



ZDLM Electronic Electric Sleeve Regulating Valve

Design Features

- European style finely made, precise control, good sealing performance, advanced design, excellent quality
- Exquisite technology, superior structure, stable flow, quick response, replace import
- Small pressure drop loss, stable output force, large flow coefficient, equal channel smooth cross-section
- Wide regulation range, high flow characteristic precision, top guide structure, easy handwheel operation

Overview

The ZDLM electronic electric sleeve regulating valve consists of a 3810L (or PSL series) direct stroke electronic electric actuator and a precision small sleeve valve. Equipped with a servo function, it receives a unified 4-20mA or DC1-5V standard signal, converts the current signal into a corresponding linear displacement, automatically controls the opening of the regulating valve, and achieves continuous adjustment of process parameters such as pressure, flow rate, temperature, and liquid level of the fluid in the pipeline. The main features are as follows:

1. Adopt a balanced valve core, allows for a large differential pressure and stable operation under unbalanced force.
2. The large guiding surface of the valve core can improve oscillations caused by eddy currents and impacts.
3. Compared to ordinary single and double seat regulating valves, the noise is reduced by about 10dB.
4. Simple structure, easy to assemble, disassemble, and maintain.

Model Description

-Z	-DL	-M	-	-4	-Y	-50	-50	-16	-D	-
Control valve category	Structure form	Trim type	Bonnet type	Connection mode	Sealing material	Nominal diameter	Valve core size	Nominal pressure	Flow characteristics	Action mode

Technical parameters & performance -- Valve body

Type	Straight through cast iron ball shape valve			
Nominal diameter	25, 32, 40, 50, 65, 80, 100, 125, 150, 200, 250, 300mm			
Nominal pressure	PN16, 40, 64bar			
Flange standard	JB/T79.1-94, 79.2-94, etc.			
Material	Cast steel (ZG230-450), Stainless steel (ZG1Cr18Ni9Ti, ZG1Cr18Ni12Mo2Ti), etc.			
Top bonnet	Standard type: -17~230℃ Heat sink type: 230~450℃ Low temperature type: -60~-196℃ Bellow seal type: -40~350℃			
Bonnet type	Bolt tightened type			
Packing	V-shaped PTFE, PTFE impregnated asbestos, asbestos textile, graphite			

Technical parameters & performance -- Valve trim

Valve core type	Pressure balanced type		
Flow characteristic	EQ%, Linear		
Material	Stainless steel (1Cr18Ni9Ti, 1Cr18Ni12Mo2Ti, 17-4PH, 9Cr18, 316L), Stainless steel surfacing STL, Titanium corrosion-resistant alloy, etc.		

Technical parameters & performance -- Actuator

Model	381LSA-08	381LSA-20	381LSB-30	381LSB-50	381LSC-65	381LSC-99	381LSC-160
Explosion-proof model	381LXA-08	381LXA-20	381LXB-30	381LXB-50	381LXC-65	381LXC-99	381LXC-160
Output thrust (N)	800	2000	3000	5000	6500	10000	16000
Max. stroke (mm)	30		60		100		
Working speed (mm/s)	4.2	2.1	3.5	1.7	2.8	2.0	1.0
Main technical parameters	Supply voltage: 220V/50Hz Input signal: 4-20mA or DC1-5V Output signal: 4-20mA-DC						
	Protection class: Equivalent to IP55		Explosion-proof standard: Exd II BT4		Manual operation function: Lever		
	Ambient temperature:-25~ +70℃		Ambient humidity: ≤95℃				

Valve action mode: Electric to close (B); Electric to open (K)

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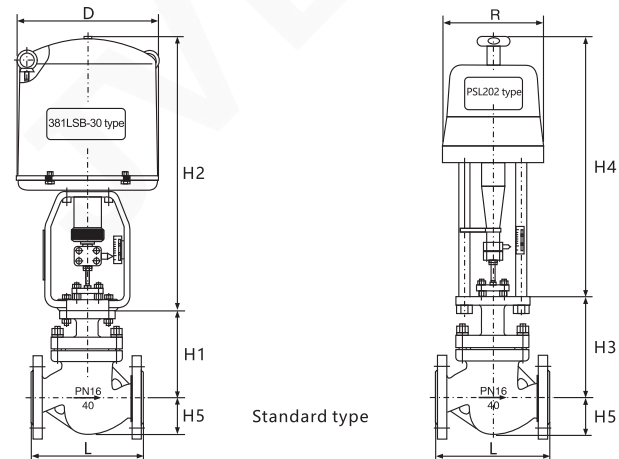
Performance

Item			Technical index
Basic error %			±2.5
Return difference %			≤2.5
Deadband %			≤1.0
Start & end point deviation %	Electric to open	Start	±2.5
		End	±2.5
	Electric to close	Start	±2.5
		End	±2.5
Rated stroke deviation %			≤2.5
Leakage rate l/h			0.01% * Valve rated capacity
Regulating range R			30:1

Rated flow coefficient Kv, rated stroke, matching actuator model, allowable differential pressure

Nominal diameter DN (mm)	25	32	40	50	65	80	100	125	150	200	250	300
Valve seat diameter (mm)	25	32	40	50	65	80	100	125	150	200	250	300
Rated flow coefficient Kv	Linear	11	17.6	27.5	44	69	110	176	275	440	630	1000
	EQ%	10	16	25	40	63	100	160	250	360	570	900
Rated stroke L (mm)	16	25		40		60		100				
Matching actuator model	381LS/XA-20	381LS/XA-30		381LS/XA-50		381LS/XA-65		381LS/XA-99				
Allowable differential pressure (bar)	64	64	64	64	64	64	64	64	64	64	26	32

• Note: For bellow sealed regulating valves, the max. allowable differential pressure is 10 bar. If the value in the table is less than 10 bar, it remains unchanged. If it is larger than 10 bar, it is taken as 10 bar.



Outline dimensions & weight

Unit: mm

Nominal diameter	25	32	40	50	65	80	100	125	150	200
L	PN16/40	184	220	222	254	276	298	352	410	600
	PN64	210	251	251	286	311	337	394	457	650
D		225	225	225	225	255	255	288	310	310
R		177	177	177	177	177	177	226	226	226
H1	PN16/40	128	152	152	160	205	205	208	273	364
	PN64/100	140	160	160	180	210	210	220	290	370
H3	PN16/40	144	172	172	180	232	232	235	300	391
	PN64/100	156	180	180	200	237	237	247	317	397
H2		373	495	495	495	700	700	700	725	725
H4		459	459	459	459	520	520	520	570	570
H5		58	68	73	80	90	98	108	123	168
		68	75	83	88	100	105	125	148	203
Weight (kg)	PN16/40	12	15	17	18	34	46	54	76	100
	PN64/100	16	19	26	27	43	69	85	120	150

- Note: 1. The outline dimensions of other structures shall refer to the ZJHM pneumatic diaphragm sleeve regulating valve.
2. The weight in the table is based on data of valve equipped with PSL actuator.
3. The valve flange and flange face to face dimension can be manufactured according to user specified standards, such as ANSI, JS, DIN standards.