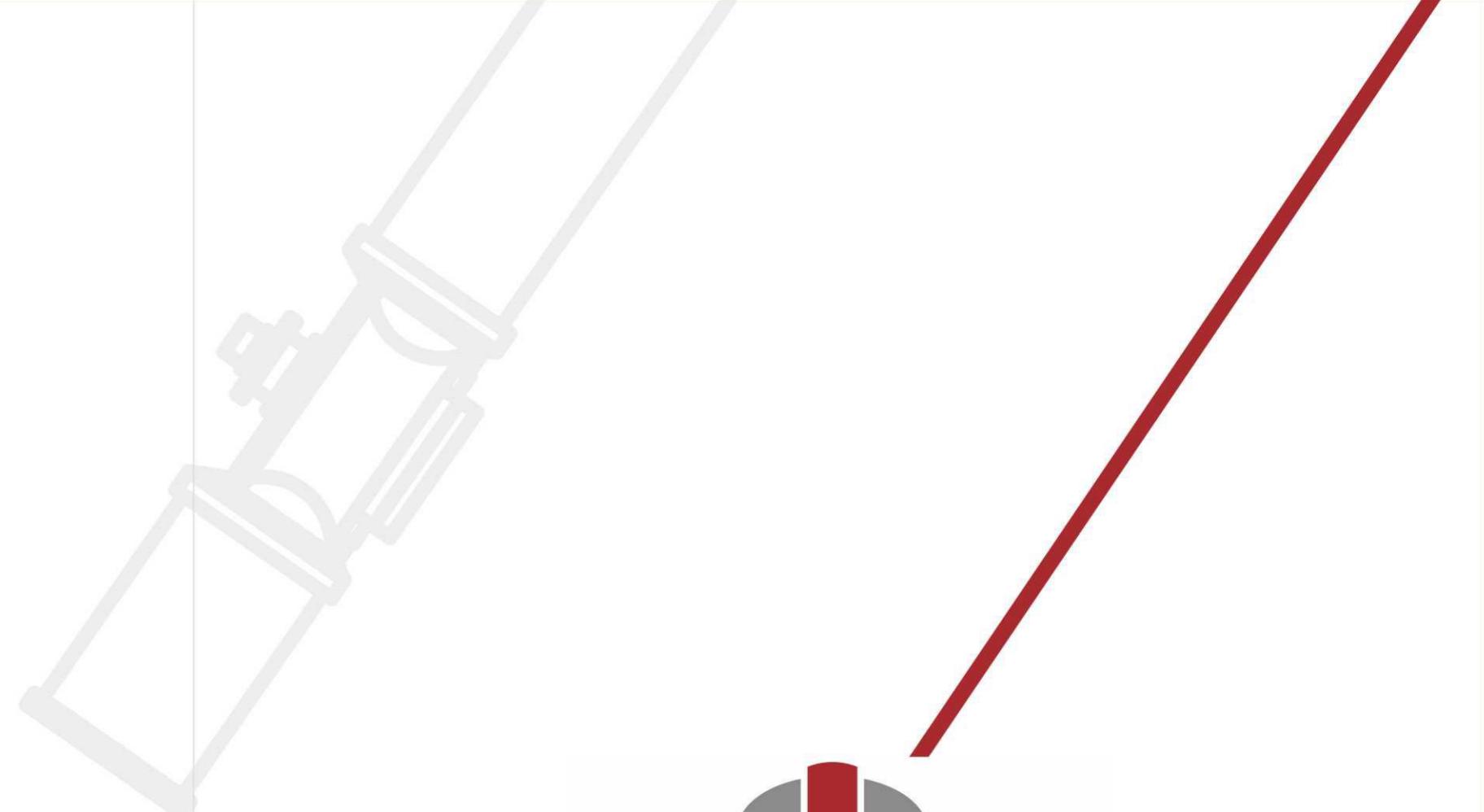




中德科技



浙江中德自控科技股份有限公司  
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**ZSH气动执行器**  
**ZSH Pneumatic Actuator**

[www.zhongdegroup.com](http://www.zhongdegroup.com)



# COMPANY PROFILE

## 公司简介

浙江中德自控科技股份有限公司是集研发、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，中德致力于发展执行器专业领域技术，使我们始终处在国内执行器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、坚持不懈打造执行器品牌，其中气动执行器、电动执行器、电液动执行器、气液动执行器等产品广泛应用于石油化工、煤化工、天然气等领域为核心的高端领域，并获得了众多用户朋友的高度信任。

“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，都能给你提供“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，全力打造国家高端执行器先进制造企业，致力于加快我国执行器的国产化进程，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！



**全球化科技品质**  
**GLOBALIZED TECHNOLOGY QUALITY**

**全方位安全保障**  
**ALL-ROUND SAFETY GUARANTEE**

Zhejiang Zhongde Automatic Control Science And Technology Joint Stock 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 actuators, keeping us always at the leading position in Chinese actuator industry. During more than twenty years of development, Zhongde personnel are building the brand of actuators with specialization, concentration and perseverance. The products such as pneumatic actuators, electric actuators, electric-hydraulic actuators and pneumatic-hydraulic actuators are widely applied in petroleum, chemical industry, coal chemical industry, natural gas and other high-end fields, receiving deep trust from users.

"Customer satisfaction is regarded as our life". For this, Zhongde has established 12 sales and service networks in China, 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 actuators in China, accelerate the process of localization of actuators and realize maximized customer satisfaction. Zhongde hopes to cooperate with you faithfully and create a brilliant future together!

