

ELECTRIC SINGLE SEAT / SLEEVE  
**REGULATING VALVE**  
电动单座/套筒调节阀



### 产品概述 Product Description

ZDLP型电动式单座调节阀采用顶导向结构，阀体结构紧凑，流体通道呈S流线型，压降损失小，流通量大，可调范围广，流量特性精度高。阀芯导向部分的导向面积大，具有抗震性能强的特点，阀座关闭性能符合GB/T4213-92标准，调节阀配用接收ON-OFF或4~20mA DC或1~5V的直流信号进行比例动作的小型、坚固、高精度的执行机构，更适用于要求可靠性及关闭性能高的高温，低温及高压场合下适用。

ZDLP electric single-seat control valve adopts the top guide structure, the valve body is compact, the fluid passage is S streamline, the pressure drop is small, the circulation is big, the adjustable range is wide, the flow characteristic is high. Valve guide part of the guide area, with strong seismic performance characteristics, valve seat closure performance in line with GB / T4213-92 standard, the valve is equipped with ON-OFF or receive 4~20mADC or 1~5V signal proportional action Of the small, rugged, high-precision actuator, more suitable for demanding reliability and high-performance closed high temperature, low temperature and high pressure applications.



■ ZDLP/ZDLM

### 标准技术参数 Standard Technical Parameters

#### 阀体

型式：单座型/套筒型

阀尺寸：DN20~200

额定压力：PN16, PN40, PN63, PN100

连接形式：法兰(标准型螺纹),焊接(须用户指定)

法兰标准：钢制法兰按GB9113-2000, JB/T-94

密封面型式：PN16为凸面

PN40, 63, 100为凹凸面

材料：ZG230~450

ZG1Cr18Ni9Ti

ZG1Cr18Ni12Mo2Ti

压盖形式：压板式

填料：V型聚四氟乙烯填料，柔性石墨填料

垫片：型式，齿型和平型

材料，F4/改性F4，不锈钢+石墨

#### Body

Type: single-seat, sleeve type

Valve size: DN20 ~ 200

Rated pressure: PN16, PN40, PN63, PN100

Connection: flange (standard thread), welding (to be user specified)

Flange standard: steel flange according to GB9113-2000, JB / T-94

Sealing surface type: PN16 is convex

PN40, 63, and 100 are convex and concave surfaces

Material: ZG230 ~ 450

ZG1Cr18Ni9Ti

ZG1Cr18Ni12Mo2Ti

Gland form: plate type

Filling: V-PTFE packing, flexible graphite packing

Gasket: type, tooth type and peace

Material, F4 / modified F4, stainless steel + graphite

### 执行机构

型式：电动执行机构

KYDLSA-20 / KYDLXA-20,  
KYDLSB-30 / KYDLXB-30,  
KYDLSB-50 / KYDLXB-50,  
KYDLSC-65, KYDLSC-99

阀作用：正作用,反作用

控制动作：比例控制或ON-OFF

输入信号：4~20mADC或1~5VDC须选择输入信号“断”时调节阀的位置（保护、全开、全关）

电源：AC200V, 50Hz

输出信号：4~20mADC（负载电阻500Ω以下）

功耗：A型/50VA, B型/150VA, C型/220VA

保护等级：IP55

出线连接：普通S型G1/2, 防爆X型G3/4

环境温度：无空间加热器-10°C~+60°C

有空间加热器-35°C~+60°C

防爆X型 -10°C~+40°C

环境湿度：普通型S型95%以下, 防爆X型45-85%

隔爆等级：ExdIIBT4

过载保护：A、B型任选, C型必配

手动装置：带手柄

### Executive body

Type: Electric Actuator

KYDLSA-20 / KYDLXA-20,  
KYDLSB-30 / KYDLXB-30,  
KYDLSB-50 / KYDLXB-50,  
KYDLSC-65, KYDLSC-99

Valve role: positive role, the reaction

Control action: Proportional control or ON-OFF

Input signal: 4~20mADC or 1~5VDC to select the input signal "off" when the control valve Position (Protection, Full, Full)

