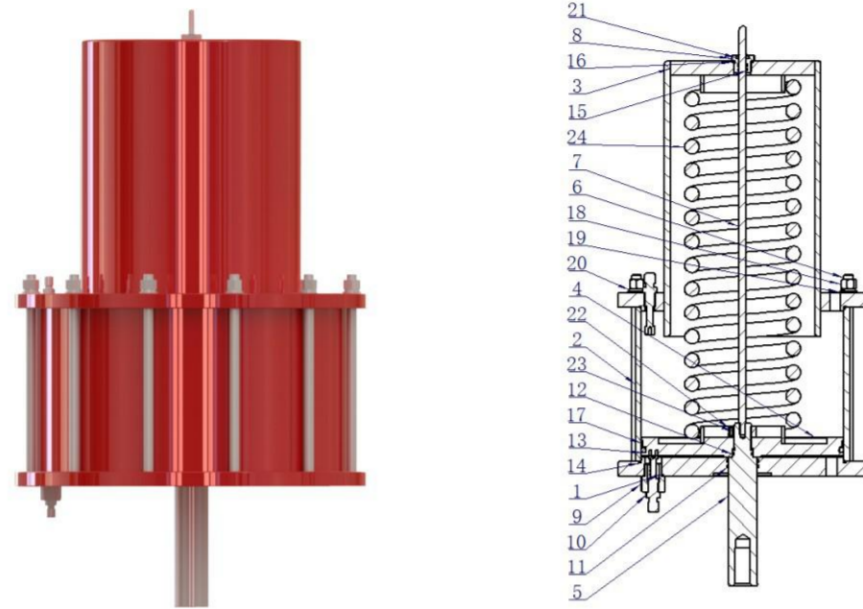
代号 Code	说明 Description
0	无手轮 Without the handwheel
1	顶置插销手轮 Overhead bolt handwheel
2	中置侧装手轮 Middle side mounted handwheel
3	顶置伞齿轮式手轮 Overhead bevel gear handwheel
4	液压手操 Hydraulic manual-operated
5	顶置丝杆手轮 Overhead screw handwheel

零部件及材料 Parts and materials



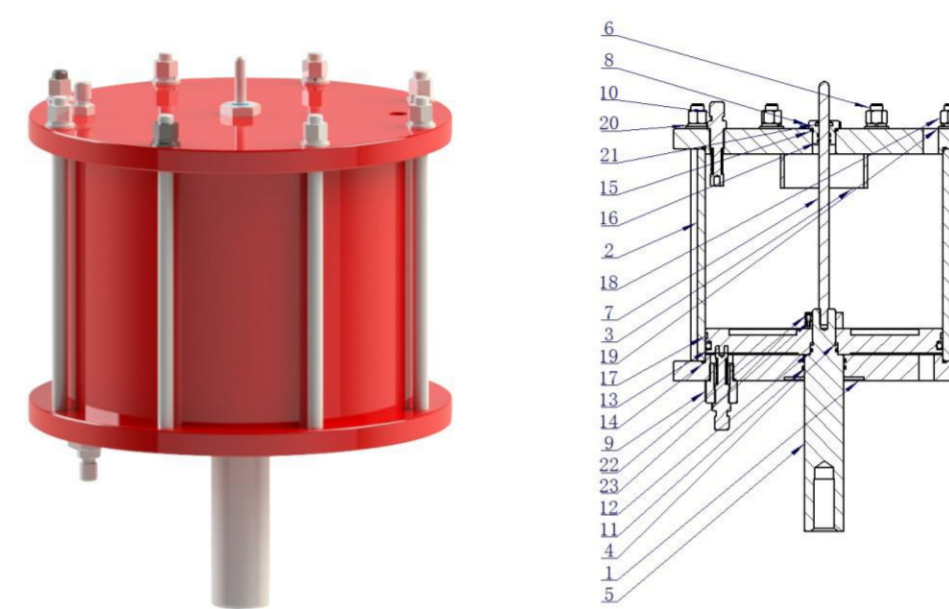
单作用常开 Single acting normally on

序号 No.	零件名称 Part name	材料 Material
1	下盖 Under the cover	A3
2	气缸 Cylinder	20
3	上盖 On the cover	A3
4	活塞 Piston	A3
5	活塞杆 Piston rod	合金钢 Alloy steel
6	拉杆 Rod	304
7	指示杆 Indication rod	304
8	指示杆盖 Indication rod cover	7050-T7651
9	限位顶杆 Limit plunger	碳钢 Carbon steel
10	六角螺母 Hexagonal nut	304
11	弹性垫圈 Elastic washer	304
12	平垫圈 Flat washer	304
13	O型圈 O-rings	丁腈橡胶 Nitrile rubber
14	O型圈 O-rings	丁腈橡胶 Nitrile rubber
15	O型圈 O-rings	丁腈橡胶 Nitrile rubber
16	O型圈 O-rings	丁腈橡胶 Nitrile rubber
17	O型圈 O-rings	丁腈橡胶 Nitrile rubber
18	O型圈 O-rings	丁腈橡胶 Nitrile rubber
19	支撑环 Support ring	四氟+铜粉 Tetrafluoro + copper powder
20	防尘圈 Shield	进口 Import TPU
21	六角圆柱头螺栓 Hexagon cylindrical head bolts	304
22	K型锁紧螺母 K type lock nut	42CrMo
23	弹簧 Spring	60Si2MnA