[www.zhongdegroup.com](http://www.zhongdegroup.com)

ZHEJIANG ZHONGDE AUTOMATIC CONTROL  
SCIENCE AND TECHNOLOGY JOINT STOCK CO.,LTD.  
浙江中德  
自控科技股份有限公司



## PRODUCTION WORKSHOP 生产车间

中德将产品质量视为公司的生命，基于此，我们不惜投入大量资金引进现代化的生产设备、建设现代化车间，规范了生产程序，使每个员工都能按科学的生产程序生产，使我们的生产程序能得到最大可能的优化，满足日益发展的企业需要，从而在生产中杜绝了浪费，加快了速度，提高了品质，最终赢得了市场。

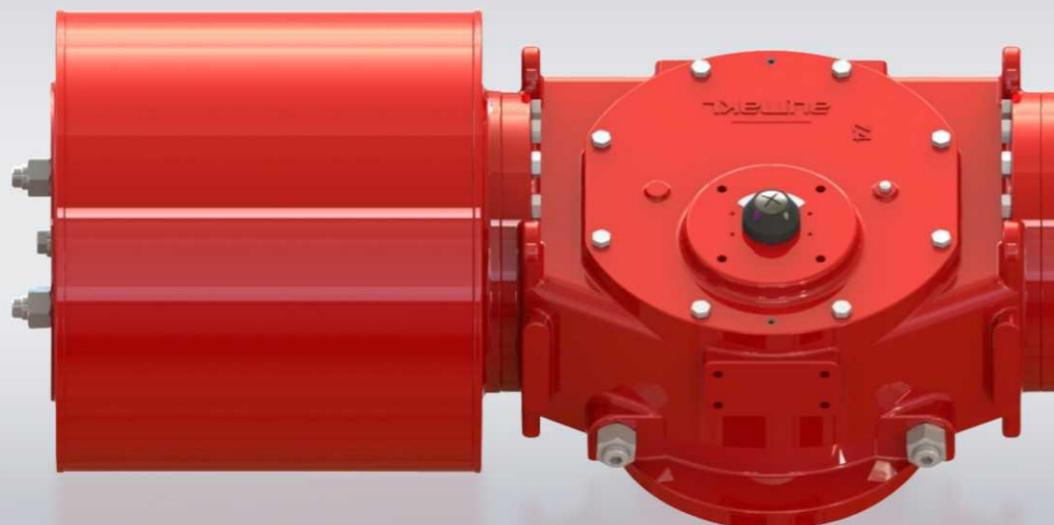
Zhongde regards product quality as the life of our enterprise. Based on this, we have made a huge investment in introducing modern production equipment, building modern workshops and standardizing production procedures, so that every employee is able to work following scientific production procedures, our production procedures are optimized as much as possible, the increasing demands of our enterprise are met, and the waste in production is avoided. Production speed and quality have been improved, and finally, we have won the market.

# ZSH

## 系列气动执行器 Pneumatic Actuator

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结构特点 Structural features	07
模块化设计 Modular design	09
产品规格型号说明 Product specification and model descriptions	11
扭矩参数表 Table of torque parameters	13
外形尺寸及数据表 Table of outline dimensions and data	15





## PRODUCT FEATURES

### 产品特点

#### 1 安全 Safety

ZSH系列弹簧预压缩后固定在弹簧模块内部，在安装和维护弹簧模块时以便操作稳定性及安全性。

After pre-compression, the ZSH series spring is fixed inside the spring module, so as to realize operation stability and safety during installation and maintenance of the spring module.

#### 2 标准化的附件安装尺寸 Standard installation size of accessories

ZSH系列气动执行器顶部输出附属连接均符合NUMAR标准，方便标准的自控附件安装操作。

The connection of output accessories at the top of the ZSH series pneumatic actuator conforms to NUMAR standard, making it convenient to carry out installation operations of standard automatic control accessories.

#### 3 标准连接尺寸 Standard connection size

ZSH系列气动执行器与阀门的连接尺寸均符合ISO-5211标准的要求，方便用户选择安装。

The connection size of the ZSH series pneumatic actuator and valve conforms to the requirements in ISO-5211 and facilitates the installation by users.

#### 4 模块化设计 Modular design

ZSH系列气动执行器由传动模块、气缸模块、弹簧模块和附属机构装置模块化构成，这些模块在安装时方便拆装、更换和稳固。根据客户需求选择进行安装、维修。

The ZSH series pneumatic actuator is composed of driving module, cylinder module, spring module and accessorial mechanisms. During installation, these modules are easy to assemble, disassemble, replace and stabilize. Installation and maintenance can be carried out according to customer needs.

#### 5 经久耐用性 Durability

ZSH系列气动执行器经过特殊处理的气缸内表面、活塞杆及导向杆与自润滑的轴承结合，保证优良的滑动和耐磨性，延长所有滑动零件的使用寿命。

The combination of the cylinder inner surfaces, piston rod and guide rod of the ZSH series pneumatic actuator that have been subjected to special treatment with the self-lubricating bearing ensures excellent sliding and anti-wear performance and prolongs the service life of all sliding parts.

#### 6 防腐 Anticorrosion

ZSH系列气动执行器喷涂层了防护涂层，连接螺栓螺帽均采用不锈钢材质，使用时对现场环境的要求，能满足不同恶劣环境的要求。

The ZSH series pneumatic actuator is sprayed with protective coating. The connection bolts and screw caps are made of stainless steel. It can meet requirements for the working sites and requirements for different severe conditions.

#### 7 防水保护 Waterproof protection

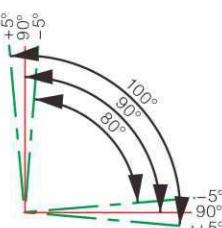
ZSH系列气动执行器箱体、箱盖等处装有密封圈，阻止外界的水分进入执行器内部，防护等级可达到IP67，可在恶劣的环境气候下持续稳定的运行。

The box body and box cover of the ZSH series pneumatic actuator are installed with seal rings to prevent water outside from entering the actuator. With the protection grade reaching IP67, it can run under severe environmental climate continuously and stably.