Power supply: AC200V, 50Hz

Output signal: 4 ~ 20mADC (load resistance 500Ω or less)

Power consumption: A type / 50VA, B type / 150VA, C type / 220VA

Protection class: IP55

Outlet connection: General S-type G1/2, explosion-proof X-type G3/4

Ambient temperature: No space Heater -10 °C ~ + 60 °C

Space heater available -35 °C ~ + 60 °C

Explosion-proof type X -10 °C ~ +40 °C

Ambient humidity: common type S 95% or less,

explosion-proof X-type 45-85%

Flameproof rating: ExdIIBT4

Overload protection: A, B-type optional, C-type must be allocated

Manual device: with handle

### 附件(根据要求配置)

空间加热器, 过载保护

### Accessories (on request)

Space heater, overload protection

### 性能

额定Kv值：参照表1

流量特性：线性,等百分比

可调范围：50:1

阀座泄漏率(对于额定Kv值%)

金属密封：小于0.01%(ANSIB16.104-1976IV级)及

小于0.001%(为选择项)

软密封：小于0.00001%

以下(ANSIB16.104-1976VI级)

基本误差：±1%

回差：≤1%

动作时间：参照表1

外形尺寸：参照表2

产品重量：参照表2

接线端子图：参阅所配执行机构使用说明书

油漆颜色：调节阀的气动执行机构和阀的表面应涂漆,不锈钢和铜的阀

可不涂漆。阀体上的箭头及文字涂红漆用户指定色彩也可。

### Performance

Rated Kv value: refer to Table 1

Flow characteristics: linear, equal percentage

Adjustable range: 50: 1

Seat leakage rate (for rated Kv value%)

Metal seal: less than 0.01% (ANSIB16.104-1976IV grade) and

Less than 0.001% (optional)

Soft Seal: Less than 0.00001%

The following (ANSIB16.104-1976VI grade)

Basic error: ± 1%

Backlash: ≤1%

Action time: Refer to Table 1

Dimensions: Refer to Table 2

Product weight: Refer to Table 2

Terminal block diagram: Refer to the instruction manual of the actuator

Paint color: Pneumatic actuator and valve surface of the control valve should be painted, stainless steel and copper valves may not be painted.

Arrows and text on the body painted red paint can also specify the color of the user.

### 型号与规格 Standard Technical Parameters

1. ZDLQ型电子式电动三通合流阀，具有二个进口，一个出口。其作用是根据生产工艺的要求，把两路流体按照一定的比例合并成一路流体。三通合流阀主要用在流体合并的场合。

2. ZDLX型电子式电动三通分流阀，具有一个进口，二个出口。其作用是根据生产工艺的要求，把一路流体按照一定的比例，分成二路流体。当阀门口径小于DN80时，用合流阀代替。三通分流阀主要用于流体分离的场合。

1st, the ZDLQ Electron electrically operated Three Contacts confluence valve, has two imports, an export . Its function is according to prod-uces the craft the request, merges group fluid two groups fluids according to the certain proportion. The Three Contacts confluence valve mainly uses the situation which merges in the fluid.

2nd, the ZDLX Electron electrically operated Three Contacts slide valve, has an import, two exports . Its function is according to pro-duces the craft the request request, group fluid according to the certain proportion, divides into two groups fluids. When the valve caliber is smaller than DN80. replaces with the confluence valve. The Three Contacts slide valve mainly uses in the fluid separation situation.



### 型号与规格 Standard Technical Parameters

#### 型号编制 Model establishment

I	II	III	IV	V	—	VI	VII	VIII
Z	D	L	Q	□		16	K	□

#### I, II, III — 执行机构代号

ZDL—直行程电子式电动执行器；  
 ZDR—角行程电子式电动执行器)

#### Implementing agency code number

ZDL—straight travelling schedule Electron electrically operated execution;  
 ZDR—angle travelling)

#### IV — 阀型代号

P-单座; N-双座; M-套筒;  
 X-三通分流; Q-三通合流

#### Valve code number

P-single-seat; N-Double Place; M-sleeve;  
 X-Three Contacts divergence; Q-Three Contacts confluence

#### V — 变型脚码代号

1—软密封；2-堆耐磨合金；F-全四氟耐腐蚀阀；.....