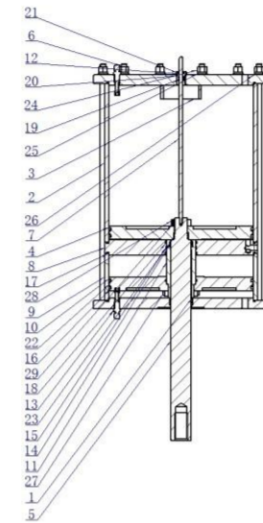
单作用常闭 Single acting normally closed

序号No.	零件名称 Part name	材料 Material
1	下盖 Under the cover	A3
2	气缸 Cylinder	20
3	上盖 On the cover	A3
4	活塞 Piston	A3
5	活塞杆 Piston rod	合金钢 Alloy steel
6	拉杆 Rod	304
7	指示杆 Indication rod	304
8	指示杆盖 Indication rod cover	7050-T7651
9	限位顶杆转接套 Limit jacking rod adapter sleeve	7050-T7651
10	限位顶杆 Limit plunger	碳钢 Carbon steel
11	O型圈 O-rings	丁腈橡胶 Nitrile rubber
12	O型圈 O-rings	丁腈橡胶 Nitrile rubber
13	O型圈 O-rings	丁腈橡胶 Nitrile rubber
14	O型圈 O-rings	丁腈橡胶 Nitrile rubber
15	O型圈 O-rings	丁腈橡胶 Nitrile rubber
16	O型圈 O-rings	丁腈橡胶 Nitrile rubber
17	支撑环 Support ring	四氟+铜粉 Tetrafluoro + copper powder
18	六角螺母 Hexagonal nut	304
19	平垫圈 Flat washer	304
20	弹性垫圈 Elastic washer	304
21	防尘圈 Shield	进口 Import TPU
22	六角圆柱头螺栓 Hexagon cylindrical head bolts	304
23	K型锁紧螺母 K type lock nut	42CrMo
24	弹簧 Spring	60Si2MnA



单缸双作用 Single cylinder double action

序号No.	零件名称 Part name	材料 Material
1	下盖 Under the cover	A3
2	气缸 Cylinder	20
3	上盖 On the cover	A3
4	活塞 Piston	A3
5	活塞杆 Piston rod	合金钢 Alloy steel
6	拉杆 Rod	304
7	指示杆 Indication rod	304
8	指示杆盖 Indication rod cover	7050-T7651
9	限位顶杆转接套 Limit jacking rod adapter sleeve	7050-T7651
10	限位顶杆 Limit plunger	碳钢 Carbon steel
11	O型圈 O-rings	丁腈橡胶 Nitrile rubber
12	O型圈 O-rings	丁腈橡胶 Nitrile rubber
13	O型圈 O-rings	丁腈橡胶 Nitrile rubber
14	O型圈 O-rings	丁腈橡胶 Nitrile rubber
15	O型圈 O-rings	丁腈橡胶 Nitrile rubber
16	O型圈 O-rings	丁腈橡胶 Nitrile rubber
17	支撑环 Support ring	四氟+铜粉 Tetrafluoro + copper powder
18	六角螺母 Hexagonal nut	304
19	平垫圈 Flat washer	304
20	弹性垫圈 Elastic washer	304
21	防尘圈 Shield	进口 Import TPU
22	六角圆柱头螺栓 Hexagon cylindrical head bolts	304
23	K型锁紧螺母 K type lock nut	42CrMo



双缸双作用 Double cylinder double action

序号 No.	零件名称 Part name	材料 Material
1	下盖 Under the cover	A3
2	气缸 Cylinder	20
3	上盖 On the cover	A3
4	活塞 Piston	A3
5	活塞杆 Piston rod	合金钢 Alloy steel
6	拉杆 Rod	304
7	指示杆 Indication rod	304
8	中隔板 Partition	A3
9	下气缸 Cylinder	20
10	下活塞 Piston	A3
11	下活塞杆 Piston rod	合金钢 Alloy steel
12	指示杆盖 Indication rod cover	7050-T7651
13	限位顶杆 Limit plunger	碳钢 Carbon steel
14	O型圈 O-rings	丁腈橡胶 Nitrile rubber
15	O型圈 O-rings	丁腈橡胶 Nitrile rubber
16	O型圈 O-rings	丁腈橡胶 Nitrile rubber
17	O型圈 O-rings	丁腈橡胶 Nitrile rubber
18	O型圈 O-rings	丁腈橡胶 Nitrile rubber
19	O型圈 O-rings	丁腈橡胶 Nitrile rubber
20	O型圈 O-rings	丁腈橡胶 Nitrile rubber
21	防尘圈 Shield	进口 Import TPU
22	支撑环 Support ring	四氟+铜粉 Tetrafluoro + copper powder
23	支撑环 Support ring	四氟+铜粉 Tetrafluoro + copper powder
24	六角螺母 Hexagonal nut	304
25	弹性垫圈 Elastic washer	304
26	平垫圈 Flat washer	304
27	圆螺母 Round nut	45
28	六角圆柱头螺栓 Hexagon cylindrical head bolts	304
29	K型锁紧螺母 K type lock nut	42CrMo