#### 8 行程调节范围 Travel adjustment range

ZSH系列气动执行器有两个独立的行程调节螺丝可以进行方便、精准 $\pm 5^\circ$ 的调节开、关位置。

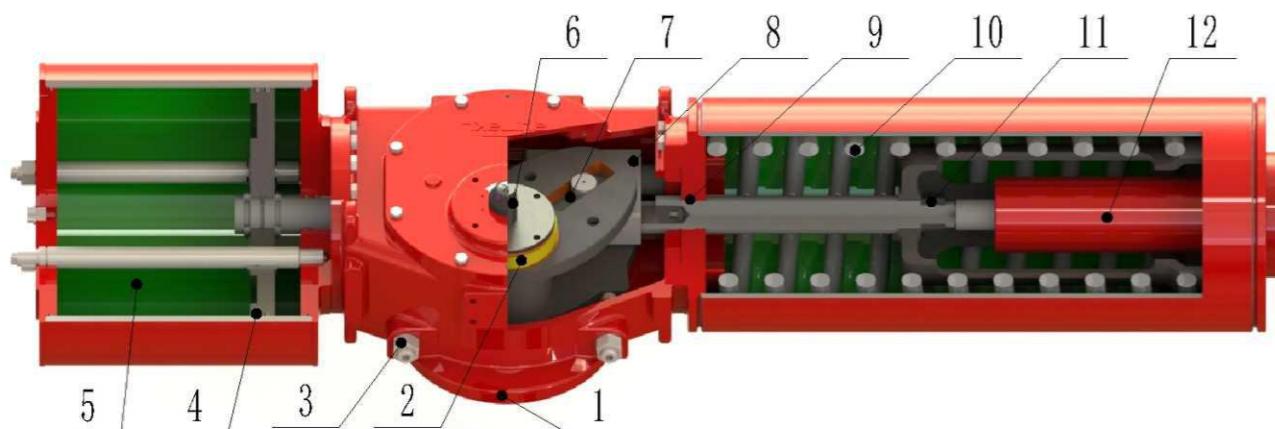
The ZSH series pneumatic actuator is provided with two independent travel adjusting screws for conveniently and accurately making  $\pm 5^\circ$  adjustment of on-off positions.





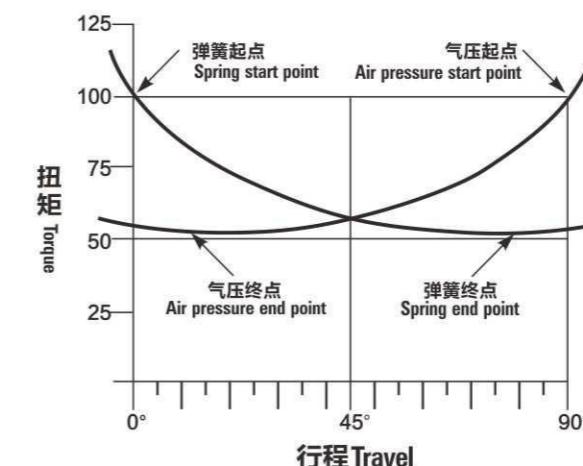
# STRUCTURAL FEATURES

## 结构特点

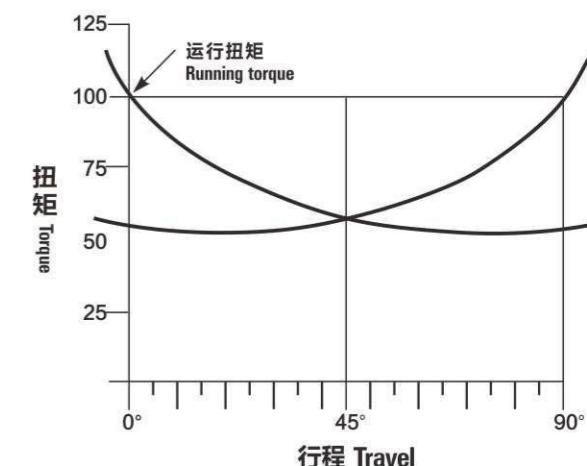


1 标准法兰连接 Standard flange Connection	2 传动轴自润滑轴承 Self-lubricating bearing of driving shaft	3 行程调节螺栓 Travel adjusting bolt	4 活塞支撑环 Piston support ring	5 缸体内表面处理 Treatment of cylinder inner surfaces	6 标准附件安装 Standard installation of accessories
ZSH系列气动执行器安装法兰与阀门连接尺寸，符合ISO5211标准。 The connection size of the ZSH series pneumatic actuator installation flange and valve conforms to ISO5211.	传动轴上下配有一自润滑轴承，用于支撑定位、耐磨性、旋转滑动性、减少摩擦力等作用，更好的使产品发挥运行性能。 The driving shaft is provided with self-lubricating bearing, which is used for supporting, positioning, anti-wear, rotary sliding and reduction of friction, so as to make the product better exert its running performance.	ZSH系列气动执行器可以进行±5°的行程调节。 The ZSH series pneumatic actuator can carry out ± 5° travel adjustment.	活塞支撑环采用复合材料组成的专用支撑环，对活塞运行时避免损伤气缸内表面，具有良好的润滑耐用性能，延长气缸使用寿命。 The piston support ring is a special support ring composed of composite materials. It can avoid damage to the cylinder inner surfaces when the piston is running and prolong the cylinder's service life with good lubrication and durability.	气缸内表面经特殊处理后，具有耐腐蚀、良好的润滑耐用等特点，提高使用寿命和效率。 After special treatment, the cylinder inner surfaces have such features as anticorrosion and good lubrication and durability, enhancing the service life and efficiency.	传动轴的输出附件接口全部相同，符合NAMUR标准，安装附件方便、快捷。 The connections for output accessories of the driving shaft are the same, conforming to NAMUR standard. The installation of accessories is convenient and quick.