#### The aberration code number

1-soft seal; 2-pile of antifriction metals;  
 The F-entire four fluorine resist corrosion the valve;.....

#### VI — 压力等级

用10×PN(MPa)表示(即常用的kgf/cm<sup>2</sup>)

#### The pressure rank

Expresses (namely commonly used kgf/cm<sup>2</sup>) with 10×PN (MPa)

#### VII — 作用方式

K—电开; B—电闭; C—保位

#### The function way

K-electricity opens; B-electricity shuts;  
 C-Guarantees the position;

#### VIII — 温度

低温—D; 常温—省略; 中温—S; 高温—G

#### Temperature

low temperature-D; Normal temperature-abbreviation;  
 Center warm-S; High temperature-G;

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产品规格表 Product specification table

类别 Category	常温型 Normal Temperature		中温型 Center warm		高温型 High temperature	
	合流阀 Confluence valve	分流阀 Slide valve	合流阀 Confluence valve	分流阀 Slide valve	合流阀 Confluence valve	分流阀 Slide valve
型号 Model	ZDLQ-16 64	ZDLX-16 64	ZDLQ-16 64S	ZDLX-16 64S	ZDLQ-16 64S	ZDLX-16 64S
规格 Specification	DN25~300	DN80~300	DN25~300	DN80~300	DN25~300	DN80~300

技术参数和性能指标 Technical parameter and performance index

技术参数 Technical Parameter

公称通径 Nominal Passes Diameter	合流 Confluence	25	32	40	50	65	80	100	125	150	200	250	300
	分流 Divergence						80	100	125	150	200	250	300
阀座直径 mm Valve seat diameter		26	32	40	50	66	80	100	125	150	200	250	300
额定流量系数 Fixed discharge coefficient Kv	合流 Confluence	8.5	13	21	34	53	85	135	210	340	535	800	1260
	分流 Divergence						85	135	210	340	535	800	1260
公称压力MPa Nominal pressure	1.6~6.4												
行程 mm Travelling schedule	16		25		40			60			100		
配执行机构型号 Matches implementing agency model	KYDLSA-20 KYDLXA-20		KYDLSB-30 KYDLXB-30		KYDLSB-50 KYDLXB-50			KYDLSC-65			KYDLSC-99		
流置特性 discharge characteristic	直线 Straight line												
可调比 May move compares	30:01												
法兰尺寸、型式 flange size, pattern	按JB/T79.2-94凹式 Is concave according to JB/T79.2-94 like												
阀体材质 Valve body material quality	ZG270-500, ZG1Cr18Ni9Ti												

**KYDL系列电子式电动执行器主要参数**  
**KYDL Series electron electrically operated execution main parameter**

型号 Model	额定输出力(N) Fixed output strength	速度(mm/s) Speed	技术参数 Technical parameter
KYDLSA-08 KYDLXA-08	800	4.2	<b>电源Power source:</b> AC220V 50Hz±1%  <b>驱动电机:</b> AC可逆电机 <b>Actuates the electrical machinery:</b> AC reversible electrical machinery  <b>控制信号Control signal:</b> DC4~20mA DC1-5V (信号线用屏蔽线) (Holding wire uses shielded wire)  <b>上盖防护等级:</b> 相当IP55 <b>Top head protection rank:</b> Quite IP55  <b>隔爆型标志:</b> Exd II BT4 <b>Separates the exploding symbol:</b> Exd II BT4
KYDLSA-20 KYDLXA-20	200	2.4	
KYDLSB-30 KYDLXB-30	3000	3.2	
KYDLSB-50 KYDLXB-50	5000	1.6	
KYDLSC-65	6500	3.4	
KYDLSC-99	10000	2	