选型及数据 Type Selection And Data

单作用&单气缸执行器弹簧输出力 Single acting & single cylinder actuator spring output force

单位: N

缸径型号 Bore model	行程 Trip	弹簧复位输出力 Spring returns the output force		0.4MPa(G)		0.5MPa(G)		0.6MPa(G)	
		终点力 End	起始力 Start	终点力 End	起始力 Start	终点力 End	起始力 Start		
ZSZ160S	60	3768	5900	1580	3242	3450	7190	5320	6752
ZSZ200S	70	5966	8692	2998	4994	5918	7734	7066	10464
ZSZ250S	70	9322	13738	4522	8208	9092	12588	13652	16978
	110								
ZSZ300S	130	13424	20489	5811	11816	12381	18126	18951	24436
	155								
ZSZ350S	185	19233	27887	7903	15507	16853	24187	25803	32877
	235								
ZSZ400S	185	23864	36424	10326	21836	22006	33256	33696	44676
	235								
ZSZ450S	235	30203	46099	13061	27527	27861	41967	42651	56397
	290								
ZSZ500S	340	33363	54950	18090	38247	36350	56147	54610	74057
	290								
ZSZ550S	450	42743	66490	21890	43267	43990	64777	66080	86277
	500								
	550								
ZSZ600S	650	50868	79128	26052	51942	52352	77652	78642	103352
	500								
	550								
ZSZ700S	750	69237	107702	35458	71563	71248	106753	107038	141953
	850								
	750								
ZSZ800S	850	90432	140672	46318	94188	93058	140348	139808	186498
	950								
ZSZ900S	850	114453	178038	58622	119277	117782	177717	176942	236147
	1050								

注: 气缸直径、行程及所需推力可以根据客户需求订制。
Note: cylinder diameter, stroke and required thrust can be customized according to customer requirements.



双作用&单气缸执行器输出力 Double acting & single cylinder actuator output force

单位: N

双作用-单缸 Double acting - single cylinder		0.3MPa(G)		0.4MPa(G)		0.5MPa(G)		0.6MPa(G)	
缸径型号 Bore model	行程 Trip	开启 Open	关闭 Close	开启 Open	关闭 Close	开启 Open	关闭 Close	开启 Open	关闭 Close
ZSZ160D	70	5260	5610	7010	7480	8770	9350	10520	11220
	110								
ZSZ200D	70	8220	8770	10960	11690	13700	14610	16430	17530
	110								
	130								
	155								
ZSZ250D	110	13150	13700	17530	18260	21910	22830	26300	27390
	130								
	155								
	185								
	235								
ZSZ300D	185	18930	19720	25240	26300	31550	32870	37860	39440
	235								
	290								
ZSZ350D	235	26050	26840	34740	35790	43420	44740	52110	53690
	290								
	340								
ZSZ400D	290	34270	35060	45700	46750	57120	58430	68540	70120
	340								
	400								
	450								
ZSZ450D	340	43300	44370	57730	59160	72170	73960	86600	88750
	400								
	450								
	500								
ZSZ500D	400	53710	54780	71610	73040	89510	91300	107420	109560
	450								
	500								
	550								
ZSZ550D	450	64510	66290	86010	88380	107520	110480	129020	132570
	500								
	550								
ZSZ600D	500	77110	78890	102810	105180	128520	131480	154220	157770
	550								
	650								
	750								
ZSZ700D	650	105600	107370	140800	143160	175990	178950	211190	214740
	750								
	850								
ZSZ800D	750	138470	140240	184620	186990	230780	233730	276930	280480
	850								
	950								
ZSZ900D	850	175300	177490	233730	236660	292170	295820	350600	354980
	950								
	1050								

双作用&双气缸执行器输出力 Double acting & double cylinder actuator output force

单位: N

双作用-双缸 Dual acting - dual cylinder		0.3MPa(G)		0.4MPa(G)		0.5MPa(G)		0.6MPa(G)	
缸径型号 Bore model	行程 Trip	开启初始 Open	关闭 Close	开启初始 Open	关闭 Close	开启初始 Open	关闭 Close	开启初始 Open	关闭 Close
ZSZ162D	70	10520	5610	14020	7480	17540	9350	21040	11220
	110								
ZSZ202D	70	16440	8770	21920	11690	27400	14610	32860	17530
	110								
	130								
	155								
ZSZ252D	110	26300	13700	35060	18260	43820	22830	52600	27390
	130								
	155								
	185								
	235								
ZSZ302D	185	37860	19720	50480	26300	63100	32870	75720	39440
	235								
	290								
ZSZ352D	235	52100	26840	69480	26840	86840	44740	104220	53690
	290								
	340								
ZSZ402D	290	68540	35060	91400	46750	114240	58430	137080	70120
	340								
	400								
	450								
ZSZ452D	340	86600	44370	115460	59160	144340	73960	173200	88750
	400								
	450								
	500								
ZSZ502D	400	107420	54780	143220	73040	179020	91300	214840	109560
	450								
	500								
	550								
ZSZ552D	450	129020	66290	172020	88380	215040	110480	258040	132570
	500								
	550								
	650								
ZSZ602D	500	154220	78890	205620	105180	257040	131480	308440	157770
	550								
	650								
	750								
ZSZ702D	650	211200	107370	281600	143160	351980	178950	422380	214740
	750								
	850								
ZSZ802D	750	276940	140240	369240	186990	461560	233730	553860	280480
	850								
	950								
ZSZ902D	850	350600	177490	467460	236660	584340	295820	701200	354980
	950								
	1050								

模块化设计 Modular Design



顶置螺杆手轮 Overhead screw handwheel
顶置插销手轮 Overhead bolt handwheel
顶置伞齿轮 Overhead bevel gears
中置旁侧手轮 Middle side handwheel



液压手操 Hydraulic manual-operated
双作用气缸-单缸 Double acting cylinder -single cylinder
双作用气缸-双缸 Double acting cylinder -double cylinder
单作用气缸-常开(FO) Single acting cylinder -normally open (FO)
单作用气缸-常闭(FC) Single acting cylinder -normally closed (FC)
单作用气缸-双缸 Single acting cylinder - double cylinder



储气罐
Storage tanks



支架
Supports



支架
Supports

外形尺寸及数据表 Dimensions And Data Sheet

双作用-单缸外形尺寸表(仅供参考)
Double acting - single cylinder external dimension table (for reference only)