## 扭矩特性 Torque features

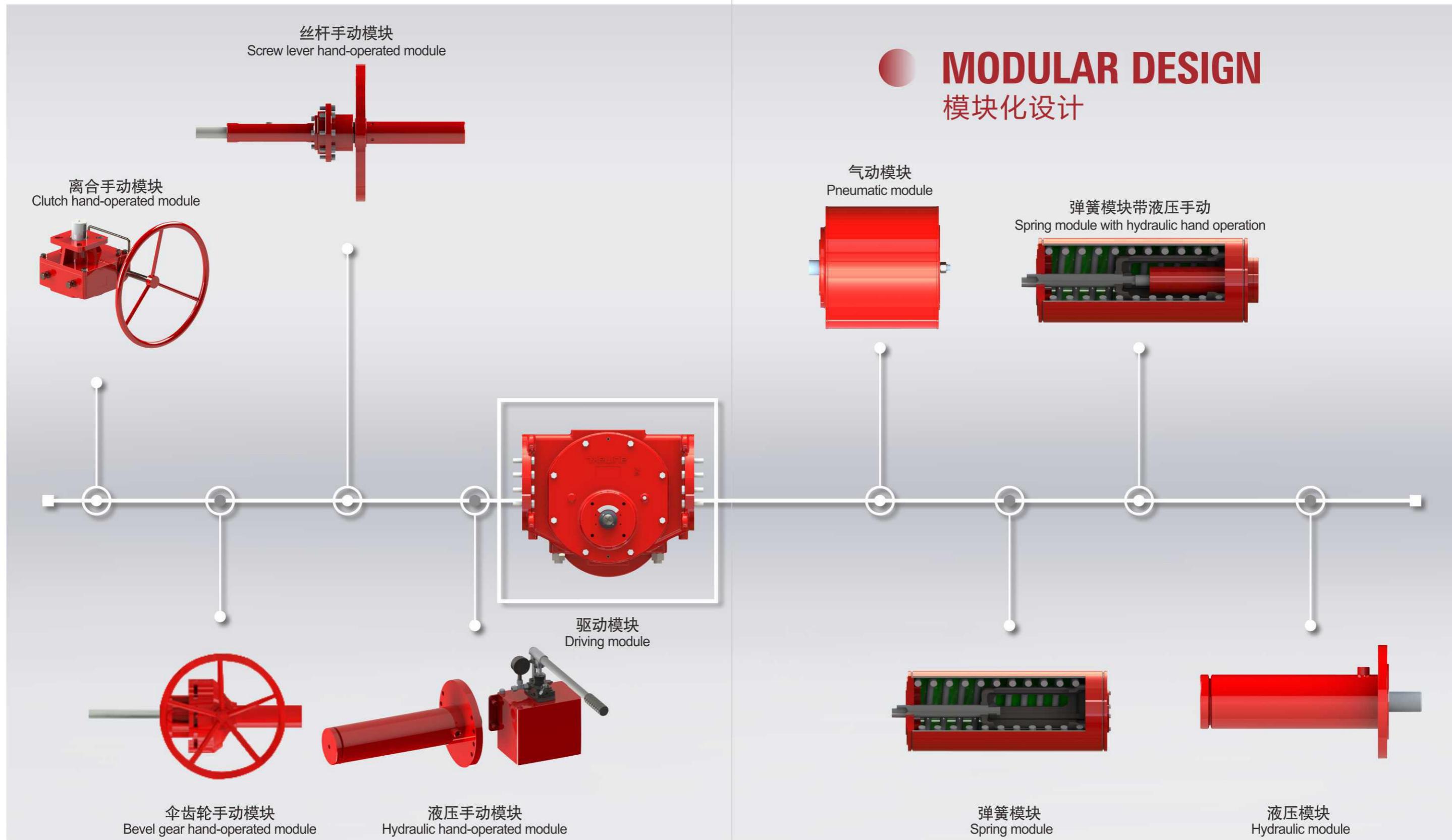


单动作型 Single acting type



双动作型 Double acting type

7 拨叉轴套结构 Fork shaft sleeve structure	8 导向装置 Guiding device	9 活塞杆自润滑轴承设计 Piston rod self-lubricating bearing design	10 弹簧模块 Spring module	11 弹簧安全锁定 Spring safe locking	12 液压手动机构 Hydraulic hand-operated mechanism
销轴上安装了轴套，减少了运行时摩擦力，使扭矩传递更加稳定，高效运行。 The pin shaft is installed with shaft sleeve to reduce friction during running, so as to make the torque driving more stable with efficient running.	创新独特的双向导引结构设计，使扭矩分配更加合理。 The innovative unique double-guiding structure design makes torque distribution more reasonable.	具有自润滑、支撑作用，降低滑动摩擦力，加强了弹簧力的传递效率。 It is provided with self-lubricating and supporting functions to reduce sliding friction and enhance transfer efficiency of spring force.	弹簧压缩后牢固封闭的弹簧模块，增强了操作安全性。 The firmly enclosed spring module after spring compression enhances operation safety.	特殊螺母防止弹簧工作时松动脱落。 The special nut prevents the spring from loosening and dropping during working.	利用弹簧内部空间，装入液压手动机构，可使用液压手动操作，减小外部安装空间。 The inner space of the spring is used to install the hydraulic hand-operated mechanism, which can realize hand operation by using hydraulic pressure and reduces external installation space.



# PRODUCT SPECIFICATION AND MODEL DESCRIPTIONS

## 产品规格型号说明

ZSH1 — 200 S — K 4 — 09 — N O

规格 Specification  
动作型式 Acting type  
故障位置 Failure position

手轮形式 Handwheel type  
使用温度 Working temperature

行程 Travel  
弹簧规格 Spring specification

### 规格 Specification

代号 Code	尺寸 Size	代号 Code	尺寸 Size
180	180	550	550
200	200	600	600
250	250	700	700
300	300	800	800
350	350	900	900
400	400	1000	1000
450	450	1100	1100
500	500		