**电动调节阀整机性能指标** Electrically operated regulating valve entire machine performance index

项目 The project	指标值 Target Value	
基本误差 % basic error	±2.5	
回差 % chapter of difference	2.0	
死区 % dies Area	3.0	
始终点偏差% Beginning end point deviation	±2.5	
		电开 Electricity opens
		始点 Beginning
		终点 end point
电关 Electricity pass	始点 Beginning	
	终点 end point	
额定行程偏差% The fixed travelling schedule deviation	±2.5	
允许泄漏量 1/h% permission divulges Quantity	$1 \times 10^{-3} \times$ 阀额定容量 Valve rated capacity	

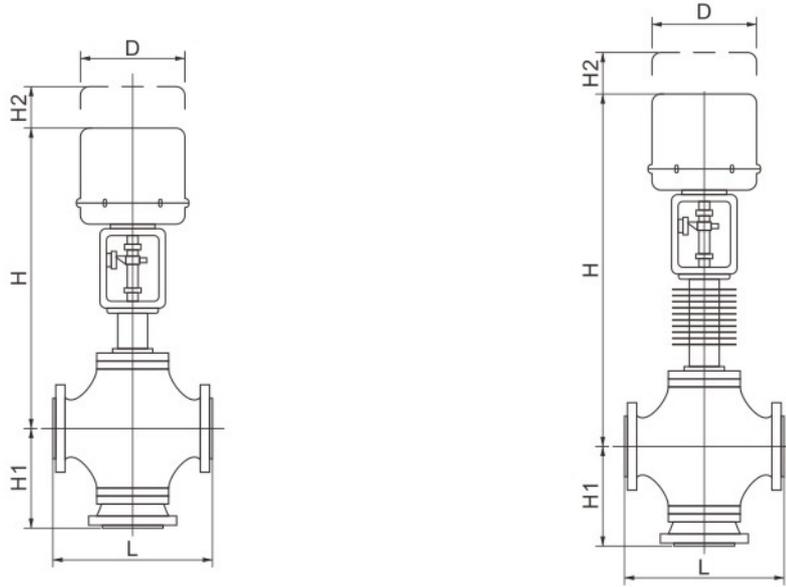
**三通调节阀允许差压(表五)** The Three Contacts regulating valve permission difference presses (table five)

公称通径 Nominal passes diameter	25	32	40	50	65	80	100	125	150	200	250	300
允许压差 Permission differential pressuro	3.2	2.20	2.20	1.41	1.38	0.94	0.61	0.51	0.36	0.2	0.19	0.13

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**ZDLQ-16<sup>16</sup>三通合流调节阀外形尺寸(表六) Three Contacts confluence regulating valve external dimensions (table six)**

DN	L		行程 Travelling schedule	D	H <sub>1</sub>		H	
	PN(MPa)				PN(MPa)		常温 temperature	中温 Center warm
	1.6	2.5			1.6	2.5		
25	190	200	16	225	150	160	555	707
32	210	210			160	170	561	709
40	230	235			170	180	660	812
50	255	265	25	225	190	200	675	827
65	285	295			220	220	863	1027
80	310	320	40	225	230	240	868	1032
100	355	370			250	260	872	1036
125	425	440			300	300	905	1120
150	460	475	60	225	320	320	920	1135
200	560	570			380	380	950	1165
250	660	670			475	475	1203	1485
300	740	770	100	310	585	585	1265	1557

**ZDLX-16<sup>16</sup>三通分流调节阀外形尺寸(表七) Three Contacts divergence regulating valve external dimensions (table seven)**

DN	L		行程 Travelling schedule	D	H <sub>1</sub>		H	重量kg Weight	
	PN(MPa)				PN(MPa)			PN(MPa)	
	1.6	2.5			1.6	2.5		4.0	6.4
80	310	320	40	225	250	260	885	78	98
100	355	370			275	285	897	93	118
125	425	440			320	320	931	155.5	172.5
150	460	475	60	225	340	340	945	207.5	323.5
200	560	570			400	400	979	384.5	412.5
250	660	670			540	540	1268	627	659
300	740	770	100	225	612	612	1294	780	819