缸径型号 Bore model	气缸行程 Cylinder stroke	阀门口径 Valve diameter	φ D	φ D1	L	L1	L2	L3	H	Tr	连接法兰 Connecting flange				
											凹口深度 Depth of concave stop	法兰外径 Flange diameter	螺纹孔中心距 Threaded hole Center distance	螺纹规格 Thread Specification	F
160D	70	DN40/50	40	225	60	130	75	48	275	Tr22*5LH	55*3	90	70	4-M8	F07
	110	DN80	40			170	115	54	315	Tr26*5LH	55*3	90	70	4-M8	F07
200D	70	DN50	40	265	60	130	75	48	375	Tr22*5LH	55*3	90	70	4-M8	F07
	110	DN80	40			170	115	54	315	Tr26*5LH	70*3	125	102	4-M10	F10
	130	DN100	40			190	135	54	275	Tr26*5LH	70*3	125	102	4-M10	F10
	155	DN125	50			215	160	57	300	Tr28*5LH	70*3	125	102	4-M10	F10
250D	110	DN80	40	315	60	170	115	54	255	Tr26*5LH	70*3	125	102	4-M10	F10
	130	DN100	40			190	135	54	275	Tr26*5LH	70*3	125	102	4-M10	F10
	155	DN125	50			215	160	57	300	Tr28*5LH	70*3	125	102	4-M10	F10
	185	DN150	50			245	190	66	330	Tr32*6LH	85*3	150	125	4-M12	F12
	235	DN200	60			295	240	72	380	Tr36*6LH	85*3	150	125	4-M12	F12
300D	185	DN150	50	380	60	245	190	66	330	Tr32*6LH	85*3	150	125	4-M12	F12
	235	DN200	60			295	240	72	380	Tr36*6LH	85*3	150	125	4-M12	F12
	290	DN250	60			350	295	78	440	Tr40*6LH	85*3	150	125	4-M12	F12
350D	235	DN200	60	430	60	295	240	72	380	Tr36*6LH	85*3	150	125	4-M12	F12
	290	DN250	60			350	295	78	440	Tr40*6LH	100*4	175	140	4-M16	F14
	340	DN300	60			400	345	81	490	Tr42*6LH	100*4	175	140	4-M16	F14
400D	290	DN250	60	480	60	350	295	78	450	Tr40*6LH	100*4	175	140	4-M16	F14
	340	DN300	60			400	345	81	410	Tr42*6LH	100*4	175	140	4-M16	F14
	400	DN350	70			460	405	87	565	Tr44*7LH	100*4	175	140	4-M16	F14
	450	DN400	70			510	455	96	615	Tr48*8LH	100*4	175	140	4-M16	F14
450D	340	DN300	60	530	60	400	345	81	410	Tr42*6LH	130*5	210	165	4-M20	F16
	400	DN350	70			460	405	87	565	Tr44*7LH	130*5	210	165	4-M20	F16
	450	DN400	70			510	455	96	615	Tr48*8LH	130*5	210	165	4-M20	F16
	500	DN450	70			560	505	102	665	Tr52*8LH	130*5	210	165	4-M20	F16
	400	DN350	70			460	405	87	565	Tr44*7LH	160*5	250	200	8-M16	F20
500D	450	DN400	70	600	60	510	455	96	615	Tr48*8LH	160*5	250	200	8-M16	F20
	500	DN450	70			560	505	102	665	Tr52*8LH	160*5	250	200	8-M16	F20
	550	DN500	90			610	555	106	715	Tr55*8LH	160*5	250	200	8-M16	F20
550D	450	DN400	70	650	60	510	455	96	615	Tr48*8LH	160*5	250	200	8-M16	F20
	500	DN450	70			560	505	102	665	Tr52*8LH	160*5	250	200	8-M16	F20
	550	DN500	90			610	555	106	715	Tr55*8LH	160*5	250	200	8-M16	F20
	650	DN600	90			710	655	114	815	Tr60*8LH	160*5	250	200	8-M16	F20
600D	500	DN450	70	700	60	560	505	102	665	Tr52*8LH	200*5	300	254	8-M16	F25
	650	DN600	90			710	655	114	815	Tr60*8LH	200*5	300	254	8-M16	F25
	750	DN700	90			810	755	125	915	Tr65*10LH	200*5	300	254	8-M16	F25
	650	DN600	90			710	655	114	815	Tr60*8LH	230*5	350	298	8-M20	F30
	850	DN800	100			910	855	135	1015	Tr70*10LH	230*5	350	298	8-M20	F30
700D	750	DN700	90	800	60	810	755	125	915	Tr65*10LH	230*5	350	298	8-M20	F30
	850	DN800	100			910	855	135	1015	Tr70*10LH	260*5	415	356	8-M30	F35
	950	DN900	100			1010	955	135	1115	Tr70*10LH	260*5	415	356	8-M30	F35

双作用—双缸外形尺寸表(仅供参考)
Dual acting – Dual cylinder external dimension table (for reference only)