### 动作型式 Acting type

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

### 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)

### 弹簧规格① Spring specification

代号 Code	说明 Description
4	4bar弹簧
5	5bar弹簧
6	6bar弹簧

### 行程② Travel

代号 Code	说明 Description
07	行程Travel: 0~70°
09	行程Travel: 0~90°

### 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

### 手轮及形式 Handwheel type

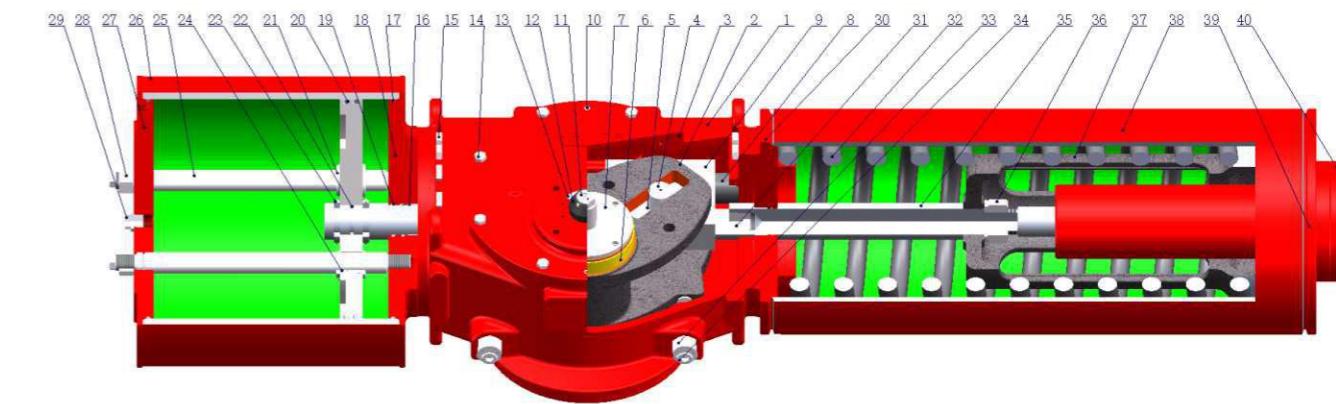
代号 Code	说明 Description
0	无手轮 Without handwheel
1	离合式手轮 Clutch type handwheel
2	丝杆手轮 Screw lever handwheel
3	伞齿轮 Bevel gear
4	液压手操 Hydraulic hand-operated mechanism

注: ①—一双作用无此代号。

②—行程可根据用户要求定制。

Note: ①—No code for double acting.

②—The travel can be customized according to user requirements.



### 零件名称与材质 Part name and material

序号 No.	零件名称 Part name	材质 Material	序号 No.	零件名称 Part name	材质 Material
1	箱体 Box body	球墨铸铁 Ductile iron	21	导向套 Guide sleeve	7075-T7651
2	拨叉 Fork	球墨铸铁 Ductile iron	22	O型圈 O ring	橡胶 Rubber
3	箱盖 Box cover	球墨铸铁 Ductile iron	23	卡键 Key	碳钢 Carbon steel
4	销轴 Pin shaft	20CrMnTi 20CrMnTi	24	O型圈 O ring	橡胶 Rubber
5	轴套 Shaft sleeve	铜合金 Copper alloy	25	拉杆 Pull rod	碳钢 Carbon steel
6	轴承 Bearing	复合材料 Composite material	26	气缸 Cylinder	碳钢 Carbon steel
7	指示轴 Indicating shaft	304 304	27	外盖 Outer cover	碳钢 Carbon steel
8	导向杆 Guide rod	碳钢 Carbon steel	28	六角螺母 Hexagonal nut	304 304
9	导向块 Guide block	碳钢 Carbon steel	29	六角螺塞 Hexagonal screw plug	碳钢 Carbon steel
10	圆柱销 Cylindrical pin	碳钢 Carbon steel	30	弹簧中盖 Spring middle cover	碳钢 Carbon steel
11	指示盖螺钉 Indicating cover screw	304 304	31	连接螺杆 Connection screw	碳钢 Carbon steel
12	指示盖 Indicating cover	塑料 Plastic	32	弹簧 Spring	优质弹簧钢 High-quality spring steel
13	指示牌 Indicating plate	304 304	33	六角螺母 Hexagonal nut	304 304
14	六角螺栓 Hexagonal bolt	304 304	34	调节螺杆 Adjusting screw	304 304
15	六角螺栓 Hexagonal bolt	304 304	35	弹簧拉杆 Spring pull rod	碳钢 Carbon steel
16	轴承 Bearing	复合材料 Composite material	36	防松螺母 Lock nut	碳钢 Carbon steel
17	O型圈 O ring	橡胶 Rubber	37	弹簧座 Spring retainer	碳钢 Carbon steel
18	中盖 Middle cover	碳钢 Carbon steel	38	弹簧缸 Spring cylinder	碳钢 Carbon steel
19	O型圈 O ring	橡胶 Rubber	39	弹簧外盖 Spring outer cover	碳钢 Carbon steel
20	O型圈 O ring	橡胶 Rubber	40	液压手动模块 Hydraulic hand-operated module	碳钢 Carbon steel

# TABLE OF TORQUE PARAMETERS

## 扭矩参数表

双作用扭矩表 Double acting torque table

单位Unit: N.m

规格型号 Type specification	气源压力 Air supply pressure(MPa)									
	0.3		0.4		0.5		0.6		0.7	
	开始/结束 Start/stop	运行 Run	开始/结束 Start/stop	运行 Run	开始/结束 Start/stop	运行 Run	开始/结束 Start/stop	运行 Run	开始/结束 Start/stop	运行 Run
ZSH0-180DA	534	378	712	504	890	629	1068	755	1246	881
ZSH0-200DA	659	466	879	622	1099	777	1319	933	1539	1088
ZSH1-250DA	1236	874	1649	1166	2061	1457	2473	1749	2885	2040
ZSH1-300DA	1780	1259	2374	1679	2967	2098	3561	2518	4154	2938
ZSH2-300DA	2226	1574	2967	2098	3709	2623	4451	3147	5193	3672
ZSH2-350DA	3029	2142	4039	2856	5049	3570	6059	4284	7068	4998
ZSH3-350DA	3837	2713	5116	3618	6395	4522	7674	5426	8953	6331
ZSH3-400DA	5012	3544	6682	4725	8353	5906	10023	7088	11694	8269
ZSH3-450DA	6343	4485	8457	5980	10572	7475	12686	8970	14800	10465
ZSH4-450DA	8012	5665	10683	7554	13354	9442	16024	11331	18695	13219
ZSH4-500DA	9892	6994	13189	9326	16486	44657	19783	13989	23080	16320
ZSH4-550DA	11969	8463	15958	11284	19948	14105	23937	16926	27927	55706
ZSH4-600DA	14244	10072	18992	13429	23740	16786	28488	20144	33235	23501
ZSH5-550DA	14961	10579	19948	14105	24935	17632	29922	21158	34909	24684
ZSH5-600DA	17805	12590	23740	16786	29675	20983	35609	25180	41544	29376
ZSH5-700DA	24234	17136	32312	22848	40390	28560	48468	34272	56546	39984
ZSH7-600DA	20179	14268	26905	19025	33631	23781	40357	28537	47084	33293
ZSH7-700DA	27465	19421	33621	25895	45776	32368	54931	33842	64086	45316
ZSH7-800DA	35873	25366	47831	33822	59789	42277	71746	50732	83704	59188
ZSH8-800DA	42204	29843	56272	39790	70340	49738	88408	59685	98475	69633
ZSH8-900DA	53414	37769	71219	50359	89024	62949	106828	75539	124633	88129
ZSH8-1000DA	65943	46629	87924	62172	109906	77715	131887	93258	153868	108801
ZSH9-900DA	72109	50989	96145	67985	120182	84981	144218	101978	168254	118974
ZSH9-1000DA	89024	62949	118698	82932	148373	104915	178047	125898	207722	146881
ZSH9-1100DA	107718	76168	143625	101558	179531	126947	215437	152337		