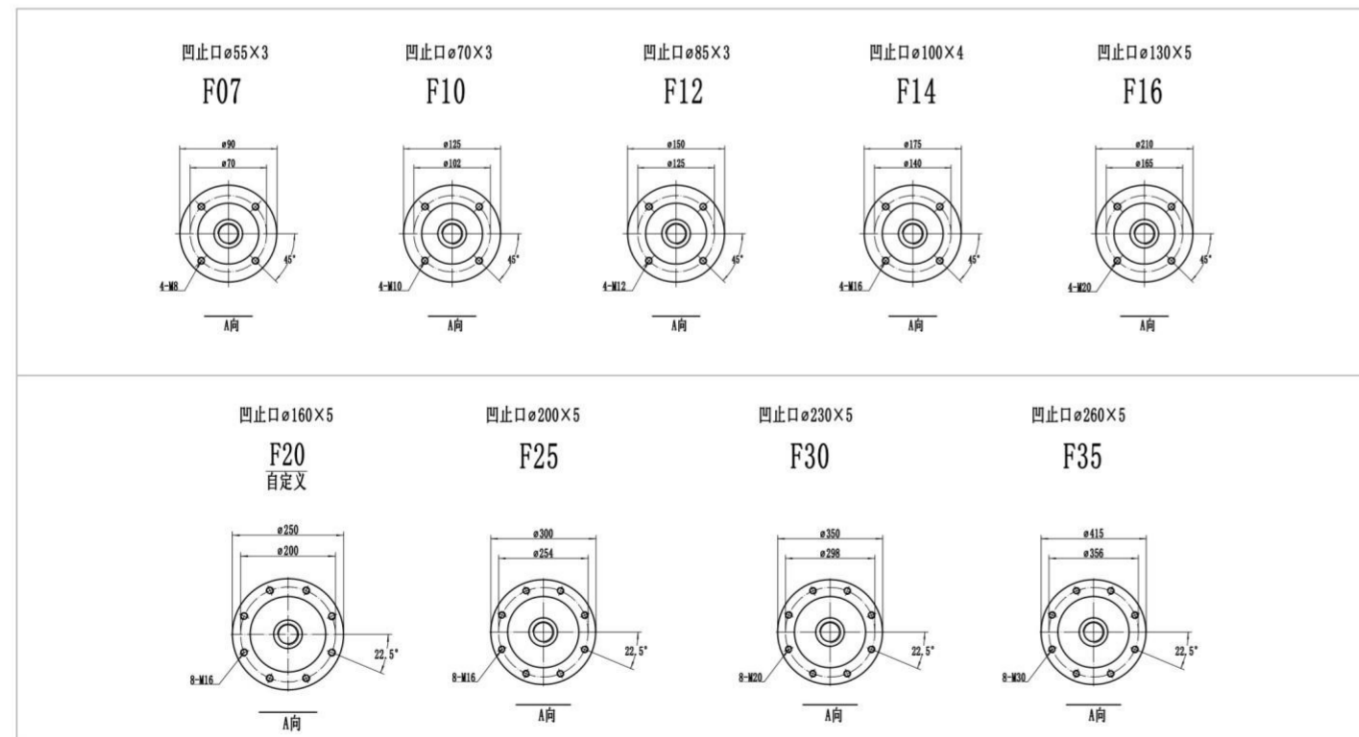
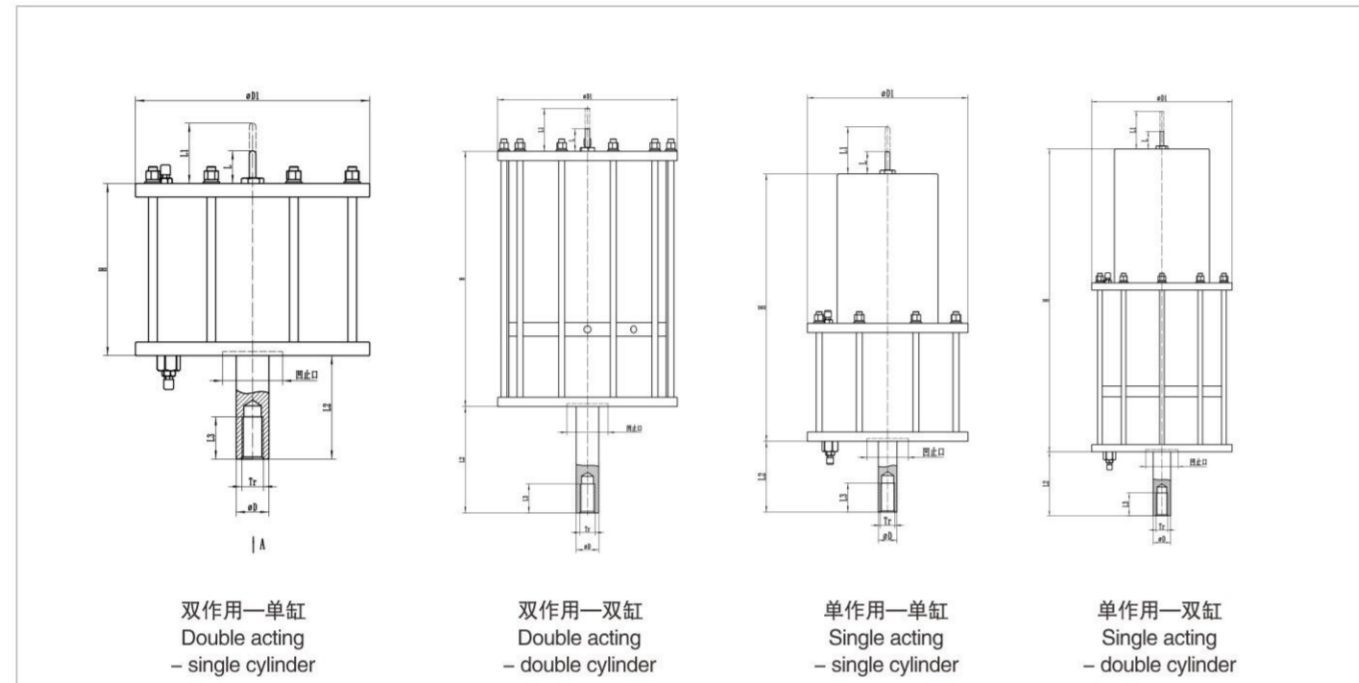
缸径型号 Bore model	气缸行程 Cylinder stroke	阀门口径 Valve diameter	φ D	φ D1	L	L1	L2	L3	H	Tr	连接法兰 Connecting flange				
											凹止口*深度 Depth of concave stop	法兰外径 Flange diameter	螺纹孔 中心距 Threaded hole Center distance	螺纹规格 Thread Specification	F
162D	70	DN40/50	40	225	60	130	75	48	460	Tr22*5LH	55*3	90	70	4-M8	F07
	110	DN80	40	225		170	115	54	500	Tr26*5LH	55*3	90	70	4-M8	F07
202D	70	DN50	40	265		130	75	48	460	Tr22*5LH	55*3	90	70	4-M8	F07
	110	DN80	40			170	115	54	500	Tr26*5LH	70*3	125	102	4-M10	F10
	130	DN100	40			190	135	54	460	Tr26*5LH	70*3	125	102	4-M10	F10
	155	DN125	50			215	160	57	485	Tr28*5LH	70*3	125	102	4-M10	F10
252D	110	DN80	40	315		170	115	54	440	Tr26*5LH	70*3	125	102	4-M10	F10
	130	DN100	40			190	135	54	500	Tr26*5LH	70*3	125	102	4-M10	F10
	155	DN125	50			215	160	57	485	Tr28*5LH	70*3	125	102	4-M10	F10
	185	DN150	50			245	190	66	515	Tr32*6LH	85*3	150	125	4-M12	F12
302D	235	DN200	60	380		295	240	72	565	Tr36*6LH	85*3	150	125	4-M12	F12
	290	DN250	60			245	190	66	515	Tr32*6LH	85*3	150	125	4-M12	F12
	235	DN200	60			295	240	72	565	Tr36*6LH	85*3	150	125	4-M12	F12
	290	DN250	60			350	295	78	625	Tr40*6LH	85*3	150	125	4-M12	F12
352D	235	DN200	60	430		295	240	72	565	Tr36*6LH	85*3	150	125	4-M12	F12
	290	DN250	60			350	295	78	625	Tr40*6LH	100*4	175	140	4-M16	F14
402D	340	DN300	60	480		400	345	81	675	Tr42*6LH	100*4	175	140	4-M16	F14
	400	DN350	70			350	295	78	626	Tr40*6LH	100*4	175	140	4-M16	F14
	450	DN400	70			400	345	81	675	Tr42*6LH	100*4	175	140	4-M16	F14
	340	DN300	60			460	405	87	750	Tr44*7LH	100*4	175	140	4-M16	F14
452D	400	DN350	70	530		510	455	96	800	Tr48*8LH	100*4	175	140	4-M16	F14
	450	DN400	70			400	345	81	675	Tr42*6LH	130*5	210	165	4-M20	F16
	500	DN450	70			460	405	87	750	Tr44*7LH	130*5	210	165	4-M20	F16
	400	DN350	70			510	455	96	800	Tr48*8LH	130*5	210	165	4-M20	F16
502D	450	DN400	70	600	560	505	102	850	Tr52*8LH	130*5	210	165	4-M20	F16	
	500	DN450	70		460	405	87	750	Tr44*7LH	160*5	250	200	8-M16	F20	
	550	DN500	90		510	455	96	800	Tr48*8LH	160*5	250	200	8-M16	F20	
	450	DN400	90		560	505	102	850	Tr52*8LH	160*5	250	200	8-M16	F20	
552D	500	DN450	70	650	610	555	106	900	Tr55*8LH	160*5	250	200	8-M16	F20	
	550	DN500	90		510	455	96	800	Tr48*8LH	160*5	250	200	8-M16	F20	
	650	DN600	90		560	505	102	850	Tr52*8LH	160*5	250	200	8-M16	F20	
602D	500	DN450	70	700	610	555	106	900	Tr55*8LH	160*5	250	200	8-M16	F20	
	550	DN500	90		560	505	102	850	Tr52*8LH	200*5	300	254	8-M16	F25	
	650	DN600	90		610	555	106	900	Tr55*8LH	200*5	300	254	8-M16	F25	
	750	DN700	90		710	655	114	1000	Tr60*8LH	200*5	300	254	8-M16	F25	
702D	650	DN600	90	800	710	655	114	1000	Tr60*8LH	230*5	350	298	8-M20	F30	
	750	DN700	90		810	755	125	1100	Tr65*10LH	230*5	350	298	8-M20	F30	
	850	DN800	100		910	855	135	1200	Tr70*10LH	230*5	350	298	8-M20	F30	
802D	750	DN700	90	920	810	755	125	1100	Tr65*10LH	260*5	415	356	8-M30	F35	
	850	DN800	100		910	855	135	1200	Tr70*10LH	260*5	415	356	8-M30	F35	
	950	DN900	100		1010	955	135	1300	Tr70*10LH	260*5	415	356	8-M30	F35	