单作用扭矩表 Single acting torque table

单位Unit: N.m

规格型号 Type specification	弹簧输出扭矩			气源输出扭矩 0.4MPa		
	90°	45°	0°	0°	45°	90°
ZSH0-180SR	410	246	267	445	267	303
ZSH0-200SR	506	303	330	550	330	374
ZSH1-250SR	989	564	618	1030	587	659
ZSH1-300SR	1424	783	890	1484	846	950
ZSH2-300SR	1780	979	1113	1855	1057	1187
ZSH2-350SR	2423	1333	1515	2524	1439	1616
ZSH3-350SR	3070	1688	1919	3198	1823	2046
ZSH3-400SR	4009	2205	2506	4176	2381	2673
ZSH3-450SR	5074	2791	3173	5286	3013	3383
ZSH4-450SR	6410	3525	4006	6677	3806	4273
ZSH4-500SR	7913	4352	4946	8243	4698	5275
ZSH4-550SR	9575	5266	5984	9974	5685	6383
ZSH4-600SR	11395	6267	7122	11870	6766	7597
ZSH5-550SR	11470	6882	7480	12966	7780	8977
ZSH5-600SR	13057	7834	8309	15431	9258	10683
ZSH5-700SR	17772	10663	11309	21003	12602	14541
ZSH7-600SR	14798	8879	9417	17488	10493	12107
ZSH7-700SR	20141	12085	12817	23803	14282	16479
ZSH7-800SR	26307	15784	16741	31090	18654	21524
ZSH8-800SR	30949	18570	19695	36577	21946	25322
ZSH8-900SR	39170	23502	24927	46292	27775	32048
ZSH8-1000SR	48358	29015	30774	57151	34291	39566
ZSH9-900SR	52880	31728	33651	62495	37497	43265
ZSH9-1000SR	65284	39170	41544	77154	46292	53414
ZSH9-1100SR	78994	47396	50269	93356	56014	64631

单作用扭矩表 Single acting torque table

单位Unit: N.m

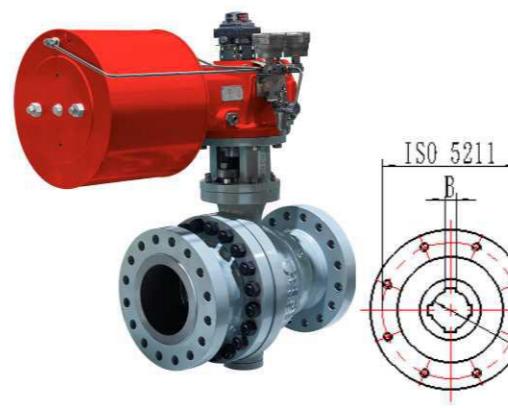
规格型号 Type specification	弹簧输出扭矩			气源输出扭矩 0.5MPa		
	90°	45°	0°	0°	45°	90°
ZSH0-180SR	570	342	392	499	299	320
ZSH0-200SR	703	422	484	615	369	396
ZSH1-250SR	1319	791	907	1154	692	742
ZSH1-300SR	1899	1140	1306	1662	997	1068
ZSH2-300SR	2374	1424	1632	2077	1246	1335
ZSH2-350SR	3231	1939	2221	2827	1696	1818
ZSH3-350SR	4093	2456	2814	3581	2149	2302
ZSH3-400SR	5346	3207	3675	4678	2807	3007
ZSH3-450SR	6766	4059	4651	5920	3552	3806
ZSH4-450SR	8546	5128	5876	7478	4487	4807
ZSH4-500SR	10551	6331	7254	9232	5539	5935
ZSH4-550SR	12767	7660	8777	11171	6702	7181
ZSH4-600SR	15193	9116	10445	13294	7977	8546
ZSH5-5						

单作用扭矩表 Single acting torque table

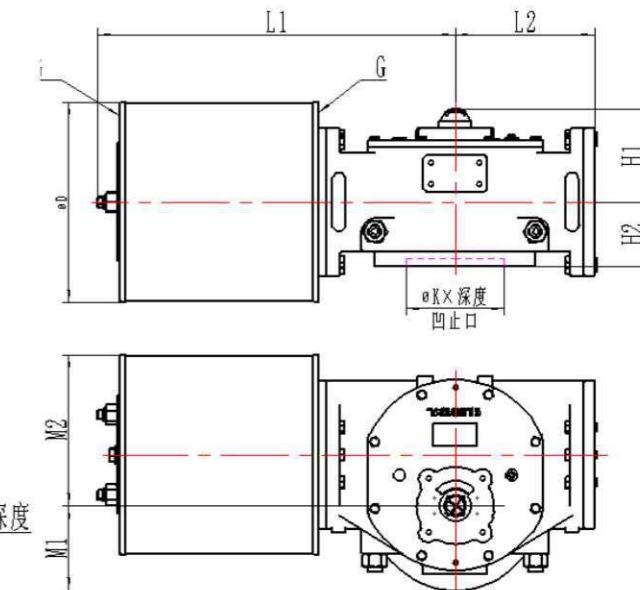
规格型号 Type specification	弹簧输出扭矩 Spring output torque			气源输出扭矩 Air supply output torque		
				0.6MPa		
	90°	45°	0°	0°	45°	90°
ZSH0-180SR	570	342	392	677	406	499
ZSH0-200SR	703	422	484	835	501	615
ZSH1-250SR	1319	791	907	1154	940	1566
ZSH1-300SR	1899	1140	1306	2255	1353	1662
ZSH2-300SR	2374	1424	1632	2819	1691	2077
ZSH2-350SR	3231	1939	2221	3837	2302	2827
ZSH3-350SR	4093	2456	2814	4860	2916	3581
ZSH3-400SR	5346	3207	3675	6348	3809	4678
ZSH3-450SR	6766	4059	4651	8034	4821	5920
ZSH4-450SR	8546	5128	5876	10149	6089	7478
ZSH4-500SR	10551	6331	7254	12529	7518	9232
ZSH4-550SR	12767	7660	8777	15160	9096	11171
ZSH4-600SR	15193	9116	10445	18042	10825	13294
ZSH5-550SR	15958	9575	10971	18950	11370	13964
ZSH5-600SR	18992	11395	13057	22553	13532	16618
ZSH5-700SR	25850	15510	17772	30697	18418	22619
ZSH7-600SR	21524	12914	14798	25560	15336	18833
ZSH7-700SR	29296	17578	20141	34790	20874	25634
ZSH7-800SR	38265	22959	26307	45439	27264	33482
ZSH8-800SR	45017	27010	30949	53458	32075	39390
ZSH8-900SR	56975	34185	39170	67658	40595	49853
ZSH8-1000SR	70340	42204	48358	83528	50117	61547
ZSH9-900SR	76916	46150	52880	76916	46150	52880
ZSH9-1000SR	94958	56975	65284	112763	67658	83089
ZSH9-1100SR	114900	68940	78994	136443	81866	100537

# DIMENSIONS AND DATA SHEET

## 外形尺寸及数据表



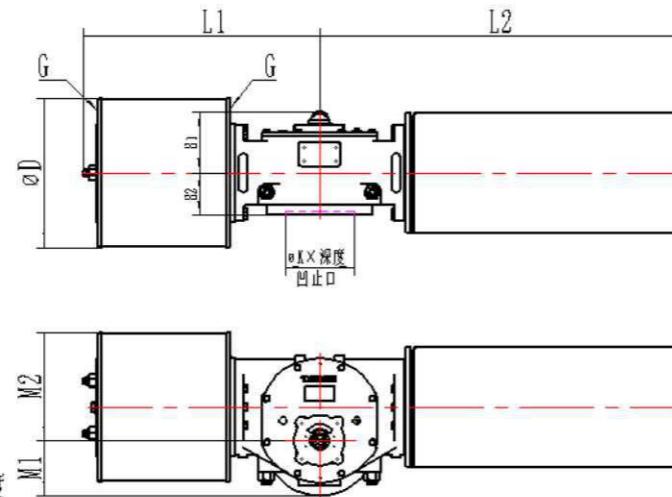
双作用型 Double acting type



规格型号 Type specification	L1	L2	H1	H2	M1	M2	ΦD	ISO5211	ΦP × 深度 Depth	ΦK × 深度 Depth	B	气源接口"G" Air supply connection
ZSH0-180D	410	145	118	70	75	172	240	F12	36×80	85×4	10	G3/8"
ZSH0-200D	410	145	118	70	75	182	266	F12	36×80	85×4	10	G3/8"
ZSH1-250D	478	169	131	84	92	195	270	F14	48×135	100×4	14	G3/8"
ZSH1-300D	478	169	131	84	92	222	324	F14	48×135	100×4	14	G1/2"
ZSH2-300D	570	206	149	106	113	237	324	F16	60×145	120×4	18	G1/2"
ZSH2-350D	577	206	149	106	113	262	374	F16	60×145	120×4	18	G1/2"
ZSH3-350D	667	260	174	120	158	282	374	F25	72×155	200×5	20	G1/2"
ZSH3-400D	672	260	174	120	158	307	424	F25	72×155	200×5	20	G3/4"
ZSH3-450D	682	260	174	120	158	334	478	F25	72×155	200×5	20	G3/4"
ZSH4-450D	783	303	183	128	185	359	478	F30	100×200	220×5	28	G3/4"
ZSH4-500D	783	303	183	128	185	385	530	F30	100×200	220×5	28	G3/4"
ZSH4-550D	783	303	183	128	185	410	580	F30	100×200	220×5	28	G3/4"
ZSH4-600D	783	303	183	128	185	450	700	F30	100×200	220×5	28	G1*
ZSH5-550D	940	345	195	160	210	475	650	F35	120×240	230×5	32	G3/4"
ZSH5-600D	940	345	195	160	210	500	700	F35	120×240	230×5	32	G1*
ZSH5-700D	940	345	195	160	210	550	800	F35	120×240	230×5	32	G1*
ZSH7-600D	1020	390	212	185	230	520	700	F40	160×280	300×8	40	G1*
ZSH7-700D	1020	390	212	185	230	570	800	F40	160×280	300×8	40	G1 1/2"
ZSH7-800D	1020	390	212	185	230	626	910	F40	160×280	300×8	40	G1 1/2"
ZSH8-800D	1175	460	235	200	300	655	910	F48	180×320	370×8	45	G1 1/2"
ZSH8-900D	1175	460	235	200	300	740	1010	F48	180×320	370×8	45	G1 1/2"
ZSH8-1000D	1175	460	235	200	300	765	1124	F48	180×320	370×8	45	G1 1/2"
ZSH9-900D	1475	565	280	235	360	775	1010	F60	220×380	470×8	50	G1 1/2"
ZSH9-1000D	1530	565	280	235	360	840	1124	F60	220×380	470×8	50	G1 1/2"
ZSH9-1100D	1530	565	280	235	360	890	1225	F60	220×380	470×8	50	G1 1/2"