单作用—单缸外形尺寸表(仅供参考)
Single acting – single cylinder external dimension table (for reference only)

缸径型号 Bore model	气缸行程 Cylinder stroke	阀门口径 Valve diameter	φ D	φ D1	L	L1	L2	L3	H	Tr	连接法兰 Connecting flange				
											凹止口*深度 Depth of concave stop	法兰外径 Flange diameter	螺纹孔 中心距 Threaded hole Center distance	螺纹规格 Thread Specification	F
160S	70	DN25/40	35	225	60	130	75	39	360	Tr18*4LH	55*3	90	70	4-M8	F07
200S	70	DN50	40	265		130	75	48	460	Tr22*5LH	55*3	90	70	4-M8	F07
250S	110	DN80	40	315		170	115	54	500	Tr26*5LH	70*3	125	102	4-M10	F07
300S	130	DN100	40	380		190	135	54	550	Tr26*5LH	85*3	150	125	4-M12	F12
350S	185	DN150	50	430		245	190	66	665	Tr32*6LH	85*3	150	125	4-M12	F12
400S	235	DN200	50	480		295	240	69	845	Tr34*6LH	100*4	175	140	4-M16	F14
450S	290	DN250	60	530		340	295	72	970	Tr36*6LH	130*5	210	165	4-M20	F16
500S	340	DN300	60	600		400	345	78	950	Tr40*6LH	160*5	250	200	8-M16	F20
550S	400	DN350	60	650		460	405	81	1180	Tr42*6LH	160*5	250	200	8-M16	F20
600S	450	DN400	70	700		510	455	96	1280	Tr48*8LH	200*5	300	254	8-M16	F25
650S	500	DN450	70	750		560	505	96	1330	Tr48*8LH	230*5	350	298	8-M20	F30
700S	550	DN500	80	800		610	555	102	1430	Tr52*8LH	230*5	350	298	8-M20	F30
800S	650	DN600	90	920		710	655	120	1530	Tr60*10LH	260*5	415	356	8-M30	F35
900S	750	DN700	90	1020		810	755	135	1530	Tr65*10LH	260*5	415	356	8-M30	F35

单作用—双缸外形尺寸表(仅供参考)
Single acting – dual cylinder external dimension table (for reference only)

缸径型号 Bore model	气缸行程 Cylinder stroke	阀门口径 Valve diameter	φ D	φ D1	L	L1	L2	L3	H	Tr	连接法兰 Connecting flange				
											凹止口*深度 Depth of concave stop	法兰外径 Flange diameter	螺纹孔 中心距 Threaded hole Center distance	螺纹规格 Thread Specification	F
252S	110	DN80	40	315	60	170	115	54	685	Tr26*5LH	70*3	125	102	4-M10	F10
302S	130	DN100	50	380		190	135	54	735	Tr26*5LH	85*3	150	125	4-M12	F12
352S	185	DN150	50	430		245	190	66	850	Tr32*6LH	85*3	150	125	4-M12	F12
402S	235	DN200	60	480		295	240	69	1030	Tr34*6LH	100*4	175	140	4-M16	F14
452S	290	DN250	60	530		340	295	72	1155	Tr36*6LH	130*5	210	165	4-M20	F16
502S	340	DN300	60	600		400	345	78	1135	Tr40*6LH	160*5	250	200	8-M16	F20
552S	400	DN350	60	650		460	405	81	1365	Tr42*6LH	160*5	250	200	8-M16	F20
602S	450	DN400	70	700		510	455	96	1465	Tr48*8LH	200*5	300	254	8-M16	F25
652S	500	DN450	70	750		560	505	96	1515	Tr48*8LH	230*5	350	298	8-M20	F30
702S	550	DN500	80	800		610	555	102	1615	Tr52*8LH	230*5	350	298	8-M20	F30
802S	650	DN600	90	920		710	655	120	1715	Tr60*10LH	260*5	415	356	8-M30	F35
902S	750	DN700	90	1020		810	755	135	1715	Tr65*10LH	260*5	415	356	8-M30	F35



订货须知 Ordering Instructions

ZSZ系列阀门气动执行机构是复杂的自动化控制仪表，由气动执行器、阀门及多种气动元件、附件组成，用户根据现场控制需要，请详细选择各部件，并在技术合同上标示。

气动执行器：气源压力、作用方式、气缸推力、全行程时间、连接支架、手动机构。

阀门：规格型号、公称压力、公称口径、阀门推力、流通介质、实际工作压力、使用温度、安装位置。

定位器：品牌和型号、双作用或单作用、防护等级、防爆等级、输入信号、输出信号、反馈信号、反馈支架、LED显示、使用温度等实际需求。

电磁阀：品牌和型号、双作用或单作用、单电控或双电控、二位三通或二位五通、电压、功率、防护等级、防爆等级、电气接口尺寸、气源接口尺寸、使用温度、手动操作。

过滤减压阀：品牌和型号、油雾器、自动排水、使用温度、阀体和压力表材质、气源接口尺寸。

行程开关：品牌和型号、机械或接近式、防护等级、防爆等级、电气接口尺寸、附件材质。

其他附件：气控阀、单向阀、快排阀、调速阀、锁止阀、增速放大器等等。

特殊要求：材质、油漆、接口尺寸、安装空间等，请联系厂家销售代表。

ZSZ series valve pneumatic actuators are complex automatic control instruments, composed of pneumatic actuators, valves and a variety of pneumatic components, accessories, users according to the field control needs, please select each component in detail, and mark on the technical contract.

Pneumatic actuators: air pressure, mode of action, cylinder thrust, full travel time, connection bracket, manual mechanism.

Valve: specification, nominal pressure, nominal diameter, valve thrust, circulation medium, actual working pressure, service temperature, installation position.

Positioner: brand and model, double role or single role, protection level, explosion-proof level, input signal, output signal, feedback signal, feedback bracket, LED display, use temperature and other actual requirements.

Solenoid valve: brand and model, double role or single role, single electronic control or double electronic control, two three or two five, voltage, power, protection grade, explosion-proof grade, electrical interface size, air source interface size, use temperature, manual operation.