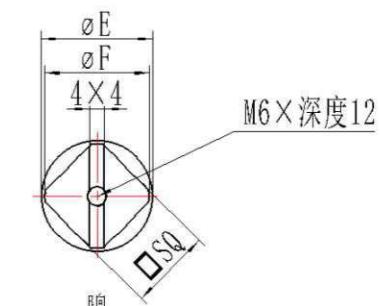
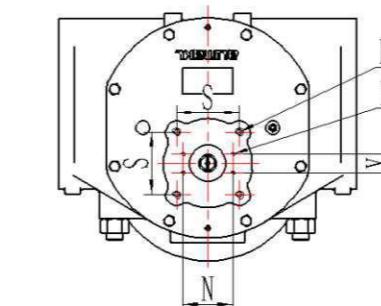
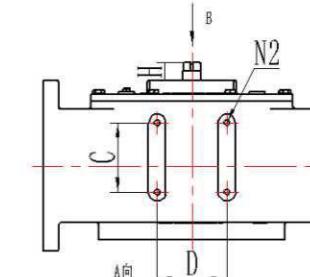
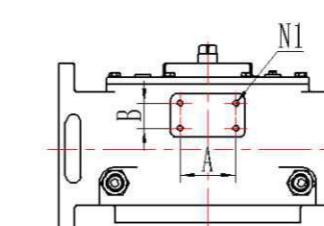
# DIMENSIONS AND DATA SHEET

## 外形尺寸及数据表



单作用型 Single acting type

规格型号 Type specification	L1	L2	H1	H2	$\Phi D$	M1	M2	ISO5211	$\Phi P \times$ 深度 Depth	$\Phi K \times$ 深度 Depth	B	气源接口"G" Air supply connection
ZSH0-180S	410	570	118	70	240	75	172	F12	36×80	85×4	10	G3/8"
ZSH0-200S	410	570	118	70	266	75	182	F12	36×80	85×4	10	G3/8"
ZSH1-250S	478	679	131	84	270	92	195	F14	48×135	100×4	14	G3/8"
ZSH1-300S	478	680	131	84	324	92	222	F14	48×135	100×4	14	G1/2"
ZSH2-300S	570	804	149	106	324	113	237	F16	60×145	120×4	18	G1/2"
ZSH2-350S	577	856	149	106	374	113	262	F16	60×145	120×4	18	G1/2"
ZSH3-350S	667	1005	174	120	374	158	282	F25	72×155	200×5	20	G1/2"
ZSH3-400S	672	1055	174	120	424	158	307	F25	72×155	200×5	20	G3/4"
ZSH3-450S	682	1065	174	120	478	158	334	F25	72×155	200×5	20	G3/4"
ZSH4-450S	783	1206	183	128	478	185	359	F30	100×200	220×5	28	G3/4"
ZSH4-500S	783	1197	183	128	530	185	385	F30	100×200	220×5	28	G3/4"
ZSH4-550S	783	1224	183	128	580	185	410	F30	100×200	220×5	28	G3/4"
ZSH4-600S	783	1230	183	128	700	185	450	F30	100×200	220×5	28	G1"
ZSH5-550S	940	1450	195	160	650	210	475	F35	120×240	230×5	32	G3/4"
ZSH5-600S	940	1490	195	160	700	210	500	F35	120×240	230×5	32	G1"
ZSH5-700S	940	1530	195	160	800	210	550	F35	120×240	230×5	32	G1"
ZSH7-600S	1020	1600	212	185	700	230	520	F40	160×280	300×8	40	G1"
ZSH7-700S	1020	1600	212	185	800	230	570	F40	160×280	300×8	40	G1 1/2"
ZSH7-800S	1020	1780	212	185	910	230	626	F40	160×280	300×8	40	G1 1/2"
ZSH8-800S	1175	1985	235	200	910	300	655	F48	180×320	370×8	45	G1 1/2"
ZSH8-900S	1175	1785	235	200	1010	300	740	F48	180×320	370×8	45	G1 1/2"
ZSH8-1000S	1175	1975	235	200	1124	300	765	F48	180×320	370×8	45	G1 1/2"
ZSH9-900S	1475	2265	280	235	1010	360	775	F60	220×380	470×8	50	G1 1/2"
ZSH9-1000S	1530	2425	280	235	1124	360	840	F60	220×380	470×8	50	G1 1/2"
ZSH9-1100S	1530	2425	280	235	1225	360	890	F60	220×380	470×8	50	G1 1/2"



规格型号 Type specification	A × B	N1	C × D	N2	N × Y	N3	S × S	N4	Φ E	Φ F	□ SQ	H
ZSH0	60×30	M6×10	60×60	M6×10	80×30	M5×10	76.2×76.2	M12×18	18	16	14×14	20
ZSH1	60×30	M6×10	80×80	M6×10	80×30	M5×10	76.2×76.2	M12×18	18	16	14×14	20
ZSH2	60×30	M8×12	90×90	M8×12	80×30	M5×10	101.6×101.6	M12×18	30	28	22×22	30
ZSH3	90×40	M10×15	112×112	M10×15	80×30	M5×10	101.6×101.6	M12×18	30	28	22×22	30
ZSH4	110×45	M12×15	200×110	M12×15	80×30	M5×10	101.6×101.6	M12×18	30	28	22×22	30
ZSH5	140×80	M12×15	200×110	M12×15	80×30	M5×10	101.6×101.6	M12×18	30	28	22×22	30
ZSH7	140×80	M12×15	200×110	M12×15	80×30	M5×10	101.6×101.6	M12×18	30	28	22×22	30
ZSH8	140×80	M12×15	200×110	M12×15	80×30	M5×10	101.6×101.6	M12×18	30	28	22×22	30
ZSH9	140×80	M12×15	200×110	M12×15	80×30	M5×10	101.6×101.6	M12×18	30	28	22×22	30