Filter valve: brand and model, oil mist, automatic drainage, operating temperature, valve body and pressure gauge material, air source interface size.

Limit switch: brand and model, mechanical or close type, protection grade, explosion-proof grade, electrical interface size, accessory material.

Other accessories: air control valve, check valve, quick discharge valve, speed regulating valve, lock valve, increase amplifier, etc.

Special requirements: material, paint, interface size, installation space, etc., please contact the manufacturer's sales representative.

安装与使用 Installation And Use

1. 气动执行器在出厂时已经经过必要的性能测试，且按订单要求进行了整定，用户一般可直接安装使用，底部安装连接尺寸，符合客户提供的数据或ISO5211标准连接尺寸，可以直接安装支架；
2. 打开包装箱后要检查产品是否有意外损坏，所配零件是否齐全，特别是经过长时间存放后的产品要全面维护后才可以安装并使用；
3. 执行器与阀门安装前应核对型号规格，是否与阀门所需推力的要求相符合；
4. 检查执行器与阀门连接的支架法兰尺寸是否相符，安装空间是否充足；
5. 如选用气/手动切换机构，执行器安装后，应对切换机构工作状态是否与实际相符，防止误操作。带手动操作机构的阀门在弹簧复位（关闭阀门）或是气动开启（关闭）阀门过程中，任何一个开度都不能使用“气动-手动”切换；
6. 如选用气/手动切换机构，使用手轮操作前，先将气缸内的残余气体通过电磁阀（或控制元件）排空（在气缸内有残余气体的情况下），手动操作确认无误后再进行气动试用检查；
7. 如选用气/手动切换机构，试用手轮操作时，不得用力过大，且不可使用外力工具作用在手轮机构上。

1. Pneumatic actuators in the factory has passed the necessary performance test, and according to the requirements of the order set, users generally can be directly installed and used, the bottom installation connection size, in line with the data provided by the customer or ISO5211 standard connection size, can be directly installed bracket;
2. After opening the packing box, check whether the product is damaged accidentally and whether the parts are complete. In particular, after a long time of storage, the product should be fully maintained before installation and use;
3. Before installation, the actuator and valve should be checked to see if the model and specification are in accordance with the thrust required by the valve;
4. Check whether the size of the bracket flange connecting the actuator and the valve is consistent and whether the installation space is sufficient;
5. If the pneumatic/manual switching mechanism is selected, after the installation of the actuator, the working state of the switching mechanism should be checked whether it conforms to the actual condition to prevent misoperation. Valve with manual operation mechanism in the spring return (close the valve) or pneumatic opening (close) valve process, any one of the opening can not use "pneumatic manual" switch;
6. If the pneumatic/manual switching mechanism is selected, the residual gas in the cylinder shall be emptied through the solenoid valve (or control element) before using the handwheel operation (in the case of residual gas in the cylinder), and then the pneumatic trial inspection shall be carried out after the manual operation is confirmed correct;
7. If pneumatic/manual switching mechanism is selected, try the hand wheel operation, do not exert too much force, and do not use external force tools on the manual mechanism.

常见故障和排除法 Common Faults And Elimination Methods

故障现象 Fault phenomenon	检查项目 Check the project	排除法 Exclusions
阀门不动作 Valve not operating	电磁阀是否正常、线圈是否烧坏、电磁阀是否被脏物卡死 Whether the solenoid valve is normal, whether the coil is burned out, whether the solenoid valve is trapped by stolen goods.	更换电磁阀、更换线圈、清除脏物 Replace the solenoid valve, replace the coil and remove the dirt.
	对执行器单独供气，是否正常工作，如气缸窜气不正常，拆开执行器检查密封件是否损坏，气缸内表面是否损坏 For the gas supply of the actuator alone, whether it works normally, such as the gas channeling of the cylinder is not normal, open the actuator to check whether the seal is damaged, whether the inner surface of the cylinder is damaged.	更换已坏密封圈，更换气缸 Replace the broken sealing ring and replace the cylinder.
	阀内有杂质将阀芯卡主 There are impurities in the valve spool card main.	清除杂质更换阀件 Remove impurities and replace valve parts.
	手动操作机构的手柄处在手动位置 The handle of the manual operation mechanism is in the manual position.	将手柄扳到自动位置 Turn the handle to automatic position.
阀门动作迟缓爬行 Valve moves slowly and crawls	气源压力不够 Insufficient air source pressure.	增加气源压力 Increase air source pressure.
	气动执行器推力过小 The thrust of pneumatic actuator is too small.	增大执行器型号规格 Increase the actuator size specification.
	阀门阀芯或其他阀件装配太紧不合理 Valve spool or other valve assembly is too tight to be reasonable.	修理装配，调整推力 Repair assembly, adjust thrust.
	气源管路堵塞流量过小 The air source pipeline is blocked and the flow is too small.	排除堵塞 Eliminate blockages.
回讯器无信号 There is no signal in the echo unit	信号电源线路、短路、短路 Signal power line, short circuit, short circuit.	维修电源线路 Repair power lines.
	凹轮位置不准确 The position of concave wheel is not accurate.	调整凹轮至正确位置 Adjust concave wheel to correct position.
	微动开关损坏 The microswitch is damaged.	更换微动开关 Replace the microswitch.

售后服务 After-sales Service

公司产品从出厂之日起一年内实行“三包”，如客户在订货检验、使用过程中需要技术咨询或故障处理，请拨打本公司售后服务热线，我们将以最快的速度为您排忧解难！

The company's products from the factory within a year from the implementation of the "three guarantees", such as customers in order to test, use the process of technical advice or troubleshooting, please call the company's after-sales service hotline, we will be the fastest speed for you to solve the problems!